

INTERCOOLER 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	INTERCOOLER KIT
USE	AUTOMOBILE PARTS
PART NUMBER	13001-AT008
APPLICATION	TOYOTA GR YARIS 4BA-GXPA16
ENGINE	G16E-GTS
YEAR	2020/9~
REMARKS	▪ Standard Installation Time: 6 hours ▪ When using the intercooler water spray together, a separate "13999-AT001 BRACKET for WATER SPRAY" is required.

※Application was confirmed as of July, 2021.

REVISION OF MANUAL

Rev. Number	Date	Manual Number	Details
3-3.01	2021/7	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.)

PARTS LIST

No.	Product	QT	Remarks
P1	Intercooler Core	1	
P2	Bracket No.1	2	
P3	Bracket No.2	1	
P4	Hose φ50-45	2	
P5	Pipe φ45	2	
P6	Hex Bolt M8-1.25 L=15	3	
P7	Flat Washer M8	3	
P8	Spring Washer M8	3	
P9	Hex Bolt M6-1.0 L=20	2	
P10	Flat Washer M6	2	
P11	Large Flat Washer M6	2	
P12	Spring Washer M6	2	
P13	Nut M6	2	
P14	Hose Band 44-56	2	
P15	Hose Band 40-60	2	
P16	Instruction Manual	1	
P17	Installation Manual	1	

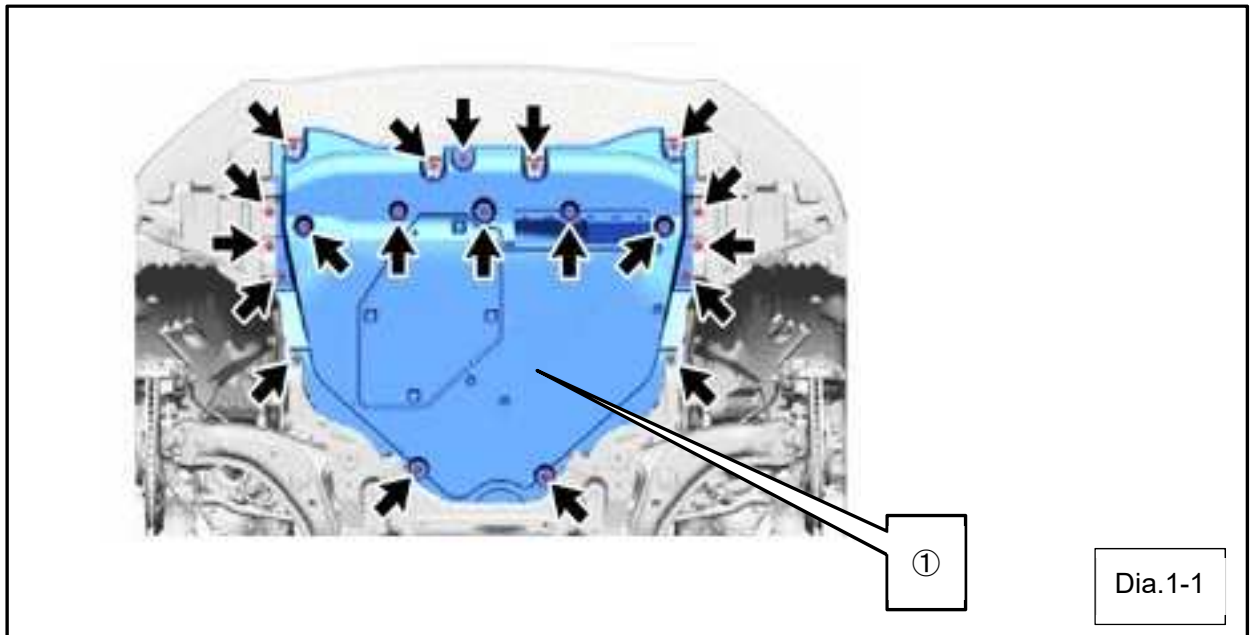
Vehicle with Intercooler Kit



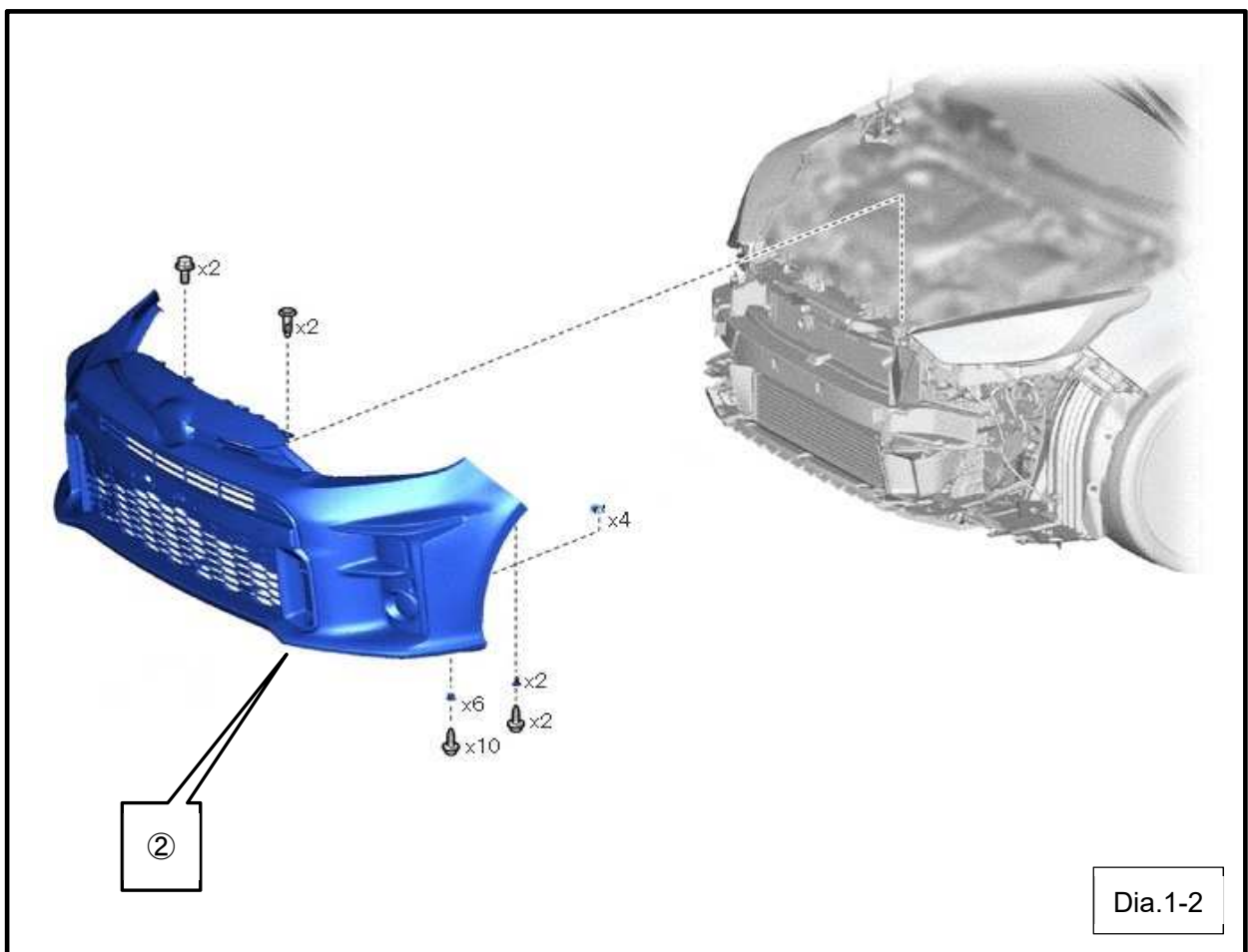
1. Removal of genuine parts.

