

Agenda

2014 Four Hour Update

1. Administrative
2. Changes to Kentucky Minimum Specifications for School Buses. (Fleet Condition)
3. National Standards' Out of service Criteria.
4. Things that need to be repeated.
 - a. Led lights warrantable at 10% failure, human eye can detect difference at 20%.
 - b. Vehicles designed to carry fewer than ten passengers.
 - c. Upgrading to current Specifications.
 - d. ASTM D-6210-08 Engine Coolant.
 - e. TES 295 Transmission fluid.
5. International Recalls
 - a. Recall G-13502R2, IPR wire connector.
 - b. TSI 13-47-01, Seat back pans.
 - c. Recall 13512R1, Passenger seat back foam.
 - d. TSI 13-04-01, Air dryer service procedure.
 - e. Recall 13513, Restraining Barrier.
 - f. Recall 13518, Emissions.
 - g. Recall 13519, Drivers seat belt buckle.
 - h. Recall 13520, Passenger seat belt buckle.
 - i. SFN-10-75RB, Service support for Eaton hybrids.
6. Bluebird Recalls
 - a. Recall R11SZ, Brake ABS Indicator Malfunction Light.

- b. Caterpillar, Product Improvement, Coolant Replacement.
- c. Recall R13WR, Front Suspension Bolts May Break.
- d. Recall R13WS, Drivers Seat Belt Buckle Noncompliance.
- e. Recall R12VT, Drag Link Castle Nut Torque.

7. Thomas Built Recalls

- a. Recall 13V-022/2013-020, Headlamp Circuit Breaker.
- b. Recall 13V-468, Minotour Floor Sheets.
- c. Recall 13V-537, IMMI Flip & Floor Mount Seat U-Bolt.
- d. Recall 13V-536, IMMI 5-row Minotour Seat Barriers.
- e. Recall 13V-539, TTB Saf-T-Liner C-2 Seat track Rivets.
- f. Recall 13V-606, IMMI Seat Belt Buckles.
- g. Recall 13V-639, Ametek Speedometer Programing.

Fleet Condition Notes 2014

1. Fleet information:

- a. There are 10,048 buses on inventory, 46 less than last year. This is the first decline since 1989. (1989 we had 8,600 buses)
- b. There are 2,094 Type D buses (21% of the fleet) down 42 from last year.
- c. There are 532 Type A buses (5% of the fleet) down 44 from last year.
- d. There are 7422 Type C buses (74% of the fleet) up 41 from last year.
- e. There are 178 manuals left *and* 3 gasoline engines.
- f. There are 157 Hybrid, diesel/electric buses, 3 gasoline buses and 1 propane powered bus.
- G. The fleet has 9,887 diesels.

2. This year's purchases:

- a. There were 353 buses on order as of 2/24/14. 211 Thomas Built (60%), 74 IC (21%), 68 Bluebird (19%)
- b. Second smallest purchase in 25 years. Historically '13, 346; '12, 466; '11, 563; '10, 631; '09,483; 08,437; '07, 815; '06, 565, '05,820.
- c. Current depreciation: \$46,961,804.00
- d. 2, 203 (22%) are out of depreciation. (20% last year) so the fleet is getting older.

Proposed Changes to
Kentucky Minimum Specification for School Buses
2015 Edition

Page 20, BATTERY: All batteries shall be mounted in a ~~skirt-mounted~~ sliding/roller tray accessible through body skirt. All battery cables shall be securely routed to the left frame rail location without crossing over the top of any frame member. Routing and clamping of conductors shall be pre-engineered to the point of termination outside the left frame rail. Both battery cables shall attach to the battery posts, or battery terminals, with a bolted connector. Manufacturers shall coordinate with the Department of Education, Pupil Transportation Branch, for approval of location.

Reason for change: This allows batteries to be chassis mounted as well as body mounted.

Page 21, Engine

- ~~1) A primary fuel filter and water separator, located between the tank and engine transfer pump. The filter shall be OEM installed and approved~~
- ~~2) Filter shall be Racor Model 330, thirty (30) micron spin on, Racor Model 490, thirty (30) micron spin on or prior approved equal. The Pupil Transportation Branch at the pilot inspection shall approve the location.~~
- ~~3) If the fuel system includes a fuel return line to the tank, a secondary fuel filtration, in addition to the Racor Model 330 thirty (30) micron, shall be the manufacturer's standard for engine protection.~~
- 5) All primary and secondary fuel filter/water separators systems shall be chassis OEM or engine Manufacturer approved and installed.

Reason for change: Auxiliary fuel filtration systems are no longer available because they slow fuel flow and make compliance with Clean Air Regulations more difficult.

Page 47, SOLENOID SWITCH

The bus body electrical system shall be equipped with a continuous-duty solenoid switch or heavy duty relays of adequate capacity to handle the body electrical load.

Reason for change: A solenoid or relays are functionally equal.

Page 48. NOISE SUPPRESSION SWITCH

All Kentucky school buses shall include a “Noise Suppression Switch” within easy access of the driver. The Switch shall turn off noise producing accessories to include heater blowers, defroster fans, auxiliary fans and radios if so equipped. The system shall include a switch and solenoid or heavy duty relays. The label may be abbreviated “Noise Supp”.

Reason for change: A solenoid or relays are functionally equal.

Page 56. CLEARANCE LAMPS

The body shall be equipped with armored (unless flush mounted) clearance and mid-body lamps. These lamps shall be manufactured by Grote, Weldon or Sound Off Inc., LED lamps, minimum of four (4) candlepower, or prior approved equal. These lamps are to be mounted at the highest and widest position on the corners.

Reason for change: Allows the use of flush mount Clearance lights.

Page 56. BACK-UP LAMPS

The school bus body manufacturer shall install two (2) back-up lamps, located on the left and right rear of the body as far outboard and as low as is practical. These back-up lights shall be Weldon, Grote, Sound-Off Signal L.E.D. lights or prior approved equal. In addition to these lights there shall be an additional lighting system behind the rear axle. The system shall be a White, six-lamp, L.E.D light wired to the back up light circuit. mounted on the chassis frame rail cross member immediately behind the axle. This light shall be pointed down to illuminate the area to the under and outside the rear wheels. The light shall be wired into the back up lamp circuit. This light shall be a high intensity focused LED white light Eluminator Model 600w WWL or prior approved equal. The system shall illuminate a rectangular area on both sides of the vehicle beginning twenty-nine(29) inches aft of the center point of the rear axle. This area shall extend outward from the vehicle sides twenty-four (24) inches and rearward thirty(30) inches with no point within this area having illumination of less than three (3) foot candles as tested on a bare concrete surface.

Reason for change: Clarifies the design parameters for the auxiliary backup light and allows multiple vendors for this light.

Page 70. SEAT PLACEMENT

~~Body company manufacturers shall be responsible for the positioning of the school bus seats and body sections in such a manner to allow pupil seat backs to be positioned approximately tangent to push out the window post. It is the intent of this requirement to provide for a reasonable clear area for emergency egress through the push out windows. A reasonable clear area will be defined as requiring the ellipsoid, as defined in FMVSS 217 to pass through the lower window area with the plane of the major axis in a horizontal position, indexed front to rear~~

Reason for change: This standard is no longer needed. It was written when the standard window was 18 by 22 and top hinged. Windows are now 24 by 22 and side hinged.

Page 104. **INTEGRATED CHILD CARRIER SEATS**

Local districts may have integrated child seats factory installed on new buses. The standard seating plan shall be altered by the Body Company and forwarded to and the Pupil Transportation Branch to be recorded at the time the order is placed. This altered and approved floor plan will be forwarded to the district as a part of the normal order confirmation process. Districts may use either C.E. White CR seats or, the IMMI Safe Guard with Integrated Child Restraint System seats, or SynTec S3c convertible seats as a part of a complete seating package designed and certified by the school bus body company as meeting all applicable FMVSS Standards. Only the original equipment manufacturer or their representatives will install these systems.

Reason for change: Allows additional vendor for this option.

Page 104. **Propane Powered Chassis Modifications Supplement**

Forward

The Kentucky Minimum Specifications for School Buses is the primary specification for all school buses in the Commonwealth pursuant to KRS 156.153. This document is supplemental to that specification and is applicable to Propane Powered buses only. All provisions of the primary

specification shall be adhered to unless specifically mentioned in this supplement. This specification is for new propane powered school buses only and does not allow for the modification of any existing school bus.

Warranty

All propane components shall be warranted for three years, unlimited miles. In addition, all normal warranties listed in the Kentucky Minimum Specifications for School Buses shall not be compromised by the propane systems.

Compliance with FMVSS

All propane powered buses shall be in full compliance with all applicable Federal Motor Vehicle Safety standards.

Propane Powered Chassis Modification

A propane fueled engine may be installed on sixty-six (66) and seventy-two(72) passenger type C and Seventy-eight (78) passenger type D, FE school buses as a local district purchase option. These propane powered buses shall be designed to improve fuel economy while decreasing emissions.

All propane powers buses shall be equipped clearly marked in one inch block letters to enable first responders to readily identify the vehicle as being fueled by propane.

All propane systems shall be factory installed by the Original Equipment Manufacture on new buses only.

The propane powered chassis shall comply with all specifications for a Type C school bus with the following exceptions and additions:

Engine

1. A Ford 6.8L V-10 or a GM 8.0L engine shall be the standard engine for this application.
2. Minimum-330 horsepower, 450 ft/lbs torque.
3. Coolant shall be the engine manufactures standard and all heating systems shall be filled with the same coolant.
4. The oil filter shall be the engine manufactures standard oil filter.
5. The propane powered bus does not require supplemental fuel filtration fuel systems, drain plugs, overflow tubes, top mount fuel sender, fuel sender access plate or other parts normally associated with liquid fuel systems.

Fuel tanks

1. Minimum 70 gallon mounted between the vehicle frame rails and shielded under the bus.
2. Optional 100 gallon mounted between the vehicle frame rails and shielded under the bus.

Propane Identification

A propane vehicle emblem or label shall be affixed to the rear bumper. An emblem or label shall also be affixed to the right side of the bus rearward of the entrance door and to the left side of the bus aft of the driver's window. LIQUIFIED PETROLEUM GAS ONLY sign shall be affixed above the fuel fill door in minimum one inch block letters. The fuel door shall be lockable. Cut off valves to the tanks shall be clearly labeled.

Transmission

A propane fueled bus shall use a Ford 6R140 or an Allison 2300 series transmission. Transmission shall be filled with TES 295 fluid.

Warranty

All propane systems shall be factory installed and backed by a three year unlimited mileage warranty on components related to the fuel system (tanks, valves, injectors) all other warranties shall be as stated in the Kentucky Minimum Specifications, Section I parts 1-2.

Reason for change: Allows local districts the option of purchasing propane powered buses if they wish.

Comments Before Out of Service Criteria

1. The out of service criteria listed in the National School Transportation Specifications and Procedures, Revised 2010, are based on 49 CFR Parts 393, 396 and parts 400-599.
2. These regulations are based on standards taken from industry based on service manuals. Because different manufactures have different designs the standard must be somewhat general to include all designs.
3. Precise measurements must be taken from the service manuals themselves. These manuals give a detailed repair/service procedure in most cases when read by a qualified technician/mechanic.
4. The reason only qualified mechanics can be inspectors is because of professional judgment. A person who understands how something works is in a position to judge if the component is near failure or simply exhibiting normal wear. This judgment requires many years of practice to develop and cannot be learned in any book.
5. Just as a general practice doctor may refer a patient to a specialist we may need to refer a repair to a specialist. The trick is to know our limitations and to remember that identifying the problem is a separate function from correcting the problem.
6. A senior inspector is expected to help the less experienced inspector as well as the general mechanics with these judgment calls. When there is a question remember that "parts are always cheaper than accidents".
7. Remember that these standards are based on the service manuals of the respective manufactures therefore if you are in compliance with the service manual you will be in compliance the standard in most cases. In cases where the two seem to be in conflict we need to get a ruling from the Federal DOT.

SCHOOL BUS RECOMMENDED OUT-OF-SERVICE CRITERIA

BRAKE SYSTEM(S)

ADJUSTMENT

1. Any one brake beyond the adjustment limit (see attachment 1)

AXLE BRAKES, GENERAL

1. Chamber size mismatched on axle (393.47(b))
2. Mismatched brake chamber long stroke verses regular stroke (393.47(b))
3. Mismatched slack adjuster length (393.47(c))

AIR SYSTEM

1. Absence of effective braking action upon application of service brakes (393.48 (a))
2. Audible air leak at chamber. e.g. ruptured diaphragm
3. System fails to maintain pressure when:
 - a. Loss rate exceeds 2psi/min with brakes released (396.3(a)(1))
 - b. Loss rate exceeds 3psi/min with brakes applied (396.3(a)(1))
 - c. Engine idle and service brakes applied (396.3(a)(1))

BRAKE COMPONENTS AIR AND HYDRAULIC

HOSES AND TUBING

1. Brake hose with any damage extending through the outer reinforcement ply (393.45(a))
2. Audible leak at other than a proper fitting or connection (393.45(a))
3. Any bulge or swelling when brake are applied (393.45(a))
4. Any restriction due to cracked, broken or crimped line/hose (393.45(a))
5. Any line, tubing, hose or connection that is not constructed to meet standard (571.106)

BRAKE SHOE/PAD/LINING

1. Any lining thickness less than allowed by (393.47)
2. Lining pad is cracked, broken, not firmly attached or missing (393.47) *(surface or heat cracks in the lining should not be considered out of service)*
3. The friction surface of drum, rotor or friction material are contaminated by oil, grease or brake fluid (393.47)
4. Loose component e.g. chambers, spiders, support brackets (393.47)
5. Fails to make contact with drum e.g. frozen, binding, uneven (393.48(a))
6. Absence of braking action on any axle e.g. failing to move upon application of a wedge, S-cam, cam or disc brake

DRUMS/ROTORS

1. External crack(s) that open upon application (393.47(a))
2. Any portion of the drum or rotor (discs) missing, broken, misplaced or cracked through rotor to center vent (393.47(a))

PARKING BRAKE

1. Fails to hold vehicle in stationary position on normal roadway conditions (absence of ice or snow) in forward or reverse (393.41) (571.105 S5.2.1 and S5.2.3(b))

HYDRAULIC BRAKE SYSTEM

1. System brake failure light or low fluid light on or inoperative (393.51)
2. Reservoir is below minimum level (393.45(a)) (571.106)
3. Any seeping, leaking or swelling of hose(s) under pressure (393.45(a))
4. Any leak in master cylinder unit (393.45(a)) (571.106)

PEDAL RESERVE

1. No pedal reserve with engine running (393.40(b))

POWER ASSIST UNIT

1. Fails to operate (396.3(a)(1))

STEERING SYSTEM

STEERING

1. Any modification or condition that interferes with free movement of any steering component (393.209(d))
2. Steering travel restricted through the limit of travel in both directions (570.60(c))

STEERING COLUMN/WHEEL

1. Absence or looseness of U-bolts or other positioning part(s) (393.209(c))
2. Welded or repaired universal joint(s) (393.209(d))
3. Steering wheel not properly secured (393.209(a))
4. Steering wheel lash/free play exceeds performance test (see Table #2) (393.209(b))

FRONT AXLE BEAM

1. Any crack(s) or obvious welded repair (393.3(a)(1))

STEERING GEAR BOX

1. Mounting bolt(s) loose or missing (393.209(d))
2. Crack(s) in gearbox or mounting brackets (393.209(d)) (396.3(a)(1))
3. Any obvious welded repair(s) (396.3(a)(1)) (393.209(d))
4. Looseness of yoke-coupling to the steering gear input shaft (393.209(d))

PITMAN ARM

1. Looseness of the pitman arm on the steering gear output shaft (393.209(d))
2. Any obvious welded repair (396.3(a)(1)) (393.209(d))

POWER STEERING

1. Auxiliary power assist cylinder loose (393.2(e)) (393.209(e))
2. Power steering system belts frayed, cracked or slipping (393.209(2)(e))
3. Power steering system leaking or insufficient fluid in reservoir (393.209(2)(e))

BALL/SOCKET JOINTS

1. Any movement under steering load of a nut stud (393.3(a)(1))
2. Any motion, other than rotational, between any linkage member and its attachment point of more than 1/8 inch measured with hand pressure only (393.209(d))

3. Any obvious welded repair (393.209)(d)

TIE RODS/DRAW LINKS

1. Loose clamp(s) or clamp bolt(s) on tie rod or drag link(s) (393.3(a)(1))
2. Any looseness in any threaded joint (396.3(a)(1))

NUTS

1. Loose or missing fasteners on tie rod, pitman arm, drag link, steering arm or tie rod arm (396.3(a)(1))

SUSPENSION COMPONENTS

AXLE PARTS/MEMBERS

1. Any U-bolt or other spring to axle clamp bolt(s) which are cracked, broken, loose or missing (393.207(a))
2. Any axle, axle housing, spring hanger(s), or other axle positioning parts which are cracked, broken, loose or missing that results in shifting of an axle from its normal position (393.207(a))
3. Any worn (beyond manufacturer specifications) or improperly assembled U-bolt, shock, king pin, ball joint, strut, air bag or positioning component (570.61 (a))
4. Any spring hanger, assembly part or portion of leaf which is broken, separated or missing (393.207(c))
5. Any broken coil spring (393.207(d))

CHASSIS/FRAME/UNIBODY

1. Any cracked, loose, sagging or broken, frame side rail. (393.201(a))
2. Any damage permitting the shifting of the body or imminent collapse of frame (393.201(a))
3. Any cracked, loose, broken frame member affecting support of functional components e.g. steering gear, engine, transmission, body part or suspension (393.201(a))
4. Any crack 1 1/2 inch or longer in the frame siderail web which is directed toward bottom flange (393.201(a))
5. Any crack extending from the frame siderail web around the radius and into the bottom flange (393.201(a))

CROSSMEMBERS

1. Any cross member, outrigger or other structural support which is cracked, missing or deformed that affects the structural integrity of the vehicle. (393.201)
2. Three or more adjacent crossmembers broken or detached (393.201)
3. Any area of the floor that is sagging or soft due to broken crossmembers (393.201)

OUTRIGGERS/BODY SUPPORTS

1. Any cross member, outrigger or other structural support which is cracked, missing, deformed or has rust holes where damage affects the safe operation of the vehicle

BUMPERS

1. Front bumper is missing or not properly secured (393.203(e))
2. Rear bumper is missing or not secured (393.86)

EXHAUST SYSTEM

1. The exhaust system is leaking or discharging directly below the driver or passenger compartment (393.83(e)) NOTE: does not apply to proper venting for emission systems
2. No part of the exhaust system shall be located and likely to result in burning, charring or damaging the electrical wiring, the fuel supply, or any combustible part of the vehicle (393.83(a))

FUEL SYSTEM

1. Any part of the fuel tank or fuel system not securely attached to the vehicle (393.65)
2. A fuel system with a dripping leak at any point (393.67 Tank)
3. Dripping leak (396.3(a)(1) leak other than tank)

DRIVESHAFT

1. Driveshaft guard loose, missing, improper placement or bent (393.89)
2. Universal joint(s) worn or faulty, or obvious welded repair (393.209(2)(d))

DIFFERENTIAL

1. Cracked or leaking housing (393.207(a))

ENGINE

1. Any critical component that fails to function as designed (396.3)
2. Any fluid leaks that would affect the safe operation of the vehicle (396.3)

TIRES/WHEELS/HUBS

TIRE TYPE

1. Any school bus operated with regrooved, recapped or retreaded tires on the front axle (393.75(d))
2. Any tire not of proper type e.g. load range, size, mismatched on axle

TIRE TREAD DEPTH

1. Any front tire worn to less than 4/32 inch (393.75(b))
2. Any rear tire worn to less than 2/32 inch (393.75(c))

TIRE SIDEWALL

1. Any sidewall cut, worn or damaged to the extent that the steel or fabric cord is exposed (393.75(a))
2. Any observable bump, bulge or knot related to sidewall or tread separation (393.75(a))

TIRE INFLATION

1. Tire is flat, has noticeable leak (393.75(a)(3))

WHEELS/RIMS/SPIDERS

1. Any nuts, bolts, studs, lugs or holes that are elongated, broken, missing, damaged or loose (393.205(b))
2. Any cracked or broken wheel or rim (393.205(a))
3. Any lock or slide ring broken, cracked, improperly seated, sprung, or has mismatched rings (393.205(a))

HUB

1. Excessive wheel bearing or king pin play that exceeds 1/4 inch (393.70) (570.61)

AISLE

1. Aisle does not have the required clearance (571.217)
2. Obstructions in aisle that prevent passengers from egress to emergency exits (393.62) (393.203)

ELECTRICAL/BATTERY

1. Electrical cable insulation chafed, frayed, damaged, burnt, causing bare cable to be exposed (393.28, 396.3(a)(1))
2. Loose or corroded connections at battery posts or compromised insulation protection to electrical components (393.28, 393.77(b), 396.3(a)(1))
3. Missing or damaged protective grommets insulating main electrical cables through metal compartment panels (393.30)
4. Broken or unsecured mounting of electrical components (396.3(a)(1))
5. Electrical cable unsupported, hanging or missing clamps that may cause chafing or frayed conditions (393.28, 396.3(a)(1))
6. Battery not secured (393.30)
7. Signs of leaking or excessive corrosion
8. Battery lacks cranking capacity to start engine

WINDSHIELD WIPERS

1. Inoperative, missing or damaged wiper (393.78)
2. Wiper does not clean sweep area of driver's windshield (393.78)

BODY INTERIOR

1. Any panel e.g. ceiling, side, wheel well, protruding, having sharp edges or not secured so is likely to cause injury
2. Floor not maintained to prevent slipping or tripping by passenger(s)
3. Any part of the step well or support structure that is damaged
4. Any part of the step well tread that is loose, torn or damaged that would present a tripping hazard
5. Handrail loose or missing
6. Handrail fails the nut/drawstring test as defined by NHTSA

SEAT(S) AND BARRIER(S)

1. Any seat or barrier that is not securely attached to the vehicle (393.91)
2. Any seat or barrier material(s) that compromises the integrity of compartmentalization and occupant protection (571.222)
3. Seat spacing fails to comply with (571.222)

SEAT, DRIVER

1. Driver seat is not securely fastened to vehicle and/or fails to maintain adjusted position (393.93)
2. Any part of the driver's safety restraint assembly is missing, not properly installed or defective as to prevent proper securement of occupant (393.93(a)(b)) (571.209)

DOOR (ENTRANCE)

1. The student entrance door does not open or close properly
2. Door control handle does not lock in the closed position
3. Door is equipped with a padlock or similar locking device (excludes interlock systems)

EMERGENCY EXITS

1. Any emergency door, window or roof hatch that fail to open freely or completely as defined in (571.217)
2. Door prop-rod device is missing or inoperative (571.217)
3. Any emergency exit equipped with a padlock or similar locking device (excludes interlock systems)
4. Any vehicle that lacks the required number of emergency exits (571.217)
5. Any emergency exit not properly labeled and marked both inside and outside the vehicle as specified by (571.217)
6. Any item or modification that reduces the size of the opening and limits egress to the emergency exit by all passengers
7. Emergency exit warning device is not audible in the driver seating position and/or the vicinity of the emergency door or window (571.217)

WINDOWS

1. Any glass or glazing that is broken through or missing (393.60)
2. Any glass not of approved type (393.60(a))
3. Windshield has discoloration or other damage in that portion extending upward from the height of the topmost portion of the steering wheel, but not including a 2 inch border at the top and a 1 inch border at each side of the windshield or each panel thereof, except as follows:
 - a. Color or tint applied by the manufacturer for the reduction of glare
 - b. Any crack not over 1/4 inch long, if not intersected by any other crack
 - c. Any damaged area, that can be covered by a disc 3/4 inch in diameter, if not closer than 3 inches to any other such damaged area and
 - d. Driver's side area window(s) have chips, clouding, or cracks that obscure the driver's vision (393.60(c))
4. No operable defrosting and defogging system to clear the driver's windshield (571.103)

BODY EXTERIOR

1. Any panel, rub rail, trim that is loose, torn, dislocated or protruding from the surface of the bus, creating a hazard (393.203)
2. Any engine, battery or other door that is not properly secured (393.203)

MIRRORS (571.114)

1. Any mirror required to provide the driver with the entire field of view, missing, damaged, clouded, or otherwise obscured so as to place children in a hazardous position.
2. Any crossover mirror system or portion thereof that fails to hold a set adjustment
3. Any crossover mirrors directed to view any area other than for which they were intended
4. Any part of the required field of vision obscured or not visible from the driver seated position

LAMPS/SIGNALS

1. Any one of the following lamps not working: brake, turn signal, tail, head (low beam), school bus overhead warning light (amber or red), hazard warning, or stop arm lamp (571.108, 571.131)
2. Horn fails to function as designed (393.81)
3. Any critical brake, telltale lamp, buzzer or gauge that fails to function as designed
4. Required stop arm(s) fail to operate with overhead red lights as mandated (571.131)
5. If equipped a crossing control device fails to extend and retract as designed

EMERGENCY EQUIPMENT

1. Fire extinguisher missing, out-of-date certification, not of proper type or size, not fully charged, has no pressure gauge, is not secured or is not readily accessible to the driver (393.95)
2. Any additional state specific equipment e.g. first aid kit, body fluid kit, belt cutter and emergency reflectors that fail to meet state specifications and places the vehicle out of service
3. Missing emergency triangles (571.125)

WHEELCHAIR LIFT-EQUIPPED VEHICLES

1. Wheelchair lift does not function as designed or is inoperable
2. Platform lift manufactured after April 1, 2005 must meet all the following criteria
 - a. Jacking prevention
 - b. Manual backup operating mode
 - c. Interlocks to prevent forward or rearward mobility of the vehicle unless lift is stowed
 - d. Wheelchair retention device
 - e. Platform outer barrier and inner roll stop
3. Any hydraulic line leaking during lift operation
4. Wheelchair restraint system is missing, incomplete or improperly installed, loose or damaged
5. Any required wheelchair occupant restraint system not in compliance (571.222)

ATTACHMENT 1 - BRAKE ADJUSTMENT SPECIFICATIONS

Brake adjustment: Shall be less than those specifications contained herein relating to "Brake Adjustment Limit." (Dimensions are in inches.)

CLAMP TYPE BRAKE CHAMBER DATA		
TYPE	OUTSIDE DIAMETER	BRAKE ADJUSTMENT LIMIT
6	4 1/2	1 1/4
9	5 1/4	1 3/8
12	5 11/16	1 3/8
16	6 3/8	1 3/4
20	6 25/32	1 3/4
24	7 7/32	1 3/4
30	8 3/32	2
36	9	2 1/4

'LONG STROKE' CLAMP TYPE BRAKE CHAMBER DATA		
TYPE	OUTSIDE DIAMETER	BRAKE ADJUSTMENT LIMIT
16	6 3/8	2.0
20	6 25/32	2.0
24	7 7/32	2.0
24*	7 7/32	2.5
30	8 3/32	2.5

* For 3" maximum stroke type 24 chambers

DD-3 BRAKE CHAMBER DATA		
TYPE	OUTSIDE DIAMETER	BRAKE ADJUSTMENT LIMIT
30	8 1/8	2 1/4
NOTE: This chamber has three air lines and is found on motorcoaches.		

WEDGE BRAKE DATA
The combined movement of both brake shoe lining scribe marks shall not exceed 1/8 inch (3.18mm).

ATTACHMENT 2 - STEERING WHEEL FREE PLAY

Steering Wheel Free Play: Steering wheel free play shall not exceed the requirements listed in the following chart:

Steering Wheel Diameter	Manual System Movement 30	Power System Movement 45
16" (41cm)	2" (5.1cm)	4 1/2" (11.5cm)
18" (46cm)	2 1/4" (5.4cm)	4 3/4" (12cm)
20" (51cm)	2 1/2" (6.4cm)	5 1/4" (13.5cm)
22" (56cm)	2 3/4" (7cm)	5 3/4" (14.5cm)

RECOMMENDED SCHOOL BUS INSPECTION PROCEDURES

WARNING! Please **READ** and follow these instructions to avoid personal injury or death. Prior to performing any inspection procedures always insure that the vehicle is properly secured, wheels chocked, and that the ignition key is controlled. Proper safety equipment should always be used.

When working on or around a vehicle, the following general precautions should be observed at all times.

1. Park the vehicle on a level surface, apply the parking brakes, and always block the wheels.
2. Always wear safety glasses and other appropriate safety gear.
3. Stop the engine and remove ignition key when working under or around the vehicle.
4. When working in the engine compartment, the engine should be shut off and the ignition key should be removed. Where circumstances require that the engine be in operation, **EXTREME CAUTION** should be used to prevent personal injury resulting from contact with moving, rotating, leaking, heated or electrically charged components.

Brake Systems

Air Brakes Measurement

This procedure is based on the applied stroke method for measuring the movement of the brake chamber push rod.

1. Release the spring brakes and visually check each brake to insure that it is in the normal released position.
2. With the brakes released, make a mark where the pushrod exits the brake chamber.
3. With the engine off, make a series of brake applications to reduce the reservoir pressure to between 90 to 100 psi.
4. Apply and hold a full brake application (90 to 100 psi).
5. Measure the distance between the mark and the face of the brake chamber. The difference between measurements is called the chamber applied stroke.

Any brake that is beyond the re-adjustment limit (Attachment 1) will require repairs and/or adjustment.

Adjustment, Hydraulic Brakes

With the brake pedal in the full upright position, the inspector shall measure the distance between the brake pedal and the floor or firewall. With the engine running, a single firm brake application shall be made and the distance between the brake pedal and the floor or firewall shall be measured a second time. The difference shall be recorded.

With vehicle stopped and engine running, depress brake pedal. The system must be able to maintain brake pedal height under moderate foot force (40-60 pounds) for one minute without pumping. With vehicle in stopped position and brake pedal depressed under moderate foot force (40-60 pounds) there should be a minimum of one-third of the total available pedal travel (manufacturer's specification) remaining on non-powered systems.

Brakes, General

Chamber Size

Visually inspect all brake chambers to insure they are properly marked, in good operating condition, have no visible damage, and are properly matched. Chambers must be matched by size, type, and stroke.

Slack Adjuster Length

Measure from the center of the S-cam to the center of the push rod clevis pin. All slack adjusters on a single axle shall be of the same type and length.

Air System

With full system air pressure, depress the brake pedal and inspect each wheel end brake to determine if effective braking forces are applied to each wheel end brake. There should be no audible air loss at supply lines, fittings, valves, or brake chambers.

With full system pressure, make a single full service brake application with the parking brake and ignition off. Note the gauges and listen for air leaks. Release the service brake.

With full system pressure, the engine stopped, and the parking brakes released; allow pressure to stabilize for at least 1 minute and observe the dash pressure gauges for 1 minute. Make note of any pressure drop. The maximum allowable drop is 2 psi within 1 minute for either reservoir.

With full system pressure, the engine stopped, and the parking brakes released; make and hold a full service brake application. Allow pressure to stabilize for at least 1 minute and observe the dash pressure gauges for 2 minutes. Make note of any pressure drop. The maximum allowable drop is 3 psi within 1 minute for either reservoir.

Brake Components Air and Hydraulic

Hoses and Tubing

Carefully perform a visual inspection of all system hoses, lines, and tubing.

Inspect all hoses, lines, and tubing for: any audible leak (if air), or visible leak (if hydraulic), any bulging/swelling when the system is pressurized, any hose, line,

or tubing is cracked, broken or crimped in such a manner as to restrict flow, any hose abraded (chafed) through outer cover to fabric layer or any line/tubing, and for proper securement and support.

Brake Shoe/Pad/Lining

Visually inspect all brake linings/shoes/pads. Linings may be checked through inspection slots. All shoes/pads/linings shall comply with the applicable standards.

The brake lining/pad thickness shall not be less than $\frac{3}{16}$ inch at the shoe center for a shoe with a continuous strip of lining; less than $\frac{1}{4}$ inch at the shoe center for a shoe with two pads; or worn to the wear indicator if the lining is so marked, for air drum brakes.

The brake lining/pad thickness shall not be less than $\frac{1}{8}$ inch for air disc brakes, or $\frac{1}{16}$ inch or less for hydraulic disc brakes

Visually inspect the brake lining/pad to insure that it is firmly attached to the shoe, is not cracked or broken, and that the friction surface is not saturated with oil, grease, or brake fluid.

Visually inspect all brake components mounting hardware for any loose, cracked, broken, or missing items. This inspection should be performed with the brakes released and with the brakes applied. It may be necessary to remove inspection access covers, brake dust covers or, in some instances, pull wheels and drums to accomplish the inspection.

Drums/Rotors

Visually inspect all brake drums/rotors for any external cracks that open when brakes are applied. Do not confuse short hairline internal check cracks with flexural cracks. Also inspect for any portion of the drum/rotor missing or in danger of falling away. It may be necessary to remove inspection access covers, brake dust covers or, in some instances, pull wheels and drums to accomplish the inspection.

Parking Brake

With the engine operating and the park brakes set, place the transmission in both forward and reverse gears to determine if brakes will hold vehicle stationary.

Visually and physically check condition of parking brake system and parking brake warning light.

Hydraulic Brake System

With the engine off, turn the ignition switch to the "on" position and check the instrument panel for visible and audible warning signals to indicate system malfunction. If bus is equipped with vacuum assist, it shall have a visible warning

signal and gauge to indicate any loss of vacuum. Audible signals must be loud enough to be heard over engine noise.

Visually inspect the master cylinder to determine if it is below the minimum fill requirements, is leaking, is loose, or improperly mounted.

Visually inspect the hydraulic fluid reservoir level in the master cylinder unit. Inspect for any fluid leaks on wheel cylinders/calipers, master cylinders, hose connections, and hydrovac and on buses using vacuum assisted brakes. Check for brake fluid around the brake booster - between the booster and firewall.

Pedal Reserve

With the brake pedal in the full upright position, the inspector shall measure the distance between the brake pedal and the floor or firewall. With the engine running, a single firm brake application shall be made and the distance between the brake pedal and the floor or firewall shall be measured a second time. The difference shall be recorded.

With vehicle stopped and engine running, depress brake pedal. The system must be able to maintain brake pedal height under moderate foot force (40-60 pounds) for one minute without pumping. With vehicle in stopped position and brake pedal depressed under moderate foot force (40-60 pounds) there should be a minimum of one-third of the total available pedal travel (manufacturer's specification) remaining on non-powered systems.

Power Assist Unit

Electric/Hydraulic Assist - with engine off, depress the brake pedal. The electric/hydraulic brake assist motor must operate.

Hydrovac Assist - With engine off, the driver shall pump the brakes to exhaust all reserve. Hold firm pressure on the brake pedal and start the engine. The pedal should fall slightly. Failure of the pedal to fall slightly indicates a malfunction of the power-assist unit.

Steering System

Steering

Visually inspect for any modification or other condition that interferes with free movement of any steering component. Turn steering wheel through a full right and left turn and feel for binding or jamming conditions. Both front wheels must be capable of being turned to full right or full left without binding or interference.

Inspect turn stops by observing for shiny spots and/or signs of wear on the sides of tires, drag links, shock absorbers or brake lines.

Steering Column/Wheel

Inspect steering column for any looseness in bolts, clamps, positioning parts or universal joints. Inspect flexible coupling in steering column (if the vehicle is so equipped) for excessive misalignment and tightness of clamp bolt or nut.

The steering column and components shall also be inspected for damage, cracks, or welded repairs. Inspect steering wheel to insure that it is properly positioned and secured.

Place steering axle wheels in a straight ahead position have an assistant turn the steering wheel until movement is observed at the left road wheel and measure the steering wheel movement from starting position to wheel movement position. Compare this measurement to the applicable listing in (see Table #2)

Front Axle Beam

Visually examine the front axle beam for any obvious bend or twist, any cracks, or any welded repair.

Steering Gear Box

Visually examine the steering gear box for any loose, damaged or missing mounting bolts. Inspect for cracks in the gear box, mounting brackets or any obvious welded repairs.

While having an assistant to rock the steering wheel back and forth; visually inspect the steering shaft and gear box for any looseness where the steering gear box is mounted to the frame. Visually inspect steering shaft coupler for cracks, damage, or looseness.

With the engine operating inspect for excessive fluid and/or oil leak (observable movement of fluid).

Pitman Arm

While the steering wheel is being rotated in a back and forth motion; visually inspect the pitman arm and output shaft connection for looseness at the output shaft joint. The pitman arm shall also be inspected for damage, cracks, or welded repairs.

Power Steering

The inspector shall manually manipulate the auxiliary power assist cylinder to check for looseness. The inspector shall start the bus and rotate the steering wheel in a back and forth action to ensure the power steering pump is operable.

With the engine stopped inspect the system drive belt(s) for any fraying, cracks, or fluid saturation. Check belt tension. On units equipped with automatic tensioner insure that tensioner moves freely.

Inspect the fluid reservoir to insure that the fluid level is not below add mark (when hot). Inspect for signs of fluid leakage.

Ball and Socket Joints

With the bus on the ground, the inspector shall examine the ball joint nut stud for movement while the steering wheel is being rocked in a back and forth action. The inspector shall examine the ball/ socket joint for weld repairs.

Check for lateral and vertical movement by grasping the tie rod and drag link sockets attempting to laterally and vertically move the ball joint (rotational movement will not be considered). Any motion, other than rotational, greater than 1/8", that can be detected by movement with two hands with moderate strength, in any connecting joint is a defect.

Tie Rods/Drag Links

While having an assistant to rock the steering wheel back and forth; visually inspect the tie rod ends, crossbar, and drag links any looseness at the steering linkage pivot points.

Check for lateral and vertical movement by grasping the tie rod and drag link sockets attempting to laterally and vertically move the ball joint (rotational movement will not be considered). Any motion, other than rotational, greater than 1/8", that can be detected by movement with two hands with moderate strength, in any connecting joint is a defect.

Check crossbar for structural damage and crossbar clamps for secure mounting.

Nuts

Visually examine all tie rods, pitman arm, drag link, steering arm and tie rod arm for looseness and missing fasteners.

Hoses/Fluids

Visually examine the power steering fluid reservoir for proper fluid level. With the system operating, inspect all system components, hoses, and fittings for leaks.

Suspension Components

Axle Parts/Members

Visually and physically inspect all front and rear axle components. Inspect all U-bolts and other suspension to axle mounting hardware for cracks, breaks, looseness, or improper type.

Inspect axle, axle housing, spring hanger(s), shackles, or other axle components for alignment, cracks, breaks, and loose or missing items that could result in shifting of an axle from its normal position.

Inspect front axle beam for signs of improper repair e.g. welding or heating.

Inspect for any worn (beyond manufacturer specifications) or improperly assembled U-bolt, shock, king pin, ball joint, strut, air spring or positioning components.

Inspect all leaf spring hangers, hanger assemblies, or portions of leaf for broken, separated, sagging, bent, abnormally worn, (beyond manufacturer specifications) shifted or missing components.

Inspect pins and bushings for wear, off center spring eye, rubbing shackle, or non-symmetric joints. Inspect for any broken, weak, or damaged coil spring and mounting assemblies.

Visually and physically inspect all hydraulic shock absorbers for leaks, looseness, damage or missing.

Inspect air suspension (if equipped). Observe that the vehicle is lifting level. With the air system fully charged, inspect for any audible or visual air leakage at the air spring assembly, supply hoses, and connections.

CAUTION: Inspector should use caution whenever underneath the vehicle. There may not be sufficient room underneath the vehicle should a problem occur with the air suspension system.

Chassis/Frame/Unibody

Visually inspect frame for cracks, loose attaching hardware, sagging, broken, or *unapproved welds to frame side rail or flange.

Visually and physically inspect for body hold down components for damage that would permit the shifting of the body.

Inspect for cracked, loose, bent, broken or *unapproved welds to frame member that affect support of functional components e.g. steering gear, engine, transmission, body parts or suspension. *Welding to frame should only be performed by manufacture or designee.

Inspect for any crack 1½ inch or longer in the frame siderail web which is directed toward bottom flange. Any crack extending from the frame siderail web around the radius and into the bottom flange

Crossmembers

Visually and physically inspect all crossmembers, attaching hardware, and other structural supports for cracks or deformations. Visually inspect for three or more adjacent cross members that are missing, broken, damaged or loose.

Inspect any area of the floor that is sagging, weak or damaged due to broken, damaged, or loose crossmembers.

Outriggers/Body Supports

Visually inspect all outriggers and attaching hardware for cracks, missing bolts, and damage.

Bumpers

Visually inspect front and rear bumpers for missing attaching hardware, broken hardware, and that the bumpers are properly mounted and secure and that there is no point protruding beyond the confines of the vehicle so as to create a hazard

Exhaust System

Visually and audibly inspect the complete exhaust system including; Muffler, Diesel Particulate Filter (DPF), Diesel Oxidation Catalyst (DOC) for leaks, restrictions, damage and to insure that it's not discharging directly below the driver or passenger compartment. All exhaust emission control devices shall be installed and operating as per the manufacturer's recommendations.

Inspect for the presence and condition of heat shielding over and around all piping, and components where specified by vehicle manufacturer.

Visually and physically inspect all exhaust system mounting hardware for loose, missing, or damaged components and that it is securely attached. Inspect to insure that all clamps are in place and secure.

Visually inspect exhaust system for indications of, and areas likely to result in, burning, charring or damaging the electrical wiring, the fuel supply, or any combustible part of the vehicle.

Fuel system

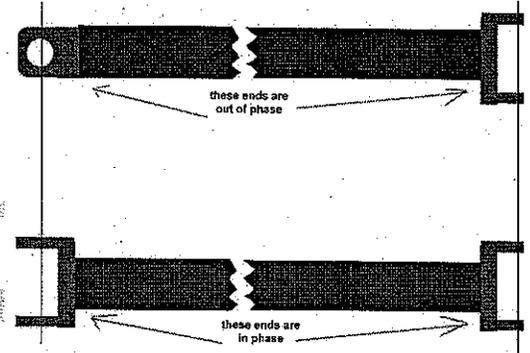
Visually inspect all parts of the fuel tank, fuel tank cage and fuel system to include; lines, hoses, filters, fill cap, and fittings for indications of damage or leaks.

Visually and physically inspect fuel lines and hoses for proper securement, routing, and missing or loose clamps that may cause chafing or come in contact with electrical components.

Driveshaft

Visually and physically inspect each segment of the driveshaft and associated hardware. Inspect for bends, cracks, missing weights, or debris entangled in the shaft. Each shaft more than 18 inches long shall be equipped with a suitable guard to prevent an accident or injury in the event of its fracture or disconnection. The inspector shall check to insure that the driveshaft guards (s) are not loose, bent, or missing.

Visually and physically inspect each universal joint and center bearing. The universal joint(s) and center bearing(s) shall not be loose or worn and shall have all attaching hardware securely fastened. The inspector shall check for lateral and vertical movement of the universal joints and center bearing by grasping the universal joint and attempting to move the joint laterally and vertically. Inspector shall inspect universal joints for substandard or welded repairs.



Visually inspect driveshaft for proper phasing. (see illustration)

Differential

The Inspector shall visually inspect the differential and differential housing for cracks and leaks. Careful attention shall be made to the areas of mounting attaching hardware and wheel end areas. Housing vent shall be inspected to insure that it is not clogged and is functional by twisting the vent cap by hand.

Engine

Visually inspect engine and surrounding components for evidence of fluid leaks, and loose or damaged components. Inspector shall start engine. While engine is operating inspector shall visually and audibly monitor engine for proper operation, leaks, and unusual noises of engine or components.

Inspect cooling fan and as per manufacturer's recommendations.

Visually and physically inspect all drive belts for proper alignment and tension as per manufacturer's recommendations. All belts shall be free of cracking, frays, fluid, glazing and excessive wear. Inspect belt tensioner as per manufacturer's recommendations.

Visually inspect all hydraulic, coolant, fuel, and pneumatic hoses for damage, proper routing, proper type, and proper securement. Hoses shall be routed in such a way as to not come in contact with exhaust, rotating or moving engine components, or sharp edges. Hoses shall not be cracked, leaking, swollen, or chaffed.

Tires/Wheels/Hubs

Tire Type

Visually inspect the steer axle (front) to insure that no recapped, re-grooved tires are present. Visually inspect tires for improper wear patterns, (see chart) proper type. i.e. load range, size, mismatched on axle.

Tire Tread Depth

Visually inspect for any front tire worn to less than 4/32 inch.

Visually inspect for any rear tire worn to less than 2/32 inch.

If a visual inspection cannot determine that the tire meets the minimum depth requirement, the inspector shall use a commercial tire depth gauge to verify tread depth.

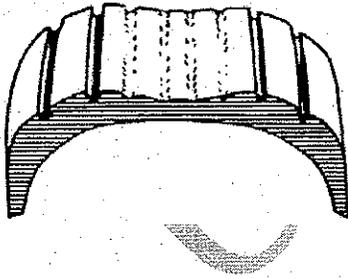
Tire Sidewall

Inspector shall inspect tire sidewall for cuts, wear, and any observable bumps or bulges.

Tire Inflation

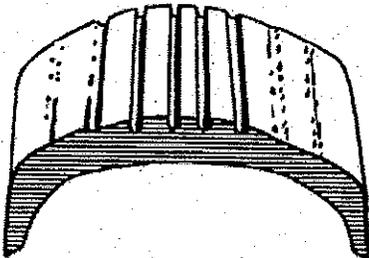
Visually inspect that tires are properly inflated, or doesn't have a noticeable leak. See 393.76 (h)(1),(2). If pressure is questionable inspector shall use a tire pressure gauge to verify pressure.

Visually inspect valve stem for damage and presence of valve cap.



Over Inflation

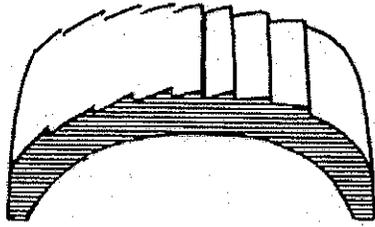
Excessive wear at the center of the tread indicates that the air pressure in the tire is consistently too high. The tire is riding on the center of the tread and wearing it prematurely. Many times, this visual method of inflation (inflating the tires up until there is no bulge at the bottom) is at fault; tire inflation pressure should always be checked with a reliable tire pressure gauge.



Under Inflation

This type of wear usually results from consistent under inflation. When a tire is under inflated, there is too much contact with the road by the outer treads, which wear prematurely. Tire pressure should be checked with a reliable pressure gauge. When this type of wear occurs, and the tire pressure is known to be consistently correct, a bent or worn steering component or the need for wheel alignment could

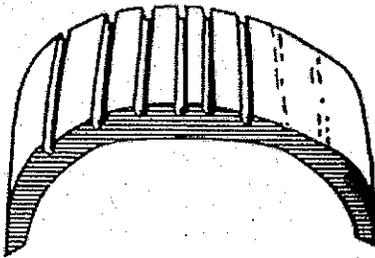
be indicated. Bent steering or idler arms cause incorrect toe-in and abnormal handling characteristics on turns.



still occurs.

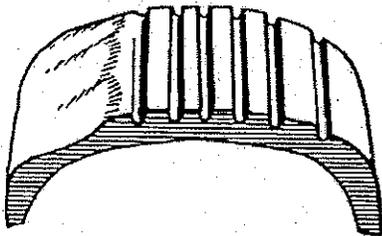
Feathering

Feathering is a condition when the edge of each tread rib develops a slightly rounded edge on one side and a sharp edge on the other. By running your hand over the tire, you can usually feel the sharper edges before you'll be able to see them. The most common cause of feathering is incorrect toe-in setting, which can be cured by having it set correctly. Occasionally toe-in will be set correctly and this wear pattern



Side Wear

When an inner or outer rib wears faster than the rest of the tire, the need for alignment is indicated. There is excessive camber in the front suspension, causing the wheel to lean too much to the inside or outside and putting too much load on one side of the tire. Misalignment could be due to sagging springs, worn ball joints, worn control arm bushings, or worn king pin bushings.



Cupping

Cups or scalloped dips appearing around the edge of the tread on one side or the other, almost always indicate worn (sometimes bent) suspension parts. Adjustment of wheel alignment alone will seldom cure the problem. Any worn component that connects the wheel assembly to the vehicle (ball joint, king pins, wheel bearing, shock absorber, springs, bushings, etc.) can cause this condition. Occasionally, wheels that are out of balance will wear like this, but wheel imbalance usually shows up as bald spots between the outside edges and center of the tread.

Wheels/Rims/Spiders

Inspector shall inspect all nuts, bolts, studs, lugs, and holes for damage. Visually inspect for broken, missing, damage, missing or loose fasteners. Rust around fasteners or on rim surface is sometimes an indication of cracked or loose mounting hardware.

Visually inspect rim for, cracks, welds, or broken components.

Visually inspect for any lock or slide ring that is broken, cracked, improperly seated, sprung, or has mismatched rings.

Hub & Assemblies

Visually inspect king pin and wheel bearing assemblies for looseness, damage, missing or loose fasteners. This shall include locking pins, draw keys, caps and bearings.

Physically inspect king pin and bearing assemblies for play as follows: Grasp tire at top and attempt to move the wheel assembly in and out. If movement is present inspector can help to identify the source by following these procedures.

Have an assistant fully apply brakes while rechecking play. If movement disappears with brakes applied, then play is in the wheel bearings. If movement remains, it is most likely in the king pin area. Assembly shall not have excessive king pin play that exceeds .250 inch measured at outside edge of tire, or wheel bearing movement that exceeds .010 inch measured at bearing hub.

Visually inspect A-frames and bushings on type (A) vehicles. Inspect bushings for wear, cracking, splitting, or severe extrusion from suspension parts.

Aisle

Visually inspect the aisle to insure that all aisles, including aisle (or passageway between seats) leading to emergency door are a minimum of 12 inches.

Visually inspect to insure that there are no obstructions in an aisle that would prevent passengers from egress to emergency exits.

On school buses with a side emergency door, check that aisle space from center aisle to side of emergency door is 12 inches by measuring between the vertical line of the seat back and the face of the next seat cushion or bottom of a fold up seat.

Electrical/Battery

Visually inspect all electrical cabling and wiring for chafed, frayed, damaged, or burnt insulation.

Visually and physically inspect for corroded or loose connections at the battery terminals. Inspect for unsuitable insulation to electrical cabling.

Inspect for missing or damaged protective grommets insulating all electrical cables through metal compartment panels. All electrical cabling passing through a metal surface shall pass thru an insulated grommet as to provide adequate protection against chaffing and shorting.

Visually and physically inspect for any broken or unsecured mounting of electrical components.

Visually and physically inspect electrical cabling for securement, routing, or any unsecured wiring that may cause chafing or frayed conditions.

Visually and physically inspect that the Battery(s) is securely mounted and no signs of leaking, or excessive corrosion.

Crank engine to insure adequate battery capacity to start engine.

Windshield Wipers

Operate wiper and washer system. The wiping system should be power driven with at least two speeds and able to clean the area of the windshield with in the wiping pattern. Wipers should operate with a minimum of 45 cycles per minute.

Body Interior

Visually inspect all interior sidewall, rear, ceiling, and driver's area paneling for secure fastening, projections, or sharp edges and condition.

Visually inspect floor covering, aisle, and cove molding strips for condition, adhesion and/or fastening holes for cracks, and condition of rubber in aisle to insure that there are no unsealed holes or cracks through the underside of the bus and there is no damage to the coverings which could cause a trip or slip hazard.

Visually inspect the step well for condition of support structure, to insure structural stability. Inspect step well treads to insure proper securing and adhesion to step well. Visually inspect step treads for any excessive worn areas that may pose a tripping or slip hazard.

Hand rail must be securely mounted and all OEM hardware present. Perform the "Nut and string test" as according to NHTSA guidelines that follow.

The Handrail Inspection Tool and Procedure

The inspection tool (Figure 6) is inexpensive and the procedure for detecting potentially fatal handrail designs is quite simple. The inspection tool is a standard $\frac{1}{2}$ " hex nut measuring $\frac{3}{4}$ " across the flats. This nut is tied to $\frac{1}{8}$ " thick cotton cord measuring 36" in length with overhand knots. The drawstring should have a minimum length of 30" when tied to the nut and attached so that a pull of at least ten pounds does not separate the nut from or break the drawstring.

Steps to conduct a handrail inspection are:

- Stand on the ground outside of the bus



- Drop the inspection tool between the handrail and step well wall, simulating the typical way students exit the bus
- Draw the inspection tool through the handrail in a smooth, continuous slow motion
- Repeat this procedure several times (minimum of three times)

Note: It is important to drop the inspection tool over the handrail in such a way as to simulate a child exiting the bus. This is a drop and drag test. Do not create a snagging situation by placing the nut in an area that would not be exposed to a drawstring or other articles.

Inspection Results

Take the bus out of service and repair it if the inspection tool catches or snags anywhere on the handrail. If the nut separates from the drawstring or the drawstring breaks, reassemble the tool and retest. If the inspection tool pulls freely without catching or snagging, the bus should not be rejected.

Seat(s) and Barrier(s)

Visually inspect all seats and barriers to insure that all are securely mounted and not loose or broken.

All seats shall be forward facing and securely fastened to the bus body. Passenger seat cushions shall be fastened to prevent the cushions from disengaging from the seat frames in the event of an accident. There shall be a minimum space of 24 inches between the forward surface of a seat back and the rear surface of the seat or barrier ahead measured across the seat cushion without depressing any surface. The forward surface may have side bolsters that briefly reduce the width to less than 24 inches provided the remainder of the seat measures at least 24 inches.

Seats and barriers should appear symmetrical. Seats/barriers that do not appear symmetrical should be physically inspected to insure seat covering and/or padding is not significantly compromised and complies with FMVSS 571.222.

Seat Driver

Visually inspect driver's seat to insure that it is securely fastened to the vehicle. Visually inspect the driver's seat for its ability to maintain the adjusted position. Inspect driver's restraining device, (seat belt) for fraying, attaching hardware, and the functionality of the seat belt's ability to maintain the driver in the seated position.

Door (Entrance)

Visually inspect and operate entrance door and inspect door to properly open and close with out any obstruction of movement. Inspect manually operated door to make sure door will maintain an open and closed position. Door shall not have

any locking device except for interlock systems. On power-operated entrance doors, the emergency release valve, switch or device to release the entrance door must be placed above or to the immediate left or immediate right of the entrance door and must be clearly labeled.

Emergency Exits

Visually inspect all emergency exits. Operate all emergency exits. Exits must open freely and completely. Door prop rods must operate freely and hold door or exit in open position without obstructing exit. There shall be no padlocks or any other locking devices on exits except interlocking systems.

Visually inspect that all exits are clearly labeled and marked on both the inside and outside of the bus.

Insure that all exits have an audible device to alert the driver of an open exit door or window.

FMVSS 571.217 defines the number of exits for each type of bus.

Windows

Visually inspect all glass for missing or broken glazing and approved type. Visually inspect windshield to insure that there is no discoloration or damage in that portion extending upward from the height of the top most portion of the steering wheel, but not including a 2 inch border at the top and a 1 inch border at each side of the windshield or each panel there of except as follows:

- Color or tint applied by manufacturer for the reduction of glare
- Any crack not over 1/4" long, if not intersected by another crack
- Any damaged area, that can be covered by a disc 3/4" in diameter, if not closer than 3" to any other such damaged area
- Any damage to the driver's side area window(s) has chips, clouding, or cracks that obscure the driver's vision.

Inspect that the defrosting and defogging system is operable to clear the driver's windshield.

Body Exterior

Visually inspect the body exterior to insure that there is not any panel, rub rail, or trim that is loose, torn, dislocated or protruding from the surface of the bus that would create a hazard.

All engine, battery, or other doors must be securely mounted and properly installed.

Mirrors

Visually inspect all mirrors to identify any mirror that is damaged, clouded or otherwise has an obscured area so as to place children in a hazardous position. All mirrors should hold a set adjustment. All mirrors should be directed to view the intended area for which they are designed.

Lamps/Signals

Visually inspect all lamps, such as brakes, turn signals, tail, head (low beam), overhead warning lights (amber and red), hazard warning, and stop arm lights to insure proper visibility and operation. Turn signals should flash at a rate of 60 to 120 times per minute.

Inspect the horn to function and that it is audible from approximately 200 feet away.

If equipped inspect the crossing control device for proper operation and that it extends and retracts as designed.

Emergency Equipment

Visually inspect that the fire extinguisher is accessible to the driver and that it is fully charged of proper type and size and has a working pressure gauge.

Visually inspect any other state required equipment such as first aid kits, body fluid kits, belt cutters and emergency reflectors and insure that these items are fully stocked and functional.

Wheel Chair Lift-Equipped Vehicles

Visually inspect and operate wheel chair lift to insure proper function as designed. Inspect for any leaks that would hinder the operation of the lift. Inspect all safety systems of the wheel chair lift, such as, hand rails, ramp stops, are functioning as designed.

Visually inspect all wheel chair securement devices to make sure none are missing or broken or straps are frayed.

SCHOOL BUS INSPECTION PROGRAM

STATE INSPECTION PROGRAMS

School bus safety programs vary greatly from state to state. Each state is urged to establish a neutral third-party inspection program. Personnel conducting school bus safety inspections must be knowledgeable in the mechanical components of a school bus and be aware of all the applicable construction standards, laws, rules and all other requirements of their jurisdiction.

INSPECTION PROCEDURE

School bus safety inspections should consist of a standardized inspection where vehicles are placed out-of-service based on uniform criteria. States should also develop specific inspection regulations, rules, procedures and out-of-service criteria for all vehicles utilized in student transportation. States are encouraged to develop a system to compile the data for analysis.

CRITERIA

The purpose of criteria is to identify critical school bus components and provide tolerances that inspectors can utilize to determine if a school bus is safe for student transportation. While it is recognized that each state may enforce more stringent standards, this document is intended to establish a baseline for inspecting and placing school buses out-of-service.

SCHOOL BUS RECOMMENDED OUT-OF-SERVICE CRITERIA

RESOURCE INFORMATION

49 CFR PARTS 570.1-570.63

49 CFR PARTS 400-599

49 CFR PARTS 393, 396

49 CFR APPENDIX G to Subchapter B – Minimum Periodic Inspection Standards

BRAKE ADJUSTMENT SPECIFICATIONS – ATTACHMENT 1

STEERING WHEEL FREE PLAY – ATTACHMENT 2

INSPECTION METHODS FOR THE ITEMS LISTED IN THE “SCHOOL BUS RECOMMENDED OUT-OF-SERVICE CRITERIA”

Mangum, Dave - Division of District Support

From: Cliff Bolhouse <cbolhouse@soundoffsignal.com>
Sent: Tuesday, March 29, 2011 9:50 AM
To: Mark Cahill
Cc: Mangum, Dave - Division of District Support
Subject: RE: LED Lights

Mark,

10% is the percentage we use for determining failed lights. It seems like most states use somewhere in the 20%-25% range which seems to work well.

Thanks,

Cliff Bolhouse
National Account Manager
SoundOff Signal
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www.soundoffsignal.com

From: Mark Cahill [<mailto:mark.cahill@fuse.net>]
Sent: Monday, March 28, 2011 10:32 AM
To: Cliff Bolhouse
Cc: Dave Mangum
Subject: LED Lights
Importance: High

Cliff,

Can you let me know the standard for number of diodes inoperative in an LED light (I think this is usually expressed as a percentage) to make it a warranty issue so that we can use that as a warranty standard for school buses in the Commonwealth of Kentucky?

Thanks,

Mark Cahill
Bluegrass International Trucks and Buses, Inc.

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Vehicles designed to transport fewer than nine passengers or less.

1. KRS 156.153 Section 2. Except in cases of emergencies or for the transportation of students with disabilities, only school buses as defined in subsection (1) of this section shall be used for transporting students to and from school along regular bus routes. Districts may use district-owned vehicles that were and built by the manufacturer for passenger transportation when transporting nine or fewer passengers, including the driver for approved school activities. Vehicles used under this subsection shall be clearly marked as transporting students and shall be inspected no less than once every thirty days.
2. 702 KAR 5:010 section 3 All vehicles used for the transportation of pupils shall meet the minimum safety standards for Kentucky school buses of the same model year, except as provided in 702 KAR 5::060 Section 6(2) or 702 KAR 5:130, Sections 1 and 2.
3. 702 KAR 5:060 section 6(2) allows the use of certificated common carriers for School events on a case by case basis with board approval per trip. A classic example of this type of trip would be a charter to Washington DC for a senior trip.
4. 702 KAR 5:130, Sections 1 and 2 allow the use of vehicles designed to carry fewer than ten for emergency transportation of students, approved school activities and for qualified special needs students.
5. Sections 6 and 7 is where we come in. Section 6 says: Before a vehicle is initially used to transport pupils, a safety inspection shall be made on the vehicle by an approved school bus inspector to certify that the vehicle is in a safe operating condition. If the vehicle is found to be in an unsafe operating condition, it shall not be used to transport pupils until the necessary repairs are made: Section 7 says: A vehicle shall be inspected at least once each month that the vehicle is used to transport pupils, utilizing the same criteria for inspection as for school buses on the "Preventative Management Inspection" Form as found in the Pupil Transportation Management Manual, April 1998.

Upgrading to Current Specifications.

Upgrading is at Local district option.

All buses are to be maintained as delivered from the factory.

A district that wishes to replace parts with new parts shall do so with the cooperation of the OEM and in full compliance with the current specification.

A district may add optional equipment listed in section IV of the specification provided he does so pursuant the OEM's installation instructions.

1. Some examples of upgrades are listed below:
 - a. Tire up grades. The new tire must be mounted on 8.25 rims, must be of the same load rating as the OE tire and must be in compliance with the current specification.
 - b. Seat covers. Non-fire block seat covers may be replaced with fire block covers (mat Kevlar only). Jersey Knit fire block covers may be replaced with mat Kevlar covers.
 - c. Complete mirror systems may be upgraded to FMVSS 111 systems but Individual parts of the system may not be changed
 - d. Rear signage may be added only if it fully meets the current specification.
 - e. Lights may be upgraded to L.E.D.'s with the OE's approval and in full compliance with the Kentucky Minimum Specifications. This requires replacement in complete sets by functional groups.

Any upgrade must be in full compliance with current specifications and in cooperation with the Original Equipment Manufacturer. No upgrade is required except pursuant to a recall.

A District wishing to refurbish a bus must use the "Bus Refurbishment Specification" listed in the "Kentucky Minimum Specifications for School Buses, Revised 2012" in order to avoid excess liability.



Standard Specification for Fully-Formulated Glycol Base Engine Coolant for Heavy-Duty Engines^{1, 2}

This standard is issued under the fixed designation D 6210; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

1. Scope*

1.1 This specification covers the requirements for fully-formulated glycol base coolants for cooling systems of heavy-duty engines. When concentrates are used at 40 to 60 % glycol concentration by volume in water of suitable quality, (see Appendix X1), or when prediluted glycol-base engine coolants (50 volume % minimum) are used without further dilution, they will function effectively during both winter and summer to provide protection against corrosion, cavitation, freezing, and boiling.

1.2 This specification is intended to cover the requirements for engine coolants prepared from virgin or recycled ethylene or propylene glycol.

Note 1—Committee D15 has not substantially studied the impact of using recycled glycols from sources such as:

- glycol bottoms
- polyester manufacturing waste
- aircraft and runway deicers
- medical waste

to prepare engine coolants. However, several serious cases of very poor performance have been reported and substantiated in heavy duty fleets when recycled glycols from sources such as above have been used to prepare engine coolants. Efforts are underway to more clearly define the purity requirements for glycols used to prepare engine coolants meeting this specification, whether from recycled engine coolants or other sources.

1.3 The coolants governed by this specification are categorized as follows:

Coolant Type	Description
I-FF	Ethylene glycol base concentrate
II-FF	Propylene glycol base concentrate
III-FF	Ethylene glycol predilute (50 vol %)
IV-FF	Propylene glycol predilute (50 vol %)

1.4 Coolant concentrates meeting this specification do not require any addition of Supplemental Coolant Additive (SCA) until the first maintenance interval when a maintenance dose of SCA is required to continue protection in certain heavy duty

engine cooling systems, particularly those of the wet cylinder liner-in-block design. The SCA additions are defined by and are the primary responsibility of the engine manufacturer or vehicle manufacturer. If they provide no instructions, follow the SCA supplier's instructions.

1.5 The values stated in SI units are to be regarded as standard. The values given in parentheses are for information only.

1.6 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2. Referenced Documents

2.1 ASTM Standards:³

- D 1126 Test Method for Hardness in Water
- D 1293 Test Methods for pH of Water
- D 3306 Specification for Glycol Base Engine Coolant for Automobile and Light-Duty Service
- D 4327 Test Method for Anions in Water by Chemically Suppressed Ion Chromatography
- D 5828 Test Method for Compatibility of Supplemental Coolant Additives (SCAs) and Engine Coolant Concentrates

2.2 Other Standards:⁴

- Federal Method 2540B Total Dissolved Solids Dried at 103-105°C

3. General Requirements

3.1 Concentrated and prediluted coolants shall meet all of the physical, chemical and performance requirements of Specification D 3306, Tables 1, 2, and 3.

3.2 The coolant concentrate mixed with water or the prediluted coolant, when maintained with maintenance doses of

¹ This specification is under the jurisdiction of ASTM Committee D15 on Engine Coolants and is the direct responsibility of Subcommittee D15.07 on Specifications. Current edition approved Oct. 1, 2008. Published November 2008. Originally approved in 1998. Last previous edition approved in 2006 as D 6210-06.

² A research report is available from ASTM International Headquarters. Request RR:D15-1023.

³ For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For Annual Book of ASTM Standards volume information, refer to the standard's Document Summary page on the ASTM website.

⁴ Standard Method for the Examination of Water and Wastewater; American Public Health Association, et al, 1015 15th Street, N.W. Washington, DC 20005

*A Summary of Changes section appears at the end of this standard.

SCA in accordance with the engine manufacturer's recommendations, and those on the product label, shall be suitable for use in a properly maintained cooling system in normal service for a minimum of two years (see Appendix X1).

4. Additional Requirements

4.1 The coolant concentrate or prediluted coolant addition-ally shall provide protection in operating engines against cavitation corrosion (also termed liner pitting) and against scaling of internal engine hot surfaces. Hot surfaces typically are within the engine head, head spacer, upper cylinder liner, or liquid cooled exhaust manifold. ASTM has test methods under development for both cavitation corrosion and hot surface scaling. Until these procedures are approved as ASTM standards, the mandatory requirements of Annex A1 shall apply.

