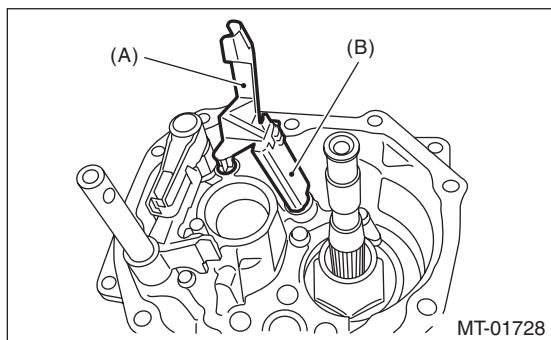


18. Transmission Case

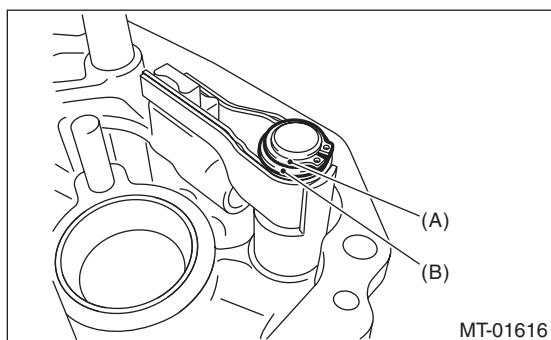
A: REMOVAL

- 1) Remove the manual transmission assembly from the vehicle. <Ref. to 6MT(TY85)-31, REMOVAL, Manual Transmission Assembly.>
- 2) Prepare the transmission for overhaul. <Ref. to 6MT(TY85)-38, Preparation for Overhaul.>
- 3) Remove the neutral position switch, back-up light switch and harness. <Ref. to 6MT(TY85)-41, REMOVAL, Neutral Position Switch.> <Ref. to 6MT(TY85)-40, REMOVAL, Back-up Light Switch.>
- 4) Remove the extension case. <Ref. to 6MT(TY85)-42, REMOVAL, Extension Case.>
- 5) Remove the transfer driven gear. <Ref. to 6MT(TY85)-54, REMOVAL, Transfer Driven Gear.>
- 6) Remove the center differential. <Ref. to 6MT(TY85)-56, REMOVAL, Center Differential.>
- 7) Remove the oil guides G and H.



(A) Oil guide G
(B) Oil guide H

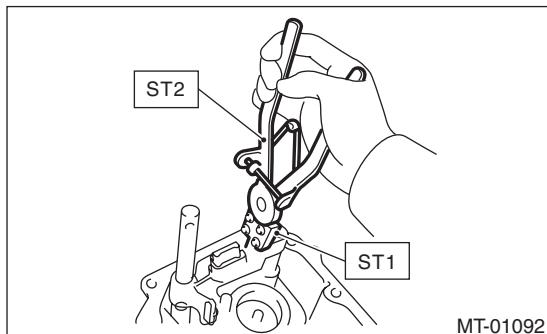
- 8) Remove the snap ring and flat washer from the selector arm area.



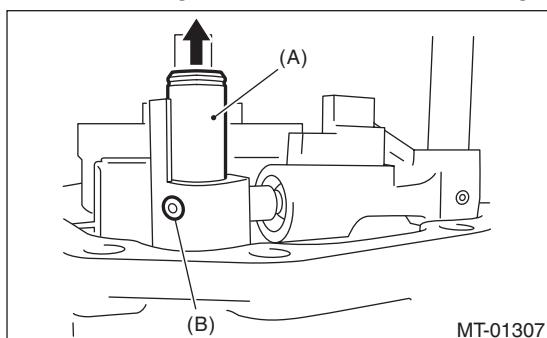
(A) Snap ring
(B) Flat washer

- 9) Using an ST, remove the neutral set spring and support.

ST1 18756AA000 CLAW
ST2 399893600 PLIER



- 10) Lift the striking rod, and remove the straight pin.

