



# Power Edger Attachment

## *Operator's Manual*

**MODEL            99944200470**

**FOR MODELS:**

**SRM-2100SB/2400SB**

**SRM-210SB/211SB/225SB**

**SRM-260SB/261SB**

**PAS 2100/2400**

**PAS 210/211**

**PAS-225**

**PAS 230/231**

**PAS 260/261**

**PAS-265**



### **WARNING**

Read rules for safe operation and instructions carefully. ECHO provides an Operator's Manual and a Safety Manual with your original Pro Attachment Series power source or Split Boom Trimmer. Those manuals and this manual must be read and understood for proper and safe operation, otherwise serious personal injury may result.

## INTRODUCTION

Welcome to the ECHO family. This ECHO product was designed and manufactured to provide long life and on-the-job-dependability. Read and understand this manual and the SAFETY MANUAL you found in the same package. You will find both easy to use and full of helpful operating tips and SAFETY messages.

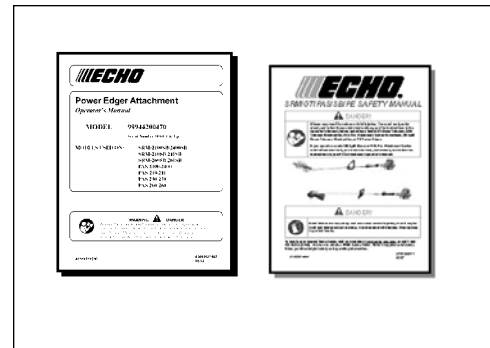
### THE ATTACHMENT OPERATOR'S MANUAL

Read and understand this manual before operation. Keep it in a safe place for future reference. It contains specifications and information for operation and maintenance specific to the attachment.

### THE SAFETY MANUAL

*(If available for attachment)*

Explains possible hazards and what measures you should take to insure safe operation.



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Specifications, descriptions and illustrative material in this literature are as accurate as known at the time of publication, but are subject to change without notice. Illustrations may include optional equipment and accessories, and may not include all standard equipment.

**SAFETY**

**MANUAL SAFETY SYMBOLS AND IMPORTANT INFORMATION**

Throughout this manual and on the product itself, you will find safety alerts and helpful, information 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 **CAN** 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 may lead to minor or moderate personal injury if not avoided.

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

**NOTE**  
This enclosed message provides tips for use, care and maintenance of the unit.

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

**INTERNATIONAL SYMBOLS**

Symbol form/shape	Symbol description/application	Symbol form/shape	Symbol description/application
	Read and understand Operator's Manual.		Fuel and oil mixture
	Wear eyes, ears and head protection		Rotating Cutting Attachment
	Hot Surface		Wear hand protection. Use two handed.
	Safety/Alert		DO NOT smoke near fuel.
	Avoid all power lines. This unit is not insulated against electrical current.		DO NOT allow flames or sparks near fuel.
		Keep bystanders away 15 m (50 ft.)	

Symbol form/shape	Symbol description/application	Symbol form/shape	Symbol description/application
	Keep feet away from blade		Direction of blade
	Thrown objects		Emergency stop
	Wear slip resistant foot wear.		Carburetor adjustment - Low speed mixture
	Primer bulb		Ignition ON/OFF
	Carburetor adjustment - High speed mixture		Carburetor adjustment - Idle speed
	Choke Control "Cold Start" Position (Choke Closed)		Choke Control "Run" Position (Choke Open)

## PERSONAL CONDITION AND SAFETY EQUIPMENT



### **WARNING**

Shaft Hedge Clipper Attachment users risk injury to themselves and others if the shaft hedge clipper is used improperly and or safety precautions are not followed. Proper clothing and safety gear must be worn when operating a shaft hedge clipper.

### ***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***

Wear eye protection that meets ANSI Z87.1 or CE requirements whenever you operate the trimmer.

### ***Hand Protection***

Wear no-slip, heavy duty work gloves to improve your grip on the Trimmer/Brush Cutter handles. Gloves also reduce the transmission of machine vibration to your hands.

### ***Hearing Protection***

ECHO recommends wearing hearing protection whenever unit is used.

### ***Vibration and Cold --***

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 trimmer 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.

### ***Proper Clothing***

Wear snug fitting, durable clothing;

- Pants should have long legs, shirts with long sleeves.
- DO NOT WEAR SHORTS,
- DO NOT WEAR TIES, SCARVES, JEWELRY.

Wear sturdy work shoes with non-skid soles;

- DO NOT WEAR OPEN TOED SHOES,
- DO NOT OPERATE UNIT BAREFOOTED.

