

BETST POWER EQUIPMENT



OPERATING & PARTS MANUAL 5 TON ELECTRIC LOG SPLITTER

**FOR YOUR SAFETY, READ AND UNDERSTAND THE ENTIRE
MANUAL BEFORE OPERATING THIS MACHINE**

Model Number: GM5T

Warranty Registration on Last Page

SAVE THIS MANUAL FOR FUTURE REFERENCE

SAFETY WARNINGS & INSTRUCTIONS

Betst Power Equipment 1-877-876-7895 Support@betstco.com

UNDERSTAND YOUR LOG SPLITTER

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 particular to it.

DRUGS, ALCOHOL AND MEDICATION

Do not operate the log splitter while under the influence of drugs, alcohol, or any medication that could affect your ability to use it properly.

AVOID DANGEROUS CONDITIONS

Put the log splitter on a 23" – 30" high, stable, flat, and level work bench where there is plenty of room for handling. Bolt the log splitter to the work surface if it tends to slip, walk, or slide.

Keep your work area clean and well lighted. A cluttered area invites injuries.

Do not use the log splitter in wet or damp areas.

Do not expose to rain.

Do not use it in areas where fumes from paint, solvents, or flammable liquids pose a potential hazard.

INSPECT YOUR LOG SPLITTER

Check your log splitter before turning it on.

Keep guards in place and in working order.

Form a habit of verifying all objects are removed from work area before turning it on.

Replace damaged, missing or failed parts before turning it on.

DRESS PROPERLY

Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches).

They can be caught in moving parts.

Wear protective electrically non-conductive gloves and non-skid footwear when operating the log splitter.

Wear protective hair covering to contain long hair to prevent it from being caught in moving parts.

PROTECT YOUR EYES AND FACE

Any log splitter may throw foreign objects into the eye or face. This can cause permanent damage.

Always wear safety goggles.

Do not put the splitter on the ground for operations. This is an awkward operating position that the operator has too bring face too close to the machine, and thus risks being struck by wood chips and debris.

EXTENSION CORDS

Improper use of extension cords may cause inefficient operation of the log splitter which can result in overheating or failure to operate.

Avoid use of broken or damaged extension cords.

Connections must be made suitable for outdoor use.

AVOID ELECTRICAL SHOCK

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.

Prevent body contact with grounded surfaces: pipes, radiators, ranges, and refrigerator enclosures.

Never open the switchbox on the motor. Should it be necessary contact a qualified electrician.

Make sure your fingers do not touch the plug's metal prongs when plugging or unplugging the log splitter.

KEEP OTHERS AWAY

The log splitter must always be operated by one person only.

Other people and children should keep a safe distance from the work area, especially when the log splitter is under operations.

Never have another person help you with freeing a jammed log.

INSPECT YOUR LOG

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.

DO NOT OVER REACH

Floor must not be slippery.

Keep proper footing and balance at all times.

Never stand on log splitter. Serious injury could occur if the machine is tipped or if the cutting tool is unintentionally contacted.

Do not store anything above or near the log splitter where anyone might stand on the machine to reach.

AVOID INJURY FROM UNEXPECTED ACCIDENT

Always pay full attention to the movement of the log pusher.

Do not attempt to load the log until the log pusher has stopped.

Keep hands out of the way of all moving parts.

PROTECT YOUR HANDS

Keep your hands away from splits and cracks which open in the log. They may close suddenly and crush or amputate an appendage.

Do not remove jammed logs with your hands.

DO NOT FORCE TOOL

Never try to split logs larger than those indicated in the specifications table. This could be dangerous and may cause damage to the machine.

Do not use the log splitter for a purpose for which it is not intended.

NEVER LEAVE MACHINE RUNNING UNATTENDED

Do not leave machine until it has come to a complete stop and is unplugged.

DISCONNECT POWER

Unplug when not in use, before making adjustments, changing parts, cleaning, or working on the log splitter. Consult this manual before servicing.

PROTECT THE ENVIROMENT

Take used oil to an authorized collection point or follow the stipulations of your governing area.

Do not discharge oil into drains, soil, or water.

MAINTAIN AND PROTECT YOUR LOG SPLITTER WITH CARE

Keep the log splitter clean for best and safest performance.

The Log Splitter is NOT WATER PROOF, prolonged expose to rain or standing water will cause the splitter to fail, electrical shock, or death.

MAKE THE STORAGE AREA CHILD PROOF

Lock the storage area.

