# 1. General Description

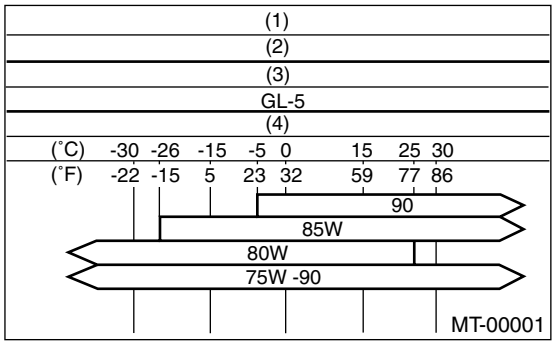
## A: SPECIFICATIONS

### 1. Manual Transmission and Differential

| Item Type | | | Model | | | |
|---|---|---|---|---|---|---|
| | | | L, L-S | GT, GTLO | OUTBACK, BAJA (Non-TURBO model) | BAJA (TURBO model) |
| Type | | | 5-forward speeds with synchromesh and 1 reverse | | | |
| Transmission gear ratio | | 1st | 3.454 | | | |
| | | 2nd | 2.062 | | | 1.947 |
| | | 3rd | 1.448 | | | 1.366 |
| | | 4th | 1.088 | | | 0.972 |
| | | 5th | 0.780 | | 0.871 | 0.738 |
| | | Reverse | 3.333 | | | |
| Front reduction gear | Final | Type of gear | Hypoid | | | |
| | | Gear ratio | 3.900 | 4.111 | | 4.444 |
| Rear reduction gear | Transfer | Type of gear | Helical | | | |
| | | Gear ratio | 1.000 | | | |
| | Final | Type of gear | Hypoid | | | |
| | | Gear ratio | 3.900 | 4.111 | | 4.444 |
| Front differential | Type and number of gear | | Straight bevel gear (Bevel pinion: 2, Bevel gear: 2) | | | |
| Center differential | Type and number of gear | | Straight bevel gear (Bevel pinion: 2, Bevel gear: 2 and viscous coupling) | | | |
| Transmission gear oil | | | GL-5 | | | |
| Transmission gear oil capacity | | | 3.5 ℓ (3.7 US qt, 3.1 Imp qt) | | | |

### 2. TRANSMISSION GEAR OIL

**Recommended oil**




(1) Item
(2) Transmission gear oil
(3) API classification
(4) SAE viscosity No. and applicable temperature

### 3. TRANSMISSION CASE ASSEMBLY

Drive pinion shim adjustment
Hypoid gear backlash
0.13 — 0.18 mm (0.0051 — 0.0071 in)

| Drive pinion shim | | | |
|---|---|---|---|
| Part No. | Thickness mm (in) | Part No. | Thickness mm (in) |
| 32295AA031 | 0.150 (0.0059) | 32295AA071 | 0.250 (0.0098) |
| 32295AA041 | 0.175 (0.0069) | 32295AA081 | 0.275 (0.0108) |
| 32295AA051 | 0.200 (0.0079) | 32295AA091 | 0.300 (0.0118) |
| 32295AA061 | 0.225 (0.0089) | 32295AA101 | 0.500 (0.0197) |

Selection of main shaft rear plate

| Main shaft rear plate | | |
|---|---|---|
| Dimension “A” mm (in) | Part No. | Mark |
| 4.00 — 4.13 (0.1575 — 0.1626) | 32294AA041 | 1 |
| 3.87 — 3.99 (0.1524 — 0.1571) | 32294AA051 | 2 |

## 4. DRIVE PINION ASSEMBLY

Preload adjustment of thrust bearing
Starting torque
0.3 — 0.8 N·m (0.03 — 0.08 kgf-m, 0.2 — 0.6 ft-lb)

| Adjusting washer No. 1 | |
|---|---|
| Part No. | Thickness mm (in) |
| 803025051 | 3.925 (0.1545) |
| 803025052 | 3.950 (0.1555) |
| 803025053 | 3.975 (0.1565) |
| 803025054 | 4.000 (0.1575) |
| 803025055 | 4.025 (0.1585) |
| 803025056 | 4.050 (0.1594) |
| 803025057 | 4.075 (0.1604) |

| Adjusting washer No. 2 | |
|---|---|
| Part No. | Thickness mm (in) |
| 803025059 | 3.850 (0.1516) |
| 803025054 | 4.000 (0.1575) |
| 803025058 | 4.150 (0.1634) |

## 5. MAIN SHAFT

Snap ring (Outer-25) to synchronizer hub clearance
0.060 — 0.100 mm (0.0024 — 0.0039 in)

| Snap ring (Outer-25) | | | |
|---|---|---|---|
| Part No. | Thickness mm (in) | Part No. | Thickness mm (in) |
| 805025051 | 2.42 (0.0953) | 805025055 | 2.62 (0.1031) |
| 805025052 | 2.47 (0.0972) | 805025056 | 2.67 (0.1051) |
| 805025053 | 2.52 (0.0992) | 805025057 | 2.72 (0.1071) |
| 805025054 | 2.57 (0.1012) | 805025058 | 2.37 (0.0933) |

## 6. REVERSE IDLER GEAR

Adjustment of reverse idler gear position
Reverse idler gear to transmission case (LH) wall clearance
6.0 — 7.5 mm (0.236 — 0.295 in)

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

After installing a suitable reverse shifter lever, adjust the reverse idler gear to transmission case wall clearance to within 0 to 0.5 mm (0 to 0.020 in) using washers.

| Washer (20.5 × 26 × t) | | | |
|---|---|---|---|
| Part No. | Thickness mm (in) | Part No. | Thickness mm (in) |
| 803020151 | 0.4 (0.016) | 803020154 | 1.9 (0.075) |
| 803020152 | 1.1 (0.043) | 803020155 | 2.3 (0.091) |
| 803020153 | 1.5 (0.059) | — | — |

## 7. SHIFTER FORK AND ROD

Select the suitable shifter forks so that both coupling sleeve and reverse driven gear are positioned in the center of their synchromesh mechanisms.
Rod end clearance
A: 1st-2nd — 3rd-4th
0.4 — 1.4 mm (0.016 — 0.055 in)
B: 3rd-4th — 5th
0.5 — 1.3 mm (0.020 — 0.051 in)

| 1st-2nd shifter fork | | |
|---|---|---|
| Part No. | Mark | Remarks |
| 32804AA060 | 1 | Approach to 1st gear by 0.2 mm (0.008 in) |
| 32804AA070 | No mark | Standard |
| 32804AA080 | 3 | Approach to 2nd gear by 0.2 mm (0.008 in) |

| 3rd-4th shifter fork | | |
|---|---|---|
| Part No. | Mark | Remarks |
| 32810AA061 | 1 | Approach to 4th gear by 0.2 mm (0.008 in) |
| 32810AA071 | No mark | Standard |
| 32810AA101 | 3 | Approach to 3rd gear by 0.2 mm (0.008 in) |

| 5th shifter fork (Non-TURBO model) | | |
|---|---|---|
| Part No. | Mark | Remarks |
| 32812AA201 | 7 | Approach to 5th gear by 0.2 mm (0.008 in) |
| 32812AA211 | No mark | Standard |
| 32812AA221 | 9 | Become distant from 5th gear by 0.2 mm (0.008 in) |

| 5th shifter fork (Turbo model) | | |
|---|---|---|
| Part No. | Mark | Remarks |
| 32812AA231 | 7 | Approach to 5th gear by 0.2 mm (0.008 in) |
| 32812AA241 | No mark | Standard |
| 32812AA251 | 9 | Become distant from 5th gear by 0.2 mm (0.008 in) |

## 8. TRANSFER CASE OR REAR CASE

Neutral position adjustment

| Adjustment shim | |
|---|---|
| Part No. | Thickness mm (in) |
| 32190AA000 | 0.15 (0.0059) |
| 32190AA010 | 0.30 (0.0118) |

| Reverse accent shaft | | |
|---|---|---|
| Part No. | Mark | Remarks |
| 32188AA090 | 3 | Neutral position is closer to 1st. |
| 32188AA100 | 0 | Standard |
| 32188AA110 | 1 | Neutral position is closer to reverse gear. |

