

# CHICAGO

Electric<sup>®</sup>Power Tools

## 2.5 HP CHIPPER/SHREDDER

Model 92281

### ASSEMBLY AND OPERATING INSTRUCTIONS



3491 Mission Oaks Blvd., Camarillo, CA 93011  
Visit our Web site at: <http://www.harborfreight.com>

**TO PREVENT SERIOUS INJURY,  
READ AND UNDERSTAND ALL WARNINGS  
AND INSTRUCTIONS BEFORE USE.**

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**For technical questions, please call 1-800-444-3353.**

## PRODUCT SPECIFICATIONS

Item	Description
Electrical Requirements	115 V / 60 Hz / 2000 Watt 4.15 AMPs (No Load) / 5.20 AMPs (With Load) 2.5 HP / Single Phase / 3460 RPM 3-Prong Power Plug / Power Cord Length: 15" Power Switch Type: ON/OFF Sliding Safety Shut-Off Switch Equipped: Yes Circuit Breaker Type: Push Button
Chipper/Shredder Capacity	Tree Limbs Up To 1-1/4" Diameter
Blade Quantity/Type	2 / Reversible / High Speed Steel Construction
Discharge Chute Size	11-3/8" L x 4-3/4" W
Opening Size	11" L x 8-3/4" W
Wheel Size	7" Diameter x 1-3/4" W
Accessories	Feed Stick (Qty. 1)
Wrenches Included	5mm Allen Wrench (Qty. 1) / 6mm Allen Wrench (Qty. 1) 13mm Double End Wrench (Qty. 1) / 16mm Double End Wrench (Qty. 1)
Overall Dimensions	36-5/8" H x 18" W x 21-1/2" L
Weight	50 Pounds

## SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

## UNPACKING

When unpacking, check to make sure all the parts shown on the **Parts Lists on page 16** are included. 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.

## GENERAL SAFETY RULES

### IMPORTANT SAFETY INSTRUCTIONS



**READ AND UNDERSTAND ALL INSTRUCTIONS**  
Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.

**SAVE THESE INSTRUCTIONS**

## WORK AREA


1. **Keep your work area clean and well lit.** Cluttered and dark work areas invite accidents.
2. **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.
3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

## ELECTRICAL SAFETY


1. **Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.** If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
2. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators.** There is an increased risk of electric shock if your body is grounded.
3. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
4. **Do not abuse the Power Cord. Never use the Power Cord to pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately.** Damaged Power Cords increase the risk of electric shock.
5. **When operating a power tool outside, use an outdoor extension cord marked “W-A” or “W”.** These extension cords are rated for outdoor use, and reduce the risk of electric shock.

## PERSONAL SAFETY

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

2. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
3. **Avoid accidental starting. Be sure the Power Switch is off before plugging in.** Plugging in power tools with the Power Switch on invites accidents.
4. **Remove adjusting keys or wrenches before turning the power tool on.** A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.
5. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the power tool in unexpected situations.
6.  **Always wear eye, hearing, breathing protection, and heavy duty work gloves.** Wear ANSI approved safety impact goggles, ANSI approved hearing protectors, ANSI approved dust mask or respirator, and heavy duty work gloves when using this product. Also, non-skid safety shoes and a hard hat must be used for appropriate conditions.

#### TOOL USE AND CARE

1. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
2. **Do not use the power tool if the Power Switch or Safety Shut-Off Switch does not turn it on or off.** Any tool that cannot be controlled with the Power Switch or Safety Shut-Off Switch is dangerous and must be replaced.
3.  **Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
4. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
5. **Maintain tools with care. Keep tools clean.** Properly maintained tools are easier to control. Do not use a damaged tool. Tag damaged tools “Do not use” until repaired.
6. **Check for misalignment or binding of moving parts, breakage of parts, and**

**any other condition that may affect the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.

7. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.

### SERVICE

1. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
2. **When servicing a tool, use only identical replacement parts. Follow instructions in the “*Inspection, Maintenance, And Cleaning*” section of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

