



HCA-266

Shaft Hedge Trimmer

Operator's Manual

WARNING



Burn Hazard

The muffler or catalytic muffler and surrounding cover may become extremely hot. Always keep clear of exhaust and muffler area, otherwise serious personal injury may occur.

WARNING

The engine exhaust from 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 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.

TABLE OF CONTENTS

Table of contents 2

Introduction 3

 The Operator’s Manual 3

Service information 3

 Parts/Serial Number..... 3

 Additional or Replacement Manuals 3

 Warranty Registration 3

 Service 3

Safety..... 5

 Manual Safety Symbols and Important Information 5

 International Symbols 6

 Personal Condition and Safety Equipment 6

 Equipment..... 10

Description 11

Contents 13

Assembly 14

 Gear Housing Assembly / Drive Shaft 14

 Balance and Adjust Unit 14

Operation 14

 Fuel 14

 Adjusting Cutting Angle..... 16

 Rotate Cutter Assembly 17

 Starting Cold Engine 18

 Starting Warm Engine..... 19

 Stopping Engine..... 20

 Hedge Trimming 20

Maintenance 21

 Skill Levels 21

 Maintenance Intervals..... 21

 Air Filter..... 22

 Fuel Filter 22

 Cooling System..... 23

 Exhaust System 24

 Carburetor Adjustment..... 25

 Lubrication 26

 Blades 28

Troubleshooting 30

Storage 31

 Long Term Storage (Over 30 Days)..... 31

Specifications..... 32

Notes 33

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. _____



Additional or Replacement Manuals

Replacement Operator, Safety Manuals, and Parts Catalogs are available from your ECHO dealer or at echo-latinamerica.com.

Warranty Registration

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

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 :

Country	Distributor Name	Address	Phone
Argentina	Munditol S.A.	Avda. Honduras 3757 1180 Buenos Aires, Argentina	11-4821-9999
Belize	Power Plus Ltd.	#1 North Front Street Belize City, Belize	(501) 22-30-690
Bolivia	Termondinamica Ltda.	Avenida Villazon #3671 Cochabamba, Bolivia	(591-4) 471-7730
Brasil	Brudden Equipamentos Ltda.	Av. Industrial 700 - Distrito Industrial CEP 17580-000, Pompeia (SP), Brazil	(55) 14-3405-5000
Chile	DercoMaq S.A.	Av. Américo Vespucio Norte 1838 Quilicura, Santiago Chile	(56) 2 - 560 1500

Country	Distributor Name	Address	Phone
Colombia	Mecanelectro S.A.	Avenida Caracas No 76 -81	(571) 7430003
Panama	Cortagramas y Repuestos S.A.	Villa Rica, Monte Oscuro/Edif. Coresa. Panamá Rep, de Panamá	507-222-2844 / 4844
Republica Dominicana	Servicios Ferro-Agro, C por A	Calle Peña Batlle No 261 casi esq. Ortega y Gasset, Santo Domingo Dominican Republic	(809) 565-9787
Ecuador	Agrota Cía. Ltda.	"Contigo en el Campo" Av. De las Américas y Los Naranjos Cuenca, Ecuador	074-100-010
El Salvador	N.R. CONSA S.A. de C.V.	Casa Matriz: Urb. Madreselva c. El Algodón No.8 Por Blvd Constitución. San Salvador, El Salvador	(503) 22742220
Guatemala	Femco S.A.	(i.e. Felix Montes CIA S.A.) Calzada Aguilar Batres 27-23, Zona 12 Guatemala, 01012	(502) 2442-3277
Honduras	Eyl Comercial S.A.	Ave. Re. de Chile Tegucigalpa M.D.C., Honduras	(504) 232-3389
Mexico D.F.	KARVS PROJARDIN & AGRO S.A. DE C.V.	MARIANO ESCOBEDO NUM 70 LOCAL A COLONIA POPOTLA MEXICO D.F. C.P. 11400 Co.Code:52	(55) 5348-1577
Greater Mexico	Promotores Agricolas SA de CV	Blvd. Paseo Solidaridad 12574 Fracc. Vilas el Dorado cp 36630, Irapuato Guanajuato, México	52 462 626 3443
Nicaragua	Formunica	De la Esquina Norte del Canal 2 de TV 1c. al lago 1 1/2c. Arriba Residencial Bolonia Managua, Nicaragua	(505) 268-7041
Peru	Vidagro S.A.C.	Av. Ingenieros Norte 251 Urb. Villa La Merced, Ate-Vitarte Lima, Peru	(51) 1-348-4726
Puerto Rico	Romar Agencies	Camino Romani Int. Carretera 842 Rio Piedras, San Juan Puerto Rico 00926-9678	(787) 720-5959
Us Virgin Islands	EZ Tool Rental and Sales	PO Box 2072 Kingshill, Saint Croix US VIRGIN ISLANDS	(340) 692-2039
Trinidad and Tobago	Trintrac Limited	No. 8 Bolai Trace I.D.C. Estate, Chase Village Trinidad, West Indies	(868) 672-5329
Uruguay	Goldfarb	Rio Negro 1617 Montevideo 11100 Uruguay	(598) 2902 2606
Venezuela	Distribuidora Agrofor C.A.	Calle Bolivar-Edificio Agrofor La Trinidad, Caracas, 1080, Venezuela	(58) 212-945-9960
Jamaica	Central Agricultural Supplies Co. Ltd.	5 ½ Caledonia Road Lot 10-11 James Plaza Mandeville, Manchester, Jamaica	876-962-3084
Paraguay	Agripar S.A.	Avda. San Blás Km. 3 1/2 Ruta Inter. Nro 7 B* Pablo Rojas- Ciudad Del Este - Paraguay	(061) 570 081

SAFETY

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.




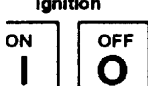



Note: This enclosed message provides tips for use, care and maintenance of the unit.



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
	Read and understand owners manual.		Fuel and oil mixture		Carburetor Adjustment - Low speed mixture		Carburetor Adjustment - High speed mixture
	Wear eye, ear and head protection		Finger severing		Safety/Alert		Carburetor Adjustment - Idle speed
	Emergency Stop		Hot Surface		Avoid all power lines. This unit is not insulated against electrical current.		Do not operate closer than 15 M (50 ft.) from electrical hazard.
	Wear hand and foot protection. Use two handed		DO NOT smoke near fuel		Plan retreat path from falling objects		Primer Bulb
	Choke Control "Cold Start" Position (Choke Closed)		Ignition ON / OFF		DO NOT allow flames or sparks near fuel		Wear slip resistant footwear
	Choke Control "Run" Position (Choke Open)		Do not operate closer than 15 M (50 ft.) from electrical hazards.		Keep bystanders at least 4.5 meters (15 ft.) away.		Chain Lubrication.

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.

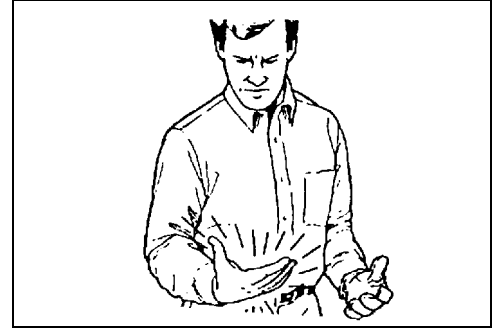
Extended Operation / Extreme Conditions

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.

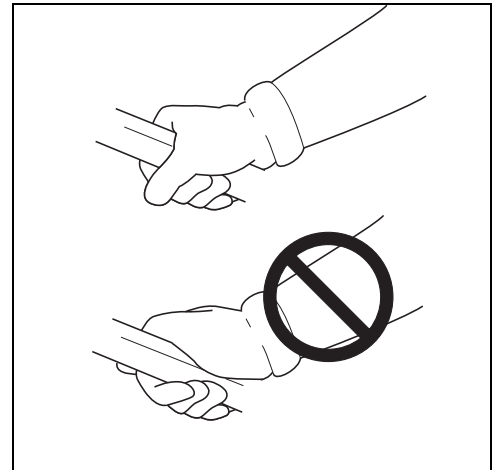


Repetitive Stress Injuries (RSI)

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 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

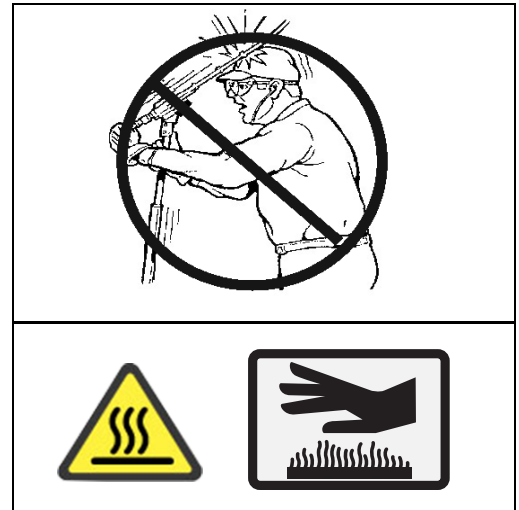
- Always hold throttle handle and support handle with thumbs and fingers tightly encircling the handles.

