

HKS[®] RACING SUCTION

NAME OF PRODUCT	Racing Suction Intake Kit
PART NUMBER	7 0 0 2 0 - A Z 1 0 1
APPLICATION	MAZDA RX-7 FD3S
ENGINE	13B-REW
YEAR	1993 - 1995
REMARKS	

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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 service manual.

SAFETY PRECAUTIONS

WARNING

- To prevent electrical damage/burns/fire, always:
 - Disconnect the negative terminal of the battery before beginning installation.
 - When disconnecting wires/connectors, take extra care to avoid breaking/snapping the connectors.

CAUTION

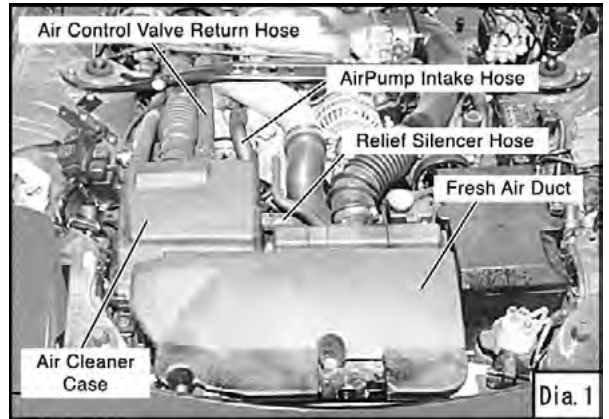
- Do not misuse this product.
 - Misuse of this product may lead to engine damage.
 - Misuse of this product may lead to loss of its original function.
- Prior to installation, make sure the engine bay temperature has cooled to approximately 40°C /104°F.
 - Failure to let the engine cool down properly can lead to severe burns.
- Insert clean rags into open piping to prevent contaminants from entering the pipes.
 - If neglected, contaminants in the piping can lead to engine damage.

- Make sure that all of the parts listed in the Parts List are included in the kit.
- Reference the factory service manual for the vehicle when removing factory parts.
- Be careful when handling this product; avoid dropping or subjecting it to excessive impacts. Failure to do so may result in product damage or improper installation.
- Use the proper tools when tightening nuts and bolts. If over tightened, the bolts may become damaged.
- Keep the removed factory parts in a safe place for ease of re-installation at a later date (if necessary).
- Replace the filter element at regular intervals:
(Recommended) Replace every 3,000~5,000km/2,000-3,200miles or every 3~6 months.
Replacement filter elements are sold separately.
Do not wash the filter elements as the filtration properties will be degraded.
- However, there are certain conditions where, depending on dirt buildup, the filter may need to be replaced earlier than the above recommended intervals.
- If the vehicle and the product are not maintained properly as mentioned above, the product may not perform properly and the airflow meter sensor may not be able to detect the intake air volume accurately; it can lead to engine damage or bad conditions.

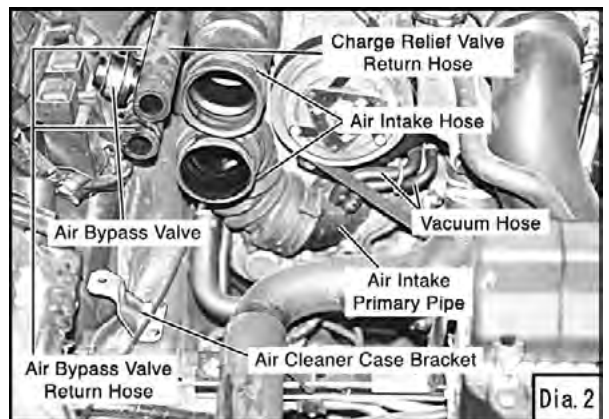
INSTALLATION PROCEDURE

1. REMOVAL OF FACTORY PARTS

- (1) Disconnect the negative terminal from the battery.
- (2) Remove the strut tower bar.
- (3) Remove the fresh air duct. (Dia.1)
- (4) Remove the following parts indicated in the diagram 1.
 - Air Cleaner Upper Case
 - Air Element
 - Air Cleaner Lower Case
 - Relief Silencer Hose
 - Air Pump Intake Hose



