

IMPORTANT MANUAL - DO NOT THROW AWAY

Manual always to be available for reference or instructing new operators. Please fill in details of purchase on back cover page.

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

INTRODUCTION

This Atom Gasoline Powered Lawn Edger is designed to the highest standards to ensure you many hours of uninterrupted service.

Pay special attention to the safety precautions outlined on pages 2 to 5. Only persons who understand this Manual are to operate the Lawn Edger.

To receive maximum performance and satisfaction from your 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 in your area if you do not understand or cannot carry out any of the operating instructions in this Manual.

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 Atom Edger differs from those described in this manual, please contact your Atom dealer for information and assistance. Call (02) 9810 0194 (within Australia) for your nearest servicing dealer.

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NOTE: OUTSIDE AUSTRALIA REFER TO BACK COVER PAGE

THE PURPOSE OF SAFETY WARNING AND NOTES IN THIS SAFETY WARNINGS

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 EDGER DO NOT, BY THEMSELVES, ELIMINATE ANY DANGER. THE INSTRUCTIONS OR WARNINGS THEY GIVE ARE NOT SUBSTITUTES FOR PROPER ACCIDENT PREVENTION MEASURES.

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

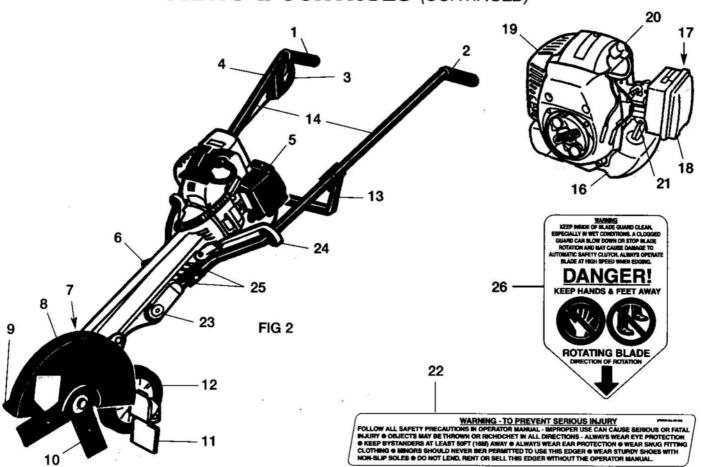
or maintenance of the equipment.

PARTS & CONTROLS

- 1,2 The handles of the Lawn Edger are held by both hands.
 - 3 The throttle trigger which increases speed of engine for automatic safety clutch to engage and thus rotate blade.
 - 4 ON/STOP switch.
 - 5 Starter grip the grip of the pull starter which is the device to start the engine.
 - 6 Handle nut for holding handles onto housing.
 - 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 Sight guide for edging.
- 10 Cutter blades rotate when engine speed is increased above idle.
- 11 Grass shield debris deflector reduces flyback of stones and foreign material.
- 12 Wheel for moving and guiding edger.

- 13 Cross Brace, attaches downward on handle.
- 14 Left and right Handle Tubes.
- 15 Fuel cap, for sealing the fuel tank filler.
- 16 Fuel Tank.
- 17 Choke lever for cold engine starting.
- 18 Filter housing covers the air filter element.
- 19 Muffler reduces exhaust noises and diverts gases away from operator.
- 20 Spark Plug terminal cap connects the spark plug to the ignition wire
- 21 Fuel pump primer under carburettor provides additional fuel for starting.
- 22 Warning Label, on left handle.
- 23 Front Round Anit-Vibration Mounting.
- 24 Rear Round Anit-Vibration Mounting (both
- 25 Twin Saddle AV Mounting (both sides).
- 26 Warning Label, on blade guard.

PARTS & CONTROLS (CONTINUED)



SAFETY PRECAUTIONS

A WARNING

As with 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. Re-read this operator's manual and the safety instructions periodically.

WARNING

Do not lend, rent or sell this machine without the

operator's manual. Be sure that anyone using this unit understands the information contained in this manual before use.

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.

Safe use of an Atom Lawn Edger involves:

- 1. The Operator
- 2. The Atom Edger
- 3. The use of the Atom 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 judgement (Fig. 3).



FIG 3

MARNING

This 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 at least 15 metres (50 feet) away (Fig. 4). Never let the unit run unattended.



FIG 4

WARNING

Electrical shock. Never touch electrical wires or

course recurred water or components while the engine is running. They are sources of high voltage and can give you an electrical shock. Replace immediately any faulty tension lead or spork plug cap.

SAFETY PRECAUTIONS (CONTINUED)

Do not operate the 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.

A 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.

PROPER CLOTHING

Clothing must be sturdy and snug-fitting, but allow complete freedom of movement (see Fig. 5). Avoid loose-fitting jackets, flared 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.

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. Never operate an Atom Edger unless wearing goggles or properly fitting safety glasses with adequate top and side protection which comply with ANSI Z 87.1.

Replace immediately broken or cracked blade covers and grass shield debris deflector.

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

SAFE FUELING INSTRUCTIONS

WARNING

Gasoline is an extremely flammable

and explosive fuel. Use extreme datificat when handling gasoline or fuel mix. Do not smoke or bring any fire or flame near the fuel (Fig.6).



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, then move at least 3 metres (10 feet) from the fueling spot before starting the engine. Wipe off any spilled fuel before starting your Atom 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.

The Atom Edger unit uses an oil-gasoline mixture for fuel (Refer "Fuel Mix and Fuelling," page 6).

SAFE 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 1/2 throttle lock to assist in starting the engine, **NEVER leave 1/2 throttle lock on, other than for starting**. For specific starting instructions refer to Page 7.

Place the machine on firm ground or other solid surface in an open area. Maintain good balance and secure footing.

! NOTE

When you pull the 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.

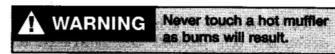
SAFETY PRECAUTIONS (CONTINUED)

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



The Atom Edger is a oneperson machine. To

reduce the risk of eye or other injury from thrown objects, ensure that bystanders are at least 15 metres (50 that) away during use. Replace



Store Atom Edger in a dry, high or locked location and out of reach of children.

