



TIMBER WOLF™

TIMBERWOLF™ MFG.
CORPORATION
WOOD PROCESSING EQUIPMENT

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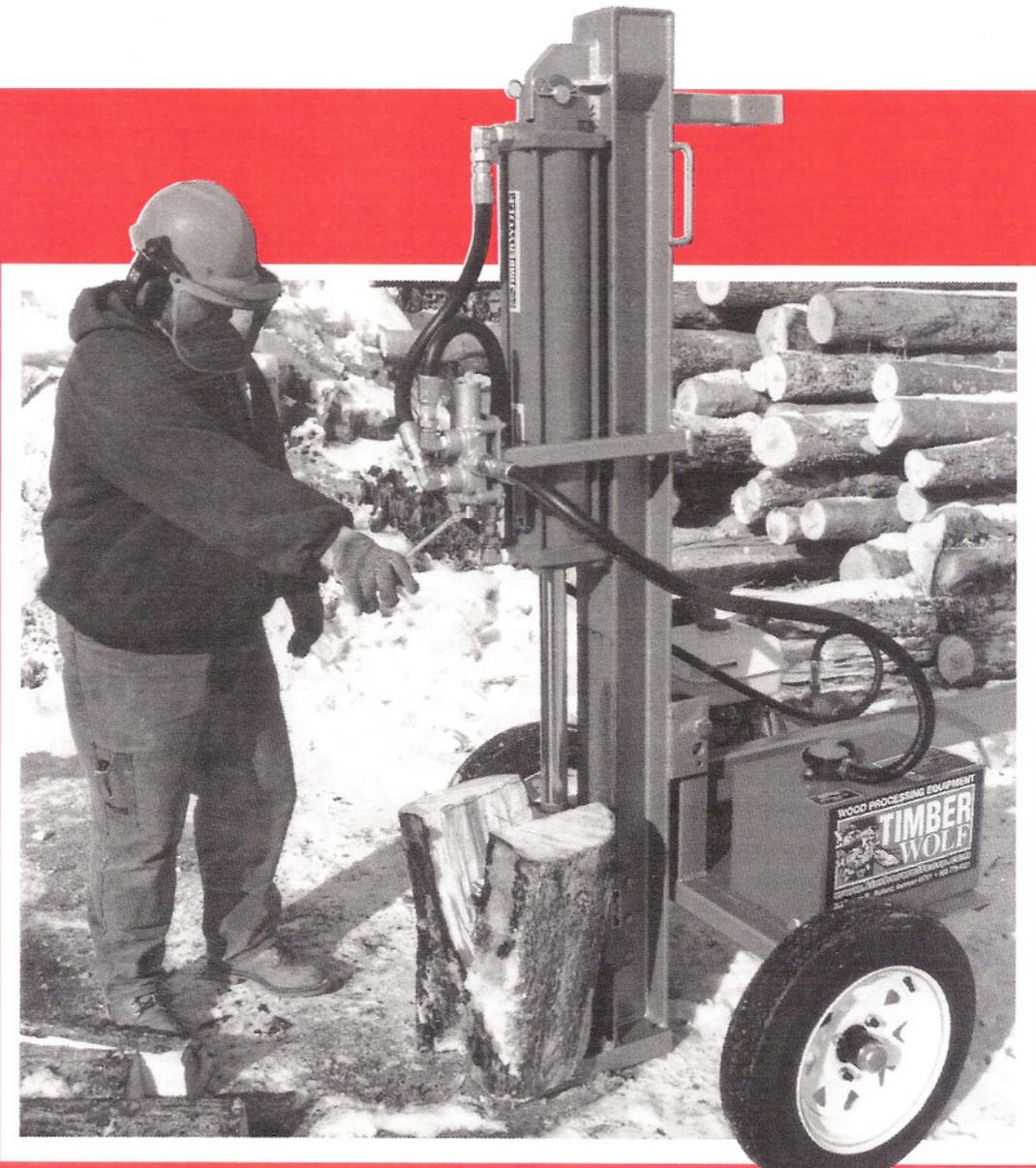
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WOOD PROCESSING EQUIPMENT



M A N U A L

Homeowner and Agricultural log Splitters

❖ **TW-HV1** ❖ **TW-HV2**

TIMBERWOLF
Manufacturing Corporation

Log Splitter
Operation Manual

Model TW-HV1

Model TW-HV2

Fill out and submit Registration Form to ensure warranty coverage and receive product updates.

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TIMBERWOLF Manufacturing Corporation,
Rutland, VT 05701

Every effort has been made to ensure the accuracy of this document.

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The information in this document reflects current or planned product features, functions, and characteristics as of the publication date. Because of on-going product improvements and feature additions, information in this document is subject to change without notice.

About the Manual

Thank you for buying a Timberwolf Manufacturing Corporation log splitter. This splitter is made with high quality components and will provide years of service under normal working conditions.

Please read this entire manual before you operate the machine. If you have any questions regarding assembly, use, safety, or maintenance, please call Timberwolf Manufacturing Corp. at 802-775-4227.

Safety Note

Please take time to read this manual and learn how operate and maintain the log splitter safely. The log splitter is a powerful piece of equipment that can generate more than 50,000 pounds of force. Incorrect use of the log splitter can cause serious injury or death.

