GENERAL INFORMATION SECTION

This service manual has been prepared to provide SUBARU service personnel with the necessary information and data for the correct maintenance and repair of SUBARU vehicles.
This manual includes the procedures for maintenance, disassembling, reassembling, inspection and adjustment of components and diagnostics for guidance of experienced mechanics.
Please peruse and utilize this manual fully to ensure complete repair work for satisfying our customers by keeping their vehicle in optimum condition. When replacement of parts during repair work is needed, be sure to use SUBARU genuine parts.

All information, illustration and specifications contained in this manual are based on the latest product information available at the time of publication approval.

FOREWORD

FW

1. Foreword

A: FOREWORD

These manuals are used when performing maintenance, repair, or diagnosis of the Subaru Legacy.

Applied model: BE***** and BH***** from 2003MY.

The manuals contain the latest information at the time of publication. Changes in specifications, methods, etc. may be made without notice.

HOW TO USE THIS MANUALS

HU

1. How to Use This Manuals

A: HOW TO USE THIS MANUALS

1. STRUCTURE

Each section consists of SCT that are broken down into SC that are divided into sections for each component. The specification, maintenance and other information for the components are included, and diagnosis information has also been added where necessary.

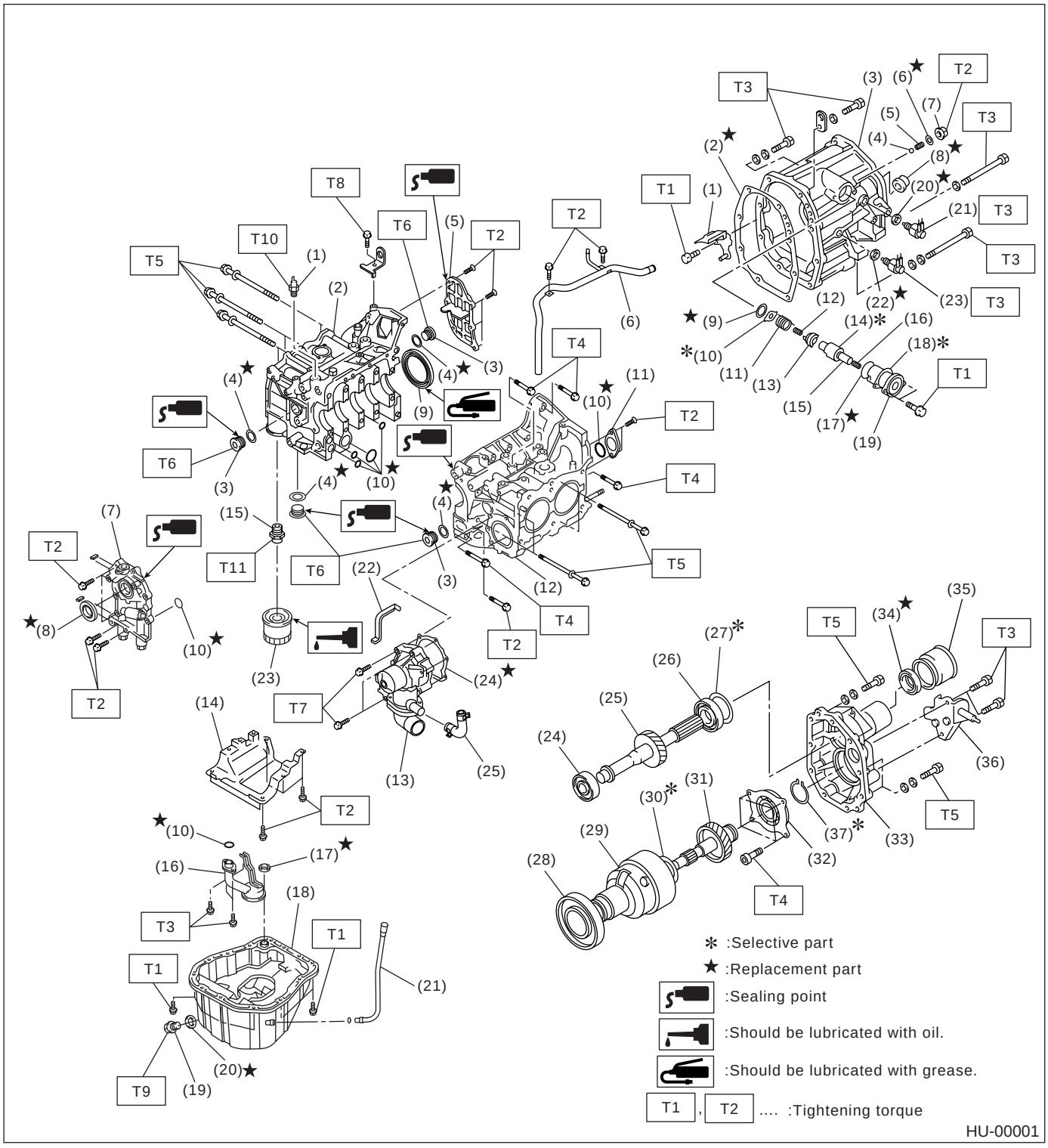
2. INDEX

The first page has an index with tabs.

3. COMPONENTS

Illustrations are listed for each component. The information necessary for repair work (tightening torque, grease up points, etc.) is described on these illustrations. Information is described using symbol. To order the parts, refer to parts catalogue.

Example:



4. SPECIFICATIONS

If necessary, specifications are also included.

5. INSPECTION

Inspections are included to be carried out before and after maintenance.

6. MAINTENANCE

• Maintenance instructions for serviceable parts describes work area and detailed steps with illustration. It also describes the use of special tool, tightening torque, cautions for each procedure.
• If many serviceable parts are included in one service procedure, appropriate reference are provided for each part.