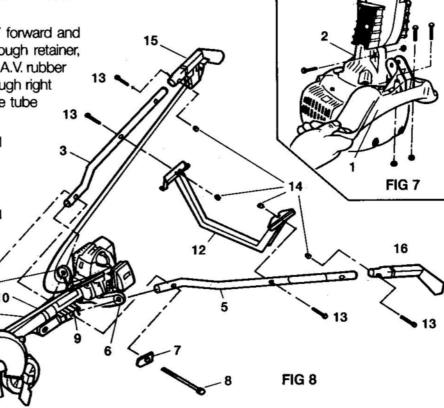


Never store the machine with gasoline inside a

ASSEMBLING THE ///ATOM LAWN EDGER

- Fit A.V. handle brace #1 to main body #2 (fig.7) with screws and nuts provided. Use straight bladed screwdriver or torx 25 driver.
- Slide right handle tube #3 through round A.V. rubber mount #4.
- Slide left handle tube #5 through round A.V. rubber mount #6.
- 4. Point black female hex bolt retainer #7 forward and insert the 150mm (6") hex bolt #8 through retainer, through left handle tube #5, through left A.V. rubber saddle #9, through main body #2, through right A.V. rubber saddle #10, through handle tube #3.
- Screw on handle wing nut #11 sufficiently. DO NOT OVERTIGHTEN wing nut as A.V. becomes less effective.
- Fit handle cross-brace #12 to handle tubes #3 and #5. Use 2 screws #13 and 3 lock nuts #14 provided.
- 7. Insert trigger handle #15 into right handle tube #3 using one screw #13 and one nut #14 to hold into place. NOTE: Throttle cable/switch wire from engine must be fitted

- under handle and clipped into holding lugs of crossbrace #12. Do not loop throttle/switch wire over handle.
- 8. Insert left handle #16 into left handle tube #5 using one screw #13 and one nut #14 to hold in place.



FUEL MIX AND FUELING

WARNING

DANGERI

FUEL IS EXTREMELY FLAMMABLE, HANDLE IT WITH CARE, KEEP AWAY FROM IGNITION SOURCES, DO NOT SMOKE WHILE FUELING YOUR EQUIPMENT.

Your Atom Edger is powered by a two-stroke, air cooled engine which requires a fuel mixture of gasoline and two-cycle oil that is used for air-cooled engines.

Do not use 2-cycle oil that is used in water-cooled engines (e.g. outboard motors).

FUEL MIX RATIO

Use a mixture of 32 parts unleaded regular gasoline and 1 part two-cycle oil of good quality such as Castrol 2T 2-cycle oil or equivalent.

Only mix sufficient fuel for a few weeks work and store in an approved safety type container. pour oil in first, 125ml for every 4 litres of gasloine. Add gasoline. Screw the fuel can cap on tightly and shake the mixture before fueling your machine.

WARNING

Pressure may build up in the canister. Remove fuel

cap slowly to swold injury from fuel spray.
Institute the case securely. Take care when
institute passifies. Avoid direct contact with the
skin and evoid inhaling fuel vapor.

Before fueling the edger, clean the filer 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 edger.

A WARNING

Always allow engine to gool before rafueling.

Accidental spillage of gasoline over a hot engine could called the or explosion to occur. See Page 4 - Salety Procautions, Fueling.

FUEL MIX AND FUELING (CONTINUED)

IMPORTANT

Two-cycle fuel separates and ages. Do not mix more than you will use in a month. Using old fuel can cause difficult starting or engine damage. Shake fuel container to thoroughly mix fuel before each use. Do not attempt to run your engine on gasoline only; this will cause engine failure and void engine warranty.

Need pre-measured engine oil? Contact your local authorized Atom dealer.

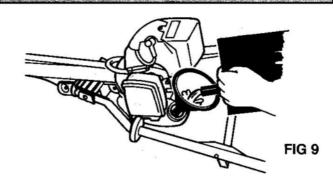
Remember ...

- Always mix two-cycle oil with gasoline before fueling your edger. Never, ever run your Edger on gasoline alone. This will ruin your engine and void all warranties.
- Always use a clean gas can and always use unleaded gas.
- Never try to mix the oil and gasoline in the engine fuel tank.
- Always mix oil and gas in the proper proportions: 125ml of two-cycle engine oil to 4 litres of unleaded gasoline.

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. (Ise fuel funnel (not supplied) to prevent spills.



IMPORTANT NOTE

DO NOT use old or stale oil/gasoline mixture. Always use the proper oil/ gasoline mixture. If you do not, your engine will suffer rapid, permanent damage and you will void the engine warranty.

STARTING & STOPPING INSTRUCTIONS

1. Place lawn edger on ground in horizontal position (see Fig.14). Be sure the ignition switch is "ON". (FIG.10)

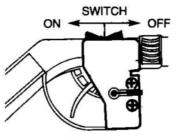
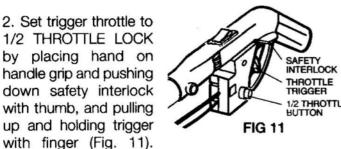


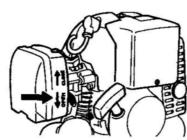
FIG 10



speed for starting (only). 3. COLD START: Slide the choke lever to full choke position (Fig. 12).

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





- Press and release the primer bulb 5 times (Fig. 13).
- 5. Make sure you have a firm footing. Hold down motor with left hand and put one foot on the cross brace. With

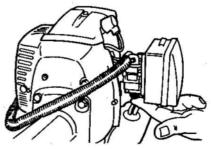
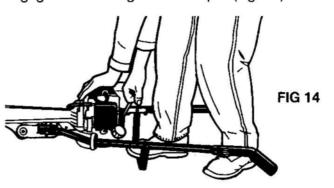


FIG 13

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 65cm (26") - it might break. Stand between handles to start. Do not let starter grip snap back. Guide it back slowly so that the starter rope can rewind slowly.

STARTING & STOPPING INSTRUCTIONS (CONTINUED)

- 6. PULL THE STARTER ROPE BRISKLY until you hear the engine sound like it wants to run or runs then stops (normally 1-5 pulls).
- 7. Slide choke lever to OFF CHOKE POSITION (see Fig. 12). Pull starter rope 1-3 times to start engine 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.

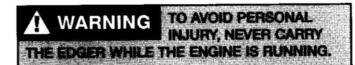
WARNING The blade will rotate when engine is idling feat, e.g. on starting (1/2 throttle lock) or when engine is cold. TO STOP ENGINE slide ignition switch forward into the "STOP" position (Fig. 10).

9. HOT OR WARM START: (Engine has already been started and warmed up). Switch ignition "ON". Set 1/2 THROTTLE LOCK (Fig. 11). Set choke lever to RUN position. Make sure you have a firm footing with one foot on the cross brace. Pull starter until motor runs and let it run for a few seconds before releasing 1/2 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.

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

- 11. FLOODED ENGINE: (Engine will not start). If smoke or fuel comes from exhaust and engine will not start.
- a) Check that ignition switch is "ON", CHOKE LEVER is on RUN position, throttle is set on 1/2 THROTTLE LOCK position.
- b) Pull starter rope up to 10 times to clear engine of fuel so it can start.
- c) If engine has excessive fuel that cannot be cleared by (a) & (b) 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, reinstall spark plug and terminal, and restart as above.
- 12. To stop engine push ignition switch slide on right side of throttle trigger forward.



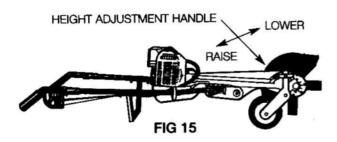
AFTER FINISHING WORK

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

Storing for a long period: Drain the fuel tank and run engine until carburettor is dry.

