

Bäumr-AG

Electric Log Splitter

User Manual



RETAIN THIS MANUAL FOR FUTURE REFERENCE
PLEASE READ THIS MANUAL CAREFULLY BEFORE USE

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Preface

Thanks for buying the Log Splitter, another high-quality machine from our company.

To get the most out of your purchase, please read the manual before using the log splitter.

We ask you to please read this manual carefully beforehand in order to familiarize yourself with this product and after reading, please store this instructional manual for future reference. Keep this manual in a safe place for future and regular reference and for ordering replacement parts. Failure to follow the proper protocols listed in the manual may cause personal injury to the operator or damage to equipment.

Restrict the use of this machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine. Some of the safety labels are reproduced here. Always follow directions on safety labels found on your equipment.

Please pay special attention when you see this icon.



Application Conditions

It is designed for operating under ambient temperatures between +5°C and 40°C and for installation at altitudes no more than 1000m above M.S.L. 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.

Safety Information

General

- Be familiar with all controls and proper operation. Know how to stop the machine quickly.
- Never allow children to operate this machine. All users must read and understand instructions and safety rules in this manual.
- Many accidents occur when more than one person operates the machine. If a helper is assisting in loading logs, never activate the control until the helper is at a minimum of 30m from the machine.
- Keep bystanders, helpers, pets and children at least 60m from the machine while it is in operation.
- Never allow anyone to ride on this machine.
- Never transport cargo on this machine.
- Hydraulic log splitters develop high fluid pressures during operation. Fluid escaping through a pin hole opening can penetrate your skin and cause blood poisoning, gangrene or death. Pay attention to the following instructions at all times:
 - a. Do not check for leaks with your hand.
 - b. Do not operate machine with frayed, kinked, cracked, or damaged hoses, fitting, or tubing.
 - c. Stop the engine and relieve hydraulic system pressure before changing or adjusting fittings, hoses, tubing, or other system components.
 - d. Do not adjust the pressure settings of the pump or valve.
- Leaks can be detected by passing cardboard or wood, (while wearing protective gloves and safety glasses) over the suspected area. Look for discoloration of cardboard or wood.
- If injured by escaping fluid, see a doctor immediately. Serious infection or reaction can develop if proper medical treatment is not administered immediately.
- Keep the operator zone and adjacent area clear for safe, secure footing.
- This machine should be used for splitting wood only, do not use it for any other purpose.

Preparation

- Always wear safety shoes or heavy boots.
- Always wear safety glasses or safety goggles during operating this machine.
- Never wear jewellery or loose clothing that might become entangled in moving or rotating parts of the machine.
- Make sure machine is on level surface before operating.
- Always block/chock the machine to prevent unintended movement and lock in either horizontal or vertical position.
- Always operate this machine from the operator zone(s) specified in the manual.
- Logs should be cut with square ends prior to splitting.
- Use log splitter in daylight or under good artificial light.

Operation

- Never leave this machine unattended with the engine running.
- Do not operate machine while under the influence of alcohol, drugs, or medication.
- Never allow anyone to operate this machine without proper instruction.
- Always operate this machine with all safety equipment in place and working. Make sure all controls are properly adjusted for safe operation.
- Do not change the engine governor settings or over-speed the engine. The governor controls the maximum safe operating speed of the engine.
- When loading a log, always place your hands on the sides of the log, not on the ends, and never use your foot to help stabilize a log. Not following these instructions may result in crushed or amputated fingers, toes, hand, or foot.
- Use only your hand to operate the controls.
- Never attempt to split more than one log at a time unless the ram has fully extended and a second log is needed to complete the separation of the first log.
- For logs which are not cut square, the least square end and the longest portion of the log should be placed toward the beam and wedge, and the square end placed toward the end plate.
- When splitting in the vertical position, stabilize the log before moving the control. Split as follows:
 - a. Place log on the end plate and turn until it leans against the beam and is stable.
 - b. When splitting extra-large or uneven logs, the log must be stabilized with wooden shims or split wood between the log and end plate or ground.
- Always keep fingers away from any cracks that open in the log while splitting. They can quickly close and pinch or amputate your fingers.
- Keep your work area clean. Immediately remove split wood around the machine so you do not stumble over it.
- Never move this machine while the engine is running.
- This machine should not be towed on any street, highway or public road.
- Do not tow machine faster than 45kph on smooth ground.
- This machine is not approved for towing on Australian public roads.
- See Transporting the Log Splitter section in this manual for proper towing instructions once all federal, local, or state requirements are met.

