

# HWP-100TR-D Firewood Processor



**Halverson**  
**HWP**  
Wood Products, Inc.

**205 College Street  
Pine River, MN 56474**

**218-587-2065**

**[www.HalversonWoodProducts.com](http://www.HalversonWoodProducts.com)**



## HWP-100TR-D Firewood Processor

*Turn your equipment  
into a firewood  
processing monster!*

**CONGRATULATIONS** on your purchase of the HWP-100TR Firewood Processor. This processor is designed and constructed to give you many years of hassle-free operation. Please be sure to read and understand this Operation/Safety Manual.

### **Operational Requirements**

The HWP-100TR Firewood Processor is designed to operate on firm and level ground. The processor's built in power unit supplies hydraulic flow up to 16 gallons per minute and uses 87 octane un-leaded Gasoline.

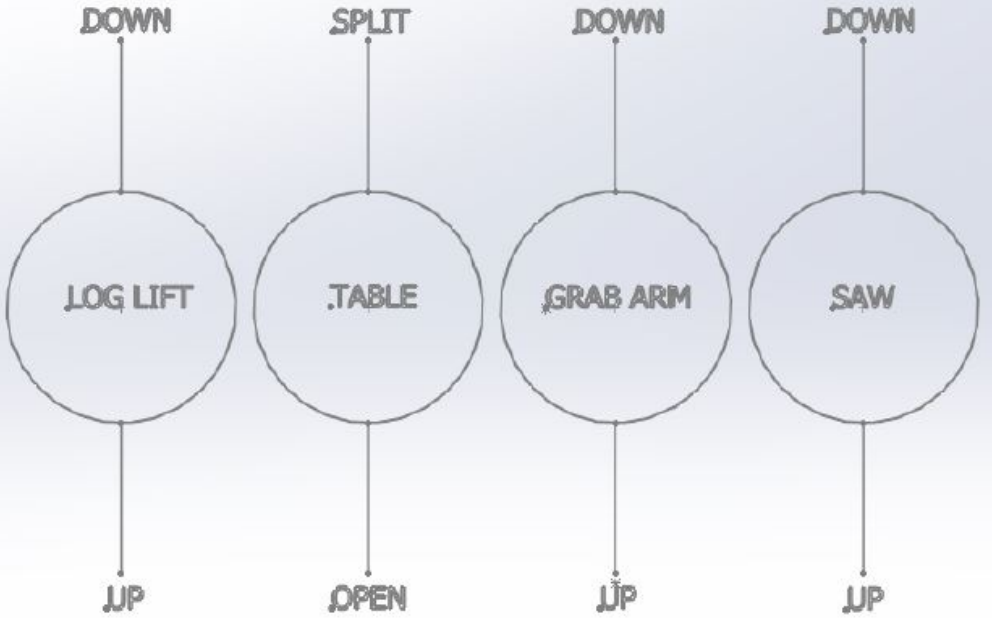
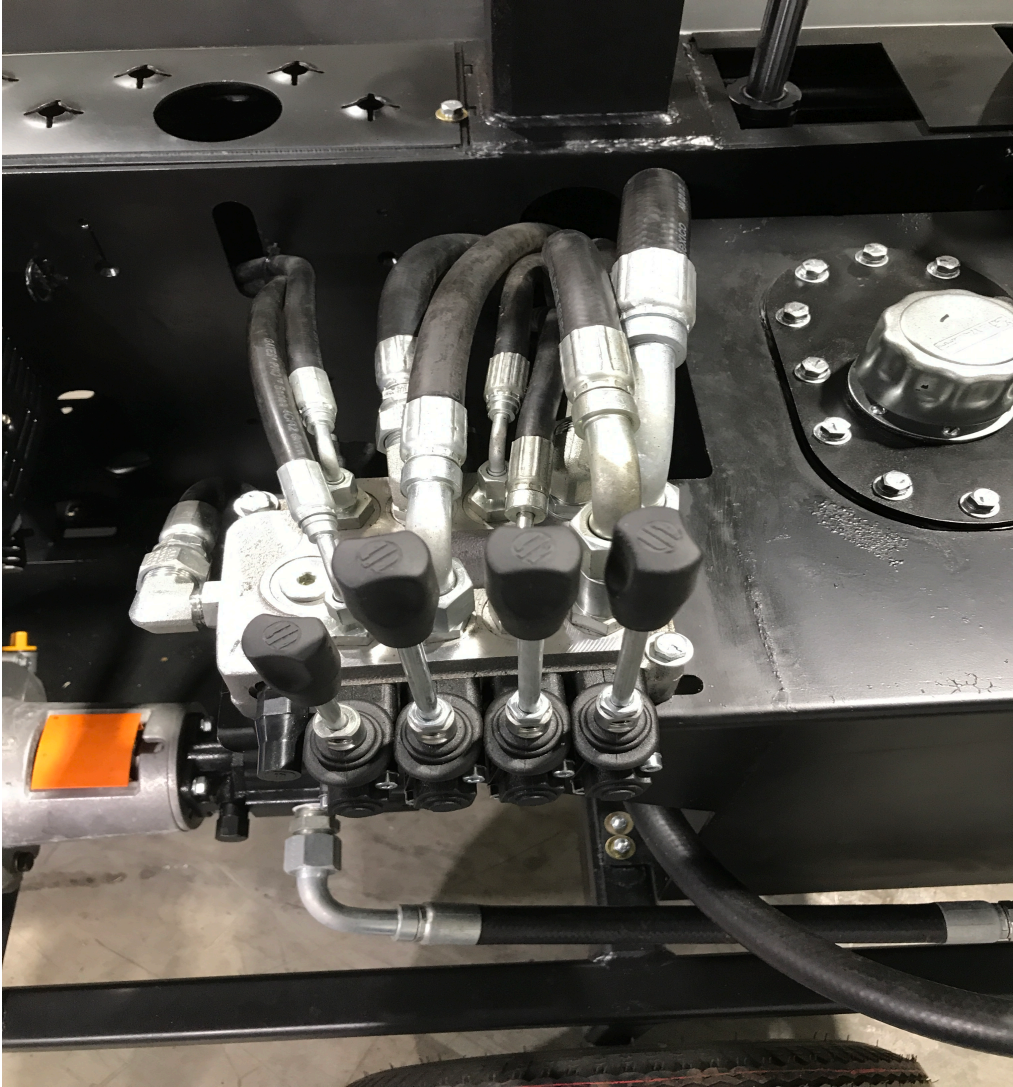
### **Motor requirements**