### GROUNDING

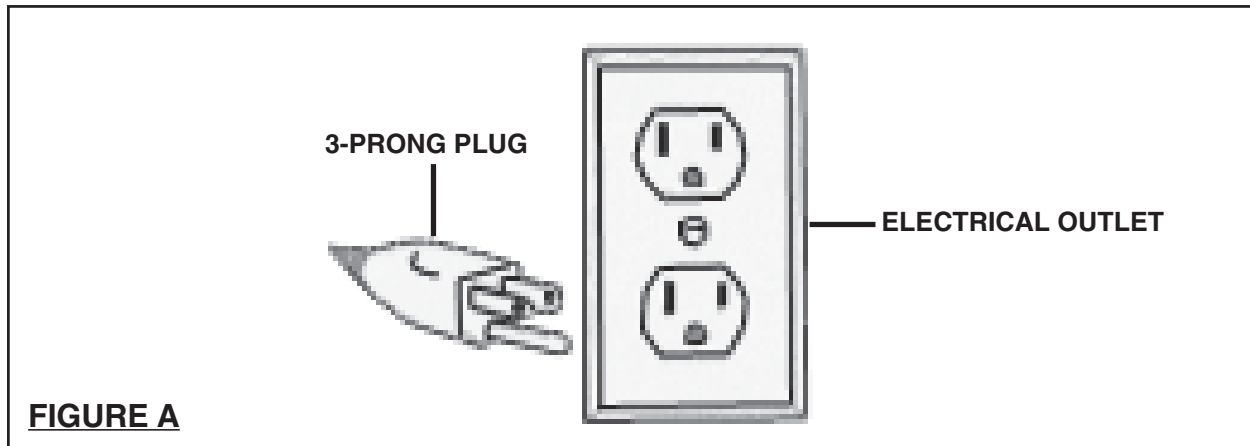


**Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use 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.**

### GROUNDING 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 Figure A, next page.)**

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 Figure A.)**
3. Your 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 that in the following illustration. **(See Figure A.)**



## EXTENSION CORDS

1. **Grounded** tools require a three wire extension cord.
2. 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 Figure B, next page.)**
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 Figure B.)**
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 Figure B.)**
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 Figure B.)**




6. If you are using an extension cord outdoors, make sure it is marked with the suffix “W-A” (“W” in Canada) to indicate it is acceptable for outdoor use.
7. Make sure your 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. Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

<b>RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (115 VOLT)</b>					
<b>NAMEPLATE AMPERES (At Full Load)</b>	<b>EXTENSION CORD LENGTH</b>				
	<b>25 FEET</b>	<b>50 FEET</b>	<b>75 FEET</b>	<b>100 FEET</b>	<b>150 FEET</b>
<b>0-2.0</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>16</b>
<b>2.1-3.4</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>16</b>	<b>14</b>
<b>3.5-5.0</b>	<b>18</b>	<b>18</b>	<b>16</b>	<b>14</b>	<b>12</b>
<b>5.1-7.0</b>	<b>18</b>	<b>16</b>	<b>14</b>	<b>12</b>	<b>12</b>
<b>7.1-12.0</b>	<b>16</b>	<b>14</b>	<b>12</b>	<b>10</b>	<b>-</b>
<b>12.1-16.0</b>	<b>14</b>	<b>12</b>	<b>10</b>	<b>-</b>	<b>-</b>
<b>16.1-20.0</b>	<b>12</b>	<b>10</b>	<b>-</b>	<b>-</b>	<b>-</b>

\*Based on limiting the line voltage drop to five volts at 150% of the rated amperes.


**FIGURE B**

**SYMBOLOLOGY**


	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
<b>V</b> ~	Volts Alternating Current
<b>A</b>	Amperes
no xxxx/min.	No Load Revolutions per Minute (RPM)

**FIGURE C**

## SPECIFIC SAFETY RULES

1. **Maintain labels and nameplates on the Chipper/Shredder.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
2. **Use the right product for the right job.** There are certain applications for which this product was designed. Do not use small equipment, tools, or attachments to do the work of larger industrial equipment, tools, or attachments. Do not use this product for a purpose for which it was not intended.
3.  **WARNING!** **Beware of the rotating Blades (15). Keeps hands and fingers away from the Hopper (1) and Chute (32).** Always use the Feed Stick (59) to push limbs from the Hopper into the Body (13).
4. **Check the Hopper Flap (2) for proper opening/closing movement before each use.** Do not operate the Chipper/Shredder if the Rubber Board does not move freely.
5. **Make certain that you or anyone in the vicinity stands clear of the Chute (32).** Fragments and chips of wood are expelled from the Chute at a very high rate of speed and can cause severe personal injury.
6. **Check the Hopper (1), Body (13), and Chute (32) for debris.** Before plugging in the Chipper/Shredder, make sure the Hopper, Body, and Chute are empty. Make a visual check and/or push the end of the Feed Stick (59) around the inside of the Hopper, Body, and Chute. Make sure to remove all debris.
7. **Inspect the material before inserting it into the Chipper/Shredder.** To avoid damaging the Blades (15), make sure the material fed into the machine does not contain metal, rocks, cans, bottles, or any other foreign objects.
8. **Use the Chipper/Shredder only for cutting limbs with a maximum diameter of 1-1/4" or smaller.**
9. **Safely clear a clogged Hopper (1).** If the Chipper/Shredder clogs, immediately turn off the Power Switch (47) and unplug the machine from its electrical outlet. Only after all moving parts of the machine have stopped moving clear out debris.
10. **Make sure the Chipper/Shredder is located on a flat, level, ground surface capable of supporting the weight of the machine, limbs, and any additional tools and equipment.**
11. **Do not use the Chipper/Shredder in the rain or in wet conditions.**

