DR[®] PULSE 62V POLE SAW

ONE RIGHT

SAFETY & OPERATING INSTRUCTIONS



Serial No.	
.	
Order No	

DR Power Equipment

Toll-free phone: 1-800-DR-OWNER (376-9637)

Fax: 1-802-877-1213

Website: www.DRpower.com



Read and understand this manual and all instructions before operating the DR PULSE 62V POLE SAW.

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Conventions used in this Manual



DANGER

This indicates a hazardous situation, which, if not followed, will result in death or serious injury.



This indicates a hazardous situation, which, if not avoided, could result in death or serious injury.

A CAUTION

This indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.

NOTICE

This information is important in the proper use of your machine. Failure to follow this instruction could result in damage to your machine or property.

DR Power Equipment reserves the right to discontinue, change, and improve its products at any time without notice or obligation to the purchaser. The descriptions and specifications contained in this manual were in effect at printing. Equipment described within this manual may be optional. Some illustrations may not be applicable to your equipment.

California Proposition 65

MARNING

CANCER AND REPRODUCTIVE HARM - www.P65Warnings.ca.gov.

A WARNING

Read this Safety & Operating Instructions manual before you use the DR PRO 62V POLE SAW. Become familiar with the operation and service recommendations to ensure the best performance from your machine. If you have any questions or need assistance, please contact us at www.DRpower.com or call toll-free 1-800-DR-OWNER (376-9637) and one of our Technical Support Representatives will be happy to help you.

Labels

Your DR PULSE 62V POLE SAW carries prominent labels as reminders for its proper and safe use. Shown below are copies of all the Safety and Information labels that appear on the equipment. Take a moment to study them and make a note of their location on your Pole Saw as you set up and before you operate the unit. Replace damaged or missing safety and information labels immediately.



A0000190505

Protecting Yourself and Those around You

MARNING

- Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people, their property, and themselves.
- Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the Saw and the activity of cutting. Never assume that children will remain where you last saw them.
- When cutting a tree limb, keep everyone a safe distance from the cutting area. The safe distance should be at least twice the length of the limb you are cutting. Stop the Saw when another person or pet approaches. If the tree limb makes contact with any utility line, notify the utility company.
- Only allow responsible individuals who have a thorough understanding of these instructions to operate the Saw. Never allow children to operate the tool.
- If you are ever unsure about an action you are about to take, please do not do it.

Dressing Appropriately

MARNING

- Always wear protective goggles or safety glasses with side shields that are marked to comply with ANSI Z87.1 standard when using your DR Pulse 62V Pole Saw to protect against thrown chips.
- We recommend the use of ear protectors or earplugs rated for at least 20 DBA to protect your hearing.
- Wear shoes with non-slip treads when using the Saw. If you have safety shoes, wear them. Do not use the Saw while barefoot or wearing sandals with exposed toes or heels.
- Wear a safety hard hat with a full-face shield that meets the ANSI Standards ANSI Z89.1 or CE Standards while operating the Pole Saw.
- We recommend wearing long pants and non-slip rubber gloves while using this Saw. Be sure the gloves fit properly.

Operating Your Pole Saw Safely

A DANGER

- Protect yourself from electrocution; maintain a minimum of 50ft (15m) from overhead electrical lines.
- If the Saw jams on any electrical cord or line, DO NOT TOUCH THE BAR OR CHAIN, THEY CAN BECOME ELECTRICALLY
 LIVE AND VERY DANGEROUS. Safely disconnect the damaged electrical cord or line from its power source. If in doubt, call
 an electrician or an electrical contractor for assistance. Failure to heed this DANGER will result in death or serious personal
 injury.
- This Saw can sever body parts! Keep hands and feet away from the Chain and always keep both hands on the Pole.

A WARNING

- Do not use your DR Pulse 62V Pole Saw for any job other than the intended use.
- Avoid unintentional starting do not carry the Saw with your finger on the ON/OFF Trigger.
- Remove the Battery Pack when inspecting or cleaning material from the Saw.
- Never pick up or hold the Saw by the cutting Chain.
- Be aware that the cutting Chain coasts to a stop after releasing the ON/OFF Trigger; it does not stop immediately.
- Do not operate the Pole Saw in gaseous or explosive environments, the Motor normally sparks, and the sparks might ignite
 fumes.
- Never over reach. Keep proper footing and balance at all times.
- Do not operate the Saw in the rain, while in a tree, on a ladder or on a scaffold.
- Never operate your Saw on a slippery, wet, muddy, or icy surface. Exercise caution to avoid slipping or falling.
- Never stand under the limb that you are trimming. Position yourself out of the way of falling debris.
- Operate only in daylight or in an area well lit by artificial light.
- Stay alert and watch what you are doing. Do not operate the Pole Saw when you are tired or under the influence of medication, drugs, or alcohol.

A CAUTION

- Do not force the Pole Saw it will do the job better and with less likelihood of a risk of injury when cutting at its own rate.
- Use extreme caution when cutting small size brush, saplings or limbs under tension, because slender and tense material may catch the Saw and be whipped toward you, or spring back, pulling you off balance. Do not cut small vines and/or small underbrush.
- If the Saw vibrates abnormally, stop the motor, remove the Battery, and inspect the tool for damage. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other condition that may affect its operation. Repair the damage before restarting and operating the Pole Saw. **Note:** Excessive vibration is generally a sign of trouble.
- Do not operate the Pole Saw if it does not start normally or stop normally with the ON/OFF Trigger Switch.

