

# FUSION™

## OPERATOR'S MANUAL



STAHL'S  
**Hotronix**®

a GroupeSTAHL company

# Safety Instructions

**When using your heat press,  
basic precautions should always be followed,  
including the following:**

1. Read all instructions.
2. Use heat press only for its intended use.
3. To reduce the risk of electric shock, do not immerse the heat press in water or other liquids.
4. Never pull cord to disconnect from outlet, instead grasp plug and pull to disconnect.
5. Do not allow cord to touch hot surfaces, allow heat press to cool completely before storing.
6. Do not operate heat press with a damaged cord or if the equipment has been dropped or damaged. To reduce the risk of electric shock, do not disassemble or attempt to repair the heat press. Take it to a qualified service person for examination and repair. Incorrect assembly or repair could increase the risk of fire, electric shock, or injury to persons when the equipment is used.
7. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
8. Close supervision is necessary for any heat press being used by or near children. Do not leave equipment unattended while connected.
9. Burns can occur when touching hot metal parts.
10. To reduce the likelihood of circuit overload, do not operate other high voltage equipment on the same circuit.
11. If an extension cord is necessary, then a 20 amperage rated cord should be used. Cords rated for less amperage may overheat. Care should be taken to arrange the cord so that it cannot be pulled or tripped over.

## **Product Warranty Registration**

Log onto [www.Hotronix.com/registration](http://www.Hotronix.com/registration)  
You must provide the Hotronix® heat press  
serial number and model information.

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# HOTRONIX® FUSION™

## Machine View



### ■ Navigation

Most screens have a Cancel or Back button to close the current screen without saving any changes and will return the user to the previous screen. (Fig.1)

Some screens may present a list of items. When the list of items is larger than can be displayed on a single screen a left and/or right arrow appears on the left or right side of the screen. A user can scroll through the list by making a sweeping gesture across the screen, either left and/or right, as indicated by the arrows. The user must be touching the screen for the gesture to be detected. Very fast and very slow gestures may not be recognized. (Fig.1)



Fig.1

### ■ Editing

Editable fields may be displayed in an Edit Box. An Edit Box typically overlays the screen and presents field(s) and/or control(s). Edit Boxes typically do not have a Back or Cancel button. The Edit Box can be closed by touching the screen anywhere outside the Edit Box, or by pressing the ("X") button. A Save or Enter button maybe displayed in an Edit Box. Closing the Edit Box without pressing the Enter button will result in the loss of your changes. (Fig.2)



Fig.2

In addition to editable fields, certain icons may be provided to increase or decrease values. These icons (in most cases) can be held down to automatically increase or decrease values. (Fig.3)



Fig.3

### ■ Keyboard / Keypad Display

The Keyboard/Keypad display is used for data entry purposes. The Keyboard/Keypad can be used to enter text or numeric data when required. The Keyboard/Keypad provides function keys for Cancel, Enter and Backspace/Clear ("~~") keys. Also, a mode key located between the Cancel and Enter keys may be present. The mode key allows the user to switch between upper and lower case letters and numeric and other characters that may be entered using the Keyboard/Keypad. (Fig.4)~~

Typically, the current value is displayed in the Keyboard/Keypad value display at the top of the screen. Use the Keyboard/Keypad to change the current value. Use the Enter key to accept the change or the Cancel key to exit without accepting the change to the current value. (Fig.4)

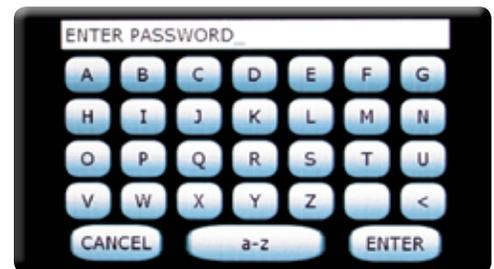


Fig.4

The Keyboard/Keypad display is also used for password entry. Password characters will be displayed with "\*" in place of the password value.

### ■ Menu Selection

The available Menu Screens are displayed as icon images on the screen. Touch and release the icon to open the desired Menu Screen. (Fig.5)



Fig.5

# HOTRONIX® FUSION™ Operating Instructions

## HOTRONIX® FUSION™

The Hotronix® Fusion™ Operating Instructions are designed with the user in mind. Carefully read and follow the step-by-step instructions for best results.



- To avoid burns, do not touch the heated platen during use.
- Keep hands clear of the upper platen of the press during platen lock down as the pressure may cause injury.
- Press should be placed on a sturdy, suitable stand at least 36"L x 24"W x 29"H.
- Work area must be kept clean, tidy and free of obstructions.
- Power supply cord must be disconnected before cleaning or servicing press.

## Connecting the System

1. Connect the power cord into the IEC inlet located in the back of the Press. (1.1)

Lower and lock the U-clip to secure the plug. (1.2)

Connect the opposite end of the cord into a properly grounded electrical outlet with a sufficient amperage rating.

