



# 99944200513

## Cultivator Pro Attachment™ Series

**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*

### WARNING



*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. You will find it easy to use and full of helpful operating tips and SAFETY messages.

### The Operator's Manual

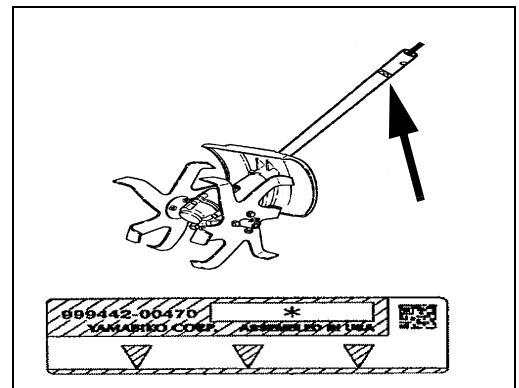
Keep it in a safe place for future reference. Contains specifications and information for safety, operation, maintenance, storage and assembly specific to this product.

## 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 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 8:00 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 [www.echo-usa.com](http://www.echo-usa.com) 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](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.



For more information scan this QR code.

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

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## SAFETY

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### WARNING

*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.

### 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.*

### 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  | Symbol | Description                               | Symbol  | Description    |
|--------|-----------------------------------|--------|--|--------|---|---|----------------|
|        | Warning, See Operator's Manual    |        | Safety/Alert   |        | <b>DO NOT USE BLADES - Line Head Only</b> |   | Thrown objects |
|        | Wear eye, ear and head protection |        | Finger Severing  |        | Plan retreat path from falling objects    |   | Hot Surface    |
|        | Wear hand and foot protection     |        | Rotating Cutting Attachment  |        |   | <b>AVOID KICKOUT.</b><br>Keep bystanders at least 15 meters (50 feet) away. |                |
|        | Wear Face Shield                  |        | Wear slip resistant foot wear  |        |   | Beware Thrown Objects<br>Wear Eye Protection                                |                |
|        | Keep feet away from blade         |        | Do not operate closer than 15 M (50 ft.) from electrical hazards.<br>Keep bystanders at least 15 meters (50 feet) away |        |   | 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 does not recommend the use of this machine by anyone who has a pacemaker.***

## Extended Operation / Extreme Conditions

### CAUTION

***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.

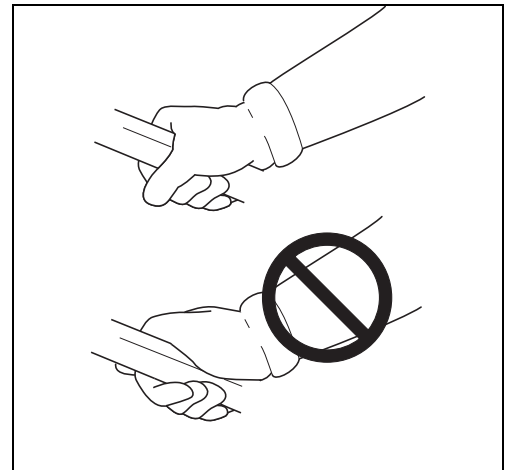


### Repetitive Stress Injuries (RSI)

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 exercise 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 may result.***

**⚠ 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 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****⚠ 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.***

- Check unit for loose/missing nuts, bolts, and screws. Tighten and/or replace as needed.
- Inspect shield for damage and that shield is securely in place. Replace if shield is damaged or missing.
- Check that the cutting attachment is firmly attached and in safe operating condition.
- The cultivator gear housing is designed for ECHO recommended tines. Do not modify the gear housing for any other purpose or replace tines with other type or size.

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.

