IMPORTANT: With this torch (or any other appliance equipped with a needle valve) you must use a regulator, such as PREST-O-LITE R-411 or R-416. An instruction booklet is packed with each PREST-O-LITE Regulator. Before attempting to connect or operate a torch equipped with a needle valve, read the regulator instructions carefully. The instructions which follow supplement those contained in the regulator instruction sheet.

A. To Connect
1. Open the tank valve slightly for an instant only, to blow out dust or dirt from the valve outlet. Use a PREST-O-LITE tank key to open the valve. NEVER use pliers.
2. Connect the regulator to the tank valve. Tighten the nut securely with a wrench.
3. Connect a 3/16-in. hose assembly to the regulator and to the No. 401 handle. Tighten the connection nuts with a wrench.
4. Insert the tip into the handle locking nut. Hold the tip in position as you tighten the nut hand tight to lock the tip in place. DO NOT USE EXCESSIVE FORCE TO TIGHTEN THE TIP IN POSITION. If ordinary hand pressure is not sufficient to obtain a gas-tight seal and hold the tip firmly in position, return the handle and tip to your PREST-O-LITE dealer.

B. To Light
The valve on the No. 401 Handle is a dual purpose valve - it has two controls, one inside the other. The outer control is a thumb lever to turn the gas on and off (it does not adjust the flame size). The inner control is the pilot needle valve. The pilot valve may be adjusted to keep a small pilot flame burning at the stem tip when the shutoff valve is closed. To light the torch:
1. Be sure the shutoff valve and the pilot needle valve are closed.
2. Open the tank valve one turn, using a PREST-O-LITE tank key. NEVER USE PLIERS.
3. Adjust the regulator pressure-adjusting screw. Follow the directions in the booklet packed with the regulator. If you are using the No. 9 paint burner tip, set the regulator to deliver 10 psi. For SWIRLJET tips, be sure to set the pressure specified in the instructions supplied with the tips. For all other tips, a 5 psi setting will usually be satisfactory as a starting point.
4. Open the torch handle shutoff valve and light the gas at the stem tip. (Before attempting to light the No. 9 paint burner tip, allow gas to flow for a few seconds to clear all air from the hose.) Adjust the regulator pressure-adjusting screw to obtain the correct flame size.
5. To adjust the pilot flame:
   a. With the torch lit, open the pilot needle valve wide (the knurled knob).
   b. Slowly close the shut-off valve. The shut-off valve should never be 'snapped' off.
   c. Slowly close the pilot needle valve until the flame is as small as it can be made before it starts to smoke.
   d. Open the shut-off valve. The torch is ready to use.

NOTE: For every fine work, the pilot may be used as the working flame.

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.

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.

---

**TIP PARTS DATA**

<table>
<thead>
<tr>
<th>Tip No.</th>
<th>Type</th>
<th>Part No. (Complete)</th>
<th>Mixer Disk Part No.</th>
<th>Filter-Screw Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-A</td>
<td>Fine</td>
<td>638948</td>
<td>638783</td>
<td>34Y02</td>
</tr>
<tr>
<td>3</td>
<td>Light</td>
<td>10X23</td>
<td>150Z44</td>
<td>34Y02</td>
</tr>
<tr>
<td>4</td>
<td>Medium</td>
<td>10X24</td>
<td>150Z45</td>
<td>34Y02</td>
</tr>
<tr>
<td>5</td>
<td>Heavy</td>
<td>10X25</td>
<td>150Z46</td>
<td>34Y02</td>
</tr>
<tr>
<td>6</td>
<td>Extra-Heavy</td>
<td>10X26</td>
<td>-</td>
<td>34Y02</td>
</tr>
<tr>
<td>8</td>
<td>Soldering Iron</td>
<td>11X18</td>
<td>150Z20</td>
<td>34Y02</td>
</tr>
<tr>
<td>8-C</td>
<td>Soldering Iron</td>
<td>11X17</td>
<td>150Z20</td>
<td>34Y02</td>
</tr>
<tr>
<td>9</td>
<td>Paint Burner</td>
<td>10X29</td>
<td>150Z45</td>
<td>34Y02</td>
</tr>
<tr>
<td>10</td>
<td>Multiflame</td>
<td>10X36</td>
<td>150Z44</td>
<td>34Y02</td>
</tr>
</tbody>
</table>

*Uses filter screen 85Z52

**SOLDERING IRON TIPS:**

Chisel ..........23S20 Pointed..........23S32

---
MAINTENANCE NOTES

HANDLE

1. To Replace Handle Casing. Remove jam nut (37Z67) and pull casing back off handle. Align new casing so that pin projecting from torch body fits into recess in casing. If necessary, lightly tap the casing with block of wood and hammer to fit it into place.

2. To Replace 'O' Sealing Ring (85W64) in Head. Use a scriber or wire with a hook on the end of it. Hook into the 'O' ring and pull it out through the nut which locks the stem in place. Squeeze the new ring down into the recess under the nut.

3. To Disassemble Shutoff Valve. Using a 1/16-in. Allen wrench remove setscrew (6123-0848) and lift off thumb lever (24Z85). Unscrew needle valve stem (48Z40). Unscrew valve screw (35Z85). Always replace ‘O’ sealing rings with new ones, being especially careful to replace the smaller one in the groove provided for it.

To Reassemble Shutoff Valve:
   a. Connect the handle to a tank of PREST-O-LITE acetylene. (Use a regulator so that the pressure can be reduced to 10 lb.)
   b. Screw the valve screw (35Z85) into the body (fingertight) as far as it will go. Screw the valve stem (48Z40) all the way into the valve screw.
   c. Immerse front body of the handle in water and adjust the regulator to 10 lb. delivery pressure.
   d. If a bubble appears, screw the valve tighter into the handle body until the leakage stops.
   e. Back out the valve screw, very carefully, until a bubble slowly forms.
   f. Connect a torch stem to the handle.
   g. Position the thumb lever on the valve screw at an angle of 90 deg. to the handle. Lock the lever in place by tightening the setscrew.
   h. Light the torch and test the shutoff valve and pilot needle valve to be sure they are working properly.

TIPS

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.