The Time Is Right

⟨FAST.⟩®

Installation
Instructions

⟨FASTRON.⟩® *Silver Edition*™
Roast Beef Cooking
Controller Upgrade

Model IR081C1H760X & IR081C1H765X

CE **All Products CE Approved**

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Toll-Free Technical Support
24 Hours A Day, 365 Days A Year
(from the U.S., Canada and the Caribbean)
1-800-243-9271

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INTRODUCTION

Thank you for your purchase. In choosing FAST you have chosen a product with over 25 years of innovation and quality manufacturing behind it. The (FASTRON.)® Silver Edition™ Cooking Controller is designed to simplify your cooking process and allow your foodservice operators to spend more time with the customers and other important responsibilities. Quality control of your food product is assured through the various features, notification displays and alarms designed into the Controller.

There are three modes of operation on the (FASTRON.)® Silver Edition™ Cooking Controller:

              Operating Mode: used to cook various menu items
    Product Programming Mode: used to add or modify menu items/parameter
     System Programming Mode: used to configure the controller to various applications

This instruction booklet covers the installation of the cooking controller system. For operating and programming instructions, please refer to the FAST manual part number 229-51012.

FAST is not liable for any use of product not in accordance with FAST's installation and operating instructions.

Before using this equipment, or for any questions on the operation of the appliance, consult and follow all instructions and safety warnings found in the appliance operator's manual supplied from the manufacturer of the appliance.

BEFORE YOU START . . . READ THIS ENTIRE MANUAL

BEFORE INSTALLATION, DO THE FOLLOWING:

A. Identify the oven manufacturer and oven energy source (gas or electric).

B. Assure that the configuration shipped can be mounted on top, right or left sides without interfering with the hood, walkway or another appliance. After determining the controller mounting location, verify that you have received the correct parts for this mounting by referring to Table 1, and Figures 1-4, as applicable.

C. Refer to your oven's wiring diagram and wiring diagram Figure 4, and locate where the thermostat or heat control is. You will need to move wires from the thermostat or controller and connect them to the heat relay later on. Determine the location of the relay panel and mark the mounting hole.

DO NOT ATTEMPT INSTALLATION IF THE ABOVE CONDITIONS CANNOT BE MET. Consult a FAST Technical Support Representative at 1-800-243-9271 for assistance.

FAST IS NOT RESPONSIBLE FOR IMPROPER INSTALLATION.

NOTE: The text of this instruction manual has been prepared to show top oven installation ONLY for computer mounting top, right and left.

FAST does NOT recommend bottom oven installation. If you have any questions concerning installation, please contact FAST at 1-800-243-9271.

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BEFORE YOU START . . .

Parts Kit

Please inspect the package carefully, ensuring that there is no damage to the carton. Once opened, carefully unpack the material, making sure that all of the parts described on the following pages are present. Note there are several small parts included with the computer, manifold, relay assembly and cables. If any of the parts listed are missing, please call the FAST Technical Service Department at 1-800-243-9271, 8-5 PM EST.

Also included should be: Operating Manual   229-51012

Tools Required

— Power drill, with drill bits (1/16" through 1/2") and a #29 drill (.131 dia.)
— Screwdrivers, Phillips and Slotted
— High Temperature Sealant (GE RTV 106, or equivalent)
— Wire Fish Device
— Crimping Tool
— Adjustable Wrench
— Safety Glasses
— 7/8" diameter Knockout Punch or Stepper Drill

