

## DISASSEMBLY AND ASSEMBLY (Continued)

- Oil pump
- Oil pressure relief valve
- Pump drive intermediate shaft

**Oil Pump****Disassembly**

1. If necessary, remove oil filter.
2. Remove oil pump cover retaining bolts and remove cover.
3. Lift pump gears off pocket in front cover.
4. Remove cover seal and discard.

**Pump Cover Flatness**

1. Remove all traces of seal material from pump cover.
2. Place a straightedge across mounting surface of pump cover and measure for wear or warpage using a feeler gauge.
3. If surface is out of flat by more than 0.04mm (0.0016 inch) replace cover.

**Assembly**

1. If necessary, remove pump gears from cover.
2. Lightly pack gear pocket with petroleum jelly or coat all gear surfaces with Engine Assembly Lubricant D9AZ-19579-D (ESR-M99C80-A) or equivalent. **Do not use chassis lubricants.**

**CAUTION: Failure to properly coat the oil pump gears may result in failure of the pump to prime when engine is started.**

3. Install gears in cover pocket. Ensure petroleum jelly fills all voids between gears and pocket.
4. Position cover seal and install pump cover.
5. Tighten pump cover retaining bolts to 25-30 N·m (18-22 lb-ft).

**Pressure Relief Valve****Removal**

1. After drilling a hole through valve plug, remove plug with a slide hammer or by prying.

2. Remove spring and valve from bore.

**Inspection**

1. Thoroughly clean valve bore and valve to remove any metal chips which may have entered bore as a result of drilling operation.
2. Inspect valve and valve bore for wear, scoring or galling. If inspection determines part(s) to be unserviceable replace valve and / or cover.
3. Check clearance between valve and bore. The valve should slip into bore without side play or binding.
4. Check spring for signs of fatigue or collapse.

**Installation**

1. Lubricate relief valve with XO-10W30-QSP (ESE-M2C153-E) or equivalent engine oil and install in bore. The end with smaller diameter goes in first.
2. Position spring in bore.
3. Install a new plug. The plug can be tapped into bore using a plastic tipped hammer. Ensure plug is 0-0.25mm (0-0.010 inch) below machined surface.

**Intermediate Shaft****Removal**

1. Remove distributor assembly.
2. Separate intermediate shaft from distribution.

**Installation**

1. Push lock ring end of shaft into distributor shaft.
2. Install distributor / shaft assembly, ensuring that end of intermediate shaft is seated in oil pump drive gear.