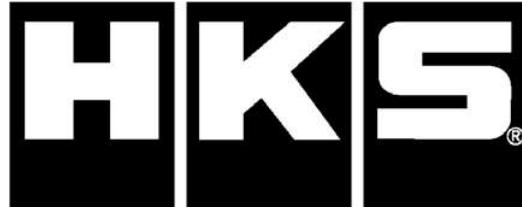


R35 GT-R GT800 FULL TURBINE KIT INSTALLATION MANUAL



NAME OF PRODUCT	R35 GT-R GT800 FULL TURBINE KIT
PART NUMBER	11003-AN011
APPLICATION	NISSAN GT-R (R35)
ENGINE	VR38DETT
YEAR	2007/12 -
REMARKS	<p>[NOTE]</p> <ul style="list-style-type: none"> • The engine must be removed in order to install this kit. • This kit does not include the following parts: Fuel Pumps, Injectors, EVC, and Engine Management such as the HKS F-Con. • Upgrading the engine internals is necessary when using this kit at high engine outputs (approximately more than 480kw / 650ps). • The boost pressure setting for the provided Wastegates is approximately 90 to 95 kPa (13 to 13.8 PSI). <p>※ This kit was developed exclusively for off-road race use only. HKS will not be responsible for engine and/or transmission damage caused by the use of this kit.</p> <p>※ This kit must be used without the catalytic converters. Because of this, the vehicle cannot be driven on any public roads or highways since it may not meet pollution laws and/or safety regulations.</p> <p>※ Any vehicle with this kit installed may void the factory manufacturer's warranty.</p>

REVISION OF MANUAL

Rev. Number	Date	Manual Number	Details
3-3.01	2010/9	E04211-N49010-00	1 st Edition




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 specific factory vehicles.
- 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.




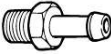












PARTS LIST

NO.	DESCRIPTION	QT	IMAGE	REMARKS
1	Exhaust Manifold LH	1		
2	Exhaust Manifold RH	1		
3	Turbocharger LH	1		
4	Turbocharger RH	1		
5	Wastegate	2		50mm
6	Front Pipe LH	1		
7	Front Pipe RH	1		
8	Suction Pipe LH	1		
9	Suction Pipe RH	1		
10	Oil Inlet Pipe LH	1		
11	Oil Inlet Pipe RH	1		
12	Oil Outlet Adapter	2		
13	Turbocharger Water Inlet Pipe LH	1		
14	Turbocharger Water Inlet Pipe RH	1		
15	Turbocharger Water Outlet Pipe LH	1		
16	Turbocharger Water Outlet Pipe RH	1		
17	Turbocharger Bracket LH	1		
18	Turbocharger Bracket RH	1		
19	Exhaust Manifold Gasket	2		
20	Turbocharger Gasket	2		Inlet














PARTS LIST

NO.	DESCRIPTION	QT	IMAGE	REMARKS
21	Turbocharger Gasket	2		Outlet
22	Front Pipe Gasket	2		
23	Oil Outlet Gasket	4		
24	Silicone Hose	2		70mm L=70
25	Silicone Hose	2		70mm L=55
26	Silicone Hose	2		48mm L=100
27	Hose	1		10mm L=1000
28	Hose	1		8mm L=200
29	Hose	1		6mm L=4000
30	Thermal Tube	1		16mm L=500
31	Banjo Bolt	2		12mm 1.2mm Orifice
32	Banjo Bolt	4		14mm
33	Plug	4		M14 (included with T/C)
34	Copper Washer	12		12mm
35	Copper Washer	12		14mm (included with T/C)
36	G-Cup Ring	2		90.8mm
37	G-Cup Ring	2		58.4mm
38	Hose Clamp	8		#48 Bead Type
39	Hose Clamp	4		#36 Bead Type
40	Thermo Insulation Sheet	3		300×300

PARTS LIST

NO.	DESCRIPTION	QT	IMAGE	REMARKS
41	T-Fitting	1		8mm
42	T-Fitting	3		6mm
43	Hose Fitting	2		10mm
44	Hose Fitting	3		6mm
45	Hose Fitting	2		6mm L-shaped
46	Elbow	2		PT1/8
47	Hose Clamp	4		10mm
48	Hose Clamp	5		8mm
49	Hose Clamp	14		6mm
50	Spacer	1		10mm-20mm t=5
51	Spacer	1		6mm-12mm t=10
52	Plug	2		PT1/8
53	Cap Bolt	4		M6 L=12 (Minor Dia.)
54	Bolt	6		M6 L=10
55	Bolt	1		M6 L=25
56	Bolt	3		M8 L=20
57	Bolt	1		M8 L=30
58	Bolt	4		M10 L=40
59	Bolt	2		M10 L=25
60	Self-Lock Nut	12		M8

PARTS LIST

NO.	DESCRIPTION	QT	IMAGE	REMARKS
61	Nut	6		M10
62	Lock Washer	7		M6
63	Lock Washer	4		M8
64	Lock Washer	6		M10
65	Washer	7		M6
66	Washer	4		M8
67	Washer	12		M10
68	Stud Bolt	12		M8
69	Emblem	1		
70	Bracket	1		
71	Bolt	2		M4 L=12
72	Installation Manual	1		
73	Instruction Manual	1		

1. Removal of Factory Parts

Refer to this instruction manual and the manufacturer's service manual to remove the exhaust system, engine, and turbochargers.