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.

Cutting Angle Adjustments

- Only adjust cutting blade angle with unit flat on the ground, with the engine stop switch in the "STOP" position. Never adjust cutting angle with unit standing upright.



Avoid Contact With Gear Box Assembly During Use

- Gear box assembly becomes hot during use. Avoid contact with gear box assembly when using unit or making cutting angle adjustments.

Avoid Hot Surfaces

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



For more information scan this QR code.

! WARNING

Never perform blade maintenance procedures while engine is running.

Equipment

! WARNING

Use only ECHO 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 and safety manual.

- Check unit for loose/missing nuts, bolts, and screws. Tighten and/or replace as needed.
- Check that the cutting attachment is firmly attached and in safe operating condition. Dull, loose or damaged blades should not be used.

WARNING

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

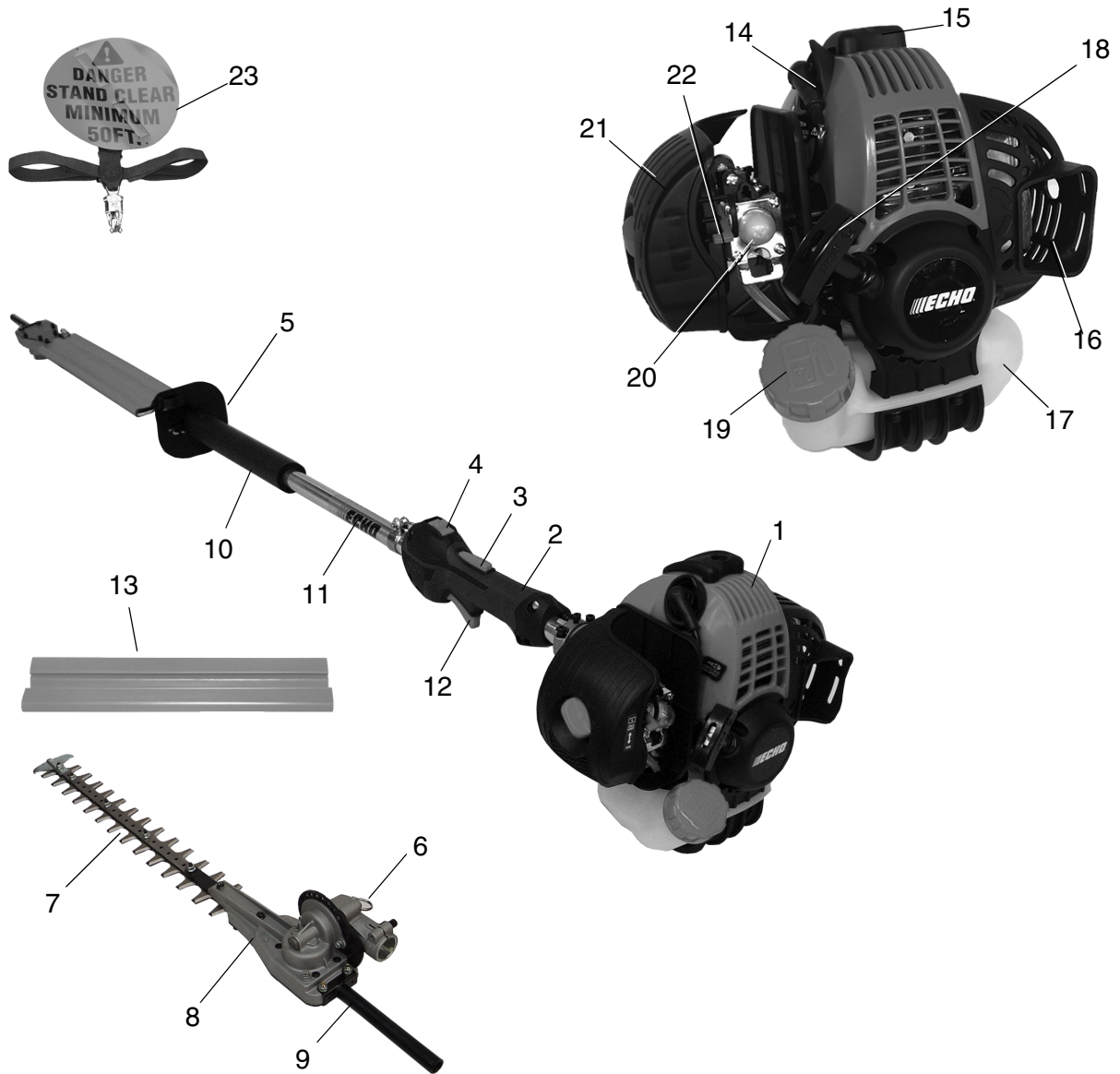
- ***ALWAYS stop engine, disconnect spark plug, and make sure all moving parts have come to a complete stop before removing obstructions, clearing debris, or servicing unit.***
- ***DO NOT start or operate unit unless all guards and protective covers are properly assembled to unit.***
- ***NEVER reach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

WARNING

Check fuel system for leaks due to fuel tank damage, especially if the unit is dropped. If damage or leaks are found, do not use unit, otherwise serious personal injury or property damage may occur. Have unit repaired by an authorized servicing dealer before using.

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.



Shaft Label



Hot Label



1. **POWER HEAD** - Includes the Engine, Clutch, Fuel System, Ignition System and Recoil Starter.
2. **THROTTLE HANDLE - FOR RIGHT HAND** - Contains Stop Switch, Throttle Lockout, and Throttle Trigger.
3. **THROTTLE TRIGGER LOCKOUT** - This lever must be held during starting. Operation of the throttle trigger is prevented unless throttle trigger lockout lever is engaged.
4. **STOP SWITCH** - "SLIDE SWITCH" mounted on top of the throttle handle. Move switch FORWARD to RUN, BACK to STOP.
5. **HAND GUARD / BLADE LOCK** - Locks blade in place for travel / storage. Always assure blade cover is installed when locking blade.
6. **BLADE INDEXING RING**- Pull ring out and turn 1/4 turn to lockout position when adjusting blade angle.
7. **BLADES** - Double reciprocating blades mounted to a blade support bar. Double sided blades, are capable of cutting on either side.
8. **GEAR HOUSING ASSEMBLY** - Gear housing contains drive gears for transmitting power to cutting blades. Pivoting design permits blades to articulate 180 degrees in 15-degree increments.
9. **BLADE ADJUSTMENT HANDLE** - Provides secure hand grip for adjusting cutting blade angle.
10. **SUPPORT HANDLE - FOR LEFT HAND** - Grip for Left Hand.
11. **DRIVE SHAFT ASSEMBLY** - Includes the flex drive shaft, throttle handle, harness ring, support handle, and safety decals.
12. **THROTTLE TRIGGER** - Spring loaded to return to idle when released. During acceleration, depress gradually for best operating technique.
13. **BLADE COVER** - Used to cover blade during transport and storage. Remove blade cover before using unit.
14. **SPARK PLUG** - Provides spark to ignite fuel mixture.
15. **TOP GUARD** - Protects arm from the hot engine.
16. **SPARK ARRESTOR MUFFLER OR SPARK ARRESTOR MUFFLER WITH CATALYST** - The muffler or catalytic muffler controls exhaust noise and emission. The spark arrestor screen prevents hot, glowing particles of carbon from leaving the muffler. Keep exhaust area clear of flammable debris.
17. **FUEL TANK** - Contains fuel and fuel filter.
18. **RECOIL STARTER HANDLE** - Pull handle slowly until starter engages, then quickly and firmly. When engine starts, return handle slowly. DO NOT let handle snap back or damage to unit will occur.
19. **FUEL TANK CAP** - Covers and seals fuel tank opening.
20. **PURGE BULB** - Pumping purge bulb before starting engine draws fresh fuel from the fuel tank, purging air from the carburetor. Pump purge bulb until fuel is visible and flows freely in the clear fuel tank return line. Pump purge bulb an additional 4 or 5 times.
21. **AIR CLEANER** - Contains replaceable filter element.
22. **CHOKE CONTROL** - Located on the air cleaner housing. Move choke lever to COLD START (|←|) to close choke for cold start. Move choke lever to "RUN" (|↓|) position to open choke.
23. **SHOULDER HARNESS** - An adjustable strap that suspends the unit from the operator.