Handling the Battery Pack Safely

A WARNING

- Always charge the Battery Pack indoors, never charge it the rain or in wet conditions.
- Use only the DR Lithium Charger with DR Lithium Battery Packs. Do not use the DR Lithium Charger with Battery Packs from other manufacturers or other DR products. Use of a different Charger may cause a fire or explosion.
- Never attempt to alter or open the Battery Pack or Charger. There are no customer serviceable parts inside. Use normal
 household voltage (110 volts) when charging the Battery Pack. Plug the Charger Power Supply directly into the electrical outlet.
- Exercise care in handling the Battery Pack in order not to short-circuit it with conducting materials such as rings, bracelets, and keys. When short-circuited, the Battery Pack or conductor may overheat and cause burns.
- Electrolyte leakage from the Battery Pack can be harmful causing serious chemical burns if on the skin or in the eyes. Remove contaminated clothing and wash skin with soap and water. If electrolyte gets in your eyes, flush with cold water for at least 15 minutes and seek medical attention. Inhalation of vapors from a ruptured Battery Pack can cause respiratory irritation, provide fresh air, and seek medical attention.
- Never dispose of the Battery Pack in a fire, as the Battery Pack may explode. Never open or mutilate the Battery Pack; released materials are flammable. If fire or explosion occurs, do not breathe the fumes. A burning Battery Pack will create toxic fumes. Fire fighters should use self-contained breathing apparatus. The fire in the Battery Pack will need to burn out, but the fire can be kept from spreading. If possible, separate the Battery Pack from other flammable materials and use sand, copper powder or powdered graphite fire extinguishers, dry ground dolomite or soda ash to smother the fire.
- Do not ship damaged Battery Packs and be sure to use the original packaging materials when shipping Batteries and tools back
 to DR Power Equipment if you decide you do not want them. Special labeling on the packaging is required because the
 Batteries are considered hazardous materials. Check with airlines before trying to check Lithium batteries with your baggage.
 New regulations are being considered that may restrict packaging and shipping of these Batteries as well as tools with Batteries
 installed.
- Please dispose of your used Battery Packs responsibly by recycling them, never throw away used Battery Packs in your household trash.

FCC Warnings

M WARNING

Please note that changes or modifications to this product not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

No list of Warnings and Cautions can be all-inclusive. If situations occur not covered by this manual, the operator must apply common sense and use the **DR®** PULSE 62V POLE SAW in a safe manner. Visit our website at www.DRpower.com or call Toll Free: **1-800-DR-OWNER** (376-9637) for assistance.

DR PULSE 62V POLE SAW Controls and Features:

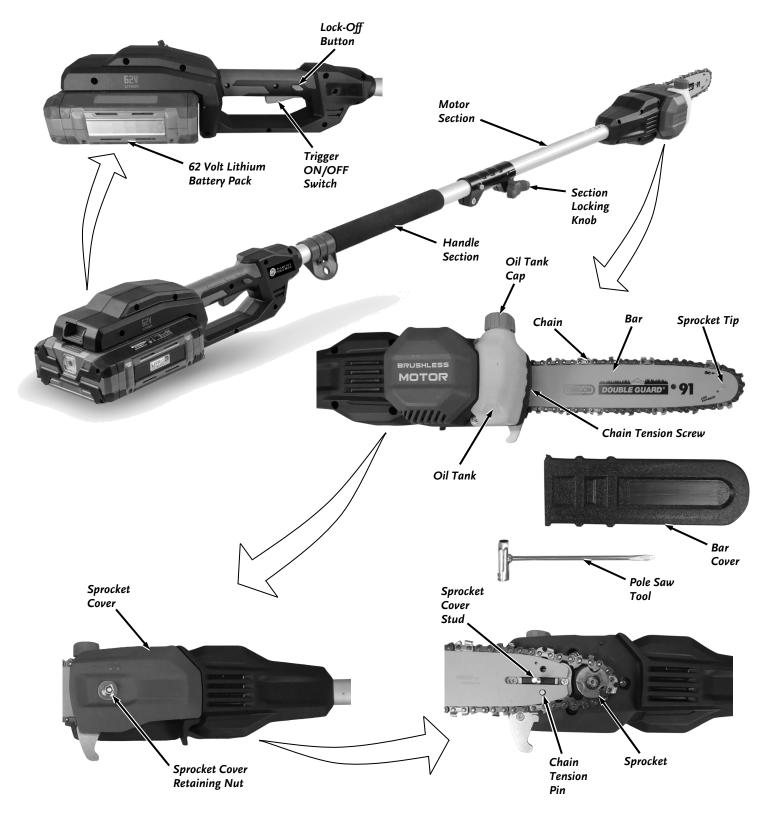


Figure 1

Specifications:

POLE SAW PART NUMBER	524141 (Tool Only); 524131 (With 2.5Ah Battery and Charger)		
MOTOR	(1		
Operating Voltage	62.7V DC		
Power	650 W Brushless		
CONTROLS			
ON/OFF	Single Trigger Switch w/Lock-Off Button		
Handles	Soft Grip Rubber over Molded Handles		
POLE SAW HOUSING			
Material	Injected Polypropylene		
Bar Length	10 inches - Oregon Bar w/ Protective Cover		
Weight	Tool without Battery 10 lbs., Tool with Battery 12 lbs.		
Chain Speed	15 Meters/second		
Bar, Chain & Motor Oiling	ain & Motor Oiling Automatic Pump System w/Oil Level markings		
Bar and Chain Oil	#32 Bar & Chain Oil		
BATTERY PACK	41423 (2.5 Ah) included		
Voltage	62V DC, 2.5 AH		
Charge Time	60 Minutes		
Replacement	Easy to snap-in and out of Saw housing		
BATTERY CHARGER	41421 (2.5 Ah) included		
Input:	100~120VAC 50/60Hz MAX 3A		
Output:	Auto Sensing 62VDC 2.5A		
Charge Time	60 Minutes		

Carton Contents:

- DR PULSE 62V POLE SAW body (Handle, Motor and Extension section)
- Shoulder Strap
- Bar, Chain and Sprocket Cover
- Battery Pack and Charger

Compare the Carton contents with the "Carton Contents" list above. If you have any questions, please contact us at www.DRpower.com.

Note: Do not discard the Shipping Carton and packaging material until you are fully satisfied with your new **DR** PULSE 62V POLE SAW.

