

99944200540

Trimmer 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

Operator's Manual



Users of this equipment risk injury to themselves and others if the unit is used improperly and/or safety precautions are not followed. ECHO provides an operator's manual. It must be read and understood for proper and safe operation. Failure to do so

could result in serious injury.

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.

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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 will find both easy to use and full of helpful operating tips and SAFETY messages.

The Operator's Manual

Keep it in a safe place for future reference. Contains specifications and information for safety, operation, maintenance, storage and assembly specific to this product. Scan QR codes throughout the operator's manual for more information.

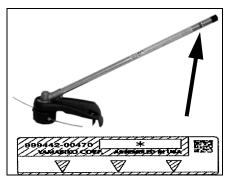
The Safety Manual

Keep it in a safe place for future reference. Explains possible hazards and the measures you should take to insure safe operation.

SERVICING INFORMATION

Parts/Serial Number

Genuine ECHO Parts, assemblies and maintenance kits for your ECHO products are available from an Authorized ECHO Dealer. When you do need to buy parts **always** have the Model Number 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. _____ Serial No. _____

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 8:00 am to 5:00 pm (Central Standard Time) Monday through Friday. Before calling, please know the model and serial number of your unit.

Product Registration

To ensure trouble free warranty coverage it is important that you register your ECHO equipment on-line at <u>www.echo-usa.com</u> or by filling out the product registration sheet included in this manual. 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 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.



SAFETY



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

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.

A 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.

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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.

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.

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.

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	<u>بلا</u>	Wear slip resistant foot wear	



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0	Description	Symbol	D		
Symbol	Keep feet away from blade		Description Do not operate closer than 15 M (50 ft.) from electrical hazards. Keep bystanders at least 15 meters (50 feet) away		
$\textcircled{\begin{tabular}{ c c c c } \hline \hline & \hline \hline & \hline & \hline \hline & \hline & \hline & \hline & \hline & $	DO NOT USE BLADES - Line Head Only		Thrown objects		
*	Plan retreat path from falling objects		Hot Surface		
		AVOID KICKOUT. Keep bystanders at least 15 meters (50 feet) away.			
		Beware Thrown Objects Wear Eye Protection			
		Keep bystanders and helpers away 15 m (50 ft.).			

Personal Condition and Safety Equipment

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 may be worn over safety glasses or goggles to provide protection from sharp branches or flying debris.

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/Ear Protection

ECHO recommends wearing hearing protection 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 BAREFOOTED.

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.

WARNING

The components of this machine generate an electromagnetic field during operation, which may 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 <u>does not recommend</u> the use of this machine by anyone who has a pacemaker.

Extended Operation / Extreme Conditions

Prolonged exposure to cold and/or vibration may result in injury. Read and follow all safety and operation instructions to minimize risk of injury. Failure to follow instructions may 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.



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.

A 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 may result.

A 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

• 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.



Avoid Hot Surfaces

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



Equipment



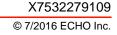
Use this attachment with ECHO approved models only. Serious injury may result from the use of this attachment combined with a non approved ECHO product.

- Check unit for loose/missing nuts, bolts, and screws. Tighten and/or replace as needed.
- Inspect shield for damage and ensure that the cut-off knife is securely in place. Replace if either is damaged or missing.
- Check that the cutting attachment is firmly attached and in safe operating condition.
- Note: ECHO, INC. will not be responsible for the failure of cutting devices, attachments or accessories which have not been tested and approved by ECHO.



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

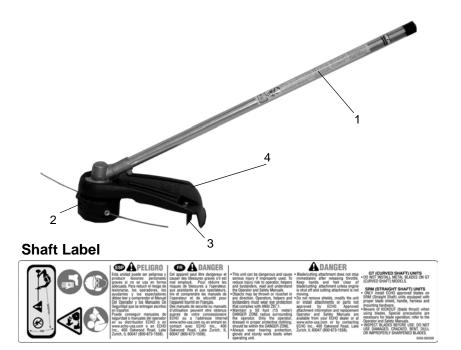
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- ALWAYS stop engine, disconnect spark plug, and make sure all moving parts have come to a complete stop before removing obstructions, clearing debris, or servicing unit.
- DO NOT start or operate unit unless all guards and protective covers are properly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

DESCRIPTION

Locate the safety decal(s) on your unit. Make sure the decal(s) is legible and that you understand and follow the instructions on it. If a decal cannot be read, a new one can be ordered from your ECHO dealer.