Store the log splitter away from children and others not qualified to use it.

TABLE OF CONTENTS

Safety Warnings & Instructions	1
Specifications	6
Power Supply Information	7
Major Components	8
Before Operating the Log Splitter	9
Log Splitter Operation	10
Freeing Jammed Log	11
Checking & Replacing Hydraulic Oil	12
Sharpening the Wedge	12
Troubleshooting	13
Parts Diagram	15
Parts List	16
Warranty Registration	19

SPECIFICATIONS

Model

Model Number	GM5T
Pre-Assembled	Partial

Motor

Watts	1500 Watts
Motor Voltage	120-Volts AC 60Hz Single Phase
Motor Amperage	15Amps
Power Cord Length	6'
Overload Protection	Yes – GFI Reset Switch

Log Capacity

Maximum Log Length	21 Inches
Maximum Log Diameter*	10 Inches (16 Inches Most Wood)*

Wedge

Wedge Material	Steel
Wedge Size	5 - Inch
Wedge Style	2 - Way Compound Angle
Replaceable Wedge	Welded
Sharpenable Wedge	Yes

Hydraulics

Auto Return	Yes
Hydraulic Filter	Internal System
Hydraulic Oil Included	Yes
Hydraulic Oil Type	Hydrostatic Oil Type 10W ISO(22/32)
Hydraulic Oil Reservoir Size	.925 Gallon
Maximum Pump PSI	2,320 Lbs.

Overview

Weight	103lbs.
Dimensions	44"L x 14"W x 20"H
Consumer Warranty	2 Years

* The diameter of the log is indicative – a small log can be difficult to split when it has knots or a particularly tough fiber. On the other hand, it may not be difficult to split logs with regular fiber even if its diameter exceeds the max figure indicated above. Green wood is harder to split than dry.

ELECTRICAL REQUIREMENTS

Connect the electrical cord to a standard 120Volt AC 60Hz 15 Amp electrical supply which has protection devices of under-voltage, over-voltage, over-current as well as a residual current device (RCD) with a maximum residual current rating of 0.03A.

The log splitter has an overload protection switch. If the log splitter suddenly stops working, check your electrical supply for faults. The switch will need to be reset before operating again.

EXTENSION CORD REQUIREMENTS

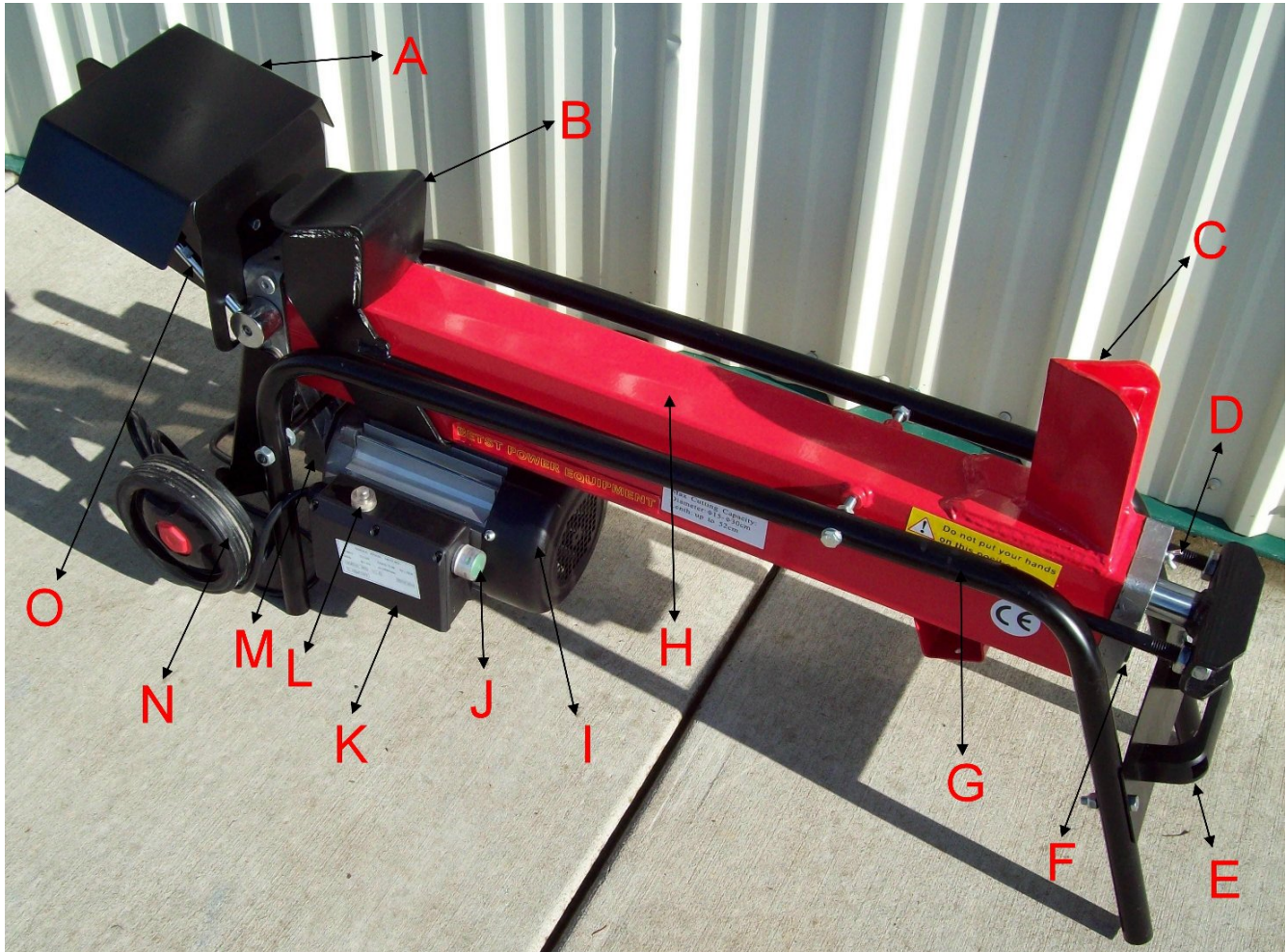
Using an extension cord can reduce the amount of electrical supply needed to operate the log splitter at its highest efficiency.