Controller Operating Environment

PLEASE NOTE: The solid state components in this controller are designed to operate reliably in a temperature range up to 158°F / 70°C. Before installing this controller, it should be verified that the ambient temperature at the mounting location does not exceed 158°F / 70°C.
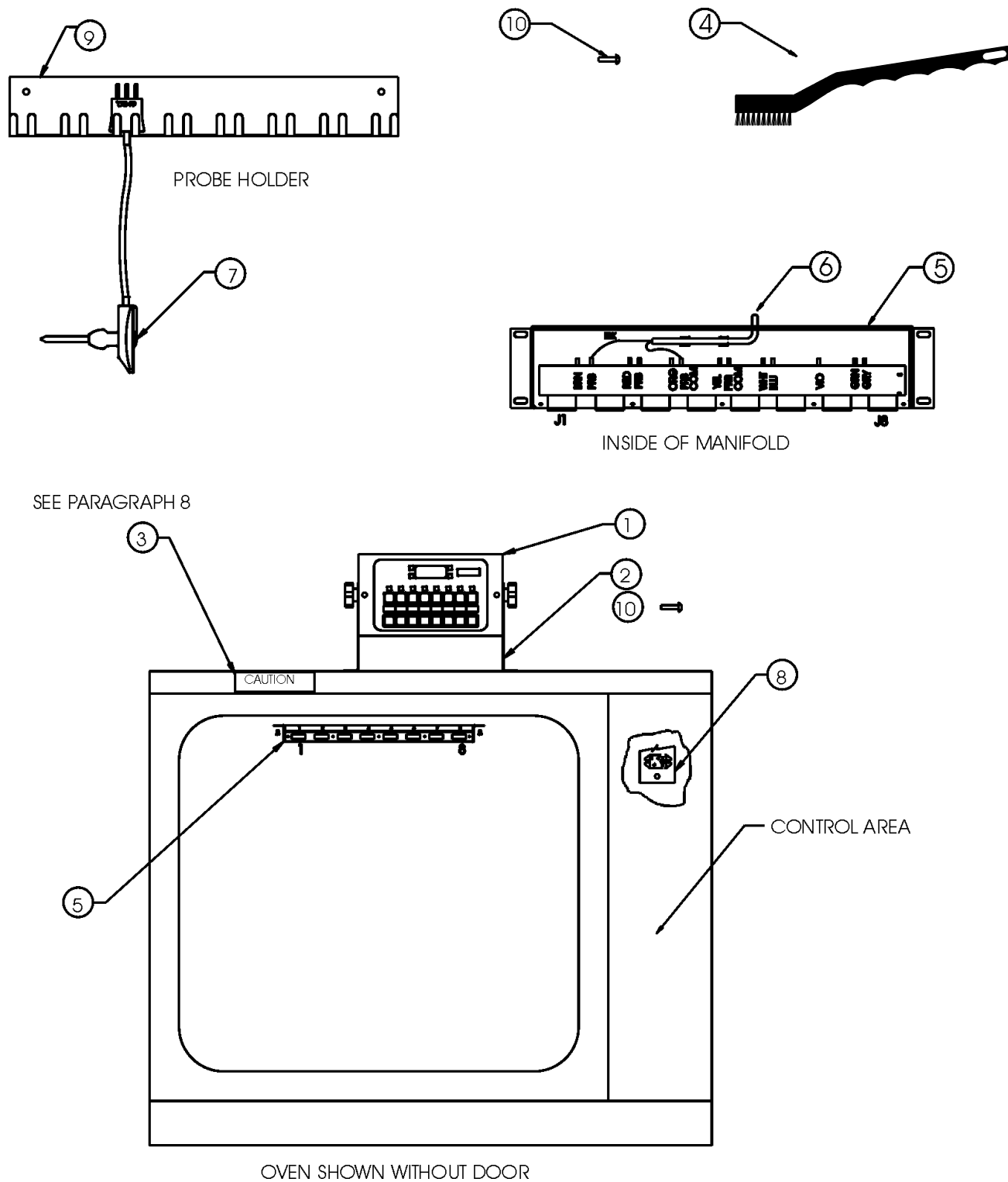
PART NUMBER LISTING

Table I

Defines parts that are required on all installations (see figure 1).

X = assembly provided with #8 x 1/2 self-tap mounting screws.

ITEM	PART NO.	QTY.	DESCRIPTION	COMMENTS
1	IR081C1H760X or IR081C1H765X	1	FAST CONTROLLER	
2	214–52543	2	BRACKET CONTROLLER MOUNTING	
3	164–10585	1	CAUTION LABEL	
4	190–50028	1	BRUSH	
5	213–50637–01	1	MANIFOLD ASSY	X
6	140–60107–04	1	OVEN PROBE	
7	140–60112–05	8	MEAT PROBE	
8	213–50619–02	1	RELAY ASSY	X
9	214–52862	1	BRACKET MEAT PROBE HOLDER	
10	150–10014	9	#8 X 1/2" PAN HD SELF TAP S.S.	
11	222-50210-13	1	HARNESS CONTROLLER TO MANIFOLD TOP MOUNTING	X
12	222-50218-03	1	HARNESS CONTROLLER TO RELAY ASSY TOP MOUNTING	
13	214-52900	1	BRACKET CONTROLLER SUPPORT	
14	213-50706-01	1	TEST PLUG	
15	180-72350	4	SCR #8-32 x 1/2" PAN HEAD, STAINLESS STEEL	

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FIGURE 1 — Required Parts On All Installations

PROBE HOLDER

INSIDE OF MANIFOLD

SEE PARAGRAPH 8

CAUTION

CONTROL AREA

OVEN SHOWN WITHOUT DOOR

INSTALLATION

WARNING: Before starting, ensure that power to the appliance and controller are shut OFF. Also, please read this entire manual prior to starting the installation. Review the drawings at the end of the manual to become familiar with the components.

