

SPORTS TURBINE KIT INSTALLATION MANUAL



Installation must be done by a professional.

Read this manual prior to the installation.

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

※ Make sure the vehicle is applicable to this kit.

NAME OF PRODUCT	SPORTS TURBINE KIT
PART NUMBER	11004-AN014
APPLICATION	NISSAN SKYLINE GT-R ①BNR32 ②BCNR33 ③BNR34
ENGINE	RB26DETT
YEAR	①1989/8 – 1994/12 ②1995/1 – 1998/12 ③1999/1 – 2002/8
REMARKS	<p>【NOTE】</p> <ul style="list-style-type: none"> • Requires ECU recalibration. • Upgrade the pump, injectors, and/or head gasket if necessary. • Check the spark plugs regularly and replace them if necessary. • Refer to page 2 for the required modifications.

REVISION OF MANUAL

Rev. Number	Date	Manual Number	Details
3-3.01	2019/07	E04211-N48220-00	1 st Edition

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NOTICE

This manual assumes that you have and know how to use the tools and equipment necessary to safely perform service operations on your vehicle. This manual assumes that you are familiar with typical automotive systems and basic service and repair procedures. Do not attempt to carry out the operations shown in this manual unless these assumptions are correct. Always have access to a factory repair manual. To avoid injury, follow the safety precautions contained in the factory repair manual.

ATTENTION

- This manual indicates items you need to pay attention to in order to install this product safely and lists precautions to avoid any possible damage and/or accidents.
- This product is an automobile part. Do not use for any other purposes.
- HKS will not be responsible for any damage caused by incorrect installation and/or use, or use after modification and/or dismantling of this product.
- This product was designed based on installation onto a specific factory vehicle.
- The specifications of this product are subject to change without notice.
- The instructions are subject to change without notice. Make sure to refer to the most recent instructions.

SAFETY PRECAUTIONS

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



WARNING

Indicates risk of serious injury and/or possible death.
























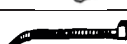











CAUTION



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

REQUIRED MODIFICATIONS

- 1 . This turbocharger has an enlarged exhaust swing valve, so when combined with our extension kits (1418-RN011 and 1418-RN005), supercharging pressure control may not be possible and can not be used together.

PARTS LIST

No.	Description	QT	Image	Remarks
1	Turbocharger Assembly	2		GTIII 2530
2	Gasket Exhaust	2		
3	Gasket Front Pipe 65mm	2		
4	Gasket Universal Exhaust Sys 75mm	1		
5	Gasket Chamber Pipe	2		
6	Gasket Suction Pipe	2		
7	Gasket Oil Out	2		
8	Copper Washer M10	4		
9	Copper Washer M12	12		
10	Copper Washer M14	8		
11	Stud Bolt M8	18		
12	Self-Lock Nut M8	8		
13	Oil Outlet Pipe Front	1		
14	Oil Outlet Pipe Rear	1		
15	Pipe Oil Inlet	2		
16	Water Bolt Banjo M12-1.25	2		Head width 14 mm
17	Water Bolt Banjo M12-1.25	2		Head width 17 mm
18	Oil Bolt Banjo M10-1.25	2		
19	Water Bolt Banjo M14-1.5	2		
20	T-fitting 6mm	1		
21	Bolt Flange	4		Oil return
22	Tie Wrap (S)	4		
23	Rubber cap 6mm	1		
24	Oil Resistant Hose 6mm	1		L=500mm
25	Hose Clip 10mm	4		#138
26	Adapter Turbocharger Water Line	2		
27	Hexagon Socket Head Cap Screw	4		
28	Spring washer	4		
29	Pipe Turbocharger Water Line	2		
30	Pipe Turbocharger Waterline Front	1		
31	Pipe Turbocharger Waterline Rear	1		
32	Gasket Adapter Water Line	2		
33	Thermal barrier seal	1		

34	Installation Manual	1		
35	Instruction Manual	1		

※To purchase individual part, please contact the dealer.

1. REMOVAL OF FACTORY PARTS

Disconnect the negative cable from the battery terminal before installation. Prepare the engine oil and coolant. Use this instruction manual and the manufacturer's service manual as a reference.

1-1. Removal of Under Cover

1-2. Drainage of Coolant and Engine Oil

1-3. removal of Strut Tower Bar

1-4. Removal of Front Pipe

1-5. Removal of Turbocharger Stay

1-6. Removal of Air Cleaner

1-7. Removal of Air Hose and Blow-by Hose

1-8. Removal of Recirculation Tube

1-9. Removal of Suction Hose

1-10. Removal of Chamber Pipe

- Reuse bolts (2pcs) and nuts (3pcs).

1-11. Removal of O2 Sensor

1-12. Removal of Water Return Tube

1-13. Removal of Exhaust Manifold Cover

- Reuse bolts.

1-14. Removal of Front Air Outlet Tube

- Reuse bolts.

1-15. Removal of Banjo Bolt to the Turbocharger

1-16. Removal of Oil Return Hose from Turbocharger

1-17. Removal of Turbocharger Assembly from Exhaust Manifold

1-18. Removal of Exhaust Manifold

- Reuse nuts(12pcs).

1-19. Removal of Turbocharger Cover

- Reuse bolts(10pcs).

