



Operating Instructions

for the VVC-208CP



COMMERCIAL COOKING APPLIANCES ALSO CLASSIFIED BY ETL IN ACCORDANCE WITH NSF STANDARD NO. NSF 199. DESIGN EVALUATED BY ETL IN ACCORDANCE WITH ANSI/ISA Z31-23 AND CAN/CSA 1-6.6-MTS.

**Roast Beef Cooking Controller Models:
231-60231-01, 231-60231-02, 231-60231-03
for Arby's**

This document contains confidential information. The dissemination, publication, copying, or duplication of this document or the software described herein without prior written authorization is strictly prohibited.

229-51338 Rev A
Printed in the USA
Copyright 2007 FAST

(FAST.)[®]
the time is right.

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

1-800-243-9271

\$5.00 USD

Notices

(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.



Probes should NOT be in the oven when oven temperature is higher than 350°F.

Not all features are available on some models.

Controller Operating Environment

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.

Cleaning the Controller

Using a clean damp cloth, wipe down your controller daily using a commercial quality, foodservice-approved detergent. Do not use excessive moisture.

Do not allow oil to build up on any part of the controller.



NEVER use chemical or abrasive cleaners on your controller. The controller's overlay may be damaged.

Cleaning the Manifold

The manifold should be cleaned weekly with a brush (we recommend using FAST part number 190-50028) using a commercial quality, foodservice-approved detergent. You should scrub the manifold completely then wipe off with a damp cloth. Finally, you should sanitize the unit with a commercial quality foodservice-approved sanitizing agent.



DO NOT USE any type of spray oven cleaner. Permanent damage can result.

Cleaning the Probes

Using the same brush (we recommend using FAST part number 190-50028) and detergent, you should scrub each probe for 2 minutes daily, then rinse each probe in 140°F water. Finish by applying the sanitizing agent. **DO NOT SOAK.**

The unauthorized use or duplication of the software described herein, or this material, is strictly prohibited.

229-51338 Rev A
© 2007 FAST

24/7 Tech Support:
1-800-243-9271

Programming Codes

- | | |
|------------------------|---------|
| 1. Beef Programming | 1 7 2 4 |
| 2. System Programming | 1 7 1 2 |
| 3. Product Programming | 3 3 3 3 |

Beef Programming allows the user to:

- change the oven set temperature (no effect unless purchased with temperature control hardware and software;
- change the product “pull” temperature; or internal (core) product cook temperature

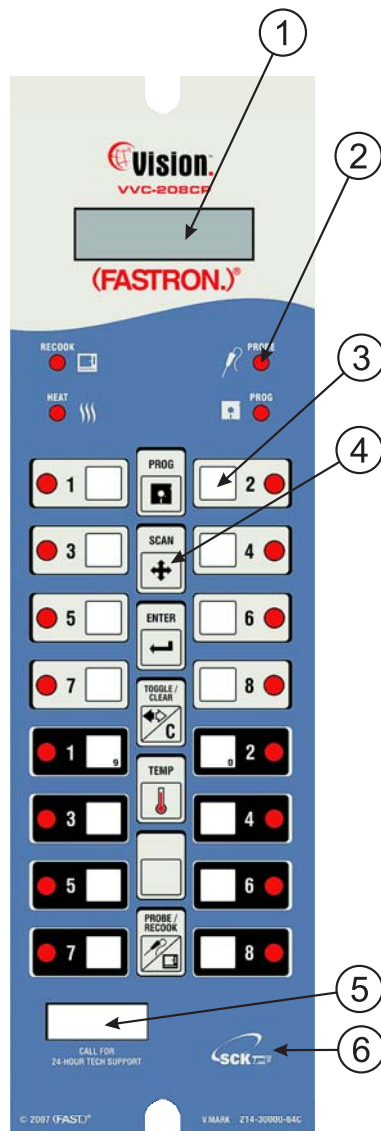
System Programming allows the user to:

- change between degrees Fahrenheit and Celsius temperature displays

Product Programming:

- allows the oven and controller to work together to bake side items at a higher temperature, and
- allows the user to preset the controller with the proper cooking parameters

