



Power Edger Attachment

Operator's Manual

MODEL 99944200470

Serial Number S0600001001 - S06000057000

MODELS USED ON:

- SRM-2100SB/2400SB**
- SRM-210SB/211SB**
- SRM-260SB/261SB**
- PAS 2100/2400**
- PAS 210/211**
- PAS 230/231**
- PAS 260/261**



WARNING



DANGER

Read rules for safe operation and instructions carefully. ECHO provides an Operator's Manual and a Safety Manual 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 OPERATOR'S MANUAL

Contains specifications and information for operation, starting, stopping, maintenance, storage and assembly specific to this product.

THE SAFETY MANUAL

Contains additional safety information. This manual does not refer directly to edger attachment operation. The safety manual does provide information pertaining to common safe operational practices relating to equipment usage. Read and understand the SAFETY MANUAL, pages 2 through 5, 8, 10 through 15, 18 through 21, and 27 before operating your edger.




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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.

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.

 This symbol accompanied by the words **WARNING** and **DANGER** calls attention to an act or condition that can lead to serious personal injury to operator and bystanders.

 The circle with the slash symbol means whatever is shown within the circle is prohibited.

 **IMPORTANT**  **NOTE**

IMPORTANT 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.


SAFETY

DECALS

Locate these safety decals on your unit. The complete unit illustration found in the "DESCRIPTION" section, will help you locate them. Make sure the decals are legible and that you understand and follow the instructions on them. If a decal cannot be read, a new one can be ordered from your ECHO Dealer. See PARTS ORDERING instructions for specific information.

These decals are in English only:

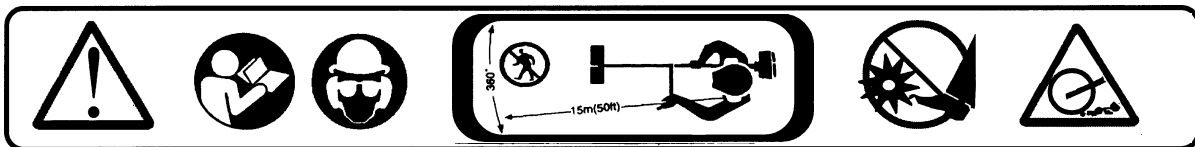
Shaft Decal

WARNING  **DANGER**

- WHEN USED IMPROPERLY, THIS EDGER COULD CAUSE SERIOUS PERSONAL INJURY. READ AND FOLLOW ALL SAFETY PRECAUTIONS IN THE OWNER'S MANUAL.
- NEVER OPERATE WITHOUT EYE PROTECTION. ALWAYS INSPECT AREA FOR HIDDEN OR THROWABLE OBJECTS. NEVER USE IN GRAVEL.
- STAY CLEAR OF ROTATING BLADE AT ALL TIMES. KEEP BYSTANDERS AT LEAST 50 FEET AWAY.
- STOP ENGINE BEFORE ADJUSTING CUTTING HEIGHT OR PERFORMING ANY SERVICE.
- NEVER OPERATE WITH UNIT POSITIONED ON LEFT SIDE OF THE BODY.
- USE ONLY ECHO APPROVED REPLACEMENT BLADES ON THIS UNIT.
- DO NOT USE EDGER BLADE ON ANY BRUSH CUTTER.
- EDGER ATTACHMENT AND BLADE ARE INTENDED FOR EDGING ONLY.
- AFTER REPLACING OR SERVICING BLADE, ARBORS, NUT AND COTTER PIN MUST BE USED PROPERLY.

P/N 89016052631

Shaft Decal



P/N 89016025560

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		Finger Severing
	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.		Engine choke control.
	Primer bulb		Ignition ON/OFF
	Carburetor adjustment - High speed mixture		Carburetor adjustment - Idle speed
	Carburetor adjustment - Low speed mixture		

SAFETY INSTRUCTIONS

PERSONAL CONDITION AND SAFETY EQUIPMENT

WARNING DANGER

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.

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.

EXTENDED OPERATION/EXTREME CONDITIONS

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.

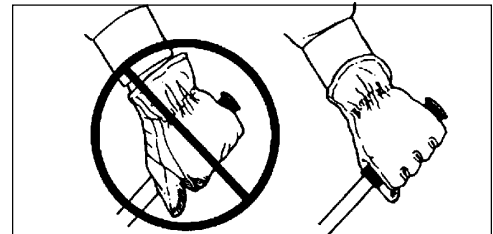
Repetitive Stress Injuries --

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/

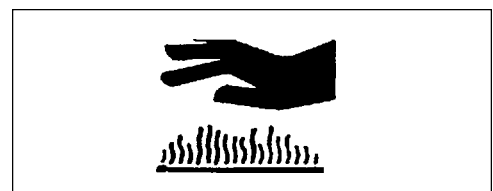
CTS is diagnosed, the more likely permanent nerve and muscle damage can be prevented.



