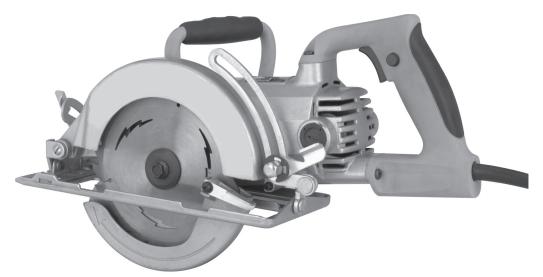
# CHICAGO ELECTRIC POWER TOOLS 7-1/4" CIRCULAR SAW WORM GEAR DRIVE

**Model 90186** 

# **ASSEMBLY AND OPERATING INSTRUCTIONS**



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.

#### PRODUCT SPECIFICATIONS

ITEM	DESCRIPTION
Electrical	110V / 60 Hz / 13 Amp / 4500 RPM Single Phase / Easy Access Carbon Brushes (Qty. 2)
Saw Blade Capacity	7-1/4" Diameter
Blade Arbor Hole	Diamond
Depth of Cut	2-1/4"
Additional Features	Two Handle Design / Spring Loaded Blade Guard / Safety Switch / 5/8" Arbor Adapter
Overall Dimensions	18-1/2"L x 7-1/8"W (at its widest point)
Shoe Plate Size	11-13/16"L x 5-3/16"W
Weight	15.85 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.

#### **GENERAL SAFETY RULES**

#### **A**WARNING

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 benches and dark 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. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

#### **ELECTRICAL SAFETY**

- 4. 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 tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
- 5. Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system.
- 6. 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.
- 7. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- 8. Do not abuse the Power Cord. Never use the Power Cord to carry the tools or 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.
- 9. 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

10. 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.

- 11. 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.
- 12. Avoid accidental starting. Be sure the Power Switch is off before plugging in. Carrying power tools with your finger on the Power Switch, or plugging in power tools with the Power Switch on, invites accidents.
- 13. 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.
- 14. **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.
- 15. **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

## TOOL USE AND CARE

- 16. 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.
- 17. **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.
- 18. **Do not use the power tool if the Power Switch does not turn it on or off.**Any tool that cannot be controlled with the Power Switch is dangerous and must be replaced.
- 19. **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.
- 20. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- 21. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with a sharp cutting edge are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools "Do not use" until repaired.

- 22. 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.
- 23. 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

- 24. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
- 25. 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.

#### SPECIFIC SAFETY RULES

- 1. **Maintain a safe working environment.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use the Circular Saw in areas near flammable chemicals, dusts, and vapors.
- 2. **Maintain labels and nameplates on the Circular Saw.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 3. **AWARNING** To avoid serious personal injury and/or property damage, always use Saw Blades (part #3) that are rated at 4500 RPM or greater on this particular Circular Saw.
- 4. Replace a dull or damaged Saw Blade (part #3) immediately.
- 5. Always wear a safety impact full face shield, hearing protection, and heavy duty work gloves when using this product. A safety impact full face shield, hearing protection, and heavy duty work gloves are available from Harbor Freight Tools.
- 6. Keep all guards in place and working properly.

