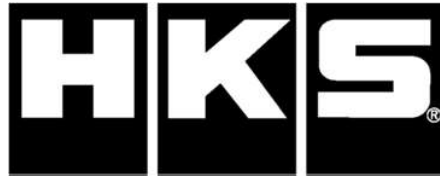


DCT COOLER KIT INSTALLATION MANUAL



NAME OF PRODUCT	DCT COOLER KIT
PART NUMBER	27002-AN005
APPLICATION	NISSAN GT-R (R35)
ENGINE	VR38DETT
YEAR	2016/7~2019/6
REMARKS	<p>【NOTE】</p> <ul style="list-style-type: none"> • The following parts are required in order to install this kit: <ul style="list-style-type: none"> ▪ MT Oil (Approximately 2L) • The front bumper inner air ducts must be modified. • The washer pump harness must be extended. (0.5SQ 1000mm x 2 are required.) • The washer fluid volume will be decreased to 1 liter (from 1.5 liters). • The washer level sensor must be removed. (The warning light does not come on.) • The sound from the factory MT oil pump may be louder. • Installation tool for the pop nut required.

※Application was confirmed as of February, 2020.

REVISION OF MANUAL

Rev. Number	Date	Manual Number	Details
3-3.01	2020/1	E04365-N24020-00	Instruction revised
3-3.02	2020/2	E04365-N24021-00	Component addition

Published in February, 2020 by HKS Co., Ltd. (Unauthorized reproduction is strictly prohibited.)

INDEX

NOTICE.....	23
ATTENTION.....	23
PARTS LIST.....	24
1. Removal of Factory Parts	27
2. Installing the Kit Parts.....	29
2-1 Installing the Oil Line Attachment.....	29
2-2 Installing the Oil Cooler Core.....	30
2-3 Installing the Oil Cooler Core Duct.....	31
2-4 Installing the Washer Tank.....	32
2-5 Modifying the Bumper.....	35
2-6 Installing the Oil Pipes.....	35
2-7 Modifying the Heat Shield.....	41
2-8 Installing the Hose Bracket.....	41
2-9 Refilling the Oil & Oil Leakage Check.....	42
3. Reinstalling Factory Parts	42
4. Confirmation after Installation	42





















NOTICE

This manual assumes that you have and know how to use the tools and equipment necessary to safely perform service operations on your vehicle. This manual assumes that you are familiar with typical automotive systems and basic service and repair procedures. Do not attempt to carry out the operations shown in this manual unless these assumptions are correct. Always have access to a factory repair manual. To avoid injury, follow the safety precautions contained in the factory repair manual.






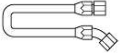
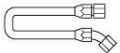
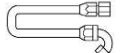
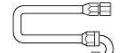











ATTENTION

- This manual indicates items you need to pay attention to in order to install this product safely and lists precautions to avoid any possible damage and/or accidents.
- This product is an automobile part. Do not use for any other purposes.
- HKS will not be responsible for any damage caused by incorrect installation and/or use, or use after modification and/or dismantling of this product.
- This product was designed based on installation onto a specific factory vehicle.
- The specifications of this product are subject to change without notice.
- The instructions are subject to change without notice. Make sure to refer to the most recent instructions.






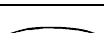


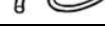
PARTS LIST

NO.	DESCRIPTION	QT	IMAGE	REMARKS
1	Oil Cooler Core	1		
2	Oil Cooler Core Bracket #1	1		
3	Oil Cooler Core Bracket #2	1		
4	Oil Cooler Core Bracket #3	1		
5	Oil Cooler Core Bracket #4	1		
6	Rubber Insulator	6		
7	Insulator Collar	5		
8	Insulator Collar	1		10mm-6mm L13
9	Oil Cooler Core Duct	1		
10	Air Guide Plate	1		
11	Sponge Tape (10mm × 10mm × 300mm)	3		
12	Sponge Tape (20mm × 20mm × 300mm)	3		
13	Washer Tank	1		
14	Washer Tank Hose	1		
15	Hose Clamp #16	3		
16	Oil Line Attachment	1		
17	Pipe #1	1		
18	Pipe #2	1		
19	Pipe #3	1		
20	O-Ring	4		

PARTS LIST

NO.	DESCRIPTION	QT	IMAGE	REMARKS
21	Pipe Bracket #1	1		
22	Pipe Bracket #2	1		
23	Pipe Bracket #3	1		
24	Pipe Bracket #4	1		
25	Collar	2		16mm-6mm L33
26	Hose #1	1		660mm
27	Hose #2	1		690mm
28	Hose #3	1		510mm
29	Hose #4	1		460mm
30	Fire Sleeve	2		500mm
31	Hose Bracket #1	1		
32	Hose Bracket #2	1		
33	Hose Bracket #3	1		
34	Spacer	3		20mm-6mm t5
35	Clamp	4		30 Pitch
36	Clamp	4		33 Pitch
37	Rubber Sheet	1		30mm×500mm t2
38	Tie Wrap	5		
39	Cap Bolt M6 L20	6		
40	Bolt M6 L15	13		

PARTS LIST

NO.	DESCRIPTION	QT	IMAGE	REMARKS
41	Bolt M6 L20	6		
42	Bolt M6 L30	6		
43	Bolt M6 L40	2		
44	Bolt M6 L50	2		
45	Bolt M6 L60	2		
46	Button Bolt M5 L15	8		
47	Button Bolt M4 L10	6		
48	Flat Washer M6	23		
49	Flat Washer M6 Large Dia.	16		
50	Flat Washer M4	12		
51	Nut M4	6		
52	Hose 22mm	1		
53	Tube	1		
54	Pop Nut	4		
55	Joint Pipe 22mm	1		
56	Flange Nut M5	8		
57	Flange Nut M6	23		
58	Hose 4mm	1		
59	Joint Pipe 4mm	1		
60	Installation Manual	1		
61	Instruction Manual	1		

1. Removal of Factory Parts

Before beginning removal of the factory parts, disconnect the negative cable from the battery terminal. Use this instruction manual and the manufacturer's service manual as a reference.

