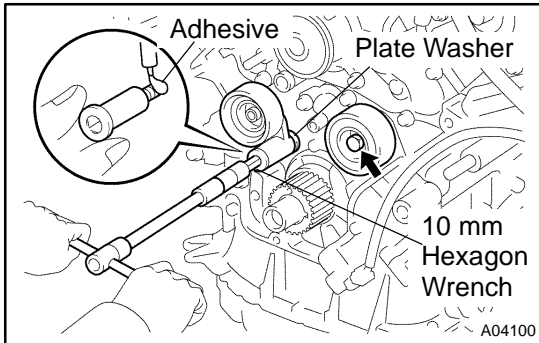


## INSTALLATION

### 1. INSTALL CRANKSHAFT TIMING PULLEY

- Align the timing pulley set key with the key groove of the pulley.
- Using SST and a hammer, tap in the timing pulley, facing the flange side inward.

SST 09223-46011



### 2. INSTALL NO.1 TIMING BELT IDLER PULLEY

- Apply adhesive 2 or 3 threads of the pivot bolt.

**Adhesive:**

**Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent**

- Using a 10 mm hexagon wrench, install the plate washer and idler pulley with the pivot bolt.

**Torque: 34.5 N·m (350 kgf·cm, 25 ft·lbf)**

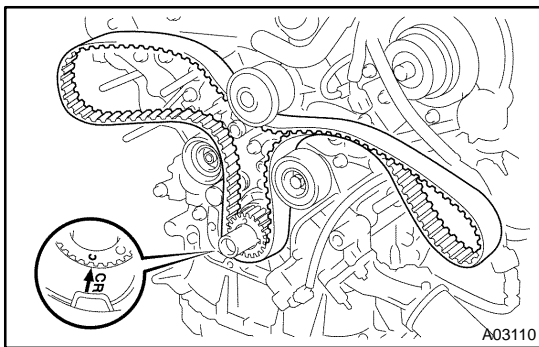
- Check that the pulley bracket moves smoothly.

### 3. INSTALL NO.2 TIMING BELT IDLER PULLEY

- Install the idler pulley with the bolt.

**Torque: 34.5 N·m (350 kgf·cm, 25 ft·lbf)**

- Check that the idler pulley moves smoothly.



### 4. TEMPORARILY INSTALL TIMING BELT

#### NOTICE:

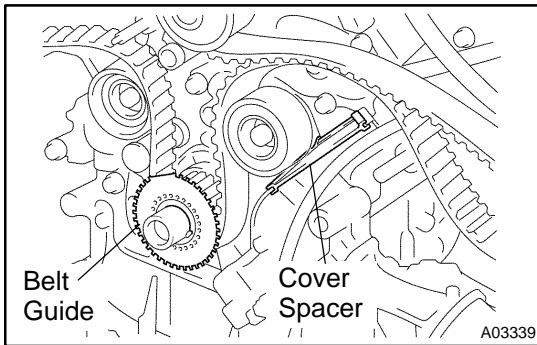
**The engine should be cold.**

- Remove any oil or water on the crankshaft pulley, oil pump pulley, water pump pulley, No.1 idler pulley and No.2 idler pulley, and keep them clean.

#### NOTICE:

**Only wipe the pulleys; do not use any cleansing agent.**

- Align the installation mark on the timing belt with the timing mark of the crankshaft timing pulley.
- Install the timing belt on the crankshaft timing pulley, No.1 idler pulley and No.2 idler pulley.

**5. INSTALL TIMING BELT COVER SPACER**

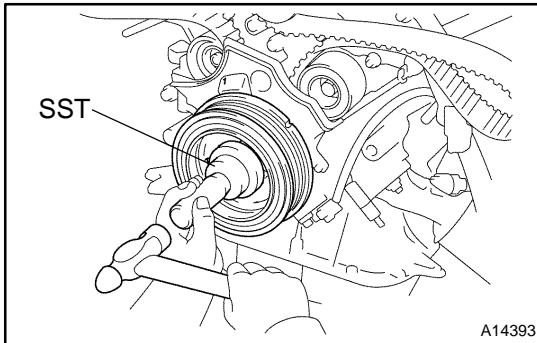
- (a) Install the gasket to the cover spacer.
- (b) Install the cover spacer.

