

# Electric Horizontal Log Splitter

## Operation Manual



**Please carefully read this operation manual before starting work.**



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# SAFETY INSTRUCTIONS

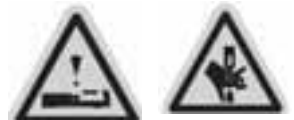
**Read and understand the owner's manual and labels affixed to the log splitter.  
Learn its application and limitations as well as the specific potential hazards.**

- Check your log splitter before use. Keep the guards in place and in working order. Check that any keys, tools or adjusting wrenches are removed from the tool area before switching on. Replace damaged, missing or failed parts immediately. Check that the electric circuit is adequately protected and that it corresponds with the power, voltage and frequency of the motor. Check that there is an earth connection, and a regulation differential switch upstream. Never open the pushbutton box on the motor – should this be necessary consult a qualified electrician. Make sure your fingers do not touch the plug's metal prongs when plugging in or unplugging the log splitter. If you need to use an extension lead, ensure that it is no longer than 10 metres and its cross-section is no less than 2.5mm<sup>2</sup> to allow sufficient current flow to the motor. Use lockable and adequately insulated connections. Connections must be made with protected material suitable for outdoor use. When unpacking the log splitter please ensure that you remove the wooden packing block and it's securing strap from under the motor.
- Do NOT operate the log splitter whilst under the influence of drugs, alcohol or any medication that could affect your ability to use the apparatus correctly.
- Dress appropriately – do NOT wear loose clothing, ties, jewellery or anything that could be caught in the moving parts. Protective, electrically non-conductive gloves and strong footwear are recommended.
- Cover or tie back long hair to prevent it getting caught in the machinery. ALWAYS wear safety goggles and ear protectors.
- Never stand on the log splitter. Keep proper footing and balance at all times. Ensure that the ground beneath the log splitter is not slippery. Do not store anything above or near the log splitter which would necessitate standing on the machine to reach it.
- The log splitter must always be operated by one person ONLY. Other people should keep a safe distance from the work area when the log splitter is in operation or switched on. Keep children away from the log splitter at all times. Store in a locked workshop and disconnect master switches after use.



# USE OF THE LOG SPLITTER

- Put the log splitter on a 60-70cm high, stable, flat and level work bench where there is plenty of room. If possible use a special log splitter stand. Bolt the log splitter to the work surface if it tends to walk, slip or slide. Keep your work area clean and well-lit. Cluttered areas invite injuries. Do NOT use the log splitter in wet or damp areas or expose it to rain. Do NOT use in an area where fumes from paint, solvents or inflammable liquid pose a potential hazard.
- Make sure there are no nails or foreign objects in the logs to be split. The ends of the logs must be cut square. Branches must be cut off flush with the trunk.
- Always pay full attention to the movement of the log pusher.
- Keep your hands away from splits and cracks which open up in the wood – they may close suddenly and cause injury. Do NOT attempt to remove jammed logs with your hands.
- The log splitter will do a better and safer job at its designed pressure/rate. Never try to split logs larger than those indicated in the specifications table. This could be dangerous and may damage the machine. Never leave the log splitter running unattended.
- Always pay full attention to the movement of the log pusher. Do not attempt to load the log on until the log pusher has stopped. Keep your hands away from all moving parts.
- Unplug when not in use, before making adjustments, changing parts, cleaning or working on the log splitter.
- Dispose of used oil responsibly. Take to an authorised collection point – refer to your local council for details. Do NOT discharge into drains, soil or water.



## APPLICATION CONDITIONS

The log splitter is for domestic use. It is designed for operation under ambient temperatures between +5°C and 40°C and for installation at altitudes of no more than 1000m above MSL. The surrounding humidity should be less than 50% at 40°C. It can be stored or transported under ambient temperatures between -25°C and 55°C.

# SPECIFICATIONS AND ELECTRICAL REQUIREMENTS

		LS7T-520
<b>Measurements</b>	<b>Length</b>	<b>96cm</b>
	<b>Width</b>	<b>27cm</b>
	<b>Height</b>	<b>47cm</b>
<b>Weight</b>		<b>49kgs</b>
<b>*Log Capacity</b>	<b>Diameter</b>	<b>5-30cm</b>
	<b>Max Length</b>	<b>52cm</b>
<b>Splitting Force</b>		<b>7 ton</b>
<b>Motor</b>		<b>220V-240V,50Hz,2350W,S6(40%),PI54</b>
<b>Hydraulic Pressure</b>		<b>22Mpa</b>
<b>Hydraulic Oil Capacity</b>		<b>2.9L</b>

