

# SET-UP AND OPERATING INSTRUCTIONS



Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. **Distributed exclusively by Harbor Freight Tools**<sup>®</sup>. 3491 Mission Oaks Blvd., Camarillo, CA 93011 **Visit our website at: http://www.harborfreight.com** 

# Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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For technical questions or replacement parts, please call 1-800-444-3353.

## SAVE THIS MANUAL

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

# **IMPORTANT SAFETY INFORMATION**



In this manual, on the labeling, and all other information provided with this product:

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

	DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
<b>ACAUTION</b>	CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE	NOTICE is used to address practices not related to personal injury.
CAUTION	CAUTION, without the safety alert symbol, is used to address practices not related to personal injury.

# **GENERAL SAFETY RULES**



WARNING! Read all instructions

Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

#### SAVE THESE INSTRUCTIONS

#### 1. Work area safety

- a. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. *Power tools create sparks which may ignite the dust or fumes.*
- c. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

#### 2. Electrical safety

- a. Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. *Unmodified plugs and matching outlets will reduce risk of electric shock.*
- b. Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. *There is an increased risk of electric shock if your body is earthed or grounded.*
- c. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d. Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e. When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

#### 3. Personal safety

a. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. *A moment of inattention while operating power tools may result in serious personal injury.* 



**Use safety equipment.** Always wear eye protection. Safety equipment such as respirator, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

- c. Avoid accidental starting. Ensure the switch is in the off-position before plugging in. *Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.*
- d. Do not overreach. Keep proper footing and balance at all times. *This enables better control of the power tool in unexpected situations.*
- e. Dress properly. Do not wear loose clothing or jewelery. Keep your hair, clothing and gloves away from moving parts. *Loose clothes, jewelery or long hair can be caught in moving parts.*

#### 4. **Power tool use and care**

- a. Do not force the power tool. Use the correct power tool for your application. *The correct power tool will do the job better and safer at the rate for which it was designed.*
- b. Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c. Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d. Store idle power tools out of the reach of children and do not allow people unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. *Many accidents are caused by poorly maintained power tools.*
- f. Use the power tool in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

#### 5. Service

a. Have your power tool serviced by a qualified repair person using only identical replacement parts. *This will ensure that the safety of the power tool is maintained.* 

# SPECIFIC SAFETY RULES

1. Maintain labels and nameplates on the Heat Gun. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.

- 2. **WARNING!** Extreme care should be taken when stripping paint. The peelings, residue, and vapors of paint may contain lead, which is poisonous. Any pre-1977 paint may contain lead and paint applied to homes prior to 1950 is likely to contain lead. Once deposited on surfaces, hand to mouth contact can result in the ingestion of lead. Exposure to even low levels of lead can cause irreversible brain and nervous system damage; young and unborn children are particularly vulnerable.
- 3. LEAD-BASED PAINT SHOULD ONLY BE REMOVED BY A PROFESSIONAL AND SHOULD NOT BE REMOVED BY USING A HEAT GUN. Before beginning a paint removal process you should determine whether the paint you are removing contains lead. This can be done by your local health department or by a professional who uses a paint analyzer to check the lead content of the paint to be removed.
- 4. People removing paint should follow these guidelines:
  - Indoors, keep the work area well ventilated. Open the windows and place an exhaust fan in one of them. Make sure the fan is moving the air from inside to outside.
  - Remove or cover any carpets, rugs, furniture, clothing, and cooking utensils.
  - Place a drop cloth in the work area to catch any paint chips or peelings.
  - Wear protective clothing such as extra work shirts, overalls, and hats.
  - Work in one room at a time. Furnishings should be removed or placed in the center of the room and covered. Work areas should be sealed off from the rest of the dwelling by sealing doorways with drop cloths.
  - Children, pregnant or potentially pregnant women and nursing mothers should not be present in the work area until the work is done and all clean up is complete.
  - Wear a dust respirator mask or a dual filter (dust and fume) respirator mask which has been approved by the Occupational Safety and Health Administration (OSHA), the National Institute of Safety and Health (NIOSH), or the United States Bureau of Mines. These masks and replaceable filters are readily available at major hardware stores. Make sure the mask fits. Beards and facial hair may keep masks from sealing properly. Change filters often. DISPOSABLE PAPER MASKS ARE NOT ADEQUATE.
  - Use caution when operating the Heat Gun. Keep the Heat Gun moving, as excessive heat will generate fumes which can be inhaled by the operator.
  - Keep food and drink out of the work area. Wash hands, arms and face and rinse mouth before eating or drinking. Do not smoke or chew tobacco in the work area.
  - When working with plastics, varnish, or similar materials, gases develop that are easily flammable and can lead to explosions. Be prepared for flames to develop and keep suitable fire extinguishing means at hand.