EQUIPMENT

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



SAFE OPERATION

Provide Safety And Operating Instructions To All Operators

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

Keep A Firm Grip

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

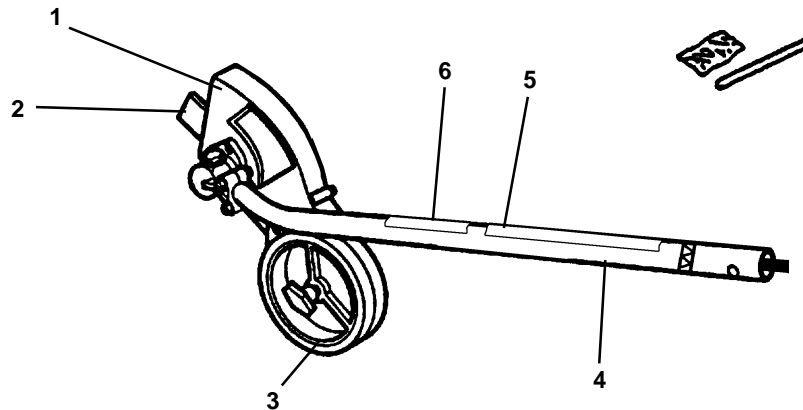
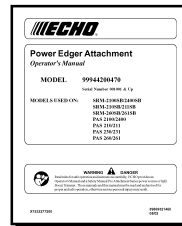


DESCRIPTION

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.

CONTENTS

- 1 - Power Edge Attachment
- Operators Manual
- Warranty Registration Card
- 10, split pin
- 1, Locking Tool



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

SPECIFICATIONS

MODEL	POWEREDGERATTACHMENT
Shaft Length	845 mm (33.25in.)
Attachment Width	165.1 mm (6.50in.)
Attachment Height	552.45 mm (21.75 in.)
Weight w/blade	2.3 kg (4.96lb.)
Drive Shaft Type	6.35 mm (1/4 in.) Flex Shaft
Rotation Direction	Clockwise viewed from right side
Blade Length	203 mm (8in.)
Gear Case Ratio	1.6 : 1.0 Reduction

ASSEMBLY

POWER HEAD SHAFT/LOWER SHAFT ASSEMBLY

Tools Required: None

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

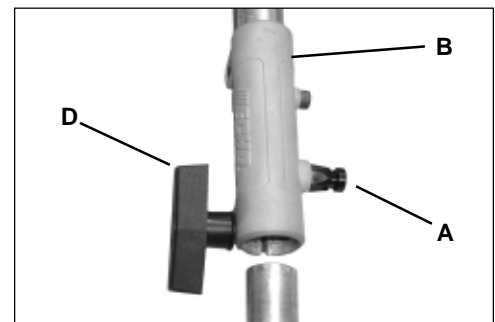
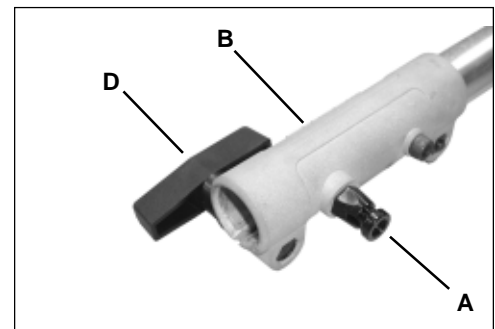
1. Set Power Head/Shaft Assembly on a level surface.
2. Pull locator pin (A) out, and turn counter-clockwise 1/4 turn to lock-out position.
3. Carefully fit attachment drive shaft assembly into coupler (B) to decal assembly line (C), making sure that the inner lower drive shaft engages into the square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

NOTE

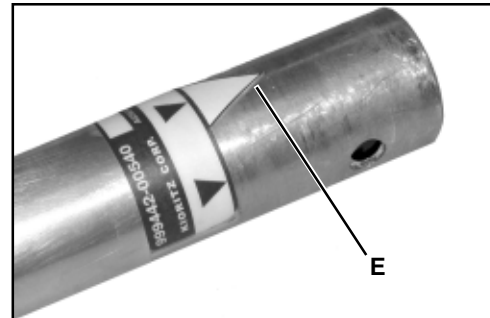
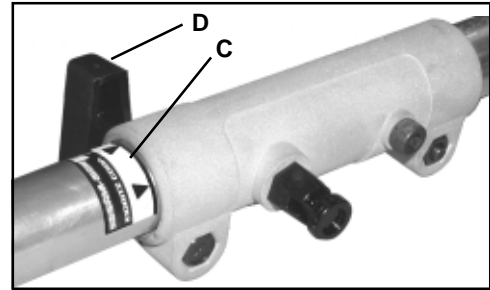
Earlier model Power Heads may have shorter couplings. Short couplings fit flush to decal point (E). New couplings are 4-3/4 in. long, and fit flush to line (C).

