

DSRM-200 CORDLESS GRASS TRIMMER

Instruction Manual



Burn Hazard

The gear case and surrounding area may become extremely hot. Always keep clear of gear case area, otherwise serious personal injury may occur.

WARNING

Some of the dust created by this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

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 instruction 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.

TABLE OF CONTENTS

table of contents	2
Introduction	3
The Instruction Manual	3
Servicing Information	3
Parts/Serial Number	
Service	
ECHO Consumer Product Support	
Warranty Registration	
Additional or Replacement Manuals	
Safety	
Manual Safety Symbols	
International Symbols	
Important Information	
Personal Condition and Safety Equipment	
Equipment	
Operation	
Description	
Safety Decals	
Contents	
Assembly	
Nylon Line Head Installation	
To Advance Trimmer Line	
Remove Nylon Line Head	
Support Handle Adjustment	
Battery Installation	
Operation	
Starting Cordless Electric Trimmer	
Stopping Cordless Electric Trimmer Maintenance	
Gear Case Lubrication	
Nylon Line Replacement	
Battery Removal	
Charging Battery	
Troubleshooting	
Storage	
Electric Trimmer	
Battery	
Battery Charger	
Disposal	
Trimmer	
Battery	
Specifications.	
Warranty Statement	
Notes	27



DSRM-200

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 this manual both easy to use and full of helpful operating tips and SAFETY messages.

The Instruction Manual

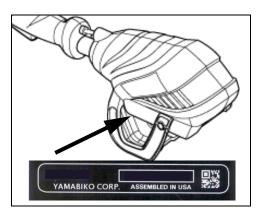
Keep it in a safe place for future reference. Contains specifications and information for safety, operation, maintenance, storage, and assembly specific to this product.

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, Type, and Serial Number of the unit with you. You can find these numbers on the housing. For future reference, write them in the space provided below.

Model No. _____ S.N. _____



Service

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

ECHO Consumer Product Support

If you require assistance or have questions concerning the application, operation or maintenance of this product you may call the ECHO Consumer Product Support Department at 1-800-673-1558 from 8:30 am to 4:30 pm (Central Standard Time) Monday through Friday. Before calling, please know the model and serial number of your unit.

Warranty Registration

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

Additional or Replacement Manuals

Replacement Operator and Parts Catalogs are available from your authorized 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.

X7508161200		
© 3/2014 ECHO Inc.		

///EEHD

SAFETY

Manual Safety Symbols

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.

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.

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.

ACAUTION

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
(%)	Read Instruction Manual		Operate Only with Debris Shield in Place		Fire Hazard, Risk of Explosion or Burns	Power ON OFF O	Power ON / OFF
	Wear Head, Eye, and Hearing Protection		Finger Sever Hazard	A PARA	Check Charger's Power Supply and Plug for Damage		Metal Blade Prohibition (Use Nylon Line Head Only)
	Wear Hand and Foot Protection		DO NOT Use in Rain; Protect from Fluids		Remove Battery from Trimmer When Not in Use		
	Safety Alert Symbol	X	DO NOT Throw Electrical Appliances in Garbage		Flying Debris Hazard		
<u></u>	Burn Hazard Alert	N	DO NOT Subject Battery to Temperatures Above 140°F (60°C)	5	Recycle Electrical Appliances		



DSRM-200

SAFETY

Symbol	Description	Symbol	Description	Symbol	Description	Symbol	Description
	Slow Speed	4	Fast Speed				ders and helpers 5 m (50 ft.).

Important Information

A DANGER

Misuse may result in serious or fatal injuries. You must read, understand, and follow all safety instructions before operating a Model DSRM Grass Trimmer.

WARNING

- This manual describes how to protect yourself and others from hazards related to operation of a Model DSRM Grass Trimmer.
- Before assembling, operating, or servicing your unit, you must read and understand this Instruction Manual.
- You must understand all safety symbols and warning labels, and obey the safety precautions provided by these important safety reminders.
- You must also be alert at all times, and be physically capable of handling and controlling the grass trimmer in a variety of applications.
- If you are unable to handle the equipment safely, or if you feel that the task you wish to perform could put you, your property, or others at risk, please call a professional landscape maintenance company to handle the job.

