



PB-265LN

Power Blower

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.

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YOUR GOLF COURSE SUPERMARKET
800-345-1960

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INTRODUCTION

Welcome to the ECHO family. This ECHO product was designed and manufactured to provide long life and on-the-job dependability. Read and understand this manual. You will find it easy to use and full of helpful operating tips and SAFETY messages.

The Operator's Manual

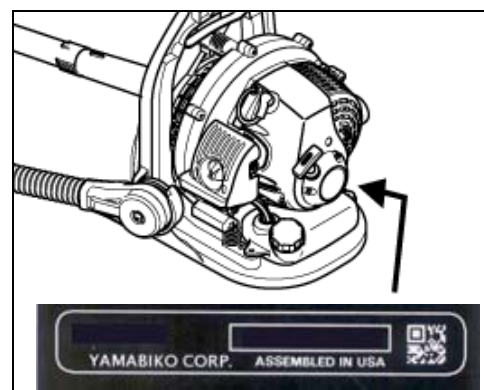
Keep it in a safe place for future reference. Contains specifications and information for safety, operation, maintenance, storage and assembly specific to this product.

SERVICING INFORMATION

Parts/Serial Number

Genuine ECHO Parts and ECHO REPOWER™ Parts and Assemblies for your ECHO products are available only from an Authorized ECHO Dealer. When you do need to buy parts **always** have the Model Number and Serial Number of the unit with you. You can find these numbers on the engine housing. For future reference, write them in the space provided below.

Model No. _____ SN. _____



Service

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

Echo Consumer Product Support

If you require assistance or have questions concerning the application, operation or maintenance of this product you may call the ECHO Consumer Product Support Department at 1-800-673-1558 from 8:30 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 www.echo-usa.com or by filling out the warranty registration card supplied with your unit. Registering your product confirms your warranty coverage and provides a direct link between you and ECHO if we find it necessary to contact you.

Additional or Replacement Manuals

Replacement Operator, Safety Manuals, and Parts Catalogs are available from your ECHO dealer or at www.echo-usa.com or by contacting ECHO Inc., 400 Oakwood Road, Lake Zurich, IL 60047 (800-673-1558). Always check the ECHO Web Site for updated information.

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

SAFETY

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	L	Carburetor Adjustment - Low speed mixture	H	Carburetor Adjustment - High speed mixture
	Wear eye, ear and head protection		Finger severing		Safety/Alert	T	Carburetor Adjustment - Idle speed
	Emergency Stop		Hot Surface		Idle Speed		Fast speed
	Wear hand protection. Use two handed		DO NOT smoke near fuel		Ignition ON / OFF		Primer Bulb
	Choke Control “Cold Start” Position (Choke Closed)		Choke Control “Run” Position (Choke Open)		DO NOT allow flames or sparks near fuel		Wear slip resistant footwear

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

Eye protection that meets ANSI Z87.1 or CE requirements must be worn whenever you operate the unit.

Hand Protection

Wear no-slip, heavy duty work gloves to improve your grip on the handles. Gloves also reduce the transmission of machine vibration to your hands.

Breathing Protection

Wear a facemask to protect against dust.

Hearing Protection

ECHO recommends wearing hearing protection whenever unit is used.

Proper Clothing

Wear snug fitting, durable clothing;

- Pants should have long legs, shirts with long sleeves.
- DO NOT WEAR SHORTS,
- DO NOT WEAR TIES, SCARVES, JEWELRY, or clothing with loose or hanging items that could become entangled in moving parts or surrounding growth.

Wear sturdy work shoes with nonskid soles;

- DO NOT WEAR OPEN TOED SHOES,
- DO NOT OPERATE UNIT BAREFOOTED.

Wear no-slip, heavy duty work gloves.

Keep long hair away from engine and air intake. Retain hair with cap or net.

Hot Humid Weather

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 ignition 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 ECHO products by anyone who has a pacemaker.

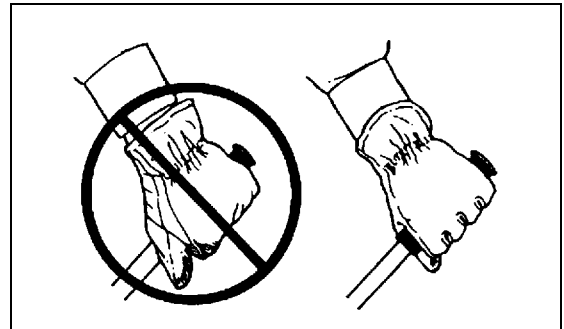
Vibration and Cold

It is believed that a condition called Raynaud's Phenomenon, which affects the fingers of certain individuals, may be brought about by exposure to vibration and cold. Exposure to vibration and cold may cause tingling and burning sensations, followed by loss of color and numbness in the fingers. The following precautions are strongly recommended, because the minimum exposure, which might trigger the ailment, is unknown.

- Keep your body warm, especially the head, neck, feet, ankles, hands, and wrists.
- Maintain good blood circulation by performing vigorous arm exercises during frequent work breaks, and also by not smoking.
- Limit the hours of operation. Try to fill each day with jobs where operating the 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**

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

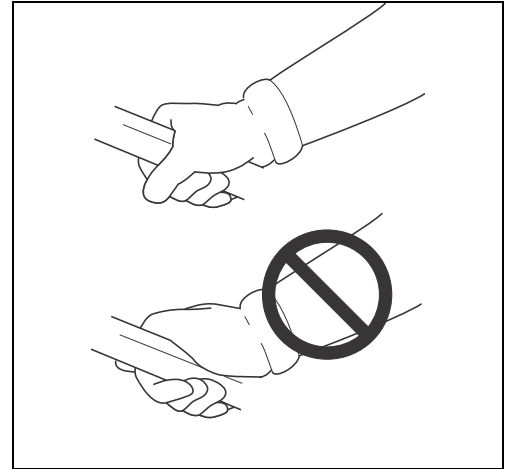
Do not operate this product indoors or in inadequately ventilated areas. Engine exhaust contains poisonous emissions and can cause serious injury or death.

Read the Manual

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

Clear the Work Area

- Spectators and fellow workers must be warned, and children and animals prevented from coming nearer than 15 m (50 ft.) while the unit is in use.
- Take wind conditions into account: avoid open doors and windows.
- Do not point blower at people or animals.
- Review area to be cleared. Look for potential hazards such as stones or metal objects.

**Keep a Firm Grip**

- Hold the handle in one hand, with thumb and fingers encircling the handle.

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

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

**Equipment****⚠ 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.

- Check unit for loose/missing nuts, bolts, and screws. Tighten and/or replace as needed.
- Do not use blower if any part is missing or damaged.
- Have repairs done only by an authorized ECHO Service dealer.

⚠ 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.

EMISSION CONTROL (EXHAUST & EVAPORATIVE)**EPA 2010 and Later and/or C.A.R.B. TIER III**

The emission control system for the engine is EM (engine modification) and, if the second to last character of the Engine Family on the Emission Control Information label (sample below) is “C”, “K”, or “T”, the emission control system is EM and TWC (3-way catalyst). The fuel tank/fuel line emission control system is EVAP (evaporative emissions). Evaporative emissions for California models are only applicable to fuel tanks.

An Emission Control Label is located on the engine. (This is an EXAMPLE ONLY, information on label varies by engine FAMILY).

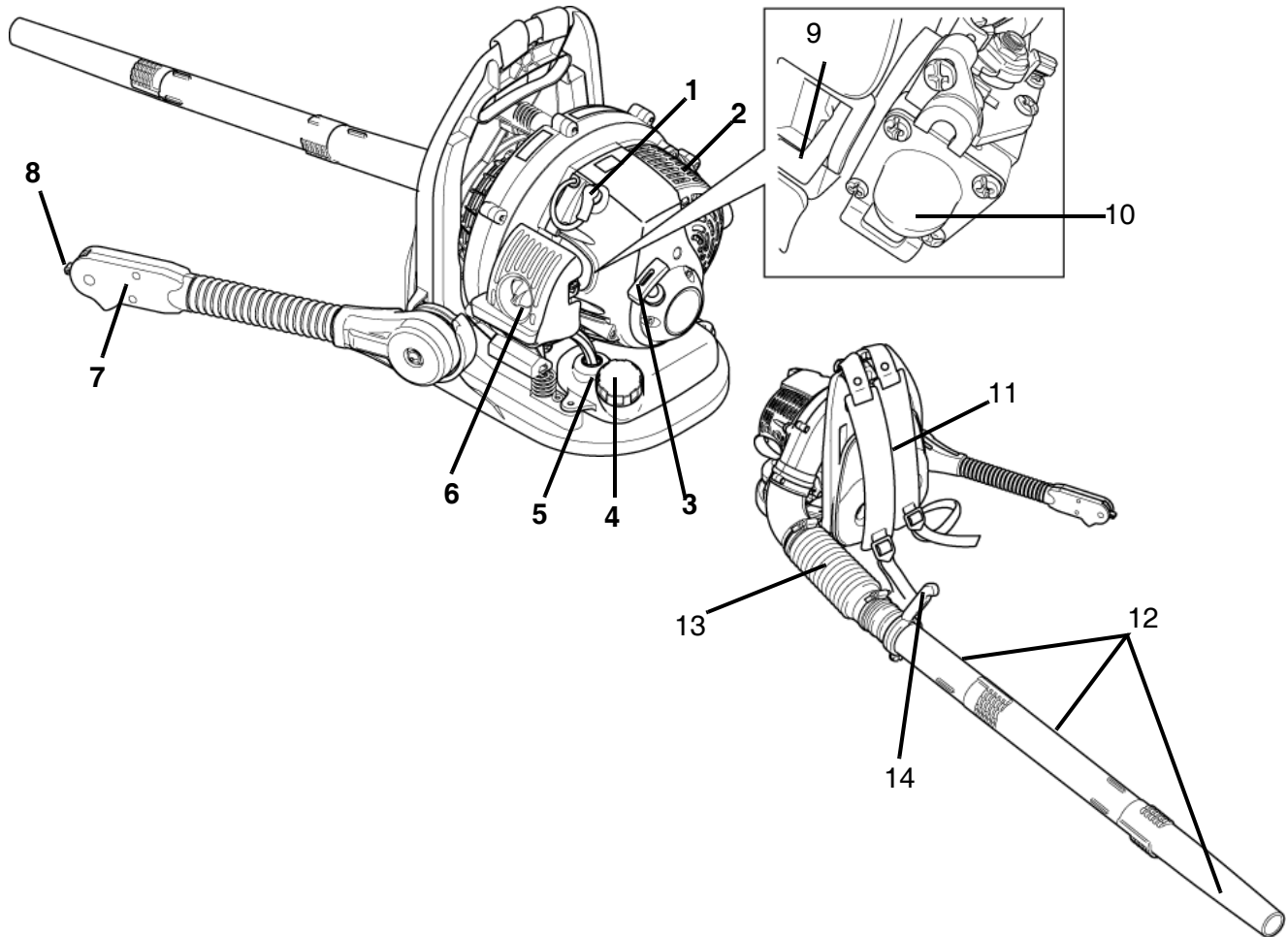
Product Emission Durability (Emission Compliance Period)

The 50 or 300 hour emission compliance period is the time span selected by the manufacturer certifying the engine emissions output meets applicable emissions regulations, provided that approved maintenance procedures are followed as listed in the Maintenance Section of this manual.



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.



Hot Decal





Sound Label



General Warning Decal

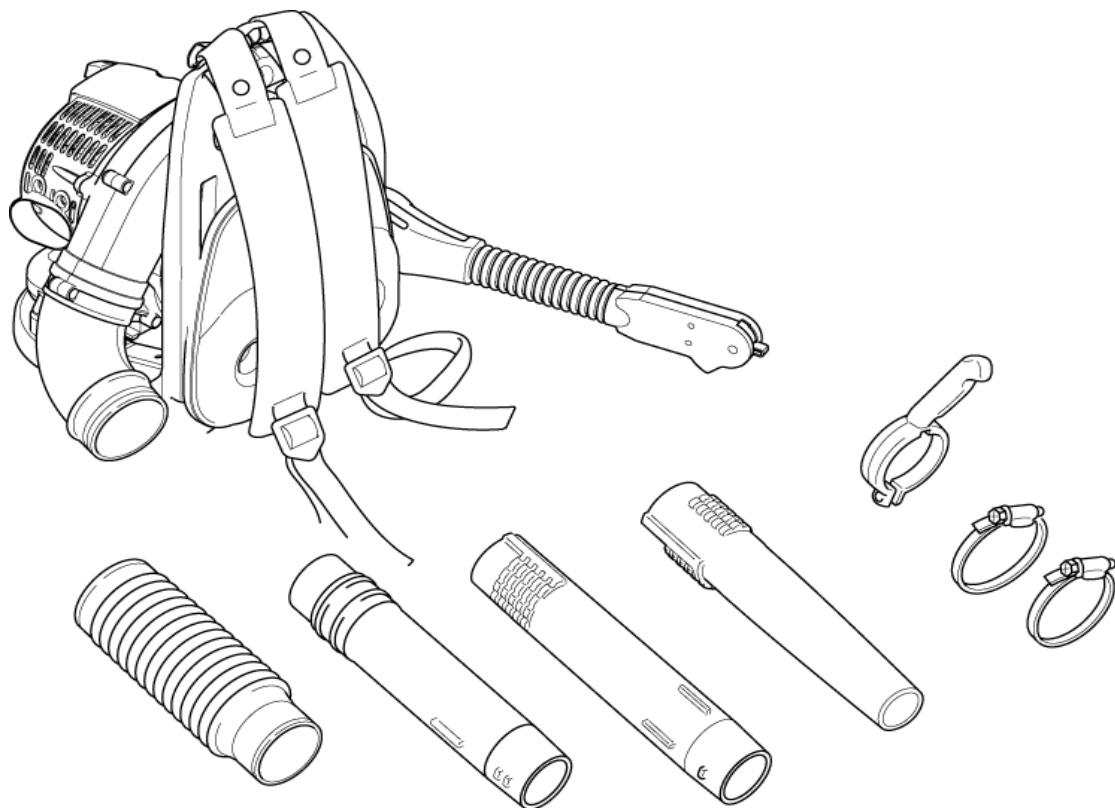
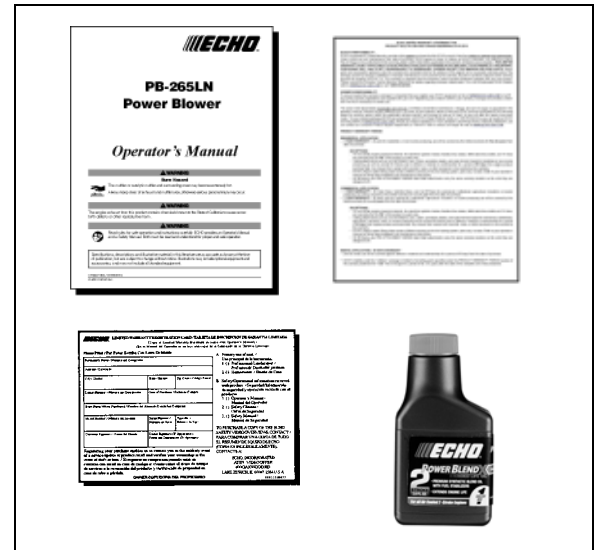


