
The Green Machine®

ASSEMBLY AND OPERATING INSTRUCTIONS MODEL 2400M-3 HEDGETRIMMER

To insure maximum performance read this manual before putting into operation.

WARRANTY CERTIFICATE

TWO (2) YEARS CONSUMER — LIMITED WARRANTY — ONE (1) YEAR COMMERCIAL

HMC warrants THE GREEN MACHINE® to be free from defects in material and workmanship under normal use for a period of two (2) years from date of purchase when used by the consumer for residential home use, or one (1) year from date of purchase when used commercially.

Should THE GREEN MACHINE® product fail within the warranty period due to defective parts or workmanship, just return the unit transportation prepaid to either (1) the retailer who sold it to you or (2) to your regional distributor, whose address is available from your retailer or (3) directly to HMC Factory Service Center, 20710 South Alameda Street, Long Beach, California 90810, U.S.A. HMC will, at its option, repair or replace the unit at no charge. HMC assumes no obligation to pay the registered owner a cash refund under any circumstances.

Please return the enclosed warranty card within ten (10) days after purchase. If we do not have the warranty card on file we will require other proof of purchase before completing the repairs. This warranty only extends to the original purchaser of the product.

This warranty does not apply if the product has been misused or used contrary to the instruction manual, or if it has been repaired or altered by anyone other than an HMC authorized service center.

This warranty applies only to parts or components which are defective and does not cover repairs necessary due to normal wear, misuse,

accidents, or lack of proper maintenance. Regular, routine maintenance of the unit to keep it in proper operating condition is the responsibility of the owner.

HMC IS NOT LIABLE FOR INDIRECT OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE USE OF THE PRODUCT INCLUDING ANY COST OF PROVIDING SUBSTITUTE EQUIPMENT DURING PERIODS OF MALFUNCTION.

Some states of the U.S.A. do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

THE GREEN MACHINE® will perform as indicated in the instruction manual and in the accompanying literature. Your retailer may have sold you the machine with a promise that it would handle a particular task. You may return the machine to him if it does not perform that specific task, but we cannot be responsible for promises which are beyond the scope of the above instruction manual or literature.

THERE ARE NO EXPRESS WARRANTIES OTHER THAN AS CONTAINED IN THIS STATEMENT, AND ANY IMPLIED WARRANTIES SHALL EXPIRE 90 DAYS AFTER DATE OF PURCHASE. Some states of the U.S.A. do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

WARNING

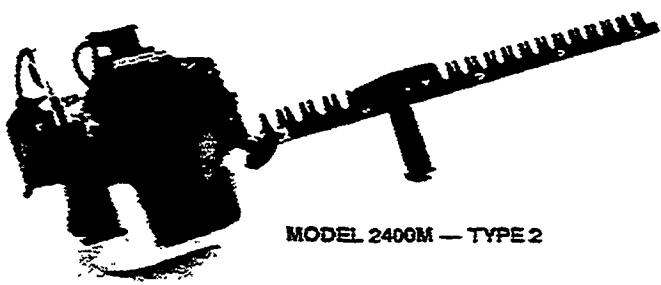
**ALWAYS WEAR PROTECTIVE CLOTHING,
INCLUDING GOGGLES AND GLOVES.
KEEP YOURSELF AWAY FROM MOVING
BLADES AND KEEP BYSTANDERS 20 FT
AWAY AT ALL TIMES.**

**CAUTION
READ OPERATING PRECAUTIONS**

**CAUTION
READ PRECAUTIONS WHEN REFUELING**

P.O. BOX 560, LONG BEACH, CALIFORNIA 90801-0560
20710 S. ALAMEDA ST., LONG BEACH, CALIFORNIA 90810 • (213) 603-9888 • TELEX 696396

GM866 1-89



MODEL 2400M — TYPE 2

Model 2400M-Type 2 Designed for the demanding day-after-day use by professional landscapers.

