

# GENERAL DESCRIPTION

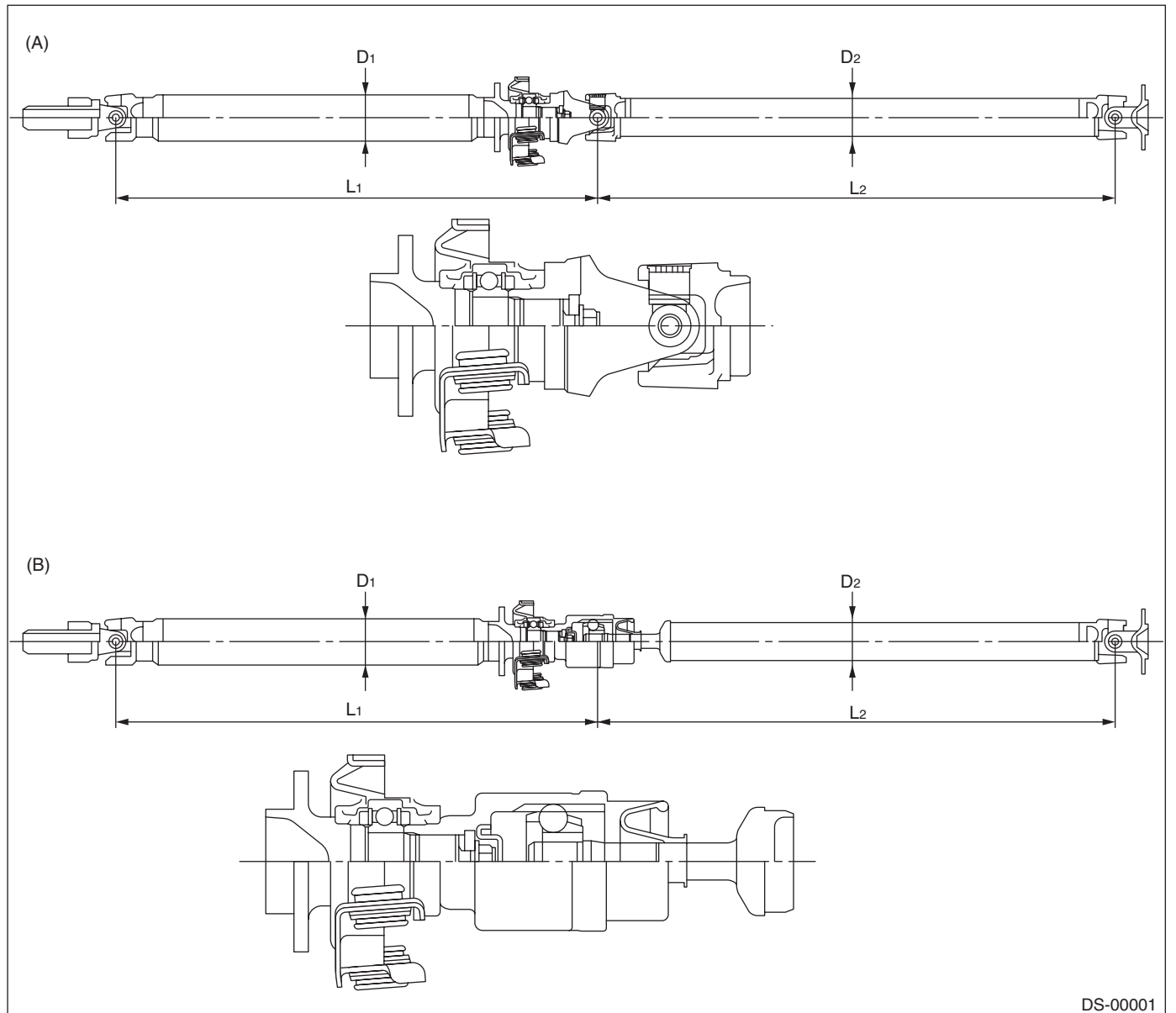
## DRIVE SHAFT SYSTEM

### 1. General Description

#### A: SPECIFICATIONS

##### 1. PROPELLER SHAFT

|  |         |             |              |
|--|---------|-------------|--------------|
| Model  |         | AT          | MT           |
| Propeller shaft type                               |         | DOJ         | 3UJ          |
| Front propeller shaft Joint-to-joint length: $L_1$ | mm (in) | 580 (22.83) | 644 (25.35)  |
| Rear propeller shaft Joint-to-joint length: $L_2$  | mm (in) | 712 (28.03) | 707 (27.83)  |
| Outside diameter of tube:                          | mm (in) | $D_1$       | 63.5 (2.500) |
|  |         | $D_2$       | 57.0 (2.244) |