- 7. When using the Circular Saw, always maintain a firm grip on the tool with both hands and keep hands and fingers away from the cutting area and Saw Blade.
- 8. Keep your body positioned to either side of the Saw Blade, but not in line with the Saw Blade.
- 9. Avoid "kickback" forces. Kickback is a sudden reaction to a pinched, bound, or misaligned Saw Blade causing an uncontrolled Circular Saw to lift up and out of the workpiece toward the operator. Always maintain a firm grip with both hands on the Saw and position your body and arm to allow you to resist kickback forces. When the Saw Blade is binding, or when interrupting a cut for any reason, release the Power Switch (part #67) and hold the Saw motionless in the workpiece until the Saw Blade comes to a complete stop. Never attempt to remove the Saw from the workpiece or pull the Saw backward while the Saw Blade is in motion or kickback may occur.
- 10. Always remove all adjusting keys and wrenches from the Circular Saw before starting.
- 11. Do not pull or carry the Circular Saw by its Power Cord (part #65), or pull the Cord around sharp corners or edges. Do not unplug the Circular Saw by pulling on the Cord. Keep the Cord away from heated surfaces.
- 12. **Do not force the tool.** This Circular Saw will do the work better and safer at the speed and capacity for which it is designed.
- 13. **Check for damaged parts.** Before using this product, carefully check that it will operate properly and perform its intended function. Check for damaged parts and any other conditions that may affect the safe operation of this product. Replace or repair damaged or worn parts immediately.
- 14. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Only use accessories intended for use with this product.
- 15. **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.
- 16. **Stay alert. Watch what you are doing at all times.** Use common sense. Do not use this product when you are tired or distracted from the job at hand.
- 17. Do not operate this product when fatigued or under the influence of alcohol or drugs.

- 18. Always turn off the Circular Saw and unplug it from its electrical outlet before changing accessories or performing any inspection, maintenance, or cleaning procedures.
- 19. **AWARNING** The warnings and cautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be under stood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied the the operator.
- 20. AWARNING 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 a well ventilated area, 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.)
- 21. **AWARNING** 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.

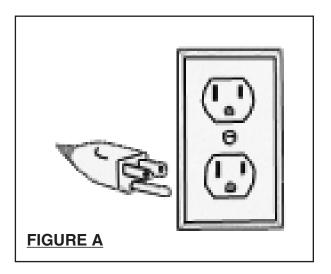
#### **AWARNING**

Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualfified 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

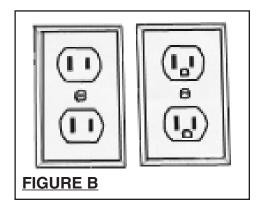
1. Tools marked with "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity aways from the user, reducing 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.)



# DOUBLE INSULATED TOOLS: TOOLS WITH TWO PRONG PLUGS

- 4. 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 Figure B.)
- 5. Double insulated tools may be used in either of the 110 volt outlets shown in the following illustration. (See Figure B.)



#### **EXTENSION CORDS**

- 1. **Grounded** tools require a three wire extension cord. **Double Insulated** tools can use either a two or 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 C, 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 C.)
- 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 C.)
- 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 C.)
- 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.

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120 VOLT)					
NAMEPLATE AMPERES (At Full Load)	EXTENSION CORD LENGTH				
	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
35-50	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			-
* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.					

FIGURE C

#### **SYMBOLOGY**

	Double Insulated
<b>(P</b>	Canadian Standards Association
(I)	Underwriters Laboratories, Inc.
V ~	Volts Alternating Current
Α	Amperes
n <sub>o</sub> xxxx/min.	No Load Revolutions per Minute (RPM)

#### **UNPACKING**

When unpacking, check to make sure all the parts shown on the <u>Parts List on page 17</u> and 18 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.

#### **ASSEMBLY INSTRUCTIONS**

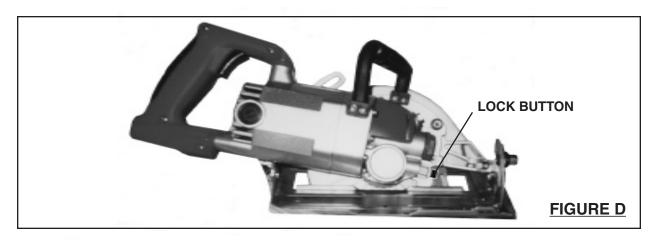
**NOTE:** For additional information regarding the parts listed in the following pages, refer to the **Assembly Diagram on page 19**.

