



SP 3-284-002
SERVICE PROGRAM

January, 2016

ATTENTION:

Service Managers / Parts Managers

SUBJECT:

Transmission Control Module (TCM) Shield.

DESCRIPTION OF WORK:

This Service Program provides information regarding the installation of the Transmission Control Module (TCM) shield on certain model year 2014-2015 Xpeditor vehicles with Cummins ISX engines.

PROGRAM EXPIRES:

December 31, 2016

VEHICLES AFFECTED:

This Service Program covers 271 vehicles. Refer to the VIN list beginning on page 8.

SERVICE RESPONSIBILITY:

This Service Program is performed on eligible vehicles and covers the cost of parts and shipping only (not labor). See CLAIMS FOR REIMBURSEMENT on page 2.

SERVICE PROGRAM INFORMATION:

Service Programs are product modifications and/or product improvements that Autocar has determined will enhance the operation of the truck. In a continuing effort to inform our customers of potential service issues and avoid unnecessary down time, Autocar has identified the following operation as recommended preventive maintenance.

This Service Program should be added to your preventive maintenance and service manuals.

While being committed to continuous product improvement, Autocar is not liable for updating existing chassis after they have been placed in service.

Questions regarding this Service Program should be directed to Autocar Technical Support at 888-218-3611.

TO OBTAIN PARTS:

Ensure that you have authorization from the customer to perform this work, and send an e-mail to:

warranty@autocartruck.com

Include:

1. VIN(s) (or) (last 6 digits of the VIN(s))
2. Attention To Name
3. Ship To Address.

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REQUIRED PARTS:

- (1) S2840001K003 TCM Shield kit
- (5) S2840005-001 Plug, Cavity
- (1) S2840014-001 Brace
- (1) S2840013-001 Shield, ISX
- (1) S2840002K002 Hardware kit
 - (1) S2840002-001 Cap
 - (2) GE410150AI16 Screw
 - (1) GE410131AX10 Screw
 - (2) GE286250BO01 Locknut
 - (1) GE286231BL01 Locknut
 - (3) GE410419CB07 # 10 Screw
 - (3) GE811619NS01 # 10 Washer

CLAIMS FOR REIMBURSEMENT:

Parts and shipping for this Service Program will be provided at no charge by Autocar. Labor for this Service Program will **not** be reimbursed by Autocar. Before proceeding, obtain permission from the vehicle's owner with the understanding the labor will be at the owner's expense.

CLAIM CODING INFORMATION:

N/A

REQUIRED TOOLS:

- 1/4" Drive ratchet
- 1/4" Drive 8mm socket
- 15/16" Combination wrench
- 1/2" Drive 15/16" socket
- 1/4" Drive 5/16" socket
- 1/2" Drive torque wrench (up to 200 ft.lb.)
- High strength thread locking compound (obtain locally)



WARNING

Allow the vehicle's engine and cooling system to cool to ambient temperature before performing the repair procedure. A hot engine or cooling assembly may cause burns or other personal injury.



WARNING

To prevent eye injury, always wear eye protection when performing vehicle maintenance, service or inspection.



WARNING

Before working on a vehicle, set the parking brake, place the transmission in neutral and block the wheels. Failure to do so can result in unexpected vehicle movement and can cause serious personal injury or death.



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SAFETY NOTICES



CAUTION

LOCKOUT/TAGOUT PROCEDURES

Before entering the vehicle or vehicle body, read and follow OSHA regulations concerning entry and working in “CONFINED SPACE” OSHA 1910.146 and “LOCKOUT/TAGOUT” OSHA 1910.147. Follow OSHA regulations while performing any work on the vehicle. The vehicle must be disabled by the following steps before performing any work on the vehicle:

1. Place the transmission in NEUTRAL.
2. Set the parking brake.
3. Shut the engine OFF.
4. Lock cab doors, keep the key in your pocket. Block the wheels before entering the body or performing any work on the vehicle.
5. Turn the battery disconnect switch OFF, if equipped.
6. Completely drain the air from the primary/A system and secondary/B system by opening the drain valves on the air tanks themselves or by using the drain manifold if supplied. When draining the air tanks, do not look into the area where air is draining. Dirt or sludge particles may be expelled in the air stream and can cause eye injury.
7. Place magnetic “DANGER” signs on both cab doors before entering the body or performing any work on the vehicle.
8. Take proper precautions before working under the vehicle. Use ramps approved for the weight of your vehicle, or use floor jacks and stands. Never work under a vehicle supported by jacks alone. Always use jack stands to support the vehicle.