1. ASSEMBLY

Front Handle

- Install the front handle onto the second and third bolts of the cutter bar as shown in (Figure 2).
- Tighten the No. 2 acorn nut securely.
- Adjust the No. 3 blade bolt so that the blade washer can move slightly when its acorn nut is tightened. (Figure 1).

CAUTION: If the No. 3 bolt and blade washer are not adjusted as instructed above, the blades will become locked or premature blade wear will result.

Rear Handle

- Install the rear handle by first removing its bolts, lower bracket and cushion. (Figure 3).
- Assemble as shown in (Figure 3) making sure the rubber cushions are properly positioned.
- This handle attachment is designed for anti-vibration by using the rubber cushions and it can be adjusted.
- By tightening the handle bolts, the handle becomes more secure but will transmit more vibration. By loosening the handle bolts, slightly, less vibration will be felt during running. The handle should be adjusted to suit the operator.



SAFETY

- Always wear close fitting, protective clothing especially safety goggles and gloves. It is advised to wear safety hat, work shoes, and ear protection when trimming.
- Keep bystanders at least 20 feet away at all times.
- Start your hedgetrimmer on a firm surface. Do not start on your leg or knee.
- Keep a firm grip on the handles with both hands at all times.
- Make sure of your footing and keep your body well balanced when starting or running trimmer.

