

Oil Filter Adapter and Bypass Valve Assembly Replacement

Tools Required

- **J 45059** Torque Angle Meter. See **Special Tools**.
- **J 41712** Oil Pressure Switch Socket. See **Special Tools**.

Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.

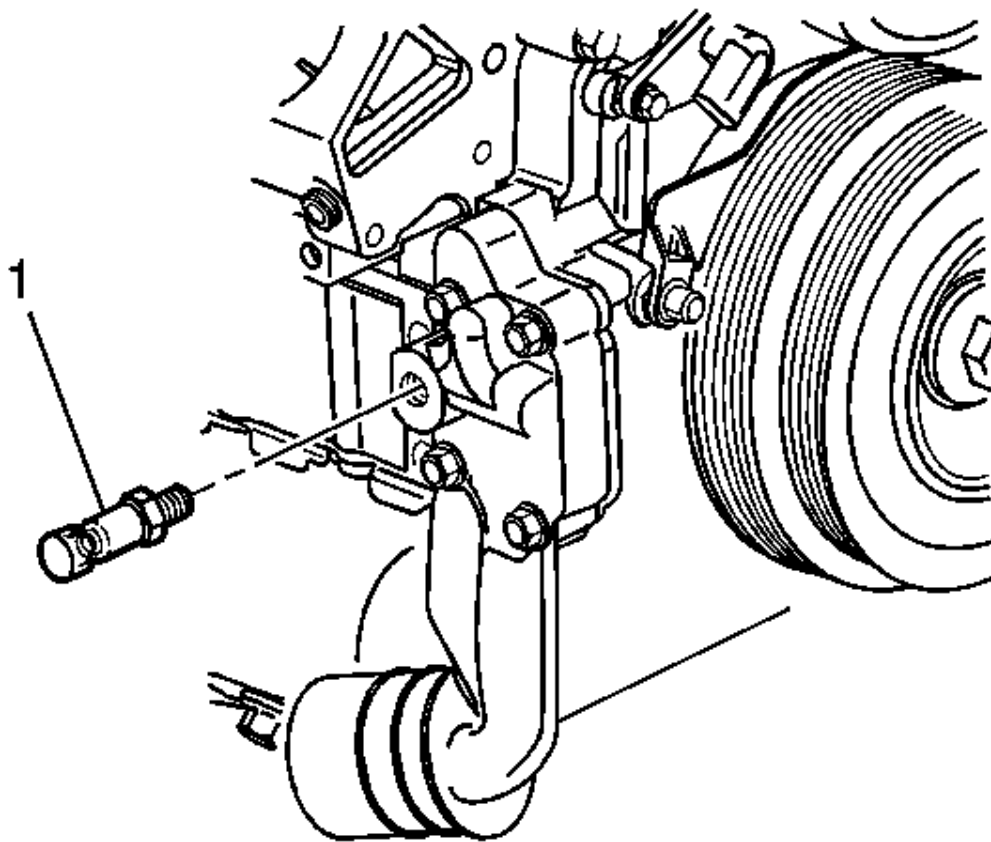


Fig. 74: Removing/Installing Engine Oil Pressure Switch
Courtesy of GENERAL MOTORS CORP.

