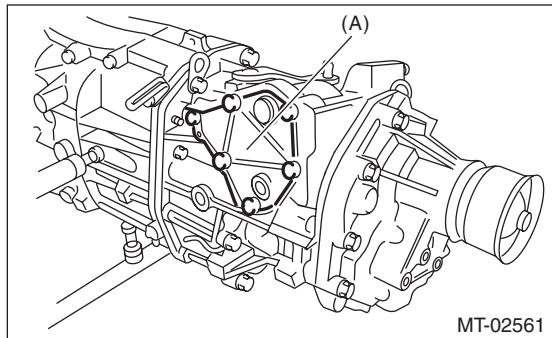


9. Transfer Case and Extension Case Assembly

A: REMOVAL

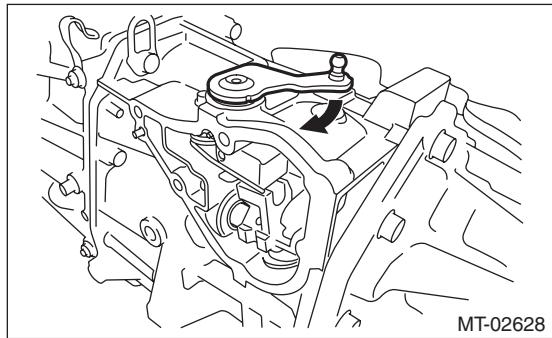
- 1) Remove the manual transmission assembly from the vehicle. <Ref. to 6MT-25, REMOVAL, Manual Transmission Assembly.>
- 2) Remove the back-up light switch and the neutral position switch. <Ref. to 6MT-36, REMOVAL, Switches and Harness.>
- 3) Remove the transfer case together with the extension case assembly.

(1) Remove the transmission cover.

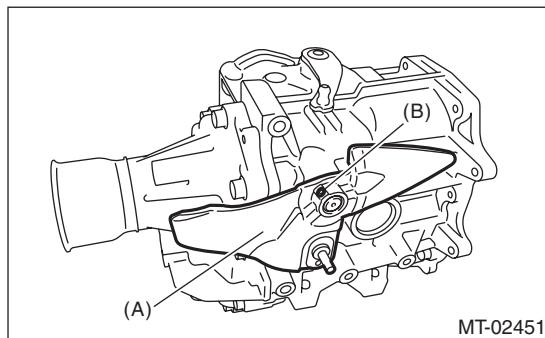


(A) Transmission cover

(2) Set and hold the selector lever COMPL to the 1st-2nd side, and remove the transfer case and extension case assembly as a unit.



4) Use the ST to push out the spring pin and remove the shift lever COMPL from shifter arm No. 2. ST 398791700 SPRING PIN REMOVER 2

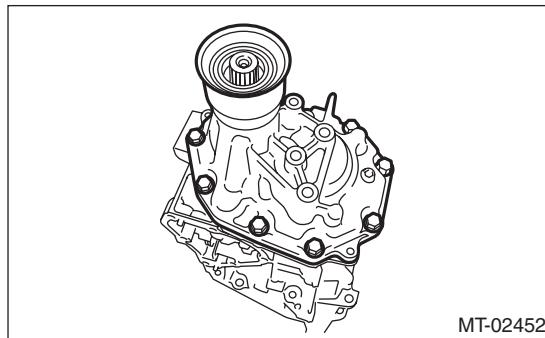


MT-02451

(A) Shift lever COMPL

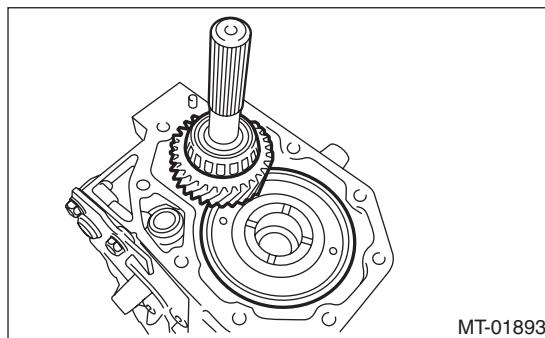
(B) Spring pin

5) Remove the extension case assembly.



