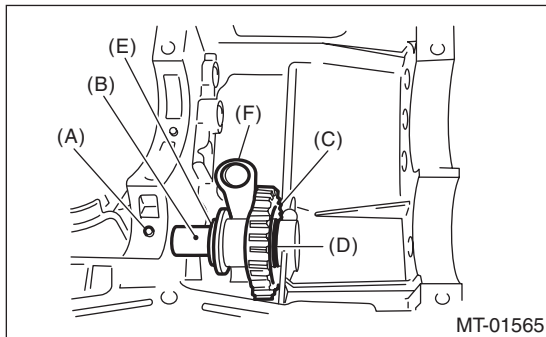


## 19.Reverse Idler Gear

### A: REMOVAL

- 1) Remove the manual transmission assembly from the vehicle. <Ref. to 5MT-22, REMOVAL, Manual Transmission Assembly.>
- 2) Remove the back-up light switch and the neutral position switch. <Ref. to 5MT-35, REMOVAL, Switches and Harness.>
- 3) Remove the transfer case together with the extension case assembly. <Ref. to 5MT-39, REMOVAL, Transfer Case and Extension Case Assembly.>
- 4) Remove the transmission case. <Ref. to 5MT-53, REMOVAL, Transmission Case.>
- 5) Remove the drive pinion shaft assembly. <Ref. to 5MT-62, REMOVAL, Drive Pinion Shaft Assembly.>
- 6) Remove the main shaft assembly. <Ref. to 5MT-57, REMOVAL, Main Shaft Assembly.>
- 7) Remove the front differential assembly. <Ref. to 5MT-72, REMOVAL, Front Differential Assembly.>
- 8) Remove the shifter forks and rods. <Ref. to 5MT-81, REMOVAL, Shifter Fork and Rod.>
- 9) Pull out the straight pin, and remove the reverse idler gear shaft, adjusting washer, reverse idler gear and washer.



- (A) Straight pin
- (B) Reverse idler gear shaft
- (C) Reverse idler gear
- (D) Adjusting washer
- (E) Reverse idler gear washer
- (F) Reverse shifter lever

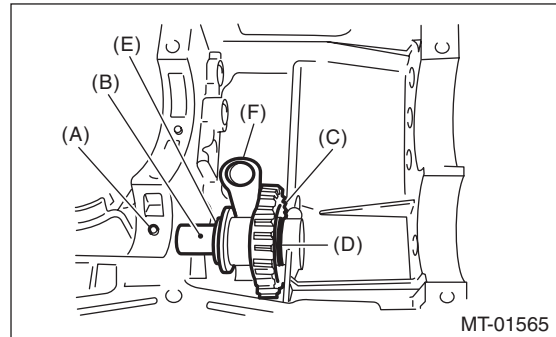
- 10) Remove the reverse shifter lever.

### B: INSTALLATION

- 1) Install the reverse shifter lever, adjusting washer, reverse idler gear, reverse idler gear shaft and washer, and secure them with the straight pin.

#### NOTE:

- Be sure to install the reverse idler gear shaft from rear side.
- Use a new straight pin.



- (A) Straight pin
- (B) Reverse idler gear shaft
- (C) Reverse idler gear
- (D) Adjusting washer
- (E) Reverse idler gear washer
- (F) Reverse shifter lever

- 2) Check and adjust clearance between the reverse idler gear and the timing case wall surface. <Ref. to 5MT-79, INSTALLATION, Reverse Idler Gear.> <Ref. to 5MT-80, ADJUSTMENT, Reverse Idler Gear.>
- 3) Install the shifter forks and rods. <Ref. to 5MT-82, INSTALLATION, Shifter Fork and Rod.>
- 4) Install the front differential assembly. <Ref. to 5MT-72, INSTALLATION, Front Differential Assembly.>
- 5) Install the main shaft assembly. <Ref. to 5MT-57, INSTALLATION, Main Shaft Assembly.>
- 6) Install the drive pinion shaft assembly. <Ref. to 5MT-62, INSTALLATION, Drive Pinion Shaft Assembly.>
- 7) Install the transmission case. <Ref. to 5MT-54, INSTALLATION, Transmission Case.>
- 8) Install the transfer case together with the extension case assembly. <Ref. to 5MT-39, INSTALLATION, Transfer Case and Extension Case Assembly.>
- 9) Install the back-up light switch and the neutral position switch. <Ref. to 5MT-35, INSTALLATION, Switches and Harness.>
- 10) Install the manual transmission assembly to the vehicle. <Ref. to 5MT-25, INSTALLATION, Manual Transmission Assembly.>

