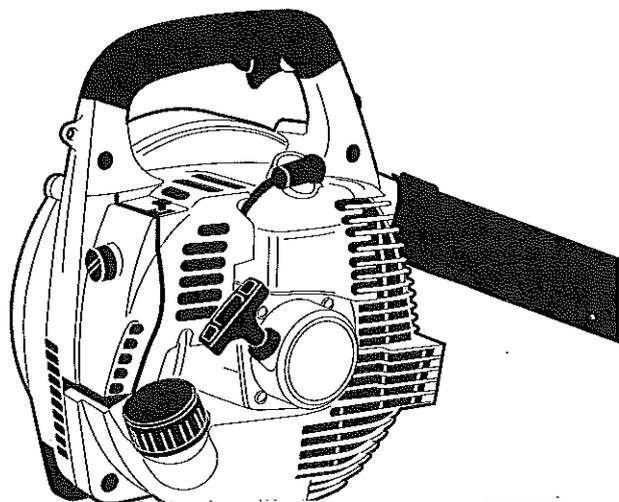


## SHINDAIWA OWNER'S MANUAL

# EB240 BLOWER



This engine meets U.S. EPA PHASE I emission regulations for utility and lawn and garden equipment. This engine is certified to operate on a 40:1 mixture consisting of unleaded gasoline and 2-cycle engine mixing oil only. Please refer to this manual for all maintenance specifications and adjustments.

# shindaiwa



### WARNING!

Always wear eye and hearing protection when operating this machine. Minimize the risk of injury: Read this manual and familiarize yourself with its contents. This product is intended for outdoor use only and should be used only in well ventilated areas.

# INTRODUCTION

Your Shindaiwa EB240 has been designed and built to deliver superior performance and reliability without compromise to quality, comfort, safety, or durability.

Shindaiwa high performance engines represent the leading edge of 2-cycle engine technology, delivering exceptionally high power at remarkably low displacement and weight. As a professional owner/operator, you'll soon discover why Shindaiwa is simply in a class by itself!

## **IMPORTANT!**

The information contained in this manual describes machines available at the time of production. While every attempt has been made to give you the very latest information about your Shindaiwa EB240 blower, there may be some differences between your machine and what is described here. Shindaiwa Inc. reserves the right to make changes in production without prior notice, and without obligation to make alterations to machines previously manufactured.

Before using this product, consult local regulations concerning noise restrictions and hours of operation.



### **CAUTION!**

This EB240 blower is equipped with a spark-arresting muffler. Never operate this machine without both the muffler and spark arrestor installed and properly functioning!

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# ATTENTION STATEMENTS

This manual contains special "attention statements" surrounded by boxes and preceded by the triangular Attention Symbol.



## WARNING!

A statement preceded by the word "WARNING" contains information that should be acted upon to prevent serious bodily injury.



## CAUTION!

A statement preceded by the word "CAUTION" contains information that should be acted upon to prevent machine damage.

Additional attention statements that are not preceded by the Attention Symbol are:

## IMPORTANT!

A statement preceded by the word "IMPORTANT" is one that possesses special significance.

## NOTE:

A statement preceded by the word "NOTE" contains information that is handy to know and may make your job easier.



Read and follow this manual. Failure to do so could result in serious injury.



Wear eye and hearing protection at all times during the operation of this machine.



Do not operate this machine if you are tired, ill or under the influence of alcohol, drugs, or medicine.

## IMPORTANT!

The operational procedures described in this manual are intended to help you get the most from your machine and also to protect you and others from harm. These procedures are general guidelines only, and are not intended to replace any safety rules/laws that may be in force in your area.

If you have any questions regarding your EB240 blower, or if you do not understand something in this manual, your Shindaiwa dealer will be glad to assist you.

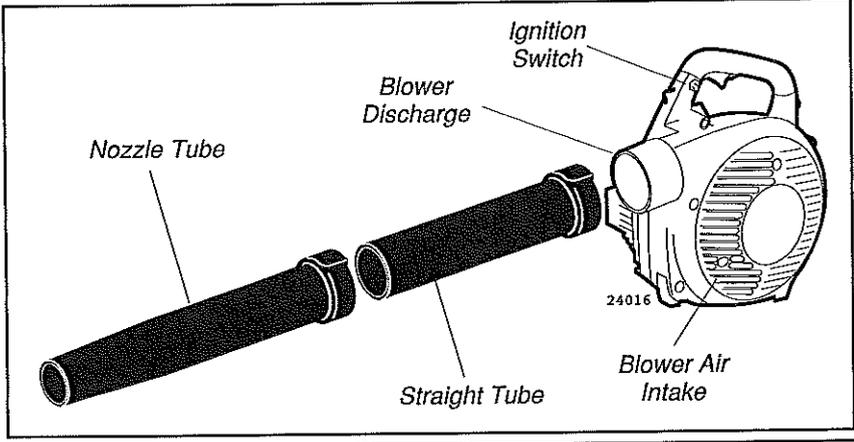
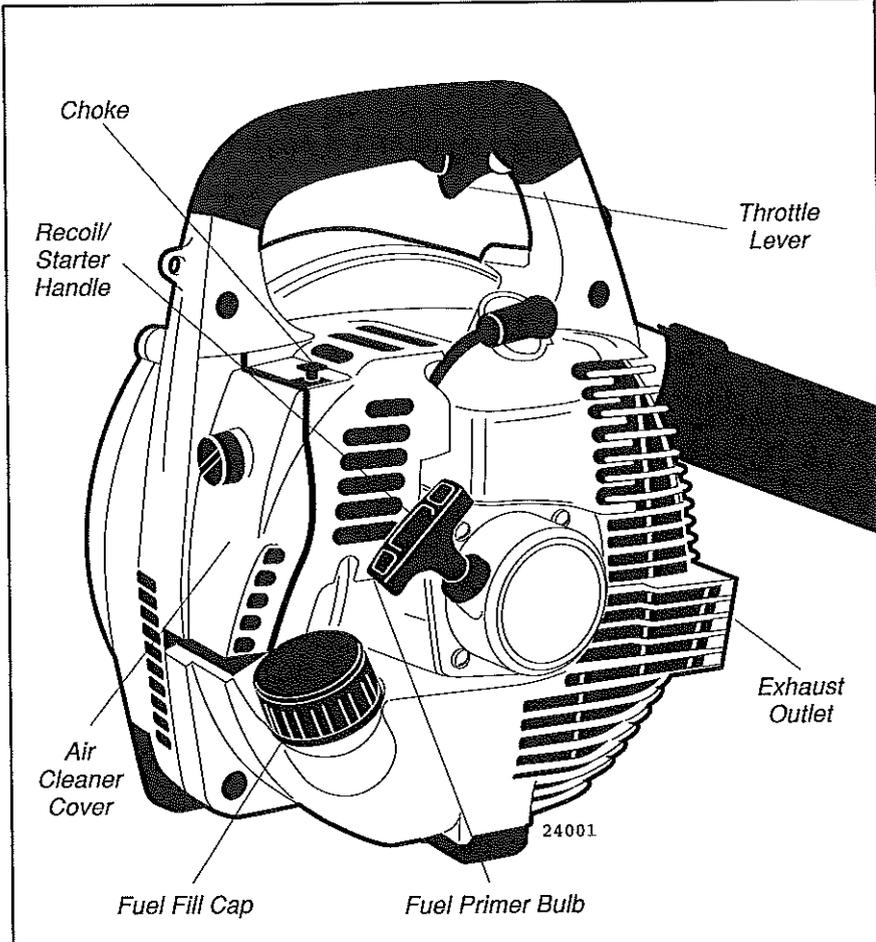
For additional information, you may also contact Shindaiwa Inc. at the address printed on the back of this manual.