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.

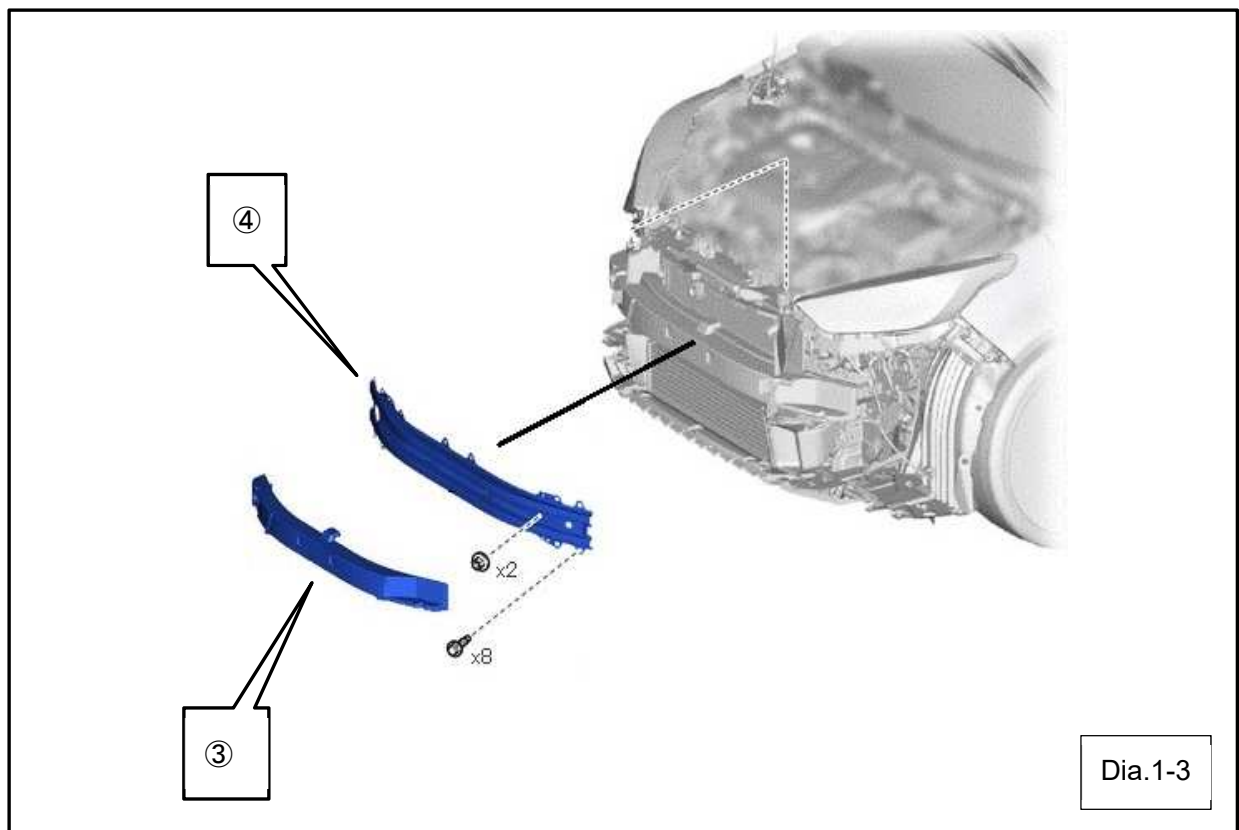
(1) Remove the ①Undercover. (Dia.1-1)



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



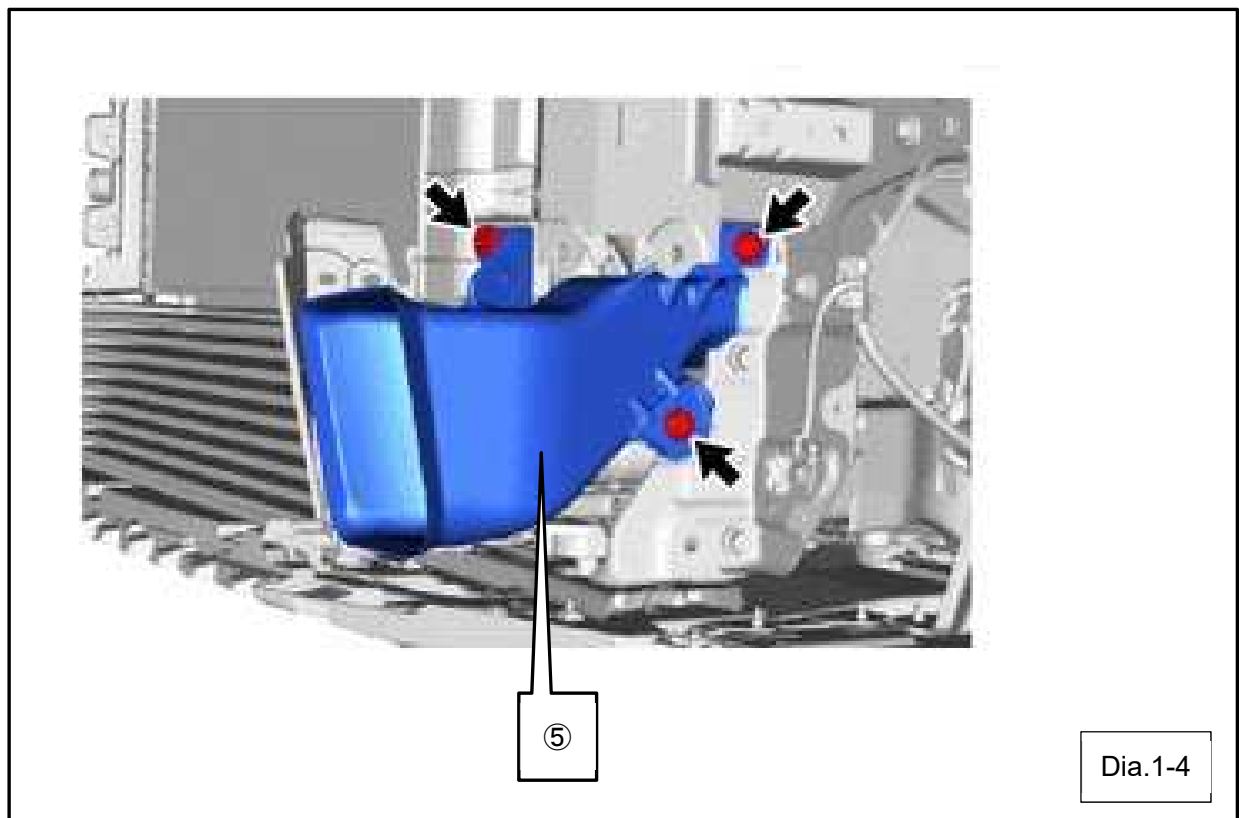
(3) Remove the ③Front bumper absorber,④Bumper reinforcement (Dia.1-3)