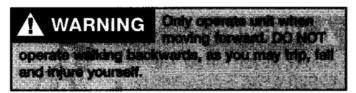
EDGING INSTRUCTIONS

- 1. The Atom Edger is very easy and simple to use. For some people, it may take a few edgings to become an expert.
- Thoroughly inspect the area where the edger is to be used and remove all stones, sticks wires and other foreign objects.
- 3. Adjust blade height (Fig. 15). With a new blade, try the second hole closest to operator.

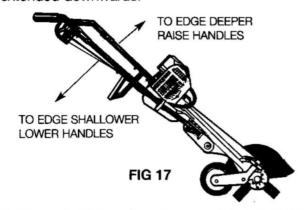




EDGING INSTRUCTIONS (CONTINUED)



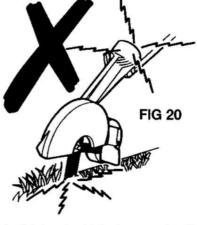
5. If blade is not deep enough, or if digging too deep, adjust blade height, or slightly raise or lower handles to suit depth required (Fig. 17). However, it is always more comfortable and relaxed to have arms fully extended downwards.



6. Do not lift handles by excessive bending of elbows (Fig 18). Always keep arms straight as shown in Fig 16.

9. If blade jams or stops in the ground 20), (Fig. lower handles or pull back unit and recommence. Engine speed should be full throttle under load with blade rotating.

10. Edging along Concrete edge: For position



blade, align edge guide (at front of blade cover) with edge of concrete. If blade hits concrete, lower handles and re-position blade at side of concrete. Even with the grass growing over the concrete and you cannot see the edge, you can feel the edge of the concrete with the rotating blade by slightly sideways tilting the handles of the edger away from the concrete so that the blade tilts towards the concrete and touches or "kisses" the concrete edge and acts as a guide (Fig 21). Edger blades are made from high tensile hardened spring steel and will last a long time. Once the edge is



7. As cutting action begins, move the lawn edger forward so that the blade can cut the edge as you move forward (Fig. 19).

8. Continue at moderate pace until you are familiar with the controls and the handling of the Atom Edger.

FIG 19

established the second and subsequent times around are very fast.



FIG 21

FIG 22

11. Sideways Tilting: Lower either left or right handle to achieve angle cutting (Fig 22).

12. Clutch: The Atom Edger is equipped with a centrifugal clutch. DO NOT run edger at low speeds (or, if blade is jammed, at high engine speeds) as clutch shoes will prematurely wear and cause damage if cutting blades do not rotate.

Note: When cutting efficiently, engine speed should be full throttle under load.

EDGING INSTRUCTIONS (CONTINUED)

! NOTE

Keep inside of blade guard clean, especially in wet conditions. A

clogged guard can slow down or stop blade rotation and may cause damage to automatic safety clutch. Always operate blade at high speed when edging.

The Lawn edger can be transported by pushing it on it's wheel, or carrying it with engine switched off as in Fig. 23.

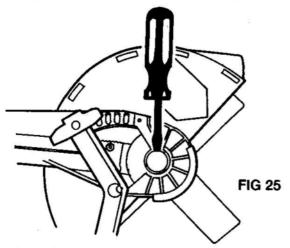




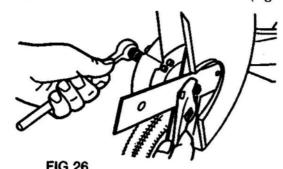
MAINTENANCE INSTRUCTIONS

BLADE REPLACEMENT

1. Stop engine. Clean area around dust cover #44042 and pry out with screwdriver (Fig. 25) exposing 14mm hex head for unscrewing blade nut.



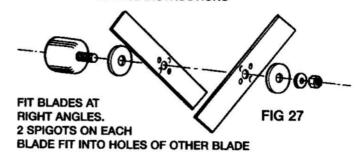
2. Through dust cover hole, place 14 mm socket and place 17 mm wrench on blade nut (Fig. 26).



3. Unscrew nut counter (anti) clockwise (normal right hand thread).

4. Remove one small washer, one large washer and two blades (Fig 27). Before installing blade and washers, clean all grit and grease. Assemble these parts clean and dry. Fit large washer, new blades with spiggots of one blade interlocking with holes on opposite blade, large washer, one small washer, and nut. Tighten nut to 15-20 ft. lbs. (20-27Nm) or hand tight with 8" (200mm) or longer spanner.

FITTING INSTRUCTIONS



MARNING

USE ONLY ATOM BLADES
Other blades have larger

size house (1,62°) which will cause out-of-balance vibrations which will damage unit and cause injury. Other bisdes can also break and cause major injury.

! NOTE

Do not run engine without blade tightened to blade shaft as gear

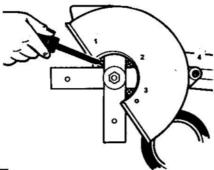
damage will occur. Always use two blades as shown above. Never use a single blade. Do not use other thicker blades as you will damage the unit.

MAINTENANCE INSTRUCTIONS (CONTINUED)

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

TO REMOVE BLADE COVER LID

Remove 4 screws as shown. Lift off cover. To reinstall, reverse procedure with blade cover metal support in place #43109. FIG.28



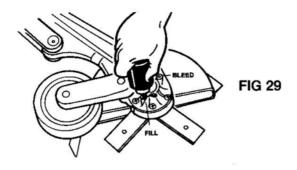
LOOSE BLADE

Follow steps 1 and 2 of Blade Replacement and tighten nut clockwise.

LUBRICATION OF GEARS

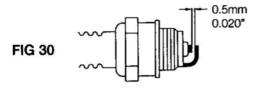
There is usually sufficient grease to last at least 6 months or 125 hours for professional use before topping it up. The grease in the gear case should be added according to use. Use a light, free-flowing lithium-based grease such as Castrol EPL1 or its equivalent. This is available in a handy to use squeeze pack with nozzle (#43227). Remove two screws marked FILL and BLEED. Inject grease into FILL screw hole and allow grease to begin to eject from BLEED hole indicating gear box is 3/4 full (Fig.29). Refit and tighten BLEED screw and squeeze in 3 to 4 more lots of grease. Refit FILL screw and tighten.

NOTE: Do not use light or heavy gear oil as it might leak out. If case joint is damaged, clean and dry and use a gasket sealant. Replace o-ring if damaged. Tighten all srews. Refill casing.



SPARK PLUG

Recommended spark plug is a Champion RCJ-6Y, or NGK BPMR7A Specified electrode gap is:



CHECKING THE SPARK PLUG

If engine is low 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 See Fig.30.
- Rectify faults which have caused fouling of spark plug. Possible faults include:
 - Incorrect carburetor setting.
 - Too much oil or wrong type of oil in fuel mix.
 - Old fuel mix.
 - Dirty air filter.
 - Unfavorable 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 engine could occur through loose grit damaging chrome in cylinder bore.

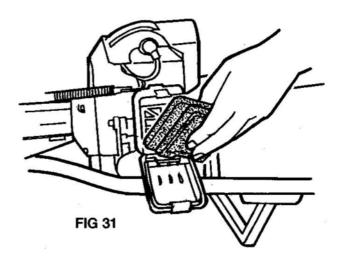
Fit a new spark plug after approximately 100 operating hours or earlier if electrodes are badly eroded.

