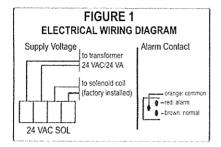
Kit ACB for Scroll Compressors

- Assure that there is no pressure in the compressor crankcase and unscrew the threaded fitting attaching the sight glass to the compressor.
 Take note of the original oil level since oil may be lost when the sight glass is removed. Tip the compressor to avoid oil loss if possible.
- Reuse the original seal between the threaded adapter and compressor. With the three hole flange ring installed on the adapter, screw the adapter into the compressor and torque to 18-22 ft.-lbs. Take care not to scratch the O-ring seal surface of the adapter.
- Using the O-ring and bolts provided, install the control unit to the adapter flange. The top of the control unit must be perfectly horizontal with the oil inlet fitting to the left. Torque the bolts to 120 in.-lbs.
- Connect the oil supply line to the ¼ inch male flare fitting. A cleanable strainer is incorporated into the fitting.
- 5. Make wiring connections in accordance with Figure 1. Important: The screw clamp style connector plugs used for the power supply and solenoid coil must be unplugged from the circuit board to gain access to the wire clamp screws. Use a small screwdriver to pry them outward.
- Assure there is proper oil level in the crankcase before restarting the compressor.



INSTRUCTIONS FOR FIELD CHANGEOUT OF OMA TO OMB OIL CONTROL

This instruction has been developed to minimize down time based upon actual field experience. Read through the entire instruction before proceeding with the change-out.

Tools Recommended: 7/16" nut driver; 7/16" open-end wrench; adjustable wrench; small slotted screwdriver; wire stripper; manifold gauge set; refrigeration valve wrench (Additional items which may be required depending on application: 1' of $\frac{1}{4}$ " refrigerant grade copper tubing. $2-\frac{1}{4}$ " brass flare nuts; flaring tool; 3/8" male flare by $\frac{1}{4}$ " female flare adapter; 3-electrical wire nuts).

- 1. Disconnect all electrical power to the compressor.
- Safely connect gauge bar hoses in the following sequence: discharge line to backseat port of an adjacent compressor service valve; common line to oil pressure port on crankcase of compressor on which control is to be changed; suction line to suction manifold on compressor rack. (Manifold valves should be closed.)
- 3. Close discharge, suction, and oil feed service valves on compressor.
- Open the gauge manifold discharge hand wheel to pressurize the crankcase to discharge pressure. (Important: Do not exceed allowable pressure limits set by the compressor manufacturer for the crankcase.)
- After pressurizing the crankcase to a safe pressure, close manifold gage discharge wheel.
- Open the gage manifold suction wheel to allow the high pressure in the crankcase to meter the oil into the suction manifold.
- After the oil is below the sight glass on the compressor crankcase, close the suction hand wheel and safely reclaim the remaining refrigerant pressure in the crankcase.
- After all the pressure is depleted in the crankcase, remove the existing oil control as follows:
 - A. Disconnect the electrical leads at the control and label each if wire color codes change.
 - B. Remove flexible conduit (if used) at the junction box.
 - C. Disconnect the oil supply line. Note: A new one may need to be fabricated, or an adapter required, if replacing an OMA with an OMB.
 - D. Remove the three flange mounting bolts which hold the control to the adapter and remove existing control.

- 9. Install supplied O-ring in the O-ring groove of the new control. Remove "knockout" from the junction box of the new control. On scroll compressors, install injection tube per diagram – note that it installs at a slight angle (see diagram). Thread tube in handlight and tighten ½ turn with a wrench or pliers.
- 10. With the solenoid off, mount and level the new control to existing adapter using (3) 1/4" x 20 TPI x 1" bolts. If replacing an OMA with an OMB, turn the ringed adapter flange approximately ¼ turn counterclockwise to provide the correct hole alignment for the OMB since the holes are not equidistant. (Important: Some older racks have a flange with an O-ring groove machined in it. Replace with the correct adapter for the application see catalog.) Be sure that the O-ring has not fallen out of the groove and tighten evenly to 40 in.-lbs.
- 11. Reconnect the oil inlet line.
- With pressure valved off, remove gauge manifold, cap ports, open service valves and check for leaks.
- 13.Reconnect electrical power following color code and install solenoid coil and power plugs. Note: Do not energize solenoid coil before replacing on enclosing tube.
- 14.Check that the green LED is on. Yellow LED should come on after about 10 seconds.
- 15.Check that the solenoid is energized and that the control is filling. (Note: If crankcase does not fill in 2 minutes, the red LED should come on.) (Solenoid remains on to continue filling.) If the alarm trips before the crankcase is filled to ½ sight glass, remove OMB power plug for several seconds and reinstall to reset alarm. Compressor should then fill to ½ sight glass and yellow "fill" LED should go out.
- 16.Restart the compressor using the reverse procedure to shutting it down.
- 17. Recheck for leaks and repair if necessary.

Important: Injection tube is not used on reciprocating compressors where the control is mounted directly to the crankcase.

LED Codes When Lit:

Green - 24 VAC power is supplied to OMB.

Yellow – Float sensor determined that the oil level has been below ½ sight glass for over 10 seconds. Fill solenoid has been activated. Red (continually lit) – Oil level has remained below ½ sight glass for over two minutes after fill solenoid has been activated. Alarm has been activated and compressor is prevented from operating until oil level reaches ½ sight glass when alarm automatically resets.

Red (flashing) – There have been five auto reset alarms registered within a 30 minute period. Alarm circuit is now locked on and compressor locked off. Fill solenoid is de-energized. Alarm remains locked in until 24 VAC power lead is manually unplugged and again plugged back into device.

Note: OMB units used on scroll compressors require the use of an injection tube this tube is shipped wired to the unit but not installed. It is to be screwed into the rear of the unit, and tightened hand tight plus one half turn. When properly installed, the tube will be at a slight angle relative to the OMB. See figure 2 below.

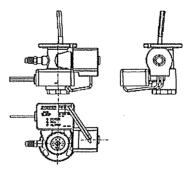


FIGURE 2

Note: Use of crimp type wiring connectors is highly recommended. If wire nuts must be used, taping joint after assembly with electrical tape is required.