

# Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2013 Jeep Compass Service and Repair Manual

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### **Refer To List:**

### List 1

- 09 Engine, 2.0L / Engine Sensors / Removal and Installation
- 09 Engine, 3.6L / Engine Sensors / Removal and Installation
- 09 Engine, 5.7L / Engine Sensors / Removal and Installation



### YOUR CURRENT VEHICLE

# Oil Filter Adapter

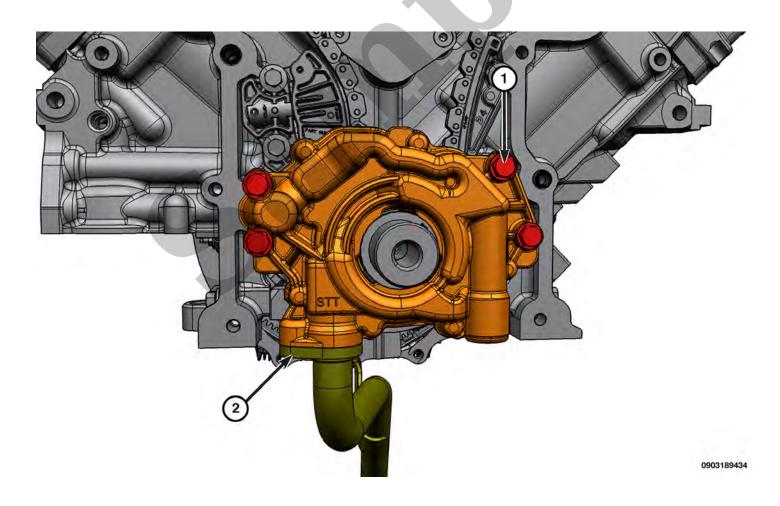
### **OIL FILTER ADAPTER**

### **REMOVAL**

- 1. Remove the front belly pan (Refer to Frame and Bumpers/Under Body Protection/BELLY PAN/Removal and Installation).
- 2. Remove the front skid plate (Refer to Frame and Bumpers/Under Body Protection/PLATE, Skid, Front/Removal and Installation)(Refer To List 1).



4	Oil Filter Adapter to Engine Block Bolts	12 N·m (9 Ft. Lbs.)	_
5	Oil Filter Adapter to Oil Filter Housing	12 N·m (9 Ft. Lbs.)	_
6	Oil Filter Housing to Oil Pan Bolts	25 N·m (18 Ft. Lbs.)	_
7	Oil Pan Drain Plug	34 N·m (25 Ft. Lbs.)	
8	Oil Pan to Transmission Bolts	54 N·m (40 Ft. Lbs.)	-



CALLOUT <b>DESCRIPTION</b>	SPECIFICATION	COMMENTS
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### 1 - Oil Pressure Sensor

The oil pressure sensor uses the following three circuits:

- Signal circuit to the PCM
- Sensor ground circuit from the PCM
- 5 volt reference circuit from the PCM

The oil pressure sensor returns a voltage signal back to the PCM with reference to oil pressure. Ground for the sensor is supplied by the PCM.

The oil pressure sensor is located on the right front of the engine by the generator.

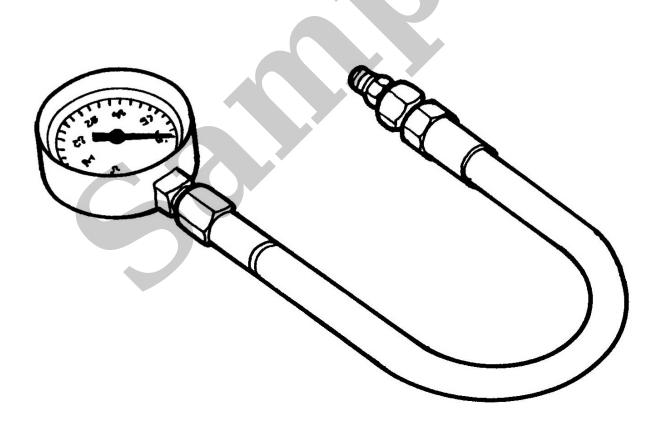


# **Checking Engine Oil Pressure**

### **CHECKING ENGINE OIL PRESSURE**

- 1. Remove the oil pressure sensor (Refer to Engine/Engine Sensors/Removal and Installation)(Refer To List 1).
- 2. Install gauge assembly

Gauge, Pressure



3. Run the engine until the thermostat opens.

- 3. Remove torque converter or clutch housing cover and inspect rear of block for evidence of oil. Use a black light to check for the oil leak:
  - a. Circular spray pattern generally indicates seal leakage or crankshaft damage.
  - b. Where leakage tends to run straight down, possible causes are a porous block, distributor seal, camshaft bore cup plugs oil gallery pipe plugs, oil filter runoff, and main bearing cap to cylinder block mating surfaces.
- 4. If no leaks are detected, pressurize the crankcase, refer to the section Air Leak Detection Test Method.

