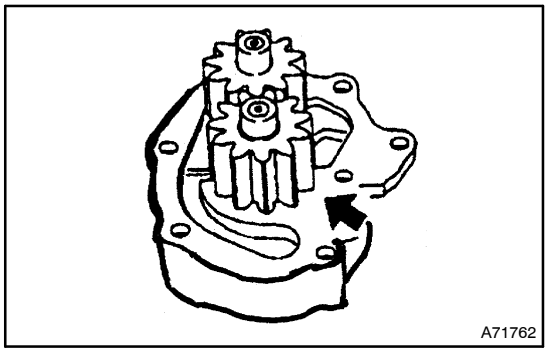
170D1–01

OVERHAUL

1. REMOVE OIL PUMP ASSY

(a) Remove the 7 bolts, the oil pump assy, drive gear and gasket.


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2. REMOVE OIL PUMP DRIVEN GEAR

(a) Remove the driven gear from the oil pump.

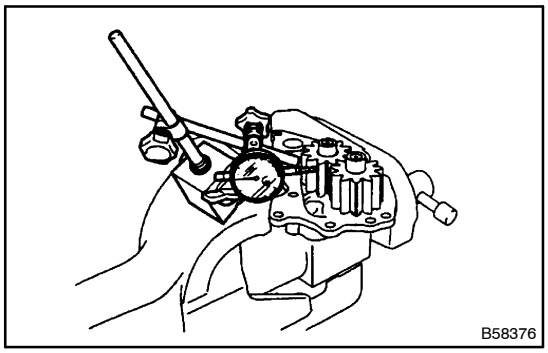
NOTICE:

Since the drive gear is a press–fit type, it can not be disassembled.

3. INSPECT OIL PUMP ASSY

(a) Visually check each part of the oil pump for damage or wear.

If damage or wear is excessive, replace the oil pump assy with a new one.


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(b) Inspect the backlash between the drive gear and driven gear.

(1) Using a vise, fix the oil pump assy.

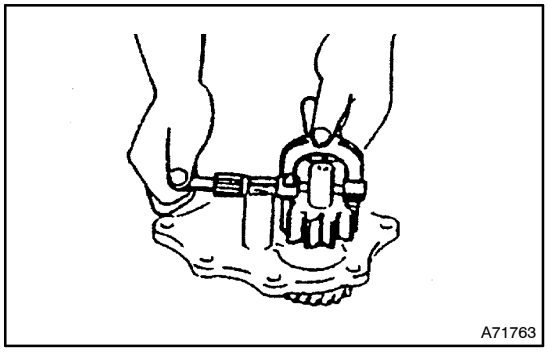
(2) Using a dial gauge, measure the backlash between the drive gear and driven gear.

Standard backlash:

0.091 – 0.217 mm (0.0036 – 0.0085 in.)

Maximum backlash: 0.30 mm (0.0118 in.)

If the backlash is greater than the maximum, replace the oil pump assy with a new one.


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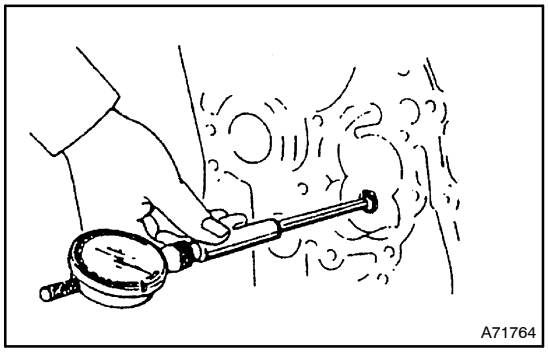
(c) Inspect the clearance between the drive gear shaft and driven gear bush.

(1) Using a micrometer, measure the diameter of the drive gear shaft.

Standard shaft diameter:

18.088 – 18.106 mm (0.7121 – 0.7128 in.)

Minimum shaft diameter: 18.062 mm (0.7111 in.)


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(2) Using a dial gauge, measure the inside diameter of the drive gear bush.

Standard bush inside diameter:

18.146 – 18.173 mm (0.7144 – 0.7155 in.)

Maximum bush inside diameter: 18.20 mm (0.7165 in.)

