(This sheet covers use of PREST-O-LITE tips which attach directly to the 403 handle. Supplementary instructions are supplied with SWIRLJET air-propane and air-acetylene tips and with leak detectors.)

Connecting:
1. Attach a regulator to your acetylene or propane tank, following the instructions supplied with the regulator.

2. Connect a 3/16-in. hose assembly with 'A'-size left-hand-thread fittings to the regulator outlet and to the handle. Tighten the connection nuts with a wrench.

3. Close the shut-off valve on the 403 handle. Open the tank valve, set the regulator to deliver 10 psi (see instructions supplied with regulator) and check for leaks, using a thick solution of soap and water, at the points indicated on the adjoining sketch.

4. Then insert the tip (stem) into the locking nut at the front of the handle. Holding tip in position, tighten the locking nut by hand to lock the stem in place.

Lighting:
1. If you have set the regulator to 10 psi delivery pressure for testing, you may wish to reset it before lighting the flame, since only a few tips require a pressure that high. Unless you are sure 10 psi is needed, we suggest the regulator be reset for 5 psi ('B' setting) before you light your torch.

2. Having set or reset your regulator to 5 psi delivery pressure, open the needle valve on the 403 handle, and light the gas at the tip with a friction lighter.

3. After lighting the torch, adjust the flame size, if necessary, by changing the setting of the regulator pressure-adjusting screw or partially closing the torch needle valve.

Shutting Off:
1. For short intervals, merely close the needle valve on the torch handle.

2. For longer periods, or if you are going to leave the outfit unattended, close the tank valve as well as the torch valve.

Maintenance:
1. If the needle valve turns too freely, or there is gas leakage around the valve stem, tighten the valve stem packing nut. If leakage persists, replace the valve stem assembly (Part No. 09M24).

2. If the needle valve does not shut off

IMPORTANT: When using SWIRLJET tips, be sure to follow the pressure recommendations given in the instruction sheets supplied with those tips.

Be sure this information reaches the operator. You can get extra copies through your supplier.
completely, remove the valve stem assembly and wipe the seating surfaces on the stem and in the body with a clean cloth. If the valve stem is bent, or the seating surface nicked or marred, replace it with a new assembly (09M24).

3. The sealing 'O' ring located in the front end of the handle, behind the attaching nut, may require renewal periodically. Remove it by catching it with a scriber, or a stiff wire hook, and pulling it out. Squeeze a new ring (Part No. 85W64) into the head, and then push it evenly into the recess behind the locking nut with a blunt instrument.

4. Each torch tip (stem) is equipped with a filter-screw, which holds a mixer disc in place. If flow of gas through the tip appears to be restricted, remove the filter-screw with a 1/8 in. socket key ('Allen wrench') and replace both filter-screw and mixer disc.

Precautions and Safe Practices:
A. DON'T let acetylene or LP-Gas escape near any possible source of ignition. Accumulations of either in certain proportions may explode if ignited.
B. NEVER store acetylene or LP-Gas tanks (cylinders) in a closed or confined space, such as a closet, tool box, or automobile trunk.
C. NEVER solder a container that contains or has contained flammable liquids or vapors (including gasoline, benzene, solvents, and other similar or dissimilar materials) unless the container has been thoroughly purged of all traces of flammable material and vapors.
D. Before starting work always test for leaks around all joints with a soapy water solution.
E. NEVER use a flame to test for leaks of flammable gases.
F. NEVER use a tank with a leaking valve.
G. DON'T attempt any repairs to an acetylene or LP-Gas tank, except to tighten the packing-gland nut on the valve.

**PARTS DATA**

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<th>Tip No.</th>
<th>Type</th>
<th>Part No. (Complete)</th>
<th>Mixer Disk Part No.</th>
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**SWIRLJET' TIP PART NUMBERS**

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*Soldering Iron Tips:*
Chisel ..........23S20 Pointed..........23S32

**403 Handle Parts:**
Valve Stem Assembly ..........Part No. 09M24
“O” Ring ..........Part No. 85W64

**H.** DON'T abuse or drop tanks or handle them roughly.

**I.** NEVER use a tank as a roller. Never use a wrench or pliers on the tank valve. Always use a PREST-O-LITE valve key.

**J.** NEVER allow full tank pressure to enter the hose. Always use a regulator when there is a needle valve on the torch handle.

**K.** NEVER lay a torch down unless the gas flow has been shut off. If you want to maintain a pilot flame when you stop work for short intervals, provide a rack or stand for the torch, away from combustible materials. Do not leave it unattended unless you are sure there is no danger of its being disturbed by unauthorized persons.

**L.** Examine your hose for leaks frequently. Dipping it in a bucket of clean water, with the pressure in the hose, is the quickest and easiest way.

**M.** DON'T use hose that is worn, or any equipment that is in need of repairs.

**N.** DON'T start fires. Be very careful when working near combustible material.

**O.** Fuel gas tanks (cylinders) are equipped with fusible-metal safety devices. NEVER store tanks near radiators, furnaces, or other heat sources.

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**UNION CARBIDE CORPORATION**
**LINDE DIVISION**

F-9295-R 82-0628 12/72 50M Litho. in U.S.A.