Reverse check plate adjustment

| Reverse check plate | | | |
|---|---|---|---|
| Part No. | Mark | Angle θ | Remarks |
| 32189AA000 | 0 | 28° | Arm stops closer to 5th gear. |
| 32189AA010 | 1 | 31° | Arm stops closer to 5th gear. |
| 33189AA020 | 2 | 34° | Arm stops in the center. |
| 32189AA030 | 3 | 37° | Arm stops closer to reverse gear. |
| 32189AA040 | 4 | 40° | Arm stops closer to reverse gear. |

## 9. EXTENSION ASSEMBLY

Thrust washer (50 × 61 × t) to taper roller bearing table outer race side clearance
0.2 — 0.3 mm (0.0008 — 0.012 in)

NOTE:
Be sure to keep the clearance within specifications.

| Thrust washer (50 × 61 × 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) |

Thrust washer to center differential side clearance
0.15 — 0.35 mm (0.0059 — 0.0138 in)

| Thrust 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) |

## 10.FRONT DIFFERENTIAL

Bevel gear to pinion backlash
0.13 — 0.18 mm (0.0051 — 0.0071 in)

| Washer (38.1 × 50 × t) | | | |
|---|---|---|---|
| Part No. | Thickness mm (in) | Part No. | Thickness mm (in) |
| 803038021 | 0.925 — 0.950 (0.0364 — 0.0374) | 803038023 | 1.025 — 1.050 (0.0404 — 0.0413) |
| 803038022 | 0.975 — 1.000 (0.0384 — 0.0394) | — | — |

Pinion shaft to axle drive shaft clearance
0 — 0.2 mm (0 — 0.008 in)

| Snap ring (Outer-28) | | | |
|---|---|---|---|
| Part No. | Thickness mm (in) | Part No. | Thickness mm (in) |
| 805028011 | 1.05 (0.0413) | 805028012 | 1.20 (0.0472) |

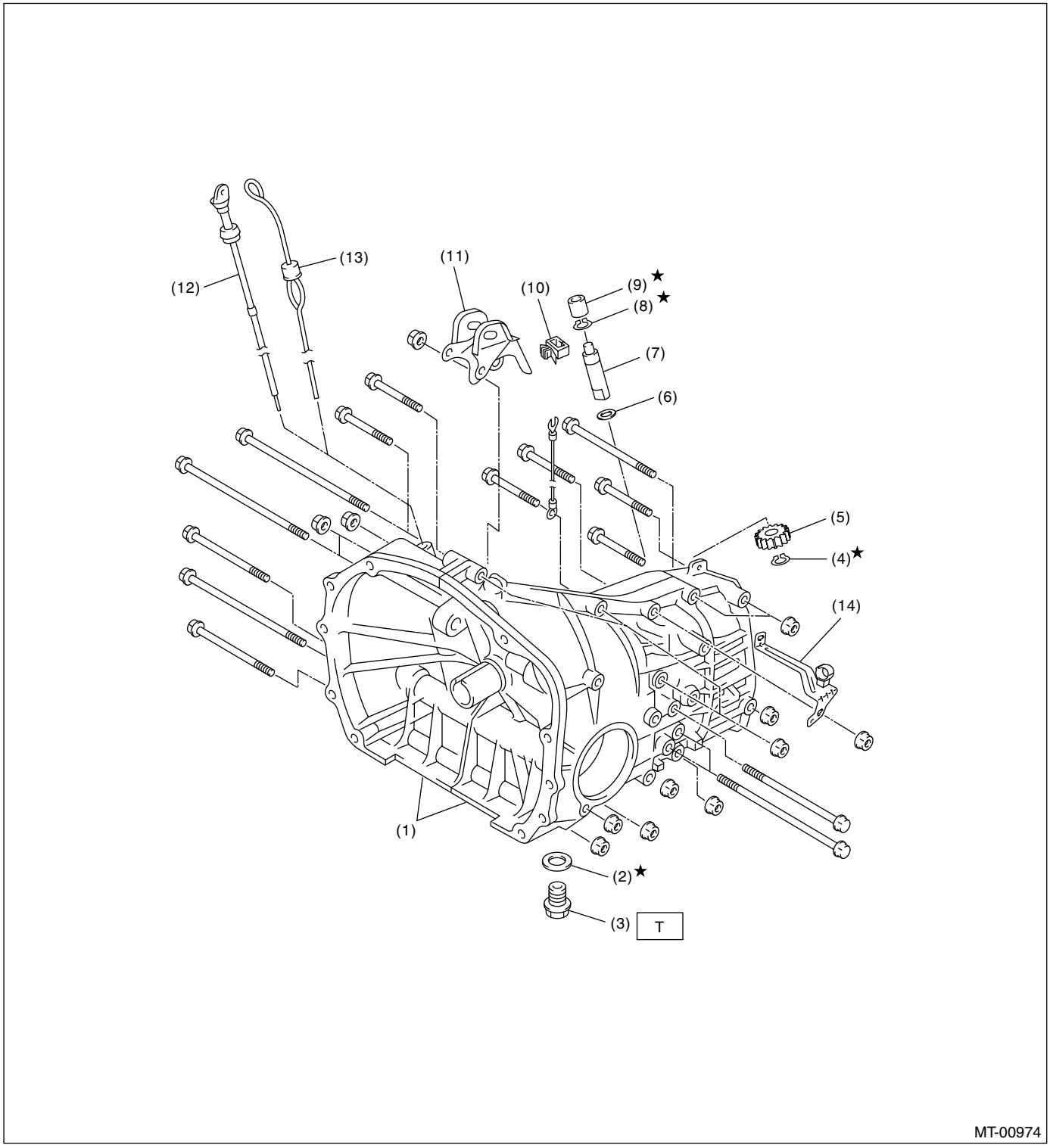
## 11.TRANSFER DRIVE GEAR

Snap ring (Outer-30) to ball bearing clearance
0.01 — 0.15 mm (0.0004 — 0.0059 in)

| Snap ring (Outer-30) | |
|---|---|
| Part No. | Thickness mm (in) |
| 805030041 | 1.53 (0.0602) |
| 805030042 | 1.65 (0.0650) |
| 805030043 | 1.77 (0.0697) |

# B: COMPONENT

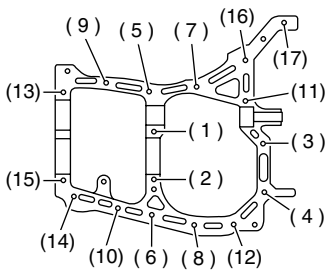
## 1. TRANSMISSION CASE



(1) Transmission case ASSY
(2) Gasket
(3) Drain plug
(4) Snap ring (Outer)
(5) Speedometer driven gear
(6) Washer
(7) Speedometer shaft
(8) Snap ring (Outer)
(9) Oil seal
(10) Clamp
(11) Pitching stopper bracket
(12) Oil level gauge (Non-TURBO model)
(13) Oil level gauge (Turbo model)
(14) Harness bracket (Non-TURBO model)

