

12.V-belt

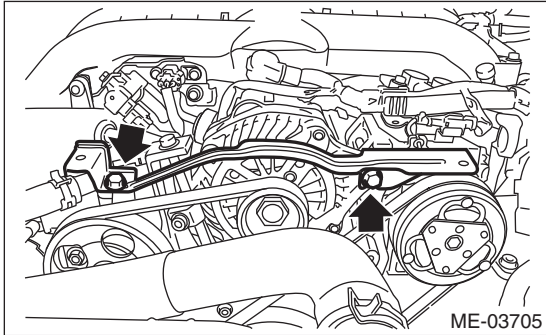
A: REMOVAL

NOTE:

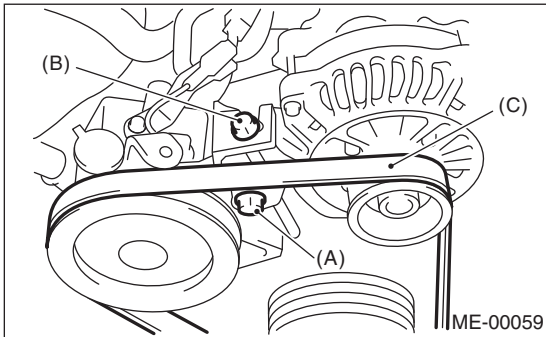
Perform the work with the engine installed to body when replacing a single part.

1. FRONT SIDE BELT

- 1) Remove the collector cover.
- 2) Remove the air intake duct (rear). <Ref. to IN(H4DOTC)-9, REMOVAL, Air Intake Duct.>
- 3) Remove the collector cover bracket.

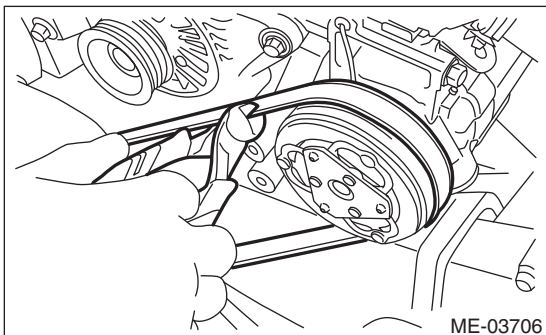


- 4) Loosen the bolt (A).
- 5) Loosen the slider bolt (B).
- 6) Remove the front side belt (C).



2. REAR SIDE BELT

- 1) Remove the front side belts. <Ref. to ME(H4DOTC)-39, FRONT SIDE BELT, REMOVAL, V-belt.>
- 2) Cut the rear side belt with a wire cutter, etc., and discard.



B: INSTALLATION

1. FRONT SIDE BELT

CAUTION:

- When reusing the front side belt, wipe off any sand or water with a cloth.
- Do not reuse the front side belt if there is any oil, grease or coolant on the belt.
- Be careful when touching the belt. If the end face of the belt is rubbed by hand, you may receive injury from bared wires.

- 1) Wipe off any sand, dust, oil or water from the pulley grooves with a cloth.
- 2) Install the front side belt (C), and adjust the slider bolt (B) so as to obtain the specified belt tension. <Ref. to ME(H4DOTC)-45, INSPECTION, V-belt.>
- 3) Tighten the bolt (A).
- 4) Tighten the slider bolt (B).

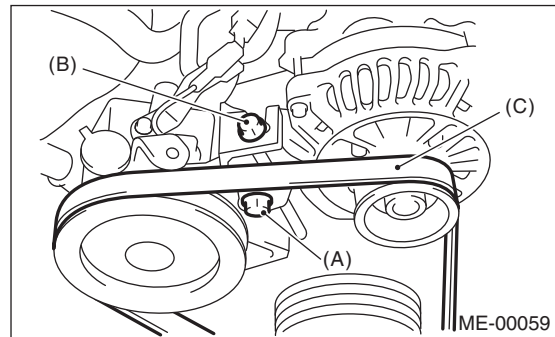
Tightening torque:

Bolt (A)

25 N·m (2.5 kgf-m, 18.4 ft-lb)

Slider bolt (B)

