

1. Foreword

A: FOREWORD

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

Applicable model:

2009MY GE*****, GH*****

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

How to Use This Manuals

HOW TO USE THIS MANUALS

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 the diagnostic information has also been added where necessary.

2. CONTENTS

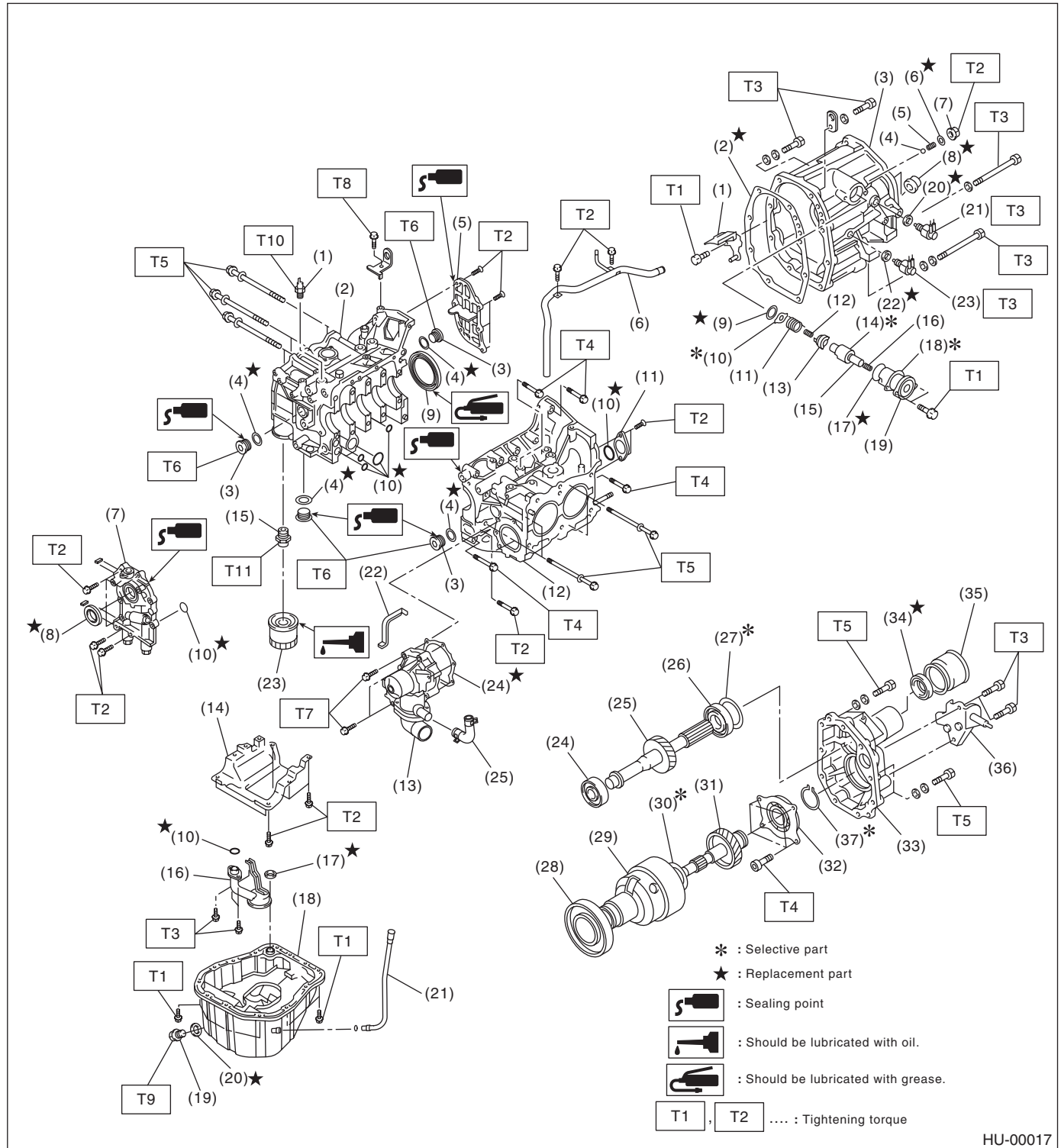
The first page has an index with tabs.

3. COMPONENT

Illustrations are provided 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 parts, refer to parts catalogue.

Example:



HU-00017

How to Use This Manuals

HOW TO USE THIS MANUALS

4. SPECIFICATION

If necessary, specifications are also included.

5. INSPECTION

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

6. MAINTENANCE

- Maintenance instructions for serviceable parts describe work area and detailed step with illustration. It also describes the use of special tool, tightening torque, caution for each procedure.
- If many serviceable parts are included in one service procedure, appropriate reference is provided for each parts.

Example:

15.Main Shaft ← (A)

A: REMOVAL ← (B)

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

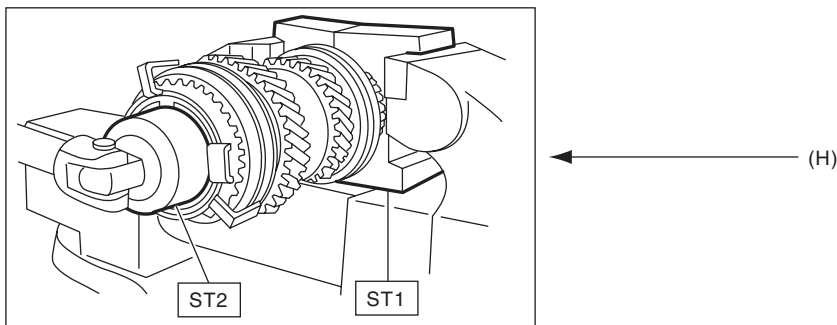
11) Tighten the lock nuts to the specified torque using ST1 and ST2.

NOTE: ← (D)
Secure the lock nuts in two places after tightening.

ST1 498937000 TRANSMISSION HOLDER

ST2 499987003 SOCKET WRENCH (35) (E) (F)

Tightening torque: ← (G)
120 N·m (12.2 kgf-m, 88.5 ft-lb)



HU-00041

(A) Component

(B) Process

(C) Reference

(D) Cautions

(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:

45 N·m (4.6 kgf-m, 33.2 ft-lb)

How to Use This Manuals

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9. EXPLANATION OF TERMINOLOGY

• List

AAI	: Air Assist Injection	HID	: High-Intensity Discharge
AAR	: Angular Adjusted Roller	H/U	: Hydraulic Unit
A/B	: Airbag	IG	: Ignition
ABS	: Anti-lock Brake System	IN	: Intake
A/C	: Air Conditioner	INT	: Intermittent
AC	: Angular Contact	I/O	: Input / Output
ACC	: Accessory	ISC	: Idle Speed Control
A/F	: Air Fuel Ratio	LAN	: Local Area Network
ALT	: Generator	LCD	: Liquid Crystal Display
ASSY	: Assembly	LED	: Light Emitting Diode
AT	: Automatic Transmission	LH	: LH (Left Hand)
ATF	: Automatic Transmission Fluid	LSD	: Limited Slip Differential
AVCS	: Active Valve Control System	M/B	: Main Fuse & Relay Box
AWD	: All Wheel Drive	MFI	: Multi Point Injection
BATT	: Battery	MP-T	: Multi-Plate Transfer
BJ	: Bell Joint	MT	: Manual Transmission
CAN	: Controller Area Network	NA	: Natural Aspiration
CD	: Compact Disc	OP	: Option Parts
COMPL	: Complete	OBD	: On-Board Diagnosis
CPU	: Central Processing Unit	P/S	: Power Steering
DOHC	: Double Overhead Camshaft	P/W	: Power Window
DTC	: Diagnosis Trouble Code	PCV	: Positive Crankcase Ventilation
DOJ	: Double Offset Joint	PID	: Parameter Identification
DVD	: Digital Versatile Disc or Digital Video Disc	RAM	: Random Access Memory
EBD	: Electronic Brake Distribution	RH	: RH (Right Hand)
EBJ	: High-efficiency Compact Ball Fixed Joint	ROM	: Read Only Memory
EDJ	: High-efficiency Compact Double Offset Joint	rpm	: Revolution Per Minute
ECM	: Engine Control Module	SOHC	: Single Overhead Camshaft
EGI	: Electronic Gasoline Injection	SRS	: Supplemental Restraint System
E/G	: Engine	SSM	: Subaru Select Monitor
EGR	: Exhaust Gas Recirculation	ST	: Special Tool
EX	: Exhaust	SW	: Switch
ETC	: Electronic Throttle Control	TGV	: Tumble Generator Valve
F/B	: Fuse & Joint Box	VDC	: Vehicle Dynamics Control
FWD	: Front Wheel Drive	V.I.N.	: Vehicle Identification Number
GPS	: Global Positioning System	VTD	: Variable Torque Distribution

Impreza

SPECIFICATIONS

1. Impreza

A: DIMENSION

Model		4 door	5 door	OUTBACK
Overall length	mm (in)	4,580 (180.3)	4,415 (173.8)	
Overall width	mm (in)	1,740 (68.5)		
Overall height (at C.W.)	mm (in)	1,475 (58.1)	1,480 (58.3)	
Compartment	Length	mm (in)	1,985 (78.1)	
	Width	mm (in)	1,475 (58.1)	
	Height	mm (in)	Model without sunroof : 1,200 (47.2) Model with sunroof : 1,170 (46.1)	
Wheelbase	mm (in)	2,620 (103.1)		
Tread	Front	mm (in)	1,495 (58.9)	1,490 (58.7)
	Rear	mm (in)	Non-turbo model: 1,495 (58.9) Turbo mode (205 tire) I: 1,500 (59.1) Turbo mode (225 tire) I: 1,505 (59.3)	
Minimum road clearance	mm (in)	155 (6.1)		160 (6.3)

B: ENGINE

Model	2.5 L Turbo	2.5 L turbo (WRX-SS model)	2.5 L
Engine type	Horizontally opposed, liquid cooled, 4-cylinder, 4-stroke gasoline engine		
Valve arrangement	DOHC		SOHC
Bore x stroke	mm (in)	99.5 x 79.0 (3.92 x 3.11)	
Displacement	cm ³ (cu in)	2,457 (149.94)	
Compression ratio	8.4		10.0
Ignition order	1 — 3 — 2 — 4		
Idle speed at Park or Neutral position	rpm	700	
Maximum output	kW (HP)/rpm	167 (224)/5,200	198 (265)/6,000
Maximum torque	N·m (kgf·m, ft·lb)/rpm	307 (31.3, 226)/2,800	330 (33.7, 244)/4,000
			127 (170)/6,000
			MT: 650 AT: 700
			230 (23.5, 170)/4,400

C: ELECTRICAL

Model	2.5 L Turbo	2.5 L
Ignition timing (at idling)	BTDC	MT: 12°±10° AT: 17°±10°
Spark plug	Type and manufacturer	NGK: FR5AP-11
Generator		12 V — 110 A
Battery	Type and capacity (5HR)	AT: 12 V — 52 AH (65D23L) MT: 12 V — 48 AH (55D23L)

D: TRANSMISSION

Model		2.5 L Turbo		2.5 L		
Transmission type		5MT	4AT	5MT	4AT	
Clutch type		DSPD	TCC	DSPD	TCC	
Gear ratio	1st	3.166	2.785	3.454	2.785	
	2nd	1.882	1.545	2.062	1.545	
	3rd	1.296	1.000	1.448	1.000	
	4th	0.972	0.694	1.088	0.694	
	5th	0.738	—	0.780	—	
	6th	—	—	—	—	
	Rev.	3.333	2.272	3.333	2.272	
Reduction gear (Front)	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	3.900	3.900	4.111
Reduction gear (Rear)	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	3.900	3.900	4.111

5MT: 5-forward speeds, 1-reverse

4AT: Electronically controlled fully-automatic, 4-forward speeds and 1-reverse

DSPD: Dry Single Plate Diaphragm

TCC: Torque Converter Clutch

E: STEERING

Model		2.5i, OUTBACK	WRX, 2.5 GT	WRX-SS
Type		Rack and pinion		
Turns, lock to lock		2.8		
Minimum turning diameter	m (ft)	Curb to curb	10.6 (34.8)	10.8 (35.5)
		Wall to wall	11.2 (36.7)	11.4 (37.4)

