

Technical Service Bulletin (TSB)
Coolant Contamination / Coolant System Flush

REFERENCE:	TSB: 07-007-24 GROUP: 07 - Cooling	Date:	August 17, 2024	REVISION:	
VEHICLES AFFECTED:	2023 - 2024 (DS) RAM 1500 Pickup This bulletin applies to vehicles built on and after June 01, 2023 (MDH 0601XX) and on and before February 16, 2024 (MDH 0216XX) equipped with a 3.6L V6 24V VVT Engine (Sales Code ERB).	MARKET APPLICABILITY:			
		<input checked="" type="checkbox"/> NA <input type="checkbox"/> MEA <input type="checkbox"/> SA <input type="checkbox"/> IAP <input type="checkbox"/> EE <input type="checkbox"/> CH			
CUSTOMER SYMPTOM:	Customers must experience a Malfunction Indicator Lamp (MIL) illumination and the vehicle must exhibit/set the following Diagnostic Trouble Code (DTC): <ul style="list-style-type: none"> • P26A3 - Engine Coolant Bypass Valve A Range-Performance. 				
CAUSE:	Contamination from stop leak pellets causing valve failure				

REPAIR SUMMARY:

This bulletin involves flushing the cooling system and replacing the Three-way coolant valve.

CLAIMS DATA:

Labor Operation No:	Labor Description	Skill Category	Labor Time
07-46-01-96	Coolant Valve, 3 Way - Replace, Includes Circuit Test and Power Flush Procedure (1 - Semi-Skilled)	7 - Cooling	1.2 Hrs.
Failure Code	ZZ	Service Action	

SPARE PARTS:

Qty	Part No.	Description	Notes
1	52014892AC	Valve, Coolant 3-Way	
(AR)	68163849AB	Engine Coolant	

DIAGNOSIS:

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in DealerCONNECT/ Service Library, verify all related systems are functioning as designed. If DTCs or symptom conditions, other than the one listed are present, record the issues on the repair order and repair as necessary before proceeding further with this bulletin.

SPECIAL TOOLS/EQUIPMENT:

Description	Ref. No.	Notes
wiTECH or Equivalent	–	–

REPAIR PROCEDURE:

1. Scan for other DTCs.
2. Are there any other LIN BUS DTCs?
 - YES>>> Perform the additional diagnostic procedures. Then proceed to [Step 3](#).
 - NO>>> Proceed to [Step 3](#).
3. Disconnect the Three-Way Valve harness connector. Check the (Z908) ground circuit for high resistance by load testing the circuit. Refer to the detailed service procedures listed in DealerCONNECT>Service Library>Service Info>under: 29 - Non-DTC Diagnostics / Circuit Testing Procedures / Standard Procedure.
4. Did the harness circuit pass the load test?
 - YES>>> Proceed to [Step 5](#).
 - NO>>> Repair the ground circuit and perform the Powertrain Verification Test. Refer to the detailed service procedures listed in DealerCONNECT>Service Library>Service Info>under: 28 - DTC Based Diagnostics /Module, Powertrain Control (PCM) - Standard Procedure.
5. Drain the cooling system and dispose of the coolant. Refer to the detailed service procedures listed in DealerCONNECT>Service Library>Service Info>under: 09 - Engine, 3.6L / Cooling System / Engine Cooling / Standard Procedure / Cooling System Draining. Do not reuse as this will re-introduce the impurities that may have caused the valve failure.
6. Backflush Auxiliary Heat Exchangers (Heater Core, Transmission Oil Heater, Engine Oil Cooler) by disconnecting hoses at the Three-Way Valve and the water pump [Fig. 1](#).

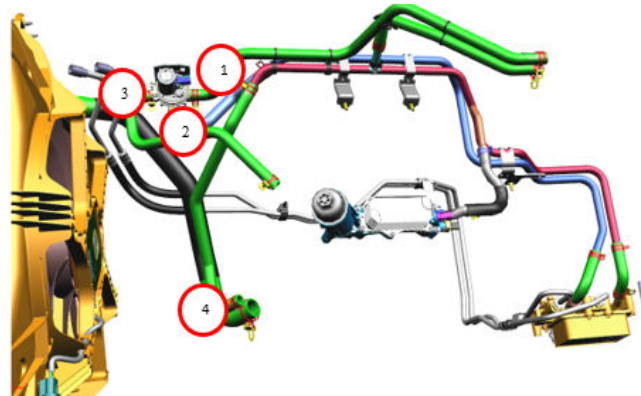


Fig. 1
Cooling System

- 1 - Heater Core Supply
- 2 - Transmission Oil Heater Supply
- 3 - Three way Valve Coolant Inlet
- 4 - Auxiliary Heater Exchange Return Hose

- Pressure flush from the location at hose four with a pressure no greater than 138 KPA (20 PSI).

CAUTION!!

Do not exceed 138 KPA (20 PSI) when flushing.

- Continue flushing with bursts of pressure until fluid runs out clear from all hoses.
- Block connections one, two and three (pinch hoses shut or plug with caps) and insert the flushing gun into hose four again. Flush with pressure from this point only while allowing drainage from point five (water pump) [Fig. 2](#).
- Leaving connections one, two, three and four DISCONNECTED, disconnect points five and six to perform a reverse flush of the radiator [Fig. 2](#).
- Insert the flushing gun into connection five hose to flush the radiator. Flush from this point only while allowing drainage from point six [Fig. 2](#).
- Reconnect hose five, disconnect hose seven, and insert flushing tool into hose seven to complete the engine flush.

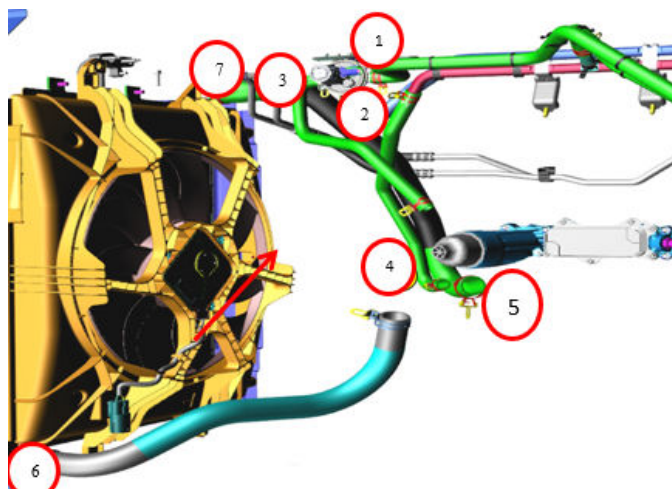


Fig. 2
Flush Points

- 1 - Heater Core Supply
- 2 - Transmission Oil Heater Supply
- 3 - Three way Valve Coolant Inlet
- 4 - Auxiliary Heater Exchange Return Hose
- 5 - Lower Radiator Hose At Water Pump
- 6 - Upper Radiator Hose At Radiator
- 7 - Lower Radiator Hose At Radiator

- Replace the Three-way coolant valve. Refer to the detailed service procedures listed in DealerCONNECT>Service Library under: 07 - Differential and Driveline / Valves / Removal and Installation / Three-Way Coolant Valve.
- Refill system with **NEW** coolant. Refer to the detailed service procedures listed in DealerCONNECT>Service Library under: 09 - Engine, 3.6L / Cooling System / Engine Cooling / Standard Procedure / Cooling System Fill.
- Clear all DTCs that have been set.

POLICY:

Reimbursable within the provisions of the warranty.

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