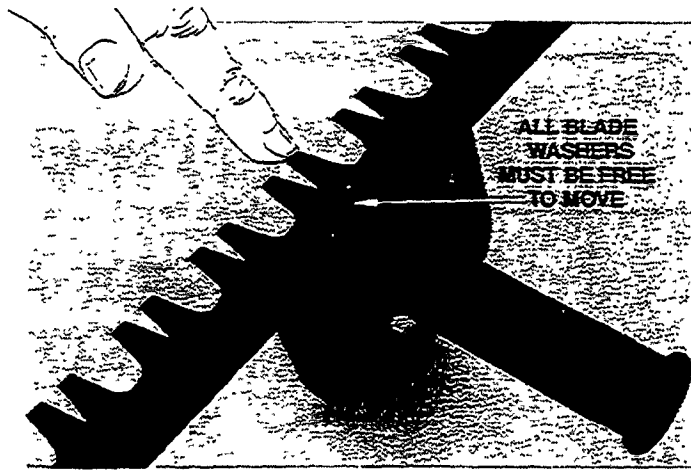


Figure 1

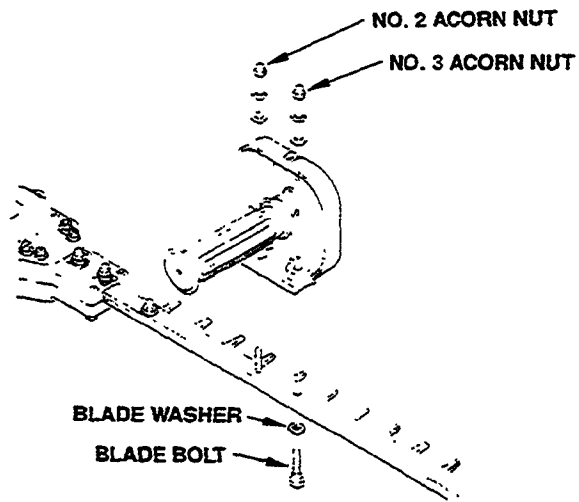


Figure 2

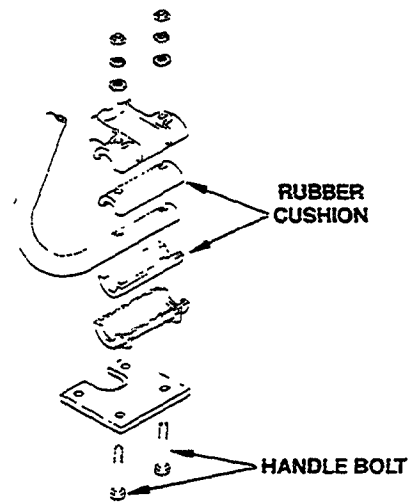


Figure 3



SAFETY

- Keep your body and clothing away from the trimmer when starting or running.
- Do not touch or try to stop moving blades with your hand.
- Never try to remove objects jammed into the blades without first stopping the engine and removing spark plug wire.
- Always carry the trimmer with the engine stopped and the muffler away from you.
- Turn the engine off when the trimmer is not in use.
- Use only fuel recommended in this owner's manual.
- Refuel in an open area, don't spill fuel and move your trimmer from the refueling area before starting. Don't refuel while the engine is hot — let it cool first. Don't smoke during refueling.
- Do not allow the muffler to contact dry grasses or flammable material. Keep hot muffler away from your body.
- Do not touch the spark plug during starting or running.
- While trimming, be alert for foreign material that may damage the blades (wire, fences, poles, etc.)
- Don't allow dirt, fuel, or debris to build up on your trimmer.

Engine to Gearcase

- Install the four (4) threaded studs into the engine, short thread end first, and tighten snugly using pliers. Be careful not to damage the threads. (Figure 4).
- Install the engine onto the gearcase/blade assembly with the carburetor pointing away from the blades as shown in (Figure 5). Assemble the washers and nuts and tighten securely with the wrench supplied in the tool kit.

CAUTION: Use extreme care when working around the cutter blades, they are very sharp and careless handling could result in injury. Never attempt blade adjustment without disconnecting the engine spark plug wire.

Throttle Cable

- Route throttle cable around handle tube as shown in (Figure 6) and install cable end into lever as shown.
- Throttle cable free play must be adjusted to approx. 1/16". by loosening the locknut, at the carburetor end of the cable and turning the adjuster. Measure the free play at the throttle lever. Retighten the locknut. (Figure 10)

