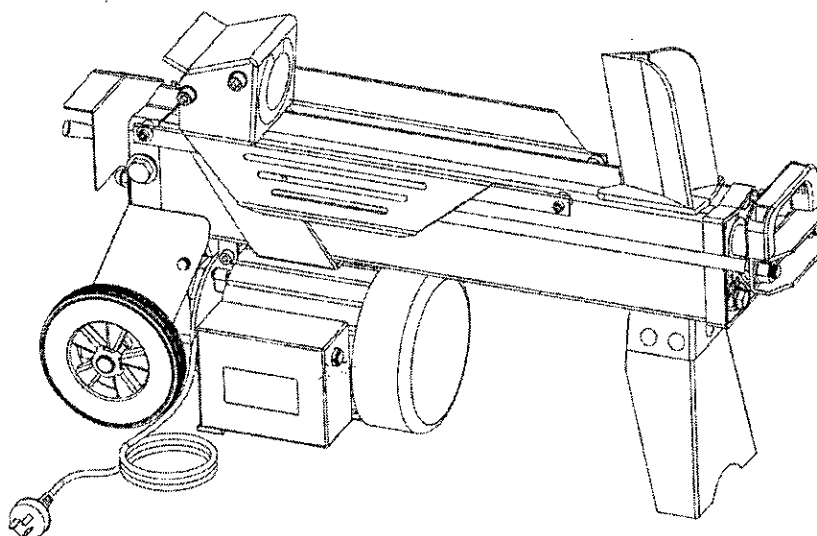


# Earthquake<sup>®</sup>

## **OPERATING & PARTS MANUAL**

### **W1000**

### **4-Ton Mini Electric Log Splitter**



OMW1000

Rev. 9/27/06

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## THANK YOU . . .

for purchasing an Earthquake® Mini Electric Log Splitter from Ardisam, Inc. We have worked to ensure that the splitter meets high standards for usability and durability. With proper care, your log splitter will provide many years of service. Please take the time to read this manual carefully to learn how to correctly operate and maintain your log splitter. Congratulations on your investment in quality.

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## REGISTRATION

Fill out and mail the registration card located in your Owner's Manual packet. Warranty is valid only if your completed registration card is received by Ardisam, Inc., at time of purchase.

Model Number \_\_\_\_\_

Serial Number \_\_\_\_\_

Date of Purchase \_\_\_\_\_

Place of Purchase \_\_\_\_\_

## WARRANTY

### One Year Limited Warranty

The Ardisam, Inc., Manufacturing Company warrants this Earthquake® Mini Electric Log Splitter to be free from defects in material and/or workmanship. Conditions of this warranty include:

#### What is covered under warranty:

For the first year from the date of purchase, Ardisam will furnish 100% parts and labor to correct any defect caused by faulty material or workmanship. All repairs made under warranty must have prior approval from Ardisam, Inc.

#### What is not covered under warranty:

This warranty applies only to products which have not been repaired or altered outside our factory. It covers only defects resulting from normal use, and does not cover defects arising from misuse, alteration, negligence, or accident. Items subject to normal wear and tear, due to the nature of their function are not covered under this warranty. This warranty applies only to the original purchaser, and is not transferrable. Any unit used in a commercial application is not covered.

#### How to obtain warranty service:

Call 800-345-6007 for service assistance, or return the product to us at the address below with transportation charges prepaid.

*This warranty supersedes all other warranties either expressed or implied, and all other obligations or liabilities on our part. Ardisam, Inc., does not assume, and does not authorize any other person to assume for us, any liability in connection with the sale of our products. This guarantee is void unless the warranty card is properly filled out and returned to Ardisam, Inc., Cumberland, Wisconsin, within two weeks of the purchase date.*



Earthquake, A Division of Ardisam, Inc.  
1690 Elm Street; P.O. Box 666  
Cumberland, Wisconsin 54829

800-345-6007 · Fax (715) 822-2223  
Email: [info@ardisam.com](mailto:info@ardisam.com)

## OWNER'S RESPONSIBILITY

**Safe and effective use of the mini electric log splitter is the owner's responsibility.**

- Read and follow all safety instructions.
- Maintain the log splitter according to directions and schedule, included in this Earthquake Operator's Manual.
- Check your log splitter before turning it on. Keep guards in place and in working order. Replace damaged, missing or failed parts before using it.
- Ensure that anyone who uses the log splitter is familiar with all controls and safety precautions.

## SPECIAL MESSAGES

Your manual contains special messages to bring attention to potential safety concerns, machine damage, as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.