1. **SPARK PLUG** - Provides spark to ignite fuel mixture.
2. **SPARK ARRESTOR MUFFLER OR SPARK ARRESTOR MUFFLER WITH CATALYST** -The muffler controls exhaust noise and emission. The spark arrestor screen prevents hot, glowing particles of carbon from leaving the muffler. Keep exhaust area clear of flammable debris
3. **RECOIL STARTER HANDLE** - Pull recoil handle slowly until recoil starter engages, then quickly and firmly. When engine starts, return handle slowly. DO NOT let handle snap back or damage to unit will occur.
4. **FUEL TANK CAP** - Covers and seals fuel tank.
5. **FUEL TANK** - Contains fuel and fuel filter.
6. **AIR CLEANER** - Contains replaceable air filter element.
7. **HANDLE** - Rotates downward for throttle control access. Spring loaded for flexible operation.
8. **THROTTLE POSITION LEVER/STOP SWITCH** - Combination stop switch and variable speed throttle lever. When the lever is moved all the way forward the blower is at Wide Open Throttle (W.O.T.). When the lever is moved rearward to detent, the blower is at idle. When the lever is moved rearward past the idle detent the blower will stop.
9. **CHOKE** - Choke is located on the side of the air cleaner. Move choke lever to "COLD START" () to close choke for cold starting. Move choke lever to "RUN" () position to open choke.
10. **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.
11. **SHOULDER HARNESS** - Used to support unit on operator's back. The straps are adjustable.
12. **BLOWER PIPES** - Exclusive positive locking system.
13. **FLEXIBLE PIPE** - Allows for full range of movement.
14. **STICK HANDLE** - Used by operator to direct air flow.

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
- ___ 1 - Flex Pipe
- ___ 1 - Swivel Pipe
- ___ 1 - Straight Pipe
- ___ 1 - Straight Pipe W/Decal
- ___ 1 - Operator's Manual
- ___ 1 - Emission Control Warranty Statement
- ___ 1 - Warranty Registration Card
- ___ 2 - Clamps W/Screws
- ___ 1 - Stick Handle Assembly
- ___ 1 - Echo Power Blend X™ 2-stroke oil sample



ASSEMBLY

⚠ WARNING

Never perform maintenance or assembly procedures with engine running or serious personal injury may result.

Install Blower Pipes / Stick Handle

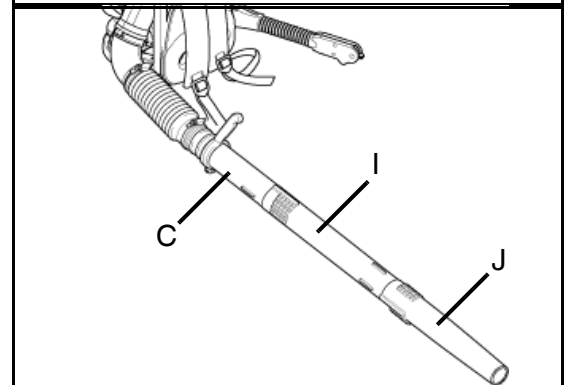
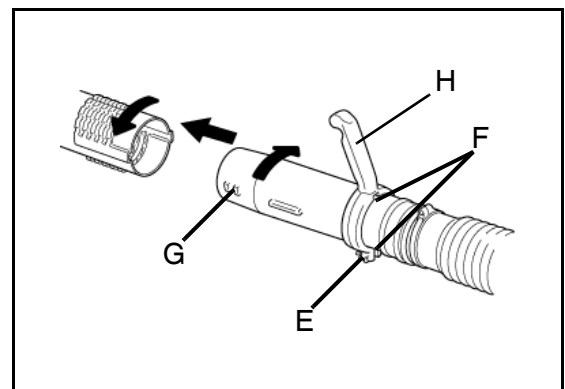
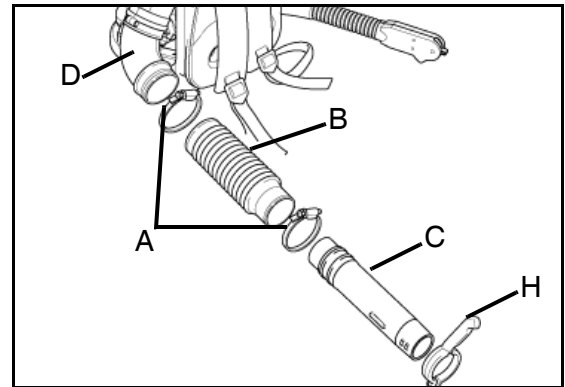
1. Assemble clamps (A) onto both ends of flexible pipe (B)
2. Assemble swivel pipe (C) into flexible pipe (B) and tighten clamp (A).
3. Assemble flexible pipe (B) to elbow (D) on blower and tighten clamp (A).

Note: A light lubricant may be used to ease assembly of flexible pipe to blower elbow.

4. Loosen wing nut (E) completely and open stick handle clamp.
5. Align notches (F) in handle clamp with tabs (G).
6. Slide stick handle onto swivel pipe (C). Stick handle should be angled away from operator.
7. Position stick handle (H) for comfortable operation, and tighten wing nut (E).

8. Assemble straight pipe (I) onto swivel pipe (C), until you feel light resistance. Do not force connection. Hold swivel pipe and turn straight pipe counter clockwise, engaging positive locking channels, until connection is firm. Do not force connection.
9. Assemble straight pipe with decal (J) to straight pipe (I) as in step 8.

Note: Blower use will eventually loosen pipe connections. Exclusive positive locking system allows pipes to be tightened. If loosening occurs, remove lower straight pipe, and install according to instructions 8 & 9.



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. Blower housing may contain shredder blades and other sharp edges that can cause serious injuries if touched, even if engine is off and blades are not moving. Wear gloves to protect hands from sharp edges and hot surfaces.

WARNING

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

Fuel

WARNING

Alternative fuels, such as E-15 (15% ethanol), E-85 (85% ethanol) or any fuels not meeting ECHO requirements are NOT approved for use in ECHO 2-stroke gasoline engines. Use of alternative fuels may cause performance problems, loss of power, overheating, fuel vapor lock, and unintended machine operation, including, but not limited to, improper clutch engagement. Alternative fuels may also cause premature deterioration of fuel lines, gaskets, carburetors and other engine components.

Fuel Requirements

Gasoline - Use 89 Octane [R+M/2] (mid grade or higher) gasoline known to be good quality. Gasoline may contain up to 10% Ethanol (grain alcohol) or 15% MTBE (methyl tertiary-butyl ether). 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			
U.S.		METRIC	
GAS	OIL	GAS	OIL
Gallons	Fl. oz.	Liter	cc.
1	2.6	4	80
2	5.2	8	160
5	13	20	400

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

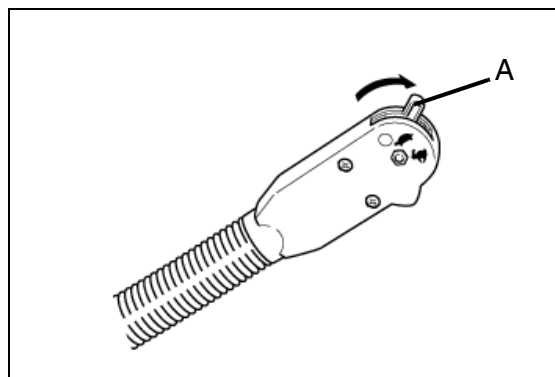
Stored two-stroke fuel may separate. ALWAYS shake fuel container thoroughly before each use.

Starting Cold Engine

- **Recoil starter:** Use short pulls - only 1/2-2/3 of rope length for starting. Do not allow the rope to snap back in. Always hold the unit firmly.
- Rotate throttle handle downward to a comfortable operating position.

1. *Throttle Position Lever*

Move throttle position lever (A) to START/IDLE DETENT position (👉).

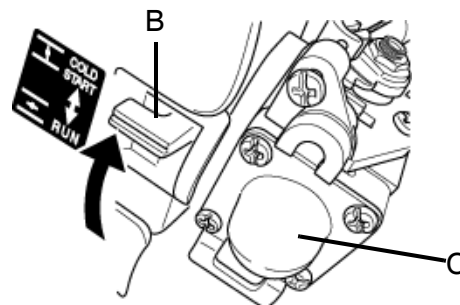


2. *Choke*

Move choke (B) to "Cold Start" (👈) position.

3. *Purge Bulb*

Pump purge bulb (C) until fuel is visible and flows freely in the clear fuel tank return line.

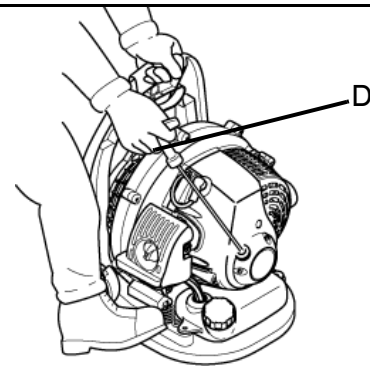


4. *Recoil Starter*

Pull recoil starter handle (D) until engine fires, or maximum 5 pulls.

5. *Choke*

Move choke lever (B) to Run (👉) position, and if necessary, restart engine.



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

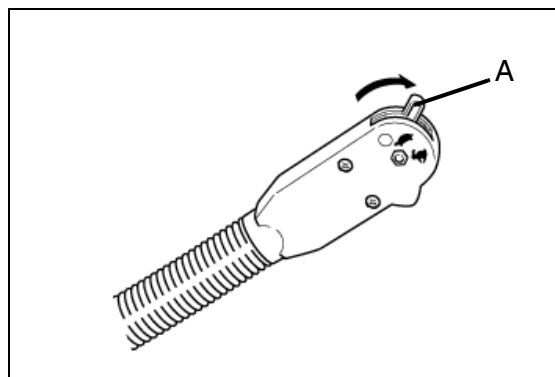
Note: Allow engine to warm up before use.

Starting Warm Engine

The starting procedure is the same as Cold Start except DO NOT close the choke.

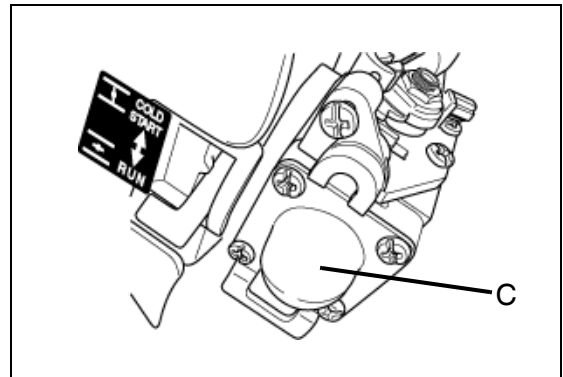
1. *Throttle Position Lever*

Move throttle position lever (A) to START/IDLE DETENT position (👉).



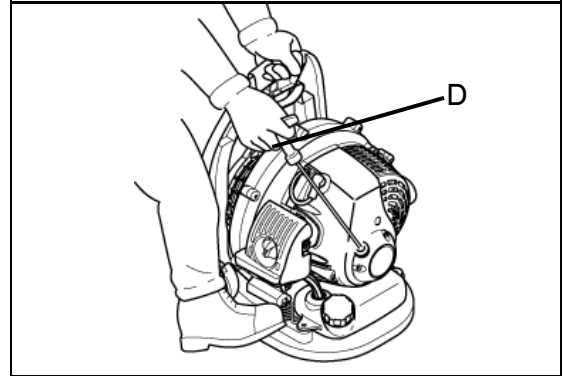
2. *Purge Bulb*


Pump purge bulb (C) until fuel is visible and flows freely in the clear fuel tank return line.

3. *Recoil Starter*


Pull recoil starter handle (D) and engine should start.

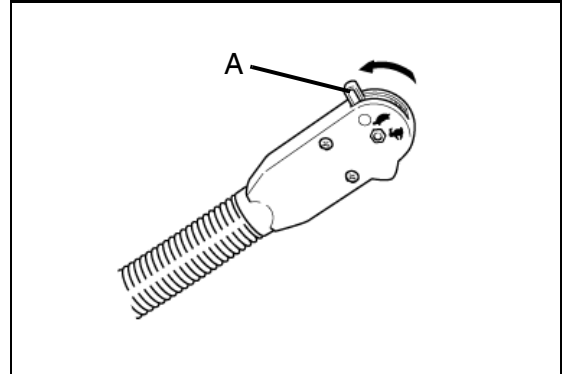
Note: If engine does not start after 5 pulls, use Cold Start Procedure.

**Stopping Engine**1. *Throttle Position Lever*

Move throttle position lever (A) to START/IDLE DETENT position () 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 trimmer again.

Operating Blower**⚠ 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

Always wear safety glasses, hearing protection and a face filter mask or serious personal injury may result. Do not point the blower pipe in the direction of people or pets.