(1) Remove the undercover. (Dia.1-1-1)



NOTE

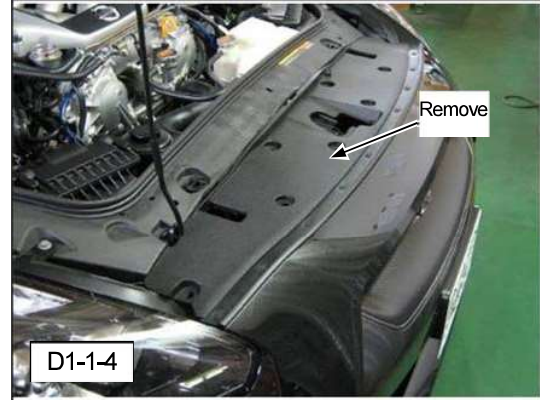
- The bolts for the undercover are underneath the rubber caps. (Dia.1-1-2)



(2) Remove the inner fenders (Left and right side). (Dia.1-1-3)

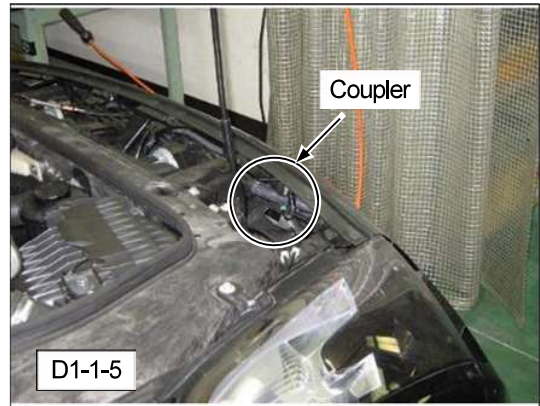


(3) Remove the radiator cover. (Dia.1-1-4)

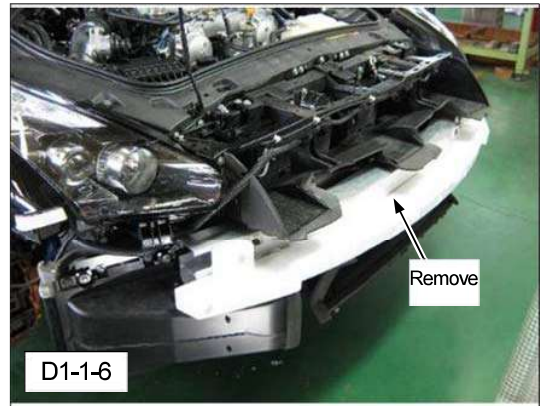


(4) Disconnect the G-sensor coupler (Dia. 1-1-5) and the turn signal couplers (Left and right side).

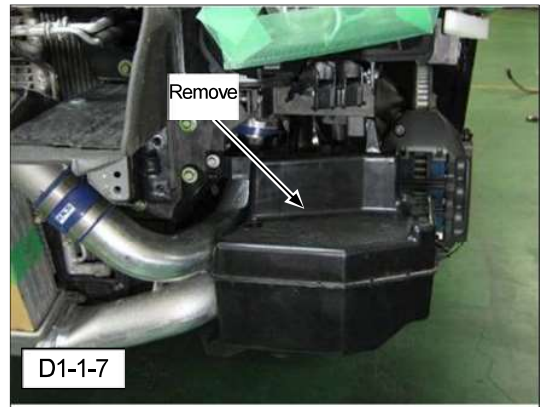
(5) Remove the front bumper.



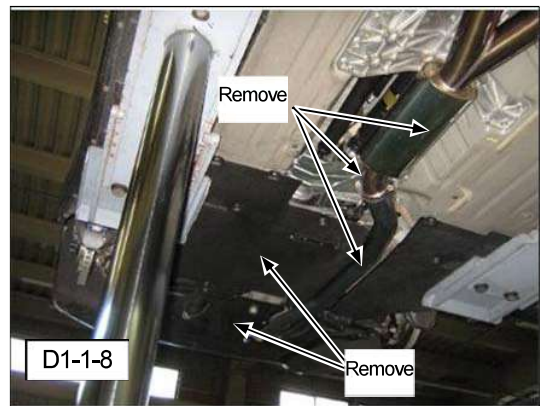
(6) Remove the reinforcement. (Dia.1-1-6)



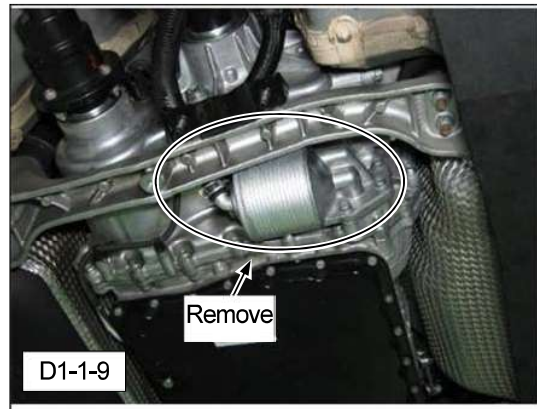
(7) Remove the washer tank. (Dia.1-1-7)



(8) Remove the undercover, mid pipe, and heat shield. If the factory exhaust system is used, remove the main muffler section as well. (Dia.1-1-8)



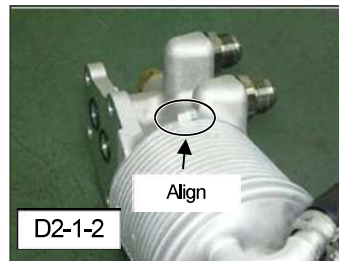
(9) Remove the heat exchanger assembly. (Dia.1-1-9)



2. Installing the Kit Parts

2-1 Installing the Oil Line Attachment

(1) Assemble the Oil Line Attachment to the heat exchanger reusing the O-ring. (Dia. 2-1-1, 2-1-2)

