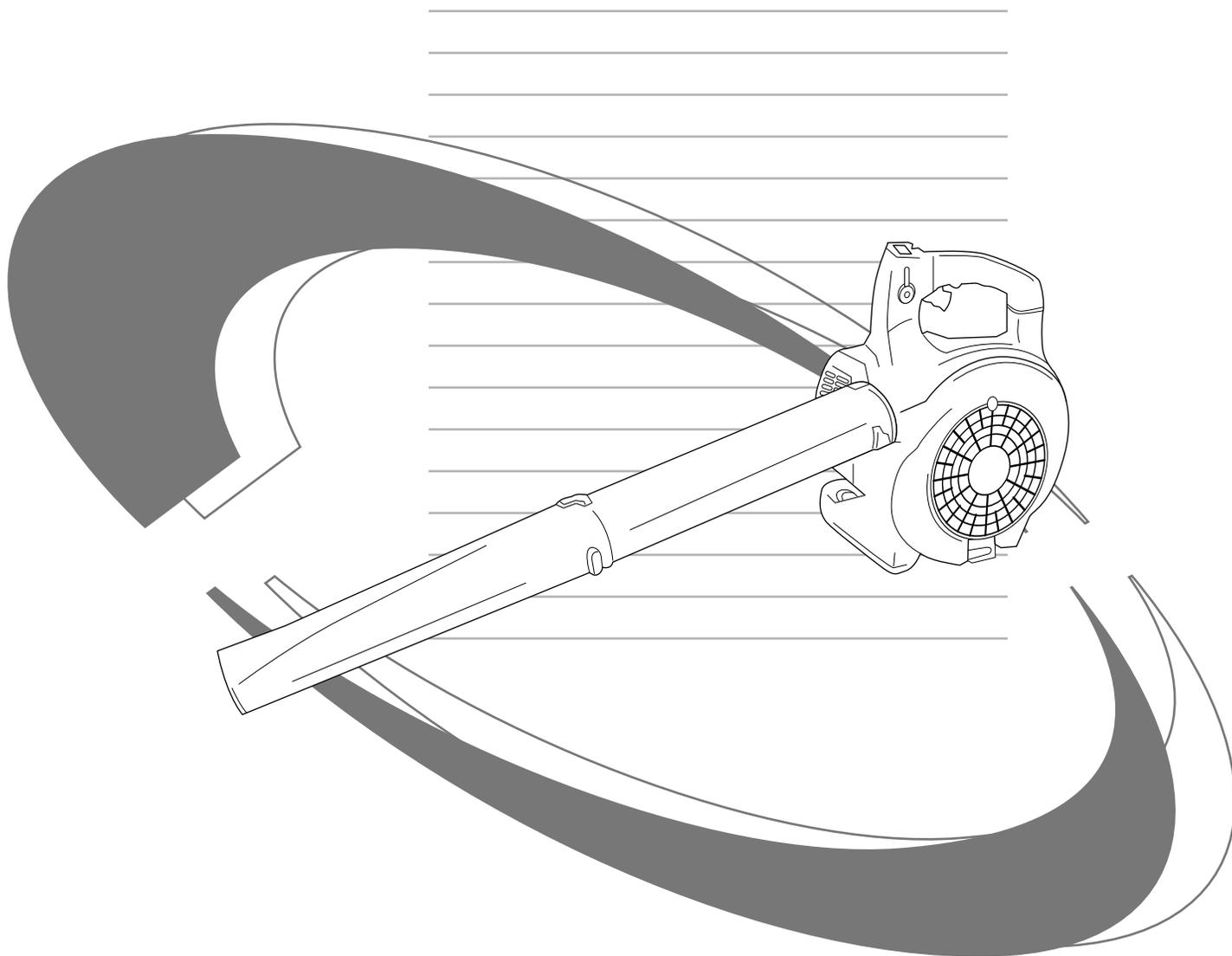


MARUYAMA

OPERATOR'S MANUAL

**BL3100
HAND-HELD BLOWER**



Premium Outdoor Power Equipment  Maruyama. *Extraordinary.*

Completely read and understand this manual prior to using this product.



Limited Warranty Statement

All Maruyama commercial/ industrial products are warranted to the original purchaser to be free from defects in material and workmanship **from the date of purchase** for the time periods listed as follows:

Lifetime for inner drive shaft on trimmers and brushcutters and all ignition modules.

3 years for residential, non-institutional, non-income producing use.

1 year for industrial, commercial, institutional, rental and income producing use.

Maruyama AE series engines and Kawasaki TEX45/TEX54 are covered exclusively for one additional year of industrial, commercial, institutional, rental and income producing use (total of 2 years).

All other engines refer to engine manufacturer's warranty statement.

Any part of a Maruyama product found to be defective within the applicable warranty period shall, at Maruyama's option, be repaired or replaced without charge. Warranty consideration is obtained by delivering any Maruyama product believed to be defective to an Authorized Maruyama Servicing Dealer within the applicable warranty period.

The purchaser shall not be charged for diagnostic labor that leads to the determination that a warranted part is defective, if the diagnostic work is performed at a Maruyama Dealer.

Any warranted part which is not scheduled for replacement as required maintenance, or which is scheduled only for regular inspection to the effect of "repair or replace as necessary" shall be warranted for the warranty period. Any warranted part, which is scheduled for replacement as, required maintenance shall be warranted for the period of time up to the first scheduled replacement point for that part. Maruyama Mfg. Co., Inc. is liable for damages to other engine components caused by the failure of a warranted part still under warranty.

The purchaser is responsible for the performance of the required maintenance, as defined by Maruyama Mfg. Co., Inc. in the Owner's/Operator's Manual.

EMISSION-RELATED PARTS WARRANTY: In addition to the above warranty coverage, Maruyama Mfg. Co., Inc. will repair or replace, free of charge, for the original purchaser and each subsequent purchaser any emission-related part or parts found to be defective in material and workmanship for two (2) years from original retail delivery date **except catalytic converter. Catalytic converter is warranted one year from original retail delivery date. Emission-related parts are the carburetor assembly, the ignition coil assembly, the ignition rotor and the spark plug and catalytic converter.** Any replacement part that is equivalent in performance and durability may be used in non-warranty maintenance or repairs, and shall not reduce the warranty obligations of Maruyama Mfg. Co., Inc.

This warranty does not cover the following:

1. Maintenance items (excluding defects in materials and workmanship) including hoses, spark plugs, starter rope, air and fuel filters, clutch shoes, vibration isolators, throttle cables and all cutting attachments, etc.
2. Extra expenses including shipping and handling, travel, payment for lost time or pay and for any inconvenience and storage.
3. Alterations or modifications including aftermarket parts not authorized by Maruyama U.S., Inc.
4. Wear, accident, abuse, neglect, misuse, negligence, improper fuels, lubricants, fuel mixtures (when applicable), or failure to operate or maintain the product in accordance with instructions approved by Maruyama.

Repair or replacement as provided under this warranty is the exclusive remedy of the consumer. Maruyama shall not be liable for any incidental or consequential damages for breach of any express or implied warranty on these products except to the extent prohibited by applicable law. Any implied warranty of merchantability or fitness for a particular purpose on these products is limited in duration to the warranty period as defined in the limited warranty statement. Maruyama reserves the rights to change or improve the design of the product without notice and does not assume obligation to update previously manufactured products.

This warranty provides you with specific legal rights, which may vary from state to state.

It is the Owner's and Dealer's responsibility to make sure the Warranty Registration Card is properly filled out and mailed to Maruyama U.S., Inc. Proof of purchase and registration will be required in order to obtain warranty service.

