

# 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.

# **A** WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

# **A WARNING**



Users of this equipment risk injury to themselves and others if the unit is used improperly and/or safety precautions are not followed. ECHO provides an operator's manual. It must be read and understood for proper and safe operation. Failure to do so could result

in serious injury.

Specifications, descriptions and illustrative material in this literature are as accurate as known at the time of publication, but are subject to change without notice. Illustrations may include optional equipment and accessories, and may not include all standard equipment.

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### INTRODUCTION

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

# The Operator's Manual

Keep it in a safe place for future reference. Contains specifications and information for safety, operation, maintenance, storage and assembly specific to this product. Scan QR codes throughout the operator's manual for more information.

### SERVICING INFORMATION

### Parts/Serial Number

Genuine ECHO Parts, assemblies and maintenance kits for your ECHO products are available 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.	 Serial No.	

### 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.



SAFETY PB-265LN

# **Echo Consumer Product Support**

If you require assistance or have questions concerning the application, operation or maintenance of this product you may call the ECHO Consumer Product Support Department at 1-800-673-1558 from 8:00 am to 5:00 pm (Central Standard Time) Monday through Friday. Before calling, please know the model and serial number of your unit.

# **Product Registration**

To ensure trouble free warranty coverage it is important that you register your ECHO equipment on-line at <a href="https://www.echo-usa.com">www.echo-usa.com</a> or by filling out the product registration sheet included in this manual. Registering your product confirms your warranty coverage and provides a direct link between you and ECHO if we find it necessary to contact you.

# **Additional or Replacement Manuals**

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

# **A** 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.

# **A** 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
<b>③</b>	Read and understand owners manual	Η	Carburetor Adjustment - High Speed Mixture
	Wear Eye, Ear and Head Protection	T	Carburetor Adjustment - Idle Speed
	Wear Hand Protection. Use two handed	L	Carburetor Adjustment - Low Speed Mixture
$\triangle$	Safety/Alert	STOP	Emergency Stop
and the state of t	Hot Surface	+0	Fuel and Oil Mixture

SAFETY PB-265LN

Symbol	Description	Symbol	Description
-	Idle speed	*	Fast speed
<b>S</b>	Finger severing	<b>H</b> ■	Primer Bulb
<b>®</b>	DO NOT Allow Flames or Sparks Near Fuel	ignition ON OFF O	Ignition ON / OFF
(3)	DO NOT Smoke Near Fuel	-	Choke Control "COLD START" Position (Choke Closed)
+	Choke Control "RUN" Position (Choke Open)	علا	Wear slip resistant footwear
15m (50ft)			ders and Helpers 5 m (50 ft.).



PB-265LN SAFETY

# **Personal Condition and Safety Equipment**

# WARNING

Users of this product risk injury to themselves and others if the unit is used improperly and/or safety precautions are not followed. Proper clothing and safety gear must be worn when operating unit.

### **Physical Condition**

Your judgment and physical dexterity may not be good:

- · If you are tired or sick.
- · If you are taking medication.
- · If you have taken alcohol or drugs.

Operate unit only if you are physically and mentally well.

### Eye Protection

# WARNING

- ◆ Eye protection that meets ANSI Z87.1 or CE requirements must be worn whenever you operate the unit.
- For additional safety, a full-face shield may be worn over safety glasses or goggles to provide protection from sharp branches or flying debris.

### **Hand Protection**

Wear sturdy, no-slip, rubber work gloves to improve your grip on the handles. Gloves also provide protection against cuts and scratches, cold environments, and reduce the transmission of machine vibration to your hands.

# **Hearing/Ear Protection**

ECHO recommends wearing hearing protection whenever unit is used.

### **Breathing Protection**

Operators who are sensitive to dust or other common airborne allergens may need to wear a dust mask to prevent inhaling these materials while operating unit. Dust masks can provide protection against dust, plant debris, and other plant matter such as pollen. Make sure the mask does not impair your vision, and replace the mask as needed to prevent air restrictions.