***Tightening torque: N·m (kgf-m, ft-lb)***
***T: 70 (7.1, 51)***

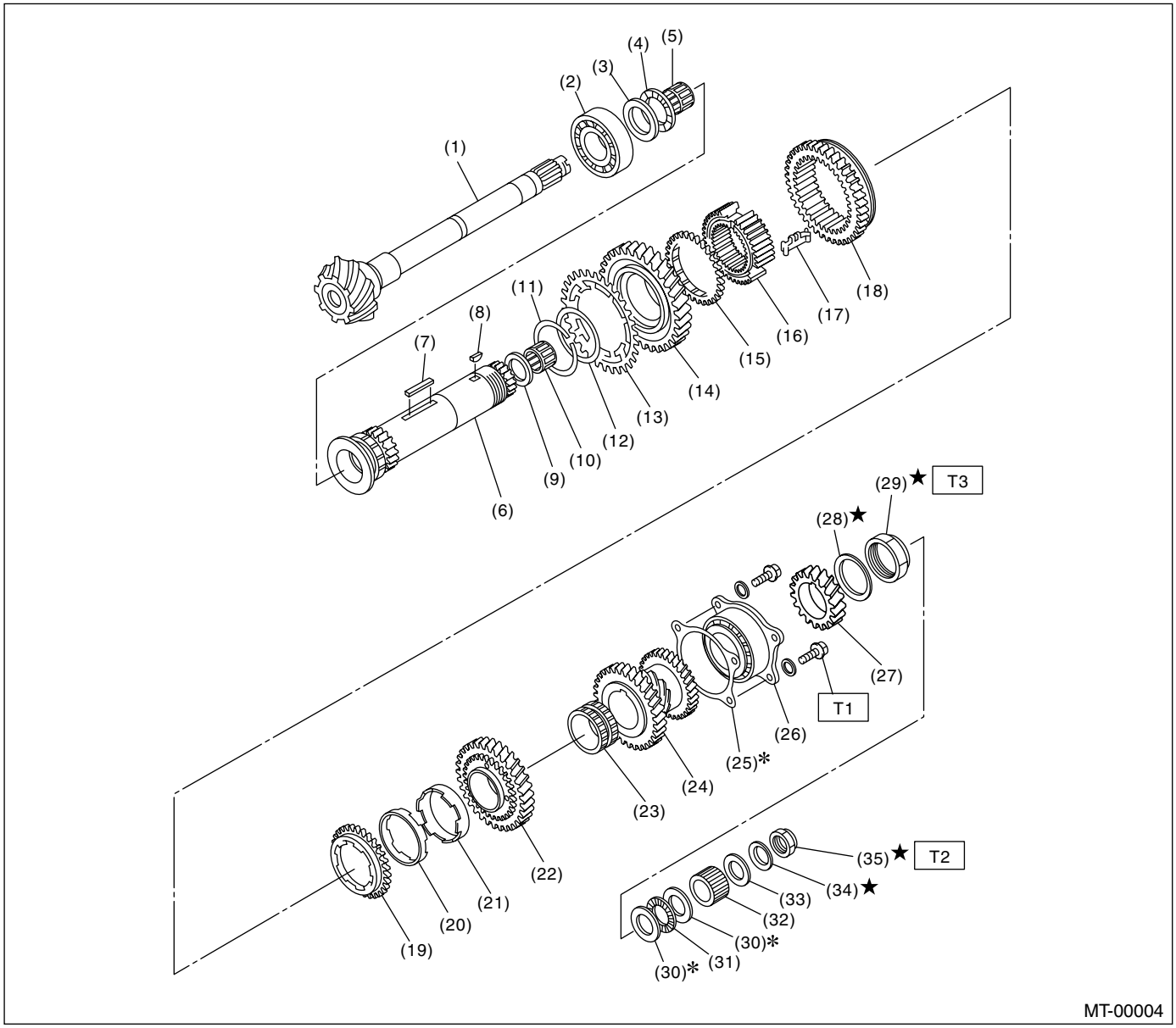
**• Transmission case tightening torque**



MT-00003

| Bolt No. | Bolt size | Tightening torque: N·m (kgf-m, ft-lb) |
|---|---|---|
| <5> to <15> | 8 mm | 25 (2.5, 18.1) |
| <1> to <4><br><16>, <17> | 10 mm | 39 (4.0, 28.9) |

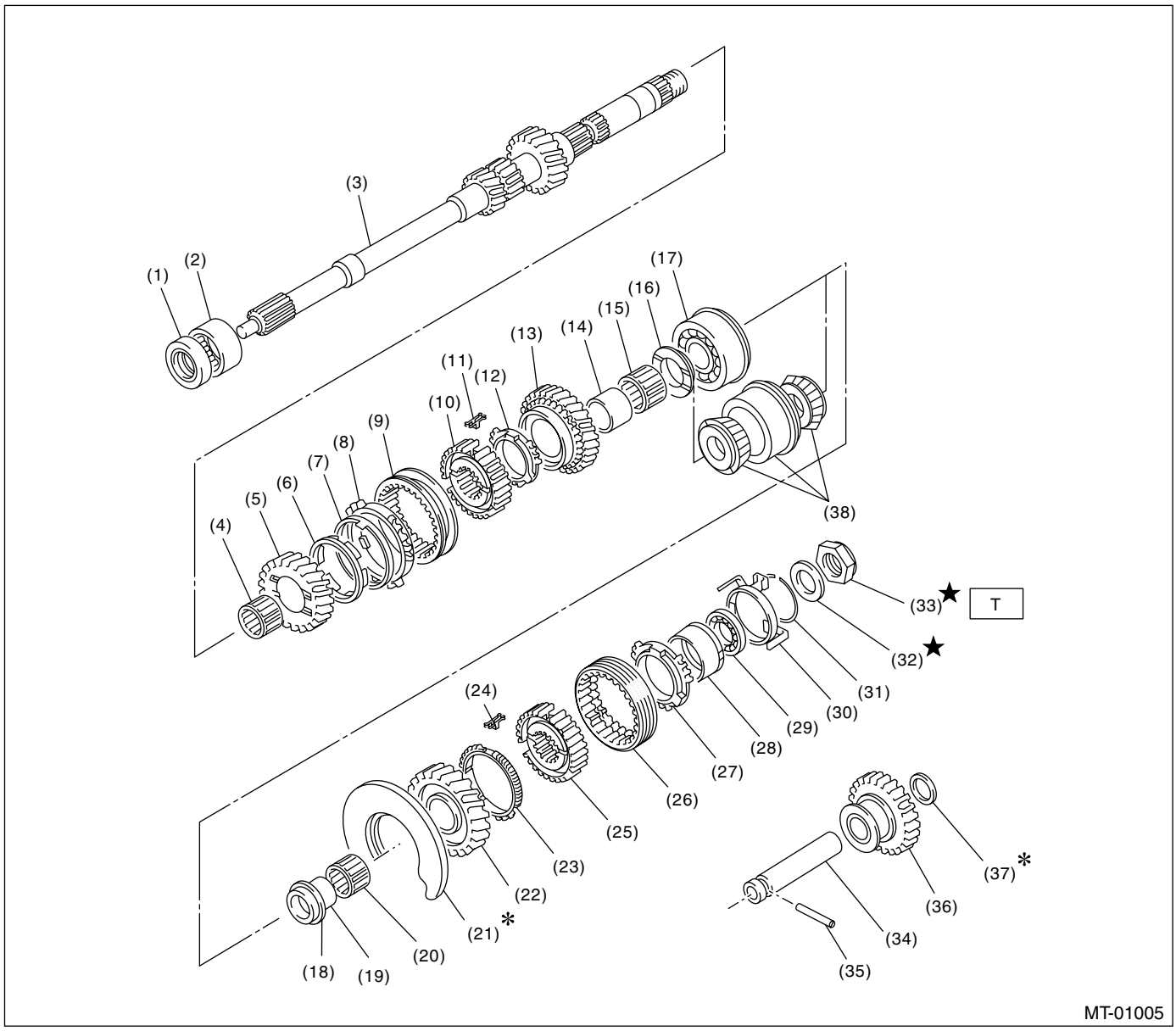
## 2. DRIVE PINION ASSEMBLY




(1) Drive pinion shaft
(2) Roller bearing
(3) Washer
(4) Thrust bearing
(5) Needle bearing
(6) Driven shaft
(7) Key
(8) Woodruff key
(9) Drive pinion collar
(10) Needle bearing
(11) Snap ring (Outer)
(12) Washer
(13) Sub gear
(14) 1st driven gear
(15) Baulk ring
(16) 1st-2nd synchronizer hub
(17) Insert key
(18) Reverse driven gear
(19) Outer baulk ring
(20) Synchro cone
(21) Inner baulk ring
(22) 2nd driven gear
(23) 2nd driven gear bush
(24) 3rd-4th driven gear
(25) Driven pinion shim
(26) Roller bearing
(27) 5th driven gear
(28) Lock washer
(29) Lock nut
(30) Washer
(31) Thrust bearing
(32) Differential bevel gear sleeve
(33) Washer
(34) Lock washer
(35) Lock nut

***Tightening torque: N·m (kgf-m, ft-lb)***
***T1: 30 (3.1, 22.4)***
***T2: 120 (12.2, 88.5)***
***T3: 260 (26.5, 191.7)***

