

OILCOOLER KIT INSTALLATION MANUAL



Installation must be done by a professional.

Read this manual prior to the installation.

Always have access to this manual as well as a factory service manual.

※ Make sure the vehicle is applicable to this kit.

NAME OF PRODUCT	OILCOOLER KIT
USE	AUTOMOBILE PARTS
PART NUMBER	15004-AT013
APPLICATION	TOYOTA GR YARIS 4BA-GXPA16
ENGINE	G16E-GTS
YEAR	2020/9~
REMARKS	<p>○Standard Installation Time: 6 hours</p> <p>○Required items to install this kit: New Engine Oil: HKS LSPI compatible engine oil is recommended. Extra Engine Oil: Approximately 500mL</p> <p>○Maintenance parts When replacing the oil filter, use "HKS Oil Filter Type 5 52009-AK009".</p>

※Application was confirmed as of February, 2022.

REVISION OF MANUAL

Rev. Number	Date	Manual Number	Details
3-3.01	2022/2	E04251-T22010-00	1 st Edition

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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 service manual. To avoid injury, follow the safety precautions contained in the factory service 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.

SAFETY PRECAUTIONS

The following precautions for use of this product are to prevent possible accidents and/or injuries and for proper use.



WARNING

Indicates risk of serious injury and/or possible death.



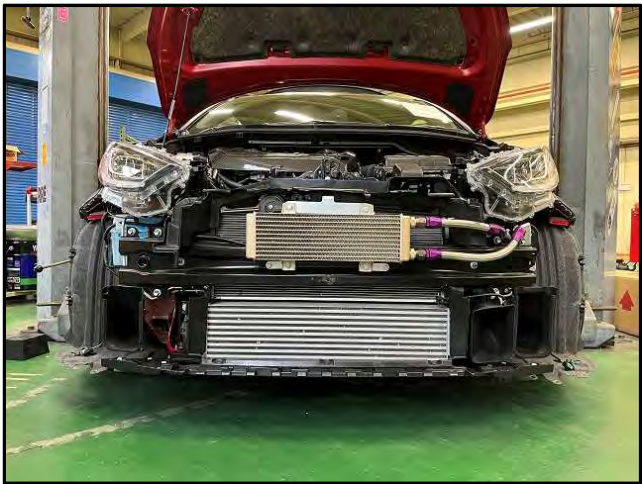
CAUTION

Indicates risk of damage to people or large-scale damage to property.
(Large-scale damage is the damage caused by a product defect.
Ex. Damage to a vehicle, burnout, etc.)