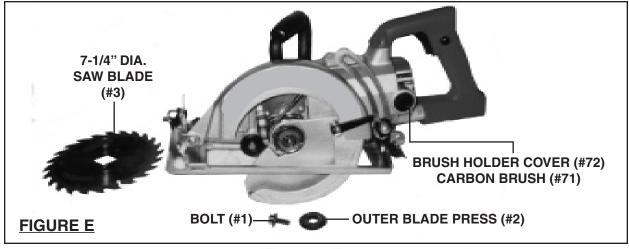
AWARNING Always make sure the Power Cord (part #65) of the Circular Saw is unplugged from its electrical outlet *prior* to assembly, adding any accessories, or making any adjustments to the tool.

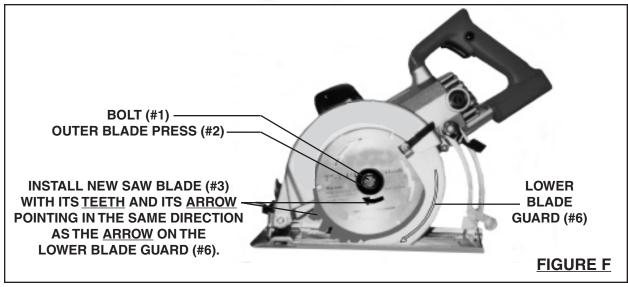
#### To Remove/Install A Saw Blade:

- Depress the Lock Button to hold the Saw Blade (part #3) in place. Continue to depress the Lock Button. Then, unscrew (clockwise) and remove the Bolt (part #1) and Outer Blade Press (part #2). (See Figures D and E, next page.)
- 2. Pull the Lower Guard (part #6) all the way up into the Upper Guard (part #21). Then, remove the old Saw Blade (part #3) and install a new Saw Blade onto the Shaft (part #15). NOTE: Make sure to install the new Saw Blade with its teeth and the arrow on the Saw Blade pointing in the same direction as the arrow on the Lower Guard. (See Figure F, next page.)

3. Once the new Saw Blade (part #3) is installed onto the Shaft (part #15) place the Outer Blade Press (part #2) back onto the Shaft and secure the Saw Blade in place by tightening (counterclockwise) the Bolt (part #1) into the Shaft. (See Figure C.)







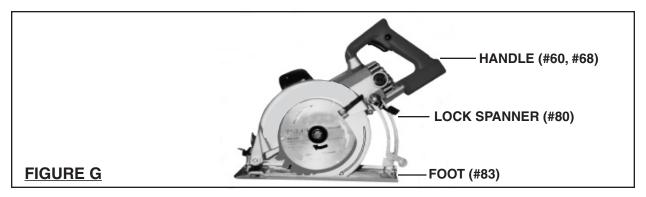
#### **OPERATING INSTRUCTIONS**

Note: Add gear oil before first use. Check gear oil level before every use. Recommended Oil Harbor Freight Tools SKU 66582. In case of unavailability, you can use the following: Shell Valvata J680®, Mobilgear SHC680®, Shell Tivela Oil s680®.

AWARNING Always make sure the Power Cord (part #65) of the Circular Saw is unplugged from its electrical outlet *prior* to assembly, adding any accessories, or making any adjustments to the tool.

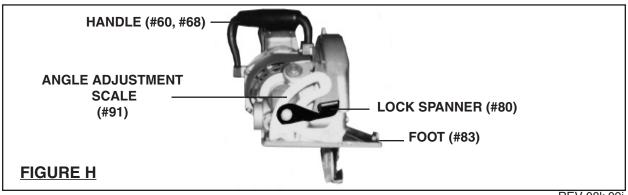
### To Adjust Depth Of Cut:

To adjust the depth at which the Circular Saw will cut, loosen the Lock Spanner (part #80) located at the rear of the Saw. Hold the Foot (part #83) down with one hand and raise or lower the Saw by the Handle (parts #60, #68). Then, retighten the Lock Spanner at the desired depth setting. (See Figure G.)



