

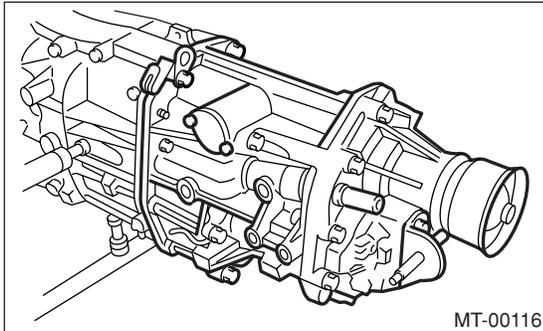
Transfer Case and Extension Case Assembly

MANUAL TRANSMISSION AND DIFFERENTIAL

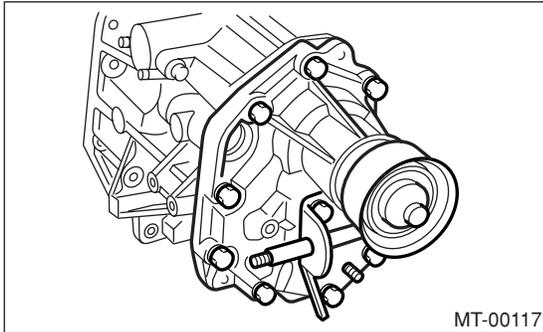
9. Transfer Case and Extension Case Assembly

A: REMOVAL

- 1) Remove the manual transmission assembly from vehicle. <Ref. to 5MT-25, REMOVAL, Manual Transmission Assembly.>
- 2) Remove the back-up light switch and neutral position switch. <Ref. to 5MT-34, REMOVAL, Switches and Harness.>
- 3) Remove the transfer case with extension case assembly.

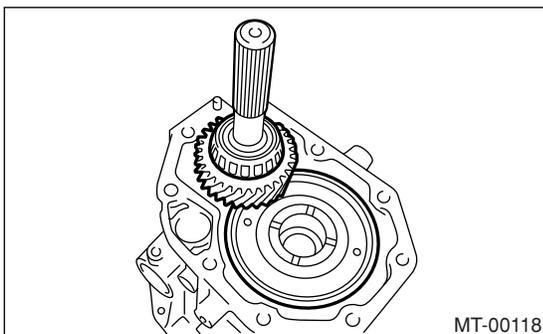


- 4) Remove the shifter arm.
- 5) Remove the extension case assembly.

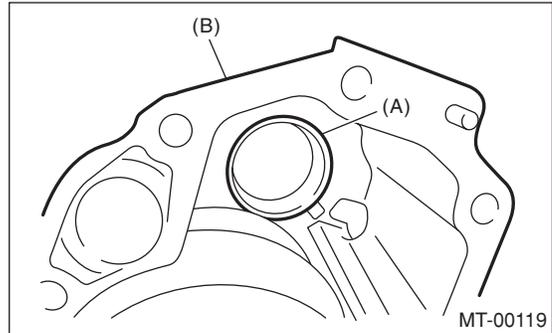


B: INSTALLATION

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

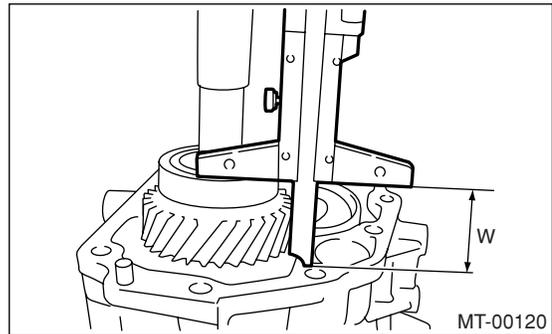


- 2) Remove the bearing outer race from extension case.



- (A) Bearing outer race
(B) Extension case

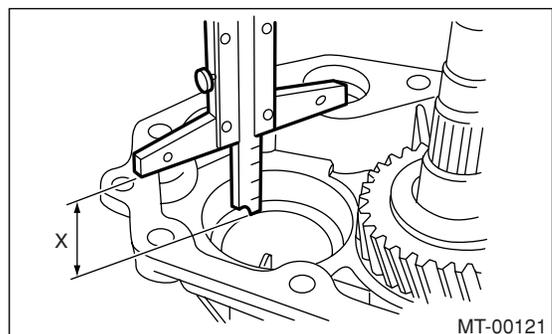
- 3) While pressing the bearing outer race horizontally, turn the driven shaft ten rotations.
- 4) Measure the height "W" between transfer case and taper roller bearing on the transfer driven gear.



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

NOTE:

Measure with bearing outer race and thrust washer removed.



- 6) Calculate the tight "t" using following equation.
 $t = X - W + 0.2 \text{ to } 0.3 \text{ mm (0.008 to 0.012 in)}$
- 7) Select the washer of nearest value in the following table:

Standard preload between thrust washer and taper roller bearing:

0.2 — 0.3 mm (0.008 — 0.012 in)

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NOTE:

Be sure that the preload is within standard value.

