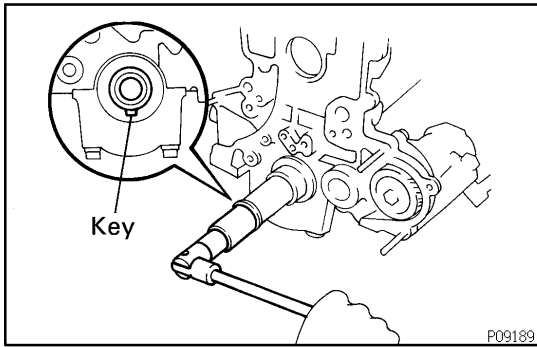
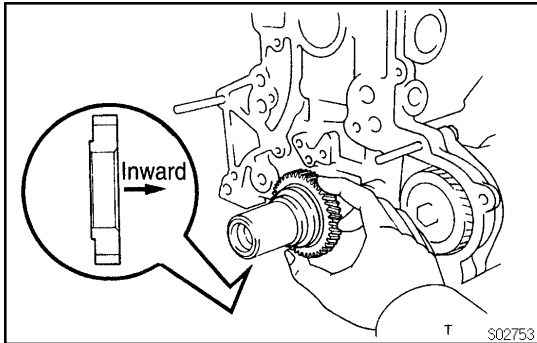




INSTALLATION

1. SET CRANKSHAFT

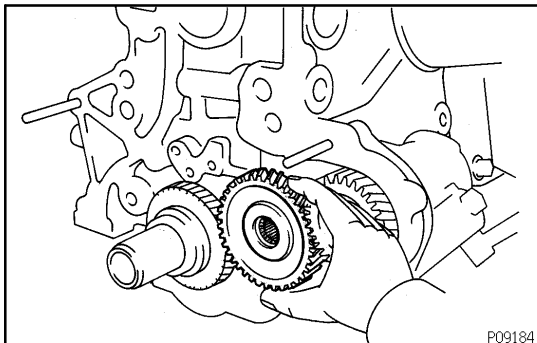
Turn the crankshaft until the set key on crankshaft facing downward.



2. INSTALL PUMP DRIVE SHAFT GEAR

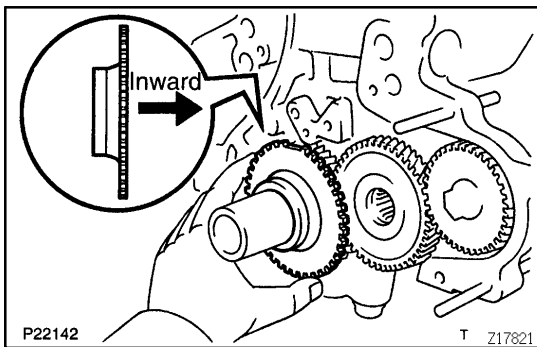
NOTICE:

Be careful of the installation direction.



3. INSTALL OIL PUMP DRIVE SHAFT GEAR

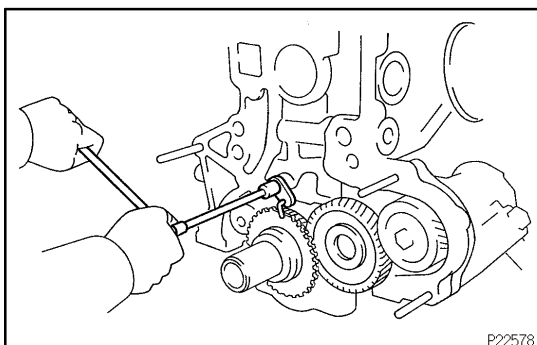
- (a) Apply a light coat of engine oil on the shaft portion of the gear.
- (b) Install the gear.



4. INSTALL CRANKSHAFT ROTOR

NOTICE:

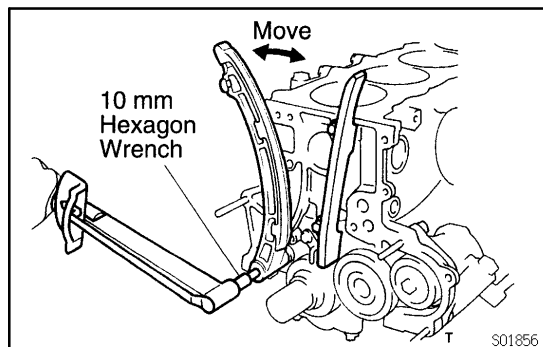
Be careful of the installation direction.



5. INSTALL OIL JET

Install the oil jet with the bolt.

Torque: 20 N·m (200 kgf·cm, 14 ft·lbf)

**6. INSTALL CHAIN VIBRATION DAMPER**

Install the damper with the 2 bolts.