NOTE Make sure to keep the removed parts for later use.

2. Installation of Kit Parts

2-1 Installing the Exhaust Manifolds

(1) Install the Stud Bolts to the Exhaust Manifolds (LH & RH). (Diagram 2-1-1)

- Exhaust Manifold LH
- Exhaust Manifold RH
- Stud Bolts M8 x 6



(2) Install the Exhaust Manifolds (LH & RH) to the engine using the following provided parts. (Diagram 2-1-2)

- Exhaust Manifold Gasket x 2
- Factory Nut x 12



(3) Modify the portion(s) of the factory heat shields so the Exhaust Manifolds do not come in contact with the shields. (Diagram 2-1-3, 2-1-4)

NOTE

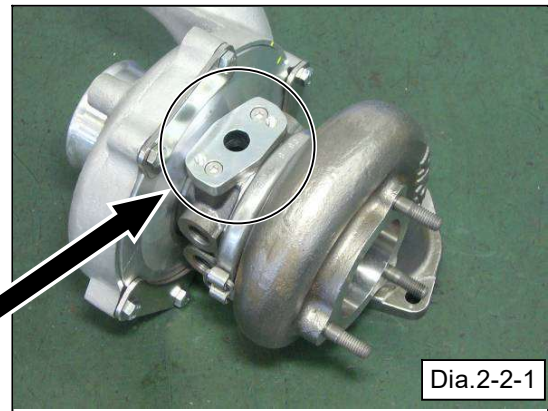
Do not reinstall the factory heat shields at this point.



2-2 Installing the Turbochargers

(1) Install the provided Stud Bolts and Oil Outlet Adapter to the Turbochargers using the provided parts. (Diagram 2-2-1, 2-2-2)

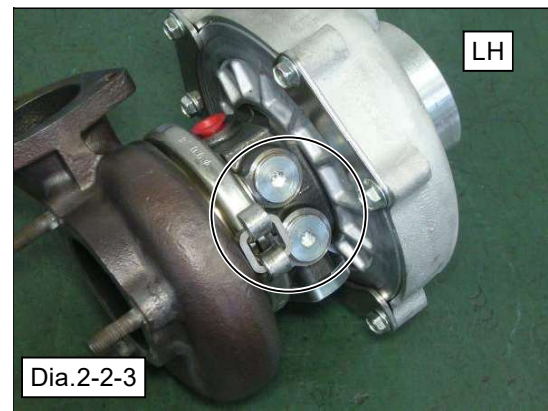
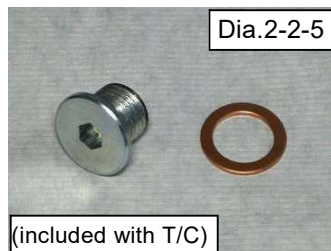
- Turbocharger LH
- Turbocharger RH
- Oil Outlet Gasket x 2
- Oil Outlet Adapter x 2
- Cap Bolt M6 L=12 x 4
- Stud Bolt M8 x 6



(2) Install the provided Plugs to the circled locations. (Diagram 2-2-3, 2-2-4, 2-2-5)

- Plug M14 x 4
- Copper Washer 14mm x 4

Torque Spec: $35 \pm 2 \text{N} \cdot \text{m}$



(3) Install the provided 6mm Hose Fitting to the Compressor Housing (LH). (Diagram 2-2-6)

- Hose Fitting 6mm x 1

NOTE

Wrap the threaded portion with Teflon tape.

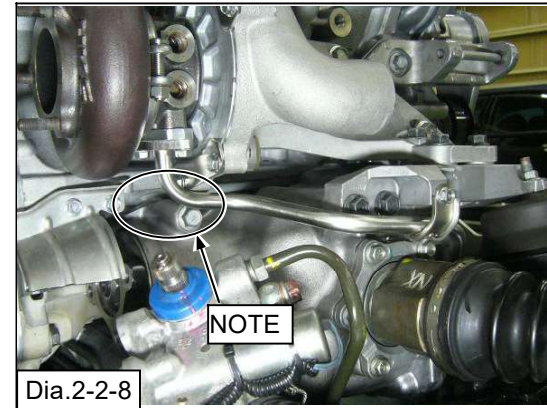


- (4) Temporarily install the Turbochargers on both Exhaust Manifolds; adjust the angle of the center housing and compressor housing. (Diagram 2-2-7)

NOTE

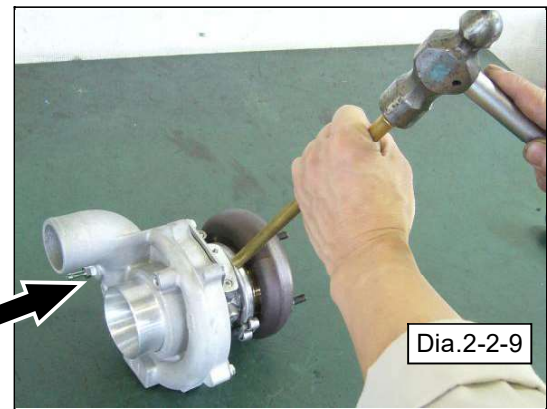
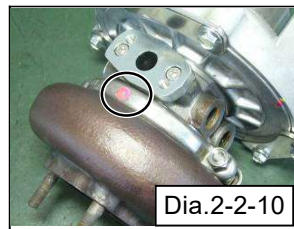
When adjusting the angle, position the oil and water lines accordingly.

