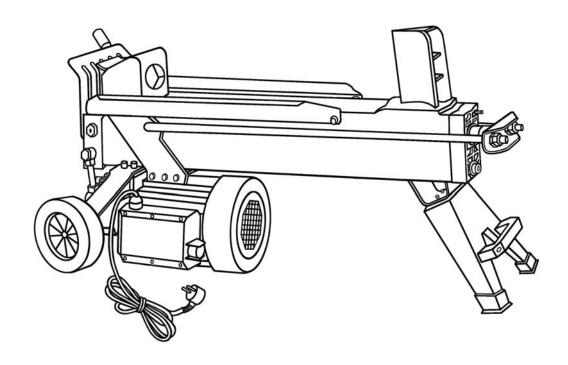


# 5 TON ELECTRIC LOG SPLITTER



**MODEL NO. 40100500** 

# **Owner's Manual**

### **ASSEMBLY & OPERATING INSTRUCTIONS**



This safety alert symbol identifies important safety messages in this manual. Failure to follow this important safety information may result in serious injury or death.

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WARNING: Read and thoroughly understand all instructions and safety information before assembling or operating this log splitter. Failure to do so may cause serious injury or death. Do not allow anyone to operate this log splitter who has not read this manual. As with all power equipment, a log splitter can be dangerous if assembled or used improperly. Do not operate this log splitter if you have doubts or questions concerning safe operation. Call our customer service department at 1-800-525-8322 to address these concerns.

Si no entiende ingles, se prefiere que busque alguien que interprete las instrucciones para usted.

#### **INTENDED USE**

**NEVER** use this log splitter for any other purposes than splitting wood. It is designed for this use **only.** Any other use can cause serious injury or death.

#### PERSONAL PROTECTIVE EQUIPMENT



**BEFORE** operating this log splitter make sure that you wear safety gear such as goggles or safey glasses, steel toed shoes and tight fitting gloves (without loose cuffs or draw strings). Always wear a protective hearing device when operating this log splitter.

**NEVER** wear loose clothing or jewelry that can be caught by moving parts of the log splitter. Keep clothing and hair away from all moving parts when operating this log splitter.

#### **GENERAL SAFETY**

Failure to follow these instructions may result in serious injury or death.

**NEVER** allow children to operate this log splitter. **NEVER** allow adults lacking proper instructions and understanding to operate this log splitter.

**KEEP** all people and pets a minimum of 10 feet away from your work area when operating this log splitter. Only the operator is to be near the log splitter during use.

If a helper is assisting in loading logs, **NEVER** actuate the control until the helper is clear of the work area.

**NEVER** operate the log splitter when under the influence of alcohol, drugs or medication.

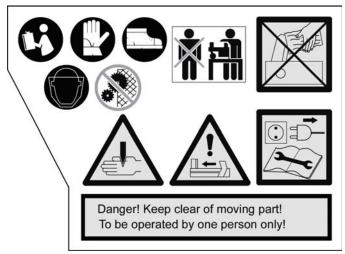
**NEVER** allow a person who is tired or otherwise not alert to use your log splitter.

**ALWAYS** unplug your log splitter when finished. Do not pull on power supply cable to unplug your log splitter.



#### **SAFETY DECALS**

Make sure that all safety warning decals are in good condition and readable. Always replace missing or defaced decals. Write us or call 1-800-525-8322 and they will be sent to you at no charge.



LOCATION: SIDE OF BEAM, WEDGE END

PART NUMBER: 52036900



Read and understand manual before assembly and operation.



Keep all people and pets away from work area. Only the operator should be near the log splitter during operation.



Always wear protective gloves.



Caution: Pinch Point



Always wear protective shoes.



Warning: Moving parts. Never place body between log and ram during forward or reverse stroke. Serious injury or death could result.



Always wear protective eye wear.



Never remove stuck log with bare hands.



Caution: Do not touch rotating parts.



Always disconnect power supply before performing maintenance, cleaning, adjustments or moving the log splitter.



#### PREPARATION OF THE LOG

Both ends of the log should be cut as square as possible to help prevent the log from riding out of the splitter during operation. Do not split logs greater than 20 in. in length.

