



# HYDRAULIC CIRCULAR POLE SAW INSTRUCTIONS

REIMANN & GEORGER CORPORATION  
CONSTRUCTION PRODUCTS

BUFFALO, NY

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## **SAFETY**

Safety is essential in the use and maintenance of RGC tools and equipment. This service manual and any markings on the tool provide information for avoiding hazards and unsafe practices related to the use of this tool. Observe all of the safety information provided. Keep this manual available to all personnel. Replacement manuals are available upon request at no charge at [www.rgcproducts.com](http://www.rgcproducts.com).

**KEEP THIS MANUAL**

# IMPORTANT SAFETY INFORMATION



## SAFETY ALERT SYMBOL

This symbol is used to call your attention to hazards or unsafe practices which could result in an injury or property damage. The signal word, defined below, indicates the severity of the hazard. The message after the signal word provides information for preventing or avoiding the hazard.

### ⚠ DANGER

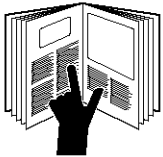
Immediate hazards which, if not avoided, WILL result in severe injury or death.

### ⚠ WARNING

Hazards which, if not avoided, COULD result in severe injury or death.

### ⚠ CAUTION

Hazards or unsafe practices which, if not avoided, MAY result in injury or property damage.



### ⚠ WARNING

Read and understand all of the instructions and safety information in this manual before operating or servicing this tool.

Failure to observe this warning could result in severe injury or death.



### ⚠ WARNING

Electric shock hazard:

- This tool is not insulated. When using this unit near energized electrical lines, use only certified non-conductive hoses and proper personal protective equipment.
- Keep fiberglass extension clean and dry when working around energized electrical lines. Accumulated oil, dirt, and moisture increase the conductive properties of the tool.

Failure to observe these warnings could result in severe injury or death.

### ⚠ WARNING



Skin injection hazard:

- Do not use hands to check for leaks.
- Do not hold hose or couplers while the hydraulic system is pressurized.
- Depressurize the hydraulic system before servicing.

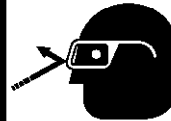
Oil under pressure easily punctures skin, causing serious injury, gangrene, or death. If you are injured by escaping oil, seek medical attention immediately.



### ⚠ WARNING

Burn hazard:

Tool motor and blade may be hot during and after operation. Hot surfaces could cause serious burns.



### ⚠ WARNING

Wear eye protection when operating or servicing this tool.

Failure to wear eye protection could result in serious eye injury from flying debris or hydraulic oil.



### ⚠ WARNING

Wear a hard hat when using this tool.

Failure to observe this warning could result in severe injury or death.





### ⚠ WARNING

Wear hearing protection when using this tool.

Long-term exposure to high noise levels could result in hearing loss.

## IMPORTANT SAFETY INFORMATION

	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Wear foot protection when using this tool.</p> <p>Failure to observe this warning could result in serious injury.</p>
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	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p>Some types of timber can produce hazardous dust when cut. Wear a dust mask to prevent breathing hazardous dust.</p> <p>Failure to observe this warning could result in temporary breathing difficulty or serious injury.</p>
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<p><b>⚠ WARNING</b></p>
<p>Do not exceed the following hydraulic power source maximums:</p> <ul style="list-style-type: none"> <li>• Hydraulic flow: 22.7 l/min (6 gpm)</li> <li>• Pressure relief: 138 bar (2000 psi)</li> <li>• Back pressure: 13.8 bar (200 psi)</li> </ul> <p>Failure to observe this warning could result in severe injury or death.</p>

<p><b>⚠ WARNING</b></p>
<p>Burn hazard:</p> <p>Do not disconnect tool, hoses, or fittings while the power source is running or if the hydraulic fluid is hot. Hot hydraulic fluid could cause serious burns.</p>

<p><b>⚠ WARNING</b></p>
<p>Cutting hazard:</p> <p>The saw blade continues to rotate after the trigger is released. Do not retract or lay the saw down until blade stops moving.</p> <p>Failure to observe this warning could result in severe injury or death.</p>

<p><b>⚠ WARNING</b></p>
<p>Do not reverse hydraulic flow. Operation with hydraulic flow reversed can cause tool malfunction. Connect the pressure (supply) hose and tank (return) hose to the proper ports.</p> <p>Failure to observe this warning could result in severe injury or death.</p>

<p><b>⚠ WARNING</b></p>
<ul style="list-style-type: none"> <li>• Do not change accessories, inspect, adjust, or clean tool when it is connected to a power source. Accidental start-up can result in serious injury.</li> <li>• Maintain a firm grip on tool, using both hands at all times. Serious injury can result if an operator does not control the tool.</li> <li>• Do not lock trigger in the Power-ON position. Operator cannot stop tool when trigger is locked.</li> <li>• Do not remove or modify tool's safety trigger. Accidental start-up can result in serious injury.</li> <li>• Always wear protective gloves when handling or adjusting the blade. The blade can cut even when stationary.</li> </ul> <p>Failure to observe these warnings could result in severe injury or death.</p>

<p><b>⚠ WARNING</b></p>
<ul style="list-style-type: none"> <li>• Always use blades that meet applicable industrial safety code specifications.</li> <li>• Always use blades rated for 5400 rpm or higher.</li> <li>• Blade must be installed to rotate correctly. Refer to the Illustrations and Parts Lists and blade manufacturer's instructions. An improperly installed blade could result in injury.</li> <li>• Inspect blades before installing and before operating. Do not use a damaged or worn blade. A damaged blade can break and injure nearby personnel. Destroy the blade if cracks, chips, gouges, or loose or missing teeth are evident.</li> </ul> <p>Failure to observe these warnings could result in severe injury or death.</p>

# IMPORTANT SAFETY INFORMATION

## **⚠ CAUTION**

Hydraulic oil can cause skin irritation.

- Handle the tool and hoses with care to prevent skin contact with hydraulic oil.
- In case of accidental skin contact with hydraulic oil, wash the affected area immediately to remove the oil.

Failure to observe these precautions may result in injury.

## **⚠ CAUTION**

- Inspect tool before use. Replace any worn, damaged, or missing parts. A damaged or improperly assembled tool can malfunction, injuring nearby personnel.
- Inspect the hydraulic hoses and couplers every operating day. Repair or replace if leakage, cracking, wear, or damage is evident. Damaged hoses or couplers can fail, resulting in injury or property damage.
- Use this tool for manufacturer's intended purpose only. Use other than that which is described in this manual can result in injury or property damage.
- Make sure that all bystanders are clear of the work area when operating the tool. Nearby personnel can be injured by flying debris.

Failure to observe these precautions may result in injury.

## **IMPORTANT**

Procedure for connecting or disconnecting hydraulic hoses, fittings, or components:

1. Move the flow lever on the hydraulic power source to the OFF position.
2. Stop the hydraulic power source.
3. Follow the sequence under "Hose Connections" to prevent pressure buildup. In case some pressure has built up, loosen hoses, fittings, or components slowly.