**6. INSTALL TIMING BELT GUIDE**

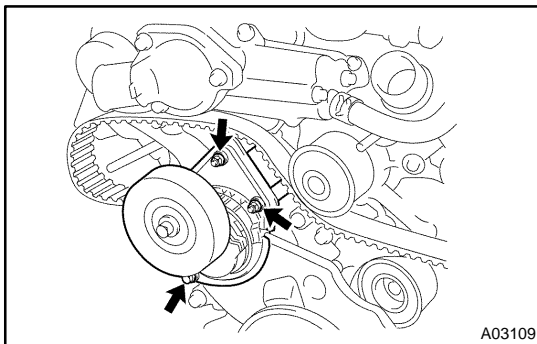
Install the belt guide, facing the cup side outward.

**7. INSTALL NO.1 TIMING BELT COVER**

Install the timing belt cover with the 4 bolts.

**8. INSTALL CRANKSHAFT PULLEY**

- (a) Align the pulley set key with the key groove of the crankshaft pulley.
- (b) Using SST and a hammer, tap in the crankshaft pulley.  
SST 09223-46011

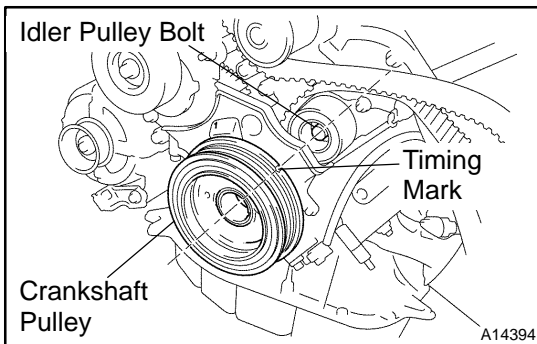
**9. INSTALL DRIVE BELT TENSIONER**

Install the belt tensioner with the bolt and 2 nuts.

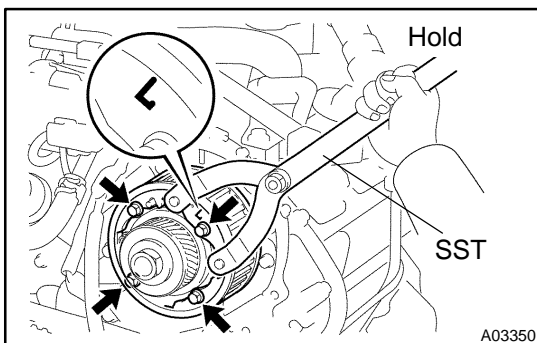
**Torque: 15.5 N·m (160 kgf·cm, 11 ft·lbf)**

**HINT:**

Use a bolt 106 mm (4.18 in.) in length.

**10. INSTALL GENERATOR (See page CH-16)****11. INSTALL PS PUMP PULLEY (See page CH-16)****12. CHECK CRANKSHAFT PULLEY POSITION**

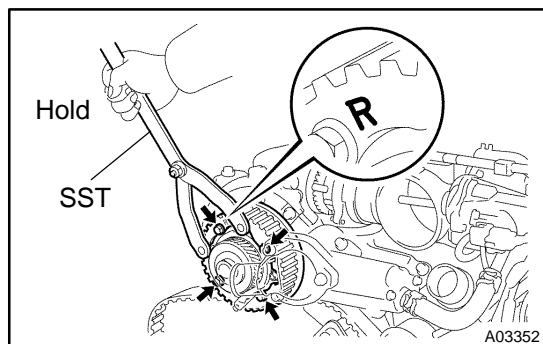
Check that the timing mark of the crankshaft pulley is aligned with the centers of the crankshaft pulley and the No.2 timing belt idler pulley bolt.

**13. INSTALL LH CAMSHAFT TIMING PULLEY**

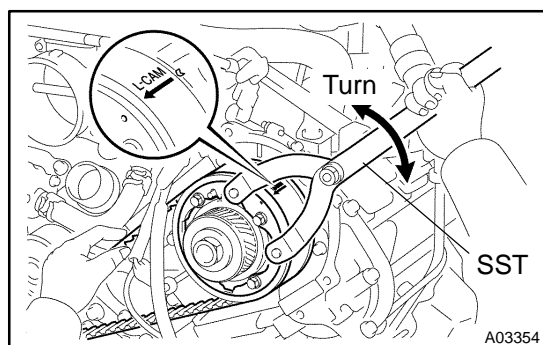
- (a) Align the camshaft timing tube knock pin with the knock pin groove of the timing pulley.
- (b) Attach the timing pulley to the camshaft timing tube, facing the "L" mark forward.
- (c) Using SST, install the 4 pulley bolts.

