


SHINDAIWA OWNER'S/OPERATOR'S MANUAL


EB212 BLOWER

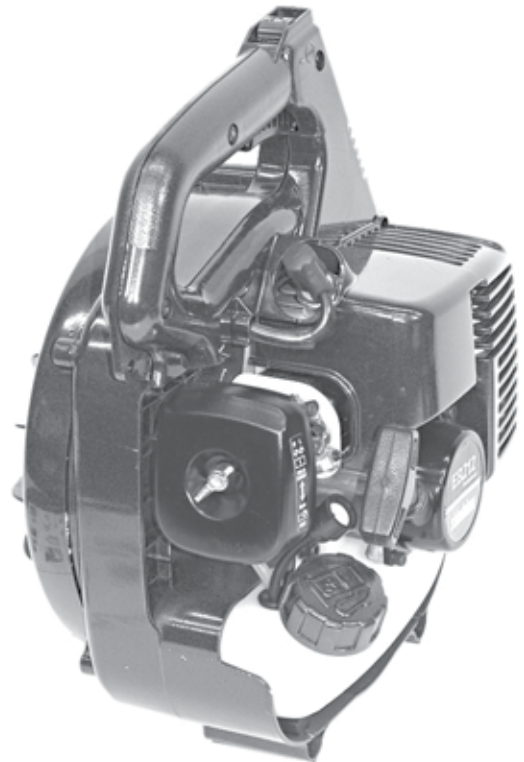
! WARNING !

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

WARNING ! DANGER

 The muffler or catalytic muffler and surrounding cover may become extremely hot.

 Always keep clear of exhaust and muffler area, otherwise serious personal injury may occur.



! WARNING! Minimize the risk of injury to yourself and others! Read this manual and familiarize yourself with the contents. Always wear eye and hearing protection when operating this unit.

INTRODUCTION

The Shindaiwa EB212 Blower is designed and built to deliver superior performance and reliability without compromise to quality, comfort, safety, or durability.

Shindaiwa engines represent the leading edge of high performance engine technology, delivering exceptionally high power at remarkably low displacement and weight. As an owner/operator, you'll soon discover why Shindaiwa is simply in a class by itself.

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..



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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.


SAFETY


MANUAL SAFETY SYMBOLS AND IMPORTANT INFORMATION

Throughout this manual and on the product itself, you will find safety alerts and helpful, informational messages preceded by symbols or key words. The following is an explanation of those symbols and key words and what they mean to you.

 **DANGER**
The safety alert symbol accompanied by the word “DANGER” calls attention to an act or condition which **WILL** lead to serious personal injury or death if not avoided.

 **WARNING**
The safety alert symbol accompanied by the word “WARNING” calls attention to an act or condition which **CAN** lead to serious personal injury or death if not avoided.

 **CAUTION**
The safety alert symbol accompanied by the word “CAUTION” calls attention to an act or condition which may lead to minor or moderate personal injury if not avoided.











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

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.

INTERNATIONAL SYMBOLS

Symbol	Description	Symbol	Description
	Read and understand Operator's Manual.		Fuel and oil mixture
	Wear eyes, ears and head protection		Finger Severing
	Hot Surface		Wear hand protection. Use two handed.
	Safety/Alert		Wear slip resistant foot wear.
	DO NOT allow flames or sparks near fuel.		DO NOT smoke near fuel.

Symbol	Description	Symbol	Description
	Emergency Stop		Ignition ON/OFF
	Carburetor adjustment Low Speed Mixture		Primer Bulb
	Carburetor adjustment Idle Speed		Carburetor adjustment High Speed Mixture
	Choke Control "COLD START" Position (Choke Closed)		Choke Control "RUN" Position (Choke Open)
	Idle Speed		Fast Speed

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 CE 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 face mask to protect against dust.

Hearing Protection

ECHO recommends wearing hearing protection whenever unit is used.

Proper Clothing

Wear snug fitting, durable clothing;

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

Wear sturdy work shoes with nonskid soles;

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

Wear no-slip, heavy duty work gloves.

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

Hot Humid Weather

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



WARNING

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



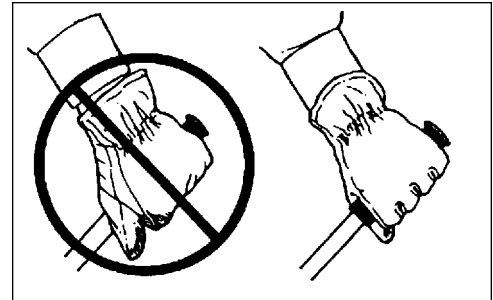
Repetitive Stress Injuries

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.



DANGER

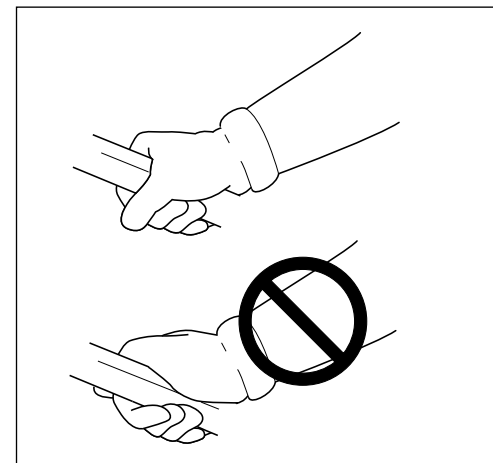
Do not operate this product indoors or in inadequately ventilated areas. Engine exhaust contains poisonous emissions and can cause serious injury or death.