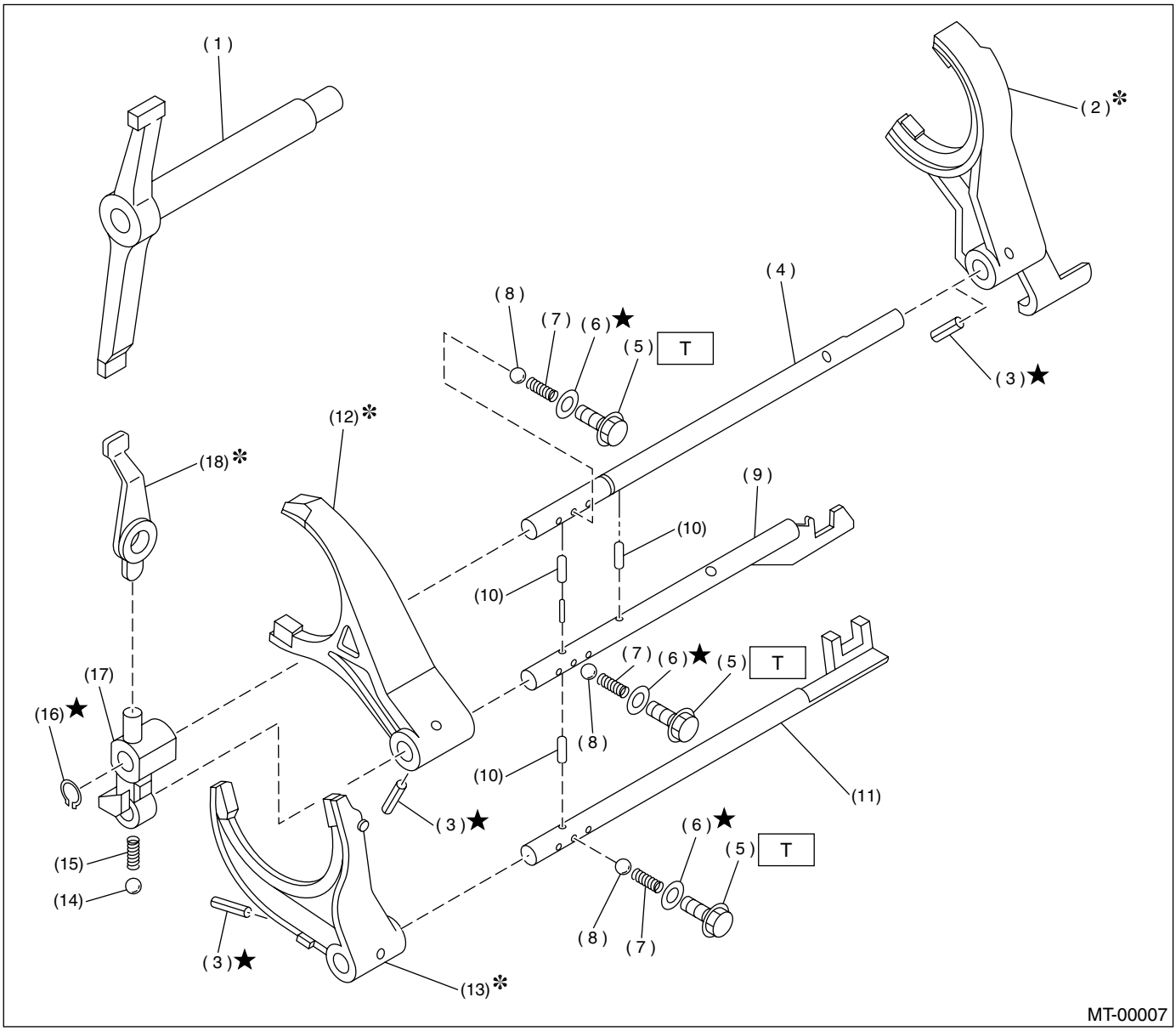
## 3. MAIN SHAFT ASSEMBLY




(1) Oil seal
(2) Needle bearing
(3) Transmission main shaft
(4) Needle bearing
(5) 3rd drive gear
(6) Inner baulk ring
(7) 3rd synchro cone
(8) Outer baulk ring
(9) 3rd-4th coupling sleeve
(10) 3rd-4th synchronizer hub
(11) 3rd-4th shifting insert key
(12) 4th baulk ring
(13) 4th drive gear
(14) 4th needle bearing race
(15) Needle bearing
(16) 4th gear thrust washer
(17) Ball bearing (Non-TURBO model)
(18) 5th gear thrust washer (Non-TURBO model)
(19) 5th needle bearing race
(20) Needle bearing
(21) Main shaft rear plate
(22) 5th drive gear
(23) 5th baulk ring
(24) 5th-Rev shifting insert key
(25) 5th-Rev synchronizer hub
(26) 5th-Rev coupling sleeve
(27) Rev baulk ring
(28) Rev synchro cone
(29) Ball bearing
(30) Synchro cone stopper
(31) Snap ring
(32) Lock washer
(33) Lock nut
(34) Reverse idler gear shaft
(35) Straight pin
(36) Reverse idler gear
(37) Washer
(38) Taper roller bearing (Turbo model)

***Tightening torque: N·m (kgf-m, ft-lb)***
***T: 120 (12.2, 88.5)***

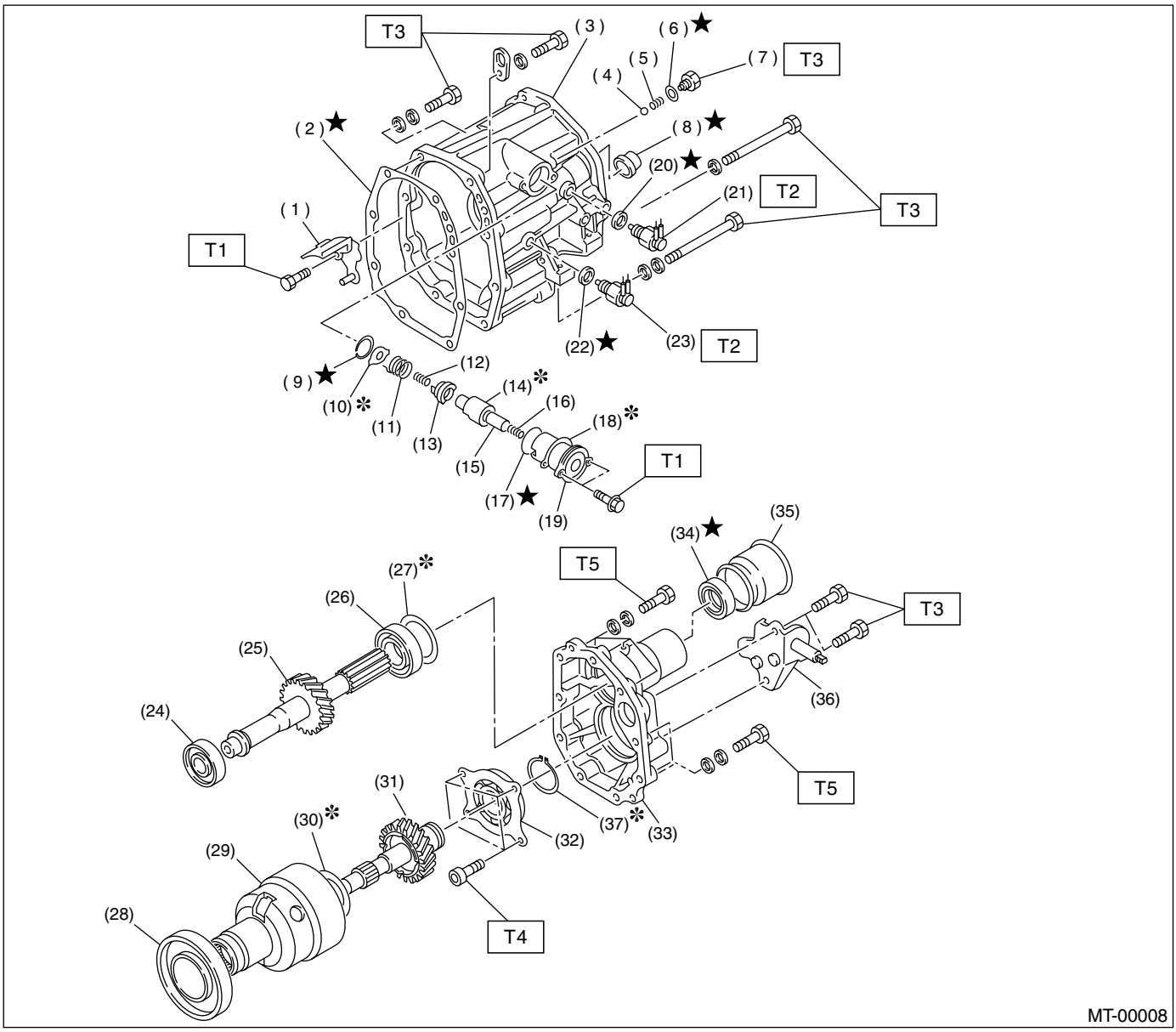
## 4. SHIFTER FORK AND SHIFTER ROD




(1) Shifter arm
(2) 5th shifter fork
(3) Straight pin
(4) Reverse fork rod
(5) Checking ball plug
(6) Gasket
(7) Checking ball spring
(8) Ball
(9) 3rd-4th fork rod
(10) Interlock plunger
(11) 1st-2nd fork rod
(12) 3rd-4th shifter fork
(13) 1st-2nd shifter fork
(14) Ball
(15) Spring
(16) Snap ring (Outer)
(17) Reverse fork rod arm
(18) Reverse shifter lever