(4) Remove the ⑤Cool air intake Duct. (Dia.1-4)

NOTE

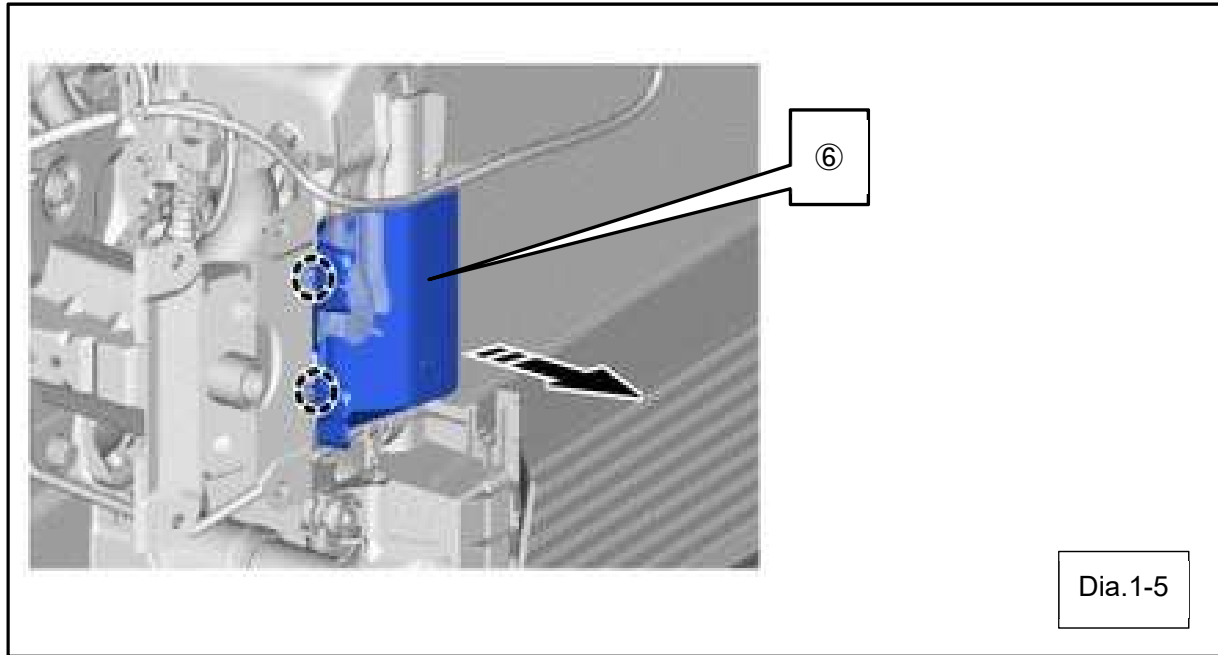
⑤Cool air intake duct will not be reused.



(5) Remove the ⑥Radiator side guide RH. (Dia.1-5)

NOTE

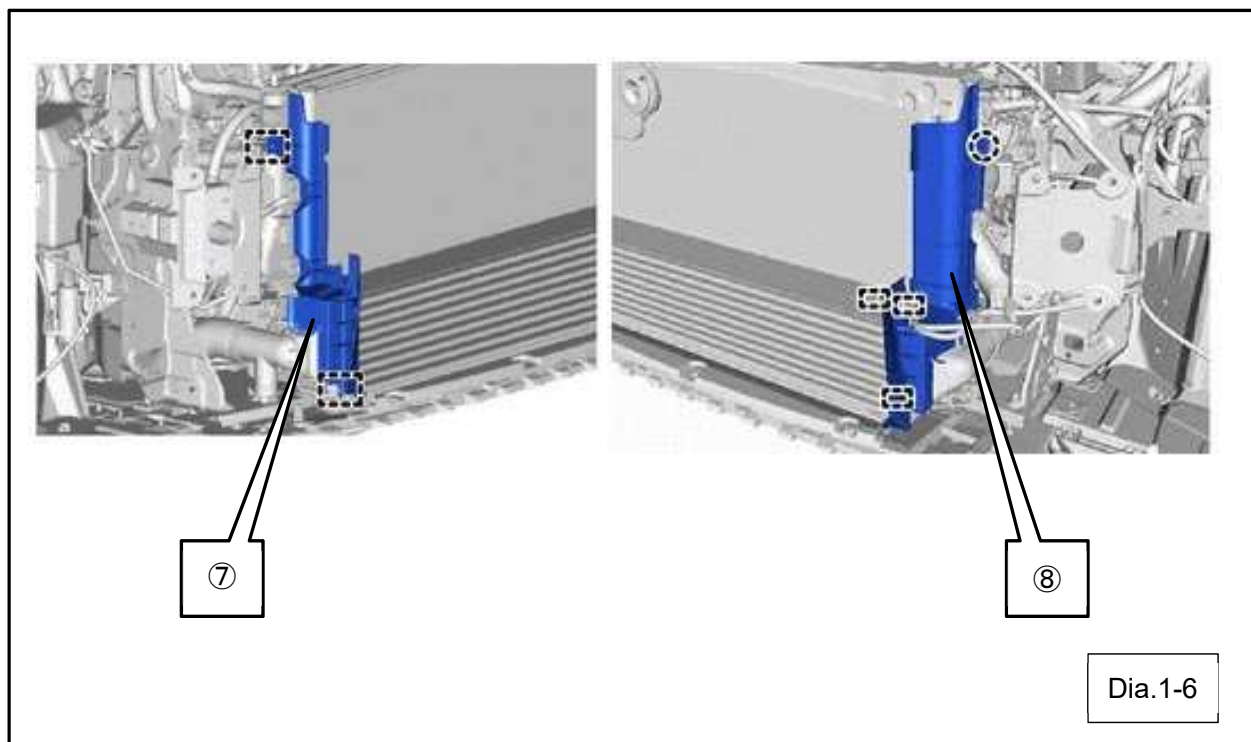
⑥Radiator side guide RH will not reused.