8 N·m (0.8 kgf-m, 5.9 ft-lb)

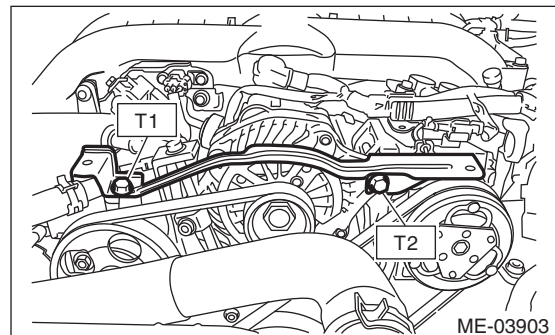


- 5) Install the collector cover bracket.

Tightening torque:

T1: 8.5 N·m (0.9 kgf-m, 6.3 ft-lb)

T2: 25 N·m (2.5 kgf-m, 18.4 ft-lb)

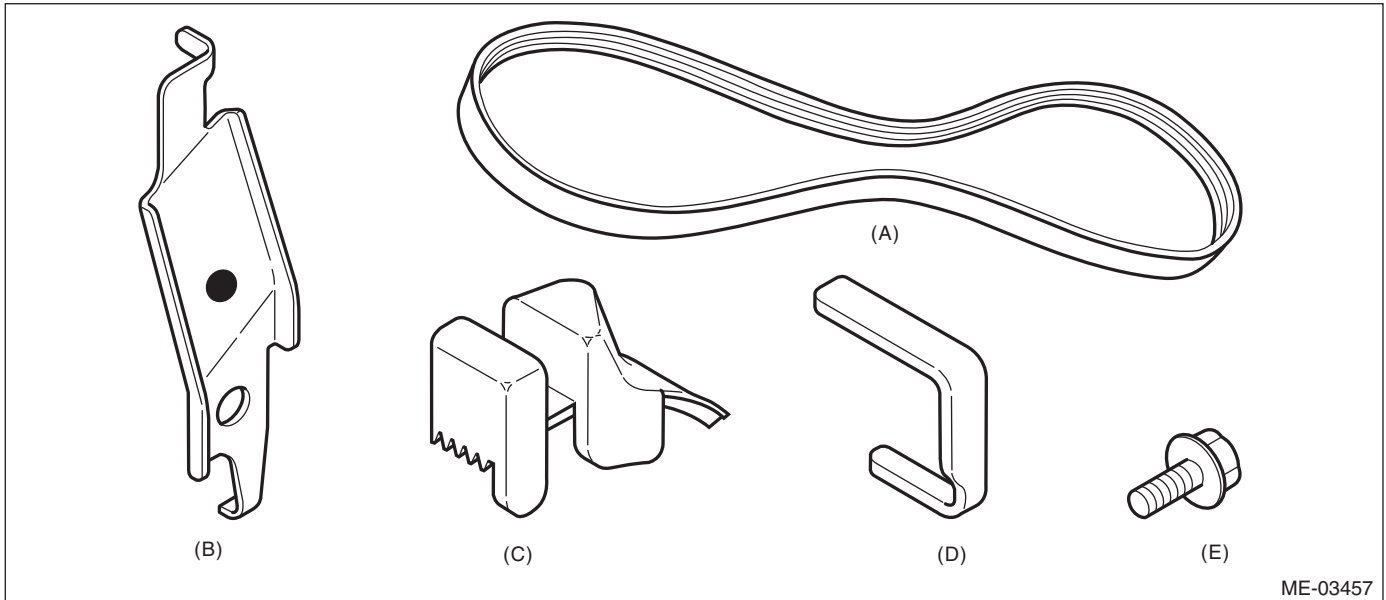


- 6) Install the air intake duct (rear). <Ref. to IN(H4DOTC)-9, INSTALLATION, Air Intake Duct.>
- 7) Install the collector cover.

2. REAR SIDE BELT

CAUTION:

- Always use new rear side belt.
- Be careful that the new rear side belt does not come into contact with any oil, grease or coolant.
- Be careful when touching the belt. If the end face of the belt is rubbed by hand, you may receive injury from bared wires.
- When installing the rear side belt, always use the provided tools (belt stopper, belt guide, belt guide holder and bolt).



