



PETROL TAMPING RAMMER 3.2KW WITH WHEEL KIT

MODEL NO: **CRX300**

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 instruction manual



Wear eye protection



Wear ear protection



Wear protective clothing



Wear safety footwear



Wear safety gloves



No open flame



Do not touch hot surfaces



Keep feet away from operating plate



Do not pull handrail over



Do not tamper with safety devices



Maintain safe working distance



Caution Excessive Noise Level

⚠ DANGER
Using an engine indoors WILL KILL YOU IN MINUTES. Exhaust fumes contains carbon monoxide, a poisonous gas you cannot see or smell.

NEVER use in the home or in partly enclosed areas such as garages.	ONLY use outdoors and far from open windows, doors, and vents.

Avoid other engine hazards.
READ MANUAL BEFORE USE

1. SAFETY

1.1. GENERAL SAFETY

- ✓ Learn how to stop the engine quickly, and understand the operation of all controls. Machine must be operated by trained users only.
- ❑ **WARNING!** Stop the engine before performing any maintenance.
- ❑ **WARNING! DO NOT operate** the rammer if damaged. Replace or repair using recommended parts only. Unauthorised parts may be dangerous and will invalidate your warranty. Use authorised Service agent only.
- * **DO NOT** make any modifications to the machine. This will invalidate your warranty and could cause issues that could be dangerous and cause injury.
- ✓ Keep the rammer in good condition. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the machine's operation. Regular maintenance will give the best and safest performance. Wear safety goggles, ear protection, adequate protective clothing, and safety footwear.
- ✓ Keep all persons and animals at a safe distance from the working area of at least 15 metres..
- * **DO NOT** allow children or untrained persons to operate the rammer.
- * **DO NOT** use the rammer if you are tired or under the influence of alcohol, drugs or intoxicating medication.
- ✓ Check your machine before starting it. Keep guards in place and in working order. Make sure all nuts, bolts, etc. are securely tightened.
- * **DO NOT** use the rammer if the engine switch does not turn it on or off. Any petrol powered machine that cannot be controlled with the engine switch is dangerous and must be repaired or replaced.
- ✓ **CHECK** that any keys, adjusting wrenches or other tools are removed from machine area before starting it. A tool that is left attached to a rotating part of the machine may result in personal injury.
- ✓ **STAY ALERT**, watch what you are doing and use common sense when operating the machine.
- * **DO NOT OVERREACH.** Keep proper footing and balance at all times. This enables better control of the machine in unexpected situations.
- ❑ **WARNING!** The upright rammer is extremely top heavy. Extra care must be taken to make sure the rammer will not tip over, roll, slide, or fall when not being operated.
- ❑ **WARNING!** Never start or run the engine inside a closed area. The exhaust fumes are dangerous, containing carbon monoxide, an odourless and deadly gas. Operate this unit only in a well ventilated outdoor area.
- ❑ **WARNING!** Never operate the machine without good visibility or light.
- ❑ **WARNING! HOT EXHAUST**
The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot. Let the engine cool before storing it indoors.
- ✓ To prevent fire hazards and to provide adequate ventilation for stationary equipment applications, keep the engine at least 1 metre away from building walls and other equipment during operation. Do not place flammable objects close to the engine.

1.2. FUEL AND ENGINE SAFETY

- ▲ **DANGER! Fuel is highly flammable, and its vapours can explode if ignited.** Take precautions when using to reduce the chance of serious personal injury.
- ❑ **WARNING! Check the engine oil level before each startup.** Only use an approved oil and never operate the engine with insufficient oil.

- ☐ **WARNING! DO NOT touch spark plug or plug lead whilst the engine is running; severe, potentially fatal, electric shock may result.**
- ✓ Ensure that only the correct fuel type and grade is used.
- ✓ **DO NOT** check ignition system by removing the spark plug or spark plug lead. Use specific tester or contact service agent.
- ✗ **DO NOT** operate the rammer in an enclosed area as the motor exhaust fumes are a health hazard.
- ✗ **DO NOT** leave the rammer unattended whilst operating, and **DO NOT** remove the fuel cap whilst the engine is running.
- ✗ **DO NOT** refuel the engine whilst it is running. Stop the engine and allow it to cool before attempting to refuel.
- ✗ **DO NOT** refuel in a closed or poorly ventilated environment as there is a danger of explosion or fire. Refuel outdoors.
- ✗ **DO NOT** smoke or place the rammer near any naked flames whilst re-fuelling.
- ✗ **DO NOT** operate rammer if there is a fuel leak. Move the unit and avoid using until the leak has been fixed and the machine is dry.
- ✗ **DO NOT** start the engine if there are any flammable materials near the exhaust system or in the path of the exhaust gases.
- ✗ **DO NOT** block the exhaust.
- ✓ Ensure fuel is stored in an approved container.
- ✓ Store fuel in a cool, well-ventilated area, safely away from sparks, open flames or other sources of ignition.
- ✓ For long term storage ensure the fuel is drained and that the rammer is adequately protected against frost.
- ✗ **DO NOT** operate the engine with either the silencer or air filter removed.
- ✗ **DO NOT** touch the engine during or after use. To avoid burns allow it to cool before handling.
- ✓ Undo the fuel tank cap slowly to relieve any pressure in the tank.
- ✗ **DO NOT** overfill fuel tank (there should be no fuel above the upper limit mark).
- ✓ Replace all fuel tank and container caps securely and wipe up spilt fuel. Never operate the unit without the fuel cap securely in place.

1.3. MACHINE USE AND CARE

- ✗ **NEVER** pick up or carry the rammer while the engine is running.
- ✗ **DO NOT** run the engine at high speed when you are not pounding.
- ✗ **DO NOT** put hands or feet near rotating parts.
- ✗ **DO NOT** touch the engine or muffler. These parts get extremely hot from operation. They remain hot for a short time after you turn off the unit. Allow the engine to cool before doing maintenance or making adjustments.
- ☐ **WARNING!** If the machine should start to make an unusual noise or vibration, immediately shut off the engine, disconnect the spark plug wire, and check for the cause.
- ☐ **WARNING!** In the event of an accident or breakdown stop the engine immediately, turn off the fuel supply and disconnect the spark plug wire.
- ✓ Keep the engine and muffler free of grass, leaves, excessive grease or carbon build up to reduce the chance of a fire hazard.
- ✓ Keep handles dry, clean and free from debris. Clean after each use.

1.4. PRODUCT SPECIFIC SAFETY RULES

- ☐ **WARNING!** To avoid injury, keep hands, fingers and feet away from the base plate. Grip the handle of the rammer firmly with both hands.
- ✓ Always operate the machine from behind, never pass or stand in front of the machine when the engine is running.
- ✓ If the unit strikes a foreign object, stop the engine, disconnect the spark plug, thoroughly inspect the machine for any damage.
- ✗ **DO NOT** overload the machine capacity by compacting too deep in a single pass or at too fast a rate.
- ✗ **NEVER** leave rammer unattended when the engine is running.
- ✓ **ALWAYS** stop the engine when compacting is delayed or when moving from one location to another.
- ✓ **ALWAYS** be aware of your surroundings and terrain, such as slopes or ditches, to avoid actions that may cause the rammer to topple over.
- ✓ **ALWAYS** rest the rammer on a firm and level surface and shut the engine off.
- ☐ **WARNING!** The upright rammer is extremely top-heavy. Move carefully and securely in an upright position.
- ✓ To reduce exposure to vibration, limit the hours of operation and take periodic breaks.
- NOTE:** Residual risks that cannot be engineered out remain during operation.

