# TRANSFER 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.

This product fits only the following vehicle.

Should the model of your vehicle not comply with the application of this product, contact the seller at your earliest convenience

PRODUCT NAME	TRANSFER OIL COOLER KIT
PURPOSE	AUTOMOBILE PARTS
PART No.	27002-AT001
MANUAL NUMBER	E04261-T76020-00
VEHICLE	TOYOTA GR COROLLA (GZEA14H)
ENGINE	G16E-GTS
MODEL YEAR	2022/12 -
	【Estimated installation time】8 hours
	【Required transfer oil】0.8[L].
REMARKS	[Separately Required Parts] Vinyl tape · Harness tape · Insulation tape · Sealing tape
	[Special tools] Electric pliers · Nutter
	【Parts requiring modification】Reinforcement, Intercooler Air Guide (Only for vehicles made after March 2025) Undercover

<sup>\*</sup>Years of compatible vehicles are as of March 2025. Please contact HKS Support Center for compatibility for vehicles registered after March 2025.

## **REVISION HISTORY**

Rev. Number	Date	Details
3-3.01	2025/3	1 <sup>st</sup> Edition

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#### NOTICE

Thank you for purchasing HKS TRANSFER OIL COOLER KIT. Please read this manual to ensure safe use and full functionality of the product. After installation, please follow the instructions in this manual and use the product safely. Always ask a specialist to install the product, and be sure to read and understand this manual thoroughly before installation. When installing or removing standard parts, use the maintenance manual issued by the manufacturer and this manual together. If you do not have the maintenance manual, please purchase a new one.

#### **ATTENTION**

- This manual contains precautions that must be observed to ensure the safe installation of this product and to prevent hazards or damage to the customer or third parties.
- This product is designed for automotive use only. Do not use this product for any purpose other than that for which it is intended.
- We are not responsible for any damage caused by modification or misuse of this product or its accessories by the customer or a third party.
- This product is designed for installation on stock vehicles and vehicles equipped with HKS products. We do
  not guarantee the function, performance, or safety of this product when installed on vehicles other than those
  listed above.
- This manual is subject to change without notice.
- This product, including accessories, is subject to change without notice for improvement.

#### **SAFETY PRECAUTIONS**

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

<u> </u>	WARNING	Indicates risk of serious injury and/or possible death.
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**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.)

## **WARNING**

- To prevent explosion and/or fires, always:
  - Work on the vehicle in a well-ventilated area.
  - Handle any flammable objects with care.
- To prevent electrical damage/burns/fires, always:
  - Disconnect the negative terminal of the battery before beginning installation.
  - When disconnecting connectors, take extra care to avoid breaking the connectors.
- Before jacking up the vehicle, always use wheel blocks and position the jack correctly. Also, do not start
  working under the vehicle without using jack stands.
  - Positioning the jack incorrectly imbalances the vehicle and may damage the vehicle body.
  - Incorrect use of jack stands may result in the vehicle falling causing serious injury or possibly death.

## **CAUTION**

- Do not misuse this product.
  - Misuse of this product may lead to engine damage.
  - Misuse of this product may lead to loss of its original function.
- Prior to installation, make sure the engine bay temperature has cooled to approximately 40°C/104°F
  - Failure to let the engine cool down properly can lead to severe burns.
- During the work, cover the hose and pipe with a rag to prevent foreign matter from entering the hose and piping.
  - If neglected, contaminants in the piping can lead to engine damage.

#### **BEFORE INSTALLATION**

- Make sure that all of the parts listed in the Parts List are included in the kit.
- Reference the factory service manual when removing factory parts.

  If you do not have a service manual please purchase one from the manuficers.
- If you do not have a service manual, please purchase one from the manufacturer.

  Be careful when handling this product: avoid dropping or subjecting it to excessive important.
- Be careful when handling this product; avoid dropping or subjecting it to excessive impacts. Failure to do so
  may result in product damage or improper installation.
- Use the proper tools when tightening nuts and bolts. If over-tightened, the bolts may become damaged.
- Make sure there is no oil left on connections between pipes and hoses. Wipe off all oil left on connections. The pipe may come off when boost pressure increases.
- Keep the removed factory parts in a safe place for ease of reinstallation at a later date (if necessary). It is recommended to mark the positions of the removed factory parts.
- When refilling oil, make sure to use the appropriate type of oil.

## **№** WARNING

Disconnect the negative terminal of the battery before beginning installation to prevent electrical damage and/or shock.