1-20. Removal of Extension

- Reuse nuts(10pcs).

2. INSTALLATION OF KIT PARTS

2-1. Installation of Turbocharger Assy Hardware

(1) Install the provided Stub Bolts to both front and rear turbochargers. (Fig. 2-1-1)

- Turbocharger Assembly (P1 x 1)
- Stud Bolt M8-1.25 (P11 x 9)

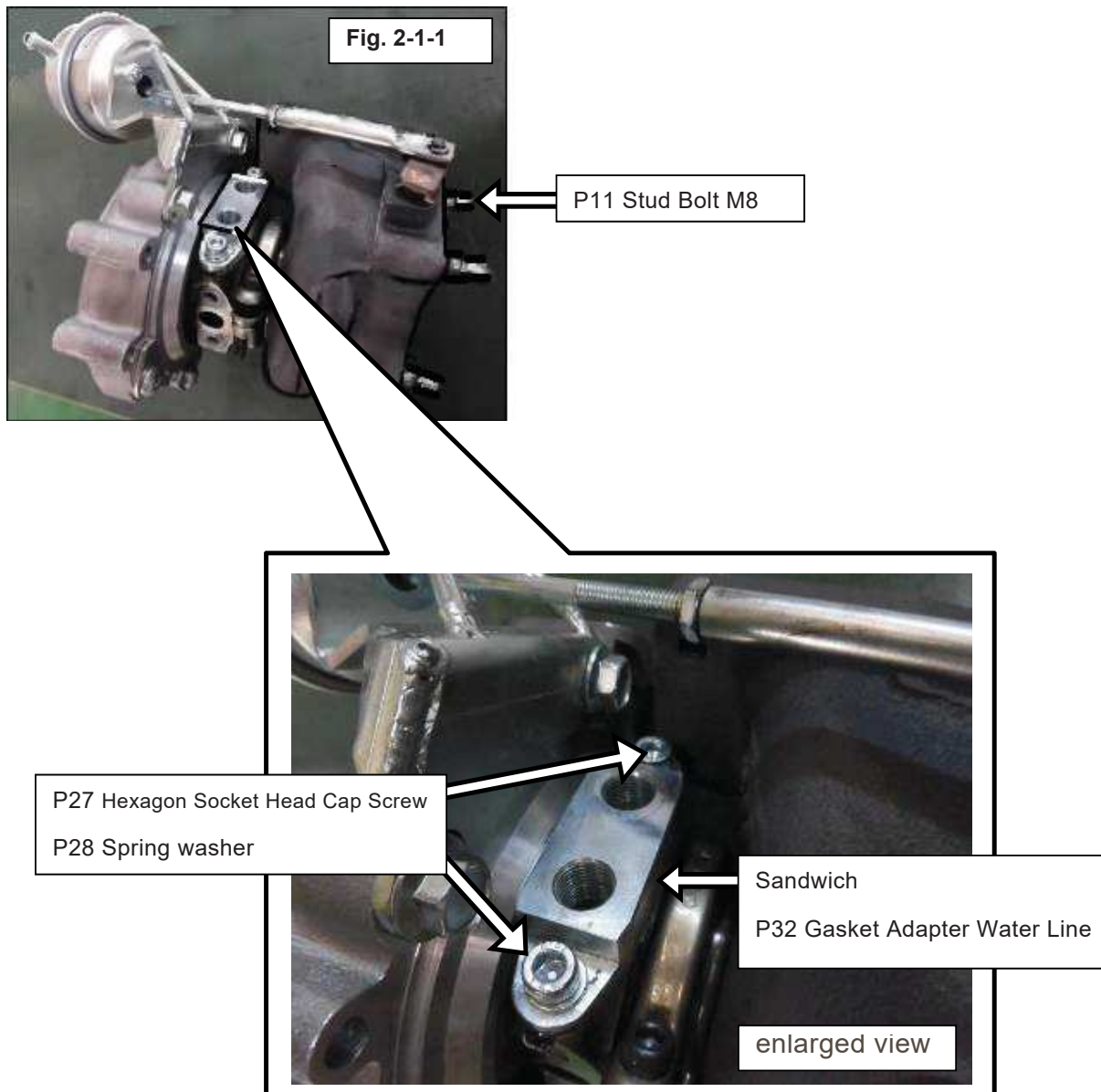
Tightening Torque N·m(kgf·m) T=17.6 – 23.5 (1.8-2.4)

NOTE The shorter threaded portion must be installed to the turbocharger side.

