

General Information

EPA10 vehicles with a Detroit 1-Box aftertreatment device may experience engine-induced derate. If the MIL light illuminates, and the derate occurs in conjunction with engine-related fault codes, this condition may be due to wear or damage to the aftertreatment electrical harness. Use the instructions in this bulletin to inspect, and if necessary, replace the harness.

New service harnesses are available for EPA10 vehicles with Detroit 1-Box aftertreatment devices. The new harnesses feature friction tape and heat sleeves, instead of corrugated conduit. These harnesses also have additional length, to allow them to be routed along the back-of-cab crossmember.

EPA10 vehicles built before March 5, 2012, and equipped with a Detroit 1-Box aftertreatment device, require a single harness part number A66-02790-000 to replace factory installed ACM and DEF wiring on the chassis. Vehicles built on or after March 5, 2012 use part number A66-02790-001. Vehicles equipped with a 6-gallon DEF tank *also* require harness part number A66-02790-002 to adapt the 6-gallon tank to the main -000 or -001 harness.

Parts

See [Table 1](#) for a list of parts required for this procedure.

Parts		
Part Number	Description	Figure
A66-02790-000	Harness, vehicles built before March 5, 2012	—
A66-02790-001	Harness, vehicles built on or after March 5, 2012	—
A66-02790-002*	Harness, vehicles with a 6-gallon DEF tank	—
23-13482-005	Tie Strap, Fir-Tree	Fig. 3
TYC DCT110HIR	Cable Tie, Dual-Clamp	Fig. 4
23-12069-001	Cable Tie, Nylon	Fig. 6
23-13481-000	Tie Strap, Push-On	Fig. 7

* This harness is installed with the harness listed above, based on build date.

Table 1, Parts

Work Instructions

1. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
2. Inspect the aftertreatment harness.
 - 2.1 Check the harness around the area of the frame rail, the crossmember, and the air lines.
 - 2.2 Make sure that the harness is not worn through, and that the wires are not exposed or damaged.
 - 2.3 If the harness is damaged, continue with these instructions.
3. Disconnect the batteries.
4. Disconnect the harnesses from the ACM and the DEF tank, then remove the harnesses.
5. Route the new aftertreatment harness. See [Fig. 1](#). Make sure that there is no contact with sharp edges. See [Fig. 2](#) and [Fig. 3](#).
6. Secure the harness away from the air lines using part number TYC DCT110HIR. See [Fig. 4](#).

7. Loop any excess harness and secure. See **Fig. 5**.
8. Secure the harness in the crossmember, including any excess, using nylon cable ties, part number 23-12069-001. See **Fig. 6**.
9. Secure the harness at the DEF tank and the pump brackets using part number 23-13481-000. See **Fig. 7**. Allow enough slack to account for transmission movement. See **Fig. 8**.

Warranty

This procedure is warrantable only if the described condition exists and the repair is performed within the applicable base or extended coverage warranty period. If a failure is not found, this procedure is considered preventive and warranty does not apply.

Normal warranty applies. See **Table 2** for OWL VMRS codes and labor allowance information. Enter this service bulletin number in the *Service Bulletin #* field.

OWL VMRS Codes and Labor Allowance					
Primary Failed Part	Component Code	Cause Code	SRT Code	Description	Time: Hours
A66-02790-000 or A66-02790-001	043-006-010	08	28F-5005A	Aftertreatment Harness, Modification	1.2

