

# **INSTRUCTION MANUAL**

## **Electric Pole Saw**

Model # PS6108





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

Website: www.Amerisuninc.com

Toll free: 1-800-791-9458 Mon-Fri 9-5 EST

Email: support@amerisuninc.com

## **CONTENTS**

Technical data	3
General safety rules	4
Specific safety rules for pole saw	5
Electrical information	6
Knowing your pole saw	8
Assembly and adjustments	9
Operation	10
Maintenance	11
Exploded view & parts list	14
Warranty	16

## **TECHNICAL DATA**

Electric Pole Saw	Model # PS6108
Motor:	120V, 60 Hz, 6A
Motor speed:	4500 RPM
Saw chain:	Oregon 91PJ033X, 3/8" Pitch
Chain gauge:	0.050"
Chain drive link amount:	33
Bar length:	Oregon 8 inch
Chain speed:	11m/s (no load)
Lubrication of chain:	Automatic lubrication
Chain oil required:	Yes
Overall length:	7.8 feet
Weight:	11 lb.

**Warning!** We strongly recommend that this item not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to its application, do not use the equipment until you have consulted us and we have advised you. **Contact Power Smart at (800)791-9458 Mon-Fri 9am-5pm EST** 

## **GENERAL SAFETY RULES**



**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

#### 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 tool's 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 the current 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)

Amper	re 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			mmended	

(When using 120 V only)

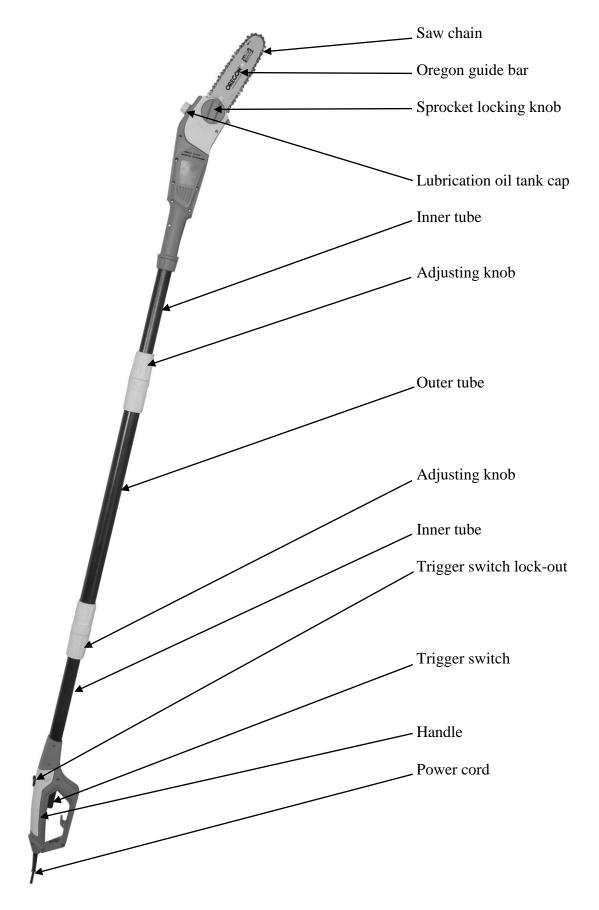
Make sure your extension cord is properly wired and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it.

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 AND ADJUSTMENTS

## Unpacking

Unpack the Pole Saw and all its parts, and compare against the list below. Do not discard the carton or any packaging until the Pole Saw is completely assembled.

- 1 Pole saw
- 1 Saw chain (assembled)
- 1 Guide bar (assembled)
- 1 Scabbard
- 1 Wrench
- 1 Owner's manual

#### Install the pole saw

1. Loosen the adjusting knob near to the handle and slide the inner and outer tube.



2. Loosen the adjusting knob near motor head and insert the inner tube of motor head until heard "click" sound. Then tighten the adjusting knob.



3. Pull inner tube out to desired length of extension then tighten the adjust knob near the handle.

## **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**

### Adjusting pole length

The pole saw has a telescoping pole assembly that will extend from 71 inches (fully retracted) to 94.5 inches (fully extended).

An adjusting knob near handle is used to hold the pole in position at any extended length.

- 1. To extend the pole, loosen the adjusting knob. Pole will slide freely.
- 2. Pull inner tube out to desired length of extension.

Note: only extend pole to minimum length required to reach limb that is being cut.

3. To lock pole in position, tighten adjusting knob.

#### 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.

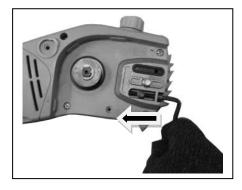




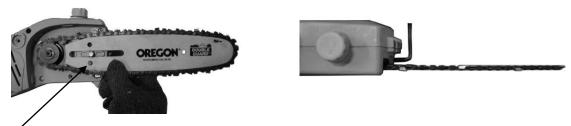
Guide Bar Cover

Sprocket Locking Knob

2. Move the chain tensioning 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 tensioning 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 bar.
- 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.



Tension Pin '

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



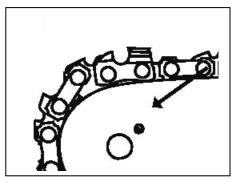
**WARNING** - Never try to run the chainsaw without sprocket cover securely tightened.