1.5. WARNING! – RISK OF HAND ARM VIBRATION INJURY.

This tool may cause Hand Arm Vibration Syndrome if its use is not managed adequately.
 This tool is subject to the vibration testing section of the Machinery Directive 2006/42/EC.
 This tool is to be operated in accordance with these instructions.

Measured vibration emission value (a):27.5 m/s²

Uncertainty value (k):2.5 m/s²

Please note that the application of the tool to a sole specialist task may produce a different average vibration emission. We recommend that a specific evaluation of the vibration emission is conducted prior to commencing with a specialist task.

A health and safety assessment by the user (or employer) will need to be carried out to determine the suitable duration of use for each tool. NB: Stated Vibration Emission values are type-test values and are intended to be typical.
 Whilst in use, the actual value will vary considerably from and depend on many factors. Such factors include; the operator, the task and the inserted tool or consumable. NB: Ensure that the length of leader hoses is sufficient to allow unrestricted use, as this also helps to reduce vibration.

The state of maintenance of the tool itself is also an important factor, a poorly maintained tool will also increase the risk of Hand Arm Vibration Syndrome.

Health surveillance.

We recommend a programme of health surveillance to detect early symptoms of vibration injury so that management procedures can be modified accordingly.

Personal protective equipment.

We are not aware of any personal protective equipment (PPE) that provides protection against vibration injury that may result from the uncontrolled use of this tool. We recommend a sufficient supply of clothing (including gloves) to enable the operator to remain warm and dry and maintain good blood circulation in fingers etc. Please note that the most effective protection is prevention, please refer to the Correct Use and Maintenance section in these instructions. Guidance relating to the management of hand arm vibration can be found on the HSE website. www.hse.gov.uk - Hand-Arm Vibration at Work.

2. INTRODUCTION

Designed for high-impact compaction in confined areas, making it ideal for trenches, foundations, and backfill work. Its powerful jumping motion delivers deep compaction perfect for clay and mixed soils, ensuring a stable base for construction projects. Can be used for a variety of construction projects, such as trench backfilling, pipeline and cable installation, road repair and foundation preparation

3. SPECIFICATION

Model	CRX300
Ramming Show Size	355 mm x 280 mm
Impact Blows / Min	660 - 700
Impact Force / Blow	18,500 N
Impact Plate Stroke	60 - 70 mm
Travel Speed	11m/min-14m/min
Engine	149cc, 3.2kW, Petrol
Dimension (Length)	715 mm
Dimension (Width)	580 mm
Dimension (Height)	1010mm:
Operating Weight	78 kg
Tested Sound Pressure Value	LPA=84.4 dB(A) / k=2.24 dB(A)
Tested Sound Power Value	LWA=104.4 dB(A) / k=2.24 dB(A)
Guaranteed Sound Power Level	LWA=107 dB(A)
Vibration/Uncertainty	27.5/2.5 m/s ²



Image for illustration purposes only. Actual product may differ slightly.

Engine			
Type	Single cylinder, Air-Cooled 4-stroke OHV	Starting Mode	Recoil start
Rated power (kW/3600rpm)	3.2	Rotation	Anti-clockwise (from P.T.O. side)
Max. torque (N·m/rpm)	8.8/2800	Valve Clearance	Input valve: 0.10~0.15mm, output valve: 0.10~0.15mm
Fuel consumption (g/kW·h)	≤395	Spark plug clearance	0.7~0.8mm
Idle Speed	1800±150 rpm	Igniting Mode	Transistorized magneto Ignition
Speed Fluctuating Ratio	≤10%	Air cleaner	Paper filter, Foam filter
Bore x Stroke(mm)	65×45	Dimension (Length) (mm)	335
Displacement(cc)	149	Dimension (Width) (mm)	290
Compression Ratio	8.5:1	Dimension (Height) (mm) 347	347
Lubricating mode	Splash	Net weight (kg)	15
The power rating of the engine indicated is the net power output tested on a production engine for the engine model and measured in accordance with SAE J1349 at 3,600 rpm (Net Power) and at 2,800 rpm (Max. Net Torque). Mass production engines may vary from this value. Actual power output for the engine installed in the final machine will vary depending on numerous factors, including the operating speed of the engine in application, environmental conditions, maintenance, and other variables.			

Engine Reference / Tune-Up					
Engine Oil	Type	SAE 10W-30,API SE or SF, for general use	Maintenance	Each use	Check engine oil. Check air filter.
	Capacity	0.5 L		First 20 hours	Change engine oil.
Spark Plug	Type	F7TC or other equivalent.		Subsequent	Refer to maintenance schedule
	Gap	0.028-0.031 in (0.70 mm-0.80 mm)	Spark Plug Gap		0.028 in -0.031 in (0.70 mm -0.80 mm)
Carburettor	Idle Speed	1800 rpm±150 rpm	Valve Clearance		IN : 0.10 mm±0.15 mm (cold) EX: 0.10 mm±0.15 mm (cold)

4. CONTENTS

Unpack contents and check to ensure all parts are present and in good condition.

Upright Rammer	Parts/Assembly Kit Comprising:	Spark plug spanner
Wheel assembly		Spare air filter
Instruction manual		2 x M6 x 16 set screws + washers

5. ASSEMBLY

5.1. ASSEMBLY

- 5.1.1. Insert the fixing plate of the wheel kit under the support plate of rammer (fig.1).
- 5.1.2. The rammer is shipped with the fixing plate in a horizontal position, secured by two set screws and washers. This plate needs rotating 90 degrees to rest on top of the leg assembly.
- 5.1.3. Loosen the two set screws (one either side of the plate) (fig.2.1).
- 5.1.4. Swing the fixing plate down, making sure the holes in the fixing plate align with the holes in the handle assembly.
- 5.1.5. The plate should be secured using the set screws (already in-situ) and the 2 x set screws (packaged separately) (fig.2.2, fig.2.3).
- 5.1.6. Tighten the screws (two on either side).