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### **Proper Clothing**

Wear snug-fitting, durable clothing:

- · Pants should have long legs, shirts should have long sleeves.
- · DO NOT WEAR SHORTS.
- DO NOT WEAR TIES, SCARVES, JEWELRY, or clothing with loose or hanging items that could become entangled in moving parts or surrounding growth.
- · Keep clothing buttoned or zipped, and keep shirt tails tucked in.

Wear sturdy work shoes with nonskid rubber soles:

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

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

Heavy protective clothing can increase operator fatigue, which may lead to heat stroke. Schedule heavy work for early morning or late afternoon hours when temperatures are cooler.

# **WARNING**

The components of this machine generate an electromagnetic field during operation, which may interfere with some pacemakers. To reduce the risk of serious or fatal injury, persons with pacemakers should consult with their physician and the pacemaker manufacturer before operating this machine. In the absence of such information, ECHO does not recommend the use of this machine by anyone who has a pacemaker.

**Extended Operation / Extreme Conditions** 

# **A CAUTION**

Prolonged exposure to cold and/or vibration may result in injury. Read and follow all safety and operation instructions to minimize risk of injury. Failure to follow instructions may result in painful wrist/hand/arm injuries.

PB-265LN SAFETY

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

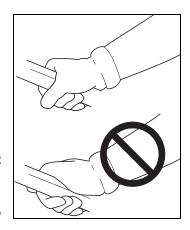
- Keep your body warm, especially the head, neck, feet, ankles, hands, and wrists.
- Maintain good blood circulation by performing vigorous arm exercises during frequent work breaks, and also by not smoking.
- Limit the hours of operation. Try to fill each day with jobs where operating the unit or other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



 If you experience discomfort, redness, and swelling of the fingers followed by whitening and loss of feeling, consult your physician before further exposing yourself to cold and vibration.

### Repetitive Stress Injuries (RSI)

It is believed that overusing the muscles and tendons of the fingers, hands, arms, and shoulders may cause soreness, swelling, numbness, weakness, and extreme pain in those areas. Certain repetitive hand activities may put you at a high risk for developing a Repetitive Stress Injury (RSI). An extreme RSI condition is Carpal Tunnel Syndrome (CTS), which could occur when your wrist swells and squeezes a vital nerve that runs through the area. Some believe that prolonged exposure to vibration may contribute to CTS. CTS can cause severe pain for months or even years.



To reduce the risk of RSI/CTS, do the following:

- Avoid using your wrist in a bent, extended, or twisted position. Instead try
  to maintain a straight wrist position. Also, when grasping, use your whole
  hand, not just the thumb and index finger.
- Take periodic breaks to minimize repetition and rest your hands.



SAFETY PB-265LN

• Reduce the speed and force with which you do the repetitive movement.

- Do exercises to strengthen the hand and arm muscles.
- Immediately stop using all power equipment and consult a doctor if you
  feel tingling, numbness, or pain in the fingers, hands, wrists, or arms. The
  sooner RSI/CTS is diagnosed, the more likely permanent nerve and
  muscle damage can be prevented.

# **▲** DANGER

All over head electrical conductors and communications wires can have electricity flow with high voltages. This unit is not insulated against electrical current. Never touch wires directly or indirectly, otherwise serious injury or death may result.

# **▲** DANGER

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

### Read the Manual

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

### 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. 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.

### 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 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**

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 may occur. Have unit repaired by an authorized servicing dealer before using.

# 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

EMISSION CONTROL INFORMATION ENGINE FAMILY: DEINS.02MED DISPLACEMENT: 2).20c EMISSION COMPLIANCE PERIOD. SONOMY THIS ENGINE MEETS 2013 U.S. EPA EXIDENP & CALIFORNIA EXIDEN MENISION REDULATIONS FOR S.O.B.E. REFER TO OWNER'S MANUAL FOR MAINTENANCE SPECIFICATIONS AND ADJUSTMENTS:

YAMABIKO CORP. MMM/YYYYY E

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)

### 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.

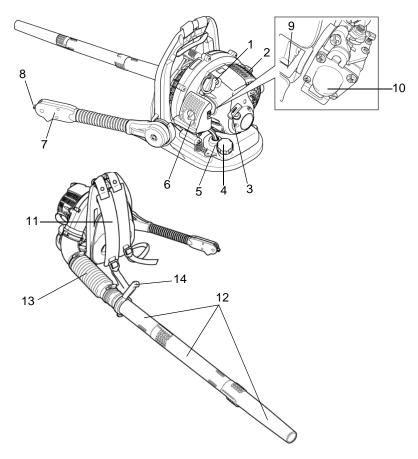
YAMABIKO CORP. MMM/YYYYY

E

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.



