
ATOM LAWN EDGER

DOMESTIC GASOLINE MODEL 103/101

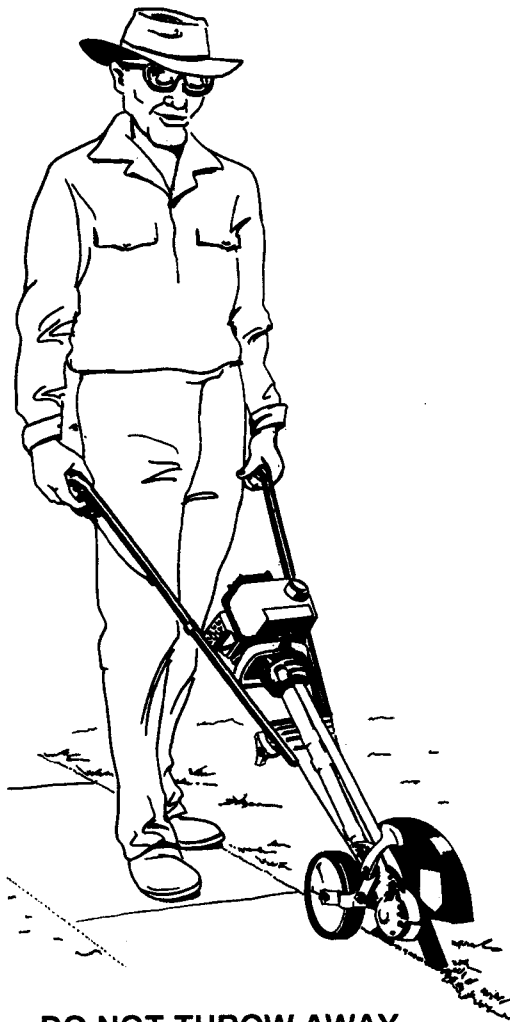
OPERATOR/OWNER MANUAL

PATENTS & DESIGN REGISTRATIONS APPLIED FOR

- * ASSEMBLING
- * SAFETY PRECAUTIONS
- * OPERATING INSTRUCTIONS
- * MAINTENANCE

**IMPROPER USE CAN
CAUSE SERIOUS
INJURY.**

MAKE SURE THIS
MANUAL IS READ
AND CAREFULLY
UNDERSTOOD
BEFORE STARTING
OR OPERATING THIS
EQUIPMENT.



IMPORTANT MANUAL - DO NOT THROW AWAY

Manual always to be available for reference or instructing new operators

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INTRODUCTION

This Manual contains operating, assembling, safety, and maintenance instructions for the Atom Lawn Edger.

Pay special attention to the safety precautions outlined on pages 4 to 7. Allow only persons who understand this Manual to operate the Lawn Edger. This lawn edger is not to be used for any purpose other than for edging lawns.

To receive maximum performance and satisfaction from this Lawn Edger, it is important that you read and understand the maintenance and safety precautions before using the edger.

Contact your Atom dealer or the Atom distributor for your area if you do not understand or cannot carry out any of the instructions in this Manual.



WARNING

As with any power tool some special safety precautions must be observed to reduce the risk of personal injury. Careless or improper use may cause serious or even fatal injury.

ATOM'S philosophy is to continually improve all of its products. As a result, engineering changes and improvements are made from time-to-time. If the operating characteristics or the appearance of your lawn edger differs from those described in this Manual, please contact your ATOM dealer for information and assistance. ATOM reserves the right to make changes at any time without notice.

SAFETY WARNINGS

THE PURPOSE OF SAFETY WARNINGS AND NOTES IN THIS MANUAL IS TO ATTRACT YOUR ATTENTION TO POSSIBLE DANGERS, AND THE EXPLANATIONS WITH THEM DESERVE YOUR CAREFUL ATTENTION AND UNDERSTANDING. THE SAFETY WARNINGS IN THIS MANUAL AND ON THE LAWN EDGER DO NOT BY THEMSELVES ELIMINATE ANY DANGER. THE INSTRUCTIONS OR WARNINGS THEY GIVE ARE NOT SUBSTITUTES FOR PROPER ACCIDENT PREVENTION MEASURES. THE SYMBOLS IN THIS MANUAL ARE SHOWN BELOW WITH THEIR APPROPRIATE SAFETY WARNING EXPLANATION.

WARNING: Failure to obey a safety warning can result in injury to yourself and others.



NOTE: Advises you of information or instructions vital to the operation or maintenance of the equipment.



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PARTS & CONTROLS

- 1, 2. The handles of the Lawn Edger held by both hands.
3. The throttle trigger which increases speed of engine for automatic safety clutch to engage and thus rotate blade.
4. Starter grip the grip of the pull starter which is the device to start the engine.
5. ON/OFF switch.
6. Handle nut for holding handles onto housing (and adjusting anti-vibration of handle).
7. Height adjustment for adjusting depth of cutting blade.
8. Blade cover reduces the risk of flying debris and direct contact with the feet or hands.
9. Cutter blade rotates when engine speed is increased above idle.
10. Wheel for moving and guiding edger.
11. Grass shield reduces flyback of stones and foreign material.
12. Fuel cap for sealing the fuel tank filler.
13. Choke lever for cold engine starting.
14. Filter housing covers the air filter element & carburetor, and carburetor adjusting screws for tuning carburetor.
15. Fuel pump primer provides additional fuel for a cold start.
16. Spark Plug terminal connects the spark plug to the ignition wire.
17. Muffler reduces exhaust noises and diverts exhaust gases away from operator.

