

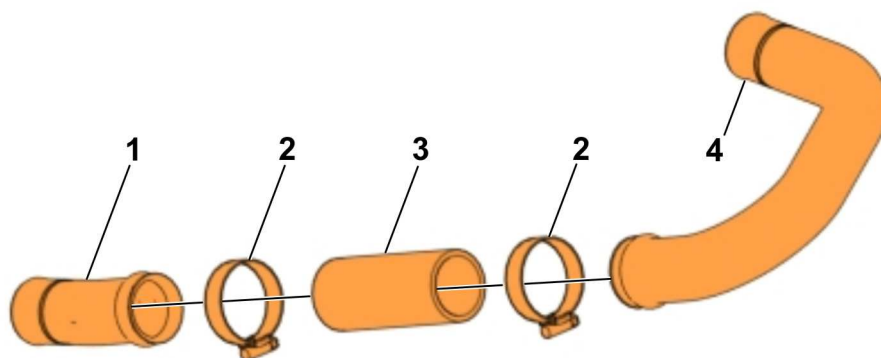


## Coolant Hose, EGR Cooler, Replacement MP10 US2010 TD

### PI0824, Coolant Hose, EGR Cooler, Replacement

(August 2013)

Mack Trucks has authorized replacement of the EGR cooler outlet coolant hose assembly on vehicles built between 03/10/2010 and 01/23/2013 with MACK MP10 US2010 engines. Approximately 215 vehicles are involved in this campaign. The EGR cooler outlet coolant hose assembly must be changed on all vehicles involved in this campaign. Before proceeding, verify campaign eligibility by checking Service Program status in eWarranty.



W2083412

#### Parts List

| Item Number | Description | Part Number | Quantity |
|-------------|-------------|-------------|----------|
| 1           | Tube        | 22007047    | 1        |
| 2           | Hose Clamp  | 11059296    | 2        |
| 3           | Hose        | 22006847    | 1        |
| 4           | Pipe        | 22022818    | 1        |

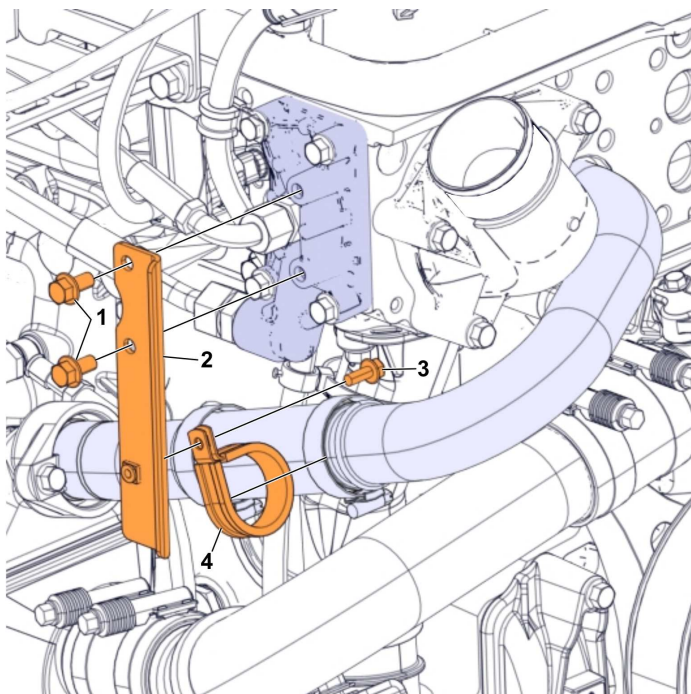
## Procedure

You must read and understand the precautions and guidelines in Service Information, Function Group 20, Engine Safety Practices, before performing this procedure. If you are not properly trained and certified in this procedure, ask your supervisor for training before you perform it.

- 1 Secure the vehicle for service by parking it on a flat level surface, applying the parking brake, chocking the rear wheels, and placing the transmission in neutral or park.
- 2 Disconnect all cables from the negative (ground) battery terminals to prevent personal injury from electrical shock and prevent damage to electrical components
- 3 Raise hood.
- 4 Drain the coolant from the radiator and engine using the coolant extractor (2815-2V700 or 85112740).