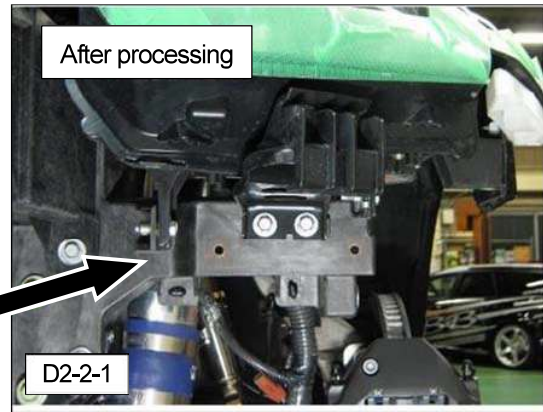
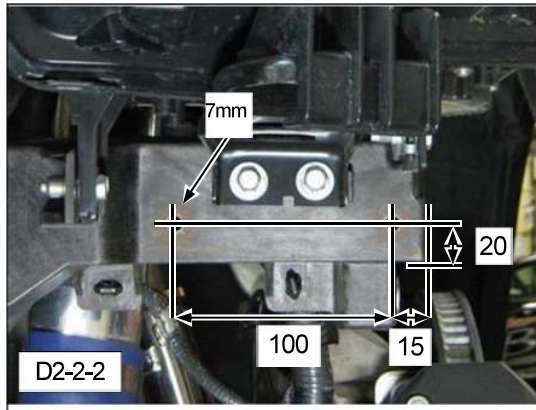


(2) Install the Oil Line Attachment to the vehicle. (Dia.2-1-3)



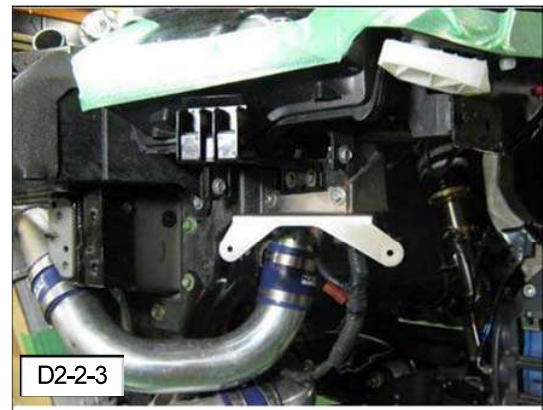
2-2 Installing the Oil Cooler Core

- (1) Drill a 7mm hole as shown in diagrams 2-2-1 and 2-2-2.



- (2) Install Oil Cooler Core Bracket #3 to the vehicle. (Dia. 2-2-3)

- M6 L20 Bolt x 2
- M6 Large Dia. Washer x 4
- M6 Flange Nut x 2



- (3) Install Oil Cooler Core Brackets #1 & #2. (Dia.2-2-4)

- M6 L15 Bolt x 8
- M6 Washer x 8
- M6 Flange Nut x 8

- (4) Install the Rubber Insulator and Insulator Collar to the bracket. (Dia.2-2-4)

- Rubber Insulator x 4
- Insulator Collar x 4



- (5) Install the Oil Cooler Core Assembly to the vehicle. (Dia.2-2-5)

- M6 L30 Bolt x 4
- M6 Large Dia. Washer x 4
- M6 Flange Nut x 4



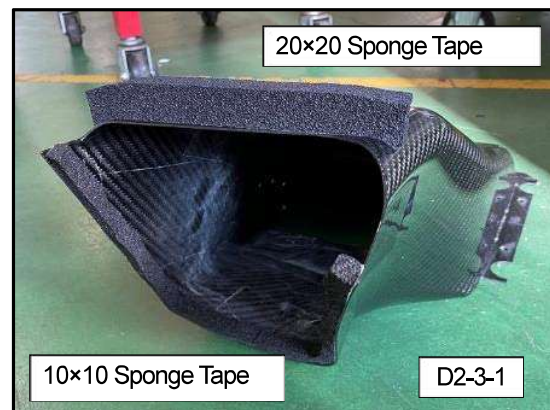
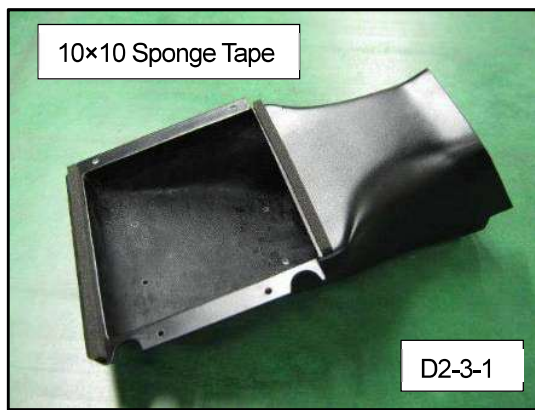
(6) Install Oil Cooler Core Bracket #4. (Dia.2-2-6)

- M6 L30 Bolt x 2
- M6 Large Dia. Washer x 2
- 20mm-6mm t5 Spacer x 1



2-3 Installing the Oil Cooler Core Duct

(1) Attach the Sponge Tape (10mmx10mmx300mm, 20mmx10mmx300mm). (Dia.2-3-1)

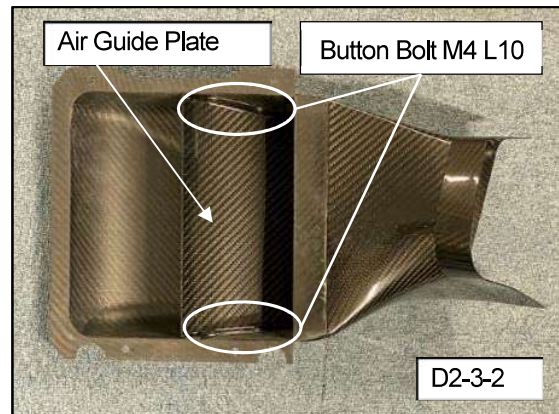


(2) Attach the Air Guide Plate to the Oil Cooler Core Duct.
(Dia.2-3-2)

- Button Bolt M4 L10 ×6
- Nut M4 ×6
- Flat Washer M4 ×12

NOTE

Attach the Button Bolt M4 inside the duct and the Nut M4 outside the duct.



