

General Description

FRONT SUSPENSION

1. General Description

A: SPECIFICATION

Tire size		P205/60R16 P215/50R17	P225/50R17 225/45R18	P225/60R17 P215/70R16
Front	Wheel arch height (Tolerance: $+12\text{ mm}$ -24 mm ($+0.47\text{ in}$ -0.94 in)) mm (in)	403 (15.9)	395 (15.6)	469 (18.5)
	Camber (Tolerance: $\pm 0^\circ 45'$ Differences between RH and LH: 45' or less)	$-0^\circ 30'$	$-0^\circ 15'$	$0^\circ 00'$
	Caster (Referential Value)	$5^\circ 55'$	$6^\circ 00'$	$5^\circ 05'$
	Steering angle (Tolerance: $\pm 1.5^\circ$)	Inner wheel	37.6°	37.4°
		Outer wheel	33.3°	33.0°
	Toe-in mm (in)	0 ± 3 (0 ± 0.12) Toe angle (sum of both wheels): $0^\circ \pm 0^\circ 15'$		
REAR	Kingpin angle (Referential Value)	$14^\circ 00'$	$14^\circ 15'$	$12^\circ 20'$
	Wheel arch height (Tolerance: $+12\text{ mm}$ -24 mm ($+0.47\text{ in}$ -0.94 in)) mm (in)	392 (15.4)	387 (15.2)	474 (18.7)
	Camber (Tolerance: $\pm 0^\circ 45'$ Differences between RH and LH: 45' or less)	$-1^\circ 00'$	$-1^\circ 10'$	$0^\circ 00'$
	Toe-in mm (in)	^{*2}		
	Thrust angle (Tolerance: $\pm 0^\circ 30'$)	0°		

^{*1}: OUTBACK model

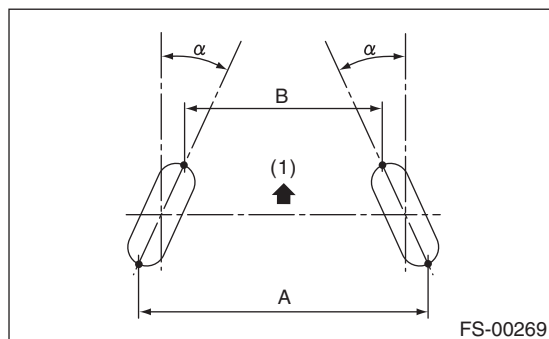
$2 \pm 3\text{ mm}$ ($0.08 - 0.12\text{ in}$) Toe angle (sum of both wheels): $0^\circ 10' \pm 0^\circ 15'$

^{*2}: Except for OUTBACK model

$0 \pm 3\text{ mm}$ ($0 \pm 0.12\text{ in}$) Toe angle (sum of both wheels): $0^\circ \pm 0^\circ 15'$

NOTE:

