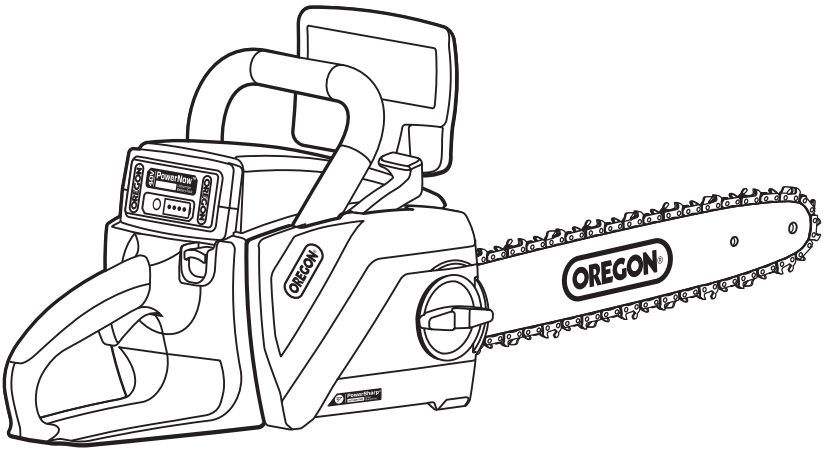
PowerNow™ | Cordless Tool System

OPERATOR'S MANUAL
CHAINSAW MODEL CS250



GUIDE DE L'OPÉRATEUR
SCIE À CHAÎNE MODÈLE CS250

MANUAL DEL OPERADOR
MOTOSIERRA MODELO CS250

AF 0911 - F/N 547361

⚠ WARNING: READ AND UNDERSTAND ALL SAFETY WARNINGS AND INSTRUCTIONS. FAILURE TO FOLLOW ALL INSTRUCTIONS LISTED IN THIS MANUAL MAY RESULT IN ELECTRIC SHOCK, FIRE, AND/OR SERIOUS PERSONAL INJURY. SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE USE.

⚠ AVERTISSEMENT : LIRE ET ASSIMILER TOUTES LES INSTRUCTIONS, CONSIGNES DE SÉCURITÉ ET AVERTISSEMENTS. L'OMISSION DE SUIVRE TOUTES LES DIRECTIVES ÉNUMÉRÉES DANS LE PRÉSENT MANUEL POURRAIT CONDUIRE À UN INCENDIE, À UN CHOC ÉLECTRIQUE OU À DES BLESSURES GRAVES. CONSERVER TOUS LES DÉCALQUES D'AVERTISSEMENT ET INSTRUCTIONS POUR UTILISATION ULTÉRIEURE.

⚠ ADVERTENCIA: LEA DETENIDAMENTE TODAS LAS INSTRUCCIONES Y ADVERTENCIAS DE SEGURIDAD. EL INCUMPLIMIENTO DE LAS INSTRUCCIONES DE ESTE MANUAL PUEDE OCASIONAR UNA DESCARGA ELÉCTRICA, UN INCENDIO O LESIONES PERSONALES GRAVES. GUARDE TODAS LAS INSTRUCCIONES Y ADVERTENCIAS PARA USARLAS EN EL FUTURO.

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* Fully charged battery voltage measured without a workload is 40 volts. Nominal voltage is 37.

INTRODUCTION

This saw is classified by CSA as a Class 2c saw. It is designed for occasional light duty use. It is not designed to fell large trees or cut large diameter logs.

GENERAL SAFETY RULES

⚠ WARNING: PRIOR TO OPERATING THE CHAINSAW, READ AND UNDERSTAND ALL SAFETY WARNINGS AND INSTRUCTIONS. FAILURE TO FOLLOW ALL INSTRUCTIONS LISTED BELOW MAY RESULT IN ELECTRIC SHOCK, FIRE, AND/OR SERIOUS PERSONAL INJURY. SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE USE.

GENERAL SAFETY RULES – WORK AREA

- Keep the work area clean and well lit. Cluttered benches and dark areas invite accidents.
- Identify and avoid gas lines, electrical hazards, tripping hazards, and potential sources of body entanglement.
- Do not operate the chainsaw in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Any power tool can create sparks which may ignite the dust or fumes.
- Establish a safe zone for helpers. Helpers should never stand directly in front of or behind the operator. Helpers should always stand to the side or perpendicular to the direction of the cut.
- Keep bystanders, children, and visitors away while operating the chainsaw. Distractions can cause you to lose control.

GENERAL SAFETY RULES – ELECTRICAL SAFETY

- Charge the battery pack only with the Blount® manufactured charger specified for the battery pack. A charger that may be suitable for one type of battery may create a risk of fire when used with another battery.
- When the battery pack is not in use, keep it away from metal objects like paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminal may cause sparks, burns, or a fire.
- Use only battery packs specifically designed for this chainsaw. Use of any other batteries may create a risk of fire.
- Do not disassemble the chainsaw, charger, or battery pack or attempt to repair these products. Doing so could result in electrical shock.

GENERAL SAFETY RULES – PERSONAL SAFETY

- Stay alert, watch what you are doing and use common sense when operating the chainsaw. Do not use the chainsaw while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the chainsaw may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection. Protective equipment such as a dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries. Never wear shorts when operating the chainsaw. Always wear long pants or chaps.
- Dress properly. Do not wear loose clothing or jewelry. Keep hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- Prevent unintentional starting. Make sure the trigger switch is in the off position and the trigger lock-out is not pressed before connecting to power source and/or battery pack, picking up, or carrying the tool. Carrying the chainsaw with finger on the trigger switch invites accidents.
- The work piece, bar, and chain can be hot after cutting. Wear gloves to avoid burns.
- Remove any adjusting tool before operating the chainsaw. A tool left attached to or near a rotating part of the chainsaw may result in personal injury.
- Use two hands when operating the chainsaw.
- Do not overreach (Fig. 1). Keep proper footing and balance at all times. This enables better control of the chainsaw in unexpected situations.

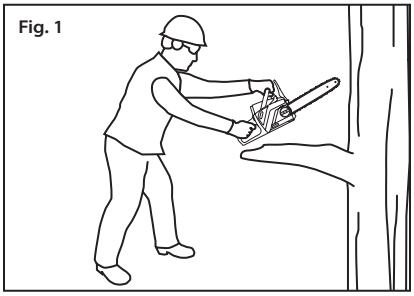


Fig. 1

- Use proper auxiliary equipment and ensure that it is not damaged, of adequate strength, and securely placed. Use auxiliary equipment only for the purpose for which it is intended.
- Prolonged use of power tools has been reported to cause vascular, muscular, or neurological disorders. To reduce the risk of injury, follow these instructions:
  - Wears gloves and keep hands and body warm.
  - Maintain a firm grip on the chainsaw, but do not use prolonged, excessive pressure.
  - Take frequent breaks.

GENERAL SAFETY RULES – POWER TOOL USE AND CARE

- Do not force the chainsaw. Use light pressure when cutting.
- Use the chainsaw only for the purpose it was intended.
- Do not use the chainsaw if the trigger switch does not turn it on and off. Any power tool that cannot be controlled with the trigger switch is dangerous and must be repaired.
- Disconnect the battery pack from

the chainsaw before making any adjustments, changing accessories, or storing or transporting the chainsaw. Such preventative safety measures reduce the risk of starting the chainsaw accidently.

- Do not allow persons unfamiliar with the chainsaw or these instructions to operate the chainsaw. Chainsaws are dangerous in the hands of untrained users.
- Maintain the chainsaw. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the chainsaw's operation. If damaged, have the chainsaw repaired before use. Many accidents are caused by poorly maintained power tools.
- Keep the saw chain sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control. See Sharpening with PowerSharp® in this manual.
- Use the chainsaw and accessories in accordance with these instructions, taking into account the working conditions and the work to be performed. Using any power tool for operations different from those intended could result in a hazardous situation.
- To reduce the risk of electric shock, never use any power tool in the rain or extremely wet conditions.

GENERAL SAFETY RULES – SERVICE

Other than the wear parts identified in this manual, the chainsaw has no user serviceable parts. Have the chainsaw serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the chainsaw is maintained.

