HKS Exhaust System User & Installation Manual



<32009-KN001>

Confirm Before Installation

Part Number : 32009-KN001

Name of Product : Full Dual Muffler

Application : INFINITI Q50(2013~)

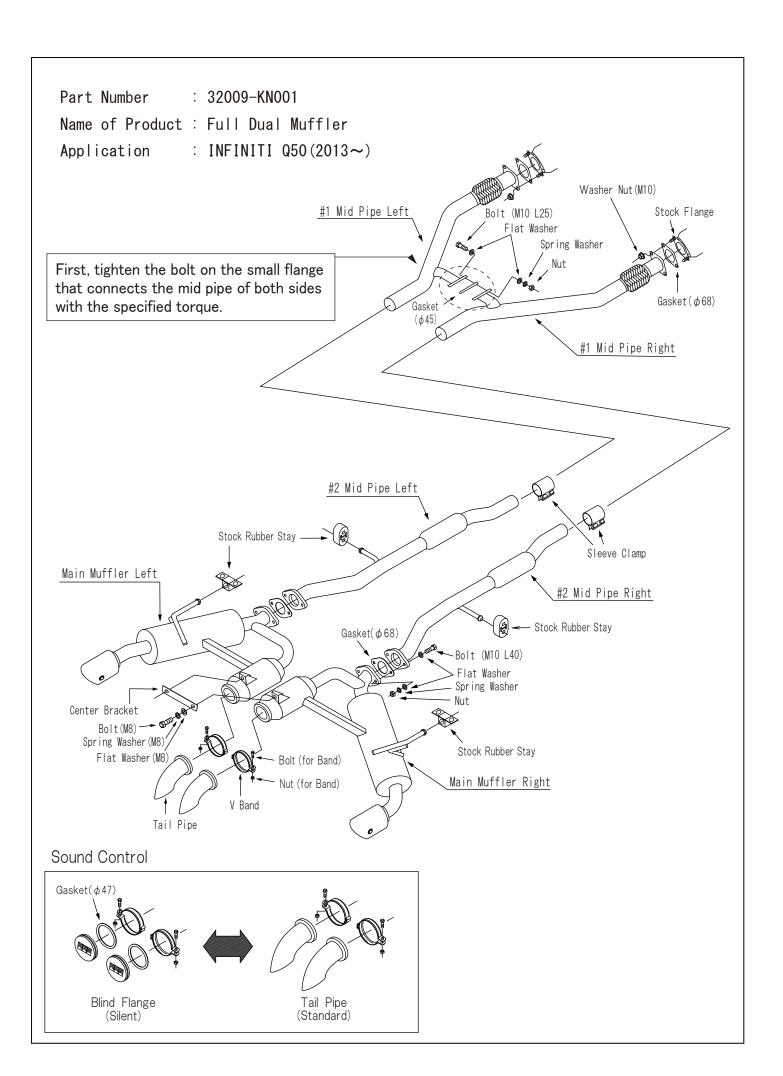
This product is only compatible with the stock catalyst or HKS downpipe.

★ Please make sure that the kit has all the provided parts listed below.

★ Be careful when handling this product; avoid dropping or giving it excessive impact. Otherwise, it may result in product damage or improper installation.

	Parts List / Hardware	QT.
1	#1 Mid Pipe Right	1
2	#1 Mid Pipe Left	1
3	#2 Mid Pipe Right	1
4	#2 Mid Pipe Left	1
5	Main Muffler Right	1
6	Main Muffler Left	1
7	Tail Pipe	2
8	Sleeve Clamp	2
9	Gasket (φ68)	4
10	Gasket (φ47)	2
11)	Gasket (φ45)	1
12	Blind Flange	2
13	V-Band	2
14)	Center Bracket	1
15)	Bolt (M10 L40)	4

	Parts List / Hardware	QT.
16	Bolt (M10 L25)	2
17	Nut (M10)	6
18	Flat Washer (M10)	12
19	Spring Washer (M10)	6
20	Washer Nut (M10)	4
21)	Bolt (M8)	2
22	Flat Washer (M8)	2
23	Spring Washer (M8)	2
24	Sticker	1
25)	Manual	1



Thank you for purchasing HKS exhaust system. Please read this User & Installation Manual thoroughly before using this product so that you will understand and use product correctly. Please confirm that the contents are correct before installation on the vehicle.