Example:

15.Main Shaft Assembly for Single-Range (A)

A: REMOVAL (B)

1) Remove the manual transmission assembly from vehicie. <Ref. to MT-33, REMOVAL, Manual Transmission Assembly.> (C)

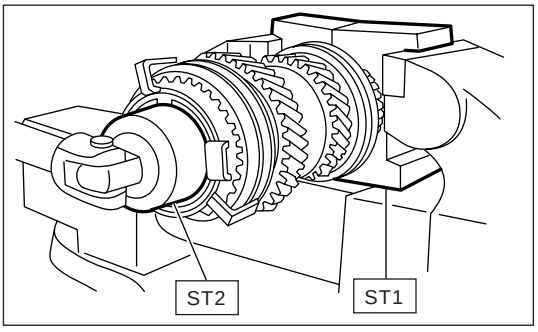
---

11) Tighten the lock nuts to the specified torque using ST1 and ST2.

NOTE: (D)
Secure the lock nuts in two Places affer tightening.

ST2 499987003 SOCKET WRENCH
ST1 498937000 (E) TRANSMISSION HOLDER (F)

Tightening torque:
118 N·m (12.0 kgf-m, 86.8 ft-lb) (G)



(H)

HU-00002

(A) Component
(B) Process
(C) Reference
(D) Caution
(E) Tool number of special tool
(F) Name of special tool
(G) Tightening torque
(H) Illustration

7. DIAGNOSIS

Tables showing a step-by-step process make it easy to conduct diagnosis.

8. SI UNITS

Measurements in these manuals are according to the SI units. Metric and yard/pound measurements are also included.

Example:

Tightening torque:
44 N·m (4.5 kgf-m, 33 ft-lb)

MEMO:

SPECIFICATIONS

SPC

1. Legacy

A: DIMENSIONS

Model			Sedan	Wagon
			AWD	
Overall length		mm (in)	4,605 (181.3)	4,680 (184.3)
Overall width		mm (in)	1,695 (66.7)	1,695 (66.7)
Overall height (at CW)		mm (in)	1,415 (55.7)	1,515 (59.6)
Compartment	Length	mm (in)	1,965 (77.4)	1,925 (75.8)
	Width	mm (in)	1,440 (56.7), 1,420 (55.9)*1	1,440 (56.7), 1,420 (55.9)*1
	Height	mm (in)	1,155 (45.5)	1,190 (46.9), 1,175 (46.3)*2
Wheelbase		mm (in)	2,650 (104.3)	2,650 (104.3)
Tread	Front	mm (in)	1,460 (57.5)	1,460 (57.5)
	Rear	mm (in)	1,460 (57.5)	1,455 (57.3)
Minimum road clearance		mm (in)	155 (6.1)	155 (6.1)

*1: With leather seat
*2: With sunroof

B: ENGINE

Model		Sedan/Wagon	
		AWD	
		2.0 L Non-TURBO	2.5 L Non-TURBO
Engine type		Horizontally opposed, liquid cooled, 4-cylinder, 4-stroke gasoline engine	
Valve arrangement		Overhead camshaft type	
Bore × Stroke	mm (in)	92 × 75 (3.62 × 2.95)	99.5 × 79.0 (3.917 × 3.110)
Displacement	cm^3 (cu in)	1,994 (121.67)	2,457 (149.9)
Compression ratio		10.0	
Firing order		1 — 3 — 2 — 4	
Idle speed at Park/ Neutral position rpm	Without OBD	700±100	
	With OBD	650±100	
Maximum output	kW (PS)/rpm	92 (125)/5,600	115 (156)/5,600
Maximum torque	N·m (kgf-m, ft-lb)/rpm	184 (18.8, 136.0)/3,600	223 (22.7, 164.2)/3,600

Model		Sedan	
		AWD	
		2.0 L TURBO	
		5MT	4AT-SS
Engine type		Horizontally opposed, liquid cooled, 4-cylinder, 4-stroke gasoline engine	
Valve arrangement		Double overhead camshaft type	
Bore × Stroke	mm (in)	92 × 75 (3.62 × 2.95)	
Displacement	cm^3 (cu in)	1,994 (121.67)	
Compression ratio		9.0±0.2	
Firing order		1 — 3 — 2 — 4	
Idle speed at Park/ Neutral position	rpm	700±100	650±100
Maximum output	kW (PS)/rpm	190 (258)/6,400	176 (239)/6,000
Maximum torque	N·m (kgf-m, ft-lb)/rpm	320 (32.6, 235.8)/4,800	309 (31.5, 227.8)/4,800

C: ELECTRICAL

Model			Sedan/Wagon	
			AWD	
			2.0 L Non-TURBO	2.5 L Non-TURBO
Ignition timing at idling speed BTDC/rpm			10°±10°	
Spark plug	Type and manufacturer	Without OBD	NGK: BKR6E (without catalyst) CHAMPION: RC10YC4 (with catalyst)	
			Alternate	NGK: BKR5E-11 (with catalyst)
		With OBD	CHAMPION: RC10YC4	
			Alternate	NGK: BKR6E-11 NGK: BKR5E-11
Generator			12V — 90A	
Battery	Type and capacity (5HR)	For Europe and South America	MT: 12V — 48AH (55D23L) AT: 12V — 52AH (65D23L)	MT: 12V — 48AH (55D23L) AT: 12V — 52AH (75D23L)
		Others	12V — 27AH (34B19L)	

Model		Sedan
		AWD
		2.0 L TURBO
Ignition timing at idling speed BTDC/rpm		14°±10°
Spark plug		NGK: PFR6G
Generator		12V — 90A
Battery	Type and capacity (5HR)	12V— 48AH (55D23L)

D: TRANSMISSION

Model			Sedan/Wagon			
			AWD			
			2.0 L Non-TURBO		2.5 L Non-TURBO	
Transmission type			5MT	4AT	5MT	4AT
Clutch type			DSPD	TCC	DSPD	TCC
Gear ratio		1st	3.454	2.785	3.454	2.785
		2nd	2.062	1.545	2.062	1.545
		3rd	1.448	1.000	1.448	1.000
		4th	1.088	0.694	1.088	0.694
		5th	0.825	—	0.825*1, 0.780*2	—
		Reverse	3.333	2.272	3.333	2.272
Auxiliary transmission gear ratio		High	1.000	—	1.000	—
		Low	1.447	—	1.196	—
Reduction gear (Front drive)	1st reduction	Type of gear	—	Helical	—	Helical
		Gear ratio	—	1.000	—	1.000
	Final reduction	Type of gear	Hypoid	Hypoid	Hypoid	Hypoid
		Gear ratio	3.900	4.111	3.700*1, 4.111*2	4.111
Reduction gear (Rear drive)	Transfer reduction	Type of gear	Helical	—	Helical	—
		Gear ratio	1.000	—	1.000	—
	Final reduction	Type of gear	Hypoid	Hypoid	Hypoid	Hypoid
		Gear ratio	3.900	4.111	3.700*1, 4.111*2	4.111

