



WOOD CHIPPER, 420CC, 15HP, 100MM CAPACITY

MODEL NO: **SWC420**

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to instructions



Wear a Face Shield



Wear protective gloves



Wear safety footwear



Wear protective clothing



Wear ear protection



Hot surfaces



Do not cover



No Reaching In



Keep Bystanders away.



Danger: Rotating Blades



Ensure Good Ventilation



Electric Shock Hazard



Switch Off engine Before Refuelling

1. SAFETY

- **WARNING! Ensure any Health & Safety, Government, or local authority regulations are adhered to when using this equipment.**
- ✓ **IMPORTANT. Read Carefully Before Use. Keep For Future Reference.**
- ✓ Familiarise yourself with the application, limitations, and the potential hazards of the chipper.
- ✓ Maintain the chipper in good condition (use an authorised service agent). Replace or repair damaged parts. Use genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
- ✓ This chipper is designed and manufactured for specific applications. **DO NOT** attempt to modify the unit or use it for any application for which it is not designed. If you have any questions regarding the application of the unit please contact your local Sealey stockist.
- **WARNING! Chipper exhaust gases contain deadly carbon monoxide which must not be inhaled. Always allow sufficient ventilation.**
- **WARNING! Petrol is highly flammable and petrol vapour is explosive. DO NOT** permit smoking, naked flames, sparks or heat in the vicinity while handling petrol. Avoid spilling petrol onto a hot engine. Comply with all laws regulating storage and handling of fuels.
- **WARNING! Risk of burns. DO NOT** touch the exhaust system or the drive unit.
- **WARNING! NEVER** refuel when the engine is running or when the engine is hot. Allow cool down time.
- ✓ Operate the chipper only on level surfaces (maximum allowable tilt is 10°) and where it will not be exposed to excessive moisture, dirt or corrosive vapours or be in the proximity of combustible material (flammable liquids, solids or gases).
- ✓ Only operate the chipper in well ventilated areas / environments.
- × **DO NOT** tip or change the chipper's position whilst it is operating.
- ✓ Remove ill fitting clothing, ties, watches, rings and other loose jewellery and contain long hair. Wear appropriate protective clothing.
- ✓ Keep non-essential persons and children away from the working area.
- × **DO NOT** use the chipper for any purpose other than that for which it is designed.
- × **DO NOT** operate the chipper if any parts are missing or damaged, as this may cause failure and/or personal injury.
- × **DO NOT** over-fill fuel tank. Always leave room for fuel to expand.
- ▲ **DANGER! DO NOT** tamper with the engine governed speed setting. Higher operating speeds are dangerous and increase the risk of personal injury and/or equipment damage. Operating at excessively low speeds may result in shortened engine life. Over-speeding will invalidate the warranty.
- × **DO NOT** operate the chipper when you are tired, or under the influence of alcohol, drugs or intoxicating medication.
- × **DO NOT** store chipper with fuel in tank where petrol vapours might reach an open flame or spark.
- OPERATIONAL SAFETY**
- × **DO NOT** allow children to operate this equipment.
- × **DO NOT** operate this equipment in the vicinity of bystanders. Keep bystanders away.
- × **DO NOT** run engine powered machines in an enclosed area since the exhaust from an engine contains carbon monoxide, which is colourless, odourless, and tasteless. Carbon monoxide can be extremely dangerous in enclosed areas.
- ✓ Wear ear protection and safety glasses at all times while operating the machine.
- ✓ Avoid wearing clothing that is loose fitting or that has hanging cords or ties.
- ✓ Only operate the machine in open space (e.g. not close to a wall or other fixed object) and on a firm, level surface.
- × **DO NOT** operate the machine on a paved or gravel surface where ejected material could cause injury.
- ✓ Before starting the machine, check that all screws, nuts, bolts, and other fasteners are properly secured and that guards and screens are in place. Replace damaged or unreadable labels.
- ✓ Use extra care in handling fuels. They are flammable and the vapours are explosive. The following points should be observed:
 - : use only an approved container.
 - : never remove the fuel cap or add fuel while power source running.