Controller / Manifold Installation
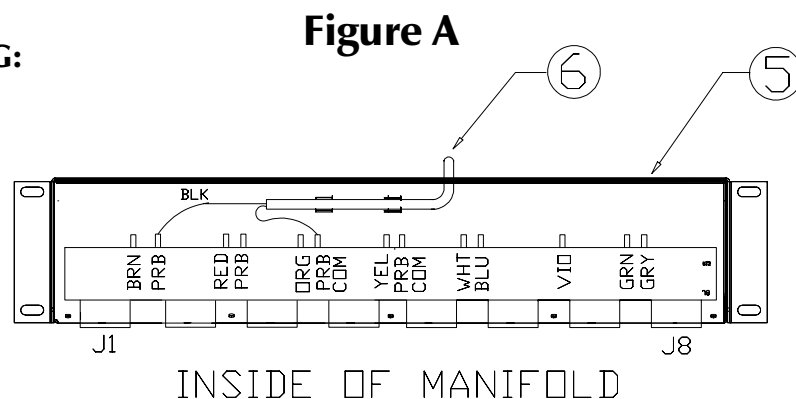
SURVEY:

1. Make sure that the oven is empty and cool enough to work in. Note that the oven figures shown are typical of ovens you will be working with, but they may not match every detail of every oven currently in use. As the installer, you must pay careful attention to these minor differences. To assure that the system you have received will fit the oven you are retrofitting (cable lengths, access and overall requirements) do the following:

    Remove panel to control area and determine heat control wiring so that a location for the relay assembly can be selected. Mark the relay assembly location. Tentatively position controller, take the heat control relay cable (P/N 222-50218-03) from computer to control area and determine the location of the 7\8" dia. hole "B" which will mount the cable clamp to oven skin and allow you to make connections to the relay assembly. Mark cable clamp hole location and tentatively position the relay assembly. Take the heat relay cable and assure that it will reach the relay assembly location previously selected and connections can be made to the computer. Having done this and there are no problems proceed to the detail installation.

OVEN PROBE INSTALLATION:

2. Insert probe in hole provided in the rear of the manifold housing, rotate the probe and snap into clips. If probe is loose in the clips, gently pinch clip ears with pliers to secure. Then make connections to probe and probe common as shown in figure A below; probe wires are interchangeable.

CABLE MOUNTING:

Figure A

INSIDE OF MANIFOLD

INSTALLATION

3. You will be drilling a 3/8″ dia. hole through the top of the interior of the oven cavity wall to provide cable access from the computer to the oven manifold. Verify that there is a clear path before drilling.

   Drill through the top of the interior of the oven cavity wall (refer to fig. 2, item A, page 11) and through the top outside wall of the oven (see figure 2).
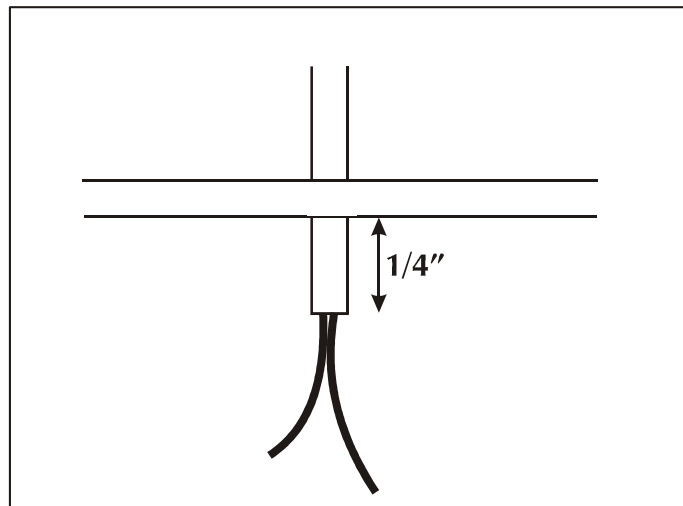
   NOTE: It is advised that you start with a small dia. drill bit as a pilot hole (1/16″) and work up to the required larger 3/8″ dia. hole.

MANIFOLD MOUNTING:
4. Tentatively position the manifold before you drill as you want to avoid any material that will prevent a clean passage for the cable.