CONTENTS

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

- ___ 1 - Power Head / Drive shaft assembly
- ___ 1 - Gear case Assembly
- ___ 1 - Operator's Manual
- ___ 1 - Shoulder Harness
- ___ 1 - Blade Cover
- ___ - Assembly Tools (s)

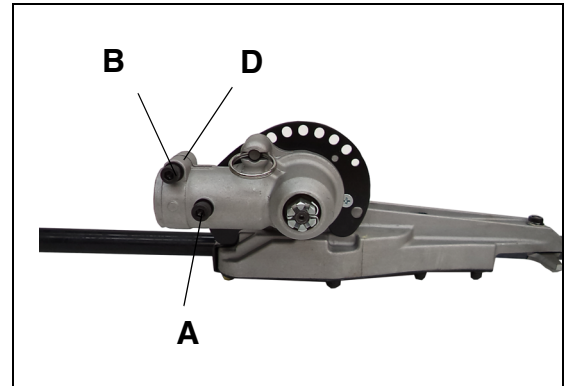


ASSEMBLY

Gear Housing Assembly / Drive Shaft

Note: Hedge Trimmer Blades are very sharp. Wear gloves to protect hands.

1. Remove locating bolt (A) and loosen clamping bolt (B).
2. Remove vinyl cap from drive shaft.
3. Slide Gear Housing Assembly onto Drive Shaft. Be certain the Flex Drive Shaft engages the hole in Driver Gear.



NOTICE

Flat edge of washer (D) must be against drive shaft.

4. Align locating hole in gear housing with locator hole in drive shaft.
5. Install locating bolt (A). Tighten clamping bolt (B).

Balance and Adjust Unit

1. Loosen harness clamp screw.
2. Put on harness and attach unit to harness.
3. Slide harness clamp up or down for comfortable operation.
4. Tighten harness clamp screw.



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.

⚠ WARNING

Operation of this equipment may create sparks that can start fires around dry vegetation. This unit is equipped with a spark arrestor to prevent discharge of hot particles from the engine. Metal cutters can also create sparks if the cutter strikes rocks, metal, or other hard objects. Contact local fire authorities for laws or regulations regarding fire prevention requirements.

Fuel

NOTICE

Use of unmixed, improperly mixed, or fuel older than 90 days, (stale fuel), may cause hard starting, poor performance, or severe engine damage and void the product warranty. Read and follow instructions in the Storage section of this manual.

! WARNING

Fuel containing more than 25% ethanol is NOT approved for use in ECHO 2-stroke gasoline engines. Fuel containing more than 25% ethanol may cause performance problems, loss of power, overheating, fuel vapor lock, and unintended machine operation, including, but not limited to, improper clutch engagement. Fuel containing more than 25% ethanol may also cause premature deterioration of fuel lines, gaskets, carburetors and other engine components.

Fuel Requirements

Gasoline - Use 89 Octane (mid grade or higher) gasoline known to be good quality. Gasoline may contain up to 25% Ethanol. Gasoline containing methanol (wood alcohol) is NOT approved.

Two Stroke Oil - A two-stroke engine oil meeting ISO-L-EGD (ISO/CD 13738) and J.A.S.O. FD Standards must be used. Echo brand premium Power Blend X™ Universal 2-Stroke Oil meets these standards. Engine problems due to inadequate lubrication caused by failure to use an ISO-L-EGD (ISO/CD 13738) and J.A.S.O. FD certified oil, such as Echo premium Power Blend X™, will void the two-stroke engine warranty.

NOTICE

Echo premium Power Blend X™ Universal 2-Stroke Oil may be mixed at 50:1 ratio for application in all Echo engines sold in the past regardless of ratio specified in those manuals.

Handling Fuel**! DANGER**

Fuel is VERY flammable. Use extreme care when mixing, storing or handling, or serious personal injury may result.

- **Use an approved fuel container.**
- **DO NOT smoke near fuel.**
- **DO NOT allow flames or sparks near fuel.**
- **Fuel tanks/cans may be under pressure. Always loosen fuel caps slowly allowing pressure to equalize.**
- **NEVER refuel a unit when the engine is HOT or RUNNING!**
- **DO NOT fill fuel tanks indoors. ALWAYS fill fuel tanks outdoors over bare ground.**
- **DO NOT overfill fuel tank. Wipe up spills immediately.**
- **Securely tighten fuel tank cap and close fuel container after refueling.**
- **Inspect for fuel leakage. If fuel leakage is found, do not start or operate unit until leakage is repaired.**
- **Move at least 3m (10 ft.) from refueling location before starting the engine.**

Mixing Instructions

1. Fill an approved fuel container with half of the required amount of gasoline.
2. Add the proper amount of 2-stroke oil to gasoline.
3. Close container and shake to mix oil with gasoline.
4. Add remaining gasoline, close fuel container, and remix.

Fuel to Oil Mix - 50:1 Ratio			
US		Metric System	
Gas	Oil	Gas	Oil
Gallons	Oz.	Liter	cm ³
1	2.6	5	100
2	5.2	10	200
5	13	25	500

NOTICE

Spilled fuel is a leading cause of hydrocarbon emissions. Some states may require the use of automatic fuel shut-off containers to reduce fuel spillage.

After use

- DO NOT store a unit with fuel in its tank. Leaks can occur. Return unused fuel to an approved fuel storage container.

Storage - Fuel storage laws vary by locality. Contact your local government for the laws affecting your area. As a precaution, store fuel in an approved, airtight container. Store in a well-ventilated, unoccupied building, away from sparks and flames.

NOTICE

Stored fuel ages. Do not mix more fuel than you expect to use in thirty (30) days, ninety (90) days when a fuel stabilizer is added.

NOTICE

Stored two-stroke fuel may separate. ALWAYS shake fuel container thoroughly before each use.

Adjusting Cutting Angle

⚠ WARNING

Never adjust cutting assembly with engine running.

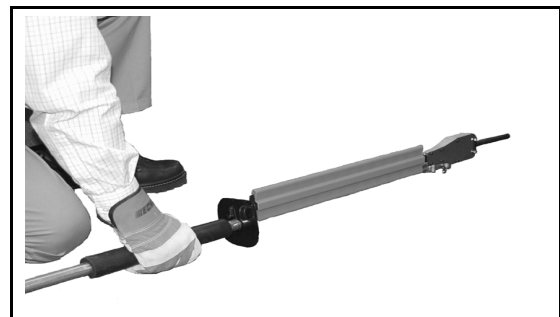
⚠ WARNING

Hedge Trimmer blades are sharp. Always wear gloves when adjusting cutting assembly.

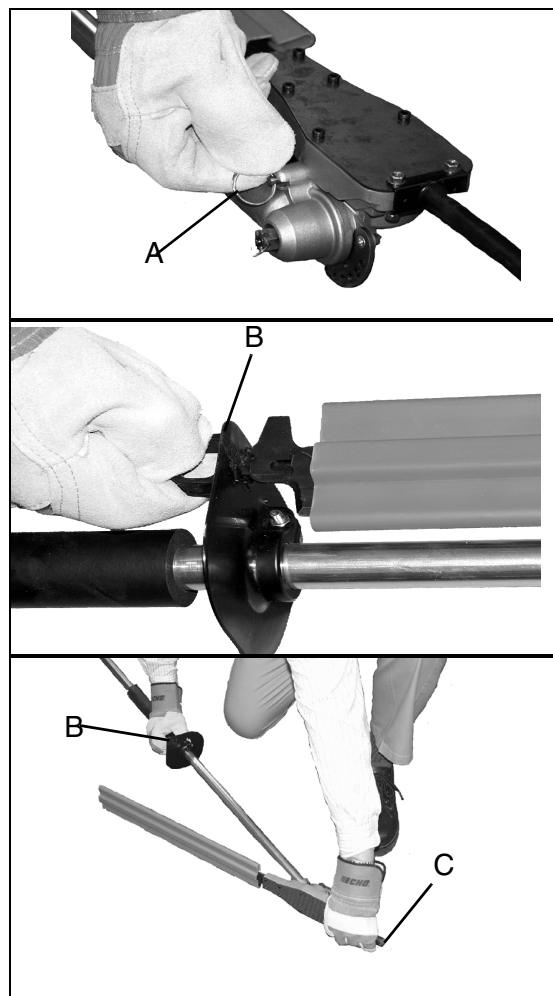
⚠ WARNING

DO NOT stand hedge trimmer on end when adjusting cutting angle, otherwise serious injury may result.

