

**IMPORTANT SERVICE
INFORMATION FOR:**
 ✓ SERVICE MANAGER
 ✓ SERVICE ADVISOR
 ✓ TECHNICIAN

BULLETIN NUMBER:
SB09-J-002C

ISSUE DATE:
MARCH 2012

GROUP:
 ENGINE

EGR COOLER PRESSURE TESTER TO DIAGNOSE ISUZU DIESEL ENGINE EGR COOLER LEAKS

AFFECTED VEHICLES

- 2005-2013MY Isuzu N-Series
- 2005-2010MY GMC and Chevrolet W-Series
- 2007-2009MY Isuzu F-Series
- 2007-2009MY GMC and Chevrolet T and C-Series 6HK1
Equipped with Diesel Engines with an EGR Cooler

This bulletin supersedes bulletin SB09-J-002B. This bulletin is updated to revised Model Years. Please discard Service Bulletin SB09-J-002B.

INFORMATION

An EGR cooler tester was shipped essential to dealers in June 2009 to diagnose EGR cooler leaks on all Isuzu diesel engines equipped with an EGR cooler. This tester consists of a pressure regulator assembly J-46091-1 and adapter EN-48974-5/EN-48974-15. One adapter will fit the 5.2L EGR cooler while the other will fit the 7.8L.

Important: *Leaks from the EGR cooler may allow coolant to pass through the exhaust system and enter the combustion chambers. Failure to inspect the EGR cooler for leaks may lead to a misdiagnosis for engine coolant in the combustion chamber.*

Important: *Leaks from the EGR cooler may allow exhaust gas air to pass to the engine coolant passage within the EGR cooler. Failure to inspect the EGR cooler for leaks may lead to a misdiagnosis of air in the engine cooling system.*



EGR Cooler Pressure Tester

J-46091-1 – EGR Cooler Tester Pressure Regulator Assembly

EN-48974-5 – EGR Cooler Tester Adapter (5/8 inch for 5.2L)

EN-48974-15 – EGR Cooler Tester Adapter (17 mm for 7.8L).

SERVICE PROCEDURE

EGR Cooler Testing

1. Partially drain the engine coolant to allow EGR cooler hose removal.
2. With the cooler on the engine, install the end cap and clamp of EN-48974 (EGR cooler tester adapter) to one of the EGR cooler hose barbs and install the pressure tester adapter hose and clamp to the other EGR cooler hose barb.
3. Back off the regulator on the J-46091-1 (EGR cooler pressure regulator assembly) by turning the knob counterclockwise until it stops.
4. Connect J-46091-1 to EN-48974, and connect 90 PSI shop air to J-46091-1.
5. Open the shutoff valve, and then slowly turn the regulator on J-46091-1 clockwise until the gauge reads 30 psi.
6. Shut off the valve on J-46091-1 and monitor the gauge for leak down. Remove the EGR cooler if it does not hold pressure.
7. If the EGR cooler does not hold pressure, redo Steps 5 and 6 with the EGR cooler submerged in water. After placing the EGR cooler under water, shake and rotate the cooler for approximately 1 minute to ensure all air bubbles escape from the exhaust gas passage before testing. With the pressure set to 30 psi watch for air bubbles. Watch for at least 1 minute. This is done to ensure the EGR cooler is leaking and not the EGR cooler tester.

Note: Not removing this trapped air may result in missed diagnosis.



Rotate Cooler to release trapped air



Shake Cooler to release trapped air