Charge the Battery Pack before your first use

The DR PULSE 62V Pole Saw uses a sealed, Lithium-Ion Battery Pack. You MUST charge the Battery Pack for at least 60 minutes before you use the Pole Saw for the first time. If you do not charge it before using the Pole Saw, the Battery Pack's charging capacity may decrease.

NOTICE

- Make sure the Charger Power Supply is plugged into a normal household voltage, 120volts, 60Hz, AC only.
- You should operate the Battery Charger in a dry place with temperatures between 50°F (10°C) and +100°F (+37.8°C). Operating above +100°F can cause Battery Pack leakage, rust, or degradation of the Battery Pack performance.
- 1. Connect the charger to a 120VAC outlet. When the Battery is not installed (no load condition), the Red LED will be lit.
- 2. Insert the Battery into the Charger (*Figure 2*). Under normal charging the Green LED will Blink.
- 3. When the Battery is fully charged, the Green LED will remain light, indicating that charging is complete.
- 4. Unplug the Charger from the Outlet and remove the Battery.

Note: There are more detailed instructions for charging and maintaining the Battery/Charger in Chapter 4

Assembling the DR PULSE 62V POLE SAW

Tools and Supplies Needed:

- Gloves
- Pole Saw Tool (included)

Joining the Pole Saw Sections

1. Align the Locking Spring Pin at the end of the Saw Motor Section and the Pin Locking Hole in the Handle Section (*Figure 3a*).

Note: Also, the opposite side has arrows on a Tab and Slot indicating section alignment (**Figure 3b**).

- 2. Push the Sections together until the locking Spring Pin clicks into the Locking Hole in the Handle section.
- 3. Secure the sections together with the Locking Knob and Nut (Figure 4).

Attaching the Shoulder Strap

1. Clip the Strap Hook into the hole in the Strap Buckle (*Figure 5*).

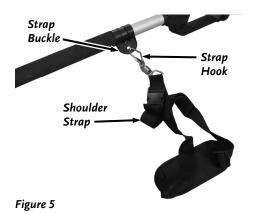
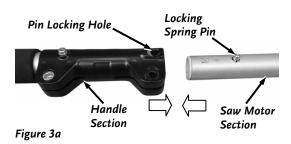
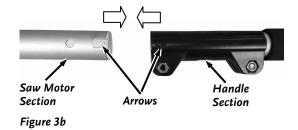
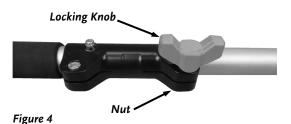




Figure 2







CONTACT US AT www.DRpower.com

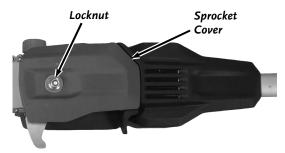


Figure 6

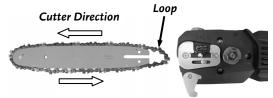


Figure 7

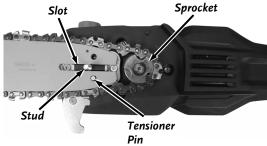


Figure 8



Figure 9



Figure 10

2. Remove the Locknut securing the Sprocket Cover and remove the Sprocket Cover (*Figure 6*).

A WARNING

Never Handle the Chain unless you are wearing Gloves. The Chain is very sharp and could cause serious injury.

- 3. Install the Saw chain into the groove of the Bar and straighten any kinks (*Figure 7*). The sharp side of the Teeth should face in the direction of the Chain rotation. If they face backwards, turn the Chain over. Form a loop with the Chain at the back end of the Bar.
- 4. Hold the Chain in position on the Bar and place the loop around the Sprocket (*Figure 8*). Position the Bar Slot over the Stud and pull the Bar forward to remove any slack in the Chain.
- 5. If the Tensioner Pin does not align with the hole in the Bar, the Pin must be adjusted as described in the next step.
- 6. Turn the Chain Tension Screw (*Figure 9*) clockwise to move the Bar away from the Sprocket or counterclockwise to move it towards the Sprocket until the Pin goes into the Hole in the Bar.
- 7. Hold the Bar in position as you position the Sprocket Cover against the Bar (*Figure 6*). Install the Nut until it is almost all the way in but not tight.

Note: The Sprocket Cover Nut must be tight enough to hold the Bar and Chain in place, but loose enough to allow the Bar to be adjusted forward or backward without binding.

8. Adjust the Chain tension by turning the Chain Tension Screw (*Figure 9*) clockwise until there is no sag in the underside of the Chain (see following note). Finish tightening the Sprocket Cover Nut when the Chain is tensioned properly.

Note: The chain is correctly tensioned when there is no sag on the underside of the guide bar, the chain is snug, but can still be turned by hand (wear gloves) without binding. If the chain is too tight, it will not rotate. See "Chain Tension" in Chapter 4 of this manual for more information.

Adding Bar and Chain Oil

The Bar and Chain requires lubrication to reduce friction and wear. Bar and Chain Oil is not supplied with the Pole saw. You can purchase Bar and Chain Oil at your local hardware store.

1. Remove the Oil Tank Cap and add #32 Bar & Chain Oil to the "MAX" level on the side of the Tank (*Figure 10*). Install the Cap when finished.

Installing the Battery Pack

- 1. Slide the Battery Pack into the Battery cradle on the Pole Saw Handle section, aligning the ribs in the cradle with the slots in the Battery until it is latched into place (*Figure 11*).
- 2. Check that the Battery is securely locked into place.

Removing the Battery Pack

1. To remove the Battery, press and hold the Battery Latch as you slide the Battery out of the Pole Saw.



Chapter 3: Operating Your DR PULSE 62V POLE SAW

Starting and Stopping the Pole Saw

Your DR PULSE 62V POLE SAW is equipped with an Automatic Oil Pump for Bar and Chain oiling. Before starting the Pole Saw, ensure the Oil Reservoir is full (see previous page). Refill when the oil level drops to the minimum level Mark.

