



## INSTRUCTION LEAFLET

# Nozzle for MAPP Gas Canister

This Operating Manual has been designed to instruct you on the correct use and operation of your product. Your satisfaction with this product and its safe operation is our ultimate concern. Therefore, please take the time to read the entire manual, especially the Safety Precautions. They will help you to avoid potential hazards that may exist when working with this product.

### WARNING

Read and understand this entire Manual and your employer's safety practices before installing, operating, or servicing the equipment. While the information contained in this Manual represents the Manufacturer's judgement, the Manufacturer assumes no liability for its use.

### TABLE OF CONTENTS:

<b>SECTION 1.</b>	<b>GENERAL SAFETY INFORMATION</b>
<b>SECTION 2.</b>	<b>TORCH ASSEMBLY</b>
<b>SECTION 3.</b>	<b>LIGHTING THE SANDARD AIR/FUEL TORCH</b>
<b>SECTION 4.</b>	<b>OPERATING THE AIR/FUEL TORCH</b>
<b>SECTION 6.</b>	<b>Nozzle CLEANING</b>

### WARNING

DO NOT attempt to use this apparatus unless you are trained in its proper use or are under competent supervision. For your safety, practice the safety and operating procedures described in this booklet every time you use the apparatus. Deviating from these procedures may result in fire, explosion, property damage, and/or operator injury. If at any time the apparatus you are using does not perform in its usual manner or you have any difficulty in the use of the apparatus, STOP using it immediately. DO NOT use this apparatus until the problem has been corrected.

**WARNING:** This product contains chemicals, including lead, or otherwise produces chemicals to cause cancer, birth defects and other reproductive harm. Wash your hands after handling.

## SECTION 1

### GENERAL SAFETY INFORMATION

#### WARNING

Some kits contain extremely flammable fuel under pressure. Keep away from heat and flames. Read the warning on the containers carefully.

#### WANING

Always use the torch in a well-ventilated working area to avoid possible health hazards from the fumes and smoke.

Torches consume oxygen while in use. Oxygen, which is necessary to support life, may be depleted when used in a confined working space.

Brazing and soldering may produce fumes and gases which may be hazardous to your health. Avoid breathing in these fumes and gases. Read and follow safeguards for all soldering and brazing materials.

1. Keep combustibles away from the flame. Keep an approved fire extinguisher of the correct size and type in the working

area. The fire extinguisher is to be inspected on a regular basis therefore ensuring that is in a proper working order. Also ensure that all staff know how to operate the fire extinguisher.

2. It is imperative to ensure that all staff that operate this apparatus wear eye protection gear and gloves at all times.

#### WARNING

This is a flame producing device using liquefied fuel gas under pressure. Improper assembling, abuse or misuse may allow the fuel to leak. Before operating this apparatus ensure that all connections are checked for leakage by using a soapy-water solution. Do this away from the flame, sparks or spark producing devices. DO NOT use flames to test for leaks, retighten and check again. DO NOT use if the leak cannot be repaired. Return this apparatus to your place of purchase. When you disconnect equipment from the fuel cylinder, do so away from flames, sparks or smoking materials.

3. Remember the torch tip and workplace may be HOT so avoid touching this.
4. DO NOT under any circumstances store the cylinders in your home or in a closed or confined space, near open flames, heaters or in direct sunlight.
5. It is imperative to ensure that this cylinder and torch are not dropped, or handled roughly. This is also not be used as a support for anything, and it is not to be rolled across the floor.
6. A lit torch is never to be left unattended.
7. Ensure that children are kept away from this equipment at all times.

#### WARNING

It is imperative that this cylinder is never in an upside down or horizontal position, as the will cause the flame to flare and sputter. If this does occur, immediately turn the cylinder right side up or turn it off. Once the liquid has burned off or evaporated then the torch will be operational again.

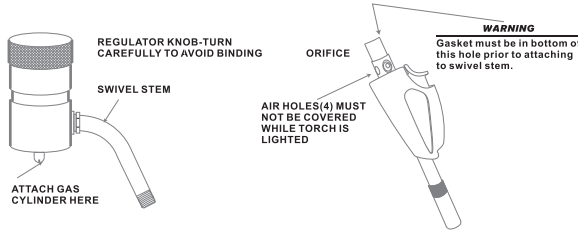
8. It is imperative to check inside the threaded hole at the base of the torch tip to ensure that the small gasket is in place at the bottom of the hold (Figure 1).
9. Before proceeding check to see that the regulator knob is in the OFF position.
10. Light standard (non-automatic lighting) tips only with a spark lighter due to the high velocity swirl combustion of this torch.
11. Always ensure the regulator is disconnected from the tank when not in use.

#### WARNING

Altering or tampering with the equipment could cause a fire or explosion.

12. DO NOT allow the fuel cylinder pressure to enter the hose. Always use a regulator to reduce pressure.
13. DO NOT lay the torch down unless the gas flow has been shut off.
14. Ensure that the hose is checked regularly by. You can dip the hose in a bucket of clean water to check for leaks.
15. It is imperative to never use a worn hose or any equipment that is in need of repairs.