4.2 Lack of compatibility between the coolant and SCA product's chemistry may cause the solute to precipitate out of solution, with potential adverse effects in the vehicle or engine cooling system. A test procedure for compatibility (Test Method D 5828) has been developed and approved. The compatibility of SCA and coolant concentrate solutions meeting this specification shall be determined using D 5828 and the results reported.

4.3 Both the concentrated and prediluted coolants shall contain less than 50 $\mu\text{g/g}$ sulfate ion.

5. Keywords

5.1 cavitation; fully-formulated heavy-duty engine coolant; supplemental coolant additive maintenance dose

ANNEX

(Mandatory Information)

A1. CHEMICAL REQUIREMENTS FOR FULLY FORMULATED HEAVY DUTY ENGINE COOLANT

A1.1 Laboratory data or in-service experience demonstrating a positive influence on reducing cavitation corrosion in an operating engine is required.

A1.1.1 In-service qualification tests may consist of single- or multiple-cylinder engine tests. At the option of the engine or vehicle manufacturer, such testing may be conducted in "loose engines" or in engines fully integrated into an application, such as a vehicle, a power boat, or a stationary power source. One such test has been developed.⁵

A1.2 Several chemical compositions have been tested extensively by producers and users and satisfactorily minimize cylinder liner cavitation in actual test engines. Coolants meeting either of the following compositions are regarded as passing the requirements of A1.1:

A1.2.1 A minimum concentration of nitrite (as NO_2^-) of 1200 $\mu\text{g/g}$ (ppm) in the 50 volume % predilute coolant, or

A1.2.2 A minimum combined concentration of nitrite (as NO_2^-) plus molybdate (as MoO_4^{2-}) in the 50 volume % predilute coolant of 780 $\mu\text{g/g}$ (ppm). At least 300 $\mu\text{g/g}$ (ppm) each of NO_2^- and MoO_4^{2-} must be present.

A1.2.3 The above concentrations are doubled for coolant concentrates.

A1.3 Chemical composition requirements for cavitation corrosion protection will be removed from this specification and replaced with an ASTM test method when a test method is developed and adopted.

A1.4 Both concentrated and prediluted coolants under this specification must contain additives to minimize hot surface scaling deposits. Certain additives (polyacrylate and other types) minimize the deposition of calcium and magnesium compounds on heat rejecting surfaces. No specific chemical requirements for hot surface scaling and deposits resistance have been established at this time. A test procedure is under development and will be incorporated into the specification when a procedure is approved by ASTM.

⁵ "A Comparison of Engine Coolant in an Accelerated Heavy-Duty Engine Cavitation Test," SAE Technical Paper 960883, SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

APPENDIX

(Nonmandatory Information)

XI. COOLANT MAINTENANCE FOR HEAVY DUTY ENGINES

X1.1 *Engine Coolant*—Cooling system fill for a heavy duty engine consists of water and fully formulated heavy duty coolant concentrate or fully formulated prediluted heavy duty coolant.

X1.1.1 *Water:*

X1.1.1.1 Water quality affects the efficiency of coolant additives. When untreated, all water is corrosive. Water having a high mineral content or corrosive materials is unfit for cooling system use.

X1.1.1.2 When preparing coolant mixtures, the water should be of such quality that it does not contain excessive solids, hardness salts, sulfates, or chlorides. In the absence of specific recommendations from the engine or vehicle manufacturer, see Table X1.1. Contact your local water department, the responsible government agency, or submit a water sample for analysis if there is a question on water quality.

X1.1.2 *Coolant Concentrates:*

X1.1.2.1 The coolant concentration should be maintained between 40 and 60 % glycol by volume, depending on the engine operating environment. Freeze protection will be provided in accordance with Table X1.2.

X1.1.3 *Prediluted Engine Coolants:*

X1.1.3.1 Prediluted glycol base engine coolants (50 volume % minimum) should be used without further dilution. If additional freeze protection is required, coolant concentrate may be added to the prediluted engine coolant to increase the total glycol content in the cooling system (see Table X1.2)

X1.1.4 *Supplemental Coolant Additive:*

X1.1.4.1 SCAs extend the life of the coolant by replenishing the additives that deplete during normal operation. SCAs, however, do not extend the freeze protection provided by the coolant concentrate.

X1.1.4.2 Heavy-duty engine users experience has shown that compositions below those defined in Annex A1.2 may not provide long term protection against cavitation corrosion (liner pitting). User experience and published information shows the presence of nitrite in an SCA or fully-formulated heavy-duty coolant is particularly effective in providing maximum protection.

TABLE X1.1 Suggested Water Quality Limits^A

Property	Specific Values	Test Method
Total solids, µg/g (ppm (grains/gal))	340 (20) max	Fed Method 2540B ^B
Total hardness, µg/g (ppm (grains/gal))	170 (10) max	D 1126
Chloride (Cl), µg/g (ppm (grains/gal))	40 (2.4) max	D 4327
Sulfate (SO ₄), µg/g (ppm (grains/gal))	100 (5.9) max	D 4327
pH	5.5 to 9.0	D 1293

^AAdopted from a survey by the D 15 Water Quality Task Force.
^BFederal Method 2540B, Total Dissolved Solids Dried at 103-105°C.

TABLE X1.2 Freeze Protection

Glycol Content, %	Approximate Freeze Protection Temperature; °C (°F)	
	Coolant Type I-FF	Coolant Type II-FF
40	-24 (-12)	-21 (-6)
50	-37 (-34)	-32 (-26)
60	-52 (-62)	-48 (-54)

X1.1.4.3 New technology consisting of other chemistries may provide satisfactory protection. Such chemistries can be established by agreement between producers and users upon demonstration of performance. Such demonstrations can consist of comparative laboratory cavitation tests or comparative damage rating from testing in operating engines. One or both of these options may be applied as determined in a specific agreement between parties. An engine test has been developed.⁵

X1.2 *Coolant Maintenance Recommendations:*

X1.2.1 If any of the following recommendations differ, follow the engine or vehicle manufacturer's recommendations.

X1.2.2 Use the coolant concentration recommended in this specification.

X1.2.3 Drain and flush the cooling system as recommended by the engine or vehicle manufacturer.

X1.2.4 Use water that meets the requirement in Table X1.1.

X1.2.5 Use accurate, reliable equipment, such as a refractometer, to measure coolant concentrate levels for freeze protections.

X1.2.6 Use the SCA manufacturer's recommended test kit when testing the coolant for proper additive concentration. Test kits shall indicate the degree of liner pitting protection present in the coolant.

X1.2.7 Check freezing point at two different levels when coolant concentrate and water is premixed and stored in bulk or drums to be sure mixing is complete before use.

X1.2.8 Use coolant mixed at the desired proportions for make-up.

X1.2.9 Use SCAs at the recommended maintenance dosage and intervals to control deposits, corrosion, water pump damage, and liner pitting.

X1.2.10 Periodically check bulk premixed coolant storage tanks for separation of chemicals and contamination.

X1.2.11 DO NOT add undiluted coolant concentrate as make-up coolant for coolant Types I-FF and II-FF.

X1.2.12 DO NOT add plain water as make-up coolant.

X1.2.13 DO NOT exceed 60 % coolant concentrate in Type I-FF and Type II-FF coolants. A coolant concentrate level greater than 68 % actually reduces freeze protection in ethylene glycol base coolants. The maximum recommended coolant concentrate level is 60 % which provides the freeze protection shown in X1.1.2.

X1.2.14 DO NOT exceed the manufacturer's recommended dosage of SCA or the recommended concentration of coolant concentrate. Over-concentration can result in plugged radiators, heater cores, and charge air coolers and can also cause water pump seal leaks.

X1.2.15 DO NOT reuse coolant that has been drained from a vehicle.

X1.2.16 DO NOT precharge the cooling system with SCA when using fully-formulated heavy-duty engine coolant.

X1.2.17 DO NOT use soluble oil additives.

X1.2.18 DO NOT use methyl alcohol or methoxypropanol base coolant concentrates.

X1.2.19 DO NOT use anti-leak additives if engine cooling system is equipped with a coolant filter, as this may plug the filter element. For all other cooling systems, follow the recommendations of the engine or vehicle manufacturer.

SUMMARY OF CHANGES

Committee D15 has identified the location of selected changes to this standard since the last issue (D 6210-06) that may impact the use of this standard.

(1) Revised Section 3.1 to allow the use of recycled glycol which was the intent when the specification was created. Coolants meeting this specification must meet the physical, chemical, and performance requirements of D 3306. The 25 µg/g (ppm) chloride limit is retained.

(2) The SCA compatibility information previously in A1.5 has been revised and placed in 4.2 along with a report requirement for D 5828.

(3) A change from ppm to µg/g has been made in 4.3, A1.2.1, A1.2.2 and in Table X1.1.

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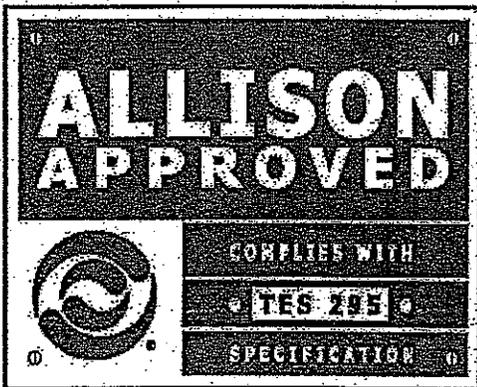
Schedule One TES 389 Fluids

TES 295™ Fluids Product Information Links

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Approved Product Listing as of 3/28/2011

TES 295 Approval Number	Approved Marketer	Product Brandname
AN-011001	Castrol Heavy Duty Lubricants	TranSynd
AN-031002	BP Lubricants	Autran Syn 295
AN-031003	Cognis Corporation	Engard 2805
AN-031004	International Truck & Engine Company	Fleetrite Synthetic ATF
AN-051005	ExxonMobil Lubricants and Petroleum Specialties Company	Mobil Delvac Synthetic ATF
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AN-101007	Volvo Trucks North America	Bulldog Synthetic ATF



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SERVICE PROCEDURE

**G-13502R2
MARCH 2013**

SUBJECT: SAFETY RECALL
Injection Pressure Regulator (IPR) wire connector on certain CE and RE school bus models built 7 December 2010 through 26 June 2012 with certain MaxxForce® DT, 9, and 10 engines.

REASON FOR THIS REVISION

The tools required for this procedure have been revised to remove an unnecessary tool listed. The tool currently listed in the Tool Information table also performs the function of the removed tool.

The service procedure has been modified. Carefully read Steps 5 through 8 and follow the instructions provided in this revision.

The standard repair times (SRTs) listed for the labor operations have changed. Please review these updated SRTs before submitting a claim.

DEFECT DESCRIPTION

The Injection Pressure Regulator (IPR) harness wire may possibly break due to vibrational damage at the crimp/wire interface. A break in the wire to the IPR could possibly cause an unexpected engine shutdown without warning.

MODELS INVOLVED

This Safety Recall involves certain CE and RE school bus models built 7 December 2010 through 26 June 2012 with certain MaxxForce® DT, 9, and 10 engines with feature codes 12NUK, 12NUL, 12NUM, 12NUN, 12NUP, and 12NUS.

PARTS INFORMATION

Part Number	Part Description	Quantity
1889325C94	Kit, IPR Valve	1

1889325C94 Kit Contents:

Part Number	Part Description	Quantity
3035970C91	IPR Valve Pigtail Assy	1
7093281C91	2-Pin Connector Service Kit	1
4328084R1	Instruction Sheet	1

TOOL INFORMATION

Tool Number	Part Description	Quantity
12-800-01	IPR Valve Socket Tool	1

SERVICE PROCEDURE

WARNING! PARK VEHICLE ON HARD FLAT SURFACE, TURN THE ENGINE OFF, SET THE PARKING BRAKE AND BLOCK THE WHEELS TO PREVENT THE VEHICLE FROM MOVING IN BOTH DIRECTIONS. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY AND/OR DEATH.

WARNING! ALWAYS WEAR SAFE EYE PROTECTION WHEN PERFORMING VEHICLE MAINTENANCE. FAILURE TO DO SO MAY RESULT IN SERIOUS EYE INJURY.

WARNING! ALLOW COMPONENTS IN ENGINE COMPARTMENT TO COOL BEFORE SERVICING ENGINE OR VEHICLE. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY AND/OR DEATH.

WARNING! KEEP FLAMES OR SPARKS AWAY FROM VEHICLE AND DO NOT SMOKE WHILE SERVICING THE VEHICLE'S BATTERIES. BATTERIES EXPEL EXPLOSIVE GASES. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, AND/OR DEATH.

WARNING! REMOVE THE GROUND CABLE FROM THE NEGATIVE TERMINAL OF THE BATTERY BOX BEFORE DISCONNECTING ANY ELECTRICAL COMPONENTS. ALWAYS CONNECT THE GROUND CABLE LAST. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, AND/OR DEATH.

Note: Refer to [Special Access Instructions for RE Bus](#).

1. Park vehicle on flat surface with wheels straight ahead.
2. Shift transmission to park or neutral and set parking brakes.
3. Install wheel chocks.
4. Unlatch and open hood.
5. Disconnect IPR connector from engine harness.
6. Refer to Instruction Sheet 4328084R1, included in Kit 1889325C94, for steps to remove old IPR and to install updated IPR.
7. Refer to Instruction Sheet 4328070R1, included in Kit 7093281C91, for additional steps for splicing.
8. Reconnect IPR connector to engine harness.
9. Run engine to verify proper operation, no fault codes present, and check for leaks.
10. Close and latch hood.
11. Remove wheel chocks.

Note: Refer to [Supplementary Installation Instructions for RE Bus](#).

END OF SERVICE PROCEDURE

LABOR INFORMATION

Operation Number	Description	Time
A40-13502-1	Install IPR with Pigtail Jumper (CE Bus)	0.6 hrs
A40-13502-2	Install IPR with Pigtail Jumper (RE Bus)	1.8 hrs

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with this campaign must be marked with a CTS-1075 Campaign Identification Label.

Complete the label and attach on a clean surface next to the vehicle identification number (VIN) plate.



The image shows a black rectangular label with a white central area. The text on the label is as follows:

DO NOT REMOVE

INTERNATIONAL

Campaign No. _____

VIN _____

Eng.# _____

COMPLETED

Service Location Code # _____

DO NOT REMOVE

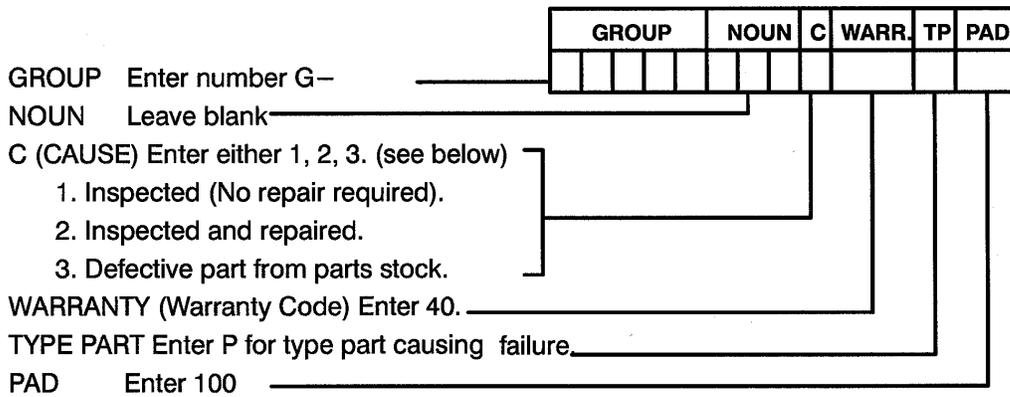
ADMINISTRATIVE/DEALER RESPONSIBILITIES

WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Safety Recall 13502.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Policy Manual, Section 7.1.8.

As with all claim submission, items acquired locally must be submitted in the "Other Charges" tab. The cost of any bulk items (bag of cable tie straps, roll of wire, barrel of oil, tube of silicone, etc.) should be prorated for the cost of the individual pieces/amount used during each repair.



UNITED STATES AND POSSESSIONS

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to replacement with an identical or reasonable equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

CANADA

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

EXPORT

Export Distributors should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your distributor location.

Export Distributors are to submit warranty claims in the usual manner making reference to this recall number.

Export Distributors are expected to provide full cooperation and follow-up with respect to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

NAVISTAR, INC

Technical Service Information

NAVISTAR[®]

TSI-13-47-01

Date: May 2013

Subject File: Bus Body

Subject: Passenger Seat Back Pan Inspection and Repair

Model: BE, CE, RE School and Commercial Bus

Start Date: February 2010 End Date: August 2011

DESCRIPTION

NOTE: Repair of the back pan attachment is the recommended repair rather than replacement of the back assembly.

This TSI applies to buses built February 2010 to August 2011 with feature code 48USV experiencing complaints of seat back pan rattles or bowing conditions. These instructions outline an inspection of the back pan-to-frame welds, which may indicate back pan attachment point failures on seats with increased fore and aft pressure applied to the back pan.

PARTS INFORMATION

Table 1. Tools Information

Description	Part Number
Cordless Drill	Obtain Locally
Drill Bit, #23	Obtain Locally
Crosstip Bit	Obtain Locally

Table 2. Parts Information

Part Number	Description	Quantity
435445001	Screw, #10	As Required

SERVICE PROCEDURE

 **WARNING:** Park vehicle on hard flat surface, turn the engine off, set the parking brake, and block the wheels to prevent the vehicle from moving in both directions. Failure to do so may result in property damage, personal injury, and / or death.

 **WARNING:** If the vehicle must be raised, do not work under the vehicle supported only by jacks. Jacks can slip or fall over, potentially resulting in property damage, personal injury, and / or death.

 **WARNING:** Always wear safe eye protection when performing vehicle maintenance. Failure to do so may result in personal injury and / or death.

 **WARNING:** Keep flames or sparks away from vehicle and do not smoke while servicing the vehicle's batteries. Batteries expel explosive gases. Failure to do so may result in property damage, personal injury, and / or death.

 **WARNING:** Remove the ground cable from the negative terminal of the battery box before disconnecting any electrical components. Always connect the ground cable last. Failure to do so may result in property damage, personal injury, and / or death.

1. Bring bus into shop and park on flat surface.
2. Shift transmission to Park or Neutral, set parking brake, and install wheel chocks.

SERVICE PROCEDURE (CONT.)

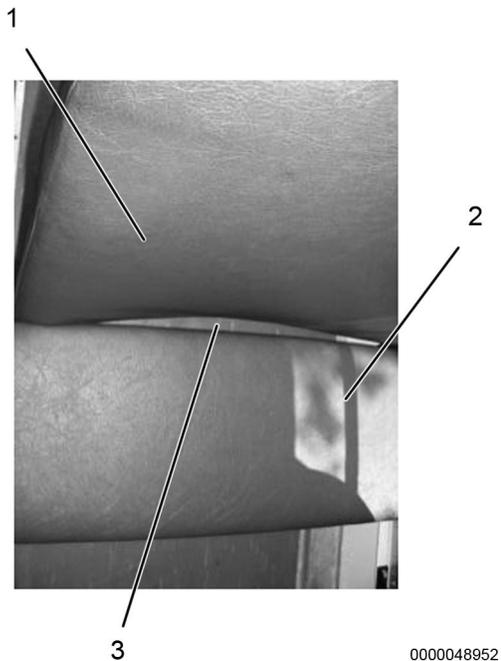


Figure 1. Bow in Seat Back.

1. Seat back
2. Seat cushion
3. Bowing

NOTE: To be most efficient, work from front to rear of bus for visual inspection of seat backs and rear to front while removing upholstery and foam assemblies.

3. Visually inspect passenger seat back (Figure 1, Item 1) for bowing (Figure 1, Item 3) between seat back and seat cushion (Figure 1, Item 2).

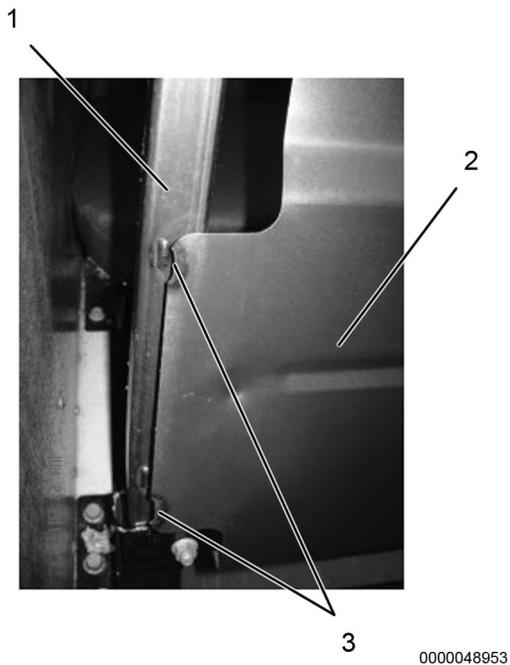
NOTE: It is common for all seats to have a slight rattle or noise condition when performing this test; however, if the back pan is loose, a distinctive rattle will be present.

4. Inspect seat back (Figure 1, Item 1) by rapping on top face of seat back with a hand or fist to listen for a rattle in back pan.
5. Unlatch and lift seat cushion (Figure 1, Item 2) of each seat back (Figure 1, Item 1) suspected of needing repair.

NOTE: Upholstery is attached at lower back of seat back with j-clip.

6. Unsnap j-clip, loosen foam from frame, and slide off upholstery and foam as assembly.
7. Install and latch seat cushion (Figure 1, Item 2) of each seat back (Figure 1, Item 1) needing repair and place upholstery and foam assembly on floor in front of seat.

SERVICE PROCEDURE (CONT.)



0000048953

Figure 2. Back Pan Welds.

1. Back pan frame
 2. Back pan
 3. Weld
8. Inspect welds (Figure 2, Item 3) on back pan (Figure 2, Item 2) and back pan frame (Figure 2, Item 1) to confirm back pan failure. If no weld failure is found, reinstall upholstery and foam assembly and snap j-clip

SERVICE PROCEDURE (CONT.)

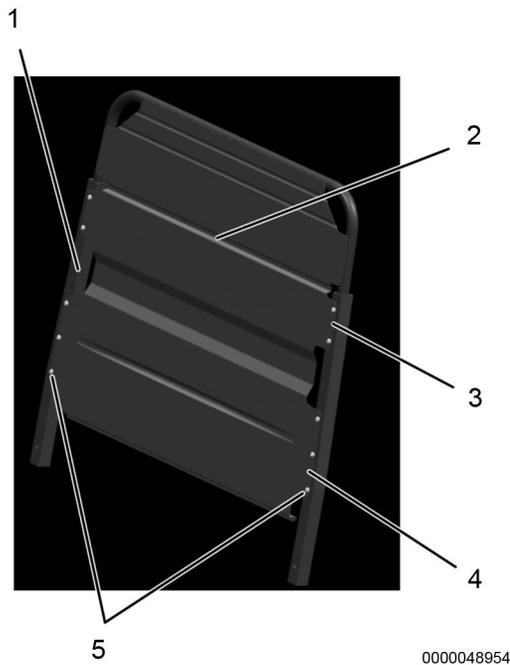


Figure 3. Back Pan.

1. Back pan frame
2. Back pan
3. Middle back pan tab
4. Lower back pan tab
5. Screw (10)

9. If bent, straighten back pan (Figure 3, Item 2) to fit it to original location.

NOTE: Drill hole in front side of back pan frame only, not through entire frame.

10. Mark 10 screw locations, and drill through middle and lower back pan tabs (Figure 3, Items 3 and 4) of back pan (Figure 3, Item 2) and back pan frame (Figure 3, Item 1).

11. To increase technician efficiency, repeat Steps 9 and 10 for each seat back pan needing repair.

NOTE: When repairing a back pan with weld failures, install three screws in each lower tab and two screws in each middle tab regardless of the original weld failure location. No screws are required in the back pan to round tube area unless a weld failure is found. If a weld failure in this area is found, drill and install one screw per failed weld location.

12. Secure back pan (Figure 3, Item 2) to back pan frame (Figure 3, Item 1) with 10 screws (Figure 3, Item 5) on each back pan drilled.

13. Unlatch and lift seat cushion (Figure 1, Item 2) of each seat back (Figure 1, Item 1) repaired.

14. Install seat back upholstery and foam assemblies on each seat repaired and snap j-clip.

SERVICE PROCEDURE (CONT.)

15. Use vacuum or suitable air supply to remove drill shavings from work area.
16. Install and latch seat cushion (Figure 1, Item 2) of each seat back (Figure 1, Item 1) repaired.
17. Remove wheel chocks.

SERVICE PROCEDURE

13512R1
OCTOBER 2013

**SUBJECT: NON-COMPLIANCE RECALL
IC Bus™ Passenger Seat Back Foam on Certain
AE, BE, CE, and RE School Bus Models Built 11
February 2010 through 17 June 2013 with IC Bus
Seats.**

DEFECT DESCRIPTION

The passenger seats may not fully conform to Federal Motor Vehicle Safety Standard No. 222 S5.3.2.2 or Canada Motor Vehicle Safety Standard No. 222 No. 12 (a) (b) General Performance Requirements. The lower outside corners of the seat back may not have sufficient padding to conform to all requirements of FMVSS 222 or CMVSS 222.

The following procedure outlines the installation of foam inserts into the lower outside corners of the seat backs to bring them into compliance.

REVISION STATEMENT

This recall has been revised. Pay close attention to Step 6. Before servicing the bus, check its repair history to see if any seats have had seat back foam replaced. The replacement foam will not allow proper installation of the foam inserts required for this repair.

MODELS INVOLVED

This non-compliance recall involves certain AE, BE, CE, and RE school bus models built 11 February 2010 through 17 June 2013 and equipped with IC Bus™ passenger seats.

PARTS INFORMATION

NOTE: To complete this repair, order the Seat Back Frame Foam Kit 8900246R91. Seat Back Frame Foam Kit 8900246R91 contains 20 pieces of Seat Foam 4037743C1, which is enough to repair 10 seat assemblies.

On the warranty claim, charge the number of individual pieces (4037743C1) used in the repair. Do not charge the kit part number (8900246R91) on the warranty claim. Depending on the number of seats in each bus, you may require all of the Seat Foam 4037743C1 pieces in the kit(S) you ordered. **DO NOT** discard the unused Seat Foam 4037743C1 pieces from the kit. They should be retained for use on the next bus needing this repair.

Part Number	Part Description	Quantity
(Order) 8900246R91	Foam, Seat Back Frame (Kit)	As Needed
(Charge Out) 4037743C1	Foam, Seat Back Frame (Individual Piece)	As Needed

SERVICE PROCEDURE

WARNING! PARK VEHICLE ON HARD FLAT SURFACE, TURN THE ENGINE OFF, SET THE PARKING BRAKE AND BLOCK THE WHEELS TO PREVENT THE VEHICLE FROM MOVING IN BOTH DIRECTIONS. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY AND / OR DEATH.

WARNING! IF THE VEHICLE MUST BE RAISED, DO NOT WORK UNDER THE VEHICLE SUPPORTED ONLY BY JACKS. JACKS CAN SLIP OR FALL OVER, POTENTIALLY RESULTING IN PROPERTY DAMAGE, PERSONAL INJURY AND / OR DEATH.

WARNING! ALWAYS WEAR SAFE EYE PROTECTION WHEN PERFORMING VEHICLE MAINTENANCE. FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY AND / OR DEATH.

WARNING! ALLOW COMPONENTS IN ENGINE COMPARTMENT TO COOL BEFORE SERVICING ENGINE OR VEHICLE. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY AND / OR DEATH.

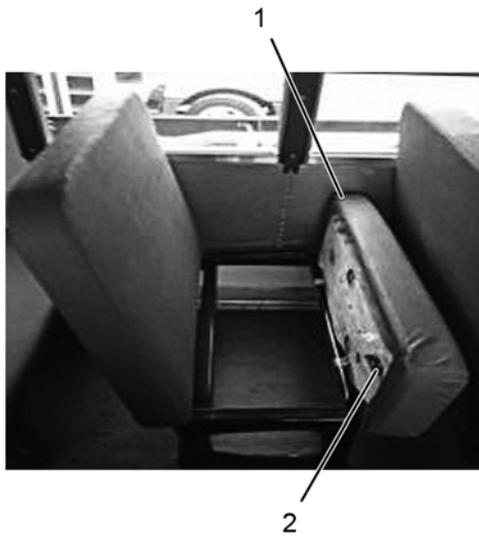
WARNING! KEEP FLAMES OR SPARKS AWAY FROM VEHICLE AND DO NOT SMOKE WHILE SERVICING THE VEHICLE'S BATTERIES. BATTERIES EXPEL EXPLOSIVE GASES. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, AND / OR DEATH.

WARNING! REMOVE THE GROUND CABLE FROM THE NEGATIVE TERMINAL OF THE BATTERY BOX BEFORE DISCONNECTING ANY ELECTRICAL COMPONENTS. ALWAYS CONNECT THE GROUND CABLE LAST. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, AND / OR DEATH.

NOTE: Only IC Bus™ standard passenger seats require the following repair. The following seats do NOT require the repair:

- Non-track-mounted seats with no seats behind them
- Rear wall seats
- Seats forward of a crash barrier
- Seats having 3-point belts or child restraint systems
- BTI seats
- Seats supplied by C.E. White, Freedman, or IMMI

1. Bring vehicle into shop and park on flat surface.
2. Shift transmission to Park or Neutral and set parking brakes.
3. Install wheel chocks.

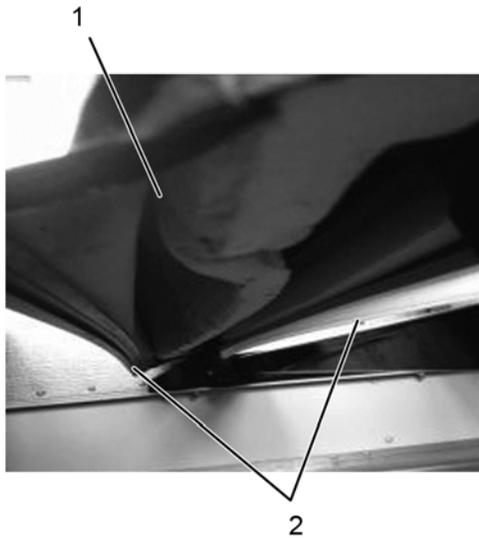


0000057661

Figure 1. Seat Cushion Bottom.

1. Seat cushion
2. Seat cushion latch

4. Reach under seat cushion (Figure 1, Item 1), unlatch (Figure 1, Item 2), and lift seat cushion to allow access to upholstery J-clip at bottom of seat back.



0000057662

Figure 2. Seat Back Bottom.

1. Seat back foam
2. Upholstery J-clip

5. At bottom of seat back upholstery, locate upholstery J-clip (Figure 2, Item 2), squeeze J-clip together, and unclasp.

NOTE: Inspection of existing foam can be performed visually or by touch.

6. If bus being serviced has had any seat back foam replaced, inspect foam.



0000061490

Figure 3. Replaced Seat Back Foam.

- a. Replaced seat back foam has a smooth square cut notch at affected area (Figure 3). No inserts are necessary. Proceed to Step 11.



0000061491

Figure 4. Original Seat Back Foam.

- b. Original seat back foam has a coarse bevel gut notch in affected area (Figure 4). Foam inserts must be installed. Proceed to Step 7.

NOTE: Foam inserts can be installed without lifting foam / upholstery (Figure 2) assembly. However, if lifting foam / upholstery assembly aids in installation process, slide foam / upholstery assembly up seat back frame slightly to expose installation area.



0000057663

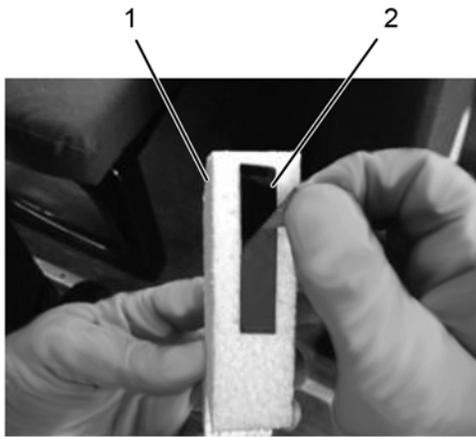
Figure 5. Aisle-Side Insert Installation Point.



0000057664

Figure 6. Seat Back Pan.

7. Using a clean rag, wipe installation points on aisle and wall side of seat back pan (Figure 5 and 6) to remove loose debris / dust.



0000057665

Figure 7. Foam Insert.

1. Foam insert
2. Adhesive tape

8. Remove adhesive tape (Figure 7, Item 2) from foam insert (Figure 7, Item 1).

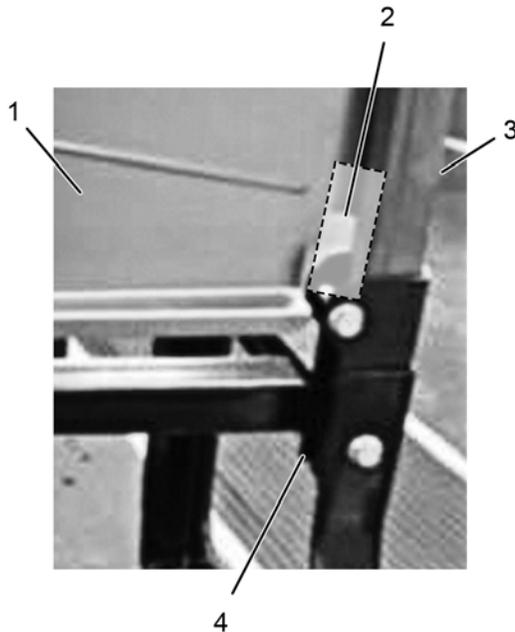
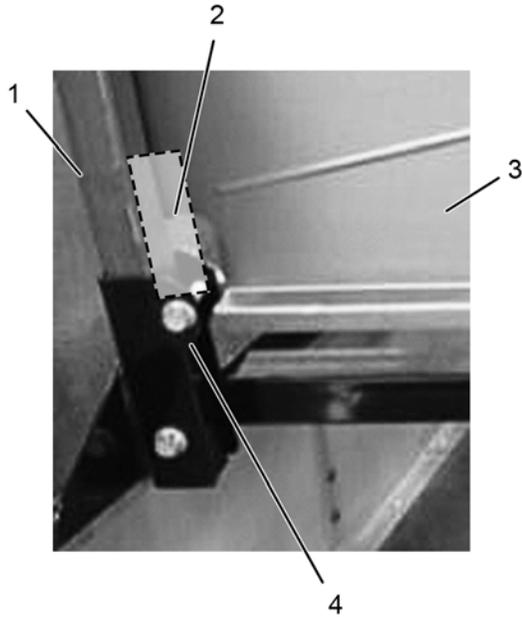


Figure 8. Aisle-Side Seat Back.

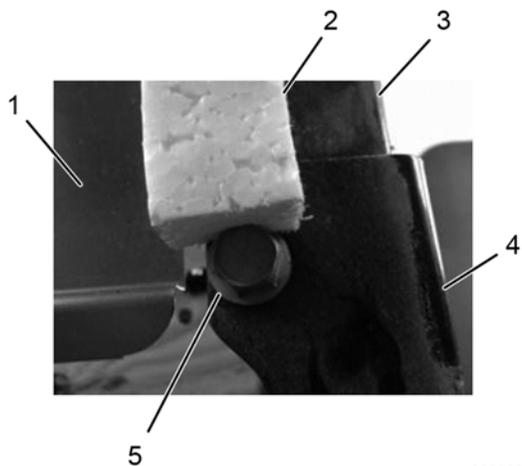
1. Seat back pan
2. Foam installation point
3. Seat back outer frame square tube
4. Seat riser



0000057666

Figure 9. Wall-Side Seat Back.

1. Seat back outer frame square tube
2. Foam installation point
3. Seat back pan
4. Seat riser



0000057668

Figure 10. Aisle-Side Foam Installation.

1. Seat back pan
2. Foam insert
3. Seat back outer frame square tube
4. Seat riser
5. Seat back upper mounting bolt

NOTE: Wall-side installation is in the same point on opposite side of seat back.

NOTE: Foam inserts can be installed without lifting foam / upholstery (Figure 2) assembly. However, if lifting foam / upholstery assembly aids in installation process, slide foam / upholstery assembly up seat back frame slightly to expose installation area.

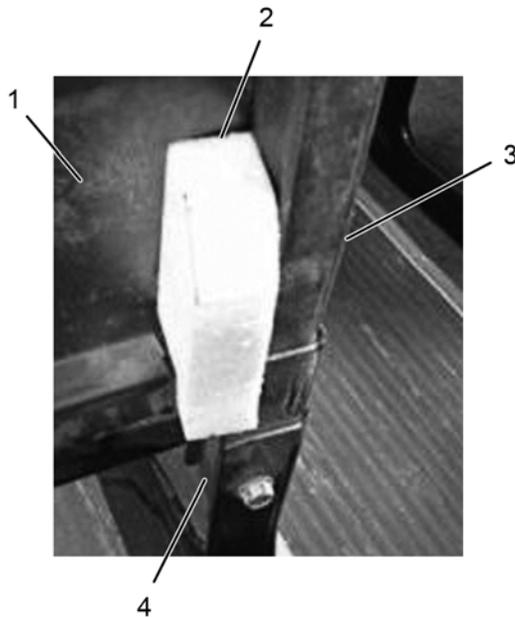
9. Secure foam insert (Figure 10, Item 2) on aisle-side seat back pan (Figure 10, Item 1), positioned outward against outer frame square tube (Figure 10, Item 3), and down against seat riser (Figure 10, Item 4) and seat back upper mounting bolt head (Figure 10, Item 5).



0000057670

Figure 11. Foam Installation with Upholstery in Place.

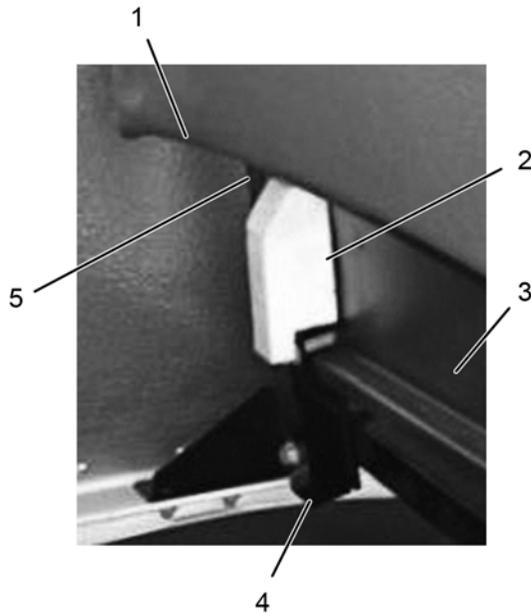
- a. Installation of foam block with foam / upholstery in place (Figure 11).
 - i. Pull foam / upholstery assembly outward.
 - ii. Reach between foam and seat back pan to position and adhere foam insert to seat back pan.



0000057672

Figure 12. Aisle-Side Foam Installation with Upholstery Moved.

1. Seat back pan
 2. Foam insert
 3. Seat back outer frame square tube
 4. Seat riser
- b. Installation of foam insert with foam / upholstery pulled upward (Figure 12).
- i. Slide foam / upholstery assembly up frame to expose lower area of seat back pan (Figure 12, Item 1).
 - ii. Position and adhere foam insert (Figure 12, Item 2) to back pan.



000057673

Figure 13. Wall-Side Foam Installation with Upholstery Moved.

1. Foam / upholstery assembly
2. Foam insert
3. Seat back pan
4. Seat riser
5. Seat back outer frame square tube

10. Repeat Steps 8 and 9 on wall side of seat back pan.

11. Reinstall seat back foam / upholstery assembly (Figure 13, Item 1) to installed position and reattach J-clip.

- a. To aid in reattaching J-clip, pull upholstery downward on seat back, roll front J-clip rearward under seat back, clip rear J-clip to forward section, and squeeze across entire length of J-clip to fully latch.

12. Close and latch seat cushion.

13. Repeat Steps 4 through 12 on remaining seats.

14. Clean any remaining material from unit.

15. Remove wheel chocks.

END OF SERVICE PROCEDURE

LABOR INFORMATION

NOTE: Use only one labor SRT according to the number of seats repaired.

Operation Number	Description	Time
A40-13512-1	Install Inserts: One to Three Seats	0.3 hr
A40-13512-2	Install Inserts: Four to Six Seats	0.4 hr
A40-13512-3	Install Inserts: Seven to Nine Seats	0.5 hr
A40-13512-4	Install Inserts: Ten to Twelve Seats	0.6 hr
A40-13512-5	Install Inserts: Thirteen to Fifteen Seats	0.7 hr
A40-13512-6	Install Inserts: Sixteen to Eighteen Seats	0.8 hr
A40-13512-7	Install Inserts: Nineteen to Twenty-one Seats	0.9 hr
A40-13512-8	Install Inserts: Twenty-two to Twenty-four Seats	1.0 hr
A40-13512-9	Install Inserts: Twenty-five to Twenty-six Seats	1.1 hrs

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with this campaign must be marked with a CTS-1075 Campaign Identification Label.

Complete the label and attach on a clean surface next to the vehicle identification number (VIN) plate.

DO NOT REMOVE
INTERNATIONAL
Campaign No.
VIN
Eng.#
COMPLETED
Service Location Code #
DO NOT REMOVE

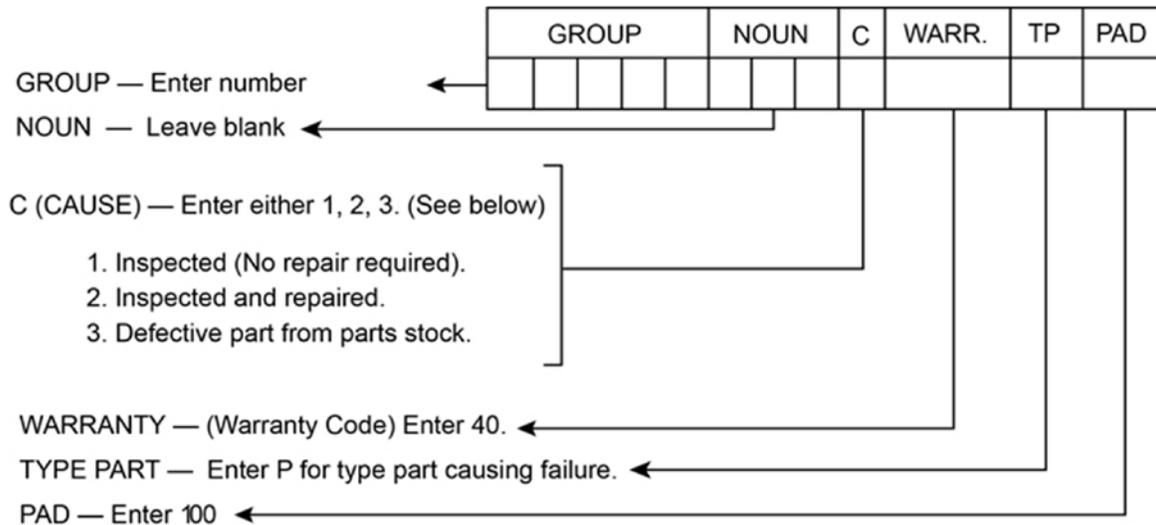
ADMINISTRATIVE / DEALER RESPONSIBILITIES

WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Safety Recall 13512.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Policy Manual, Section 7.1.8.

As with all claim submissions, items acquired locally must be submitted in the "Other Charges" tab. The cost of any bulk items (such as a bag of cable tie straps, roll of wire, a barrel of oil, or a tube of silicone) should be prorated for the cost of the individual pieces / amount used during each repair.



0000047910

UNITED STATES AND POSSESSIONS

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to replacement with an identical or reasonable equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records, and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

CANADA

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records, and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

NAVISTAR, INC.

Technical Service Information



TSI-13-04-01

Date: OCTOBER 2013

Subject File: BRAKES

Subject: Frame Mounted Battery Box - Air Drier Service Procedure

Model: CE Bus

DESCRIPTION

Group 31 frame mounted battery box includes placement of air drier, AD-9 and AD-IP, within frame mounted outer brackets. With placement of air drier within mounting brackets, service procedures for maintenance of air drier will need to be adjusted.

PARTS INFORMATION

No parts required.

SERVICE PROCEDURE

 **WARNING:** Park vehicle on hard flat surface, turn the engine off, set the parking brake, and block the wheels to prevent the vehicle from moving in both directions. Failure to do so may result in property damage, personal injury, and / or death.

 **WARNING:** If the vehicle must be raised, do not work under the vehicle supported only by jacks. Jacks can slip or fall over, potentially resulting in property damage, personal injury, and / or death.

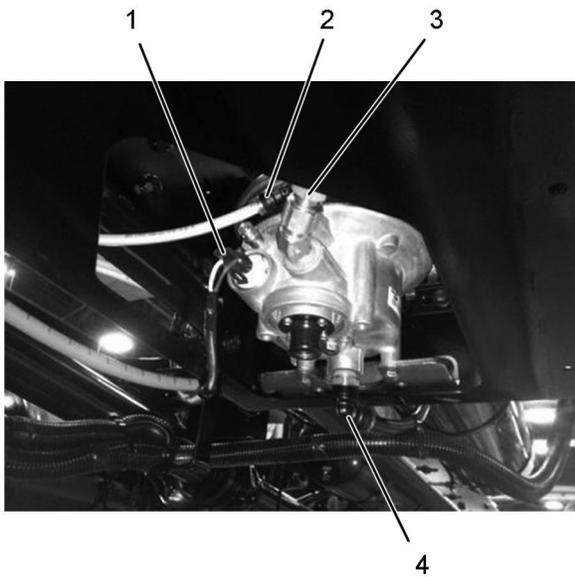
 **WARNING:** Always wear safe eye protection when performing vehicle maintenance. Failure to do so may result in personal injury and / or death.

 **WARNING:** Keep flames or sparks away from vehicle and do not smoke while servicing the vehicle's batteries. Batteries expel explosive gases. Failure to do so may result in property damage, personal injury, and / or death.

 **WARNING:** Remove the ground cable from the negative terminal of the battery box before disconnecting any electrical components. Always connect the ground cable last. Failure to do so may result in property damage, personal injury, and / or death.

1. Bring vehicle into shop and park on flat surface.
2. Shift transmission to Park or Neutral, set parking brake, and install wheel chocks.
3. Open battery box and disconnect negative battery cable(s) from batteries.
4. Drain air tanks.

SERVICE PROCEDURE (CONT.)



0000060959

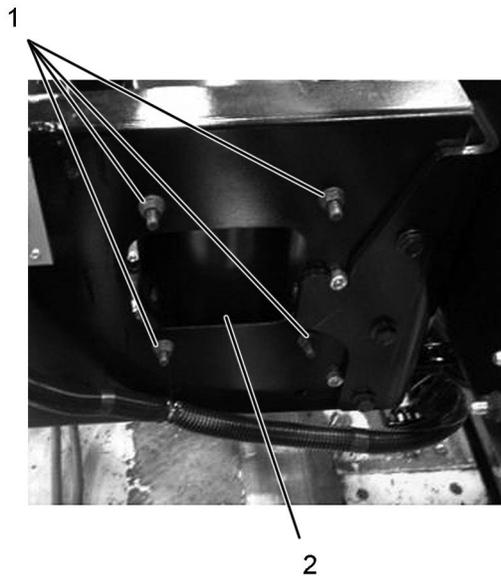
Figure 1. Disconnecting Air Drier.

1. Air drier harness connector
2. Control line and push-to-connect line fitting
3. Supply line and fitting
4. Discharge line and push-to-connect line fitting

NOTE: Disconnection of supply line is not required.

5. Disconnect air drier harness connector (Figure 1, Item 1) from air drier connector.
6. Disconnect control line from push-to-connect line fitting (Figure 1, Item 2), 5/8-in BLACK air line.
7. Disconnect discharge line from push-to-connect line fitting (Figure 1, Item 4), 3/8-in GRAY air line.

SERVICE PROCEDURE (CONT.)



000060960

Figure 2. Air Drier Attaching Hardware.

1. Nut, bolt, lockwasher (4)
2. Air drier

8. Remove four nuts, lockwashers, and bolts (Figure 2, Item 1) from air drier (Figure 2, Item 2).

SERVICE PROCEDURE (CONT.)



000060961

Figure 3. Air Drier Removed for Service (Top View).



000060962

Figure 4. Air Drier Removed for Service (Bottom View).

9. Lower air drier through service access hole in bottom of frame mounted battery box assembly and support as required for service procedure (Figures 3 and 4).
10. Service air drier as directed by Manufacturer, [AD-9 Service Instructions](#), or [AD-IP Service Instructions](#).

SERVICE PROCEDURE (CONT.)



000060962

Figure 5. Air Drier Installation (Bottom View).

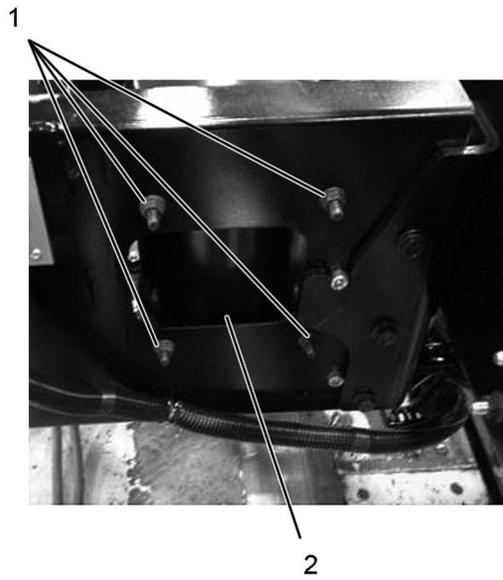


000060961

Figure 6. Air Drier Installation (Top View).

11. Raise air drier through service access hole in bottom of frame mounted battery box assembly, and support as required for installation (Figures 5 and 6).

SERVICE PROCEDURE (CONT.)



000060960

Figure 7. Air Drier Attaching Hardware.

1. Nut, bolt, lockwasher (4)
2. Air drier

12. Install four bolts, lockwashers, and nuts (Figure 7, Item 1) onto air drier (Figure 7, Item 2).

SERVICE PROCEDURE (CONT.)

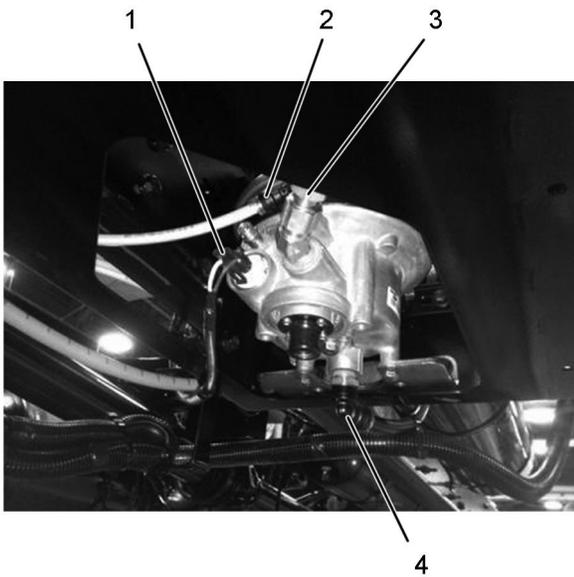


Figure 8. Connecting Air Drier.

1. Air drier harness connector
2. Control line and push-to-connect line fitting
3. Supply line and fitting
4. Discharge line and push-to-connect line fitting

! WARNING: Make sure push-to-connect lines are free from damage and / or debris before installing. Failure to do so may result in property damage, personal injury, and / or death.

NOTE: If supply line was disconnected for servicing, connect supply line.

13. Connect discharge line into push-to-connect line fitting (Figure 8, Item 4), 3/8-in GRAY air line.
14. Connect control line into push-to-connect line fitting (Figure 8, Item 2), 5/8-in BLACK air line.

! WARNING: Make sure air drier harness connector is free from damage and / or debris before connecting. Failure to do so may result in property damage, personal injury, and / or death.

15. Connect air drier harness connector (Figure 8, Item 1) onto air drier connector.
16. Connect negative battery cable(s) onto batteries and close battery box.
17. Start engine and allow air pressure to reach operating range.
18. Remove wheel chocks.

SERVICE PROCEDURE

13513
OCTOBER 2013

SUBJECT: **NONCOMPLIANCE RECALL**
Restraining barrier on certain CE and RE school bus models built 20 August 2012 through 04 September 2012

DEFECT DESCRIPTION

Certain operator's side restraining barriers may not meet one of the forward push test criteria of FMVSS 222 or CMVSS 222.

MODELS INVOLVED

This Noncompliance Recall involves certain CE and RE school bus models built 20 August 2012 thru 4 September 2012.

PARTS INFORMATION

NOTE: The scope of this campaign is very narrow in that it affects only 77 buses. In order to properly manage the inventory available to complete this repair on all vehicles, DO NOT pre-order barrier frames for inventory and only order barrier frames when customer repair request is confirmed. This will allow barrier frames to be available for each dealer when a customer requests repair.

Part Number	Part Description	Quantity
2210544C6	Frame, ASM Crash Barrier HB 39	1

SERVICE PROCEDURE

WARNING! PARK VEHICLE ON HARD FLAT SURFACE, TURN THE ENGINE OFF, SET THE PARKING BRAKE AND BLOCK THE WHEELS TO PREVENT THE VEHICLE FROM MOVING IN BOTH DIRECTIONS. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY AND / OR DEATH.

WARNING! IF THE VEHICLE MUST BE RAISED, DO NOT WORK UNDER THE VEHICLE SUPPORTED ONLY BY JACKS. JACKS CAN SLIP OR FALL OVER, POTENTIALLY RESULTING IN PROPERTY DAMAGE, PERSONAL INJURY AND / OR DEATH.

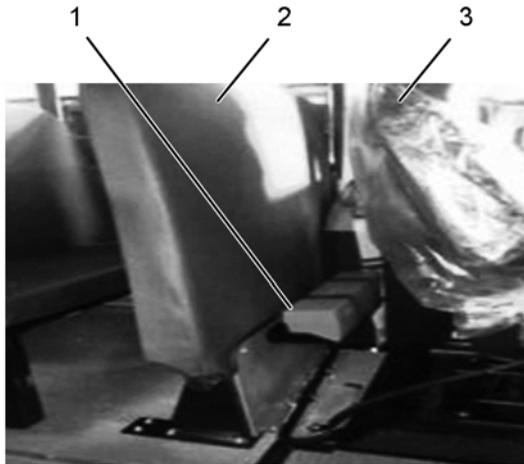
WARNING! ALWAYS WEAR SAFE EYE PROTECTION WHEN PERFORMING VEHICLE MAINTENANCE. FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY AND / OR DEATH.

WARNING! ALLOW COMPONENTS IN ENGINE COMPARTMENT TO COOL BEFORE SERVICING ENGINE OR VEHICLE. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY AND / OR DEATH.

WARNING! KEEP FLAMES OR SPARKS AWAY FROM VEHICLE AND DO NOT SMOKE WHILE SERVICING THE VEHICLE'S BATTERIES. BATTERIES EXPEL EXPLOSIVE GASES. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, AND / OR DEATH.

WARNING! REMOVE THE GROUND CABLE FROM THE NEGATIVE TERMINAL OF THE BATTERY BOX BEFORE DISCONNECTING ANY ELECTRICAL COMPONENTS. ALWAYS CONNECT THE GROUND CABLE LAST. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, AND / OR DEATH.

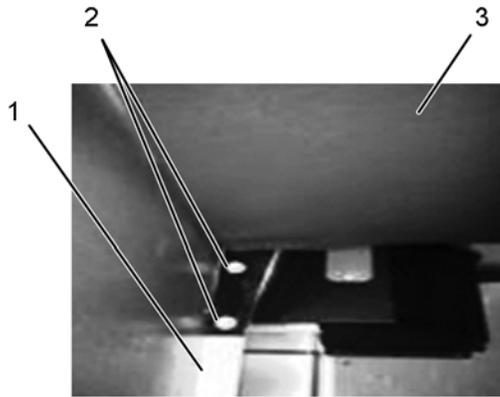
1. Bring vehicle into shop and park on flat surface.
2. Shift transmission to Park or Neutral and set parking brakes.
3. Install wheel chocks.



0000058794

Figure 1. Restraining Barrier.

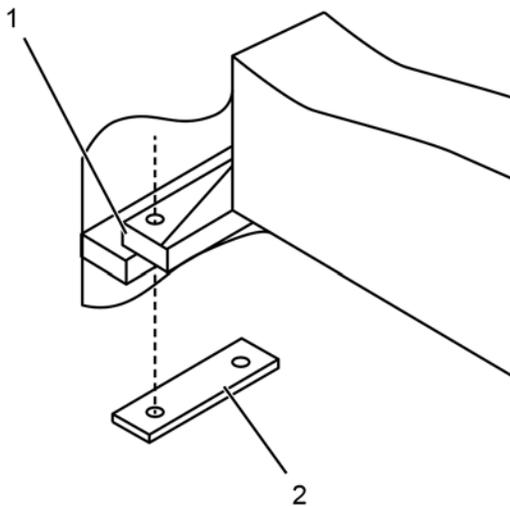
1. LH forward barrier mounted option kit
 2. Restraining barrier
 3. Operator's seat
4. Slide operator's seat (Figure 1, Item 3) to most forward position.
 5. If unit is equipped with LH forward barrier mounted option kit (such as Triangle Kit, Modesty Panel, and Safety Kit) (Figure 1, Item 1), remove from passenger restraining barrier (Figure 1, Item 2) and store for reinstallation.



000058795

Figure 2. Seat Rail and Fasteners.

1. Seat rail
2. Fastener (2)
3. Restraining barrier

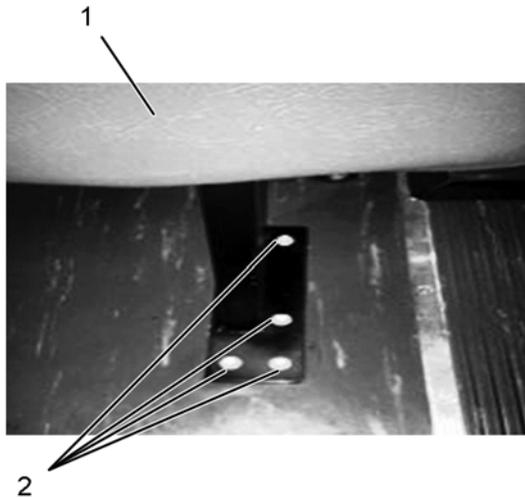


000058798

Figure 3. Threaded Plate.

1. Seat rail
2. Threaded plate

6. Remove two fasteners (Figure 2, Item 2) securing restraining barrier (Figure 2, Item 3) to seat rail (Figure 2, Item 1). Note position and orientation of threaded plate (Figure 3, Item 2) on underside of seat rail (Figure 3, Item 1) for reinstallation.

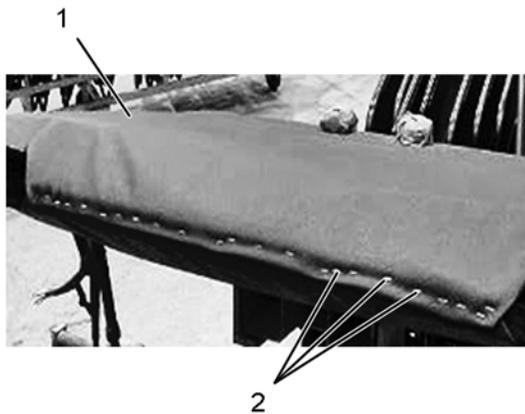


0000058797

Figure 4. Floor Mounting Fasteners.

- 1. Restraining barrier
- 2. Fastener (4)

7. With an assistant positioned under bus, remove four fasteners (Figure 4, Item 2) securing restraining barrier (Figure 4, Item 1) to floor. Note position of under floor supports (if present), so they will be installed in same position and orientation.
8. Remove barrier from unit and place on suitable work bench.



0000058796

Figure 5. Upholstery Staples.

- 1. Restraining barrier bottom
- 2. Upholstery staples

9. Remove upholstery staples (Figure 5, Item 2) from bottom of barrier (Figure 5, Item 1).
10. Remove upholstery and foam from barrier frame as an assembly. Note orientation of foam because it cannot be installed backward.

NONCOMPLIANCE RECALL 13513

11. Remove any edge trim applied to aisle side of barrier and reinstall on new restraining barrier frame.
12. Install upholstery and foam assembly on new barrier. Verify that foam is not installed backward.
13. Staple upholstery to barrier tack strip following procedure below:
 - a. Starting with material on front of barrier, fold cut ends of upholstery inside so edge is hidden.
 - b. Pull material on back of barrier and hold firmly against wood bottom (tack strip).
 - c. Working from outside to middle, staple material multiple times to secure it in place.
 - d. Pull front of cover snug over stapled bottom and hold firmly against wood bottom (tack strip).
 - e. Staple material multiple times to secure it in place.
14. Move completed barrier into bus and install.
15. Install four bolts securing barrier to floor, two bolts securing barrier to seat rail, and threaded plate under seat rail. Tighten seat rail bolts finger tight.
16. With an assistant positioned under bus, reinstall under floor supports (if present), and tighten four bolts securing barrier to floor to 18 lb-ft (24.4 N·m).
17. Tighten two bolts securing barrier to seat to 18 lb-ft (24.4 N·m).
18. Reapply undercoating on barrier mounting fasteners under the bus.
19. Reinstall barrier mounted optional equipment if removed in Step 5.
20. Clean work area and reposition operator's seat.
21. Remove wheel chocks.

END OF SERVICE PROCEDURE

LABOR INFORMATION

Operation Number	Description	Time
A40-13513-1	Crash Barrier Replacement	0.4 hr

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with this campaign must be marked with a CTS-1075 Campaign Identification Label.

Complete the label and attach on a clean surface next to the vehicle identification number (VIN) plate.



The image shows a black rectangular label with white text. At the top, it says "DO NOT REMOVE". Below that, in a white rounded rectangle, it says "INTERNATIONAL". Underneath, there are fields for "Campaign No.", "VIN", and "Eng.#". Below these fields, it says "COMPLETED" and "Service Location Code #". At the bottom, it says "DO NOT REMOVE".

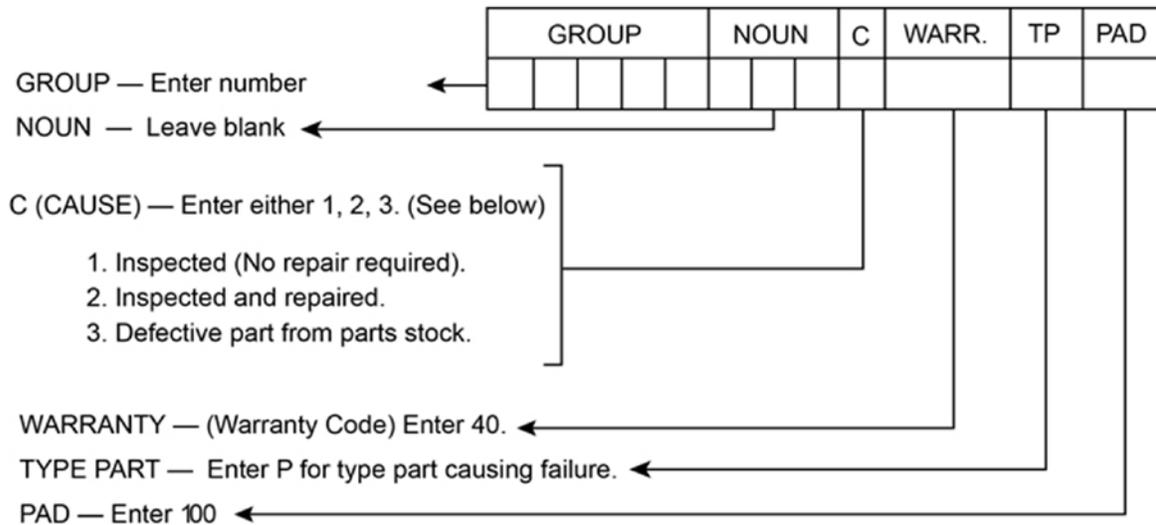
ADMINISTRATIVE / DEALER RESPONSIBILITIES

WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Safety Recall 13513.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Policy Manual, Section 7.1.8.

As with all claim submissions, items acquired locally must be submitted in the "Other Charges" tab. The cost of any bulk items (such as a bag of cable tie straps, roll of wire, a barrel of oil, or a tube of silicone) should be prorated for the cost of the individual pieces / amount used during each repair.



0000047910

UNITED STATES AND POSSESSIONS

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to replacement with an identical or reasonable equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list

NONCOMPLIANCE RECALL 13513

may contain information obtained from state motor vehicle registration records, and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

CANADA

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records, and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

EXPORT

Export Distributors should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your distributor location.

Export Distributors are to submit warranty claims in the usual manner making reference to this recall number.

Export Distributors are expected to provide full cooperation and follow-up with respect to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

NAVISTAR, INC.

NONCOMPLIANCE RECALL 13513

SERVICE PROCEDURE

13518
JANUARY 2014

SUBJECT: VOLUNTARY EMISSIONS RECALL

Navistar has decided that a defect which relates to engine emissions exists in certain DuraStar[®] and RXT[®] model trucks, 3200, BE S, CE C, CE S, and HC C model Buses, and WorkHorse[®] models built 07 February 2007 through 31 August 2010 with certain 2007, 2008, and 2009 model year MaxxForce[®] 7 engines.

DEFECT DESCRIPTION

This Emissions Recall applies to certain bus and truck models (listed below) that were built with MaxxForce[®] 7 engines between 07 February 2007 and 31 August 2010. This campaign will require recalibration of the engine ECM, cleaning of the diesel oxidation catalyst (DOC), inspection for plugged exhaust back pressure (EBP) tube, and resetting the oil level. This will reduce excessive fuel dilution and DOC face-plugging issues.

MODELS INVOLVED

This Emissions Recall includes certain vehicles listed below:

- DuraStar[®] and RXT[®] trucks built 07 February 2007 through 19 July 2010
- 3200, BE C Bus, BE S Bus, CE C Bus, and HC C Bus built 24 March 2007 through 31 August 2010
- WorkHorse[®] trucks built 22 December 2008 through 25 August 2010

PARTS INFORMATION

Part Number	Part Description	Quantity
2593986C1	DPF Gasket (as needed)	1

SERVICE PROCEDURE

WARNING! PARK VEHICLE ON HARD FLAT SURFACE, TURN THE ENGINE OFF, SET THE PARKING BRAKE AND INSTALL WHEEL CHOCKS TO PREVENT THE VEHICLE FROM MOVING IN BOTH DIRECTIONS. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY AND / OR DEATH.