MT-02452

6) Remove the transfer driven gear and center differential as a unit.



MT-01893

Transfer Case and Extension Case Assembly

MANUAL TRANSMISSION AND DIFFERENTIAL

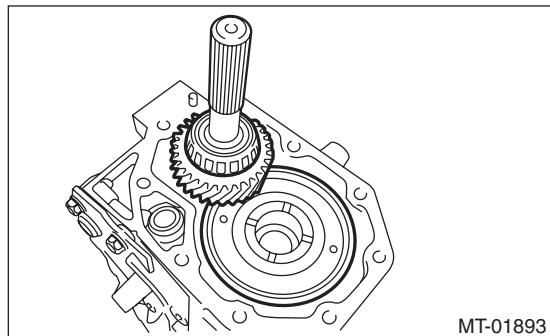
B: INSTALLATION

- 1) Clean the mating surface of the extension case assembly and transfer case and the mating surface of transfer case and transmission cover.
- 2) Apply a coat of grease to the front roller bearing and rear roller bearing of the transfer driven gear.

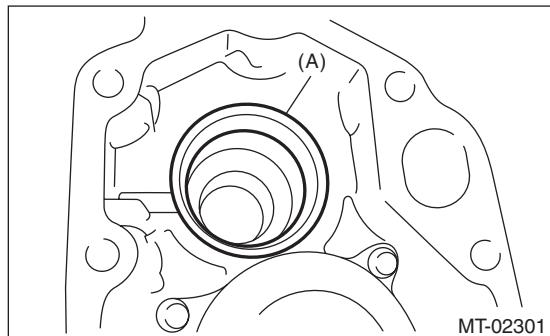
Grease:

NICHIMOLY N-130 or equivalent

- 3) Install the center differential and transfer driven gear into the transfer case.

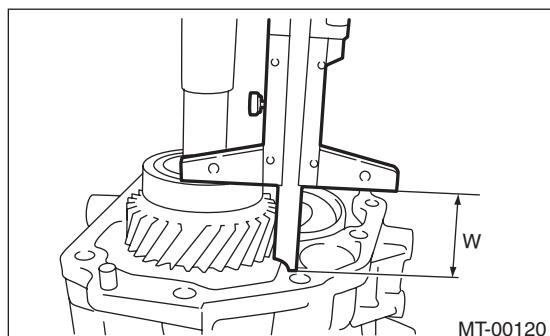


- 4) Remove the bearing outer race and adjusting washer from the extension case.



(A) Bearing outer race

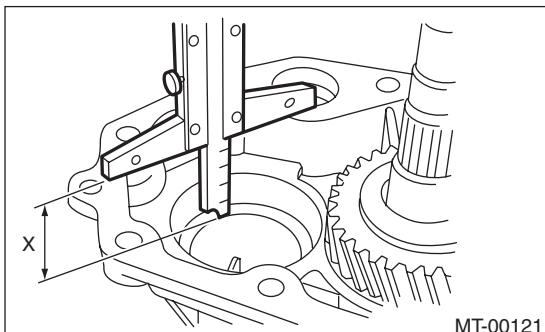
- 5) Install the bearing outer race to transfer driven gear.
- 6) While pressing the bearing outer race horizontally, rotate the driven shaft for ten turns.
- 7) Measure the height "W" between transfer case and taper roller bearing on the transfer driven gear.



- 8) Measure depth "X" of bearing insertion part of the extension case.

NOTE:

Measure with bearing outer race and adjusting washer removed.



- 9) Calculate the adjusting washer thickness "t" using the following calculation.

$$t = X - W + (0.15 - 0.2 \text{ mm (0.006 - 0.008 in)})$$

- 10) Select the washer with the nearest value in the following table.

NOTE:

Be sure that it is always within the preload.