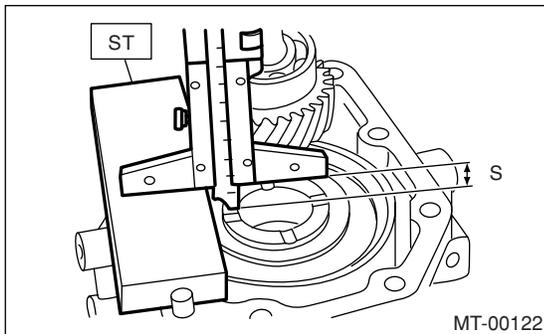
Thrust washer (50 × 61 × t)	
Part Number	Thickness mm (in)
803050060	0.50 (0.0197)
803050061	0.55 (0.0217)
803050062	0.60 (0.0236)
803050063	0.65 (0.0256)
803050064	0.70 (0.0276)
803050065	0.75 (0.0295)
803050066	0.80 (0.0315)
803050067	0.85 (0.0335)
803050068	0.90 (0.0354)
803050069	0.95 (0.0374)
803050070	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)

8) Fit the thrust washers on transfer drive shaft.

9) Install the bearing outer race into extension case.

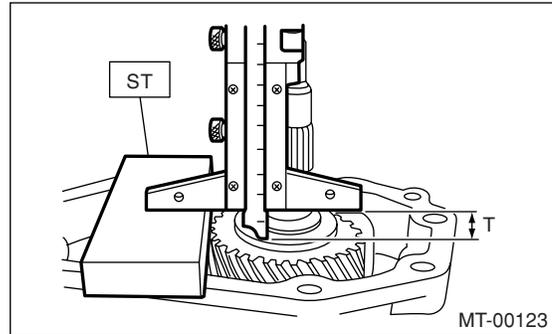
10) Measure the depth "S" between transfer case and center differential.

ST 398643600 GAUGE



11) Measure the height "T" between extension case and transfer drive gear.

ST 398643600 GAUGE



12) Calculate the thrust washer "U" using following equation.

$$U = \{15 \text{ mm (1.18 in)} - T\} - \{S - 15 \text{ mm (1.18 in)}\} - 0.15 \text{ to } 0.35 \text{ mm (0.0059 to 0.0138 in)}$$

U mm (in)	Thickness of transfer drive gear thrust washer
T mm (in)	Height from end of ST to transfer drive gear
S mm (in)	Depth from end of transmission case to the end of ST
0.15 — 0.35 mm (0.0059 — 0.0138 in)	Standard clearance between thrust washer and transfer drive gear.
15 mm (1.18 in)	Thickness of ST

13) Select a suitable washer in the following table:

Standard clearance:

0.15 — 0.35 mm (0.0059 — 0.0138 in)

Thrust washer	
Part Number	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)

14) Fit the thrust washer on center differential.

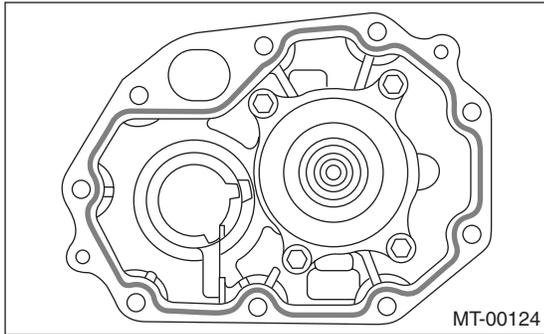
15) Apply proper amount of liquid gasket to the transfer case mating surface.

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Liquid gasket:

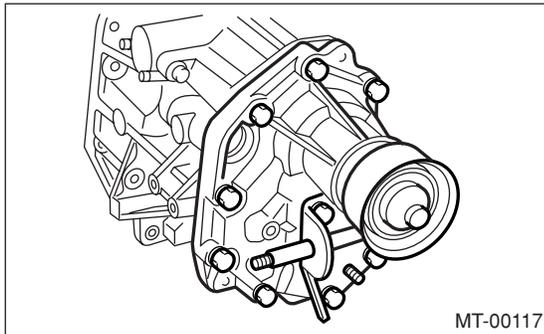
THREE BOND 1215 (Part No. 004403007) or equivalent



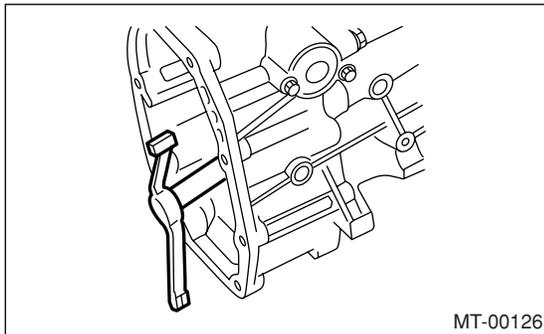
16) Install the extension assembly into transfer case.