- (5) Disconnect the vacuum hose; then remove the air intake hose and air intake primary pipe. Remove the gasket on the installing side of the air intake primary pipe. (Dia.2)
- (6) Remove the air bypass valve and the air bypass valve return hose. (Dia.2)
- (7) Remove the charge relief valve return hose. (Dia.2)
- (8) Remove the air control valve return hose. (Dia.2)
- (9) Remove the air cleaner case bracket. (Dia.2)



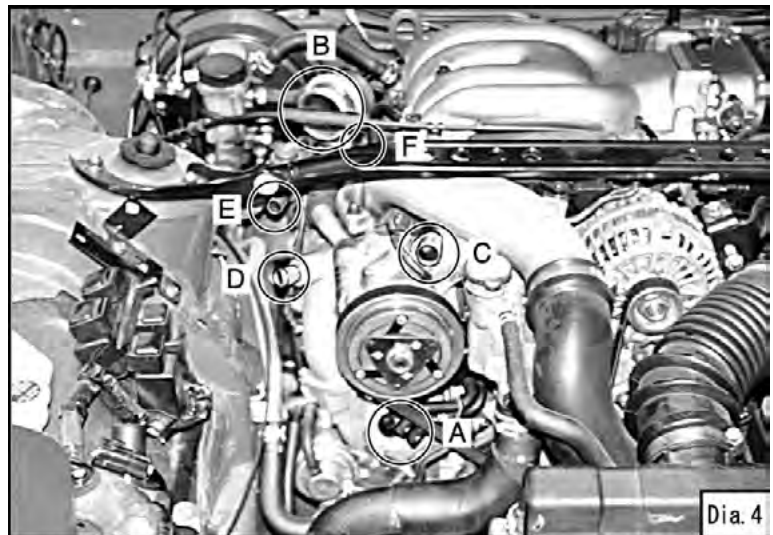
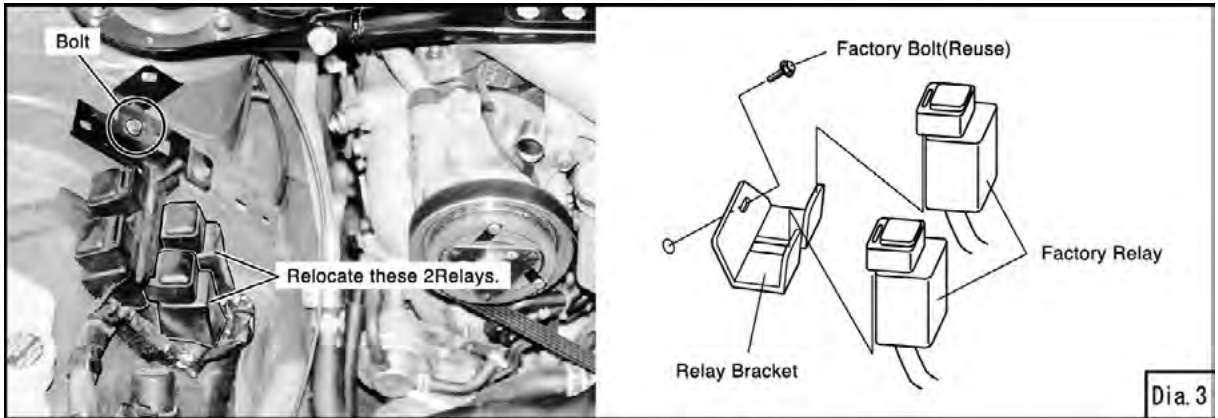
2. INSTALLATION OF KIT PARTS

(1) Install the relay bracket. (Dia.3)

(2) Relocate the relays (2 pcs) indicated in the diagram 3 onto the relay bracket. (Dia.3)