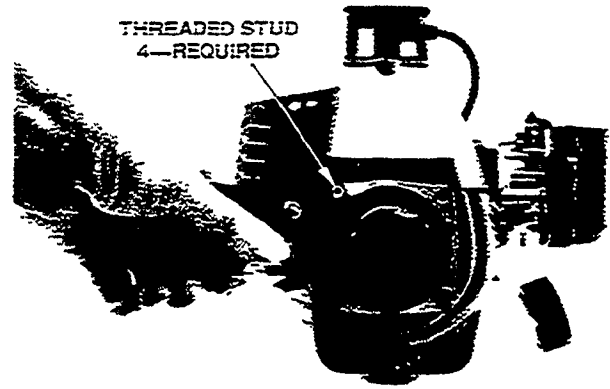


Figure 4

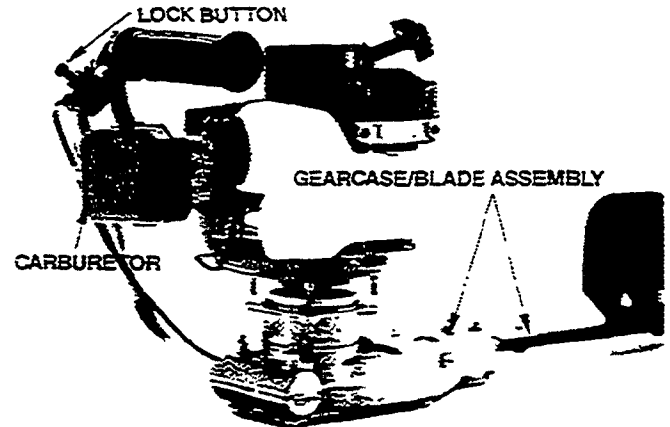


Figure 5

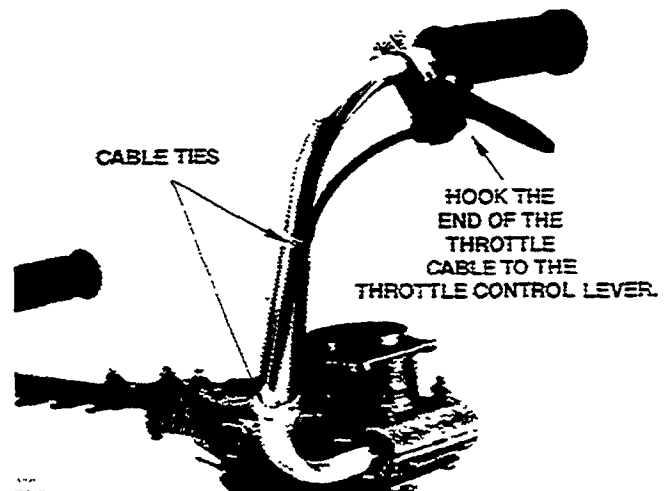


Figure 6

2. SUPPLYING FUEL:

- Fill the fuel tank with fuel to 7/8 full, using a mixed fuel of gasoline and 2 cycle air cooled engine oil.
 - HMC recommends using **One-Mix**® in its Green Machine products. When using **One-Mix**®, it is not necessary to figure fuel mixture (oil to gasoline) ratio. Simply mix one packet of **One-Mix**® to one U.S. gallon of regular leaded or unleaded gasoline.
 - **Special Note: Never use gasohol.** If gasohol is used, engine warranty will be voided. To test for alcohol content in gasoline, an inexpensive gasohol tester kit is available, order part #27339.
 - If you do not wish to use **One-Mix**®, you must then make certain of a proper oil to gasoline ratio.
 - When any oil other than **One-Mix**® is used, you must use a ratio of 25:1 (25 parts of gasoline to one part of oil) i.e., 5.12 oz. of oil mixed in one U.S. gallon of gasoline.
 - Always thoroughly mix the oil and the gasoline by mixing vigorously to insure thorough blending. There are countless small 2 cycle engines destroyed each year because of improperly mixed oil and gasoline.
- | | |
|----------------|--------------------------|
| Econo Pack | Mixes 1 Gallon of Fuel |
| Pro Tube | Mixes 1 Gallon of Fuel |
| 8 oz. bottle | Mixes 2½ Gallons of Fuel |
| 32 oz. bottle | Mixes 10 Gallons of Fuel |
| 128 oz. bottle | Mixes 40 Gallons of Fuel |

3. STARTING THE ENGINE WHEN COLD (INITIAL ENGINE STARTING)

- Push the primer pump until fuel flows through the clear plastic return line (**Figure 7**).
- Place choke lever in the closed position (**Figure 7**).
- Pull starter rope slowly, until engine compression is felt (**Figure 9**).
- Lock throttle lever in the start position as shown in (**Figure 8**.) Pull the starter in short rapid strokes until engine starts.
- Avoid pulling the rope to its full extension as starter failure could result.
- Once the engine has started, slowly return the choke lever to its open position.
- Return the throttle lever to its idle position.
- Always allow the engine to run 1 to 2 minutes at idle for warm up before starting work.

When Warm (Restarting Engine)

- Hold throttle lever in the open position.
- Place choke lever in its open position.
- Pull starter rope as outlined in "Starting When Cold."
- **Note:** If engine fails to start, push primer until fuel appears in clear plastic return line.

4. STOPPING ENGINE

- Return throttle lever to its idle position, and allow the engine to idle for a short period (approx. 30 sec.). This allows the engine to cool down.
- Push in and hold the red stop button until the engine comes to a complete stop (**Figure 7**).
- **Note:** Except for emergencies, avoid stopping engine while it is running at high speed



WARNING:

1. Never smoke when refueling or refuel in an area with open flame (such as water heater pilot light). Gasoline vapors spread rapidly and are highly explosive.
2. Always stop engine and wait for it to cool before refueling.
3. Clean up any spills and dispose of clean-up materials.
4. After refueling, move to another area for starting.
5. Never over fill. Fill tank only 7/8 full to avoid spillage.