1. Place unit on a flat clear area. Assure stop switch is in the "STOP" position.



2. Pull out indexing ring (A), and turn $\frac{1}{4}$ turn to lockout position.
3. Turn hedge trimmer $\frac{1}{4}$ turn so that indexing ring faces downward.
4. Release hand-guard blade lock (B) with right hand, while holding blade-adjustment handle (C) with left hand.
5. Rotate blades to desired cutting position.
6. Turn indexing ring $\frac{1}{4}$ turn to lock blade in place.



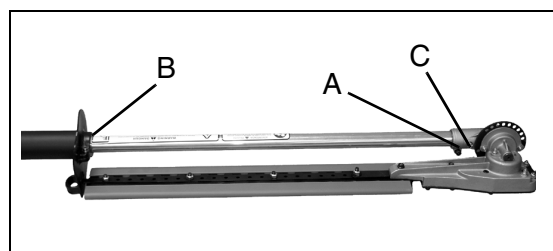
⚠ WARNING

Gear case assembly becomes HOT during use. Always grip assembly at blade-adjustment handle when making cutting angle adjustments, otherwise serious injury may result.

Rotate Cutter Assembly

Always use the unit from the right-hand side of your body – NEVER from the left side. Rotate cutter assembly 180 degrees on driveshaft in order to avoid cutting directly above your head, and to avoid contact with hot muffler.

1. Loosen gearcase clamping screw (A), hand guard clamping screw (B), and remove gearcase locating screw (C).
2. Rotate cutter assembly 180-degrees on driveshaft until locating hole in driveshaft is visible through locating hole in gearcase.
3. Install gearcase locating screw (C), and securely tighten all hardware.



⚠ WARNING

Hedge Trimmer blades are very sharp. Wear gloves to protect hands when rotating cutter assembly or serious personal injury may result.

⚠ WARNING

During operation, the complete unit, especially the drive shaft housing and gearcase may become too hot to touch. Avoid contact when rotating cutter assembly.

Starting Cold Engine

WARNING

Hedge Trimmer blades are very sharp. Touching them may lead to severe personal injury. Avoid touching blades whenever possible, and always wear gloves to protect hands.

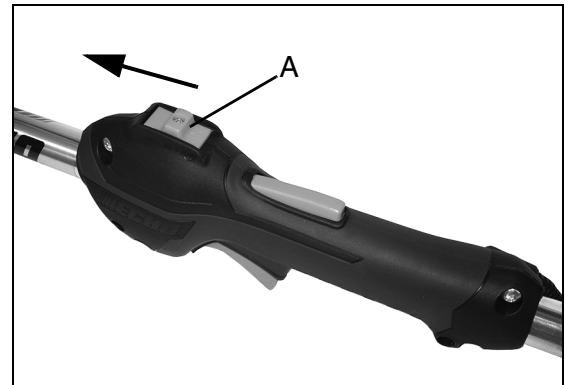
Note: The blade cover is used for transportation and storage. Remove blade cover before using the unit.

WARNING

The attachment will operate immediately when the engine starts, and could result in possible serious injury. Keep movable parts of the attachment away from objects that could become entangled or thrown, and surfaces that could cause loss of control.

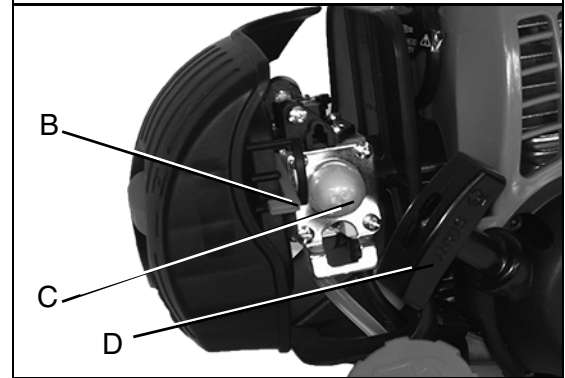
1. Stop Switch

Move stop switch (A) away from the STOP position.



2. Choke

Move choke (B) to COLD START (|←|) (closed) position.

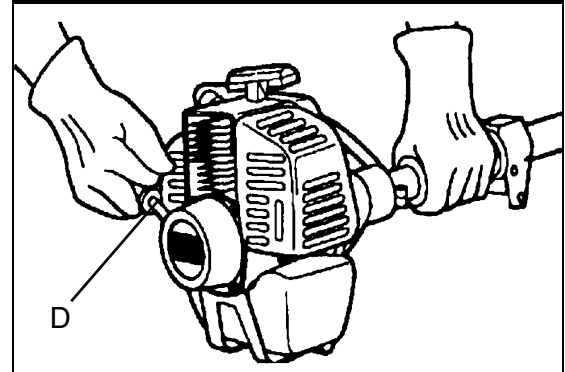


3. Purge Bulb

Pump purge bulb (C) until fuel is visible and flows freely in the clear fuel tank return line. Pump bulb an additional 4 or 5 times.

4. Recoil Starter

Lay the unit on a flat area and keep movable attachment parts clear of all obstacles. Firmly grasp throttle handle and throttle trigger lockout with left hand and fully depress throttle trigger to wide open position. Rapidly pull recoil starter handle/rope (D) until engine fires (or maximum five [5] pulls).



5. Choke

After engine fires (or 5 pulls), move choke (B) to the RUN (|↑|) (open) position. Firmly grasp throttle handle and throttle trigger lockout with left hand and fully depress throttle trigger to wide open position. Pull starter handle/rope until engine starts and runs. Release throttle trigger and allow unit to warm up at idle for several minutes.

Note: If engine does not start with choke in "RUN" position after 5 pulls, repeat instructions 2 - 5.

! WARNING

The blades must not move at idle, otherwise serious personal injury may result. Periodic carburetor adjustment may be necessary to assure blades do not move at idle. If blades move, readjust carburetor according to “Carburetor Adjustment” instructions in this manual or see your ECHO Dealer.

6. Throttle Trigger

After engine warm-up, grip throttle handle and support handle. Depress the throttle trigger lockout, and gradually depress throttle trigger to increase engine RPM to operating speed.

Starting Warm Engine

The starting procedure is the same as Cold Start except DO NOT close the choke, and do not depress throttle trigger to wide open position.

! WARNING

The blades must not move at idle, otherwise serious personal injury may result. Periodic carburetor adjustment may be necessary to assure blades do not move at idle. If blades move, readjust carburetor according to “Carburetor Adjustment” instructions in this manual or see your ECHO Dealer.

1. Stop Switch

Move stop switch (A) away from the STOP position.

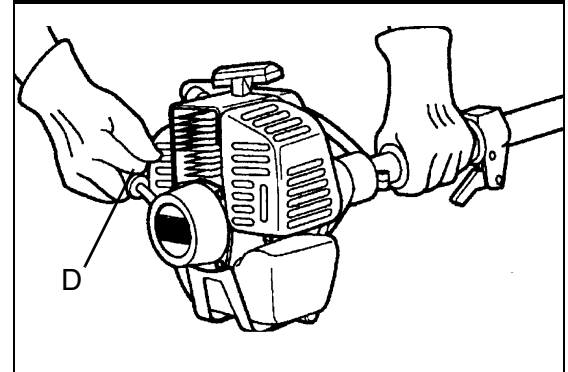
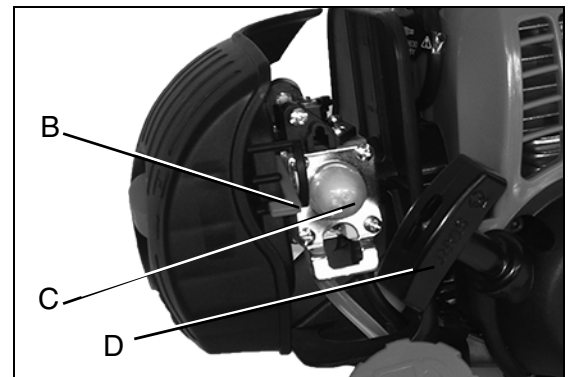
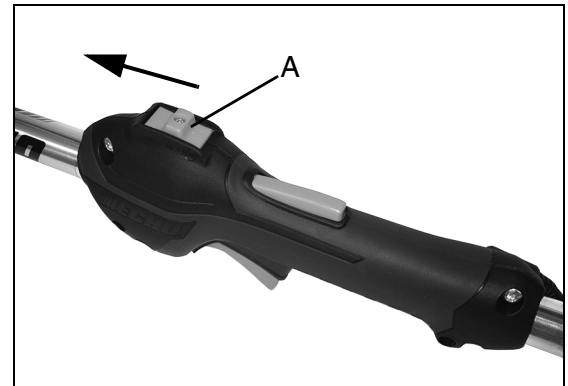
2. Purge Bulb

Pump purge bulb (C) until fuel is visible and flows freely in the clear fuel tank return line. Pump bulb an additional 4 or 5 times.