## PARTS LIST

NO.	PRODUCT	QUANTITY	REMARKS
P1	Transfer Cooler Pipe	1	
P2	Oil Pump	1	
P3	Pump Controller	1	
P4	Main Harness	1	
P5	Pump Harness	1	
P6	Pump Bracket	1	
P7	Filter Bracket	1	
P8	Hose Bracket No.1	1	
P9	Hose Bracket No.2	1	
P10	Cooler Bracket L	1	
P11	Cooler Bracket R	1	
P12	Cooler Bracket	4	
P13	Oil Hose Ø10 L3000	1	
P14	Braided Tubing 1200mm	2	
P15	Braided Tubing 130mm	1	
P16	Oil Filter	1	
P17	Pump Banjo Bolt M16	2	
P18	Pump Banjo Ø16	2	
P19	Drain Banjo Bolt M18	1	
P20	Drain Banjo Ø18	1	
P21	Transfer Case Connector	1	
P22	Fitting AN6-Ø10	1	
P23	Hose Band	1	Engraving NO.36 70-46mm
P24	Rubber Insulator	7	
P25	Spacer Ø10-Ø25 t5	2	
P26	Collar Ø8-Ø10 t15	3	
P27	Hose Clip	8	

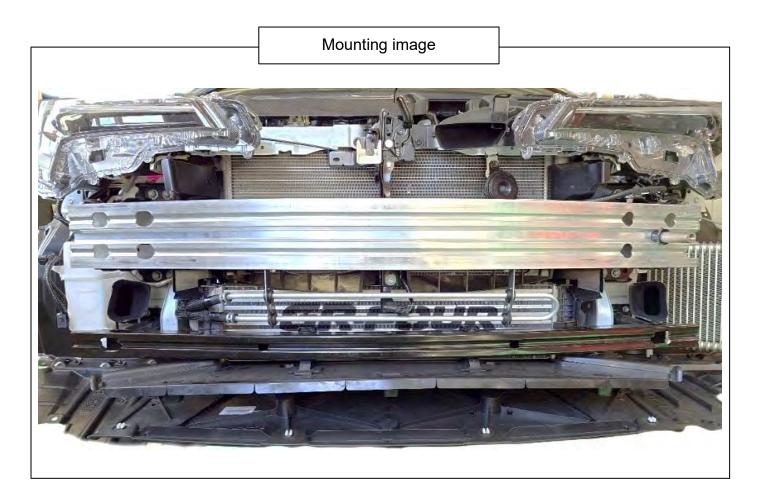
P28	Stabilizer Bolt M10 L41 (Screw length:28)	1	
P29	Nut Flange Hexagon M10	2	
P30	Bolt Flange Hexagon M8 L25	3	
P31	Bolt Flange Hexagon M8 L16	2	
P32	Nut Flange Hexagon M8	3	
P33	Large Diameter Washer M8	3	
P34	Bolt Flange Hexagon M6 L15	3	
P35	Nut Flange Hexagon M6	1	
P36	Button Bolt M4 L10	2	
P37	Nut Flange Hexagon M4	2	
P38	Pop Nut	2	
P39	Copper Washer Ø18.6×t1.0	3	
P40	Copper Washer Ø16×t1.0	4	
P41	Plug PT1/8	1	
P42	Clamp	2	
P43	Silicone Hose Ø55 L43	1	
P44	Medium Zip Ties	10	
P45	Small Zip Ties	10	
P46	Zip Ties Base	4	
P47	Corrugated Tubing Ø5 L250	2	
P48	Sachet (Gibbon, Sleeve, Round Terminal, Splice, Cushion Tape)	1	Included with controller
P49	Installation Manual	1	
P50	Pump Controller Operation Manual	1	

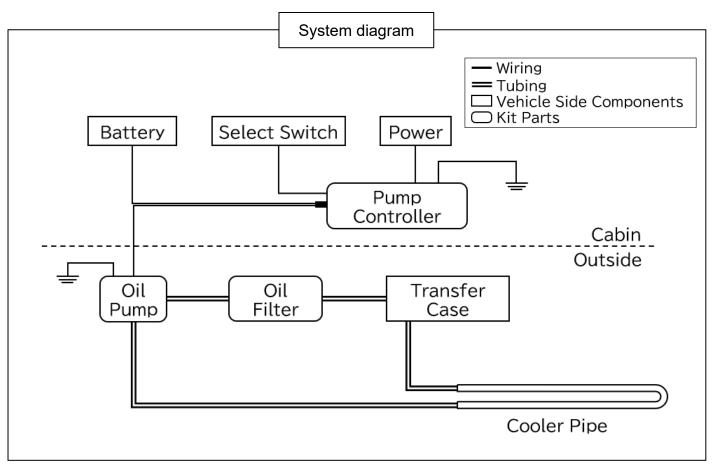
## **PARTS LIST**











## 1. REMOVAL OF STOCK PARTS

Be Sure to work according to the maintenance manual and instruction manual.

Do not scratch the body of the vehicle with masking tape, etc.

Photos of removal of stock parts are for left-hand drive vehicles.

Please do the same for Right-hand drive vehicles

- Remove Cable Terminal from Negative Terminal of the Battery.
- Remove Deck Board Assembly.



Remove Bench Type Rear Seat Cushion Assembly.
 MORIZO Edition is not equipped with a rear seat.
 Therefore, remove the special cover secured with clips.
 Remove the special cover secured with clips.





• Remove Instrument Panel Undercover SUB-ASSY.



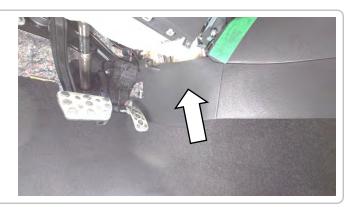
• Remove Console Box Insert FR NO.1.