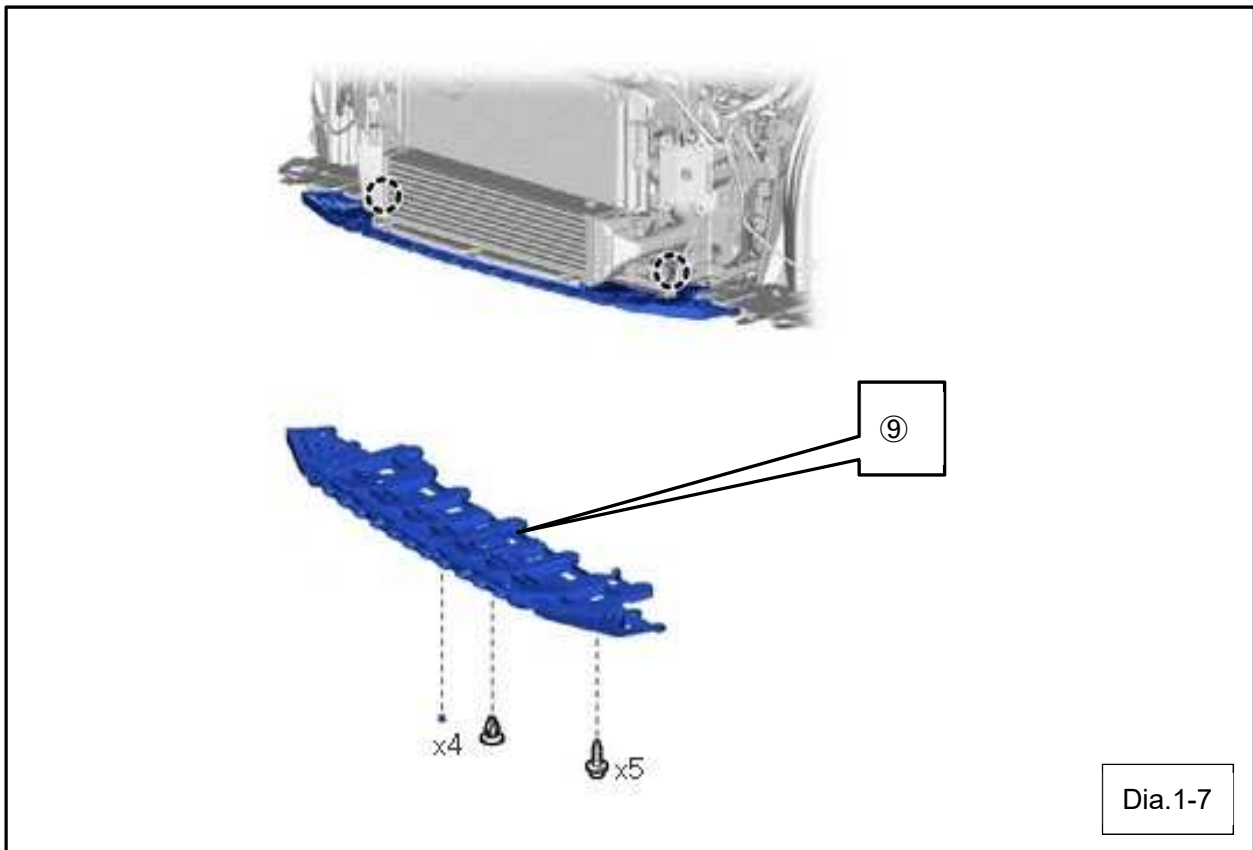
(6) Remove the ⑦Radiator guide RH,⑧Radiator guide LH. (Dia.1-6)

NOTE

⑦Radiator guide RH & ⑧Radiator guide LH will not reused.



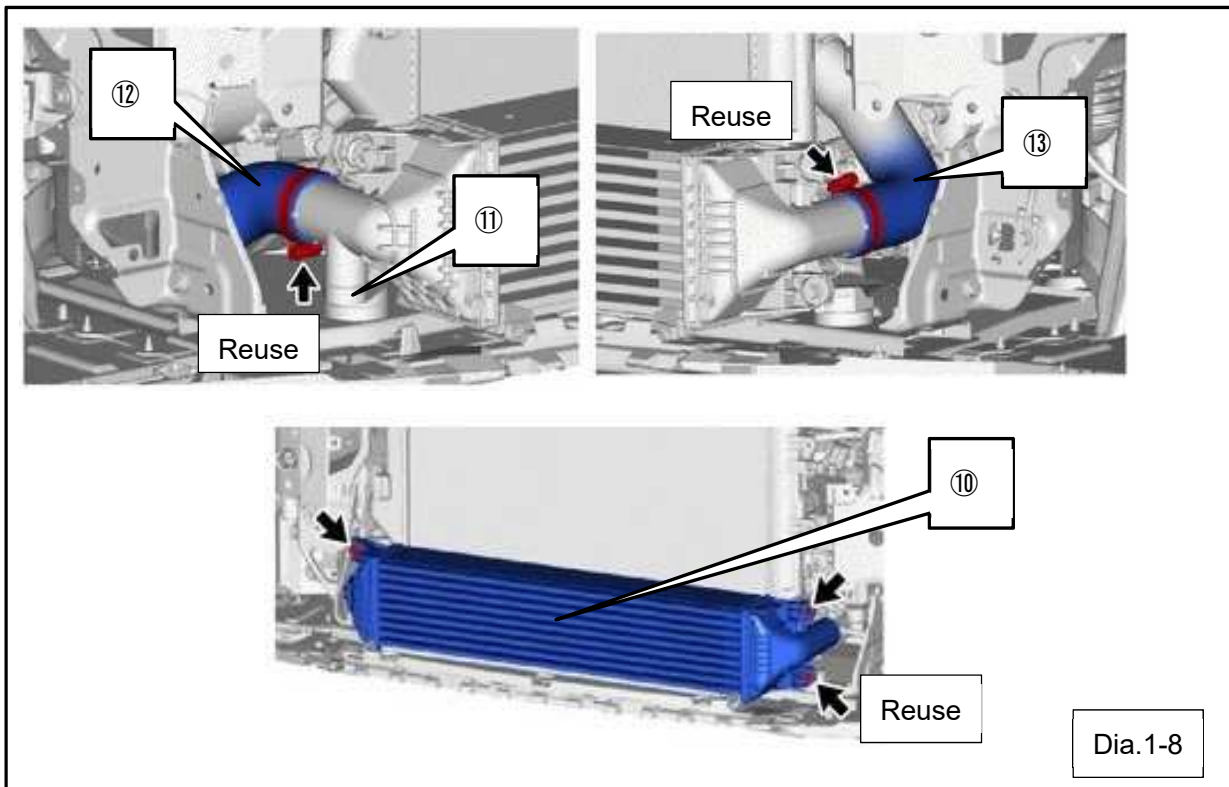
(7) Remove the ⑨Front bumper lower absorber. (Dia.1-7)



(8) Remove the ⑩Intercooler, ⑪Rubber bush, ⑫Inlet hose, ⑬Outlet hose
(Dia.1-8)

NOTE

Reuse one genuine intercooler fixing bolt and hose band.

