Operator's Manual 9994200532 Power Pruner® Attachment

FOR MODELS: SRM-2100SB, 2400SB, 210SB, 211SB, 225SB, 260SB, 261SB

PAS-2100, 2400, 2601, 210, 211, 225, 225VP, 225VPB, 230, 231, 260, 261, 265, 266, 280, 2620

DPAS-2100/SB, 2600/SB

⚠ WARNING



Read and understand all provided literature before use. Failure to do so could result in serious injury.

X7702092209

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INTRODUCTION

Specifications, descriptions, and illustrative material in this literature are as accurate as possible. Specifications are subject to change without notice. Illustrations might include optional equipment and accessories, and might not include all standard equipment. Your equipment might appear slightly different than pictured equipment.



Read and understand all provided literature. Literature contains specifications and information for safety, operation, maintenance, storage, and assembly specific to this product. Scan QR codes for more information.



For additional literature, including safety manuals where applicable, or questions regarding terms used in this manual, visit:

https://www.echo-usa.com/technical-documentation

OR

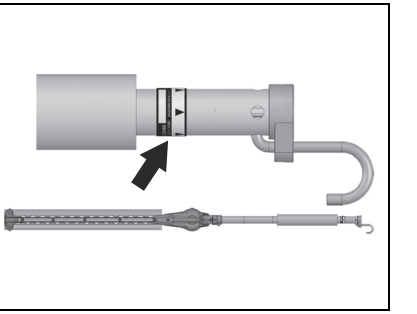
https://www.shindaiwa-usa.com/technical-documentation

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SERVICING INFORMATION

Parts and Serial Number

Genuine ECHO parts and assemblies for your ECHO products are available only from an Authorized Service Dealer. When you do need to buy parts, always have the model number and serial number of the unit with you. Image shows serial number location. For future reference write them in the space provided below.



Model No. _____ Serial No. _____

Service

Service of this product during the warranty period must be performed by an Authorized Service Dealer. For the name and address of the Authorized Service Dealer nearest you, ask your retailer or call 1-800-432-ECHO (3246). Authorized Service Dealer information is also available on our website https://www.echo-usa.com. When presenting your unit for warranty service/repairs, proof of purchase is required.

ECHO Consumer Product Support

If you require assistance or have questions concerning the application, operation, or maintenance of this product, call the ECHO Consumer Product Support Department at 1-800-432-ECHO (3246) from 8:00 a.m. to 5:00 p.m. (Central Standard Time) Monday through Friday. Before calling, please know the model and serial number of your unit.

Product Registration

Register your ECHO equipment online at https://www.echo-usa.com or by filling out the product registration sheet included in this manual. Registering your product confirms warranty coverage and provides a direct link to ECHO if we find it necessary to contact you.

Additional Literature

In addition to finding information online, information is available from your Authorized Service Dealer, or by contacting ECHO Incorporated, 400 Oakwood Road, Lake Zurich, IL 60047, 1-800-432-ECHO (3246).

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SAFETY

Manual Safety Symbols and Important Information

Throughout this manual and on the product itself, you will find safety alerts and helpful informational messages preceded by symbols or key words. The following is an explanation of those symbols and key words and what they mean to you.

⚠ DANGER

The safety alert symbol accompanied by the word "DANGER" calls attention to an act or condition which WILL lead to serious personal injury or death if not avoided.

⚠ WARNING

The safety alert symbol accompanied by the word "WARNING" calls attention to an act or condition which COULD lead to serious personal injury or death if not avoided.

⚠ CAUTION

The safety alert symbol accompanied by the word "CAUTION" calls attention to an act or condition which might lead to minor or moderate personal injury if not avoided.

NOTICE

The enclosed message provides information necessary for the protection of the unit.

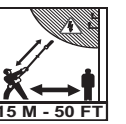
Note: This enclosed message provides tips for use, care and maintenance of the unit.



CIRCLE AND SLASH SYMBOL
This symbol means the specific action shown is prohibited. Ignoring these prohibitions can result in serious or fatal injury.

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International Symbols

Symbol	Description	Symbol	Description
	Warning, see Operator's Manual.		Safety / Alert
	Wear eye, ear and head protection.		Finger severing.
	Wear hand and foot protection.		Rotating cutting attachment.
	Wear face shield.		Wear slip-resistant footwear.
	Keep feet away from blade.		Do not operate closer than 15 m (50 ft.) from electrical hazards. Keep bystanders at least 15 m (50 ft.) away.
	Do not use blades - line head only.		Beware of thrown objects.

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Symbol	Description	Symbol	Description
	Hot surface		Plan retreat path from falling objects.
	Do not use line head - blades only.		Do not cut branches overhead.
	Chain lubrication		
		Keep bystanders and helpers away 15 m (50 ft.).	
		Beware thrown objects. Wear eye protection.	
		Keep bystanders and helpers away 15 m (50 ft.).	
			

Note: Not all symbols will appear on your unit.

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Personal Condition and Safety Equipment

⚠ WARNING

Cancer and Reproductive Harm
https://www.P65Warnings.ca.gov

⚠ WARNING

The muffler or catalytic muffler and surrounding cover may become extremely hot. If unit is equipped with muffler, always keep clear of exhaust and muffler area, otherwise serious personal injury might occur.