To locate an Authorized Maruyama Servicing Dealer nearest you, contact:

Maruyama U.S., Inc.
3570 Shelby Lane
Denton, TX 76207 U.S.A
P.O. Box 2107
Denton, TX 76202 U.S.A
Phone 940-383-7400
maruyama@maruyama-us.com
www.maruyama-us.com

OWNER'S WARRANTY RESPONSIBILITIES:

- (a) As the small off-road engine owner, you are responsible for the performance of the required maintenance listed in your owner's manual.
Maruyama Manufacturing Company, Inc. recommends that you retain all receipts covering maintenance on your small off-road engine, but Maruyama Manufacturing Company, Inc. cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance. Any replacement part or service that is equivalent in performance and durability may be used in non-warranty maintenance or repairs, and shall not reduce the warranty obligations of the engine manufacturer.
- (b) As the small off-road engine owner, you should be aware, however, that Maruyama Manufacturing Company may deny you warranty coverage if your small off-road engine or a part has failed due to abuse, neglect improper maintenance or unapproved modifications.
- (c) You are responsible for presenting your small off-road engine to a Maruyama Manufacturing Company, Inc. service center as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, you should contact Maruyama U.S., Inc. at **1-940-383-7400**.

COVERAGE

Maruyama Manufacturing Company, Inc. warrants to the ultimate purchaser and each subsequent purchaser that your small off-road engine will be designed, built and equipped, at the time of sale, to meet all applicable regulations. Maruyama Manufacturing Company, Inc. also warrants to the initial purchaser and each subsequent purchaser that your small off-road engine is free from defects in materials and workmanship which cause the engine to fail to conform with applicable regulations for a period of two years.

The 1995 and later small off-road engines are warranted for two years in California. In all other states for 1997 and later model years, EPA requires manufacturers to small off-road engines for two years. These warranty periods will begin on the date the small off-road engine is purchased by the initial purchaser. If any emission-related part on your engine is defective, the part will be replaced by Maruyama Manufacturing Company, Inc. at no cost to the owner.

Maruyama Manufacturing Company, Inc. shall remedy warranty defects at any authorized Maruyama Manufacturing Company, Inc. engine dealer or warranty station. Any authorized work done at an authorized dealer or warranty station shall be free of charge to the owner if such work determines that a warranted part is defective. Any manufacturer-approved or equivalent replacement part may be used for any warranty maintenance or repairs on emission-related parts, and must be provided free of charge to the owner if the part is still under warranty, Maruyama Manufacturing Company, Inc. is liable for damages to other engine components caused by the failure of a warranted part still under warranty.

The California Air Resources Board's Emission Warranty Parts List specifically defines the emission-related warranted parts, (EPA's regulations do not include a parts list, but EPA considers emission-related warranted parts to include all the parts listed below.) These warranted parts are: **the carburetor assembly, the ignition coil assembly, the ignition rotor , the spark plug and the catalytic converter.**

MAINTENANCE REQUIREMENTS

The owner is responsible for the performance of the required maintenance as defined by the Maruyama Manufacturing Company, Inc. in the owner's manual.

LIMITATIONS

This Emission Control System Warranty shall not cover any of the following:

- (a) Repair or replacement required because of misuse or neglect, lack of required maintenance, repairs improperly performed or replacements not conforming to Maruyama Manufacturing Company, Inc. specifications that adversely affect performance and/or durability, and alterations or modifications not recommended or approved in writing by Maruyama Manufacturing Company, Inc., and
- (b) Replacement of parts and other services and adjustments necessary for required maintenance at and after the first scheduled replacement point.

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Introduction

Thank you for purchasing a Maruyama product.

Maruyama, its distributors, and dealers want you to be completely satisfied with your new product. Please feel free to contact your local Authorized Service Dealer for help with service, genuine Maruyama parts, or other information you may require.

Whenever you contact your Authorized Service Dealer or the factory, always know the serial number of your product. This number will help the Service Dealer or Service Representative provide exact information about your specific product. You will find the model and serial number located in a unique place on the product (Product Description on page 11).

For your convenience, write the product model name and serial number in the space to the right.

Model Name _____
Serial No. _____

Read this manual carefully to learn how to operate and maintain your product correctly. Reading this manual will help you and others avoid personal injury and damage to the product.

Although Maruyama designs, produces and markets safe, state-of-the-art products, you are responsible for using the product properly and safely. You are also responsible for training persons who you allow to use the product about safe operation.

The Maruyama warning system in this manual identifies potential hazards and has special safety messages that help you and others avoid personal injury, even death. DANGER, WARNING and CAUTION are signal words used to identify the level of hazard. However, regardless of the hazard, be extremely careful.

DANGER signals an extreme hazard that will cause serious injury or death if the recommended precautions are not followed.

WARNING signals a hazard that may cause serious injury or death if the recommended precautions are not followed.

CAUTION signals a hazard that may cause minor or moderate injury if the recommended precautions are not followed. Two other words are also used to highlight information. “Important” calls attention to special mechanical information and “Note” emphasizes general information worthy of special attention.

Safety

Operator Safety

1. Read and understand this Operator’s Manual before using this product. Be thoroughly familiar with the proper use of this product.
2. Never allow children to operate the Handheld Blower. It is not a toy. Never allow adults to operate the unit without first reading the Operator’s Manual.
3. Always wear eye protection that complies with ANSI (American National Standards Institute) Z87-1.



4. Always wear hearing protection.



5. Always wear sturdy boots with nonslip soles.
6. Always wear heavy, long pants, a long sleeved shirt and gloves. Do not wear loose clothing, jewelry, short pants, sandals, or go barefoot. Secure hair so it is above shoulder length.
7. Always wear a face filter mask.
8. Never operate this Handheld Blower when you are tired, ill, or under the influence of alcohol, drugs or medication.
9. Never start or run the engine inside a closed room or building. Breathing exhaust fumes can cause death.



10. Keep handles clean of oil, fuel and dirt.

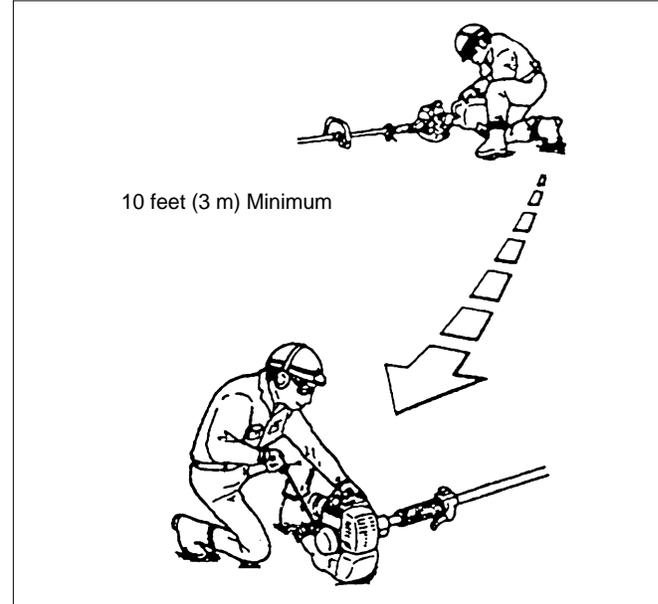
Handheld Blower Safety

1. Make sure the Handheld Blower is correctly assembled as instructed in the Assembly section of this manual.
2. Before each use, inspect the Handheld Blower, replace damaged parts, And check for fuel leaks. Make sure all fasteners are in place and tightened securely.
3. Maintain the Handheld Blower in accordance with the recommended maintenance intervals and procedures detailed in the “Maintenance” section, beginning on page 18.
4. Use the correct accessories. Never use replacement parts that are not approved by Maruyama U.S., Inc.
5. Shut off the engine before performing maintenance or working on the machine.
6. If running problems or excessive vibration occur, stop immediately and inspect the unit for the cause. If the cause cannot be determined, or is beyond your ability to correct, return the Handheld Blower to your servicing dealer for repair.

Fuel Safety

1. Gasoline is highly flammable and must be handled and stored carefully. Use a container approved for storing gasoline and/or fuel/oil mixture.
2. Mix and pour fuel outdoors away from sparks or flames.
3. Do not smoke near fuel storage containers or the Handheld Blower. Do not smoke while operating the Handheld Blower.
4. Do not overfill the fuel tank. Stop filling 1/4 to 1/2 inch (6mm-13mm) from the top of the tank.
5. Wipe up any spilled fuel before starting the Handheld Blower engine.