## WARNING!

Do not make unauthorized modifications to this machine!

# NOMENCLATURE



## SPECIFICATIONS

---

Model .....	EB240
Dimensions (L x W x H) .....	325 x 230 x 330 mm (12.8 x 9.1 x 13.0 inches)
Engine Type .....	2 cycle air cooled gas engine, vertical cylinder
Bore & Stroke .....	33 x 28 mm (1.3 x 1.1 inches)
Displacement .....	24.0 cc (1.46 cu. inches)
Fuel .....	Gasoline/oil mixture(40:1 with Shindaiwa Premium 2-cycle Engine Oil)
Carburetor .....	Walbro diaphragm-type with primer pump
Ignition .....	All transistor electronic ignition system
Spark Plug .....	Champion CJ8
Starting .....	Recoil starter
Stopping .....	Grounding (toggle switch)
Fuel Tank Capacity .....	0.5 liter (16.9 oz.)
Exhaust System .....	Low dB; spark-arrestor muffler
Air Cleaner Type .....	Semi-wet
Weight (dry; with blower tubes) .....	4.2 kg (9.3 lbs)

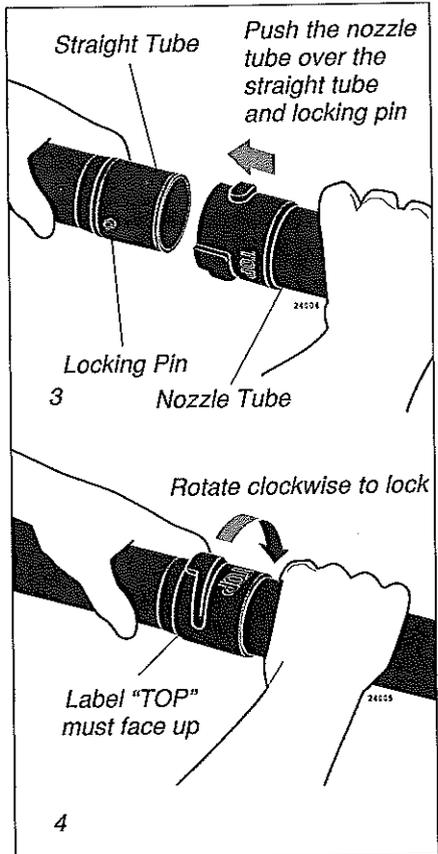
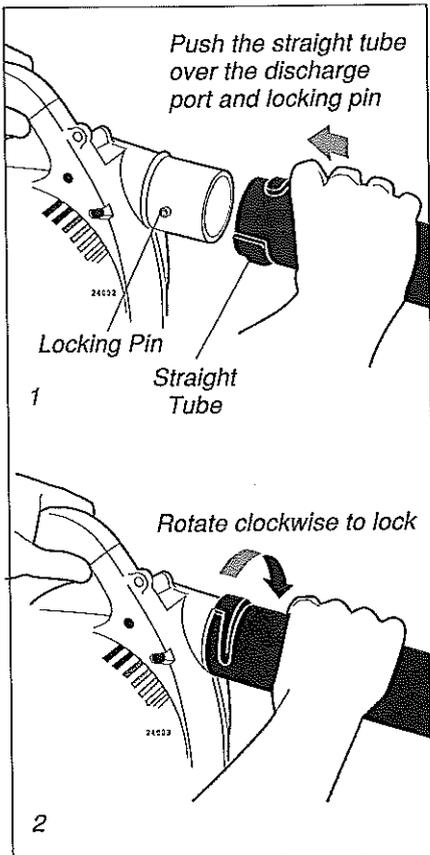
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### Standard Accessories and Tools

- 4 mm hex wrench
- Combination spark plug/13 mm wrench/screwdriver
- Tool bag

Shindaiwa reserves the right to make subsequent modifications to this product without prior notification.

## ASSEMBLING THE BLOWER



Place the blower upright on the ground or on a sturdy work surface.

1. Grasp the straight tube as shown, and push the tube over the blower discharge port and locking pins.
2. Lock the straight tube to the blower discharge port by rotating the tube as shown.
3. Grasp the nozzle tube with the label "TOP" positioned as shown, and then push the nozzle over the straight tube and locking pins.
4. Lock the nozzle tube to the straight tube by rotating the nozzle tube as shown.

### IMPORTANT!

Blower tube installation affects both blower balance and performance! The tube and nozzle are correctly installed when the label "Top" is visible to the operator during normal operation.



### WARNING!

**Danger from rotating impeller!** Stop the engine before installing or removing the blower tubes! Never perform any maintenance or assembly procedures on this machine while the engine is running!

# MIXING FUEL

## Fuel Requirements

- Use only fresh, clean fuel
- Use only fuel with an octane rating of 87 or higher
- Mix all fuel with Shindaiwa Premium 2-Cycle Engine Oil at a gasoline/oil ratio of 40:1 (3.2 ozs. engine oil to 1 gallon gasoline).