WARNING

Autocar natural gas powered vehicles require specific compliance in the service, storage and refueling procedures.

If you store or dispense Compressed Natural Gas (CNG) or Liquid Natural Gas (LNG), or if you work on CNG or LNG trucks, your location must be fully compliant with applicable codes, regulations and standards, including National Fire Protection Association (NFPA) codes, Society of Automotive Engineers (SAE) standards, American National Standards Institute (ANSI), Natural Gas Vehicle (NGV) standards, the United States Code of Federal Regulations (CFR), and your state and local fire and other applicable codes (including the California Code of Regulations and the Texas Administrative Code, as applicable).

Contact your local fire department for guidance and additional compliance information. Technicians working on Autocar trucks with CNG or LNG engines must be trained in the proper repair of CNG and LNG engines and the safe storage and dispensing of CNG and LNG.

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Preparation For Installation Of The TCM Shield

1. Locate the transmission control module (TCM) under the cross member (see Figure 1).

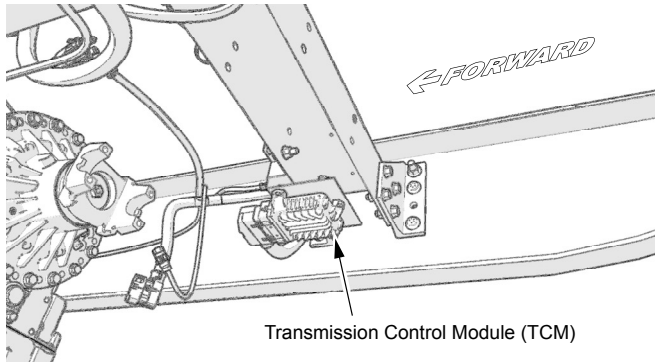


Figure 1, TCM Location

2. Remove the 4 screws that mount the TCM bracket to the cross member. Discard the 2 screws from the left side, and set aside the 2 screws from the right side for reinstallation (see Figure 2).

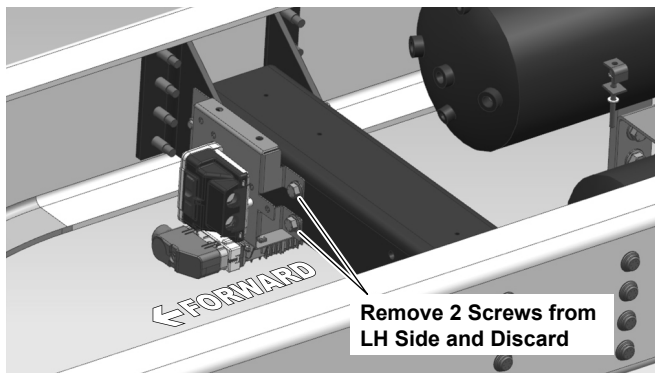


Figure 2, TCM Bracket

3. Leaving the TCM connected to the TCM bracket, lower the entire assembly away from the cross member.
4. Remove the TCM cover and unplug the TCM connector from the TCM. Inspect the connector for missing cavity plugs and replace with cavity plug (S2840005-001) as needed (see Figure 3).