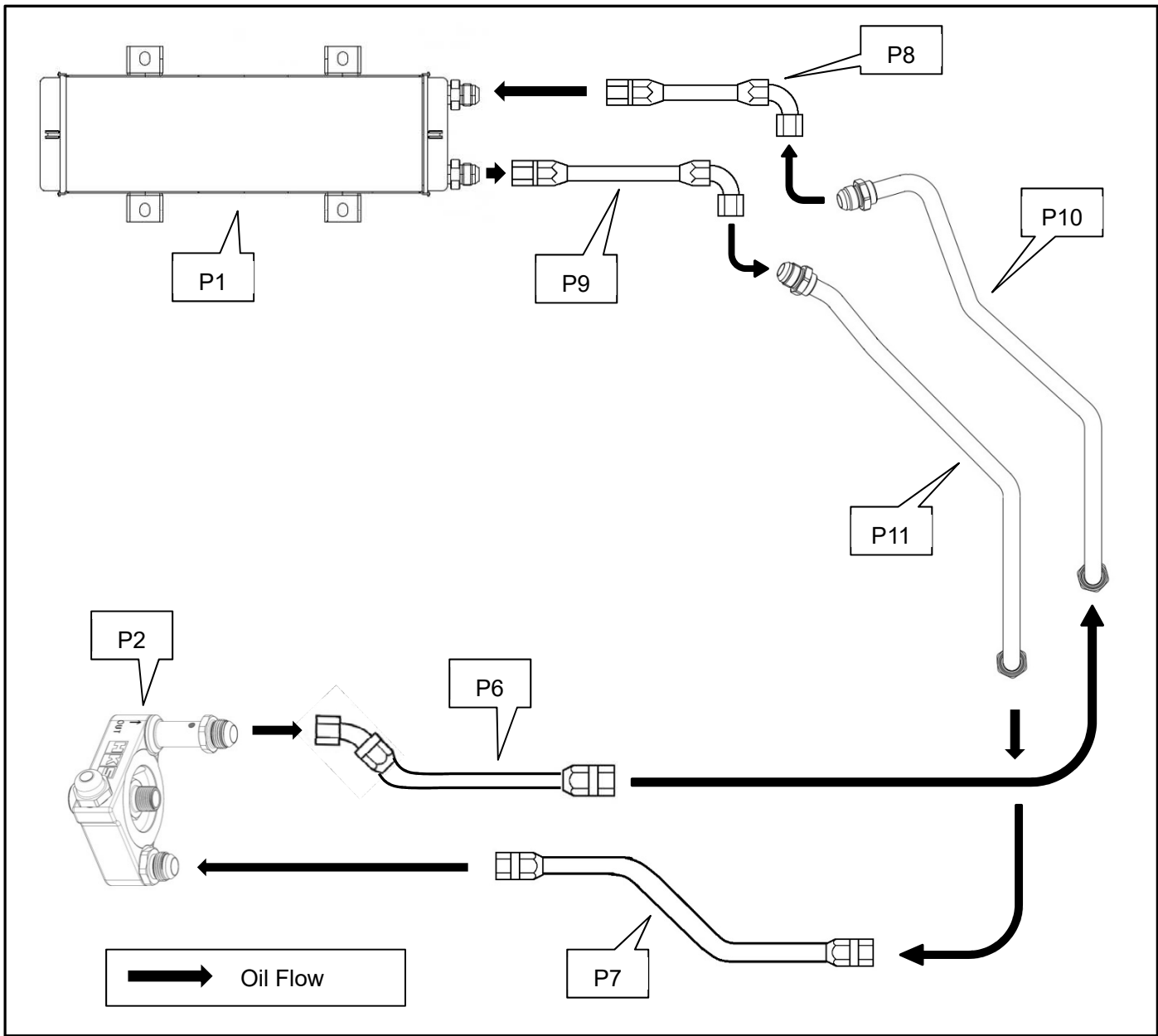
PARTSLIST

No.	Product	QT	Remarks
P1	Oil Cooler Core	1	
P2	Oil Filter Mount	1	
P3	Center Bolt	1	
P4	O-Ring	1	I.D. 59.9mm
P5	Oil Filter	1	φ65-H50 UNF 3/4-16 52009-AK009
P6	Oil Cooler Hose No.1	1	260mm Straight-45°
P7	Oil Cooler Hose No.2	1	280mm Straight-Straight
P8	Oil Cooler Hose No.3	1	185mm Straight-90°
P9	Oil Cooler Hose No.4	1	290mm Straight-90°
P10	Oil Cooler Pipe No.1	1	
P11	Oil Cooler Pipe No.2	1	
P12	Oil Cooler Pipe Clump	4	
P13	Silicon Rubber Sheet	1	
P14	Bracket No.1	1	
P15	Bracket No.2	2	
P16	Bracket No.3	1	
P17	Bracket No.4	1	
P18	Bracket No.5	2	
P19	Spacer	2	
P20	Hexagon Bolt M8-1.25 L=15	2	
P21	Spring Washer M8	2	
P22	Flat Washer M8	2	
P23	Flange Nut M8-1.25	2	
P24	Hexagon Bolt M6-1.0 L=55	2	
P25	Hexagon Bolt M6-1.0 L=40	2	
P26	Hexagon Bolt M6-1.0 L=15	5	
P27	Large Diameter Flat Washer M6	7	
P28	Spring Washer M6	9	
P29	Flat Washer M6	4	
P30	Flange Nut M6-1.0	7	
P31	Nut M6-1.0	2	
P32	Installation Manual	1	
P33	Instruction Manual	1	