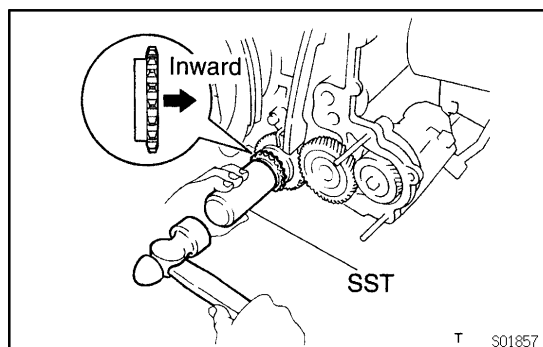
Torque: 20 N·m (200 kgf·cm, 14 ft·lbf)

7. INSTALL CHAIN TENSIONER SLIPPER

- (a) Using a 10 mm hexagon wrench, install the slipper with the bolt.

Torque: 69 N·m (700 kgf·cm, 51 ft·lbf)

- (b) Check that the slipper moves smoothly.

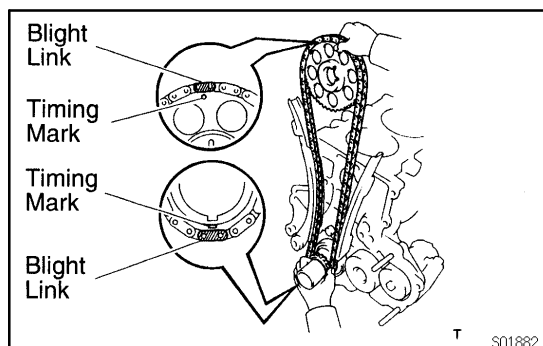
**8. INSTALL CRANKSHAFT TIMING GEAR****NOTICE:**

Be careful of the installation direction.

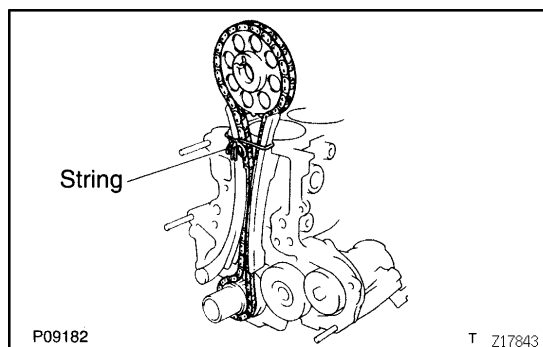
HINT:

If necessary, install the gear with SST.

SST 09636-20010

**9. INSTALL TIMING CHAIN AND CAMSHAFT TIMING GEAR**

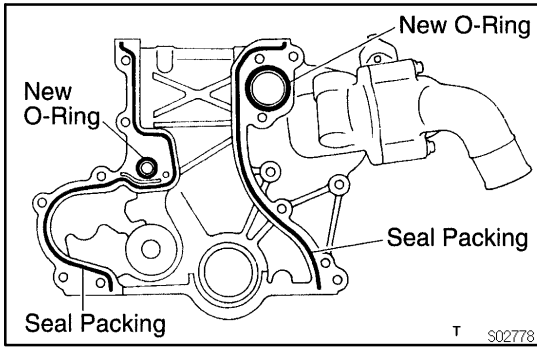
- (a) Install the timing chain on the camshaft timing gear with the blight link aligned with the timing mark on the camshaft timing gear.
- (b) Install the timing chain on the crankshaft timing gear with the other blight link aligned with the timing mark on the crankshaft timing gear.



- (c) Tie the timing chain with a string as shown in the illustration and make sure it doesn't come loose.

10. INSTALL TIMING CHAIN COVER

- (a) Remove any old packing (FIPG) material and be careful not to drop any oil on the contact surfaces of the timing chain cover and cylinder block.
- Using a razor blade and gasket scraper, remove all the old packing (FIPG) material from the gasket surfaces and sealing grooves.
 - Thoroughly clean all components to remove all the loose material.
 - Using a non-residue solvent, clean both sealing surfaces.



- (b) Apply seal packing to the timing chain cover as shown in the illustration.

Seal packing:

Part No. 08826-00080 or equivalent

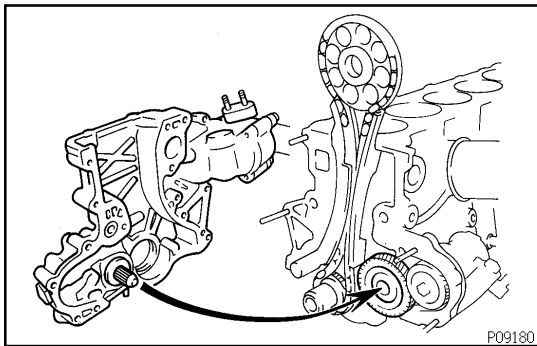
- Install a nozzle that has been cut to a 2 – 3 mm (0.08 – 0.12 in.) opening.