NOTICE

- Always keep the Oil Fill Reservoir full. Do not let the level get below the "Minimum Level Mark" (see previous page) because
 the Bar and Chain could be damaged, and the Motor will be overworked. Damage due to low Bar and Chain Oil is not covered
 by the Warranty.
- Starting, stopping, and restarting an electric Motor repeatedly within a few seconds can generate a great deal of heat and damage the Motor. To protect the life of your Pole Saw, always wait at least five seconds after stopping before restarting the

A WARNING

Be certain that the Chain is not in contact with any object when you start the Motor, or you could be seriously injured.

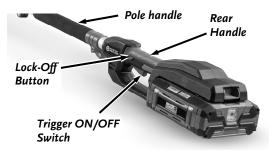
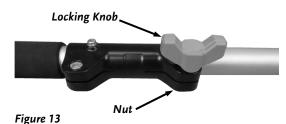


Figure 12



Pin Locking Hole Spring Pin

Handle Section Section

Saw Motor Section

- Read and understand all Safety Warnings and wear proper safety gear as listed in Chapter 1. Perform the Daily Checks listed on the back cover of this manual.
- 2. Firmly grip the Rear Handle with your right hand and the Pole Handle with your left hand whether you are right or left handed (*Figure 12*).

Note: The Pole Saw Motor can take up to one second to start after the Trigger ON/OFF Switch is pressed as described in the next step.

- 3. Push the Lock-Off Button in with your right thumb and squeeze the Trigger ON/OFF Switch with your fingers. Once the Motor starts you can remove your thumb from the Lock-Off Button. If the Saw does not start, make sure the Battery Pack is charged and locked firmly into place in the Saw Housing.
- 4. To stop the Saw, simply release the Trigger ON/OFF Switch.

Adding the Pole Extension

- 1. Remove the Battery Pack from the Pole Saw.
- 2. Remove the Locking Knob and Nut (Figure 13).
- 3. Push in the Locking Pin and pull the Handle and Motor sections apart (*Figure 14*).
- 4. Insert the Extension Section between the Handle and Motor Sections. Connect the sections as described on page 9.

Proper Cutting Stance

- Balance your weight with both feet on solid ground (*Figure 15*).
- Your body should always be to the left of the Chain Line.
- The most typical cutting application is to position the unit at an angle of 60° or less depending on the specific situation. As the angle of the pole saw shaft to ground increases, the difficulty of making the first cut (from the underside of limb) increases.

Basic Cutting Procedure

This unit is designed for trimming small branches and limbs up to 6 in. in diameter. Practice cutting a few small limbs using the following technique to get the "feel" of using the Saw before you begin a major sawing operation.

- Take the proper stance in front of the tree with the Saw OFF (Figure 15).
- Start the Saw and let the Chain accelerate to full speed before entering the cut.
- Keep the Saw running the entire time you are cutting, maintain a steady speed.
- Allow the Chain to cut for you; exert only light, downward pressure. If you force the cut, damage to the Bar, Chain, or unit can result.
- Push and Pull This reaction force is always opposite to the direction the Chain is moving when it is in contact with the wood. Thus, the operator must be ready to control the PULL when cutting on the bottom edge of the Bar, and PUSH when cutting along the top edge.
- Do not put pressure on the Saw at the end of the cut.

Pruning

Pruning is trimming limbs from a live tree (Figure 16).

- Remove long branches in several stages.
- Cut lower branches first to allow the top branches more room to fall.
- When pruning trees, it is important not to make the finishing cut next to the main limb or trunk until you have cut off the limb further out to reduce the weight. This prevents stripping the bark from the main member.
- Under cut the branch 1/3 through for your first cut. Your second cut should over cut to drop the branch off. Be prepared to balance the weight of the Pole Saw tool when the limb falls.

Note: For the second and final cuts (from top of limb or branch), hold front Cutting Guide against the limb you are cutting (Figure 17). This will help steady the limb and make it easier to cut. Allow the Chain to cut for you; exert only light, downward pressure. If you force the cut, damage to the Bar, Chain, or Motor can result.

- Now make your finishing cut from the topside of the branch smoothly and neatly against the main member so the bark will grow back to seal the wound.
- Release the Trigger ON/OFF Switch as soon as the cut is completed. Failure to follow proper cutting procedures will result in the Bar and Chain binding and becoming pinched or trapped in the limb.

Limbing

Limbing is removing branches from a fallen tree.

- You should cut limbs one at a time. Remove the cut limbs from the work area often to help keep the work area clean and safe.
- Cut branches under tension from the bottom up to avoid binding the Pole Saw.
- Keep the tree between you and the Pole Saw while limbing. Cut from the side of the tree opposite the branch you are cutting.

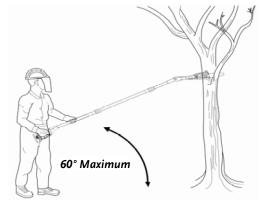


Figure 15

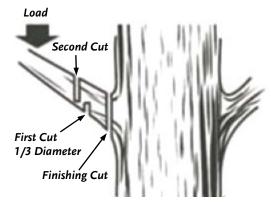


Figure 16

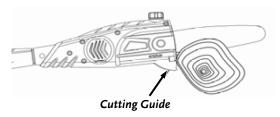


Figure 17

If the Saw Becomes Pinched or Trapped

- 1. Wait for the Blade to stop, wait five minutes for the Saw to cool, remove the Battery and wear gloves to protect your hands from the Chain teeth.
- 2. If you can reach the limb from the ground, lift the limb while holding the Saw. This should release the "PINCH" and free the Saw.
- 3. If the Saw is still trapped, call a professional for assistance.