Personal Condition and Safety Equipment

A 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

WARNING

Operating this unit while you are impaired can result in serious personal injury or death to yourself and others. Never operate the unit if you are fatigued, or are under the influence of alcohol, medication, or any other substances that can affect your judgment, reflexes, vision, or coordination. You must be mentally alert and physically able to operate a trimmer safely. If you are impaired in any way, or are physically unable to safely operate and control the unit, do not attempt to use the unit.

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.

X7508161200 © 3/2014 ECHO Inc.



Stay Alert – Watch what you are doing. Use common sense. DO NOT operate unit when you are tired. Operate unit only if you are physically and mentally well.

Eye Protection

- Eye protection that meets ANSI Z87.1 or CE requirements must be worn whenever you operate the unit.
- Always use face or dust mask if operation is dusty.
- 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.

Dust 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.

Wear protective hair covering to contain long hair.

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 ECHO products by anyone who has a pacemaker.

Extended Operation / Extreme Conditions

ACAUTION

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.

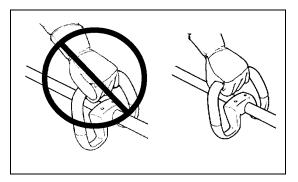
Repetitive Stress Injuries (RSI)

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.







SAFETY

- 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.

Read the Manual

Provide all users of this equipment with the Instruction Manual for instructions on safe operation.

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

Avoid contact during and immediately after operation.







For more information scan this QR code.

Equipment

NOTICE

Avoid unnecessary impact and abusive treatment. Unit contains electronic components.

WARNING

- Avoid Dangerous Environment DO NOT use electric trimmer in damp or wet locations.
- DO NOT use electric trimmer in the rain.

WARNING

Keep Children Away – All visitors should be kept at a distance from work area.

///=++//

Use Right Appliance – DO NOT use appliance for any job except that for which it is intended.

WARNING

DO NOT Force Appliance – It will do the job better and with less likelihood of a risk of injury at the rate for which it was designed.

WARNING

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

WARNING

- Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing, and loose objects away from all openings.
- ALWAYS move stop switch to "0" position, and make sure all moving parts have come to a complete stop, and remove battery before removing obstructions, clearing debris, or servicing unit.
- Avoid Unintentional Starting DO NOT carry electric trimmer with the switch in the "I" position. Be sure switch is "0" when carrying the unit.
- Store Idle Appliances Indoors When not in use, appliances should be stored indoors in dry, and high or locked-up place out of reach of children.
- To reduce the risk of injury to persons, do not operate without debris shield installed.

A WARNING

- Check unit for damage, especially if the unit is dropped. If damage is found, do not use unit, otherwise serious personal injury or property damage may occur. Have unit repaired by an authorized servicing dealer before using.
- Check unit for loose/missing nuts, bolts, and screws. Tighten and/or replace as needed.
- Check that the cutting head is firmly attached and in safe operating condition.
- Check that support handle is adjusted for safe, comfortable operation. See Assembly Section for proper adjustment.
- Keep handles dry and clean.

Plastic Debris Shield

WARNING

- Plastic debris shields are equipped with a sharp cutoff knife for cutting nylon trimmer line to length during operation. Wear work gloves and use extreme care when assembling trimmer head to cutter head motor to avoid accidental contact with cut-off knife.
- Inspect plastic debris shield for damage and ensure that the cut-off knife is securely in place. Replace if either is damaged or missing.



Battery

- DO NOT charge or use a defective, damaged or deformed battery. Do not open, damage, or drop the battery. Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed.
- Exercise care in handling batteries in order not to short the battery with conducting materials such as rings, bracelets, and keys. The battery or conductor may overheat and cause burns.
- DO NOT dispose of the battery in a fire. The cell may explode. Check with local codes for possible special disposal instructions, or recycle the battery at an accredited Rechargable Battery Recycling Corporation recycling center.
- DO NOT expose battery to to temperatures greater than 60°C (140°F).
- DO NOT allow battery to get wet.
- CHARGE battery only in proper temperature range of 0°C to 45°C (32°F to 113°F).
- Use only the correct ECHO charger that is designed for the type and size battery for this unit.
- Check battery for damage, especially if the battery is dropped. If damage is found, do not use battery, otherwise serious personal injury or property damage may occur. Replace battery before using unit.
- DO NOT solder on battery pack.
- DO NOT reverse battery polarity or terminals.
- DO NOT reverse charge or reverse connect battery.
- Connect battery only to ECHO lithium ion charger.
- Use battery only with intended unit.