### WARNING!

**Danger of fire!** Never transfer or store fuels in the presence of combustible materials! Before starting the engine, always move the blower to a clear area at least 10-feet (3-meters) away from fuels and other combustible materials!



### CAUTION!

Never attempt to mix fuel in the blower fuel tank!

Always mix all fuels in a clean, approved container!

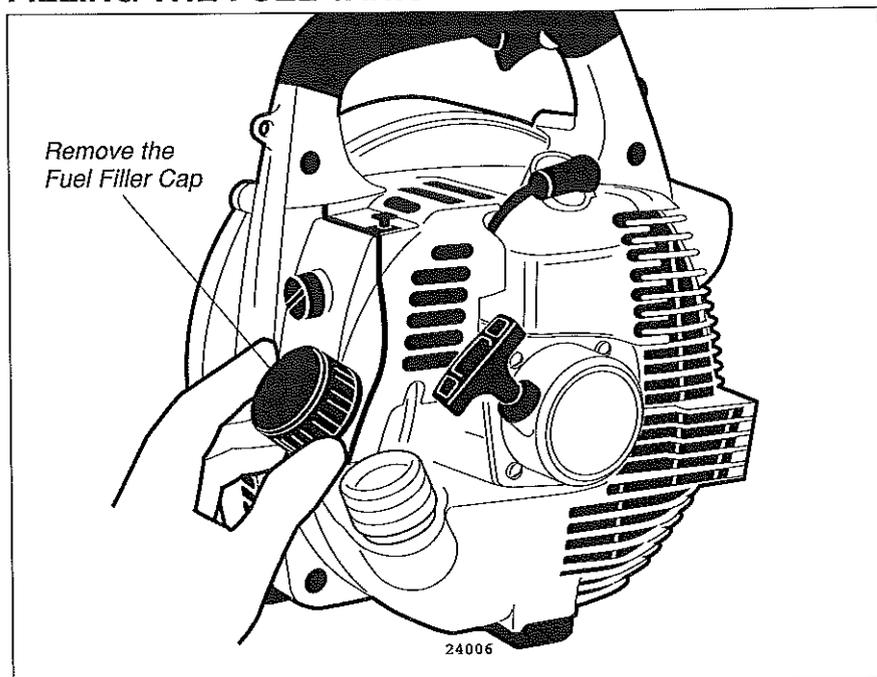
Some gasolines contain alcohol as an oxygenate! Oxygenated fuels may cause increased engine operating temperatures! Under certain conditions, alcohol-based fuels may also reduce the lubricating qualities of some mixing oils! Never use any fuel containing more than 10% alcohol by volume! When an oxygenated fuel *must* be used, fuel containing an ether-based oxygenate such as MTBE is to be preferred over alcohol!

Whenever possible, use Shindaiwa Premium 2-cycle Engine Oil or equivalent oil mixed at a 40:1 ratio. Be aware that generic oils and some outboard mixing oils may not be intended for use in high-performance air cooled 2-cycle engines, and should never be used in your Shindaiwa blower!

### IMPORTANT!

Mix only enough fuel for your immediate needs! If fuel must be stored longer than 30-days, it should first be treated with a stabilizer such as StaBil™ or equivalent product!

## FILLING THE FUEL TANK



1. Place the blower upright on the ground or on a sturdy work surface, and wipe any debris from around the fuel cap.
2. Remove the fuel cap.
3. Fill the tank with clean, fresh fuel.
4. Replace the cap, and wipe away any spilled fuel before starting the blower.



### **WARNING!** Danger of fire and burn injury!

- Always use extreme care when handling fuel! Fuel is highly flammable!
- Never operate this blower if fuel system components are damaged or are leaking!
- Never attempt to refuel the engine while it is running!
- Never attempt to refuel a hot engine! Always allow the blower engine to cool before fueling!
- Never smoke or light any fires near the blower or fuels!
- Always transport and store fuels in an approved container!
- Never place flammable material close to the engine muffler!
- Never operate the blower without a properly functioning muffler and spark arrestor installed!
- Never operate this blower unless it is properly assembled and in good working condition!

# STARTING THE BLOWER



## WARNING!

**Danger from rotating impeller!** The impeller

will rotate whenever the blower is operated! Never operate this blower unless the intake cover and blower tubes are properly installed and in good working order!

**Danger from thrown dust or debris!** Always wear eye protection when operating this machine! Never direct the blower stream toward people or animals!

**Never operate this blower unless all controls are properly installed and in good working order.**



## CAUTION!

The recoil starter can be damaged by abuse!

- Never pull the starter cord to its full length!
- Always engage the starter before cranking the engine!
- Always rewind the starter cord slowly!

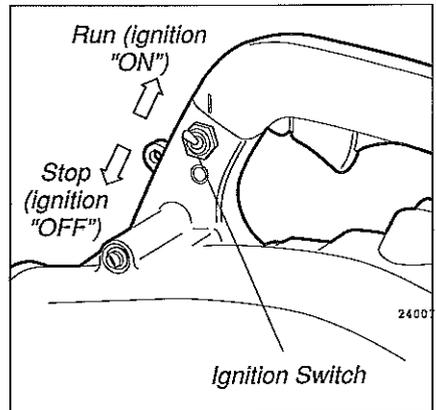
Never operate the blower if blower tubes are missing or damaged!

## IMPORTANT!

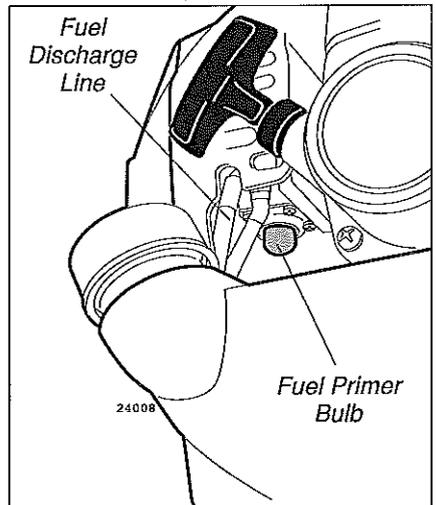
The engine ignition is controlled by a two-position "ON-OFF" switch located on the left side of the blower handle grip. This switch is typically labeled "I" for ON and "O" for OFF.