TRANSPORTING AND STORAGE

STORING THE SAW

- Remove the battery pack and thoroughly clean the saw (see Maintenance and Cleaning in this manual). Install the blade cover prior to storing.
- Store in a dry place out of reach of children or pets.
- It is normal for a small amount of oil to seep from the bar when the chainsaw is not in use. To protect against seepage, install the blade cover and place an absorbent pad under the guide bar.

STORING THE BATTERY PACK

- Remove the battery pack from the chainsaw or charger.
- Store in a cool, dry place out of reach of children and animals.
- To maximize performance, never store battery packs in a completely discharged condition.
- Store with a charge of about 40–50% (two green lights on the charge level indicator) in temperatures above -4°F (-20°C) but below 86°F (30°C).

STORING THE CHARGER

- Remove the battery pack and disconnect the charger cord from the power source.
- Store in a dry place out of reach of children and animals.

TRANSPORTING THE CHAINSAW

Remove the battery pack from the saw and install the blade cover. Clean the saw thoroughly and if desired, drain the bar and chain oil to reduce seepage.

BATTERY PACK DISPOSAL

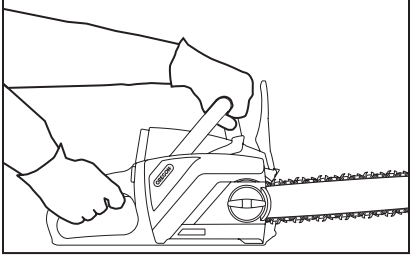
Do not dispose of battery pack in household garbage or incinerate. Local waste management and recycling agencies have information on proper recycling or disposal instructions. Battery packs can be collected in the United States or Canada through Rechargeable Battery Recycling Corporation. OREGON® has already paid the costs involved to recycle battery packs. Return end of life battery packs to participating retailer or recycling center. Return locations and more information can be found at www.call2recycle.org or 1-800-8BATTERY.

CHAINSAW SAFETY RULES

- Follow the instructions in this manual for starting the chainsaw and control the chainsaw with a firm grip on both handles when it is in operation.
- Wear safety glasses and hearing protection. Further protective equipment for head, hands, legs and feet is recommended. Adequate protective clothing will reduce personal injury by flying debris or accidental contact with the saw chain.
- Avoid unintentional contact with the stationary saw chain or guide bar rails. These can be very sharp. Always wear gloves and long pants or chaps when handling the chainsaw, saw chain, or guide bar.
- Never operate a chainsaw that is damaged or improperly adjusted or that is not completely and securely assembled. Be sure that the saw chain stops moving when the trigger switch is released.
- Inspect the work piece for nails, wire, or other foreign objects prior to cutting.
- Keep handles dry, clean, and free of oil.
- Plan the work, ensuring an obstacle-free work area and, in the case of felling, at least one escape path from the falling tree.
- When felling, keep bystanders at least two tree lengths away.

• A chainsaw is intended for two-handed use (Fig. 2). Serious injury to the operator, helpers, and/or bystanders can result from one-handed operation.

Fig. 2



• When bucking, secure the work piece prior to cutting. When felling or pruning, identify and secure hazardous branches.

• Aggressive or abusive cutting or misuse of the chainsaw can cause premature bar, chain, and/or sprocket wear, as well as broken chain or bar, leading to kickback, chain throw or the ejection of material.

• Never use the guide bar as a lever. A bent guide bar can cause premature bar, chain, and/or sprocket wear, as well as broken chain or bar, leading to kickback, chain throw or the ejection of material.

• Use extreme caution when cutting small brush and saplings because slender material can catch the saw chain and be whipped toward you or can cause the chain to be thrown from the guide bar.

• Cut only one work piece at a time.

KICKBACK

⚠ WARNING: KICKBACK IS AN EXTREMELY FAST, BACKWARD AND/OR UPWARD MOTION OF THE CHAINSAW OCCURRING WHEN THE SAW CHAIN NEAR THE NOSE OR TOP AREA OF THE GUIDE BAR CONTACTS ANY OBJECT, OR WHEN THE WOOD CLOSES IN AND PINCHES THE GUIDE BAR.

• All saw chain can kick back.

• Kickback can lead to dangerous loss of control of the chainsaw which can result in serious personal injury to saw operator or to bystanders.

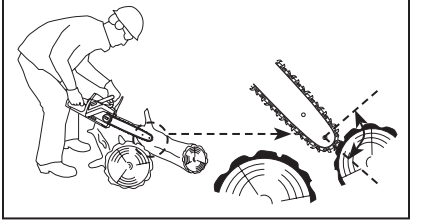
• Avoid contact of the upper quadrant of the guide bar nose with any object.

KICKBACK SAFETY DEVICES ON THIS SAW

CHAIN BRAKE

The chainsaw comes equipped with a chain brake, which stops both the motor and the motion of the chain when kickback occurs (Fig. 3). The chain brake can be activated by the forward motion of the hand guard as the saw rotates backward during kickback; it can also be activated by the inertial forces generated during rapid pushback.

Fig. 3



⚠ DANGER: NEVER MODIFY OR ATTEMPT TO DISABLE THE CHAIN BRAKE.

Make sure the chain brake is working properly before using the chainsaw. The hand guard should move back and forth easily.

To test the operation of the chain brake, perform the following steps:

- Disengage the chain brake by pulling the hand guard towards the front handle.
- Start the saw.
- Push the hand guard towards the front of the saw.

A properly functioning hand brake will stop the movement of the chain immediately. If the chain brake is not working properly, do not use the chainsaw until it has been repaired by a qualified service representative.

CHAIN

The saw chain in this package is low-kickback saw chain. It met the reduced kickback requirements of ANSI B175.1 when tested on a representative sample of chainsaws. Replace only with genuine PowerSharp® saw chain.

BAR

This saw comes equipped with a guide bar that has a small radius nose. Small radius noses generally have less potential for kickback.

When replacing the bar, be sure to order the bar listed in this manual.

BATTERY SAFETY

⚠ DANGER: FAILURE TO FOLLOW THESE SAFETY RULES CAN CAUSE THE BATTERY PACK TO LEAK HAZARDOUS CHEMICALS, OVERHEAT, EMIT SMOKE, BURST, FLARE, EXPLODE, AND/OR IGNITE.

- Do not disassemble or modify the battery pack. The battery pack is equipped with built-in safety and protection features which may be inadvertently disabled.
- Do not connect the positive (+) and negative (-) terminals with metal objects. Do not transport or store the battery pack together with metal objects such as coins or screws. Short-circuiting may occur or the metal object in contact with the battery pack can generate heat.
- Do not discard the battery pack into fire or otherwise expose to excessive heat. Such conditions can cause the insulation to melt or safety features to be damaged.
- Do not use, charge, or store the battery pack near a heat source as fire or a heater that generate temperatures above 176°F (80°C). Overheating and/or internal short circuiting may occur.
- Do not immerse the battery pack in water or expose it to extremely wet conditions. Moisture can cause the protective features to be damaged, resulting in charging with extremely high current and voltage, which may lead to abnormal chemical reactions.
- To recharge the battery pack, use the battery charger specifically designed for the battery pack and observe the specified charger safety precautions detailed in this manual. Failure to do so may result in extremely high current and voltage, which may lead to abnormal chemical reactions.

- Do not strike, pierce, or throw battery pack.
- Do not used an apparently damaged or deformed battery pack.
- If the recharging operation fails to complete even after the specified recharging time has elapsed, immediately stop further recharging.
- If the battery pack gives off an odor, generates heat, becomes, discolored or deformed, or in any way appears abnormal during use, recharging, or storage, immediately remove it from the equipment or charger.

⚠ CAUTION: DO NOT DISPOSE OF THE BATTERY PACK IN THE TRASH OR FIRE. LITHIUM ION BATTERY PACKS SHOULD BE RECYCLED BY LOCAL AUTHORIZED RECYCLER.

⚠ CAUTION: DO NOT EXPOSE BATTERY PACK TO EXCESSIVE HEAT, SUCH AS THE INTERIOR OF A VEHICLE IN HOT WEATHER. SUCH EXPOSURE CAN CAUSE A LOSS IN PERFORMANCE AND/OR ITS SERVICE LIFE SHORTENED. DO NOT ATTEMPT TO RE-CHARGE CHARGE A NON-RECHARGEABLE BATTERY PACK.

