

OIL COOLER 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 | OIL COOLER KIT |
| PART NUMBER | 15004-AH004 |
| APPLICATION | HONDA CIVIC TYPE-R(DBA-FK8) |
| ENGINE | K20C |
| YEAR | 2017/9~ |
| REMARKS | <ul style="list-style-type: none"> • Standard time required to install this kit is approximately 4 hours. • When replacing the oil filter, use HKS Oil Filter Type 1 (52009-AK005). • Modification of the following factory parts is required: <ul style="list-style-type: none"> ○ Inside the front bumper ○ Brake Duct Bracket ○ Inner Fender LH • Required item to install this kit: <ul style="list-style-type: none"> ○ Wire • Required tool to install this kit: <ul style="list-style-type: none"> ○ Riveter |

※ This application was confirmed by July, 2018.

REVISION OF MANUAL

| Rev. Number | Date | Manual Number | Details |
|-------------|--------|------------------|-------------------------|
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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 for installation on 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. | DESCRIPTION | QT | REMARKS |
|-----|----------------------|----|------------------------|
| 1 | Oil Cooler Core | 1 | |
| 2 | Oil Filter Mount | 1 | |
| 3 | Center Bolt | 1 | M20-P1.5 |
| 4 | O-ring | 1 | I.D. 59.92mm AS568-229 |
| 5 | Core Bracket 1 | 1 | |
| 6 | Core Bracket 2 | 1 | |
| 7 | Core Bracket 3 | 1 | |
| 8 | Core Bracket 4 | 1 | |
| 9 | Core Bracket 5 | 1 | |
| 10 | Air Duct 1 | 1 | |
| 11 | Air Duct 2 | 1 | |
| 12 | Air Duct 3 | 1 | |
| 13 | Air Duct 4 | 1 | |
| 14 | Brake Duct Bracket | 1 | |
| 15 | Conical Seal | 4 | |
| 16 | Oil Cooler Hose 1 | 1 | L=1340 180°- 45° |
| 17 | Oil Cooler Hose 2 | 1 | L=950 180°- 45° |
| 18 | Spacer | 1 | φ20-6 t=2 |
| 19 | Spacer | 1 | φ14-6 t=3 |
| 20 | Grommet | 5 | |
| 21 | Grommet Collar | 5 | |
| 22 | Grommet | 1 | |
| 23 | Punching Plate | 1 | |
| 24 | Vibration Insulator | 1 | |
| 25 | Heat Insulating Tape | 1 | 0.5m |
| 26 | Rivet | 9 | |

| NO. | DESCRIPTION | QT | REMARKS |
|-----|--------------------------|----|--|
| 27 | Button Bolt M4 L8 | 27 | |
| 28 | Button Bolt M5 L12 | 2 | |
| 29 | Hexagon Bolt M6-1.0 L=15 | 9 | |
| 30 | Hexagon Bolt M6-1.0 L=25 | 5 | |
| 31 | Nut M4 | 27 | |
| 32 | Self-lock Nut M5 | 2 | |
| 33 | Flange Nut M6 | 10 | |
| 34 | Washer M4 | 27 | |
| 35 | Washer M5 | 2 | |
| 36 | Washer M6 | 14 | |
| 37 | Tie Wrap L | 6 | |
| 38 | Tie Wrap S | 3 | |
| 39 | Oil Filter | 1 | 52009-AK005 HKS Oil Filter Type 1 φ68-H65 M20 |
| 40 | Sticker | 1 | |
| 41 | Instruction Manual | 1 | |
| 42 | Installation Manual | 1 | |

1. REMOVAL OF FACTORY PARTS

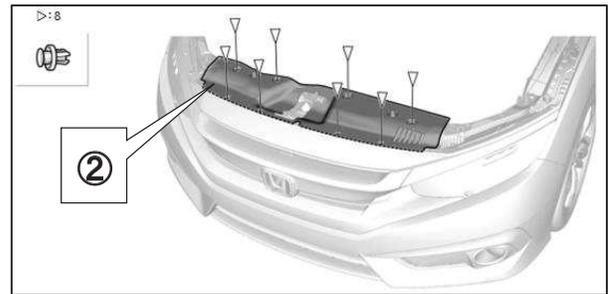
Before beginning removal of the factory parts, disconnect the negative cable from the battery terminal.
Use this instruction manual and the manufacturer's service manual as a reference.

(7) Disconnect the negative cable from the battery.

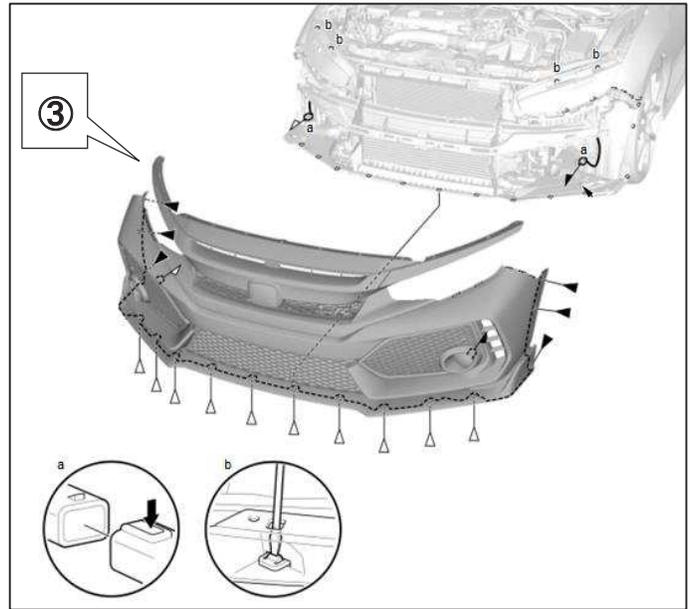
(8) Remove ①engine under cover plate.
※ Removed ① will be reused later.