## Starting Procedure

1. Switch the ignition to the "I" (ON) position.



2. Prime the fuel system by repeatedly depressing the fuel primer bulb until no air bubbles are visible in the fuel discharge line.



3. **Cold Engine Only.** Choke the engine by pulling the choke control to the fully extended position (choke is closed).
4. Place the blower on the ground, and hold the blower handle firmly with your right hand.
5. Pull the starter cord slowly until you feel the starter engage, then...
6. ...start the blower by pulling the starter cord upward rapidly.

If necessary, repeat Step 6 two or three times until the engine starts.

### When the engine starts

#### **IMPORTANT!**

For maximum blower performance and operating life, allow the engine to warm before use.

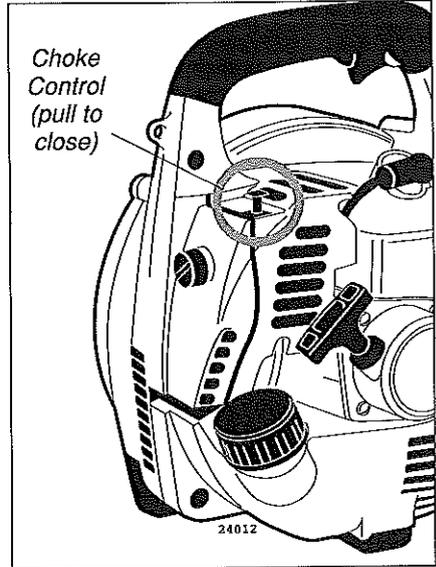
1. Run the engine at idle speed until operating temperature is reached (2 or 3 minutes).
2. As the engine warms, open the choke gradually by slowly pushing the choke control in to the fully retracted position.
3. The blower should now be ready for use.

### If the engine does not start

Repeat the appropriate starting procedures for "hot" or "cold" engine. If the engine still will not start, follow the "Starting a Flooded Engine" procedure (below).

### Starting a flooded engine

1. Disconnect the spark plug lead, and use the spark plug wrench to remove the spark plug in a counter-clockwise direction.
2. If the spark plug is fouled or is soaked with fuel, clean or replace the plug as required.



3. Clear excess fuel from the combustion chamber by cranking the engine several times while the spark plug is removed.
4. Install the spark plug and firmly tighten it with the spark plug wrench. If a torque wrench is available, torque the spark plug to 148-165 inch-pounds. Reconnect the spark plug lead.

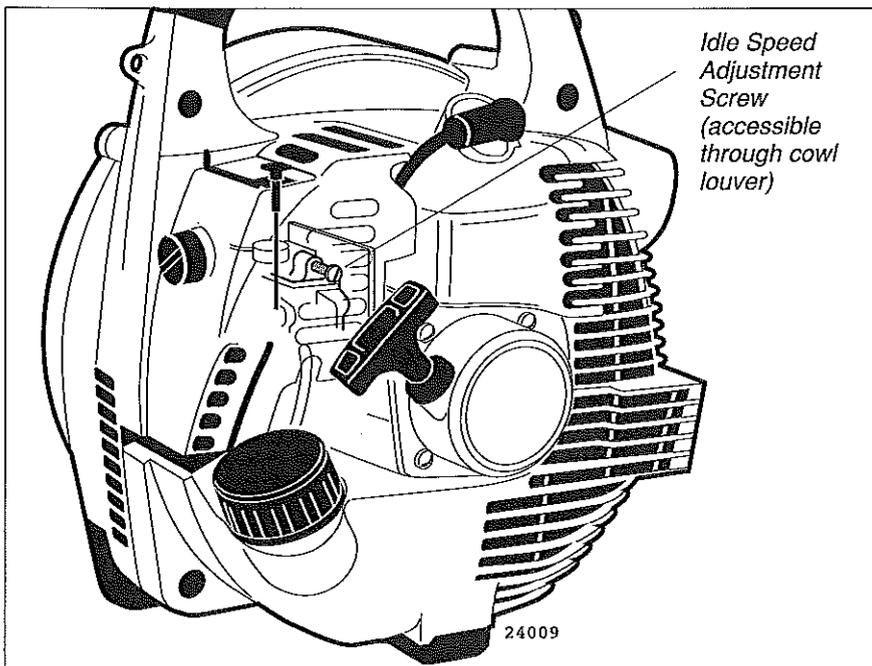


#### **CAUTION!**

Incorrect spark plug installation can result in serious engine damage!

5. Repeat the starting procedures for "warm engine."
6. If the engine still fails to fire or start, refer to the troubleshooting flowchart at the end of this manual.

## ADJUSTING ENGINE IDLE SPEED



1. Start the engine by following the procedures described on the preceding pages.
2. Run the engine at idle speed until operating temperature is reached (2-3 minutes).
3. Use a screwdriver to adjust the engine idle speed to 2300-2500 rpm.
  - Turn the idle screw clockwise to increase engine idle speed.
  - Turn the idle screw counter-clockwise to decrease engine idle speed.

### **IMPORTANT!**

Blower tubes and intake cover must be installed while adjusting engine idle! Engine idle speed will also be affected if either the intake cover or blower tubes are blocked, damaged or incorrectly installed!

## STOPPING THE ENGINE

1. Cool the engine by allowing it to run at idle for 2 to 3 minutes.
2. Stop the engine by moving the ignition switch to the "O" (OFF) position.

### **IMPORTANT!**

If the engine continues to run with the ignition switch in the "O" (OFF) position, stop the engine by pulling the choke control out to the fully closed position.

A clean and unrestricted airflow is essential to your blower's engine performance and durability! Before attempting any carburetor adjustments, inspect and clean the engine air cleaner as described on page 12 of this manual.

## USING THE BLOWER



### THINK SAFETY!

In the hands of an experienced operator, the EB240 can efficiently move a wide variety of debris ranging from grass clippings to gravel. As a general rule, try to operate your EB240 at the **lowest throttle setting** necessary to get the job done:

- Use low throttle settings when clearing lightweight materials from around lawns or shrubbery.

- Use medium to higher throttle settings to move lightweight grass or leaves from parking lots or walkways.
- Use full throttle when moving heavy loads such as dirt or snow.

### IMPORTANT!

Blower noise increases at higher throttle settings! Always use the lowest throttle setting required to get the job done!

