

ECHO Quick Start Guide

PB-9010 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.



For Operators Manual, additional literature, or a copy of the product warranty scan QR code, visit www.echo-usa.com/manuals, or call 1-800-432-ECHO (3246). Before calling or accessing the website, know the model and serial number of your unit.

Products sold in Canada comply with CAN ICES-2 / NMB-2.

INTERNATIONAL SAFETY SYMBOLS

Symbols	Description	Symbols	Description
	Warning, See Operator's Manual	H	Carburetor Adjustment - High Speed Mixture
	Wear Eye, Ear and Head Protection	T	Carburetor Adjustment - Idle Speed
	Wear Hand Protection	L	Carburetor Adjustment - Low Speed Mixture
	Safety / Alert		STOP Switch
	Hot Surface		Fuel and Oil Mixture
	Idle Speed		Fast Speed
	Finger Sever		Purge Bulb
	Do Not Allow Flames or Sparks Near Fuel	Ignition 	Ignition ON / OFF
	Choke Control RUN Position (Choke Open)		Choke Control COLD START Position (Choke Closed)
	Do Not Smoke Near Fuel		Wear Slip Resistant Footwear
			Beware of thrown objects
			Keep Bystanders and Helpers Away 15 m (50 ft.)

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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.
- 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	• Open Toed Shoes
• Gloves	• Bare feet
• Long Sleeve Shirt	• Long Hair Below Shoulders

Equipment Safety

WARNING

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).

Use only ECHO attachments. Serious injury can result from the use of a non-approved attachment combination. ECHO, Incorporated 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.

- Do not attempt to modify this product. Serious injury can result from the use of any modified product.
- Check unit for loose or missing nuts, bolts, and screws. Tighten or replace as needed.
- Inspect guard for damage and make sure guard is properly installed securely in place. Replace if either is damaged or missing.
- Assure that throttle trigger, throttle trigger lockout, and stop switch all work properly.
- Check that handle and harness are installed and adjusted for safe, comfortable operation. See Assembly Section for proper adjustment.
- 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 assembling unit, removing obstructions, clearing debris, or servicing unit.
- Do not connect spark plug lead to spark plug until unit is ready for use.
- 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.
- Position wiring safely to prevent snagging, separation of connectors, or breakage during operation. Gather excess wire, and secure with wiring clamp if provided on equipment, or tuck behind the air filter area. Do not place wiring directly against hot engine components.
- Check wiring and connectors for nicks, cuts, exposed wire, or other damage, and repair or replace as needed. Exposed wire or connectors can cause shocks, sparks, and risk of fire or explosion, resulting in serious injury.
- Check wire terminals for secure connections.
- Periodically check fuel system (fuel lines, vent, grommet, fuel tank, and fuel cap) for leaks especially if the unit is dropped. If damage or leaks are found, do not use unit, otherwise serious personal injury or property damage can occur. Have unit repaired by an Authorized Service Dealer before using.