Read Entire Manual Before Operating the Log Splitter

Attention Rental Companies

It is extremely important that any person who operates this equipment has access to and has read the operator's manual. Timberwolf Manufacturing Corporation strongly urges you to keep the manual with the splitter at all times, and to instruct all persons who will operate this machine to read the manual.

Caution!

Residual Hydraulic Energy

Residual energy must be released from the pressurized hydraulic fluid before any maintenance or repair work is done on the log splitter. Hydraulic fluid can remain highly pressurized even while the splitter's motor is off. Escaping pressurized hydraulic fluid can penetrate skin and cause serious injury.

To release residual hydraulic energy:

1. Shut off splitter motor (tractor motor if splitter is a three-point hitch model).
 2. Move control valve back and forth, from one limit of travel to the other, at least four times.
 3. Hold valve for three seconds at each limit of travel.
-

Record your log splitter's ID numbers here:

Model # _____

Serial # _____

Motor # _____

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Protect the investment you've made in a Timberwolf Manufacturing log splitter.

Fill out the Registration Form and send it to us by mail or Fax to ensure your warranty coverage and enable you to receive product updates.

All warning stickers and hazard triangles should be secured and clearly visible at all times. Please check decals daily.

Replacement safety and warning stickers are available free of charge from Timberwolf Manufacturing. Warning stickers include: **One Man Operation** and **Caution**.