Failure to use the correct extension cord may result in damage to the splitter and reduced ability to split logs.

Recommended cord size:

14ga. @ 20ft, 12ga. @ 50ft, 10ga. @ 100ft, 8ga. @ 200ft

SET UP AND PREPARATION FOR OPERATION



LIST OF MAJOR COMPONENTS OF LOG SPLITTER

- A. Operation Handle Safety Shield
- B. Log Pusher
- C. Splitting Wedge
- D. Bleed Screw
- E. Moving Handle
- F. Hydraulic Oil Plug/Dipstick
- G. Support Frame
- H. Splitting Table
- I. Electric Motor
- J. Start Switch
- K. Switch Box
- L. GFI Reset Switch
- M. Hydraulic Pump Cover
- N. Wheels
- O. Log Pusher Engagement Handles

BEFORE OPERATING THE LOG SPLITTER

Before each use of the log splitter the bleed screw (See Pic Part D) should be loosened by 3 - 4 rotations until air can go in and out of the oil tank smoothly.

Before moving the log splitter and after each use, make sure the bleed screw is tightened to avoid oil leaking from bleed screw port.

***WARNING:** Failure to loosen the bleed screw will keep the sealed air in the hydraulic system. This will cause the air to be compressed and decompressed. Continuous compression and decompression will blow out the seals of the hydraulic system and cause permanent damage to the log splitter.*

MAXIMUM PRESSURE LIMITING SCREW

**DO NOT ADJUST THE MAX PRESSURE LIMITING SCREW,
THIS WILL VOID YOUR WARRANTY**

Max pressure was set by the manufacture and the max pressure limiting screw is sealed with glue to ensure the log splitter works under pressure of no more than 5 Tons. The setting was done by a qualified person with professional instruments. Unauthorized resetting will void your warranty and cause hydraulic pump failure.

LOG SPLITTER OPERATION

The log splitter is equipped with “ZHB” control system that requires to be operated with both hands of the user – Left and Right hand control the hydraulic levers. The log splitter will freeze upon absence of either hand. Only after both hands have released the controls will the log pusher begin to return backward to the starting position. The electric motor will stay running once the green button has been depressed. (See Pic Part J) To turn off the electric motor depress the button again.

WARNING: Never force the log splitter for more than 5 seconds by keeping pressure on it to split excessively hard wood. Excessive Force Will Void Your Warranty.

For such extremely hard wood, rotate it 90 degrees to see whether it can be split in a different location or swap ends of the log on the wedge side.