### ■ Voltage

120 Volt - The Hotronix® Fusion™ requires a full 20 amp grounded circuit for 120 volt operation.

220 Volt - The Hotronix® Fusion™ requires a full 10 amp grounded circuit for 220 volt operation.

### ■ Extension Cords

If used, extension cords should be as short as possible and not less than 12 gauge. Heavy-duty cords are recommended.

### ■ Circuits

Circuits that have less than 15 amps or that have other high demand equipment or appliances (especially more than one heat seal machine) plugged in, should not be used.

**Note:** If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or a similarly qualified person in order to avoid hazard. Use SJT type, rated 300 V for replacement.



1.1



1.2

**CAUTION** Failure to follow these instructions will cause:

1. Erratic controller functions.

2. Inaccurate displays and slow heat-up.

3. The circuit breaker to disengage.

## Start Up / Shut Down

**2.** To start up your Fusion™ Press:



2.1

Flip the Power switch to the On position. (The power switch is located on the top of the control housing). (2.1) During the startup, a splash screen is shown for approximately 3 seconds. This screen displays the Hottronix® logo and current software version information. (2.2)



2.2

To turn your Fusion Press off, press and release the “Shut Down” button on the operation screen. (2.3)



2.3

**Note:** When the heat platen is above 100°F (38°C), the current platen temperature is displayed on an orange background as a warning, indicating that the platen is still hot. (2.4)



2.4

During this time, the Shutdown operation can be exited by simply pressing the start button displayed on the touch screen (2.4). The system will exit the Shutdown screen and return to the Main Menu.

Once the platen has cooled below 100° F (38° C), a screen saver will display, showing the Stahls Hottronix® logo, START, and Shut Down buttons. (2.5)



2.5

Press and Hold the Shut Down button until this screen appears. (2.6)

Flip the main Power Switch at the top of the press to the off position.



2.6

**Note:** The Hottronix® Fusion is equipped with an Auto Sleep Mode. When the machine is not in use for a period of four hours, it will enter an energy-saving sleep mode. To restore to normal operating mode, press the start button located on the touch screen and allow the heat press to return to the target temperature.

### Print Screen

- 3.** The Print Screen is the first screen displayed after the splash screen and start up has completed. This screen provides all the printing functions.

#### ■ Presets

Saved Presets are displayed at the top of the Print Screen. These are pre-programmed heat application settings that allow you to quickly and accurately change your print settings for specific materials. The example shown is a preset named “Preset 1” with a first timer of 4 seconds, a target temperature of 320°F, and a platen pressure of 5. (3.1)

To select a new application setting, press the preset bar at the top of the Print Screen. (3.1)

A pop up menu with all of the optional presets will be displayed. (3.2)

**Note:** if there are no Presets pre-programmed on your system, the Preset menu will be blank. To edit, delete or create new presets, see ‘Preset Setup’ on pages 11 and 12.

Press your desired preset and select the “ACCEPT” icon to continue. (3.3)

The system will automatically return you to the Print Screen showing your new preset settings. (3.4)

**Note:** You can “Override” your current heat application settings to fit any material desired. See “Target Settings” below.

#### ■ Target Settings

Your target Temperature and Time settings are displayed as shown. (3.4)  
These settings may be overridden.

**Note:** when changing a Target Setting, the Preset display name at the top of the screen will change to “Override” to indicate the Preset has been manually changed.

To change your **Temperature Settings**, press the Target Temperature display located on the right side of the print screen. A pop-up menu will be displayed. Press the red or blue temperature icons to increase or decrease the temperature (press and hold to change values faster). (3.5)

**Note:** The temperature can be set from a range of 32°F (0°C) to 430° F (221°C).



3.1



3.2



3.3



3.4



3.5

## Print Screen Cont.

### ■ Target Settings Cont.

To change your **Time Settings**, press the Target Timer display located on the right side of your print screen. A pop-up menu will be displayed. Press the minus or plus icons to decrease or increase the time (Press and hold to change values faster). (3.6)

**Note:** The time can be set from a range of 1-999 seconds.



3.6

### ■ Actual Readings

The Actual Temperature and Pressure readings are displayed on the left side of the Print screen. These are the current heat press readings. (3.7)

**Note:** The actual platen pressure will only be displayed when the lift handle is locked down into the print position.



3.7

### ■ Job Counter

The Job Counter counts the total number of complete print cycles performed using the current Preset or Override settings. Exiting the Print Screen or changing the Preset will reset the Job Counter to 0. Changing an Override setting does not reset the Job Counter to 0. (3.8)

### ⏻ Power Button

Use the Power Button to perform system shutdowns. (3.9)

**Note:** See "Start up / Shut Down" on page 7.



3.8

### ⚙️ Setup button

The Setup menu allows you to edit and create Presets, program the Date and Time, change your display units (F°/C°), set your Auto On/Off functions and more. A password is required to enter the Setup menu. The system supports two levels of passwords: "User" and "Manager". Features of the Setup menu are limited by the password level entered. (3.9)

**Note:** See "Passwords" on page 10.

### 🔄 Refresh Button

When using a Preset with multiple timer settings programmed, press and hold the refresh button to revert back to the first timer setting when desired. (3.9)



3.9

### Passwords

4. A password is required to access the Setup Menu and configure certain functions of the Hotronix® Fusion™. The system supports two levels of passwords: “User” and “Manager”. The User Level password provides access to the Preset Setup, Date & Time, Display, and Auto On/Off Setup screens. The Manager Level password provides access to the Preset Setup, Date & Time, Display, Auto On/Off, Password, Language and System Setup screens.



