

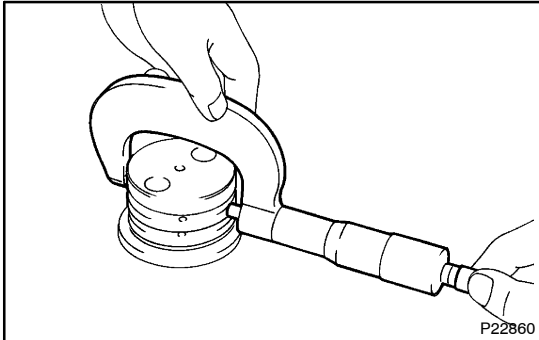
## INSPECTION

### 1. INSPECT IDLER GEAR

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

**Idler gear inside diameter:**

**45.000 – 45.025 mm (1.7717 – 1.7726 in.)**



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

**Idler gear shaft diameter:**

**44.950 – 44.975 mm (1.7697 – 1.7707 in.)**

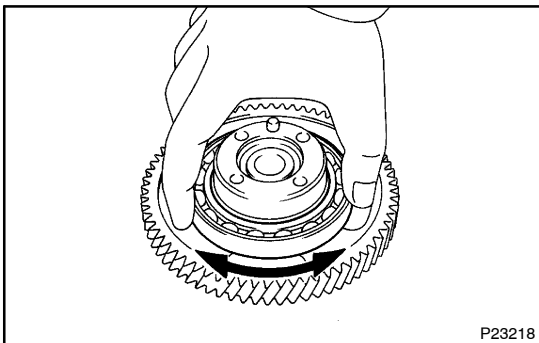
- (c) Subtract the idler gear shaft diameter measurement from the idler gear inside diameter measurement.

**Standard oil clearance:**

**0.025 – 0.075 mm (0.0010 – 0.0030 in.)**

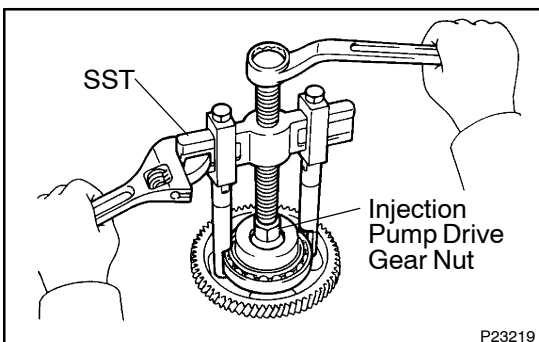
**Maximum oil clearance: 0.20 mm (0.0079 in.)**

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.

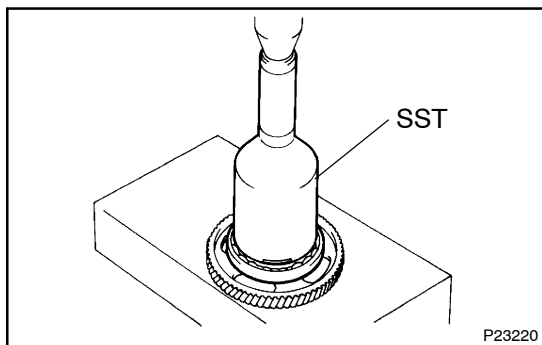


### 3. IF NECESSARY, REPLACE INJECTION PUMP DRIVE GEAR BEARING

- (a) Remove bearing

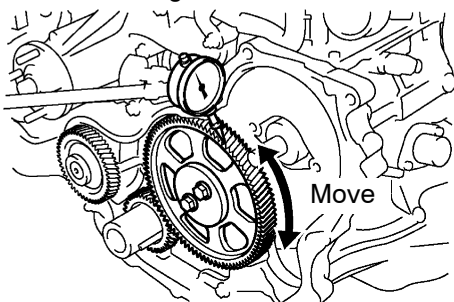
Using SST, remove the bearing

SST 09950-40010 (09951-04010, 09952-04010, 09953-04020, 09954-04010, 09955-04040)

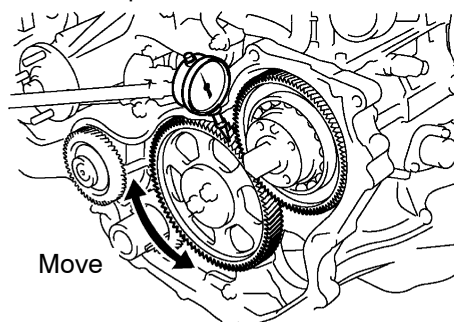


- (b) Install bearing  
Using SST and a press, press in a new bearing.  
SST 09502-12010  
09223-15020  
09950-70010 (09951-07100)

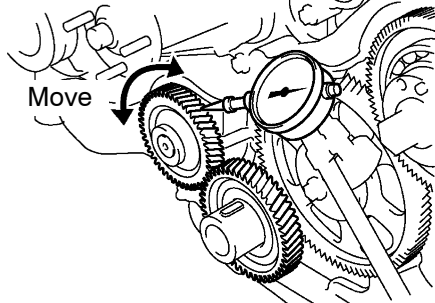
Crankshaft Timing Gear To Idler Gear



Injection Pump Drive Gear To Idler Gear



Oil Pump Drive Shaft Gear To Driven Shaft Gear



A06005

#### 4. CHECK BACKLASH OF TIMING GEARS

- (a) Install the gears.  
(b) Using a dial indicator, measure the backlash.

**Standard gear backlash:**

**0.05 – 0.15 mm (0.0020 – 0.0059 in.)**

**Maximum gear backlash: 0.30 mm (0.0118 in.)**

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

- (c) Remove the gears.