fig.1

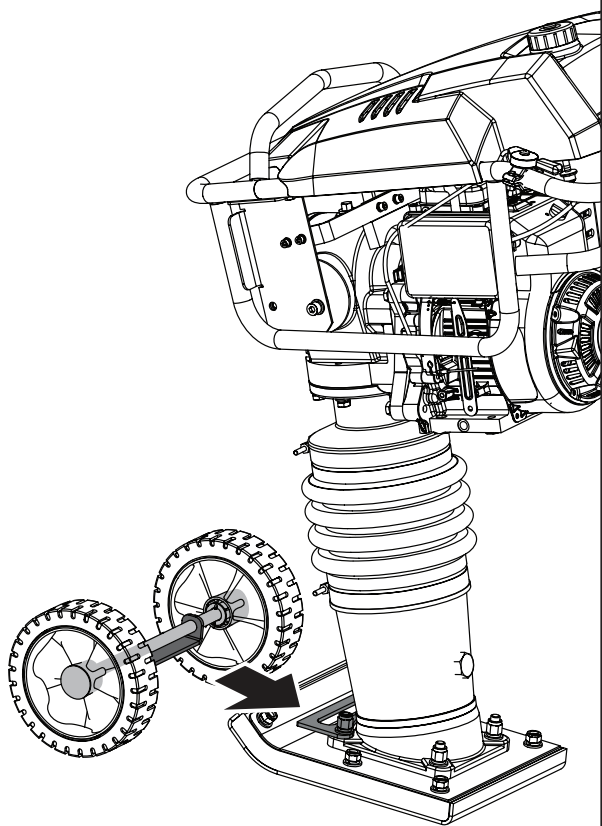
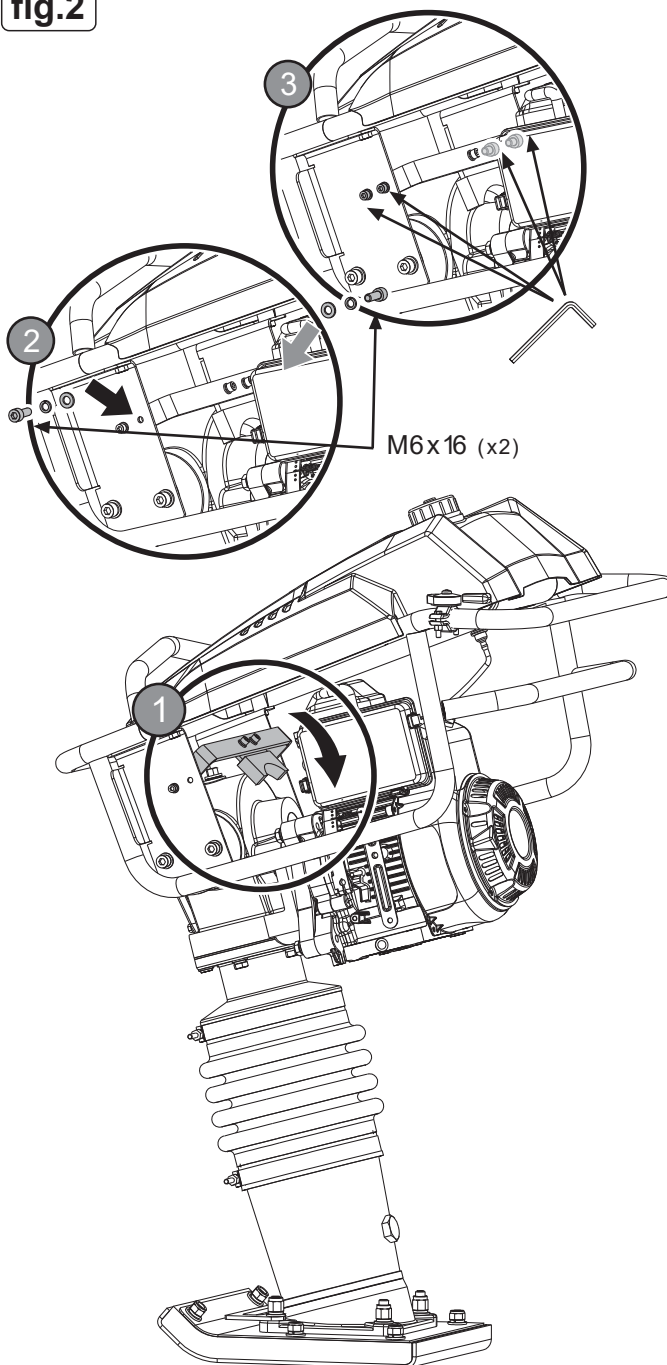


fig.2



6. FEATURES AND CONTROLS

Upright Rammer Full Assembly		
1	Hook Point	Used to lift rammer for transportation.
2	Fuel Filler Cap (Refer to Fuel and Engine Safety section 1.2)	Remove cap to add unleaded petrol to the fuel tank. Make sure cap is tightened securely. Do not over fill. Fuel Tank Capacity 1.8L.
3	Throttle Lever	Use to adjust engine speed (rpm). Move lever forward (SLOW) to reduce engine speed, move lever back toward operator (FAST) to increase speed. Always operate the rammer at full speed (rpm).
4	Hand Rail/Grip	To operate rammer, grip handle assembly firmly on both sides.
5	Engine On/Off Switch	Cuts power to the rammer at the end of working or to stop the engine.
6	Fuel On/Off Switch	Stops fuel feed to engine.
7	Engine	Engine assembly
8	Bellows	Contains oil reservoir.
9	Oil Window	Indicates level of oil reservoir.
10	Ramming Plate	Tempered steel plate with rubber for shock absorption.

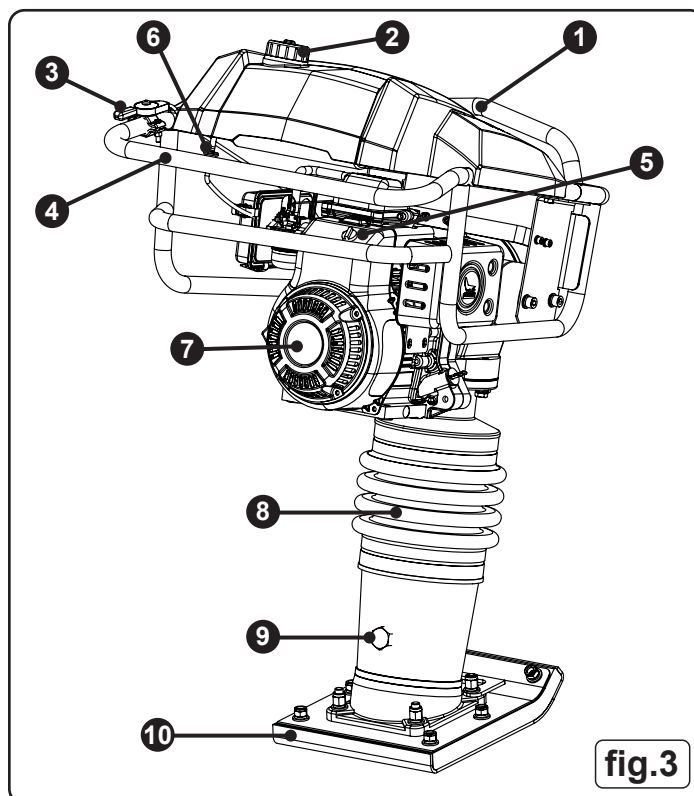


fig.3

Engine Assembly			
1	Choke Lever	7	Crank Case
2	Cover Comp Head	8	Starter Handle
3	Spark Plug	9	Starter Assembly
4	Muffler Assembly	10	Engine Oil Filler Cap/Dipstick (located below muffler assembly)
5	Air Filter Assembly	11	Engine On/Off Switch
6	Oil Drain Plug	12	Muffler Protection Housing