**⚠ WARNING**

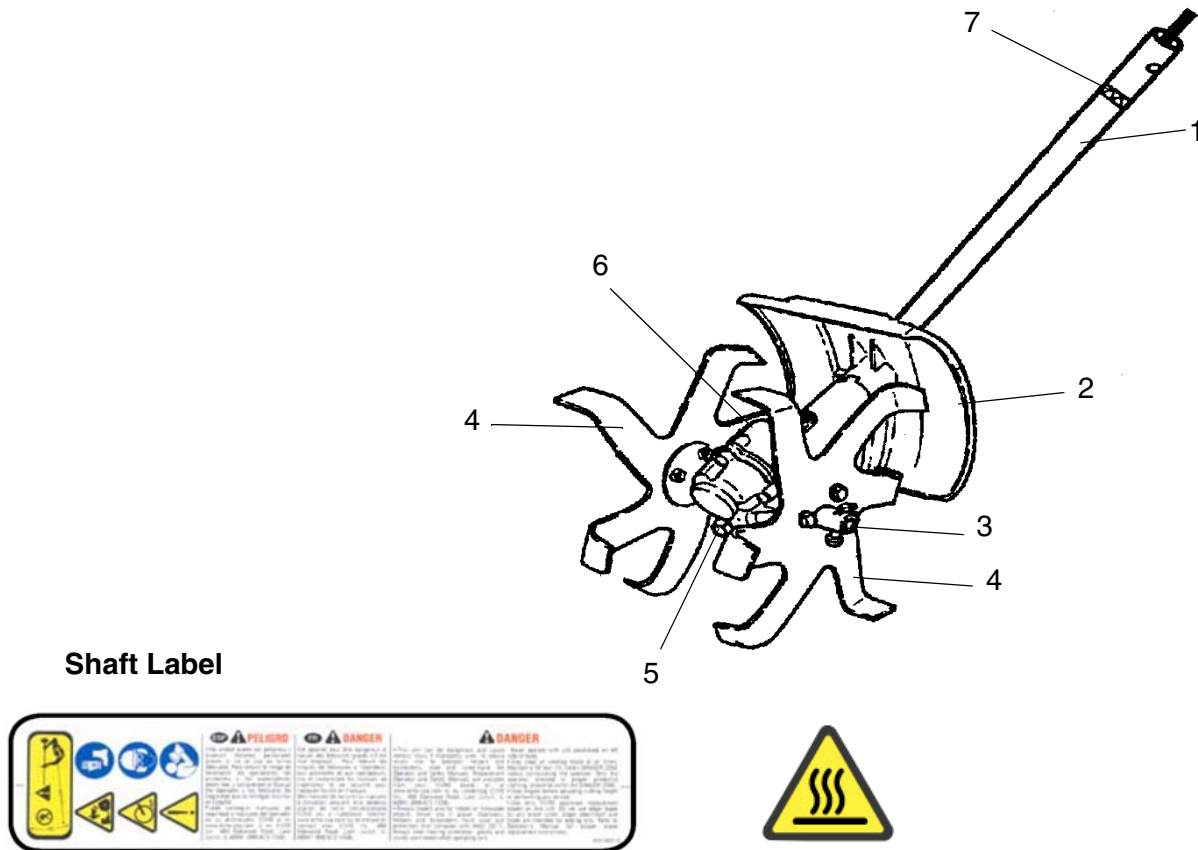
***Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing and loose objects away from all openings.***

- ◆ *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.



## 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. See PARTS ORDERING instructions for specific information.



1. **DRIVE SHAFT ASSEMBLY** - Contains a specially designed liner and the flexible drive shaft.
2. **SHIELD** - Attached to deflect debris away from operator and reduce accidental contact with tines.
3. **HUB** - Separately attached to axle ends by clevis pin and spring pin. Tines bolt to hubs.
4. **TINES** - Identical on right and left side from operator's position. See page 12 for optional settings.
5. **GREASE ACCESS BOLT** - Apply grease to gear housing every 25 hours of use.
6. **GEAR HOUSING** - Houses gears and ball bearings for driving tines.
7. **SERIAL NUMBER LABEL** - Also serves as insertion line when drive shaft is properly engaged.

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**CONTENTS**

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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 - PAS Cultivator Attachment
- \_\_\_\_ 1 - Operator's Manual
- \_\_\_\_ 1 - Storage Hook Assembly



## ASSEMBLY

### Power Head Shaft/Lower Shaft Assembly

#### **⚠ WARNING**

***Do not perform maintenance or assembly procedures with engine running.***

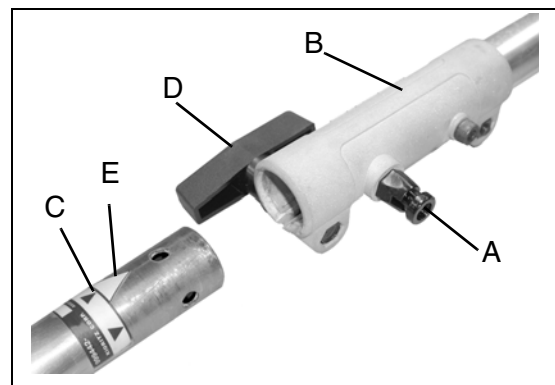


For more information scan this QR code.

