

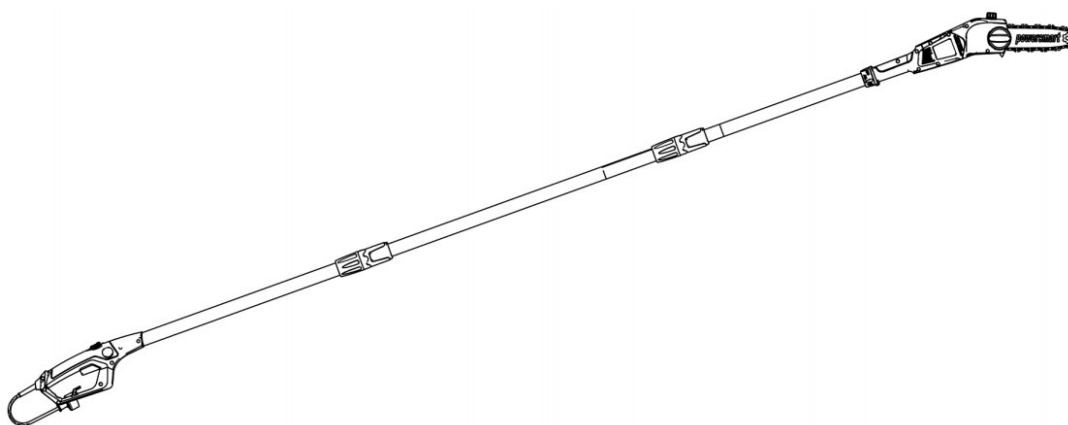


# POWERSMART<sup>®</sup>

## INSTRUCTION MANUAL

### Electric Pole Saw

Model # PS6109



Have product questions or need technical support? Please feel free to contact us!

Website: [www.PowerSmartUSA.com](http://www.PowerSmartUSA.com)

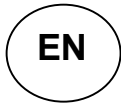
Tollfree: 1-800-791-9458 Mon-Fri 9-5 EST

Email: [support@amerisuninc.com](mailto:support@amerisuninc.com)



Website





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**TECHNICAL DATA**

Electric Pole Saw:	Model#PS6109
Motor:	120V, 60Hz,6A
Motor speed:	6200 RPM
Saw chain:	Chinese, 3 / 8" Pitch
Chain gauge:	0.050"
Chain drive link amount:	40
Bar length:	Chinese 10 inch
Chain speed:	11m/s ( no load )
Lubrication of chain:	Automatic lubrication
Chain oil required:	Yes
Overall length:	8.86 feet
Weight:	11 lb

## **INTRODUCTION**

Thank You for Purchasing a PowerSmart® Product. This manual provides information regarding the safe operation and maintenance of this product. Every effort has been made to ensure the accuracy of the information in this manual. PowerSmart® reserves the right to change this product and specifications at any time without prior notice.

Please keep this manual available to all users during the entire life of the string trimmer.



This manual contains special messages to bring attention to potential safety concerns, string trimmer damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.

## **QUESTIONS? PROBLEMS?**

Please contact our Customer Service Dept. with any questions and/or comments, either by Email: support@amerisuninc.com, or Toll Free at (800)791-9458. We are available Mon-Fri 9am-5pm EST to help solve any issues that you might encounter.

## **SAFETY INFORMATION**

Before operating this pole saw, read and observe all warnings, cautions, and instructions in this Owner's Manual.

NOTE: The following safety information is not meant to cover all possible conditions and situations that may occur. Read the entire Owner's Manual for safety and operating instructions. Failure to follow instructions and safety information could result in serious injury or death.

This safety alert symbol is used to identify safety information about hazards that can result in personal injury.



A signal word (DANGER, WARNING, or CAUTION) is used with the alert symbol to indicate the likelihood and the potential severity of injury. In addition, a hazard symbol may be used to represent the type of hazard.

**DANGER** Indicates a hazard, which, if not avoided, will result in death or serious injury.

**WARNING** Indicates a hazard, which, if not avoided, could result in death or serious injury.

**CAUTION** Indicates a hazard, which, if not avoided, might result in minor or moderate injury.

**CAUTION** Without the alert symbol, indicates a situation that could result in damage.

## **GENERAL SAFETY RULES**

Safety is a combination of common sense, staying alert, and knowing how your pole saw works.

**SAVE THESE SAFETY INSTRUCTIONS.**



**WARNING:** When using an electric pole saw, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the

following:

## **READ ALL INSTRUCTIONS**

Make sure you read and understand all instructions. Improper use of this pole saw can cause severe injury or death from fire, electrical shock, and body contact with moving chain, on falling wood.