- (9) Remove ② front grill cover.
※ Removed ② will be reused later.



- (10) Remove ③ front bumper.
※ Removed ③ will be reused later.



- (11) Remove ④ brake duct LH and ⑤ brake duct bracket LH.
※ Removed ④ and ⑤ will be reused later.



- (12) Remove ⑥ oil filter.



2. MODIFICATION OF FACTORY PARTS

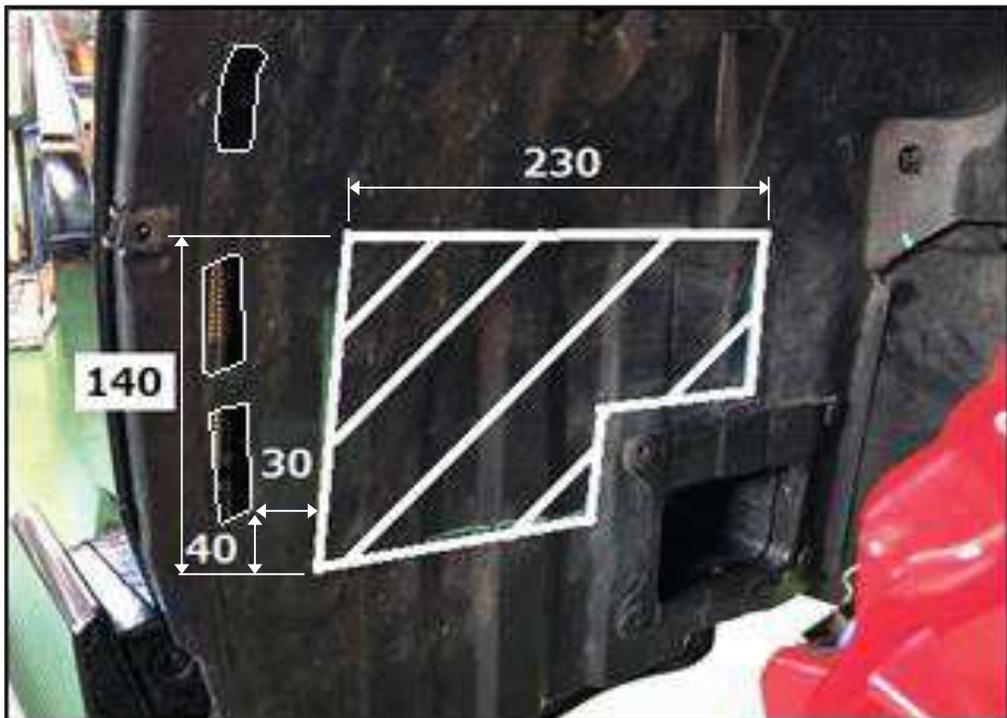
| PARTS LIST | | | |
|---|-----|----------------|----|
|  | No. | Descriptions | QT |
| | P23 | Punching Plate | 1 |
| | P26 | Rivet | 9 |
| | P38 | Tie Wrap S | 3 |

(10) Remove the garnish LH from the front bumper. Make a cooling air passage from the back using a belt sander.



(11) Reinstall the garnish LH to the bumper.

(12) Cut off the portion of the front inner fender LH along a line shown in the diagram.



(13) Drill an installation hole in the inner fender LH and Punching Plate using a 3.5mm drill.

- P23: Punching Plate x 1

(14) Install the Punching Plate to the inner fender LH using the Rivets.

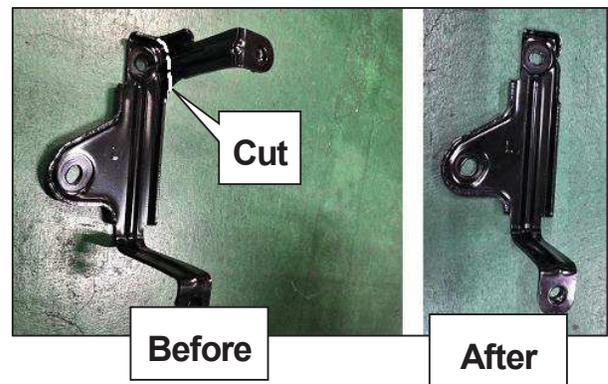
- P26: Rivet x 9

NOTE

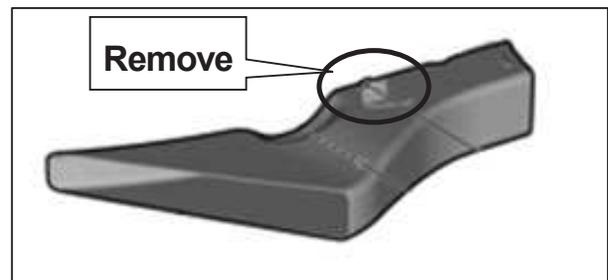
- If the punching plate comes in contact with the brake duct, cut off the portion of the punching plate coming in contact with the brake duct using metal cutting scissors.