#### To Adjust Angle Of Cut:

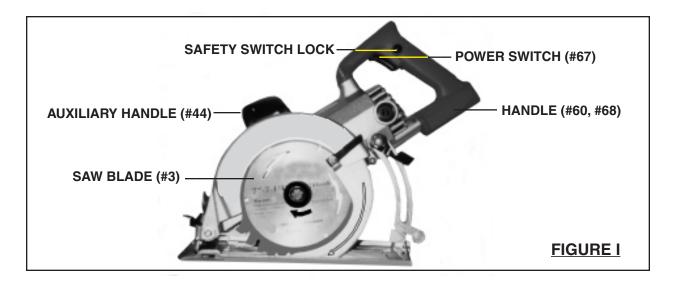
To adjust the angle at which the Circular Saw will cut, loosen the Lock Spanner (part #85) located at the front of the Saw. With one hand hold the Handle (parts #59, #66), and with the other hand tilt the Foot (part #83) to the right or left until the desired angle of cut is indicated on the Angle Adjustment Scale (part #94). Then, re-tighten the Lock Spanner at the desired angle setting. (See Figure H.)



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#### The Power Switch:

- 1. To start the Circular Saw, depress the Safety Switch with your thumb, and then the Power Switch (part #67). To stop the tool, release pressure on the Power Switch. (See Figure I.)
- 2. **WARNING!** Prior to using the Circular Saw (each time), make sure the Switch Lock mechanism is working properly. Always release the Switch Lock mechanism before disconnecting the Saw from its electrical outlet. Failure to do so will cause the tool to start immediately the next time it is plugged into an electrical outlet, resulting in possible injury or property damage. **(See Figure I.)**



# **Proper Operation During The Sawing Process:**

- 1. **AWARNING** When sawing a workpiece, always push the Circular Saw into the workpiece with one hand <u>firmly gripping</u> the Handle (parts #60, #68) and the other hand <u>firmly gripping</u> the Auxiliary Handle (part #46). Never pass hands or fingers directly in front of, to the rear, or below the Saw Blade (part #3). (See Figure I.)
- 2. Make all necessary depth and angle adjustments to the Circular Saw. (See Figures G and H.)
- 3. Make sure the workpiece is free from nails and any other foreign objects which could damage the Saw Blade (part #3). (See Figure I.)

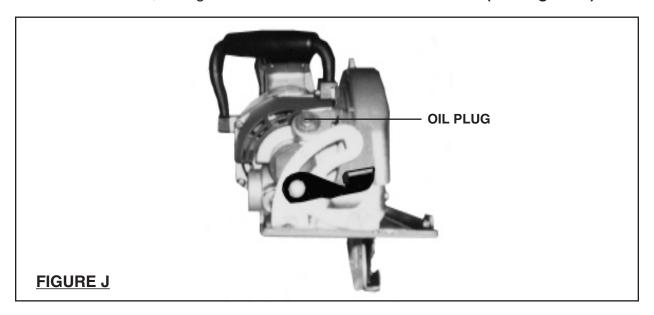
- 4. Make sure the workpiece is supported at all times. Whenever possible, secure the workpiece in a vise or with clamps (not included). If necessary, use a roller stand (not included) with larger workpieces.
- 5. Plug the Power Cord (part #65) into the nearest 110 volt, grounded, electrical outlet.
- 6. Firmly grip the Handle (parts #60, #68) with one hand and the Auxiliary Handle (part #46) with the other hand. Then, squeeze the Safety Switch and Power Switch (part #67) to turn on the Circular Saw. If desired, use the Switch Lock to run the Saw in its continuous mode. (See Figure I.)
- 7. Allow the Saw Blade (part #3) to spin up to full speed before feeding the Saw Blade into the workpiece. (See Figure I.)
- 8. Make straight cuts only. Do not attempt to twist the Circular Saw to the right or left while cutting. If this occurs, the Saw Blade (part #3) will "bind" in the workpiece causing kickback, potential injury, and/or damage to the workpiece and Circular Saw.
- 9. Do not force the Circular Saw to remove material faster than it is designed to cut. Feed the Saw Blade (part #3) *gradually* into the workpiece.
- 10. Turn off the Circular Saw if the Saw Blade (part #3) is to be backed out of an uncompleted cut. When turning off the Circular Saw, allow the Saw Blade to fully stop on its own before removing the Circular Saw. Do not press against the Saw Blade to stop it.
- 11. Once the cutting job is completed, turn off the Circular Saw and wait until the Saw Blade (part #3) stops spinning. Then, unplug the Power Cord (part #65) from its electrical outlet.