ME-03457

(A) Rear side belt
(B) Belt stopper

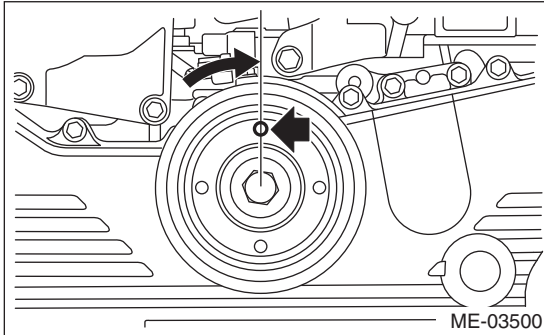
(C) Belt guide
(D) Belt guide holder

(E) Bolt

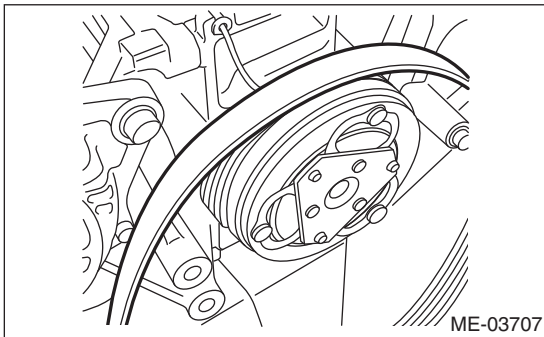
- 1) Wipe off any sand, dust, oil or water from the pulley grooves with a cloth.
- 2) Wipe off any oil, water, mud or rust attached to the front side of the crank pulley with a cloth.
- 3) Turn the crank pulley to the right slowly, until the crank pulley service hole near the top.

CAUTION:

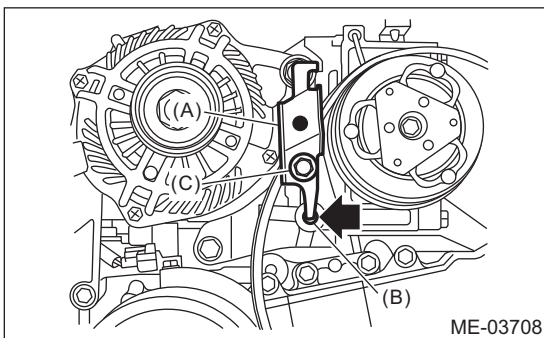
Never turn the crank pulley to the left.



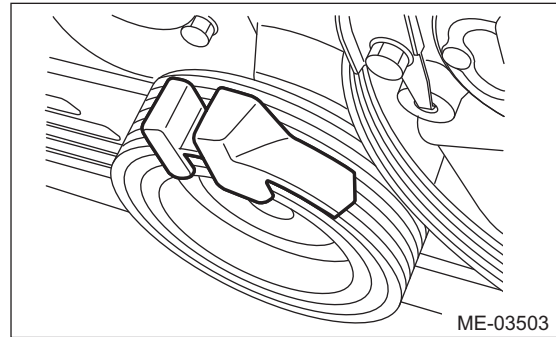
- 4) Attach a new rear side belt on the A/C compressor belt.



- 5) Insert the claw of the belt stopper (A) into the lower hole (B) on the compressor bracket as shown in the figure, and attach using bolt (C).



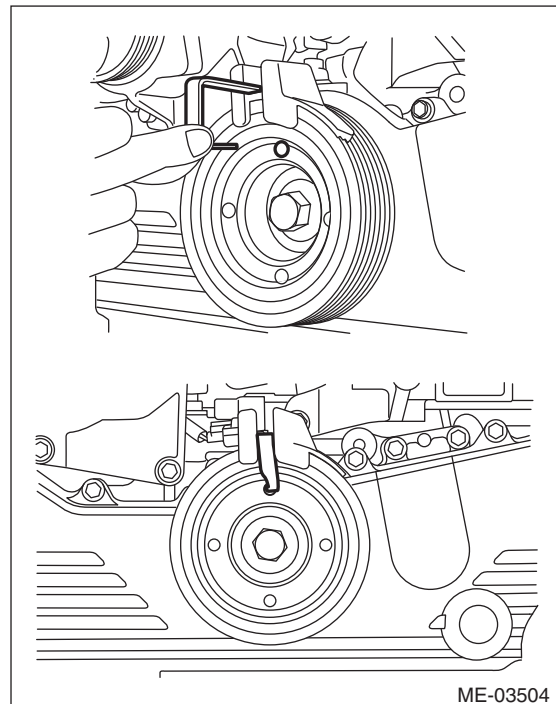
- 6) Mount the belt guide by matching to the belt line on the front side belt of the crank pulley.