NOTICE

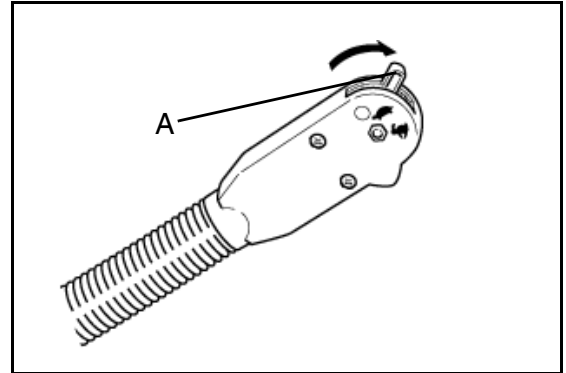
Use reduced speed only when performing light-duty tasks or to comply with local noise regulations. Continuous low speed operation may allow fuel/oil residue to build-up on the piston and cause rapid build-up of carbon on the spark arrestor screen, resulting in overheating and engine damage. To reduce harmful build-up, run engine at wide open throttle for at least 5 minutes every hour, and inspect/clean the spark arrestor screen after approximately 40 hours of operation.

Read the Safety Section carefully.

NOTICE

To avoid engine damage due to over-revving, do not block blower pipe.

1. Use only during appropriate hours.
2. Allow the engine to warm up at a fast idle for a few minutes.
3. Set engine speed with throttle position lever (A).
4. Use lower speed to blow dry grass and leaves from walks, patios and drives.
5. Additional speed may be necessary to clean leaves from a lawn or flower bed.
6. Higher speed may be necessary to move gravel, dirt, snow, bottles or cans from a driveway, street, parking lot or stadium.



Note: Never use a higher speed setting than necessary to perform a task. Remember, the higher the engine speed, the louder the blower noise. Minimize dust by using blower at lower speeds. Keep debris on your property. Be Smart - be a good neighbor.

MAINTENANCE

⚠ WARNING

Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing and loose objects away from all openings. Always stop engine, disconnect spark plug, and make sure all moving parts have come to a complete stop before removing obstructions, clearing debris, or servicing unit. Allow unit to cool before performing service. Wear gloves to protect hands from sharp edges and hot surfaces.

Your ECHO unit is designed to provide many hours of trouble free service. Regular scheduled maintenance will help your unit achieve that goal. If you are unsure or are not equipped with the necessary tools, you may want to take your unit to an ECHO Service Dealer for maintenance. To help you decide whether you want to DO-IT-YOURSELF or have the ECHO Dealer do it, each maintenance task has been graded. If the task is not listed, see your ECHO Dealer for repairs.

Skill Levels

Level 1 = Easy to do. Common tools may be required.

Level 2 = Moderate difficulty. Some specialized tools may be required.

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

Maintenance Intervals

COMPONENT/SYSTEM	MAINTENANCE PROCEDURE	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 (1) *	I (1) *		
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	
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.

MAINTENANCE PROCEDURE NOTES:


(1) Low evaporative fuel tanks DO NOT require regular maintenance to maintain emission integrity.

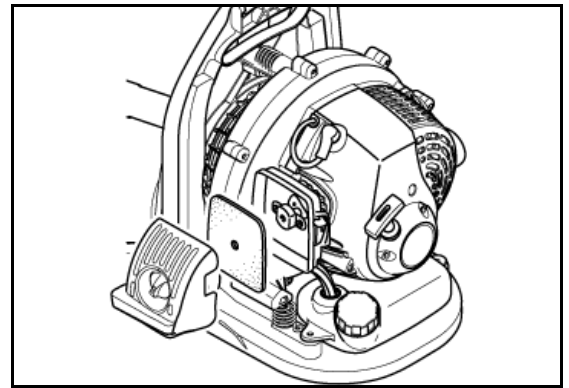
* Replacement is recommended based on the finding of damage or wear during inspection.

Air Filter

Level 1.

Parts Required: REPOWER™ AIR & FILTER KIT.

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. Brush dirt from inside cover.
3. Remove air filter and lightly brush debris from filter. Replace filter if it is damaged, fuel soaked, very dirty, or the rubber sealing edges are deformed.
4. If filter can be reused, be certain it:
 - Fits tightly in the air filter cavity
 - Is installed with the original side out
5. Install air filter cover.



Fuel Filter

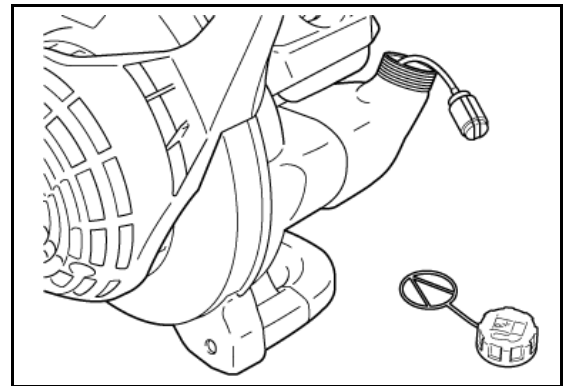
Level 1.

Parts Required: REPOWER™ AIR & FILTER KIT.

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 the “fuel line 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

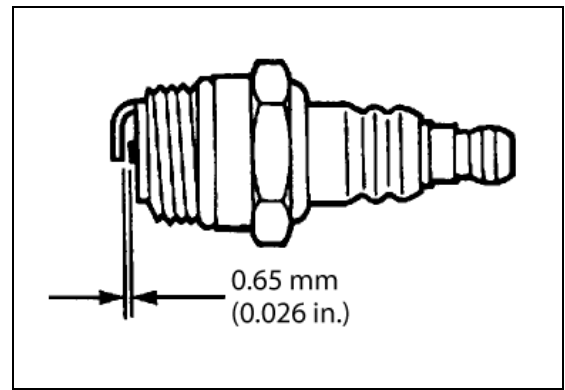
Level 2.

Parts Required: REPOWER™ Tune-Up Kit

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.

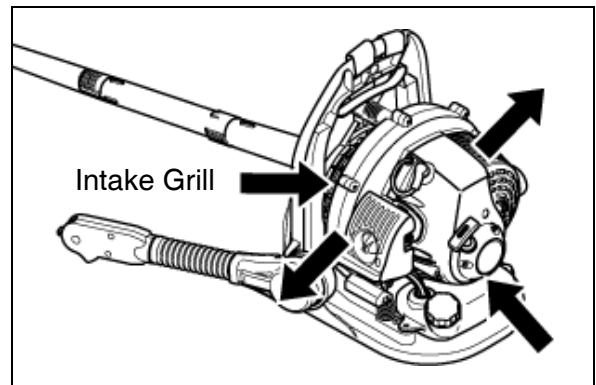
NOTICE

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:

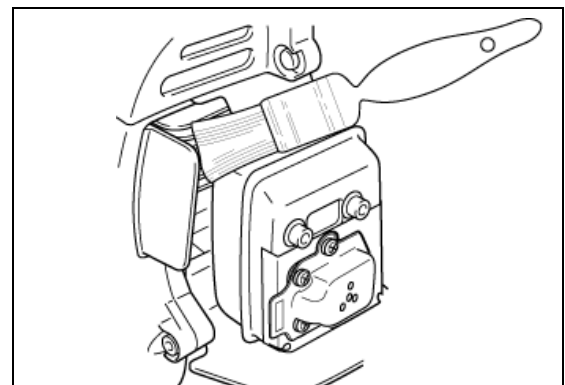
- Air intakes are blocked, preventing cooling air from reaching the cylinder.
- Dust and grass build up on the outside of the cylinder. This build up insulates the engine and prevents the heat from leaving.

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



Cleaning Grill and Cylinder Fins

1. Remove accumulated debris from intake grill between backpack frame and blower housing.
2. Disconnect spark plug lead from spark plug.
3. Remove spark plug.
4. Remove engine cover.
5. Loosely install spark plug to keep dirt out of cylinder.
6. Clean cylinder fins to allow cooling air to pass freely.
7. Reassemble parts in reverse order.



NOTICE

Do not over-tighten screws, otherwise mounting holes may become stripped.

Exhaust System**Spark Arrestor Screen****Level 2.**

Parts Required: Spark Arrestor Screen, Gasket

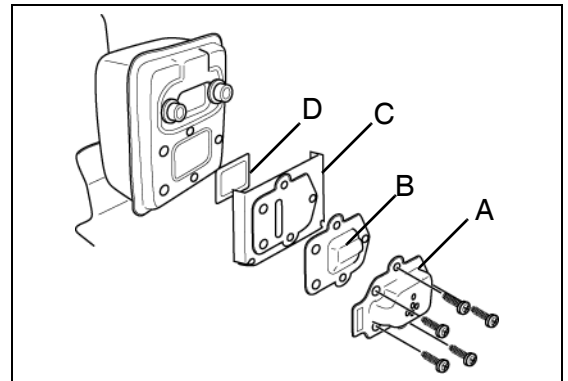
NOTICE

Carbon deposits in muffler will cause a drop in engine output and overheating. Spark arrestor screen must be checked periodically.

1. Remove spark plug lead from spark plug.
2. Remove engine cover.
3. Remove exhaust deflector (A), spark arrestor cover (B), gasket (C), and spark arrestor screen (D) from muffler. Replace screen if plugged with carbon deposits.

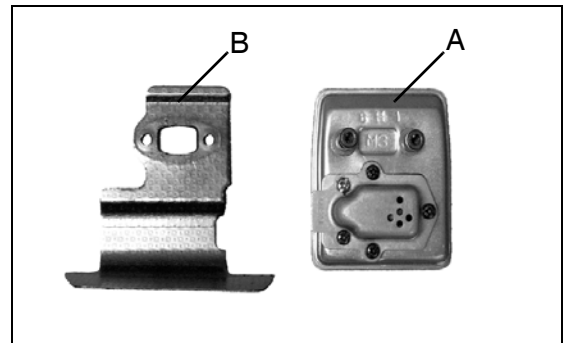
Note: When cleaning carbon deposits, be careful not to damage the catalytic element inside muffler.

4. Clean carbon deposits from muffler components.
5. Install spark arrestor screen, gasket, and covers.
6. Install engine cover.
7. Attach spark plug lead.

**Exhaust Port Cleaning****Level 2.**

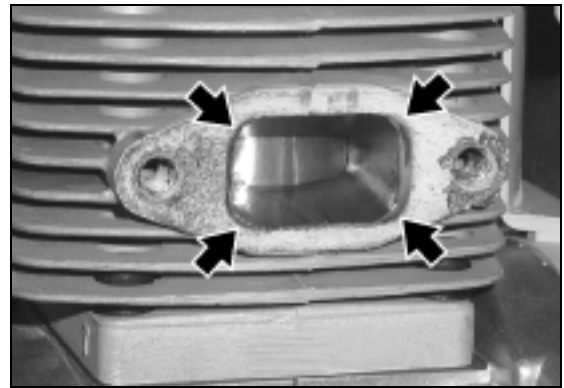
Parts Required: As needed: Heat Shield

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 60-70 in•lbf (70-80 kgf•cm).
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

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.

Level 2.

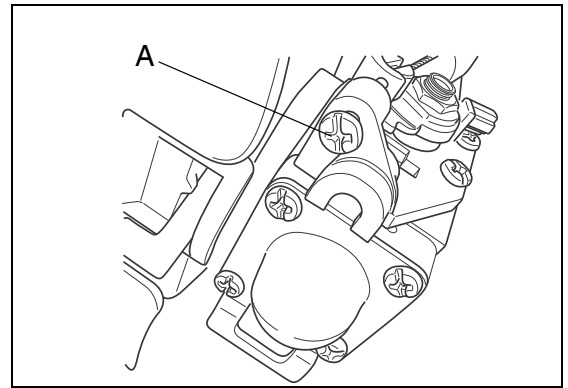
Parts Required: None

Note: Every unit is run at the factory and the carburetor is set in compliance with emission regulations. Carburetor adjustments, other than idle speed, must be performed by an authorized ECHO dealer.

Before adjustment make sure that:

- Air filter is clean and properly installed.
- Spark arrestor screen is free of carbon.
- Blower pipes are installed.

1. Start engine, run at idle for one minute.
2. Complete warm up by running at full throttle for 5 minutes, operating choke twice to clear air from carburetor chambers.
3. Check idle speed and reset if necessary. If a tachometer is available, idle speed screw (A) should be set to the specifications found on "Specifications" Page of this manual. Turn idle screw (A) clockwise to increase idle speed; counter clockwise to decrease idle speed.



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 .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
Engine runs, blower doesn't work or is weak/uneven	Blower pipe	Pipe clogged	Build-up of debris	Unclog
		Pipe loose	Vibration	Tighten
		Pipe damaged	Wear/Misuse	Replace

⚠ 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

During operation the muffler or catalytic muffler and surrounding cover become hot. 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.

DANGER

Do not store in enclosure where fuel fumes may accumulate or reach an open flame or spark.

2. Place the stop switch in the "OFF" 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. Tighten all the screws and nuts.
6. 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.
7.
 - a. Allow 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.
 - 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.
8. Install the spark plug (do not connect ignition cable).
9. Remove blower pipe assembly from unit.

SPECIFICATIONS

MODEL	PB-265 LN
Length	305 mm (12.0 in.) (w/o pipes)
Width	410 mm (16.1 in.)
Height	435 mm (17.1 in.)
Weight (dry)	6.1 kg (13.3 lb.)
Engine Type	Air cooled, two-stroke, single cylinder gasoline engine
Bore	34.0 mm (1.34 in.)
Stroke	28.0 mm (1.1 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. Do not use alternative fuels such as E-15 or E-85.
Oil	Power Blend X™ Premium Universal 2-Stroke Oil
Fuel Tank Capacity	0.66 lit. (22.3 US fl. oz.)
Starter System	Automatic Rrecoil Starter
Idle Speed	3,000 RPM
Wide Open Throttle Speed (W.O.T.)	6,950 RPM
Average Air Speed w/pipes (MPH)	58.56 m/sec (131 mph)
Maximum Air Speed w/pipes (MPH)	70.63 m/sec (158 mph)
Air Volume	10.62 m ³ /min. (375 cu. ft./min.)
Sound Level at 50 ft. dB(A) scale per ANSI B175.265 dB(A)	64 dB(A)

WARRANTY STATEMENTS

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

ECHO'S RESPONSIBILITY

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

OWNER'S RESPONSIBILITY

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

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

PRODUCT WARRANTY PERIOD

RESIDENTIAL APPLICATION

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

EXCEPTIONS:

- For two-stroke engine powered products, the electronic ignition module, flexible drive cables, SRM solid drive shafts, and TC tines are warranted for the **life*** of the product on parts only.
- Cutting attachments such as, but not limited to, bars, chains, sprockets, blades, and nylon trimmer heads for 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's Rapid Loader String Head carries a lifetime warranty on the line locking system, parts only; no labor. Refer to your operator's manual for string head installation and maintenance instructions.
- All SB-Series and PRO ATTACHMENT SERIES Split Shaft attachments carry the same warranty duration as the units they are designed to fit.

