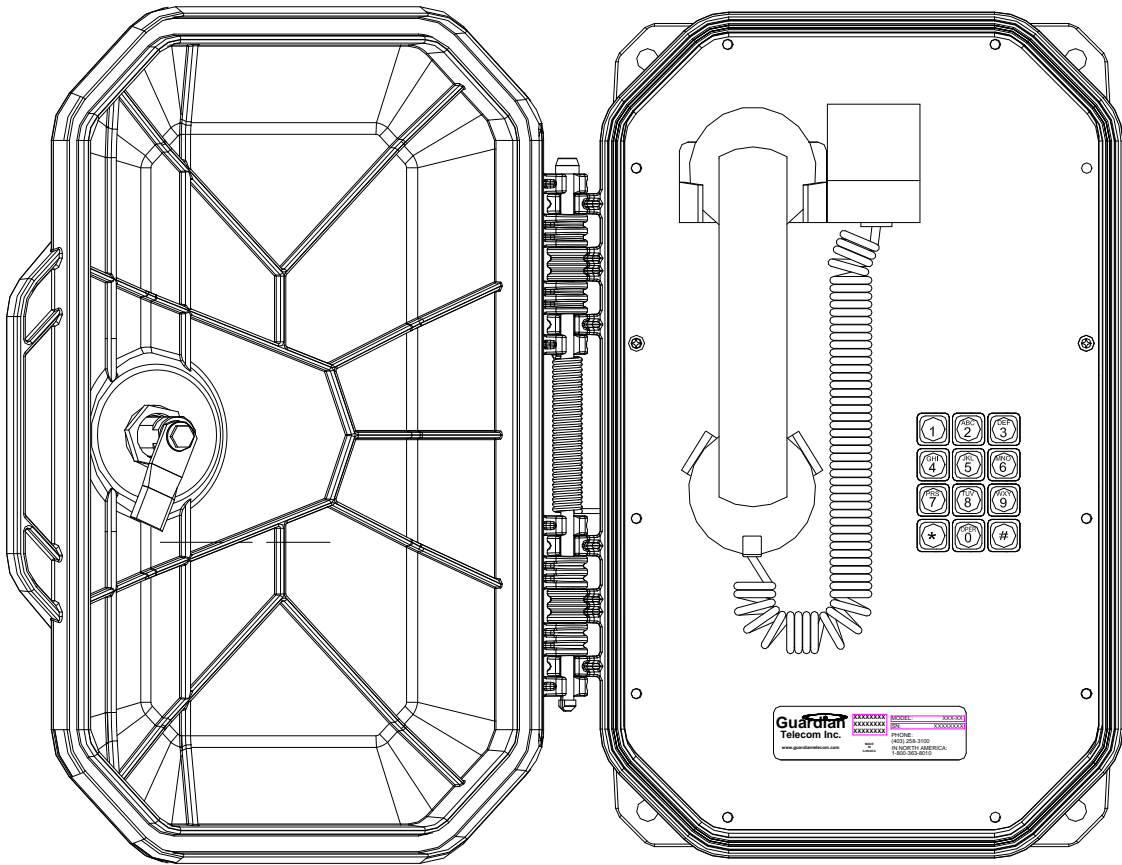


# Food Industry Telephone

Model FIT-80

Installation and Operation



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## Package Contents

- (1) FIT-80 Telephone
- (2) Door Latch Keys (if locking door option chosen)
- (12) Faceplate screws (standard or vandal resistant with driver bit)
- (1) Installation and Operation Manual

## Models and Options

- **P6484** Model FIT-80 Food Industry Telephone
- VR-WTE** Vandal Resistant Screws With Driver Bit
- LCK-WTE** Locking Door

## Accessories

- **P7224** Potted ring detect relay, (internal to telephone)
- **P7225** Weatherproof ring detect relay, (external to telephone)
- **P7228** Potted off-hook detect relay, (internal to telephone)
- **P7229** Weatherproof off-hook detect relay, (external to telephone)
- Loud Ringer

## Overview

### ***FIT-80 Food Industry Telephone***

Guardian's FIT-80 offers maximum efficiency under extreme environmental conditions. The sturdy enclosure protects the internal circuitry against wind blown dust and rain, corrosion, splashing and high pressure water.

The FIT-80 is approved with a CSA Type 4X rating, making it the ideal telephone for use in wet or corrosive atmospheres as are found in the Food Industry.