# INSPECTION, MAINTENANCE, AND CLEANING

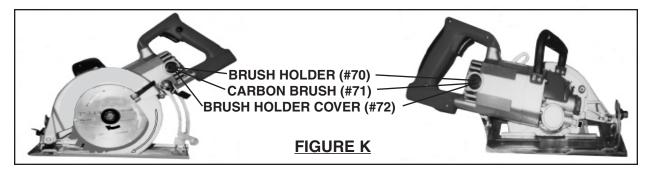
- 1. **AWARNING** Make sure the Power Switch (part #67) of the Circular Saw is in its "**OFF**" position and that the tool is unplugged from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.
- 2. **BEFORE EACH USE**, inspect the general condition of the Circular Saw. Check for loose screws, misalignment or binding of moving parts, damaged electrical wiring, dull or damaged Saw Blade (part #3), 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. **TOOL LUBRICATION:** Always check the oil level of the Circular Saw before each use. To check and add oil, make sure the Circular Saw is sitting on a flat, level surface. Remove the Oil Plug located at the front of the Circular Saw. The oil level should never be below the bottom threads of the Oil Plug Hole. When adding oil, fill with a 5 to 10 Weight Worm Drive Lubricant until the oil begins to run out of the Oil Plug Hole. Then, replace the Oil Plug. **NOTE:** With a new Circular Saw, change the oil after the first ten hours of use. (See Figure J.)



4. **CARBON BRUSHES:** To maintain peak efficiency of the Circular Saw's Motor it is recommended that every two to six months the Carbon Brushes (part #71) be examined. The Carbon Brushes should be free of dust and dirt. The Carbon Brushes should be replaced when they have worn down to 3/16" in length. The Carbon Brushes should slide freely in and out of the Brush Holders (part #70) without sticking. To check the Carbon Brushes, remove the Brush Holder Cover (part #72) located on each side of the Circular Saw. Lift out the Carbon Brushes to inspect. If cleaning is necessary, rub the Carbon Brushes thoroughly with a pencil eraser. Next, clean the Brush Holder openings with compressed air or a clean cloth. Then, replace the Carbon Brushes and Brush Holder Covers. If replacement is necessary, make sure to replace both Carbon Brushes at once. (See Figure K.)



5. **TO CLEAN:** The ventilation openings should be kept clean and free of dirt and debris. The most effective way to clean the ventilation openings is with compressed air. The outer body may be cleaned with a clean cloth and a mild detergent. Do not use solvents. Do not immerse the Circular Saw in liquid.

#### 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 MANUFACTURE 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
1	Bolt M8x20	1
2	Outer blade press	1
3	Saw blade 185	1
4	Inner blade press	1
5	Check ring	1
6	Lower guard	1
7	Spring	1
8	Screw M5x18	4
9	Taper washer	5
10	Bearing cap	1
11	Bearing 60203	2
12	Oil seal 35x 22x7	1
13	Bearing set	1
14	Sheet oil seal	1
15	Shaft	1
16	Woodruff key	1
17	Worm gear	1
18	Lock piece	1
19	Bearing 60102	1
20	Spring washer 32	1
21	Upper guard	1
22	Screw M4x14	8
23	Spring washer	7
24	Oil seal cover	1
25	Special oil seal	1
26	Taper cap	1
27	Screw M5x14	1
28	Stopper	1
29	Screw M5x50	4
30	Spring washer	9
31	Special nut	1
32	O ring 35.5* 1.25	1
33	Lock nut M8	1
34	Bearing 60201	1
35	Worm shaft	1
36	Lockpin	1
37	Special nut M18x1	1
38	Check ring	1
39	Spring	1
40	Washer	1