#### **WORK AREA**

**NEVER** operate the log splitter on slippery, wet, muddy or icy ground.

**ONLY** operate your log splitter on a level surface. Operating on a slope could cause the log splitter to roll over or logs to fall off.

**NEVER** operate your log splitter in a damp or rainy environment to avoid electric shock or short circuit.

**ALWAYS** block the wheels to prevent movement of the log splitter while in operation.

**ONLY** operate your log splitter in daylight or under good artificial light.

**ALWAYS** keep the work area clean. Remove split wood around your log splitter immediately so that you don't stumble over it.

#### **OPERATION OF THE LOG SPLITTER**

**ALWAYS** enusre the motor is properly grounded or apply protection device. Only use rubber-jacketed cable of sufficient lead cross section as an extension cable.

**KNOW** how to stop the log splitter and disengage the controls before operating it.

**NEVER** place hands, feet or any body part between the ram and splitting wedge during forward or reverse stroke. Serious injury or death could result.

**NEVER** straddle or step over the log splitter during operation.

**NEVER** reach or bend over the log splitter to pick up a log.

**NEVER** try to split two logs on top of each other.

**NEVER** try to cross split a second log.

**NEVER** allow one person to operate the valve while another is positioning the log.

**NEVER** attempt to load your log splitter when the ram is in motion.

**ALWAYS** use your hand to operate the control lever and the switch. NEVER use your foot, a rope or any extension device.

**NEVER** move the log splitter while the motor is running. Shut off the motor even if you are leaving the log splitter for a short period of time.



#### **REPAIR AND MAINTENANCE SAFETY**

**NEVER** operate your log splitter when it is in poor mechanical condition or in need of repair.

**ALWAYS** unplug the power cable before performing any maintenance and repair.

Periodically check that all nuts, bolts, screws, hydraulic fittings and hose clamps are tightened.

**NEVER** alter your log splitter in any manner such as adding a rope or extenstion to the control lever or adding to the width or height of the wedge. Such alterations may cause your log splitter to be unsafe and will void the warranty.

Perform all recommended maintenance procedures before using your log splitter.

Replace all damaged or worn parts immediately.

**NEVER** tamper with the motor to run it at excessive speeds. The maximum motor speed is preset by the manufacturer and is within safety limits.

**NEVER** adjust the hydraulic valve. The system is preset at the factory and is within safety limits.

**ALWAYS** check the level of hydraulic oil before operation.

**ALL** replacement parts must meet manufacturer's specifications.

#### **HYDRAULIC SAFETY**

The hydraulic system of your log splitter requires careful inspection along with the mechanical parts. Be sure to replace frayed, kinked, cracked or otherwise damaged hydraulic hose and components.

**NEVER** check for leaks of hydraulic fluid with your hand. Fluid escaping from a small hole can be almost invisible. Escaping fluid under pressure can have sufficient force to penetrate skin causing serious personal injury or even death. Leaks can be detected by passing a piece of cardboard over the suspected leak and looking for discoloration.

**ALWAYS** seek professional medical attention immediately if injured by escaping hydraulic fluid. Serious infection or reaction can develop if proper medical treatment is not administered immediately.

**ALWAYS** be sure to relieve all pressure by shutting off the engine and moving the valve control handle back and forth should it become necessary to loosen or remove any hydraulic fitting.

**NEVER** remove the cap from the hydraulic tank or reservoir while the log splitter is running. Hot oil under pressure could result in serious injury.

**NEVER** adjust the hydraulic valve. The pressure relief valve on your log splitter is preset at the factory. Only a qualified service technician should perform this adjustment.



#### **FIRE PREVENTION**

**NEVER** operate your log splitter near a flame or spark. Hydraulic oil is flammable and can explode.

**ALWAYS** take a Class B fire extinguisher with you when operating this log splitter in dry areas as a precautionary measure against possible flying sparks.