WARNING

- Do not use battery in conjunction with other battery types.
- Keep battery out of reach of children.
- Charge battery only according to instructions in this manual.
- DO NOT expose battery to microwaves or high pressure.
- DO NOT charge appliance in rain or in wet locations.
- Use only the correct ECHO type and size battery for this unit.
- Remove battery from unit before transporting or storing unit.



Operation

WARNING

Careless operation, misuse, improper configuration or assembly, or use of unapproved cutting heads and work attachments can result in serious or fatal injuries to operator and bystanders. Flying debris can cause serious eye injury, loss of sight, or property damage. You must read, understand, and follow all safety and operating instructions in this manual.

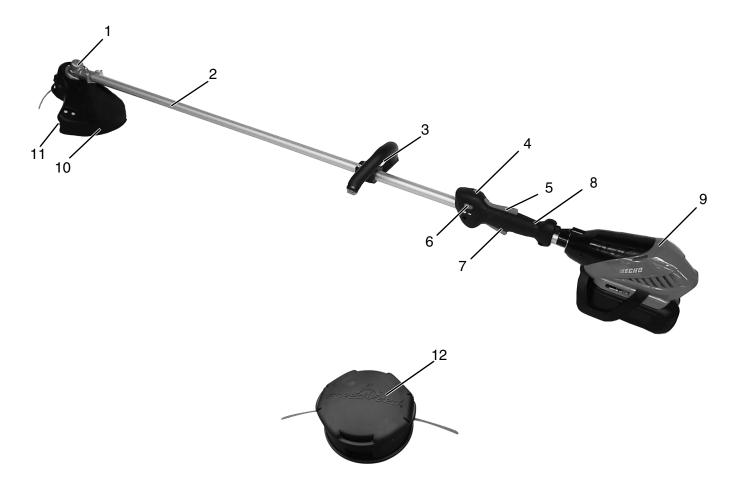
- ALWAYS maintain a minimum safety zone of 50 feet (15 meters) from where you are working. Don't allow others to enter the safety zone unless you have shut the unit off and the trimmer head has completely stopped moving.
- ALWAYS clear the intended cutting/work area of debris such as wire, stones, wood, cans, broken glass, and other objects which could be thrown, become entangled, or damage the cutting head.
- ALWAYS maintain a direct line of sight to the trimmer head and the area where trimming/work is being performed. Be aware of what lies in the path of the trimmer head at all times.
- NEVER work in the dark or when visibility of the work area is poor.
- ALWAYS be alert for changes in operation that could signal a problem sudden vibration and unusual noise require immediate attention. Stop the unit and correct any problems before resuming cutting.
- NEVER carry unit around the work site while the trimmer head is rotating. ALWAYS let the trimmer head stop before lifting the unit and moving to a new position.
- Keep debris flow directed away from operator to minimize risk of being struck and injured by flying debris. Debris flows in direction of line head rotation at point of cutting contact. Change line head position as needed to change debris flow.
- NEVER operate trimmer with cutter head above knee height operation with the cutter head well above ground level produces a higher debris flow, and can cause debris to strike you in the face.
- Contact with spinning nylon line will cause serious injury. Keep hands, feet, and all other body parts away from cutter head.
- Always switch off the unit and remove the battery when transporting the unit.



DESCRIPTION

Safety Decals

Locate these safety decals on your unit. 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 authorized ECHO dealer. See SERVICING INFORMATION for details.



Shaft Decal



Handle Spacing Label





- 1. GEAR CASE
- 2. **DRIVE SHAFT ASSEMBLY** Includes the drive shaft, throttle handle, support handle, and safety decals.
- 3. SUPPORT HANDLE FOR LEFT HAND Grip for Left Hand.
- 4. **STOP SWITCH** "SLIDE SWITCH" mounted on top of the throttle handle. Move switch FORWARD to RUN, BACK to STOP.
- 5. **THROTTLE TRIGGER LOCKOUT** Operation of the throttle trigger is prevented unless throttle trigger lockout lever is engaged.
- 6. SPEED SELECTOR SWITCH Select the \Leftrightarrow speed position or the \Leftrightarrow speed position.
- 7. **THROTTLE TRIGGER** Spring loaded to return to idle when released. During acceleration, depress gradually for best operating technique.
- 8. **THROTTLE HANDLE FOR RIGHT HAND** Contains Stop Switch, Throttle Lockout, and Throttle Trigger.
- 9. POWER HEAD Houses Motor and Battery.
- 10. **PLASTIC DEBRIS SHIELD ASSEMBLY** MUST be installed on unit. Shield assembly includes the Cut-Off Knife. Mounts on the Gear Housing Assembly just above the cutting attachment. Helps protect the operator by deflecting debris produced during the trimming operation.
- 11. **CUT-OFF KNIFE** Automatically trims line to the correct length after head is tapped on the ground. If trimmer is operated without a cut-off knife, the line will become too long and motor damage may occur.
- 12. **NYLON LINE HEAD** 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.