Using spark plugs other than those designated may result in the engine failing to operate properly or in the engine becoming overheated and damaged.

AIR FILTER MAINTENANCE

! NOTE CLEAN AND RE-OIL THE AIR FILTER EVERY 5 HOURS OF OPERATION OR DAILY.

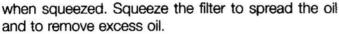
The air filter is one of the most important areas to maintain. If it is not maintained, you will void the warranty. Before cleaning, make sure the unit is turned off.



MAINTENANCE INSTRUCTIONS (CONTINUED)

FIG 32

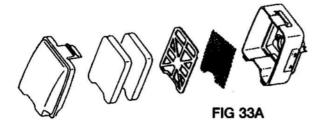
- If filter torn or very dirty replace.
- Wash the filter in detergent and water (Fig. 32). Rinse the filter thoroughly and allow it to dry.
- 4. Apply enough clean two-stroke oil or SAE 30 oil to saturate the filter



- 5. Reinstall the filter (Fig. 31) air filter cover.
- 6. Note sequence of parts (Fig 33A).

! NOTE If the unit is operated with dry or dirty filter or without the air filter &/or carburettor air filter cover, you will void the warranty.

! NOTE CHECK TIGHTNESS OF SCREWS at regular intervals and retighten as necessary especially during the first few hours of operation.



CARBURETTOR

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, check the condition of the air filter before adjusting the carburettor. Refer to Air Filter Maintenance on page 11. 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. The idling screw adjustment is accessible without removing the air filter cover. See Fig. 12 on Page 7. To increase engine idle speed, turn IDLE SCREW (#1) clockwise (Refer Fig.33B). To decrease engine speed, turn IDLE SCREW counter (anti) clockwise. Throttle trigger to be in idle position.
- 2. If air filter is dirty then correct idle adjustment can not be made and air filter must be cleaned. Refer to Air Filter Maintenance and Figs 31, 32 and 33A.

! 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 carby throttle lever.

The throttle cable normal play is .040" to .080" (1 to 2mm) when measured at the carburettor side. Re-adjust with the cable adjuster (#2) as required and re-adjust the idle screw (#1) on carburettor as desired.

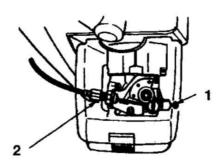


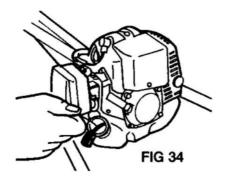
FIG 33B

! NOTE No mixture screws for high or low speed settings are fitted to this carburettor. Use clean fuel and clean air filter. No other adjustment is required due to fixed jets fitted.

MAINTENANCE INSTRUCTIONS (CONTINUED)

FUEL FILTER

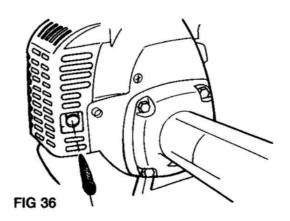
When the engine runs short of fuel supply and the tank has gasoline in it, clean the fuel filter for blockage (Fig. 34).



CHECKING EXHAUST MUFFLER

Tighten exhaust screws. If exhaust gasket is leaking, replace gasket. If the engine is low on power, check the muffler. Allow motor to cool down. Remove and scrape out excess carbon (Fig. 35) on both inlet and exit exhaust or have this done by a service dealer. Replace exhaust spark arrestor if worn, broken or blocked (Fig 36).





! NOTE

If debris causes blockage around the intake air cooling vent or

between the cylinder fins, it may cause the engine

to overheat, and that in turn may cause mechanical failure on the part of the Atom Edger. Remove air deflector to clean.

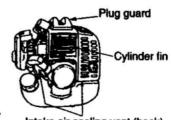
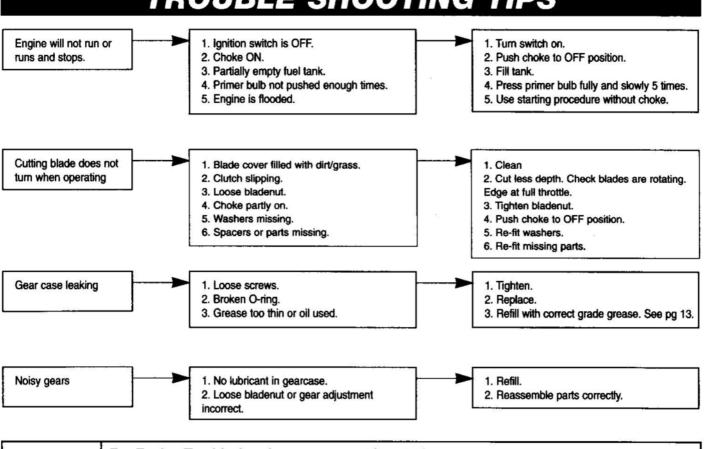


FIG 37

Intake air cooling vent (back)

ROUBLE SHOOTING TIPS



! NOTE

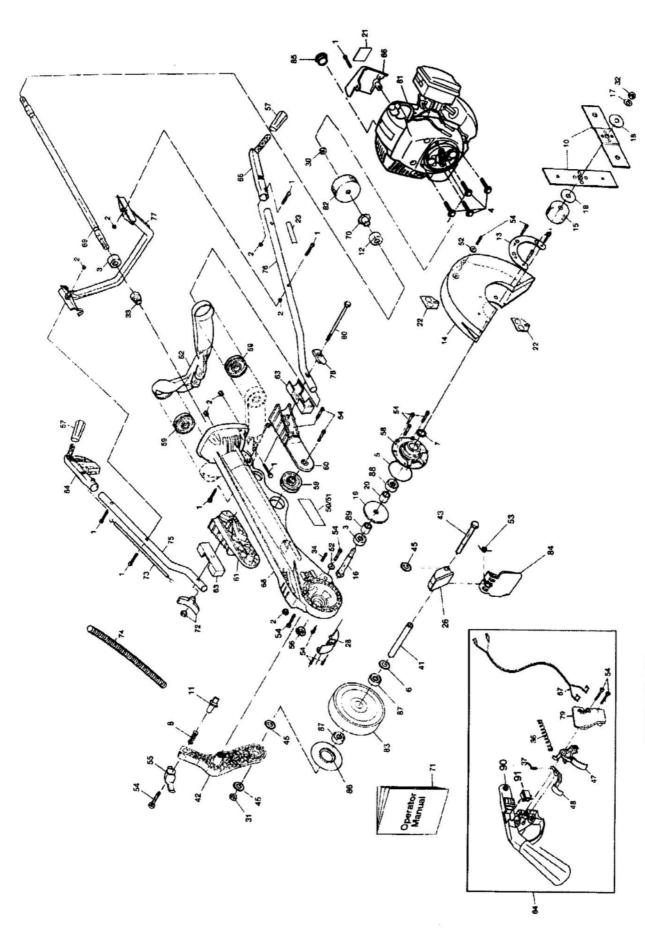
For Engine Troubleshooting see pages 18 and 19.