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

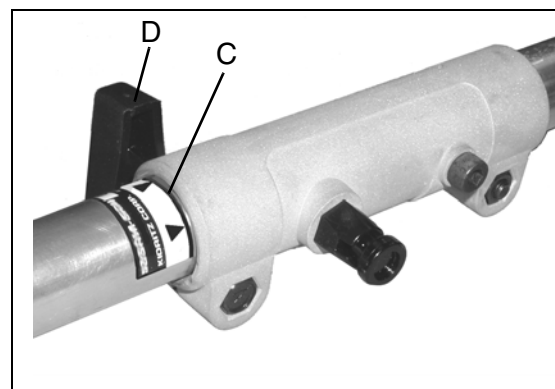
1. Set Power Head/Shaft Assembly on a level surface.
2. Pull locator pin (A) out, and turn counter-clockwise 1/4 turn to lock-out position.
3. Remove vinyl cap from attachment drive shaft.
4. Remove cardboard spacer, if necessary.
5. Carefully fit attachment drive shaft assembly into coupler (B) to decal 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.

6. 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.
7. Secure lower shaft assembly to coupler by tightening clamping knob (D).



## OPERATION

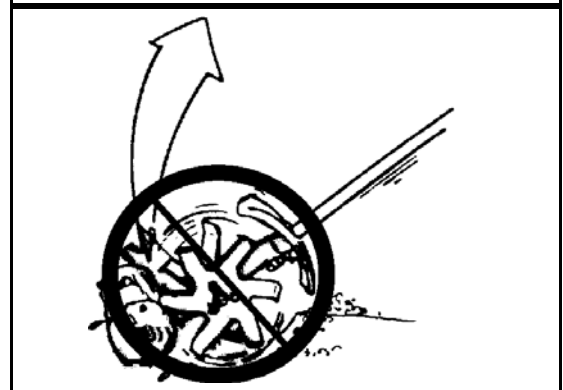
### ⚠ WARNING

*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.*

## Operating Techniques

### ⚠ WARNING

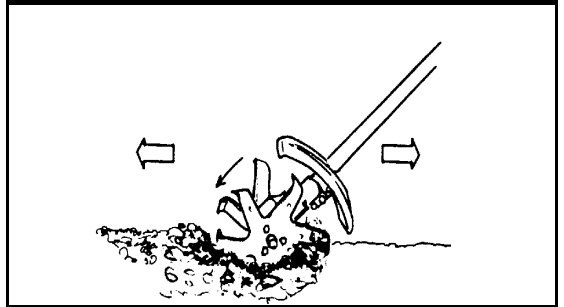
- When engine starts tines may rotate. Warn fellow workers and keep children and pets from coming nearer than 4.5 m (15 ft.).
  - ◆ Always grip throttle handle with right hand and support handle with left hand.
  - ◆ Always stop engine when transporting unit to or between work areas..
  - ◆ Do not perform maintenance procedures, unclog or clean cultivator tines while engine is running.
  - ◆ Do not operate the cultivator above ground level or near feet.
  
- ◆ Do not allow the tines to contact large obstructions which may cause kickback and loss of control..
  
- ◆ Failure to follow these warnings may result in serious injury.



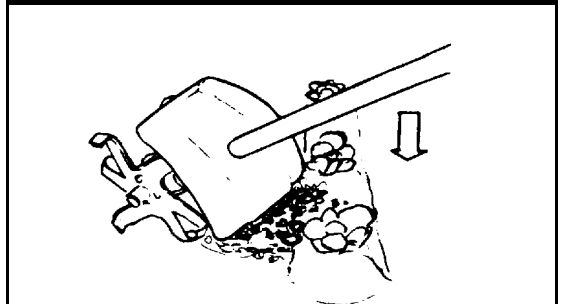
1. The tilling width of the cultivator is approximately 165 mm (6.5 in.). Place cultivator in area to be tilled, hold unit firmly with left hand on front grip and right hand on rear grip and gradually engage throttle trigger. Guide the cultivator allowing the tines to pull forward. The soil hardness will control tilling speed.



2. The cultivator attachment is capable of tilling in the forward or reverse direction. For deep soil tilling, till forward then lightly pull unit rearward allowing the tines to make a deeper cut into the soil. Deep soil cultivating can also be enhanced by repositioning the tines. (Refer to Tine Setting).