## **BEFORE OPERATING SAW**

1. Read and understand this owner's manual before operating pole saw.
2. Watch what you are doing. Use common sense. Do not operate saw when you are tired.
3. Use pole saw for cutting wood only. Do not use pole saw for purpose not intended. Do not use for cutting plastic, masonry, etc.
4. Only well-instructed adults should operate pole saw. Never allow children to operate pole saw.
5. Use only electrical voltage noted on model plate of pole saw.
6. Use only extension cords marked for outdoor use.
7. Do not operate pole saw
  - While under the influence of alcohol, medication or drugs.
  - In rain or in damp or wet areas.
  - Where highly flammable liquids or gases are present.
  - If saw is damaged , adjusted wrong , or not fully and securely assembled.
  - If trigger does not turn saw on and off. Chain must stop moving when you release trigger. Have faulty switch replaced by authorized service center.
  - While in a hurry.
  - While in tree or on a ladder unless trained to do so.
8. Wear snug-fitting clothes when operating pole saw. Do not wear loose clothing or jewelry. They can get caught in moving saw chain.
9. Wear the following safety gear when operating pole saw.
  - Heavy-duty gloves (wear rubber gloves when working outdoors).
  - Steel-toed safety footwear with non-skid soles.
  - Eye protection such as safety glasses, goggles, or face screen.
  - Hard hat.
  - Ear mufflers or ear plugs.
  - Hair covering to contain long hair.
  - Face or dust mask (if working in dusty areas).
10. Before cutting, always provide the following:
  - Clear work area.
  - Secure footing.
  - Planned retreat path from falling tree.

11. Inspect tree before cutting down. Make sure there are no dead limbs or branches that may fall on you.
12. To reduce the risk of electric shock, this saw has a polarized plug ( one blade is wider than the other )This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet of your extension cord, reverse the plug. If it still does not fit, a polarized extension cord will be necessary. Do not change the plug in any way.

## **WHILE OPERATING SAW**

- Stay alert. Use common sense while operating pole saw.
- Keep work area clean. Cluttered areas invite injuries.
- Be aware of extension cord while operating pole saw. Be careful not to trip over cord. Keep cord away from chain and operator at all times.
- Keep children, animals, and bystanders away from pole saw and extension cord. Only pole saw user should be in work area.
- Do not cut down a tree unless you are trained or have expert help.
- If two or more persons perform bucking and felling operations at the same time, provide plenty of distance between operations. Provide distance of at least twice the height of tree being felled.
- Grip pole saw firmly with both hands Never operate pole saw with one hand. Never use hand guard as handle.
- Keep finger off trigger until ready to make cut.
- Before starting pole saw , make sure chain is not touching anything.
- To guard against electrical shock, avoid body contact with grounded objects such as pipes, fences, and metal posts.
- Keep all parts of body away from chain when saw is running.
- Do not force pole saw while cutting . Apply light pressure. It will do the job better and safer at the rate for which it was intended.
- Cut small brush and saplings with extreme care Slender material may catch in chain and be whipped toward you. This could also pull you off balance.
- When cutting limb or tree trunk that is under tension, use extreme caution . Be alert for wood springing back. When wood tension is released, limb could spring back and strike operator causing severe injury or death.
- Carry pole saw from one place to another.
  - With saw stopped and unplugged
  - By holding front handle ( never use hand guard as handle )
  - With finger off trigger
  - With guide bar and chain to rear
- Keep all parts of the body away from the saw chain. Do not remove cut material or hold material to be cut when blades are moving. Make sure the switch is off when clearing jammed material. Saw chain continues to move after the switch is turned off. A moment of inattention while operating the extended-reach pruner may result in serious personal injury.

- Carry the extended-reach pruner by the handle with the saw chain stopped. When transporting or storing the extended-reach pruner, always fit the saw chain device cover. Proper handling of the extended-reach pruner will reduce possible personal injury from the saw chain.
- Hold the extended-reach pruner by insulated gripping surfaces only, because the saw chain may contact hidden wiring or its own cord. A saw chain contacting a <sup>2</sup>live<sup>2</sup> wire may make exposed metal parts of the extended-reach pruner <sup>2</sup>live<sup>2</sup> and could give the operator an electric shock.  
Exception: <sup>2</sup>or its own cord<sup>2</sup> maybe omitted for battery-operated appliances.
- Keep cable away from cutting area. During operation the cable may be hidden in shrubs and can be accidentally cut by the saw chain.  
Exception: This warning does not apply to a battery-operated appliance.