(15) Cut off the portion of ⑤ brake duct bracket LH along a dotted line as shown in the diagram.



(16) Remove the rivet installed to the upper part of ④ brake duct LH using a drill as shown in the diagram.

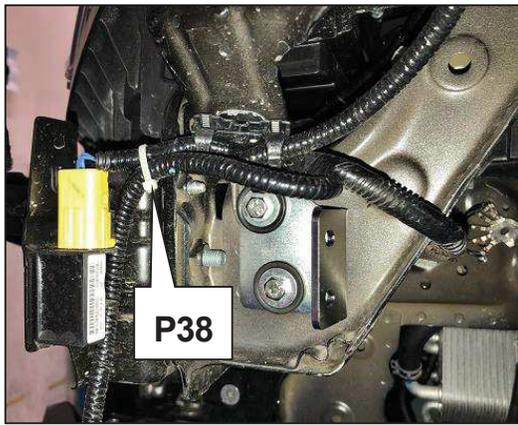
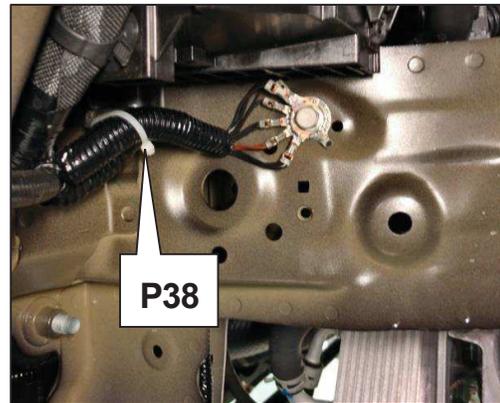
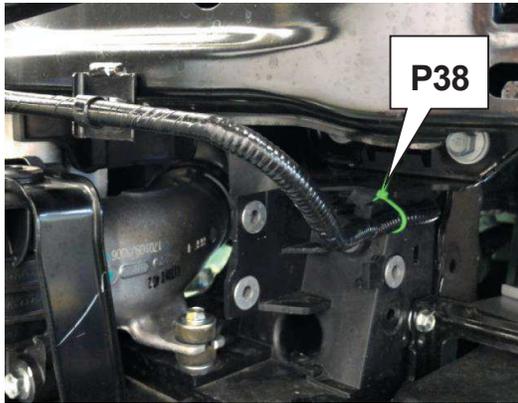


(17) Cut off the portion along a dotted line shown in the diagram.



(18) Secure the wires shown in the diagrams below using the provided Tie Wrap S.

• P38: Tie Wrap S x 3



3. INSTALLATION OF OIL FILTER MOUNT

PARTS LIST

| No. | Descriptions | QT |
|-----|------------------|----|
| P2 | Oil Filter Mount | 1 |
| P3 | Center Bolt | 1 |
| P4 | O-ring | 1 |

(3) Make sure there is no scratch on kit parts. Remove foreign objects from parts.

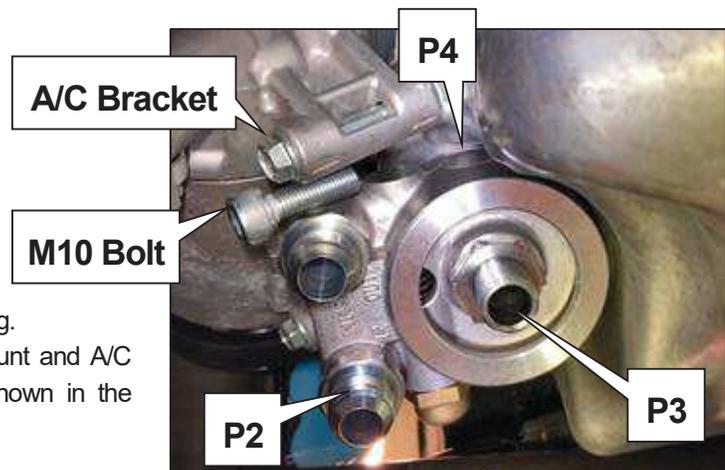
(4) Install the Oil Filter Mount to the engine.

Center Bolt Tightening Torque
45N·m (4.6kgf·m)

- P2: Oil Filter Mount x 1
- P3: Center Bolt x 1
- P4: O-ring x 1

NOTE

- Apply a small amount of oil to the O-ring.
- Insert a M10 bolt between the oil filter mount and A/C bracket to keep a 10mm clearance as shown in the diagram, and adjust the installation position.