SST 09960-10010 (09962-01000, 09963-00350)

**Torque: 7.5 N·m (80 kgf·cm, 66 in.-lbf)**

**14. INSTALL RH CAMSHAFT TIMING PULLEY**

- Align the camshaft timing tube knock pin with the knock pin groove of the timing pulley.
- Attach the timing pulley to the camshaft timing tube, facing the "R" mark forward.
- Using SST, install the 4 pulley bolts.  
SST 09960-10010 (09962-01000, 09963-00350)  
**Torque: 7.5 N·m (80 kgf·cm, 66 in.-lbf)**

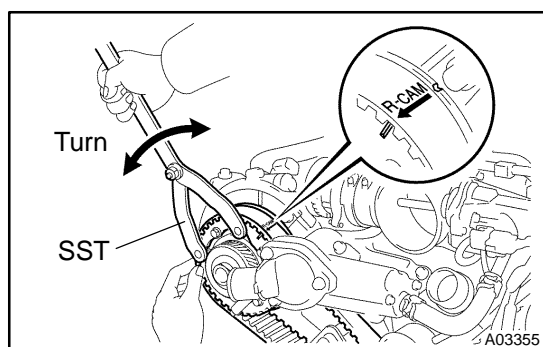
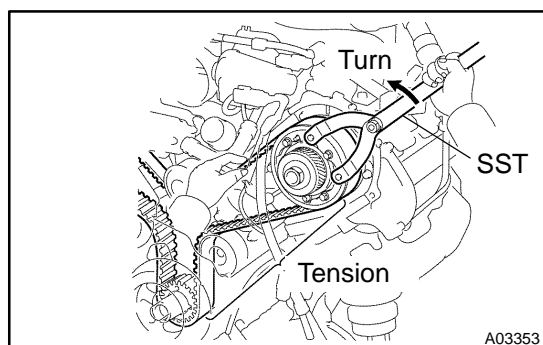
**15. CONNECT TIMING BELT TO LH CAMSHAFT TIMING PULLEY**

- Remove any oil or water on the timing pulley, and keep it clean.

**NOTICE:**

**Only wipe the pulleys; do not use any cleansing agent.**

- Using SST, turn the timing pulley. Align the installation mark on the timing belt with the timing mark of the timing pulley.  
SST 09960-10010 (09962-01000, 09963-00350)
- Using SST, turn the LH camshaft timing pulley counter-clockwise until there is tension between the crankshaft timing pulley and LH camshaft timing pulley.  
SST 09960-10010 (09962-01000, 09963-00350)

**16. CONNECT TIMING BELT TO RH CAMSHAFT TIMING PULLEY**

- Remove any oil or water on the camshaft timing pulley and water pump pulley, and keep them clean.

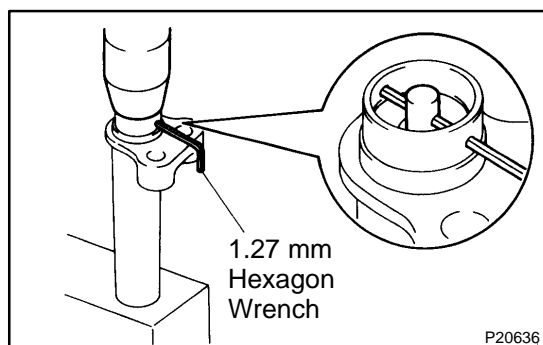
**NOTICE:**

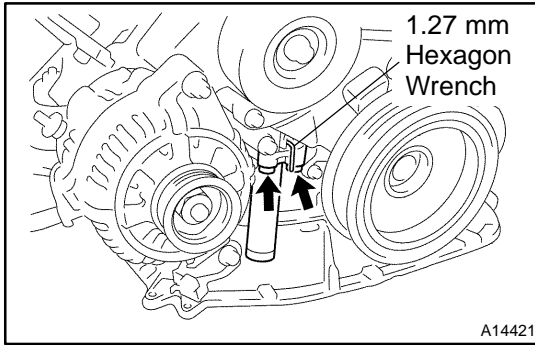
**Only wipe the pulleys; do not use any cleansing agent.**

- Using SST, turn the timing pulley. Align the installation mark on the timing belt with the timing mark of the timing pulley.  
SST 09960-10010 (09962-01000, 09963-00350)

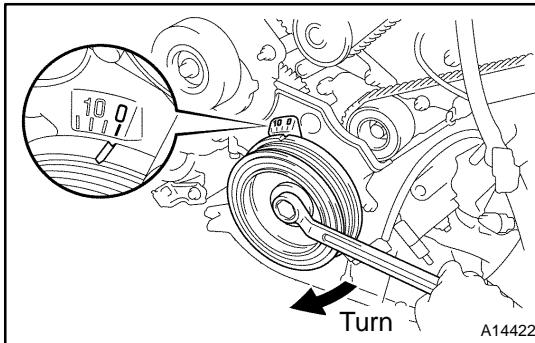
**17. SET TIMING BELT TENSIONER**

- Using a press, slowly press in the push rod using 981 – 9,807 N (100 – 1,000 kgf, 220 – 2,205 lbf) of pressure.
- Align the holes of the push rod and housing, pass a 1.27 mm hexagon wrench through the holes to keep the setting position of the push rod.
- Release the press.
- Install the dust boot to the belt tensioner.



