INSTRUCTIONS and PARTS LIST for

**Oxweld**

**R-506**

**AIR REGULATOR**

Listed under Re-examination Service of Underwriters' Laboratories, Inc.

I. OPERATING INSTRUCTIONS

The R-506 Regulator is for regulation of oil-pumped air at a maximum inlet pressure of 300 psi. IT IS NOT FOR USE ON A CYLINDER.

A. To Connect

1. The regulator inlet connection nut has left-hand threads. Turn the nut to the left (counter-clockwise) when connecting the regulator to the supply source. Tighten the nut securely with a wrench.

2. The regulator outlet has left-hand threads. Securely connect the outlet to the hose or tubing which will convey the air to the point of use.

3. Make sure the regulator pressure-adjusting screw is fully released. To do this, turn it to the left (counter-clockwise) as far as it will go.

4. Before starting to work test all connections for leakage with a solution of soap and water.

B. To Adjust Pressure

To increase delivery pressure, turn the pressure adjusting screw to the right (clockwise). To decrease delivery pressure, turn the pressure-adjusting screw to the left (counter-clockwise).

C. Operating Hints

If the regulator is to be out of use for a few days or more, turn in the pressure-adjusting screw enough to move the valve stem off the seat. When the regulator is returned to service make sure the pressure-adjusting screw is fully released before pressure is admitted to the regulator.

Be sure this information reaches the operator. You can get extra copies through any Linde office.
II. MAINTENANCE INSTRUCTIONS

For all repairs and replacements other than those mentioned below send the regulator to the nearest Linde Company apparatus repair station. This can be done directly, or through your Linde distributor. The specific repair information shown on the parts drawing is provided only for experienced and qualified persons engaged in the repair of this type of apparatus. Improperly repaired apparatus may be hazardous.

A. Replacing the Valve Seat

1. Using a 1/8-in. Allen wrench, remove the socket-type screw from the inlet nipple. Be careful not to lose the spacer bushing and the valve closing spring; they will pop out when the screw is removed. The valve seat will fall out in your hand when the regulator is inverted.

2. When reassembling, hold the regulator at an angle so that the valve seat will slide into place. Replace the spring, spacer bushing, and screw in the nipple. Care should be used in starting the screw into the nipple so as not to cross the threads.

3. Attach the regulator to the air supply line, and screw the pressure-adjusting screw out as far as it will go. With line pressure on the regulator, test for valve leakage by placing a film of soapy water over the regulator outlet.

4. Block off the regulator outlet* and adjust the working-pressure to about 25 lbs. Using soapy water, test for leakage between the regulator cap and regulator body. Test the diaphragm for leakage by placing a film of soapy water over the two vent holes in the regulator cap.

* Use a standard “A” size hose nipple plugged by soldering or welding, and an “A” size hose connection nut.

C. Replacing the Filter

1. The filter is located within the socket-type screw in the regulator inlet nipple. To replace it you must replace the screw (see section A-1). Clogging of the filter is indicated by a no-reading or a very sluggish climb on the gauge.

D. Replacing the Pressure-Adjusting Screw

1. Insert two pieces of 1/4-in. drill rod in the vent holes of the regulator cap, and use them as handles for unscrewing the cap. Williams “Superior” Pin Spanner Wrench, Catalog No. 456, can also be used to unscrew the cap. Remove the spring washer, spring, diaphragm ring, and diaphragm.

2. Holding the body with the gauge face upward, replace the diaphragm, diaphragm ring, spring, and spring washer. Screw on the regulator cap, and tighten it with your hand.

3. Attach the regulator to the air supply line, making sure that the nut is tight. Insert drill rod in the vent holes of the regulator cap as before, and further tighten cap.

4. Screw the pressure-adjusting screw into the regulator cap as far as it will go.

5. To reassemble, screw the new pressure-adjusting screw into the regulator cap as far as it will go. Press the lock ring into place on the inner end of the pressure-adjusting screw.

The term OXWELD is a registered trade mark of Union Carbide Corporation.
Replacement Parts List

FOR
R-506 (Series 3)
PART NO. 04X48

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