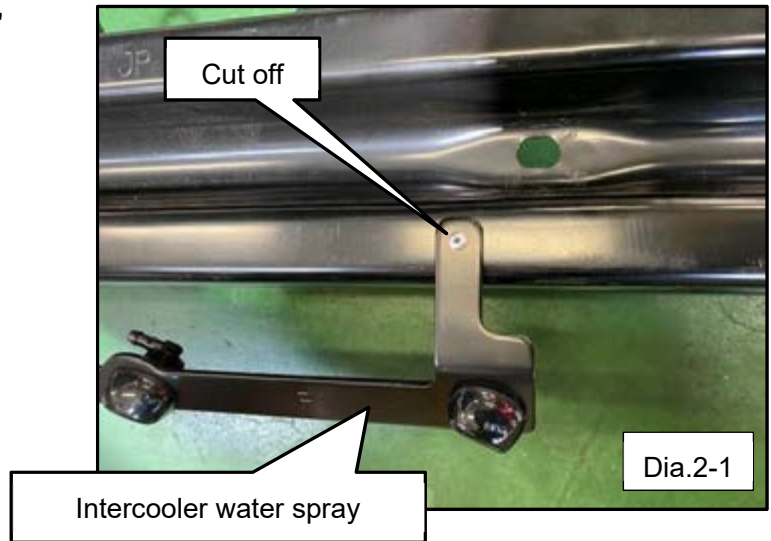


2. Processing of genuine parts.

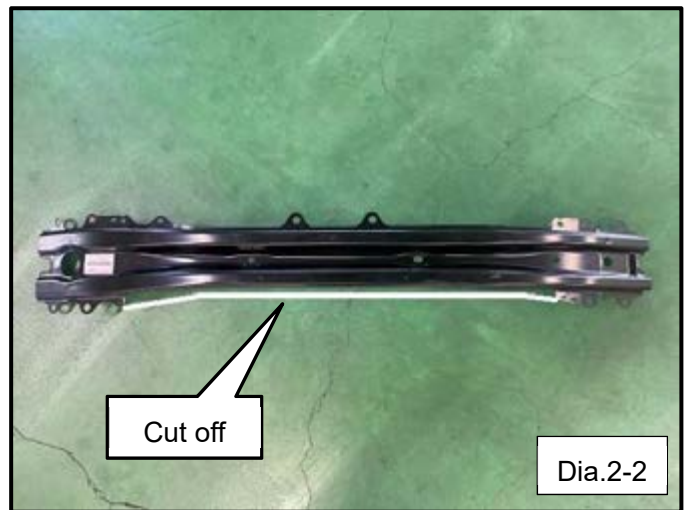
- (1) For "Vehicles with intercooler water spray"
Remove the Intercooler water spray from
the ④Bumper reinforcement. (Dia.2-1)

NOTE

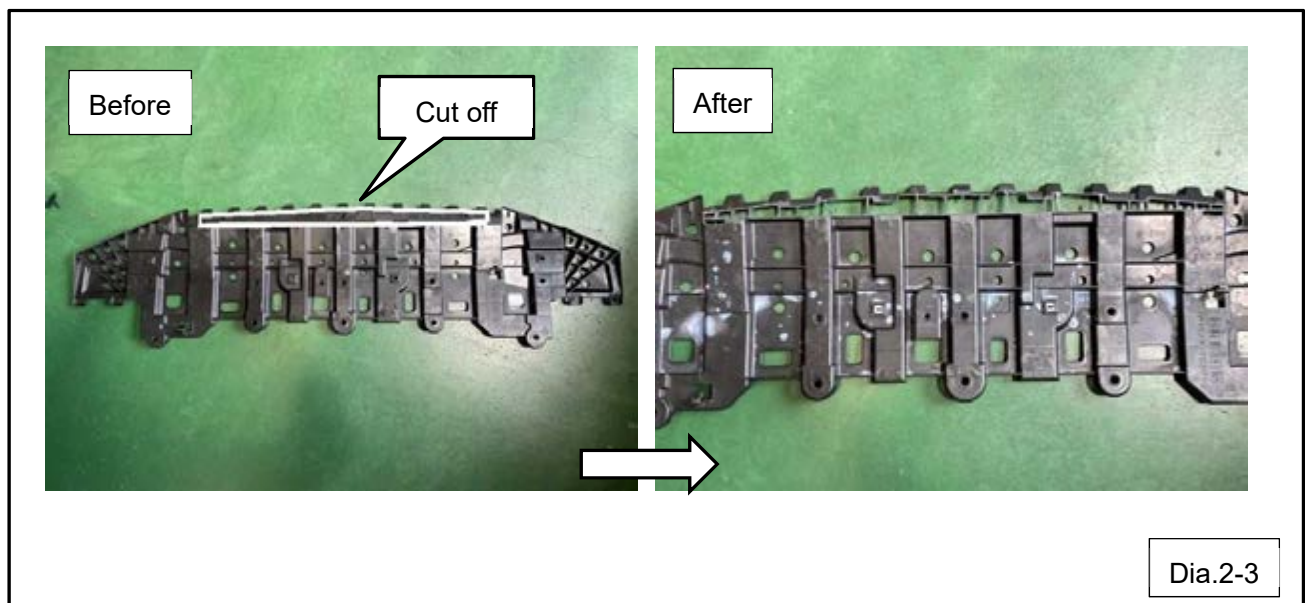
This process is not required for
"vehicles without intercooler water
spray".



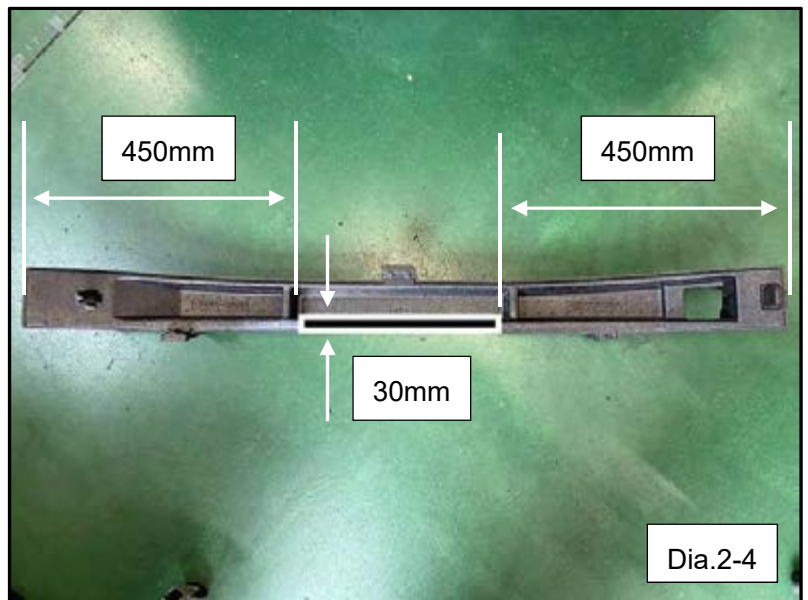
- (2) Cut off the white line at the bottom of the
④Bumper reinforcement. (Dia.2-2)