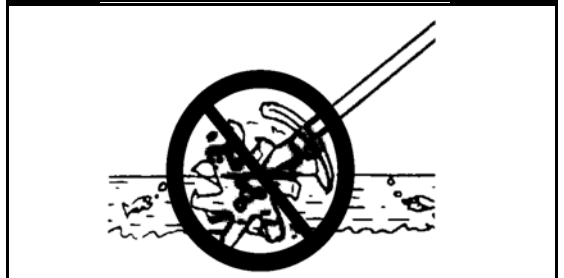


3. To raise or aerate the soil, tilt engine closer to the ground which will raise cultivator tines higher relative to the soil surface.



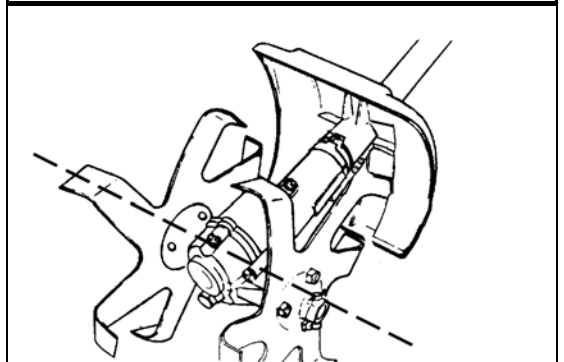
### NOTICE

*Do not operate cultivator underwater. The gear housing is not sealed and water will wash away lubrication, damaging gears, bearings, and seals.*

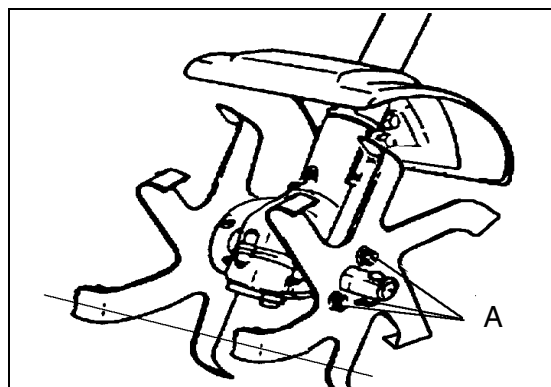


### Resetting Tines for Deep Cultivation

The tines are factory assembled with blade ends offset for standard cultivation. For deep cultivation, the left tine (viewed from the operator's position) must be repositioned on the hub aligning the left and right tine blade ends directly across from each other.

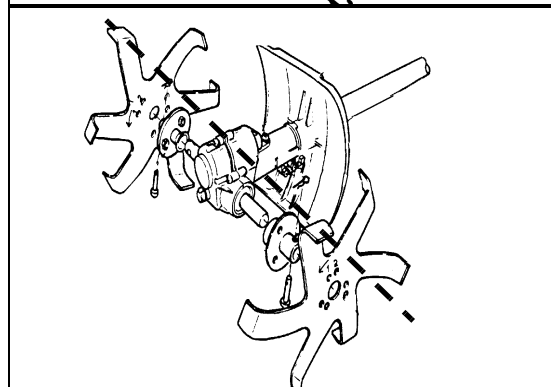


1. Remove three (3) bolts (A) mounting left tine to hub. The bolts will be mounted in hole labeled (1).



2. Rotate tine counter clockwise and position hole labeled (2) over hub mounting holes. The tine blade ends should be aligned directly opposite each other.

3. Install and tighten bolts.



## 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 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, 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. 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.

ECHO offers **REPOWER™** Maintenance Kits and Parts to make your maintenance job easier.

### Maintenance Intervals

| COMPONENT/SYSTEM   | MAINTENANCE PROCEDURE   | SKILL LEVEL | Interval                  |
|--------------------|-------------------------|-------------|---------------------------|
| Drive Shaft        | Grease                  | 1           | Every 25 hours of use [1] |
| Gear Housing       | Grease                  | 1           | Every 25 hours of use [2] |
| Gear Housing/Tines | Clean                   | 1           | Dailey or Every 4 hours   |
| 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.

[2] Apply Lithium-based EP00 Grease every 25 hours of use.

