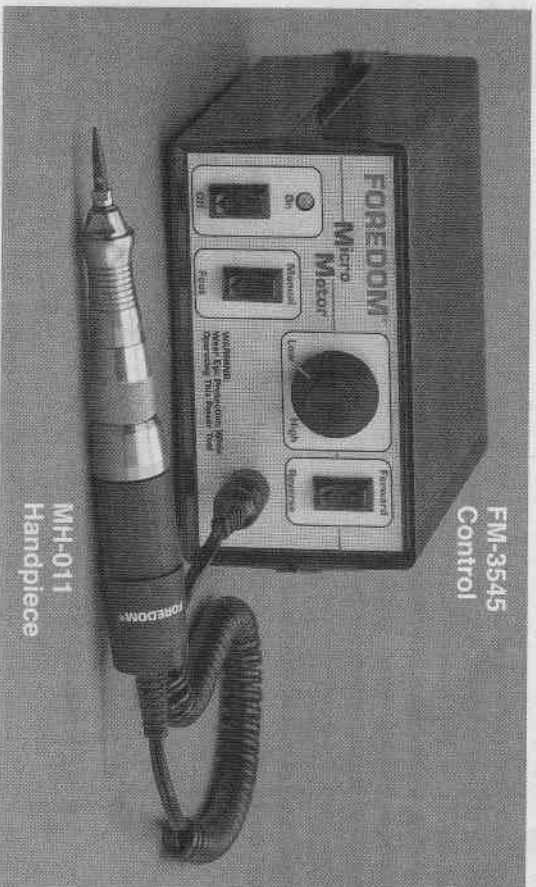


FOREDDOM[®]

Operation and Maintenance Manual for the No. 1011 Micro Motor Hammer Kit



For Your Safety:

- Read this Manual before operating your Foreddom Micro Motor Power Tool.
- Always wear eye protection while using the Foreddom Micro Motor Handpieces.

Safety Instructions

- **Always wear proper eye and face protection.** Whenever you operate a Foredom or any power tool wear safety glasses to prevent serious eye or face injuries.

Connecting Handpiece:

With the Power Switch in the **Off** position and the Rotation Selection Switch in the **forward** position, attach the handpiece to the control by plugging the coiled cord into the handpiece connection port on the lower right side of the front control panel. (See Figure 1) Be sure to align pins properly using keyway when plugging in the cord.

- **Always** use the MH-011 handpiece in the forward direction.
- **Do not** operate the handpiece in the presence of any flammable liquid or gas.
- **Do not** cover the ventilation slots of handpiece motor with cloth or tape. Air must pass freely through the intake and exhaust ventilation slots to properly cool the motor. If the power cord or plug to the handpiece is damaged, repair or replace immediately.
- **Never** operate with a damaged power cord.

Figure 1
Front Panel

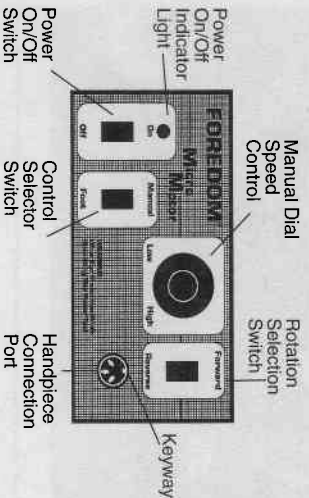
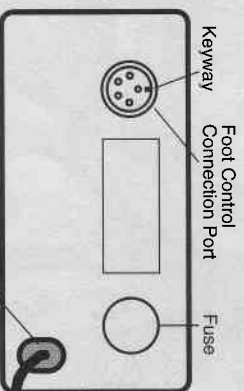


Figure 2
Rear Panel



Connecting Foot Pedal: (Optional)

The Foot Pedal Control SC-2000 can be used with either 110/120 Volt or 220/240 Volt models of the FM-3545 control. Attach it by inserting the foot pedal connector pins into the foot control connector port on rear panel of control (see Figure 2) using keyway to properly align pins. Then tighten the threaded locking collar by turning it clockwise. (It is not necessary to have the foot pedal connected to the control box to operate the dial speed control.) The Micro Motor control and handpiece are now ready to operate.

