SMALL TANK ACETYLENE REGULATORS

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<table>
<thead>
<tr>
<th>F.E.</th>
<th>Adjustable Pressure Regulators</th>
<th>Regulators Factory Preset at 7 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use</td>
<td>Single Outlet</td>
<td>With Delivery Gauge</td>
</tr>
<tr>
<td>With</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC Tanks</td>
<td>Type R-411-MC</td>
<td>R-411-MCD</td>
</tr>
<tr>
<td>Gas Tanks</td>
<td>Type R-411-B</td>
<td>R-411-BD</td>
</tr>
<tr>
<td>Part No.</td>
<td>04X36</td>
<td>05X02</td>
</tr>
</tbody>
</table>

1. Operating Instructions

If you do not understand the general principles of operation and safe practice to be followed while operating air-acetylene equipment, you should also read the booklet entitled PREST-O-LITE Air Appliances - How and Where to Use Them (F-9061). This booklet may be obtained free of charge from any Linde office, or from your PREST-O-LITE appliance dealer.

A. To Connect

1. Before attaching the regulator, use a PREST-O-LITE tank key (NEVER pliers) to open the tank valve slightly for an instant, then close it again. This blows out any dust or dirt which may be in the valve outlet. NEVER OPEN AN ACETYLENE VALVE NEAR HOT WORK, SPARKS, OR ANY OTHER POSSIBLE SOURCE OF IGNITION.
2. Attach the regulator to the tank valve. (The regulator inlet nut has a right-hand thread.) Tighten the nut with a wrench.
3. Attach the hose to the regulator outlet and to the torch or other appliance. (The connections have left-hand threads.) Tighten the connections with a wrench.
4. SLOWLY, open the tank valve about 1/4 turn. Stand to one side, not in front or in back of the regulator, when opening the valve.
5. Do not begin operations until you have checked all connections, including the packing nut on the tank valve, for leaks. Set the regulator for a working pressure of 10 lbs. per sq. in. (see section B for R-411 only), and use a soapy water solution to test connections.

B. To Adjust Working Pressure

(Disregard for R-415 Regulators)

1. Working pressure is adjusted by use of the pressure-adjusting screw. To increase working pressure, turn the pressure-adjusting screw to the right - clockwise. To decrease pressure, turn the screw to the left - counterclockwise.
2. To adjust the working pressure, move the pressure-adjusting screw with the desired pressure registers on the gauge. The first time you light the torch it may be necessary to adjust the pressure slightly.

If your regulator is equipped with a working pressure gauge, skip steps 3 and 4.

3. The pressure-adjusting screw has two flat-bottom grooves on which the lettered settings "A", "B", and "C" are marked at intervals of two turns. These settings serve the same purpose as a working-pressure gauge. Letter "A" represents the point at which gas begins to flow. Letters "B" and "C" represent approximate settings of 5 and 10 lb. per sq. in.
4. Since the distance from one lettered setting to the next is two full turns (approximately 5 lbs.) pressure settings between the letters are easy to determine. A full turn past "B" would give a setting of approximately 7-1/2 lb. per sq. in. A half turn past "B" would give a setting of approximately 11-1/4 lbs., etc.
5. When the desired working pressure is obtained for a particular operation, you may leave the pressure-adjusting screw at that setting as long as you are using the same appliance. If an adjustment becomes necessary because of small changes in operating conditions (such as changing of tips), it may be made by a slight turn of the pressure-adjusting screw.

NOTE: If the regulator is to be out of use for a few days or more, leave the pressure-adjusting screw turned in enough to move the valve seat off the seating surface of the body. A quarter turn beyond the "A" setting is generally sufficient. (Disregard for R-415 Regulators)

(See other side for Maintenance Instructions)
II. Maintenance Instructions

In normal use, only the valve seat, diaphragm and filter screw may need replacement. These parts are available with instructions for replacement in an inexpensive kit. We recommend that you buy and keep on hand one of these kits. Ask for PREST-O-LITE Acetylene Regulator Renewal Kit, Part No. 62708.

A. To Replace Valve Seat or Diaphragm
1. Insert two pieces of 1/4-in. drill rod in the vent holes of the regulator cap, and use them as handles to loosen the cap.
2. Remove the regulator from the tank.
3. Remove the regulator cap from the regulator. When unscrewing the cap, exert a downward pressure to counteract the spring pressure inside the cap. The downward pressure will keep the cap from "jumping off" the last thread.
4. Remove the spring cap, spring, diaphragm ring, and diaphragm.
5. Using a 1/8-in. socket key, remove the socket-type screw from the inlet nipple. Be careful not to lose the valve closing spring—it will pop out when the screw is removed. The valve seat will fall out in your hand when the regulator is inverted.

B. To Reassemble
1. Hold the regulator at an angle so that the valve seat will slide into position.
2. Replace the spring, 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 tank, and tighten the connection nut.
4. SLOWLY open the tank valve. Stand to one side— not in front or in back of the regulator, when opening the valve.

5. Place a film of soapy water around the valve seat pin which protrudes through the regulator body. Bubble formations indicate leakage past the valve seat. If the valve seat is new and appears to be clean and undamaged, leakage may be due to a damaged body. Send the regulator to your PREST-O-LITE dealer or the nearest Linde repair station for examination and repair.
6. If the valve seat leak test shows no leakage, shut off the tank and remove the regulator from the tank.
7. Replace the diaphragm, diaphragm ring, spring, and spring washer, in that order, in the front part of the regulator.
8. Screw the cap onto the body, hand tight. Press down, to overcome spring tension; and be careful not to cross the threads.
9. Attach the regulator to the tank, and tighten the connection nut.
10. Insert the drill rods into the cap, and tighten the cap securely.
11. Stand to one side of the regulator and SLOWLY open the tank valve.
12. Blank off the regulator outlet and test for leakage at the threads of the regulator cap, and at the two vent holes in the cap. *

C. Replacing the Filter
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-5). Clogging of the filter is indicated by a no-reading or a very sluggish climb on the gauge.