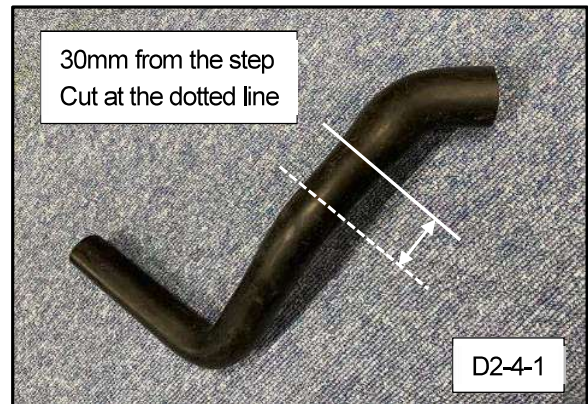
(3) Attach the Oil Cooler Core Duct. (Dia.2-3-3)

- Button Bolt M5 L15 ×4
- Flange Nut M5 ×4



2-4 Installing the Washer Tank

(1) Cut the hose in the kit as shown.
(Dia.2-4-1)

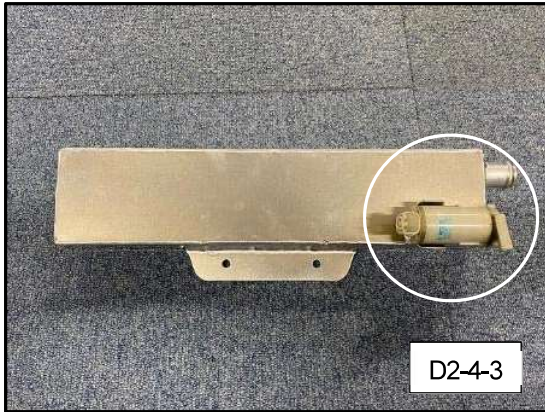


(2) Attach the Hose and Joint Pipe 22mm in the kit cut in (1)
to the Genuine washer tank pipe. (Dia.2-4-2)

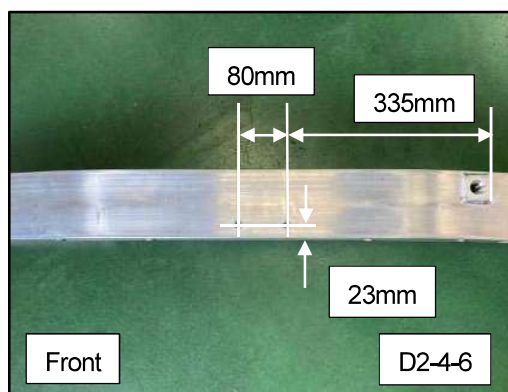
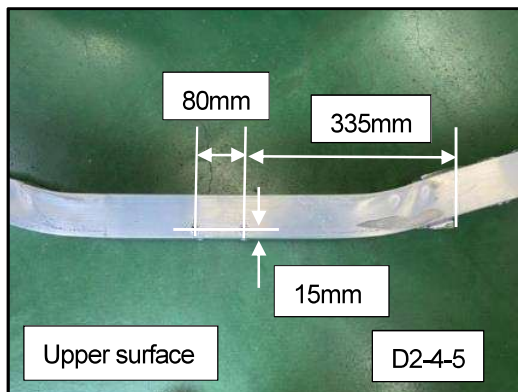
- Joint Pipe 22mm ×1
- Hose Clamp #16 ×1



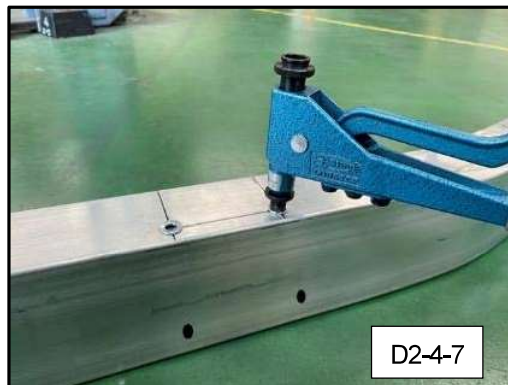
- (3) Remove the washer pump from the genuine washer tank and attach it to the kit's Washer Tank.
(Dia.2-4-3、 2-4-4)



- (4) Drill the mounting holes ($\phi 11$) at the positions shown in the figure for the bumper fascia. (Dia.2-4-5、 2-4-6)

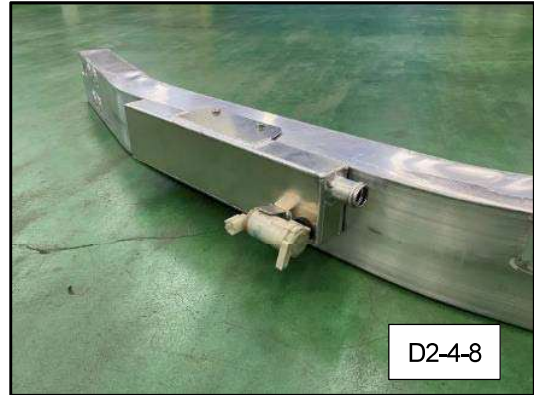


- (5) Attach the Pop Nut to the mounting hole of the bumper fascia opened in (4). (Dia.2-4-7)
• Pop Nut $\times 4$



(6) Attach the Washer Tank to the bumper fascia. (Dia.2-4-8)

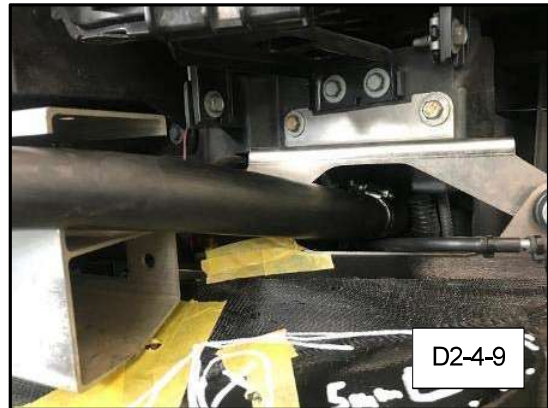
- Bolt M6 L15 ×4
- Flat Washer M6 ×4



(7) Attach the bumper fascia to the vehicle.

(8) Attach the Hose 22mm to the Joint Pipe 22mm attached at (2) and the washer tank attached at (6). (Dia.2-4-9)

- Hose 22mm ×1
- Hose Clamp #16 ×2



(9) Attach the Tube to the Hose 22mm.