⚠ WARNING

Users of this product risk injury to themselves and others if the unit is used improperly and/or safety precautions are not followed. Proper clothing and safety gear must be worn when operating unit.

Physical Condition

Your judgment and physical dexterity may not be good:

- If you are tired or sick
- If you are taking medication
- If you have taken alcohol or drugs

Operate unit only if you are physically and mentally well.

Eye Protection

⚠ WARNING

- **Eye protection that meets ANSI Z87.1 or CE requirements must be worn whenever you operate the unit.**
- **For additional safety, a full-face shield (not included) can be worn over safety glasses or goggles to provide protection from sharp branches or flying debris.**

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Hand Protection

Wear sturdy, no-slip, rubber work gloves to improve your grip on the handles. Gloves also provide protection against cuts and scratches, cold environments, and reduce the transmission of machine vibration to your hands.

Hearing and Ear Protection

ECHO recommends wearing personal protective equipment whenever unit is used.

Breathing Protection

Operators who are sensitive to dust or other common airborne allergens may need to wear a dust mask to prevent inhaling these materials while operating unit. Dust masks can provide protection against dust, plant debris, and other plant matter such as pollen. Make sure the mask does not impair your vision, and replace the mask as needed to prevent air restrictions.

Proper Clothing

Wear snug-fitting, durable clothing:

- Pants should have long legs, shirts should have long sleeves.
- Do not wear shorts.
- Do not wear ties, scarves, jewelry, or clothing with loose or hanging items that could become entangled in moving parts or surrounding growth.
- Keep clothing buttoned or zipped, and keep shirt tails tucked in.
- Wear sturdy work shoes with nonskid rubber soles.
- Do not wear open toed shoes.
- Do not operate unit with bare feet.
- Keep long hair away from engine and air intake. Retain hair with cap or net.

Heavy protective clothing can increase operator fatigue, which may lead to heat stroke. Schedule heavy work for early morning or late afternoon hours when temperatures are cooler.

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⚠ WARNING

The components of this machine generate an electromagnetic field during operation, which can interfere with some pacemakers. To reduce the risk of serious or fatal injury, persons with pacemakers should consult with their physician and the pacemaker manufacturer before operating this machine. In the absence of such information, ECHO does not recommend the use of this machine by anyone who has a pacemaker.

Extended Operation and Extreme Conditions

⚠ CAUTION

Prolonged exposure to cold and/or vibration can result in injury. Read and follow all safety and operation instructions to minimize risk of injury. Failure to follow instructions can result in painful wrist/hand/arm injuries.

It is believed that a condition called Raynaud's Phenomenon, which affects the fingers of certain individuals, may be brought about by exposure to vibration and cold. Exposure to vibration and cold may cause tingling and burning sensations, followed by loss of color and numbness in the fingers. The following precautions are strongly recommended, because the minimum exposure, which might trigger the ailment, is unknown.

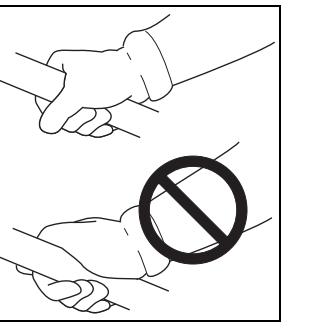
- Keep your body warm, especially the head, neck, feet, ankles, hands, and wrists.
- Maintain good blood circulation by performing vigorous arm exercises during frequent work breaks, and also by not smoking.
- Limit the hours of operation. Try to fill each day with jobs where operating the unit or other hand-held power equipment is not required.
- If you experience discomfort, redness, and swelling of the fingers followed by whitening and loss of feeling, consult your physician before further exposing yourself to cold and vibration.

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Repetitive Stress Injuries (RSI)

It is believed that overusing the muscles and tendons of the fingers, hands, arms, and shoulders may cause soreness, swelling, numbness, weakness, and extreme pain in those areas. Certain repetitive hand activities may put you at a high risk for developing a Repetitive Stress Injury (RSI). An extreme RSI condition is Carpal Tunnel Syndrome (CTS), which could occur when your wrist swells and squeezes a vital nerve that runs through the area. Some believe that prolonged exposure to vibration may contribute to CTS. CTS can cause severe pain for months or even years.

To reduce the risk of RSI/CTS, do the following



- Avoid using your wrist in a bent, extended, or twisted position. Instead try to maintain a straight wrist position. Also, when grasping, use your whole hand, not just the thumb and index finger.
- Take periodic breaks to minimize repetition and rest your hands.
- Reduce the speed and force with which you do the repetitive movement.
- Do exercises to strengthen the hand and arm muscles.
- Immediately stop using all power equipment and consult a doctor if you feel tingling, numbness, or pain in the fingers, hands, wrists, or arms. The sooner RSI/CTS is diagnosed, the more likely permanent nerve and muscle damage can be prevented.

⚠ DANGER

All over head electrical conductors and communications wires can have electricity flow with high voltages. This unit is not insulated against electrical current. Never touch wires directly or indirectly, otherwise serious injury or death can result.

⚠ DANGER

Do not operate gas-powered products indoors or in inadequately ventilated areas. Engine exhaust contains poisonous emissions and can cause serious injury or death.