*Never operate the blower when visibility is poor.*

*Always wear eye protection such as a face shield or goggles while operating this machine.*

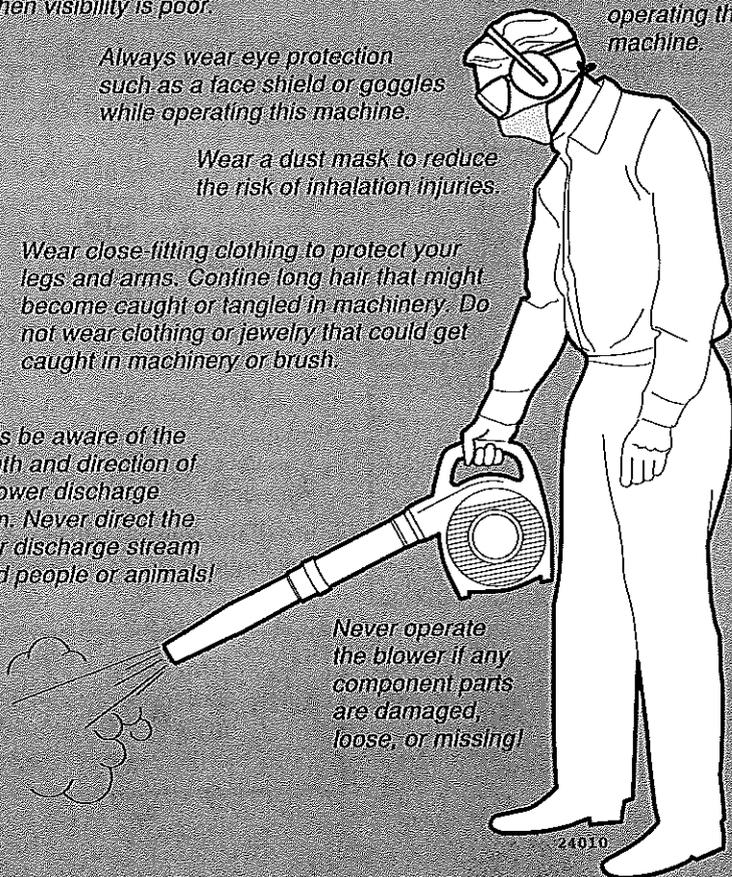
*Wear a dust mask to reduce the risk of inhalation injuries.*

*Wear close-fitting clothing to protect your legs and arms. Confine long hair that might become caught or tangled in machinery. Do not wear clothing or jewelry that could get caught in machinery or brush.*

*Always be aware of the strength and direction of the blower discharge stream. Never direct the blower discharge stream toward people or animals!*

*Never operate the blower if any component parts are damaged, loose, or missing!*

*Wear hearing protection when operating this machine.*



## ROUTINE MAINTENANCE



### WARNING!

Before performing any maintenance on this blower, stop the engine and disconnect the spark plug wire!

### Daily Maintenance

- Remove dirt and debris from the blower exterior.
- Inspect the engine, tank, and hoses for possible fuel leaks, and repair as necessary.
- Inspect the entire blower for loose, damaged, or missing components, and repair as necessary.
- Inspect the engine cooling fins for accumulations of dirt or debris, and clean as necessary.



### CAUTION!

Dirty or damaged cooling system components may allow the engine to overheat, possibly causing serious engine damage!



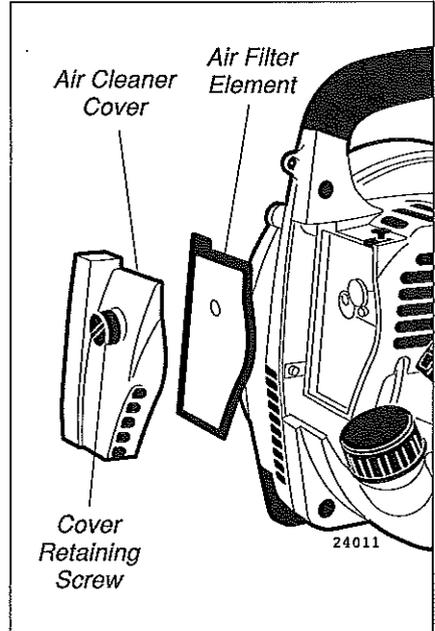
### CAUTION!

Operating the blower with loose, missing, or damaged components could allow the engine to overspeed, possibly causing serious engine damage!

- Inspect the entire blower for damage, loose or missing components or fastenings, and repair as necessary.

## EVERY 10 HOURS

(more frequently in dusty conditions)



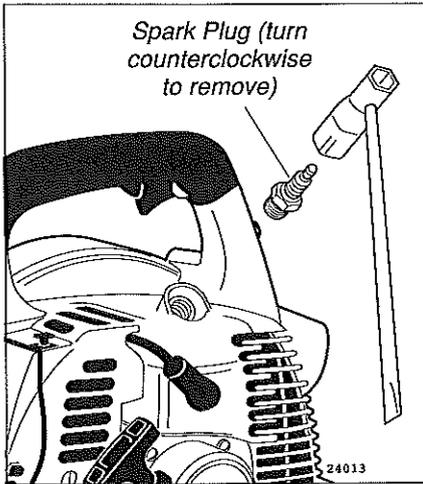
1. Loosen the air cleaner cover retaining screw, and remove the cover and filter element.
2. Inspect the element. If the element is distorted or damaged, replace it with a new one.
3. Wash the element in clean fuel, and squeeze or blow dry. Wash the air cleaner cover in clean fuel, and wipe or blow dry.
4. Install the element and cover, and then tighten the cover retaining screw.



### CAUTION!

Never operate the blower if the air cleaner assembly is damaged or missing!

## EVERY 10/15 HOURS



1. Use the spark plug wrench to remove the spark plug (turn counter-clockwise to remove).
2. Clean and adjust the spark plug gap to 0.024" (0.6 mm). Replace any damaged or visibly worn plug with a Champion CJ8 or equivalent.
3. Install the spark plug finger-tight in the cylinder head, then tighten it firmly with the spark plug wrench. If a torque wrench is available, torque the spark plug to 148–165 inch-pounds.



### CAUTION!

Never allow dirt or debris to enter the cylinder bore!

Before removing the spark plug, thoroughly clean the spark plug and cylinder head area!