- Remove Instrument Panel Finish Panel LWR CTR.
   Advice
  - Be careful to remove the clips on the back of the panel.



• Remove Console Box Insert FR NO.2.



• Remove Console Upper Panel Garnish.

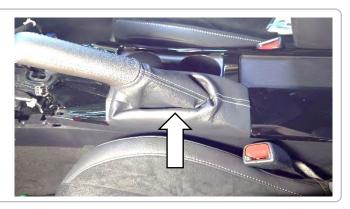


• Remove Shift Lever.

• Remove Console Panel SUB-ASSY.



• Remove Parking Brake Hole Cover SUB-ASSY.



- Remove Console Cup Holder Box SUB-ASSY.
- Remove the select switch connector.

#### Advice

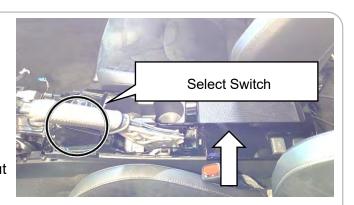
When putting back the interior, connect Select Switch Wire to Main Harness of the kit before returning it.

Please use without connection for vehicles without Transfer Protection Control Cancel Program (4WD mode switching will not be possible).

Select Switch is removed together with Console Cup Holder Box SUB-ASSY.

Select Switch





Select Switch (Coupler)



• Remove Console Box Assembly.



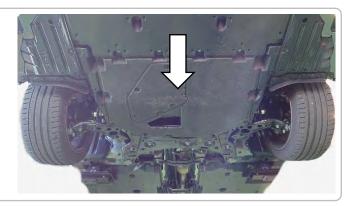
• Remove Front Door Scuff Plate RH.



• Remove Cowl Side Trim SUB-ASSY RH.



- Remove the right front wheel assembly.
- Remove Engine Undercover.



- Remove Radiator Support Opening Cover.
- Remove front bumper.



• Remove Engine Undercover RR RH.



• Remove Front Floor Cover RH.

#### Advice

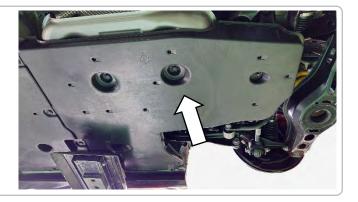
 Remove the clip while turning it counterclockwise to avoid damage to the stud bolt.



•Remove Rear Floor Side Member Covers.

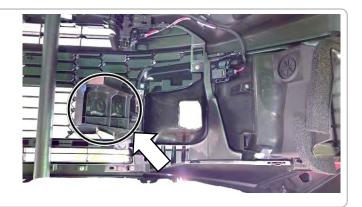
#### Advice

 Remove the clip while turning it counterclockwise to avoid damage to the stud bolt.



- 12 -

 Remove Right Side Intercooler Air Guide from Front bumper (inside).



• Remove Right Front Stabilizer Bracket Fixing Bolt.



- Remove Steering Rack Bracket Fixing Bolt.
   Advice
  - · Bolt is used again.



• Drain Transfer Oil.

Remove Transfer Filler Plug and Transfer Drain Plug and drain Transfer Oil.

#### Advice

Transfer Filler Plugs will be reused.

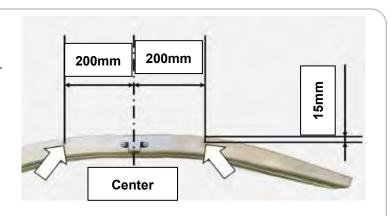


## 2. COOLER PIPE INSTALLATION

 Install Pop Nut on the underside of Reinforcement.

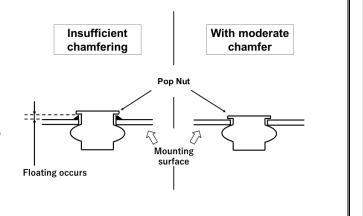
Drill the hole shown in the figure to the right for mounting Pop Nut. The diameter of the bottom hole should be Ø9.1mm.

P38 Pop Nut ×2



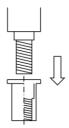
## CAUTION

- After drilling, be sure to chamfer the hole sufficiently.
  - Insufficient chamfering may cause Pop Nut seat to protrude from the mounting surface.
- Note that too much chamfering will result in insufficient seating surface for mounting Pop
- · Use Nutter to install Pop Nut.

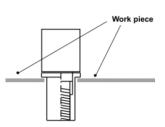


#### How to use Pop Nuts

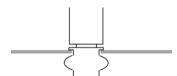
①Press Pop Nut against the mandrel of Nutter.



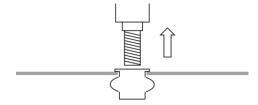
②Insert Pop Nut deep into the mandrel and insert Pop Nut into the lower hole of the workpiece.



③Adhere Pop Nut to the workpiece, pull the trigger of Nutter, and fasten Pop Nut.