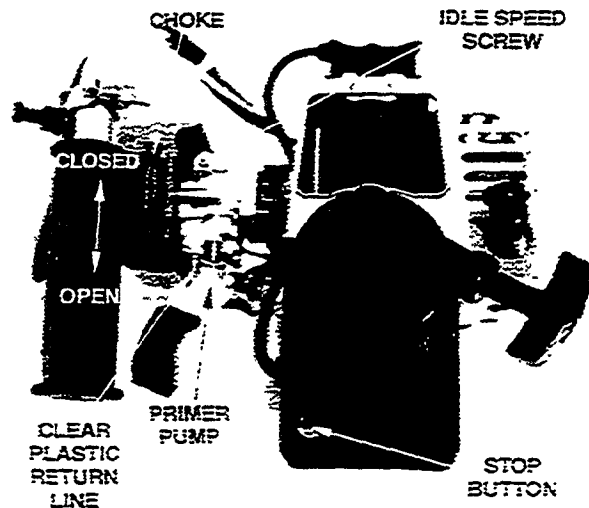
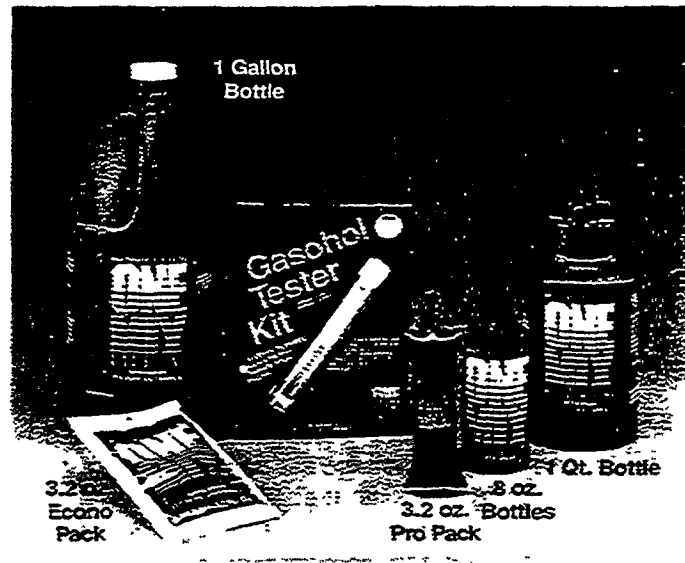


Figure 7

5. ADJUSTING ENGINE

- Your Green Machine engine has been adjusted at the factory for optimum performance and fuel consumption, and no further adjustment should be required. However, because of varying atmospheric and climatic conditions, some minor adjustment may be needed for your area.
- Adjusting idle speed should always be done with a tachometer to insure proper idle speed (2,800 to 3,300 rpm). If a tachometer is not available, the idle speed may be adjusted as follows (**Figure 10**):
 1. Turn idle speed screw clockwise until blades or lower drive begins to move.
 2. Turn idle speed screw counterclockwise until blades stop.
 3. Turn idle speed screw approximately 1/4 turn more.
- If the engine does not idle properly after this adjustment, contact your nearest Green Machine dealer for service.
- Condition of the air cleaner is very important to the operation and life of the engine, and also has a major effect on carburetor adjustments. The air cleaner should be checked for cleanliness before each use, and before making any carburetor adjustment.

6. MAINTENANCE

After each use

- Thoroughly clean the blades with a stiff brush in warm soapy water and wipe clean with a dry cloth. Coat the blades with SAE 10 or a thin machine oil.

10 hours

- Each 10 hours or less the air filter should be serviced by removing the filter element and washing in kerosene, cleaning solvent or detergent and squeeze dry. (**Figure 11**).
- Place a few drops of SAE 30 engine oil on the element and squeeze it to spread oil. Re-install filter.
- Check all bolts, and fasteners for tightness.