⚠ CAUTION: THIS APPLIANCE IS NOT INTENDED FOR USE BY PERSONS (INCLUDING CHILDREN) WITH REDUCED PHYSICAL, SENSORY OR MENTAL CAPABILITIES, OR LACK OF KNOWLEDGE, UNLESS THEY HAVE BEEN GIVEN SUPERVISION OR INSTRUCTION BY A PERSON RESPONSIBLE FOR THEIR SAFETY. CHILDREN SHOULD BE SUPERVISED TO ENSURE THAT THEY DO NOT PLAY WITH THE APPLIANCES.

CHARGER SAFETY

IMPORTANT SAFETY INSTRUCTIONS — SAVE THESE INSTRUCTIONS

⚠ CAUTION: RISK OF INJURY FROM ELECTRIC SHOCK AND FIRE. CHARGE ONLY WITH LITHIUM ION BATTERIES INTENDED FOR THIS APPLIANCE. THIS CHARGER IS INTENDED FOR DRY LOCATION USE ONLY. BEFORE USING THE CHARGER, READ AND UNDERSTAND ALL INSTRUCTIONS AND SAFETY MARKINGS IN THIS MANUAL, ON THE CHARGER AND ON THE BATTERY PACKS.

⚠ CAUTION: USE THIS CHARGER ONLY WITH THE SUPPLIED POWER CORD, MAKING SURE THAT THE INPUT PLUG CORRECTLY MATES TO THE OUTPUT RECEPTACLE.

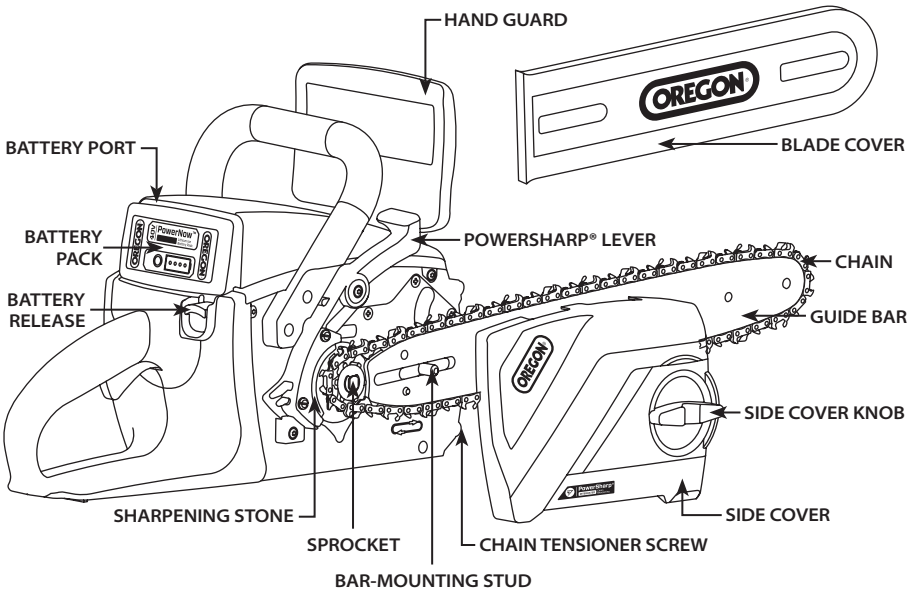
- Do not expose the charger to rain.
- Disconnect the charger from the power supply when not in use.
- Do not disassemble the charger. THERE ARE NO USER SERVICEABLE PARTS INSIDE. Take it to an approved service location when repair is required.
- Do not use the charger if it has been dropped, received a sharp impact, or otherwise damaged in any way. Replace or take the charger to an approved service location immediately.
- To reduce the risk of injury, charge only the lithium ion batteries specified for the charger.
- Do not operate the charger with a damaged cord or plug. Replace damaged power cord with the power cord part number located in this operators manuals SPECIFICATIONS.
- Locate the cord so that it will not be tripped over, stepped on, or otherwise subjected to potential damage.
- Never unplug the charger by pulling on the cord; always pull by the plug.

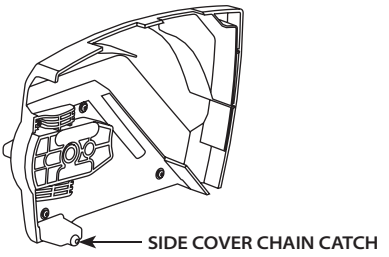
SYMBOLS AND LABELS

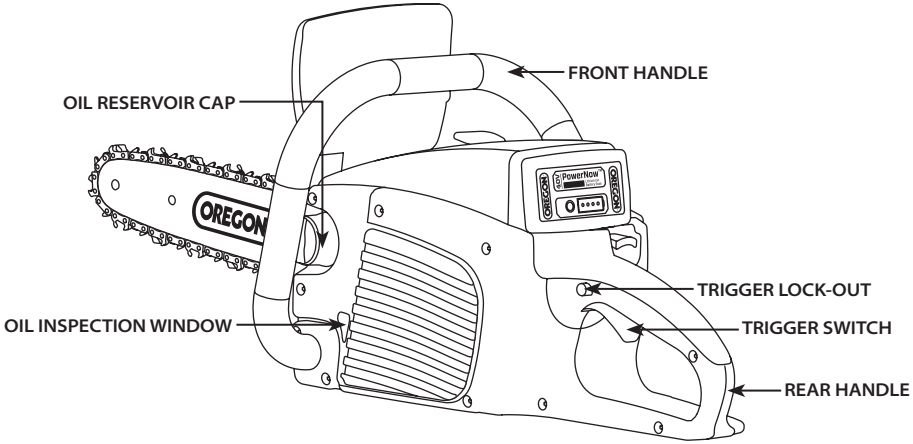
SYMBOL	NAME	EXPLANATION
V	VOLTS	VOLTAGE
A	AMPERES	CURRENT
W	WATT	POWER
~	ALTERNATING CURRENT	TYPE OF CURRENT
⎓	DIRECT CURRENT	TYPE OF CURRENT
	CLASS II CONSTRUCTION	DESIGNATED DOUBLE INSULATED CONSTRUCTION TOOLS
	SAFETY ALERT SYMBOL	INDICATES THAT THE TEXT THAT FOLLOWS EXPLAINS A DANGER, WARNING, OR CAUTION.
	READ OPERATOR'S MANUAL	THE OPERATOR'S MANUAL CONTAINS IMPORTANT SAFETY AND OPERATING INFORMATION. TO AVOID INJURY AND ENSURE THE SAFE AND EFFECTIVE OPERATION OF THE SAW, READ THE ENTIRE MANUAL CAREFULLY.
	WEAR EYE, HEARING, HEAD, AND HAND PROTECTION	WEAR EYE PROTECTION WHICH COMPLIES WITH ANSI Z87.1; WEAR HEARING, HEAD, AND HAND PROTECTION WHEN OPERATING THE CHAINSAW.
	BEWARE OF KICKBACK	DANGER! KICKBACK CAN CAUSE SEVERE INJURIES.
	BAR NOSE CONTACT	AVOID BAR NOSE CONTACT.
	CHAIN KICKBACK ANGLE	USE LOW KICKBACK CHAIN.
	TWO-HANDED HOLD	HOLD SAW WITH TWO HANDS.
	ONE-HANDED HOLD	DO NOT HOLD SAW WITH ONE HAND.
	DO NOT EXPOSE TO RAIN	DO NOT OPERATE THE CHAINSAW IN EXTREMELY WET ENVIRONMENTS.
	DO NOT INCINERATE	DO NOT DISPOSE IN FLAMES.
	DO NOT DISPOSE	DO NOT THROW IN THE TRASH. TAKE TO AN AUTHORIZED RECYCLER.