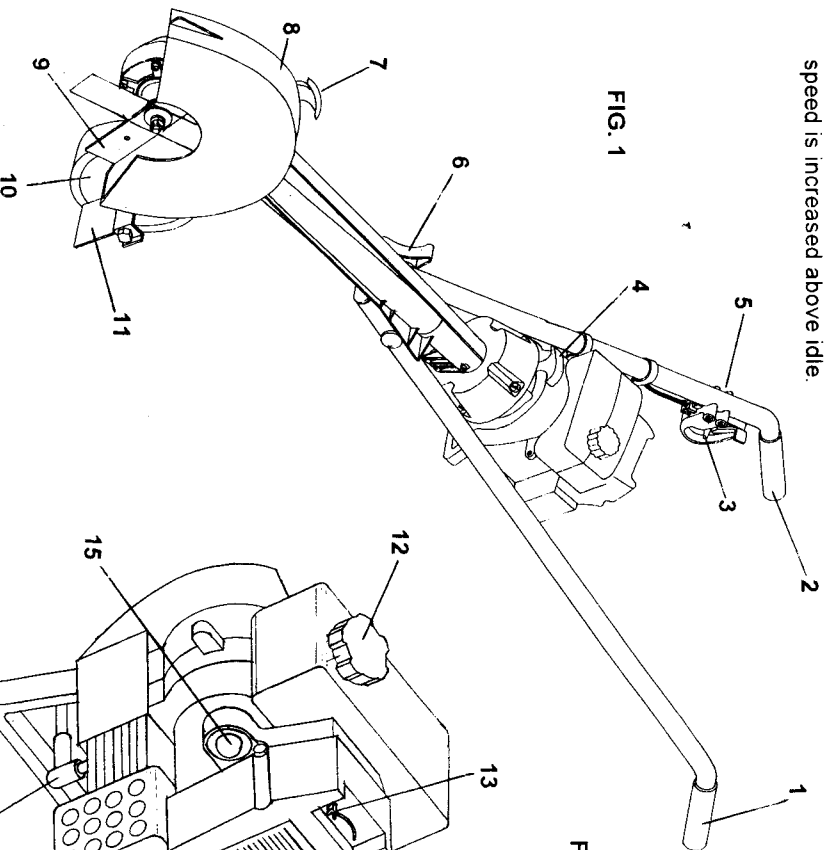


FIG. 1

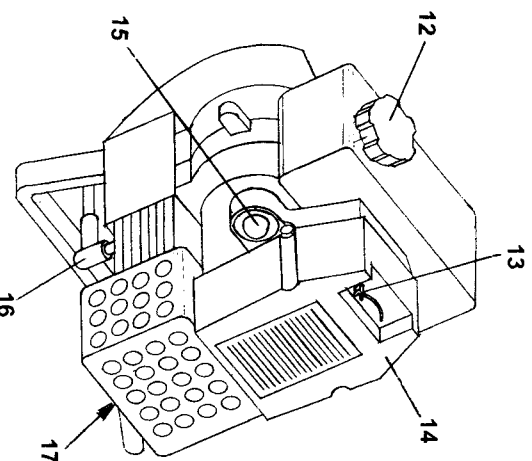


FIG. 2

SAFETY PRECAUTIONS

⚠️ WARNING

Like any power tool the use of any lawn edger may be dangerous. It is important that you read, fully understand, and observe the following safety precautions and warnings. Reread this operator's manual and the safety instructions periodically.

⚠️ WARNING

Careless or improper use of the machine may cause serious injury. Have your Dealer show you how to operate your lawn edger.

⚠️ WARNING

The lawn edger must not be operated by minors. Bystanders, especially children and animals should not be allowed in the area where a machine is in use. Never let the unit run unattended.

Do not lend, rent or sell this machine without this operator's manual. Be sure that anyone using this unit understands the information contained in this manual before use.

Safe use of a Lawn Edger involves

1. the operator
2. the lawn edger
3. the use of the lawn edger

THE OPERATOR

Physical Condition

Operator must be in good physical condition and mental health and not under the influence of any substance (drugs, alcohol, etc.) which might impair vision, dexterity or judgment Fig. 3.

Do not operate a lawn edger when fatigued. Be alert - if you get tired while operating the machine, take a break. Tiredness may result in loss of control. Working with any power tool can be strenuous. If you have any condition that might be aggravated by

strenuous work, check with your doctor before operating the machine.



FIG. 3

⚠️ WARNING

Prolonged use of any hand held powered machine exposing the operator to vibrations may produce whitefinger disease (Raynaud's phenomenon) or carpal tunnel syndrome. These conditions reduce the hand's ability to feel and regulate temperature, produce numbness and burning sensations and may cause nerve and circulation damage and tissue necrosis.

The ATOM LAWN EDGER is equipped with vibration reducing hand grips and main handle anti-vibration mountings. These are designed to reduce the transmission of engine vibrations to the operator's hands. Replace hand grips and mountings when worn or damaged.

The rubber handles do not guarantee that you will not sustain whitefinger disease or carpal tunnel syndrome. Therefore, continual and regular users should monitor closely the conditions of their hands and fingers. If any of the above symptoms appear, seek medical advice immediately.

Proper Clothing

Clothing must be sturdy and snug-fitting, but allow complete freedom of movement. See Fig. 4. Avoid loose-fitting jackets, flared

SAFETY PRECAUTIONS (Continued)

or cuffed pants, or anything that could trip the operator. Wear overalls or long pants to protect your legs. Do not wear shorts. Use of gloves when working with the lawn edger is recommended. Good footing is most important. Wear sturdy shoes with nonslip soles. Do not wear sandals or operate with bare feet. In hot or sunny conditions always wear a hat and long sleeve shirt for protection against skin cancers. Use of a good brand of sunscreen cream is also recommended on exposed skin surfaces.