4.1

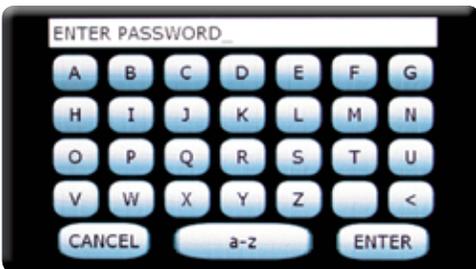
In the Print Screen, press the Setup icon. (4.1)

Then press the Setup icon again. (4.2)



4.2

A keypad will be displayed. Enter the letter “U” for a user level password or “M” for a manager level password. (4.3)

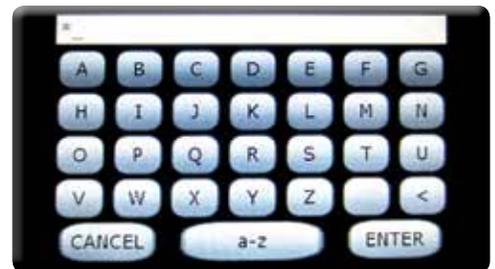


4.3

**Note:** we will continue under a “User Level” password.

Press Enter when complete.

If an invalid password is entered, simply repeat the previous step. (4.4)



4.4

**Note:** You can Select the Cancel button to exit the Password Entry screen and return to the previous screen at any time.

Now you will be automatically entered into the Setup Menu where you will have access to the Setup functions. (5.1)



## Preset Setup

**5.** After your password is entered in the setup menu, press the Preset Setup icon. (5.1). This option will allow you to edit, delete, and create new Presets. A preset can have:

- 1 Preset Name
- 1-4 Timer values each with a range of 1-999 seconds
- 1 Platen Pressure settings with a range of 0-9
  - Note:** A "0" Pressure readout would indicate no pressure at all and "9" would indicate very heavy pressure.
- 1 Temperature value with a range of 32°F - 430°F (0°C- 221°C)



5.1

■ **To create a new Preset:**



5.2

Press the NEW button on the preset setup screen. (5.2)

First, give the Preset a name by selecting the Preset Name field. (5.3)



5.3



5.4

Type in the name of your new Preset and Press ENTER when finished. (5.4)

Repeat the same process for your new Preset Timer, Pressure, and Temperature fields.



5.5



5.6

If desired, you can also change the Pressure and Temperature units here by pressing the F or C (Fahrenheit/Celsius). (5.5)

Press the SAVE button when finished. (5.5)



5.7

**Note:** if you receive an error message after saving, select the Error message. (5.6)  
A Preset Error menu will display, informing you of any changes needed. (5.7)

Press the yellow Error icon again to the close the Error menu and make any necessary corrections.  
Press the SAVE button again when finished.

### Preset Setup Cont.

- **To Create a New Preset (Continued):**



5.8

**Note:** A DELETE button will appear after saving if you do not wish to save. (5.8)

Press the BACK button until you return to the Print Screen. The message “Saving Settings! Please wait...” will appear.



5.9

Press the Presets bar at the top of the Print Screen to select your New Preset. (5.9)



5.10

Locate and select your New Preset. (5.10)

Press ACCEPT. (5.11)

The Print Screen will now display your new settings.



5.11

- **To edit an existing Preset:**

In the Preset Setup menu, press the name of the Preset you wish to change. (5.12)

**Note:** If a blue arrow appears on your screen, this indicates there are more presets hidden from view. Slide your finger across the screen towards the arrow to view the rest of your Presets.

Select the desired field (Preset Name, Timer, Pressure or Temperature) that you wish to edit. A keypad will be displayed. Use the left arrow (<) to override the current name or value, then key in your new entry desired. Press ENTER when finished (or X to cancel).



5.12

- **To Delete a Preset:** In the Preset Setup menu, Select the name of the Preset you wish to delete. (5.12)



5.13

Press the DELETE button. (5.13)

A pop up menu will appear. Press ACCEPT to continue or CANCEL to return to the Preset Setup page. (5.14)



5.14

## Date & Time Setup

- 6.** The Date and Time Setup feature allows you to program the Month, Day, Year, Hour and Minute (displayed in the lower right corner of the Print Screen).