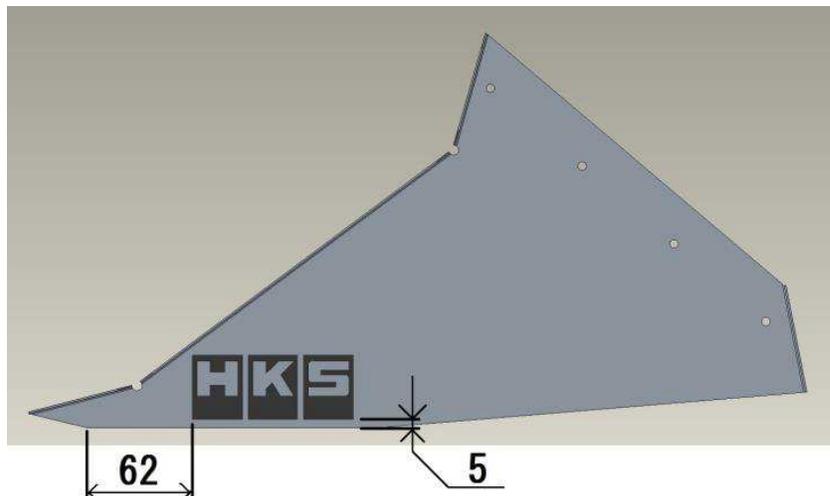


4. ASSEMBLY OF OIL COOLER CORE

| PARTS LIST | | |
|------------|--------------------------|----|
| No. | Descriptions | QT |
| P1 | Oil Cooler Core | 1 |
| P5 | Core Bracket 1 | 1 |
| P6 | Core Bracket 2 | 1 |
| P7 | Core Bracket 3 | 1 |
| P8 | Core Bracket 4 | 1 |
| P9 | Core Bracket 5 | 1 |
| P10 | Air Duct 1 | 1 |
| P11 | Air Duct 2 | 1 |
| P12 | Air Duct 3 | 1 |
| P13 | Air Duct 4 | 1 |
| P20 | Grommet | 5 |
| P21 | Grommet Collar | 5 |
| P27 | Button Bolt M4 L8 | 27 |
| P29 | Hexagon Bolt M6-1.0 L=15 | 6 |
| P31 | Nut M4 | 27 |
| P33 | Flange Nut M6 | 8 |
| P34 | Washer M4 | 27 |
| P36 | Washer M6 | 6 |
| P40 | Sticker | 1 |

- (1) Make sure there is no scratch on kit parts. Remove foreign objects from parts.
- (2) Remove protection films from Air Duct 1 to 4.
- (3) Affix the Sticker to the Air Duct 2.

- P11: Air Duct 2 x 1
- P40: Sticker x 1

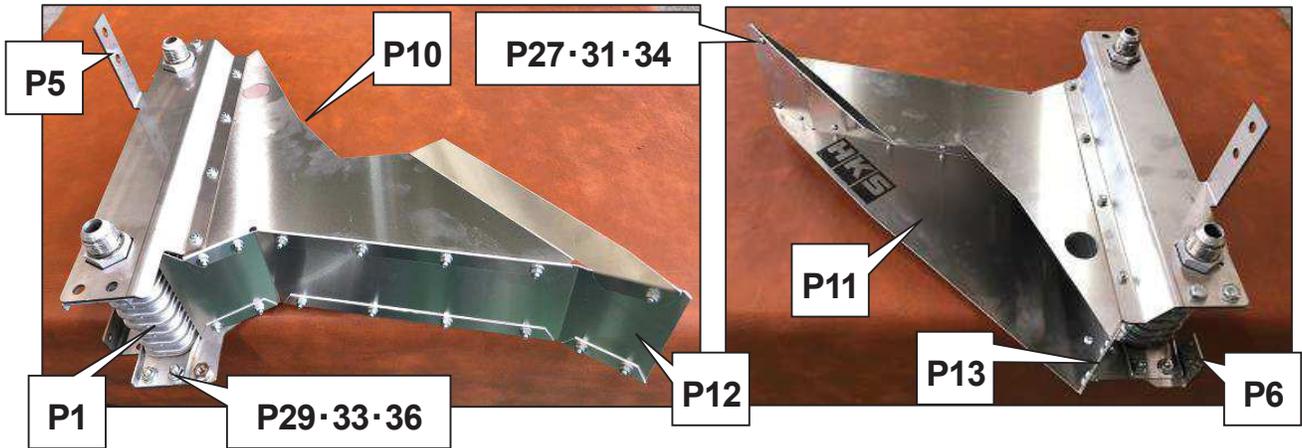


(4) Install the Core Bracket 1 and 2 and Air Duct 1 to 4 to the Oil Cooler Core.

- P1: Oil Cooler Core x 1
- P5: Core Bracket 1 x 1
- P6: Core Bracket 2 x 1
- P10: Air Duct 1 x 1
- P11: Air Duct 2 x 1
- P12: Air Duct 3 x 1
- P13: Air Duct 4 x 1
- P27: Button Bolt M4 L8 x 27
- P29: Hexagon Bolt M6-1.0 L=15 x 6
- P31: Nut M4 x 27
- P33: Flange Nut M6 x 6
- P34: Washer M4 x 27
- P36: Washer M6 x 6

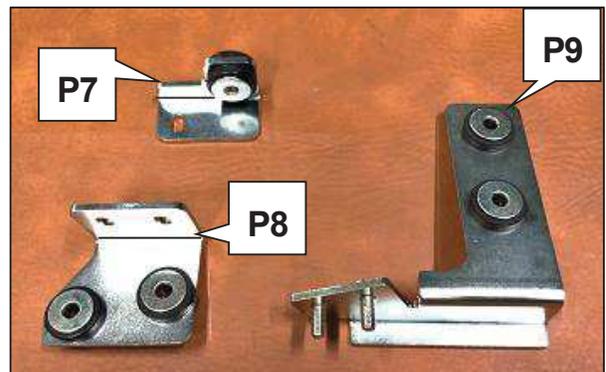
NOTE

- Install the button bolt M4 inside the air duct.