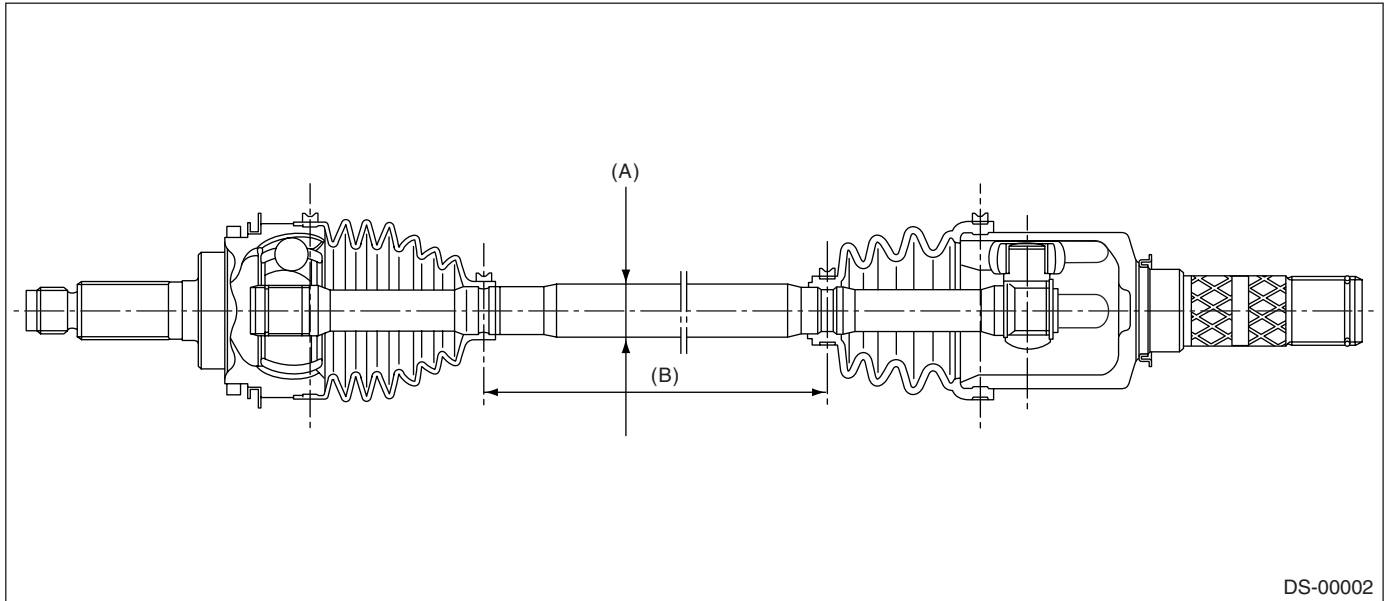


(A) 3UJ type (MT model)

(B) DOJ type (AT model)

## 2. FRONT DRIVE SHAFT ASSEMBLY

| Size            | Model               | Identification color of shaft | L1 mm (in)    | $\phi$ D mm (in) |
|-----------------|---------------------|-------------------------------|---------------|------------------|
| AC2300/AAR2300i | Non-turbo, Turbo AT | —                             | 513 (20.2)    | 24.9 (0.98)      |
| AC2300/AAR2600i | Turbo MT            | Pink                          | 511.4 (20.13) | 24.9 (0.98)      |