30 hours

- Grease the internal gears and bearings with a manual type grease gun at the fitting in **Figure 12**. 3-4 pumps of the gun will supply sufficient grease. Do not pack. Use multi-purpose gear and bearing grease. **Do not use moly or graphite base grease.** Use grade No. 2 grease.
- Re-adjust the cutter blades by loosening all the acorn nuts on the topside of the cutter bar, including those at the handle. (**Figure 2**).
- Tighten all the blade bolts on the bottom of the cutter bar firmly. Then, loosen each bolt approx. 1/2 turn or until the blade washer can be slightly turned. (**Figure 1**).
- Re-tighten the acorn nuts, while holding the blade bolts and recheck the blade washers for the correct looseness. If the washer looseness has changed, the blade bolt must be re-adjusted. (**Figure 1**).
- **important:** The blade bolts should be adjusted only after the blades have been thoroughly cleaned with a stiff brush in warm soapy water, dried and lightly oiled

TO START:
DEPRESS LEVER-PUSH
BUTTON IN
AFTER WARM-UP:
DEPRESS LEVER
TO RELEASE
BUTTON

LOCK
BUTTON

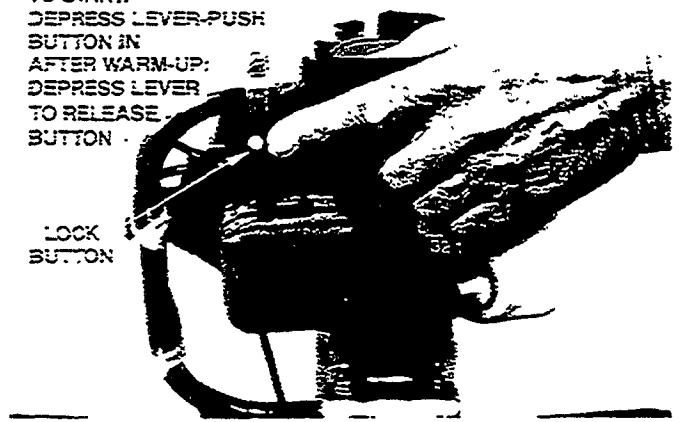


Figure 8



Figure 9

CAUTION: Always start the trimmer on a firm flat surface. Never attempt starting on your leg or knee.



Figure 10

30-Hour Service, or Once a Week for Commercial Use.

- All items under daily service plus:
- Remove, clean, and regap spark plug (0.6mm/0.024 inches) (Figure 13).
- Clean and service air filter (after cleaning put small amount of engine oil on sponge and squeeze out excess) (Figure 11).
- Remove cylinder cover and clean out all dust, dirt, and foreign material.
- Check fuel filter in tank and clean if needed.
- Return the trimmer to your Green Machine Dealer for routine servicing, blade sharpening, and adjustment.
- **Note:** It is recommended that blade sharpening be performed by a Green Machine Service Dealer — who is equipped to do this type of service.



Figure 11

7. BEFORE EACH USE

- Inspect trimmer for loose or missing parts.
- Inspect air cleaner for cleanliness.
- Make sure no fuel or grease is leaking. If so, correct before using.
- Make sure all air passages are free of dirt and other foreign material.
- Make sure the blade washers and blades are free and clean. (See Figure 1).

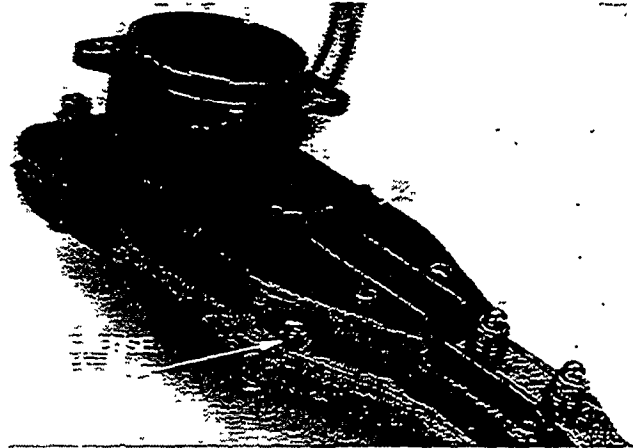
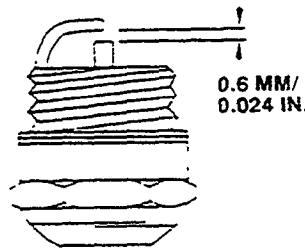