Controller Features



- LARGE MULTI-CHARACTER GRAPHICAL DISPLAY:** Displays programming and cook cycle information in a user-friendly format.
- INDICATOR LIGHTS:** lit when there’s an active cook cycle and in programming mode.
- PRODUCT KEYS:** Press to start a cook cycle. Also used in programming.
REPLACEABLE MENU STRIPS: Make menu changes quickly and easily.
- FUNCTION (FEATURE) KEYS:** Used to access programming functions and some controller features.
PROGRAM—used to enter and exit programming mode. **SCAN**—Used during programming to continue with next step; used in operating mode to scan product temperatures. **ENTER**—Used during programming to accept entry and continue with next step. **TOGGLE/CLEAR**—Used in programming mode to toggle choices and clear values. **TEMP**—Press and hold to display actual and programmed temperatures (Axxx is actual; Pxxx is programmed). **9/0**—Used during programming to enter numerical values nine and zero. **MODE KEY**— Used to switch between probe and non-probe cooking modes.
- SERVICE WINDOW:** Locate the controller’s serial number and tech support phone number easily.
- SCK LINK:** Signifies that your control is communications-capable.

Features Explained

Highest Temperature Display

The controller will display the highest temperature of the beef being cooked. The red light next to the product key associated with the highest core probe temperature being displayed will also blink on and off.

Probe Insertion Acknowledgment

The red light next to the product key of the beef being cooked will blink on and off. In addition, the controller will display the temperature of the roast beef being started for five seconds and then proceed to display the temperature of the beef with the highest internal temperature.

Fahrenheit or Celsius Temperature Display

The controller can be configured to display the temperature in degrees Fahrenheit or Celsius (accessible through System Programming mode).

Multiple Cook Starts

The controller is capable of monitoring up to eight roast beefs simultaneously. A cook cycle is started automatically when the controller recognizes a probe insertion.

Estimate Cook Time Remaining

Press the number key associated with an active cook to display *BEEF?* and *XXXX* minutes remaining (estimated) until cook done temperature is reached.

Done Indication

The controller will flash *DONE* on and off, then the temperature of the cooked beef. In addition, the controller will beep and turn on the red light of the product key to inform you that the product is done. All other product LEDs will be off.

Ending a Cook Cycle

A cook cycle can be cancelled any time by removing the probe from its respective product jack.

Oven Temperature Display

At power up, the controller will display *READY* and beep for ten seconds when the oven temperature reaches the programmable oven set temperature. The controller will display *LOW* or *NOT RDY* when the oven temperature is below the programmable oven set temperature.

To see the oven temperature, press and hold the TEMP key. The display will toggle between actual and programmed temperatures.

Programmable Oven Set Temperature

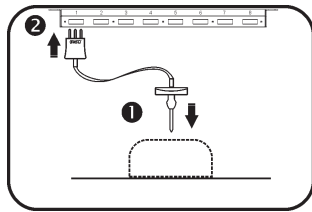
The set temperature indicates the temperature at which the (FASTRON.) will control the oven in order to cook the beef. When at this temperature, the controller will display *READY*. The controller is factory programmed to 200°F following Arby's Corporate specifications, but can easily be reprogrammed at the store.

To view current programmed set temperature of the controller, press the TEMP key.

Programmable Cook "Pull" Temperature

The cook temperature is the core product temperature to which the controller cooks the beef. When this temperatures is reached, the cook cycle is ended. The controller is factory programmed for 143°F following Arby's Corporate specifications, but can easily be reprogrammed at the store. The allowed temperature range is 100°F to 200°F (see Programming instructions).

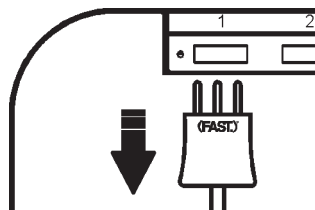
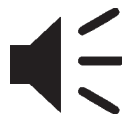
Operating the Controller



Starting a Core Probe Cook Cycle

To start a core probe cook cycle: 1) insert the probe end (FAST part number 140-60112-05) into the product according to your standard procedures; 2) then insert the plug into an open slot in the manifold mounted inside the oven cavity.

Approximately 3 seconds later the display on the controller will show the temperature of the product that just started cooking. Also, the LED next to the product number associated with the manifold slot will blink. If more than one manifold slot is occupied, after approximately five seconds, the display will revert to show the product with the highest temperature and its LED will blink. Any active manifold slot will have a lit LED on the controller.