**WARNING:** Do not operate near electrical power lines. The unit has not been designed to provide protection from electric shock in the event of contact with overhead electric lines, Consult local regulations for safe distances from overhead electric power lines and ensure that the operating position is safe and secure before operating the saw chain pole pruner.

### KICKBACK SAFETY PRECAUTIONS

**WARNING:** Kickback may occur when the nose or tip of the guide bar touches on object, or when the wood closes in the cut. Tip contact in some cases may cause a lightning fast reverse reaction, kicking the guide bar up and back towards the operation. Pinching the saw chain along the top of the guide bar may push the guide bar rapidly back towards the operator. Either of these reactions may cause you to lose control of the saw which could result in serious injury to user.



Kickback is the name given to a sudden, rapid upward movement of the saw cutting mechanism in an upward arc towards the operator. Kickback occurs when the upper quadrant of the bar nose comes in contact with a solid object or is pinched. The rotational force of the chainsaw can be reversed in the opposite direction of the chain movement. This may fling the bar up and back in an arc towards the operator. Serious injury or even death can result from contact between the moving saw chain and the operator.

The best protection against injury due to kickback is to avoid situations that can cause kickback:

- Hold the chainsaw firmly with both hands and maintain a secure grip.
- Be aware of the location of the bar nose at all times while cutting.
- Never bring the nose of the guide bar in contact with any object. Never cut limbs with the nose of the guide bar. Be especially careful when cutting saplings, brush and small hard limbs that may easily pinch the cutting chain.
- Don't cut above shoulder height. Don't overreach or use the chainsaw while standing on a ladder or tree.
- Never use the chainsaw one-handed.
- Use extreme caution when entering a previous cut.
- Do not attempt plunge cuts if you are not familiar with this cutting technique.
- Stand to the side of the cutting path of the chainsaw.
- Cut with a correctly sharpened , properly tensioned chain at all times.

**Save these instructions. It is your guide to safe and proper operation of this pole saw.**

## ELECTRICAL INFORMATION

### DOUBLE INSULATION

Double insulation is a concept in safety in electric power tools that eliminates the need for the usual three-wire grounded power cord. All exposed metal parts are isolated from the internal metal motor components with protecting insulation. Double insulated tools do not need to be grounded.



**WARNING:** The double insulated system is intended to protect the user from shock resulting from a break in the tools internal insulation. Observe all normal safety precautions to avoid electrical shock.

**NOTE:** Servicing a product with double insulation requires extreme care and knowledge of the system. This should be performed only by a qualified service technician. For service, we suggest you return the product to your nearest authorized service center for repair. Always use original replacement parts intended for your particular model of tool when servicing

**WARNING:** This tool is for outdoor use only. Do not expose to rain or use in damp locations.

### Guidelines for using extension cords

Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The table below shows the correct size to be used according to cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

#### Minimum Gauge for Extension Cords (AWG)

(When using 120 V only)

Ampere Rating		Total Length of Cord in Feet			
More Than	Not More Than	25	50	100	150
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	Not Recommended	

Make sure your extension cord is properly wired and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it.