Keep long hair away from engine and air intake. Retain hair with cap or net.

### ***Hot Humid Weather***

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.

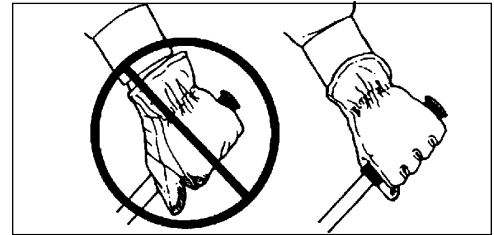


**Repetitive Stress Injuries --**

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**

Do not operate this product indoors or in inadequately ventilated areas. Engine exhaust contains poisonous emissions and can cause serious injury or death.

**Read the Manuals**

- Provide all users of this equipment with the Operator's Manual and Safety 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.

**Keep a Firm Grip**

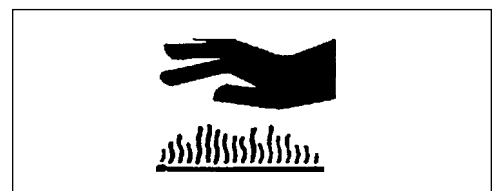
- Hold the front and rear handles with both hands, with thumbs and fingers tightly encircling the handles.

**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.

**Avoid Hot Surfaces**

- During operation, the drive shaft housing, attachment bearing housing and muffler cover area may become very hot, too hot to touch. Avoid contact during and immediately after operation.



## EQUIPMENT



### WARNING

Use this attachment with ECHO approved models only. Serious injury may result from the use of this attachment combined with a non approved ECHO product.

Before operation a complete check of the unit must be performed;

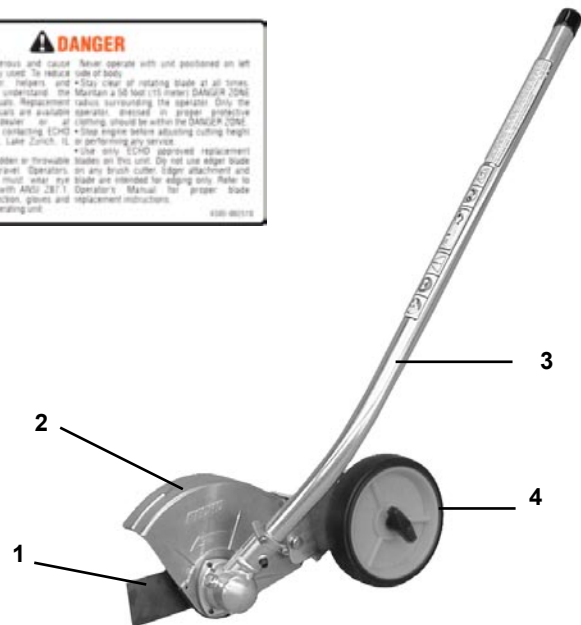
- Check unit for loose/missing nuts, bolts and screws. Tighten and/or replace as needed.
- Inspect fuel lines, tank and area around carburetor for fuel leaks. DO NOT operate unit if leaks are found.
- Inspect shield for damage and is **securely** in place. Replace if shield is damaged or missing.
- Check that the cutting attachment is firmly attached and in safe operating condition.

## DESCRIPTION

Locate this safety decal on your attachment. Make sure the decal is legible and that you understand and follow the instructions on it. If it cannot be read, a new one can be ordered from your ECHO dealer. See PARTS ORDERING instructions for specific information.

### Shaft Decals

P/N 505002510

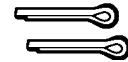
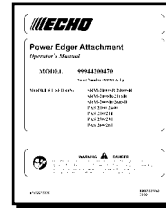


1. **BLADE** - Rotates to provide cutting action.
2. **DEBRIS SHIELD/FLAP** - Mounted over the cutting attachment. Helps protect operator by deflecting debris produced during the edging operation.
3. **DRIVE SHAFT ASSEMBLY** - Contains a specially designed liner and the flexible drive shaft.
4. **WHEEL** - Adjustable up/down, sets depth of blade.

## CONTENTS

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 Edger Attachment
- \_\_\_ 1 - Operators Manual
- \_\_\_ 1 - Warranty Registration Card
- \_\_\_ 2 - Split Pins
- \_\_\_ 1 - Storage Hook Assembly



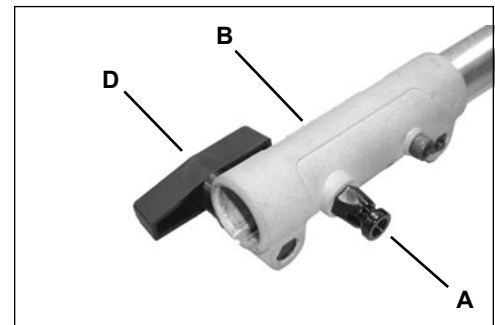
This unit is factory pre-assembled.