Minimize Kickback

Kickback may occur when the moving Chain contacts an object at the upper portion of the tip of the Bar or when the wood closes in and pinches the Pole Saw in the cut. Contact at the upper portion of the tip of the Bar can cause the Chain to dig into the object and stop the Chain for an instant. The result is a lightening fast, reverse reaction, which kicks the Bar up and back toward the operator. If the Pole Saw is pinched along the top of the Bar, the Bar can be driven rapidly back toward the operator. Either of these reactions can cause loss of Saw control, which can result in serious injury. Do not rely exclusively upon the safety devices built into the Saw. As a Pole Saw user, you should take several steps to keep your cutting jobs free from accident or injury.

You should follow the following precautions to minimize kickback:

- Before you start the unit, make sure the Pole Saw is not contacting any object.
- Always grip the Pole and Handle firmly with both hands when unit is running. Place one hand on the Pole and your other hand on the Molded Handle with your thumbs and fingers encircling the Pole and Handle. A firm grip together with positioning the Handle against your body will help you maintain control of the Saw if kickback occurs.

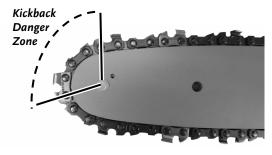


Figure 18



- Make sure that the area in which you are cutting is free from obstructions.
- Do not let the Kickback Danger Zone area of the Bar contact a log, branch, fence or any other obstruction that could be hit while you are operating the Saw (Figure 18).
- Always cut with the unit running at full speed. Fully squeeze the ON/OFF Trigger and maintain a steady cutting speed.
- Wear non-slip gloves for maximum grip and protection.
- Extend the Pole only to the length required to reach the limb cut. Do not extend the Handle above waist height.

Additional Features

USB Charge Port

The Battery can be used to charge/operate phones or other electronic devices that use a USB cord.

- 1. Remove the Battery from the Pole Saw.
- 2. Plug the device into the USB Port of the Battery (Figure 19).

A WARNING

Always remove the Battery Pack before performing any maintenance, or repairs to your Pole Saw.

Chain Tension

Check the Chain Tension before using the Saw when the Chain is cold. The correct tension of a cold Chain is when there is no slack on the underside of the Bar, the Chain is snug, but you can turn it by hand without binding.

During normal Saw operation, the temperature of the Chain will increase. The Drive Links of a correctly tensioned warm Chain will hang approximately .050 in. (1.25mm) out of the Bar Groove (*Figure 20*). Be aware that a Chain tensioned while warm, may be too tight upon cooling. Check the "cold tension" before next use.

The Chain must be re-tensioned whenever the Flats on the Drive Links hang out of the Bar groove.

Note: A new Chain tends to stretch so check the Chain tension frequently and retension as required.

- 1. Loosen the Sprocket Cover Locknut slightly to allow the Bar to move without binding (*Figure 21*).
- Turn the Tension Screw clockwise to tighten the Chain as needed (Figure 22).
- 3. Tighten the Sprocket Cover Screw and recheck Chain tension.
- 4. Repeat steps 1 through 3 if needed to achieve correct Chain tension.

Bar Maintenance

When the Bar shows signs of wear, turn it over on the Saw to distribute the wear for maximum Bar life. Feathering or burring of the Bar Rails is a normal process of Bar wear. You should smooth such faults with a file as soon as they occur.

Replace a Bar with any of the following faults:

- Wear inside the Bar Rails permitting the Chain to layover sideways.
- Bent Bar
- Cracked or broken Rails
- Spread Rails

Turn the Saw over, check the underside of the Bar, and make sure that the lubrication holes and Chain Groove are free from debris.

Properly Adjusted Warm Chain



Approximately .050 in. (1.25mm)



Figure 20

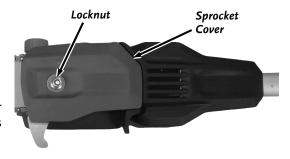


Figure 21



Figure 22

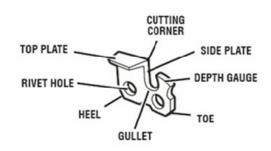


Figure 23

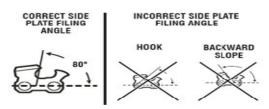


Figure 24

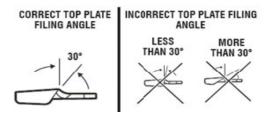


Figure 25

Sharpening the Chain and filing the Depth Gauge

For smooth and fast cutting, the chain needs to be maintained properly. The chain requires sharpening when the wood chips are small and powdery, the chain must be forced through the wood during cutting, or the chain cuts to one side. Refer to *Figure 23* for description of chain features.

Note: Improper Chain sharpening increases the risk of Kickback. Therefore, we highly recommend that when the Chain requires sharpening, you have the Chain professionally sharpened.

During maintenance of your chain, remember:

- Depth Gauge (also called "raker") clearance.
 - Too low increases the potential for kickback.
 - Not low enough decreases cutting ability.
- If cutter teeth have hit hard objects such as nails and stones or have been abraded by mud or sand on the wood, have service dealer sharpen chain.
- Be careful to file all cutters to the specified angles and to the same length, as fast cutting can be obtained only when all cutters are uniform.
- Properly tension the chain prior to sharpening. Refer to "Adjusting Chain Tension" Section earlier in this manual.
- Do all your filing at the midpoint of the bar.
- Use light but firm pressure when filing.
- Keep the file level with the top plate of the tooth and do not let the file dip or rock.

MARNING

- Improper chain sharpening increases the potential of kickback.
- Failure to replace or repair damaged chain can cause serious injury.

A CAUTION

Wear leather Gloves when maintaining the Chain to protect your hands from cuts.

SIDE PLATE ANGLE (Figure 24)

Correct – 80 degrees produced automatically if correct diameter file is used in file holder.

Hook – "Grabs" and dulls quickly. Increases potential of kickback. Results from using a file with a diameter too small, or file held to low.

Backward Slope – Needs too much feed pressure, causes excessive wear to bar and chain. Results from using a file with a diameter too large, or file held too high.

TOP PLATE FILING ANGLE (Figure 25)

Correct 30 degrees - File holders are marked with guide marks to align file properly to produce top plate angle.