WARNING! IF THE VEHICLE MUST BE RAISED, DO NOT WORK UNDER THE VEHICLE SUPPORTED ONLY BY JACKS. JACKS CAN SLIP OR FALL OVER, POTENTIALLY RESULTING IN PROPERTY DAMAGE, PERSONAL INJURY AND / OR DEATH.

WARNING! ALWAYS WEAR SAFE EYE PROTECTION WHEN PERFORMING VEHICLE MAINTENANCE. FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY AND / OR DEATH.

WARNING! ALLOW COMPONENTS IN ENGINE COMPARTMENT TO COOL BEFORE SERVICING ENGINE OR VEHICLE. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY AND / OR DEATH.

WARNING! KEEP FLAMES OR SPARKS AWAY FROM VEHICLE AND DO NOT SMOKE WHILE SERVICING THE VEHICLE'S BATTERIES. BATTERIES EXPEL EXPLOSIVE GASES. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, AND / OR DEATH.

WARNING! REMOVE THE GROUND CABLE FROM THE NEGATIVE TERMINAL OF THE BATTERY BOX BEFORE DISCONNECTING ANY ELECTRICAL COMPONENTS. ALWAYS CONNECT THE GROUND CABLE LAST. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, AND / OR DEATH.

ECM RECALIBRATION

NOTE: If AutoUpgrade or PocketMaxx™ functionality is not available, use NETS.

1. Verify ECM has latest software by referring to vehicle calibration scorecard on International® Service PortalSM system.

If calibration scorecard indicates that calibration is not current, engine must be reprogrammed as follows:

- ECM programming method for 2007 MaxxForce® 7 engines is to use NETS or AutoUpgrade. For instructions, see IK2600010 - NETS Programming and Troubleshooting Guide. Use Update to Latest Calibration programming option or IK2600082 - Auto Upgrade Programming Instructions. For PocketMaxx™: IK3300001 - Updating Engine Calibrations with PocketMaxx™.
 - These articles provide general information about each reprogramming method and software, with links to specific instructions for each.
2. If assistance is required, contact Vehicle Programming by creating an iKNOW case file, or by calling 1-800-336-4500 and selecting options 3, 1, and 1.

ECM BACK PRESSURE (EBP) TUBE INSPECTION

1. Park vehicle on flat surface, shift transmission to park or neutral, and set parking brake.
2. Install wheel chocks.
3. Open hood.
4. Remove inner fender.
5. Remove air cleaner harness.
6. Remove air cleaner and bracket.
7. Disconnect EBP sensor harness connector.
8. Remove EBP sensor.
9. Make sure all tools and parts are secured so they will not fall.

10. Start engine and check for exhaust discharge from EBP tube.
 - a. If no exhaust is observed from EBP tube, create a case file for proper repair procedure.
 - b. If exhaust is observed from EBP tube, follow remaining steps of this procedure.
11. Stop engine.
12. Install EBP sensor.
13. Using torque wrench, tighten EBP sensor to 15 lb-ft (20 N•m).
14. Connect EBP sensor harness connector.
15. Install air cleaner bracket and air cleaner.
16. Install air cleaner sensor harness.
17. Install inner fender.

SET ENGINE OIL LEVEL

1. Check engine oil. If oil level is above MAX or FULL mark on dipstick, drain oil from engine until oil is at MAX or FULL mark.
2. Close hood.

DIESEL OXIDATION CATALYST (DOC) CLEANING

1. DOC cleaning is required after calibration is complete. Refer to IK1200478 - On-Vehicle DOC Cleaning MaxxFORCE® 7 Engines.
2. Remove wheel chocks.

ADDITIONAL REQUIREMENTS FOR DEALERS AND CUSTOMERS OPERATING IN CALIFORNIA

Note: The following step is required only for dealers and customers operating in the state of California.

After completing this recall, dealer must fill out salmon-colored Proof of Correction certificate and provide a copy to customer.

Use either Figure 1 (certificate to print on white paper) or Figure 2 (certificate to print on salmon-colored paper) to print DMV certificates.

Vehicle Emission Recall - Proof of Correction				
License Number	Make	Year Model	Body Type	Vehicle Identification Number <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div>
Manufacturer _____			Recall Number _____	
The above described vehicle has been repaired, modified and/or equipped with new emission control devices to meet applicable California Emission Control Laws.				
Dealer's _____		Address, City, State _____		
		Dealership's Authorized		
		X		
Return this certificate to DMV <u>only</u> when required - otherwise retain for your records.				

0000047743

Figure 1. DMV Certificate, Salmon (Print on 8.5 x 11 inch White Paper).

Vehicle Emission Recall - Proof of Correction				
License Number	Make	Year Model	Body Type	Vehicle Identification Number <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div>
Manufacturer _____			Recall Number _____	
The above described vehicle has been repaired, modified and/or equipped with new emission control devices to meet applicable California Emission Control Laws.				
Dealer's _____		Address, City, State _____		
		Dealership's Authorized		
		X		
Return this certificate to DMV <u>only</u> when required - otherwise retain for your records.				

0000047729

Figure 2. DMV Certificate, White (Print on 8.5 x 11 inch Salmon Paper).

END OF SERVICE PROCEDURE

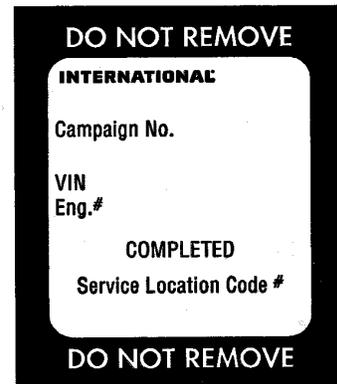
LABOR INFORMATION

Operation Number	Description	Time
A40-13518-1	Inspect EBP Tube, Clean DOC, Recalibrate ECM, Adjust Oil Level	1.5 hrs

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with this campaign must be marked with a CTS-1075 Campaign Identification Label.

Complete the label and attach on a clean surface next to the vehicle identification number (VIN) plate.



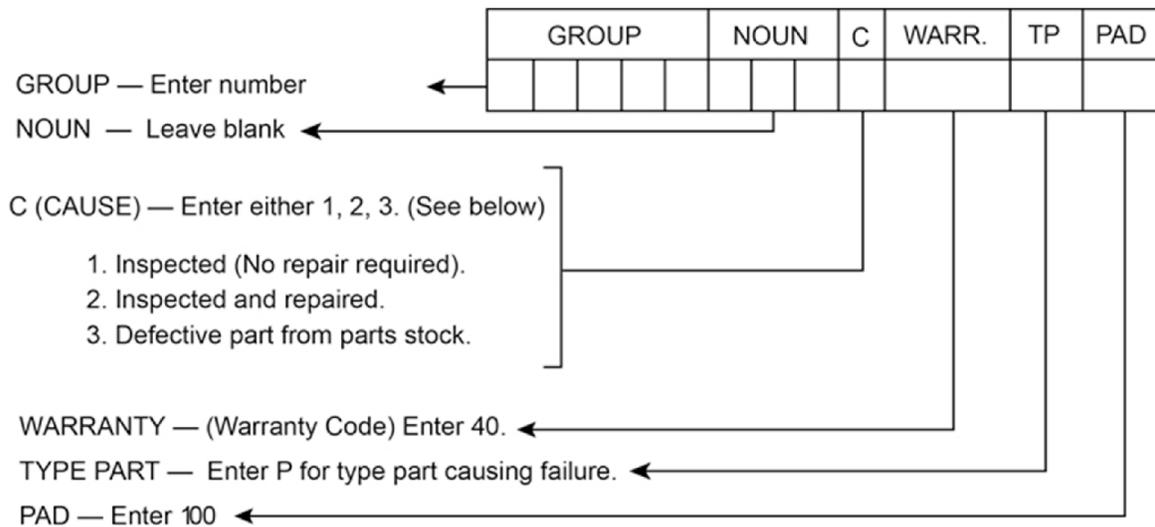
ADMINISTRATIVE / DEALER RESPONSIBILITIES

WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Emissions Recall 13518.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Policy Manual, Section 7.1.8.

As with all claim submissions, items acquired locally must be submitted in the "Other Charges" tab. The cost of any bulk items (such as a bag of cable tie straps, roll of wire, a barrel of oil, or a tube of silicone) should be prorated for the cost of the individual pieces / amount used during each repair.



0000047910

UNITED STATES AND POSSESSIONS

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records, and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

CANADA

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list

may contain information obtained from state motor vehicle registration records, and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

EXPORT

Export Distributors should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your distributor location.

Export Distributors are to submit warranty claims in the usual manner making reference to this recall number.

Export Distributors are expected to provide full cooperation and follow-up with respect to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

NAVISTAR, INC.

SERVICE PROCEDURE

13519
FEBRUARY 2014

SUBJECT: NON-COMPLIANCE RECALL
Driver seat belt buckle on certain AE, BE, CE, and RE school bus models built 8 August 2013 thru 14 November 2013 having certain IMMI seat belt assemblies with L9 end-release seat belt buckles

DEFECT DESCRIPTION

Certain IMMI seat belt assemblies with L9 end-release seat belt buckles may fail to conform to the requirements of Federal Motor Vehicle Safety Standard No. 209 "Seat Restraint Systems."

MODELS INVOLVED

This non-compliance recall involves certain AE, BE, CE, and RE school bus models built 8 August 2013 thru 14 November 2013 having certain IMMI seat belt assemblies with L9 end-release seat belt buckles.

PARTS INFORMATION

For any seat belt buckle requiring replacement, contact IMMI field sales fieldservice@imminet.com or call 317-867-8496 with part numbers and quantities of each part number, bus make, and VIN#. Refer to the IMMI instructions attached to this letter for details.

Further parts handling information is provided below.

SERVICE PROCEDURE

WARNING! PARK VEHICLE ON HARD FLAT SURFACE, TURN THE ENGINE OFF, SET THE PARKING BRAKE AND INSTALL WHEEL CHOCKS TO PREVENT THE VEHICLE FROM MOVING IN BOTH DIRECTIONS. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY AND / OR DEATH.

WARNING! ALWAYS WEAR SAFE EYE PROTECTION WHEN PERFORMING VEHICLE MAINTENANCE. FAILURE TO DO SO MAY RESULT IN PERSON INJURY AND / OR DEATH.

1. Park the vehicle on a flat surface with the wheels straight ahead.
2. Shift the transmission to park or neutral and set the parking brakes.
3. Install wheel chocks.
4. Please refer to the IMMI inspection, parts ordering, and repair instructions at the end of this letter.
5. Remove wheel chocks.

END OF SERVICE PROCEDURE

LABOR INFORMATION

Operation Number	Description	Time
A40-13519-1	Inspection Only; No Repair Required	0.2 hr
A40-13519-2	Inspect and Replace Seat Belt Buckle	0.3 hr

SPECIAL HANDLING INFORMATION

The dealer PO number (referenced below), from the IMMI seat belt buckles packing slip **MUST** be entered into the Claim Comments section .

Also enter a handling fee of \$3.00 for each buckle replaced for coordinating and submitting this claim as "Other charges."



18881 U.S. 31 North
Westfield, NJ 46074 U.S.A.

☎ 317 896.9531
☎ 317 896.2142
✉ immi.net.com

IMMI
BRINGING SAFETY TO PEOPLE™

INTERMEDIATE SHIP TO:

SHIP TO: 014-0
IC CORP OF OKLAHOMA, LLC (TBP)
2322 NORTH MINGO RD
SUPPLIER CODE: 41294X1
TULSA, OK 74116

Packing Slip

PACKING SLIP NUMBER: 2082229

PAGE NUMBER: 2 OF 3 SUPPLIER CODE: 41294X1

SHIP DATE: 19-AUG-13

SHIP TO: 014-0

SHIP TO: IC CORP OF OKLAHOMA, LLC (TBP)
2322 NORTH MINGO RD
SUPPLIER CODE: 41294X1
TULSA, OK 74116

SHIP TO: 19-AUG-13

SHIP TO: 2082229 DEALER PO

Order Line #	Release Number	Lot ID Number	Sched Ship Date	Qty Shipped	UCM
81.1	014 41294X133	4934481	19-AUG-13	1.00	EA

SHIP TO CONSOLIDATION REQUIRED !

SHIPPING LABELS :

LABEL FORMAT 1 - 001 - 2 REQUIRED -- PRESHIP

LABEL FORMAT 2 - 031M - 2 REQUIRED -- PRESHIP

LABEL FORMAT 3 - 031 ADD - 1 REQUIRED PER SKID --

LABEL FORMAT 4 - 031 MIXED - 1 REQUIRED PER MIXED ITEMS SKID (MULTIPLE ITEMS ON ONE SKID)

0000240969

PARTS RETURN INFORMATION

All replaced seat belt buckles **MUST** be returned. IMMI field sales will provide an RMA number and instructions for shipping buckles back to IMMI. Refer to the IMMI instructions attached to this letter.

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with this campaign must be marked with a CTS-1075 Campaign Identification Label.

Complete the label and attach on a clean surface next to the vehicle identification number (VIN) plate.

DO NOT REMOVE
INTERNATIONAL
Campaign No.
VIN
Eng.#
COMPLETED
Service Location Code #
DO NOT REMOVE

ADMINISTRATIVE / DEALER RESPONSIBILITIES

WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Safety Recall 13519.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Policy Manual, Section 7.1.8.

As with all claim submission, items acquired locally must be submitted in the "Other Charges" tab. The cost of any bulk items (such as a bag of cable tie straps, roll of wire, barrel of oil, tube of silicone) should be prorated for the cost of the individual pieces / amount used during each repair.

	GROUP	NOUN	C	WARR.	TP	PAD
GROUP — Enter number						
NOUN — Leave blank						
C (CAUSE) — Enter either 1, 2, 3. (See below)						
1. Inspected (No repair required).						
2. Inspected and repaired.						
3. Defective part from parts stock.						
WARRANTY — (Warranty Code) Enter 40.						
TYPE PART — Enter P for type part causing failure.						
PAD — Enter 100						

UNITED STATES AND POSSESSIONS

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to replacement with an identical or reasonable equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

CANADA

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

EXPORT

Export Distributors should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your distributor location.

Export Distributors are to submit warranty claims in the usual manner making reference to this recall number.

Export Distributors are expected to provide full cooperation and follow-up with respect to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

NAVISTAR, INC

REPLACEMENT INSTRUCTIONS

School Bus Seat Belts With L9 Buckles

3 STEPS

1. Inspect

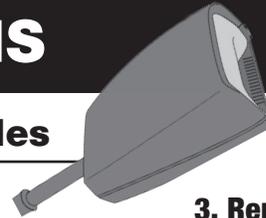
Determine if your L9 seat belt buckle needs to be replaced.

2. Order

Provide the necessary information to obtain the correct replacement buckle.

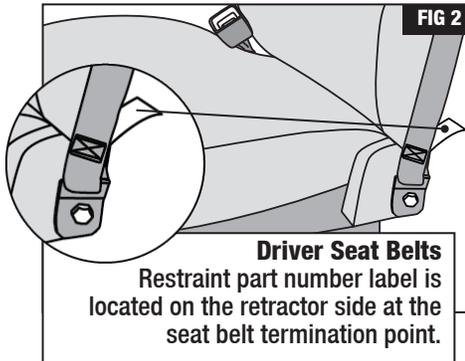
3. Replace

Properly replace the buckle on your unique seat.



STEP 1. Inspect all buckles on your bus

Driver Seat Belts



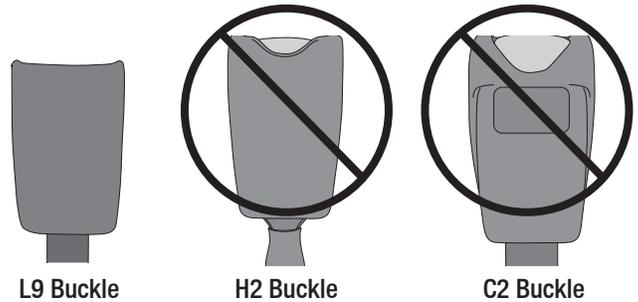
1. Inspect date code on back of driver buckle on identified vehicles. See instructions on the right.
2. Note restraint part number for any buckles that fall within suspect date code range.
3. **IF** you have buckles that fall into the date code range, then gather restraint part numbers (FIG 2) and total quantities for ordering replacement buckles from IMMI.

Buckle Date Code Range

Follow these instructions to determine if your L9 seat belt buckle needs to be replaced.

1.  Verify you have an IMMI buckle by looking for the IMMI logo on the back housing.

2. Verify you have an IMMI L9 buckle.



3. Find the buckle assembly date code on the back housing of the buckle. (FIG 3 and 4)
4. There are 2 different date code formats as illustrated below. (FIG 3 and 4)

FORMAT 1

Suspect code range is **13220 through 13256**

YEAR	DAY
13	230

14

FIG 3

FORMAT 2

Suspect code range is **214 13 through 256 13**

DAY	YEAR
216	13

FIG 4

5. If your buckle code is within either of the ranges above, follow instructions to order, then replace the buckle.
6. If your code does NOT fall within either range, you do NOT need to replace your buckle.

REPLACEMENT INSTRUCTIONS

STEP 2. Order Replacement Buckles

1. Contact IMMI field sales with part numbers and quantities of each part number: fieldservice@imminet.com, 317-867-8496
2. Place order with IMMI Field Sales noting: 1) Buckle part number, 2) Quantity, and 3) Bus make
3. All replaced L9 buckles must be returned. IMMI Field Sales will provide an RMA number and instructions for shipping buckles back to IMMI.

RETURN ALL BUCKLES TO:
IMMI
302 East Dean Street
Burrton, KS 67020

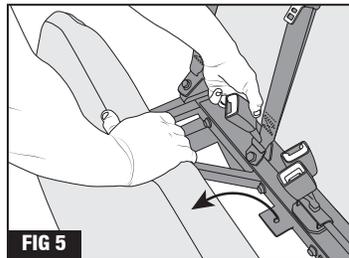
STEP 3. Replace Buckles

Tools Required

1. Torque wrench with at least a 30 lb-ft capacity
2. 5/8 inch, 11/16 inch, and 3/4 inch sockets and wrenches
3. Pliers or vise grips

Removal

1. Unlatch seat cushion and pivot cushion up and forward. (FIG 5)
2. At this point the buckle attachment hardware will be accessible.
3. Before beginning removal of the seat belt buckle take care to **note the orientation of the seat belt buckle end fitting, bolts, nuts, and washers**. When installing the replacement buckle assembly the end fitting and hardware orientation must match the original configuration for proper performance.
4. Loosen and remove the fasteners for one buckle assembly at a time. Due to the locking patch on some of the fasteners they may seem very tight.



Replace

1. Reinstall by reusing the original hardware and the new replacement buckle assembly. Make sure you don't mix up the old and new buckle assembly.
2. Tighten bolts and nuts to 30-50 lb-ft. torque.
3. Repeat for the remaining buckle assemblies that require replacement.
4. All replaced L9 buckles must be returned.

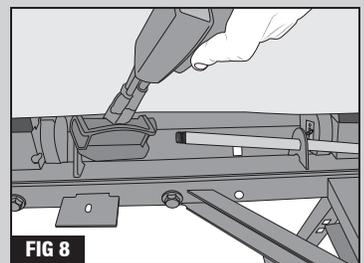
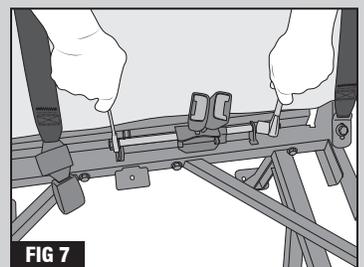
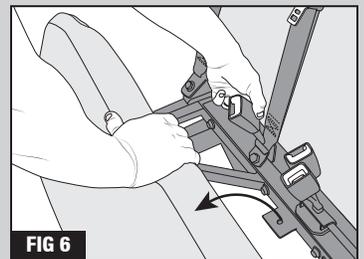
RETURN ALL BUCKLES TO:
IMMI
302 East Dean Street
Burrton, KS 67020

39" Seat with 3 Lap-Shoulder Belts

In the special case of a 39" seat with 3 lap-shoulder seat belts the replacement of the sliding double buckles is as follows:

Removal

1. Unlatch seat cushion and pivot cushion up and forward. (FIG 6)
2. Loosen and remove the nut on the end of the slider rod closest to the center of the seat. It may be necessary to grasp the rod with pliers or vise grips if the nut furthest from the center of the seat begins to loosen first. (FIG 7)
3. Slide the rod to the left (as seated in the seat) enough for the end near the center of the seat to clear the bracket. (FIG 8)
4. Tilt the rod enough to clear the bracket. (FIG 8)
5. Slide out the rod. (FIG 8)
6. Remove the two buckles.
7. Push the plastic sleeve out of the buckle slider assembly and remove old buckles.



Replace

1. Install new buckles and slide the sleeve back in place.
2. Reverse the disassembly instructions to replace the sliding buckle assembly on the seat.
3. Make sure the two nuts are fully threaded onto the rod and tighten the nuts snugly.
4. All replaced L9 buckles must be returned. IMMI Field Sales will provide an RMA number and instructions for shipping buckles back to IMMI.

SERVICE PROCEDURE

13520
FEBRUARY 2014

SUBJECT: NON-COMPLIANCE RECALL
Driver and / or passenger seat belt buckle on certain CE and RE school bus models built 8 August 2013 thru 14 November 2013 having certain IMMI seat belt assemblies with L9 end-release seat belt buckles

DEFECT DESCRIPTION

Certain IMMI seat belt assemblies with L9 end-release seat belt buckles may fail to conform to the requirements of Federal Motor Vehicle Safety Standard No. 209 "Seat Restraint Systems."

MODELS INVOLVED

This Safety Recall involves certain CE and RE school bus models built 8 August 2013 thru 14 November 2013 having certain IMMI seat belt assemblies with L9 end-release seat belt buckles.

PARTS INFORMATION

For any seat belt buckle requiring replacement, contact IMMI field sales fieldservice@imminet.com or call 317-867-8496 with part numbers and quantities of each part number, bus make, and VIN#. Refer to the IMMI instructions attached to this letter for details.

Further parts handling information is provided below.

SERVICE PROCEDURE

WARNING! PARK VEHICLE ON HARD FLAT SURFACE, TURN THE ENGINE OFF, SET THE PARKING BRAKE AND INSTALL WHEEL CHOCKS TO PREVENT THE VEHICLE FROM MOVING IN BOTH DIRECTIONS. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY AND / OR DEATH

WARNING! ALWAYS WEAR SAFE EYE PROTECTION WHEN PERFORMING VEHICLE MAINTENANCE. FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY AND / OR DEATH.

1. Park the vehicle on a flat surface with the wheels straight ahead.
2. Shift the transmission to park or neutral and set the parking brakes.
3. Install wheel chocks.
4. Please refer to the IMMI inspection, parts ordering, and repair instructions at the end of this letter.
5. Remove wheel chocks.

END OF SERVICE PROCEDURE

LABOR INFORMATION

Operation Number	Description	Time
A40-13520-1	Inspection Only; No Repair Required	0.2 hr
A40-13520-2	Inspect and Replace One Seat Belt Buckle	0.3 hr
A40-13520-3	Replace Each Additional Seat Belt Buckle	0.1 hr

SPECIAL HANDLING INFORMATION

The dealer PO number (referenced below), from the IMMI seat belt buckles packing slip **MUST** be entered into the Claim Comments section .

Also enter a handling fee of \$3.00 for each buckle replaced for coordinating and submitting this claim as "Other charges."



18831 U.S. 31 North
Westfield, IN 46074 U.S.A.

☎ 317.896.9531
☎ 317.896.2142
🌐 immi.net

IMMI
BRINGING SAFETY TO PEOPLE™

BILL TO: 1889200
IC BUS
CALLER SERVICE 59009
1129MAX
KNOXVILLE, TN 37950, United States

INTERMEDIATE SHIP TO:		Packing Slip	
		PACKING SLIP NUMBER: 4082229	
			
		PAGE NUMBER: 2 of 3	SUPPLIER CODE: 41294X1
		SHIP VIA: YT	
SHIP TO: 014-0 IC CORP OF OKLAHOMA, LLC (TBP) 2322 NORTH MINGO RD SUPPLIER CODE: 41294X1 TULSA, OK 74116		PACKED DATE: 19-AUG-13	Net Weight: 1695.50 LB
		PACKED BY: COLLECT	Gross Weight: 382.90 LB
		PACKED DATE: 19-AUG-13	DEALER PO: 20729

Order Line #	Release Number	Lot ID Number	Sched Ship Date	Qty Shipped	UCM
81.1	014 41294X133	4831481	19-AUG-13	1.00	FA

***** SHIP TO CONSOLIDATION REQUIRED ! *****

***** SHIPPING LABELS : *****

***** LABEL FORMAT 1 - 001 - 2 REQUIRED - PRESHIP *****

***** LABEL FORMAT 2 - 031M - 2 REQUIRED - PRESHIP *****

***** LABEL FORMAT 3 - 031 ADD - 1 REQUIRED PER SKID - *****

***** LABEL FORMAT 4 - 031 MIXED - 1 REQUIRED PER MIXED ITEM'S SKID (MULTIPLE ITEMS ON ONE SKID) *****

0000240969

PARTS RETURN INFORMATION

All replaced seat belt buckles **MUST** be returned. IMMI field sales will provide an RMA number and instructions for shipping buckles back to IMMI. Refer to the IMMI instructions attached to this letter.

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with this campaign must be marked with a CTS-1075 Campaign Identification Label.

Complete the label and attach on a clean surface next to the vehicle identification number (VIN) plate.

DO NOT REMOVE
INTERNATIONAL
Campaign No. _____
VIN _____
Eng.# _____
COMPLETED
Service Location Code # _____
DO NOT REMOVE

ADMINISTRATIVE / DEALER RESPONSIBILITIES

WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Safety Recall 13520.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Policy Manual, Section 7.1.8.

As with all claim submission, items acquired locally must be submitted in the "Other Charges" tab. The cost of any bulk items (such as a bag of cable tie straps, roll of wire, barrel of oil, tube of silicone) should be prorated for the cost of the individual pieces / amount used during each repair.

	GROUP	NOUN	C	WARR.	TP	PAD

GROUP — Enter number ←

NOUN — Leave blank ←

C (CAUSE) — Enter either 1, 2, 3. (See below)

- 1. Inspected (No repair required).
- 2. Inspected and repaired.
- 3. Defective part from parts stock.

WARRANTY — (Warranty Code) Enter 40. ←

TYPE PART — Enter P for type part causing failure. ←

PAD — Enter 100 ←

UNITED STATES AND POSSESSIONS

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to replacement with an identical or reasonable equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

CANADA

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

EXPORT

Export Distributors should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your distributor location.

Export Distributors are to submit warranty claims in the usual manner making reference to this recall number.

Export Distributors are expected to provide full cooperation and follow-up with respect to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

NAVISTAR, INC

REPLACEMENT INSTRUCTIONS

School Bus Seat Belts With L9 Buckles

3 STEPS

1. Inspect

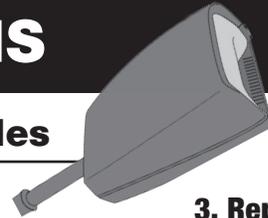
Determine if your L9 seat belt buckle needs to be replaced.

2. Order

Provide the necessary information to obtain the correct replacement buckle.

3. Replace

Properly replace the buckle on your unique seat.



STEP 1. Inspect all buckles on your bus

Passenger Seat Belts

1. Inspect date codes on back of buckles on seat. See instructions on the right.

DO NOT remove buckles with suspect date codes until after new buckles are received.

2. Identify buckle type for any buckles that fall within the suspect date code range.
3. **IF** you have buckles that fall into the date code range, then please gather buckle part numbers (FIG 1) and total quantities for ordering replacement buckles from IMMI.

Webbing Buckles

Buckles connected to seats with webbing are identified by part number on the label.

Cable Buckles

Buckles connected to bus seats with a flexible cable are to be identified as "cable buckle" or by part number A95064.

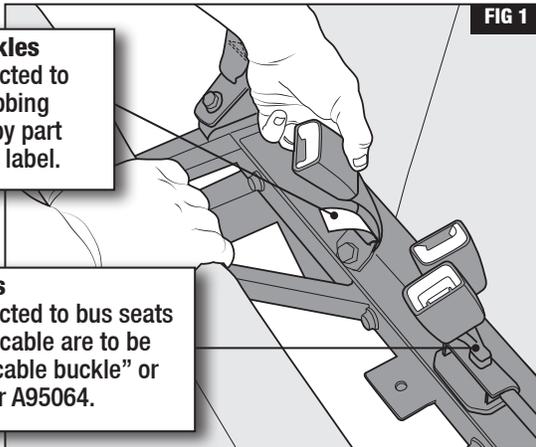


FIG 1

Driver Seat Belts

1. Inspect date code on back of driver buckle on identified vehicles. See instructions on the right.
2. Note restraint part number for any buckles that fall within suspect date code range.
3. **IF** you have buckles that fall into the date code range, then gather restraint part numbers (FIG 2) and total quantities for ordering replacement buckles from IMMI.

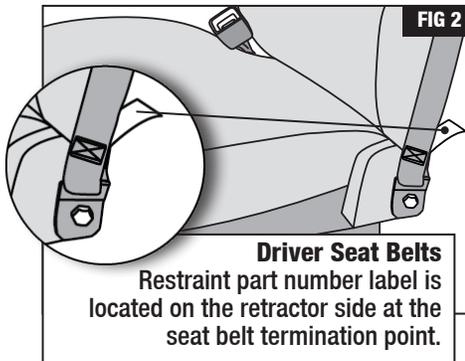


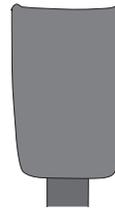
FIG 2

Buckle Date Code Range

Follow these instructions to determine if your L9 seat belt buckle needs to be replaced.

1.  Verify you have an IMMI buckle by looking for the IMMI logo on the back housing.

2. Verify you have an IMMI L9 buckle.



L9 Buckle



H2 Buckle



C2 Buckle

3. Find the buckle assembly date code on the back housing of the buckle. (FIG 3 and 4)
4. There are 2 different date code formats as illustrated below. (FIG 3 and 4)

FORMAT 1

Suspect code range is
13220 through 13256

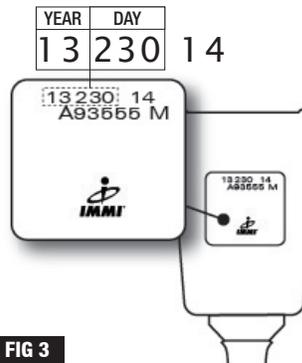


FIG 3

FORMAT 2

Suspect code range is
214 13 through 256 13

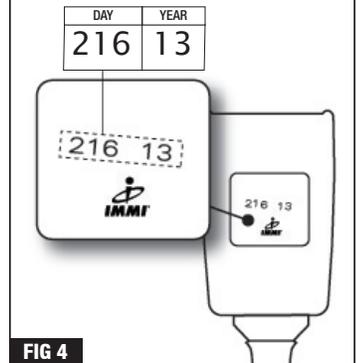


FIG 4

5. If your buckle code is within either of the ranges above, follow instructions to order, then replace the buckle.
6. If your code does NOT fall within either range, you do NOT need to replace your buckle.

REPLACEMENT INSTRUCTIONS

STEP 2. Order Replacement Buckles

1. Contact IMMI field sales with part numbers and quantities of each part number: fieldservice@imminet.com, 317-867-8496
2. Place order with IMMI Field Sales noting: 1) Buckle part number, 2) Quantity, and 3) Bus make
3. All replaced L9 buckles must be returned. IMMI Field Sales will provide an RMA number and instructions for shipping buckles back to IMMI.

RETURN ALL BUCKLES TO:
IMMI
302 East Dean Street
Burrton, KS 67020

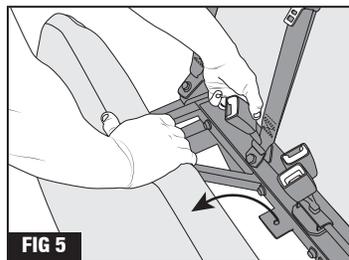
STEP 3. Replace Buckles

Tools Required

1. Torque wrench with at least a 30 lb-ft capacity
2. 5/8 inch, 11/16 inch, and 3/4 inch sockets and wrenches
3. Pliers or vise grips

Removal

1. Unlatch seat cushion and pivot cushion up and forward. (FIG 5)
2. At this point the buckle attachment hardware will be accessible.
3. Before beginning removal of the seat belt buckle take care to **note the orientation of the seat belt buckle end fitting, bolts, nuts, and washers**. When installing the replacement buckle assembly the end fitting and hardware orientation must match the original configuration for proper performance.
4. Loosen and remove the fasteners for one buckle assembly at a time. Due to the locking patch on some of the fasteners they may seem very tight.



Replace

1. Reinstall by reusing the original hardware and the new replacement buckle assembly. Make sure you don't mix up the old and new buckle assembly.
2. Tighten bolts and nuts to 30-50 lb-ft. torque.
3. Repeat for the remaining buckle assemblies that require replacement.
4. All replaced L9 buckles must be returned.

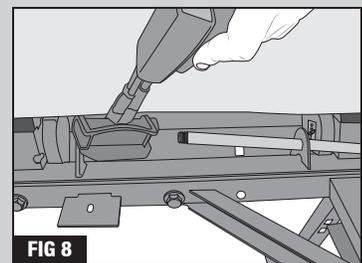
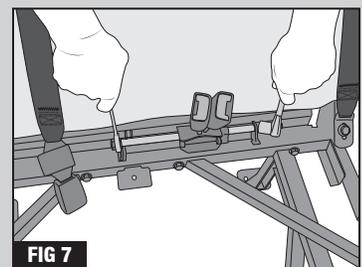
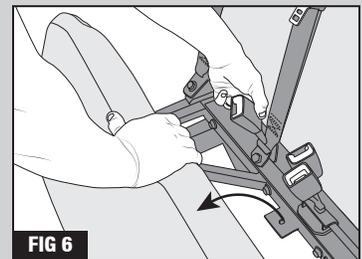
RETURN ALL BUCKLES TO:
IMMI
302 East Dean Street
Burrton, KS 67020

39" Seat with 3 Lap-Shoulder Belts

In the special case of a 39" seat with 3 lap-shoulder seat belts the replacement of the sliding double buckles is as follows:

Removal

1. Unlatch seat cushion and pivot cushion up and forward. (FIG 6)
2. Loosen and remove the nut on the end of the slider rod closest to the center of the seat. It may be necessary to grasp the rod with pliers or vise grips if the nut furthest from the center of the seat begins to loosen first. (FIG 7)
3. Slide the rod to the left (as seated in the seat) enough for the end near the center of the seat to clear the bracket. (FIG 8)
4. Tilt the rod enough to clear the bracket. (FIG 8)
5. Slide out the rod. (FIG 8)
6. Remove the two buckles.
7. Push the plastic sleeve out of the buckle slider assembly and remove old buckles.



Replace

1. Install new buckles and slide the sleeve back in place.
2. Reverse the disassembly instructions to replace the sliding buckle assembly on the seat.
3. Make sure the two nuts are fully threaded onto the rod and tighten the nuts snugly.
4. All replaced L9 buckles must be returned. IMMI Field Sales will provide an RMA number and instructions for shipping buckles back to IMMI.

Special Field Notification



SFN-10-75RB

Date: September, 2011

Subject File: GENERAL

Subject: Service Support for CE and HC bus with Eaton Hybrid feature code (10HEV)

Model: CE Bus

Model: HC Bus

Unit Code: 10HEV

DESCRIPTION

This SFN applies to CE and HC buses built with the Eaton hybrid feature code (10HEV).

 **WARNING** – The hybrid drive system utilizes potentially dangerous high voltages. Only trained technicians should service this vehicle. Failure to follow this warning could result in property damage, personal injury or death.

 **WARNING** – Caution should be taken when working with high voltage equipment (Reference TSI 06-08-05 and [TSI 08-08-01](#)). Failure to follow these TSIs could result in property damage, personal injury or death.

The following service and support information pertains to the 10HEV hybrid feature.

- I. Operator, Service, and Diagnostic Literature
- II. Service Tools
- III. Pre-Delivery Inspection (PDI)
- IV. Standard Repair Time (SRT)
- V. Warranty
- VI. Diagnostic Software
- VII. Dealer Education and Development
- VIII. Service Parts

DESCRIPTION (CONT.)

- IX. Technical Support

I. Operator, Service, and Diagnostic Literature

The following publications are available:

Table 1

Publication	Link
Eaton Hybrid Publications (Operator):	
Hybrid Transmissions Driver Instructions	TRDR1000
Eaton Hybrid Publications (Service and Diagnostic):	
Hybrid Transmission Troubleshooting Guide	TRTS1000
Enhanced Hybrid Transmission Troubleshooting Guide	TRTS2000
Hybrid Transmission Service Manual	TRSM1000
Enhanced Hybrid Transmission Service Manual	TRSM2000
Hybrid Electric High-Voltage Service Shutdown Procedure Video	309099
Hazmat Shipping Requirements (U.S. DOT) – Med. Duty Hybrid Batteries	TAIB0817
Eaton Hybrid Publications (Emergency Responder):	
Eaton Hybrid Transmissions Emergency Response Guide	TRDR1100
Hybrid First Responder Presentation	TRFR1100
Navistar Eaton Hybrid Bus Publications (Operator):	
HC Series Supplemental Operator’s Manual – Eaton Hybrid	3863172R1
Navistar Eaton Hybrid Bus Publications (Service & Diagnostic):	
Eaton Hybrid System Service Manual – HC Bus	S10025
High Voltage Pre-Service Checklist	TSI 08–08–01
High Voltage Circuits	TSI 06-08-05
Eaton Hybrid Lockout Plate	SFN 08-36
High Voltage Kit (ZTSE-5017)	SFN 07-68
HEV Battery Shipping and Receiving	SFN 09-05
Navistar Electrical Circuit Diagrams:	
BE, CE Hybrid Bus Electrical Circuit Diagrams	S08364

II. Service Tools

The following essential service tools have been identified to support feature code 10HEV:

- ZTSE 5017 - High Voltage Kit ([SFN 07-68](#))
- NAVCoM or NavLink ([SFN 08-80](#)) (may be used in place of the Nexiq USB-Link, J-48624 in Eaton’s essential tool list)

DESCRIPTION (CONT.)

- Lockout Plate J48506 ([SFN 08-36](#))
- ZTSE 4357 - Fluke Multimeter (may be used in place of the Fluke DMM, J-46708 in Eaton's essential tool list)

International Truck dealers received ZTSE 5017 as an essential tool.

IC bus only dealers that either sell or service a hybrid bus and do not already have the ZTSE 5017 kit MUST order ZTSE 5017 (will NOT be direct shipped). See section VII, Dealer Education and Development below for more information.

Additionally, Eaton has a list of recommended tools for hybrid service. These tools are listed in the appendix section of both the Hybrid Transmission Service Manual ([TRSM1000](#)) and Enhanced Hybrid Transmission Service Manual ([TRSM2000](#)).

NOTE:

- High Voltage Kit (ZTSE-5017) includes the components in Eaton's Basic PPE tool list.
- The NAVCoM cable listed above may be used in place of the Nexiq USB-Link Communication Adapter (J-48624) in Eaton's essential tool list.
- The Fluke Multimeter (ZTSE-4357) sent as essential tools to Navistar Truck and Bus dealers may be used in place of the Fluke Digital Multimeter (J-46708) in Eaton's essential tool list.

III. Pre-Delivery Inspection (PDI)

CE bus with 10HEV feature – [S00203](#)

HC bus with 10HEV feature – [S00170](#)

IV. Standard Repair Time (SRT)

Any warranty work performed should use the appropriate SRT for that specific repair operation as listed in the SRT database.

*Any repair operation not listed in the SRT database should utilize **Actual reasonable** T-Times for the repair operation.

Table 2

Publication	Link
SRT User's Guide	SRTUserGuide
SRT Homepage	SRTHome.aspx

V. Warranty

For Eaton Hybrid system warranty, refer to:
www.roadranger.com/Roadranger/warranty/ExtendedWarranty/Hybrid/index.htm

Warranty coverage follows the standard published warranty and be administered through International's existing warranty process.

DESCRIPTION (CONT.)

Please refer to the [Warranty Policy Letter 07-004G](#) for submitting warranty pertaining to Eaton Hybrid components.

Any warranty should be coded using the appropriate noun codes under the hybrid group codes (listed below) from the warranty coding manual ([CTS-1025](#)).

Hybrid warranty group codes:

- 08004 - Hybrid/Electric Vehicle
- 09003 - Hybrid/Electric Drive Cooling

Vehicle warranty information is available on the warranty matrix:

Table 3

Publication	Link
Warranty Policy Manual	CTS-1100
Warranty Form Matrix	Warranty Form Matrix

VI. Diagnostic Software

Feature 10HEV (Eaton hybrid system) requires the use of Eaton's ServiceRanger software for diagnostics. To obtain a copy, please call 1-800-336-4500 then option 2, and then option 1.

VII. Dealer Education and Development

Below is a listing of hybrid specific training available from Eaton and Navistar:

***NOTE:** Technicians MUST have received the minimum 2 day Hybrid training (course: Hybrid Electric Transmission Service Training) through the Roadranger Academy (reference [TAIB-0825](#)).

Table 4

Training	Link
Hybrid Training offered by Eaton:	
Eaton Hybrid Service Training Requirements - Technicians	TAIB-0825
*Hybrid Electric Transmission Service Training (2-day Hands on course)	Roadranger Academy
Hybrid Electric Power System Driver Training Video (CH 1-7 below)	RRSD0004
CH 1 - Hybrid Electric Power System Driving	RRSD0004
CH 2 - Hybrid Electric Power System Basic Troubleshooting	RRSD0004
CH 3 - Hybrid Electric Power System Improving Fuel Economy	RRSD0004
CH 4 - Hybrid Electric Power System Optional Equipment	RRSD0004
CH 5 - Hybrid Electric Power System Frequently Asked Questions	RRSD0004
CH 6 - Hybrid Electric Power System Preventative Maintenance	RRSD0004
CH 7 - Hybrid Electric Power System First Responder Information	RRSD0004

DESCRIPTION (CONT.)

Training	Link
Hybrid Training offered by Navistar:	
Service Training:	
Eaton Hybrid Interactive Training	LMS
Operating Eaton Hybrid Powered Vehicles	LMS
Sales Training:	
Hybrid Electric Vehicle Sales Training	LMS
Hybrid Vehicle In-Service Delivery Training	LMS

VIII. Service Parts

Service parts for the hybrid system are available from Eaton. Eaton's technical support must be called prior to any hybrid component replacement.

Eaton Technical Support: 1-800-826-4357

IX. Technical Support

If needed, Tech Services may be contacted for technical support.

iKNow should be checked before contacting the Tech Service as information is added to the knowledge base regularly.

SERVICE PROCEDURE

13521
FEBRUARY 2014

SUBJECT: NON-COMPLIANCE RECALL
Driver seat belt buckle on certain CE and RE commercial bus models built 12 August 2013 thru 14 November 2013 having certain IMMI seat belt assemblies with L9 end-release seat belt buckles

DEFECT DESCRIPTION

Certain IMMI seat belt assemblies with L9 end-release seat belt buckles may fail to conform to the requirements of Federal Motor Vehicle Safety Standard No. 209 "Seat Restraint Systems."

MODELS INVOLVED

This Safety Recall involves certain CE and RE commercial bus models built 8 August 2013 thru 14 November 2013 having certain IMMI seat belt assemblies with L9 end-release seat belt buckles.

PARTS INFORMATION

For any seat belt buckle requiring replacement, contact IMMI field sales fieldservice@imminet.com or call 317-867-8496 with part numbers and quantities of each part number, bus make, and VIN#. Refer to the IMMI instructions attached to this letter for details.

Further parts handling information is provided below.

SERVICE PROCEDURE

WARNING! PARK VEHICLE ON HARD FLAT SURFACE, TURN THE ENGINE OFF, SET THE PARKING BRAKE AND INSTALL WHEEL CHOCKS TO PREVENT THE VEHICLE FROM MOVING IN BOTH DIRECTIONS. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY AND / OR DEATH

WARNING! ALWAYS WEAR SAFE EYE PROTECTION WHEN PERFORMING VEHICLE MAINTENANCE. FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY AND / OR DEATH.

1. Park the vehicle on a flat surface with the wheels straight ahead.
2. Shift the transmission to park or neutral and set the parking brakes.
3. Install wheel chocks.
4. Please refer to the IMMI inspection, parts ordering, and repair instructions at the end of this letter.
5. Remove wheel chocks.

END OF SERVICE PROCEDURE

LABOR INFORMATION

Operation Number	Description	Time
A40-13521-1	Inspection Only; No Repair Required	0.2 hr
A40-13521-2	Inspect and Replace Seat Belt Buckle	0.3 hr

SPECIAL HANDLING INFORMATION

The dealer PO number (referenced below), from the IMMI seat belt buckles packing slip **MUST** be entered into the Claim Comments section.

Also enter a handling fee of \$3.00 for each buckle replaced for coordinating and submitting this claim as "Other charges."



18831 U.S. 31 North
Westfield, RI 04078 U.S.A.

☎ 317 896.9531
☎ 317 896.2142
🌐 immi.net

IMMI
BRINGING SAFETY TO PEOPLE™

BILL TO: 1989200
IC BUS
CALLER SERVICE 59009
41294AX
KNOXVILLE, TN 37950, United States

INTERMEDIATE SHIP TO:

SHIP TO: 014-0
IC CORP OF OKLAHOMA, LLC (TBP)
2322 NORTH MINGO RD
SUPPLIER CODE: 41294X1
TULSA, OK 74116

Packing Slip

PACKING SLIP NUMBER: 4082229

PAGE NUMBER: 2 of 3 SUPPLIER CODE: 41294X1

SHIP DATE: 19-AUG-13

SHIP TO: 014-0

SHIP TO: IC CORP OF OKLAHOMA, LLC (TBP)
2322 NORTH MINGO RD
TULSA, OK 74116

SHIP TO: 19-AUG-13

SHIP TO: 207729

SHIP TO: DEALER PO

Order Line #	Release Number	Lot ID Number	Sched Ship Date	Qty Shipped	UCM
81.1	014 41294X113	4931481	19-AUG-13	1.00	EA

SHIP TO CONSOLIDATION REQUIRED I

SHIPPING LABELS:

LABEL FORMAT 1 - 091 - 2 REQUIRED - PRESHIP

LABEL FORMAT 2 - 031M - 2 REQUIRED - PRESHIP

LABEL FORMAT 3 - 031 ADD - 1 REQUIRED PER SKID -

LABEL FORMAT 4 - 031 MIXED - 1 REQUIRED PER MIXED ITEMS SKID (MULTIPLE ITEMS ON ONE SKID)

0000240969

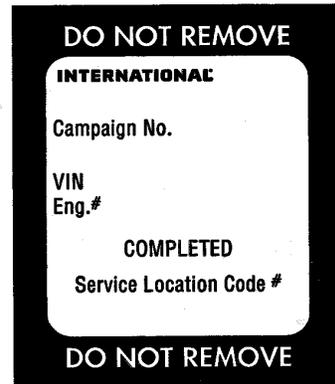
PARTS RETURN INFORMATION

All replaced seat belt buckles **MUST** be returned. IMMI field sales will provide an RMA number and instructions for shipping buckles back to IMMI. Refer to the IMMI instructions attached to this letter.

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with this campaign must be marked with a CTS-1075 Campaign Identification Label.

Complete the label and attach on a clean surface next to the vehicle identification number (VIN) plate.



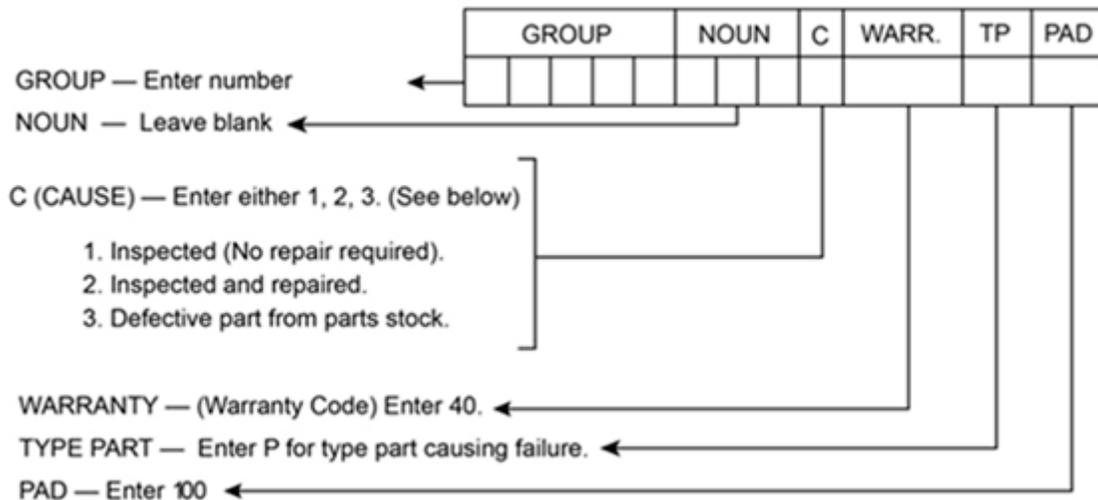
ADMINISTRATIVE / DEALER RESPONSIBILITIES

WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Safety Recall 13521.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Policy Manual, Section 7.1.8.

As with all claim submission, items acquired locally must be submitted in the "Other Charges" tab. The cost of any bulk items (such as a bag of cable tie straps, roll of wire, barrel of oil, tube of silicone) should be prorated for the cost of the individual pieces / amount used during each repair.



UNITED STATES AND POSSESSIONS

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to replacement with an identical or reasonable equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

CANADA

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

EXPORT

Export Distributors should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your distributor location.

Export Distributors are to submit warranty claims in the usual manner making reference to this recall number.

Export Distributors are expected to provide full cooperation and follow-up with respect to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

NAVISTAR, INC

REPLACEMENT INSTRUCTIONS

School Bus Seat Belts With L9 Buckles

3
STEPS

1. Inspect

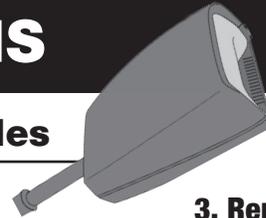
Determine if your L9 seat belt buckle needs to be replaced.

2. Order

Provide the necessary information to obtain the correct replacement buckle.

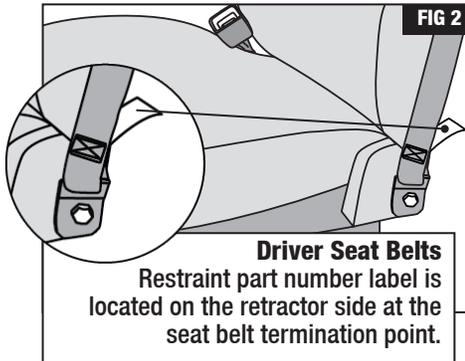
3. Replace

Properly replace the buckle on your unique seat.



STEP 1. Inspect all buckles on your bus

Driver Seat Belts



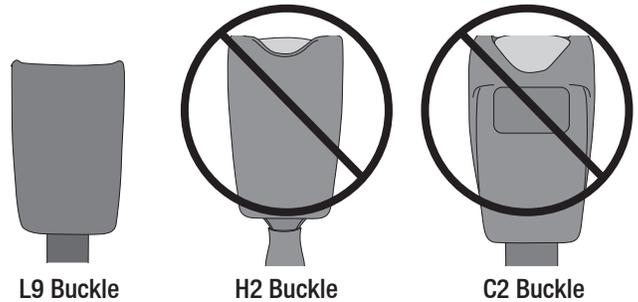
1. Inspect date code on back of driver buckle on identified vehicles. See instructions on the right.
2. Note restraint part number for any buckles that fall within suspect date code range.
3. **IF** you have buckles that fall into the date code range, then gather restraint part numbers (FIG 2) and total quantities for ordering replacement buckles from IMMI.

Buckle Date Code Range

Follow these instructions to determine if your L9 seat belt buckle needs to be replaced.

1.  Verify you have an IMMI buckle by looking for the IMMI logo on the back housing.

2. Verify you have an IMMI L9 buckle.



3. Find the buckle assembly date code on the back housing of the buckle. (FIG 3 and 4)
4. There are 2 different date code formats as illustrated below. (FIG 3 and 4)

FORMAT 1

Suspect code range is **13220 through 13256**

YEAR	DAY
13	230

14

FIG 3

FORMAT 2

Suspect code range is **214 13 through 256 13**

DAY	YEAR
216	13

FIG 4

5. If your buckle code is within either of the ranges above, follow instructions to order, then replace the buckle.
6. If your code does NOT fall within either range, you do NOT need to replace your buckle.

REPLACEMENT INSTRUCTIONS

STEP 2. Order Replacement Buckles

1. Contact IMMI field sales with part numbers and quantities of each part number: fieldservice@imminet.com, 317-867-8496
2. Place order with IMMI Field Sales noting: 1) Buckle part number, 2) Quantity, and 3) Bus make
3. All replaced L9 buckles must be returned. IMMI Field Sales will provide an RMA number and instructions for shipping buckles back to IMMI.

RETURN ALL BUCKLES TO:
IMMI
302 East Dean Street
Burrton, KS 67020

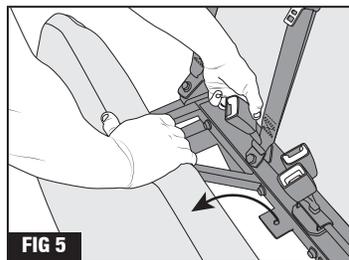
STEP 3. Replace Buckles

Tools Required

1. Torque wrench with at least a 30 lb-ft capacity
2. 5/8 inch, 11/16 inch, and 3/4 inch sockets and wrenches
3. Pliers or vise grips

Removal

1. Unlatch seat cushion and pivot cushion up and forward. (FIG 5)
2. At this point the buckle attachment hardware will be accessible.
3. Before beginning removal of the seat belt buckle take care to **note the orientation of the seat belt buckle end fitting, bolts, nuts, and washers**. When installing the replacement buckle assembly the end fitting and hardware orientation must match the original configuration for proper performance.
4. Loosen and remove the fasteners for one buckle assembly at a time. Due to the locking patch on some of the fasteners they may seem very tight.



Replace

1. Reinstall by reusing the original hardware and the new replacement buckle assembly. Make sure you don't mix up the old and new buckle assembly.
2. Tighten bolts and nuts to 30-50 lb-ft. torque.
3. Repeat for the remaining buckle assemblies that require replacement.
4. All replaced L9 buckles must be returned.

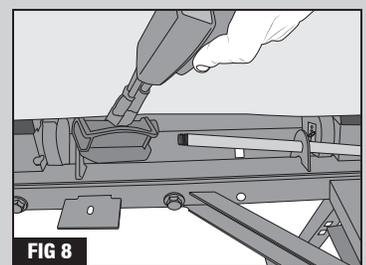
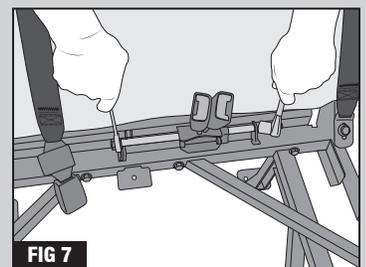
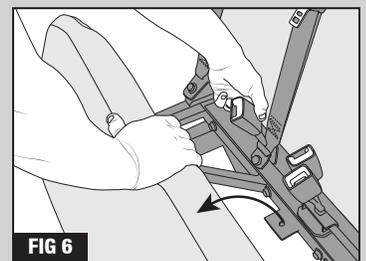
RETURN ALL BUCKLES TO:
IMMI
302 East Dean Street
Burrton, KS 67020

39" Seat with 3 Lap-Shoulder Belts

In the special case of a 39" seat with 3 lap-shoulder seat belts the replacement of the sliding double buckles is as follows:

Removal

1. Unlatch seat cushion and pivot cushion up and forward. (FIG 6)
2. Loosen and remove the nut on the end of the slider rod closest to the center of the seat. It may be necessary to grasp the rod with pliers or vise grips if the nut furthest from the center of the seat begins to loosen first. (FIG 7)
3. Slide the rod to the left (as seated in the seat) enough for the end near the center of the seat to clear the bracket. (FIG 8)
4. Tilt the rod enough to clear the bracket. (FIG 8)
5. Slide out the rod. (FIG 8)
6. Remove the two buckles.
7. Push the plastic sleeve out of the buckle slider assembly and remove old buckles.



Replace

1. Install new buckles and slide the sleeve back in place.
2. Reverse the disassembly instructions to replace the sliding buckle assembly on the seat.
3. Make sure the two nuts are fully threaded onto the rod and tighten the nuts snugly.
4. All replaced L9 buckles must be returned. IMMI Field Sales will provide an RMA number and instructions for shipping buckles back to IMMI.

Special Field Notification



SFN-07-78

Date: October 19, 2007

Subject File: ELECTRICAL

Subject: LED Replacement Bulbs for Turn Signal Indicators on Instrument Cluster Printed Circuit Boards

Model: BE Bus, CE Bus, 3200, 4100, 4200, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600
Start Date: 11/01/2000 End Date: 12/01/2006

DESCRIPTION

This SFN applies to models built prior to 2007 emissions.

With the exception of the backlight illumination for the speedometer and tachometer faces, all indicator lights on HPV instrument cluster printed circuit boards are permanently soldered LED bulbs. This procedure provides guidelines to remove burned out LED turn signal indicator bulbs so that replacement LED's with twist lock bases can be installed into the mounting hole. While the mounting bases of the incandescent bulbs are similar and can be locked into place, they will not illuminate because of their higher current requirements. ONLY LED REPLACEMENT BULBS WILL WORK WHEN REPLACING A FAILED LED.

PARTS INFORMATION

3578733C1, LED - Light Green

SERVICE PROCEDURE

1. Disconnect the negative cable and ECM ground from the battery.
2. Remove fasteners and the steering wheel lower column (Figure 1).



Figure 1

3. Remove fasteners and the instrument cluster dash trim panel (Figure 2).



Figure 2

SERVICE PROCEDURE (CONT.)

4. Remove fasteners from the instrument cluster (Figure 3) and move the instrument cluster away from the dash to gain access to the harness connector (Figure 4). Disconnect connector and remove the instrument cluster.

CAUTION – Static electricity can cause permanent damage to the instrument cluster. Before working on the cluster, be sure to discharge all static from your body by touching metal that is grounded. Do not wear clothing that causes static buildup (such as nylon). Do not touch any pin connectors during removal and installation of the cluster. Work on the instrument cluster in a clean environment.



Figure 3

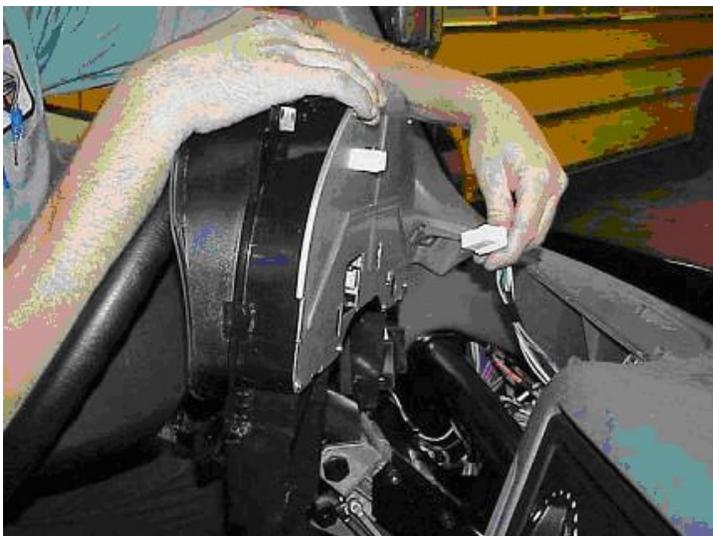


Figure 4

SERVICE PROCEDURE (CONT.)

5. Place the instrument cluster face down on a protected work surface.
6. Remove the fasteners from the rear instrument cluster cover (Figure 5). Remove the cover.



Figure 5



Figure 6

7. Determine the location of the LED needing replacement. Figure 6 shows the backside of the circuit board with red circles around the right and left turn signals, and the hi beam headlight indicators.

SERVICE PROCEDURE (CONT.)



Figure 7



Figure 8

8. Using a sharp knife or similar tool, carefully cut away the winged legs that are supporting the LED and mounting. Figure 7 shows the position of the knife as it cuts one leg of the right turn signal indicator. As viewed from the rear of the circuit board, the leg on the left side should be cut midway between the LED mounting and the side where the leg attaches to the board, the leg on the right should be cut closer to the attaching point of the main board. Figure 8 shows the circuit board after it has been cut. When one of the attaching legs has been cut, hold the LED mount with needle nose pliers while cutting the second leg. Failure to hold the LED mount will allow the LED and mount to fall into the housing cavity and result in a difficult removal.

SERVICE PROCEDURE (CONT.)

9. Figure 9 shows a replacement LED with a twist lock base. Note that the twist lock tab on the right side is wider (extends farther out from the base) than the tab on the left side of the base.

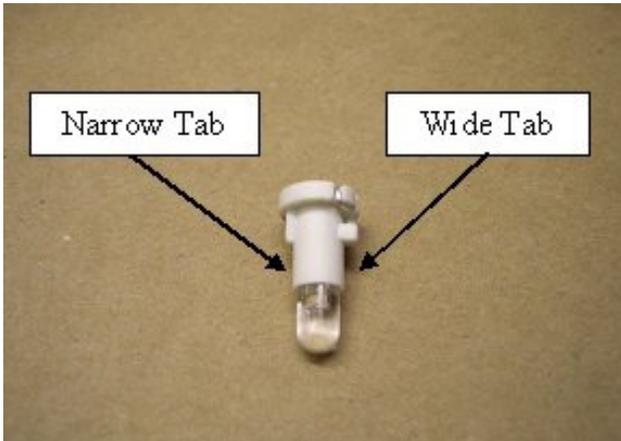


Figure 9



Figure 10

10. Insert the replacement LED into the mounting hole. Place the wider tab as shown in Figure 9 toward the right side of the mounting hole as viewed from rear of the printed circuit board. Insert a small flat bladed screw driver into the LED base and rotate it clockwise until the stop is felt (approx. 30°). See Figure 11. If the replacement LED is placed into the hole with the larger lug on the left side, it will not illuminate. LED's must have the proper polarity to function properly.

NOTE – The color of the replacement LED will be a yellowish green as apposed to the dark green of the original turn indicator-see Figure 10. For uniform appearance at minimal cost, replace both left and right turn indicators at the same time while the back of the board is accessible.

SERVICE PROCEDURE (CONT.)

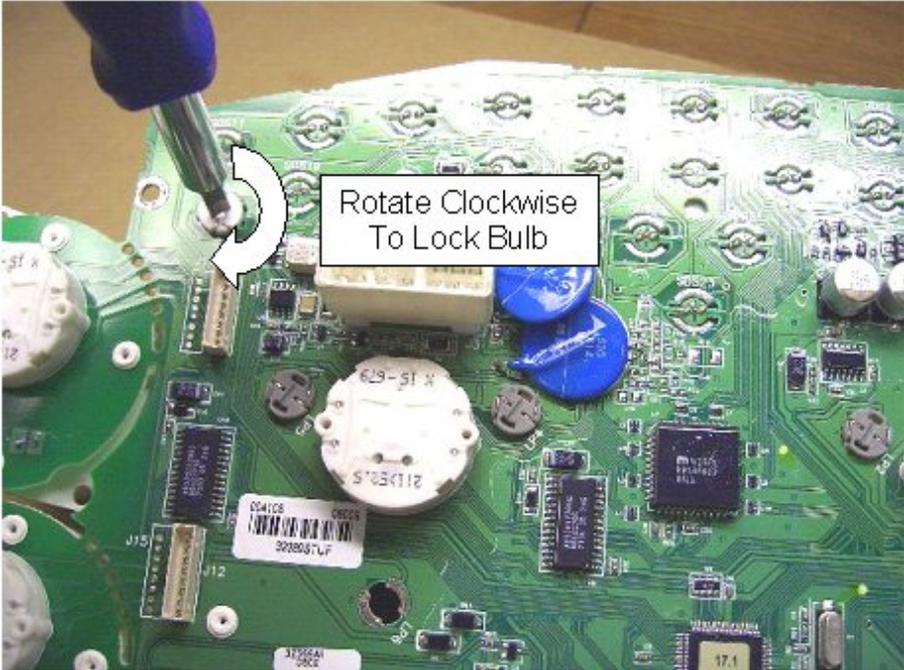


Figure 11



R11SZ

ORIGINAL ISSUE DATE: JUNE 23, 2011
REVISION DATE: AUGUST 10, 2011

TO: U.S. DEALERS

**SUBJECT: RECALL R11SZ BRAKE ABS MALFUNCTION INDICATOR LIGHT
NONCOMPLIANCE**

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Blue Bird Body Company has decided that certain 2007 through 2011 model year "Vision" conventional model school buses manufactured from October 23, 2006 through December 09, 2009 fail to conform to the requirements of Federal Motor Vehicle Safety Standard (FMVSS) 105 "Hydraulic and Electric Brake Systems" Section 5.3.1 for buses equipped with hydraulic brakes and (FMVSS) 121 "Air Brake Systems" Section 5.1.6.2 for buses equipped with air brakes.

On the subject buses, the dash instrument panel ABS malfunction indicator light does not illuminate when the main ABS module is disconnected. In the event the ABS circuit is disconnected from the main ABS module, the bus operator would be unaware of the failure of the ABS braking system and the associated nonfunctioning ABS braking which could increase the risk of a crash in certain circumstances and could potentially result in property damage and/or personal injury.

On buses manufactured with hydraulic brakes and equipped with the cab mounted (behind the PDU cover) "D" version of the Wabco hydraulic brake ABS module the main wiring circuit must be rewired. Buses with Type "D" Wabco ABS modules were manufactured from November 02, 2006 through December 17, 2008. See attached R11SZ instructions modification procedures for buses equipped with Type "D" ABS modules.

Note: The instrument panel on buses equipped with Type "D" Wabco ABS modules **will not** be reprogrammed.