(2) Install the adapter turbocharger water line to the front and rear turbocharger. (Fig. 2-1-1)

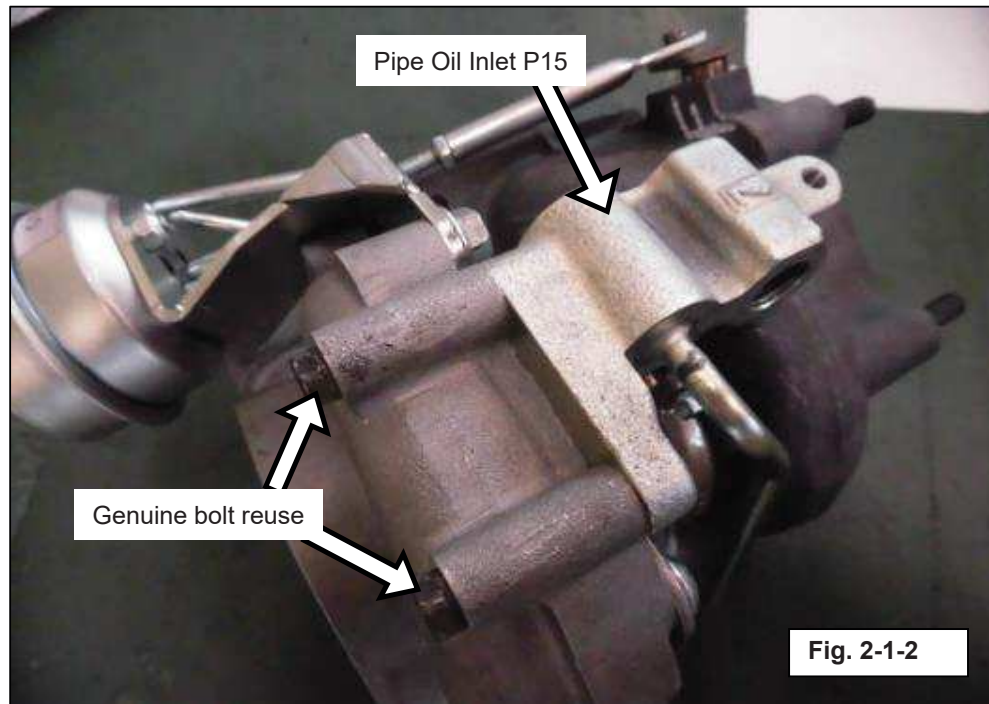
- Adapter Turbocharger Water Line (P26 x 1)
- Gasket Adapter Water Line (P32 x 1)
- Hexagon Socket Head Cap Screw (P27 x 2)
- Spring washer (P28 x 2)

Tightening Torque N·m(kgf·m) T=8.5 – 10 (0.8-1.0)



(3) Install a pipe oil inlet on the front and rear turbocharger. Reuse two genuine 6mm bolts and assemble them temporarily. (Fig. 2-1-2)

- Pipe Oil Inlet (P15 x 1)

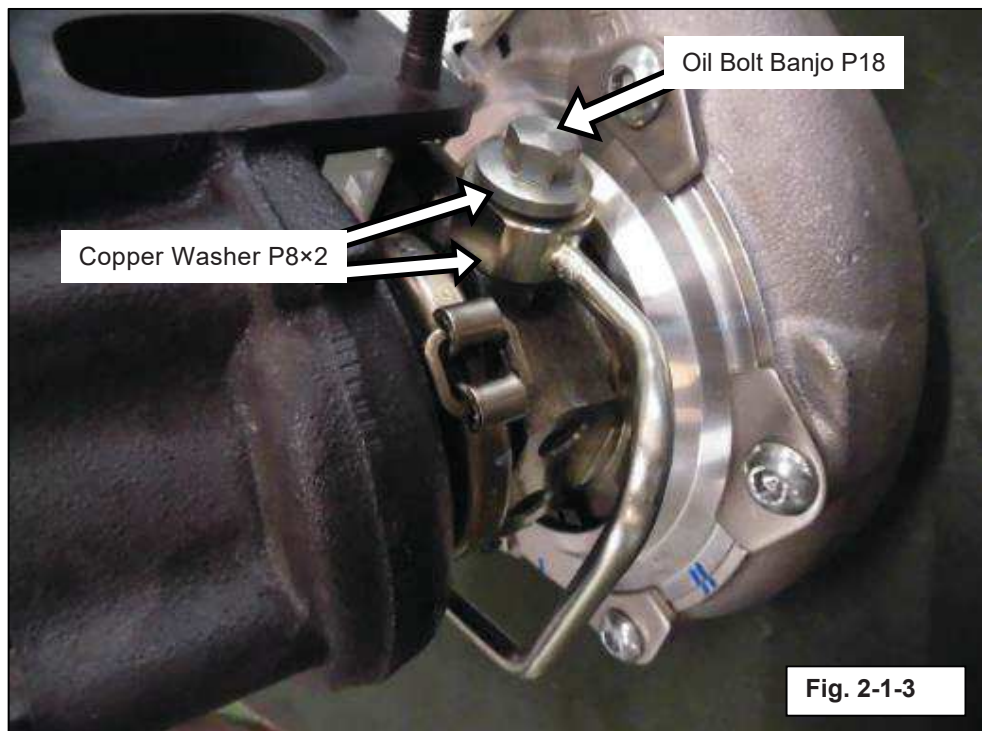


(4) Connect the pipe oil inlet to the front and rear turbocharger oil inlets. (Fig. 2-1-3)

- Oil Bolt Banjo M10-1.25 (P18 x 1)
- Copper Washer M10 (P8 x 2)

Tightening Torque N·m(kgf·m) T=17.6 –23.5 (1.8-2.4)

(5) Tighten two genuine 6mm bolts of the front and rear turbocharger oil inlets.