- The Nozzle becomes very hot. Do not lay the Heat Gun on flammable surfaces when operating the Gun or immediately after turning the Gun off. Always set the Heat Gun on a flat, level surface so that the Nozzle tip is directed upwards and away from the supporting surface.
- Clean up all removed paint and dust by wet mopping the floors. Use a wet cloth to clean all walls, sills, and any other surface where paint or dust is clinging. DO NOT SWEEP, DRY DUST, OR VACUUM. Use a high phosphate detergent or trisodium phosphate (TSP) to wash and mop areas.
- At the end of each work session, place the paint chips and debris in a double plastic bag. Then close the bag with tape or twist ties and dispose of properly.
- Remove protective clothing and work shoes in the work area to avoid carrying dust into the rest of the dwelling. Wash work clothes separately. Wipe shoes off with a wet cloth that is then washed with the work clothes. Wash hair and body thoroughly with soap and water.
- 5. This Heat Gun can ignite combustible fluids and gases. Do not work in a potentially explosive environment. Check the surrouding area before starting the work. Do not work on fuel or gas containers or in their vicinity, even when they are empty.
- 6. Hidden areas such as behind walls, ceilings, floors, soffit boards, and other panels may contain flammable materials that could be ignited by the Heat Gun when working in these locations. The ignition of these materials may not be readily apparent and could result in property damage and injury to people. When working in these locations, keep the Heat Gun moving in a back-and-forth motion. Lingering or pausing in one spot could ignite the panel or the material behind it.
- 7. The hot air jet can injure people and animals. Touching the hot tube of the heating element or the Nozzle leads to skin burns. Do not touch the tube of the heating element or the Nozzle when they are hot. Do not use the Heat Gun as a hair dryer. Do not use the unit to heat up fluids or to dry objects or materials that are destroyed through the influence of hot air.
- 8. This Heat Gun is for indoor use only.
- 9. Avoid unintentional starting. Prepare to begin work before turning on the tool.
- 10. Do not leave the Heat Gun unattended when it is plugged into an electrical outlet. Turn off the tool. Unplug it from its electrical outlet. And allow the tool to completely cool before leaving.
- 11. Use clamps (not included) or other practical ways to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- 12. This product is not a toy. Keep it out of reach of children.

- 13. Do not drop the Heat Gun as the heating elements may be damaged.
- 14. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition, people with pacemakers should:
  - Avoid operating alone.
  - Do not use with power switch locked on.
  - Properly maintain and inspect to avoid electrical shock.

• Any power cord must be properly grounded. Ground Fault Circuit Interrupter (GFCI) should also be implemented – it prevents sustained electrical shock.

15. Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contains chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

Lead from lead-based paints

Crystalline silica from bricks and cement or other masonry products Arsenic and chromium from chemically treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those respirators that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, *et seq.*)

16. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

# SAVE THESE INSTRUCTIONS.

## GROUNDING

# 

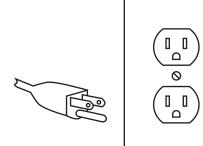
Improperly connecting the grounding wire can result in electric shock.

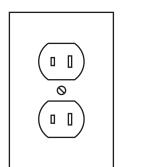
Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

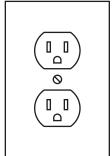
## **Grounded Tools: Tools with Three Prong Plugs**

- 1. Tools marked with "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. (See 3-Prong Plug and Outlet.)
- 2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal. (See 3-Prong Plug and Outlet.)
- 3. The tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the following illustration.

(See 3-Prong Plug and Outlet.)