A population of air brake buses manufactured from October 23, 2006 through February 23, 2007 has also been identified that will need the wiring circuit update performed instead of reprogramming the dash. A list of your units is also attached. These units will also have Warranty claims filed under R11SZ Type D since the remedy is the same.

Note: The instrument panel on these air brake buses **will not** be reprogrammed.

BLUE BIRD BODY COMPANY
P.O. Box 937 – 402 Blue Bird Blvd – Fort Valley, Georgia – (478) 825-2021

All other buses subject to Recall R11SZ will require the Dealer to reprogram the Stoneridge instrument panel with the appropriate software as required. The software for reprogramming the dash will be available on the Blue Bird Customer Service website within the next 30 days. See attached R11SZ instructions for Stoneridge instrument panel reprogramming procedures. **Owners are being directed to contact their dealer to have Recall R11SZ performed.**

We have included an updated owner list of units requiring reprogramming.

Labor time to rewire the type "D" ABS module on subject buses equipped with hydraulic brakes and manufactured from November 02, 2006 through December 17, 2008 is 0.2 hours per bus.

Labor time to rewire the air brake modules on subject buses equipped with air brakes and manufactured from October 23, 2006 through February 23, 2007 is 0.2 hours per bus. **Note: Claims for this population of air brake buses are also to be filed under R11SZ Type D.**

Labor time to install the appropriate software on all other buses is 0.2 hours per bus.

Dealers may submit campaign claims in Blue Bird iWarranty. **Claims for buses with Type D Wabco ECUs will be filed under campaign "R11SZ Type D" in iWarranty.**

If our records indicate affected buses were delivered in your service area, a printout identifying affected buses is enclosed. **Dealers should verify correct owners and assure that complete mailing addresses are provided for each listed vehicle.**

If you have in your possession or have sold a bus that was purchased from another dealer that may be affected by this recall, please notify me at 478-822-2242.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Dealers are reminded of their responsibilities under section 154 of The National Traffic and Motor Vehicle Safety Act of 1991. Dealers are required to complete modifications on units in their inventory before delivering to the final owner. Reference Blue Bird Body Company Distributor Memo No. 42-92.

Questions regarding this recall campaign should be directed to me at (478) 822-2242.

Thank you,



Bill Coleman
Corporate Recall Administrator
Blue Bird Corporation



BLUE BIRD

R11SZ

June 23, 2011

Dear Blue Bird Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Blue Bird Body Company has decided that certain 2007 through 2011 model year "Vision" model conventional school and non-school buses manufactured from October 23, 2006 through December 09, 2009 fail to conform to Federal Motor Vehicle Safety Standard (FMVSS No. 105) "Hydraulic and Electric Brake Systems" for buses equipped with hydraulic brakes and (FMVSS No. 121) "Air Brake System" for buses equipped with air brakes.

On the subject buses, the dash instrument panel ABS malfunction indicator light does not illuminate when the ABS circuit is disconnected at the main ABS module. In the event the ABS circuit is disconnected from the main ABS module, the bus operator would be unaware of the failure of the ABS braking system and the associated nonfunctioning ABS braking, which could increase the risk of a crash in certain circumstances and could potentially result in property damage and/or personal injury. Parts and labor required to complete Recall R11SZ will be provided at no cost to you.

Your Blue Bird bus(es) affected by this recall are identified by body serial number(s) on the enclosed cover sheet(s). The cover sheets will indicate the type of ABS module installed on the buses listed.

If you no longer own the subject bus(es), please complete the appropriate section of the cover sheet and return to Blue Bird in the enclosed pink postage prepaid envelope.

If your bus is equipped with hydraulic brakes and was manufactured between November 02, 2006 and December 17, 2008 and equipped with the Wabco Type "D" ABS module you will need to have the ABS module wiring circuit only modified according to the attached recall instructions. These buses will not need to be reprogrammed. You may contact your Blue Bird dealer to have this modification performed or you may perform this modification yourself. You may also have this modification performed by a reputable local repair facility convenient to you. A qualified technician must perform the wiring circuit modification.

Reimbursement for labor for performing the wiring modification on the Wabco Type D ECU may be obtained by completing the "Completed Reply/Labor Reimbursement" sheet provided and returning it to Blue Bird in the enclosed pink postage prepaid envelope.

BLUE BIRD BODY COMPANY

P.O. Box 937 – 402 Blue Bird Blvd – Fort Valley, Georgia – (478) 825-2021

If your bus is equipped with air brakes or equipped with hydraulic brakes **and not** manufactured within the dates for buses equipped with Wabco Type D ECU's, you will need to schedule an appointment with your dealer to have the dash instrument panel reprogrammed. Your Blue Bird dealer must perform the software update. The software needed to correct this condition on these buses is anticipated to be available to your Blue Bird dealer within the next 30 days. Reprogramming the dash instrument panel will be performed by your Blue Bird dealer at no charge to you. A qualified technician must perform the software update.

If the modifications directed by this notification were performed on your bus prior to the receipt of this recall notification, complete and sign the recall reply sheet and attached a copy of the work order/invoice. Mail the documents in the **pink** self-addressed postage paid envelope included with the recall notification to Blue Bird for warranty consideration. Reimbursements will be made in accordance with the requirements of the National Highway Transportation Safety Act, Title 49 Code of Federal Regulations, Parts 573 and 577.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

If Blue Bird Body Company should fail to or is unable to remedy this condition without charge to you, you may contact:

**ADMINISTRATOR
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
1200 NEW JERSEY AVENUE, SE
WASHINGTON, D.C. 20590**

Or, you may call The National Highway Traffic Safety Administration toll free at:

1-888-327-4236
TTY 1-800-424-9153

Or, go to: [HTTP://WWW.SAFERCAR.GOV](http://WWW.SAFERCAR.GOV)

Questions regarding this recall campaign should be directed to me at (478) 822-2242.

Thank you,



Bill Coleman
Corporate Recall Administrator
Blue Bird Corporation



Stoneridge Instrument Cluster ABS Malfunction Indicator Noncompliance

RECALL

Models Affected: 2007-2011 Model Year "Vision" Buses

ISSUE

Under certain conditions the anti-lock brake (ABS) malfunction indicator may not illuminate when required.

CORRECTIVE ACTION

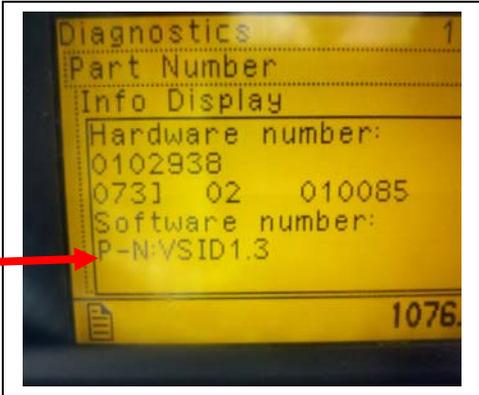
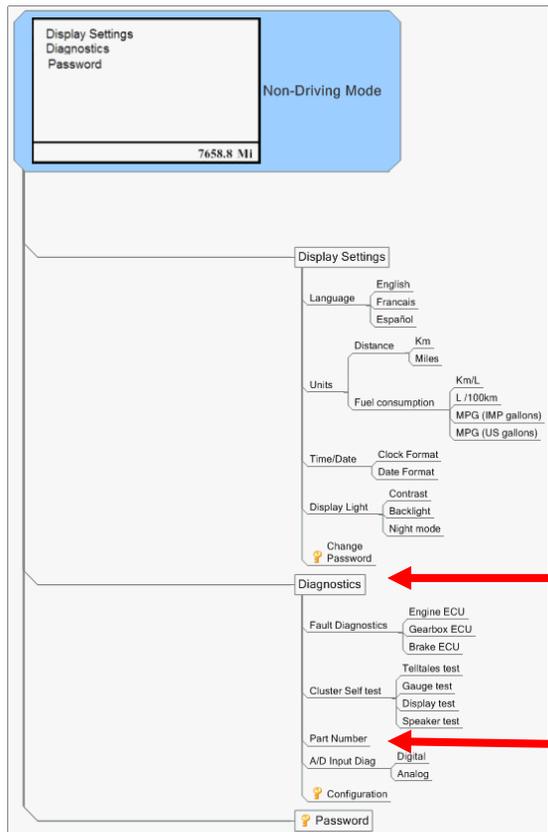
Affected units will require corrective action based on instrumentation software version and ABS control module type. Complete the appropriate corrective action procedure below.

SOFTWARE UPDATE PROCEDURE

WARNING: Always follow all Federal, State, Local, and Shop safety standards and use proper safety equipment when performing these procedures. **NOTE:** Software update procedure is NOT applicable to buses with cab mounted "D" version ABS ECU's.

Step 1. Set the bus parking brake.

Step 2. Using steering column stalk switch and instrument cluster diagnostics menu verify current software version displayed under part number menu.



R I I S Z
R E C A L L C A M P A I G N



Stoneridge Instrument Cluster ABS Malfunction Indicator Noncompliance

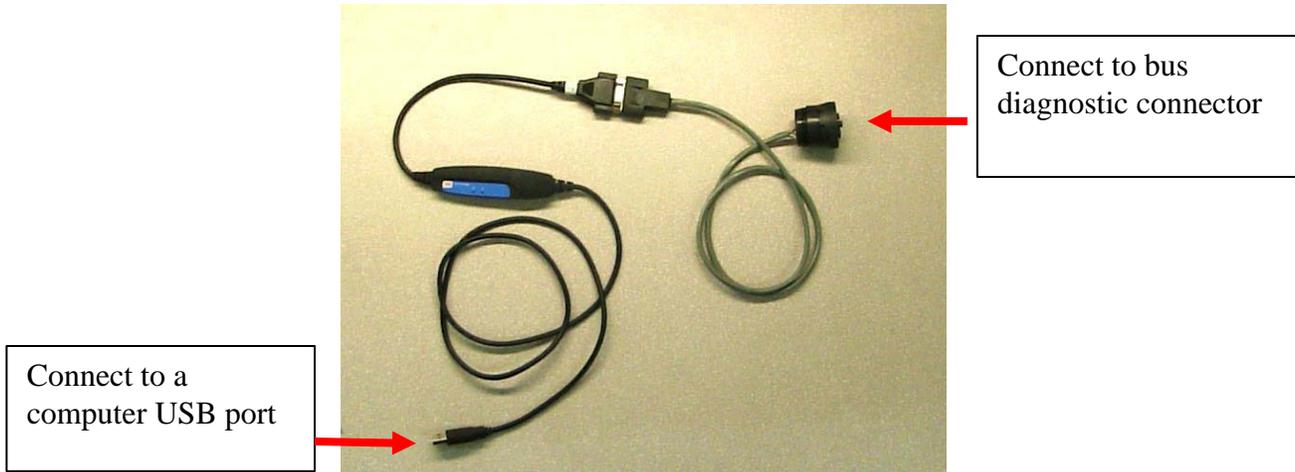
RECALL

Step 3. On units with version 1.4 or lower software installed flash the instrument cluster with version 4.11 software provided. On units with version 1.5 or higher installed flash the instrument cluster with version 4.1 software provided.

Step 4. Connect Kvaser CAN interface cables (supplied in kit 00114694) to the computers USB port and the Bus diagnostic connector located below the driver side dash area.

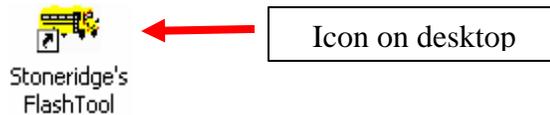
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Step 5. Once everything is connected, turn ignition switch on.

Step 6. Run the Flash Tool application by double clicking the Flash Tool icon on your desktop.





Stoneridge Instrument Cluster ABS Malfunction Indicator Noncompliance

RECALL

Step 7. You will see the following screen (main window):

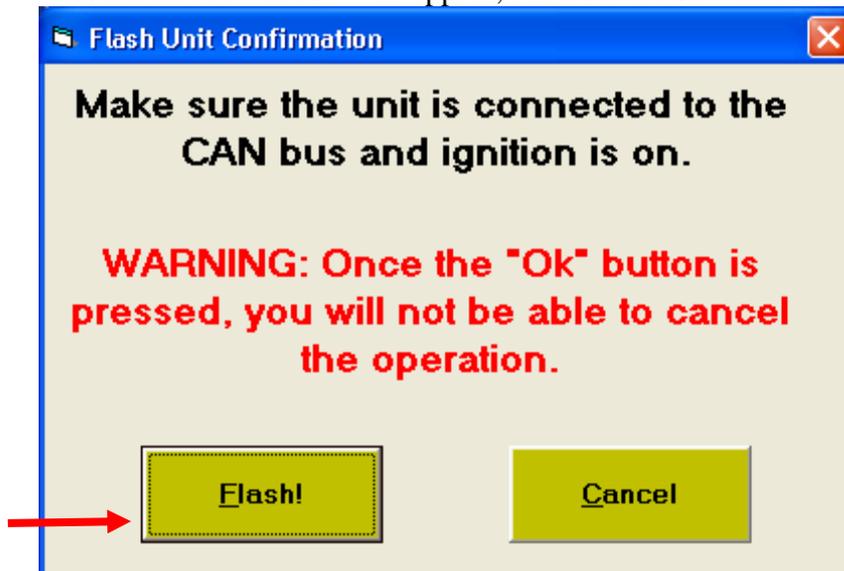


Step 8. Click on “Open Hex File...” button

- a. Select the appropriate software version hex file supplied.

Step 9. Click on “Flash!” button

- a. A confirmation window will appear, click on “Flash!” button



R I I S Z

R E C A L L C A M P A I G N

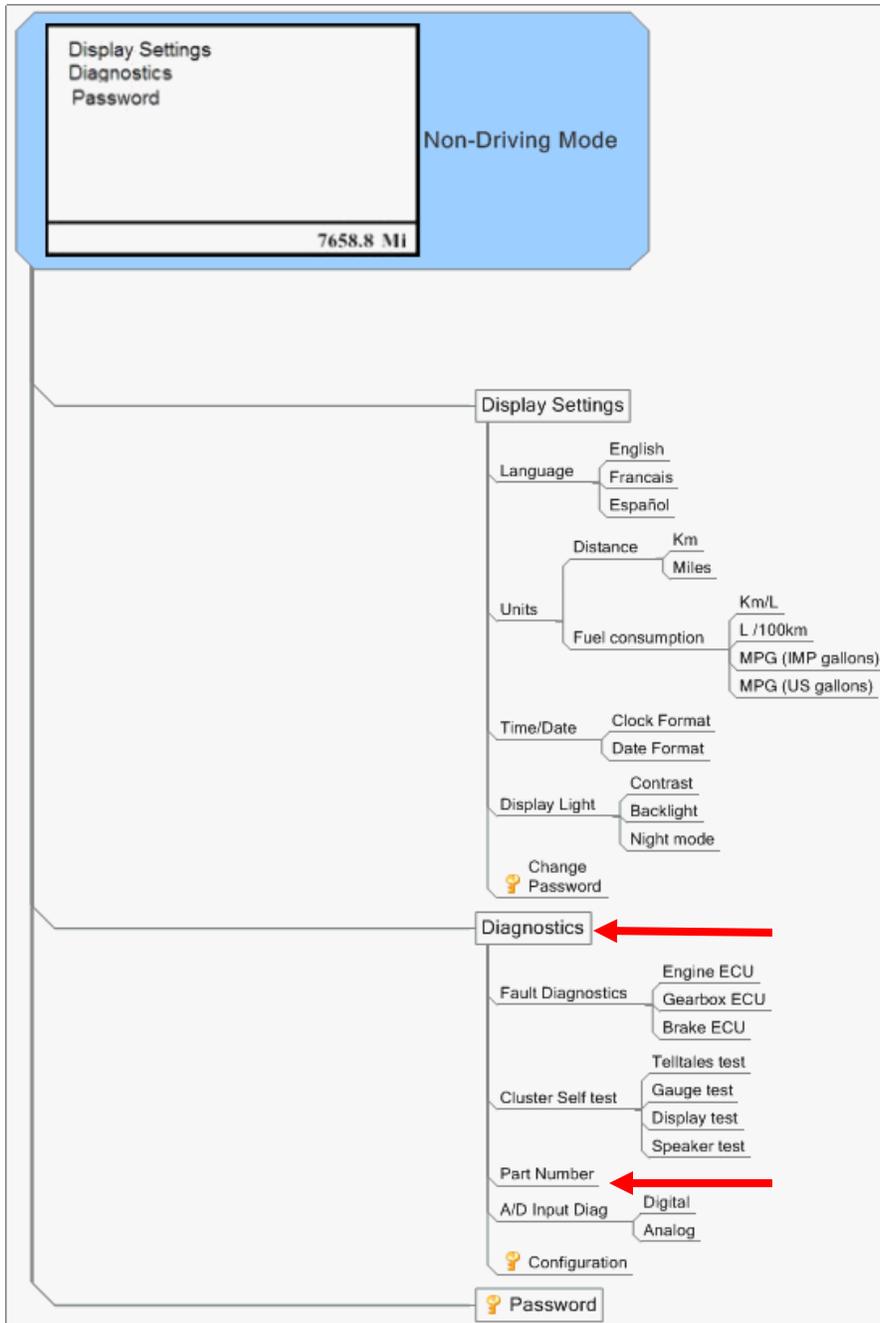


Stoneridge Instrument Cluster ABS Malfunction Indicator Noncompliance

RECALL

Step 10. Wait for the cluster unit to automatically restart. Once the flash process has started there is no way to abort. The status screen will display “passed Operation successful!” when process is complete. DO NOT switch ignition off while in process.

Step 11. Using steering column stalk switch and instrument cluster diagnostics menu verify software version displayed under part number menu is updated version level you installed.



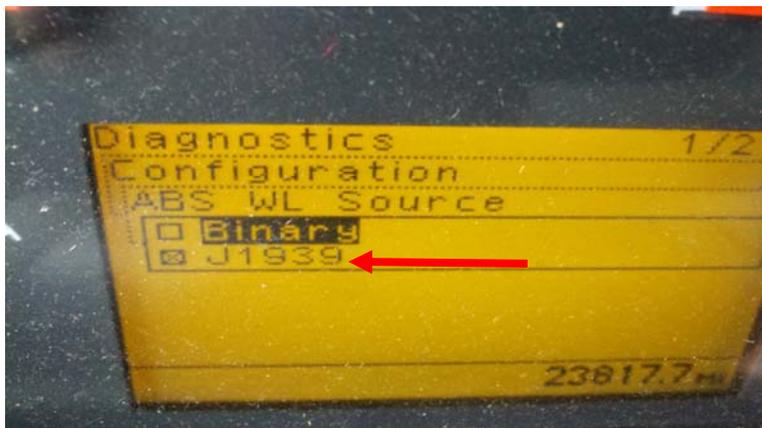
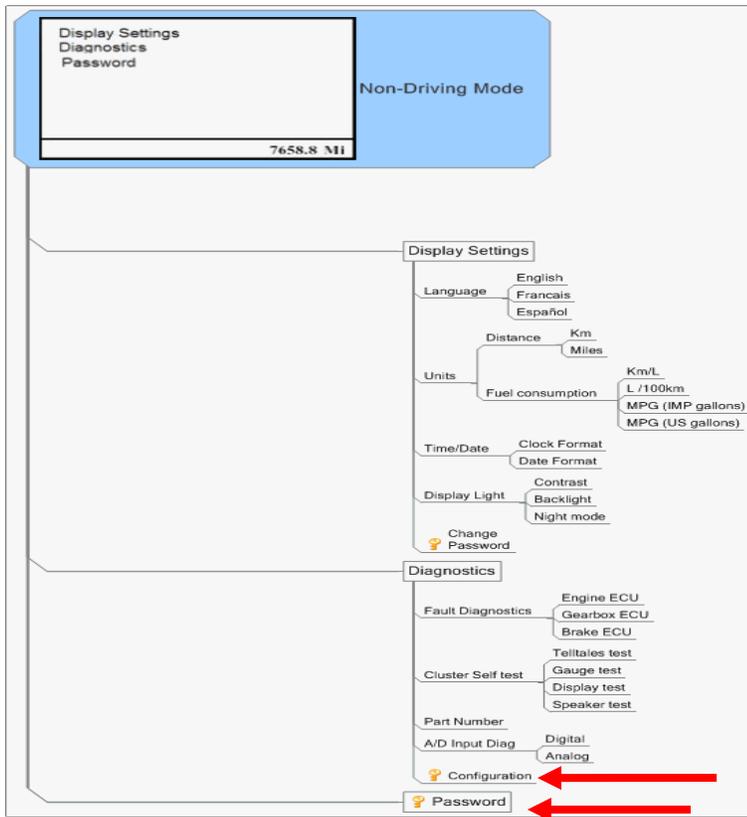
RECALL CAMPAIGN R I I S Z



Stoneridge Instrument Cluster ABS Malfunction Indicator Noncompliance

RECALL

Step 12. Using steering column stalk switch and instrument cluster configuration menu verify the “ABS WL Source” is set for “J1939”. Access to the configuration option is protected and requires the user to provide the access code via the “**Password**” option to enable it. Enter the password “2290” first. It is necessary to execute an ignition cycle (OFF/ON), after revising desired parameters, for EE parameter changes to take effect.



Step 13. Instrument cluster software update is complete.

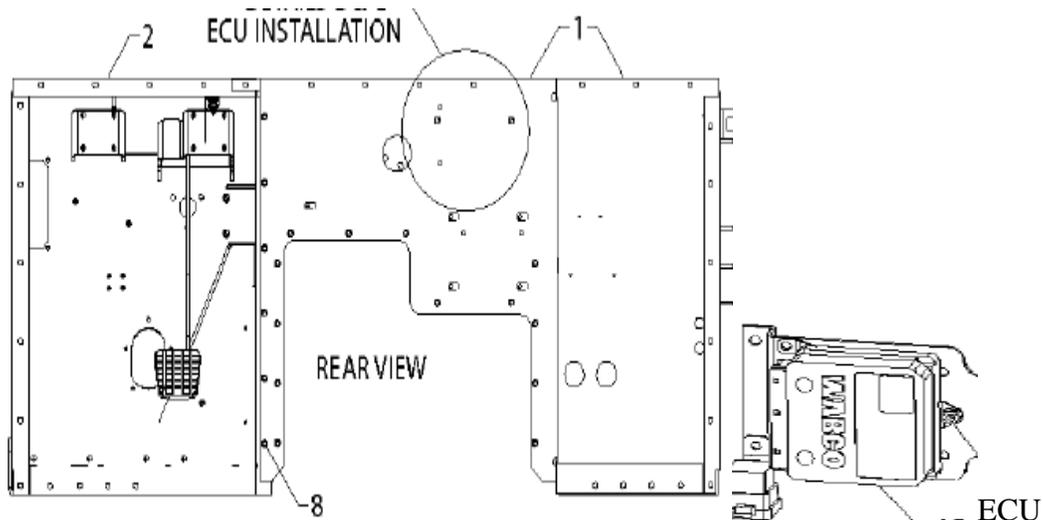
R I I S Z
R E C A L L C A M P A I G N



WIRING UPDATE PROCEDURE

WARNING: Always follow all Federal, State, And Local and Shop safety standards and use proper safety equipment when performing these procedures. Observe all safety precautions to secure the bus from rolling. **NOTE:** Wiring update procedure is **ONLY** applicable to buses with cab mounted “D” version ABS ECU’s.

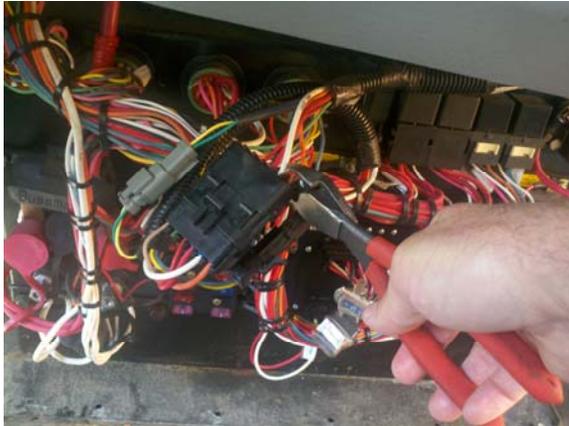
1. Park the bus on a level surface, apply parking brakes, turn off engine and remove keys. Chock wheels.
2. Disconnect batteries – Note; When disconnecting the batteries, remove the negative cable first.
3. Remove chassis Power Distribution Unit (PDU) cover by unscrewing two thumb screws. The thumb screws are located at the top of each side of the cover.





WIRING UPDATE PROCEDURE

4. Locate connector C504 in PDU (detail shown below). Cut and remove connector C504 from the PDU and ABS harness.



5. Splice each circuit from previous step to the corresponding circuit. Use appropriate terminal as listed below.

“ABS LGT”, “ABS ACTIVE”, circuit use terminal # 00005840.

“ABS GND”, “ABS BATT”, “MOD PUMP BATT”, circuit use terminal # 0036508.

“ABS IGN” circuit use terminal # 00036507.

	C504	
ABS IGN (OR)	>A>	ABS IGN (OR)
ABS GND (WH)	>B>	ABS GND (WH)
ABS BAT (RD)	>C>	ABS BAT (RD)
MOD PMP BAT (RD)	>D>	MOD PMP BAT (RD)
ABS LGT (GN)	>E>	ABS LGT (TN)
ABS ACTIVE + (GN)	>F>	ABS ACTIVE + (TN)

Remove two “C504” connectors and splice each circuit to the corresponding circuit.

6. Wiring update procedure is complete.



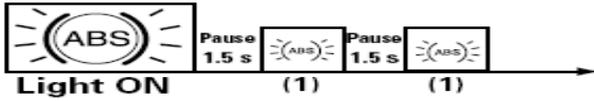
Stoneridge Instrument Cluster ABS
Malfunction Indicator Noncompliance

RECALL

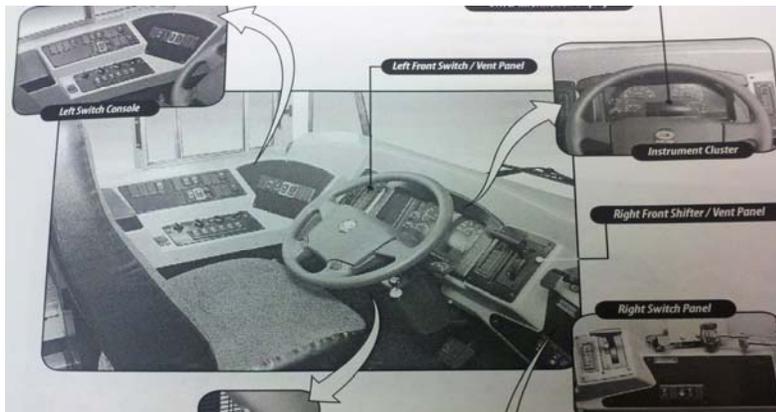


1 Second Hold

System O.K.



Blink Code 1-1: System OK



Diagnostic Switch located in this panel.

8. Blink code 1-1 indicates system OK and no fault codes. Any other blink code indicates a fault code. If any fault code exists please refer to maintenance manual 39 included in your Vision service manual.
9. ABS wiring update procedure is complete.

PARTS

PART NUMBER	QUANTITY	DESCRIPTION
00036507	1	Terminal, Butt Conn, 14-16 GA, Sealed
00036508	3	Terminal, Butt Conn, 10-12 GA, Sealed
00005840	2	Terminal, Butt Conn, 18-22 GA, Sealed

R I I S Z
R E C A L L C A M P A I G N



Service Information System

Shutdown SIS

Previous Screen

< Product: NO EQUIPMENT SELECTED
Model: NO EQUIPMENT SELECTED
Configuration: NO EQUIPMENT SELECTED

Service Letter

PRODUCT IMPROVEMENT PROGRAM FOR REPLACING COOLANT IN CERTAIN C7S ENGINES IN SCHOOL BUSES

Media Number -REBE7838-00

Publication Date -23/12/2011

Date Updated -23/12/2011

CONFIDENTIAL

REBE7838-00



SERVICE LETTER

23Dec2011

- U-588
- A-475
- D-504
- O-514
- TT-15

Safety

PRODUCT IMPROVEMENT PROGRAM FOR REPLACING COOLANT IN CERTAIN C7S ENGINES IN SCHOOL BUSES

1350 1395

PI10883

NOTE:

This Program must be administered as soon as possible. When reporting the repair, use "PI10883" as the Part Number and "7751" as the Group Number, "56" as the Warranty Claim Description Code and "T" as the SIMS Description Code. Exception: If the repair is done after failure, use "PI10883" as the Part Number, "7751" as the Group Number, "96" as the

Warranty Claim Description Code, and "Z" as the SIMS Description Code.

PROBLEM

This Product Improvement Program is a Safety Recall in accordance with the US National Motor Vehicle Safety Act and the Canadian Motor Vehicle Safety Act. Cooling system coolant in this application can degrade, which may cause engine components to prematurely deteriorate and a coolant leak could be experienced. If coolant leaks are observed, they should be immediately remedied. Failure to remedy a coolant leak, in conjunction with other factors or circumstances, may create the potential for a crash hazard.

It is a violation of US Federal law for a dealer to deliver a new motor vehicle or new or used engine covered by this Safety PIP until the PIP has been completed.

AFFECTED PRODUCT

Model	Identification Number
C7	C7S00422, 722, 726, 981, 998, 1003, 1461, 1464-1465, 1467, 1472-1474, 1481, 1487, 1490, 1492, 1494, 1496-1497, 1500, 1502-1505, 1507, 1511, 1514, 1516, 1518, 1523, 1526, 1528, 1530, 1533, 1537, 1539-1540, 1543, 1547, 1549, 1553-1554, 1558-1559, 1562, 1564, 1566, 1571, 1575, 1577, 1579, 1581-1582, 1585-1586, 1588-1592, 1594-1601, 1603-1605, 1607-1609, 1612, 1614, 1617-1642, 1644-1646, 1648-1650, 1652, 1654-1655, 1658-1664, 1666-1675, 1677-1683, 1685-1691, 1693-1725, 1727-1733, 1735-1736, 1738-1740, 1742-1745, 1747-1767, 1769-1771, 1774-1778, 1780, 1782-1789, 1791-1792, 1794-1798, 1800-1802, 1804-1808, 1810-1811, 1814-1815, 1817-1818, 1820-1827, 1829-1834, 1836, 1838-1858, 1860-1861, 1863-1867, 1869-1904, 1906-1907, 1909-1914, 1916-1918, 1920, 1922-1925, 1927-1930, 1932, 1936-1937, 1939-1944, 1946-1955, 1957-1966, 1968-1971, 1973-1980, 1982-1995, 1999-2001, 2003, 2005-2017, 2019-2022, 2025-2031, 2033-2039, 2041-2069, 2071, 2073-2074, 2076-2085, 2087, 2089-2101, 2103-2105, 2108-2112, 2114-2118, 2120-2137, 2139, 2141-2145, 2147-2155, 2157, 2159-2164, 2167-2171, 2173-2176, 2178-2181, 2183-2195, 2197-2200, 2203-2216, 2219, 2221, 2223, 2228, 2239, 2243, 2261, 2264-2265, 2274, 2276, 2279, 2283, 2286, 2290, 2293, 2296, 2303, 2305-2316,

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4716, 4718-4722, 4725-4727, 4729, 4732, 4734, 4737-4738, 4742, 4744-4745, 4747-4753, 4757, 4759-4761, 4763-4765, 4767-4768, 4771, 4774, 4776-4780, 4782-4783, 4785, 4787-4791, 4793-4794, 4796-4797, 4800-4802, 4804-4805, 4807-4826, 4828-4829, 4831-4840, 4842-4852, 4854-4861, 4863-4866, 4868-4873, 4875, 4878-4879, 4881, 4883-4899, 4902-4906, 4908-4910, 4912-4918, 4921-4922, 4925-4927, 4929-4935, 4937-4943, 4945-4948, 4950-4954, 4956-4957, 4960, 4962-4964, 4966-4967, 4969, 4971-4976, 4978-4979, 4981-4987, 4990-4994, 4999, 5001-5002, 5004-5005, 5007-5033, 5038, 5047, 5049-5052, 5054-5068, 5071-5073, 5075-5082, 5084, 5100, 5126, 5133, 5144, 5172-5175, 5182, 5188-5191, 5193, 5195-5196, 5198-5199, 5201-5205, 5207-5208, 5210, 5220, 5232, 5236, 5245, 5254, 5261-5262, 5264-5265, 5267-5269, 5271, 5273, 5276-5277, 5279, 5282, 5285-5286, 5288-5290, 5292-5293, 5299-5300, 5302-5303, 5305-5310, 5313, 5315, 5318, 5322-5323, 5325, 5330, 5334, 5336-5338, 5340, 5342-5343, 5345, 5349-5350, 5352, 5354-5355, 5380, 5383, 5421, 5425, 5430, 5436-5443, 5451, 5456, 5461-5462, 5472, 5579, 5589-5591, 5594, 5596-5599, 5601, 5603, 5608, 5613-5614, 5629-5630, 5636, 5645, 5662, 5671, 5673-5674, 5678, 5681, 5685, 5687-5689, 5691-5692, 5695, 5703-5705, 5708-5710, 5713-5714, 5718, 5720, 5722-5723, 5732, 5751-5752, 5754, 5777-5778, 5783, 5786, 5789, 5802, 5808-5809, 5814, 5827, 5831-5833, 5837, 5839, 5842, 5846, 5848, 5850, 5852, 5854, 5867, 5871, 5873, 5875, 5879, 5883, 5886, 5891-5892, 5896-5897, 5900, 5902-5903, 5910, 5912-5913, 5916-5918, 5920, 5924, 5926, 5931, 5936, 5942-5947, 5952-5954, 5965, 5967-5969, 5973, 5976, 5979, 5981-5983, 5987, 5989, 5991, 5998, 6000, 6003, 6005-6006, 6012, 6015, 6017, 6029-6030, 6034, 6047-6049, 6054, 6056, 6059, 6062, 6064-6065, 6067, 6069, 6094-6095, 6098-6102, 6104, 6106-6107, 6112-6113, 6115, 6118-6119, 6125, 6127-6145, 6148, 6152-6153, 6156, 6158, 6161, 6164-6165, 6172-6173, 6176, 6188, 6238, 6255, 6295, 6305, 6321, 6333, 6338, 6342, 6360, 6443-6446, 6448-6466, 6468-6469, 6472-6474, 6476-6477, 6479, 6481-6483, 6485, 6488-6491, 6493-6496, 6498, 6501, 6503-6507, 6509, 6511-6534, 6537, 6544-6545, 6547-6556, 6558, 6561-6562, 6564-6567, 6569-6573, 6578-6580, 6584-6587, 6593-6597, 6599, 6601-6603, 6609, 6611, 6614, 6616, 6620-6623, 6629-6631, 6634-6636, 6638, 6644-6650, 6654-6658, 6660-6663, 6665-6669, 6672-6676, 6678-6682, 6684-6696, 6698-6722, 6724-6729, 6733-6738, 6742-6749, 6751, 6753-6754, 6756-6763, 6765, 6767, 6769, 6771-6777, 6779-6794, 6796-6805, 6808, 6811, 6816-6819, 6821-6829, 6831-6832, 6834-6837, 6859, 6864, 6870-6871, 6874, 6878, 6880, 6882, 6888, 6890, 6894, 6899, 6905, 6928, 6930, 6934-6935, 6952,

6961, 6967, 6970, 6972-6973, 6976-6984, 6987, 6990-6991, 6993-6995, 6997-7008, 7010, 7013, 7015-7016, 7026, 7028, 7031, 7033, 7036-7037, 7039, 7043, 7047, 7049, 7053-7054, 7056, 7058, 7061, 7066, 7068-7070, 7073, 7077, 7081, 7083-7098, 7100-7101, 7104-7105, 7107, 7117-7118, 7124-7125, 7130, 7138, 7140, 7143-7144, 7148, 7150, 7153, 7155-7157, 7161, 7165, 7167-7168, 7171, 7173-7174, 7176, 7178-7179, 7181-7199, 7206, 7210-7212, 7216-7220, 7223-7225, 7227-7229, 7232-7237, 7239-7240, 7243, 7246-7247, 7251, 7254-7256, 7258-7259, 7262, 7268, 7272, 7276-7277, 7279-7281, 7284-7288, 7290-7294, 7296, 7298, 7301, 7303-7305, 7308-7314, 7316, 7318-7325, 7330-7332, 7334, 7336-7353, 7355-7356, 7358, 7361, 7364-7371, 7377, 7380-7384, 7387-7388, 7390-7393, 7395-7397, 7399, 7406, 7408-7409, 7411-7412, 7414-7415, 7418, 7421-7423, 7425, 7428, 7431, 7434, 7438, 7442-7447, 7480-7483, 7486-7487, 7491-7492, 7495-7499, 7501-7503, 7505, 7507-7508, 7512-7514, 7516-7517, 7521-7539, 7541-7544, 7546, 7548-7556, 7560, 7562-7564, 7568, 7571, 7576, 7578, 7587-7588, 7591-7594, 7598-7599, 7601-7602, 7605-7606, 7608-7609, 7611, 7616-7620, 7624, 7627-7628, 7635, 7641-7646, 7648-7667, 7669-7676, 7702, 7704-7709, 7712-7714, 7718, 7723-7725, 7737, 7740-7741, 7743, 7745-7746, 7749-7752, 7776, 7795, 7797, 7803, 7805, 7807-7809, 7812, 7816-7818, 7820-7823, 7828, 7832, 7834-7835, 7841, 7844, 7848-7851, 7853-7854, 7856, 7871, 7873, 7876, 7879, 7882, 7884-7886, 7888-7890, 7896-7899, 7902, 7904, 7907-7908, 7910, 7912-7919, 7922-7923, 7925, 7928, 7952, 7954-7955, 7957, 7960, 7963-7966, 7969-7975, 7979, 7981-7991, 7994, 7996, 7999-8000, 8002-8003, 8005-8006, 8008-8009, 8011, 8013, 8020-8021, 8023, 8026, 8031, 8035, 8038, 8044, 8049, 8053, 8055-8063, 8065, 8068, 8072-8074, 8076-8078, 8080-8085, 8087-8094, 8096, 8098, 8100, 8102, 8104-8134, 8136, 8138, 8140-8143, 8147, 8149, 8152-8157, 8159-8161, 8163-8164, 8168, 8170-8244, 8247-8253, 8258-8259, 8261, 8264, 8266-8267, 8269, 8271-8273, 8275-8278, 8281-8283, 8286-8287, 8290-8298, 8300, 8302-8306, 8308, 8310-8316, 8319-8328, 8331-8336, 8338, 8340-8352, 8354-8357, 8359-8370, 8372-8376, 8378-8381, 8383-8384, 8387, 8389-8390, 8392, 8394, 8396-8399, 8401-8411, 8414-8416, 8418, 8420, 8422, 8426-8428, 8430-8431, 8435, 8437-8438, 8440, 8442, 8446, 8452-8453, 8455-8458, 8462, 8467-8468, 8470-8473, 8475-8479, 8483-8487, 8490, 8494, 8496-8498, 8501, 8503-8504, 8506, 8512, 8518-8527, 8529-8530, 8532-8533, 8536, 8538-8542, 8544-8545, 8547, 8549, 8551-8552, 8554, 8556-8557, 8563, 8569-8570, 8572-8573, 8575-8576, 8583, 8591, 8594, 8600-8602, 8609-8623, 8630, 8632-8690, 8697, 8701, 8703, 8706, 8713-8736, 8738-8746,

8748-8750, 8752, 8755-8758, 8763, 8766-8768, 8770, 8774
-8775, 8777, 8779-8786, 8788-8789, 8794-8799, 8807,
8813, 8815-8816, 8820, 8827, 8829, 8837, 8855-8856,
8858, 8861-8864, 8866-8867, 8877, 8883, 8889, 8899,
8901-8909, 8914, 8918-8919, 8921-8931, 8933-8935, 8971-
8985, 8988, 8990-9000, 9002, 9005-9006, 9030-9031,
9035, 9037-9038, 9040-9051, 9053-9060, 9089-9095, 9097,
9100-9103, 9106, 9113-9118, 9120-9125, 9127-9139, 9141-
9143, 9145, 9147-9149, 9151-9154, 9156-9161, 9163-9176,
9178-9181, 9183-9235, 9237-9257, 9259, 9261-9274, 9276-
9279, 9284-9286, 9298, 9301, 9307, 9310, 9315-9316,
9318, 9320, 9336-9339, 9342-9345, 9348-9350, 9352-9357,
9359-9362, 9364-9369, 9373, 9380-9381, 9384, 9386, 9388
-9389, 9391, 9394, 9396-9397, 9400, 9402, 9404-9405,
9407, 9410-9418, 9421-9423, 9447-9451, 9455-9456, 9459,
9461, 9463-9465, 9469-9470, 9480-9482, 9490, 9492-9498,
9536, 9556-9564, 9566-9567, 9569-9572, 9574, 9579,
9582, 9587, 9632, 9635, 9640, 9642, 9645-9649, 9652-
9661, 9663-9668, 9671-9672, 9674, 9678, 9683-9684,
9688, 9693, 9696-9697, 9699, 9703-9704, 9708, 9713-
9715, 9719, 9727, 9738, 9740, 9742-9745, 9747-9751,
9855, 9858-9859, 9892, 9913-9932, 9934-9942, 9947-9952,
9954-9957, 9959, 9961-9962, 9964-9977, 9979, 9981-9985,
9987-9998

PARTS NEEDED

No parts needed for this program

ACTION REQUIRED

1. Drain all the coolant from the system.
2. Fill the system with CAT ELC coolant.
3. Bring the engine to operating temperature.
4. Add additional coolant if necessary.
5. Take a level 2 coolant sample and send for analysis.
6. Return the bus to service.

OWNER NOTIFICATION

U.S. and Canadian owners will receive the attached Owner Notification.

SERVICE CLAIM ALLOWANCES

Caterpillar		Dealer Suggested		Customer Suggested	
Parts %	Labor Hrs%	Parts %	Labor Hrs%	Parts %	Labor Hrs%
100%	100%	0%	0%	0%	0%

NOTE: This is a 1.0-hour job

Claim 7 gallons of bulk coolant @ \$12.00/gal for standard fill.
Claim up to an additional 3 gal of bulk coolant @ \$12.00/gal if additional heaters have been installed in the bus.
1395 081 Claim \$24.00 for the level 2 coolant sample.

PARTS DISPOSITION

Handle the parts in accordance with your Warranty Bulletin on warranty parts handling.

MAKE EVERY EFFORT TO COMPLETE THIS PROGRAM AS SOON AS POSSIBLE.

COPY OF OWNER NOTIFICATION FOR U.S. AND CANADIAN OWNERS

XYZ Corporation
3240 Arrow Drive
Anywhere, YZ 99999

SAFETY - RECALL - PROGRAM FOR COOLANT REPLACEMENT

MODELS INVOLVED - CERTAIN C7 SCHOOL BUS ENGINES

Dear Caterpillar Product Owner:

This notice is sent to you in accordance with the requirements of

the U.S. National Traffic and Motor Vehicle Safety Act. This notice is also in accordance with the requirements of the Canadian Motor Vehicle Safety Act. Caterpillar has decided that a defect, which relates to motor vehicle safety, exists in school buses equipped with certain Caterpillar C7 engines.

Cooling system coolant in this application can degrade, which may cause engine components to prematurely deteriorate and a coolant leak could be experienced. As prescribed in the Operations and Maintenance Manual, a daily walk-around inspection should be conducted to check for coolant leaks. If coolant leaks are observed, they should be immediately remedied. Failure to remedy a coolant leak, in conjunction with other factors or circumstances, may create the potential for a crash hazard.

Caterpillar will change the coolant in the engine serial numbers listed in this letter and provide new instructions for coolant sampling to determine the correct coolant maintenance and change interval for your application in an updated Operation and Maintenance Manual. Caterpillar will perform this service for you free of charge.

Contact your local Caterpillar dealer immediately to schedule this service. The dealer will advise you of the time required to complete this service.

Contact Caterpillar at this toll free number 1-800-447-4986 to request the number of updated Operation and Maintenance Manuals needed for your operation. Provide the shipping addresses and the manuals will be mailed to you.

If you are a lessor of these vehicles, you must forward this letter to your lessee within ten days.

If you have had your vehicle repaired for this condition prior to receipt of this notice and incurred any costs, you may be eligible for reimbursement. Please contact Caterpillar at this toll free number 1-800-447-4986.

If you no longer own the truck with this engine, please contact Caterpillar at this toll free number 1-800-447-4986.

If the dealer is unable to have the inspection or repair made, please contact:

Caterpillar Inc.
Peoria, IL 61629-2490
Attn: Americas Distribution Services Division
Truck Engine Call Center
Telephone: 1-800-447-4986

If you are unable to have the inspection or repair made within 60 days or without charge, you may submit a complaint to:

In the U.S.
Administrator
National Highway Traffic Safety Administration
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590
Telephone: 1-888-327-4236 (TTY:1-800-424-9153) or go to
<http://www.safercar.gov>

In Canada
Transport Canada
Defects Investigations and Recalls
Telephone: 1-800-333-0510

Please refer the dealer to their Service Letter dated 23Dec2011 when scheduling this service.

We regret the inconvenience this may cause you, but urge you to have this service performed for your added safety and satisfaction.

Caterpillar Inc.

Identification #(s)

Attached to 23Dec2011 Service Letter

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Wed Jan 11 11:02:21 EST 2012



BLUE BIRD

R10RV

DATE: APRIL 28, 2010

TO: U.S. DEALERS

**SUBJECT: RECALL R10RV RICON MODEL S & K SERIES L-MODEL
WHEELCHAIR LIFT PLATFORM OVERRUN**

This notice is sent to you in accordance with the requirements of The National Traffic and Motor Vehicle Safety Act.

Blue Bird Corporation has decided that in certain 2010 model year Blue Bird All American, Vision and Micro-Bird school buses manufactured from April 24, 2009 through November 14, 2009 and equipped with a Ricon Corporation Series model S or K L-model platform lift that a defect exists in the lift "Up" function software.

If the wheelchair lift "Up" function switch is released before the floor level limit switch is activated, the lift may continue its upward travel for approximately 1 second before stopping. This continued upward travel may overrun the floor level cut off point. When the platform overruns the vehicle floor level and stops at an angle of 15-20 degrees, it is possible for a person in a wheelchair to tip over and for someone standing on the platform to fall. This condition could cause personal injury.

Blue Bird is conducting a recall to notify you of this defect. Blue Bird is working with Ricon Corporation and Ricon will be contacting all affected owners and will provide, at no cost to owners, a bulletin outlining proper wheelchair lift operation and a DVD-based training aid. **Dealers and owners will be provided with a recall completion reply sheet which must be completed for each body number/lift indicating the bulletin has been received and reviewed and the DVD based training aid has been received and reviewed. This reply sheet must be returned to Blue Bird Att: Recall Administration. Failure to return the completed reply sheet will result in follow up notices being mailed.**

A printout is enclosed with the body numbers of the buses that were delivered in your service area which may have the subject lifts installed. **You must enter the wheelchair lift serial number on the Ricon website to determine if the wheelchair lift installed is affected by the campaign. The Ricon recall number is 09E-061.**

BLUE BIRD BODY COMPANY

P.O. Box 937 – 402 Blue Bird Blvd – Fort Valley, Georgia – (478) 825-2021

If you are not an authorized Ricon dealer or service center, you can find the nearest Ricon dealer/service center by visiting Ricon Corporation's website and selecting "Dealer Locator" at the bottom left of Ricon's home page. You may also call Ricon at (800) 322-2884 Daniel Mata-Recall Coordinator -ext. 3374.

It is the dealers responsibility to verify that the correct owner name, address and telephone number is provided for each listed vehicle. Any corrections or updates should be made on BBOND. Addresses that cannot be updated on BBOND should be forwarded to the Recall Administrator.

If you have in your possession or have sold a vehicle that was purchased from another dealer that may be affected by this recall, please notify me at 478-822-2242.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Dealers are reminded of their responsibilities under section 154 of The National Traffic and Motor Vehicle Safety Act of 1991. Dealers are required to complete modifications or repairs on units in their inventory before delivering to the final owner. Reference Blue Bird Body Company Distributor Memo No. 42-92.

Questions regarding this recall campaign should be directed to me at (478) 822-2242.

Thank you,

A handwritten signature in cursive script that reads "Bill Coleman".

Bill Coleman
Corporate Recall Administrator
Blue Bird Corporation
478-822-2242
bill.coleman@blue-bird.com



BLUE BIRD

R10RV

April 28, 2010

Dear Blue Bird Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Blue Bird Corporation has decided that in certain 2010 model year Blue Bird All American, Vision and Micro-Bird school buses manufactured from April 24, 2009 through November 14, 2009 and equipped with a Ricon Corporation Series model S or K L-model platform lift that a defect exists in the lift "Up" function software.

If the wheelchair lift "Up" function switch is released before the floor level limit switch is activated, the lift may continue its upward travel for approximately 1 second before stopping. This continued upward travel may overrun the floor level cut off point. When the platform overruns the vehicle floor level and stops at an angle of 15-20 degrees, it is possible for a person in a wheelchair to tip over and for someone standing on the platform to fall. This condition could cause personal injury.

The body numbers of your Blue Bird buses which **may** have the subject lifts installed are indicated on the attached yellow cover sheet. You can enter the wheelchair lift serial number(s) on the Ricon website to determine if the wheelchair lift installed in your bus(es) is affected by this campaign. The Ricon recall number is 09E-061.

If your Ricon wheelchair lift serial number is one of the affected lifts, you should contact Ricon Corporation immediately by calling Ricon Customer service at (800) 322-2884 or by emailing Daniel Mata, Recall Coordinator, at dmata@wabtec.com or you can locate your nearest servicing dealer by using the Ricon Dealer Locator at the lower left of the Ricon Website www.riconcorp.com.

Ricon is developing a software solution for this issue. In the interim, Ricon will be providing, at no charge to you, both a bulletin outlining proper wheelchair lift operation and a DVD-based training aid. The software solution will be forwarded to you at no charge by Ricon Corporation when complete.

Attached is a recall completion reply sheet which must be completed for each body number/lift indicating the bulletin has been received and reviewed and the DVD-based training aid has been received and reviewed. This reply sheet must be returned to Blue Bird Att: Recall Administration. Failure to return the completed reply sheet will result in follow up notices being mailed.

BLUE BIRD BODY COMPANY

P.O. Box 937 – 402 Blue Bird Blvd – Fort Valley, Georgia – (478) 825-2021

If you no longer own the subject bus(es), please complete the appropriate section of the yellow cover sheet and return to Blue Bird in the enclosed pink postage prepaid envelope.

If the remedy directed by this notification was provided for your bus(es) prior to the receipt of this recall notification, complete and sign the recall reply sheet and return to Blue Bird Attn: Recall Administrator. Mail the documents in the pink self-addressed postage paid envelope included with this recall notification. If there were cost associated with obtaining the Ricon bulletin and Ricon DVD-based training aid you may be eligible to receive reimbursement for that cost. Include a copy of the invoice with the recall completion reply sheet for reimbursement consideration.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

If after contacting Ricon Corporation, your warning decal and DVD based training aid are not received in a reasonable time and without charge you may contact:

ADMINISTRATOR
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
1200 NEW JERSEY AVENUE, SE
WASHINGTON, D.C. 20590

or you may call The National Highway Traffic Safety Administration toll free at:

1-888-327-4236
TTY: 1-800-424-9153
or go to: <http://www.safercar.gov>

Questions regarding this recall campaign should be directed to me at (478) 822-2242.

Thank you,



Bill Coleman
Corporate Recall Administrator
BLUE BIRD CORPORATION



Recall Completion Reply Sheet

Blue Bird Body Company Recall R10RV (Ricon #09E-061) Ricon Lift Platform Overrun

When you have received and installed the warning decal and reviewed the DVD based training aid for your Ricon wheelchair lift(s) affected by above recall campaign, please complete the form below and return to Blue Bird in the pink reply envelope provided. **Completing and returning this form will prevent you from receiving follow up notices on this recall.**

Blue Bird Body Number	Ricon Lift Serial Number	Date Ricon Bulletin Reviewed	Date Ricon DVD Based Training Aid Reviewed

Form Completed by: _____
(Print Name)

School/Company: _____

Address: _____

City: _____

State: _____ Zip: _____

Signature: _____ Date: _____



BLUE BIRD

R10RW

DATE: MAY 26, 2010

TO: U.S. DEALERS

SUBJECT: RECALL R10RW POWER CABLE LUG ORIENTATION

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Blue Bird has decided that a defect which relates to motor vehicle safety exists on certain 2004 through 2009 model year "Vision" conventional **school buses** manufactured from January 30, 2003 through September 24, 2008.

On the subject buses, the main power cable lugs (eyelets) may have been improperly oriented at the power distribution unit (PDU) and the driver's control module (DCM). If the power cable lug(s) are improperly oriented vibration may wear the insulation permitting direct contact between the bare lug and the PDU or DCM which could cause a direct short with potential for fire.

Blue Bird is conducting a recall to correct this defect. Buses with this defect must be inspected for proper power cable lug orientation and, if needed, power cable lugs re-oriented according to the enclosed instructions for Recall R10RW.

If our records indicate affected buses were delivered in your service area, a printout identifying affected buses is enclosed. **Dealers should verify correct owners and assure that complete mailing and shipping addresses are provided for each listed vehicle.**

If you have in your possession or have sold a bus that was purchased from another dealer that may be affected by this recall, please notify Blue Bird Recall Administration at 478-822-2242.

Labor time to inspect for proper orientation of power cable lugs is 0.5 hrs per bus.

Labor time to inspect for proper orientation of power cable lugs and re-orient lugs at one location (DCM or PDU) is 0.8 hours per bus.

Labor time to inspect for proper orientation of power cable lugs and re-orient lugs at two locations (DCM and PDU) is 1.1 hours per bus.

BLUE BIRD BODY COMPANY

P.O. Box 937 – 402 Blue Bird Blvd – Fort Valley, Georgia – (478) 825-2021

Warranty applications for labor reimbursement may be submitted to Blue Bird iWarranty (Campaigns/Claims).

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Dealers are reminded of their responsibilities under section 154 of The National Traffic and Motor Vehicle Safety Act of 1991. Dealers are required to complete modifications on units in their inventory before delivering to the final owner. Reference Blue Bird Body Company Distributor Memo No. 42-92.

Questions regarding this recall campaign should be directed to me at (478) 822-2242.

Sincerely,

A handwritten signature in black ink that reads "Bill Coleman". The signature is written in a cursive style with a large, stylized "B" and "C".

Bill Coleman
Corporate Recall Administrator
Blue Bird Corporation



R10RW

May 26, 2010

Dear Blue Bird Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Blue Bird has decided that a defect which relates to motor vehicle safety exists on certain 2004 through 2009 model year "Vision" conventional **school buses** manufactured from January 30, 2003 through September 24, 2008.

On the subject buses, the main power cable lugs (eyelets) may have been improperly oriented at the power distribution unit (PDU) and the driver's control module (DCM). If the power cable lug(s) are improperly oriented vibration may wear the insulation permitting direct contact between the bare lug and the PDU or DCM which could cause a direct short with potential for fire.

Blue Bird is conducting a recall to correct this defect. Buses with this defect must be inspected for proper power cable lug orientation and, if needed, power cable lugs re-oriented according to the enclosed instructions for Recall R10RW.

Your Blue Bird bus(es) affected by this recall are identified by body serial number(s) on the enclosed reply sheets. If you no longer own the subject bus(es), please complete the appropriate section of the **pink** reply sheet and return to Blue Bird in the enclosed pink postage prepaid envelope.

Labor time to inspect for proper orientation of power cable lugs is 0.5 hrs per bus.

Labor time to inspect for proper orientation of power cable lugs and re-orient lugs at one location (DCM or PDU) is 0.8 hours per bus.

Labor time to inspect for proper orientation of power cable lugs and re-orient lugs at two locations (DCM and PDU) is 1.1 hours per bus.

Reimbursement for labor may be obtained by completing the enclosed **labor reimbursement sheet** and returning it to Blue Bird in the enclosed **pink** postage prepaid envelope.

BLUE BIRD BODY COMPANY

P.O. Box 937 – 402 Blue Bird Blvd – Fort Valley, Georgia – (478) 825-2021

If the modifications directed by this notification were performed on your bus prior to the receipt of this recall notification, complete and sign the recall reply sheet and attached a copy of the work order/invoice. Mail the documents in the **pink** self-addressed postage paid envelope included with the recall notification to Blue Bird for warranty consideration. Reimbursements will be made in accordance with the requirements of the National Highway Transportation Safety Act, Title 49 Code of Federal Regulations, Parts 573 and 577.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

If Blue Bird Body Company should fail to or is unable to remedy this condition without charge to you, you may contact:

**ADMINISTRATOR
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
1200 NEW JERSEY AVENUE, SE
WASHINGTON, D.C. 20590**

Or, you may call The National Highway Traffic Safety Administration toll free at:

1-888-327-4236
TTY 1-800-424-9153

Or, go to: [HTTP://WWW.SAFERCAR.GOV](http://WWW.SAFERCAR.GOV)

Questions regarding this recall campaign should be directed to me at (478) 822-2242.

Thank you,



Bill Coleman
Corporate Recall Administrator
BLUE BIRD CORPORATION



Incorrect Power Cable Lug Orientation

RECALL

Models Affected: 2004 through 2009 Vision

ISSUE

The power cables running to the power distribution unit (PDU) and driver's control module (DCM) may have been installed with the lug (eyelet) flat side up. Vibration of the bus may cause the insulation to wear permitting direct contact between the PDU or DCM which could result in a direct short in the electrical system.

CORRECTIVE ACTION

The power cable connections at the DCM and PDU must be inspected to determine if the power cable lugs were incorrectly installed (flat side up). If they were installed incorrectly, disconnect the cable(s) and reinstall correctly per the procedure listed below. If the cable(s) are found to be damaged, contact Blue Bird Recall Administration for further instructions.

PROCEDURE: NOTE: ALWAYS READ THE ENTIRE PROCEDURE BEFORE PERFORMING

WARNING: Always follow all Federal, State, Local and Shop safety standards and use proper safety equipment when performing these procedures.

WARNING: Ensure that no wires are pinched at the Power Distribution Unit (PDU) when PDU is slid back into position.

Caution: Be sure to replace any broken or removed wire ties.

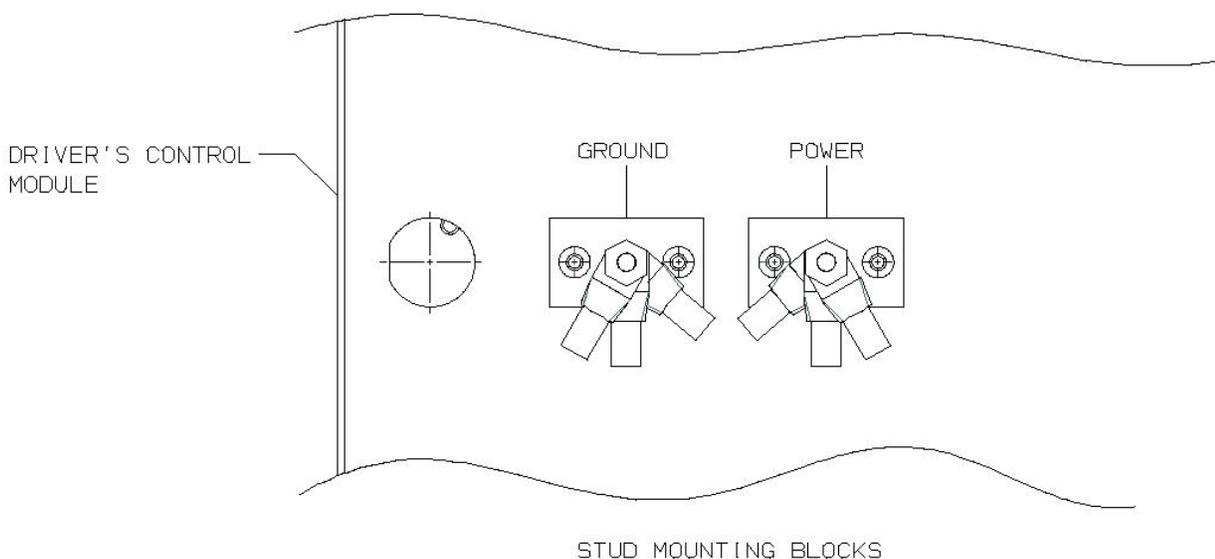
PARTS: (If needed, contact Blue Bird Recall Administration)

00024076 Button Head Cable Tie 14.75 X .22W

00029999 Cable, Tie, 14.75L x .22W

INSPECTION OF DRIVER'S CONTROL MODULE (DCM)

1. Park the vehicle on a level surface, apply parking brake, turn engine off, remove ignition key and chock wheels.
2. Disconnect batteries. *Always remove negative cables first.*
3. Open engine hood and locate the Chassis Power Stud(s) on the driver's side of the **Driver's Control Module (DCM)**. Depending on the type of engine installed and options on the vehicle (air conditioning and/or lift), there could be one or two power studs next to the Ground Stud. See the following diagrams.



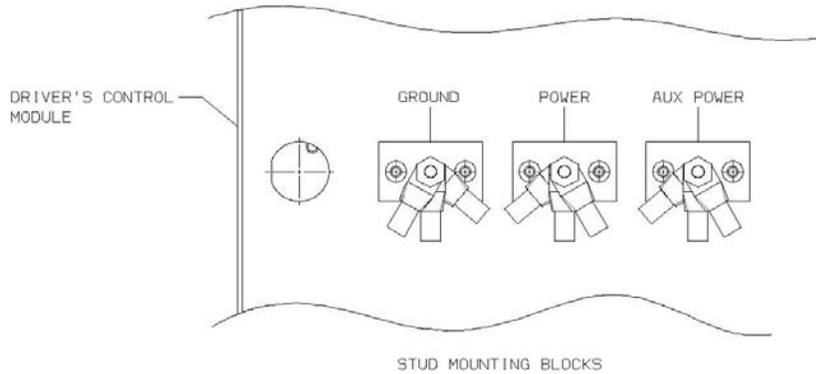
R I O R W

R E C A L L C A M P A I G N

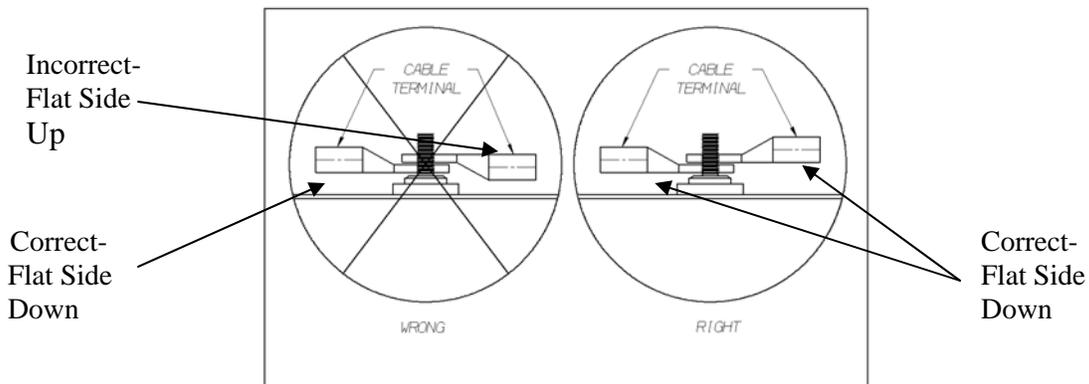


Incorrect Power Cable Lug Orientation

RECALL



4. Inspect the electrical cable connections at the Power Stud and Aux Power Stud, if installed. See the diagram below to determine if the cables were installed correctly. ALL terminal lugs on each power stud should be oriented such that the barrel of the lug is further away from the mounting surface of the isolated stud. The flat side of terminal end (lug) must be down.



5. If the cables were installed incorrectly, remove the nut securing the cables. Then remove the cables and reinstall correctly per the diagram above. Make sure the terminal lugs are fanned out on the stud as opposed to directly on top of each other. Vice-grip pliers are recommended when turning incorrectly installed cable terminal lug to the correct orientation of flat side down.

Caution: Do not grasp cable on insulation



6. Secure the cables with the nut and torque to 12 to 15 ft-lbs.
7. Apply corrosion resistant coating (glyptal) as required to prevent corrosion.

R I O R W
R E C A L L C A M P A I G N

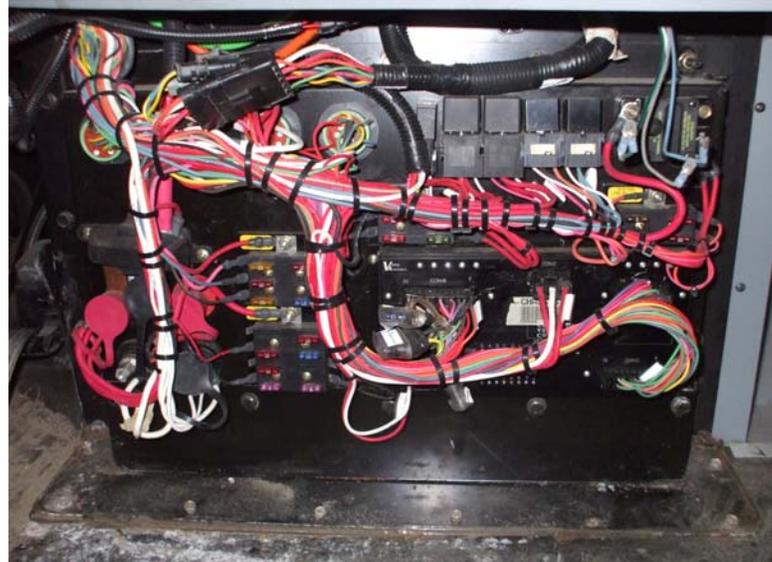


INSPECTION OF POWER DISTRIBUTION UNIT (PDU)

8. Next, the Chassis Power Studs located behind the PDU must be checked. To gain access behind the PDU go inside the vehicle and do the following:
 - a. Remove the Power Distribution Unit (PDU) cover by unscrewing the two thumb screws, located at the top of each side of the cover.



- b. Remove the fasteners securing the PDU to the Driver's Control Module (DCM) and the fasteners securing the PDU to the floor.





Incorrect Power Cable Lug Orientation

RECALL

- c. Carefully slide the right side of the PDU rearward far enough to access the wiring behind the engine.



- i. To gain access behind the PDU to inspect and possibly correct the cables, it may be necessary to cut the two cable ties securing cables to the PDU.

The upper cable tie is shown below.