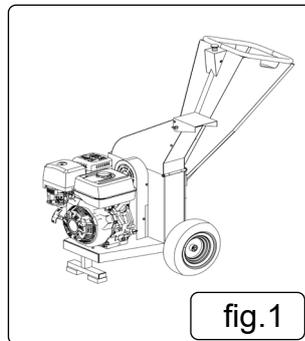
- : Allow engine and exhaust components to cool before refuelling.
- : **DO NOT** smoke.
- : never refuel the machine indoors.
- : never store the machine or fuel container inside where there is an open flame, such as a water heater.
- ✗ If fuel is spilt, **DO NOT** attempt to start the power source, but move the machine away from the area of spillage before starting.
- ✓ Always replace and securely tighten the fuel cap after refuelling.
- ✓ If the fuel tank is drained, this should be done outdoors.
- ✓ Before starting the machine, look into the feeding chamber to make certain that it is empty.
- ✓ Keep your face and body away from the feed intake opening.
- ✗ **DO NOT** allow hands or any other part of the body or clothing inside the feeding chamber, discharge chute, or near any moving part.
- ✓ Keep proper balance and footing at all times. **DO NOT** overreach. Never stand at a higher level than the base of the machine when feeding material into it.
- ✓ Always stand clear of the discharge zone when operating this machine.
- ✓ When feeding material into the machine be extremely careful that pieces of metal, rocks, bottles, cans or other foreign objects are not included.
- ✓ If the cutting mechanism strikes any foreign objects or if the machine should start making any unusual noise or vibration, shut off the power source and allow the machine to stop. Disconnect the spark plug wire from the spark plug (electric unit disconnect from supply) and take the following steps:
 - : inspect for damage.
 - : check for and tighten any loose parts .
 - : have any damaged parts replaced or repaired with parts having equivalent specifications.
- ✗ **DO NOT** allow processed material to build up in the discharge zone. this may prevent proper discharge and can result in kickback of material through the feed intake opening.
- ✓ If the machine becomes clogged at the inlet opening or discharge chute shut off the power source and disconnect the spark plug wire or remove the ignition key before clearing debris in the inlet opening or discharge chute. Keep the power source clear of debris and other accumulations to prevent damage to the unit or possible fire. Remember that operating the starting mechanism on engine powered machines will still cause the cutting blades to move.
- ✓ Keep all guards and deflectors in place and in good working condition.
- ✗ **DO NOT** tamper with the power source governor settings; the governor controls the safe maximum operating speed and protects the power source and all moving parts from damage caused by over-speed. Seek authorised service if a problem exists.
- ✗ **DO NOT** transport this machine while the power source is running.
- ✓ Shut off the power source and disconnect the spark plug lead (electric unit disconnect from supply) whenever you leave the work area.
- ✗ **DO NOT** tilt the machine while the power source is running.
- ✓ Position the machine such that it is not necessary to work downwind of the exhaust.

2. INTRODUCTION

Safe and easy way to chip wood, powered by a 420cc engine with a speed of 3600rpm. Chips wood almost instantly upon contact, keeping labour and work time to a minimum. Features self-feeding chipping hopper and adjustable height of the discharge port. Supplied with wheels for easy manoeuvrability. Chipping capacity: 100mm. Fuel type: Unleaded Petrol. Motor Power: 15hp/3600rpm. Overall Size (W x D x H): 842 x 1285 x 1245mm.

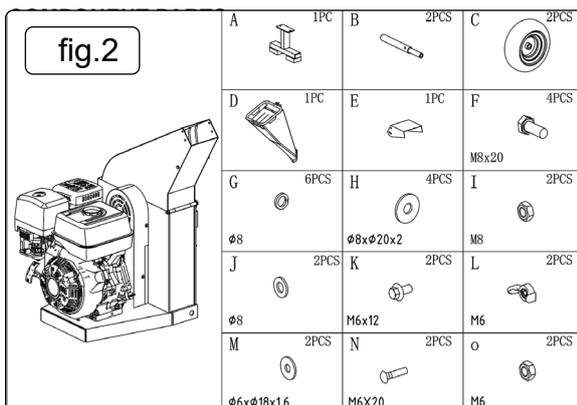
3. SPECIFICATION

Model no.:SWC420
 Blade Speed: 2400rpm
 Drive Type:.....Belt Driven
 Engine Capacity:..... 420cc
 Engine Type:..... Overhead Valve 4-Stroke
 Fuel Tank: 6.5L
 Fuel:..... Unleaded 95 RON - E10 compatible
 Max. Engine Speed:..... 3500rpm
 Maximum Power:15hp @ 3600rpm
 Noise Rating: 114/94.3 dB(A)
 Oil Volume: 1.1L
 Starting System:..... Recoil
 Noise Test Code:..... EN ISO 3744:1995



4. ASSEMBLY

4.1.