Figure 12

8. CUTTING TIPS

- Always keep your body to the carburetor side of your trimmer, never on the muffler side.
- Keep a firm grip on both handles at all times.
- Always wear goggles and gloves.
- Use only as much throttle as is needed to do the job. Excessive engine speed is unnecessary.
- Make sure your footing and balance are good while trimming.
- Tilting the trimmer 5-10 degrees into your work will make your job easier and produce a better cut. (Figure 14).
- Always stop the engine to remove branches or material that jam the blades.



	CHAMPION	NGK
Hot Type	CJ8	BM6A
STD	CJ6	BM7A
Cold Type	CJ4	BM7A

FOR BEST PERFORMANCE
USE ONLY N.G K BM7A

Figure 13

9. STORAGE

- Never store your hedgetrimmer for a long period without performing the following:
- Completely drain the fuel tank.
- Start the engine and run it at idle until it stops.
- Remove the spark plug and pour a few drops of two cycle oil into the combustion chamber through the spark plug hole and crank the engine over a few times. Reinstall the spark plug tightly.
- Clean and oil the blades as outlined in the maintenance section.
- Store the hedgetrimmer in a dry clean place.

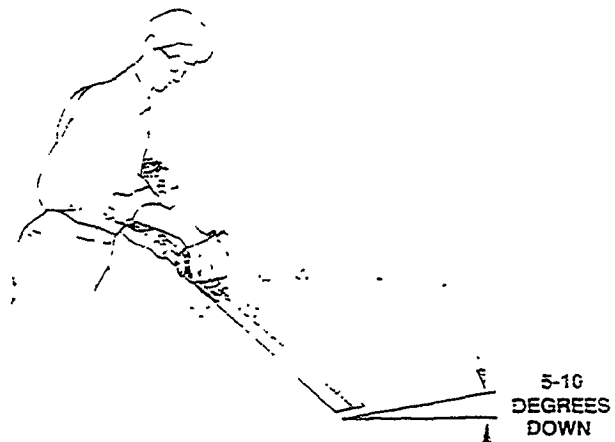


Figure 14

**THE GREEN MACHINE®
TROUBLE SHOOTING CHART**

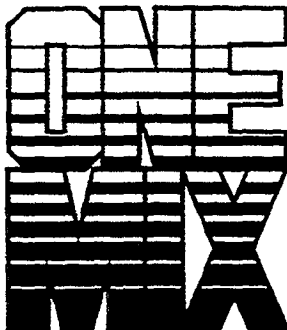
TROUBLE	POSSIBLE CAUSE	CORRECTION
FAILURE OF ENGINE TO START — NO SPARK 1. Failure located on the spark plug side	<ol style="list-style-type: none"> 1. The electrode of spark plug is wet 2. Carbon deposit sticks to the electrodes of spark plug 3. Poor insulation caused by crack, etc. of insulator 4. Undersize or oversize gap of the electrodes of spark plug 5. Burning of the electrodes of spark plug 	<ol style="list-style-type: none"> 1. Dry it 2. Clean it 3. Replace spark plug 4. Adjust the gap to 0.6mm 5. Replace spark plug
2. Failure located on the magneto side	<ol style="list-style-type: none"> 1. Coil burnout 2. Coil poor insulation 3. Cord coating breakage 4. Unit burnout 	<ol style="list-style-type: none"> 1. Replace coil 2. Replace coil 3. Replace or repair cord 4. Replace magneto
HAS SPARK 1. Proper compression and sufficient fuel	<ol style="list-style-type: none"> 1. Engine flooded 2. Use of improper fuel mixture 	<ol style="list-style-type: none"> 1. Discharge outward with recoil starter 2. Replace with proper fuel 25:1 ONE-MIX*
2. Sufficient supply of fuel but compression is poor	<ol style="list-style-type: none"> 1. Heavy wear of cylinder, piston and piston ring 2. Loose spark plug 	<ol style="list-style-type: none"> 1. Replace all worn parts 2. Tighten
3. No supply of fuel to the carburetor	<ol style="list-style-type: none"> 1. Fuel tank is empty 2. Loose fuel hose fitting or loose carburetor 3. Filter clogging 4. Fuel is available in the tank, however, fuel does not reach the carburetor 5. Air vent in the fuel tank clogging 	<ol style="list-style-type: none"> 1. Refill the fuel tank 2. Tighten fuel lines or carburetor 3. Clean or replace filter 4. Refer to the starting procedure 5. Clean it