6.1

To set the Date and Time, press the Date & Time button in the Setup screen. (6.1)

Press the "Month" field. (6.2)



6.2



6.3

Change the numeric value using the displayed Keypad, then press Enter. (6.3)

Repeat the same process to set the Day, Year, Hour and Minute.

Select the AM/PM button to toggle between the AM/PM settings.



6.4

Press the SAVE button to save the new Date and Time settings. (6.4)

**Note:** It may take a few seconds for the Date and Time display to update on your screen.

Select the BACK button to return to the Setup menu. (6.4)



### Display Setup

- 7.** The Display Setup allows you to change your Temperature units (Fahrenheit/Celsius)



7.1

To change your display units, press the Display button in the Setup screen. (7.1)

Press the Temperature field (F or C) to toggle between Fahrenheit and Celsius. (7.2)



7.2



7.3

Press the SAVE button to save your changes. (7.3)

Select the BACK button to return to the Setup menu. (7.4)



7.4



## Auto On and Off Setup

- 8.** The system can turn On or Off automatically when configured. The Auto On and Off feature is configured for each day of the week.



8.1

In the Setup Menu, Select the Auto On/Off Button. (8.1)

To configure an Auto On/Off setting, select the day of the week to be configured. (8.2)



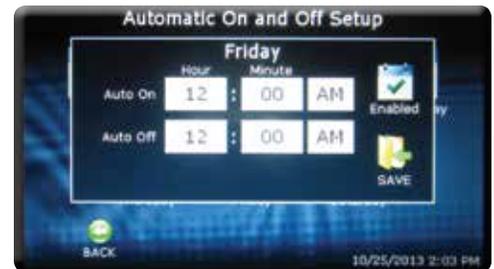
8.2



8.3

Use the Enable/Disable button to enable On/Off settings for the selected day of the week. (8.3)

**Note:** Each day that you want the system to automatically turn On/Off, must be Enabled.



8.4

When enabled, set the time of day for Auto On and Off events by selecting the Hour and Minute fields. (8.4)



8.5

Using the displayed Keyboard/Keypad, enter the numeric time values and press ENTER. (8.5)

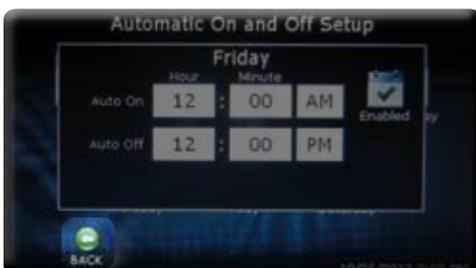
Use the AM/PM designator button to toggle between the AM or PM settings. (8.6)



8.6

Select the SAVE button to save the settings. (8.6)

**Note:** Selecting another day of the week or exiting the Auto On and Off Setup screen without saving will result in loss of changes.



8.7

Press the BACK button to return to the Automatic On and Off Setup screen. (8.7)

**Note:** You will see a green check mark for any day you have your Auto On/Off Enabled. (8.8)



8.8

### Passwords Setup (Manager Level Only)

9. When logged in at a “Manager Level”, Passwords may be changed in the Setup menu. This will allow you to control who can access additional features in the Setup menu such as Passwords, Language and System Setup.

**Note:** To continue at a “Manager Level”, select the letter “M” in the Setup menu and press enter (see “Passwords” on page 10).



9.1

Press the Passwords setup icon in the Setup menu. (9.1)

Select the Password level (User or Manager) to be edited. (9.2)

A Keyboard / Keypad will be displayed. (9.3)



9.2



9.3

Type in your new Password and press ENTER when finished. (9.3)

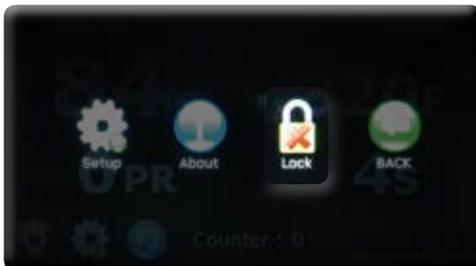
**Note:** Do not forget your new Password(s). It will be required for future logins.

Save any changes prior to exiting the Password Setup screen to prevent losing your changes. (9.4)



9.4

You can also access the “Lock” function when logged in at a Manager Level. This feature will prevent a user from changing any print settings and functions of the print screen when heat applying.