ITEM	Description	Qty.
A	Support	1
B	Axle	2
C	Tyres	2
D	Feed Hopper	1
E	Discharge Port	1
F	Bolt M8x20	4
G	Ø8 Spring Washer	6
H	Ø8x20x2 Washer	4
I	Hex. nut M8	2
J	Ø8 Plain Washer	2
K	Bolt M6 x 12	2
L	M6 Wing Nut	2
M	Ø6xØ18x1.6 Washer	2
N	Bolt M6x20	2
O	Hex Nut M6	2

4.2. SUPPORT LEG AND WHEEL ASSY (fig.3)

4.2.1. Attach the Support (A) to the main body by using Nut M8 (I).

4.2.2. Install the wheels on both sides to the main body by using Tyres (C) , Wheel Axle (B) , Bolt M8x20 (F) , Ø8 Spring Washer (G) and Ø8x20x2 Flat Washer (H).

4.3. FEED HOPPER ASSY (fig.4, fig.5)

4.3.1. Open the main body cover by loosening the screw.

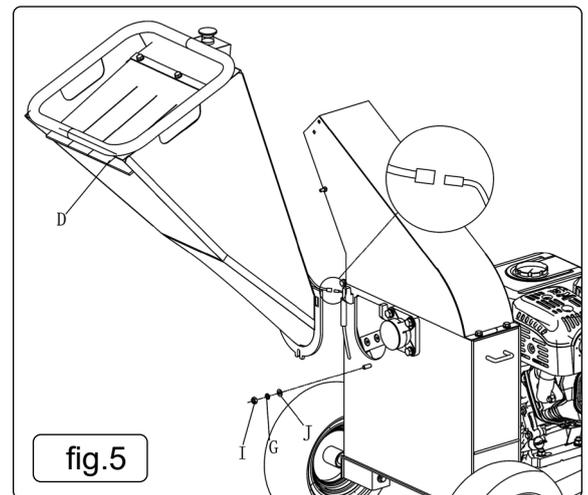
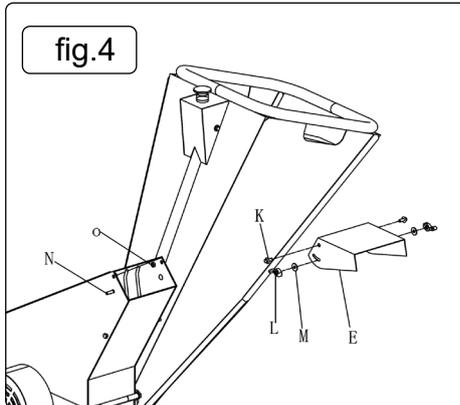
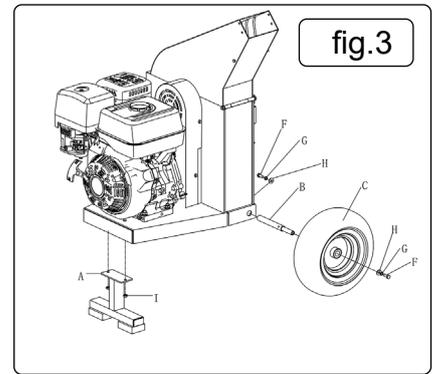
4.3.2. Install the Feed Hopper(D) to the main body by using Ø8 Flat Washer(J) , Ø8 Spring Washer (G) and Nut M8 (I).

