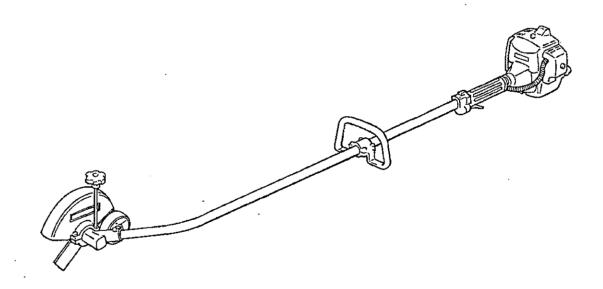


# INSTRUCTION MANUAL

FOR POWER EDGER: MODEL ED260



It is essential that any operator of a MARUYAMA POWER Edger reads and understands the contents of this manual before the engine is started.

Important safety instructions will be identified by the safety symbol.



Failure to comply with the instructions in this manual may result in serious injury.

# **FOREWORD**

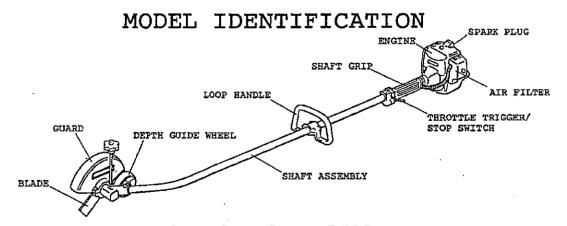
This instruction Manual is designed to familiarize the operator with the various features and component parts of the equipment and to assist you with the assembly, operation and maintenance of your new Power Edger.

Special attention should be given to the SAFETY INSTRUCTIONS provided throughout the Instruction Manual.

Please read this Instruction Manual carefully before using the Power Edger and acquaint yourself thoroughly with the equipment. For additional assistance, contact any local authorized MARUYAMA dealer, or MARUYAMA U.S.,  $301-30^{th}$  St. NE, Suite 118, Auburn, WA 98002.

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# **SPECIFICATIONS**

DRY WEIGHT	12.3 lbs	HANDLE CONFIGURATION	LOOP HANDLE						
MAXIMUM R.P.M.	9000	CARBURETOR	WALBRO DIAPHRAGM TYPE WYK						
ENGINE DISPLACEMENT	25.4cc	IGNITION	SOLID STATE SYSTEM						
FUEL TANK CAPACITY	0.85Qts	4							
SPARK PLUG	NGK BPM6Y SET GAP 0.024-0.028 INCHES								
FUEL MIXTURE	USE ONLY NON-LEADED REGULAR GASOLINE. MARUYAMA 2-CYCLE OIL MIX 50:1 RATIO *OTHER 2-CYCLE OIL MIX 25:1 RATIO *MUST BE APPROVED FOR AIR-COOLED ENGINES								



# SAFETY INSTRUCTIONS



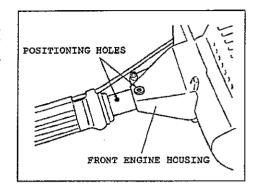
- 1.Read and understand this Instruction Manual before using the equipment. Be thoroughly familiar with the proper use of the Power Edger.
- 2. Never allow children to operate the Power Edger. It is not a toy. Never allow adults to operate the unit without first reading the Instruction Manual.
- 3.Become familiar with the controls and know how to the engine quickly.
- 4.ALWAYS WEAR SAFETY GLASSES or other suitable eye protection, and hearing protection.
- 5. Keep the area of operation clear of all persons, particularly small children and pets.
- 6. Never operate a Power Edger when you are fatigued.
- 7. Never operate a Power Edger without proper guards or other protective safety devices in place.
- 8.Dress properly; do not wear loose clothing or jewelry. They can be caught in moving parts. Always wear substantial footwear, long pants, and long sleeved shirt.
- 9. Gasoline is highly flammable; handle it carefully. Fill the fuel tank with the correct mixture of gasoline and oil before trying to start the engine.
  - A.Use an approved fuel container for storing the gasoline/oil mixture.
  - B.Do not fill the tank when the engine is hot or running.
  - C.Do not smoke while handling gasoline.
  - D.Fill the fuel tank outdoors and up to about one-half inch from the top of the tank, not the top of the filler neck.
  - E. Wipe any spilled gasoline before starting the engine.
- 10. Always be sure of your footing; keep a firm hold of the handles with both hands, and walk, never run.
- 11. Use the right tool for the job. Do not use the Power Edger for any job that is not recommended by the manufacturer.
- 12. Keep all fasteners tight to be sure the Power Edger is in safe working condition. Follow the maintenance instructions provided on page 9 to 11 of this manual.
- 13.Do not put hands or feet near or under any rotating parts. Keep clear at all times.
- 14. If the Power Edger should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
- 15. Avoid using the Power Edger near rocks, gravel, stones and similar material that would cause harmful missiles.
- 16.Use the Power Edger only in daylight or good artificial light.
- 17. Shut off the engine and be certain the cutting blade has completely stopped rotating before inverting the machine.