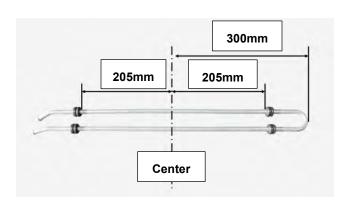


4 Remove Nutter.



• Attach Rubber Insulator to Cooler Pipe.





#### Advice

- When passing Rubber Insulator through Cooler Pipe, wet it with water or other liquids to make it easier to pass.
- Attach Cooler Bracket to the groove of Rubber Insulator.
   Install the bracket from the direction of Cooler Pipe logo.









 Install Cooler Bracket. Attach Cooler Brackets L and R, which have just been attached, so that they are sandwiched between the two brackets.

Tightening torque N · m (kgf · m)

• Button Bolt M4 : T = 2 (0.2)

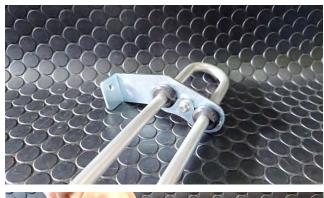
P12 Cooler Bracket ×4



P36 Button Bolt M4 L10 ×2 P37 Nut Flange Hexagon M4 ×2

#### Advice

Button Bolt M4 is passed through the Cooler
 Bracket by pressing Cooler Bracket hard against
 Rubber Insulator and coaxing the bolt holes.





 Attach Cooler Pipe assembly to Pop Nut installed on Reinforcement..

#### Advice

• Install the unit so that the HKS logo is facing front.

Tightening torque N · m (kgf · m)

• Bolt Flange Hexagon M6 : T = 7 (0.7)

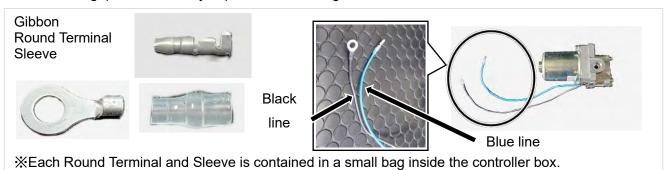
P34 Bolt Flange Hexagon M6 L15 ×2





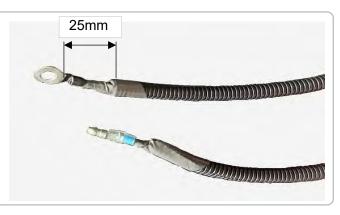
## 3. OIL PUMP INSTALLATION

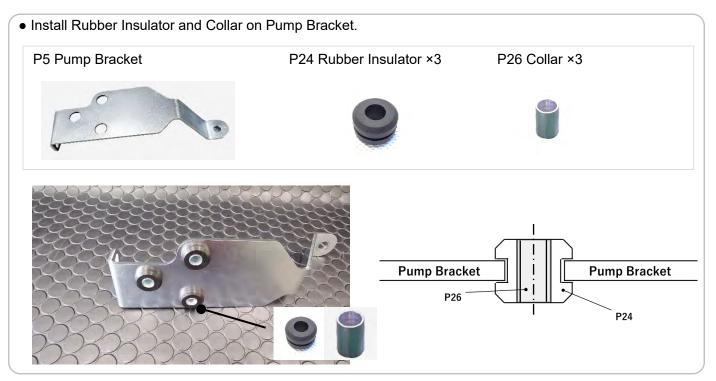
- Attach a connector and Round Terminal to Oil Pump Harness.
  - Thread the sleeve for Gibbon through the blue wire and then crimp Gibbon.
  - · Crimp a Round Terminal to the black wire.
  - After caulking, protect with vinyl tape or shrink tubing.



Attach the Corrugated Tubing to Oil Pump Harness.
 Secure both ends of Corrugated Tubing with vinyl tape.
 The exposed hose at both ends should be
 25mm(±3mm) from the end of the harness.

P47 Corrugated Tubing Ø5 L250 ×2



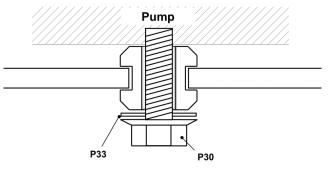


• Fasten Pump to Pump Bracket.

Tightening torque N · m (kgf · m)

• Bolt Flange Hexagon M8 : T = 13 (1.3)

P30 Bolt Flange Hexagon M8 L25 ×3 P33 Large Diameter Washer M8 ×3





• Cut Oil Hose to 1190mm(±3mm) and install Pump Banjo.





Attach Braided Tubing to Oil Hose.
 Braided Tubing should be tightly adhered to Oil Hose and then secured with vinyl tape.

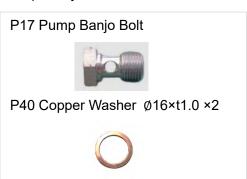
The exposed hose on one side should be  $65mm(\pm 5mm)$ .

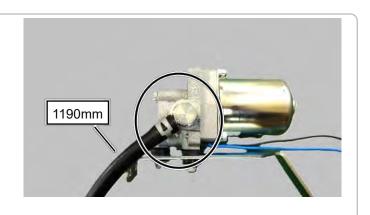




27002-AT001

• Temporarily attach Oil Hose to Oil Pump.