# Reverse Idler Gear

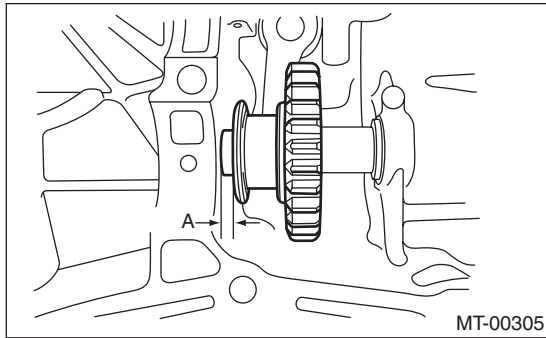
## MANUAL TRANSMISSION AND DIFFERENTIAL

### C: INSPECTION

1) Move the reverse shifter rod toward the reverse side. Check the clearance between the reverse idler gear and the transmission case wall surface. If the value is out of specification, select the appropriate reverse shifter lever and adjust. <Ref. to 5MT-80, ADJUSTMENT, Reverse Idler Gear.>

#### **Clearance A:**

**6.0 — 7.5 mm (0.236 — 0.295 in)**

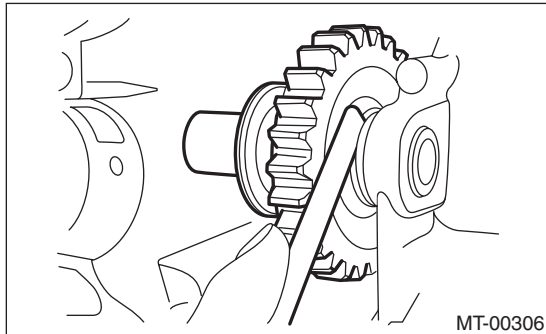


2) After installing a suitable reverse shifter lever, shift into neutral. Check the clearance between the reverse idler gear and the transmission case wall surfaces.

If the value is out of specification, select the appropriate adjusting washer and adjust. <Ref. to 5MT-80, ADJUSTMENT, Reverse Idler Gear.>

#### **Clearance:**

**0 — 0.5 mm (0 — 0.020 in)**



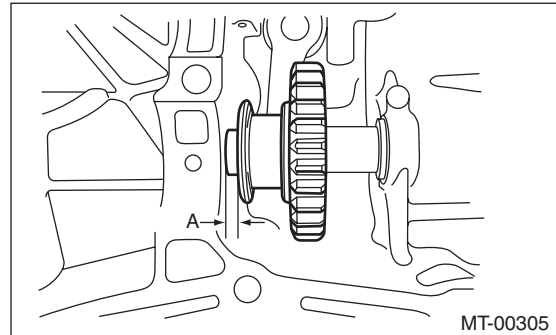
3) Check the reverse idler gear and shaft for damage. Replace if it is damaged.

### D: ADJUSTMENT

1) Select the appropriate reverse shifter lever from the table below, and adjust until the clearance between the reverse idler gear and transmission case wall is within specification.

#### **Clearance A:**

**6.0 — 7.5 mm (0.236 — 0.295 in)**

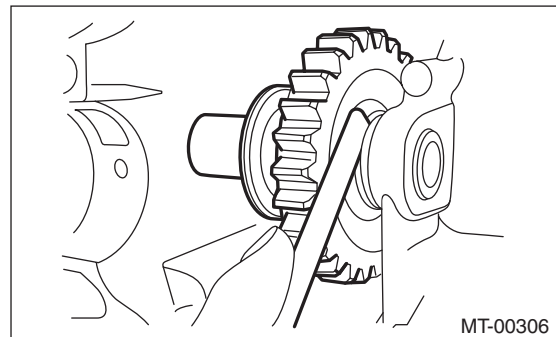


| Reverse shifter lever |      |                     |
|-----------------------|------|---------------------|
| Part No.              | Mark | Contents            |
| 32820AA070            | 7    | Far from case wall  |
| 32820AA080            | 8    | Standard            |
| 32820AA090            | 9    | Closer to case wall |

2) Select the appropriate adjusting washer from the table below, and adjust until the clearance between the reverse idler gear and transmission case wall is within specification.

#### **Clearance:**

**0 — 0.5 mm (0 — 0.020 in)**



| Adjusting washer |                   |
|------------------|-------------------|
| Part No.         | Thickness mm (in) |
| 803020151        | 0.4 (0.016)       |
| 803020152        | 1.1 (0.043)       |
| 803020153        | 1.5 (0.059)       |
| 803020154        | 1.9 (0.075)       |
| 803020155        | 2.3 (0.091)       |