



## INSTALLATION MANUAL

NAME OF PRODUCT	GT SUPERCHARGER SYSTEM
PART NUMBER	12001-AT006 / 12001-AT008
APPLICATION	TOYOTA 86 (DBA-ZN6) 2012/4- SUBARU BRZ (DBA-ZC6) 2012/3-
ENGINE	FA20
YEAR	TOYOTA 86: 2012/4- SUBARU BRZ: 2012/3-
REMARKS	This system is applicable for Toyota 86 with the manual transmission and automatic transmission and Subaru BRZ with the manual transmission. Applicability to Subaru BRZ with the automatic transmission has not been confirmed, yet.

※This application was confirmed by January 2013.



FA20 Engine with HKS GT Supercharger System

REMARKS			
<ul style="list-style-type: none"> <li>▪ HKS will not be responsible for any and all damages to the vehicle's engine or other supplemental devices through the use of this product.</li> <li>○ This kit (12001-AT006/AT008) includes the HKS GT Supercharger System Complete Kit base warranty.</li> <li>○ 12001-AT006 includes a specific preset sub-computer; however, the factory setting data do not guarantee the system performance. Therefore, do not use the factory setting data without fuel and ignition setting before using this kit. Failure to do so may cause damage to the engine. <ul style="list-style-type: none"> <li>▪ Factory setting data prepared based on the following specifications:  Catalytic Converter: Stock  Exhaust System: 32018-AT040 HKS Legamax Premium (including a mid pipe)</li> </ul> </li> <li>○ This kit is best used with the engine oil which viscosity is higher than 40.</li> <li>○ If the product is used under the following conditions, the warranty will be void.</li> </ul>			
<table border="1" style="width: 100%;"> <thead> <tr> <th>Conditions/Usage That Voids Warranty</th> </tr> </thead> <tbody> <tr> <td>HKS will not be responsible for any damage caused by ECU changes such as increasing maximum RPM limit and high-load driving in circuit and etc.</td> </tr> </tbody> </table>		Conditions/Usage That Voids Warranty	HKS will not be responsible for any damage caused by ECU changes such as increasing maximum RPM limit and high-load driving in circuit and etc.
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**REVISION OF MANUAL**

Rev. Number	Date	Manual Number	Details
3-3.01	2012/11	E04215-T59011-00	1 <sup>st</sup> 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 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 serious injury and/or possible property damage (i. e. vehicle damage as from use of this product.).

# PARTS LIST

No. 1

NO.	DESCRIPTIONS	QT	REMARKS
1	GT Supercharger	1	
2	Supercharger Bracket No. 1	1	
3	Supercharger Bracket No. 2	1	
4	Supercharger Bracket Spacer No. 1	2	
5	Supercharger Bracket Spacer No. 2	2	
6	Supercharger Bracket Spacer No. 3	1	
7	Supercharger Bracket Spacer No. 4	1	
8	Cap Bolt M8 P1.25 L=185	1	
9	Cap Bolt M10 P1.25 L=55	2	
10	Cap Bolt M10 P1.25 L=125	2	
11	Idler Pulley	1	
12	Idler Pulley	1	
13	Supercharger Pulley	1	
14	Supercharger Pulley Spacer	1	
15	V-belt	1	6PK2440
16	Suction Pipe	1	
17	Suction Pipe Gasket	2	
18	Restrictor	1	
19	Airflow Adapter	1	
20	Air Cleaner	1	
21	Air Cleaner Bracket No. 1	1	
22	Air Cleaner Bracket No. 2	1	
23	Joint Pipe 12mm	1	
24	Support Clamp	1	
25	Intercooler	1	
26	Intercooler Bracket No. 1	1	
27	Intercooler Bracket No. 2	1	
28	Intercooler Bracket No. 3	1	
29	Intercooler Pipe No. 1	1	
30	Intercooler Pipe No. 2	1	
31	Intercooler Pipe No. 3	1	
32	Intercooler Pipe No. 4	1	
33	Intercooler Pipe No. 5	1	
34	Pipe Bracket No. 1	1	
35	Pipe Bracket No. 2	1	
36	Insulator	2	
37	Blow-off Valve	1	
38	Blow-off Valve Hose	1	

# PARTS LIST

No. 2

NO.	DESCRIPTIONS	QT	REMARKS
39	Joint Pipe 22mm	1	
40	T-fitting 10mm-4mm-10mm	1	
41	Traction Fluid	1	
42	Traction Fluid Tank	1	
43	Traction Fluid Filter	1	
44	Traction Fluid Cooler	1	
45	Corrugated Tube	1	
46	Traction Fluid Cooler Bracket No.1	1	
47	Traction Fluid Cooler Bracket No.2	1	
48	Traction Fluid Tank Bracket	1	
49	F-CON iS	1	
50	F-CON Harness	1	
51	F-CON Communication Cable	1	
52	F-CON Bracket	1	
53	Silicone Hose 60mm-80mm	1	
54	Silicone Hose 80mm	1	
55	Silicone Hose 75mm	1	
56	Silicone Hose 70mm	1	
57	Silicone Hose 50mm	4	
58	Silicone Hose 50mm w/ Cushion	2	
59	Silicone Hose 55mm	1	
60	Oil-resistant Hose 22mm	1	L=1000mm
61	Oil-resistant Hose 12mm	1	L=300mm
62	Traction Fluid Hose 9mm	1	L=600
63	Traction Fluid Hose 8mm	1	L=2000
64	Vacuum Hose 4mm	1	L=2000
65	Rubber Cap 16mm	1	
66	Hose Clamp #48	5	
67	Hose Clamp #40	2	
68	Hose Clamp #36	2	
69	Hose Clamp #28	14	
70	Hose Clamp #20	1	
71	Hose Clamp 22mm	3	No Stamp
72	Hose Clamp 12mm	2	Stamp 180
73	Hose Clamp 9mm	6	Stamp 155
74	Hose Clamp 8mm	5	Stamp 30
75	Hose Clamp 4mm	2	Stamp 68

# PARTS LIST

No. 3

NO.	DESCRIPTIONS	QT	REMARKS
76	Hex Bolt M8-1.25 L=30	5	
77	Hex Bolt M8-1.25 L=20	10	
78	Hex Bolt M6-1.0 L=30	5	
79	Hex Bolt M6-1.0 L=25	5	
80	Hex Bolt M6-1.0 L=20	10	
81	Hex Bolt M6-1.0 L=15	10	
82	Cap Bolt M6-1.0 L=20	5	
83	Button Bolt M4-0.7 L=8	2	
84	Pan Head Machine Screw M3-0.5 L=8	5	
85	Stud Bolt M6	1	
86	Flat Washer M10	5	
87	Flat Washer M8	15	
88	Flat Washer M6 Major Dia.	20	
89	Flat Washer M6	5	
90	Lock Washer M8	15	
91	Lock Washer M6	25	
92	Flange Nut M8	10	
93	Flange Nut M6	10	
94	Tie Wrap L	5	
95	Tie Wrap M	5	
96	Flat Head Bolt M8-1.25 L=35	1	
97	Hose Clamp 10mm	2	Stamp 135
98	Oil-resistant Hose 10mm L=200	1	
99	Installation Manual	1	
100	Instruction Manual	1	

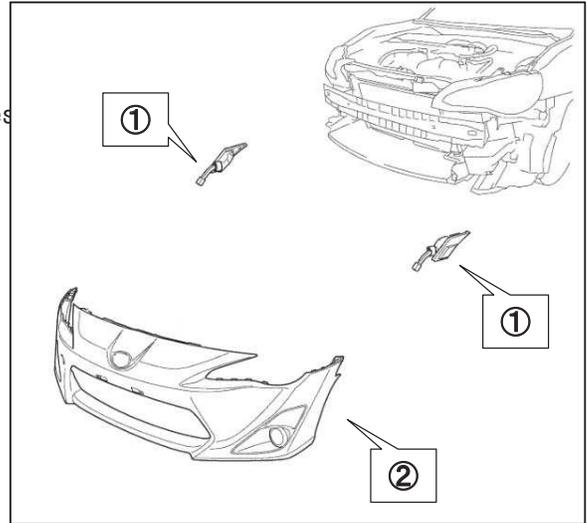
※Extra bolts and tie wraps are included in this kit.

## 1. REMOVAL & RELOCATION OF FACTORY PARTS

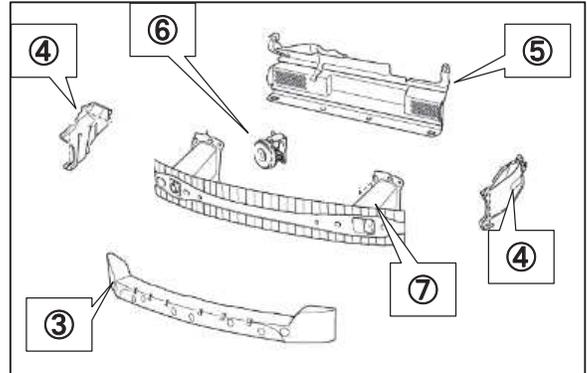
Refer to this instruction manual and the factory service manual to remove the factory parts.

PARTS LIST			
Refer to the parts list on page 3 to 5.	No.	Description	Qt
	P65	Rubber Cap 16mm	1

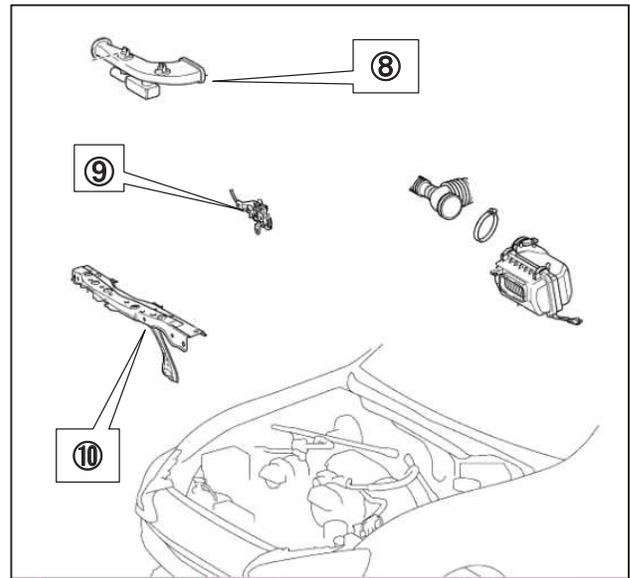
- (1) Disconnect the negative cable from the battery.
- (2) Remove the engine under cover.
- (3) Remove ① Side turn signal light from both sides
- (4) Remove ② Front bumper.



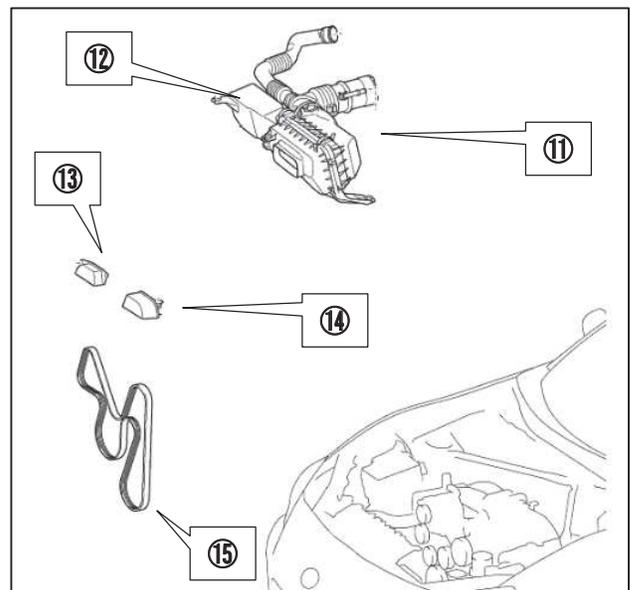
- (5) Remove ③ Front bumper energy absorber.
- (6) Remove ④ Front bumper reinforcement plate from both sides.
- (7) Remove ⑤ Radiator cover plate.
- (8) Remove the ambient temperature sensor coupler and ⑥ Horn; then, remove ⑦ Front bumper reinforcement.



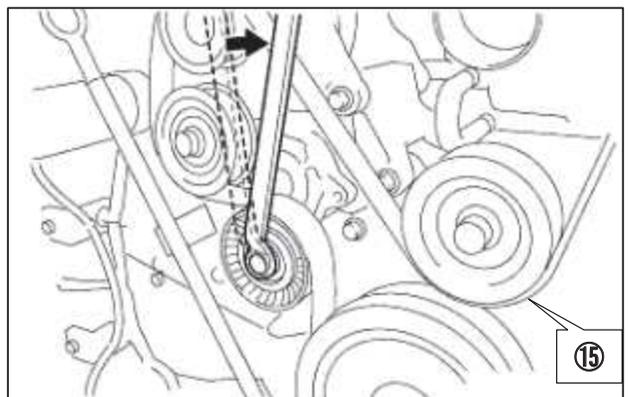
- (9) Remove ⑧ Air cleaner duct.
- (10) Remove ⑨ Hood lock from the radiator support.
- (11) Remove ⑩ Radiator support.



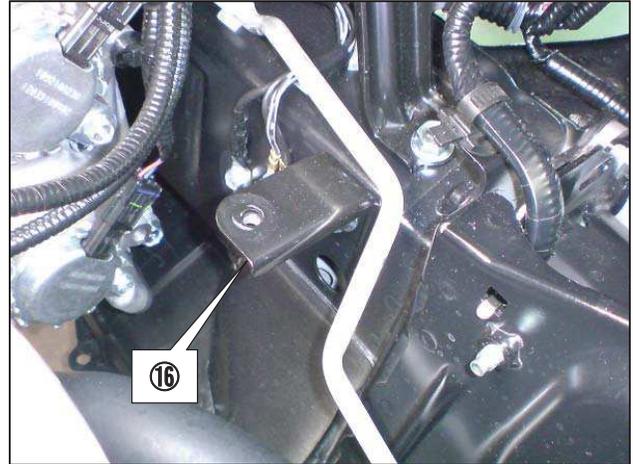
- (12) Remove ⑪ Air cleaner case.
- (13) Remove ⑫ Airflow meter from ⑪ Air cleaner case.
- (14) Remove ⑬ · ⑭ Belt covers.



- (15) Place a tool on the belt tensioner pulley set bolt. Turn the belt tensioner to the right to lower the tension of the belt, and lock the tensioner using a 4mm hexagon wrench; then, remove ⑮ Belt.



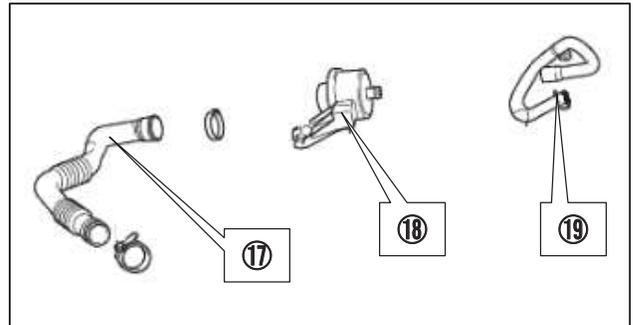
(16) Remove ⑩ Air cleaner case bracket.



(17) Remove ⑪ Air cleaner duct, ⑫ Chamber, and ⑬ Hose.

(18) Install the provided Rubber Cap 16mm to the place ⑬ Hose was removed from.

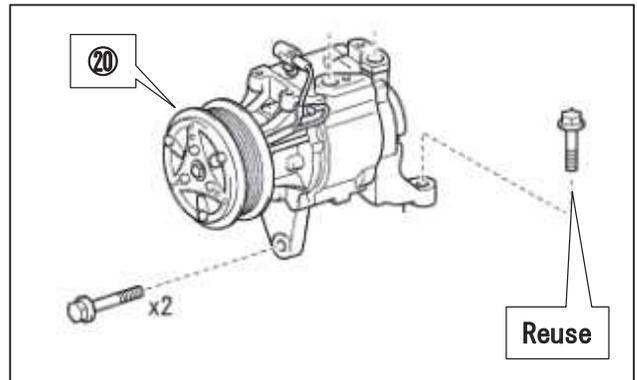
- P65 Rubber Cap 16mm x 1



(19) Remove ⑭ Air compressor installation bolt.