Tightening torque:

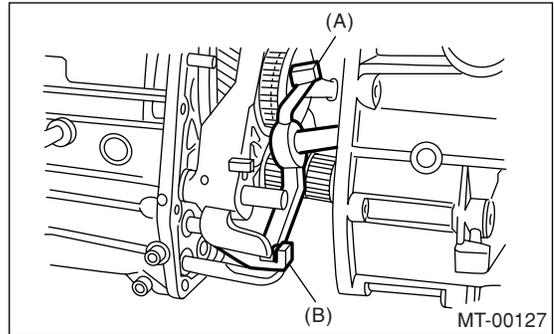
40 N·m (4.1 kgf·m, 29.7 ft·lb)



17) Install the shifter arm to transfer case.



18) Hang the shifter arm on 3rd-4th fork rod.



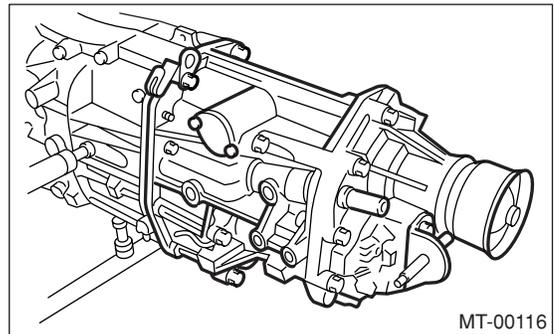
(A) Shifter arm

(B) 3rd-4th fork rod

19) Install the transfer case with extension case assembly to transmission case.

Tightening torque:

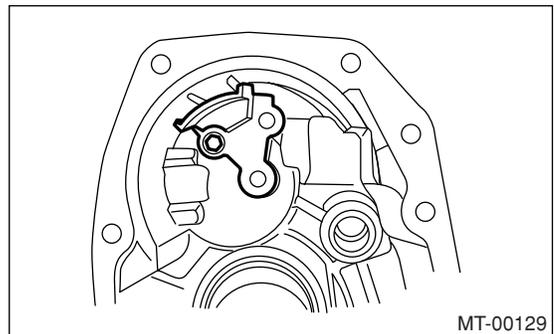
24.5 N·m (2.5 kgf·m, 18.1 ft·lb)



C: DISASSEMBLY

1. TRANSFER CASE

- 1) Remove the reverse check assembly. <Ref. to 5MT-46, REMOVAL, Reverse Check Sleeve.>
- 2) Remove the oil guide.



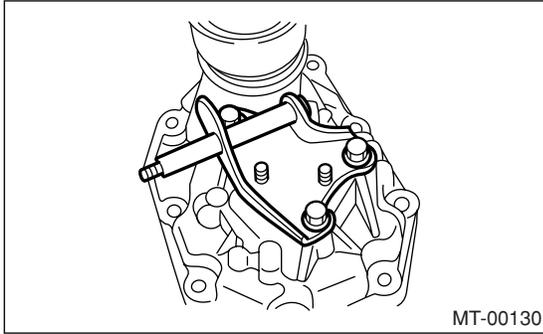
2. EXTENSION CASE

- 1) Remove the transfer drive gear assembly. <Ref. to 5MT-41, REMOVAL, Transfer Drive Gear.>

Transfer Case and Extension Case Assembly

MANUAL TRANSMISSION AND DIFFERENTIAL

2) Remove the shift bracket.



2) Install the reverse check sleeve assembly to transfer case. <Ref. to 5MT-46, INSTALLATION, Reverse Check Sleeve.>

3) Remove the oil seal from extension case. <Ref. to 5MT-32, Oil Seal.>

D: ASSEMBLY

1. EXTENSION CASE

1) Using the ST, install the oil seal to extension case. <Ref. to 5MT-32, Oil Seal.>

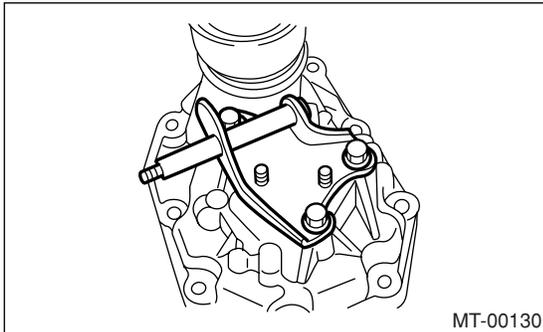
NOTE:

Use a new oil seal.

2) Install the shift bracket to extension case.

Tightening torque:

24.5 N·m (2.5 kgf·m, 18.1 ft·lb)



3) Install the transfer drive gear to extension case. <Ref. to 5MT-41, INSTALLATION, Transfer Drive Gear.>

2. TRANSFER CASE

1) Install the oil guide to transfer case.

Tightening torque:

6.4 N·m (0.65 kgf·m, 4.7 ft·lb)

