

## Road Race Header Installation

### Installation Instructions -

### Locate the information for your header before proceeding.

We recommend the use of “never-sieze” lubricant on all threaded fasteners. You may use a small amount on the oxygen sensor (if used), taking care not to contaminate the sensing element. Raise the car and place on jack stands. Never work on a car that is supported only by a floor jack! 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.

#### **Pre-1986 Applications**

1. Remove the air pump, belt and bracket, the thermal reactor (or exhaust manifold), and heat shield. NOTE: At this point, if you are planning to use the original air filter housing, tape shut, plug or crimp the two (2) small blue tubes on the housing that are uncovered after the removal process.
2. Install the header onto the engine. To reduce the chance of a exhaust gas leakage, use a new gasket and tighten the nuts gradually in very small steps. In the case of the nuts that retain the header to the engine, tight the lower nuts first in each step. Torque the header-to-engine nuts to 25 ft/lbs.

For custom exhaust systems - Fit tubing between the header and the remainder of the exhaust system and weld it where necessary. NOTE: We do not recommend using tubing with a wall thickness less than .090” (3/32”) anywhere in the exhaust system.

On 1975 and earlier engines, the air injection nozzles should be plugged using Racing Beat Part No. 11301(1971-75 12A) if you plan to use the original intake manifold.

#### **1984-85 RX-7 & 1986-92 RX-7 13B 6-Port Intake Applications**

**The Racing Beat Road Race Header (PN 16127) is intended for use with all 1984-92 13B 6-port intake engines. However, this header will ONLY bolt-on to the Racing Beat Street Port Center Section for the 79-85 RX-7.** This header is intended for racing applications and has no provision for a back pressure pickup tube or an oxygen sensor.

If you are retaining the stock intake manifold, you will need to obtain an Air Control and Check Valve (AC&CV) cover plate.

#### **1984-1988 ENGINES ONLY:**

- A. Remove the air pump, with its mounting bracket and belt. 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).
- B. Use the triangular cover plate and (3) small screws provided by Racing Beat to cover the void that resulted from the AC&CV removal. 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.
- C. Insert the red plastic plug into the air cleaner fitting previously serving as an air inlet source for the air pump.

1. Remove the stock exhaust manifold and the heat shield.
2. Install the header onto the engine. To reduce the chance of a exhaust gas leakage, use a new gasket and tighten the nuts gradually in very small steps. In the case of the nuts that retain the header to the engine, tight the lower nuts first in each step. Torque the header-to-engine nuts to 25 ft/lbs.

**1986-92 Applications Header Part Numbers 16128, 16129 (steel) & 16132 & 16134 (stainless)**

This section covers all 1986-92 6-port RX-7 models and the headers listed above can be used without (custom exhaust) or with the Racing Beat Road Race Presilencer section (bolt-on configuration). The 1986-88 6-port RX-7 models use exhaust back pressure to open the 6-port intake actuators, while the 1989-92 models use the air pump to open the actuators. For this reason it is NOT recommended that the air pump be removed from the 1989-92 model. If you elect to remove the air pump from a 1986-88 model, follow the steps presented immediately below:

**1986-1988 ENGINES ONLY:**

- A. Remove the air pump, with its mounting bracket and belt. 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).
- B. Use the triangular cover plate and (3) small screws provided by Racing Beat to cover the void that resulted from the AC&CV removal. 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.
- C. Insert the red plastic plug into the air cleaner fitting previously serving as an air inlet source for the air pump.

**1989-92 ENGINES ONLY:**

- A. While you will be retaining both the air pump and the air control and check valve (AC&CV) in order for the 6-port intake actuators to function correctly, the emissions split air tube that supplies air from the air pump to the catalytic converter is no longer utilized and can be removed. Using the black rubber cap provided with this header, cover the open end of the split air pipe and secure with a zip tie.

**REMOVAL OF THE STOCK EXHAUST MANIFOLD:**

1. Remove the stock exhaust manifold, the heat shield, and if you are installing the Racing Beat Road Race Exhaust system, remove all remaining exhaust components. (If you are retaining the stock mufflers, or already have installed Racing Beat replacement mufflers, leave these units on the car.) Spray the rubber hangers with a lubricating spray to facilitate the removal of the exhaust components. Once the stock components have been removed, un-thread the oxygen sensor and install it on the Racing Beat header. Torque the sensor to 15-20 ft/lbs.
2. Install the header onto the engine. To reduce the chance of a exhaust gas leakage, use a new gasket and tighten the nuts gradually in very small steps. In the case of the nuts that retain the header to the engine, tight the lower nuts first in each step. Torque the header-to-engine nuts to 25 ft/lbs.
3. Connect the electrical connector to the oxygen sensor. If the car is a 1986-88 model, connect the supplied small rubber hose from the barbed hose fitting on the header to the 6-port actuator tube.