

GROUP:	GAS TORCH
CODE:	GT5
CATEGORY:	GAS



FEATURES:

- Quick Self Lighting
- Swirl Flame
- Flame Control
- Tip Swivels 360 Degrees
- High Temperature
- Faster Soldering
- Safety Lock





SELF-LIGHTING HAND TORCH GT5



Safety and Operating Instructions

WE APPRECIATE YOUR CHOICE!

This Operating Manual has been designed to instruct you on the correct use and operation of your RTM 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 judgment, the Manufacturer assumes no liability for its use.

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SECTION

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INTRODUCTION

This booklet is a guide to the safe and efficient operation of a propane, MAPP, and MAP//Pro brazing / soldering apparatus. If the apparatus is not used in a propane, MAP/Pro or MAPP brazing/soldering application, the operator must follow those safety and operating procedures that do apply to that particular application, Read this booklet thoroughly and carefully before operating this equipment. A system of notes, cautions, and warnings emphasize important safety and operating information in this booklet. These are:

NOTE conveys installation, operation, or maintenance information which is important but not hazard-related.

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in injury.

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

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 the apparatus until the problem has been corrected!

WARNING Service or repair of apparatus should be performed only by a qualified repair technician capable of servicing gas apparatus in strict accordance to applicable Part and Service bulletins for RTM manufactured products. Improper service repair or modification of the product could result in damage to the product or injury to the operator.

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

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SECTION

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GENERAL SAFETY INFORMATION

Read and understand all safety and operating instructions provided before using this apparatus.
RETAIN THESE INSTRUCTIONS NEARBY FOR FUTURE REFERENCE.

2.01 FIRE PREVENTION

Welding and cutting operations use fire or combustion as a basic tool. The process is very useful when properly controlled, However, it can be extremely destructive if not performed correctly in the proper environment:

1. The work area must have a fireproof floor.
2. Work benches or tables used during welding or cutting operations must have fireproof tops.
3. Use heat resistant shields or other approved material to protect nearby walls or unprotected flooring from sparks and hot metal
4. Keep an approved fire extinguisher of the proper size and type in the work area. Inspect it regularly to ensure that it is in proper working order. Know how to use the fire extinguisher.
5. Move combustible materials away from the work site. If you cannot move them, protect them with fireproof covers.

WARNING NEVER perform welding, heating, or cutting operations on a container that has held toxic, combustible, or flammable liquids, or vapors. NEVER perform welding, heating, or cutting operations in an area containing combustible vapors, flammable liquids, or explosive dust. NEVER perform welding, heating, or cutting operations on a closed container or vessel, which may explode when heated.

2.02 VENTILATION

WARNING Ventilate welding, heating, and cutting work areas adequately to prevent accumulation of explosive or toxic concentrations of gases. Certain combinations of metals, coatings, and gases generate toxic fumes. Use respiratory protection equipment in these circumstances, when welding/brazing, read and understand the Material Safety Data Sheet for the welding/brazing alloy.

2.03 PERSONAL PROTECTION

Gas flames produce infrared radiation which may have a harmful effect on the skin and especially on the eyes. Select goggles or a mask with tempered lenses shaded 3 or darker to protect your eyes from injury and provide good visibility of the work. Always wear protective gloves and flame resistant clothing to protect skin and clothing from sparks and slag. Keep collars, sleeves and pockets buttoned, DO NOT roll up sleeves or cuff pants,

SECTION

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TORCH ASSEMBLY

1. Be sure the Trigger Lock is in the "OFF" position (Figure 6).
2. Install a Propane, MAPP, or MAP//Pro container into the inlet connections of the torch. Hold torch and tank upright; install tank into torch inlet connection by turning tank counterclockwise until it is attached securely (Figure 2). Check connection for leaks.

WARNING This is a flame producing device using liquefied fuel gas under pressure. Improper assembly, abuse, or misuse may allow the fuel to leak. Before using, check all connections for leaks using a soapy-water solution. Do this away from flames, sparks or spark producing devices. DO NOT use flames to test for leaks. Test with pressure on low for no more than 30 seconds at a time. If a leak is detected, retighten and check again. DO NOT use if the leak cannot be corrected. Return to place of purchase. When disconnecting equipment from a fuel cylinder, do so away from flames, sparks or smoking materials.

NOTE The use of acetylene or any fuel gas other than MAPP, MAP//Pro, or Propane with this torch may cause a fire or explosion, Use either 14,1 oz. Propane, 14,1 oz, MAP//Pro, or 16oz. MAPP cylinder with the torch. Read and follow the instructions on the cylinder labels before using.

