

## 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**

**HOW TO USE THIS MANUALS** **HU**

**SPECIFICATIONS** **SPC**

**PRECAUTION** **PC**

**NOTE** **NT**

**IDENTIFICATION** **ID**

**RECOMMENDED MATERIALS** **RM**

**PRE-DELIVERY INSPECTION** **PI**

**PERIODIC MAINTENANCE SERVICES** **PM**



# FOREWORD



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## 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***



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### **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.

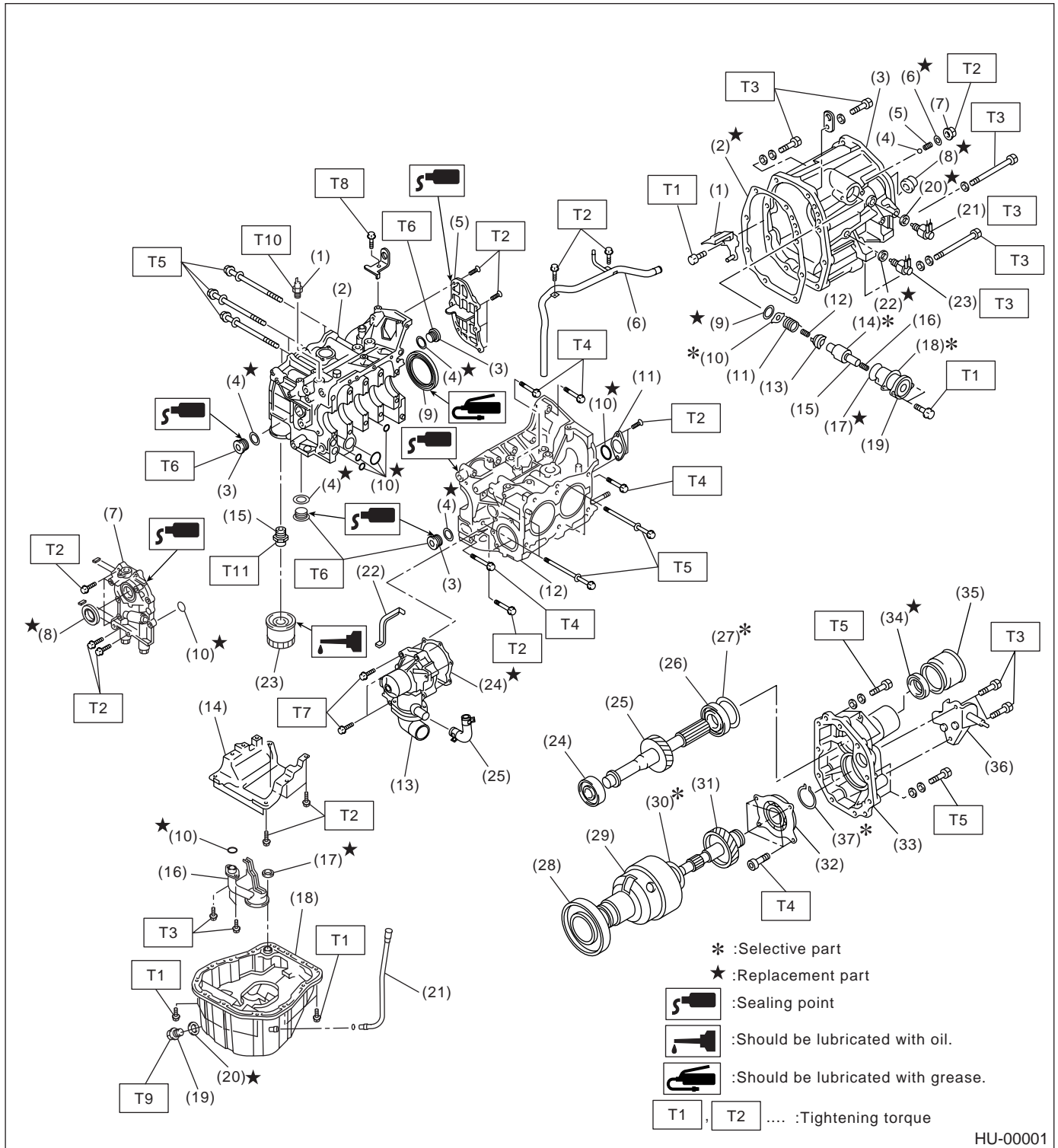
##### **2. INDEX**

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:**



HU-00001

# HOW TO USE THIS MANUALS

## HOW TO USE THIS MANUALS

### 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 Sin- ← (A) gle-Range

### A: REMOVAL ← (B)

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

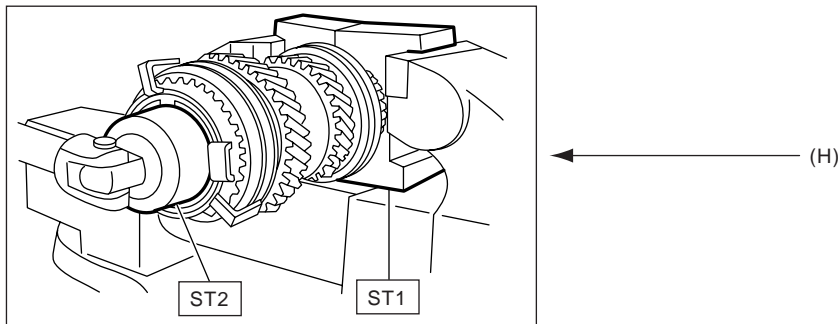
11) Tighten the lock nuts to the specified torque using ST1 and ST2.

NOTE: ← (D)

Secure the lock nuts in two Places after tightening.

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

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



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)***

# HOW TO USE THIS MANUALS

HOW TO USE THIS MANUALS

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**MEMO:**

# SPECIFICATIONS

# SPC



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# LEGACY

## SPECIFICATIONS

### 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 <sup>3</sup> (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 <sup>3</sup> (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	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

# LEGACY

## SPECIFICATIONS

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	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 <sup>1</sup> / <sub>2</sub> 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		—	—	—	—	—	—

# LEGACY

## SPECIFICATIONS

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		—	—	—	—	—



# LEGACY

## SPECIFICATIONS

Option code *1		KA					
Model		2.0 L			2.5 L		
		AWD					
		GL (GX)			GX (RX)		
		5MT		4AT		5MT	
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.>

# LEGACY

## SPECIFICATIONS

### 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.>

# LEGACY

## SPECIFICATIONS

### • 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.>

# OUTBACK

## SPECIFICATIONS

## 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 <sup>3</sup> (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)		

## 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	—		
		Gear ratio	—		
	Final reduction	Type of gear	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		
		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

# OUTBACK

## SPECIFICATIONS

### 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 × 6 <sup>1</sup> / <sub>2</sub> JJ
Tire size	215/60R16
Type	Steel belted radial, Tubeless

### I: CAPACITY

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

# OUTBACK

## SPECIFICATIONS

### • 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

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# PRECAUTION

## PRECAUTION

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### 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 handling 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***