COMMERCIAL APPLICATION

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

EXCEPTIONS:

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

RENTAL APPLICATION - 90 DAYS WARRANTY

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

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

PURCHASED REPAIR PARTS, SHORT BLOCKS AND ACCESSORIES

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

ATTENTION TWO-STROKE ENGINE POWER PRODUCT OWNERS

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

THIS WARRANTY DOES NOT COVER DAMAGE CAUSED BY:

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

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

DISCLAIMER OF IMPLIED WARRANTIES

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

99922201032
11/18/2011

NOTES



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

P35411001001/P35411999999
P35312001001/P35312999999

BACKPACK BLOWER / SOPLADORA DE MOCHILA / SOUFFLANTE DORSALE

PB-265LN / PB-580 H/T / PB-755S H/T / PB-760LN H/T / PB-770 H/T

INTRODUCTION:

This ECHO Quick Start Guide is designed to provide you with details about safety warning symbols, necessary assembly steps, and operational instructions to use your product without delay.

INTRODUCCIÓN:

Esta guía de inicio rápido de ECHO está diseñada para proporcionarle detalles sobre los símbolos de advertencia de seguridad, los pasos necesarios para el ensamblaje y las instrucciones de operación para usar el producto sin demora.

INTRODUCTION:

Ce Guide de démarrage rapide ECHO est conçu pour vous fournir les détails sur les signaux de sécurité et d'avertissement, les étapes de montage nécessaires et les instructions opérationnelles qui vous permettront d'utiliser votre produit dans les plus brefs délais.



Scan QR Code or visit the web link www.echo-usa.com/manuals or call 1-800-432-ECHO (3246) for the Operators Manual, additional literature including safety manual, a copy of the product warranty, or to register your product. Before calling or accessing the website, know the model and serial number of your unit. Escanee el código QR o visite el enlace al sitio web www.echo-usa.com/manuals o llame al 1-800-432-ECHO (3246) para obtener el Manual del operador, la bibliografía adicional incluido un manual de seguridad, una copia de la garantía del producto, o para registrar el producto. Antes de llamar o acceder al sitio web, conozca el modelo y el número de serie de su unidad. Scannez le code QR ou visitez le lien www.echo-usa.com/manuals ou appelez au 1 800 432-ECHO (3246) pour avoir le Manuel de l'utilisateur, une documentation complémentaire tels que le manuel de sécurité, une copie de la garantie du produit, ou encore pour enregistrer votre produit. Avant d'appeler ou d'accéder au site Web, connaissez le modèle et le numéro de série de votre appareil.

INTERNATIONAL SAFETY SYMBOLS / SÍMBOLOS DE SEGURIDAD INTERNACIONALES / SYMBOLES INTERNATIONAUX DE SÉCURITÉ

<i>Symbols / Símbolos / Symboles</i>	<i>International Symbols</i>	<i>Símbolos internacionales</i>	<i>Symboles internationaux</i>
	Warning, See Operator's Manual	Lea y entienda el manual del operador	Lire et veiller à bien comprendre les instructions du manuel d'utilisation
	Wear Eye, Ear and Head Protection	Protéjase los ojos, oídos y cabeza	Porter des protections pour les yeux, les oreilles et la tête
	Wear Hand and Foot Protection	Use protección para pies y manos	Usure protection de main et de pied
	Safety / Alert	Seguridad / alerta	Sécurité / alerte
	DO NOT Allow Flames or Sparks Near Fuel	NO permita que haya llamas o chispas cerca del combustible	le carburant de flammes ou d'étincelles
	DO NOT Smoke Near Fuel	NO fume cerca del combustible	NE PAS fumer près du carburant
	Hot Surface	Superficie caliente	Surface brûlante
	Fuel and Oil Mixture	Mezcla de combustible y aceite	Mélange huile et essence
	Choke Control "RUN" Position (Choke Open)	Control del estrangulador "marcha" posición (estrangulador abierto)	Starter volet de départ position RUN (ouvert)
	Choke Control "COLD START" Position (Choke Closed)	Control del estrangulador "arranque en frío" posición (estrangulador cierre)	Starter volet de départ position START (fermé)
	Finger Sever	Dedo severo	Doigt sévère
	Thrown Objects	Objetos lanzados	Projection d'objets
	Wear Slip Resistant Footwear	Lleve calzado resistente a las resbaladuras.	Porter des chaussures antidérapantes
	Keep Bystanders and Helpers Away 15 m (50 ft.)	No permita a nadie que se acerque más de 15 metros (50 pies) de la máquina	Ne laisser personne approcher à moins de 15 m (50 pi)

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.

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.

GENERAL SAFETY REQUIREMENTS

Read and understand all provided literature before use. Failure to do so could result in serious injury. Additional operating instructions are available from your Authorized ECHO Dealer.

⚠ WARNING

- Operating a poorly maintained unit can result in serious injuries to operator or bystanders. Always follow all maintenance instructions as written, otherwise serious personal injury can result.
- Use only approved attachments. Serious injury can result from the use of a non-approved attachment combination.
- Do not attempt to modify this product. Serious injury can result from the use of any modified product.
- Do not operate this unit when tired, ill, or under the influence of alcohol, drugs, or medication. Serious injury can result from the use of this product in an impaired state.
- 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.
- Eye protection that meets ANSI Z87.1 or CE requirements must be worn whenever you operate the unit.
- 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.
- This blower should be used for clearing leaves, grass, and dust in yards, gardens, driveways, and parking lots only.

Use The Correct Personal Protection**⚠ WARNING**

ALWAYS WEAR	NEVER WEAR
Hearing Protection	Loose Clothing
Eye Protection	Jewelry
Heavy, Long Pants	Short Pants, Short Sleeve Shirt
Boots	Sandals
Gloves	Barefoot
Long-Sleeve Shirt	Long Hair Below Shoulders

Before Each Use Inspect:

- For damaged parts.
- Loose or missing fasteners.
- Guards are installed correctly.
- For fuel leaks from any point of the fuel system (tank to carburetor).

Proper Operating Position**⚠ WARNING**

- Keep a firm grip on all handles.
- Keep firm footing and balance.
- Adjust the straps according to instructions. Use both straps at all times.
- Do not over-reach.
- Keep all body parts away from hot surfaces.
- Do not operate from ladders, maintaining balance will be difficult and could result in serious injury.
- Read and understand all provided literature before use. Failure to do so could result in serious injury.
- Operate power equipment only at reasonable hours, not early in the morning or late at night when people might be disturbed. Comply with times listed in local ordinances.
- To reduce sound levels, limit the number of pieces of equipment used at any one time.
- Operate blowers at the lowest possible engine speed to do the job.
- Use rakes and brooms to loosen debris before blowing.
- In dusty conditions, slightly dampen surfaces when water is available.
- Conserve water by using blowers instead of hoses for many lawn and garden applications, including areas such as gutters, screens, patios, grills, porches, and gardens.
- Avoid blowing debris towards people, pets, open windows, or cars when using unit.
- Use the full blower nozzle extension when blowing.
- After using blowers and other equipment, CLEAN UP! Dispose of debris in trash receptacles.

Exhaust Gases**⚠ WARNING**

Do not operate this product indoors or in inadequately ventilated areas. Engine exhaust contains poisonous emissions and can cause serious injury or death.

Fuel Handling**⚠ DANGER**

- Fuel is **VERY** flammable. Use extreme care when mixing, storing or handling, or serious personal injury can result.
- Mix and pour fuel outdoors where there are no sparks and flames.
- Slowly remove the fuel cap only after stopping the engine.
- Do not smoke while fueling or mixing fuel.
- Wipe spilled fuel from the unit.
- Move at least 3 m (10 ft) away from the fueling source and site before starting engine.

Work Area

- Review the area to be cleared. Remove potential hazards such as rocks, broken glass, nails, wire, or metal objects, which can be thrown.
- Clear the area of children, bystanders and pets.
- At a minimum, keep all children, bystanders and pets outside a 15m (50 ft) radius.
- Outside the 15 m (50 ft) zone, there is still a risk of injury from thrown objects.
- Bystanders should be encouraged to wear eye protection.
- Avoid blowing debris towards people, pets, open windows, or vehicles when using unit. If you are approached, stop the engine.

MANUAL DE SÍMBOLOS DE SEGURIDAD E INFORMACIÓN IMPORTANTE

A lo largo de este manual, y en el producto mismo, encontrará alertas de seguridad y mensajes informativos de gran utilidad precedidos por símbolos o palabras clave. A continuación, se enumera una explicación de dichos símbolos y palabras clave y su significado.

⚠ DANGER

El símbolo de alerta de seguridad acompañado por la palabra “PELIGRO” destaca un acto o condición que LLEVARÁ a que se produzcan lesiones personales graves o la muerte si no se evita.

⚠ WARNING

El símbolo de alerta de seguridad acompañado por la palabra “ADVERTENCIA” destaca un acto o condición que PUEDE llevar a que se produzcan lesiones personales graves o la muerte si no se evita.

NOTICE

El mensaje adjunto proporciona información necesaria para proteger la unidad.

Nota: Este mensaje adjunto proporciona sugerencias para el uso, cuidado y mantenimiento de la unidad.

REQUISITOS DE SEGURIDAD GENERALES

Lea y comprenda toda la bibliografía provista antes del uso. De lo contrario, pueden producirse lesiones graves. Su concesionario de mantenimiento autorizado de ECHO le proporcionará instrucciones de funcionamiento adicionales.

⚠ WARNING

- *La operación de una unidad en condiciones de mantenimiento deficientes puede ocasionar lesiones graves en el operador o las demás personas presentes. Siempre siga todas las instrucciones de mantenimiento como están escritas; de lo contrario, pueden producirse lesiones personales graves.*
- *Use solo los accesorios aprobados. Pueden producirse lesiones graves si se usa una combinación no aprobada de accesorios.*
- *No intente modificar este producto. Pueden producirse lesiones graves si se usa una modificación de este producto.*
- *No opere esta unidad cuando esté cansado, enfermo, o si está bajo los efectos del alcohol, las drogas o medicamentos. Pueden producirse lesiones graves si se usa este producto en un estado de deterioro.*
- *Las piezas móviles pueden amputar dedos o causar lesiones graves. Mantenga las manos, la vestimenta y los objetos sueltos alejados de todas las aberturas. Siempre apague el motor, desconecte la bujía y asegúrese de que todas las partes móviles se hayan detenido por completo antes de eliminar obstrucciones, limpiar suciedad o realizar tareas de reparación en la unidad.*
- *Cada vez que haga funcionar la unidad, debe utilizar protección ocular conforme a los requisitos de ANSI Z87.1 o CE.*
- *Los operadores que tengan sensibilidad al polvo o a otros alérgenos comunes transportados por el aire pueden necesitar una máscara antipolvo para prevenir la inhalación de estos materiales mientras ponen en funcionamiento la unidad. Las máscaras anti-polvo pueden brindar protección contra el polvo, los residuos de las plantas y otros componentes de las plantas, como el polen. Asegúrese de que la máscara no altere su visión y reemplácela según sea necesario para prevenir restricciones de aire.*
- *Este soplador debe usarse para limpiar hojas, césped y polvo únicamente de patios, jardines, entradas para el automóvil y estacionamientos.*

Utilice la protección personal adecuada

⚠ WARNING

USE SIEMPRE	NO USE NUNCA
Protección auditiva	Ropa suelta
Protección ocular	Joyas
Pantalones largos y gruesos	Pantalones cortos y camisa de mangas cortas
Botas	Sandalias
Guantes	Descalzo
Camisa de mangas largas	Cabello largo por debajo de los hombros

Antes de cada uso, inspeccione lo siguiente:

- Si hay piezas dañadas.
- Si hay sujetadores sueltos o faltantes.
- Los protectores están instalados correctamente.
- Si hay pérdidas de combustible de algún punto del sistema de combustible (del tanque al carburador).

Recomendaciones de funcionamiento

⚠ WARNING

- *Agarre con firmeza todos los mangos.*
- *Mantenga una posición estable y un equilibrio firme.*
- *Ajuste las correas de acuerdo con las instrucciones. Use ambas correas en todo momento.*
- *No se estire.*
- *Mantenga todas las partes del cuerpo alejadas de las superficies calientes.*
- *No opere desde las escaleras, ya que será difícil mantener el equilibrio y podría sufrir lesiones graves.*
- *Lea y comprenda toda la bibliografía provista antes del uso. De lo contrario, pueden producirse lesiones graves.*
- *Ponga en funcionamiento el equipo eléctrico solo a un horario razonable: no lo haga temprano a la mañana ni tarde a la noche cuando podría molestar a las personas. Cumpla con los horarios que figuran en las ordenanzas locales.*
- *Para reducir los niveles de ruido, restrinja el número de piezas del equipo que utiliza al mismo tiempo.*
- *Ponga en funcionamiento los sopladores a la velocidad del motor más baja para realizar el trabajo.*
- *Antes de utilizar el soplador, utilice rastrillos y escobas para que los desechos sean más fáciles de soplar luego.*
- *En condiciones donde haya mucho polvo, humedezca un poco las superficies o use un accesorio atomizador cuando tenga agua disponible.*
- *Ahorre agua usando sopladores en lugar de mangueras para muchas aplicaciones de césped y jardín, incluidas áreas como canaletas, pantallas, patios, parrillas, porches y jardines.*
- *Cuando utilice la unidad, no sople residuos en dirección hacia personas, mascotas, ventanas abiertas o automóviles.*
- *Cuando realice el soplado, utilice toda la extensión de la boquilla del soplador.*
- *Luego de usar los sopladores y otros equipos, ¡LÍMPIELOS! Quite los desechos de los receptáculos de basura.*

Gases del escape

⚠ WARNING

No haga funcionar este producto en interiores o en áreas mal ventiladas. El sistema de escape del motor contiene emisiones tóxicas que pueden producir lesiones graves o la muerte.