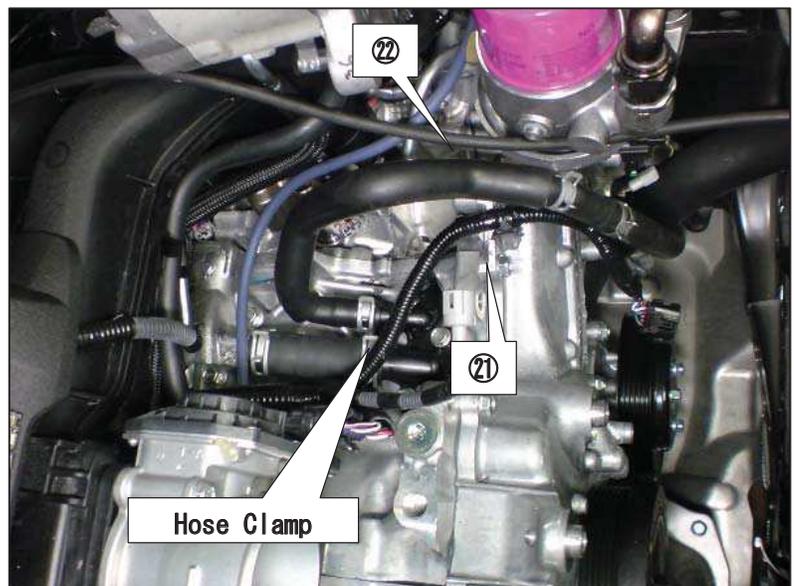
**NOTE**

- Keep the bolt indicated in the diagram on the right for later use.



(20) Lift ⑮ A/C compressor and route ⑯ Airflow meter wire harness under the A/C compressor.

(21) Lift ⑮ A/C compressor and loosen the hose clamp of ⑰ Blow-by hose. Relocate the blow-by hose to the position indicated in the diagram on the right.



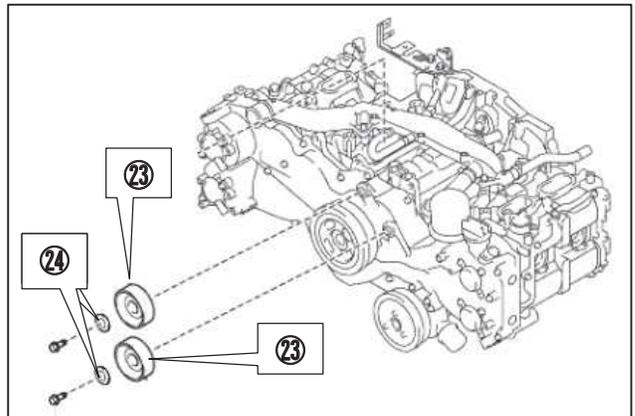


(22) Temporarily install the air compressor to the engine using the factory bolt removed in (19).

(23) Remove 23 Idler pulley and 24 Cover.

**NOTE**

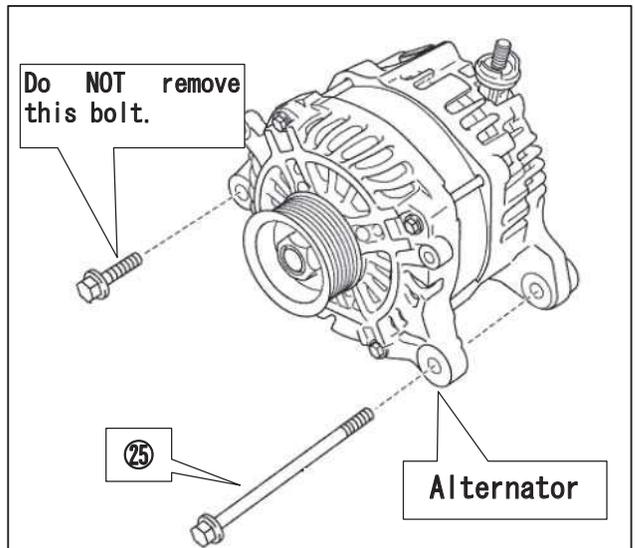
- Keep 23 Idler pulley and 24 Cover for later use.



(24) Remove 25 long bolt from the alternator.

**NOTE**

- Make sure not to remove the short bolt.
- Do not remove the alternator.



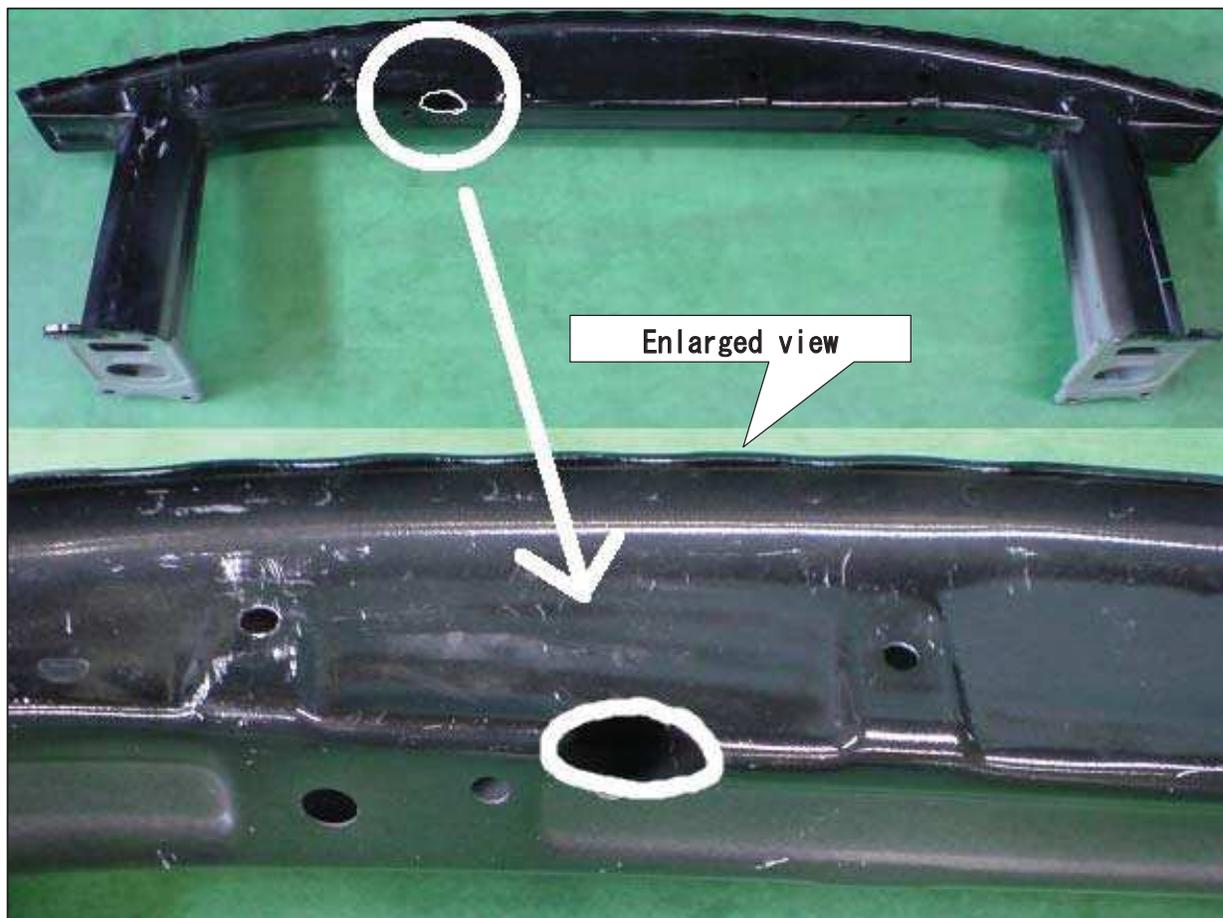
## 2. MODIFICATION OF FACTORY PARTS

PARTS LIST			
No.	Descriptions	Qt	
P26	Intercooler Bracket No.1	1	
P27	Intercooler Bracket No.2	1	
P43	Traction Fluid Filter	1	
P45	Corrugated Tube	1	
P59	Silicone Hose 55mm L=43	1	
P62	Traction Fluid Hose 9mm	1	
P68	Hose Clamp #36	1	
P73	Hose Clamp 9mm	2	
P82	Cap Bolt M6-1.0 L=20	3	
P88	Flat Washer M6 Major Dia.	3	
P91	Lock Washer M6	3	
P93	Flange Nut M6	3	

(1) Cut off the circled portion of the front bumper reinforcement as shown in the diagram below.

### NOTE

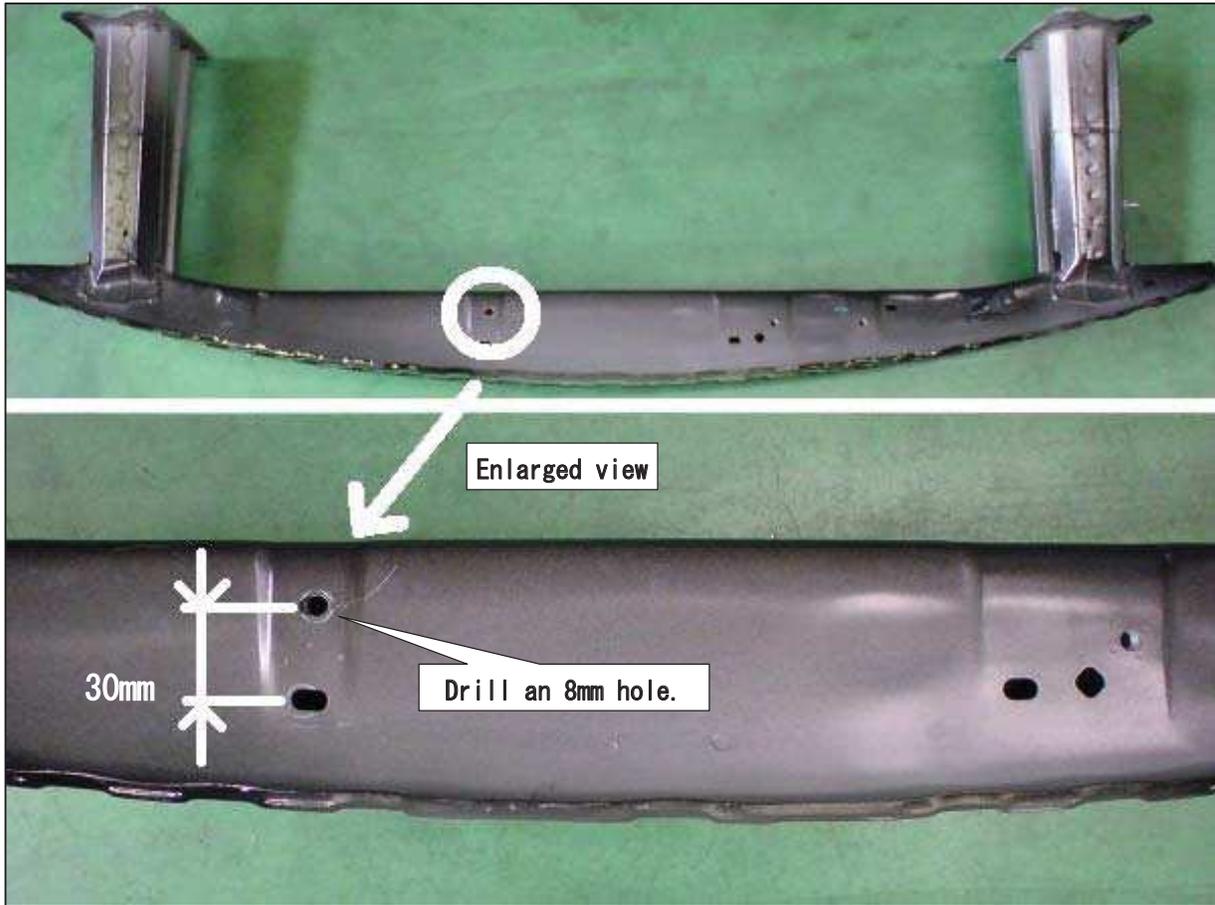
- The reinforcement in the diagram was viewed from above.



- (2) Drill an 8mm hole on the circled position of the front bumper reinforcement as shown in the diagram below.

**NOTE**

- The reinforcement in the diagram was viewed from below.

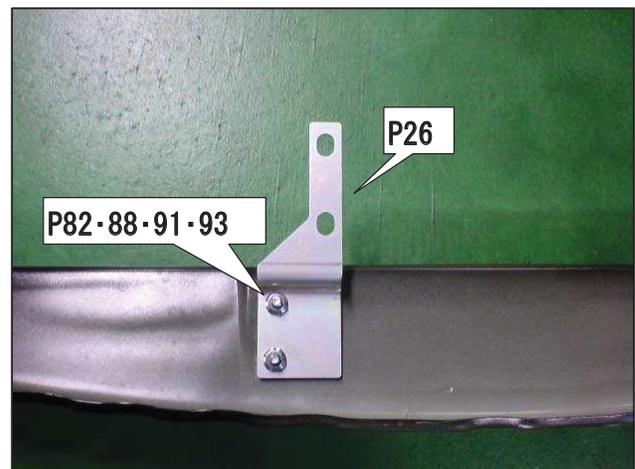


- (3) Temporarily install the Intercooler Bracket No.1 to the hole drilled in (2) using the following provided parts.

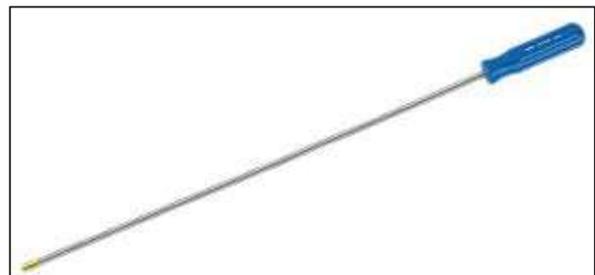
- P26 Intercooler Bracket No.1 x 1
- P82 Cap Bolt M6 P=1.25 L=20 x 2
- P88 Flat Washer M6 Major Dia. x 2
- P91 Lock Washer M6 x 2
- P93 Flange Nut M6 x 2

**NOTE**

- Install the Cap Bolt inside of the front bumper reinforcement. Install the Flange Nut outside of the reinforcement.



- For easier bolt installation, use a magnet hand shown in the diagram on the right.

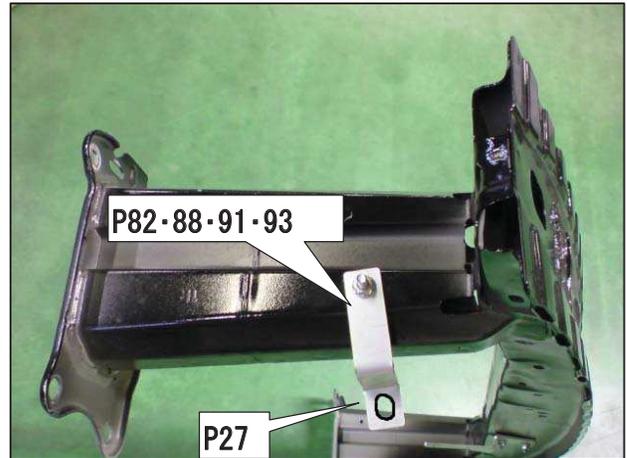


(4) Temporarily install the Intercooler Bracket No.2 to the front bumper reinforcement (right side of the vehicle) using the following provided parts as shown in the diagram on the right.

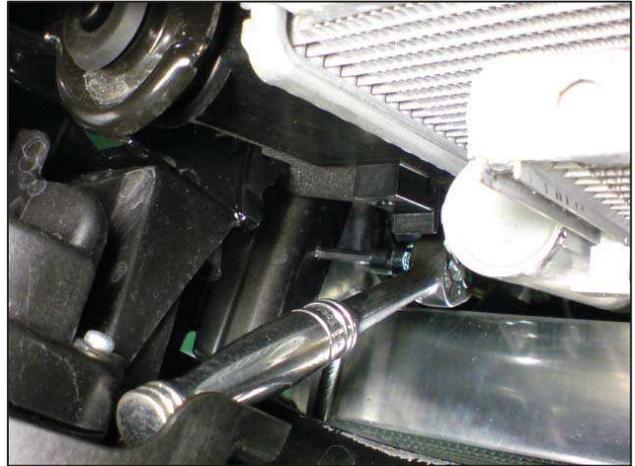
- P27 Intercooler Bracket No.2 x 1
- P82 Cap Bolt M6 P=1.25 L=20 x 1
- P88 Flat Washer M6 Major Dia. x 1
- P91 Lock Washer M6 x 1
- P93 Flange Nut M6 x 1

**NOTE**

- Install the Cap Bolt inside of the front bumper reinforcement. Install the Flange Nut outside of the reinforcement.
- For easier bolt installation, use a ball point type hexagon wrench.