**18. INSTALL TIMING BELT TENSIONER**

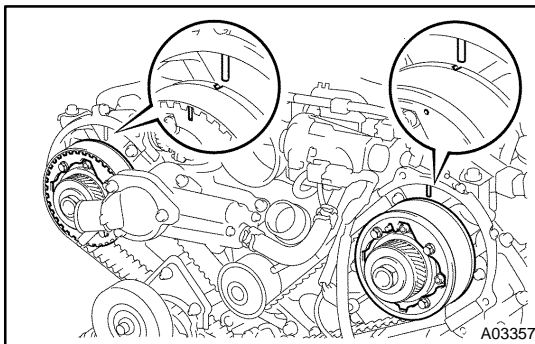
- Temporarily install the belt tensioner with the 2 bolts.
- Alternately tighten the 2 bolts.  
**Torque: 26 N·m (270 kgf-cm, 19 ft-lbf)**
- Using pliers, remove the 1.27 mm hexagon wrench from the belt tensioner.

**19. CHECK VALVE TIMING**

- Temporarily install the crankshaft pulley bolt.
- Slowly turn the crankshaft pulley 2 revolutions from TDC to TDC.

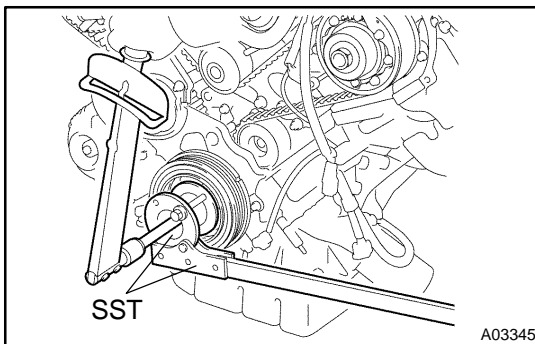
**NOTICE:**

**Always turn the crankshaft pulley clockwise.**



- Check that each pulley aligns with the timing marks as shown in the illustration.

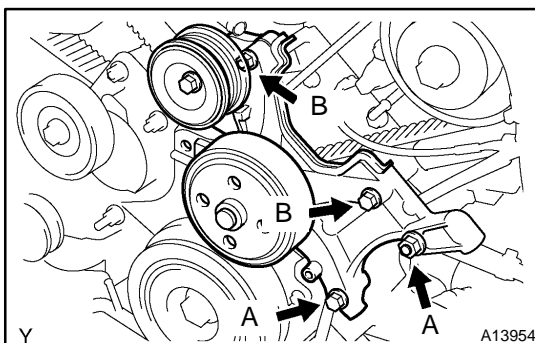
If the timing marks do not align, remove the timing belt and reinstall it.

**20. TIGHTEN CRANKSHAFT PULLEY BOLT**

Using SST, install the pulley bolt.

SST 09213-70010, 09330-00021

**Torque: 245 N·m (2,500 kgf-cm, 181 ft-lbf)**

**21. INSTALL NO.1 DRIVE BELT IDLER PULLEY**

Install the idler pulley with the 2 bolts and 2 nuts.

**Torque:**

**16 N·m (160 kgf-cm, 12 ft-lbf) for 12 mm head**

**32 N·m (330 kgf-cm, 24 ft-lbf) for 14 mm head**

**HINT:**

- Each bolt length is indicated in the illustration.

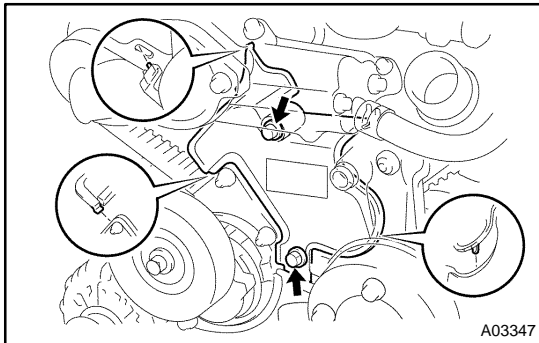
**Bolt Length:**

106 mm (4.17 in.) for 12 mm head (A)

114 mm (4.49 in.) for 14 mm head (B)

- Pass the engine wire for the crankshaft position sensor between the idler pulley and oil pump.