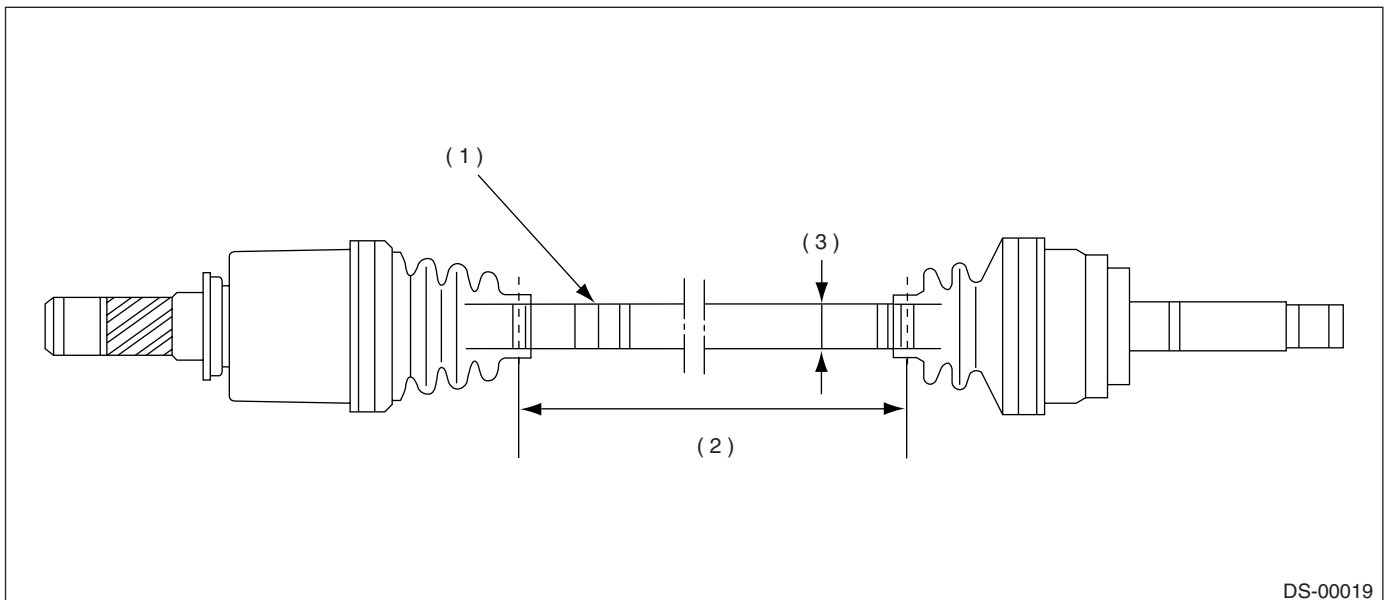


(A)  $\phi$  D mm (in)

(B) L1 mm (in)

## 3. REAR DRIVE SHAFT ASSEMBLY

| Type of drive shaft assembly | Model       | No. of identification protrusion on shaft | L1 mm (in)  | $\phi$ D mm (in) |
|------------------------------|-------------|---|-------------|------------------|
| BJ79/DOJ79 R160RH            | Non-turbo   | 2   | 368 (14.49) | 23 (0.91)        |
| BJ79/DOJ79 R160LH            | Non-turbo   | 1   | 358 (14.09) | 23 (0.91)        |
| EBJ82/DOJ82 R160RH           | Turbo MT&AT | 2   | 363 (14.2)  | 24 (0.9)         |
| EBJ82/DOJ82 R160LH           | Turbo MT&AT | 1   | 353 (13.9)  | 24 (0.9)         |



(1) Identification groove

(2) L1 mm (in)

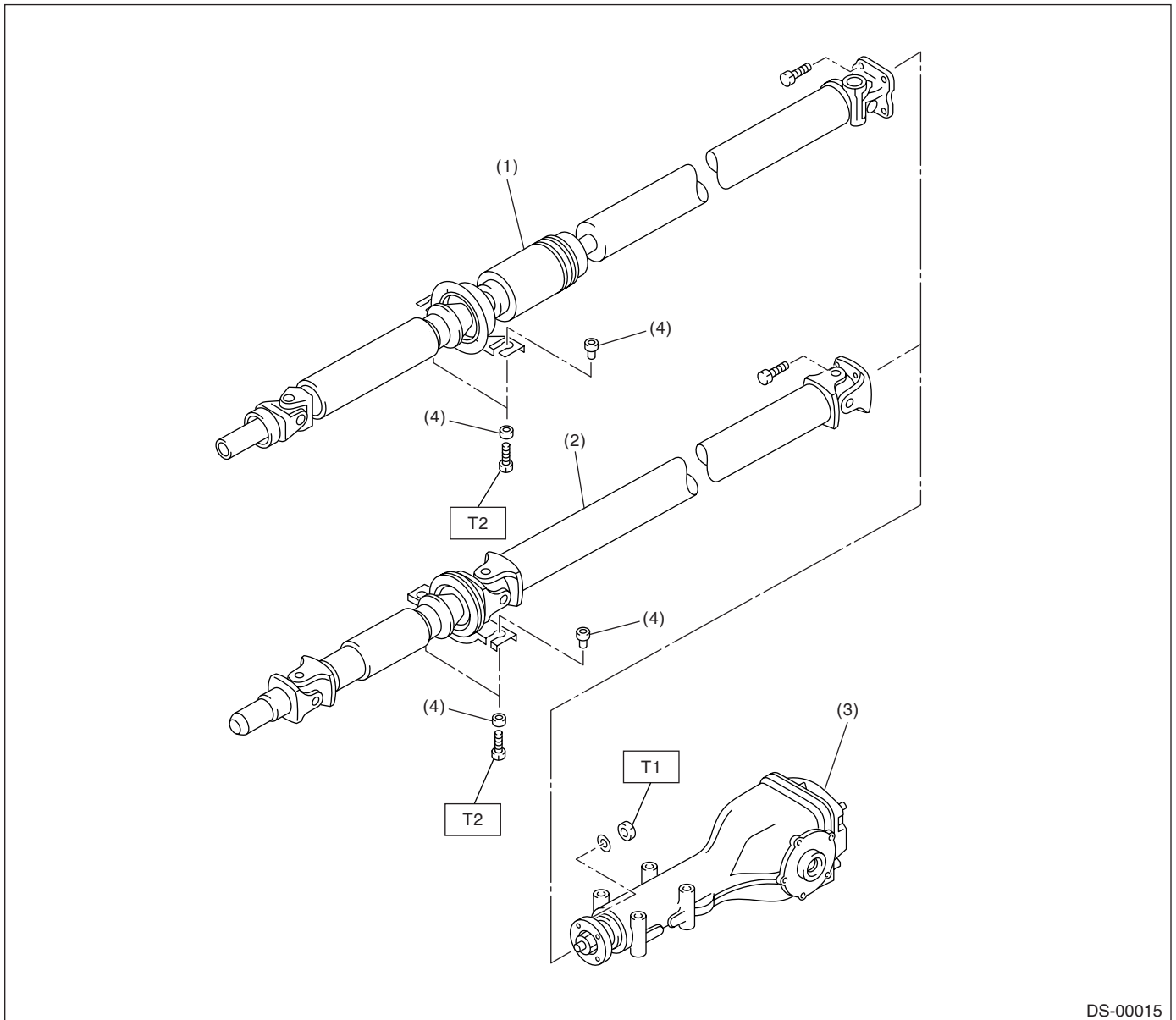
(3)  $\phi$  D mm (in)