3-Prong Plug and Outlet

Outlets for 2-Prong Plug

#### **Double Insulated Tools: Tools with Two Prong Plugs**

- Tools marked "Double Insulated" do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code.
   (See Outlets for 2-Prong Plug.)
- 2. Double insulated tools may be used in either of the 120 volt outlets shown in the preceding illustration. (See Outlets for 2-Prong Plug.)

## **Extension Cords**

- 1. Grounded tools require a three wire extension cord. Double Insulated tools can use either a two or three wire extension cord.
- As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. (See Table A.)

- 3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. (See Table A.)
- 4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. (See Table A.)
- 5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. (See Table A.)
- 6. Make sure the extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.

7.	Protect the extension cords from sharp objects, excessive heat, and damp or wet
	areas.

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120/240 VOLT)					
NAMEPLATE AMPERES		EXTENSION CORD LENGTH			
(at full load)	25 Feet	50 Feet	75 Feet	100 Feet	150 Feet
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-
TABLE A	* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.				

## Symbology

	Double Insulated	٧~	Volts Alternating Current
	Canadian Standards Association	Α	Amperes
(UL)	Underwriters Laboratories, Inc.	n <sub>0</sub> xxxx/min.	No Load Revolutions per Minute (RPM)

# SPECIFICATIONS

Electrical Requirements	120 V~ / 60 Hz / 1500 Watts (12.5 Amps (Peak) Power Cord: 16 AWG x 2C / 6' Long Power Plug: 2-Prong / Class 2 Double Insulated: Yes Power Switch: ON/OFF / 3 Position Switch
Adjustable Heat Setting Type	Rocker Switch
Heat Temperatures	Low Setting: 572° Fahrenheit (Maximum) High Setting: 1112° Fahrenheit (Maximum)
Heat Element Tube Size	1.36"~1.50" Diameter
Handle Type	Pistol Grip
Overall Dimensions	10" L x 3-1/4" W x 8-1/2" H
Net Weight	1.65 Pounds



## UNPACKING

When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

## **SET UP INSTRUCTIONS**



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Risk of accidental starting; resulting in serious personal injury. Turn the Power Switch of the tool to its "OFF" position and unplug the tool from its electrical outlet and allow the tool to completely cool before assembling or making any adjustments to the tool.

**Note:** For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

# **OPERATING INSTRUCTIONS**



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

#### **Product Applications**

- 1. When observing the safety rules, this Heat Gun is designed for all applications with hot air that are listed below:
  - Shrinking of shrinkdown tubing, solder connectors and solder terminals, packaging and electrical components.
  - Deforming of articles made from acrylic, PVC, and polystyrene tubing, plates, and profiles as well as most woods.
  - Welding of thermoplastic polymer, flooring materials of PVC and linoleum, PVCcoated fabric, tarpaulins and foils.
  - Soldering of tin, special silver solder, SMD elements, cable lugs, and for loosening soldered connections.
  - Paint removal. Removal of old and even thick coatings of oil paint, varnish, and synthetic plaster.
  - Drying of color shade samples, filter, adhesives, construction joints and stucco forms.
  - Joining adhesives. Large surface gluing with contact adhesives, activation of pressure sensitive adhesives, acceleration of bonding processes, releasing of bonding points as well as releasing or bonding of edge bond or veneer.
  - Defrosting of icy stairs and steps, door locks, trunk lids, car doors or water pipes, as well as for defrosting refrigerators and ice boxes.
  - Disinfection. With the tool set at 1112° Fahrenheit, animal sites/stables may be disinfected. Woodworm infestation may be controlled (Caution: Danger of fire. Do not heat up the wood surface excessively.)