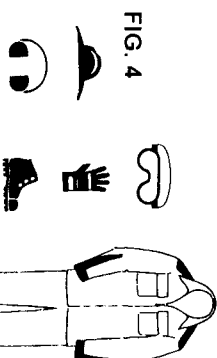


FIG. 4

⚠️ WARNING

Proper eye protection is a must. The blade cover may not protect the operator from all fast moving foreign objects even though the discharge is directed away from the operator, as ricochets and bouncebacks may occur during lawn edging operations. Replace immediately broken or cracked blade covers and grass debris deflector.

Never operate a lawn edger unless wearing goggles or properly fitted safety glasses with adequate top and side protection which comply with ANZI Z87.1 (or your applicable national standard).

Engine noise may damage your hearing. Wear sound barriers (ear plugs or ear muffs) to protect your hearing. Continual and regular users should have their hearing checked regularly.

Fueling

This ATOM unit uses an oil-gasoline mixture for fuel (see the chapter on "Fuel").

⚠️ WARNING



Gasoline (petrol) is an extremely flammable and explosive fuel. Use extreme caution when handling gasoline or fuel mix. Do not smoke or bring any fire or flame near the fuel.

Fueling instructions

Refuel outdoors only. Always switch off the engine and allow it to cool before refueling. Relieve fuel tank pressure by loosening fuel cap slowly. Never remove fuel filler cap while engine is running.

Select bare ground for fueling and move at least 10 feet (3m) from the fueling spot before starting the engine. Wipe off any spilled fuel before starting your lawn edger and check for leakage. Always tighten fuel filler cap securely after fueling.

⚠️ WARNING

Always allow engine to cool before refueling. Accidental spillage of gasoline over hot engine could cause fire or explosion to occur with consequent possible disfigurement or fatal injury. Wash and clean hands after fueling.

Starting

You should always inspect your unit before starting it. Make sure the controls and safety devices are working properly.

As the throttle trigger is fitted with a ½ throttle lock to assist in starting the engine, **NEVER leave ½ throttle lock on, other than for starting.**

⚠️ WARNING

The lawn edger is a one-person machine. To reduce the risk of eye or other injury

SAFETY PRECAUTIONS (Continued)

from thrown objects, ensure that bystanders are at least 15 feet (5m) away during use.

Fig. 6. Replace immediately any worn or broken debris deflector shield or blade cover. If approached, release throttle trigger to immediately de-accelerate the engine.

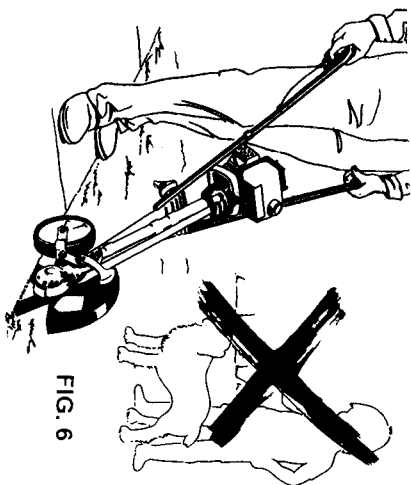


FIG. 6

For specific starting instructions, see the appropriate section of this operator's manual. Place the machine on firm ground or other solid surface in an open area. Maintain good balance and secure footing.

⚠ WARNING

When you pull starter grip, **do not** wrap starter rope around your hand. Do not allow grip to snap back, but guide starter rope slowly back to permit rope to rewind properly.

Failure to follow this procedure may result in injury to hand or fingers or may damage the starter mechanism.

Working instructions and important adjustments

Never operate your machine if it is damaged, improperly adjusted or not completely and securely assembled. At correct idle speed the blade should not turn. Do not use lawn edger with incorrect idle speed adjustment. Adjust the speed yourself (Page 13) setting Carburettor Idle Speed Adjustment, or by a service dealer.

MAINTENANCE, REPAIR AND STORING

Use only original ATOM replacement parts for maintenance and repair. Use of parts manufactured by others will void warranty, and/or may cause serious or fatal injury. Follow the maintenance instructions in the appropriate section of this manual. Any repairs should be carried out by an authorised service dealer.

⚠ WARNING

Always stop the engine and make sure that the blade is stopped before adjusting blade height, doing any maintenance or repair work, cleaning the unit or removing grass or debris from the blade.

Check fuel filler cap for leaks at regular intervals. Use the specified spark plug and make sure it and the ignition lead are always in good condition.

⚠ WARNING

A worn or damaged muffler is a fire hazard and may cause loss of hearing. Check to see that the muffler is in good condition. The lawn edger must not be operated if the muffler is not functioning properly, is damaged, or has been removed. In order to reduce the risk of fire, do not modify or remove any part of the muffler.

Remember that the risk of forest or grass fires is greater in hot weather.

⚠ WARNING

Never touch a hot muffler or burn will result.

Keep spark plug and wire connection tight and clean. Spark plug electrode gap should be checked with a feeler gauge at least every 50 operating hours and reset if necessary. Fit a new spark plug if electrodes are badly pitted or fouled with carbon build up.

SAFETY PRECAUTIONS (Continued)

Store lawn edger in a dry, high or locked location place and out of reach of children.

Before storing for a longer period, always empty the fuel tank.

⚠ WARNING

Never store the machine with gasoline inside a building where fumes may reach an open flame or spark, e.g. gas or oil fired heater appliance, electric motor etc.

⚠ WARNING

Start and operate your unit outdoors in a ventilated area. Keep the space behind and beside the engine clear at all times to allow for the escape of hot and toxic exhaust fumes. Operate your machine under good visibility and daylight conditions only. Work carefully.

Working Conditions

When working with the lawn edger always

wrap your fingers tightly around each handle. Keep your hands in this position to have your machine under control at all times. NEVER attempt to operate lawn edger with one hand as loss of control may result in serious or fatal injury.

