

## 13. Crank Pulley

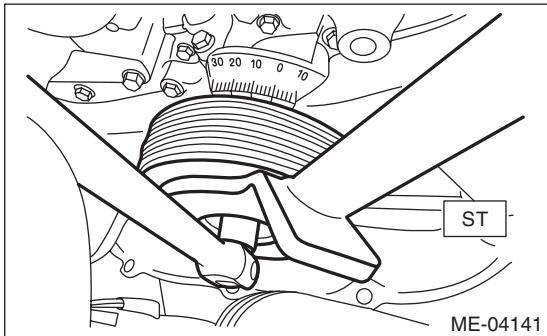
### A: REMOVAL

NOTE:

When replacing the single part, perform the work with the engine installed to vehicle body.

- 1) Remove the V-belts. <Ref. to ME(H4DOTC)-37, REMOVAL, V-belt.>
- 2) Use the ST to lock the crank pulley, and remove the crank pulley bolt.

ST 499977100 CRANK PULLEY WRENCH



- 3) Remove the crank pulley.

### B: INSTALLATION

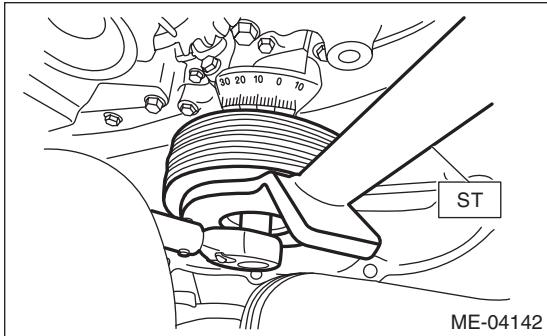
#### 1. METHOD WITHOUT ANGLE GAUGE

- 1) Clean the crankshaft thread using compressed air.
- 2) Install the crank pulley.
- 3) Apply engine oil to the crank pulley bolt seat and thread.
- 4) Tighten the crank pulley bolts.
  - (1) Use the ST to lock the crank pulley, and temporarily tighten the crank pulley bolt.

ST 499977100 CRANK PULLEY WRENCH

**Tightening torque:**

47 N·m (4.8 kgf·m, 34.7 ft-lb)

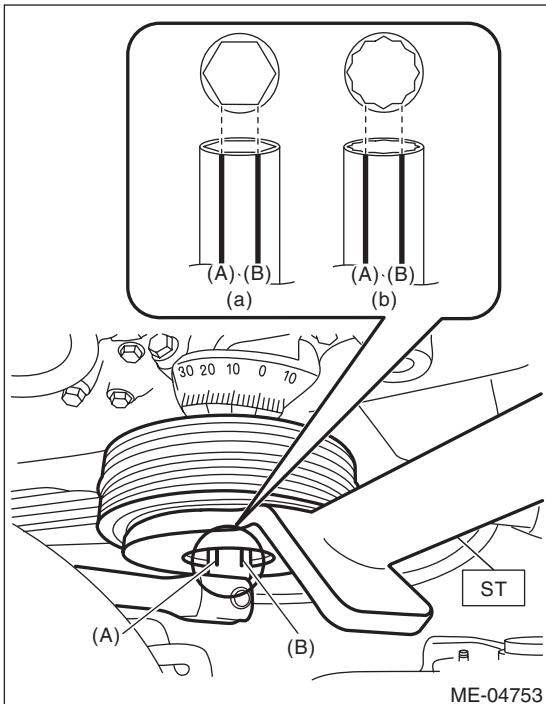


- (2) Draw reference lines (A) and (B) using a marker to set the socket to the crank pulley bolt as shown in the figure.

ST 499977100 CRANK PULLEY WRENCH

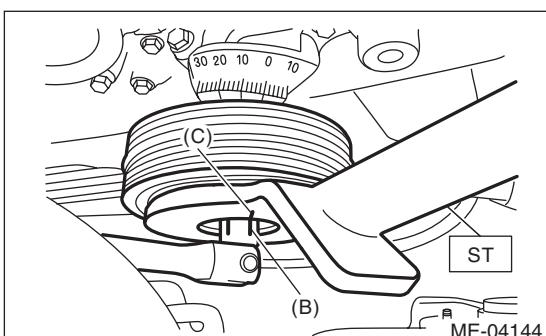
NOTE:

Set the socket onto the crank pulley bolt so that reference lines (A) and (B) is visible.