CONTENTS

DSRM-200

CONTENTS

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

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

* Some units may be factory pre-assembled. The support handle may need to be re-positioned for comfortable operation.

- _____1 -Trimmer Assembly
- _____ 1, Instruction Manual
- _____ 1, Warranty Registration Card
- _____ 1, Safety Glasses
- _____ 1, Battery
- _____ 1, Battery Charger
- _____ Assembly Tool(s)*









ASSEMBLY

Nylon Line Head Installation

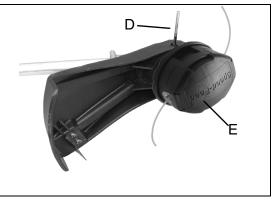
Parts Required: Nylon Line Head.

ACAUTION

Wear Gloves or personal injury may result:

- Cutoff knife is sharp.
- Gearcase and surrounding area may be hot.
- 1. Be sure adapter plate (C) remains on PTO shaft (A).
- 2. Align locking hole in upper plate with notch in edge of gear housing and insert head locking tool (D).
- Thread line head (E) onto shaft by turning it counter-clockwise until head is tight against adapter plate (C).
- 4. Remove locking tool (D).

NOTICE



D

Semi-automatic nylon line heads must be used only with plastic debris shield with cut-off knife. Using nylon line heads with metal debris shield can result in trimmer damage, caused by operation with excessive line length.

Note: Your nylon line head may appear different than nylon line head shown.

To Advance Trimmer Line

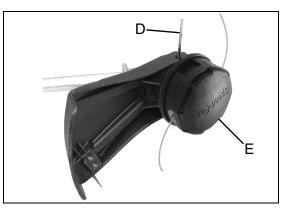
See Maintenance Section for nylon line replacement.

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

Remove Nylon Line Head

Note: Do not disassemble nylon line head.

- 1. Align locking hole in upper plate with notch in edge of gear housing and insert head locking tool (D).
- 2. Remove line head (E) by turning it clockwise until head is completely off of shaft.
- 3. Remove locking tool (D).

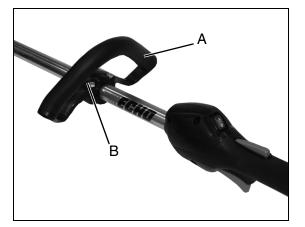




ASSEMBLY

Support Handle Adjustment

- Note: The ECHO label shows minimum spacing for support handle location.
- 1. Position support handle (A) for comfortable operation.
- 2. Secure screws (B).



Battery Installation

WARNING

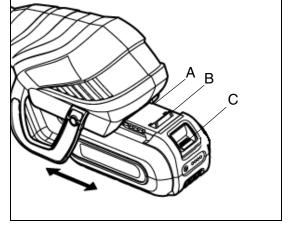
The attachment will operate when the battery is installed, the stop switch is in the "I" position, and the triggers are engaged. Make sure the trimmer is properly positioned to prevent loss of control and possible serious injury. Keep movable parts of the attachment off the ground and away from objects that could become entangled or thrown.

- Note: The battery comes partially charged from the factory and needs to be fully charged before first use.
- 1. Make sure the stop switch is in the "O" position.
- 2. Align ridges (A) on battery pack with grooves in power head. Slide battery pack into power head.

NOTICE

Assure the battery pack latch (B) snaps into place and battery pack is secure before beginning operation.

3. Depress battery pack latch release (C) to remove battery pack.



OPERATION

A WARNING

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

Starting Cordless Electric Trimmer

A WARNING

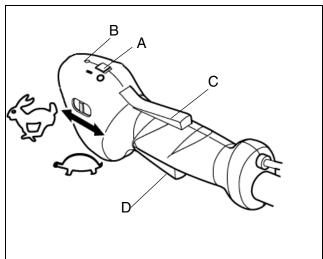
The attachment will operate when the battery is installed, the stop switch is in the "I" position, and the trigger and trigger lockout are engaged. Make sure the trimmer is properly positioned to prevent loss of control and possible serious injury. Keep movable parts of the attachment off the ground and away from objects that could become entangled or thrown.