Handling Fuel

DANGER

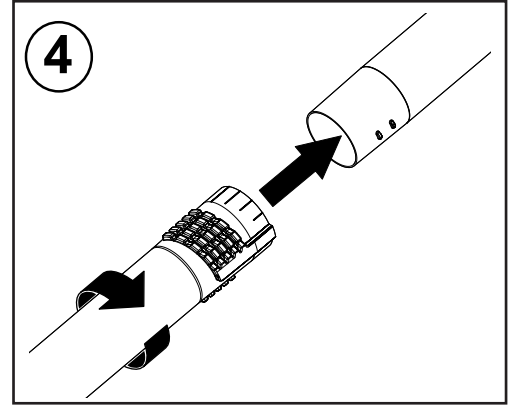
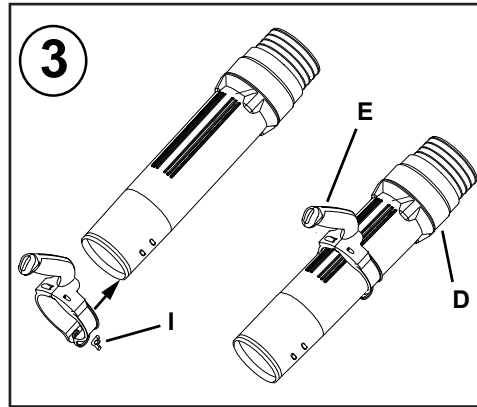
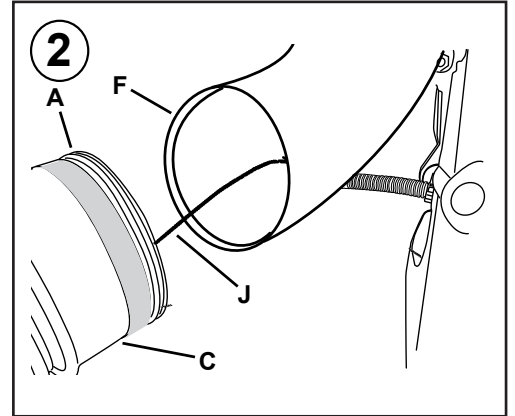
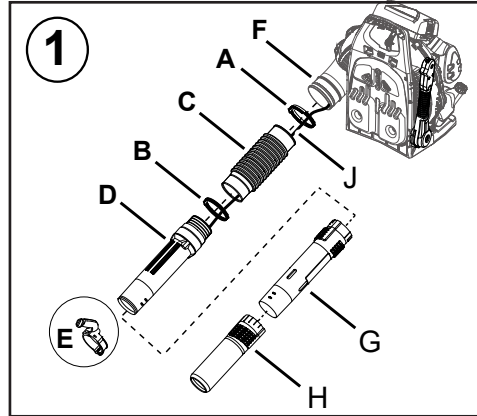
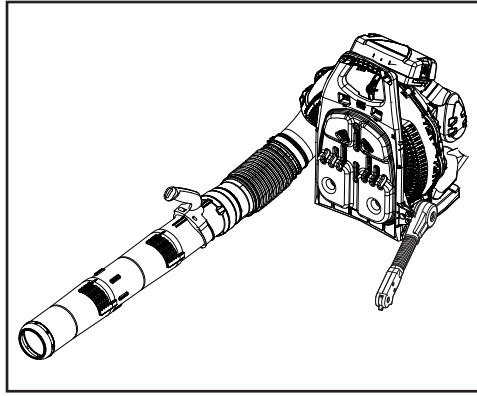
- Fuel is flammable. Use care when mixing, storing, or handling, or serious personal injury will result.
- Mix and pour fuel outdoors where there are no sparks and flames.
- Slowly remove the fuel cap only after stopping the engine.
- Do not smoke while fueling or mixing fuel.
- Wipe spilled fuel from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

Clear the Work Area

- Clear the area of children, bystanders, and pets. At a minimum, keep all children, bystanders, and pets outside a 15 m (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 (not included). If you are approached, stop the engine.
- Avoid blowing debris towards people, pets, open windows, or vehicles when using unit.
- Review area to be cleared. Look for potential hazards such as stones or metal objects.

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H MODEL ASSEMBLY



Step 1. Assemble Clamps:

- (a) Install clamps (A and B) onto both ends of flexible blower tube (C).

Note: Apply a light lubricant if needed to ease tube assembly.

- (b) Slide the swivel blower tube (D) onto the lower end of the flexible blower tube (C)
- (c) Tighten the lower clamp (B) securely.

Step 2. Assemble Static Discharge Wire (if equipped):

- (a) Unwrap and fully extend the static discharge wire (J).
- (b) Insert the wire through flexible blower tube (C).
- (c) Assemble the upper end of the flexible blower tube (C) onto elbow blower tube (F).
- (d) Tighten the upper clamp (A) securely.

Step 3. Assemble H Model Front Handle Set:

- (a) Loosen screw knob (I) on the bottom of front handle set (E).
- (b) Expand the clamp and slide the handle over the swivel blower tube (D).

- (c) Ensure the alignment groove on the front handle set (E) matches the metal strip area on the swivel tube (D).