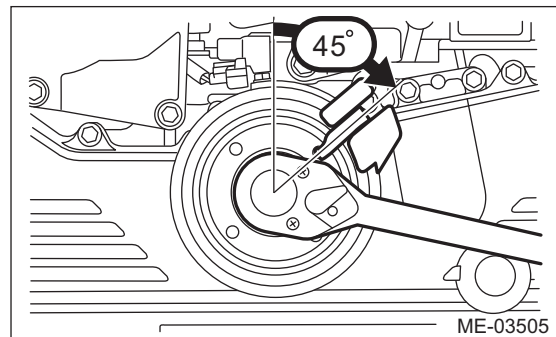
- 7) Insert the belt guide holder into the crank pulley service hole so as to clamp the belt guide.

NOTE:

The longer side of the belt guide holder is the upper side.



- 8) Turn the crank pulley slowly to the right, and set the belt guide at an approximately 45° position.



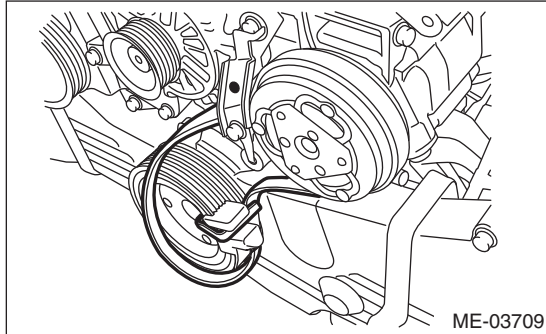
V-belt

MECHANICAL

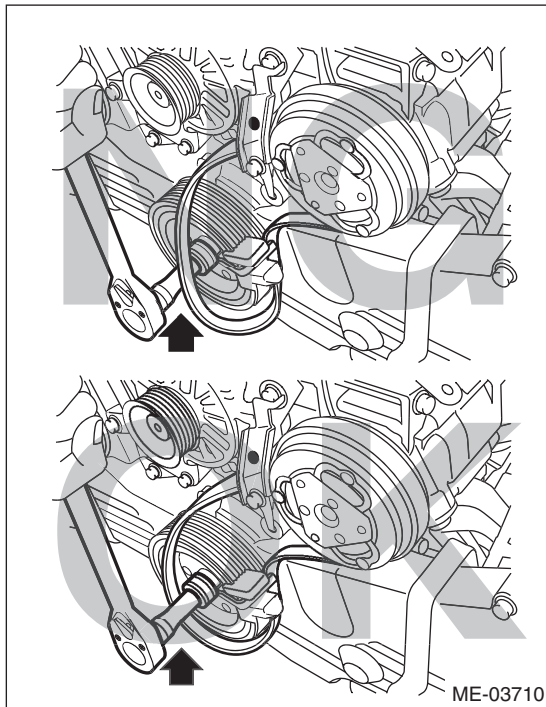
9) Place the rib face of the rear side belt onto the grooves of the crank pulley, and sandwich the rear side belt with the belt guide holder.

CAUTION:

If the rear side belt does not fit onto the groove of the crank pulley easily, pull out the belt guide holder halfway, then insert the rear side belt into the groove, and sandwich it with the belt guide holder.