#### **TRANSPORTATION**

**NEVER** move this log splitter while the motor is running.

**NEVER** carry any cargo or wood on your log splitter.

**NEVER** allow anyone to sit or ride on your log splitter.

Be careful when moving your log splitter on rugged and rough terrain. Keep your log splitter upright.

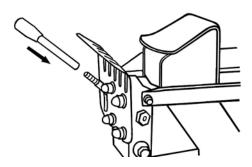
#### **ASSEMBLY INSTRUCTIONS**

**NOTE:** This log splitter was partially assembled at the factory. Refer to the drawing and parts list should it become necessary to disassemble the unit for repair or replacement of parts.

**NOTE:** Ensure the power supply is not connected while assembling the log splitter.

**STEP 1:** Remove all the components from the crate. Inspect each piece for shipping damage. If any part is damaged, contact your dealer or delivering carrier.

STEP 2: Connect the control handle bar. Align the control handle bar to its linkage part at the back of the log splitter and twist to tighten.



#### **OPERATING INSTRUCTIONS**

STEP 1: Preparation



WARNING: Read and thoroughly understand all instructions and safety information before operating this log splitter. Failure to do so may cause serious injury or death. Do not allow anyone to operate this log splitter who has not read this manual. As with all power equipment, a log splitter can be dangerous if assembled or used improperly. Do not operate this log splitter if you have doubts or questions concerning safe operation. Call our customer service department at 1-800-525-8322 to address these concerns.

Si no entiende ingles, se prefiere que busque alguien que interprete las instrucciones para usted.

IMPORTANT: The hydraulic tank is shipped with 10W hydrualic fluid. To use Dextron automatic transmission fluid, you must drain the system. Do not mix Dextron and 10W hydrualic fluid.

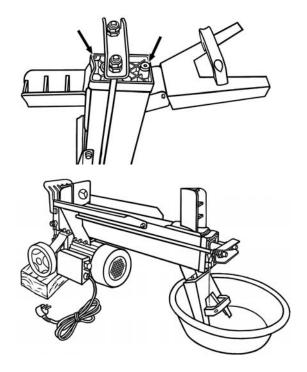


CAUTION: DO NOT START OR RUN THE ENGINE WITHOUT OIL IN THE HYDRAULIC RESERVOIR AND IN THE ENGINE.

STEP 2: The hydraulic reservoir should be filled with 10W hydraulic oil. If hydraulic oil is difficult to obtain, Dextron automatic transmission fluid can be substituted. Use only clean oil and take care to prevent dirt from entering the hydraulic reservoir. Do not mix 10W hydrualic fluid with Dextron transmission fluid. Log splitter is shipped with 10W hydraulic oil, drain system if you wish to use Dextron transmission fluid.

#### DIRECTIONS FOR FILLING HYDRAULIC SYSTEM

- 1) Disconnect the control hand bar from its linkage part and take off the cushions from the front frame.
- 2) Lift the towing handle and keep the tank in the vertical position.
- Disconnect the vent plug and dipstick from the front cylinder cover. 3)
- 4) Put the front frame of the unit in some container; raise the wheels 2 in. off the ground on blocks, and drain the hydraulic tank.
- 5) Refill the tank within the marked range on the dipstick.
- 6) After refilling, insert and tighten the vent plug and dipstick.



Fill the hydraulic reservoir with at least 3 quarts of hydraulic fluid. After the hydraulic reservoir is filled with oil, start the motor. The hydraulic pump should prime itself. With the motor running, move the hydraulic valve lever toward the wedge. This will cause the cylinder to extend and expel air. When the cylinder is fully extended, retract it. Repeat this procedure several times. An erratic movement of the cylinder indicates that there is still air in the system. More oil should then be added to bring the fluid level up to the "OK" range on the dipstick. Total hydraulic capacity is 3.3 quarts. NOTE: If the tank is overfilled, it will tend to expel oil from the breather cap when the cylinder is retracted. After adding more oil to the tank, cycle the cylinder again until it has a constant speed indicating that all oil has been expelled. Check the oil level in the reservoir again to make sure it is in the "OK" range.

#### **STORAGE**

Store the log splitter switched off and unplugged.