***Tightening torque: N·m (kgf-m, ft-lb)***
***T: 20 (2.0, 14.4)***

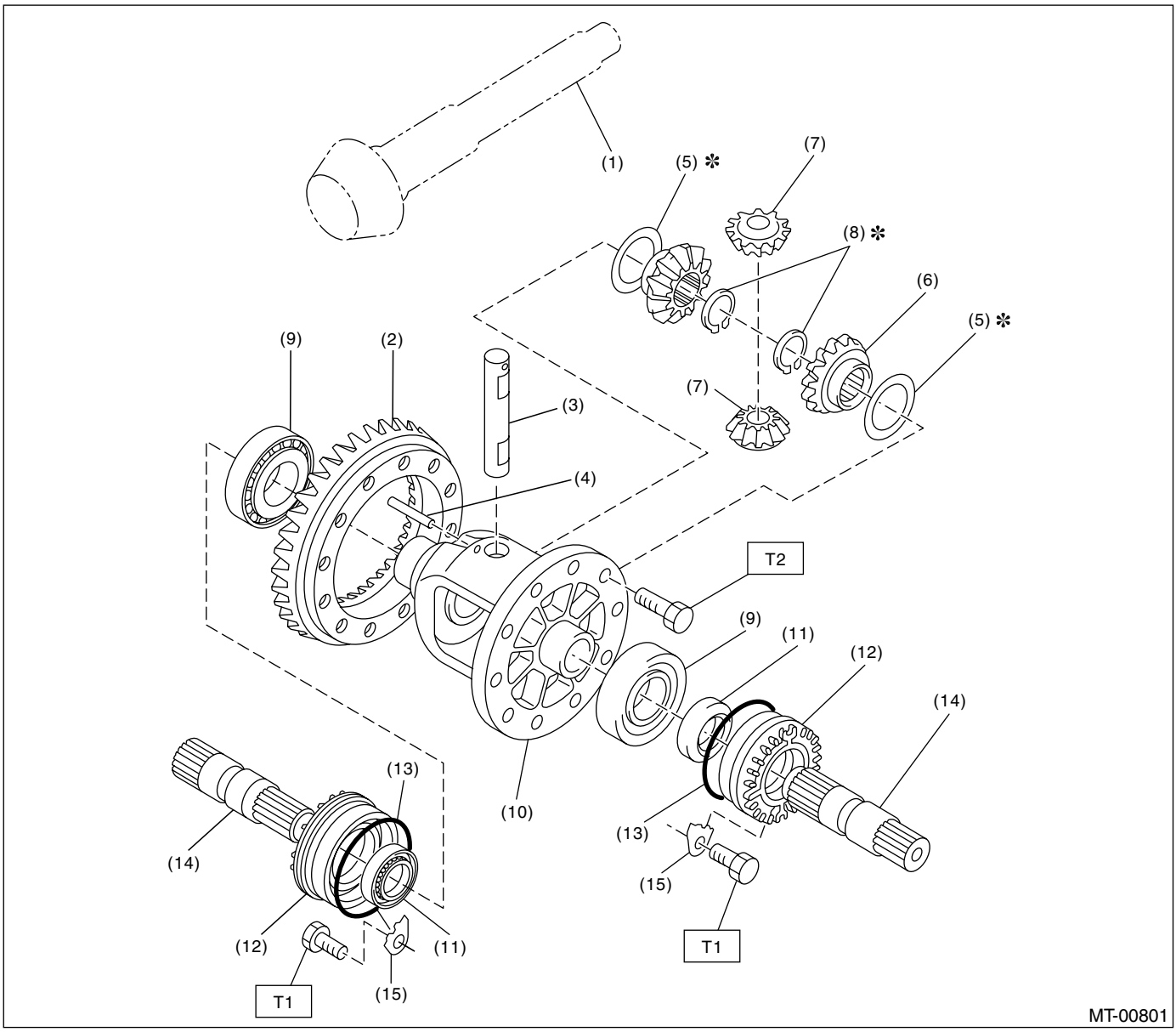
## 5. TRANSFER CASE AND EXTENSION




(1) Oil guide
(2) Gasket
(3) Transfer case
(4) Ball
(5) Reverse accent spring
(6) Gasket
(7) Plug
(8) Oil seal
(9) Snap ring (Inner)
(10) Reverse check plate
(11) Reverse check spring
(12) Reverse return spring
(13) Reverse check cam
(14) Reverse accent shaft
(15) Return spring cap
(16) Return spring
(17) O-ring
(18) Adjusting select shim
(19) Reverse check sleeve
(20) Gasket
(21) Neutral switch
(22) Gasket
(23) Back-up light switch
(24) Roller bearing
(25) Transfer driven gear
(26) Roller bearing
(27) Adjusting washer
(28) Ball bearing
(29) Center differential
(30) Adjusting washer
(31) Transfer drive gear
(32) Ball bearing
(33) Extension case
(34) Oil seal
(35) Dust cover
(36) Shift bracket
(37) Snap ring

***Tightening torque: N·m (kgf-m, ft-lb)***
***T1: 6.4 (0.65, 4.7)***
***T2: 9.75 (1.0, 7.2)***
***T3: 24.5 (2.5, 18.1)***
***T4: 26 (2.7, 20)***
***T5: 40 (4.1, 29.7)***