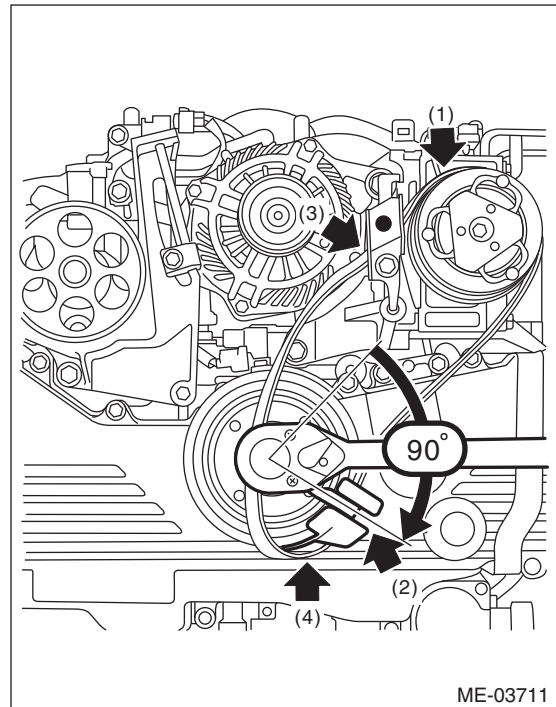
10) Place the tool through the loop of the rear side belt, and set on the crank pulley belt.



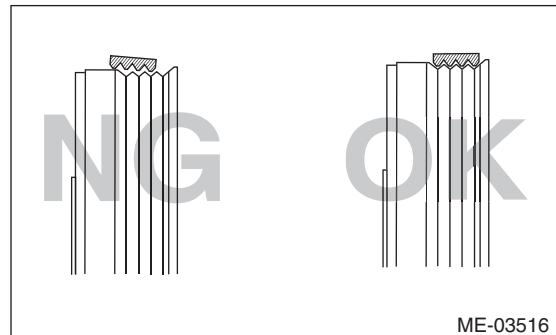
11) While checking for the following, turn the crank pulley slowly to the right by approximately 90° and set the belt guide to the position shown in the figure.

CAUTION:

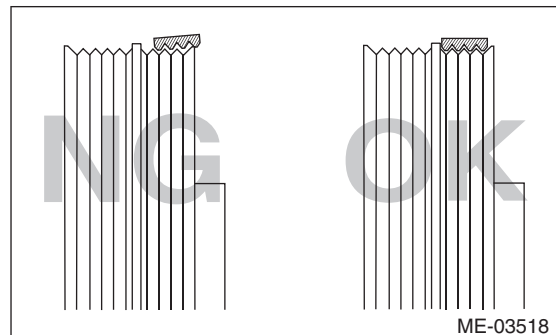
When rotating the crank pulley, be careful that the belt guide does not deviate from the groove of the crank pulley.



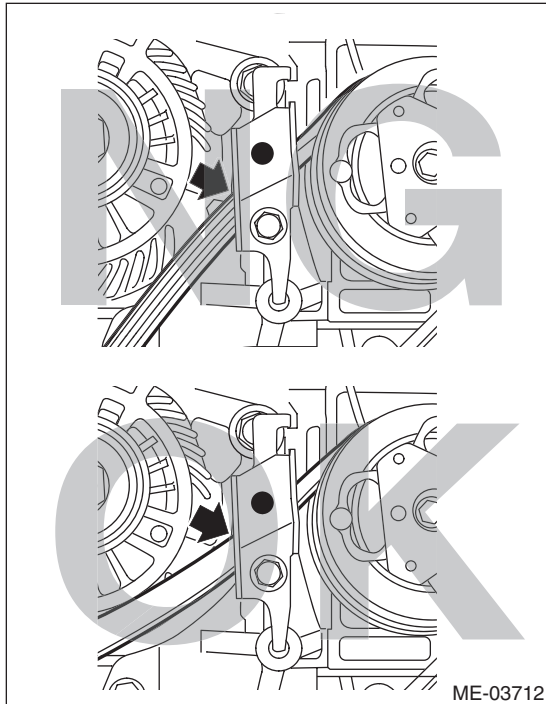
(1) The ribs of the rear side belt are properly riding on the grooves of the A/C compressor pulley.



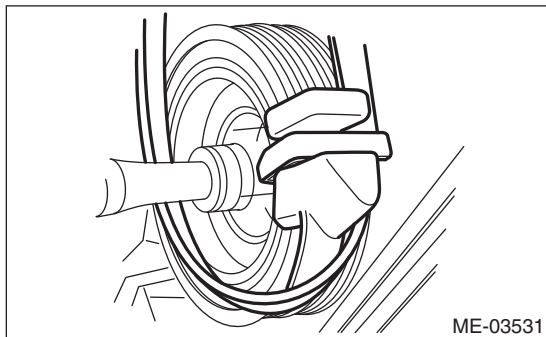
(2) The ribs of the rear side belt are properly riding on the grooves of the crank pulley.