## Features

### ***Enclosure***

- Thermoplastic resin body construction
- weatherproof and corrosion resistant
- spring loaded, locking hinged door

### ***Keypad***

- Standard 3x4 matrix metal keypad with Teleseal cover

### ***Encapsulated Circuitry***

- encapsulated circuit boards are resistant to corrosive agents (e.g. H<sub>2</sub>S, SO<sub>2</sub> and NH<sub>3</sub>) and environments with high humidity

### ***Magnetic Reed Hook Switch***

- No moving parts

### ***Surge Arrestor and Field Replaceable Fuse***

- Protects the user and prevents damage to the electronic circuitry in the event of a high voltage spike on the telephone line

### ***Wall Mount***

- Easily mounted on any sturdy vertical structure

### ***Noise Canceling Microphone***

- allows a high level of intelligibility in locations with high background noise

### ***Tone (DTMF) Operation***

- factory set to tone (DTMF) dialing
- can be ordered set for pulse dialing or configured in the field

### ***Handset Cord***

- 6 foot heavy duty

### ***Handset***

- compatible with inductively coupled hearing-aid devices
- receiver volume control

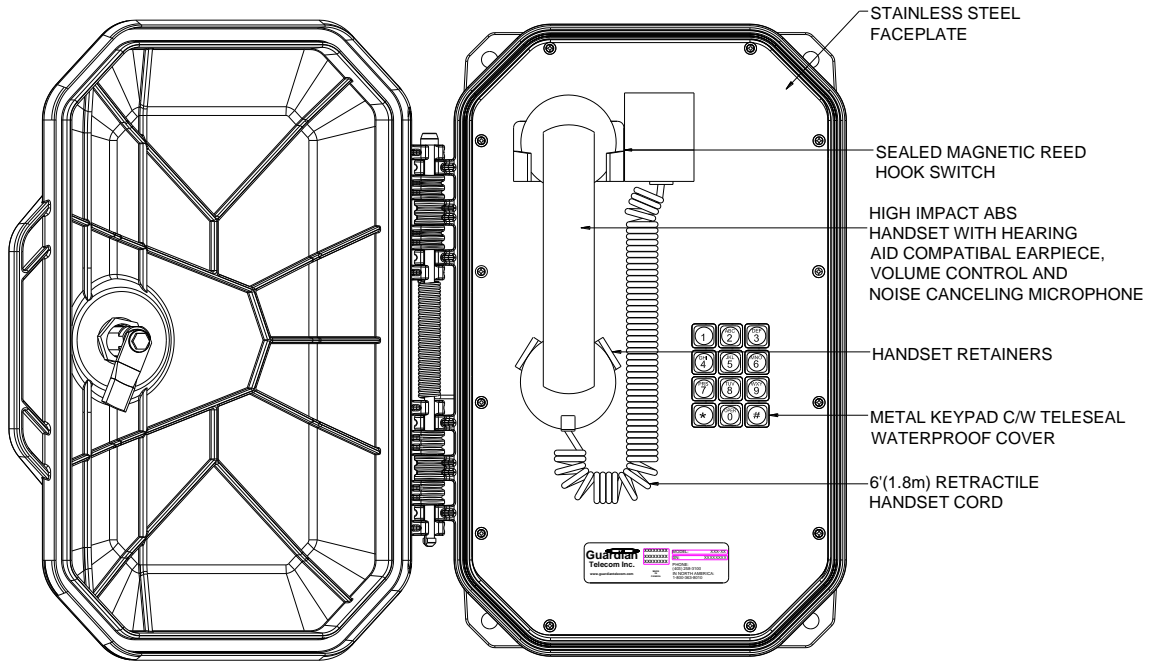


Figure 1 - Features

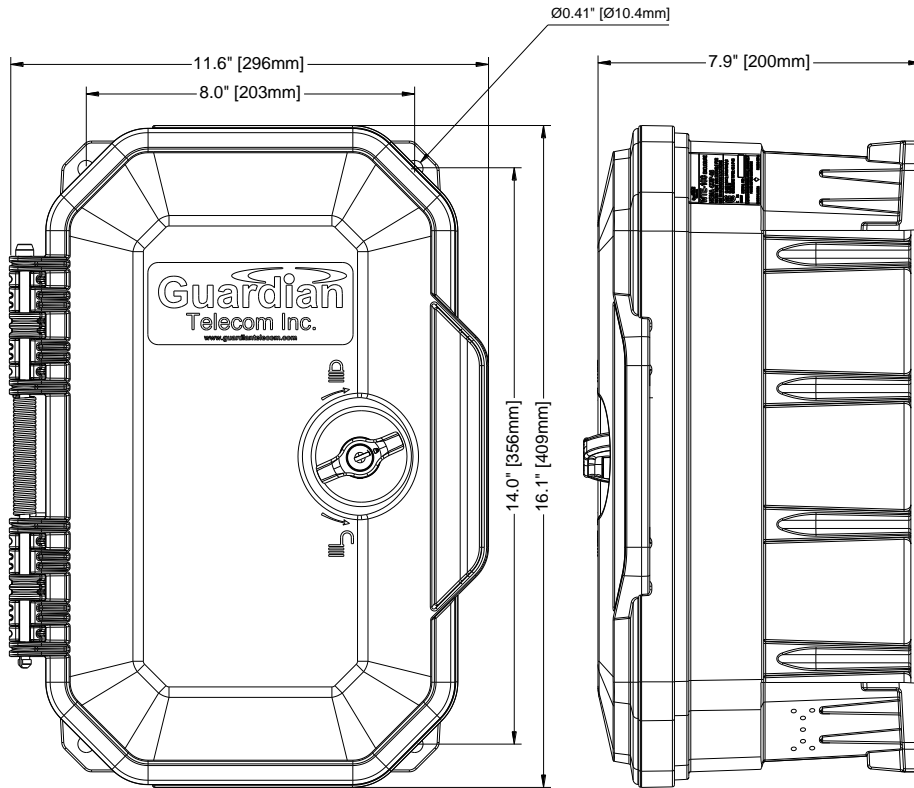
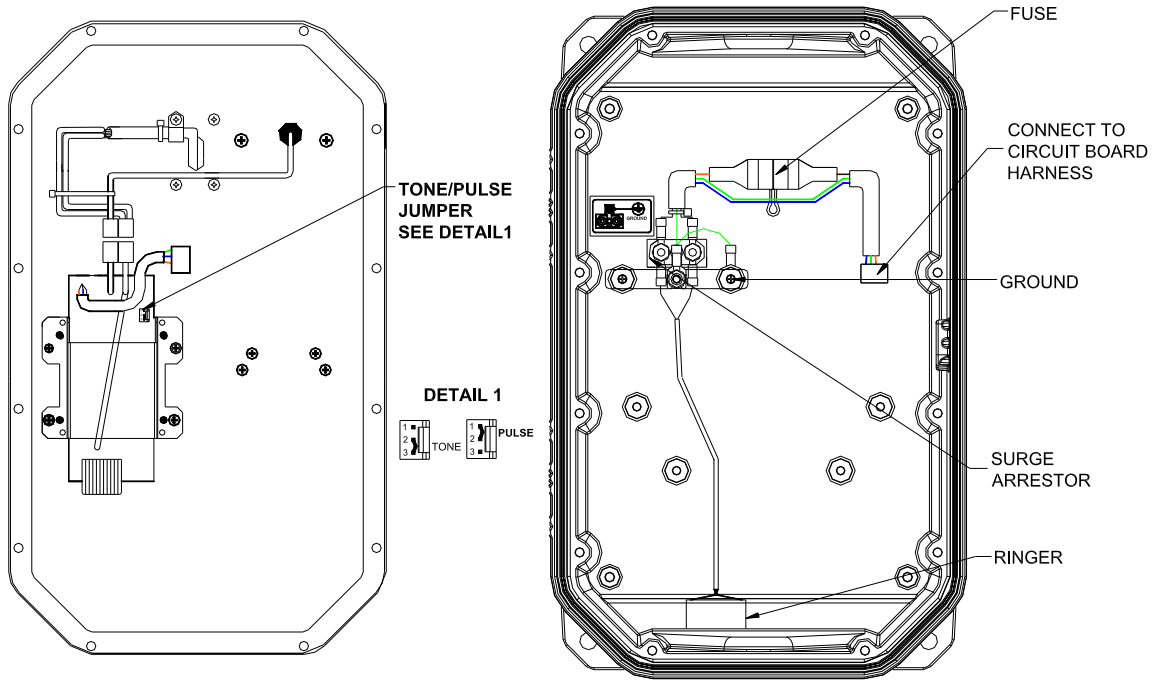


Figure 2 - Dimensions & Mounting



**Note:** This telephone does not meet FCC and IC requirements for receiver volume control and is not approved by these agencies. Do not connect directly to a Central Office line.