FROM INSIDE OVEN:
Using the manifold as a template, align the manifold so the computer cable is not interfering with the internal probe or PC board and is 1/2″ inside the housing of the manifold. Mark the location of the four mounting holes. Again view the tentative positioning and ensure that there are no location problems. Drill the four holes with a #29 drill bit. Do NOT screw the manifold in place yet.
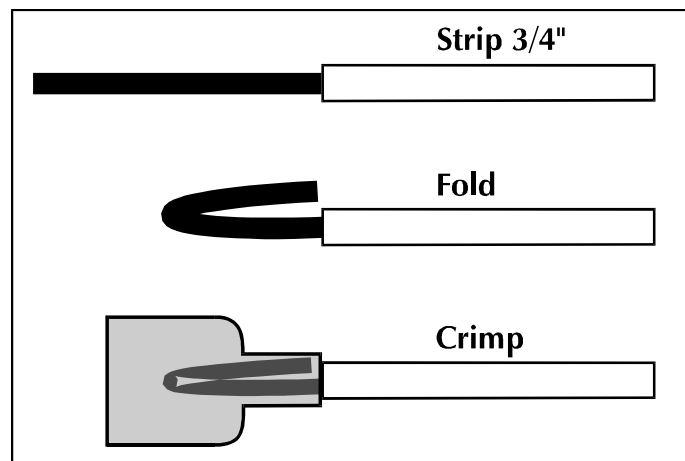
1/4″

SECURE PROBE CABLE:

5a. **Top mount two external cable (see figure 2).** Feed the controller cable through the 3/8" dia. hole. Using the cable mounting flange as a template, drill two holes using a #29 drill bit. Secure the cable with supplied screws. 1/4" of conduit should clear the hole on the inside of the oven. If this is not the case, loosen the screw on the cable bulkhead fitting and adjust its length.

CONNECTING WIRES TO THE MANIFOLD:

5b. Strip each of the wires 3/4" from the end, double wires over then crimp one uninsulated female Faston to each of the wires. Connect wires to manifold board matching colors marked on the board. Connect one black wire to "PRB" and the other Black wire to "PRB COM." (See Figure A on page 7 or Figure 4 on page 15).

SECURING MANIFOLD:

5c. After connecting the Fastons, screw the manifold into position, making sure to enclose all of the wires inside the manifold. Note that the gap between the manifold and the ceiling of the oven must not exceed 1/32". If the gap is larger than 1/32", you must use GE RTV 106 to seal the gap.
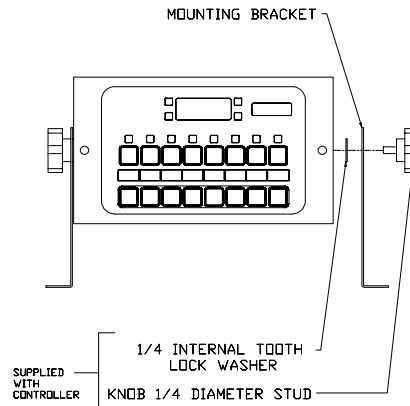
NOTE: Do NOT pinch any of the wires between the manifold and the oven.

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INSTALLATION

COMPUTER MOUNTING:

6. **To mount the controller on top of the oven:** Attach the mounting legs to the controller using the lock washer, bracket and knobs as shown in figure B.

FIGURE B

Line up the controller in the predetermined location. There are four slots in the bracket to mount the controller to the oven. Using the controller as a template, mark the location of these slots on the oven, drill four holes using #29 drill (.131 dia.). Reposition the controller and screw in place with hardware supplied. See step #9.