Read the Manuals

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

Clear the Work Area

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



Keep a Firm Grip

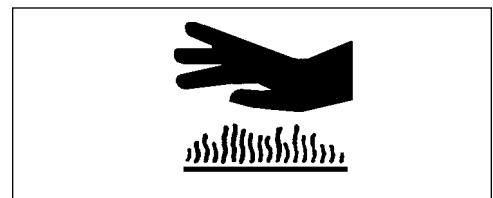
- Hold the handle in one hand, with thumb and fingers encircling the handle.

Keep a Solid Stance

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

Avoid Hot Surfaces

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



EQUIPMENT CHECK



WARNING

Use only Shindaiwa 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.



WARNING

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

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



WARNING

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

EMISSION CONTROL (EXHAUST & EVAPORATIVE)

EPA 2010 and Later and/or C.A.R.B. TIER III

The emission control system for the engine is EM (engine modification) and, if the second to last character of the Engine Family on the Emission Control Information label (sample below) is “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.

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



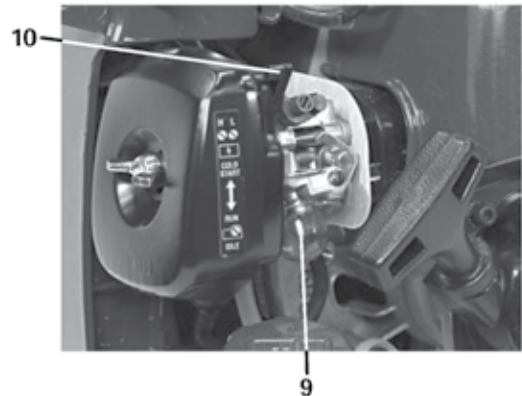
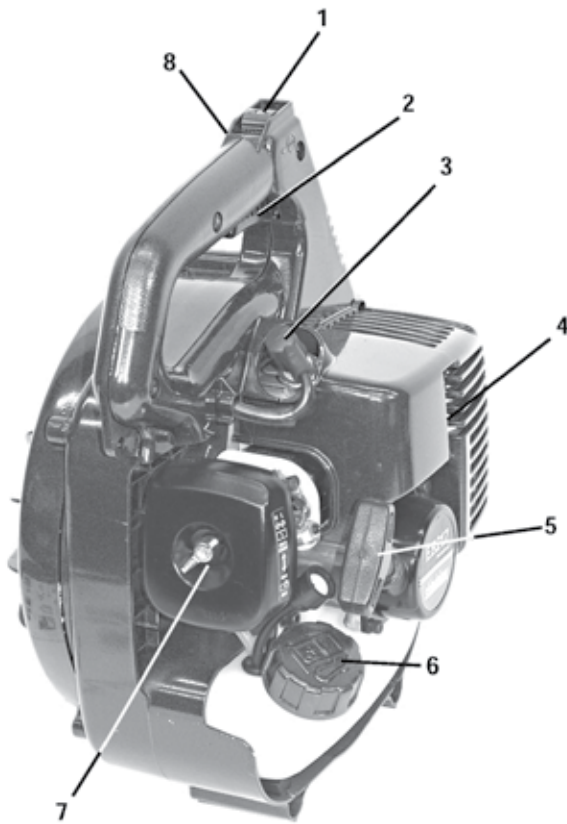
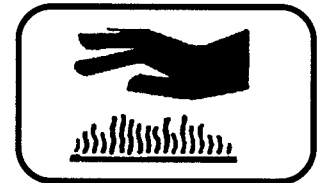
PRODUCT EMISSION DURABILITY (EMISSION COMPLIANCE PERIOD)

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 Shindaiwa dealer. See PARTS ORDERING instructions for specific information.

Hot Decal (near muffler)



General Warning Decal (located on top of blower housing)



Sound Label (located on blower housing)

67 _{dB(A)} **Category II**
Measured at 15 m (50 ft.) per ANSI B175.2

1. **STOP SWITCH** - "SLIDE SWITCH" mounted on top of handle. Push forward to start and run. Slide back to stop.
2. **THROTTLE TRIGGER** - Spring loaded to return to idle when released. During acceleration, press trigger gradually for best operating technique.
3. **SPARK PLUG** - Provides spark to ignite fuel mixture.
4. **SPARK ARRESTOR MUFFLER OR SPARK ARRESTOR MUFFLER WITH CATALYST** -The muffler or catalytic muffler controls exhaust noise and emission. The spark arrestor screen prevents hot, glowing particles of carbon from leaving the muffler. Keep exhaust area clear of flammable debris.
5. **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.
6. **FUEL TANK CAP** - Covers and seals fuel tank.
7. **AIR CLEANER** - Contains replaceable air filter element.
8. **THROTTLE POSITION LEVER** - Pull back to increase engine speed. Friction washers maintain throttle lever setting.
9. **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.
10. **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.
11. **BLOWER PIPES** - Twist lock design.