- -Less than 30 degrees for cross cutting.
- -More than 30 degrees feathered edge dulls quickly.

Tools and Supplies Needed:

- File Holder
- 5/32" Round Chain File
- Wire Brush
- Depth Gauge jointer
- Flat File
- Safety Glasses
- Gloves

Note: Occasionally remove filing from the file with a wire brush.

- 1. Position the File into a left-hand cutter with the holder and file at a 30° angle to the Bar (*Figure 26 and 27*).
- Keep the file level with the top plate of the tooth and do not let the file dip or rock.
- 3. Use light but firm pressure to stroke towards the front corner of the tooth and lift file away from the steel on the return stroke.
- 4. Sharpen every left-hand tooth in the same direction.
- 5. Move to the other side and file the right-hand cutters in the opposite direction remembering to lift file away from the steel on each return stroke.

Note: Every time the Chain is filed, check the Depth Gauge clearance with a Depth Gauge Jointer. The depth gauge should be maintained at a clearance of .025 in. (0.6 mm) (**Figure 28**). Depth Gauge Jointers are available in .020 in. to .035 in. (0.5 mm to 0.9 mm). Use a .025 in. (0.6 mm) Depth Gauge Jointer.

6. Position the Depth Gauge Jointer (*Figure 29*) onto the top of the cutters, with a Depth Gauge in the slot at the end of the jointer.

Note: Depth Gauges on a Saw Chain are sometimes referred to as "Rakers".

7. If the Depth Gauge is above the Jointer, use a flat file to file it down to be as close to level with top surface of the jointer without filing the Jointer.

Note: Depth gauges must be adjusted with the flat file in the same direction the adjoining cutter was filed with the round file. Use care not to contact cutter face with the file when adjusting depth gauges.

- 8. Check all remaining Depth Gauges with the Depth Gauge Jointer and file as needed.
- 9. After lowering each depth gauge, restore original shape by rounding the front. Be careful not to damage adjoining drive links with the edge of the file (*Figure 30*).

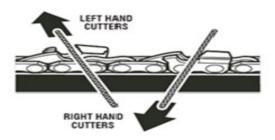


Figure 26

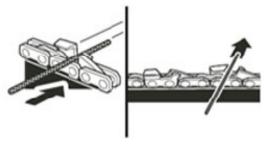


Figure 27



Figure 28

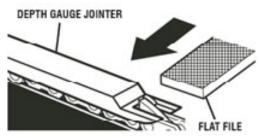


Figure 29

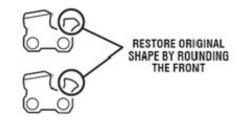


Figure 30

Additional Battery Pack and Charger Information

The Battery Pack should not leak, regardless of the position in which it is stored. Read "Handling the Battery Safely" in Chapter 1 for additional information. The Battery Pack is completely maintenance free. You never need to add water. With all rechargeable Batteries, after years of use, they will eventually need replacement.

A CAUTION

Use only the DR® 62V Charger with DR® 62V Battery Packs. Do not try to use the DR® 62V Charger with Battery Packs from other manufacturers.

NOTICE

- Make sure the Charger Power Supply is plugged into a normal household voltage, 120volts, 60Hz, AC only.
- You should operate the Battery Charger in a dry place with temperatures between 50°F (10°C) and +100°F (+37.8°C). Operating above +100°F can cause Battery Pack leakage, rust, or degradation of the Battery Pack performance.
- Disconnect Charger Power Supply from the household voltage power when not in use to prevent damage to the Charger during a power surge.
- Periodically inspect the Power Cord on the Charger unit for damage. If damage occurs, do not use the Charger until you have replaced or repaired the Power Cord. Do not abuse the Power Cord. Never carry the Charger by the Power Cord. Always pull the Plug and not the Power Cord when disconnecting the Power Supply from the electrical outlet (wall outlet) and from the Charger. When using an Extension Cord with your Charger, use a heavy-duty Extension Cord of a type 'suitable for outdoor use' (although you should never charge the Battery Pack in the open outdoors).
- The Battery Pack requires 2-3 charging and discharging cycles before reaching full charge ability.
- A Battery Pack may last much longer if you charge it as soon as it starts to lose power and not let it completely discharge.
 Recharge the Battery Pack as soon as the cutting power of your Pole Saw is no longer effective. This would be a good time to have a spare Battery Pack ready to go. Recharge the Battery Pack for up to 60 minutes or until fully charged and remove it from the Charger.
- A good time to consider purchasing a replacement Battery Pack is when it loses its power quickly.

Recycling a Used Battery

Please dispose of your used Batteries responsibly by recycling them. Call your local Solid Waste Management District or your local waste handler to locate the collection site nearest you. Some collection sites recycle Batteries year-round; others collect them periodically.

You can also visit the Website of Earth 911 for more information (www.earth911.com). Once there, click Recycle Guide at the top of the page, then click the Municipal HHW link under Hazardous Household Waste, and enter your zip code. The site lists recycling centers located near you.

For a fee, you can recycle your Batteries with the International Metals Reclamation Company. Visit them at www.inmetco.com and click Services, then click Battery Recycling; or contact them at: INMETCO, One INMETCO Drive, Ellwood City, PA 16117, (724) 758-5515; fax (724) 758-2845.

To learn more about hazardous waste recycling, visit the Website for Battery Council International (www.batterycouncil.org) or for the Environmental Protection Agency (www.epa.gov)

Battery LED Lights (Figure 31)

You can check the charge percentage of your 62V Battery by pushing the Indicator Button on the front of the Battery. The number of Green LED indicators will tell you the % of power left in the Battery. 1-25%, 2-50%, 3-75% and 4-100%.

If you press the Indicator Button and only the fourth LED flashes, the Battery needs charging.

Charger indicator Lights (Figure 32)

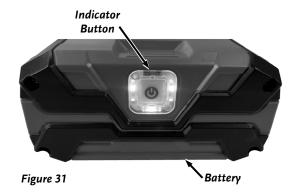
Red LED Lit, Green LED is not lit; The Charger is plugged in, but the Battery is not installed (no load condition).