Ending a Core Probe Cook Cycle

Once the temperature has reached the preset limit, the controller will beep continuously to alert the operator a product has finished cooking. The display will alternate between DONE and the probe temperature, and the LED for that product will remain lit. All other LEDs will be off.

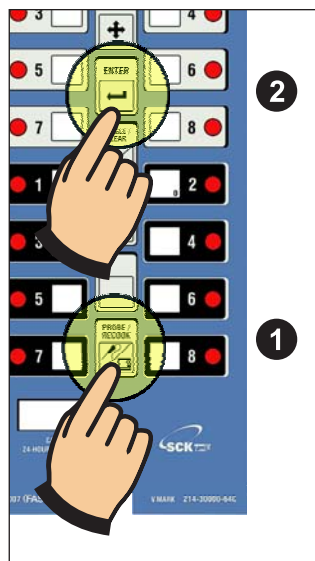
The beeping cannot be stopped until the plug has been removed from the oven manifold. Once removed, the product can be prepared for serving according to the operator's standard procedures.

Mode Change (Beef Cook, Recook or Product)


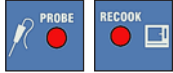

If this feature is available on your controller, you can toggle between beef cook, beef recook and product modes. In **beef cook mode**, the oven is controlled at the programmable oven set and beef cook temperatures (discussed previously). In **beef recook mode**, the controller is factory programmed to cook at an oven set temperature of 325°F, and the beef is done when it has maintained a temperature of 165°F for 15 seconds. **These values are not changeable via programming.**

In **products mode**, the oven and controller work together to bake side items at a higher temperature and to preset the controller with the proper parameter; i.e. time, temperature, flex or straight time, cook control and action alarms.

Continued on next page.



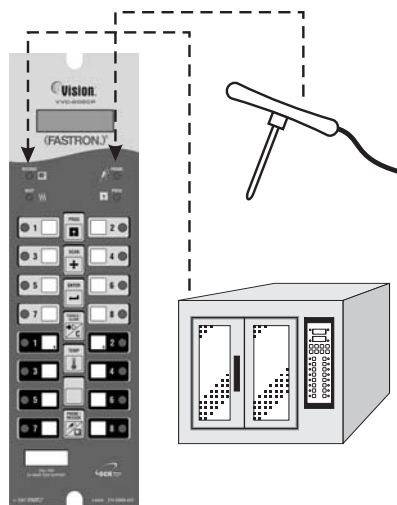
To change cook modes, press the MODE key (1) until the desired mode is displayed—either *BEEF*, *RECOOK* or *PRODUCT*. Then press the ENTER key (2). The mode will be displayed for approximately 3 seconds then the display will show the appropriate message for the mode.

-  In BEEF mode, only the probe LED will be lit.
-  In RECOOK mode, both the probe and oven LEDs will be lit.
-  In PRODUCTS mode, the oven LED will be lit.

To Use the Controller in Products Mode, go to *PRODUCT*.

1. Select a product key. Press the key once (product LED lights up) to heat oven to proper baking temperature.
2. When the correct temperature is reached, the controller will read *READY* and be accompanied by a self-canceling audible signal.

Starting a Timing Cycle





To start a timing cycle, simply press the product key for the product you wish to cook. If the product key is programmed, the total cooking time will be displayed (*12:00* for example) and this time will immediately start to count down in minutes and seconds. The programmed time will count down to *:00* followed by *DONE* and sound an audible alarm and visual signal. If *DONE* is displayed immediately and the unit starts to signal, the key being operated does not have a programmed time.

To cancel a **DONE** signal, press the product key used to start the timing cycle.

To cancel a cycle during count down, press and hold the same product key used to start the timing cycle for 3 seconds.

When finished with **Products Mode**, you will need to re-enter BEEF or RECOOK mode before using the oven for core probe cooking.

SYSTEM LEDs

	Beef Mode	Recook Mode	Side Products Mode
	● ON	● ON	○ OFF
	○ OFF	● ON	● ON

The unauthorized use or duplication of the software described herein, or this material, is strictly prohibited.

Display Descriptions



The controller is accepting the programming passcodes. The display will show a " = " for each passcode number entered.



The controller is in Product Programming Standby Mode.



The controller is waiting for a passcode entry.