Model			Sedan	
			AWD	
			2.0 L TURBO	
Transmission type			5MT	4AT-SS
Clutch type			DSPD	TCC
Gear ratio		1st	3.166	2.785
		2nd	1.882	1.545
		3rd	1.296	1.000
		4th	0.972	0.694
		5th	0.738	—
		Reverse	3.333	2.272
Reduction gear (Front drive)	1st reduction	Type of gear	—	Helical
		Gear ratio	—	1.000
	Final reduction	Type of gear	Hypoid	Hypoid
		Gear ratio	4.111	4.111
Reduction gear (Rear drive)	Transfer reduction	Type of gear	Helical	—
		Gear ratio	1.000	—
	Final reduction	Type of gear	Hypoid	Hypoid
		Gear ratio	4.111	4.111

5MT: 5 forward speeds with synchromesh and 1-reverse
4AT: Electronically controlled fully-automatic, 4-forward speeds and 1-reverse
DSPD: Dry Single Plate Diaphragm
TCC: Torque Converter Clutch
*1: Except Australia spec. vehicles
*2: Australia spec. vehicles

E: STEERING

Model		2.0 L, 2.5 L Non-TURBO	2.0 L TURBO
Type		Rack and Pinion	
Turns, lock to lock		3.1	3.0
Minimum turning circle m (ft)	Curb to curb	10.8±1.0 (35.4±3.3)	11.2±1.0 (36.7±3.3)
	Wall to wall	11.5±1.0 (37.7±3.3)	12.0±1.0 (39.4±3.3)

F: SUSPENSION

Model	Conventional suspension
Front	Macpherson strut type, Independent, Coil spring
Rear	Multi-link type, Independent, Coil spring

G: BRAKE

Model	2.0 L, 2.5 L Non-TURBO	2.0 L TURBO
Service brake system	Dual circuit hydraulic with vacuum suspended power unit	
Front	Ventilated disc brake	
Rear	Disc brake	Ventilated disc brake
Parking brake	Mechanical on rear brakes	

H: TIRE

Rim size	15 × 6JJ	16 × $6^{1}/_{2}$JJ	17 × 7JJ
Tire size	195/60R15	205/50R16	215/45ZR17
Type	Steel belted radial, Tubeless		

I: CAPACITY

Model		Sedan/Wagon			
		AWD			
		2.0 L		2.5 L	
		5MT	4AT	5MT	4AT
Fuel tank	ℓ (US gal, Imp gal)	64 (16.9, 14.1)			
Engine oil (When replacing)	ℓ (US qt, Imp qt)	Approx. 4.0 (4.2, 3.5), 4.5 (4.8, 4.0)*			
Transmission gear oil	ℓ (US qt, Imp qt)	3.5 (3.7, 3.1)	—	3.5 (3.7, 3.1)	—
Automatic transmission fluid	ℓ (US qt, Imp qt)	—	9.3 – 9.6 (9.8 – 10.1, 8.2 – 8.4)	—	9.3 – 9.6 (9.8 – 10.1, 8.2 – 8.4)
AT differential gear oil	ℓ (US qt, Imp qt)	—	1.1 – 1.3 (1.2 – 1.4, 1.0 – 1.1)	—	1.1 – 1.3 (1.2 – 1.4, 1.0 – 1.1)
AWD rear differential gear oil	ℓ (US qt, Imp qt)	0.8 (0.8, 0.6)			
Power steering fluid	ℓ (US qt, Imp qt)	0.7 (0.7, 0.6)			
Engine coolant	ℓ (US qt, Imp qt)	7.0 (7.4, 6.2) 7.7 (8.1, 6.8)*	6.9 (7.3, 6.1) 7.6 (8.0, 6.7)*	6.8 (7.2, 6.0)	6.7 (7.1, 5.9)

*: TURBO model

J: WEIGHT

1. SEDAN

• LHD Vehicle

Option code *1			EC		K4		KO, KS	
Model			2.0 L					
			AWD					
			GL					
			5MT	4AT	5MT	4AT	5MT	4AT
Curb weight (C.W.)	Front	kg (lb)	785 (1,730)	810 (1,785)	775 (1,710)	800 (1,765)	790 (1,740)	815 (1,795)
	Rear	kg (lb)	605 (1,335)	605 (1,335)	610 (1,345)	610 (1,345)	610 (1,345)	610 (1,345)
	Total	kg (lb)	1,390 (3,065)	1,415 (3,120)	1,385 (3,055)	1,410 (3,110)	1,400 (3,085)	1,425 (3,140)
Maximum permissible axle weight (M.P.A.W.)	Front	kg (lb)	970 (2,140)	970 (2,140)	970 (2,140)	970 (2,140)	970 (2,140)	970 (2,140)
	Rear	kg (lb)	975 (2,150)	975 (2,150)	975 (2,150)	975 (2,150)	975 (2,150)	975 (2,150)
Maximum permissible weight (M.P.W.)	Total	kg (lb)	1,870 (4,125)	1,870 (4,125)	1,870 (4,125)	1,870 (4,125)	1,870 (4,125)	1,870 (4,125)
Option	Side airbag		❍	❍	—	—	—	—
	Air conditioner		—	—	—	—	❍	❍
	Audio		—	—	—	—	❍	❍
	Cruise control		—	—	—	—	—	—
	Cold weather pack		—	—	—	—	—	—