fig.5

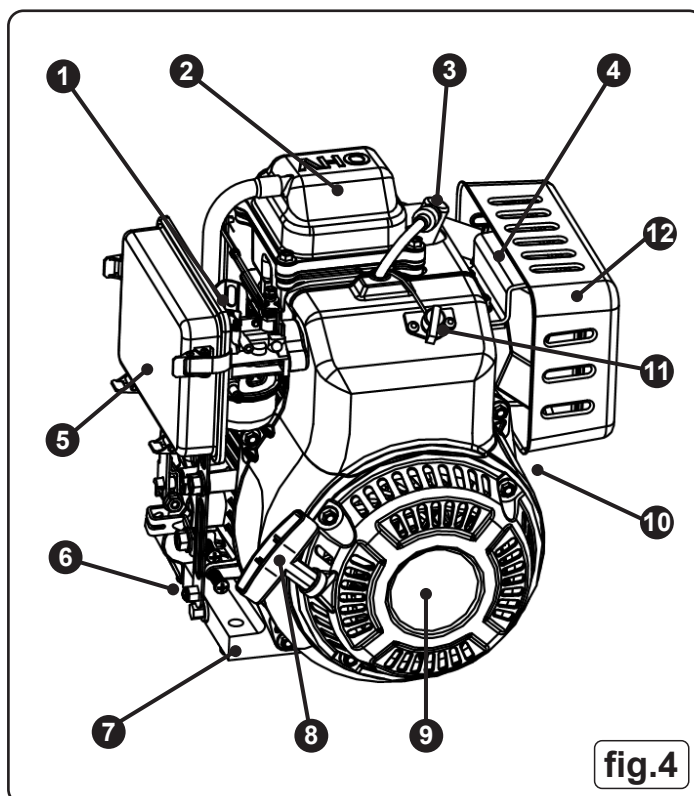
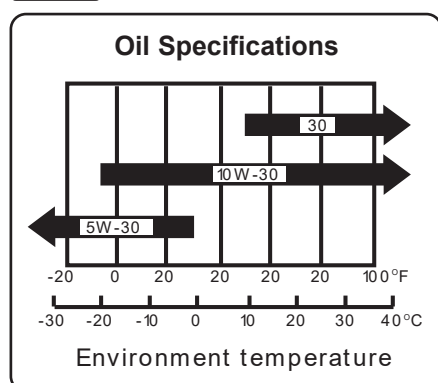


fig.4

7. PREPARATION

Read the entire "SAFETY" section at the beginning of this manual including all text under subheadings therein before setup or use of this product. Improper treatment of the rammer can damage internal components and shorten the life of the unit. Failure to follow this warning will void warranty

7.1. This machine is intended to be used for compacting friable soil (crushed stone ratio <30%).

* **DO NOT** operate plate on concrete or on extremely hard, dry, compacted surfaces. The plate will jump rather than vibrate and could damage both plate and engine.

7.2. PRE START CHECKS

Inspect engine and equipment looking for damaged, loose and missing parts before set up and starting. If any problems are found, do not use equipment until fixed properly.

7.3. ADD ENGINE OIL

NOTE: The rammer comes supplied empty and must be filled with oil prior to first use.

NOTE: Your Warranty is VOID if the engine's crankcase is not properly filled with oil before each use. Before each use, check the oil level. Engine will not start with low or no engine oil.

7.3.1. Make sure the machine with engine stands vertically.

7.3.2. Remove the oil dipstick (fig.4.10), then add the engine oil.

7.3.3. Insert the dipstick into the oil tank to check the oil level, if the oil lever comes near to the lower limit mark, refill the oil tank up to the upper limit mark.

✓ Engine capacity: 0.5 L

✓ Recommended oil: SAE10W-30 is recommended, as it is suitable to average environment temperatures (see fig.5).

7.3.4. Check the impact system lubricating oil level, if necessary fill the oil to the upper location of the oil window.

7.4. **CHECK THE AIR CLEANER** (fig.4.5): Check whether the filter is blocked or damaged; a dirty or damaged filter will block the air cleaner, which may damage or inhibit the engine from starting.

7.5. **CHECK THE FUEL TANK:** The fuel must be above 90 octane lead-free petrol. The recommended fuel is above 93 octane lead-free petrol.

* **DO NOT** get dust, water or other foreign matter into the fuel tank, do not mix the fuel with engine oil.

□ **WARNING! NEVER** fill fuel tank while operating the unit.

8. OPERATION

8.1. STARTING THE RAMMER

8.1.1. Position the rammer on a flat, level ground surface.

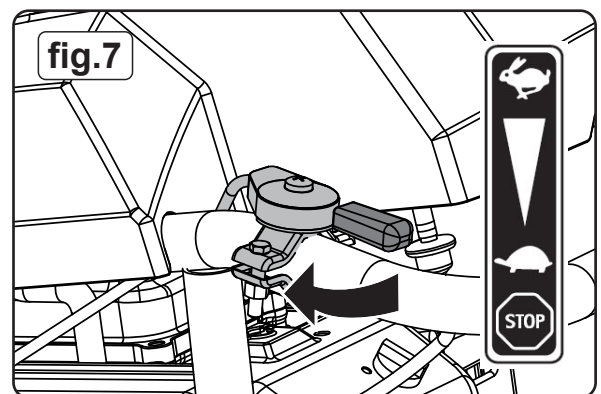
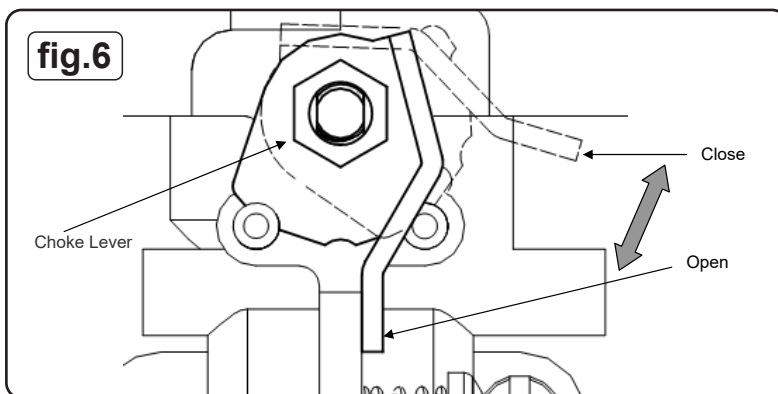
8.1.2. Start the engine.

8.1.3. Turn on the engine switch (see fig.3.5 / fig.4.11 / fig.8).

8.1.4. Close the choke lever (fig.4.1, fig.6), which cannot be closed if the machine is overheated.

8.1.5. Turn the fuel lever to the open position (fig.3.6).

8.1.6. Set throttle lever to the idle slow speed position (fig.3.3, fig.7).



8.1.7. Grip the starter handle (fig.4.8, fig.9) of the engine loosely and pull it slowly two times to allow the petrol to flow into the engine's carburettor. Then pull the starter handle gently until resistance is felt. Allow cable to retract fully and then pull it quickly. Repeat until the engine starts.