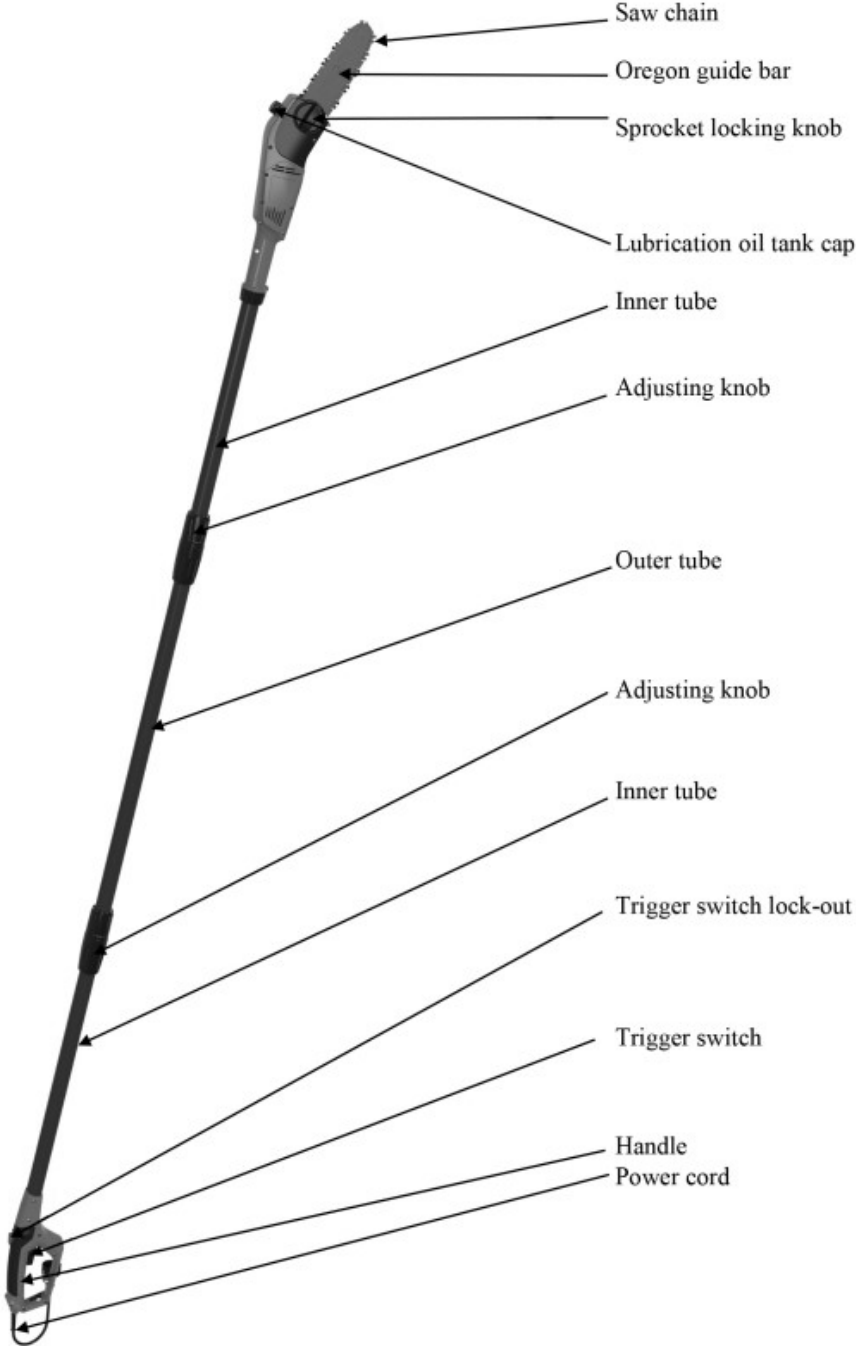
Protect your extension cords from sharp objects, excessive heat and damp or wet areas.

Use a separate electrical circuit for your tools. This circuit must not be less than a # 12 wire and should be protected with a 15 Amp time-delayed fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

**WARNING:** This tool must be grounded while in use to protect the operator from electric shock.



**KNOWING YOUR POLE SAW**



# **ASSEMBLY INSTRUCTIONS**

## **Unpacking**

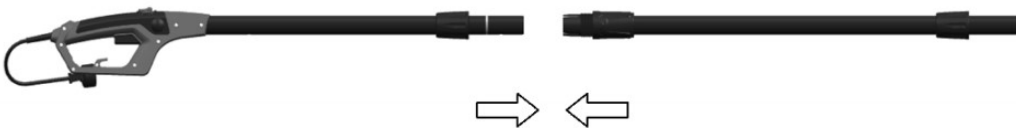
Unpack the pole saw and all its parts, and compare against the list below. Do not discard the carton or any packaging materials. Please call 1-800-791-9458 or E-mail us at [support@amerisuninc.com](mailto:support@amerisuninc.com) if any parts are damaged or missing.

## **PACKING LIST**

Pole saw\*1  
Saw chain\*1  
Guide bar\*1  
Scabbard\*1  
Wrench\*2  
User manual\*1