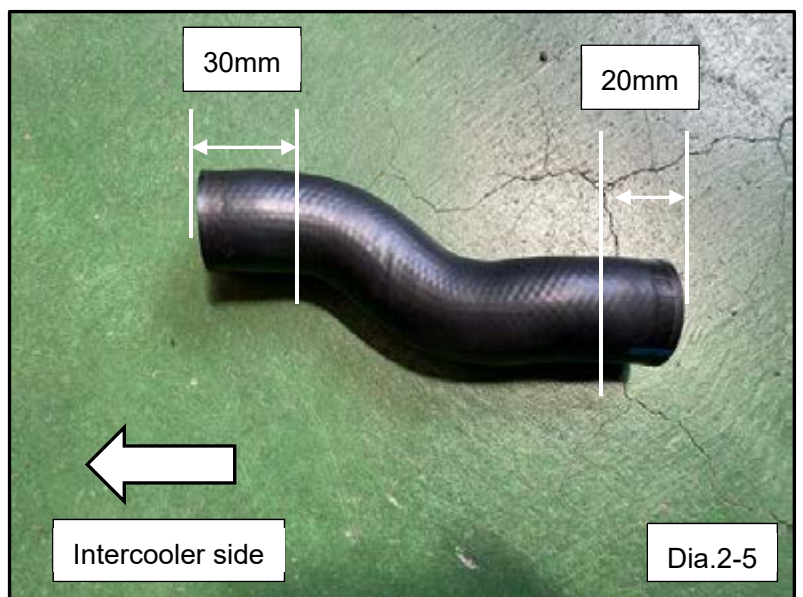
- (3) Cut off the white line on the ⑨Front bumper lower absorber. (Dia.2-3)



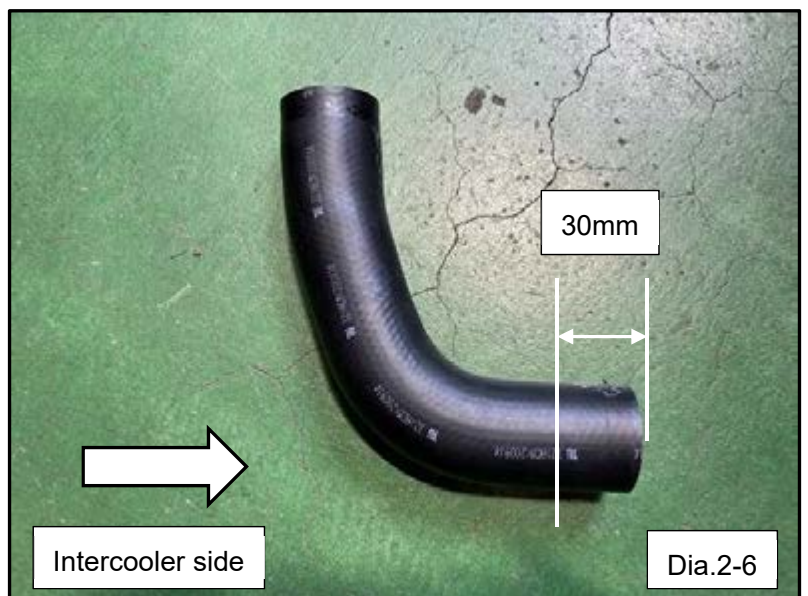
- (4) Cut off the white line on the
③Front bumper absorber.
(Dia.2-4)



- (5) Cut out the illustrated part of the
⑫Inlet hose. (Dia.2-5)



- (6) Cut out the illustrated part of the
⑬Outlet hose. (Dia.2-6)



3.Installation of kit parts.

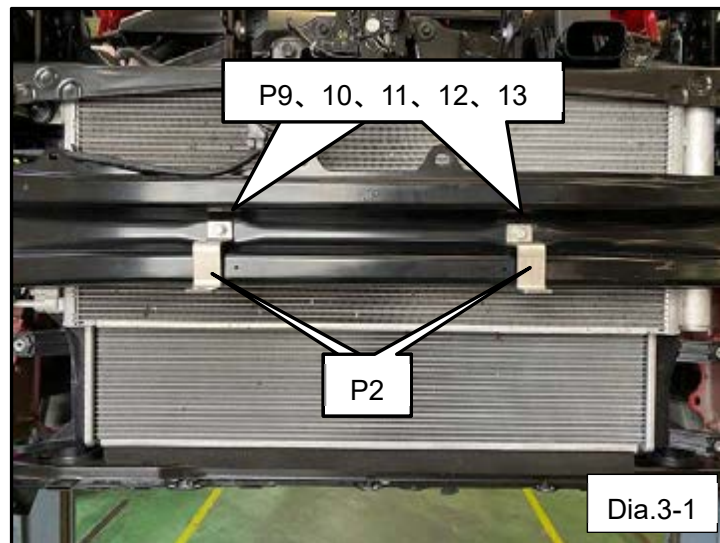
(1) Install the ④Bumper reinforcement.

(2) Attach bracket No. 1 to the ④Bumper reinforcement. (Dia.3-1)

NOTE

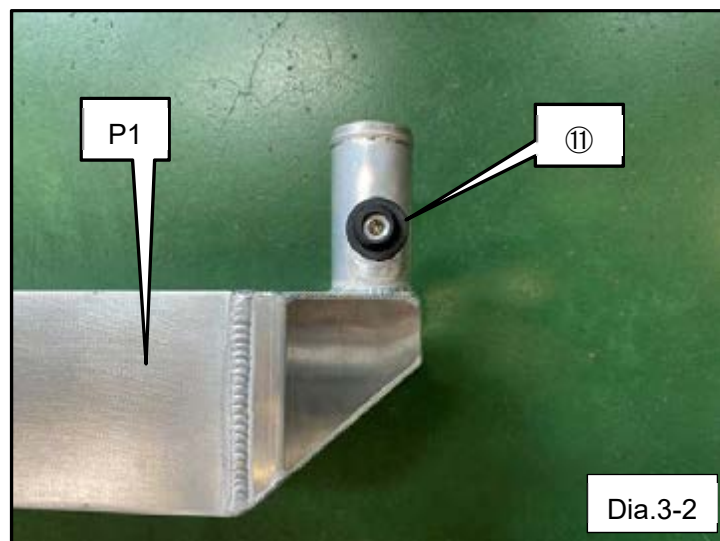
Temporarily tighten the bolts.