Maintenance

- Stop the engine and relieve hydraulic system pressure before repairing or adjusting fittings, hoses, tubing, or other system components.
- To prevent fires, clean debris and chaff from the engine and muffler areas. If the engine is equipped with a spark arrester muffler, clean and inspect it regularly according to manufacturer's instructions. Replace if damaged.
- Periodically check that all nuts and bolts, hose clamps, and hydraulic fittings are tight to be sure equipment is in safe working condition.
- Check all safety guards and shields to be sure they are in the proper position. Never operate with safety guards, shields, or other protective features removed.

- The pressure relief valve is pre-set at the factory. Do not adjust the valve.
- Never attempt to move this machine over hilly or uneven terrain without a tow vehicle or adequate help.
- For your safety, replace all damaged or worn parts immediately with original equipment manufacturer's (O.E.M.) parts only. "Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety!"
- Do not alter this machine in any manner, alterations such as attaching a rope or extension to the control lever, or adding to the width or height of the wedge may result in personal injury.

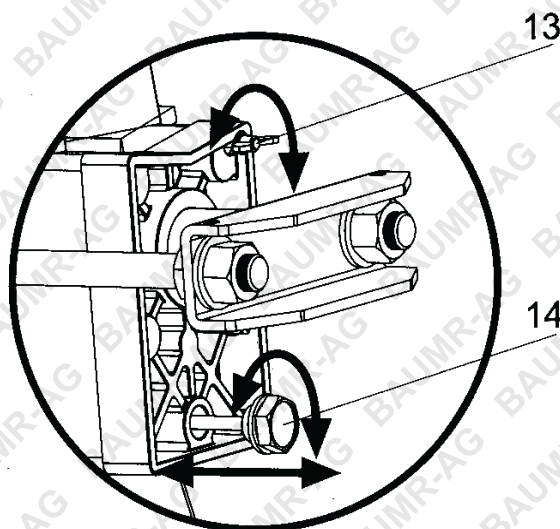
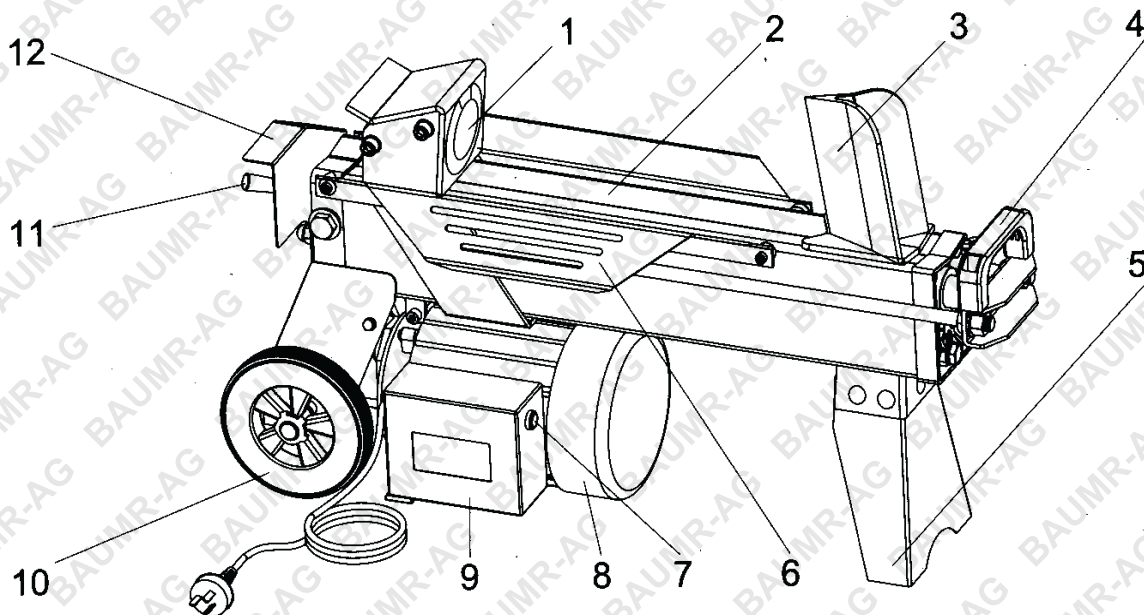
Set Up Preparation for Operation



Place it on a stable, flat and level work surface.

2 people are required to assemble the splitter.