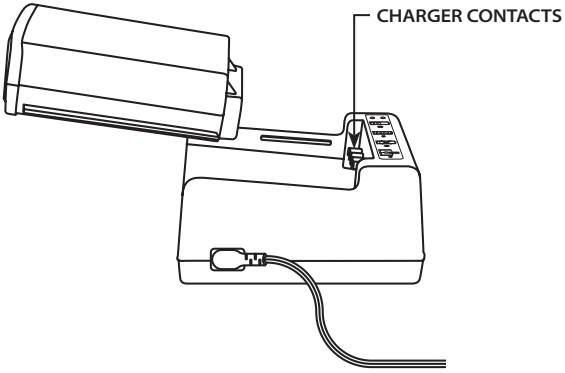
PRODUCT IDENTIFICATION

KNOW THE CHAINSAW






FRONT HANDLE
OIL RESERVOIR CAP
OREGON
PowerNow
TRIGGER LOCK-OUT
OIL INSPECTION WINDOW
TRIGGER SWITCH
REAR HANDLE


CHARGER CONTACTS

SPECIFICATIONS AND COMPONENTS

REPLACEMENT COMPONENTS		
GUIDE BAR	P/N 548182 14 inch (35 cm)	
SAW CHAIN AND STONE, POWERSHARP®	P/N 548179 14 inch (35 cm)	
SAW CHAIN, 91PX (NON POWERSHARP®)	P/N 550685 14 inch (35 cm) IMPORTANT: ONLY POWERSHARP® CHAIN CAN BE SHARPENED WITH THE POWERSHARP® SYSTEM	
BAR/CHAIN OIL	P/N 546619 1 quart (946 ml)	
BATTERY PACK B500S B400E B500E	 P/N 545937 P/N 545938 P/N 545939	
CHARGER C600	P/N 540580	
CHARGER MODEL: C600		
INPUT	100-240V~ 50-60Hz 60W	
INPUT (U.S. AND CANADA ONLY)	120V~ 60Hz 60W	
OUTPUT	41.5V⎓ 1.25A	
POWER CORD	US/CAN P/N: 546636 EU P/N: 547383 UK P/N: 547384	
BATTERY PACK		
TYPE	LITHIUM ION	
VOLTAGE, NOMINAL	+37 VDC	
OPERATING TEMPERATURES	32°F TO 104°F (0°C TO 40°C)	
MODEL	CAPACITY, NOMINAL	CHARGE TIME (APPROX.)
B500S	1.25 Ah / 47 Wh	60 MINUTES
B400E	2.40 Ah / 89 Wh	120 MINUTES
B500E	2.50 Ah / 93 Wh	120 MINUTES
SAW		
OIL TANK CAPACITY	5.9 oz (175 ml)	
BAR OIL	OREGON®	
DRY WEIGHT WITH B500S	11.0 lb (5.0 kg)	
DRY WEIGHT WITH B400E	12.0 lb (5.4 kg)	
DRY WEIGHT WITH B500E	12.0 lb (5.4 kg)	
SOUND PRESSURE LEVEL NEAR THE EAR	84.5 dB	
SOUND POWER LEVEL	104.5 dB	
UNCERTAINTY, K	2.5 dB	
VIBRATION	2.87 m/s^2	
UNCERTAINTY, K	1.5 m/s^2	

CHAINSAW NAMES AND TERMS

Automatic Oiler: A system that automatically lubricates the guide bar and saw chain.

Bucking: The process of cross-cutting a felled tree or log into lengths.

Bucking Spikes: The pointed tooth or teeth for use when felling or bucking to pivot the saw and maintain position while sawing.

Chain Brake: A device used to stop the saw chain.

Chainsaw Powerhead: A chainsaw without the saw chain or guide bar.

Drive Sprocket: The toothed part that drives the saw chain.

Felling: The process of cutting down a tree.

Felling Back Cut: The final cut in a tree felling operation made on the opposite side of the tree from the notching undercut.

Front Handle: The support handle located at or toward the front of the chainsaw.

Hand Guard: A structural barrier between the front handle of a chainsaw and the guide bar, typically located closest to the hand position of the front handle and sometimes employed as an activating mechanism for the chain brake.

Guide Bar: A railed structure that supports and guides the saw chain.

Kickback: The backward or upward motion, or both, of the guide bar occurring when the saw chain near the nose of the top area of the guide bar contacts any object such as a log or branch, or when the wood closes in and pinches the saw chain in the cut.

Low-Kickback Chain: A chain that complies with the kickback performance requirements of ANSI B175.1 when tested on a representative sample of chainsaws.

Normal Cutting Position: Those positions assumed in performing the bucking and felling cuts.

Notching Undercut: A notch cut in a tree that directs the tree's fall.

Rear Handle: The support handle located at or toward the rear of the saw.

Reduced Kickback Guide Bar: A guide bar which has been demonstrated to reduce kickback significantly.

Replacement Saw Chain: A chain that complies with the kickback performance requirements of ANSI B175.1 when tested with specific chainsaws. It may not meet the ANSI performance requirements when used with other saws.

Saw Chain: A loop of chain having cutting teeth, that cut the wood, and that is driven by the powerhead and is supported by the guide bar.

Trigger Lock-Out: A movable stop that prevents the unintentional operation of the trigger switch until manually actuated.

Trigger Switch: A device that when operated will complete or interrupt an electrical power circuit to the motor of the chainsaw.

ASSEMBLY

UNPACKING

Some chainsaw kits come completely assembled. If the chainsaw has been packaged without the saw chain and guide bar installed, see Replacing the Bar and Chain in this manual for installation instructions. After removing the chainsaw from its box, inspect it carefully to make sure no damage has occurred during shipping.

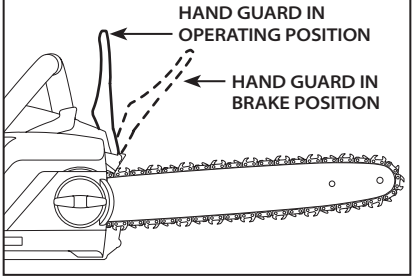
Some chainsaw kits come with metal bucking spikes as an accessory. Depending on user technique, the metal bucking spikes may increase the stability of the chainsaw during felling. The metal bucking spikes may reduce the cut quality during pruning, again depending on user technique.

Inspect the chainsaw for missing parts. If any parts are damaged or missing, contact OREGON® PowerNow™ to obtain replacement parts.

⚠ DANGER: DO NOT ATTEMPT TO OPERATE THE CHAINSAW IF ANY PART IS DAMAGED OR MISSING.

After unpacking the chainsaw, check the position of the hand guard. The chainsaw will not run with the chain brake engaged. Pull the hand guard back towards the front handle before operation (Fig. 4).

Fig. 4



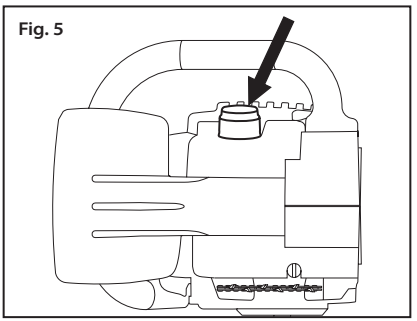
FILLING OIL RESERVOIR

Bar and chain oil is required to properly lubricate the bar and chain. Use OREGON® bar and chain oil for best results. It is specially designed to provide low friction and faster cuts. NEVER use oil or other lubricants not specifically designed for use on the bar and chain. This can lead to a clogged oil system, which may cause premature wear of the bar and chain.

Place the chainsaw on its side on a firm, flat surface, so that the oil cap is on top (Fig. 5). After cleaning any debris from the cap area, remove the cap and carefully pour the bar and chain oil into the reservoir. Fill to the bottom of the fill neck. Replace the cap, place the saw upright, and view the level through the oil inspection window. Oil should fill the window.

⚠ CAUTION: CHECK OIL LEVEL FREQUENTLY AND FILL AS NEEDED. NEVER OPERATE THE CHAINSAW IF OIL IS NOT VISIBLE.

Fig. 5



OPERATING THE SAW

BATTERY PACK AND CHARGER

BATTERY PACK LED CHARGE-LEVEL INDICATOR

The lithium ion battery pack is equipped with an LED charge-level indicator. To test the charge level of the battery pack, press the indicator button on the battery pack's face (Fig. 6).

No lights: recharge.