///ATOM MODEL 205 LAWN EDGER PARTS LIST

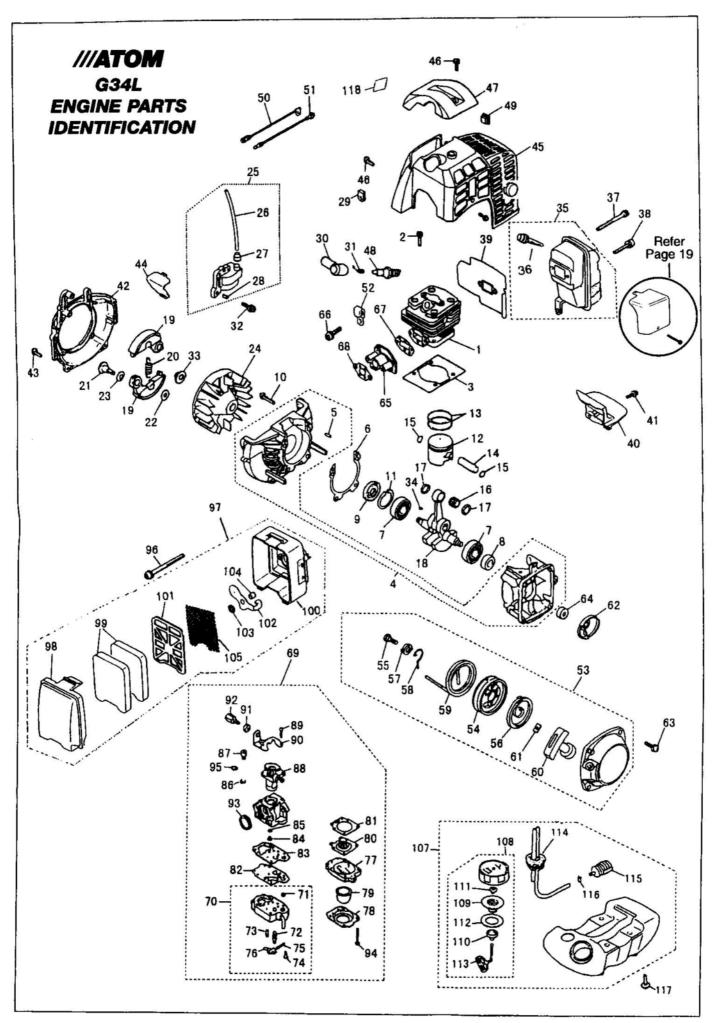
	40650	Screw M5 x 36mm
2	40652	Nut Nyloc 5mm
ဗ	40835	Bearing 31x10x12mm
	40838	Hex Screw 6mm x 19mm
2	40906	"O" Ring
	42111	Seals nylon od27.2 x 12.70
	42112	Felt Seal
	43452	Adjusting arm spring
10	43105	Cross blade set (formed & straight)
=	44302	
12	43108	Bearing with Seal 37x12x12
3	43109	Blade cover support
4	43110	Blade cover
2	43112	Blade drum
16	43114	Blade shaft drive
2	43115	Blade washer small
18	43116	Blade washer large
19	43122	Crown gear UE
20	43125	Spacer 15.5mm
21	43127	Warning label hot motor
22	43128	Warning label blade cover
ຮ	43133	Warning label handle
26	44308	Grass shield limiter Pro AV2
28	43155	Main body shield
30	43163	Flange nut 3/8 UNC
31	43172	Nut nyloc 3/8"
32	43173	Nut M12 x 1.75
33	43176	Pinion L.E. Long (25.4mm)
34	43179	Bearing screw M5 x 39
36	43198	Trigger comp. Spring
37	43199	Trigger Spring, Small
41	44307	Wheel axle tube spacer 94.35mm
42	44301	Wheel support arm (AV2)
43	44304	Wheel support axle bolt 3/8x5.5
45	43218	Washer Flat 9.77x19.05x1.6
47	43288	Throttle trigger(hook)
48	43292	Throttle interlock
9		

KEY#	PART #	DESCRIPTION
20	43406	Label Professional
51	43413	Label Model no.505
52	43484	Washer 22.43 x 5.94
53	43719	Debris deflector spring
54	43790	Screw 5.5mm for plastic
55	44303	Height adjust handle
99	43910	Dust plug
22	43922	Handle grip
58	43941	Main body cover
29	43951	Round AV Rubber
9	43952	L.H. AV Mount
61	43953	R.H. AV Mount
62	43954	Main handle bracket
63	43955	Body AV Rubber
64	44086	Handle Throttle Assy. Complete
65	43961	
99	44000	Engine Air Deflector
29	44164	Switch wire
89	44311	Main Body 205/505
69	43978	Main Shaft Screwed ends
20	43980	Flange bush spacer
71	43986	
72	44003	Handle knob w/nut(44006+44075)
73	44010	Throttle cable
74	44012	Corrugated loom
75	44060	Handle Tube RH
9/	44061	Handle Tube LH
77	44062	Handle cross brace
78	44064	Handle bolt hex piece
79	44085	Handle housing small
80	44074	Handle bolt 1/4"x6" BSW
18	43947	Komatsu-Zenoah G34L Engine
82	44312	
83	43765	Wheel (only)
84	44309	Grass Flap
85	44001	Muffler Shield Plug
98	44310	Wheel Hub Cap
R7	44305	Saalad Baaring 28x8x12 8

97 | 1 44305 | Sealed Bearing 28x8x12.8 88 | 43860 | Bearing 32x10x12+4mm 89 | 44016 | Spacer 8.35mm 90 | 43963 | RH Handle 91 | 44440 | Switch