Product Image



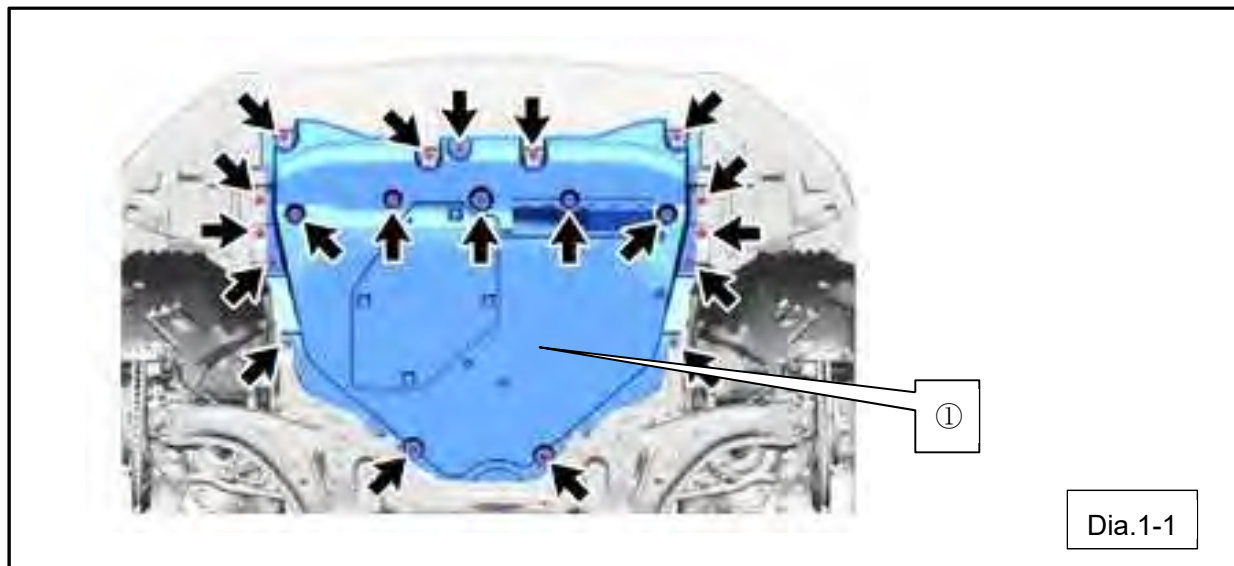
Schematic Diagram of Piping



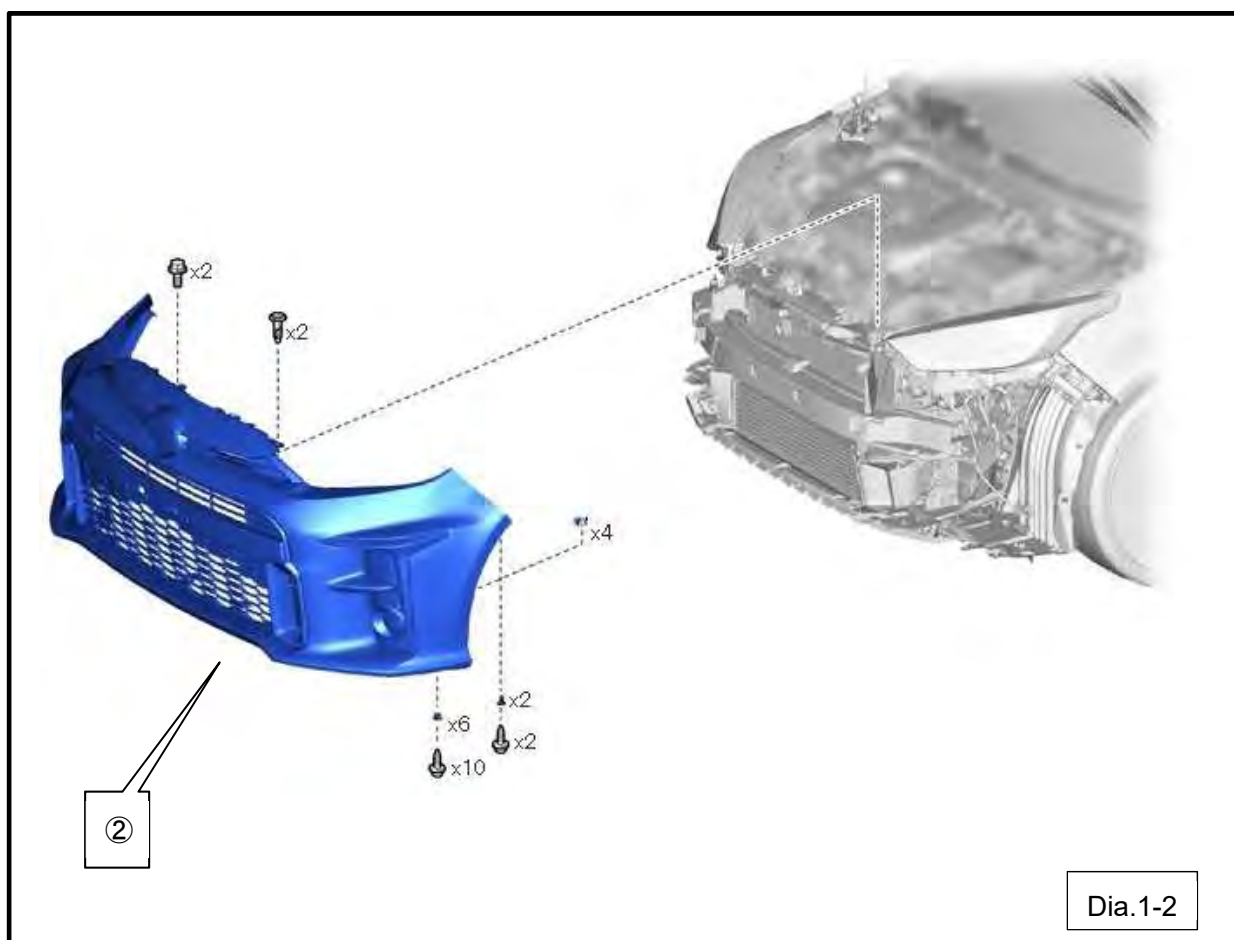
1. Removal of Genuine Parts

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 ①Undercover. (Dia.1-1)



(2) Remove the ②Front bumper.(Dia.1-2)



(3) Remove the ③Front bumper absorber、④Radiator upper air guide plate、⑤Horn.

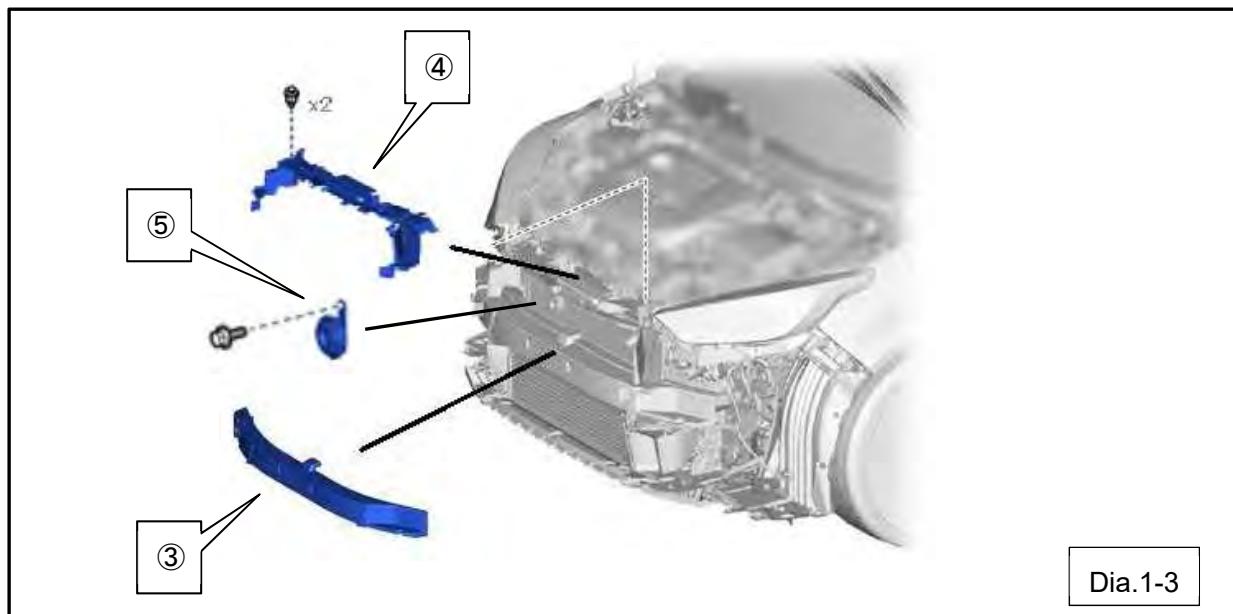
(Dia.1-3)

Note

③Front bumper absorber will not be reused.

④Radiator upper air guide plate is processed and reused.