- Cut Oil Hose to 190mm(±3mm).
- Install the drain banjo on Oil Hose of the one with the adjusted length of the exposed hose.

P17 Drain Banjo Ø18 P27 Hose Clip



 Install Braided Tubing (130mm).
 Place the Braided Tubing in close contact with the oil hose and secure with vinyl tape 35 mm (±5 mm) from the end of the hose.





Cut Oil Hose to 135 mm (±3 mm) and install Pump Banjo Ø16.
 P13 Oil Hose



Ø16





 Attach each Oil Hose to Oil Filter.
 Fix Pump Banjo so that it faces the same direction as Drain Banjo.





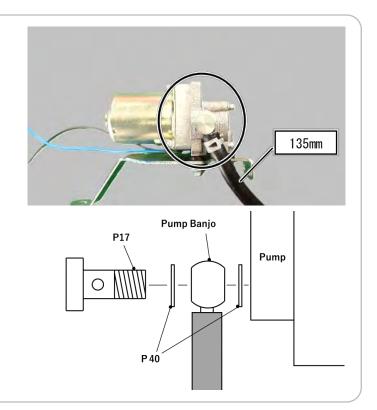
• Attach Silicone Hose to Oil Filter.





• Attach Oil Hose cut to 135 mm to Pump.





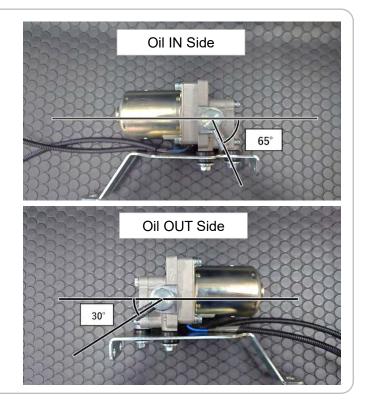
• Fix Pump Banjo.

#### Mounting angle

Oil IN side : 65°Oil OUT side : 30°

Tightening torque N ⋅ m (kgf ⋅ m)

• Pump Banjo Bolt M16 : T = 35 (3.6)



• Attach the assembled Pump to the car body.



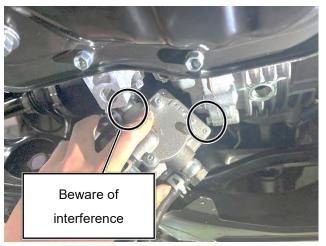




Place Pump on top of Suspension Member through Transfer Case and between Transfer Case and Suspension Member.

#### Advice

- When installing Pump, mask Pump and the vehicle side of the Pump to avoid interference with the engine and the vehicle.
- When installing Pump on the car body, it is possible to insert it smoothly by twisting It in from the side with Pump facing sideways as shown in the figure.

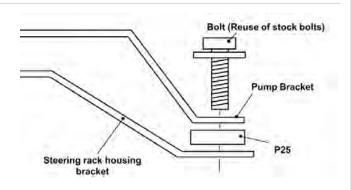




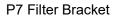
Temporarily fix Pump Bracket.

The bolts for fixing Steering Rack Housing Bracket are the bolts removed in the normal parts removal.



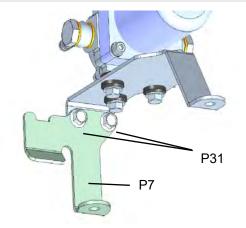


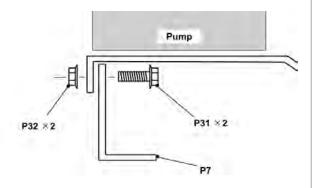
Temporarily attach Filter Bracket to Pump Bracket. Combine Pump Bracket with Pump Bracket facing toward the front of the vehicle.





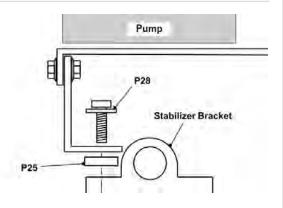
P31 Bolt Flange Hexagon M8 L16 ×2 P32 Nut Flange Hexagon M8 ×2





Temporarily attach Filter Bracket to Stabilizer Bracket by co-tightening.





Tighten Pump Bracket and Filter Bracket.

Tightening torque N • m (kgf • m)

• The bolts for fixing Steering Rack Housing Bracket : T = 90 (9.2)

• P28 Stabilizer Bolt M10 : T = 108 (11.0)

• P31 Bolt Flange Hexagon M8 : T = 16 (1.6)

## 4. OIL HOSE CONNECTION

●Install PT1/8 Plug on Drain Banjo Bolt.

PT1/8 Plug should be sealed using sealing tape.

P19 Drain Banjo Bolt



P41 PT1/8 Plug





• Fix Filter to Filter Bracket.

Tightening torque N · m (kgf · m)

• P23 Hose Band : T = 4 (0.4)





• Attach a 190mm Oil Hose to Transfer Drain.