Option code *1			EC		K4		KS	
Model			2.5 L					
			AWD					
			GX					
			5MT	4AT	5MT	4AT	5MT	4AT
Curb weight (C.W.)	Front	kg (lb)	805 (1,775)	830 (1,830)	795 (1,750)	820 (1,810)	785 (1,730)	810 (1,785)
	Rear	kg (lb)	605 (1,335)	610 (1,345)	610 (1,345)	615 (1,355)	610 (1,345)	615 (1,355)
	Total	kg (lb)	1,410 (3,110)	1,440 (3,175)	1,405 (3,095)	1,435 (3,165)	1,395 (3,075)	1,425 (3,140)
Maximum permissible axle weight (M.P.A.W.)	Front	kg (lb)	985 (2,170)	985 (2,170)	985 (2,170)	985 (2,170)	985 (2,170)	985 (2,170)
	Rear	kg (lb)	1,000 (2,205)	1,000 (2,205)	1,000 (2,205)	1,000 (2,205)	1,000 (2,205)	1,000 (2,205)
Maximum permissible weight (M.P.W.)	Total	kg (lb)	1,910 (4,210)	1,910 (4,210)	1,910 (4,210)	1,910 (4,210)	1,910 (4,210)	1,910 (4,210)
Option	Side airbag		❍	❍	—	—	—	—
	Air conditioner		❍	❍	❍	❍	—	—
	Audio		—	—	—	—	❍	❍
	Cruise control		—	—	❍	❍	—	—
	Cold weather pack		—	—	—	—	—	—

*1: For option code, refer to ID section. <Ref. to ID-4, MODEL NUMBER PLATE, IDENTIFICATION, Identification.>

• RHD Vehicle

Option code *1			K1	EK			
Model			2.0 L			2.5 L	
			AWD				
			GL			GX	
			4AT	5MT	4AT	5MT	4AT
Curb weight (C.W.)	Front	kg (lb)	800 (1,765)	795 (1,750)	820 (1,810)	795 (1,750)	820 (1,810)
	Rear	kg (lb)	605 (1,335)	605 (1,335)	605 (1,335)	605 (1,335)	610 (1,345)
	Total	kg (lb)	1,405 (3,100)	1,400 (3,085)	1,425 (3,145)	1,400 (3,085)	1,430 (3,155)
Maximum permissible axle weight (M.P.A.W.)	Front	kg (lb)	970 (2,140)	970 (2,140)	970 (2,140)	985 (2,170)	985 (2,170)
	Rear	kg (lb)	975 (2,150)	975 (2,150)	975 (2,150)	1,000 (2,205)	1,000 (2,205)
Maximum permissible weight (M.P.W.)	Total	kg (lb)	1,870 (4,125)	1,870 (4,125)	1,870 (4,125)	1,910 (4,210)	1,910 (4,210)
Option	Side airbag		—	❍	❍	❍	❍
	Air conditioner		—	❍	❍	—	—
	Audio		❍	❍	❍	❍	❍
	Cruise control		—	—	—	—	—
	Cold weather pack		—	—	—	—	—

Option code *1			KA			
Model			2.0 L		2.5 L	
			AWD			
			GL (GX)		GX (RX)	
			5MT	4AT	5MT	4AT
Unladen mass (U.M.)	Front	kg (lb)	780 (1,720)	775 (1,710)	775 (1,710)	785 (1,730)
	Rear	kg (lb)	585 (1,290)	585 (1,290)	595 (1,310)	595 (1,310)
	Total	kg (lb)	1,365 (3,010)	1,360 (3,000)	1,370 (3,020)	1,380 (3,040)
Gross vehicle mass (G.V.M.)	Front	kg (lb)	930 (2,050)	930 (2,050)	940 (2,075)	940 (2,075)
	Rear	kg (lb)	970 (2,140)	970 (2,140)	980 (2,160)	980 (2,160)
	Total	kg (lb)	1,900 (4,190)	1,900 (4,190)	1,920 (4,235)	1,920 (4,235)
Option	Side airbag		—	—	—	—
	Air conditioner		❍	—	—	—
	Audio		❍	❍	❍	❍
	Cruise control		❍	—	—	—
	Cold weather pack		—	—	—	—

Option code *1			KA	
Model			2.0 L	
			AWD	
			B4	
			5MT	4AT-SS
Unladen mass (U.M.)	Front	kg (lb)	875 (1,930)	900 (1,985)
	Rear	kg (lb)	620 (1,365)	620 (1,365)
	Total	kg (lb)	1,495 (3,295)	1,520 (3,350)
Gross vehicle mass (G.V.M.)	Front	kg (lb)	1,005 (2,215)	1,005 (2,215)
	Rear	kg (lb)	980 (2,160)	980 (2,160)
	Total	kg (lb)	1,985 (4,375)	1,985 (4,375)
Option	Side airbag		—	—
	Air conditioner		❍	❍
	Audio		❍	❍
	Cruise control		—	—
	Cold weather pack		—	—
	Leather trim		❍	❍
	Rear spoiler		❍	❍

*1: For option code, refer to ID section. <Ref. to ID-4, MODEL NUMBER PLATE, IDENTIFICATION, Identification.>

2. WAGON

• LHD Vehicle

Option code *1			EC		K4		KO, KS	
Model			2.0 L					
			AWD					
			GL					
			5MT	4AT	5MT	4AT	5MT	4AT
Curb weight (C.W.)	Front	kg (lb)	780 (1,720)	800 (1,765)	775 (1,710)	790 (1,740)	790 (1,740)	805 (1,775)
	Rear	kg (lb)	650 (1,435)	650 (1,435)	655 (1,445)	655 (1,445)	655 (1,445)	655 (1,445)
	Total	kg (lb)	1,430 (3,155)	1,450 (3,200)	1,430 (3,155)	1,445 (3,185)	1,445 (3,185)	1,460 (3,220)
Maximum permissible axle weight (M.P.A.W.)	Front	kg (lb)	960 (2,115)	960 (2,115)	960 (2,115)	960 (2,115)	960 (2,115)	960 (2,115)
	Rear	kg (lb)	1,030 (2,270)	1,030 (2,270)	1,030 (2,270)	1,030 (2,270)	1,030 (2,270)	1,030 (2,270)
Maximum permissible weight (M.P.W.)	Total	kg (lb)	1,920 (4,235)	1,920 (4,235)	1,920 (4,235)	1,920 (4,235)	1,920 (4,235)	1,920 (4,235)
Option	Side airbag		—	❍	—	—	—	—
	Air conditioner		—	—	—	—	❍	❍
	Audio		—	—	—	—	❍	❍
	Cruise control		—	—	—	—	—	—
	Cold weather pack		—	—	—	—	—	—