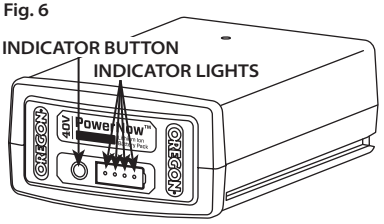
One steady green light:
less than 25% charged. CHARGE BATTERY PACK BEFORE USE.

Two steady green lights:
26-50% charged.

Three steady green lights:
51-75% charged.

Four steady green lights:
76-100% charged.

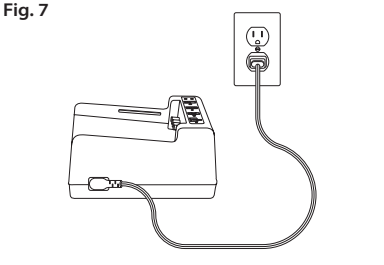
Fig. 6



CONNECTING THE CHARGER

Connect the charger cord to the charger and to the proper electrical outlet (Fig. 7).

Fig. 7



Only use the cord set that was supplied with the charger. At first use, verify that the plug type matches the receptacle.

CHARGER LED CHARGE-STATE INDICATOR

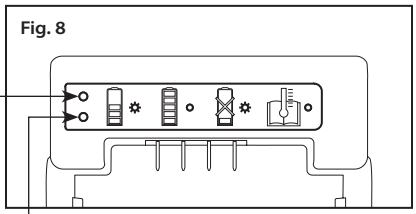
The battery charger is equipped with an LED charge-state indicator that alerts you to the state of charging, as well as conditions that may delay or prevent charging (Fig. 8).

Note: Until a battery pack is inserted, no lights will be visible.

Blinking orange light: a fault condition exists. There are several potential causes. See Troubleshooting in this manual.

Steady orange light: the battery pack temperature is beyond the acceptable range (32°F/0°C to 104°F/40°C). ALLOW THE BATTERY PACK TO REACH THE ACCEPTABLE TEMPERATURE RANGE BEFORE CHARGING. The pack may be left on the charger AS THE TEMPERATURE ADJUSTS. Charging will begin when the proper temperature is reached.

Fig. 8



Blinking green light: battery pack is charging.

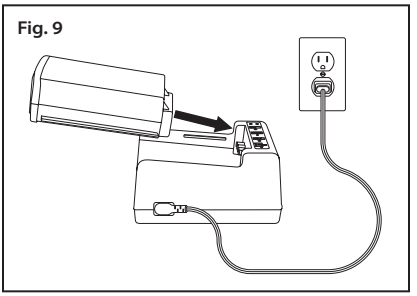
Steady green light: battery pack READY FOR USE.

CHARGING THE BATTERY PACK

⚠ WARNING: FAILURE TO FOLLOW PROPER CHARGING PROCEDURES MAY CAUSE EXCESSIVE VOLTAGE, EXCESSIVE CURRENT FLOW, LOSS OF CONTROL DURING CHARGING, LEAKAGE OF HAZARDOUS CHEMICALS, HEAT GENERATION, BURSTING, OR FIRE.

With the charger cord connected to the charger and plugged into an electrical outlet, align the grooves in the battery with the rails on the charger and slide the battery pack onto the charger until fully seated (Fig. 9).

Fig. 9



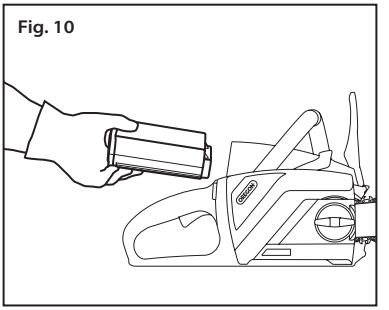
Check the charge-state indicator for charging conditions.

The battery pack should be ready for use in approximately one hour for S-series battery packs and in approximately two hours for model E-series battery packs.

INSERTING AND RELEASING THE BATTERY PACK

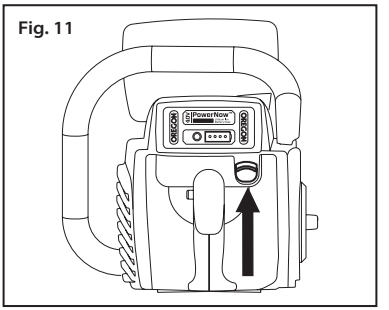
Align the groove in the battery with the rails inside the battery port. Firmly insert the battery pack into the chainsaw's battery port, pressing forward until you hear a click as it locks into place (Fig. 10).

Fig. 10



To remove the battery pack, lift up on the battery release and remove the pack (Fig. 11).

Fig. 11



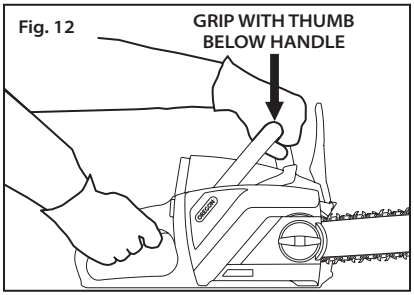
GENERAL OPERATION

⚠ WARNING: ALWAYS WEAR PROPER GLOVES AND HEARING AND EYE PROTECTION.

PROPER GRIP

With the saw on a firm, flat surface, grasp the front handle with the left hand and the rear handle with the right. Fingers should wrap over the top of the handle and the thumb below the handle (Fig. 12).

Fig. 12



PROPER STANCE

Both feet should be on solid ground, with weight evenly spread between them.

Left arm should be straight, with elbow locked. This helps to withstand the forces generated by kickback.

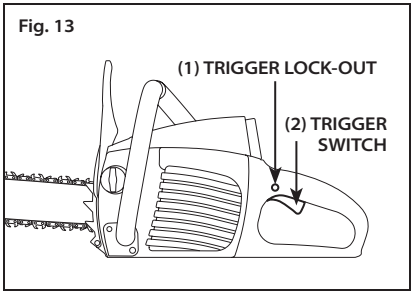
STOPPING THE SAW

To stop the chainsaw, release the trigger switch and the trigger lock-out.

STARTING THE SAW

Grasp the top and rear handles firmly. Press and hold the trigger lock-out with the thumb (1). To start the saw, squeeze the trigger switch (2) (Fig. 13). There is no need to continue to press the trigger lock-out. It will remain disengaged until the trigger is released.

Fig. 13



CUTTING

BASIC CUTTING

⚠ WARNING: ALWAYS BE SURE OF FOOTING AND HOLD THE CHAINSAW FIRMLY WITH BOTH HANDS WHILE THE MOTOR IS RUNNING.

Assume the proper cutting grip and stance in front of the wood with the saw off. Press the trigger lock-out and squeeze the trigger switch. Let the chain reach full speed before beginning the cut.

Begin cutting by lightly pressing the guide bar against the wood. Use only light pressure, letting the saw do the work.

Maintain a steady speed throughout the cut, releasing pressure just before the end of the cut.

PRUNING

When pruning, make sure all bystanders or helpers are a safe distance from falling branches and are not directly in front of or behind the saw operator. Secure any branches that might pose a hazard. Use the proper auxiliary equipment. Maintain good footing, hold the saw firmly with both hands, and do not overreach.

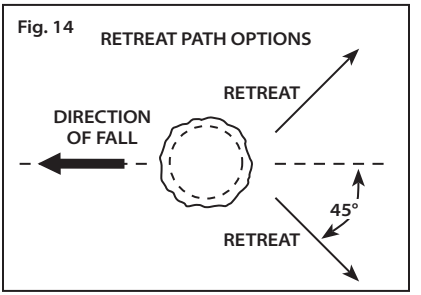
With the saw at full speed, bring the bottom of the guide bar into contact with the branch to be cut. Continue cutting using light pressure. For larger branches, first make a shallow undercut on the bottom of the branch and then finish the cut from the top. Cutting a large branch completely from the top could cause splintering. A complete cut from the bottom can cause the branch to pinch the bar.

FELLING A TREE

When bucking and felling operations are being performed by two or more persons, at the same time, the felling operation should be separated from the bucking operation by a distance of at least twice the height of the tree being felled. Trees should not be felled in a manner that would endanger any person, strike any utility line or cause any property damage. If the tree does make contact with any utility line, the utility company should be notified immediately.