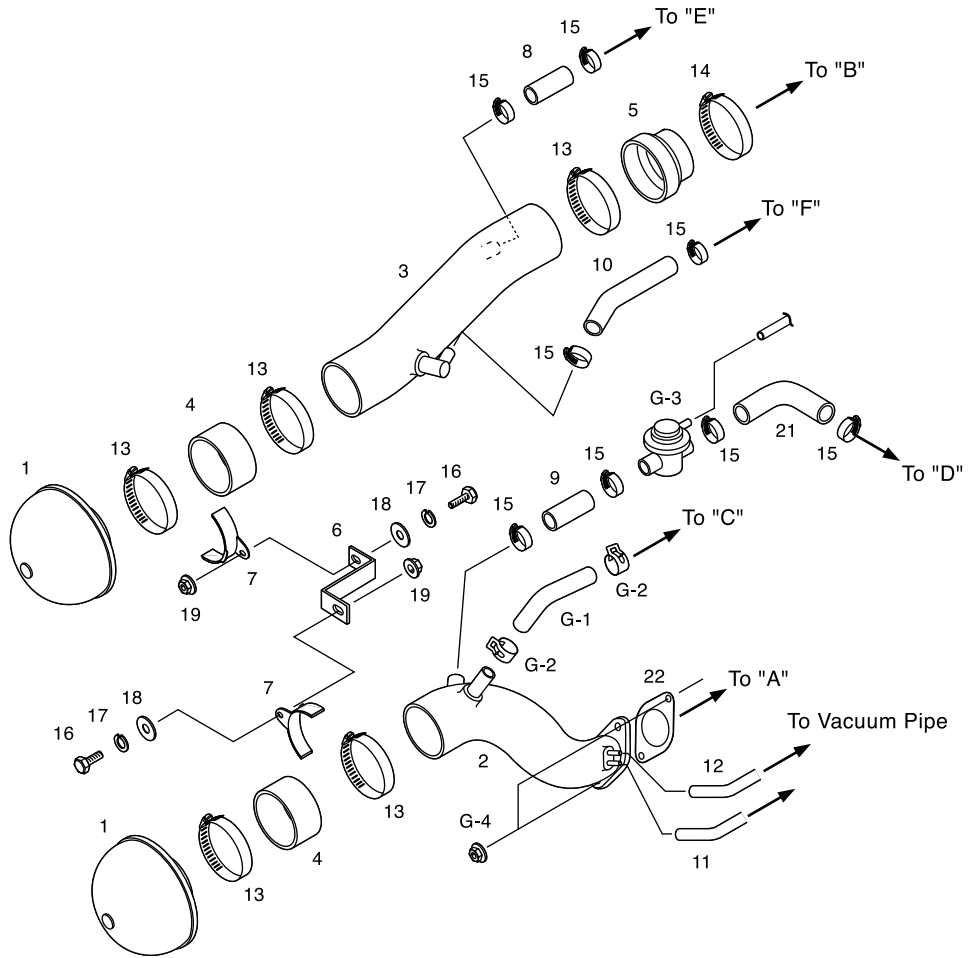
ADVICE:

When installing with an HKS SSQV, do not use the relay bracket. Secure the relays (2 pcs) using the included tie wrap to the position where they don't come in contact with other parts.



(3) Install the gasket included in the kit. (Dia.5)

(4) Temporarily install the parts included in the kit. (Dia.4, 5, 6)



1. Filter Assy

2. Air Intake Pipe No.1

3. Air Intake Pipe No.2

4. Joint Hose 70mm

5. Joint Hose 70-60mm

6. Bracket

7. Universal Bracket

8. Hose 22mm L=70

9. Hose 22mm L=120

10. Hose 22mm L=200

11. Hose 6mm L=150

12. Hose 8mm L=150

13. Hose Clamp #48

14. Hose Clamp #40

15. Hose Clamp #12

16. Bolt M6-15

17. Lock Washer M6

18. Flat Washer M6

19. Flange Nut M6

21. Joint Hose

22. Gasket

G-1. Air Pump Intake Hose (Factory)

G-2. Hose Clamp (Factory)

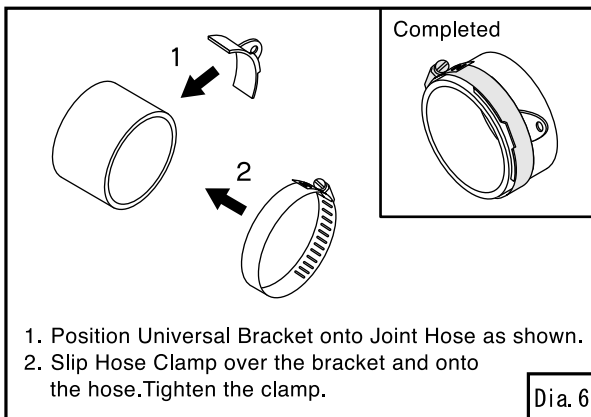
G-3. Air Bypass Valve (Factory)

G-4. Flange Nut (Factory)