### CAUTION

**Avoid injury! This symbol and text highlight's potential hazards or death to the operator or bystanders that may occur if the hazards or procedures are ignored.**



**Avoid damage! This text is used to tell the operator of actions or conditions that may result in damage to the machine.**

**NOTE: General information is given throughout the manual that may help the operator perform the operation or service of the machine.**

## IMPORTANT SAFETY PRECAUTIONS

**Please read this section carefully.** Operate the mini electric log splitter according to the safety instructions and recommendations outlined here, and stated throughout the text. Anyone who uses this log splitter must read the instructions carefully and be familiar with the controls.



**This symbol signifies important safety instructions, which, if not followed could endanger your personal safety. Read and follow all instructions in this manual before attempting to operate this equipment.**

- Do not transport the log splitter with the motor running.
- Dress appropriately when operating the log splitter. Always wear sturdy footwear. Do not wear sandals, sneakers, or open toed shoes, and never operate the log splitter with bare feet. Do not wear loose clothing or jewelry that may get caught in moving parts. Always wear safety goggles for eye protection. Everyday glasses have only impact resistant lenses and are not effective safety glasses.
- Always pay full attention to the movement of the log pusher. Do not attempt to load the log onto the log splitter until the log pusher has come to a complete stop. Always keep hands, feet, hair and loose clothing away from any moving parts on the log splitter.
- Do not allow children to operate this log splitter. Adults should not operate the log splitter without proper instruction.
- Do not operate any power equipment under the influence of drugs, alcohol, or any medication that could affect your ability to use the equipment properly.
- Always keep your work area clean and well lit.
- Keep all screws, nuts and bolts tight.
- Always inspect the logs to be split for nails or other foreign objects. The ends of the logs must be cut square. Branches must be cut off flush with the trunk.
- Do not overreach. Keep proper footing and balance at all times. Never stand on the log splitter. Do not use the log splitter as a step.
- Do not operate the log splitter from ground level. Place log splitter at a comfortable height (24-32 inches), on a stable, flat, and level work surface where there is plenty of room for handling material. Bolt the log splitter to the work surface if it tends to slip, walk, or slide.

- Do not use the log splitter in wet or damp areas or expose to rain.
- Never try to split logs larger than those indicated in the specifications table. Failure to do so may damage the machine. Do not use the log splitter for anything other than splitting logs. Do not force log through splitter.
- Never use an extension cord that is not rated for outdoor use. The cord should not be longer than 30 feet.
- 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 a ground connection, and a regulation differential switch upstream. Ground the log splitter. Prevent body contact with ground surfaces: pipes, radiations, ranges, refrigerator enclosures, etc. Never open the pushbutton box on the motor. Make sure your fingers do not touch the plug's metal prongs when plugging or unplugging the log splitter.
- Do not remove jammed logs with your hands. If an object becomes lodged in the ram, unplug electric motor before attempting to remove the foreign object.
- Do not use the log splitter in areas where fumes from paint, solvents, or flammable liquids pose a potential hazard.
- Use only original equipment parts from Ardisam, Inc., including all nuts and bolts.
- Disconnect power by unplugging power cord when not in use, before making adjustments, changing parts, cleaning, or working on the log splitter.
- Maintain and keep the log splitter clean for the best and most safe performance.

## STEPS FOR WORKING ON MINI ELECTRIC LOG SPLITTER

1. Turn off motor switch. Unplug motor.
2. Replace or repair the part on the log splitter.
3. Check all parts that were repaired, or removed during repair, to ensure they are secure and fit correctly.

**NOTE: All repair parts must come from the factory. Never replace parts that are not specifically designed for this log splitter.**

## SAFETY DECAL

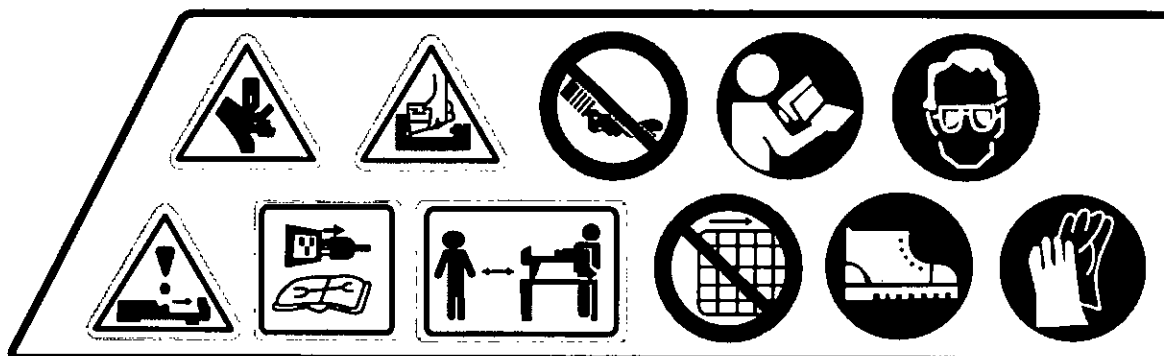
The Earthquake® Mini Electric Log Splitter has been designed and manufactured to provide you with the safety and reliability you would expect from an industry leader in outdoor power equipment manufacturing.