1. Pry top, sides, and ends off the pallet. Set panels aside to avoid tire puncture or personal injury.
2. Remove any loose parts if included with unit (i.e. operator's manual, etc.)
3. Cut and remove straps which secure parts to bottom of pallet. Unbolt and remaining parts which may be bolted to the bottom of the pallet. Familiarise yourself with the controls and features of this log splitter in the illustrations.



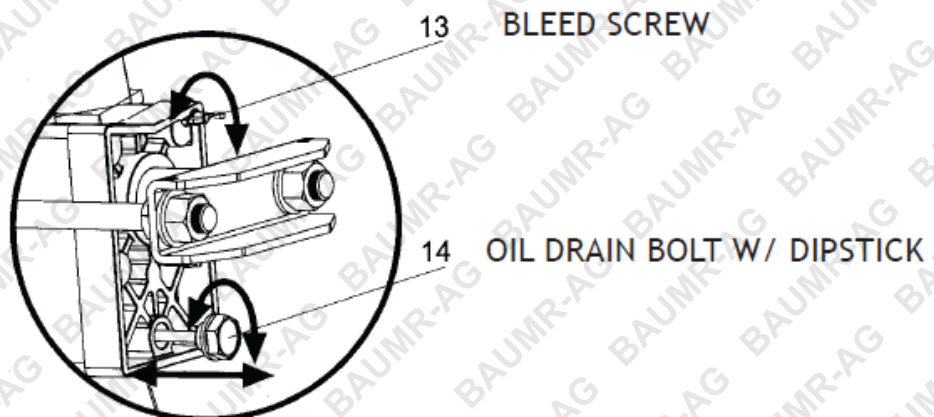
1.	Log Pusher	8.	Motor
2.	Work Table	9.	Pushbutton Box
3.	Wedge	10.	Wheels for Minor Moving Only
4.	Lift Handle	11.	Hydraulic Control Lever
5.	Support Leg	12.	Control Lever Guard
6.	Log Retaining Plates	13.	Bleed Screw
7.	Switch	14.	Oil Drain Bolt w/ Dipstick

Bleed Screw

Before operating the log splitter, the bleed screw (oil drain bolt with dipstick) should be loosened by rotation until air can go in and out of the oil tank smoothly.

Air flow through the bleed screw hole should be detectable while the log splitter is in operation.

Before moving the log splitter, make sure the bleed screw is tightened to avoid oil leaking from this point.



Before operation, loosen the bleed screw/ oil filter plug to allow air to escape while in use.



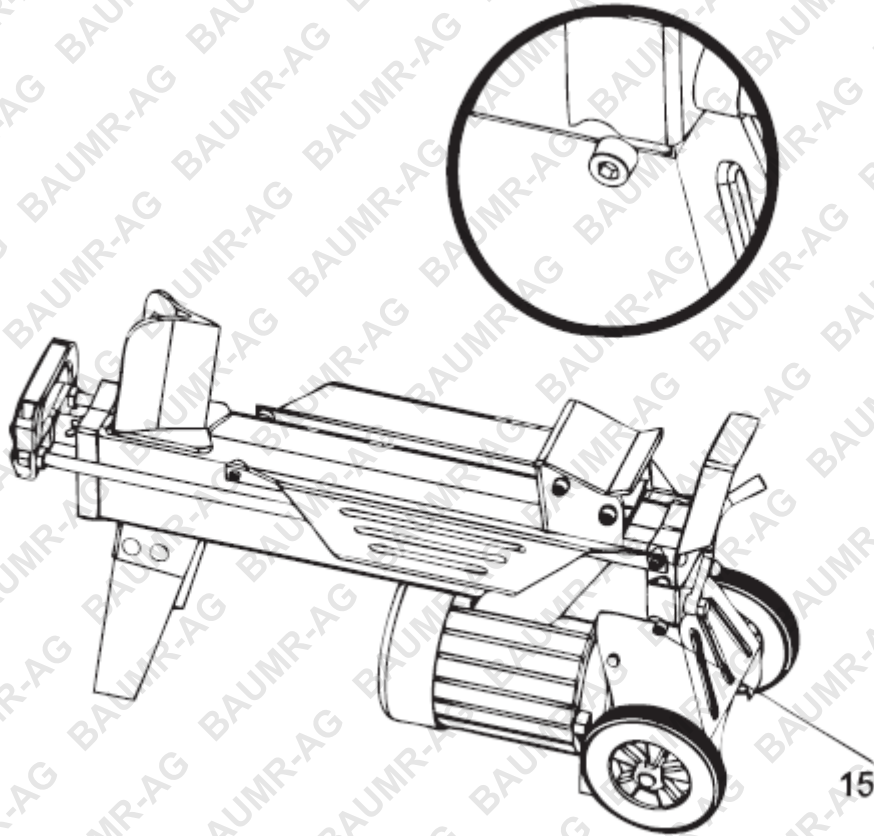
Failure to loosen the bleed screw will keep the air in the hydraulic system compressed. Continuous air compression and decompression will blow out the seals of the hydraulic system and cause permanent damage to the log splitter.

