



# Instruction Manual





# **Pre-operation Checklist**

Before you begin, the following routine checks and safety inspections should be made prior to using the Inferno-X Torch Adapter:

- ✓ Be sure to use the correct OEM style adaptor for your torch.
- Check that the adaptor nut is tight on the torch head.
- Be sure burning bars are properly seated against the internal washer. Use correct size brass collet with rod size being used.
- ✓ Check for oxygen leaks. DO NOT USE A LIGHTER!
- Check for proper oxygen flow through lines and burning bar prior to ignition.
- ✓ Be sure brass collet nut is tight. Do not overtighten with a wrench.
- ✓ Be sure hand shield is intact and undamaged.

# **Safety Precautions**

- Read and understand all operating procedures.
- Keep head away from fumes.
- Use adequate ventilation and exhaust at the work place to keep fumes and gases from general area and breathing zone.
- Special care should be taken when cutting plated, galvanized or painted parts to avoid exposure to toxic fumes.
- Perform all work in an area free of combustibles.
- Be sure to use only Inferno-X burning bars with the Inferno-X.
- Be sure you are well informed of the proper use and applications of this product.
- Observe all safety precautions associated with standard gas cutting torch operations.
- Wear appropriate gear associated with standard gas cutting torch operations.
- For extra protection, it may be necessary to wear a respirator.
- DO NOT use electricity to ignite Inferno-X.

### PROTECT YOURSELF AND OTHERS

FUMES AND GASES CAN BE DANGEROUS TO YOUR HEALTH

**EXOTHERMIC ARCS CAN INJURE EYES AND BURN SKIN** 



# **Initial System Assembly**

## **EQUIPMENT NEEDED**

- Inferno-X Torch Kit and Burning Bars
- Standard Gas Cutting Torch Setup

#### TORCH HOOKUP

- Turn off both oxygen and fuel gas cylinders.
- 2. Purge torch and hose of oxygen and fuel gas.
- 3. Disconnect fuel hose from torch.
- 4. Remove cutting tip from torch.
- 5. Place Inferno-X adaptor into torch head and tighten with a wrench, as you would a cutting tip.
- 6. If using optional shield, attach it to collet nut.
- 7. Place rubber washer into adaptor.
- 8. Place collet into adaptor.
- Place collet nut onto adaptor and leave it loose.
- 10. Insert Inferno-X burning bar *crimped end* fully into collet.
- 11. Firmly tap open end of burning bar on hard surface in order to seal it against the rubber washer inside the adaptor.
- 12. Hand tighten collet nut. *Tightening with a wrench may damage the washer.*
- 13. Open oxygen cylinder valve slowly. When high pressure gauge indicates maximum pressure, open cylinder valve fully.
- Adjust regulator to the working pressure recommended in the following table.

OPTIMAL OPERA	ATING PRESSURES
Bar Thickness	Pressure Range
3/16"	40-60 PSI
1/4"	45-60 PSI
3/8"	60-80 PSI

All rods can work at up to 120 PSI if necessary.

## **Ignition**

Only tube igniters are supported by Flame Tech, for use with igniting the Inferno-X torch adaptor.

# DO NOT USE ANY ELECTRICAL IGNITION SYSTEM TO IGNITE THE INFERNO-X

- Ignite open end of cardboard tube igniter with a match.
- 2. Place end of burning bar 4 inches inside of the tube igniter.
- Slowly squeeze oxygen lever so a small amount of oxygen flows.
- 4. Oxygen will enhance heat and ignite burning bar.

## **Operation**

Bring rod to work piece and fully depress oxygen lever. You may now proceed with the job. Releasing oxygen lever will cause the torch to stop burning. See cutting guidelines on the next page.

# ALWAYS BE CERTAIN RUBBER WASHER IS IN PLACE BEFORE OPERATING INFERNO-X TORCH

### DO NOT USE INFERNO-X TORCH FOR UNDERWATER CUTTING

## FLAME TECH®

## **General Cutting Guidelines**

It should be noted that once ignited, the Inferno-X Torch will continue to burn as long as oxygen is supplied to the burning bar. Pull the burning bar away from work piece before stopping the torch.

- 1. Always start a cut on an exposed edge of material. If this cannot be done, see the section on piercing.
- 2. Be sure the burning bar is ignited before beginning an actual cut. Be certain that hoses are clear of the cutting torch.
- 3. Always cut by pulling the torch toward you.
- 4. Be sure the burning bar has cut completely through material (if appropriate) before moving on.

## Gouging Procedures for the Inferno-X Torch

Gouging techniques should be very similar to the ones used in carbon arc gouging—a sawing motion.

## Piercing Procedures

- 1. Slightly depress oxygen lever and place rod against work piece to make a little dimple.
- 2. Fully depress oxygen and pierce work piece.
- 3. While piercing, slightly move the rod in and out. This will allow the oxygen pressure to blow away the molten material.

# **End of Day Shutdown**

When ending a job, the following procedure should be used.

- 1. Release the oxygen lever to stop the torch.
- 2. Shut off the oxygen cylinder.
- 3. Blow out the oxygen line by squeezing the oxygen lever on the holder.

4. Loosen collet nut.

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- 5. Remove used burning bar from holder.
- 6. Hand tighten collet nut, so as not to lose it.

Components	
78058001	Adapter, Victor® Compatible
78058002	Adapter, Airco® Compatible
78058003	Adapter, Harris® Compatible
78058004	Adapter, Smith® Compatible
78058005	Adapter, Oxweld® Compatible
78058021	Collet, for 3/8" Bar
78058022	Collet, for 1/4" Bar
78058023	Collet, for 3/16" Bar
78058025	Burning Bar Tube Igniter 30 Pieces
78058030	Washer, Rubber, 1/4" × 3/8"
78058041	Inferno-X Adapter Shield
<i>7</i> 8058051	Burning Bar, 3/16" × 21-3/4" 25 Pieces
78058061	Burning Bar, 1/4" × 21-3/4" 25 Pieces
<i>7</i> 80 <i>5</i> 8081	Burning Bar, 3/8" × 18" 40 Pieces

PARTS REFERENCE

## Complete Kits

78058085

78058091

INF-X-V-KIT Inferno-X kit to convert Victor® compatible torches INF-X-A-KIT Inferno-X kit to convert Airco® compatible torches INF-X-H-KIT Inferno-X kit to convert Harris® compatible torches INF-X-S-KIT Inferno-X kit to convert Smith® compatible torches INF-X-O-KIT Inferno-X kit to convert Oxweld® compatible torches

Burning Bar, 3/8" x 36" 20 Pieces

Burning Bar, 3/8" x 48" 50 Pieces

#### Each Kit Includes\*

1 torch adaptor (for OEM requested); 3 total collets (1 each of sizes 3/8," 1/4", 3/16"); 6 rubber washers; 1 shield

\*Tube ignitors sold separately.

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