## **Install the pole saw**

1. Insert the Lower tube and the Middle tube into the Green marking line.



2. Tighten the knob of Middle tube and Lower tube.



3. Insert the middle tube and the upper tube into the green marking line.

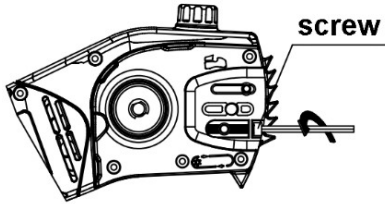


4. Tighten the knob of Middle tube and Upper tube.

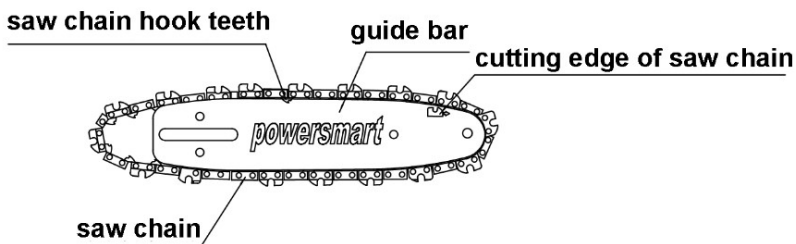


## Install the guide bar&saw chain

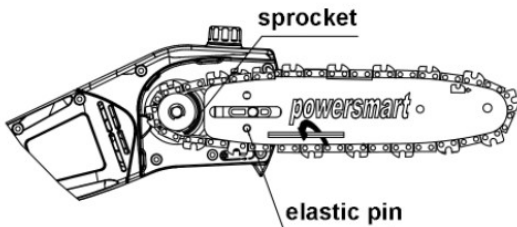
1. Loosen the screw on the machine in the direction of the arrow with an inner hexagon wrench.



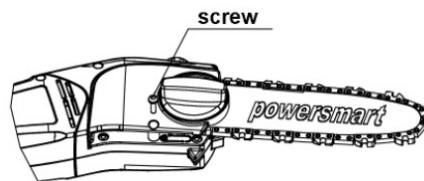
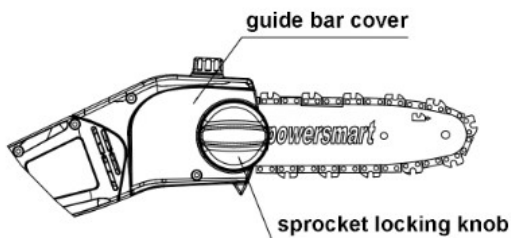
2. Install the saw chain hook teeth into the groove of the guide bar.  
**Note: ensure that the saw chain is installed in the correct direction of rotation.**



3. Install the guide bar and saw chain assembly onto the chain teeth and clip the guide bar into the elastic pin.
4. Adjust the length and tightness of the guide plate by twisting with an inner hexagon wrench.



5. Close the guide bar cover and tighten the sprocket locking knob.
6. Tighten the screw.



## Chain Lubricating Oil

Use high quality chain lubricating oil to minimize wear between the saw chain and guide bar while in use. We recommend using SAE No 30 in the summer and SAE No 10 in the winter or when cutting resinous wood. Check the oil level prior to each use.



**WARNING:** The chain saw is not supplied filled with oil. It is essential to fill with oil before use. Never operate the chain saw without chain oil or at an empty oil tank level, as this will result in extensive damage to the product.



**WARNING:** Never use waste or reclaimed oil. This results in damage to the oil pump, saw chain and guide bar.

### Filling oil tank

1. Set chain saw on any suitable surface with Oil Tank Cap facing upward.
2. Clean area around the Oil Tank Cap with cloth and unscrew the cap by turning it counter clockwise.
3. Add chain oil until reservoir is full.
4. Avoid dirt or debris entering oil tank, refit Oil Tank Cap and tighten by turning clockwise until hand tight.

## OPERATION

### Turn on the pole saw

1. Use both hands to grip Pole Saw. Use only designated grip areas when operating Pole Saw. Use firm grip. Thumbs and fingers must wrap around Pole Saw handle and pole.
2. Make sure your footing is firm . Keep feet apart \. Divide your weight evenly on both feet.
3. When ready to make a cut, press in trigger switch lock-out and squeeze trigger switch. This will turn pole saw on.



**Warning:** Never stand directly under the limb you are trimming. Always position yourself out of the path of falling debris.

**Warning:** Never stand on a ladder or other type of unstable support while using the pole saw.



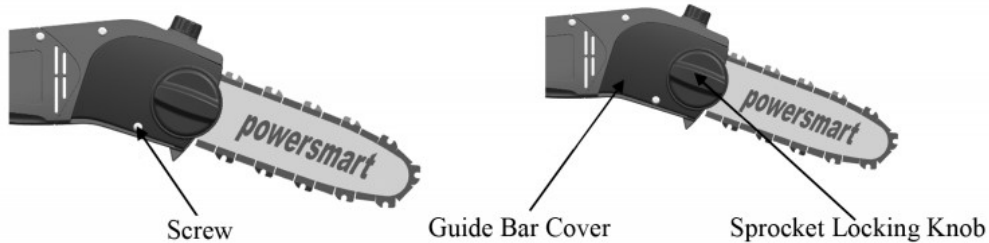
**Warning:** Do not use pole saw near cable , electric power or telephone lines. Maintain a minimum clearance of 10 feet from all power lines.

