SHINDAIW	R'S/OPERA	TOR'S MA	ANUAL

# **EB633RT BLOWER**

EB633RT

# WARNING

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

#### 

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.

**Shindaiwa**<sup>®</sup>

X7531126005 11/19

# INTRODUCTION

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.

Read and understand all provided literature. Literature contains specifications and information for safety, operation, maintenance, storage and assembly specific to this product. For additional literature, including safety manuals where applicable, or questions regarding terms used in this manual, visit:



https://www.echo-usa.com/manuals OR



https://www.shindaiwa-usa.com/manuals



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



## A WARNING

Read and understand all provided literature before use. Failure to do so could result in serious injury

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# 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.

## 

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.

#### A 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.

## INTERNATIONAL SYMBOLS



### **CIRCLE AND SLASH SYMBOL**

This symbol means the specific action shown is prohibited. Ignoring these prohibitions can result in serious or fatal injury.

Description

lanition

ON/OFF

Primer Bulb

Carburetor

adjustment

High Speed

Mixture

**Choke Control** 

"RUN"

Position

(Choke Open)

Fast Speed

Away 15 m (50 Ft.)

OFF

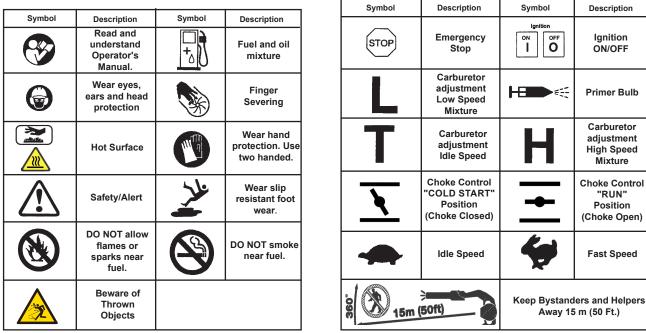
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### NOTE

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

### IMPORTANT

The enclosed message provides information necessary for the protection of the unit.



# 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

Wear eye protection that meets ANSI Z87.1 or CSA Z94.3 requirements whenever you operate the unit.

### Hand Protection

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

### **Breathing Protection**

Wear a facemask to protect against dust.

### **Hearing Protection**

Shindaiwa 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.

# 

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, Shindaiwa does not recommend the use of Shindaiwa 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

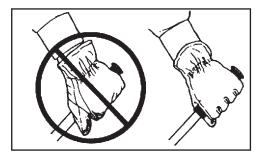
It is believed that overusing the muscles and tendons of the fingers, hands, arms, and shoulders may cause soreness, swelling, numbness, weakness, and extreme pain in those areas. Certain repetitive hand activities may put you at a high risk for developing a Repetitive Stress Injury (RSI). An extreme 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 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.



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



### **Read the Manuals**

• Provide all users of this equipment with the Operator's Manual 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.

### Keep a Firm Grip

• Hold the front and rear handles with both hands, with thumbs and fingers encircling the handles.

### Keep a Solid Stance

• Maintain footing and balance at all times. Do not stand on slippery, uneven or unstable surfaces. Do not work in odd positions or on ladders. Do not over reach.

### Avoid Hot Surfaces

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



## EQUIPMENT

## WARNING

Use only 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 service dealer.

# 

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.

# 

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.