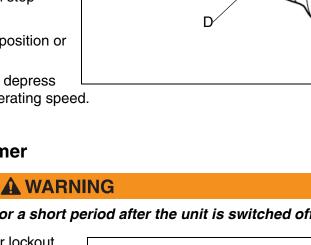
- 1. Slide the stop switch (A) to the "I" position.
- Note: Red LED indicator (B) illuminates when stop switch is in "I" position.
- 2. Slide speed selecor switch to rightarrow speed position or the 😓 speed position.
- 3. Hold down throttle trigger lockout (C) and depress throttle trigger (D) to increase RPM to operating speed.

Stopping Cordless Electric Trimmer

The cutting attachment continues to run for a short period after the unit is switched off.

- 1. Release throttle trigger and throttle trigger lockout, and allow trimmer head to stop.
- 2. Slide stop switch (A) backward to "0" position.
- Note: Red LED indicator (B) turns off when switch is "0" position.





В

С



WARNING

If the Stop switch does not stop the trimmer, remove the battery to stop the power supply to trimmer. Have your authorized ECHO servicing dealer repair stop switch before using trimmer again. If the trimmer head does not stop when the trigger and trigger lockout are released, remove the battery to stop the power supply to trimmer. Have your authorized ECHO servicing dealer repair the trigger and trigger lockout before using trimmer again.

NOTICE

When the stop switch is in the "I" position:

- If the LED remains lit, operation is normal.
- If the LED is off, battery pack was installed when the stop switch was at the "I" position. Slide stop switch to the "0" position, and then return to the "I" position.
- If the LED flashes once per second, the unit has stopped due to overload or battery overheating.

- If the cutting attachment has grass or other foreign objects causing overload, turn the unit off and remove the battery. Remove the blockage before reinstalling battery and turning trimmer back on.

- If the battery is overheated, turn the trimmer off and remove the battery. Allow the battery to cool before reinstalling and turning trimmer back on.

• If the LED flashes five times per second, the battery's power level is below 10%. Charge or change the battery.



MAINTENANCE

WARNING

Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing, and loose objects away from all openings. Always remove battery 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 trimmer is designed to provide many hours of trouble-free service. Regular scheduled maintenance will help your trimmer achieve that goal. If you are unsure or are not equipped with the necessary tools, you may want to take your unit to your authorized ECHO servicing dealer for maintenance.

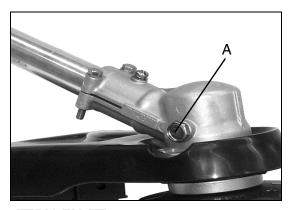
Gear Case Lubrication

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

Nylon Line Replacement

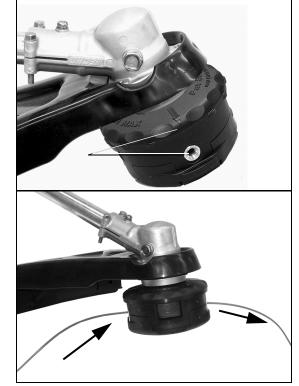
Wear Gloves or personal injury may result:

- Cutoff knife is sharp.
- Gearcase and surrounding area may be hot.
- 1. Cut one piece of line to recommended length. .080" (2.0 mm) dia. – 20' (6 m)
- 2. Align arrows on top of knob with openings in eyelets.
- 3. Insert one end of trimmer line into an eyelet, and push line equal distance through trimmer head.





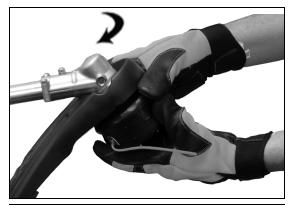
For more information scan this QR code.



MAINTENANCE

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

Trimmer head is now fully loaded and ready for operation.



NOTICE

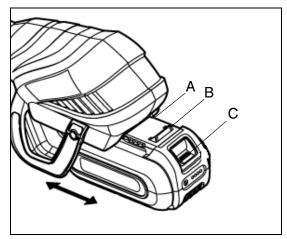
When the wear indicators located at the bottom of the Speed-Feed® head are worn smooth, or if holes appear, replacement of the cover or the entire Speed-Feed® head is required.