NOTE

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



4. 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.
5. Secure lower shaft assembly to coupler by tightening clamping knob (D).



OPERATION

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

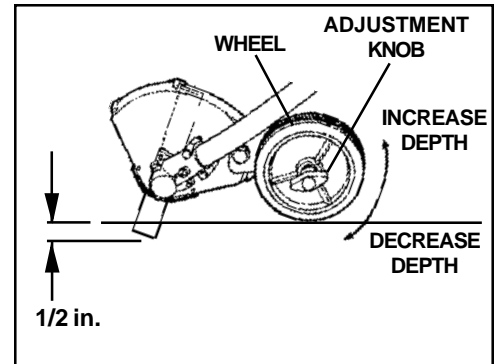
Blade depth may have to be adjusted due to differences in height between the hard surface and the top of the grass.



WARNING **DANGER**

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

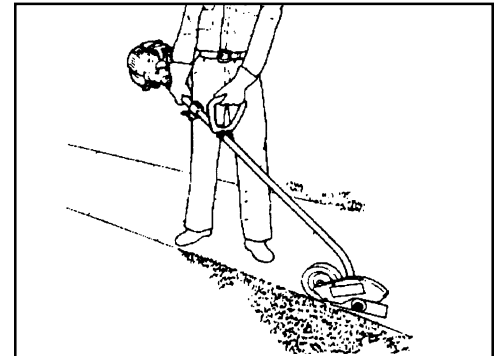
4. Adjust the blade's depth of cut to produce a fine cut between sidewalk and grass using a minimum blade depth, usually with about 13 mm (1/2 in.) of the blade into the ground.
5. Before edging, plan your direction of travel so that the unit will always be positioned on your right side and so that you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



WARNING  **DANGER**

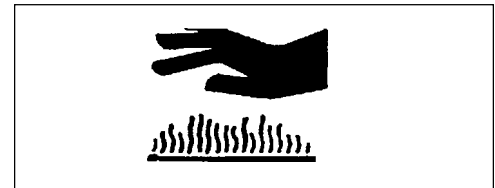
Before edging, be sure to read and understand the entire Operator's Manual to avoid the chance of serious injury.

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  **DANGER**

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

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. Most required tools come with unit.
- Level 2** = Moderate difficulty. Some specialized tools may be required.
- Level 3** = Experience required. Specialized tools are required. ECHO recommends that the unit be returned to your ECHO dealer for servicing.

MAINTENANCE INTERVALS

Component/System	Maintenance Procedure	Skill Level	Frequency
Drive Shaft	Grease	1	Every 25 hours of use
Gear Housing	Grease	1	Every 50 hours of use
Screws/Nuts/Bolts	Inspect/Tighten/Replace	1	Before each use

BLADE REPLACEMENT/LUBRICATION

Level 1.

Tools Required: Scrench, Locking Tool, Needle Nose Pliers, 8 mm Open End Wrench, Grease Gun

Parts Required: ECHO® LUBE™ 8 oz. (P/N 91014) or Lithium Base Grease, Blade P/N 69601552632

Gear Case

NOTE

Grease gear case every 50 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

Shield cover not shown for illustration clarity.

NOTE

Blade nut (D) is left hand thread.

4. Remove blade nut (D) in a clockwise direction using scrench. Remove outer blade adapter (E), blade (F) and inner blade adapter (B).
5. Remove plug (G) and grease gear housing. Do not over fill - grease will emerge between PTO shaft (C) and seal when over full.

