



FORNEY

HEAT-A-MATIC

OPERATING INSTRUCTIONS

FORNEY MANUFACTURING COMPANY
Fort Collins, Colorado

HEAT-A-MATIC OPERATION INSTRUCTIONS

The HEAT-A-MATIC is a quality engineered unit designed to do a multitude of heating jobs quickly and safely. The HEAT-A-MATIC unit has 3 output heat ranges to cover most jobs encountered by the Contractor, Service or Maintenance man and many production applications.

POWER SUPPLY -- The HEAT-A-MATIC operates on 115V AC 60 cycle current. Plug into convenience outlets of 15 amp capacity or more. If heavy work is encountered for prolonged periods on the HIGH output an outlet of 20 amps capacity should be used.

SWEAT SOLDERING -- The universal HEAT-A-PLYER tool is supplied as standard equipment. The HEAT-A-PLYER will accommodate tubing size up to 2½" diameter. Connect the lug ends to the desired output stage. You will notice the phenolic spacers between the clamp handles and the heat jaws prevent the jaw contacts from touching. This allows the clamp to be connected and set down without heating. Clamp the HEAT-A-PLYER around the fitting or part to be soldered. Remember the solder or lead tends to flow to the heat.

Sweating is faster with the HEAT-A-PLYER as the heat is applied at four (4) contact points - two (2) on each jaw in the case of round tubing or fittings. With heat applied on both sides plus the electrical and rapid heat flow around the fitting, the joint is completely sweated throughout. Use standard materials and technique as in other soldering methods.

GUIDE FOR PIPE SIZES	HEAT STAGES
Less than 1/2" dia.	LOW
1/2" to 5/8"	MED
3/4" and over	HIGH

RUSTY OR CORRODED CONNECTIONS -- The HEAT-A-PLYER is an excellent tool for loosening rusted and corroded bolts, fittings, connections, mufflers, etc. Simply attach the HEAT-A-PLYER jaws around the nut or threaded section. Small nuts and bolts use "MED", large nuts and bolts, mufflers, etc., use "HIGH". The heat produced by electric current surrounding the area loosens the threaded areas. In exceptionally stubborn cases apply penetrating oil shortly after applying heat.

SPECIAL HEATING JOBS OR PRODUCTION SETUP -- Many individual jobs can be undertaken by adapting the HEAT-A-MATIC and the HEAT-A-PLYER.

1. The HEAT-A-PLYER jaw inserts can be filed or ground to accept special shapes to increase the contact area around the shape to be heated. Flat inserts can be ordered for this purpose.
2. The user can make up production aids to clamp parts together for heating. For instance, small air cylinders or levers using jaw inserts can be adapted for parts being heated on a production line. The cable can be removed from the HEAT-A-PLYER and connected to the special clamp. Many customers have made applications in soldering fittings together - expanding slip-on rings that shrink tight when cool - silver soldering inserts on saw blades - heat solder lugs to attach to electric cable, etc.

PIPE THAWING -- Thawing out frozen water pipes can be done quickly, economically and safely with the HEAT-A-MATIC. Thawing of pipes underground can be done as easily as exposed pipes. Pipe thawing clamps and cable sets are available. The clamp is a heavy duty fibreglass handle with curved jaws to fit 1/4" to 2" pipe.

Clamp to the pipe so that the frozen area is between the clamps. If a long reach of pipe is encountered cable extension can be added to the clamps. The principle of electric pipe thawing is to put a high-amperage, low-voltage current through the pipe. The resistance of the pipe causes it to heat equally all along the pipe, both under and above ground. Since copper pipe doesn't have as much resistance to electrical flow as steel and iron it takes more current and a longer time to thaw. Use the following table as a guide.

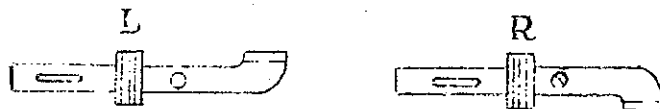
STEEL - IRON PIPE
Under 60 Ft. - Med. Stage
Over 60 Ft. - Hi Stage

COPPER PIPE
Under 10 Ft. - Low Stage
10 to 60 Ft. - Med. Stage
Over 60 Ft. - Hi Stage

NOTE: Thawing will be much faster if the outlet valve can be left open.

PARTS LIST

- HU400-1 Main case (Front and back)
- HU400-2 Case top and sides with handle
- HU400-3 Transformer Assembly
- HU400-4 Line Switch - On and Off
- HU400-5 Power Cord with Plug
- HU400-6 Insulated Stud Assembly
- HU400-6A Wing nut for Stud
- HU400-7 Cable for HEAT-A-PLYER #3 12' (2 required)
- HU400-8 HEAT-A-PLYER Clamp Assembly complete
- HU400-8A Fibreglass Handle section with spring
- HU400-8B Jaw Contacts - curved (pair)
- HU400-8C Jaw Contacts - flat (pair)
- HU400-8D Jaw Assembly - specify role



- HU400-9 PIPE THAWING CLAMP (2 REQUIRED)
- HU400-10 Cable for pipe thawing #3 25'
with fittings (2 required)
- HU400-11 Cable for pipe thawing #3 50'
with fittings (2 required)

GUARANTEE AND SERVICE POLICY

This is to certify that this FORNEY HEAT-A-MATIC, Serial No. _____ has been built of quality materials and workmanship and has been carefully and completely tested. We, therefore, make the following guarantee and warranty:

UNCONDITIONAL SIX-MONTH GUARANTEE

The Forney Manufacturing Company agrees to repair or replace this FORNEY HEAT-A-MATIC without charge to the original owner if, for any reason whatsoever, it fails to give satisfactory service within a period of six months from date of purchase. The unusual guarantee is your INSURANCE POLICY for six months covering your FORNEY HEAT-A-MATIC unit against the hazards of fire, windstorm, hail, flood, falling aircraft or moving vehicles.

SERVICE WARRANTY - ADDITIONAL EIGHTEEN MONTHS

If during the next eighteen months, the FORNEY HEAT-A-MATIC unit fails to operate satisfactorily the FORNEY MANUFACTURING COMPANY will repair it at factory cost of repairs provided it is still the property of the original owner. This Service Warranty covers all components of the unit with the exception of the accessories, which are expendable.

FORNEY MANUFACTURING COMPANY
P. O. Box 563 Fort Collins, Colorado

THE FORNEY HEAT-A-MATIC

SWEAT AND THAW PIPES - Heat metals - for the Plumber-Refrigeration and General Serviceman, Mechanics - etc. Built to sweat solder copper pipe and steel tubing up to 2" dia. Melts solder, lead, heats liquids in small amounts. Loosens rusted and corroded nuts, fittings and mufflers. Thaws pipes -- above or underground. Adaptable to many production applications, such as attaching carbide tips and cutting edges, also silver soldering, etc. The unit has a high energy output for many quick heating uses. Heats $\frac{1}{2}$ " copper tubing to sweat solder in five seconds.

ADVANTAGES - Safe, no danger from flames, fast and economical. Concentrated heat to let you get into tight places where flame would start fire, scorch or scar woodwork, finish, etc.

SPECIFICATIONS - 115 volt--1 phase--60 cycle, 75-450 amps output-- 20 amp maximum input -- 2 to 8 volts -- 3 heat ranges -- carrying handle on top of case. Over-all dimensions, 12" wide X 9" deep X 11" high. Light weight, only 33 lbs. and portable.