3. Recoil Starter

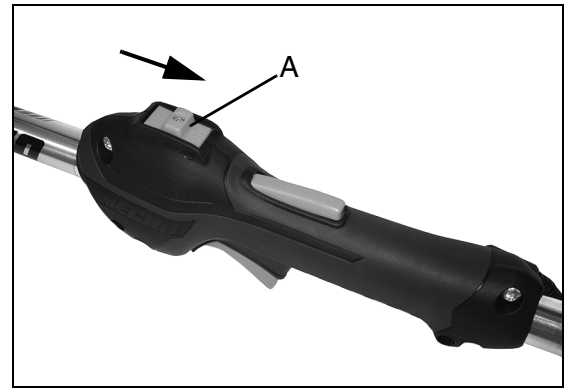
Lay the unit on a flat area and keep movable attachment parts clear of all obstacles. Firmly grip throttle handle and throttle trigger lockout with left hand. Rapidly pull recoil starter handle/rope (D) until engine fires.

Note: If engine does not start after 5 pulls, use Cold Start Procedure.



Stopping Engine

1. *Throttle*
Release throttle trigger and allow engine to return to idle before shutting off engine.
2. *Stop Switch*
Move stop switch (A) to STOP position.



⚠ WARNING

If engine does not stop when stop switch is moved to STOP position, close choke - COLD START position - to stall engine. Have your ECHO dealer repair stop switch before using unit again.

Hedge Trimming

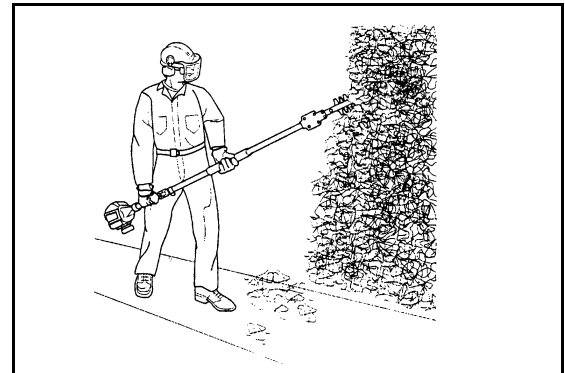
⚠ WARNING

Engine exhaust IS HOT, and contains Carbon Monoxide (CO), a poison gas. Breathing CO can cause unconsciousness, serious injury, or death. Exhaust can cause serious burns. ALWAYS position unit so that exhaust is directed away from your face and body.

⚠ WARNING

Hedge Trimmer blades are very sharp. Touching them may lead to severe personal injury. Avoid touching blades whenever possible, and always wear gloves to protect hands.

1. Always grip throttle handle with right hand and support handle with left hand.
2. Hold trimmer firmly and squeeze throttle trigger to accelerate engine.
3. Tilt trimmer so cutting teeth are angled slightly toward the hedge or shrub and proceed to cut.



⚠ WARNING

Never remove hands from unit when blades are moving.

⚠ WARNING

The engine continues running even when the blades have stopped due to an obstruction. If this occurs, stop the engine, disconnect ignition cable and remove the obstruction.

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.

Maintenance Intervals

COMPONENT/SYSTEM	MAINTENANCE PROCEDURE	REQ'D SKILL LEVEL	DAILY OR BEFORE USE	EVERY REFUEL	3 MONTHS	YEARLY
Air Filter	Inspect/Clean	1	I / C *		R *	
Choke Shutter	Inspect/Clean	1	I / C			
Fuel Filter	Inspect/Replace	1			I *	I / R *
Fuel Cap Gasket	Inspect/Replace	1			I *	R *
Fuel System	Inspect/Replace	1	I (3) *	I (3) *		
Spark Plug	Inspect/Clean/Replace	1			I / C / R *	
Cooling System	Inspect/Clean	2	I / C			
Muffler Spark Arrestor	Inspect/Clean/Replace	2			I / C / R *	
Cylinder Exhaust Port	Inspect/Clean/Decarbon	2			I / C	
Drive Shaft (flex cable models)	Grease	2			I (1)	
Gear Housing	Grease	2			I (1)	
Blades	Inspect/Clean	1	I / C (2)			
Recoil Starter Rope	Inspect/Clean	1	I / C *			
Screws/Nuts/Bolts	Inspect/Tighten/Replace	1	I *			

MAINTENANCE PROCEDURE LETTER CODES: I = INSPECT, R = REPLACE, C = CLEAN

IMPORTANT NOTE - Time intervals shown are maximum. Actual use and your experience will determine the frequency of required maintenance.

* Replacement is recommended based on the finding of damage or wear during inspection.

MAINTENANCE PROCEDURE NOTES:


1. Apply lithium based grease every 25 hours of use.
2. Inspect blade, and clean and sharpen as needed. Lubricate blades periodically during use

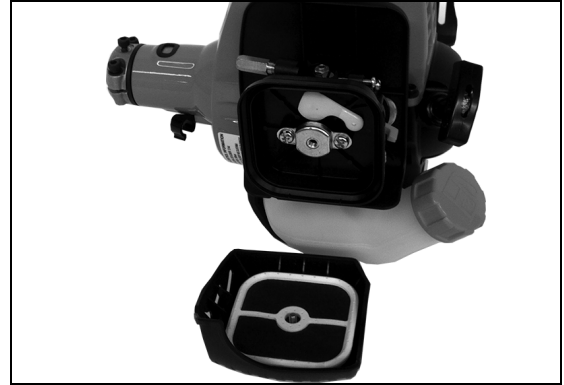
3. Low evaporative fuel tanks DO NOT require regular maintenance to maintain emission integrity.

Air Filter

Level 1

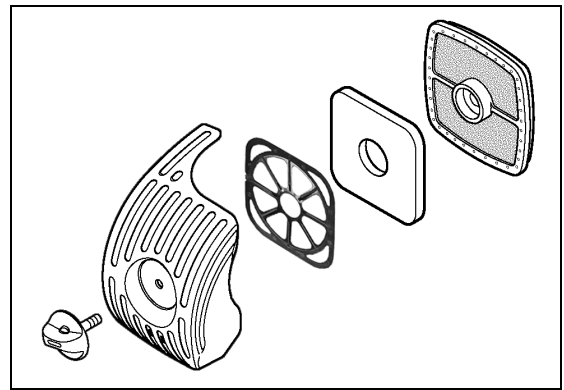
Parts Required: air filter

1. Close choke (Cold Start Position []). This prevents dirt from entering the carburetor throat when the air filter is removed. Brush accumulated dirt from air cleaner area.
2. Remove air filter cover and air filter retainer from inside cover. Brush dirt from inside cover.
3. Replace filter if it is damaged, very dirty, or the rubber sealing edges are deformed.
4. Remove foam pre-filter and air filter and clean as indicated below:



Foam Pre-filter

- Clean foam filter in water/detergent solution and rinse with clean water.
- Wrap the filter in a clean, dry cloth and squeeze (do not wring) dry. Allow to dry completely before reuse. Do not oil.



Dual Layer Air Filter

- Lightly brush debris from filter.
 - Soak heavily soiled filters in water/detergent solution to loosen dirt, then brush lightly.
 - Rinse with clean water and allow to dry completely before reuse.
5. Place foam pre-filter over raised center and inside outer lip of air filter. Install air filter in air filter case.
 6. Install air filter retainer on post in air filter cover, flat side up.
 7. Install air filter cover and tighten cover knob securely.

Fuel Filter

Level 1

Parts Required: fuel filter

 DANGER

Fuel is VERY flammable. Use extreme care when mixing, storing or handling, or serious personal injury may result.

1. Use a clean rag to remove loose dirt from around fuel cap and empty fuel tank.
2. Use a hook to pull the fuel line and filter from the tank.
3. Remove the filter from the line and install the new filter.



Note: Federal EPA regulations require all model year 2012 and later gasoline powered engines produced for sale in the United States to be equipped with a special low permeation fuel supply hose between the carburetor and fuel tank. When servicing model year 2012 and later equipment, only fuel supply hoses certified by EPA can be used to replace the original equipment supply hose. Fines up to \$37,500 may be enforced for using an un-certified replacement part.