1. **DRIVE SHAFT ASSEMBLY** - Contains a specially designed liner and the flexible drive shaft.

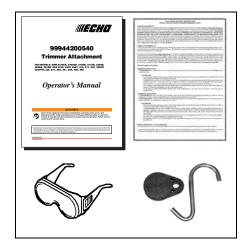
- 2. **NYLON CUTTING ATTACHMENT** Contains replaceable nylon trimming line that advances when the trimmer head is tapped against the ground while the head is turning at normal operating speed.
- 3. **CUT-OFF KNIFE** Automatically trims line to the correct length: 5 in. after head is tapped on the ground. If trimmer is operated without a cut-off knife the line will become too long, the engine will overheat, and engine damage may occur.
- 4. **DEBRIS SHIELD with CUT-OFF KNIFE** Required when unit is equipped with nylon line head. Do not operate unit without shield.

CONTENTS

The ECHO product you purchased has been factory pre-assembled for your convenience.

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 PAS Trimmer Attachment
- _____1 Operator's Manual
- _____1 Warranty Sheet
- _____1 Storage Hook Assembly
- ____ 1 Safety Glasses





ASSEMBLY

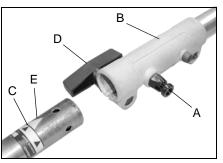
Power Head Shaft/Lower Shaft Assembly



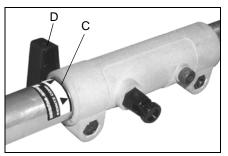
Do not perform maintenance or assembly procedures with engine running.

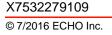
Parts Required: PAS or SRM-SB Power Head w/Shaft & Coupling

- 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. Remove cardboard spacer, if necessary.
- Carefully fit attachment drive shaft assembly into coupler (B) to decal assembly line (C), making sure that the inner lower drive shaft engages 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.
- 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.
- Secure lower shaft assembly to coupler by tightening clamping knob (D).









OPERATION

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

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.

To Advance Trimmer Line (Automatic Line Head Models)

See Maintenance Section for nylon line replacement.

To advance trimmer line, tap trimmer head against the ground while the head is turning at normal operating speed.

MAINTENANCE



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 unit is designed to provide many hours of trouble free service. Regular scheduled maintenance will help your unit achieve that goal. If you are unsure or are not equipped with the necessary tools, we recommend that you take your unit to an ECHO Servicing 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. If the task is not listed, see your ECHO Dealer for repairs.

Skill Levels

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



Click HERE or go to http://www.echo-usa.com/products/maintenance-kit for information on Maintenance Kits

Maintenance Intervals

Component/System	Maintenance Procedure	Skill Level	Interval
Drive Shaft	Grease	1	Every 25 hours of use (1)
Gear Housing	Grease	1	Every 50 hours of use (1)
Screws/Nuts/Bolts	Inspect/ Tighten/ Replace	1	Before Each Use

IMPORTANT - Time intervals shown are maximum. Actual use and your experience will determine the frequency of required maintenance. (1) Apply lithium based grease.

Lubrication

Level 1.

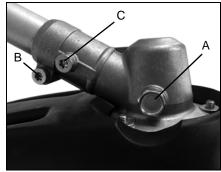
Parts Required: Lithium Base Grease.

Gear Housing

- 1. Clean all loose debris from gear case.
- 2. Remove plug (A) and check level of grease.
- Add grease if necessary. DO NOT over-fill.