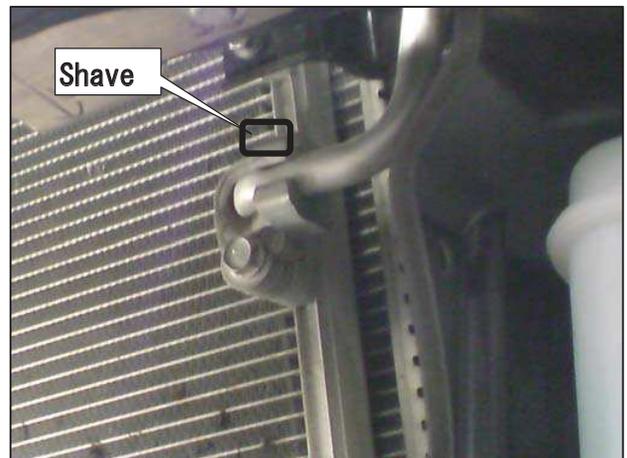
(5) Reinstall the front bumper reinforcement to the original position.



(6) Shave approximately 2mm of the portion of the pipe clamp on the cooler condenser of the passenger's side as indicated in the diagram on the right.

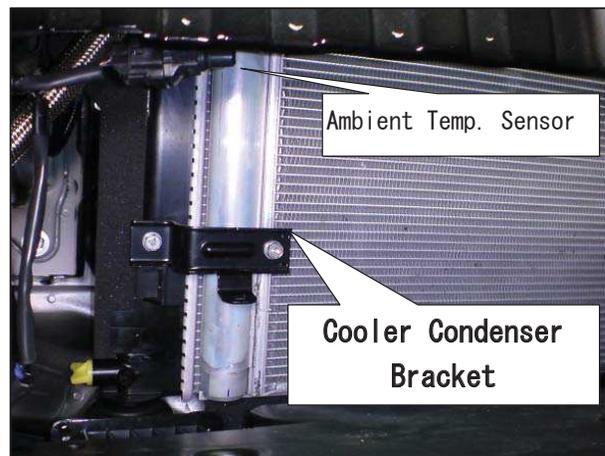
**NOTE**

- This modification avoids unnecessary contact between the traction fluid cooler and pipe clamp.



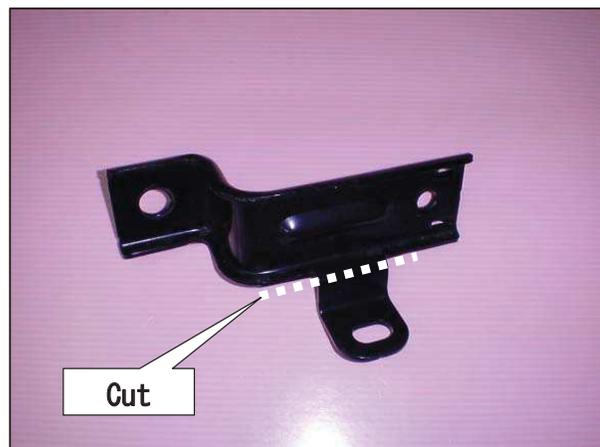
(7) Remove the ambient temperature sensor from the cooler condenser bracket and install the sensor to the front bumper reinforcement.

(8) Remove the cooler condenser bracket.

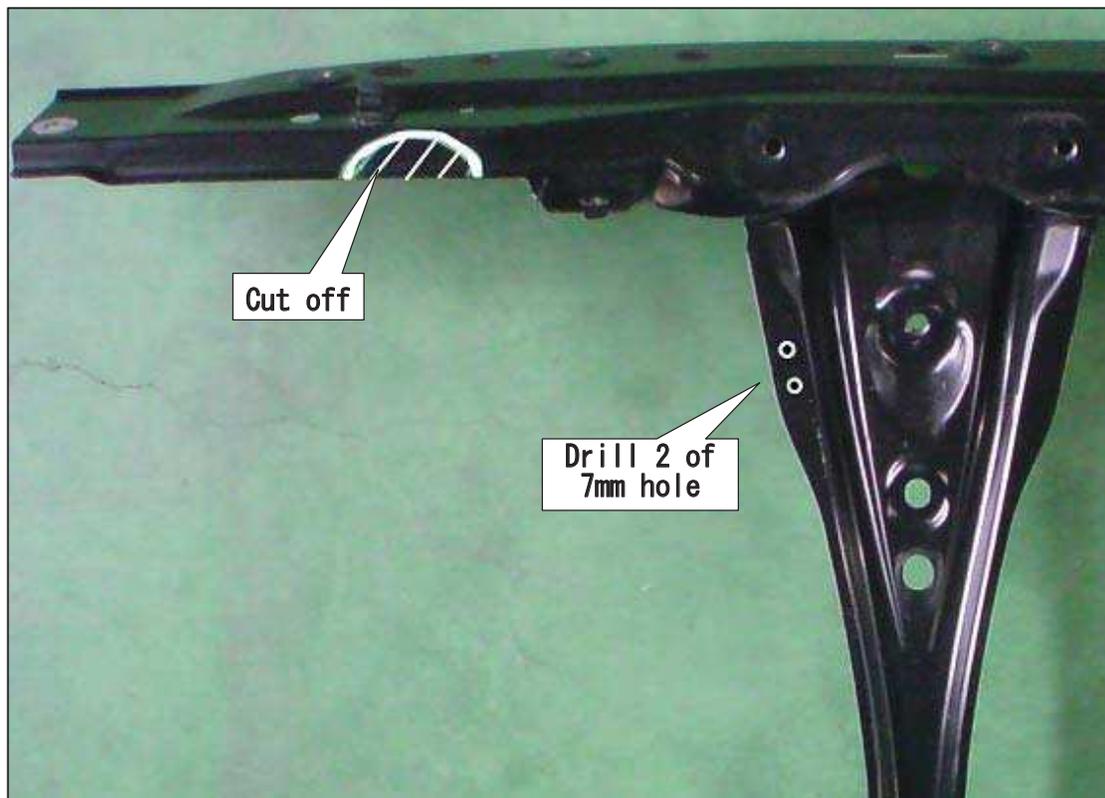


(9) Cut the cooler condenser bracket along the line indicated in the diagram on the right.

(10) Reinstall the cooler condenser bracket to the original position.



(11) Cut off the shaded portion of the radiator support in the diagram below.



(12) Drill two of 7mm hole on the radiator support as shown in the diagram.

(13) Cut the Traction Fluid Hose 9mm to ①290mm and ②240mm.

- P62 Traction Fluid Hose 9mm x 1

**NOTE**

- The internal components of the GT Supercharger assembly are very precise and exact; foreign objects mixed with Traction Fluid can lead to damage to the Supercharger Assy. Make sure the hoses and/or fitting ends are covered to prevent foreign objects from getting inside the hoses, tank and/or cooler.

(14) Cut the provided Corrugated Tube to ③190mm and ④140mm.

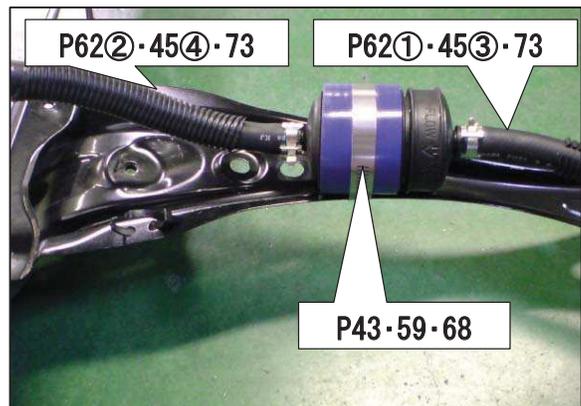
- P45 Corrugated Tube x 1

(15) Install the provided Silicone Hose 55mm L=43 to the Traction Fluid Filter.

- P43 Traction Fluid Filter x 1
- P59 Silicone Hose 55mm L=43 x 1

(16) Install ①290mm and ②240mm long Traction Fluid Hose, cut in (11), to the Traction Fluid Filter.

- P73 Hose Clamp 9mm x 2



(17) Install the Traction Fluid Filter using the provided Hose Clamp #36 to the radiator support as shown in the diagram above.

- P68 Hose Clamp #36 x 1

(18) Cover Hose ① and ② with the Corrugated Tube ③ and ④ cut in (14).

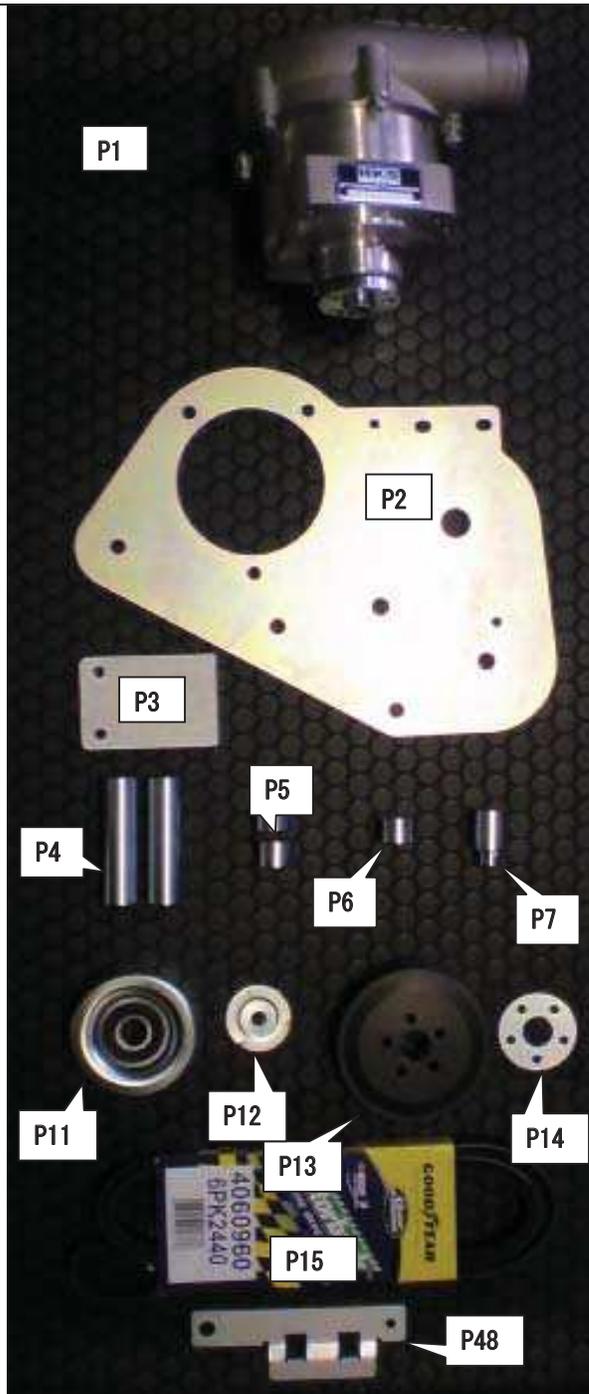
(19) Temporarily install the radiator support to the vehicle.

**NOTE**

- The radiator support position must be adjusted when installing the intercooler pipe; therefore, do not fully tighten the bolt on the radiator support.

### 3. INSTALLATION OF GT SUPERCHARGER

#### PARTS LIST



No.	Descriptions	Qt
P1	GT Supercharger	1
P2	Supercharger Bracket No. 1	1
P3	Supercharger Bracket No. 2	1
P4	Supercharger Bracket Spacer No. 1	2
P5	Supercharger Bracket Spacer No. 2	2
P6	Supercharger Bracket Spacer No. 3	1
P7	Supercharger Bracket Spacer No. 4	1
P8	Cap Bolt M8 P1.25 L=185	1
P9	Cap Bolt M10 P1.25 L=55	2
P10	Cap Bolt M10 P1.25 L=125	2
P11	Idler Pulley	1
P12	Idler Pulley Cover	1
P13	Supercharger Pulley	1
P14	Supercharger Pulley Spacer	1
P15	V-belt	1
P48	Traction Fluid Tank Bracket	1
P76	Hex Bolt M8-1.25 L=30	3
P78	Hex Bolt M6-1.0 L=30	2
P79	Hex Bolt M6-1.0 L=25	2
P81	Hex Bolt M6-1.0 L=15	6
P86	Flat Washer M10	4
P87	Flat Washer M8	4
P88	Flat Washer M6 Major Dia.	5
P89	Flat Washer M6	5
P91	Lock Washer M6	10
P96	Flat Head Bolt M8-1.25 L=35	1

- (1) Temporarily install two of ②3 Idler pulley that were removed in 1. (23) to the original position.

**NOTE**

- To prevent the idler pulley from falling off, temporarily install the idler pulley using a factory bolt. (The bolt must be removed after the pulley is installed.)

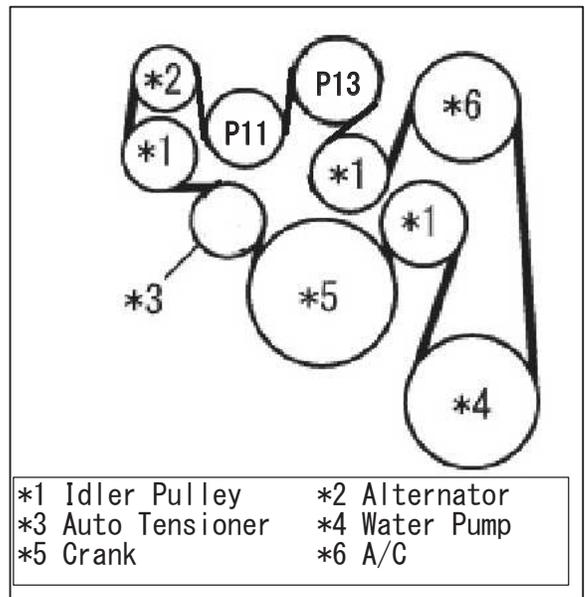


- (2) Temporarily install the V-belt.

**NOTE**

- Temporarily install the belt as shown in the diagram on the right till the Supercharger Pulley (P13) and Idler Pulley (P11) are installed.

- P15 V-belt x 1

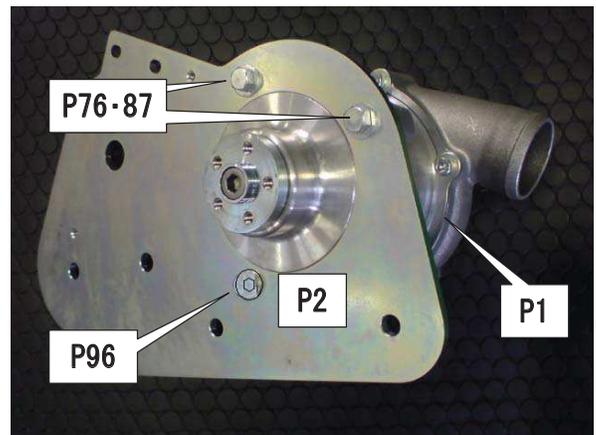


- (3) Install the GT Supercharger to the Supercharger Bracket No. 1.

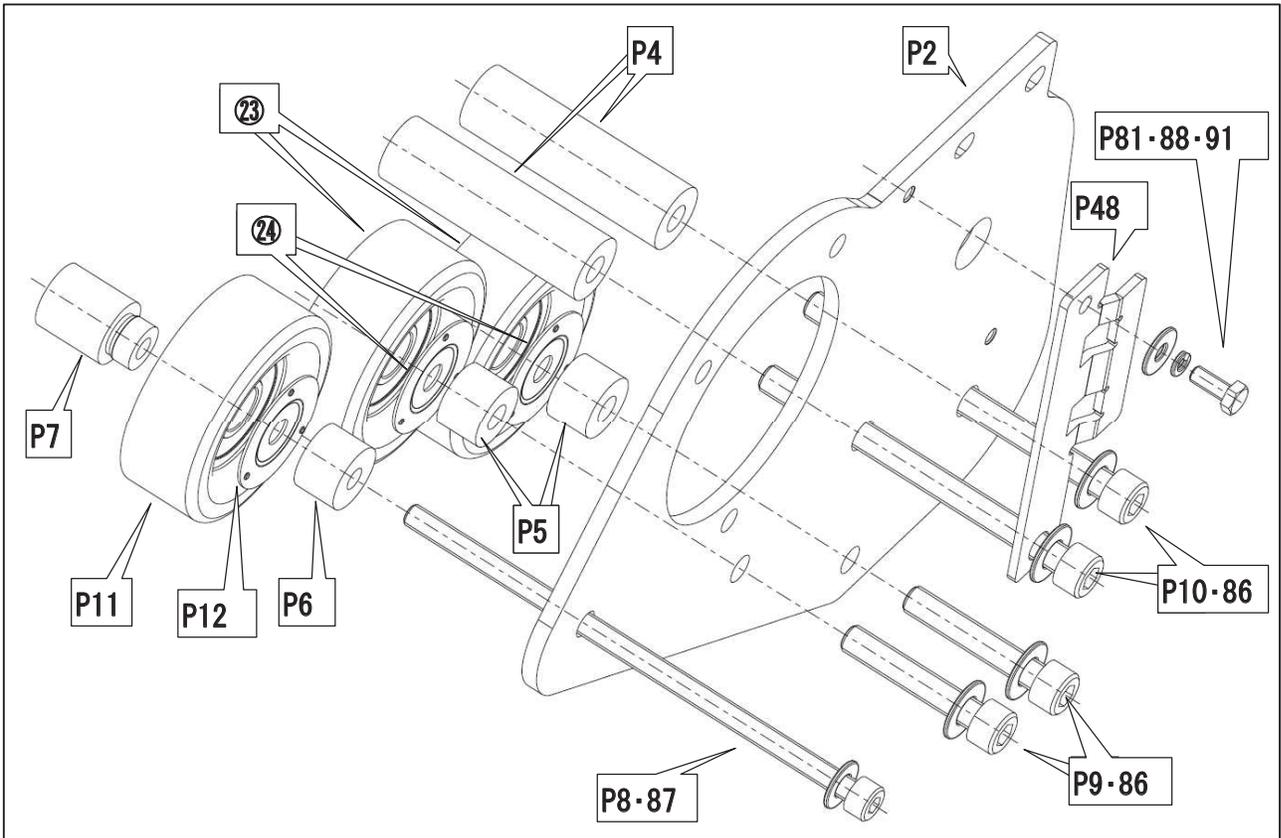
**NOTE**

- Do not use the lock washer since the washer may come in contact with other parts.