Allow the log splitter to cool for 5 minutes after use before storing.

Protect the power supply cable from heat, sunshine, agressive liquids and sharp edges.

Store unit in a clean, dry area. Don't store it unprotected outdoors, next to corrosive materials or in damp environment.

Store this log splitter where children can not start it.

#### **OPERATION**



WARNING:

ALWAYS WEAR SAFETY GLASSES, SAFETY GLOVES, SAFETY SHOES AND SUITABLE WORK CLOTHING WHEN OPERATING THIS LOG SPLITTER. NEVER WEAR JEWELRY, NECKTIES OR OTHER LOOSE CLOTHING.

DANGER: KEEP HANDS AND FEET CLEAR OF RAM AND WEDGE AT ALL TIMES.

- 1) Place the log splitter on a sturdy, level surface.
- 2) Ensure the equipment is in safe working condition. Check all nuts, bolts and hydraulic fittings are tight. Check the switch, power cable and plug are not damaged. Check that all safety shields are in proper position.
- 3) Check that the outlet's main voltage and frequency match the data stated on the model plate (or "Technical Specifications" in this manual).
- 4) Plug in the power cable and switch on the motor. NEVER use an extension cord longer than 25 feet. Cord gage must be 14 or lower.
- 5) Place a log on the beam against the wedge. Make sure that the log is securely on the wedge and up against the beam. Logs should be cut wth square ends and to a maximum length of 20 in. in advance. Always use extra care when splitting logs with unsquare ends.
- Depress the control handle so that the cylinder will drive the ram into the log. Extend the cylinder until the log splits or to the end of its stroke. If the log has not completely split after the cylinder has reached the end of its extension, retract the cylinder.

  IMPORTANT: Leaving the valve in the "actuate" position at the end of the stroke may damage the pump.

CAUTION: ALWAYS SPLIT THE LOG ALONG ITS GRAIN. IF SPLIT ACROSS THE GRAIN SOME TYPES OF WOOD MAY

BURST OR FLY OUT RESULTING IN INJURY.

CAUTION: IF THE LOG IS STUCK ON THE WEDGE, RELEASE BOTH HANDS AND UNPLUG THE POWER CABLE

IMMEDIATELY. KNOCK OFF THE LOG WITH A HAMMER. DO NOT USE YOUR HANDS.

7) When finished splitting log, switch the motor off and unplug the power cable.

NOTE: If you experience problems splitting especially hard wood, do not keep pushing on the control handle. Release the handle and the ram will return. If you continue to push the control handle, the ram may fail to retract. If this occurs, turn off the power switch. Then, turn on the power switch and continue operation.

#### **MAINTENANCE**

- 1) Switch off and unplug power cable before performing any maintenance and repair.
- 2) Always check the oil level of the hydraulic reservoir before operation. Operating the log splitter without an adequate oil supply will cause severe damage to the pump.
- 3) If the wedge becomes dull or nicked, it can be sharpened. ALWAYS wear safety gloves while handling the wedge.
- 4) See also Repair and Maintenance Safety in the Safety Information section of this manual.
- 5) All replacement parts must meet manufacturer's specifications.

NOTE: If the motor is overloaded for a long time, the thermal protector will disconnect the power of the motor. Contact our customer service department.

NOTE: Switch off and unplug the power cable quickly if the machine is acting abnormal. Contact our customer service department to address these concerns.