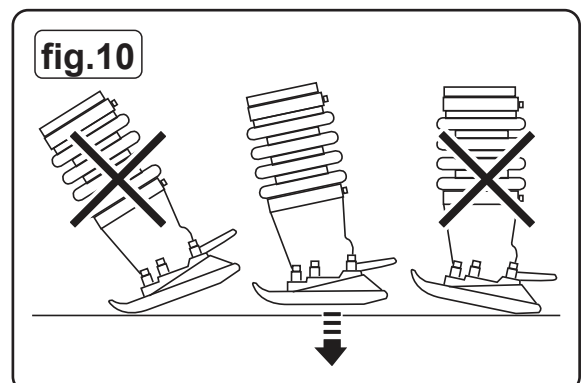
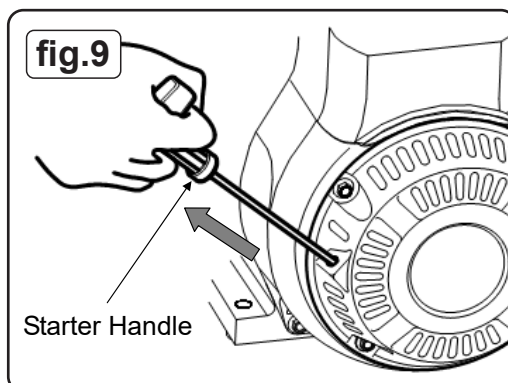
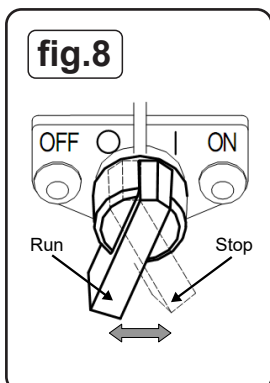
8.1.8. Open the choke lever after starting the engine (fig.6), allow approximately 5 minutes to warm up.

8.1.9. Put the throttle lever towards to FAST position (fig.7). The rammer will commence the pounding action.

8.1.10. Run rammer at the full throttle position for maximum performance.

8.1.11. Guide rammer with its handle. Allow machine to pull itself forward. Do not try to over-power the machine. Bearing down on the handle is unnecessary and causes shock absorber wear.

8.1.12. For best compaction, the shoe must hit the ground flat, not on its toe or heel. This will save on excessive shoe wear (see fig.10).



* **DO NOT** stop the engine when the rammer is running at high speed, or it will cause the engine oil to deteriorate or for parts to seize as the temperature of the engine rises suddenly.

□ **WARNING!** When operating the rammer, keep feet clear from the bottom ramming plate to avoid personal injury.

- ✗ **DO NOT** operate plate on concrete or on extremely hard, dry, compacted surfaces. The plate will jump rather than vibrate and could damage both plate and engine.
- ✓ The upright rammer is designed to run at an engine speed (engine take off shaft) of 3600 rpm (Normally considered full throttle). Running the engine at lower rpm's will result in a decrease of compaction force and lower travel speed. It will create excessive "out-of-synch" vibrations resulting in poor compaction, manoeuvrability, excessive wear to the machine, and discomfort to the operator.

8.2. STOPPING THE RAMMER

- ❑ **WARNING! To stop the engine in an emergency, turn the engine switch to the OFF position** (see fig.3.5 / fig.4.11 /fig.8).

Under normal conditions, use the following:

- 8.2.1. Move the throttle lever to the SLOW position (fig.3.3, fig.7).
- 8.2.2. Let engine idle for one or two minutes.
- 8.2.3. Turn the engine switch to the OFF position (see fig.3.5 / fig.4.11 /fig.8).
- 8.2.4. Turn the fuel valve lever to the OFF position (fig.3.6).

- ✗ **DO NOT** move choke control to CLOSE to stop engine. Backfire or engine damage may occur.

8.3. IDLE SPEED

Set throttle control lever to its "low" position to reduce stress on the engine when compacting is not being performed. Lowering the engine speed to idle the engine will help extend the life of the engine, as well as conserve fuel and reduce the noise level of the machine.

9. LIFTING AND TRANSPORTING

9.1. LIFTING

- ✓ Check lifting device (hoist) is suitable for the weight of the rammer (~78 kg).
- ❑ **WARNING! To avoid burns or fire hazards, let engine cool before lifting / transporting or storing indoors.**
- ✓ The rammer can be lifted by the handles in the front and back of the unit.
- ❑ **WARNING! You must use the hooking point when attaching a hoist to lift the rammer** (fig.11).
- ❑ **WARNING! The rammer must be transported in the upright position to prevent fuel from spilling. Do not lay machine on its side or top.**
- ❑ **WARNING! Secure or tie down unit using the lifting handle to prevent machine from sliding or tipping over.**
- ❑ **WARNING! Machine may fall and cause damage or injury if lifted incorrectly.**

9.2. TRANSPORTING

- 9.2.1. The rammer can be transported short distances using the wheel assembly.
- 9.2.2. Attach the wheel assembly as shown in fig.1.
- 9.2.3. The rammer can now be manoeuvred within the work site (fig.12).
- ❑ **WARNING! ALWAYS** remove the wheels before recommencing operation of the rammer.

fig.11

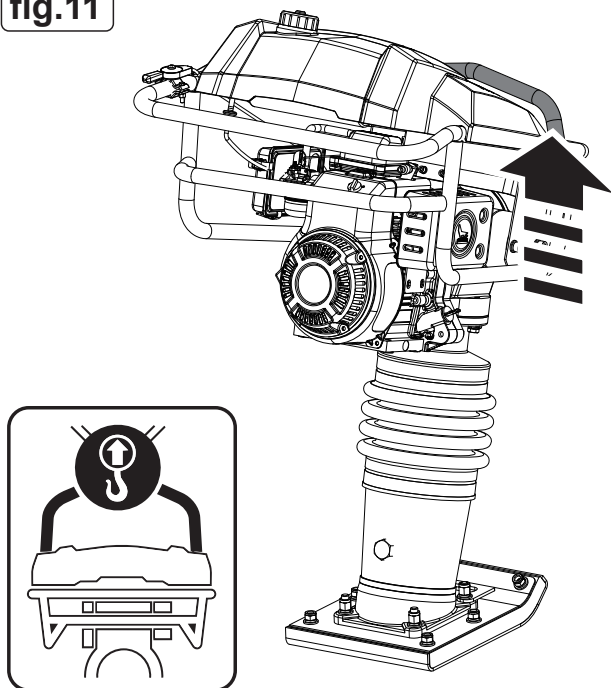
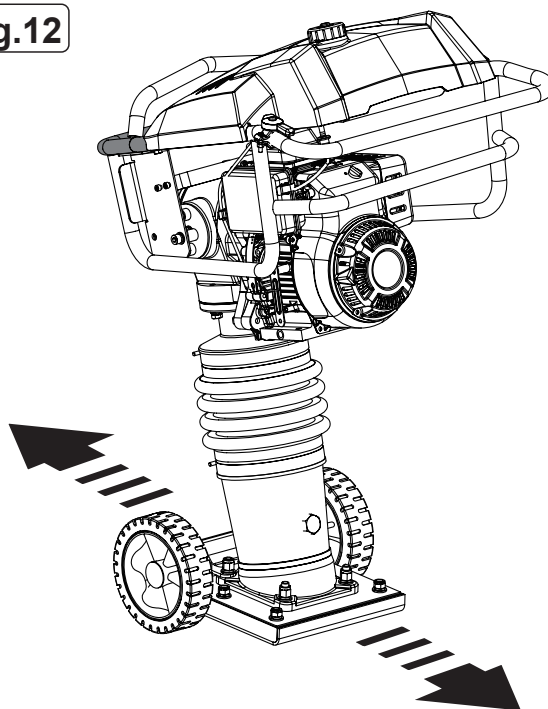


fig.12



10. MAINTENANCE

Maintaining your upright rammer essential for safe and trouble-free operation.