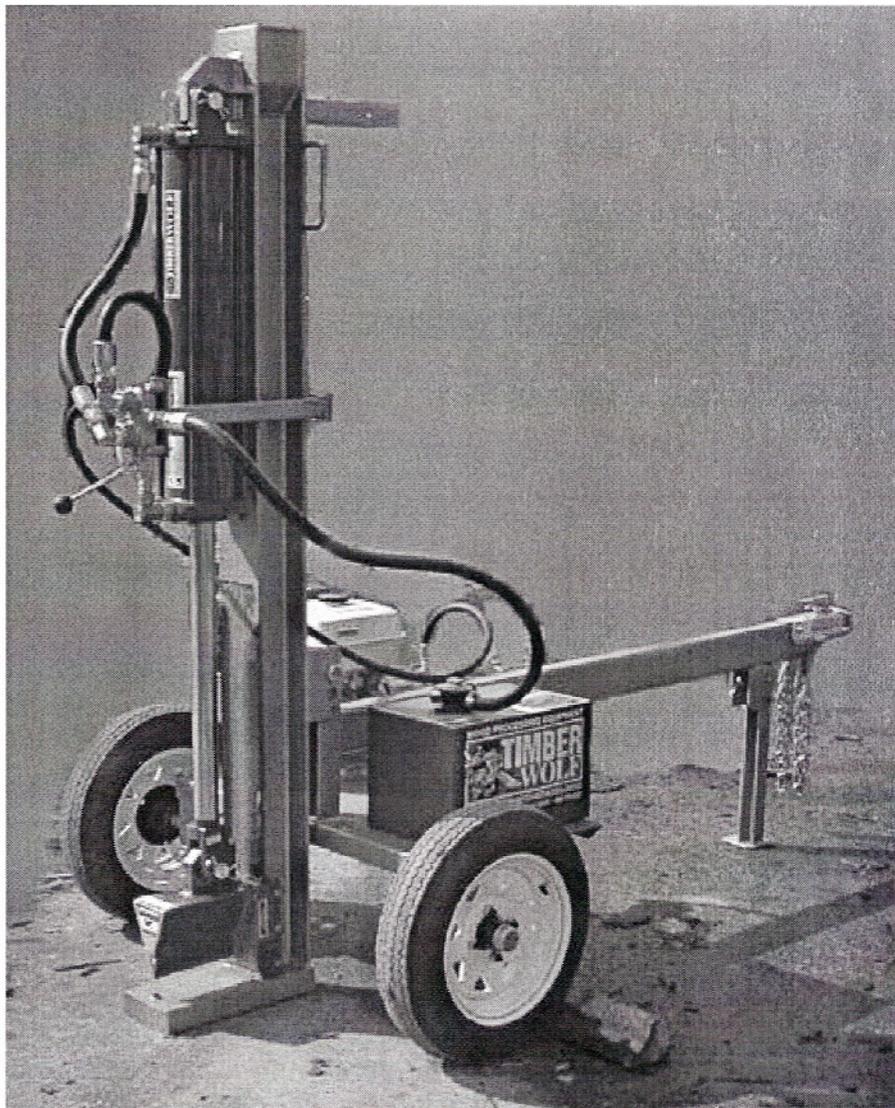
About Your Timberwolf Log Splitter

General

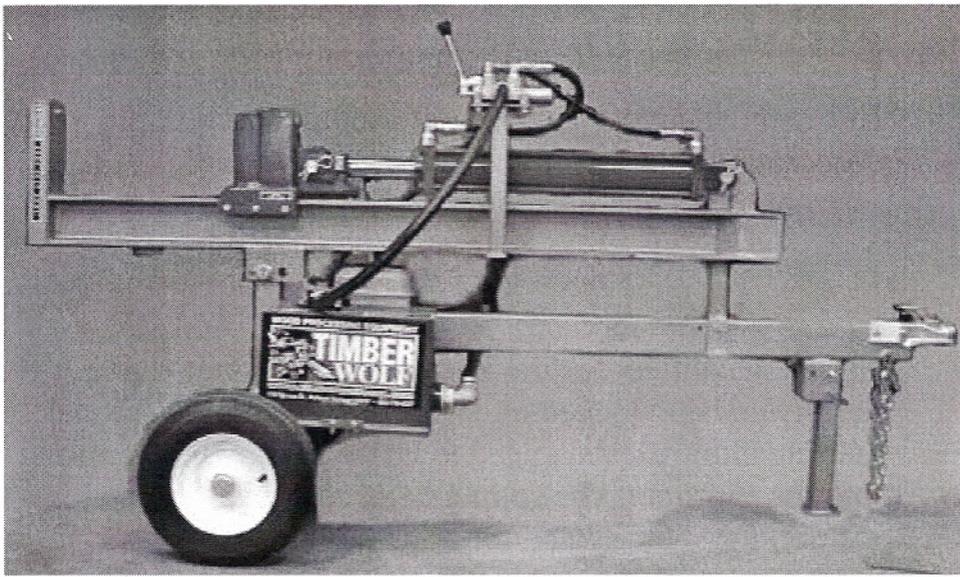
This manual covers Timberwolf Manufacturing Corporation's family of convenient and versatile, horizontal/vertical log splitters:

- TW-HV1
- TW-HV2

These log splitters feature a hinged log carriage that can be swiveled and locked into a vertical position. Vertical splitting eliminates the need to wrestle large pieces up and onto the carriage. The splitters also lock in horizontal position for splitting and for transport.



Don't forget to fill out and submit your Log Splitter's registration form.

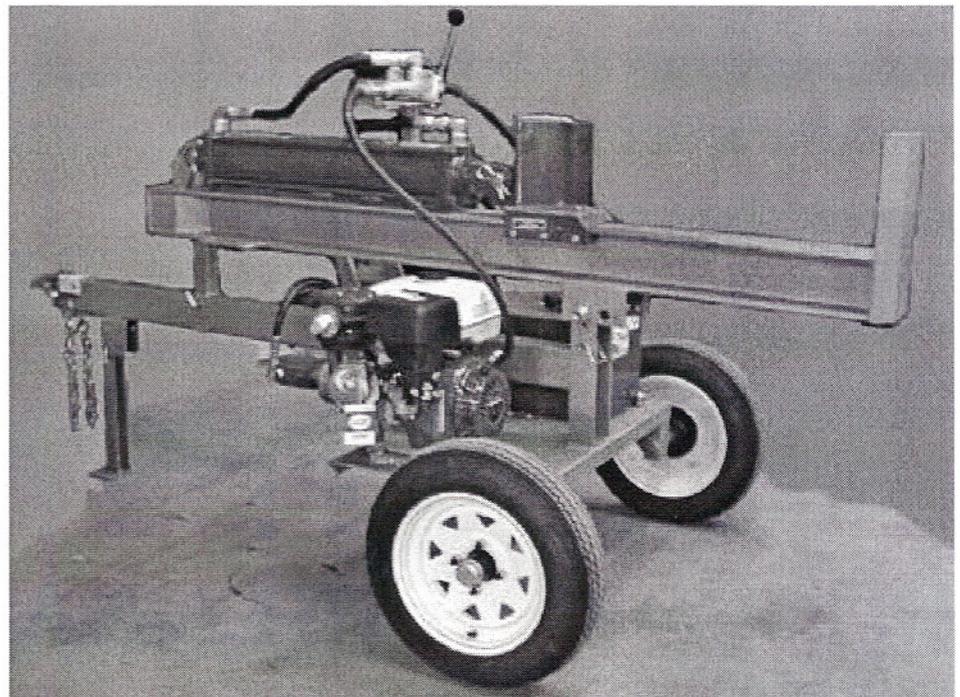


TW-HV1 –

- 5.5 HP motor,
- 11 GPM pump,
- 4 inch cylinder,
- 20 tons of force,
- 8 inch tires

TW-HV2 –

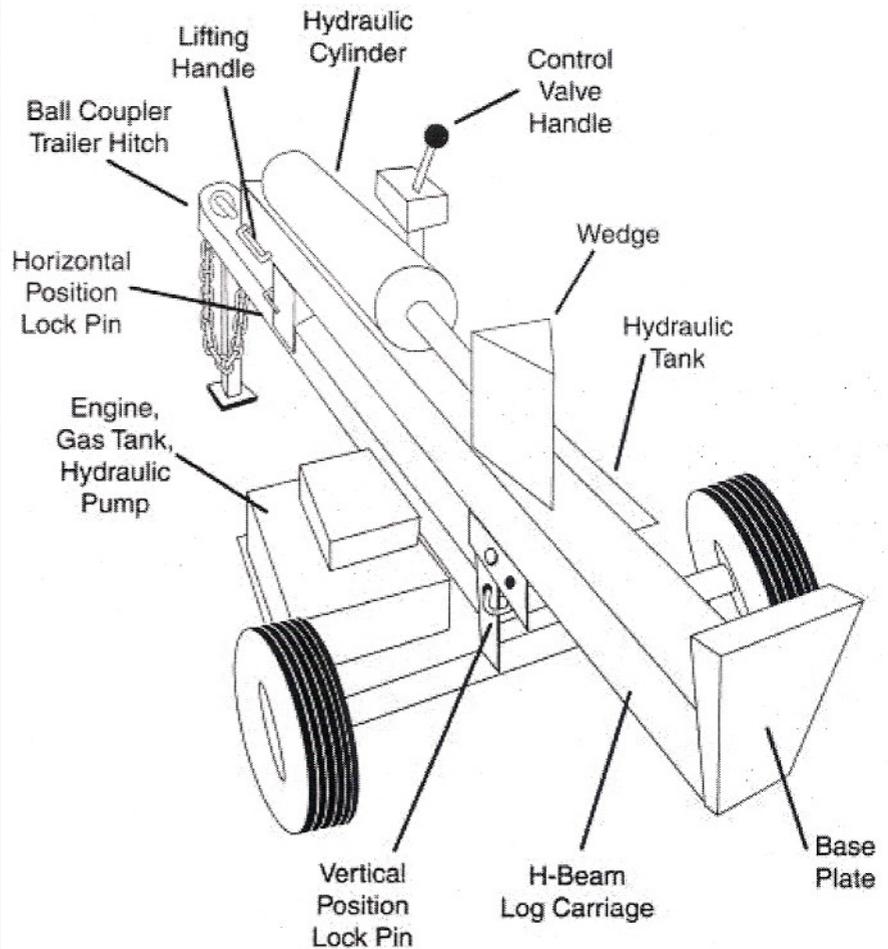
- 9 HP motor,
- 16 GPM pump,
- 5 inch cylinder,
- 25 tons of force,
- 12 inch tires