Preload of the taper roller bearing (amount of standard protrusion):

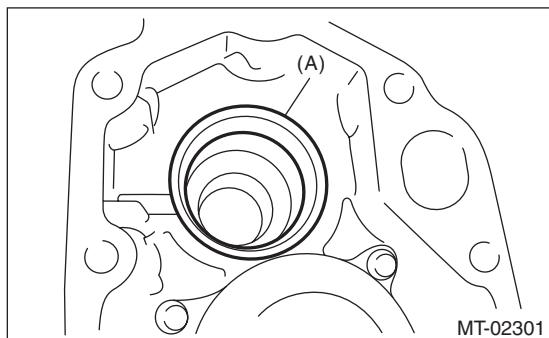
0.15 — 0.20 mm (0.006 — 0.008 in)

Adjusting washer (50 x 61 x t)	
Part No.	Thickness mm (in)
803050060	0.50 (0.0197)
803050061	0.55 (0.0217)
803050062	0.60 (0.0236)
803050063	0.65 (0.0256)
803050064	0.70 (0.0276)
803050065	0.75 (0.0295)
803050066	0.80 (0.0315)
803050067	0.85 (0.0335)
803050068	0.90 (0.0354)
803050069	0.95 (0.0374)
803050070	1.00 (0.0394)
803050071	1.05 (0.0413)
803050072	1.10 (0.0433)
803050073	1.15 (0.0453)
803050074	1.20 (0.0472)
803050075	1.25 (0.0492)
803050076	1.30 (0.0512)
803050077	1.35 (0.0531)
803050078	1.40 (0.0551)
803050079	1.45 (0.0571)

Transfer Case and Extension Case Assembly

MANUAL TRANSMISSION AND DIFFERENTIAL

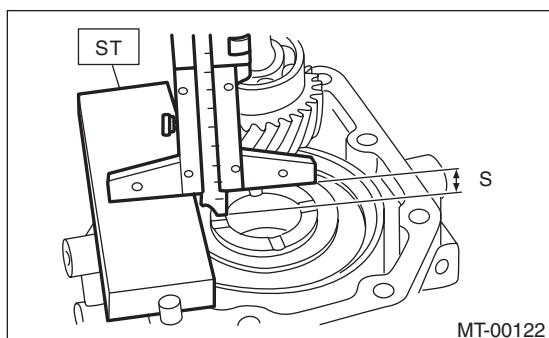
11) Install the selected adjusting washer and bearing outer race to the extension case.



(A) Bearing outer race

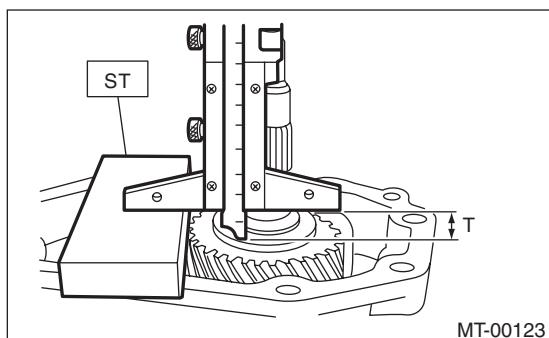
12) Measure the depth "S" between the transfer case + ST and the center differential.

ST 398643600 GAUGE



13) Measure the height "T" between the extension case + ST and the transfer drive gear.

ST 398643600 GAUGE



14) Calculate the adjusting washer thickness "U" using the following calculation.

$$U = S + T - 30 \text{ mm (1.18 in)} - (0.15 - 0.35 \text{ mm (0.00590 - 0.0138 in)})$$

S: Depth between the transfer case + ST and the center differential

T: Depth between the extension case + ST and the transfer gear

30 mm (1.18 in): Thickness of ST ($\times 2$ pieces)

0.15 — 0.35 mm (0.0059 — 0.0138 in): Clearance

15) Select a suitable adjusting washer in the following table.