NOTE

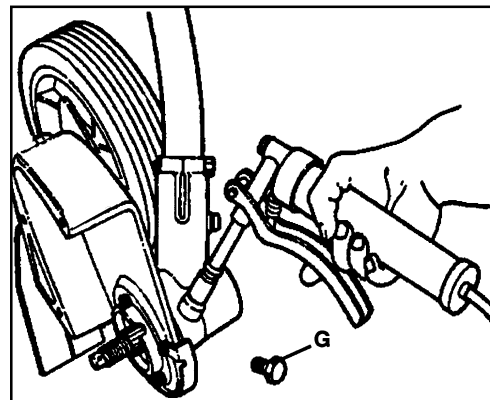
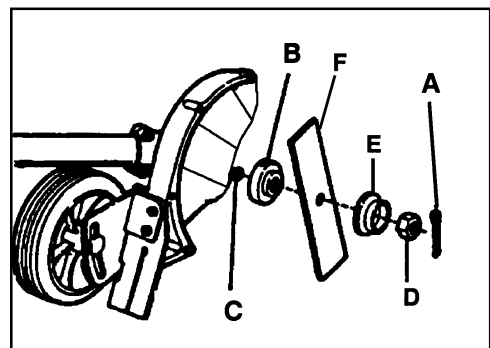
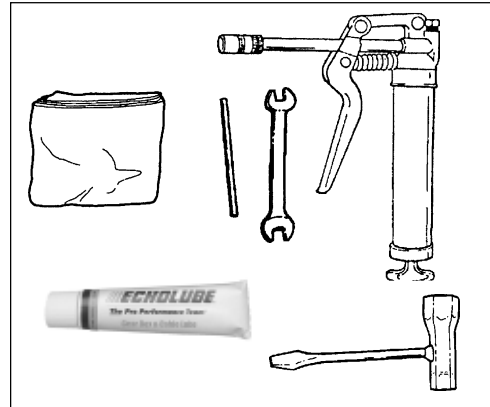
Shield cover not shown for illustration clarity.

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) (#89850201130) to secure nut.

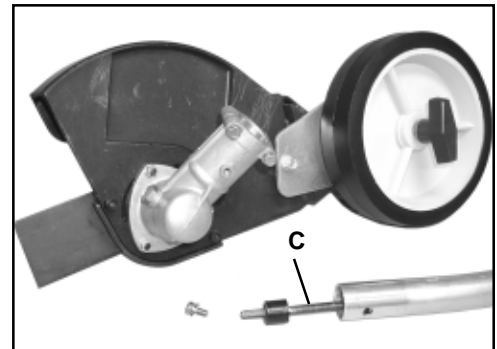
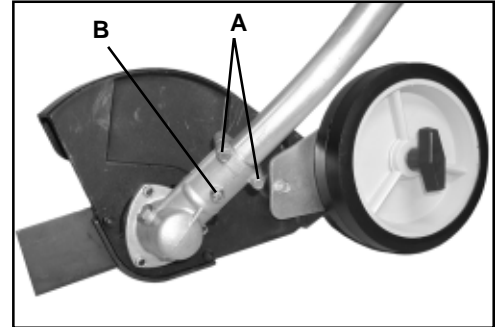


Drive Shaft (Lower)

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 ECHO[®] LUBE[™].
3. Slide the flexible cable (C) back in the drive housing. DO NOT get dirt on the flex cable.
4. Install the gear housing and shield assembly.



SERVICING INFORMATION

PARTS

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 and Serial Number of the attachment with you. You can find these numbers on the driveshaft model/serial number label. 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 to help your Consumer Product Support Representative.

WARRANTY REGISTRATION

You may register your Echo equipment using the warranty registration card or register on-line at www.echo-usa.com. Registering provides a direct link between you and ECHO if we find it necessary to contact you.

ADDITIONAL OR REPLACEMENT MANUALS

Safety Manuals in English/Spanish or English/French are available, free of charge, from your ECHO dealer or at www.echo-usa.com.

Operator's and Parts Manuals are available by:

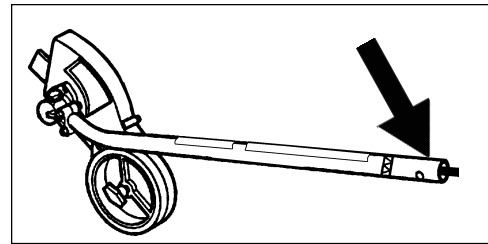
- Downloading free from www.echo-usa.com
- Purchasing from your Echo Dealer.
- Sending a check or money order for \$2.00 per Parts Catalog or \$1.50 per Operator's Manual made payable to ECHO, INCORPORATED. State on a sheet of paper the model number and serial number of the ECHO unit you have, part number of the manual (if known), your name and address and mail to address above.

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

Available Parts Catalog

Power Edger Attachment 99944200470 S/N S06000001001 - S06000057000

P/N99922203066



DEALER?