## 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.

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

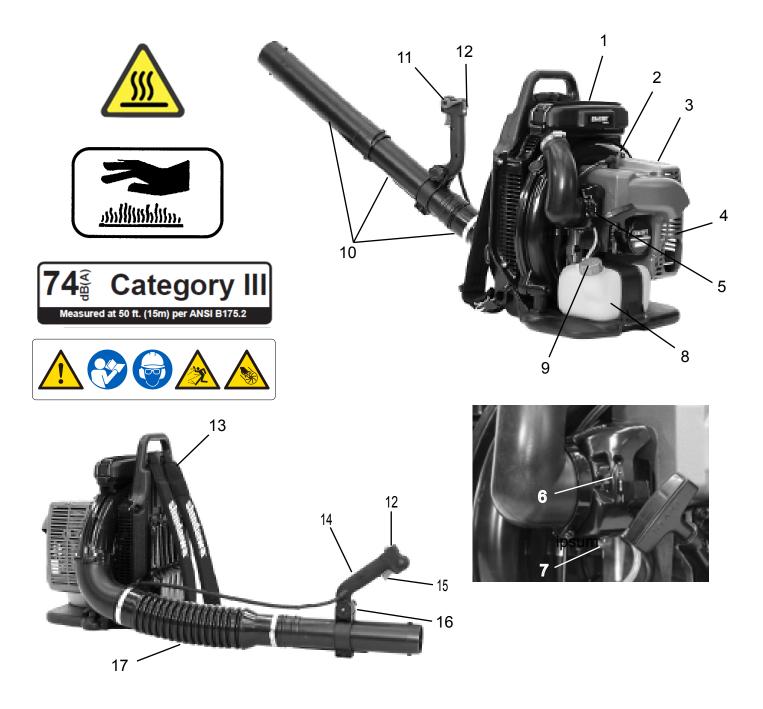


### PRODUCT EMISSION DURABILITY (EMISSION COMPLIANCE PERIOD)

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 these safety decals on your unit. Make sure the decals are legible and that you understand and follow the instructions on them. If a decal cannot be read, a new one can be ordered from your dealer. The safety decal is for example only. Your label may appear slightly different.



# DESCRIPTION

- 1. Air Cleaner
- 2. Spark Plug
- 3. Safety Decal
- 4. Spark Arrestor Muffler or Spark Arrstor Muffler with Catalyst
- 5. Recoil Starter Handle
- 6. Choke
- 7. Purge Bulb
- 8. Fuel Tank
- 9. Fuel Tank Cap
- 10. Blower Pipes
- 11. Throttle Position Lever
- 12. Stop Switch
- 13. Shoulder Harness
- 14. Handle
- 15. Throttle Trigger
- 16. Locking Knob
- 17. Flexible Pipe

# CONTENTS

- 1 Power Head
- 1 Flex Pipe
- 1 Pipe w/swivel
- 1 Straight Pipe
- 1 Straight Pipe
- 1 Operator's Manual
- 1 Emission Control Warranty Statement
- 1 Plastic Bag
- 2 Clamps w/screws

# ASSEMBLY

## WARNING

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

## **INSTALL BLOWER PIPES**

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

#### NOTE

Clamp with cable guide loop (G) fits elbow end of flexible pipe.

#### NOTE

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

2. Assemble flexible pipe to elbow (D) on blower. Position clamp with cable guide loop (G) on outside of flexible pipe and tighten clamp.

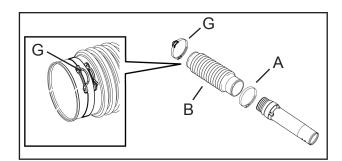
### NOTE

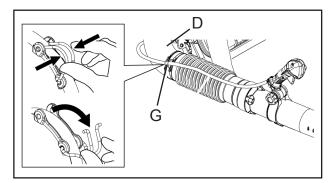
Hang handle freely from blower to assure throttle cable is not twisted before installing handle (E).

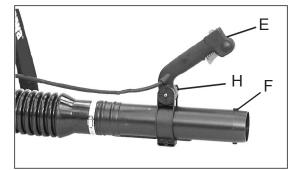
- 3. Position cable along the outside of elbow. Loosen knob (H) on handle (E). Align notches in handle with tabs (F) and install onto swivel pipe (C) past long ridges in pipe.
- 4. Assemble swivel pipe into flexible pipe and tighten clamp (A).
- 5. Clip throttle cable into throttle cable guide loop.
- 6. Move handle (E) to desired position. Tighten knob (H) hand tight.
- 7. Assemble straight pipe (K) onto swivel pipe, until you feel light resistance. Do not force connection. Hold swivel pipe and turn straight pipe clockwise, engaging positive locking channels, until connection is firm. Do not force connection.
- 8. Assemble straight pipe (J) to straight pipe as in step 7.

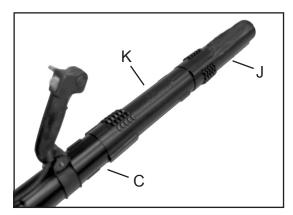
### NOTE

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 7 & 8.