General Description

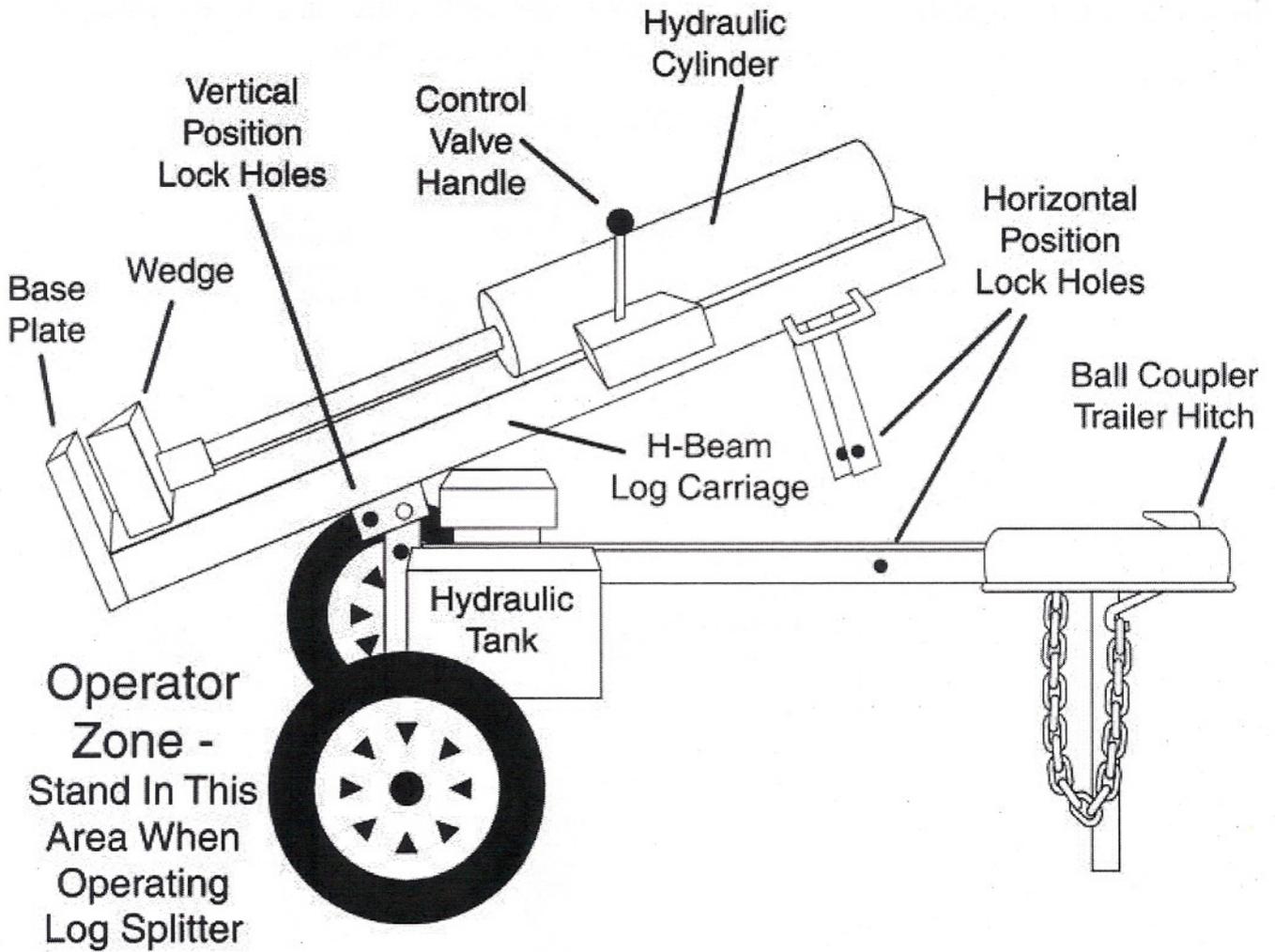
The next two drawings identify the log-splitters' parts by the names this manual uses for them.

TW-HV Components:



⚠ CAUTION

Operator Zone is the area forward of the wheel, on hydraulic tank side of the machine. Stand in that area while operating the log splitter. Do not reach across to the controls from anywhere else.