Manipulación del combustible

DANGER

- *El combustible es MUY inflamable. Tenga extremo cuidado al mezclar, almacenar o manipular el combustible, o pueden producirse lesiones personales graves.*
- *Mezcle y vierta el combustible en exteriores donde no haya chispas ni llamas.*
- *Retire lentamente la tapa del combustible solo después de detener el motor.*
- *No fume mientras abastece o mezcla el combustible.*
- *Limpie el combustible derramado de la unidad.*
- *Aléjese al menos 3 m (10 ft) de la fuente y del sitio de abastecimiento de combustible antes de arrancar el motor.*

Área de trabajo

- Revise el área que se limpiará. Elimine potenciales peligros, como rocas, vidrio roto, clavos, cables u objetos metálicos, que pueden volar por el aire.
 - Despeje el área de niños, otras personas presentes y mascotas.
 - Como mínimo, mantenga a todos los niños, otras personas presentes y mascotas fuera de un radio de 15 m (50 ft).
 - Fuera de la zona de 15 m (50 ft), aún hay riesgo de sufrir lesiones a causa de los objetos lanzados.
 - Se debe alentar a las personas presentes a usar protección ocular.
- Cuando utilice la unidad, no sople residuos en dirección hacia personas, mascotas, ventanas abiertas o vehículos. Si alguien se le acerca, detenga el motor.

SYMBOLS DE SÉCURITÉ MANUELS ET INFORMATIONS IMPORTANTES

Tout au long de ce manuel et sur le produit lui-même, vous trouverez des alertes de sécurité et des messages d'information, précédés par des symboles ou des mots clés. Voici une explication des symboles et des mots clés et ce qu'ils signifient pour vous.

DANGER

Le symbole d'alerte de sécurité accompagné du mot « DANGER » attire l'attention d'un acte ou condition qui MÈNERA à des blessures graves ou décès, si non évité.

WARNING

Le symbole d'alerte de sécurité accompagné du mot « AVERTISSEMENT » vise à attirer l'attention sur une action ou situation susceptible D'ENTRAÎNER des blessures graves ou mortelles, si elle n'est pas évitée.

NOTICE

Le message ci-joint fournit les informations nécessaires à la protection de l'unité.

Remarque : Ce message ci-joint fournit des conseils pour l'utilisation, soins et maintenance de l'unité.

EXIGENCES GÉNÉRALES DE SÉCURITÉ

Lire et comprendre toute la documentation à votre disposition avant utilisation. Ne pas le faire pourrait entraîner des blessures graves. Des instructions d'utilisation supplémentaires sont disponibles auprès de votre concessionnaire ECHO agréé.

WARNING

- *L'utilisation d'un appareil mal entretenu peut causer de graves blessures à l'utilisateur ou aux curieux. Toujours suivre les instructions d'entretien telles que prescrites, sinon de graves blessures peuvent être causées.*
- *N'utiliser que des attaches approuvées. L'utilisation de combinaisons d'accessoires non-approuvés peut causer de graves blessures.*
- *Ne pas essayer de modifier ce produit. L'utilisation d'un produit modifié peut causer de graves blessures.*
- *Ne pas manipuler ce dispositif lorsque fatigué, malade ou sous l'influence de l'alcool, de drogues ou de médicaments. L'utilisation du produit lorsqu'on est en état affaibli ou affecté peut causer de graves blessures.*
- *Les pièces mobiles peuvent amputer les doigts et causer de graves blessures. Garder les mains, les vêtements et les objets libres hors de portée de toute ouverture. Toujours arrêter le moteur, débrancher la bougie, et s'assurer que toutes les pièces mobiles sont complètement arrêtées avant d'enlever les obstructions, faire le nettoyage des débris, ou faire l'entretien de l'unité.*
- *Une protection oculaire qui répond aux exigences ANSI Z87.1 ou CE doit être portée à chaque fois que vous faites fonctionner l'unité.*
- *Operadores sensíveis ao pó e a outros alergênicos aéreos comuns podem precisar de uma máscara anti-pó para prevenir inalação durante o uso da unidade. Máscaras anti-pó podem proteger contra pó, restos de plantas e outros materiais, como o pólen. Certifique-se de que a máscara não prejudique sua visão e a troque conforme necessário para evitar restrições aéreas.*
- *Ce souffleur devrait être utilisé pour enlever les feuilles, l'herbe et la poussière dans les cours, les jardins, les allées et les stationnements uniquement.*

Utiliser la protection personnelle adéquate

⚠ WARNING

TOUJOURS PORTER	NE JAMAIS PORTER
Protection auditive	Vêtements amples
Protection oculaire	Bijoux
Pantalons épais et longs	Pantalons courts, chemises à manches courtes
Bottes	Sandaes
Gants	Pieds nus
Chemises à manches longues	Cheveux dont la longueur dépasse les épaules

Avant chaque utilisation, inspecter qu'il n'y a pas:

- de pièces endommagées.
- d'attaches manquantes ou mal fixées.
- Les gardes sont installés correctement.
- de fuites de carburant par n'importe quel point du système d'alimentation (du réservoir au carburateur).

Recommandations opérationnelles

⚠ WARNING

- Tenir fermement toutes les poignées.
- Bien placer ses pieds et garder l'équilibre.
- Ajustez les sangles conformément aux instructions. Utilisez les deux sangles en tout temps.
- Ne pas trop se pencher pour atteindre.
- Tenir toutes les parties du corps éloignées des surfaces chaudes
- Ne pas travailler à partir d'une échelle, auquel cas le maintien de l'équilibre sera difficile et pourrait entraîner des blessures graves.
- Lire et comprendre toute la documentation à votre disposition avant utilisation. Ne pas le faire pourrait entraîner des blessures graves.
- Faire fonctionner l'équipement électrique à des heures raisonnables uniquement-- pas tôt le matin ou tard le soir lorsque la tranquillité des gens pourrait être troublée. Respecter les délais indiqués dans la réglementation locale.
- Pour réduire les niveaux sonores, limiter le nombre de pièces d'équipement utilisées en même temps.
- Faire fonctionner les souffleurs au régime moteur le plus bas pour effectuer une tâche.
- Utiliser des râtaux et des balais pour dégager les débris avant de souffler.
- Dans des conditions poussiéreuses, humidifier légèrement les surfaces ou utiliser le brumisateurs lorsqu'il y a de l'eau.
- Conserver l'eau en utilisant des souffleurs au lieu de tuyaux pour de nombreuses applications dans les pelouses et les jardins, y compris les gouttières, les écrans, les patios, les grilles, les porches et les jardins.
- Éviter de souffler des débris vers les personnes, les animaux domestiques, les fenêtres ouvertes ou les voitures pendant l'utilisation de l'appareil.
- Utiliser la rallonge de la buse du souffleur pendant l'utilisation de l'appareil.
- Après avoir utilisé des souffleurs et d'autres équipements, NETTOYER! Jeter les débris dans les poubelles.

Les gaz d'échappement

⚠ WARNING

Ne pas utiliser ce produit à l'intérieur ou dans des zones mal ventilées. L'échappement du moteur contient des émissions toxiques et pourrait causer des blessures graves ou la mort.

Manutention du carburant

⚠ DANGER

- Le carburant est TRÈS inflammable. Faire très attention pendant le mélange, la conservation et la manipulation; sinon des blessures graves peuvent survenir.
- Mélanger et verser le carburant à l'extérieur, loin des flammes et des étincelles.
- Retirer lentement le bouchon de réservoir du carburant uniquement après avoir arrêté le moteur.
- Ne pas fumer lorsqu'on ravitaille le moteur ou lorsqu'on mélange le carburant.
- Essuyer le carburant déversé sur l'appareil.
- Se tenir à une distance d'au moins 3 m (10 pi) de la source et du site de ravitaillement avant de démarrer le moteur.

Aire de travail

- S'assurer que l'aire de travail est libre. Enlever les objets qui représentent un danger potentiel tels que les roches, le verre brisé, les clous, les fils de fer ou les objets métalliques qui peuvent être jetés dans l'herbe.
- Éviter de travailler en présence des enfants, de curieux et d'animaux domestiques.
- Au mieux, garder les enfants, les curieux et les animaux domestiques en dehors d'un rayon de 15 m (50 pi).
- Il y a encore des risques de blessures en dehors de la zone de 15 m (50 pi) avec les objets rejetés.
- Les curieux doivent porter des lunettes protectrices.
- Éviter de souffler des débris vers les personnes, les animaux domestiques, les fenêtres ouvertes ou les véhicules pendant l'utilisation de l'appareil. À l'approche d'une personne, couper le moteur.

ASSEMBLY / MONTAJE / ASSEMBLAGE

1 T MODEL / T MODELO / T MODÈLE

Note: PB-580T Model shown. Your model may be slightly different.
 Nota: Se muestra el modelo PB-580T. Su modelo puede ser ligeramente diferente.
 Remarque: le modèle PB-580T est illustré. Votre modèle peut être légèrement différent.

1A Detail of cable clip (A) and clamp (B) assembly. Shows the connection of the flexible blower tube (C) to the motor assembly (D, E, F, G, H, I, J, K).

1B Detail of throttle cable (L) and control assembly (F, H, K).

1C PB-770T Detail of static discharge wire (G) and its connection to the blower tube (C, H).

1C PB-580T Detail of elbow blower tube (H) and its connection to the motor assembly (C, G).

1D Detail of throttle cable (L) connection to the control assembly (A).

1E Detail of nozzle blower tube assembly.

1F Final assembly view showing the blower tube connected to the motor. Includes detail of the air intake cover (M).

Figure 1 Legend / Figura 1 Leyenda / Figure 1 Légende

A	Cable Clip / Clip de cable / Clip de câble	B	Clamp / Abrazadera / Serrer	C	Flexible Blower Tube / Tubo de soplador flexible / Tube Souffleur Flexible
D	Clamp / Abrazadera / Serrer	E	Swivel Blower Tube / Tubo de soplador giratorio / Tube de ventilateur pivotant	F	Throttle Control / Control del acelerador / Commande d'accélérateur
G	Static Discharge Wire / Cable de descarga estática / Fil de décharge statique	H	Elbow Blower Tube / Tubo soplador de codo / Tube de soufflante coudé	I	Straight Blower Tube / Tubo de soplador recto / Tube de ventilateur droit
J	Nozzle Blower Tube / Boquilla Tubo Soplador / Tube de souffleur de buse	K	Screw Knob / Perilla de tornillo / Bouton à vis	L	Throttle Cable / Cable del acelerador / Câble d'accélérateur
M	Air Intake Cover / Tapa de entrada de aire / Couverture d'admission d'air				

1A. Assemble "T" Model blower tubes:

- Assemble Cable Clip (A) onto Clamp (B).
- Install Clamp Assembly (A+B) onto upper end of Flexible Blower Tube (C).
- Assemble Clamp (D) onto lower end of Flexible Blower Tube (C).

Note: Before installing Throttle Control (F), allow it to hang freely from blower to make sure Throttle Cable (L) is not twisted.

1B. Assemble Throttle Control (F):

- Position Throttle Cable (L) along outside of Elbow Blower Tube (H).
- Loosen Screw Knob (K) and install Throttle Control (F) onto Swivel Blower Tube (E) as shown. Tighten Screw Knob finger tight only.

1C. Assemble Static Discharge Wire (If Equipped):

- Unwrap and fully extend the Static Discharge Wire (G) to insert it through Flexible Blower Tube (C) as shown in Step 1C.

Note: On PB-580 Leave enough slack in Static Discharge Wire to allow for full rotation of Elbow Blower Tube (H). Static Discharge Wire will hang freely inside tubes.

Refer to Figure 1A. again to Assemble "T" Model blower tubes:

Note: A light lubricant can be used to ease the assembly of Flexible Blower Tube (C) to Elbow Blower Tube (H).

- Assemble Flexible Blower Tube (C) to Elbow Blower Tube (H). Position Clamp Assembly (B) with Cable Clip (A) on outside of Flexible Blower Tube (C) and tighten Clamp.
- Assemble Swivel Blower Tube (E) onto lower end of Flexible Blower Tube (C) and tighten Clamp (D).

1D. Secure Throttle Cable:

- Secure Throttle Cable (L) into Cable Clip (A).
- Position Throttle Control (F) to desired position and tighten Screw Knob (K) hand tight.

1E. Assemble straight blower tubes:

- Assemble Straight Blower Tube (I) onto Swivel Blower Tube (E) until light resistance is felt. Hold Swivel Blower Tube and turn Straight Blower Tube clockwise to engage Posi-Loc™ channels, until connection is firm. Do not force connection.
- Assembly Nozzle Blower Tube (J) to Straight Blower Tube (I) as shown in previous step.

Note: Blower tube use can eventually loosen connections. Exclusive Posi-Loc™ tube design allows tubes to be re-tightened. Remove straight tubes and reinstall per instructions.

1F. Install Air Intake Cover (M), if needed for cold weather operation:

- Refer to on-line Operators Manual for installation.

1A. Ensamblar los tubos del soplador del "T" Modelo :

- Coloque el Agarre del cable (A) sobre la Abrazadera (B).
- Instale en Conjunto de la abrazadera (A+B) sobre el extremo superior del Tubo flexible del soplador (C).
- Coloque la Abrazadera (D) sobre el extremo inferior del Tubo flexible del soplador (C).

Nota: Antes de instalar el Control del acelerador (F), permita que cuelgue libremente desde el soplador para asegurarse de que el Cable del acelerador (L) no esté enroscado.

1B. Ensamblar el Control del acelerador (F):

- Coloque el Cable del acelerador (L) a lo largo de la parte externa del Tubo codo del soplador (H).
- Afloeje la Perilla con rosca (K) e instale el Control del acelerador (F) sobre el Tubo oscilante del soplador (E) como se muestra. Ajuste solo con los dedos la Perilla con rosca.

1C. Ensamblar el Cable de descarga estática (Si está equipado):

- Desenrolle y extienda completamente el cable de descarga estática (G) para insertarlo a través del tubo flexible del ventilador (C).

Nota: PB-580 Deje suficiente holgura en el Cable de descarga estática para permitir un giro completo del Tubo codo del soplador (H). El Cable de descarga estática colgará libremente dentro de los tubos.

Consulte la Figura 1A. nuevamente para ensamblar los tubos del soplador "T" Modelo:

Nota: Se puede utilizar un lubricante liviano para facilitar el ensamble del Tubo flexible del soplador (C) al Tubo codo del soplador (H).