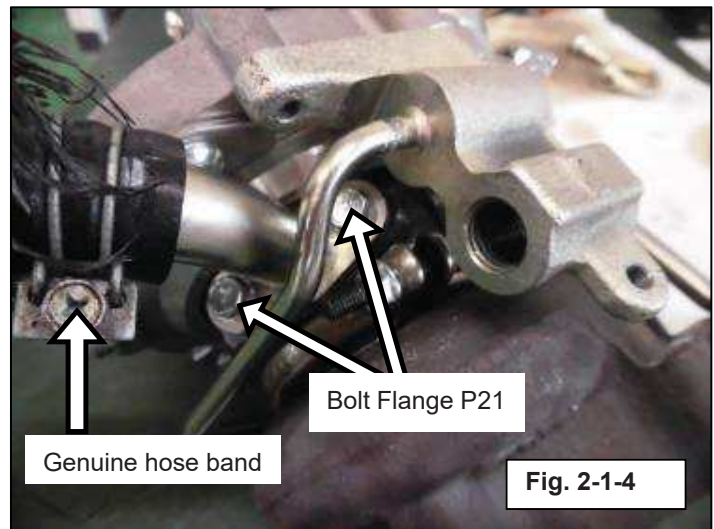
(6) Attach the oil outlet pipe to the front and rear turbocharger. (Fig. 2-1-4)

- Gasket Oil Out (P7 x 1)
 - Oil Outlet Pipe Front (P13 x 1)
 - Oil Outlet Pipe Rear (P14 x 1)
 - Bolt Flange (P21 x 2)
- Tightening Torque N·m(kgf·m)
T=8.5 –10 (0.8-1.0)

(7) Attach genuine hoses and hose bands to the front and rear oil outlet pipes. (Fig. 2-1-4)

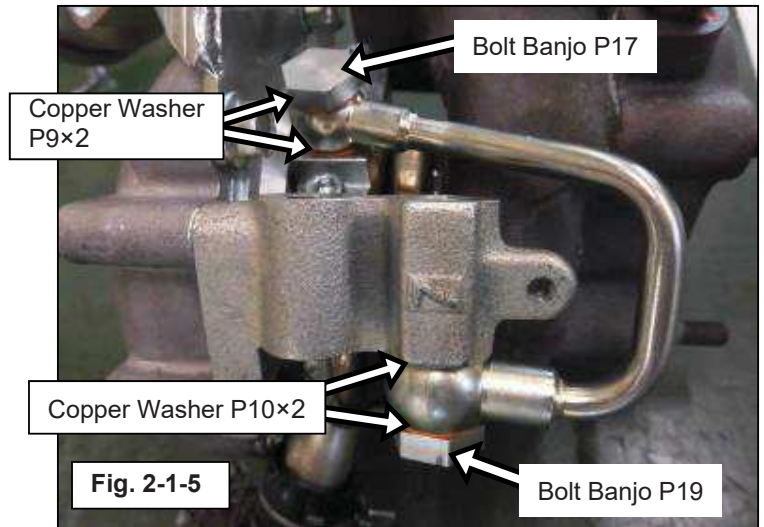
NOTE

Secure the turbocharger to the Exhaust manifold before tightening the upper and lower hose bands.



(8) Install the pipe turbocharger water line on the front and rear turbocharger. (Dia.2-1-5)

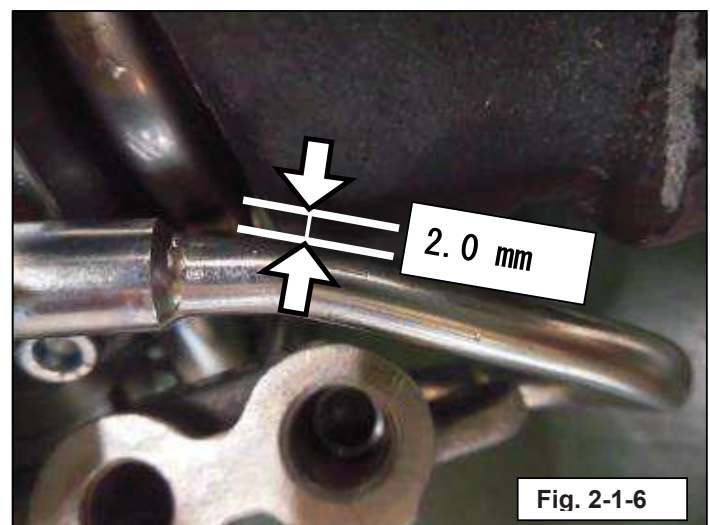
- Pipe Turbocharger Water Line (P29 x 1)
 - Water Bolt Banjo M12-1.25 (Head width 17 mm) (P17 x 1)
 - Water Bolt Banjo M14-1.5 (P19 x 1)
 - Copper Washer M12 (P9 x 2)
 - Copper Washer M14 (P10 x 2)
- Tightening Torque N·m(kgf·m)
T=17.6 –23.5 (1.8-2.4)