- (d) Tighten screw knob (I) finger tight only.

Step 4. Assemble Straight Blower Tubes:

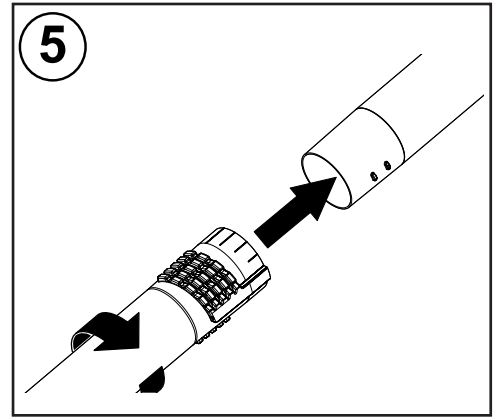
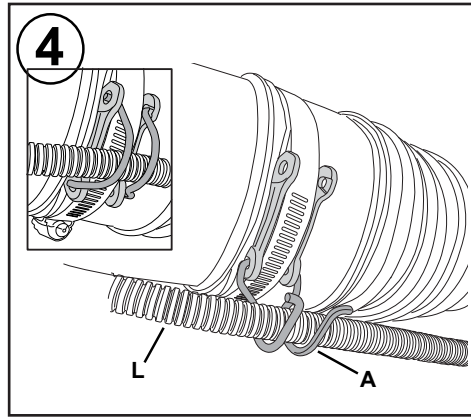
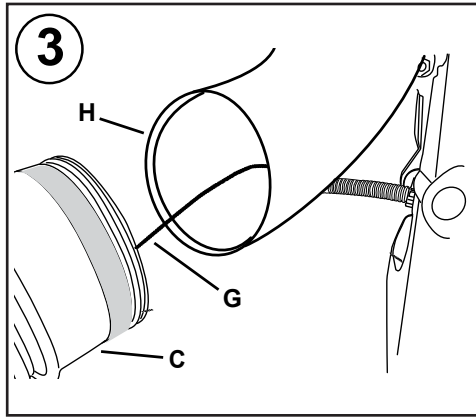
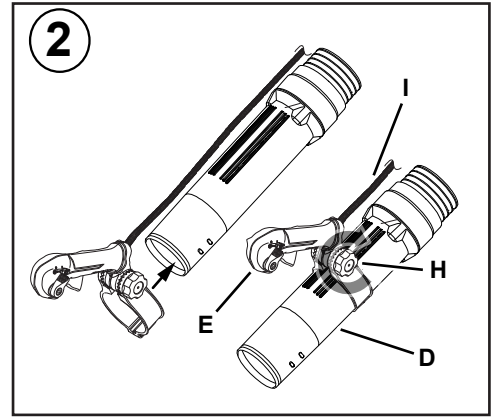
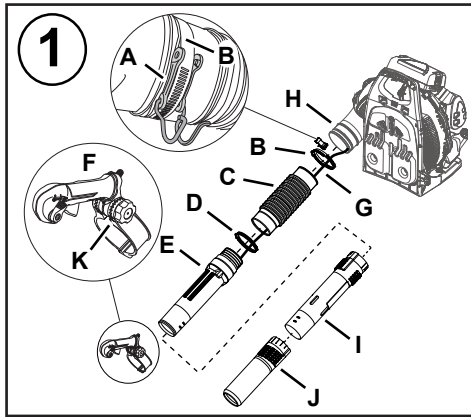
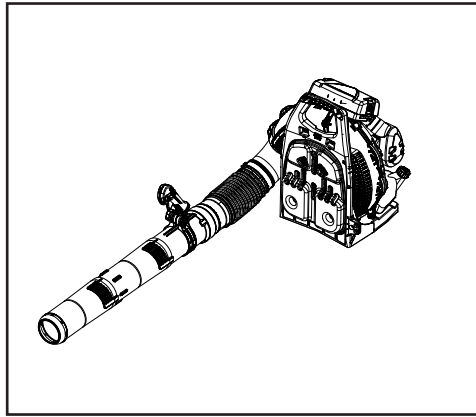
- (a) Slide the straight blower tube (G) onto swivel blower tube (D) until light resistance is felt.
- (b) Hold the swivel blower tube and rotate the straight blower tube clockwise to engage Posi-Loc™ channels.
- (c) Ensure the connection is firm. Do not force.
- (d) Slide the nozzle blower tube (H) onto straight blower tube (G) until light resistance is felt.
- (e) Hold the straight blower tube and rotate the nozzle blower tube clockwise to engage Posi-Loc™ channels.
- (f) Ensure the connection is firm. Do not force.