The Duro Max XP16HP motor uses SAE 10W-30 motor oil. See the Duro Max user manual for further maintenance information and service intervals.

# HWP-100TR-D Specifications

Length .....	Travel Configuration: 126" (320 cm) Working Configuration: 96" (244 cm)
Width .....	68" (173 cm)
Height .....	64" (162 cm)
Weight .....	706 lbs. (320 kg)
	<u>Hydraulic Requirements</u> 13 gallons Universal Trans Hydraulic oil (fill to 3/4 on sight glass)
Control System.....	Manually operated valves mounted on the processor.
Max Log Diameter .....	14" (36 cm)
Max Log Length .....	8' (2.4 m)
Min Log Length .....	4' (1.22 m)
Firewood Cut Length.....	Up to 16 " (40.64 cm)
Saw Bar.....	Length: 18" (64.2 cm)
Saw Chain.....	Oregon 3/8 pitch; .058; 68 DL
Saw Oiler .....	Automatic 2 quart oil tank (1.89 l)
Splitter Cylinder .....	Custom welded 3" Bore x 18" Stroke
Splitter Force.....	21,195 lbs. @ 2400 psi
Splitting Wedge.....	2-Way – Optional 4-Way
In-feed.....	Sliding table carries log to wedge
Mounting Spec.....	2" ball receiver

# DIAGRAM OF VALVE BODY



## DIAGRAM OF HWP-100TR-D MAIN PARTS



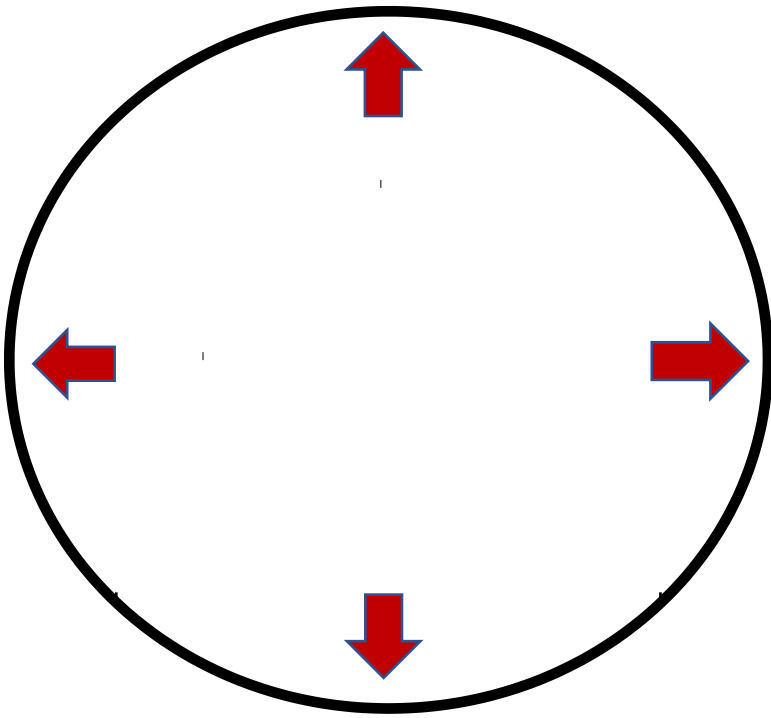
1. SPLITTING WEDGE
2. CHAIN SAW
3. SAW GUARD
4. GRAB ARM
5. LOG LIFT
6. OIL CONTAINER
7. TABLE
8. SPLITTER TROUGH
9. MOTOR
10. CONTROL LEVERS