### Lubrication

#### Level 2.

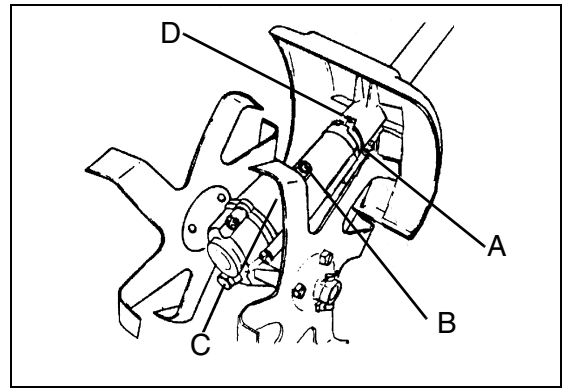
Parts Required: Lithium-based EP00 Grease for gearcase;  
Lithium Base Grease for driveshaft

#### Gear Housing

1. Clean all loose debris from gear box.
2. Remove plug (C) and check level of grease.



3. Add grease if necessary. DO NOT over-fill.
4. Install screw plug (C).



**Drive Shaft (Lower)**

1. Loosen gear housing mounting bolt (A) and remove gear housing locator screw (B).
2. Pull gear box from drive shaft housing. Shield will remain on drive shaft.
3. Pull flexible cable from the drive shaft housing, wipe clean and re-coat with a thin coating [15 ml (1/2 oz.)] of grease.
4. Slide the flexible cable back in the drive housing. DO NOT get dirt on the flex cable.
5. Assemble gear housing onto drive shaft correctly matching gear housing to shield cutout (D).
6. Install and tighten locator screw (B).
7. Tighten gear housing mounting bolt (A).





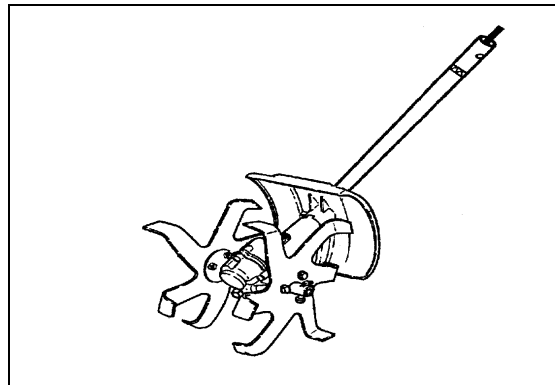
## STORAGE

1. Clean cultivator attachment.

### NOTICE

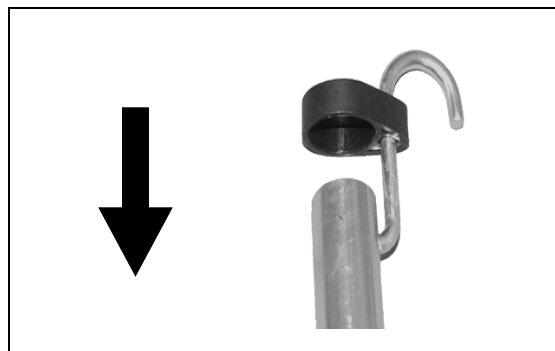
*Do not immerse this attachment in water. Water will enter gear housing and damage gears, bearings and seals..*

2. Apply thin coating of oil to metal parts to prevent rust.
3. Lubricate lower shaft assembly with lithium grease.
4. Store cultivator attachment in a dry, dust free place, out of the reach of children, using supplied storage hook.



### 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**


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| MODEL                    | 99944200513                    |
|--------------------------|--------------------------------|
| Length                   | 895 mm (35.2 in.)              |
| Width                    | 162 mm (6.4 in.)               |
| Height                   | 211 mm (8.3 in.)               |
| Weight                   | 1.94 kg (4.29 lb.)             |
| Blade Diameter           | 216 mm (8.5 in.)               |
| Cultivating Width        | 160 mm (6.3 in.)               |
| Cultivator Mounting Bore | 25.0 mm (0.98 in.)             |
| Coupling Square Hole     | 5.4 x 5.4 mm (0.21 x 0.21 in.) |
| Gear Reduction Ratio     | 46.15:1                        |
| Gear Case Capacity       | 38 grams (1.34 oz.)            |
| Gear Case Lubrication    | EP00 Lithium-based grease      |
| Drive Shaft Lubrication  | Lithium-based grease           |