2. Disconnect the electrical connector from the engine oil pressure switch (1).

3. Remove the engine oil pressure switch (1) from the oil filter adapter using the **J 41712** . See **Special Tools**.

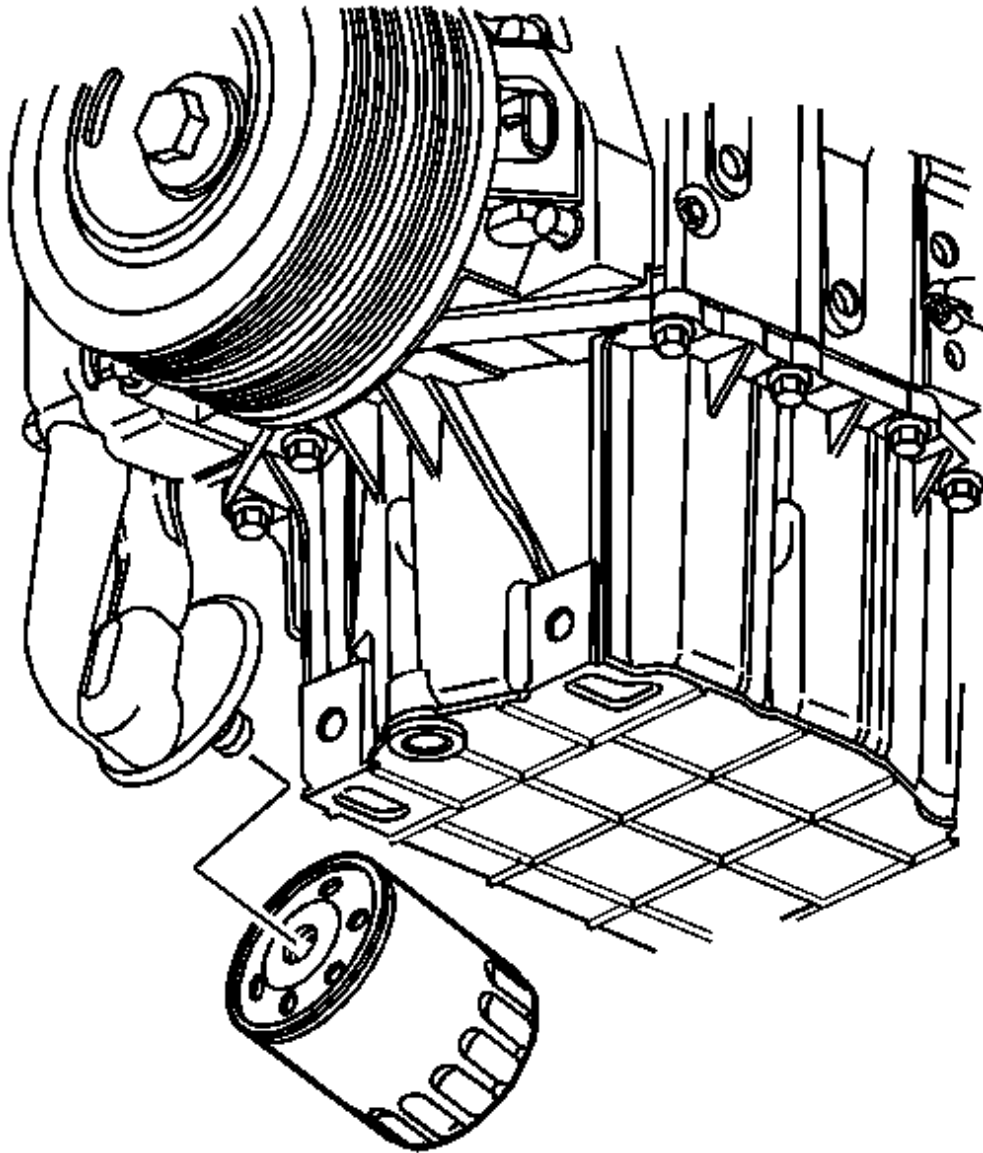


Fig. 75: Identifying Oil Filter Location
Courtesy of GENERAL MOTORS CORP.

