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**CROSSTECH  
PROFESSIONAL  
TORCHES™**

# MAPP® / PROPANE TORCHES WITH CROSSWIRL™ BURNERS

**PROVEN DESIGN - IN FIELD USE SINCE 1978**

**FOUR INDUSTRIAL PERFORMANCE TORCHES USING ONE-POUND PORTABLE TANKS. THESE TORCHES WILL SOLDER AND BRAZE ALL THE NEW HIGH TEMPERATURE SOLDERING ALLOYS. THEY ARE LIGHT, VERY MANEUVERABLE, AND PORTABLE. LARGE, COSTLY TORCH OUTFITS ARE NO LONGER NEEDED.**

## **JOBS:**

**RESIDENTIAL PLUMBING - COMMERCIAL PLUMBING - HEATING SYSTEMS  
AIR CONDITIONING - VENTILATION SYSTEMS - REFRIGERATION - SHEET METAL WORK  
HEAT TREATING - INDUSTRIAL BRAZING - AUTOMOBILE REPAIR WORK**

## **APPLICATIONS:**

<b>COMMON 60/40 TIN-LEAD SOLDER</b>	(Liquidus @ 375°F)
<b>HIGH TEMP. 95/5 SOLDER</b> (TIN-ANTIMONY)	(Liquidus @ 464°F)
<b>TIN-SILVER SOLDER</b>	(Liquidus @ 535°F)
<b>ALUMINUM BRAZING</b>	(Liquidus @ 1100°F)
<b>SILVER BRAZING</b>	(Liquidus @ 1200°F)
<b>COPPER - PHOSPHORUS BRAZING</b>	(Liquidus @ 1450°F)
<b>PHOSPHORUS BRONZE BRAZING</b>	(Liquidus @ 1800°F)

## **PRODUCT DESCRIPTION:**

CROSSTECH™ TORCHES are high-performance tools designed to burn either MAPP® or propane gas at maximum efficiency. It has been engineered to provide years of uninterrupted service. General Regulator, Inc., incorporated in 1978, has been producing this torch design since 1978. This has been made possible by a patented, all-metallic construction of mechanical excellence. Only premium quality materials are used in both the regulator and torch assemblies. This high performance regulator is also used on larger acetylene, MAPP®, and propane outfits requiring higher gas flow rates and pressure.

The torch tip provides a very intense vortex combustion which involves a CROSSWIRL™ burner. The fuel is practically completely burned inside the flame tube. The gas coming out of the flame tube is pure heat. The flame is neither oxidizing nor carbonizing. When you light the torch, you will notice the jet-like sound. While using the torch, you will see how quickly the work is heated. This high-performance burner results in higher work temperature in less time and lower fuel costs than any other torch on the market. In comparing CROSSTECH TORCHES with competitors torches, you will note that the CROSSWIRL TORCH TIPS are cool to the touch. The competitors' designs waste energy in heating up the torch tip, making them hot to the touch. This explains why the CROSSTECH TORCH FLAMES ARE HOTTER THAN THE COMPETITION.

## **GENERAL REGULATOR, INC. SUCCESS STORY:**

Frank Baranowski, Jr., the President of General Regulator, Inc. worked 32 years at The General Electric Co. in West Lynn, Massachusetts, designing instrumentation equipment. During that time, he received 10 U.S. Patents for his inventions. Later, he joined Wingaersheek (Turbo-Torch®) and designed the original "Handiman" torch. That torch was the first hand-held torch to use both a torch tip and a small regulator attached to a one-pound propane gas cylinder. In 1978, Frank Baranowski, Jr. and his two sons formed a new corporation, General Regulator, Inc. Frank designed the present 2000 Series of torches, which is superior to anything in the marketplace. Our torches are the only ones on the market with high temperature, stainless steel flame stabilizers which won't melt out. Frank owns 9 patents on products being manufactured by General Regulator, Inc., which has been selling its torches through sales representatives on a national basis. General Regulator, Inc. produces the finest portable propane/MAPP® torches, which have an excellent track record of reliability in both the United States and Canadian marketplaces.

## CROSSTECH™ TORCH PRODUCTS

General Regulator, Inc. provides a complete product line, enabling the plumber to do all of his work by choosing one of our four torches. With our handy "Copper Tubing Size Capacity" chart below, the plumber can choose the correct torch and fuel to do his job.

**MODEL 100 CROSSTECH TORCH:** The Model 100 torch is designed for the refrigeration market, providing a small, 1/4" diameter, extremely intense swirl flame. This torch is also very handy for the plumber who needs to use 95/5 solder (Tin-Antimony) to join copper tubing in close proximity to combustible building materials.