H-beam Log Carriage

- The hydraulic cylinder/wedge assembly is mounted on a 5" x 5" H-beam log carriage.
- Carriage hinged for operation in either horizontal or vertical position.
- H-beam configuration is stronger and more rigid than equivalent-size I-beam.

⚠ CAUTIONS

- Always insert locking pin to secure carriage in the selected position.
- Never move the log splitter with carriage in the vertical position.

Two-stage Hydraulic Pump

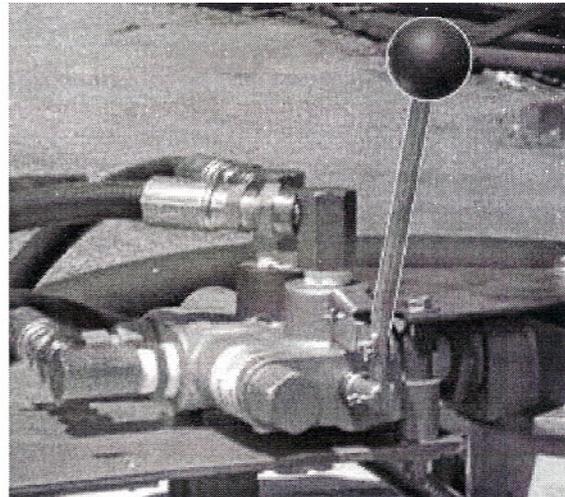
Timberwolf log splitters use a two-stage hydraulic pump that –

- Normally moves the wedge at high speed with low force.
- Shifts automatically to low speed and high force when the log splitter encounters more resistance.
- May shift two or three times splitting some logs.

If the two-stage hydraulic pump stays in one stage all the time, contact your local dealer or another authorized Timberwolf service facility.

Single Handle Valve

Standard-equipment hydraulic control is a single handle valve.



- Wedge travels forward only while valve handle is held in position.
- Cylinder automatically completes return stroke when valve handle is pushed back to détente position and released.

Wedges

- Timberwolf HV log splitters employ a hydraulically powered, single-blade wedge.
- Wedge splits logs into two pieces on each stroke.

Specifications		
Models:	TW-HV1	TW-HV2
Weight –	590 lb.	660 lb.
Splitting Force –	20 tons	25 tons
Horse Power –	5.5	9
Hydraulic Pump –	11 GPM	16 GPM
Hydraulic Tank –	4.5 gallons	7.5 gallons
Max. Log Length –	26 inches	26 inches
Cylinder Size –	24 x 4 x 1.75 in.	24 x 5 x 2 in.
Cycle Time –	13 seconds	11 seconds
Log Carriage –	5 in. x 5 in. H-beam	5 in. x 5 in. H-beam
Tire Size –	8 inch	12 inch
Hitch –	2 in. ball coupler	

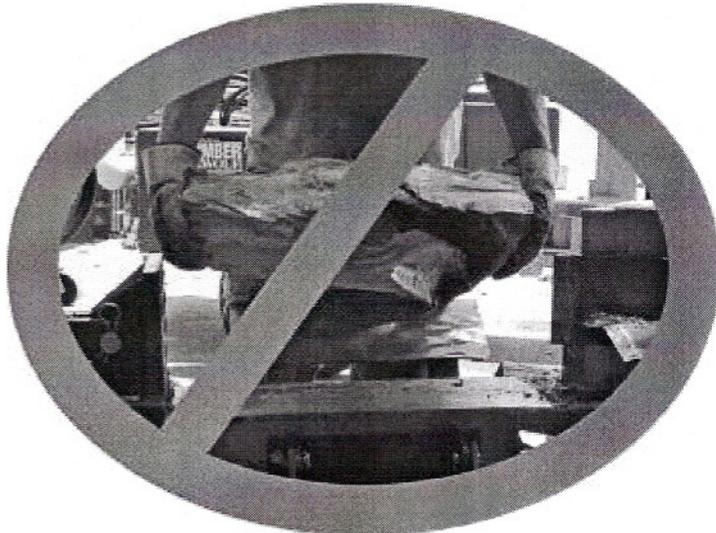
Important Safety Instructions

What You SHOULD Do

- Read this manual before you operate the log splitter.
- Locate log splitter only on firm, level ground. Site must be free of slippery surfaces and tripping obstacles.
- Only operate the log splitter outdoors or in a well-ventilated area. The motor emits colorless, odorless carbon monoxide gas that can cause fatal poisoning.
- Only operate the log splitter in a well-lit area.
- Always wear personal protective equipment –
 - Goggles or face shield for eye protection
 - Ear plugs or hearing protectors
 - Snug-fitting work gloves (loose gloves increase risk of snagging)
 - Steel toe safety shoes.
- Keep hands and feet clear of splitting area while the wedge is in motion.
- Clear pieces from underfoot after each log is split when operating in horizontal position.

What You SHOULD NOT Do

- Never split anything other than logs.
- Don't handle logs by their ends when you position them for horizontal splitting.



What You SHOULD NOT Do (Continued)

You don't want your hands at pinch points where they can get caught between a log and the wedge or base plate.

- Don't put any part of yourself, your clothing, or your personal protective equipment into a crack in a log that's being split; it might close suddenly and with great force.
- Do not straddle or climb over the log splitter at any time.
- Do not move or reposition the log splitter with the motor running.
- Do not modify or alter the machine in any way at any time.

