

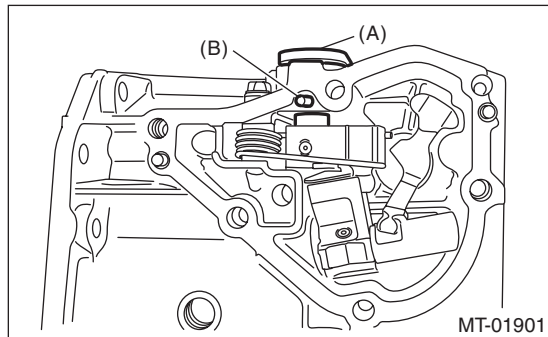
Shift Link Assembly

MANUAL TRANSMISSION AND DIFFERENTIAL

14.Shift Link Assembly

A: REMOVAL

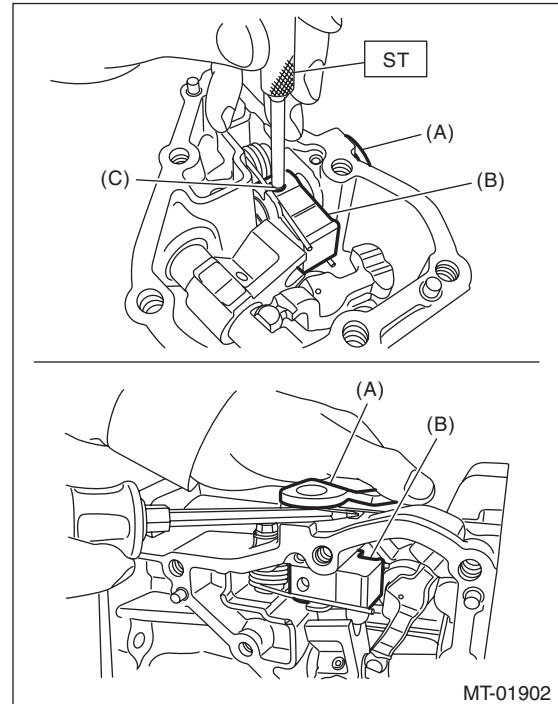
- 1) Remove the manual transmission assembly from the vehicle. <Ref. to 6MT(TY75)-25, REMOVAL, Manual Transmission Assembly.>
- 2) Remove the back-up light switch and the neutral position switch. <Ref. to 6MT(TY75)-45, REMOVAL, Switches and Harness.>
- 3) Remove the transfer case together with the extension case assembly. <Ref. to 6MT(TY75)-51, REMOVAL, Transfer Case and Extension Case Assembly.>
- 4) Remove the extension case assembly. <Ref. to 6MT(TY75)-51, REMOVAL, Transfer Case and Extension Case Assembly.>
- 5) Remove the center differential and transfer driven gear as a unit. <Ref. to 6MT(TY75)-65, REMOVAL, Transfer Driven Gear.>
- 6) Pull out the straight pin.



- (A) Selector lever COMPL
- (B) Straight pin

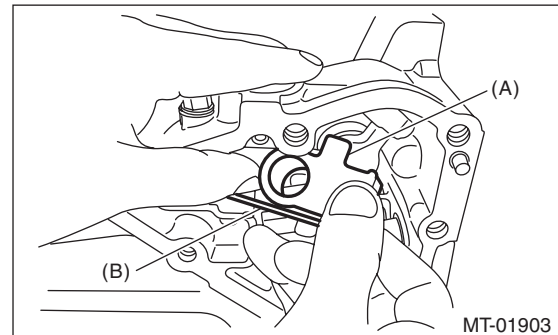
- 7) Use the ST to remove the straight pin, and remove the selector lever COMPL.

ST 398791700 SPRING PIN REMOVER 2



- (A) Selector lever COMPL
- (B) Selector arm No. 2
- (C) Straight pin

- 8) Remove the selector arm No. 2.