CONTENTS

- 1 - Power Head
- 1 - Blower Pipe Assembly
- 1 - Operator's Manual
- 1 - Emission Control Warranty Statement



ASSEMBLY



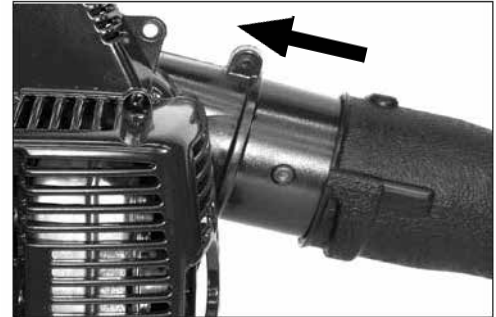
WARNING

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

BLOWER APPLICATION

Install Blower Pipes

1. Align grooves in straight pipe with pegs on blower housing and slide pipe onto housing.
2. Turn straight pipe clockwise to lock into place.
3. Align grooves in fan head nozzle with pegs on straight pipe and slide fan head nozzle onto straight pipe.
4. Turn fan head nozzle clockwise to lock into place.



OPERATION



WARNING

Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing and loose objects away from all openings. Always stop engine, disconnect spark plug, and make sure all moving parts have come to a complete stop before removing obstructions, clearing debris, or servicing unit. Blower housing may contain shredder blades and other sharp edges that can cause serious injuries if touched, even if engine is off and blades are not moving. Wear gloves to protect hands from sharp edges and hot surfaces.



WARNING

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

FUEL

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



WARNING

Diesel fuels and alternative fuels, such as E15 (15% ethanol), E85 (85% ethanol) or any fuels not meeting Shindaiwa requirements are NOT approved for use in Shindaiwa 2-stroke or Hybrid 4-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™ is 93 octane, ethanol-free fuel premixed with ECHO Red Armor® engine oil at 50:1 ratio. Use of ECHO Power Fuel™ is recommended to extend engine life in all air-cooled 2-stroke and 2/4-stroke hybrid engines.

2 Stroke Mixture Oil - A 2-stroke engine oil meeting ISO-L-EGD (ISO/CD 13738) and J.A.S.O. M345/FD standards must be used. Shindaiwa Red Armor™ 2-Stroke Oil is strongly recommended as it meets this standard and is specifically formulated for use in all Shindaiwa 2-stroke engines. 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 engine warranty.

IMPORTANT

Shindaiwa Red Armor™ 2-Stroke engine oil may be mixed at 50:1 ratio for application in all Shindaiwa engines sold in the past, regardless of ratio specified in those manuals.

IMPORTANT

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

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

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

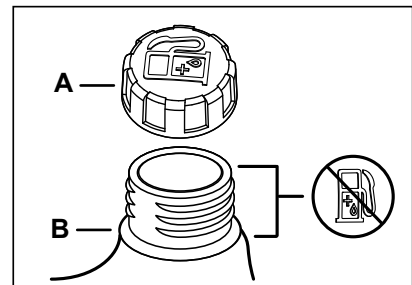
Fuel to Oil Mix - 50:1 Ratio			
US		Metric	
Gas	Oil	Gas	Oil
Gallons	Oz.	Liter	CC.
1	2.6	5	100
2	5.2	10	200
5	13	25	500



Filling the fuel tank

1. Place the unit on a flat, level surface.
2. Clear any dirt or other debris from around the fuel filler cap.

CAUTION!
Slowly remove the fuel cap only after stopping the engine.



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.

IMPORTANT
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.

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

STARTING COLD ENGINE

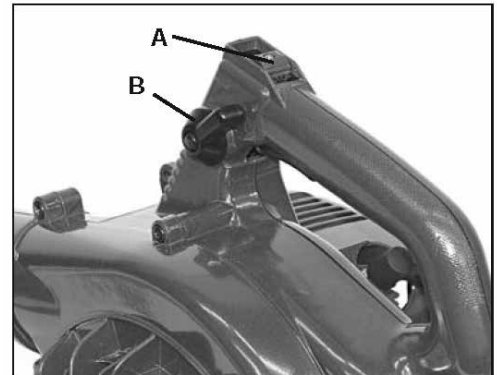
- Provide all operators of this equipment with the Operator's Manual and instructions for safe operation.
- Before starting the unit, equip yourself and any other person working within the 15 m (50 ft.) Safety Zone with the required Protective Equipment and clothing.

1. *Stop Switch*

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

2. *Throttle Position*

Move throttle position lever (B) midway between idle and full throttle positions.

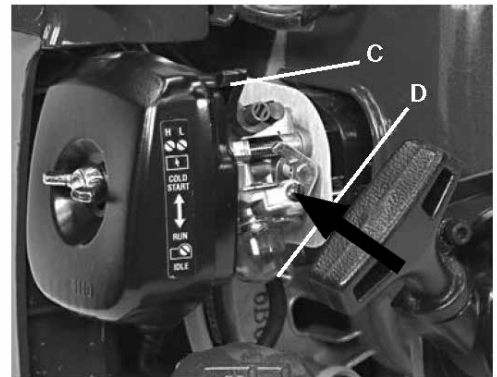


3. *Choke*

Move choke (C) to "COLD START" (↔) position.