Max Pressure Limiting Screw

Do not adjust the Max Pressure Limiting Screw

Max pressure has already been set on the log splitter and the max pressure limiting screw is sealed to ensure the log splitter works under a pressure set by the manufacturer. This setting was done by qualified mechanics with professional instruments.

Unauthorised resetting could result in damage to the machine and possible serious injury to the user.



MAX PRESSURE LIMITING SCREW

Log Splitter Operation

This log splitter is equipped with a “ZHB” control system that is designed to be operated by both hands of the user.

The left hand controls the hydraulic control lever while right hand controls the other hydraulic control.

The log splitter will freeze upon absence of either hand. Only after both hands are released from the controls will the log pusher then return backwards to the starting position.

When in use, ensure that the oil hasn't overheated as this can cause damage to the log splitter.

For extremely hard logs, try rotating it by 90° to see whether it can be split in a different direction. In the case of not being able to split the log, this means that the hardness of the log exceeds the capacity of the machine and thus that log should be pre-cut with a chainsaw to prevent damage to the log splitter.

Placing the Logs

Always set logs firmly on the log retaining plates and work table. Make sure that the logs will not twist, rock or slip while being split. Do not force the blade by splitting the log on the upper part. This will break the blade or damage the machine.

Break the log in the direction of its growing grain. Do not place the log across the log splitter for splitting. It may be dangerous and may seriously damage the machine. Do not attempt to split 2 pieces of log at the same time. One of them may fly up and hit you.

Maintenance



Before cleaning, lubricating, repairing or inspecting, disengage the control lever and stop engine. For petrol engines, disconnect the spark plug wire and ground it against the engine to prevent unintended starting. In the case of a diesel engine, stop the engine and disconnect the high pressure diesel line.

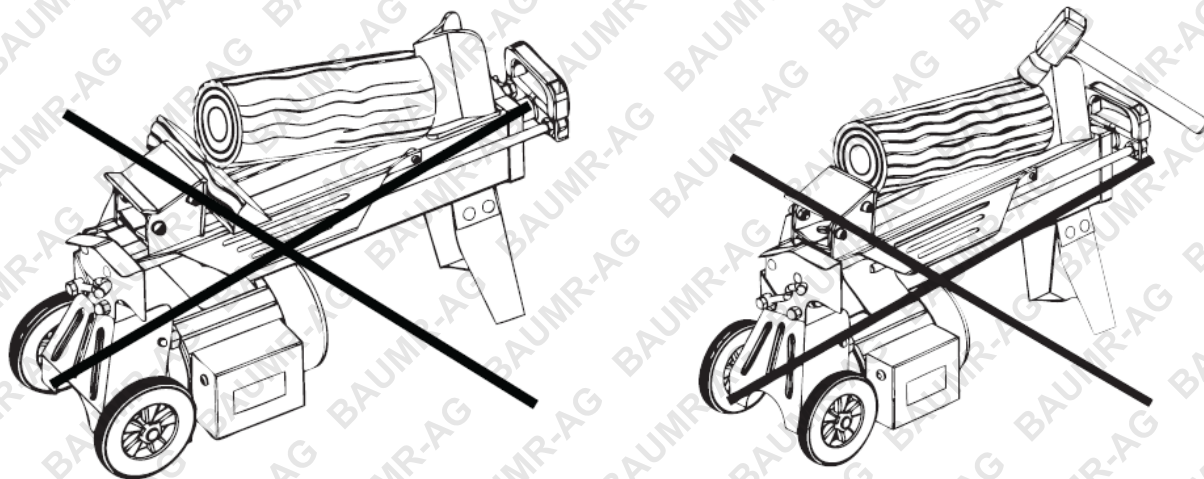
The following conditions may damage the splitter. Damages from these conditions are not covered under warranty:

- Failure to maintain proper fluid level in the reservoir.
- Changing the relief valve setting or pressure adjustment of control valve without proper knowledge and instruction from the factory. Higher pressures could cause the hoses to burst, the cylinder to rupture, and pressurized fluid to be released, which could result in serious personal injury.
- Disassembling the pump.
- Use of incorrect hydraulic fluid.
- Allowing the flexible pump coupler to deteriorate without proper and regular inspection.
- Lack of lubrication or improper lubrication of the beam or unit.
- Improper adjustment of the splitting wedge.
- Excessive heating of the hydraulic system.
- Attempting to start the unit in temperatures under -7°C without pre-heating the fluid in the reservoir.
- Unattended leaks in the hydraulic system.