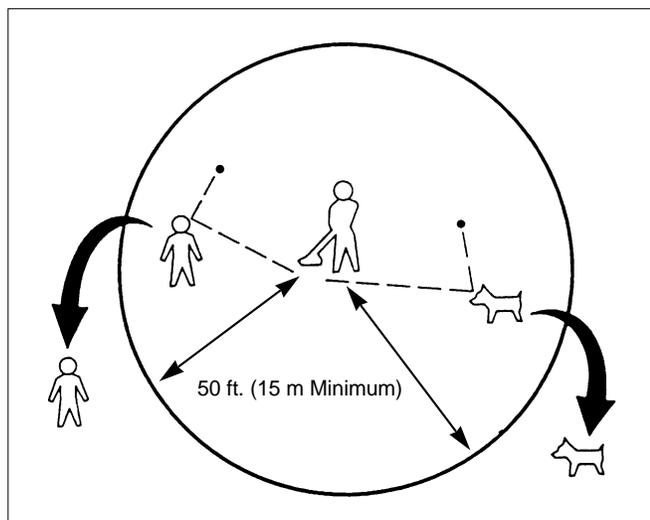
6. Move the Handheld Blower at least 10 feet (3m) away from the fueling location before starting the engine.



7. Do not remove the fuel tank cap while the engine is running or immediately after stopping the engine.
8. Allow the engine to cool before refueling.
9. Empty the fuel tank before storing the Handheld Blower. Fuel should be emptied after each use as fuel remaining in the tank may leak during storage.
10. Store both fuel and the Handheld Blower away from open flame, sparks and excessive heat. Make sure fuel vapors cannot reach sparks or open flames from heaters, furnaces, electric motors, etc.

Operating Safety

1. THIS HANDHELD BLOWER CAN CAUSE SERIOUS INJURIES. Read the instructions carefully. Be familiar with all controls and the proper use of the Handheld Blower.
2. Avoid using the Handheld Blower near rocks, gravel, stones and similar materials which can become dangerous projectiles.
3. Keep children, bystanders and animals outside a 50ft. (15m) radius surrounding the area of operation.



4. If you are approached while operating the Handheld Blower, stop the engine.
5. Never allow children to operate the Handheld Blower.
6. Use the Handheld Blower only in daylight or adequate artificial lighting.
7. Never operate the Handheld Blower without proper guards or other protective safety devices in place.
8. Do not put hands or feet near any moving parts. Keep clear of hot surfaces such as the muffler.
9. Maintain a firm footing while operating the Handheld Blower.

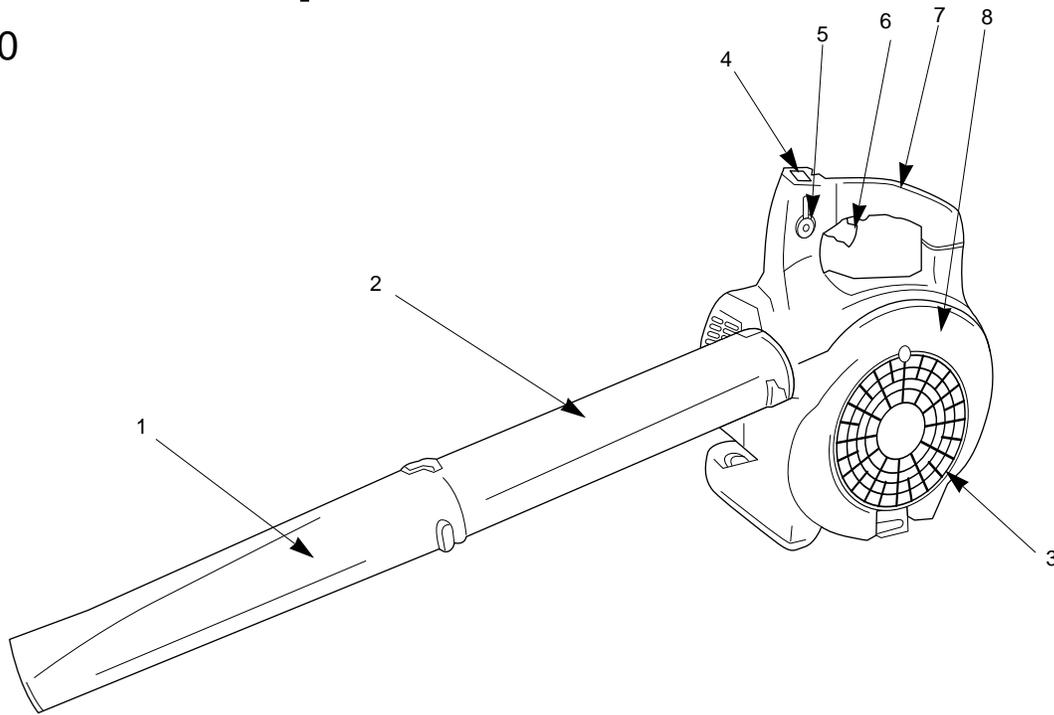
10. Use the right tool for the job. Do not use the Handheld Blower for any job that is not recommended.
11. Know how to stop the machine quickly in an emergency. For information on how to stop the engine refer to the Starting and Stopping Procedures on page 15.
12. Do not point the Handheld Blower nozzle in the direction of people or pets.

Operating Techniques

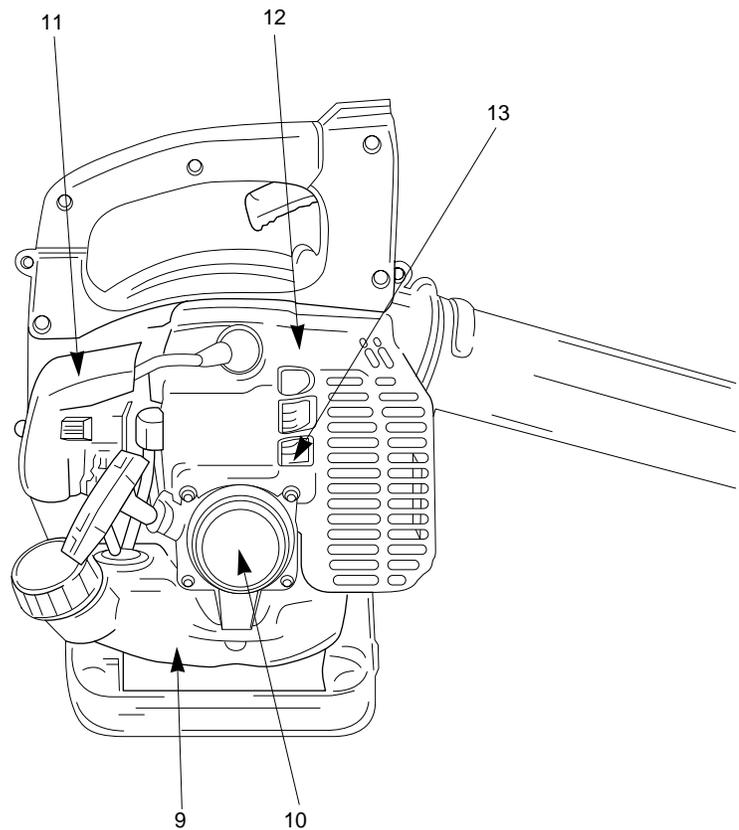
1. Operate power equipment only at reasonable hours — not early in the morning or late at night when people may be disturbed. Comply with the times listed in local ordinances. Usual recommendations for hours of operation are 9:00 a.m. to 5:00 p.m., Monday through Saturday.
2. To reduce noise levels, limit the number of pieces of equipment used at any one time and operate power blowers at the lowest possible throttle speed to do the job.
3. Check your equipment before operation, especially the muffler, air intakes and air filters.
4. Use rakes or brooms to loosen debris before blowing.
5. In dusty conditions, slightly dampen surfaces or use a mister attachment when water is available.
6. Conserve water by using power blowers instead of hoses for many lawn and garden applications, including areas such as gutters, screens, patios, grills, porches and gardens.
7. Use the full blower nozzle extension so the air stream can work close to the ground.
8. Watch out for children, pets, open windows, or freshly washed cars and blow debris safely away.
9. After using blowers and other equipment, CLEAN UP! Dispose of debris in trash receptacles.

