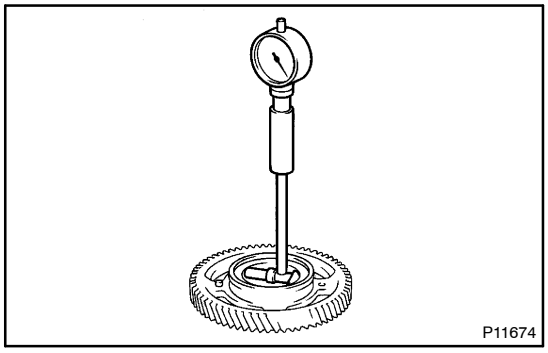
EM157–01

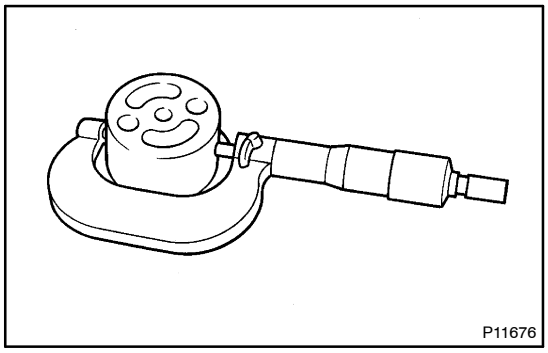
INSPECTION



1. INSPECT IDLER GEAR

(a) Using a cylinder gauge, measure the inside diameter of the idler gear.

Idler gear inside diameter:
44.000 – 44.025 mm (1.7323 – 1.7333 in.)



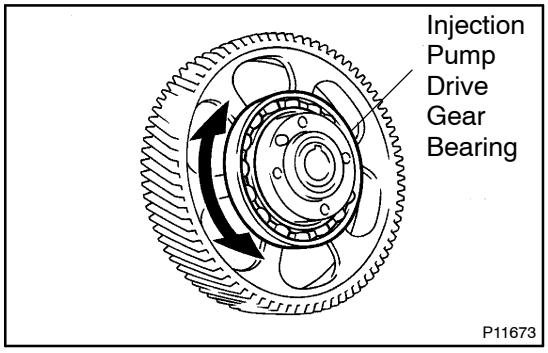
(b) Using a micrometer, measure the diameter of the idler gear shaft.

Idler gear shaft diameter:
43.955 – 43.990 mm (1.7305 – 1.7319 in.)

(c) Subtract the idler gear shaft diameter measurement from the idler gear inside diameter measurement.

Standard oil clearance:
0.010 – 0.070 mm (0.0004 – 0.0028 in.)
Maximum oil clearance: 0.20 mm (0.0079 in.)

If the clearance is greater than maximum, replace the gear and shaft.



2. INSPECT INJECTION PUMP DRIVE GEAR BEARING

Check that bearing is not rough or worn.

If necessary, replace the bearing. (See page EM–31)

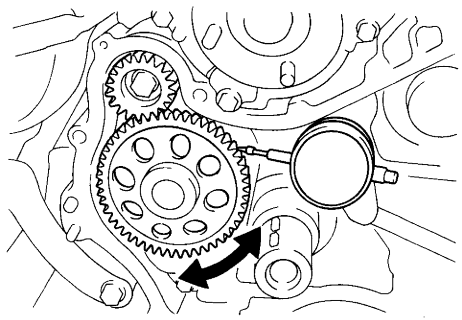
3. CHECK BACKLASH OF TIMING GEARS

Using a dial indicator, measure the backlash.

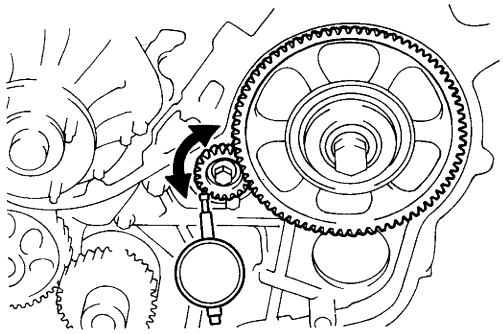
Standard gear backlash:
0.02 – 0.15 mm (0.0008 – 0.0060 in.)
Maximum gear backlash: 0.20 mm (0.0079 in.)

If the gear backlash is greater than maximum, replace the gears as a set.

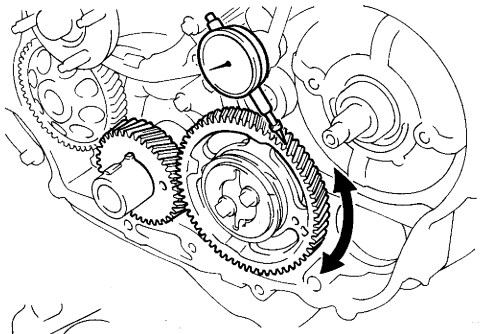
Balance Shaft No.1 x Oil Pump



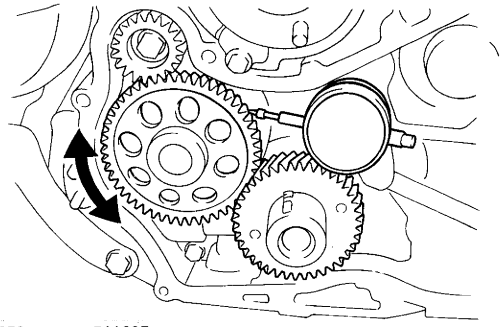
Balance Shaft No.2 x Injection Pump



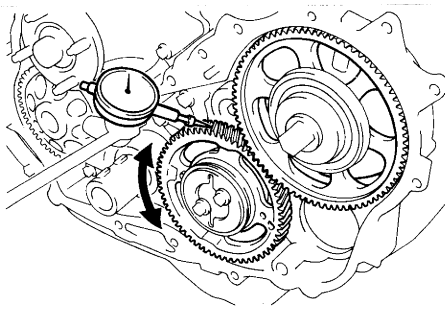
Crankshaft x Idler



Oil Pump x Crankshaft



Injection Pump x Idler



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P11652 P11671 P11670

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