The controller is in either Fahrenheit or Celsius Programming Mode.



The controller is below the programmed oven set temperature.



The controller has just been powered on and is not yet ready for operation.



In Programming Mode, this is the option to change the oven set temperature.



The beef probe is either open or shorted; check and or replace the probe. (A number will designate the location of the defective probe.)



The oven's temperature control probe (if so equipped) is either open or shorted; check and/or replace the probe.



In Programming Mode, this is the option to change the roast beef "pull" temperature.



The controller is in the factory-programmed Recook Mode.



The controller is ready for operation.



The controller is in the factory-programmed Product Mode.



The controller is in system Programming Standby Mode.

BEEF Programming

CODE 1724



In BEEF Programming, you can:

- a. Change the oven set temperature (no effect unless purchased with temperature control hardware and software;
- b. Change the product "pull" temperature; or internal (core) product cook temperature.

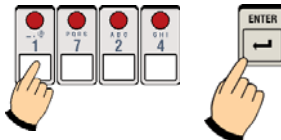
ENTER PROGRAMMING MODE.

Press the PROG key.



CODE

Type in 1 7 2 4 using the product keys. Press the ENTER key.



BEEF

Continue to next step—Change Oven Set Temperature.

CHANGE OVEN SET TEMPERATURE.

Press the ENTER key.



OVN SET TEMP

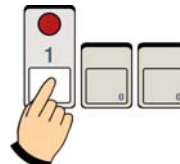
200F

Press the TOGGLE/CLEAR key to clear the current entry.



OF

Using the product and/or function keys, enter a new oven set temperature. (Example shown)



100F

Press the SCAN key.



PULL TEMPERATURE

143F

Roast beef cook temperature is displayed. Press the SCAN key again.



BEEF

Press the PROG key.



This step EXITS back to Operating Mode; continue on with next step if you want to change the roast beef cook "pull" temperature.

CHANGE ROAST BEEF COOK PULL TEMPERATURE.

BEEF

Press the ENTER key.



OVN SET TEMP

200F

Press the SCAN key.



PULL TEMPERATURE

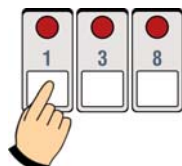
143F

Press the TOGGLE/CLEAR key to clear the current entry.



OF

Using the product and/or function keys, enter a new pull temperature. (Example shown)



138F

Press the SCAN key.



BEEF

Press the PROG key.



READY

Programming is complete and you have EXITED the programming mode.

The unauthorized use or duplication of the software described herein, or this material, is strictly prohibited.

SYSTEM Programming

CODE 1712



In SYSTEM Programming, you can:

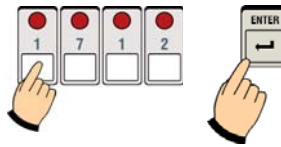
- Change between degrees Fahrenheit and degrees Celsius display temperature;
- Change the oven's set-back time.

ENTER SYSTEM PROGRAMMING MODE.
Press the PROG key.



CODE

Type in 1 7 1 2 using the product keys. Press the ENTER key.

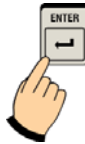


SYSTEM PROGRAM

Continue to next step—Change Degrees Display to Fahrenheit or Celsius.

CHANGE DEGREES TO FAHRENHEIT OR CELSIUS.

Press the ENTER key.



DEGREE

Press the TOGGLE/CLEAR key to toggle between F (Fahrenheit) and C (Celsius).



Press the SCAN key when your choice is displayed.



SYSTEM PROGRAM

Press the PROG key.



READY

System Programming is complete and you have EXITED the programming mode.

PRODUCT Programming

CODE 3333



In PRODUCT Programming Mode, you can:

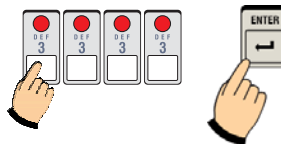
- Program the oven and controller to work together to bake side items at a higher temperature;
- Preset the controller with the proper cooking parameters

ENTER PRODUCT PROGRAMMING MODE.
Press the PROG key.



CODE

Type in 3 3 3 3 using the product keys. Press the ENTER key.