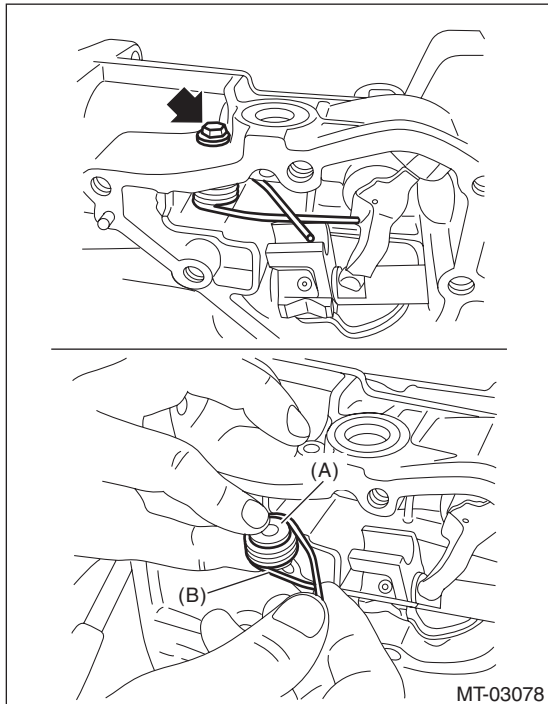


- (A) Selector arm No. 2
- (B) Neutral set spring

Shift Link Assembly

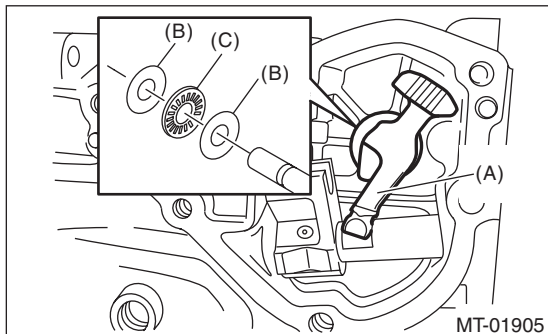
MANUAL TRANSMISSION AND DIFFERENTIAL

9) Remove the bolts and remove the shifter arm collar and neutral set spring.



- (A) Shifter arm collar
- (B) Neutral set spring

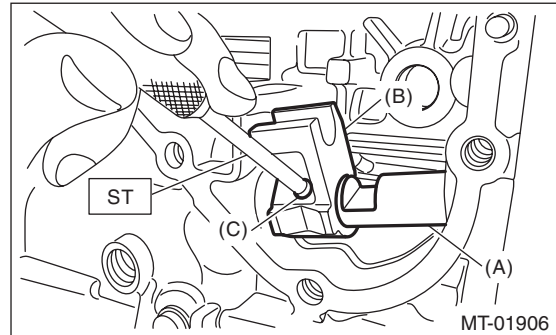
10) Remove the shifter arm No. 2, washers and thrust bearing.



- (A) Shifter arm No. 2
- (B) Washer
- (C) Thrust bearing

11) Use the ST to remove the straight pin, and remove the shifter arm and selector arm.

ST 398791700 SPRING PIN REMOVER 2

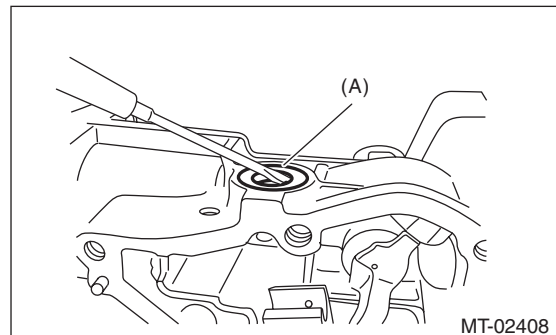


- (A) Shifter arm
- (B) Selector arm
- (C) Straight pin

12) Remove the oil seal using a screwdriver wrapped with tape, etc.

NOTE:

The illustration shows the oil seal of selector lever COMPL. Perform the same procedures for removing the shifter arm No. 2.