### **CAUTION**

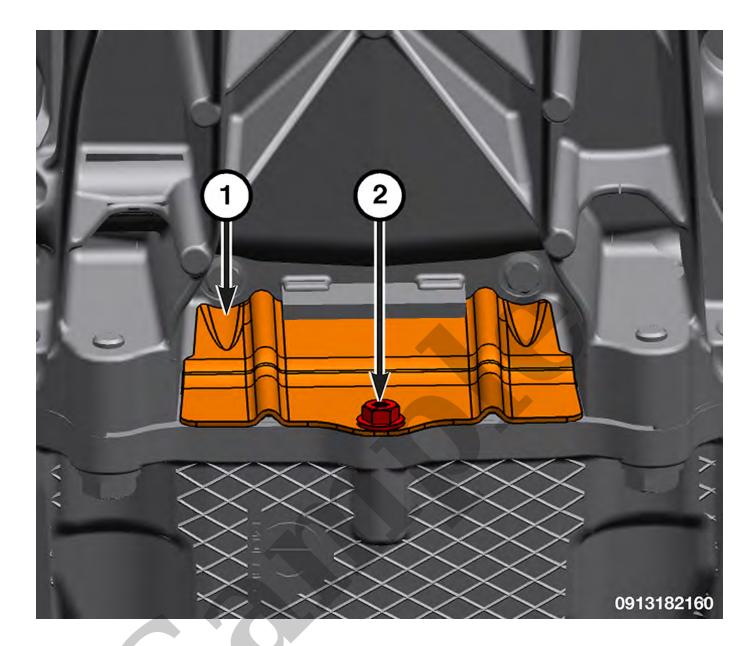
Do not exceed 20.6 kPa (3 psi).

5. If the leak is not detected, very slowly turn the crankshaft and watch for leakage. If a leak is detected between the crankshaft and seal while slowly turning the crankshaft, it is possible the crankshaft seal surface is damaged. The seal area on the crankshaft could have minor nicks or scratches that can be polished out with emery cloth.

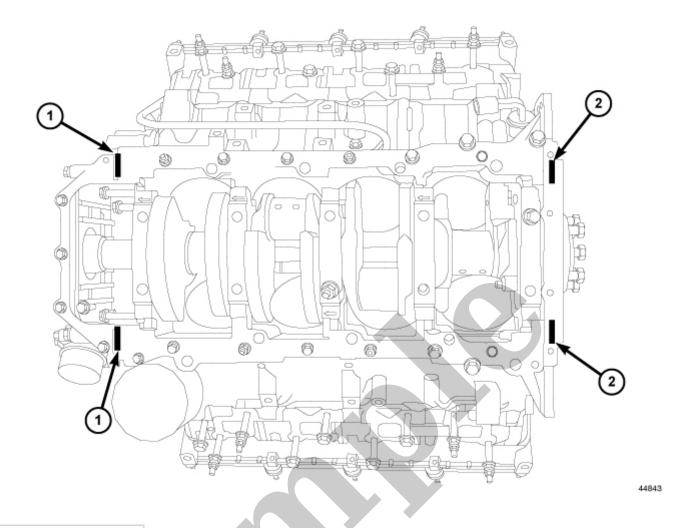
### **CAUTION**

Use extreme caution when crankshaft polishing is necessary to remove minor nicks and scratches. The crankshaft seal flange is especially machined to complement the function of the rear oil seal.

6. For bubbles that remain steady with shaft rotation, no further inspection can be done until disassembled.



- 1 Transmission Dust Cover
- 2 Transmission Dust Cover Bolt
- 7. Remove the transmission dust cover bolt and the transmission dust cover.



- 1 Front T-Joint Locations
- 2 Rear T-Joint Locations
  - Mopar® Engine RTV must be applied to the four T-joints. The bead of RTV should cover the bottom of the gasket. This area is approximately 4.5 mm x 25 mm in each of the four T-joint locations.
  - Install the oil pan bolts and tighten to the proper torque in the sequence shown in the torque table below.

## **TORQUE SPECIFICATIONS - LUBRICATION**

# **Engine Oil Pump**

### **ENGINE OIL PUMP**

### **REMOVAL**

- 1. Remove the timing cover (Refer to Engine/Valve Timing/COVER(S), Engine Timing/Removal and Installation)(Refer To List 1).
- 2. Remove the oil pan (Refer to Engine/Lubrication/PAN, Oil/Removal and Installation)(Refer To List 2).



1 - Oil Pump Bolts

3. Remove the oil pump bolts and the oil pump.

### **ENGINE OIL PUMP INSPECTION**