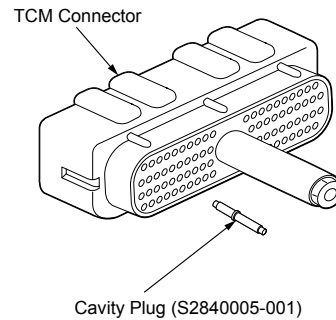


Figure 3, TCM Connector and Cavity Plug

5. Inspect the cavity plugs and the connector for any evidence of corrosion. If corrosion exists, clean the affected areas using a soft bristle brush and a mild solution of water and baking soda.
6. To facilitate the installation of the new TCM shield, cut all zip ties holding the air lines against the cross member.

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7. Remove the L-bracket that is mounted flush with the top of the cross member and set aside for reinstallation (see Figure 4).

Note: The L-bracket must be removed because the new TCM shield is 2 inches higher than the top of the cross member when mounted.

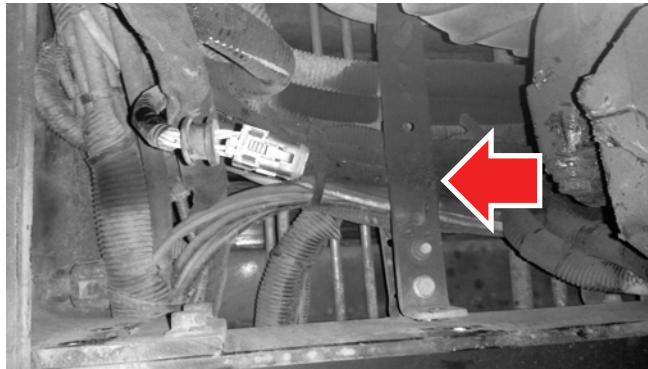


Figure 4, L-Bracket

8. Disconnect the battery cable clamp and set aside for reconnect (see Figure 5).

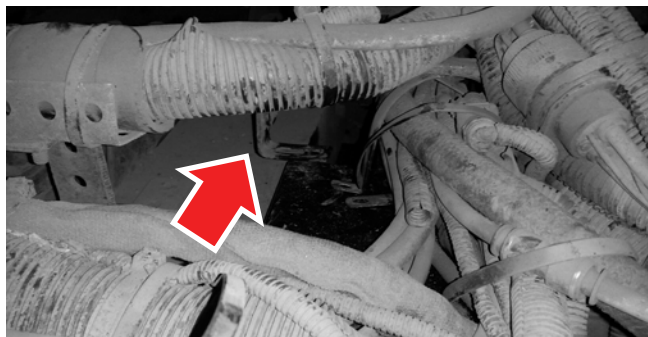


Figure 5, Battery Cable Clamp Disconnect

9. Disconnect the air line P-clamp and set aside for reinstallation (see Figure 6).

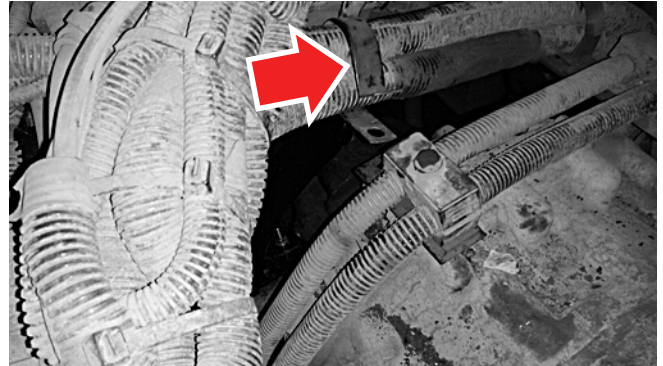


Figure 6, Air Line P-Clamp Disconnect

Note: Cut the zip ties holding the air lines to provide slack in the TCM connector wiring harness.