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# NOTE

## NOTE

### 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.

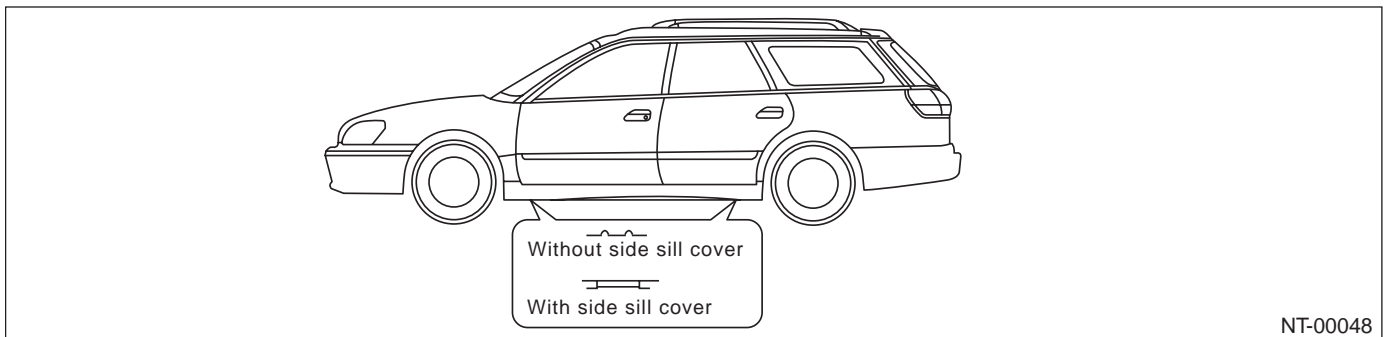
#### 4. SERVICE PARTS

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.

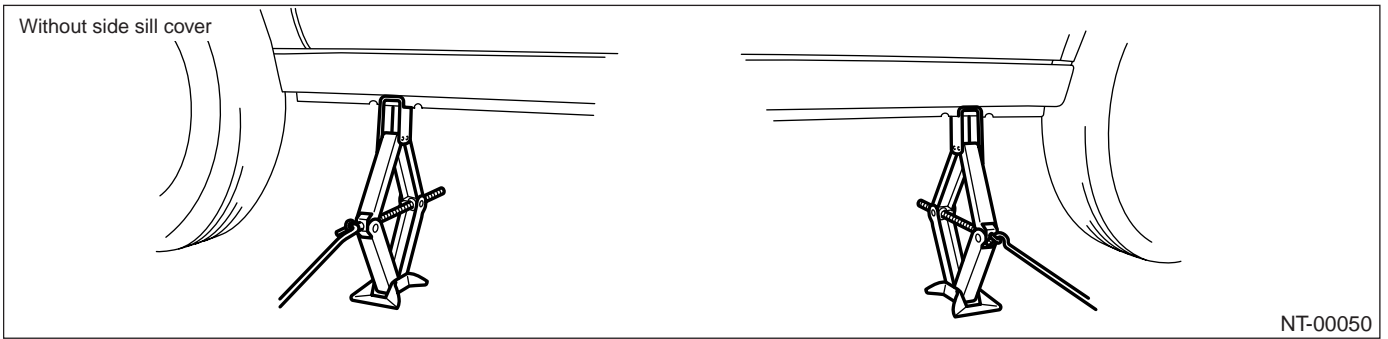
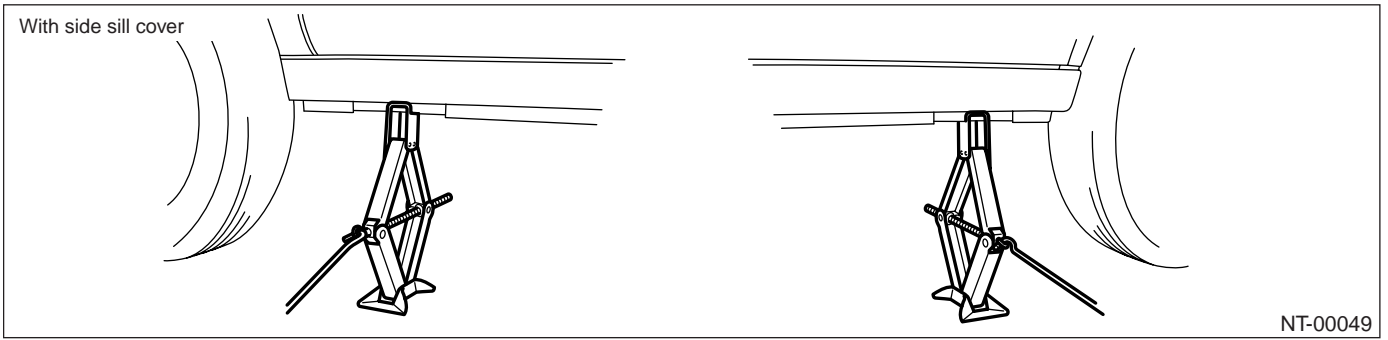
#### 5. LIFTS AND JACKS

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



• Pantograph jack



• Lift