# 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.

# 

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

# 

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 maintain a direct, clear line of site to the unit and the work being performed.

- Always be alert for changes in operation of unit.
- Always shut engine off before transporting unit to new location.

## FUEL

# 

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. Use of ECHO branded fuel is recommended to extend engine life in all air-cooled 2-stroke and 2/4-stroke hybrid engines.

*Two Stroke Oil* - A two-stroke engine oil, such as ECHO branded 2-stroke oils, meeting ISO-L-EGD (ISO/CD 13738) and J.A.S.O. FD Standards must be used. ECHO branded 2-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.

# 

2-Stroke engine oil contains petroleum distillates and other additives that may be harmful if swallowed. Heated oil can release vapors that can cause flash fire, or ignite with explosive force. Read and follow the oil manufacturer's instructions, and observe all safety warnings and precautions for handling flammable liquids. For more detailed safety and first aid information, visit www.echo-usa.com for a copy of the Material Safety Data Sheet.

- KEEP OUT OF REACH OF CHILDREN.
- If swallowed, do not induce vomiting. CALL PHYSICIAN OR A POISON CONTROL CENTER IMMEDIATELY.
- WEAR SAFETY GLASSES when mixing or handling.
- AVOID repeated or prolonged skin contact
- AVOID inhaling oil mists or vapors.

### NOTICE

ECHO branded 2-stroke oils 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.

- Use an approved fuel contain
- 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.

## DANGER

Gasoline vapor is heavier than air, and can travel along the ground to nearby sources of ignition such as electrical motors, pilot lights, and hot or running engines. Vapors ignited by an ignition source can flash back to the fuel container, resulting in an explosion, fire, serious or fatal injuries, and extensive property damage.

### **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.

Fu	el to Oil M	ix - 50:1 Ra	tio
U	IS	Me	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.

• Empty the fuel tank prior to storing the unit. 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 30 days, 90 days when a fuel stabilizer is added.

### NOTICE

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

### NOTICE

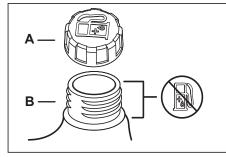
Used oil and gasoline, and soiled towels are hazardous waste materials. Disposal laws vary by locality.

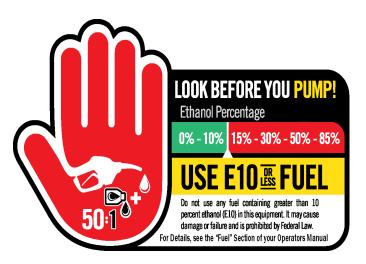
## Filling the Fuel Tank

### **CAUTION!**

Slowly remove the fuel cap after stopping the engine.

- 1. Place the unit on a level surface.
- 2. Clear any dirt or other debris from around the fuel filler cap.
- 3. Remove the fuel cap (A), and fill the fuel tank with clean, fresh fuel. Do not fill above bottom of fuel tank neck (B).
- 4. Reinstall the fuel tank cap (A) and tighten firmly.
- 5. Wipe away any spilled fuel before starting engine.

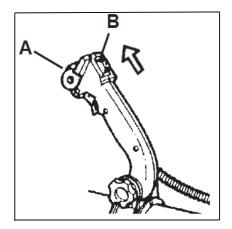




# STARTING COLD ENGINE

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.

- 1. Move throttle lever (A) forward to idle position.
- 2. Slide stop switch (B) forward to run position.
- 3. Move choke (C) up to "Cold Start" position
- 4. Pump purge bulb (D) until fuel is visible and flows freely in the clear fuel tank return line. Pump bulb an additional 4 or 5 times
- 5. Pull recoil starter handle (E) until engine fires (5 or 6 pulls maximum).
- 6. Move choke (C) down to run position  $\bullet$ . If necessary, restart engine.

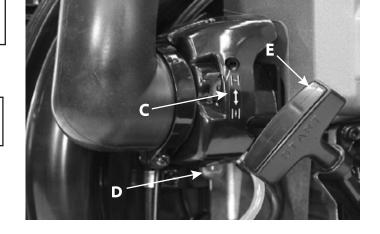


### NOTE

If engine does not start after 5 pulls, move choke to "Cold Start" position **4** and repeat steps 4 & 5.