Wear Indicators

Battery Removal

- 1. Release throttle trigger and throttle trigger lockout and allow trimmer head to stop.
- 2. Slide stop switch backward to "0" position.
- 3. Push battery latch release (C) to release battery latch.
- 4. Remove battery.





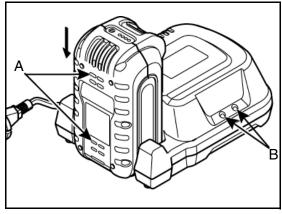
Charging Battery

WARNING

- Keep charger and battery away from damp conditions and all liquids.
- Connect the charger only to 120V AC outlet.
- Never insert objects in the battery pack's or charger's cooling slots (A).

Note: The battery comes partially charged from the factory and needs to be fully charged before first use.

- Note: Charge the battery when it no longer produces sufficient power to operate the trimmer or when battery lights indicate that the battery is low.
- 1. Plug charger AC cord into 120V AC outlet. Charger LED (B) will blink GREEN.
- 2. Align ridges on battery with grooves on charger, and slide battery into charger.
- 3. During normal charging, the charger LED will blink continuously GREEN.
 - NOTICE

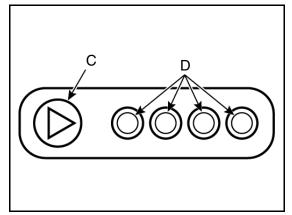


If charger detects a problem, LED blinks RED. Remove battery from charger, clean contacts, and reinstall battery into charger. If battery is outside acceptable temperature range (0°C to 45°C or 32°F to 113°F) LED remains RED. Remove battery from charger and warm or cool as needed, then reinstall battery into charger.

4. When charging is complete, LED will remain GREEN.

Note: A fully discharged battery pack will charge in about 50 minutes.

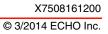
- 5. Verify battery is fully charged by removing battery from charger, then pressing battery charge status button (C), and checking LED display (D).
 - 1 red light indicates that the battery has 10-40% charge.
 - 2 red lights indicate that the battery has 40-60% charge.
 - 3 red lights indicate that the battery has 60-80% charge.
 - 4 red lights indicate that the battery has 80-100% charge.
 - One continuously flashing red light indicates the battery's power level is below 10%. Charge the battery.
 - 4 continuously flashing red lights indicates the battery is completely discharged. Charge the battery.
- 6. Disconnect battery charger from power supply.





TROUBLESHOOTING

Trouble	Cause	Remedy
The red light on the charger flashes or does not light up	-Plug not connected to power outlet -Battery pack not installed properly -Dirty charger or battery contacts -Fault in the charger -Fault in the battery pack	-Plug in the charger -Check the battery pack installation -Install the battery pack again after, removing and cleaning it -Ask your ECHO dealer -Ask your ECHO dealer
Unit will not turn on	-Battery pack not installed properly	-Check the battery pack installation
Unit does not run when switched on	-Battery pack discharged -Grass jammed -Battery pack too hot	-Charge the battery pack -Turn off the unit and clean the cutting attachment -Remove the battery pack and cool down slowly
Running time is too short	-Battery pack too hot -Motor unit circuitry too hot -Battery pack discharged	-Remove the battery pack and cool down slowly -Turn off and cool down the motor unit -Charge the battery pack
Line won't feed	-Not enough line on the spool -Line tangled in the spool	-Rewind with new line -Unwind and rewind the line
Line fails to cut off	-Cut off knife in the shield is damaged or missing	-Ask your ECHO dealer



STORAGE

WARNING

During operation the gear case. Always keep area clear of flammable debris during transportation or when storing, otherwise serious property damage or personal injury may result.

WARNING

Do not store in an enclosure where combustible fumes may accumulate.

Electric Trimmer

Do not store your unit without performing protective storage maintenance which includes the following:

- 1. Place the stop switch in the OFF position.
- 2. Remove battery from power head. See Battery Removal.
- 3. Remove accumulation of dirt and debris from exterior of unit.
- 4. Perform all periodic lubrication and services that are required..
- 5. Tighten all the screws and nuts.
- 6. Cover the battery compartment of power head.
- 7. Store unit in a dry, dust-free place, out of the reach of children.