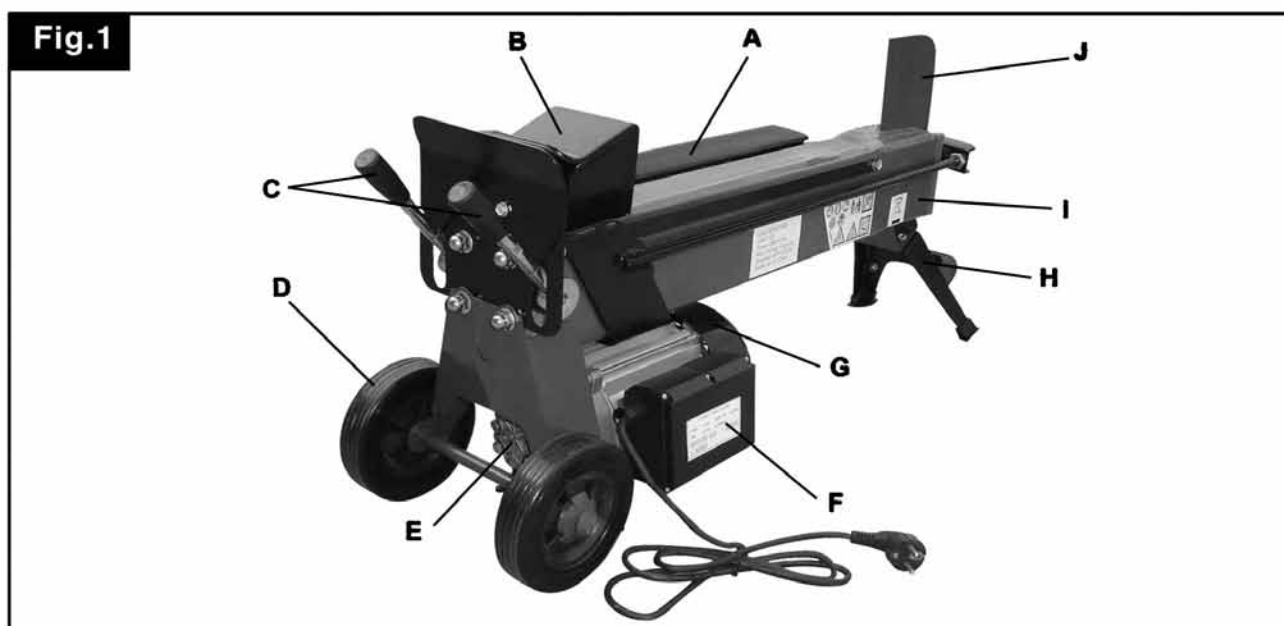
\* **Note:** the diameter of the log is not the only factor that determines how easy it is to split.  
A small log may be difficult to split if it has knots or is a particularly hard wood.

Connect the mains lead to a standard 230V $\pm$ 10% (50Hz  $\pm$ 1Hz) electrical supply which has under-voltage, over-voltage and over-current protection devices as well as a residual current device (RCD) with a maximum residual current rated at 0.03A.

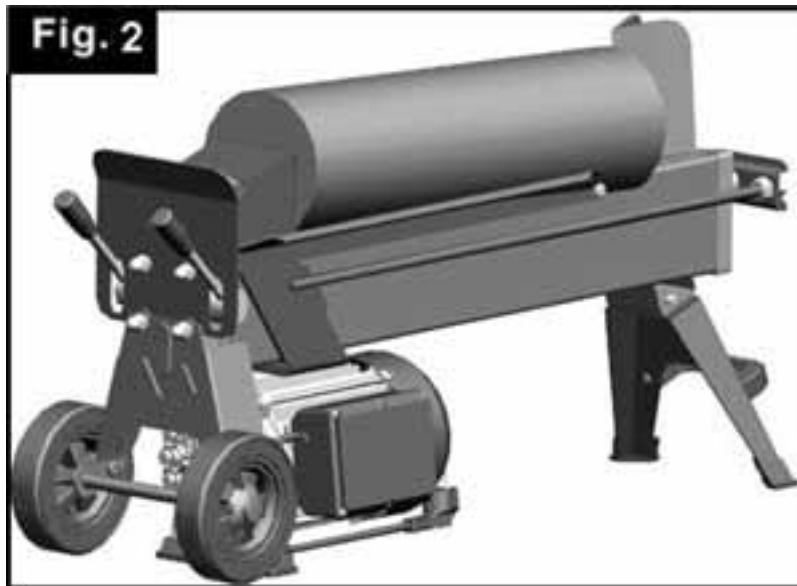
## LIST OF MAJOR COMPONENTS

Check these components according to the following list and Figure 1 below:

- A. Log Guiding Plates
- B. Log Pusher
- C. Operating Handle Assembly
- D. Wheel and Frame
- E. Oil Pump
- F. Electrical Motor Switch
- G. Electrical Motor Assembly
- H. Supporting Feet
- I. Main Body
- J. Splitting Wedge



# LOG SPLITTER OPERATION



1. Plan the work area before using the log splitter. Have the logs positioned where they can be easily reached.
2. The log splitter accommodates logs up to 52cm in length. The log splitter will work most efficiently on dry, seasoned logs.
3. Position the log splitter securely on level ground or on a secure stand. If necessary stabilise the wheels to prevent the log splitter from moving during use. If using an extension cable, do so in a safe way to avoid damaging the cable or creating a hazard.

4. Before operating the log splitter, the bleed screws (Fig 3) should be loosened by 3-4 turns to allow the air to go in and out of the oil tank. Re-tighten the screw when the work is complete or when moving the log splitter to avoid oil leaks.



5. Always place logs firmly on the main body, lying flat against the log guide plates (Ref A on Fig1). Never attempt to split a log at an angle and make sure the logs will not twist or slip whilst being split. Ensure the splitting wedge (Ref J on Fig1) and the log pusher (Ref B on Fig1) will make contact with the log squarely at each end.



6. For reasons of safety the log splitter requires a two-handed operation. Switch on the electric motor using the green starting switch (Ref F on Fig1). Using both hands press down on both operating handles (Ref C on Fig1). The log splitter will compress the log, pushing against the splitting wedge. When the log is split release both handles – this will allow the log pusher to retract.

**WARNING – Never force the splitting of a log by sustaining the hydraulic pressure for more than 5 seconds. Try re-positioning the log on the splitter.**

## TO FREE A JAMMED LOG

Release both operating handles so that the log pusher is fully retracted. Insert a triangular wedge of wood under the log and activate the log pusher to push the wedge under the jammed log. Repeat this process using progressively larger wedges until the jammed log is freed.



**WARNING – Never hammer a jammed log or place your hands near the log when attempting to free a jammed log.**

## SHARPENING THE WEDGE AND CLEANING THE GUIDE RAIL

After using the log splitter for some time, sharpen the wedge using a fine tooth file and smooth any burrs or rough edges along the cutting edge.

Clean the guide rail regularly, especially when splitting wood that is rich in resin.

# REPLACING HYDRAULIC OIL

Replace the hydraulic oil in the log splitter after every 150 hours of use. Take the following steps to replace the oil:

1. Make sure all moving parts are stopped and the log splitter is unplugged.
2. Unscrew the oil drain bolt.
3. Turn the log splitter onto the support leg side and hold over a 3 litre container to drain the oil into.
4. Turn the log splitter vertically to stand on its end with the motor underneath and the operating handles uppermost.
5. Fill with fresh hydraulic oil. As stated in the Specifications Table on page 5 the correct oil capacity is 2.9L.
6. Clean the surface of the dipstick, which is attached to the oil drain bolt, with a clean lint free cloth and put back into the tank to check the new level. Make sure the level of the refilled oil is just between the two grooves around the dipstick.
7. Clean the oil drain bolt before screwing it back. Make sure it is tightened to avoid leakage before placing the log splitter horizontally.



**Periodically check the oil level to ensure it is between the two grooves on the dipstick. Refill when the oil reaches the lower level.**

The following hydraulic oils or equivalent are recommended for the log splitter's hydraulic transmission system:

SHELL Tellus 22  
MOBIL DTE 11  
ARAL Vitam GF22  
BP Energol HLP-HM22



# TROUBLE SHOOTING

Problems that may arise when using the log splitter and some recommended actions and checks are shown in the table below:

Problem	Probable Cause	Corrective Action
Log fails to split....	<p>Incorrect positioning of log.</p> <p><i>The log exceeds permitted dimensions or the wood is too hard for the machine.</i></p> <p>Wedge does not cut.</p> <p><i>Oil leak.</i></p> <p>Hydraulic pressure is too low.</p>	<p>Ensure log is positioned correctly.</p> <p><i>Try to cut a small part or reduce log size using other means.</i></p> <p>Sharpen the wedge and file if necessary.</p> <p><i>Locate leak using a piece of wood or card.</i></p> <p>Contact your local dealer.</p>
Log Pusher/Cams advance jerkily or with strong upward vibrations.....	Air in the circuit.	Check oil level and fill if necessary. If problem persists contact your local dealer.
Oil leak from the cams or other external points....	<p>Leakage from the oil tank</p> <p><i>Seals worn.</i></p>	<p>Check that the bleed screw has been unscrewed before use.</p> <p><i>Contact your local dealer.</i></p>