#### Advice

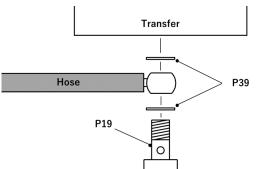
- Do this while adjusting the direction of the banjo so that the hose does not interfere with Stabilizer.
- Install Oil Hose with a little extra room so that it can absorb the rocking motion of the engine.

#### Tightening torque N · m (kgf · m)

Drain Banjo Bolt M18 : T = 40 (4.0)







•Cut Oil Hose to 1170 mm (±3 mm) and Install Fitting AN 6-Ø10 on the section of Oil Hose.









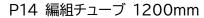
 Secure Braided Tubing tightly to Oil Hose before securing it with vinyl tape.

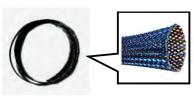
The exposed hose on one side should be 35 mm (±5 mm).

 The tape should be fastened in a position where it will not be caught between the hose and Hose Clip.









 Attach Transfer Case Connector to the screw hole of Transfer Case Plug.

Tightening torque N · m (kgf · m)

• Transfer Case Connecter: T = 49 (5.0)

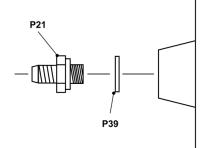




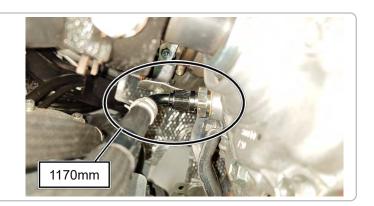
P39 Copper Washer Ø18.6×t1.0







 Temporarily attach the 1170 mm Oil Hose to Transfer Case Connector.



• Install Hose Bracket No. 1.

Attach Hose Clamp to Hose Bracket No. 1.

#### Advice

· Make sure that Hose Clamp is securely disengaged.

P8 Hose Bracket No.1 P42 Hose Clamp



Fasten Hose Bracket No. 1 to the factory bolt shown in the figure.

Tightening torque N · m (kgf · m)

• Nut Flange Hexagon M10:T = 13 (1.3)

P29 Nut Flange Hexagon M10 ×2



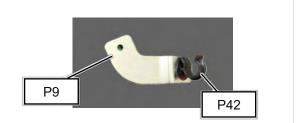
• Install Hose Bracket No. 2.

Attach Hose Clamp to Hose Bracket No. 2.

#### Advice

· Make sure that Hose Clamps is securely disengaged.

P9 Hose Bracket No.2 P42 Hose Clamp



Install Hose Bracket No. 2.

#### Tightening torque N · m (kgf · m)

• M6 : T = 7 (0.7)

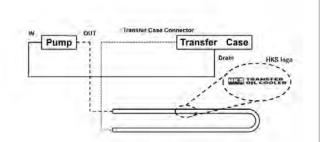
P34 Bolt Flange Hexagon M6 L15 P35 Nut flange Hexagon M6

#### Advice

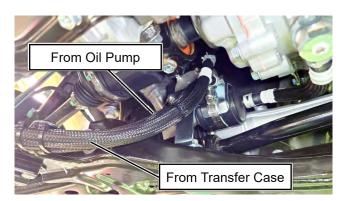
- If it is inconvenient to work on the windshield, remove the windshield washer tank.
   Please put it back in place after the work.
- A saucer is needed to drain the washer fluid.



 Connect Cooler Pipe to Oil Hose. Install Oil Hose according to the following instructions.



①Fix the 1190 mm Oil Hose connected to Oil Pump with Hose Clamp of Hose Bracket No. 1. Place the 1170 mm Oil Hose connected to Transfer Case side by side.



②Place the two hoses on the outside of Intercooler Pipe Bracket.

Line them up vertically with the 1170 mm Oil Hose connected to the Transfer Case on the lower side.

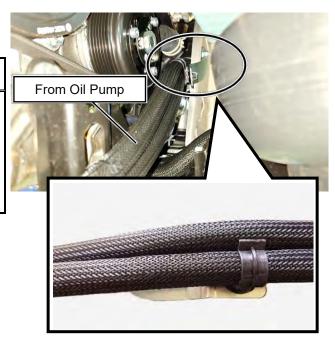


③Fix the 1170 mm Oil Hose connected to Transfer Case with Hose Clamp of Hose Bracket No. 2.

#### **CAUTION**

Adjust the position of Hose Bracket No. 2 so that the hose does not interfere with the edge of the frame.

Interference may damage the hose and cause oil leakage.



④Connect Cooler Pipe to Oil Hose.
Using Tie Wrap, bundle the two hoses at the positions indicated by the arrows.



5 Tighten Fitting on Transfer Case.

Tightening torque N · m (kgf · m)

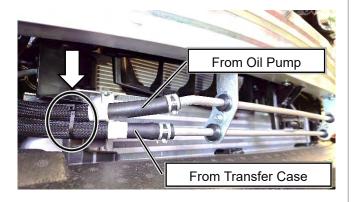
• Fitting : T = 20 (2.0)

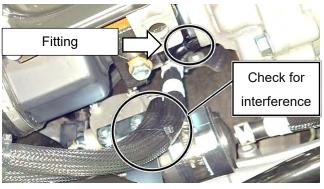
#### Advice

Adjust the orientation of Fitting so that it does not interfere with the hose and Hose Band securing Filter Bracket or Filter.