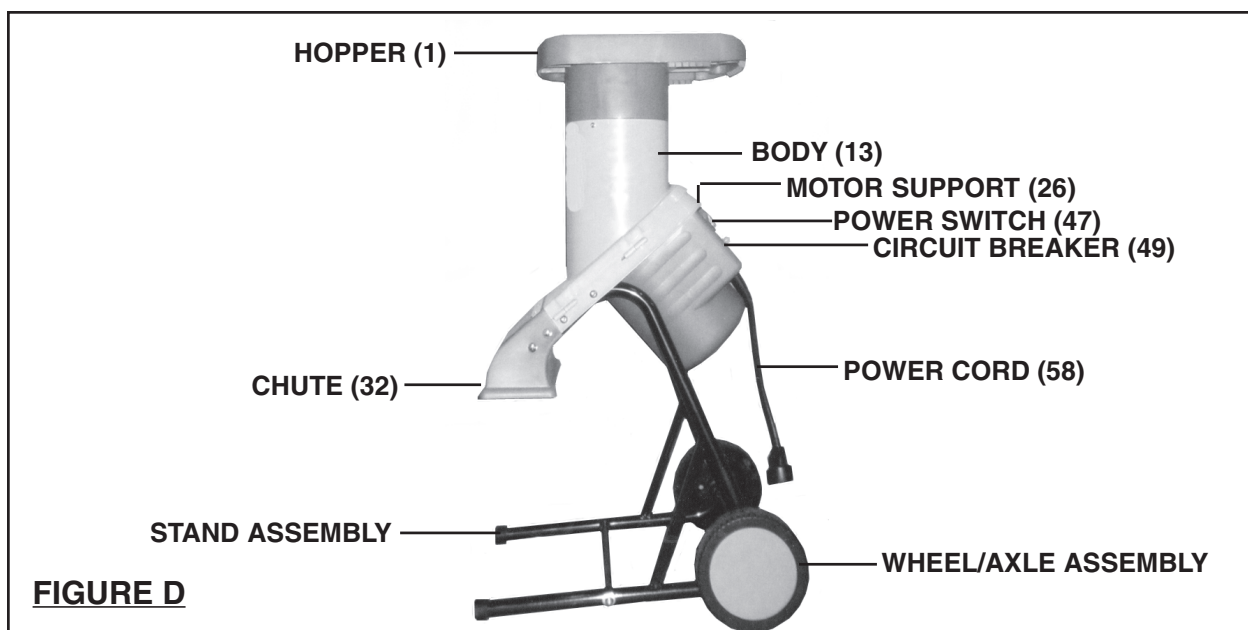


12. **Keep all electrical connections dry and off the ground.**
13. **Do not handle the Power Switch (47) with wet hands.**
14. **Never leave the Chipper/Shredder unattended when it is plugged into an electrical outlet.** Turn off the machine, and unplug it from its electrical outlet.
15. **Allow the Blades (15) to spin up to full speed before feeding limbs into them.** When turning off the Chipper/Shredder, allow the Blades to spin down and stop on their own. Do not press against the Blades with limbs or any other objects to stop them.
16. **Do not force limbs into the Blades (15) when cutting.** Apply moderate pressure, allowing the Blades to cut without being forced.
17. **Never attempt to remove material stuck in the moving parts of the Chipper/Shredder while it is plugged in.**
18. **Never stand on the Chipper/Shredder.** Serious injury could result if the Chipper/Shredder is tipped.
19. **Industrial applications must follow OSHA requirements.**
20. **Keep all bystanders and animals safely away while operating the Chipper/Shredder.**
21. **For your safety:** In extreme working conditions, sensors in the Chipper/Shredder will automatically switch off the Motor to prevent overheating. In this event, turn the Power Switch (47) to its "OFF" position. Unplug the electrical cord and wait five minutes or until the Motor has cooled. Clear the machine of all debris. Plug in the electrical cord and depress the Circuit Breaker. Then, turn the Power Switch to its "ON" position to resume cutting. **NEVER attempt to disable the Circuit Breaker.**
22. **Performance of this machine (if powered by line voltage) may vary depending on variations in local line voltage Extension cord usage may also affect machine performance.**
23. **Wait for sufficient time after shut down before performing any maintenance on the Chipper/Shredder.** The Blades (15) do not stop immediately after turning off the power and unplugging the machine. Avoid injury by performing maintenance on the Chipper/Shredder only when all parts are cool to the touch.
24.  **Avoid entanglement. Feed only one limb at a time into the Hopper (1).** Feeding two or more limbs at a time can entangle hands in the limbs, pulling fingers and hands downward into the spinning Blades (15).

25. **⚠ WARNING!** To avoid personal injury or death, NEVER attempt to alter or disable the Safety Shut-Off Switch (42).
26. **⚠ WARNING!** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain 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 and 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 well ventilated areas, and work with approved safety equipment such as those dust masks that are specially designed to filter out microscopic particles. *(California Health & Safety Code 25249.5, et seq.)*
27. **⚠ WARNING!** People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.
28. **⚠ WARNING!** The warnings and cautions discussed in this 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 the operator.