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### B: COMPONENT

#### 1. PROPELLER SHAFT



DS-00015

- (1) Propeller shaft (AT model)
- (2) Propeller shaft (MT model)

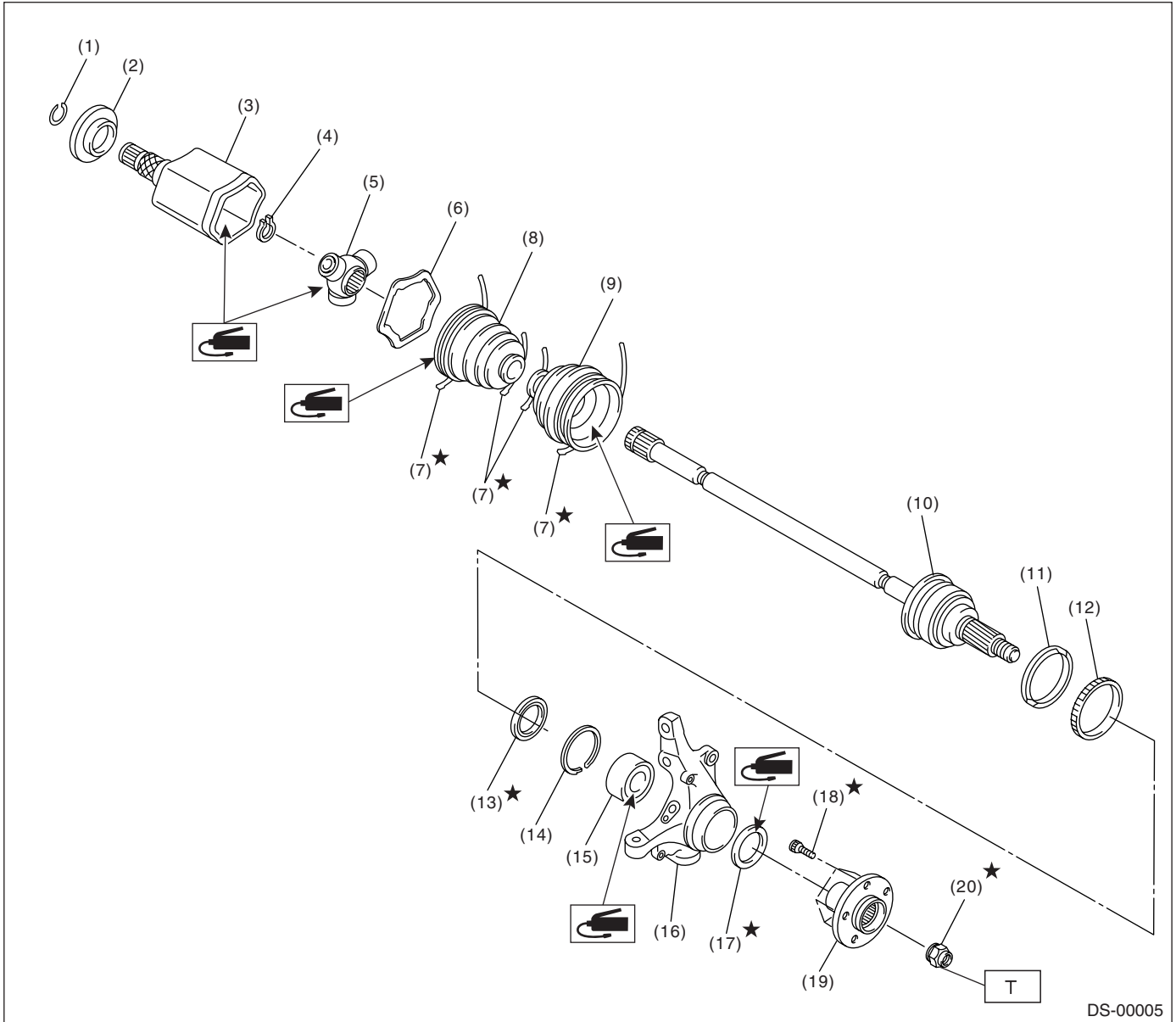
- (3) Rear differential
- (4) Bush

**Tightening torque: N-m (kgf-m, ft-lb)**

**T1: 31 (3.2, 23.1)**

**T2: 52 (5.3, 38.3)**

### 2. FRONT AXLE



DS-00005

- |                        |                    |                     |
|------------------------|--------------------|---------------------|
| (1) Spring pin         | (9) Boot (AC)      | (17) Oil seal (OUT) |