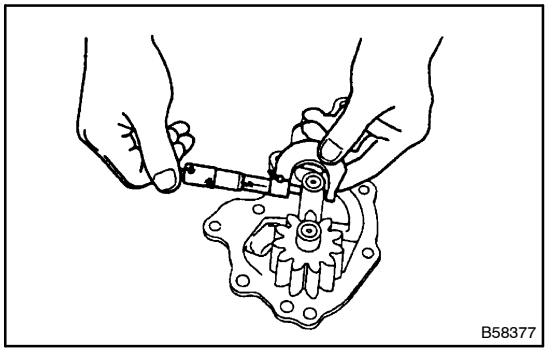
(3) Subtract the diameter measurement of the drive gear shaft from the inside diameter measurement of the drive gear bush.

Standard clearance:

0.040 – 0.085 mm (0.0016 – 0.0033 in.)

Maximum clearance: 0.10 mm (0.0039 in.)

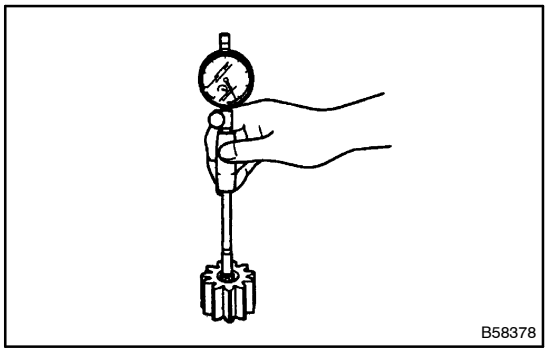
If the clearance is greater than the maximum, replace the oil pump assy or drive gear bush.


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(d) Inspect the clearance between the driven gear shaft and driven gear bush.

(1) Using a micrometer, measure the diameter of the driven gear shaft.

Standard shaft diameter:
17.979 – 17.997 mm (0.7078 – 0.7085 in.)
Minimum shaft diameter: 17.97 mm (0.7075 in.)


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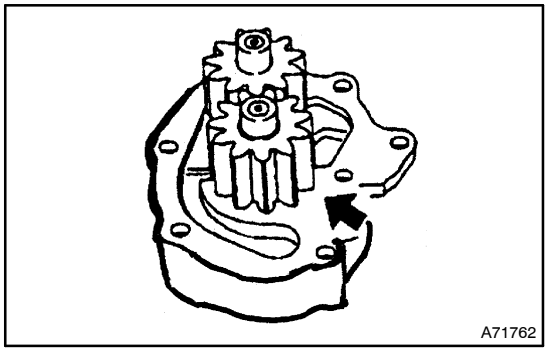
(2) Using a dial gauge, measure the inside diameter of the driven gear bush.

Standard bush inside diameter:
18.037 – 18.054 mm (0.7101 – 0.7108 in.)
Maximum bush inside diameter: 18.07 mm (0.7114 in.)

(3) Subtract the diameter measurement of the driven gear shaft from the inside diameter measurement of the driven gear bush.

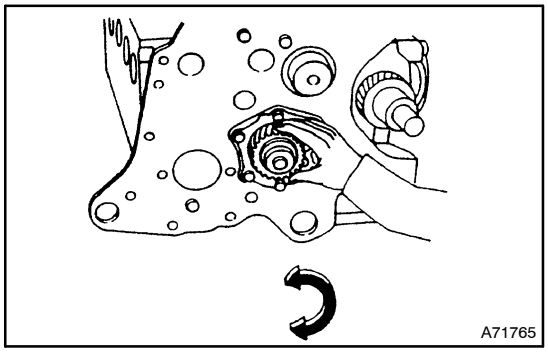
Standard clearance:
0.040 – 0.075 mm (0.0016 – 0.0030 in.)
Maximum clearance: 0.10 mm (0.0039 in.)

If the clearance is greater than the maximum, replace the drive gear shaft or the driven gear.


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4. INSTALL OIL PUMP DRIVEN GEAR

(a) Install the driven gear to the oil pump.


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5. INSTALL OIL PUMP ASSY

(a) Apply oil liberally to the cylinder block case and bearing before installing the oil pump

(b) Tighten the 7 bolts.

Torque: 22.5 N·m (230 kgf·cm, 17 ft·lbf)

(c) Confirm smooth rotation of the oil pump.