### SAVE THESE INSTRUCTIONS

## PRODUCT DESCRIPTION



## ASSEMBLY INSTRUCTIONS

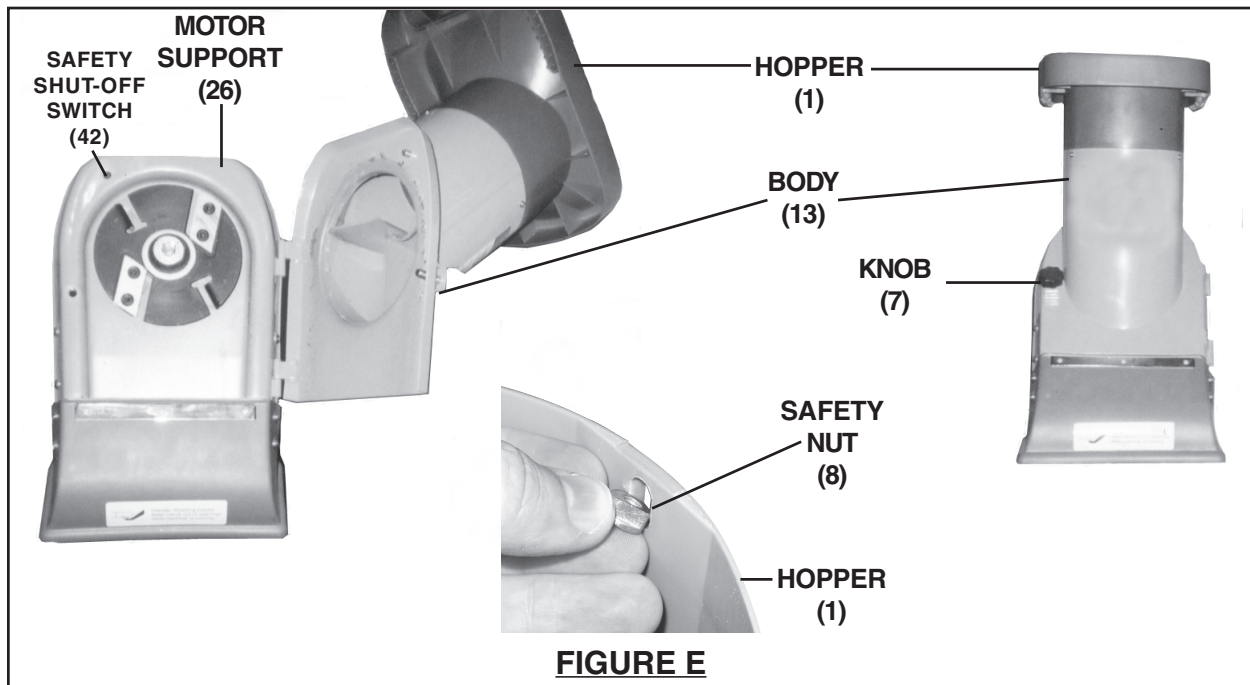
**NOTE:** For additional information regarding the parts listed in the following pages, refer to the **Assembly Diagram on page 17**.

**WARNING!** Always make sure the Power Switch (47) of the Chipper/Shredder is in its “OFF” position and the unit is unplugged from its electrical outlet *prior* to assembling the unit, unclogging the unit, or making any adjustments to the unit.

The Body (13) is pre-attached to the Motor Support (26) by the manufacturer, and requires no additional assembly. **(See Figure E.)**

### ***To Attach The Hopper To The Body:***

1. If not already installed, insert all three Safety Nuts (8) into the slots in the Hopper (1) from the inside so that their round ends are inside the Hopper (1). **(See Figure E.)**
2. Place the Hopper (1) into the Body (13), lining up the Safety Nuts (8) with the slots in the Body. Secure the Hopper in place using Washers (9 & 10) and Screws (11).
3. Close the Body (13) and tighten the Knob (7) firmly to secure it in place. **(See Figure E.)**