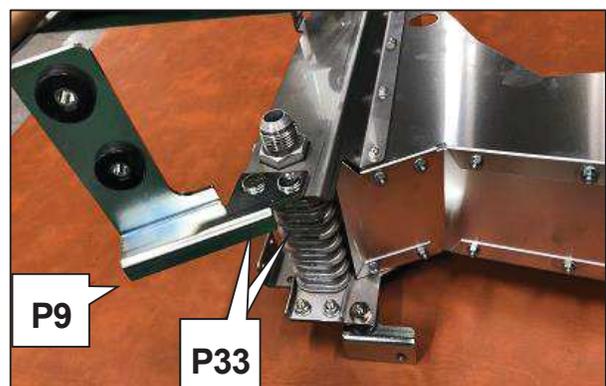
(5) Install the Grommet and Grommet Collar to the Core Bracket 3 to 5.

- P7: Core Bracket 3 x 1
- P8: Core Bracket 4 x 1
- P9: Core Bracket 5 x 1
- P20: Grommet x 5
- P21: Grommet Collar x 5



(6) Temporarily install the Core Bracket 5 to the Core Bracket 1.

- P33: Flange Nut M6 x 2



5. INSTALLATION OF OIL COOLER CORE & HOSE

| PARTS LIST | | |
|------------|--------------------------|----|
| No. | Descriptions | QT |
| P14 | Brake Duct Bracket | 1 |
| P15 | Conical Seal | 4 |
| P16 | Oil Cooler Hose 1 | 1 |
| P17 | Oil Cooler Hose 2 | 1 |
| P18 | Spacer $\phi 20-6$ t=2 | 1 |
| P19 | Spacer $\phi 14-6$ t=3 | 1 |
| P22 | Grommet | 1 |
| P24 | Vibration Insulator | 1 |
| P25 | Heat Insulating Tape | 1 |
| P28 | Button Bolt M5 L12 | 2 |
| P29 | Hexagon Bolt M6-1.0 L=15 | 3 |
| P30 | Hexagon Bolt M6-1.0 L=25 | 5 |
| P32 | Self-lock Nut M5 | 2 |
| P33 | Flange Nut M6 | 2 |
| P35 | Washer M5 | 2 |
| P36 | Washer M6 | 8 |
| P37 | Tie Wrap L | 6 |
| P39 | Oil Filter | 1 |

(21) Remove foreign objects from parts.

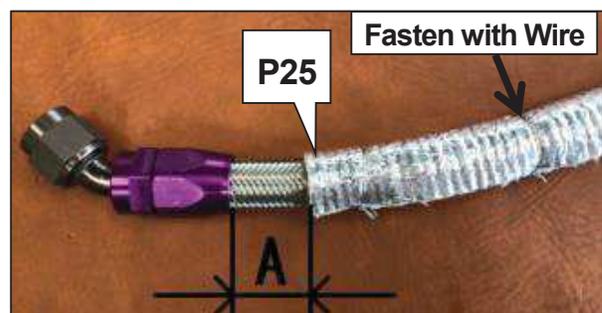
(22) Cut the Heat Insulating Tape in half (250mm in length).

• P25: Heat Insulating Tape x 1

(23) Wrap the Heat Insulating Tape around the Oil Cooler Hose 1 and 2 on the side with a 45° fitting as shown in the diagram. Fasten the tape with stainless wires. Make sure to leave space "A" between the fitting and the tape. The space length of "A" for each hose is shown below.

• P16: Oil Cooler Hose 1 x 1
 ※ Space Length of A: 80mm

• P17: Oil Cooler Hose 2 x 1
 ※ Space Length of A: 30mm



(24) Mark the point on the Oil Cooler Hose 1 as indicated in the diagram.

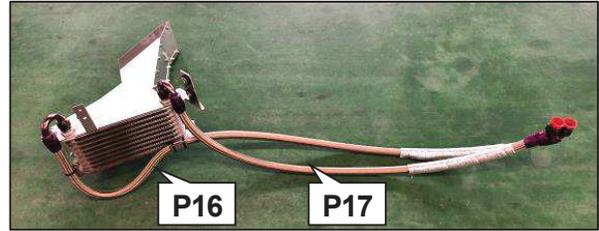


(25) Remove a protection cover from the 180° fitting attached to the Oil Cooler Hose 1 and 2. Temporarily install the hoses to the Oil Cooler Core.

- P15: Conical Seal x 2

NOTE

- Insert the provided Conical Seal between the Oil Cooler core and Oil Cooler Hose 1 and 2

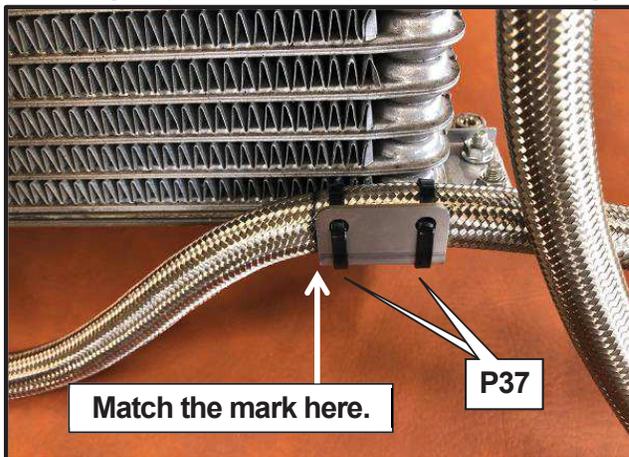


(26) Secure the Oil Cooler Hose 1 to the Core Bracket 2 using the provided Tie Wrap L.