## 6. FRONT DIFFERENTIAL

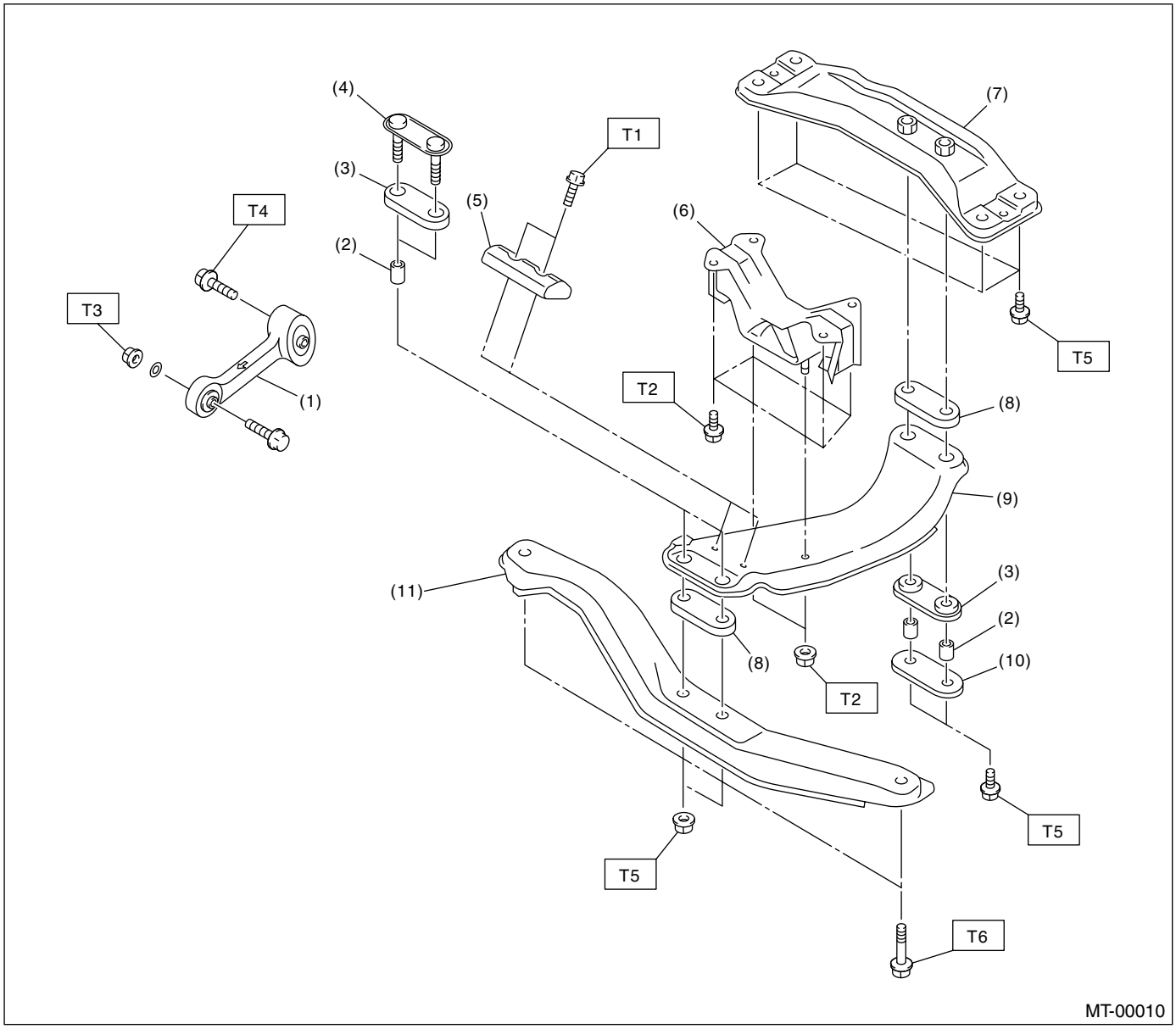



(1) Drive pinion shaft
(2) Hypoid driven gear
(3) Pinion shaft
(4) Straight pin
(5) Washer
(6) Differential bevel gear
(7) Differential bevel pinion
(8) Snap ring (Non-TURBO model)
(9) Roller bearing
(10) Differential case
(11) Oil seal
(12) Differential side retainer
(13) O-ring
(14) Axle drive shaft (Non-TURBO model)
(15) Retainer lock plate

***Tightening torque: N·m (kgf-m, ft-lb)***
***T1: 25 (2.5, 18.1)***
***T2: 62 (6.3, 45.6)***

## 7. TRANSMISSION MOUNTING

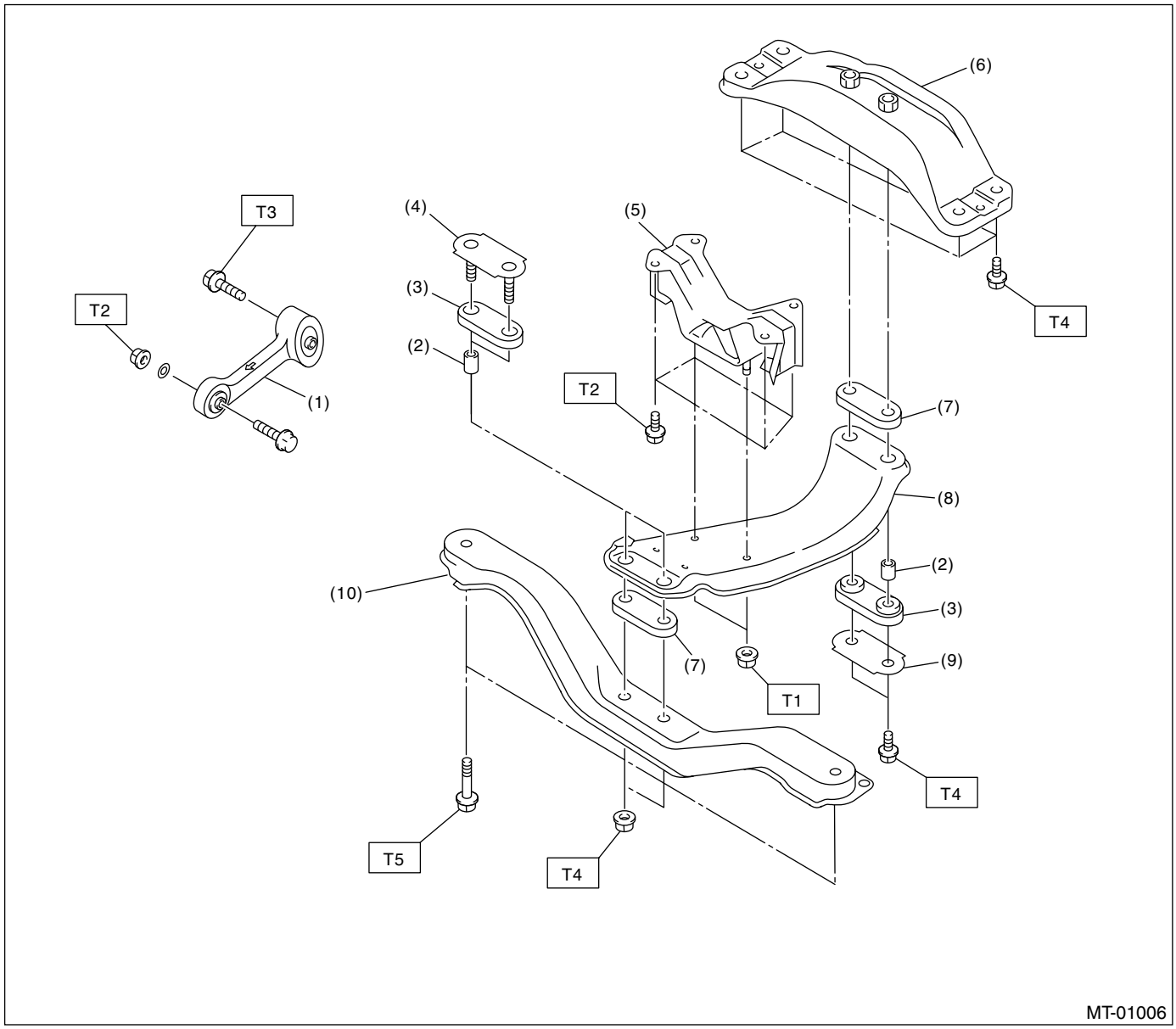
**• Except U5 model**




(1) Pitching stopper
(2) Spacer
(3) Cushion C
(4) Front plate
(5) Dynamic damper (Outback model)
(6) Rear cushion rubber
(7) Rear crossmember
(8) Cushion D
(9) Center crossmember
(10) Rear plate
(11) Front crossmember

| *Tightening torque: N·m (kgf-m, ft-lb)* |
|---|
| *T1: 7.5 (0.76, 5.5)* |
| *T2: 35 (3.6, 26)* |
| *T3: 50 (5.1, 37)* |
| *T4: 58 (5.9, 43)* |
| *T5: 70 (7.1, 51)* |
| *T6: 140 (14.3, 103)* |

**• U5 model**




(1) Pitching stopper
(2) Spacer
(3) Cushion C
(4) Front plate
(5) Rear cushion rubber
(6) Rear crossmember
(7) Cushion D
(8) Center crossmember
(9) Rear plate
(10) Front crossmember

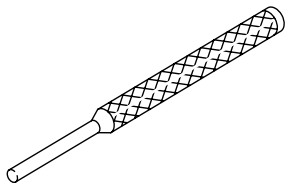
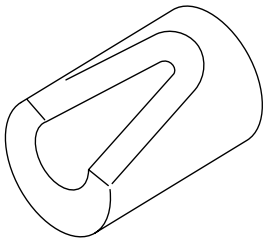
***Tightening torque: N·m (kgf-m, ft-lb)***
***T1: 35 (3.6, 26)***
***T2: 50 (5.1, 37)***
***T3: 58 (5.9, 43)***
***T4: 70 (7.1, 51)***
***T5: 140 (14.3, 103)***

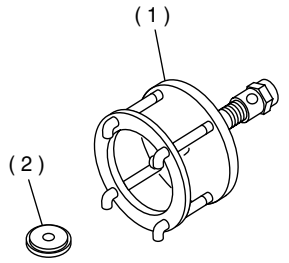
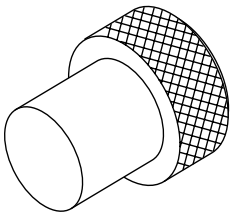
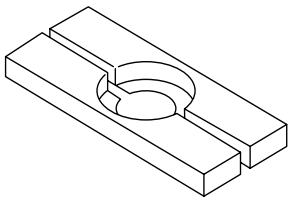
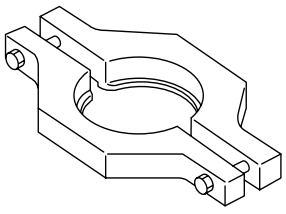
## C: CAUTION