Always set log firmly on the log retaining platform. Make sure 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.

Split log in the direction of its growing grain.

Do not place log across the log splitter for splitting. It may be dangerous and may seriously damage the machine.

Do not Split 2 logs at the same time.

PLAN YOUR WORK AREA FOR SAFETY

Work safely and save effort by planning your work before you begin. Have your logs positioned where they can easily be reached. Have a place to stack the split wood.

PREPARE THE LOG FOR SPLITTING

Be sure your logs have no limbs or branches still attached to the log. Be sure the ends of the logs have been cut square to the length of the log. Dry wood splits easier than green wood. Green wood will jam more easily than dry wood.

CONNECTING TO POWER SOURCE

Be sure that your power source and extension cord meets the requirements as noted earlier in this manual. Your power source determines the splitters ability to exert force to split the log. Be sure to avoid wet conditions; **do not** allow the power supply to be exposed to standing water.

POSITION THE SPLITTER SECURELY

Be sure the splitter is positioned firmly on level, solid platform 23" – 30" high. Be sure nothing is in the area of your work space that could be knocked over onto the splitter during operation. Never operate the splitter with your face close or above the splitting area; debris may be thrown into your body and cause severe damage.

OPEN THE AIR BLEED SYSTEM

Loosen the Bleed Screw (See Pic Part D) 3 - 4 turns whenever the splitter is being used. Retighten the bleed screw when you are finished or before moving the splitter. Failure to loosen the bleed will result in air build inside of hydraulic chamber causing permanent damage and eventual failure.

PLACING A LOG ONTO THE SPLITTER

Place the log onto the splitter lengthwise and laying flat on the Splitting Table (See Pic Part H). The log should lie flat on the splitter and be cradled by the log guides. NEVER attempt to split a log at an angle. Be sure the log pusher (See Pic Part B) and wedge (See Pic Part C) will contact the log squarely on the ends.

SPLITTING THE LOG

Depress the electric motor start switch (See Pic Part J) with one hand. This will start the electric motor which will run continuously until the switch is pressed again. Wait a few seconds for the hydraulic system to build pressure. Then when it is safe to do so, depress both Log Pusher Engagement Handles (See Pic Part O) at the same time. The log pusher will compress the log against the wedge, splitting the log. Once the log is split release both handles so the pusher will retract to its starting position. Remove the split log and repeat process.

WARNING: If the log does not split immediately, do not force it by maintaining the movement of log pusher. It is better to reposition the log until it splits smoothly. If you continue to try and split the log a *bypass will engage and the hydraulic system will not work*. You must then stop the electric motor completely and then restart the electric motor.

FREEING A JAMMED LOG

Release both controls.

With the log pusher fully returned to the starting position, insert a wedge under the jammed log. Start the log splitter to push the wedge under the jammed log.

Repeat above procedure with sharper angled wedge until jammed log is free.

Do not try to knock the jammed log off; this may cause damage to the splitter.

CHECKING AND REPLACING THE HYDRAULIC OIL

The hydraulic oil should be replaced every 150 hours of operation.

To check the hydraulic oil level:

Turn the log splitter on end with the wheel down.

Support it well so it can not fall over.

Let sit 1 minute so all the oil is at the bottom of the hydraulic reservoir.

Remove oil plug/dipstick (8mm Hex)

Verify the oil level is between the 2 grooves at end of dipstick

If the oil level is not showing on the dipstick, double check it, if it is still reading below the 2 grooves add oil as specified in the specification at the beginning of this manual.

Replacing the hydraulic oil:

Remove oil plug/dipstick (8mm Hex)

Turn the log splitter on the support leg over a container to drain the hydraulic fluid.

After allowing it to completely drain, turn log splitter on end with wheel down.

Support it so it cannot fall over.

Fill with approx. 0.925 Gallons

Let sit 1 minute so the all the oil as at the bottom of the hydraulic reservoir.

Verify the oil level is between the 2 grooves at end of dipstick

If the oil level is not showing on the dipstick, double check it, if it is still reading below the 2 grooves add oil as specified in the specification at the beginning of this manual.

Recommended Oil Types:

Hydraulic Tractor Fluid 10W (22-32 ISO Viscosity)

Heavy Duty Hydrostatic Oil 10W (22-32 ISO Viscosity)

Shell Tellus 22

Mobil DTE 11

BP Energol HLP-HM 22

SHARPENING THE WEDGE

After using the log splitter for some time and when required sharpen the wedge of the log splitter using a fine-toothed file and smooth any burs or crushed areas along the cutting edge. Be sure to unplug the splitter before sharpening the wedge.