⑥Bundle the two hoses with Tie Wrap before and after the clamps on Hose Bracket No. 1.Tie wrapping should be done close to Hose Clamp.

P44 Medium Zip Ties ×2

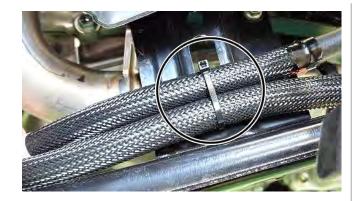






Tie the two hoses to the Intercooler Piping Bracket with tie wrap.

P44 Medium Zip ties



®Bundle the two hoses with Tie Wrap before and after the clamps on Hose Bracket No. 2.

Tie wrapping should be done close to Hose Clamp.

P44 Medium Zip Ties×2



## **<u>A</u>** CAUTION

Adjust the position of the Hose Bracket No. 2 to prevent interference between the hose and the edge of the frame, and install it.

Interference may damage the hose and cause oil leakage.



#### 5. PUMP HARNESS AND PUMP CONTROLLER INSTALLATION

Connect the Pump Harness to Battery.
 Insert the Round Terminal into the bolt and secure it with the nut.

Tightening torque N · m (kgf · m)

Nut Flange Hexagon M8 : T = 16 (1.6)





• Wire Pump Harness.

#### Advice

- Temporarily attach and adjust the harness so that it can be reached.
- Pump Harness is passed through the grommet hole next to Battery to the underbody of the vehicle



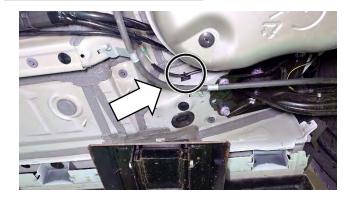
Secure the wiring in three places with Tie Wrap Base.

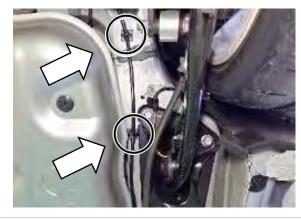
#### Advice

• Please degrease the mounting points before attaching the Tie Wrap Base.

P45 Small Zip Ties ×3 P46 Zip Ties Base ×3







Secure the wires in three places with Tie wrap.

P44 Medium Zip Ties ×3



• Connect and secure the Oil Pump Power Supply.

Connect the female connector of Pump Harness to the male connector of the Oil Pump Harness. After connecting, insert the sleeve all the way to the back.

Secure the wiring with a Tie Wrap Base.

P45 Small Zip Ties P46 Zip Ties Base





 Remove paint from the pump ground terminal area in order to attach the ground terminal to the bolt on the vehicle body side of the battery wiring fixing bracket.
 Advice

If grounding is inadequate, the Pump will not operate.



• Fix the pump ground.

#### Advice

- If grounding is inadequate, the Pump will not operate.
- Ensure that the bracket does not ride on the ground terminal caulking area.

Tightening torque N · m (kgf · m)

• Grounding portion nut : T = 5 (0.5)



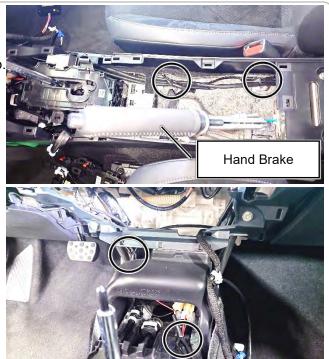
Place Pump Harness on the rear seat floor.
 Allow extra wiring on Battery side.



 Place Main Harness in Center Console.
 Place them so that they do not interfere with the side brake or shift wires and tie them together with Tie Wrap.

P45 Small Zip Ties ×4





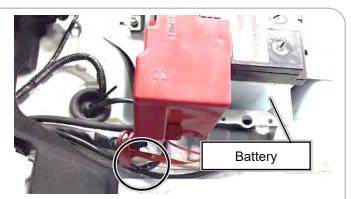
Connect the Wired Harness to the Select Switch Coupler
 Be sure to connect the Select Switch when putting the interior back together.

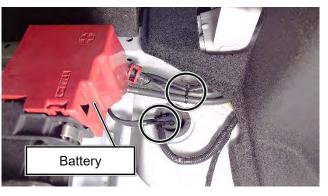
Please use without connection for vehicles without Transfer Protection Control Cancel Program (4WD mode switching will not be possible).



• Put together the excess wiring on the battery side.

P44 Medium Zip Ties P45 Small Zip Ties ×2





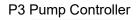
• Position and secure Pump Controller.

Fix Pump Controller in the preferred position as far as the wiring can reach.

Grounding is taken from the Ground Terminal in Instrument Panel.