Table 2, OWL VMRS Codes and Labor Allowance

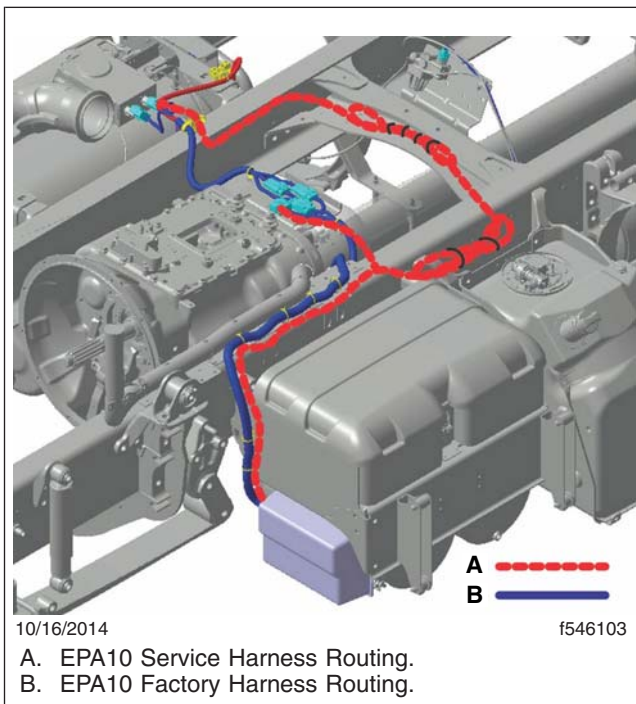


Fig. 1, Aftertreatment Harness Routing

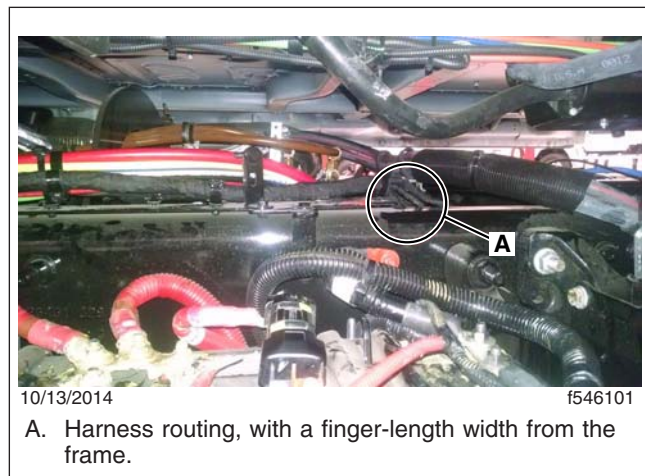


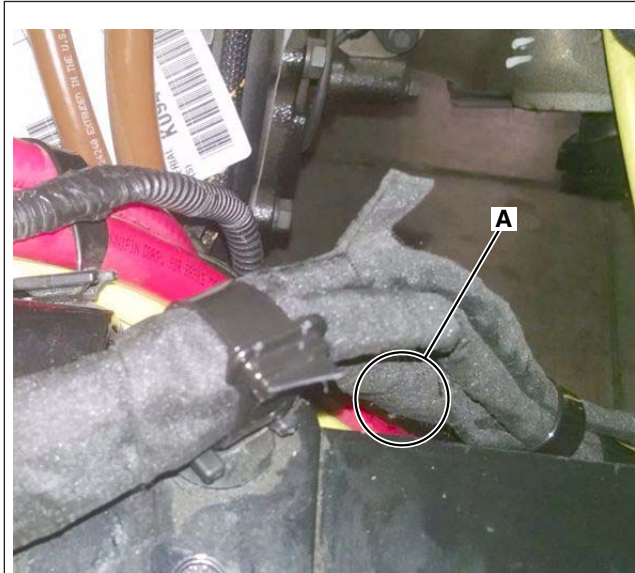
Fig. 2, Aftertreatment Harness Routed Along the Frame

Constellation
Heritage

> 4700 Models
> 4800 Models

> 4900 Models
> 6900 Models

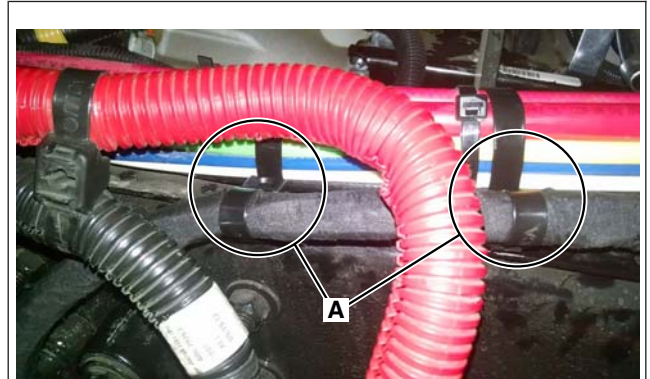
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10/08/2014 f546095

A. There must be at least a finger width between the harness and the frame.

Fig. 3, Aftertreatment Harness Installed Away from the Frame



10/13/2014 f546098

A. Harness secured away from the air line using dual-clamp cable ties, part number TYC DCT110HIR.

Fig. 4, Secure the Harness



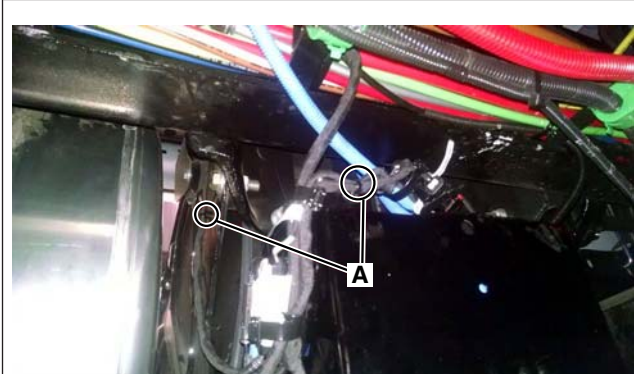
10/13/2014 f546097

Fig. 5, Excess Harness Secured



10/13/2014 f546099

Fig. 6, Harness Secured in the Crossmember with nylon Cable Ties, Part Number 23-12069-001



10/13/2014

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- A. Use push-on tie straps, part number 23-13481-000, to secure the harness.

Fig. 7, Harness Secured at the DEF Tank



10/13/2014

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- A. Allow enough slack to account for transmission movement.

Fig. 8, Securing Excess Harness