NOTE

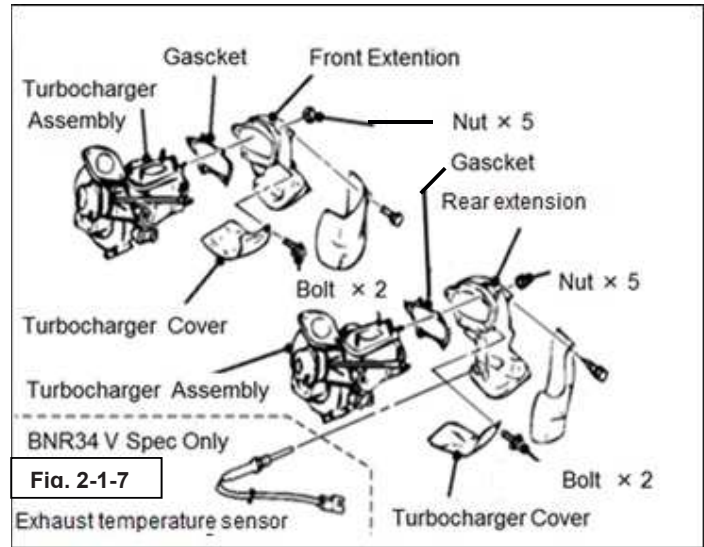
Tighten the banjo bolt so that the gap between the turbocharger housing and the pipe is approximately 2.0 mm.

(Fig. 2-1-6)

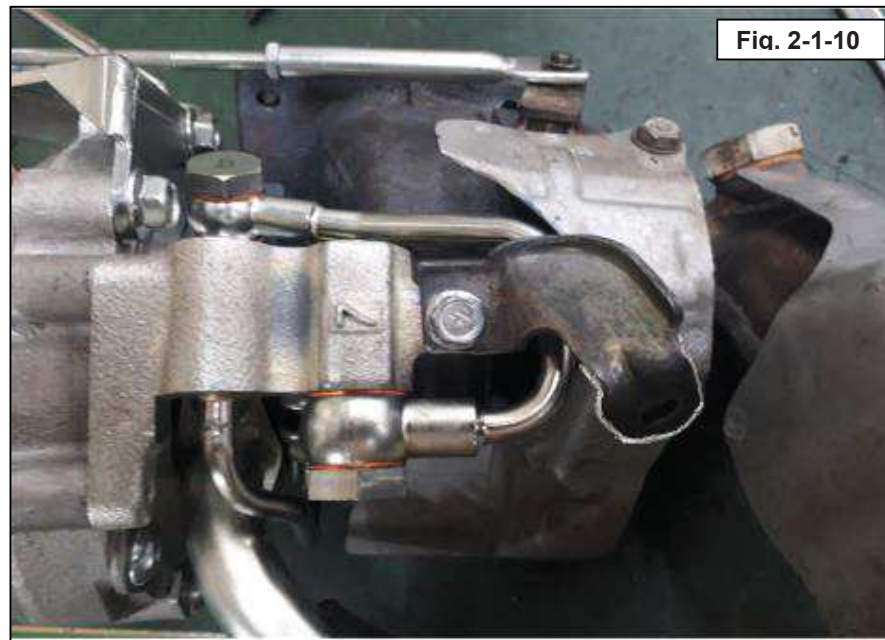
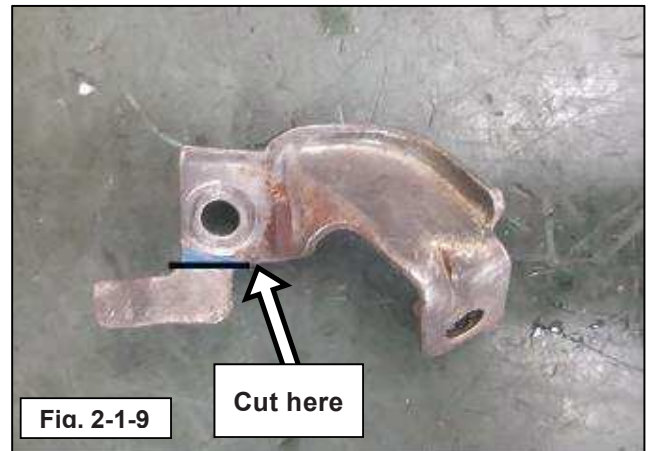


- (9) Attach the extension, extension cover and exhaust temperature sensor (R34 only) to the front and rear turbochargers. Gaskets and Bolt, nuts will be used with Genuine parts.
(Fig. 2-1-7)

Tightening Torque N·m(kgf·m)
 Bolts 8mm : T=17.6 –23.5 (1.8-2.4)
 Bolts 6mm : T=3.7 –4.9 (0.38-0.5)
 Sensor : T= 17.6 –23.5 (1.8-2.4)



- (10) Cut the front and rear turbocharger covers and the rear water pipe bracket so that they do not interfere with the pipe turbocharger water line.
(Fig. 2-1-8,2-1-9)