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Installation Of The TCM Shield

10. Install the TCM shield (S2840013-001) by sliding it up and behind the TCM and installing 1 screw (GE410150AI16) and 1 locknut (GE286250BO01) into the upper mounting hole. Tighten the locknut to 90 ft-lbs (122.0 Nm) of torque (see Figure 9).
11. Install the TCM shield brace (S2840014-001) with 1 screw (GE410131AX10) and 1 locknut (GE286231BL01) and tighten to 15 ft-lb (20.34 Nm) of torque. Install 1 screw (GE410150AI16) and 1 locknut (GE286250BO01) into the lower mounting hole and tighten the locknut to 90 ft-lbs (122.0 Nm) of torque (see Figure 9).
12. Reinstall the two screws, that were set aside in step 2, to the right side of the TCM assembly.
13. Reconnect the TCM connectors and reinstall the cover that was removed in step 4.
14. Install the TCM shield cap (S2840002-001) (see Figure 9).
15. Secure all air lines with zip ties.

Note: It may be necessary to raise the rear of the vehicle to gain access to air lines.

16. Reinstall the L-bracket that was removed in step 6. Position the L-bracket on the top of the TCM shield, close to its original position when it was mounted to the cross member.

Note: In order to reinstall the L-bracket some adjustments to the L-bracket may be required.

Note: Self tapping screws may be necessary to install the L-bracket to the top of the TCM shield if the pre-drilled holes in L-bracket do not line up with the holes in the TCM shield.