F: SUSPENSION

Front	Macpherson strut type suspension
Rear	Double-wishbone type suspension

G: BRAKE

Model	2.5 i	OUTBACK, WRX, 2.5 GT, WRX-SS
Service brake system	Dual circuit hydraulic with vacuum suspended power unit	
Front	Ventilated disc brake	
Rear	Drum brake (OP: Disc brake)	Disc brake
Parking brake	Mechanical on rear brakes	

H: TIRE

Model	2.5 i	OUTBACK, WRX, 2.5 GT	WRX-SS
Rim size	16 × 6 ¹ / ₂ JJ	17 × 7JJ	
Tire size	P205/55R16 89V	P205/50 R17 88V	225/45 R17 91W
Type	Tubeless, Steel belted radial		

Impreza

SPECIFICATIONS

I: CAPACITY

Model		2.5 L Turbo		2.5 L		
		5MT	4AT	5MT	4AT	
Fuel tank		ℓ (US gal, Imp gal)				64 (16.9, 14.1)
Engine oil	Capacity (at overhaul)	ℓ (US qt, Imp qt)				5.0 (5.3, 4.4)
	When replacing engine oil and oil filter	ℓ (US qt, Imp qt)				4.2 (4.4, 3.7)
	When replacing engine oil only	ℓ (US qt, Imp qt)				4.0 (4.2, 3.5)
Transmission gear oil		ℓ (US qt, Imp qt)				3.5 (3.7, 3.1) — 3.5 (3.7, 3.1) —
ATF		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)
Front 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)
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)				7.5 (7.9, 6.6) 7.4 (7.8, 6.5) 6.8 (7.2, 6.0) 6.7 (7.1, 5.9)

J: WEIGHT

Model		4 door										
		SOHC										
		2.5 i										
		MT					AT					
OP code		U4	U4	U4	U4	U4	C0	U4	U4	U4	U4	
		FW	NF	IZ	IO	VO	NF	FW	NF	IZ	IO	
Curb weight (C.W.)	Total	kg (lb)	1,390 (3,064)	1,395 (3,075)	1,385 (3,053)	1,405 (3,097)	1,405 (3,097)	1,395 (3,075)	1,420 (3,130)	1,425 (3,141)	1,415 (3,119)	1,435 (3,163)
	Front	kg (lb)	780 (1,719)	780 (1,719)	775 (1,708)	785 (1,730)	785 (1,730)	780 (1,719)	810 (1,785)	810 (1,785)	805 (1,774)	815 (1,796)
	Rear	kg (lb)	610 (1,345)	615 (1,356)	610 (1,345)	620 (1,367)	620 (1,367)	615 (1,356)	610 (1,345)	615 (1,356)	610 (1,345)	620 (1,367)
Gross vehicle weight (G.V.W.)		kg (lb)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)
Gross axle weight (G.A.W.)	Front	kg (lb)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)
	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)	1,000 (2,205)	1,000 (2,205)	1,000 (2,205)	1,000 (2,205)
Option	Aluminum wheel		—	—	○	○	○	—	—	—	○	○
	Cruise control		○	○	○	○	○	○	○	○	○	○
	Leather package		—	—	○	○	○	—	—	—	○	○
	Genuine leather seat		—	—	—	—	—	—	—	—	—	—
	High grade audio		—	—	○	○	—	—	—	—	○	○
	Navigation		—	—	—	—	○	—	—	—	—	—
	Satellite tuner		—	—	—	—	○	—	—	—	—	—
	Rear disc brake		—	○	○	○	○	○	—	○	○	○
	Satellite SW		—	—	○	○	○	—	—	—	○	○
	Side airbag		○	○	○	○	○	○	○	○	○	○
	Curtain airbag		○	○	○	○	○	○	○	○	○	○
	VDC		—	○	○	○	○	○	—	○	○	○
	Front fog light		—	—	○	○	○	—	—	—	○	○
	Cold weather package		—	—	—	—	—	—	—	—	—	—
	Sunroof		—	—	—	○	○	—	—	—	—	○
Spare tire (standard)		—	—	—	—	—	—	—	—	—	—	

Impreza

SPECIFICATIONS

Model		4 door									
		SOHC						DOHC Turbo			
		2.5 i			2.5 i-S			2.5 GT			
		MT					AT				
OP code		U4	C0	C0	C4	C0	C4	U4	U4	C4	
		VO	NF	IG	IG	IG	IG	KG	ZG	KG	
Curb weight (C.W.)	Total	kg (lb)	1,435 (3,163)	1,425 (3,141)	1,415 (3,119)	1,420 (3,130)	1,445 (3,185)	1,450 (3,196)	1,470 (3,240)	1,470 (3,240)	1,475 (3,251)
	Front	kg (lb)	815 (1,796)	810 (1,785)	790 (1,741)	790 (1,741)	820 (1,807)	820 (1,807)	850 (1,874)	850 (1,874)	850 (1,874)
	Rear	kg (lb)	620 (1,367)	615 (1,356)	625 (1,378)	630 (1,389)	625 (1,378)	630 (1,389)	620 (1,366)	620 (1,366)	625 (1,377)
Gross vehicle weight (G.V.W.)		kg (lb)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)
Gross axle weight (G.A.W.)	Front	kg (lb)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)
	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)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)
Option	Aluminum wheel		○	—	○	○	○	○	○	○	○
	Cruise control		○	○	○	○	○	○	○	○	○
	Leather package		○	—	○	○	○	○	○	○	○
	Genuine leather seat		—	—	—	—	—	—	—	○	—
	High grade audio		—	—	○	○	○	○	○	○	○
	Navigation		○	—	—	—	—	—	—	—	—
	Satellite tuner		○	—	—	—	—	—	—	—	—
	Rear disc brake		○	○	○	○	○	○	—	—	—
	Satellite SW		○	—	○	○	○	○	○	○	○
	Side airbag		○	○	○	○	○	○	○	○	○
	Curtain airbag		○	○	○	○	○	○	○	○	○
	VDC		○	○	○	○	○	○	○	○	○
	Front fog light		○	—	○	○	○	○	○	○	○
	Cold weather package		—	—	○	○	○	○	○	○	○
	Sunroof		○	—	○	○	○	○	○	○	○
Spare tire (standard)		—	—	—	○	—	○	—	—	○	

Impreza

SPECIFICATIONS

Model		4 door									
		DOHC Turbo									
		WRX-S		2.5GT-S		WRX-SS					
		MT		AT		MT					
OP code		C0	C4	C4	C4	U4	U4	U4	C0	C4	
		YJ	KG	KG	YZ	YF	KG	ZG	TG	KG	
Curb weight (C.W.)	Total	kg (lb)	1,430 (3,152)	1,455 (3,207)	1,485 (3,273)	1,460 (3,218)	1,440 (3,174)	1,465 (3,229)	1,465 (3,229)	1,465 (3,229)	1,470 (3,240)
	Front	kg (lb)	820 (1,807)	830 (1,829)	855 (1,885)	845 (1,863)	825 (1,818)	835 (1,840)	835 (1,840)	835 (1,840)	835 (1,840)
	Rear	kg (lb)	610 (1,345)	625 (1,378)	630 (1,388)	615 (1,355)	615 (1,356)	630 (1,389)	630 (1,389)	630 (1,389)	635 (1,400)
Gross vehicle weight (G.V.W.)		kg (lb)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)
Gross axle weight (G.A.W.)	Front	kg (lb)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)
	Rear	kg (lb)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)
Option	Aluminum wheel		○	○	○	○	○	○	○	○	○
	Cruise control		○	○	○	○	○	○	○	○	○
	Leather package		○	○	○	○	○	○	○	○	○
	Genuine leather seat		—	—	—	—	—	—	○	—	—
	High grade audio		—	○	○	—	—	○	○	○	○
	Navigation		—	—	—	—	—	—	—	—	—
	Satellite tuner		—	—	—	—	—	—	—	○	—
	Rear disc brake		—	—	—	—	—	—	—	—	—
	Satellite SW		—	○	○	—	—	○	○	○	○
	Side airbag		○	○	○	○	○	○	○	○	○
	Curtain airbag		○	○	○	○	○	○	○	○	○
	VDC		○	○	○	○	○	○	○	○	○
	Front fog light		○	○	○	○	—	○	○	○	○
	Cold weather package		○	○	○	—	—	○	○	○	○
	Sunroof		—	○	○	—	—	○	○	○	○
Spare tire (standard)		—	○	○	○	—	—	—	—	○	

Impreza

SPECIFICATIONS

Model		5 door										
		SOHC										
		2.5 i										
		MT					AT					
OP code		U4	U4	U4	U4	U4	C0	U4	U4	U4	U4	
		FW	NF	IZ	IO	VO	NF	FW	NF	IZ	IO	
Curb weight (C.W.)	Total	kg (lb)	1,390 (3,064)	1,395 (3,075)	1,385 (3,053)	1,405 (3,097)	1,405 (3,097)	1,395 (3,075)	1,420 (3,130)	1,425 (3,141)	1,415 (3,119)	1,435 (3,163)
	Front	kg (lb)	780 (1,719)	780 (1,719)	775 (1,708)	785 (1,730)	785 (1,730)	780 (1,719)	810 (1,785)	810 (1,785)	805 (1,774)	815 (1,796)
	Rear	kg (lb)	610 (1,345)	615 (1,356)	610 (1,345)	620 (1,367)	620 (1,367)	615 (1,356)	610 (1,345)	615 (1,356)	610 (1,345)	620 (1,367)
Gross vehicle weight (G.V.W.)		kg (lb)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)
Gross axle weight (G.A.W.)	Front	kg (lb)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)
	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)	1,000 (2,205)	1,000 (2,205)	1,000 (2,205)	1,000 (2,205)
Option	Aluminum wheel		—	—	○	○	○	—	—	—	○	○
	Cruise control		○	○	○	○	○	○	○	○	○	○
	Leather package		—	—	○	○	○	—	—	—	○	○
	Genuine leather seat		—	—	—	—	—	—	—	—	—	—
	High grade audio		—	—	○	○	—	—	—	—	○	○
	Navigation		—	—	—	—	○	—	—	—	—	—
	Satellite tuner		—	—	—	—	○	—	—	—	—	—
	Rear disc brake		—	○	○	○	○	○	—	○	○	○
	Satellite SW		—	—	○	○	○	—	—	—	○	○
	Side airbag		○	○	○	○	○	○	○	○	○	○
	Curtain airbag		○	○	○	○	○	○	○	○	○	○
	VDC		—	○	○	○	○	○	—	○	○	○
	Front fog light		—	—	○	○	○	—	—	—	○	○
	Cold weather package		—	—	—	—	—	—	—	—	—	—
	Sunroof		—	—	—	○	○	—	—	—	—	○
Spare tire (standard)		—	—	—	—	—	—	—	—	—	—	

Impreza

SPECIFICATIONS

Model		5 door										
		SOHC								DOHC Turbo		
		2.5 i		2.5 i-S				OUTBACK SPORT		2.5 GT		
		MT				AT		MT	AT			
OP code		U4	C0	C0	C4	C0	C4	U4	U4	U4	U4	
		VO	NF	IG	IG	IG	IG	KJ	KJ	KG	ZG	
Curb weight (C.W.)	Total	kg (lb)	1,435 (3,163)	1,425 (3,141)	1,415 (3,119)	1,420 (3,130)	1,445 (3,185)	1,450 (3,196)	1,410 (3,108)	1,440 (3,174)	1,470 (3,240)	1,470 (3,240)
	Front	kg (lb)	815 (1,796)	810 (1,785)	790 (1,741)	790 (1,741)	820 (1,807)	820 (1,807)	790 (1,741)	820 (1,807)	850 (1,874)	850 (1,874)
	Rear	kg (lb)	620 (1,367)	615 (1,356)	625 (1,378)	630 (1,389)	625 (1,378)	630 (1,389)	620 (1,367)	620 (1,367)	620 (1,366)	620 (1,366)
Gross vehicle weight (G.V.W.)		kg (lb)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,950 (4,299)	1,990 (4,387)	1,990 (4,387)
Gross axle weight (G.A.W.)	Front	kg (lb)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	990 (2,183)	1,020 (2,249)	1,020 (2,249)
	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)	1,000 (2,205)	1,000 (2,205)	1,030 (2,271)	1,030 (2,271)
Option	Aluminum wheel		○	—	○	○	○	○	○	○	○	○
	Cruise control		○	○	○	○	○	○	○	○	○	○
	Leather package		○	—	○	○	○	○	○	○	○	○
	Genuine leather seat		—	—	—	—	—	—	—	—	—	○
	High grade audio		—	—	○	○	○	○	○	○	○	○
	Navigation		○	—	—	—	—	—	—	—	—	—
	Satellite tuner		○	—	—	—	—	—	—	—	—	—
	Rear disc brake		○	○	○	○	○	○	—	—	—	—
	Satellite SW		○	—	○	○	○	○	○	○	○	○
	Side airbag		○	○	○	○	○	○	○	○	○	○
	Curtain airbag		○	○	○	○	○	○	○	○	○	○
	VDC		○	○	○	○	○	○	○	○	○	○
	Front fog light		○	—	○	○	○	○	○	○	○	○
	Cold weather package		—	—	○	○	○	○	○	○	○	○
Sunroof		○	—	○	○	○	○	—	—	○	○	
Spare tire (standard)		—	—	—	○	—	○	—	—	—	—	