Standard clearance:

0.15 — 0.35 mm (0.0059 — 0.0138 in)

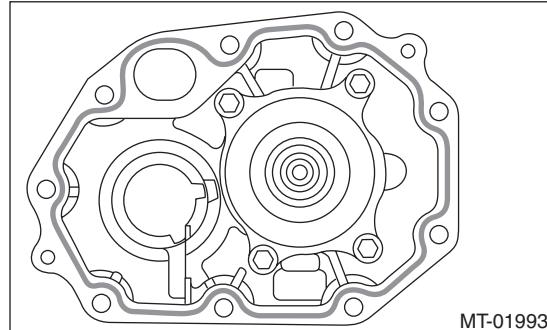
Adjusting washer	
Part No.	Thickness mm (in)
803036050	0.9 (0.035)
803036054	1.0 (0.039)
803036051	1.1 (0.043)
803036055	1.2 (0.047)
803036052	1.3 (0.051)
803036056	1.4 (0.055)
803036053	1.5 (0.059)
803036057	1.6 (0.063)
803036058	1.7 (0.067)
803036080	1.8 (0.071)
803036081	1.9 (0.075)

16) Install the adjusting washer to center differential.

17) Apply liquid gasket seamlessly to the mating surface of transfer case.

Liquid gasket:

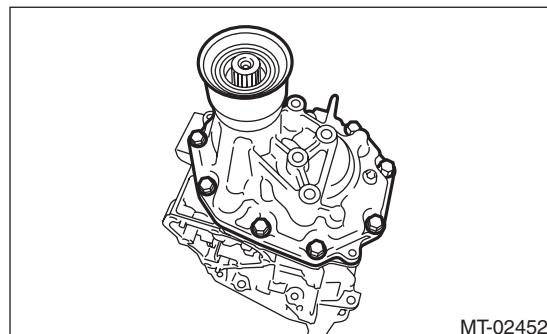
THREE BOND 1215 (Part No. 004403007) or equivalent



18) Install the extension case assembly to the transfer case.

Tightening torque:

40 N·m (4.1 kgf-m, 29.5 ft-lb)



Transfer Case and Extension Case Assembly

MANUAL TRANSMISSION AND DIFFERENTIAL

19) Temporarily install the gasket to the transmission case side.

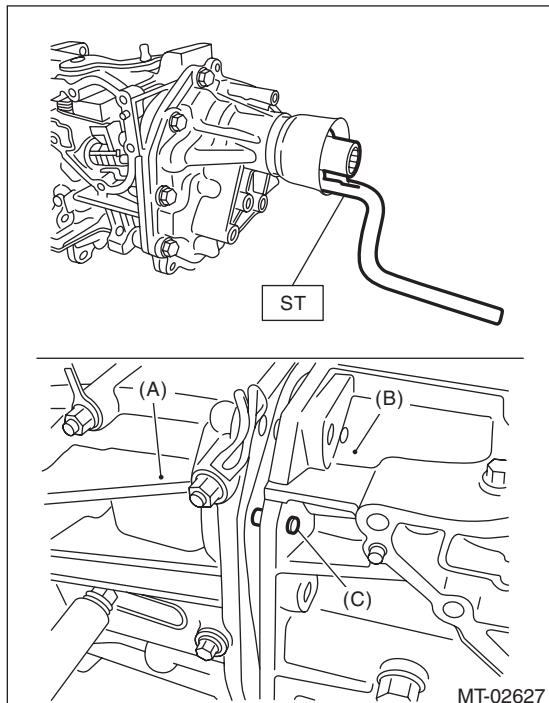
NOTE:

Use a new gasket.

20) Install the extension case assembly along with the transfer case to the transmission case.