### **Hot Decal**



### Sound Label



### **General Warning Decal**



- 1. **SPARK PLUG** Provides spark to ignite fuel mixture.
- 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.
- 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.
- 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**

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

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

1 - Power Head
1 - Flex Pipe
1 - Pipe w/swivel
1 - Straight Pipe
1 - Straight Pipe w/decal
1 - Operator's Manual
1 - Warranty statement
2 - Clamps w/screws
1 - Stick Handle
1 - Bolt 6 x 45 mm
1 - Washer 6 mm
1 - Wing nut



# **ASSEMBLY**

# **A WARNING**

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

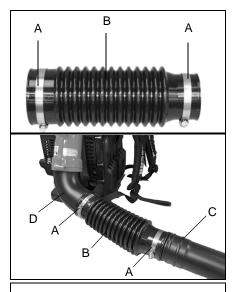
# **Install Blower Pipes / Stick Handle**

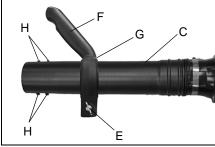
 Assemble clamps (A) onto both ends of flexible pipe
 (B).

- Assemble straight pipe with swivel (C) into flexible pipe (B).
- Assemble flexible pipe (B) to elbow (D) on blower and tighten clamps (A).

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

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





- Assemble straight pipe (J) onto swivel pipe (C), until you feel light resistance.
  Hold swivel pipe and turn straight pipe clockwise, engaging positive locking channels, until connection is firm. Do not force connection.
- Assemble straight pipe with decal (K) to straight pipe (J) 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 two straight pipes 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.

# **A WARNING**

Operation of this equipment may create sparks that can start fires around dry vegitation. This unit is equipped with a spark arrestor to prevent discharge of hot particles from the engine. Contact local fire authorities for laws or regulations regarding fire prevention requirements. OPERATION PB-265LN

### **Fuel**

# **WARNING**

Diesel fuels and 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 diesel or 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. Diesel or 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. ECHO brand Power Fuel<sup>™</sup> is 93 octane, ethanol-free fuel premixed with ECHO Red Armor<sup>®</sup> engine oil at 50:1 ratio. Use of ECHO Power Fuel<sup>™</sup> is recommended to extend engine life in all aircooled 2-stroke and 2/4-stroke hybrid engines.

**Two Stroke Oil** - A two-stroke engine oil meeting ISO-L-EGD (ISO/CD 13738) and J.A.S.O. <u>FD</u> Standards must be used. Echo brand premium Power Blend X<sup>™</sup> 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. M345-<u>FD</u> certified oil, such as Echo premium Power Blend X<sup>™</sup>, will void the two-stroke engine warranty.

# NOTICE

Echo premium Power Blend  $X^{TM}$  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 3 m (10 ft.) from refueling location before starting the engine.

### **Mixing Instructions**

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

Fuel to Oil Mix – 50:1 Ratio			
US		Ме	tric
Gas	Oil	Gas	Oil
Gallons	Oz.	Liter	CC.
1	2.6	5	100
2	5.2	10	200
5	13	25	500

# NOTICE

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

### After use

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

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

# NOTICE

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

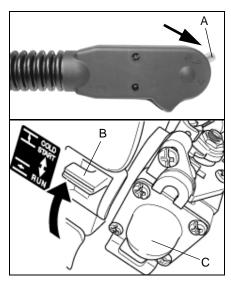
# NOTICE

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

# **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 spring loaded throttle arm downward to a comfortable operating position.
- Throttle Lever
   Move throttle lever (A) to START/IDLE ( ) position.
- Choke
   Move choke (B) to COLD START ( ) position.
- Purge Bulb

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

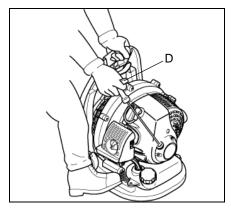


### 4. Recoil Starter

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

### Choke

After engine fires (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 2 - 5.