Impreza

SPECIFICATIONS

Model		5 door										
		DOHC Turbo										
		2.5 GT	WRX-S		2.5GT-S		WRX-SS					
		AT	MT		AT		MT					
OP code		C4	C0	C4	C4	C4	U4	U4	U4	C0	C4	
		KG	YJ	KG	KG	YZ	YF	KG	ZG	TG	KG	
Curb weight (C.W.)	Total	kg (lb)	1,475 (3,251)	1,430 (3,152)	1,455 (3,207)	1,485 (3,273)	1,460 (3,218)	1,440 (3,174)	1,465 (3,229)	1,465 (3,229)	1,465 (3,229)	1,470 (3,240)
	Front	kg (lb)	850 (1,874)	820 (1,807)	830 (1,829)	855 (1,885)	845 (1,863)	825 (1,818)	835 (1,840)	835 (1,840)	835 (1,840)	835 (1,840)
	Rear	kg (lb)	625 (1,377)	610 (1,345)	625 (1,378)	630 (1,388)	615 (1,355)	615 (1,356)	630 (1,389)	630 (1,389)	630 (1,389)	635 (1,400)
Gross vehicle weight (G.V.W.)		kg (lb)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)	1,990 (4,387)
Gross axle weight (G.A.W.)	Front	kg (lb)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)	1,020 (2,249)
	Rear	kg (lb)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)	1,030 (2,271)
Option	Aluminum wheel		○	○	○	○	○	○	○	○	○	○
	Cruise control		○	○	○	○	○	○	○	○	○	○
	Leather package		○	○	○	○	○	○	○	○	○	○
	Genuine leather seat		—	—	—	—	—	—	—	○	—	—
	High grade audio		○	—	○	○	—	—	○	○	○	○
	Navigation		—	—	—	—	—	—	—	—	—	—
	Satellite tuner		—	—	—	—	—	—	—	—	○	—
	Rear disc brake		—	—	—	—	—	—	—	—	—	—
	Satellite SW		○	—	○	○	—	—	○	○	○	○
	Side airbag		○	○	○	○	○	○	○	○	○	○
	Curtain airbag		○	○	○	○	○	○	○	○	○	○
	VDC		○	○	○	○	○	○	○	○	○	○
	Front fog light		○	○	○	○	○	—	○	○	○	○
	Cold weather package		○	○	○	○	—	—	○	○	○	○
	Sunroof		○	—	○	○	—	—	○	○	○	○
Spare tire (standard)		○	—	○	○	○	—	—	—	—	○	

1. Precaution

A: CAUTION

Please clearly understand and adhere to the following general precautions for environmental protection and 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 parts which are not instructed in this manual. Follow the directions in this manual when performing maintenance on the ABS/SCM&H/U. When parts other than those specified are disassembled, it is possible that the ABS system will not operate when needed or cause it to operate incorrectly and result in injury.

2. VEHICLE DYNAMICS CONTROL (VDC)

Handle the VDC as a total system. Do not disassemble or attempt to repair individual parts. Follow the directions in this manual when performing maintenance on the VDCCM&H/U. When parts other than those specified are disassembled, it is possible that the VDC system will not operate when needed or cause it to operate incorrectly and result in injury.

3. BRAKE FLUID

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

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

4. RADIATOR FAN

The radiator 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.

5. ROAD TEST

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

6. AIRBAG

To prevent bodily injury from unexpected deployment of airbags and unnecessary maintenance, follow the instructions in this manual when performing maintenance on or near the airbag components, around front of the vehicle (radiator panel, front wheel apron, front side frame, front bumper, front hood, front fender), around side of the vehicle (front door, rear door, center pillar, rear fender, side sill, rear wheel apron), around rear of the vehicle (rear seat cushion, rear floor, rear crossmember), and on or near the airbag wiring harnesses.

To prevent unexpected deployment, turn the ignition switch to OFF and disconnect the ground cable from battery, then wait at least 20 seconds before starting work.

7. AIRBAG DISPOSAL

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

8. AIRBAG MODULE

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

- Do not hold the 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.

9. AIRBAG SPECIAL TOOL

To prevent unexpected deployment, only use special tools.

10.WINDOW

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

11.WINDOW ADHESIVE

Always use the recommended or equivalent adhesive when attaching glass to prevent it from coming falling, resulting in accidents and injury.

12.OIL

When handling oil, adhere to the following to prevent unexpected accident.

- Prepare a container and cloth to prevent scattering of oil when performing work where oil can be spilled. If the oil spills, wipe it off immediately to prevent from penetrating into floor or flowing out for environmental protection.
- Follow all government and local regulations concerning disposal of refuse when disposing.

13.FUEL

When handling and storing fuel, adhere to the following to prevent from unexpected accident.

- Be careful with fire.
- Prepare a container and cloth to prevent scattering of fuels when performing work where fuels can be spilled. If the fuel spills, wipe it off immediately to prevent from penetrating into floor or flowing out for environmental protection.
- Follow all government and local regulations concerning disposal of refuse when disposing.

14.ENGINE COOLANT

When handling engine coolant, adhere to the following to prevent from unexpected accident.

- Never remove the radiator cap since engine coolant may blow out when it is hot.
- Prepare a container and cloth to prevent scattering of engine coolant when performing work where engine coolant can be spilled. If the fuel spills, wipe it off immediately to prevent from penetrating into floor or flowing out for environmental protection.
- Follow all government and local regulations concerning disposal of refuse when disposing.

15.AIR CONDITIONER REFRIGERANT

In order to prevent from global warming, avoid releasing air conditioner refrigerant into the atmosphere. Using a refrigerant recovery system, discharge and recycle it.

Precaution

PRECAUTION

1. Note

A: NOTE

This information will improve the efficiency of maintenance and assure that the finished work is of a good quality.

1. FASTENERS NOTICE

Fasteners must be tightened to the specified torque.

Do not apply paint, lubricant, rust retardant or other substance to the surface around bolts, nuts, etc. Doing so will make it difficult to obtain the correct torque and result in looseness and other problem.

2. STATIC ELECTRICITY DAMAGE

Always touch grounded metal for the elimination of static electricity before conducting work.

3. BATTERY

When removing the battery cables, always be sure to turn the ignition switch to OFF.

4. SERVICE PARTS

Use genuine parts for maximum performance and maintenance when conducting repairs. Subaru/FHI will not be responsible for poor performance resulting from the use of parts except for genuine parts.

5. PROTECTING VEHICLE UNDER MAINTENANCE

Make sure to attach the fender cover, seat covers, etc. before work.

6. ENSURING SECURITY DURING WORK

When working in a group of two or more, perform the work with calling each other to ensure mutual safety.

7. LIFT AND JACK

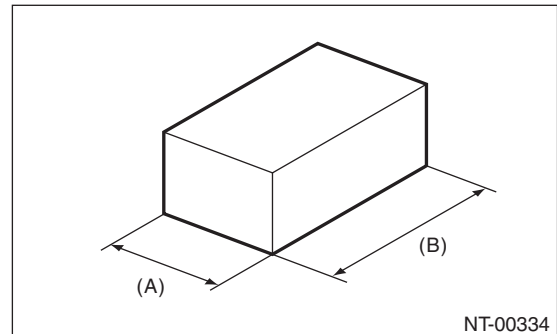
When using a lift or shop jack to raise a vehicle or using rigid rack to support a vehicle, always follow instructions concerning jack-up points and weight limits to prevent the vehicle from falling, which could result in injury. Be especially careful that the vehicle is balanced before raising it. Be sure to set the wheel stoppers when jacking-up only the front or rear side of the vehicle.

CAUTION:

Not to let the side sill cover interfere with the lift arm, use a lift attachment.

NOTE:

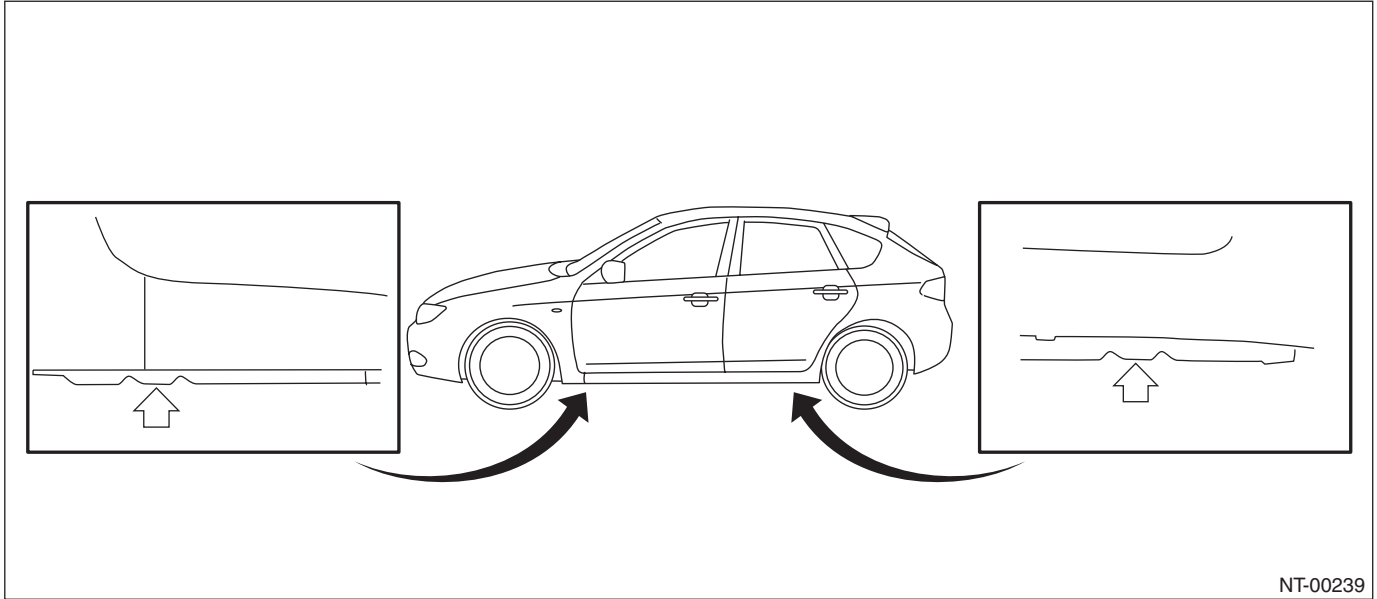
- When using a lift, follow its operation manual before work.
- When using, insert the body flange to the attachment groove.
- When the side sill cover contacts the lift arm, use a lift attachment.
- Do not work or leave unattended while the vehicle is supported with jack, support it with rigid racks.
- Be sure to use the rigid racks with rubber attached to cradle to support the vehicle.
- When using a plate lift, use a rubber attachment. (Model with side sill cover)