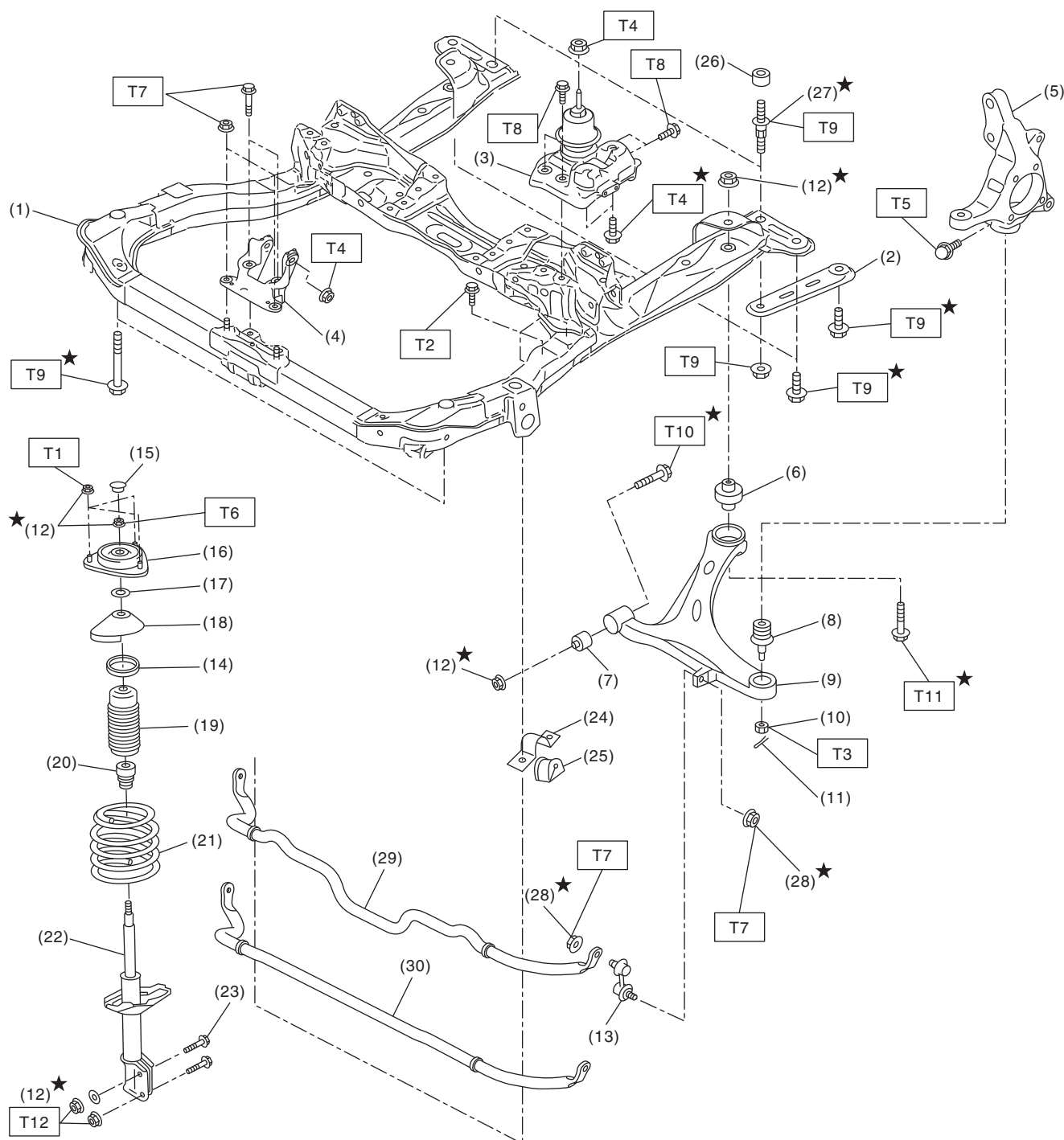
- Front and rear toe-in and front camber can be adjusted. Adjust if the toe-in or camber tolerance exceeds specifications.
- For other items indicated in the specifications table, there is no adjustment mechanism. If other items exceed specifications, check the suspension parts and connections for deformation, and replace the parts if defective.



(1) Front

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

α = Individual toe angles



FS-00374

General Description

FRONT SUSPENSION

(1) Cradle	(16) Strut mount
(2) Stiffener	(17) SPACER
(3) Main mounting bracket	(18) Upper spring seat
(4) Front mounting bracket	(19) Dust cover
(5) Front housing	(20) Helper
(6) Rear bushing	(21) Coil spring
(7) Front bushing	(22) STRUT
(8) Ball joint	(23) Adjusting bolt
(9) Front arm	(24) Stabilizer bracket
(10) Castle nut	(25) Stabilizer bushing
(11) Cotter pin	(26) STOPPER
(12) Self-locking nut	(27) Stud bolt
(13) Stabilizer link	(28) Flange nut
(14) Rubber seat (OUTBACK model only)	(29) Stabilizer (H4 model)
(15) Dust seal	(30) Stabilizer (H6 model)

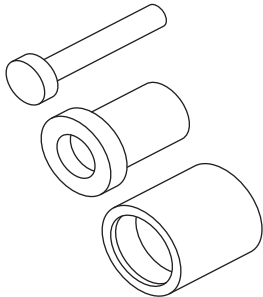
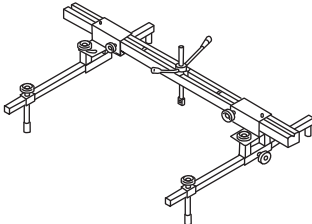
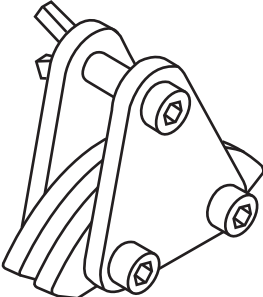
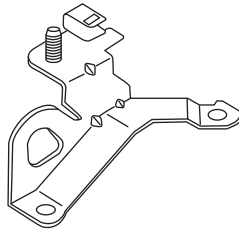
Tightening torque:N·m (kgf-m, ft-lb)