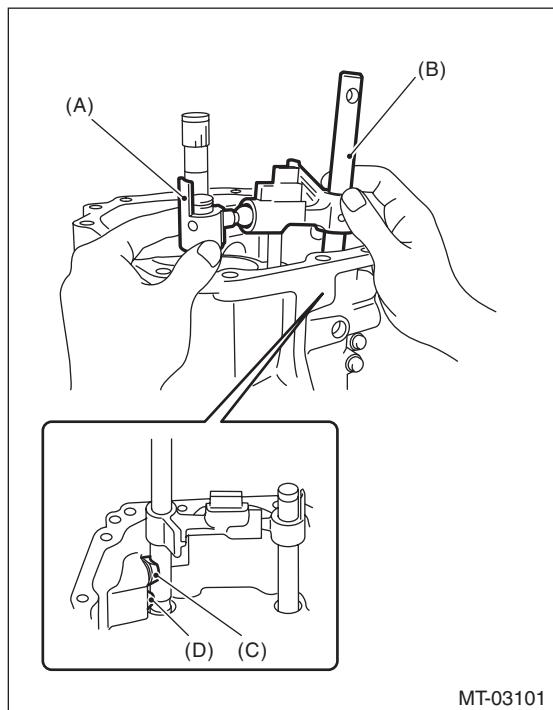


(A) Striking rod
(B) Straight pin

Transmission Case

MANUAL TRANSMISSION AND DIFFERENTIAL

11) Remove the selector arm No. 2, shifter arm shaft, selector plunger, shift accent plunger and spring.



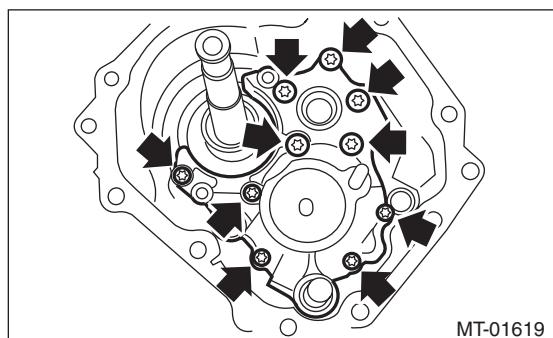
- (A) Selector arm No. 2
- (B) Shifter arm shaft
- (C) Selector plunger
- (D) Shift accent plunger

12) Remove the transfer bearing holder.

NOTE:

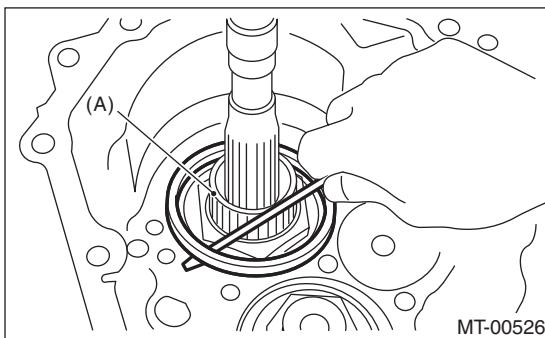
Using a general tool may cause damage. Remove the bolt using the ST.

ST 18663AA000 SOCKET



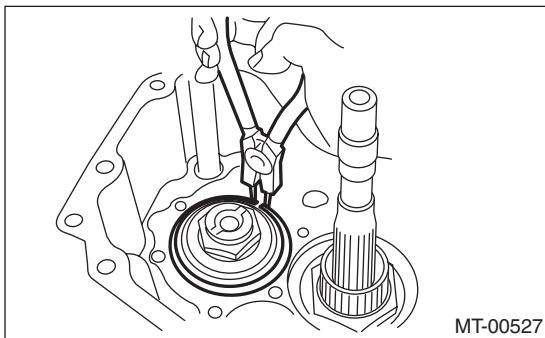
13) Remove the washer on the main shaft section.

14) Remove the driven gear assembly shim and spacer.