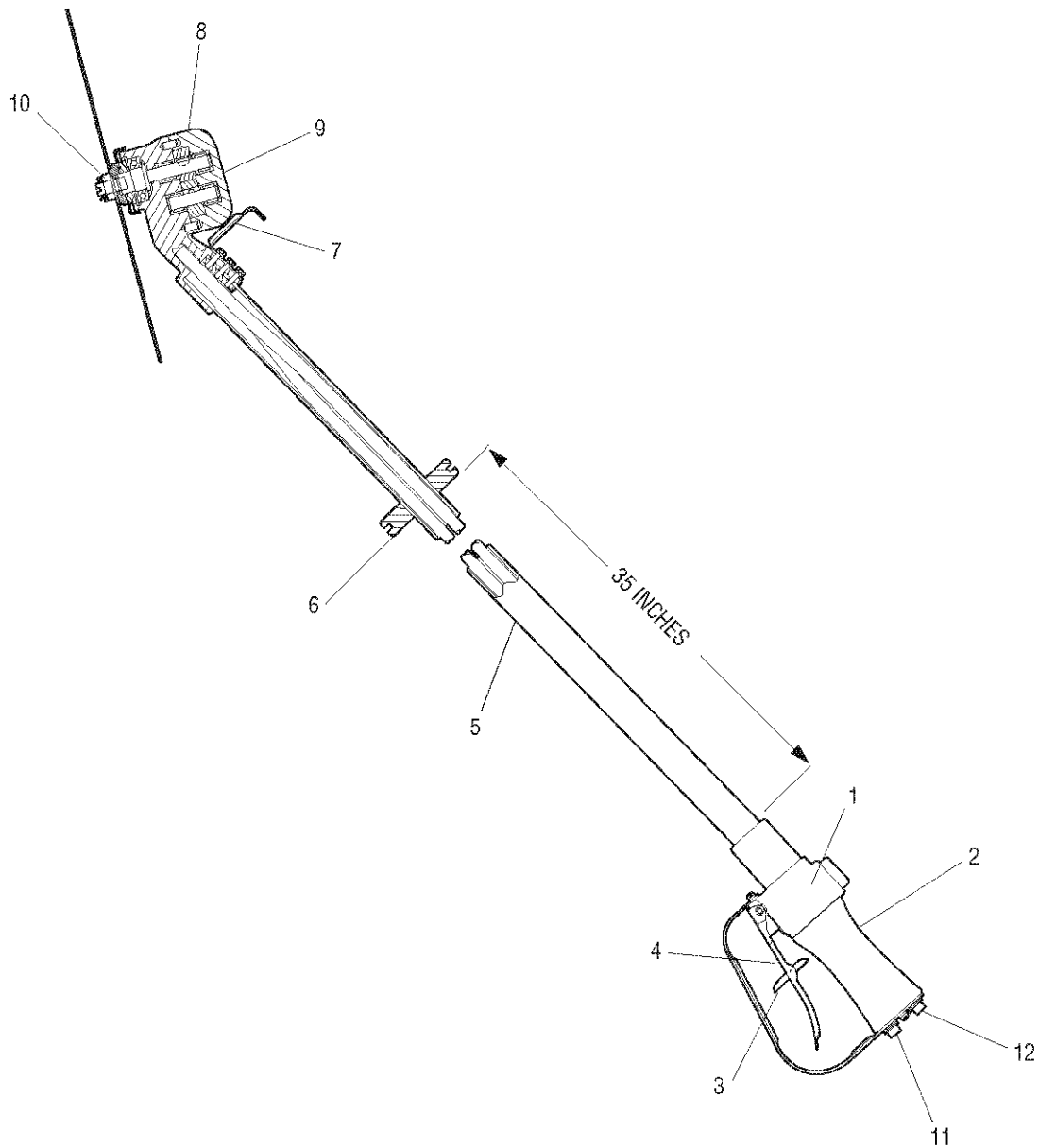
## **IMPORTANT**

Emergency stop procedure:

1. Release the trigger.
2. Shut off the hydraulic power source.

*Note: Keep all decals clean and legible, and replace when necessary.*

# Identification



## Overhead Circular Saw

- |                            |                              |
|----------------------------|------------------------------|
| 1. Serial Number           | 7. Hook                      |
| 2. Trigger Handle          | 8. Saw Head                  |
| 3. Trigger Interlock Latch | 9. Hydraulic Gear Motor      |
| 4. Trigger                 | 10. Saw Blade                |
| 5. Fiberglass Extension    | 11. Pressure Port P (Supply) |
| 6. Rubber Hand Stop        | 12. Tank Port T (Return)     |

# Specifications

## Circular Saw

Type of Hydraulic System ..... Open-center or closed-center

### Hydraulic Ports

Pressure ..... 3/8 NPT

Return ..... 3/8 NPT

Mass/Weight (with 9" blade) ..... 4 kg (8.8 lb)

Length (with 9" blade) ..... 206 cm (81")

Width (with 9" blade) ..... 22.9 cm (9")

Blade Diameter Capacity (maximum) ..... 22.9 cm (9")

Cutting Depth (with 9" blade) ..... 89 mm (3.5")

### Revolutions per Minute

@ 15.1 l/min (4 gpm) ..... 3571

@ 18.9 l/min (5 gpm) ..... 4464

@ 22.7 l/min (6 gpm) ..... 5357

## Blades

### **WARNING**

- Always use blades that meet applicable industrial safety code specifications.
  - Always use blades rated for 5400 rpm or higher.
  - Blade must be installed to rotate correctly. Refer to the Illustrations and Parts Lists and blade manufacturer's instructions. An improperly installed blade could result in injury.
  - Inspect blades before installing and before operating. Do not use a damaged or worn blade. A damaged blade can break and injure nearby personnel. Destroy the blade if cracks, chips, gouges, or loose or missing teeth are evident.
- Failure to observe these warnings could result in severe injury or death.

A 9" blade, rated at 7500 rpm, is furnished with the tool. Replacement blades are available from Fairmont as repair parts. Contact an authorized Fairmont distributor. Any blade used with this tool must meet the following requirements:

Blade Diameter (maximum) ..... 22.9 cm (9")

Blade Thickness ..... 1.6 mm (1/16")  
(nominal)

Arbor Hole Diameter ..... 16.1 mm x 22.3 mm  
(0.635" x 0.878")

Rated Operating rpm (minimum) ..... 5400

# Specifications (cont'd)

## Hydraulic Power Source

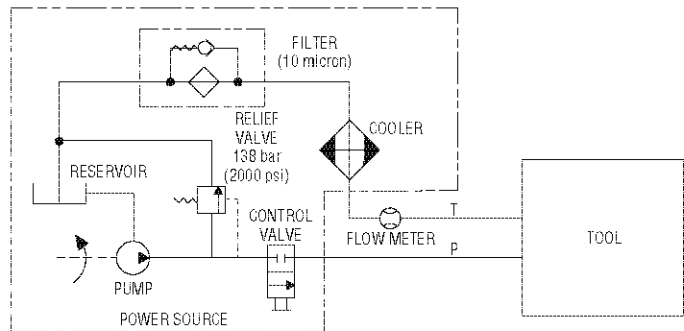
**⚠ WARNING**

Do not exceed the following hydraulic power source maximums:

- Hydraulic flow: 22.7 l/min (6 gpm)
- Pressure relief: 138 bar (2000 psi)
- Back pressure: 13.8 bar (200 psi)

Failure to observe this warning could result in severe injury or death.

## Hydraulic Schematic



Type of Hydraulic System ..... Open-center or closed-center

Flow  
 Minimum ..... 15.1 l/min (4 gpm)  
 Recommended ..... 18.9 l/min (5 gpm)  
 Maximum ..... 22.7 l/min (6 gpm)

Filtration ..... 10 micron (nominal)

Operating Pressure  
 Minimum ..... 121 bar (1750 psi)  
 Maximum ..... 138 bar (2000 psi)

Pressure Relief Setting ..... 138 bar (2000 psi)

Back Pressure (maximum)\* ..... 13.8 bar (200 psi)

\* 13.8 bar (200 psi) is the maximum agreed standard back pressure for the HTMA (Hydraulic Tool Manufacturers Association). Fairmont tools will operate satisfactorily at this standard.