Call

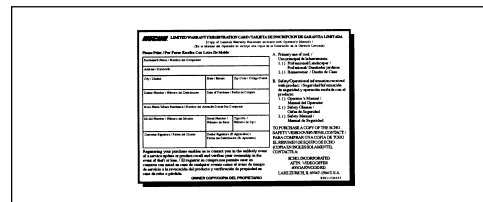
1-800-432-ECHO

www.echo-usa.com

CONSUMER PRODUCT SUPPORT

1-800-673-1558

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



ECHO
ECHO, INCORPORATED
400 OAKWOOD ROAD
LAKE ZURICH, IL 60047
www.echo-usa.com



SUPPLEMENT TO OPERATOR'S MANUAL
PART NUMBER X7532278700 (X753001210)
FOR MODEL: POWER EDGER ATTACHMENT
P/N 99944200470 S/N 001001 & UP

*This Supplement contains important information.
Please keep with your Operator's Manual.*

Your unit was manufactured using Echo's new open-face, all-metal blade guard, and improved heavy-duty gear case.

Specification (Pg. 7)

Gear Ratio ----- **2.07:1**
Weight w/Blade ----- **2.54 kg (5.6 lbs.)**

Maintenance (Pg. 9)

Maintenance Intervals

Drive Shaft Every **50** hours of use
Gear Housing Every **15-25** hours of use

Blade Replacement/Lubrication (Pg. 10)

Tools Required: 13 mm open-end wrench
Parts Required: Split pin P/N **90030020022**

Gear Case

NOTE: Grease gear case every **15-25** hours of use.

Drive Shaft

IMPORTANT: Lower and upper drive shaft must be lubricated with high temperature automotive grease every **50** hours of operation, otherwise drive shaft assembly overheating and failure can result.

*Este suplemento contiene la información importante.
Guarde por favor con el manual de su operador.*
Su unidad era manufacturada con el nuevo protector de Echo's de la lámina con la abrir-cara, y la caja mejorada del engranaje de calidad profesional.

Especificación (Pagina 7)

Relación de la caja de engranajes -- **2,07:1**
Peso (seco) con cuchulla ----- **2,54 kg. (5,6 lb.)**

Mantenimiento (Pagina 9)

Intervalos de mantenimiento
Eje Motriz Cada **50** horas de operación
Cubierta de Engranaje Cada **15 - 25** horas de operación

Reemplazo/lubricación de la hoja (Pagina 10)

Herramientas requeridas: llave de boca de **13 mm**
Piezas requeridas: pasador hendido N/P **90030020022**

**SUPLEMENTO DEL MANUAL DEL OPERADOR
NUMERO DE PIEZA X7532278700 (X753001210)
PARA LOS MODELO: ADAPTADOR PARA EL ORILLADOR
N/P 99944200470 N/S 001001 Y SIG.**

Caja de engranajes

NOTA
Engrase la caja de engranajes cada **15-25** horas de uso.

Eje de Manejo

IMPORTANTE
El eje inferior y el superior de manejo deben de ser lubricados con grasa "automotive" a alta temperatura cada **50** horas que esta se encuentre en operación de lo contrario el eje de manejo ensamblado se sobrecalentara y como resultado no funcionara.

Ce supplément contient l'information importante. Veuillez le garder avec le manuel de votre opérateur.
Votre unité a été fabriquée en employant le nouveau Echo ouvrir-visage, garde en métal de la lame, et la améliorée graisse caisse.

Caractéristiques (Page 7)

Rapport de caisse de vitesse ----- **2,07/1**
Poids de l'accessoire ----- **2,54 kg (5,6 lb.)**

Entretien (Page 9)

Intervalles d'entretien

Arbre moteur Toutes les **50** heure
Carter d'engrenages Toutes les **15 - 25** heure

Remplacement de la lame/lubrification (Page 10)

Outils nécessaires : clé plate de **13 mm**
Pièces nécessaires : goupille fendue réf. **90030020022**

**SUPPLÉMENT AU MANUEL DE L'OPÉRATEUR
RÉFÉRENCE X7532278700 (X753001210)
POUR MODÈLE: L'ACCESSOIRE DE COUPE-BORDURES
RÉF. 99944200470 N/S 001001 ET SUPERIEUR**

Carter d'engrenages

REMARQUE
Graisser le carter d'engrenages toutes les **15 - 25** heures de fonctionnement.

Arbre moteur

IMPORTANT
L'arbre moteur (inférieur et supérieur) doit être lubrifié avec la graisse automobile pou toutes les **50** heures de fonctionnement pour éviter sa surchauffe et une défaillance.