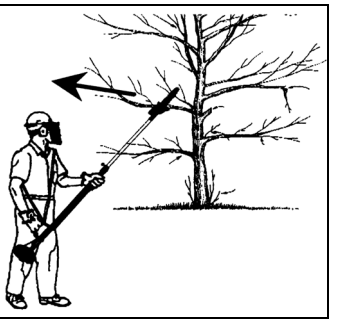
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Kickback

WARNING

Kickback can lead to dangerous loss of control of the pole pruner and result in serious injury to the operator or any one standing close by. Hold the pole pruner firmly with both hands with thumbs and fingers encircling the front and rear handles. Be aware of the down and outward path the pruner will take after the cut is made.

Kickback may occur when the moving saw chain at the nose or tip of the guide bar touches an object, or when the wood closes in and pinches the saw chain in the cut. In some cases this may cause a lightning-fast reverse action, kicking the guide bar and saw chain up and back or down and back towards the operator. Either of these reactions may cause the operator to lose control of the pole pruner which could result in serious personal injury.



With a basic understanding of kickback, you can reduce or eliminate the element of surprise which contributes to accidents.

Avoid contact of the guide bar tip with any object while the saw chain is moving.

Cut only wood. Avoid striking concrete, metal, wire, or other obstructions which could cause kickback or damage to the saw chain.

If the saw chain does strike a foreign object, immediately stop the engine, inspect and repair the pole pruner if necessary.

Read the Manuals

- Provide all users of this equipment with the Operator's Manual for instructions on Safe Operation.

Clear the Work Area

- Spectators and fellow workers must be warned, and children and animals prevented from coming nearer than 15 m (50 ft.) while the unit is in use.

Use Proper Clothing & Equipment

- Always wear head protection with full face shield to help protect against falling branches and debris.

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Keep a Firm Grip

- Always hold throttle handle and support handle with thumbs and fingers tightly encircling the handles.

Keep a Solid Stance

- Maintain footing and balance at all times. Do not stand on slippery, uneven or unstable surfaces. Do not work in odd positions or on ladders. Do not over reach.
- Operate the pole pruner only from the ground or out of an approved bucket lift.
- Always evaluate the branches to be pruned for hazards such as loose dead branches which may fall and strike the operator or helpers. Remove hazards before pruning.
- Plan retreat path from falling objects.
- Cut branches bounce when striking ground.
- Check that shoulder harness is adjusted for safe, comfortable operation.
- Turn the pole pruner off when moving from tree to tree.
- Avoid any contact with saw chain.

Avoid Hot Surfaces

- Keep exhaust area clear of flammable debris. Avoid contact during and immediately after operation.



Equipment

⚠ WARNING

Use only ECHO attachments. Serious injury may result from the use of a non-approved attachment combination. ECHO Incorporated will not be responsible for the failure of cutting devices, attachments or accessories which have not been tested and approved by ECHO. Read and comply with all safety instructions listed in this manual and safety manual.

- **Check unit for loose and missing nuts, bolts, and screws. Tighten or replace as needed.**

Guide Bar and Saw Chain

- Check that the cutting attachment, guide bar, and saw chain is firmly attached and in safe operating condition.
- Use only one ECHO extension on the pruner.

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- Do not hit rocks, stones, tree stumps, and other foreign objects with the saw chain.
- Do not cut into the ground with the saw chain.
- If cutting attachment end strikes an obstruction, stop engine immediately and inspect saw chain for damage.
- Do not operate with a dull, fractured, or discolored saw chain.
- Remove all foreign objects from work area.
- Always cover the guide bar and saw chain with guide bar cover during transportation and for storage.

⚠ WARNING

Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing and loose objects away from all openings.

- ***Always stop engine, disconnect spark plug, and make sure all moving parts have come to a complete stop before removing obstructions, clearing debris, or servicing unit.***
- ***Do not start or operate unit unless all guards and protective covers are properly assembled to unit.***
- ***Never reach into any opening while the engine is running. Moving parts may not be visible through openings.***

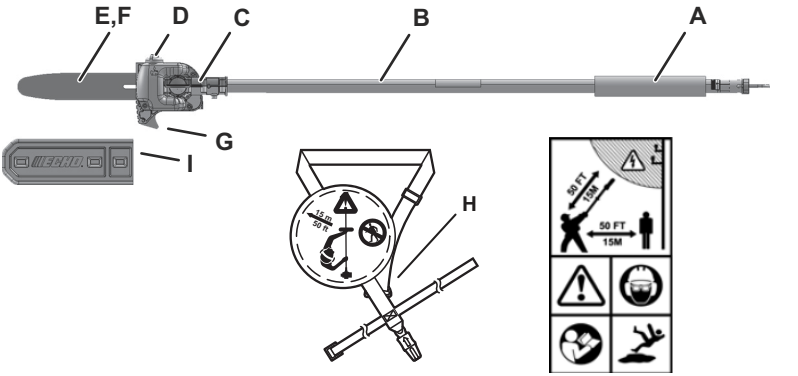
⚠ WARNING

Periodically check fuel system (fuel lines, vent, grommet, fuel tank, and fuel cap) for leaks especially if the unit is dropped. If damage or leaks are found, do not use unit, otherwise serious personal injury or property damage may occur. Have unit repaired by an Authorized Service Dealer before using.