1. Maximum hydraulic fluid temperature must not exceed 60 °C (140 °F). A sufficient oil cooling capacity is needed to limit the hydraulic fluid temperature.
2. Hydraulic flow must not exceed 22.7 l/min (6 gpm). Install a flow meter in the return line to measure the rate of hydraulic flow before using the tool.
3. Pressure relief valve setting must not exceed 138 bar (2000 psi) at the tool's maximum flow. Locate the pressure relief valve in the supply circuit to limit excessive hydraulic pressure to the tool.

## Recommended Hydraulic Fluids

**⚠ WARNING**

Electric shock hazard:  
 When using this tool near energized electrical lines, select and maintain the hydraulic fluid to meet the minimum dielectric standards required by your safety department.  
 Failure to observe this warning could result in severe injury or death.

Use any non-detergent, petroleum-based hydraulic fluid which meets the following specifications or HTMA specifications.

S.U.S. @	
38 °C (100 °F) .....	140 to 225
99 °C (210 °F) .....	40 minimum
Flash Point .....	170 °C (340 °F) minimum
Pour Point .....	-34 °C (-30 °F) minimum

## Hose Connections

### **⚠ WARNING**

Burn hazard:

Do not disconnect tool, hoses, or fittings while the power source is running or if the hydraulic fluid is hot. Hot hydraulic fluid could cause serious burns.

#### **Connecting Hoses**

1. Move the flow lever on the hydraulic power source to the OFF position.
2. Stop the hydraulic power source.
3. Connect the return hose to the return port on the hydraulic power source, and then to the return port on the tool.
4. Connect the pressure hose to the pressure port on the tool, and then to the pressure port on the hydraulic power source.

#### **Disconnecting Hoses**

1. Move the flow lever on the hydraulic power source to the OFF position.
2. Stop the hydraulic power source.
3. Disconnect the pressure hose from the hydraulic power source, and then from the tool.
4. Disconnect the return hose from the tool, and then from the hydraulic power source.
5. Install dust caps over the ports to prevent contamination.

## Blade Removal/Installation

### **⚠ WARNING**

- Do not change accessories, inspect, adjust, or clean tool when it is connected to a power source. Accidental start-up can result in serious injury.
- Always wear protective gloves when handling or adjusting the blade. The blade can cut even when stationary.

Failure to observe these warnings could result in severe injury or death.



### **⚠ WARNING**

Tool motor and blade may be hot during and after operation. Hot surfaces could cause serious burns.

### **⚠ WARNING**

The saw blade continues to rotate after the trigger is released. Do not retract or lay the saw down until blade stops moving.

Failure to observe this warning could result in severe injury or death.

### **⚠ WARNING**

- Always use blades that meet applicable industrial safety code specifications.
- Always use blades rated for 5400 rpm or higher.
- Blade must be installed to rotate correctly. Refer to the Illustrations and Parts Lists and blade manufacturer's instructions. An improperly installed blade could result in injury.
- Inspect blades before installing and before operating. Do not use a damaged or worn blade. A damaged blade can break and injure nearby personnel. Destroy the blade if cracks, chips, gouges, or loose or missing teeth are evident.

Failure to observe these warnings could result in severe injury or death.

### **Removing the Blade**

Refer to the Illustrations and Parts Lists.


1. Stop power source. Disconnect hydraulic hoses from power source to tool.
2. Remove cotter key (21).
3. Loosen and remove arbor nut (20). A flat blade screwdriver may be inserted in arbor shaft (6) end slot to hold shaft when loosening nut. Arbor nut has left-hand threads. Turn nut clockwise to loosen and remove.
4. Remove outer flange (19) and blade (18) from arbor shaft (6).
5. Remove guard (17) and inner flange (16) from arbor shaft (6).

### **Installing the Blade**

Refer to the Illustrations and Parts Lists.

1. Inspect inner flange (16) and guard (17) for gouges, hairline cracks, and wear. If defective, replace component. After inspection, install inner flange and guard on arbor shaft (6).
2. Inspect blade that is to be installed. **Destroy blade if cracks, chips, gouges, or loose or missing tips are evident.**
3. Install blade (18) on arbor shaft (6). Make sure a directional blade is installed correctly to rotation of saw blade. **Blade rotation is counterclockwise as viewed from motor side of saw.**
4. Inspect outer flange (19) for gouges, hairline cracks, and wear. If defective, replace component. Install flange on arbor shaft (6).
5. Thread arbor nut (20) on arbor shaft (6). Tighten nut securely. A flat blade screwdriver may be inserted in arbor shaft end slot to hold shaft when tightening nut. Arbor nut has left-hand threads. Turn nut counterclockwise to tighten. Be sure flanges are tightened securely but not too tight to spring flanges and change pressure area. Install cotter pin (21).

## Operation

	<b>⚠ WARNING</b>
	<p>Electric shock hazard:</p> <ul style="list-style-type: none"><li>• This tool is not insulated. When using this unit near energized electrical lines, use only certified non-conductive hoses and proper personal protective equipment.</li><li>• Keep fiberglass extension clean and dry when working around energized electrical lines. Accumulated oil, dirt, and moisture increase the conductive properties of the tool.</li></ul> <p>Failure to observe these warnings could result in severe injury or death.</p>

<b>⚠ WARNING</b>
<p>Do not disconnect tool, hoses, or fittings while the power source is running or if the hydraulic fluid is hot. Hot hydraulic fluid could cause serious burns.</p>

<b>⚠ WARNING</b>
<p>Do not change accessories, inspect, adjust, or clean tool when it is connected to a power source. Accidental start-up can result in serious injury.</p> <p>Failure to observe this warning could result in severe injury or death.</p>

<b>⚠ WARNING</b>
<p>The saw blade continues to rotate after the trigger is released. Do not retract or lay the saw down until blade stops moving.</p> <p>Failure to observe this warning could result in severe injury or death.</p>

<b>⚠ WARNING</b>
<p>Do not use this saw for cutting or clearing at ground level. If the blade contacts the ground or other solid object, the operator can lose control of the saw and the blade can shatter. Operator can be injured by flying debris.</p> <p>Failure to observe this warning could result in severe injury or death.</p>

<b>IMPORTANT</b>
<p>Emergency stop procedure:</p> <ol style="list-style-type: none"><li>1. Release the control lever.</li><li>2. Shut off the hydraulic power source.</li></ol>

### Pre-Operation

Refer to the "Identification" section.

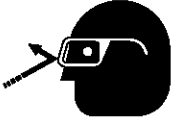
1. Stop power source.
2. **Hand stop (6) must be positioned between saw head (8) and your hand on fiberglass extension (5), preferably located 35" from trigger handle (2).**
3. Connect hydraulic hoses from power source to tool. Start power source.
4. It is recommended that power source be allowed to run (idle) for a few minutes to warm hydraulic reservoir fluid. Actuating tool intermittently will reduce time required to warm fluid to an efficient operating temperature.
5. **Always operate newly mounted blades on saw for one minute to ensure proper blade application before cutting any material.**

### Operation

Refer to the "Identification" section.

1. Grasp fiberglass extension (5) with one hand and trigger handle (2) with your opposite hand.
2. Position saw in approximate area to make the desired cut.
3. To start saw, move trigger interlock latch (3) and press (squeeze) trigger (4).
4. Feed rotating blade into work using a straight, steady, constant pressure. **Do not "bump", jam, or force blade into work, or twist blade in saw cut.**
5. Feed blade through work as fast as possible without slowing blade in cut. Blades operated at speeds significantly below efficient speed or if fed through cut too slowly will generate excessive heat, resulting in rapid blade wear and/or blade breakage.
6. To stop saw, release trigger (4).
7. **After blade has stopped rotating**, lay saw on a flat surface or hang up saw using hook (7).
8. Hook (7) may be used to assist in clearing cut branches **only if blade is not rotating**.