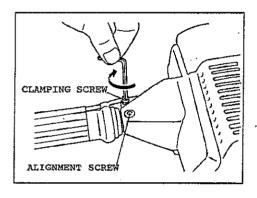
The MARUYAMA Power Edger includes a Tool kit, Instruction Manual, and a Warranty Registration Card.

#### ASSEMBLY INSTRUCTIONS

#### ENGINE AND DRIVESHAFT ASSEMBLY

Insert the shaft into the front engine housing. Align the positioning hole in the shaft with the threaded hole in the side of the front engine housing.

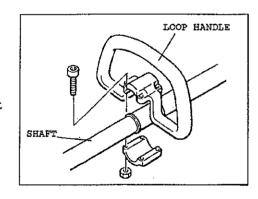


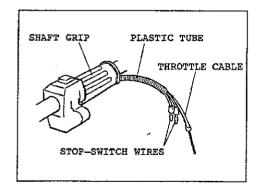


Install and tighten the alignment screw. Then tighten the clamping screw (located below the alignment screw).

## LOOP HANDLE

The loop handle attaches to the shaft with four screws, as shown.



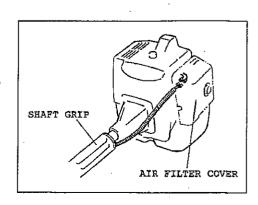


#### THROTTLE CABLE AND WIRING

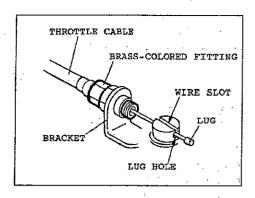
Install the plastic tube (packed with shaft assembly) around the throttle cable and stop-switch wires, as shown.

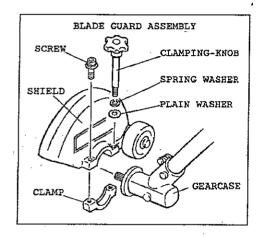
Remove the air filter connect the stop-switch wires, shown. (Connections are near the carburetor on the engine.)

cover to



The throttle cable end must be inserted into and through the brass-colored fitting held by bracket on top of the carburetor. The wire-end lug fits into the slotted (as shown) on top of carburetor. A HOLE IS PROVIDED FOR THE LUG AT ONE END OF THE WIRE SLOT.



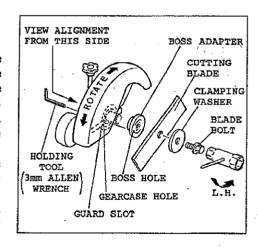


#### BLADE GUARD AND BLADE

To install the blade guard assembly, first place the shield onto the gearcase (see sketch). Place the clamp onto the gearcase opposite the shield. Install the screw and clamping-knob, as shown, and tighten ONLY AS NEEDED.

Before installing the cutter-blade, rotate the blade-guard (on the gearcase) until the hole in the gearcase can be viewed. Next, rotate the boss adapter to align the holes for inserting the holding tool. With the holding tool inserted, place the cutting blade onto the boss adapter, and then the clamping washer onto the splined shaft. Finally, the blade bolt must be installed.

The bolt is threaded LEFT-HAND, and must be tightened quite securely (100 In.Lbs.).



CAUTION-Remove any holding tools before operating the equipment!

# **BEFORE OPERATION**

#### FUEL: MIXING GASOLINE AND OIL



CAUTION-READ SAFETY INSTRUCTIONS CONCERNING GASOLINE ON PAGE(2).

The two-cycle engine used on the MARUYAMA Power Edger requires a mixture of GASOLINE and OIL for lubrication of bearings and other moving parts. The correct fuel mixture ratio depends upon the type of two-cycle motor oil that is used. If MARUYAMA two-cycle oil is used, the proper fuel mixture ratio is 50:1, which is 2.5oz. of oil mixed with one gallon of gasoline. If other oil for two-cycle air cooled engines is used, the proper fuel mixture ratio is 25:1, which is 5.0 oz. of oil mixed with one gallon of gasoline.