Spark Plug

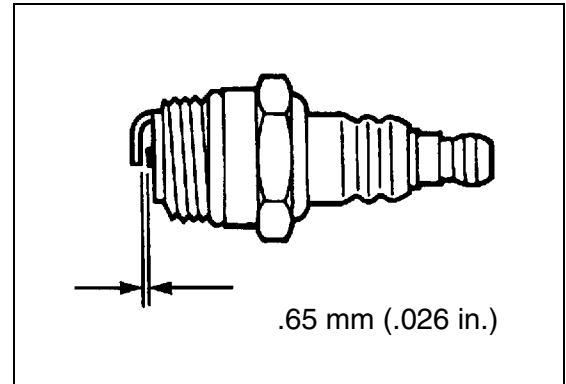
Level 2

Parts Required: spark plug

NOTICE

Use only NGK BPM-8Y spark plug (BPMR-8Y in Canada) otherwise severe engine damage may occur.

1. Remove spark plug and check for fouling, worn and rounded center electrode.
2. Clean the plug or replace with a new one. DO NOT sand blast to clean. Remaining sand will damage engine.
3. Adjust spark plug gap by bending outer electrode.
4. Tighten spark plug to 150–170 kgf • cm (130–150 in • lbf).



Cooling System

Level 2

Parts Required: None if you are careful.

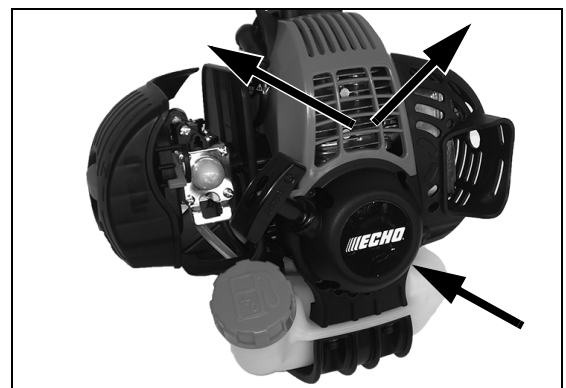
NOTICE

To maintain proper engine operating temperatures, cooling air must pass freely through the cylinder fin area. This flow of air carries combustion heat away from the engine.

Overheating and engine seizure can occur when:

- Air intakes are blocked, preventing cooling air from reaching the cylinder.
- Dust and grass build up on the outside of the cylinder. This build up insulates the engine and prevents the heat from leaving.

Removal of cooling passage blockages or cleaning of cooling fins is considered "Normal Maintenance." Any failure attributed to lack of maintenance is not warranted.

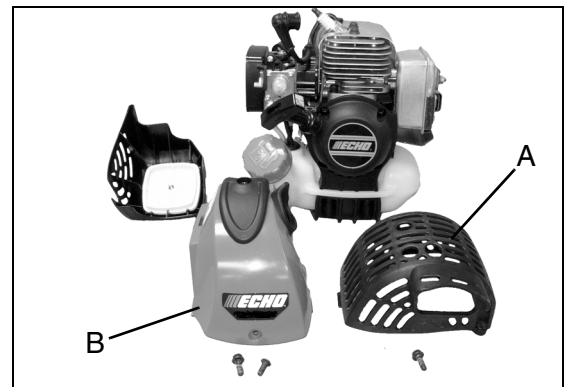


1. Remove spark plug lead.
2. Remove air cleaner cover.
3. Remove muffler cover (A).
4. Remove engine cover (B).

NOTICE

DO NOT use a metal scraper to remove dirt from the cylinder fins.

5. Use brush to remove dirt from the cylinder fins.
6. Remove grass and leaves from the grid between the recoil starter and fuel tank.
7. Assemble components in reverse order.



Exhaust System

Spark Arrestor Screen

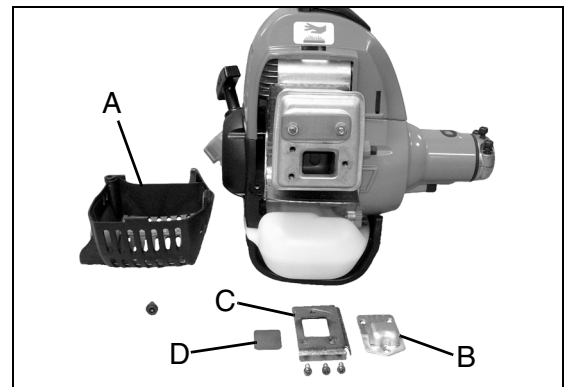
Level 2

Parts Required: Spark Arrestor Screen, Gasket

1. Remove spark plug lead.
2. Remove muffler cover (A).
3. Place piston at Top Dead Center (TDC) to prevent carbon/dirt from entering cylinder.
4. Remove spark arrestor screen (D), gasket (C) and exhaust guide (B) from muffler body.
5. Clean carbon deposits from muffler components.

Note: When cleaning carbon deposits, be careful not to damage the catalytic element inside muffler.

6. Replace screen if it is cracked, plugged, or has holes burned through.
7. Assemble components in reverse order.

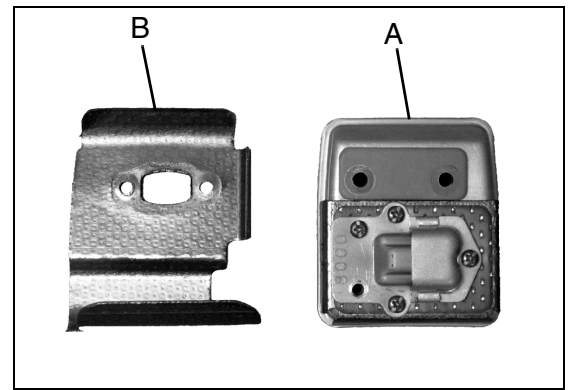


Exhaust Port Cleaning

Level 2

Parts Required: As needed; Heat Shield

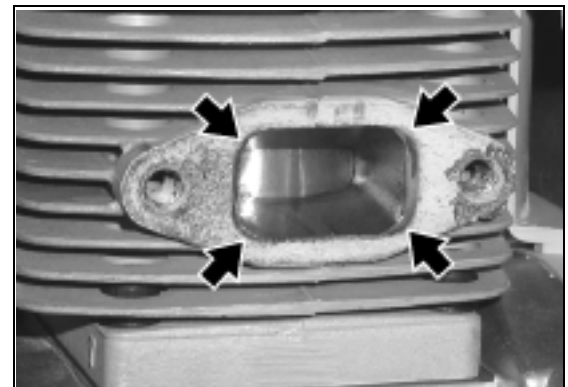
1. Remove spark plug lead from spark plug, and remove engine cover.
2. Place piston at top dead center. Remove muffler (A) and heat shield (B).
3. Use a wood or plastic scraping tool to clean deposits from cylinder exhaust port.



NOTICE

Never use a metal tool to scrape carbon from the exhaust port. Do not scratch the cylinder or piston when cleaning the exhaust port. Do not allow carbon particles to enter the cylinder.

4. Inspect heat shield, and replace if damaged.
5. Install heat shield and muffler.
6. Tighten muffler mounting bolts (or nuts) to 90–110 kgf • cm (80–95 in • lbf).
7. Install engine cover and attach spark plug lead.
8. Start engine, and warm to operating temperature.
9. Stop engine, and re-tighten mounting bolts (or nuts) to specifications.



Carburetor Adjustment

Level 2

Engine Break-In

New engines must be operated a minimum duration of two tanks of fuel break-in before carburetor adjustments can be made. During the break-in period your engine performance will increase and exhaust emissions will stabilize. Idle speed can be adjusted as required.

High Altitude Operation

This engine has been factory adjusted to maintain satisfactory starting, emission, and durability performance up to 1,100 feet above sea level (ASL) (96.0 kPa). To maintain proper engine operation and emission compliance above 1,100 feet ASL the carburetor may need to be adjusted by an authorized ECHO service dealer.

NOTICE

If the engine is adjusted for operation above 1,100 feet ASL, the carburetor must be re-adjusted when operating the engine below 1,100 feet ASL, otherwise severe engine damage may result.

Parts Required: None

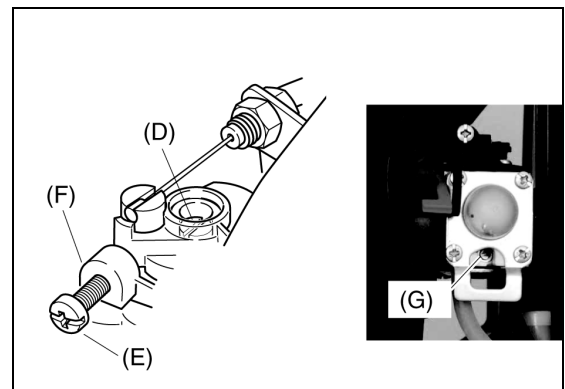
! WARNING

Always operate unit in a clear work area. Keep hands clear of moving parts during adjustment otherwise serious bodily injury may occur.