| (2) Baffle plate (SFJ) | (10) AC ASSY       | (18) Hub bolt       |
| (3) Outer race (SFJ)   | (11) Tone wheel    | (19) Hub            |
| (4) Snap ring          | (12) Baffle plate  | (20) Axle nut       |
| (5) Trunnion           | (13) Oil seal (IN) |                     |
| (6) Retainer           | (14) Snap ring     |                     |
| (7) Boot band          | (15) Bearing       |                     |
| (8) Boot (AARi)        | (16) Housing       |                     |

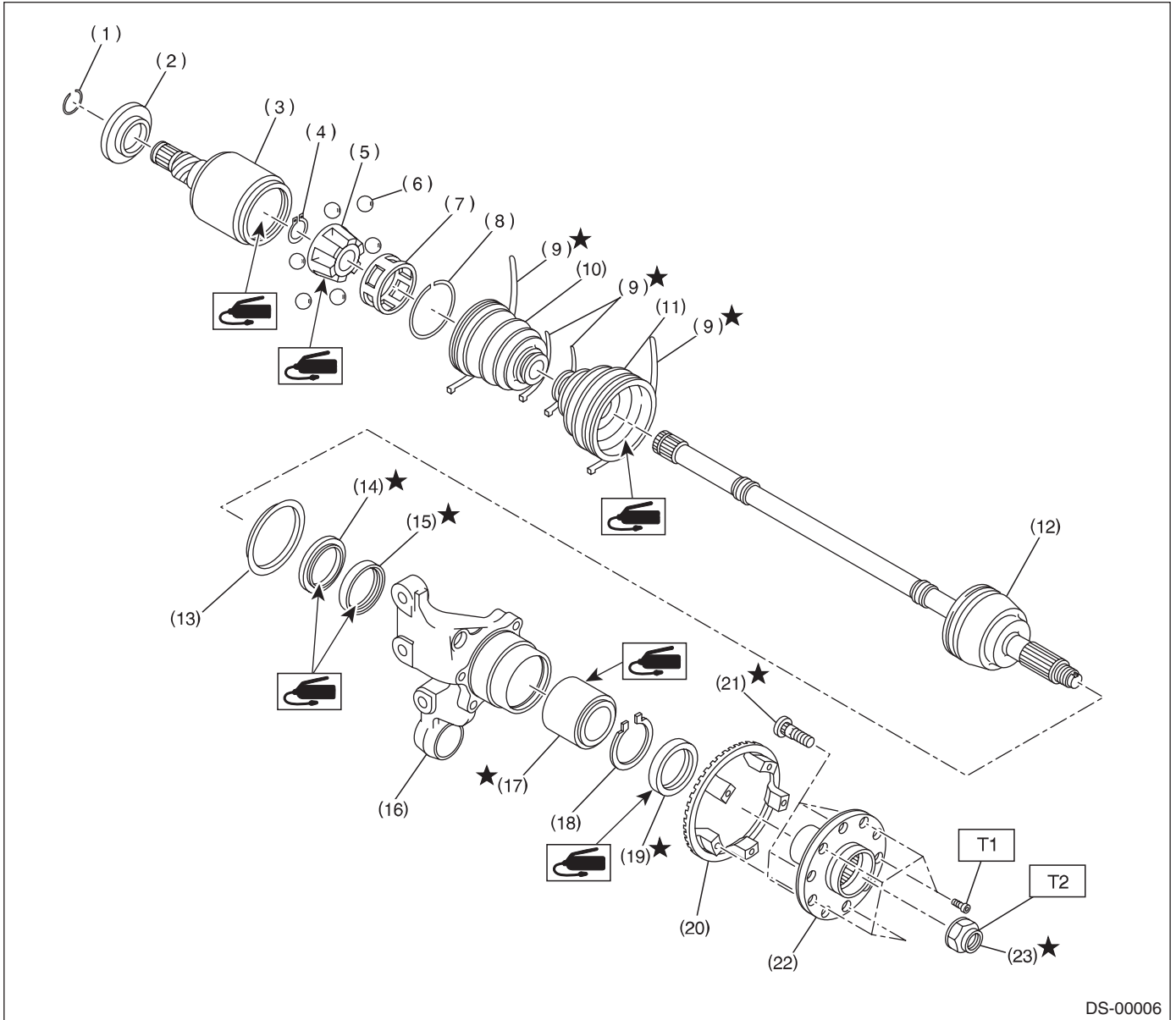
**Tightening torque: N·m (kgf·m, ft·lb)**