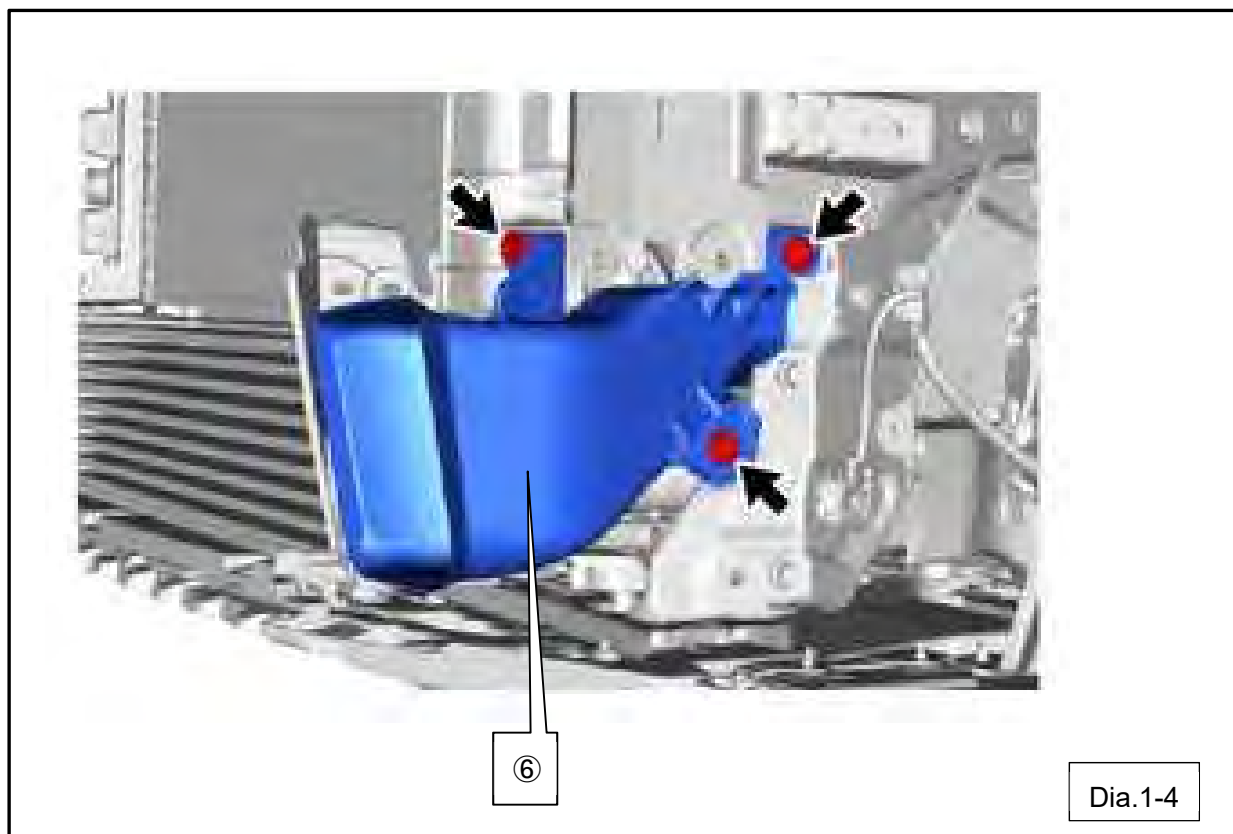
⑤Horn will be reused.



(4) Remove the ⑥Cool air intake duct (Dia.1-4)

Note

⑥Cool air intake duct is processed and reused.



(5) Drain the Engine oil and remove the Oil filter.

Note

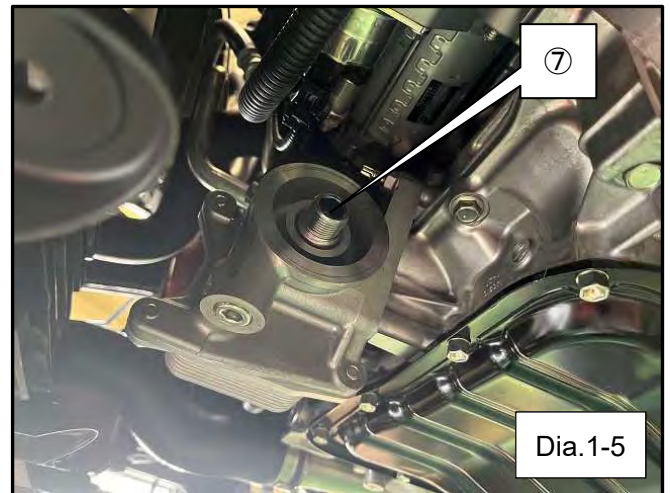
Oil filter will not be reused.

(6) Remove the ⑦Oil attachment center bolt.

(Dia.1-5)

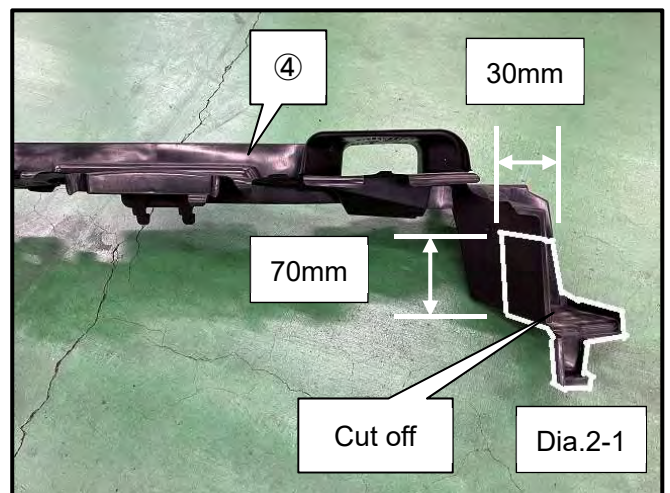
Note

⑦Oil attachment center bolt will not be reused.

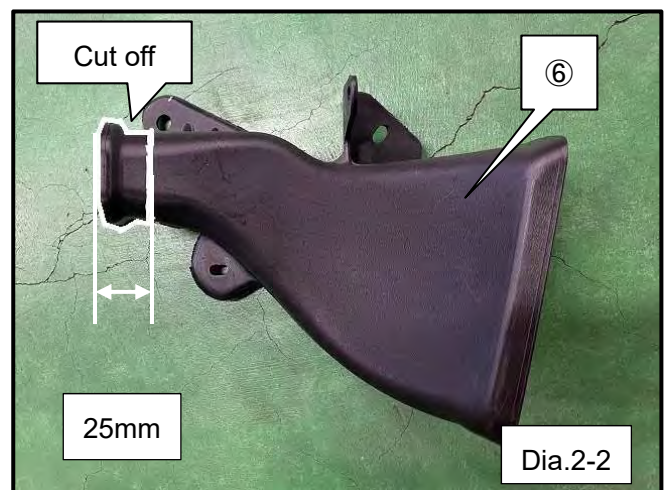


2. Processing of Genuine Parts

(1) Cut off the part of the ④Radiator upper air guide plate surrounded by the white line. (Dia.2-1)



(2) Cut off the part of the ⑥Cool air intake duct surrounded by the white line. (Dia.2-2)



