



# OPERATING INSTRUCTIONS FOR ATD-3410 AIR OPERATED VACUUM PUMP

## OPERATING INSTRUCTIONS:

This pump is designed to evacuate unwanted air and moisture from the air conditioning system. A system that has been opened for repairs, or one that is found to be excessively low on refrigerant **MUST BE FULLY EVACUATED**, first by a recycling/recovery machine and then by a vacuum pump. If there is any refrigerant in the system, by law, it must be evacuated by a recovery or recycling machine. Only after the system has been emptied of refrigerant and the pressure in the system is around zero, can this air operated pump be used to deep vacuum the system.

## CONNECTING MANIFOLD:

1. Be sure that the hand valves on the manifold gauge set are in the closed position.  
**(ALWAYS WEAR GLOVES AND SAFETY GOGGLES WHEN WORKING WITH REFRIGERANT!!!)**
2. Remove the protective caps from the system ports.
3. Connect the Low side service hose (Blue) to the suction side of the compressor (see Schematic). Connect the High side service hose (Red) to the discharge side of the compressor. Make sure connections are secure.

## PUMP CONNECTIONS AND OPERATION:

1. To connect and operate the vacuum pump, first, connect the Service hose (Yellow) to the appropriate fitting on the front of the pump (labeled Vacuum). When one is ready to pull a vacuum, connect an appropriate air line to the back of the pump (labeled Air In). For maximum performance, **(the shop air compressor should be rated at 4.5 CFM with an output of 90 psi)**.
2. Open both hand valves on the manifold set. The low side gauge has a vacuum section reading in inches of Mercury. The dial on the gauge should fall below zero and continue to fall below 20 inches. **(The ultimate vacuum varies depending on altitude and shop air pressure)**.
3. In order to properly evacuate your A/C system, one should run the pump for approximately 10 minutes after the low side dial has

stopped.

4. Once lowest vacuum point has been obtained, close both high side and low side hand valves on the manifold. Let system stand for 5 minutes or longer and recheck reading on low side gauge. If system has lost vacuum, a leak exists. If reading is the same, no leak exists.

**\*\*Note no moving parts, no oil required,  
1.3 CFM air displacement venturi type pump.**

