



**IMPORTANT SERVICE
INFORMATION FOR:**

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

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GROUP:
ENGINE

POSSIBLE CAUSES FOR ENGINE OIL DILUTED WITH DIESEL FUEL

AFFECTED VEHICLES

- 2005MY - Current Isuzu N-Series
- 2005-2010MY GMC and Chevrolet W-Series
Equipped with 4HK1 5.2L Diesel Engine
- 1999-2009MY Isuzu F/H Series
- 1999-2009MY GMC and Chevrolet C/T Series
Equipped with 6HK1 7.8L Diesel Engine
- 2011MY -Current NPR/NPR Stripped Chassis (Reach)
Equipped with 4JJ1 3.0L Diesel Engine

INFORMATION

Isuzu Motors Limited has analyzed failed engines and determined that engine oil diluted with diesel fuel is a cause of some engine failures. If the engine oil level is high, the oil may be diluted with diesel fuel. This bulletin is being issued to advise dealers of possible reasons that engine oil may be overfull or diluted with diesel fuel.

1. Engine oil is overfilled during maintenance.

Refer to figure 1 for correct oil level on a dipstick.



Figure 1.

When refilling the engine oil, refer to the Workshop Manual (WSM) for the oil capacity of the engine you are servicing. Fill the engine with about 80% of the oil capacity. Start the engine to allow the oil filter to fill. Turn the engine off and allow the oil to drain down for several minutes, then check the dipstick. Continue to add oil as necessary to bring the level up to the full mark on the dipstick.

Note: On 2007-2010MY Models equipped with 4HK1 engines, refer to TSB SB09-J-006, “Oil Related Misdiagnosis – Engine Oil Dipstick Calibration Incorrect,” to ensure the correct dipstick is used.

2. Fuel tank fill and vent hoses are kinked during temporary transport or during vehicle upfit.

If the fuel tank fill and vent hoses are kinked, a vacuum will build up inside the fuel tank while the engine is running. This condition may cause the fuel tank to contract, potentially blocking off the fuel return line at the bottom of the fuel tank. This, in turn, will increase fuel pressure in the fuel return line, causing the fuel pump seal to release fuel into the crankcase.

Refer to figure 2 for an illustration of improperly installed and kinked fuel tank fill and vent hoses during transport.



Figure 2.

3. Restricted fuel return line

A restricted fuel return line between the engine and the fuel tank will increase fuel pressure in the fuel return line, causing the fuel pump seal to fail releasing fuel into the crankcase. Check the upfit installation to ensure that a fuel return line has not been crushed or kinked.

4. Incorrect installation of high pressure injector lines.

Lines can become damaged if improperly handled or improperly aligned during installation. Isuzu recommends that all high pressure fuel injection lines be replaced any time they are removed. Please follow the Workshop Manual procedure to make certain new lines are aligned and torqued properly.

Note: Any time a high pressure fuel injector line is replaced, the oil level should be measured and recorded before the vehicle is driven. A rise in oil level after a repair would be an indication of a fuel leak into the crankcase. The oil level should be rechecked after the vehicle's normal test drive to ensure a fuel leak into the crankcase is not occurring.

5. Leaking fuel return line gaskets under the valve cover (4HK1/6HK1 only)

If the fuel return lines have to be removed new gaskets should be used when reinstalling them. Refer to the Workshop Manual for proper torque.