10.1. PREVENTATIVE MAINTENANCE

- 10.1.1. Turn off engine. Engine must be cool.
- 10.1.2. Keep the engine's throttle lever in its SLOW position, and remove spark plug wire from spark plug and secure.
- 10.1.3. Inspect the general condition of the upright rammer. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, and any other condition that may affect its safe operation.
- 10.1.4. Remove all debris from the upright rammer with a soft brush, vacuum, or compressed air. Then use a premium quality lightweight machine oil to lubricate all moving parts.
- 10.1.5. Clean the bottom of the upright rammer base as soon as it begins to pick up compacted soil. The unit cannot do a good job if the bottom surface is not smooth and clean.

10.1.6. Replace spark plug wire.

✱ **NEVER** use a pressure washer to clean your upright rammer. Water can penetrate the unit and cause damage to spindles, pulleys, bearings, or the engine.

10.2. CHECKING OIL LEVEL OF RAMMING SYSTEM

10.2.1. Place the rammer on a level surface with ramming plate resting on the ground.

10.2.2. Check the oil level through the oil window (fig.3.9).

10.2.3. The correct ramming system lubrication quantity is indicated when approximately 1/2-3/4 of the window is full.

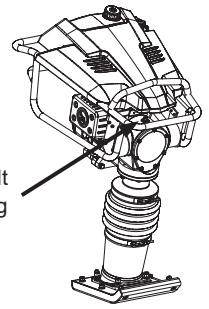
10.2.4. If the oil is not visible, oil must be added through the oil filling bolt (fig.13).

10.2.5. Oil recommended: generally SAE 10W30 is recommended.

10.2.6. After adding oil, screw the oil filling bolt tightly

fig.13

Oil Filler Bolt
for Ramming
System



11. ENGINE MAINTENANCE

ENGINE MAINTENANCE SCHEDULE						
REGULAR SERVICE PERIOD		Each Use	First Month or 20 Hrs.	Every 3 Months or 50 Hrs.	Every 6 Months or 100 Hrs.	Every Year or 300 Hrs.
Performed at every indicated month or operating hour interval, whichever comes first.						
Engine Oil	Check level	●				
	Change		●		●	
Air Cleaner	Check	●				
	Clean		● (2)			
	Replace			● (1)		
Spark Plug	Check/Clean				●	
	Replace					●
Idle Speed	Check/Adjust				● (3)	
Valve Clearance	Check/Adjust					● (3)
Combustion Chamber	Clean	After every 300 hours (3)				
Fuel Line	Check	Every 2 years (replace if necessary) (3)				
(1) Replace the paper element type only. (2) Service more frequently when used in dusty areas. (3) These items should be serviced by your servicing dealer unless you have the proper tools and are mechanically proficient. Refer to manual for service procedures.						

✓ Maintaining the engine correctly is essential for safe, economical, and trouble-free operation.

✓ Read the instructions before you begin, and make sure you have the tools and skills required.

❑ **WARNING!** To reduce the possibility of fire or explosion, be careful when working around petrol. Use only a non-flammable solvent, not petrol, to clean parts. Keep sparks and naked flames away from all fuel-related parts.

11.1. PREVENTATIVE MAINTENANCE

11.1.1. Turn off engine. Engine must be cool.

11.1.2. Keep the engine's throttle lever in its SLOW position, and remove spark plug wire from spark plug and secure.

11.1.3. Inspect the general condition of the engine. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, and any other condition that may affect its safe operation.

11.1.4. Remove all debris with a soft brush, vacuum, or compressed air. Then use a premium quality lightweight machine oil to lubricate all moving parts.

11.1.5. Replace spark plug wire.

✱ **NEVER** use a pressure washer to clean the engine. Water can penetrate the unit and cause damage to spindles, pulleys, bearings, or the engine.

11.2. ENGINE OIL LEVEL CHECK

Make sure the machine with engine stands vertically.

11.2.1. Remove the oil dipstick (fig.14).

11.2.2. Insert the dipstick into the oil tank, without re-screwing it, to check the oil level, if the oil lever comes near to the lower limit mark, refill the oil tank up to the upper limit mark (fig.15).

✓ Engine capacity: 0.5 L

✓ Recommended oil: SAE10W-30 is recommended, as it is suitable to average environment temperatures.

fig.14

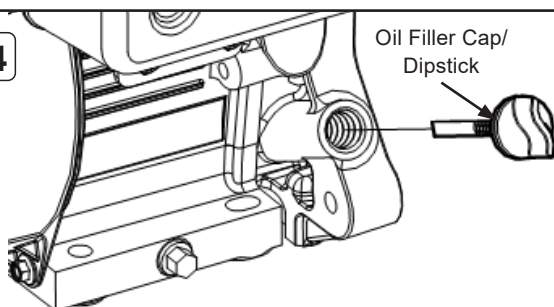
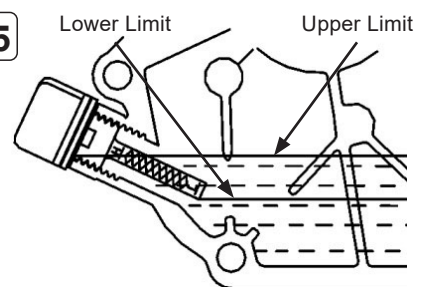


fig.15



11.3. ENGINE OIL CHANGE

- 11.3.1. Drain the used oil while the engine is warm. Warm oil drains quickly and completely.
- 11.3.2. Place a suitable container below the engine to catch the used oil, and then remove the filler cap/dipstick (fig.14) and the drain plug (fig.16).
- 11.3.3. Allow the used oil to drain completely, and then reinstall the drain plug and sealing washer (fig.16), and tighten it securely.
- 11.3.4. Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take used oil in a sealed container to your local recycling centre or service station for reclamation. Do not throw it in the trash; pour it on the ground; or down a drain.
- 11.3.5. With the engine in a level position, fill to the outer edge of the oil filler hole with the recommended oil (SAE 10W-30 for general use (fig.15)).
- ✓ Engine oil capacity: 0.5L.
- ❑ **WARNING!** Running the engine with a low oil level can cause engine damage.