Note: Allow engine to warm up for several minutes before use.

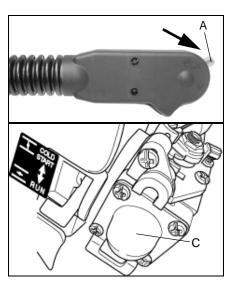
# **Starting Warm Engine**

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

# Throttle Position Lever Move throttle lever (A) to START/IDLE ( ) position.



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

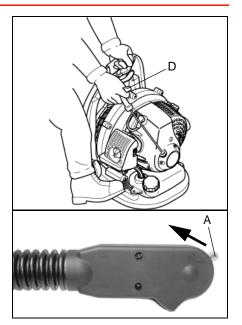


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### 3. Recoil Starter

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

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



# **Stopping Engine**

Throttle Position Lever
 Move throttle position lever
 (A) to START/IDLE ( )
 position and allow engine to return to idle before shutting off engine.

2. Stop Switch

Move throttle lever (A) to STOP (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 dealer repair stop switch before using unit 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.

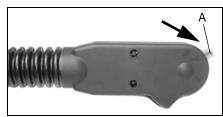
# NOTICE

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

1. Use only during appropriate hours. Contact your local government for the ordinances affecting your area.

///ECHO

- 2. Allow the engine to warm up at a fast idle for a few minutes.
- 3. Set engine speed with throttle lever (A).
- Use lower speed to blow dry grass and 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.
- 7. 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. Minimize dust by using blower at lower speeds. Keep debris on your property.

- Minimize dust by using blower at lower speeds or dampen surface with water. Blower can be used to clean most surfaces when water conservation is desired.
- 9. Use the full blower pipe configuration when blowing.
- After using blowers and other equipment, CLEAN UP! Dispose of debris in trash receptacles.

# **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, we recommend that you take your unit to an ECHO Servicing 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.

Click HERE or go to http://www.echo-usa.com/products/maintenance-kit for information on Maintenance Kits

# Maintenance Intervals

COMPONENT/SYSTEM	MAINTENANCE PROCEDURE	REQ'D SKILL LEVEL			
Daily or Before Use					

COMPONENT/SYSTEM	MAINTENANCE PROCEDURE	REQ'D SKILL LEVEL		
Air Filter	Inspect/Clean *	1		
Choke Shutter	Inspect/Clean *	1		
Fuel System	Inspect (1)	1		
Cooling System	Inspect/Clean	2		
Recoil Starter Rope	Inspect/Clean *	1		
Screws/Nuts/Bolts	Inspect/Tighten/Replace *	1		
Every Refuel				
Fuel System	Inspect (1)	1		
3 Months				
Air Filter	Replace *	1		
Fuel Filter	Inspect *	1		
Fuel Cap Gasket	Inspect *	1		
Spark Plug	Inspect/Clean/Replace *	1		
Muffler Spark Arrestor	Inspect/Clean/Replace *	2		
Cylinder Exhaust Port	Inspect/Clean/Decarbon	2		
Yearly				
Fuel Filter	Inspect/Replace *	1		
Fuel Cap Gasket	Replace *	1		

**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: Tune-Up Kit.

- 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.
- Remove air filter cover.Brush dirt from inside cover.
- 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.

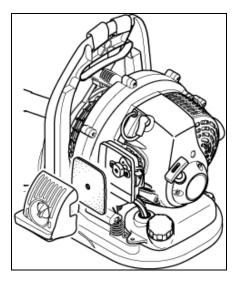


Level 1.

Parts Required: Tune-Up Kit.

# DANGER

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



- Use a clean rag to remove loose dirt from around fuel cap and empty fuel tank.
- Pull the fuel line and filter from the tank.
- 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: Tune-Up Kit

# **NOTICE**

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

- Remove spark plug and check for fouling, worn and rounded center electrode.
- Clean the plug or replace with a new one. DO NOT sand blast to clean. Remaining sand will damage engine.
- 0.65 mm (0.026 in.)
- 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.