- Use a "Cylinder Base" to prevent the torch and cylinder from toppling over.
- High flow torches such as the fuel tip may cause the cylinder to be overdrawn. This condition is noticeable by a weak flame and top overheating. If you experience this it is imperative to discontinue use until the cylinder has returned to its normal pressure.
- Never apply heat to a container that contains toxic, combustible or flammable liquids or vapours.



**FIGURE 1: TIP/REGULATOR ASSEMBLY**

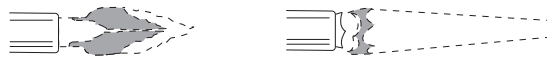
## SECTION 2 TORCH ASSEMBLY

- Ensure that the tip is screwed into the swivel tightly (Figure 1). A wrench is not to be used to do this. The air/fuel snake torch is to be assembled by hand and the hose to torch with a wrench.
- Before attaching the regulator to the tank, ensure that the regulator knob is in the OFF position. Do not force this process because it will cause the knob to bend.
- Screw the regulator assembly over the fitting on the top of the gas cylinder. Press down, turn, clockwise and tighten by hand. DO NOT use a wrench or any other tools to tighten this.
- Check for leaks before lighting the torch. Use a soapy water solution as instructed.

## SECTION 3 LIGHTING THE STANDARD AIR/FUEL TORCH

- To light standard tips, turn the regulator on (counter clockwise), cup the spark lighter over the torch tip in order to collect the gas (Figure 1).
- Always use a spark lighter to light the torch.
- The ignition button can be switched on for automatic lighting.
- Once the torch is lit the regulator is to be adjusted.

**NOTE** It is essential to wear ear protection gear when the torch is lit. Due to a very high performance of air/fuel when torch is lit.



**CORRECT ADJUSTMENT**  
Compact flame-dark blue points extending from tips about 1" ~ 1-1/4" beyond end of tip. Tip remains cool.

**TOO LITTLE GAS**  
Soft flame-pressure too low to achieve proper mix. Tip will overheat. Darker blue portion of flame barely visible from end of tip. Flame pink in colour.

**TOO MUCH GAS**  
Darker blue portion of flame comes out from tip. Combustion taking place beyond flametube.

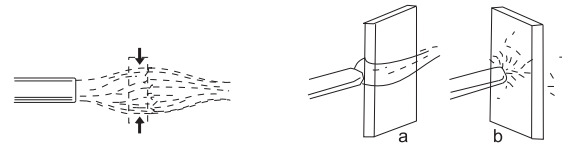
**FIGURE 2: FLAME SETTING**

**FIGURE 2: FLAME SETTING**

## SECTION 4 OPERATING THE AIR/FUEL TORCH

- Tip interchangeability: Other tips are available for the air/fuel torch, but it's imperative to use genuine replacement parts of the same brand. Ensure that the sealing gasket is in place before lighting the torch. (Figure 1)
- Heating Technique: the maximum heat zone of the air/fuel tip is very concentrated and is located between 1 and 2 tip diameters away from the end of the tip (Figure 3). If you hold the torch too close or too far awash, there will be noticeably less heat. The angle at which the heat is applied can also increase the target heat (Figure 4).
- Temperature Control: In order to reduce the heating effect of the air/fuel torch move the flame further away from the target. Ensure that the correct fuel is used. Use smaller tips – if not included in your kit, smaller tips are available as an option.

**NOTE:** Do not lower regulator pressure to reduce heat output, this will cause the tip to overheat.



**FIGURE 3: MAXIMUM HEAT ZONE**

**FIGURE 4: HEAT ANGLE**  
a.) To obtain maximum target heat  
b.) Less effective heating angle

## SECTION 5 NOZZLE CLEANING

If you experience a clogged or partially blocked Nozzle, it can be cleaned as follows (Figures 5,6)

**NOTE:** Do not attempt to clean the Nozzle with a wire or any other object. This will cause the hole to become enlarged and inhibiting the tip to work correctly.

- Make sure that the regulator is off, then remove the tip(s), the fuel cylinder is to be left attached to the regulator.
- The gasket(s) are to be removed by using a pick or a small bent wire, remove the Nozzle from the tip(s) using an 1/8" (0.3cm) hex wrench.
- Screw the Nozzle into the end of the swivel stem on the regulator.
- The gas can be turned on in short bursts away from the flat, sparks or smoking materials. The pressure will blow the Nozzle clean.
- Remove the Nozzle from the regulator swivel stem. Replace tips and gasket, if using the dual tip attachment, you must repeat this procedure for each Nozzle.
- Recheck for leaks before lighting the air/fuel torch.



**FIGURE 5: UNCLOG NOZZLE**  
To unclog Nozzle, first remove it from tip.

**FIGURE 6: SCREW NOZZLE**  
Screw Nozzle into swivel stem and turn on gas.