**Warning:** Keep other persons from cutting end of pole saw and at a safe distance from work area.

# MAINTENANCE

## Change saw chain

1. Remove the screw and turn Sprocket Locking Knob counterclockwise to remove the guide bar cover.



2. Move the chain tension pin fully back towards the sprocket using the chain tension screw. ( See direction arrow)



3. Place the guide bar onto the bar studs so that the chain tension pin fits into the hole in the guide bar.

4. Install chain over clutch and place around the sprocket and guide bar.

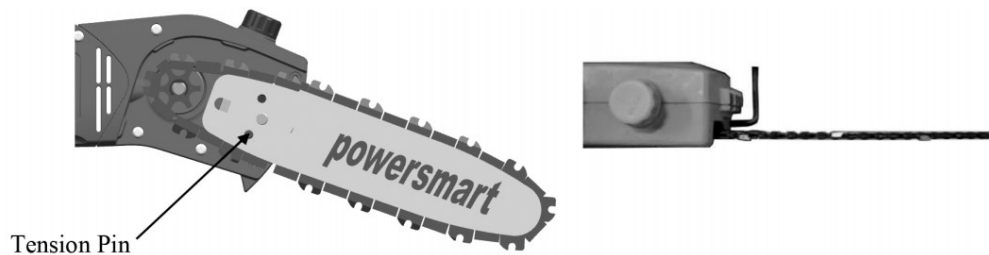
5. Make sure the chain cutters on top of the guide bar face in the direction that the chain runs.

6. Install guide bar cover. Tighten the sprocket locking knob finger tight.

7. Adjust saw chain tension by first holding the bar nose up and turning the chain tension screw clockwise until saw chain touches the bottom of the guide.

8. Tighten the sprocket cover locking nut using the wrench provided, keeping the guide bar nose up while tightening the nut.

9. Pull the saw chain around the guide bar by hand to check for tight spots. Saw chain should move freely but not sag. If too tight loosen the guide bar nuts and adjust using the chain tension screw.



10. Tighten the guide bar cover by turning the sprocket locking knob and using a screwdriver to tighten crew.



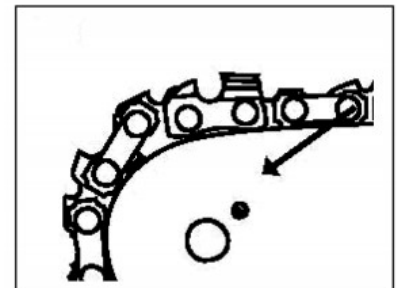
**WARNING:** Never try to run the chainsaw without sprocket cover securely tightened.

**Caution:** Proper saw chain tension is extremely important. If saw chain is too tight, the guide bar and saw chain will be quickly damaged. If the saw chain is too loose, it may get out of the guide bar groove and cause an Injury.

**Note:** A new chain will stretch so adjust the tension after a few cuts. Watch saw chain tension carefully for the first half hour of cutting.

### Guide bar and oil holes

Clean guide bar before use. Follow instructions for removing and installing guide bar and saw chain. Remove guide bar and clean groove of the guide bar with a small screwdriver . Clean oil holes with a wire. Check the sprocket and the clutch and clean the bar mount area before installing the bar. Guide bar with sprocket nose should be lubricated with grease using a lubricating syringe. Invert the symmetrically shaped guide bar every 8 working hours or each time the chain is removed to ensure uniform wear. Check the bar rails frequently for wear and remove burrs and square up the rails using a flat file. Clean the Oiler port on the saw every time the saw chain and guide bar are removed.



### Sprocket

A damaged drive sprocket will cause premature wear or damage of the chainsaw. Check the sprocket when installing a new chain. When outer diameter of sprocket is worn 0.5mm (0.020”) or more, replace it. Always clean sprocket, clutch and bar mount area before installing guide bar.