4.3.3. Close the main body cover by retightening the screw

4.3.4. Connect the wire connector

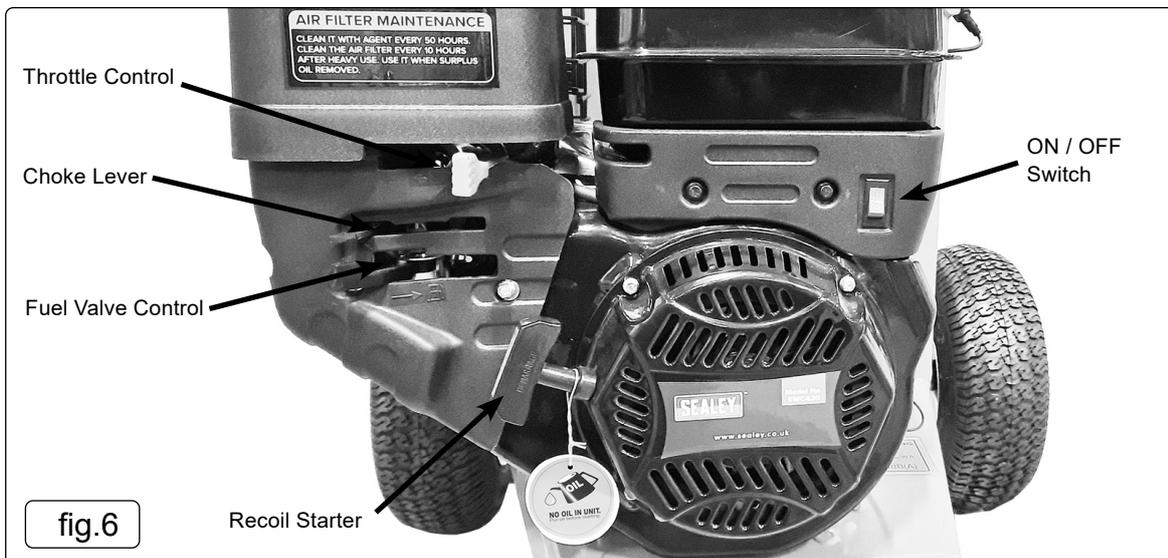
4.4. DISCHARGE PORT(fig.4)

4.4.1. Install the Discharge Port (E) to the main body cover by using Bolt M6x12 (K), Nut M6 (O), Bolt M6x20 (N), Ø6xØ18x1.6 Flat Washer (M) and Wing Nuts (L).



5. OPERATION

5.1. CONTROLS (fig.6)



5.1.1. **IMPORTANT:** Ensure engine has correct oil level prior to each use.

5.2. **FUEL VALVE CONTROL** (fig.6) The fuel valve opens and closes the fuel line between the fuel tank and the carburettor. The fuel valve lever must be in the ON position for the engine to run. When the engine is not in use, leave the fuel valve lever in the OFF position to prevent carburettor flooding and to reduce the possibility of fuel leakage.

5.3. **THROTTLE CONTROL LEVER** (fig.6)

5.3.1. The throttle lever controls engine speed. Moving the throttle lever makes the engine run faster or slower.

5.4. **ENGINE ON/OFF SWITCH** (fig.6)

5.4.1. The engine switch enables and disables the ignition system. The engine switch must be in the ON position for the engine to run. Turning the engine switch to the OFF position stops the engine.

5.5. **CHOKE LEVER** (fig.6)

5.5.1. The choke lever opens and closes the choke valve in the carburettor. The closed position enriches the fuel mixture for starting a cold engine.

5.5.2. The open position provides the correct fuel mixture for operation after starting, and for restarting a warm engine.

- 5.5.3. **RECOIL STARTER GRIP (fig.6)**
- 5.5.4. Pulling the starter grip operates the recoil starter to crank the engine.
- 5.6. **FEED HOPPER (fig.5)**
- 5.6.1. The opening into which all materials to be chipped should be fed.
- 5.7. **DISCHARGE PORT (fig.4)**
- 5.7.1. Chipped materials are discharged through this opening. Deflector should be attached to the chute.
- 5.8. **DEFLECTOR LEVER (fig.4)**
- 5.8.1. Loosen it in the anti-clockwise direction to adjust discharge angle. Tighten it in the clockwise direction.
- 5.9. **EMERGENCY STOP (fig.7)**
- 5.9.1. Rotate the Emergency Stop button to engage this feature. The button will rise up.
- 5.9.2. If an emergency stop is required whilst running, depress the switch. **NOTE:** the chipper will run on for a few seconds before stopping.