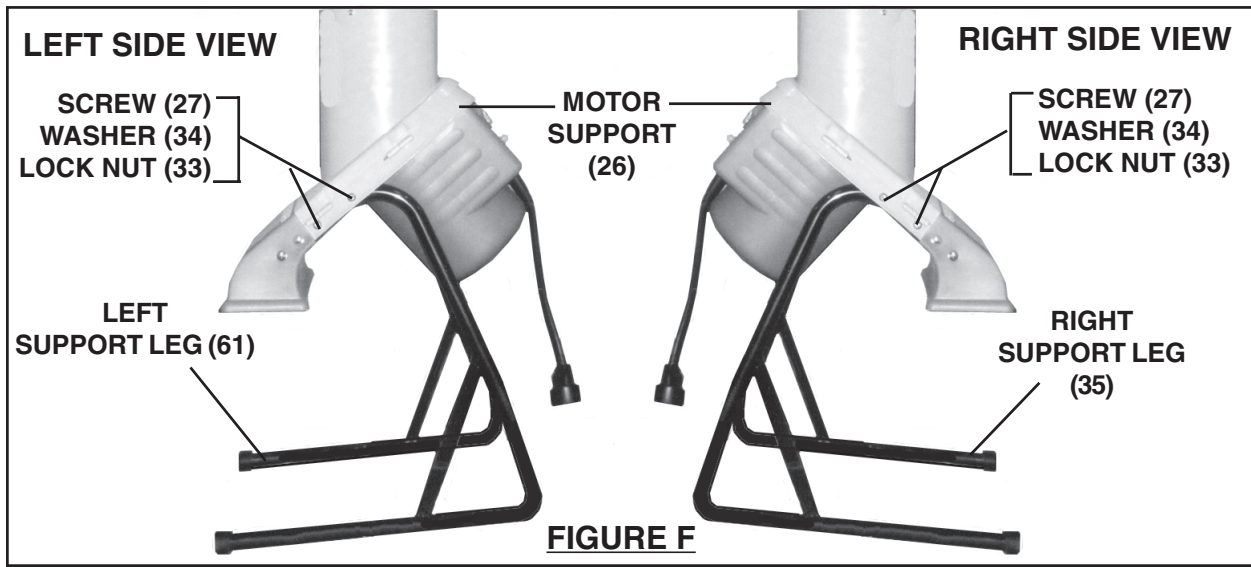
**FIGURE E**

### ***To Assemble The Stand:***

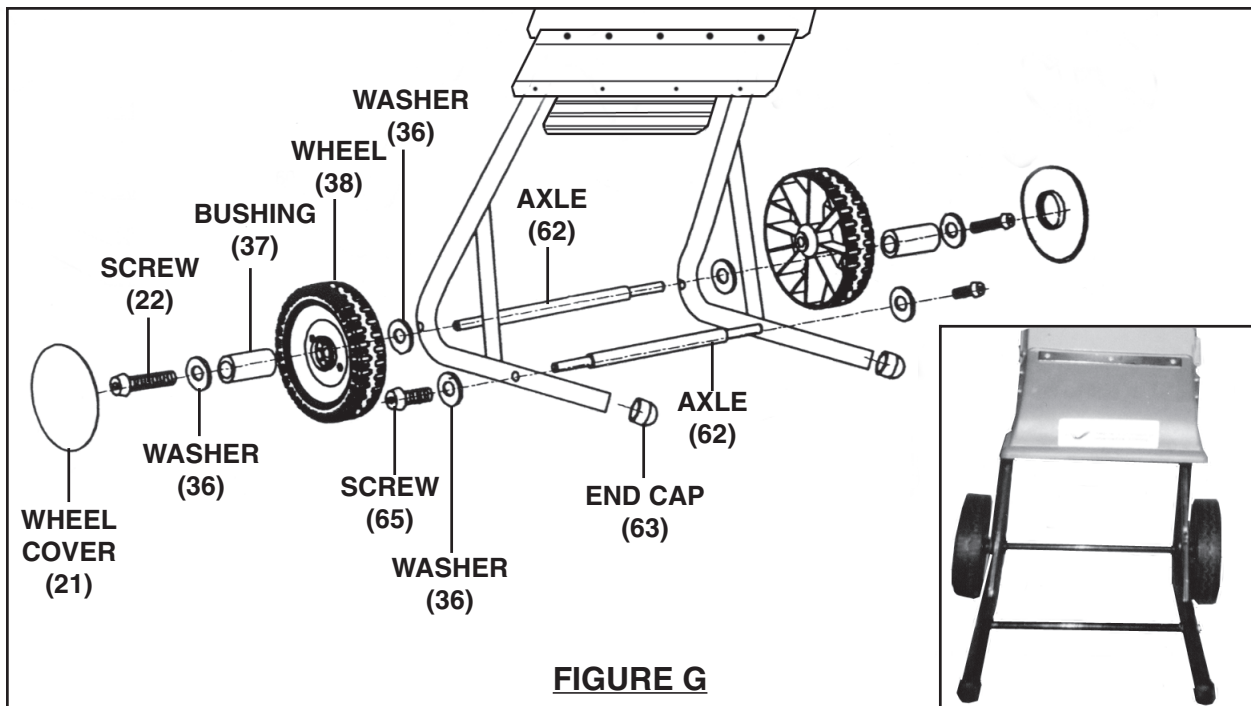
1. **NOTE:** Assembling the Stand will require the use of the following hand tools provided as accessories; the 5mm Allen Wrench (69), 6mm Allen Wrench (70), 13mm Double End Wrench (71), and 16mm Double End Wrench (72). These wrenches should only be used when assembling the Chipper Shredder.

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2. Attach the Left Support Leg (61) to the left side of the Motor Support (26), using two Screws (27), two Washers (34), and two Lock Nuts (33).  
**(See Figure F.)**
3. Attach the Right Support Leg (35) to the right side of the Motor Support (26), using two Screws (27), two Washers (34), and two Lock Nuts (33).  
**(See Figure F.)**



