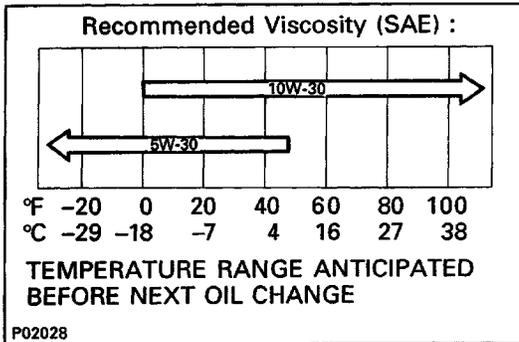


# TROUBLESHOOTING

Problem	Possible cause	Remedy	Page
Oil leakage	Cylinder head, cylinder block or oil pump body damaged or cracked Oil seal faulty Gasket faulty	Repair as necessary Replace oil seal Replace gasket	EM-207, 249, 294 LU-20
Low oil pressure	Oil leakage Relief valve faulty Oil pump faulty Engine oil poor quality Crankshaft bearing faulty Connecting rod bearing faulty Oil filler clogged	Repair as necessary Repair relief valve Repair oil pump Replace engine oil Replace bearing Replace bearing Replace oil filler	LU-9, 17 LU-9, 17 LU-7 EM-1 85, 224, 269 E M -185, 224, 269 LU-7
High oil pressure	Relief valve faulty	Repair relief valve	LU-9, 17



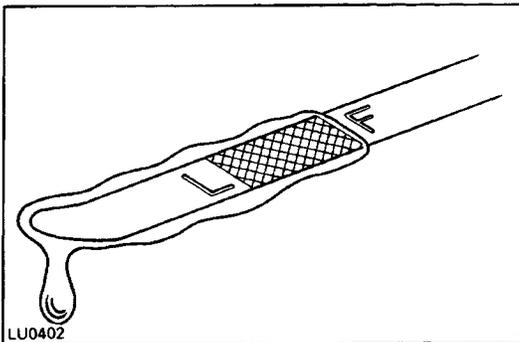
## OIL PRESSURE CHECK

### 1. CHECK ENGINE OIL QUALITY

Check the oil for deterioration, entry of water, discoloring or thinning.

If the quality is poor, replace the oil.

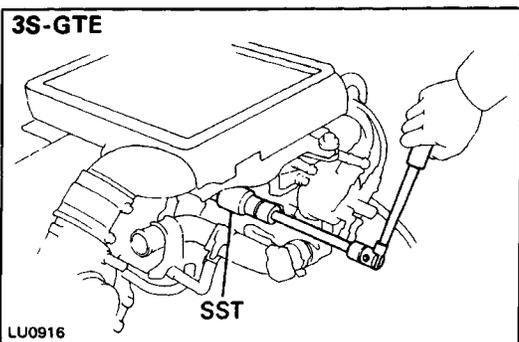
**Oil grade: API grade SG multigrade and fuel-efficient engine oil. Recommended viscosity is as shown.**



### 2. CHECK ENGINE OIL LEVEL

The oil level should be between the "L" and "F" marks on the dipstick.

If low, check for leakage and add oil up to "F" mark.



### 3. REMOVE OIL PRESSURE SWITCH, AND INSTALL OIL PRESSURE GAUGE

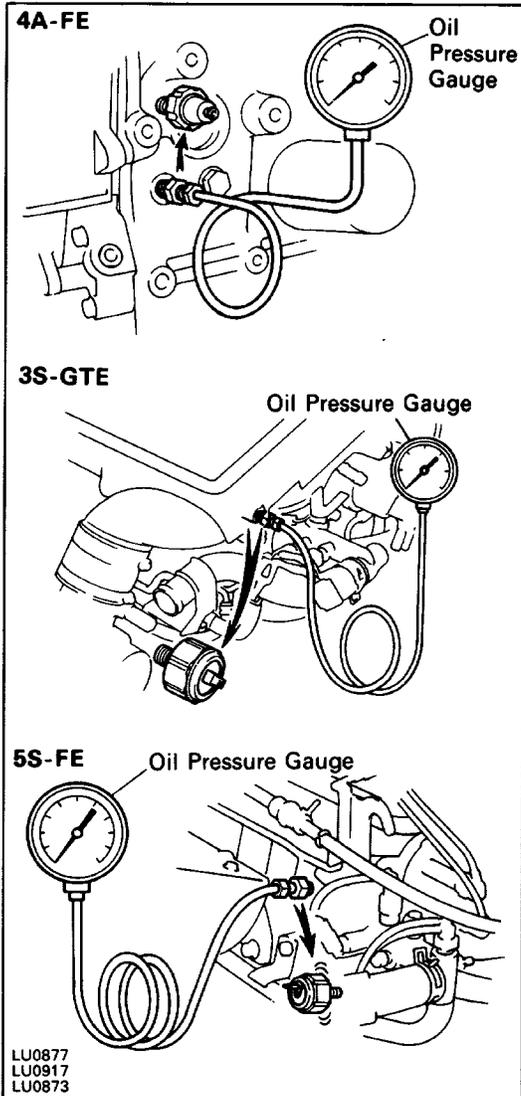
(a) (4A-FE)

Remove the generator and bracket.

(b) Remove the oil pressure switch.

HINT (3S-GTE): Use SST.

SST 09816-30010



(c) Install an oil pressure gauge.

(d) (4A-FE)

Install the bracket and generator.

#### 4. WARM UP ENGINE

Allow the engine to warm up to normal operating temperature.

#### 5. CHECK OIL PRESSURE

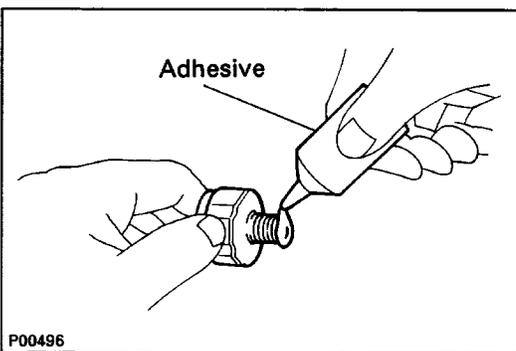
Oil pressure:

At idle 29 kPa (0.3 kgf/cm<sup>2</sup>, 4.3 psi)

or more

At 3,000 rpm 245 – 490 kPa

(2.5 – 5.0 kgf/cm<sup>2</sup>, 36 – 71 psi)



#### 6. REINSTALL OIL PRESSURE SWITCH

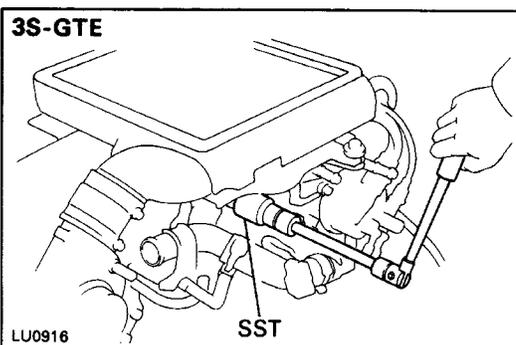
(a) (4A-FE)

Remove the generator and bracket.

(b) Remove the oil pressure gauge.

(c) Apply adhesive to two or three threads of the oil pressure switch.

**Adhesive: Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent**



(d) Reinstall the oil pressure switch.

HINT (3S-GTE): Use SST.

SST 09816-30010

(e) (4A-FE)

Reinstall the bracket and generator.

#### 7. START ENGINE AND CHECK FOR LEAKS