

#2. Once you have decided where the pump will go, mark which side of the engine the pressure fitting should be placed. Remove engine, usually there are four screws on the bottom of the car. If you are careful, the engine can be removed, without removing the clutch.

#3. Look inside the engine. I have found that the transfer port directly above the motor mount tabs is a good place to place the pressure fitting. There is a space on the side of the crankcase directly below the bottom of the cylinder liner that is perfect. This may seem very thin, but it has been my experience that this area is about .100 thick. This is more than enough thickness for drilling and tapping. Another way of locating this position is look at the motor mount and measure up (from the top side) about 1/8" and half way between the motor mount screws. Refer to drawing. Remember this is only a reference point. It may differ from engine to engine. On the Ofna .12, I removed the "Colt" stick-on aluminum label and located the hole placement. The Ofna .21 was drilled directly through the raised lettering in the castings. There was still enough thread on the pressure fitting to screw in and seal with a little Loctite. The HPI .15 was located in approximately the same place. It is important that the placement of the hole be far enough above the top edge of the motor mount for the points on the hex of the pressure fitting to clear. This may seem like a minor point, but these engines are rather small and sometimes 1/32" may make a lot of difference.

#4. Completely "wash and dry" the inside of the crankcase with a good cleaner. This is very important because the aluminum chips will not stick to the residue of oil that is in the engine. This should be done on all engines, both new and used.

- A. Once the exact location of the pressure fitting has been established and marked, lightly center punch.

REFER TO REPRINT OF ARTICLE IN **RC CAR ACTION** FOR FURTHER INSTRUCTIONS.

THIS STEP IS EXTREMELY IMPORTANT. Rotate the crankshaft so the piston is not visible below the bottom on the cylinder liner (when looking at the interior or the engine and the position of the rod is away from the hole(refer to drawing) that you are planning to drill.

#5. After the engine has been reinstalled in the car, install the carb and adaptor. Make sure that the "O" ring on the base of the manifold is snug against the crankcase while tightening the screw. In some installations it may be necessary to rotate the carb 90 degrees to align with linkage. It may be necessary to add a longer linkage wire that goes to the carb. In some cases it may be necessary to attach a ball link on the control arm. You may also need to put a small bend in the linkage, for alignment purposes. If your car has a slide barrel carb you may need to install a 90-degree "bell crank" which turns linear or sliding motion into rotary motion. These are available at most hobby shops and distributors. In most cases it can be mounted on the "top plate" of the car. This plate is usually supported by riser blocks from the frame (pan) of the car. I used one of these risers and just installed a longer screw through the bell crank. If a bell crank is used, it will be necessary to add an additional linkage rod.

#6. Connect all components together as per drawing inclosed

#7. Connect the "red" thick wall tubing from the pressure fitting on the engine to the bottom of the pump. Remember, it is very important to avoid any area that may "kink" this or any other fuel line. Also make sure to keep this tubing away from the muffler or exhaust pipe.

#8. DO NOT USE MUFFLER PRESSURE IN CONJUNCTION WITH THE PERRY PUMP. Plug the pressure outlet on the muffler by placing a very short length of fuel line tubing over the pressure tap and placing a small screw in the opposite end of the tubing.

#9. If you are running a new engine for the first time, try to avoid making any adjustments on either the idle disk or the high-speed needle. Run about 5 tanks of fuel through the engine then go through the adjustment process. Refer to instructions on carb adjustments included with your kit.

#10. If the engine does not seem to run correctly, after you have several tanks of fuel through the engine and the carburetor has been adjusted, try changing the glow plug. It seems like the first thing people want to do is adjust the carburetor. Even try different glow plug manufacturers. You may be surprised with the results. It may be necessary to