#### Tightening torque N · m (kgf · m)

• Grounding Bolt : T = 7 (0.7)





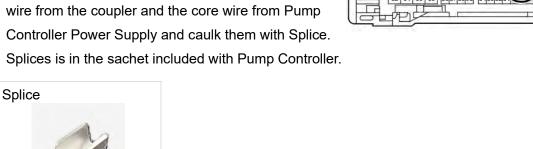




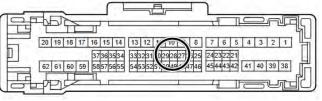
 Power the Pump Controller from the floor wire to the Instrument Panel Wire #28.

#### Advice

- The coupler shown at right is located behind the "Cowl Side Trim SUB-ASSY RH" that was removed during the removal of the stock parts (see photo).
- Wiring should be routed through the back of the Instrument Panel Undercover.
- Pull the coupler out to a position that is easy to work with, peel off the wire sheath, and caulk it together with the power supply for Pump Controller. Twist the core wire from the coupler and the core wire from Pump Controller Power Supply and caulk them with Splice.
   Splices is in the sachet included with Pump Controller.

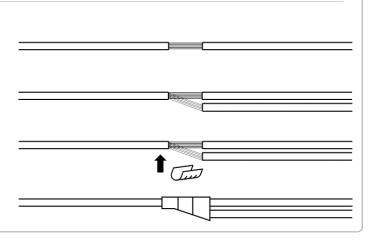






#### How to use Splice

- ①Peel off about 5 mm of the wire sheath on the coupler side where the wiring is to be done.
- ②Double-fold the wire at the point where the sheathing was peeled off, and then fit the wire together.
- 3 Firmly clamp Splice on top of the yawning line.
- Securely insulate with insulation tape (vinyl tape) to prevent short circuit.



#### 6. MODIFICATION OF STOCK PARTS

 Modify Intercooler Air Guide so that it does not interfere with Oil Hose.

#### Advice

Make sure that there is a clearance of 5 to 10 mm with the Oil Hose when installing the bumper. If clearance is insufficient, adjust by additional machining.



#### [For vehicles after March 2025]

- For models after March 2025, Oil Hose and Drain Banjo Bolt interfere with Undercover, so the shaded area in the figure should be modified to prevent interference.
  - Machining is done so that a clearance of about
     15 mm can be secured to absorb engine oscillation.





#### 7. INSTALLATION OF STOCK PARTS AND START-UP CHECK

- When installing the center console box assembly, be sure to use Select Switch.
   Please use without connection for vehicles without Transfer Protection Control Cancel Program (4WD mode switching will not be possible).
- Check the following items before installing the stock parts.

Checklist	Confirmation
Are pipes, hoses, etc. piped correctly?	
Are hose bands and hose clamps securely fastened?	
Are there any bolts or nuts that have not been tightened?	
Are installed parts interfering with other parts?	

- Connect the cable terminal of the negative terminal of the battery.
- Refill transfer oil.

Refer to the controller's operating instructions to activate it using manual mode.

Tightening torque N · m (kgf · m)

• Transfer Filler Plugs : 39 (4.0)

Transfer oil reference oil quantity L

With kit installed:0.8[L]

(Genuine oil quantity: 0.45[L])

#### Advice

- After filling the transfer oil to the specified level, run the pump (about 1 minute), circulate the oil through the pipes, and then add more oil to the specified level again (may be necessary twice for the first time).
- Check the oil level with the pump stopped (the oil level will drop while the pump is running).
- Operate Pump and check for oil leakage from various parts.

#### Advice

• Allow it to run for about 1 minute. Do not operate the pump for a long period of time when the transfer oil temperature is low, as the load on the pump is high.

Start the engine and check the following items.

Checklist	Confirmation
Blow the engine dry a couple of times to see if the engine revs up smoothly?	
Are there any interference noises from parts?	
Is there any abnormality in idling operation?	
Stop the engine and check for loose bolts?	
(Check the tightness of the mounting portion again)	

• Install both the interior and exterior in the reverse order of the removal procedure.

This completes the work.

#### MAINTENANCE AND MANAGEMENT

Maintenance of this product in necessary in order to maintain the safety, reliability, and function of this product.

- •Maintenance is this the responsibility of the driver/owner.
- •If you notice any abnormalities other than those listed in the instruction manual, please contact a professional.

#### **TROUBLESHOOTING**



Do not restart the engine if oil leakage has occurred.

- Tell the specialist where and how the leak is coming from and have it repaired.
- If the oil leakage is severe, please ask about first aid measures when making inquiries to prevent secondary disasters.
- Always follow the instructions of a professional contractor.
   In the worst case, an oil leak could cause a vehicle fire.
- Never attempt to repair any malfunctions on your own. Please contact a professional for repair.
- Please note that the contents of this manual may change without notice.

#### **ABOUT AFTER-SALE SERVICE**

For inquiries about this product, please contact a specialist or the store where you purchased it.

Please note that the contents of this manual may change without notice.

#### FOR SUBSEQUENT OWNERS

- When passing on this product, be sure to pass on the instruction manual to the next owner.
- When removing this product from your vehicle, please be sure to ask a professional to remove it.

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HKS Co., Ltd.

7181 Kitayama, Fujinomiya, Shizuoka 418-0192, Japan https://www.hks-power.co.jp/en/