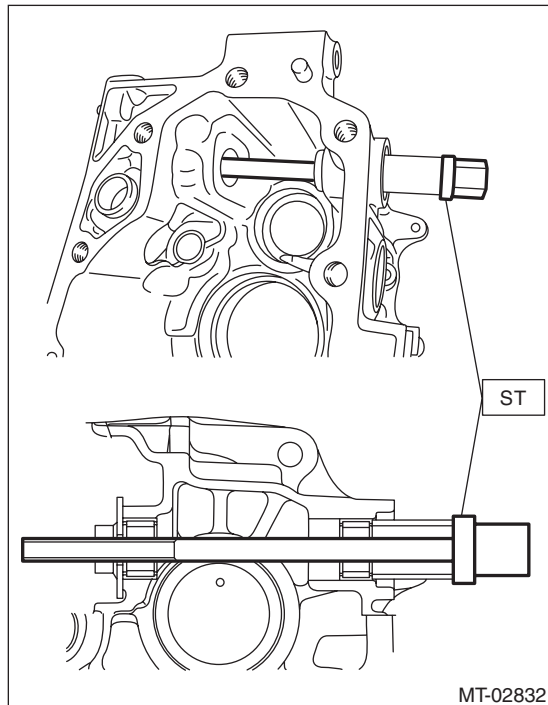
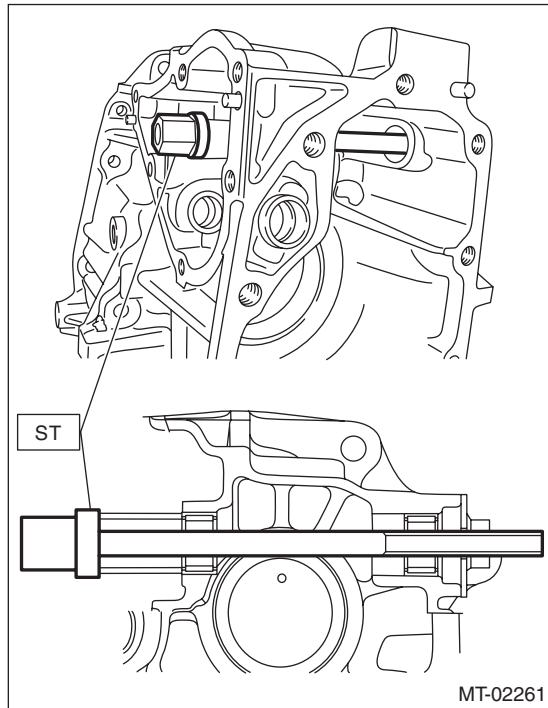
- (A) Oil seal

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13) Remove the needle bearing by using a tube with the diameter of 20 mm (0.79 in) or 21 mm (0.83 in) and the ST.

ST 18763AA000 COMPRESSOR SHAFT



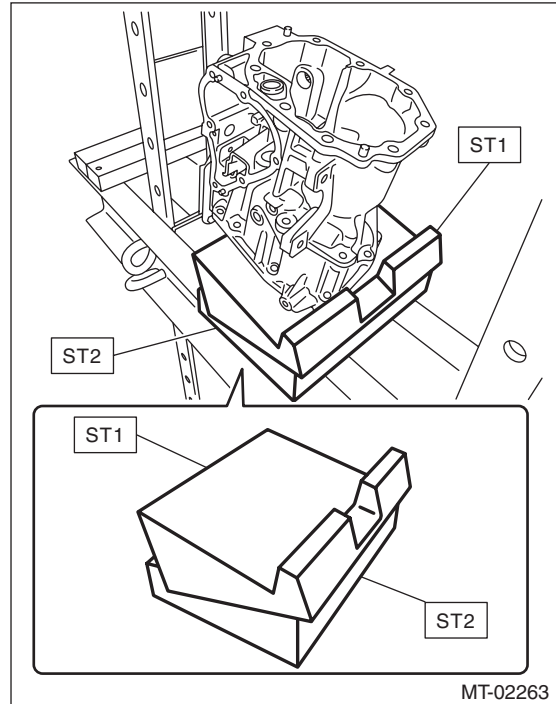
14) Set ST1, ST2 and transfer case to a press.