Reading this manual, and the safety instructions it contains, will provide you with the necessary knowledge to operate this equipment safely and effectively. We have placed a safety decal on the log splitter to remind you of some of the important information while you are operating the unit.

This important safety decal is illustrated below, and is shown here, to help familiarize you with the location and content of the safety messages you will see as you perform normal log splitting operations. Please review this decal now, and if you have any questions regarding its meaning or complying with these instructions, reread the complete safety instruction text in this manual, or contact your local dealer.

Should this decal become unreadable, because of being worn, faded, or otherwise damaged during the use of your log splitter, please use the part number information provided to order a replacement label from your local authorized dealer. These decals are easily applied, and will act as a constant visual reminder to you, and others who may use the equipment, to follow the safety instructions necessary for safe, effective operation of your log splitter.

**Part No. LBLW1000SH**  
**Warning Decal W1000**  
**Frame Decal**



# SPECIFICATIONS AND ELECTRICAL REQUIREMENTS

**Earthquake**

## APPLICATION CONDITIONS

The Earthquake® Mini Electric Log Splitter has been designed as a home use model only. It is designed for operating under ambient temperatures between 40° F. and 105° F. and install at altitudes no more than 3,250 ft. above M.S.L. The surrounding humidity should be less than 50% at 100° F. The log splitter can be stored or transported under ambient temperatures between -10° F. and 130° F.

## ELECTRICAL REQUIREMENTS

Connect the main leads to a standard 110V  $\pm 10\%$  electrical supply which has protection devices under-voltage, over-voltage, over-current, as well as a residual current device (RCD) with a maximum residual current of 0.03A.