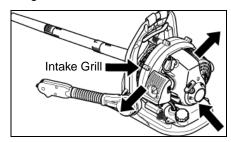
Parts Required: None if you are careful.

# 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:

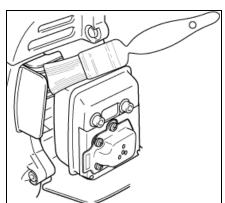
- Air intakes are blocked, preventing cooling air from reaching the cylinder.
- Dust and grass build up on the outside of the cylinder. This build up insulates the engine and prevents the heat from leaving.



Note: 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**

- 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.



# Exhaust System

### **Spark Arrestor Screen**

Level 2.

Parts Required: Spark Arrestor Screen, Gasket

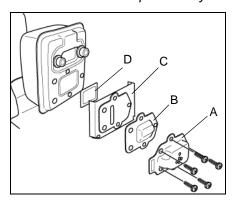
# NOTICE

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.
- 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.

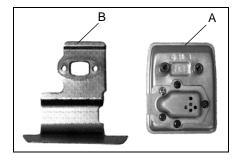
# **Exhaust Port Cleaning**

Level 2.

Parts Required: As needed: Heat Shield

Remove spark plug lead from spark plug, and remove engine cover.

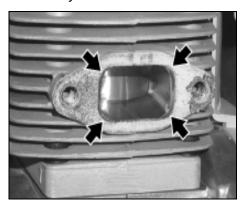
- Place piston at top dead center. Remove muffler (A) and heat shield (B).
- Use a wood or plastic scraping tool to clean deposits from cylinder exhaust port.



# 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.
- Install heat shield and muffler.
- Tighten muffler mounting bolts (or nuts) to 70-80 kgf•cm (60-70 in•lbf).
- 7. Install engine cover and attach spark plug lead.
- 8. Start engine, and warm to operating temperature.
- Stop engine, and retighten 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 <u>may</u> 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.

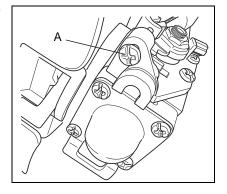
### Level 2.

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

PB-265LN STORAGE

	ENGINE PROBLEM TROUBLESHOOTING CHART			
Problem	Check	Status	Cause	Remedy
Engine does not crank	N/A	N/A	Internal engine problem	See your Echo dealer
Engine runs,	Blower pipe	Pipe clogged	Build-up of debris	Unclog
blower		Pipe loose	Vibration	Tighten
doesn't work or is weak/ uneven		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.

# **A** DANGER

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



STORAGE PB-265LN

- 2. Place the stop switch in the "OFF" position.
- 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.
- 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.
- 8. Pull the recoil starter handle 2-3 times to distribute the oil inside the engine.
- Observe the piston location through the spark plug hole. Pull the recoil handle slowly until the piston reaches the top of its travel and leave it there.
- 10. Install the spark plug (do not connect ignition cable).
- 11. 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)	5.2 kg (11.5 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 <sup>TM</sup> or ECHO Red Armor <sup>®</sup> 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 <sup>TM</sup> or ECHO Red Armor <sup>®</sup> Premium Universal 2-Stroke Oil
Fuel Tank Capacity	0.66 lit. (22.3 US fl. oz.)
Starter System	Automatic Recoil 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 <sup>3</sup> /min. (375 cu. ft./min.)
Sound Level at 50 ft. dB(A) scale per ANSI B175.2	64 dB(A)

### PRODUCT REGISTRATION

### Thank you for choosing ECHO Power Equipment

Please go to <a href="http://www.echo-usa.com/Warranty/Register-Your-ECHO">http://www.echo-usa.com/Warranty/Register-Your-ECHO</a> to register your new product on-line. It's **FAST** and **EASY!** NOTE: your information will never be sold or misused by ECHO, Inc. Registering your purchase enables us to contact you in the unlikely event of a service update or product recall, and verifies your ownership for warranty consideration.

If you do not have access to the Internet, you can complete the form below and mail to:

ECHO Inc., Product Registration, PO Box 1139, Lake Zurich IL 60047.



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

Please Print : Por Favor Enscriba Con Letra De Molde : En Lettre Carré S.V.P.

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# **Notes**

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