NOTE:

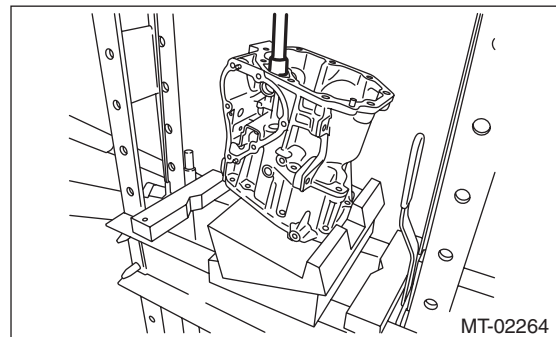
- Set the ST2 under ST1.
- Set the transfer case so that the hole for shifter arm is positioned vertically.

ST1 498267300 CYLINDER HEAD TABLE

ST2 498267200 CYLINDER HEAD TABLE



15) Remove the roller bearing by using a round bar with the diameter of 22 mm (0.87 in) or 23 mm (0.91 in).



16) Flip over the transfer case, and set an iron plate between transfer case and ST.

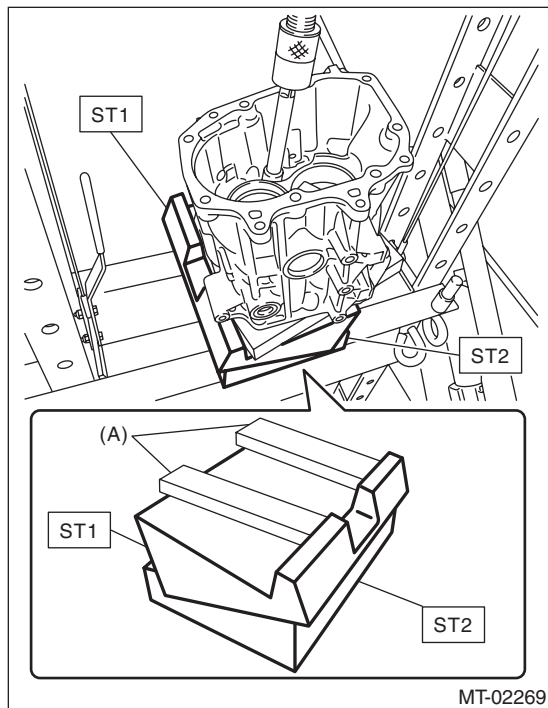
NOTE:

- Insert the iron plate which is thicker than the exposed length of the transfer case knock pin between the ST and transfer case.
- Set the iron plate so that the transfer case knock pin does not ride on the iron plate.

Shift Link Assembly

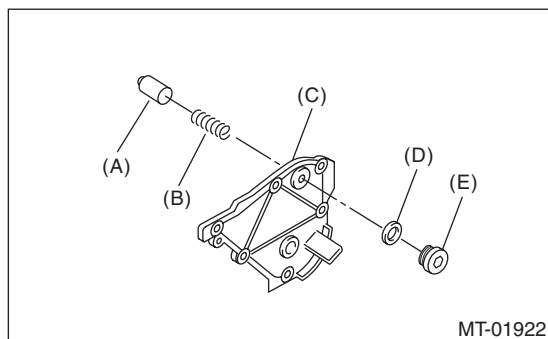
MANUAL TRANSMISSION AND DIFFERENTIAL

17) Remove the roller bearing by using a tube with the diameter of 22 mm (0.87 in) or 23 mm (0.91 in).



(A) Iron plate

18) Remove the plunger and the check ball spring.



(A) Plunger
(B) Checking ball spring
(C) Transmission cover
(D) Seal ring
(E) Seal bolt

B: INSTALLATION

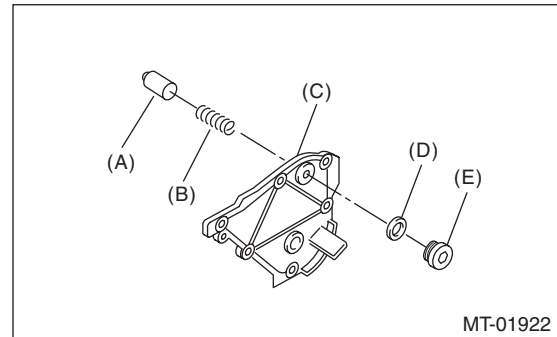
- 1) Clean the mating surface of the transmission cover and transfer case.
- 2) Install the plunger and the check ball spring.