- Ensamble el Tubo flexible del soplador (C) con el Tubo codo del soplador (H). Coloque el ensamble de la abrazadera (B) con el Agarre del cable (A) en la parte exterior del Tubo flexible del soplador (C) y ajuste la Abrazadera.
- Ensamble el Tubo oscilante del soplador (E) sobre el extremo inferior del Tubo flexible del soplador (C) y ajuste la Abrazadera (D).

1D. Sujetar el Cable del acelerador:

- Sujete el Cable del acelerador (L) dentro del Agarre del cable (A).
- Coloque el Control del acelerador (F) en la posición deseada y ajuste con la mano la Perilla con rosca (K).

1E. Ensamblar los tubos rectos del soplador:

- Ensamble el Tubo recto del soplador (I) sobre el Tubo oscilante del soplador (E) hasta sentir una leve resistencia. Sostenga el Tubo oscilante del soplador y gire el Tubo recto del soplador en sentido horario hasta conectar los canales Posi-Loc™, hasta que la conexión quede firme. No fuerce la conexión.
- Ensamble el Tubo de boquilla del soplador (J) al Tubo recto del soplador (I) como se muestra en el paso anterior.

Nota: El uso del tubo del soplador puede eventualmente aflojar las conexiones. El diseño exclusivo del tubo Posi-Loc™ permite que los tubos se puedan volver a ajustar. Retire los tubos rectos y vuelva a instalar según las instrucciones.

1F. Instalar la Cubierta de admisión de aire (M), si es necesario para el funcionamiento en clima frío:

- Consulte el Manual para operadores en línea para la instalación.

1A. Assemblez les tubes du souffleur en "T" modèle:

- Assemblez l'attache-câble (A) sur la bride de serrage (B).
- Installez l'ensemble de bride de serrage (A+B) sur l'extrémité supérieure du tube flexible (C) du souffleur.
- Assemblez la bride de serrage (D) sur l'extrémité inférieure du tube flexible (C) du souffleur.

Remarque: Avant d'installer la commande d'accélérateur (F), laissez la bride pendre librement du souffleur pour vous assurer que le câble d'accélérateur (L) n'est pas enroulé.

1B. Assemblez la commande d'accélérateur (F):

- Placez le câble d'accélérateur (L) le long de l'extérieur du coude du tube du souffleur (H).
- Desserrez le bouton de serrage (K) et installez la commande d'accélérateur (F) sur le pivot (E) du tube du souffleur comme indiqué. Serrez le bouton de serrage à la main uniquement.

1C. Assemblez le fil de décharge statique (Si équipé):

- Déballiez et déployez complètement le fil de décharge statique (G) pour l'insérer dans le tube flexible de soufflante (C).

Remarque: PB-580 Laissez suffisamment de mou dans le fil de décharge statique pour permettre une rotation complète du coude du tube (H) du souffleur. Le fil de décharge statique pend librement à l'intérieur des tubes.

Reportez-vous de nouveau à la Figure 1A. pour assembler les tubes du souffleur en "T" modèle:

Remarque : Un lubrifiant léger peut être utilisé pour faciliter l'assemblage du tube flexible (C) du souffleur sur le coude du tube (H) du souffleur.

(b) Assemblez le tube flexible (C) du souffleur sur le coude du tube (H) du souffleur. Placez l'ensemble bride (B) et l'attache-câble (A) sur la partie externe du tube flexible (C) du souffleur et resserrez la bride.

(c) Assemblez le tube pivotant (E) du souffleur sur l'extrémité inférieure du tube flexible (C) du souffleur et resserrez la bride (D).

1D. Fixez le câble de la commande d'accélérateur:

(a) Fixez le câble d'accélérateur (L) dans l'attache-câble (A).

(b) Placez la commande d'accélérateur (F) dans la position de votre choix et serrez à la main le bouton de serrage (K).

1E. Assemblez les tubes droits du souffleur:

(a) Assemblez le tube droit (I) du souffleur sur le tube pivotant (E) du souffleur jusqu'à ressentir une légère résistance. Maintenez le tube pivotant du souffleur et tournez le tube droit du souffleur dans le sens horaire pour engager les canaux Posi-Loc™, jusqu'à ce que le raccordement soit fixe. Ne forcez pas le raccordement.

(b) Assemblez la buse (J) du tube du souffleur sur le tube droit (I) du souffleur comme indiqué à l'étape précédente.

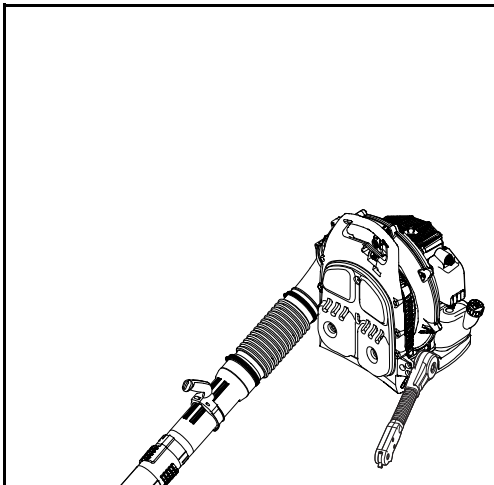
Remarque: L'utilisation d'un tube de souffleur peut éventuellement desserrer les raccordements. Grâce à la conception exclusive du tube proposée par Posi-Loc™, les tubes peuvent être resserrés. Retirez les tubes droits et réinstallez-les suivant les instructions.

1F. Installez le couvercle d'admission à air (M), si vous en avez besoin pour une utilisation par temps froid:

(a) Reportez-vous au manuel d'utilisation en ligne pour l'installation.

ASSEMBLY / MONTAJE / ASSEMBLAGE

2 H MODEL / H MODELO / H MODÈLE & PB-265LN



Note: PB-580 H Model shown. Your model may be slightly different.

Nota: Se muestra el modelo PB-580. Su modelo puede ser ligeramente diferente.

Remarque: le modèle PB-580 est illustré. Votre modèle peut être légèrement différent.

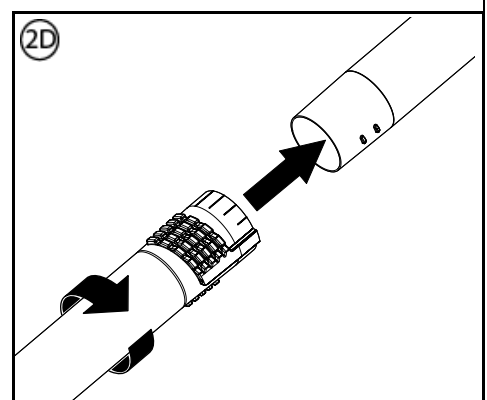
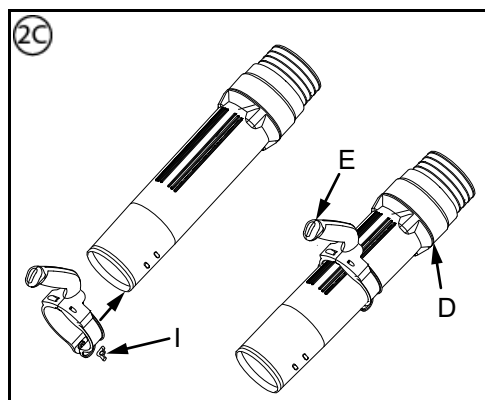
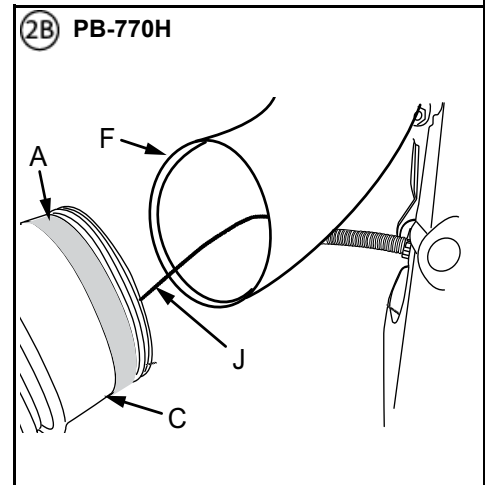
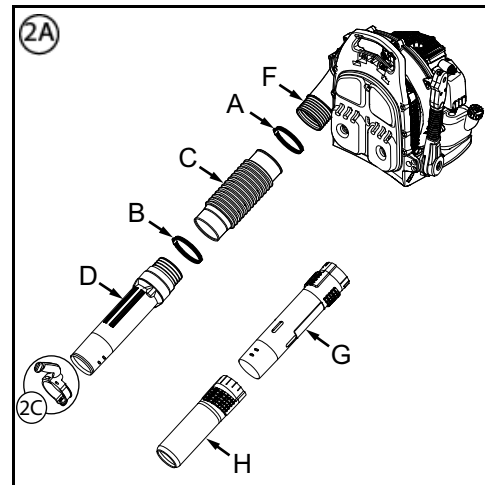


Figure 2 Legend / Figura 2 Leyenda / Figure 2 Légende

A	Clamp / Abrazadera / Serrer	B	Clamp / Abrazadera / Serrer	C	Flexible Blower Tube / Tubo de soplador flexible / Tube Souffleur Flexible
D	Swivel Blower Tube / Tubo de soplador giratorio / Tube de ventilateur pivotant	E	Front Handle Set / Juego de manijas delanteras / Jeu de poignée avant/	F	Elbow Blower Tube / Tubo soplador de codo / Tube de soufflante coudé
G	Straight Blower Tube / Tubo de soplador recto / Tube de ventilateur droit	H	Nozzle Blower Tube / Boquilla Tubo Soplador / Tube de souffleur de buse	I	Wing Nut / Tuerca de mariposa / Écrou papillon
J	Static Discharge Wire				

2A. Assemble "H" Model blower tubes:

- (a) Assemble Clamps (A & B) onto both ends of Flexible Blower Tube (C).
- (b) Assemble Swivel Blower Tube (D) onto Flexible Blower Tube (C) and tighten Clamp (B).

2B. Assemble Static Discharge Wire (If Equipped):

- (a) Unwrap and fully extend the Static Discharge Wire (J) to insert it through Flexible Blower Tube (C).
- (b) Assemble Flexible Blower Tube (C) onto Elbow Blower Tube (F) and tighten Clamp (A).

Note: A light lubricant can be used to ease the assembly of Flexible Blower Tube (C) to Elbow Blower Tube (F), and Swivel Blower Tube (D).

2C. Assemble "H" Model Front Handle Set (E):

- (a) Loosen Wing Nut (I) on bottom of Front Handle Set (E) and expand clamp to allow it to slide over Swivel Blower Tube (D). Front Handle Set (E) should be angled slightly away from operator and positioned for comfortable operation. Tighten Wing Nut (I).

Note: (PB-760LN / PB-770 only) The alignment groove in the Front Handle Set (E) must align within the area of metal strips on top of the Swivel Blower Tube (D).

2D. Assemble Straight Tubes:

- (a) Assemble Straight Blower Tube (G) onto Swivel Blower Tube (D) until light resistance is felt. Hold Swivel Blower Tube and turn Straight Blower Tube clockwise to engage Posi-Loc™ channels, until connection is firm. Do not force connection.
- (b) Assemble Nozzle Blower Tube (H) to Straight Blower Tube (G) as shown in previous step.

Note: Blower tube use can eventually loosen connections. Exclusive Posi-Loc™ tube design allows tubes to be re-tightened. Remove straight tubes and reinstall per instructions.

2A. Ensamblar los tubos del soplador "H" Modelo :

- (a) Ensamble las Abrazaderas (A y B) en ambos extremos del Tubo flexible del soplador (C).
- (b) Ensamble el Tubo oscilante del soplador (D) en el Tubo flexible del soplador (C) y ajuste la Abrazadera (B).
- (c) Ensamble el Tubo flexible del soplador (C) sobre el Tubo codo del soplador (F) y ajuste la Abrazadera (A).

Nota: Se puede utilizar un lubricante liviano para facilitar el montaje del Tubo flexible del soplador (C) al Tubo codo del soplador (F) y al Tubo oscilante del soplador (D).

2B. Ensamblar el Cable de descarga estática (Si está equipado):

- (a) Desenrolle y extienda completamente el cable de descarga estática (J) para insertarlo a través del tubo flexible del ventilador (C) como se muestra en el paso 2B.
- (b) Ensamble el tubo flexible del ventilador (C) en el tubo del ventilador del codo (F).

2C. Ensamblar el Conjunto de la manija delantera "H" Modelo (E):

- (a) Afloje la Tuerca con alas (I) en la parte inferior del Conjunto del mango delantero (E) y agrande la abrazadera para permitir que se deslice sobre el Tubo oscilante del soplador (D). El Conjunto del mango delantero (E) se debe alejar apenas en ángulo del operador y se debe colocar de manera que se obtenga una operación cómoda. Ajuste la Tuerca con alas (I).

Nota: (Solo para PB-760LN / PB-770) La ranura de alineación en el Conjunto del mango delantero (E) debe estar en línea dentro del área de las tiras metálicas en la parte superior del Tubo oscilante del soplador (D).

2D. Ensamblar los Tubos rectos:

- (a) Ensamble el Tubo recto del soplador (G) en el Tubo oscilante del soplador (D) hasta sentir una leve resistencia. Sostenga el Tubo oscilante del soplador y gire el Tubo recto del soplador en sentido horario hasta conectar los canales Posi-Loc™, hasta que la conexión quede firme. No fuerce la conexión.
- (b) Ensamble el Tubo de boquilla del soplador (H) al Tubo recto del soplador (G) como se muestra en el paso anterior.

Nota: El uso del tubo del soplador puede eventualmente aflojar las conexiones. El diseño exclusivo del tubo Posi-Loc™ permite que los tubos se puedan volver a ajustar. Retire los tubos rectos y vuelva a instalar según las instrucciones.

2A. Assemblez les tubes du souffleur en "H" modèle:

- (a) Assemblez les brides de serrage (A et B) sur les deux extrémités du tube flexible (C) du souffleur.
- (b) Assemblez le tube pivotant (D) du souffleur sur le tube flexible (C) du souffleur et resserrez la bride (B).
- (c) Assemblez le tube flexible (C) du souffleur sur le coude du tube (F) du souffleur et resserrez la bride (A).