Make sure the right side of the oil outlet pipe does not come in contact with the compressor housing. (Diagram 2-2-8)

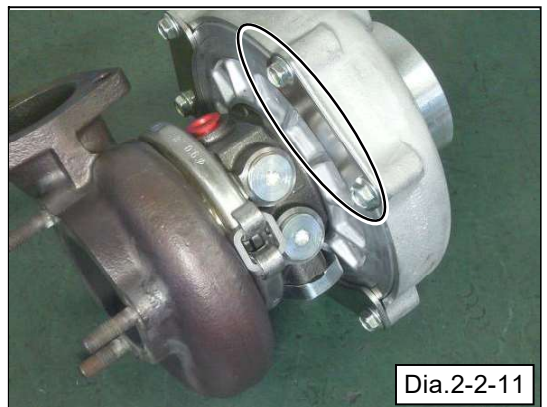


- (5) Remove the Turbochargers and tighten the factory coupling as follows (Diagram 2-2-9, 2-2-10):

1. Tighten to $1.16 \pm 1 \text{N} \cdot \text{m}$.
2. Lightly tap both sides of the coupling with a brass bar.
3. Tighten to $3.16 \pm 1 \text{N} \cdot \text{m}$.
4. Lightly tap both sides of the coupling with a brass bar.
5. Tighten to $16 \pm 1 \text{N} \cdot \text{m}$.



- (6) Tighten the Compressor Housing bolts to $7 \pm 1 \text{N} \cdot \text{m}$. (2 bolts x 6 positions)



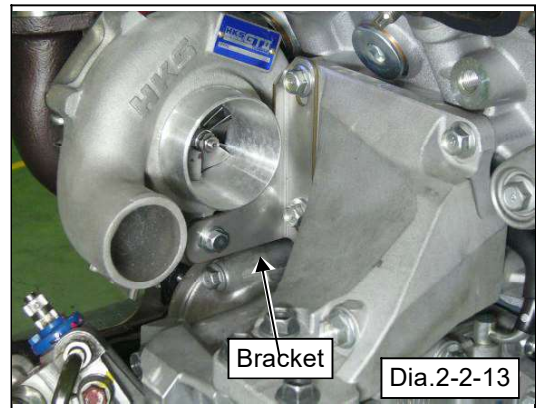
(7) Install the Exhaust Manifolds to the Turbocharger LH and RH using the following provided parts. (Diagram 2-2-12)

- Turbocharger Gasket (Inlet) x 2
- Self-lock Nut M8 x 6



(8) Install the Turbocharger Brackets LH and RH using the following provided parts. (Diagram 2-2-13)

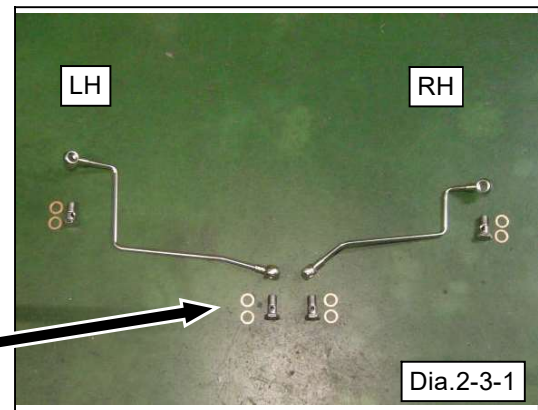
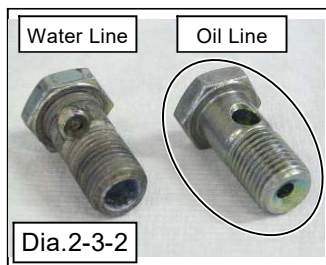
- Turbocharger Bracket LH
- Turbocharger Bracket RH
- Bolt M8 L=20 x 2
- Washer M8 x 2
- Lock Washer M8 x 2



2-3 Installing the Oil Lines

NOTE

Reuse the factory banjo bolts on the engine block side. Make sure use the correct bolts. The bolt for the oil line has the smaller center hole.

