

13.Crank Pulley

A: REMOVAL

NOTE:

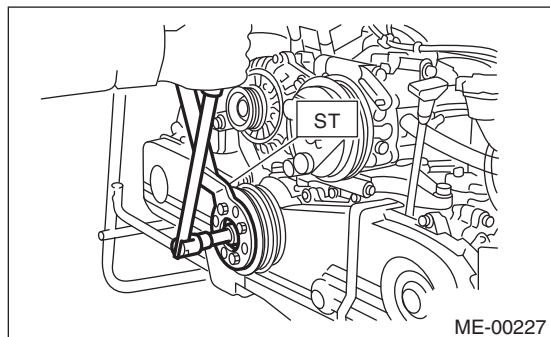
Perform the work with the engine installed to body when replacing a single part.

1) Remove the V-belts. <Ref. to ME(H4SO)-42, REMOVAL, V-belt.>

2) Use the ST to lock the crank pulley, and remove the crank pulley bolts.

ST 499977100 CRANK PULLEY WRENCH (MT model)

ST 499977400 CRANK PULLEY WRENCH (AT model)



3) Remove the crank pulley.

B: INSTALLATION

1. AT MODEL

1) Install the crank pulley.

2) Use the ST to lock the crank pulley, and attach the crank pulley bolts.

ST 499977400 CRANK PULLEY WRENCH

(1) Clean the crankshaft thread using compressed air.

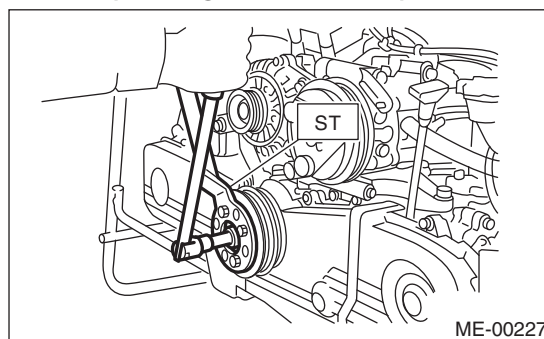
(2) Apply engine oil to the crank pulley bolt seat and thread.

(3) Tighten the bolts temporarily with tightening torque of 44 N·m (4.5 kgf-m, 32.5 ft-lb).

(4) Tighten the crank pulley bolts.

Tightening torque:

130 N·m (13.3 kgf-m, 95.9 ft-lb)



3) Check that the tightening angle of the crank pulley bolt is 45° or more. Perform the following procedure when less than 45°.

CAUTION:

If the tightening angle of crank pulley bolt is less than 45°, the bolt is damaged. In this case, the bolt must be replaced.

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

Crank pulley bolt:

Part No. 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, 32.5 ft-lb).

(5) Tighten the crank pulley bolts 45° to 60°.

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 V-belts. <Ref. to ME(H4SO)-42, INSTALLATION, V-belt.>

2. MT MODEL

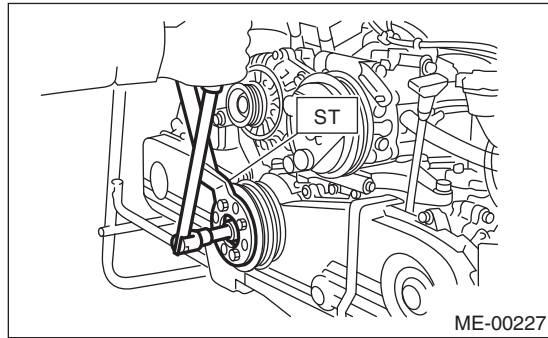
- 1) Install the crank pulley.
- 2) Use the ST to lock the crank pulley, and attach the crank pulley bolts.

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, 32.5 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 procedure 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:

Part No. 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, 32.5 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 V-belts. <Ref. to ME(H4SO)-42, INSTALLATION, V-belt.>

C: INSPECTION

- 1) Make sure the V-belts are not worn or otherwise damaged.
- 2) Check the tension of the front side belt. <Ref. to ME(H4SO)-48, INSPECTION, V-belt.>