#### NOTE

Allow engine to warm up before use.



## **STARTING WARM ENGINE**

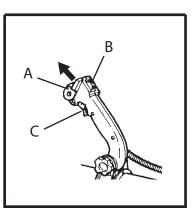
- 1. Move throttle lever (A) forward to idle position.
- 2. Slide stop switch (B) forward to run position.
- 3. Pull recoil starter handle (E) and engine should start. Do not use choke (C).

NOTE

If engine does not start after 5 pulls, repeat Cold Starting Procedure.

# **STOPPING ENGINE**

- 1. Release throttle trigger (C).
- 2. Move throttle position lever (A) forward to idle position and allow engine to return to idle before shutting engine off.
- 3. Slide stop switch (B) to Stop position.



## WARNING

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

## **OPERATING BLOWER**

## 

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

### IMPORTANT

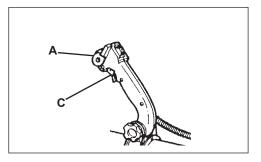
Use reduced speed only when performing light-duty tasks or to comply with local noise regulations. Continuous low speed operation may allow fuel/oil residue to build-up on the piston and cause rapid build-up of carbon on the spark arrestor screen, resulting in overheating and engine damage. To reduce harmful build-up, run engine at wide open throttle for at least 5 minutes every hour, and inspect/clean the spark arrestor screen every 40 hours of operation. To avoid engine damage due to over-revving, do not block blower pipe opening.

Read the Safety Section carefully.

- 1. Use only during appropriate hours.
- 2. Allow the engine to warm up at a fast idle for a few minutes.
- 3. Control engine speed with throttle trigger (C), or throttle position lever (A). Rotate throttle position lever forward for lower speed, back for higher speed.
- 4. Use lower speed to blow dry leaves from walks, patios and drives.
- 5. Additional speed may be necessary to clean grass and 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 and by dampening material with water/mist when necessary. 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.

# 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 may result.

Your 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 a Servicing Dealer for maintenance. To help you decide whether you want to DO-IT-YOURSELF or have the Dealer do it, each maintenance task has been graded. If the task is not listed, see your 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.

Level 3 = See your dealer.

Click HERE or go to http://www.echo-usa.com/products/maintenance-kit

or

 $HERE\ https://www.shindaiwa-usa.com/you-can.aspx$ 

For information about maintenance kits.

## 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.

\* All recommendations to replace are based on the finding of damage or wear during inspection.

# AIR FILTER

Level 1.

Parts Required: Tune up kit

#### NOTE

Always brush dirt and debris away from air cleaner area prior to cleaning air filter.

- 1. Brush dirt off air cleaner area. Keep dirt away from engine and air intake grid.
- 2. Remove air filter cover. Brush dirt from inside cover and away from edges of air filter.
- 3. Check air filter seal for tight fit with air filter case.
- 4. Remove air filter from case. Use care to prevent dirt and debris from falling into air filter case.
- 5. Inspect filter element and seal. Replace filter if any of these problems are present:
- Air filter seal does not fit tightly against case
- · Air filter seal is distorted, worn, or damaged
- · Air filter element has holes or other damage
- Air filter element is saturated with dirt
- Air filter element is soaked with fuel mix
- 6. If air filter is in good condition and can be cleaned and reused, lightly brush debris from air filter element, or blow filter element clean using low pressure (276 kPa [40 psi] or less) compressed air directed at inside of filter.

### IMPORTANT

When using compressed air, always direct air stream at inside surface of filter so dust and debris will be blown out of filter. Keep air nozzle 15 - 20 cm (6 - 8 inches) away from filter to prevent damage to filter.

7. Install air filter in case, and replace cover.

### NOTICE

Actual replacement interval for air filter depends on operating conditions. Operation in dustier applications requires more frequent cleaning and replacement. Continued operation with a damaged or excessively dirty filter will allow dirt and debris to enter engine, and result in poor performance, rapid engine wear, and premature engine failure.