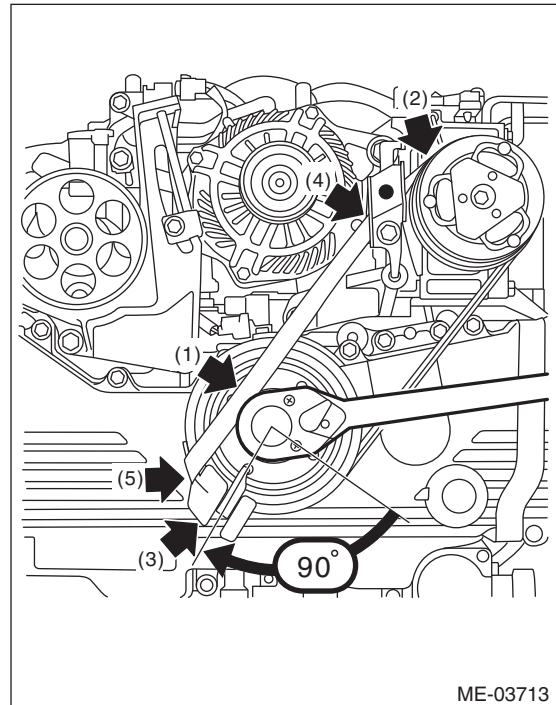
(3) The surface of the rear side belt is being pressed by the belt stopper.



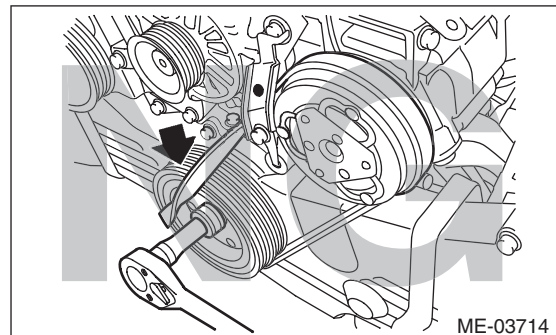
(4) The rear side belt is riding properly on the belt guide.



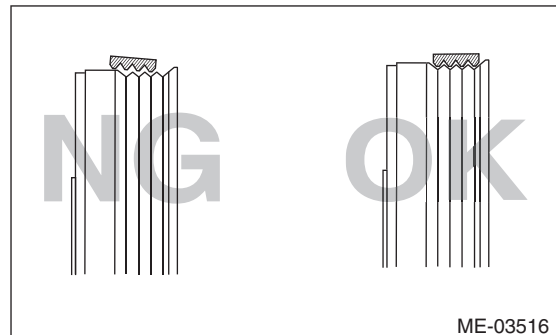
12) While checking for the following, turn the crank pulley slowly to the right by approximately 90° and set the belt guide to the position shown in the figure.



(1) The rear side belt is not twisted.



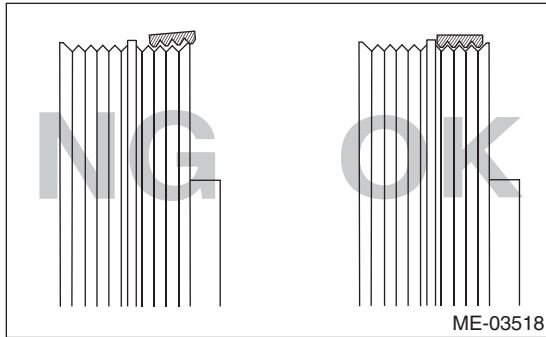
(2) The ribs of the rear side belt are properly riding on the grooves of the A/C compressor pulley.