Product Description

BL3100



1. Pipe B
2. Pipe A
3. Air Intake Screen
4. Stop Switch
5. Throttle Setting Lever
6. Throttle Trigger
7. Handle
8. Fan Cover
9. Fuel Tank
10. Recoil Starter
11. Air Cleaner
12. Engine
13. Serial Number
(on the top of crankcase)



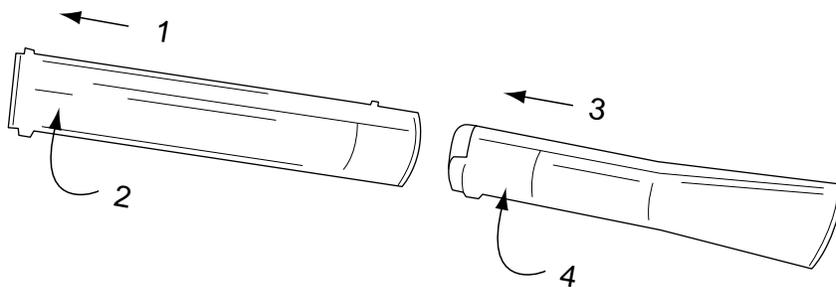
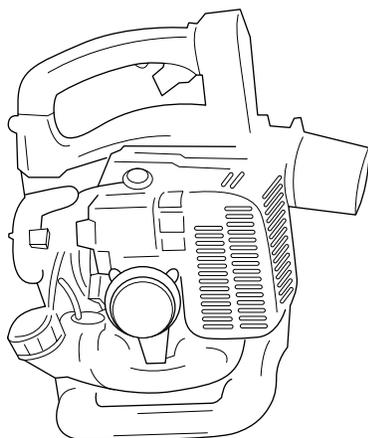
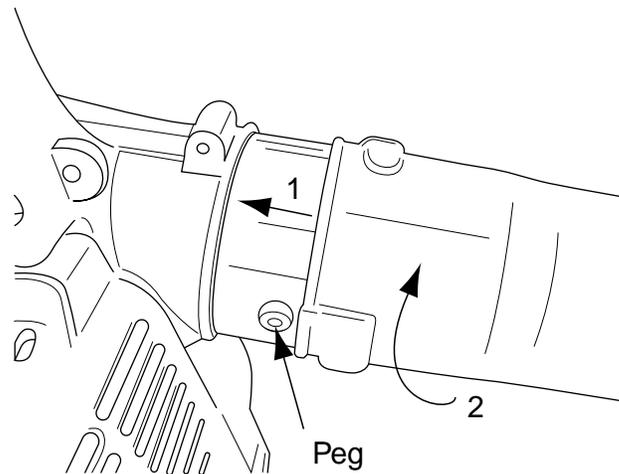
Assembly

Blower Pipes Installation

WARNING

Stop the engine before installing or removing blower pipes.

1. Align groove in pipe A with pegs on blower housing and slide pipe A on to housing.
2. Rotate pipes A clock wise to lock it into place.
3. Align groove in pipe B with pegs on pipe A and slide pipe B until proper position.
4. Rotate pipe B clockwise to lock it into place.



Before Operation

Oil and Fuel

DANGER

POTENTIAL HAZARD

- In certain conditions gasoline is extremely flammable and highly explosive.

WHAT CAN HAPPEN

- A fire or explosion from gasoline can burn you, others, and cause property damage.

HOW TO AVOID THE HAZARD

- Use a funnel and fill the fuel tank outdoors, in an open area, when the engine is cold. Wipe up any gasoline that spills.
- Do not fill the fuel tank completely full. Add gasoline to the fuel tank until the level is 1/4" to 1/2" (6 mm to 13 mm) below the bottom of the filler neck. This empty space in the tank allows gasoline to expand.
- Never smoke when handling gasoline, and stay away from an open flame or where gasoline fumes may be ignited by a spark.
- Store gasoline in an approved container and keep it out of the reach of children.
- Never buy more than a 30-day supply of gasoline.

1. Do not smoke near fuel.
2. Mix and pour fuel outdoors and where there are no sparks or flames.
3. Always shut off the engine before refueling. Never remove the fuel tank cap while the engine is running or just right after stopping the engine.

WARNING

POTENTIAL HAZARD

- Gasoline contains gasses that can build up pressure inside a gas tank.

WHAT CAN HAPPEN

- Fuel can be sprayed on you when removing gas cap.

HOW TO AVOID THE HAZARD

- Remove fuel cap slowly to avoid injury from fuel spray.

4. Always open the fuel tank cap slowly to release any possible overpressure inside the tank.
5. Do not overfill the fuel tank. Stop filling 1/4-1/2 inch (6 mm-13 mm) from the top of the tank.
6. Tighten the fuel tank cap carefully but firmly after refilling.
7. Wipe up any spilled fuel before starting the engine.
8. Move the Handheld Blower at least 10 feet (3 m) away from the fueling location and fuel storage container before starting the engine.

Recommended Oil Type

Only use a two-cycle engine oil formulated for use in high-performance, air-cooled two-cycle engines. Maruyama brand 2-cycle oil is formulated for use in high-performance, air-cooled two-cycle engines.

IMPORTANT: Do not use National Marine Manufacturer's Association (NMMA) or BIA certified oils. This type of 2-cycle engine oil does not have the proper additives for air-cooled, 2-cycle engines and can cause engine damage.

Do not use automotive motor oil. This type of oil does not have the proper additives for air-cooled, 2-cycle engines and can cause engine damage.

Recommended Fuel Type

Use clean, fresh lead-free gasoline, including *oxygenated* or *reformulated* gasoline, with an octane rating of 85 or higher. To ensure freshness, purchase only the quantity of gasoline that can be used in 30 days. Use of lead-free gasoline results in fewer combustion chamber deposits and longer spark plug life. Use of premium grade fuel is not necessary or recommended.

Use of Fuel Additives

IMPORTANT: NEVER USE METHANOL, GASOLINE CONTAINING METHANOL, GASOHOL CONTAINING MORE THAN 10% ETHANOL, PREMIUM GASOLINE, OR WHITE GAS BECAUSE ENGINE FUEL SYSTEM DAMAGE COULD RESULT.

DO NOT USE FUEL ADDITIVES OTHER THAN THOSE MANUFACTURED FOR FUEL STABILIZATION DURING STORAGE SUCH AS MARUYAMA'S STABILIZER/CONDITIONER OR A SIMILAR PRODUCT. MARUYAMA'S STABILIZER/CONDITIONER IS A PETROLEUM DISTILLATE BASED CONDITIONER/STABILIZER.

MARUYAMA DOES NOT RECOMMEND STABILIZERS WITH AN ALCOHOL BASE SUCH AS ETHANOL, METHANOL OR ISOPROPYL. ADDITIVES SHOULD NOT BE USED TO TRY TO ENHANCE THE POWER OR PERFORMANCE OF MACHINE.

Mixing Gasoline And Oil

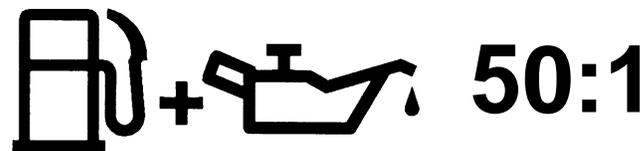
IMPORTANT: The engine used on this Handheld Blower is of a 2-cycle design. The internal moving parts of the engine, i.e., crankshaft bearings, piston pin bearings and piston to cylinder wall contact surfaces, require oil mixed with the gasoline for lubrication.