Note: With use, blower tubes can eventually become loose. Exclusive Posi-Loc™ tube design allows tubes to be re-tightened. Remove Nozzle Blower Tube and reinstall per instructions.

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T MODEL ASSEMBLY



Step 1. Assemble Clamps:

- Install cable clip (A) onto clamp (B).
- Install this clamp assembly onto upper end of flexible blower tube (C).
- Install the second clamp (D) onto lower end of the flexible blower tube (C).

Step 2. Assemble Throttle Control:

Note: Let the throttle control (E), hang freely to ensure throttle cable (I) is not twisted.

- Route throttle cable (L) along the outside of elbow blower tube (H).
- Remove screw knob (K).
- Install throttle control (F) onto swivel blower tube (E).
- Ensure the handle bracket straddles the guide rails on the swivel blower tube.
- Adjust throttle control (F) to desired angle.
- Install screw knob (K) finger tight only.

Step 3. Assemble Static Discharge Wire (If equipped):

- Unwrap and fully extend the static discharge wire (G)
- Insert the wire through the flexible blower tube (C).

Note: Apply a light lubricant if needed to ease tube assembly.

- Assemble flexible blower tube (C) to elbow blower tube (H), and tighten the clamp assembly (from step 1).

- Assemble swivel blower tube (E) onto lower end of flexible blower tube (C) and tighten clamp (D).

Step 4. Secure Throttle Cable:

- Secure throttle cable (L) into cable clip (A).

Step 5. Assemble straight blower tubes:

- Slide straight blower tube (I) onto swivel blower tube (E) until light resistance is felt.
- Hold swivel blower tube and rotate straight blower tube clockwise to engage Posi-Loc™ channels.
- Ensure the connection is firm. Do not force.
- Slide the nozzle blower tube (J) onto straight blower tube (I) until light resistance is felt.
- Hold the straight blower tube and rotate the nozzle blower tube clockwise to engage Posi-Loc™ channels.
- Ensure the connection is firm. Do not force.

Note: With use, blower tubes can eventually become loose. Exclusive Posi-Loc™ tube design allows tubes to be re-tightened. Remove nozzle blower tube and reinstall per instructions.

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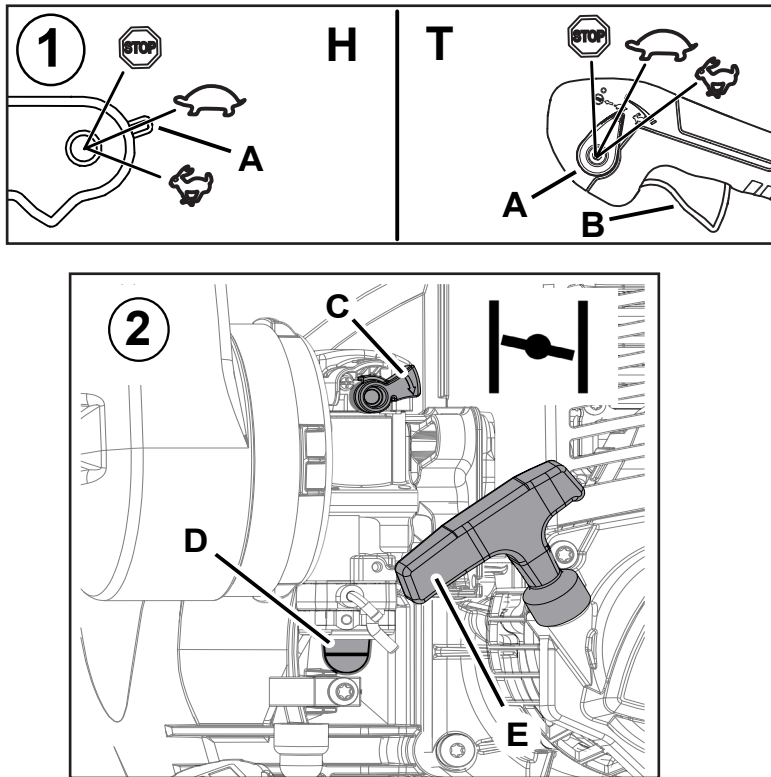
FUEL REQUIREMENTS

