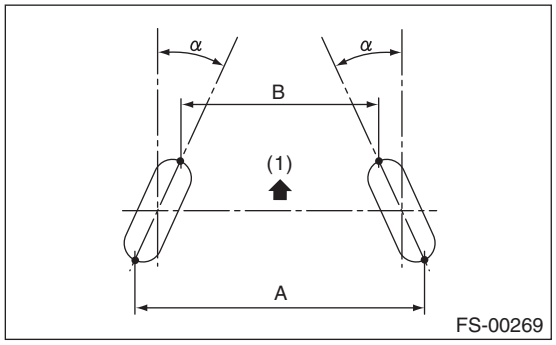
1. General Description

A: SPECIFICATION

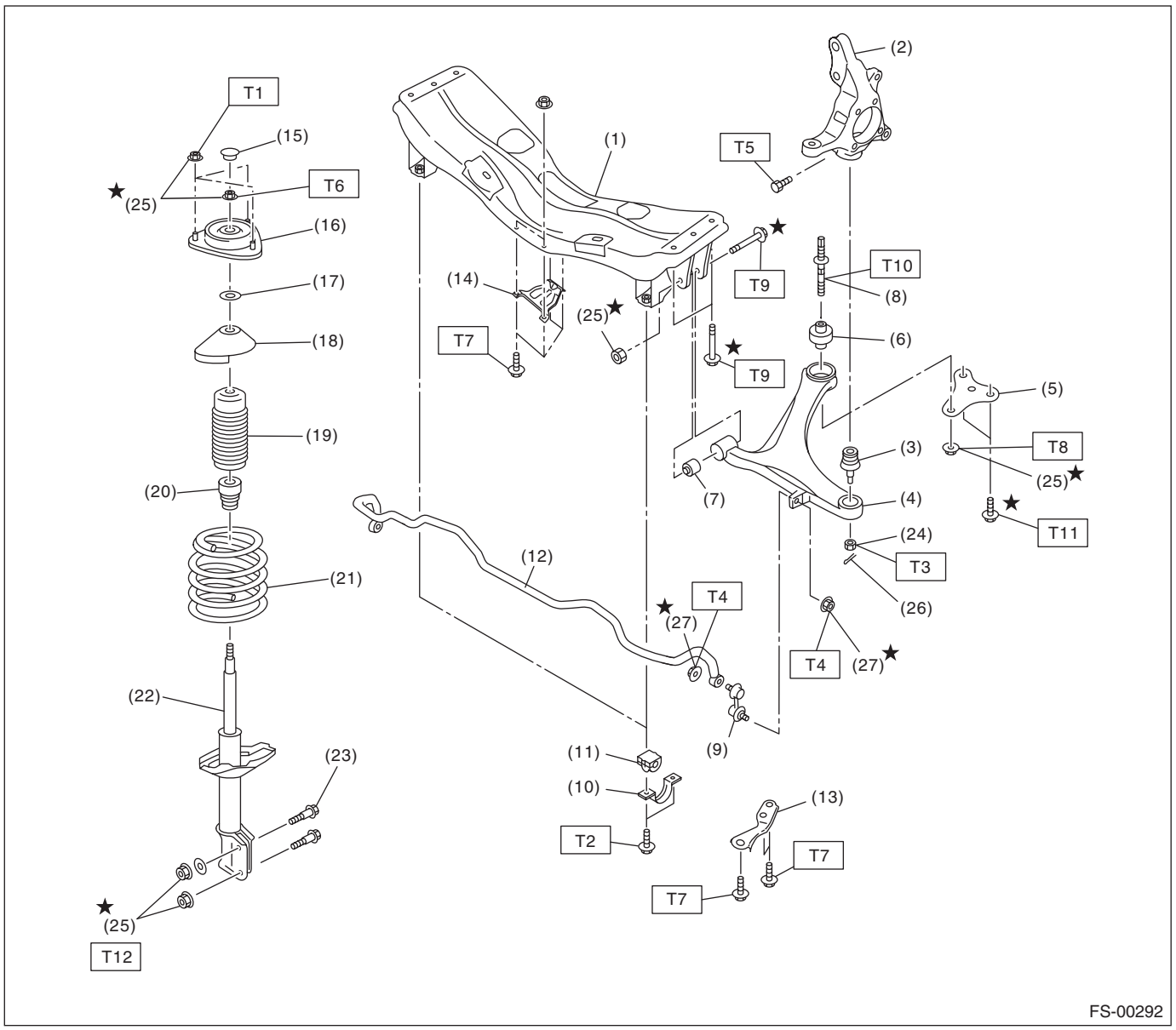
Front	Wheel arch height (Tolerance: $^{+12\ mm}_{-24\ mm}$ ($^{+0.47\ in}_{-0.94\ in}$)) mm (in)		452 (17.8)
	Camber (tolerance: ±0°45′ Differences between RH and LH: 45′ or less)		0°10′
	Caster (referential value)		4°00′
	Steering angle (tolerance: ±1.5°)	Inner wheel	37.0°
		Outer wheel	32.0°
	Toe-in mm (in)		0±3 (0±0.12) Toe angle (sum of both wheels): 0°±0°14′
	Kingpin angle (referential value)		12°00′
Rear	Wheel arch height (Tolerance: $^{+12\ mm}_{-24\ mm}$ ($^{+0.47\ in}_{-0.94\ in}$)) mm (in)		449 (17.7)
	Camber (tolerance: ±0°45′ Differences between RH and LH: 45′ or less)		–0°15′
	Toe-in mm (in)		2±2 (0.08±0.08) Toe angle (sum of both wheels): 0°10′±0°10′
	Thrust angle (tolerance: ±0°30′)		0°