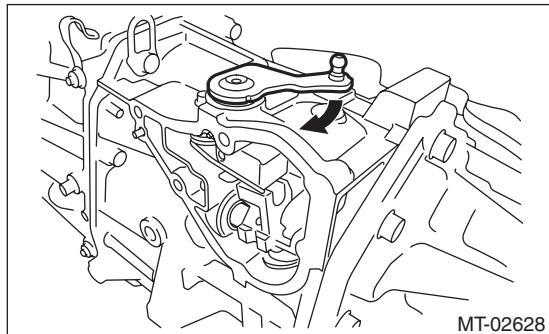
(1) While moving the HANDLE to align the spline position, press in the transfer case assembly until the knock pin comes slightly out of transfer case.

ST 18631AA000 HANDLE



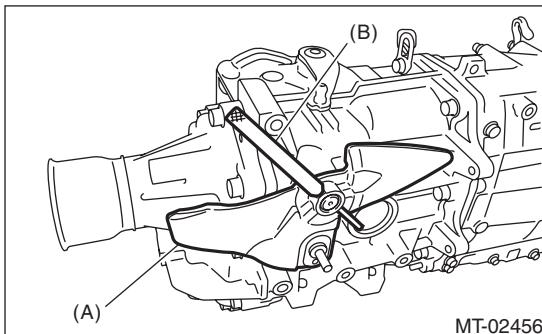
(A) Transmission case
(B) Transfer case
(C) Knock pin

(2) Set and hold the selector lever to the 1st-2nd side, and install the transfer case assembly so that the shifter arm edge and fork rod does not contact.



21) Temporarily tighten the transfer case assembly.

22) Install the shift lever COMPL to the shifter arm No. 2, then insert the remover or similar tool instead of spring pin.



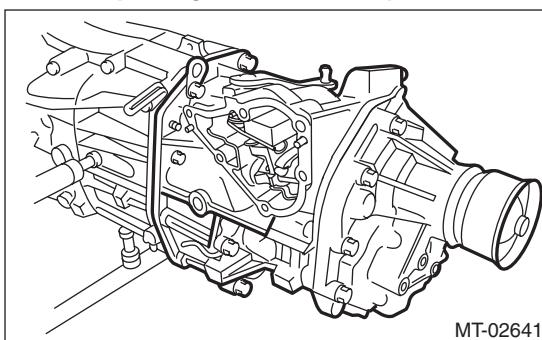
(A) Shift lever COMPL
(B) Remover

23) Operate the selector arm and remover to confirm the correct shifting into each gear is possible.

24) Tighten the transfer case assembly to the specified torque.

Tightening torque:

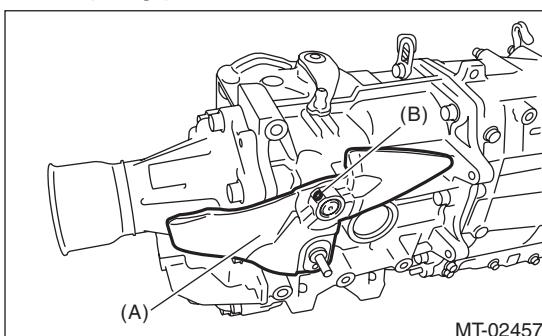
24.5 N·m (2.5 kgf·m, 18.1 ft-lb)



25) Install the shift lever COMPL to the shifter arm No. 2, then fix it using a spring pin.

NOTE:

Use new spring pin.

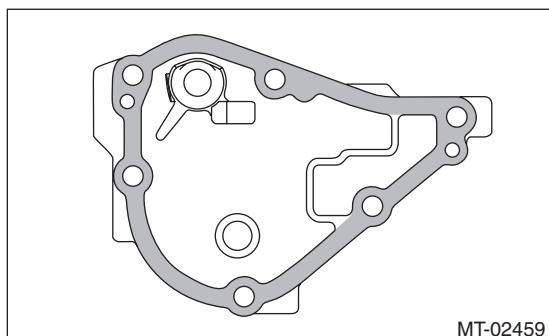


(A) Shift lever COMPL
(B) Spring pin

26) Apply liquid gasket seamlessly to the mating surface of transmission cover.

