

NUMBER: 09-004-16

GROUP: Engine

DATE: March 03, 2016

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THIS SERVICE BULLETIN IS ALSO BEING RELEASED AS RAPID RESPONSE TRANSMITTAL (RRT) 16-023. ALL APPLICABLE SOLD AND UN-SOLD RRT VIN'S HAVE BEEN LOADED. TO VERIFY THAT THIS RRT SERVICE ACTION IS APPLICABLE TO THE VEHICLE, USE VIP OR PERFORM A VIN SEARCH IN TECHCONNECT. ALL REPAIRS ARE REIMBURSABLE WITHIN THE PROVISIONS OF WARRANTY.

SUBJECT:

Cummins Service Engine Replacement

OVERVIEW:

This bulletin involves replacing the engine assembly.

MODELS:

| 2013 - 2015 | (DJ) | RAM 2500 Pickup |
|-------------|------|---------------------------|
| 2012 - 2015 | (D2) | RAM 3500 Pickup |
| 2013 - 2015 | (DD) | RAM 3500 Cab Chassis |
| 2013 - 2015 | (DP) | RAM 4500/5500 Cab Chassis |

NOTE: This bulletin applies to vehicles within the following markets/countries: NAFTA and LATAM.

NOTE: This bulletin applies to vehicles equipped with 6.7L I6 Cummins Turbo Diesel Engine (Sales Code ETK).

SYMPTOM/CONDITION:

Remanufactured long block or short block was installed during a prior repair. A new replacement engine will be installed.

DIAGNOSIS:

If a customer's VIN is listed in VIP or your RRT VIN list, The customer call center agent will provide the customer with the RRT# to perform the repair.

- 1. The customer will provide the RRT# given by the customer call center agent.
- 2. The service advisor can confirm that the customer's vehicle is part of the field service action by the VIN "To Do List" which will be published on DealerConnect.
- 3. After confirmation the dealer will need to schedule a repair time with the customer.

- 4. Does the customer want the engine assembly installed?
 - a. YES>>> Continue with Step #5.
 - b. NO>>> This bulletin has been completed, use LOP (09-01-01-9F) to close the active RRT.

NOTE: The engine shipment will take 3-5 days

- 5. While the customer is still at the dealership, the service advisor needs to gather the below listed images from the vehicle, to submit a Powertrain Service Center (PSC) Digital Imaging Request In DealerConnect. This will then trigger and engine ordering process.
 - Door VIN tag image.
 - Under hood image.
 - Engine data tag image.
 - Odometer image.
- 6. After gathering the above information, the dealership will need to submit a Digital Imaging Request using the above information.
- 7. The dealership will need to provide the information listed below, on the digital imaging report.
 - Parts serial number image (insert engine data tag image).
 - Odometer image (insert vehicle odometer image).
 - Diagnostic check sheet (type in the RRT# and attach).
 - Repair/replace worksheet (add coolant and the lop and attach).
 - Affected area image 1 (insert door VIN tag image).
 - Affected area image 2 (insert vehicle under hood image).
 - Complete the remainder of the digital imaging document (dealer info, mileage, etc.).
- 8. Submit documents and set up appointment for repair procedure.

PARTS REQUIRED:

| Qty. | Part No. | Description |
|------|--|----------------------|
| 1 | N/A | Engine Assembly |
| 1 | 68071676AA | Gasket, Exhaust Pipe |
| (AR) | 1 Gallon - 68163848AA (concentrate) 68163849AA (50/50) | Engine Coolant |
| 1 | 52121859AD | Clamp, Exhaust |

REPAIR PROCEDURE:

Replace the engine assembly. Refer to the detailed service procedures available in DealerCONNECT> TechCONNECT under: Service Info> 09 - Engine, 6.7L Diesel> Removal/Installation.

- 1. While engine is removed from chassis, the ECM and the F-Pipe will need to be transferred from the original engine to the replacement engine.
- 2. Is the vehicle a Cab Chassis?
 - a. YES>>> Continue with Step #3.
 - b. NO>>> Continue with Step #18.

3. Remove the banjo bolt securing the coolant vent hoses and cab heater return hose (Fig. 1).



Fig. 1 Hoses

- 1 Coolant Vent Hose Banjo Bolt
- 2 Cab Heater Return Hose

09-004-16 -4-

4. Remove turbo coolant return hose and bolt at the Exhaust Gas Recirculation (EGR) cooler (Fig. 2).

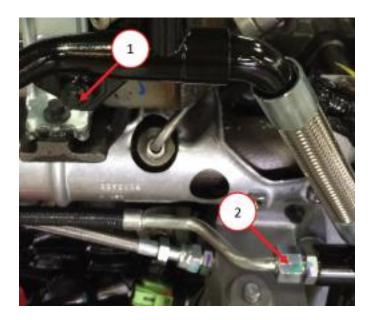


Fig. 2 EGR Cooler-Bolt

- 1 EGR Cooler
- 2 Turbo Coolant Return Hose
- 5. Remove EGR cooler outlet tube from the EGR cooler.
- 6. Remove EGR cooler outlet tube from the cooler inlet connection