### Saw chain sharpening

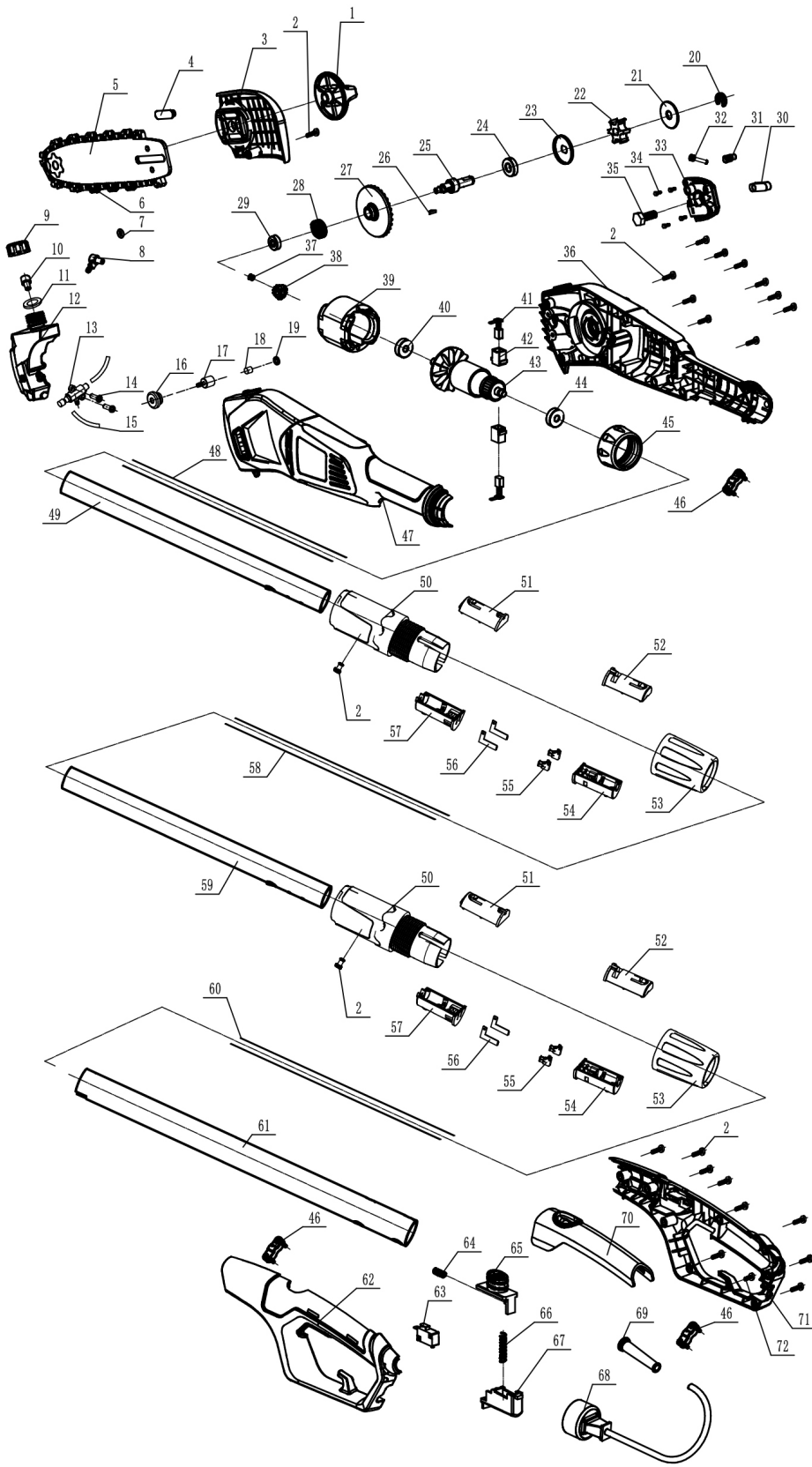
It is advisable to have professional shops sharpen saw chains. It is beyond the expertise of the typical home owner to sharpen saw chains. An improperly sharpened saw chain will not cut effectively, require more physical effort, and cause high vibrations and a higher rate of wear.

### Maintenance chart

		Before Work	After Work	Weekly	Monthly	If faulty	If damaged	As required
Complete machine	Visual inspection	x						
	Clean		x					
Switch	Check operation	x						
Oil tank	Clean				x			
Chain lubrication	Check	x						

Saw chain	Inspect and check the sharpness	x						
	Check chain tension	x						
	Sharpen							x
Guide bar	Check(wear,damage)	x						
	Clean and turn over			x		x		
	Debugger							x
	Replace						x	x
Chain sprocket	Check			x				
Screw and nuts	Re-tighten							x
Power cord	Check	x						
	Replace						x	

