

ISUZU

**IMPORTANT SERVICE
INFORMATION FOR:**

- ✓ SERVICE MANAGER
- ✓ SERVICE ADVISOR
- ✓ TECHNICIAN
- ✓ PARTS DEPARTMENT
- ✓ WARRANTY PERSONNEL

BULLETIN NUMBER:
SB09-J-002F

ISSUE DATE:
DECEMBER 2020

GROUP:
ENGINE

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

AFFECTED VEHICLES

- 2005MY- Current Isuzu N-Series
- 2011-2018MY NPR Stripped Chassis (Reach)
- 2005-2010MY GMC and Chevrolet W-Series
- 2007i-2009MY Isuzu F-Series
- 2018MY-Current Isuzu F-Series
- 2007i-2009MY GMC and Chevrolet T and C-Series 6HK1
Equipped with Diesel Engines with an EGR Cooler

This bulletin supersedes SB09-J-002E. This bulletin is being revised to update model years and content. Please discard previous bulletin SB09-J-002E.

INFORMATION

An EGR cooler tester was provided 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 adapters EN-48974-5, EN-48974-15, and EN-48974-30.

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 2005-2007 5.2L,

2007-2009 7.8L, 2011-2018 3.0L)
EN-48974-15 – EGR Cooler Tester Adapter (17 mm for 2007i-2010 5.2L)
EN-48974-30 – EGR Cooler Tester Adapter (1 inch for 2011-Current 5.2L)

SERVICE PROCEDURE

EGR Cooler Testing

1. Partially drain the engine coolant and remove the EGR cooler hoses.
2. With the cooler on the engine, install the end cap and clamp of EN-48974 (EGR cooler tester adapter) on 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 very warm water (which allows the EGR cooler to expand). After placing the EGR cooler under very warm 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