17. Reconnect the battery cable clamp, disconnected in step 7, to the adjusted L-bracket (see Figure 7).

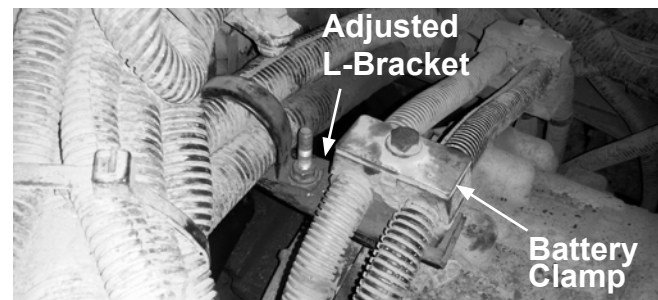


Figure 7, Battery Clamp Reconnect

18. Reconnect air line P-clamp (see Figure 8).

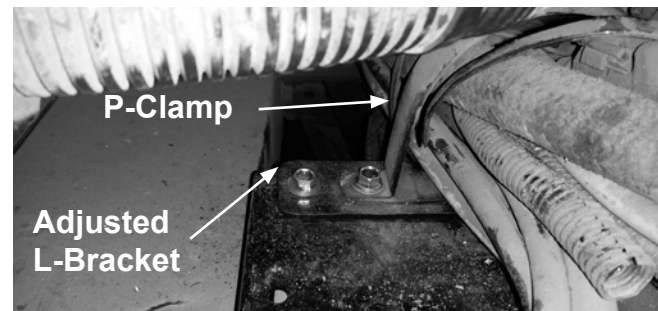


Figure 8, Air Line P-Clamp Reconnect

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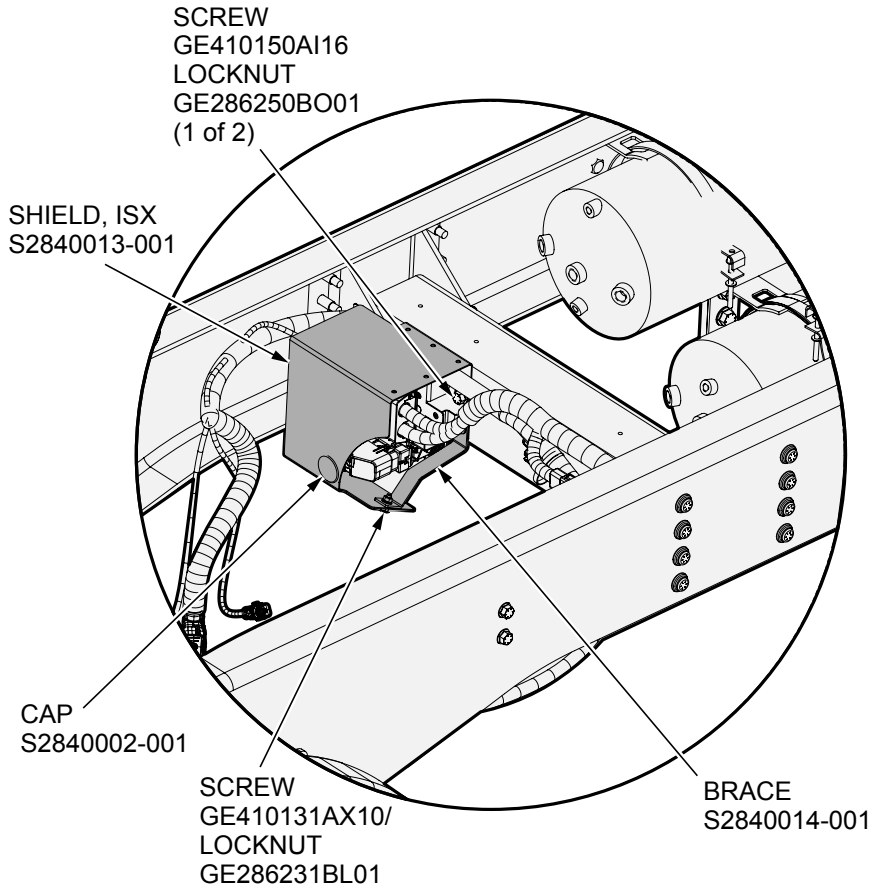


Figure 9, TCM Shield Installed

19. Installation of the TCM shield is complete.



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5VACLUF6EH216264	5VCACS7F4EH216818	5VACLUF1EH217600	5VCACSSF3FH218147
5VCACSUFXEH216410	5VCACS7F6EH216819	5VACLUF3EH217601	5VCACSSF5FH218148
5VCACSUF1EH216411	5VCACS7F2EH216820	5VACLUF5EH217602	5VCACDSF0FH218232
5VCACSUF3EH216412	5VCACS7F4EH216821	5VACLUF7EH217603	5VCACDUH8FH218333
5VCACSUF5EH216413	5VCACS7F6EH216822	5VCACDUF5EH217539	5VCACRUF8FH218294
5VCACSUF7EH216414	5VCACS7F8EH216823	5VCACDUF1EH217540	5VCACRUFXFH218295
5VCACSUF9EH216415	5VCACS7FXEH216824	5VCACDUF3EH217541	5VCACRUF5FH218317
5VCACSUF0EH216416	5VCACS7F1EH216825	5VCACDUF5EH217542	5VACL7F7FH218318
5VCACSUF2EH216417	5VCACS7F3EH216826	5VCACDUF7EH217543	5VACL7F9FH218319
5VCACSUF4EH216418	5VCACS7F5EH216827	5VCACDUF9EH217544	5VACL7F6FH218326
5VCACSUF6EH216419	5VCACS7F7EH216828	5VACL7FXEH217713	5VACL7F8FH218327
5VCACSUF2EH216420	5VCACS7F9EH216829	5VCACDSF8EH217716	5VACL7FXFH218328
5VCACSUF4EH216421	5VCACS7F5EH216830	5VCACDSFXEH217717	5VACL7F1FH218329
5VCACSUF6EH216422	5VCACS7F7EH216831	5VCACDSF1EH217718	5VACL7F8FH218330
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5VCACDUF4EH216771	5VACL7F1EH217034	5VCACSSF6EH217749	5VACL7F2FH218369
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5VCACS7F3EH216793	5VCACDUF8EH217017	5VCACSSF4EH217751	5VACL7F0FH218371
5VCACS7F5EH216794	5VCACSUF1EH217025	5VCACSSF6EH217752	5VACL7F2FH218372
5VCACS7F7EH216795	5VACL7F1EH217406	5VCACRUG2EH217763	5VACL7F4FH218373
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5VCACLSF0FH218385	5VCACRUF1FH218525	5VCACLUH1FH219026	5VCACLSF5FH219418
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