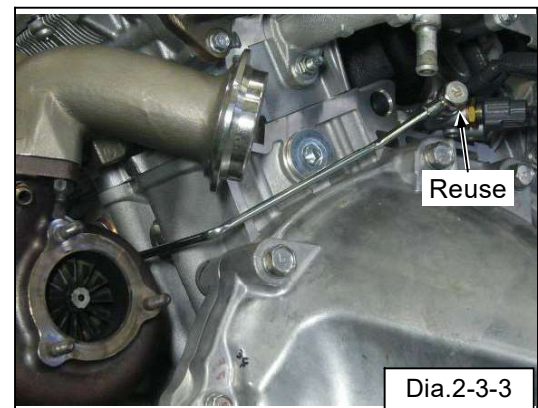


(1) Install the Oil Inlet Pipe LH using the following provided parts. (Diagram 2-3-3)

- Oil Inlet Pipe LH
- Banjo Bolt 12mm x 1
- Copper Washer M12 x 4
- Factory Banjo Bolt M12 x 1 (Reuse)

NOTE

Before installation, blow off any dust and/or debris inside the pipe with an air gun. Make sure no foreign objects enter the Turbocharger Assembly through the pipe.

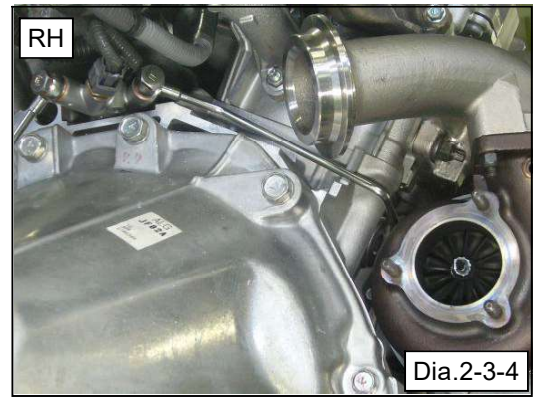


(2) Install the Oil Inlet Pipe RH using the following the provided parts. (Diagram 2-3-4)

- Oil Inlet Pipe RH
- Banjo Bolt 12mm x 1
- Copper Washer M12 x 4
- Factory Banjo Bolt M12 x 1 (Reuse)

NOTE

Before installation, blow off any dust and/or debris inside the pipe with an air gun. Make sure no foreign objects enter the Turbocharger Assembly through the pipe.

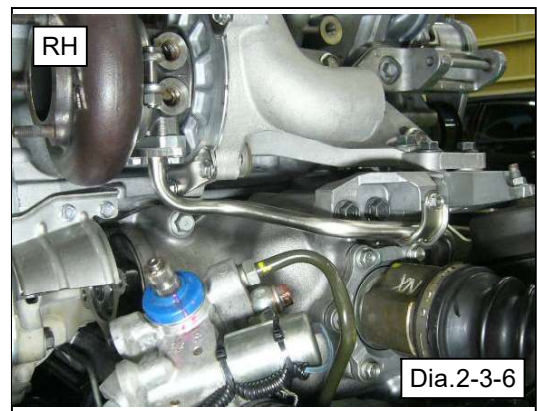
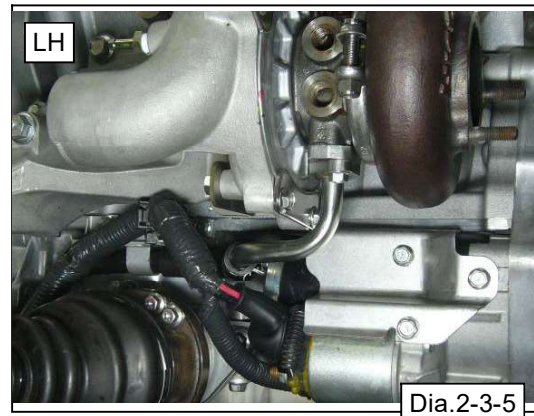


(3) Reinstall the factory oil outlet pipe using the following parts. (Diagram 2-3-5, 2-3-6)

- Oil Outlet Gasket x 2
- Factory Bolt M6 L=12 x 4 (Reuse)

NOTE

Before installation, blow off any dust and/or debris inside the pipe with an air gun. Make sure no foreign objects enter the Turbocharger Assembly through the pipe.



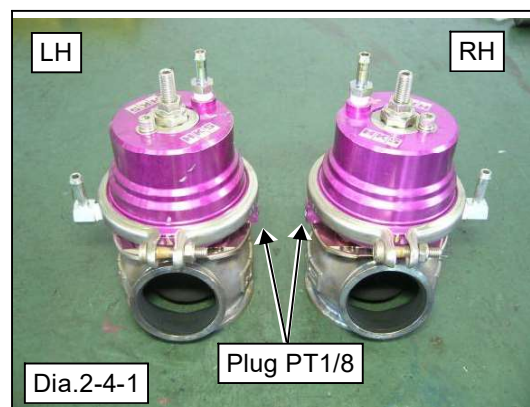
2-4 Installing the Wastegates

(1) Install the provided 6mm Hose Fittings and Plugs to the Wastegates using the following provided parts. (Diagram 2-4-1)

- Wastegate x 2
- Hose Fitting 6mm x 2
- Hose Fitting 6mm L-Shaped x 2
- Plug PT1/8 x 2

NOTE

Wrap the threaded portion with Teflon tape.