- P1 GT Supercharger x 1
- P2 Supercharger Bracket No.1 x 1
- P76 Hex Bolt M8-1.25 L=30 x 2
- P87 Flat Washer M8 x 2
- P96 Flat Head Bolt M8-1.25 L=35 x 1



(4) Temporarily install the Supercharger Bracket No.1 to the engine.



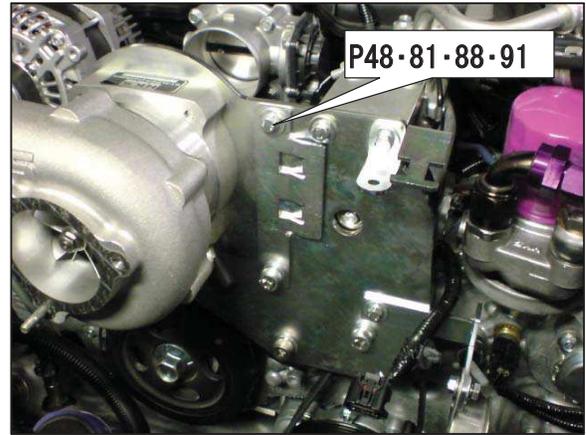
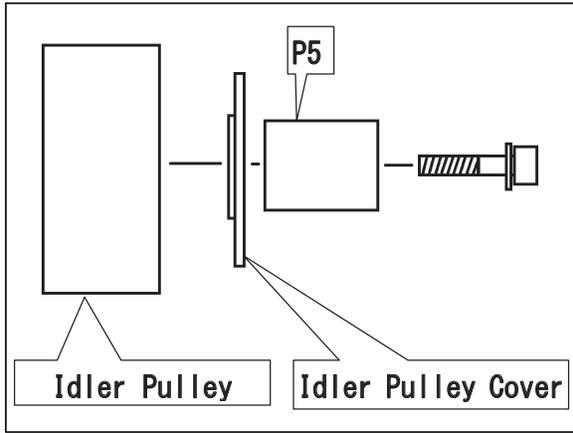
**NOTE**

- Tighten bolts only for a few threads.
- Insert ②4 factory idler pulley cover between ②3 factory idler pulley and Supercharger Bracket Spacer No.2.
- Make sure to install ②4 factory idler pulley cover in the correct direction.  
The dent side of the factory idler pulley cover must be faced to the Supercharger Bracket Spacer No.2 (P5).



**CAUTION**

- Installing the idler pulley cover in the wrong direction may cause damage to the idler pulley bearing.



- P4 Supercharger Bracket Spacer No. 1 x 2
- P5 Supercharger Bracket Spacer No. 2 x 2
- P9 Cap Bolt M10 P1.25 L=55 x 2
- P10 Cap Bolt M10 P1.25 L=125 x 2
- P48 Traction Fluid Tank Bracket x 1
- P81 Hex Bolt M6 P1.0 L=15 x 1
- P86 Flat Washer M10 x 4
- P88 Flat Washer M6 Major Dia. x 1
- P91 Lock Washer M6 x 1

(5) Temporarily install the Idler Pulley.

**NOTE**

- Insert the Idler Pulley Cover between the Idler Pulley and Supercharger Bracket Spacer No. 3.
- Make sure to install the Idler Pulley Cover in the correct direction.  
The dent side of the Idler Pulley Cover must be faced to the Supercharger Bracket Spacer No. 3.



**CAUTION**

- Installing the idler pulley cover in the wrong direction may cause damage to the idler pulley bearing.

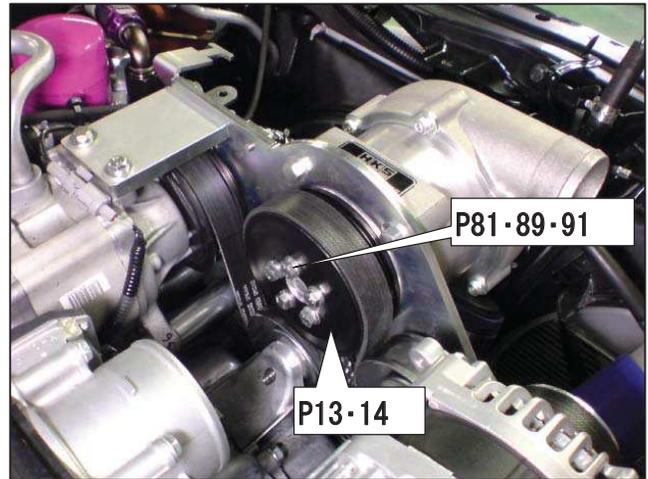
- P6 Supercharger Bracket Spacer No. 3 x 1
- P7 Supercharger Bracket Spacer No. 4 x 1
- P8 Cap Bolt M8 P1.25 L=185 x 1
- P11 Idler Pulley x 1
- P12 Idler Pulley Cover x 1
- P87 Flat Washer M8 x 1

(6) Install the Supercharger Pulley to the GT Supercharger.

- P13 Supercharger Pulley x 1
- P14 Supercharger Pulley Spacer x 1
- P81 Hex Bolt M6-1.0 L=15 x 5
- P89 Flat Washer M6 x 5
- P91 Lock Washer M6 x 5

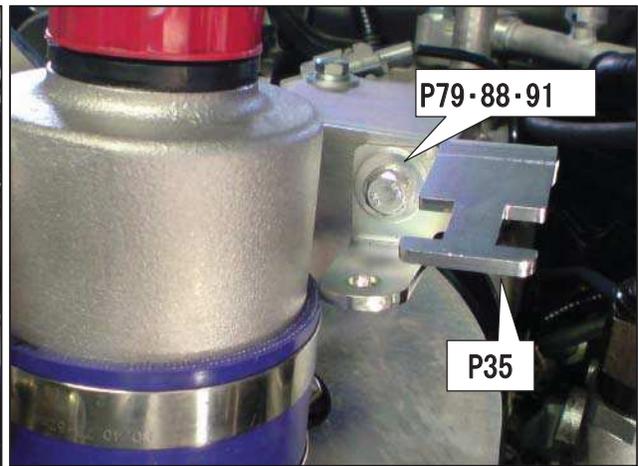
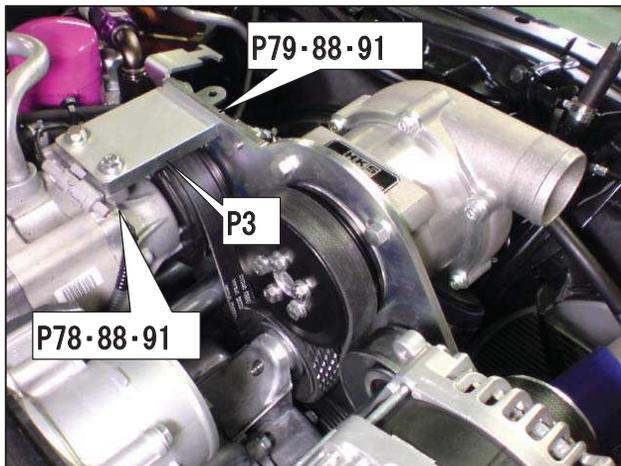
**NOTE**

Insert the Supercharger Pulley Spacer between the Supercharger and Supercharger Pulley.



(7) Temporarily install the Supercharger Bracket No. 2 and Pipe Bracket No. 2 to the A/C compressor.

- P3 Supercharger Bracket No. 2 x 1
- P35 Pipe Bracket No. 2 x 1
- P78 Hex Bolt M6-1.0 L=30 x 2
- P79 Hex Bolt M6-1.0 L=25 x 2
- P88 Flat Washer M6 Major Dia. x 4
- P91 Lock Washer M6 x 4



- (8) Place the belt on the Supercharger Pulley. Make sure the belt is aligned. Make sure the belt is correctly aligned with the grooves on the pulley.

**NOTE**

- The supercharger pulley has 8 ribs; however, the belt has only 6 ribs. The belt must be aligned with 6 ribs from the vehicle's rear.



- (9) Tighten each bolt little by little and install the Supercharger Bracket No.1 and No.2.

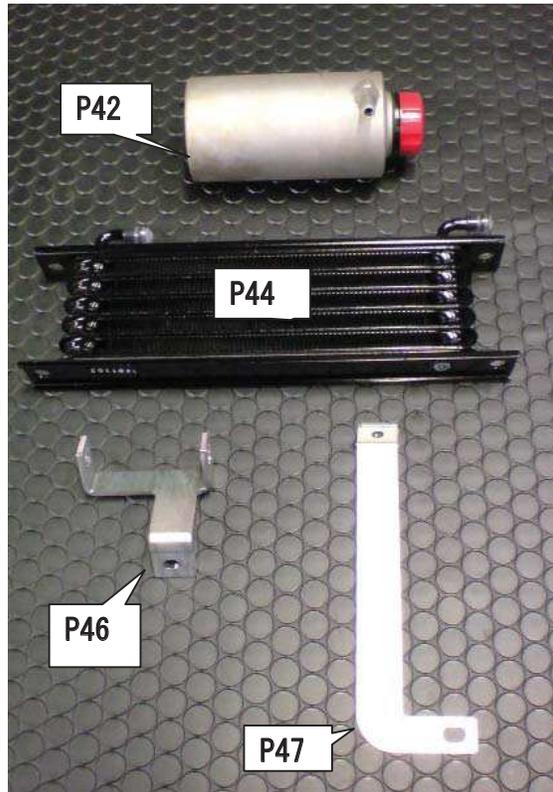
- (10) Unlock the belt tensioner lock and apply tension to the belt.

**NOTE**

- Rotate the crank pulley and turn the belt around. Make sure the belt is correctly aligned.
-

#### 4. INSTALLATION OF TRACTION FLUID TANK & TRACTION FLUID COOLER

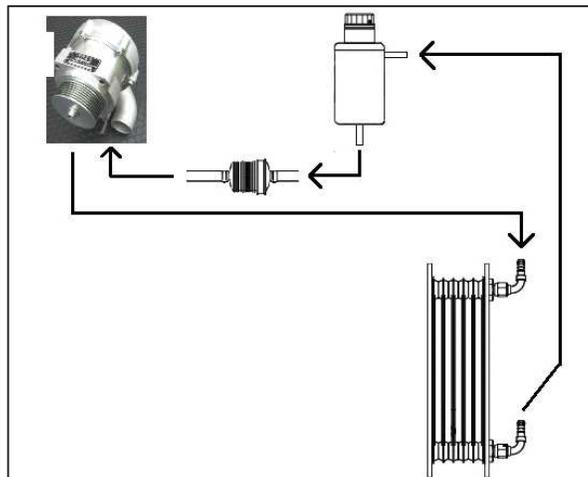
##### PARTS LIST



No.	Descriptions	Qt
P42	Traction Fluid Tank	1
P44	Traction Fluid Cooler	1
P45	Corrugated Tube	1
P46	Traction Fluid Cooler Bracket No. 1	1
P47	Traction Fluid Cooler Bracket No. 2	1
P56	Silicone Hose 70mm L=70	1
P63	Traction Fluid Hose 8mm	1
P67	Hose Clamp #40	2
P73	Hose Clamp 9mm	2
P74	Hose Clamp 8mm	4
P77	Hex Bolt M8 P=1.25 L=20	3
P80	Hex Bolt M6 P=1.0 L=20	2
P87	Flat Washer M8	3
P88	Flat Washer M6 Major Dia.	2
P90	Lock Washer M8	3
P91	Lock Washer M6	2
P92	Flange Nut M8	3
P93	Flange Nut M6	2
P94	Tie Wrap (L)	2

##### NOTE

- The internal components of the GT Supercharger assembly are very precise and exact; foreign objects mixed with Traction Fluid can lead to damage to the Supercharger Assy. Make sure the hoses and/or fitting ends are covered to prevent foreign objects from getting inside the hoses, tank and/or cooler.
- The diagram below shows traction fluid piping. Reference this diagram to complete the following procedures.



(1) Cut the Traction Fluid Hose 8mm to ①850mm and ②780mm.

- P63 Traction Fluid Hose 8mm L=2000 x 1

(2) Cut the Corrugated Tube to ③750mm and ④680mm.

- P45 Corrugated Tube x 1

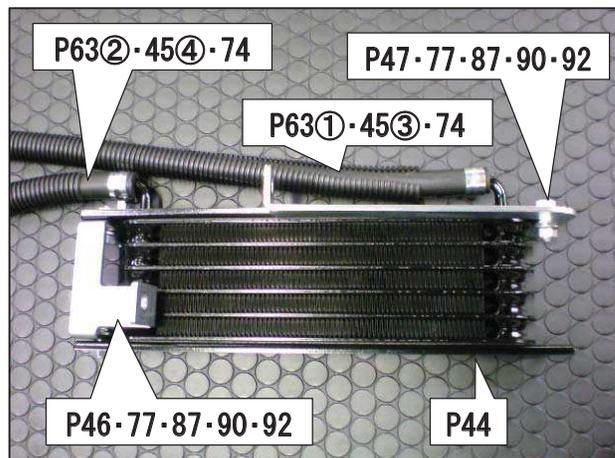
(3) Install Hose ① and ② prepared in (1), to the Traction Fluid Cooler using the following provided Hose Clamp.

- P74 Hose Clamp 8mm x 2

(4) Install Corrugated Tube ③ and ④ prepared in (2) to Hose① and ②.

(5) Temporarily install the Traction Fluid Bracket to the Traction Fluid Cooler.

- P44 Traction Fluid Cooler x 1
- P46 Traction Fluid Bracket No.1 x 1
- P47 Traction Fluid Bracket No.2 x 2
- P77 Hex Bolt M8 P=1.0 L=20 x 3
- P87 Flat Washer M8 x 3
- P90 Lock Washer M8 x 3
- P92 Flange Nut M8 x 3



(6) Temporarily install the Traction Fluid Cooler Bracket No.2 to the front bumper reinforcement.

- P80 Hex Bolt M6 P=1.0 L=20 x 1
- P88 Flat Washer M6 Major Dia. x 1
- P91 Lock Washer M6 x 1
- P93 Flange Nut M6 x 1



(7) Temporarily install the Traction Fluid Cooler Bracket No.1 to the front bumper reinforcement.

- P80 Hex Bolt M6 P=1.0 L=20 x 1
- P88 Flat Washer M6 Major Dia. x 1
- P91 Lock Washer M6 x 1
- P93 Flange Nut M6 x 1

(8) Make sure all installed components do not come in contact with any other parts; then, tighten all bolts.

(9) Install the Traction Fluid Hose 9mm ② to the GT Supercharger.

- P73 Hose Clamp 9mm x 1

(10) Install the Traction Fluid Hose 8mm ② to the GT Supercharger.

- P74 Hose Clamp 8mm x 1

(11) Install the Traction Fluid Tank to the Traction Fluid Tank Bracket.

- P42 Traction Fluid Tank x 1
- P56 Silicone Hose 70mm L=70 x 1
- P67 Hose Clamp #40 x 2

(12) Install the Traction Fluid Hose 9mm ① to the Traction Fluid Tank.

- P73 Hose Clamp 9mm x 1

(13) Install the Traction Fluid Hose 8mm ① to the Traction Fluid Tank.