Make sure the handle grips are in good condition and free of moisture, pitch, oil or grease. Use both hands, one on each handle, to operate and control the lawn edger. Do not overreach. Keep proper footing & balance at all times.

⚠ WARNING

Electrical shock. Never touch electrical wires or components while the engine is running. They are sources of high voltage & can give you an electrical shock. Replace immediately any faulty high tension lead or spark plug cap.

⚠ WARNING

DO NOT TOUCH HOT ENGINE DURING AND IMMEDIATELY AFTER USE AS YOU MAY BURN YOURSELF.

ASSEMBLING THE LAWN EDGER

Remove all items from Carton.

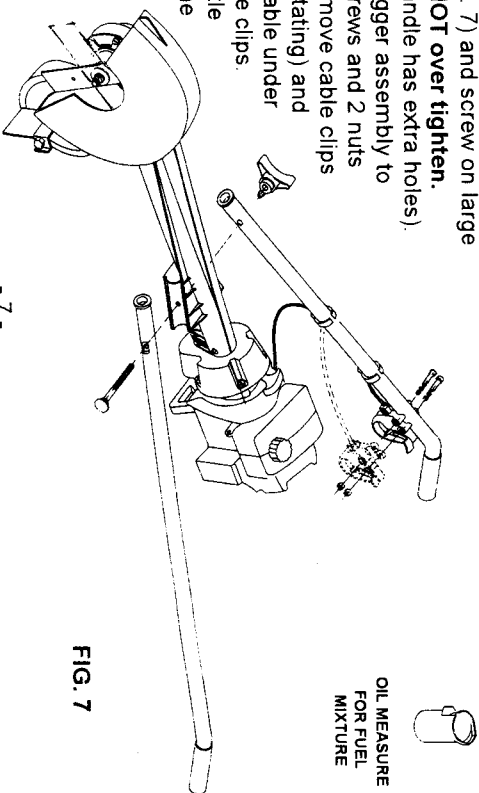
Fit bolt through left handle, edger body and right handle (Fig. 7) and screw on large plastic nut. **Do NOT over tighten.**

(NOTE: Right handle has extra holes).

Screw throttle trigger assembly to handle with 2 screws and 2 nuts supplied, and remove cable clips off handle (by rotating) and secure throttle cable under handle with these clips.

Check that throttle cable from engine

is fitted **under** handle (**Do not** loop throttle cable over handle).



OIL MEASURE
FOR FUEL
MIXTURE

FIG. 7

FUEL MIX AND FUELING

Fuel Mix

Prepare the mixture of a brand-name unleaded gasoline and quality two-stroke (2 cycle) engine oil in an approved safety-type canister. Pour in the oil first e.g. Castrol 2T two stroke oil or equivalent and then add gasoline. Do not use BIA or TCW (two cycle water cooled) mix oils. Use supplied oil measure. One full measure to 4 litres, or one U.S. gallon, of gasoline (32:1 fuel/oil mix)

Well known brands of 2 stroke (2 cycle) engine oil are recommended. They are formulated specially for 2 cycle engines and guarantees a long engine life.

For the sake of your health and the environment unleaded gasoline is recommended.

Inferior quality gasolines or oils may damage the engine, sealing rings, fuel lines or fuel tank, and carburettor. Also causes rough and irregular running and starting.

Mix ratio

For proper engine operation and maximum reliability pay strict attention to the fuel oil mixing instructions. Use a 32:1 fuel oil ratio when you use Castrol 2T 2 cycle oil or equivalent. Use measure supplied.

Fill oil to this level
to mix with 4
litres (1 US. Gallon)
of gasoline

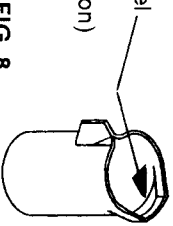


FIG. 8

With other branded two-stroke engine oils: 25 parts gasoline to 1 part oil.

Fuel mix:

Only mix sufficient fuel for a few weeks work - store in approved safety-type canisters. Pour oil in first.

Screw the fuel can cap on tightly and thoroughly shake the mixture before fueling your machine.

WARNING

Pressure may build up in the canister. Remove fuel cap slowly to avoid injury from fuel spray. Replace fuel cap securely.

Clean the fuel tank and canister from time to time.

Take care when handling gasoline. Avoid direct contact with the skin and avoid inhaling fuel vapor.

Change fuel pickup filter at least once every year or more frequently depending on use.

Before fueling, clean the filler cap and the area around it to ensure that no dirt falls into the tank. Never mix the gasoline and oil in the fuel tank of the engine.

WARNING

Always allow engine to cool before refueling. Accidental spillage of gasoline over a hot engine could cause fire or explosion to occur. See Page 5 Safety Precautions Fueling.

WARNING

Fill or add fuel to the tank only when the edger is in a horizontal position as shown (Fig. 9). ALLOW engine to cool down for at least 5 minutes before adding fuel.

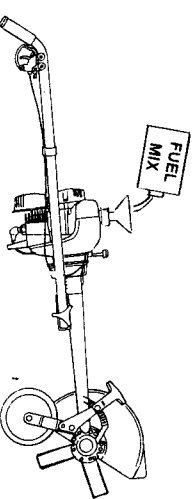


FIG. 9

STARTING & STOPPING INSTRUCTIONS

1. Place lawn edger on ground in horizontal position (see Fig. 14). Be sure the ignition switch is "ON". Pull switch toward operator to turn ON. Switch located on right side of trigger. See Fig. 11

2. Set trigger throttle to 1/2 THROTTLE LOCK by placing hand on handle grip and pushing down safety interlock with thumb, and pulling up and holding trigger with finger (Fig. 11). Then move thumb to hold in 1/2 throttle button, release trigger, then release 1/2 throttle button. Trigger throttle is then engaged at half speed for starting (only).