R I O R W

R E C A L L C A M P A I G N



Incorrect Power Cable Lug Orientation

RECALL

- ii. To gain better access it may be necessary to disconnect the 4 Deutsch connectors.



9. Next, locate and inspect the two Power Studs below the 4 Deutsch connectors.



10. Remove the two red protective covers and inspect the electrical cable connections at the Power Studs.

Reference diagram at top of page six (6) for proper cable end installation.

ALL terminal lugs on each power stud should be oriented such that the barrel of the lug is further away from the mounting surface of the isolated stud. The flat side must be down.

If the cables were installed correctly, proceed to step 16 on page 6.

If cables **are not** installed correctly, follow steps 11 through 15.

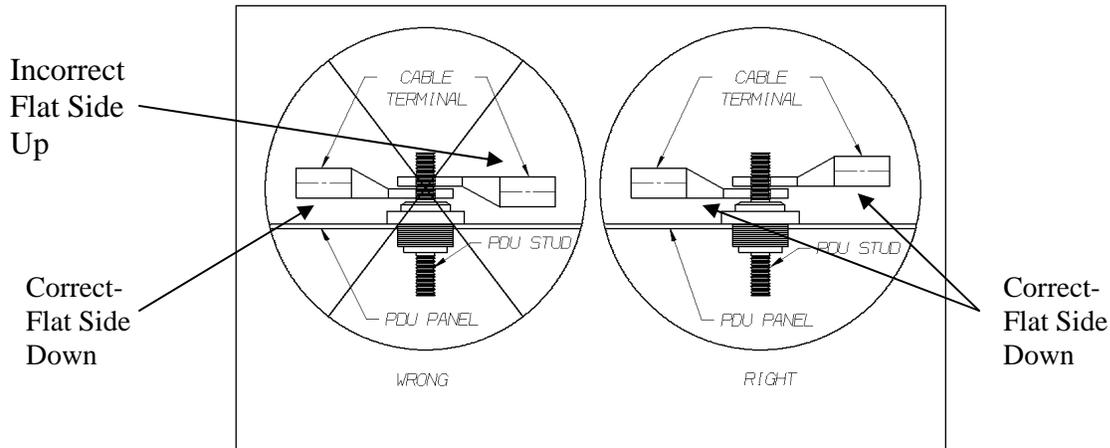
R I O R W

R E C A L L C A M P A I G N



Incorrect Power Cable Lug Orientation

RECALL



11. Remove the nut securing the cables. Then remove the incorrectly installed cables and reinstall correctly with flat side down. Make sure the terminal lugs are fanned out on the stud as oppose to directly on top of each other.
12. If needed, use vise grips to rotate cable so lug fits with flat side down. See photo on page 2.
13. Secure the cables with the nut and torque to 12 to 15 ft-lbs.
14. Apply corrosion resistant coating (glyptal) as required to prevent corrosion.
15. Reinstall the red protective covers.
16. While having access to this area, inspect ALL power cables for any evidence of contact with the rear of the engine, chaffing, or other damage. **Ensure clearance between power cables and any part of the engine is more than ½ inch.**

If any damaged cables are found, contact Blue Bird Recall Administration for replacement cable(s).

17. Reinstall the Power Distribution Unit (PDU).
 - a. Reconnect the 4 Deutsch connectors if they were removed.
 - b. Secure the power cables to the back of the PDU with Button Cable Ties, if they were damaged or removed.
 - c. Carefully slide the PDU back into position against the DCM.

WARNING: Ensure that no wires are pinched at the Power Distribution Unit (PDU) when PDU is slid back into position.

- d. Secure the PDU to the DCM and floor with the fasteners removed earlier.
 - e. Reinstall the Power Distribution Unit cover with the two thumb screws.
18. Close the engine hood. Reconnect batteries.

[CAUTION] When reconnecting the batteries, connect the Negative cable last.

19. The procedure is complete, and the bus may be returned to normal service.

R I O R W

R E C A L L C A M P A I G N



BLUE BIRD

R10RZ

DATE: SEPTEMBER 10, 2010

TO: U.S. DEALERS

**SUBJECT: RECALL R10RZ CATERPILLAR C7 07 NUMBER 5 AND 6 FUEL LINE
CRACKS**

This notice is sent to you in accordance with the requirements of The National Traffic and Motor Vehicle Safety Act.

Blue Bird Body Company has decided that a defect which relates to motor vehicle safety exists in certain vehicles it manufactured equipped with Caterpillar C7 07 engines. This decision was based on information provided by Caterpillar Inc. that a defect exists in their C7 07 engines installed in 2008 through 2010 model year Blue Bird All American school buses and Blue Bird "Vision" conventional school buses manufactured from May 23, 2007 through March 09, 2010.

Caterpillar notified Blue Bird that certain C7 07 engines may develop a crack in the #5 and #6 fuel lines. Caterpillar advises that a cracked fuel line may cause fuel to spray and leak out of the crack which, in the presence of an ignition source, could be a potential fire hazard. An engine de-rate may be experienced and a check engine lamp or an engine protection lamp may also be activated.

Caterpillar is conducting a voluntary recall to correct this defect and will be mailing notification letters to owners. Buses with the defect must be corrected by a Caterpillar dealer. A copy of Caterpillar's owner notification letter dealer service letter is attached.

It is a violation of Federal law for a dealer to deliver a new motor vehicle covered by this recall under a sale or lease until the defect is remedied. Therefore, dealers must complete modifications/repairs on units in their inventory before delivering to the final owner. Reference Blue Bird Body Company Distributor Memo No. 42-92. A list of your units affected by Recall R10RZ is attached.

It is the dealer's responsibility to verify that the correct owner name, address and telephone number is provided for each listed vehicle. Any corrections or updates should be made on BBOND. Addresses that cannot be updated on BBOND should be forwarded to the Recall Administrator.

BLUE BIRD BODY COMPANY

P.O. Box 937 – 402 Blue Bird Blvd – Fort Valley, Georgia – (478) 825-2021

If you have in your possession or have sold a vehicle that was purchased from another dealer that may be affected by this recall, please notify me at 478-822-2242.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Dealers are reminded of their responsibilities under section 154 of The National Traffic and Motor Vehicle Safety Act of 1991.

Questions regarding this recall campaign should be directed to me at (478) 822-2242.

Sincerely,

A handwritten signature in cursive script that reads "Bill Coleman". The signature is written in black ink and is positioned above the typed name and title.

Bill Coleman
Corporate Recall Administrator
Blue Bird Corporation



BLUE BIRD

R10SH

DATE: AUGUST 05, 2010

TO: U.S. DEALERS

SUBJECT: RECALL R10SH CRUISE CONTROL MAY NOT DEACTIVATE

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Blue Bird has decided that a defect which relates to motor vehicle safety exists on certain model school buses identified below.

2011 model year "Vision" model conventional school and non school buses manufactured from November 09, 2009 through August 04, 2010.

2010 and 2011 model year "D3" All American model school and non school buses manufactured from May 13, 2009 through August 04, 2010. The "A3" All American model school and non school buses are not affected.

On the subject buses, the cruise control may not deactivate when the service brakes are applied. Failure of the cruise control to deactivate may result in a vehicle crash with potential for personal injury or death. Blue Bird is conducting a recall to correct this condition.

If not already disabled, the cruise control feature on the subject buses MUST be disabled until the permanent remedy for this condition can be performed. Instructions for disabling the cruise control feature are attached. Decals indicating cruise control has been disabled may be obtained from Blue Bird Recall Administration and must be affixed to the dash after the cruise control has been disabled. Owners will be notified to have the cruise control feature.

The permanent remedy requires the installation of a "fail safe" wiring circuit in the cruise control wiring. Special software and connecting cable (part number 10016388) for the new style ACTIA instrument panel are required to reprogram the instrument panel as part of the permanent remedy therefore **the permanent remedy must be performed by a Blue Bird dealer. Reprogramming software to perform Recall R10SH will be provided via email from Blue Bird Recall Administration.**

All Blue Bird dealers should have part number 00072987 Kit, Actia, Diagnostic Tool and related connecting cables as part of their shop tool inventory for servicing Blue Bird buses with Actia instrument clusters. The new connecting cable (part number 10016388) is included in current kits available through Blue Bird Parts Sales. If you already have part number 00072987 Kit, Actia, Diagnostic Tool, you will need part number 10016388 Harness, Interface, to complete Recall R10SH. The connecting cable (10016388) must be purchased through Blue Bird Parts Sales.

BLUE BIRD BODY COMPANY

P.O. Box 937 – 402 Blue Bird Blvd – Fort Valley, Georgia – (478) 825-2021

Separate instructions for installing the fail safe wiring circuit on affected "Vision" buses and "D3" All American buses are attached.

Parts required to install the "fail safe" wiring circuitry must be ordered through Blue Bird Recall Administration. Body numbers are required for each order. Parts are anticipated to be available on or about August 30, 2010.

If our records indicate affected buses were delivered in your service area, a printout identifying affected buses is enclosed. **Dealers should verify correct owners and assure that complete mailing and shipping addresses are provided for each listed vehicle.**

Labor time to disable the cruise control mechanism is 0.4 hrs (24 minutes) per bus. Warranty applications for labor reimbursement for disabling the cruise control may be submitted to Blue Bird iWarranty. Claims for **disabling the cruise control MUST** be filed under Recall **R10SH**.

Labor time to install the fail safe wiring circuit on the All American (D3) is 0.75 hrs (45 minutes) per bus.

Labor time to perform the permanent remedy on the Vision (BBCV) is 0.5 hrs (30 minutes) per bus.

Warranty applications for labor reimbursement for installing the fail safe wiring circuit may be submitted to Blue Bird iWarranty. Claims for **installing the fail safe wiring circuit MUST** be filed separately under **R10SH-2**. **Do not submit combined claims.**

If you have in your possession or have sold a bus that was purchased from another dealer that may be affected by this recall, please notify Blue Bird Recall Administration at 478-822-2242.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Dealers are reminded of their responsibilities under section 154 of The National Traffic and Motor Vehicle Safety Act of 1991. Dealers are required to complete modifications on units in their inventory before delivering to the final owner. Reference Blue Bird Body Company Distributor Memo No. 42-92.

Questions regarding this recall campaign should be directed to me at (478) 822-2242.

Sincerely,



Bill Coleman
Corporate Recall Administrator
Blue Bird Corporation



R10SH

August 05, 2010

Dear Blue Bird Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Blue Bird has decided that a defect which relates to motor vehicle safety exists on certain model school buses identified below.

2011 model year "Vision" model conventional school and non-school buses manufactured from November 09, 2009 through August 04, 2010.

2010 and 2011 model year "D3" All American model school and non-school buses manufactured from May 13, 2009 through August 04, 2010. The "A3" All American model school and non-school buses are not affected.

On the subject buses, the cruise control may not deactivate when the service brakes are applied. Failure of the cruise control to deactivate may result in a vehicle crash with potential for personal injury or death. Blue Bird is conducting a recall to correct this condition.

Your Blue Bird bus(es) affected by this recall are identified by body serial number(s) on the enclosed cover sheet. If you no longer own the subject bus(es), please complete the appropriate section of the cover sheet and return to Blue Bird in the enclosed pink postage prepaid envelope.

If not already disabled, the cruise control MUST be disabled until the permanent remedy for this condition can be performed. Instructions for disabling the cruise control feature are attached. Decals indicating cruise control has been disabled may be obtained from Blue Bird Recall Administration and must be affixed to the dash once the cruise control has been disabled.

Labor time to disable the cruise control feature is 0.4 hrs (24 minutes) per bus.

To receive reimbursement for labor for disabling the cruise control feature you will need to complete the labor reimbursement section of the pink labor reimbursement sheet. Check column "A" to indicate cruise control has been disabled and return it to Blue Bird in one of the enclosed postage paid pink reply envelopes.

To re-activate the cruise control feature, you must contact your Blue Bird dealer to arrange a time to have the permanent remedy performed. It is necessary for your Blue Bird dealer to perform the permanent remedy because the dash instrument panel must be reprogrammed and special software and connecting cables are required. Your Blue Bird Dealer will remove the decal indicating the cruise control has been disabled once the permanent remedy has been performed.

Parts for the permanent remedy are anticipated to be available to your Blue Bird dealer on or about August 30, 2010.

If you disabled the cruise control feature on your bus prior to the receipt of this recall notification and require reimbursement for labor, complete and sign the recall reply sheet and attached a copy of the work order/invoice. Mail the documents in the pink self-addressed postage paid envelope included with the recall notification to Blue Bird for warranty consideration. Reimbursements will be made in accordance with the requirements of the National Highway Transportation Safety Act, Title 49 Code of Federal Regulations, Parts 573 and 577.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

If Blue Bird Body Company should fail to or is unable to remedy this condition without charge to you, you may contact:

**ADMINISTRATOR
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
1200 NEW JERSEY AVENUE, SE
WASHINGTON, D.C. 20590**

Or, you may call The National Highway Traffic Safety Administration toll free at:

1-888-327-4236
TTY 1-800-424-9153

Or, go to: [HTTP://WWW.SAFERCAR.GOV](http://WWW.SAFERCAR.GOV)

Questions regarding this recall campaign should be directed to me at (478) 822-2242.

Thank you,



Bill Coleman
Corporate Recall Administrator
BLUE BIRD CORPORATION



Cruise Control May Not Deactivate

RECALL

2011 Model Year BBCV "Vision" and 2010-2011 Model Year D3 All American

ISSUE

Once activated the cruise control feature may not deactivate as designed when the service brakes are applied.

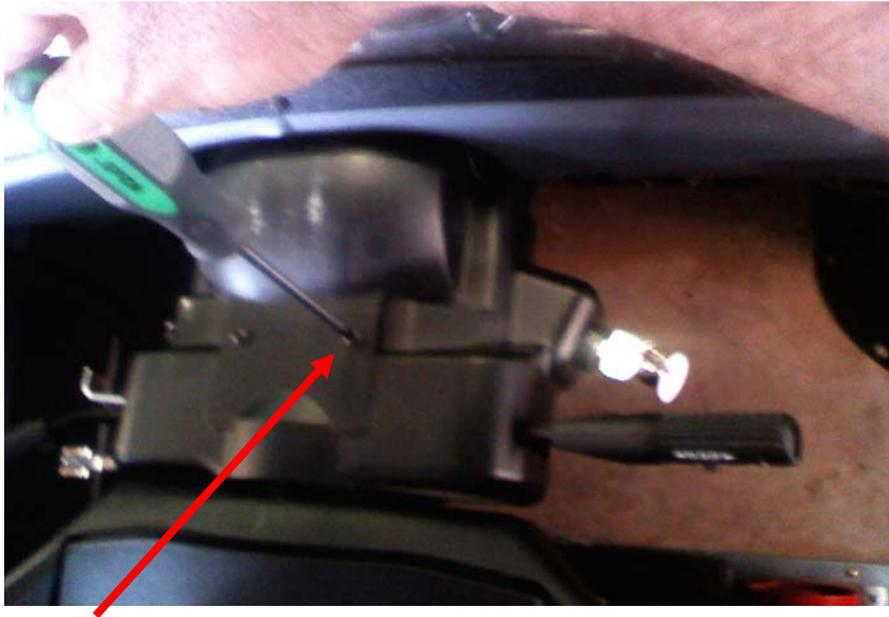
CORRECTIVE ACTION

Until the permanent remedy is installed the cruise control feature must be disabled in the steering column according to the following instructions.

PROCEDURE

WARNING: Always follow all Federal, State, Local and Shop safety standards and use proper safety equipment when performing these procedures.

1. Park the bus on a level surface, apply parking brakes, turn off engine and remove ignition key. Chock wheels.



Location of Phillips Screw

2. Remove two Phillips screws on top side of steering column cover. (See above photo)

R I O S H

R E C A L L C A M P A I G N



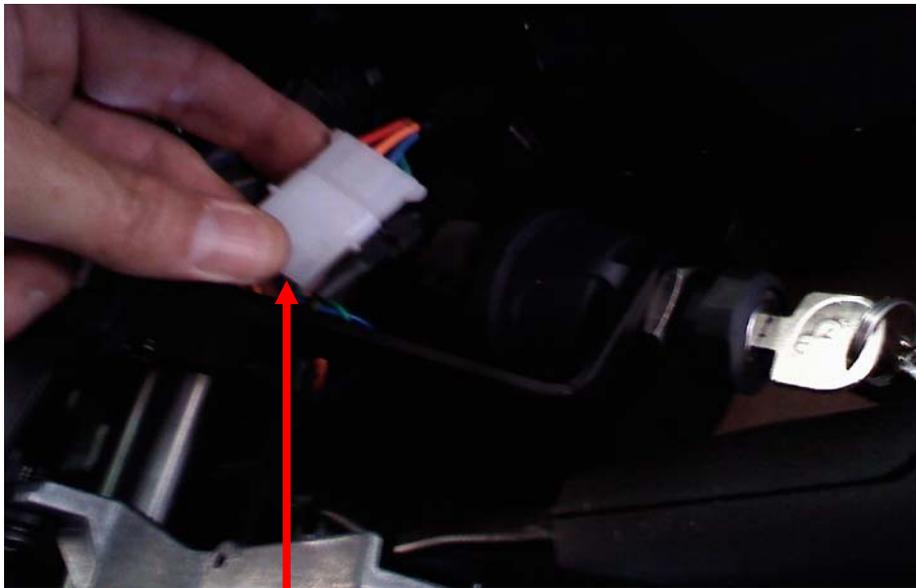
Cruise Control May Not Deactivate

RECALL



Torx T15 Screw Location

2. Remove four Torx T15 screws on bottom side of steering column cover. (See above photo)



Cruise Control Switch Connector

3. Lift top half steering column cover up and off. Locate cruise switch connector. Connector has four circuits. Unplug cruise switch connector. (See above photo)

R I O S H

R E C A L L C A M P A I G N



Cruise Switch on Steering Column

5. Verify cruise feature is disabled:
 - 1) Bus in “neutral”
 - 2) Park brake “set”
 - 3) Engine “running”
 - 4) Cruise switch held in the R/A position “resume/accel”
 - 5) Engine rpm “SHOULD NOT RAMP UP”
6. After verifying cruise function has been disabled reinstall steering column cover.
7. Prior to installing the supplied decal clean surface area with a moist towelette or Windex. Dry surface with clean towel.
8. Install supplied decal in locations shown on page 4.

R I O S H

R E C A L L C A M P A I G N



Cruise Control May Not Deactivate

RECALL



Decal Location on D3FE and D3RE All American Models



Decal Location on BBCV "Vision" Models

R I O S H
R E C A L L C A M P A I G N



Cruise Control Fail Safe Wiring Circuit Installation

RECALL

2011 Model Year BBCV "Vision"

ISSUE

Once activated the cruise control feature may not deactivate as designed when the service brakes are applied.

CORRECTIVE ACTION

A "failsafe" wiring circuit must be installed in the cruise control system according to the following instructions.

PROCEDURE

WARNING: Always follow all Federal, State, Local and Shop safety standards and use proper safety equipment when performing these procedures.

Note: These instructions pertain to the 2010 Model Year Vision only. Read all instructions carefully before beginning work:

Step 1. Turn battery disconnect switch to "OFF" position if equipped. If no switch, disconnect the Negative cables from the batteries.

Step. 2 Remove the steering column cover. Tilt the column to the most forward position. There are six (6) screws to be removed. See picture 1 below. The two (2) screws in the center are Phillips and the four (4) around the perimeter are torx.



Phillips Screws

Torx Screws
Note: One more torx screw is located on bottom left.

RECALL CAMPAIGN R10SH-2



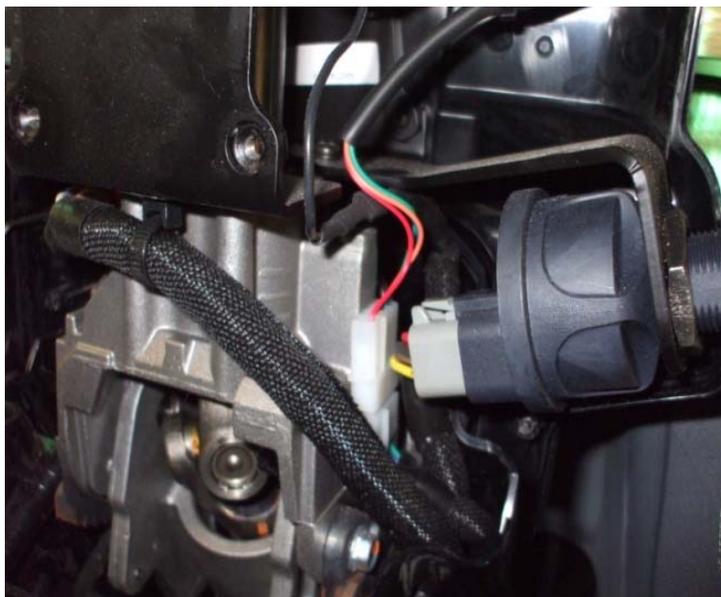
Cruise Control Fail Safe Wiring Circuit Installation-BBCV

RECALL

Step 3. Reconnect cruise control switch and tuck the connector behind the ignition switch as shown. Refer to Pictures 2 & 3. Re-assemble the column cover.



Picture 2



Picture 3

R I O S H - 2

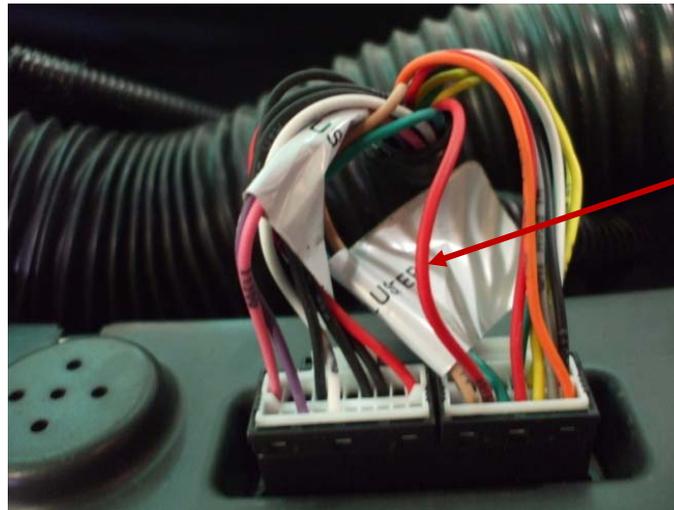
R E C A L L C A M P A I G N



Cruise Control Fail Safe Wiring Circuit Installation-BBCV

RECALL

Step 4. Remove Instrument cluster from dash using #2 Phillips screw driver. Flip Dash forward to gain access to the connections on the back of the cluster. Once cluster is flipped you will see two connections reference Picture 4.



STOP LGT A

Picture 4

Note: Some wire colors may be different than pictured.

Step 5. Locate Red wire labeled “STOP LGT A”. Wire is in location as shown in Picture 4 above.



Picture 5



Picture 6

Step 6. Cut wire approx 2.5” back from connector. Strip wire back as shown in Picture 5. Install harness 10019450, butt connector end onto this wire. Refer to Picture 6. Note: the end of “STOP LGT A” going into the main loomed harness should be taped back- it will no longer be used.

R I O S H - 2

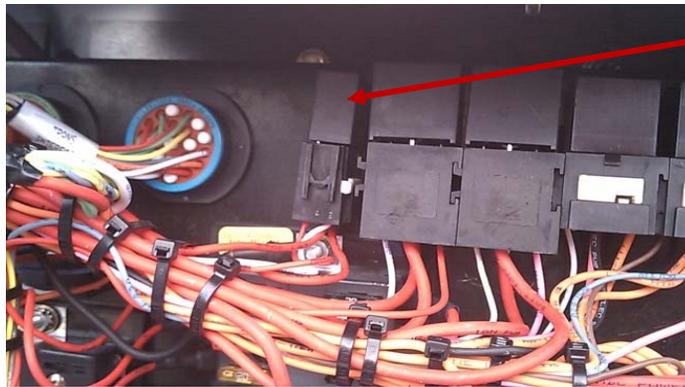
R E C A L L C A M P A I G N



Cruise Control Fail Safe Wiring Circuit Installation-BBCV

RECALL

Step 7. Remove the chassis PDU cover. There are two thumb screws on the top left and right of cover.



Stop Light Relay

Picture 7

Step 8. Route the 10019450 harness to the right, following the PDU harness down and into the PDU assembly. Secure the harness as needed with wire ties.

Step 9. Locate the "Stop Light Relay". Refer to Picture 7. Remove the relay from the panel mounted base. Remove the base with a #2 Phillips screwdriver. Refer to Picture 8.



Base Retaining
Screw

Picture 8

R I O S H - 2

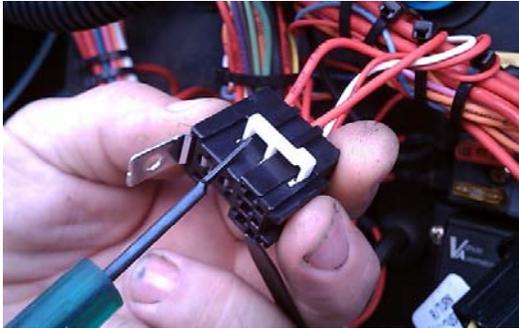
R E C A L L C A M P A I G N



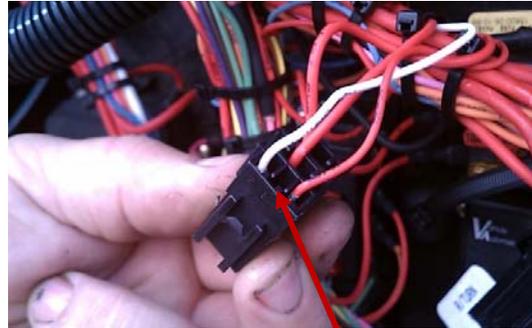
Cruise Control Fail Safe Wiring Circuit Installation-BBCV

RECALL

Step 10. Using the jeweler's screwdriver pry the lock out of the relay base as shown in Picture 9 below.



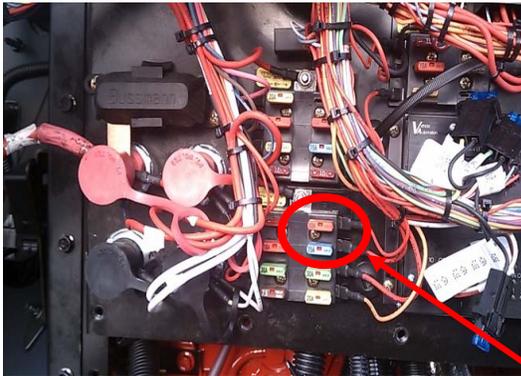
Picture 9



Picture 9

Insert Terminal Lead Here

Insert terminal lead end, from 10019450 into relay base cavity 4(87A), as shown above. Note: The terminal will only lock in place when oriented correctly. Be sure the terminal “clicks” into place. Replace lock into relay base and re-mount onto panel. Re-install relay into base.



Picture 11



Picture 12

Step 11. Locate circuit breakers for “STOP LGT PWR” and “BRAKE SW PWR”. These are on the bottom most fuse panel. They are the two top right breakers on that panel. See Picture 11. **Refer to the Decal on PDU cover for clarification.**

Step 12. Remove both wires from circuit breaker labeled “STOP LGT PWR” and “BRAKE SW PWR”. Strip the wires back and install wires into terminal 02007417 and crimp. Refer to Picture 12.

Note: Refer to the Decal on PDU cover for clarification.

R I O S H - 2
R E C A L L C A M P A I G N

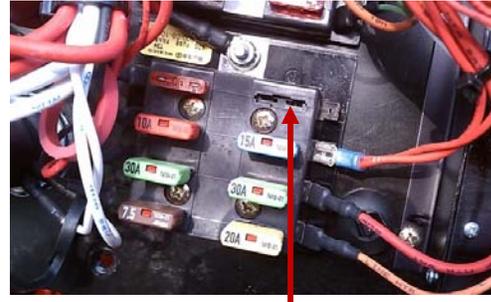


Cruise Control Fail Safe Wiring Circuit Installation-BBCV

RECALL



Picture 13



Picture 14 *Breaker Removed*

- Step 13. Install the newly crimped terminal onto the 15 amp circuit breaker position labeled “STOP LGT PWR”. Refer to Picture 13.
- Step 14. Remove the 10 amp circuit breaker from position labeled “BRAKE SW PWR” and discard. It is no longer needed. Secure any loose wires with wire ties. Turn battery disconnect switch “ON” or re-attach the negative cables. Refer to picture 14.
- Step 15. Reprogram Instrument cluster using the kit and instructions from 00072987 Actia Cluster Download Kit. The current file to load into the cluster will be sent via email to dealers.
- Step 16. Validation: The validation of the cruise can be done while the vehicle is stationary with the ignition “ON”. Refer to Instruction “INSTRUMENT CLUSTER SERVICE BRAKE INPUT VERIFICATION”. If unit does not pass this verification, repeat the above steps and check to be sure rework was done correctly. Once verification has been passed proceed to step 17.
- Step 17: Remove recall sticker on dash and notify Blue Bird Recall Administrator that recall has been completed.

Tools Required:

- #2 Phillips Screwdriver- Used on steering column and instrument panel
- T20 Torx hand driver-Used on steering column
- Flat Head jeweler’s screwdriver- Used to remove lock from “Stop Light Relay”
- Wire Cutters
- Wire Strippers
- Crimper for BUTT CONN
- 00072987 Actia Cluster Download Kit

Parts:

- 10019450 Harness, wrg, Cruise Rework R10SH, PDU, BBCV, QTY 1
- 02007417 Terminal, Slide ¼, 14-16ga, Insulated, QTY 1
- 01674811 Tie, cable, nylon, QTY 10
- Black Electrical Tape
- Cluster software refer to Step 15

R 1 0 S H - 2
R E C A L L C A M P A I G N



ACTIA INSTRUMENT CLUSTER SERVICE BRAKE INPUT VERIFICATION

To complete Recall R10SH-2 you must use the following procedures to verify that the Actia Instrument Cluster is receiving the brake signal when the brake pedal is applied.

Step 1. Turn on Ignition switch and allow cluster to complete its start up. Start up is complete when gauges are no longer sweeping.

Step 2. For Air brake vehicles verify system pressure is above the warning levels. Start vehicle, if needed, to bring levels above the low air warning levels. Note: this step does not apply to hydraulic brake vehicles.

Step 3. Locate push button switches on instrument cluster. Switches are in located in the bottom right corner.



Picture 1



Start at "Set Units"
Picture 2

Step 4. Press and hold the lower push button switch (picture 1) until the display changes as shown in picture 2

Step 5. Using the bottom button scroll through the menus, until you see highlighted: "6- INSTRUMENT DIAG" (see picture 3)

***Note: The screen will return to the start up menu after a few seconds of inactivity. Should this occur, return to Step 4.**



Picture 3



Cruise Control Fail Safe Wiring Circuit Installation-BBCV

RECALL

Step 6. Press both buttons simultaneously to select the highlighted choice. This will now bring you to the following screen shown in picture 4: INSTRUMENT DIAGNOSTICS.

Use the bottom button to scroll through and highlight: D-I/O STATUS.



Picture 4

Step 7. Press both buttons simultaneously to enter into the I/O STATUS menu. See Picture 5. Using the bottom button, scroll through the menus until you come to CL-24 Srvc brake. This is shown in picture 5.

At this point note the status should be displayed as "CL-24 Srvc brake High" when the brake pedal is NOT pressed.



Picture 5

R I O S H - 2

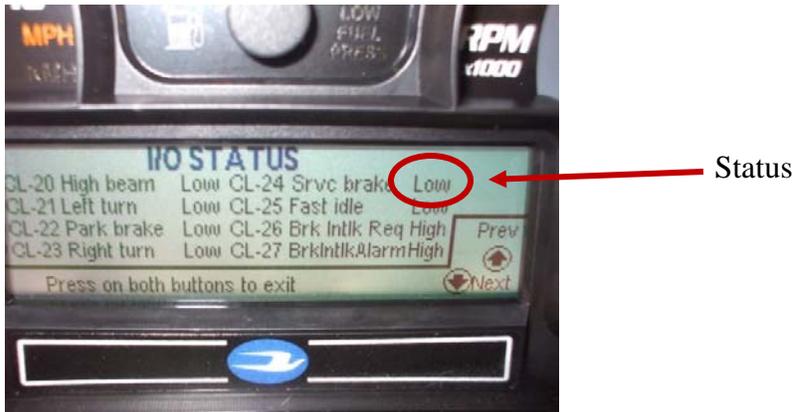
R E C A L L C A M P A I G N



Cruise Control Fail Safe Wiring Circuit Installation-BBCV

RECALL

Step 8. Press the brake pedal firmly and note the status of CL-24. It should have changed to:
“CL-24 Srvc brake Low”. See picture 6



Picture 6

If the display changed from High to Low, the cluster is receiving a brake switch status and verification is complete.

If the display did not change from High to Low, the cluster is not receiving a brake switch status. Please consult with your Blue Bird Field Service Rep for trouble shooting procedures if the status did not change.

R I O S H - 2

R E C A L L C A M P A I G N



Cruise Control Fail Safe Wiring Circuit Installation

RECALL

2010-2011 Model Year "D3" All American

ISSUE

Once activated the cruise control feature may not deactivate as designed when the service brakes are applied.

CORRECTIVE ACTION

To correct or re-activate a disabled cruise control feature a "failsafe" wiring circuit must be installed in the cruise control system according to the following instructions.

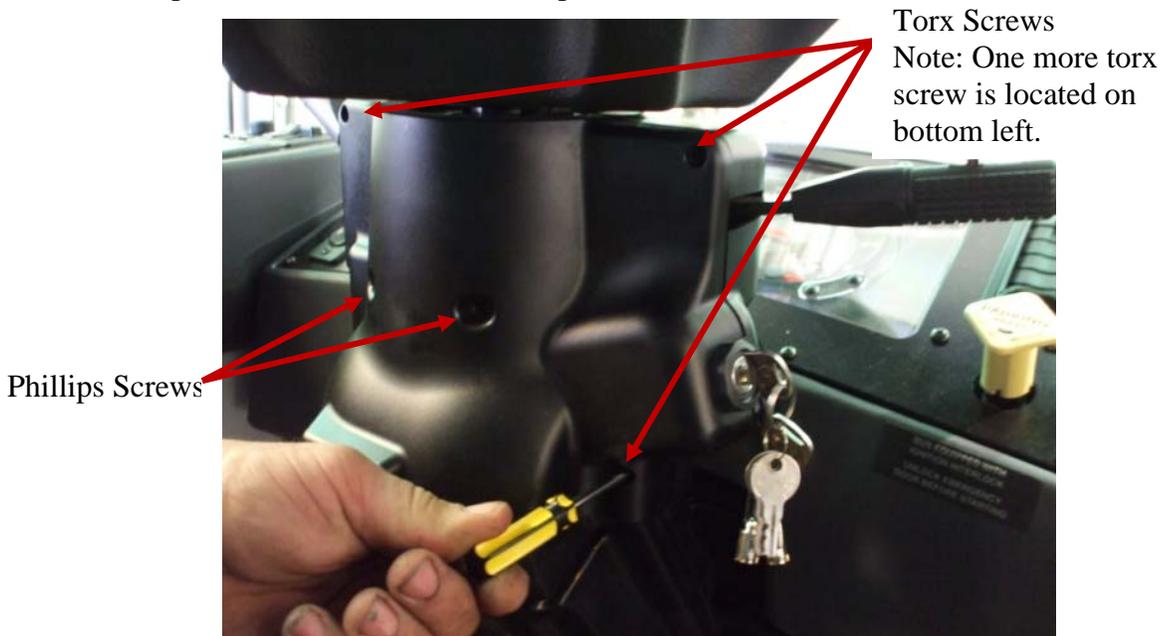
PROCEDURE

WARNING: Always follow all Federal, State, Local and Shop safety standards and use proper safety equipment when performing these procedures.

Note: These instructions pertain to the 2010-11 Model Year "D3" All American only. Read all instructions carefully before beginning work.

Step 1. Turn battery disconnect switch to "OFF" position if equipped. If no switch, disconnect the Negative cables from the batteries.

Step. 2 Remove the steering column cover. Tilt the column to the most forward position. There are six (6) screws to be removed. See picture 1 below. The two (2) screws in the center are Phillips and the four (4) around the perimeter are torx.



Picture 1

R I O S H - 2
R E C A L L C A M P A I G N



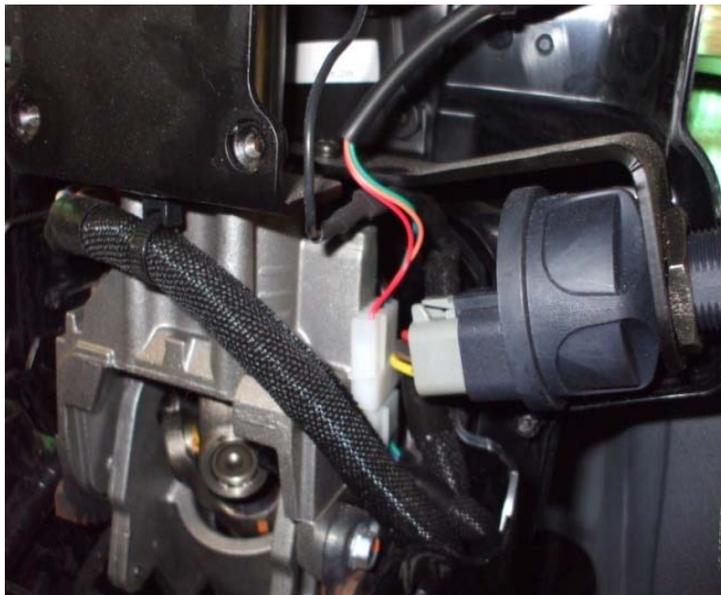
Cruise Control Fail Safe Wiring Circuit Installation-D3

RECALL

Step 3. Reconnect cruise control switch and tuck the connector behind the ignition switch as shown. Refer to Pictures 2 & 3. Re-assemble the column cover.



Picture 2



Picture 3

R I O S H - 2

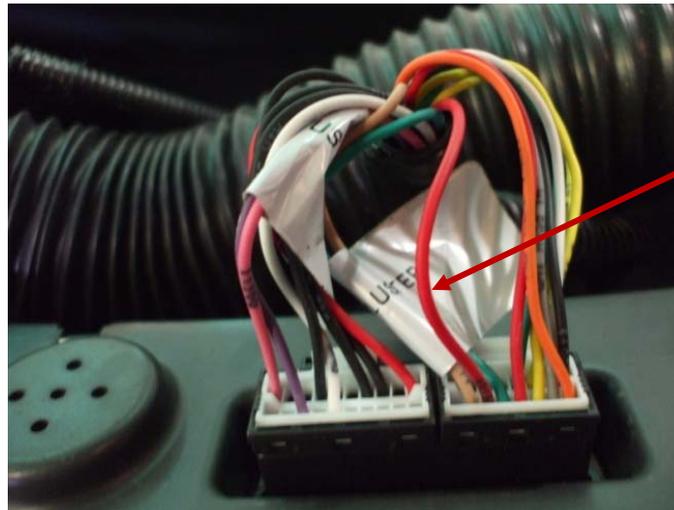
R E C A L L C A M P A I G N



Cruise Control Fail Safe Wiring Circuit Installation-D3

RECALL

Step 4. Remove Instrument cluster from dash using #2 Phillips screw driver. Flip Dash forward to gain access to the connections on the back of the cluster. Once cluster is flipped you will see two connections reference Picture 4.



Picture 4

Note: Some wire colors may be different than pictured.

Step 5. Locate Red wire labeled “1316D”. Wire is in location as shown in Picture 4 above.



Picture 5



Picture 6

Step 6. Cut wire approx 2.5” back from connector. Strip wire back as shown in Picture 5. Install harness 10019449, butt connector end onto this wire. Refer to Picture 6. Note: the end of “1316D” going into the main loomed harness should be taped back- it will no longer be used.

R I O S H - 2

R E C A L L C A M P A I G N



Cruise Control Fail Safe Wiring Circuit Installation-D3

RECALL

- Step 7. Route the harness through the left corner access hole and into the outside electrical panel. Refer to Picture 7. In outside electrical panel upper left corner, locate the wire that was pushed through. In addition, locate the EP/IP P17 interface connector as shown in Picture 8.



Picture 7



Picture 8

- Step 8. Disconnect the EP/IP P17 interface connector. Starting with the smaller connector of the two halves, remove the blue terminal lock from the side of the connector with cavity “T”.

The lock is removed by disengaging the two hook points as shown in Picture 9. Once the points are disengaged pull the lock out of the back of the connector.



Picture 9

- Step 9. Install the terminal lead end that was brought through the hole from Step 7 into cavity “T”. Note: the terminal will only lock in place when oriented correctly. Be sure the terminal “clicks” into place.

Re-install the blue terminal lock into the back of the connector. Be sure it is fully seated and latched at the two hook points. Visually inspect the front side of the connector to be sure the terminal is seated.

R I O S H - 2

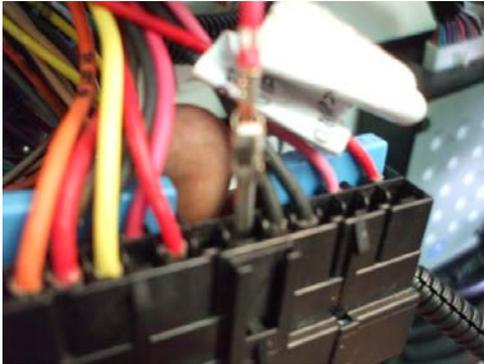
R E C A L L C A M P A I G N



Cruise Control Fail Safe Wiring Circuit Installation-D3

RECALL

- Step 10. Repeat step 8 on the other half of the EP/IP P17 interface connector. Install terminal lead end labeled “P17-T” from harness 10019448 into cavity “T”. Refer to Picture 10.



Picture 10

Note: The terminal will only lock in place when oriented correctly. Be sure the terminal “clicks” into place.

Re-install the blue terminal lock into the back of the connector. Be sure it is fully seated and latched at the two hook points. Visually inspect the front side of the connector to be sure the terminal is seated. Re-connect the two halves together and be sure they are locked into place.

- Step 11. Route other end of wire lead from 10019448 down the left side of the electrical panel harness to the bottom. Follow the bottom main harness over to the DILL BLOX fuse panel. Secure along the length with wire ties as needed. Refer to Picture 11.



DILL BLOX
fuse panel

Picture 11

Leave length of 10019448 coiled below the middle of the DILL BLOX.

R I O S H - 2

R E C A L L C A M P A I G N



Cruise Control Fail Safe Wiring Circuit Installation-D3

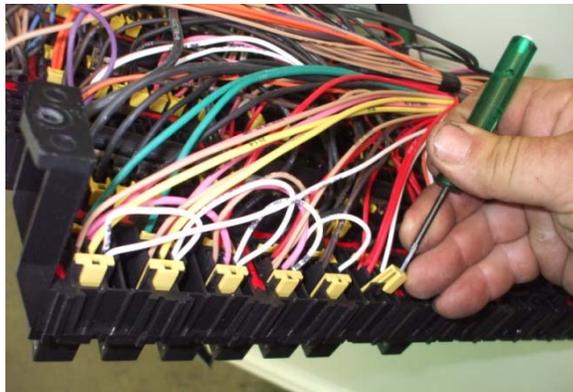
RECALL

- Step 12. Using a #2 Phillips screwdriver, remove the 4 screws holding the DILL BLOX fuse panel in place. Note: there are 4 screws, one in each corner leg. Refer to Picture 12.



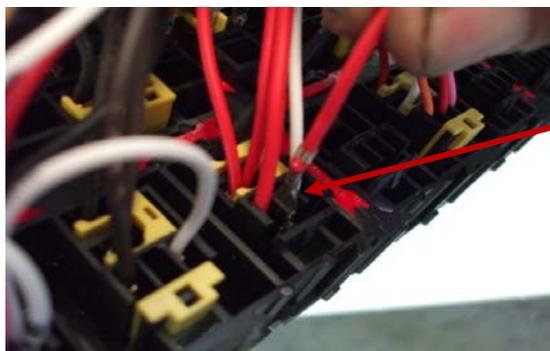
Picture 12

- Step 13. Remove yellow lock from back of panel for the R36 Brake Light Relay. Use a jeweler's screwdriver to open the hook tab and remove the lock. See Picture 13. Refer to the decal for location of this relay.



Picture 13

Once lock is removed insert terminal lead end of 10019448 which was coiled up from Step 11. Be sure the lead is inserted into cavity 4(87A) which is located between the Red and White wire as shown in Picture 14. Note: The terminal will only lock in place when oriented correctly. Be sure the terminal “clicks” into place.



Insert into cavity 4(87A)

Picture 14

R I O S H - 2

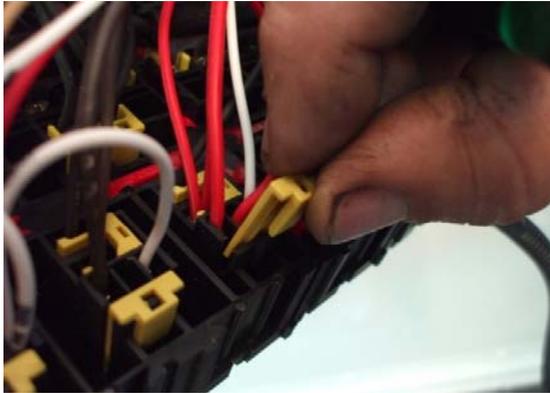
R E C A L L C A M P A I G N



Cruise Control Fail Safe Wiring Circuit Installation-D3

RECALL

Re-install lock into back of fuse block. Refer to Picture 15



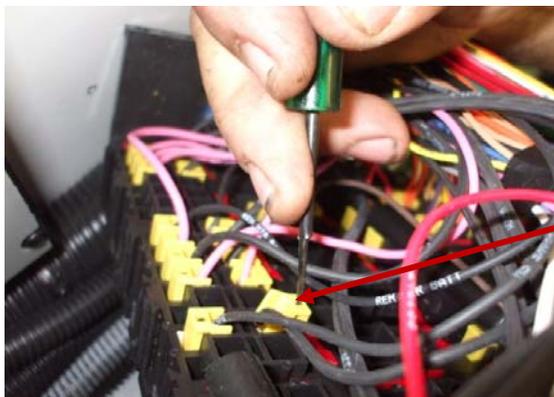
Picture 15

Step 14. Remove “Brake Switch” fuse/breaker from location CB23 on the front of the panel if applicable.

NOTE: If there is no fuse/breaker in CB 23 position, skip steps 14- 17 and proceed to Step 18. This part of the procedure will not have to be done.

Discard this fuse/breaker- it will no longer be used. At the back side of the panel locate and remove the yellow lock. Use the jeweler’s screwdriver to open the hook tab and remove the lock. See Picture 16.

Note: This wire should be Black and labeled “BRAKE SW PWR”.



Picture 16

R I O S H - 2

R E C A L L C A M P A I G N



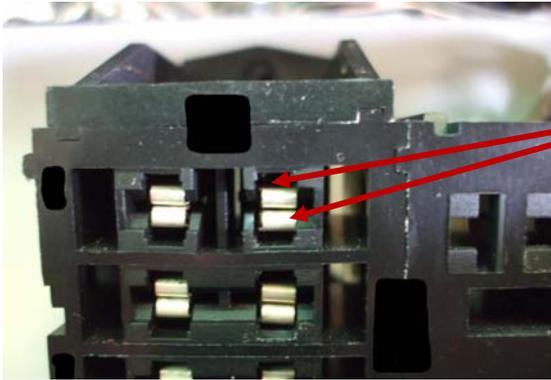
Cruise Control Fail Safe Wiring Circuit Installation-D3

RECALL

From the front side of panel use a flat head jeweler's screwdriver to remove the fuse block terminal from the right side of that location.

Using the screwdriver, insert the screwdriver into both the top and bottom area of the block. This will release the tabs and allow the wire to be removed from the back side. See picture 7.

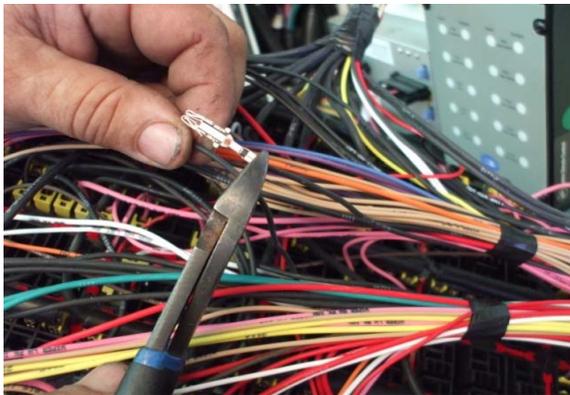
Note: This picture is not the location but an example of how to remove the terminal.



Use flat side
of jeweler's
screwdriver
to release
tabs.

Picture 17

Step 15. Cut off the terminal from the wire removed in Step 13 above (BRAKE SW PWR). Cut the wire as close as possible to the terminal to ensure the most usable wire length. See Picture 18.



Picture 18

R I O S H - 2

R E C A L L C A M P A I G N

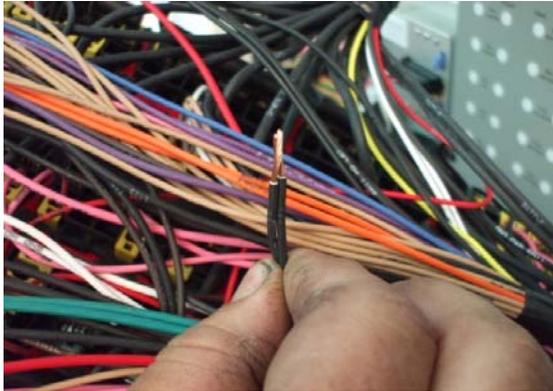


Cruise Control Fail Safe Wiring Circuit Installation-D3

RECALL

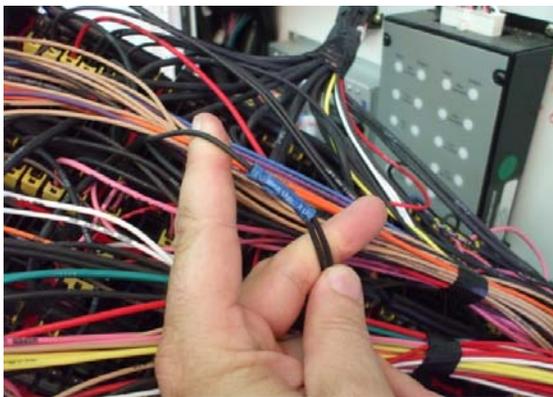
- Step 16. Locate wire that runs between R36-3 and CB5. This wire is labeled “BATT BRK” and is black 16GA. Use the decal as a guide to find the location. Use wire from Step 15 as a length guide.

Place the cut end of that wire on the “BATT BRK” wire and then cut the “BATT BRK” wire at that location. Strip both ends of the “BATT BRK” wire as shown in Picture 19. Twist these together. Strip the end of the wire from Step 15 (BRAKE SW PWR).



Picture 19

- Step 17. Install Butt Connector 02007409 onto one end with the two wires, and onto the other end of the single wire from Step 15. See Picture 20.



Picture 20

- Step 18. Re-install the DILL BLOX fuse panel using the #2 screwdriver and the 4 screws from Step 12.

Secure any loose wires with wire ties.

Turn “ON” battery disconnect switch or re-attach the negative cables.

R I O S H - 2

R E C A L L C A M P A I G N



Cruise Control Fail Safe Wiring Circuit Installation-D3

RECALL

- Step 19. Reprogram Instrument cluster using the kit and instructions from 00072987 ACTIA Cluster Download Kit. The current file to load into the cluster will be sent via email to dealers.
- Step 20. Validation: The validation of the cruise can be done while the vehicle is stationary with the ignition “ON”. Refer to Instruction “INSTRUMENT CLUSTER SERVICE BRAKE INPUT VERIFICATION”. If unit does not pass this verification repeat the above steps and check to ensure rework was done correctly. Once passed go to step 21.
- Step 21. Remove recall sticker on dash and notify Blue Bird Recall Administrator that recall has been completed.

Parts List:

Parts No.	Description	Qty
10019448	Harness, Wrg, Cruise Rework R10SH, EP D3-	1
10019449	Harness, Wrg, Cruise Rework R10SH, IP D3-	1
02007409	Terminal, BUTT CONN, 14-16 GA, Insulated,	1
01674811	Tie, cable, nylon,	5
NPN	Black Electrical Tape	
NPN	Cluster software file refer to Step 19	

Tools:

- #2 Phillips Screwdriver- Used on steering column and instrument panel
- T20 Torx hand driver-Used on steering column
- Flat Head jeweler’s screwdriver- Used to remove terminals and locks from Elec. Panel DILL BLOX
- Wire Cutters
- Wire Strippers
- Crimper for BUTT CONN
- 00072987 ACTIA Cluster Download Kit

R I O S H - 2

R E C A L L C A M P A I G N



BLUE BIRD

R10SL

DATE: SEPTEMBER 24, 2010

TO: U.S. DEALERS

**SUBJECT: RECALL R10SL STARTER CABLE AND ENGINE WIRING
HARNES MAY CONTACT ENGINE FAN HUB**

Dear Blue Bird Dealer:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Blue Bird has decided that a defect which relates to motor vehicle safety exists on certain 2007-2011 model year All American front engine school and non school buses manufactured from May 26, 2006 through August 07, 2010 and certain 2007 model year Commercial Series front engine non school buses manufactured from May 16, 2007 through March 14, 2008.

On the subject buses, an incorrect combination of flat washer and serrated nut may have been installed on the bolt that secures the starter cable and engine wiring harness retaining clamp to its attaching bracket at front of engine above engine cooling fan. The presence of the flat washer could prevent the serrated nut from locking against the attaching bracket, and over time, cause the serrated nut to loosen allowing the starter cable and main engine wiring harness to fall and contact the engine fan hub while in operation. If the starter cable or engine wiring harness contacts the engine fan hub while the fan is in operation, the cable and/or harness covering may abrade which could result in a direct short. A direct short could potentially result in a vehicle fire.

Blue Bird is conducting a recall to correct this defect. Buses with this defect must be modified according to the enclosed instructions for Recall R10SL.

If our records indicate affected buses were delivered in your service area, a printout identifying affected buses is enclosed. **Dealers should verify correct owners and assure that complete shipping addresses are provided for each listed vehicle.**

If you have in your possession or have sold a bus that was purchased from another dealer that may be affected by this recall, please notify me at 478-822-2242.

Labor time to install new locknuts and flat washers and inspect the routing of the starter cable and engine wiring harness is 0.5 hrs (30 minutes) per bus.

BLUE BIRD BODY COMPANY

P.O. Box 937 – 402 Blue Bird Blvd – Fort Valley, Georgia – (478) 825-2021

Replacement locknuts and flat washers must be ordered through Blue Bird Recall Administration. You will need to provide body number(s) and a UPS shipping address.

Replacement starter cables and engine wiring harnesses, if needed, must be ordered through Recall Administration. You will need to provide body number(s) and a UPS shipping address.

Warranty applications for labor reimbursement may be submitted to Blue Bird iWarranty (Campaigns/Claims).

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

It is a violation of Federal law for a dealer to deliver a new motor vehicle covered by this recall under a sale or lease until the defect is remedied. Therefore, dealers must complete modifications/repairs on units in their inventory before delivering to the final owner. Reference Blue Bird Body Company Distributor Memo No. 42-92.

Questions regarding this recall campaign should be directed to me at (478) 822-2242.

Sincerely,

A handwritten signature in cursive script that reads "Bill Coleman".

Bill Coleman
Corporate Recall Administrator
Blue Bird Corporation



BLUE BIRD

R10SL

September 24, 2010

Dear Blue Bird Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Blue Bird has decided that a defect which relates to motor vehicle safety exists on certain 2007-2011 model year All American front engine school and non school buses manufactured from May 26, 2006 through August 07, 2010 and certain 2007 model year Commercial Series front engine non school buses manufactured from May 16, 2007 through March 14, 2008.

On the subject buses, an incorrect combination of flat washer and serrated nut may have been installed on the bolt that secures the starter cable and engine wiring harness retaining clamp to its attaching bracket at the front of the engine above the engine cooling fan. The presence of the flat washer could prevent the serrated nut from locking against the attaching bracket, and over time, cause the serrated nut to loosen allowing the starter cable and engine wiring harness to fall and contact the engine fan hub while in operation. If the starter cable or engine wiring harness contacts the engine fan hub while the fan is in operation, the cable and/or harness covering may abrade which could result in a direct short. A direct short could potentially result in a vehicle fire.

Blue Bird is conducting a recall to correct this defect. Buses with this defect must be modified according to the enclosed instructions for Recall R10SL.

You may contact your Blue Bird dealer to arrange to have this recall performed. Or, if you prefer, you may perform this recall yourself or have a qualified repair facility convenient to you perform this recall. A qualified technician should perform this recall.

Your Blue Bird bus(es) affected by this recall are identified by body serial number(s) on the enclosed reply sheets. If you no longer own the subject bus(es), please complete the sold to section of the **labor reimbursement** sheet and return to Blue Bird in the enclosed pink postage prepaid envelope.

To receive replacement locknuts and washers to correct this condition, you must return the yellow recall reply sheet to Blue Bird in the pink, self addressed, postage prepaid envelope. Be sure to provide a valid shipping address as UPS does not deliver to P.O. Boxes.

BLUE BIRD BODY COMPANY

P.O. Box 937 – 402 Blue Bird Blvd – Fort Valley, Georgia – (478) 825-2021

Labor time to install new locknuts and flat washers and inspect the routing of the starter cable and engine wiring harness is 0.5 hrs (30 minutes) per bus.

Reimbursement for labor may be obtained by completing the **pink recall request for reimbursement sheet** provided and returning it to Blue Bird in the enclosed **pink** postage prepaid envelope. If reimbursement is not desired, please complete the bottom portion of the pink reply sheet and return to Blue Bird in the enclosed pink reply envelope so we may update our records to show recall R10SL has been completed.

If the modifications directed by this notification were performed on your bus prior to the receipt of this recall notification, complete and sign the recall reply sheet and attached a copy of the work order/invoice. Mail the documents in the **pink** self-addressed postage paid envelope included with the recall notification to Blue Bird for warranty consideration. Reimbursements will be made in accordance with the requirements of the National Highway Transportation Safety Act, Title 49 Code of Federal Regulations, Parts 573 and 577.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

If Blue Bird Body Company should fail to or is unable to remedy this condition without charge to you, you may contact:

**ADMINISTRATOR
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
1200 NEW JERSEY AVENUE, SE
WASHINGTON, D.C. 20590**

Or, you may call The National Highway Traffic Safety Administration toll free at:

1-888-327-4236
TTY 1-800-424-9153

Or, go to: [HTTP://WWW.SAFERCAR.GOV](http://WWW.SAFERCAR.GOV)

Questions regarding this recall campaign should be directed to me at (478) 822-2242.

Thank you,



Bill Coleman
Corporate Recall Administrator
BLUE BIRD CORPORATION

BLUE BIRD BODY COMPANY
P.O. Box 937 – 402 Blue Bird Blvd – Fort Valley, Georgia – (478) 825-2021



Starter Cable and Wiring Harness May Contact Engine Fan Hub

RECALL

Models Affected: 2007 – 2011 All American (A3FE) and Commercial Series (C3FE), and 2010-2011 All American (D3FE) equipped with Cummins ISB Engines

ISSUE

The ¼” serrated flange head nuts that secures the starter cable and engine wiring harness to the mounting brackets located on the front of the engine may become loose and fall off allowing the cable and harness to contact engine fan drive belt or the fan clutch assembly.

CORRECTIVE ACTION

Replace ¼” serrated head flange nut with a ¼” locking nut, add a flat washer and inspect starter cable and engine wiring harness.

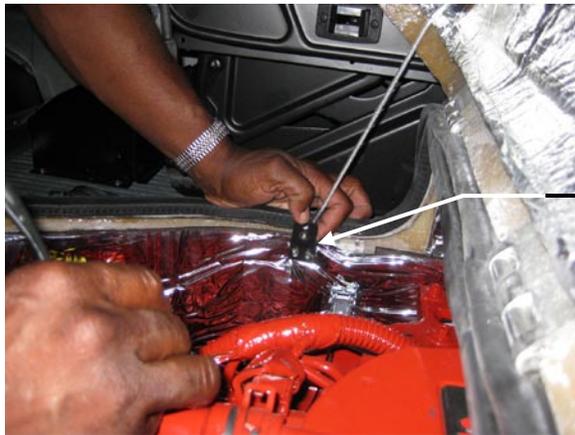
PROCEDURE

WARNING: Always follow all Federal, State, Local and Shop safety standards and use proper safety equipment when performing these procedures. Thoroughly read and understand all instructions before performing this procedure.

CAUTION: Engine **MUST** be at ambient temperature before performing these procedures.

All American (A3FE and C3FE)

1. Park bus on a level surface, applying parking brake, switch engine off, remove ignition key and chock wheels. Disconnect batteries. **Always remove negative cable first.**
2. Open engine hood and disconnect hood stop cable from inside cover assembly by removing a ½ x 24 machine screw and 10-24 hex locknut.



Remove machine screw and locknut

3. Locate the two latches on each side and one latch at the rear and release the latches.
4. Remove cover assembly and move it away from the engine to access the front fan area.

RECALL CAMPAIGN R I O S L



Starter Cable & Wiring Harness May Contact Engine Fan Hub

RECALL

- 5 Inspect the starter cable and wiring harness from the right side of the engine, across front of engine to left side of engine for any chaffing, rubbing or damage. If starter cable and wiring harness shows any evidence of damage, contact Blue Bird Recall Administration.

Area of Left side support Bracket, See photos in step 8



Area of Right side support Bracket, See photo in Step 7

- 6 One starter cable and wiring harness support is located on the right side of the engine between the alternator and engine fan.
- 7 Remove and discard the ¼" serrated nut (and flat washer if installed). Install the new ¼" locknut (0145847) and flat washer (01247709) provided. Torque nut to 60-85 in. lbs. Note: two complete threads must extend completely through the nut.



Replace with new locknut and flat washer (Note: new locknut shown)

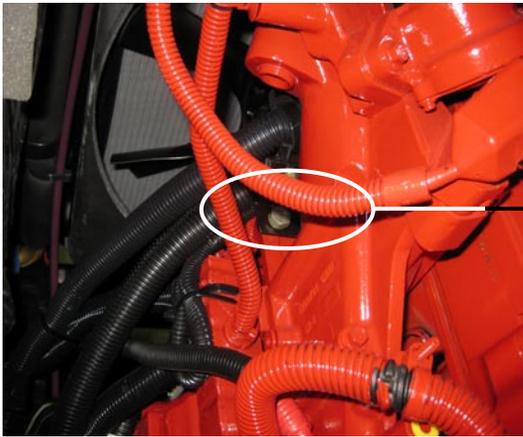
R I O S L
R E C A L L C A M P A I G N



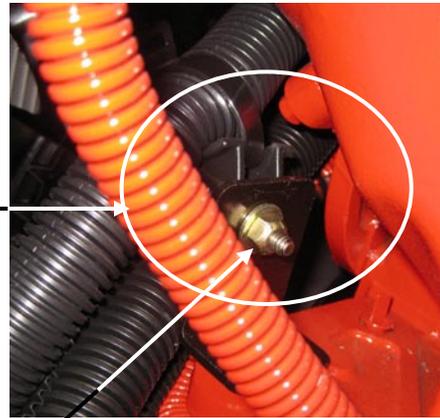
Starter Cable & Wiring Harness May Contact Engine Fan Hub

RECALL

8. The second starter cable and wiring harness support is located on the front left side of the engine block.
9. Remove and discard the $\frac{1}{4}$ " serrated nut (and flat washer if installed). Install the new $\frac{1}{4}$ " locknut (0145847) and flat washer (01247709) provided. Torque nut to 60-85 in. lbs. Note: two complete threads must extend completely through the nut.



Left Side support



Replace with new locknut and flat washer (Note: New locknut shown)

10. Reinstall the engine cover assembly with the latches. After the latches have been snapped in place, reattach the cable on the inside cover assembly with $\frac{1}{2}$ x 24 machine screw and 10-24 hex locknut removed in earlier step. Reconnect the batteries.

Caution: When reconnecting the batteries, connect the negative last.

11. Place bus back in service.

R I O S L

C A M P A I G N

R E C A L L



Starter Cable & Wiring Harness May Contact Engine Fan Hub

RECALL

All American (D3FE)

1. Park bus on a level surface, applying parking brake, switch engine off, remove ignition key and chock wheels. Disconnect batteries. **Always remove negative cable first.**
2. To remove engine cover assembly to access front of engine:
 - a. Remove cup holder by removing the Phillip head screws on the front of center console.
 - b. Remove the PA microphone if equipped.
 - c. Pull to release the rubber handle latch anchor located at the right hand lower front wall of the engine cover assembly.
 - d. Open hood and locate the four latches on the inside of hood. One is located on the driver's side toward the front, one on each side and one at rear center. Release these latches and remove engine cover assembly for access to front of engine.



3. Inspect the starter cable and wiring harness from the right side of engine, across front of engine to left side of engine for any chaffing, rubbing or damage. If starter cable and wiring harness shows any evidence of damage, contact Blue Bird Recall Administration.

R I O S L

R E C A L L C A M P A I G N



Starter Cable & Wiring Harness May Contact Engine Fan Hub

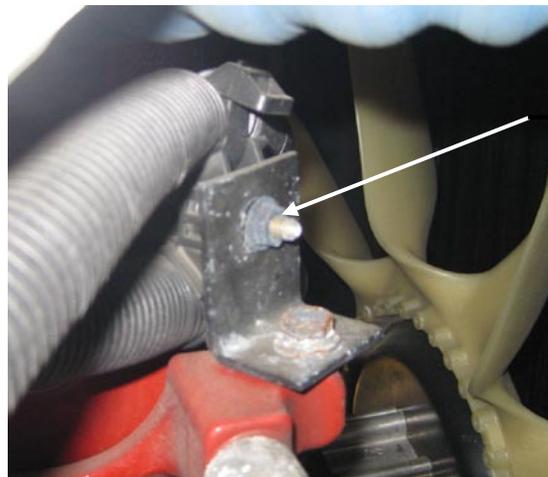
RECALL

Area of Left Side Support Bracket, see photos in step 6



Area of Right Side Support Bracket, see photo in step 5

- 4 One starter cable and wiring harness support is located on the right side of the engine between the alternator and engine fan.
5. Remove and discard the 1/4" serrated nut (and flat washer if installed). Install the new 1/4" locknut (0145847) and flat washer (01247709) provided. Torque nut to 60-85 in. lbs. Note: two complete threads must extend completely through the nut.