# FUEL FILTER

### Level 1.

Parts Required: Tune up kit

# 

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. Pull the fuel filter from the tank.
- 3. Remove the filter from the line and install the new filter.

### IMPORTANT

Do not damage fuel line while removing fuel filter from tank.

### 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

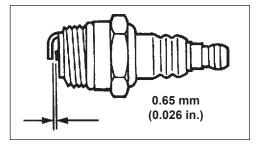
Level 2.

Parts Required: Tune up kit

### IMPORTANT

Use only NGK BPM8Y spark plug (BPMR8Y 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.

### IMPORTANT

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.

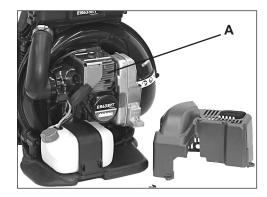
## **Cleaning Grill**

1. Remove accumulated debris from intake grill between backpack frame and blower housing.

## **Cleaning Cylinder Fins**

- 1. Remove spark plug lead from spark plug, and remove engine cover.
- 2. Clean cylinder fins (A) to allow cooling air to pass freely.
- 3. Install engine cover and attach spark plug lead.





## **EXHAUST SYSTEM** Spark Arrestor Screen

### Level 2.

Parts Required: Spark arrestor screen, Gaskets

# WARNING

Do not perform maintenance on engine or muffler until engine and muffler are completely cool, otherwise serious personal injury may result.

### IMPORTANT

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, and remove engine cover.
- 2. Remove spark arrestor covers (A), gaskets (B), and spark arrestor screen (C) from muffler. Replace screen if plugged with carbon deposits.

#### NOTE

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

- 3. Install spark arrestor screen, gaskets, and cover.
- 4. Install engine cover and 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.

### IMPORTANT

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 110-150 kgf cm (95-130 in lbf).
- 7. Install engine cover and attach spark plug lead.
- 8. Start engine, and warm to operating temperature.
- 9. Stop engine, and re-tighten mounting bolts to specifications.

## **CARBURETOR ADJUSTMENT**

### **Engine Break-In**

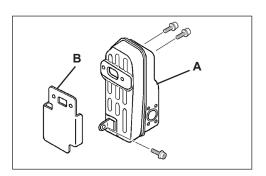
New engines must be operated a minimum duration of two tanks of fuel break-in before carburetor adjustments can be made. During the break-in period your engine performance will increase and exhaust emissions will stabilize. Idle speed can be adjusted as required.

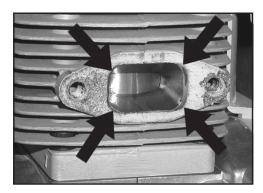
### High Altitude Operation

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 Shindaiwa service dealer.

### IMPORTANT

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.

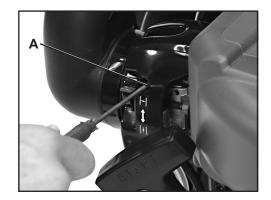
### NOTE

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 dealer.

### **Before** Adjustment

Check 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.
- 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.



# **TROUBLE SHOOTING**

		TROUBLESHO	OTING 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 dealer
	Fuel at cylinder	No fuel at cylinder	Carburetor	See your dealer
Engine cranks - starts hard/ doesn't		Muffler wet with fuel	Fuel Mixture too rich	Open choke Clean/replace air filter Adjust carburetor See your dealer
start	Spark at end of plug wire	No spark	Stop switch off Electrical problem Interlock switch	Turn switch to ON See your dealer See your 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
	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 does not	Spark Plug	Plug dirty/worn	Normal wear	Clean and adjust or replace
accelerate properly	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 dealer
Engine runs, blower doesn't	Blower pipe	Pipe clogged	Build-up of debris	Unclog
work or is		Pipe loose	Vibration	Tighten
weak/uneven		Pipe damaged	Wear/Misuse	Replace

# 

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.

# 

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

# LONG TERM STORAGE (OVER 30 DAYS)

- 1. Store unit in a dry, dust free place, out of the reach of children.
- 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. Allow engine to cool. Remove the spark plug lead from the spark plug. Remove the spark plug. Pour 7 cc (0.25 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.
- 9. 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. Connect the spark plug lead to the spark plug.