## Maintenance

	<b>⚠ WARNING</b>
	<p>Wear eye protection when operating or servicing this tool.</p> <p>Failure to wear eye protection could result in serious eye injury from flying debris or hydraulic oil.</p>

<b>⚠ WARNING</b>
<ul style="list-style-type: none"><li>• Do not change accessories, inspect, adjust, or clean tool when it is connected to a power source. Accidental start-up can result in serious injury.</li><li>• Inspect blades before installing and before operating. Do not use a damaged or worn blade. A damaged blade can break and injure nearby personnel. Destroy the blade if cracks, chips, gouges, or loose or missing teeth are evident.</li><li>• Blade must be installed to rotate correctly. Refer to the Illustrations and Parts Lists and blade manufacturer's instructions. An improperly installed blade can result in injury.</li><li>• Always wear protective gloves when handling or adjusting the blade. The blade can cut even when stationary.</li></ul> <p>Failure to observe these warnings could result in severe injury or death.</p>

Use this maintenance schedule to maximize the tool's service life.

*Notes: Keep all decals clean and legible, and replace when necessary.*

*When disposing of any components (hydraulic hoses, hydraulic fluid, worn parts, etc.), do so in accordance with federal, state, and local laws or ordinances.*

### Daily

1. Wipe all tool surfaces clean, especially fiberglass extension.
2. Inspect blade mounted on saw. **Remove and destroy blade if cracks, chips, gouges, or loose or missing tips are evident.**
3. Inspect the hydraulic hoses and fittings for signs of leaks, cracks, wear, or damage. Replace if necessary.
4. Install dust caps over the hydraulic ports when the tool is disconnected.

### Monthly

Perform a thorough inspection of the hydraulic hoses and fittings as described

# Troubleshooting

Before troubleshooting, determine whether the problem is in the tool, hoses, or power source. Substitute a tool, hoses, or power source known to be in good working order to identify the item that is not operating.

If the problem is in the tool, refer to the troubleshooting table below. If the problem is in the power source, refer to the troubleshooting section of the power source instruction manual.

Problem	Probable Cause	Possible Remedy
Tool inoperative.	<p>Tool connected to improper power source hydraulic system.</p> <p>No hydraulic fluid in system or fluid level low.</p> <p>Incorrect hydraulic fluid viscosity.</p> <p>Tool components loose.</p> <p>Dirt, contaminants, etc., in tool components.</p> <p>Tool components worn or damaged.</p>	<p>Refer to "Specifications" for type of hydraulic system required. Verify power source hydraulic system.</p> <p>Check fluid level. Fill to FULL mark. Check system for leaks.</p> <p>Use fluid viscosity recommended. Refer to "Recommended Hydraulic Fluids" under "Specifications."</p> <p>Tighten component hardware.</p> <p>Disassemble tool and clean components.</p> <p>Disassemble tool. Replace worn or damaged components.</p>
Tool operates erratically.	<p>Hydraulic fluid cold.</p> <p>Air in system.</p> <p>Tool components sticking or binding.</p> <p>Dirt, contaminants, etc., in tool components.</p>	<p>Viscosity of fluid may be too high at start of tool operation. Allow fluid to warm to operating temperature. Actuating tool intermittently will reduce time required to warm fluid to an efficient operating temperature.</p> <p>Check pump suction line for damage or loose clamps. Tighten clamps or replace components if necessary. Fill reservoir.</p> <p>Check for dirt or gummy deposits. Clean components. Check for worn or damaged components. Replace components.</p> <p>Disassemble tool. Clean components.</p>
Tool operates slowly.	<p>Power source components not adjusted correctly.</p> <p>Hydraulic fluid cold.</p>	<p>Refer to power source operator's manual for recommended speed, flow, and pressure settings.</p> <p>Viscosity of fluid may be too high at start of tool operation. Allow fluid to warm to operating temperature. Actuating tool intermittently will reduce time required to warm fluid to an efficient operating temperature.</p>

## Troubleshooting (cont'd)

Problem	Probable Cause	Possible Remedy
Tool operates slowly. (cont'd)	<p>Hydraulic fluid level low.</p> <p>Hydraulic fluid viscosity too heavy.</p> <p>Tool components loose.</p> <p>Dirt, contaminants, etc., in tool components.</p> <p>Tool components worn or damaged.</p>	<p>Check fluid level. Fill to FULL mark. Check system for leaks.</p> <p>Use fluid viscosity recommended. Refer to "Recommended Hydraulic Fluids" under "Specifications."</p> <p>Tighten component hardware.</p> <p>Disassemble tool. Clean components.</p> <p>Disassemble tool. Replace worn or damaged components.</p>
Tool operates too fast.	<p>Power source components not adjusted correctly.</p>	<p>Refer to power source operator's manual for recommended speed, flow, and pressure settings.</p>
Tool feels too hot.	<p>Hydraulic fluid level low.</p> <p>Hydraulic fluid viscosity too light.</p> <p>Hydraulic fluid dirty.</p> <p>Tool control valve stuck in partial or open position.</p> <p>Power source components not adjusted correctly.</p> <p>Dirt, contaminants, etc., in tool components.</p> <p>Worn or damaged O-rings or gaskets.</p> <p>Tool components worn or damaged.</p>	<p>Check fluid level. Fill to FULL mark. Check system for leaks.</p> <p>Use fluid viscosity recommended. Refer to "Recommended Hydraulic Fluids" under "Specifications."</p> <p>Drain reservoir, flush and fill with clean fluid.</p> <p>Free spool so it returns to neutral position.</p> <p>Refer to power source operator's manual for proper adjustment of components (flow).</p> <p>Disassemble tool. Clean components.</p> <p>Replace worn or damaged O-rings or gaskets.</p> <p>Disassemble tool. Replace worn or damaged components.</p>
Tool leaks hydraulic fluid.	<p>Tool components loose.</p> <p>Worn or damaged O-rings or gaskets.</p> <p>Tool components worn or damaged.</p>	<p>Tighten component hardware.</p> <p>Replace worn or damaged O-rings or gaskets.</p> <p>Disassemble tool. Replace worn or damaged components.</p>

## Troubleshooting (cont'd)

Problem	Probable Cause	Possible Remedy
Tool control valve sticks or works hard.	<p>Check for dirt or gummy deposits.</p> <p>Misalignment or binding of control linkage.</p> <p>Valve components worn or damaged.</p>	<p>Clean components.</p> <p>Correct alignment. Lubricate linkage joints. Replace damaged components.</p> <p>Disassemble valve and replace worn or damaged components.</p>
Tool operates backwards.	<p>Hydraulic flow reversed to tool.</p> <p>Hydraulic pressure and return lines connected to opposite tool ports.</p> <p>Tool components assembled incorrectly.</p>	<p>Reverse flow to tool. Check for valve in system that has reversed flow. Check hoses for proper flow.</p> <p>Disconnect hoses. Reverse couplers. Reconnect hoses to proper tool ports.</p> <p>Disassemble tool. Reassemble correctly.</p>
Tool operates, but blade does not cut.	<p>Blade loose, spinning on arbor shaft.</p> <p>Blade installed opposite to manufacturer's cutting rotation.</p> <p>Blade dull.</p>	<p>Remove blade. Inspect arbor hole. Replace blade if necessary. Tighten arbor nut securely. Refer to "Blade Removal/Installation."</p> <p>Check for correct cutting rotation of blade. If installed incorrectly, remove and install correctly.</p> <p>Remove blade and sharpen, or install a sharp, new blade.</p>
Power source operates but tool lacks power.	<p>Valve components worn or damaged leaking fluid internally (control spool, sleeve, O-rings, etc.).</p> <p>Motor components worn or damaged leaking fluid internally (bearings, gears, shafts, keys, O-rings, gasket, etc.).</p>	<p>Disassemble tool valve. Replace worn or damaged valve components.</p> <p>Disassemble tool motor. Replace worn or damaged motor components.</p>

## Disassembly

Refer to the Illustrations and Parts Lists.