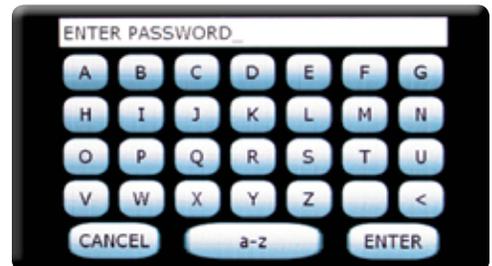


9.5

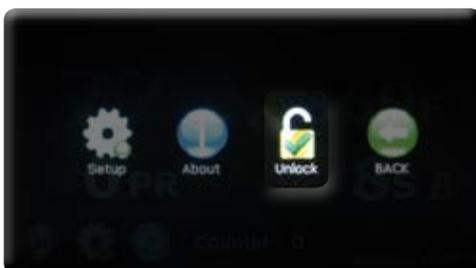
To Lock the print settings, Press the Lock icon in the Setup menu. (9.5)

Type in your Manager Level password and press ENTER when finished. (9.6)

**Note:** The “Unlock” icon will now be displayed in the setup screen if you wish to Unlock the print settings. (9.7)



9.6



9.7

Press the BACK button in the Setup menu. (9.7)

The print screen will now display the Lock icon indicating the heat application settings will no longer be editable. (9.6)



9.6

## Language Setup (Manager Level Only)

- 10.** When logged in at a “Manager Level”, the display Language may be changed in the Setup menu. Choose from eight languages: English, Deutsch, Espanol, Francais, Italiano, Japanese, Pyccko, and Chinese.



10.1

In the Setup Menu, Select the Language Button. (10.1)

Press the icon of your Desired Language. (10.2)

**Note:** The selected icon will appear larger than unselected icons.



10.2

This example shows the Language “Espanol” being selected. (10.3)



10.3

Once the desired language is selected, press the Save button. (10.3)



10.4

Your Fusion™ will automatically restart and return you to the Print Screen using the new Language display settings. (10.4)



### System Setup (Manager Level Only)

- 11.** When logged in at the “Manager Level”, system functions such as Internal Temperature, Fan Status, Power Save Status, and Key Touch Frequency can be turned on, off, or adjusted in the Setup menu.

Press the System icon in the Setup menu. (11.1)



11.1

■ **Internal Temperature**

The current internal temperature reading of the system is displayed. (11.2)



11.2

■ **Power Save Status**

With the Power Save Status turned on, the system will automatically shut down after 4 hours of inactivity to save power. The Power Save Feature can be turned On or Off by selecting the On/Off button. (11.2)

■ **Key Touch Frequency**

When the user touches a control on the screen an audible tone is produced as a verification that a control was touched. The tone frequency can be changed by adjusting the Key Touch Frequency system setting. (11.3)



11.3

Use the plus / minus (+/-) buttons to adjust the frequency setting or select the field value to display a Keyboard/Keypad for editing the value. (11.4)

**Note:** The value can be set in the range of 1 - 10000 Hz.

After your new frequency value is entered, press the ENTER key. (11.4)



11.4

Press the SAVE button to save any changes, followed by the BACK button. (11.5)

Press the BACK button again in the Setup menu to return to the Print Screen.



11.5

## Prepare to Print

**12.** To begin Printing/Pressing, start by verifying that you have the proper settings selected in the Print Screen: (12.1)

- Do you have the correct preset selected?

**Note:** You may also manually adjust your desired Time, Temperature and Pressure settings (refer to Target Settings on pg 8-9).

Also, Be sure your Actual Temperature Setting has reached the Target Temperature.



12.1

When the desired settings are reached you may begin to Print / Press.

- When using the “**Swing**” feature, swing the heat platen out and position the garment and application. (12.2)



12.2

- When using the “**Draw**” feature, pull out the lower platen and position the garment and application. (12.3)



12.3

- Swing the heat platen or push the lower platen back into position.

- Lower the heat platen into the press position. (12.4)

- The Timer display on your Print Screen will automatically initiate a count down. It will visually and audibly signal you when to lift the platen off the garment. Immediately lift the platen to the UP position.



12.4

Swing the heat platen or pull the lower platen away and proceed according to your application’s instructions.

Your equipment has automatically reset and you may continue to Print / Press.