///ATOM MODEL 505 LAWN EDGER PARTS LIST

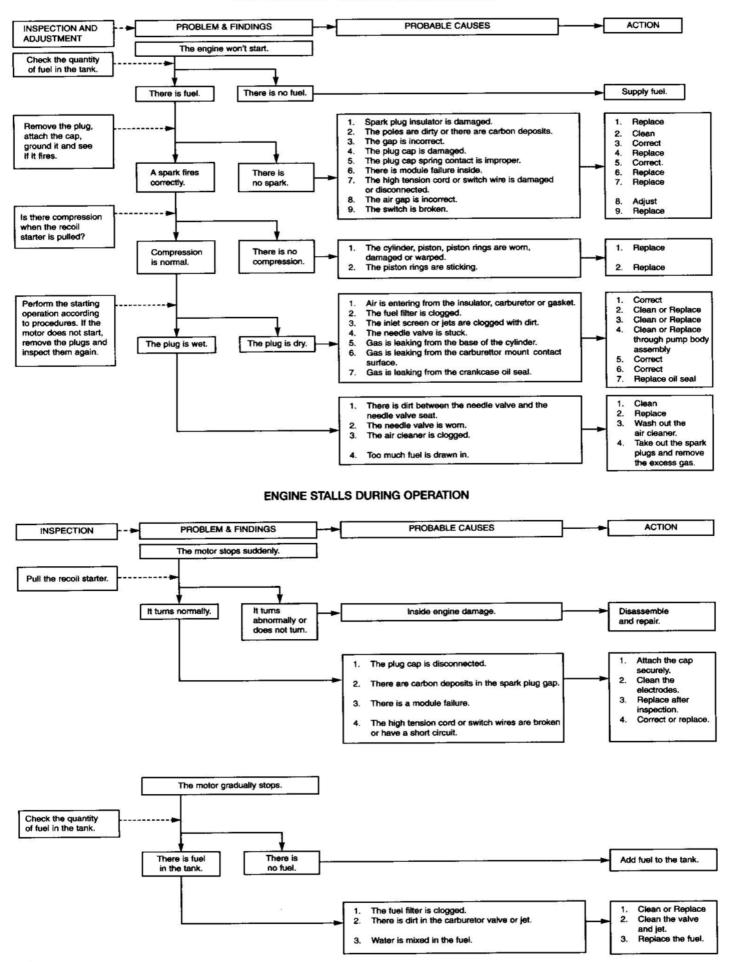


///ATOM G34L ENGINE PARTS LIST

KEY#			QTY		PART #		QTY
1	46600	Cylinder	1	60	46659	Knob	1
2	46601	Bolt, M5 x L20	4	61	46660		1
3	46602	Gasket, Base	1	62	46661	Pulley	4
4_	46603	Crankcase Comp.	1	63	46662	Screw, M6 x L14	1
5_	46604	Pin	3	64	46663	Collar	1
6	46605	Gasket, Case	1	65	46664	Insulator	2
7	46606	Bearing	2	66	46665	Screw, M5 x L20	1 1
8	46607	Oil Seal	1	67	46666	Gasket, Insulator	1
9	46608	Oil Seal	1	68	46667	Gasket, Carburettor	1
10	46609	Bolt, M5 x L30	4	69	46668	Carburettor Assembly	1
11	46610	Snap Ring	1	70	46669	Body Assembly	1 1
12	46611	Piston	1	71	46670	Screen	1 1
13	46612	Ring	2	72	46671	Valve	1 1
14	46613	Pin	1	73	46672	Spring	1 ;
15	46614	Ring	2	74	46673	Screw	
16	46615	Bearing	1	75	46674	Pin	1 1
17	46616	Washer	2	76	46675	Lever	1
18	46617	Crankshaft Comp.	1	77	46676		1
19	46618	Shoe, Clutch	2	78			1
20	46619	Spring	1	79	46677		1
21	46620	Screw			46678		11
22	46621	Washer	2	80	46679	Diaphragm	1
23	46622	Washer	2	81	46680	Gasket, Diaphragm	11
24	46623	Rotor	2	82	46681	Diaphragm, Pump	1_
25	46624		1	83	46682	Gasket, Pump	1
		Coil Assembly	1	84	46683	Jet	1
26	46625	Cord	1	85	46684	O-Ring	1
27	46626	Сар	1	86	46685	Ring	1
28	46627	Pin	2	87	46686	Swivel	1
29	46628	Grommet	1	88_	46687	Valve Assembly	1
30	46629	Cap, Plug	1	89	46688	Screw	2
31	46630	Spring	1	90	46689	Bracket	1
32	46631	Bolt M4 x L22	2	91	46690	Nut, Adjuster	1
33	46632	Nut	1	92	46691	Screw, Adjuster	1
34	46633	Key	1	93	46692	Ring	1
35	46634	Muffler Assembly	1	94	46693	Screw	4
36	46635	Arrestor	1	95	46694	Washer	1
37	46636	Bolt, M5 x L60	2	96	46695	Screw, M5 x L50	2
38	46637	Bolt, M5 x L14	1	97	46696	Cleaner Assembly	1
39	46638	Gasket	1	98	46697	Cover	1 1
40	46639	Plate	1	99	46698	Filter	2
41	46640	Screw, M5 x L14	1 1	100	46699	Housing	1 1
42	46641	Cover	1	101	46700	Plate	+ +
43	46642	Bolt, M5 x L20	4	102	46701	Valve	
44	46643	Plate	1	102			1 1
45	46644	Cover	1	103	46702	Washer	1
46	46645	Screw, M5 x L12			46703		2
47	46646		4	105	46704	Screen	1
		Guard	1	107	46705	Tank Assembly	1
48	46647	Spark Plug	1	108	46706	Cap, Assembly	1
49	46648	Grommet	1	109	46707	Holder	1
50	46649	Cord	1	110	46708	Сар	1
51	46650	Cord, Earth	1	111	46709	Valve	1
52	46651	Clamp	1	112	46710	Packing	1
53	46652	Recoil Assembly	1	113	46711	Stopper	1
54	46653	Reel	1	114	46712	Pipe Clamp	1
55	46654	Screw	1	115	46713	Filter Assembly	1
56	46655	Spring, Spiral	1	116	46714	Clip	1
57	46656	Collar	1	117	46715	Screw, M5 x L22	4
58	46657	Arm	1	118	46716	Label	1
59	46658	Shroud Extension and Stand	1				

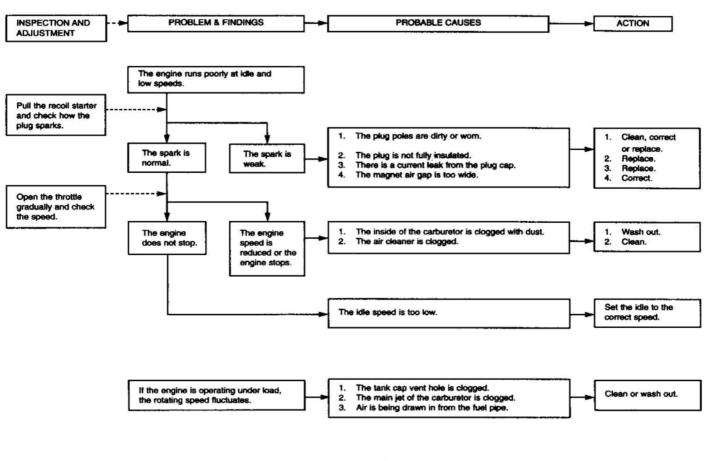
ENGINE TROUBLESHOOTING

HARD STARTING - MISSING ROUGH RUNNING

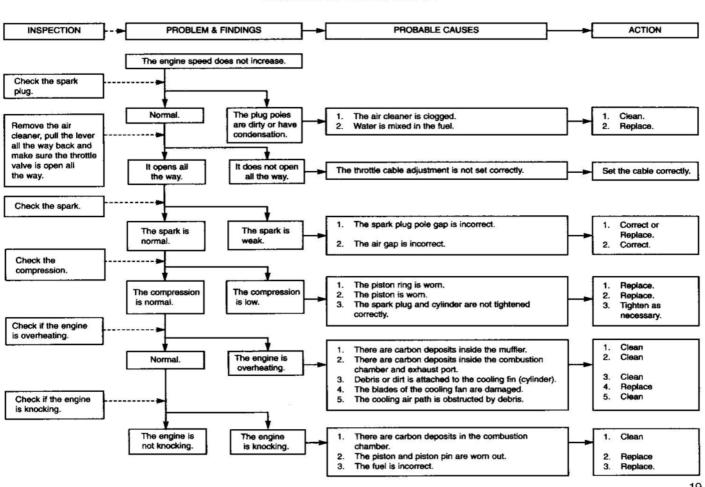


ENGINE TROUBLESHOOTING (CONTINUED)

THE ENGINE RUNS POORLY



INSUFFICIENT POWER OUTPUT



COMPLETE WORKSHOP MANUAL

! NOTE

INTENTIONALLY LEFT

BLANK

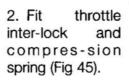
This information is for persons with suitable servicing experience should this unit ever require workshop repair.