## 22. INSTALL A/C COMPRESSOR (See page [EM-85](#))



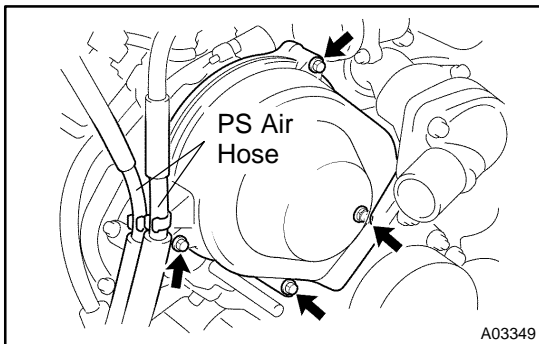
## 23. INSTALL NO.2 TIMING BELT COVER

- Fit the timing belt cover, matching the claws and pin with each part.
- Install the timing belt cover with the 2 bolts.

**Torque: 16 N·m (160 kgf-cm, 12 ft-lbf)**

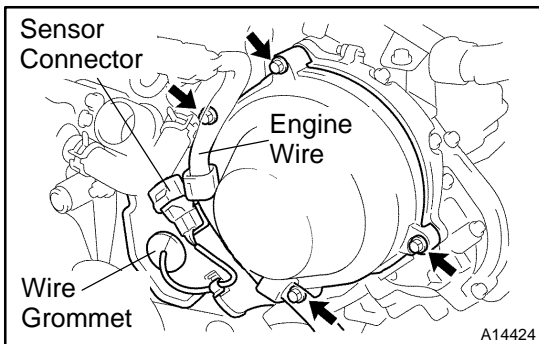
**HINT:**

Use bolts 106 mm (4.17 in.) in length.



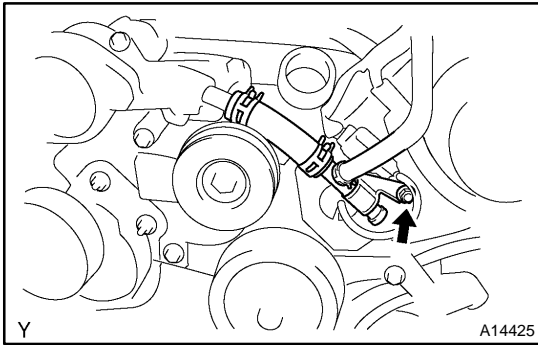
## 24. INSTALL RH NO.3 TIMING BELT COVER

- Install the gasket to the timing belt cover.
- Install the timing belt cover with the cap nut and 3 bolts.
- Install the 2 PS air hoses to the clamp on the timing belt cover.



## 25. INSTALL LH NO.3 TIMING BELT COVER

- Install the gasket to the LH No.3 timing belt cover.
- Run the camshaft position sensor wire through the timing belt cover hole.
- Install the LH No.3 timing belt cover with the 4 bolts.
- Install the wire grommet to the LH No.3 timing timing belt cover.
- Install the sensor connector to the connector holder.
- Connect the sensor connector.
- Install the sensor wire to the wire clamp on the LH No.3 timing belt cover.
- Install the connector holder to the LH No.3 timing belt cover.
- Install the engine wire to the 2 wire clamps on the LH No.3 timing belt cover.



- (j) Connect the 2 water bypass hoses to the No.3 water bypass pipe.
- (k) Install the No.3 water bypass pipe to the LH No.3 timing belt cover with the cap nut.

**26. INSTALL NO.2 DRIVE BELT IDLER PULLEY**

Install the idler pulley and cover plate with the bolt.

**Torque: 39 N·m (398 kgf-cm, 29 ft-lbf)**

**27. INSTALL RADIATOR ASSEMBLY (See page [CO-24](#))**

**28. INSTALL DRIVE BELT (See page [CH-1](#))**

**29. INSTALL INTAKE AIR CONNECTOR PIPE**

**30. INSTALL AIR CLEANER ASSEMBLY**

**31. FILL WITH ENGINE COOLANT (See page [CO-2](#))**

**32. START ENGINE AND CHECK FOR ENGINE COOLANT LEAKS**

**33. INSTALL V-BANK COVER**

**34. INSTALL AIR CLEANER INLET**

**35. INSTALL ENGINE UNDER COVER**