The chainsaw operator should keep on the uphill side of the terrain as the tree is likely to roll or slide downhill after it is felled. A retreat path should be planned and cleared as necessary before cuts are started. The retreat path should extend back and diagonally to the rear of the expected line of fall (Fig. 14).

Fig. 14

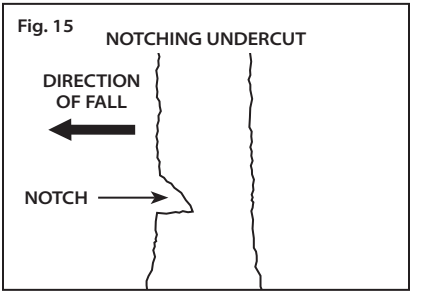


Before felling is started, consider the natural lean of the tree, the location of larger branches and the wind direction to judge which way the tree will fall. Remove dirt, stones, loose bark, nails, staples, and wire from the tree where felling cuts are to be made.

1) NOTCHING UNDERCUT

   Make the notch 1/3 the diameter of the tree, perpendicular to the direction of fall. Make the lower horizontal notching cut first. This will help to avoid pinching of either the saw chain or the guide bar when the second notch is being made (Fig. 15).

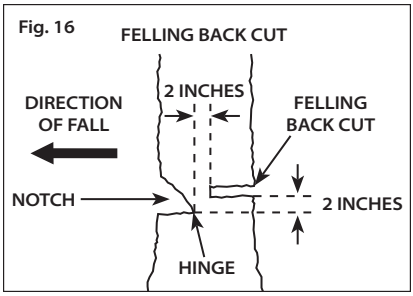
Fig. 15



2) FELLING BACK CUT

Make the felling back cut at least 2 inches (51 mm) higher than the horizontal notching cut (Fig. 16). Keep the felling back cut parallel to the horizontal notching cut. Make the felling back cut so enough wood is left to act as a hinge. The hinge wood keeps the tree from twisting and falling in the wrong direction. Do not cut through the hinge.

Fig. 16



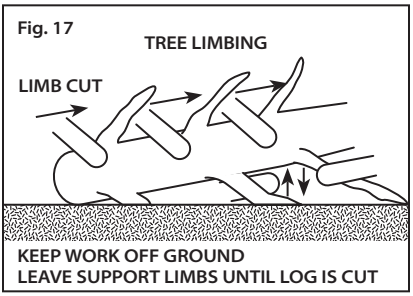
As the felling cut gets close to the hinge the tree should begin to fall. If there is any chance that the tree may not fall in the desired direction or it may rock back and bind the saw chain, stop cutting before the felling back cut is complete and use wedges of wood, plastic or aluminum to open the cut and drop the tree along the desired line of fall.

When the tree begins to fall, remove the chainsaw from the cut, stop the motor, put the chainsaw down, then use the retreat path planned. Be alert for overhead limbs falling and watch footing.

3) LIMBING A TREE

Limbing is removing the branches from a fallen tree. When limbing, leave larger lower limbs to support the log off the ground. Remove the small limbs in one cut. Branches under tension should be cut from the bottom up to avoid binding the chainsaw (Fig. 17).

Fig. 17

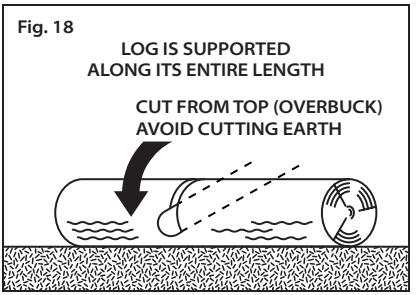


4) BUCKING A LOG

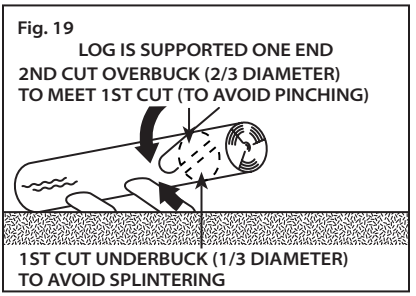
Bucking is cutting a log into lengths. It is important to make sure footing is firm and weight is evenly distributed on both feet. When possible, the log should be raised and supported by the use of limbs, logs or chocks.

FOLLOW THESE SIMPLE DIRECTIONS FOR EASY CUTTING:

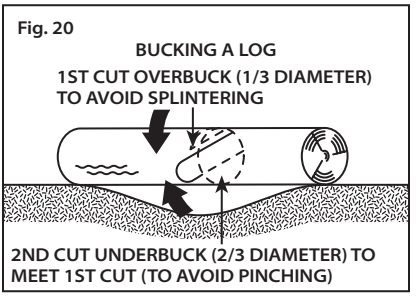
When the log is supported along its entire length, it is cut from the top (overbuck) (Fig. 18).



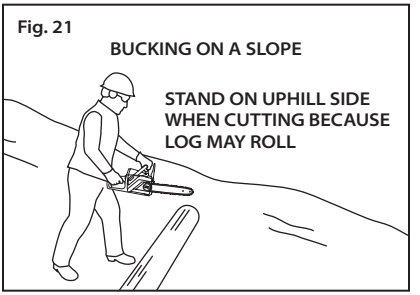
When the log is supported on one end, cut 1/3 the diameter from the underside (underbuck). Then make the finished cut by overbucking to meet the first cut (Fig. 19).



When the log is supported on both ends, cut 1/3 of that diameter from the top overbuck. Then make the finished cut by underbucking the lower 2/3 to meet the first cut (Fig. 20).



When bucking on a slope always stand on the uphill side of the log (Fig. 21).



To maintain complete control when cutting through, release the cutting pressure near the end of the cut without relaxing the grip on the chainsaw handles. Don't let the chain contact the ground. After completing the cut, wait for the saw chain to stop before you move the chainsaw. Always stop the motor before moving from tree to tree.

SHARPENING WITH POWERSHARP®

INTRODUCTION TO POWERSHARP®

This chainsaw is equipped with the PowerSharp® integrated sharpening system, a fast and easy way to sharpen chain on the saw. It is time to sharpen the saw chain when cuts take longer or the wood chips become smaller, in extreme cases turning to saw dust.

OPERATION

IMPORTANT: THE POWERSHARP® INTEGRATED SHARPENING SYSTEM IS FOR USE ONLY WITH POWERSHARP® CHAIN. NEVER ATTEMPT TO SHARPEN OTHER CHAIN WITH THE INTEGRATED SHARPENER. DAMAGE TO THE CHAIN AND SHARPENER WILL OCCUR.

IMPORTANT: POWERSHARP® CHAIN USES UNIQUE TOP-SHARPENING CUTTERS AND CAN ONLY BE SHARPENED WITH A GENUINE POWERSHARP® SHARPENER.

- With the saw at full speed, lightly lift the PowerSharp® lever for 3-5 seconds (Fig. 22). Sparks will be visible when the cutters are in contact with the sharpening stone.

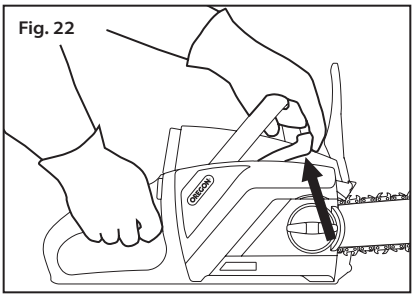


Fig. 22

- Make a test cut to determine if the chain has been sufficiently sharpened. If not, repeat the sharpening procedure until the chain is sufficiently sharp.

⚠ CAUTION: SHARPENING WITH THE POWERSHARP® SYSTEM PRODUCES LOW ENERGY SPARKS.

⚠ WARNING: POWERSHARP® SHOULD NOT BE USED IN THE PRESENCE OF EXPOSED, EXTREMELY FLAMMABLE MATERIALS SUCH AS GASOLINE AND ACETYLENE.

IMPORTANT: DO NOT APPLY TOO MUCH FORCE WHEN SHARPENING. EXCESSIVE FORCE CAN REDUCE THE PERFORMANCE OF THE SHARPENING STONE.

IMPORTANT: IT IS NORMAL TO SEE A SMALL AMOUNT OF SPARKS AND SMOKE DURING SHARPENING AS THE CUTTERS CONTACT THE STONE AND FRICTION HEATS THE CHAIN.