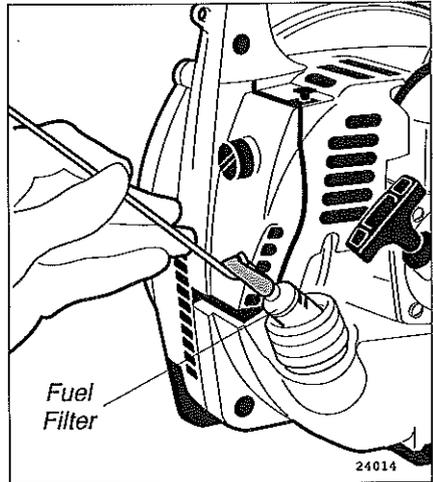
Allow the engine to cool before servicing the spark plug! Cylinder threads can be damaged by tightening or loosening the spark plug while the engine is hot!

Incorrect spark plug installation can result in serious engine damage!

## EVERY 50 HOURS

(more frequently if you note reduced performance)

- **INSPECTION** Inspect the entire blower and tubes for damage, including loose or missing components, and repair as necessary.
- **SPARK PLUG** Replace the spark plug with a Champion CJ8 (or equivalent), gapped to 0.024 inch (0.6 mm).



- **FUEL FILTER** Use a wire hook to extract the fuel filter from inside the fuel tank, and then remove and wash the filter element in clean fuel.

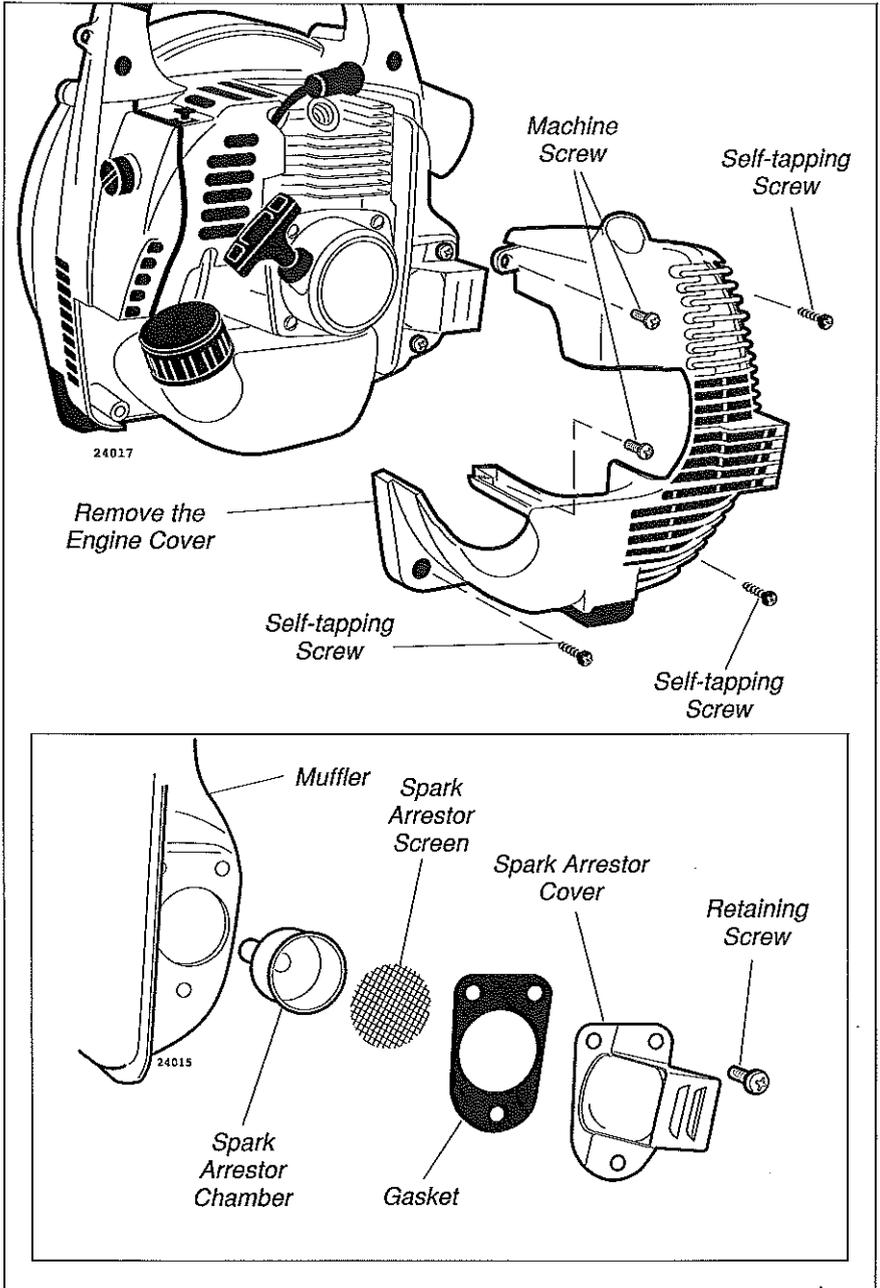
Before reinstalling the filter, inspect the condition of the fuel line. If damage or deterioration are noted, the blower should be removed from service until it can be inspected by a Shindaiwa-trained service technician.

- **COOLING SYSTEM** Remove the engine cover (as described under "Spark Arrestor"), and use a wood or plastic scraper and a soft brush to remove dirt and debris from the cylinder fins and crankcase.

# SPARK ARRESTOR MAINTENANCE

Hard starting or a gradual loss of performance can be caused by carbon deposits lodged in the spark arrestor

screen. For maximum performance, the spark arrestor screen should be periodically cleaned as follows:



1. Remove the spark plug.
2. Remove three self-tapping screws and two machine screws from the engine cover, and then gently move the engine cover aside.
3. Remove the three spark arrestor retaining screws, then remove the spark arrestor cover, screen, gasket, and chamber.
4. Use a plastic scraper or wire brush to remove carbon deposits from the arrestor screen, chamber, and cover.
5. Inspect the screen carefully, and replace any screen that has been perforated, distorted, or is otherwise unserviceable.
6. Install the chamber, screen, gasket and cover in the reverse order of disassembly, and then install and securely tighten the three cover retaining screws.
7. Install the engine cover, and verify that the fuel line connections are still tightly in place.
8. Install the engine cover retaining screws in the reverse order of removal, and tighten securely.
9. Install and tighten the spark plug, and reconnect the spark plug wire.