4. Remove the oil filter.

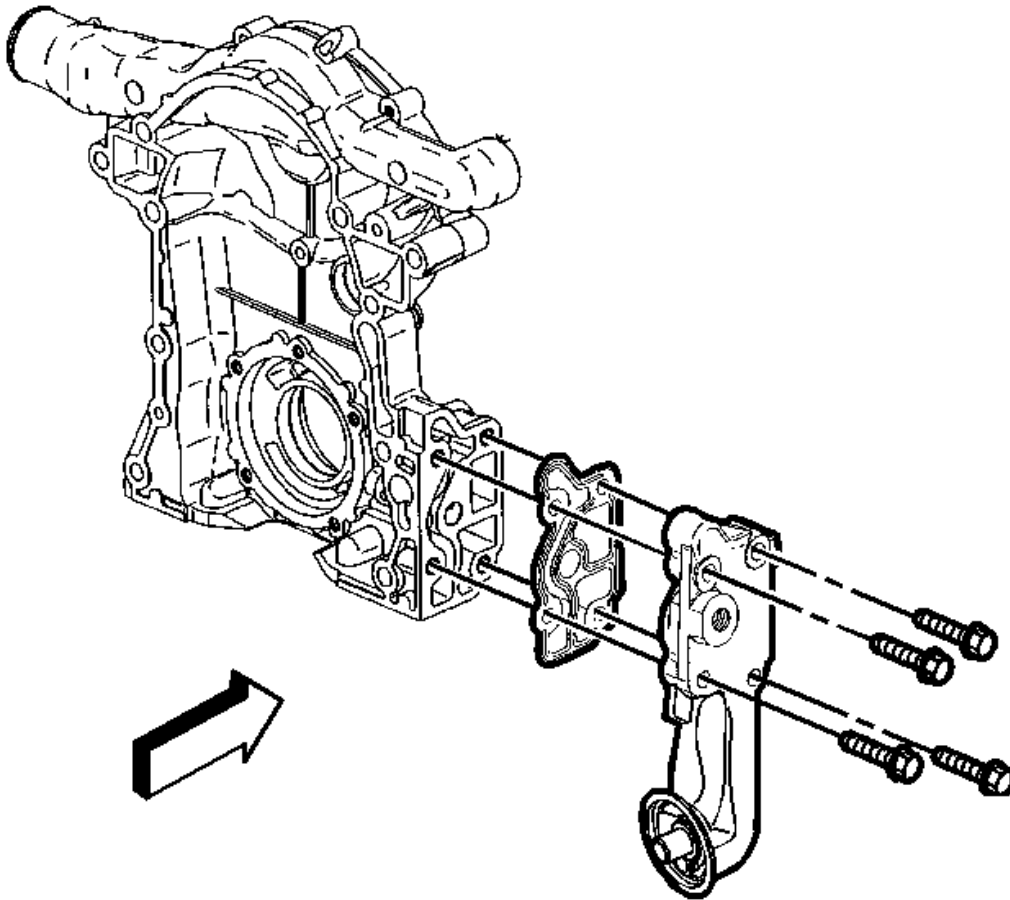


Fig. 76: Removing/Installing Oil Filter Adapter Bolts
Courtesy of GENERAL MOTORS CORP.

5. Remove the 3 oil filter adapter bolts from the engine front cover.
6. Remove the following components:
 1. The oil filter adapter.
 2. The oil filter adapter gasket.
 3. The oil pressure relief valve.
 4. The oil pressure relief valve spring.
7. Clean all parts in a suitable solvent and allow to dry.
8. Inspect the following components:

- Oil pressure valve for burrs
- Valve bore for burrs
- Valve spring for loss of tension