4. Assemble the Wheel/Axle assemblies using the parts shown below.  
**(See Figure (G.))**

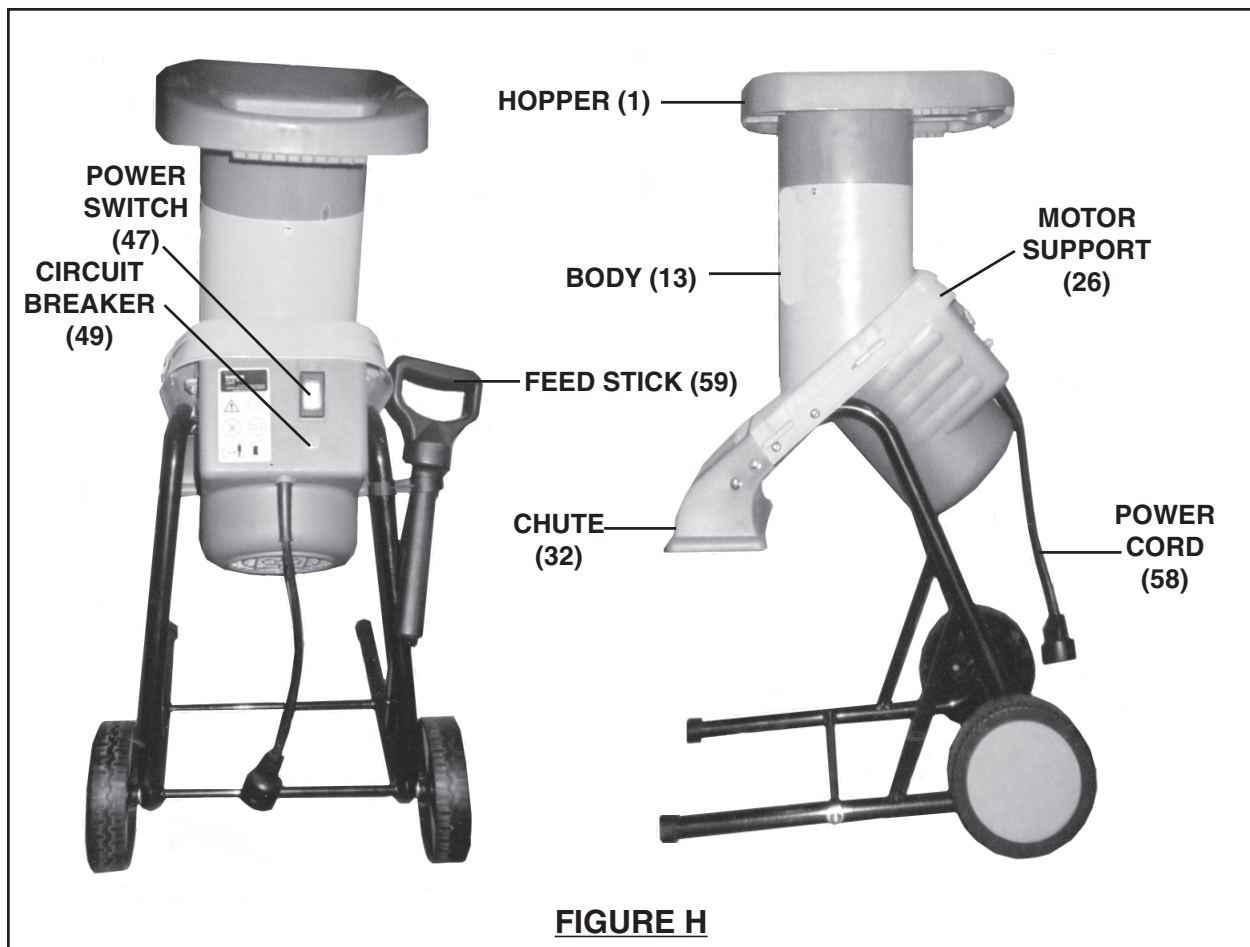


## OPERATING INSTRUCTIONS



1.  **WARNING!** Use safety equipment. Always wear ANSI approved safety impact glasses under an ANSI approved full face shield, ANSI approved hearing and breathing protection, heavy duty work gloves, and nonskid safety shoes and work pants and work shirt.
2. Make sure to position the Chipper/Shredder on a flat, level, dry ground surface. Position the machine so that the Chute (32) is pointed in a safe direction, at least 25 feet from any people, animals, or objects. Then, chock both Wheels (38) of the machine with scrap branches or rocks to keep the unit from moving.
3. Connect an appropriate extension cord (not included) to the Power Cord Plug (58), and plug the extension cord into the nearest 115 volt, grounded, electrical outlet. **(See Figure H, next page.)**
4. Turn the Power Switch (47) to its “**ON**” position, and allow the Blades (15) to spin up to full speed. **(See Figure H.)**
5. **Branches cannot be more than 1-1/4” in diameter.** Do not attempt to force larger branches into the Chipper/Shredder.
6. **Do not force the Chipper/Shredder.** Let the natural suction process take in the material to be cut. Always stand clear and to the side of the Chute (32). **(See Figure H.)**
7. Without putting your hands into the Hopper (1), slowly drop the material in (one branch at a time). The machine will pull it in automatically.
8.  **WARNING!** **Never use your hands to feed material into the Hopper (1). Always use the Feed Stick (59).** **(See Figure H.)**
9. Should the Chipper/Shredder jam while in use, immediately turn the Power Switch (47) to its “**OFF**” position. Unplug the Power Cord (58). Loosen the Knob (7), and open the Body (13) to expose the Blades (15). Clear the jam. Close the Body, and retighten the Knob. Then plug the Power Cord into its extension cord, and turn the Power Switch to its “**ON**” position to resume cutting. **(See Figures E and H.)**
10. In extreme working conditions sensors in the Chipper/Shredder will automatically switch off the Motor to prevent overheating. In this event, turn the Power Switch (47) to its “**OFF**” position and unplug the machine from its electrical supply. Wait five minutes or until the Motor has cooled. Clear the machine of all debris. Depress the Circuit Breaker (49). Then, plug the machine into its electrical supply,