Replace serrated nut (shown) with new locknut and flat washer

6. The second starter cable and wiring harness support is located on the front left side of the engine block.

R I O S L

R E C A L L C A M P A I G N

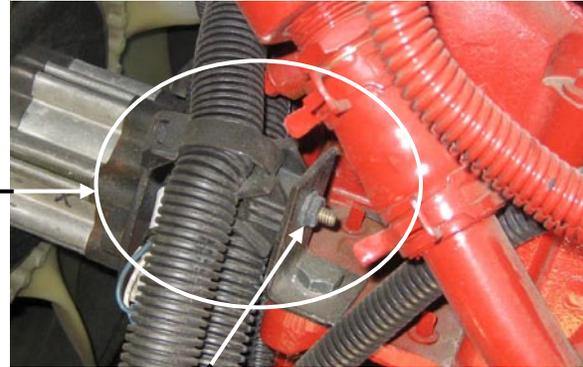


Starter Cable & Wiring Harness May Contact Engine Fan Hub

RECALL



Left Side Support



Replace serrated nut (shown) with locknut and flat washer

- 7 Remove and discard the ¼" serrated nut (and flat washer if installed). Install the new ¼" locknut (0145847) and flat washer (01247709) provided. Torque nut to 60-85 in. lbs. Note: two complete threads must extend completely through the nut.
 8. Reinstall the engine cover assembly by reversing the steps above. Reconnect the batteries.
- Caution:** *When reconnecting the batteries, connect the negative cable last.*
9. Place bus back in service.

PARTS LIST

PART NUMBER	DESCRIPTION	QUANTITY
01455947	Nut, Hex Head, ¼ -20, Locking, Nylon Insert	2
01247709	Washer, Flat, 17/64 ID X 5/8 OD	2

R I O S L

R E C A L L C A M P A I G N



Product Recall

To: ALL DEALERS

From: TRACY DANIELS - WARRANTY/RECALL DEPARTMENT

Subject: RECALL 13V-022/2013-020 – Headlamp Circuit Breaker – Previously VON 83

Date: March 14, 2013

Enclosed are copies of the customer notification letter and the repair procedures for Recall 13V-022. This recall involves certain Saf-t-liner EFX model school buses manufactured between March 29, 2012 and November 14, 2012. The defect involves the headlamps, marker lamps, tail lamps and dash lighting. The 20 amp headlamp circuit breaker may trip during continuous operation of the headlamps in high beam mode resulting in a temporary loss of power to the headlamps, marker lamps, tail lamps and dash lighting until the circuit breaker cools and automatically resets.

This is a universal notification sent to all dealers. You may or may not have customers in your area affected by this recall. If owners in your area are subject to this recall, we have enclosed a printout listing those customers' names and addresses. If there is not a printout enclosed according to our records there are no units in your area involved. **If you have a printout and any of the units on it are still in your possession it is your responsibility to ensure the recall is performed before the unit is delivered to the customer.**

The remedy will consist replacing the 20 amp circuit breaker with a 30 amp type 1circuit breaker and a new label will be installed on the cover of the power distribution module. The labor allowance is .1 hour per unit. Thomas Bus Service sent breakers and labels previously for VON 83. If you do need parts please order the circuit breaker from PDC and if you need labels, please contact me directly.

Thomas Built Buses has elected to notify all customers directly. **Only customers that did not respond to VON 83 will be receiving a notification.** Your customers will be contacting you to schedule an appointment for repairs. Reimbursement for labor, (if requested) may be obtained by filing a warranty claim.

If you know of any customers who own or operate a Thomas bus in this recall, whose name and address is NOT listed or is INCORRECTLY listed on the enclosed printout, please promptly notify Thomas Built Buses of that additional information in writing. Thank you for your cooperation and assistance.

Tracy

Enclosures: Customer Letter Repair Procedure Printout (if applicable)



March 21, 2013

Recall 13V-022
TC 2013-020

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Thomas Built has decided that a defect which relates to motor vehicle safety exists on certain Saf-T-Liner EFX model school buses manufactured between March 29, 2012 and November 14, 2012.

The defect involves the headlamps, marker lamps, tail lamps and dash lighting. The 20 amp headlamp circuit breaker may trip during continuous operation of the headlamps in high beam mode resulting in a temporary loss of power to the headlamps, marker lamps, tail lamps, and dash lighting until the circuit breaker cools and automatically resets. Under certain driving conditions a temporary loss of power to the headlamps, marker lamps, tail lamps, and dash lighting may increase the risk of a vehicle crash.

To arrange for repairs, you should contact your local Thomas Built Bus dealer immediately. Thomas will remedy this defect without charge. The remedy will consist of replacing the 20 amp circuit breaker with a 30 amp type 1 circuit breaker and a new label will be installed on the cover of the power distribution module. The repair should take approximately .1 hour per unit to complete.

If you do not own the vehicle that corresponds to the identification number(s) which appears on the Recall Notification, please return the notification to the Warranty Campaigns Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, Federal law requires that you forward this notice to the lessee within 10 days.

If you have had your vehicle repaired due to this defect prior to receipt of this notice and you have incurred any costs, you may be eligible for reimbursement. For further information, please contact the Warranty Department at (336) 889-4871, 8 a.m. to 5 p.m. Eastern Time Monday through Friday. To find a dealer in your area please go to www.thomasbus.com. Owners may be liable for any progressive damage that results from its failure to complete campaigns within a reasonable time after receiving notification.

If the defect is not remedied without charge and within a reasonable time which is not longer than 60 days after you tender the vehicle for repair, also please contact the Warranty Department at (336)889-4871, 8:00 a.m. to 5:00 p.m. Eastern Time, Monday through Friday. If you believe that Thomas Built Buses has failed or is unable to remedy the defect without charge longer than 60 days, you may submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, S.E., Washington, DC 20590, or phone the Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153) or go to <http://www.safercar.gov>. In Canada, if after contacting your dealer and/or Manufacturer Customer Service you have additional question with regards to this recall, you may contact Transport Canada – road Safety, 80 rue Noel, Gatineau, Quebec J8Z 0A1 or call 1-800-333-0510.

Sincerely,

Tracy Daniels
Warranty/Recall Department

Enclosure



March 21, 2013

TC 2013-020

This notice is sent to you in accordance with the requirements of the Canada Motor Vehicle Safety Act. Thomas Built has decided that a defect which relates to motor vehicle safety exists on certain Saf-T-Liner EFX model school buses manufactured between March 29, 2012 and November 14, 2012.

The defect involves the headlamps, marker lamps, tail lamps and dash lighting. The 20 amp headlamp circuit breaker may trip during continuous operation of the headlamps in high beam mode resulting in a temporary loss of power to the headlamps, marker lamps, tail lamps, and dash lighting until the circuit breaker cools and automatically resets. Loss of headlamp illumination, should it occur during a rainy/snowy day or during hours of darkness, could compromise the driver's ability to see the road and its users. Also, failure of the lighting system could render the vehicle less visible to other motorists. These issues could result in a crash causing property damage and/or personal injury.

To arrange for repairs, you should contact your local Thomas Built Bus dealer immediately. Thomas will remedy this defect without charge. The remedy will consist of replacing the 20 amp circuit breaker with a 30 amp type 1 circuit breaker and a new label will be installed on the cover of the power distribution module. The repair should take approximately .1 hour per unit to complete.

If you do not own the vehicle that corresponds to the identification number(s) which appears on the Recall Notification, please return the notification to the Warranty Campaigns Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, Federal law requires that you forward this notice to the lessee within 10 days.

If you have had your vehicle repaired due to this defect prior to receipt of this notice and you have incurred any costs, you may be eligible for reimbursement. For further information, please contact the Warranty Department at (336) 889-4871, 8 a.m. to 5 p.m. Eastern Time Monday through Friday. To find a dealer in your area please go to www.thomasbus.com. Owners may be liable for any progressive damage that results from its failure to complete campaigns within a reasonable time after receiving notification.

If the defect is not remedied without charge and within a reasonable time which is not longer than 60 days after you tender the vehicle for repair, also please contact the Warranty Department at (336)889-4871, 8:00 a.m. to 5:00 p.m. Eastern Time, Monday through Friday. If you believe that Thomas Built Buses has failed or is unable to remedy the defect without charge longer than 60 days, and/or you have additional question with regards to this recall, you may contact Transport Canada – road Safety, 80 rue Noel, Gatineau, Quebec J8Z 0A1 or call 1-800-333-0510.

Sincerely,

Tracy Daniels
Warranty/Recall Department

Enclosure



RECALL #13V-022

REPAIR PROCEDURE

MODEL: EFX

SUBJECT: BLOWN FUSE WITH 100% DRL LOW BEAM

PAGE: 1 OF 3

IMPORTANT: READ ENTIRE PROCEDURE BEFORE BEGINNING.

General Information:

Some EFX School Buses built between March 29, 2012 to November 14, 2012 ordered with option C3676-24-000 or C3676-23-001 may pop the breaker to headlamps after about 15 minutes causing all headlamps, marker, and cluster lamps to shut off.

Procedure:

1. First chock the wheels and make sure the key is in the off position and you have the bus in neutral (Park) with the parking brake set.
2. Breaker for the Headlamps is under the dash at the driver's area near the steering column. Locate and remove the cover for the breaker. (PDM D)
3. Locate the breaker identified in the picture. **(Figure 1)**
 - 3.1 If it is a 20A (yellow breaker) then it has the incorrect breaker size installed.
 - 3.2 If it is a 30A type I breaker then no replacement is necessary.
 - 3.3 If the lights are still opening breaker there is another cause and you may stop at this step.
4. Remove 20A breaker.



LOCATION OF BREAKER.
REPLACE WITH 30A BREAKER.

Figure 1

5. Install new 30A Type I breaker #TBB 159393 purchased from PDC. (Only type that is approved.)
6. Locate the cover to the PDM that you removed. It should have a label on it telling where each breaker and relay goes in the PDM. **(Figure 2)**
7. Clean dust and other debris off of the original label for PDM
8. After it is clean, take #TBB 181070 (purchased from PDC) and apply directly over the original label. **(Figure 3)**
9. Reinstall cover and verify operation of lights.
10. Remove wheel chocks when done.



Figure 2, Old Label



Figure 3, New Label

PARTS REQUIRED		
PART NUMBER(S)	QUANTITY	DESCRIPTION
TBB159393	1	BREAKER, 30A, T1, MINI, ETA, 12V
TBB 181070	1	LABEL, ELEC PDM, DASH, EF, A

WARRANTY:

SEE TABLE BELOW FOR **OWL VMRS CODES AND LABOR ALLOWANCE** INFORMATION. ENTER THIS **RECALL NUMBER** IN THE **CAMPAIGN NUMBER** FIELD.

OWL VMRS CODES AND LABOR ALLOWANCE					
PRIMARY FAILED PART	COMPONENT CODE	CAUSE CODE	SRT CODE	DESCRIPTION	TIME: HOURS
BREAKER, TBB 159391	001-002-179	00	174-6787R	CRT BKR-20A,T1,MINI,ETA,12V	0.1

November 2013
FL647A
NHTSA # 13V-468
Transport Canada # 13-313

Subject: Minotour Floor Sheets

Models Affected: Specific Thomas Built Buses Minotour DRW school buses manufactured June 29, 2013, through July 16, 2013.

General Information

Daimler Trucks North America LLC (DTNA), on behalf of its wholly owned subsidiary, Thomas Built Buses (TBB), has decided that a defect that relates to motor vehicle safety exists on the vehicles mentioned above.

There are approximately 40 vehicles involved in this campaign.

On certain buses, an alternative material was used in the assembly of the vehicle's floor. The adhesive used to join the floor components may not bond as well as expect to this alternative material. In the event of a crash, the floor joint may not perform to DTNA standards, increasing the risk of injury to vehicle occupants.

Mechanical fasteners will be added to the affected floor joints.

Additional Repairs

Dealers must complete all outstanding Recall and Field Service campaigns prior to the sale or delivery of a vehicle. A Dealer will be liable for any progressive damage that results from its failure to complete campaigns before sale or delivery of a vehicle.

Owners may be liable for any progressive damage that results from failure to complete campaigns within a reasonable time after receiving notification.

Work Instructions

Please refer to the attached work instructions.

Replacement Parts

Replacement parts are now available and can be obtained by ordering from your facing Parts Distribution Center.

If our records show your dealership has ordered any vehicles involved in campaign number FL647, a list of the customers and vehicle identification numbers will be available on AccessFreightliner.com. Please refer to this list when ordering parts for this recall.

Table 1 – Replacement Parts for FL647

Campaign Number	Part Number	Description
FL647A	69003248	#12 Screw or equivalent screw with same specifications
	69005005	3/16" Pop-Rivet or equivalent rivet with same specifications

Table 1

Removed Parts

Please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts.

Recall Campaign

Daimler Trucks
North America LLC

November 2013
FL647A
NHTSA # 13V-468
Transport Canada # 13-313

Labor Allowance

Table 2 – Labor Allowance

Campaign Number	Procedure	Time Allowed (Hours)	SRT Code	Correction Code
FL647A	Floor joint modification	2.5	174-6526B	12 – Repair Recall/Campaign

Table 2

Claims for Credit

You will be reimbursed for your parts, labor, and handling by submitting your claim through the Warranty system within 30 days of completing this campaign. Please reference the following information in QuickClaim or OWL:

- Claim Type is **Recall**
- Enter the campaign number and appropriate condition code (**FL647A**).
- In the Primary Failed Part Number field, enter **TBB 175380**.
- In the Parts field, enter the appropriate kit/part number(s) as shown in the Replacement Parts Table.
- In the Parts field, enter the appropriate kit/part number(s) as shown in the Replacement Parts Table.
- In the Labor field, first enter the appropriate SRT from the Labor Allowance Table.
- For OWL, the VMRS Component Code is 174-001-008 and the Cause Code is A1 - Campaign.
- **U.S. and Canada – Reimbursement for Prior Repairs.** When a customer asks about reimbursement, please do the following:
 - Accept the documentation of the previous repair.
 - Make a brief check of the customer's paperwork to see if the repair may be eligible for reimbursement. (See the "Copy of Owner Letter" section of this bulletin for reimbursement guidelines for this recall.)
 - Submit a Campaign Pre-Approval inquiry to the Warranty Campaigns Department for a decision and authorization number.
 - Include the approved amount on your claim in sublet/outside purchases.
 - In the claim story, first note the authorization number and that the claim includes a reimbursement request.\
 - Retain the documentation and provide it to Warranty Campaigns or Claims Processing if requested.
 - When your claim is paid, reimburse the customer the appropriate amount.

IMPORTANT: ServicePro or OWL must be viewed prior to performing the recall to ensure the vehicle is involved and the campaign has not been previously completed. Also, check for a completion sticker prior to beginning work.

U.S. and Canadian dealers, contact the Warranty Campaigns Department at (336) 889-4871, from 8:00 a.m. to 5:00 p.m. Eastern Time, Monday through Friday, via Web inquiry at AccessFreightliner.com / My Tickets and Submit an Inquiry, if you have any questions or need additional information.

Recall Campaign

**Daimler Trucks
North America LLC**

**November 2013
FL647A
NHTSA # 13V-468
Transport Canada # 13-313**

U.S. and Canadian Dealers: To return excess kit inventory related to this campaign, U.S. dealers must submit a Parts Authorization Return (PAR) to the Memphis PDC. Canadian dealers must submit a PAR to their facing PDC. All kits must be in resalable condition. PAR requests must include the original purchase invoice number.

The letter notifying U.S. and Canadian vehicle owners is included for your reference.

Please note that the National Traffic and Motor Vehicle Safety Act, as amended (Title 49, United States Code, Chapter 301), requires the owner's vehicle(s) be corrected within a reasonable time after parts are available to you. The Act states that failure to repair a vehicle within 60 days after tender for repair shall be prima facie evidence of an unreasonable time. However, circumstances of a particular situation may reduce the 60 day period. Failure to repair a vehicle within a reasonable time can result in either the obligation to (a) replace the vehicle with an identical or reasonably equivalent vehicle, without charge, or (b) refund the purchase price in full, less a reasonable allowance for depreciation. The Act further prohibits dealers from selling a vehicle unless all outstanding recalls are performed. Any lessor is required to send a copy of the recall notification to the lessee within 10 days. Any subsequent stage manufacturer is required to forward this notice to its distributors and retail outlets within five working days.

November 2013
FL647A
NHTSA # 13V-468
Transport Canada # 13-313

Copy of Notice to Owners

Subject: Minotour Floor Sheets

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. This notice is sent to you in accordance with the Canadian Motor Vehicle Safety Act.

Daimler Trucks North America LLC (DTNA), on behalf of its wholly owned subsidiary, Thomas Built Buses (TBB) has decided that a defect which relates to motor vehicle safety exists on specific Thomas Built Buses Minotour DRW school buses manufactured June 29, 2013, through July 16, 2013.

On certain buses, an alternative material was used in the assembly of the vehicle's floor. The adhesive used to join the floor components may not bond as well as expect to this alternative material. In the event of a crash, the floor joint may not perform to DTNA standards, increasing the risk of injury to vehicle occupants.

Mechanical fasteners will be added to the affected floor joints.

To arrange for repairs, you should contact your local Thomas Built Bus dealer immediately. Thomas will remedy this defect without charge. The repair should take approximately two to three hours and will be performed at no charge to you.

You may be liable for any progressive damage that results from your failure to complete the Recall within a reasonable time after receiving notification.

If you do not own the vehicle that corresponds to the identification number(s) which appears on the Recall Notification, please return the notification to the Warranty Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, Federal law requires that you forward this notice to the lessee within 10 days.

If you have paid to have this recall condition corrected prior to this notice, you may be eligible to receive reimbursement. For further information, please contact the Warranty Department at (336) 889-4871, 8 a.m. to 5 p.m. Eastern Time Monday through Friday. To find a dealer in your area please go to www.thomasbus.com.

If you have any questions about this recall, please contact the Warranty Department at (336) 889-4871, 8:00 a.m. to 5:00 p.m. Eastern time, Monday through Friday. If you are not able to have the defect remedied without charge and within a reasonable time, you may wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the Vehicle Safety Hotline at (888) 327-4236 (TTY: 800-424-9153); or to <http://www.safercar.gov>. In Canada, you may contact Transport Canada-road safety, 80 rue Noel, Gatineau, Quebec J8Z 0A1 or call 1-800-333-0510.

We regret any inconvenience this action may cause but feel certain you understand our interest in motor vehicle safety.

THOMAS BUILT BUSES WARRANTY DEPARTMENT
Enclosure

November 2013
FL647A
NHTSA # 13V-468
Transport Canada # 13-313

Work Instructions

Subject: Minotour Floor Sheets

Models Affected: Specific Thomas Built Buses Minotour DRW school buses manufactured June 29, 2013, through July 16, 2013.

Floor Sheet Reinforcement

1. If a vehicle lift is present, it would be best to complete the procedure while vehicle is on the lift, if not please chock wheels and make sure vehicle is off and has cooled for a while.
2. Place the vehicle on the lift and raise it so that you can work under bus comfortably.
3. Once the bus has been raised, find an area at each of the 3-4 floor sections that has the least amount of undercoating. ER60 with a rag works great to remove the undercoating (see Figure 1).



Figure 1

4. The sheet that is shiny is the one that will need to have this procedure done to it. If it has a dull finish then you can proceed to the next one. Check all sheets (see Figure 2). If any doubt, complete procedure with all sheets.
5. Once you have found a sheet that is galvanized then you will need to repair each end (the ends at the left and right side of the bus). This requires adding extra fasteners between the existing fasteners. For the locations that are at the ends of the floor, sheet rivets will be used (TBB69005005 3/16" pop rivet). Between the screws that are coming down from inside the bus there will be 2 rivets installed. Drill two .191 diameter holes equal distance between the existing screws as shown in between existing side lining attachments. Drill these holes 1 1/8" distance from each other. There are only 2 screws shown but this is to be done between each set of screws all the way across the floor sheet on both ends (see Figure 3). Make sure that the fastener tightens all the way up against the metal. This may require removing more undercoating (see figure 3). Also, in hard to reach places where a pop rivet gun will not reach, screws can be substituted such as shown in Figure 5. If you are unable to distinguish between galvanized and galvanneal then proceed with the procedure for all sheets.

Recall Campaign

November 2013
FL647A
NHTSA # 13V-468
Transport Canada # 13-313



Figure 2

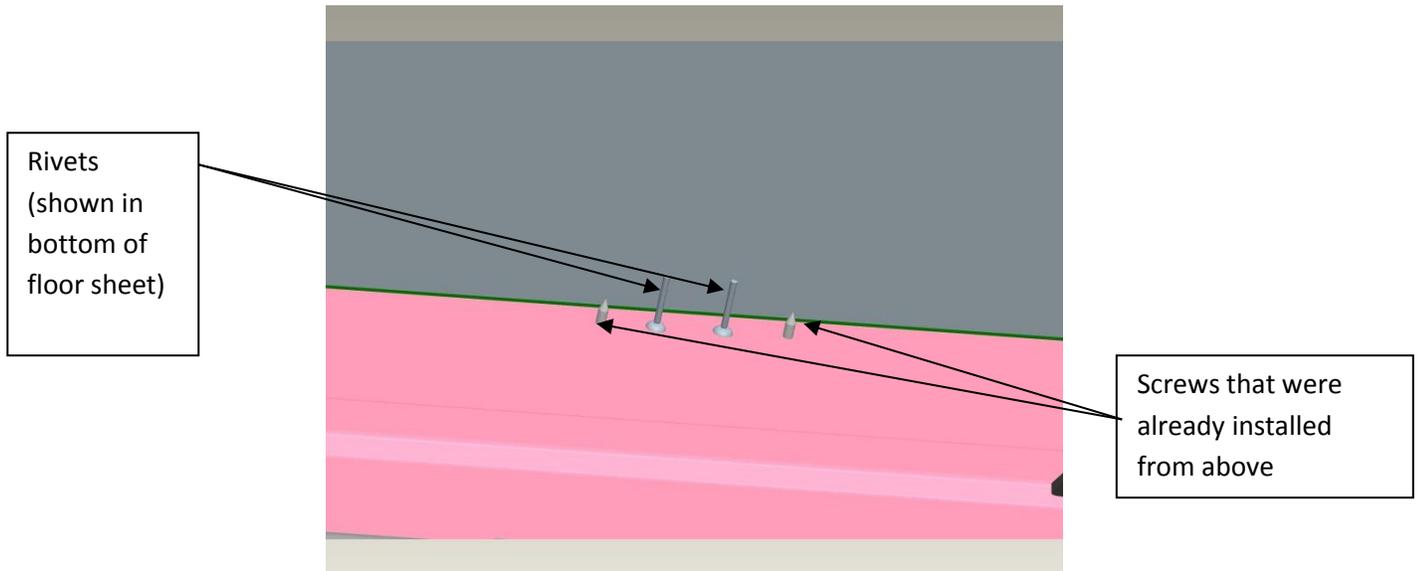


Figure 3

- 6 If a battery box happens to fall on one side of the sheet you are working on then the same process will be used, it will just go up through the battery box and again you will use two rivets between the two rivets already there. This will continue all the way across the battery box inside top as shown in Figure 4.

Recall Campaign

November 2013
FL647A
NHTSA # 13V-468
Transport Canada # 13-313

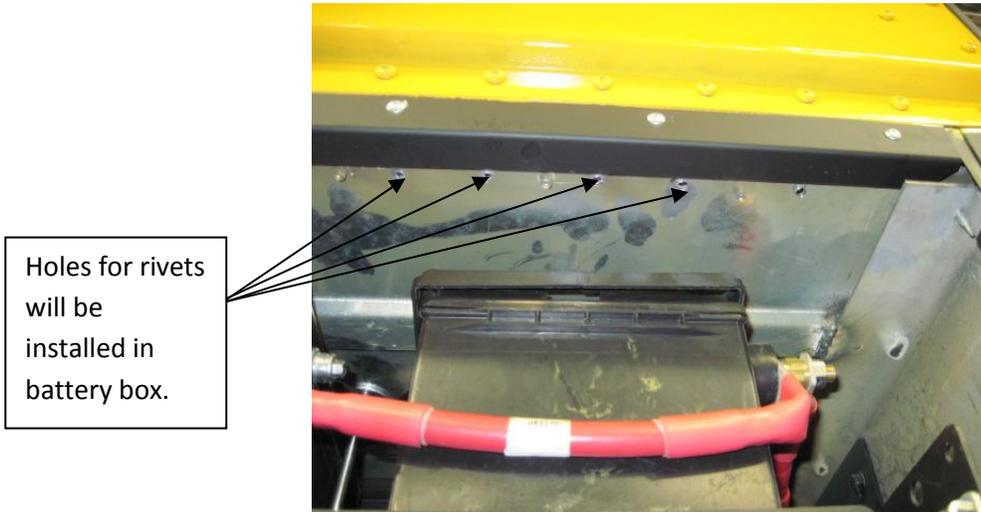


Figure 4

- 7 If the sheet that you have to repair is the last sheet in the bus (the one that butts up to the emergency door) it will require this to be done on three sides. The two ends will just be a repeat of the above steps. The edge facing the rear of the bus will use screws (TBB P/N 69003248 #12 screws) at each pin and collar configuration. Scrape away any undercoating so that holes can be drilled and the fastener will mount metal to metal. Drill four 5/32" holes in line with the pin and collar fasteners as shown in Figure 5. This will be done at each location the pin and collar fasteners are along the back of the bus. Two of the screws will be installed between the two pin and collar fasteners at 1.15" from each screw. Then one on each side of the row for a total of 4 screws.

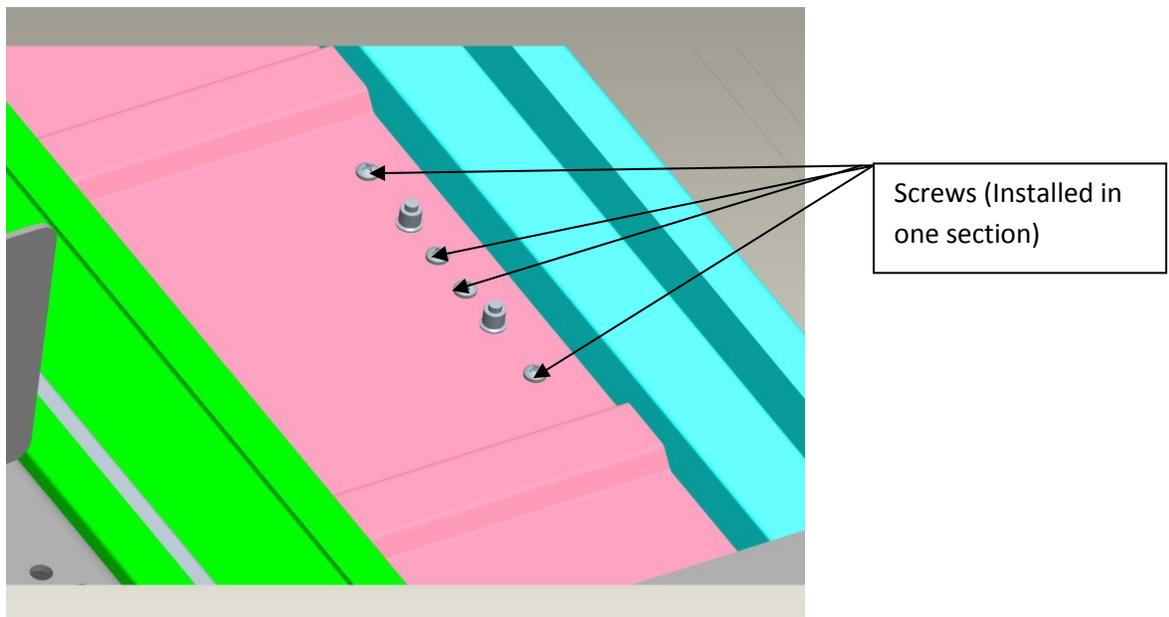


Figure 5

Recall Campaign

Daimler Trucks
North America LLC

November 2013

FL647A

NHTSA # 13V-468

Transport Canada # 13-313

8) If the repair area is where the AC condenser is located then you will need to remove the grill for the repair. After removing the grill it is best to use extensions for the drill bit and the screw bit. This will allow you to reach the floor section without removing the condenser. Again, the repair will be just like steps 3-5 on each end of floor sheet.

December 2013
FL650AB
NHTSA # 13V-537

Subject: IMMI FLIP & Floor Mount Seat U- Bolt

Models Affected: Specific Thomas Built Buses Saf-T-Liner HDX and Saf-T-Liner EFX school buses manufactured October 17, 2011 through July 3, 2013.

General Information

Daimler Trucks North America LLC (DTNA), on behalf of its wholly owned subsidiary, Thomas Built Buses (TBB), has decided that a defect that relates to motor vehicle safety exists on the vehicles mentioned above.

There are approximately 328 vehicles involved in this campaign.

On certain buses, A U-bolt intended to reinforce certain seat installations to the chassis, may have been left out of the assembly process. Units with missing reinforcement components may not withstand high seat loads during a crash.

A U- bolt will be added to the affected IMMI seats.

Additional Repairs

Dealers must complete all outstanding Recall and Field Service campaigns prior to the sale or delivery of a vehicle. A Dealer will be liable for any progressive damage that results from its failure to complete campaigns before sale or delivery of a vehicle.

Owners may be liable for any progressive damage that results from failure to complete campaigns within a reasonable time after receiving notification.

Work Instructions

Please refer to the attached work instructions.

Replacement Parts

Replacement parts are now available and can be obtained by ordering from your facing Parts Distribution Center.

If our records show your dealership has ordered any vehicles involved in campaign number FL650AB, a list of the customers and vehicle identification numbers will be available on AccessFreightliner.com. Please refer to this list when ordering parts for this recall.

Table 1 – Replacement Parts for FL650AB

Campaign Number	Part Number	Description
FL650AB	TBB 59000137	U-Bolt Mounting Body to Chassis
	TBB 69004066	Washer, Flat, 7/16 ID
	TBB 29940038	Locknut 7/16-14 Prevailing

Table 1

Removed Parts

Please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts.

Recall Campaign

December 2013
FL650AB
NHTSA # 13V-537

Labor Allowance

Table 2 – Labor Allowance

Campaign Number	Procedure	Time Allowed	SRT Code	Correction Code
FL650A (325 units involved)	(2) U-Bolt IMMI Seat Modification	.8	174-6070M	12 – Repair Recall/Campaign
FL650B (3 units involved)	(1) U-Bolts IMMI Seat Modification	.4	174-6070N	12 – Repair Recall/Campaign

Table 2

Claims for Credit

You will be reimbursed for your parts, labor, and handling by submitting your claim through the Warranty system within 30 days of completing this campaign. Please reference the following information in QuickClaim or OWL:

- Claim Type is **Recall**
- Enter the campaign number and appropriate condition code (**FL650AB**).
- In the Primary Failed Part Number field, enter **TBB 175694**
- In the Parts field, enter the appropriate kit/part number(s) as shown in the Replacement Parts Table.
- In the Parts field, enter the appropriate kit/part number(s) as shown in the Replacement Parts Table.
- In the Labor field, first enter the appropriate SRT from the Labor Allowance Table.
- For OWL, the VMRS Component Code is **174-002-001** and the Cause Code is A1 - Campaign.
- **U.S. and Canada – Reimbursement for Prior Repairs.** When a customer asks about reimbursement, please do the following:
 - Accept the documentation of the previous repair.
 - Make a brief check of the customer's paperwork to see if the repair may be eligible for reimbursement. (See the "Copy of Owner Letter" section of this bulletin for reimbursement guidelines for this recall.)
 - Submit a Campaign Pre-Approval inquiry to the Warranty Campaigns Department for a decision and authorization number.
 - Include the approved amount on your claim in sublet/outside purchases.
 - In the claim story, first note the authorization number and that the claim includes a reimbursement request.\
 - Retain the documentation and provide it to Warranty Campaigns or Claims Processing if requested.
 - When your claim is paid, reimburse the customer the appropriate amount.

IMPORTANT: ServicePro or OWL must be viewed prior to performing the recall to ensure the vehicle is involved and the campaign has not been previously completed. Also, check for a completion sticker prior to beginning work.

Recall Campaign

Daimler Trucks
North America LLC

December 2013
FL650AB
NHTSA # 13V-537

U.S. and Canadian dealers, contact the Warranty Campaigns Department at (336) 889-4871, from 8:00 a.m. to 5:00 p.m. Eastern Time, Monday through Friday, via Web inquiry at AccessFreightliner.com / My Tickets and Submit an Inquiry, if you have any questions or need additional information.

U.S. and Canadian Dealers: To return excess kit inventory related to this campaign, U.S. dealers must submit a Parts Authorization Return (PAR) to the Memphis PDC. Canadian dealers must submit a PAR to their facing PDC. All kits must be in resalable condition. PAR requests must include the original purchase invoice number.

The letter notifying U.S. and Canadian vehicle owners is included for your reference.

Please note that the National Traffic and Motor Vehicle Safety Act, as amended (Title 49, United States Code, Chapter 301), requires the owner's vehicle(s) be corrected within a reasonable time after parts are available to you. The Act states that failure to repair a vehicle within 60 days after tender for repair shall be prima facie evidence of an unreasonable time. However, circumstances of a particular situation may reduce the 60 day period. Failure to repair a vehicle within a reasonable time can result in either the obligation to (a) replace the vehicle with an identical or reasonably equivalent vehicle, without charge, or (b) refund the purchase price in full, less a reasonable allowance for depreciation. The Act further prohibits dealers from selling a vehicle unless all outstanding recalls are performed. Any lessor is required to send a copy of the recall notification to the lessee within 10 days. Any subsequent stage manufacturer is required to forward this notice to its distributors and retail outlets within five working days.

December 2013
FL650AB
NHTSA # 13V-537

Copy of Notice to Owners

Subject: IMMI FLIP & Floor Mount Seat U- Bolt

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. This notice is sent to you in accordance with the Canadian Motor Vehicle Safety Act.

Daimler Trucks North America LLC (DTNA), on behalf of its wholly owned subsidiary, Thomas Built Buses (TBB) has decided that a defect which relates to motor vehicle safety exists on specific Thomas Built Buses.

On certain buses, A U-bolt intended to reinforce certain seat installations to the chassis, may have been left out of the assembly process. Units with missing reinforcement components may increase the risk of injury to the vehicle occupants.

A U- bolt will be added to the affected IMMI seats.

To arrange for repairs, you should contact your local Thomas Built Bus dealer immediately. Thomas will remedy this defect without charge. The repair should take approximately .4 hours up to .8 hours depending on your vehicle, and will be performed at no charge to you.

You may be liable for any progressive damage that results from your failure to complete the Recall within a reasonable time after receiving notification.

If you do not own the vehicle that corresponds to the identification number(s) which appears on the Recall Notification, please return the notification to the Warranty Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, Federal law requires that you forward this notice to the lessee within 10 days.

If you have paid to have this recall condition corrected prior to this notice, you may be eligible to receive reimbursement. For further information, please contact the Warranty Department at (336) 889-4871, 8 a.m. to 5 p.m. Eastern Time Monday through Friday. To find a dealer in your area please go to www.thomasbus.com.

If you have any questions about this recall, please contact the Warranty Department at (336) 889-4871, 8:00 a.m. to 5:00 p.m. Eastern Time, Monday through Friday. If you are not able to have the defect remedied without charge and within a reasonable time, you may wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the Vehicle Safety Hotline at (888) 327-4236 (TTY: 800-424-9153); or to <http://www.safercar.gov>. In Canada, you may contact Transport Canada-road safety, 80 rue Noel, Gatineau, Quebec J8Z 0A1 or call 1-800-333-0510.

We regret any inconvenience this action may cause but feel certain you understand our interest in motor vehicle safety.

THOMAS BUILT BUSES WARRANTY DEPARTMENT
Enclosure

December 2013
FL650AB
NHTSA # 13V-537

Work Instructions

Subject: Missing U-Bolt for IMMI seat mounting

Models Affected: Specific Thomas Built Buses Saf-T-Liner HDX, MVP-EF/EFX school buses manufactured October 17, 2011, through July 3, 2013.

This document will provide general instructions for the addition of U-Bolt underneath floor behind IMMI four-legged floor mount seats and IMMI flip seats near side door entrance.

Problem: IMMI seats may require extra strength via a U-bolt mounted underneath floor to meet FMVSS seating requirements.

Repair Procedure:

- 1) Chock wheels, set parking brake, place the bus in Park or Neutral and make sure the key is in the OFF position.
- 2) Locate IMMI seat (either flip seat or four legged) and note the location of the back feet of the seat.
- 3) Under bus, locate where the back legs are mounted. They will be mounted where two floor sheet pieces come together. Using this as a reference, go back one floor joint and this will be the joint you will mount U-Bolt. (See **Figure 1**)

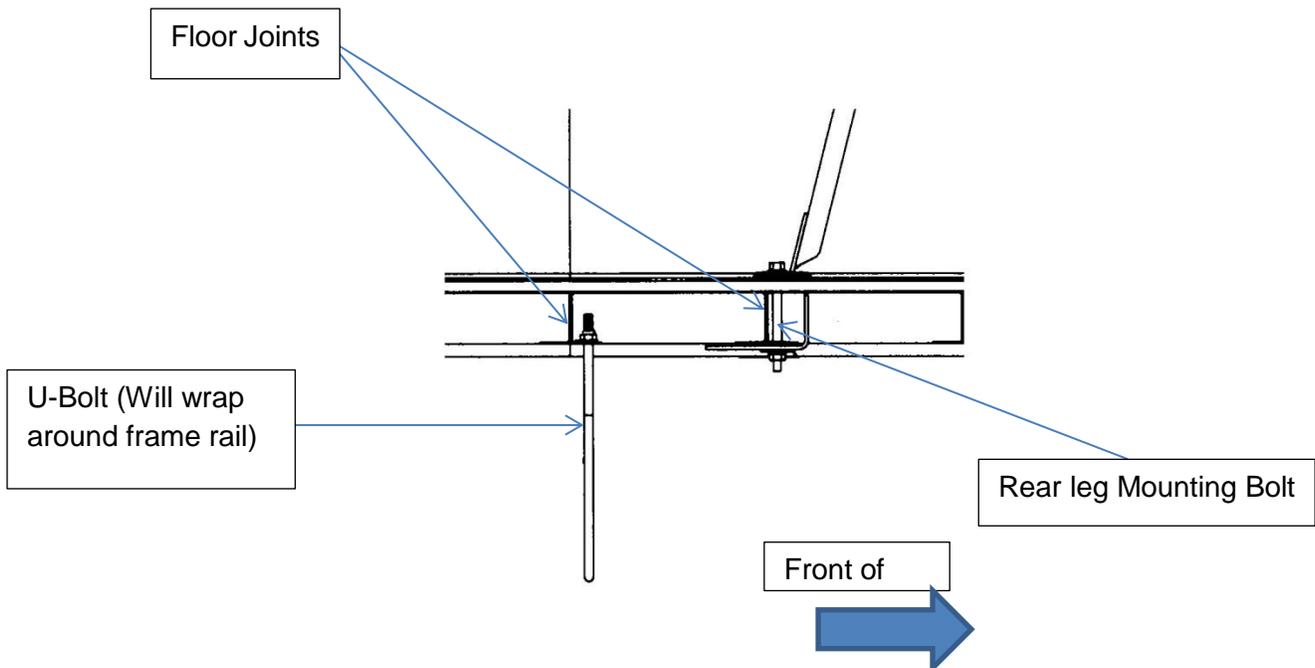


Figure 1

- 4) On the inside of frame rail, there will be a hole to mount the U-Bolt to floor flange. Hold up the U-bolt under

Recall Campaign

December 2013
FL650AB
NHTSA # 13V-537

the frame rail, line up with one leg with the hole. With a magic marker, mark the location of where the outside leg falls on the floor flange. This is the location to drill hole to mount other side of U-bolt.

- 5) Drill 7/16" hole where you marked the spot on the flange.
- 6) Wrap U-bolt (TBB 59000137) around the frame rail and push threaded ends into the two holes. (When the U-bolt is tightened, make sure that it does not crush any hoses, pipes or wiring harnesses.)
- 7) Install one washer (TBB 69004066) on threaded part of U-bolt after installed in hole..
- 8) Install one nut (TBB 29940038) on each as well and tighten down by hand.
- 9) Using 11/16" socket, tighten the bolts down until they are tight, but DO NOT deform floor flange.
- 10) Repeat procedure for second U-Bolt if necessary

Parts:

Part number	Description	Qty. Per seat
TBB 59000137	BOLT- U, MOUNTING BODY TO CHASSIS	1
TBB 69004066	WASHER, FLAT, .500 ID, 1.250 OD, STEEL, CLR ZINC	2
TBB 29940038	LOCKNUT 7/16-14 PREVAILING	2

Tools:

- 7/16" Drill Bit
- Drill
- Black Sharpie
- 11/16" Socket

Recall Campaign

Daimler Trucks
North America LLC

December 2013
FL649A
NHTSA # 13V-536

Subject: 5-Row Minotour Seat Barriers

Models Affected: Specific Thomas Built Buses Minotour SRW school buses manufactured June 19, 2013, through August 9, 2013.

General Information

Daimler Trucks North America LLC (DTNA), on behalf of its wholly owned subsidiary, Thomas Built Buses (TBB), has decided that a defect that relates to motor vehicle safety exists on the vehicles mentioned above.

There are approximately 6 vehicles involved in this campaign.

On certain buses, incorrect components may have been used for the installation of the 5 row seat barrier on certain Minotour vehicles. The use of incorrect components may cause the seat barrier to not perform to DTNA specifications in the event of a crash.

The correct Barrier reinforcements will be installed.

Additional Repairs

Dealers must complete all outstanding Recall and Field Service campaigns prior to the sale or delivery of a vehicle. A Dealer will be liable for any progressive damage that results from its failure to complete campaigns before sale or delivery of a vehicle.

Owners may be liable for any progressive damage that results from failure to complete campaigns within a reasonable time after receiving notification.

Work Instructions

Please refer to the attached work instructions.

Replacement Parts

Replacement parts are now available and can be obtained by ordering from your facing Parts Distribution Center.

If our records show your dealership has ordered any vehicles involved in campaign number FL649, a list of the customers and vehicle identification numbers will be available on AccessFreightliner.com. Please refer to this list when ordering parts for this recall.

Table 1 – Replacement Parts for FL649

Campaign Number	Part Number	Description
FL649A	TBB 69001947	HEX FLANGE, SAE GRADE 8, STEEL, NON SERRATED FLANGE, BLACK ZINC
	TBB 183618	PAD, ASSEMBLY, LOWER LS BEHIND DRIVER, POLYFOAM, MAX PASS.GM SRW 5 ROW
	TBB 182254	UNDERFLOOR BARRIER REINFORCEMENT, LEFT SIDE FORWARD, 5 ROW MINOTOUR
	TBB 183396	JOIST REINFORCEMENT, FLOOR, 5 ROW MINOTOUR
	TBB 182325	BARRIER PLATE, LEFT SIDE, 7.25 INCH OFFSET, 5 ROW MINOTOUR
	TBB 69003040	SCREW-TAPPING, # 10 1/2", PHILP TRUSS HEAD, TYPE B, .0003 ZINC, W/LOCTITE

Table 1

Recall Campaign

Daimler Trucks
North America LLC

December 2013
FL649A
NHTSA # 13V-536

Removed Parts

Please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts.

Labor Allowance

Table 2 – Labor Allowance

Campaign Number	Procedure	Time Allowed (Hours)	SRT Code	Correction Code
FL469A	Install Barrier Reinforcements	1.3	174-6794D	12 – Repair Recall/Campaign

Table 2

Claims for Credit

You will be reimbursed for your parts, labor, and handling by submitting your claim through the Warranty system within 30 days of completing this campaign. Please reference the following information in QuickClaim or OWL:

- Claim Type is **Recall**
- Enter the campaign number and appropriate condition code (**FL649A**).
- In the Primary Failed Part Number field, enter **TBB 172206**
- In the Parts field, enter the appropriate kit/part number(s) as shown in the Replacement Parts Table.
- In the Parts field, enter the appropriate kit/part number(s) as shown in the Replacement Parts Table.
- In the Labor field, first enter the appropriate SRT from the Labor Allowance Table.
- For OWL, the VMRS Component Code is **174-018-001** and the Cause Code is A1 - Campaign.
- **U.S. and Canada – Reimbursement for Prior Repairs.** When a customer asks about reimbursement, please do the following:
 - Accept the documentation of the previous repair.
 - Make a brief check of the customer's paperwork to see if the repair may be eligible for reimbursement. (See the "Copy of Owner Letter" section of this bulletin for reimbursement guidelines for this recall.)
 - Submit a Campaign Pre-Approval inquiry to the Warranty Campaigns Department for a decision and authorization number.
 - Include the approved amount on your claim in sublet/outside purchases.
 - In the claim story, first note the authorization number and that the claim includes a reimbursement request.\
 - Retain the documentation and provide it to Warranty Campaigns or Claims Processing if requested.
 - When your claim is paid, reimburse the customer the appropriate amount.

IMPORTANT: ServicePro or OWL must be viewed prior to performing the recall to ensure the vehicle is involved and the campaign has not been previously completed. Also, check for a completion sticker prior to beginning work.

Recall Campaign

Daimler Trucks
North America LLC

December 2013
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U.S. and Canadian dealers, contact the Warranty Campaigns Department at (336) 889-4871, from 8:00 a.m. to 5:00 p.m. Eastern Time, Monday through Friday, via Web inquiry at AccessFreightliner.com / My Tickets and Submit an Inquiry, if you have any questions or need additional information.

U.S. and Canadian Dealers: To return excess kit inventory related to this campaign, U.S. dealers must submit a Parts Authorization Return (PAR) to the Memphis PDC. Canadian dealers must submit a PAR to their facing PDC. All kits must be in resalable condition. PAR requests must include the original purchase invoice number.

The letter notifying U.S. and Canadian vehicle owners is included for your reference.

Please note that the National Traffic and Motor Vehicle Safety Act, as amended (Title 49, United States Code, Chapter 301), requires the owner's vehicle(s) be corrected within a reasonable time after parts are available to you. The Act states that failure to repair a vehicle within 60 days after tender for repair shall be prima facie evidence of an unreasonable time. However, circumstances of a particular situation may reduce the 60 day period. Failure to repair a vehicle within a reasonable time can result in either the obligation to (a) replace the vehicle with an identical or reasonably equivalent vehicle, without charge, or (b) refund the purchase price in full, less a reasonable allowance for depreciation. The Act further prohibits dealers from selling a vehicle unless all outstanding recalls are performed. Any lessor is required to send a copy of the recall notification to the lessee within 10 days. Any subsequent stage manufacturer is required to forward this notice to its distributors and retail outlets within five working days.

December 2013
FL649A
NHTSA # 13V-536

Copy of Notice to Owners

Subject: 5-Row Minotour Barrier Reinforcement

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Daimler Trucks North America LLC (DTNA), on behalf of its wholly owned subsidiary, Thomas Built Buses (TBB) has decided that a defect which relates to motor vehicle safety exists on specific Thomas Built Buses Minotour SRW school buses manufactured June 19, 2013 through August 9, 2013.

On certain buses, incorrect components may have been used for the installation of the 5th row seat barrier on certain Minotour vehicles. The use of incorrect components may cause the seat barrier to not perform to DTNA specifications in the event of a crash.

The correct Barrier reinforcements will be installed.

To arrange for repairs, you should contact your local Thomas Built Bus dealer immediately. Thomas will remedy this defect without charge. The repair should take approximately one hour and 18 minutes and will be performed at no charge to you.

You may be liable for any progressive damage that results from your failure to complete the Recall within a reasonable time after receiving notification.

If you do not own the vehicle that corresponds to the identification number(s) which appears on the Recall Notification, please return the notification to the Warranty Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, Federal law requires that you forward this notice to the lessee within 10 days.

If you have paid to have this recall condition corrected prior to this notice, you may be eligible to receive reimbursement. For further information, please contact the Warranty Department at (336) 889-4871, 8 a.m. to 5 p.m. Eastern Time Monday through Friday. To find a dealer in your area please go to www.thomasbus.com.

If you have any questions about this recall, please contact the Warranty Department at (336) 889-4871, 8:00 a.m. to 5:00 p.m. Eastern time, Monday through Friday. If you are not able to have the defect remedied without charge and within a reasonable time, you may wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the Vehicle Safety Hotline at (888) 327-4236 (TTY: 800-424-9153); or to <http://www.safercar.gov>. In Canada, you may contact Transport Canada-road safety, 80 rue Noel, Gatineau, Quebec J8Z 0A1 or call 1-800-333-0510.

We regret any inconvenience this action may cause but feel certain you understand our interest in motor vehicle safety.

THOMAS BUILT BUSES WARRANTY DEPARTMENT
Enclosure

December 2013
FL649A
NHTSA # 13V-536

Work Instructions

Subject: 5-Row Minotour Barrier Reinforcement

Models Affected: Specific Thomas Built Buses Minotour SRW school buses manufactured June 19, 2013, through August 9, 2013.

Subject: Barrier may not pass FMVSS requirements if these reinforcements are not present.

Note: This Repair Procedure requires the use of a vehicle lift.

- 1) Before lifting bus, chock the tires and perform two and three.
- 2) Remove the bolts holding down the barrier on aisle side, retain for reinstallation.
- 3) Remove bolts holding down seat behind barrier on front leg at aisle, retain for reinstallation.
- 4) Raise bus on vehicle lift to perform the next steps.
- 5) Using a flat head screwdriver, loosen hose clamps and detach two hoses that connect to the fuel filler.

(Figure 1)



Figure 1

- 6) If possible, drain fuel tank to lessen weight of the tank before dropping it off the chassis.
- 7) Place cart under fuel tank to support tank after releasing it. Tank will need to be lowered enough to unplug two electrical plugs on sending unit and a fuel hose in that location, as well as the fuel hose at front of tank. (Figure 2)

Recall Campaign

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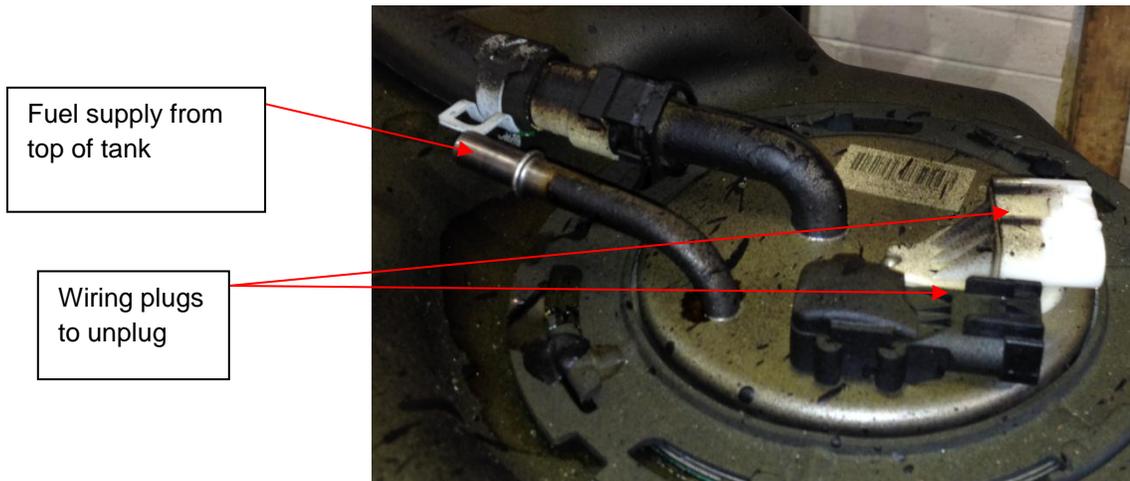


Figure 2

- 8) Using 15mm socket, loosen two fuel tank straps from chassis.
- 9) Lower tank down several inches. Unplug two harnesses from fuel sending unit located on top of tank. (**Figure 2**)
- 10) Disconnect fuel line located beside the two plugs. (**Figure 2**)
- 11) Disconnect fuel line at front of tank near driver.
- 12) Lower the tank to cart and tape up ends of fuel connections to keep fumes from spreading. Store tank in ventilated area until reinstallation.
- 13) Weld joist reinforcement channel (TBB 183396) into location shown in **Figure 3**. (Use the measurement for joist reinforcement.) Detail shown in **Figure 4**.

Recall Campaign

Daimler Trucks
North America LLC

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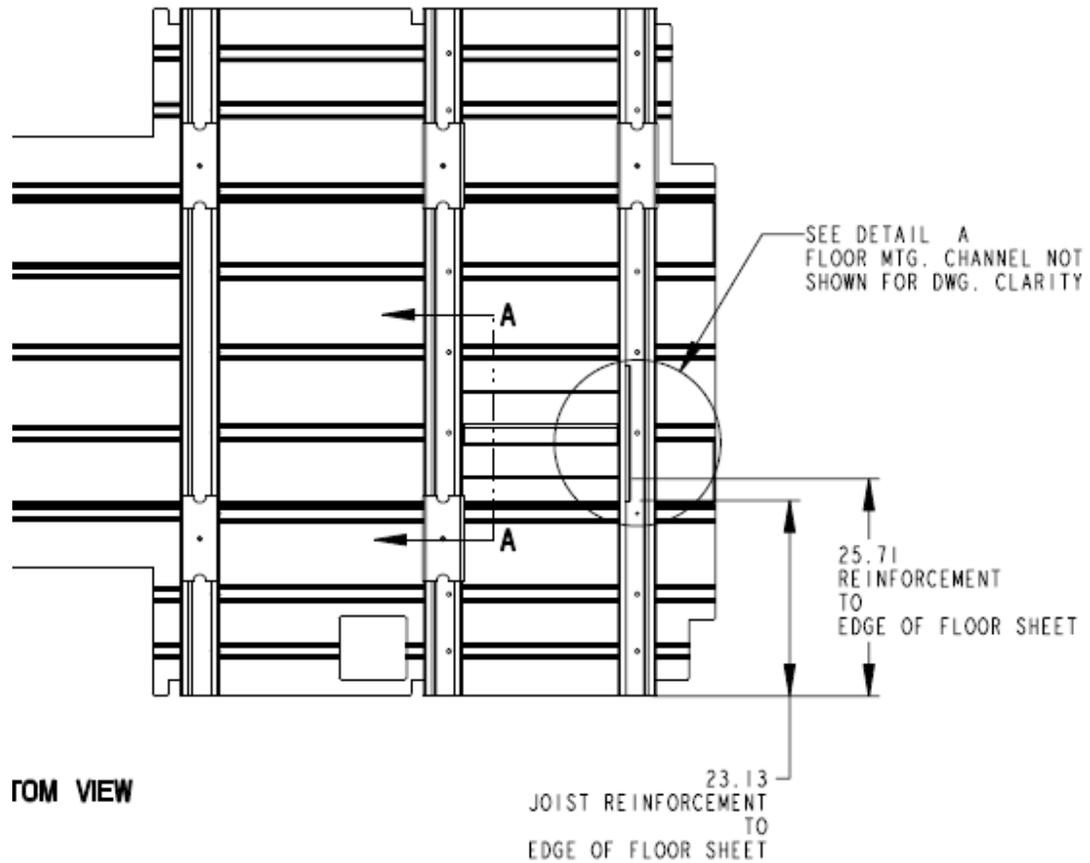


Figure 3

Recall Campaign

Daimler Trucks
North America LLC

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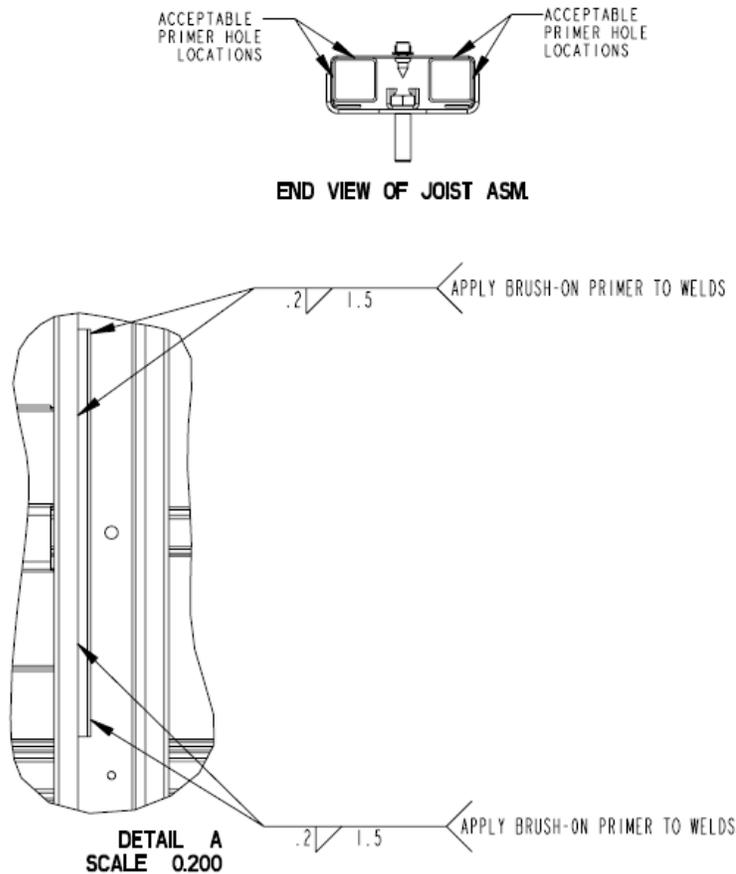


Figure 4

- 14) In area behind where joist reinforcement was just welded, (between it and the next joist) the nails from the installation of plywood floor must be broken off to install the floor reinforcement. This can be done by using a grinder to grind ends of nails off or using a hammer beat them flat against floor sheet. This needs to be done across to outer area of the frame rail to allow the barrier reinforcement plate to be slid over the frame rail.
- 15) To mount barrier reinforcement plate (TBB 182254), it will involve sliding the plate from the outside over the frame rail into location shown in **Figure 3**. **Figure 5** shows how to slide the plate over the frame rail. Once the plate is in place and making sure all harnesses are moved out of the way, weld plate as

Recall Campaign

Daimler Trucks
North America LLC

December 2013
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shown in detail in **Figure 6**



Figure 5

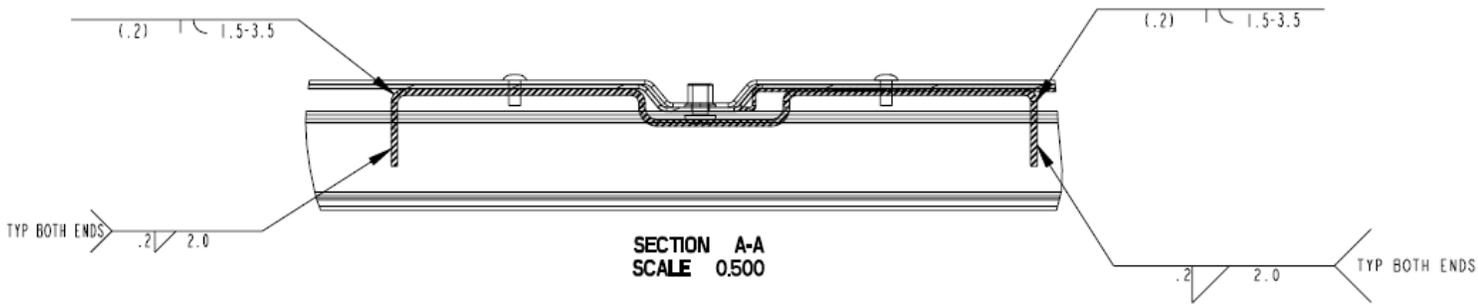


Figure 6

Recall Campaign

Daimler Trucks
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- 16) Re-drill barrier and seat holes using 3/8" drill bit through barrier plate.
- 17) Install new bolts (TBB 69001947) with existing washers and nuts.
- 18) Bring fuel tank back over and position underneath vehicle.
- 19) Raise fuel tank enough to re-connect the front fuel line and the fuel line on top tank.
- 20) Plug back in two connectors.
- 21) Reinstall the fuel tank straps using bolts and 15MM socket.
- 22) Reconnect the two hoses shown in **Figure 1** and tighten down clamps with flat head screwdriver.
- 23) Remove cart and any other items from underneath the bus and lower bus.
- 24) Remove lower pad on y-post (facing rear of bus) by removing 3 screws May require removing upper pad first.
- 25) Install new pad (TBB183618) using existing screws.
- 26) Install bracket (TBB 182325) in front of barrier as shown in **Figure 7** below. This will be installed by drilling three holes using a G drill bit, and then installing with three screws (TBB 69003140). This may require loosening the barrier at seat rail in order to get bracket into correct position.
- 27) Tighten seat barrier back if loosened.

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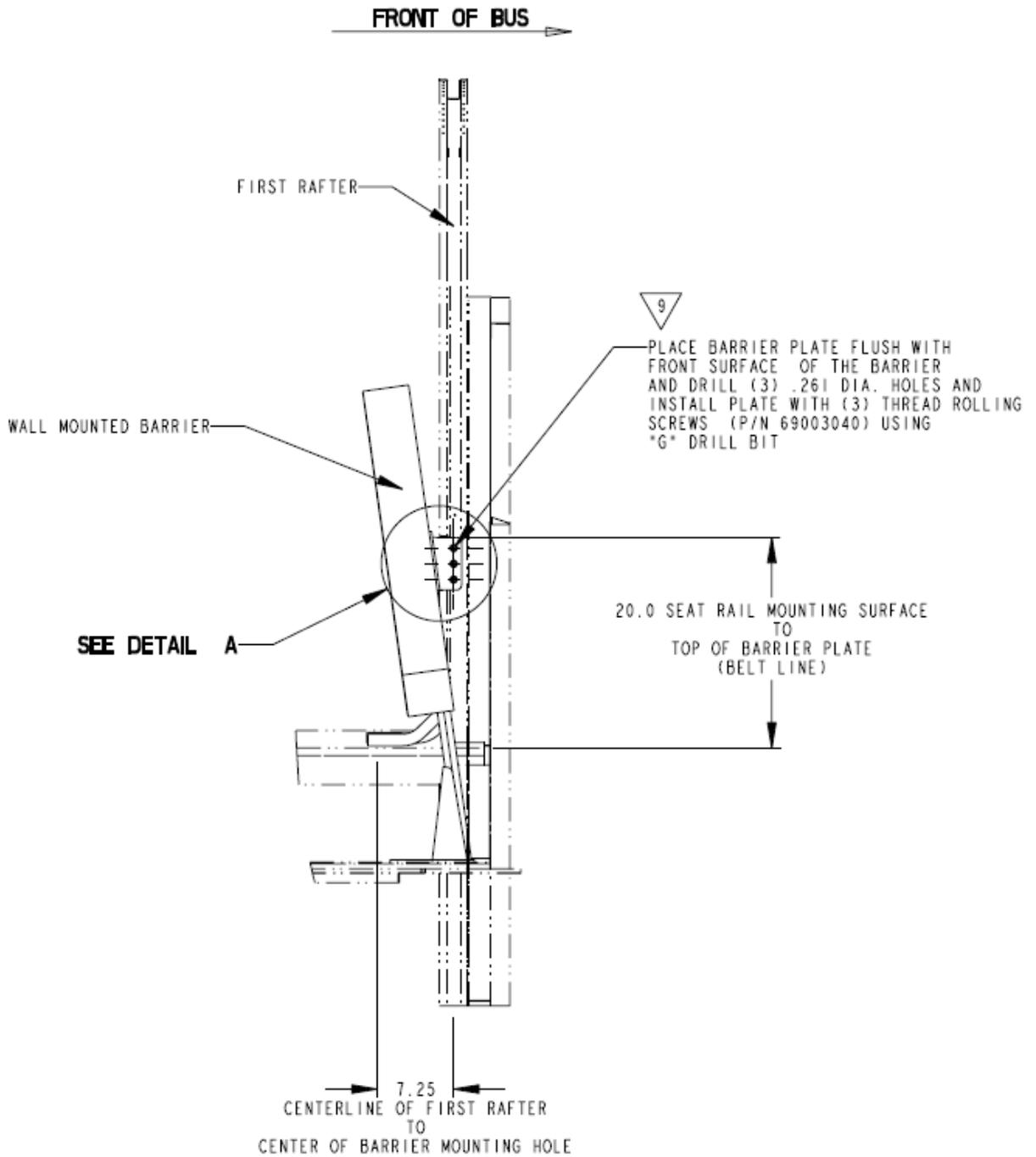


Figure 7

Recall Campaign

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NHTSA # 13V-536

TOOLS:

- Vehicle Lift
- Welder
- Jack and table for lowering fuel tank.
- Hammer
- Drill
- 3/8 drill bit
- G sized drill bit
- Flat Head screwdriver
- 15MM socket

PARTS: (Per bus)

QTY	Part number	Description
4	TBB69001947	HEX FLANGE, SAE GRADE 8, STEEL, NON SERRATED FLANGE, BLACK ZINC
1	TBB182254	UNDERFLOOR BARRIER REINFORCEMENT, LEFT SIDE FORWARD, 5 ROW MINOTOUR
1	TBB183396	JOIST REINFORCEMENT, FLOOR, 5 ROW MINOTOUR
1	TBB182325	BARRIER PLATE, LEFT SIDE, 7.25 INCH OFFSET, 5 ROW MINOTOUR
3	TBB69003040	SCREW-TAPPING,#10-1/2",PHILLIP TRUSS HEAD,TYPE B,.0003 ZINC,W/ LOCTITE PATCH
1	TBB183618	PAD, ASSEMBLY, LOWER LS BEHIND DRIVER, POLYFOAM, MAX PASS. GM SRW 5 ROW

Recall Campaign

Daimler Trucks
North America LLC

December 2013
FL651A-G
NHTSA # 13V-539
Transport Canada # 13-379

Subject: TBB Saf-T- Liner C2 Seat Track Rivets

Models Affected: Specific Thomas Built Buses Saf-T-Liner C2 school buses manufactured July 9, 2013 through September 12, 2013.

General Information

Daimler Trucks North America LLC (DTNA), on behalf of its wholly owned subsidiary, Thomas Built Buses (TBB), has decided that a defect that relates to motor vehicle safety exists on the vehicles mentioned above.

There are approximately 74 vehicles involved in this campaign.