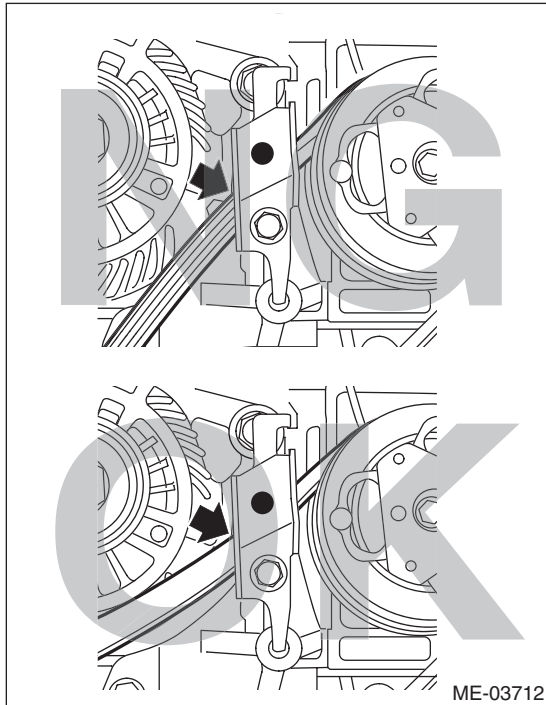
V-belt

MECHANICAL

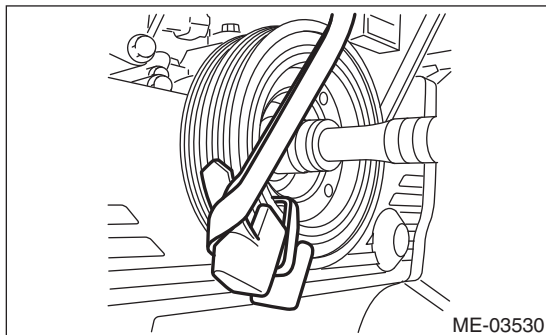
- (3) The ribs of the rear side belt are properly riding on the grooves of the crank pulley.



- (4) The surface of the rear side belt is being pressed by the belt stopper.



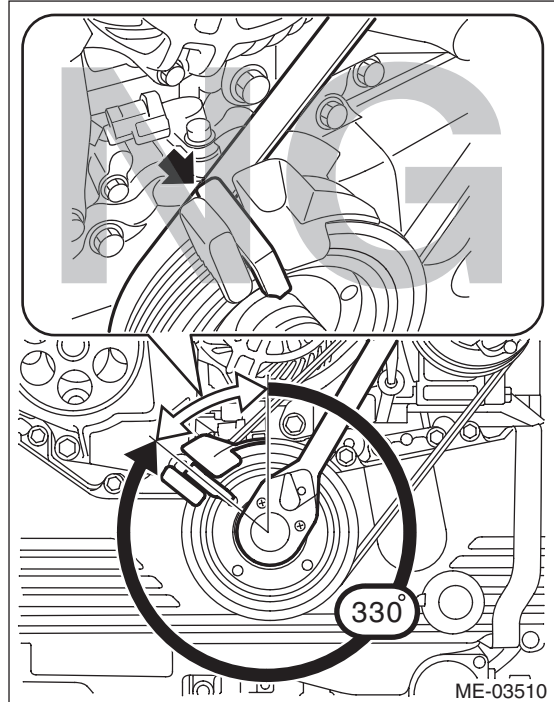
- (5) The rear side belt is riding properly on the belt guide.



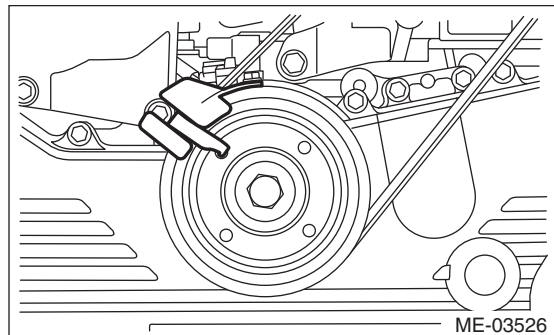
- 13) Turn the crank pulley slowly to the right, and attach the rear side belt.

CAUTION:

Because there is a possibility of damage to the rear side belt, and the belt guide holder falling off, care must be taken to make sure that the total of steps 8), 11), 12), and 13) does not exceed 330°.



