ADJUSTING THE VALVE

Before operating the compressor, unscrew the plastic cover on the valve body. Note the adjusting knob. Counter-clockwise rotation decreases the pressure. Clockwise rotation increases the pressure. One turn should equal a 2-psi pressure change. Check that the valve is set in the "0" position. The "0" position is when the top thread on the valve adjustment knob is even with the valve body. See drawing below.

Start the compressor. The valve must be adjusted to a 0 to 2 psi reading on the low side gauge port. Be sure your gauge is set at O before hook-up. Allow several minutes between each adjustment. Moisture may form on the adjusting knob side of the valve and freeze causing the valve to malfunction. To prevent this, replace the cap after each adjustment. Be sure the valve is dry before final cap replacement. Operate for 30 minutes to confirm proper valve setting and operation.

The valve may need to be cleared of dirt or chips if adjustment is not possible. With the compressor running, turn the valve adjustment knob clockwise about 3 turns momentarily, and then back to the proper setting. Do not leave the valve in open position (allowing high backpressure) as this may cause the compressor to overload.

After satisfactory adjustment, turn off the thermostat. Remove the gauges. Recap the service ports. Replace the service panel. When the valve has dried, insulate the valve body (if it is outside the box) by wrapping it with foam and cork tape. This is to prevent condensation. Also insulate the one-foot section of 3/8" tubing that exits the cabinet. The valve need not be insulated if the valve is in the icebox.

Trouble shooting note: The operating pressure of the system will not indicate the amount of refrigerant in the system. The valve will not give proper operation or pressure if it is undercharged. Check the valve scribe line. It should correlate to gauge pressure.

The system requires enough refrigerant to supply liquid to the valve. If the valve has a steady hissing, then the charge is okay. If the valve is sputtering then it is low. If the valve is making a noticeable roar it is empty. If the low side pressure is properly set the high side pressure will be 80 to 135 psi. depending on the air temperature (50 to 95 degrees F.) through the unit. Almost immediately upon start up the valve body will begin to frost.