Before adjustment make sure that:

- Check for correct spark plug (BPM-8Y P/N 15901019830) and gap: .026 in (0.65 mm).
- The air filter element is clean and properly installed.
- The muffler spark arrestor screen and exhaust port are clear of carbon.
- The fuel lines, tank vent, and fuel filter are in good condition and clear of debris.
- The fuel is fresh (> 89 octane : RON+MON/2) and properly mixed at 50 : 1 with “ISO L-EGD” or “JASO-FD” 2-stroke oil.

1. Turn Hi mixture needle (G) clockwise (CW) until lightly seated. And then turn Hi mixture needle (G) (CCW) 1 3/8 turns. Turn idle mixture needle (D) (CW) until lightly seated. And then turn idle mixture needle (D) (CCW) 2 1/8 turns.
2. Turn idle adjust screw (E) until the head touches boss (F). Then turn idle adjust screw (E) (CCW) 8 3/4 turns.
3. Start and run engine for 2 minutes alternating between wide open throttle (WOT) and idle every 5 seconds. Adjust idle mixture needle (D) to achieve 2900 RPM.
4. Adjust Hi mixture needle (G) and achieve 10250 RPM
5. When final adjustment is completed, the engine should idle, accelerate smoothly, and attain (WOT) per above specification.



Lubrication

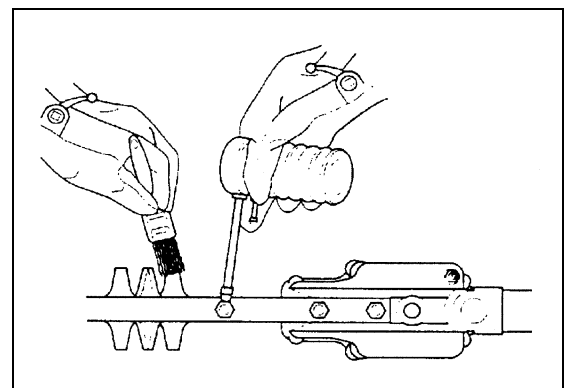
Blades

Level 1.

Parts Required: 20W Engine Oil (blade lubrication), 50-50 mixture of kerosene and 20W oil (blade cleaning)

! WARNING

Hedge Trimmer blades are very sharp. Touching them may lead to severe personal injury. Avoid touching blades whenever possible, and always wear gloves to protect hands.



1. Brush loose debris from blade and coat both sides of blade with the 50-50 cleaning mixture.
2. Allow cleaning mixture to soften the remaining gummy residue then wipe it from the blade.
3. Apply clean oil to the entire length of the blade. Be certain the blade bolts are lubricated.

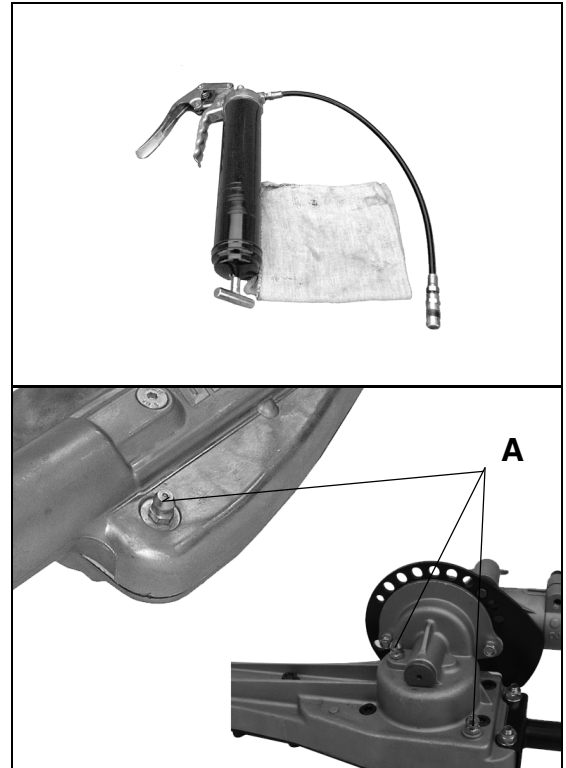
- Wipe excess oil from the blade before putting the unit back in service.

Gear Case

Level 1.

Parts Required: Lithium Based Grease.

- Clean dirt from the grease fitting (A).
- Carefully pump grease into fitting (A). DO NOT force grease. Too much pressure will force grease past seals and cause damage. Apply 1 - 2 pumps of grease every 15 - 25 hours of operation.
- Wipe excess grease from around grease fitting.



Drive Shaft Assembly

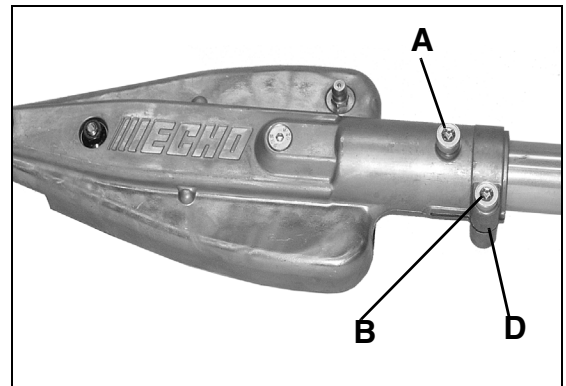
Level 1.

Parts Required: Lithium Based Grease.

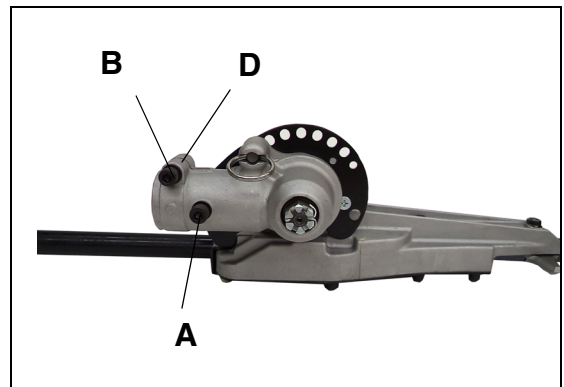
! WARNING

Hedge Trimmer blades are very sharp. Touching them may lead to severe personal injury. Avoid touching blades whenever possible, and always wear gloves to protect hands.

- Remove gear housing locating screw (A) and loosen clamping screw (B). Remove the gear housing assembly from the drive shaft housing.



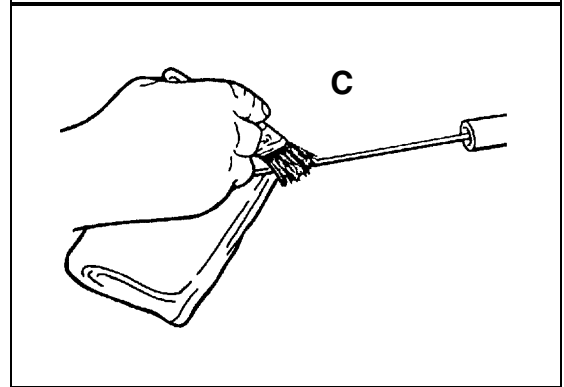
2. Pull the drive shaft (C) from the housing, wipe clean and re-coat with a thin coating (15 ml [1/2 oz.] of grease.
3. Slide the drive shaft back in the drive housing being careful not to get dirt on the flex shaft.



4. Install the gear housing assembly.

NOTICE

Flat edge of washers (D) must be against drive shaft.



Blades

NOTICE

Blades should only be removed and reinstalled by an Authorized ECHO Servicing Dealer, otherwise premature wear or internal damage may occur.

Sharpening

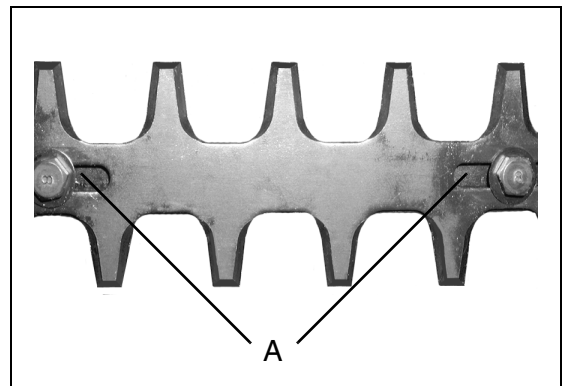
Level 2.

Parts Required: none

WARNING

Hedge Trimmer blades are very sharp. Touching them may lead to severe personal injury. Avoid touching blades whenever possible, and always wear gloves to protect hands.

