

# GENERAL DESCRIPTION

## FRONT SUSPENSION

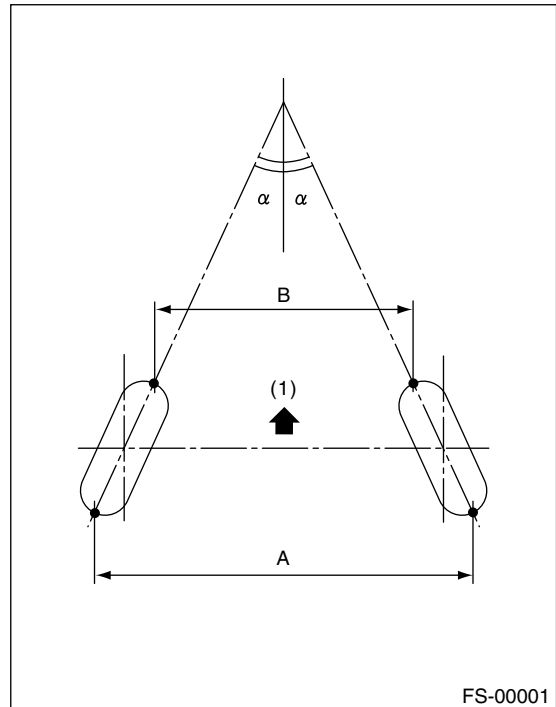
### 1. General Description

#### A: SPECIFICATIONS

	Model	Sedan			Wagon		OUT- BACK
		Non-turbo	Turbo	STi	Non-turbo	Turbo	
Front	Camber (tolerance: $\pm 0^{\circ}45'$ )	$-0^{\circ}15'$	$-0^{\circ}25'$	$-0^{\circ}30'$	$-0^{\circ}10'$	$-0^{\circ}20'$	$-0^{\circ}05'$
	Caster (common difference: $\pm 0^{\circ}45'$ )	$3^{\circ}25'$	$3^{\circ}35'$	$4^{\circ}50'$	$3^{\circ}25'$	$3^{\circ}35'$	$3^{\circ}25'$
	Toe-in	$0 \pm 3$ mm ( $0 \pm 0.12$ in) Each toe angle: $\pm 0^{\circ}07'30''$					
	Kingpin angle (tolerance: $\pm 0^{\circ}45'$ )	$14^{\circ}20'$	$14^{\circ}35'$	$14^{\circ}50'$	$13^{\circ}30'$	$13^{\circ}45'$	$13^{\circ}20'$
	Wheel arch height [tolerance: $\pm 12$ mm ( $\pm 0.47$ in)]	406 mm (15.98 in)	396 mm (15.59 in)	386 mm (15.20 in)	397 mm (15.28 in)	387 mm (15.24 in)	402 mm (15.83 in)
	Diameter of stabilizer	20 mm (0.79 in)	20 mm (0.79 in)	19 mm (0.75 in)	20 mm (0.79 in)	20 mm (0.79 in)	20 mm (0.79 in)
Rear	Camber (tolerance: $\pm 0^{\circ}45'$ )	$-1^{\circ}25'$	$-1^{\circ}30'$	$-0^{\circ}40'$	$-1^{\circ}15'$	$-1^{\circ}20'$	$-1^{\circ}10'$
	Toe-in	$0 \pm 3$ mm ( $0 \pm 0.12$ in) Each toe angle: $\pm 0^{\circ}09'$					
	Thrust angle	$0^{\circ} \pm 30'$					
	Wheel arch height [tolerance: $\pm 12$ mm ( $\pm 0.47$ in)]	381 mm (15.0 in)	376 mm (14.80 in)	366 mm (14.41 in)	381 mm (15.0 in)	376 mm (14.80 in)	386 mm (15.20 in)
	Diameter of stabilizer	13 mm (0.51 in)	17 mm (0.67 in)	20 mm (0.79 in)	13 mm (0.51 in)	17 mm (0.67 in)	13 mm (0.51 in)

#### NOTE:

- Front and rear toe-ins and front camber can be adjusted. If toe-in or camber tolerance exceeds specifications, adjust toe-in and camber to the middle value of specification.
- The other items indicated in the specification table cannot be adjusted. If the other items exceeds specifications, check suspension parts and connections for deformities; replace with new ones as required.