**Note:** An alternate method is to connect the drain hose (9996049) to the drain fitting and drain the coolant.

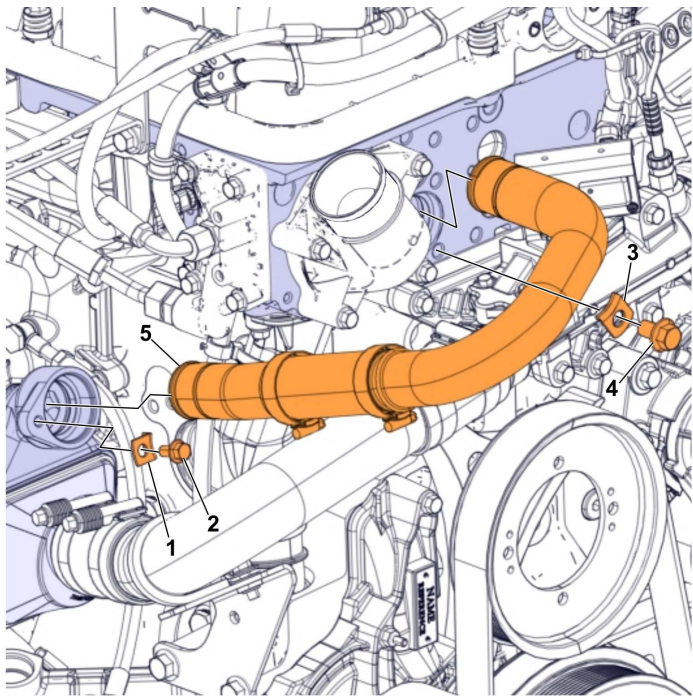
- 5 Remove the fastener and P-clamp securing the EGR cooler coolant outlet hose assembly to the support bracket. Remove the fasteners and support bracket.



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|   |                          |
|---|--------------------------|
| 1 | Support Bracket Fastener |
| 2 | Support Bracket          |
| 3 | P-clamp Fastener         |
| 4 | P-clamp                  |

- 6 Remove the fasteners and clamps securing the hose assembly to the EGR cooler and cylinder head. Remove the clamps, tube, pipe and hose as an assembly.

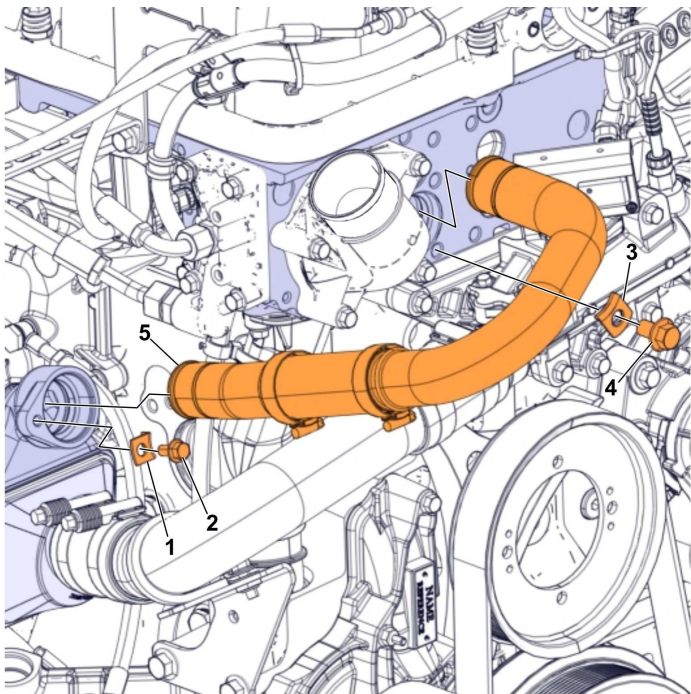


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|   |               |
|---|---------------|
| 1 | Clamp         |
| 2 | M8 Fastener   |
| 3 | Clamp         |
| 4 | M10 Fastener  |
| 5 | Hose Assembly |

- 7 Using the previously removed hose assembly as a template, assemble the new tube, hose, pipe and clamps ensuring the correct orientation is maintained. The punch mark on the tube must align with the fastener hole on the EGR cooler coolant outlet port. Align the hose to the marked stripes on the tube and pipe. There must be rubber on both sides of the hose clamps. Tighten the hose clamps snugly.