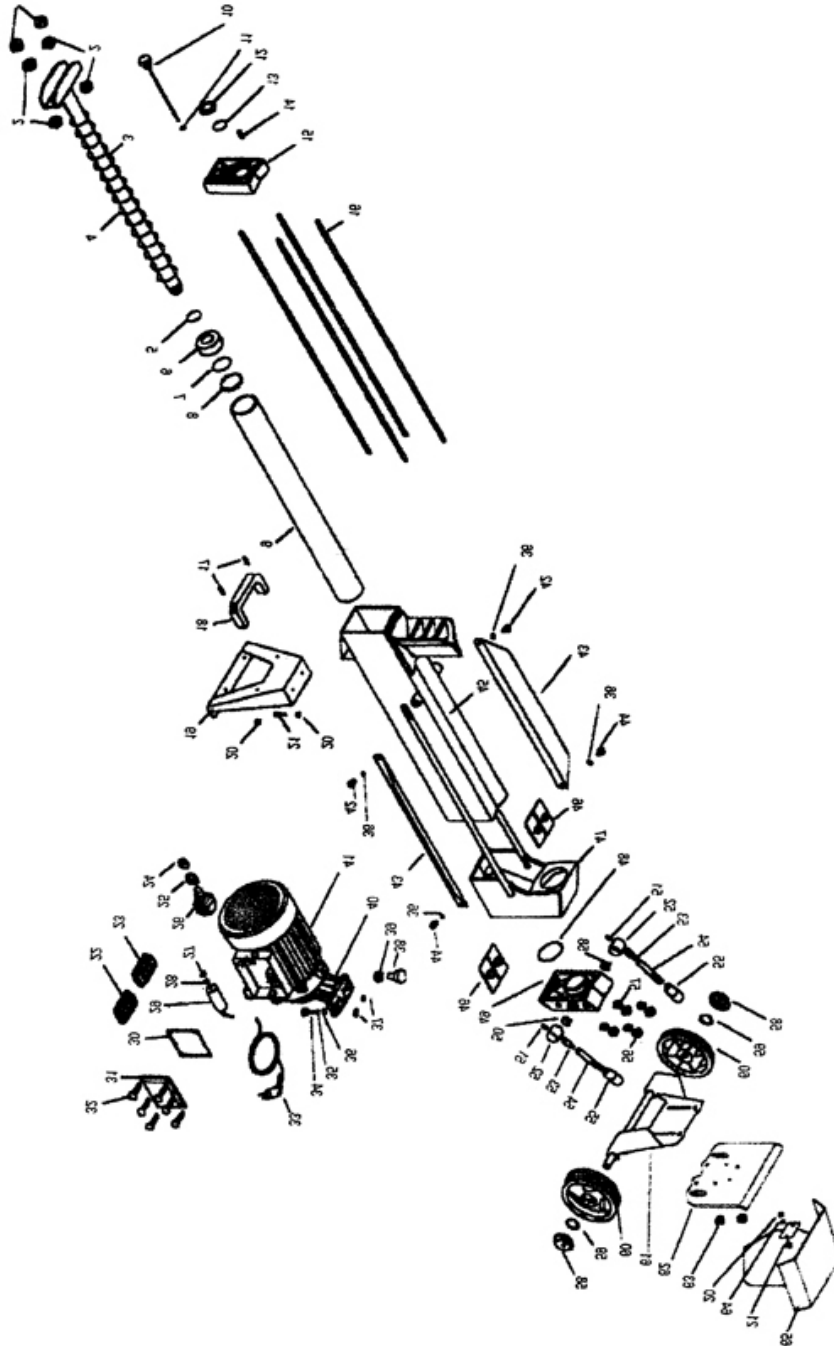
Troubleshooting

Symptom	Possible Cause	Possible Solution
Machine Does Not Start or a Breaker Trips	<ol style="list-style-type: none"> 1. Plug/Receptacles is a at fault or Circuit Breaker has tripped 2. Verify the Plug/Receptacle Source meets Electrical Requirements 3. Wiring is Open/has High Resistance 4. If you are using an Extension Cord 5. Motor On/Off Switch is at fault 6. Start Capacitor is faulty 7. Motor is at fault 	<p>Test Plug/Receptacle or check Circuit Breaker</p> <p>120V AC and 15 Amp Circuit Breaker that is not in use</p> <p>Check for broken/disconnected/loose/corroded connections and repair/replace as necessary</p> <p>Be sure the Extension Cord is of the right gauge size for the length that you are using to meet the electrical requirements of the machine</p> <p>Test On/Off Switch</p> <p>Test/Repair/Replace</p> <p>Test/Repair/Replace</p>
Ram will Not Move / is Slow to Respond / Motor Hums	<ol style="list-style-type: none"> 1. Is the Bleed Screw Adjusted Properly 2. Bleed Accumulated Air from the Hydraulic System 3. Is the Splitter on Level Surface? 4. The Hydraulic Level may be Low 5. Damaged Motor Fan Cover 6. Motor Fan Not Turning 	<p>See Page 9 Owner's Manual</p> <p>Unplug/Move Both Handles Up and Down 4 times, on 4th time the Log Pusher should not move and be fully retracted</p> <p>Splitter should only be operate on Level Surface</p> <p>Check Hydraulic Fluid Level, see page 12 Owner's Manual</p> <p>Check Motor Fan Cover for Dent Repair/Replace</p> <p>Unplug and Remove Motor Fan</p>

	7. Overheating	<p>Cover, Remove any debris blocking motor fan from turning, Will Motor Fan Turn By Hand Repair/Replace</p> <p>In High Temperature and/or during Rapid Use the Hydraulic Fluid may have overheated. Allow the machine to cool</p>