(1) Front

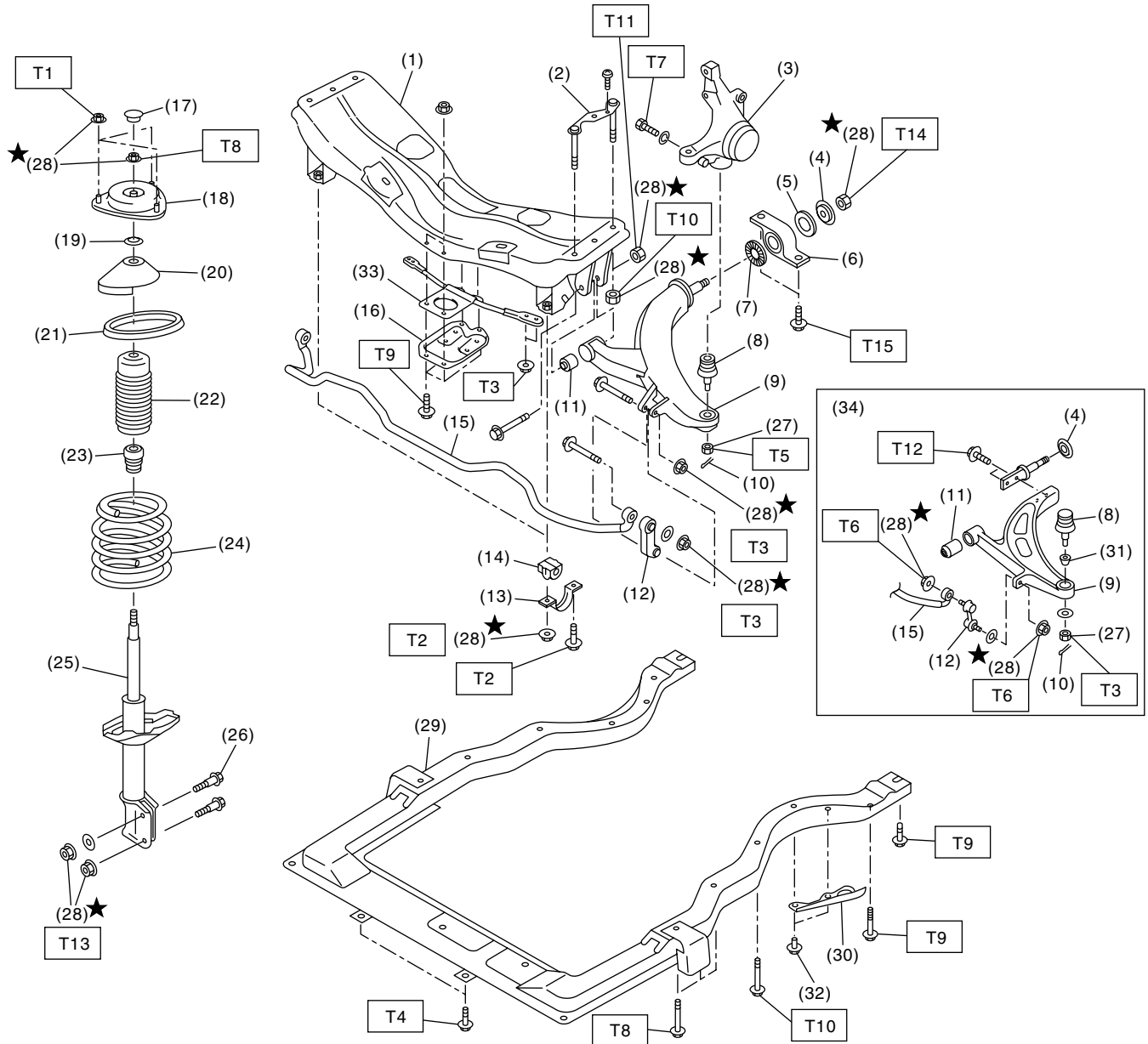
A – B = Positive: Toe-in, Negative: Toe-out