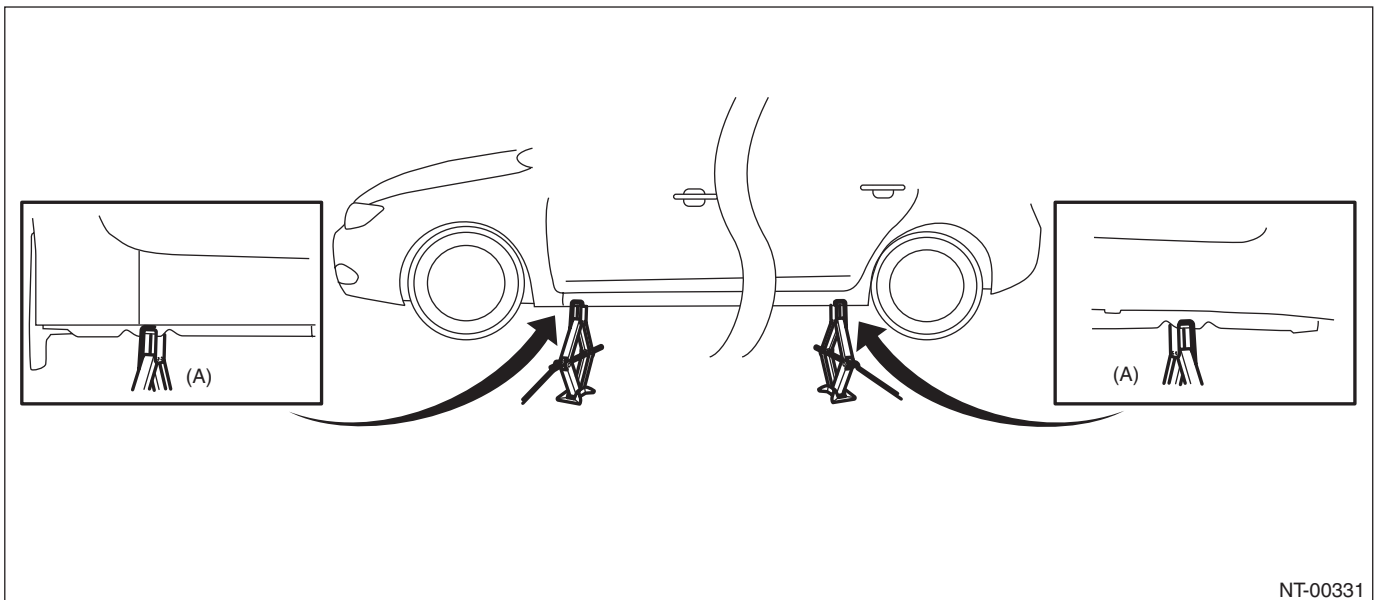
(A) Approx. 100 mm (3.94 in)

(B) 120 — 180 mm (4.72 — 7.01 in)

- Do not use the plate lift whose attachment does not reach the supporting locations. The figure of vehicle indicates the supporting locations, supporting procedures, etc. for 5 door model, and they are same for 4 door model.
Supporting locations



Pantograph jack

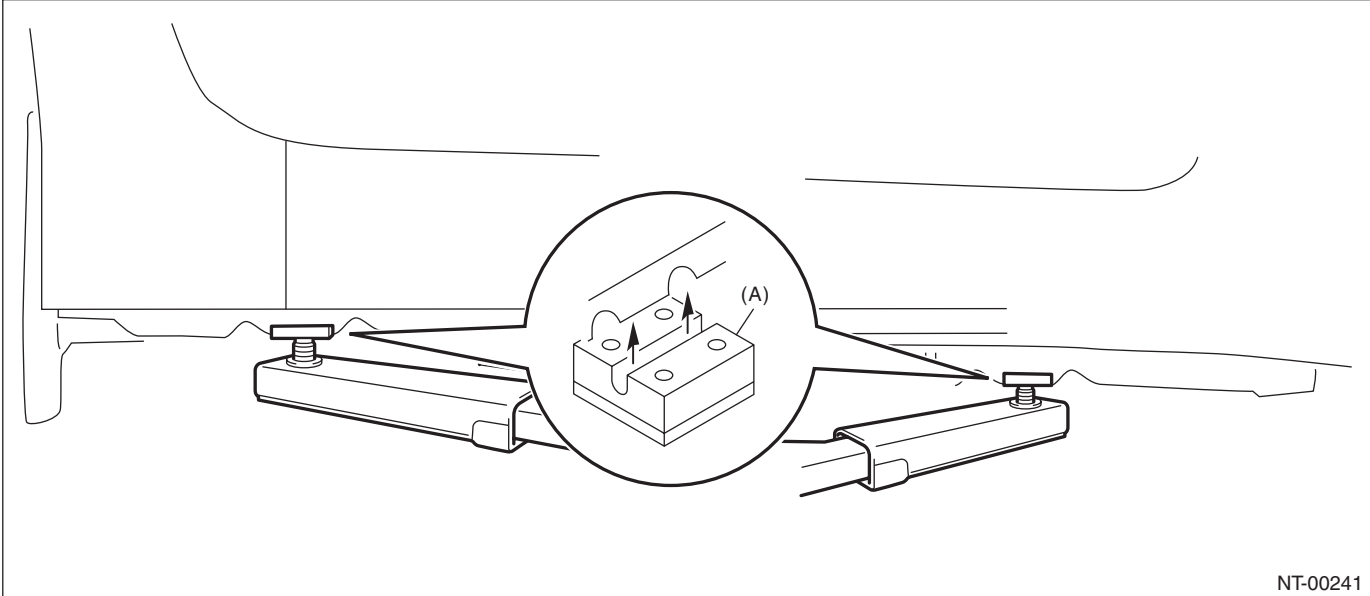


- (A) Set the jacks between cutout portions.

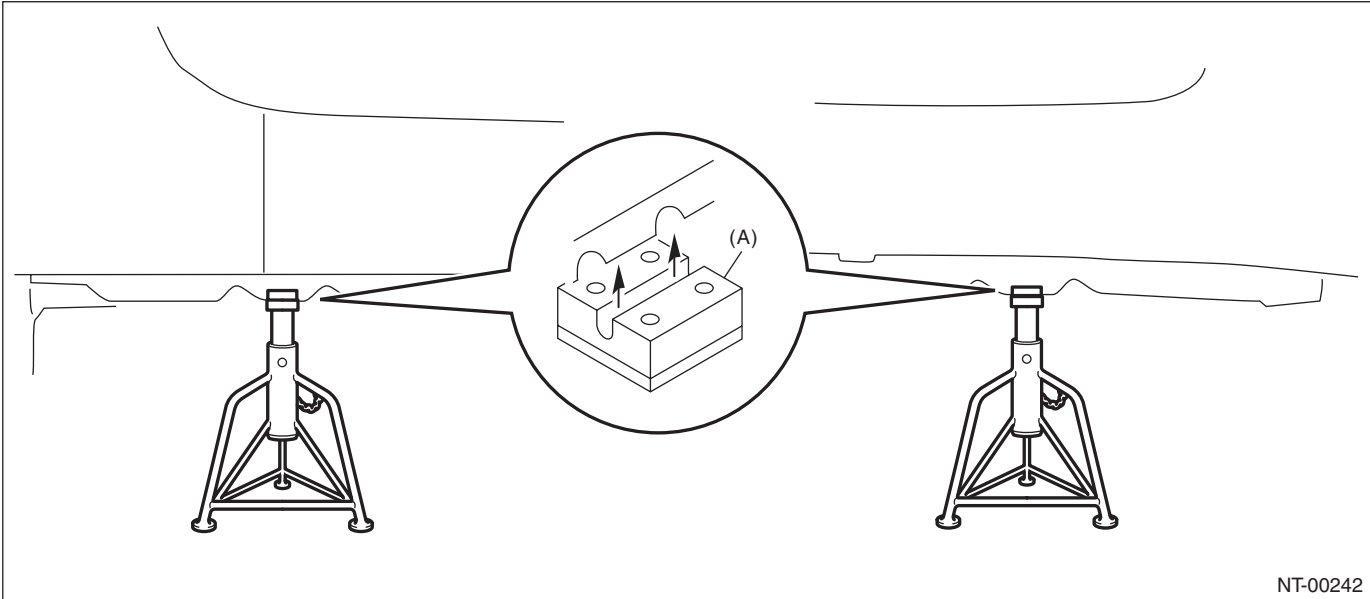
Note

NOTE

Lift

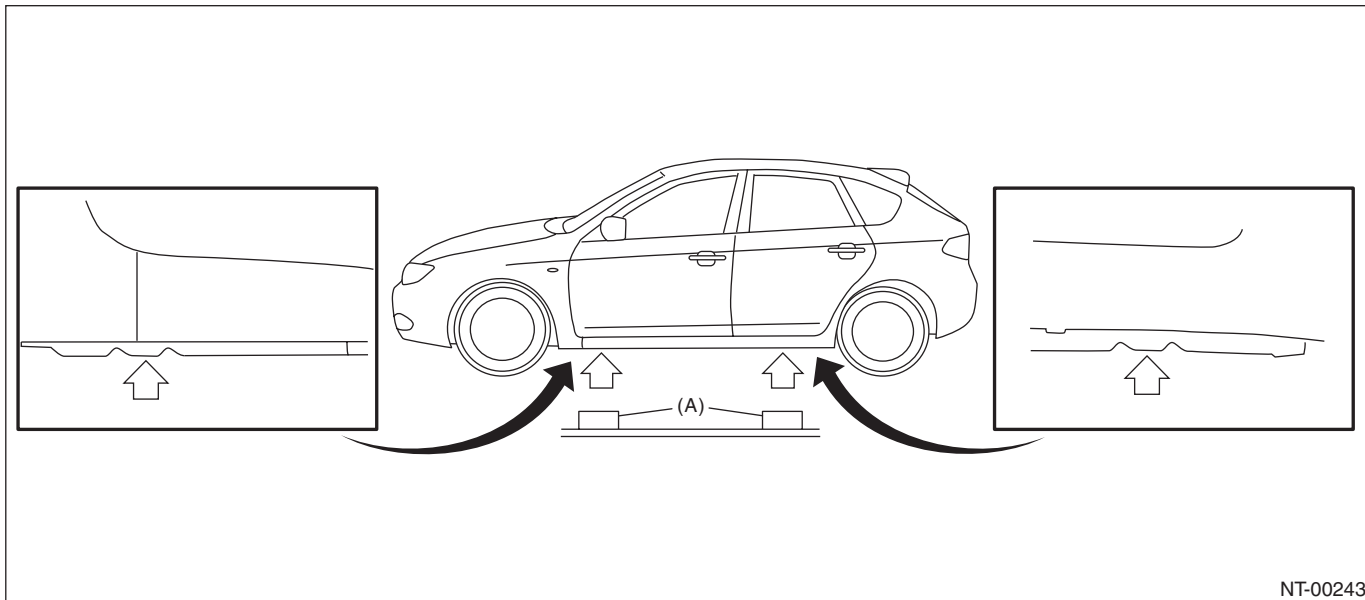


(A) Attachment
Rigid rack



(A) Attachment

Plate lift



NT-00243

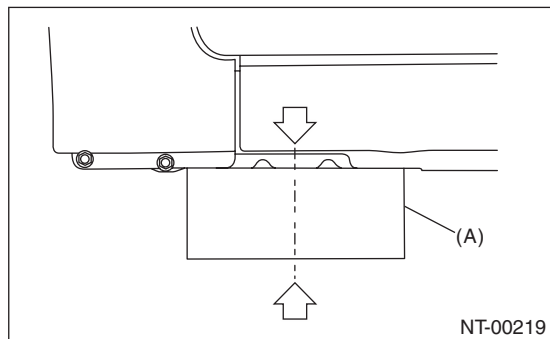
(A) Attachment

- Use the attachment by aligning its position as follows.

- Model without side sill spoiler

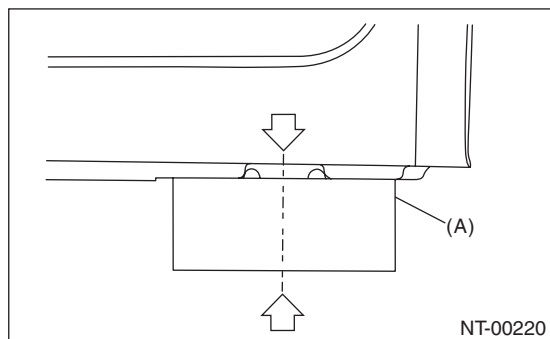
For the models without side sill spoiler, align the center of attachment with the center of cutout portions.