- P2 : Bracket No.1×2
- P9 : Hex Bolt M6-1.0 L=20×2
- P10 : Flat Washer M6×2
- P11 : Large Flat Washer M6×2
- P12 : Spring Washer M6
- P13 : Nut M6×2



(3) Attach ⑪ Rubber bush to the Intercooler core. (Dia.3-2)

- P1 : Intercooler core

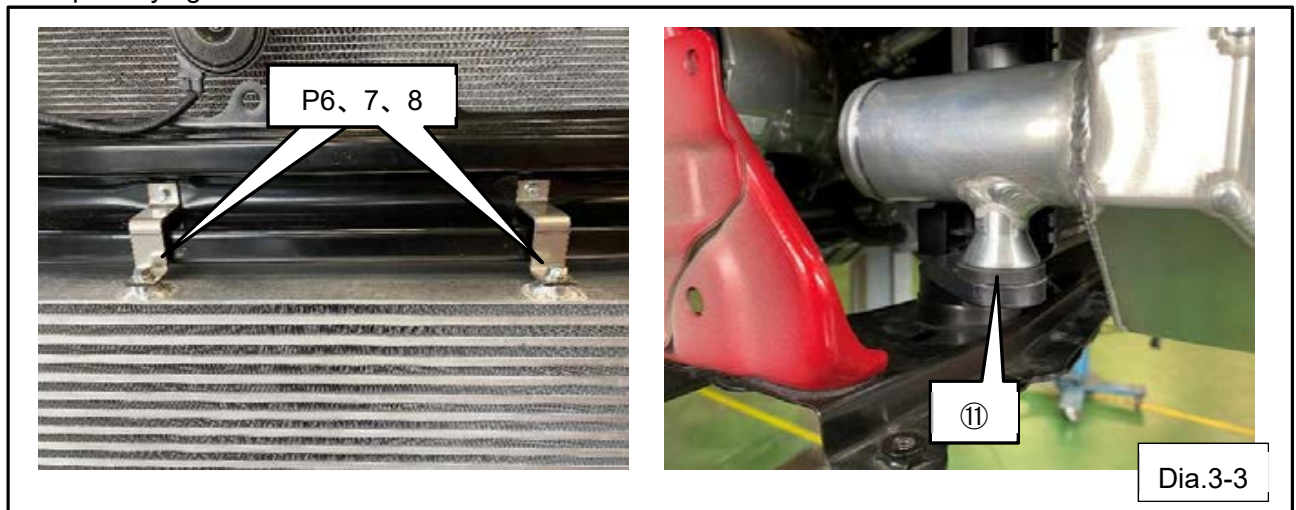


(4) Install the intercooler core. (Dia.3-3)

- P6 : Hex Bolt M8-1.25 L=15×2
- P7 : Flat washer M8×2
- P8 : Spring Washer M8×2

NOTE

Temporarily tighten the bolts.

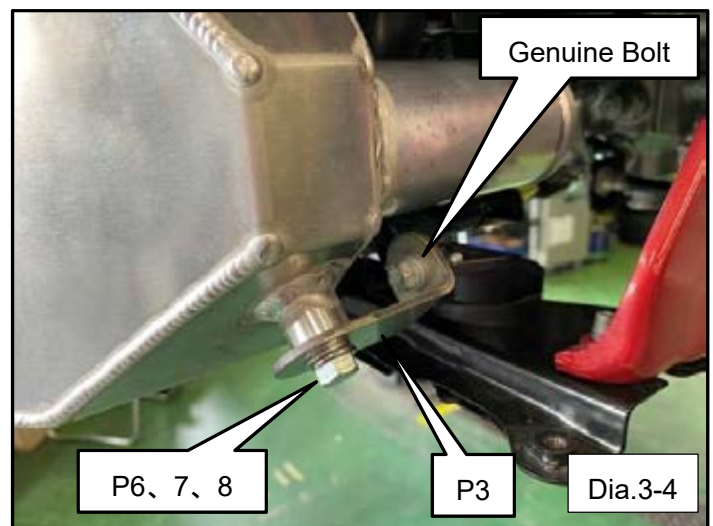


(5) Install the Bracket No.2. (Dia.3-4)

- P3 : Bracket No.2
- P6 : Hex Bolt M8-1.25 L=15
- P7 : Flat Washer M8
- P8 : Spring Washer M8
- Genuine Bolt

NOTE

Temporarily tighten the bolts.



(6) Make sure that the intercooler core does not interfere with the vehicle body and that it is horizontal, and then fully tighten the bolts used to attach the intercooler core bracket.

Tightening torque (N · m)

P6 : T=15

P9 : T=8

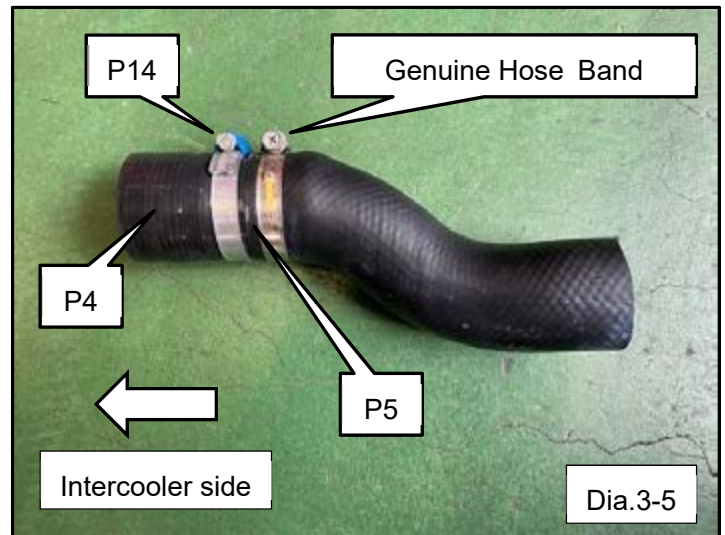
Genuine Bolt : T=8.5

(7) Attach the “Hose ϕ 50-45” and the “Pipe ϕ 45” to the ⑫Inlet hose processed in 2.(5). (Dia.3-5)

- P4 : Hose ϕ 50-45
- P5 : Pipe ϕ 45
- P14 : Hose Band 44-56
- Genuine Hose Band

Tightening torque (N · m)

T=20

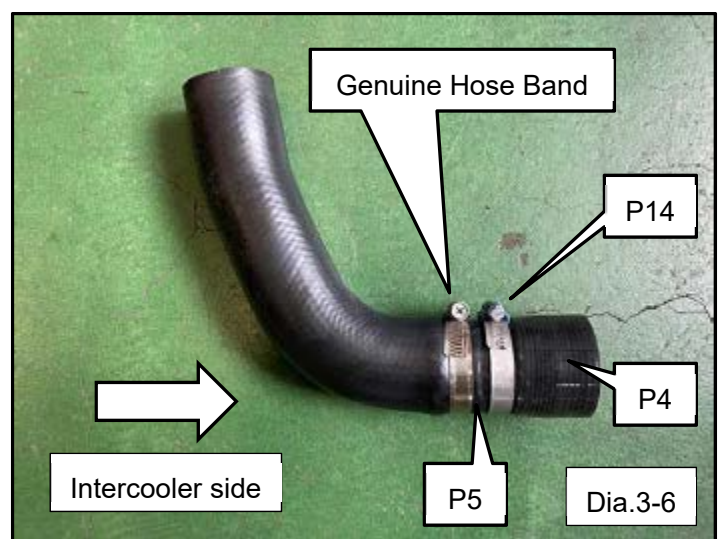


(8) Attach the “Hose ϕ 50-45” and the “Pipe ϕ 45” to the ⑬Outlet hose processed in 2.(6). (Dia.3-6)

- P4 : Hose ϕ 50-45
- P5 : Pipe ϕ 45
- P14 : Hose Band 44-56
- Genuine Hose Band

Tightening torque (N · m)