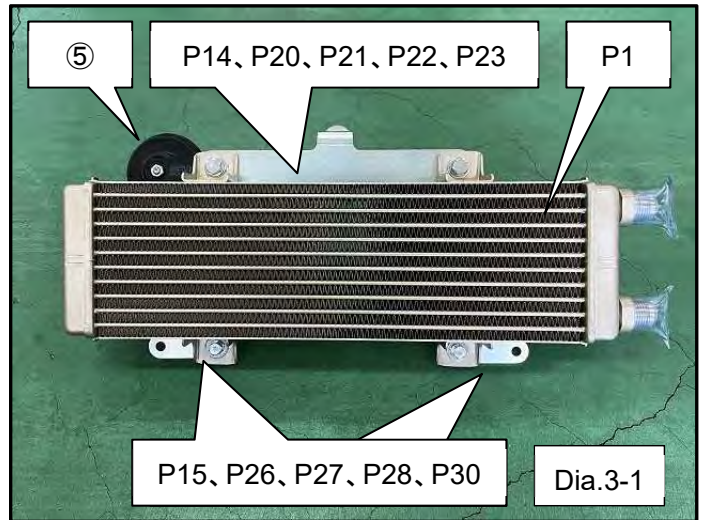
3. Installation of Kit Parts

- (1) Attach Bracket No. 1, Bracket No. 2 to the Oil cooler core. (Dia.3-1)
Tighten the ⑤Horn together with bracket No.1. (Dia.3-1、 3-2)

- P1 : Oil cooler core× 1
- P14 : Bracket No.1× 1
- P15 : Bracket No.2× 2
- P20 : Hexagon Bolt M8-1.25 L=15× 2
- P21 : Spring Washer M8× 2
- P22 : Flat Washer M8× 2
- P23 : Flange Nut M8-1.25× 2
- P26 : Hexagon Bolt M6-1.0 L=15× 2
- P27 : Large Diameter Flat Washer M6× 2
- P28 : Spring Washer M6× 2
- P30 : Flange Nut M6-1.0× 2

Note

Temporarily tighten the bolts.



(2) Install the oil cooler core on the vehicle.

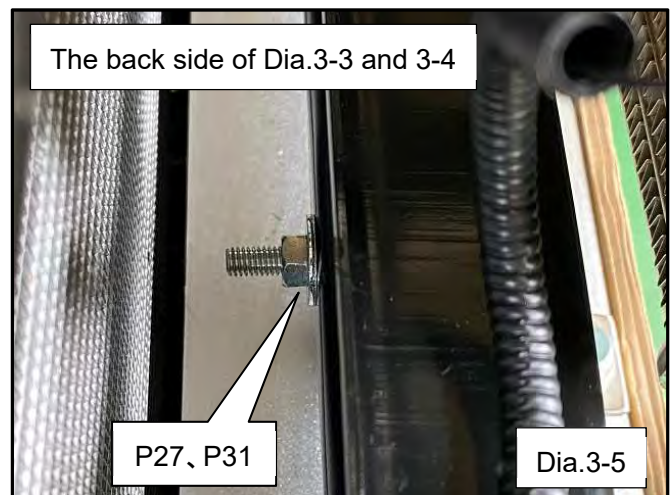
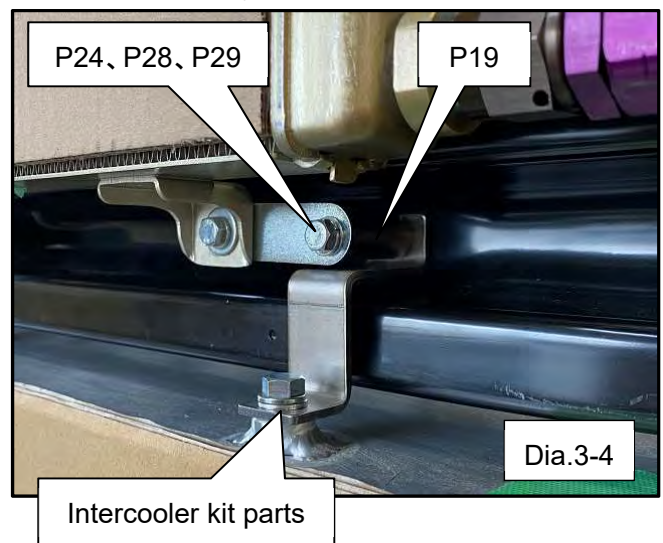
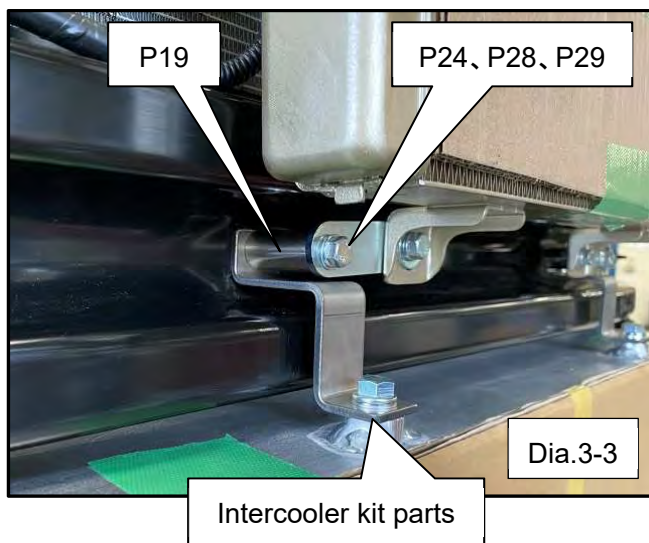
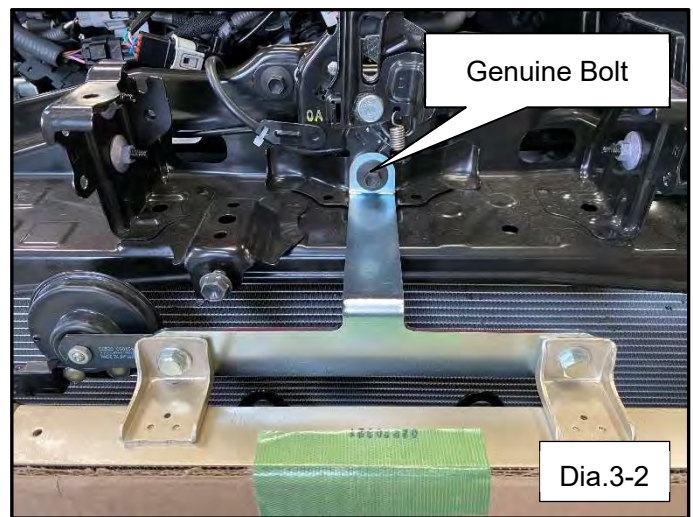
(Dia.3-2、 3-3、 3-4、 3-5)

- P19 : Spacer× 2
- P24 : Hexagon Bolt M6-1.0 L=55× 2
- P27 : Large Diameter Flat Washer M6× 2
- P28 : Spring Washer M6× 2
- P29 : Flat Washer M6× 2
- P31 : Nut M6× 2
- Genuine Bolt

Note

- Temporarily tighten the bolts.
- Dia.3-3 and 3-4 are for "HKS Intercooler kit equipped vehicle".