**T: 190 (19.4, 140)**

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## DRIVE SHAFT SYSTEM

### 3. REAR AXLE



- (1) Circlip
- (2) Baffle plate (DOJ)
- (3) Outer race (DOJ)
- (4) Snap ring
- (5) Inner race
- (6) Ball
- (7) Cage
- (8) Circlip
- (9) Boot band

- (10) Boot (DOJ)
- (11) Boot
- (12) BJ ASSY
- (13) Baffle plate
- (14) Oil seal (IN. No. 2)
- (15) Oil seal (IN. No. 3)
- (16) Housing
- (17) Bearing
- (18) Snap ring

- (19) Oil seal (OUT)
- (20) Tone wheel
- (21) Hub bolt
- (22) Hub
- (23) Axle nut

**Tightening torque: N·m (kgf·m, ft·lb)**

**T1: 13 (1.3, 9.4)**

**T2: 190 (19.4, 140)**

## **C: CAUTION**

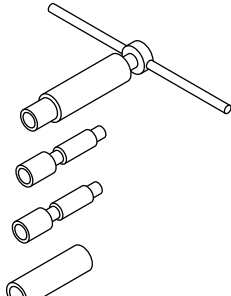
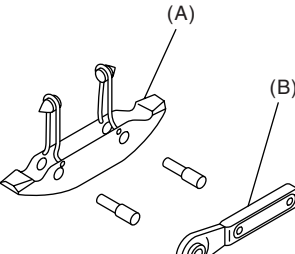
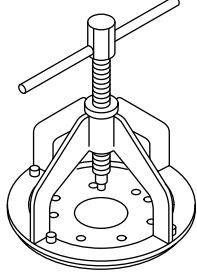
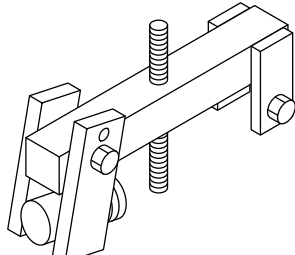
- Wear working clothing, including a cap, protective goggles, and protective shoes during operation.
- Remove contamination including dirt and corrosion before removal, installation or disassembly.
- Keep the disassembled parts in order and protect them from dust or dirt.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly, and replacement.
- Be careful not to burn your hands, because each part on the vehicle is hot after running.
- Use SUBARU genuine grease etc. or the equivalent. Do not mix 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 grease onto sliding or revolution surfaces before installation.
- Before installing snap rings, apply sufficient amount of grease to avoid damage and deformation.
- 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.

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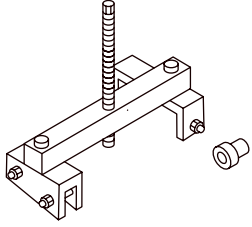
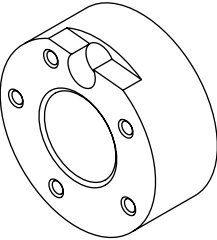
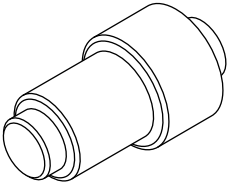
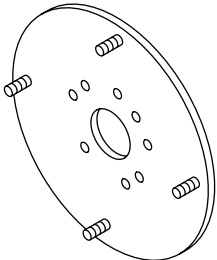
### D: PREPARATION TOOL