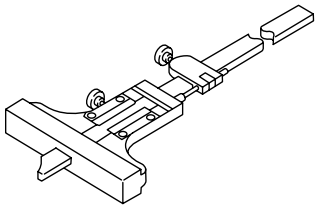
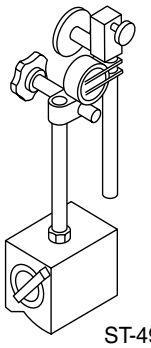
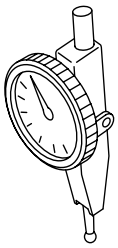
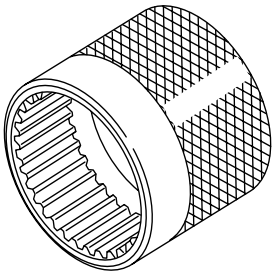
• Wear working clothing, including a cap, protective goggles, and protective shoes during operation.
• Remove contamination including dirt and corrosion before removal, installation, and disassembly.
• Keep the disassembled parts in order and protect them from dust or dirt.
• Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly and replacement.
• When disassembling the case and other light alloy parts, use a plastic hammer to force it apart. Do not pry it apart with a screwdriver or other tool.
• Be careful not to burn your hands, because each part on the vehicle is hot after running.
• Use SUBARU genuine gear oil, grease etc. or the equivalent. Do not mix gear oil, grease etc. with that of another grade or from other manufacturers.
• Be sure to tighten fasteners including bolts and nuts to the specified torque.
• Place shop jacks or safety stands at the specified points.
• Apply gear oil onto sliding or revolution surfaces before installation.
• Replace deformed or otherwise damaged snap rings with new ones.
• Before installing O-rings or oil seals, apply sufficient amount of gear oil to avoid damage and deformation.
• Be careful not to incorrectly install or fail to install O-rings, snap rings and other such parts.
• Before securing a part on a vise, place cushioning material such as wood blocks, aluminum plate, or shop cloth between the part and the vise.
• Avoid damaging the mating surface of the case.
• Before applying sealant, completely remove the old seal.

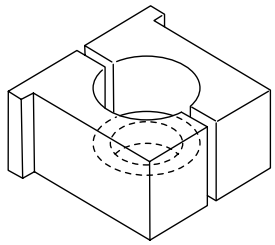
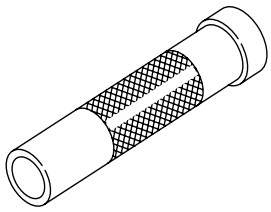
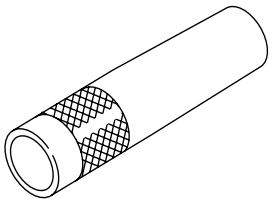
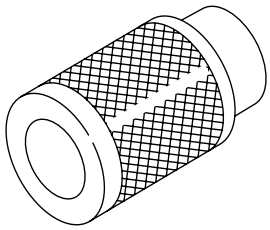
## D: PREPARATION TOOL

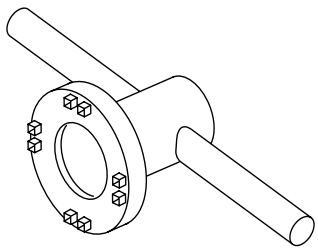
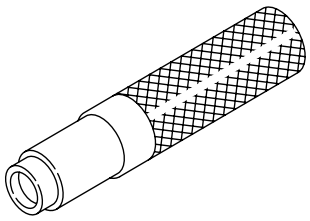
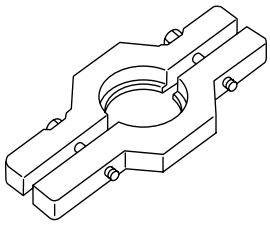
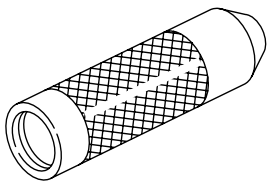
### 1. SPECIAL TOOLS

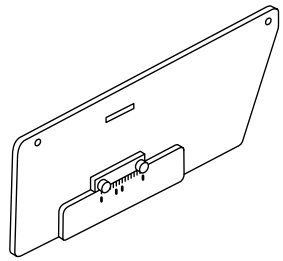
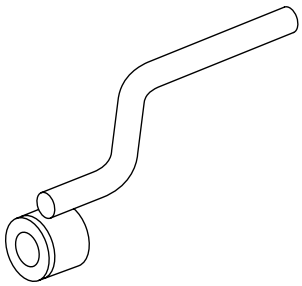
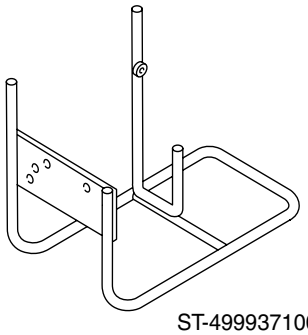
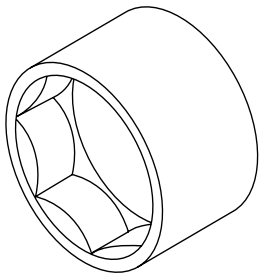
| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|---|---|---|
|  ST-398791700 | 398791700 | REMOVER | Used for removing and installing spring pin (6 mm). |
|  ST-399411700 | 399411700 | ACCENT BALL INSTALLER | Used for installing reverse shifter rail arm. |

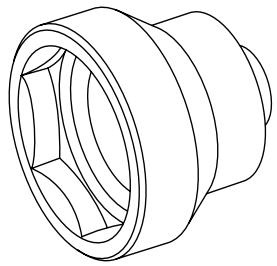
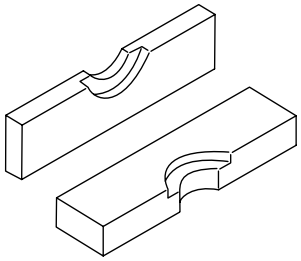
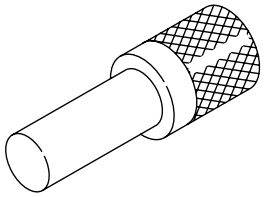
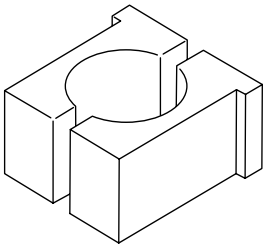
| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|---|---|---|
|  ST-899524100 | 899524100 | PULLER SET | Used for removing and installing roller bearing (Differential).<br>(1) PULLER<br>(2) CAP |
|  ST-399780104 | 399780104 | WEIGHT | Used for measuring preload on roller bearing. |
|  ST-498077000 | 498077000 | REMOVER | Used for removing roller bearing of drive pinion shaft. |
|  ST-498077300 | 498077300 | CENTER DIFFERENTIAL BEARING REMOVER | Used for removing the center differential cover ball bearing. |

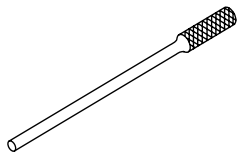
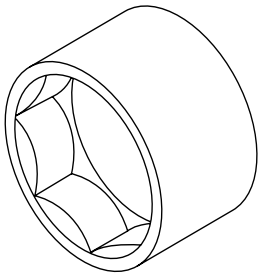
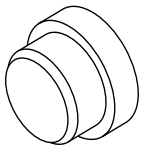
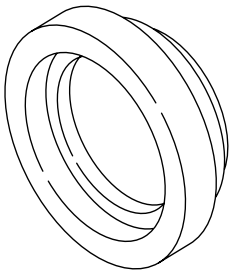
| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|---|---|---|
|  ST-498147000 | 498147000 | DEPTH GAUGE | Used for adjusting main shaft axial end play. |
|  ST-498247001 | 498247001 | MAGNET BASE | • Used for measuring backlash between side gear and pinion, and hypoid gear.<br>• Used with DIAL GAUGE (498247100). |
|  ST-498247100 | 498247100 | DIAL GAUGE | • Used for measuring backlash between side gear and pinion, and hypoid gear.<br>• Used with MAGNET BASE (498247001). |
|  ST-498427100 | 498427100 | STOPPER | Used for securing the drive pinion shaft assembly and driven gear assembly when removing the drive pinion shaft assembly lock nut. |