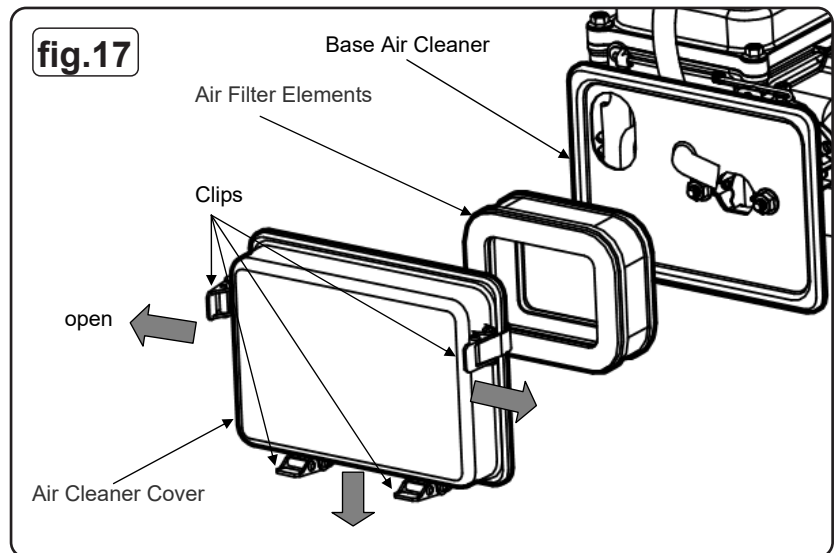
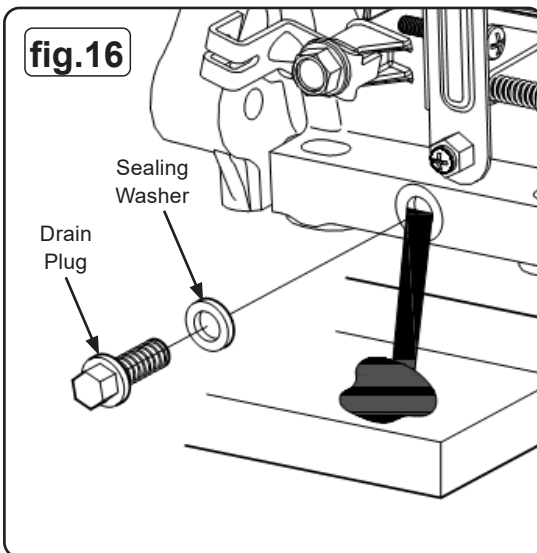
- 11.3.6. Screw in the filler cap/dipstick securely (fig.14).

11.4. AIR FILTER INSPECTION

- 11.4.1. Remove the air cleaner cover and inspect the filter (fig.17). Clean or replace dirty filter elements. Always replace damaged filter elements.

11.5. AIR CLEANER SERVICE (fig.17)

- ✓ A dirty air filter will restrict air flow to the carburettor, reducing engine performance. If you operate the engine in very dusty areas, clean the air filter more often than specified in the maintenance schedule.
- * Operating the engine without an air filter, or with a damaged air filter, will allow dirt to enter the engine, causing rapid engine wear. This type of damage is not covered under warranty.
- 11.5.1. Unsnap the clips, and remove the air cleaner cover.
- 11.5.2. Remove the air filter elements from the air cleaner cover.
- 11.5.3. Inspect the air filter elements, and replace them if they are damaged.
- 11.5.4. Clean the air filter elements if they are to be reused.
- * **DO NOT** try to clean the paper air filter. If the paper air filter is too dirty, replace it with a new one.
- 11.5.5. Tap the paper filter several times on a hard surface to remove dirt, or blow compressed air [not exceeding 30 psi (207 kPa)] through the paper filter from the inside. Never try to brush off dirt because this will force dirt into the fibres.
- 11.5.6. Wipe dirt from the inside of the air cleaner base and cover, using a moist rag.
- ❑ **WARNING!** Be careful to prevent dirt from entering the air duct that leads to the carburettor.
- 11.5.7. Reinstall the filter in the air cleaner cover.
- 11.5.8. Reinstall the air cleaner cover, and close the clips securely.



11.6. SEDIMENT CUP CLEANING (fig.18)

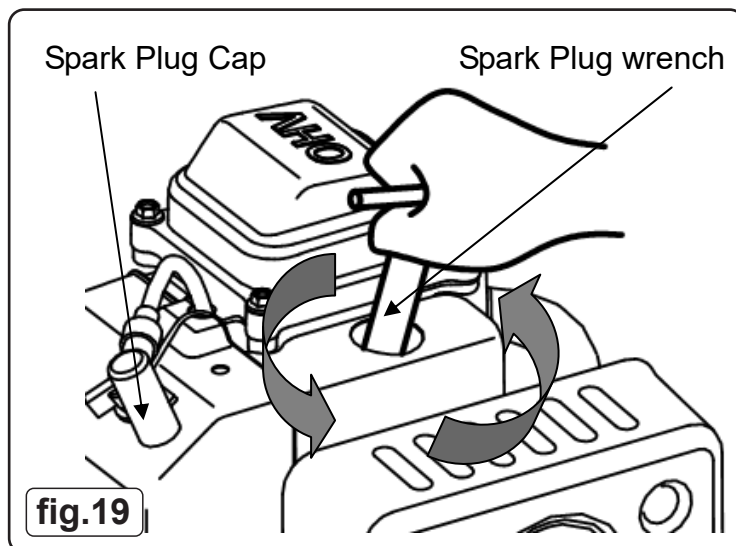
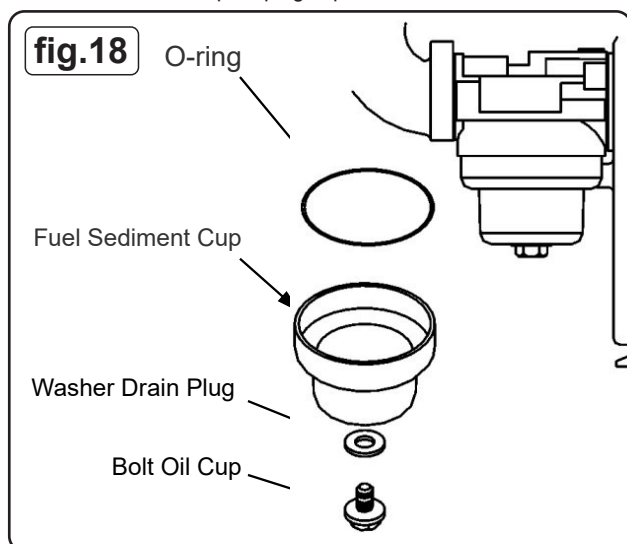
- 11.6.1. Remove the fuel sediment cup and O-ring
- ▲ **DANGER!** Petrol is highly flammable and explosive.
- ❑ **WARNING!** Handling fuel can cause burns and serious injury.
- ❑ **WARNING!** Keep heat, sparks and flame away.
- ❑ **WARNING!** Handle fuel only outdoors. Wipe up spills immediately.
- 11.6.2. Wash the sediment cup and O-ring in non-flammable solvent, and dry them thoroughly.
- 11.6.3. Place the O-ring in the fuel valve, and install the sediment cup. Tighten the sediment cup securely.
- 11.6.4. Check for leaks. Replace the O-ring if there is any leakage.

11.7. SPARK PLUG SERVICE (fig.19)

- ✓ Recommended spark plugs: F7RTC or equivalent.
- ❑ **An incorrect spark plug can cause engine damage.**
- 11.7.1. Remove the spark plug cap, and clean any dirt from around the spark plug area.
- 11.7.2. Remove the spark plug with a spark plug wrench.
- 11.7.3. Visually inspect the spark plug. Replace it if the electrodes are worn, or if the insulator is cracked, chipped or fouled.
- 11.7.4. Measure the spark plug electrode gap with a suitable gauge. The gap should be 0.028 -0.031 in (0.70 - 0.80mm). Correct the gap, if necessary, by carefully bending the side electrode.
- 11.7.5. Install the spark plug carefully, by hand, to avoid cross-threading.
- 11.7.6. After the spark plug seats, tighten with a spark plug wrench to compress the water.
- NOTE:** If reinstalling the used spark plug, tighten 1/8 - 1/4 turn after the spark plug seats. If installing a new spark plug, tighten 1/2 turn after the spark plug seats.
- ❑ **WARNING!** A loose spark plug can overheat and damage the engine.