7. Remove reservoir return hose (Fig. 3).



Fig. 3 Reservoir and Return Hoses

1 - Reservoir Return Hose

8. Remove bolt at the coolant inlet connection (Fig. 4).

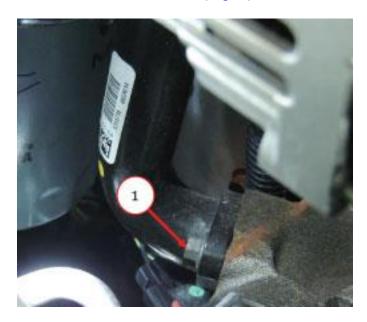


Fig. 4 Coolant Inlet

1 - Coolant Inlet Bolt

9. Installation is reverse of removal.

09-004-16 -6-

NOTE: Inspect EGR cooler outlet tube for any damages from removal of previous engine.

NOTE: O-rings need to be lubricated with P-80 or vegetable oil.

- 10. Install bolt at the coolant inlet and torque to 10 N·m (89 in. lbs.).
- 11. Connect reservoir return hose.
- 12. Install the coolant outlet tube into the EGR cooler.
- 13. Install EGR coolant inlet connection into the EGR cooler.
- 14. Install bolt at EGR cooler and torque to 10 N·m (89 in. lbs.).
- 15. Connect turbo coolant return hose.
- 16. Connect cab heater return hose.
- 17. Install banjo bolt with new sealing washers on to coolant outlet tube and torque to 15 N⋅m (11 ft. lbs.). Proceed to Step #32.
- 18. Remove coolant vent hose, cab heater return hose and bolt to EGR cooler (Fig. 5).

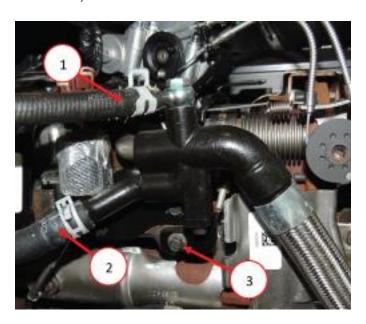


Fig. 5 EGR Cooler

- 1 Coolant Vent Hose
- 2 Cab Heater Return Hose
- 3 EGR Cooler Bolt

19. Remove reservoir return hose and turbo coolant return hose (Fig. 6).



Fig. 6 Return Hoses

- 1 Reservoir Return Hose
- 2 Turbo Coolant Return Hose

20. Remove bolt at coolant inlet (Fig. 7).

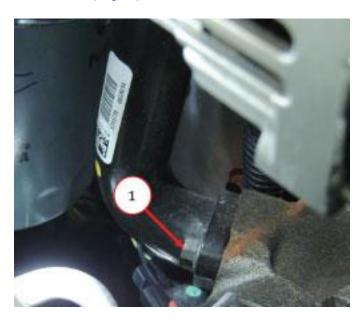


Fig. 7 Coolant Inlet

^{1 -} Coolant Inlet Bolt

09-004-16 -8-

- 22. Remove EGR outlet tube from coolant inlet housing.
- 23. Installation is reverse of removal.

NOTE: Inspect EGR cooler outlet tube for any damages from removal of previous engine.

NOTE: O-rings need to be lubricated with P-80 or vegetable oil.

- 24. Install EGR water outlet tube into the water inlet housing.
- 25. Install the EGR cooler water outlet tube to the EGR cooler.
- 26. Install bolt at the water inlet and torque to 10 N·m (89 in. lbs).
- 27. Connect Turbo Coolant Return Line.
- 28. Connect reservoir return hose.
- 29. Install bolt to EGR cooler and torque to 9.5 N·m (84 in. lbs).
- 30. Connect cab heater return hose.
- 31. Connect coolant vent hose.
- 32. Install air inlet tube to turbo charger.
- 33. Install the air cleaner body (DealerCONNECT> TechCONNECT under: Service Info> 09 Engine/Air Intake System/BODY, Air Cleaner Installation).
- 34. Connect negative battery cables.
- 35. Fill engine coolant (DealerCONNECT> TechCONNECT under: Service Info> 07 Cooling Standard Procedure) .
- 36. Check the cooling system for leaks and proper operation.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

| Labor Operation No: | Description | Skill Category | Amount |
|---------------------|--|----------------|-----------|
| 09-01-01-9F | Inspect for Engine Assembly Replacement (0 - Introduction) | 10 - Diesel | 0.2 Hrs. |
| 09-01-01-9G | Engine assembly - Replace (3 - Skilled) | 10 - Diesel | 15.5 Hrs. |

FAILURE CODE:

| ZZ | Service Action |
|----|----------------|
|----|----------------|