On certain buses, seats with seatbelts are attached to a seat track that is mounted to the floor. The rivets used to attach the seat track to the floor may not have been properly seated when installed. If the rivets are not properly seated, in the event of a crash, the seat belt anchorages may not perform as expected increasing the risk of injury.

The seat track mounting will be reinforced as needed.

Additional Repairs

Dealers must complete all outstanding Recall and Field Service campaigns prior to the sale or delivery of a vehicle. A Dealer will be liable for any progressive damage that results from its failure to complete campaigns before sale or delivery of a vehicle.

Owners may be liable for any progressive damage that results from failure to complete campaigns within a reasonable time after receiving notification.

Work Instructions

Please refer to the attached work instructions.

Replacement Parts

Replacement parts are now available and can be obtained by ordering from your facing Parts Distribution Center.

If our records show your dealership has ordered any vehicles involved in campaign number FL651A-G, a list of the customers and vehicle identification numbers will be available on AccessFreightliner.com. Please refer to this list when ordering parts for this recall.

Table 1 – Replacement Parts for FL651A-G

Campaign Number	Part Number	Description
FL651A-G	TBB 69004114	Washer, Flat – 5/16 I.D. x 1 ½ O.D.
	TBB 69004121	Nut, Flange 5/16-18, Serrated
	TBB 125077	Floor Reinforcement, Channel. Seat (Only needed where bolt falls on z-channel)
	TBB 174029	5/16"-18x3.50, Flat Head SOC CAP, Screw (only needed where bolt falls z-channel)
	TBB 174027	5/16"-18x1.25, Flat Head SOC CAP, Screw
	TBB 182294	Rivet, Huck Magna Bulb, 5/16" Countersunk, -15

Table 1

Recall Campaign

Daimler Trucks
North America LLC

December 2013
FL651A-G
NHTSA # 13V-539
Transport Canada # 13-379

Removed Parts

Please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts.

Labor Allowance

Table 2 – Labor Allowance Procedure 1

Campaign Number	Procedure	Time Allowed	SRT Code	Correction Code
FL651A (17 Units Involved)	Add Extra Bolt Every 12" To Track – Full Bus	32	174-6795A	12 – Repair Recall/Campaign
FL651B (4 Units Involved)	Add Extra Bolt Every 12" To Track – 1/2 Bus	16	174-6795B	12 – Repair Recall/Campaign
FL651C (9 Units Involved)	Add Extra Bolt Every 12" To Track – 1/4 Bus	8	174-6795C	12 – Repair Recall/Campaign

Table 2

Table 3 – Labor Allowance Procedure 2

Campaign Number	Procedure	Time Allowed	SRT Code	Correction Code
FL651D (29 Units Involved)	Add Extra Rivet Every 12" To Track – Full Bus	18	174-6795D	12 – Repair Recall/Campaign
FL651E (2 Units Involved)	Add Extra Rivet Every 12" To Track – 3/4 Bus	13	174-6795E	12 – Repair Recall/Campaign
FL651F (1 Unit Involved)	Add Extra Rivet Every 12" To Track – 1/2 Bus	9	174-6795F	12 – Repair Recall/Campaign
FL651G (12 Units Involved)	Add Extra Rivet Every 12" To Track – 1/4 Bus	4.5	174-6795G	12 – Repair Recall/Campaign

Table 3

Recall Campaign

Daimler Trucks
North America LLC

December 2013
FL651A-G
NHTSA # 13V-539
Transport Canada # 13-379

Claims for Credit

You will be reimbursed for your parts, labor, and handling by submitting your claim through the Warranty system within 30 days of completing this campaign. Please reference the following information in QuickClaim or OWL:

- Claim Type is **Recall**
- Enter the campaign number and appropriate condition code (**FL651A-G**).
- In the Primary Failed Part Number field, enter **TBB 173640**.
- In the Parts field, enter the appropriate kit/part number(s) as shown in the Replacement Parts Table.
- In the Parts field, enter the appropriate kit/part number(s) as shown in the Replacement Parts Table.
- In the Labor field, first enter the appropriate SRT from the Labor Allowance Table.
- For OWL, the VMRS Component Code is **174-001-066** and the Cause Code is A1 - Campaign.
- **U.S. and Canada – Reimbursement for Prior Repairs.** When a customer asks about reimbursement, please do the following:
 - Accept the documentation of the previous repair.
 - Make a brief check of the customer's paperwork to see if the repair may be eligible for reimbursement. (See the "Copy of Owner Letter" section of this bulletin for reimbursement guidelines for this recall.)
 - Submit a Campaign Pre-Approval inquiry to the Warranty Campaigns Department for a decision and authorization number.
 - Include the approved amount on your claim in sublet/outside purchases.
 - In the claim story, first note the authorization number and that the claim includes a reimbursement request.
 - Retain the documentation and provide it to Warranty Campaigns or Claims Processing if requested.
 - When your claim is paid, reimburse the customer the appropriate amount.

IMPORTANT: ServicePro or OWL must be viewed prior to performing the recall to ensure the vehicle is involved and the campaign has not been previously completed. Also, check for a completion sticker prior to beginning work.

U.S. and Canadian dealers, contact the Warranty Campaigns Department at (336) 889-4871, from 8:00 a.m. to 5:00 p.m. Eastern Time, Monday through Friday, via Web inquiry at AccessFreightliner.com / My Tickets and Submit an Inquiry, if you have any questions or need additional information.

U.S. and Canadian Dealers: To return excess kit inventory related to this campaign, U.S. dealers must submit a Parts Authorization Return (PAR) to the Memphis PDC. Canadian dealers must submit a PAR to their facing PDC. All kits must be in resalable condition. PAR requests must include the original purchase invoice number.

The letter notifying U.S. and Canadian vehicle owners is included for your reference.

Please note that the National Traffic and Motor Vehicle Safety Act, as amended (Title 49, United States Code, Chapter 301), requires the owner's vehicle(s) be corrected within a reasonable time after parts are available to you. The Act states that failure to repair a vehicle within 60 days after tender for repair shall be prima facie

Recall Campaign

Daimler Trucks
North America LLC

December 2013
FL651A-G
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evidence of an unreasonable time. However, circumstances of a particular situation may reduce the 60 day period. Failure to repair a vehicle within a reasonable time can result in either the obligation to (a) replace the vehicle with an identical or reasonably equivalent vehicle, without charge, or (b) refund the purchase price in full, less a reasonable allowance for depreciation. The Act further prohibits dealers from selling a vehicle unless all outstanding recalls are performed. Any lessor is required to send a copy of the recall notification to the lessee within 10 days. Any subsequent stage manufacturer is required to forward this notice to its distributors and retail outlets within five working days.

December 2013
FL651A-G
NHTSA # 13V-539
Transport Canada # 13-379

Copy of Notice to Owners

Subject: TBB Saf-T-Liner C2 seat Track Rivets

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. This notice is sent to you in accordance with the Canadian Motor Vehicle Safety Act.

Daimler Trucks North America LLC (DTNA), on behalf of its wholly owned subsidiary, Thomas Built Buses (TBB) has decided that a defect which relates to motor vehicle safety exists on specific Thomas Built Buses.

On certain buses, seats with seatbelts are attached to a seat track that is mounted to the floor. The rivets used to attach the seat track to the floor may not have been properly seated when installed. If the rivets are not properly seated, in the event of a crash, the seat belt anchorages may not perform as expected increasing the risk of injury.

The seat track mounting will be reinforced as needed.

To arrange for repairs, you should contact your local Thomas Built Bus dealer immediately. Thomas will remedy this defect without charge. The repair should take approximately 8 hours up to 32 hours depending on your vehicle, and will be performed at no charge to you.

You may be liable for any progressive damage that results from your failure to complete the Recall within a reasonable time after receiving notification.

If you do not own the vehicle that corresponds to the identification number(s) which appears on the Recall Notification, please return the notification to the Warranty Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, Federal law requires that you forward this notice to the lessee within 10 days.

If you have paid to have this recall condition corrected prior to this notice, you may be eligible to receive reimbursement. For further information, please contact the Warranty Department at (336) 889-4871, 8 a.m. to 5 p.m. Eastern Time Monday through Friday. To find a dealer in your area please go to www.thomasbus.com.

If you have any questions about this recall, please contact the Warranty Department at (336) 889-4871, 8:00 a.m. to 5:00 p.m. Eastern Time, Monday through Friday. If you are not able to have the defect remedied without charge and within a reasonable time, you may wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the Vehicle Safety Hotline at (888) 327-4236 (TTY: 800-424-9153); or to <http://www.safercar.gov>. In Canada, you may contact Transport Canada-road safety, 80 rue Noel, Gatineau, Quebec J8Z 0A1 or call 1-800-333-0510.

We regret any inconvenience this action may cause but feel certain you understand our interest in motor vehicle safety.

THOMAS BUILT BUSES WARRANTY DEPARTMENT
Enclosure

December 2013
FL651A-G
NHTSA # 13V-539
Transport Canada # 13-379

Work Instructions

Subject: TBB Saf-T-Liner C2 Seat Track Rivets

**Models Affected: Specific Thomas Built Buses Saf-T-Liner C2
school buses manufactured July 9, 2013
† † through September 12, 2013.**

Repair procedure 1, applies for population groups A, B, C:

Subject: Additional Bolts needed to ensure seats meet FMVSS tests.

This document will provide general instructions to install additional bolts to ensure seats meet FMVSS requirements.

Repair Procedure:

- 1) Chock wheels, set parking brake, make sure shifter is in Park or Neutral, and the ignition switch is off.
- 2) After reviewing the layout of the track, mark off with tape the first location near end of track as in Figure 1. Next mark off 12" from that location to the next on same piece of track. Continue marking off every 12" until end of that section and for each of the remaining sections.
- 3) Drill using a "P" bit (.3230" bit), drill hole centered on track at each of the markings provided in step 2. (This may require removing seats if drill will not fit.) This hole will be thru the track and floor. See Figure 1.

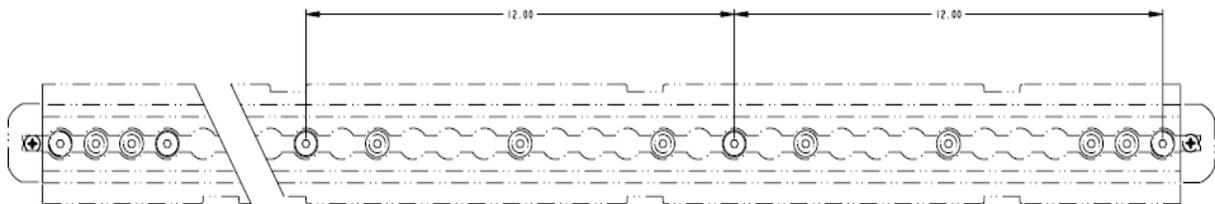


Figure 1

- 4) Using countersink tool (TBB 185046), create a countersink in each of the holes that were previously drilled. This should be an 82 degree countersink at a .191" depth.
- 5) Insert 5/16"-18 X 1.25 flat head socket cap bolt (TBB 174027) in each hole.
- 6) Underneath bus, install a washer (TBB 69004114) and nut (TBB 69004121) on each of the bolts that were inserted thru track and floor.
- 7) If Z-section interferes with the washer and nut being tightened up against floor, use bracket (TBB125077) over the Z-section as shown in Figure 2 along with longer bolt (TBB 174029).

Recall Campaign

Daimler Trucks
North America LLC

December 2013
FL651A-G
NHTSA # 13V-539
Transport Canada # 13-379

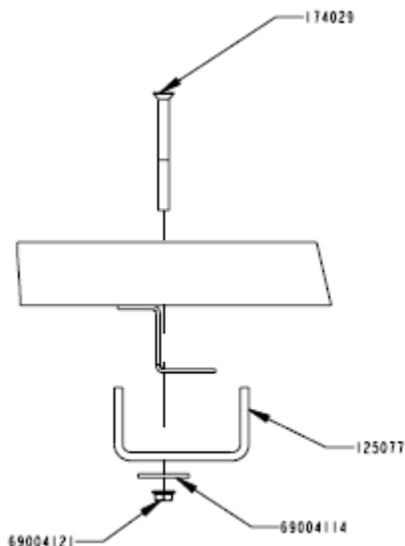


Figure 2

- 8) Tighten each nut down until secure against floor and bolt is flush against top of track.
- 9) Re-verify that all bolts are installed and tightened down.
- 10) Spray on undercoating anywhere it was removed from installing bolts.
- 11) Un-chock wheels.

Tools needed

P sized drill bit
Countersink Kit (TBB 185406)

Includes:

- TBB 185046 Countersink Fixture for bolted track.
- TBB 185260 3/4" E-Clip fits .580" Groove
- TBB 185261 LINK 5/16" Counter Drill Ring Seat

5/16" Socket wrench
3/16" X 50mm point

Parts list

TBB 69004114	Washer, Flat - 5/16 I.D. X 1 1/2 O.D.
TBB 69004121	Nut, Flange 5/16-18, Serrated
TBB125077	Floor Reinforcement, Channel, Seat (Only needed where bolt falls on z-channel)
TBB 174029	5/16"-18 X 3.50, Flat Head SOC CAP, Screw (Only needed where bolt falls on z-channel)
TBB 174027	5/16"-18 X 1.25, Flat Head SOC CAP, Screw

Recall Campaign

Daimler Trucks
North America LLC

December 2013
FL651A-G
NHTSA # 13V-539
Transport Canada # 13-379

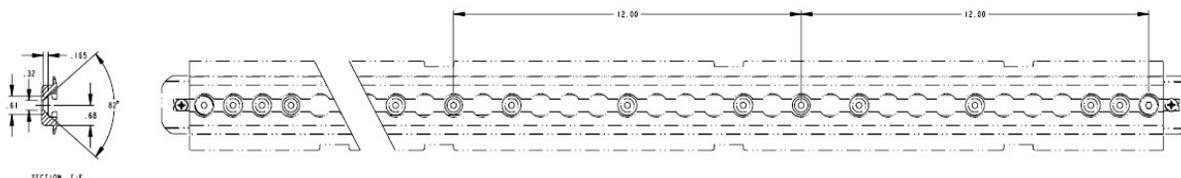
Repair procedure 2, applies for Population groups D, E, F, G:

Subject: Additional Rivets needed to ensure seats meet FMVSS tests.

This document will provide general instructions to install additional rivets to ensure seats meet FMVSS requirements.

Repair Procedure:

- 1) Chock wheels, set parking brake, make sure shifter is in Park or Neutral, and the ignition switch is off.
- 2) After reviewing the layout of the track, mark off with measuring tape the first location near end of track as in Figure 1. Next mark off 12" from that location to the next on same piece of track. Continue marking off every 12" until end of that section and for each of the remaining sections.
- 3) Using a drill with a "P" bit (.3230" bit) drill hole centered on track at each of the markings provided in steps 2 and 3. (This may require removing seats if drill will not fit.) This hole will be thru the track and floor. See Figure 1.



INSTALL PROCEDURE:

- 1) ADDITIONAL #15 RIVETS (182294) ARE TO BE PLACED IN 12" INCREMENTS.
- 2) USE "P" BIT (\varnothing .3230") TO DRILL HOLE THRU TRACK AND FLOOR AT APPROPRIATE RIVET LOCATION.
- 3) ADD 82° COUNTERSINK AT .165" DEPTH.
- 4) INSTALL RIVET WHERE AN ACCEPTABLE BULB IS POSSIBLE WITH TWO THREADS VISIBLE AND WITHOUT INTERFERENCE. INSTALL BOLT (174029) WITH BRACKET (125077), NUT (69004121) AND WASHER (69004114) AT ANY LOCATION WITH A Z-RAIL OR OTHER INTERFERENCE THAT DOES NOT ALLOW A RIVET WITH AN ACCEPTABLE BULB AND AT LEAST TWO VISIBLE THREADS (REFER TO VIEW A, SHEET 1).

Figure 1

- 4) Using countersink tool (TBB185642), create a countersink in each of the holes that were previously drilled. This should be an 82 degree countersink at a .191" depth.
- 5) Insert #15 Rivet (TBB 182294) into each hole drilled and using appropriate rivet gun install rivet.
- 6) Make sure that the rivet is seated properly as shown in **Figure 2**. If it does not seat properly, drill out and reinstall.

Recall Campaign

Daimler Trucks
North America LLC

December 2013
FL651A-G
NHTSA # 13V-539
Transport Canada # 13-379

RIVET INSTALLATION QUALITY

SEE NOTE T PAGE 1



Figure 2

- 7) If Z-section interferes with installing rivet, use bracket (TBB125077) over the Z-section as shown in Figure 3, along with bolt (TBB 174029), washer (TBB 69004114) and Flange Nut, (TBB69004121).

December 2013
FL651A-G
NHTSA # 13V-539
Transport Canada # 13-379

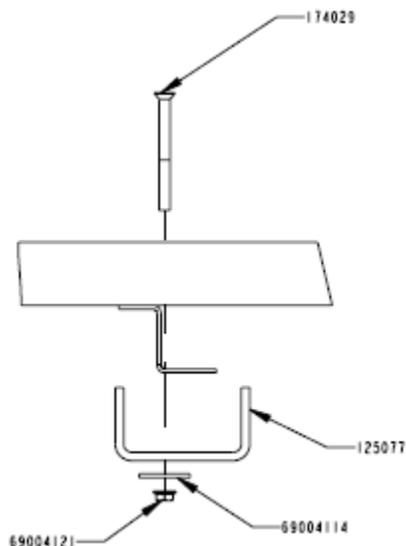


Figure 3

- 8) Tighten flange nut (TBB 69004121) down until secure against floor and bolt is flush against top of track.
- 9) Re-verify that all bolts are installed and tightened down.
- 10) Spray on undercoating anywhere it was removed from installing bolts.
- 11) Un-chock wheels.

Tools needed

P sized drill bit
Countersink Kit (TBB 185642)
5/16" Socket wrench
3/16" X 50mm point

Parts list

TBB 69004114	Washer, Flat - 5/16 I.D. X 1 1/2 O.D.
TBB 69004121	Nut, Flange 5/16-18, Serrated
TBB125077	Floor Reinforcement, Channel, Seat (Only needed where bolt falls on z-channel)
TBB 174029	5/16"-18 X 3.50, Flat Head SOC CAP, Screw (Only needed where bolt falls on z-channel)
TBB 182294	Rivet, Huck Magna Bulb, 5/16" Countersunk, -15

January 2014

FL654

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

Subject: IMMI Seat Belt Buckles

Models Affected: Specific Freightliner 108SD, 114SD, 122SD, Argosy, Business Class M2, Cascadia, Columbia, and Coronado vehicles; Western Star 4700, 4900, and 6900 vehicles; and Thomas Built Buses Saf-T-Liner C2, HDX, and Minotour vehicles with certain IMMI seat belt assemblies.

General Information

ATTENTION: Locations that are authorized to perform campaigns on Freightliner and Western Star vehicles and Freightliner Custom Chassis chassis should complete this Recall on those vehicles. Locations that are authorized to perform campaigns on Thomas Built Buses bodies and chassis should complete this Recall on those vehicles.

Daimler Trucks North America LLC, on behalf of its Freightliner Trucks Division and its wholly owned subsidiary Thomas Built Buses, has decided that a non-compliance with Federal regulations exists on the vehicles mentioned above.

There are approximately 32,000 vehicles involved in this campaign.

Certain Indiana Mills and Manufacturing, Inc. (IMMI) seat belt assemblies equipped with L9 buckles may not satisfy the requirements of S4.3(g) of FMVSS 209/CMVSS 209, Seat Belt Assemblies. When the push button on the buckle is pressed to release the latch plate for egress, the latch plate can become partially engaged with the buckle. In the event of an accident or emergency, occupants may be unable to exit the vehicle immediately and an injury could occur.

Seat belt assemblies will be inspected and replacement buckles will be installed as required. In trucks, most buckles are expected to be replaced. In school buses, replacements are expected to vary from a few buckles to all buckles. Customers are being informed that parts are currently being manufactured, and they should contact a dealer in advance to ensure that parts are available.

Additional Repairs

Dealers must complete all outstanding Recall and Field Service campaigns prior to the sale or delivery of a vehicle. A Dealer will be liable for any progressive damage that results from its failure to complete campaigns before sale or delivery of a vehicle.

Owners may be liable for any progressive damage that results from failure to complete campaigns within a reasonable time after receiving notification.

Work Instructions

Please refer to the attached work instructions. Prior to performing the campaign, check the vehicle for a completion sticker (Form WAR260).

Replacement Parts

Replacement parts are now available and can be obtained by ordering the kit number(s) listed below from your facing Parts Distribution Center.

If our records show your dealership has ordered any vehicles involved in campaign number FL654, a list of the customers and vehicle identification numbers will be available on AccessFreightliner.com. Please refer to this list when ordering parts for this recall.

Vehicles in each group in this Recall may use any one or combination of the following kits:

- FL654A – School Buses (123 Vehicles)
25-FL654-000 25-FL654-001 25-FL654 002
- FL654B – School Buses (22 Vehicles)
25-FL654-003 25-FL654-004 25-FL654-005

Recall Campaign

Daimler Trucks
North America LLC

January 2014

FL654

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

- FL654C – Trucks (8,836 Vehicles)
25-FL654-006
- FL654D – Trucks (6,334 Vehicles)
25-FL654-006 25-FL654-007 25-FL654-010 25-FL654-011 25-FL654-044
- FL654E – Trucks (4,469 Vehicles)
25-FL654-006 25-FL654-008
- FL654F – Trucks (2,026 Vehicles)
25-FL654-006 25-FL654-009
- FL654G – Trucks (2,048 Vehicles)
25-FL654-006 25-FL654-010
- FL654H – Trucks (2,048 Vehicles)
25-FL654-006 25-FL654-024 25 FL654 025 25 FL654 030
- FL654I – Trucks (822 Vehicles)
25-FL654-008 25-FL654-014 25-FL654-025 25-FL654-030 25-FL654-031 25-FL654-032
25-FL654-033 25-FL654-034
- FL654J – Trucks (735 Vehicles)
25-FL654-011 25-FL654-015 25-FL654-017 25-FL654-018 25-FL654-020 25-FL654-028
- FL654K – Trucks (709 Vehicles)
25-FL654-009 25-FL654-014 25-FL654-025 25-FL654-030 25-FL654-031 25-FL654-032
- FL654L – Trucks (621 Vehicles)
25-FL654-006 25-FL654-017
- FL654M – Trucks (583 Vehicles)
25-FL654-006 25-FL654-018 25-FL654-019 25-FL654-028
- FL654N – Trucks (568 Vehicles)
25-FL654-014 25-FL654-012
- FL654O – Trucks (461 Vehicles)
25-FL654-04
- FL654P – Trucks (418 Vehicles)
25-FL654-006 25-FL654-015
- FL654Q – Trucks (232 Vehicles)
25-FL654-008 25-FL654-013 25-FL654-027
- FL654R – Trucks (143 Vehicles)
25-FL654-013 25-FL654-024 25-FL654-025 25-FL654-030

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FL654
NHTSA #13V-604 (Non-School Buses)
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- FL654S – Trucks (242 Vehicles)
25-FL654-014 25-FL654-021 25-FL654-022 25-FL654-023 25-FL654-024 25-FL654-025
25-FL654-029 25-FL654-030 25-FL654-031 25-FL654-032 25-FL654-033 25-FL654-034
- FL654T – Trucks (117 Vehicles)
25-FL654-035 25-FL654-036 25-FL654-037 25-FL654-038 25-FL654-039 25-FL654-040
- FL654SU – Trucks (206 Vehicles)
25-FL654-006 25-FL654-008 25-FL654-009 25-FL654-021 25-FL654-022 25-FL654-025
25-FL654-030 25-FL654-031 25-FL654-033 25-FL654-032 25-FL654-034
- FL654V – Trucks (60 Vehicles)
25-FL654-010 25-FL654-015
- FL654W – Trucks (75 Vehicles)
25-FL654-025 25-FL654-030
- FL654X – Trucks (62 Vehicles)
25-FL654-017 25-FL654-041
- FL654Y – Trucks (54 Vehicles)
25-FL654-018 25-FL654-028 25-FL654-041
- FL654SZ – Trucks (199 Vehicles)
25-FL654-006 25-FL654-013 25-FL654-014 25-FL654-020 25-FL654-021 25-FL654-022
25-FL654-023 25-FL654-024 25-FL654-025 25-FL654-026 25-FL654-027 25-FL654-029
25-FL654-030 25-FL654-031 25-FL654-032 25 FL654 033 25 FL654 034 25 FL654 038
25-FL654-041

Table 1 - Replacement Parts for FL654

NOTE: There are 145 school buses and 31,933 trucks in this recall. At the end of this bulletin is a cross reference list of seat belt assemblies to individual buckle and kit numbers. This list may be helpful in selecting the correct replacement buckles.

25-FL654-000 through 25-FL654-044

Campaign Number	Kit Number	Buckle Part Number	Part Description	Qty. per Kit	Suggested Wholesale*
FL654AB (School Buses)	25-FL654-000	A95064	Buckle	1 ea	\$10.97 U.S. \$11.41 CAN
	25-FL654-001	A96477	Buckle	1 ea	
	25-FL654-002	A96655	Buckle	1 ea	
	25-FL654-003	F111539RPL	Buckle	1 ea	
	25-FL654-004	F111540RPL	Buckle	1 ea	
	25-FL654-005	F111541RPL	Buckle	1 ea	

Table 1, Continues on the Next 2 Pages

Recall Campaign

Daimler Trucks
North America LLC

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FL654

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

Campaign Number	Kit Number	Buckle Part Number	Part Description	Qty. per Kit	Suggested Wholesale*
FL654C-Z (Trucks)	25-FL654-006	A93555	Buckle	1 ea	\$10.97 U.S. \$11.41 CAN
	25-FL654-007	A93559	Buckle	1 ea	
	25-FL654-008	A93706	Buckle	1 ea	
	25-FL654-009	A93764	Buckle	1 ea	
	25-FL654-010	A96474	Buckle	1 ea	
	25-FL654-011	A93542	Buckle	1 ea	
	25-FL654-012	A100397	Buckle	1 ea	
	25-FL654-013	A101245	Buckle	1 ea	
	25-FL654-014	A91317	Buckle	1 ea	
	25-FL654-015	A93455	Buckle	1 ea	
	25-FL654-016	A93541	Buckle	1 ea	
	25-FL654-017	A93603	Buckle	1 ea	
	25-FL654-018	A93608	Buckle	1 ea	
	25-FL654-019	A93620	Buckle	1 ea	
	25-FL654-020	A93655	Buckle	1 ea	
	25-FL654-021	A93712	Buckle	1 ea	
	25-FL654-022	A93713	Buckle	1 ea	
	25-FL654-023	A93714	Buckle	1 ea	
	25-FL654-024	A93725	Buckle	1 ea	
	25-FL654-025	A93726	Buckle	1 ea	
	25-FL654-026	A93727	Buckle	1 ea	
	25-FL654-027	A93760	Buckle	1 ea	
	25-FL654-028	A93762	Buckle	1 ea	
	25-FL654-029	A93766	Buckle	1 ea	
	25-FL654-030	A93767	Buckle	1 ea	
	25-FL654-031	A93768	Buckle	1 ea	
	25-FL654-032	A93769	Buckle	1 ea	
	25-FL654-033	A93772	Buckle	1 ea	
	25-FL654-034	A93773	Buckle	1 ea	
	25-FL654-035	A93832	Buckle	1 ea	
	25-FL654-036	A93833	Buckle	1 ea	
	25-FL654-037	A93834	Buckle	1 ea	
	25-FL654-038	A93835	Buckle	1 ea	

Table 1, Continues on the Next Page

January 2014

FL654

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

Campaign Number	Kit Number	Buckle Part Number	Part Description	Qty. per Kit	Suggested Wholesale*
FL654C-Z (Trucks)	25-FL654-039	A93837	Buckle	1 ea	\$10.97 U.S. \$11.41 CAN
	25-FL654-040	A93838	Buckle	1 ea	
	25-FL654-041	A95244	Buckle	1 ea	
	25-FL654-042	A96522 (ICP BAR)	Buckle	1 ea	
	25-FL654-043	A96805	Buckle	1 ea	
	25-FL654-044	A99639	Buckle	1 ea	

* Please charge all U.S. and Canadian Direct Warranty Customers the above-listed price for the kit, as they are authorized to perform their own Recalls. This pricing does not apply to Export Distributors.

Table 1, Continued from the Previous Page

Removed Parts

U.S. and Canadian Dealers, please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts. Export distributors, please destroy removed parts unless otherwise advised.

Labor Allowance

Table 2 - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Correction Code
FL654AB (School Buses)	Inspect all seat belt buckles - Saf-T-Liner C2 or HDX (Claim once on each C2 or HDX claim)	0.4	996-0923A	06 - Inspect
	Inspect all seat belt buckles - Minotour (Claim once on each Minotour claim)	0.2	996-0923B	06 - Inspect
	Replace 1 seat belt buckle - Saf-T-Liner C2, HDX, or Minotour (Claim once for each buckle replaced)	0.2	996-0923C	12 - Repair Recall/Campaign
FL654C-Z (Trucks)	Inspect all seat belt buckles - All trucks	0.2	996-0923D	06 - Inspect
	Inspect all and replace 1 to 2 seat belt buckles - All trucks	0.5	996-0923E	12 - Repair Recall/Campaign
	Inspect all and replace 3 to 5 seat belt buckles - All trucks	0.7	996-0923F	12 - Repair Recall/Campaign

Table 2

IMPORTANT: When the Recall has been completed, locate the base completion label in the appropriate location on the vehicle, and attach the red completion sticker provided in the recall kit (Form WAR260). If the vehicle does not have a base completion label, clean a spot on the appropriate location of the vehicle and first attach the base completion label (Form WAR259). If a recall kit is not required or there is no completion sticker in the kit, write the recall number on a blank sticker and attach it to the base completion label.

Recall Campaign

Daimler Trucks
North America LLC

January 2014

FL654

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

Claims for Credit

You will be reimbursed for your parts, labor, and handling (landed cost for Export Distributors) by submitting your claim through the Warranty system within 30 days of completing this campaign. Please reference the following information in OWL:

NOTE: There are 145 school buses and 31,933 trucks in this recall.

- Claim type is **Recall**.
- In the FTL Authorization field, enter the campaign number and appropriate condition code (e.g. **FL654A, FL654B, FL654C, etc.**).
- In the Primary Failed Part Number field, enter **25-FL654-000**.
- In the Parts field, enter the appropriate kit number(s) as shown in the Replacement Parts Table. There are 145 school buses and 31,933 trucks in this recall. At the end of this bulletin is a cross reference list of seat or seat belt assemblies to individual buckle and kit numbers. This list may be helpful in selecting the correct replacement buckles.
- In the Labor field, first enter the appropriate SRT from the Labor Allowance Table. For administrative time, enter SRT 939-6010A for 0.3 hours.
- **For school buses with more than one buckle replaced, claims must be brought into OWL manually. Please submit a WSC Campaigns inquiry asking for your "Ready to Submit" recall claim to be brought into OWL.**
- For OWL, the VMRS Component Code is 002-011-005 and the Cause Code is A1 - Campaign.
- **U.S. and Canada – Reimbursement for Prior Repairs.** When a customer asks about reimbursement, please do the following:
 - Accept the documentation of the previous repair.
 - Make a brief check of the customer's paperwork to see if the repair may be eligible for reimbursement. (See the "Copy of Owner Letter" section of this bulletin for reimbursement guidelines for this recall.)
 - Submit a Campaign Pre-Approval inquiry to the Warranty Campaigns Department for a decision and authorization number.
 - Include the approved amount on your claim in Other Charges section.
 - In the claim story, first note the authorization number and that the claim includes a reimbursement.
 - Retain the documentation and provide it to Warranty Campaigns or Claims Processing if requested.
 - When your claim is paid, reimburse the customer the appropriate amount.

IMPORTANT: OWL must be viewed prior to performing the recall to ensure the vehicle is involved and the campaign has not been previously completed. Also, check for a completion sticker prior to beginning work.

U.S. and Canadian dealers, contact the Warranty Campaigns Department from 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, via Web inquiry at AccessFreightliner.com / Support / My Tickets and Submit an Inquiry, or the Customer Assistance Center at (800) 385-4357, after normal business hours, if you have any questions or need additional information. Export distributors, submit a Web inquiry or contact your International Service Manager.

U.S. and Canadian Dealers: To return excess kit inventory related to this campaign, U.S. dealers must submit a Parts Authorization Return (PAR) to the Memphis PDC. Canadian dealers must submit a PAR to their facing PDC. All kits must be in resalable condition. PAR requests must include the original purchase invoice number. Export Distributors: Excess inventory is not returnable.

January 2014

FL654

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

The letter notifying U.S. and Canadian vehicle owners is included for your reference.

Please note that the National Traffic and Motor Vehicle Safety Act, as amended (Title 49, United States Code, Chapter 301), requires the owner's vehicle(s) be corrected within a reasonable time after parts are available to you. The Act states that failure to repair a vehicle within 60 days after tender for repair shall be prima facie evidence of an unreasonable time. However, circumstances of a particular situation may reduce the 60 day period. Failure to repair a vehicle within a reasonable time can result in either the obligation to (a) replace the vehicle with an identical or reasonably equivalent vehicle, without charge, or (b) refund the purchase price in full, less a reasonable allowance for depreciation. The Act further prohibits dealers from selling a vehicle unless all outstanding recalls are performed. Any lessor is required to send a copy of the recall notification to the lessee within 10 days. Any subsequent stage manufacturer is required to forward this notice to its distributors and retail outlets within five working days.

Recall Campaign

Daimler Trucks
North America LLC

January 2014

FL654

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

Copy of Notice to Owners

Subject: IMMI Seat Belt Buckles

For the Notice to U.S. Customers: This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

For the Notice to Canadian Customers: This notice is sent to you in accordance with the Canadian Motor Vehicle Safety Act.

Daimler Trucks North America LLC, on behalf of its Freightliner Trucks Division and its wholly owned subsidiary Thomas Built Buses, has decided that a non-compliance with Federal regulations exists on specific Freightliner 108SD, 114SD, 122SD, Argosy, Business Class M2, Cascadia, Columbia, and Coronado vehicles; Western Star 4700, 4900, and 6900 vehicles; and Thomas Built Buses Saf-T-Liner C2, HDX, and Minotour vehicles with certain IMMI seat belt assemblies.

Certain Indiana Mills and Manufacturing, Inc. (IMMI) seat belt assemblies equipped with L9 buckles may not satisfy the requirements of S4.3(g) of FMVSS 209/CMVSS 209, Seat Belt Assemblies. When the button is pressed to release the seat belt, the latch plate can become partially engaged with the buckle, and it may take more effort than specified in the standard to separate the latch plate from the buckle. If the latch plate remains partially engaged after the button is pressed, egress from the vehicle could be hindered which would increase the risk of injury in the event of an emergency.

Seat belt assemblies will be inspected and replacement buckles will be installed as required.

Please contact an authorized Daimler Trucks North America dealer to arrange to have the recall performed.

IMPORTANT: Parts are currently being manufactured, please contact a dealer in advance to ensure that parts are available. To locate an authorized dealer, search online at www.Daimler-TrucksNorthAmerica.com. The Recall may take up to several hours on buses and up to an hour on all other vehicles, depending on the number and type of buckles requiring replacement, and will be performed at no charge to you.

You may be liable for any progressive damage that results from your failure to complete the Recall within a reasonable time after receiving notification.

If you do not own the vehicle that corresponds to the identification number(s) which appears on the Recall Notification, please return the notification to the Warranty Campaigns Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, Federal law requires that you forward this notice to the lessee within 10 days. If you are a subsequent stage manufacturer, Federal law requires that you forward this notice to your distributors and retail outlets within five working days. If you have paid to have this recall condition corrected prior to this notice, you may be eligible to receive reimbursement. Please see the reverse side of this notice for details.

For the Notice to U.S. Customers: If you have questions about this Recall, please contact the Warranty Campaigns Department at (800) 547-0712, 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, e-mail address DTNA.Warranty.Campaigns@Daimler.com, or the Customer Assistance Center at (800) 385-4357 after normal business hours. If you are not able to have the defect remedied without charge and within a reasonable time, you may wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the Vehicle Safety Hotline at (888) 327-4236 (TTY: 800-424-9153); or to <http://www.safercar.gov>.

For the Notice to Canadian Customers: If you have questions about this Recall, please contact the Warranty Campaigns Department at (800) 547-0712, 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, e-mail address DTNA.Warranty.Campaigns@Daimler.com, or the Customer Assistance Center at (800) 385-4357 after normal business hours.

We regret any inconvenience this action may cause but feel certain you understand our interest in motor vehicle safety.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

January 2014

FL654

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

Reimbursement to Customers for Repairs Performed Prior to Recall

If you have already **paid** to have this recall condition corrected you may be eligible to receive reimbursement.

Requests for reimbursement may include parts and labor. Reimbursement may be limited to the amount the repair would have cost if completed by an authorized Daimler Trucks North America LLC dealer. The following documentation must be presented to your dealer for consideration for reimbursement.

Please provide original or clear copies of all receipts, invoices, and repair orders that show

- The name and address of the person who paid for the repair
- The Vehicle Identification Number (VIN) of the vehicle that was repaired
- What problem occurred, what repair was done, when the repair was done
- Who repaired the vehicle
- The total cost of the repair expense that is being claimed
- Proof of payment for the repair (such as the front and back of a cancelled check or a credit card receipt)

Reimbursement will be made by check from your Daimler Trucks North America LLC dealer.

Please speak with your Daimler Trucks North America LLC authorized dealer concerning this matter.

January 2014

FL654

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

Work Instructions

Subject: IMMI Seat Belt Buckles

Models Affected: Specific Freightliner 108SD, 114SD, 122SD, Argosy, Business Class M2, Cascadia, Columbia, and Coronado vehicles; Western Star 4700, 4900, and 6900 vehicles; and Thomas Built Buses Saf-T-Liner C2, HDX, and Minotour vehicles with certain IMMI seat belt assemblies.

ATTENTION: Locations that are authorized to perform campaigns on Freightliner and Western Star vehicles and Freightliner Custom Chassis chassis should complete this Recall on those vehicles. Locations that are authorized to perform campaigns on Thomas Built Buses bodies and chassis should complete this Recall on those vehicles.

NOTE: There are 145 school buses and 31,933 trucks in this recall. At the end of this bulletin is a cross reference list of seat belt assemblies to individual buckle and kit numbers. This list may be helpful in selecting the correct replacement buckles.

NOTE: For school buses with more than one buckle replaced, claims must be brought into OWL manually. Please submit a WSC Campaigns inquiry asking for your "Ready to Submit" recall claim to be brought into OWL.

L9 Seat Belt Buckle Inspection – All Vehicles

1. Check the base label (Form WAR259) for a completion sticker for FL654 (Form WAR260) indicating this work has been done. The base label is usually located on the passenger-side door, about 12 inches (30 cm) below the door latch. If a completion sticker is present, no work is needed. If a completion sticker is not present, continue with the next step.
2. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.

IMPORTANT: Determine whether or not any seat belt buckles in the vehicle need to be replaced. A vehicle may have some buckles that fall under this recall, and some that may not. It is important to inspect each buckle. In trucks, most buckles are expected to be replaced. In school buses, replacements are expected to vary from a few buckles to all buckles.

3. Check the buckle for the IMMI logo. See **Fig. 1**.



Fig. 1, IMMI Logo

4. Verify that the buckle is an IMMI L9 buckle. Only IMMI L9 buckles are affected by this recall. See **Fig. 2**.
5. If the buckle is an IMMI L9 buckle, check the back of the housing for the date code. See **Fig. 3**.
If the date code is included in the ranges shown in **Fig. 3**, the buckle needs to be replaced. If the date code is outside these ranges, the buckle does not need to be replaced.
6. If the vehicle has buckles that need to be replaced, go to "Buckle Replacement – School Buses" or "Buckle Replacement – Trucks" as appropriate in these Work Instructions.
If no buckles need to be replaced, clean a spot on the base label (Form WAR259), write the recall number, FL654, on a blank red completion sticker (Form WAR260), and attach it to the base label.

January 2014

FL654

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

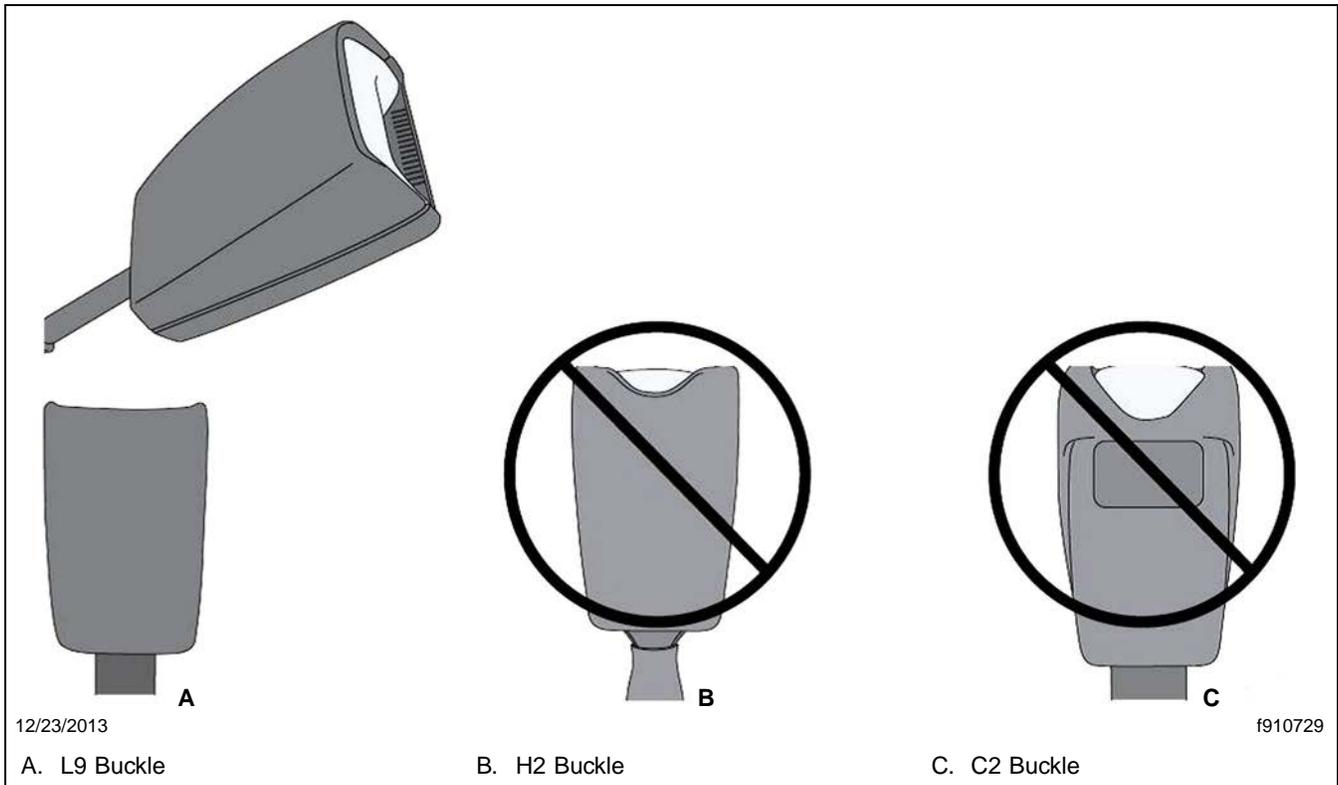


Fig. 2, IMMI L9 Buckle Identification

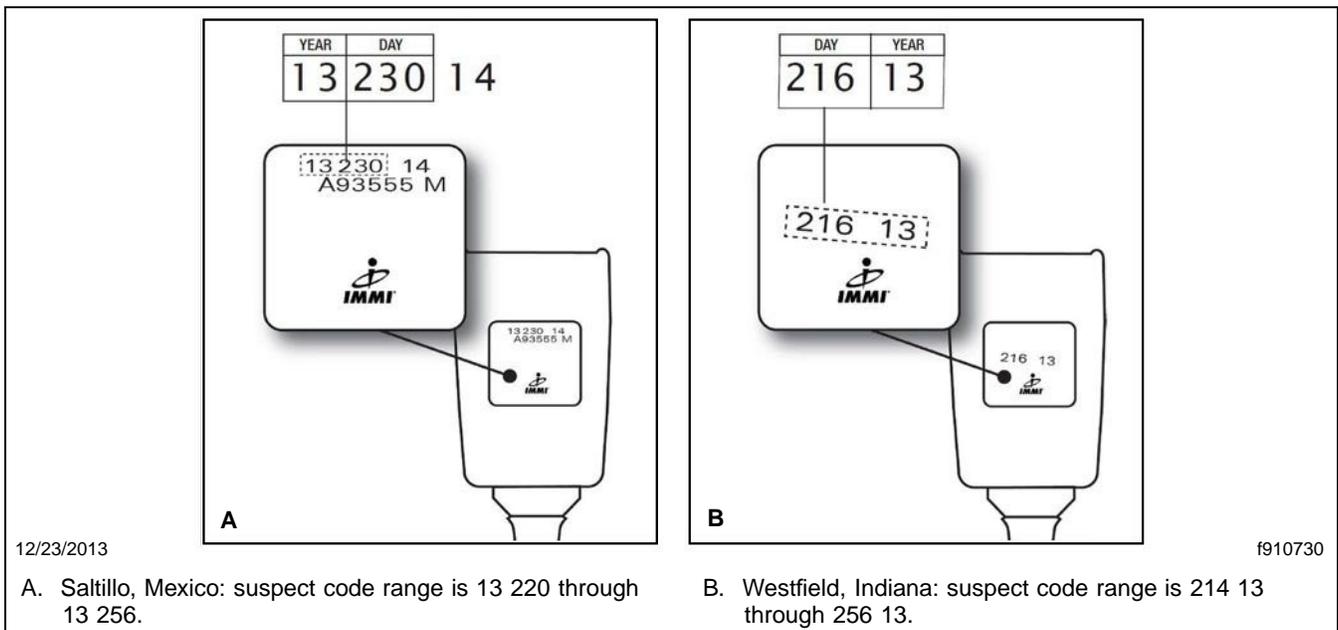


Fig. 3, Buckle Date Code Ranges

January 2014

FL654

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

Buckle Replacement – School Buses

1. Reach under the center of the bottom cushion and release the latch by sliding the locking plate tab toward the front of the seat, as shown in **Fig. 4**.
2. Lift up the back of the cushion to gain access to the buckle mounting. See **Fig. 5**.
3. Go to the replacement steps below for the applicable type of seat belt assembly:
 - Sliding Buckles
 - Fixed Center-Mounted Buckles
 - Web-Type Buckles
4. When all buckles are replaced, clean a spot on the base label (Form WAR259), write the recall number, FL654, on a blank red completion sticker (Form260), and attach it to the base label.

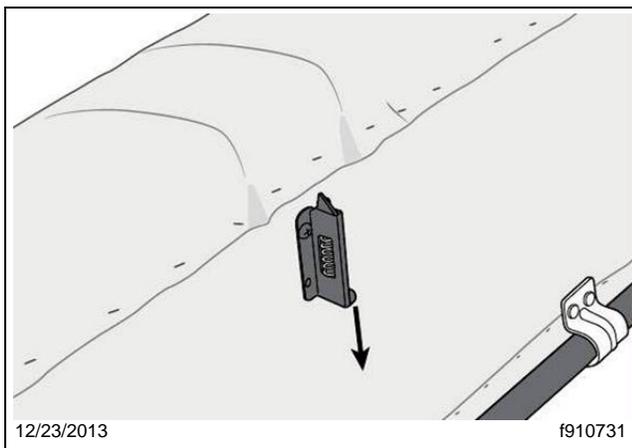


Fig. 4, Releasing the Bottom Cushion Latch

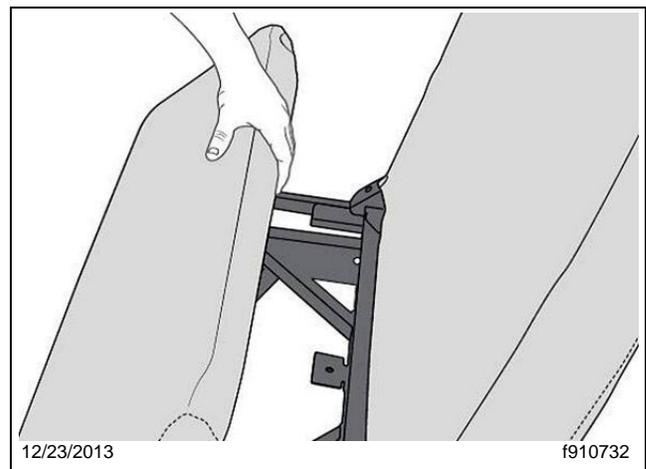


Fig. 5, Lifting Up the Bottom Cushion

Sliding Buckles

NOTE: Sliding buckles are located on the right-hand side when you are facing the seat.

1. Using two 3/4-inch wrenches, remove the nut at one end of the shaft. See **Fig. 6**.
2. Pull the shaft end with the removed nut through the support bracket hole, then slide the plastic sleeve with the buckles off the shaft. See **Fig. 7**.
3. Remove both buckles from the plastic sleeve. Based on the date code of each buckle, discard the suspect buckle(s). If one buckle has a "good" date code, retain it for reinstallation.
4. Install the buckles into the plastic sleeve.
5. Slide the plastic sleeve onto the shaft.
6. Position the shaft in the support bracket holes. Install the nut on the shaft.

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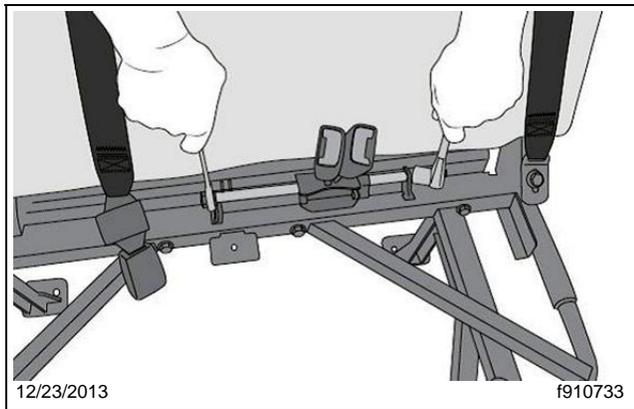


Fig. 6, Removing the Nut at the Shaft End, Sliding Buckles

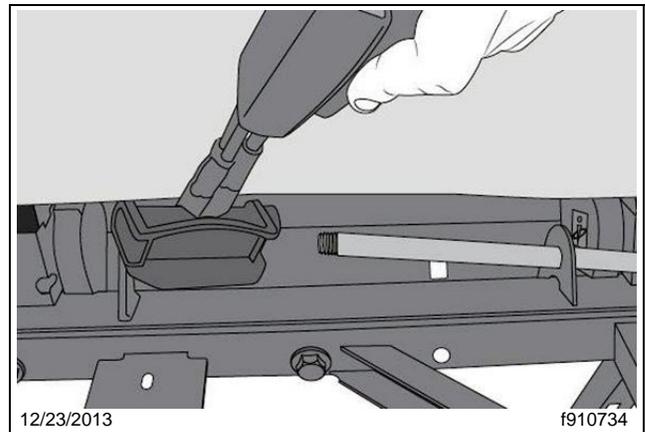


Fig. 7, Removing the Sliding Buckles

Fixed Center-Mounted Buckles

NOTE: Fixed center-mounted buckles are installed in the center of the seat, using one nut and bolt.

1. Using a 5/8-inch ratchet and an 11/16-inch wrench, remove the nut and bolt from the mounting bracket. Remove both buckles. Based on the date code of each buckle, discard the suspect buckle(s). If one buckle has a "good" date code, retain it for reinstallation. See **Fig. 8**.
2. Install both buckles, using the bolt and nut. Tighten the nut 25 lbf-ft (34 N·m).

Web-Type Buckle

1. Using a 5/8-inch wrench and a 11/16-inch wrench, remove the buckle mounting bolt. Remove the buckle, nut, and washer. See **Fig. 9**.
2. Orient the new buckle as before, then install it, using the bolt, nut, and washer. Tighten the nut 25 lbf-ft (34 N·m).

Recall Campaign

Daimler Trucks
North America LLC

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NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

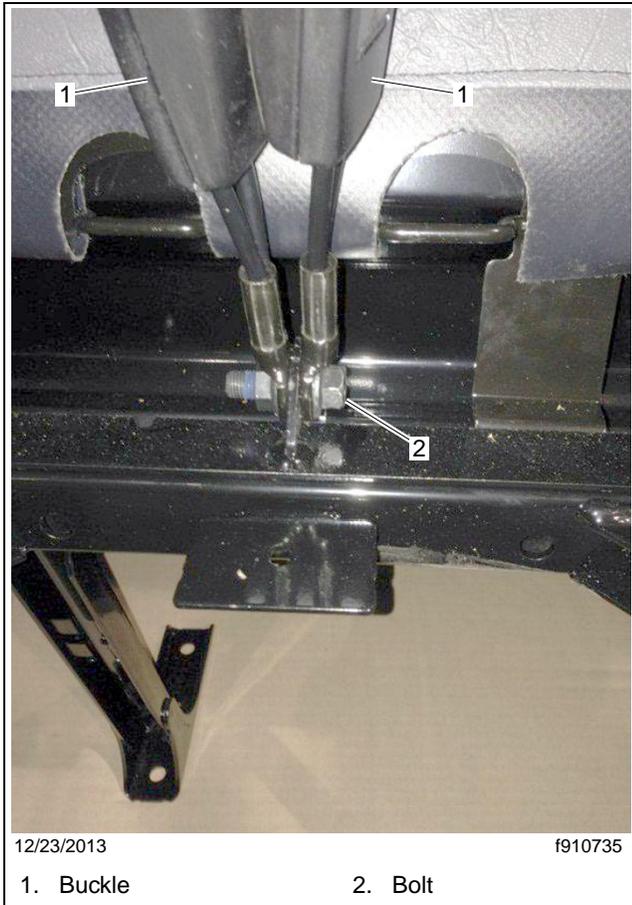


Fig. 8, Fixed Center-Mounted Buckles

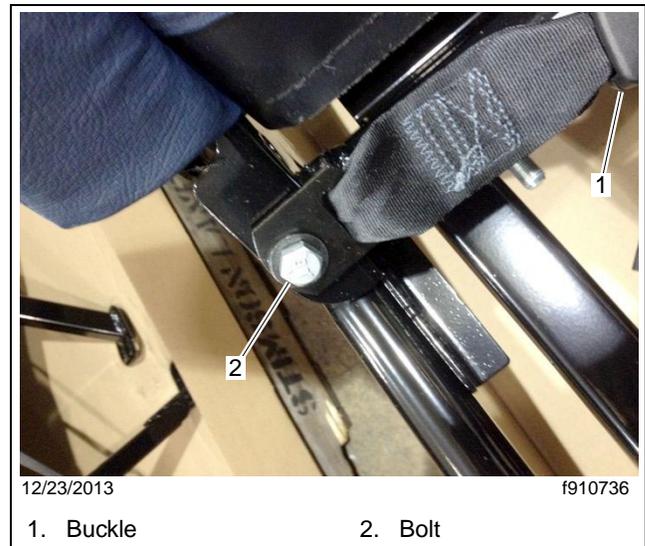


Fig. 9, Webbed Buckle

Buckle Replacement – Trucks

There are several buckle mounting configurations, depending on the type of seat:

- Static seats have the buckles mounted directly to the cab floor. See **Fig. 10**.
- Air suspension seats have buckles mounted to the ICP (intermediate-connection-point bar or bracket), with a tether belt attached to the cab floor. See **Fig. 11**.
- Bench seats may have floor-mounted buckles at the ends, and floor-bracket-mounted buckles in the middle. One or two buckles may be mounted to each floor bracket. See **Fig. 12** and **Fig. 13**.

1. Go to the replacement steps below for the applicable type of seat belt assembly:
 - Floor-Mounted Buckles
 - ICP-Bar-Mounted Buckles
 - Floor-Bracket-Mounted Buckles
2. When all buckles are replaced, clean a spot on the base label (Form WAR259), write the recall number, FL654, on a blank red completion sticker (Form260), and attach it to the base label.

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NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

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Floor-Mounted Buckles

1. Remove the capscrew that attaches the buckle to the cab deck. See **Fig. 10**. Remove and discard the buckle.
2. Attach the new buckle to the cab deck. Tighten the capscrew 35 to 45 lbf·ft (48 to 61 N·m).

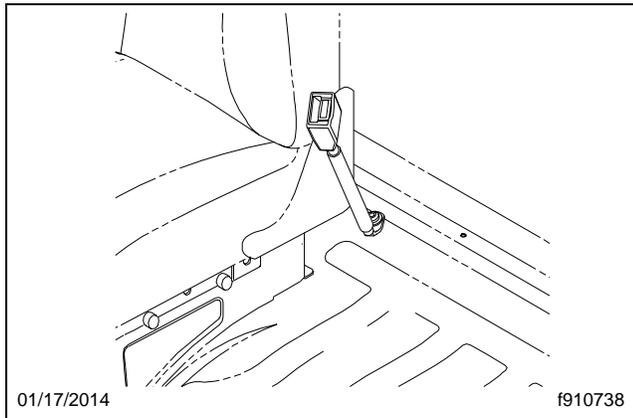


Fig. 10, Floor-Mounted Buckle

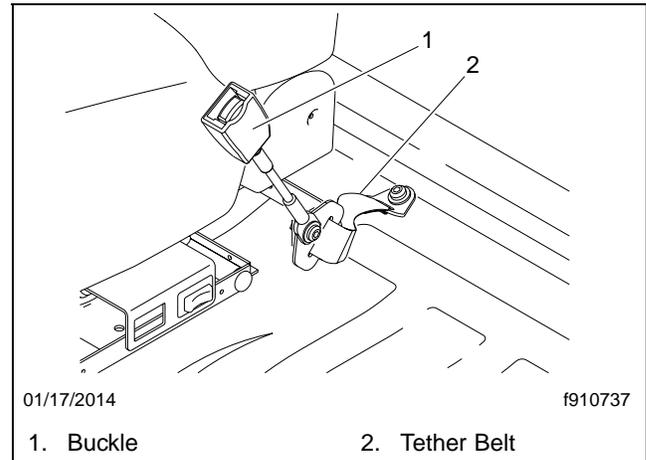


Fig. 11, ICP-Bar-Mounted Buckle

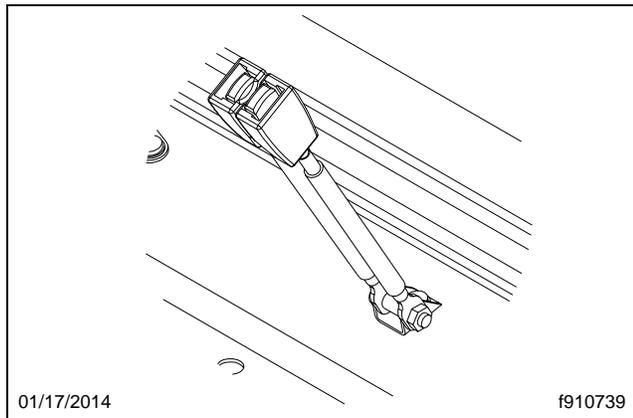


Fig. 12, Floor-Bracket-Mounted Buckle, Dual Buckle Mounting

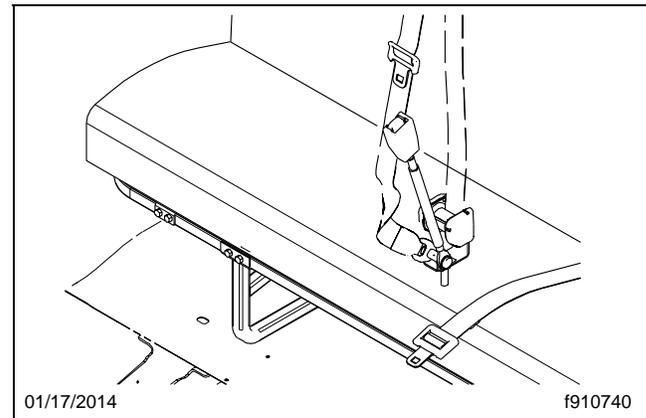


Fig. 13, Floor-Bracket-Mounted Buckle, Retractor and Buckle Mounting

ICP-Bar-Mounted Buckles

1. Disconnect the buckle from the seat by removing the capscrew from the end of the intermediate-connection-point (ICP) bar (or bracket); see **Fig. 11**. Remove and discard the buckle.
2. Place the tether bracket against the ICP bar (or bracket), then place the bracket of the new buckle on top of the tether bracket. Install the capscrew through the brackets into the ICP bar. Tighten the capscrew 35 to 45 lbf·ft (48 to 61 N·m).

Floor-Bracket-Mounted Buckles

1. If necessary, remove the seat cushion to access the buckle mounting.
2. Remove the capscrew that attaches the buckle to the floor bracket (**Fig. 12** or **Fig. 13**). Remove and discard the buckle.
3. Attach the new buckle to the floor bracket. Tighten the capscrew 35 to 45 lbf·ft (48 to 61 N·m).

**FL654 IMMI Seat Belt Buckles
Cross Reference List
Seat Belt Assembly to Recall Kit/Buckle Part Number
School Buses**

Seat Assembly				Recall Kit	Buckle Part Number
F107181R	F107496R	F107961R	F108096R	25-FL654-000	A95064
F107186R	F107811L	F107991L	F108246L		
F107212L	F107811R	F108247L	F108246R		
F107216L	F107816R	F108247R	F108277R		
F107216R	F107916L	F108251L	F108281L		
F107220L	F107916R	F108251R	F108291L		
F107396L	F107917L	F108262L	F108292L		
F107396R	F107917R	F108266L	F108296L		
F107400R	F107920R	F108276L	F108366L		
F107407L	F107951L	F108276R			
F107407R	F107951R	F108277L			
F107411R	F107961L	F108096L			
F108246L	F108251R	F107396R	F108281L		
F108246R	F108262L	F107400R	F108291L		
F108247L	F108266L	F108276R	F108292L		
F108247R	F108276L	F108277L	F108296L		
F108251L	F107396L	F108277R	F108366L		
F107396L	F107396R	F107400R		25-FL654-002	A96655
F108531L	F108537R	F108565L	F108667R	25-FL654-003	F111539RPL
F108531R	F108542L	F108565R	F108672L		
F108536L	F108542R	F108666L	F108672R		
F108536R	F108561L	F108666R	F115232L		
F108537L	F108561R	F108667L			
F107407L	F108536R	F108561R	F108667R	25-FL654-004	F111540RPL
F107407R	F108537L	F108565L	F108672L		
F107411R	F108537R	F108565R	F108672R		
F108531L	F108542L	F108666L	F115232L		
F108531R	F108542R	F108666R			
F108536L	F108561L	F108667L			
F107407L	F108536R	F108561R	F108667R	25-FL654-005	F111541RPL
F107407R	F108537L	F108565L	F108672L		
F107411R	F108537R	F108565R	F108672R		
F108531L	F108542L	F108666L	F115232L		
F108531R	F108542R	F108666R			
F108536L	F108561L	F108667L			

**FL654 IMMI Seat Belt Buckles
Cross Reference List
Seat Belt Assembly to Recall Kit/Buckle Part Number
Trucks**

Seat Belt Assembly	Recall Kit	Buckle Part Number
IMM F104989	25-FL654-006	A93555
IMM F105006		
IMM F105125		
IMM F114827		
IMM F114834		
IMM F114835		
IMM F115151		
IMM F115152		
IMM F115154		
IMM F115155		
IMM F115157		
IMM F115158		
IMM F115494		
IMM F13159		
IMM F104990		
IMM F105007		
IMM F105123		
IMM F105127		
IMM F111533		
IMM F105150	25-FL654-008	A93706
IMM F105187	25-FL654-009	A93764
IMM F111098	25-FL654-010	A96474
IMM F114643		
IMM F114836		
IMM F114836		
IMM F114837		
IMM F105059	25-FL654-011	A93542
IMM F105062		
IMM F105092		
IMM F105093		
IMM F105124		
IMM F105128		
IMM F105225		
IMM F123223		
IMM F116071	25-FL654-012	A100397
IMM F116152		
IMM F121846	25-FL654-013	A101245

Seat Belt Assembly	Recall Kit	Buckle Part Number
IMM F105009	25-FL654-014	A91317
IMM F105149		
IMM F105152		
IMM F105162		
IMM F105182		
IMM F106779	25-FL654-015	A93455
IMM F106780	25-FL654-016	A93541
IMM F105041		
IMM F105126		
IMM F105143	25-FL654-017	A93603
IMM F105035		
IMM F105224	25-FL654-018	A93608
IMM F105046		
IMM F105196	25-FL654-019	A93620
IMM F105142	25-FL654-020	A93655
IMM F105060	25-FL654-021	A93712
IMM F116117		
IMM F105178		
IMM F105184		
IMM F105197	25-FL654-021	A93712
IMM F105210		
IMM F105185		
IMM F105185	25-FL654-022	A93713
IMM F105198	25-FL654-021	A93712
IMM F105198	25-FL654-022	A93713
IMM F105161	25-FL654-022	A93713
IMM F105211		
IMM F105179	25-FL654-022	A93713
IMM F105179	25-FL654-026	A93727
IMM F105155	25-FL654-023	A93714
IMM F105183		
IMM F105189	25-FL654-024	A93725
IMM F105189	25-FL654-025	A93726
IMM F105168	25-FL654-025	A93726
IMM F104985	25-FL654-025	A93726
IMM F104985	25-FL654-033	A93772
IMM F104985	25-FL654-034	A93773

Seat Belt Assembly	Recall Kit	Buckle Part Number
IMM F105201	25-FL654-025	A93726
	25-FL654-033	A93772
	25-FL654-034	A93773
IMM F105201	25-FL654-025	A93726
	25-FL654-033	A93772
	25-FL654-034	A93773
IMM F105238	25-FL654-025	A93726
	25-FL654-030	A93767
IMM F105031	25-FL654-027	A93760
IMM F105089	25-FL654-028	A93762
IMM F111720		
IMM F111721		
IMM F105165	25-FL654-029	A93766
	25-FL654-030	A93767
IMM F105200	25-FL654-029	A93766
	25-FL654-030	A93767
IMM F105157	25-FL654-031	A93768
	25-FL654-032	A93769
IMM F105025	25-FL654-035	A93832
IMM F105026	25-FL654-036	A93833
	25-FL654-037	A93834
IMM F105027	25-FL654-037	A93834
IMM F105028	25-FL654-038	A93835
IMM F106731		
IMM F106737		
IMM F111033		
IMM F111034		
IMM F105030	25-FL654-039	A93837
	25-FL654-040	A93838
IMM F106377	25-FL654-041	A95244
IMM F122726		
IMM F116280	25-FL654-043	A96805
IMM F115528	25-FL654-044	A99639
C27-00097-002	25-FL654-042	A96522
C27-00097-003		
C27-00097-004		
C27-00097-007		
C27-00097-008		

March 2014

FL654A-Z

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

REVISED NOTICE

Subject: IMMI Seat Belt Buckles

Models Affected: Specific Freightliner 108SD, 114SD, 122SD, Argosy, Business Class M2, Cascadia, Columbia, and Coronado vehicles; Western Star 4700, 4900, and 6900 vehicles; and Thomas Built Buses Saf-T-Liner C2, HDX, and Minotour vehicles with certain IMMI seat belt assemblies.