## ASSEMBLY

### POWER HEAD SHAFT/LOWER SHAFT ASSEMBLY

*Parts Required:* PAS or SRM-SB Power Head w/Shaft & Coupling.

1. Set Power Head/Shaft Assembly on a level surface.
2. Pull locator pin (A) out, and turn counter-clockwise 1/4 turn to lock-out position.
3. Remove vinyl cap from attachment drive shaft.
4. Carefully fit attachment drive shaft assembly into coupler (B) to decal assembly line (C), making sure that the inner lower drive shaft engages into the square upper drive shaft socket.



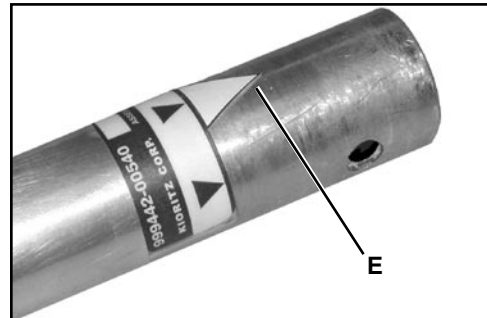
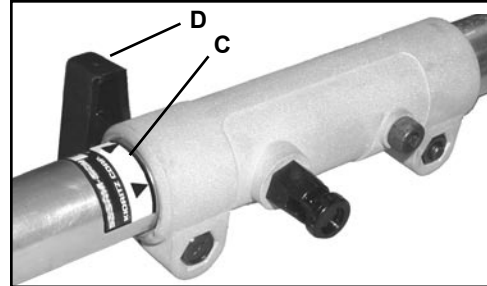
**NOTE**

Earlier model Power Heads may have shorter couplings. Short couplings fit flush to decal point (E). New couplings are 4-3/4 in. long, and fit flush to line (C).

**NOTE**

Lower bearing housing and head assembly must be in line with the engine.

5. Rotate locator pin (A) 1/4 turn clockwise to engage lower shaft hole. Insure locator pin is fully engaged by twisting lower drive shaft. Locator pin should snap flush in coupler. Full engagement will prevent further shaft rotation.
6. Secure lower shaft assembly to coupler by tightening clamping knob (D).



## OPERATION



**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. Allow unit to cool before performing service.

**NOTE**

Refer to your Pro Attachment Series Operator's Manual for correct engine fueling, starting and stopping instructions.

### *Operating Techniques*

1. Before edging, water the area to soften the ground to make edging easier.
2. Before edging, check the area and remove all obstacles and objects that could be thrown.
3. Plan to edge regularly to make it easier to keep a neat edge and to avoid having to make more than one pass.

**NOTE**

Blade depth may have to be adjusted due to differences in height between the hard surface and the top of the grass.



**WARNING**

Never adjust blade height with engine running, otherwise serious personal injury may result.



4. Adjust the blade's depth of cut to produce a fine cut between sidewalk and grass using a minimum blade depth, usually with about 13 mm (1/2 in.) of the blade into the ground.
5. Before edging, plan your direction of travel so that the unit will always be positioned on your right side and so that you walk on a hard surface whenever possible.
6. Hold edger as shown.



**WARNING**

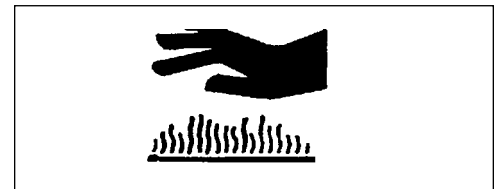
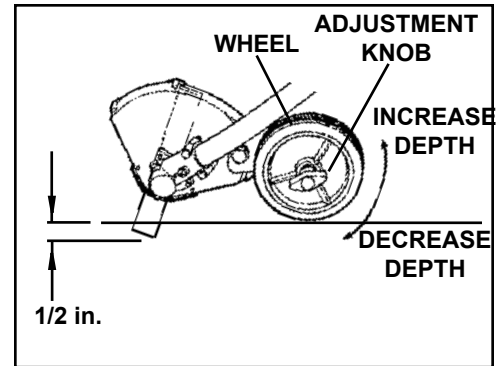
Before edging, be sure to read and understand the entire Operator's Manual to avoid the chance of serious injury.

7. When starting to edge, run the engine at full throttle, and lower the blade gently into the ground, being careful not to hit the concrete with the blade.
8. Don't force the blade. Only move forward as the blade will allow.