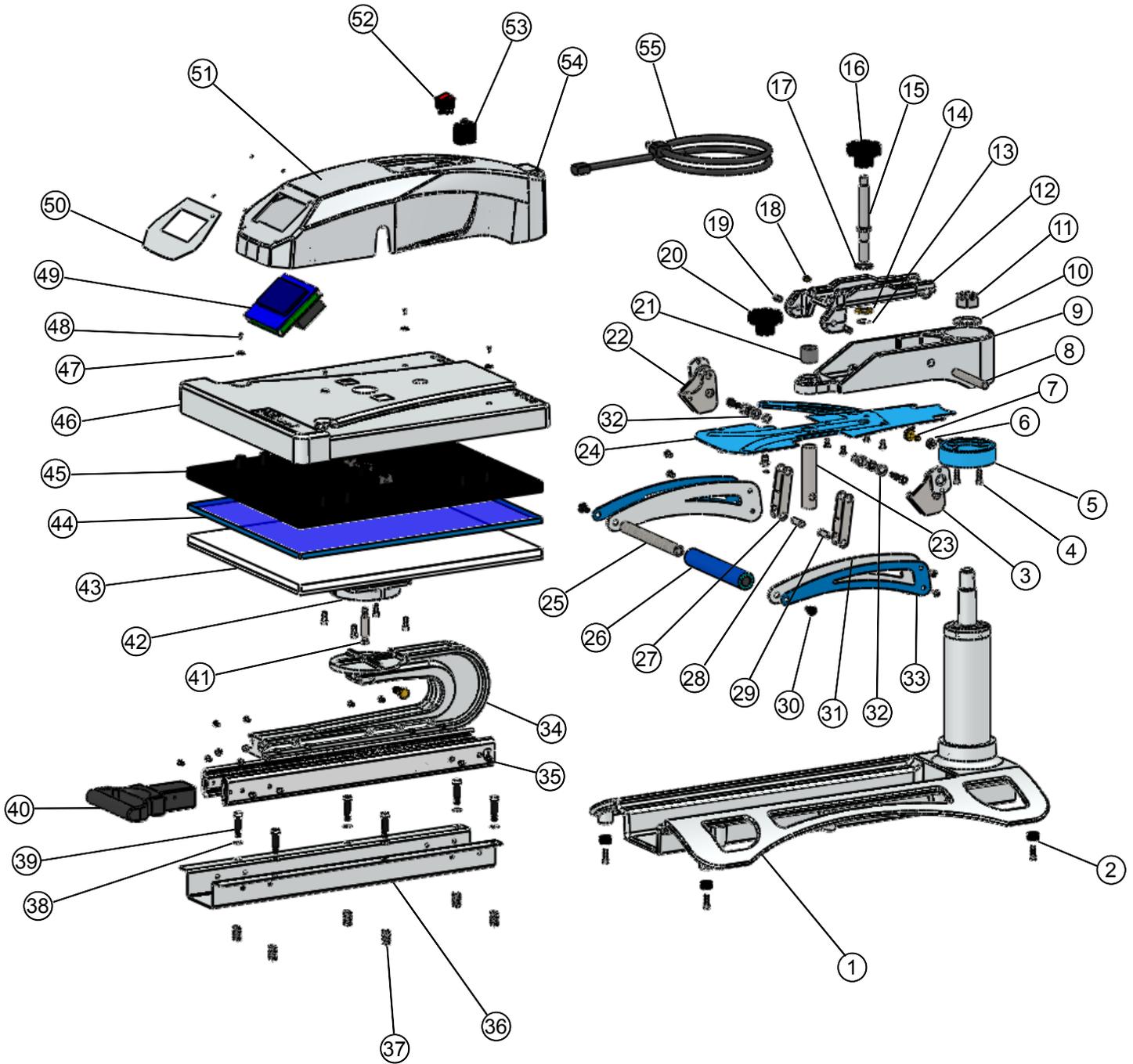
# HOTRONIX® FUSION™

## Replacement Parts List

Item #	Part Name	Part #	Qty.
1	Base Assembly	Kit 3-6942	1
2	Rubber Foot	1-2199	4
3	Right Upper Link	1-2255	1
4	Low Profile SHCS	3-1011-245	2
5	Stop Collar	1-2203	1
6	Hex Nut	2-1006-93	1
7	Hand Retractable Plunger	1-2206	2
8	Steel Pin	1-2204	1
9	Upper Casting	2-1664	1
10	Washer	2-1006-21	1
11	Castle Nut	2-1006-1	1
12	Adjustment Casting	Kit 3-6943	1
13	E-Clip	1-1019-1	1
14	Steel Shim	1-2217	1
15	Adjustment Spindle	1-1010-2	1
16	Adjustment Knob	1-1012	1
17	Spherical Washer	2-1006-92	1
18	Ball Plunger	1-2201	1
19	Roll Pin	1-1018-1	2
20	Swing Knob	1-1054	1
21	Lift Rod Bushing	1-1013	1
22	Left Upper Link	1-2255	1
23	Guide Tube	1-2194	1
24	Undercarriage	Kit 3-6911	1
25	Handle Spacer	0175-12	1
26	Foam Grip	1-2116	1
27	Lift Link	1-1024	2
28	Clevis Pin	1-1017-1	2
29	Nylon Lock Nut	2-1006-20	2
30	Screw, Cap But Hd. 3/8-16 x 3/4"	3-1011-244	3
31	Inner Lift Arm (Thick)	1-2207	2
32	Bearing	1-1300	2
33	Outer Lift Arm (Thin)	1-2208	2
34	C-Frame	3-1335	1
35	Slide Rail	1-1749	1
36	Draw Tray	1-2164	1
37	Compression Spring	1-2195	6
38	Nylon Washer	2-1006-65	6
39	Shoulder Bolt	3-1011-121	6
40	Draw Handle	1-2182	1
41	Quick Change Pin	1-2215	1
42	Adaptor Plate	3-1336	1
43	Lower Platen	2-1029	1
44	Silicone Pad 16"x20" (Blue)	1-2136	1
45	Heat Platen (16"x20")	2-1002	1
46	Heater Cover	1-2189	1
47	Finish Washer	1-1063	4
48	Cover Screw	3-1011-217	4
49	Touch Screen Controller	1-2266	1
50	Control Housing Overlay	1-2198	1
51	Control Housing	1-2197	1
52	Power Switch	1-2087	1
53	Breaker	1-1331	1
54	IEC Inlet	1-1759	1
55	Power Cord	2-1013-1	1