Battery

- 1. Remove battery from power head. See Battery Removal.
- 2. Store in a dry, dust-free place, out of the reach of children.
- 3. Store in temperatures between -20°C (-4°F) and 60°C (140°F).
- 4. If the battery is stored for longer than one year, charge it to approximately 40 60% capacity (see "Charging Battery" section) or for approximately 10 minutes evey six months.

Battery Charger

- 1. Remove battery from battery charger.
- 2. Disconnect battery charger from power supply.
- 3. Store in a dry, dust-free place, out of the reach of children.

DISPOSAL

DISPOSAL

Trimmer

Major plastic parts making up the product have codes showing their materials. The codes refer to the following materials; dispose of those plastic parts in accordance with local regulations.

Mark	Material
>PA6-GF<	Nylon 6 - Glass fiber
>PP-GF<	Polypropylene - Glass fiber
>PE-HD<	Polyethylene

Battery



ECHO, Incorporated, participates in the the Rechargable Battery Recycling Corporation (RBRC) program.

ECHO has prepaid so that our customers can responsibly dispose of batteries. PLEASE DO NOT throw battery away in garbage. Please recycle the battery at an accredited RBRC recycling center. Visit www.call2recycle.org, or call 1-800-822-8831 to find a recycling center near you.



SPECIFICATIONS

MODEL	DSRM-200
Length	1790mm (70.5 in)
Width	232mm (9.1 in)
Height	248mm (9.76 in)
Weight (dry) w/Battery	5 kg (11.0 lb)
RPM (cutter)	5,200 / 3,500 (hi / low)
Rotating Direction	Counter clockwise, viewed from top
Cutter Head	Speed Feed® 400 LH Nylon line head, Line capacity 6.0 m (20 ft.)
Handle	front - loop
Battery Type	Li-ion
Battery Pack Voltage	36 Volts
Battery Charge Life	300
Battery Charger Type	CVCC
Battery Charger Input Voltage	110–120 Volts
	Red LED – Battery is outside charging temperature range
Battery Charger Lights	Red LED Blinking – Fault
	Green LED – Battery finished charging
	Green LED Blinking Battery is charging normally
Charge Time	Approximately 50 minutes



WARRANTY STATEMENT

WARRANTY STATEMENT

ECHO LIMITED WARRANTY STATEMENT FOR DSRM-200 SOLD IN USA AND CANADA

ECHO'S RESPONSIBILITY - ECHO Incorporated's Limited Warranty, provides to the <u>original</u> purchaser that this ECHO product is free from <u>defects in material and workmanship</u>. 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. Repair parts and accessories replaced under this warranty are warranted only for the balance of the original unit or accessory warranty period. Any damage the property of ECHO, Inc. For a list of Authorized ECHO Dealers refer to 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 <u>WWW.ECHO-USA.COM</u> 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 <u>reasonable care and use</u>, and follow preventative maintenance, and storage 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 <u>WWW.ECHO-USA.COM</u>. 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 <u>WWW.ECHO-USA.COM</u>.

PRODUCT WARRANTY PERIOD - RESIDENTIAL APPLICATION

3 YEAR WARRANTY - All units for residential, or non-income producing use will be covered by this limited warranty for three (3) years from date of purchase.

EXCEPTIONS:

• Nylon trimmer heads for residential 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 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 <u>original purchaser only, and is not transferable</u>. 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 AND ACCESSORIES

· 90-day residential, or non-income producing warranty

THIS WARRANTY DOES NOT COVER DAMAGE CAUSED BY:

- Operation of the unit with improperly maintained/removed cutting shield.
- 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, 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 <u>customer's responsibility</u>.
- Failures due to improper set-up, pre-delivery service or repair service by anyone other than authorized ECHO servicing dealer during the warranty period.
- Other parts and items that are not warranted.
- 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.
- Additional damage to parts or components due to continued use after operational problem or failure occurs. Should operational problem
 or failure occur, the product <u>should not</u> be used, but delivered <u>as is</u> 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 <u>WWW.ECHO-USA.COM</u>. Your receipt of purchase including date, model and serial number must be maintained and presented to an authorized ECHO servicing dealer for warranty service. <u>Proof of purchase rests solely with the customer</u>. 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.

> 99922202055 03/11/2014



NOTES





ECHO, INCORPORATED 400 Oakwood Road Lake Zurich, IL 60047 www.echo-usa.com T9000001001/T90000999999