- Tube ×1
- Tie Wrap ×2

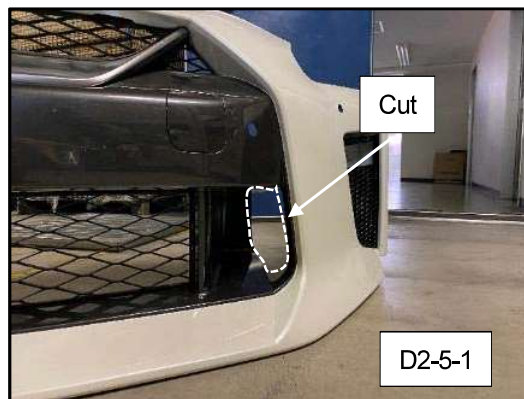
(10) Extend the washer pump hose.

- Hose 4mm ×1
- Joint pipe 4mm ×1

(11) Extend the washer pump harness.

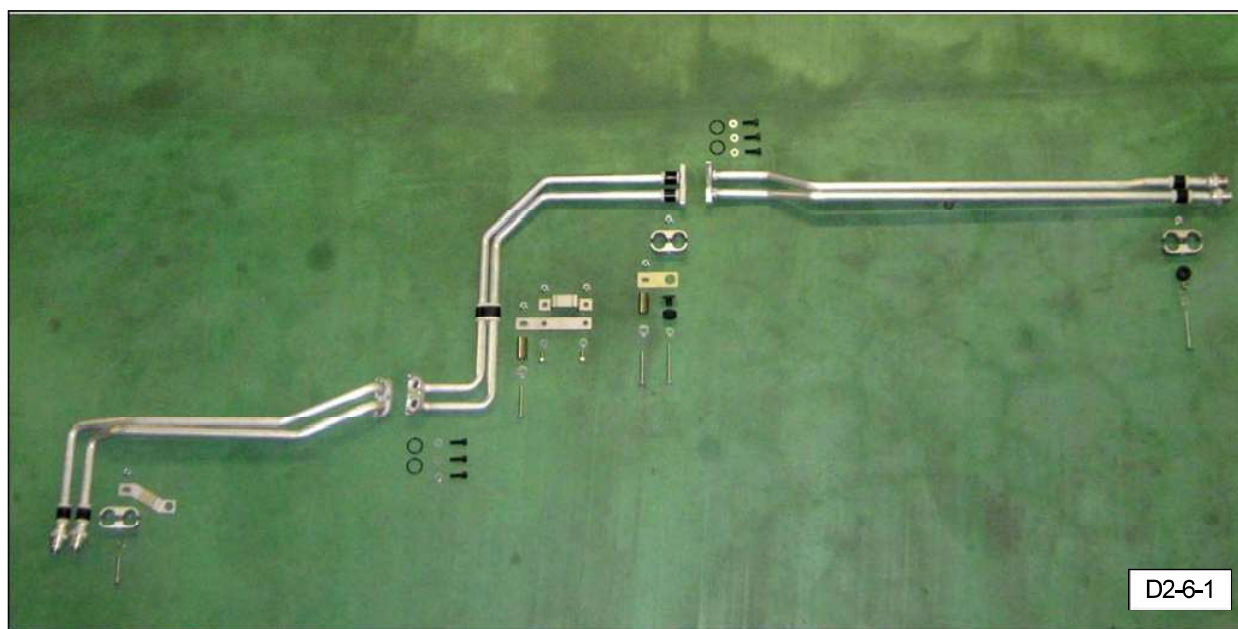
2-5 Modifying the Bumper

(1) Modify the bumper as shown. (Dia.2-5-1)

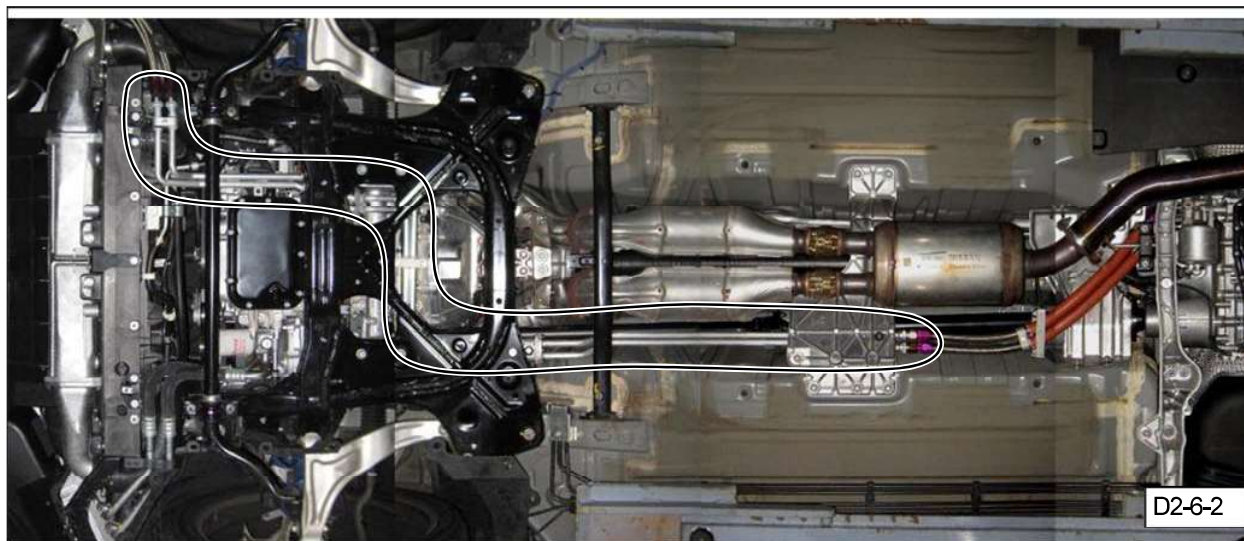


2-6 Installing the Oil Lines

Piping layout:



How the piping is routed:

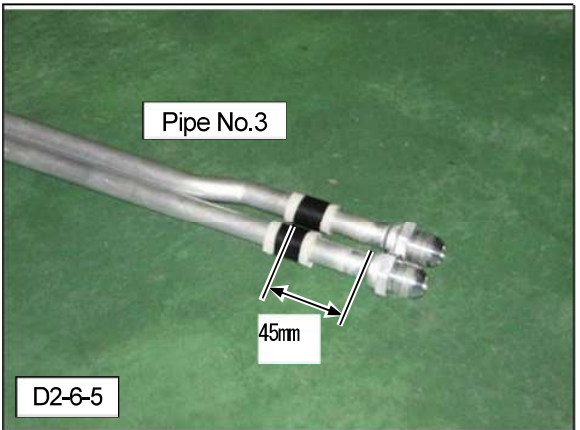
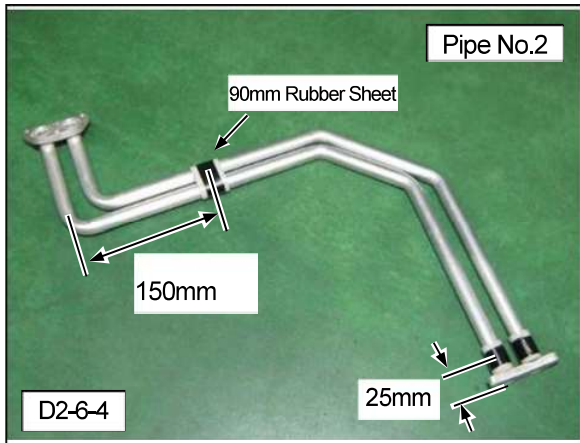
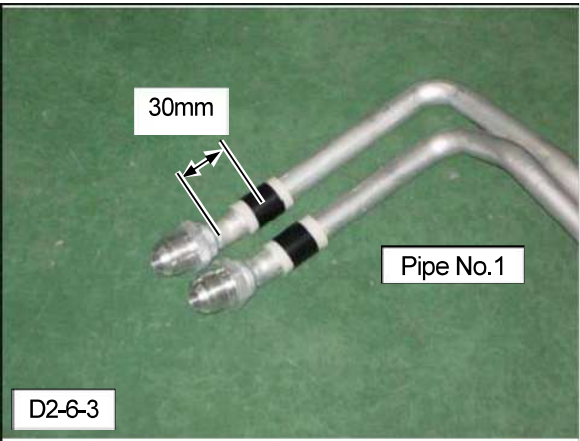


(1) Cut the Rubber Sheet (30x500x2) to 6 x 55mm sheets and 1 x 90mm sheet.

(2) Attach the cut Rubber Sheets to the piping clamps.
(Dia.2-6-3 to 2-6-5)

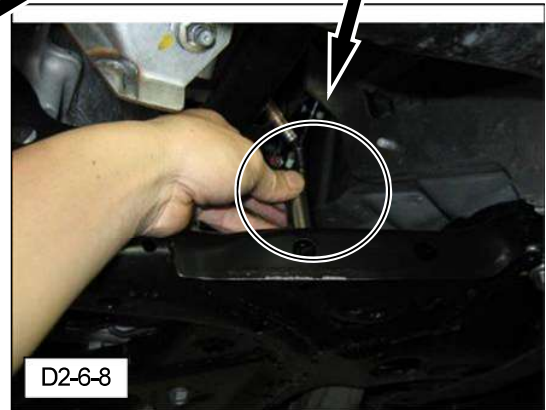
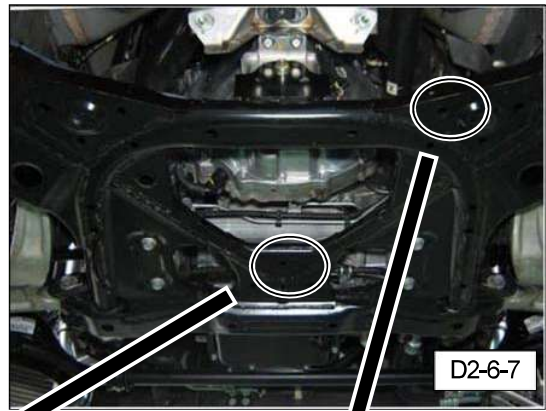
NOTE

For easier installation, secure the rubber sheets with tape.

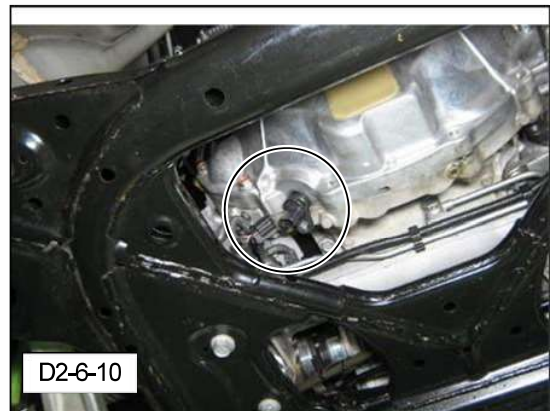


(3) Insert the Collar from the top side of the member. (Dia.2-6-7 to 2-6-9)

- 16mm-6mm L33 Collar x 2

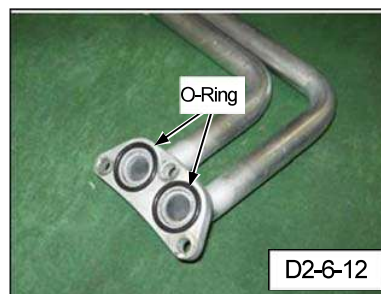


(4) Remove the coupler. (Dia.2-6-10)

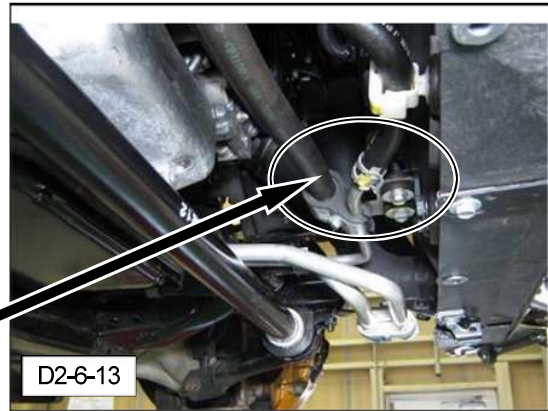
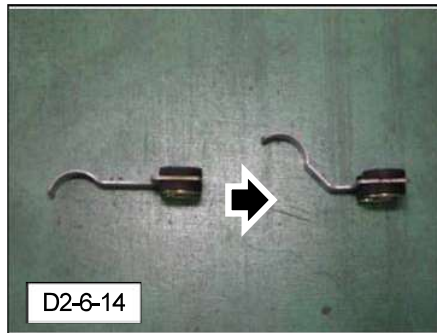