#### 1. SPECIAL TOOLS

| ILLUSTRATION  | TOOL NUMBER | DESCRIPTION          | REMARKS  |
|---|-------------|----------------------|--|
|  <p style="text-align: center;">ST-922431000</p>   | 922431000   | AXLE SHAFT INSTALLER | <ul style="list-style-type: none"> <li>• Used for installing axle shaft into housing.</li> <li>• Used with ADAPTER (927390000).</li> </ul> |
|  <p style="text-align: center;">ST-925091000</p>  | 925091000   | BAND TIGHTENING TOOL | <ul style="list-style-type: none"> <li>• Used for tightening boot band.</li> <li>(A) Jig for band</li> <li>(B) Ratchet wrench</li> </ul>   |
|  <p style="text-align: center;">ST-926470000</p> | 926470000   | AXLE SHAFT PULLER    | Used for removing axle shaft.  |
|  <p style="text-align: center;">ST-927060000</p> | 927060000   | HUB REMOVER          | <ul style="list-style-type: none"> <li>• Used for removing front hub.</li> <li>• Used with HUB STAND (927080000).</li> </ul>               |

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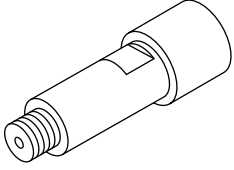
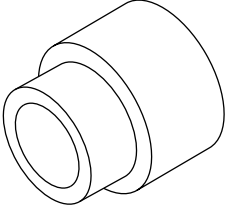
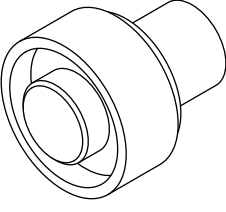
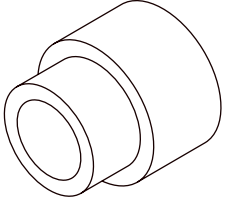
## DRIVE SHAFT SYSTEM

| ILLUSTRATION  | TOOL NUMBER | DESCRIPTION             | REMARKS  |
|---|-------------|-------------------------|--|
|  <p style="text-align: center;">ST-927420000</p>   | 927420000   | HUB REMOVER             | <ul style="list-style-type: none"> <li>• Used for removing rear hub.</li> <li>• Used with HUB STAND (927080000).</li> </ul>                                      |
|  <p style="text-align: center;">ST-927080000</p>   | 927080000   | HUB STAND               | Used for disassembling and assembling hub bolt in hub.   |
|  <p style="text-align: center;">ST-927100000</p> | 927100000   | BEARING PULLER          | <ul style="list-style-type: none"> <li>• Used for disassembling and assembling front housing bearing.</li> <li>• Used with HOUSING STAND (927400000).</li> </ul> |
|  <p style="text-align: center;">ST-927140000</p> | 927140000   | AXLE SHAFT PULLER PLATE | Same as plate 2 included in AXLE SHAFT PULLER (926470000).   |



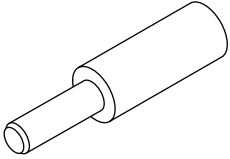
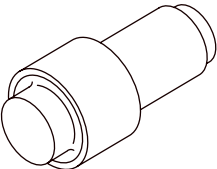
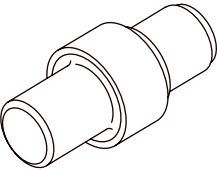
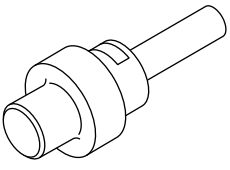
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|---|-------------|--------------------|---|
|  <p style="text-align: center;">ST-927390000</p>   | 927390000   | ADAPTER            | Used as an adapter for AXLE SHAFT INSTALLER (922431000).  |
|  <p style="text-align: center;">ST-927400000</p>   | 927400000   | HOUSING STAND      | <ul style="list-style-type: none"> <li>• Used for disassembling and assembling front housing bearing.</li> <li>• Used with BEARING PULLER (927100000).</li> </ul> |
|  <p style="text-align: center;">ST-927410000</p> | 927410000   | OIL SEAL INSTALLER | <ul style="list-style-type: none"> <li>• Used for installing oil seal into front housing.</li> <li>• Used with HOUSING STAND (927400000).</li> </ul>              |
|  <p style="text-align: center;">ST-927430000</p> | 927430000   | HOUSING STAND      | <ul style="list-style-type: none"> <li>• Used for disassembling and assembling rear housing bearing.</li> <li>• Used with BEARING PULLER (927440000).</li> </ul>  |