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DESCRIPTION

Locate the safety decal(s) or etching(s) on your unit. Make sure they are legible, and that you understand and follow the instructions. If any cannot be read, replacements can be ordered from your ECHO dealer. Images shown below are for example only. Those on your unit might appear slightly different.



A. Support handle - for left hand
B. Lower drive shaft assembly
C. Cutting attachment
D. Automatic oiler assembly
E. Saw chain
F. Guide bar
G. Cutting shoe
H. Shoulder harness
I. Guide bar cover

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CONTENTS

The ECHO product you purchased has been factory pre-assembled for your convenience. Due to packaging restrictions, some assembly may be necessary.

After opening the carton, check for damage. Immediately notify your retailer or ECHO Dealer of damaged or missing parts. Use the contents list to check for missing parts.

1 Power Pruner® Attachment
1 Guide Bar Cover
1 Shoulder Harness
1 Storage Hook Assembly
1 Operator's Manual
1 Warranty Statement

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ASSEMBLY

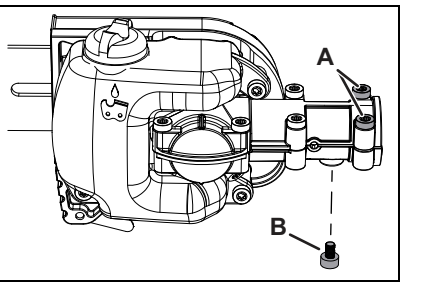
Cutting Attachment to Drive Shaft Installation

Parts required: Drive shaft assembly, Cutting attachment.

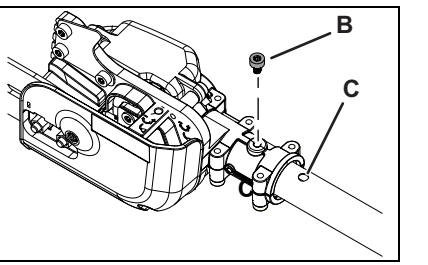
WARNING

Saw chain is sharp. Always wear gloves when handling assembly, otherwise serious personal injury may result.

1. Loosen the two screws (A) and remove the locator screw (B) on cutting attachment.
2. Remove the vinyl cap from the drive shaft.



3. Slide the cutting attachment onto the shaft housing until the hole in the neck of the cutting attachment aligns with the hole (C) in the housing. It may be necessary to rotate the saw chain slightly to align the internal pinion and drive shaft.
4. Insert locator screw (B) into hole (C) and tighten to snug.



NOTICE

Over-tightening screws can damage gear case. Do not use impact tools or damage may result.

5. Tighten cutting attachment screws (A) to 3.9-4.9 N•m (34.5-43.0 in. lbs.).

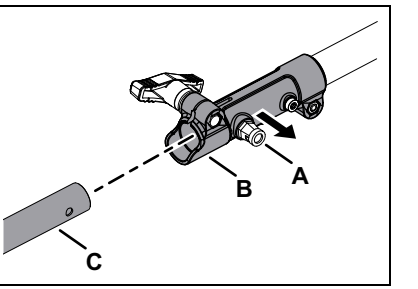
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Power Head Shaft to Lower Drive Shaft Assembly

WARNING

Perform assembly procedures only when the unit is not running. Assembling a running unit can result in serious personal injury.

1. Move STOP switch to OFF position.
2. Allow unit to cool.
3. Remove spark plug lead or remove battery.
4. Set power head/shaft assembly on a level surface.
5. Pull the locater pin (A) out and turn counterclockwise one-quarter turn to lock-out position.
6. Remove the storage hook and cap from the attachment drive shaft, if necessary.

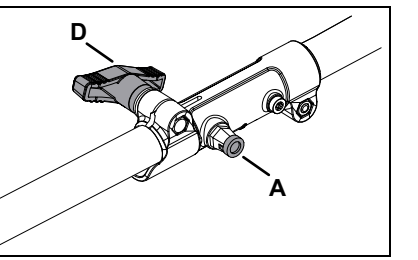


Note: Your coupler may appear different than coupler shown. Earlier model power heads may have shorter couplers.

7. Place attachment drive shaft assembly into coupler (B). Rotate shaft (C) to make sure lower drive shaft engages upper drive shaft socket.

Note: Lower head assembly must be in line with engine.

8. Rotate locater pin (A) one-quarter turn clockwise to engage lower shaft hole. Ensure locater pin is fully engaged by rotating lower drive shaft. Locater pin should snap flush in coupler.



Note: Full engagement of locator pin will prevent shaft rotation.

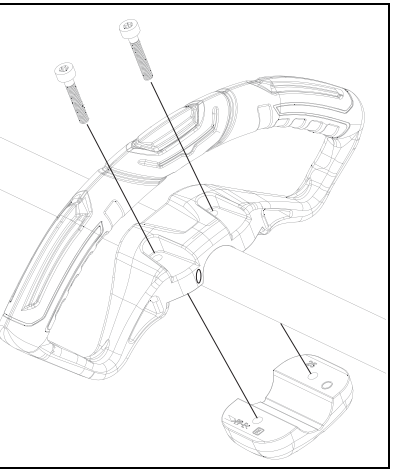
9. Secure lower shaft assembly to coupler by tightening clamping knob (D).