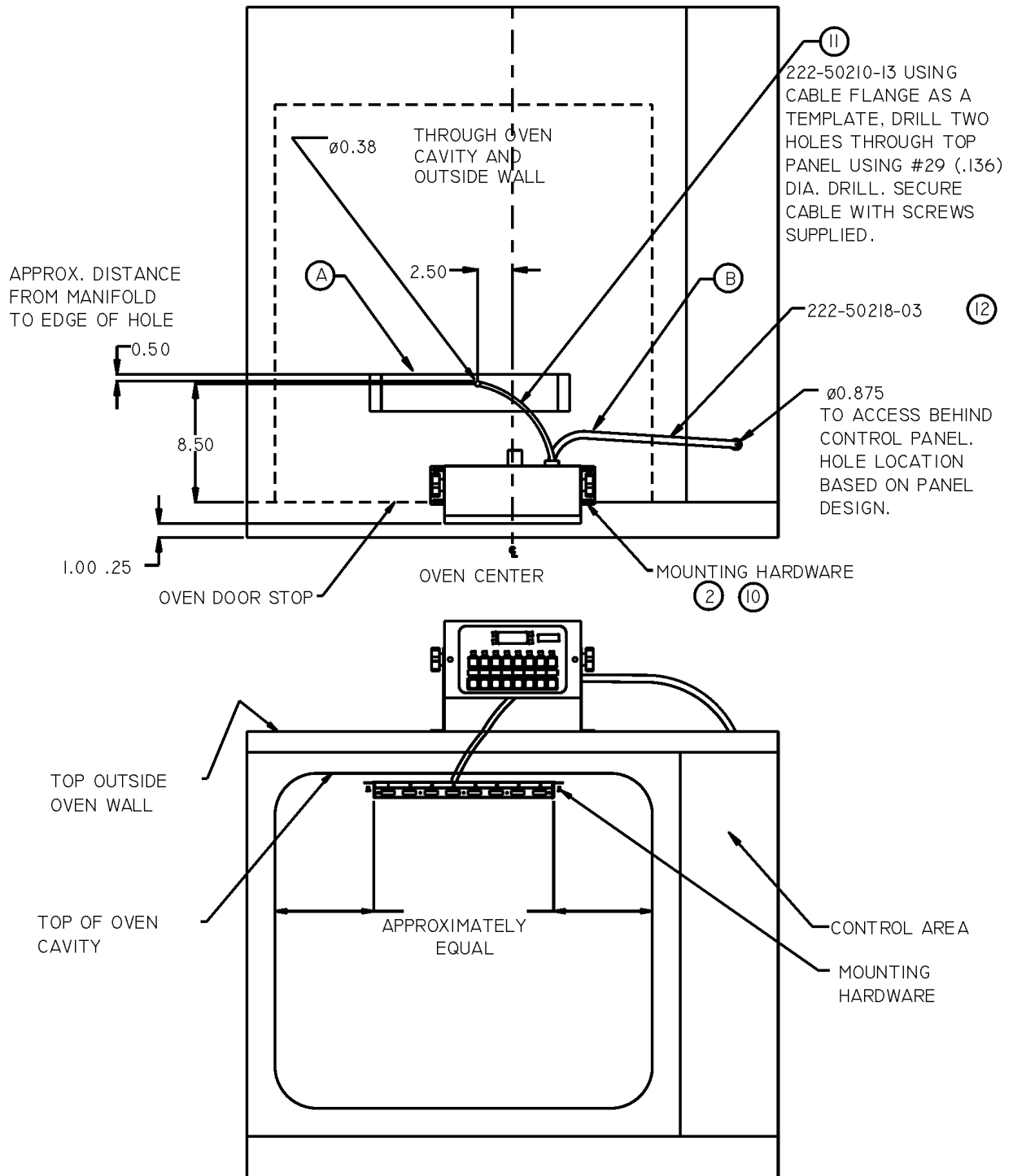## REFER TO FIG. 2, ITEM B. LOCATE THE HOLD PLACEMENT FOR THE CONTROL CABLE.

7. **Heat relay cable installation to control area.** The control cable clamp mount will require a 7/8" dia. hole through the top or side (depending on mounting option) of the oven into the control panel. Check to ensure no problems exist making connections to the relay assembly or manifold cable. If none exist, punch or drill 7/8" hole, feed cable through hole and secure with cable clamp.

    Engage cable connector or connectors to the back of controller locking them by rotating collar on cable connector.

8. Apply the label "CAUTION - HOT SURFACE GLOVES REQUIRED" (part number 164-10585) to the stainless steel strip (above the doors, but below the top of the oven).

    This label is NOT to be attached to the oven door, nor is it to cover any existing labels.

FIGURE 2

Top Mounting, Two External Cables

222-50210-13 USING CABLE FLANGE AS A TEMPLATE, DRILL TWO HOLES THROUGH TOP PANEL USING #29 (.136) DIA. DRILL. SECURE CABLE WITH SCREWS SUPPLIED.

ø0.38

THROUGH OVEN CAVITY AND OUTSIDE WALL

APPROX. DISTANCE FROM MANIFOLD TO EDGE OF HOLE

0.50

8.50

1.00 .25

222-50218-03

ø0.875 TO ACCESS BEHIND CONTROL PANEL. HOLE LOCATION BASED ON PANEL DESIGN.