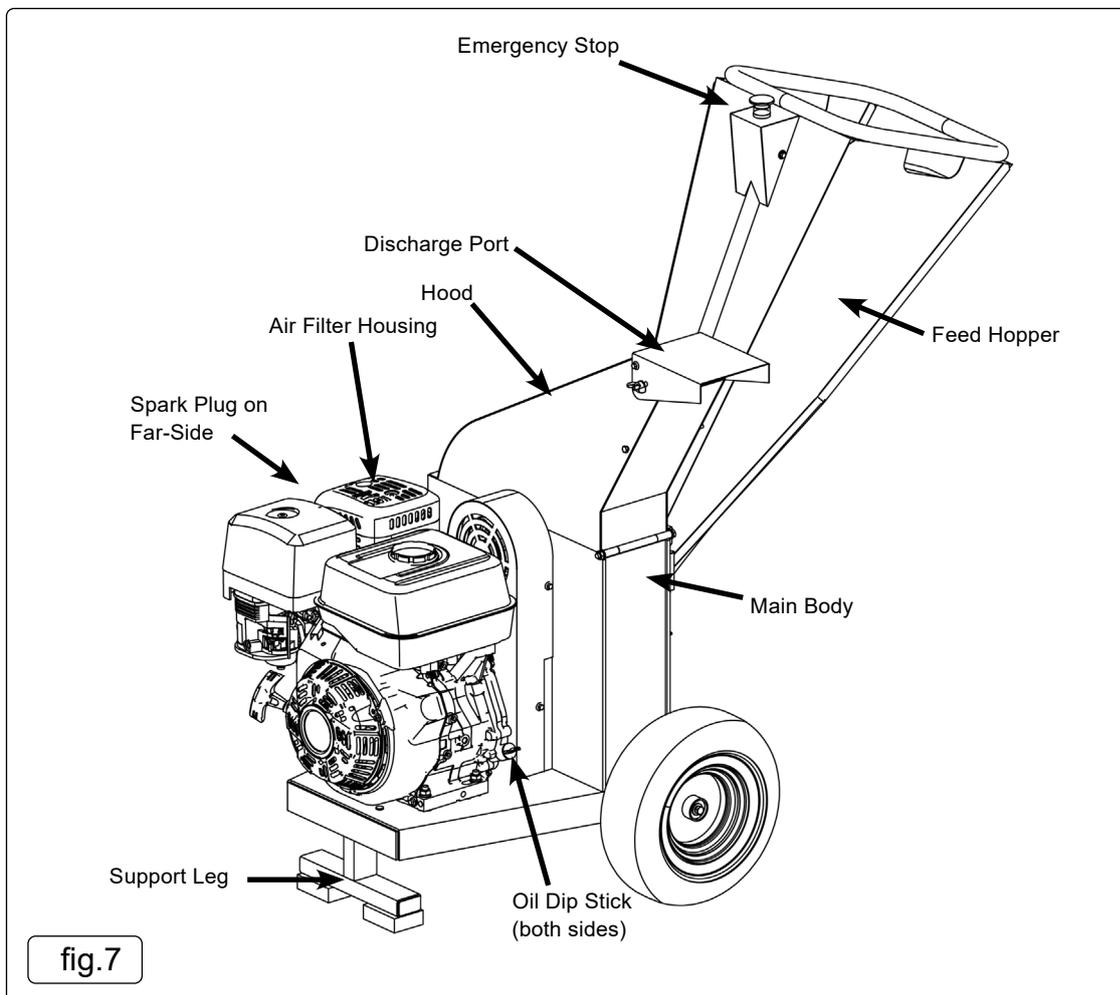


fig.7

5.10. ON PROCEDURE

- 5.10.1. Check oil and fuel (fig.7). **NOTE: THE ENGINE IS NOT SUPPLIED WITH OIL.**
- 5.10.2. If from cold, set Choke on (fig.6). If not ensure choke is set off.
- 5.10.3. Turn fuel supply on (fig.6).
- 5.10.4. Set throttle lever to full on (rabbit symbol fig.6).
- 5.10.5. Prepare Emergency Dead Stop switch (fig.7).
- 5.10.6. Switch ignition circuit on (fig.6)
- 5.10.7. Apply Recoil Start (fig.6)
- 5.10.8. Once started and warmed, set choke off (fig.6)
- 5.10.9. Adjust throttle lever to reqd value (fig.6)

5.11. OFF PROCEDURE

- 5.11.1. Throttle off (fig.6)
- 5.11.2. Fuel off (fig.6)
- 5.11.3. Switch off (fig.6)