Green LED blinks, Red LED is not lit; Battery is charging normally.

The Green LED is lit, Red LED is not lit; Battery is fully charged.

Green LED is not lit, Red LED blinks; There is a fault with the Battery or Charger. Remove the Battery from the Charger and wait about 30 minutes, then reinsert the Battery into the Charger.

If the Battery does not hold its charge for very long under normal conditions or it simply won't hold a charge, then replace it. You can purchase a replacement Battery directly from us at www.DRpower.com.





Chapter 5: Troubleshooting Your DR PULSE 62V POLE SAW

Most problems are easy to fix. Consult the Troubleshooting Table for common problems and their solutions. If you continue to experience problems or need repairs beyond these minor adjustments, visit our website at www.DRpower.com or call DR Power Equipment. Toll Free at: 1-800-DR-OWNER (376-9637) for assistance.

M WARNING

Always remove the Battery Pack before performing any maintenance, or repairs to your Pole Saw.

PROBLEM	CORRECTIVE ACTION			
The Motor fails to start.	 ⇒ Check that you installed the Battery Pack correctly and that the Battery Pack is fully charged. ⇒ Make sure that you fully push in the Lock-Off Button before squeezing the ON/OFF Trigger Switch. ⇒ It can take up to one second for the motor to start. Keep the Lock-Off Button and the Trigger ON/OFF depressed for at least 3 seconds. 			
The Battery Pack will not charge.	 ⇒ Check to see if the Battery Pack is all the way into the Charger. Insert the Battery Pack until the Green LED Light illuminates. ⇒ The Charger Power Supply is not in a working outlet. Check the outlet with a lamp or other appliance. ⇒ Check to see if the outlet that you are using for the Charger Power Supply is controlled from a wall switch. ⇒ The surrounding air temperature is too hot or too cold. Move Charger and Battery Pack to a location where the surrounding air temperature is between 50°F (10°C) and +100°F (+37.8°C). 			
The Motor runs, but the Chain speed Is slow.	 ⇒ The Battery Pack was probably not at full charge prior to cutting. Charge the Battery Pack, if necessary. ⇒ The Chain tension is too tight. Check and re-tension the Chain. 			
The Battery loses its charge quickly.	 ⇒ The Battery Pack was probably not at full charge prior to cutting. Charge the Battery Pack, if necessary. Note: You will need to charge a new Battery Pack 2-3 times to achieve maximum cutting time. ⇒ The Battery Pack may be getting old. After some time, you will need to replace the Battery Pack. 			
Bar and Chain running hot and smoking.	 ⇒ The Chain is over tightened. Check and adjust the Chain tension. ⇒ Chain Oiling Tank is empty. Check the Oil Level and fill accordingly. ⇒ The Lubrication Port is plugged. Check and clean the Port. ⇒ The Chain is installed in the wrong direction. Reverse chain so the cutters face the proper direction. 			
The Motor runs, but the Chain is not turning.	 ⇒ The Chain tension is too tight. Check and re tension Chain. ⇒ Bar and/or chain may be damaged. Check the Bar and Chain for damage and replace as needed. 			

Notes:

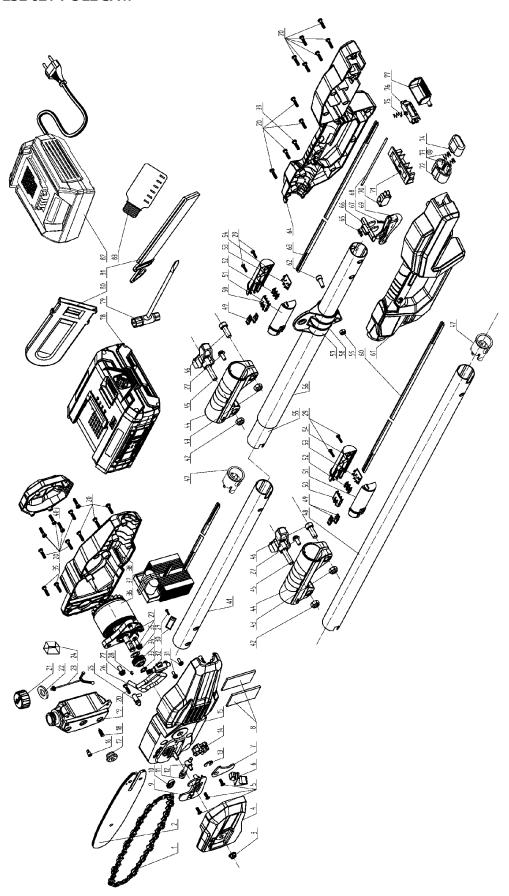
Chapter 6: Parts Lists and Schematic Diagrams

Parts List – PULSE 62V POLE SAW

Note: Part numbers listed are available through DR Power Equipment. Not all parts appear on all diagrams.