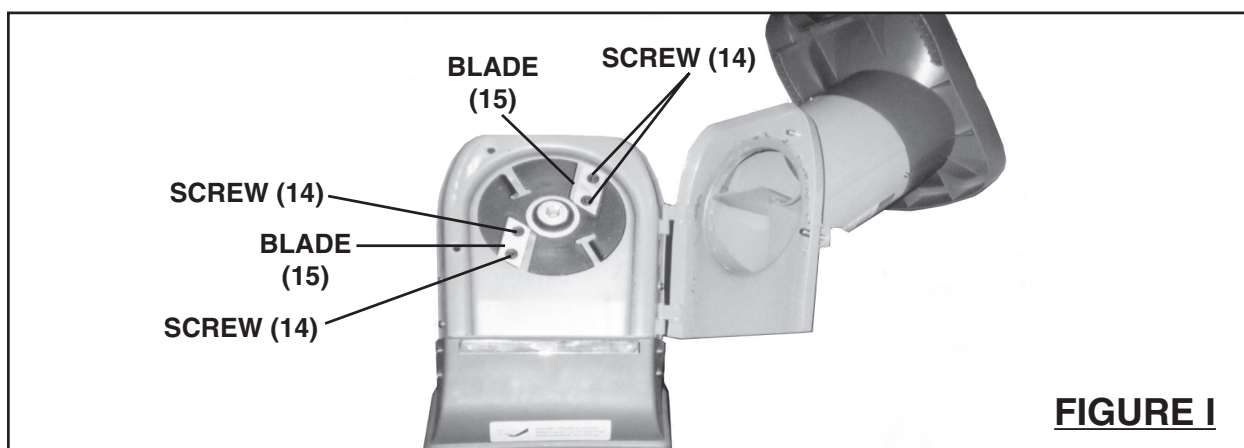
and turn the Power Switch to its “ON” position to resume cutting.  
**NEVER attempt to disable the Circuit Breaker. (See Figure H.)**

11. **NOTE:** The Motor is equipped with a Safety Shut-Off Switch (42) located on the top portion of the Motor Support (26). Should the Motor not restart, check to make sure the Body (13) is firmly secured to the Motor Support. If necessary, retighten the Knob (7) to ensure a solid connection between the Body and Motor Support. **(See Figure E.)**
12. When finished using the Chipper/Shredder, turn the Power Switch (47) to its “OFF” position. Unplug the Power Cord (58) from its extension cord. Then, unplug the extension cord from its electrical outlet. **(See Figure H.)**
13. Wait until all moving parts on the Chipper/Shredder have stopped moving. Then open the unit and clean out the Hopper (1), Body (13), Motor Support (26), and Chute (32). **(See Figure H.)**
14. Make sure to store the Chipper/Shredder in a clean, dry, safe location out of reach of children and other unauthorized people.



## INSPECTION, MAINTENANCE, AND CLEANING

1.  **WARNING!** Make sure the Power Switch (47) of the Chipper/Shredder is in its “OFF” position and that the machine is unplugged from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.
2. **Before each use**, inspect the general condition of the Chipper/Shredder. Check for loose screws, misalignment or binding of moving parts, damaged electrical wiring, jammed Blades (15), and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**
3. **Before and after each use**, open the unit and clean out the Hopper (1), Body (13), Motor Support (26), and Chute (32).
4. **Periodically**, inspect the *two* Blades (15). Using dull Blades will cause excessive wear on the Motor, and will cause jamming. *Reverse or sharpen* the Blades when needed. When reversing Blades always wear heavy duty gloves to avoid accidental cuts to hands and fingers. To reverse the Blades, remove the *four* Screws (14) that secure the Blades to the Disc (19). Turn the Blades over to expose the sharp edges. Then retighten the Screws to secure the Blades to the Disc. **(See Figure I.)**
5. **To clean the exterior parts:** Use only a clean cloth and mild detergent to clean the body of the Chipper/Shredder. Do not use solvents. **Do not immerse any electrical part of the tool in liquid.**
6. **When storing**, Store the Chipper/Shredder in a clean, dry, safe location out of reach of children and other unauthorized people.
7.  **CAUTION!** All maintenance, service, or repairs not listed in this manual are only to be attempted by a qualified service technician.



**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	Qty.	Part #	Description	Qty.
1	Hopper	1	37	Bushing	2
2	Hopper Flap	1	38	Wheel	2
3	Press Board	1	39	Screw	7
4	Screw	7	40	Washer	3
5	Cover	1	41	Switch Shelf	1
6	Nut	1	42	Safety Shut-Off Switch	1
7	Knob	1	43	Wire A	2
8	Safety Nut	3	44	Motor Assembly	1
9	Washer	3	45	Covering	1
10	Washer	11	46	Wire B	2
11	Screw	3	47	Power Switch	1
12	Bolt	1	48	Wire D	1
13	Body	1	49	Circuit Breaker	1
14	Screw	4	50	Nut	1
15	Blade	2	51	Capacitor	1
16	Bolt	1	52	Cable Fix	1
17	Spring Washer	1	53	Protect Tube	1
18	Fix Board	1	54	Motor Housing	1
19	Disc	1	55	Screw	3
20	Disc Base	1	56	Spring Washer	3
21	Wheel Cover	2	57	Washer	3
22	Screw	2	58	Power Cord	1
23	Screw	4	59	Feed Stick	1
24	Washer	4	60	Brace	1
25	Washer	4	61	Left Support Leg	1
26	Motor Support	1	62	Axle	2
27	Screw	4	63	End Cap	2
28	Washer	4	64	Small Rivet	3
29	Safety Screw	4	65	Screw	2
30	Washer	4	66	Steel Pad	1
31	Lock Nut	4	67	Washer	1
32	Chute	1	68	Washer	1
33	Lock Nut	4	69	5mm Allen Wrench	1
34	Washer	8	70	6mm Allen Wrench	1
35	Right Support Leg	1	71	13mm Double End Wrench	1
36	Washer	2	72	16mm Double End Wrench	1