- P37: Tie Wrap L x 3

NOTE

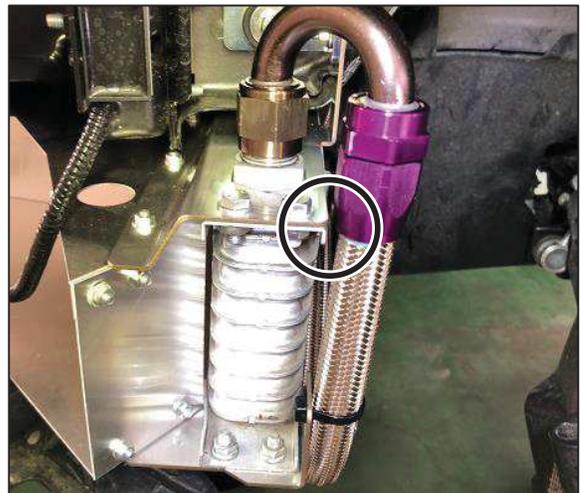
- Match the mark made on the hose in 5.(4) with the position indicated in the diagram below. Secure the hose using the provided Tie Wrap L as shown in the diagram.



(27) Securely install the Oil Cooler Hose 1 to the Oil Cooler Core.

NOTE

- Make a 3mm clearance between the oil cooler core and oil cooler hose as shown in the diagram.
- When tightening the fittings, make sure to hold the hexagon part of the oil cooler core.



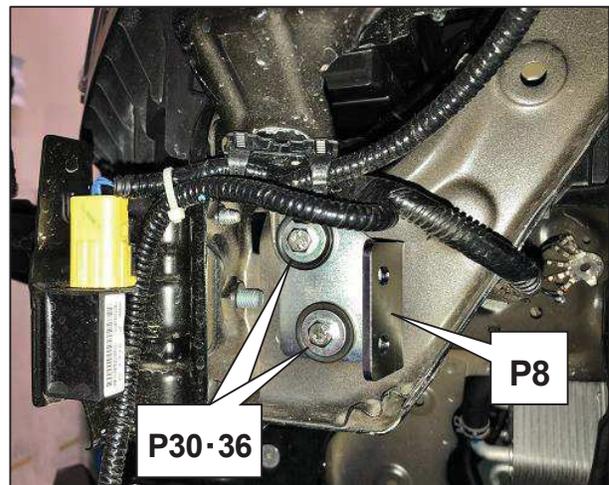
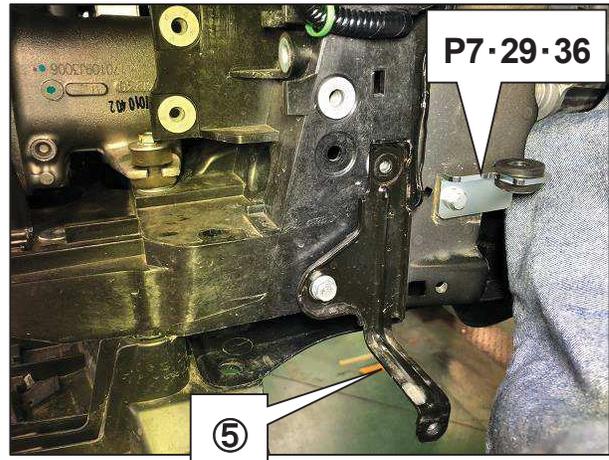
(28) Install ⑤ brake duct bracket that was modified in 2.(6) to the vehicle.

NOTE

Tighten only the lower side's bolt.

(29) Temporarily install the Core Bracket 3 and 4 to the vehicle using the following provided parts.

- P7: Core Bracket 3 x 1
- P8: Core Bracket 4 x 1
- P29: Hexagon Bolt M6-1.0 L15 x 1
- P30: Hexagon Bolt M6-1.0 L25 x 2
- P36: Washer M6 x 3



(30) Install the Brake Duct Bracket to ④ brake duct LH using the following provided parts.

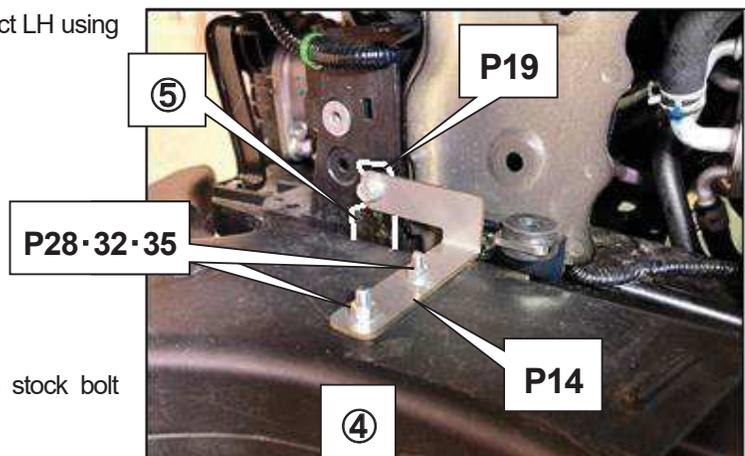
- P14: Brake Duct Bracket x 1
- P19: Spacer $\phi 14-6$ t=3 x 1
- P28: Button Bolt M5 L12 x 2
- P32: Self-lock Nut M5 x 2
- P35: Washer M5 x 2

(31) Install ④ brake duct to the vehicle using a stock bolt using the following provided part.