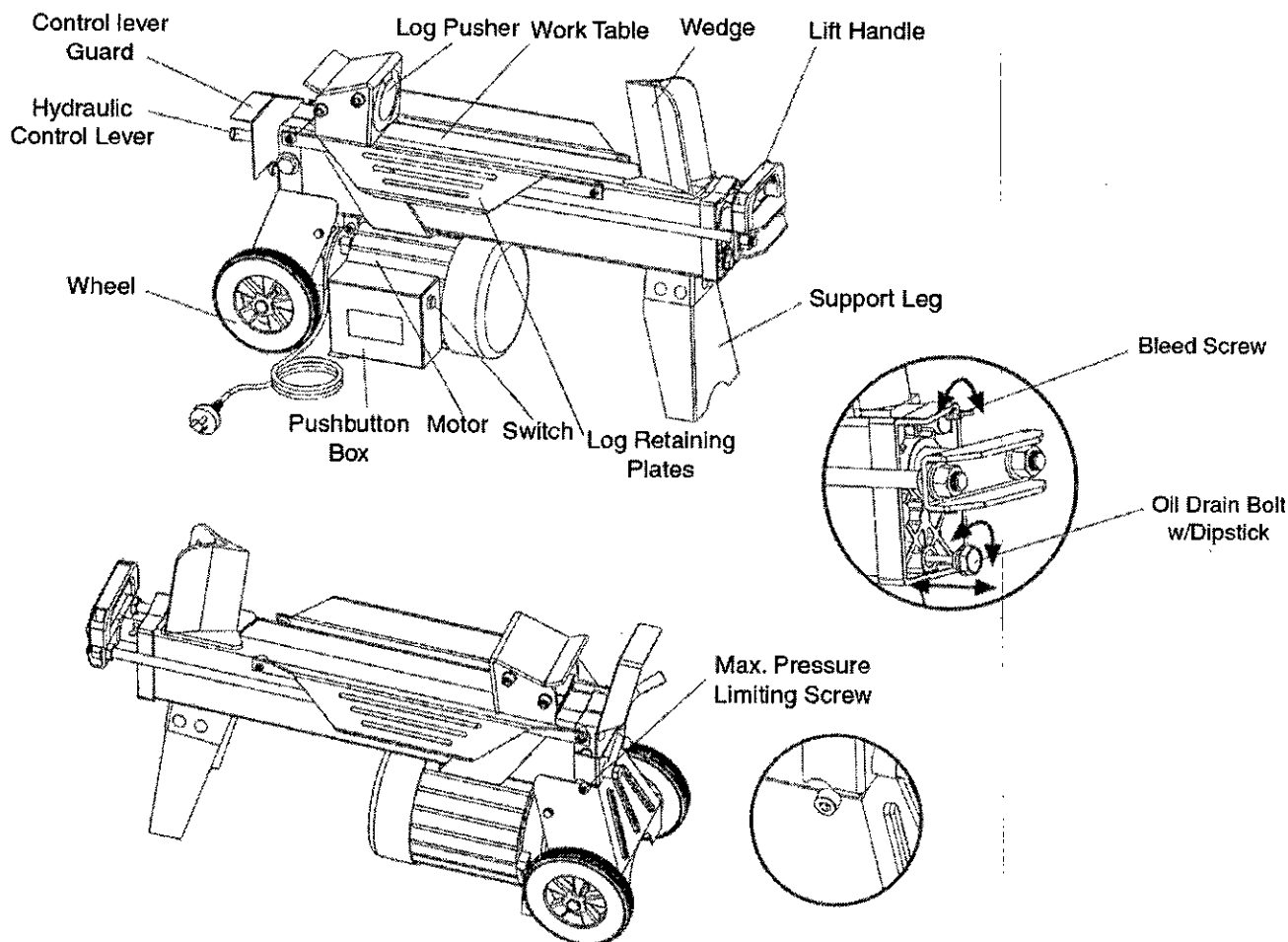
## SPECIFICATIONS

Model Number		W1000
Motor		120V~60Hz 1500W IP54
Log Capacity	Diameter*	2 - 10 inches
	Length	20.5 inches
Splitting Force		4 ton
Hydraulic Pressure		2,300 psi
Hydraulic Oil Capacity		3.2 quarts
Overall Size	Length	37 inches
	Width	11 inches
	Height	20 inches
Weight		99 lbs

\*The diameter of the log is indicative - a small log can be difficult to split when it contains knobs or a particularly tough fiber. On the other hand, it may not be difficult to split logs with regular fibers even if its diameter exceeds the max. figure indicated above.

## SET UP AND PREPARATION

1. Bolt the support leg to the log splitter. Lift the log splitter by the handles at both ends and place it on a 24-32 inch high, stable, flat and level work surface.
2. Familiarize yourself with the controls and features of this log splitter as shown below.



**NOTE:** Before operating the log splitter, the bleed screw should be loosened by 3-4 rotations so air can go in and out of the oil tank smoothly. Air flow thru the bleed screw hole should be detectable during log splitter operation. Before moving the log splitter, make sure the bleed screw is tightened to avoid oil leakage from this point.

### **CAUTION**

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

### **CAUTION**

**DO NOT** adjust the maximum pressure limiting screw. The pressure limiting screw has been sealed at the factory to prevent unauthorized adjusting. Resetting the screw will cause the hydraulic pump to fail to output enough splitting pressure or cause too much pressure, which may result in serious injury, as well as damage to the machine.

## LOG SPLITTER OPERATION

The Earthquake® Mini Electric Log Splitter requires the use of both hands to operate. The user's left hand controls the hydraulic control lever, while the right hand controls the pushbutton switch. The log splitter will freeze upon absence of either hand. The log pusher will return back to the starting position only after both hands release the controls.



### CAUTION

Never force pressure on the log splitter for more than 5 seconds in order to split excessively hard wood.



### CAUTION

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

Split log in the direction of its grain. Placing logs across the log splitter for splitting is dangerous and may seriously damage the machine. Do not attempt to split two logs at the same time.

## FREEING A JAMMED LOG

1. Release both controls.
2. Once the log pusher completely stops at its starting position, insert a wood wedge under the jammed log.
3. Start the log splitter to push the wood wedge under the jammed log.
4. Repeat above procedure with sharper sloped wood wedges until the log is completely freed.