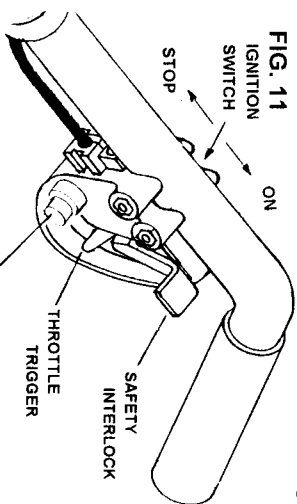


FIG. 11

Make sure you have a firm footing. Hold down motor with left hand and with right hand pull the starter grip slowly until you feel it engage - and then give it a fast pull (Fig. 14). Do not pull out starter rope more than 26" (65cm) - it might break.

STAND BETWEEN HANDLES TO START

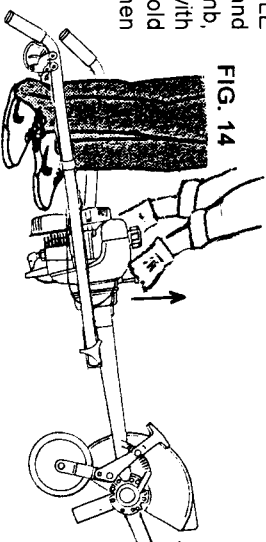


FIG. 14

Do not let starter grip snap back. Guide it back slowly so that the starter rope can rewind slowly.

4. PULL THE STARTER ROPE BRISKLY until you hear the engine sound like it wants to run or runs then stops (normally 1-5 pulls).

5. Slide choke lever to PARTIAL POSITION (see Fig. 12). Pull starter rope 1-3 times to start engine.

3. COLD START: Slide the choke lever to full choke position (Fig. 12). Press and release the primer bulb 2-5 times (Fig. 13).

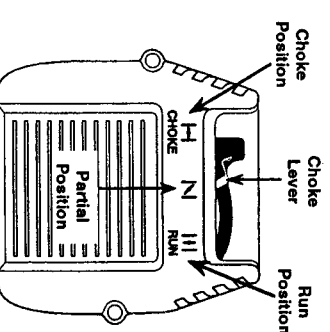


FIG. 12

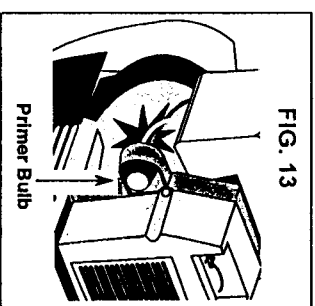


FIG. 13

1 NOTE
In warm temperature or hot engine this step may not be necessary.

6. Slide the choke lever to RUN POSITION (Fig. 12). Re-start and allow the engine to run for a few more seconds on 1/2 throttle lock (engine runs fast). Pull throttle trigger (releases 1/2 throttle lock), & allow throttle trigger to slowly pull back to engine idle.

STARTING & STOPPING (CONTINUED)

7. HOT OR WARM START: (Engine has already been started and warmed up). Switch ignition "ON". Set ½ THROTTLE LOCK (Fig. 11). Pull starter until motor runs and let it run for a few seconds before releasing ½ THROTTLE LOCK. This allows cooler fuel to enter the carburettor. Allow throttle trigger to slowly pull back to idle.

! NOTE

A built in automatic centrifugal clutch disengages the blade from rotating at engine idle speed. The clutch engages the blade when the engine speed is increased.

8. Throttle trigger (engine accelerator control) is operated by pushing down interlock with thumb and pulling on trigger. Fig. 11.

! WARNING

The blade will rotate when engine is idling

OPERATING INSTRUCTIONS

Anti-Vibration (AV) Adjustment

Handle nut (Item 6, Page 3) can be loosened (or tightened) to obtain best AV affect to reduce any handle vibrations.

During break-in period

A factory new machine should not be run at high revs (full throttle) without any load. This avoids unnecessary wear during the break-in period. Engine develops its maximum power after a few tank fillings. When using, increase engine revs as load is increased on lawn edger. When lawn edger is under full load, full throttle is to be used.

After finishing work

Storing for short period - keep the unit in a dry place until you need it again. Do not store where naked flame or electrical machinery is operating.

fast e.g. on starting (½ throttle lock) or when engine is cold. TO STOP ENGINE move ignition switch up into the "OFF" position Page 9 Fig. 10.

9. FLOODED ENGINE: (Engine will not start) If smoke or fuel comes from exhaust and engine will not start.

- i. Check that ignition switch is "ON", CHOKE LEVER is on RUN position, throttle is set on HALF THROTTLE LOCK position.
- ii. Pull starter rope up to 10 times to clear engine of fuel so it can start.
- iii. If engine has excessive fuel that cannot be cleared by i & ii above, remove spark plug from engine and from spark plug terminal, crank engine to clear excess fuel, wipe and dry spark plug of all fuel, re-install spark plug and terminal, and restart as above.

Storing for a long period - drain the fuel tank - run engine until carburettor is dry.

EDGING OF LAWN

1. The edger is very easy and simple to use, and most operators can immediately adapt to its unique flexible use. For some people it may take a few edgings to become accustomed to its operation.

2. Thoroughly inspect the area where the edger is to be used and remove all stones, sticks, wires and other foreign objects.

OPERATING INSTRUCTIONS (CONTINUED)

3. Adjust blade height. With a new blade try first hole closest to operator.

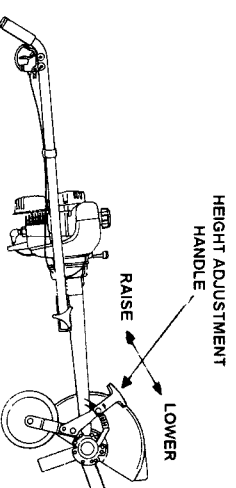


FIG. 15

4. With both arms fully extended downwards (see illustration on front cover) hold both handle grips firmly. With the engine running pull the throttle trigger to increase engine speed.

