

## 13. Crank Pulley

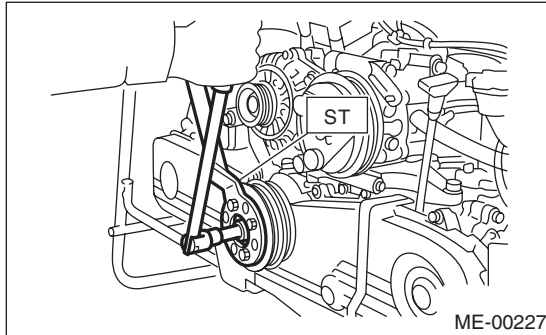
### A: REMOVAL

#### NOTE:

Perform the work with the engine installed to body when replacing a single part.

- 1) Remove the V-belts. <Ref. to ME(H4SO)-37, REMOVAL, V-belt.>
- 2) Remove the crank pulley bolt. To lock the crankshaft, use ST.

ST 499977100 CRANK PULLEY WRENCH



- 3) Remove the crank pulley.

### B: INSTALLATION

- 1) Install the crank pulley.
- 2) Install the pulley bolt.

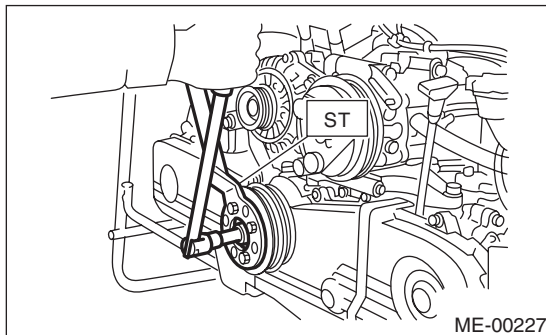
To lock the crankshaft, use ST.

ST 499977100 CRANK PULLEY WRENCH

- (1) Clean the crankshaft thread using compressed air.
- (2) Apply engine oil to the crank pulley bolt seat and thread.
- (3) Tighten the bolts temporarily with tightening torque of 44 N·m (4.5 kgf·m, 33 ft·lb).
- (4) Tighten the crank pulley bolts.

#### Tightening torque:

**180 N·m (18.4 kgf·m, 132.8 ft·lb)**



- 3) Check that the tightening angle of the crank pulley bolt is 65° or more. Perform the following procedures when less than 65°.

#### CAUTION:

**If the tightening angle of crank pulley bolt is less than 65°, the bolt is damaged. In this case, the bolt must be replaced.**

- (1) Replace the crank pulley bolts and clean them.

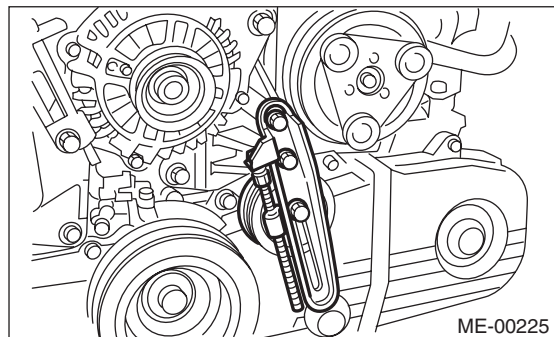
#### Crank pulley bolt: 12369AA011

- (2) Clean the crankshaft thread using compressed air.
- (3) Apply engine oil to the crank pulley bolt seat and thread.
- (4) Tighten the bolts temporarily with tightening torque of 44 N·m (4.5 kgf·m, 33 ft·lb).
- (5) Tighten the crank pulley bolts 65° to 75°.

#### NOTE:

Conduct the tightening procedures by confirming the turning angle of crank pulley bolt referring to the gauge indicated on timing belt cover.

- 4) Install the belt tensioner.



- 5) Install the V-belts. <Ref. to ME(H4SO)-37, INSTALLATION, V-belt.>

### C: INSPECTION

- 1) Make sure the V-belt is not worn or otherwise damaged.
- 2) Check the tension of the belt. <Ref. to ME(H4SO)-38, INSPECTION, V-belt.>