Freeing a Jammed Log

1. Release both controls.
2. After the log pusher moves back and completely stops at its starting position, insert a wedge of wood under the jammed log.
3. Start the log splitter and push the wedge of wood so that it is completely under the jammed one.
4. Repeat the above procedure until the log is completely freed.

Do not try to knock the jammed log off. This could damage the machine or may launch the log causing an accident.



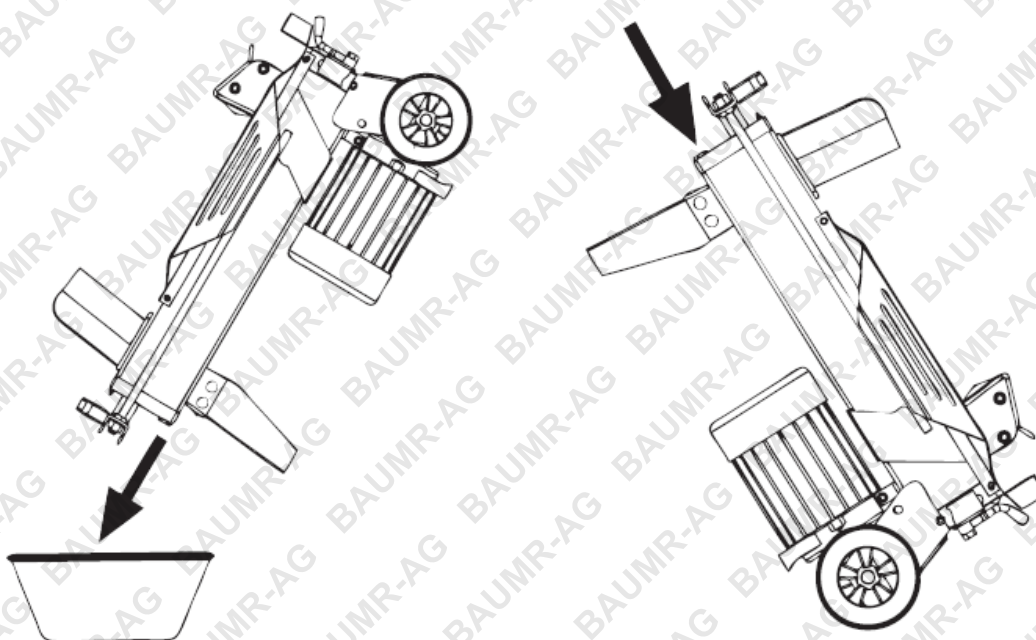
Replacing the Hydraulic Oil

Hydraulic Oil Type: Use 10w-30/ 10w-40/ 15w-30/ 15w-40 non-synthetic engine oil.

- Check the hydraulic fluid level in the log splitter reservoir tank before each use.
- Maintain the fluid level within the range specified on the dipstick at all times.
- Change the hydraulic fluid in the reservoir every 150 hours of operation.
- Disconnect the suction hose from the bottom of the reservoir tank and drain the fluid into a suitable container.

Please dispose of used hydraulic fluid and engine oil at approved recycling centres only.

- Since contaminants in fluid may damage the hydraulic components, you will have to drain the fluid and flush the reservoir tank and hoses with kerosene whenever any repair work is performed on the tank, hydraulic pump or valve. For this job, contact your nearest service dealer.



Sharpening the Wedge

After using the log splitter for a period of time, sharpen the wedge of the log splitter using a metal file. File and smooth any burrs or crushed areas along the cutting edge.

Hose Clamps

Before each use, check that the hose clamps on the suction hose (attached to the side of the pump) are tight. Check the hose clamps on the return hose at least once a season.

Tyres



See sidewall of tire for recommended pressure. Maximum tire pressure under any circumstances is 30 psi. Maintain equal pressure on all tires.

Excessive pressure (over 30 psi) may cause tire/rim assembly to burst with a force sufficient enough to cause serious injury.

Storing Your Log Splitter

Prepare your log splitter for storage at the end of the season or if the log splitter remains unused for 30 days or more.