Foreword

- •Replacing exhaust systems entails dangerous work that only mechanics with specialized training should perform in an automobile service shop with adequate facilities. For untrained customers to install an unfamiliar product could be dangerous as it could result in injury and/or severe burns. Please request a specialist service shop to do the installation.
- •Do not perform any illegal modifications on this product, such as cutting the pipe and/or removing the internal components of the muffler.
- •Our company shall not bear any responsibility should you, the customer, or a third-party cause a breakdown of the product and its auxiliary product through modification or disassembly, or for damages caused by problems resulting from its misuse.
- •This product and its parts may be revised without warning to the customer.
- •Due to regulations, it is not legal to drive any vehicle with the catalytic converter or any other emission device removed or modified (Unless specified by local regulations).

Product Precautions

- •When the engine is turned on or immediately after it is stopped, the exhaust manifold, exhaust pipe, catalyst and muffler are extremely hot. Be extra careful not to touch the section that exits the rear of the vehicle. You may suffer burns if you touch this or any section of the exhaust system. Please note that when you load or unload items from the trunk, your clothing could burn or melt if it touches the tail pipe. Please take caution around the surroundings when you stop or park the car.
- •Oil or brake fluid split on the exhaust manifold could burst into flames.
- •Exhaust gases contain toxic substances. There is always a danger of carbon monoxide poisoning if you continue to work in a poorly ventilated garage or warehouse with the engine running. Always turn off the engine and check for adequate ventilation before working in an enclosed space. Be especially careful when pets and children are near the installation site. Take note of wind direction when running a vehicle near people.
- •This aftermarket exhaust improves exhaust efficiency and enhances the performance characteristics of the vehicle. Make certain that the brakes have been serviced completely and verify the brake performance and safety check all under carriage components.
- •This exhaust system is designed to have a safe clearance from the road surface with the vehicle at standard (stock) height. Therefore, if the vehicle is modified and body height is lowered to an extremely low level, the muffler could become damaged or may damage other objects when it comes in contact with the road surface or protruding objects. Please do not lower the height of the vehicle to extreme levels because exhaust gas could leak from a damaged exhaust system.

- Even if parts in the emission system are used correctly, there is the possibility of deteriorating sound muffling performance from toxic substances in the exhaust gases or corrosion causing holes in the product depending on the usage of the automobile. If this is the case, please consult promptly with your dealer or service shop. If the product had lost its original capabilities, please have it exchanged with the same product.
- If corrosion is left untended, this could cause fire from leakage of exhaust gas under the lower part of the chassis. Moreover, the driver could be fined for driving a poorly maintained vehicle.
- •It is the legal responsibility of the driver to safely upkeep his/her car. Periodic inspection and service is essential for safety and to prevent pollution. Be certain that routine inspections are made as well as periodic inspections and parts replacement if necessary.
- •While the product of our company uses carefully selected materials, and the product is manufactured under strict quality control standards in consideration of durability, the product could corrode and develop holes at an unexpectedly early stage if the vehicle is driven under adverse conditions. Moreover, the product could be hit by small rock and other road debris that may damage or cause holes in the product. Please be very careful because this could cause leakage of exhaust gases.
- •The law prohibits the removal of the catalytic converter or removing the interior components of it. Please refrain from such action as this could lead to environmental pollution.
- •Exhaust components on automobiles sometimes reach very high temperatures. Do not leave the vehicle over dry grass or other flammable materials with the engine running or even after immediately turning off the engine.
- This could cause a fire. Please stop or park your vehicle in an area where there are no flammable objects under the vehicle.
- •When using your vehicle, refrain from revving or idling the engine for extended periods of time. This could cause deterioration of the sound muffling material in the muffler. The heat from stagnant exhaust could cause breakdowns of electrical parts and auxiliary parts in the engine compartment.
- •Do not store or leave vehicle in humid areas or where salt is prevalent. This could cause deterioration and corrosion of parts.
- •Please understand that using your vehicle in various types of races, circuit runs and other special use could markedly lower the durability of the product.