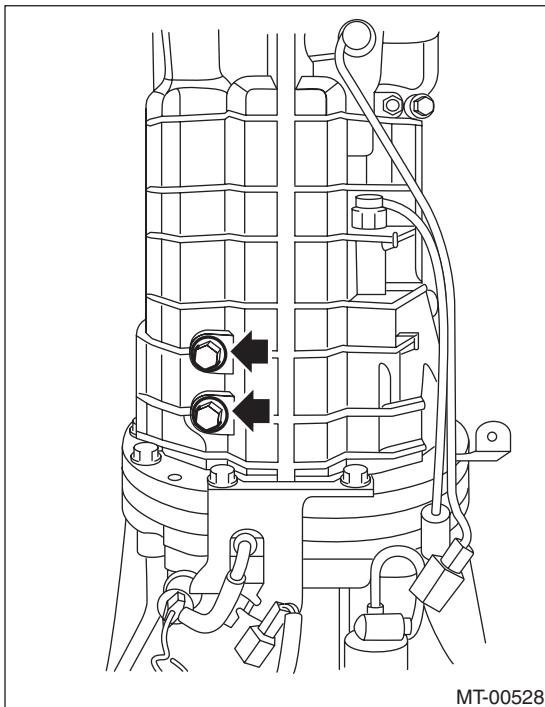


(A) Driven gear ASSY

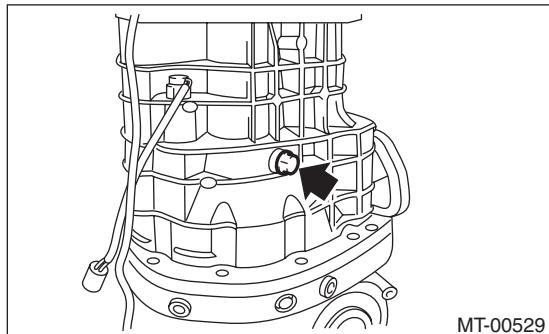
15) Remove the snap ring.



16) Remove the pilot bolt.



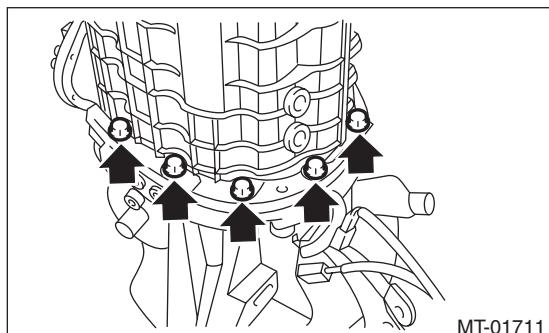
17) Remove the holder reverse bolt.



18) Remove the transmission case.

NOTE:

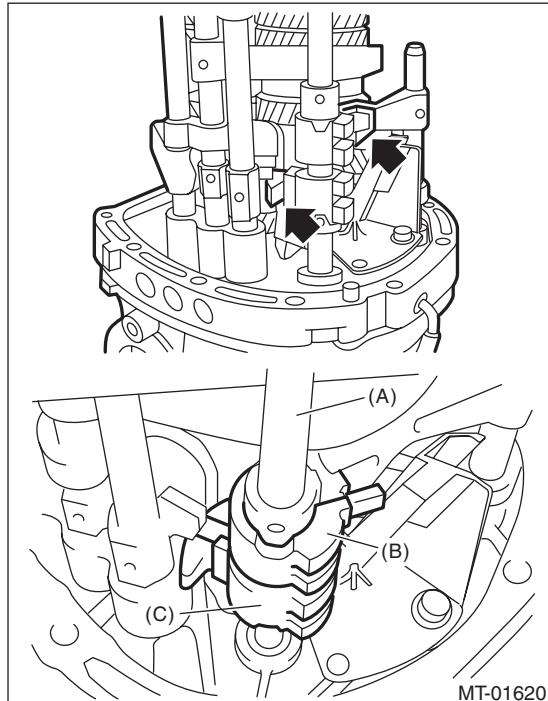
If the oil guide is caught between the shift fork, it may be difficult to remove the transmission case. Move the oil guide, then remove. Do not pull on the transmission case with excessive force.



19) Remove any remaining liquid gasket from the transmission case and adapter plate.