Never store machine with fuel in the fuel tank inside of building where fumes may reach an open flame or spark, or where ignition sources are present such as hot water, space heaters, furnaces, clothes dryers, stoves, electric motors, etc.



We do not recommend the use of pressure washers or garden hose to clean your unit. These may cause damage to electric components, spindles, pulleys, bearings or the engine. The use of water will shorten its life and reduces serviceability.

- Clean the log splitter thoroughly.
- Wipe the unit with an oiled rag to prevent rust, especially on the wedge and the beam.
- Drain the fuel tank. Always drain fuel into approved container outdoors, away from open flame. Be sure that engine is cool before draining the fuel. Do not smoke while handling fuel.
- Start the engine and let it run until the fuel lines and carburettor are empty (petrol engines only).
- Remove the spark plug. Pour approximately 1/2 ounce (approximately one tablespoon) of engine oil into cylinder and crank slowly to distribute oil (petrol engines only).
- Replace spark plug (petrol engines only).
- Do not store fuel from one season to another.
- Replace your fuel can if it starts to rust. Rust and/or dirt in the fuel will cause problems.
- Store unit in a clean, dry area. Do not store next to corrosive materials such as fertilisers.



If storing in an unventilated or metal storage shed, make sure to protect the equipment from rust by coating it with a light oil or silicone.

Transportation

Always turn the fuel valve to off position before transporting the log splitter.

1. Attach the hitch coupler to a class I or higher hitch with a suitable ball on the towing vehicle, making sure to latch securely.
 - a. If the coupler hitch does not fit on the ball, turn the adjustment nut one turn counter clockwise.
 - b. If the coupler hitch is too loose on the ball, turn the adjustment nut one turn clockwise.
2. Connect the safety chains to the towing vehicle.

Do not tow faster than 45km/hr. on a smooth surface. The splitter cannot be towed on a public road in Australia or New Zealand.

Use caution when reversing. It is recommended to use a spotter outside the vehicle.

Troubleshooting

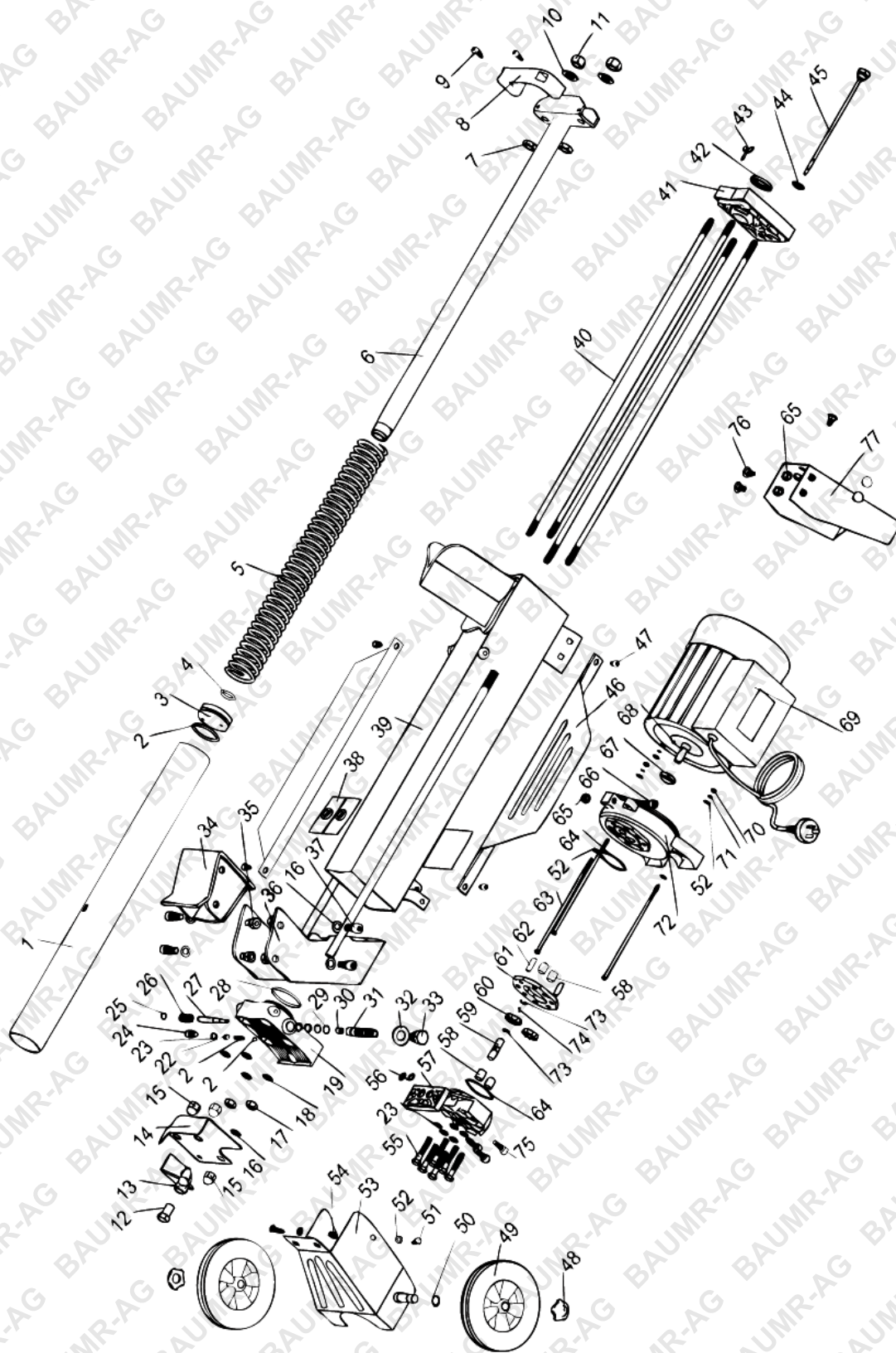
Problem	Cause	Remedy Suggested
Fails to split logs	Log is improperly positioned	Refer to 'Log Splitter Operation' section on how to load a log
	The size or hardness of the log exceeds the capacity of the machine	Reduce the log sizes before splitting it in the splitter
	Wedge cutting edge is blunt	Refer to 'Sharpening Wedge' section in the manual
	Oil leaks	Locate leak and contact the dealer
	Unauthorised adjustment was made on Max Pressure Limiting Screw. Lower max pressure rating was set.	Consult a mechanic
The ram moves jerkily, making unfamiliar noise or vibrating a lot	Lack of hydraulic oil and excessive air in the hydraulic system	Check oil level
Oil leaks around cylinder ram or from other points.	Air sealed in hydraulic system while operating	Loosen bleed screw before operating the log splitter
	Bleed screw is not tightened before moving the log splitter	Tighten the bleed screw up before moving the log splitter
	Oil drain bolt with dip- stick is not tight	Tighten the oil drain bolt with dipstick

