

# SURE FLAME

## Models ST2 and ST3 Propane Torches



### Specification

Model	Inlet Pressure	Capacity	Orifice Size
ST2	5 to 40 psig (35 to 276 kPa)	50,000 to 200,000 btu/h (15 to 59 kW)	54 dms
ST3	5 to 40 psig (35 to 276 kPa)	90,000 to 375,000 btu/h (27 to 110 kW)	49 dms

### Warning

Read this notice before operating torch

This torch uses LP-Gas (Propane). Propane is **EXTREMELY FLAMMABLE AND EXPLOSIVE** and can result in **DAMAGE** or **LOSS TO PROPERTY, SERIOUS PERSONAL INJURY, OR DEATH**.

If you **SEE, SMELL** or **HEAR ESCAPING GAS**, **IMMEDIATELY EVACUATE THE AREA, CONTACT YOUR LOCAL FIRE DEPARTMENT** and IF **SAFE TO DO SO, CLOSE THE PROPANE SUPPLY**.

**DO NOT** use this torch in an enclosed area  
**DO NOT** supply liquid fuel to this torch  
**DO NOT** store propane in buildings or other enclosed areas

Sure Flame Torch Models ST2 and ST3 **MUST ONLY BE USED OUTDOORS**.

**TORCHES MUST NEVER BE USED AS BUILDING SPACE HEATERS.**

**AFTER** attaching torch to LP-Gas (propane) fuel supply **AND BEFORE LIGHTING**, check all fittings and joints with water and soap solution to ensure there are no leaks.

When lighting the torch, always apply lighter **BEFORE** opening propane supply valve. Propane is heavier than air and will settle to the floor.

Once the torch is lighted, it **MUST NEVER BE LEFT UNATTENDED** AS **DAMAGE OR LOSS TO PROPERTY, SERIOUS PERSONAL INJURY, OR DEATH** MAY RESULT.

Consult your local authority having jurisdiction over torch connections and use with a propane regulator. Contact your propane supplier for more information on the use and hazards of this fuel.

### Connecting to Fuel Supply

Use only a vapor withdrawal propane cylinder with this torch. Inspect the torch, hose, regulator, and POL fitting to ensure they are not damaged. Ensure that the O-ring is in place on the POL fitting. Attach the fitting to the cylinder by turning it counter clockwise. Tighten with a wrench, but do not over tighten.

If the torch was purchased without a regulator, be sure to install a regulator set within the pressure range indicated on the torch's specification decal.

Once all connections have been tightened, ensure that the valve on the torch is closed, then slowly open the valve on the tank. Opening the valve too quickly will activate the check valve in the POL fitting to close and restrict the flow of propane to the torch.

Check all connections with a soap and water solution. If bubbles form, turn off the propane, fix the leak, and retest.

### Lighting Instructions

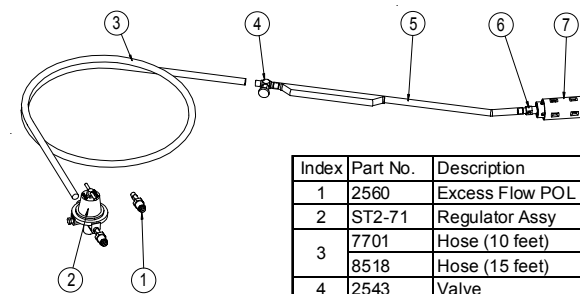
After connecting to the fuel supply and testing for leaks, apply the lighter to the end of the burner and slowly open the valve on the torch.

To turn off the torch, turn off the valve at the propane cylinder and let the fuel in the hose burn out. Then turn off the valve on the torch. Do not place the hot torch head on combustible material.

### Maintenance

Ensure torch, hose, regulator, and POL fitting are protected from damage both during use and while in storage. Examine hose and POL fitting before each use. Replace hoses that are damaged or show excessive wear. Make sure the POL fitting is not damaged and that the O-ring is in place.

### Parts Diagram



Index	Part No.	Description
1	2560	Excess Flow POL
2	ST2-71	Regulator Assy
3	7701	Hose (10 feet)
	8518	Hose (15 feet)
4	2543	Valve
5	ST2-51	Handle
6	2559	Orifice (ST2)
	ST3-101	Orifice (ST3)
7	BV1-51	Burner (ST2)
	BV3-51	Burner (ST3)

### Important Safeguards

When using torches, basic safety precautions should always be followed:

#### a) READ ALL INSTRUCTIONS.

b) Before using, check all parts for proper function and damage to component parts.

c) Do not use this torch to heat, mold or bend plastic sheets, moulding or tubing.

d) "Hidden areas such as behind walls, ceilings, floors, soffit boards and other panels may contain flammable materials that could be ignited by the heat gun when working in these locations. The ignition of these materials may not be readily apparent and could result in property damage and injury to persons. When working in these locations, keep the torch moving in a back-and-forth motion. Lingering or pausing in one spot could ignite the panel or the material behind it."

e) Do not use this torch to remove paint (if the torch can be used to remove paint, items (f) and (g) below shall be used).

f) **WARNING:** Extreme care should be taken when stripping paint. The peelings, residue and vapors of paint may contain lead, which is poisonous. Any pre-1977 paint may contain lead and paint applied to homes prior to 1950 is likely to contain lead. Once deposited on surfaces, hand to mouth contact can result in the ingestion of lead. Exposure to even low levels of lead can cause irreversible brain and nervous system damage; young and unborn children are particularly vulnerable. Before beginning any paint removal process you should determine whether the paint you are removing contains lead. This can be done by your local health department or by a professional who uses a paint analyzer to check the lead content of the paint to be removed. **LEAD-BASED PAINT SHOULD ONLY BE REMOVED BY A PROFESSIONAL AND SHOULD NOT BE REMOVED USING A TORCH.**

g) Persons removing paint should follow these guidelines:

- Move the work piece outdoors.
- Children, pregnant or potentially pregnant women and nursing mothers should not be present in the work area until the work is done and all clean up is complete.
- Wear a dust respirator mask or a dual filter (dust and fume) respirator mask which has been approved by the Occupational Safety and Health Administration (OSHA), the National Institute of Safety and Health (NIOSH), or the United States

Bureau of Mines. These masks and replaceable filters are readily available at major hardware stores. Be sure the mask fits. Beards and facial hair may keep masks from sealing properly. Change filters often. **DISPOSABLE PAPER MASKS ARE NOT ADEQUATE.**

- Use caution when operating the heat gun. Keep the heat gun moving, as excessive heat will generate fumes, which can be inhaled by the operator.
- Keep food and drink out of the work area. Wash hands, arms and face and rinse mouth before eating or drinking. Do not smoke or chew gum or tobacco in the work area.
- Clean up all removed paint and dust by wet mopping the floors. Use a wet cloth to clean all walls, sills and any other surface where paint or dust is clinging. **DO NOT SWEEP, DRY DUST OR VACUUM.** Use a high phosphate detergent or trisodium phosphate (TSP) to wash and mop areas.
- At the end of each work session put the paint chips and debris in a double plastic bag, close it with tape or twist ties and dispose of properly.
- Remove protective clothing and work shoes in the work area to avoid carrying dust into the rest of the dwelling. Wash work clothes separately. Wipe shoes off with a wet rag that is then washed with the work clothes. Wash hair and body thoroughly with soap and water.

#### h) SAVE THESE INSTRUCTIONS

**SURE FLAME** PRODUCTS

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