1. Remove 2 screws (A) as shown in Fig. 28

TO REPAIR THROTTLE TRIGGER

screws (A) as shown in Fig 38 and remove cover and all parts. Reassemble as follows.

ASSEMBLY



3. Fit throttle trigger with top hook #43288 and throttle trigger compression spring #43198, fit trigger then compression spring.

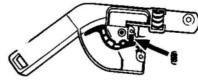
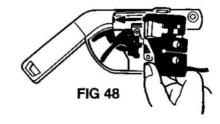


FIG 45

FIG 47



4. Hold trigger in place with finger until throttle cover#44069 is fitted (Fig 48). It is then ready for screwing tight (with 2 screws (A) as shown in Fig 38). Ensure throttle cover rear lug (arrowed Fig. 48) engages underside of handle wall.

TO REPLACE BLADE SHAFT

- 1. After removing blades (Refer Pg 10, Figs 25, 26 and 27) remove blade drum#43112, felt seal #42112 and spring bevel washers #43115. Inspect threaded end of shaft and file off any rough surfaces so shaft is round and smooth.
- 2. Hold unit as shown in Fig. 49 and tap shaft through using a 3/8 bolt or similar so that bolt replaces shaft and maintains alignment and contains washers, spacer and gear inside housing DO NOT TURN HOUSING OVER.

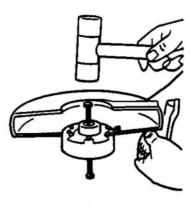
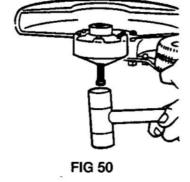


FIG 49

COMPLETE WORKSHOP MANUAL (CONTINUED)

- 3. Carefully push new blade shaft #43114 up into bearing and tap through carefully so washers, crown gear and spacer remain in position and the 3/8 bolt is pushed out (Fig. 50).
- 4. When blade shaft comes through, turn



assembly over. Tap blade shaft so head of shaft is against bearing.

5. Re-assemble in reverse order all parts listed in 1. above. Refit blade (as per instructions on Pg 10, Figs 25, 26 and 27) and tighten up to 15-20 ft lbs (20-27Nm) or hand tight with 8" (200mm) or larger spanner. Head of blade shaft must pull up tight against bearing, otherwise blade will become loose during use.

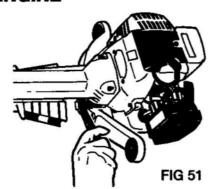
! NOTE

If shaft is difficult to knock out, remove complete main body

bearing cover housing (see p.22, Removing Gear Assembly Shaft).

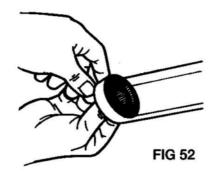
TO REMOVE ENGINE

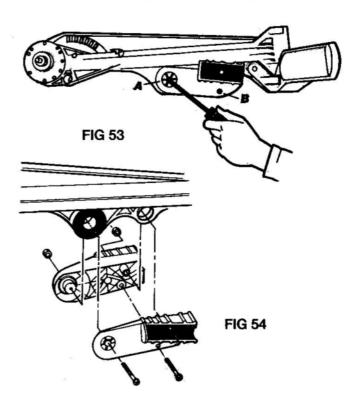
- 1. Remove throttle cable (Fig 41, page 20), unclip switch wire from motor.
- 2. Unscrew with 8mm (5/16") socket spanner, 4 screws around clutch housing Fig 51.



TO REPLACE A.V. MOUNTS

- 1. Pull worn parts out and replace with new (Fig 52) on main handle mount.
- 2. To replace front A.V. mount rubber Remove 2 screws A & B, split handle housing, replace rubber mount and reverse procedure to assemble Fig 54.





TO REMOVE CLUTCH DRUM

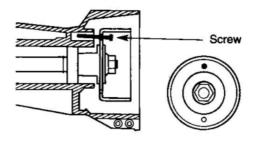


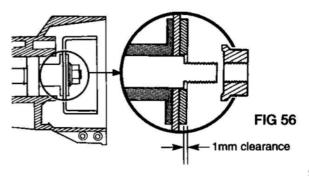
FIG 55

- 1. Slide long thin screw through hole in clutch drum and ribs in body casing. Unscrew flanged nut in anti-clockwise direction.
- 2. Replace clutch drum with new clutch drum kit if worn or out of round. Fit and retighten.

! NOTE

Washer clearance under flange nut. If shaft end passes

through this washer, flanged nut will not tighten clutch drum. See Fig 56 for correct installation. if end of shaft shoulder clearance does not allow clutch drum to tighten add another washer.



COMPLETE WORKSHOP MANUAL (CONTINUED)

TO REMOVE REAR ASSEMBLY AND MAIN DRIVE PINION SHAFT

- 1. Remove blade cover as shown in Fig 28, page11.
- 2. Remove 6 screws holding main bearing housing (Fig 57) shown marked. Remove bearing holding screw A.

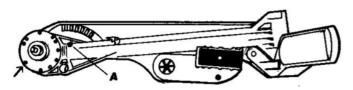
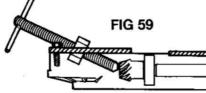


FIG 57

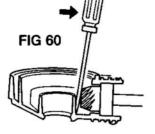
- 3. Turn edger over to remove dust cover (refer Fig 25, page 10).
- 4. With a soft punch, tap hex end blade shaft as in Fig 58 until cover and gear assembly pops out of body housing.
- 5. If service tool available, remove shaft after fixing to

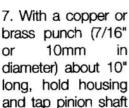
FIG 58

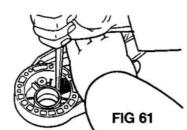


main casing with existing screws and screwing out.

6. If no service tool available, use a screwdriver to lever pinion back. Turn screwdriver on end to lever further. Fig 60-61.









! NOTE

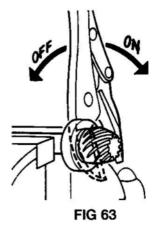
out Fig 62.