NOTE:
• Front and rear toe-in and front camber can be adjusted. Adjust if the toe-in or camber tolerance exceeds specifications.
• Other items indicated in the specifications table cannot be adjusted. If other items exceed specifications, check the suspension parts and connections for deformation, and replace with new parts as required.



(1) Front
A – B = Positive: Toe-in, Negative: Toe-out
α = Individual toe angles

B: COMPONENT



(1)	Front crossmember	(15)	Dust seal	***Tightening torque: N·m (kgf-m, ft-lb)***
(2)	Housing	(16)	Strut mount	***T1: 20 (2.0, 14.5)***
(3)	Ball joint	(17)	Spacer	***T2: 25 (2.5, 18.1)***
(4)	Front arm	(18)	Upper spring seat	***T3: 45 (4.6, 33.2)***
(5)	Arm support plate	(19)	Dust cover	***T4: 60 (6.1, 44.3)***
(6)	Rear bushing	(20)	Front helper	***T5: 50 (5.1, 36.9)***
(7)	Front bushing	(21)	Front coil spring	***T6: 55 (5.6, 40.6)***
(8)	Stud bolt	(22)	Front strut	***T7: 60 (6.1, 44.3)***
(9)	Stabilizer link	(23)	Adjusting bolt	***T8: 88 (9.0, 64.9)***
(10)	Stabilizer clamp	(24)	Castle nut	***T9: 95 (9.7, 70.1)***
(11)	Stabilizer bushing	(25)	Self-locking nut	***T10: 110 (11.2, 81.1)***
(12)	Front stabilizer	(26)	Cotter pin	***T11: 150 (15.3, 110.6)***
(13)	Crossmember support plate	(27)	Flange nut	***T12: 155 (15.8, 114.3)***
(14)	Jack-up plate			

C: CAUTION

Please clearly understand and adhere to the following general precautions. They must be strictly followed to avoid any injury to the person doing the work or people in the area.