Figure 3 - Electrical Connections

### Installing the FIT-80

- Follow all appropriate electrical codes and use only approved electrical fittings for the installation.
- For waterproofing purposes apply Teflon tape to all glands and conduits.
- Choose a wall location that is free of obstructions and permits space for ½” NPT conduit runs.
- Ensure mounting can support 16 lbs (7.3 kg) and any additional load to which the telephone may be subjected.
- **Ensure that none of the electrical connection circuits are live.**
- Separate the faceplate from the housing by removing the two temporary, factory installed screws and unplugging the wiring harness from the faceplate.
- To change the Tone/Pulse setting to pulse, if required:
  - Move the jumper from pins 1 & 2 of the Tone/Pulse connector to pins 2 & 3.
  - To change the setting back to tone move the jumper back to pins 1 & 2.
- Drill or punch cable entrances as required at the three drill dimples.
- Use the template provided or the enclosure itself to locate and drill holes for mounting screws.
- Secure the unit to the wall.
- Bring cable into the enclosure through the conduit entrance and attach individual wires from the exchange (Tip/Ring/Ground) to the surge arrestor, (Tip & Ring are not polarity sensitive.). If a conduit hub is used, ensure it is grounded to the ground stud.
- Plug the wiring harness back into the faceplate and secure the faceplate with the twelve screws provided.
- Connect the telephone lines at the local exchange or demarcation block.
- Test the unit by making calls to and from another station.

*See: Figure 2 - Dimensions.*

*Tip: The FIT-80 is factory preset for DTMF tone.*

*Tip: Use ¼” or M8 screws to secure the unit to the wall.*

*See: Figure 3 - Electrical Connections*

*Note: If Vandal Resistant screws were ordered a special driver bit will also be included.*

### Operation

- Once your Model FIT-80 Telephone has been properly installed and energized, operation is identical to most other single line telephones.

### Field Repairs

Field repairs may only be carried out by qualified technicians using OEM parts. Substitution of parts voids warranty and may pose a hazard to users of the equipment.

- Disconnect the telephone from Tip and Ring power supplied by the PABX before attempting to replace the fuse.
- Carefully remove the front cover assembly and separate from the housing by disconnecting the harness plugs. NOTE that the handset and all electronics are attached to the front plate.
- Perform the necessary repairs or adjustments.
- Carefully replace the front plate and install all twelve screws. Do not over tighten the cover screws; there is a flexible gasket between the cover and the body, excessive tightening of the screws deforms the gasket and reduces the weather resistance of the set.

### Fuse Replacement

- Remove the old fuse by pulling on the ends of the fuse holder to open. Insert a new 0.25 amp, 250Volt, 3AG fast blow fuse and close the fuse holder.

## WARNING!

- Replace only with a 0.25 amp 250V 3AG fast blow fuse. Failure to do so will void the warranty.
- If, on reconnecting power, the fuse fails, check the telephone system wiring. The fuse protects the Tip and Ring line from the telephone system. It is usually powered at 48 volts DC and must not be connected to 120 volts AC.

### Changing the Tone/Pulse Setting

- Set the Tone/Pulse jumper for the desired operation. For pulse, set the jumper between the center pin and the "P", for tone set it between the center pin and "T".

*See: Replacement Parts*

*See: Figure 3 - Electrical Connections*

*See: Figure 3 - Electrical Connections*

## Cleaning Tips for Guardian Telephones

Guardian Telephones may occasionally need to be cleaned to maintain appearance. Generally, wiping the surface with a clean, water dampened cloth will remove most films or residues. If the soiling is too stubborn for plain water, a mild detergent solution may be used. Be sure to wipe away any detergent residue with a plain water dampened cloth. The Telephone may be cleaned with any general-purpose household glass and surface type cleaner. Do not spray the telephone directly! Spray the cleaner on a soft cloth then wipe the surface. Pre-treated cloths, like those used for eyeglasses or cameras, may be used to clean the Telephone. Premoistened towelettes may also be used, however, avoid those containing lanolin or aloe as they will leave a slippery residue. The handset and surface of the telephone may be cleaned with disinfectants used for general cleaning in a medical environment. Isopropyl alcohol may be used applied with a cloth. Avoid using alcohol on silicon based keypads, since doing so may significantly degrade legibility.