# WARRANTY STATEMENTS

## ECHO LIMITED WARRANTY STATEMENT FOR PRODUCT SOLD IN USA AND CANADA BEGINNING 01/01/2010

### ECHO'S RESPONSIBILITY

ECHO Incorporated's Limited Warranty, provides to the original purchaser that this ECHO product is free from defects in material and workmanship. Under normal use and maintenance from date of purchase, ECHO agrees to repair or replace at ECHO's discretion, any defective product free of charge at any authorized ECHO servicing dealer within listed below application time periods, limitations and exclusions. **THIS LIMITED WARRANTY IS ONLY APPLICABLE TO ECHO PRODUCTS SOLD BY AUTHORIZED ECHO DEALERS. IT IS EXTENDED TO THE ORIGINAL PURCHASER ONLY, AND IS NOT TRANSFERABLE TO SUBSEQUENT OWNERS EXCEPT FOR EMISSION RELATED PARTS.** Repair parts and accessories replaced under this warranty are warranted only for the balance of the original unit or accessory warranty period. Any damage caused by improper installation or improper maintenance is not covered by this warranty. All parts or products replaced under warranty become the property of ECHO, Inc. This warranty is separate from the Emission control warranty statement supplied with your new product. Please consult the Emission Control Warranty Statement for details regarding emission related parts. For a list of Authorized ECHO Dealers refer to [WWW.ECHO-USA.COM](http://WWW.ECHO-USA.COM) or call **1-800-432-ECHO**.

### OWNER'S RESPONSIBILITY

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 if we find it necessary to contact you.

The owner shall demonstrate reasonable care and use, and follow preventative maintenance, storage, fuel and oil usage as prescribed in the operator's manual. Should a product difficulty occur, you must, at your expense, deliver or ship your ECHO unit to an authorized ECHO servicing dealer for warranty repairs (within the applicable warranty period), and arrange for pick-up or return of your unit after the repairs have been made. For your nearest authorized ECHO servicing dealer, call ECHO's Dealer Referral Center, at 1-800-432-ECHO or you can locate an ECHO servicing dealer at [WWW.ECHO-USA.COM](http://WWW.ECHO-USA.COM). Should you require assistance or have questions concerning ECHO's Warranty Statement, you can contact our Consumer Product Support Department at 1-800-673-1558 or contact us through the web at [WWW.ECHO-USA.COM](http://WWW.ECHO-USA.COM).

### PRODUCT WARRANTY PERIOD

#### HOMEOWNER APPLICATION

- **5 YEAR WARRANTY** - All units for homeowner, or non-income producing use will be covered by this limited warranty for **five (5) years** from date of purchase.

#### EXCEPTIONS:

- For two-stroke engine powered products, the electronic ignition module, flexible drive cables, SRM solid drive shafts, and TC tines are warranted for the **life\*** of the product on parts only.
- Cutting attachments such as, but not limited to, bars, chains, sprockets, blades, and nylon trimmer heads for homeowner or non-income producing use will be covered for failures due to defects in material or workmanship for a period of **60 days** from original product purchase date. Any misuse from contact with concrete, rocks, or other structures is not covered by this warranty.
- ECHO's Rapid Loader String Head carries a lifetime warranty on the line locking system, parts only; no labor. Refer to your operator's manual for string head installation and maintenance instructions.
- All SB-Series and PRO ATTACHMENT SERIES Split Shaft attachments carry the same warranty duration as the units they are designed to fit.

#### COMMERCIAL APPLICATION

- **1 YEAR WARRANTY** - All Chain Saws, QuikVent Saws, and Cut-Off Saws for commercial, institutional, agricultural, industrial, or income producing use will be covered by this limited warranty for one **(1) year** from the date of purchase.
- **2 YEAR WARRANTY** - All other units for commercial, institutional, agricultural, industrial, or income producing use will be covered by this limited warranty for two **(2) years** from the date of purchase.

#### EXCEPTIONS:

- For two-stroke engine powered products, the electronic ignition module, flexible drive cables, SRM solid drive shafts and TC tines, are warranted for the **life\*** of the product on parts only.
- Cutting attachments such as, but not limited to, bars, chains, sprockets, blades, and nylon trimmer heads for commercial, institutional, agricultural, industrial, rental, or income producing will be covered for failures due to defects in material or workmanship for a period of **30 days** from original product purchase date. Any misuse from contact with concrete, rocks, or other structures is not covered by this warranty.
- ECHO's Rapid Loader String Head carries a lifetime warranty on the line locking system, parts only; no labor. Refer to your operator's manual for string head installation and maintenance instructions.
- All SB-Series and PRO ATTACHMENT SERIES Split Shaft attachments carry the same warranty duration as the units they are designed to fit.

#### RENTAL APPLICATION - 90 DAYS WARRANTY

- Units for rental use will be covered against defects in material and workmanship for a period of 90 days from the date of purchase.

\* ECHO's liability under the "Lifetime" coverage is limited to furnishing parts specified under the PRODUCT WARRANTY PERIOD section of this warranty statement for "**Life**" free of charge for a period of ten (10) years after the date of the complete unit's final production.