(5) Install the O-Rings to Pipe #2; then, temporarily install Pipes #1 and #2. (Dia.2-6-11, 2-6-12)

- M6 L20 Cap Bolt x 3
- M6 Washer x 3



(6) Bend the factory power steering pipe bracket as shown in the diagrams below so Pipe #1 does not come in contact with the power steering pipe. (Dia.2-6-13, 2-6-14)



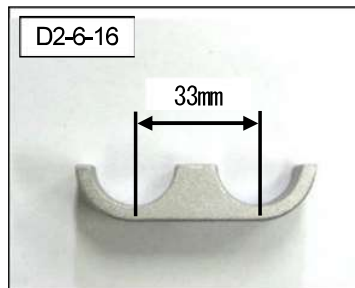
(7) Temporarily assemble Pipe Bracket #1 and the clamp.

(Dia.2-6-15, 2-6-16)

- M6 L40 Bolt x 1
- M6 Washer x 1
- M6 Flange Nut x1

NOTE

Use the 33mm pitched Clamp x 2.



(8) Temporarily assemble the Pipe Bracket #2 and #3. (Dia.2-6-17)

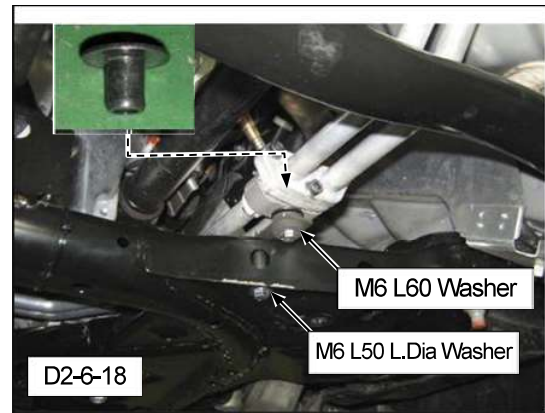
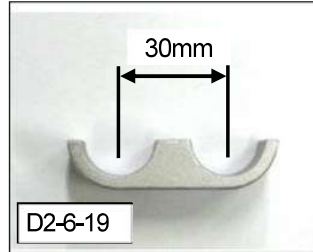
- M6 L50 Bolt x 1
- M6 L15 Bolt x 2
- M6 Washer x 2
- M6 Large Dia. Washer x 1
- M6 Flange Nut x 3



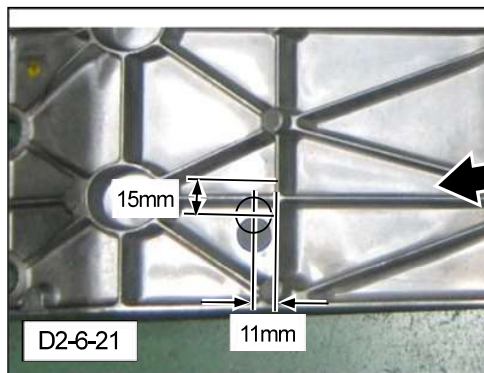
(9) Install the Rubber Insulator and Insulator Collar to Pipe Bracket #4; then temporarily assemble the pipe to the vehicle using the 30mm pitched clamp.

(Dia.2-6-18, 2-6-19)

- M6 L50 Bolt x 1
- M6 L60 Bolt x 1
- M6 Washer x 1
- M6 Large Dia. Washer x 1
- M6 Flange Nut x 1



(10) Drill a 16mm hole as shown in the diagrams below. Install the Rubber Insulator and Insulator Collar (10mm-6mm L13) to the hole. (Dia. 2-6-20, 2-6-21, 2-6-22)

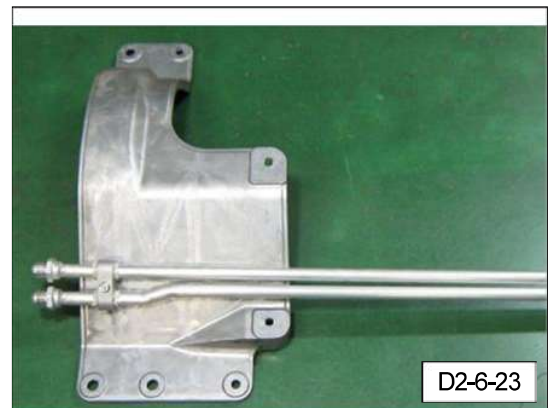
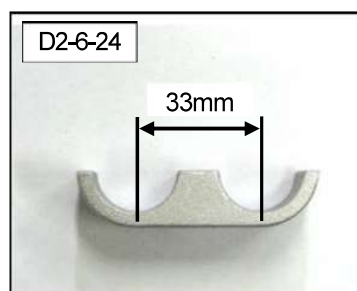


(11) Temporarily assemble Pipe #3 and the Clamp. (Dia.2-6-23, 2-6-24)

- M6 L60 Bolt x 1
- M6 Washer x 1
- M6 Flange Nut x 1

NOTE

Use the 33mm pitched Clamp x 2.



- (12) Install the O-Ring to Pipe #3; then temporarily assemble Pipes #2 and #3. (Dia.2-6-25)
- M6 L20 Cap Bolt x 3
 - M6 Washer x 3
- (13) Tighten all bolts adjusting clearance between the pipes and the vehicle. **(IMPORTANT)**

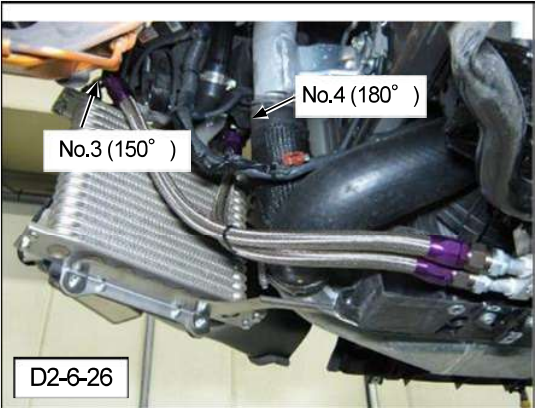
NOTE

If any part of the piping comes in contact with the vehicle, it may make noise due to the vibration.