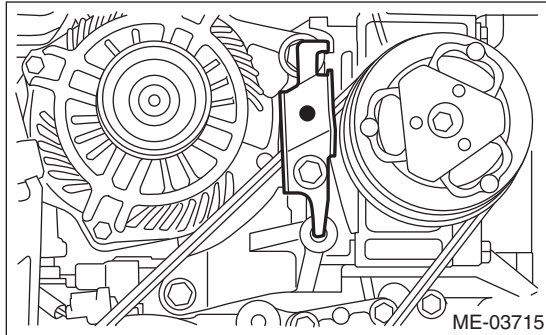
- 14) Remove the belt guide and belt guide holder from the crank pulley.



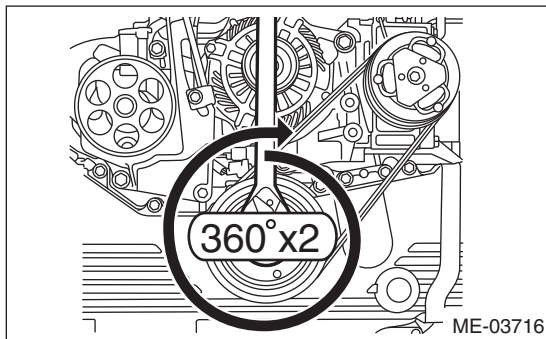
15) Remove the belt stopper from the compressor bracket.

CAUTION:

Make sure to remove the belt stopper, as leaving it on can cause smoke, flames or belt breakage.



16) Make sure that the belt ribs are properly riding on the grooves of the pulleys, and turn the crank pulley slowly to the right twice to break in the rear side belt.



17) Discard the provided tools (belt stopper, belt guide, belt guide holder, bolt).

18) Install the front side belt. <Ref. to ME(H4DOTC)-39, FRONT SIDE BELT, INSTALLATION, V-belt.>

C: INSPECTION

1. FRONT SIDE BELT

- 1) Replace the front side belt, if cracking, fraying or wear is found.
- 2) Check the front side belt tension and adjust it if necessary by adjusting the generator installing position.

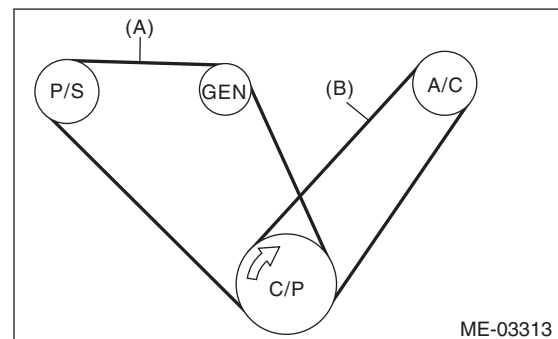
Front side belt tension (when using a belt tension gauge):

When installing new parts:

640 — 780 N (65 — 80 kgf, 144 — 175 lbf)

At inspection

490 — 640 N (50 — 65 kgf, 110 — 144 lbf)



(A) Front side belt

(B) Rear side belt

C/P Crank pulley

GEN Generator

P/S Power steering oil pump pulley

A/C A/C compressor pulley

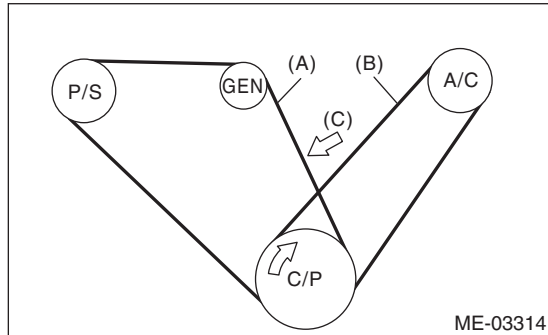
Front side belt tension (when not using a belt tension gauge):

When installing new parts

7 — 9 mm (0.276 — 0.354 in)

At inspection

9 — 11 mm (0.354 — 0.433 in)



(A) Front side belt

(B) Rear side belt

(C) 98 N (10 kgf, 22 lbf)

C/P Crank pulley

GEN Generator

P/S Power steering oil pump pulley

A/C A/C compressor pulley

2. REAR SIDE BELT

If cracks, fraying or wear is found, and when abnormal noise is produced, replace the rear side belt.

NOTE:

Because the rear side belt is a stretch type belt, it is not necessary to check deflection and tension.