- (3) Draw end line (C) on ST using a marker at the same position as reference line (B) was drawn on the socket in step (2).

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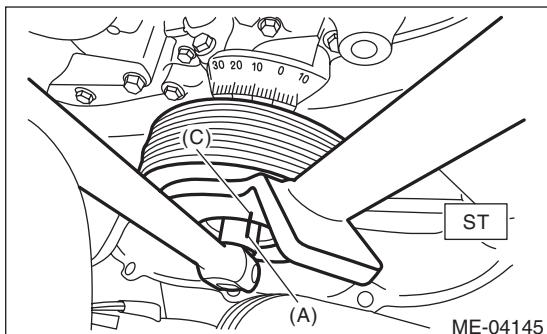


- (4) Use the ST to lock the crank pulley, and tighten the crank pulley bolt to the angle where reference line (A) and end line (C) are aligned.

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NOTE:

It should be approx. 60° when reference line (A) and end line (C) are aligned.

**Tightening angle:** $60^\circ \pm 5^\circ$ 

5) Install the V-belts. <Ref. to ME(H4DOTC)-38, INSTALLATION, V-belt.>

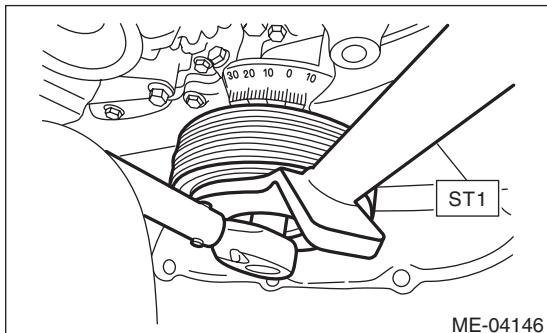
**2. METHOD WITH ANGLE GAUGE**

- 1) Clean the crankshaft thread using compressed air.
- 2) Install the crank pulley.
- 3) Apply engine oil to the crank pulley bolt seat and thread.
- 4) Tighten the crank pulley bolts.
  - (1) Remove the radiator main fan motor assembly and radiator sub motor assembly. <Ref. to CO(H4DOTC)-24, REMOVAL, Radiator Main Fan and Fan Motor.> <Ref. to CO(H4DOTC)-27, REMOVAL, Radiator Sub Fan and Fan Motor.>
  - (2) Use the ST1 to lock the crank pulley, and temporarily tighten the crank pulley bolt.

ST1 499977100 CRANK PULLEY WRENCH

**Tightening torque:**

47 N·m (4.8 kgf·m, 34.7 ft-lb)



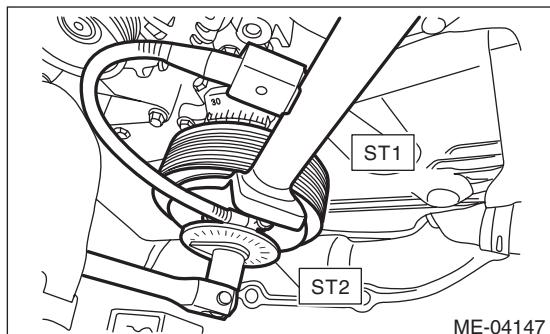
(3) Set the ST2, use the ST1 to lock the crank pulley, and tighten the crank pulley bolt to the specified angle.

ST1 499977100 CRANK PULLEY WRENCH

ST2 18854AA000 ANGLE GAUGE

**NOTE:**

Attach the magnet used for securing the ST2 (ANGLE GAUGE) to ST1.

**Tightening angle:** $60^\circ \pm 5^\circ$ 

(4) Install the radiator main fan motor assembly and radiator sub motor assembly. <Ref. to CO(H4DOTC)-25, INSTALLATION, Radiator Main Fan and Fan Motor.> <Ref. to CO(H4DOTC)-27, INSTALLATION, Radiator Sub Fan and Fan Motor.>

5) Install the V-belts. <Ref. to ME(H4DOTC)-38, INSTALLATION, V-belt.>

**C: INSPECTION**

- 1) Make sure the V-belt is not worn or damaged.
- 2) Check the tension of the front side belt. <Ref. to ME(H4DOTC)-39, INSPECTION, V-belt.>