WHEN TO REPLACE THE SHARPENING STONE

The sharpening stone is designed to wear at the same rate as the chain. Always replace the stone when replacing the chain, even if appears to have more life. See Replacing the Sharpening Stone in this manual.

MAINTENANCE AND CLEANING

⚠ WARNING: INSPECT THE CHAINSAW. REGULAR INSPECTION IS THE FIRST STEP TO PROPER MAINTENANCE. BY FOLLOWING THE GUIDELINES BELOW, YOU CAN MAXIMIZE SAFETY AND SATISFACTION. SHOULD YOU IDENTIFY ANY DAMAGED OR EXCESSIVELY WORN PARTS, REPLACE THEM IMMEDIATELY.

⚠ WARNING: REMOVE THE BATTERY PACK FROM THE CHAINSAW BEFORE INSPECTING, CLEANING, OR PERFORMING MAINTENANCE. A BATTERY OPERATED TOOL WITH THE BATTERY PACK INSERTED IS ALWAYS ON AND CAN START ACCIDENTLY.

BEFORE EACH USE

- Handles: Front and rear handles should not have cracks or other damage. They should be clean and dry.
- Hand Guard: The hand guard should be free of damage and able to move easily back and forth.
- Guide Bar: The guide bar should be straight and free of chips, cracks, or excessive wear.
- Saw Chain: The chain should be properly tensioned, and all components free of cracks, chips, or excessive wear.
- Side Cover: The side cover should be free of cracks or other damage. It should fit tightly to the saw body with no warping. Make sure the chain catch is free of cracks.
- Battery Pack: The battery pack should be clean, dry, with no signs of puncture, impact, or other damage. The contacts should be clean, dry and free of debris.
- Battery Port: The battery port and contacts should be clean, dry, and free of debris.
- Chain Brake: Test the chain brake to make sure it is functioning properly.
- Oil Level: Oil should fill the inspection window. If not, fill the oil reservoir before use.
- Motor Cover: Check for cracks in the cover and debris in the air intake vents.

PERIODICALLY

- Drive Sprocket: Look for deep grooves, broken teeth, or burrs.
- Tensioning Screw: Inspect the head and body of the tensioning screw for excessive wear, stripped or crossed threads, or other damage.
- Bar-Mounting Area: Make sure the bar-mounting stud is not bent, stripped, or cross-threaded and that the bar pad and alignment flange are free of debris and intact.
- Charger: The charger should be clean, dry, and free of punctures or other damage. The battery tray and contacts should be free of debris.

REPLACING THE BAR AND CHAIN

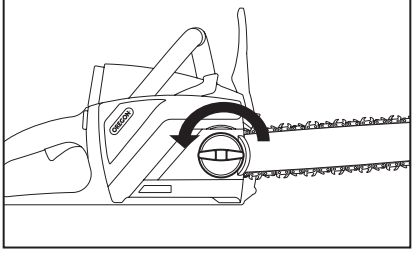
⚠ CAUTION: ONLY POWERSHARP® SAW CHAIN CAN BE SHARPENED BY THE POWERSHARP® LEVER ON THE CHAINSAW. REMOVE THE SHARPENING STONE WHEN USING SAW CHAIN OTHER THAN POWERSHARP®. FAILURE TO DO SO MAY RESULT IN DAMAGE TO THE SAW CHAIN, SHARPENING SYSTEM, AND/OR CHAINSAW.

Wear gloves. With the chainsaw off and cool and the battery pack removed, remove the side cover by loosening the side cover knob (Fig. 23). Make sure the bar pad, sprocket, and tensioning screw are free of debris.

NOTE: This is a good time to inspect the drive sprocket and tensioning screw for excessive wear or damage.

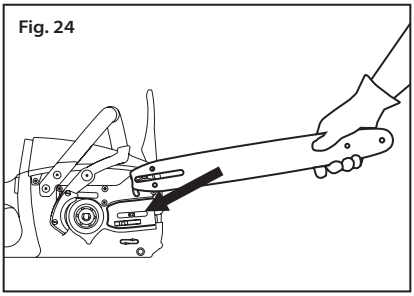
Install the new bar and chain as follows:

Fig. 23



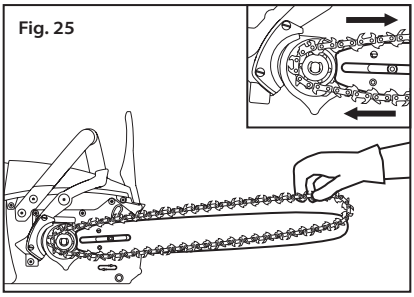
- Adjust the tensioning pin as far back towards the rear of the saw as it will go. Place the guide bar on the mounting pad, by sliding the bar slot over the alignment flange (the long, raised portion of the bar pad holding the mounting stud) (Fig. 24), making sure the bar adjusting pin is inserted in the bottom hole in the tail of the bar.

Fig. 24



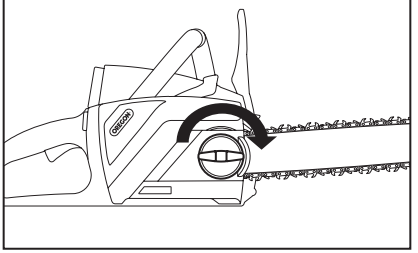
- Loop the new chain onto the drive sprocket with teeth cutting edges facing away from the drive sprocket along top edge of the guide bar.
- Feed the chain into the groove of the bar and slide the bar away from the motor to remove slack from the chain (Fig. 25). Adjust the position of the bar adjusting pin until it engages the hole in the bar.

Fig. 25



• Reattach the side cover, making sure the chain catch is properly seated in its hole. Lightly tighten the side cover knob (Fig. 26).

Fig. 26



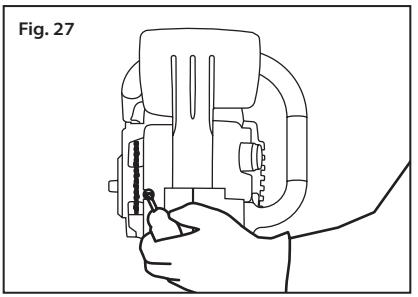
IMPORTANT: THE SAW CHAIN MUST BE PROPERLY TENSIONED BEFORE USING. SEE TENSIONING INSTRUCTIONS BELOW.

***To even bar wear and maximize bar life, invert the bar occasionally.**

TENSIONING INSTRUCTIONS

• With the side cover knob only slightly tightened, hold up the nose of the bar and tighten the bar adjusting screw (Fig. 27).

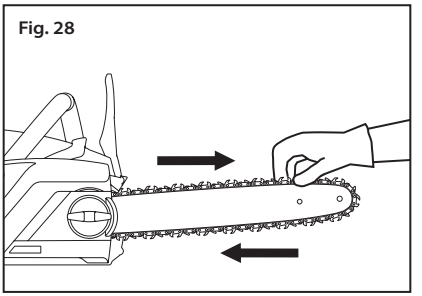
Fig. 27



• Tighten the side cover knob securely.

Chain tension is correct when, with some effort, with a gloved hand you are able to pull the chain smoothly around the bar. The chain should touch the underside of the bar rail (Fig. 28).

Fig. 28



During its early life use, run the chainsaw, not cutting for a minute or two, making sure the chain is getting a good supply of oil. Stop the motor and check the chain tension. If it has loosened, readjust.

After a short period of use, allow the chain to cool and once again recheck the tension (remove the battery first). Watch tension carefully for the first half-hour of use and periodically throughout the life of the chain, readjusting as required when the chain and bar are cool to the touch. Never tighten chain when it is hot.

Lubricate the chain properly with OREGON® brand bar and chain oil. It has been specially formulated to maximize power and reduce friction. Make certain the chain is getting an adequate supply of oil. Oil should be thrown from the nose of the bar when the chainsaw is running, but not in the cut.

Saw chain will stretch as a result of normal use, but insufficient oil, aggressive use, or failure to perform recommended maintenance can lead to premature stretching.

REPLACING THE SHARPENING STONE

⚠ CAUTION: REPLACE POWERSHARP® SAW CHAIN AND THE SHARPENING STONE AT THE SAME TIME. FAILURE TO DO SO COULD RESULT IN DECREASED PERFORMANCE OR DAMAGE TO THE CHAIN AND/OR SHARPENING STONE.