5. If blade is not deep enough, or is digging too deep, adjust blade height Fig. 15, or slightly raise or lower handles to suit depth required Fig. 16. However it is always more comfortable and relaxed to have arms fully extended downwards.

6. As cutting action begins, push the lawn edger forward so that the blade can cut the edge as you move forward.

Fig. 16

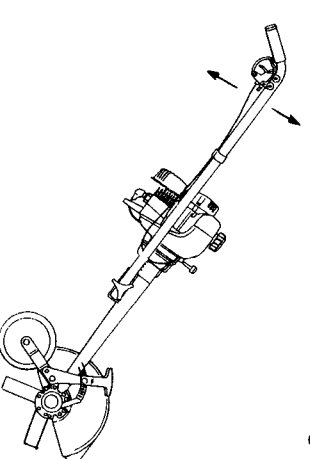


FIG. 17

The Lawn Edger may be transported by pushing it on its wheel or carrying it as shown in Fig. 17 (engine switched off).

! NOTE

! WARNING

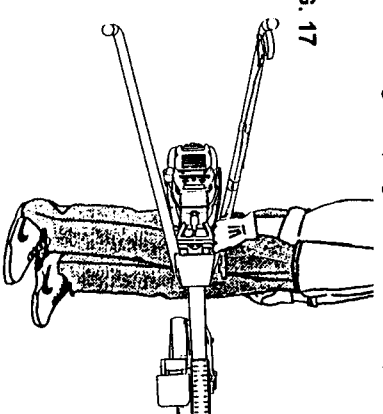
To avoid personal injury, never carry the edger while the engine is running. Stay clear of the rotating blade. Stop the engine prior to making adjustments and cleaning.

! WARNING

ONLY OPERATE UNIT WHEN MOVING FORWARD. DO NOT OPERATE WALKING BACKWARDS AS YOU MAY TRIP, FALL AND INJURE YOURSELF.

! NOTE

Pull, push or lower edger gently up or down edges, gutters, steps etc. DO NOT drop edger suddenly onto wheel over high ledges as you may damage unit.



7. Continue at a moderate pace until you are familiar with the controls and the handling of the lawn edger.

MAINTENANCE INSTRUCTIONS

AIR FILTER MAINTENANCE

! NOTE

CLEAN AND RE-OIL THE AIR FILTER EVERY 5 HOURS OF OPERATION OR DAILY. The air filter is one of the most important areas to maintain. If it is not maintained, you will void the warranty. Before cleaning, make sure the unit is turned off.

1. Remove screws on each side of carburettor/air filter cover assembly. Remove the air filter cover (Fig. 18) and air filter (Fig. 19).

! NOTE

The choke lever must be in the "CHOKE" position to remove and install the air filter cover.

FIG. 18

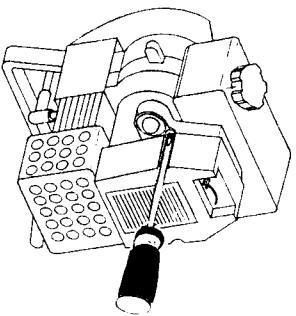
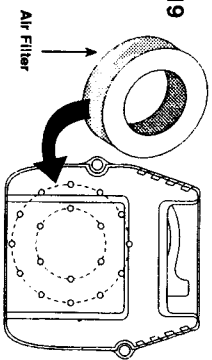
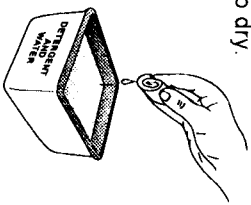


FIG. 19



2. If filter torn or very dirty replace.
3. Wash the filter in detergent and water (Fig. 20). Rinse the filter thoroughly and allow it to dry.

FIG. 20



MAINTENANCE INSTRUCTIONS (CONTINUED)

check the condition of the air filter before adjusting the carburettor. Refer to Air Filter Maintenance on Page 12.

If the following conditions are experienced, it may be necessary to adjust the carburettor:

- The engine will not idle.
- The engine hesitates or stalls on acceleration.
- The loss of engine power that is not corrected by cleaning the air filter and muffler.
- The engine operates in an erratic or fuel-rich condition (indicated by excessive exhaust smoke from the muffler).

! NOTE

Careless adjustments can seriously damage the carburettor &/or engine.

ADJUSTING THE CARBURETTOR

1. Remove carburettor/air filter cover (Fig. 18). **Clean air filter if it is dirty.** Refer to Air Filter Maintenance (Page 12). Throttle trigger to be in idle position.
2. **Engine Idling Setting:** To increase engine idle speed, turn clockwise IDLE SCREW (C) in Fig. 22. To decrease engine idle speed, turn idle screw (C) counter (anti) clockwise.

! NOTE

Edger blade NOT to rotate when engine is idling.

! NOTE

Throttle cable wire is NOT to be pulled tight (against trigger throttle). Trigger to have small initial movement before it pulls cable and carb throttle lever.

3. High Speed and Low Speed Mixture Setting:

Gently turn both the low speed (B) and high speed (A) mixture screws **clockwise** until they are lightly seated. Then turn the screws **counter (anti) clockwise 1-1/4 turns.**

HIGH SPEED MIXTURE SCREW (A)

LOW SPEED MIXTURE SCREW (B)

THROTTLE LEVER

CABLE ADJUSTING & FASTENING SCREW

ENGINE

IDLE SCREW (C)

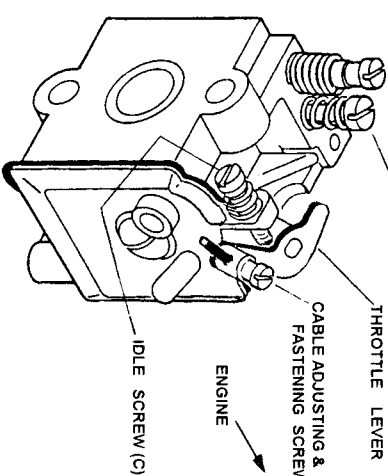


FIG. 22

! NOTE

Forcing the mixture screws (with screwdriver) will damage the screw tip and the seat in the carburettor body.