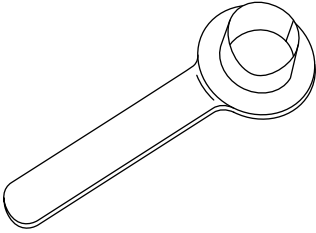
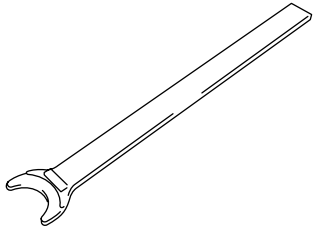
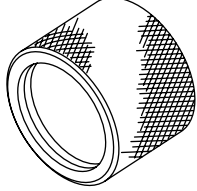
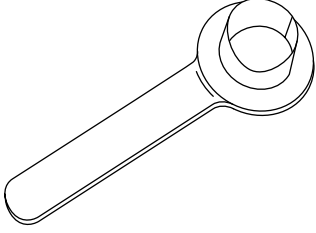
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| ILLUSTRATION  | TOOL NUMBER                                  | DESCRIPTION                   | REMARKS   |
|---|--|-------------------------------|---|
|  <p style="text-align: center;">ST-927120000</p>   | <p style="text-align: center;">927120000</p> | <p>HUB INSTALLER</p>          | <p>Used for installing hub.</p>   |
|  <p style="text-align: center;">ST-927440000</p>   | <p style="text-align: center;">927440000</p> | <p>BEARING<br/>REMOVER</p>    | <ul style="list-style-type: none"> <li>• Used for disassembling and assembling rear wheel bearing.</li> <li>• Used with HOUSING STAND (927430000).</li> </ul> |
|  <p style="text-align: center;">ST-927460000</p> | <p style="text-align: center;">927460000</p> | <p>OIL SEAL<br/>INSTALLER</p> | <ul style="list-style-type: none"> <li>• Used for installing outer oil seal.</li> <li>• Used with HOUSING STAND (927430000).</li> </ul>                       |
|  <p style="text-align: center;">ST-927450000</p> | <p style="text-align: center;">927450000</p> | <p>HUB INSTALLER</p>          | <ul style="list-style-type: none"> <li>• Used for pressing hub bearing into hub.</li> <li>• Used with HUB STAND (927080000).</li> </ul>                       |

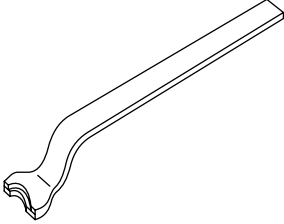
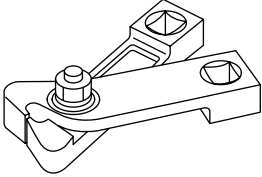
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| ILLUSTRATION  | TOOL NUMBER | DESCRIPTION                          | REMARKS  |
|---|-------------|--------------------------------------|--|
|  <p style="text-align: center;">ST28399SA010</p>   | 28399SA010  | OIL SEAL PROTECTOR                   | <ul style="list-style-type: none"> <li>• Used for installing front drive shaft into front differential.</li> <li>• For protecting oil seal.</li> </ul> |
|  <p style="text-align: center;">ST28399SA000</p>   | 28399SA000  | DRIVE SHAFT REMOVER                  | Used for removing front drive shaft from front differential.   |
|  <p style="text-align: center;">ST18675AA000</p> | 18675AA000  | DIFFERENTIAL SIDE OIL SEAL INSTALLER | Used for installing differential side retainer oil seal.   |
|  <p style="text-align: center;">ST28099PA090</p> | 28099PA090  | OIL SEAL PROTECTOR                   | <ul style="list-style-type: none"> <li>• Used for installing rear drive shaft into rear differential.</li> <li>• For protecting oil seal.</li> </ul>   |

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| ILLUSTRATION  | TOOL NUMBER | DESCRIPTION            | REMARKS  |
|---|-------------|------------------------|--|
|  <p data-bbox="332 541 475 562">ST28099PA100</p> | 28099PA100  | DRIVE SHAFT<br>REMOVER | Used for removing rear drive shaft from rear differential. |
|  <p data-bbox="332 919 475 940">ST28099AC000</p> | 28099AC000  | BOOT BAND PLI-<br>ERS  | Used for tightening front AC boot band.                    |

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DRIVE SHAFT SYSTEM

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## 2. GENERAL PURPOSE TOOLS

| TOOL NAME        | REMERKS  |
|------------------|--|
| Puller           | Used for removing ball joint from knuckle arm. |
| Dial gauge       | Used for inspecting propeller shaft run-out.   |
| Snap ring pliers | Used for installing and removing snap ring.    |