1. Move stop switch to STOP position.
2. Disconnect spark plug wire.

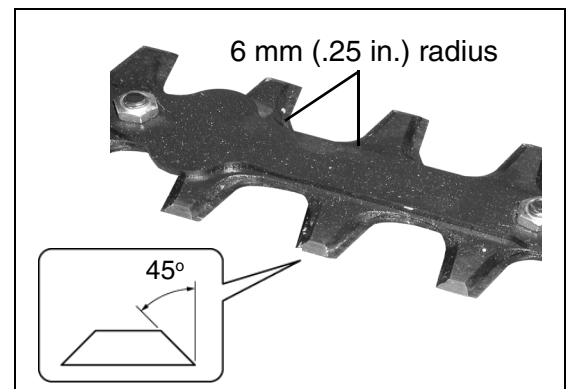


3. Remove blade guard, if installed (see “Blade Guard Remove/Install instructions”).
4. Slide blades to allow file clearance using slots (A) on bottom of blade. Do not pry against cutting edges.
5. File each edge carefully. Follow the original shape of the blade.

NOTICE

If a power grinder is used DO NOT allow blade to over heat.

6. Install blade guard, if necessary (see “Blade Guard Remove/Install instructions”).
7. Lubricate blades (see “Lubrication”).
8. Connect spark plug wire.



Adjustment

Level 2.

Parts Required: none

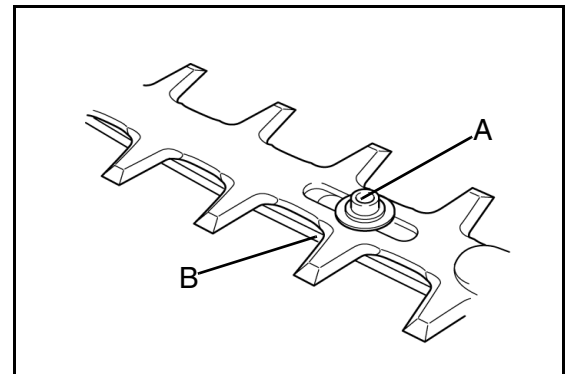
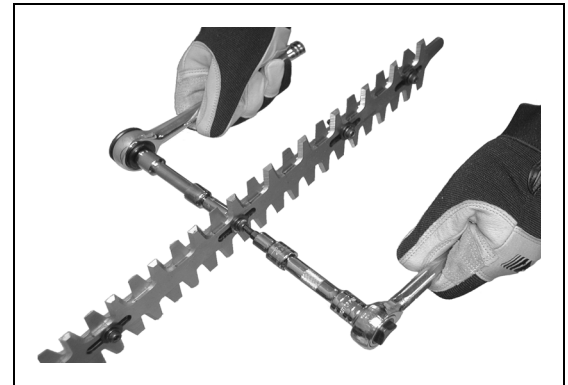
⚠ WARNING

Hedge Trimmer blades are very sharp. Touching them may lead to severe personal injury. Use long hex wrenches and sockets with extensions when tightening blade screws and blade lock nuts to keep hands at a safe distance from sharp blades.

1. Tighten blade screws (A) securely.
2. Hold blade screws (A) to prevent turning, and tighten lock nuts (B).

NOTICE

Locking ability of Hedge Trimmer blade lock nuts will diminish each time they are removed. Replace if turning resistance is not felt when installing lock nuts.



TROUBLESHOOTING

ENGINE PROBLEM TROUBLESHOOTING CHART				
Problem	Check	Status	Cause	Remedy
Engine cranks - starts hard/ doesn't start	Fuel at carburetor	No fuel at carburetor	Fuel strainer clogged Fuel line clogged Carburetor	Clean or replace Clean or replace See your Echo dealer
	Fuel at cylinder	No fuel at cylinder	Carburetor	See your Echo dealer
		Muffler wet with fuel	Fuel Mixture too rich	OPEN choke Clean/replace air filter Adjust carburetor See your Echo dealer
	Spark at end of plug wire	No spark	Stop switch OFF Electrical problem Interlock switch	Turn switch to ON See your Echo dealer See your Echo dealer
Spark at plug	No spark	Spark gap incorrect Covered with carbon Fouled with fuel Plug defective	Adjust to 0.65mm (0.026 in.) Clean or replace Clean or replace Replace plug	
Engine runs, but dies or does not accelerate properly	Air filter	Air filter dirty	Normal wear	Clean or replace
	Fuel filter	Fuel filter dirty	Contaminants/residues in fuel	Replace
	Fuel vent	Fuel vent plugged	Contaminants/residues in fuel	Clean or replace
	Spark Plug	Plug dirty/worn	Normal wear	Clean and adjust or replace
	Carburetor	Improper adjustment	Vibration	Adjust
	Cooling System	Cooling system dirty/plugged	Extended operation in dirty/dusty locations	Clean
Spark Arrestor Screen	Spark arrestor screen plugged	Normal wear	Replace	
Engine does not crank	N/A	N/A	Internal engine problem	See your Echo dealer

 **DANGER**

Fuel vapors are extremely flammable and may cause fire and/or explosion. Never test for ignition spark by grounding spark plug near cylinder plug hole, otherwise serious personal injury may result.

STORAGE

WARNING

The muffler and surrounding cover become hot during operation. Always keep exhaust area clear of flammable debris during transportation or when storing, otherwise serious property damage or personal injury may result.

Long Term Storage (Over 30 Days)

Do not store your unit for a prolonged period of time (30 days or longer) without performing protective storage maintenance which includes the following:

1. Store unit in a dry, dust free place, out of the reach of children.

WARNING

Hedge Trimmer blades are very sharp. Touching them may lead to severe personal injury. Avoid touching blades whenever possible, and always wear gloves to protect hands.

DANGER

Do not store in enclosure where fuel fumes may accumulate or reach an open flame or spark, otherwise serious personal injury may result.

2. Place the stop switch in the “STOP” position.
3. Remove accumulation of grease, oil, dirt and debris from exterior of unit.
4. Perform all periodic lubrication and services that are required.
5. Apply clean oil to the entire length of the blade. Be certain the blade bolts are lubricated.
6. Install blade cover on blades.
7. Tighten all the screws and nuts.
8. Drain fuel tank completely. Press purge bulb 6-7 times to remove remaining fuel from carburetor then drain the tank again. Close choke, start and run the engine until it stops due to lack of fuel.
9. Allow the engine to cool, then remove the spark plug and pour 7 cc (1/4 oz.) of fresh, clean, two-stroke engine oil into the cylinder through the spark plug hole.
 - a. Place a clean cloth over the spark plug hole.
 - b. Pull the recoil starter handle 2-3 times to distribute the oil inside the engine.
 - c. Observe the piston location through the spark plug hole. Pull the recoil handle slowly until the piston reaches the top of its travel and leave it there.
10. Install the spark plug (do not connect ignition cable).

NOTICE

Always store and transport hedge trimmers in a stable, horizontal position. Support gear case and cutting blades to prevent excessive flexing, which may cause damage to these components. Always install blade cover when transporting or storing unit.

SPECIFICATIONS

MODEL	HCA-266
Length	2365 mm (93.1 in.)
Width	250 mm (9.85 in.)
Height	250 mm (9.85 in.)
Weight (dry)	7.12 kg (15.7 lb.)
Engine Type	Air cooled, two-stroke, single cylinder gasoline engine
Bore	34.0 mm (1.34 in.)
Stroke	28.0 mm (1.10 in.)
Displacement	25.4 cc (1.55 cu. in.)
Exhaust	Spark arrestor muffler or spark arrestor muffler with catalyst
Carburetor	Diaphragm w/purge pump
Ignition System	Flywheel magneto, capacitor discharge ignition type
Spark Plug	NGK BPM-8Y (Gap 0.65 mm (0.026 in.))
Fuel	Mixed (Gasoline and Two-stroke Oil)
Fuel/Oil Ratio	50 : 1 Power Blend X™ ISO-L-EGD (ISO/CD 13738) and J.A.S.O. M345- <u>FD</u> , two-stroke, air-cooled engine oil.
Gasoline	Use 89 Octane unleaded. Do not use fuel containing methyl alcohol, or more than 25% ethyl alcohol.
Oil	Power Blend X™ Premium Universal 2-Stroke Oil
Fuel Tank Capacity	0.5 lit. (16.9 US fl. oz.)
Starter System	Automatic Rrecoil Starter
Clutch	Centrifugal Type
Gear Case Ratio	3.95:1
Cutter	Double Reciprocating Blade, Double Edge
Length	446 mm (17.7 in.)
Pitch	35 mm (1.1 in.)
Maximum Diameter Cut	
Soft Material	25.4 mm (1 in.)
Woody Material	13 mm (1/2 in.)
Cutting Angle Adjustment	-30 ~ 150 (total180) Degrees in 15 degree increments
Idle Speed	2,900 RPM
Clutch Engagement Speed	3,900 RPM
Wide Open Throttle Speed (W.O.T.)	10,250 RPM

NOTES



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

T45426001001/T45426999999