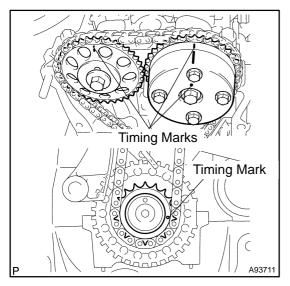
1410Q-01

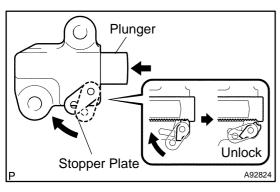
# REPLACEMENT

- 1. REMOVAL & INSTALLATION OIL PUMP ASSY (See page 17-7)
- 2. REMOVAL & INSTALLATION OIL PUMP SEAL (See page 17-7)



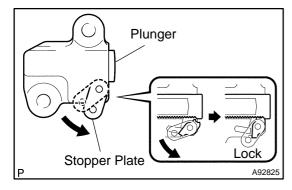
### 3. SET NO. 1 CYLINDER TO TDC/COMPRESSION

- (a) Install the washer to the crankshaft bolt, then install the bolt to the crankshaft.
- (b) Turn the crankshaft clockwise so it is located as illustrated.

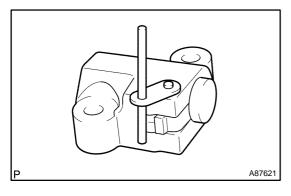


## 4. REMOVE CHAIN SUB-ASSY

- (a) Remove the chain tensioner.
  - (1) Lift up the stopper plate, then unlock the plunger.
  - (2) Push in the plunger to the end with the plunger unlocked.



(3) Lift down the stopper plate with the plunger pushed to the end, then lock the plunger.



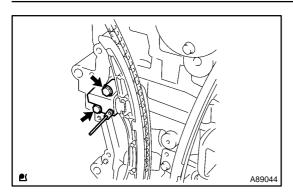
(4) Insert a 3.0 mm (0.118 in.) diameter bar into the hole of the stopper plate with the plunger locked.

#### HINT:

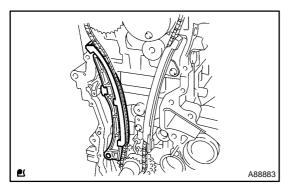
If the stopper plate is not completely lifted down and a 3.0 mm (0.118 in.) diameter bar cannot be inserted, unlock and pull out the plunger slightly. The stopper plate will be completely lifted down and a 3.0 mm (0.118 in.) diameter bar can be inserted easily.

2004 Prius - Preliminary Release (RM1075U)

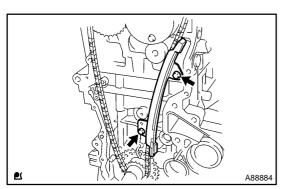
Author: Date: 192



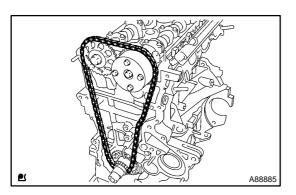
(5) Remove the 2 bolts and chain tensioner.



(b) Remove the chain tensioner slipper.

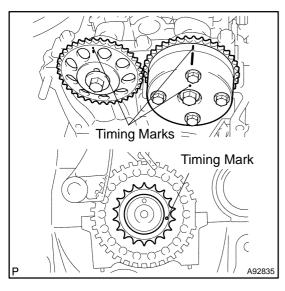


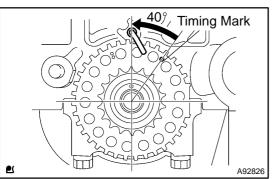
(c) Remove the 2 bolts and chain vibration damper.

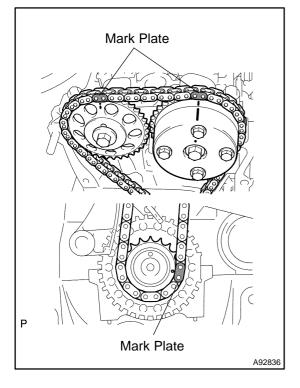


(d) Remove the chain.

193







## 5. INSTALL CHAIN SUB-ASSY

(a) Check that the timing marks are located as illustrated.

#### NOTICE:

- Do not turn the crankshaft with the chain tensioner removed.
- If turning the camshaft with the chain removed, turn the crankshaft counterclockwise by 40  $^\circ$  from the TDC/compression.

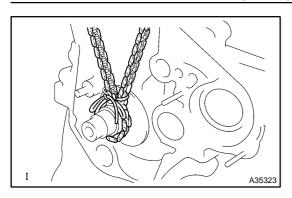
(b) Install the chain so the timing mark and the mark plate of the chain are aligned.

# HINT:

- The camshaft side Orange
- The crankshaft side Yellow

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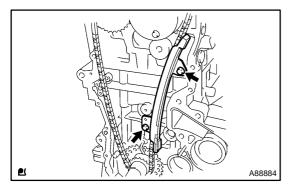
Author: Date: 194



(c) To prevent misalignment of the mark plate and timing mark, tie the chain around the crankshaft timing sprocket with a string.

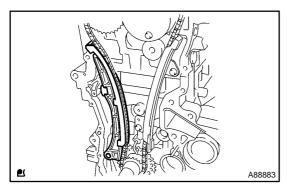
## HINT:

Tie the chain to prevent misalignment of the timing marks.

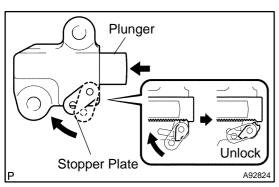


(d) Install the chain vibration damper with the 2 bolts.

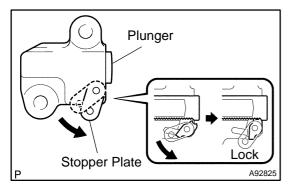
Torque: 9.0 N·m (92 kgf·cm, 80 in.·lbf)



(e) Remove the string, then install the chain tensioner stopper.



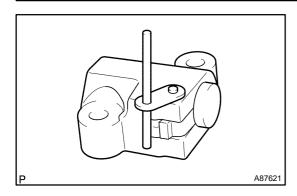
- (f) Install the chain tensioner.
  - (1) Lift up the stopper plate, then unlock the plunger.
  - (2) Push in the plunger to the end with the plunger unlocked.



(3) Lift down the stopper plate with the plunger pushed to the end, then lock the plunger.

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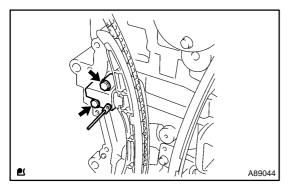
Author: Date: 195



(4) Insert a 3.0 (0.118 in.) mm diameter bar into the hole of the stopper plate with the plunger locked.

#### HINT:

If the stopper plate is not completely lifted down and a 3.0 mm (0.118 in.) diameter bar cannot be inserted, unlock and pull out the plunger slightly. The stopper plate will be completely lifted down and a 3.0 mm (0.118 in.) diameter bar can be inserted easily.



- (5) Install the chain tensioner with the 2 bolts. Torque: 9.0 N·m (92 kgf·cm, 80 in.·lbf)
- (6) Remove the 3.0 mm (0.118 in.) diameter bar from the chain tensioner.

- 6. INSTALL OIL PUMP SEAL (See page 17-7)
  SST 09950-60010 (09951-00250, 09951-00380, 09952-06010), 09950-70010 (09951-07100)
- 7. INSTALL OIL PUMP ASSY (See page 17–7)