Installation Procedure

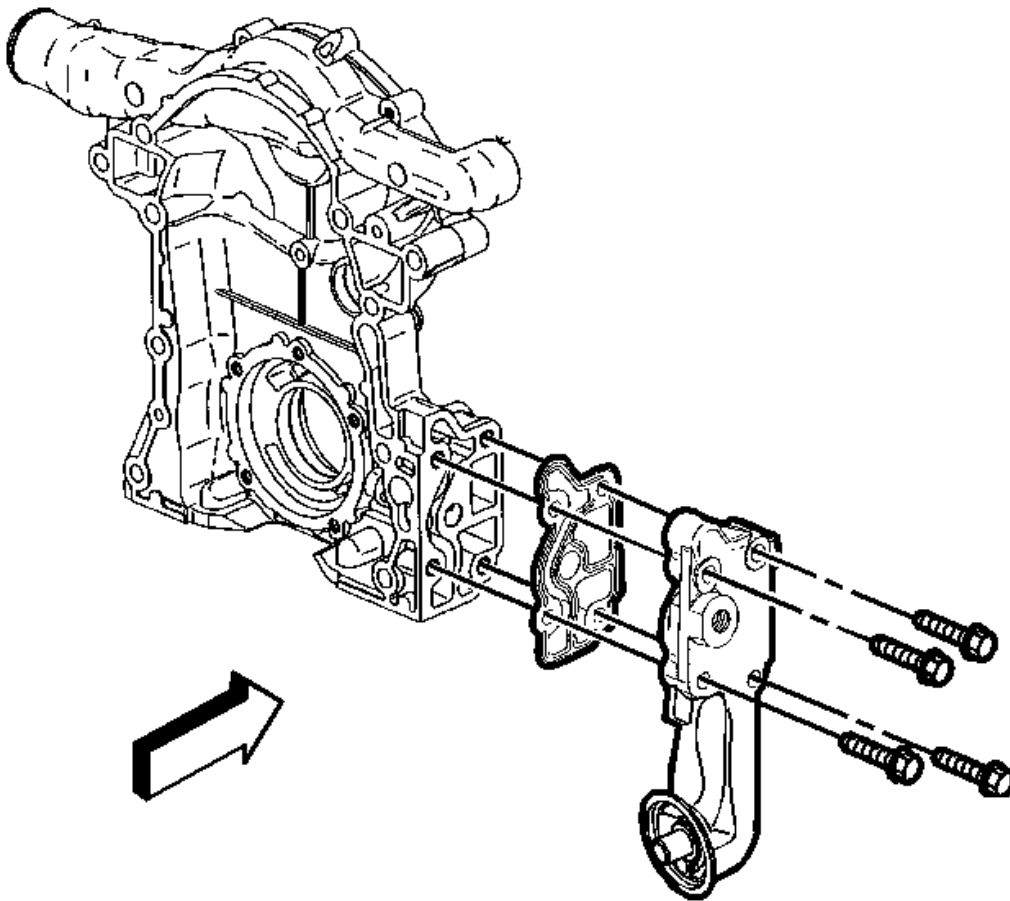


Fig. 77: Removing/Installing Oil Filter Adapter Bolts
Courtesy of GENERAL MOTORS CORP.

1. Install the spring into the engine front cover.
2. Install the oil pressure valve into the engine front cover.
3. Install a new oil filter adapter gasket.
4. Install the oil filter adapter.

5. Install the oil filter adapter bolts.

Tighten: Tighten the oil filter adapter bolts to 15 N.m (11 lb ft). Use the **J 45059** to tighten the oil filter adapter bolts an additional 50 degrees. See **Special Tools**.