4. Set 1/2 throttle lock (Fig. 11 Page 9). Start the engine and let it run for a few seconds.
5. Release 1/2 throttle lock and let the engine idle. If the engine stops, turn the IDLE SCREW (C) **clockwise 1/8 turn** at a time (as required) until the engine idles. If idle speed is too high turn IDLE SCREW (C) counter (anti) clockwise.

6. Final Idle Speed And Mixture Settings:

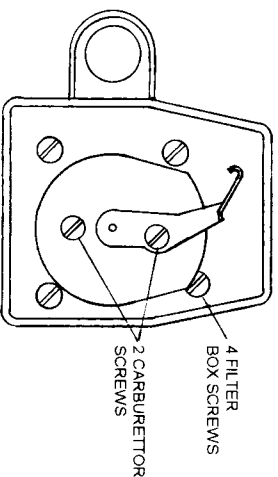
- Adjust the idle speed and mixture for smoothest engine idle as follows:-
- i. Slowly turn the low speed mixture screw (B) clockwise until you hear the fastest idle; then turn the screw (B) **counter (anti) clockwise 1/8 turn.**
 - ii. Squeeze the throttle trigger. If the engine falters or hesitates as it accelerates, turn low speed mixture screw (B) **counter (anti) clockwise 1/16 turn** at a time until engine accelerates rapidly.

CARBURETTOR ADJUSTMENT

This unit is equipped with a diaphragm-type carburettor that has been carefully calibrated at the factory. In most cases, no further adjustment will be required.

The condition of the air filter is important to the operation of the edger. A dirty air filter will restrict the air flow, which upsets the fuel-air mixture in the carburettor. The resulting symptoms are often mistaken for an out-of-adjustment carburettor. Therefore,

FIG. 21



MAINTENANCE INSTRUCTIONS(CONTINUED)

- iii. After running engine for a little time, it may cut out on idle. Increase idle speed by screwing idle screw (c) clockwise.

7. High Speed Screw Mixture

Adjustment:

- a. High speed mixture screw adjustment is not recommended without a precision high speed tachometer.
- b. The factory presets the high speed mixture screw at 1-1/4 turns out from the closed position. Your unit should perform well at this setting. If additional adjustment of the high speed mixture is required, contact your local authorized service dealer.

! NOTE

The edger BLADE should not rotate when the engine idles.

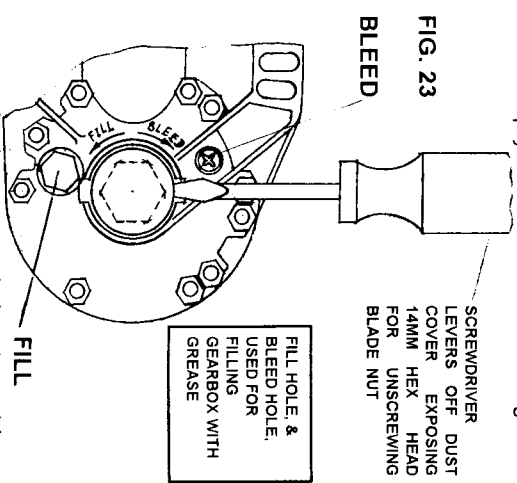
! NOTE

If the carburettor adjustments do not help the unit to run properly, contact your authorized service dealer. Recommended idle speed is 3000 to 3200 RPM.

BLADE REPLACEMENT

1. Stop engine. Clean area around dust cover and pry out with screwdriver. Fig. 23.

FIG. 23



2. Through dust cover hole place 14mm single socket spanner. On blade end of

3. Unscrew nut counter- (anti-) clockwise (normal right hand thread).
4. Remove two small washers, one large washer and blade. Before fitting blade and washers, clean all grit and grease. Assemble these parts clean and dry. Fit large washer, new blade with flat blade on inside, large washer, 2 small washers, and nut. Fig. 24. Tighten nut.

! WARNING

Use only Atom Blades. Other blades have larger size holes (1/2") which will cause our-of-balance vibrations which will damage unit and MUST NOT BE FITTED.

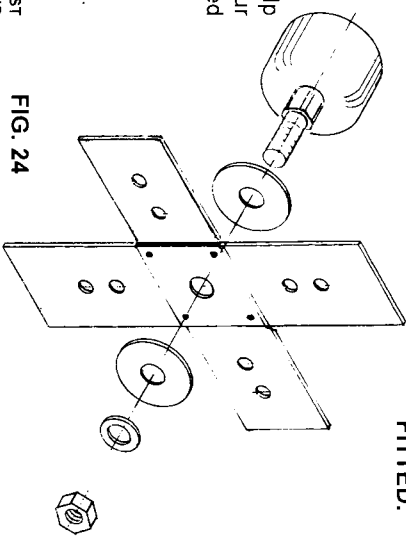


FIG. 24

5. Clean plastic dust cap and housing, press back by gently tapping into place. Clean inside blade cover of any built up dirt.

! WARNING

Do not run engine without blade tightened to blade shaft as gear damage will occur.

LOOSE BLADE

As in 1 and 2 of Blade Replacement and tighten nut clockwise.