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Fails to Split Logs	<ol style="list-style-type: none"> 1. Log is Improperly positioned 2. The size or hardness of the log may be greater than the ability of the splitter to split. 3. Splitting wedge is dull or damaged 4. The Hydraulic Level may be Low 	<p>Refer to Log Splitter Operation section in this manual.</p> <p>Certain type of wood grain and fiber may not be able to be split with this splitter without reducing the length of the log.</p> <p>Refer to Sharpening the Wedge section in this manual.</p> <p>Check Hydraulic Fluid Level, see Checking Oil Level section in this manual.</p>
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PARTS DIAGRAM



PARTS LIST

No	Name	Qty
1	Hexagonal nut(M14)	2
2	Hexagonal nut(thin)(M14)	4
3	Hydraulic Rod	1
4	Spring	1
5	O-ring seal	1
6	Piston	1
7	O-ring seal	1
8	Square piston ring	1
9	Oil cylinder casing	1
10	Dip stick	1
11	O-ring seal	oil seal
12	Teflon seal ring	1
13	O-ring oil seal	oil seal
14	Bleed screw (M3*10)	1
15	Oil cylinder cover	1
16	Screw stud	2
17	Philips screw(M6*20)	2
18	Moving handle	1
19	Supporting leg	1
20	Nut(M6)	4
21	Screw(M6*14)	2

22/23	Rubber supporter for electrical motor	1
24	Switch dust shield	1
25	Switch	1
26	Switch seat	1
27	Nut(M8)	1
28	Fixing washer	1
29	Capacitor	1
30	Rubber seal	1
31	Switch Box & Cover	1
32	Philips screw	8
33	Cord and plug	1
34	Bolt (M8*30)	3
35	Spring Lock Washer (8mm)	9
36	Washer (8mm)	13
37	O-ring seal	2
38	Bolt (8 mm)	1
39	Nut (M8)	1
40	Oil pump cover	1
41	Electrical motor assembly	1
42/44	Bolt (M8*30)	4
43	Log guiding plate	2
45	Main body	1
46	Plastic sheath plate	2
47	Log pusher assembly	1

48	O-ring seal	1
49	Oil cylinder cover-front	1
50	Spring	1
51	Fixing screw(M8*30)	1
52	Handle seat	1
53	Valve knob	1
54	Handle bar	1
55	Handle	1
56	Nut (M8)	2
57	Brass shim	4
58	Wheel axle cover	2
59	Circlip	2
60	Rubber wheel	2
61	Wheel frame	1
62	Support plate	1
63	Washer (10 mm)	2
64	Spring	1
65	Protection hood	1

Betst Products, LLC. / Betst Power Equipment

WARRANTY & REGISTRATION

Laizhou Zhongxin Machinery warrants to original Purchaser that its product is free from major defects in material under normal use and service for a period of 2 Years from the date the product is purchased. If product is used commercially the warranty period is reduced by one half. Warranty Void if product has been disassembled by unauthorized personnel.

