

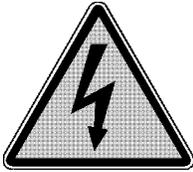


Kit Instruction Sheet

Sheet P/N: 091-0464 Kit P/N: 005-0323

Firmware Upgrade, Ver. 02.01
MiniMicro™ Firmware Upgrade for CobraTig® 150

CAUTION



**DISCONNECT UNIT FROM ALL POWER
SOURCES PRIOR TO INSTALLING THIS OR
ANY OTHER KIT.**

ELECTRIC SHOCK CAN KILL.

Firmware Downloading Instructions to CobraTig® 150

In order to properly use the Model 4000, MiniMicro™ Orbital Weldhead, this version firmware **MUST** be loaded into the CobraTig® 150. This instruction will guide you in loading the new version firmware.

The term 'firmware' is synonymous with 'software'. The firmware is the operating software used by CobraTig® 150.

In order to update the firmware version in the CobraTig® 150, the following items are needed:

- CobraTig® 150.
 - PC running Windows 95/98/2000 (Mac not supported).
 - Null Modem Cable (Female DB9 to Female DB9) included, P/N 843-0563.
 - Diskette with SmartArc™ Weld Program Editor and the upgrade.150 files.
1. Connect the Null Modem serial cable between the PC COM port and the rear panel of the CobraTig® 150.
 2. On the CobraTig® 150 front panel, press and hold the F10 button (lower-right hand button) while turning on the CobraTig® 150.

The screen will display "READY TO RECEIVE...", as shown on next page. If it does not, turn CobraTig® 150 off, wait 15 seconds and try again.

THIS KIT FOR USE ON: CobraTig® 150 Orbital Welder, Model 254-150
Supercedes: N/A

MK Products, Inc. 16882 Armstrong Ave., Irvine, CA 92606 Phone: 949-863-1234 Fax: 949-474-1428

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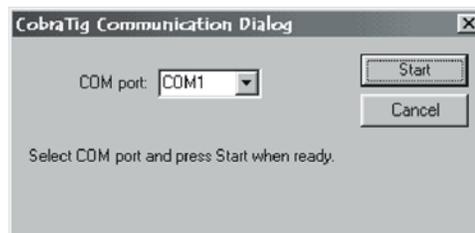
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3. Insert disk into PC and copy the SmartArc™ Weld Program Editor (MK_Edit.exe) to your desktop.
4. Run the SmartArc™ Weld Program Editor from your PC. On the Tool Bar, select Send then select Send Firmware Upgrade to CobraTig (Ctrl + U).



Choose the correct COM port, in accordance with your PC, from the CobraTig Communication dialog box. Press Start.



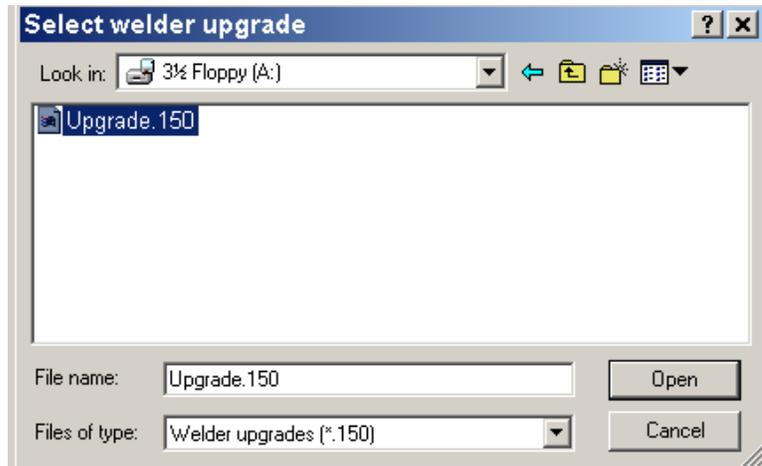
If the program returns with a COM Error Dialog Box indicating an invalid storage control block address, choose the other COM port from the CobraTig Communication Dialog box.*



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From the Select Welder Upgrade dialog box, in the Look in box choose the 3-1/2 Floppy (A:). Select the file named upgrade.150.



5. Once the firmware upgrading starts, the screen on the CobraTig[®] 150 will show the status of the downloading. The bottom of this screen will count upwards the number of 'blocks' being received from the SmartArc[™] Weld Program Editor.

Simultaneously, the CobraTig Communication Dialog box will show a bar graph, moving from left to right, as the firmware is being sent to the CobraTig.

If the CobraTig[®] 150 is not turned on, or the Null Modem serial cable is not properly connected, the transmission will time-out after 30 seconds.

6. Once the firmware has been successfully transmitted, restart the CobraTig[®] 150 (turn off, wait 15 seconds, then turn on) and disconnect Null Modem serial cable. View the CobraTig[®] 150 MAIN MENU and inspect for the new firmware version number.
7. Installation Complete

!!! CAUTION !!!

**TO ELIMINATE POTENTIAL DAMAGE TO THE PC OR LAPTOP,
DISCONNECT THE NULL MODEM CABLE PRIOR TO WELDING.**

Notes:

* When using the SmartArc[™] Weld Editor Program on a laptop, any external COM port software must not only be disabled but also turned OFF (i.e.: Palm[™], Casio[™] or any other HotSync[™] type of applications).

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TRANSMITTING MODIFIED/SAVED WELD PROCEDURES

To copy a weld procedure from the CobraTig[®] 150 to the SmartArc[™] Weld Program Editor, use the instructions in the CobraTig[®] 150 owners manual under COMMUNICATION.

This will allow transfer of weld procedures using the 'WIRED CABLE' transmission channel. This can be selected from the COMMUNICATION MENU.

On the Tool Bar across the top, select Receive then select Receive Weld Prog. From CobraTig (Ctrl + R).