Failure to add oil to the gasoline or failure to mix oil with the gasoline at the appropriate ratio will cause major engine damage which will void your warranty.

For your fuel premix, only use a quality oil designed for 2-cycle air cooled engines. Maruyama 50:1 2-cycle Oil is formulated to meet the requirements of high-performance, air-cooled two-cycle engines.

Fuel Mixture

The fuel: oil ratio is 50 parts gasoline to 1 part oil or 50:1.



Note: Never use a mixing ratio less than 50:1 regardless of the oil package mixing instructions. Ratios less than 50:1, (for example, 60:1, 80:1, 100:1), reduce the amount of lubrication to the internal moving parts of the engine and can cause damage.

Fuel Mixture Chart

Gasoline	50:1 2-cycle oil
1 gallon	2.6 oz.
2 gallons	5.1 oz.
5 gallons	12.8 oz.
1 litre	20 ml
5 litre	100 ml

Mixing Instructions

IMPORTANT: Never mix gasoline and oil directly in the Handheld Blower fuel tank.

1. Always mix fuel and oil in a clean container approved for gasoline.
2. Mark the container to identify it as fuel mix for the Handheld Blower.
3. Use regular unleaded gasoline and fill the container with half the required amount of gasoline.
4. Pour the correct amount of oil into the container then add the remaining amount of gasoline.
5. Close the container tightly and shake it momentarily to evenly mix the oil and the gasoline before filling the fuel tank on the Handheld Blower.
6. When refilling the Handheld Blower fuel tank, clean around the fuel tank cap to prevent dirt and debris from entering the tank during cap removal.
7. Always shake the premix fuel container momentarily before filling the fuel tank.
8. Always use a spout or funnel when fueling to reduce fuel spillage.
9. Fill the tank only to within 1/4-1/2 inch (6 mm-13 mm) from the top of the tank. Avoid filling to the top of the tank filler neck.

Starting and Stopping

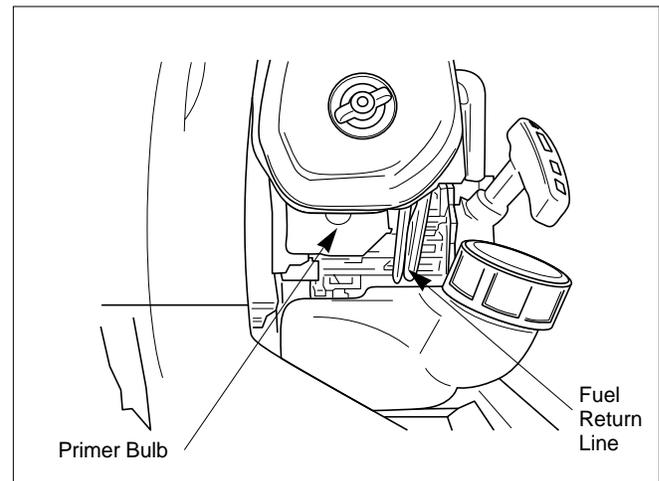
Before Starting the Engine

1. Fill the fuel tank as instructed in the “Before Operation” section of this manual (page13).
2. Rest the Handheld Blower on the ground.
3. Make sure that the area is clear of any broken glass, nails, wire, rocks or other debris.
4. Keep all bystanders, children and animals away from the working area.

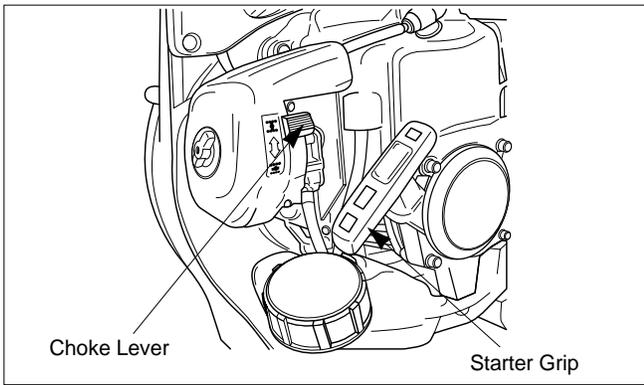
Cold Starting Procedure

This Blower is equipped with a fuel primer and a choke system. To start a “cold” engine properly, perform the following procedure:

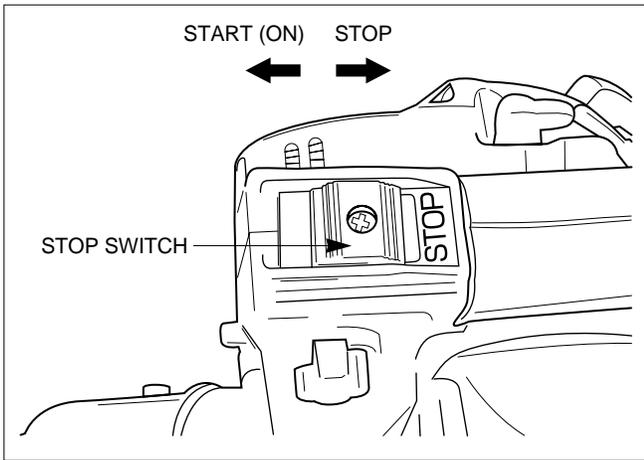
1. Pump the primer bulb at the bottom of the carburetor until fuel can be seen flowing through the fuel return line to the fuel tank.
(Flowing fuel should be almost clear, not foamy or full of bubbles.)



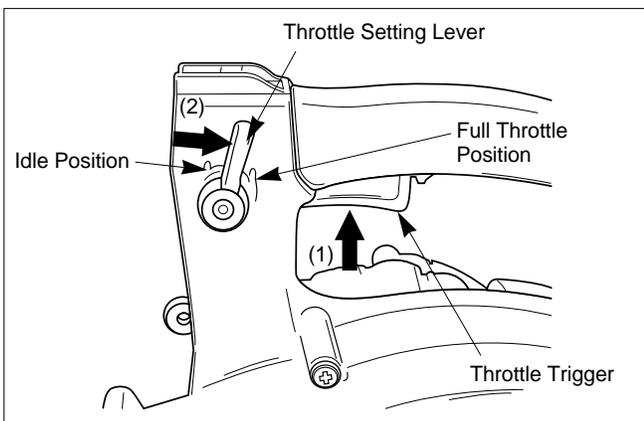
2. Move the choke lever to the closed () position



3. Move the stop switch to the “ON” position.

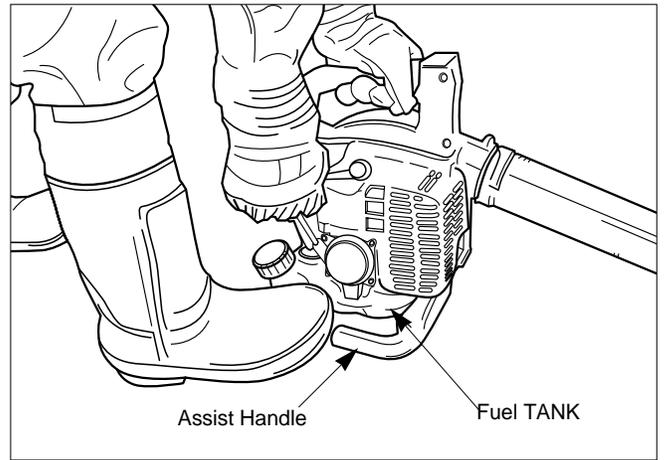


4. (1) Press the throttle trigger.
(2) Move the throttle setting lever to half position.
(3) Release the throttle trigger.
(4) Release the throttle setting lever.
(Throttle is kept in half position.)



5. Hold the Handheld Blower with your left hand and press it down firmly. Hold the assist handle with your right foot gently.

IMPORTANT: Be careful not make damages to fuel tank or the blower by your foot.