Hydraulic Troubleshooting

Cylinder rod will not move	Broken drive shaft	Consult a mechanic
	Shipping plugs left in hydraulic hoses	Disconnect hydraulic hoses, remove shipping plugs, and then reconnect hoses.
	Set screws in coupling not adjusted properly	Adjust coupling screws
	Loose shaft coupling	Correct engine/pump alignment as necessary
	Gear sections damaged	Consult a mechanic
	Damaged relief valve	Consult a mechanic
	Hydraulic lines blocked	Flush and clean hydraulic system
Extremely slow cylinder shaft speed while extending and retracting	Gear sections damaged	Consult a mechanic
	Excessive pump inlet vacuum	Make certain pump inlet hoses are clear and unblocked. Use short, large diameter inlet hoses

Hydraulic Troubleshooting		
	Slow engine speed	Adjust throttle setting
	Damaged relief valve	Consult a mechanic
	Incorrect oil level	Check oil level
	Contaminated oil	Drain oil, clean reservoir and refill
	Directional valve leaking internally	Consult a mechanic
	Internally damaged cylinder	Consult a mechanic
Leaking cylinder	Broken seals	Consult a mechanic
	Scored cylinder	Consult a mechanic
Engine runs but wood will not split or wood splits extremely slowly	Small gear section damaged	Consult a mechanic
	Pump check valve leaking	Consult a mechanic
	Excessive pump inlet vacuum	Make certain pump inlet hoses are clear and unblocked
	Incorrect oil level	Check oil level
	Contaminated oil	Drain oil, clean reservoir and refill
	Directional valve leaking internally	Consult a mechanic
	Overloaded cylinder	Do not attempt to split wood against the grain
	Internally damaged cylinder	Consult a mechanic
Leaking pump shaft seal	Broken drive shaft	Consult a mechanic
	Engine/pump misalignment	Correct alignment as necessary
	Gear sections damaged	Consult a mechanic
	Poorly positioned shaft seal	Consult a mechanic
	Plugged oil breather	Make certain reservoir is properly vented