**MODEL 2000 CROSSTECH TORCH:** The Model 2000 torch is our general purpose torch which is used throughout the plumbing industry. This torch does 90% of all the plumbing jobs which the average plumber will encounter in his daily work.

**MODEL 2100 CROSSTECH TORCH:** The Model 2100 torch is our Industrial performance torch, which has a very strong customer acceptance in the industry. Its flame shape is wide and short, allowing for concentrated heat in a large area. There is no other torch in the marketplace like it. Like the Model 2000 CROSSTECH TORCH, the Model 2100 CROSSTECH TORCH has been in production since General Regulator, Inc. incorporated in June of 1978.

**MODEL 3000 CROSSTECH TORCH:** The Model 3000 torch is for very heavy duty work. It also provides a wide and short flame for concentrated heat in a large area. Most users are astonished by the tremendous amount of heat coming out of the torch when they see this torch demonstrated. It is ideal for quickly heat-treating large work pieces. This torch will allow the user to have a very powerful heating tool when he needs it without having to own expensive air-acetylene outfits. It has been given "The Gatling Gun Torch™" nickname.

**KITS:** Kits are available with combinations of MODEL 2000 TORCHES and Model 100, 2100 & 3000 tips:

**K1 KIT: MODEL 2000 TORCH and MODEL 2100 TIP.**

**K2 KIT: MODEL 2000 TORCH and MODEL 3000 TIP.**

**K3 KIT: MODEL 2000 TORCH and MODEL 2100 & 3000 TIPS.**

**K4 KIT: MODEL 2000 TORCH and MODEL 100 TIP.**

**K5 KIT: MODEL 2000 TORCH and MODEL 100, 2100 & 3000 TIPS.**

### CROSSTECH™ TORCHES - COPPER TUBING SIZE CAPACITY

MODEL 100	Propane		MAPP®	
	in.	mm	in.	mm
Soft Solder	5/8	16	1	25
Silver Solder	3/8	10	3/4	19
Copper - Phos.	1/4	6	1/2	13
BTU'S / HR	4,700		4,770	

MODEL 2000	Propane		MAPP®	
	in.	mm	in.	mm
Soft Solder	1 1/2	38	2 1/2	64
Silver Solder	3/4	19	1 1/2	38
Copper - Phos.	1/2	13	1	25
BTU'S / HR	8,120		11,530	

MODEL 2100	Propane		MAPP®	
	in.	mm	in.	mm
Soft Solder	2 1/2	64	4	102
Silver Solder	1 1/2	38	2 1/2	64
Copper - Phos.	1	25	1 3/4	44
BTU'S / HR	19,050		21,880	

MODEL 3000	Propane		MAPP®	
	in.	mm	in.	mm
Soft Solder	4	102	6	152
Silver Solder	2 1/2	64	4	102
Copper - Phos.	1 3/4	44	3	76
BTU'S / HR	26,510		30,910	

#### CROSSTECH™ TORCHES CONTINUOUS USE - FUEL CONSUMPTION

	Propane (14.1 oz)	MAPP® (16 oz)
MODEL 100	4 Hrs 5 Min.	4 Hrs 25 Min.
MODEL 2000	2 Hrs 22 Min.	1 Hr 50 Min.
MODEL 2100	1 Hr	58 Min.
MODEL 3000	43 Min.*	41 Min.*

\* The Model 100, 2000 and 2100 CROSSTECH TORCHES can be used continuously from the same tank. In the case of the Model 3000, the user will have to change to a warm tank after approximately 20 minutes of continuous use, depending upon the outside air temperature. The 20-minute time period was measured with an air temperature of 40°F. This should not be a problem as most jobs will be done in 5 to 10 minutes. The advantage of the Model 3000 is that the user can apply a tremendous amount of heat to the work piece and get the job done quickly without large bulky tanks.

*Made in the United States Of America*

# FEATURES:

**HIGH PERFORMANCE CROSSWIRL™ BURNERS:** Flame stabilizers made from space-age, high temperature stainless steel that will not melt out. (U.S. Patent Nos. 4,255,124 and Des. 263,790) Flame tube cool to the touch. No wasted energy heating up the tip.

**SWIRL FLAME TEMPERATURE:** MAPP®: 3700 °F. (500 ° F. HOTTER than propane). Don't be fooled by competitors which rate their torches for an ambiguous "Target Heat". What really counts is what size copper tubing can be heated for a given fuel. See our "CROSSTECH TORCHES - COPPER TUBING SIZE CAPACITY" table in this brochure. We have available a separate application note explaining CROSSTECH TORCH flame temperature vs. "Target Heat".