HINT:

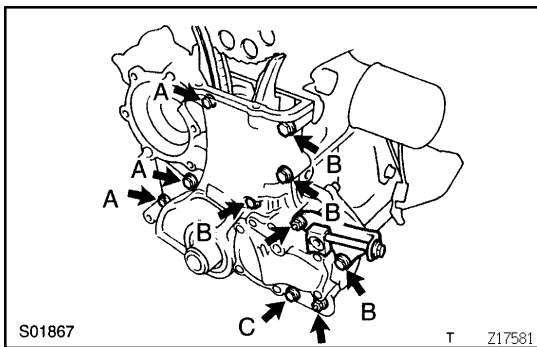
Avoid applying an excessive amount to the surface.

- Parts must be assembled within 5 minutes of application. Otherwise the material must be removed and reapplied.
- Immediately remove nozzle from the tube and reinstall cap.

- (c) Place 2 new O-rings on the timing chain cover.



- (d) Engage the gears of the oil pump drive rotor and drive gear, and install the oil pump.



- (e) Install the oil pump and drive belt adjusting bar with the 9 bolts and 2 nuts.

Torque: 21 N·m (210 kgf·cm, 15 ft·lbf)

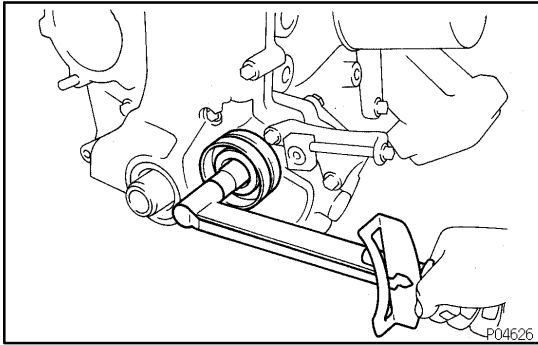
HINT:

Each bolt length is indicated in the illustration.

Bolt length:

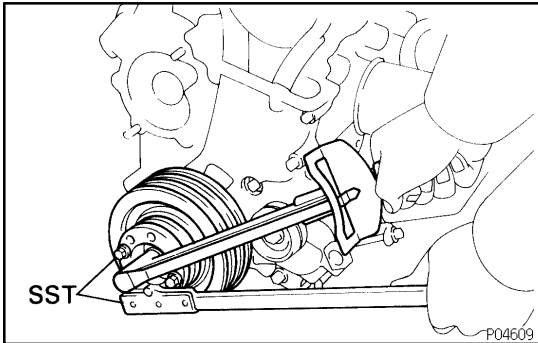
A	30 mm (1.18 in.)
B	50 mm (1.97 in.)
C	60 mm (2.38 in.)

- (f) Remove the cord from the chain.

**11. INSTALL DRIVE BELT IDLER PULLEY**

Install the pulley with the bolt.

Torque: 43 N·m (440 kgf·cm, 32 ft·lbf)

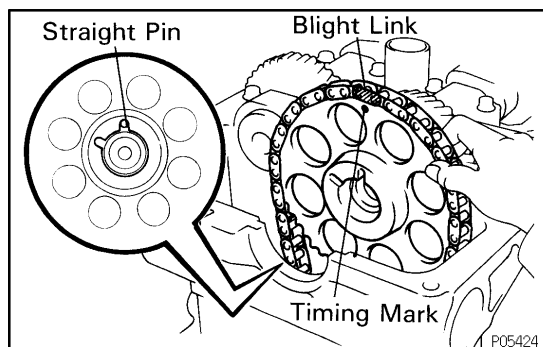
**12. INSTALL CRANKSHAFT PULLEY**

(a) Align the pulley set key with the key groove of the pulley, and slide on the pulley.

(b) Using SST, install the pulley bolt.

SST 09213-58012 (90201-08131, 91111-50845),
09930-00021

Torque: 412 N·m (4,200 kgf·cm, 304 ft·lbf)

13. INSTALL NO.1 AND NO.2 OIL PANS (See page LU-12)**14. INSTALL CYLINDER HEAD ASSEMBLY (See page EM-50)****NOTICE:**

However, for the installation of the camshaft timing gear and timing chain, follow the below procedure. Align the blight link of the timing chain and camshaft timing gear mark, and install them to the camshaft.

15. INSTALL WATER PUMP (See page CO-6)**16. INSTALL RADIATOR PIPE (See page EM-50)****17. INSTALL A/C COMPRESSOR AND BRACKET (See page EM-104)****18. INSTALL RADIATOR (See page CO-16)****19. FILL WITH ENGINE OIL****20. INSTALL ENGINE UNDER COVER****21. START ENGINE AND CHECK FOR LEAKS**