IMPORTANT: THE POWERSHARP® INTEGRATED SHARPENING SYSTEM IS FOR USE ONLY WITH POWERSHARP® CHAIN.

With the chainsaw off and cool and the battery pack removed, remove the side cover by removing the side cover knob. Install the new sharpening stone as follows:

- Remove the two screws holding the sharpening stone. Remove the stone (Fig. 29).
- Make sure the PowerSharp® lever and surrounding area are free of debris.
- Place the new stone in place. Replace the screws and tighten snugly.
- Reinstall side cover and tighten the side cover knob.

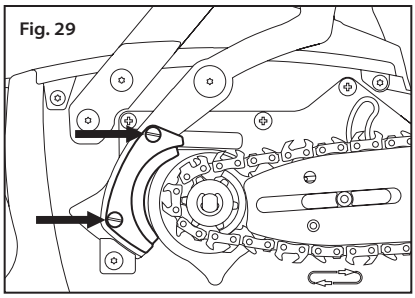


Fig. 29

BATTERY PACK MAINTENANCE

⚠ WARNING: THERE ARE NO USER SERVICEABLE PARTS INSIDE THE BATTERY PACK. DO NOT DISASSEMBLE.

Lithium ion batteries have a predetermined operating life. If the operating time shortens excessively, this means the battery is at the end of its useful life. Replace the battery pack.

CLEANING

⚠ CAUTION: WHEN CLEANING THE CHAINSAW POWER HEAD, DO NOT IMMERSE IN WATER OR OTHER LIQUIDS.

SAW

- Remove battery pack before cleaning.
- Remove wood chips and other debris from the battery port. Make sure the contacts are clean and dry.
- After use, clean debris from the chain and guide bar. Wipe power head with a clean cloth moistened with a mild soap solution. Never use harsh cleaners or solvents.
- Always clean out wood chips, saw dust, and dirt from the bar groove when replacing the saw chain.

BATTERY PACK

If the battery pack terminals are dirty, clean them with a soft, dry cloth prior to use. Dirt or oil on the contacts can cause a poor connection, resulting in loss of power or inability to function.

CHARGER

As with the battery pack, dirty terminals can cause a poor connection. Be sure the charger is unplugged. Clean terminals with a dry, clean cloth.

TROUBLESHOOTING

If the steps below do not solve the problem, please see Service Information in this manual.

SYMPTOM	POSSIBLE CAUSE	RECOMMENDED ACTIONS
Motor does not run or runs intermittently	Chain brake engaged	Before starting, make sure the hand guard is in its most rearward position (chain brake disengaged). For correct hand guard position, see "Starting The Saw" in this manual.
	Battery discharged	Check the charge-level indicator on the battery. If no green indicator lights are on, recharge.
	Trigger lock-out not pressed	Trigger lock-out must be depressed. See "Starting The Saw" in this manual.
	Battery pack not fully inserted	Clean debris from the battery port and terminals with a clean dry cloth or non-conductive brush.
	Debris in side cover	Remove battery pack, then remove side cover and clean out debris.
	Battery pack cold	Allow battery to warm above the minimum operating temperature of 10°F (-12°C).
Motor runs, but chain does not rotate	Chain not engaging drive sprocket	Reinstall the chain, making sure the drive links on the chain are fully seated on the sprocket. See "Maintenance and Cleaning" in this manual for installation instructions.
Chain brake does not engage	Debris preventing full movement of hand guard	Clean debris from external chain brake mechanism.
	Possible chain brake malfunction	Contact an approved service location immediately. ⚠ WARNING: OPERATING A CHAINSAW WITHOUT A FUNCTIONING CHAIN BRAKE COULD LEAD TO SERIOUS PERSONAL INJURY.
Chainsaw does not cut properly	Insufficient chain tension	See "Tensioning Instructions" in this manual.
	Dull chain	Sharpen according to "Sharpening with PowerSharp®" in this manual.
	Chain installed backwards	See "Replacing the Bar and Chain" in this manual.
	Worn chain	Replace both the chain and stone. They are designed to wear at the same rate.
	Dry or excessively stretched chain	Check the oil level. Refill oil reservoir if necessary. See "Assembly" in this manual. Check for a clogged oil system. A small amount of oil should be delivered to the bar.
	Chain not in bar groove	See "Replacing the Bar and Chain" in this manual.

SYMPTOM	POSSIBLE CAUSE	RECOMMENDED ACTIONS
Battery pack does not charge	Battery pack over/under temperature protection is activated	This may occur when the saw is run continuously or exposed to high ambient temperatures. Allow the battery pack to reach the appropriate temperature before charging (the overtemp indicator light on the charger will be on when an over- or under-temperature condition exists). See "Charging the Battery Pack" in this manual.
	Dirty or damaged contacts on the battery pack or charger	Inspect the contacts on the both the battery pack and charger. If necessary, clean according to the instructions in this manual. Reinsert battery pack into the charger, making sure it is fully seated.
	Battery pack is at the end of its life	All batteries have a limited life. If the battery pack is more than two years old or has been recharged frequently, it may be time to replace it. Replace only with the battery specified for the chainsaw.
	Charger faulty	Take the charger to an approved service location for a function check.
Low cut time per battery charge	Dull chain	Sharpen according to "Sharpening with PowerSharp®."
	Worn chain	Replace both the chain and stone. See "Maintenance and Cleaning" in this manual.
	Dry chain	Check the oil level according to the instructions. Refill oil reservoir if necessary. See "Fill the Oil Reservoir" in this manual.
	Improper cutting technique	See "Basic Cutting" in this manual for proper cutting technique.
	Debris in side cover	Remove battery pack, then remove side cover and clean out debris.
	Battery pack not fully charged	Recharge battery pack according to the instructions in "Charging the Battery Pack."
Blinking orange light on charge state indicator	Possible causes include charger short circuit, charger over current, over voltage limit, open circuit on battery pack, or charge/pre-charge time out error.	Follow these steps: 1. Check to ensure that the plugs into the charger and the outlet are fully inserted. 2. Make sure the charger is receiving the correct voltage. 3. If available, try charging a different battery pack (only packs specified for this charger). If this does not correct the problem, take the battery pack and charger to an approved service location.

WARRANTY AND SERVICE

WARRANTY

Blount, Inc. warrants all registered OREGON® PowerNow™ Cordless Tools, Battery Packs, and Chargers for a period of two (2) years from original date of purchase, and ninety (90) days if used for commercial purposes. This limited warranty applies to OREGON® PowerNow™ brand manufactured products. During the warranty period, Blount will replace or, at its option, repair for the original purchaser only, free of charge, any product or part which is found upon examination by Blount to be defective in material and/or workmanship. The purchaser shall be responsible for all transportation charges and any cost of removing any part submitted for replacement under this warranty.

SERVICE AND SUPPORT INFORMATION

Visit us on the web at **OregonPowerNowTools.com** for service center information. Or contact our customer service department at **888.313.8665** for assistance, additional technical advice, repair, or replacement parts. For safety, use only genuine factory replacement parts on the chainsaw. Our service center is staffed with trained personnel to efficiently provide further support and assistance with adjustment, repair, or replacement of all OREGON® PowerNow™ products.

SAFETY DECLARATION

Chainsaw is safety certified by TÜV-Rheinland.

Battery Charger is safety certified by Intertek.

Lithium Ion Battery Packs are safety certified by Intertek.

We declare that the above listed products conform to the following Directives and Standards.

MACHINE DIRECTIVE	**2006/42/EC**
NOISE DIRECTIVE	**2005/88/EC**
HAND VIBRATION DIRECTIVE	**2002/44/EC**
ROHS	**2002/95/EC**
WEEE	**2002/96/EC**
BATTERY DIRECTIVE	**2006/66/EC**
LOW VOLTAGE DIRECTIVE	**2006/95/EC**
EMC DIRECTIVE	**2004/108/EC**
BATTERY OPERATED CHAINSAWS	**EN 60745-1, -2-13**
BATTERY CHARGERS	**EN 60335**
LITHIUM ION BATTERY PACKS	**EN 62133**