2.50

A   B

OVEN DOOR STOP

OVEN CENTER

MOUNTING HARDWARE

TOP OUTSIDE OVEN WALL

TOP OF OVEN CAVITY

APPROXIMATELY EQUAL

CONTROL AREA

MOUNTING HARDWARE

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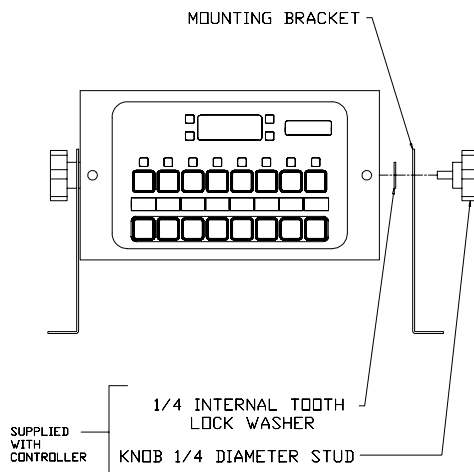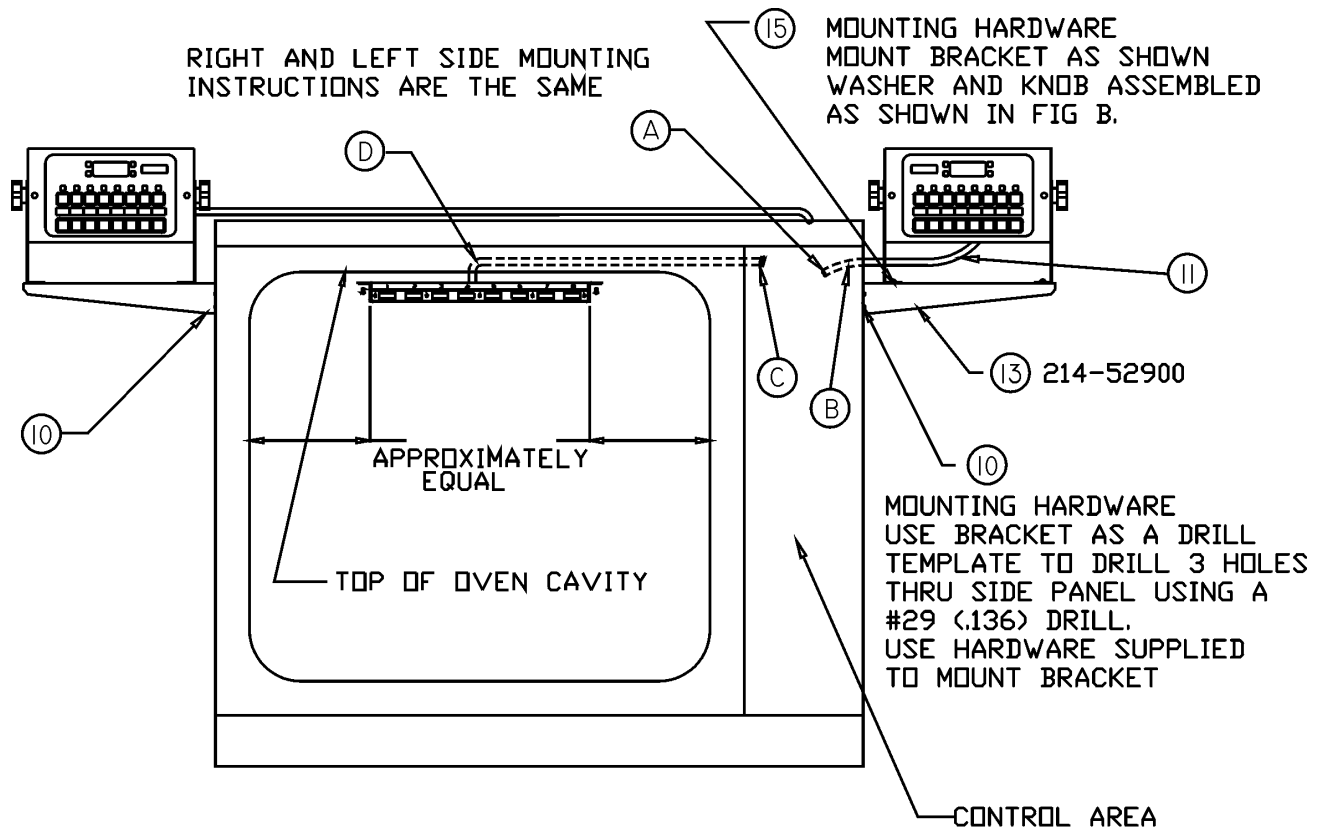
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INSTALLATION

COMPUTER MOUNTING:

9. Attach the mounting legs to the controller using the lock washer, bracket and knobs as shown in figure B. When using the side-mounting option, turn legs inward, secure controller to support (item 13, figure 3) with screws (item 15, figure 3). Using the controller support (item 13 on parts list) as a template, mark the three holes on the side of the oven, then drill with #29 bit.