What You SHOULD NEVER Do

- When splitting vertically, never put **any** part of your hand on the top end of the log to steady it. If you must steady a log, place your hand mid-way down the side.



- Never team up with another person to operate the log splitter controls – it's a one-person job.
- Never operate log splitter under the influence of alcohol, drugs, or medication.
- Never operate log splitter with faculties reduced by any physical condition such as head cold or dizziness.
- Never allow an untrained operator to use the log splitter.
- Never allow anyone under age eighteen to operate the log splitter.
- Never leave log splitter unattended with its motor running.

Hydraulic Safety

WARNINGS

Escaping pressurized fluid from hydraulic system leaks can have enough force to penetrate skin and cause serious injury or death.

Hydraulic fluid can remain highly pressurized while splitter motor is off.

Never use your hand or any part of your body to check for hydraulic system leaks while the system is pressurized.

Get professional medical help at once if hydraulic oil penetrates anyone's skin.

Always release residual energy from pressurized hydraulic fluid before doing any maintenance or repair work on the log splitter.

<p>What You SHOULD Do</p>	<ul style="list-style-type: none"> • Inspect hydraulic hoses every day – check for worn, frayed, kinked, and cracked areas. • Replace any damaged or worn hoses. • Use sheet of cardboard or log to check for hydraulic leaks while system is running. • Depressurize system to release residual hydraulic energy before starting any repairs. <ol style="list-style-type: none"> 1. Shut off splitter motor. 2. Move control valve handle back and forth, from one limit of travel to the other, at least four times. 3. Hold valve for three seconds at each limit of travel. • Contact Timberwolf Manufacturing Corp. or a qualified hydraulic mechanic to replace worn components.
<p>What You SHOULD NOT Do</p>	<ul style="list-style-type: none"> • Do not make any adjustments to the pressure relief valve. • Never remove cap from hydraulic tank while motor is running or while tank is still warm after motor is shut off. Hot pressurized oil can cause serious injury, so wait for hydraulic tank to cool before removing cap. • Never use any connectors, valves, or fittings that are different from the ones originally installed on the log splitter.

Before You Start the Log Splitter

Check Fluids

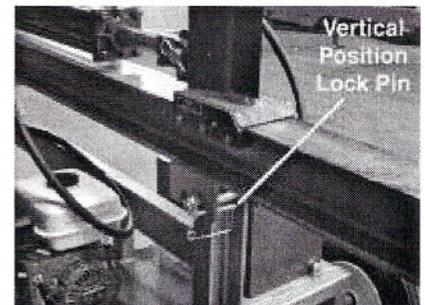
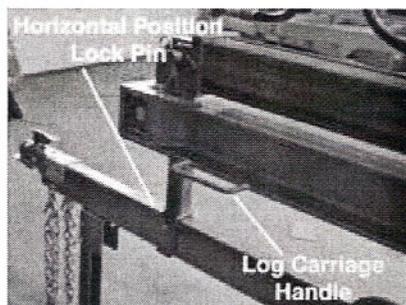
- Engine oil should be to the level of the fill pipe.
- Hydraulic oil:
 - Timberwolf recommends use of Rando 46 (Texaco).
 - Level should be two inches below the top of the tank.

Location & Setup

- Place log splitter on level ground, in a well lit, well ventilated spot.
- Check around log splitter for hazards. Make sure there are no slippery surfaces or objects to trip over in the area.
- Make sure there won't be people or animals in the area around the log splitter.
- Take out cotter pin holding the hitch support leg in the raised position, swing leg down, and insert cotter pin in the hole for the down position..

Vertical Setup

- Raising and lowering the log carriage to and from vertical position requires two people, one on each side of the machine.
- Firmly block wheels so that log splitter cannot roll in either direction.
- For best weight distribution, wedge should be fully extended when raising and lowering log carriage.
- Unclip and remove both the horizontal and vertical position lock pins.



**Vertical
Setup**
(Continued)

- Firmly grasping the log carriage handles, raise the log carriage into the vertical position.

 **WARNING**

When raising or lowering the log carriage, never reach across to the handle on the far side.

- Continue supporting the log carriage until the lock pin is inserted in the vertical locking position and clipped.
- Re-insert and clip the horizontal position lock pin to keep it from getting lost.

Operating Instructions

Start Up

- Start motor.

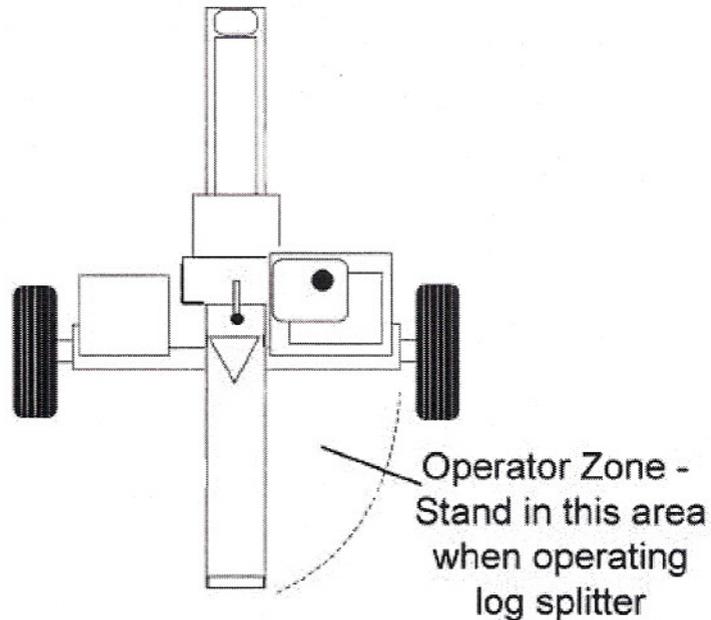
NOTE

See motor manufacturer's manual for motor starting and maintenance instructions.