Complete disassembly of the tool is not recommended. If a complete overhaul is necessary, return the tool to your nearest Fairmont Authorized Service Center.

The disassembly procedure is divided into sections of the tool. Disassemble only the section(s) necessary to complete the repair.

**Note:** *Remove blade before attempting to disassemble any components of tool. Refer to "Blade Removal/Installation."*

Disassemble the tool on a flat, clean surface. Take care not to lose or damage any parts that may fall free during disassembly.

Inspect all parts as they are disassembled and mating parts in tool that are not removed for signs of damage, wear, cracks, etc. Replace any parts which appear to be damaged.

When removing O-rings which must slide over sharp surfaces, be careful not to damage the O-rings. Use a rolling motion, and apply hydraulic fluid to ease removal of O-rings if necessary.

### Inner and Outer Tubes

1. Remove hex head cap screw (9) and lock washer (8) which secure outer tube (7). Remove handle assembly (1) from outer tube (7). Nut carrier (11) may fall free. Remove inner tubes (4, 5) from ports of handle assembly (1).
2. Remove three hex head cap screws (15) and lock washers (14) from motor body (12). The tool hook (13) can be removed.
3. Pull fiberglass outer tube (7) and two inner tubes (4, 5) out of motor body (12), if not removed previously. Nut carrier (11) may fall free. Remove rubber hand stop safety collar (10), if necessary.
4. Pull two inner tubes (4, 5) out of fiberglass outer tube (7).
5. Remove three O-rings (6) twisted in figure eight to separate the two inner tubes.

### Handle Assembly

1. Remove two round head machine screws (13) and lock washers (14) from guard (12). Remove guard (12) from handle assembly (1).
2. Remove retaining ring (20) and trigger pivot (19) which secures trigger (15).
3. Remove internal retaining ring (4) from sleeve (2) which allows spring (7) and washer (6) to be removed.
4. Remove internal retaining ring (24) and washer (11).
5. Remove spool (9) from sleeve (2). Remove O-ring (10) from spool (9).
6. Remove external retaining ring (23). Pull sleeve (2) out of handle (1). Remove O-rings (3, 5, 8) from sleeve (2). Remove O-ring (22) from handle (1).

### Motor

1. Scribe a line across motor cap (11) and motor body (1) to align parts correctly during reassembly.
2. Remove eight socket head cap screws (12). Pull motor cap (11) off motor body (1). Remove gasket (9).
3. Pull two dowel pins (10) out of motor body, only if necessary.
4. Pull idler shaft (4) with gear (8) out of motor body. Remove gear (8) from idler shaft (4). Remove drive pin (5) from idler shaft.
5. Remove gear (8) and Woodruff key (7) from drive shaft (6).
6. Remove the internal snap ring (14). Drive shaft (6) and bearing (13) may be driven out of saw head assembly, threaded end first, using a rubber mallet. Remove bearing (13) from drive shaft (6), only if necessary.
7. O-ring (2) in motor body may be removed with needle bearing in place using an O-ring tool.
8. If fiberglass outer tube and two inner tubes have been removed, remove the two O-rings (15) from ports in motor body (1).

### Needle Bearing Removal

**Note:** *If needle bearings (3) in motor cap (11) or motor body (1) are damaged or worn, Fairmont recommends replacing the component as an assembly with bearings already pressed in.*

1. Do not remove needle bearings (3) unless they are damaged or worn. Bearings will be ruined when they are removed.
2. A blind-hole bearing puller is required to remove bearings from motor cap or motor body.

## Inspection

Refer to the Illustrations and Parts Lists.

Clean all parts with an appropriate cleaning solution and dry them thoroughly. Inspect each component as described in this section. Replace any component that shows wear or damage.

1. Bearing (13): Hold center hub of bearing between your thumb and index finger. Roll outer surface against palm of your other hand. Motion should be smooth with no rough spots. If not, replace bearing.
2. Needle Bearings (3): Hold motor cap or motor body in one hand, or place on a flat surface. Insert drive shaft or idler shaft in bearing. Spin shaft. Shaft and bearing should turn smoothly. If not, Fairmont recommends replacing motor body or motor cap as an assembly with bearing already pressed in.
3. Motor Body (1) and Motor Cap (11): Mating surfaces, gear cavities, oil passageways, etc., in components must be smooth and free of grooves or nicks. If not, replace component as an assembly with bearings already pressed in.
4. Drive Shaft (6) and Idler Shaft (4): All surfaces must be smooth and free of grooves or nicks. If not, replace component.
5. Spool (9) and Sleeve (2): All surfaces must be smooth and free of grooves or nicks. If not, replace component.
6. O-rings: Always replace O-rings in components that have been disassembled with new O-rings during assembly. A packing kit is available that includes all O-rings and gasket.
7. Gasket (9): Always replace gasket when motor cap is removed from motor body.

# Assembly

Refer to the Illustrations and Parts Lists for the correct orientation and placement of parts.

Replace any O-rings, V-rings, seals, and gaskets on parts that have been disassembled. Apply hydraulic fluid or O-ring lubricant to all O-rings and all metal surfaces which they must slide over. When installing an O-ring which must slide over sharp surfaces, use a rolling motion and be careful not to damage the O-ring.

Wherever the assembly results in metal-to-metal contact, coat the surfaces with hydraulic fluid or O-ring lubricant.

## Needle Bearing Installation

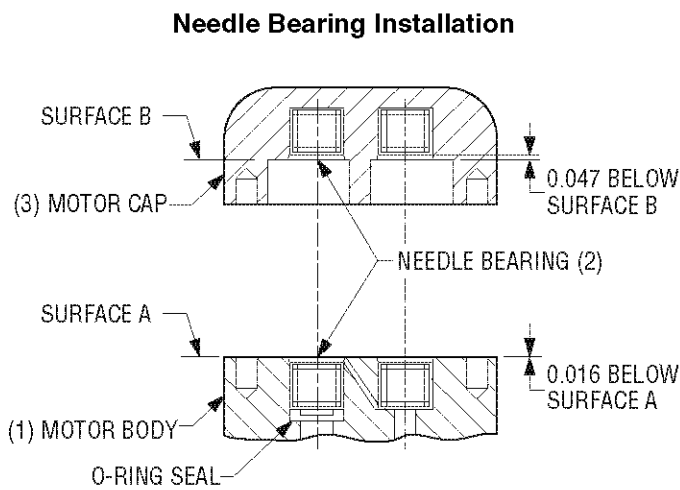
Refer to the figure below.

### Motor Body:

1. Install a new bearing (2) with identification mark facing up (readable from Surface A) into motor body (1).
2. Press bearing into motor body until bearing cage is 0.016" below Surface A.
3. Repeat procedure for the other bearing if it was removed.

### Motor Cap:

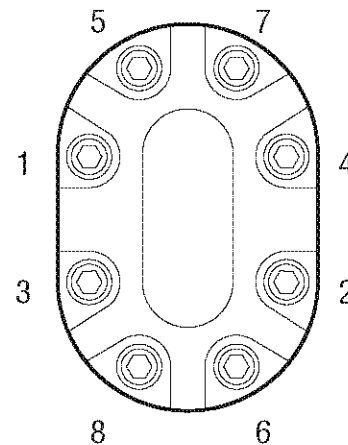
1. Install a new bearing (2) with identification mark facing up (readable from Surface B) into motor cap (3).
2. Press bearing into motor cap until bearing cage is 0.047" below Surface B.
3. Repeat procedure for the other bearing if it was removed.