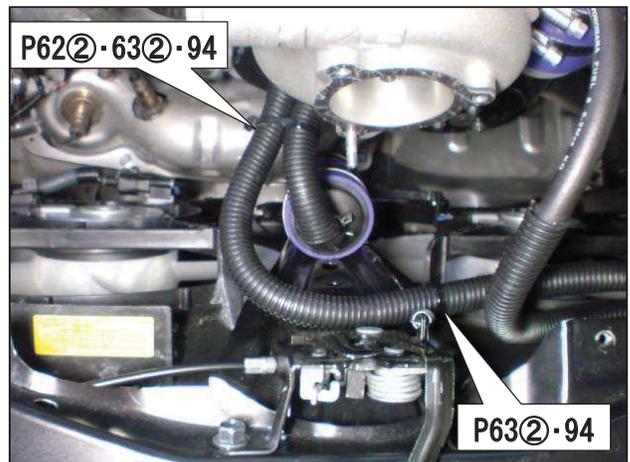
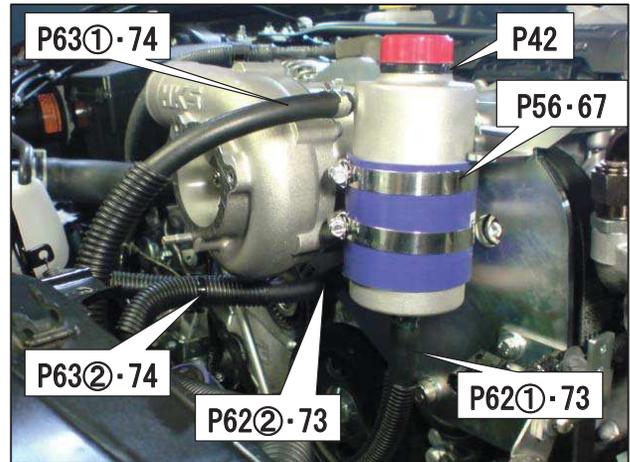
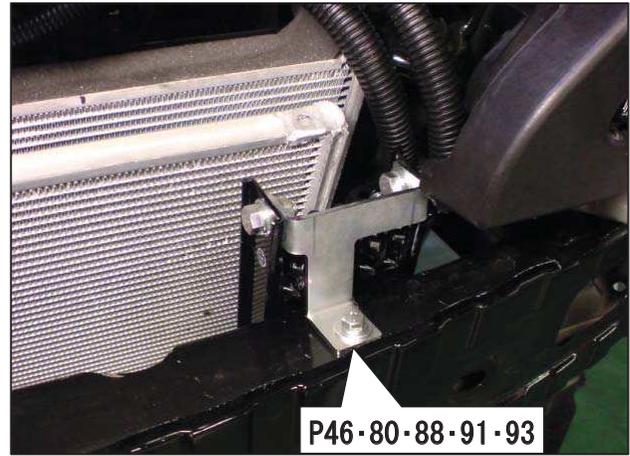
- P74 Hose Clamp 8mm x 1

(14) Secure the Traction Fluid Hose 9mm ② and Traction Fluid Hose 8mm ② using the Tie Wrap (L).

- P94 Tie Wrap (L) x 1

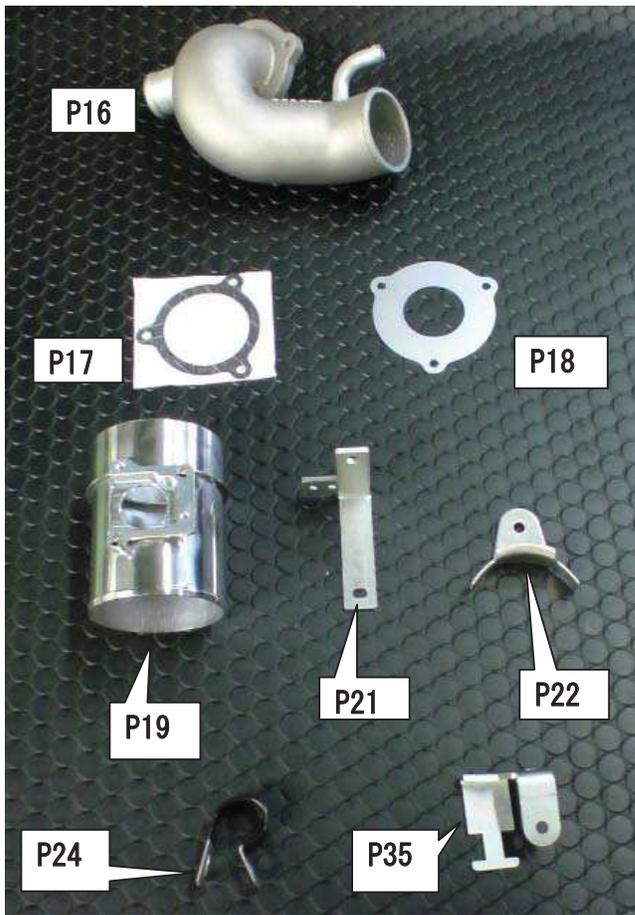
(15) Secure the Traction Fluid Hose 8mm ② to the hole drilled on the radiator support in 2. (10) using the Tie Wrap (L).

- P94 Tie Wrap (L) x 1



## 5. INSTALLATION OF SUCTION PIPE

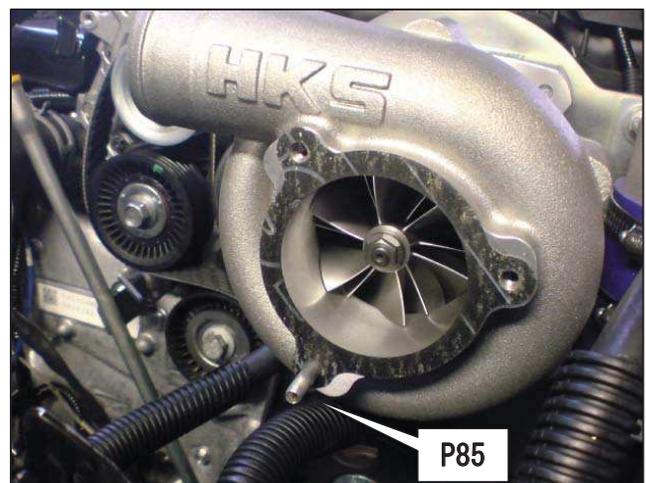
### PARTS LIST



No.	Descriptions	Qt
P16	Suction Pipe	1
P17	Suction Pipe Gasket	2
P18	Restrictor	1
P19	Airflow Adapter	1
P20	Air Cleaner	1
P21	Air Cleaner Bracket No. 1	1
P22	Air Cleaner Bracket No. 2	2
P23	Joint Pipe 12mm	1
P24	Support Clamp	1
P35	Pipe Bracket No. 2	1
P53	Silicone Hose 60mm-80mm	1
P54	Silicone Hose 80mm	1
P61	Oil-resistant Hose 12mm	1
P66	Hose Clamp #48	3
P68	Hose Clamp #36	1
P72	Hose Clamp 12mm	2
P79	Hex Bolt M6 P=1.0 L=25	2
P80	Hex Bolt M6 P=1.0 L=20	2
P81	Hex Bolt M6 P=1.0 L=15	2
P83	Button Bolt M4-0.7 L=8	2
P85	Stud Bolt M6	1
P88	Flat Washer M6 Major Dia.	6
P91	Lock Washer M6	6
P93	Flange Nut M6	3
P94	Tie Wrap (L)	1
P95	Tie Wrap (M)	1

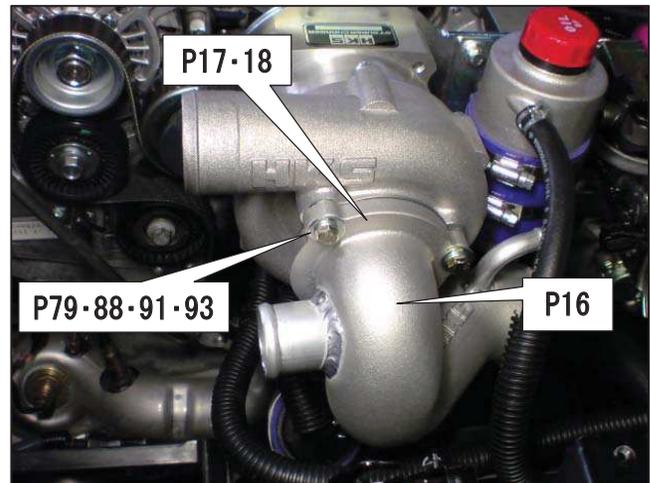
(1) Install the Stud Bolt M6 to the GT Supercharger.

- P85 Stud Bolt M6 x 1



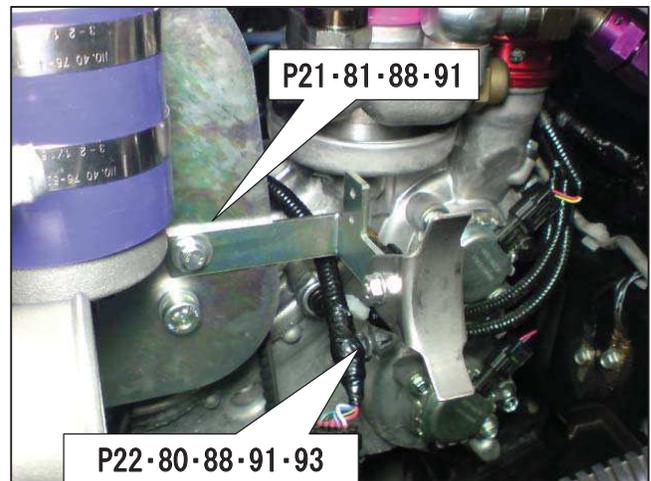
(2) Install the Suction Pipe and Restrictor to the GT Supercharger.

- P16 Suction Pipe x 1
- P17 Suction Pipe Gasket x 2
- P18 Restrictor x 1
- P79 Hex Bolt M6 P=1.25 L=25 x 2
- P88 Flat Washer M6 Major Dia. x 2
- P91 Lock Washer M6 x 2
- P93 Flange Nut M6 x 1



(3) Temporarily install the Air Cleaner Bracket No.1 to the Supercharger Bracket No.1.

- P21 Air Cleaner Bracket No.1 x 1
- P81 Hex Bolt M6 P=1.25 L=15 x 1
- P88 Flat Washer M6 Major Dia. x 1
- P91 Lock Washer M6 x 1



(4) Temporarily install the Air Cleaner Bracket No.2 to the Air Cleaner Bracket No.1.

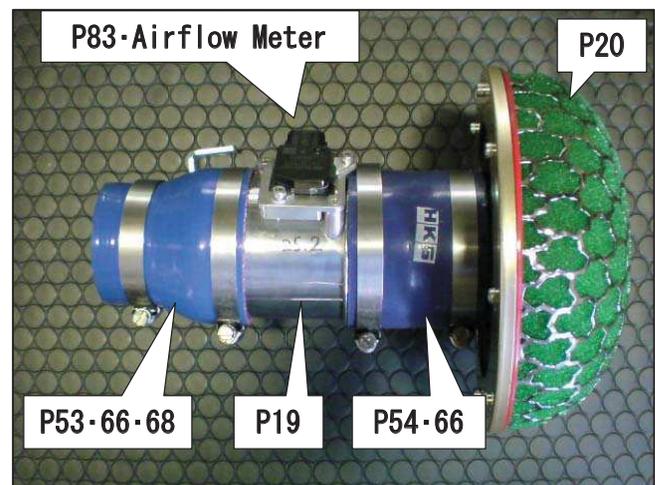
- P22 Air Cleaner Bracket No.2 x 1
- P80 Hex Bolt M6 P=1.0 L=20 x 1
- P88 Flat Washer M6 Major Dia. x 1
- P91 Lock Washer M6 x 1
- P93 Flange Nut M6 x 1

(5) Temporarily assemble the Air Cleaner, Airflow Adapter, and factory airflow meter.

- P19 Airflow Adapter x 1
- P20 Air Cleaner x 1
- P53 Silicone Hose 60mm-80mm x 1
- P54 Silicone Hose 80mm x 1
- P66 Hose Clamp #48 x 3
- P68 Hose Clamp #36 x 1
- P83 Button Bolt M4-0.7 L=8 x 2

**NOTE**

Make sure the logo of HKS and the airflow adapter are positioned as shown in the diagram on the right.



- (6) Temporarily assemble the Airflow Adapter temporarily assembled in (5) to the Suction Pipe.

**NOTE**

Make sure the logo of HKS on the silicone hose faces upward as shown in the diagram on the right.

- (7) Tighten the Air Cleaner Bracket No.1, Air Cleaner Bracket No.2, and Hose Clamps.

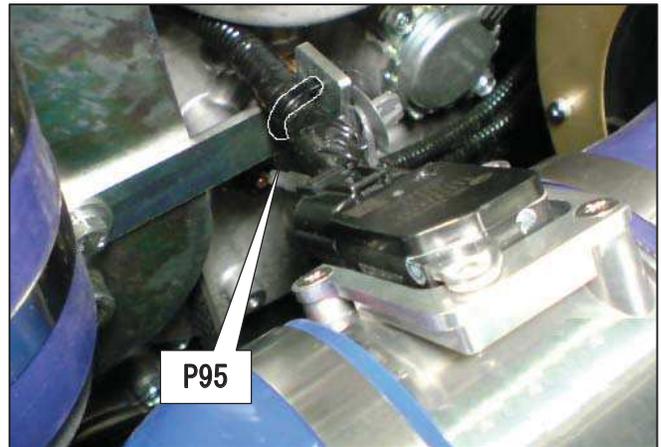
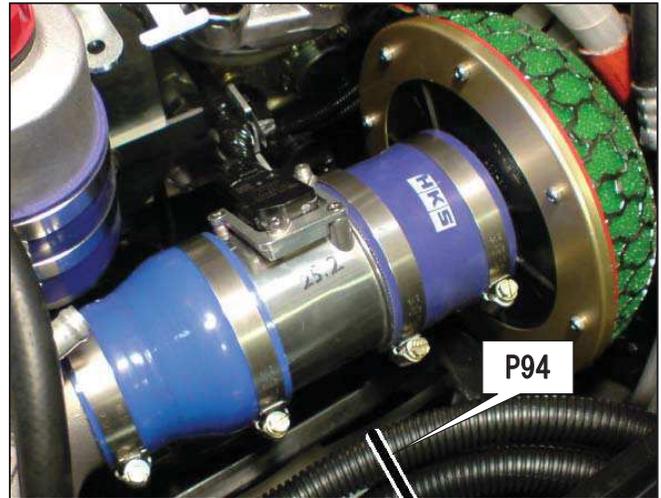
- (8) Secure two Traction Fluid Hoses using the Tie Wrap (L).

- P94 Tie Wrap (L) x 1

- (9) Connect the connector to the airflow meter.

- (10) Secure the airflow meter harness to the Air Cleaner Bracket No.1 using the Tie Wrap (M).

- P95 Tie Wrap (M) x 1



- (14) Cut the Oil-resistant Hose 12mm to 250mm.

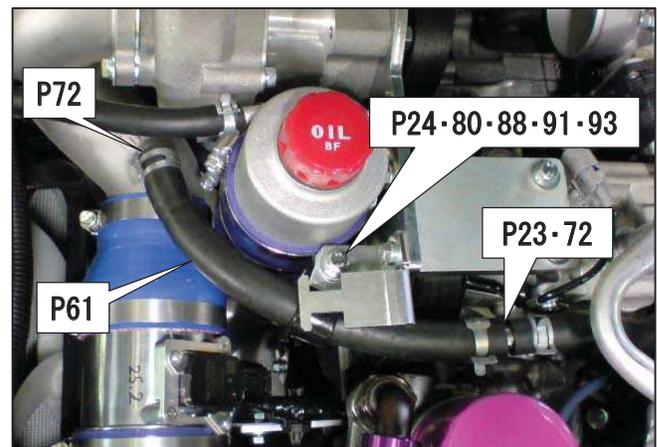
- P61 Oil-resistant Hose 12mm x 1

- (15) Connect the factory blow-by hose and Suction Pipe using the cut Oil-resistant Hose 12mm.

- P23 Joint Pipe 12mm x 1
- P72 Hose Clamp 12mm x 2

- (16) Secure the Oil-resistant Hose 12mm to the Pipe Bracket No.2 using the Support Clamp.