B: INSTALLATION

1) Check that the shifter fork and the interlock block are both shifted into the neutral position. If they are not, shift into the neutral position.

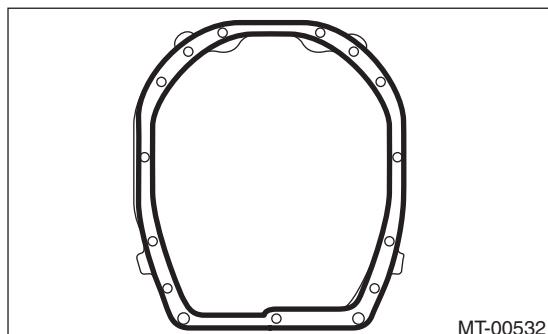


(A) Striking rod
 (B) Reverse interlock block
 (C) Interlock block

2) Apply liquid gasket to the adapter plate.

Liquid gasket:

THREE BOND 1215B or equivalent

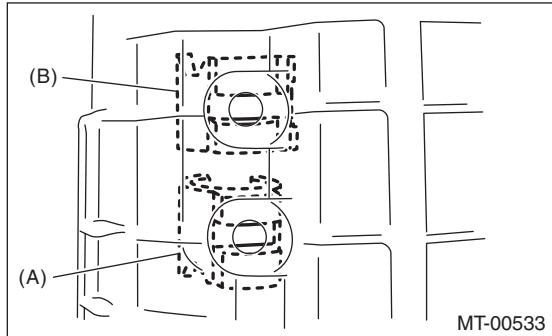


3) Install the transmission case.

Transmission Case

MANUAL TRANSMISSION AND DIFFERENTIAL

4) By inspecting from the pilot bolt attachment hole, check that the interlock block and the reverse interlock block are aligned to the neutral position. If not aligned, remove the transmission case, and shift the shifter fork and interlock block to the neutral position.



(A) Interlock block
(B) Reverse interlock block

- 5) Use a new gasket to temporarily attach the pilot bolt.
- 6) Affix the transmission case with the bolts and nuts.

Tightening torque:

50 N·m (5.1 kgf·m, 36.9 ft-lb)

- 7) Tighten the pilot bolt.

Tightening torque:

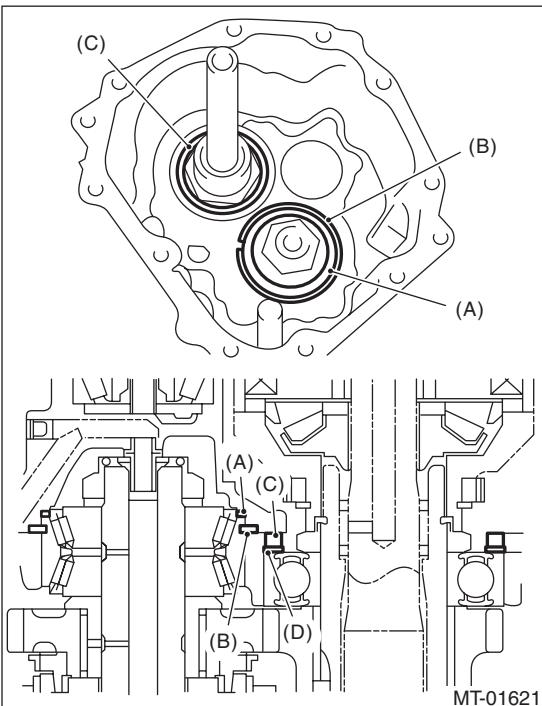
34 N·m (3.5 kgf·m, 25.1 ft-lb)

- 8) Tighten the holder reverse bolt.

Tightening torque:

25 N·m (2.5 kgf·m, 18.4 ft-lb)

9) Install the snap ring and washer for the main shaft assembly, and washer and collar for the driven gear assembly.



(A) Washer
(B) Snap ring
(C) Collar
(D) Washer

- 10) Install the transfer bearing holder.