**WARNING**

The complete unit, specifically the drive shaft assembly and muffler exhaust area may become very hot during use. Avoid contact during and immediately after operation, otherwise serious personal injury may result.



**MAINTENANCE**



**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. Allow unit to cool before performing service. Wear gloves to protect hands from sharp edges and hot surfaces.

Your ECHO edger is designed to provide many hours of trouble free service. Regular scheduled maintenance will help your edger achieve that goal. If you are unsure or are not equipped with the necessary tools, you may want to take your unit to an ECHO Service Dealer for maintenance. To help you decide whether you want to DO-IT-YOURSELF or have the ECHO Dealer do it, each maintenance task has been graded.

## SKILL LEVEL

- Level 1 = Easy to do. Common tools may be required.  
 Level 2 = Moderate difficulty. Some specialized tools may be required.

## MAINTENANCE INTERVALS

Component	Maintenance Procedure	Skill Level	Interval
Drive Shaft	Grease	1	Every 25 hours of use [1]
Gear Housing	Grease	1	Every 15-25 hours of use [1]
Screws/Nuts/Bolts	Inspect/Tighten/Replace	1	Before Each Use
<b>IMPORTANT</b> - Time intervals shown are maximum. Actual use and your experience will determine the frequency of required maintenance.			
[1] Apply POWER BLENDX™ Grease.			

## BLADE REPLACEMENT/LUBRICATION

### Level 1.

*Parts Required:* **POWER BLENDX™** 8 oz. (P/N 91014) or Lithium Base Grease, Blade P/N 69601552632, split pin P/N 90030020022

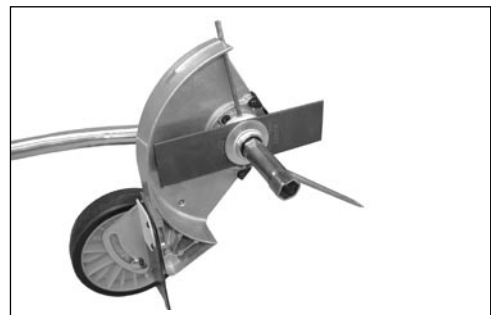


### Gear Case

#### NOTE

Grease gear case every 15 - 25 hours of use. Replace blade when it is worn shorter than 6 in. Remove blade and holders before greasing to prevent damage to gear and bearings.

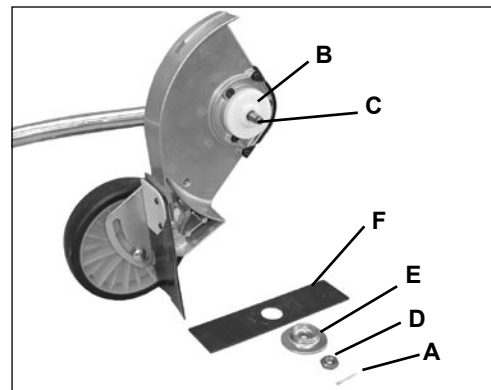
1. Shut engine off.
2. Remove split pin (A).
3. Rotate blade until holes in inner blade adapter (B) and gear box align. Insert locking tool to lock PTO shaft (C).



#### NOTE

Blade nut (D) is left hand thread.

4. Remove blade nut (D) in a clockwise direction using a wrench. Remove outer blade adapter (E), blade (F) and inner blade adapter (B).

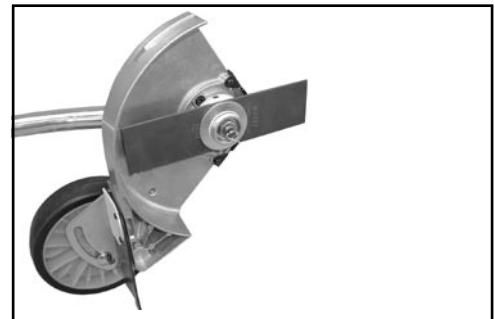
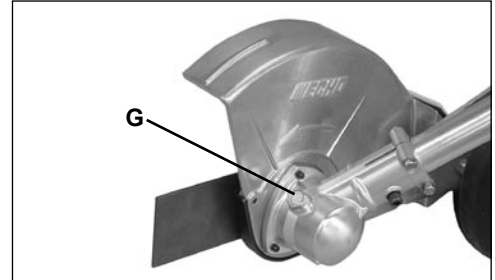


5. Remove plug (G) and fill gear case with grease. Install plug.
6. Install inner blade adapter (B) onto PTO shaft (C).
7. Install and center new blade (F) onto inner adapter (B).
8. Install outer adapter (E) and nut (D). Tighten nut (D) firmly, counterclockwise (CCW).