6. Pull the starter grip. Grasping the starter grip, slowly pull the starter cord out until you feel resistance, then pull the cord quickly and powerfully. Pull the starter grip until the engine starts.
7. After the engine starts, move the throttle setting lever to the idle position, then move the choke lever to the open () position.

If the engine stops running before you move the choke lever to the open () position:

- A. Go ahead and open the choke.
- B. Make sure the throttle setting lever is set to the idle position.
- C. Pull the starter grip until the engine starts.

WARNING

POTENTIAL HAZARD

- The components of your recoil starter assembly are under high spring tension. If improperly disassembled these parts may strike you with considerable force, possibly causing personal injury.

WHAT CAN HAPPEN

- Contact with the parts can cause severe personal injury.

HOW TO AVOID THE HAZARD

- Never attempt to disassemble your recoil starter assembly yourself. Always consult your authorized Maruyama dealer for repair by qualified service technicians.

Hot Restart

To start the engine that is already warmed up (hot restart), or if the ambient temperature exceeds 68°F (20°C):

1. Pump the primer bulb at the bottom of the carburetor until fuel can be seen flowing through the fuel return line to the fuel tank.
2. Move the choke lever to the open (☰) position and move the stop switch to the “ON” position.
3. Move the throttle setting lever to the idle position and pull the starter grip.
4. If the engine fails to start after three to four pulls, follow the instruction in the Cold Starting Procedure section (page15).

If the engine fails to start after you follow the above procedures, contact an authorized Maruyama dealer.

Note: 1. Don't pull the starter cord out completely.
2. Do not release the starter cord from the fully extended position.

To Stop The Engine:

1. Move the throttle setting lever to the idle position. Release the throttle trigger.
2. Slide the stop switch to the “STOP” position.

Handheld Blower Operation

CAUTION

- **Always wear eye protection, hearing protection, gloves, face filter mask and sturdy boots with nonslip soles when operating the Handheld Blower.**

1. Allow the engine to warm up for a few minutes.
2. control engine speed by the throttle trigger, or set the engine speed by the throttle setting lever.

*To adjust the throttle setting lever.

Press the throttle trigger, then adjust the throttle setting lever as you wish operation.
3. Operate lower speed to blow leaves or debris ground.
4. If the blow is not enough to blow, open the throttle gradually.

Note: Operate Handheld Blower at the lowest throttle setting to do the job.

Maintenance

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 Maruyama Manufacturing Company, Inc. 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.

Idle Speed Adjustment

This Handheld Blower is equipped with non-adjustable fuel mixture carburetor. The engine idle speed is the only adjustment for the operator.

WARNING

- **Idle speed adjustment should be checked each time the unit is operated.**

WARNING

POTENTIAL HAZARD

- **Engine must be running to make carburetor adjustments.**
- **When engine is running, fan is rotating and other parts are moving.**

WHAT CAN HAPPEN

- **Contact with rotating fan or other moving parts could cause serious personal injury or death.**

HOW TO AVOID THE HAZARD

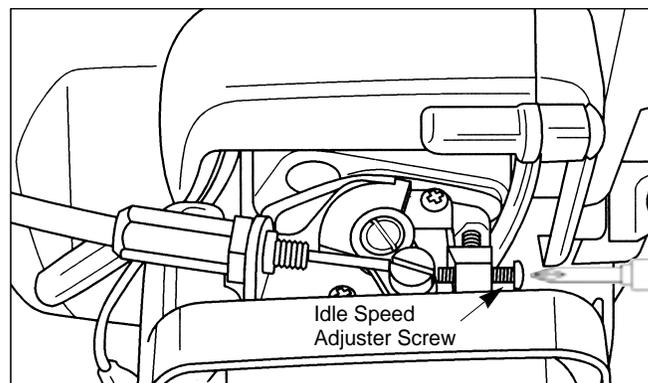
- **Keep hands, feet and clothing away from fan and other moving parts.**
- **Keep all bystanders and pets away from unit while making carburetor adjustments.**

Wear the recommended personal protective equipment and observe all safety instructions.

When the throttle trigger and the throttle setting lever is idle position the engine should return to an idle speed

between 2700 and 3300 RPM. The engine should not stall (stop running) at engine idle speed.

To adjust the engine idle speed, rotate the idle speed adjustment screw on the carburetor.



- Turn the idle speed screw in (clockwise) to increase the engine idle speed.
- Turn the screw out (counterclockwise) to decrease the engine idle speed.

If idle speed adjustment is necessary, and after adjustment the engine stalls, stop using the Handheld Blower immediately!

Contact your local authorized Maruyama Dealer for assistance and servicing.

! WARNING

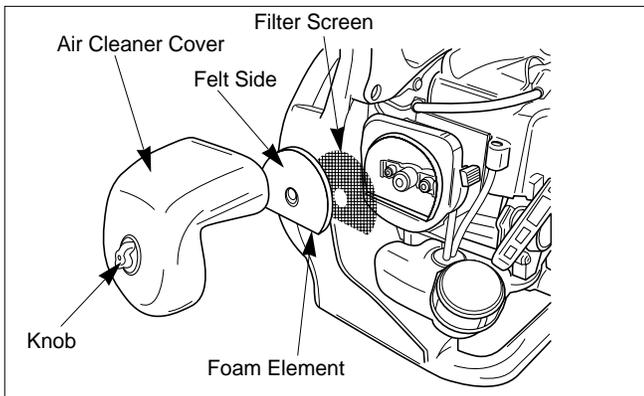
- **Stop the engine before performing maintenance.**

Air Filter

Maintenance Interval

- The air filter should be cleaned and inspected each time the Handheld Blower is used, or more often when working in extremely dusty conditions.
- Replace after every 100 hours of operation.

Air Filter Cleaning



1. Move the choke lever to the closed (\perp) position.
2. Loosen the knob and remove the air cleaner cover.
3. Remove the foam element and filter screen from the air cleaner body.
4. Clean the foam element and filter screen with air blow or warm soapy water.
5. Reassemble the filter screen and foam element to the air cleaner body. Foam element must be located as the felt side face to the cleaner cover.
6. Reinstall the air cleaner cover and tighten the knob.

Fuel Filter

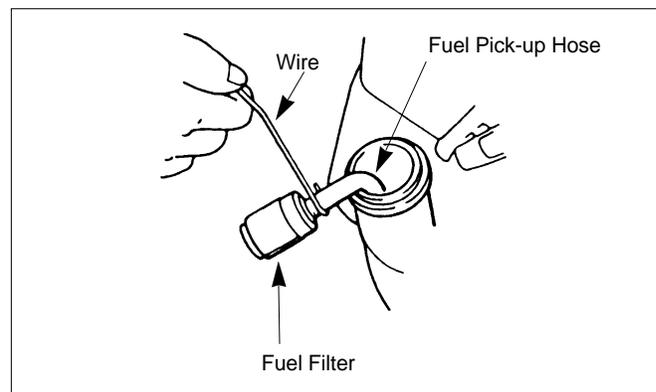
Maintenance Interval

The fuel filter should be cleaned and inspected for damage after each 20 hours of operation.

The fuel filter should be replaced after every 100 hours of operation.

Fuel Filter Replacement

The fuel filter is attached to the end of the fuel pick-up hose inside the fuel tank.



To replace the fuel filter:

1. Make sure the fuel tank is empty.
2. Remove the fuel cap.
3. Using a wire hook, gently pull the fuel filter out through the fuel filler opening.
4. Grasp the fuel hose next to the fuel filter fitting and remove the filter, but do not release the hose.
5. While still holding on to the fuel hose, attach the new fuel filter.
6. Drop the new fuel filter back into the fuel tank.
7. Make sure that the fuel filter is not stuck in a corner of the tank, and that the fuel hose is not doubled over (kinked) before refueling.