- (2) Adjust the positions of the Wastegate's upper case. (Diagram 2-4-2)

CAUTION
When adjusting the upper case, use the SST or proper tools. If the proper tools are not used, the spring may come out and cause an injury.

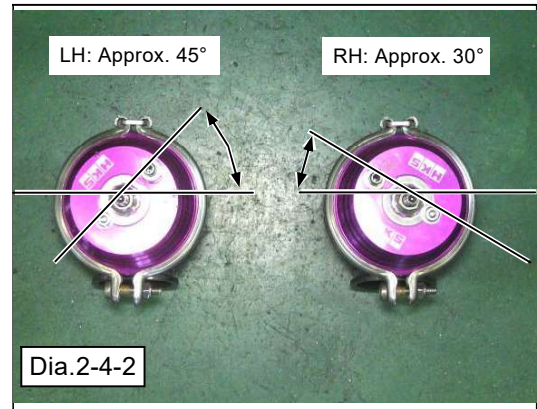
Make sure the Wastegates function properly after installation.

- (3) Install the Wastegates to the Exhaust Manifolds using the following provided pars. (Diagram 2-4-3)

- G-Cup Ring 90.8mm x 2

NOTE

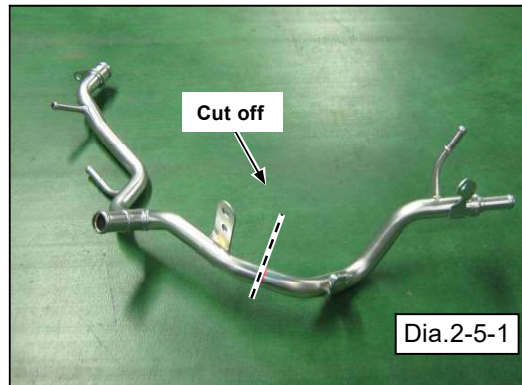
Temporarily install the Front Pipes to adjust the angle of the pipes.



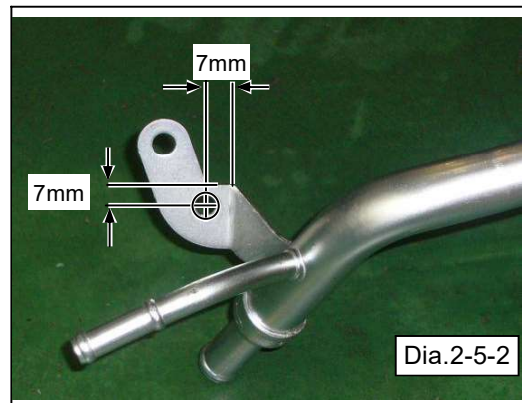
2-5 Modifying the Factory Water Pipe

Modify the factory water pipe so it does not come in contact with the Wastegate. (Diagram 2-5-1 to 2-5-4)

- (1) Cut the factory water pipe as shown in Diagram 2-5-1.



- (2) Drill a 7mm hole in the bracket as shown in Diagram 2-5-2.



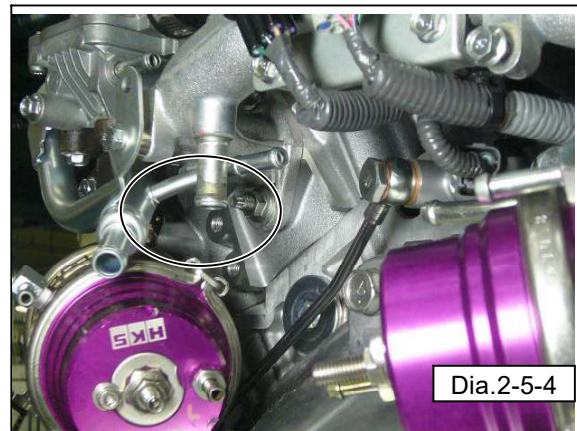
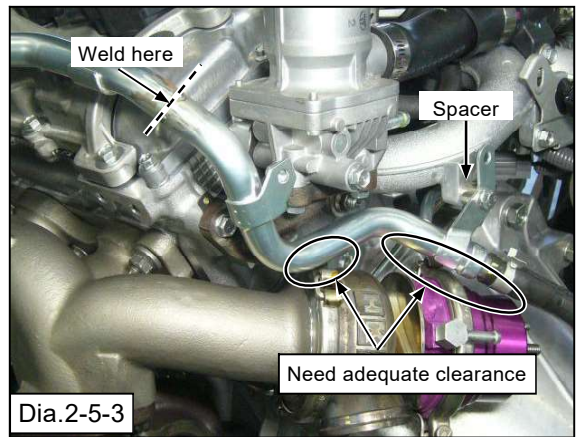
(3) Insert the provided Spacer between the modified bracket and the engine. Weld the factory water pipe (previously cut in 2-5-1) and install the pipe using the following provided parts. Make sure the pipe does not come in contact with the Wastegate, (Diagram 2-5-3)

- Spacer 6mm-12mm t=10 x 1
- Bolt M6 L=25 x 1
- Lock Washer M6 x 1
- Washer M6 x 1

NOTE

If the cut pipes are connected with a joint hose, make sure the pipes are secure to avoid leaks.