Gasoline/Oil Ratio 50:1

Gasoline - Use fresh (purchased within the last 30 days from the pump) 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. Use of ECHO branded fuel is recommended to extend engine life in all air-cooled two-stroke and two or four-stroke hybrid engines.

Two-Stroke Oil - A two-stroke engine oil, such as ECHO branded two-stroke oils, meeting ISO-L-EGD (ISO/CD 13738) and J.A.S.O. FD Standards must be used. ECHO branded two-stroke oils meet 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. M345-FD certified oil will void the two-stroke engine warranty.

COLD START



1. **PB-9010 H model only:** Rotate spring loaded throttle arm downward to a comfortable operating position.

Note: 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.

2. Move throttle lever (A) to IDLE position.

3. Rotate choke (C) to COLD START position.

4. Pump purge bulb (D) until fuel is visible. Pump bulb an additional 5 times.

5. Pull recoil starter handle (E) until engine fires, or a maximum of 5 pulls.

6. If engine fires and remains running, pull throttle trigger (B) (T model) or advance throttle lever (A) (H model) to automatically return choke to run position, then proceed to step 8. If engine fires and dies, proceed to step 7.

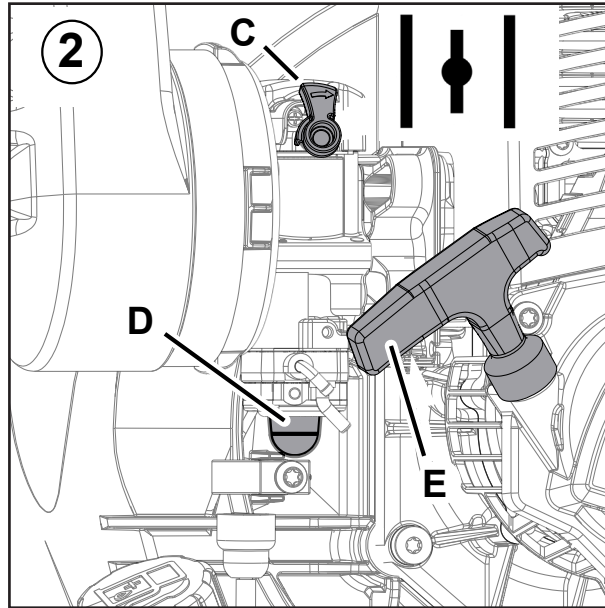
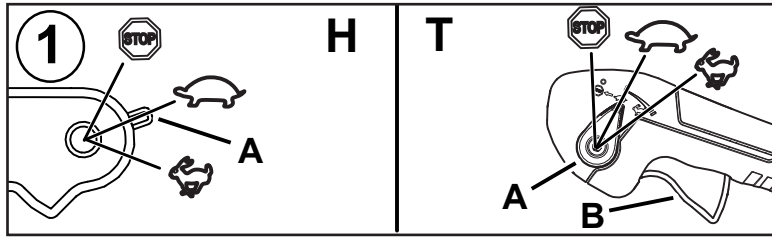
7. After engine fires and dies (or 5 pulls), move choke lever back to RUN position, then pull starter handle/ rope until engine starts and runs. Allow unit to warm up at idle for several minutes.