ECHO does not offer an over the counter exchange program. Any ECHO product re-built other than by ECHO or sold through an unauthorized dealer, or an unauthorized outlet store, is sold without ECHO's limited warranty coverage. The ECHO Limited Warranty coverage is extended to the original purchaser only, and is not transferable except for emission related parts. Repair parts and accessories replaced under this warranty are warranted only for the balance of the original unit or accessory warranty period. Any damage caused by improper installation or improper maintenance is not covered by this warranty. All parts or products replaced under warranty become the property of ECHO.

#### **PURCHASED REPAIR PARTS, SHORT BLOCKS AND ACCESSORIES**

- 90-day homeowner, or non-income producing warranty
- 30-day commercial, institutional, agricultural, industrial, income producing, or rental application warranty

#### **ATTENTION TWO-STROKE ENGINE POWER PRODUCT OWNERS**

This ECHO two-stroke engine power product is a quality-engineered unit which has been manufactured to exact tolerances to provide superior performance. To help ensure the performance of the unit, it is required to use two-stroke oil which meets the ISO-L-EGD Standard per ISO/CD 13738 and JASO M345FD Standards. **ECHO Power Blend™ Two-Stroke Oil** is a premium two-stroke oil specifically formulated to meet ISO-L-EGD (ISO/CD 13738) and JASO M345FD Standards. The use of two-stroke oils designed for other applications, such as for outboard motors or lawnmowers can result in severe engine damage, and will void your two-stroke engine limited warranty.

#### **THIS WARRANTY DOES NOT COVER DAMAGE CAUSED BY:**

- Lack of lubrication or engine failure, due to the use of two-stroke oils that do not meet the ISO-L-EGD (ISO/CD 13738) and JASO M345FD Standards. Engine problems due to inadequate lubrication caused by failure to use an ISO-L-EGD compliant and JASO M345FD registered oil, will void the two-stroke engine limited warranty. ECHO Power Blend™ Two-Stroke Oil meets the ISO-L-EGD and JASO M345FD Standard. Emission related parts are covered for 5 years homeowner use or 2 years commercial use regardless of two-stroke oil used, per the statement listed in the EPA or California Emission Defect Warranty Explanation.
- Damage caused by use of gasohol, containing methanol (wood alcohol), or gasoline containing less than 89 octane. Only use gasoline which contains 89 octane or higher. Gasohol which contains a **maximum** 10% ethanol (grain alcohol) or 15% MTBE (methyl/tertiary/butyl/ether) is also approved. The prescribed mixing ratio of gasoline to oil is listed on the ECHO oil label and covered in your operator's manual.
- Engine damage caused by use of ether or any starting fluids.
- Damage caused by tampering with engine speed governor or emission components, or running engines above specified and recommended engine speeds as listed in your operator's manual.
- Operation of the unit with improperly maintained/removed cutting shield or removed/damaged air filter.
- Damage caused by dirt, pressure or steam cleaning the unit, salt water, corrosion, rust, varnish, abrasives, and moisture.
- Defects, malfunctions or failures resulting from abuse, misuse, neglect, modifications, alterations, normal wear, improper servicing, or use of unauthorized attachments.
- Incorrect storage procedures, stale fuel, including failure to provide or perform required maintenance services as prescribed in the operator's manual. Preventative maintenance as outlined in the operators manual is the customer's responsibility.
- Failures due to improper set-up, pre-delivery service or repair service by anyone other than authorized ECHO servicing dealer during the warranty period.
- Certain parts and other items are not warranted, including but not limited to: lubricants, starter cords, and engine tune-ups.
- Use of spark plugs other than those meeting performance and durability requirements of the OEM spark plug listed in the Operator's Manuals.
- Overheating or carbon scoring failures due to restricted, clogged exhaust port or combustion chamber, including damage to spark arrester screen.
- Adjustments after the first (30) thirty days and beyond, such as carburetor adjustment and throttle cable adjustment.
- Damage to gears or gear cases caused by contaminated grease or oil, use of incorrect type or viscosity of lubricants, and/or failure to comply with recommended grease or oil change intervals.
- Damage caused by loading SHRED 'N' VAC® beyond recommended capacity.
- Damage caused by pump or sprayer running dry, pumping or spraying caustic or flammable materials, or lack of or broken strainers.
- Additional damage to parts or components due to continued use after operational problem or failure occurs. Should operational problem or failure occur, the product should not be used, but delivered as is to an authorized ECHO servicing dealer.