**IMPORTANT**

Never reuse old split pin.

9. Install new split pin (A) to secure nut.

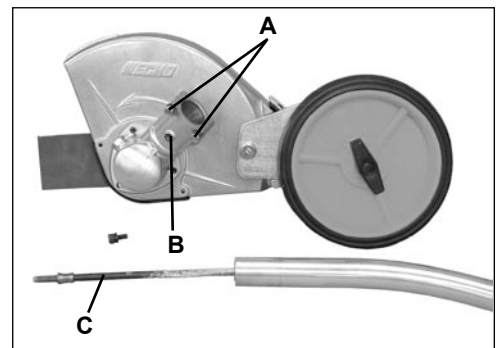


***Drive Shaft (Lower)***

**IMPORTANT**

Lower and upper drive shaft must be lubricated with high temperature automotive grease every 25 hours of operation, otherwise drive shaft assembly overheating and failure can result.

1. Loosen two (2) screws (A) and remove center locating screw (B). Pull gear box and shield from drive shaft housing.
2. Pull flexible cable (C) from the drive shaft housing, wipe clean and re-coat with a thin coating [15 ml (1/2 oz.)] of grease.
3. Slide the flexible cable (C) back in the drive housing. **DONOT** get dirt on the flex cable.
4. Install the gear housing and shield assembly.



## 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.



## SPECIFICATIONS

<b>MODEL</b> .....	<b>POWER EDGER ATTACHMENT</b>
Shaft Length .....	845 mm (33.25in.)
Attachment Width .....	165.1 mm (6.50 in.)
Attachment Height.....	552.45 mm (21.75 in.)
Weight w/blade.....	2.54 kg (5.6 lb.)
Drive Shaft Type.....	6.35 mm (1/4 in.) Flex Shaft
Rotation Direction .....	Clockwise viewed from right side
Blade Length .....	203 mm (8 in.)
Gear Case Ratio.....	2.07 : 1.0 Reduction
Shield.....	Open, anti-clog

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## SERVICING INFORMATION

### PARTS/SERIAL NUMBER

Genuine ECHO Parts and ECHO REPOWER™ Parts and Assemblies for your ECHO products are available only from an Authorized ECHO Dealer. When you do need to buy parts **always** have the Model Number, Type and Serial Number of the unit with you. You can find these numbers on the engine housing. For future reference, write them in the space provided below.

Model No. \_\_\_\_\_ SN. \_\_\_\_\_

### SERVICE

Service of this product during the warranty period must be performed by an Authorized ECHO Service Dealer. For the name and address of the Authorized ECHO Service Dealer nearest you, ask your retailer or call: 1-800-432-ECHO (3246). Dealer information is also available on our Web Site. 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 you may call the ECHO Consumer Product Support Department at 1-800-673-1558 from 8:30 am to 4:30 pm (Central Standard Time) Monday through Friday. Before calling, please know the model and serial number of your unit.

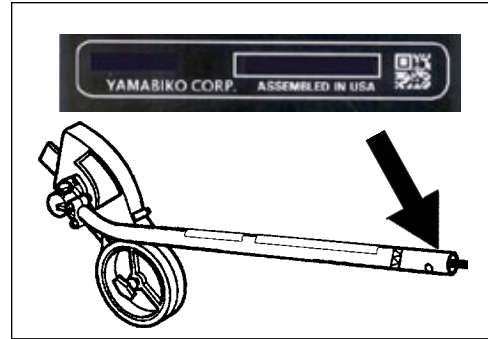
### WARRANTY REGISTRATION

To ensure trouble free warranty coverage it is important that you register your ECHO equipment on-line at [www.echo-usa.com](http://www.echo-usa.com) or by filling out the warranty registration card supplied with your unit. Registering your product confirms your warranty coverage and provides a direct link between you and ECHO if we find it necessary to contact you.

### ADDITIONAL OR REPLACEMENT MANUALS

Replacement Operator, Safety Manuals, and Parts Catalogs are available from your ECHO dealer or at [www.echo-usa.com](http://www.echo-usa.com) or by contacting ECHO Inc., 400 Oakwood Road, Lake Zurich, IL 60047 (800-673-1558). Always check the ECHO Web Site for updated information.

Safety Videos are available from your Echo dealer. A \$5.00 shipping charge will be required for each video.



### DEALER?

Call

**1-800-432-ECHO**

**[www.echo-usa.com](http://www.echo-usa.com)**

### CONSUMER PRODUCT SUPPORT

**1-800-673-1558**

**8:30 - 4:30 Mon - Fri C.S.T.**



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