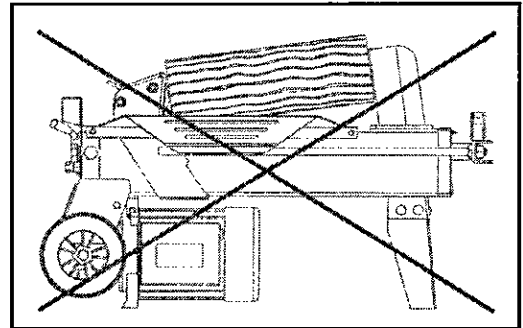
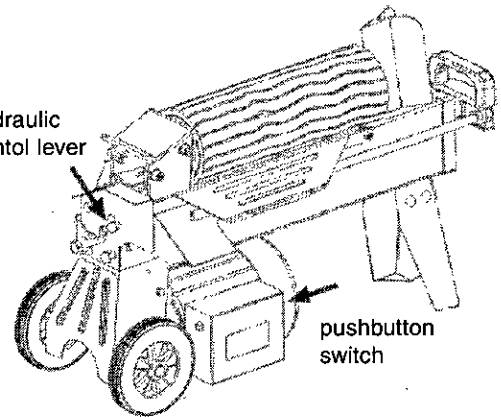


### CAUTION

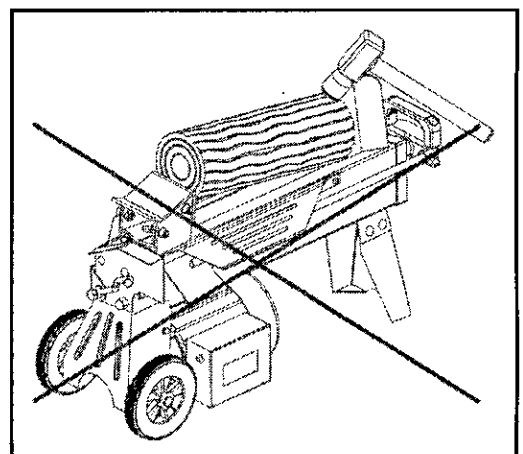
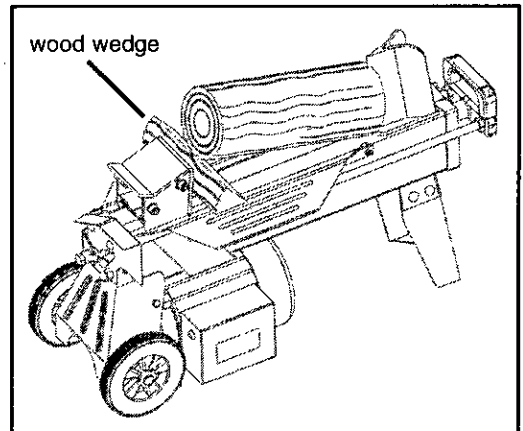
DO NOT try to knock the jammed log off the wedge using a hammer or other device.

hydraulic control lever

pushbutton switch



wood wedge



## 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. Remove oil drain bolt and dipstick. Make sure bleed screw is closed tight.
3. Turn the log splitter on the support leg side over using a one gallon or larger capacity container to drain the hydraulic oil.
4. Turn the log splitter on the motor side.
5. Refill with 3.75 quarts of fresh hydraulic oil.
6. While keeping the log splitter vertical, clean the surface of dipstick on the oil drain bolt and put it back into the oil tank.
7. Make sure the level of the refilled oil is between the 2 grooves around the dipstick.
8. Clean the oil drain bolt before re-threading it back in. Make sure the bolt is tightened to avoid leakage before placing the log splitter horizontally. Loosen bleed screw 3-4 turns before operation.

Periodically check oil level to ensure it is between the 2 grooves around the dipstick. If the level is below the lower limit, fill until level is correct.