Remarque : Un lubrifiant léger peut être utilisé pour faciliter l'assemblage du tube flexible (C) du souffleur sur le coude du tube (F) du souffleur et sur le tube pivotant (D) du souffleur.

2B. Assemblez le fil de décharge statique (Si équipé):

- (a) Déballez et déployez complètement le fil de décharge statique (G) pour l'insérer dans le tube flexible de soufflante (C) comme indiqué à l'étape 2C.
- (b) Assemblez le tube flexible de soufflante (C) au tube de soufflante coudé (F).

2C. Assemblez l'ensemble de poignée avant (E) du en "H" modèle:

- (a) Desserrez l'écrou à oreilles (I) sur la partie inférieure de l'ensemble de poignée avant (E) et élargir la bride de sorte qu'elle puisse glisser sur le tube pivotant (D) du souffleur. L'ensemble de poignée avant (E) doit être légèrement incliné loin de l'utilisateur et placé de manière à permettre une utilisation facile. Resserrez l'écrou à oreilles (I).

Remarque: (PB-760LN/PB-770 uniquement) La rainure d'alignement de l'ensemble de poignée avant (E) doit s'aligner dans l'espace entre les bandes métalliques au-dessus du tube pivotant (D) du souffleur.

2D. Assemblez les tubes droit:

- (a) Assemblez le tube droit (G) du souffleur sur le tube pivotant (D) du souffleur jusqu'à ressentir une légère résistance. Maintenez le tube pivotant du souffleur et tournez le tube droit du souffleur dans le sens horaire pour engager les canaux Posi-Loc™, jusqu'à ce que le raccordement soit fixe. Ne forcez pas le raccordement.
- (b) Assemblez la buse du tube (H) du souffleur sur le tube droit (G) du souffleur comme indiqué à l'étape précédente.


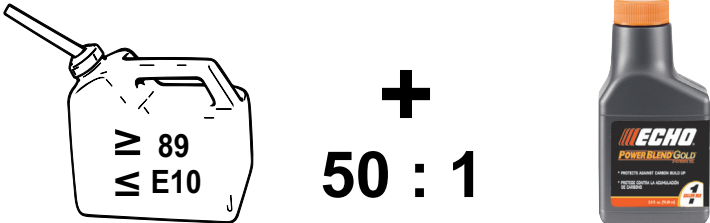
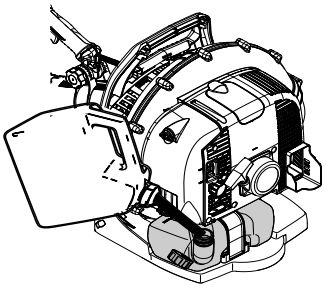

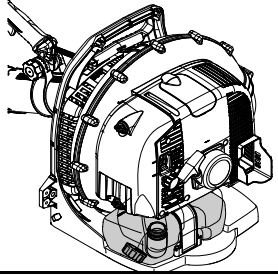
Remarque: L'utilisation d'un tube de souffleur peut éventuellement desserrer les raccordements. Grâce à la conception exclusive du tube proposée par Posi-Loc™, les tubes peuvent être resserrés. Retirez les tubes droits et réinstallez-les suivant les instructions.

FUEL HANDLING / MANIPULACIÓN DEL COMBUSTIBLE / MANIPULATION DU CARBURANT

Use fresh fuel (purchased within the last 30 days from the pump) when fueling your ECHO product. Stored fuel ages. Do not mix more fuel than you expect to use in 30 days. To extend the life of your fuel beyond 90 days, use Red Armor™ Fuel Treatment mixed with ECHO Powerblend® Gold oil. Alternatively, use Red Armor™ Pre-mixed Fuel.

Utilice combustible nuevo (comprado en los últimos 30 días desde el bombeo) cuando recargue combustible al producto ECHO. El combustible almacenado envejece. No mezcle más combustible del que espere utilizar en 30 días. Para prolongar la vida útil del combustible por más de 90 días, utilice Tratamiento para combustible Red Armor™ mezclado con aceite ECHO Powerblend® Gold. De manera alternativa, utilice combustible premezclado Red Armor™.

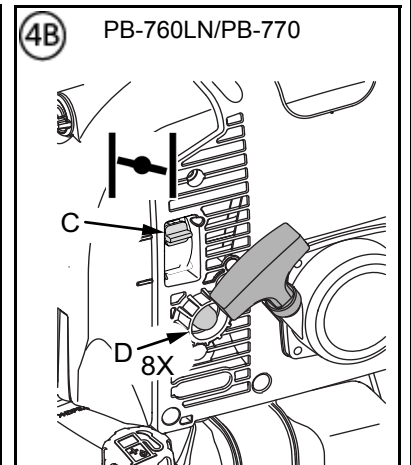
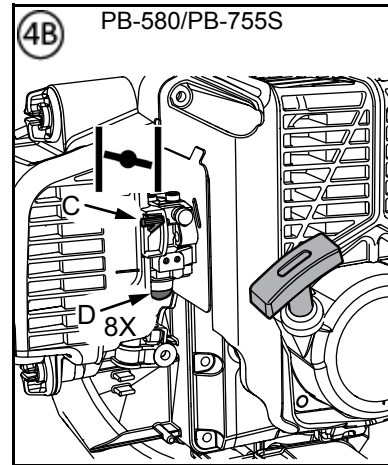
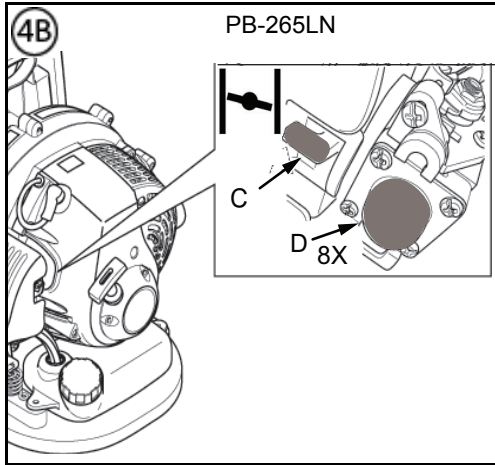
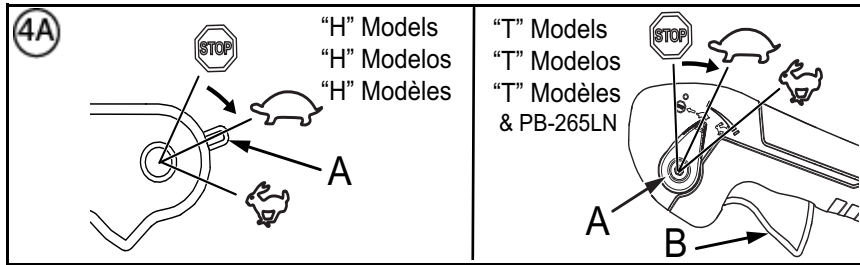
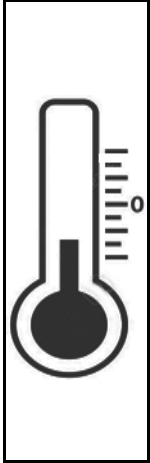
Lorsque vous faites le plein du réservoir de votre produit ECHO, utilisez du carburant neuf (c'est-à-dire acheté au cours des 30 derniers jours d'une station d'essence). Le carburant entreposé se détériore. Ne mélangez pas plus de carburant que vous prévoyez d'utiliser en 30 jours. Pour prolonger de plus de 90 jours la durée de vie de votre carburant, utilisez Red Armor™ Fuel Treatment mélangé à ECHO Powerblend® Gold oil. Vous pouvez également utiliser Red Armor™ Pre-mixed Fuel.

3 	3A  50 : 1 
	3A Pre-Mixed Premezclado Pré-mélangé Red Armor™ Fuel  

OR / O / OU

COLD START / ARRANQUE EN FRÍO / DÉMARRAGE À FROID

4



Note: After engine starts, move Choke Lever (C) to RUN |+| position. Allow engine to warm up with Throttle Position Lever (A) in IDLE [↻] position, for 3 minutes before use.

After engine warm up:

- "H" Model move Throttle Lever (A) to desired speed.
- "T" Model use Throttle Trigger (B) to select a desired variable speed. Alternatively, you can move Throttle Lever (A) to IDLE [↻] or set to a FAST [⚡] speed.

Note: If after 5 pulls, the engine does not start, move Choke Lever (C) to COLD START |−| position, push Purge (D) again, and repeat step 4.

Nota: Luego de arrancar el motor, mueva la Palanca de cebador (C) a la posición RUN |+|. Permita que el motor se caliente con la Palanca de posición del acelerador (A) en posición IDLE [↻] durante 3 minutos antes de usar.

Luego de calentar el motor:

- "H" Model mueva la Palanca del acelerador (A) a la velocidad deseada.
- "T" Modelo use el Gatillo del acelerador (B) para seleccionar la velocidad variable deseada. De manera alternativa, puede mover la Palanca del acelerador (A) a IDLE [↻] o ajustar a una velocidad FAST [⚡].

Nota: Si después de 5 intentos, el motor no arranca, mueva la Palanca de cebador (C) a la posición COLD START |−|, presione Purgar (D) nuevamente y repita el paso 4.

Remarque: Une fois le moteur démarré, placez le levier de l'étrangleur (C) en position |+| MARCHE. Laissez le moteur se préchauffer avec le levier de position de l'accélérateur (A) en position de RALENTI [↻], pendant 3 minutes avant utilisation.

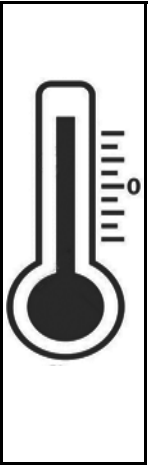
Après préchauffage du moteur:

- Sur les en "H" modèles, placez le levier d'accélérateur (A) sur la vitesse souhaitée.
- Sur les en "T" modèles, utilisez la gâchette d'accélérateur (B) pour sélectionner la vitesse variable désirée. Sinon, vous pouvez placer le levier d'accélérateur (A) sur RALENTI [↻] ou le régler sur vitesse RAPIDE [⚡].

Remarque: Si, après 5 tractions, le moteur ne démarre pas, placez le levier de l'étrangleur (C) en position DÉMARRAGE À FROID |−|, puis poussez la purge (D) à nouveau et répétez l'étape 4.

WARM START / ARRANQUE EN CALIENTE / DÉMARRAGE À CHAUD

5



5A

"H" Models
"H" Modelos
"H" Modèles

"T" Models
"T" Modelos
"T" Modèles
& PB-265LN

5B PB-265LN

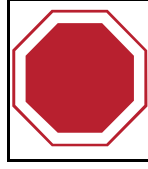
5B PB-580 / PB-755S

5B PB-760LN / PB-770

Diagram 5A shows the throttle lever (A) and choke lever (B) for "H" and "T" models. Diagram 5B shows the carburetor adjustment for three models: PB-265LN, PB-580 / PB-755S, and PB-760LN / PB-770. In all 5B diagrams, 'C' points to the idle speed screw and 'D' points to the mixture screw, both labeled '8X'.

STOP ENGINE / DETENER MOTOR / ARRÊT MOTEUR

6



6A

"H" Models
"H" Modelos
"H" Modèles

"T" Models
"T" Modelos
"T" Modèles
& PB-265LN

Note: Move Throttle Lever (A) to IDLE [↔] position and allow engine to return to idle before shutting off engine.
Nota: Mueva la palanca del acelerador (A) a la posición de reposo [↔] y permita que el motor regrese a ralentí antes de apagar el motor.
Remarque: Placez le levier de l'accélérateur (A) sur la position de ralentí [↔] et laissez le moteur revenir au ralentí avant de couper le moteur.

Diagram 6A shows the throttle lever (A) and choke lever (B) for "H" and "T" models, with arrows indicating the movement to the idle position.

MAINTENANCE INTERVALS / INTERVALOS DE MANTENIMIENTO / INTERVALLES D'ENTRETIEN

Daily Or Before Use / Diariamente O Antes De Usar / Quotidienn Ou Avant Utilisation

Air Filter, Choke Shutter Filtro de aire, Estrangulador Filtre à air, Volet de départ	Inspect-Clean* Inspeccionar-Limpiar* Inspection-Nettoyage*
Recoil Starter Rope Cuerda del motor de arranque Cordon lanceur	Inspect-Clean* Inspeccionar-Limpiar* Inspection-Nettoyage*
Cooling System Sistema de enfriamiento Système de refroidissement	See Dealer for maintenance Consulte al concesionario para el mantenimiento Voir le concessionnaire pour la maintenance
Screws, Nuts, Bolts Tornillos, tuercas, pernos Vis, écrous, boulons	Inspect-Tighten-Replace* Inspeccionar-Apretar-Reemplazar* Inspection-Serrage-Remplacement*

3 Months / 3 Meses / 3 Mois

Air Filter Filtro de aire Filtre à air	Replace* Reemplazar* Remplacement*
Fuel Filter, Fuel Cap Gasket Filtro de combustible, Empaquetadura de la cubierta del combustible Filtre à carburant, Joint de couverture de carburant	Inspect* Inspeccionar* Inspection*
Spark Plug Bujía Bougie	Inspect-Tighten-Replace* Inspeccionar-Apretar-Reemplazar* Inspection-Serrage-Remplacement*
Muffler Spark Arrestor Apagachispas del silenciador Pare-étincelles	See Dealer for maintenance Consulte al concesionario para el mantenimiento Voir le concessionnaire pour la maintenance

Yearly / Anualmente / Annuellement

Fuel Filter Filtro de combustible Filtre à carburant	Inspect-Replace* Inspeccionar-Reemplazar* Inspection-Remplacement*
--	--

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.
NOTA IMPORTANTE - Los intervalos indicados son máximos. El uso real y su experiencia determinarán la frecuencia del mantenimiento requerido.
 * Todas las recomendaciones de reemplazo se basan en encontrar piezas dañadas o desgastadas durante la inspección.
REMARQUE IMPORTANTE - Intervalles de temps sont maximales. Utilisation réelle et votre expérience détermineront la fréquence d'entretien requis.
 * Toutes les recommandations de remplacement de pièces sont basées sur la découverte de dommages ou d'usure lors de l'inspection.