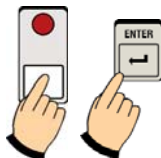


PRODUCT

Continue to next step—Programming A Product Key Cook Time

PRODUCT

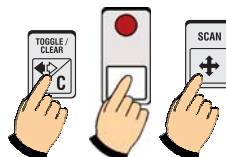
SELECT ANY PRODUCT KEY to be programmed, then press the ENTER key.



COOK TIME

XX:XX

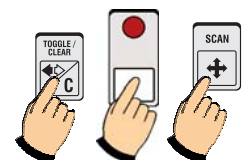
SET PRODUCT KEY COOK TIME. Actual set time will be displayed. To change, press toggle clear to change the time to zero. Type in a new time using the product keys. Press the SCAN key.



COOK TEMPERATURE

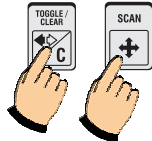
XXXX

SET COOK TEMPERATURE. Actual set temperature will be displayed. To change, press toggle clear to change the temperature to zero. Type in a new temperature using the product keys. Press the SCAN key.



FAN SPEED
HIGH
LOW

PROGRAMMING FAN SPEED. Previously programmed Fan Speed will be displayed. To change, press toggle clear to choose between HIGH or LOW. Press the SCAN key.



Flex Time compensates for temperature variations that can be caused by such things as load size, oven door openings or initial product temperature.

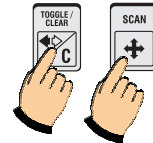
Straight Time acts like a stopwatch and does not adjust for variables.

NOTE: For best results, using Flex Time is recommended.

TIMING MODE
FLEX
STRAIGHT

SET TIMING CONTROL MODE.

Previously set timing control mode will be displayed. To change, press toggle clear to choose between Straight or Flex. Press the SCAN key.

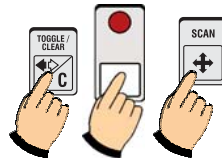


Action Alarms will audibly alert the operator to perform a task at a pre-determined time. The alarm will sound for 5 seconds and then continue normal operation.

PREALARM TIME
XX:XX

SET ACTION (PRE-ALARM) MODE.

Previously set action alarm time will be displayed. To change, press toggle clear to change the time to zero. Type in a new time using the product keys. Press the SCAN key.



PRODUCT

EXIT PRODUCT PROGRAMMING MODE.

Press the PROGRAM key.



READY

Programming is complete and you have EXITED the programming mode. *READY* or a temperature will be displayed.

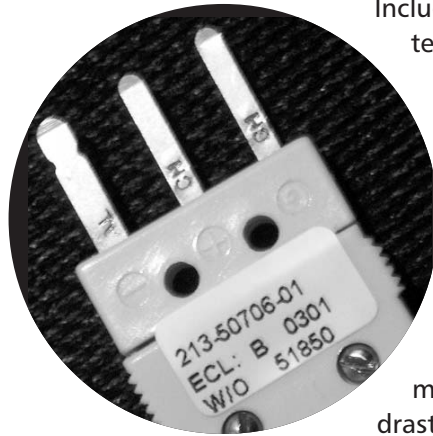
Parts & Accessories

DESCRIPTION	(FAST.) PART NUMBER
Sheet Metal Bezel	214-50291
Slotted Round Head Screw, Black, 1/4-20 x 3/4"	150-10202
Tinnerman Spring Nut 1/4-20	150-11025

Troubleshooting

PROBLEM	CAUSE	SOLUTION
No Power	Circuit breaker OFF	Check and reset.
	Appliance not plugged in	Plug in cord.
	Defective 24VAC transformer	Replace transformer. Replace controller.
No Sound	Inoperable speaker	Replace controller.
Button Problem	Frozen key	Unplug controller. Hold down the TOGGLE/CLEAR key as you plug controller back in.
	Inoperable key	Replace controller.
OPENED or SHORTED PROBE is Displayed	Defective temperature probe	Replace temperature probe.
	Probe not plugged in	Plug in probe.
Reading Wrong Temperature	Defective temperature probe	Replace temperature probe.
Not Heating	Defective element, relay, contactor or gas valve	Replace defective part.
	Defective controller	Replace controller.
PROBE X is displayed. (X is for a beef probe 1-8)	Defective beef probe	Replace probe.
	Defective manifold	Replace manifold.