# **SPECIFICATIONS**

MODEL	- EB633RT
Length	- 375 mm (14.8 in.)
Width	- 485 mm (19.0 in.)
Height	- 527 mm (20.8 in.)
Weight (dry	- 11.0 kg (24.9 lb.)
Engine Type	- Air cooled, two-stroke, single cylinder gasoline engine
Displacement	- 63.3 cc (3.86 cu. in.)
Bore	- 48.0 mm (1.89 in.)
Stroke	- 35.0 mm (1.38 in.)
Carburetor	- Diaphragm type w/purge
Ignition System	- Flywheel Magneto, capacitor discharge ignition type
Spark Plug	- NGK BPM8Y Gap 0.65 mm (0.026 in.)
Exhaust System	- Spark arrestor muffler or spark arrestor muffler with catalyst
Fuel	- Mixed (Gasoline and Two-stroke Oil)
Fuel/Oil Ratio	- 50:1
Gasoline	- Use 89 Octane unleaded. Do not use fuel containing methyl alcohol, more than 10% ethyl alcohol or 15% MTBE. Do not use alternative fuels such as
	E-15 or E-85.
Oil	- ISO-L-EGD (ISO/CD 13738) and J.A.S.O. M345- FD, two-stroke, air-
	cooled engine oil.
Fuel Tank Capacity	- 2.0 L (67.7 US fl. oz.)
Recoil Starter System	- Automatic Recoil Starter Centrifugal Type
Idle Speed	- 2,800 RPM
Wide Open Throttle Speed	- 7,000 RPM
Maximum Air Speed (Measured at pipe end)	- 330 km/h (233 mph)
Average Air Speed (Measured at pipe end)	- 314 km/h (195 mph)
Air Volume (Measured at pipe end)	- 18.4 m <sup>3</sup> /min. (651 cu. ft./min.)
Sound Level at 50 ft. dB(A) scale per ANSI B175.2	- 74 dB(A)

## WARRANTY STATEMENTS

#### ECHO INCORPORATED LIMITED WARRANTY STATEMENT FOR ECHO AND SHINDAIWA PRODUCTS SOLD IN USA AND CANADA BEGINNING 01/01/2010

#### ECHO INCORPORATED'S RESPONSIBILITY

ECHO Incorporated's (ECHO, Inc.) Limited Warranty, provides to the <u>original</u> purchaser that this ECHO or Shindaiwa product is free from <u>defects</u> in <u>material</u> and <u>workmanship</u>. Under normal use and maintenance from date of purchase, ECHO Inc. agrees to repair or replace at ECHO Inc.'s discretion, any defective product free of charge at any authorized ECHO or Shindaiwa servicing dealer (as applicable) within listed below application time periods, limitations and exclusions. THIS LIMITED WARRANTY IS ONLY APPLICABLE TO ECHO AND SHINDAIWA PRODUCTS SOLD BY AUTHORIZED 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 and does not exclude or change the Emission control warranty statement that is supplied separately 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 <u>www.echo-usa.com</u> or call **1-800-432-ECHO**. For a list of Authorized Shindaiwa Dealers refer to <u>www.shindaiwa-usa.com</u> or call **1-877-986-7783**.

#### **OWNER'S RESPONSIBILITY**

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

The owner shall demonstrate <u>reasonable care and use</u>, and follow preventative maintenance, 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 or Shindaiwa unit to an authorized servicing dealer for warranty repairs (within the applicable warranty period), and arrange for pick-up or return of your unit after the repairs have been made. For your nearest authorized ECHO servicing dealer, call ECHO's Dealer Referral Center, at 1-800-432-ECHO or you can locate an ECHO servicing dealer at <u>www.echo-usa.com</u>. For your nearest authorized Shindaiwa servicing dealer, call Shindaiwa's Dealer Referral Center, at 1-877-986-7783 or you can locate a Shindaiwa servicing dealer at <u>www.shindaiwa-usa.com</u>. Should you require assistance or have questions concerning this Warranty Statement, you can contact our Consumer Product Support Department at 1-800-673-1558. Contact us through the web at <u>www.echo-usa.com</u>, <u>www.shindaiwa-usa.com</u>, or Email us at support@echo-usa.com.