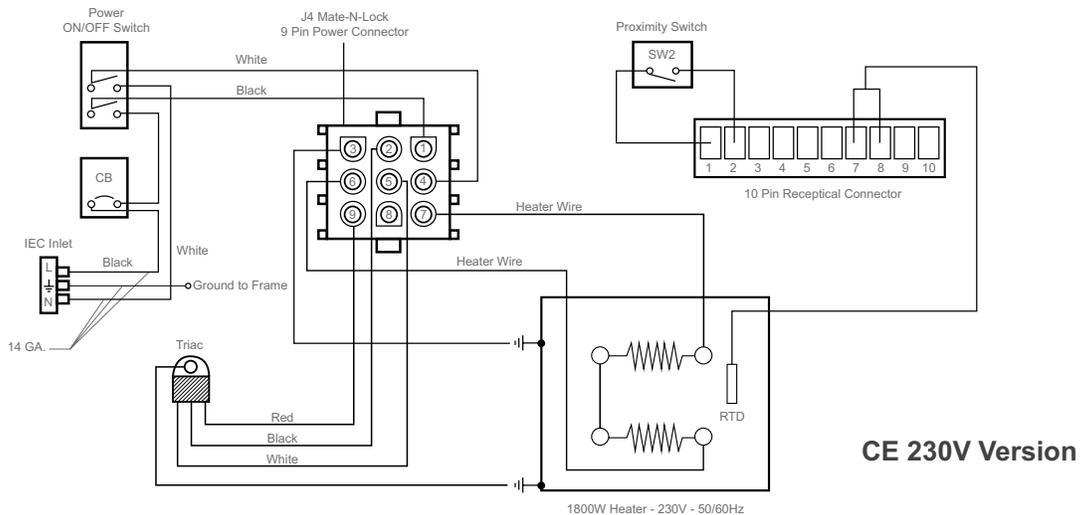
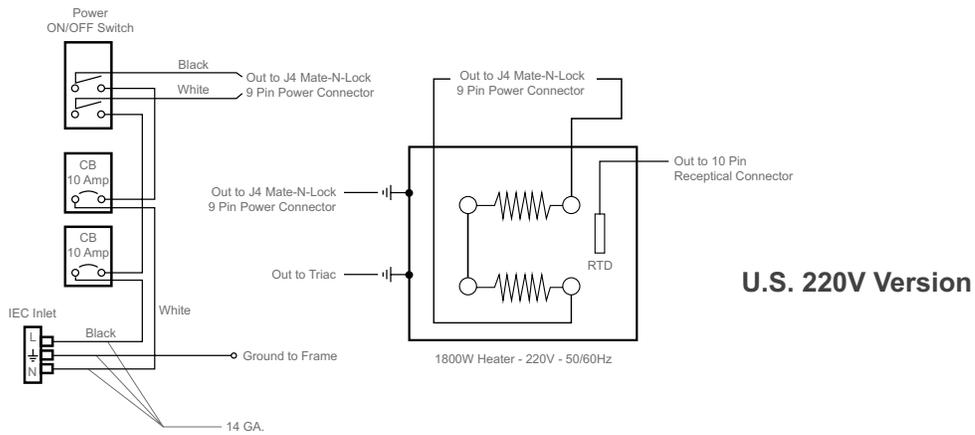
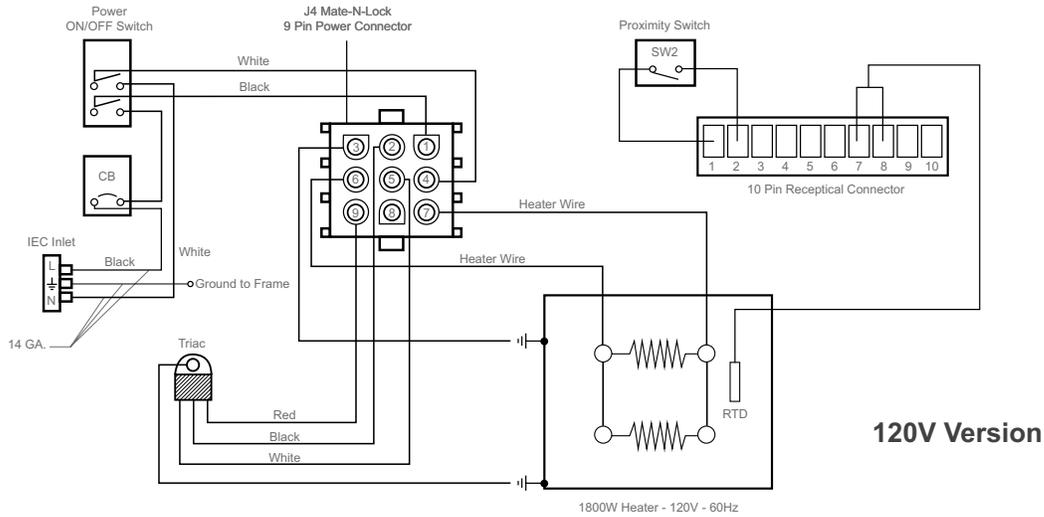
# HOTRONIX® FUSION™

## Parts Location Guide



# HOTRONIX® FUSION™

## Electrical Schematic



# Contact us

Stahls' Hotronix®  
One Paisley Park  
Carmichaels, PA 15320  
U.S.A.