- Do not use furniture polishes, waxes or plasticizer-based cleaner (Armor All etc.)
- Do not use lanolin, aloe, glycerin or other skin care type products.
- Do not apply any solvent such as acetone, mineral spirits etc.
- Do not directly spray or immerse the handset.

<b>Engineering Specifications</b>	
<b><i>Electrical Performance</i></b>	
AUDIBLE RANGE FREQUENCY RESPONSE	300 - 3400 Hz
DIALING METHOD	DTMF or 40/60 PULSE AT 10 PPS
TRANSMIT OBJECTIVE LOUDNESS RATING (TOLR)	-33 +/- 3 dB
RECEIVER VOLUME ADJUSTMENT	+8.1 / -5.4 dB IN STEPS OF 2.7 dB
RECEIVE OBJECTIVE LOUDNESS RATING (ROLR)	
-AT NOMINAL VOLUME LEVEL	39.6 +/- 3 dB
-AT MAXIMUM VOLUME LEVEL	31.9 +/- 3 dB
-AT MINIMUM VOLUME LEVEL	45.2 +/- 3 dB
SIDE TONE OBJECTIVE LOUDNESS RATING (SOLR)	
-AT NOMINAL VOLUME LEVEL	-3.1 +/- 4 dB
-AT MAXIMUM VOLUME LEVEL	-10.5 +/- 4 dB
-AT MINIMUM VOLUME LEVEL	2.6 +/- 4 dB
RINGER OUTPUT	>75 dB
FCC RINGER EQUIVALENCENCE NUMBER (REN)	0.8 B
SET IMPEDANCE	600 OHMS NOMINAL
MAXIMUM LOOP	15,000 FT (4,600 M) of 22 AWG COPPER
<b><i>Electrical Requirements</i></b>	
RINGER SENSITIVITY	40 - 100 V, 16 - 25 Hz
LINE VOLTAGE	24 - 56 VDC
LOOP CURRENT	20 - 120 mA
CONNECTION METHOD	SURGE ARRESTOR
FUSE	¼ AMP 250 VOLT 3AG FAST BLOW
<b><i>Environmental</i></b>	
WEATHER AND CORROSION RESISTANT	Enclosure 4X
TEMPERATURE	-58° TO +176° F (-50° TO +80° C)
HUMIDITY	0 TO 95% RH
DUST RESISTANT	FULL GASKET FACEPLATE
<b><i>Mechanical</i></b>	
HOOK SWITCH (CRADLE SWITCH) LIFE	>1 000 000 OPERATIONS
BODY CONSTRUCTION	POLYURETHANE
FACEPLATE	STAINLESS STEEL
DIMENSIONS (H x W x D)	16.1 x 11.8 x 6.1 INCHES (410 x 300 x 154 MM)
NET WEIGHT	16 LBS (7.3 KG)



HANDSET MATERIAL	HIGH IMPACT ABS
MICROPHONE	NOISE CANCELING
RECEIVER	HEARING AID COMPATIBLE
STANDARD MOUNTING	VERTICAL WALL
CONNECTIONS	1/2" NPT THREADED OPENINGS
HARDWARE MATERIAL	STAINLESS STEEL
<b>Compliance</b>	
WATERPROOF ENCLOSURE	CSA TYPE 4X

**Note:** This telephone does not meet FCC and IC requirements for receiver volume control and is not approved by these agencies. Do not connect directly to a Central Office line.

### Replacement Parts

Part No.	Description
P006513	Faceplate
P006499	Gasket – Faceplate
P004052	Faceplate Screws – standard – (12 required)
P007004	Faceplate Screws – Vandal Resistant – (12 required)
P004260	Driver Bit for Vandal Resistant Screws
P005477	Handset Shell Only C/W 6' Curly Cord
P002786	Handset Cradle
P004371	Handset Retainer
P004538	Microphone Cartridge – Noise Canceling
P002080	Receiver Cartridge
P005845	Handset Assembly C/W 6' Curly Cord and Noise Canceling Microphone
P005844	Potted Volume Control Phone Circuitry C/W Keypad
P000907	Keypad Cover – Teleseal
P006646	Ringer – Floyd Bell BR-3
P005917	Reed Switch
P002992	Surge Arrestor – TII 126L1
P002991	Fuse – Glass 0.25 Amp 250V 3AG
P006442	Housing
P006441	Door
P006440	Hinge Pin
P006439	Hinge Spring
P006460	Door Latch – (non-locking)
P006461	Door Latch – (locking)

### **Warranty**

Guardian Telecom warrants your product to be free of defects in material and workmanship for a period of one year. Guardian Telecom will repair or replace any defective unit that is under warranty.