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

SHELL Tellus 22

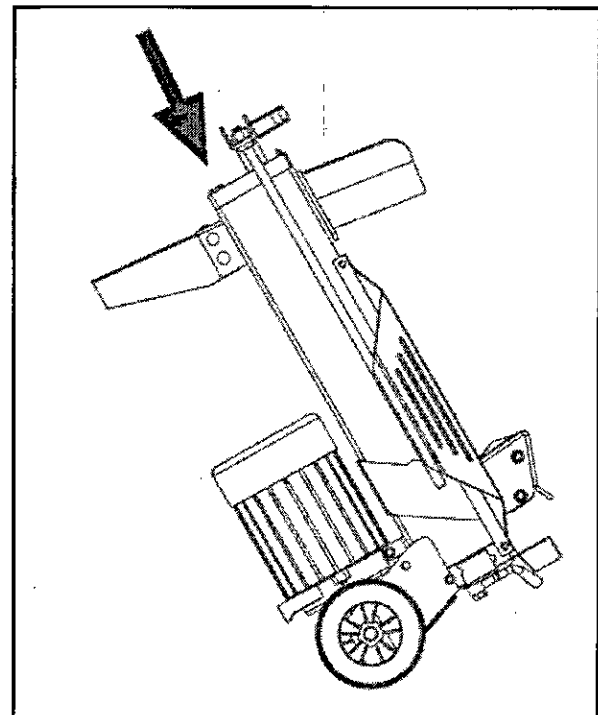
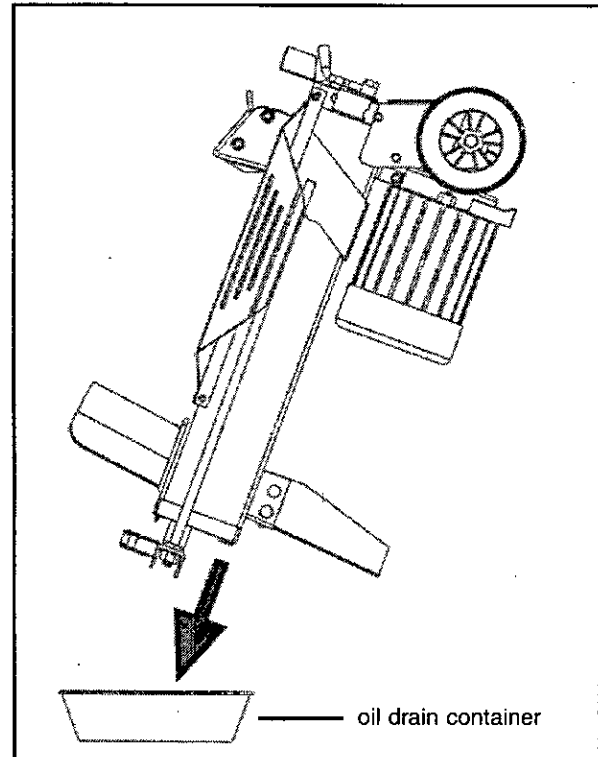
MOBIL DTE 11

ARA Vitam GF 22

BP Energol HLP-HM 22

## SHARPENING WEDGE

When the log splitter wedge becomes dull and/or worn, sharpen the wedge using a fine-toothed file and smooth any burrs or crushed areas along the cutting edge.





## SERVICE INFORMATION



**IN CASE OF A SERVICE PROBLEM, DO NOT SEND UNIT BACK TO RETAILER. CONTACT ARDISAM, INC. AT 1-800-345-6007. WE WELCOME YOUR CALL.**

*In the event you experience trouble operating your mini log splitter, follow the suggestions in the troubleshooting guide in this section.*

*The guide will help you pinpoint the causes of common problems and identify remedies.*

*For more complicated repairs you may want to rely on your retailer, an authorized mechanic, or Ardisam, Inc. (contact your retailer for a list of authorized mechanics in your area). A parts catalog is included in this section.*

*We will always be glad to answer any questions you have, or help you find suitable assistance. To order parts or inquire about warranty, call or write us at the address found in the next column, under the section ordering repair parts.*

## ORDERING REPAIR PARTS

Parts can be obtained from the store where your mini log splitter was purchased or direct from the factory. To order from the factory, call or write to:



**Ardisam, Inc.**

**1690 Elm Street, Cumberland, WI 54829**

**Phone (715) 822-2415 Main Fax (715) 822-2223**

**800-345-6007**

**Email [info@ardisam.com](mailto:info@ardisam.com)**

Please include the following information with your order:

1. Part numbers
2. Part description
3. Quantity
4. Model number and serial number

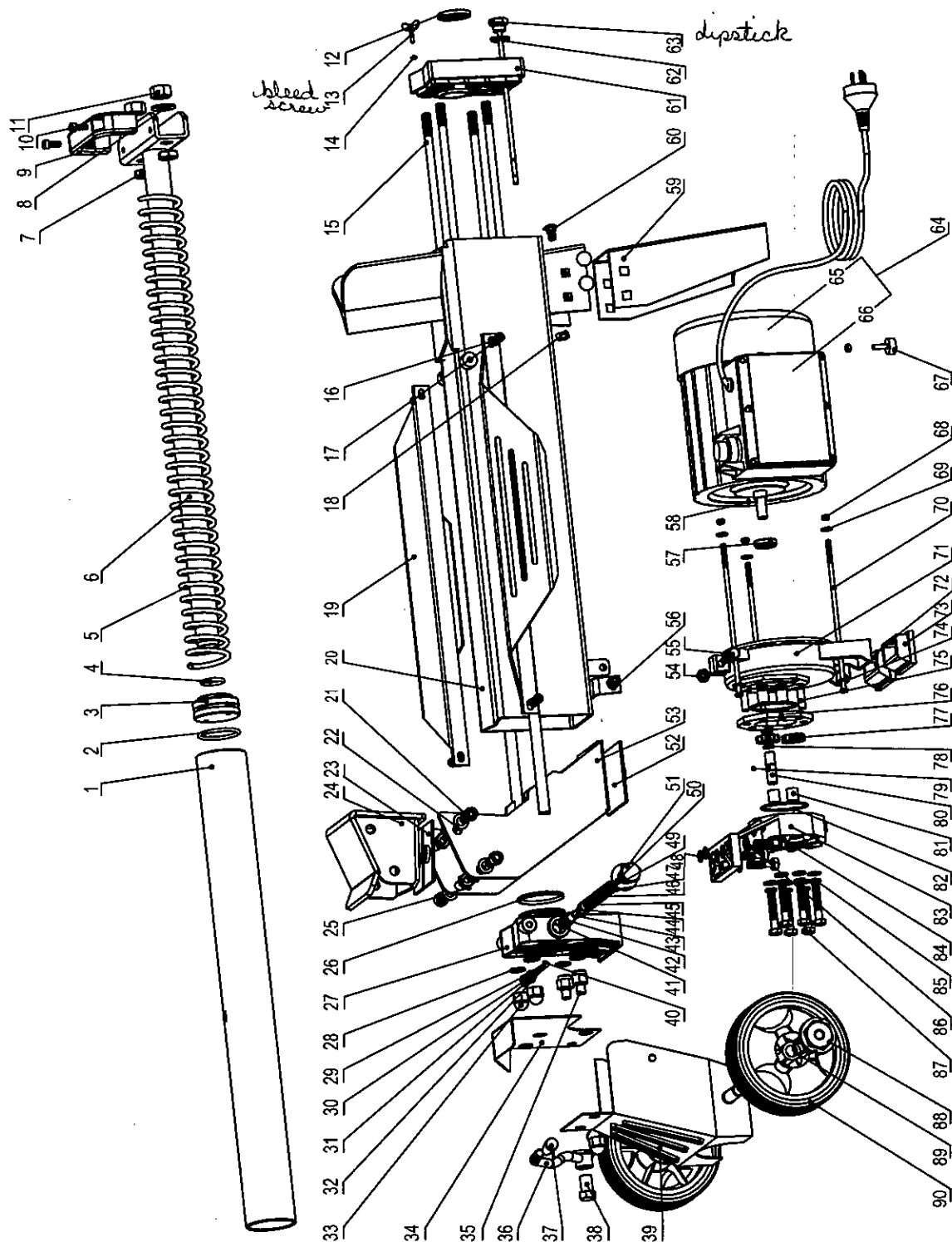
## TROUBLESHOOTING

Problem	Possible cause	Remedy/Action
Fails to split logs	<ol style="list-style-type: none"> <li>1. Log is improperly positioned</li> <li>2. The size or hardness of the log exceeds the capacity of the machine</li> <li>3. Wedge cutting edge is blunt</li> <li>4. Oil leaks</li> <li>5. Unauthorized adjustment was made onto the maximum pressure limiting screw</li> </ol>	<ol style="list-style-type: none"> <li>1. Refer to Log Splitter Operation Section for perfect log loading</li> <li>2. Reduce the log size before splitting on the log splitter</li> <li>3. Refer to Sharpening Wedge Section to sharpen the cutting edge</li> <li>4. Locate leak(s) and contact the dealer</li> <li>5. Contact the dealer</li> </ol>
The log pusher moves with a jerking motion, makes an unfamiliar noise or vibrates excessively	<ol style="list-style-type: none"> <li>1. Lack of hydraulic oil and excessive air in the hydraulic system</li> </ol>	<ol style="list-style-type: none"> <li>1. Check oil level for possible oil refilling. Contact the dealer.</li> </ol>
Oil leak occurs around cylinder ram or from other points	<ol style="list-style-type: none"> <li>1. Air sealed in hydraulic system while operating</li> <li>2. Bleed screw is not tightened before moving the log splitter</li> <li>3. Oil drain bolt with dipstick is not tight</li> <li>4. Hydraulic control valve assembly and/or seal(s) worn</li> </ol>	<ol style="list-style-type: none"> <li>1. Loosen bleed screw 3-4 rotations before operating the log splitter</li> <li>2. Tighten the bleed screw before moving the log splitter</li> <li>3. Tighten the oil drain bolt with dipstick</li> <li>4. Contact the dealer</li> </ol>