NOTE

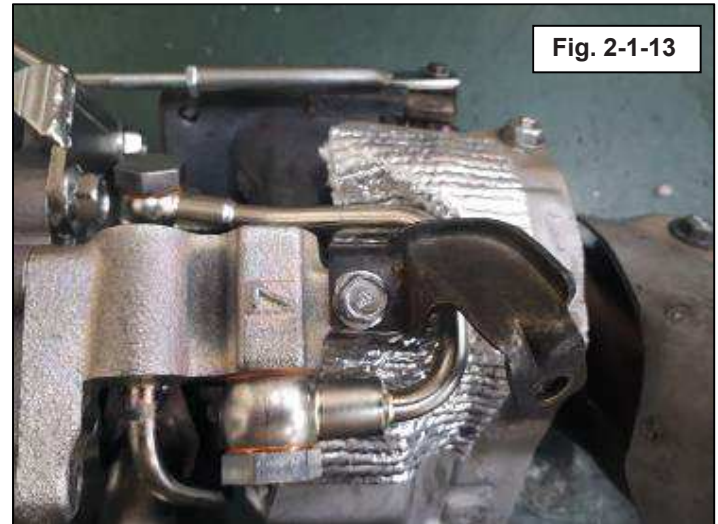
Please cut until it does not interfere with the pipe turbo water line (Fig. 2-1-10)

※ Fig. 2-1-10 shows the rear turbocharger.

- (11) Cut the Thermal barrier seal on the turbocharger cover cut in Fig. 2-1-8, and attach them from the front and back .(Fig. 2-1-11,2-1-12)
- Thermal barrier seal (P33 x 1)



- (12) Attach the processed turbocharger cover and the original water pipe fixing bracket to the turbocharger. (Fig.2-1-13)
- ※ Fig.2-1-13 is the rear turbocharger.



2-2. Installation of Turbocharger Assemblies

- (1) Insert the oil outlet hose from the rear turbocharger to the pipe in the cylinder block.
- (2) Attach the rear side Exhaust manifold to the cylinder head and attach the Turbocharger Assemblies to the Exhaust manifold.
- Gasket Exhaust (P2 x 1)
 - Self-Lock Nut M8 (P12 x 4)
- Tightening Torque N·m(kgf·m)
- T=22.5 –29.4 (2.3-3.0)

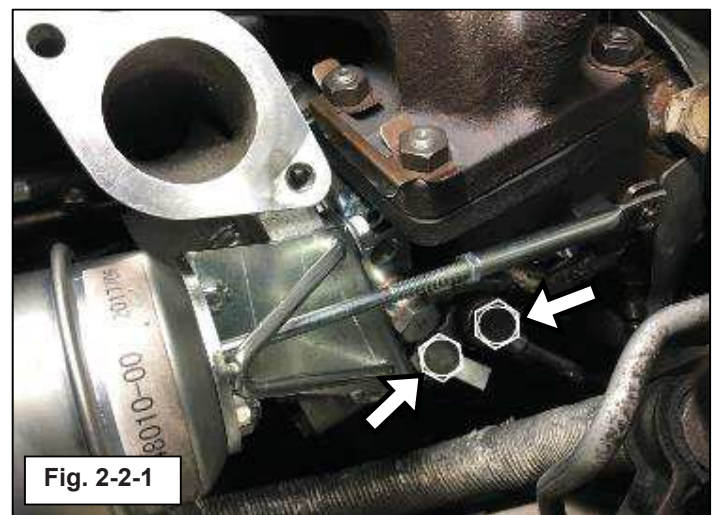
NOTE

- ① **When installing the turbocharger to the exhaust manifold, insert the factory lock plates under the nuts, and tighten the nuts; then, bend the plate.**
- ② **Reuse the factory nuts and washers (6 pcs each) for the cylinder head side and the factory gasket between the turbocharger and exhaust manifold.**

- (3) Connect the genuine oil feed tube and water feed tube to the rear side turbocharger pipe oil inlet.
- Each banjo bolt (eyebolt) reuses a genuine product.
- (Fig. 2-2-1)
- Copper Washer M12 (P9 x 2)
 - Copper Washer M14 (P10 x 2)
- Tightening Torque N·m(kgf·m)
- Oil side : T=15.0 –2.0 (1.5-2.0)
- Water side : T=29.0-39.0(3.0-4.0)

NOTE

After temporary tightening (4), fully tighten.



(4) Tighten the upper and lower hose bands of the rear turbocharger oil outlet hose.

Tightening Torque N·m(kgf·m)

T=3.7 –4.9 (0.38-0.5)

(5) Attach the front side Exhaust manifold to the cylinder head and install the Turbocharger Assy on the Exhaust manifold.

• Gasket Exhaust (P2 x 1)

• Self-Lock Nut M8 (P12 x 4)

Tightening Torque N·m(kgf·m)

T=22.5–29.4 (2.3-3.0)

NOTE

① **When installing the turbocharger to the exhaust manifold, insert the factory lock plates under the nuts, and tighten the nuts; then, bend the plate.**

② **Reuse the factory nuts and washers (6 pcs each) for the cylinder head side and the factory gasket between the turbocharger and exhaust manifold.**

(6) Connect the genuine oil feed tube and water feed tube to the front side turbocharger pipe oil inlet. Each banjo bolt (eyebolt) reuses a genuine product.

• Copper Washer M12 (P9 x 2)

• Copper Washer M14 (P10 x 2)

Tightening Torque N·m(kgf·m)

Oil side : T=15.0 –2.0 (1.5-2.0)

Water side : T=29.0-39.0(3.0-4.0)

(7) Tighten the upper and lower hose bands of the front turbocharger oil outlet hose.