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Support Handle Removal

Note: Support handles or support handles with barrier bars are not recommended for use with this attachment.

1. Remove support handle assembly, barrier bar (if installed), and mounting hardware from PAS or SRM-SB power head.
2. Save parts for future use.

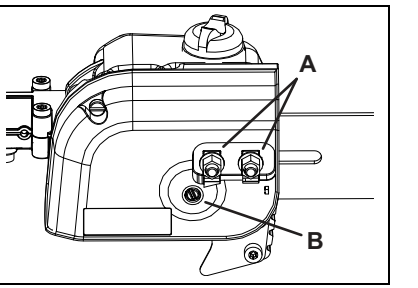


Saw Chain Adjustment

WARNING

Always disconnect spark plug wire or remove battery before servicing cutting attachment. Wear gloves when handling saw chain, otherwise serious personal injury may result.

1. Move stop switch to STOP position.
2. Disconnect spark plug lead or remove battery.
3. Loosen two guide bar nuts (A) until finger tight.



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NOTICE

Always loosen guide bar nuts before turning the chain tension adjuster, otherwise the clutch cover and tensioner will be damaged.

4. Hold the bar nose up, and turn the adjuster screw (B) clockwise until the chain fits snugly against the underside of the bar, as shown.
5. Cold Chain Only - turn adjuster screw CW an additional 1/8-1/4 turn.
6. Tighten both guide bar nuts with nose held up. Tighten rear nut first.
7. Pull the chain around the guide bar by hand. Reduce the chain tension if you feel tight spots.
8. When chain is properly tensioned, tighten guide bar nuts securely.

NOTICE

Tighten guide bar nuts to 8-9 N•m (71-80 in. lbs.). Do not over-tighten nuts or damage may result.

9. Keep chain properly tensioned at all times.

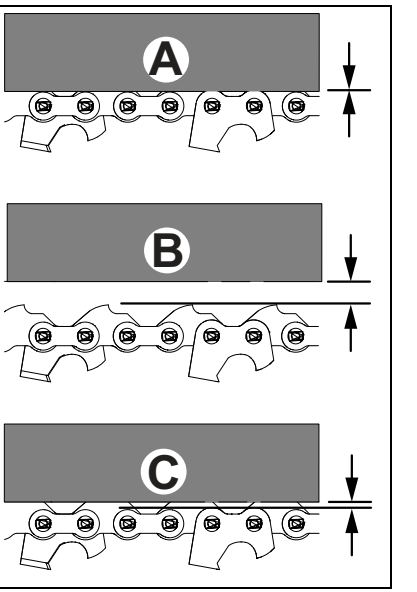
   (A) - Correct cold tension. The side link contacts the guide bar.

   (B) - Chain needs tensioning.

   (C) - Correct warm tension. A distance of 3 mm (1/8 in.) between side link and guide bar at bottom.

Note: All chains require frequent adjustment.

10. Connect spark plug lead.



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OPERATION

⚠ WARNING

Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing and loose objects away from all openings. Always stop unit, disconnect spark plug or remove battery, and make sure all moving parts have come to a complete stop before removing obstructions, clearing debris, or servicing unit.

⚠ WARNING

Engine exhaust is hot, and contains Carbon Monoxide (CO), a poison gas. Breathing CO can cause unconsciousness, serious injury, or death. Exhaust can cause serious burns. Always position unit so that exhaust is directed away from your face and body.

⚠ WARNING

Operation of this equipment may create sparks that can start fires around dry vegetation. This unit is equipped with a spark arrester to prevent discharge of hot particles from the engine. Metal cutters can also create sparks if the cutter strikes rocks, metal, or other hard objects. Contact local fire authorities for laws or regulations regarding fire prevention requirements.

Note: Refer to your PAS power source Operator's Manuals for starting and stopping instructions.

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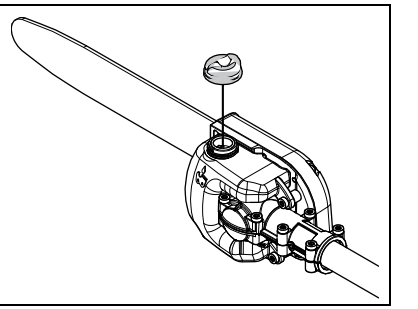
Lubricating the Guide Bar and Saw Chain

Automatic Oiling System

NOTICE

To prevent plastic deterioration, do not use synthetic or silicone based oil.

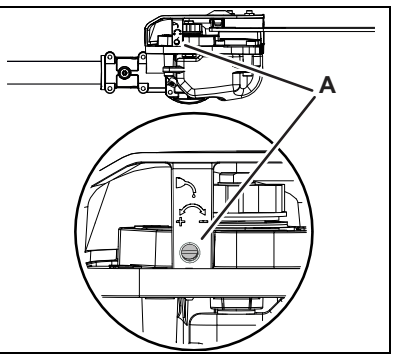
1. Wipe debris from around oil fill cap.
2. Remove oil fill cap and fill reservoir with a quality, low viscosity guide bar and saw chain oil.



Adjusting Automatic Oiler

Note: Very little visible oil on the saw chain will provide sufficient lubrication.

1. From the bottom of gear case, turn the adjustment screw (A) clockwise to decrease oil volume, or counterclockwise to increase oil volume.