NOTE: Gasoline and oil must be premixed in a clean gasoline container. Never mix gasoline and oil indoors or in the Power Edger fuel tank. Always use fresh gasoline.

Add a small quantity of unleaded regular gasoline to a gasoline container. Pour the proper amount of two-cycle oil into the gasoline container. Do not use multi-viscosity oils. Install the cap on the gasoline container before shaking. Shake the gasoline container vigorously so the oil mixes with the gasoline. Add the additional gasoline needed to complete the required amount (see the fuel mixture chart below).

IMPORTANT: Do not fill the fuel tank with gasoline that does not have oil mixed in it. Do not use gasoline additives because the engine could be damaged.



WARNING!!-NEVER USE GASOHOL OR ALCOHOL BLENDED FUELS IN MARUYAMA ENGINES.

Before filling the Power Edger fuel tank, clean around the fuel tank cap so dirt and debris does not enter the fuel tank. Always shake the fuel container before filling the fuel tank. Remove the fuel cap, then fill the fuel tank to within 1/4-1/2 inch from the top of the tank. Avoid filling the fuel tank filler neck. Install the cap securely onto the fuel tank.

#### FUEL MIXTURE CHART

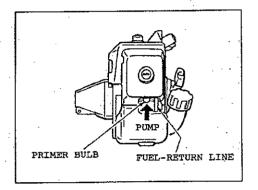
MARUYAMA 2-ČYCLE OIL (50:1)						OTHER 2-CYCLE OIL (25:1)									
WITH	1	GALLON	GASOLINE	MIX	2.5	OZ	OIL	WITH	1	GALLON	GASOLINE	XIM	5.0	OZ	OIL
-	2	GALLON	GASOLINE	MIX	5.0	ΟZ	OIL		2	GALLON	GASOLINE	MIX	10.5	O,Z	OIL
	5	GALLON	GASOLINE	MIX	12.5	oz	OIL	_	5	GALLON	GASOLINE	MIX	25.0	ΟZ	OIL

# OPERATING INSTRUCTIONS

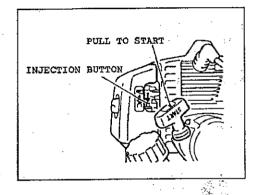
#### STARTING PROCEDURE

The carburetors on MARUYAMA engines do not contain a choke system and are designed to start at IDLE speed. A greater throttle setting will cause difficult starting. To properly start a "cold" engine, perform the following procedure.

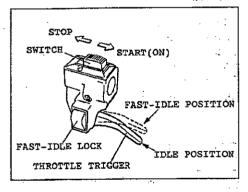
Step #1) Pump the primer-bulb at the bottom of the carburetor until fuel can be seen flowing through the fuel-return line to the fuel tank. (Flowing fuel should be clear, not foamy or full of bubbles.)



Step #2) Fully depress the black injection button, then release.



Step #3) With the ignition switch "ON", and the throttle trigger positioned at IDLE, pull the starter cord. The engine should start at IDLE within 5 to 6 pulls.



For starting an engine that is already warmed-up(hot restart), or if the ambient temperature exceeds 70°F(20°C), the injection button should not be used. Follow steps #1) and #3) only.

If the engine fails to start at the IDLE position, set the throttle trigger at the FAST-IDLE position (see sketch). Then repeat the starting procedure (prime, injection, and pull).

(If a MARUYAMA engine fails to start after following the above procedures, contact an authorized MARUYAMA dealer.)

# ENGINE OPERATION

After starting, allow the engine to a run a few minutes to warm it up before using.

NOTE: DO NOT have the engine under any load during this warm up period.

By squeezing the throttle trigger, increase the engine RPM to the speed required for operation before placing the power edger under load. ALWAYS reduce the engine speed to idle when it is not edging. Do not operate the engine at high RPM's with no load.

#### STOPPING THE ENGINE

Always run the engine at idle speed for a few minutes to allow cooling before stopping. To stop the engine, move the stop-switch to the STOP position.

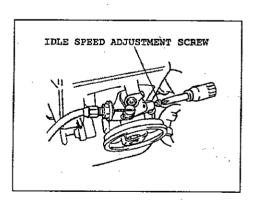


If the stop-switch fails to stop the engine, pump the primer-bulb at the bottom of the carburetor a few times, then depress the black injection button.