LUBRICATION OF GEARS

The oil in the gear case should be topped up each 10 hours or according to use by adding light free flowing lithium based grease through FILL hole in casing Fig. 23. Use a suitable filling gun, remove BLEED

MAINTENANCE INSTRUCTIONS (CONTINUED)

screw to allow grease to eject indicating gear box is 3/4 full. Refit BLEED screw and push in 3-4 more pumps. Refit FILL bolt (tighten gently).

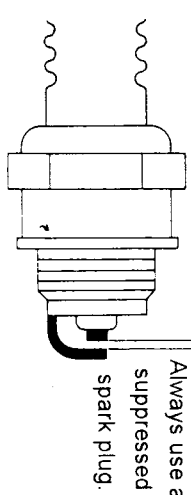
! WARNING

Over Tightening will cause plastic thread to strip.

CHECK THE SPARK PLUG

If engine is down on power, difficult to start or runs poorly at idling speed, check the spark plug.

- Allow engine to cool down.
- Remove spark plug
- Clean dirty spark plug.
- Check electrode gap - it should be 0.02" (0.5mm)



MAINTENANCE INSTRUCTIONS (CONTINUED)

Rectify faults which have caused fouling of spark plug. Possible faults include:

- Incorrect carburettor setting, too much oil or wrong type of oil in fuel mix, old fuel mix, dirty air filter, unfavourable running conditions, e.g. operating at part load
- Do not clean the spark plug in an abrasive grit spark plug cleaner, as expensive damage to the motor could occur through loose grit
- Fit a new spark plug after approx. 100 operating hours - or earlier if electrodes are badly eroded. Recommended spark plug is Champion D8J.

CHECKING EXHAUST MUFFLER

Tighten exhaust screws. If exhaust gasket is leaking, replace gasket. If the engine is down on power check the muffler. Allow engine to cool down. Remove and scrape out excess carbon on both inlet and exit exhaust, or have this done by a service dealer.

TROUBLESHOOTING

| PROBLEM | CAUSE | ACTION |
|---|--|--|
| 1. Engine will not run | Ignition switch is "OFF" Empty fuel tank. Primer bulb was not pushed enough times. Engine flooded | Turn switch to "ON". Push down. Fill fuel tank. Press primer bulb fully & slowly 5 times. Use starting procedure WITHOUT USING CHOKE. See Page 10. |
| 2. Engine will not idle | Carburettor misadjusted. | Adjust carburettor. See Page 13. |
| 3. Engine will not accelerate | Carburettor misadjusted. | Adjust carburettor. See Page 13. |
| 4. Engine runs rough or hard to start | Carburettor/crankcase/cylinder gaskets/crankshaft seal leaking damaged engine parts | Tighten screws Page 12 Fig. 21. Replace gaskets with a sealant and tighten screws. Replace crankshaft seal, damaged parts. |
| 5. Engine lacks power or stalls when cutting | See (4) above. Dirty air filter. Wrong carburettor adjustment | Clean or replace air filter. See Page 12. Re-adjust carburettor. See Page 13. |
| 6. Cutting blade does not turn when operating | Blade cover filled with dirt/ Grass. Clutch slipping Loose blade nut. | Clean. Cut less depth. Check clutch Tighten nut. See Page 14. |
| 7. Gear case leaking | Loose screws. Broken "O" ring. | Tighten. Replace. |
| 8. Noisy gears | No heavy oil in gear case Loose blade nut or gear adjustment incorrect. | Refill. See Page 14. Re-assemble parts correctly. |

Atom Industries (ATOM) warrants each new ATOM Lawn Edger for TWELVE (12) months according to the following terms.

This warranty extends to the original retail purchaser only and commences on the date of original retail purchase.

Any part of the ATOM Lawn Edger manufactured or supplied by ATOM and found in the reasonable judgement of ATOM to be defective in material or workmanship will be repaired or replaced by an authorised ATOM service dealer without charge for parts and labour.

The ATOM Lawn Edger including any defective part must be returned to an authorised service dealer within the warranty period. The expense of delivering the ATOM Lawn Edger to the dealer for warranty work and the expense of returning it back to the owner after repair or replacement will be paid for by the owner. ATOM's responsibility in respect to claims is limited to making the required repairs or replacements and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any ATOM Lawn Edger. Proof of purchase will be required by the dealer to substantiate any warranty claim. All warranty work must be performed by an authorised ATOM service dealer or by Atom Industries.

This warranty is limited to NINETY (90) days from the date of original retail purchase for any ATOM Lawn Edger that is used for rental or commercial purposes, or any other income producing purpose.

This warranty does not cover any ATOM Lawn Edger that has been subject to misuse, neglect, negligence, or accident, or that has been operated in any way contrary to the operating instructions as specified in the ATOM Operator's manual. This warranty does not apply to any damage to the ATOM Lawn Edger that is the result of improper maintenance or to any ATOM Lawn Edger that has been altered or modified so as to adversely affect the products operation, performance or durability or that has been altered or modified so as to change its intended use. The warranty does not extend to repairs made necessary by normal wear or by the use of parts or accessories which are either incompatible with the ATOM Lawn Edger or adversely affect its operation, performance or durability.

ATOM reserves the right to change or improve the design of any ATOM Lawn Edger without assuming any obligation to modify any product previously manufactured.

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PLEASE FILL IN INFORMATION BELOW ON PURCHASE AS THIS WILL ALSO BE REQUIRED FOR ANY WARRANTY.

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 A separate Lawn Edger Workshop Manual is available Part No. 43175

This is your Lawn Edger machine model number. Should you ever require any parts, please quote these numbers.

ATOM INDUSTRIES, 9 FRED STREET, LILYFIELD, NSW 2040, AUSTRALIA
 P O Box 513, Rozelle NSW 2039 AUSTRALIA
 Phone within Australia: (02) 810 0194; International: +61 2 810 0194
 Fax within Australia: (02) 810 6691; International: +61 2 810 6691
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