4. *Purge Bulb*

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.



IMPORTANT

Recoil starter: Use short pulls - only 1/2-2/3 of rope for starting. Do not allow the rope to snap back in. Always hold the unit firmly.

5. *Recoil Starter*

Place the unit on a flat, clear area. Firmly grasp throttle grip with left hand and rapidly pull recoil starter handle/rope (E) until engine fires (5 pulls maximum).

6. *Choke*

After engine fires (or 5 pulls), move choke lever to "RUN" (↕) position and 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, repeat instructions 2- 5.

7. After engine warm up, gradually depress throttle trigger to increase engine RPM to operating speed.



STARTING WARM ENGINE

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

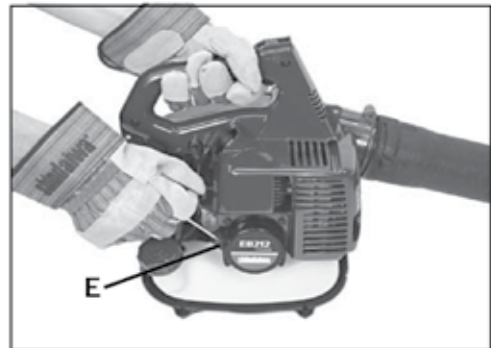
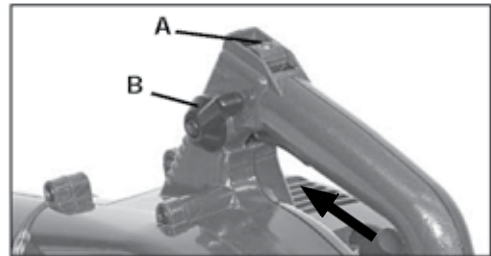
1. *Stop Switch*
Move stop switch button (A) away from the STOP position.
2. *Throttle Position*
Move throttle position lever (B) midway between idle and full throttle positions.
3. *Recoil Starter*
Place the unit on a flat clear area. Firmly grasp throttle grip with left hand and rapidly pull recoil starter handle/rope (E) until engine fires.

IMPORTANT

Recoil starter: Use short pulls - only 1/2 - 2/3 of rope for starting. Do not allow the rope to snap back in. Always hold the unit firmly.

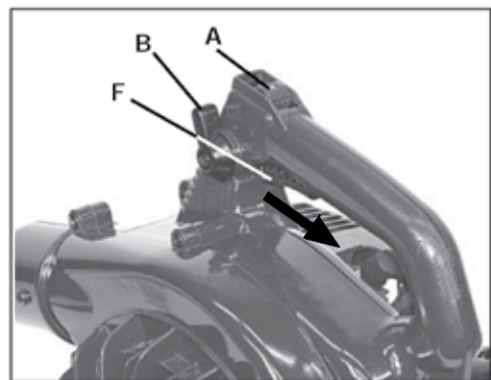
NOTE

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



STOPPING ENGINE

1. *Throttle Trigger/Throttle Position Lever*
Release throttle trigger (F). Move throttle position lever (B) forward to idle position and allow engine to return to idle before shutting engine off.
2. *Stop Switch*
Move stop switch (B) to "STOP" position.



WARNING

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

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 after approximately 40 hours of operation.

Read the Safety Section carefully.

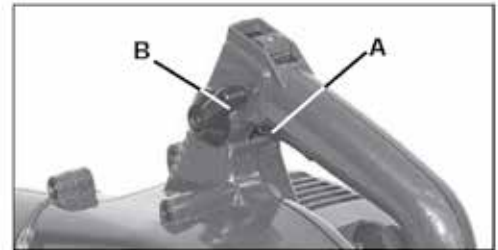
IMPORTANT

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

1. Use only during appropriate hours.
2. Allow the engine to warm up at a fast idle for a few minutes.
3. Control engine speed with throttle trigger (A), or for continuous use, set engine speed with throttle position lever (B). Rotate throttle position lever forward for lower speed, back for higher speed.
4. Use lower speed to blow debris from hard surfaces.
5. Additional speed may be necessary to clean debris, snow, etc. from lawns and flower beds.

NOTE

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



MAINTENANCE



WARNING

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

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

SKILL LEVEL

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

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

MAINTENANCE INTERVALS

COMPONENT / SYSTEM	MAINTENANCE PROCEDURE	REQ'D SKILL LEVEL	DAILY OR BEFORE USE	EVERY REFUEL	3 MONTHS OR 90 HOURS	YEARLY 600 HOURS
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 *	
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: Air Filter

NOTE

Clean daily.

1. Close choke (COLD START position []). This prevents dirt from entering the carburetor throat when the air filter is removed. Brush accumulated dirt from air cleaner area.
2. Remove air filter cover. Brush dirt from inside cover.
3. Remove air filter and lightly brush debris from filter. Replace filter if it is damaged, fuel soaked, very dirty, or the rubber sealing edges are deformed.
4. If filter can be reused, be certain it:
 - Fits tightly in the air filter cavity.
 - Is installed with the original side out.
5. Install air filter cover.