Ref#	Part#	Description	Ref#	Part#	Description
1	A0000222200	Chain, Oregon, 10"	44	A0000222244	Clamp Sleeve, Extension
2	A0000222201	Bar, Oregon, 10"	45	A0000222245	Knob, Extension
3	A0000222202	Locknut, Bar	46	A0000222246	Bolt, Hex, Clamp
4	A0000222203	Cover, Chain Drive	47	A0000222247	5 Plug Seat, Electrical
5	A0000222204	Screw, M4 X 12	48	A0000222248	Aluminum Tube, Extension
7	A0000222213	Bar Stop	55	A0000222249	Aluminum Tube, Trigger
8	A0000222214	Sponge, Dustproof	56	A0000222250	Foam Grip, Trigger
9	A0000222215	Plate, Bar Adjust	57	A0000222251	Harness Clip, Trigger
11	A0000222216	Worm Screw, Bar Adjust	58	A0000222252	Lock Ring, Harness Clip, Trigger
12	A0000222217	Screw, Bar Adjust	59	A0000222253	Locknut, Harness Clip
13	A0000222218	E-clip, Chain Drive	60	A0000222254	Cord, 5 Core, Electrical
14	A0000222219	Sprocket, Chain Drive	61	A0000222255	Left Housing, Trigger
16	A0000222220	Vent, Bar Oil	62	A0000222256	Hex Bolt, Harness Clip
17	A0000222221	Output Seal, Bar Oil	64	A0000222257	Right Housing, Trigger
18	A0000222222	Filter Spring, Bar Oil	65	A0000222258	Spring, 2 Step, Trigger
19	A0000222223	Oil Tank, Bar Oil	66	A0000222259	Button, 2 Step, Trigger
20	A0000222224	Screw, M8 X 45	67	A0000222260	Spring, Trigger
21	A0000222225	Tank Cap, Bar Oil	69	A0000222261	Button, Trigger
22	A0000222226	Seal, Tank Cap	70	A0000222262	Switch, Trigger
23	A0000222227	Retainer, Tank Cap	71	A0000222263	Terminal, Battery
24	A0000222228	Sponge, Dustproof, Tank Cap	72	A0000222264	Housing, Battery Ejector
25	A0000222229	Fitting, Hose	75	A0000222265	Spring, Battery Lock
26	A0000222230	Hose, Bar Oil	76	A0000222266	Housing, Battery Lock
28	A0000222231	Flat Key, Motor, 3mm X 3mm X	77	A0000222267	Button, Battery Lock
		6mm	78	414230 Battery	
31	A0000222232	Screw, M4 X 12, Zinc	79	A0000222268	Multi Tool, Accessory
32	A0000222233	Oil Pump, Bar Oil	80	A0000222269	Cover, Chainsaw, 10in
33	A0000222234	Retaining Ring, Motor	81	A0000222270	Strap, Shoulder
34	A0000222235	Worm Gear, Bar Oil	82	414210 Charger	, Battery
36	A0000222236	Motor	Not S	ihown:	
37	A0000222237	Controller, Motor			
38	A0000222238	Right Housing, Powerhead	1	A0000222271	Tube Assembly, Extension (27, 29,
39	A0000222239	Screw, Oil Tank	2	4000022222	42 Through 54, 60)
40	A0000222240	Motor Cover, Powerhead	2	A0000222272	Ejector Assembly, Battery (72 Through 74)
41	A0000222241	Aluminum Tube, Powerhead	3	A0000222273	Tank Assembly, Oil (16 Through
42	A0000222242	Nut, Knob, Clamp	5		26)
43	A0000222243	Locknut, Clamp	4	A0000222274	Cap Assembly, Oil (21 Through 24)

Schematic – PULSE 62V POLE SAW



Daily Checklist, Cleaning and Storing for your DR PULSE 62V POLE SAW

To help maintain your DR Pole Saw for optimum performance, we recommend you follow this checklist each time you use your Saw.

M WARNING

Always remove the Battery Pack before performing any maintenance, or repairs or inspection to your Pole Saw.

[] BATTERY PACK: Make sure the Battery Pack has a full charge.

[] INSPECT: Before inserting the Battery Pack, inspect for any visible damage to the Chain, Bar, or Motor Housing. Inspect the Oil Port, Bar Rails, and clean them to remove any debris.

Check the Chain tension and Chain Teeth for sharpness.

Check the Bar and Chain Oil level, fill with only new Chain Oil specifically formulated for pole saws.

[] NOISES: If you notice anything unusual, such as a vibration or odd sound, shut the Saw OFF immediately. Remove the Battery Pack and check the Saw for any damage.

If you cannot find the cause of the problem or are uncertain what to do, then have the Saw inspected by a qualified repair shop before using it or visit our website at www.DRpower.com.

A CAUTION

- Remove the Battery Pack and allow the Saw to cool for at least five minutes before servicing or storing.
- If you drop the Saw, carefully inspect it for damage. If the Battery is damaged, Bar is bent, Housing cracked, or Handle broken or if you see any other condition that may affect the Saw's operation, visit our website at www.DRpower.com or call DR Power Equipment Toll Free at: 1-800-DR-OWNER (376-9637) for assistance before putting it back into use.

Cleaning the Pole Saw

Use only mild soap and a damp cloth to clean the Saw. Never let any liquid get inside the Motor Housing and NEVER immerse any part of the Saw Housing into a liquid.

Storing

- Always store the Saw with a full Battery Pack charge.
- Ensure that the plastic Bar Cover is in place when storing.
- Do not store the Saw near chemicals, such as fertilizers, organic or other solvents. Do not expose brake fluids, gasoline, petroleum-based products, penetrating oils, etc., to the plastic parts of the Saw. These products are often highly corrosive and may cause permanent damage, weaken, or destroy the plastic to your Saw.
- When not in use, your Pole Saw should be stored indoors in a dry and high or locked-up place, out of reach of children.
- For superior Battery Pack performance, always store the Battery Pack and Charger in a DRY environment with temperatures between 50°F (10°C) and +100°F (+37.8°C). Storing above +100 °F can cause Battery Pack leakage, rust, or degradation of the Battery Pack performance. The lower the storage temperature is within the specified range, the better. The Battery Pack will discharge more slowly at low temperatures. Charge the Battery Pack for 75 minutes, until fully charged, prior to storage and then every one to two months; and then again prior to the first seasons use. To prevent permanent damage to the Battery Pack, never store it in a discharged condition. Be sure to remove the Battery Pack from the Charger after charging. In addition, you can safely keep the Battery Pack in your tool when storing for the long term.

A WARNING

Do not store the Battery Pack near children or pets, with metal objects that could short circuit the terminals, or close to a source of heat, sparks, open flame or on the floor as it may be damp or subject to accidental flooding. In addition, never expose the Battery Pack to abnormal shaking or shocks. Regularly observe the external appearance of the Battery Pack. Never use a Battery Pack that shows cracks, changes shape, or obviously damaged.