#### **General Operating Procedures**

- Make sure the Power Switch (3) is in its "0" (OFF) position. Then plug the Power Cord (1) of the tool into the nearest 120 volt, grounded, electrical outlet. (See Figure A, previous page.)
- 2. To turn on the Heat Gun, set its Power Switch (3) to "I" or "II".(See Figure A.)
  - Switch "I" Low temperature position (572° Fahrenheit maximum). Used for mild heating applications, i.e., heat shrink tube, heat shrink bag, plastic bending, shaping and welding, removing old paint coating. (See Figure A.)
  - Switch "II" High temperature position (1076° Fahrenheit maximum). Used for intense heating applications, i.e., frozen water pipe, defrosting refrigerator, and metal welding. (See Figure A.)
- To turn off the Heat Gun, set its Power Switch (3) to "I". Then set the Power Switch to "0" and unplug the tool from its electrical outlet. (This method helps cool down the Heat Element (11) properly to extend the life of the Heat Gun.) (See Figure A.)
- 4. **CAUTION! Danger of fire.** Make sure to set the Heat Gun on a non-flammable surface until it has completely cooled.
- 5. Once cooled, store the Heat Gun in a clean, dry, safe location out of reach of children and other unauthorized people.

## MAINTENANCE AND SERVICING

**AWARNING** Risk of serious personal injury from accidental starting or electric shock. Turn the Power Switch of the tool to its "OFF" position and unplug the tool from its electrical outlet and allow the tool to completely cool before performing any inspection, maintenance, or cleaning procedures.

> Damaged equipment can fail, causing serious personal injury. Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

> > REV 08b

#### Inspection, Maintenance, and Cleaning

- 1. **DISCONNECT** from power outlet and make sure that it is completely cooled.
- 2. **BEFORE EACH USE**, inspect the general condition of the Heat Gun. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation.

- 3. **AFTER USE,** clean the external surfaces of the tool with a clean, moist cloth and mild detergent. Then dry. Do not use solvents.
- 4. **CAUTION!** All maintenance, service, and repairs not mentioned in this manual must only be performed by a qualified service technician.
- 5. **WARNING!** If the supply cord of this power tool is damaged, it must be replaced only by a qualified service technician.

#### Troubleshooting

Problem	Possible Causes	Possible Solutions
Heat Gun will not turn	1. Power Switch set at "0".	1. Turn Power Switch to "I" or "II".
on.	2. No power at outlet.	2. Check power at outlet.
	3. Cord not connected.	3. Check that cord is plugged in.
Unsatisfactory results.	1. Improper heat setting.	<ol> <li>Adjust heat setting ("I" or "II") for correct application.</li> </ol>

## PLEASE READ THE FOLLOWING CAREFULLY

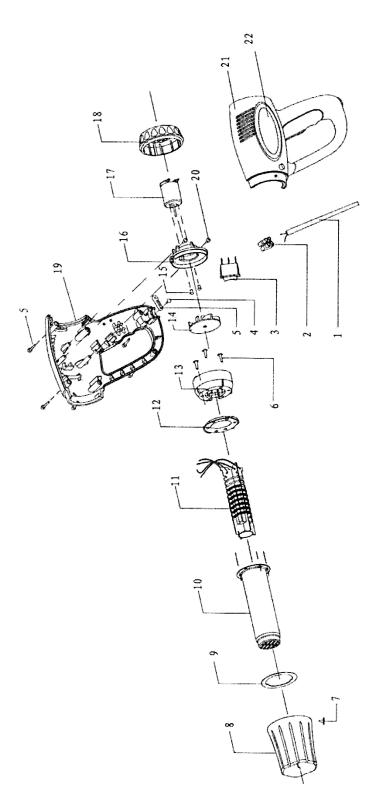
THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

#### PARTS LIST

Part	Description	Q'ty
1	Power Cord & Plug	1
2	Terminal Block	1
3	Power Switch	1
4	Screw	7
5	Wire Clamp	1
6	Screw	3
7	Screw	1
8	Barrel Cover	1
9	Ring	1
10	Barrel	1
11	Heat Element	1

Part	Description	Q'ty
12	Barrel Mounting Flange	1
13	Fan Cover	1
14	Fan	1
15	Screw	2
16	Motor Mounting Plate	1
17	Motor	1
18	Rear Enclosure	1
19	Right Enclosure	1
20	Screw	2
21	Left Enclosure	1
22	Label	2

# ASSEMBLY DIAGRAM



## LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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#### Record Product's Serial Number Here:\_

**Note:** If product has no serial number, record month and year of purchase instead.

**Note:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.