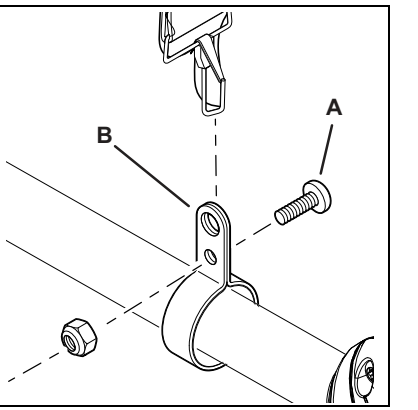


Note: The automatic oiler is preset to deliver a sufficient oil discharge volume during normal operating conditions. During heavy or dry cutting conditions, the oil discharge volume may be increased to assure adequate lubrication. If oil is leaking from the bar cover area, reduce the oil discharge volume. Refill the oil reservoir with each tank of fuel.

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Pruning Techniques

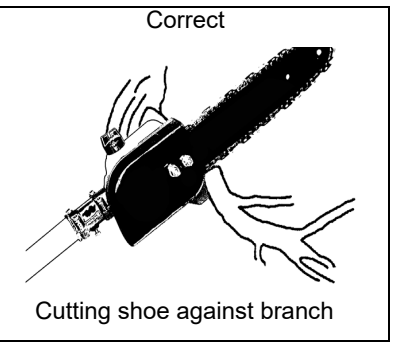
Shoulder Harness (if included)



1. Loosen the harness clamp bolt (A).
2. Put the harness on and attach it to the clamp ring (B).
3. Adjust harness for comfortable operation.
4. Tighten harness clamp bolt (A).

The Power Pruner® attachment is designed for light to medium trimming of limbs and branches up to 203 mm (8 in.) in diameter. Follow these tips for successful operation.

- Plan cut carefully. Check direction branch will fall.
- Plan retreat path from falling branch. Cut branches bounce when striking ground.
- Long branches should be removed in several pieces.
- Do not stand directly beneath branch being cut.
- When ready to cut, hold the cutting shoe against the branch. This will prevent whipping of the branch. Do not use back and forth sawing action.



Cutting shoe against branch

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- Look out for branches immediately behind the branch being cut. If saw chain hits a rear branch damage to the saw chain and guide bar may occur.
- Accelerate to full speed.

Not Correct



Cutting shoe away from branch

- Ease cutting pressure when nearing end of cut to maintain control.
- When pruning a limb 102 mm (4 in.) in diameter or larger, cut as follows:
  1. Under cut 1/4 limb diameter near tree trunk.
  2. Finish top cut slightly farther out on limb.
  3. Flush-cut stub at trunk.
- Do not use for felling or bucking.

Not Correct



Blade hits rear branch

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MAINTENANCE

⚠ WARNING

Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing and loose objects away from all openings. Always stop unit, disconnect spark plug or remove battery, and make sure all moving parts have come to a complete stop before removing obstructions, clearing debris, or servicing unit. Allow the unit to cool before performing maintenance or adjustments. Wear gloves to protect hands from sharp edges and hot surfaces.

⚠ WARNING

Operating a poorly maintained unit can result in serious injuries to operator or bystanders. Always follow all maintenance instructions as written, otherwise serious personal injury can result.

Your unit is designed to provide years of trouble-free service. Perform regular scheduled maintenance. If you are unsure about the task, or are not equipped with the necessary tools, we recommend that you take your unit to an Authorized Service Dealer for maintenance. To help you decide whether you want to do it yourself or have the Authorized Service Dealer do it, each maintenance task has been graded. If a task is not listed, see your Authorized Service Dealer for repairs.

NOTICE

The use of emission control components other than those specifically designed for this unit is a violation of federal law.

Skill Levels

Level 1 = Easy to do. Common tools may be required.

Level 2 = Moderate difficulty. Some specialized tools may be required.

Level 3 = See your Authorized Service Dealer.

Click HERE or go to https://www.echo-usa.com/products/maintenance-kit

or

https://www.shindaiwa-usa.com/you-can.aspx

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Maintenance Intervals

Component	Maintenance Procedure	Skill Level	Interval
Drive Shaft	Apply lithium based grease.	1	Every 25 hours of use.
Guide Bar	Inspect/Clean/Lubricate	2	Before each use.
Saw Chain	Inspect/Sharpen/ Replace/Tension		
Screws/Nuts/ Bolts	Inspect/Tighten/Replace	1	
Important - Time intervals shown are maximum. Actual use and your experience will determine the frequency of required maintenance.			

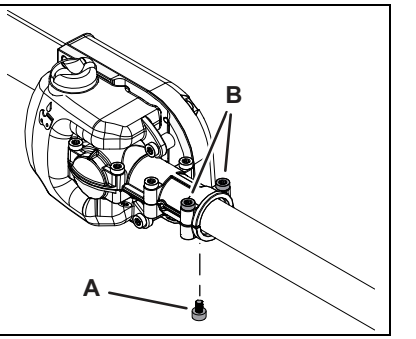
Lubrication

Drive Shaft

Level 1.