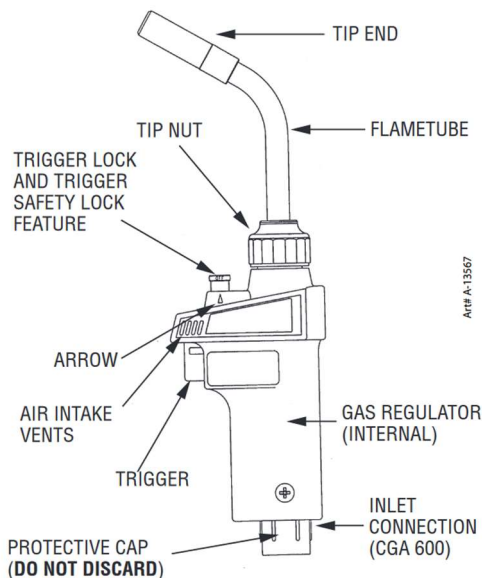


Figure 1: Hand Torch Identification

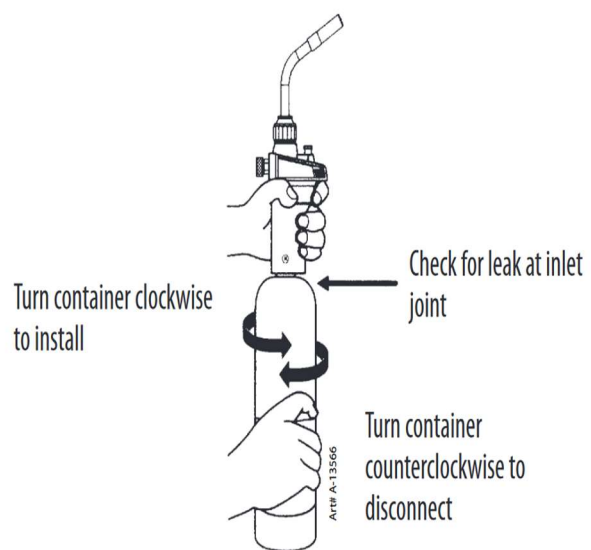


Figure 2: Assembly and Disassembly

LIGHTING THE TORCH

1. Squeeze trigger slowly, allowing gas to flow into Flametube. Continue to squeeze trigger until torch lights.
2. If torch does **NOT** light, squeeze trigger again

WARNING Torch lights instantly and can ignite combustibles and / or cause severe burn.

NOTE! Extremely low or high flame settings are hard to ignite. A low flame setting will cause the Flame tube to overheat.

Figure 3: Flame Settings



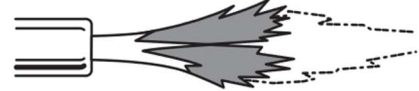
CORRECT ADJUSTMENT:

Compact flame - dark blue points extending from tip about 1-1/2 tip diameters 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 color.



TOO MUCH GAS:

Darker blue portion of flame comes out from tip. Combustion taking place beyond flametube.

OPERATING THE TORCH

1. **Tip Interchangeability:** Other tips are available for the air/fuel torch. Use genuine replacement parts of the same brand.

NOTE Propane tips operate at 24 PSIG, a medium adjustment for R-LP regulators. MAPP tips operate at 42 PSIG, a full adjustment for R-LP regulators,

2. **Heating Technique:** The maximum heat zone of the air/fuel tip is very concentrated. It is located between 1 and 2 tip diameters away from the end of the tip (Figure 4). If you hold the torch too close or too far away, there will be noticeably less heat. The angle at which the heat is applied can also increase the target heat (Figure 5).

3. **Temperature Control:** To reduce the heating effect of the air/fuel torch, several approaches are recommended:

Move the flame farther away from the target.

Use propane fuel instead of MAPP fuel.

Use smaller tips - if not included in your kit, smaller tips are available as an option, **ONLY** use tips intended for the air/fuel torch. **NOTE**

DO NOT lower regulator pressure to reduce heat output. This will cause the tip to overheat.

WARNING Remember the torch tip may be **HOT** and can cause a burn if touched.

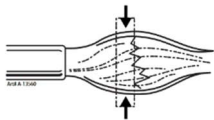


Figure 4: Maximum Heat Zone

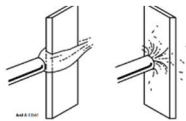


Figure 5: Heat Angle

- a) To obtain maximum target heat.
- b) Less effective heating angle.

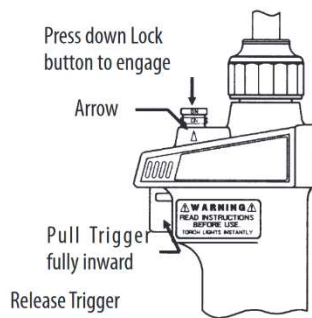


Figure 6: Trigger Lock and Safety Lock

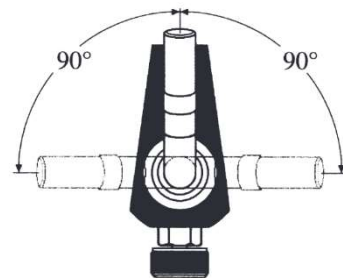


Figure 7: Flametube Swivel Angles

4. Trigger Lock ■ Engage:

- a) Make sure the Lock Button is in the "ON" position and the torch is burning (see Figure 6).
- b) Pu the Trigger fully inward and push the Lock Button downward.
- c) Hold the Lock Button and release the Trigger.