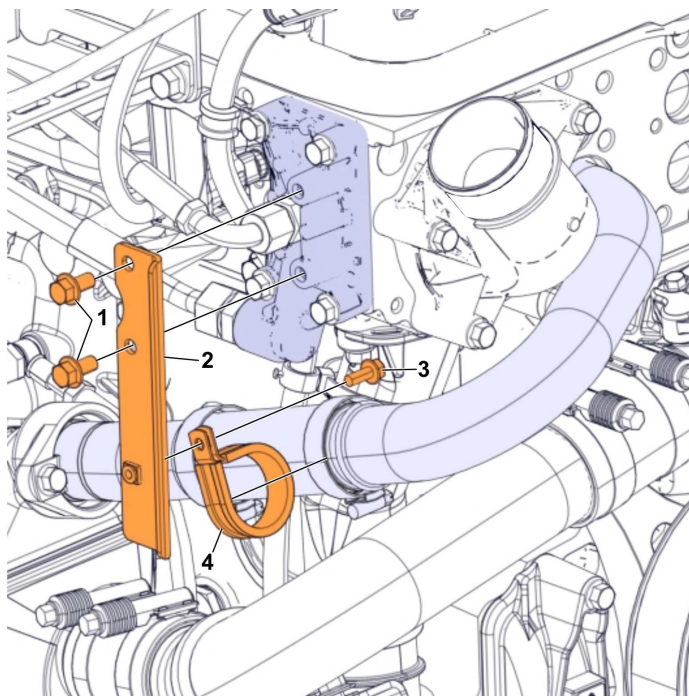
- 8 Using new seals, position the hose assembly on the engine. Push the tube all the way into the EGR cooler coolant outlet port. Install the clamps and fasteners securing the hose assembly to the EGR cooler and cylinder head. It may be necessary to lift upwards on the front section of the hose assembly to allow clearance for the fastener. Tighten M8 clamp fastener to  $24 \pm 4$  Nm ( $18 \pm 3$  ft-lb) and the M10 clamp fastener to  $48 \pm 8$  Nm ( $35 \pm 6$  ft-lb).



W2083411

|   |               |
|---|---------------|
| 1 | Clamp         |
| 2 | M8 Fastener   |
| 3 | Clamp         |
| 4 | M10 Fastener  |
| 5 | Hose Assembly |

- 9 Position the P-clamp on the hose assembly. Loosely install the P-clamp and fastener to the support bracket before securing the bracket. Install the fasteners securing the support bracket.



W2083410

|   |                          |
|---|--------------------------|
| 1 | Support Bracket Fastener |
| 2 | Support Bracket          |
| 3 | P-clamp Fastener         |
| 4 | P-clamp                  |

- 10 Tighten the hose clamps to  $5.5 \pm 0.5$  Nm ( $50 \pm 4$  lb-in).
- 11 Tighten the P-clamp fastener and support bracket fasteners to  $24 \pm 4$  Nm ( $18 \pm 3$  ft-lb).
- 12 Use coolant extractor (2815-2V700 or 85112740) to fill the system with approved coolant.
- 13 Install all previously removed cables to the ground (negative) battery terminals.
- 14 Start the engine. Check for proper operation and leaks.
- 15 Close hood.

**Reimbursement**

|                                                                                                                                  |                             |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| <b>This repair is covered by an authorized Service Program. Reimbursement is obtained via the normal claim handling process.</b> |                             |
| <b>Claim Type (used only when uploading from the Dealer Bus. Sys.)</b>                                                           | 41                          |
| <b>Recall Status</b>                                                                                                             |                             |
| Vehicle inspected, repair not required                                                                                           | 1- Inspected OK             |
| Vehicle repaired per instruction                                                                                                 | 2- Modified per instruction |
| <b>Labor Code</b>                                                                                                                |                             |
| Primary Labor Code                                                                                                               | 2351W-38-96 — 1.2 hrs.      |
| Time to take charge and determine campaign status                                                                                | 101AA-0A- 00 — 0.3 hrs      |
| <b>Causal Part</b>                                                                                                               | 21619428                    |
| <b>Parts Disposition</b>                                                                                                         |                             |
| All parts to be scraped locally                                                                                                  |                             |
| <b>Authorization Number</b>                                                                                                      | PI0824                      |
| <b>Expiration Date</b>                                                                                                           | 31-January-14               |

**Note:** Take Charge Time is not included in the Labor Code for this operation. Take charge may be eligible but can only be used once per repair visit. If vehicle is having other warranty repairs performed, take charge should be charged to the warranty repair, otherwise take charge can be charged to this service program.