FUEL FILTER

Level 1.

Parts required: Fuel Filter



WARNING

Fuel is **VERY** flammable. Use extreme care when mixing, storing or handling.

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

SPARK PLUG

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.



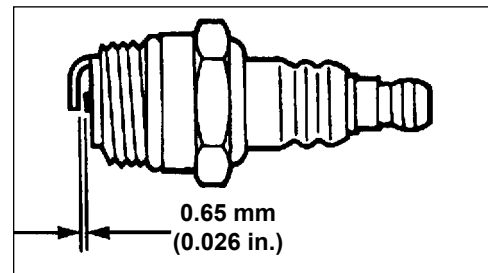
Level 2.

Parts Required: Spark Plug

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.

Parts Required: None, if you are careful.

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:

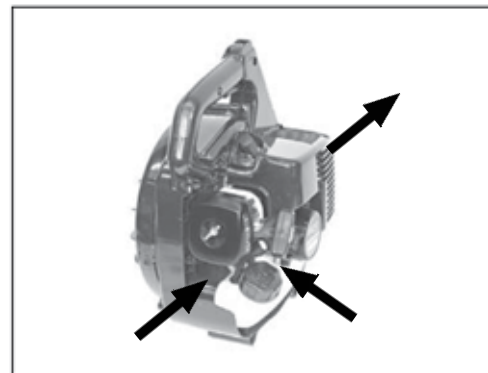
- Air intakes are blocked, preventing cooling air from reaching the cylinder.
- Dust and grass build up on the outside of the cylinder. This build up insulates the engine and prevents the heat from leaving.

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. Brush accumulated debris from crankcase intake grill above the fuel tank.

Cleaning Cylinder Fins



1. Remove spark plug lead and spark plug.
2. Remove engine cover, pull cover away from engine. Loosely install spark plug to prevent dirt from entering cylinder. Clean cylinder fins to allow cooling air to pass freely.
3. Remove spark plug and loosely reassemble engine cover with five cross head and two hex head screws.
4. Tighten all screws securely.
5. Install spark plug and spark plug lead.



EXHAUST SYSTEM

Spark Arrestor Screen

Level 2.

Parts Required: Spark arrestor screen, Gasket

IMPORTANT

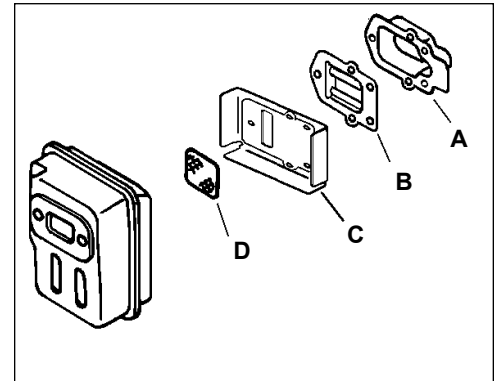
Carbon deposits in muffler will cause a drop in engine output and overheating. Spark arrestor screen must be checked periodically.

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

NOTE

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

4. Install spark arrestor screen, gasket, and covers.
5. Loosely reassemble engine cover with five cross head and two hex head screws.
6. Tighten all screws securely.
7. Install spark plug and spark plug lead.



CARBURETOR ADJUSTMENT

Exhaust Port Cleaning

Level 2.

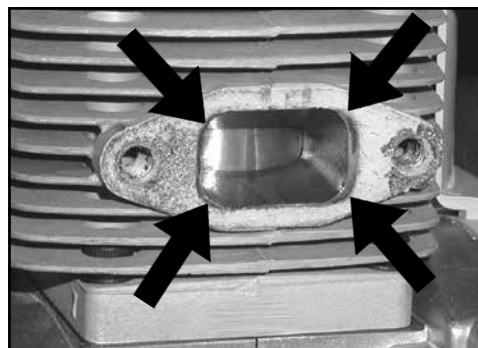
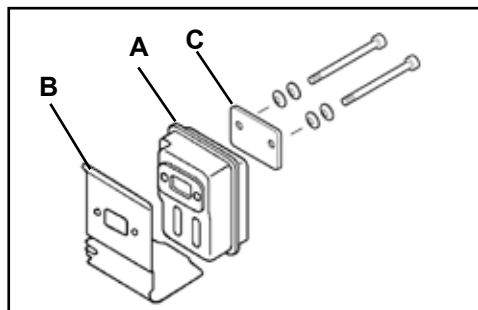
Parts Required: As needed: Heat Shield

1. Remove engine cover. (See "Cleaning Cylinder Fins for step by step instructions)
2. Place piston at top dead center. Remove muffler (A), heat shield (B), and eye plate (C).
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, muffler, and eye plate.
6. Tighten muffler mounting bolts (or nuts) to 90 - 110 kgf•cm (80 - 95 in•lbf).
7. Install engine cover and attach spark plug lead.
8. Start engine, and warm to operating temperature.
9. Stop engine, and re-tighten mounting bolts (or nuts) to specifications.



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 and below). To maintain proper engine operation and emission compliance above 1,100 feet ASL the carburetor may need to be adjusted by an authorized 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 can result.