- Run motor at idle for 10 – 15 minutes to let hydraulic oil warm up.

Splitting Safety

- Always stand inside the **Operator Zone** to run the log splitter. Never operate the log splitter from anyplace else, including the area in front of the valve handle.



- Handle logs only from the sides; never by the ends.
- For best splitting results, place log with butt end on the base plate.
- Be very careful to keep arms and fingers away from the wedge and base plate.
- Keep hands and fingers clear at **all** times. Many log-splitting accidents happen on the return portion of the stroke.

<p>Splitting Safety (Continued)</p> <p>Vertical Operation Safety</p>	<ul style="list-style-type: none"> • Don't put any part of your body within the splitting area. Use a stick if you need to remove debris from the splitting area. • Pieces to be split with the machine in vertical position should be cut as near to a 90° angle as possible. • Stand piece unsupported or leaned back against the log carriage beam if possible. • If you must support a piece, place your hand midway down the outside surface – away from the beam – and remove your hand as soon as the pieces is firmly held between the wedge and the base plate.
<p>Operating the Log Splitter</p>	<ul style="list-style-type: none"> • For best splitting results, place logs with the butt (wider) end on the base plate. • For horizontal splitting – <ul style="list-style-type: none"> • Put one hand on top of log in the middle to keep it steady until it's held firmly between wedge and base plate – then get your hand out of there. • For Vertical splitting – <ul style="list-style-type: none"> • Stand piece unsupported or leaned back against the log carriage beam if possible. • If you must support a piece, place your hand midway down the outside surface – away from the beam – and take it away as soon as the piece is firmly held between the wedge and the base plate. • Activate control valve – push handle forward and hold. • Keep holding valve handle down until split pieces fall away or wedge reaches full extension, one or two inches from base plate. • Before starting return stroke, let hydraulic system recover by moving valve handle to neutral position for a moment. • Make sure nothing will interfere with wedge while it retracts. • Press valve handle backward into locked position and let go. Wedge returns by itself.

- Valve handle stays in locked position until wedge is fully retracted.
- To stop wedge –
 - During forward stroke, release control handle.
 - During return stroke, pull control handle forward to release it from the locked position.

NOTE

Operate hydraulic control valve smoothly. Allow a short pause when reversing directions, then press lever firmly in direction you need to go. Slamming valve lever in either direction makes the system wear out faster.

- Clear split pieces from the operator zone frequently. Allowing pieces to accumulate underfoot can be both inconvenient and unsafe.

Transporting the Log Splitter

Preparation

- **Never** move the log splitter with the log carriage in the vertical position.
- **Never** move the log splitter with the motor running.
- Make sure fuel valve on log splitter motor is in the "OFF" position.

CAUTION

If fuel valve isn't shut off, fuel will be forced into the cylinder and crankcase during travel. If that happens, the engine motor oil and spark plug have to be replaced.

- Make sure there are no loose parts or debris on the log splitter to fall off while it's being towed.
- Never tow the log splitter with a log on it.
- Make sure the front leg is retracted and pinned up before transporting.
- Make sure log splitter's ball coupler is firmly attached to ball on tow vehicle hitch:
 - Raise hitch latch to unlocked position.



- Place hitch onto ball of tow vehicle's trailer hitch.
 - Lower hitch latch into locked position and secure with locking bolt.
- Make sure that safety chains are securely attached, with sufficient slack to allow for turning.

Towing Safety

- **Never allow anyone to ride on the log splitter.**
- **Never transport anything on the log splitter.**
- **Obey local, state, and federal regulations** when you tow the log splitter on public roads and highways.

NOTE

Some states may require the log splitter to be registered with the State Department of Motor Vehicles.

- **Fenders and light kits**, required in some states, are available from Timberwolf Manufacturing as optional equipment.
- **Do not exceed 30 MPH** while towing the log splitter.
- **Towing log splitter can affect handling:**
 - Log splitter might "off track" tow vehicle.
 - Log splitter can turn tighter than tow vehicle does.
- **Never back up tow vehicle with log splitter attached.** Log splitter can jack knife, causing damage to itself and/or tow vehicle.
- **Long distance towing is not recommended.** The log splitter does not have springs to absorb road shock. Extended towing can cause unnecessary wear.

Maintenance

⚠ WARNING

Make sure motor is shut off and hydraulic system is depressurized before you perform any maintenance. Make sure hydraulic oil has cooled. Read "Safety" section of this manual before performing any repairs.