T1:	20 (2.0, 14.8)
T2:	25 (2.5, 18.4)
T3:	39 (4.0, 28.8)
T4:	45 (4.6, 33.2)
T5:	50 (5.1, 36.9)
T6:	55 (5.6, 40.6)
T7:	60 (6.1, 44.3)
T8:	65 (6.6, 47.9)
T9:	75 (7.6, 55.3)
T10:	95 (9.7, 70.1)
T11:	140 (14.3, 103.3)
T12:	155 (15.8, 114.3)

C: CAUTION

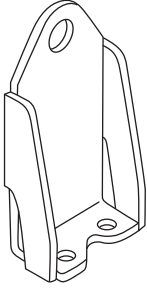
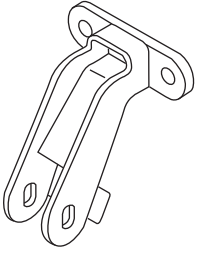
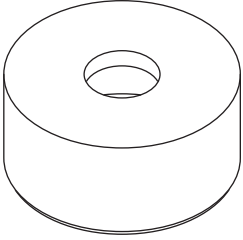
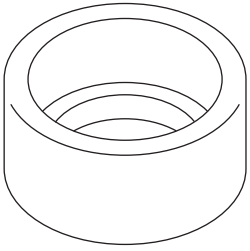
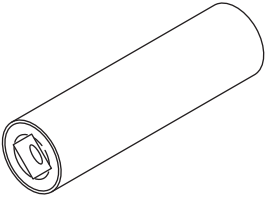
- Wear appropriate work clothing, including a cap, protective goggles and protective shoes when performing any work.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly and replacement.
- Use SUBARU genuine grease etc. or 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.

D: PREPARATION TOOL**1. SPECIAL TOOL**

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST-927680000</p>	927680000	INSTALLER & REMOVER SET	Used for replacing front arm front bushing.
 <p>ST99099AJ000</p>	99099AJ000 (Newly adopted tool)	ENGINE HANGER	<ul style="list-style-type: none"> • Used for hanging power unit. • Used together with CHAIN BALANCER (99099AJ010).
 <p>ST99099AJ010</p>	99099AJ010 (Newly adopted tool)	CHAIN BALANCER	<ul style="list-style-type: none"> • Used for hanging power unit. • Used together with ENGINE HANGER (99099AJ000).
 <p>ST10004AA180</p>	10004AA180 (SUBARU genuine part)	HANGER CP ENGINE RR	<ul style="list-style-type: none"> • Used for hanging power unit. • For H4 - non-turbo model. • SUBARU genuine part

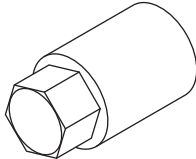
General Description

FRONT SUSPENSION

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST18360AA020</p>	18360AA020 (Newly adopted tool)	HANGER	<ul style="list-style-type: none"> Used for hanging power unit. For H6 model.
 <p>ST41099AJ000</p>	41099AJ000 (Newly adopted tool)	SPECIAL TOOL H4	Used for removing and installing front stabilizer. (for turbo model)
 <p>ST20299AG000</p>	20299AG000	REMOVER	<ul style="list-style-type: none"> Used for replacing front arm rear bushing. Used together with BASE (20999AG010).
 <p>ST20299AG010</p>	20299AG010	BASE	<ul style="list-style-type: none"> Used for replacing front arm rear bushing. Used together with REMOVER (20299AG000).
 <p>ST20299AG020</p>	20299AG020	STUD BOLT SOCKET	Used for removing and installing the stud bolt for front arm installing portion.

General Description

FRONT SUSPENSION

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST20399AG000</p>	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.
Chain sling	<ul style="list-style-type: none"> Used for hanging power unit. Diameter: 6 mm (0.24 in) or 6.3 mm (0.25 in) Length: 0.8 — 1 m (2.6 — 3.3 ft) Chain inner width: 8.5 mm (0.33 in) or more Chain external width: 23.5 mm (0.93 in) or less Load capacity: 1.2 t (2646 lb) or more
Shackle	<ul style="list-style-type: none"> Two units used for hanging power unit. Attached to both end of chain sling and connected to engine hook. Load capacity: 250 kg (551 lb) or more
Sling belt	<ul style="list-style-type: none"> Used to remove and install the cradle. Width: 35 — 40 mm (1.38 — 1.57 in) Length: 2 m (6.6 ft) Load capacity: 1 t (2205 lb) or more
Shackle	<ul style="list-style-type: none"> Used to remove and install the cradle. Load capacity: 500 kg (1103 lb) or more