Note: If engine does not start with choke in RUN position after 5 pulls, move choke to COLD START position, and repeat steps 3- 6.

8. After engine warm-up, move throttle lever gradually to increase engine RPM to desired operating speed.

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WARM START



1. **PB-9010 H model only:** Rotate spring loaded throttle arm downward to a comfortable operating position.

Note: 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.

The starting procedure is the same as Cold Start except do not close the choke.

2. Move throttle lever (A) to IDLE position.

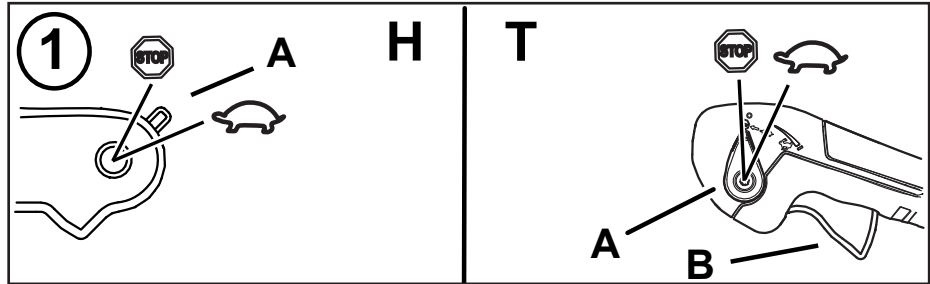
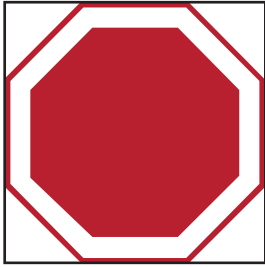
3. Pump purge bulb (D) until fuel is visible. Pump bulb an additional 5 times.

4. Pull recoil starter handle (E) until engine fires. Do not use choke (C).

Note: If engine does not start after five pulls, use cold start procedure.

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STOP ENGINE



1. **PB-9010 T model only:** Release throttle trigger (B).
2. Move throttle lever (A) to IDLE position and allow engine to return to idle.
3. Move throttle lever (A) to STOP position.

OPERATION

WARNING

- Keep a firm grip on all handles.
- Keep firm footing and balance.
- Adjust the straps according to instructions. Use both shoulder straps and waist strap 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.

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.

Engine Speed Adjustment

NOTICE

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

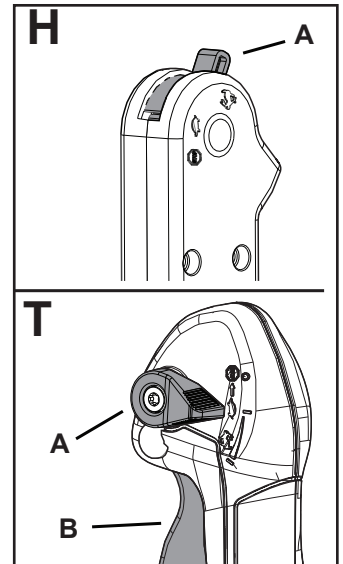
1. Allow the engine to warm up for a few minutes.

2. Set engine speed with throttle position lever (A).

3. Control engine speed with throttle trigger (B), or for continuous use, set engine speed with throttle position lever (A).

- Use lower speed to blow dry leaves from walks, patios and drives. Use rakes and brooms to loosen debris before blowing.
- Additional speed may be necessary to clean grass and leaves from a lawn or flower bed.
- Higher speed may be necessary to move gravel, dirt, snow, bottles or cans from a driveway, street, parking lot or stadium.
- Always stop unit using stop engine procedure.

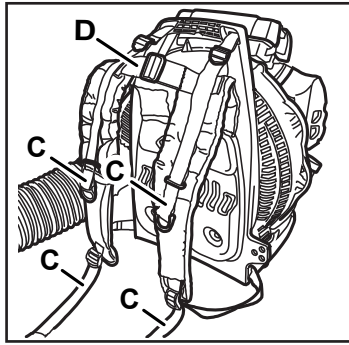
Note: Never use a higher speed setting than necessary to perform a task. Remember, the higher the engine speed, the louder the blower noise.