(4) Bend the 8mm pipe so it does not come in contact with the 13mm pipe. (Diagram 2-5-4)

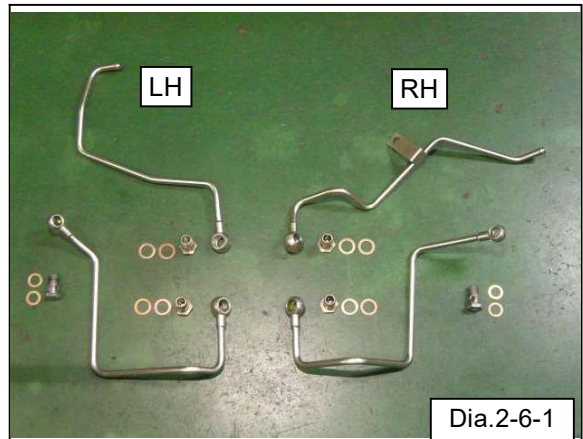


2-6 Installing the Turbocharger Water Lines

NOTE

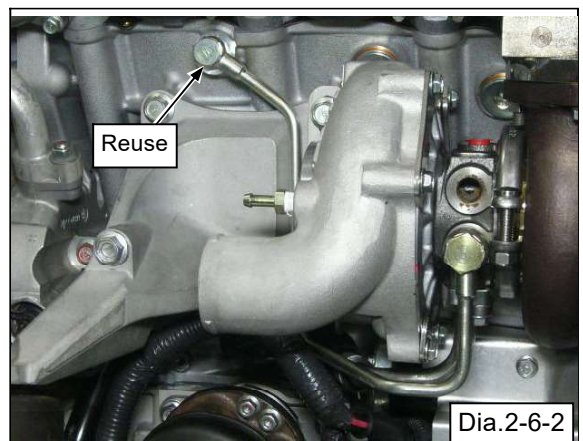
Reuse the factory 12mm banjo bolts on the engine side. Make sure to use the correct bolts on each water line.

Before installation, blow off any dust and/or debris inside the pipes with an air gun. Make sure no foreign objects enter the Turbocharger Assembly through the pipes.



(1) Install the Turbocharger Water Inlet Pipe LH side using the following provided parts. (Diagram 2-6-2)

- T/C Water Inlet Pipe LH x 1
- Banjo Bolt 14mm x 1
- Copper Washer 14mm x 2
- Factory Banjo Bolt 12mm x 1 (Reuse)
- Copper Washer 12mm x 2

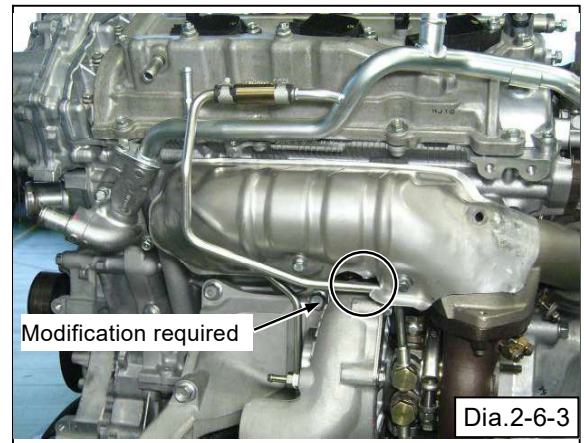


(2) Modify the factory heat shield so it does not come in contact with the Turbocharger Water Outlet Pipe LH side. Install the modified heat shield using the following parts (Diagram 2-6-3)

- Bolt M6 L=10 x 3
- Washer M6 x 3
- Lock Washer M6 x 3

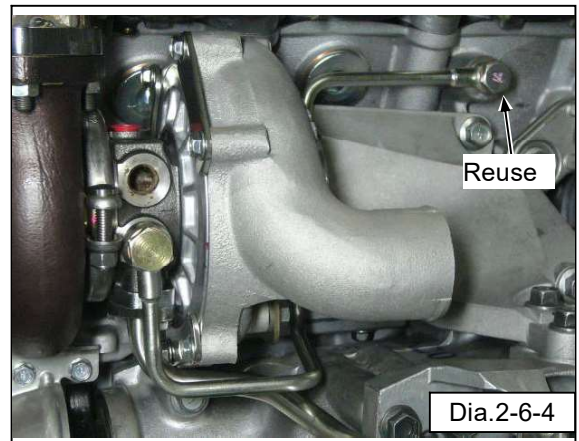
(3) Install the Turbocharger Water Outlet Pipe LH side using the following provided parts. (Diagram 2-6-3)

- T/C Water Outlet Pipe LH x 1
- Banjo Bolt 14mm x 1
- Copper Washer 14mm x 2



(4) Install the Turbocharger Water Inlet Pipe RH side using the following provided parts. (Diagram 2-6-4)

- T/C Water Inlet Pipe RH x 1
- Banjo Bolt 14mm x 1
- Copper Washer 14mm x 2
- Factory Banjo Bolt 12mm x 1 (Reuse)
- Copper Washer 12mm x 2



