

## Holley High Performance Intake System 1979-83 RX-7 1971-75 -12A Street Ported Engines, Manual/Headers

Part No.18030, 18031, 18032, 18033

### Installation Instructions

1. Using (2) of the bolts supplied, attach the large throttle cable housing bracket to the intake manifold from the underside of the portion of the carburetor mounting flange which extends toward the engine. Do not use washers. Install the other (2) bolts along with (2) flat washers in the remaining (2) holes in the carburetor mounting flange.

2. Install the carburetor on the manifold, using the flat washers, lock washers, and nuts supplied. Torque nuts to 11 ft. lbs. (Caution: Do not over torque the nuts.) Before proceeding, check primary and secondary throttle shafts for freedom of operation and full throttle. Also install the air cleaner stud and air cleaner.

3. (RX-2 & RX-3 ONLY) Remove the battery to gain access, and drain the water from the engine; remove the air pump, intake manifold with carburetor, metering oil pump rod, and any emission control valves.

4. (1971-73 models ONLY) Remove both plastic metering oil pump oil tubes and their rubber connecting hoses from the metering oil pump. Remove both rubber connecting hoses from the longer tube (one 900 and one straight). Using those (2) hoses, the complete shorter tube, and the plastic "T" supplied, re-connect the metering oil tubes as shown in Figure 1.

(1974-75 models ONLY) Remove both plastic metering oil pump oil-tubes, the rubber connecting hoses, and the brass check valves from the metering oil pump as assemblies. Remove both rubber connecting hoses from the longer plastic tube. Using the parts removed from the longer plastic tube, all of the short tube assembly, and the plastic "T" supplied, re-connect the metering oil tubes as shown in Figure 2.

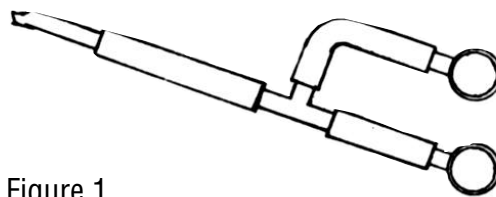


Figure 1

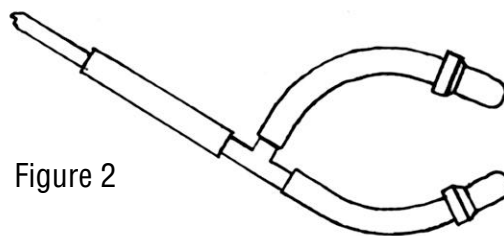


Figure 2

5. Remove all traces of the original intake gasket from the engine. Put a small amount of gasket sealer (preferably non-hardening Permatex) around the water ports in the new intake gasket. On 1971-75 engines, also install the supplied water passage O-rings in the rotor housing recess. Install the intake manifold/carburetor assembly.

6. Insert the metering oil pump rod into the pump arm, then attach it to the carburetor arm just below the choke housing using the black linkage clip supplied. Slip (3) small flat washers onto the rod from the lower end, and hold them in position with the cotter pin (1974-75 RX-2 & RX-3 ONLY, place pin in lower hole). Do not spread the cotter pin yet. Check the distance from the top of the (3) washers to the underside of the round portion of the pump arm. The initial setting distance should be:

RX-2 & RX-3	1/2" (+/- 1/32")
RX-4 & Rotary P.U.	3/16" (+/- 1/32")

Add or remove washers as necessary to obtain this clearance, then spread the cotter pin. This setting is approximate, so it is desirable to set the flow to the recommended rate as soon as possible.

7. Connect the metering oil pump tube to the fitting on the carburetor primary float bowl.

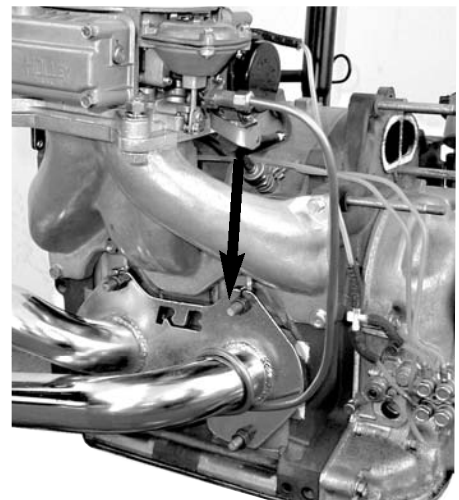
8. Insert the throttle cable housing into its bracket. Then insert the round portion of the cable end into the holes in the links attached to the carburetor throttle arm, so that the cable wire is situated between the links. Tighten the bolt that holds the links to the throttle lever so that the links are just able to rotate on the lever. Hook the end of the throttle return spring with the longer straight section between the two nuts on the upper portion of the primary throttle lever. Hook the other end in the small hole on the throttle cable housing bracket. Adjust the linkage so that full throttle occurs when the throttle pedal touches the floor.