Part#	Description	Qty
41	O ring 7.5* 1.5	1
42	Special nut M16x1.5	1
43	O ring 12.5x 2.5	1
44	Screw ST4.2x13	5
45	Gearbox cap	1
46	Auxiliary handle	1
47	Screw M4x18	2
48	Gearbox	1
49	Screw M6x16	2
50	Special washer	2
51	Spring washer	2
52	Screw M5x10	3
53	Oil seal 35x 16x7	1
54	Bush	1
55	Screw M4x8	5
56	Armature	1
57	Bearing 60018	1
58	Spring washer 22	1
59	Screw M5x8	2
60	Handle(R)	1
61	Capacitor	1
62	Screw ST4.2x17	4
63	Cord jacket	1
64	Screw M6x20	4
65	Power cord	1
66	Cord clamp	1
67	Power switch	1
68	Handle(L)	1
69	Screw M8x25	1
70	Brush holder	2
71	Carbon brush	2
72	Brush holder cover	2
73	Motor housing	1
74	Stator	1
75	Screw M5x55	2
76	Special screw M5x25	1
77	Screw M8x16	1
78	Lock nut M6	1
79	Washer	2
80	Lock spanner	2

Part#	Description	Qty
81	Special nut	2
82	Check ring	2
83	Foot	1
84	Special bolt	1
85	Moving guard lever	1
86	Wrench	1
87	Rip fence	1
88	Screw M4x6	2
89	Pointer	1
90	Screw M5x12	1
91	Angle adjustment scale	1

#### **LIMITED 90 DAY WARRANTY**

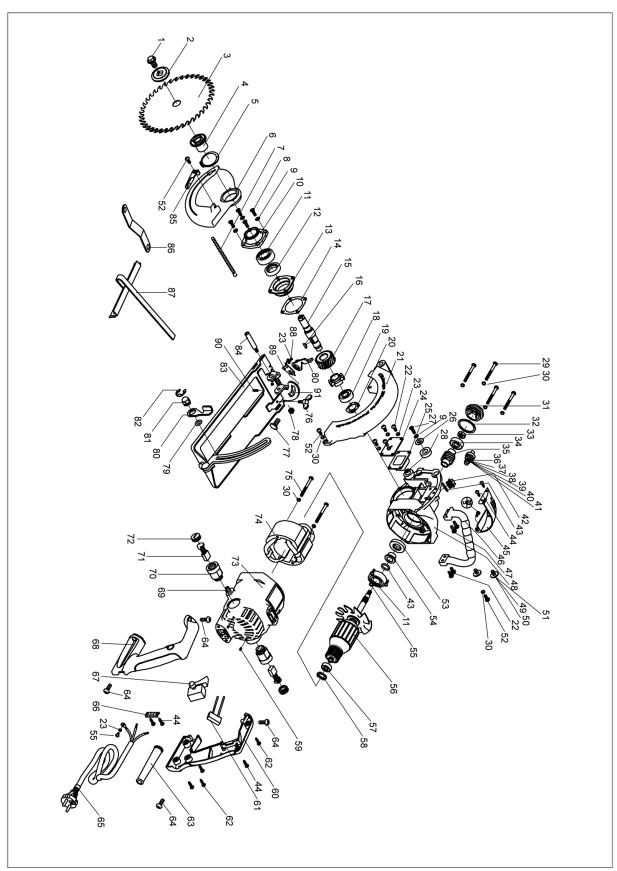
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