- P24 Support Clamp x 1
- P80 Hex Bolt M6 P=1.0 L=20 x 1
- P88 Flat Washer M6 Major Dia. x 1
- P91 Lock Washer M6 x 1
- P93 Flange Nut M6 x 1



## 6. INSTALLATION OF INTERCOOLER

### PARTS LIST

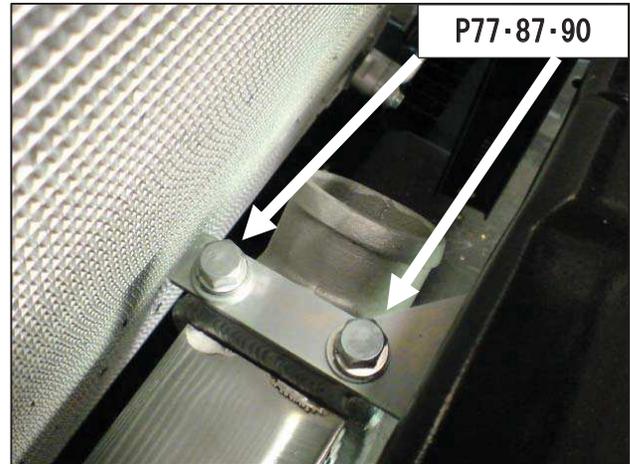
No.	Descriptions	Qt
P25	Intercooler	1
P28	Intercooler Bracket No. 3	1
P77	Hex Bolt M8-1.25 L=20	4
P80	Hex Bolt M6-1.0 L=20	1
P87	Flat Washer M8	4
P88	Flat Washer M6 Major Dia.	1
P90	Lock Washer M8	4
P91	Lock Washer M6	1
P93	Flange Nut M6	1

- (1) Temporarily install the Intercooler to the Intercooler Bracket temporarily installed in 2. (3) and (4).

#### NOTE

Apply the liquid gasket to the Hex Bolt M8 P=1.25 L=20 for better airtightness. (ThreeBond 1217G or equivalent is recommended.)

- P25 Intercooler x 1
- P77 Hex Bolt M8 P=1.25 L=20 x 3
- P87 Flat Washer M8 x 3
- P90 Lock Washer M8 x 3

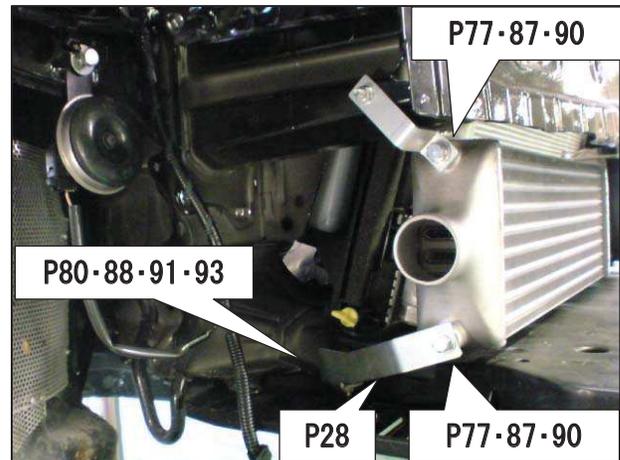


- (2) Temporarily install the Intercooler Bracket No. 3 to the Intercooler and vehicle.

#### NOTE

Apply the liquid gasket to the Hex Bolt M8 P=1.25 L=20 for better airtightness. (ThreeBond 1217G or equivalent is recommended.)

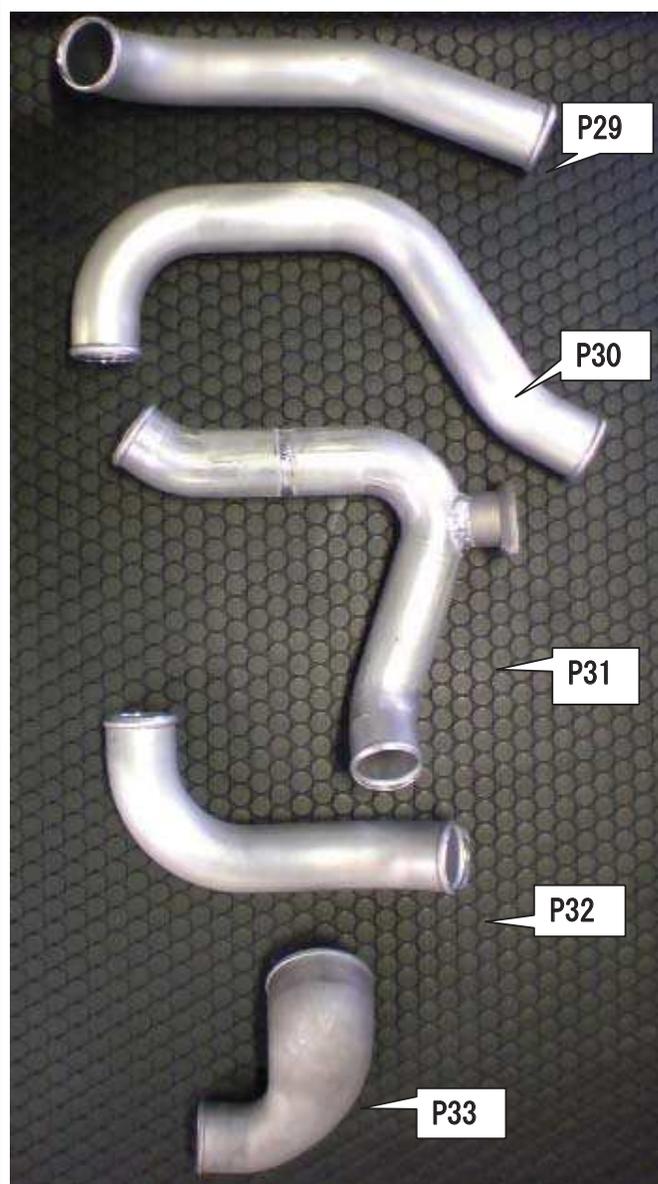
- P28 Intercooler Bracket No. 3 x 1
- P77 Hex Bolt M8-1.25 L=20 x 1
- P80 Hex Bolt M6-1.0 L=20 x 1
- P87 Flat Washer M8 x 1
- P88 Flat Washer M6 Major Dia. x 1
- P90 Lock Washer M8 x 1
- P91 Lock Washer M6 x 1
- P93 Flange Nut M6 x 1



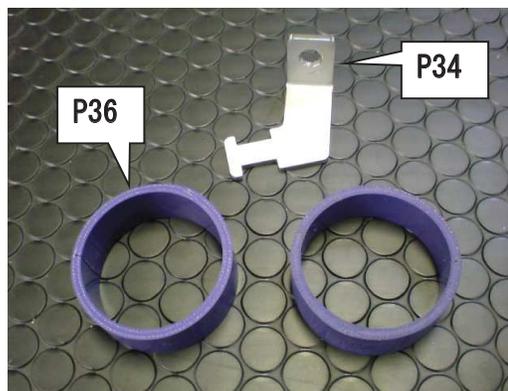
- (3) Make sure all installed parts do not come in contact with the Intercooler. Tighten all bolts.

## 7. INSTALLATION OF INTERCOOLER PIPE

### PARTS LIST

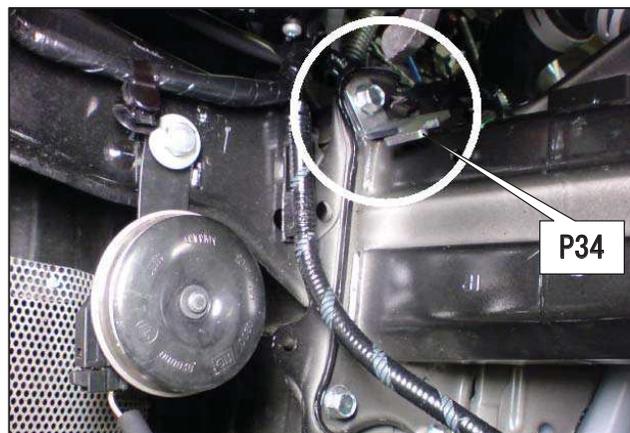


No.	Descriptions	Qt
P29	Intercooler Pipe No.1	1
P30	Intercooler Pipe No.2	1
P31	Intercooler Pipe No.3	1
P32	Intercooler Pipe No.4	1
P33	Intercooler Pipe No.5	1
P34	Pipe Bracket No.1	1
P36	Insulator	2
P55	Silicone Hose 75mm L=55	1
P57	Silicone Hose 50mm	4
P58	Silicone Hose 50mm w/Cushion	2
P66	Hose Clamp #48	2
P69	Hose Clamp #28	14



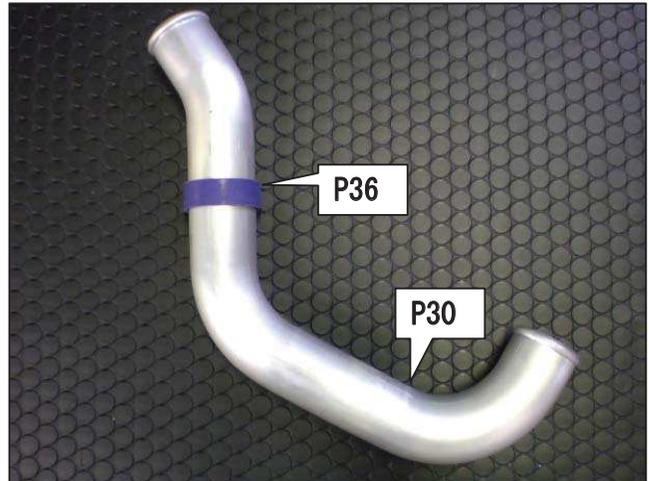
(1) Temporarily install the Pipe Bracket No.1 to the front bumper reinforcement as shown in the diagram on the right.

- P34 Pipe Bracket No.1 x 1



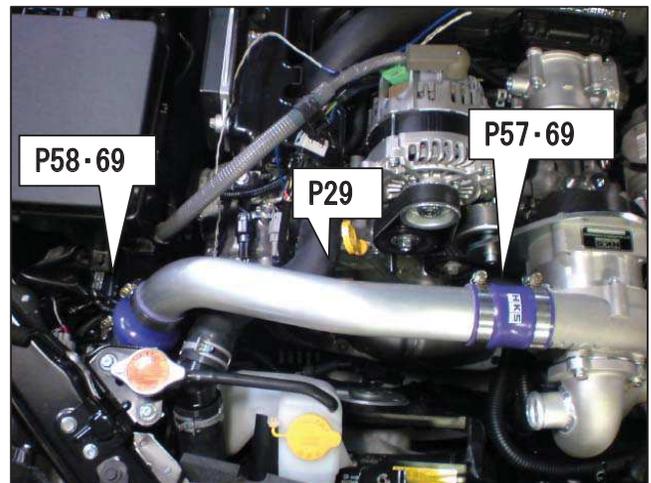
(2) Temporarily install the Insulator to the Intercooler Pipe No.2 as shown in the diagram on the right.

- P30 Intercooler Pipe No.2 x 1
- P36 Insulator x 1



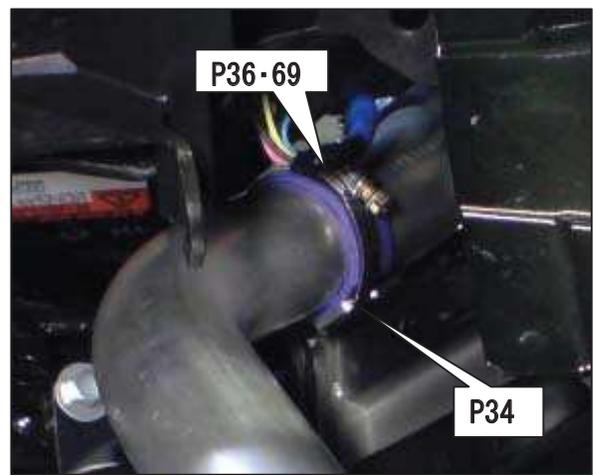
(3) Temporarily install the Intercooler Pipe No.1 and No.2.

- P29 Intercooler Pipe No.1 x 1
- P57 Silicone Hose 50mm x 2
- P58 Silicone Hose 50mm w/Cushion x 1
- P69 Hose Clamp #28 x 6



(4) Secure the Intercooler Pipe No.2 to the Pipe Bracket No.1.

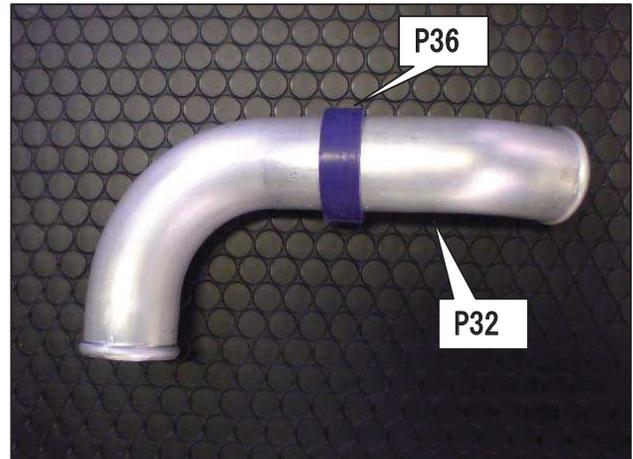
- P69 Hose Clamp #28 x 1



(5) Make sure all installed parts do not come in contact with the Intercooler. Tighten all hose clamps.

(6) Temporarily install the Insulator to the Intercooler Pipe No. 4 as shown in the diagram on the right.

- P32 Intercooler Pipe No. 4 x 1
- P36 Insulator x 1



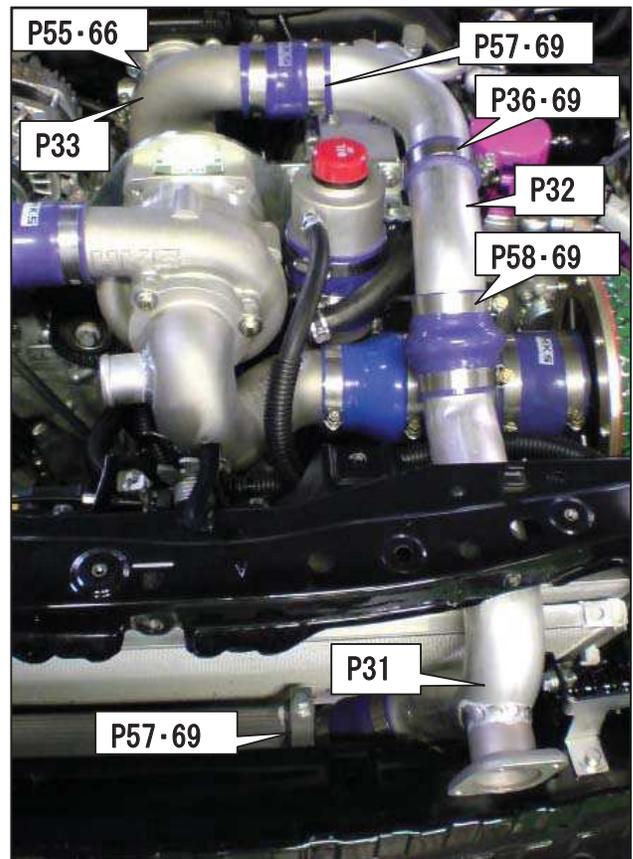
(7) Temporarily install the Intercooler Pipe No. 3, No. 4, and No. 5.

- P31 Intercooler Pipe No. 3 x 1
- P33 Intercooler Pipe No. 5 x 1
- P55 Silicone Hose 75mm x 1
- P57 Silicone Hose 50mm x 2
- P58 Silicone Hose 50mm w/Cushion x 1
- P66 Hose Clamp #48 x 2
- P69 Hose Clamp #28 x 6

(8) Adjust the position of the Insulator temporarily installed in (6). Secure the Insulator to the Pipe Bracket No.2 temporarily installed in 3. (7).

- P69 Hose Clamp #28 x 1

(9) Make sure all installed parts do not come in contact with the Intercooler. Tighten all hose clamps.



## 8. INSTALLATION OF BLOW-OFF VALVE

### PARTS LIST

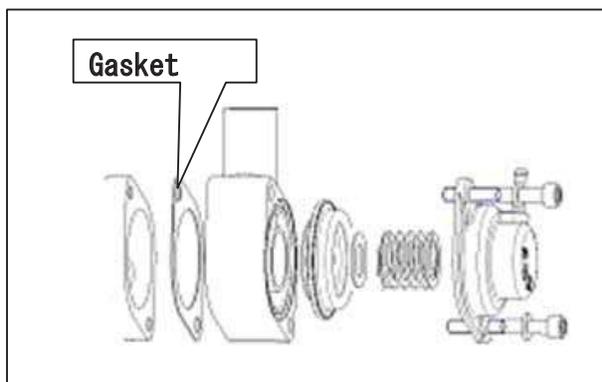
No.	Descriptions	Qt
P37	Blow-off Valve	1
P38	Blow-off Valve Hose	1
P39	Joint Pipe 22mm	1
P40	T-fitting 10mm-4mm-10mm	1
P60	Oil-resistant Hose 22mm	1
P64	Vacuum Hose 4mm	1
P70	Hose Clamp #20	1
P71	Hose Clamp 22mm	3
P73	Hose Clamp 9mm	2
P74	Hose Clamp 8mm	1
P75	Hose Clamp 4mm	2
P95	Tie Wrap (M)	4
P97	Hose Clamp 10mm	2
P98	Oil-resistant Hose 10mm L=200	1

(1) Cut the Oil-resistant Hose 22mm to 710mm.