DO NOT USE A STEEL DRIFT as a punch as you will damage

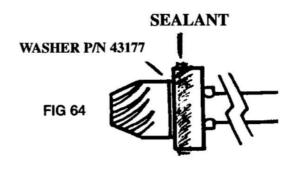
the pinion teeth.

TO REMOVE PINION

- 1. Hold shaft in vice between two pieces of aluminum so as not to damage shaft.
- 2. To remove pinion, grip shaft just behind bearing in jaws of vice (Fig. 63) and unscrew pinion counter (anti) clockwise (normal thread) with vice grips. If tight, heat to break loctite seal.



3. Fit new pinion with fresh loctite on thread, making sure it is tight up to spacer washer #43229, (Fig. 64) and washer does not move.

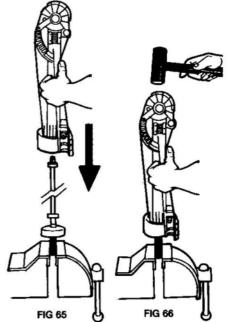


4. To remove clutch drum, grip shaft just behind bearing in aluminium vice jaws and impact off with 14mm (9/16") hex socket. See Page 21 for replacement of drum.

ASSEMBLING MAIN HOUSING

1. Clean and dry bearing. Place oil resistant gasket sealant (e.g. Fullerprene 303) around bearing as in Fig. 64.

- 2. Place and lock-up a 15mm d i a m e t e r (approx.) brass drift vertically in a vice (Fig. 65).
- 3. Hold centre of clutch drum nut on top of drift and slide main body housing down over shaft (Fig. 65).



COMPLETE WORKSHOP MANUAL (CONTINUED)

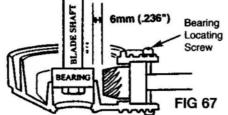
- 4. With a soft hammer, tap casing down until it bottoms on pinion bearing (Fig. 66).
- 5. Fit bearing location screw (See Fig. 59 marked A) and leave nut loose.
- 6. Using a screwdriver, lever pinion firmly back onto bearing locating screw and tighten nut (Fig. 60 & 61).

! NOTE

Bearing must be forward to allow bearing locating screw to be

fitted, then pinion and bearing forced back onto screw. If this is not done, pinion or crown gear could be tight. Correct distance is 6mm (.236") Fig. 67.

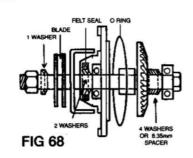
7. Replace crown gear if teeth are worn. See sequence of assembly (Fig. 68).



8. Check and renew O' ring #40906 if necessary. Fit assembly into housing. If bearing is loose in housing, smear loctite around bearing before assembling. Carefully drive down (making sure gears are meshing) by gently tapping around bearing area (Fig. 69) and turning clutch drum. Refit 6 screws around shaft.

 Fill or top up with gear lubricant.
 See Page 11 "LUBRICATION OF GEARS".

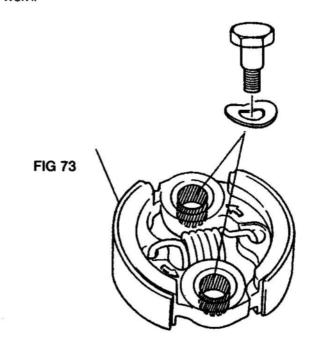
10. Fit blade (see page 10) and bearing cap and check rotation that gears are not binding. It should turn smoothly from clutch end. Backlash at end of blade about 2-4mm. Refit blade cover lid, engine, handles and test.





TO REPAIR CLUTCH

Replace these parts if the Clutch spring is broken, the Clutch fibre is worn or the Clutch bolt or shoe holes are worn.



! NOTE

Re-assemble with clutch shoe arrows pointing anti-clockwise in direction of

rotation Fig 73.

Atom warrants each new Atom Edger Model 205 for ONE YEAR for residential use based on the following terms.

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

Any part of the Atom 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 authorized Atom service dealer without charge for parts and labor.

The Atom Edger, including any defective part, must be returned to an authorized service dealer within the warranty period. The expense of delivering the Atom 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 Edger. Proof of purchase will be required by the dealer to substantiate any warranty claim. All warranty work must be performed by an authorized Atom service dealer or by Atom.

This warranty is limited to NINETY (90) days from the date of original retail purchase for any Atom Edger that is used for commercial purposes and ONE (1) month for rental purposes.

This warranty does not cover any Atom 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 Edger that is the result of improper maintenance or to any Atom Edger that has been altered or modified so as to adversely affect the product's 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 Edger or adversely affect its operation, performance or durability.

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

ALL IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE ONE YEAR WARRANTY PERIOD OR NINETY (90) DAYS FOR PRODUCTS USED FOR ANY COMMERCIAL PURPOSE AND ONE (1) MONTH FOR RENTAL PURPOSES. ACCORDINGLY, ANY SUCH IMPLIED WARRANTIES, INCLUDING MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE, ARE DISCLAIMED IN THEIR ENTIRETY AFTER THE EXPIRATION OF THE APPROPRIATE TWELVE (12) MONTHS OR

THIRTY (30) DAY WARRANTY PERIOD. ATOM'S OBLIGATION UNDER THIS WARRANTY IS STRICTLY AND EXCLUSIVELY LIMITED TO THE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS AND ATOM DOES NOT ASSUME OR AUTHORIZE ANYONE TO ASSUME FOR THEM ANY OTHER OBLIGATION. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

ATOM ASSUMES NO RESPONSBILITY FOR INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, EXPENSE OF RETURNING THE ATOM PRODUCT TO AN AUTHORIZED SERVICE DEALER AND EXPENSE OF DELIVERING IT BACK TO THE OWNER, MECHANIC'S TRAVEL TIME, TELEPHONE OR TELEGRAM CHARGES, RENTIAL OF A LIKE PRODUCT, DURING THE TIME WARRANTY SERVICE IS BEING PERFORMED, TRAVEL, LOSS OR DAMAGE TO PERSONAL PROPERTY, LOSS OF REVENUE, LOSS OF USE OF THE PRODUCT, LOSS OR TIME, OR INCONVENIENCE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATION OR EXCLUSION 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.

This warranty applies to Atom Edger Model 205 manufactured by Atom.

IMPORTANT: PLEASE FILL OUT THE INFORMATION BELOW ON PURCHASE

DATE OF PURCHASE:	
PURCHASED BY:	
Address:	1 100
State:	Post/Zip Code:
SOLD BY:	
Address:	
State:	Post/Zip Code:

Keep this manual as proof of purchase. This is your Lawn Edger machine model number. Should you ever require any parts, please quote these numbers.

Lawn Edger No:

Record number printed on label of body

Model No: 205

Catalogue No: 20205

Atom Edgers are manufactured in Australia and exported around the world.

Aust. Patent No. 678575.

US Patent No's 5,826,667 & 6,116,350.

Other Australian and US Patents pending. Patent Pending in Europe, Japan and elsewhere.

Design registrations granted in Australia, USA, Japan and Great Britain.

Patents pending on Cross-Blade system.

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