Front



NT-00219

Rear



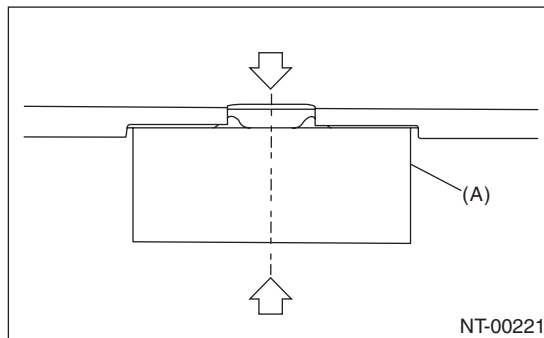
NT-00220

(A) Attachment

- Model with side sill spoiler

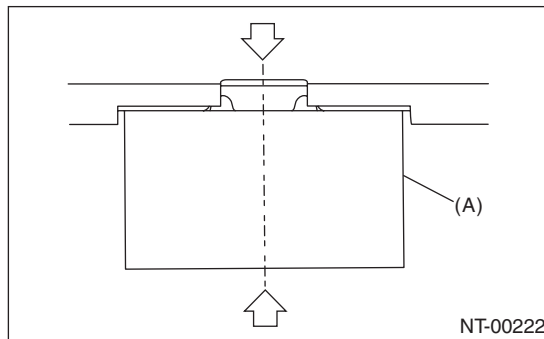
For the models with side sill spoiler, align the center of attachment with the center of vehicle cutout portion (the center of spoiler cutout portion).

Front



NT-00221

Rear

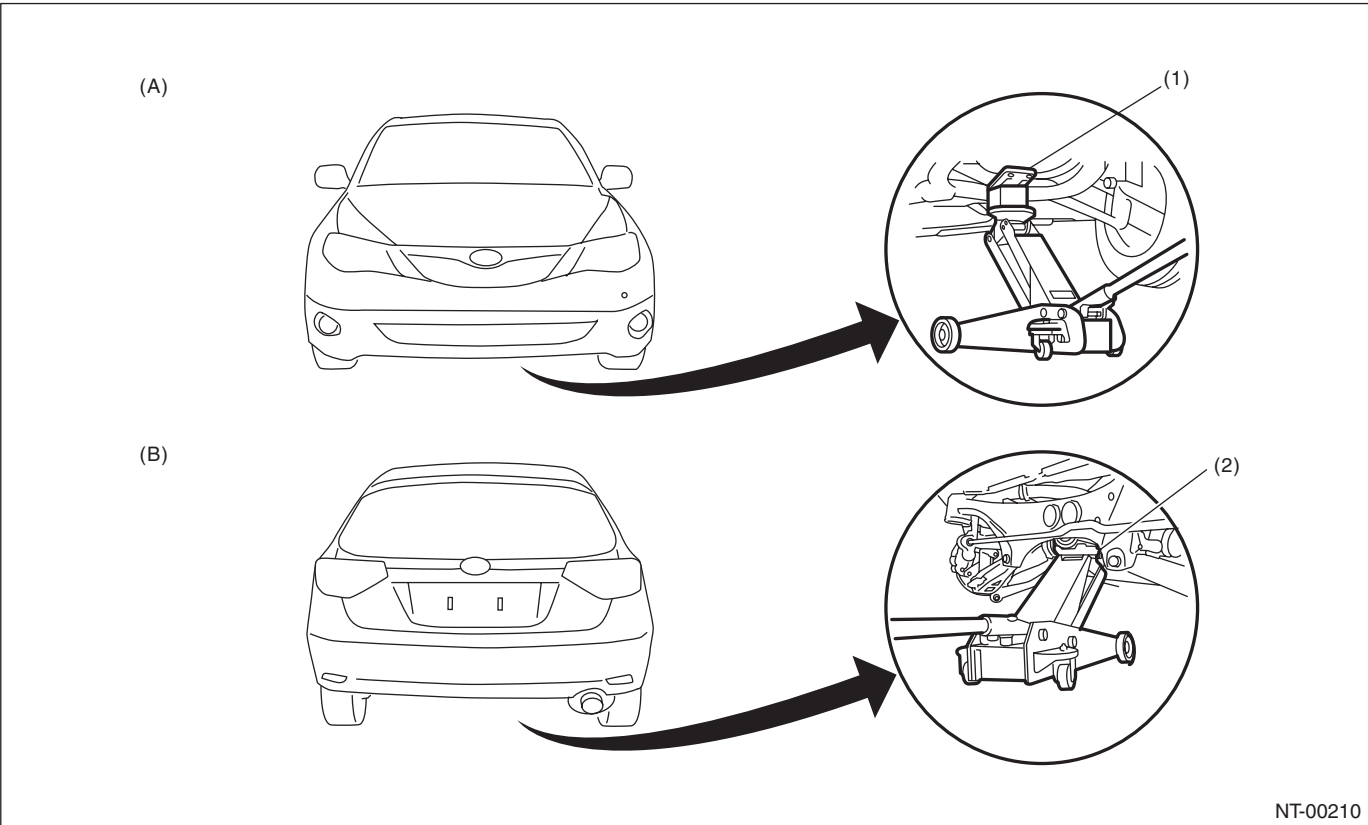


NT-00222

(A) Attachment

Note

NOTE



NT-00210

(A) Front

(B) Rear

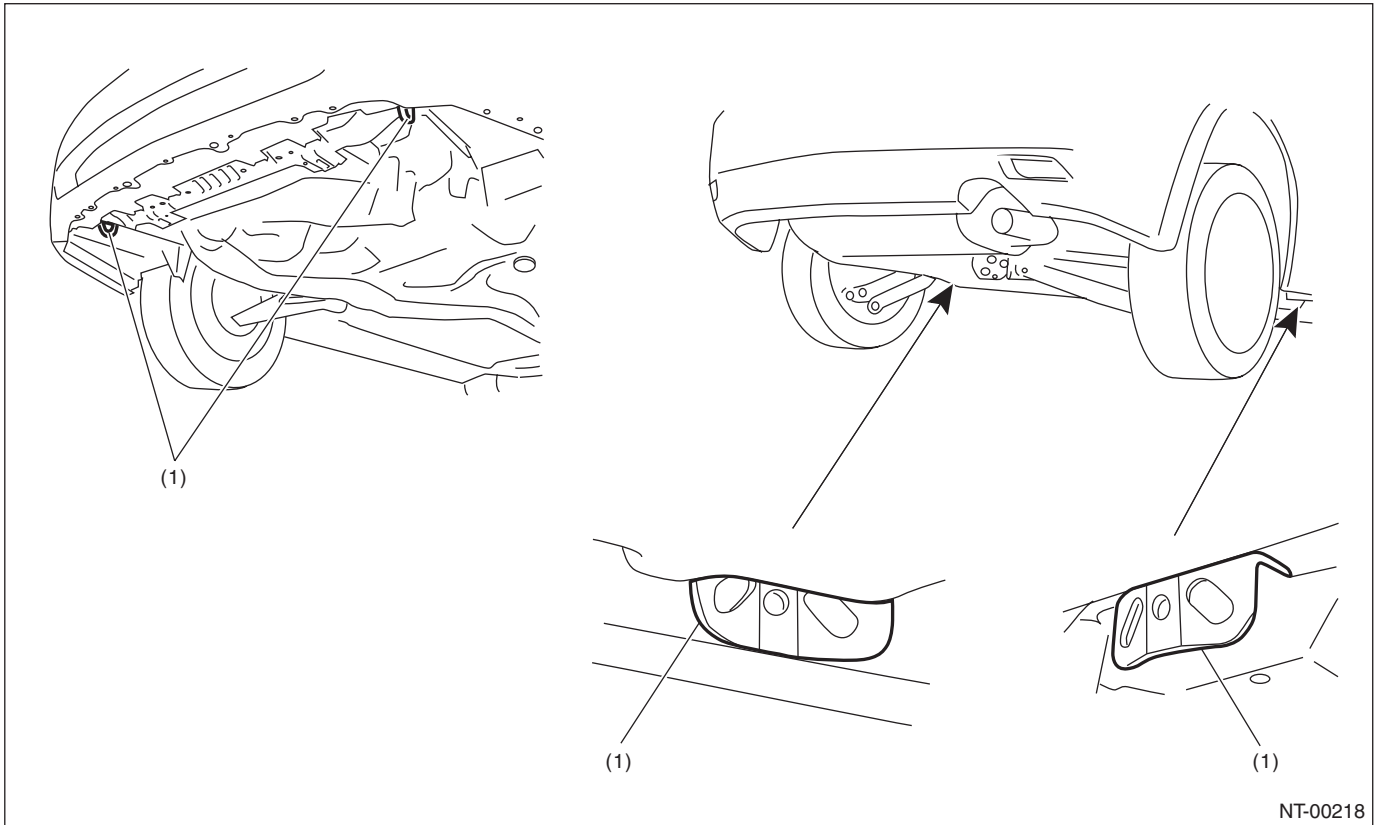
(1) Front crossmember

(2) Rear differential

8. TIE-DOWNS

The tie-down hooks are used when transporting vehicles and when using the chassis dynamo. Attach tie-down only to the specified locations on the vehicle.