# EXPLODED VIEW & PART LIST





Item	Stock#	Description	Qty
1	203020664A	Sprocket Locking Knob	1
2	303010325	Screw ST4.2X14	22
3	203020323A	Guide bar Cover	1
4	302070005	Seal ring	1
5	303150035	Guide Bar	1
6	303143006	Saw Chain	1
7	302010005	O-ring seal	1
8	203020310	Pipe Connector	1
9	203020120	Oil tank cap	1
10	302060006	Check valve	1
11	302070001	Oil tank seal	1
12	302110050A	Oil tank	1
13	202320008	Oil Pump	1
14	303010363	Screw ST4.2X10	2
15	302050012	Inlet Pipe	2
16	302060028	Plug	1
17	203021242	Oil filter valve	1
18	302020017	Oil filter sponge	1
19	203021243	Oil filter cover	1
20	303050029	Shaft ring	1
21	303043007	Gasket	1
22	303060011	Sprocket	1
23	303070055	Bearing cap	1
24	303100011	Bearing 6900Z	1
25	303160821B	Output shaft	1
26	303110020	Woodruff key	1
27	303160822B	Big Gear	1
28	203020324A	Worm Gear	1
29	303100015	Bearing 606Z	1
30	302070006	Oil outlet seal ring	1
31	303160063	Nut	1
32	303020421	Hexagon socket screw M5X30	1
33	303090020A	Right Motor Insert	1
34	303010367	Screw M4X10	4
35	303020106	Outer hexagon bolt	1
36	203020968A	Right Motor cover	1

Item	Stock#	Description	Qty
37	303030062	Locknut	1
38	303160653	Small Gear	1
39	301030087	Stator	1
40	303100023	Bearing 608Z	1
41	301110057	Carbon brush	2
42	301110034	Brush holder	2
43	301030072	Rotor	1
44	303100012	Bearing 627Z	1
45	203020328	Knob	1
46	203020047	Cable clamp	3
47	203020967B	Left Motor cover	1
48	306040036	Upper tube wire	2
49	303081154A	Upper Tube	1
50	203020320A	Pipe expansion joint	2
51	203021374	Male plug upper Fixed cover	2
52	203021375	Female plug upper Fixed cover	2
53	203020319	Expansion knob	2
54	203021376	Female plug Lower Fixed cover	2
55	301080033	Battery pack clip	4
56	203050517	Charger insert 1	4
57	203021377	Male plug lower Fixed cover	2
58	306040037	Middle tube wire	2
59	303081155A	Middle tube	1
60	306040038	Lower tube wire	2
61	303081156A	Lower tube	1
62	203020973	Left handle	1
63	301100051	Microswitch	1
64	303130021	Braking Spring	1
65	203010487	Push switch button	1
66	303130024	Handle rod spring	1
67	203010486	Rear switch button	1
68	301040104	Power line	1
69	302030034	Cable sheath	1
70	203020317	Buckles leather	1
71	203020974	Right Handle	1
72	303010209	Screw 4*10mm	1

## **TWO (2) YEARS LIMITED WARRANTY**

PowerSmart® is committed to building tools that are dependable for years. Our warranties are consistent with our commitment and dedication to quality.

### **TWO (2) YEARS LIMITED WARRANTY OF POWER SMART PRODUCTS FOR HOME USE.**

PowerSmart ("Seller") warrants to the original purchaser only, that all PowerSmart consumer power tools will be free from defects in material or workmanship for a period of two (2) years from date of purchase. Ninety (90) days for all Power Smart Products, if the tool is used for professional or commercial use.

SELLER'S SOLE OBLIGATION AND YOUR EXCLUSIVE REMEDY under this Two (2) Years Limited Warranty and, to the extent permitted by law, any warranty or condition implied by law, shall be the repair or replacement of parts, without charge, which are defective in material or workmanship and which have not been misused, carelessly handled, or misrepaired by persons other than Seller or Authorized Service Center. To make a claim under this Limited Warranty, you must return the entire power tool product; transportation prepaid, to Power Smart Include a legible copy of the original receipt, which lists the date of purchase (month and year) and the name of the company purchased from.

THIS LIMITED WARRANTY DOES NOT APPLY TO ANY ACCESSORY ITEMS INCLUDED WITH THE TOOL SUCH AS CIRCULAR SAW BLADES OTHER RELATED ITEMS OR TO ANY REPLACEMENT PARTS LISTED UNDER MAINTENANCE.

ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO TWO (2) YEARS FROM DATE OF PURCHASE. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING BUT NOT LIMITED TO LIABILITY FOR LOSS OF PROFITS) ARISING FROM THE SALE OR USE OF THIS PRODUCT. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE IN THE U.S., PROVINCE TO PROVINCE IN CANADA AND FROM COUNTRY TO COUNTRY.

For questions / comments, technical assistance or repair parts –  
Please call toll free at: 1-800-791-9458 (M-F 9am – 5pm EST)  
Email: [support@amerisuninc.com](mailto:support@amerisuninc.com)

**SAVE YOUR RECEIPTS. THIS WARRANTY IS VOID WITHOUT THEM.**