(5) Install the Turbocharger Water Outlet Pipe RH side using the following provided parts. (Diagram 2-6-5)

- T/C Water Outlet Pipe RH x 1
- Banjo Bolt 14mm x 1
- Copper Washer 14mm x 2
- Bolt M8 L=20 x 1
- Washer M8 x 1
- Lock Washer M8 x 1

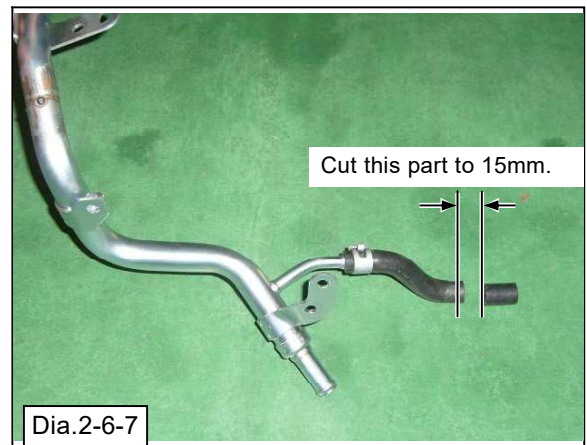


(6) Install the right side heat shield using the following provided parts. (Diagram 2-6-6)

- Bolt M6 L=10 x 3
- Washer M6 x 3
- Lock Washer M6 x 3

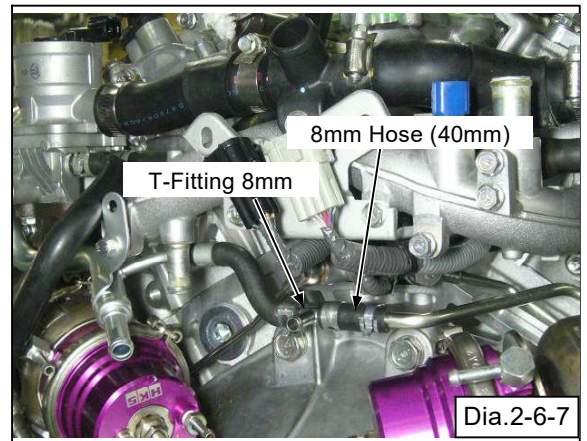


- (7) Modify the factory hose as shown in Diagram 2-6-7. Install the modified hose to the factory water pipe. (Diagram 2-6-7)



- (8) Route the water lines as shown in Diagram 2-6-7 and 2-6-8 using the following the provided parts.

- T-Fitting 8mm x 1
- Hose Clamp 8mm x 5
- Hose 8mm (Cut to 40mm in length)



2-7 Installing the Front Pipes

- (1) Install the factory A/F sensor and O2 sensor to each Front Pipe LH side and RH side; then install the pipes to each Turbocharger using the following provided parts. (Diagram 2-7-1)

- Front Pipe LH
- Front Pipe RH
- T/C Gasket (Outlet) x 2
- Self-Lock Nut x 6
- G-Cup Ring 58.4mm x 2



(2) Install the front pipe bracket using the following provided parts. (Diagram 2-7-2)

- Bolt M10 L=25 x 2
- Nut M10 x 2
- Lock Washer M10 x 2
- Washer M10 x 4

NOTE

Install the bracket in the opposite direction of the factory catalytic converters using the following provided parts.

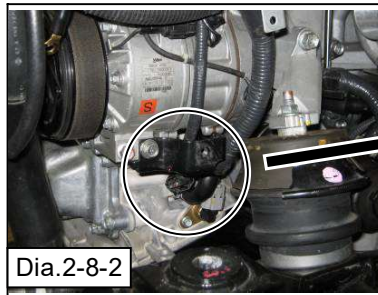
- Front Pipe Gasket x 2
- Bolt M10 L=40 x 4
- Nut M10 x 4
- Lock Washer M10 x 4
- Washer M10 x 8



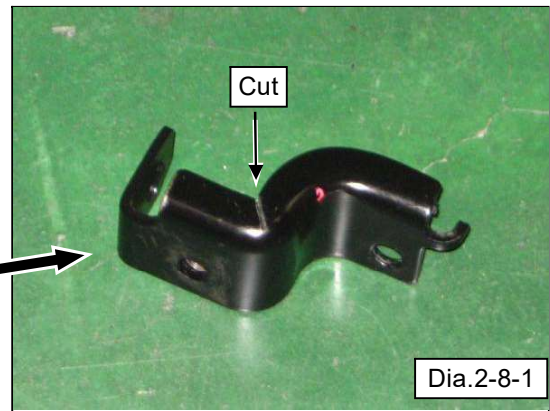
Dia.2-7-2

2-8 Reinstalling the Factory Chamber Pipes

(1) Remove the factory bracket and make a cut along the dotted line on the bracket as shown in Diagram 2-8-1 and 2-8-2.



Dia.2-8-2



Dia.2-8-1

(2) Reinstall the factory chamber pipe LH side. Align the center of the pipe as shown in Diagram 2-8-3.