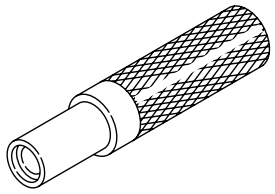
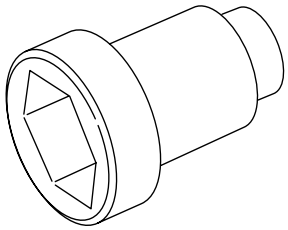
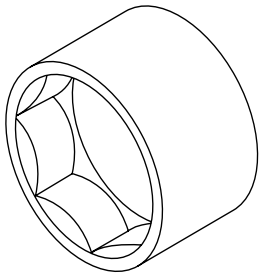
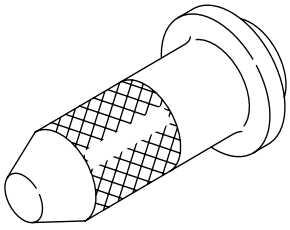
| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|---|---|---|
|  ST-498937000 | 498937000 | TRANSMISSION HOLDER | Used for removing and installing transmission main shaft lock nut. |
|  ST-499277100 | 499277100 | BUSH 1-2 INSTALLER | • Used for installing 1st driven gear thrust plate and 1st-2nd driven gear bush.<br>• Used for installing roller bearing outer races to differential case. |
|  ST-499277200 | 499277200 | INSTALLER | Used for press-fitting the 2nd driven gear, roller bearings and 5th driven gear onto the driven shaft. |
|  ST-499757002 | 499757002 | INSTALLER | • Used for installing snap ring (OUT 25) and ball bearing ($25 \times 26 \times 17$).<br>• Used for installing bearing cone of transfer driven gear (extension core side). |

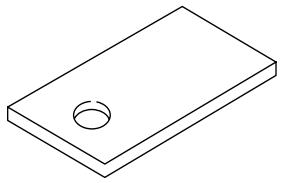
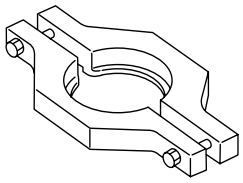
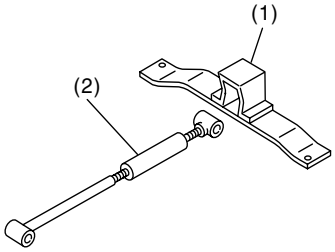
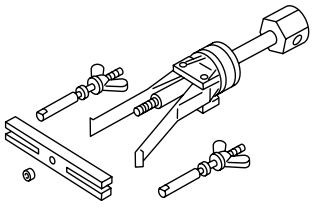
| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|---|---|---|
|  ST-499787000 | 499787000 | WRENCH ASSY | Used for removing and installing differential side retainer. |
|  ST-499827000 | 499827000 | PRESS | Used for installing speedometer oil seal when installing speedometer cable to transmission. |
|  ST-499857000 | 499857000 | 5TH DRIVEN GEAR REMOVER | Used for removing 5th driven gear. |
|  ST-499877000 | 499877000 | RACE 4-5 INSTALLER | • Used for installing 4th needle bearing race and ball bearing onto transmission main shaft.<br>• Used with REMOVER (899714110). |

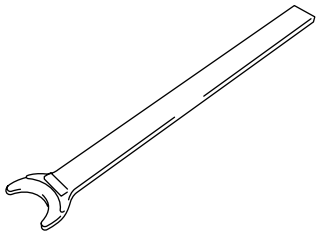
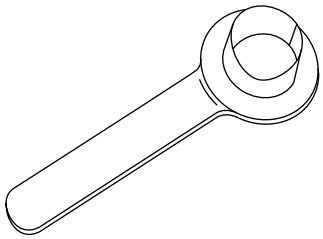
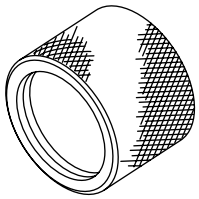
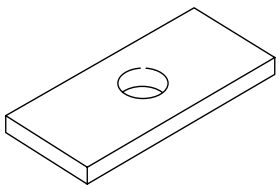
| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|---|---|---|
|  ST-499917500 | 499917500 | DRIVE PINION GAUGE ASSY | Used for adjusting drive pinion shim. |
|  ST-499927100 | 499927100 | HANDLE | Used for fitting transmission main shaft. |
|  ST-499937100 | 499937100 | TRANSMISSION STAND SET | Stand used for transmission disassembly and assembly. |
|  ST-499987003 | 499987003 | SOCKET WRENCH (35) | Used for removing and installing driven pinion lock nut and main shaft lock nut. |

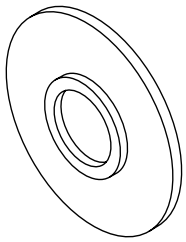
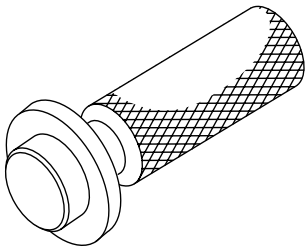
| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|---|---|---|
|  ST-499987300 | 499987300 | SOCKET WRENCH (50) | Used for removing and installing driven gear assembly lock nut. |
|  ST-899714110 | 899714110 | REMOVER | Used for fixing transmission main shaft, drive pinion and rear drive shaft. |
|  ST-899864100 | 899864100 | REMOVER | Used for removing parts on transmission main shaft and drive pinion. |
|  ST-899884100 | 899884100 | HOLDER | Used for tightening lock nut on sleeve. |

| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|---|---|---|
|  ST-899904100 | 899904100 | REMOVER | Used for removing and installing straight pin. |
|  ST-899988608 | 899988608 | SOCKET WRENCH (27) | Used for removing and installing drive pinion lock nut. |
|  ST-398497701 | 398497701 | ADAPTER | • Used for installing roller bearing onto differential case.<br>• Used with INSTALLER (499277100). |
|  ST-499587000 | 499587000 | INSTALLER | Used for installing driven gears to driven shaft. |

| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|---|---|---|
|  ST-899824100 | 899824100 | PRESS | Used for installing speedometer shaft oil seal. |
|  ST-499987100 | 499987100 | SOCKET WRENCH (35) | Used for removing and installing drive pinion lock nut. |
|  ST-899984103 | 899984103 | SOCKET WRENCH (35) | Used for removing and installing drive pinion lock nut. |
|  ST-498057300 | 498057300 | INSTALLER | Used for installing extension oil seal. |

| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|---|---|---|
|  ST-498255400 | 498255400 | PLATE | Used for measuring backlash. |
|  ST-498077400 | 498077400 | SYNCHRONIZER CONE REMOVER | • Used for removing synchronizer cone of main shaft.<br>• Used for removing 5th driven gear of drive pinion shaft. |
|   ST41099AA000 | 41099AA000 | ENGINE SUPPORT BRACKET | Used for supporting engine.<br>(1) Engine support bracket (41099AA010)<br>(2) Engine support (41099AA020) |
|  ST-398527700 | 398527700 | PULLER ASSY | Used for removing extension case roller bearing. |

| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|---|---|---|
|  ST28399SA000 | 28399SA000 | FRONT DRIVE SHAFT REMOVER | • Used for removing front drive shaft (AT and MT vehicle).<br>• TURBO model |
|  ST28399SA010 | 28399SA010 | FRONT DRIVE SHAFT OIL SEAL PROTECTOR | • Used for protecting oil seal from scratches while installing front drive shaft.<br>• TURBO model |
|  ST18675AA000 | 18675AA000 | DIFFERENTIAL SIDE OIL SEAL INSTALLER | • Used for installing differential side retainer oil seal.<br>• TURBO model |
|  ST-398643600 | 398643600 | GAUGE | Used for measuring total end play, extension end play and drive pinion height. |

| ILLUSTRATION | TOOL NUMBER | DESCRIPTION | REMARKS |
|---|---|---|---|
|  ST-398177700 | 38177700 | INSTALLER | • Used for installing bearing cone of transfer driven gear (transfer case side).<br>• Used for installing ball bearing of transfer drive gear. |
|  ST-499797000 | 499797000 | INSTALLER | • Used for installing differential side retainer oil seal.<br>• Non-TURBO model |

## 2. GENERAL PURPOSE TOOLS

| TOOL NAME | REMARKS |
|---|---|
| Circuit Tester | Used for measuring resistance, voltage and ampere. |