Liquid gasket:

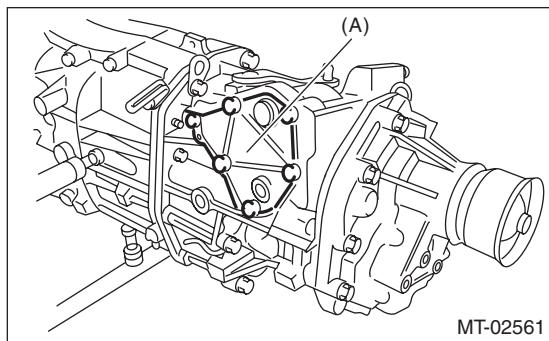
THREE BOND 1215 (Part No. 004403007) or equivalent



27) Install the transmission cover to transfer case.

Tightening torque:

25 N·m (2.5 kgf·m, 18.4 ft-lb)



(A) Transmission cover

28) Install the back-up light switch and the neutral switch. <Ref. to 6MT-36, BACK-UP LIGHT SWITCH & NEUTRAL POSITION SWITCH, INSTALLATION, Switches and Harness.>

29) Install the manual transmission assembly to the vehicle. <Ref. to 6MT-29, INSTALLATION, Manual Transmission Assembly.>

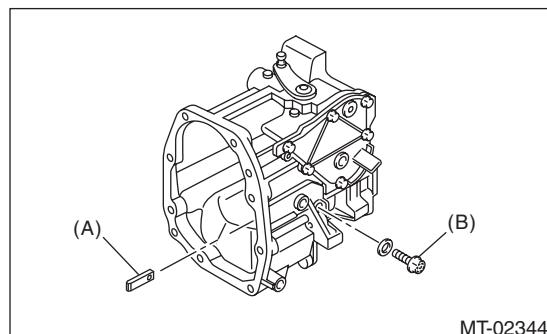
C: DISASSEMBLY

1. TRANSFER CASE

1) Remove the interlock plate.

NOTE:

Do not remove the precoat bolt (B) if the parts are assembled as a transmission assembly.



(A) Interlock plate

(B) Precoat bolt

2) Remove the shift link assembly. <Ref. to 6MT-50, REMOVAL, Shift Link Assembly.>

2. EXTENSION CASE

1) Remove the transfer drive gear assembly. <Ref. to 6MT-45, REMOVAL, Transfer Drive Gear.>

2) Remove the oil seal from the extension case. <Ref. to 6MT-34, REPLACEMENT, Oil Seal.>

3) Remove the dust cover.

Transfer Case and Extension Case Assembly

MANUAL TRANSMISSION AND DIFFERENTIAL

D: ASSEMBLY

1. TRANSFER CASE

1) Install the shift link assembly to the transfer case. <Ref. to 6MT-53, INSTALLATION, Shift Link Assembly.>

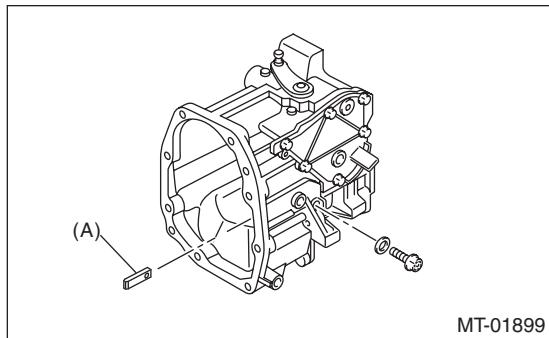
2) Install the interlock plate to the transfer case.

NOTE:

- Use a new bolt and gasket.
- Before installing the interlock plate, clean the screw threads.

Tightening torque:

20 N·m (2.0 kgf-m, 14.8 ft-lb)



(A) Interlock plate

2. EXTENSION CASE

1) Using the ST, install the oil seal to the extension case. <Ref. to 6MT-34, REPLACEMENT, Oil Seal.>

NOTE:

Use a new oil seal.

2) Install the transfer drive gear to the extension case. <Ref. to 6MT-45, INSTALLATION, Transfer Drive Gear.>

3) Install the dust cover.