

1986-92 RX-7 Header 13B 6-Port Intake Engine Installation Instructions

Read All Steps Before Proceeding. If you have any questions regarding the following process, contact Racing Beat before proceeding!

These instructions assume the header will be installed along with the appropriate Racing Beat Presilencer unit in a 1986-92 RX-7 13B Non-turbo (6-port intake) vehicle application. When installed per these instructions the header/presilencer will correctly mate to the Y-pipe section and retain functionality of the 6-port intake actuators. If you are installing a Racing Beat header/presilencer combination onto a 1987-91 RX-7 Turbo II vehicle application, disregard the steps pertaining to the air pump removal.

Removal:

It is suggested that the exhaust be "cold" before attempting to install these components. Exhaust components (especially catalytic converters) may retain heat for a substantial period of time after the car has been shut off. Furthermore, you may experience difficulty removing the nuts on "hot" exhaust components. If you experience difficulty removing the nuts on a "cold" component, apply a loosening agent (i.e. WD 40) and slowly and carefully work the nuts off the studs. It is recommended that a "non-seizing" agent is applied to all threaded components during installation.

Raise the car and place it on four (4) jack stands. Never work on a car supported only by a floor jack.

NOTE: We recommend using new gaskets to ensure positive gas sealing; however, a used gasket may still seal adequately. If in doubt, replace with new gaskets.

1.) Remove the exhaust manifold with its oxygen sensor, as well as all of the exhaust system components back to, and including, the main catalytic converter. (Diagram A)

2.) **1986-1988 RX-7:** Remove the air pump along with its mounting bracket and belt. (Diagram B) Also, remove the air control and check valve (AC&CV) assembly mounted on the side of the lower intake manifold nearest the right fender well. The AC&CV assembly is held in place by either (3) bolts or (3) nuts (depending on year of manufacture).

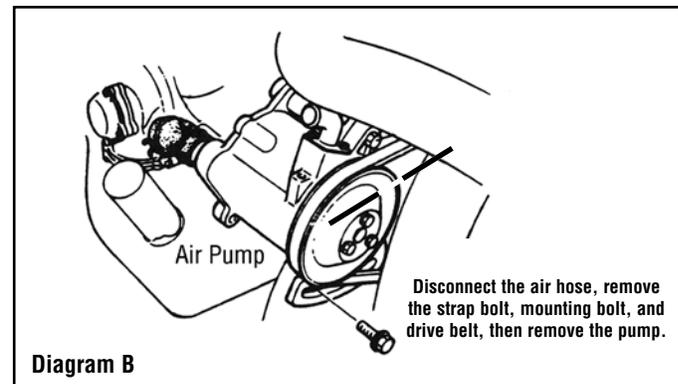
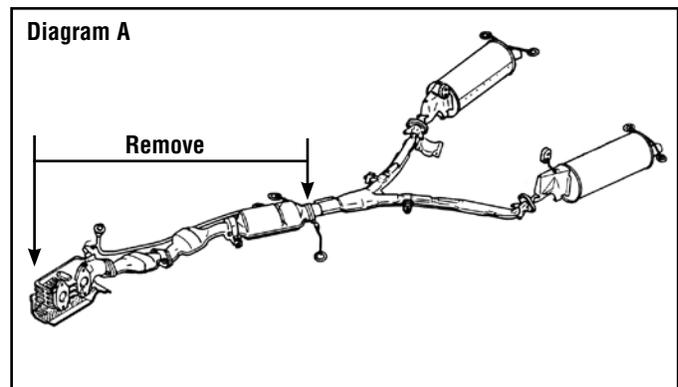
1989-92 RX-7: The air pump **MUST** be retained on the 1989-92 RX-7 13B NT for correct operation of the 6-port intake actuators on the manifold. (The tube leading into the catalytic converter is an emissions device and will not be retained during the header installation.)

Installation:

3.) Assemble the Header to the Racing Beat Presilencer using the gasket and hardware supplied. Note the small tube extending from 1986-88 RX-7 Presilencer. When assembled properly, positioning the header and presilencer as they would fit in the chassis, the small tube will extend forward on the passenger side of the chassis.

4.) Remove the oxygen sensor from the stock exhaust manifold and install it in the header, using never-seize thread material on the threads.

5.) Position the Header/Presilencer assembly into the chassis and begin the nut/bolt tightening sequence. To reduce the



possibility of gasket leakage tighten the nuts/bolts gradually in several steps. Install the LOWER nuts that hold the header to the engine block first, then install the upper nuts. Tighten these in several steps to control alignment of the header flange.

6.) Connect the small tube, discussed in Step (3), extending from the 1986-88 RX-7 Presilencer to the long, small diameter tube extending from the intake manifold.

7.) Connect the Racing Beat-supplied wire to the oxygen sensor lead, then route this wire along the left side of the transmission, following the factory wiring loom. Connect the free end of the wire to the connector from which the oxygen sensor was previously disconnected.

NOTE: We recommend sealing both ends of this connector wire with either silicone sealer or heat-shrink tubing to reduce the likelihood of corrosion.

STEPS (8) AND (9) APPLY TO 1986-1988 RX-7 VEHICLES ONLY!

8.) Use the triangular cover plate and (3) small screws provided by Racing Beat to cover the void that resulted from the AC&CV removal in Step 2. Re-use the original gasket and also apply an adequate amount of gasket sealer. If the valve assembly was originally held in place by (3) studs, these will need to be removed to allow installation of the (3) screws provided.

9.) Insert the red plastic plug into the air cleaner fitting previously serving as an air inlet source for the air pump.

10.) Check all heat shields to ensure a minimum of 1/2" clearance around the header system to insure that no rattles or squeaks will develop. Your vehicle is now ready to be driven - start the vehicle and check for any signs of an exhaust gas leak.

Note: You may notice an "oily" smell during the break-in period of your exhaust system. This is a result of lubricating materials used during the manufacturing process and is considered "normal".