Trigger Lock - Disengage:

- a) Pu the Trigger inward and the Lock Button will pop up.
- b) Release the Trigger.

NOTE NEVER leave the torch unattended with flame burning.

5. Trigger Safety Lock - Engage:

- a) Slightly push the Lock Button downward and turn,
- b) Release downward force and continue to turn the Lock Button until the "OFF" marking aligns with the Arrow. The Lock Button should pop up.
- c) The Trigger is now disabled.

Trigger Safety Lock - Disengage:

- a) Slightly push the Lock Button downward and turn,
- b) Release downward force and continue to turn the Lock Button until the ON" marking aligns with the Arrow. The Lock Button should pop up.

6. Flaring: Operating the torch in an upside-down position is not recommended. Increased flame size, known as "flaring" can occur when the torch is operated in an upside-down position over a period of time at cold temperatures (below 20°F). Liquid fuel requires heat to

change to a gaseous state and upside-down operation causes the regulator to cool rapidly, thus liquid may enter the torch causing flaring. This is especially true with MAPP gas.

NOTE Flaring is usually preceded by noticeable sputtering or spitting of the flame. Please follow steps 1-3 of Disassembly in Section 6 to stop flaring.

7. Swivel Tip Feature: While the torch is not in operation, the Tip Nut may be loosened to swivel the flame tube to a desired position for a preferred use. Retighten the Tip Nut hand-tight to lock into position.

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TORCH DISASSEMBLY AND STORAGE

6.01 DISASSEMBLY

1. Release the trigger to extinguish the flame.
2. In a well-ventilated area away from flame or source of ignition, disconnect the fuel container by turning it counterclockwise.
3. Slightly pull the Trigger to vent the remaining fuel inside the torch.

NOTE Torch may light and momentarily burn the remaining gas.

6.02 STORAGE

1. After disassembly, position the Lock Button in the "OFF" position.

WARNING Store the torch and fuel container in a well-ventilated area away from any flame or source of ignition. Always separate torch and fuel container after use. **DO NOT** store the tanks in a room used for habitation, closed or confined space, near open flames, heaters, or in direct sunlight. Protect tank and torch from damage. Keep out of the reach of children.

SECTION

7

TORCH FILTER REPLACEMENT INSTRUCTIONS

The Filter may require replacement when the flame softens or no gas flows out.

NOTE DO NOT attempt to clean filter with a wire or other object. Filter hole may become enlarged which will cause air/fuel tip to operate improperly.

1. Screw out the torch tube and then remove the white gasket by hand.
2. Remove the filter from the tip(s) using an 1/8" (0.3 cm) hex wrench as below figure 9.
3. Replace the new extra filter and gasket inside the blister within a polybag.
4. Recheck for leaks before lighting the air/fuel torch.

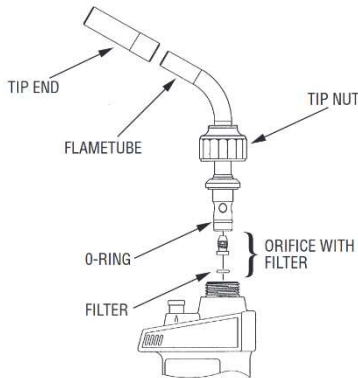


Figure 8: Air/Fuel Torch Assembly

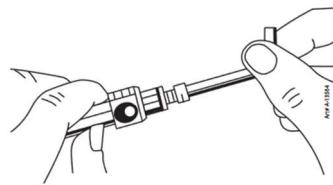


Figure 9: Unclog Orifice

SECTION

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TROUBLESHOOTING GUIDE

Symptom	Possible Cause	Remedy
Torch will not light	Regulator pressure incorrectly set.	Set regulator at correct pressure.
	Activating Trigger too rapidly.	Pull Trigger slowly and steadily.
	Fuel cylinder empty.	Replace with full cylinder.
	Orifice, Filter Screen, or Tip End clogged with debris.	Clean clogged components.
Flame softens, turns yellow, or does not heat effectively	Excessive moisture.	Remove tip end. Allow parts to dry.
	Orifice, Filter Screen, or Tip End Clogged with debris.	Clean clogged components.
Tip End overheats or turns red	Regulator pressure set too low.	Set regulator at correct pressure.
	Orifice, Filter Screen, or Tip End clogged with debris.	Clean clogged components.
	Fuel supply nearing empty.	Replace with full cylinder.
Unstable or erratic flame	Torch operated in extreme wind.	Avoid operating torch in areas of extreme ambient air movement.
	Leak present.	Check for leaks and correct as necessary.