Drive Shaft (Lower)

 Loosen screw (B) and remove locating screw (C). Pull gear case and shield from drive shaft housing.



- 2. Pull flexible cable 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 back in the drive housing. DO NOT get dirt on the flex cable.
- 4. Install the gear housing and shield assembly.



MAINTENANCE

Nylon Line Replacement



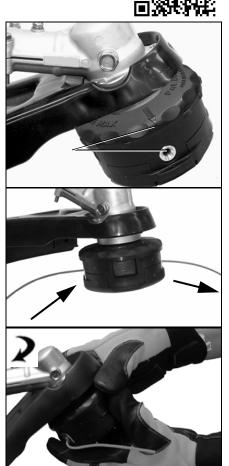
Wear Gloves or personal injury may result:

- Cutoff knife is sharp.
- Gearcase and surrounding area may be hot.

- Cut one piece of line to recommended length.
 2.0 mm (.080) diam. - 6 m (20 ft.)
 2.4 mm (.095) diam. - 6 m (20 ft.)
- 2. Align arrows on top of knob with openings in eyelets.
- Insert one end of trimmer line into an eyelet, and push line equal distance through trimmer head.

4. Hold trimmer head while turning knob clockwise to wind line onto spool until about 13 cm (5 in.) of each line remains exposed.

Trimmer head is now fully loaded and ready for operation.







NOTICE

When the wear indicators located at the bottom of the Speed-Feed® head are worn smooth, or if holes appear, replacement of the cover or the entire Speed-Feed® head is required.

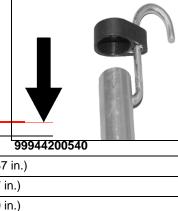


STORAGE

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



MODEL	99944200540			
Shaft Length	834 mm (32.87 in.)			
Attachment Width	177 mm (6.97 in.)			
Attachment Height	236 mm (9.29 in.)			
Weight (dry) w/line head	1.07 kg (2.35 lb.)			
Drive Shaft	1/4" Flex Shaft			
Direction of Rotation	Counter clockwise viewed from the top			
Cutter Head	Speed-Feed® Nylon line head			
Line Capacity	6 m (20 ft.)			



PRODUCT REGISTRATION

Thank you for choosing ECHO Power Equipment

Please go to <u>http://www.echo-usa.com/Warranty/Register-Your-ECHO</u> to register your new product on-line. It's **FAST** and **EASY**! NOTE: your information will never be sold or misused by ECHO, Inc. Registering your purchase enables us to contact you in the unlikely event of a service update or product recall, and verifies your ownership for warranty consideration.

If you do not have access to the Internet, you can complete the form below and mail to:

ECHO Inc., Product Registration, PO Box 1139, Lake Zurich IL 60047.



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ONLINE OPTION: Register online and save a stampl You will be alerted of product updates and/or be sampl You will alore una set product information and special offers. Simply go to: www.eetho-uss.com branch : Por Favor Enscriba Con Letra De Molde : En Lettre Carré S.V.R.	Purchaser's Name : Nombre del Comprador : Nom de l'acheteur	Address : Dirección : Adresse	City : Cludad : Ville State : Estado : Zip Province	E-Mail Address : Dirección De Correo Electrónico : Courrier Électronique	Phone Number : Número De Teléfono : Téléphone Date o Date d	Where Purchased : Nombre del Almacén donde fue Comprado : Lieu d'achat	Nodel Number : Numero del Modelo: No. de modéle Serial Number : Numero de Serie : No. de série	Registering your purchase enables us to contract you in the unlikely event of a service update or product recall and verifies your womeship. In the event of loss. El trapstra su comparts permittered war are nonarison unset on raso de lagaque event como el avior de fampo de avrole activitation and producty verificación. Les progradad en raso de voto opérida. E Lemegatament de votre acadar uno permittar de voto contacter data con esta productor servicio demonstramente de votre acadar uno permittar de voto contacter data con esta productor servicio demonstrament de acord in un de ranord in travensi base la mondationa an esta contra predictar.	

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