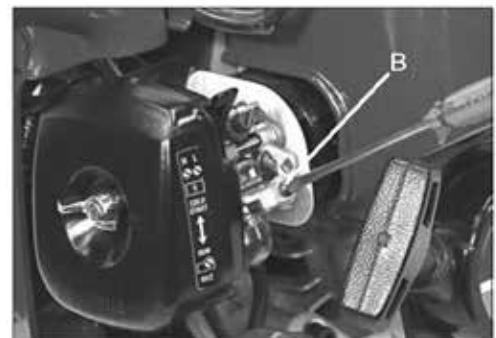
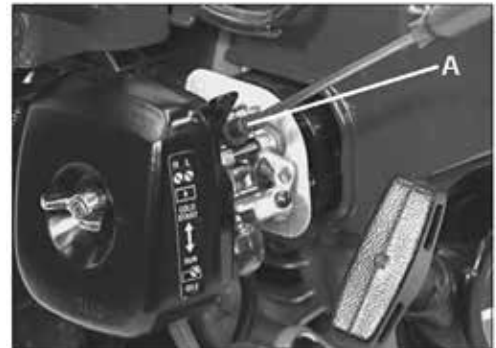
Level 2.

Parts required: None.

NOTE

Every unit is run at the factory and the carburetor is set in compliance with emission regulations. This carburetor does not have acceleration and high speed adjustment needles.

1. Before adjusting the carburetor, clean or replace the air filter and spark arrestor screen and blower pipes are installed.
2. Start engine and run for several minutes to reach operating temperature.
3. Stop engine. Turn red HI speed needle (A) CCW (counterclockwise) to stop.
4. Idle Speed Adjustment with tachometer.
Start engine and turn "idle" speed adjustment screw (B) to idle RPM found on "Specifications" page section of this manual.
5. Accelerate to full throttle for 2-3 seconds to clear excess fuel from engine then return to idle. Accelerate to full throttle to check for smooth transition from idle to full throttle. If engine stops or stalls after full warm up return the unit to your authorized dealer for repair.
6. Check HI speed RPM at W.O.T. (Wide Open Throttle). HI speed RPM should be set to specifications found in "Specifications" of this manual.
7. Check idle speed and reset if necessary.



TROUBLESHOOTING

TROUBLESHOOTING CHART				
Problem	Check	Status	Cause	Remedy
Engine cranks - starts hard/ doesn't start	Fuel at carburetor	No fuel at carburetor	Fuel strainer clogged Fuel line clogged Carburetor	Clean or replace Clean or replace See your Shindaiwa dealer
	Fuel at cylinder	No fuel at cylinder	Carburetor	See your Shindaiwa dealer
		Muffler wet with fuel	Fuel Mixture too rich	Open choke Clean/replace air filter Adjust carburetor See your Shindaiwa dealer
	Spark at end of plug wire	No spark	Stop switch off Electrical problem Interlock switch	Turn switch to ON See your Shindaiwa dealer See your Shindaiwa dealer
	Spark at plug	No spark	Spark gap incorrect Covered with carbon Fouled with fuel Plug defective	Adjust to .65mm (0.026 in.) Clean or replace Clean or replace Replace plug
Engine runs, but dies or does not accelerate properly	Air filter	Air filter dirty	Normal wear	Clean or replace
	Fuel filter	Fuel filter dirty	Contaminants/residues in fuel	Replace
	Fuel vent	Fuel vent plugged	Contaminants/residues in fuel	Clean or replace
	Spark Plug	Plug dirty/worn	Normal wear	Clean and adjust or replace
	Carburetor	Improper adjustment	Vibration	Adjust
	Cooling System	Cooling system dirty/plugged	Extended operation in dirty/dusty locations	Clean
	Spark Arrestor Screen	Spark arrestor screen plugged	Normal wear	Replace
Engine does not crank	N/A	N/A	Internal engine problem	See your Shindaiwa dealer
Engine runs, blower doesn't work or is weak/uneven	Blower pipe	Pipe clogged	Build-up of debris	Unclog
		Pipe loose	Vibration	Tighten
		Pipe damaged	Wear/Misuse	Replace



DANGER

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

STORAGE



WARNING

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

Long Term Storage (Over 30 Days)

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

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



DANGER

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

2. Place the stop switch in the "STOP" position.
3. Remove accumulation of grease, oil, dirt and debris from exterior of unit.
4. Perform all periodic lubrication and services that are required.
5. Tighten all screws and nuts.
6. **Drain** fuel tank **completely**. Press purge bulb 6 -7 times to remove remaining fuel from carburetor then drain the tank again. Close choke, start and run the engine until it stops due to lack of fuel.
7.
 - A. Allow engine to cool then remove the spark plug and pour 7 cc (1/4 oz.) of fresh, clean, 2-stroke engine oil into the cylinder through the spark plug hole.
 - B. Pull the recoil starter handle 2-3 times to distribute the oil inside the engine.
 - C. Observe the piston location through the spark plug hole. Pull the recoil handle slowly until the piston reaches the top of its travel and leave it there.
8. Install the spark plug (do not connect ignition cable).
9. Remove blower pipe assembly from unit.