Figure B

MOUNTING BRACKET

1/4 INTERNAL TOOTH LOCK WASHER

SUPPLIED WITH CONTROLLER

KNOB 1/4 DIAMETER STUD

OPTIONAL SIDE MOUNTING *

FIGURE 3
Right & Left Side Mounting
(instructions are the same for both sides)

RIGHT AND LEFT SIDE MOUNTING
INSTRUCTIONS ARE THE SAME

MOUNTING HARDWARE
MOUNT BRACKET AS SHOWN
WASHER AND KNOB ASSEMBLED
AS SHOWN IN FIG B.

214-52900

APPROXIMATELY
EQUAL

TOP OF OVEN CAVITY

MOUNTING HARDWARE
USE BRACKET AS A DRILL
TEMPLATE TO DRILL 3 HOLES
THRU SIDE PANEL USING A
#29 (.136) DRILL.
USE HARDWARE SUPPLIED
TO MOUNT BRACKET

CONTROL AREA

SIDE MOUNTING

VIEWING COMPUTER FROM FRONT USING THE
SUPPORT BRACKET.
CABLES AND MOUNTING ARE THE SAME AS
FIG 2, EXCEPT AS SHOWN.

* For use when oven clearance does not permit top mounting.

(FAST.)®

INSTALLATION

Heat Relay Installation

10. Relay panel location previously selected in the control area. Use the relay panel as a template to mark the mounting hole. Drill hole using #29 drill bit. Mount panel using screws supplied.

    Make connections from the computer cable to the relay panel matching colors WHT/VIO and WHT/RED. See wiring diagram Figure 4. Tape any unused wires separately.

    Disconnect the terminals from the manual thermostat and connect them to the relay panel wires YEL and BLU. Note there is no concern with matching colors to the thermostat. If the oven you are working on has a control other than a mechanical thermostat, call a FAST technician before proceeding.
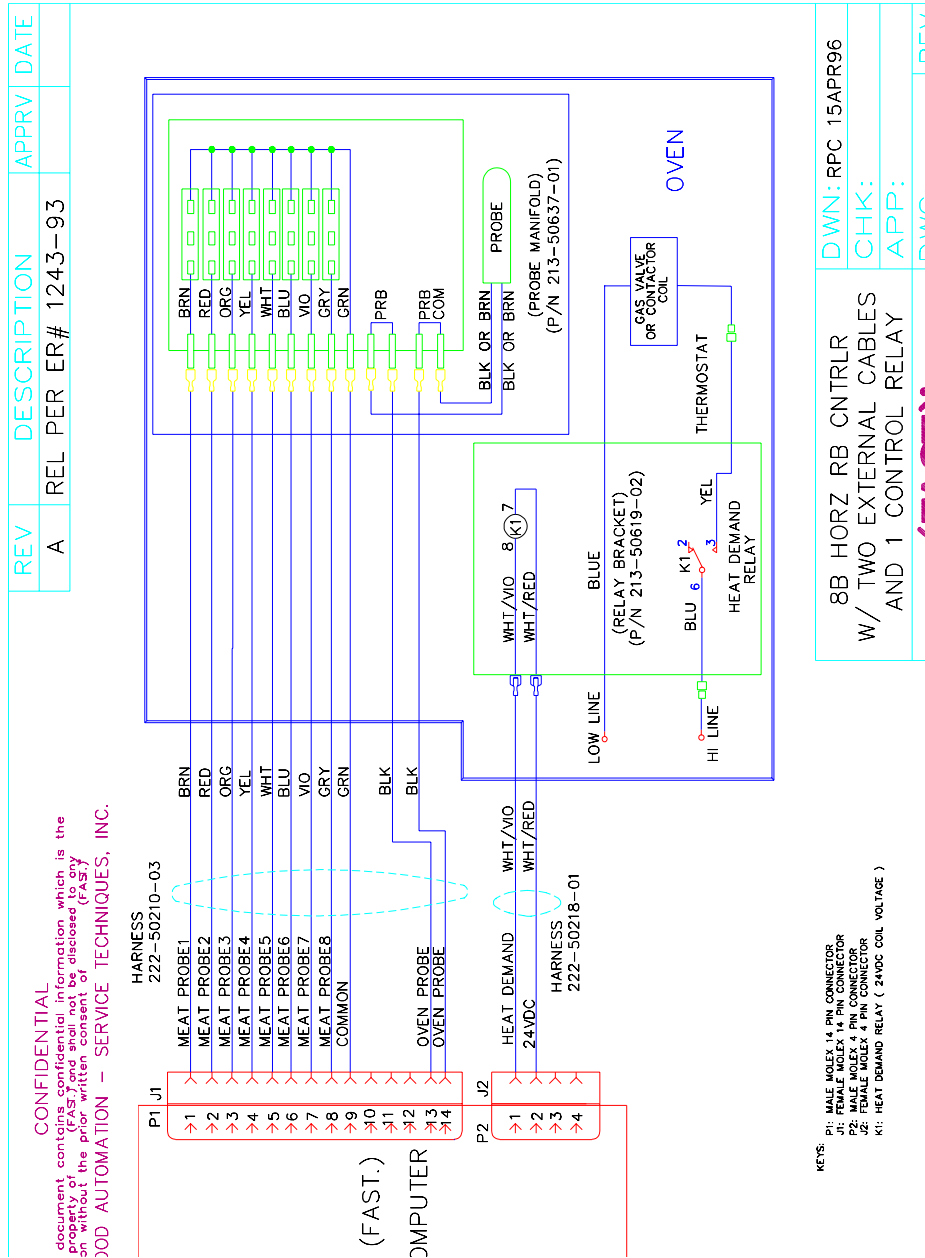
Probe Brackets Installation