**METHOD OF COMBUSTION:** Efficient laminar flow. (Not inefficient turbulence) This is why our flame tubes operate cool.

**FLAME SPEED: "Q"** (Inches of water using MAPP® Gas) Models: 2000, 2100 & 3000: 1.75 - 2.0 Model 100: .9

**WINDPROOF:** Won't blow out.

**INTERCHANGEABLE BURNERS:** Same regulator for single, double or triple tips.

**EFFICIENT FUEL CONSUMPTION:** One-pound propane tank lasts 2.4 hours with single tip, 1 hour with double tip and 43 min. with triple tip. 4 hours with small Model 100 tip.

**PRECISION ORIFICES:** Factory positioned for peak performance. Orifice is non removable. Special cleaning and a stainless screen prevent dirt from clogging the orifice hole. The user should never have to clean the orifice.

**360 DEGREE SWIVEL:** TEFLON® clutch provides high torque, smooth action, and long wear life. After 21 years of use, these swivels are still functioning correctly. The torch tip rotates to any position and makes use simple for hard to reach jobs. Swivel assembly is tamperproof and cannot be disassembled from the regulator body. This prevents potential leaks.

**PRECISION REGULATOR** (U.S. Patent No. 4,324,269): Maintains precise torch pressure when the tank pressure changes due to either temperature or position variations. Diaphragm construction that will not leak in cold weather use.

**METALLIC KNOB WITH SAFETY LOCK:** Delivers smooth action; cannot be accidentally turned on and prevents jamming of the regulator when turning off. Single turn knob indexes to the optimum MAPP® or propane setting. This allows one torch to be used for both gases.

**STAINLESS STEEL FILTER:** Valve assembly has a stainless steel filter to prevent dirt from the tank contaminating the valve and causing leaks.

**REGULATING VALVE:** The valve uses a soft seat, Buna-N "O" ring for good sealing. 21 years of proven history.

**PREMIUM MATERIAL:** Aircraft Quality Material: 6262-T9; Corrosion resistant.

**LIGHT WEIGHT:** Model 2000: 5 oz. - low fatigue factor when using on overhead work.

**TESTING:** Regulator bubble tested so tanks won't be wasted.

Regulator statically tested @ full pressure for 4 hours.

Torches tested for optimum performance.

**OPERATING TEMPERATURE:** MAPP® (20 to 120 °F) Propane (0 to 120 °F.)

**WARRANTY:** 3-YEAR LIMITED WARRANTY

There are an unlimited number of repair, industrial, plumbing and hobby projects that can be accomplished with your CROSSTECH TORCH. The CROSSTECH TORCH is for the craftsman who wants the finest quality tools. When you purchase your CROSSTECH TORCHES, you will receive an easy to follow instruction manual. No special previous experience is required. You will find the CROSSTECH TORCH easy to use. Although it is easy to use, **THE USER MUST BE EXTREMELY CAREFUL WHILE USING THE PRODUCT, BECAUSE IT PRODUCES EXTREMELY HIGH TEMPERATURE FLAMES.** With a minimum amount of practice you will master soldering and brazing to achieve professional-like results. MAPP® and propane fuel cylinders are available at most home centers, hardware, farm, hobby, department, discount, craft, auto stores, and through leading catalog houses. GENERAL REGULATOR, INC. DOES NOT SUPPLY FUEL CYLINDERS WITH THE CROSSTECH TORCH. WE ARE REGULATOR AND TORCH SPECIALISTS. The CROSSTECH TORCHES are supplied in a clear vinyl plastic pouch to display the torch. The pouches are useful to the customer and allows the seller to display them on "pegboard" panels.

**SEND ORDERS TO: GENERAL REGULATOR, INC., P.O. DRAWER 553, WAKEFIELD, MASSACHUSETTS 01880**

**TEL.: (781)-334-3644 FAX.: (781)-334-2637**

**E-Mail: Sales@SupplierOfChoice.com**

**UNIT PRICING:** See trade price list

**SATISFACTION GUARANTEE:** IF YOU ARE NOT COMPLETELY SATISFIED WITH YOUR CROSSTECH TORCH, RETURN IT WITHIN 30 DAYS OF THE SHIPPING DATE, AND WE WILL REFUND YOUR PURCHASE PRICE.

\*CROSSTECH, CROSSWIRL, CROSSTECH PROFESSIONAL TORCHES, CROSSTECH 357 and THE GATLING GUN TORCH are trademarks of General Regulator, Inc. \*MAPP is a registered trademark of Airco, Inc., Montvale, NJ. \*TEFLON is a registered trademark of Du Pont De Nemours & Co., Inc., E.I. Wilmington, Delaware. CROSSTECH torch is covered by one or more of the following patents: U.S. Patent Nos. 3698427 & 3699998, GT. BRIT. 137829, Patented 1974-1975-1982-1984 CANADA

**Contact General Regulator, Inc. for information on  
CROSSTECH 357™ SELF IGNITING PROFESSIONAL TORCHES**