Option code *1			EC		K4		KS	
Model			2.5 L					
			AWD					
			GX					
			5MT	4AT	5MT	4AT	5MT	4AT
Curb weight (C.W.)	Front	kg (lb)	790 (1,740)	820 (1,810)	790 (1,740)	805 (1,775)	780 (1,720)	810 (1,785)
	Rear	kg (lb)	655 (1,445)	655 (1,445)	655 (1,445)	655 (1,445)	655 (1,445)	655 (1,445)
	Total	kg (lb)	1,445 (3,185)	1,475 (3,255)	1,445 (3,185)	1,460 (3,220)	1,435 (3,165)	1,465 (3,230)
Maximum permissible axle weight (M.P.A.W.)	Front	kg (lb)	995 (2,195)	995 (2,195)	995 (2,195)	995 (2,195)	995 (2,195)	995 (2,195)
	Rear	kg (lb)	1,050 (2,315)	1,050 (2,315)	1,050 (2,315)	1,050 (2,315)	1,050 (2,315)	1,050 (2,315)
Maximum permissible weight (M.P.W.)	Total	kg (lb)	1,980 (4,365)	1,980 (4,365)	1,980 (4,365)	1,980 (4,365)	1,980 (4,365)	1,980 (4,365)
Option	Side airbag		❍	❍	—	—	—	—
	Air conditioner		—	❍	❍	❍	—	❍
	Audio		—	—	—	—	❍	❍
	Cruise control		—	❍	❍	❍	—	❍
	Cold weather pack		—	❍	—	—	—	—

*1: For option code, refer to ID section. <Ref. to ID-4, MODEL NUMBER PLATE, IDENTIFICATION, Identification.>

• RHD Vehicle

Option code *1			K1		EK			
Model			2.0 L				2.5 L	
			AWD					
			GL				GX	
			5MT	4AT	5MT	4AT	5MT	4AT
Curb weight (C.W.)	Front	kg (lb)	775 (1,710)	790 (1,740)	795 (1,750)	810 (1,785)	790 (1,740)	805 (1,775)
	Rear	kg (lb)	655 (1,445)	655 (1,445)	650 (1,435)	650 (1,435)	655 (1,445)	655 (1,445)
	Total	kg (lb)	1,430 (3,155)	1,445 (3,185)	1,445 (3,185)	1,460 (3,220)	1,445 (3,185)	1,460 (3,220)
Maximum permissible axle weight (M.P.A.W.)	Front	kg (lb)	960 (2,115)	960 (2,115)	960 (2,115)	960 (2,115)	995 (2,195)	995 (2,195)
	Rear	kg (lb)	1,030 (2,270)	1,030 (2,270)	1,030 (2,270)	1,030 (2,270)	1,050 (2,315)	1,050 (2,315)
Maximum permissible weight (M.P.W.)	Total	kg (lb)	1,920 (4,235)	1,920 (4,235)	1,920 (4,235)	1,920 (4,235)	1,980 (4,365)	1,980 (4,365)
Option	Side airbag		—	—	❍	❍	❍	❍
	Air conditioner		—	—	❍	❍	—	—
	Audio		❍	❍	❍	❍	❍	❍
	Cruise control		—	—	—	—	—	—
	Cold weather pack		—	—	—	—	—	—

Option code *1			KA			
Model			2.0 L		2.5 L	
			AWD			
			GL (GX)		GX (RX)	
			5MT	4AT	5MT	4AT
Unladen mass (U.M.)	Front	kg (lb)	775 (1,710)	775 (1,710)	765 (1,685)	780 (1,720)
	Rear	kg (lb)	635 (1,400)	635 (1,400)	645 (1,420)	645 (1,420)
	Total	kg (lb)	1,410 (3,110)	1,410 (3,110)	1,410 (3,105)	1,425 (3,140)
Gross vehicle mass (G.V.M.)	Front	kg (lb)	930 (2,050)	930 (2,050)	950 (2,095)	950 (2,095)
	Rear	kg (lb)	1,010 (2,225)	1,010 (2,225)	1,040 (2,295)	1,040 (2,295)
	Total	kg (lb)	1,940 (4,275)	1,940 (4,275)	1,990 (4,390)	1,990 (4,390)
Option	Side airbag		—	—	—	—
	Air conditioner		❍	—	—	—
	Audio		❍	❍	❍	❍
	Cruise control		❍	—	—	—
	Cold weather pack		—	—	—	—

*1: For option code, refer to ID section. <Ref. to ID-4, MODEL NUMBER PLATE, IDENTIFICATION, Identification.>

2. OUTBACK

A: DIMENSIONS

Model			OUTBACK
			AWD
Overall length		mm (in)	4,720 (185.8)
Overall width		mm (in)	1,745 (68.7)
Overall height (at CW)		mm (in)	1,580 (62.2), 1,590 (62.6)*3
Compartment	Length	mm (in)	1,925 (75.8)
	Width	mm (in)	1,440 (56.7), 1,420 (55.9)*1
	Height	mm (in)	1,190 (46.9), 1,175 (46.3)*2
Wheelbase		mm (in)	2,650 (104.3)
Tread	Front	mm (in)	1,470 (57.9)
	Rear	mm (in)	1,460 (57.5)*3 , 1,465 (57.7)
Minimum road clearance	2.5 L	mm (in)	190 (7.5)
	3.0 L	mm (in)	200 (7.9)

*1: With leather seat
*2: With sunroof
*3: Australia spec. vehicles

B: ENGINE

Model		OUTBACK		
		AWD		
		2.5 L		3.0 L
Engine type		Horizontally opposed, liquid cooled, 4-cylinder, 4-stroke gasoline engine		Horizontally opposed, liquid cooled, 6-cylinder, 4-stroke gasoline engine
Valve arrangement		Overhead camshaft type		Double overhead camshaft type
Bore × Stroke	mm (in)	99.5 × 79.0 (3.917 × 3.110)		89.2 × 80.0 (3.512 × 3.150)
Displacement	cm^3 (cu in)	2,457 (149.9)		3,000 (183.06)
Compression ratio		10.0		10.7
Firing order		1 — 3 — 2 — 4		1 — 6 — 3 — 2 — 5 — 4
Idle speed at Park/ Neutral position	rpm	Without OBD	700±100	600±100
		With OBD	650±100	
Maximum output	kW (PS)/rpm	115 (156)/5,600		154 (207)/6,000
Maximum torque	N·m (kgf-m, ft-lb)/rpm	223 (22.7, 164.2)/3,600		282 (28.8, 208)/4,400