## Motor

1. Install new O-ring (2) in motor body drive shaft opening using an O-ring tool. Be careful not to damage O-ring during installation.
2. Install two new O-rings (15) in ports of motor body (1).
3. Press bearing (13) on drive shaft (6). Generously lubricate drive shaft. Install drive shaft with bearing in motor body. Press bearing into place. Secure with a 1-3/8" internal snap ring (14).
4. Install Woodruff key (7) and one gear (8) on drive shaft (6).
5. Install drive pin (5) in idler shaft (4). Slide one gear (8) on idler shaft (4). Install idler shaft with gear in motor body.
6. Install two dowel pins (10) in motor body, if they were removed. Install gasket (9).
7. Install motor cap (11) on motor body (1), aligning the scribe marks that were made during disassembly.
8. Secure motor cap using eight socket head cap screws (12). Torque cap screws to 80 in-lb. Refer to the figure below for the correct torque sequence.

## Torque Sequence



## Assembly (cont'd)

### Handle Assembly

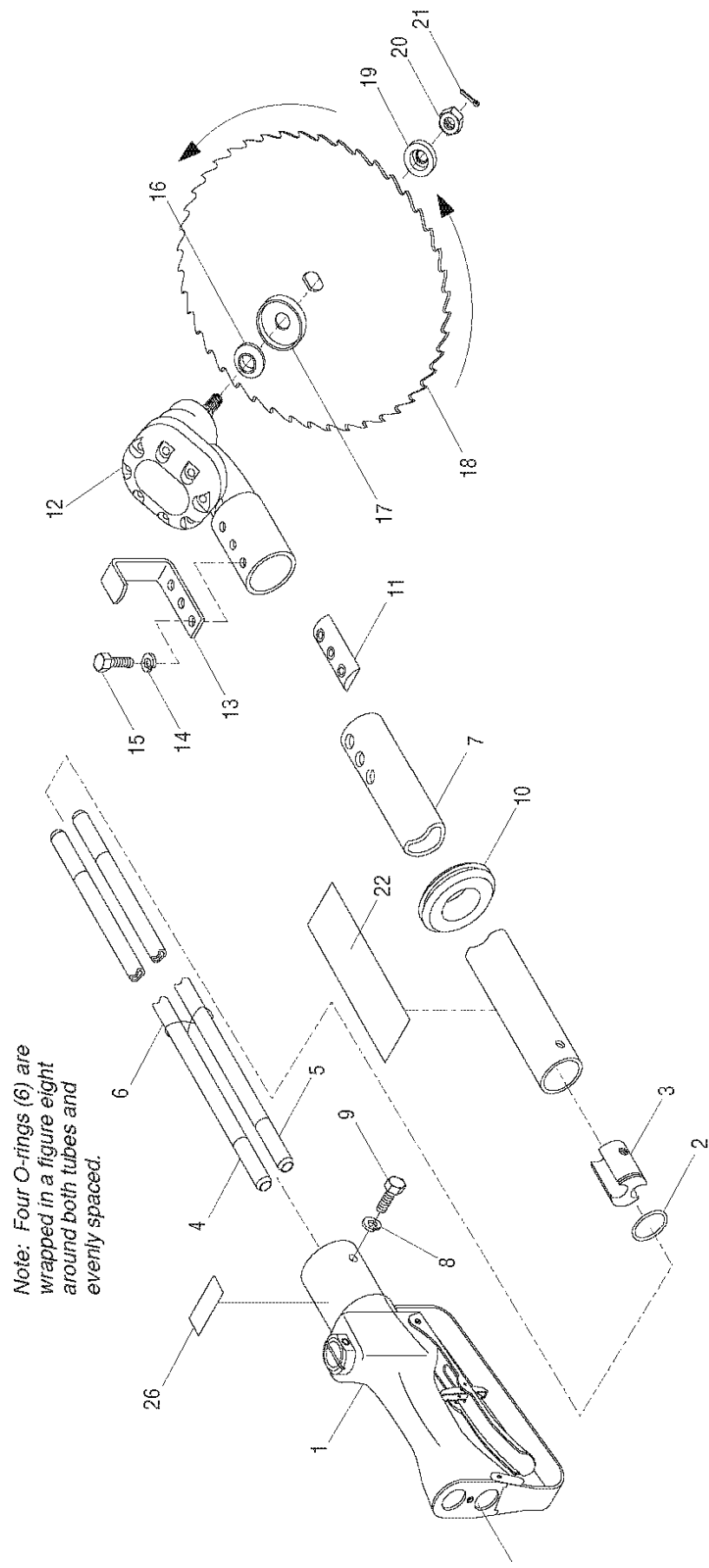
1. Install O-ring (21) in valve handle (1).
2. Install O-rings (22) in valve handle (1). Install O-rings (3, 5, 8) in sleeve (2). Install sleeve (2) in valve handle (1). Secure with external retaining ring (23).
3. Install O-ring (10) on spool (9). Install spool (9) through trigger end of valve handle (1).
4. Install spring (7) and cap (6) and secure with retaining ring (4).
5. Install cap (11) and secure with retaining ring (24).
6. Position trigger (15) onto handle assembly (1). Slide trigger pivot (19) through holes and secure with retaining rings (20).
7. Position guard (12) onto handle assembly (1). Secure with lock washers (14) and round head machine screws (13).

### Inner and Outer Tubes

*Note: Inner pressure tube (5) is marked with dye on both ends for identification during assembly. This inner pressure tube must be installed in "P" port of both motor body and valve body. Improper installation of inner tubes will cause tool to run backwards.*

1. Hold the two inner tubes (4, 5) together. Slide one O-ring (6) over tubes until approximately halfway. Turn one of the tubes end for end, so that O-ring forms a figure eight around tubes. Twist one O-ring (6) in a figure eight and slide over one end of tubes, locating twisted O-ring approximately 6" from end of tubes. Repeat twisted O-ring (6) installation for opposite ends of inner tubes.
2. Lubricate one end of both inner tubes with clean hydraulic oil to facilitate assembly. Push pressure inner tube (5) into right pressure port (marked "P") of motor body (12). Push return inner tube (4) into left return port (no mark) of motor body (12).
3. Slide rubber hand stop safety collar (10) on fiberglass outer tube (7), if removed. Press the nut carrier (11) into the holes on upper end of fiberglass outer tube (7). The nut carrier may be glued to fiberglass outer tube to hold it in place during assembly. Slide fiberglass outer tube over both inner tubes. Push fiberglass outer tube into motor body, aligning nut carrier inside fiberglass tube with the holes in motor body. Apply a drop of Loctite EV sealant, or equivalent, to three hex head cap screws (15). Follow manufacturer's recommendations for curing. Install tool hook (13) to nut carrier inside fiberglass outer tube and motor body using three cap screws (15) and lock washers (14).
4. For proper tool operation, the same inner tube (5) which was installed in the pressure port of the motor assembly (12) **must** be installed in the pressure port of the handle assembly (1). Lubricate tips of inner tubes with hydraulic oil to ease assembly. Press inner tube (5) into the top (return) port of handle assembly (1). Press inner tube (4) into the lower (pressure) port, which is marked "P".
5. Insert plug (3) and O-ring (2) in outer tube (7) and install in valve handle (1). Secure with cap screw hex head (9) and washer (8).