Installation Precautions

- •When installing the product, make sure all instructions are followed precisely. Use a torque wrench and tighten the screws to the regulation (factory) torque so as to prevent the screws from loosening while the vehicle is in operation.
- •Exhaust manifolds and catalytic converters can become extremely hot during usage. Coming in contact with a hot exhaust system may result in severe burns. Only work on the vehicle after it cools down. Please use heat-resistant gloves during service to prevent burns.
- •Rust may make it difficult to loosen the nuts and bolts on the exhaust system. Use a spray-type lubricant and the correct tools to loosen the nuts and bolts and refrain from using excessive force that may cause the nuts and bolts to break. Always use heat-resistant gloves to prevent injury to hands.
- •Exhaust system replacements are usually performed underneath of the vehicle. It is dangerous to replace the system if the lifted vehicles is in an unstable condition. Be certain to work safely by using a specified lifting machine for vehicles. Never work underneath of the vehicle lifted only by a standard car jack, as this could be extremely dangerous.
- •Replacing of an exhaust system entails simultaneous tightening of nuts and bolts located separately, and working in situations where a heavy system is supported from below. Therefore, working alone could be very dangerous. Always work with two or more persons.
- •Be careful to maintain the proper clearance when installing a new exhaust system. Please be particularly careful when working near brakes, fuel line, drivetrain and electrical systems.
- •If you find cracks and other deterioration in the rubber exhaust hangers, replace them with the vehicle manufacturer's new standard parts.

- •After the standard (stock) exhaust system is removed, disassemble them into shortest possible pieces and store them horizontally to allow for and moisture dissipation.
- •In some instances it may be necessary to cut the stock exhaust into two pieces to remove it. The stock exhaust was installed before the rear suspension was installed on the vehicle.

The replacement HKS exhaust system will bolt directly on and does not require any modification (to the vehicle or the exhaust system).

Installation Procedure

WARNING

Protect against injuries & burns.

* "stock parts" in this manual refers to the manufacturer's genuine parts.

NOTE

- Do not reuse the gasket.
- All rubber stays for hanging should be reused in the stock parts.

1. Remove Stock parts

(1) Remove stock #1 mid pipe and #2 mid pipe, main muffler.

NOTE

Please follow the automobile manufacturer's work procedures when removing stock parts.

2. Temporary assembly of #1 Mid Pipe Right

(1) Place the gasket (dia. 68) between the right side of the flange of the stock catalyst and the flange of the #1 Mid Pipe Right.

Tighten it temporarily with the washer nut (M10).

3. Temporary assembly of #1 Mid Pipe Left

- (1) Place the gasket (dia. 68) between the left side of the flange of the stock catalyst and the flange of the #1 Mid Pipe Left.
 - Tighten it temporarily with the washer nut (M10).
- (2) Place the gasket (dia. 45) between the small flanges of the #1 mid pipes of the right and left sides.

Put the flat washer (M10) into the provided bolt (M10, L25).

Pass it through a hole in the flange from the left.

Then, put the provided flat washer (M10), spring washer (M10), and nut (M10) following this order and tighten it temporarily.

4. Temporary assembly of #2 Mid Pipe Right

- (1) Align the #2 Mid Pipe Right in the proper position. Attach the stock rubber stay on the hanging hooks.
- (2) Put the provided slip joint on the rearward of the #1 mid pipe on the right. Connect it temporarily with the frontward of the #2 mid pipe on the right.

5. Temporary assembly of #2 Mid Pipe Left

- (1) Align the #2 Mid Pipe Left in the proper position. Attach the stock rubber stay on the hanging hooks.
- (2) Put the provided slip joint on the rearward of the #1 mid pipe on the left. Connect it temporarily with the frontward of the #2 mid pipe on the left.

- 6. Temporary assembly of Main Muffler Right
 - (1) Align the Main Muffler Right in the proper position. Attach the stock rubber stay on the hanging hooks.
 - (2) Place the gasket (dia. 68) between the flanges of the frontward of the main muffler on the right and the rearward of the #2 mid pipe on the right.

 Put the provided flat washer (M10) into the provided bolt (M10, L40) and through

it the hole of the flange from the front side.

