GENERAL SAFETY RULES

- Do not use the torch until you have understood all the operation instructions and cautions, and familiarized yourself with the torch before using it. Review instructions and caution periodically to maintain awareness. Deviating from these procedures may result in fire, explosion, property damage and/or operator injury. Do not try to operate before reading instructions.
- 2. Using any fuel other than MAPP™GAS or Propane with this torch may cause a fire or explosion.
- 3. Wait for the torch to cool down before tightening or removing torch head and before installing or removing accessories.
- 4. Do not point torch toward face, other people or flammable objects. Never attempt to use torch as a cigarette lighter.
- Disconnect gas cylinder when not in use. Never store with torch attached to the gas cylinder.
- 6. Do not attach or detach the torch from the cylinder at where accidentally released gas might be ignited by open flames.
- 7. Never attempt to modify the torch construction and never use unapproved fuel.
- Treat the torch as you would for any fine tool or instrument. Do not drop or otherwise abuse.
- 9. Do not use a leaking, damaged or malfunctioning torch. DO NOT use the torch until you have corrected the problem. Torches improperly operated, maintained or repaired can be dangerous. Improper use, service repair or modification of the torch could result in damage to the product, property damage or personal injury to the operator.
- 10. Work only in well ventilated areas.
- Always place your work on firebrick. Ordinary brick and concrete can explode when subjected to a high temperature. Do not work on wood or metal surfaces. Always shield your work.
- 12. Always wear protective glasses and gloves. Use proper tools to handle hot work.
- 13. Be aware that the tip of the torch can get extremely hot during use. Take precautions to protect yourself and others from accidental burns. Never use the torch on or near combustibles. Be especially careful around motor vehicles or any petrol-powered products and beware of hidden fuel lines and tanks.
- 14. Always make certain the torch is placed on a level surface when connected to the gas cylinder to reduce the risk of accidentally tip over. Be sure the torch is not pointing in a direction which could cause nearby objects to be burned when torch is set down.
- 15. When thawing pipes, be very careful not to overheat surrounding materials.
- 16. Always have a fire extinguisher and a bucket of water near the torch and work area. Do not place them in the flame path or a location where you could not reach them should a fire break out.

DANGER EXTREMELY FLAMMABLE. CONTENTS UNDER PRESSURE.

Keep out of reach of children. Keep away from heat or flame. It is illegal and dangerous to refill the cylinder. Obtain new gas cylinder from your dealer. Avoid prolonged exposure to sunlight. Do not store near heat or in a room used for habitation. Always close torch valve and wait at least 30 seconds before removing torch from gas cylinder. Always detach gas cylinder from torch when not in use. Do not breathe gas, fumes, vapor or spray. If inhaled remove affected person to fresh air. Avoid contact with skin and eyes. For skin contact, flush with large amounts of water. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. When gas cylinder is empty, discard in a safe place. Do not throw in fire. Do not puncture or incinerate container.

K-T adjustable Brazing and Soldering Self-Igniting Hand Torch Operating and Safety Instruction.

Please read carefully prior to use.

OPERATION AND LIGHTING

- 1. Use only with high quality Mapp $^{\text{\tiny TM}}$ or Propane gas.
- 2. Before installing the torch to the gas cylinder, turn the ignition button in a clock wise direction to make sure the ignition safety feature is ON.
- Before installing the torch to the cylinder, make sure the valve is OFF by turning the gas adjustment knob in a clockwise direction until hand tight only.

DO NOT FORCE.

- 4. Hold torch and gas cylinder upright. Turn the gas cylinder clockwise into the torch valve body until locked tight and attached securely to the torch connector. Check connection for leaks.
- 5. After the gas cylinder is attached to the torch, check all connections for leaks with soapy water. Check all joints and couplings periodically to ensure against loose connections. If a leak is detected, replace the cylinder and check for leaks again. If leaking still occurs, the torch must not be used.
- Turn the gas adjustment knob counter-clockwise about a quarter of a turn. At this stage, the gas is not being released yet.
- 7. Turn the ignition button counter-clockwise to disengage the ignition safety lock.
- 8. Squeeze the ignition button, slowly allowing gas flow into the burner tube. Continue to squeeze it until the torch is lit. If torch does not light, squeeze the ignition button again.
- To engage the ignition button lock for continuous work, pull the ignition button fully inward and press the lock button on top. Then release the ignition button.

FLAME ADJUSTMENT

- Turn the adjustment knob to control the gas output according to different applications.
- 2. The maximum heat zone is very concentrated. It is located between $\frac{1}{2}$ " and 1" from the end of the tip. Holding the torch too close or too far away from the target can reduce the heating effect.

COLD WEATHER OPERATION

In cold weather the size of the flame can be smaller due to lower gas pressure. To produce a larger flame, pre-warm the gas cylinder to room temperature prior to use. Shaking the gas cylinder a few times to warm the fuel up will help. There is a possibility that the flame will extinguish when the torch is turned upside down in cold weather.

SHUTDOWN AND STORAGE

- Release the ignition to extinguish the flame. If the ignition button lock is ON, pull
 the ignition button fully inward to release the lock.
- Turn the valve OFF. Note: The flame may continue to burn for a short period of time if the torch has been operated in an inverted (upside down) position.
- 3. When the torch is cool, turn the gas cylinder counter-clockwise to disconnect it. Slightly pull the ignition button to vent the remaining gas inside the torch.
- 4. Turn the ignition button clockwise to engage the ignition safety lock.
- 5. Store the torch and gas cylinder separately. Read other cautions on gas cylinder label.