- P19: Spacer $\phi 14-6$ t=3 x 1

NOTE

- Insert the Spacer $\phi 14-6$ t=3 (P19) between ⑤ brake duct bracket and Brake Duct Bracket (P14).

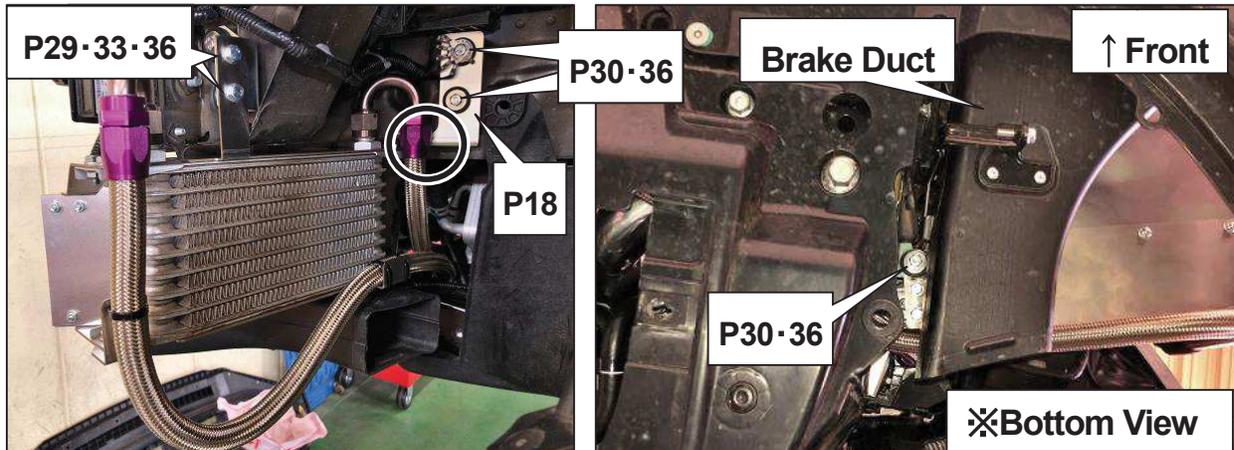


(32) Install the Oil Cooler Core to the vehicle using the following provided parts.

- P18: Spacer $\phi 20-6$ t=2 x 1
- P29: Hexagon Bolt M6-1.0 L15 x 2
- P30: Hexagon Bolt M6-1.0 L25 x 3
- P33: Flange Nut M6 x 2
- P36: Washer M6 x 5

NOTE

- Insert the Spacer $\phi 20-6$ t=2 between the grommet collar and the vehicle body.



(33) Tighten the Core Bracket 3 to 5.

(34) Tighten the Oil Cooler Hose 2 to install to the Oil Cooler Core.

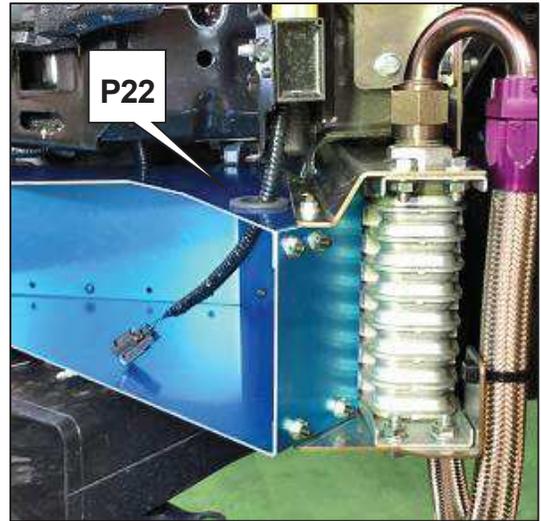
NOTE

- Make a 3mm clearance between the Core Bracket 5 and Oil Cooler Hose's fitting.
- When tightening the fittings, makes sure to hold the hexagon part of the oil cooler core.



(35) Route the wire of the fog light through the Grommet and install the Grommet to the Air Duct 1 as shown in the diagram below.