- Position the intake assembly on the vehicle avoiding unnecessary contact with other parts of the vehicle. Once the position is determined, secure the intake assembly to the vehicle using the supplied hose clamps and bolts. Do not over-tighten the clamps and bolts. (Dia.9)

ADVICE:

Use of proper tools can help avoid over-tightening of the hose clamps. (Screwdrivers are recommended. Do not use boxed wrenches since they tend to use more force.) If over-tightened, the filter assembly outlet may bend or become damaged. (Tightening torque: 2.0~3.0 N-m {0.2~0.3 kg-m})

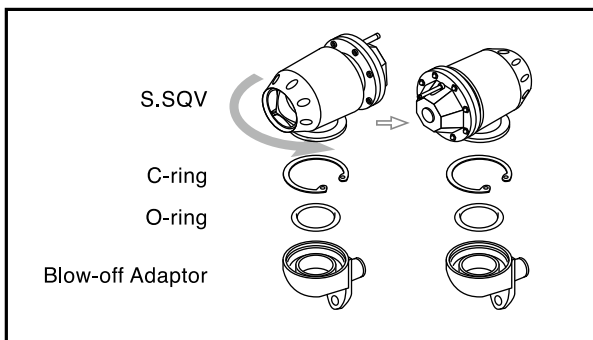


- Reinstall the fresh air duct. (Dia.7)
- Reinstall the tower bar.
- Reconnect negative terminal to the battery.



Installing Racing Suction Intake Kit onto a vehicle SSQV is installed.

- When relocating the relays (2 pcs), do not use the relay bracket. Secure the relays (2 pcs) using the included tie wrap to the position where they don't come in contact with other parts. (Dia.3)
- Adjust the angle of the SSQV and the blow-off adaptor. Turn the SSQV to the point where the 4mm nipple comes toward the vehicle's front. (Fig.1)
- Make sure the SSQV is not contact with the body and/or the suction pipe.



* Refer to the SSQV instruction manual for installation.

Strangle the C-ring to loosen the SSQV using the C-ring pliers before turning the SSQV. If not, the SSQV will be damaged.

CONFIRMATION AFTER INSTALLATION

Check the following after the installation process is complete.


























(1) Check the following before starting the engine:

- Make sure all pipes and hoses are routed and connected correctly.
- Make sure all hose clamps are tightened.
- Make sure the negative cable terminal is securely attached to the battery.
- Make sure all bolts and nuts are tightened.
- Make sure all installed components do not come in contact with other parts.

(2) Start the engine and check the following:

- Make sure air is not leaking.
- Make sure the RPM rises smoothly after revving the engine 2-3 times while in neutral.
- Make sure the installed parts are not hitting each other.
- Make sure there are no issues idling.
- Make sure there are no loose parts after the engine is stopped.

PARTS LIST

No.	Description	Qty	Image	Remarks	No.	Description	Qty	Image	Remarks	No.	Description	Qty	Image	Remarks
1	Filter Assy	2		150-70 mm	10	Hose	1		22mm L=200	19	Flange Nut	2		M6
2	Air Intake Pipe No.1	1			11	Hose	1		6mm L=150	20	Relay Bracket	1		
3	Air Intake Pipe No.2	1			12	Hose	1		8mm L=150	21	Joint Hose	1		
4	Joint Hose	2		70mm	13	Hose Clamp	5		#48	22	Gasket	1		
5	Joint Hose	1		70-60 mm	14	Hose Clamp	1		#40	23	Tie Wrap	3		
6	Bracket	1			15	Hose Clamp	8		#12	24	Sticker	1		
7	Universal Bracket	2		70mm	16	Bolt	2		M6-15	25	Instruction Manual	1		
8	Hose	1		22mm L=70	17	Lock Washer	2		M6	26				
9	Hose	1		22mm L=120	18	Flat Washer	2		M6	27				

MAINTENANCE

Proper daily maintenance of this product is necessary in order to maintain the safety, reliability, and function of this product. Maintenance is the responsibility of the driver/owner.

- If work needs to be performed outside the scope of this manual, consult a professional.
- If the vehicle becomes damaged, have the repairs performed by a professional.
- If you experience abnormal noises, scents, or vibrations from the vehicle while driving, reference the vehicle's Owner's Manual.
- If this product is ever sold, please give this Instruction Manual to the new owner.
- When removing this product from the vehicle, please consult a professional.