SPECIFICATIONS

MODEL -----	EB212
Length -----	330 mm (13.0 in.) (w/o pipes)
Width -----	215 mm (8.5 in.)
Height -----	340 mm (13.4 in.)
Weight (dry) -----	3.8 kg (8.38 lb.)
Engine Type -----	Air cooled, two-stroke, single cylinder gasoline engine
Displacement -----	21.2 cc (1.39 cu. in.)
Bore -----	32.2 mm (1.27 in.)
Stroke -----	26.0 mm (1.10 in.)
Carburetor -----	Diaphragm model w/purge bulb
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 Shindaiwa Red Armor® ISO-L-EGD (ISO/CD 13738) and J.A.S.O.M345- FD, two-stroke, air-cooled engine oil.
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.
Oil -----	Shindaiwa Red Armor® ISO-L-EGD (ISO/CD 13738) and J.A.S.O. M345- FD two-stroke, air-cooled engine oil
Fuel Tank Capacity -----	0.5 L (16.9 US fl. oz.)
Recoil Starter System -----	Automatic Recoil Starter Centrifugal Type
Wide Open Throttle Speed (RPM) -----	7,500
Idle Speed (RPM) -----	3,000
Air Volume -----	8.2 m ³ /min. (290 cu. ft./min.)
Average Air Speed w/pipes -----	198 km/h (123 mph)
Maximum Air Speed w/pipes -----	242 km/h (150 mph)
Sound Level at 50 ft. dB(A) scale per ANSI B175.2 -	67 dB(A)

WARRANTY STATEMENTS

SHINDAIWA LIMITED WARRANTY STATEMENT FOR PRODUCT SOLD IN USA AND CANADA BEGINNING 01/01/2015

ECHO, INC'S RESPONSIBILITY

ECHO Incorporated's (ECHO, INC.) Limited Warranty, provides to the original purchaser that this Shindaiwa product is free from defects in material and workmanship. Under normal use and maintenance from date of purchase, ECHO, INC. agrees to repair or replace at it's discretion, any defective product free of charge at any authorized Shindaiwa servicing dealer within listed below application time periods, limitations and exclusions. **THIS LIMITED WARRANTY IS ONLY APPLICABLE TO SHINDAIWA PRODUCTS SOLD BY AUTHORIZED SHINDAIWA DEALERS. IT IS EXTENDED TO THE ORIGINAL PURCHASER ONLY, AND IS NOT TRANSFERABLE TO SUBSEQUENT OWNERS EXCEPT FOR EMISSION RELATED PARTS.** Repair parts and accessories replaced under this warranty are warranted only for the balance of the original unit or accessory warranty period. Any damage caused by improper installation or improper maintenance is not covered by this warranty. All parts or products replaced under warranty become the property of ECHO, INC. This warranty is separate from the Emission control warranty statement supplied with your new product. Please consult the Emission Control Warranty Statement for details regarding emission related parts. For a list of Authorized Shindaiwa Dealers refer to WWW.SHINDAIWA.COM or call **1-877-986-7783**.

OWNER'S RESPONSIBILITY

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

The owner shall demonstrate reasonable care and use, and follow preventative maintenance, storage, fuel and oil usage as prescribed in the operator's manual. Should a product difficulty occur, you must, at your expense, deliver or ship your Shindaiwa unit to an authorized Shindaiwa 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 Shindaiwa servicing dealer, call Shindaiwa's Dealer Referral Center, at 1-877-986-7783 or you can locate a Shindaiwa servicing dealer at WWW.SHINDAIWA.COM. Should you require assistance or have questions concerning Shindaiwa's Warranty Statement, you can contact our Consumer Product Support Department at 1-800-673-1558 or contact us through the web at WWW.SHINDAIWA.COM.

PRODUCT WARRANTY PERIOD

HOMEOWNER APPLICATION

- **5 YEAR WARRANTY** - 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 engine powered products, the electronic ignition module, flexible drive cable, and solid drive shaft are warranted for the life* of the product on parts only.
- Cutting attachments such as, but not limited to, bars, chains, sprockets, tines, blades, PowerBroom™, belts, 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.
- Multipurpose Tool Attachments carry the same warranty duration as the units they are designed to fit.

COMMERCIAL APPLICATION

- **1 YEAR WARRANTY** - All Chain Saws for commercial, institutional, agricultural, industrial, or income producing use will be covered by this limited warranty for 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 engine powered products, the electronic ignition module, flexible drive cables, and solid drive shafts are warranted for the life* of the product on parts only.
- Cutting attachments such as, but not limited to, bars, chains, sprockets, tines, blades, PowerBroom™, belts, 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.
- Multipurpose Tool Attachments carry the same warranty duration as the units they are designed to fit.

RENTAL APPLICATION - 90 DAYS WARRANTY

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

* ECHO 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.

PURCHASED REPAIR PARTS AND ACCESSORIES

- 90-day all applications

ATTENTION ENGINE POWERED PRODUCT OWNERS

This Shindaiwa engine powered product is a quality-engineered unit which has been manufactured to exact tolerances to provide superior performance. To help ensure the performance of the unit, it is required to use engine oil which meets the ISO-L-EGD Standard per ISO/CD 13738 and JASO M345/FD Standards. Shindaiwa Red Armor™ is a premium engine oil specifically formulated to meet ISO-L-EGD (ISO/CD 13738) and JASO M345/FD Standards. The use of engine oils designed for other applications, such as for outboard motors or lawnmowers can result in severe engine damage, and will void your engine limited warranty.