- P60 Oil-resistant Hose 22mm x 1

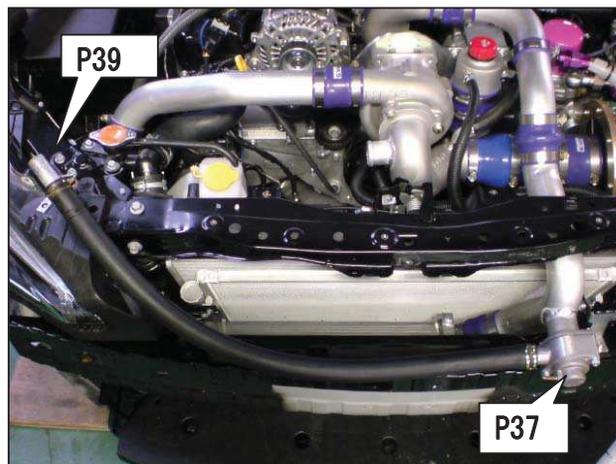
(2) Install the Blow-off Valve to the Intercooler Pipe No. 3.

- P37 Blow-off Valve x 1



#### NOTE

Insert the gasket between the Intercooler Pipe No.3 and Blow-off Valve.



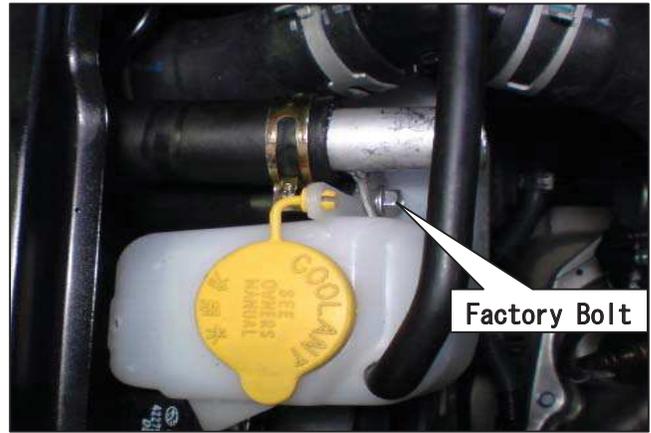
(3) Install the 710mm Oil-resistant Hose 22mm to the Joint Pipe 22mm.

- P39 Joint Pipe 22mm x 1
- P71 Hose Clamp 22mm x 1

(4) Install the Oil-resistant Hose 22mm to the Blow-off Valve.

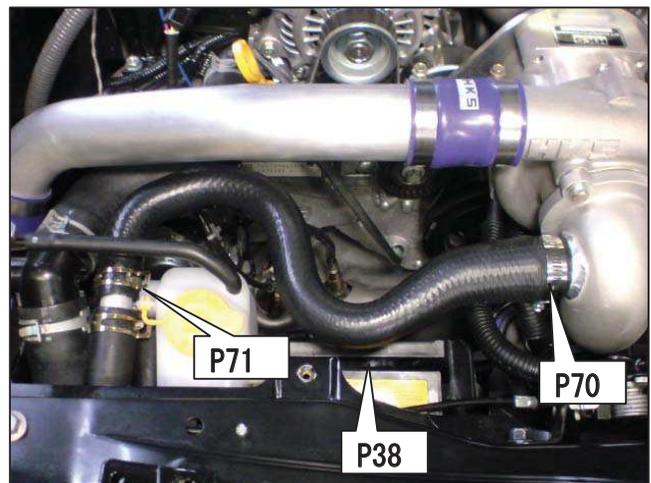
- P71 Hose Clamp 22mm x 1

- (5) Install the Joint Pipe 22mm together with the factory reservoir tank using the factory reservoir tank installation bolt.



- (6) Install the Blow-off Valve Hose.

- P38 Blow-off Valve Hose x 1
- P70 Hose Clamp #20 x 1
- P71 Hose Clamp 22mm x 1



**For a Vehicle with a Manual Transmission:**

- (7) Cut the brake vacuum hose at the position indicated in the diagram on the right.

- (8) Cut the Vacuum Hose 4mm to 1400mm.

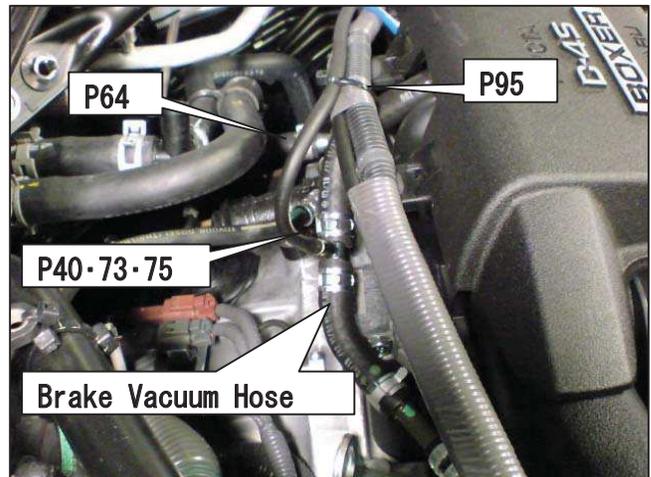
- P64 Vacuum Hose 4mm x 1

- (9) Install the T-fitting 10mm-4mm-10mm to the Vacuum Hose 4mm cut in (8).

- P40 T-fitting 10mm-4mm-10mm x 1
- P75 Hose Clamp 4mm x 1

- (10) Install the T-fitting 10mm-4mm-10mm to the brake vacuum hose.

- P73 Hose Clamp 9mm x 2



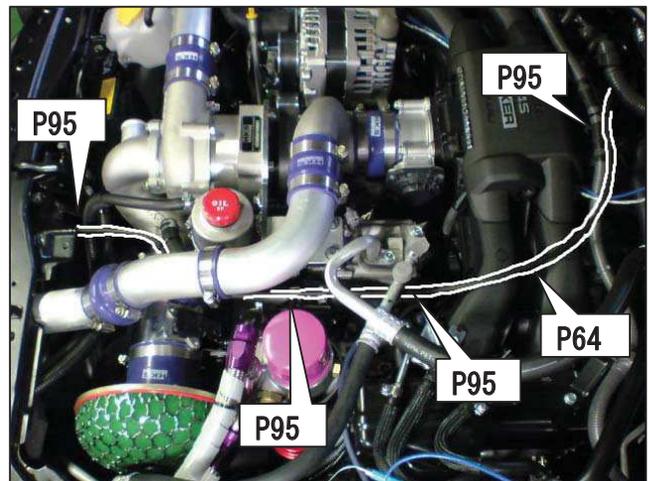
(11) Install the Vacuum Hose 4mm to the Blow-off Valve.

- P75 Hose Clamp 4mm x 1



(12) Secure the Vacuum Hose 4mm using the Tie Wrap (M).

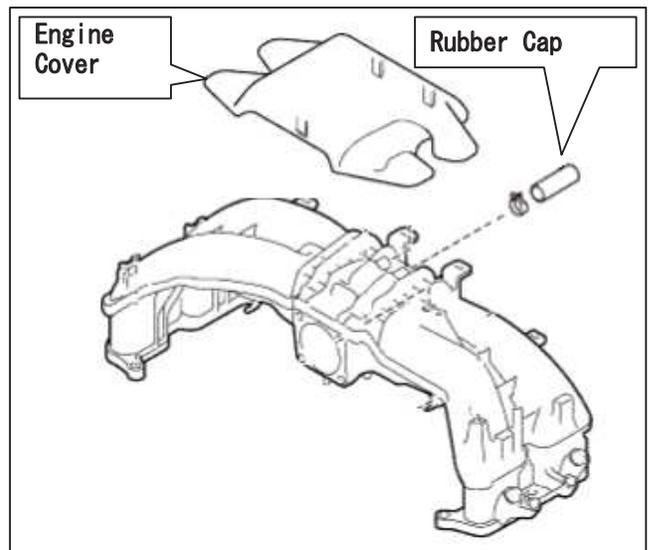
- P95 Tie Wrap (M) x 4



**For a Vehicle with an Automatic Transmission:**

(16) Remove the engine cover.

(17) Remove the rubber cap.



(18) Cut the Vacuum Hose 4mm to 1150mm.

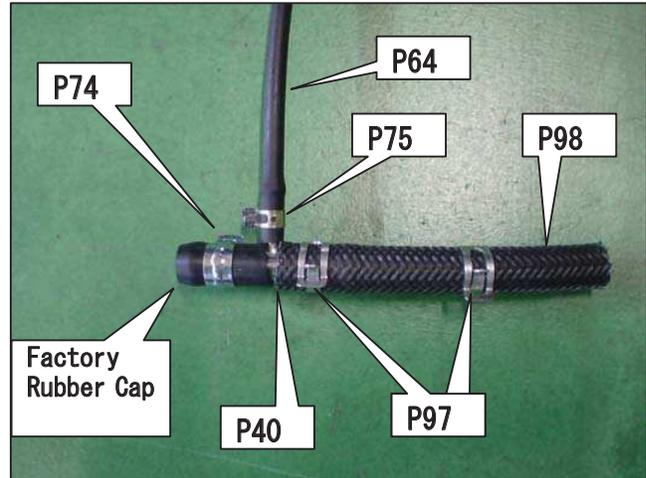
- P64 Vacuum Hose 4mm x 1

(19) Cut the Oil-resistant Hose 10mm to 115mm.

- P98 Vacuum Hose 10mm x 1

(20) Install the rubber cap removed in (8), the Vacuum Hose 4mm cut to 1150mm in (9), and the Oil-resistant Hose 10mm cut to 115mm in (10) to the T-fitting 10mm-4mm-10mm.

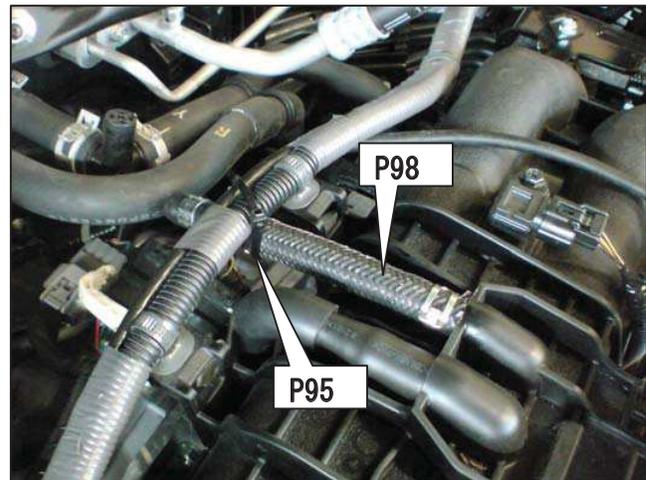
- P40 T-fitting 10mm-4mm-10mm x 1
- P74 Hose Clamp 8mm x 1
- P75 Hose Clamp 4mm x 1
- P97 Hose Clamp 10mm x 2



(21) Install the Oil-resistant Hose 10mm to the intake manifold.

(22) Secure the Oil-resistant Hose 10mm using the Tie Wrap (M).

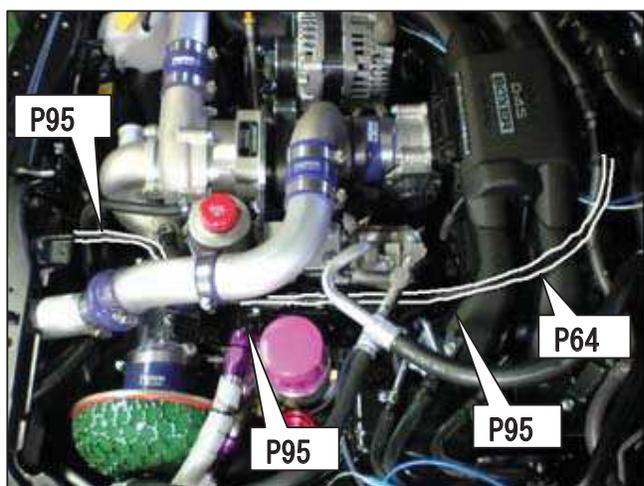
- P95 Tie Wrap (M) x 1



(23) Secure the Vacuum Hose 4mm using the Tie Wrap (M).

- P95 Tie Wrap (M) x 3

(24) Install the engine cover to the intake manifold.



## 9. INSTALLATION OF ENGINE MANAGEMENT PARTS

### NOTE

This section is required only for 12001-AT006.

PARTS LIST			
No.	Descriptions	Qt	
P49	F-CON iS	1	
P50	F-CON Harness	1	
P51	F-CON Communication Cable	1	
P52	F-CON Bracket	1	
P81	Hex Bolt M6-1.0 L=15	2	
P84	Pan Head Machine Screw M3-0.5 L=8	4	
P88	Flat Washer M6 Major Dia.	2	
P91	Lock Washer M6	2	

- (1) Remove the cover from the back side of the F-CON iS.

- P49 F-CON iS x 1

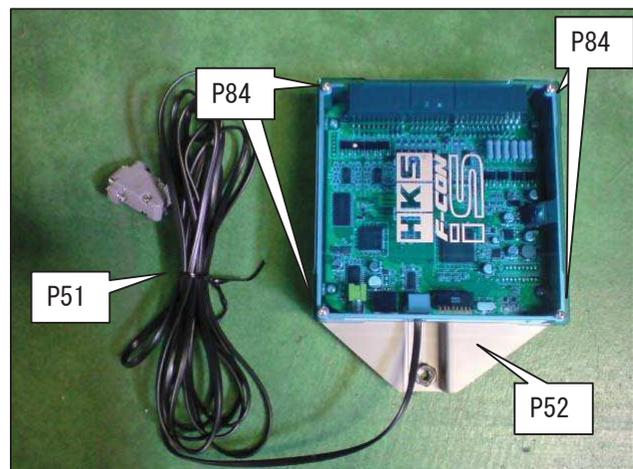


- (2) Install the F-CON Bracket to the F-CON iS.

- P52 F-CON Bracket x 1
- P84 Pan Head Machine Screw M3-0.5 L=8 x 4

- (3) Install the F-CON Communication Cable to the F-CON iS.

- P51 F-CON Communication Cable x 1

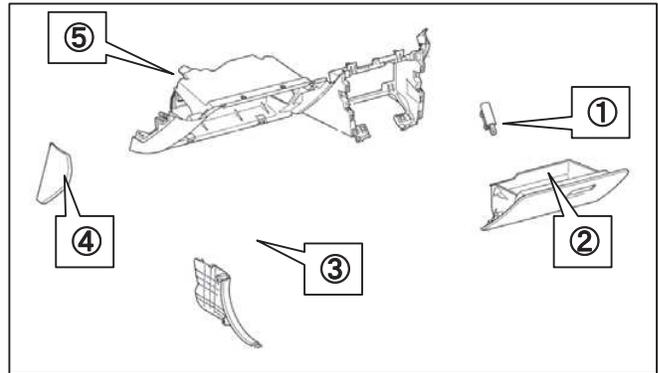


(4) Remove ①Glove-compartment door damper.

(5) Remove ②Glove-compartment door assembly.

(6) Remove the left-hand side's ③Cowl side trim board.

(7) Remove the left-hand side's ④Instrument side panel.

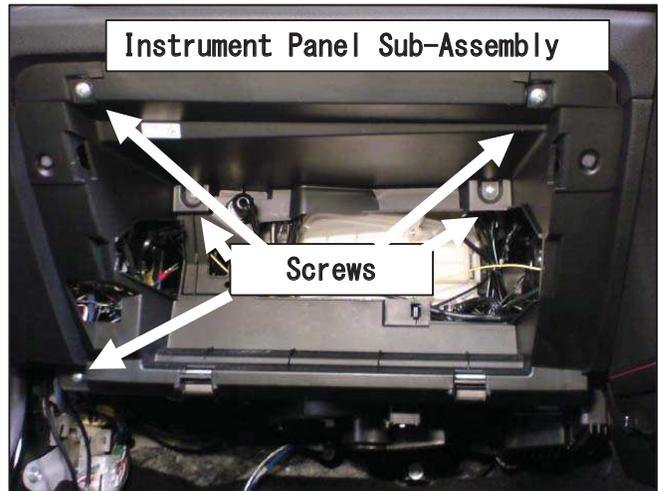


(8) Remove 5 screws indicated in the diagram on the right.