General Information

ATTENTION: Locations that are authorized to perform campaigns on Freightliner and Western Star vehicles and Freightliner Custom Chassis chassis should complete this Recall on those vehicles. Locations that are authorized to perform campaigns on Thomas Built Buses bodies and chassis should complete this Recall on those vehicles.

Daimler Trucks North America LLC, on behalf of its Freightliner Trucks Division and its wholly owned subsidiary Thomas Built Buses, has decided that a non-compliance with Federal regulations exists on the vehicles mentioned above.

There are approximately 32,000 vehicles involved in this campaign.

Certain Indiana Mills and Manufacturing, Inc. (IMMI) seat belt assemblies equipped with L9 buckles may not satisfy the requirements of S4.3(g) of FMVSS 209/CMVSS 209, Seat Belt Assemblies. When the push button on the buckle is pressed to release the latch plate for egress, the latch plate can become partially engaged with the buckle. In the event of an accident or emergency, occupants may be unable to exit the vehicle immediately and an injury could occur.

Seat belt assemblies will be inspected and replacement buckles will be installed as required. In trucks, most buckles are expected to be replaced. In school buses, replacements are expected to vary from a few buckles to all buckles. Customers are being informed that parts are currently being manufactured, and they should contact a dealer in advance to ensure that parts are available.

REVISIONS: IMMI has added a buckle to the Recall (buckle part number A96765, replacement kit 25-FL654-009). Typographical errors have been corrected.

Additional Repairs

Dealers must complete all outstanding Recall and Field Service campaigns prior to the sale or delivery of a vehicle. A Dealer will be liable for any progressive damage that results from its failure to complete campaigns before sale or delivery of a vehicle.

Owners may be liable for any progressive damage that results from failure to complete campaigns within a reasonable time after receiving notification.

Work Instructions

Please refer to the attached work instructions. Prior to performing the campaign, check the vehicle for a completion sticker (Form WAR260).

Replacement Parts

Replacement parts are now available and can be obtained by ordering the kit number(s) listed below from your facing Parts Distribution Center.

If our records show your dealership has ordered any vehicles involved in campaign number FL654, a list of the customers and vehicle identification numbers will be available on AccessFreightliner.com. Please refer to this list when ordering parts for this recall.

Recall Campaign

Daimler Trucks
North America LLC

March 2014

FL654A-Z

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

REVISED NOTICE

Vehicles in each group in this Recall may use any one or combination of the following kits:

- FL654A – School Buses (123 Vehicles)
25-FL654-000 25-FL654-001 25-FL654-002
- FL654B – School Buses (22 Vehicles)
25-FL654-003 25-FL654-004 25-FL654-005
- FL654C – Trucks (8,836 Vehicles)
25-FL654-006
- FL654D – Trucks (6,334 Vehicles)
25-FL654-006 25-FL654-007 25-FL654-010 25-FL654-011 25-FL654-044
- FL654E – Trucks (4,469 Vehicles)
25-FL654-006 25-FL654-008
- FL654F – Trucks (2,026 Vehicles)
25-FL654-006 25-FL654-009
- FL654G – Trucks (2,048 Vehicles)
25-FL654-006 25-FL654-010
- FL654H – Trucks (2,048 Vehicles)
25-FL654-006 25-FL654-024 25-FL654-025 25-FL654-030
- FL654I – Trucks (822 Vehicles)
25-FL654-008 25-FL654-014 25-FL654-025 25-FL654-030 25-FL654-031 25-FL654-032
25-FL654-033 25-FL654-034
- FL654J – Trucks (735 Vehicles)
25-FL654-011 25-FL654-015 25-FL654-017 25-FL654-018 25-FL654-020 25-FL654-028
- FL654K – Trucks (709 Vehicles)
25-FL654-009 25-FL654-014 25-FL654-025 25-FL654-030 25-FL654-031 25-FL654-032
- FL654L – Trucks (621 Vehicles)
25-FL654-006 25-FL654-017
- FL654M – Trucks (583 Vehicles)
25-FL654-006 25-FL654-018 25-FL654-019 25-FL654-028
- FL654N – Trucks (568 Vehicles)
25-FL654-014 25-FL654-012
- FL654O – Trucks (461 Vehicles)
25-FL654-004

March 2014
FL654A-Z
NHTSA #13V-604 (Non-School Buses)
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Transport Canada #13-427
REVISED NOTICE

- FL654P – Trucks (418 Vehicles)
25-FL654-006 25-FL654-015
- FL654Q – Trucks (232 Vehicles)
25-FL654-008 25-FL654-013 25-FL654-027
- FL654R – Trucks (143 Vehicles)
25-FL654-013 25-FL654-014 25-FL654-024 25-FL654-025 25-FL654-030
- FL654S – Trucks (242 Vehicles)
25-FL654-014 25-FL654-021 25-FL654-022 25-FL654-023 25-FL654-024 25-FL654-025
25-FL654-029 25-FL654-030 25-FL654-031 25-FL654-032 25-FL654-033 25-FL654-034
- FL654T – Trucks (117 Vehicles)
25-FL654-035 25-FL654-036 25-FL654-037 25-FL654-038 25-FL654-039 25-FL654-040
- FL654SU – Trucks (206 Vehicles)
25-FL654-006 25-FL654-008 25-FL654-009 25-FL654-021 25-FL654-022 25-FL654-025
25-FL654-030 25-FL654-031 25-FL654-033 25-FL654-032 25-FL654-034
- FL654V – Trucks (60 Vehicles)
25-FL654-010 25-FL654-015
- FL654W – Trucks (75 Vehicles)
25-FL654-025 25-FL654-030
- FL654W – Trucks (62 Vehicles)
25-FL654-017 25-FL654-041
- FL654Y – Trucks (54 Vehicles)
25-FL654-018 25-FL654-028 25-FL654-041
- FL654Z – Trucks (199 Vehicles)
25-FL654-006 25-FL654-013 25-FL654-014 25-FL654-020 25-FL654-021 25-FL654-022
25-FL654-023 25-FL654-024 25-FL654-025 25-FL654-026 25-FL654-027 25-FL654-029
25-FL654-030 25-FL654-031 25-FL654-03225-FL654-033 25-FL654-034 25-FL654-038
25-FL654-041

Recall Campaign

Daimler Trucks
North America LLC

March 2014
FL654A-Z
NHTSA #13V-604 (Non-School Buses)
NHTSA #13V-606 (School Buses)
Transport Canada #13-427
REVISED NOTICE

Table 1 - Replacement Parts for FL654

NOTE: There are 145 school buses and 31,933 trucks in this recall. At the end of this bulletin is a cross reference list of seat belt assemblies to individual buckle and kit numbers. This list may be helpful in selecting the correct replacement buckles.

25-FL654-000 through 25-FL654-044

Campaign Number	Kit Number	Buckle Part Number	Part Description	Qty. per Kit	Suggested Wholesale*
FL654AB (School Buses)	25-FL654-000	A95064	Buckle	1 ea	\$10.97 U.S. \$11.41 CAN
	25-FL654-001	A96477	Buckle	1 ea	
	25-FL654-002	A96655	Buckle	1 ea	
	25-FL654-003	F111539RPL	Buckle	1 ea	
	25-FL654-004	F111540RPL	Buckle	1 ea	
	25-FL654-005	F111541RPL	Buckle	1 ea	
FL654C-Z (Trucks)	25-FL654-006	A93555	Buckle	1 ea	\$10.97 U.S. \$11.41 CAN
	25-FL654-007	A93559	Buckle	1 ea	
	25-FL654-008	A93706	Buckle	1 ea	
	25-FL654-009	A93764	Buckle	1 ea	
	25-FL654-010	A96474	Buckle	1 ea	
	25-FL654-011	A93542	Buckle	1 ea	
	25-FL654-012	A100397	Buckle	1 ea	
	25-FL654-013	A101245	Buckle	1 ea	
	25-FL654-014	A91317	Buckle	1 ea	
	25-FL654-015	A93455	Buckle	1 ea	
	25-FL654-016	A93541	Buckle	1 ea	
	25-FL654-017	A93603	Buckle	1 ea	
	25-FL654-018	A93608	Buckle	1 ea	
	25-FL654-019	A93620	Buckle	1 ea	
	25-FL654-020	A93655	Buckle	1 ea	
	25-FL654-021	A93712	Buckle	1 ea	
	25-FL654-022	A93713	Buckle	1 ea	
	25-FL654-023	A93714	Buckle	1 ea	
	25-FL654-024	A93725	Buckle	1 ea	
	25-FL654-025	A93726	Buckle	1 ea	
	25-FL654-026	A93727	Buckle	1 ea	
	25-FL654-027	A93760	Buckle	1 ea	
	25-FL654-028	A93762	Buckle	1 ea	
	25-FL654-029	A93766	Buckle	1 ea	
25-FL654-030	A93767	Buckle	1 ea		

Table 1, Continues on the Next Page

March 2014

FL654A-Z

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

REVISED NOTICE

Campaign Number	Kit Number	Buckle Part Number	Part Description	Qty. per Kit	Suggested Wholesale*
FL654C-Z (Trucks)	25-FL654-031	A93768	Buckle	1 ea	\$10.97 U.S. \$11.41 CAN
	25-FL654-032	A93769	Buckle	1 ea	
	25-FL654-033	A93772	Buckle	1 ea	
	25-FL654-034	A93773	Buckle	1 ea	
	25-FL654-035	A93832	Buckle	1 ea	
	25-FL654-036	A93833	Buckle	1 ea	
	25-FL654-037	A93834	Buckle	1 ea	
	25-FL654-038	A93835	Buckle	1 ea	
	25-FL654-039	A93837	Buckle	1 ea	
	25-FL654-040	A93838	Buckle	1 ea	
	25-FL654-041	A95244	Buckle	1 ea	
	25-FL654-042	A96522 (ICP BAR)	Buckle	1 ea	
	25-FL654-043	A96805	Buckle	1 ea	
	25-FL654-044	A99639	Buckle	1 ea	

* Please charge all U.S. and Canadian Direct Warranty Customers the above-listed price for the kit, as they are authorized to perform their own Recalls. This pricing does not apply to Export Distributors.

Table 1, Continued from the Previous Page

Removed Parts

U.S. and Canadian Dealers, please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts. Export distributors, please destroy removed parts unless otherwise advised.

Labor Allowance

Table 2 - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Correction Code
FL654AB (School Buses)	Inspect all seat belt buckles - Saf-T-Liner C2 or HDX (Claim once on each C2 or HDX claim)	0.4	996-0923A	06 - Inspect
	Inspect all seat belt buckles - Minotour (Claim once on each Minotour claim)	0.2	996-0923B	06 - Inspect
	Replace 1 seat belt buckle - Saf-T-Liner C2, HDX, or Minotour (Claim once for each buckle replaced)	0.2	996-0923C	12 - Repair Recall/Campaign
FL654C-Z (Trucks)	Inspect all seat belt buckles - All trucks	0.2	996-0923D	06 - Inspect
	Inspect all and replace 1 to 2 seat belt buckles - All trucks	0.5	996-0923E	12 - Repair Recall/Campaign
	Inspect all and replace 3 to 5 seat belt buckles - All trucks	0.7	996-0923F	12 - Repair Recall/Campaign

Table 2

Recall Campaign

Daimler Trucks
North America LLC

March 2014

FL654A-Z

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

REVISED NOTICE

IMPORTANT: When the Recall has been completed, locate the base completion label in the appropriate location on the vehicle, and attach the red completion sticker provided in the recall kit (Form WAR260). If the vehicle does not have a base completion label, clean a spot on the appropriate location of the vehicle and first attach the base completion label (Form WAR259). If a recall kit is not required or there is no completion sticker in the kit, write the recall number on a blank sticker and attach it to the base completion label.

Claims for Credit

You will be reimbursed for your parts, labor, and handling (landed cost for Export Distributors) by submitting your claim through the Warranty system within 30 days of completing this campaign. Please reference the following information in OWL:

REVISIONS: IMMI has added a buckle to the Recall (buckle part number A96765, replacement kit 25-FL654-009). Typographical errors have been corrected.

NOTE: There are 145 school buses and 31,933 trucks in this recall.

- Claim type is **Recall**.
- In the FTL Authorization field, enter the campaign number and appropriate condition code (e.g. **FL654A, FL654B, FL654C, etc.**).
- In the Primary Failed Part Number field, enter **25-FL654-000**.
- In the Parts field, enter the appropriate kit number(s) as shown in the Replacement Parts Table. There are 145 school buses and 31,933 trucks in this recall. At the end of this bulletin is a cross reference list of seat or seat belt assemblies to individual buckle and kit numbers. This list may be helpful in selecting the correct replacement buckles.
- In the Labor field, first enter the appropriate SRT from the Labor Allowance Table. For administrative time, enter SRT 939-6010A for 0.3 hours.
- **For school buses with more than one buckle replaced, claims must be brought into OWL manually. Please submit a WSC Campaigns inquiry asking for your "Ready to Submit" recall claim to be brought into OWL.**
- For OWL, the VMRS Component Code is 002-011-005 and the Cause Code is A1 - Campaign.
- **U.S. and Canada – Reimbursement for Prior Repairs.** When a customer asks about reimbursement, please do the following:
 - Accept the documentation of the previous repair.
 - Make a brief check of the customer's paperwork to see if the repair may be eligible for reimbursement. (See the "Copy of Owner Letter" section of this bulletin for reimbursement guidelines for this recall.)
 - Submit a Campaign Pre-Approval inquiry to the Warranty Campaigns Department for a decision and authorization number.
 - Include the approved amount on your claim in Other Charges section.
 - In the claim story, first note the authorization number and that the claim includes a reimbursement.
 - Retain the documentation and provide it to Warranty Campaigns or Claims Processing if requested.
 - When your claim is paid, reimburse the customer the appropriate amount.

IMPORTANT: OWL must be viewed prior to performing the recall to ensure the vehicle is involved and the campaign has not been previously completed. Also, check for a completion sticker prior to beginning work.

**March 2014
FL654A-Z**

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

REVISED NOTICE

U.S. and Canadian dealers, contact the Warranty Campaigns Department from 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, via Web inquiry at AccessFreightliner.com / Support / My Tickets and Submit an Inquiry, or the Customer Assistance Center at (800) 385-4357, after normal business hours, if you have any questions or need additional information. Export distributors, submit a Web inquiry or contact your International Service Manager.

U.S. and Canadian Dealers: To return excess kit inventory related to this campaign, U.S. dealers must submit a Parts Authorization Return (PAR) to the Memphis PDC. Canadian dealers must submit a PAR to their facing PDC. All kits must be in resalable condition. PAR requests must include the original purchase invoice number. Export Distributors: Excess inventory is not returnable.

The letter notifying U.S. and Canadian vehicle owners is included for your reference.

Please note that the National Traffic and Motor Vehicle Safety Act, as amended (Title 49, United States Code, Chapter 301), requires the owner's vehicle(s) be corrected within a reasonable time after parts are available to you. The Act states that failure to repair a vehicle within 60 days after tender for repair shall be prima facie evidence of an unreasonable time. However, circumstances of a particular situation may reduce the 60 day period. Failure to repair a vehicle within a reasonable time can result in either the obligation to (a) replace the vehicle with an identical or reasonably equivalent vehicle, without charge, or (b) refund the purchase price in full, less a reasonable allowance for depreciation. The Act further prohibits dealers from selling a vehicle unless all outstanding recalls are performed. Any lessor is required to send a copy of the recall notification to the lessee within 10 days. Any subsequent stage manufacturer is required to forward this notice to its distributors and retail outlets within five working days.

March 2014
FL654A-Z
NHTSA #13V-604 (Non-School Buses)
NHTSA #13V-606 (School Buses)
Transport Canada #13-427
REVISED NOTICE

Copy of Notice to Owners Subject: IMMI Seat Belt Buckles

For the Notice to U.S. Customers: This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

For the Notice to Canadian Customers: This notice is sent to you in accordance with the Canadian Motor Vehicle Safety Act.

Daimler Trucks North America LLC, on behalf of its Freightliner Trucks Division and its wholly owned subsidiary Thomas Built Buses, has decided that a non-compliance with Federal regulations exists on specific Freightliner 108SD, 114SD, 122SD, Argosy, Business Class M2, Cascadia, Columbia, and Coronado vehicles; Western Star 4700, 4900, and 6900 vehicles; and Thomas Built Buses Saf-T-Liner C2, HDX, and Minotour vehicles with certain IMMI seat belt assemblies.

Certain Indiana Mills and Manufacturing, Inc. (IMMI) seat belt assemblies equipped with L9 buckles may not satisfy the requirements of S4.3(g) of FMVSS 209/CMVSS 209, Seat Belt Assemblies. When the button is pressed to release the seat belt, the latch plate can become partially engaged with the buckle, and it may take more effort than specified in the standard to separate the latch plate from the buckle. If the latch plate remains partially engaged after the button is pressed, egress from the vehicle could be hindered which would increase the risk of injury in the event of an emergency.

Seat belt assemblies will be inspected and replacement buckles will be installed as required.

Please contact an authorized Daimler Trucks North America dealer to arrange to have the recall performed. **IMPORTANT: Parts are currently being manufactured, please contact a dealer in advance to ensure that parts are available.** To locate an authorized dealer, search online at www.Daimler-TrucksNorthAmerica.com. The Recall may take up to several hours on buses and up to an hour on all other vehicles, depending on the number and type of buckles requiring replacement, and will be performed at no charge to you.

You may be liable for any progressive damage that results from your failure to complete the Recall within a reasonable time after receiving notification.

If you do not own the vehicle that corresponds to the identification number(s) which appears on the Recall Notification, please return the notification to the Warranty Campaigns Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, Federal law requires that you forward this notice to the lessee within 10 days. If you are a subsequent stage manufacturer, Federal law requires that you forward this notice to your distributors and retail outlets within five working days. If you have paid to have this recall condition corrected prior to this notice, you may be eligible to receive reimbursement. Please see the reverse side of this notice for details.

For the Notice to U.S. Customers: If you have questions about this Recall, please contact the Warranty Campaigns Department at (800) 547-0712, 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, e-mail address DTNA.Warranty.Campaigns@Daimler.com, or the Customer Assistance Center at (800) 385-4357 after normal business hours. If you are not able to have the defect remedied without charge and within a reasonable time, you may wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the Vehicle Safety Hotline at (888) 327-4236 (TTY: 800-424-9153); or to <http://www.safercar.gov>.

For the Notice to Canadian Customers: If you have questions about this Recall, please contact the Warranty Campaigns Department at (800) 547-0712, 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, e-mail address DTNA.Warranty.Campaigns@Daimler.com, or the Customer Assistance Center at (800) 385-4357 after normal business hours.

March 2014

FL654A-Z

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

REVISED NOTICE

We regret any inconvenience this action may cause but feel certain you understand our interest in motor vehicle safety.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

March 2014

FL654A-Z

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

REVISED NOTICE

Reimbursement to Customers for Repairs Performed Prior to Recall

If you have already **paid** to have this recall condition corrected you may be eligible to receive reimbursement.

Requests for reimbursement may include parts and labor. Reimbursement may be limited to the amount the repair would have cost if completed by an authorized Daimler Trucks North America LLC dealer. The following documentation must be presented to your dealer for consideration for reimbursement.

Please provide original or clear copies of all receipts, invoices, and repair orders that show

- The name and address of the person who paid for the repair
- The Vehicle Identification Number (VIN) of the vehicle that was repaired
- What problem occurred, what repair was done, when the repair was done
- Who repaired the vehicle
- The total cost of the repair expense that is being claimed
- Proof of payment for the repair (such as the front and back of a cancelled check or a credit card receipt)

Reimbursement will be made by check from your Daimler Trucks North America LLC dealer.

Please speak with your Daimler Trucks North America LLC authorized dealer concerning this matter.

March 2014
FL654A-Z
NHTSA #13V-604 (Non-School Buses)
NHTSA #13V-606 (School Buses)
Transport Canada #13-427
REVISED NOTICE

Work Instructions

Subject: IMMI Seat Belt Buckles

Models Affected: Specific Freightliner 108SD, 114SD, 122SD, Argosy, Business Class M2, Cascadia, Columbia, and Coronado vehicles; Western Star 4700, 4900, and 6900 vehicles; and Thomas Built Buses Saf-T-Liner C2, HDX, and Minotour vehicles with certain IMMI seat belt assemblies.

ATTENTION: Locations that are authorized to perform campaigns on Freightliner and Western Star vehicles and Freightliner Custom Chassis chassis should complete this Recall on those vehicles. Locations that are authorized to perform campaigns on Thomas Built Buses bodies and chassis should complete this Recall on those vehicles.

NOTE: There are 145 school buses and 31,933 trucks in this recall. At the end of this bulletin is a cross reference list of seat belt assemblies to individual buckle and kit numbers. This list may be helpful in selecting the correct replacement buckles.

NOTE: For school buses with more than one buckle replaced, claims must be brought into OWL manually. Please submit a WSC Campaigns inquiry asking for your "Ready to Submit" recall claim to be brought into OWL.

L9 Seat Belt Buckle Inspection – All Vehicles

1. Check the base label (Form WAR259) for a completion sticker for FL654 (Form WAR260) indicating this work has been done. The base label is usually located on the passenger-side door, about 12 inches (30 cm) below the door latch. If a completion sticker is present, no work is needed. If a completion sticker is not present, continue with the next step.
2. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.

IMPORTANT: Determine whether or not any seat belt buckles in the vehicle need to be replaced. A vehicle may have some buckles that fall under this recall, and some that may not. It is important to inspect each buckle. In trucks, most buckles are expected to be replaced. In school buses, replacements are expected to vary from a few buckles to all buckles.

3. Check the buckle for the IMMI logo. See **Fig. 1**.



Fig. 1, IMMI Logo

4. Verify that the buckle is an IMMI L9 buckle. Only IMMI L9 buckles are affected by this recall. See **Fig. 2**.
5. If the buckle is an IMMI L9 buckle, check the back of the housing for the date code. See **Fig. 3**.
If the date code is included in the ranges shown in **Fig. 3**, the buckle needs to be replaced. If the date code is outside these ranges, the buckle does not need to be replaced.
6. If the vehicle has buckles that need to be replaced, go to "Buckle Replacement – School Buses" or "Buckle Replacement – Trucks" as appropriate in these Work Instructions.
If no buckles need to be replaced, clean a spot on the base label (Form WAR259), write the recall number, FL654, on a blank red completion sticker (Form WAR260), and attach it to the base label.

Recall Campaign

Daimler Trucks
North America LLC

March 2014
FL654A-Z
NHTSA #13V-604 (Non-School Buses)
NHTSA #13V-606 (School Buses)
Transport Canada #13-427
REVISED NOTICE

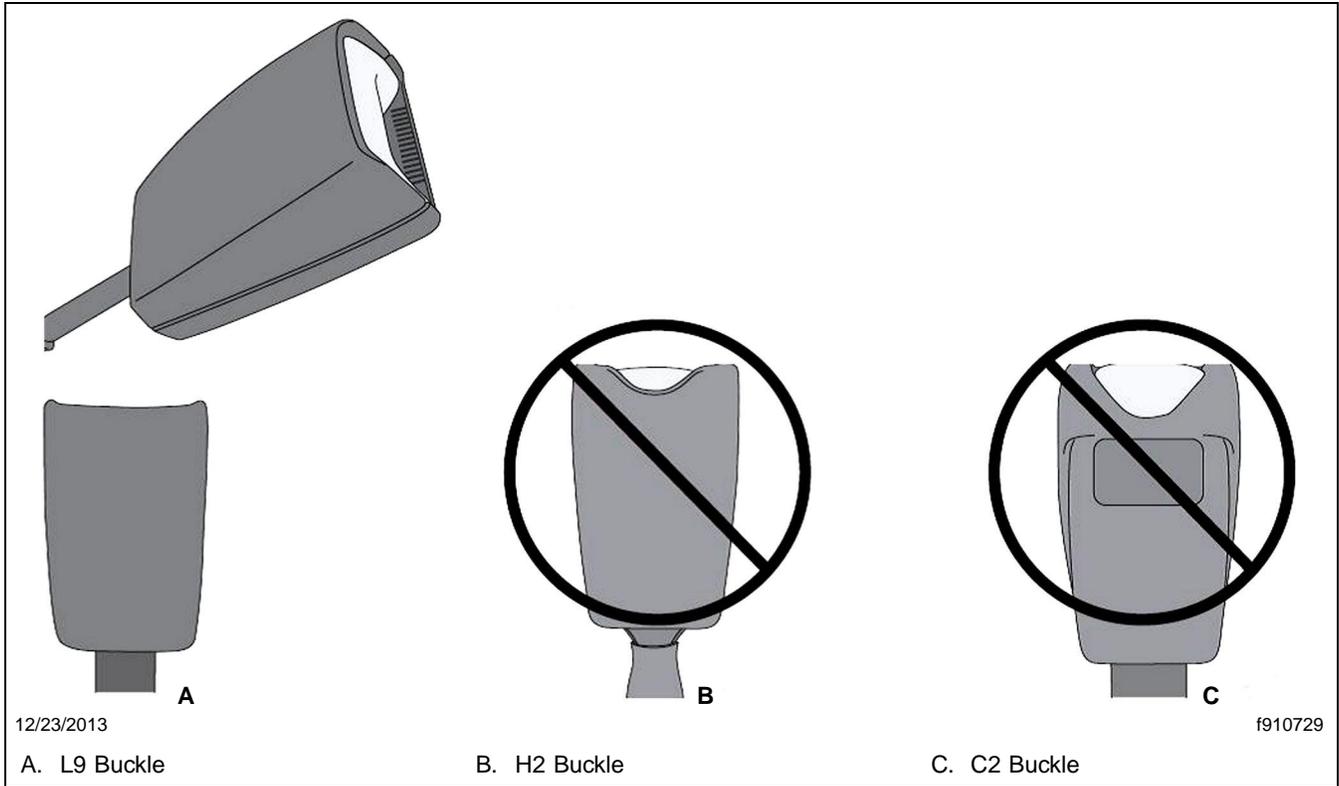


Fig. 2, IMMI L9 Buckle Identification

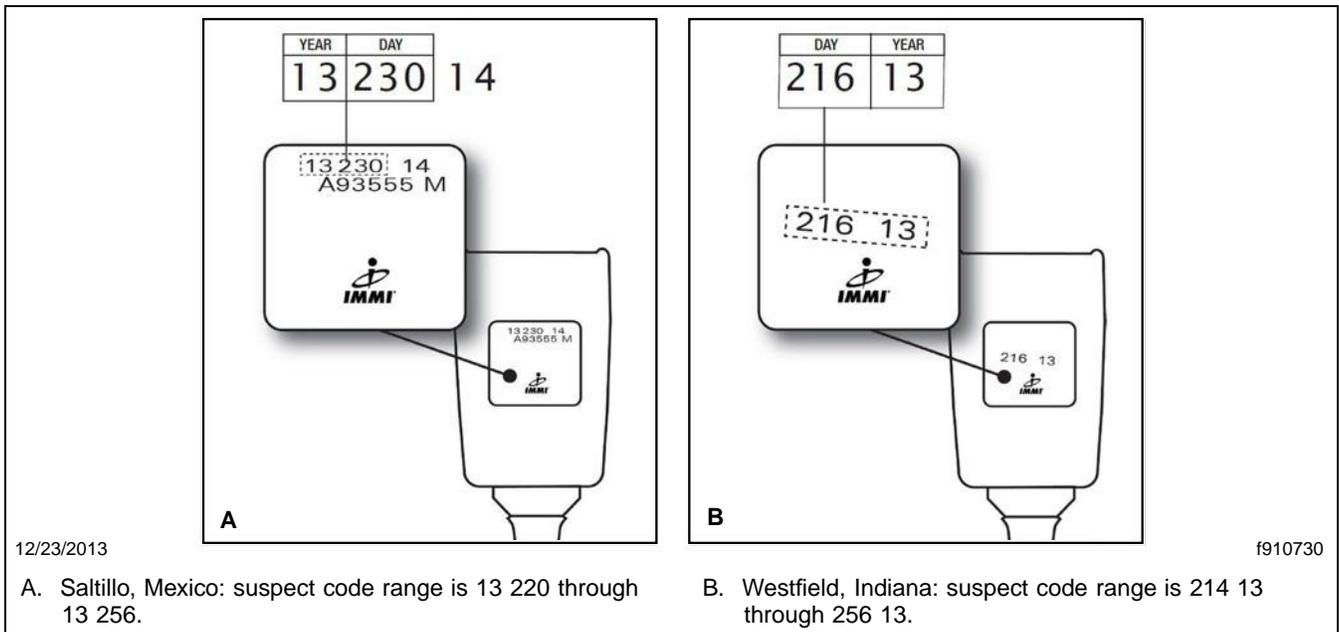


Fig. 3, Buckle Date Code Ranges

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FL654A-Z

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

REVISED NOTICE

Buckle Replacement – School Buses

1. Reach under the center of the bottom cushion and release the latch by sliding the locking plate tab toward the front of the seat, as shown in **Fig. 4**.
2. Lift up the back of the cushion to gain access to the buckle mounting. See **Fig. 5**.
3. Go to the replacement steps below for the applicable type of seat belt assembly:
 - Sliding Buckles
 - Fixed Center-Mounted Buckles
 - Web-Type Buckles
4. When all buckles are replaced, clean a spot on the base label (Form WAR259), write the recall number, FL654, on a blank red completion sticker (Form260), and attach it to the base label.

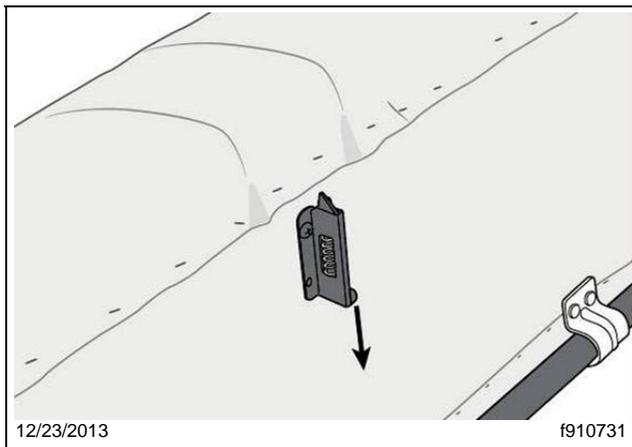


Fig. 4, Releasing the Bottom Cushion Latch

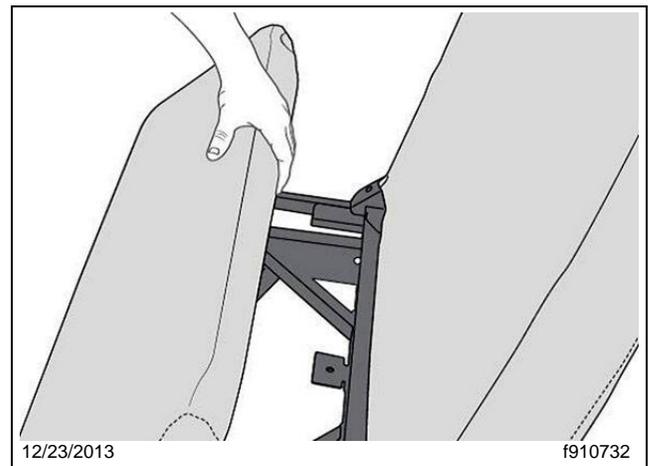


Fig. 5, Lifting Up the Bottom Cushion

Sliding Buckles

NOTE: Sliding buckles are located on the right-hand side when you are facing the seat.

1. Using two 3/4-inch wrenches, remove the nut at one end of the shaft. See **Fig. 6**.
2. Pull the shaft end with the removed nut through the support bracket hole, then slide the plastic sleeve with the buckles off the shaft. See **Fig. 7**.
3. Remove both buckles from the plastic sleeve. Based on the date code of each buckle, discard the suspect buckle(s). If one buckle has a "good" date code, retain it for reinstallation.
4. Install the buckles into the plastic sleeve.
5. Slide the plastic sleeve onto the shaft.
6. Position the shaft in the support bracket holes. Install the nut on the shaft.

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NHTSA #13V-604 (Non-School Buses)
NHTSA #13V-606 (School Buses)
Transport Canada #13-427
REVISED NOTICE

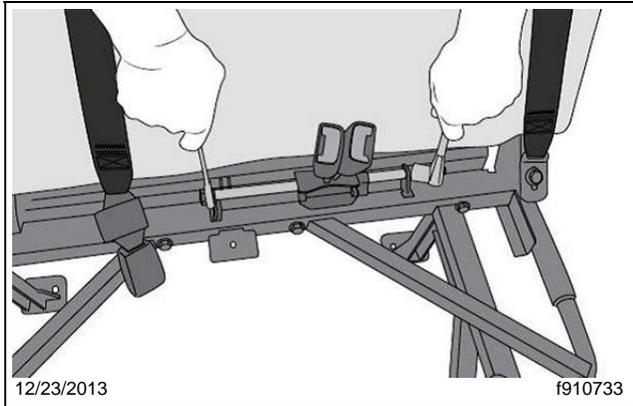


Fig. 6, Removing the Nut at the Shaft End, Sliding Buckles

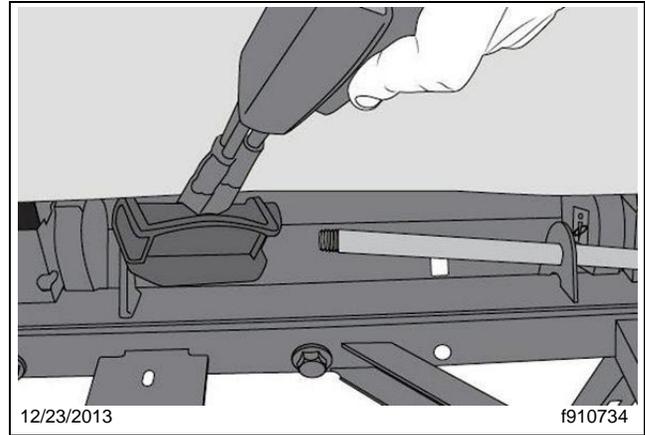


Fig. 7, Removing the Sliding Buckles

Fixed Center-Mounted Buckles

NOTE: Fixed center-mounted buckles are installed in the center of the seat, using one nut and bolt.

1. Using a 5/8-inch ratchet and an 11/16-inch wrench, remove the nut and bolt from the mounting bracket. Remove both buckles. Based on the date code of each buckle, discard the suspect buckle(s). If one buckle has a "good" date code, retain it for reinstallation. See **Fig. 8**.
2. Install both buckles, using the bolt and nut. Tighten the nut 25 lbf-ft (34 N·m).

Web-Type Buckle

1. Using a 5/8-inch wrench and a 11/16-inch wrench, remove the buckle mounting bolt. Remove the buckle, nut, and washer. See **Fig. 9**.
2. Orient the new buckle as before, then install it, using the bolt, nut, and washer. Tighten the nut 25 lbf-ft (34 N·m).

March 2014

FL654A-Z

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

REVISED NOTICE

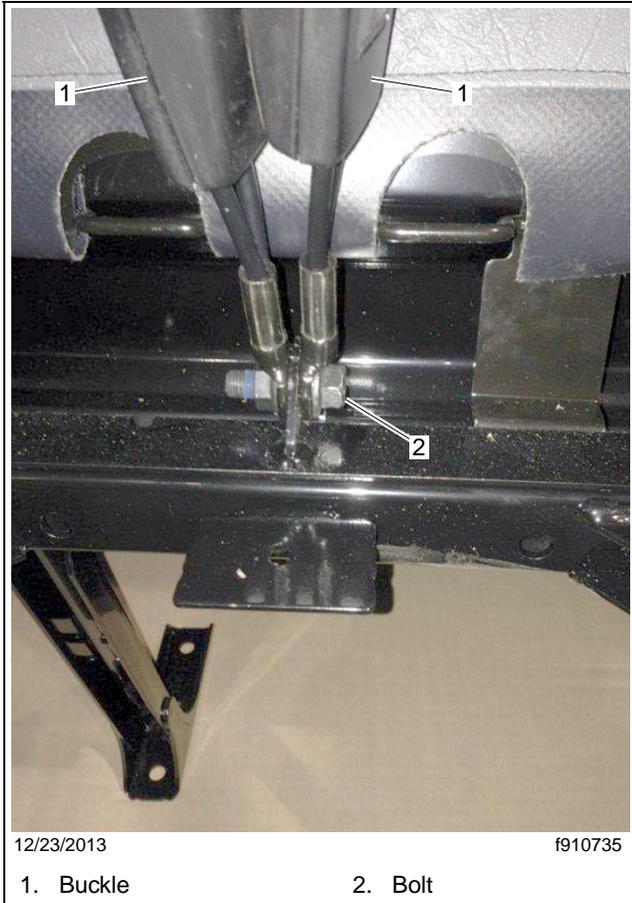


Fig. 8, Fixed Center-Mounted Buckles

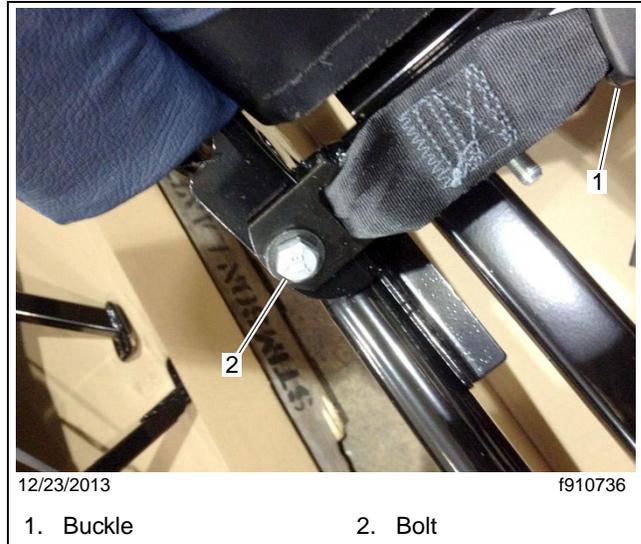


Fig. 9, Webbed Buckle

Buckle Replacement – Trucks

There are several buckle mounting configurations, depending on the type of seat:

- Static seats have the buckles mounted directly to the cab floor. See **Fig. 10**.
- Air suspension seats have buckles mounted to the ICP (intermediate-connection-point bar or bracket), with a tether belt attached to the cab floor. See **Fig. 11**.
- Bench seats may have floor-mounted buckles at the ends, and floor-bracket-mounted buckles in the middle. One or two buckles may be mounted to each floor bracket. See **Fig. 12** and **Fig. 13**.

1. Go to the replacement steps below for the applicable type of seat belt assembly:
 - Floor-Mounted Buckles
 - ICP-Bar-Mounted Buckles
 - Floor-Bracket-Mounted Buckles
2. When all buckles are replaced, clean a spot on the base label (Form WAR259), write the recall number, FL654, on a blank red completion sticker (Form260), and attach it to the base label.

March 2014
FL654A-Z
NHTSA #13V-604 (Non-School Buses)
NHTSA #13V-606 (School Buses)
Transport Canada #13-427
REVISED NOTICE

Floor-Mounted Buckles

1. Remove the capscrew that attaches the buckle to the cab deck. See **Fig. 10**. Remove and discard the buckle.
2. Attach the new buckle to the cab deck. Tighten the capscrew 35 to 45 lbf-ft (48 to 61 N·m).

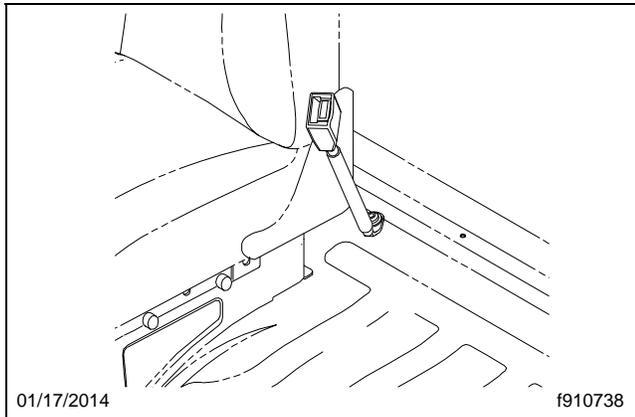


Fig. 10, Floor-Mounted Buckle

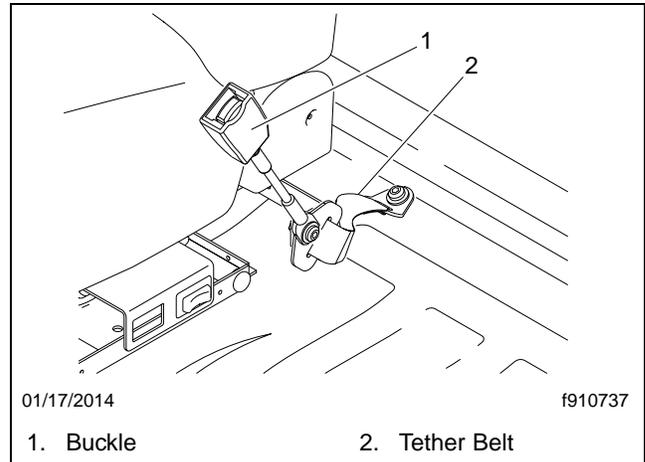


Fig. 11, ICP-Bar-Mounted Buckle

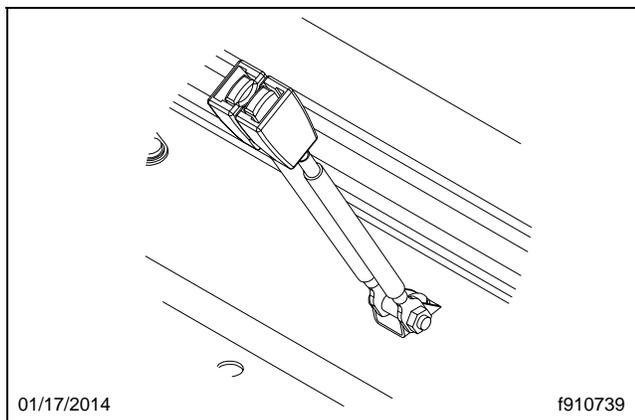


Fig. 12, Floor-Bracket-Mounted Buckle, Dual Buckle Mounting

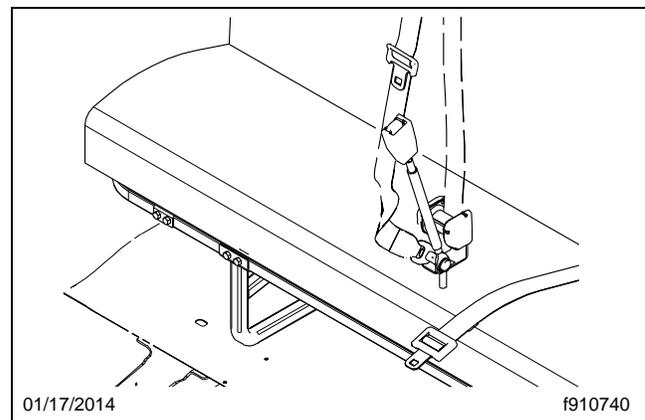


Fig. 13, Floor-Bracket-Mounted Buckle, Retractor and Buckle Mounting

2. Attach the new buckle to the cab deck. Tighten the capscrew 35 to 45 lbf-ft (48 to 61 N·m).

ICP-Bar-Mounted Buckles

1. Disconnect the buckle from the seat by removing the capscrew from the end of the intermediate-connection-point (ICP) bar (or bracket); see **Fig. 11**. Remove and discard the buckle.
2. Place the tether bracket against the ICP bar (or bracket), then place the bracket of the new buckle on top of the tether bracket. Install the capscrew through the brackets into the ICP bar. Tighten the capscrew 35 to 45 lbf-ft (48 to 61 N·m).

March 2014
FL654A-Z

NHTSA #13V-604 (Non-School Buses)

NHTSA #13V-606 (School Buses)

Transport Canada #13-427

REVISED NOTICE

Floor-Bracket-Mounted Buckles

1. If necessary, remove the seat cushion to access the buckle mounting.
2. Remove the capscrew that attaches the buckle to the floor bracket (**Fig. 12** or **Fig. 13**). Remove and discard the buckle.
3. Attach the new buckle to the floor bracket. Tighten the capscrew 35 to 45 lbf·ft (48 to 61 N·m).

**FL654 IMMI Seat Belt Buckles
Cross Reference List
Seat Belt Assembly to Recall Kit/Buckle Part Number
School Buses**

Seat Assembly				Recall Kit	Buckle Part Number
F107181R	F107496R	F107961R	F108096R	25-FL654-000	A95064
F107186R	F107811L	F107991L	F108246L		
F107212L	F107811R	F108247L	F108246R		
F107216L	F107816R	F108247R	F108277R		
F107216R	F107916L	F108251L	F108281L		
F107220L	F107916R	F108251R	F108291L		
F107396L	F107917L	F108262L	F108292L		
F107396R	F107917R	F108266L	F108296L		
F107400R	F107920R	F108276L	F108366L		
F107407L	F107951L	F108276R			
F107407R	F107951R	F108277L			
F107411R	F107961L	F108096L			
F108246L	F108251R	F107396R	F108281L		
F108246R	F108262L	F107400R	F108291L		
F108247L	F108266L	F108276R	F108292L		
F108247R	F108276L	F108277L	F108296L		
F108251L	F107396L	F108277R	F108366L		
F107396L	F107396R	F107400R		25-FL654-002	A96655
F108531L	F108537R	F108565L	F108667R	25-FL654-003	F111539RPL
F108531R	F108542L	F108565R	F108672L		
F108536L	F108542R	F108666L	F108672R		
F108536R	F108561L	F108666R	F115232L		
F108537L	F108561R	F108667L			
F107407L	F108536R	F108561R	F108667R	25-FL654-004	F111540RPL
F107407R	F108537L	F108565L	F108672L		
F107411R	F108537R	F108565R	F108672R		
F108531L	F108542L	F108666L	F115232L		
F108531R	F108542R	F108666R			
F108536L	F108561L	F108667L			
F107407L	F108536R	F108561R	F108667R	25-FL654-005	F111541RPL
F107407R	F108537L	F108565L	F108672L		
F107411R	F108537R	F108565R	F108672R		
F108531L	F108542L	F108666L	F115232L		
F108531R	F108542R	F108666R			
F108536L	F108561L	F108667L			

**FL654 IMMI Seat Belt Buckles
Cross Reference List
Seat Belt Assembly to Recall Kit/Buckle Part Number
Trucks**

Note: The seat belt assembly part number can be found on the seat belt webbing or in PartsPro.

Seat Belt Assembly	Recall Kit	Buckle Part Number
IMM F104989	25-FL654-006	A93555
IMM F105006		
IMM F105125		
IMM F114827		
IMM F114834		
IMM F114835		
IMM F115151		
IMM F115152		
IMM F115154		
IMM F115155		
IMM F115157		
IMM F115158		
IMM F115494		
IMM F13159		
IMM F104990		
IMM F105007		
IMM F105123		
IMM F105127		
IMM F111533		
IMM F105150	25-FL654-008	A93706
IMM F105187		
IMM F105166	25-FL654-009 (Also replaces buckle A96765)	A93764
IMM F111098	25-FL654-010	A96474
IMM F114643		
IMM F114836		
IMM F114836		
IMM F114837		
IMM F105059	25-FL654-011	A93542
IMM F105062		
IMM F105092		
IMM F105093		
IMM F105124		
IMM F105128		
IMM F105225		
IMM F123223		

Seat Belt Assembly	Recall Kit	Buckle Part Number
IMM F105009	25-FL654-014	A91317
IMM F105149		
IMM F105152		
IMM F105162		
IMM F105182		
IMM F106779	25-FL654-015	A93455
IMM F106780		
IMM F105041	25-FL654-016	A93541
IMM F105126		
IMM F105143	25-FL654-017	A93603
IMM F105035		
IMM F105224		
IMM F105046	25-FL654-018	A93608
IMM F105196		
IMM F105142	25-FL654-019	A93620
IMM F105060	25-FL654-020	A93655
IMM F116117		
IMM F105178	25-FL654-021	A93712
IMM F105184		
IMM F105197		
IMM F105210		
IMM F105185	25-FL654-021	A93712
	25-FL654-022	A93713
IMM F105198	25-FL654-021	A93712
	25-FL654-022	A93713
IMM F105161	25-FL654-022	A93713
IMM F105211		
IMM F105179	25-FL654-022	A93713
	25-FL654-026	A93727
IMM F105155	25-FL654-023	A93714
IMM F105183		
IMM F105189	25-FL654-024	A93725
	25-FL654-025	A93726
IMM F105168	25-FL654-025	A93726

Seat Belt Assembly	Recall Kit	Buckle Part Number
IMM F104985	25-FL654-025	A93726
	25-FL654-033	A93772
	25-FL654-034	A93773
IMM F116071	25-FL654-012	A100397
IMM F116152		
IMM F121846	25-FL654-013	A101245
IMM F105201	25-FL654-025	A93726
	25-FL654-033	A93772
	25-FL654-034	A93773
IMM F105156	25-FL654-030	A93767
IMM F105238	25-FL654-025	A93726
	25-FL654-030	A93767
IMM F105031	25-FL654-027	A93760
IMM F105089	25-FL654-028	A93762
IMM F111720		
IMM F111721		
IMM F105165	25-FL654-029	A93766
	25-FL654-030	A93767
IMM F105200	25-FL654-029	A93766
	25-FL654-030	A93767
IMM F105157	25-FL654-031	A93768
	25-FL654-032	A93769
IMM F105025	25-FL654-035	A93832
IMM F105026	25-FL654-036	A93833
	25-FL654-037	A93834
IMM F105027	25-FL654-037	A93834
IMM F105028	25-FL654-038	A93835
IMM F106731		
IMM F106737		
IMM F111033		
IMM F111034		
IMM F105030	25-FL654-039	A93837
	25-FL654-040	A93838
IMM F106377	25-FL654-041	A95244
IMM F122726		
IMM F116280	25-FL654-043	A96805
IMM F115528	25-FL654-044	A99639
C27-00097-002	25-FL654-042	A96522
C27-00097-003		
C27-00097-004		
C27-00097-007		
C27-00097-008		

February 2014

FL658A-C

NHTSA #13V-639 (School Buses)

NHTSA #13V-640 (Non-School Buses)

Subject: Ametek Speedometer Programming

Models Affected: Specific Freightliner Custom Chassis MBC shuttle buses and MT45/MT55 walk-in vans; and Thomas Built Buses EFX buses and chassis manufactured September 24, 2013, through November 7, 2013, and equipped with an Ametek instrument panel.

General Information

Daimler Trucks North America LLC, on behalf of its wholly owned subsidiaries, Freightliner Custom Chassis Corporation and Thomas Built Buses, Inc., has decided that a defect that relates to motor vehicle safety exists on the vehicles mentioned above.

There are approximately 215 vehicles involved in this campaign.

Certain vehicles were equipped with speedometers that were programmed incorrectly. This may result in the vehicle operating at speeds higher than the speedometer displays and potentially exceed the posted speed limit increasing the risk of a crash.

The speedometer will be reprogrammed with the correct calibration.

Additional Repairs

Dealers must complete all outstanding Recall and Field Service campaigns prior to the sale or delivery of a vehicle. A Dealer will be liable for any progressive damage that results from its failure to complete campaigns before sale or delivery of a vehicle.

Owners may be liable for any progressive damage that results from failure to complete campaigns within a reasonable time after receiving notification.

Work Instructions

Please refer to the attached work instructions. Prior to performing the campaign, check the vehicle for a completion sticker (Form WAR260).

Replacement Parts

There are no replacement parts for this repair.

If our records show your dealership has ordered any vehicles involved in campaign number FL658A-C, a list of the customers and vehicle identification numbers will be available on AccessFreightliner.com.

Removed Parts

U.S. and Canadian Dealers, please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts. Export distributors, please destroy removed parts unless otherwise advised.

Labor Allowance

Table 1 - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Damage Code
FL658A-C	Calibrate speedometer	0.3	996-0925A	000-Modifiedx

Table 1

Recall Campaign

Daimler Trucks
North America LLC

February 2014
FL658A-C
NHTSA #13V-639 (School Buses)
NHTSA #13V-640 (Non-School Buses)

IMPORTANT: When the Recall has been completed, locate the base completion label in the appropriate location on the vehicle, and attach the red completion sticker provided in the recall kit (Form WAR260). If the vehicle does not have a base completion label, clean a spot on the appropriate location of the vehicle and first attach the base completion label (Form WAR259). If a recall kit is not required or there is no completion sticker in the kit, write the recall number on a blank sticker and attach it to the base completion label.

Claims for Credit

You will be reimbursed for your parts, labor, and handling (landed cost for Export Distributors) by submitting your claim through the Warranty system within 30 days of completing this campaign. Please reference the following information in QuickClaim or OWL:

- Claim type is **Recall**.
- In the FTL Authorization field, enter the campaign number and appropriate condition code (**FL658A, FL658B, etc.**).
- In the Primary Failed Part Number field, enter **25-FL658-000**.
- In the Labor field, first enter the appropriate SRT from the Labor Allowance Table. For administrative time, enter SRT 939-0010A for 0.3 hours.
- For OWL, the VMRS Component Code is 002-008-002 and the Cause Code is A1 - Campaign.
- **U.S. and Canada – Reimbursement for Prior Repairs.** When a customer asks about reimbursement, please do the following:
 - Accept the documentation of the previous repair.
 - Make a brief check of the customer's paperwork to see if the repair may be eligible for reimbursement. (See the "Copy of Owner Letter" section of this bulletin for reimbursement guidelines for this recall.)
 - Submit a Campaign Pre-Approval inquiry to the Warranty Campaigns Department for a decision and authorization number.
 - Include the approved amount on your claim in Other Charges section.
 - In the claim story, first note the authorization number and that the claim includes a reimbursement.
 - Retain the documentation and provide it to Warranty Campaigns or Claims Processing if requested.
 - When your claim is paid, reimburse the customer the appropriate amount.

IMPORTANT: ServicePro or OWL must be viewed prior to performing the recall to ensure the vehicle is involved and the campaign has not been previously completed. Also, check for a completion sticker prior to beginning work.

U.S. and Canadian dealers, contact the Warranty Campaigns Department from 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, via Web inquiry at AccessFreightliner.com / Support / My Tickets and Submit an Inquiry, or the Customer Assistance Center at (800) 385-4357, after normal business hours, if you have any questions or need additional information. Export distributors, submit a Web inquiry or contact your International Service Manager.

U.S. and Canadian Dealers: To return excess kit inventory related to this campaign, U.S. dealers must submit a Parts Authorization Return (PAR) to the Memphis PDC. Canadian dealers must submit a PAR to their facing PDC. All kits must be in resalable condition. PAR requests must include the original purchase invoice number. Export Distributors: Excess inventory may be returned as noted for U.S. and Canadian dealers. Export locations will pay freight to return kits.

The letter notifying U.S. and Canadian vehicle owners is included for your reference.

February 2014

FL658A-C

NHTSA #13V-639 (School Buses)

NHTSA #13V-640 (Non-School Buses)

Please note that the National Traffic and Motor Vehicle Safety Act, as amended (Title 49, United States Code, Chapter 301), requires the owner's vehicle(s) be corrected within a reasonable time after parts are available to you. The Act states that failure to repair a vehicle within 60 days after tender for repair shall be prima facie evidence of an unreasonable time. However, circumstances of a particular situation may reduce the 60 day period. Failure to repair a vehicle within a reasonable time can result in either the obligation to (a) replace the vehicle with an identical or reasonably equivalent vehicle, without charge, or (b) refund the purchase price in full, less a reasonable allowance for depreciation. The Act further prohibits dealers from selling a vehicle unless all outstanding recalls are performed. Any lessor is required to send a copy of the recall notification to the lessee within 10 days. Any subsequent stage manufacturer is required to forward this notice to its distributors and retail outlets within five working days.

Recall Campaign

Daimler Trucks
North America LLC

February 2014
FL658A-C
NHTSA #13V-639 (School Buses)
NHTSA #13V-640 (Non-School Buses)

Copy of Notice to Owners

Subject: Ametek Speedometer Programming

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Daimler Trucks North America LLC, on behalf of its wholly owned subsidiaries, Freightliner Custom Chassis Corporation and Thomas Built Buses, Inc., has decided that a defect which relates to motor vehicle safety exists on specific Freightliner Custom Chassis MBC shuttle buses and MT45/MT55 walk-in vans; and Thomas Built Buses EFX buses and chassis manufactured September 24, 2013, through November 7, 2013, and equipped with an Ametek instrument panel.

Certain vehicles were equipped with speedometers that were programmed incorrectly. This may result in the vehicle operating at speeds higher than the speedometer displays and potentially exceed the posted speed limit increasing the risk of a crash.

The speedometer will be reprogrammed with the correct calibration.

Please contact an authorized Daimler Trucks North America dealer to arrange to have the recall performed and to ensure that parts are available at the dealership. To locate an authorized dealer, search online at www.Daimler-TrucksNorthAmerica.com. The Recall will take approximately half an hour and will be performed at no charge to you.

You may be liable for any progressive damage that results from your failure to complete the Recall within a reasonable time after receiving notification.

If you do not own the vehicle that corresponds to the identification number(s) which appears on the Recall Notification, please return the notification to the Warranty Campaigns Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, Federal law requires that you forward this notice to the lessee within 10 days. If you are a subsequent stage manufacturer, Federal law requires that you forward this notice to your distributors and retail outlets within five working days. If you have paid to have this recall condition corrected prior to this notice, you may be eligible to receive reimbursement. Please see the reverse side of this notice for details.

If you have questions about this Recall, please contact the Warranty Campaigns Department at (800) 547-0712, 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, e-mail address DTNA.Warranty.Campaigns@Daimler.com, or the Customer Assistance Center at (800) 385-4357 after normal business hours. If you are not able to have the defect remedied without charge and within a reasonable time, you may wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the Vehicle Safety Hotline at (888) 327-4236 (TTY: 800-424-9153); or to <http://www.safercar.gov>.

We regret any inconvenience this action may cause but feel certain you understand our interest in motor vehicle safety.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

February 2014

FL658A-C

NHTSA #13V-639 (School Buses)

NHTSA #13V-640 (Non-School Buses)

Reimbursement to Customers for Repairs Performed Prior to Recall

If you have already **paid** to have this recall condition corrected you may be eligible to receive reimbursement.

Requests for reimbursement may include parts and labor. Reimbursement may be limited to the amount the repair would have cost if completed by an authorized Daimler Trucks North America LLC dealer. The following documentation must be presented to your dealer for consideration for reimbursement.

Please provide original or clear copies of all receipts, invoices, and repair orders that show

- The name and address of the person who paid for the repair
- The Vehicle Identification Number (VIN) of the vehicle that was repaired
- What problem occurred, what repair was done, when the repair was done
- Who repaired the vehicle
- The total cost of the repair expense that is being claimed
- Proof of payment for the repair (such as the front and back of a cancelled check or a credit card receipt)

Reimbursement will be made by check from your Daimler Trucks North America LLC dealer.

Please speak with your Daimler Trucks North America LLC authorized dealer concerning this matter.

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NHTSA #13V-639 (School Buses)
NHTSA #13V-640 (Non-School Buses)

Work Instructions

Subject: Ametek Speedometer Programming

Models Affected: Specific Freightliner Custom Chassis MBC shuttle buses and MT45/MT55 walk-in vans; and Thomas Built Buses EFX buses and chassis manufactured September 24, 2013, through November 7, 2013, and equipped with an Ametek instrument panel.

Calibration Procedure

1. Check the base label (Form WAR259) for a completion sticker for FL658 (Form WAR260) indicating this work has been done. On shuttle buses and walk-in vans the base label is usually located in the driver's area. On school buses the base label is usually located above the driver's window. If a sticker is present, no further work is needed. If there is no sticker, proceed with the next step.
2. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
3. Connect the laptop being used to a power adapter, then connect the laptop connector to the diagnostic connector. See **Fig. 1**.
4. Using the laptop, go to AccessFreightliner.com. From the left side column click "Support."
5. Next, click "Download Center."
6. Click, "FL658 Ametek Speedometer Correction" dated February 1, 2014.
7. Click, "Install" to access the FCCC_GaugeCalReset.exe file.
8. Click, "Open" to open the FCCC_GaugeCalReset.exe file, then click on the FCCC_GaugeCalReset.exe application.
9. Next, select the communication adapter to use, then click "OK." See **Fig. 2**.

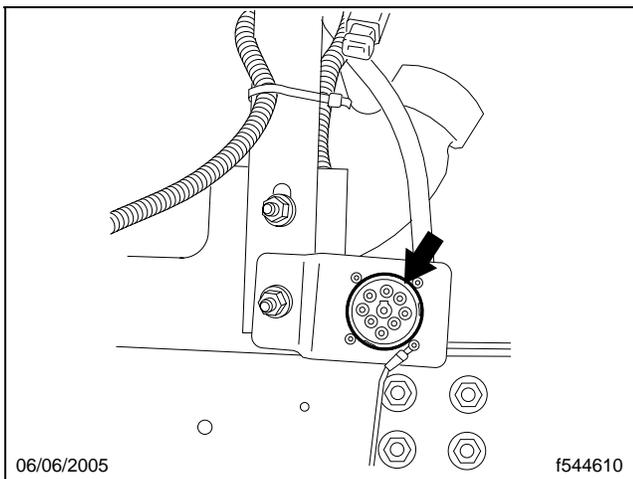


Fig. 1, Diagnostic Connector (location will vary)



Fig. 2, Select Communication Adapter Screen

10. Once connected, check the Cluster Speedometer Gauge calibration. See **Fig. 3**.
If the message reads, "IS SPEED GAUGE AT FULL SCALE **70** MPH?", go to Step 11.
If the message reads, "IS SPEED GAUGE AT FULL SCALE **90** MPH?", go to Step 12.
11. Click "NO." This will program the new speedometer calibration. When the calibration is completed a verification message will read "Set Gauge Calibration Unsuccessful," or "Set Gauge Calibration Successful." See **Fig. 4**.
If the verification message reads, "Set Gauge Calibration Unsuccessful," click NO again to retry the calibration.
If the verification message reads, "Set Gauge Calibration Successful," the speedometer is correctly programmed. Go to Step 13.
12. Click "YES." A verification will run to confirm the speedometer calibration is programmed correctly. See **Fig. 4**.
If the verification message reads, "Set Gauge Calibration Unsuccessful," go to Step 11 and repeat the process.
If the verification message reads, "Set Gauge Calibration Successful," the speedometer is correctly programmed. Go to Step 13.

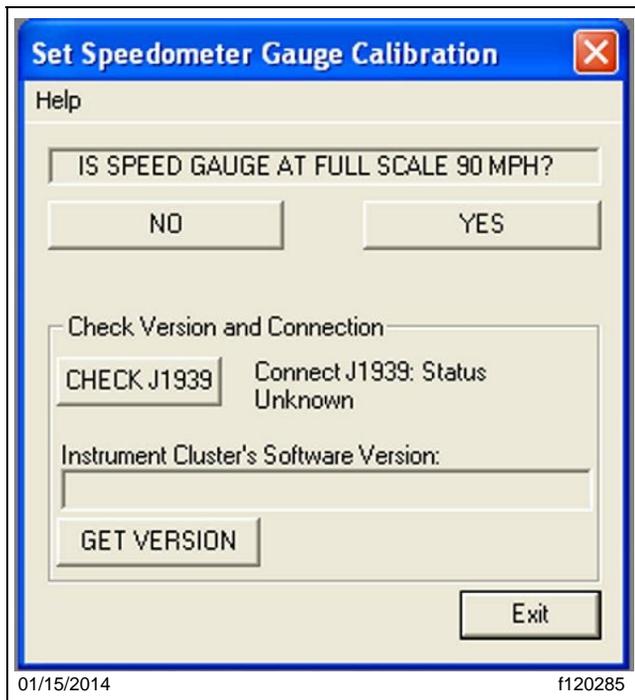


Fig. 3, Speedometer Gauge Calibration Screen

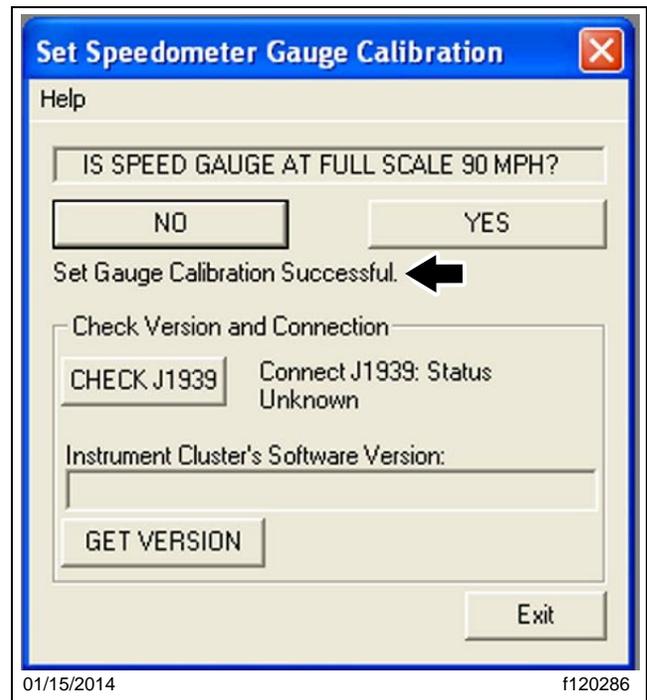


Fig. 4, Verifying the Speedometer Gauge Calibration

13. Remove the laptop connector from the diagnostic connector.
14. Clean a spot on the base label (Form WAR259), write the recall number FL658 on a completion sticker (Form WAR260), and attach it to the base label.