- TIE-DOWN LOCATION



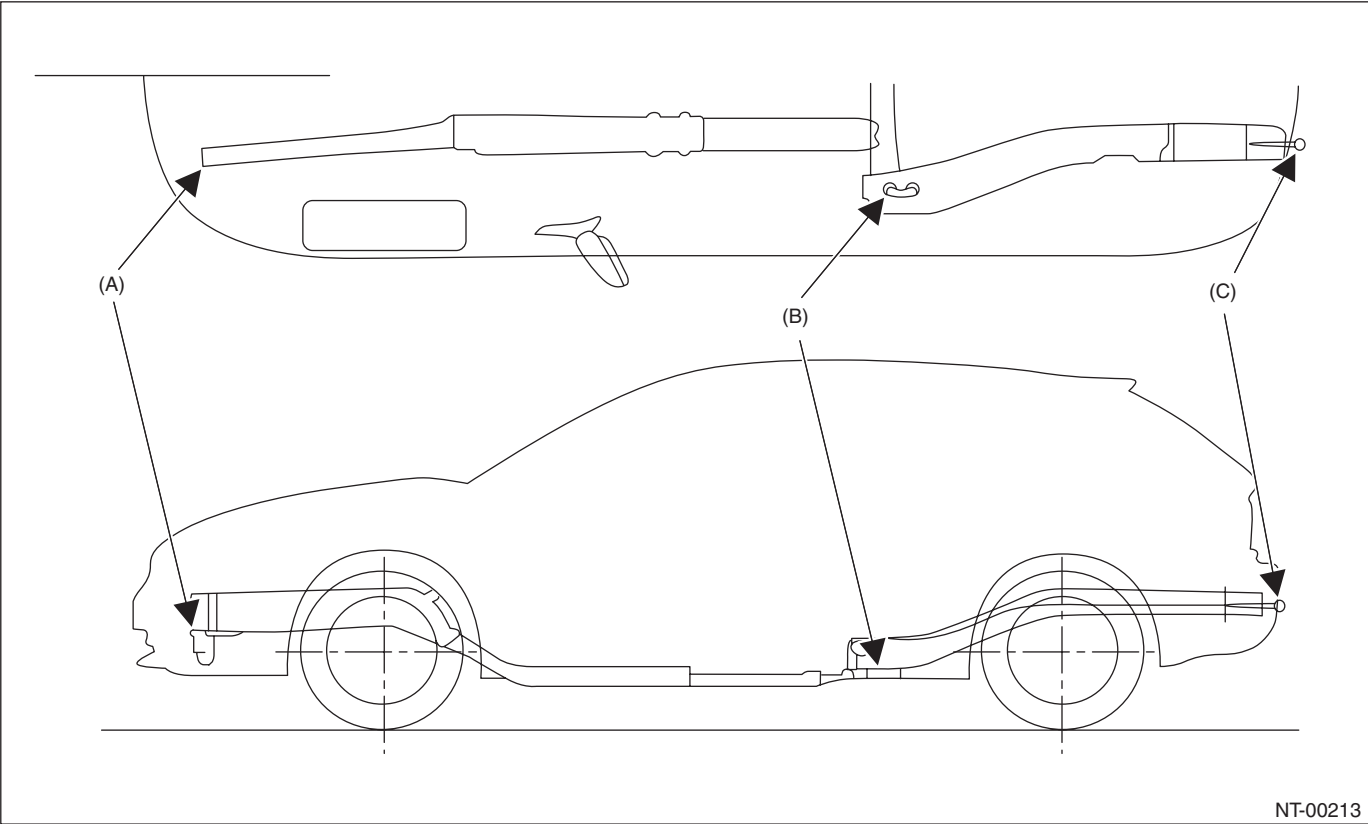
NT-00218

(1) Hook for tie-down

Note

NOTE

- TIE-DOWN HOOK & EYE BOLT



(A) Front tie-down hook

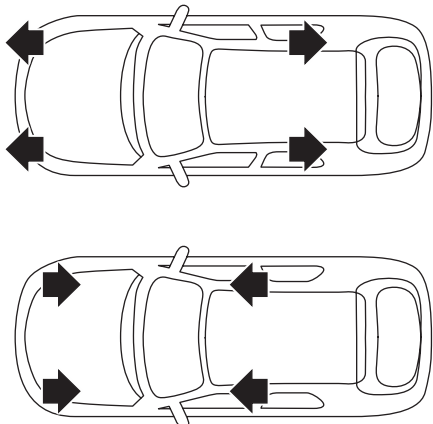
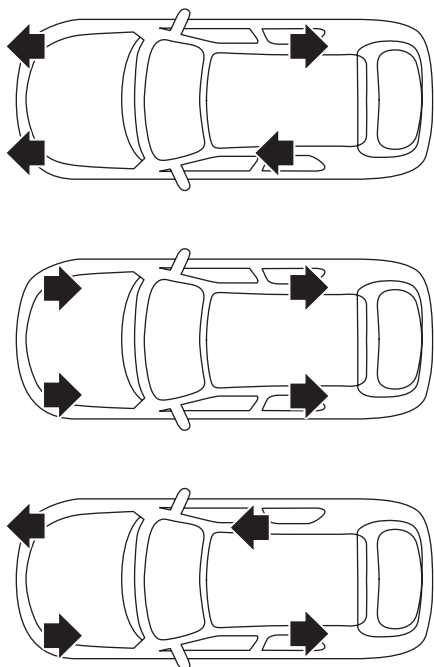
(B) Rear tie-down hook

(C) Eye bolt

• TIE-DOWN DIRECTION

CAUTION:

Pull the tie-down chains LH and RH in the same direction, but front and rear side in the counter direction.

	Recommended	NG
Tie-down direction	 <p data-bbox="812 1018 909 1050">NT-00214</p>	 <p data-bbox="1380 1018 1477 1050">NT-00215</p>

Note

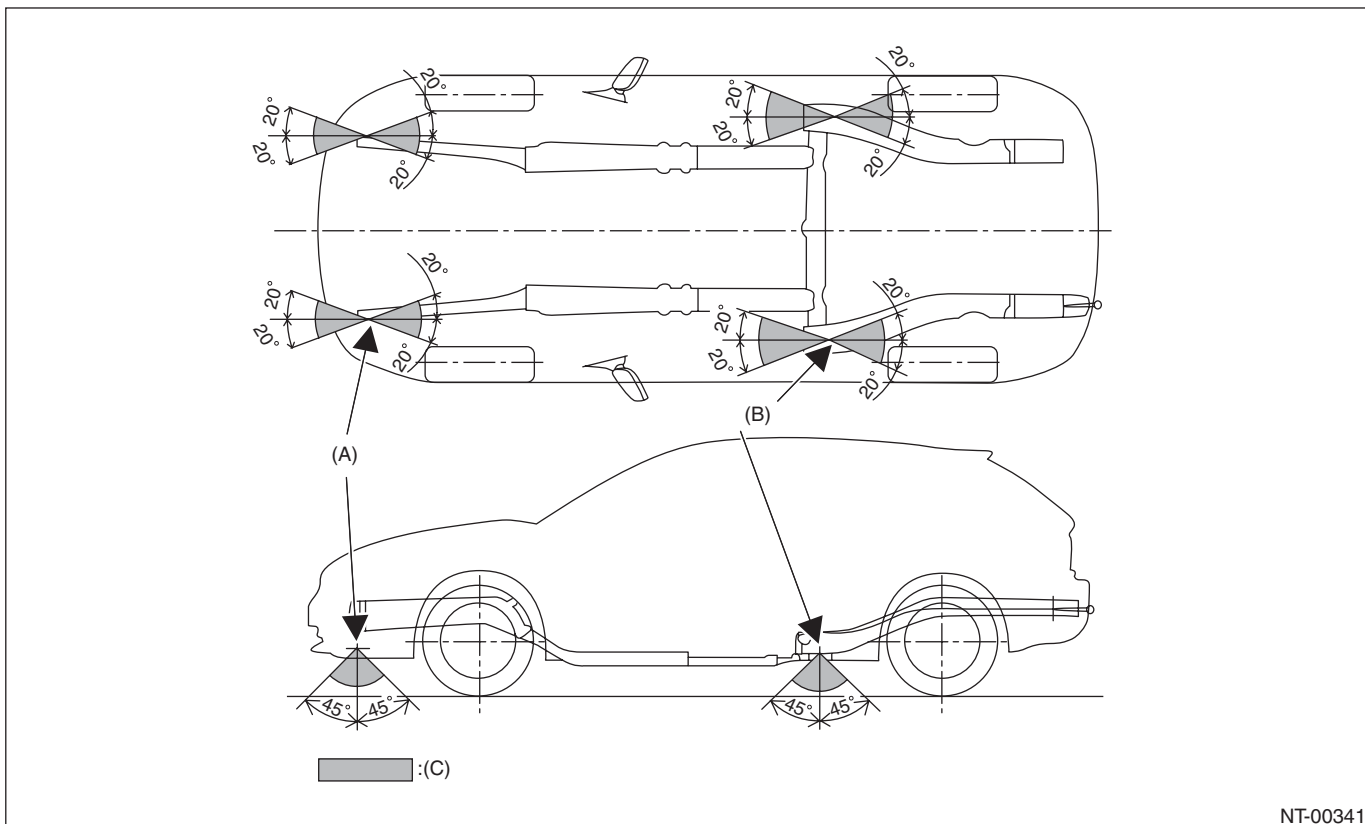
NOTE

• TIE-DOWN RANGE

For ground transportation

CAUTION:

When the vehicle is tied down from vehicle inside, hook the hooks of tie-down chain on the rear tie-down hooks from vehicle inside. When the vehicle is tied down from vehicle outside, hook the hooks of tie-down chain on the rear tie-down hooks from vehicle outside.



NT-00341

(A) Front tie-down hook

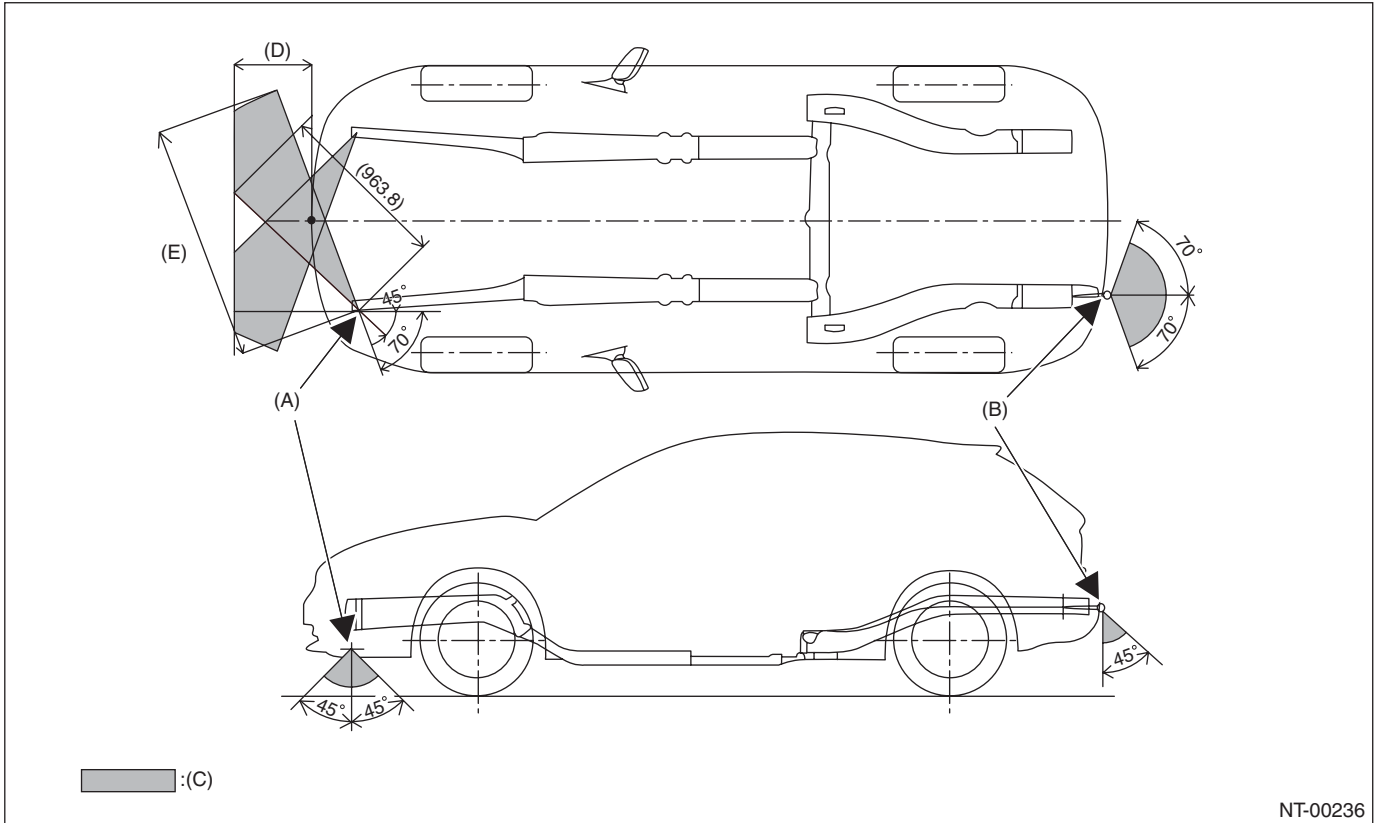
(B) Rear tie-down hook

(C) Chain pulling range at tie-down condition

For sea transportation

CAUTION:

The eye bolts are exclusively used for towing and sea transportation tie-down, and do not use them for ground and freight transportation.