$\alpha$  = Each toe angle

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### B: COMPONENT



FS-00093

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(1) Front crossmember	(18) Strut mount	<b>Tightening torque: N-m (kgf-m, ft-lb)</b>
(2) Bolt ASSY	(19) Spacer	<b>T1: 20 (2.0, 14.5)</b>
(3) Housing	(20) Upper spring seat	<b>T2: 25 (2.5, 18.1)</b>
(4) Washer	(21) Rubber seat	<b>T3: 30 (3.1, 22)</b>
(5) Stopper rubber (Rear)	(22) Dust cover	<b>T4: 34 (3.5, 25)</b>
(6) Rear bushing	(23) Helper	<b>T5: 40 (4.1, 30)</b>
(7) Stopper rubber (Front)	(24) Coil spring	<b>T6: 45 (4.6, 33)</b>
(8) Ball joint	(25) Damper strut	<b>T7: 50 (5.1, 37)</b>
(9) Transverse link	(26) Adjusting bolt	<b>T8: 55 (5.6, 41)</b>
(10) Cotter pin	(27) Castle nut	<b>T9: 70 (7.1, 52)</b>
(11) Front bushing	(28) Self-locking nut	<b>T10: 105 (10.7, 77)</b>
(12) Stabilizer link	(29) Sub frame	<b>T11: 125 (12.7, 92)</b>
(13) Clamp	(30) Cover	<b>T12: 155 (15.8, 114)</b>
(14) Bushing	(31) Boss	<b>T13: 175 (17.8, 129)</b>
(15) Stabilizer	(32) Clip	<b>T14: 190 (19.4, 140)</b>
(16) Jack-up plate	(33) Front support arm	<b>T15: 250 (25.5, 184)</b>
(17) Dust seal	(34) STi model	

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### C: CAUTION

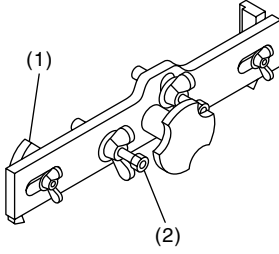
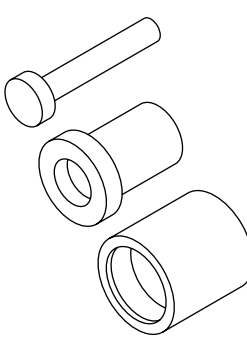
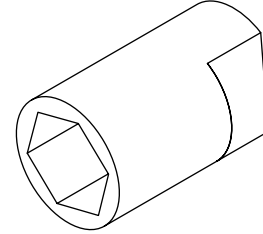
- Wear working clothing, including a cap, protective goggles, and protective shoes during operation.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly, and replacement.
- Use SUBARU genuine grease etc. or the equivalent. Do not mix grease etc. with that of another grade or from other manufacturers.
- 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.
- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Place shop jacks or safety stands at the specified points.

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## D: PREPARATION TOOL

### 1. SPECIAL TOOLS

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p style="text-align: center;">ST-927380002</p>	927380002	ADAPTER	Used as an adapter for camber & caster gauge when measuring camber and caster. (1) 28199AC000 PLATE (2) 28199AC010 BOLT
 <p style="text-align: center;">ST-927680000</p>	927680000	INSTALLER & REMOVER SET	Used for replacing transverse link bushing.
 <p style="text-align: center;">ST-927760000</p>	927760000	STRUT MOUNT SOCKET	Used for disassembling and assembling strut and shock mount.

### 2. GENERAL PURPOSE TOOLS

TOOL NAME	REMARKS
Alignment gauge	Used for wheel alignment measurement.
Turning radius gauge	Used for wheel alignment measurement.
Toe-in gauge	Used for toe-in measurement.
Dial gauge	Used for damper strut measurement.
Coil spring compressor	Used for strut disassembly/assembly.