Tightening torque:

25 N·m (2.5 kgf·m, 18.4 ft-lb)

ST 18663AA000 SOCKET

- 11) When replacing the transfer bearing holder, select the appropriate transfer driven gear and adjusting washer, and install to the extension case. <Ref. to 6MT(TY85)-44, ADJUSTMENT, Extension Case.>

12) Install the selector arm No. 2, shifter arm shaft, selector plunger, shift accent plunger and spring.

13) Install a new straight pin.

14) Using the ST, install the neutral set spring.

ST1 18756AA000 CLAW

ST2 399893600 PLIER

15) Install the snap ring and flat washer to the selector arm area.

16) Install the oil guides G and H.

17) Install the center differential. <Ref. to 6MT(TY85)-56, INSTALLATION, Center Differential.>

18) Install the transfer driven gear. <Ref. to 6MT(TY85)-54, INSTALLATION, Transfer Driven Gear.>

- 19) Install the extension case. <Ref. to 6MT(TY85)-42, INSTALLATION, Extension Case.>
- 20) Install the neutral position switch, back-up light switch and harness. <Ref. to 6MT(TY85)-41, INSTALLATION, Neutral Position Switch.> <Ref. to 6MT(TY85)-40, INSTALLATION, Back-up Light Switch.>
- 21) Install the manual transmission assembly to the vehicle. <Ref. to 6MT(TY85)-33, INSTALLATION, Manual Transmission Assembly.>

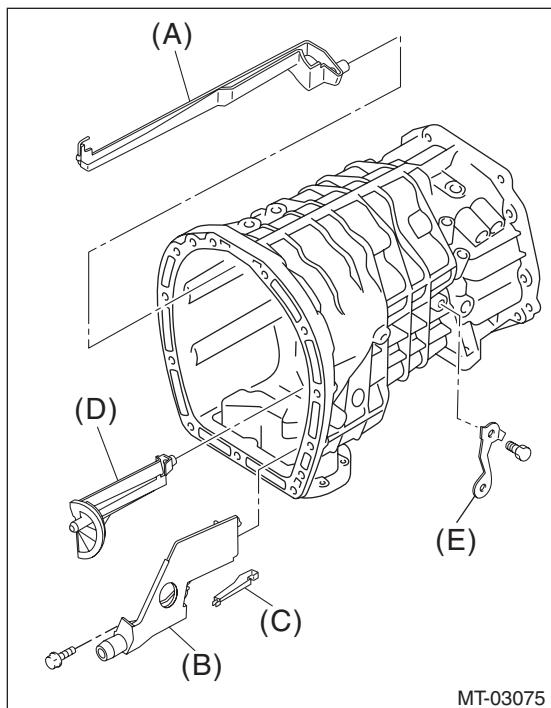
C: DISASSEMBLY

- 1) Remove the transmission harness from the transmission case.

NOTE:

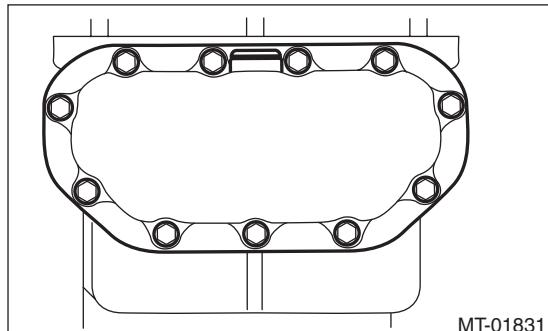
Remove the connector by disengaging the connector claw from the inside of the transmission.

- 2) Remove the oil guides C, D, E, F and harness bracket.



- (A) Oil guide C
- (B) Oil guide D
- (C) Oil guide E
- (D) Oil guide F
- (E) Harness bracket

- 3) Remove the oil pan.

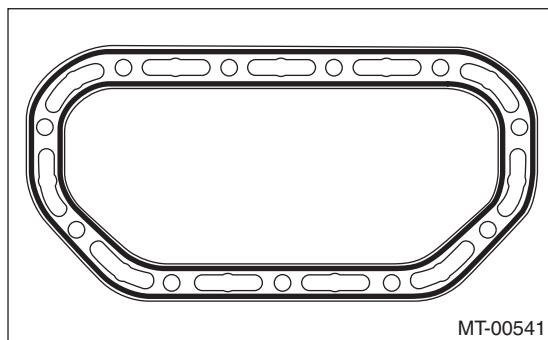


- 4) Remove any remaining liquid gasket from the transmission case and oil pan.