Tightening Torque N·m(kgf·m)

T=3.7 –4.9 (0.38-0.5)

NOTE

If the oil outlet hose is bent, insert it further to the engine side so that there is no bending. If it is bent, it may cause oil leakage from the turbocharger.

(8) Attach the front and rear Exhaust manifold covers.

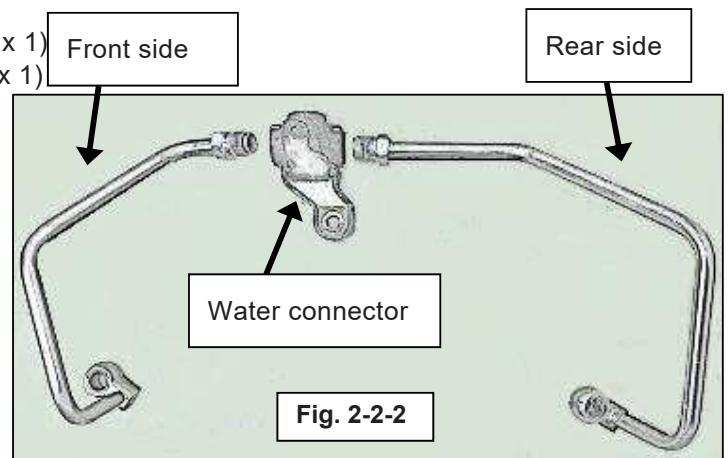
NOTE

Tighten the ground wire to the front Exhaust manifold.

(9) Connect the pipe water line to the pipe oil inlet and the pure water connector. Select the front and rear pipes. (Fig. 2-2-2)

• Pipe Turbocharger Waterline Front (P30 x 1)

• Pipe Turbocharger Waterline Rear (P31 x 1)



(10) Temporarily fasten the pipe turbocharger water line rear to the adapter turbocharger water line on the rear side with banjo bolts. (Fig. 2-2-3)

- Water Bolt Banjo M12-1.25 (Head width 14 mm) (P16 x 1)
- Copper Washer M12 (P9 x 2)

Tightening Torque N·m(kgf·m)

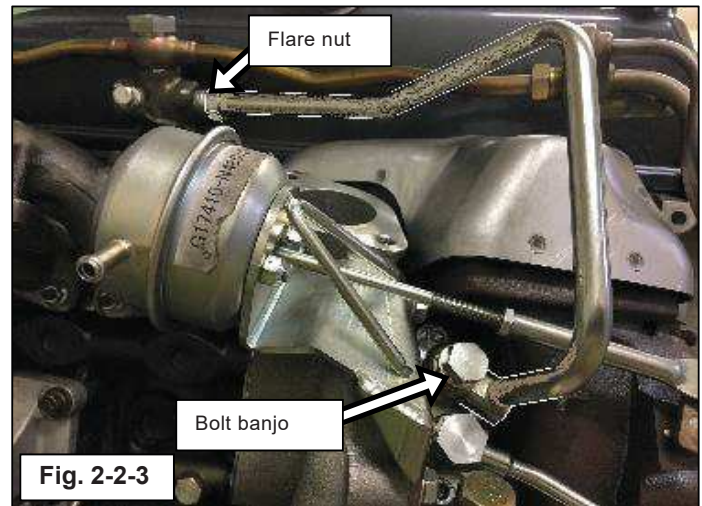
T=17.6 –23.5 (1.8-2.4)

(11) Connect the flare nut on the pipe turbocharger waterline rear to the genuine water connector. (Fig. 2-2-4)

Temporarily tighten both ends of the pipe, and then fully tighten it.

Tightening Torque N·m(kgf·m)

T=20.0 –31.0 (2.0-3.2)



(12) Temporarily fasten the pipe turbocharger waterline front with the banjo bolt on the adapter turbocharger water line on the front side turbocharger. (Fig. 2-2-4)

- Water Bolt Banjo M12-1.25 (Head width 14 mm) (P16 x 1)
- Copper Washer M12 (P9 x 2)

Tightening Torque N·m(kgf·m)

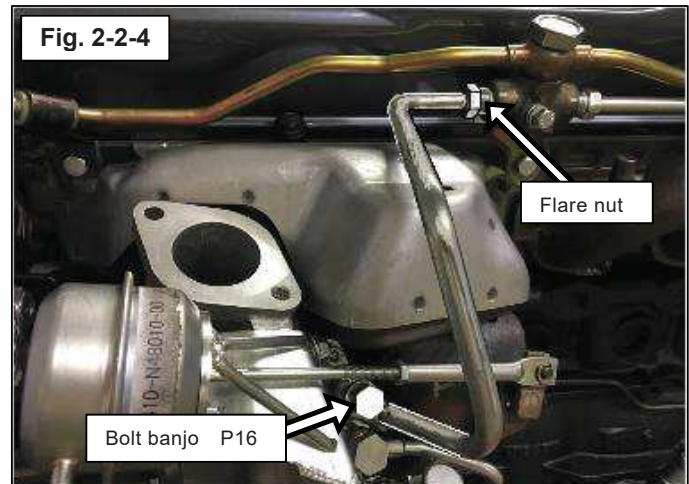
T=17.6 –23.5 (1.8-2.4)

(13) Connect the flare nut on the pipe turbocharger waterline front to the genuine water connector. (Fig. 2-2-4)

Temporarily tighten both ends of the pipe, and then fully tighten it.