**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 burs 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.

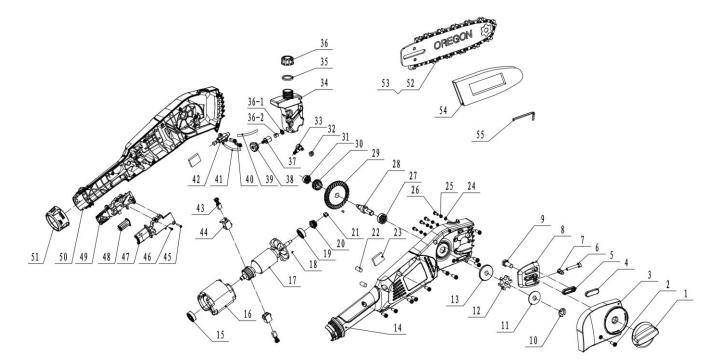
#### Saw chain sharpening

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	After	Weekly	Monthly	If	If	As
		Work	work			faulty	damaged	required
Complete	Visual inspection	X						
Machine	Clean		Х					
Switch	Check operation	х						
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)	х						
	Clean and turn over			X		X		
	Deburr							х
	Replace						X	х
Chain sprocket	Check			X				
Screws and Nuts	Retighten							X
Power	Check	X						
cord	Replace						X	

## **EXPLODED VIEW & PARTS LIST**



Item	Stock #	Description			
1	PS6108-101	Sprocket locking knob			
2	PS6108-102	Screw ST4.2x14			
3	PS6108-103	Guide bar cover			
4	PS6108-104	Gasket			
5	PS6108-105	Seal			
6	PS6108-106	Tension screw M5x30			
7	PS6108-107	Tension nut			
8	PS6108-108	Right side			
9	PS6108-109	Bolt M8x20			
10	PS6108-110	Snap ring			
11	PS6108-111	Washer			
12	PS6108-112	Sprocket			
13	PS6108-113	Bearing cover			
14	PS6108-114	Right motor cover			
15	PS6108-115	Bearing 627			
16	PS6108-116	Stator			
17	PS6108-117	Rotor			
18	PS6108-118	Key 2.5x10			
19	PS6108-119	Bearing 608			
20	PS6108-120	Gear			
21	PS6108-121	Locknut M5			
22	PS6108-122	Rubber bracket			
23	PS6108-123	bracket			
24	PS6108-124	Washer 4			
25	PS6108-125	Spring washer 4			
26	PS6108-126	Screw M4x10			
27	PS6108-127	Bearing 6900			
28	PS6108-128	Shaft			
29	PS6108-129	Worm gear			

Item	Stock #	Description
30	PS6108-130	Worm shaft
31	PS6108-131	Bearing 606
32	PS6108-132	O-ring
33	PS6108-133	Pipe connector
34	PS6108-134	Oil tank
35	PS6108-135	Oil tank seal
36	PS6108-136	Oil tank cap
36-1	PS6108-136-1	filter cover
36-2	PS6108-136-2	Filter
37	PS6108-137	Valve
38	PS6108-138	Pipe seal
39	PS6108-139	Pipe 70mm
40	PS6108-140	Screw ST4.2x10
41	PS6108-141	Pipe 65mm
42	PS6108-142	Oil pump
43	PS6108-143	Carbon brush
44	PS6108-144	Brush holder
45	PS6108-145	Screw ST2.9x16
46	PS6108-146	ST2.9x10
47	PS6108-147	Right switch box
48	PS6108-148	Plug
49	PS6108-149	Left switch box
50	PS6108-150	Left motor cover
51	PS6108-151	Knob
52	PS6108-152	Guide bar
53	PS6108-153	Saw chain
54	PS6108-154	Scabbard
55	PS6108-155	Wrench

<u>29 28 27 26 25 24</u> <u>19</u> <u>18</u> \_17 . 

R

Item	Stock #	Description	Item	Stock #	Description
1	PS6108-201	Screw ST4.2x14	16	PS6108-216	Screw M4x5
2	PS6108-202	Right handle	17	PS6108-217	Ring
3	PS6108-203	Handle grip	18	PS6108-218	Tube connector
4	PS6108-204	Cable holder	19	PS6108-219	Spring pin
5	PS6108-205	Cable sleeve	20	PS6108-220	Stop bracket
6	PS6108-206	Power cord	21	PS6108-221	Spring
7	PS6108-207	Switch lever	22	PS6108-222	Outer tube
8	PS6108-208	Spring	23	PS6108-223	Cable
9	PS6108-209	Switch lock-out	24	PS6108-224	Inner tube B
10	PS6108-210	Spring	25	PS6108-225	Screw ST2.9x8
11	PS6108-211	Switch	26	PS6108-226	Left bracket
12	PS6108-212	Left handle	27	PS6108-227	Plug
13	PS6108-213	Inner tube A	28	PS6108-228	Screw ST4.2x8
14	PS6108-214	Tube spring	29	PS6108-229	Right bracket
15	PS6108-215	Adjusting knob			

## TWO (2) YEARS LIMITED WARRANTY

PowerSmart<sup>®</sup> 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.

Power Smart ("Seller") warrants to the original purchaser only, that all Power Smart 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<sup>®</sup> 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 (Mon-Fri 9am – 5pm EST) Email: support@amerisuninc.com

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