1. OPERATION

• Wear appropriate work clothing, including a cap, protective goggles and protective shoes when performing any work.
• Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly and replacement.
• Use SUBARU genuine grease etc. or equivalent. Do not mix grease etc. of different grades or manufacturers.
• Before securing a part on a vise, place cushioning material such as wood blocks, aluminum plate, or cloth between the part and the vise.
• Be sure to tighten fasteners including bolts and nuts to the specified torque.
• Place shop jacks or rigid racks at the specified points.

2. OIL

When handling oil, follow the rules below to prevent unexpected accidents.
• Prepare container and waste cloths when performing work which oil could possibly spill. If oil spills, wipe it off immediately to prevent from penetrating into floor or flowing outside, for environmental protection.
• Follow all government and local regulations concerning waste disposal.

D: PREPARATION TOOL

1. SPECIAL TOOL

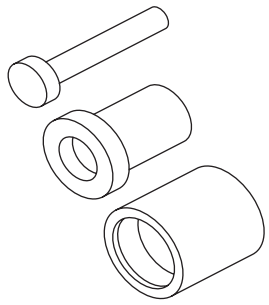
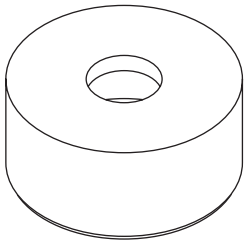
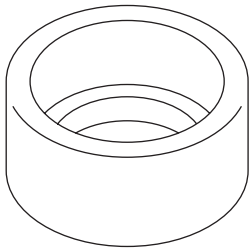
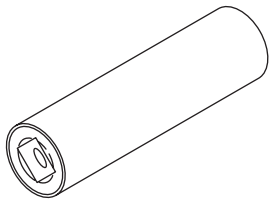
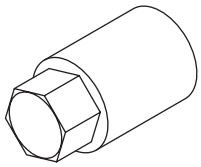
ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST-927680000	927680000	INSTALLER & REMOVER SET	Used for replacing front arm front bushing.
 ST20299AG000	20299AG000	REMOVER	Used for replacing front arm rear bushing. Used together with BASE (20299AG010).

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST20299AG010	20299AG010	BASE	Used for replacing front arm rear bushing. Used together with REMOVER (20299AG000).
 ST20299AG020	20299AG020	STUD BOLT SOCKET	Used for removing and installing the stud bolt for front arm installing portion.
 ST20399AG000	20399AG000	STRUT MOUNT SOCKET	Used for disassembling and assembling strut mount.

2. GENERAL TOOL

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

2. Wheel Alignment

A: INSPECTION

Check the following items before performing the wheel alignment measurement.
Check items before measuring wheel alignment:

- Tire inflation pressure
- Uneven wear of RH and LH tires, or difference of sizes
- Tire runout
- Excessive play and wear of ball joint
- Excessive play and wear of tie-rod end
- Excessive play of wheel bearing
- Right and left wheel base imbalance
- Deformation and excessive play of steering link
- Deformation and excessive play of suspension parts

Check, adjust and measure the wheel alignment in accordance with the procedures indicated in the figure.

Wheel arch height (front and rear wheels) <Ref. to FS-7, WHEEL ARCH HEIGHT, INSPECTION, Wheel Alignment.>
↓
Camber (front and rear wheels) <Ref. to FS-8, CAMBER, INSPECTION, Wheel Alignment.>
↓
Caster (front wheel) <Ref. to FS-9, CASTER, INSPECTION, Wheel Alignment.>
↓
Steering angle <Ref. to FS-10, STEERING ANGLE, INSPECTION, Wheel Alignment.>
↓
Front wheel toe-in <Ref. to FS-10, FRONT WHEEL TOE-IN, INSPECTION, Wheel Alignment.>
↓
Rear wheel toe-in <Ref. to FS-10, REAR WHEEL TOE-IN, INSPECTION, Wheel Alignment.>
↓
Thrust angle <Ref. to FS-12, THRUST ANGLE, INSPECTION, Wheel Alignment.>