It is a dealer's and/or customer's responsibility to complete and return the warranty registration card supplied with your ECHO product or by visiting [WWW.ECHO-USA.COM](http://WWW.ECHO-USA.COM). Your receipt of purchase including date, model and serial number must be maintained and presented to an authorized ECHO servicing dealer for warranty service. Proof of purchase rests solely with the customer. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so you may also have other specific legal rights which vary from state to state. This limited warranty is given by ECHO Incorporated, 400 Oakwood Rd., Lake Zurich, IL 60047.

#### **DISCLAIMER OF IMPLIED WARRANTIES**

This limited warranty is in lieu of all other expressed or implied warranties, including any warranty of FITNESS FOR A PARTICULAR PURPOSE OR USE and any implied warranty of **MERCHANTABILITY** otherwise applicable to this product. ECHO and its affiliated companies shall not be liable for any special incidental or consequential damage, including lost profits. There are no warranties extended other than as provided herein. This limited warranty may be modified only by ECHO.

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11/18/2011

# PRODUCT REGISTRATION

## Thank you for choosing ECHO Power Equipment

Please go to <http://www.echo-usa.com/Warranty/Register-Your-ECHO> 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.**



**ECHO** PRODUCT REGISTRATION CARD : TARJETA DE REGISTRO : CARTE D'ENREGISTREMENT DU PRODUIT

**ONLINE OPTION:** Register online and save a stamp! You will be alerted of product updates and/or be sent new ECHO product information and special offers. Simply go to: [www.echo-usa.com](http://www.echo-usa.com)

**OPCION POR INTERNET:** Regístrese en la página web y ahorre una estampita. Le alertarán sobre actualizaciones del producto y le enviarán información y ofertas especiales. Simplemente visite: [www.echo-usa.com](http://www.echo-usa.com)

**OPTION EN LIGNE:** Enregistrez en ligne et épargnez un timbre! Vous serez informé sur les nouveaux produits ECHO et les mises à jour de produit ainsi que les offres spéciales. Simplement visitez le: [www.echo-usa.com](http://www.echo-usa.com)

**Please Print :** Por Favor Enscriba Con Letra De Molde : En Lettre Carré S.V.P. **Confidential: information provided will not be shared or sold**

|  |   |
|--|---|
| Purchaser's Name : Nombre del Comprador : Nom de l'acheteur              |   |
| Address : Dirección : Adresse  |   |
| City : Ciudad : Ville  | State : Estado : Province                               |
| Zip Code : Código Postal : Code Postal                                   |   |
| E-Mail Address : Dirección De Correo Electrónico : Courrier Electronique |   |
| Phone Number : Número De Teléfono : Téléphone                            | Date of Purchase : Fecha de la Compra : Date de l'achat |
| Where Purchased : Nombre del Almacén donde fue Comprado : Lieu d'achat   |   |
| Model Number : Numero del Modelo : No. de modèle                         | Serial Number : Numero de Serie : No. de série          |

**Primary use of tool:**  Professional  Homeowner  Rental Equip.  
 Uso primario de la herramienta:  Profesional  Dueño de casa  Alquiler

**Usage principal:**  Professional  Residential  Location  
 Do you wish to receive periodic ECHO product information and special offers by e-mail?  Yes  No

¿Desea usted recibir información periódica y ofertas especiales por correo electrónico sobre el producto ECHO?  Yes  No

Souhaitez-vous recevoir périodiquement de l'information sur les produits ECHO et les offres spéciales par courrier électronique ?  Oui  Non

**Did you visit the ECHO website before purchasing your product?**  
 Yes  No

Visité usted la pagina web ECHO antes de comprar su producto?  
 Si  No

Avez-vous visité le site d'ECHO avant de procurer votre produit?  
 Oui  Non

**What factor(s) most influenced your purchase?**  
 Performance  Dealer  
 Reliability  Price  Quality  
 Friend/Family  Brand  Warranty  
 Funcionamiento  Precio  Distribuidor  
 Confiabilidad  Experiencia Anterior  Calidad  
 Antigo/Familia  Marca  Garantía

¿Qué factor(es) influenció más en su compra?  
 Performance  Marchand  
 Fiabilidad  Expérience  Qualité  
 Ami/Famille  Marque  Garantie

Quel facteur (facteurs) vous a influencé le plus?  
 Performance  Marchand  
 Fiabilité  Expérience  Qualité  
 Ami/Famille  Marque  Garantie

ECHO INC., 400 Oakwood Rd., Lake Zurich, IL 60047  
 1.800.432.ECHO WWW.ECHO-USA.COM X7572270206 02-2012









**ECHO, INCORPORATED**

400 Oakwood Road

Lake Zurich, IL 60047

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

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