Connecting Power Cord:

Before connecting power cord plug (see Figure 2) to a power outlet, put the on/off selector switch in the OFF position and turn the dial to the **Low** speed position. **Put the Rotation Selection Switch in the Forward position** (Operating the handpiece with this switch in the reverse position can severely damage the handpiece.) Now plug in the power cord to a 110/120 Volt (or 220/240 Volt) AC current outlet. Refer to the section below for selecting the Manual/Foot and Forward/Reverse switches.

Operating Instructions

FM3545 Control

Power On/Off Switch and Indicator Light:

With the Power On/Off Switch in the **On** position and the Control Selector Switch in the **Manual** position, the Power Indicator Light will go on immediately and the handpiece will run at the speed set on the Dial Speed Control.

With the Power On/Off Switch in the **On** position and the Control Selector Switch in the **Foot** position, the Power Indicator Light will go on but the handpiece will not rotate until the Foot Pedal is depressed.

Control Selector Switch:

With the Power On/Off Switch in the **Off** position, select either foot or manual speed control

Forward/Reverse Rotation Selection Switch:

With Power On/Off Switch in **Off** position, select the **Forward** position. **Do not change handpiece direction while it is running or use in reverse.** This can damage handpiece motor and hammer mechanism.

Manual Dial Speed Control:

The dial control will vary handpiece speed (impacts per minute) from low to full speed. It will only function while Power On/Off Switch is in the **On** position and Control Selector Switch is in **Manual** position.

Handpiece Overload Protection:

If handpiece is used in overload condition, it will trigger the overload circuit protector. The power on light will change in color from green to red and handpiece will stop. Immediately turn off control by putting power ON/OFF switch in **Off** position. Remove overload condition and put power switch in **On** position again.

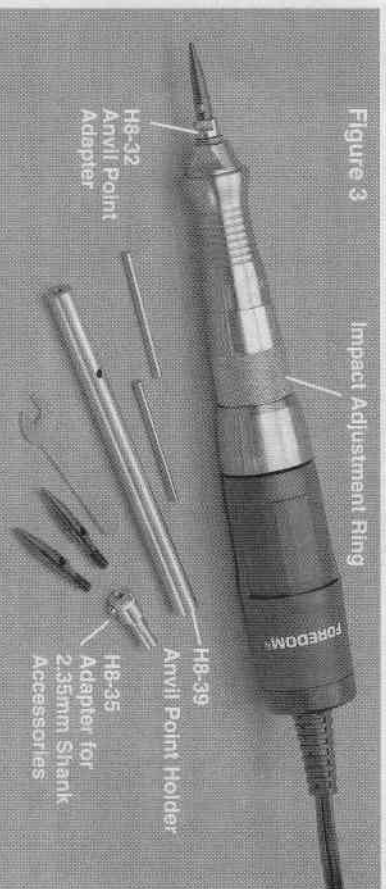
Fuse Protection:

The transformer and control circuit board are protected from power line current surges or shorts by a 1.5 Amp fuse in fuse holder in rear panel of control (see Figure 2, at left). It can be checked or replaced by unscrewing cap and inserting a new fuse (Part No. CP10543) if necessary.

Attaching Handpiece Accessories

The MH-011 Hammer Handpiece comes with the following accessories and adapters:

- 3-10177K Anvil Points with Threaded Shanks
- 1- H8-32 Anvil Point Adapter for Threaded Anvil Point 10177K
- 1- H8-35 Adapter for Non-threaded Shank Accessories (2.35mm shank tools)
- 1- H8-38 Open End Wrench (5mm)
- 2-10562 Pins, used to tighten Anvil Points
- 1- H8-39 Anvil Point Holder (used for shaping the point)



Three anvil points are supplied so that the tips can be shaped or modified for different setting operations. To use the anvil points, thread in the anvil point adapter and tighten with wrench. Thread an anvil point in to it and tighten it with a pin in its cross hole.