THIS WARRANTY DOES NOT COVER DAMAGE CAUSED BY:

- Lack of lubrication or engine failure, due to the use of engine oils that do not meet the ISO-L-EGD (ISO/CD 13738) and JASO M345/FD Standards. Shindaiwa Red Armor™ Engine Oil meets the ISO-L-EGD and JASO M345/FD Standard. Emission related parts are covered for 5 years homeowner or 2 years commercial use regardless of two-stroke oil used, per the statement listed in the EPA or California Emission Control 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 Shindaiwa 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 customer's responsibility.
- Failures due to improper set-up, pre-delivery service or repair service by anyone other than authorized Shindaiwa 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 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 Shindaiwa servicing dealer.

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

DISCLAIMER OF IMPLIED WARRANTIES

This limited warranty is in lieu of all other expressed or implied warranties, including any warranty of FITNESS FOR A PARTICULAR PURPOSE OR USE and any implied warranty of **MERCHANTABILITY** otherwise applicable to this product. ECHO, 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. This limited warranty may be modified only by ECHO, INC.

NOTES

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 REGISTRATION CARD : TARJETA DE REGISTRO : 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 Shindaiwa product information and special offers. Simply go to: www.shindaiwa-usa.com

OPCIÓN POR INTERNET: Regístrese en la página web y ahorre una estampita. Le alertaran sobre actualizaciones del producto y/o se le enviara información sobre los nuevos productos Shindaiwa y las ofertas especiales. Simplemente visite: www.shindaiwa-usa.com

OPTION EN LIGNE: Enregistrez en ligne et épargnez un timbre! Vous serez informé sur les nouveaux produits Shindaiwa et les mises à jour de produit ainsi que les offres spéciales. Simplement visitez le: www.shindaiwa-usa.com

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

Confidential: Information provided will not be shared or sold

Purchaser's Name : Nombre del Comprador : Nom du Acheteur	
Address : Dirección : Adresse	
City : Ciudad : Ville	State : Estado : Province
Zip Code : Código Postal : Code Postal	
E-Mail Address : Dirección De Correo Electrónico : Courrier Électronique	
Phone Number : Número De Teléfono : Téléphone	Date of Purchase : Fecha de la Compra : Date de l'achat
Where Purchased : Nombre del Almacén donde fue Comprado : Lieu d'achat	
Model Number : Número del Modelo (No. de modèle) Serial Number : Número de Serie : No. de série	

Primary use of tool: Professional Homeowner Rental Equip.
 Uso primario de la herramienta Profesional Dueño de casa Alquiler
 Usage principal: Professional Residential Location
 Do you wish to receive periodic Shindaiwa product information and special offers by e-mail? Yes No
 ¿Desee usted recibir información periódica y ofertas especiales por correo electrónico sobre el producto Shindaiwa? Yes No
 Souhaitiez-vous recevoir périodiquement de l'information sur les produits Shindaiwa et les offres spéciales par courrier électronique ? Oui Non
 Did you visit the Shindaiwa website before purchasing your product? Yes No
 Visité usted la página web Shindaiwa antes de comprar su producto? Si No
 Avez-vous visité le site d'Shindaiwa avant de procurer votre produit? Oui Non

What factor(s) most influenced your purchase?
 Performance Price Dealer Quality
 Reliability Prior Experience Warranty
 Friend/Family Brand Warranty
 ¿Qué factor(es) influenció más en su compra?
 Funcionamiento Precio Distribuidor Calidad
 Confabilidad Experiencia Anterior Garantía
 Amigo/Familia Marca Garantía
 Quel facteur (facteurs) vous a influencé le plus?
 Performance Prix Marchand Fiabilité Expérience Qualité Ami/Famille Marque Garantie

1.877.986.7783 www.shindaiwa-usa.com X7571120102 02-2012

Registering your purchase enables us to contact you in the unlikely event of a service update or product recall and verifies your ownership in the event of loss. El registrar su compra nos permite estar en contacto con usted en caso de cualquier evento como el finno de tiempo de servicio o la renovación del producto y verificación de propiedad en caso de robo o pérdida. L'enregistrement de votre achat nous permettra de vous contacter dans le cas improbable de modifications des instructions d'entretien ou de rappel du produit et vérifier que vous êtes le propriétaire en cas de vol ou de perte.

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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, Type and Serial Number of the unit with you. You can find these numbers on the engine. For future reference, write them in the space provided below.

Model No. _____ SN. _____

Service

Service of this product during the warranty period must be performed by an Authorized 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.

Warranty 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 or Replacement Manuals

Replacement Operator and Parts Catalogs are available from your SHINDAIWA dealer or at WWW.SHINDAIWA-USA.COM or by contacting the Consumer Product Support Department (1-877-986-7783). Always check WWW.SHINDAIWA-USA.COM for updated information.

shindaiwa[®]

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