5.12. OPERATING PROCEDURE

- 5.12.1. Place the unit on a level surface that will support its weight.
- 5.12.2. Inspect unit before each use or at the start of each shift. The disc hood (fig.7) should be closed and latched. Check the infeed chute for foreign objects. Make sure bolts and pins are tight. Inspect the knives for wear or damage. Running the chipper with worn or damaged knives can cause the feed to clog and eventually kick debris back through the feed hopper chute.
- 5.12.3. Check the guards. Make sure they're not missing.
- 5.12.4. Check oil level. **NOTE:** The unit has a low oil level sensor which will stop the engine when low thus preventing internal damage.
- 5.12.5. Point the discharge chute away from people and traffic.
- 5.12.6. Check tree debris before feeding it into the chipper to make sure it doesn't contain foreign objects. Never throw other materials into the machine.

- 5.12.7. Limit the size of the pieces you insert. **DO NOT** feed the machine with material that is larger than it is rated for.
- 5.12.8. Stay free and clear as you feed. Stand to the side of the infeed chute, pushing materials in with a wooden push tool or long branch and feeding branches in butt-end first and placing shorter branches on top of longer ones.
- 5.12.9. Before starting the machine, look into the feeding chamber to make certain that it is empty.
- 5.12.10. Keep your face and body away from the feed intake opening.
 - × **DO NOT** allow hands or any other part of the body or clothing inside the feeding chamber, discharge chute, or near any moving part. Keep proper balance and footing at all times.
 - × **DO NOT** overreach. Never stand at a higher level than the base of the machine when feeding material into it. Always stand clear of the discharge zone when operating this machine
- 5.12.11. When feeding material into the machine be extremely careful that pieces of metal, rocks, bottles, cans or other foreign objects are not included.
- 5.12.12. If the cutting mechanism strikes any foreign objects or if the machine should start making any unusual noise or vibration, shut off the power source and allow the machine to stop. Disconnect the spark plug wire from the spark plug (electric unit disconnect from supply) and inspect for damage check for any loose parts and tighten.
- 5.12.13. Have any damaged parts replaced or repaired with parts having equivalent specifications.
 - × **DO NOT** allow processed material to build up in the discharge zone. this may prevent proper discharge and can result in kickback of material through the feed intake opening.
- 5.12.14. If the machine becomes clogged at the inlet opening or discharge chute shut-off the power source and disconnect the spark plug wire or remove the ignition key before clearing debris in the inlet opening or discharge chute.
- 5.12.15. Keep the power source clear of debris and other accumulations to prevent damage to the power source or possible fire. Remember that operating the starting mechanism on engine powered machines will still cause the cutting means to move.
- 5.12.16. Keep all guards and deflectors in place and in good working condition.
 - × **DO NOT** tamper with the power source governor settings. the governor controls the safe maximum operating speed and protects the power source and all moving parts from damage caused by over-speed. Seek authorised service if a problem exist.
 - × **DO NOT** transport this machine while the power source is running.
- 5.12.17. Shut off the power source and disconnect the spark plug lead (electric unit disconnect from supply) whenever you leave the work area.
 - × **DO NOT** tilt the machine while it is running.