# W1000 MINI ELECTRIC LOG SPLITTER BREAKDOWN

**Earthquake**

MINIMUM ORDER ..... \$10.00



# W1000 MINI ELECTRIC LOG SPLITTER PARTS LIST

**Earthquake**

Key #	Part #	Description	Qty.	Key #	Part #	Description	Qty.
1	300101	CYLINDER .....	1	46	300146	O-RING .....	5
2	300102	O-RING, PISTON .....	1	47	300147	O-RING .....	2
3	300103	PISTON .....	1	48	300148	SPRING, SLIDING SLEEVE .....	1
4	300104	O-RING .....	1	49	300149	SLEEVE, SLIDING .....	1
5	300105	SPRING .....	1	50	300150	WASHER .....	1
6	300106	POSITION ROD WELDMENT .....	1	51	300151	PLUG, VALVE .....	1
7	300107	NUT, M14 .....	2	52	300152	INSERT, LOWER PLASTIC .....	1
8	300108	WASHER .....	2	53	300153	DRAWING WELDMENT .....	1
9	300109	HANDLE, ABS MOVING .....	1	54	300154	NUT, LOOSE M8 .....	1
10	300110	BOLT, HEX M6X16 .....	2	55	300155	BOLT, HEX M8X35 .....	1
11	300111	NUT, M14 .....	2	56	300156	WASHER .....	2
12	300112	SEAL, PLASTIC .....	1	57	300157	SEAL, MOTOR SHAFT .....	1
13	300113	SCREW, WING/BLEED .....	1	58	300158	BALL, STEEL 2.5 .....	1
14	300114	O-RING .....	1	59 <sup>60</sup>	300159	BOLT, CARRIAGE M8X12 .....	5
15	300115	STUB, LONG .....	4	60 <sup>59</sup>	300160	LEG, SUPPORT .....	1
16	300116	BOLT, HEX M6X8 .....	6	61	300161	COVER, RIGHT CYLINDER .....	1
17	300117	WASHER, SPRING .....	4	62	300162	GASKET, DIPSTICK .....	1
18	300118	NUT, M8 .....	5	63	300163	DIPSTICK .....	1
19	300119	PLATE, SUPPORT .....	2	64	300164	MOTOR W/SWITCH .....	1
20	300120	FRAME, TUBE/TANK, OIL .....	1	65	300165	MOTOR .....	1
21	300121	BOLT, HEX M10X25 .....	4	66	300166	BOX, SWITCH .....	1
22	300122	WASHER .....	4	67	300167	BOLT .....	1
23	300123	INSERT, UPPER PLASTIC .....	1	68	300168	NUT .....	1
24	300124	LOG PUSHER WELDMENT .....	1	69	300169	WASHER, SPRING .....	3
25	300125	NUT, M10 .....	4	70	300170	BOLT .....	3
26	300126	O-RING .....	1	71	300171	COVER, MOTOR .....	1
27	300127	COVER, LEFT CYLINDER .....	1	72	300172	SHOE, LEFT MOTOR SUPPORT .....	1
28	300128	GASKET, COPPER .....	4	73	300173	SHOE, RIGHT MOTOR SUPPORT .....	1
29	300129	SPRING, SAFETY VALVE .....	1	74	300174	WASHER .....	9
30	300130	SCREW, M8X8 .....	1	75	300175	PIN .....	2
31	300131	BOLT, SAFETY VALVE .....	1	76	300176	BODY, GEAR .....	1
32	300132	O-RING .....	1	77	300177	GEAR .....	2
33	300133	NUT, ROUND HD M10 .....	3	78	300178	WASHER, SNAP GEAR SHAFT .....	2
34	300134	GUARD, LEVER .....	1	79	300179	PIN .....	1
35	300135	NUT .....	2	80	300180	SHAFT, GEAR .....	1
36	300136	LEVER WELDMENT .....	1	81	300181	BEARING, SLIDING .....	4
37	300137	HEAD, LEVER .....	1	82	300182	O-RING .....	2
38	300138	NUT, LEVER .....	1	83	300183	COVER, PUMP .....	1
39	300139	WHEEL FRAME PLATE WELDMENT .....	1	84	300184	BOLT .....	3
40	300140	BALL, STEEL 6 .....	1	85	300185	WASHER, SPRING .....	9
41	300141	CIRCLIP .....	1	86	300186	WASHER .....	9
42	300142	SPRING, RESTORE VALVE .....	1	87	300187	BOLT .....	6
43	300143	ROD, VALVE .....	1	88	300188	COVER, WHEEL .....	2
44	300144	O-RING .....	1	89	300189	SNAP RING, WHEEL SHAFT .....	2
45	300145	SLEEVE, VALVE .....	1	90	300190	WHEEL .....	2

# Earthquake®

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1-800-345-6007

Email [info@ardisam.com](mailto:info@ardisam.com)