9. Remove the fuel high-temp bypass hose from the tube leading back to the tank (the carburetor end of this hose was connected to the top of the fuel inlet fitting). Install a plastic cap on this tube and secure it with one of the smallest hose clamps.

10. Connect the fuel pressure hose to the carburetor using the other of the (2) smallest hose clamps (cut hose as necessary).

11. Form the long copper tube to fit neatly from the choke heat inlet (near the black housing on the carburetor) and wrap around the #1 header pipe 1.25 times. See photo at right.

12. Connect the hose from the fuel tank evaporation control tube (the third of the 3 lines that come from the fuel tank) to the short



tube on the intermediate housing just below the air/oil separator (if the evaporation control system is not used and the tank is vented elsewhere, place a plastic cap on the blue tube).

13. Use one of the original rubber hoses to connect the tube on the air/ oil separator to the carburetor air cleaner. Slip the hose end into the tube in the lower portion of the air cleaner, then push the short copper tube provided into the end of the hose to retain it.

14. RX-2 ONLY: Remove the power brake~check valve from the stock manifold, and install it in the fitting provided. Connect the power brake hose.

RX-3 ONLY: Remove the steel power brake vacuum tube from the engine. Cut the tube approximately 4" from the boss on the manifold end. Using the rubber hose and hose clamps supplied to join the parts, re-install the tube, bending it as necessary.

15. 1971-75 models - no vacuum advance is used.

16. Before starting the engine, check the float level. Be sure the car is on level ground. When fuel level is correct, fuel will just begin to drip from the inspection port. Also re-check throttle for smooth operation and full opening, and for fuel leaks.

17. After cold starting, idle should be approximately 1,100 RPM. When warm, idle should be 900 RPM. The cold idle speed can be adjusted with the fast idle screw, accessible behind the choke housing. In addition, the black choke housing can be rotated to tailor the choke operation to local weather conditions.

Once the engine is warm, adjust the idle mixture by turning in each screw until the engine just peaks in RPM, then backing off the screw about 3/8 turn. Reset the idle RPM and repeat this procedure if necessary.

**CAUTION:**

**Installation of this kit requires the use of a high performance fuel pump delivering 6 PSI.**

Recommendations

Ignition Advance:	1971-73	1974-75 (RX-3 & RX-3)
(Check at idle) Leading distributor	8° BTC	2° BTC
Trailing distributor	2°	6° ATC
Fuel Filter: Fram G-12		
Spark Plugs:	NGK B9EV @ .020" gap (racing) NGK B8EV @ .020" gap (street) NGK B7EV @ .020" gap (city)	
Metering Oil Pump Flow:	Idle position - stock Full throttle position* 5 cc/5 min. @ 2000 RPM	

\*Hold metering oil pump arm in the full throttle position with a piece of string or light wire while testing.

Carburetor Jetting: The jets supplied are approximately correct for an engine with muffled exhaust. For an engine with open headers, start with 2 steps larger primary jets.

Blocking Nozzles: It is desirable to install Racing Beat blocking nozzles in place of the air injection nozzles in the engine. This requires the removal of the oil pan, which can be done with the engine in the car.

## CRUISE CONTROL INSTALLATION INSTRUCTIONS

1. Attach the red cruise control bracket (supplied) to the throttle cable bracket by installing it on the throttle cable housing between the upper jam-nut and the bracket. Tighten the throttle cable jam-nuts securely.
2. Slip the barrel shaped end on the cruise control in between the outer most two links on the throttle lever, in a maneuver similar to the throttle cable attachment.
3. Pull the throttle open and insert the cruise control cable housing into the tubular section of the red bracket. Adjust the cruise control cable to ensure there is a small amount of slack when the throttle is closed.
4. Install the cruise control vacuum hose on the intake manifold Tee fitting which also supplies manifold vacuum to the power brakes.