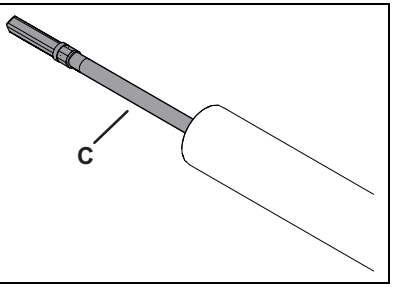
Parts required: Lithium-based grease.

1. Remove the cutting attachment locater screw (A).
2. Loosen the two bolts (B).
3. Remove the cutting attachment assembly.



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4. Remove the flex cable (C), wipe it clean, and apply 15 ml (0.5 oz.) of lithium-based grease.
5. Slide the flexible cable back into the drive housing. Do not get dirt on the flex cable.
6. Install and secure the cutting attachment assembly.



Guide Bar and Saw Chain Replacement

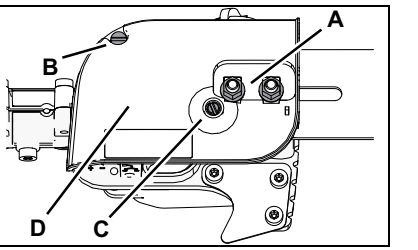
⚠ WARNING

Never try to replace or adjust guide bar and saw chain with engine running. Always disconnect spark plug wire or remove battery before servicing guide bar and saw chain. This saw chain is VERY sharp, wear heavy gloves to protect your hands when handling it. Wear eye protection meeting CE or ANSI specification Z87.1.

Guide Bar Replacement

Level 2.

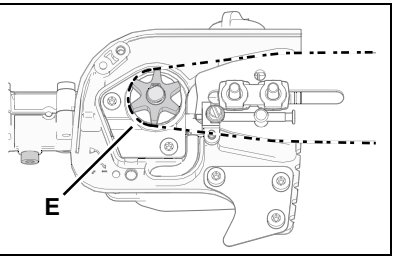
1. Remove two guide bar nuts (A) and guide bar cover screw (B), turn saw chain tension adjustment screw (C) counterclockwise to release tension.
2. Remove guide bar cover (D).
3. Remove guide bar and saw chain from gear case and sprocket.



4. Remove chain from guide bar and check guide bar for damage and excessive or uneven wear. Replace guide bar if necessary.
5. Install chain on guide bar with cutters on top of bar facing toward bar tip.

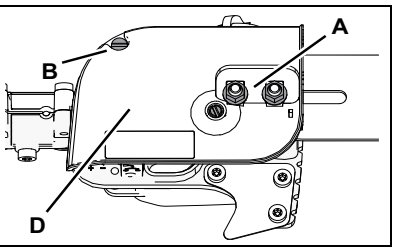
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6. Install guide bar and chain on gear case, engaging chain with drive sprocket (E).
7. Turn tension adjustment screw (C) clockwise to take up slack in saw chain.
8. Install guide bar cover (D), and tighten guide bar nuts finger tight and install guide bar cover screw (B).
9. Adjust chain tension.

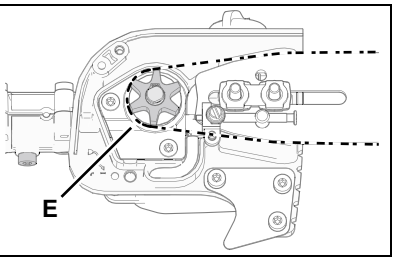


Guide Bar Cover Cleaning

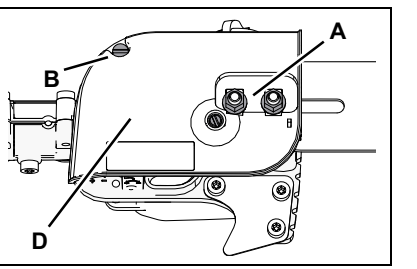
1. Remove two guide bar nuts (A) and guide bar cover screw (B).
2. Remove guide bar cover (D).



3. Gently brush debris from inside guide bar cover and from around sprocket (E).



4. Hold the bar nose up. Install guide bar cover (D). Install the guide bar nuts (A). Tighten the rear nut first, then tighten the front nut. Install and tighten the guide bar cover screw (B).



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Filing Standard Saw Chain

Level 2

NOTICE

Check bar part number on your Power Pruner. Chain and guide bar gauge size must be identical. Use bar and chain combinations shown in table below.

Power Pruner® Bar and Chain Combinations					
BAR P/N	**CHAIN P/N**	**CHAIN TYPE**	**LINKS**	**PITCH**	**GAUGE**
Narrow Kerf					
254 mm (10 in.) narrow bar P/N 10A4CD3739C	90PX39CQ	90	39	0.375 in.	0.043 in.
305 mm (12 in.) narrow bar P/N 12A4CD3744C	90PX44CQ		44		
Regular					
254 mm (10 in.) regular bar P/N 10A0CD3739C	91VXL39CQ	91	39	0.375 in.	0.050 in.
305 mm (12 in.) regular bar P/N 12A0CD3744C	91VXL44CQ		44		

NOTICE

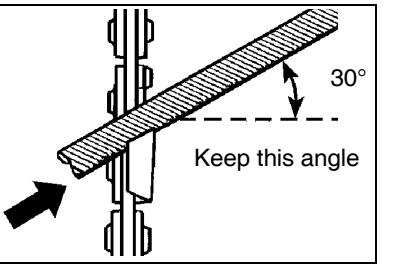
Dull or damaged cutters will result in poor cutting performance, increased vibration, and premature saw chain failure.