NOTE:

Use new seal rings.

Tightening torque:

25 N·m (2.5 kgf-m, 18.4 ft-lb)



(A) Plunger
(B) Checking ball spring
(C) Transmission cover
(D) Seal ring
(E) Seal bolt

3) Using the ST, install the needle bearing.

NOTE:

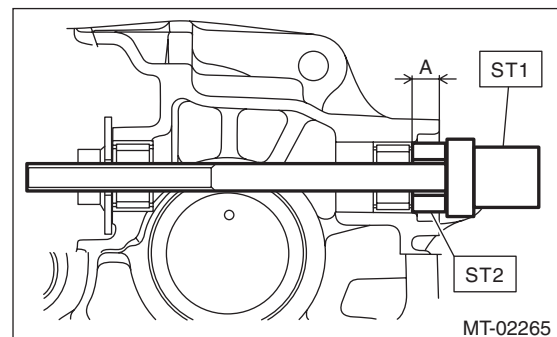
- Use a new needle bearing.
- If the press-fit depth exceeds the service limit, replace with a new needle bearing.

ST1 18763AA000 COMPRESSOR SHAFT

ST2 498277200 STOPPER SET

Press-fit depth of needle bearing:

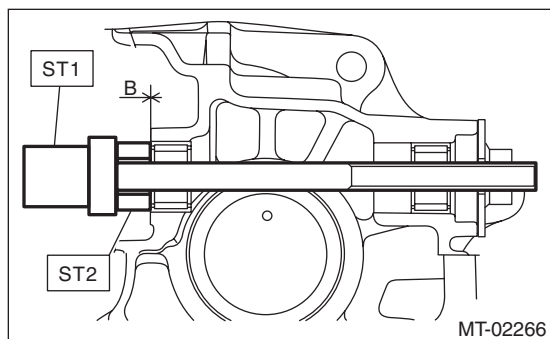
A: 8.5 ± 0.2 mm (0.33 ± 0.01 in) from the end of transfer case



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B: 0.2 ± 0.2 mm (0.01 ± 0.01 in) from the end of transfer case



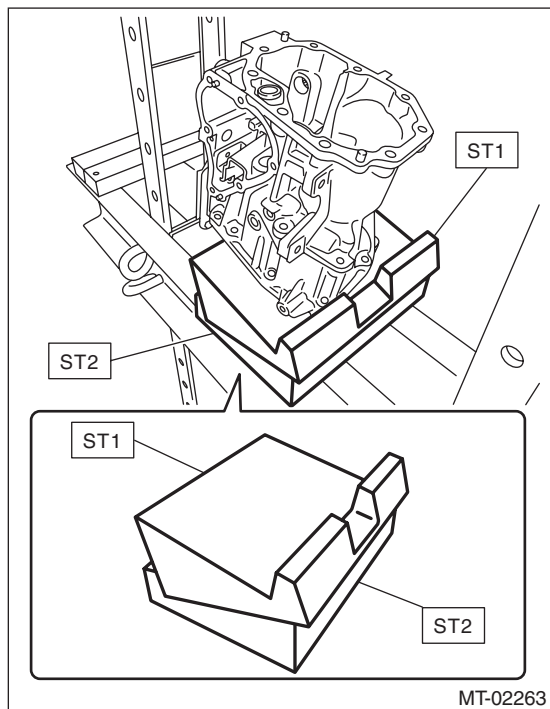
4) Set ST1, ST2 and transfer case to a press.

NOTE:

- Set the ST2 under ST1.
- Set the transfer case so that the hole for shifter arm is positioned vertically.