Technical Support  
800 . 727 . 8520  
Monday - Friday  
8am - 7pm EST

Customer Service  
800 . 727 . 8520  
Monday - Friday  
8am - 5pm EST

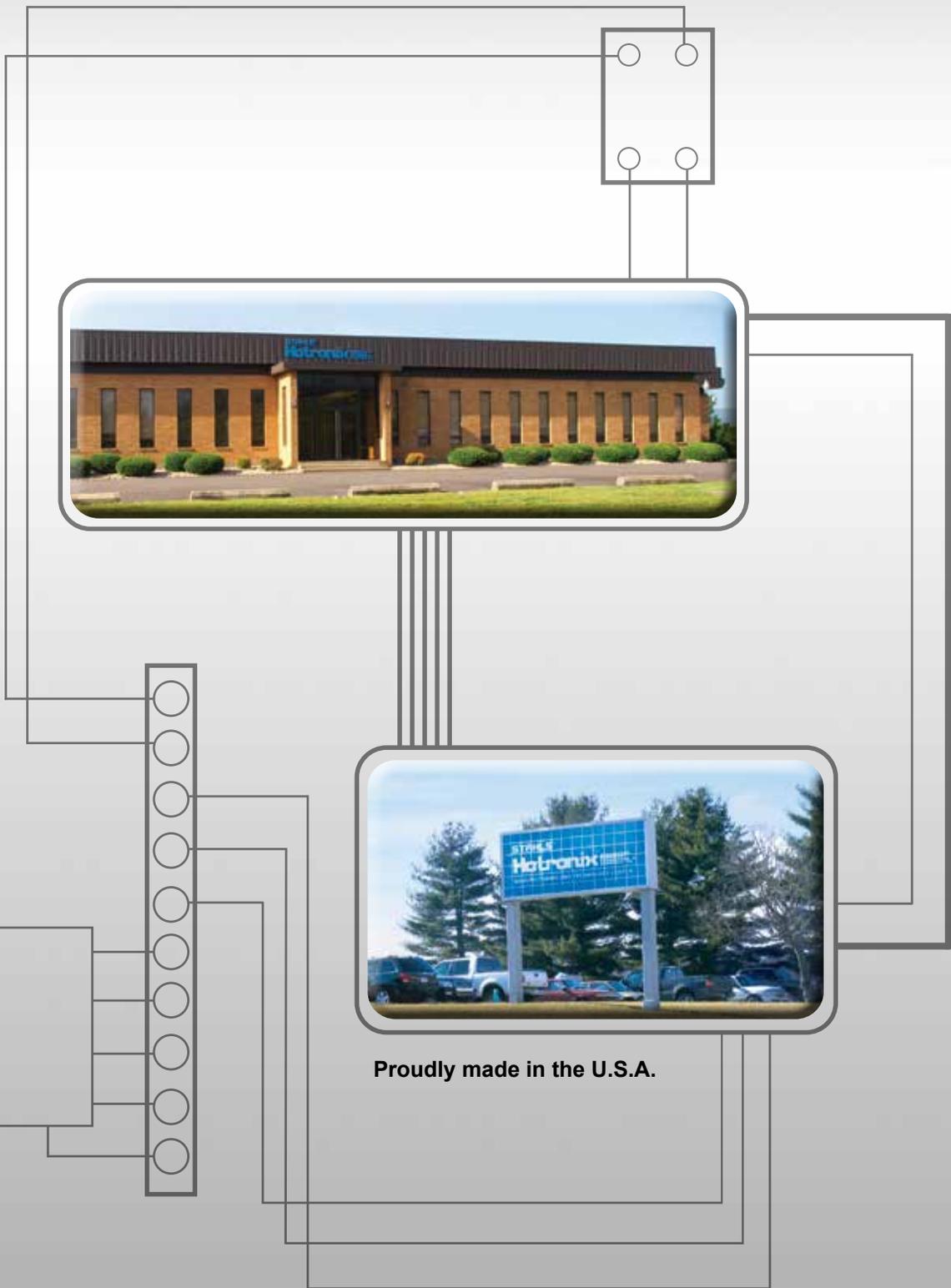
Replacement Parts  
800 . 727 . 8520  
8am - 7pm EST

Web  
[Hotronix.com](http://Hotronix.com)



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