- Then, put the provided flat washer (M10), spring washer (M10), and nut (M10) following this order, and tighten it temporarily from the opposite.
- (3) Put the provided spring washer (M8) and the flat washer (M8) following this order to the provided bolt (M8) and attach the Center Bracket temporarily on the top of the main muffler on the right.
- (4) (Silent) Put the gasket (dia. 47) between the tail of the inner side of the main muffler on the right side and the blind flange.

Tighten it temporarily with the provided V-band.

(Standard) Tighten the tail of the inner side of the main muffler on the right side and the tail pipe temporarily with the provided V-band.

NOTE

The provided gasket (dia. 47) will not use in the case of (Standard).

7. Temporary assembly of Main Muffler Left

- (1) Align the Main Muffler Left in the proper position.

 Attach the stock rubber stay on the hanging hooks.
- (2) Place the gasket (dia. 68) between the flanges of the frontward of the main muffler on the left and the rearward of the #2 mid pipe on the left.

Put the provided flat washer (M10) into the provided bolt (M10, L40) and through it the hole of the flange from the front side.

- Then, put the provided flat washer (M10), spring washer (M10), and nut (M10) following this order, and tighten it temporarily from the opposite.
- (3) Put the provided spring washer (M8) and the flat washer (M8) following this order to the provided bolt (M8) and attach the Center Bracket temporarily on the top of the main muffler on the left.
- (4) (Silent) Put the gasket (dia. 47) between the tail of the inner side of the main muffler on the left side and the blind flange.

Tighten it temporarily with the provided V-band.

(Standard) Tighten the tail of the inner side of the main muffler on the left side and the tail pipe temporarily with the provided V-band.

NOTE

The provided gasket (dia. 47) will not use in the case of (Standard).

8. Assemble the entire system

- (1) Please check the proper position of each pipe and the muffler, car floor, cross member, surrounding parts, clearance, and the misalignment of the gasket.
- (2) Tighten the bolt and nut that are tightened temporarily with the specified torque. First, tighten the bolt on the small flange that connects the mid pipe of both sides with the specified torque.
 - Second, tighten each bolt and nut from the front to the rear of the vehicle in this order with the specified torque.
- (3) The Ti Tip of the outer side tail of the main muffler can be adjusted the position back and forth by loosening the Ti Tip fixing bolts (2 places) of both sides. Tighten the Ti Tip fixing bolts (2 places) with the specified torque after determined the preferred position of the Ti Tip.



Always assemble first from the small flange that connects the mid pipe of both sides.

Assembling in improper sequence may cause the breakage of the product due to the excessive force applied.

Tightening Torque Sleeve Clamp $T=39\sim44~\text{N}\cdot\text{m}~(T=4.0\sim4.5~\text{kgf}\cdot\text{m})$ $T=29\sim34~\text{N}\cdot\text{m}~(T=3.0\sim3.5~\text{kgf}\cdot\text{m})$ $T=19\sim24~\text{N}\cdot\text{m}~(T=2.0\sim2.5~\text{kgf}\cdot\text{m})$ $T=19\sim24~\text{N}\cdot\text{m}~(T=5.4~\text{kgf}\cdot\text{m})$ $T=52~\text{N}\cdot\text{m}~(T=5.4~\text{kgf}\cdot\text{m})$ $T=3.9\sim4.9~\text{N}\cdot\text{m}~(T=0.4\sim0.5~\text{kgf}\cdot\text{m})$ $T=3.9\sim4.9~\text{N}\cdot\text{m}~(T=1.0~\text{kgf}\cdot\text{m})$ $T=10~\text{N}\cdot\text{m}~(T=1.0~\text{kgf}\cdot\text{m})$

(4) Check whether the proper position of the tail pipe and the bumper and the clearance are maintained (Approx. 10 mm).

Tighten the bolt and nut again from the beginning if there are any problems. Insufficient clearance may cause an abnormal sound or melts the resin-made bumper by the heat.

9. Verifying a Correct Installation

- (1) Check the clearance for each section by shaking the muffler after installing the product.
- (2) Start the engine, idle for a while, and rotate up to approx 2500 rpm. Then, inspect that there is no leaking of the exhaust air and abnormal sounds from the flange at each section.
- (3) Drive for a while, then inspect that there is no leaking of the exhaust air and abnormal sounds from the flange at each section.
- (4) If there are any problems found in the (1) to (3), install the product again from the beginning.



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