For "vehicles without Intercooler kit", install the Oil cooler core directly on the vehicle.



- (3) Check that there is no interference with other parts of the oil cooler core, check the levelness, and then fully tighten the bolts used for Bracket mounting and Horn mounting.

Tightening Torque (N·m)

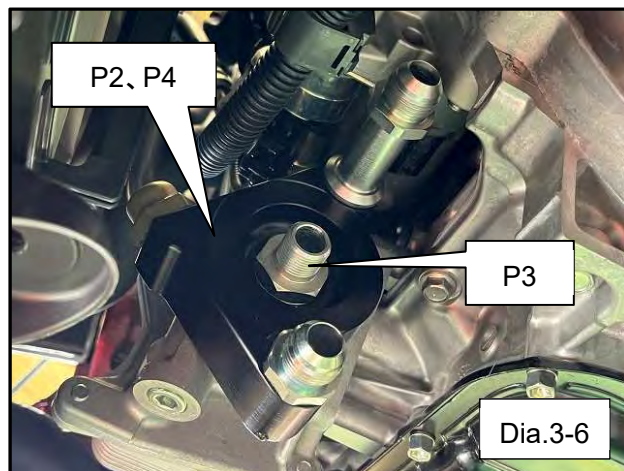
- P20 : T=15
- P24、 P26 : T=8
- Genuine Bolt : T=11.5

- (4) Install the Oil filter mount. (Dia.3-6)

- P2 : Oil filter mount× 1
- P3 : Center Bolt× 1
- P4 : O-Ring

Note

Temporarily tighten the Center Bolt.



- (5) Cut the Silicone Rubber Sheet into 55 mm x 4 sheets.

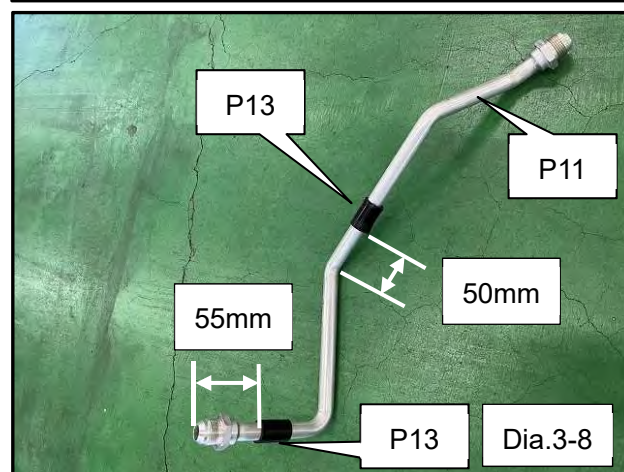
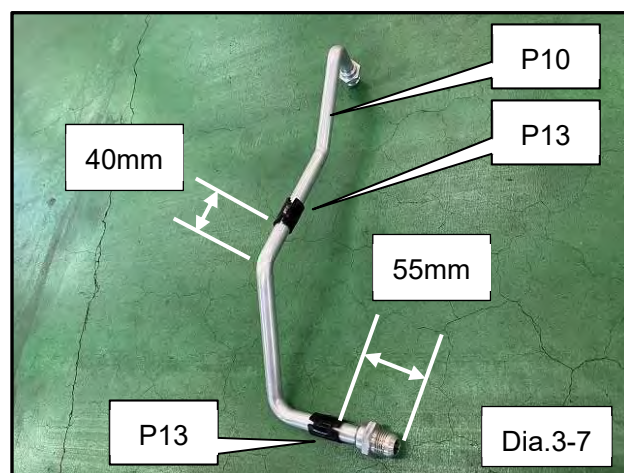
- P13 : Silicon Rubber Sheet× 1

- (6) Attach the Silicon Rubber Sheet cut into Oil cooler pipes No. 1 and No. 2. (Dia.3-7、 3-8)

- P10 : Oil Cooler Pipe No.1× 1
- P11 : Oil Cooler Pipe No.2× 1

Note

Fixing the silicone rubber sheet with vinyl tape makes it easier to install.



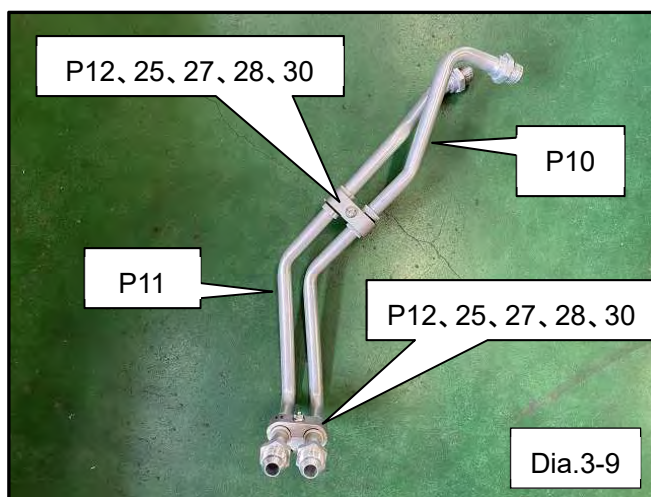
15004-AT013

(7) Install the Oil Cooler Pipe Clamps on the Oil Cooler Pipes No. 1 and No.2. (Dia.3-9)