**CAUTION!**

Always replace cover screws in the same holes as removed! Substitution or incorrect assembly of engine cover screws can permanently damage aluminum castings and plastic components!

**STORAGE** (30 days or longer)

- **CLEANING** Thoroughly clean the blower exterior.
- **INSPECTION** Inspect the entire blower and tubes for damage, including loose or missing components, and repair as necessary.
- **FUEL** Drain the fuel tank, and then clear the carburetor and lines by running the blower until it stops from lack of fuel.



**CAUTION!**

Never store this product with any fuel remaining in the tank, fuel lines, or carburetor! Your Shindaiwa warranty does not include coverage for damage caused by "stale" or contaminated fuels!

- **LUBRICATION** Remove the spark plug, and then pour approximately 1/4-oz of oil into the cylinder through the spark plug hole. Before reinstalling the spark plug, pull the recoil starter 2 or 3 times to distribute the oil over the cylinder walls.
- **AIR CLEANER** Remove, clean, and reinstall the filter element as described under "daily maintenance."
- **STORAGE** Store the blower in a clean, dry, dust-free environment.

# TROUBLESHOOTING GUIDE

## ENGINE DOES NOT START

What To Check	Possible Cause	Remedy
Does the engine crank?	<b>NO</b> → Faulty recoil starter. Fluid in the crankcase. Internal damage.	Return blower to dealer.
<b>YES</b> ↓		
Good compression?	<b>NO</b> → Loose spark plug. Excess wear on cylinder, piston, rings.	Tighten and re-test. Return blower to dealer.
<b>YES</b> ↓		
Does the tank contain fresh fuel of the proper grade?	<b>NO</b> → Fuel/mixture incorrect, stale, contaminated.	Re-fill with fresh fuel of the correct mixture (Shindaiwa Premium 2-cycle Engine Oil and gasoline, 40 : 1 ratio; pg 6.)
<b>YES</b> ↓		
Is fuel visible and moving in the return line when priming?	<b>NO</b> → Check for clogged fuel filter and/or vent.	Clean as required; re-start
<b>YES</b> ↓		
Is there spark at the spark plug wire terminal?	<b>NO</b> → The ignition switch is OFF ("O") Faulty ignition ground. Faulty transistor unit.	Move switch to ON ("I") and re-start Return blower to dealer.
<b>YES</b> ↓		
Check the spark plug	If the plug is wet, excess fuel may be in the cylinder. The plug may be fouled or improperly gapped. The plug may be damaged internally or of the wrong size.	Crank the engine with the plug removed, replace the plug, and re-start. Clean and re-gap the plug to 0.024 inch (0.6 mm). Re-start. Replace the plug with a Champion CJ8. Re-start.

## LOW POWER OUTPUT

What To Check	Possible Cause	Remedy
<div style="border: 1px solid black; padding: 5px; width: fit-content;">                     Is the engine overheating?                 </div>	Operator is overworking the machine.  Carburetor mixture is too lean.  Improper fuel ratio.  Fan, fan cover, cylinder fins dirty or damaged.  Carbon deposits on piston or in the muffler.	Use lower throttle setting.  Return blower to dealer.  Re-fill with fresh fuel of the correct mixture (Shindaiwa Premium 2-cycle Engine Oil and gasoline—40 : 1 ratio; refer to page 6).  Clean, repair or replace as necessary.  Decarbonize (refer to page 15).
<div style="border: 1px solid black; padding: 5px; width: fit-content;">                     Engine is rough at all speeds. May also have black smoke and/or unburned fuel at the exhaust.                 </div>	Clogged air cleaner element.  Loose or damaged spark plug.  Air leakage or clogged fuel line.  Water in the fuel.  Piston seizure.  Faulty carburetor and/or diaphragm.	Service the air cleaner.  Tighten or replace.  Repair or replace filter and/or fuel line.  Drain the fuel system, replace the fuel.  Return blower to dealer.  Return blower to dealer
<div style="border: 1px solid black; padding: 5px; width: fit-content;">                     Engine is knocking.                 </div>	Overheating condition.  Improper fuel.  Carbon deposits in the combustion chamber.	Idle engine until cool; find reason for overheat.  Check fuel octane rating; check for presence of alcohol in the fuel. Refuel as necessary (pg. 6).  Decarbonize (refer to page 15).

# TROUBLESHOOTING GUIDE (continued)

## ADDITIONAL PROBLEMS

Symptom	Possible Cause	Remedy
<div style="border: 1px solid black; padding: 5px; display: inline-block;">Poor acceleration.</div>	Clogged air cleaner element.	Clean the element.
	Clogged fuel filter.	Replace the fuel filter as required (refer to page 13).
	Carburetor mixture too lean.	Return blower to the dealer
	Idle speed set too low.	Adjust: 2300-2500 rpm
<div style="border: 1px solid black; padding: 5px; display: inline-block;">Engine stops abruptly.</div>	Ignition switch turned OFF.	Set the switch to "I" (ON) and re-start.
	Fuel tank empty.	Refuel.
	Clogged fuel filter.	Clean or replace filter as required.
	Water in the fuel.	Drain; replace with clean fuel.
	Shorted spark plug or loose terminal.	Clean and replace spark plug; tighten the terminal.
	Ignition failure.	Return blower to the dealer.
	Piston seizure.	Return blower to the dealer.
<div style="border: 1px solid black; padding: 5px; display: inline-block;">Engine difficult to shut off.</div>	Ground (stop) wire is disconnected, or switch is defective.	Test and replace as required.
	Overheating due to incorrect spark plug.	Correct plug: Champion CJ8.
	Overheated engine.	Idle engine until cool.
<div style="border: 1px solid black; padding: 5px; display: inline-block;">Excessive vibration</div>	Warped or damaged blower fan	Inspect and replace fan as required.
	Loose bolt or fastener	Tighten as required.
	Internal engine damage.	Return blower to dealer.

**Shin-Daiwa Kogyo Co., Ltd.**  
**Federal Emission Design And Defect Limited Warranty**  
**Utility And Lawn And Garden Engines**

Shin-Daiwa Kogyo Co., Ltd. warrants to the initial purchaser and each subsequent owner, that this utility equipment engine (herein engine) is designed, built and equipped to conform at the time of initial sale, to all applicable regulations of the U.S. Environmental Protection Agency (EPA), and that the engine is free of defects in materials and workmanship that would cause this engine to fail to conform with EPA regulations during its warranty period. This emission warranty is applicable in all States, except the State of California.