## GENERAL SAFETY

### Labels

Your HWP Firewood Processor carries prominent labels as reminders for its proper and safe use. Shown below are copies of all the labels that appear on the equipment. Take a moment to study them and make note of their location on your processor before you operate the unit. Replace damaged or missing labels immediately.





**Keep everyone at least  
50 FEET (15 meters) away  
from machine while in  
operation.**

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Operating this Firewood Processor safely is necessary to prevent or minimize the risk of serious injury or death. Unsafe operation can create a number of hazards for you. Always take the following precautions

## GENERAL SAFETY, CONTINUED

### Firewood Processor Capabilities and Limits

- Used to process logs, do not use for other purposes.
- Process only wood that is within recommended size limits.
- Process one log at a time.
- Do not modify the processor except as noted in this manual.

### Operator Requirements

- Operators must be adults and familiar with the operation of your equipment.
- Never operate while impaired.

### General Safe Operating Practices

- Keep all bystanders at least 50 feet (15 meters) away while operating processor. Do not allow bystanders directly in front of or directly behind processor.
- Keep hands and feet away from processor's moving parts. **WARNING!!** Never load wood into or remove wood from the processor or splitter by hand.
- Make sure all equipment safety devices are in working order.
- Before performing any maintenance or inspection, shut down the equipment's engine.

## GENERAL SAFETY, CONTINUED

### Chain Shot

#### What is chain shot?

Chain shot is the high velocity separation and ejection of a piece or pieces of cutting chain from the end of a broken chain in mechanized timber harvesting. Chain shot exposes both machine operators and bystanders to a risk of serious injury or death. Chain shot typically occurs near the drive end of the cutting system but can also come from the bar tip area.

Industry research indicates an average of 1 in 50 broken chains had parts missing that may have been the result of a chain shot event.

#### How does chain shot occur?

A chain shot consists of two breaks in a chain.

First, the loop of chain breaks and forms two ends. One end moves past the drive sprocket or bar nose and is rapidly accelerated due to a whip-like motion of the chain end.

The “whip action” causes the second break releasing small parts at very high velocity.

Chain shot can cause chain parts to be thrown in many directions, especially those along the plane of the saw bar.

#### What does a typical chain shot piece look like?

The most dangerous chain shot parts consist of one to three parts as shown:



#### How can operators reduce the risk of chain shot?

- Operators and bystanders must never be in the plane of the bar when the chain is in motion on the bar.
- Chain speed must be 8000 ft/min (35 m/s) or less for 3/8 pitch Oregon® chain.
- A chain shot guard should be installed near the drive sprocket.
- Chains should be inspected frequently. Remove from service all dull and/or worn, damaged and/or cracked chains.
- Always use new Oregon® parts when repairing Oregon® chains.
- Industry groups recommend that chains should be discarded after the second break.
- Always sharpen Oregon® chains to Oregon® factory specifications.
- Maintain proper bar and chain lubrication.
- Maintain proper chain tension.
- Replace the drive sprocket when it has any visible signs of wear.

For additional information see the *Oregon® Mechanical Timber Harvesting Handbook*.

# NOT FOR HIGHWAY USE

### Fitting the Processor to a Vehicle

- 1) Lower the 2" ball receiver onto your vehicle's 2" ball, rotate locking latch and install the spring latch thru the safety lock hole.
- 2) Attach safety chains to your vehicle's hitch assy.
- 3) Install (2) 1/2"x3 1/2" bolts thru the tongue mounting holes, install and tighten lock nuts to secure tongue for towing.

**NOTE:** The processor log lift is not designed to bust frozen wood off the ground. Attempting to break frozen pieces loose may result in damage to the structure of the Firewood Processor.

**NOTE:** The firewood processor can be operated while connected to a vehicle or on it's own.



## REPLACING THE CHAIN

Oregon Saw Chain Part #73EXL068G (3/8" / 0.58" 1.5 mm)

### STEP ONE:

Position the log table in the extended position. This would be all the way to the left.

### STEP TWO:

Hold saw lever forward while bar goes down.

### STEP THREE:

SHUT MACHINE'S MOTOR OFF.

### STEP FOUR:

Loosen saw clamp bolts. See picture to right.