POWER IS NOT SUFFICIENT 1. Compression of engine is normal and there is no misfiring	<ol style="list-style-type: none"> 1. Air cleaner clogging 2. The muffler is plugged with carbon 3. Air leakage through the pipe fitting, etc. 4. Fuel passage clogging 5. Water is mixed in fuel 	<ol style="list-style-type: none"> 1. Clean 2. Clean the muffler or replace 3. Tighten the fitting securely 4. Clean 5. Replace with proper fuel
2. Overheating is observed	<ol style="list-style-type: none"> 1. Excessive lean fuel mixture 2. Use of improper mixed oil 3. Carbon deposit 4. Fan cover, cylinder fin, etc. are stuffed with dirt 5. Forced operation 	<ol style="list-style-type: none"> 1. Adjust and clean carburetor 2. Replace with 2-cycle ONE-MIX* 3. Clean 4. Clean and remove dirt 5. Operate properly
3. Knocking noise is heard	<ol style="list-style-type: none"> 1. Cylinder overheat 2. Use of improper fuel 3. The combustion is covered with carbon deposits 	<ol style="list-style-type: none"> 1. Adjust carburetor, clean cylinder fin 2. Replace with proper fuel 25:1 ONE-MIX* 3. Clean the combustion chamber
4. Miscellaneous		
POOR ACCELERATION 1. Fuel passage clogging.	<ol style="list-style-type: none"> 1. Filter clogging 2. Excessive lean fuel 3. Air cleaner clogging 4. Excessive low idling 	<ol style="list-style-type: none"> 1. Clean 2. Adjust the setting of the carburetor 3. Clean 4. Speed up
2. Air Suction	<ol style="list-style-type: none"> 1. Loose carburetor 2. Loose fuel pipe 	<ol style="list-style-type: none"> 1. Tighten 2. Insert firmly
ENGINE STOPS WHILE IN OPERATION 1. Engine stops abruptly	<ol style="list-style-type: none"> 1. Defective stop button 2. Dislocation of plug cap 3. The piston shows score surface with indication of seizure 4. Short circuit of spark plug electrode due to carbon deposit 5. Failure of proper functioning of magneto 	<ol style="list-style-type: none"> 1. Replace 2. Fix firmly 3. Repair or replace 4. Clean 5. Disassemble and replace necessary parts
2. Engine stops gradually	<ol style="list-style-type: none"> 1. Empty fuel tank 2. Inside carburetor clogging 3. Fuel tank clogging 4. Water is mixed in fuel 	<ol style="list-style-type: none"> 1. Refill 2. Disassemble and clean 3. Disassemble and clean breathe 4. Replace with proper fuel
ENGINE WILL NOT STOP WHEN TURNED OFF	<ol style="list-style-type: none"> 1. The extreme end portion of ignition plug is red-neated 2. Broken stop button 	<ol style="list-style-type: none"> 1. Clean or replace spark plug and adjust the gap to 0.6 mm. 2. Replace worn part

50,000 Dinosaurs gave their lives for ONE MIX®. In their honor, we make it the best it can be.



One Mix® is simply the best 2-cycle engine oil you can buy. Formulated for all 2-cycle vehicles at one mixing ratio. One Mix® is available in pre-measured packets for one gallon of gasoline up to 55 gallon drums. Pure and simple.

A PRODUCT OF
HMC



Don't let
your yard-care
equipment
become
extinct!

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