6. MAINTENANCE

- 6.1. Have your machine serviced by qualified repair personnel using only identical replacement parts. This will ensure the safety of the machine is maintained.
 - WARNING** When the machine is stopped for servicing, inspection, or storage, or to change an accessory, shut off the power source and disconnect the spark plug wire from the spark plug.
- 6.2. Make sure that all moving parts have come to a complete stop.
- 6.3. Allow the machine to cool before making any inspections, adjustments, etc.
- 6.4. Store the machine where fuel vapour will not reach an open flame or spark. For extended storage periods, run the unit dry of fuel. Always allow the machine to cool before storing.
- 6.5. When servicing the cutting means be aware that the cutting means can still be moved by a manual starting mechanism.
 - WARNING:** Switch off the motor and pull the spark plug boot from the spark plug before doing any cleaning and maintenance work on the equipment.
IMPORTANT: Switch off the machine immediately and contact your Sealey stockist:
in the event of unusual vibrations or noise.
if the engine appears to be overloaded or misfires.
- 6.6. **CLEANING**
 - 6.6.1. Keep all safety devices, air vents and the motor housing free of dirt and dust as far as possible.
 - 6.6.2. Wipe the equipment with a clean cloth or blow it with compressed air at low pressure.
 - 6.6.3. We recommend that you clean the device immediately each time you have finished using it. Clean the equipment regularly with a moist cloth and some soft soap. **DO NOT** use cleaning agents or solvents. These could attack the plastic parts of the equipment. Ensure that no water can seep into the device.
- 6.7. **AIR FILTER SEE FIG. 7**
 - 6.7.1. Clean the air filter at regular intervals, and replace it if necessary.
 - 6.7.2. Open and remove the air filter cover, see fig. 7.
 - 6.7.3. Remove the filter elements, see fig.7. **DO NOT** use abrasive cleaning agents or petrol to clean the elements. Clean the elements by tapping them on a flat surface. In cases of stubborn dirt first clean with soapy water, then rinse with clear water and air dry.
 - 6.7.4. Assemble in reverse order.
- 6.8. **SPARK PLUG** see fig.7 Check the spark plug for dirt and grime after 20 hours of operation and if necessary clean with a copper wire brush. Thereafter service the spark plug after every 50 hours of operation.
 - 6.8.1. Pull off the spark plug boot with a twist.
 - 6.8.2. Remove the spark plug with the supplied spark plug wrench.
 - 6.8.3. Assemble in reverse order.
- 6.9. **GREASING BEARINGS**
 - 6.9.1. All accessible bearings have grease nipples fitted. Lubricate with suitable grease as required.
- 6.10. **CHANGING THE OIL AND CHECKING THE OIL LEVEL** see fig.7.
 - 6.10.1. Check oil level before using the machine. see fig.7.
 - 6.10.2. Only use motor oil (15W40).
- 6.10.3. **NOTE:** The unit has a low oil level sensor which will stop the engine when low thus preventing internal damage.

7. TROUBLESHOOTING

Problem	Cause	Remedy
Engine fails to start	Spark plug wire disconnected	Attach spark plug wire securely to spark plug
	Out of fuel or stale fuel	Fill with clean, fresh gasoline
	Fuel valve not in ON position	Fuel valve must be in ON position
	Choke lever not in CLOSE position	Choke level must be in CLOSE position for a cold start
	Blocked fuel line	Clean the fuel line
	Fouled spark plug	Clean, adjust gap, or replace
	Engine flooding	Wait a few minutes to restart, but do not prime
Engine runs Erratically	Spark plug wire loose Unit running with Choke lever in CLOSE position Blocked fuel line or stale fuel Vent plugged Water or dirt in fuel system Dirty air cleaner Improper carburettor adjustment	Connect and tighten spark plug wire Move choke lever to OPEN position Clean fuel line. Fill tank with clean, fresh gasoline Clear vent Drain fuel tank. Refill with fresh fuel Clean or replace air cleaner
		Refer to Engine Manual
Engine overheats	Engine oil level low Dirty air cleaner Air flow restricted Carburettor not adjusted properly	Fill crankcase with correct oil Clean air cleaner Remove housing and clean Refer to Engine Manual
Chipping action too slow, or cutting disk stalls, or no material is discharged	The engine speed is too slow causing belt to slip Drive Belt loose or damaged Knives dull or damaged Cutting disk jammed by debris from the feed hopper and discharge chute Discharge chute clogged	Run the engine at full throttle Tighten or replace drive belt Sharpen or replace knives Remove any built-up debris and turn cutting disk with a wooden stick to be sure it turns freely Clean out debris
The belt frays or Rolls over the pulley	The rotor drive pulley groove may be nicked The drive belts may be stretched The pulleys may be misaligned	Check the drive belts for wear and hard spots. File off any nicks on the pulley Replace the drive belts Adjust the pulleys
Vibrate and move about excessively with unusual noise when working	Knives dull or damaged	Sharpen or replace knives
	Knives is not properly seated on the cutting disk	Loosen the knives mounting screws, reset the knives and tighten the screws
	The gap between the knives and wear plate is too large	Adjust the gap
	Rotor overloaded with material	Allow unit to clear itself before adding more material to the hopper
Chipper Knives Are hitting the Wear plate	The gap between the knives and wear plate is set incorrectly.	Adjust the gap.



ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

Important: No Liability is accepted for incorrect use of this product.

Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.



REGISTER YOUR PURCHASE HERE

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