(Repair the stop-switch.)

## CARBURETOR ADJUSTMENT

The carburetor has been carefully adjusted at the factory and should not require any further adjustment. Only the idling speed can be adjusted by turning the idle speed adjustment screw (see sketch). The correct idle speed is 2800-3200RPM. Turning the adjustment screw clockwise will increase the idle speed.



If further adjustment is necessary, please contact a local authorized MARUYAMA dealer.

## OPERATING THE POWER EDGER



CAUTION—Read the SAFETY INSTRUCTIONS on page(2) concerning the proper use of the Power Edger.

The MARUYAMA Power Edger is designed for edging and tested to cut nearly all grasses and thick weeds. As you continue to use the equipment, many tasks will become easier.

By adjusting the handle, the MARUYAMA Power Edger can be operated while standing in a natural position, and can only be positioned at the right side of the operator. To adjust the loop handle, see the ASSEMBLY INSTRUCTIONS on page (3).

If it is necessary to reposition the shaft grip, loosen the clamping screw of the throttle trigger assembly before moving the grip. Then use caution to prevent any damage to the throttle cable and stop-switch connections.

Be sure the throttle trigger assembly is in place firmly against the shaft grip before tightening the clamping screw.



Adjust the blade guard to a position that does not make contact with the blade and shields the operator from thrown debris.

(See ASSEMBLY INSTRUCTIONS for blade guards.)



CAUTION-Remove any holding tools before operating the equipment!



The cutting depth should be established before starting the engine.

To adjust the cutting depth, first loosen the clamping-knob. Then rotate the blade guard forward or backward until the desired cutting depth is acquired (see sketch). Tighten the clamping-knob ONLY AS NEEDED.

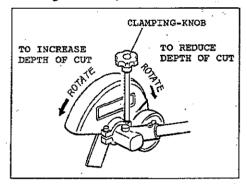


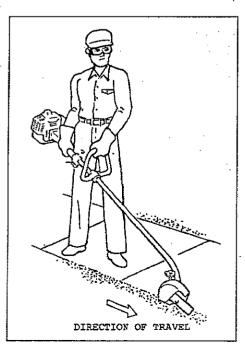
Always operate the Power Edger positioned at the RIGHT-SIDE of the operator (see sketch).

Be sure the blade is rotating (at least half-throttle) before inserting it into the cut. The Power Edger performs best at full throttle.



Always use eye protection when operating the edger.



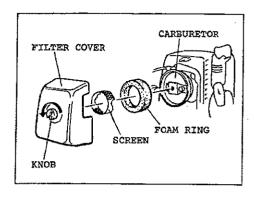


## REGULAR MAINTENANCE

#### AIR FILTER

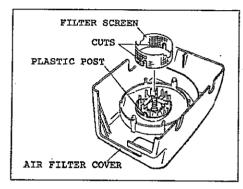
The air filter should be cleaned each time the power edger is used. (or more often with extreme conditions.) The filter cover can be removed by unscrewing the single knob (see sketch).

Remove the screen from the foam ring, wash the foam in kerosene or warm detergent, then squeeze dry. Apply oil (#30 wt.) to foam, removing all excess oil. Assemble and re-install air filter on carburetor.





CAUTION-The air filter screen is designed to fit the filter cover ONE WAY ONLY! It must not be reversed! Refer to the sketch and match the cuts in the screen to the plastic posts inside the filter cover. (The fit should be snug.)

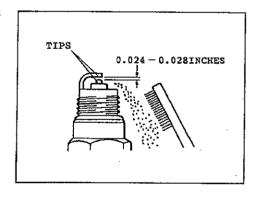


#### SPARK PLUG

The spark plug should be removed from the engine and checked after each 25 hours of operation. The tips can be cleaned with a stiff brush. Adjust the gap to 0.024-0.028 inches (see sketch). Replace the spark plug if it is oil-fouled or damaged. The average spark plug life is approximately 100 hours.

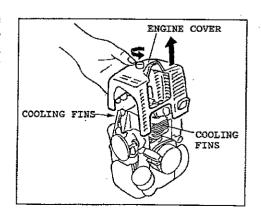


CAUTION-Do not over-tighten the spark plug. The correct torque is 10-12 Ft.Lbs.