- P22: Grommet x 1

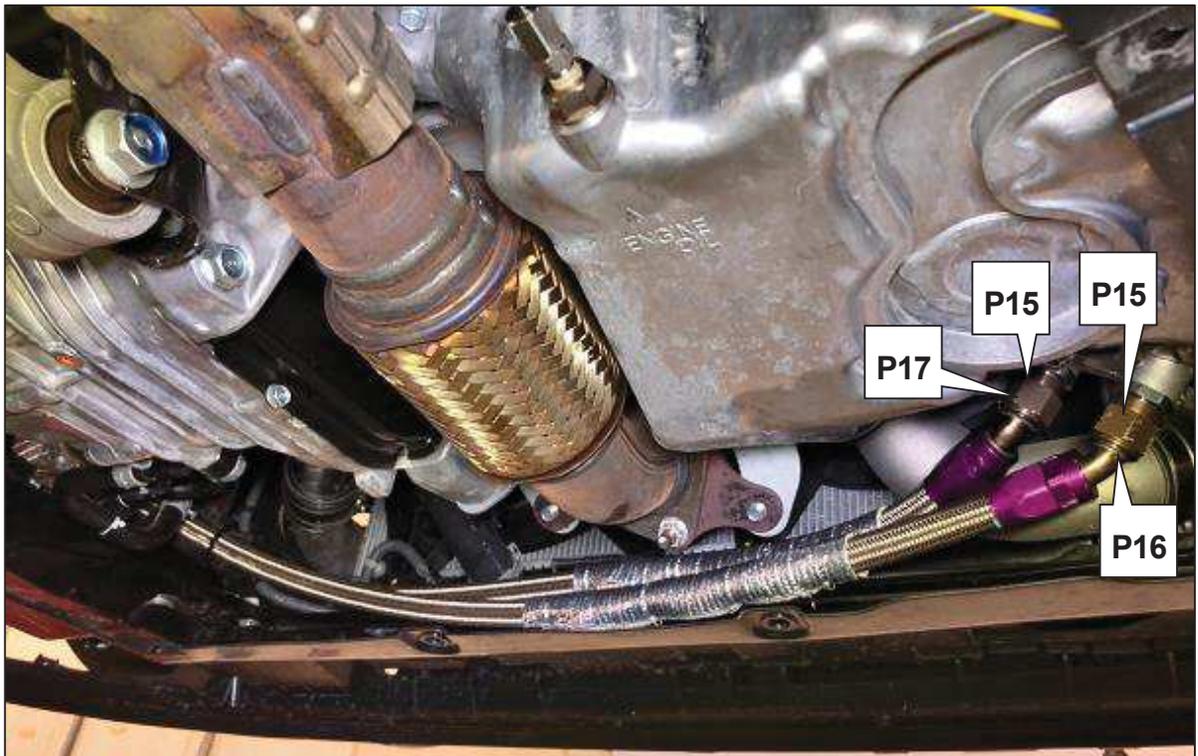


(36) Temporarily install the Oil Cooler Hose to the Oil Filter Mount.

- P15: Conical Seal x 2

NOTE

- Insert the Conical Seal between the Oil Cooler Core and Oil Cooler Hose's fitting.

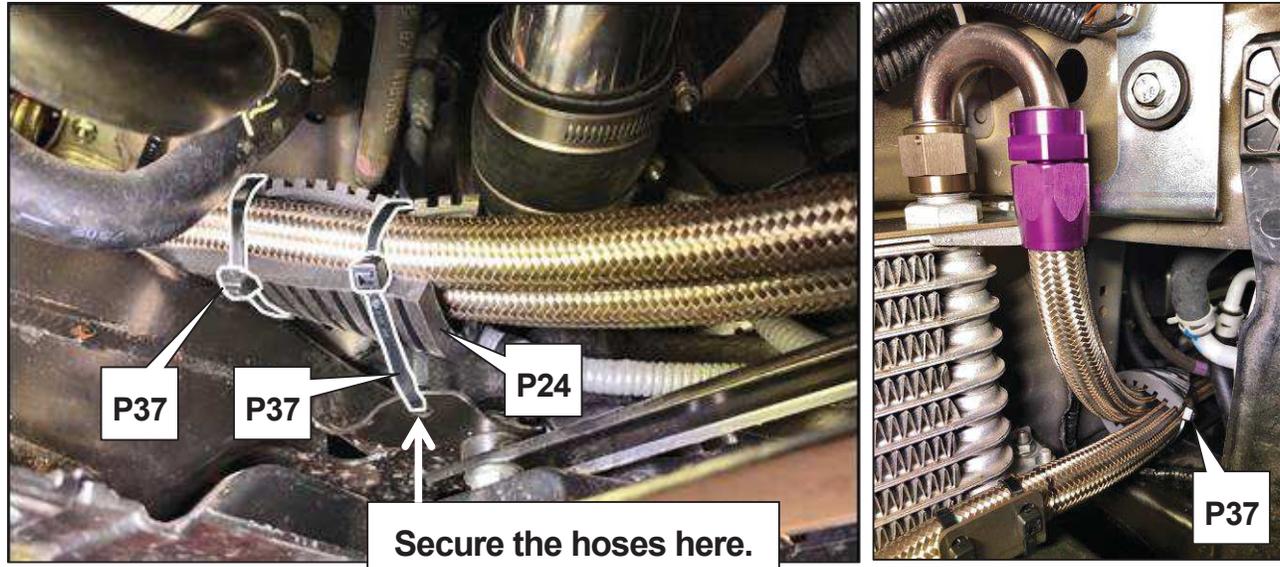


(37) Install the Vibration Insulator to the Oil Cooler Hose as shown in the diagram below.

- P24: Vibration Insulator x 1
- P37: Tie Wrap L x 2

NOTE

Make sure the Oil Cooler Hose does not come in contact with the clutch hose and/or water hose.



(38) Secure the Oil Cooler Hoses using the provided Tie Wrap L to the position indicated in the diagram below.

- P37: Tie Wrap L x 1

(39) Connect the Oil Cooler Hoses to the Oil Filter Mount.

(40) Install the Oil Filter.

- P39: Oil Filter x 1

6. REINSTALLATION OF FACTORY PARTS

(5) Make sure the installed parts do not come in contact with any other parts of the vehicle.

(6) Reconnect the negative cable to the battery.

(7) Start the engine. Check to see if the oil is not leaking, and installed parts do not come in contact with any other parts of the vehicle.

(8) Reinstall the removed factory parts ① to ③.

※ After the installation process is complete, check all items listed in the “Confirmation After Installation” section of the instruction manual.