T=20

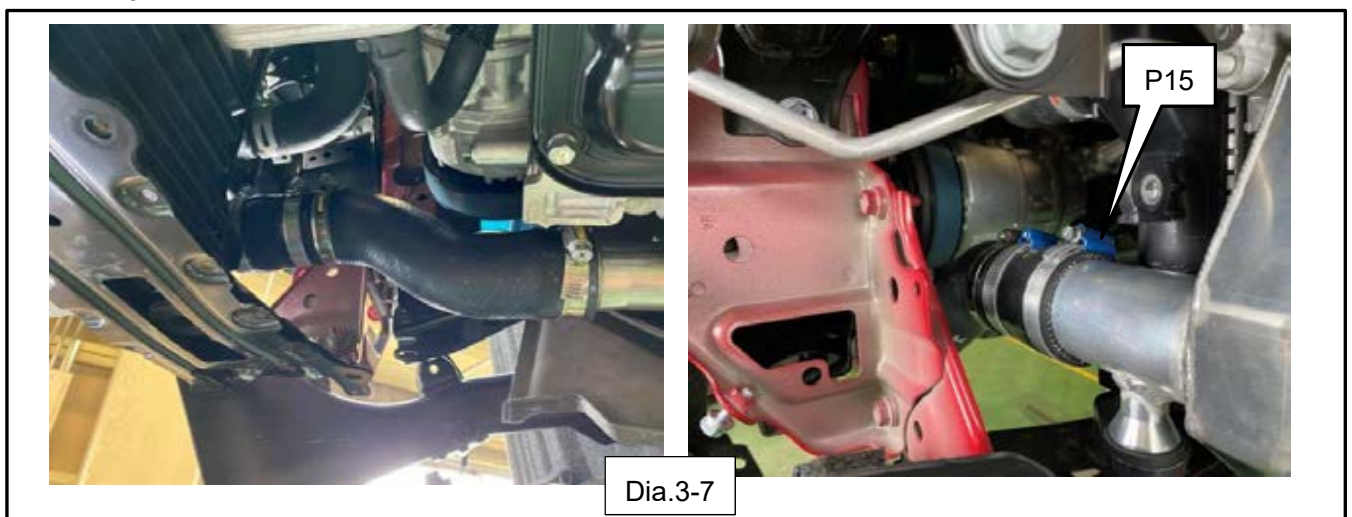


(9) Install the Inlet hose. (Dia.3-7)

- P15 : Hose Band 40-60

Tightening torque (N · m)

T=20



(10) Install the Outlet hose. (Dia.3-8)

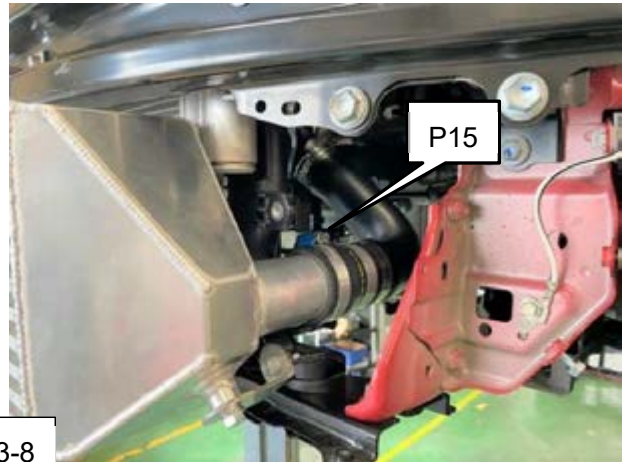
• P15 : Hose Band 40-60

Tightening torque (N · m)

T=20



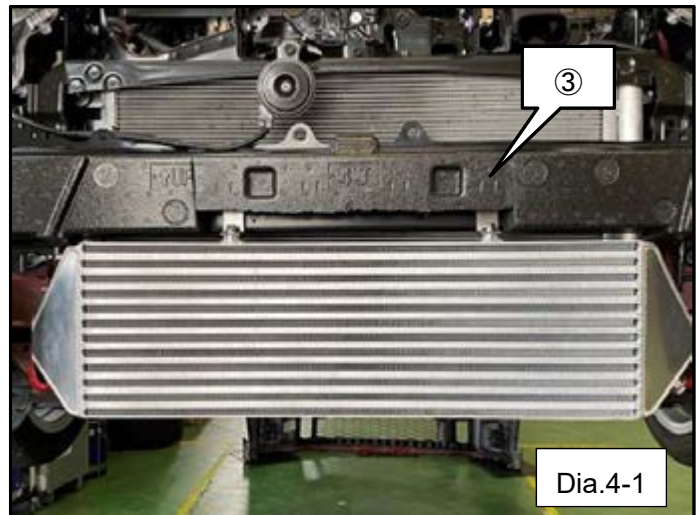
Dia.3-8



4. Installation of Genuine Parts & Operation check

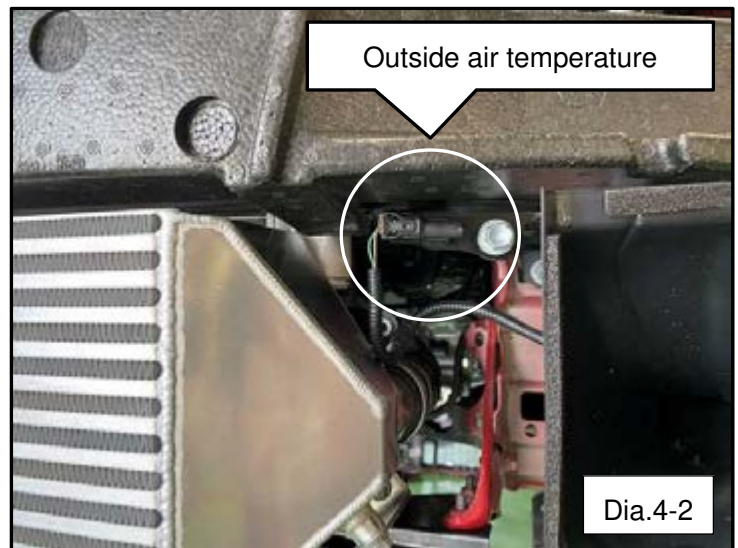
(1) Install the ⑨Front bumper lower absorber processed in 2.(3).

(2) Install the ③Front bumper absorber processed in 2.(4). (Dia.4-1)



Dia.4-1

- (3) Attach the outside air temperature sensor removed from the ⑧Radiator guide LH to the ④Bumper reinforcement. (Dia.4-2)



- (4) Install the ②Front bumper.
- (5) Install the ①Under cover.
- (6) Install the negative terminal of the battery.
- (7) Start the engine and check the following.
- There is no interference between parts.
 - There is no air leakage.

※After completing the installation work, be sure to perform the confirmation work according to "Confirmation after installation" in the instruction manual.



HKS Co., Ltd.

7181 Kitayama, Fujinomiya, Shizuoka 418-0192, Japan

<http://www.hks-power.co.jp>