(9) Move ⑤Instrument panel sub-assembly LWR to make room for installation.

**NOTE**

It is not necessary to remove the instrument panel sub-assembly LWR completely.

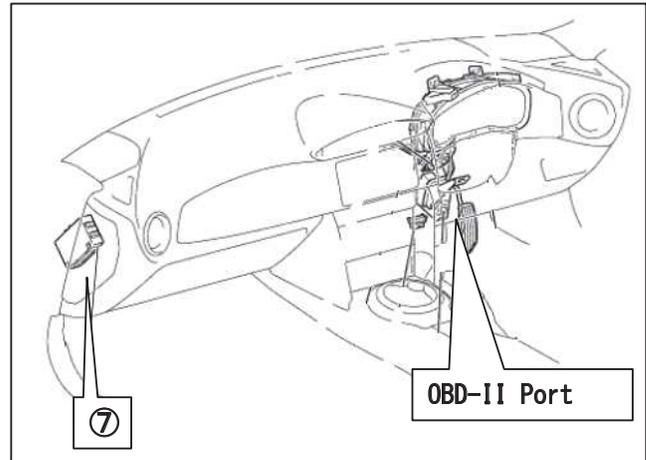


(10) Disconnect the connector of ⑥Smart key computer assembly.

(11) Remove ⑥Smart key computer assembly.



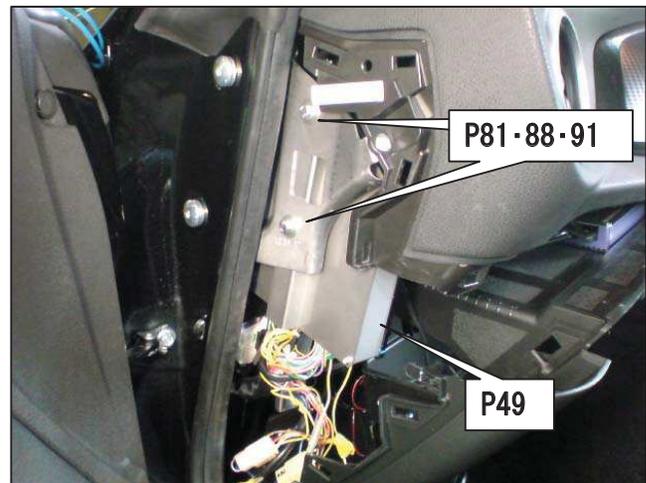
- (12) Disconnect the connector of ⑦ Engine Control Computer.
- (13) Install the F-CON Harness to ⑦ Engine control computer and vehicle's harness.
  - P50 F-CON Harness x 1
- (14) Connect the OBD-II connector of the F-CON Harness to the OBD-II port of the vehicle.



- (15) Reinstall ⑥Smart key computer assembly.

- (1) Connect the connector to ⑥Smart key computer assembly.

- (2) Install the F-CON iS to the position indicated in the diagram on the right.
  - P81 Hex Bolt M6-1.0 L=15 x 2
  - P88 Flat Washer M6 Major Dia. x 2
  - P91 Lock Washer M6 x 2



- (3) Connect the F-CON Harness to the F-CON iS.

- (4) Reinstall ⑤Instrument panel sub-assembly LWR.

- (5) Reinstall the left-hand side's ④Instrument side panel.

- (6) Reinstall the left-hand side's ③Cowl side trim board.

- (7) Reinstall ②Glove-compartment door assembly.

- (8) Reinstall ①Glove-compartment door damper.

## 10. REINSTALLATION OF FACTORY PARTS

- (1) Reinstall ⑬Belt cover.
- (2) Reinstall ⑩Radiator support.
- (3) Install ⑨Hood lock to the radiator support.
- (4) Reinstall the ambient temperature sensor coupler and ⑥Horn.
- (5) Reinstall ③Front bumper energy absorber.
- (6) Reinstall ②Front bumper.
- (7) Reinstall ①Side turn signal light to both sides.
- (8) Reinstall the engine under cover.
- (9) Reconnect the cable to the negative terminal of the battery.

## 11. FILLING TRACTION FLUID

### PARTS LIST

	No.	Description	Qt
	P41	Traction Fluid	1

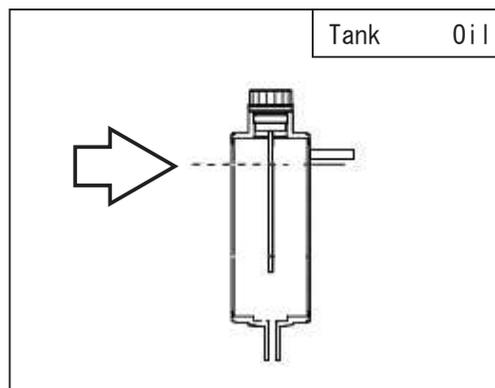
#### NOTE

Do not allow foreign objects to mix with the Traction Fluid.

The internal components of the Supercharger assembly are very precise and exact; foreign objects mixed with Traction Fluid can lead to damage to the Supercharger Assy.

Make sure the hoses and/or fitting ends are covered to prevent foreign objects from getting inside the hoses, tank and/or cooler.

- (1) Check to make sure that there are no foreign objects in the Oil Tank. Add the Traction Fluid to the oil tank up to the line in the diagram. Close the cap properly and securely.



## 12. CHECKING TRACTION FLUID VOLUME

(1) Check off the following before starting the engine:

	Items to confirm:	Check
1	Make sure the piping for traction fluid is correct.	
2	Make sure the wiring harnesses and installed components do not come in contact with any other parts on the vehicle.	
3	Make sure the unused connectors on the F-Con Harness are left open.	
4	Make sure the F-Con Harness is connected securely.	
5	Make sure the F-Con Harness is connected securely to OBD-II port.	
6	Make sure the harness is not pinched at any point.	
7	Make sure all bolts (especially the pulley bolts) are tightened	
8	Make sure the belt is properly aligned with the grooves of the pulley.	
9	Make sure the Traction Fluid is at the correct level.	
10	Make sure all pipes and hoses are routed and connected correctly.	
11	Make sure hoses are not kinked or bent.	
12	Make sure all hose clamps are tight.	
13	Make sure all bolts and nuts are tightened properly.	
14	Make sure all installed components are secured.	
15	Make sure the negative cable terminal is securely attached to the	
16	Make sure the engine oil level dipstick is between H-L.	

\*The supplied F-CON iS unit is pre-programmed.

(2) Prepare a small amount of Traction Fluid in a beaker or small container, open the oil cap and start the engine.

(3) Immediately after starting the engine, perform the following:

1. Check to make sure that the oil level starts to decline, and then increase again.
2. Add oil from the beaker or small container, so that the Oil Tank level does not get empty. Also make sure that the Oil Tank does not overflow.

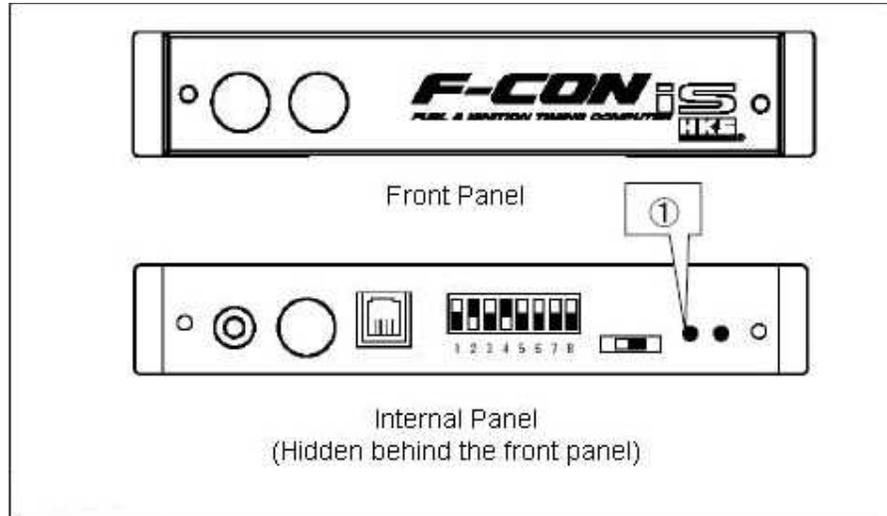
※ There may be some unusual or unpleasant noises emanating from the Supercharger Assembly after starting the engine. This is normal, and this noise will go away after the Traction Fluid warms up (approximately 2-3 minutes).

(4) Start the engine and perform the following checks after the engine reaches normal operating temperature:

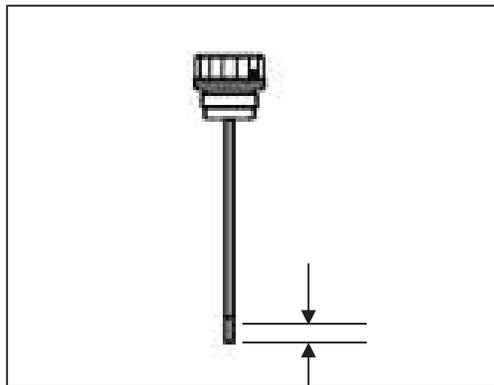
### NOTE

Do not raise the engine RPM while the engine is warming up; let it idle.

	Items to confirm:	Check
1	Make sure the Traction Fluid returns to the Oil Tank.	
2	Make sure the green Power LED on the F-CON iS is ON. (See diagram below)	
3	Make sure there are no leaks in the fuel, Traction Fluid, coolant, or piping.	
4	Make sure there is no excessive stress on any harnesses, fuel lines, or	
5	Make sure the installed parts do not come in contact with any other parts.	



- (5) After verifying the above items, raise and keep the RPM stable at 2000RPM for 10 seconds. Immediately shut off the engine and check the Traction Fluid level. The level needs to be at level indicated by an arrow in the diagram below. If it is lower, add Traction Fluid as necessary.



- ※ If there is excess Traction Fluid remaining in the bottle, replace the cap on the bottle and store in a safe location. Always store excess Traction Fluid in the original bottle.

- (6) Put the oil tank cap back on.

*The installation process is now complete.*

- ※ Belt squeals when the engine is stopped while the engine compartment temperature is high. This is because the factory auto tensioner is adjusting tension of the belt.

### 13. 1<sup>st</sup> MONTH INSPECTION

- Within 40 days of installation, it is recommended to consult your installer/retailer for the following 1<sup>st</sup> month inspection:
- If there is no trouble found after the inspection, fill out the registration form to register.

Entry Method	No Problem	<input checked="" type="checkbox"/>	Exchange	×	Adjust	A	Tighten	T
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Inspection Item	
1	<p><u>Supercharger Unit Check</u></p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="text-align: center;"> <b>WARNING</b></p> <ul style="list-style-type: none"> <li>• When checking operation of the unit, avoid touching any moving belts, even clothing.</li> <li>• Touching these moving belts can lead to severe injury and damage.</li> </ul> </div> <p>Compare the operating sound currently against initial installation, check for increased sound levels or unusual noises. <input type="checkbox"/></p> <p>Compare the sound of the air cleaner against initial installation, check for increased intake sound levels or unusual noises. <input type="checkbox"/></p> <p>Check Traction Oil level for unusually high Traction Oil consumption. (Oil level surface is not touching the oil level gauge) <input type="checkbox"/></p>
2	<p><u>Traction Oil Piping Inspection</u></p> <p>Check for Traction Oil leaking from the piping, loose hose clamps</p> <p>Locations:</p> <ul style="list-style-type: none"> <li>• Connection point to the Supercharger <input type="checkbox"/></li> <li>• Connection point to the fluid cooler <input type="checkbox"/></li> <li>• Connection point to the fluid tank <input type="checkbox"/></li> <li>• Connection point to the fluid filter <input type="checkbox"/></li> </ul> <p>Signs of damage due to rubbing of the Traction Oil hose to other parts <input type="checkbox"/></p> <p>Cracks or breaks in the Traction Oil hose <input type="checkbox"/></p> <p>If Traction Oil filled to the marking level on the oil level gauge <input type="checkbox"/></p>
3	<p><u>Belt Inspection</u></p> <p>Check if V-belt tension is within the Auto-tensioner's adjusting range <input type="checkbox"/></p> <p>Cracks or breaks in the belts. <input type="checkbox"/></p>
4	<p><u>Bolt Tightening</u></p> <p>Check if Supercharger Assy mounting bolt is tightened <input type="checkbox"/></p> <p>Check if pulley mounting bolts are properly tightened <input type="checkbox"/></p> <p>Check if pulley does not come in contact with any other parts <input type="checkbox"/></p>
5	<p><u>Other</u></p> <p>Check if any harnesses are interfering with other parts</p> <p>Locations:</p> <ul style="list-style-type: none"> <li>• F-CON Harness <input type="checkbox"/></li> </ul> <p>Check all mounted parts for interference with other parts</p> <p>Locations:</p> <ul style="list-style-type: none"> <li>• Suction Pipe No.1 &amp; Vehicle's body <input type="checkbox"/></li> <li>• Traction Fluid Hose &amp; Vehicle's body <input type="checkbox"/></li> <li>• 4mm hose of Blow-off Valve &amp; Vehicle's body <input type="checkbox"/></li> </ul> <p>Check if hose clamps are properly tightened <input type="checkbox"/></p> <p>Check if engine oil level is between H-L <input type="checkbox"/></p>

## 14. MAINTENANCE/MANAGEMENT

- Traction Oil is used specifically for the HKS GT Supercharger. Do not use other types of oils; use of other or inappropriate brands of Traction Oil, engine oil, or transmission oil can lead to damage to the HKS GT Supercharger internals.
- The HKS Traction Fluid does not need to be replaced. However, periodically check the oil level prior to driving. If the oil level is low, add the HKS Traction Fluid as necessary. Use the part number below to order additional Traction Oil:

<u>Product Name</u>	<u>Part Number</u>
Traction Fluid	12002-AK029

- Replace the Traction Fluid Filter after 5 years or 70,000 km after installation of the HKS GT Supercharger. Use the part number below to order the Traction Fluid Filter:

<u>Product Name</u>	<u>Part Number</u>
Traction Fluid	12002-AK015

- V-belts is a “wear and tear” item. Periodically check the belt prior to driving for any cracks or tears. Replace damaged or worn belts immediately. Use only the specified belt to prevent the belt from making squeaking sound at engine start or idling. Use the part number below to order the V-belt replacement:

<u>Product Name</u>	<u>Part Number</u>
V-Belt	G13572-T59010-00

- Replace the air cleaner element after 6 months or 5,000 km. Use the part number below to order the element replacement:

<u>Product Name</u>	<u>Part Number</u>
Air Cleaner Element	70001-AK022

## 15. TROUBLESHOOTING

- If this product does not perform properly, check all wiring and connections referring to the following before contacting your dealer.

<u>Symptom</u>	<u>Cause</u>	<u>Action</u>
<ul style="list-style-type: none"><li>• F-CON iS' Power LED does not come on when ignition is ON.</li><li>• Engine does not start.</li><li>• Engine is unstable.</li></ul>	Bad connection	<ul style="list-style-type: none"><li>• Make sure each connector is clicked securely in place.</li></ul>
<ul style="list-style-type: none"><li>• Belt squeals for a few seconds when engine starts.</li><li>• Engine output feels weak.</li><li>• At wide open throttle the boost starts to decrease at a certain RPM while engine RPM is increasing.</li></ul>	Low belt tension	<ul style="list-style-type: none"><li>• If the belt tension does not reach the required spec, replace with a new belt.</li><li>• Replace the auto-tensioner with a new belt after 50,000km.</li></ul>
<ul style="list-style-type: none"><li>• Engine output feels weak.</li><li>• At wide open throttle the boost starts to decrease at a certain RPM while engine RPM is increasing.</li></ul>	Worn air filter	<ul style="list-style-type: none"><li>• Replace the filter element depending on dirt buildup.</li><li>• If HKS Hybrid Filter was used for more than 3,000km, replace the filter element. (Replace the element even it's used less than 3,000km depending on the filter condition.)</li></ul>

## 16. IF THE BELT BREAKS

- Park the vehicle in a safe place to check if the car is still drivable. Check for any damage caused by the torn belt such as oil leak, coolant leak, damaged harness, and etc.
- Do not drive the vehicle if the belt is damaged since the water pump and alternator are operated by the belt.
- Move the vehicle to a safe place and replace the belt with a brand new one. Repair any problems that may have caused the belt to break.





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