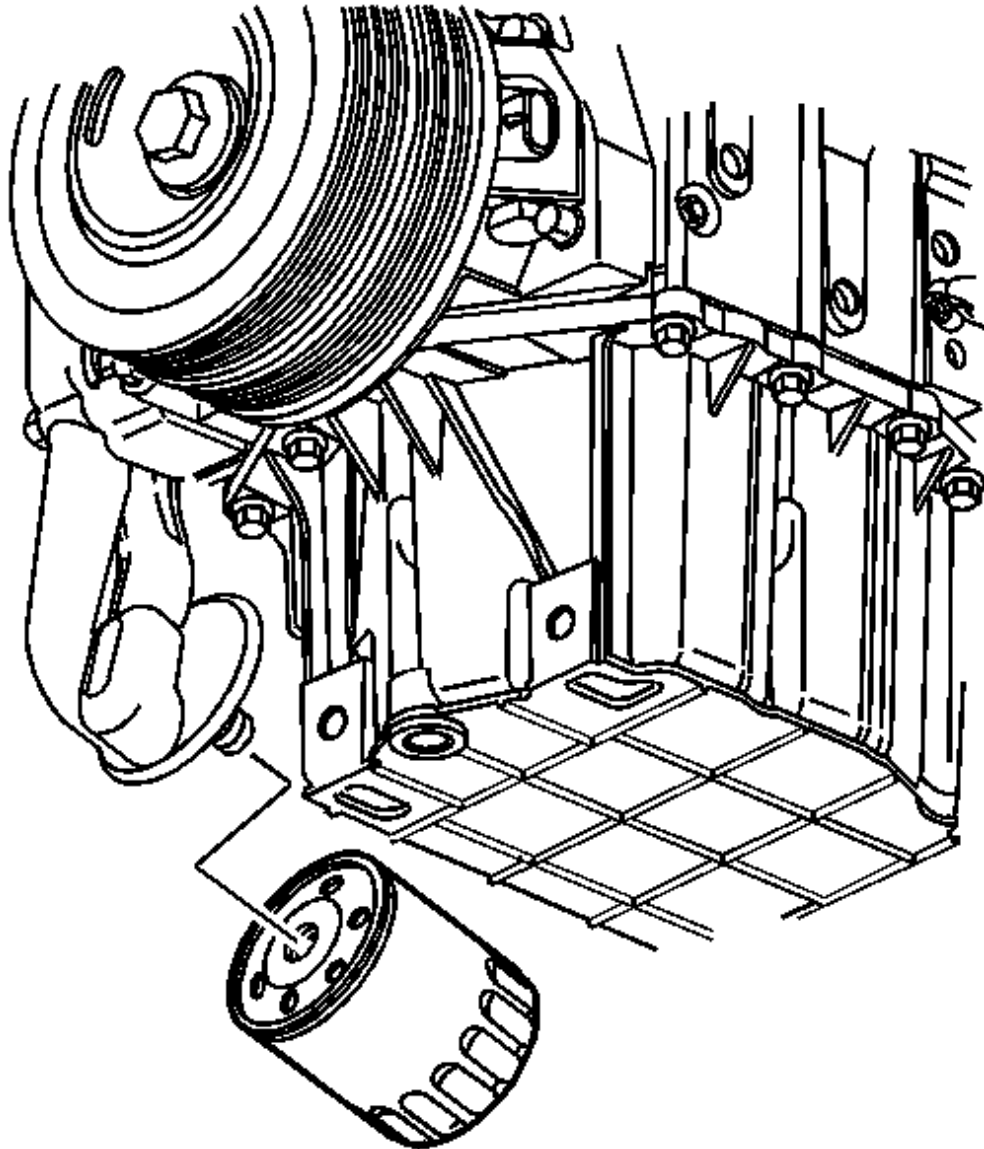


Fig. 78: Identifying Oil Filter Location

Courtesy of GENERAL MOTORS CORP.

6. Lightly oil the replacement oil filter gasket with clean oil.
7. Install the new oil filter.

Tighten: Tighten the new oil filter to 3/4 to 1 full turn, after the oil filter gasket contacts the oil filter mounting surface.

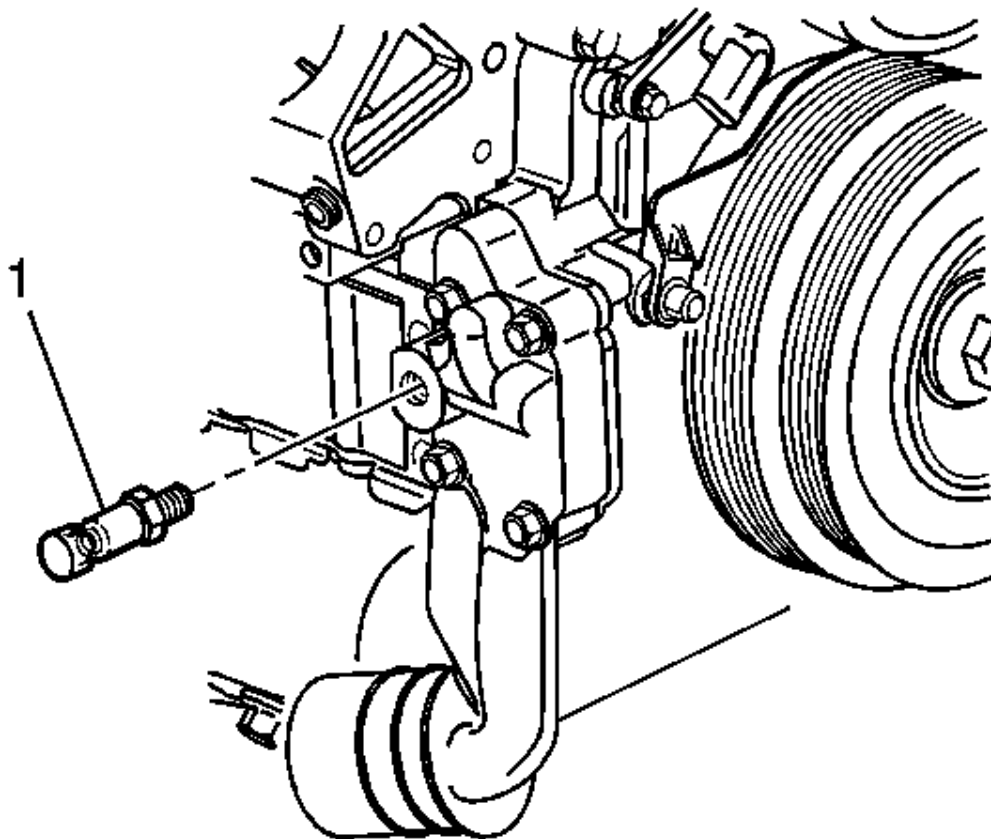


Fig. 79: Removing/Installing Engine Oil Pressure Switch
Courtesy of GENERAL MOTORS CORP.

8. Install the engine oil pressure switch (1) to the oil filter adapter using the **J 41712** . See **Special Tools**.

Tighten: Tighten the engine oil pressure switch to 16 N.m (12 lb ft).