For parts listed under PARTS COVERED, the dealer authorized by Shin-Daiwa Kogyo Co., Ltd. will, at no cost to you, make the necessary diagnosis, repair, or replacement of any defective emission-related component to ensure that the engine complies with applicable U.S. EPA regulations.

**MANUFACTURERS WARRANTY COVERAGE**

When sold within the U.S., this engine's emission control system is warranted for a period of two (2) years from the date this product is first delivered to the original retail purchaser.

**OWNER'S WARRANTY RESPONSIBILITIES**

As the engine owner, you are responsible for the performance of the required maintenance listed in your owner's manual. Shin-Daiwa Kogyo Co., Ltd. recommends that you retain all receipts covering maintenance on your engine, but Shin-Daiwa Kogyo Co., Ltd. cannot deny a warranty claim solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the engine owner, you should however be aware that Shin-Daiwa Kogyo Co., Ltd. may deny your warranty coverage if your engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

You are responsible for presenting your engine to the nearest dealer authorized by Shin-Daiwa Kogyo Co., Ltd. when a problem exists.

If your Shindaiwa Dealer is unable to answer questions regarding your warranty rights and responsibilities, you should then contact your Shindaiwa Distributor.

For the name and telephone number of the Shindaiwa Distributor in your area, please call Shindaiwa Inc. at (503) 692-3070 between the hours of 8:00 AM and 5:00 PM Pacific Standard Time.

## **PARTS COVERED**

Listed below are the parts covered by the Federal Emission Design and Defect Warranty. Some parts listed below may require scheduled maintenance and are warranted up to the first scheduled replacement of that part. The warranted parts include:

1. Carburetor Internal Components
  - Jet, Diaphragm Assembly-Metering
2. Ignition System Components
  - Ignition Coil
  - Flywheel Rotor

The emission control system for your particular Shindaiwa engine may also include certain related hoses and connectors.

## **LIMITATIONS**

The Federal Emission Design and Defect Warranty shall not cover any of the following:

- (a) conditions resulting from tampering, misuse, improper adjustment (unless they were made by the dealer or service center authorized by Shin-Daiwa Kogyo Co., Ltd. during a warranty repair), alteration, accident, failure to use the recommended fuel and oil, or not performing required maintenance services,
- (b) the replacement parts used for required maintenance services,
- (c) consequential parts used for required maintenance services,
- (d) diagnosis and inspection fees that do not result in eligible warranty service being performed, and
- (e) any non-authorized replacement part, or malfunction of authorized parts due to use of non-authorized parts.

## **MAINTENANCE AND REPAIR REQUIREMENTS**

You are responsible for the proper use and maintenance of the engine. You should keep all receipts and maintenance records covering the performance of regular maintenance in the event questions arise. These receipts and maintenance records should be transferred to each subsequent owner of the engine. Shin-Daiwa Kogyo Co., Ltd. reserves the right to deny warranty coverage if the owner has not properly maintained the engine. Shin-Daiwa Kogyo Co., Ltd. will not deny warranty repairs, however, solely because of the lack of repair, maintenance or failure to keep maintenance records.

MAINTENANCE, REPLACEMENT OR REPAIR OF EMISSION CONTROL DEVICES AND SYSTEMS MAY BE PERFORMED BY ANY REPAIR ESTABLISHMENT OR INDIVIDUAL; HOWEVER, WARRANTY REPAIRS MUST BE PERFORMED BY A DEALER OR SERVICE CENTER AUTHORIZED BY SHIN-DAIWA KOGYO CO., LTD. THE USE OF PARTS THAT ARE NOT EQUIVALENT IN PERFORMANCE AND DURABILITY TO AUTHORIZED PARTS MAY IMPAIR THE EFFECTIVENESS OF THE EMISSION CONTROL SYSTEM AND MAY HAVE A BEARING ON THE OUTCOME OF A WARRANTY CLAIM.

If other than the parts authorized by Shin-Daiwa Kogyo Co., Ltd. are used for maintenance replacements or for the repair of components affecting emission control, you should assure yourself that such parts are warranted by their manufacturer to be equivalent to the parts authorized by Shin-Daiwa Kogyo Co., Ltd. in their performance and durability.

### **OBTAINING WARRANTY SERVICE**

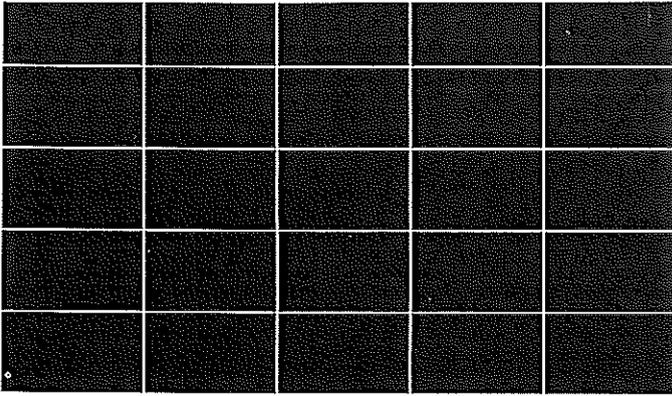
All repairs qualifying under this limited warranty must be performed by a dealer authorized by Shin-Daiwa Kogyo Co., Ltd.

If any emission-related part is found defective during the warranty period, it is your responsibility to present the product to an authorized Shindaiwa dealer. Bring your sales receipts showing the date of purchase for this engine. The dealer authorized by Shin-Daiwa Kogyo Co., Ltd. will perform the necessary repairs or adjustments within a reasonable amount of time and furnish you with a copy of the repair order. All parts and accessories replaced under this warranty become the property of Shin-Daiwa Kogyo Co., Ltd.

To locate an authorized Shindaiwa dealer nearest you, contact your Shindaiwa Distributor. For the name and telephone number of the Shindaiwa Distributor in your area, please call Shindaiwa Inc. at (503) 692-3070 between the hours of 8:00 AM and 5:00 PM Pacific Standard Time.

### **THIS WARRANTY IS ADMINISTERED BY**

Shindaiwa Inc.  
11975 S.W. Herman Rd.  
Tualatin OR. 97062  
(503) 692-3070



# shindaiwa

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