D: ASSEMBLY

- 1) Apply liquid gasket to the oil pan.

Liquid gasket:
THREE BOND 1215B or equivalent



- 2) Install the oil pan.

Tightening torque:
6.4 N·m (0.7 kgf-m, 4.7 ft-lb)

Transmission Case

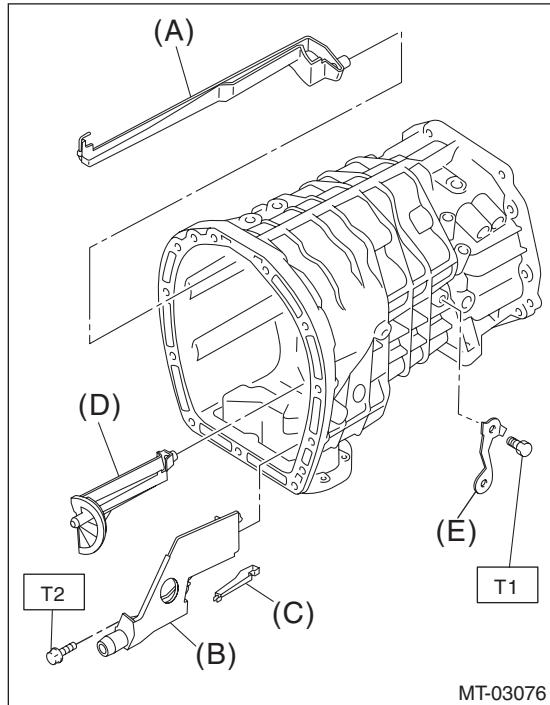
MANUAL TRANSMISSION AND DIFFERENTIAL

3) Install the oil guides C, D, E, F and harness bracket.

Tightening torque:

T1: 16 N·m (1.6 kgf-m, 11.8 ft-lb)

T2: 18 N·m (1.8 kgf-m, 13.3 ft-lb)

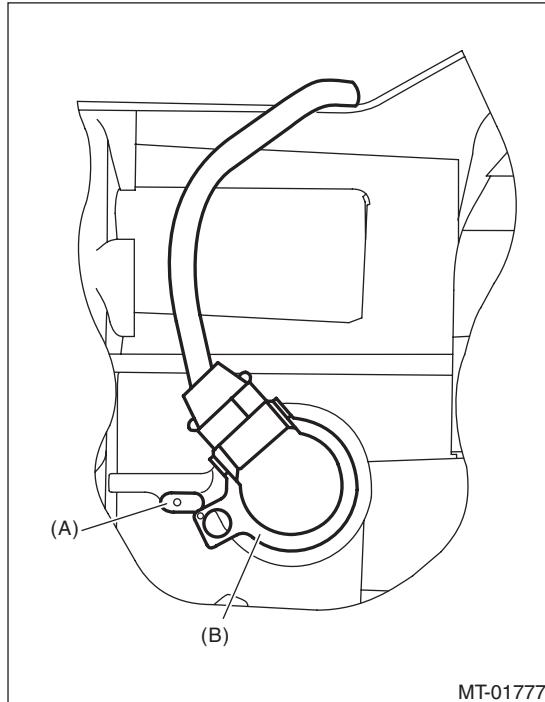


- (A) Oil guide C
- (B) Oil guide D
- (C) Oil guide E
- (D) Oil guide F
- (E) Harness bracket

4) Install the transmission harness to the transmission.

NOTE:

Install the transmission harness connector by aligning the protrusions of the transmission and transmission harness connector.



- (A) Protrusion
- (B) Transmission harness connectors

E: INSPECTION

- 1) If the sludge is accumulated in the oil pan, use a waste cloth to wipe it off completely.
- 2) Check that there is no damage on any parts. Replace damaged parts with new parts.