This warranty is null and void if any non-authorized modifications have been made to this product, or if it has been subjected to misuse, neglect, or accident. This warranty covers bench repairs only; such repairs must be made at Guardian Telecom or an authorized service depot. Guardian Telecom is not responsible for costs incurred for on-site service calls, freight, or brokerage.

***A return authorization must be obtained prior to warranty claims or repairs.***

### **Disclaimer**

The products covered by this manual are designed for use in Industrial Environments and/or Hazardous Locations. Due to the range of possible applications for these instruments the manufacturer will not be responsible for damages or losses of any kind suffered as a result of the use of this product, including consequential damages.

### **Warning**

This device may be opened and reassembled by qualified personnel only, for the purposes of installing the product, making adjustments and replacing components, following the instructions in the product manual.

**High voltages may be present in this product when connected to telephone wiring.**

### **Service Telephone Number**

**1-800-363-8010**

Guardian Telecom provides a customer service telephone number which is toll-free within North America. If you need assistance when installing or operating this product, please call the toll-free telephone number between regular business hours (8:00AM-5:00PM), Mountain Standard Time. If you are calling outside of regular business hours, please leave a detailed message, and a member of Guardian Telecom's Service Department will return your call as soon as possible. If your product requires service, Guardian personnel will supply you with an RMA (return materials authorization) number over the telephone or through our web site product return page. This number must be included with your return address and the name of the person to contact.

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### **Feedback**

Guardian Telecom continually strives to make reliable, durable, and easy to use products. If you, as an installer or user of our equipment, have any suggestions for improvements to this or any of our products or documents, including this manual, we would appreciate hearing from you.

<b>Guardian Product Return</b>
Guardian products have been quality tested and are in full working order when shipped from the factory, given the rugged nature of these products shipping is not expected to damage a unit. In the unlikely event of a malfunction, Guardian follows the three step procedure below.
<b><i>Step I - On-Site Correction</i></b>
<ul style="list-style-type: none"><li>• The most common source of difficulties with a new product is improper installation in one of two ways: incorrect wiring connections or connection to an incorrect power source.</li><li>• Product wiring needs to be properly connected to the on-site wiring. Correct wiring instructions are shown in the user manual included with the product.</li><li>• Connecting a telephone to a standard power source, rather than tip &amp; ring, will blow the telephone's internal, user-replaceable fuse. In the event of fuse burn-out, disconnect the telephone from the power source, replace the fuse, and reconnect following the wiring diagrams provided with the product.</li></ul>
<b><i>Step II - Return Materials Authorization (RMA)</i></b>
<ul style="list-style-type: none"><li>• When a product has been installed following user manual instructions, and the unit fails to operate, the user must contact Guardian Telecom to obtain authorization to return the product. This can be done by completing a RMA form online at <a href="http://www.guardiantelecom.com">www.guardiantelecom.com</a>, or by calling the service telephone number given in this manual.</li><li>• After providing information on the product, the owner and the nature of the problem, Guardian will issue a RMA number, to be shown on documentation returned with the product.</li><li>• In addition to the RMA number, shipping documents should include name, address and telephone number of the owner along with contact information for the person responsible for the repair and/or the user who identified the malfunction.</li><li>• (Where a product is being returned for repair from outside of Canada, customs documentation must show the product's serial number, date of export [date of purchase], and a notation that the equipment is: "Canadian goods returning.")</li></ul>
<b><i>Step III - Factory Authorized Service</i></b>
<ul style="list-style-type: none"><li>• Once received, each product is carefully inspected and tested. If the product is under warranty, repairs are completed and the product returned to the owner, generally within five working days of receipt by the factory.</li><li>• A product that has been subjected to misuse, neglect or accident or is beyond the warranty period will be evaluated. The service department will provide the owner's representative with a repair cost estimate. Once approved, repairs are completed and the product returned, generally within five working days.</li></ul>



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