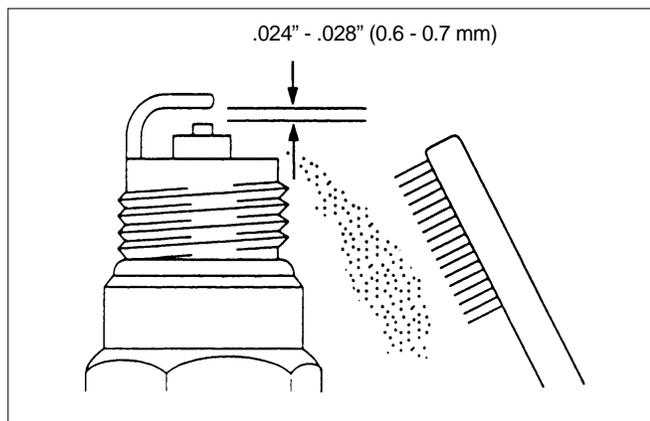
Spark Plug

Maintenance Interval

- The spark plug should be removed from the engine and checked after each 25 hours of operation.
- Replace the spark plug after every 100 hours of operation.

Spark Plug Maintenance

1. With the engine at ambient (room) temperature, twist the high tension lead boot on the spark plug back and forth a couple of times to loosen the boot, then pull the boot off of the spark plug.
2. Remove the spark plug.
3. Clean the electrodes with a stiff brush.



4. Adjust the electrode air gap to .024-.028 in (0.6-0.7 mm).
5. Replace the spark plug if it is oil-fouled, damaged, or if the electrodes are worn down.
6. Do not overtighten the spark plug when installing. The tightening torque is 95-148 in. lbs. (10.7-16.6 N·m).

Cylinder Cooling Fins

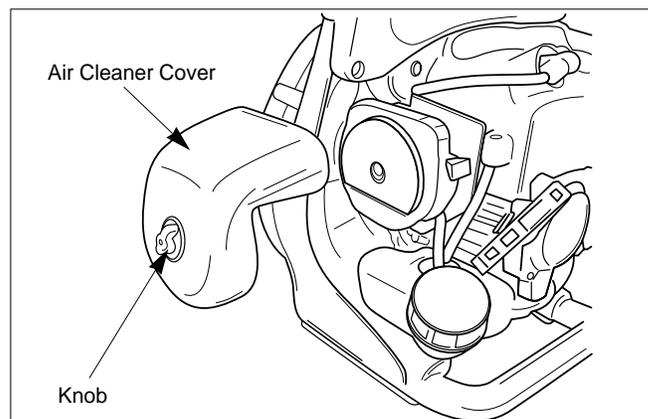
Maintenance Interval

The cylinder cooling fins should be cleaned after every 25 hours of operation, or once a week, whichever comes first.

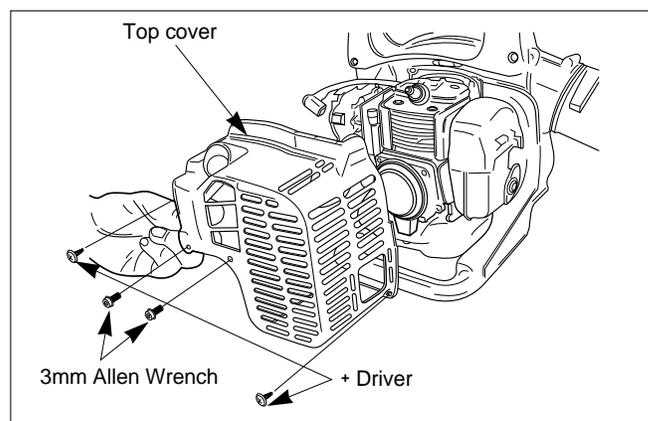
Air must flow freely around and through the cylinder cooling fins to prevent engine overheating. Leaves, grass, dirt and debris buildup on the fins will increase the operating temperature of the engine, which can reduce engine performance and shorten engine life.

Cooling Fin Cleaning

1. With the engine at ambient (room) temperature, loosen the knob and remove the air cleaner cover.



2. Twist the high tension lead boot on the spark plug back and forth a couple of times to loosen the boot, then pull the boot off of the spark plug.
3. Remove the four screws retaining the topcover, then remove the topcover.



4. Clean all dirt and debris from the cooling fins and from around the cylinder base.
5. Reinstall the topcover and the cleaner cover.

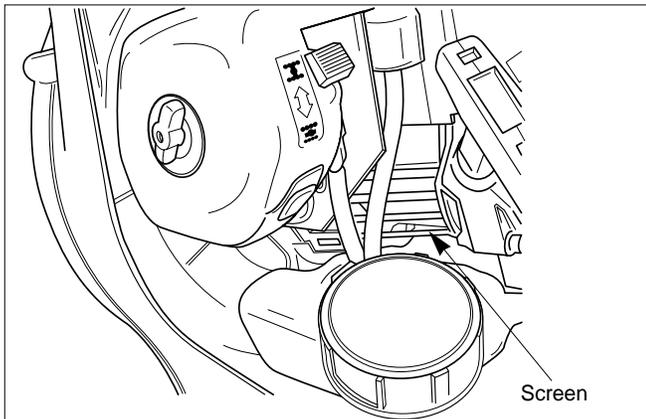
Engine Screen

Maintenance Interval

The screen should be cleaned and inspected each time the Handheld Blower is used.

Screen Cleaning

Clean all dirt and debris from the screen.



Spark Arrester

⚠ WARNING

POTENTIAL HAZARD

- **Muffler surface becomes hot when Handheld Blower is in operation and remains hot for some time after the engine is shut off.**

WHAT CAN HAPPEN

- **Contact with hot muffler surfaces could cause a burn.**

HOW TO AVOID THE HAZARD

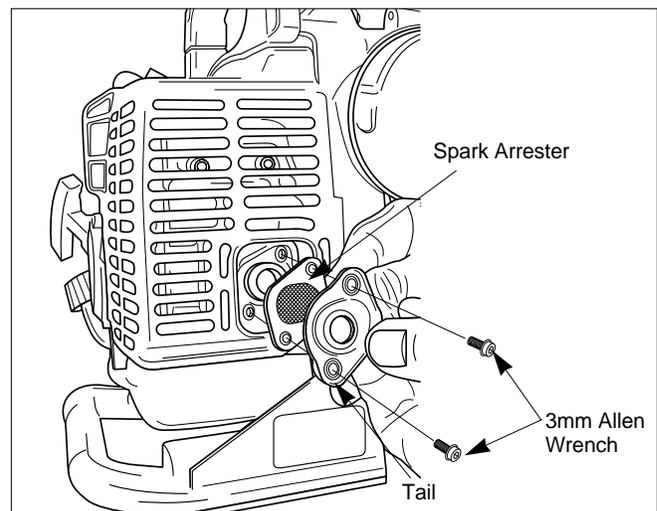
- **Make sure the muffler is cool before inspecting and cleaning the spark arrester.**

Maintenance Interval

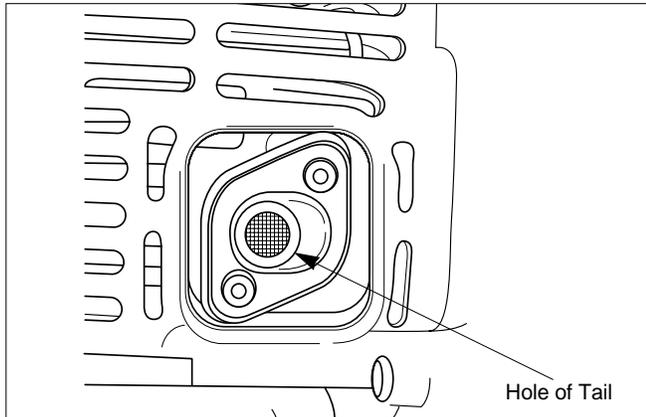
- The spark arrester should be inspected and cleaned after every 25 hours of use.
- Replace the screen if it cannot be thoroughly cleaned, or if it is damaged.