Engine Oil

- First change after first 5 hours of operation
- Regular changes after every 20 hours of operation

Hydraulic Oil

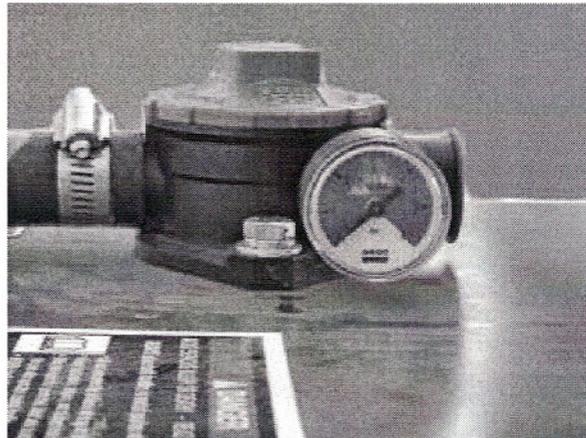
- Regular changes after every 200 hours of operation

NOTE

If hydraulic oil becomes contaminated it should be changed immediately.

Hydraulic Oil Filter

- The log splitter is equipped with an in-tank, ultra-fine steel mesh hydraulic oil filter.
- Under normal operating conditions change the filter after every 1000 hours of operation.
- There is also a green/yellow/red filter condition gauge mounted on the hydraulic oil tank filler cap.



- Change the filter if gauge approaches the red zone.

Wedge Assembly

- Grease assembly daily to reduce wear on beam and sides.
- Use any high-grade tube grease.
- Replace wear plates (also called "gibbs") if wedge can be raised more than one quarter inch off the beam.
- Sharpen wedge regularly with file or grinder.

Daily Maintenance

General

- Check all nuts, bolts, and welds to be sure that the frame and components are secure.
- Make sure that the wear plates attached to the wedge assembly are firmly bolted in place.

Grease

- Make sure wedge assembly and top of beam are well lubricated with grease.
- Grease push block at grease fittings.
- Smear grease across top of beam.

Motor

- Consult motor manufacturer's manual for motor's daily maintenance requirements.

Hydraulic Hoses

- Inspect hydraulic hoses for frayed, worn, kinked, or abraded areas.
- Replace any damaged or worn hydraulic hoses immediately.

 WARNING

Make sure system is depressurized before you do any hydraulic system repairs. See Hydraulic Safety in the Safety section.

Annual Maintenance

Grease

- Grease wheel bearings annually.
- Grease wheel bearings after any trip longer than 50 miles.

Hydraulics

- Change hydraulic oil annually.
- Change hydraulic oil filter after 1000 hours of operation or when filter condition gauge approaches red zone.

 **CAUTION**

Make sure system is depressurized before you do any hydraulic system repairs. See Hydraulic Safety in the Safety section.

Limited Warranty

Product Covered:

This warranty is for Timberwolf and/or Valley Wood Processing branded log splitters, conveyors, wood processors, ride-on equipment and their attachments or accessories.

Date Warranty Begins:

The warranty begins on the date of sale and is warranted by Timberwolf Mfg. Corp. to the original purchaser only.

What We Will Do for You:

We or your authorized dealer will, at our option, repair or replace any part found to be defective in material or workmanship, without charge for parts or labor, to the original residential purchaser for a period of time of one year. However, charges for pickup, delivery, and service calls are not covered by this warranty. The engine is warranted separately by the engine manufacturer.

What Is Not Covered:

This warranty does not apply to parts that have been damaged by accident, alteration, misuse, abuse or improper lubrication. The following items are not covered after the first six months of home use: hoses, batteries, bushings, seals, filters, tires, wheels, paint, chains, appearance items, light bulbs, and similar items which are normally replaced through periodic maintenance.

Limited Commercial Use Warranty:

If used for commercial, institutional or rental purposes, the warranty on this product is limited in duration to 90 days from date of purchase. This warranty does not apply to parts that have been damaged by accident, alteration, misuse, abuse or improper lubrication. The engine for commercial use is warranted separately by the engine manufacturer.

Commercial Use Definition:

For the purpose of this warranty "consumer use" means personal residential household use by the original retail consumer. "Commercial use" means all other uses, including use for commercial, income producing or rental purposes. Once a unit has experienced "commercial" use it will be considered as a commercial unit for the purposes of this warranty.

How To Get Service:

To obtain service, contact our nearest dealer, or Timberwolf Mfg. Corp. at 118 Spruce Street, Rutland, VT 05701, or call us at 802-775-4227. For engines, contact us or our dealers, or consult your Yellow Pages for the name of the service dealer that is authorized by the manufacturer.

Disclaimer of Consequential Damages:

Timberwolf Mfg. Corp. shall not be liable under any circumstances for any incidental or consequential damages or expenses of any kind, including – but not limited to – the cost of equipment rental, loss of profits, or cost of hiring services to perform tasks normally performed by the equipment.

Limitation of Implied Warranties:

Any implied warranties, including without limitation any implied warranty of merchantability or fitness for a particular purpose, shall be limited in duration to a period of one year (90 days if product is purchased for commercial or other non-residential use) from the date of sale.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitation on how long an implied warranty lasts.

Your Rights Under State Law:

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

TIMBERWOLF MANUFACTURING CORPORATION

Warranty Registration Form

Timberwolf Manufacturing Corporation requires this warranty registration form to be filled out and returned within 30 days after the machine's purchase. The record of your purchase helps us to efficiently process any warranty claims that may arise.

**Purchaser Name
(Individual or Company):** _____

Address: _____

**Purchased From
(Dealer):** _____

Address: _____

Date of Purchase: _____

Model Number: _____

Serial Number: _____

Motor Serial Number: _____

Options: _____

Mail to TIMBERWOLF Manufacturing Corporation
118 Spruce Street
Rutland, Vermont 05701

OR

Fax to 802-773-1275

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