11. The meat probe holder is provided to prevent damage to the probes when not is use. Consult with store manager for mounting location that best suits his needs. Mounting screws provided as shown in figure 1.

OPERATION

1. Turn the power to the oven and controller back ON (controller must be plugged in).

2. Fan should turn on and heat should be on when the heat light on the beef controller is on. If not, turn off and check heat relay connections.

3. Refer to the operating instructions for further information.

FIGURE 4

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NOTES

Customer Service and Technical Assistance

Our customer service department is available for orders and questions Monday through Friday between the hours of 8 AM and 5 PM EST by calling toll-free at **1-800-FASTRON** (327-8766).

Toll-free technical assistance is available 24 hours a day, 365 days a year by calling **1-800-243-9271** (from the U.S., Canada and the Caribbean) when help is needed immediately.

Warranty Statement

FAST provides a limited one-year warranty for its products (except probes and hoses for which the period is 90 days). A copy of the exact provisions of this warranty and the other terms and conditions of sale are available upon request.

Controller Operating Environment

PLEASE NOTE: The solid state components in this controller are designed to operate reliably in a temperature range up to 158°F/70°C. Before installing this controller, it should be verified that the ambient temperature at the mounting location does not exceed 158°F / 70°C.

Patents

The products manufactured by FAST are protected under one or more of the following U.S. Patents:

4,610,238	4,644,931	4,688,475
4,742,455	4,782,445	4,812,625
4,812,963	4,864,498	4,911,068
4,920,948	5,043,860	5,171,974
5,331,575	5,485,780	5,539,671
5,542,344	5,711,606	5,723,846
5,726,424	5,730,308	5,875,430

Plus foreign patents and patents pending.

Plus licensed patents:

4,437,159	4,549,527	4,663,710
4,672,540	4,858,119	

Free Program for Service Exchanges

FAST provides an Exchange Program, at no extra cost, if a unit should fail. In the event of failure, the Customer has the option of (1) receiving from our factory, freight prepaid, a replacement product; (2) exchanging the failed product for a replacement product at one of our authorized local service centers; or (3) selecting on-site repair or replacement of the failed unit by one of our authorized local service centers.

Simply call our toll-free customer service number, 1-800-243-9271. If the customer elects to receive an exchange unit from the factory, a replacement unit will be sent immediately. Upon receipt of the replacement unit, the customer simply returns the failed unit to the factory, freight prepaid, using the same carton and packing material in which the replacement unit was shipped. The unit will be replaced free of charge, if still under warranty, and if the product shows no evidence of abuse or alteration. If the unit is not under warranty, the Customer will pay repair charges and shipping costs to and from the factory. If the Customer should elect on-site repair and the unit is under warranty, the Customer will not be required to pay the costs of reasonable on-site labor, but will be required to pay the service agency's travel charges to and from the on-site location.

Any minor adjustment or calibration and any labor costs for the replacement of probes will be made at the Customer's expense.

The FAST exchange Program is available to all FAST Domestic Customers whose account is current and applies to all (FAST.)® Timers, Computers and Controllers.

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Specifications subject to change without notice.

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