- P12 : Oil Cooler Pipe Clump× 4
- P25 : Hexagon Bolt M6-1.0 L=40× 2
- P27 : Large Diameter Flat Washer M6× 2
- P28 : Spring Washer M6× 2
- P30 : Flange Nut M6-1.0× 2

Tightening Torque (N·m)

T=8

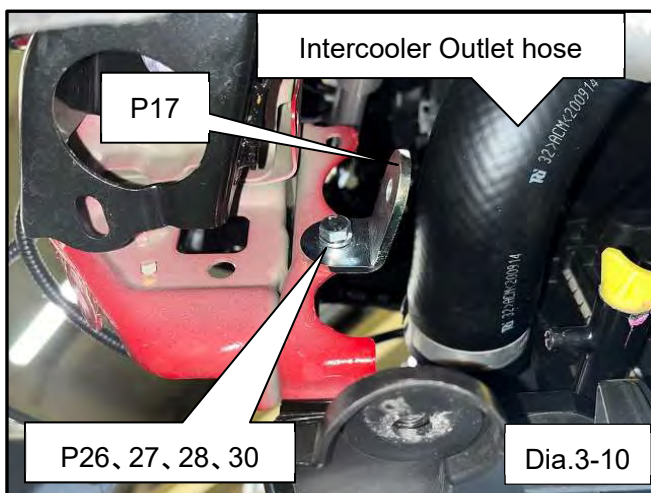


(8) Install Bracket No.4. (Dia.3-10)

- P17 : Bracket No.4× 1
- P26 : Hexagon Bolt M6-1.0 L=15× 1
- P27 : Large Diameter Flat Washer M6× 1
- P28 : Spring Washer M6× 1
- P30 : Flange Nut M6-1.0× 1

Note

Temporarily tighten the bolts.

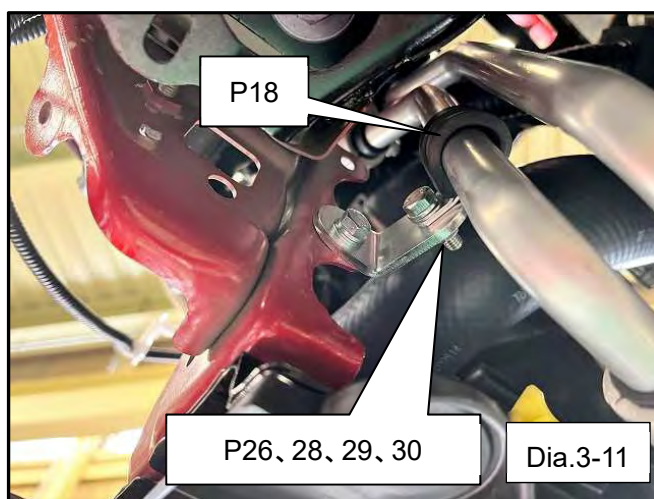


(9) Attach Bracket No. 5 to Bracket No. 4 and fix the Oil Cooler Pipe No. 1 (Dia.3-11)

- P18 : Bracket No.5× 1
- P26 : Hexagon Bolt M6-1.0 L=15× 1
- P28 : Spring Washer M6× 1
- P29 : Flat Washer M6× 1
- P30 : Flange Nut M6-1.0× 1

Note

Temporarily tighten the bolts.



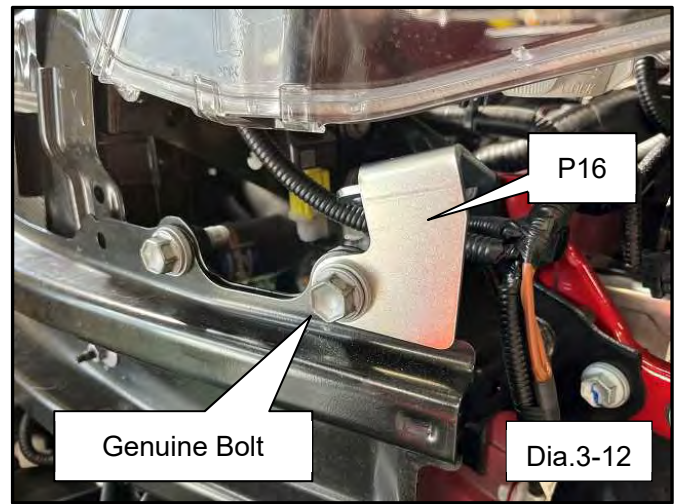
(10) Attach Bracket No. 3 to the reinforcement.

(Dia.3-12)

- P16 : Bracket No.3
- Genuine Bolt

Note

Temporarily tighten the Genuine Bolt.

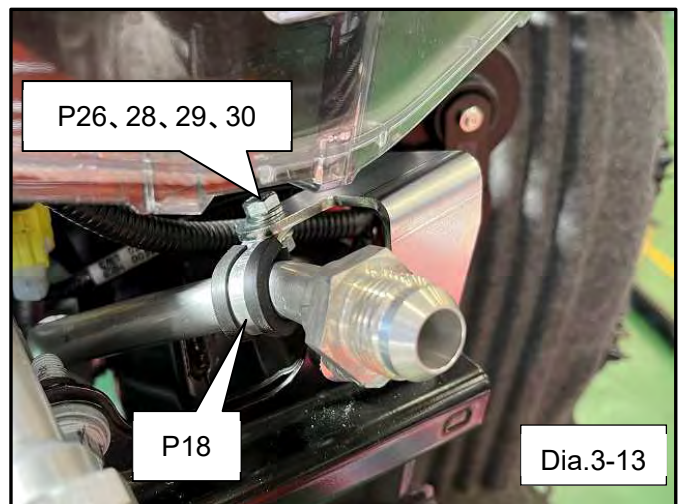


(11) Attach Bracket No. 5 to Bracket No. 3 and fix the Oil Cooler Pipe No. 2. (Dia.3-13)

- P18 : Bracket No.5× 1
- P26 : Hexagon Bolt M6-1.0 L=15× 1
- P28 : Spring Washer M6× 1
- P29 : Flat Washer M6× 1
- P30 : Flange Nut M6-1.0× 1

Note

Temporarily tighten the bolts.



(12) Make sure that the Oil Cooler Pipe does not interfere with the vehicle or other parts, and then fully tighten all the bolts used to attach the Bracket and fix the Oil Cooler Pipe.