# COOLING FINS

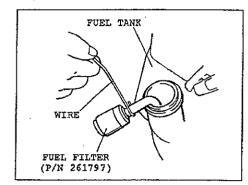
Free passage of air through the cylinder cooling fins is required to prevent poor engine performance and shortened engine life. Regularly check and clean all debris from the cooling fins by removing the engine cover (see sketch).



#### FUEL FILTER

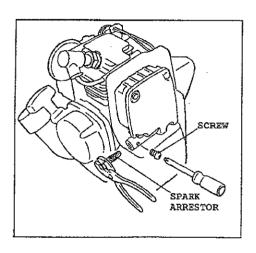
The fuel filter is attached to the fuel pick-up tube inside the fuel tank. After each 25 hours of use, it should be checked for dirt or damage, and replaced if necessary.

A wire with a hooked end aids in removing the filter from the tank. Avoid damaging the fuel line.



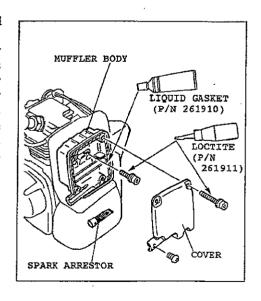
#### SPARK ARRESTOR

The spark arrestor should inspected and cleaned after each 20 hours of use. The spark arrestor is installed inside the exhaust outlet of the muffler, and is secured by one screw through the side of the exhaust outlet (see sketch). Remove screw, and pull the spark arrestor from inside the exhaust outlet tube. (If using pliers, care must be used to avoid crushing the spark arrestor flange.) Solvent and brushing will usually required for cleaning. Re-install the spark arrestor and the fastening screw.



#### EXHAUST MUFFLER

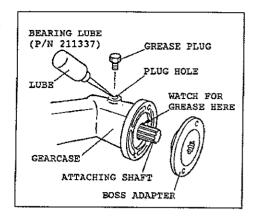
The muffler should be inspected and cleaned after each 100 hours of use. The engine cover must be removed for access to the muffler. Four screws (see sketch) attach the muffler cover to the muffler body. When the cover is removed, the spark arrestor is revealed in the exhaust outlet tube of the muffler cover. Remove the one screw securing the spark arrestor to the muffler cover and separate them. Clean the cover and the spark arrestor. (see instructions-Spark Arrestor.) It is not necessary to remove the muffler body from the cylinder for cleaning, BUT special care should be taken to prevent any debris from entering the exhaust ports. Use liquid gasket P/N 261910 form the gasket between muffler body and cover. Use Loctite P/N261911 on the four attaching the cover to the muffler body. Secure the spark arrestor into place with the fastening screw.



#### LUBRICATION: GEARCASE

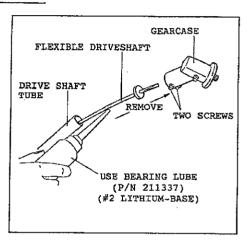
The gearcase should be checked for lubrication after each 30 hours of use. The blade and boss adapter must be removed (see sketch). Remove the grease plug from the side of the gearcase.

Inject lithium-base bearing lube (P/N 211337) through the plug hole until grease begins to appear around the attaching shaft. Re-install the boss adapter and grease plug.



## LUBRICATION: FLEXIBLE DRIVESHAFT

The Power Edger contains a flexible driveshaft inside the driveshaft tube. The flexible driveshaft should be lubricated after each 30 hours of operation. Loosen the two screws on the gearcase and remove the gearcase. The inner flexible driveshaft is easily removed by gripping the end securely and pulling it from the driveshaft tube. Lubricate the entire length of the flexible driveshaft and insert it into the driveshaft tube. Twist the flexible shaft pushing to insure that it seats correctly into clutch the drum. Re-install the gearcase onto driveshaft tube and tighten the two screws.



# GENERAL CLEANING AND TIGHTENING

The MARUYAMA Power Edger 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.

# STORAGE

ALL MODELS: For long-term storage of the Power Edger, perform all regular maintenance procedures and needed repairs. Empty the fuel tank. Disconnect the fuel-return tube from the carburetor, then continue to pump the primer bulb until fuel stops discharging from the fuel-return fitting. Start the engine and allow it to run until it stops. Pull the starter cord a few times to remove any excess fuel from the engine. Remove the spark plug and insert a small amount of oil. Pull the starter cord once and bring the piston to a position closest to the spark plug hole. Re-install the spark plug. Apply a thin coating of oil to the entire machine and store in a dry place.