ST1 498267300 CYLINDER HEAD TABLE

ST2 498267200 CYLINDER HEAD TABLE



5) Using the ST, install the roller bearing.

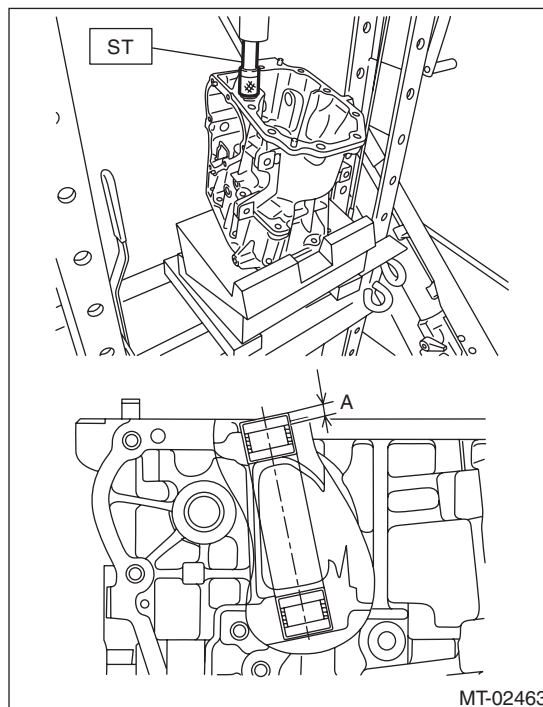
NOTE:

- Use a new roller bearing.
- Gradually perform the press-fit operation while measuring the press-fit depth.
- If the press-fit depth exceeds the service limit, replace with a new bearing.

ST 899864100 REMOVER

Press-fit depth of roller bearing:

A: 5.1 ± 0.2 mm (0.20 ± 0.01 in) from the finished surface of transfer case



6) Flip over the transfer case, and set an iron plate between transfer case and ST.

NOTE:

- Insert the iron plate which is thicker than the exposed length of the transfer case knock pin between the ST and transfer case.
- Set the parts while taking care that the transfer case knock pin and the roller bearing do not ride over the iron plate.

Shift Link Assembly

MANUAL TRANSMISSION AND DIFFERENTIAL

7) Using the ST, install the roller bearing.

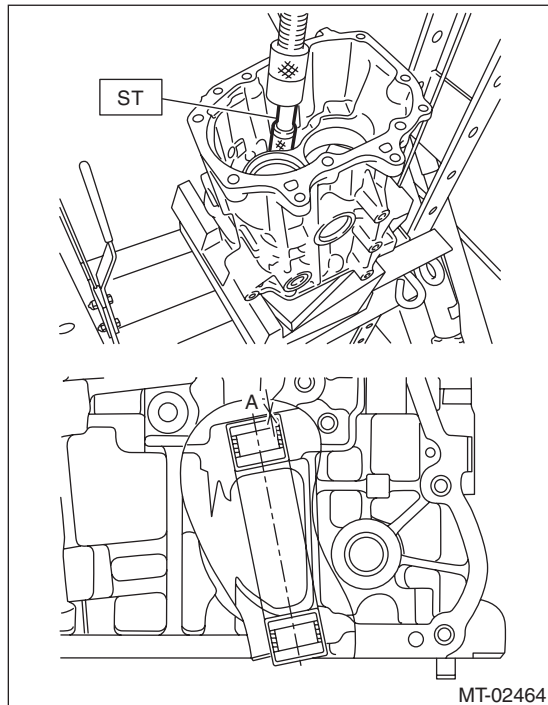
NOTE:

- Use a new roller bearing.
- Gradually perform the press-fit operation while measuring the press-fit depth.
- If the press-fit depth exceeds the service limit, replace with a new bearing.

ST 899864100 REMOVER

Press-fit depth of roller bearing:

A: 0 ± 0.2 mm (0 ± 0.01 in) from the end of transfer case



8) Using the ST, install the oil seal.