#### PRODUCT WARRANTY PERIOD HOMEOWNER APPLICATION

• 5 YEAR WARRANTY - All units for homeowner, 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, trimmer 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, tines, belts, PowerBroom<sup>tm</sup> and nylon trimmer heads for homeowner 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.
- 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, Multipurpose Tool attachments, and PRO ATTACHMENT SERIES Split Shaft attachments carry the same warranty
  duration as the units they are designed to fit.
- HP-43, HP-44, and HP-62 hand pruners are covered by a lifetime warranty. Warranty is handled through Echo's Consumer Support Department. For specific information, visit www.echo-usa.com.
- All handheld sprayers of 50 ounces or less are covered by a 90-day warranty for homeowner applications.

#### COMMERCIAL APPLICATION

- 1 YEAR WARRANTY All Chain 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, trimmer 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, tines, belts, PowerBroom<sup>Im</sup> 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.
- 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, Multipurpose Tool attachments, and PRO ATTACHMENT SERIES Split Shaft attachments carry the same warranty duration as the units they are designed to fit.
- HP-43, HP-44, and HP-62 hand pruners are covered by a lifetime warranty. Warranty is handled through Echo's Consumer Support Department. For specific information, visit www.echo-usa.com.
- All handheld sprayers of 50 ounces or less are not covered by warranty for commercial applications.

#### **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.
   EXCEPTIONS:
  - · HP-43, HP-44, and HP-62 hand pruners are covered by a lifetime warranty. Warranty is handled through Echo's Consumer Support

# WARRANTY STATEMENTS

- Department. For specific information, visit www.echo-usa.com.
- All handheld sprayers, of 50 ounces or less are not covered by warranty for rental applications.

\* ECHO Inc.'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. ECHO Inc. does not offer an over the counter exchange program. Any product re-built or sold through an unauthorized dealer, or an unauthorized outlet store, is sold without ECHO Inc.'s limited warranty coverage. This Limited Warranty coverage is extended to the <u>original purchaser</u> <u>only, and is not transferable except for emission related parts</u>. Repair parts and accessories replaced under this warranty are warranted only for the balance of the original unit or accessory warranty period. Any damage caused by improper installation or improper maintenance is not covered by this warranty. All parts or products replaced under warranty become the property of ECHO Inc.

#### PURCHASED REPAIR PARTS, SHORT BLOCKS AND ACCESSORIES

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

#### ATTENTION TWO-STROKE ENGINE POWER PRODUCT OWNERS

Two-stroke engine power products are quality-engineered and manufactured to exact tolerances to provide superior performance. To help ensure the performance of the unit, it is <u>required</u> to use two-stroke oil which meets the ISO-L-EGD Standard per ISO/CD 13738 and JASO M345FD Standards. **ECHO Power Blend™ and Red Armor,™ and Shindaiwa Red Armor™** are premium two-stroke oils 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 <u>that do not meet the ISO-L-EGD (ISO/CD 13738) and JASO M345FD</u> <u>Standards</u>. 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<sup>™</sup> and Red Armor,<sup>™</sup> and Shindaiwa Red Armor<sup>™</sup> meet the ISO-L-EGD and JASO M345FD Standard. Emission related parts are covered for 5 years homeowner 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 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 operator's manual is the <u>customer's responsibility</u>.
- Failures due to improper set-up, pre-delivery service or repair service by anyone other than authorized 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<sup>®</sup> 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 servicing dealer.

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

#### DISCLAIMER OF IMPLIED WARRANTIES

This limited warranty is in lieu of all other expressed or implied warranties, including any warranty of FITNESS FOR A PARTICULAR PURPOSE OR USE and any implied warranty of **MERCHANTABILITY** otherwise applicable to this product. ECHO Inc. 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, except for the emission control warranty statement that is provided separately with the product when originally purchased. This limited warranty may be modified only by ECHO Inc.