C: ELECTRICAL

Model		OUTBACK		
		AWD		
		2.5 L		3.0 L
Ignition timing at idling speed BTDC/rpm		10°±10°		10°±8°
Spark plug	Type and manufacturer	CHAMPION: RC10YC4		NGK: PLFR6A-11
		Alternate	NGK: BKR6E-11 NGK: BKR5E-11	
Generator		12V — 90A		12V — 100A
Battery	Type and capacity (5HR)	For Europe and South America	MT: 12V — 48AH (55D23L) AT: 12V — 52AH (75D23L)	12V — 52AH (75D23L)
		Others	12V — 27AH (34B19L)	12V — 48H (55D23L)

D: TRANSMISSION

Model			OUTBACK		
			AWD		
			2.5 L		3.0 L
Transmission type			5MT	4AT	4AT
Clutch type			DSPD	TCC	TCC
Gear ratio		1st	3.454	2.785	
		2nd	2.062	1.545	
		3rd	1.448	1.000	
		4th	1.088	0.694	
		5th	0.825	—	
		Reverse	3.333	2.272	
Auxiliary transmission gear ratio		High	1.000	—	
		Low	1.196	—	
Reduction gear (Front drive)	1st Reduction	Type of gear	—	Helical	
		Gear ratio	—	1.000	
	Final reduction	Type of gear	Hypoid	Hypoid	
		Gear ratio	3.900*1, 4.111*2	4.444	4.111
Reduction gear (Rear drive)	Transfer reduction	Type of gear	Helical	—	
		Gear ratio	1.000	—	
	Final reduction	Type of gear	Hypoid	Hypoid	
		Gear ratio	3.900*1, 4.111*2	4.444	4.111

5MT: 5 × 2 forward speeds with synchromesh and 1-reverse
4AT: Electronically controlled fully-automatic, 4-forward speeds and 1-reverse
DSPD: Dry Single Plate Diaphragm
TCC: Torque Converter Clutch
*1: Except Australia spec. vehicles
*2: Australia spec. vehicles

E: STEERING

Model		OUTBACK
Type		Rack and Pinion
Turns, lock to lock		3.0
Minimum turning circle m (ft)	Curb to curb	11.2±1.0 (36.7±3.3)
	Wall to wall	12.0±1.0 (39.4±3.3)

F: SUSPENSION

Model	OUTBACK
Front	Macpherson strut type, Independent, Coil spring
Rear	Multi-link type, Independent, Coil spring

G: BRAKE

Model	OUTBACK
Service brake system	Dual circuit hydraulic with vacuum suspended power unit
Front	Ventilated disc brake
Rear	Disc brake
Parking brake	Mechanical on rear brakes

H: TIRE

Model	OUTBACK
Rim size	$16 \times 6^1/_2$JJ
Tire size	215/60R16
Type	Steel belted radial, Tubeless

I: CAPACITY

Model		OUTBACK		
		AWD		
		2.5 L		3.0 L
		5MT	4AT	
Fuel tank	ℓ (US gal, Imp gal)	64 (16.9, 14.1)		
Engine oil (When replacing)	ℓ (US qt, Imp qt)	Approx. 4.0 (4.2, 3.5)		Approx. 5.6 (5.9, 4.9)
Transmission gear oil	ℓ (US qt, Imp qt)	4.0 (4.2, 3.5)	—	
Automatic transmission fluid	ℓ (US qt, Imp qt)	—	9.3 – 9.6 (9.8 – 10.1, 8.2 – 8.4)	
AT differential gear oil	ℓ (US qt, Imp qt)	—	1.1 – 1.3 (1.2 – 1.4, 1.0 – 1.1)	
AWD rear differential gear oil	ℓ (US qt, Imp qt)	0.8 (0.8, 0.7)		
Power steering fluid	ℓ (US qt, Imp qt)	0.7 (0.7, 0.6)		
Engine coolant	ℓ (US qt, Imp qt)	6.8 (7.2, 6.0)	6.7 (7.1, 5.9)	7.9 (8.4, 7.0)

J: WEIGHT

1. OUTBACK

• LHD vehicle

Option code *1			K4		KS	
Model			2.5 L			
			AWD			
			5MT	4AT	5MT	4AT
Curb weight (C.W.)	Front	kg (lb)	810 (1,785)	825 (1,820)	815 (1,795)	830 (1,830)
	Rear	kg (lb)	670 (1,475)	670 (1,475)	670 (1,475)	670 (1,475)
	Total	kg (lb)	1,480 (3,265)	1,495 (3,295)	1,485 (3,275)	1,500 (3,310)
Maximum permissible axle weight (M.P.A.W.)	Front	kg (lb)	995 (2,195)	995 (2,195)	995 (2,195)	995 (2,195)
	Rear	kg (lb)	1,050 (2,315)	1,050 (2,315)	1,050 (2,315)	1,050 (2,315)
Maximum permissible weight (M.P.W.)	Total	kg (lb)	2,000 (4,410)	2,000 (4,410)	2,000 (4,410)	2,000 (4,410)
Option	Side airbag		—	—	—	—
	Air conditioner		❍	❍	❍	❍
	Audio		—	—	❍	❍
	Cruise control		❍	❍	❍	❍
	Cold weather pack		—	—	—	—
	Leather trim		—	—	—	—
	Sunroof		—	—	—	—