❑ **WARNING!** Over tightening the spark plug can damage the threads in the cylinder head.

11.7.7. Attach the spark plug cap.



11.8. IDLE SPEED ADJUSTMENT (fig.20)

11.8.1. Start the engine outdoors, and allow it to warm up to operating temperature.

11.8.2. Move the throttle lever to its slowest position.

11.8.3. Turn the throttle stop screw to obtain the standard idle speed. Standard idle speed: 1800 ± 150 rpm

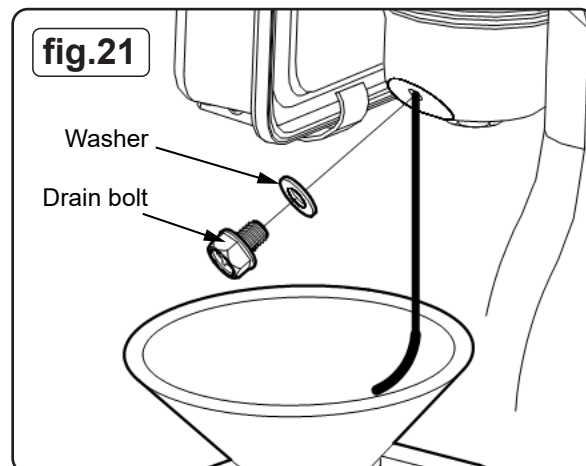
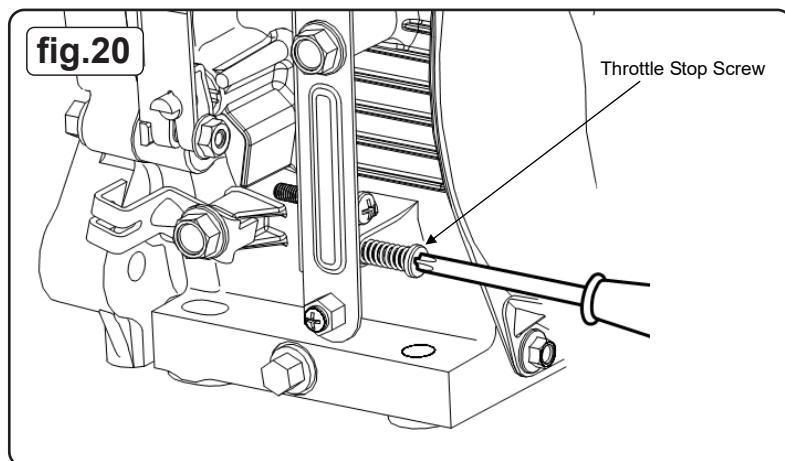
11.9. DRAINING THE FUEL TANK AND CARBURETTOR (fig.21)

11.9.1. Place a suitable container below the carburettor, and use a funnel to avoid spilling fuel.

11.9.2. Loosen the carburettor drain bolt, and drain the gasoline from the carburettor.

11.9.3. After all the fuel has drain into the container, reinstall the drain bolt. Tighten them securely.

NOTE: The length of time that petrol can be left in your fuel tank and carburettor without causing functional problems will vary with such factors as the petrol blend, storage temperatures, and whether the fuel tank is partially or completely filled. The air in a partially filled fuel tank promotes fuel deterioration. Very warm storage temperatures accelerate fuel deterioration. Petrol will oxidize and deteriorate in storage. Deteriorated petrol will cause hard starting, and it leaves deposits that clog the fuel system. As a result, if the engine is not used for more than one month, the fuel oil should be drained thoroughly to prevent from deterioration of the fuel in fuel system and carburettor. The failures of fuel system or engine performance arising from improper storage are not covered by the warranty.



12. STORAGE

If the rammer will not be used for a period longer than 30 days, follow the steps below to prepare your unit for storage.

12.1. Drain the fuel tank completely. Stale fuel has high gum content and can clog the carburettor and restrict fuel flow.

12.1.1. Start the engine and allow it to run until it stops. This ensures no fuel is left in the carburettor. This helps prevent deposits from forming inside the carburettor and possible engine damage.

12.1.2. While the engine is still warm, drain the oil from the engine. Refill with fresh oil.

12.1.3. Allow the engine to cool. Remove the spark plug and put 60 ml of SAE-30 high quality motor oil into the cylinder. Pull the starter rope slowly to distribute the oil. Replace the spark plug.

12.1.4. Remove the spark plug and drain all of the oil from the cylinder before attempting to start the unit after storage.

12.1.5. Use clean cloths to clean off the outside of the upright rammer and to keep the air vents free of obstructions.

* **DO NOT** use strong detergents or petroleum based cleaners when cleaning plastic parts. Chemicals can damage plastics.

12.1.6. Carefully fold the upper handle down. **DO NOT** allow control cables to become pinched or bent.

12.1.7. Store the rammer in an upright position in a secure, clean, dry and well-ventilated area.

* **DO NOT** store upright rammer with fuel in a non-ventilated area where fuel fumes may reach flame, sparks, pilot lights or any ignition sources.

✓ Use only approved fuel containers.

13. TROUBLESHOOTING

Engine fails to start.	1. Spark plug wire disconnected. 2. Out of fuel or stale fuel. 3. Throttle control lever not in correct starting position. 4. Choke not in OPEN Position. 5. Blocked fuel line. 6. Fouled spark plug. 7. Engine flooding. 8. Engine switch OFF.	1. Attach spark plug wire securely to spark plug. 2. Fill with clean, fresh petrol. 3. Move throttle control lever to start position. 4. Move the choke lever to the CLOSE position for a cold start. 5. Clean the fuel line. 6. Clean, adjust gap, or replace. 7. Wait a few minutes to restart, but do not prime. 8. Turn engine switch to ON
Engine runs erratically.	1. Spark plug wire loose. 2. Blocked fuel line or stale fuel. 3. Vent plugged. 4. Water or dirt in fuel system. 5. Dirty air cleaner.	1. Connect and tighten spark plug wire. 2. Clean fuel line. Fill tank with clean, fresh petrol. 3. Clear vent. 4. Drain fuel tank. Refill with fresh fuel. 5. Clean or replace air cleaner.
Engine overheats.	1. Engine oil level low. 2. Dirty air cleaner. 3. Air flow restricted.	1. Fill crankcase with proper oil. 2. Clean air cleaner. 3. Remove blower housing and clean.
Engine will not stop when throttle control is positioned at stop, or engine speed does not increase properly when throttle control is adjusted.	Debris interfering with throttle linkage.	Clean dirt and debris.
Upright rammer is difficult to control when pounding (machine jumps or lurches).	Too high engine speed on hard ground.	Set the throttle lever at lower speed.



WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.



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.



REGISTER YOUR PURCHASE HERE

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: Lifetime guarantee. Proof of which is required for any claim.

Jack Sealey Ltd t/a Sealey Group, Kempson Way, Suffolk Business Park, Bury St Edmunds, Suffolk, IP32 7AR UK

Jack Sealey (EU) Ltd t/a Sealey Group, Farney Street, Carrickmacross, Co. Monaghan, A81 PK68 Ireland

Tel: 01284 757500 • **Email:** sales@sealey.co.uk • **Web:** www.sealey.co.uk