X7562090702 11/6/2017

# **PRODUCT REGISTRATION**

### Thank you for choosing Shindaiwa Power Equipment

Please go to http://www.shindaiwa-usa.com 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

Shindaiwa® Product Regis	PRODUCT REGISTRATION CARD : TARJETA	TARJETA DE REGISTRO : CART	CARTE D'ENREGISTREMENT DU PRODUIT
ONLINE OPTION: Register online and save a stamp! You will be alerted of product updates and/or be sent new Shindawa product information and special offers. Simply go to: www.shindaiwa-usa.com	OPCIÓN POR INTERNET: ¡Registrese en la pagina web y ahorre una estampilal. Le alertaran sobre actualizzaciones del producto y/o se le envirar imformación sobre los nuevos pro- ductos Shindaiwa y las ofertas especiales. Simplemente visite: www.shindaiwa-usa.com		OPTION EN LIGNE : Enregistrer en ligne et épargner un timbre! Vous serez informé sur les nouveaux produits Shindalwa et les mises à jour de produit ainsi que les offres spéciales. Simplement visitez le: www.shindalwa-usa.com
Please Print : Por Favor Enscriba Con Letra De Molde : En Lettre Carré S.V.P	1 Lettre Carré S.V.P.	Col	Confidential: Information provided will not be shared or sold
Purchaser's Name : Nombre del Comprador : Nom de l'acheteur	teteur	Primary use of tool: □Professional □ Homeow Uso primario de la herramienta:□Profesional □ U Usage principal : □Professionnel □ Residential Do von wich to receive pariodic Shindaiwa moduri	Primary use of tool:
Address : Dirección : Adresse		defers by e-mail? ☐ Yes ☐ No defers by e-mail? ☐ Yes ☐ No ¿Desea usted recibir información periódica dectronico sobre el producto Shindaiwa? Souhaita-zvous nerevoir nériodiquemen	offers by e-mail? To yes the product in the product internation and product in the product in the product in the product is the product of th
City : Ciudad : Ville State : Estado : Z Province	Zip Code : Código Postal : Code Postal	Shindaiwa et les offres spécie Did you visit the Shindaiwa we	Shindaiwa et les offres spéciales par courrier électronique ? □ Oui □ Non Did you visit the Shindaiwa website before purchasing your product? □ Yes □ No
E-Mail Address : Dirección De Correo Electrónico : Courrier Électronique	er Électronique	Visito usted la pagina web Sh Si Do Avez-vous visité le site d'Shin Oui Don	Visito usited la pagina web Shindaiwa antes de comprar su producto? 261
Phone Number : Número De Teléfono : Téléphone Dat	Date of Purchase : Fecha de la Compra : Date de l'achat	What factor(s) most influenced your purchase?	enced your purchase? Price Dealer Prior Experience Ouelity Reand
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Registering your purchase enables us to contact you in the unlikely event of a service update or product recall and verifies your over a service update or product recall and verifies your contracts print ands perime tester at contract contract your part on service on a service of a tester such and verifies yean occurrent and the importance on the service of a service of a tester such and verifies yean occurrent and the product or year and the product of the product o	of a service update or product recall and verifies your encontraction on uster as on exuptiver eventio action de propriedad en caso de uctoure verventio action de propriedad en caso de uctoure verventions e cas improbable de modifications des instructions e en cas de vol ou de perfe.	Ami/Famille	wa-usa.com

# SERVICING INFORMATION

## PARTS/SERIAL NUMBER

Genuine SHINDAIWA Parts and Assemblies for your SHINDAIWA products are available only from an Authorized SHINDAIWA 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 SHINDAIWA Service Dealer. For the name and address of the Authorized SHINDAIWA Service Dealer nearest you, ask your retailer or call: 1-877-986-7783. Dealer information is also available on WWW.SHINDAIWA-USA.COM. When presenting your unit for Warranty service/repairs, proof of purchase is required.

## **CONSUMER PRODUCT SUPPORT**

If you require assistance or have questions concerning the application, operation or maintenance of this product you may call the SHINDAIWA Consumer Product Support Department at 1-877-986-7783 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 SHINDAIWA equipment on-line at WWW.SHINDAIWA-USA.COM 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 Literature

In addition to finding information online, information is available from your Authorized Shindaiwa Service Dealer, or by contacting ECHO Inc., 400 Oakwood Road, Lake Zurich, IL 60047 (800-673-1558).

NOTES

## NOTES

## NOTES



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