⚠ WARNING

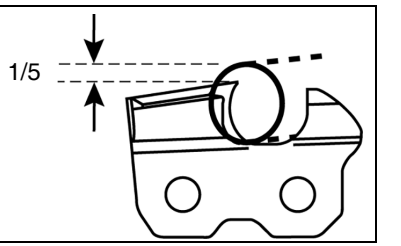
Always stop unit and disconnect spark plug wire, or remove battery before servicing guide bar and saw chain. Always wear gloves when filing saw chain, otherwise serious personal injury may result.

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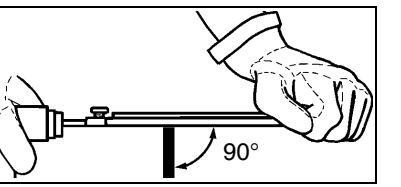
1. Use a 4.5 mm round file for a 0.043 in. gauge saw chain. Use a 5/32 in. round file for 0.050 in. gauge saw chain.
2. Set round file in cutter at 30° angle. One-fifth (1/5) of the file should be exposed above top cutter edge.



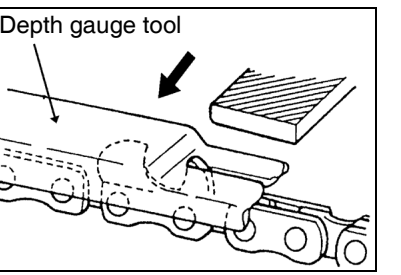
3. Keep file horizontal in cutter and file in one direction.



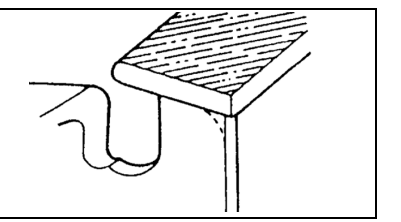
4. File until cutter top and side bevel edges are sharp without nicks.



5. Place depth gauge tool firmly on top of cutter with 0.635 mm (0.025 in.) slot and end against front cutter raker. File cutter raker with flat file until flush with top of depth gauge.

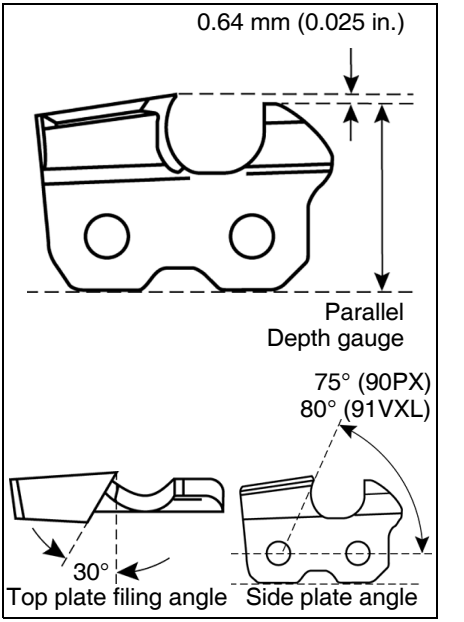


6. Finish cutter sharpening by rounding front raker edge with flat file.



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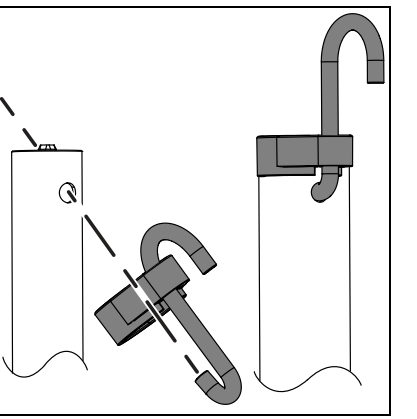
7. Properly filed cutter is as shown.
8. Apply clean oil and rotate saw chain slowly to wash away filings.
9. If saw chain is coated or clogged with resin, clean in kerosene, then soak in oil.



STORAGE

Storage Hook Installation

1. Insert small end of hook into locating hole on attachment shaft.
2. Slide plastic cap onto end of attachment shaft.



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SPECIFICATIONS

MODEL	99944200532
Length	1451 mm (57.1 in.)
Width	105 mm (4.1 in.)
Height	147 mm (5.8 in.)
Weight	2.25 kg (4.96 lbs)
Drive Shaft Assembly	6.35 mm (0.25 in.) flexible shaft
Rotation Direction	Counter-clockwise
Gear Case Ratio	1.5:1
Handle	Foamed rubber grip
Oiling System	Automatic, 225 ml (7.6 oz.) capacity
Sprocket Type	6 tooth spur, 9.53 mm (0.375 in.) pitch
Guide Bar	1.3 mm (0.050 in.) gauge; sprocket nose 254 mm (10 in.); 9.53 mm (0.375) pitch
Chain	Oregon Chain 91VXL-39E

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¿Qué factor(es) influenció más en su compra?
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☐ Confiabilidad ☐ Experiencia Anterior ☐ Calidad
☐ Amigo/Familia ☐ Marca ☐ Garantía

Quel facteur (facteurs) vous a influencé le plus?
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