Texturing and beading tools with non-threaded 2.35mm shanks such as the pave diamond point (No. R146) and carbide engraving point (No. A-EP165) can be used with the Adapter (No. H8-35) in the handpiece. Thread the Adapter into the front of the handpiece and tighten with the wrench. Insert a 2.35mm shank tool into the adapter and tighten the set screw with a Phillips screw driver.

Impact Adjustment

The force of impact can be increased or decreased by turning the metal ring while the handpiece is either off or running. Test the impact on a piece of metal or material similar to the work piece until the correct combination of speed and impact is obtained.

Maintenance

The MH-011 has permanently lubricated ball bearings that do not require lubrication. Putting even a small amount of oil into the handpiece can damage it.

Cleaning Handpiece:

Use the Handpiece in as clean and dust free an environment as possible.

A cloth with a small amount of alcohol solution can be used to clean outside of handpiece if necessary.

Do not use any other cleaning fluids or immerse handpiece in any liquid.

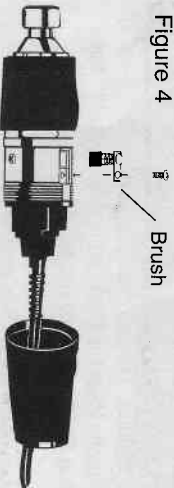
Checking/Changing Carbon Brushes:

A spare set of carbon brushes (Part No. 813514) is supplied with each handpiece. Depending on how long the handpiece is used each day, the brushes should be checked for wear periodically (about every **200** hours of use) and replaced when the brush is less than 2mm (5/64") long.

To Check/Replace Motor Brushes:

1. Unscrew protective cap from rear of motor (see Figure 4) by turning in counter-clockwise direction while gripping handpiece body. (It has a standard right hand thread.)
2. With small crosspoint screwdriver remove screws and brush assemblies one at a time. Check length of carbon brush from spring to curved side of brush. **Brushes should be removed, examined, and replaced (if necessary) one at a time.**
3. Re-insert brush assembly or new brush assembly into brush tube. Replace and tighten screws.
4. Screw protective cap back onto rear of motor housing so that top of brush assembly is completely covered.

Figure 4



Repair Services

Factory repairs are done promptly and at reasonable cost. If you wish, you can send your equipment directly to the factory marked "Attention: Service Department". Be sure to give your street address. The equipment should be accompanied by a brief note describing the problem with the equipment. Estimates will be made upon request.

Owner's Registration Card

Send your Owner's Registration Card to Foredom right away. We will keep your card in our Owner's Registration File.

WARRANTY

Foredom warrants its product to be free of defects in material or workmanship for a period of one year after purchase. During the warranty period, the defective product will be repaired or replaced without charge or, at our option, the purchase price will be refunded. This warranty does not cover damage caused in transit or by accident, misuse, or ordinary wear.

ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF FITNESS AND MERCHANTABILITY, ARE HEREBY LIMITED IN DURATION TO A PERIOD ENDING ONE YEAR FROM DATE OF PURCHASE, AND WE WILL NOT BE LIABLE OR RESPONSIBLE FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES.

Repair or replacement will be made at our option if the product is returned postpaid to:

The Foredom Electric Company

16 Stony Hill Road, Bethel, CT 06801

All warranty repairs must be done at the factory at the address above. We will not pay any shipping or transportation charges. This warranty only covers the original purchaser of the product. Proof of purchase may be requested. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For more information on Foredom power tools and accessories contact your local dealer. When no local dealer is available, write:

The Foredom Electric Company, 16 Stony Hill Rd, Bethel, CT 06801

Or call **203-792-8622** or Fax: **203-796-7861**.