REASSEMBLY

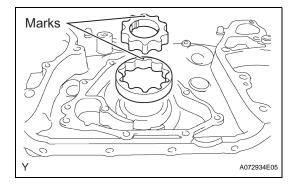
1. INSTALL OIL PUMP RELIEF VALVE

- (a) Coat the relief valve with engine oil and insert the relief valve and spring into the valve hole.
- (b) Install the relief valve plug.

 Torque: 49 N*m (500 kgf*cm, 36 ft.*lbf)

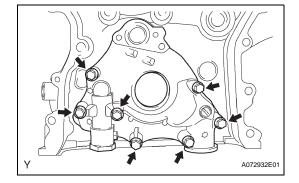
2. INSTALL OIL PUMP COVER

- (a) Apply fresh engine oil to the drive and driven rotors.
- (b) Place the drive and driven rotors into the timing chain cover with the marks facing the oil pump cover side.



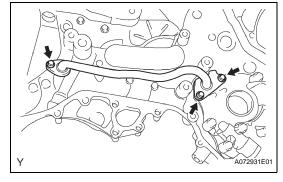
- (c) Install the oil pump cover with the 7 bolts.

 Torque: 9.0 N*m (92 kgf*cm, 80 in.*lbf)
- (d) Install a new O-ring onto the oil pump cover.
- (e) Install a new O-ring onto the oil pipe.



(f) Install the oil pipe with the 3 bolts.

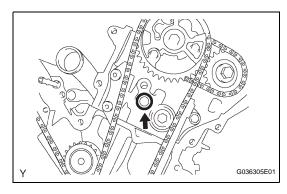
Torque: 9.0 N*m (92 kgf*cm, 80 in.*lbf)



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INSTALLATION

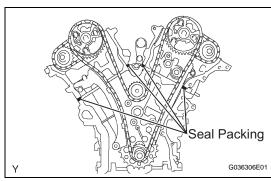
- INSTALL TIMING GEAR CASE OR TIMING CHAIN CASE OIL SEAL (See page EM-236)
- 2. INSTALL TIMING CHAIN OR BELT COVER SUB-ASSEMBLY
 - (a) Remove any old packing (FIPG) material. Be careful not to drop any oil on the contact surfaces of the timing chain cover, cylinder head and cylinder block.
 - (b) Install a new O-ring onto the LH cylinder head as shown in the illustration.



(c) Apply continuous beads of seal packing (diameter 3 to 4 mm (0.12 to 0.16 in.)) to the 4 locations shown in the illustration.

Seal packing:

Part No. 08826-00080 or equivalent



(d) Apply continuous beads of seal packing (diameter 3 to 4 mm (0.12 to 0.16 in.)) to the timing chain cover as shown in the illustration.

Seal packing:

Water pump part:

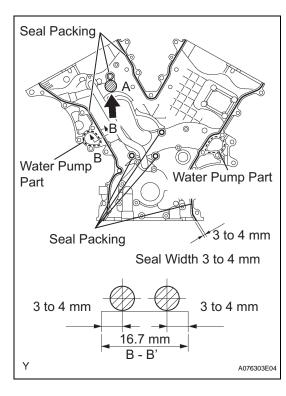
Part No. 08826-00100 or equivalent

Other parts:

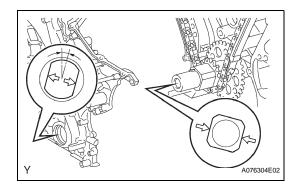
Part No. 08826-00080 or equivalent

NOTICE:

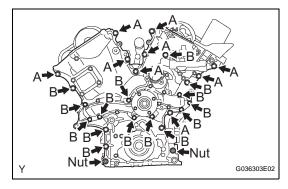
- Install the timing chain cover within 3 minutes of applying the seal packing. Timing chain cover bolts and nuts must be tightened within 15 minutes of installation. Otherwise, the seal packing must be removed and reapplied.
- Do not apply seal packing to portion A shown in the illustration.







(e) Align the key way of the oil pump drive rotor with the rectangular portion of the crankshaft timing gear, and slide the timing chain cover into place.



f) Install the timing chain cover with the 24 bolts and 2 nuts. Tighten the bolts and nuts uniformly in several steps.

Torque: 23 N*m (235 kgf*cm, 17 ft.*lbf)

NOTICE:

Pay attention not to wrap the chain and slipper over the timing chain cover seal line.

Each bolt length is as follows

Bolt	Length
A	25 mm (0.98 in.)
В	55 mm (2.17 in.)

3. INSTALL OIL FILTER BRACKET SUB-ASSEMBLY

(a) Install a new gasket and the oil filter bracket with the 3 bolts and 2 nuts.

Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)

- 4. INSTALL VVT SENSOR (See page IG-8)
- 5. INSTALL CAMSHAFT TIMING OIL CONTROL VALVE ASSEMBLY (See page ES-408)
- 6. INSTALL CYLINDER HEAD COVER SUB-ASSEMBLY LH (See page EM-68)
- 7. INSTALL CYLINDER HEAD COVER SUB-ASSEMBLY (See page EM-68)
- 8. INSTALL IGNITION COIL ASSEMBLY (See page IG-8)
- 9. INSTALL OIL PAN SUB-ASSEMBLY (See page EM-31)
- 10. INSTALL OIL STRAINER SUB-ASSEMBLY (See page EM-29)
- 11. INSTALL NO.2 OIL PAN SUB-ASSEMBLY (See page EM-29)
- 12. INSTALL CRANKSHAFT PULLEY (See page EM-30)
- 13. INSTALL NO.1 IDLER PULLEY SUB-ASSEMBLY (See page EM-30)
- 14. INSTALL NO.2 IDLER PULLEY SUB-ASSEMBLY (See page EM-30)
- 15. INSTALL V-RIBBED BELT TENSIONER ASSEMBLY (See page EM-30)
- 16. INSTALL WATER INLET (See page CO-10)



- 17. INSTALL OIL LEVEL GAUGE GUIDE
- **18. INSTALL ENGINE ASSEMBLY** (See page EM-190)
- 19. INSTALL BATTERY
- 20. ADD ENGINE COOLANT (See page CO-3)
- 21. ADD ENGINE OIL (See page LU-5)
- 22. CHECK FOR ENGINE COOLANT LEAKAGE (See page CO-4)
- 23. CHECK FOR ENGINE OIL LEAKAGE
- 24. CHECK FOR FUEL LEAKAGE
- 25. CHECK FOR EXHAUST GAS LEAKAGE
- 26. INSPECT IGNITION TIMING (See page EM-1)
- 27. INSPECT ENGINE IDLING SPEED (See page EM-2)
- 28. INSPECT CO/HC (See page EM-3)