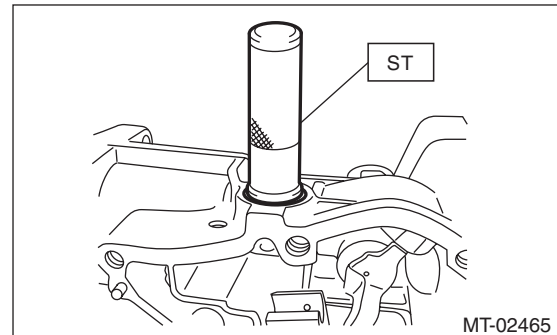
NOTE:

- Use a new oil seal.
- The illustration shows the oil seal of selector lever COMPL. Perform the same procedures for installing the oil seal of shifter arm No. 2.
- Apply transmission gear oil to the oil seal lips.

ST 18657AA000 INSTALLER

Press-fit depth of oil seal:

1 ± 0.2 mm (0.04 ± 0.01 in) from the end of transfer case

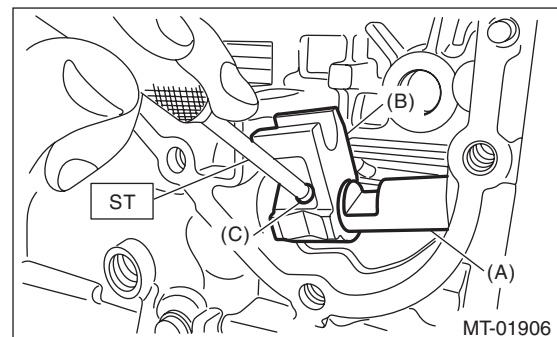


9) Insert the shifter arm and fix with a straight pin.

NOTE:

Use a new straight pin.

ST 398791700 SPRING PIN REMOVER 2



- (A) Shifter arm
- (B) Selector arm
- (C) Straight pin

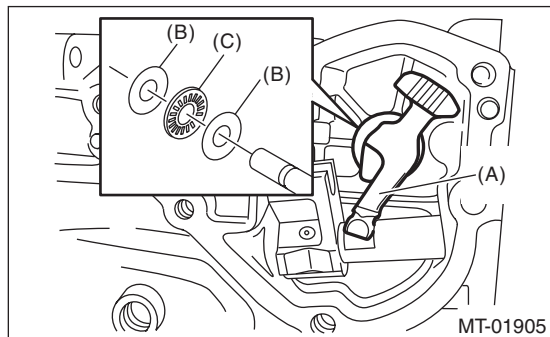
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10) Install the shifter arm No. 2, washers and thrust bearing.

CAUTION:

Be careful not to damage the oil seal.



- (A) Shifter arm No. 2
- (B) Washer
- (C) Thrust bearing

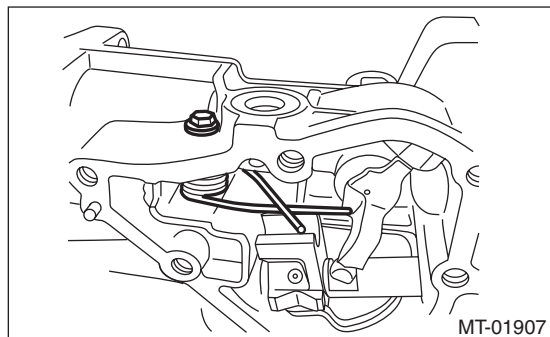
11) Install the shifter arm collar and neutral set spring.

NOTE:

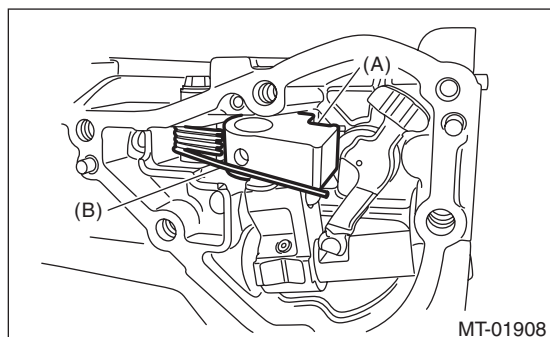
Use a new gasket.