MAINTENANCE

Emissions Control Components

NOTICE

- The use of emission control components other than those specifically designed for this unit is a violation of federal law.
- 1. Air Filter: Close choke, remove air filter cover, clean air cleaner area, clean or replace filter (if damaged).
- 2. Spark Plug:
 - (a) PB-256LN / PB-580 / PB-755LN / PB-770
 - Use only NGK BPM8Y (BPMR8Y in Canada) spark plug otherwise severe engine damage may occur. Adjust spark plug gap by bending outer electrode to a 0.65 mm (0.026 in) gap.
 - (b) PB-760LN
 - Use only NGK BPM6Y (BPMR6Y in Canada) spark plug otherwise severe engine damage may occur. Adjust spark plug gap by bending outer electrode to a 0.65 mm (0.026 in) gap.

DANGER

- Fuel is VERY flammable. Use extreme care when mixing, storing or handling, or serious personal injury may result.
- 1. Fuel Filter replacement: Use a clean rag to remove loose dirt from around fuel cap and empty fuel tank. Pull the fuel filter from the fuel tank. Remove the filter from the line and install the new filter (do not damage fuel line when removing the fuel filter from the tank).

Transportation

WARNING

- During operation the muffler or catalytic muffler and surrounding cover become hot. Always keep exhaust area clear of flammable debris during transportation or when storing, otherwise serious property damage or personal injury may result.
- Always secure the unit during transportation to prevent turnover, fuel spillage, and damage to the unit.

Short-term Storage

DANGER

- Store unit in a dry, dust free place, out of the reach of children.
- Do not store in enclosure where fuel fumes may accumulate or reach an open flame or spark.

Long-term Storage (Over 30 Days)

NOTICE

- Place the stop switch in the "OFF" position.
- Clean the exterior of the product.
- Perform all periodic maintenance.
- Tighten all the screws and nuts.
- Drain the fuel and run the unit until it stops.
- Allow engine to cool.
- Store unit in a dry, dust free place, out of the reach of children.

EMISSION CONTROL (Exhaust & Evaporative)

- CARB and EPA Emissions Control Information.
- The emission control system for the engine is EM (engine modification) and, if the second to last character of the Engine Family on the Emission Control Information label (sample below) is "B", "C", "K", or "T", the emission control system is EM and TWC (3-way catalyst). The fuel tank/fuel line emission control system is EVAP (evaporative emissions). Evaporative emissions for California models are only applicable to fuel tanks and fuel feed lines.

EMISSION CONTROL INFORMATION

ENGINE FAMILY: #EHXS.0364KC DISPLACEMENT: 35.8 cc
EMISSION COMPLIANCE PERIOD: 300 Hours
THIS ENGINE MEETS * * * * U.S. EPA EXH/EVP & CALIFORNIA
EXH/EVP EMISSION REGULATIONS FOR S.O.R.E. REFER TO OWNER'S
MANUAL FOR MAINTENANCE SPECIFICATIONS AND ADJUSTMENTS.
YAMABIKO CORP. * * * X X X X



- An Emission Control Label is located on the engine. (This is an EXAMPLE ONLY, information on label varies by ENGINE FAMILY).
- Product Emission Durability (Emission Compliance Period).
- The 50 or 300 hour emission compliance period is the time span selected by the manufacturer certifying the engine emissions output meets applicable emissions regulations, provided that approved maintenance procedures are followed as listed in the Maintenance Section of this manual.

SERVICE

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

WARNING

Cancer and Reproductive Harm.
www.P65Warnings.ca.gov

Note: This product complies with CAN ICES-2/NMB-2.

MANTENIMIENTO**Ajuste de la velocidad de ralentí** **NOTICE**

- Cada unidad se pone en marcha en la fábrica y el carburador se ajusta de acuerdo con las reglamentaciones de emisiones. Los ajustes al carburador, distinto a la velocidad de ralentí, debe realizarlos un concesionario de ECHO autorizado.
- Si tiene disponible un tacómetro, el tornillo de ajuste de ralentí (Figura 6A) debe establecerse en 3000 RPM. Gire el tornillo de ralentí en sentido horario para aumentar la velocidad de ralentí, y en sentido anti-horario para disminuirla.

Componentes de control de emisiones **NOTICE**

- El uso de componentes de control de emisiones diferentes de aquellos diseñados específicamente para esta unidad viola la ley federal.
1. Filtro de aire: Cierre el estrangulador, retire la cubierta del filtro de aire, limpie el área del limpiador de aire, limpie o reemplace el filtro (si está dañado).

2. Bujía:

(a) PB-256LN, PB-580, PB-755LN, PB-770

- Use solamente una bujía BPM8Y (BPMR8Y in Canada), pues de lo contrario el motor podría sufrir graves daños. Ajuste la separación de la bujía doblando el electrodo exterior para formar una separación de 0.65 mm (0.026 in).

(b) PB-760LN

- Use solamente una bujía BPM6Y (BPMR6Y in Canada), pues de lo contrario el motor podría sufrir graves daños. Ajuste la separación de la bujía doblando el electrodo exterior para formar una separación de 0.35 mm (0.014 in).

DANGER

- El combustible es MUY inflamable. Tenga extremo cuidado al mezclar, almacenar o manipular el combustible, o pueden producirse graves lesiones personales.
1. Reemplazo del filtro de combustible: Use un trapo limpio para eliminar la suciedad suelta alrededor de la tapa del combustible y vacíe el tanque de combustible. Retire el filtro de combustible del tanque de combustible. Retire el filtro de la línea e instale el nuevo filtro (no dañe la línea de combustible cuando retire el filtro de combustible del tanque).

Transporte **WARNING**

- Durante el funcionamiento, el silenciador o el silenciador catalítico y la cubierta circundante pueden calentarse. Durante el transporte o el almacenamiento, siempre mantenga despejada el área del escape de residuos inflamables; de lo contrario, pueden producirse graves lesiones personales o daños a la propiedad.
- Durante el transporte, proteja siempre la unidad para prevenir el vuelco, el derrame de combustible y el daño de la unidad.

Almacenamiento a corto plazo **DANGER**

- Almacene la unidad en un lugar seco y sin polvo, fuera del alcance de los niños.
- No almacene la unidad en recintos donde los gases del combustible se puedan acumular o alcanzar una llama abierta o una chispa.

Almacenamiento a largo plazo (más de 30 días) **NOTICE**

- Coloque el interruptor de parada en la posición "OFF" (APAGADO).
- Limpie el exterior del producto.
- Realice todo el mantenimiento periódico.
- Ajuste todos los tornillos y las tuercas.
- Drene el combustible y ponga en marcha la unidad hasta que se detenga.
- Permita que el motor se enfríe.
- Almacene la unidad en un lugar seco y sin polvo, fuera del alcance de los niños.

CONTROL DE EMISIONES (escape y evaporativas)

- Información sobre el control de emisiones de CARB y EPA.
- El sistema de control de emisiones del motor es EM (modificación del motor) y, si el penúltimo carácter de la familia de motores que aparece en la etiqueta de información sobre el control de emisiones (ejemplo a continuación) es "B", "C", "K" o "T", el sistema de control de emisiones es EM y TWC (catalizador de 3 vías). El sistema de control de emisiones del tanque y tubería de combustible es EVAP (emisiones evaporativas). Las emisiones evaporativas para los modelos de California solo se aplican a tanques de combustible y a líneas de alimentación de combustible.

EMISSION CONTROL INFORMATION

ENGINE FAMILY: #EHXS.0364KC DISPLACEMENT: 35.8 cc
 EMISSION COMPLIANCE PERIOD: 300 Hours
 THIS ENGINE MEETS * * * * U.S. EPA EXH/EVP & CALIFORNIA
 EXH/EVP EMISSION REGULATIONS FOR S.O.R.E. REFER TO OWNER'S
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 YAMABIKO CORP. * * * X X X X



- Puede encontrarse una etiqueta de control de emisiones en el motor. (Este es SOLO UN EJEMPLO, la información en la etiqueta varía según la FAMILIA de MOTOR).
- Durabilidad de las emisiones del producto (período de cumplimiento de las emisiones).
- El período de cumplimiento de las emisiones de 50 o 300 horas es el intervalo de tiempo seleccionado por el fabricante por el que se certifica que la salida de emisiones del motor cumple con las reglamentaciones correspondientes, siempre que se sigan los procedimientos de mantenimiento aprobados según lo establecido en la sección Mantenimiento de este manual.

SERVICIO

- Durante el período de garantía, el mantenimiento de este producto lo debe realizar un concesionario de mantenimiento de ECHO autorizado. Para conocer el nombre y el domicilio del concesionario de mantenimiento de ECHO autorizado más cercano, pregúntese a su revendedor o llame al 1-800-432-ECHO (3246). La información sobre el concesionario también está disponible en nuestro sitio web www.echo-usa.com. Cuando presente su unidad para que le realicen mantenimiento o reparaciones bajo la garantía, deberá mostrar comprobante de compra.

WARNING

Cáncer y daño reproductivo.
www.P65Warnings.ca.gov

Nota: Este producto cumple con CAN ICES-2/NMB-2.

ENTRETIEN

Réglage de la vitesse de ralenti

NOTICE

- Chaque dispositif est testé à l'usine et le carburateur est réglé conformément aux règlements sur les émissions. Les réglages du carburateur, autres que le régime au ralenti, doivent être effectués par un concessionnaire ECHO agréé.
- Si l'on dispose d'un tachymètre, il convient de régler la vis de régime de ralenti (Figure 6A) à 3 000 tr/min. Tourner la vis de régime de ralenti dans le sens horaire pour augmenter la vitesse de ralenti, et dans le sens anti-horaire pour diminuer la vitesse de ralenti.

Éléments antipollution

NOTICE

- L'utilisation d'éléments antipollution différents de ceux qui ont été spécialement conçus pour ce dispositif constitue une infraction à la loi fédérale.
1. Filtre à air: Volet fermé; retirer le capot du filtre à air; nettoyer la zone du filtre à air; nettoyer ou remplacer le filtre (si endommagé).
 2. Bougie d'allumage:
 - (a) PB-256LN, PB-580, PB-755LN, PB-770
 - Utiliser seulement la bougie d'allumage BPM8Y (BPMR8Y in Canada). Sinon, de graves dommages au moteur pourraient se produire. Régler l'écart de la bougie d'allumage en pliant l'électrode extérieure à un écart de 0,65 mm (0,026 po).

(b) PB-760LN

- Utiliser seulement la bougie d'allumage BPM6Y (BPMR6Y in Canada). Sinon, de graves dommages au moteur pourraient se produire. Régler l'écart de la bougie d'allumage en pliant l'électrode extérieure à un écart de 0,35 mm (0,014 po).

DANGER

- Le carburant est TRÈS inflammable. Demeurer extrêmement prudent lors du mélange, du rangement ou de la manipulation; l'ignorer peut causer des lésions corporelles graves.
1. Remplacement du filtre à carburant: Utiliser un linge propre pour retirer la saleté autour du bouchon du réservoir et vider le réservoir de carburant. Retirer le filtre à carburant du réservoir. Retirer le filtre de la conduite et installer un nouveau (ne pas endommager la conduite de carburant en retirant filtre à carburant du réservoir).

Moyens de transport

WARNING

- En cours d'utilisation, le silencieux ou le silencieux catalytique et le boîtier l'entourant deviennent très chauds. Toujours garder la zone d'échappement à l'abri de débris inflammables durant le transport ou lors de l'entreposage, sinon de graves dommages ou blessures pourraient en résulter.
- Toujours sécuriser l'appareil pendant le transport afin d'éviter tout retournement, tout déversement de carburant et tout dommage à l'appareil.

Rangement à court terme

DANGER

- Ranger le dispositif dans un endroit sec, à l'abri de la poussière et hors de portée des enfants.
- Ne pas ranger dans une enceinte où les émissions de carburant peuvent s'accumuler et atteindre une flamme ou une étincelle.

Rangement à long terme (Plus de 30 jours)

NOTICE

- Placer l'interrupteur d'arrêt en position "OFF".
- Nettoyer l'extérieur du produit.
- Effectuer toutes les procédures de maintenance périodique.
- Resserer toutes les vis et écrous.
- Drainer le carburant et démarrer le dispositif jusqu'à ce qu'il s'arrête de marcher.
- Laisser le moteur se refroidir.
- Ranger le dispositif dans un endroit sec, à l'abri de la poussière et hors de portée des enfants.

CONTRÔLE DES ÉMISSIONS (Échappement et évaporation)

- Informations sur le contrôle des émissions du CARB et de l'EPA.
- Le système antipollution du moteur est EM (modification du moteur) et, si l'avant-dernier caractère de la famille de moteurs sur l'étiquette d'informations antipollution (échantillon ci-dessous) est "B", "C", "K" ou "T", le système antipollution est EM et TWC (catalyseur à 3 voies). Le système de contrôle des émissions du réservoir de carburant/conduite de carburant est EVAP (émissions par évaporation). Les émissions par évaporation des modèles californiens ne s'appliquent qu'aux réservoirs de carburant et aux conduites d'alimentation en carburant.

EMISSION CONTROL INFORMATION

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 YAMABIKO CORP. * * * X X X X



- Une étiquette d'information sur la réduction des émissions est apposée sur le moteur. (Ceci n'est qu'un EXEMPLE SEULEMENT, l'information sur l'étiquette varie par FAMILLE de MOTEUR).
- Durabilité des émissions du produit (période de conformité des émissions).
- La période de conformité de 50 ou 300 heures est la période de temps choisie par le fabricant pour certifier que les émissions du moteur sont conformes aux règlements sur les émissions applicables, à condition que les procédures d'entretien approuvées soient suivies comme indiqué dans la section Entretien du présent manuel.

SERVICE

- L'entretien de ce produit pendant la période de garantie doit être effectué par un distributeur agréé ECHO. Pour obtenir le nom et l'adresse du distributeur agréé ECHO le plus près de chez vous, demandez à votre revendeur ou appelez le 1 800 432-ECHO (3246). Des renseignements sur les concessionnaires sont également disponibles sur notre site Web
- www.echo-usa.com. Lors de la présentation de l'appareil pour réparation/entretien couvert par la garantie, la preuve d'achat est requise.

WARNING

Cancer et dommages à la reproduction.
www.P65Warnings.ca.gov

Remarque : Ce produit est conforme à la norme CAN ICES-2/
NMB-2.

NOTES / NOTAS / REMARQUES