- (A) Front tie-down hook
- (B) Eye bolt

- (C) Chain pulling range at tie-down condition

- (D) 400 mm (15.7 in)
- (E) 1,320 mm (52.0 in)

Note

NOTE

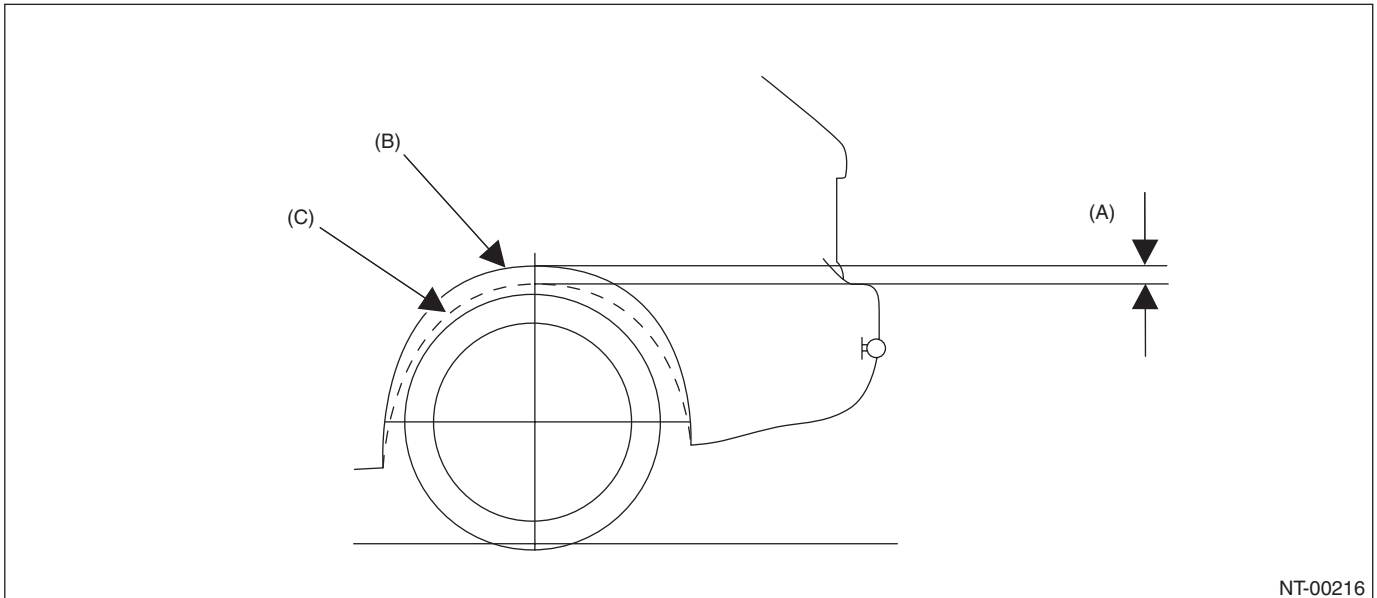
• VEHICLE SINKING VOLUME AT TIE-DOWN CONDITION

CAUTION:

The vehicle sinking volume at tie-down condition should be less than 50 mm (1.97 in) and make sure to fix the vehicle securely.

Check to see if the tensions of chains or belts at tie-down condition are appropriate in the following procedures.

- 1) Measure the distance (A) between the center of wheel and highest arch point.
- 2) Compare the measured dimensions of before and after tie-down.
- 3) If the difference is less than 50 mm (1.97 in), it is judged as OK. If the difference is 50 mm (1.97 in) or more, it is judged as NG because the tension is too high.



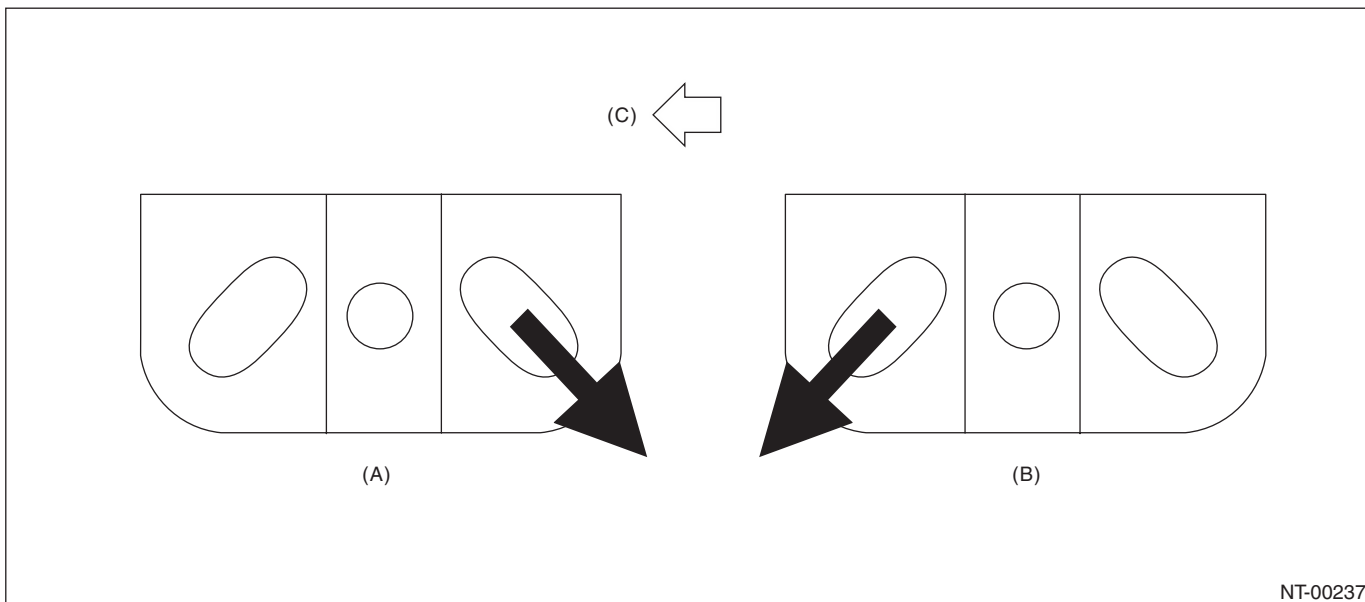
(B) Arch position before tie-down

(C) Arch position after tie-down

• NOTES FOR THE USE OF TIE-DOWN HOOK

When the vehicle is tied down from the rear side, use the holes at the rear side, and when the vehicle is tied down from the front side, use the holes at the front side.

When the vehicle is tied down from vehicle inside, hook the hooks of tie-down chain from vehicle inside, and when the vehicle is tied down from vehicle outside, hook the hooks of tie-down chain from vehicle outside.



NT-00237

(A) When the vehicle is tied down towards the rear side

(B) When the vehicle is tied down towards the front side

(C) Vehicle front

Note

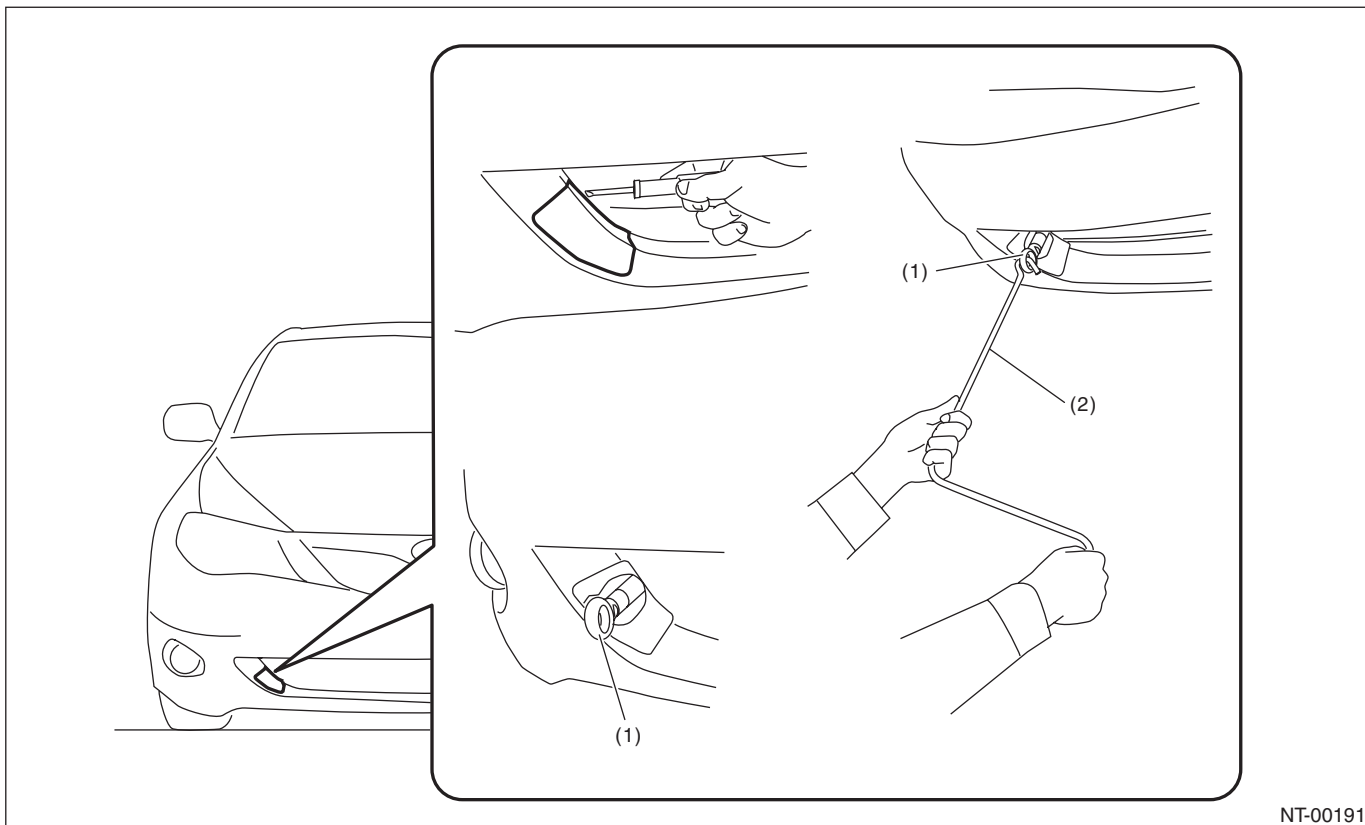
NOTE

9. TOWING

Avoid towing vehicles except when the vehicle cannot be driven. For models with AWD and AT, use a car carrier truck instead of towing. When towing other vehicles, pay attention to the following to prevent hook or vehicle damage resulting from excessive weight.

- Do not tow other vehicles with a front tie-down hook.
- Make sure the vehicle towing is heavier than the vehicle being towed.

• FRONT

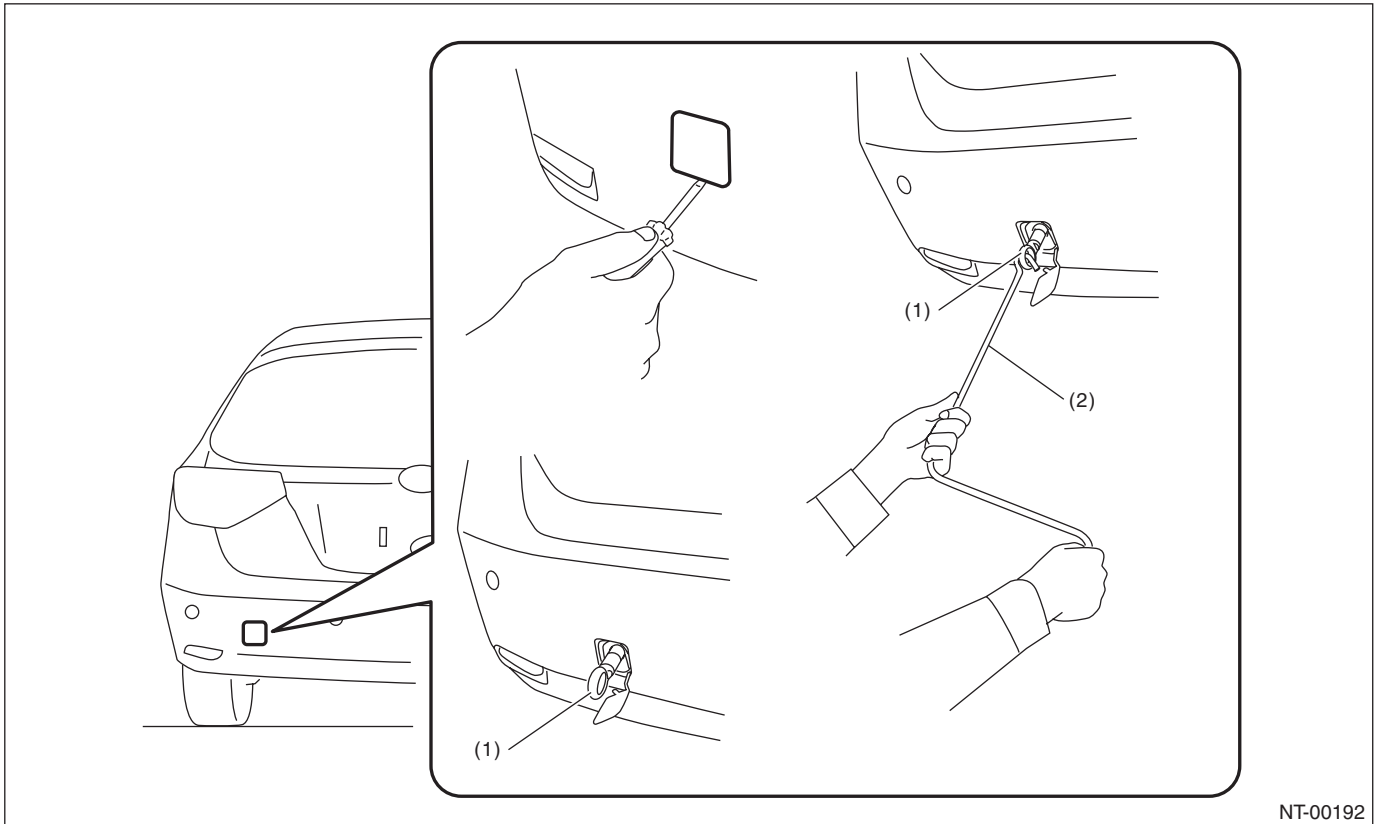


NT-00191

(1) Eye bolt

(2) Jack handle

• REAR

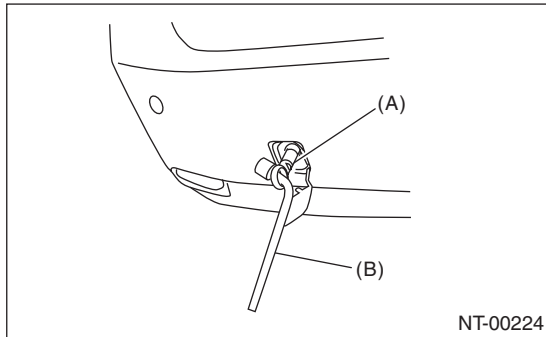


(1) Eye bolt

(2) Jack handle

CAUTION:

When tightening the eye bolt using a wheel wrench, be careful not to scratch the bumper.



(A) Eye bolt

(B) Wheel wrench

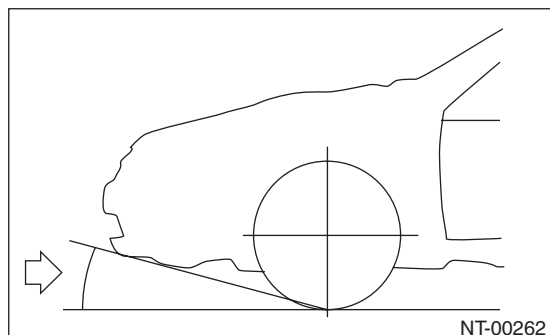
Note

NOTE

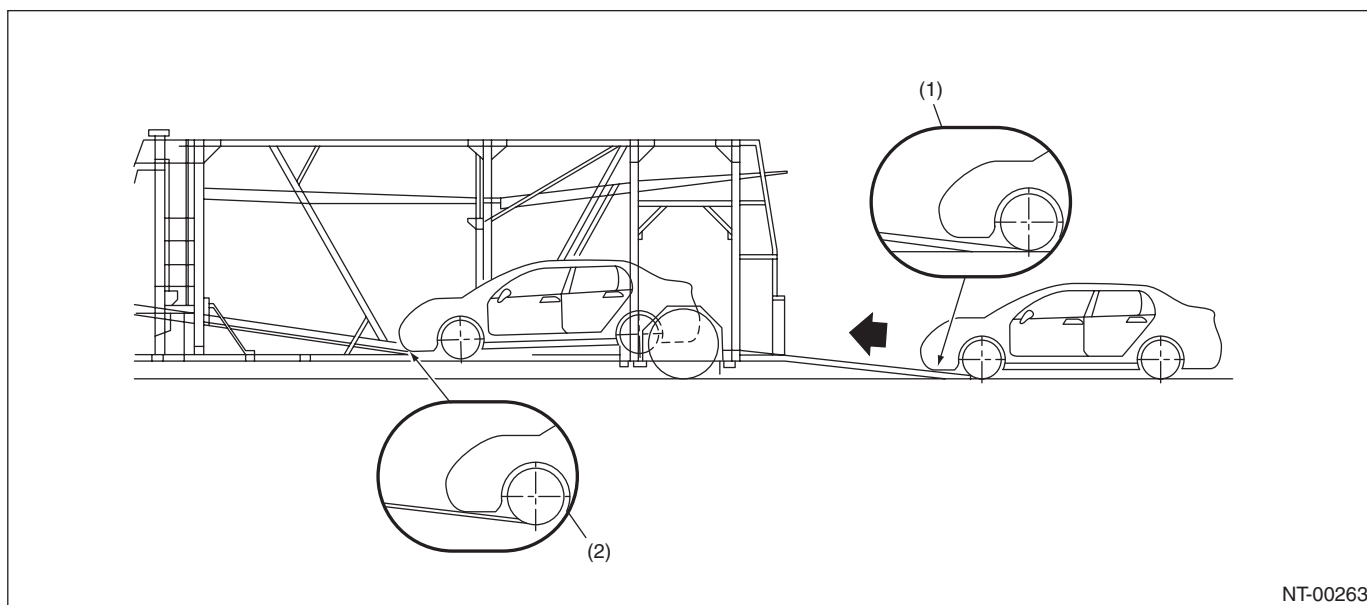
10. LOADING ONTO CAR CARRIER TRUCK

CAUTION:

- When carrying the vehicle onto a car carrier truck, perform the operation being careful with the gap between the height of the carrier's floor and the vehicle lower side because of little clearance under the front bumper.



- Use a supporting board (rubber) where the clearance is too small.
- Perform the operation being careful with the position shown in the figure below.



(1) Use a supporting board (rubber) to ensure clearance from the ramp.

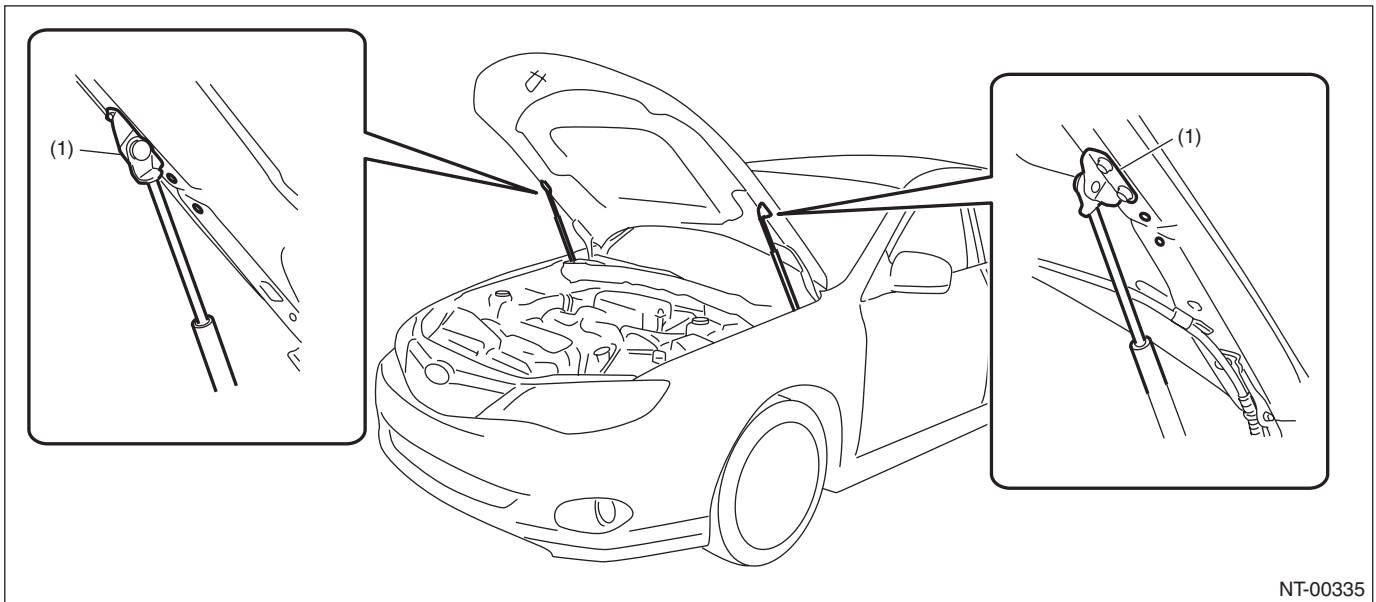
(2) Before carrying the vehicle completely, lower the lower center floor until it is level to make clearance.

11.FRONT HOOD DAMPER STAY

1) Always perform works such as inspections and maintenance with both damper stays attached.

CAUTION:

- At the inspection and general maintenance, do not detach the damper stays.



NT-00335

(1) Normal attached position

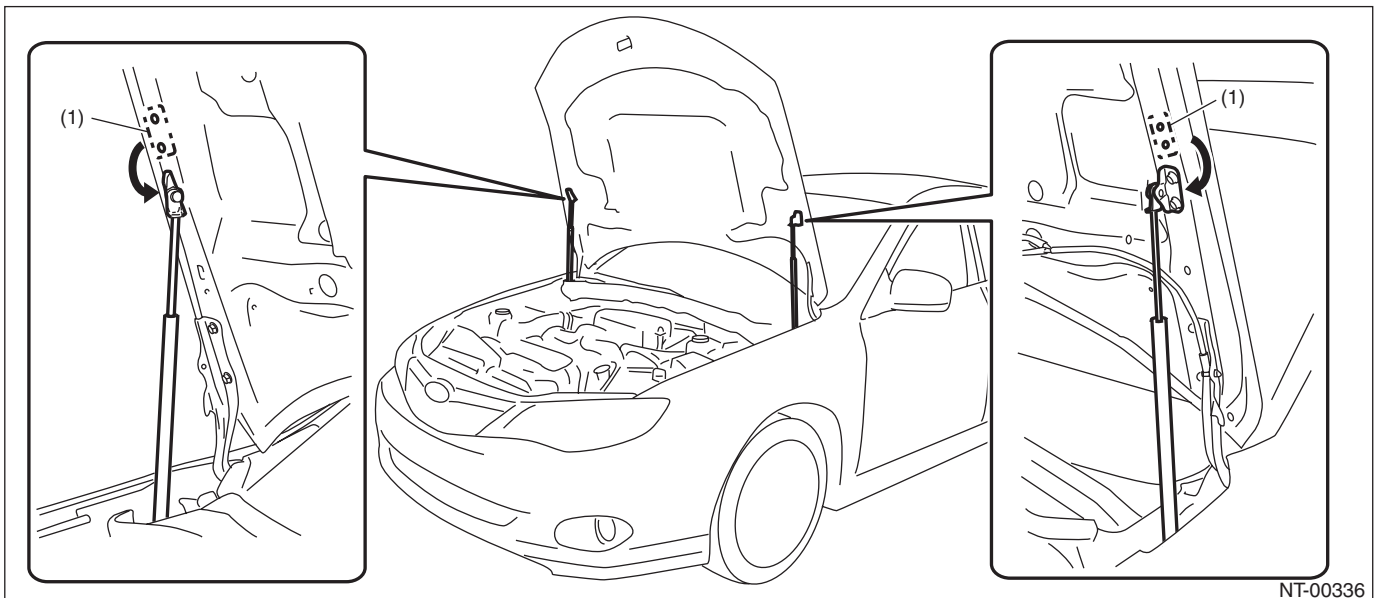
2) When wider hood opening is necessary, set the damper stay below as shown in the figure.

Tightening torque:

<Ref. to EB-8, FRONT HOOD, COMPONENT, General Description.>

CAUTION:

- Always perform works such as inspections and maintenance with both damper stays attached.
- Do not leave one side of damper stay removed.
- The hood cannot be closed with the hood damper on the full open side. When it is necessary to close, tie the hood striker and the radiator panel with a string etc. to fix them.
- After work, set the damper stays back to the normal position and tighten the bolts to the specified torque.



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(1) Normal attached position

NOTE

12. TRAINING

For an information about training, contact a dealer or agent.

13. GENERAL SCAN TOOL

Using general scan tools will greatly improve the efficiency of repairing engine electronic controls. Subaru Select Monitor can be used to diagnose the engine, VDC, AT and other electronically controlled parts.