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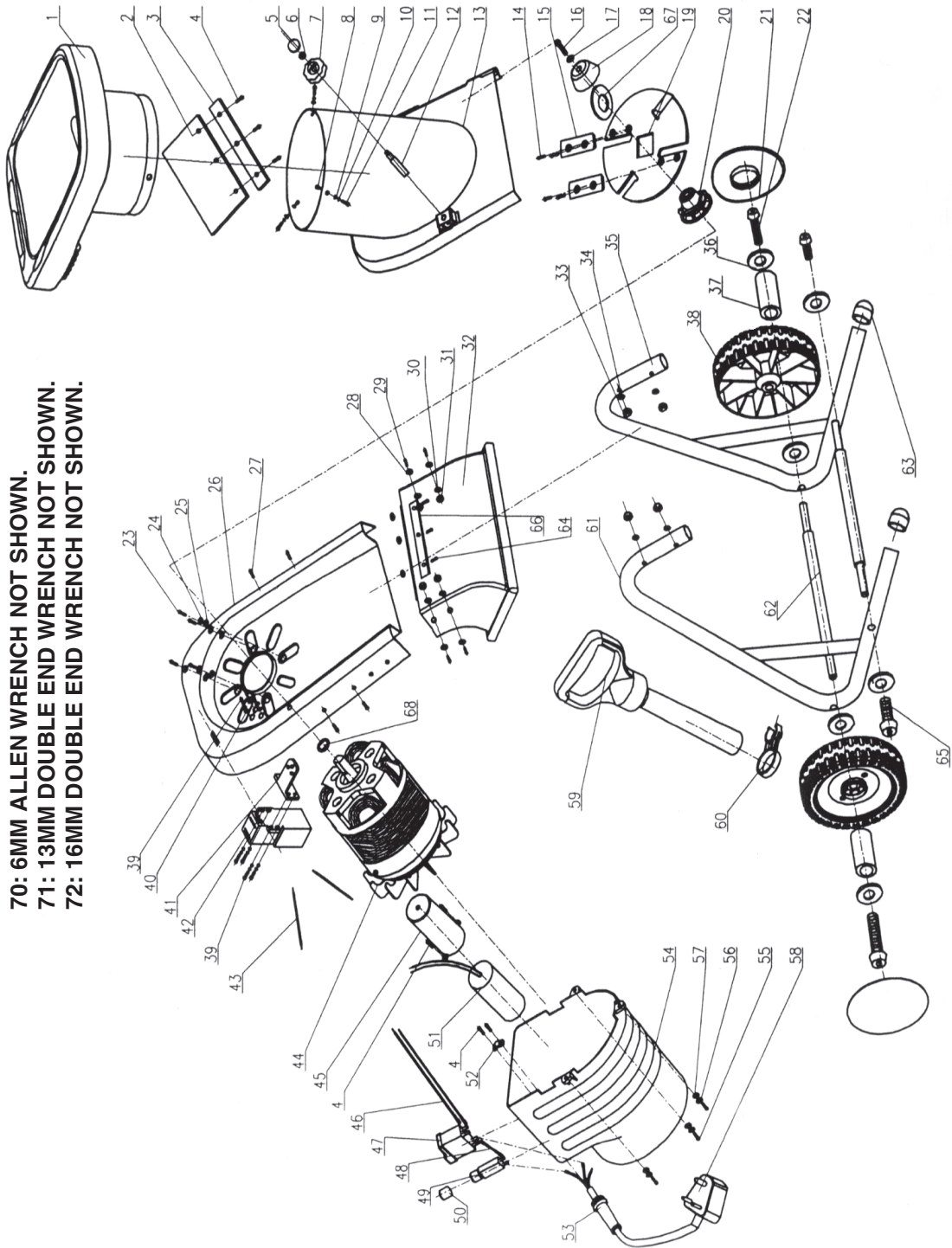
**NOTE:**

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



# ASSEMBLY DIAGRAM

69: 5MM ALLEN WRENCH NOT SHOWN.  
 70: 6MM ALLEN WRENCH NOT SHOWN.  
 71: 13MM DOUBLE END WRENCH NOT SHOWN.  
 72: 16MM DOUBLE END WRENCH NOT SHOWN.



**NOTE:**

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

# WIRING DIAGRAM