Option code *1			EC		
Model			2.5 L		3.0 L
			AWD		
			5MT	4AT	
Curb weight (C.W.)	Front	kg (lb)	805 (1,775)	830 (1,830)	915 (2,020)
	Rear	kg (lb)	680 (1,500)	675 (1,490)	695 (1,530)
	Total	kg (lb)	1,485 (3,275)	1,505 (3,320)	1,610 (3,550)
Maximum permissible axle weight (M.P.A.W.)	Front	kg (lb)	1,010 (2,225)	1,010 (2,225)	1,040 (2,295)
	Rear	kg (lb)	1,060 (2,335)	1,060 (2,335)	1,060 (2,335)
Maximum permissible weight (M.P.W.)	Total	kg (lb)	2,015 (4,445)	2,015 (4,445)	2,085 (4,595)
Option	Side airbag		❍	❍	❍
	Air conditioner		—	❍	❍
	Audio		❍	—	—
	Cruise control		❍	—	❍
	Cold weather pack		❍	—	—
	Leather trim		—	—	❍
	Sunroof		—	—	❍
	Self-levelizer		❍	—	❍

*1: For option code, refer to ID section. <Ref. to ID-4, MODEL NUMBER PLATE, IDENTIFICATION, Identification.>

• RHD vehicle

Option code *1			EK		
Model			2.5 L		3.0 L
			AWD		
			5MT	4AT	
Curb weight (C.W.)	Front	kg (lb)	800 (1,765)	815 (1,795)	915 (2,020)
	Rear	kg (lb)	670 (1,475)	670 (1,475)	695 (1,530)
	Total	kg (lb)	1,470 (3,240)	1,485 (3,275)	1,610 (3,550)
Maximum permissible axle weight (M.P.A.W.)	Front	kg (lb)	1,010 (2,225)	1,010 (2,225)	1,040 (2,295)
	Rear	kg (lb)	1,060 (2,335)	1,060 (2,335)	1,060 (2,335)
Maximum permissible weight (M.P.W.)	Total	kg (lb)	2,015 (4,445)	2,015 (4,445)	2,085 (4,595)
Option	Side airbag		—	—	❍
	Air conditioner		—	—	❍
	Audio		❍	❍	❍
	Cruise control		—	—	❍
	Cold weather pack		—	—	❍
	Leather trim		—	—	❍
	Sunroof		—	—	❍
	Self-levelizer		—	—	❍

Option code *1			KA		
Model			2.5 L		3.0 L
			AWD		
			5MT	4AT	
Unladen mass (U.M.)	Front	kg (lb)	790 (1,740)	800 (1,765)	900 (1,985)
	Rear	kg (lb)	650 (1,435)	650 (1,435)	690 (1,520)
	Total	kg (lb)	1,440 (3,175)	1,450 (3,200)	1,590 (3,505)
Gross vehicle mass (G.V.M.)	Front	kg (lb)	970 (2,140)	970 (2,140)	1,035 (2,280)
	Rear	kg (lb)	1,050 (2,315)	1,050 (2,315)	1,050 (2,315)
	Total	kg (lb)	2,020 (4,455)	2,020 (4,455)	2,085 (4,595)
Option	Side airbag		—	—	❍
	Air conditioner		—	—	❍
	Audio		❍	❍	❍
	Cruise control		—	—	❍
	Cold weather pack		—	—	—
	Leather trim		—	—	❍
	Sunroof		—	—	❍
	Self-levelizer		—	—	❍

*1: For option code, refer to ID section. <Ref. to ID-4, MODEL NUMBER PLATE, IDENTIFICATION, Identification.>

PRECAUTION

PC

1. Precaution

A: PRECAUTION

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

1. ABS

Handle the ABS as a total system. Do not disassemble or attempt to repair individual parts. Doing so could prevent the ABS system from operating when needed or cause it to operate incorrectly and result in injury.

2. BRAKE FLUID

If brake fluid gets in your eyes or on your skin, do the following:

- Wash out your eyes and seek immediate medical attention.
- Wash your skin with soap and then rinse thoroughly with water.

3. ELECTRIC FAN

The electric fan may rotate without warning, even when the engine is not on. Do not place your hand, cloth, tools, or other items near the fan at any time.

4. ROAD TESTS

Always conduct road tests in accordance with traffic rules and regulations to avoid bodily injury and interrupting traffic.

5. AIRBAG

To prevent bodily injury from unexpected deployment of airbags and unnecessary maintenance, follow the instructions in this manual when performing maintenance on airbag components or nearby, and airbag wiring harnesses or nearby.
To prevent unexpected deployment, perform one of the steps below and then wait at least 20 seconds to discharge electricity before beginning work.

- Step 1: Turn the ignition switch OFF.
- Step 2: Remove the negative battery terminal.

6. AIRBAG DISPOSAL

To prevent bodily injury from unexpected airbag deployment, do not dispose airbag modules in the same way as other refuse. Follow all government regulations concerning disposal of refuse.

7. AIRBAG MODULE

Adhere to the following when handing and storing the airbag module to prevent bodily injury from unexpected deployment:

- Do not hold harnesses or connectors to carry the module.
- Do not face the bag in the direction that it opens towards yourself or other people.
- Do not face the bag in the direction that it opens towards the floor or walls.

8. AIRBAG SPECIAL TOOLS

To prevent unexpected deployment, only use special tools.

9. WINDOW

Always wear safety glasses when working around any glass to prevent glass fragments from damaging your eyes.

10.WINDOW ADHESIVE

Always use the specified urethane adhesive when attaching glass to prevent it from coming loose and falling, resulting in accidents and injury.

NOTE

NT

1. Note

A: NOTE

This is information that can improve efficiency of maintenance and assure sound work.

1. FASTENER NOTICE

Fasteners are used to prevent parts from damage and dislocation due to looseness. Fasteners must be tightened to the specified torque.
Do not apply paint, lubricant, rust retardant, or other substances to the surface around bolts, fasteners, etc. Doing so will make it difficult to obtain the correct torque and result in looseness and other problems.

2. STATIC ELECTRICITY DAMAGE

Do not touch the ECM, connectors, logic boards, and other such parts when there is a risk of static electricity. Always use a static electricity prevention cord or touch grounded metal before conducting work.

3. IGNITION OFF BATTERY

When removing the battery cables, always be sure to turn the ignition off to prevent electrical damage to the ECM from rush current.