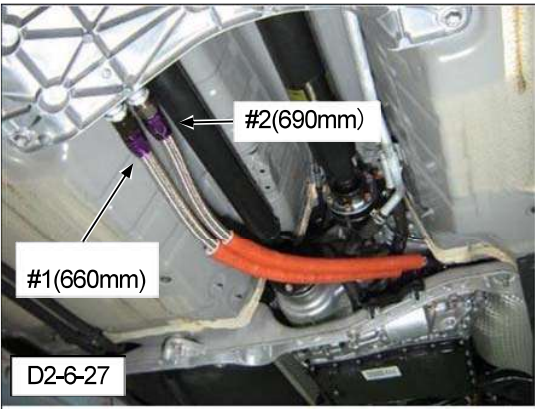
<p>⚠ CAUTION</p> <p>Make sure kit parts do not come in contact with any rotating parts such as the drive shaft and/or propeller shaft when installing. If the piping gets damaged, it can cause an oil leak and/or a serious accident.</p>

- (14) Install Hoses #3 and #4. (Dia.2-6-26)



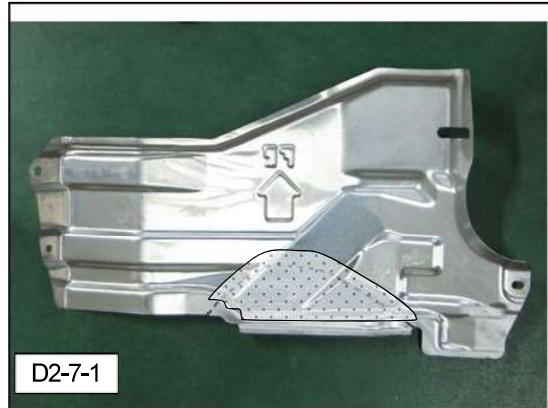
- (15) Cut the 2 x Fire Sleeves to 430mm. Install the cut sleeves to the hoses. Install Hoses #1 and #2 to the vehicle. (Dia.2-6-27)

<p>⚠ CAUTION</p> <p>Make sure the transmission bracket does not come in contact with the hose fittings when installing. Failure to do so may cause an oil leak and/or serious accident.</p>
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2-7 Modifying the Heat Shield

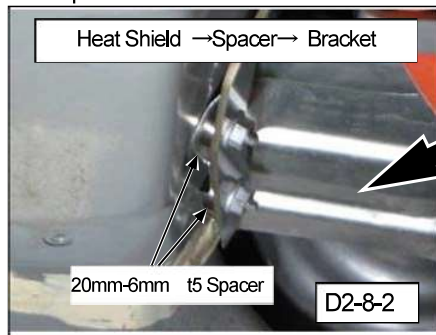
- (1) Cut off the shaded portion in diagram 2-7-1 so the heat shield does not come in contact with the hoses.



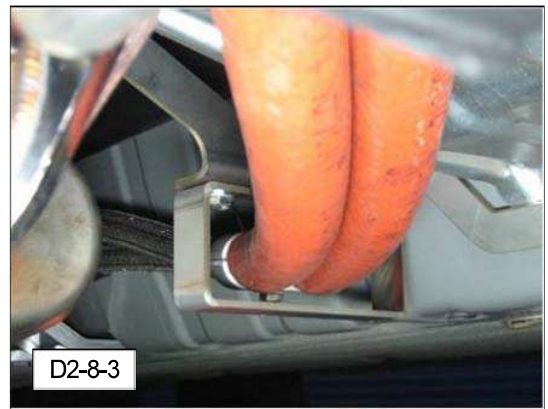
2-8 Installing the Hose Bracket

- (1) Install the Hose Bracket and Clamp (Pitch 30mm). (Dia.2-8-1, 2-8-2)

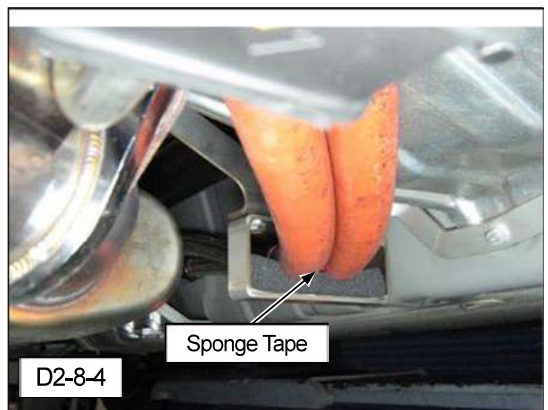
- M6 L40 Bolt x 1
- M6 L15 Bolt x 3
- M6 Washer x 4
- M6 Flange Nut x 2
- 20mm-6mm t5 Spacer x 2



- (2) Adjust the hoses so they do not come in contact with the bracket. (Dia.2-8-3)



- (3) Attach the Sponge Tape (20x20) to the Bracket. (Dia.2-8-4)



2-9 Refilling the Oil & Oil Leakage Check

- (1) Before checking the oil level, warm the engine oil to about 80°C so the thermostat opens and oil circulates through the oil cooler core. Adjust the oil level referring to the factory service manual.

NOTE

Carefully touch the oil cooler core to make sure oil is circulating. (Make sure not to get burned as the core can become very hot.)

NOTE

If the engine is started without the front bumper installed, the check light will come on. To avoid this from happening, temporarily install the bumper, or reset the check light later.

3. Reinstalling Factory Parts

- (1) Reinstall the factory parts using the opposite of the removal procedure.

4. Confirmation after Installation

- (1) On a regular basis, check to make sure oil is not leaking.
- (2) After installing this kit, the operating sound of the factory pump may increase slightly.
- (3) If any pipe and/or hose come in contact with the vehicle, noise from the engine bay may increase.



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