Laizhou Zhongxin Machinery obligation under this warranty is to repair or replace defective product upon approval of our USA Agent; Betst Products 83371 Melton Rd. N., Creswell OR 97426 that Warranty Claim is Valid. Product shall be returned upon request of Betst Products. Transportation charges to be prepaid by seller.

Laizhou Zhongxin Machinery assumes no responsibility for outside labor.

THE GOODS SOLD PURSUANT TO THIS AGREEMENT ARE SOLD AS IS BY AGENT BETST PRODUCTS. BETST PRODUCTS MAKES NO WARRANTY. THE ONLY WARRANTY IS THAT OF THE MANUFACTURER AND THE PURCHASER MUST LOOK SOLELY TO THE MANUFACTURER FOR WARRANTY. THERE SHALL BE NO LIABILITY FOR PRODUCT LIABILITY OR LIABILITY ON THE PART OF BETST PRODUCTS FOR Laizhou Zhongxin Machinery ANY GENERAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE SALE OR USE OF ANY PRODUCTS SOLD HEREUNDER. BETST PRODUCTS & Laizhou Zhongxin Machinery MAKES NO WARRANTIES, EXPRESS OR IMPLIED, (INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS OF THE PRODUCTS FOR ANY PURPOSE) WITH RESPECT TO THE PRODUCTS COVERED BY THIS AGREEMENT EXCEPT AS IN THIS PARAGRAPH OTHERWISE EXPRESSLY PROVIDED.

THIS IS THE SOLE AND ONLY WARRANTY OF **BETST POWER EQUIPMENT** PRODUCTS AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESSED OR IMPLIED, IN FACT OR BY LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE.

This warranty shall not be interpreted to render Laizhou Zhongxin Machinery or our USA agent liable for injury or damages of any kind or nature, direct, consequential, or contingent, to person or property.

The sole and only remedy in regard to any defective products shall be the replacement thereof herein provided, and neither Laizhou Zhongxin Machinery nor our agent Betst Products shall not be liable for any consequential, special, incidental or punitive damages resulting from or caused by any such defects.

Laizhou Zhongxin Machinery reserves the right to make improvements in design or changes in specifications at any time, without incurring any obligations to owners of units previously sold.

No one is authorized to alter, modify, or enlarge this warranty nor the exclusions, limitations, and reservation.

**WARRANTY VOID IF REGISTRATION IS NOT
MAILED WITHIN 15 DAYS OF PURCHASE DATE**

REGISTRATION

Product Model # _____
Purchase Date ____/____/_____
Purchased From: _____

Your Name: _____
Your Address: _____
City: _____ County: _____ ST: _____ Zip Code: _____
Phone: _____ Email: _____
Attach a Copy of Proof of Purchase

Acceptance of responsibility:

I (Purchaser) have read operators manual and Limited Warranty or someone has read/and explained all instructions to me. I understand this warranty does not cover any labor and that all disputes will be settled by binding arbitration. Warranty void if any attempt to repair or replace defective parts has been made by unauthorized personnel. I have received my Operators Manual and fully understand my requirements. The mark next to each item below confirms my acceptance of responsibility for the use and maintenance of this Log Splitter. **I understand that I alone am responsible for proper maintenance, care and safe operation of this Log Splitter.**

Received and read or will read Operators Manual Specifically Safe Operation section

Specifications accepted Controls understood

Maintenance Requirements understood Storage of Product

I (purchaser) also understand that persons not familiar with the operation of this equipment should not be allowed to use it. Children especially should not operate or be near equipment. ANYONE OPERATING EQUIPMENT SHOULD HAVE READ ALL EQUIPMENT OPERATIONS MANUALS AND SAFETY MANUALS.

Is Product used in a business **NO** YES If yes business type _____

Owners Signature: x _____ Date: ____/____/____

It is recommended that a copy of the registration be given to the seller.

You must sign this warranty and mail copy to Betst Products, 83371 Melton Rd N.#3, Creswell OR 97426 or Fax to 904-216-2059 This warranty is not effective unless the Purchaser mails this Registration and Warranty Form within 15 days of purchase. NOTE: The Manufacturer may refuse warranty of any kind unless Betst Products receives a completed, legible and signed warranty registration. It is the responsibility of the purchaser to assure that this registration document is received by Betst Products.