Tightening Torque N·m(kgf·m)

T=20.0 –31.0 (2.0-3.2)



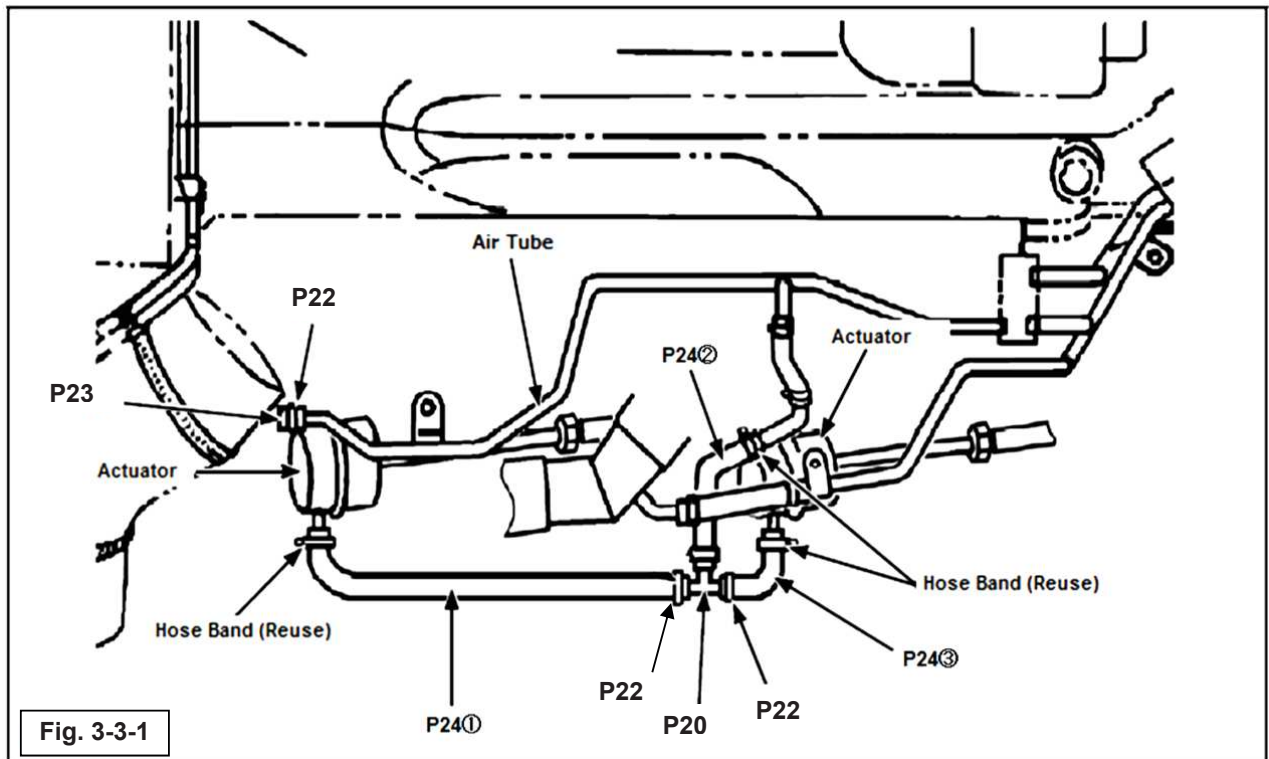
3. REINSTALLATION OF FACTORY PARTS

3-1. Reinstallation of Turbocharger Bracket

3-2. Reinstallation of Water Return Tube

3-3. Piping of Actuators

- (1) Install the provided Rubber Cap 6mm (P8) and Tie Wrap(S) (P19) to the vacuum hose.
(Fig. 3-3-1)
· Rubber cap 6mm (P23 x 1)



- (2) Cut the Oil Resistant Hose to the following lengths:

- Oil Resistant Hose 6mm (P24 x 1)
 - ① 280mm
 - ② 140mm
 - ③ 80mm

- (3) Connect the vacuum hose. (Fig. 3-3.1)

- T-fitting 6mm (P20 x 1)
- Tie Wrap (S) (P22 x 1)
- Oil Resistant Hose 6mm (P24①)
- Oil Resistant Hose 6mm (P24②)
- Oil Resistant Hose 6mm (P24③)

- (4) Remove the coupler since the factory boost control valve is not used.

3-4. Reinstallation of O2 Sensor

3-5. Reinstallation of Chamber Pipe

3-6. Reinstallation of Strut Tower Bar

3-7. Reinstallation of Suction Hose

3-8. Reinstallation of Recirculation Tube

3-9. Reinstallation of Air Hose and Blow-by Hose

3-10. Reinstallation of Air Cleaner

3-11. Reinstallation of Front Pipe

3-12. Reinstallation of Under Cover

3-13. Reconnect the negative cable to the battery terminal.

3-14. Refill the coolant. Remove the air.

3-15. Refill the engine oil.

NOTE

We recommend using HKS engine oil.

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



CAUTION

- Upgrade the pump, injectors, and/or head gasket if necessary.
- Adjust the boost pressure according to the engine specifications. Improper adjustment of the boost pressure may cause damage to the engine.



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