Spark Arrester Maintenance

1. With the engine at ambient (room) temperature.
2. Remove the two screws retaining the muffler.



3. Remove and clean the tail, gasket and spark arrester with a safety solvent and a stiff brush. If any part cannot be thoroughly cleaned, it must be replaced.
4. Reinstall the spark arrester and tail onto the muffler, then reinstall and tighten the two screws. The hole of tail must be located in left (refer to the picture.)



Exhaust Muffler

Maintenance Interval

The muffler should be inspected and cleaned after each 100 hours of use.

Muffler Maintenance

1. With the engine at ambient (room) temperature, loosen the knob and remove the air cleaner cover. (See cooling fin cleaning.)
2. Twist the high tension lead boot on spark plug back and forth a couple of times to loosen the boot, then pull the boot of the spark plug.
3. Remove the four screws, and remove the topcover (see Cooling fin cleaning).
4. Remove the spark arrester (see spark arrester maintenance). Clean the muffler with a stiff brush.

IMPORTANT: Be careful not to allow any dirt or debris to fall into the exhaust port, as this can cause engine damage.

5. Reinstall the spark arrester and tail onto the muffler, then reinstall and tighten the two screws. The hole of tail must be located in left. (see spark arrester maintenance)
6. Reinstall the top cover and the cleaner cover.

General Cleaning and Tightening

⚠ WARNING

POTENTIAL HAZARD

- **When engine is running, fan is rotating and other parts are moving.**

WHAT CAN HAPPEN

- **Contact with rotating fan or other moving parts could cause serious personal injury or death.**

HOW TO AVOID THE HAZARD

- **Always turn off your Handheld Blower before you clean or perform any maintenance on it.**

The Maruyama Handheld Blower will provide maximum performance for many, many hours if it is maintained properly. Good maintenance includes regular checking of all fasteners for correct tightness, and cleaning the entire machine.

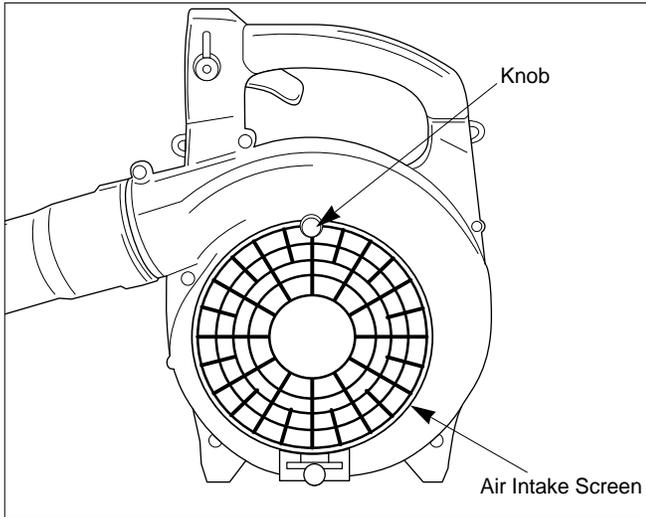
Air Intake Screen

Maintenance Interval

The air intake screen should be cleaned and inspected each time Handheld Blower is used and when air flow dropped down during operation.

Air Intake Screen Cleaning

Clean all dirt and debris from the air intake screen.



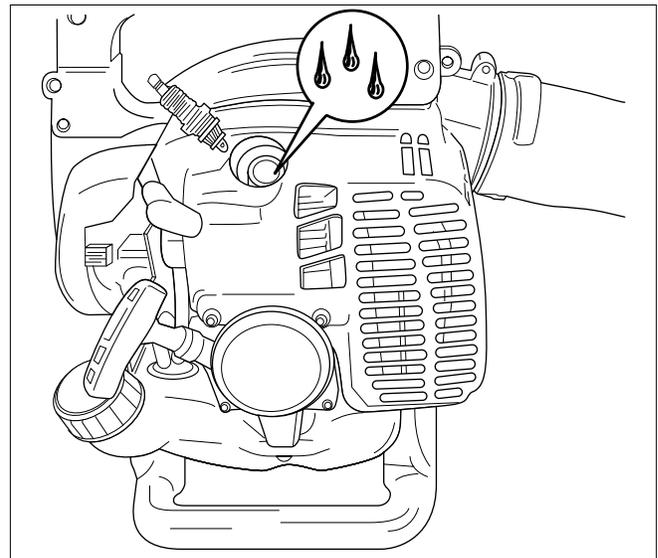
⚠ WARNING

- **Never use the handheld Blower without the air intake screen. Before starting the engine, check that the knob is securely tightened and not damaged.**

Storage

For long term storage of the Handheld Blower:

1. Empty the fuel tank into a suitable fuel storage container approved for gasoline.
2. Pump the primer bulb on the carburetor until all fuel is discharged through the clear fuel return hose.
3. Run the engine to remove any fuel that may remain in the carburetor.
4. Perform all regular maintenance procedures and any needed repairs.
5. Remove the spark plug and squirt a very small amount of oil into the cylinder.



⚠ CAUTION

POTENTIAL HAZARD

- **Oil may squirt out of the spark plug opening when you pull the starter grip.**

WHAT CAN HAPPEN

- **Oil can cause eye injuries.**

HOW TO AVOID THE HAZARD

- **Protect your eyes and keep your face away from the spark plug opening.**

6. Pull the starter grip once.
7. Slowly pull the starter grip to bring the piston to the top of the cylinder (TDC).
8. Reinstall the spark plug.
9. Store the Handheld Blower in a dry place away from excessive heat, sparks or open flame.

Troubleshooting

Problem	Cause	Action
Engine Will Not Start	STOP switch set to off position Empty fuel tank Primer bulb wasn't pushed enough Engine flooded	Move switch to on position Fill fuel tank Press primer bulb until fuel flows through fuel return line Use warm engine starting procedure
Engine Lacks Power or dropped down when blowing.	Dirty air filter Clogged spark arrester or exhaust port. Blower pipes clogged, loose or damaged.	Clean or replace air filter Clean spark arrester or exhaust port. Unclog or tighten or replace

If further assistance is required, contact your local authorized Maruyama service dealer.

Maintenance Period

		Daily	Every 20 hours	Every 50 hours	Every 100 hours
	Maintenance				
●	Check and replenish fuel	●			
●	Check for fuel leakage	●			
●	Check bolts, nuts and screws for tightness or missing	●			
●	Check engine idle speed adjustment	●			
■	Clean air filter element		●		
■	Remove dust and dirt from engine screen		●		
■	Remove dust and dirt from air intake screen		●		
	Tighten bolts and nuts			●	
	Clean spark plug and adjust electrode gap			●	
■	Remove dust and dirt from cylinder fins			●	
●	Remove carbon deposits in exhaust port			●	
●	Clean spark arrester			●	
	Replace fuel filter				●
●	Remove carbon deposits on piston head and combustion chamber				●
●	Remove carbon deposits in transfer ports				●
	Replace fuel tube, fuel tank cap gasket	It is recommended to replace every 3 years			

●: Service to be performed by an authorized Maruyama engine dealer.

■: Service more frequently under dusty conditions.

NOTE:

The service intervals indicated are to be used as a guide.

Service to be performed more frequently as necessary depending on operating condition.

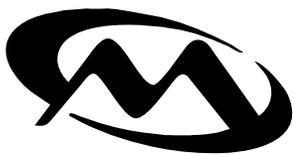
Use Maruyama standard 50:1 two-cycle engine oil.

Specifications

Model	BL3100
Dimensions L x W x H	12.8 x 10.0 x 14.6in (325 x 255 x x370mm)
Dry Weight 1	9.5lbs (4.3 Kg)
Engine Displacement	30.1 cm ³
Ignition System	Solid State
Carburetor	Walbro Diaphragm Type
Fuel Tank Capacity	0.53 qts. (0.5 ℓ)
Gas to Oil Ratio	50:1
Spark Plug	NGK BPM6Y
Spark Plug Gap	.024 -.028 in (0.6 - 0.7 mm)
CARB Approved	Tier 3

Emission durability of 300 hours.

1. Dry weight without Pipe A and B



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