Tightening torque:

6.4 N·m (0.7 kgf-m, 4.7 ft-lb)



12) Install the selector arm No. 2.



- (A) Selector arm No. 2
- (B) Neutral set spring

13) Insert the selector lever COMPL and fix with a straight pin.

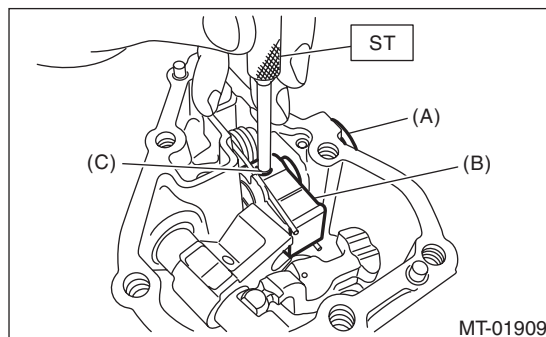
CAUTION:

Be careful not to damage the oil seal.

NOTE:

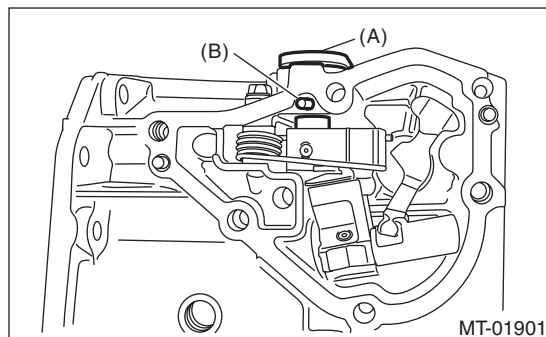
Use a new straight pin.

ST 398791700 SPRING PIN REMOVER 2



- (A) Selector lever COMPL
- (B) Selector arm No. 2
- (C) Straight pin

14) Insert a new straight pin.



- (A) Selector lever COMPL
- (B) Straight pin

15) Install the center differential and transfer driven gear as a unit.

16) Install the extension case assembly to the transfer case. <Ref. to 6MT(TY75)-53, INSTALLATION, Transfer Case and Extension Case Assembly.>

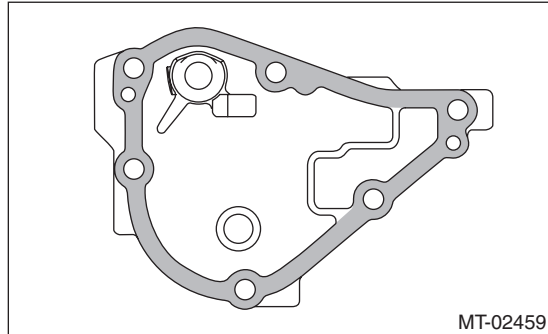
17) Install the transfer case and the extension case assembly. <Ref. to 6MT(TY75)-53, INSTALLATION, Transfer Case and Extension Case Assembly.>

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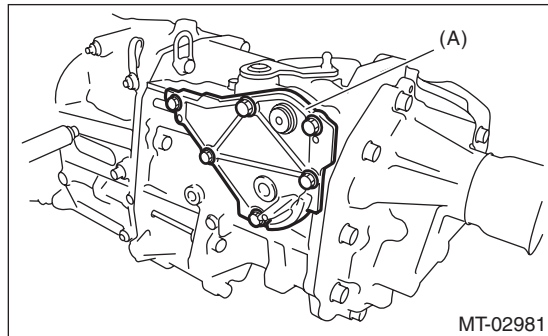
18) Apply liquid gasket seamlessly.

Liquid gasket:
THREE BOND 1215B or equivalent



19) Install the transmission cover.

Tightening torque:
25 N·m (2.5 kgf-m, 18.4 ft-lb)



(A) Transmission cover

20) Install the back-up light switch and the neutral position switch. <Ref. to 6MT(TY75)-46, INSTALLATION, Switches and Harness.>

21) Install the manual transmission assembly to the vehicle. <Ref. to 6MT(TY75)-30, INSTALLATION, Manual Transmission Assembly.>