Troubleshooting



Included with all controllers for Arby's is a manifold test plug (FAST part number 213-50706-01). This is a valuable tool and should be kept on site. It will be used when troubleshooting on the phone with FAST technical support and can eliminate the need for unnecessary service calls.

The test plug is used to aid in troubleshooting the manifold in the event of erratic beef probe temperature readings. It simulates a constant 137-140°F temperature when plugged into the manifold socket. If any of the 8 sockets shows a drastically different temperature reading with the test plug in place, it would indicate a manifold problem. If all readings are 137-140°F, this would indicate a beef probe problem. Beef probes can be ordered direct from FAST and would require no outside service call.

PLEASE HAVE THIS TOOL READY WHEN CONTACTING (FAST.) FOR TECHNICAL SUPPORT.

NOTES

NOTES

The unauthorized use or duplication of the software described herein, or this material, is strictly prohibited.

229-51338 Rev A
© 2007 FAST

24/7 Tech Support:
1-800-243-9271

Index

Cleaning the Controller	2
Cleaning the Manifold	2
Cleaning the Probes	2
Controller Features Diagram	3
Features Explained	4
Controller Operating Environment	2
Customer Service and Technical Assistance	16
Display Descriptions	7
Free Program for Service Exchanges	16
Notices	2
Operating the Controller	5
Cancel a Cycle During Count Down	6
Cancel a DONE Signal	6
Ending a Core Probe Cook Cycle	5
Mode Change (Beef Cook, Recook or Product)	5
Starting a Core Probe Cook Cycle	5
Starting a Timing Cycle	6
Parts & Accessories	11
Programming Codes	3
Programming	
BEEF Programming	8
PRODUCT Programming	9
SYSTEM Programming	9
Troubleshooting	11, 12
Warranty	16



Food Automation - Service Techniques, Inc.
905 Honeyspot Road
Stratford, Connecticut 06615-7147 USA

Phone: +1-203-377-4414

Sales: 1-800-FASTRON

Fax: +1-203-377-8187

International Callers: +1-203-378-6860

www.fastinc.com

Toll-free technical support 24/7 from the U.S., Canada,
and Caribbean:
1-800-243-9271

International offices are located in:

United Kingdom

31 Saffron Court
Southfields Business Park
Basildon Essex SS15 6SS
England

Phone: +44-0 1268-544000

Fax: +44-0 1268-544500

Asia/Pacific

1803, 18F, No 922 Hengshan Rd
Shanghai 200030,
China

Phone: +86 13916854613

#11-359, BLK 217, Bukit Batok ST 21
Singapore 650217

Phone: +65 98315927

Fax: +65 66658462

The unauthorized use or duplication of the software described herein, or this material, is strictly prohibited.

229-51338 Rev A
© 2007 FAST

24/7 Tech Support:
1-800-243-9271



229-51338

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. Call us toll-free at **1-800-FASTRON** (800-327-8766) if you're in the US, Canada or the Caribbean, or at 203-378-6860 if you're outside of these areas.

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.

You can also send an instant email message to a FAST technician, Monday through Friday, 8am-5pm EST, by going to www.fastinc.com, selecting the 'Support' link, and clicking on 'Email Us.'

Free Program for Service Exchanges

FAST provides an Exchange Program, at no extra cost, if a unit should fail. In the event of failure, you have the option of (1) receiving a replacement product from our factory, freight prepaid; (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.

To take advantage of this program, simply call our toll-free customer service number, 1-800-243-9271. If you elect to receive an exchange unit from the factory, a replacement unit will be sent immediately. Upon receipt of the replacement unit, simply return 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, you will pay repair charges and shipping costs to and from the factory. If you should elect on-site repair and the unit is under warranty, you 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 your expense.

The FAST Exchange Program is available to any FAST Domestic Customer whose account is current, and applies to all FAST Timers, Computers and Controllers.

Warranty

FAST provides a limited one-year warranty (optional two-year and lifetime) for its products. Warranty replacement units are available. A copy of the exact provisions of this warranty and the other terms and conditions of sale are available upon request.

Patents

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

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 5,539,671 5,711,606 5,723,846
5,726,424 5,875,430 6,142,666 6,339,930 6,401,467 6,505,546
6,581,391 7,015,433

Plus foreign patents and patents pending. Plus licensed patent 5,973,297

Specifications subject to change without notice.