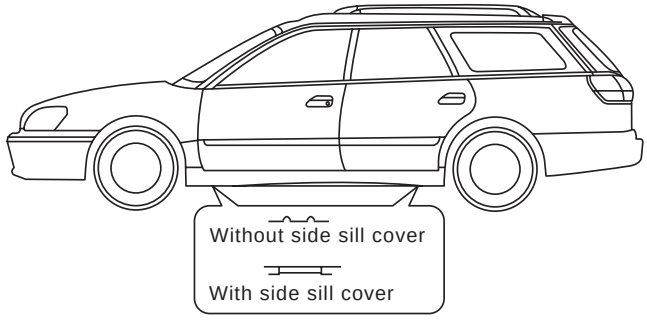
4. SERVICE PARTS

Use authentic service parts for maximum performance and maintenance, when conducting repairs. Subaru/FHI will not be responsible for poor performance resulting from the use of parts not specified by a genuine dealer.

5. LIFTS AND JACKS

When using a lift or jack-ridged rack to raise a vehicle, always follow instructions concerning jack-up points and weight limits to prevent the vehicle from falling, which could result in injury. Be especially careful to make sure the vehicle is balanced before raising it.

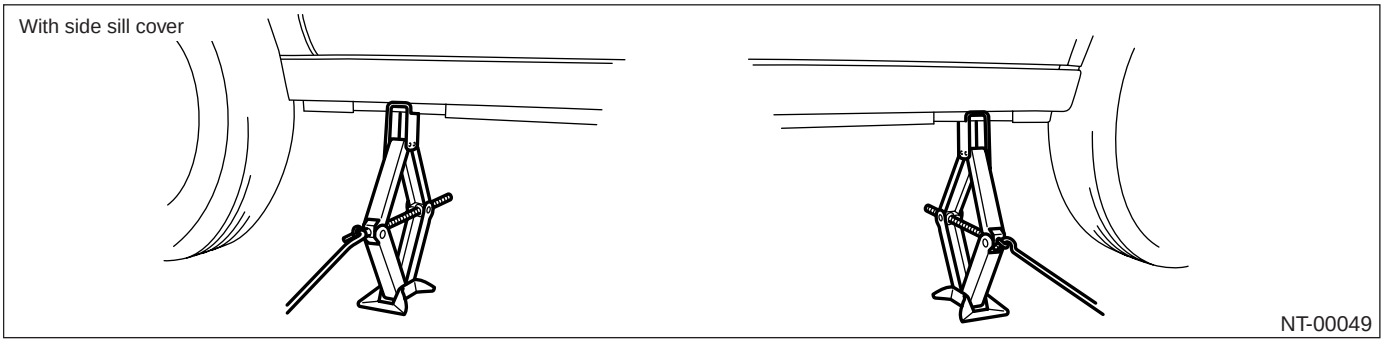
• Support locations



NT-00048

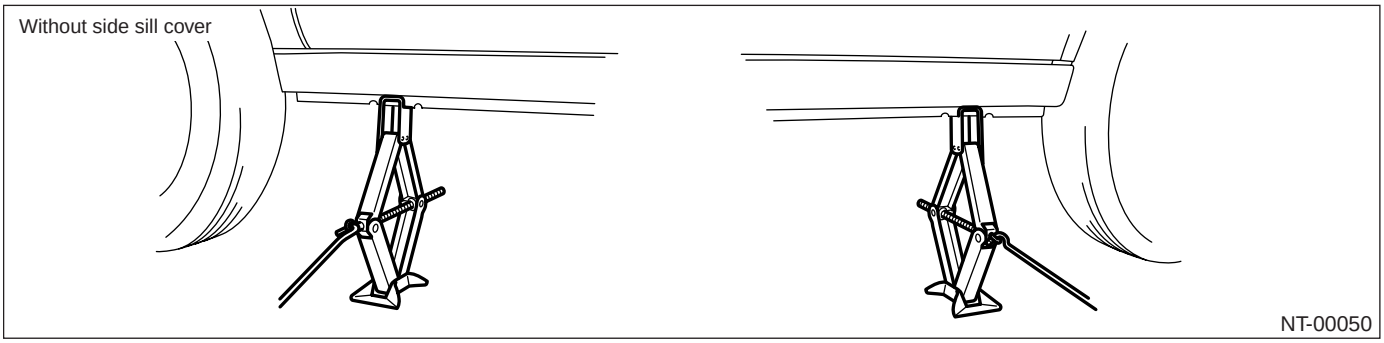
• **Pantograph jack**

With side sill cover



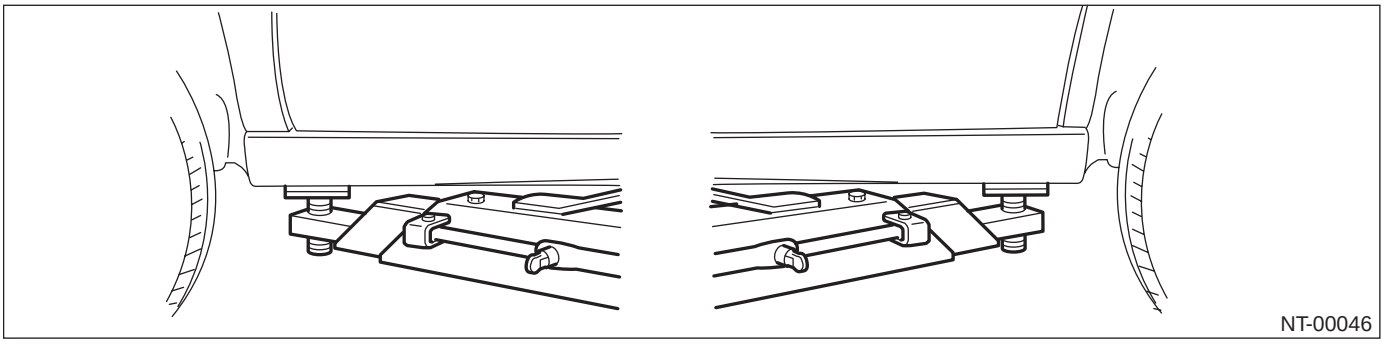
NT-00049

Without side sill cover



NT-00050

• **Lift**



NT-00046

- **Safety stand**