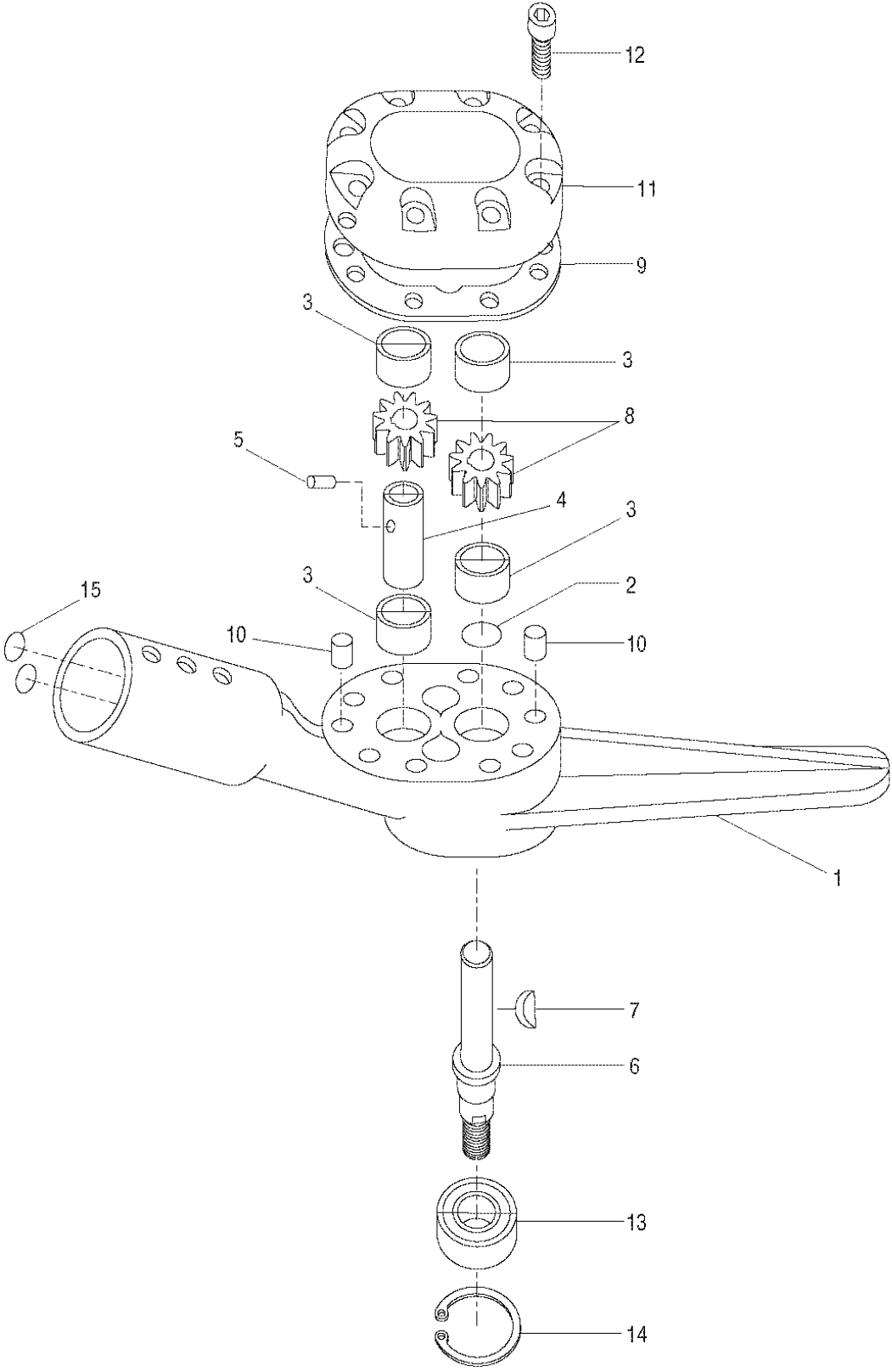
# Pole Circular Saw Drawing



## Pole Circular Saw Parts List

Key	Part No.	Description	Qty
1	48818	Handle assembly—Model Code FRN (refer to separate breakdown) .....	1
2*	F015676	O-ring, 15/16" x 1-1/16" x 1/16" .....	1
3	139021	Tube plug .....	1
4	170130	Inner tube .....	1
5	170136	Pressure tube .....	1
6	F015679	O-ring, 7/8" x 1" x 1/16" .....	4
7	48264	Outer tube assembly (includes item 22) .....	1
8	L084005	Lock washer, 1/4" .....	2
9	L083038	Hex head cap screw, 1/4–20 x 3/4" .....	2
10	F022910	Grommet .....	1
11	101390K	Nut carrier .....	1
12	137860	Motor assembly (refer to separate breakdown) .....	1
13	101394	Hook .....	1
14	F009535	Lock washer, 1/4" .....	3
15	F002355	Hex head cap screw, 1/4–20 x 3/4" .....	3
16	155216	Hub washer .....	1
17	101404	Guard .....	1
18	L88009	Saw blade—5/8" arbor .....	1
†18A	48511	Saw blade—5/8" arbor and adapter (includes items 18 and 19) .....	1
19	139706	Adapter .....	1
20	F025019	Hex nut, M10 x 1.5" LH .....	1
21	F001066	Cotter pin, 1/16" x 1/2" .....	1
22	50462946	Decal .....	1
*	132541	Packing kit (includes items marked with an asterisk)	