Dia.2-8-3

(3) Reinstall the factory chamber pipe LH side using the following provided parts. (Diagram 2-8-4)

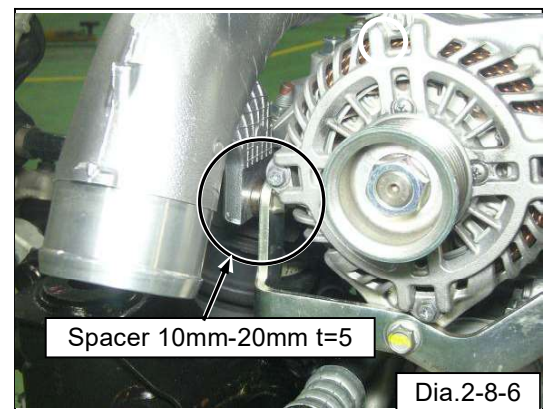
- Silicone Hose 48mm L=100 x 1
- Hose Clamp #36 x 2



Dia.2-8-4

(4) Reinstall the factory chamber pipe RH side using the following provided parts. (Diagram 2-8-5, 2-8-6)

- Silicone Hose 48mm L=100 x 1
- Hose Clamp #36 x 2
- Spacer 10mm-20mm t=5 x1
- Bolt M8 L=30 x 1
- Lock Washer M8 x 1
- Washer M8 x 1



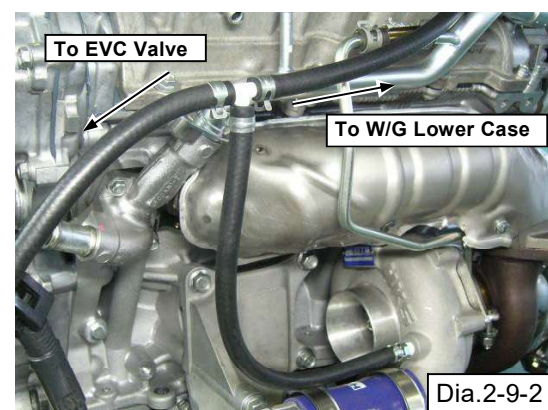
2-9 Connecting the Wastegates

NOTE

This section assumes that an HKS EVC will be installed on the vehicle.
Refer to the HKS EVC manual when connecting the EVC hoses.

(1) Connect the Wastegates using the following provided parts. (Diagram 2-9-1, 2-9-2)

- Hose 6mm
- T-Fitting 6mm x 3
- Hose Clamp 6mm x 14



2-10 Installing the Thermo Insulation Sheet

(1) Cut the provided Thermal Insulation Sheet to the appropriate sizes and affix to the vehicle's body as shown in Diagram 2-10-1 and 2-10-2.

- Thermo Insulation Sheet



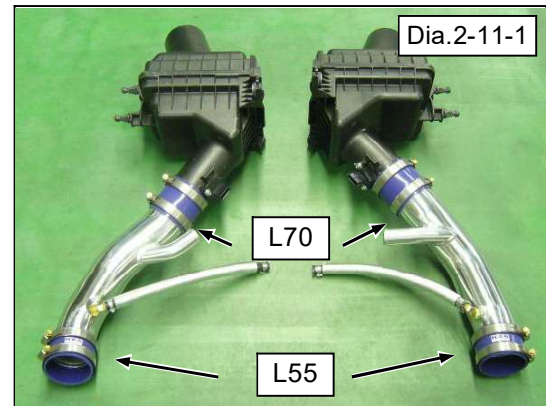
2-11 Installing the Suction Pipes

NOTE

Install the Suction Pipes after the engine is reinstalled to the vehicle. If not, the Suction Pipes may come in contact with the vehicle's body.

(1) Install the Suction Pipes and factory air cleaner cases using the following provided parts. (Diagram 2-11-1, 2-11-2)

- Suction Pipe LH
- Suction Pipe RH
- Silicone Hose 70mm L=70 x 2
- Silicone Hose 70mm L=55 x 2
- Hose Clamp #48 x 8
- Elbow PT1/8 x 2
- Hose Fitting 10mm x 2
- Hose Clamp 10mm x 4
- Hose 10mm (Cut to 300mm x 2)
- Thermal Tube (Cut to 250mm x 2)



- (2) Connect the 10mm hose to the 10mm Hose Fitting (Blow-by) on the valve cover. (Diagram 2-11-3, 2-11-4)



2-12 Installing the Emblem

- ※ The provided Emblem was designed for use with the HKS Superior Finisher (P/N 34005-AN001). If a GT600 Package was not previously installed on the vehicle, an HKS Superior Finisher (P/N 34005-AN001) is required.

- (1) Install the Emblem using the following provided parts. Put the Emblem and Bracket on each side of the Superior Finisher and tighten the bolts. (Diagram 2-12)

- Emblem x 1
- Bracket x 1
- Bolt M4 L=12 x 2



Installation is complete.

Reinstall all removed factory parts.

3. Confirmation after Installation

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



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