

INTRODUCTION

Now 2 cycle engines can be all you had hoped for. Gone are fuel tank location problems. Gone are engine destroying hot lean runs. Gone are power robbing rich runs needed to protect your valuable engine. Now you can set the engine needle valves for optimum efficiency and performance and it will deliver it throughout the entire run, no matter where the fuel tank is located!

HOW IT WORKS

The pump is so constructed that it draws fuel from the tank, passes it through a precision regulator section, then to the carburetor. Correct pressure to the carburetor is adjusted by the Hex Regulator Adjustment Screw on the plastic end of the pump. To increase fuel flow turn hex screw in, to decrease turn hex screw out. The pump is energized by engine crankcase pressure.

This pump is recommended for carburetors utilizing two needle valves, one for high speed and one for idle. Air-bleed carburetors and Perry non-pump Carburetors will run rich in the mid-range and are not recommended for use with this pump.

- Perry Large Bore pump Carburetors are available for most engines. They are designed to be used in conjunction with the VP Regulating pump to maximize your engines r.p.m. and power.
- The Model VP-30 (Blue Case) is intended for alcohol based fuels only.
- The Model VP-40 (Gold Case) is intended for gasoline or diesel fuel and for model airplane smoke units, etc.

***Always use a good non-corrosive element type fuel filter between the tank and pump inlet.**

Conley Precision Engines, Inc.

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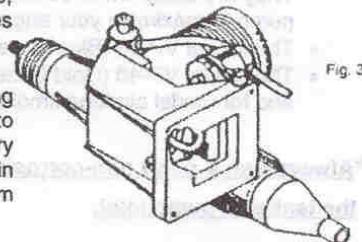
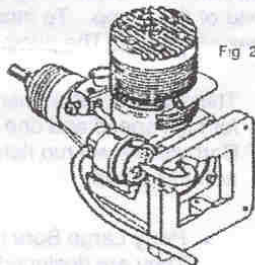
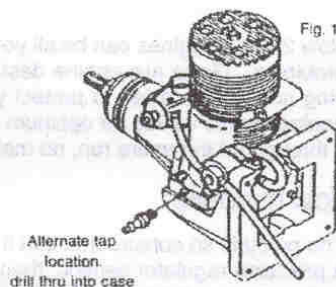
Visit our 1/4 scale V-8 engine web site:
www.Conleyprecision.com

For further information concerning all Perry products visit our web site:
www.perrypumps.com

Conley Precision can custom fit a carburetor for almost any engine.

1. INSTALLATION AND OPERATING INSTRUCTIONS

- A Crankcase Pressure Tap (fitting included) is necessary for the operation of the pump. This tap may be installed in the center of the engine crankcase back cover or horizontally in the center of the engine mounting lugs on either side of the engine. Drill through with a #36 drill and tap with a #6-32 tap after the back cover has been removed from the engine. Care should be taken that the installation does not interfere with the engine crankshaft or connecting rod and that all drill shavings, etc. are cleaned from the engine before reassembling.
- The pump is best mounted horizontally and on the same level (as close as possible) with the carburetor. The small vent hole in the side of the plastic housing should face down. Fig. 1, 2 & 3 show various methods of mounting.
- The pump may be secured to the engine, engine mount or firewall with a plastic clamp (included) or with silicone (RTV) cement. Be sure to clean both parts with alcohol before cementing. If the pump is not held in place, the pressure will vary as the pump moves around.
- Use only stiff semi-flexible urethane tubing (included) to connect the Crankcase tap to the fitting on the metal end of the pump. Try to keep this connection 4 inches or less in length. This is very important for maximum pumping action.



**** Design Change ****

After extensive input from customers the hex nut for adjusting fuel flow was replaced with a socket head set screw. This change allows for easier adjustments after the pump has been installed. All instructions remain the same with one exception, **DO NOT TURN THE SET SCREW LOWER THAN THE TOP SURFACE OF THE PUMP, OR INTERNAL DAMAGE WILL OCCUR. THIS DAMAGE WILL NOT BE COVERED BY WARRANTY.**

- USE ONLY THE TYPES OF FUEL RECOMMENDED FOR THE MODEL PUMP YOU HAVE:
Model VP-30 (Blue Case) for alcohol based fuels.
Model VP-40 (Gold Case) for gasoline or diesel fuels.
- Do not use muffler, pipe pressure, or any other form of pressure boost with this pump. Be sure the tank is properly vented.
- Prime the pump by first opening the high speed needle valve to a rich setting for your particular engine. Rotate the throttle arm to full high speed. Prime the pump by choking with your finger in the usual manner. After the fuel reaches the carburetor, turn the prop or flywheel about 3 additional turns. Close the throttle arm slightly above idle, connect the engine glow plug to a fully charged battery and start the engine. Advance the throttle arm to full open position. The engine should now be running excessively rich. If not, turn the pump regulator hex adjustment screw in until a rich mixture is achieved. **NOW LEAN THE ENGINE BY TURNING THE CARBURETOR HIGH SPEED NEEDLE VALVE IN UNTIL MAXIMUM SPEED IS OBTAINED.** Next adjust the idle by closing the throttle arm and adjusting the carburetor idle mixture disc.
- Do not turn the hex adjustment screw in closer than 1/32nd of an inch from the plastic housing as thread damage will result. Also, do not remove the hex adjustment screw, as the spring beneath it could escape unnoticed rendering the regulator inoperative.