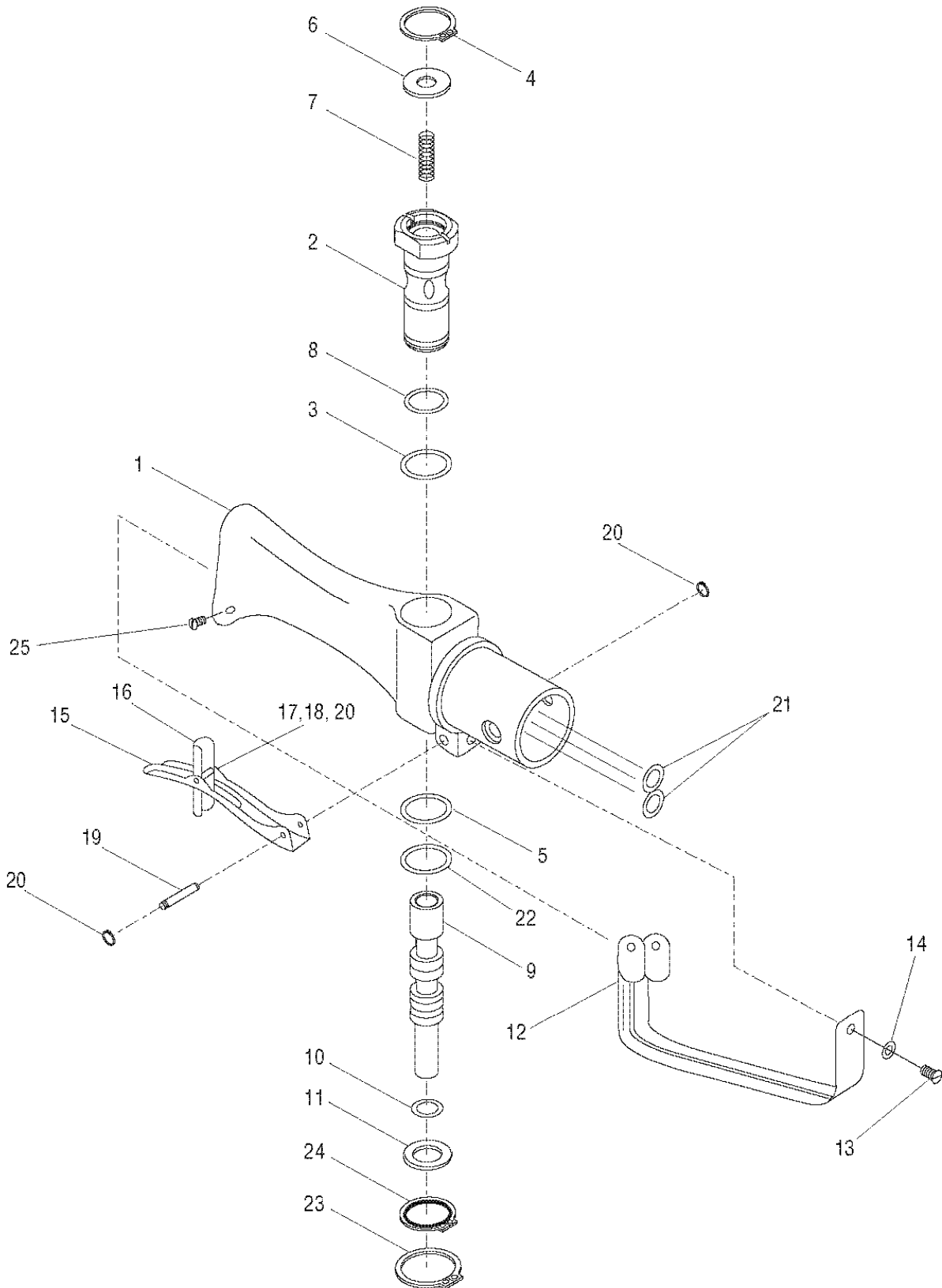
# Pole Circular Saw Motor Drawing



## Pole Circular Saw Motor Drawing

Key	Part No.	Description	Qty
	137860	Motor assembly (includes items 1–15) .....	1
1	137861	Body assembly (includes items 2 and 3).....	1
2*	F015305	O-ring .....	1
3	F016728	Bearing .....	4
4	104110K	Idler shaft .....	1
5	F016730	Drive pin .....	1
6	137865	Shaft .....	1
7	F016729	Key .....	1
8	F017105	11-tooth gear .....	2
9*	F016732	Gasket .....	1
10	F016733	Dowel pin .....	2
11	118070	Motor cap (includes item 3) .....	1
12	F016807	Socket head cap screw, #10–32 x 3/8" .....	8
13	F016735	Ball bearing .....	1
14	F014990	Retaining ring .....	1
15*	F022714	O-ring .....	2
*	132541	Packing kit (includes items marked with an asterisk)	

# Pole Circular Saw Handle Drawing



## Pole Circular Saw Handle Drawing

Key	Part No.	Description	Qty
	48818	Handle assembly (includes items 1–25)	
1	48815	Handle .....	1
2	170251	Sleeve .....	1
3*	F015403	O-ring .....	1
4	F018511	Retaining ring .....	1
5*	F024419	O-ring .....	1
6	138312	Cap .....	1
7	L089019	Spring .....	1
8*	F011762	O-ring .....	1
9	170088	Spool.....	1
10*	F016327	O-ring .....	1
11	138313	Washer .....	1
12	48817	Trigger guard .....	1
13	F018077	Machine screw, round head .....	2
14	L084015	Lock washer .....	2
	50047965	Safety trigger assembly (includes items 15–20)	
15	50047973	Trigger .....	1
16	50047981	Latch, trigger interlock.....	1
17	50047990	Spring, torsion .....	1
18	50048007	Pin .....	1
19	L060058	Trigger pivot .....	1
20	L085019	Retaining ring .....	4
21*	F022714	O-ring .....	2
22*	F015679	O-ring .....	1
23	90548191	Retaining ring .....	1
24	F008797	Retaining ring .....	1
25	F021676	Button socket screw .....	2
*	132541	Packing kit (includes items marked with an asterisk)	

## **LIMITED PRODUCT WARRANTY**

**Reimann & Georger Corporation  
Hoisting and Construction Products**

### **A. LIMITED WARRANTY**

Reimann & Georger Corporation (the "Manufacturer") warrants to the original purchaser (the "Buyer") that all Reimann & Georger Hoisting and Construction products shall be free of defects in material and workmanship for a period of one (1) year from date of original purchase.

### **B. MANUFACTURER'S OBLIGATIONS**

The Manufacturer's sole obligation under this Limited Warranty is the repair or, at the Manufacturer's discretion, the replacement of parts found to be defective. Parts and equipment must have authorization from the Manufacturer prior to return to the Manufacturer or repair by an authorized service person. Costs of transportation and other expenses connected with replacing or repairing parts are not covered under this Limited Warranty.

### **C. PARTS MANUFACTURED BY OTHERS**

This Limited Warranty does not cover any parts manufactured by others. Such parts are subject to the warranty, if any, of their respective manufacturers, and are to be repaired only by a respective authorized service person for such parts. The Manufacturer shall have no obligation to undertake repairs of parts manufactured by others.

### **D. NO SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES**

**IN NO EVENT SHALL THE MANUFACTURER BE LIABLE TO THE BUYER OR ANY OTHER PERSON FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL LOSSES OR DAMAGES CONNECTED WITH THE USE OF THE PRODUCT UNDER THIS LIMITED WARRANTY. SUCH DAMAGES FOR WHICH THE MANUFACTURER SHALL NOT BE RESPONSIBLE INCLUDE, BUT ARE NOT LIMITED TO, LOST TIME AND CONVENIENCE, LOSS OF USE OF THE PRODUCT, THE COST OF A PRODUCT RENTAL, COSTS OF GASOLINE, TELEPHONE, TRAVEL, OR LODGING, THE LOSS OF PERSONAL OR COMMERCIAL PROPERTY, AND THE LOSS OF REVENUE.**

### **E. NO LIABILITY IN EXCESS OF PURCHASE PRICE**

**IN NO EVENT SHALL THE MANUFACTURER'S OBLIGATIONS UNDER THIS LIMITED WARRANTY EXCEED THE PURCHASE PRICE OF THE PRODUCT.**

### **F. NO EXTENSION OF STATUTE OF LIMITATIONS**

**ANY REPAIRS PERFORMED UNDER THIS WARRANTY SHALL NOT IN ANY WAY EXTEND THE STATUTES OF LIMITATIONS FOR CLAIMS UNDER THIS LIMITED WARRANTY.**

### **G. WAIVER OF OTHER WARRANTIES**

**THE EXPRESS WARRANTIES SET FORTH IN THIS LIMITED WARRANTY ARE IN LIEU OF AND EXCLUDE ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

### **H. PROCEDURE FOR WARRANTY PERFORMANCE**

If the product fails to perform to the Manufacturer's specifications, the Buyer must provide the Manufacturer with the applicable model and serial numbers, the date of purchase, and the nature of the problem.

**I. ADDITIONAL EXCLUSIONS FROM THIS LIMITED WARRANTY. THIS LIMITED WARRANTY DOES NOT COVER ANY OF THE FOLLOWING:**

1. Equipment which has been abused, damaged, used beyond rated capacity, or repaired by persons other than authorized service personnel.
2. Damage caused by acts of God which include, but are not limited to, hailstorms, windstorms, tornadoes, sandstorms, lightning, floods, and earthquakes.
3. Damage under conditions caused by fire or accident, by abuse or by negligence of the user or any other person other than the Manufacturer, by improper installation, by misuse, by incorrect operation, by "normal wear and tear", by improper adjustment or alteration, by alterations not completed by authorized service personnel, or by failure of product parts from such alterations.
4. Costs of repairing damage caused by poor or improper maintenance, costs of normally scheduled maintenance, or the cost of replacing any parts unless done as the result of an authorized repair covered by the one (1) year Limited Warranty.
5. Costs of modifying the product in any way once delivered to the Buyer, even if such modifications were added as a production change on other products made after the Buyer's product was built.

**J. NO AUTHORITY TO ALTER THIS LIMITED WARRANTY**

No agent, representative, or distributor of the Manufacturer has any authority to alter the terms of this Limited Warranty in any way.