Parts



No	Name	No	Name	No	Name
1	Oil Cylinder	32	Gasket 16	63	Motor Connecting Spindle
2	ST-Style Gasket 44x55	33	Screw M14x1.5	64	Ring 46.2x1.8
3	Piston	34	Pushing Plate	65	Nut 6
4	ST-Style Gasket	35	Nut M10	66	Inner Hexagonal Bolt M6x30
5	Big Spring	36	Support Bracket	67	Framework Oil Seal
6	Piston Rod	37	Inner Hexagon Bolt M8x15	68	Motor Spindle
7	Nut M14	38	Plastic Pad 1	69	Motor
8	Lift Handle	39	Workable Tank	70	Nut 6
9	Inner Hexagon Bolt M6x16	40	Two-Head Bolt	71	Stretching Pad 6
10	Washer 14	41	Oil Tank Aluminium Cover	72	Front Aluminium Cover
11	Anti-loose Nuts M14	42	CK-Type Dustproof Ring 30x41.8	73	Steel Stop 11
12	Fixing Nut for Handle	43	Butterfly Style Nut M4x16	74	Ball 2.5
13	Operation Handle	44	Gasket 10	75	Hexagon Nut M8x30
14	Handle Guard	45	Oil Ruler	76	Bolt M8x20
15	Cover Type Nut M10	46	Support & Protection Guard	77	Frontal Support Stand
16	Washer M10	47	Inner Hexagon Bolt M6x10		
17	Nuts M10	48	Red Plastic Cover		
18	Gasket	49	Wheel		
19	Aluminium Block	50	Spindle Cap 13		
20	Steel Ball S6 (Diameter)	51	Cross Half-Round Head Bolt M6x10		
21	Spring 6.2x1.6	52	Washer 6		
22	Fixing Bolt M8x8	53	Back Steel Plate Support		
23	O Ring 8x1.8	54	Nut M6		
24	Column Head Bolt M8x10	55	Hexagonal Head Bolt M8x55		
25	Stop Ring 6	56	O Ring 10x2.65		
26	Small Spring 7.8	57	Gear Pump Housing		
27	Small Spindle	58	Roll Spindle 13x11x15		
28	Gasket 55x3.1	59	Gear Spindle		
29	O Ring 10.6x1.8	60	Gear		

Electric Log Splitter

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No	Name	No	Name	No	Name
30	Inner Sheath	61	Middle Clapboard		
31	Small Spindle Sheath	62	Column Pin 8x25		

Specifications

Model Number		LS7T-52
Motor		240V~ 50Hz 2350W
Log Capacity	Diameter	5-25cm
	Length	52cm
Splitting Force		7T
Hydraulic Pressure		16Mpa
Hydraulic Oil Capacity		4.2L
Overall Size	Length	940mm
	Width	260mm
	Height	480mm
Weight		44kg



Some experts believe the incorrect or prolonged use of almost any product could cause serious injury or death. For information that may reduce your risk of serious injury or death consult the points below and additionally, the information available at www.datastreamserver.com/safety

- Consult all documentation, packaging and product labelling before use. Note that some products feature online documentation which should be printed and kept with the product.
- Check product for loose / broken / damaged / missing parts, wear or leaks (if applicable) before each use. Never use a product with loose / broken / damaged / missing parts, wear or leaks (if applicable).
- Products must be inspected and serviced (if applicable) by a qualified specialist every 6 months assuming average residential use by a person of average weight and strength, above average technical aptitude, on a property matching average metropolitan specification. Intended use outside these guidelines could indicate the product is not suitable for intended use or may require more regular inspection or servicing.
- Ensure all possible users of the product have completed an industry recognised training course before being given access to the product.

- The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or your description of the application. Be sure to attain third party approval for your application from a qualified specialist before use regardless of prior assurances by the retailer or its representatives.
- This product is not intended for use where fail-safe operation is required. As with any product (take an automobile, aircraft, computer or ball point pen for example) there is always a small chance of a technical issue that needs to be repaired or may require replacement of the product or a part. If the possibility of such failure and the associated time it takes to rectify could in any situation inconvenience the user, business or employee or could financially affect the user, business or employee then the product is not suitable for your requirements. This product is not for use where incorrect operation or a failure of any kind, including but not limited to a condition requiring product return, replacement, service by a technician or replacement of parts could cause a financial loss, loss of employee time or an inconvenience requiring compensation.
- If this item has been purchased in error considering the points above simply contact the retailer directly for details of their returns policies if required.

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