Tightening Torque (N·m)

- P26 : T=8
- Genuine Bolt : T=11.5

(13) Install the Oil Cooler Hoses No.1, No.2, No.3, and No.4 by referring to the "Schematic diagram of Piping".

- P6 : Oil Cooler Hose No.1× 1
- P7 : Oil Cooler Hose No.2× 1
- P8 : Oil Cooler Hose No.3× 1
- P9 : Oil Cooler Hose No.4× 1

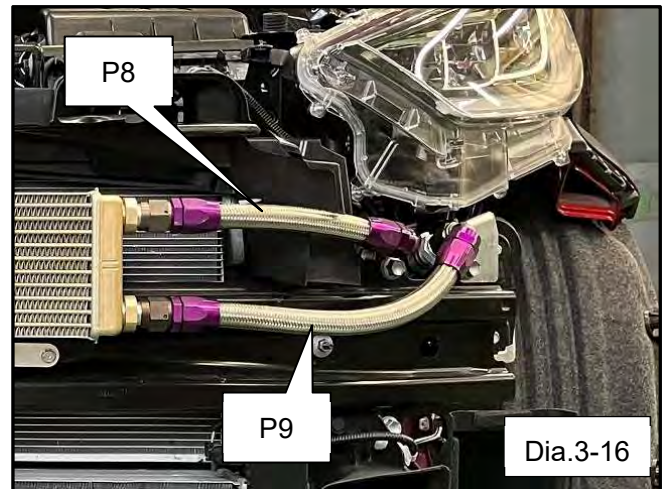
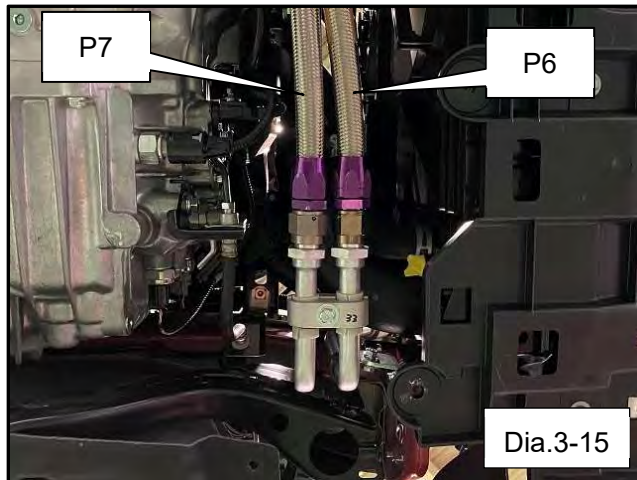
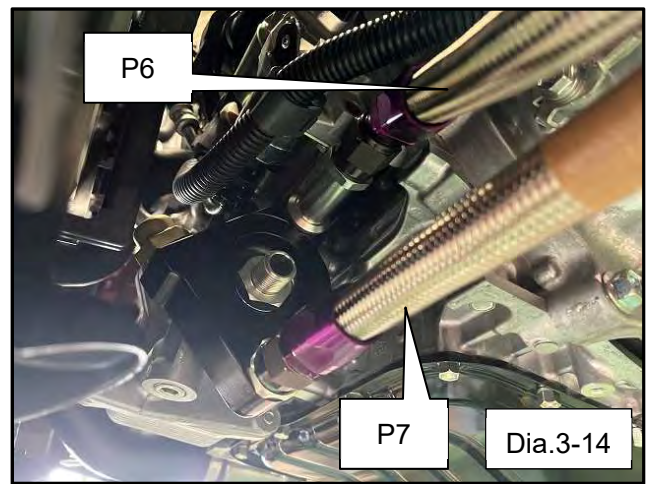
Note

Temporarily tighten the Oil Cooler Hoses.

- (14) Make sure that the Oil Cooler Hoses No. 1, No. 2, No. 3, and No. 4 do not interfere with each part, and then fully tighten the Oil Cooler Hoses.
(Dia.3-14、3-15、3-16)

Tightening Torque (N·m)

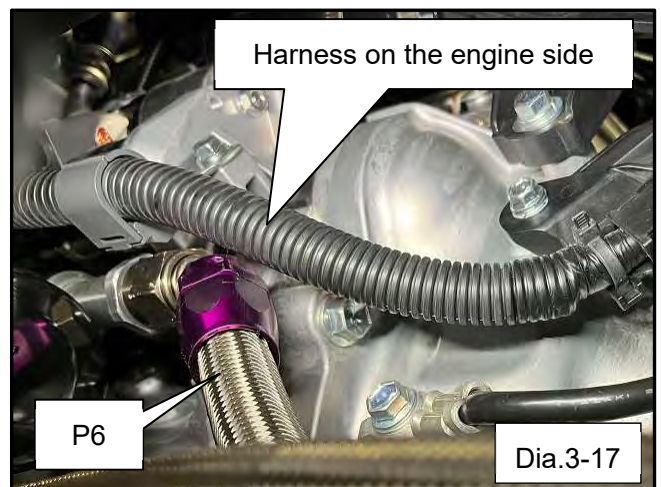
T=14.7~17.7



Note

Adjust the fitting direction so that the Oil Cooler Hose No. 1 and the harness on the engine side do not interfere with each other.

(Dia.3-17)



- (15) Adjust the position of the Oil Filter Mount so that there is no interference with each part, and fully tighten the Center Bolt.

Tightening Torque (N·m)

T=45

- (16) Install the Oil Filter.

- P5 : Oil Filter× 1

4 . Installation of Genuine Parts and start confirmation

- (1) Add an appropriate amount of Engine Oil to the Engine.

Note

HKS LSPI compatible Engine Oil is recommended.

- (2) Install the negative terminal of the battery.

- (3) Start the engine and check the following after warming up (oil temperature is 75 ° C or higher).

- There is no oil leak.
- The Oil Cooler Hose does not interfere with other parts.

- (4) Install the ⑥Cool Air Intake Duct.

- (5) Install the ②Front Bumper.

- (6) Install the ①Undercover.

* After completing the installation work, be sure to perform the confirmation work according to "Confirmation after installation" in the Instruction Manual.



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