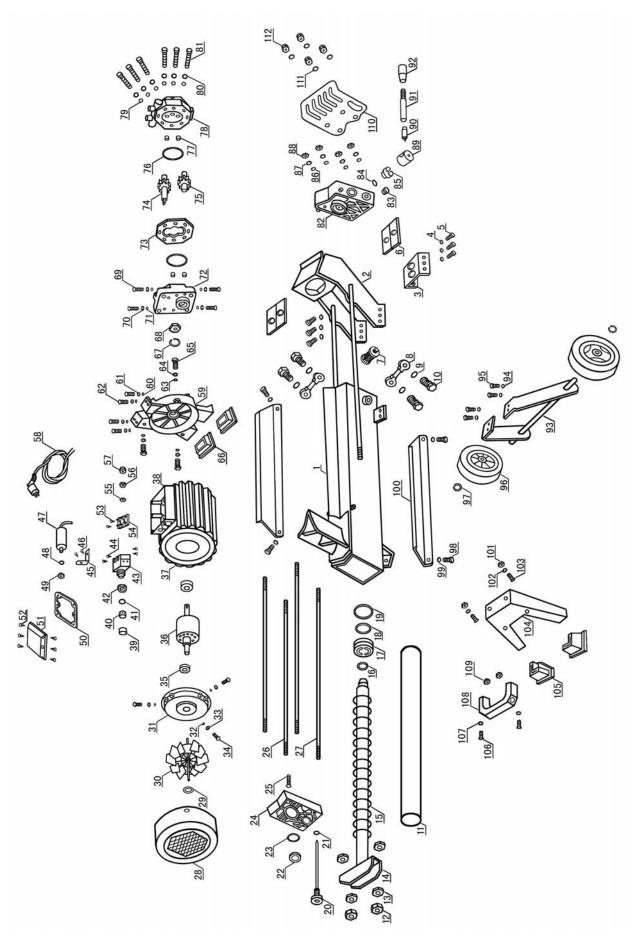
#### PARTS BREAKDOWN FOR 40100500 LOG SPLITTER

REFERENCE NUMBER	DESCRIPTION	REFERENCE NUMBER	DESCRIPTION
1	Tank with wedge	39-44	Key switch assembly
2	Ram	45-49	Capacitor assembly
3	Base plate of ram	50	Rubber cover
4	Spring washer	51-52	Connecting box cover assembly
5	Snap head bolt	53-54	Wiring board assembly
6	Nylon liner	55-57	Cable fastener assembly
7	Oil filter	58	Power cable and plug
8	Oil tube	59-65	Motor rear end plate assembly
9	Seal ring	66	Motor frame cushion
10	Bored bolt	67	Check ring
11	Hydraulic cylinder	68	Skeleton seal ring
12-14	Piston shaft and nuts	69-72	Pump rear cover assembly
15	Retracting spring	73	Gear housing
16-19	Piston and seal rings	74-75	Gear section
20-21	Dipstick and seal ring	76	O-shape seal ring
22	Oil seal ring	77	Compound annular tubes
23	Check ring	78-81	Pump front cover assembly
24	Front cylinder cover	82-88	Hydraulic valve
25	Vent plug	89-92	Control handle assembly
26-27	2-end long bolt	93-95	Tire frame assembly
28	Fan cover for motor	96	Tire
29-30	Fan and check ring	97	Spring clip
31-34	Front motor cover assembly	98-100	Log cradle assembly
35	Bearing	101-104	Front frame assembly
36	Rotator	105	Front frame cushion
37	Motor casing	106-109	Towing handle assembly
38	Connecting box bottom	110-112	Shields assembly

**NOTE:** Drawing and parts list are shown for reference only should it become necessary to disassemble the unit for repair or replacement of parts.

<b>PART NUMBER</b> 39063700	<b>DESCRIPTION</b> Valve Seal Kit	RELATED PROBLEM Oil leak from valve
39063800	Hydraulic Tank Seal Kit	A) Oil leak from connection position of front cylinder cover and tank B) Oil leak from connection position of hydrualic valve and tan.
39063900	Oil Tube Seal Kit	Oil leak from connection position of oil tube
39064000	Dipstick Seal Kit	Worn out seal at dipstick
39064100	Wheel Assembly	Broken or damaged wheel
39064200	Nylon Liner	Worn out nylon liner under the ram

### PARTS BREAKDOWN FOR 40100500 LOG SPLITTER



### — NOTES —

Model No	Serial No
Date of Purchase	Place of Purchase

# **SPECIFICATIONS**

5 Tons
110V/60Hz
1960W
1500W
12A
3400 RPM
3G 1.0mm <sup>2</sup>
3.3 Quarts
14 seconds
20"
9"
20MPa
20-1/2"
7"
38-1/4" x 11" x 18"
105 lbs.