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Shoulder Strap Adjustment

1. Pull straps (C) downward to adjust shoulder harness.
2. Adjust harness limiter strap (D) for comfortable operation.

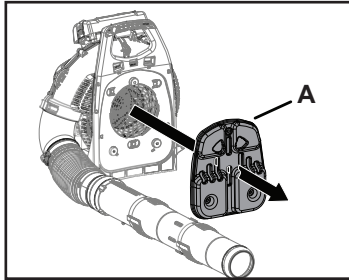


For Operator Comfort in Cold Weather Operation

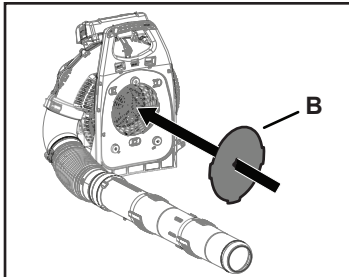
NOTICE

This product should not be used in temperatures below 15° F (-9° C) otherwise damage to the fuel lines may occur.

1. Remove clips or clips and screws as equipped from back cushion. Remove back cushion (A) from frame.

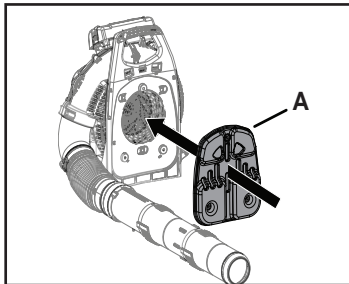


2. Install cold weather insert (B) on frame over air intake.



3. Install back cushion (A) to frame over cold weather insert.

Note: Blower performance may be reduced slightly.



MAINTENANCE

Idle Speed Adjustment

NOTICE

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.

If a tachometer is available, idle speed screw should be set to the specifications found on "Specifications" page of the operator manual. Turn idle screw clockwise to increase idle speed; counterclockwise to decrease idle speed.

Fuel Filter Replacement

⚠ DANGER

Fuel is flammable. Use 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. Pull the fuel filter from the fuel tank.
3. Remove the filter from the line and install the new filter (do not damage fuel line when removing the fuel filter from the tank).

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 filters (if damaged).
2. Spark Plug: Use only NGK CMR7H 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.

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.*

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CARB and EPA Emission 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.

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

EMISSION CONTROL INFORMATION
ENGINE FAMILY: E31EHS.0214EQ DISPLACEMENT: 21.2cc
EMISSION COMPLIANCE PERIOD: 500Hours
THIS ENGINE MEETS 2013 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. MMM/YYYY 

EMISSION CONTROL INFORMATION
ENGINE FAMILY: CEHXS.0214KL DISPLACEMENT: 21.2cc
EMISSION COMPLIANCE PERIOD: 300Hours
THIS ENGINE MEETS 2012 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. MMM/YYYY 

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 website www.echo-usa.com. When presenting your unit for Warranty service/repairs, proof of purchase is required.



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

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

MAINTENANCE INTERVALS

Daily Or Before Use	
Air Filter, Choke Shutter	Inspect-Clean*
Fuel System	Inspect*
Recoil Starter Rope	Inspect-Clean*
Cooling System	Inspect-Clean*
Screws, Nuts, Bolts	Inspect-Tighten-Replace*
3 Months	
Air Filter	Replace*
Fuel Filter, Fuel Cap Gasket	Inspect*
Spark Plug	Inspect-Tighten-Replace*
Muffler Spark Arrestor	Inspect-Clean*
Cylinder Exhaust Port	Inspect-Clean-Decarbon
Yearly	
Fuel Filter Fuel	Inspect-Replace*
Fuel Cap Gasket	Replace*
<i>NOTE - Time intervals shown are maximum. Actual use and your experience will determine the frequency of required maintenance.</i> * Replacement is recommended based on the finding of damage or wear during inspection.	

PRODUCT REGISTRATION

To register your product, visit www.echo-usa.com.