### STEP FIVE:

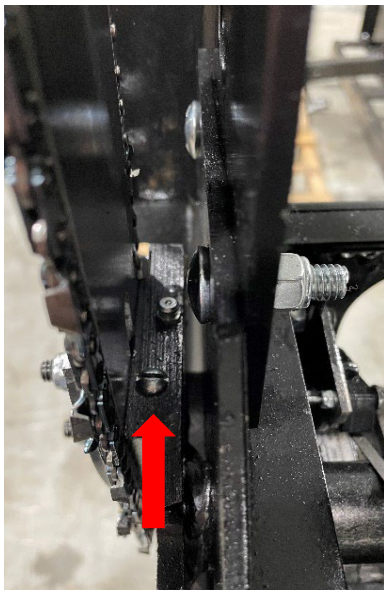
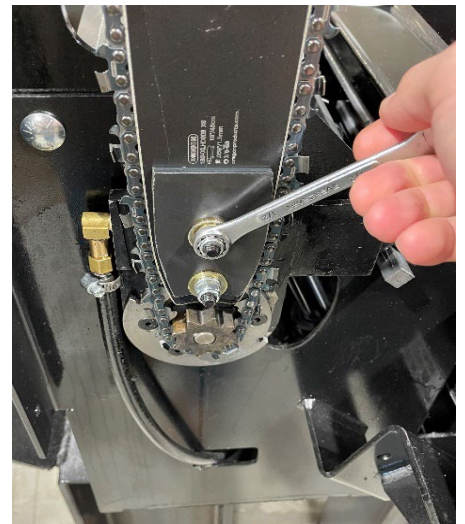
Loosen adjustment behind saw bar. See picture below.

### STEP Six:

Remove chain.

### MOUNTING NEW CHAIN:

Reverse steps to mount new chain.



### NOTE:

Chain requires a 7/32" file to sharpen.

## OPERATING SEQUENCE

- 1) Place the processor near the log pile with the log loader facing the pile.
- 2) Push the log lift handle forward to lower the log lift to the ground.
- 3) With a Cant Hook, roll a log onto the log lift.
- 4)** Pull back on the log lift handle to raise log lift until the log rolls onto the table.
- 5) Push the Table handle forward to extend the splitting cylinder and splitter table carrying the log to the splitter head.
- 6) Pull the Table handle back enabling the table to retract to the desired length of cut.
- 7) Push the Grab Arm handle forward to hold the log in position.
- 8) Pull the Table handle Back until the table is all the way Open.
- 9) Push the Saw Down handle to cut a piece from the log. As the cut is completed, the log will fall into the splitter hopper.
- 10) Pull the Saw Down handle to allow the saw to retract to its home position.
- 11) Pull the Grab Arm handle to release the log.
- 12) Push the Table handle forward to extend the splitter table. This action splits the wood while delivering the remaining log to the splitter wedge for the next cut.

***This completes one cutting and splitting cycle. Repeat this sequence until the log has been cut and split completely.***

# WARRANTY

## Warranty Duration

Unless otherwise provided in writing by Halverson Wood Products Inc., Halverson Wood Products makes the following warranty to the first retail purchaser of each HWP-100 TR attachment:

6 Months from the date of delivery to the first retail purchaser.

## Warranty Coverage

This warranty applies to the HWP-100TR firewood attachment manufactured by Halverson Wood Products, Inc. All parts and components of the HWP-100 processor delivered to the original purchaser, which are found to be defective in materials and/or workmanship, will be repaired or replaced as Halverson Wood Products Inc. elects without charge for parts or repair labor if such defect appears within the warranty period as measured from the date of delivery to the first retail purchaser and if the delivery is reported within 30 days of delivery to:

Halverson Wood Products Inc. 218-587-2065, or  
205 College St, Pine River, MN 56474, or  
Email: halversonwoodproducts@halversonwp.com

## Obtaining Warranty Service

All warranty repair work must be authorized by Halverson Wood Products Inc **prior** to having the work performed. Call 218-587-2065 for authorization. At the time of requesting warranty service, the purchaser must be prepared to present evidence of the date of delivery of the HWP-100.

***\* Without Halverson Wood Products Inc's authorization, the warranty is void!***

## Warranty Exclusions

Halverson Wood Products' obligations shall not apply to any part or component not manufactured, furnished or installed by Halverson Wood Products, nor failures caused by such items.

Specifically excluded are failures of and damage to any vehicle or other piece of equipment, either rubber tired or tracked, upon which the HWP-100TR is attached and any damage to the HWP-100TR caused by failure on a vehicle or other piece of equipment upon which the firewood processor is attached.

## Purchaser's Responsibilities

- The cost of normal maintenance and depreciation.
- Consequences of negligence, misuse, or accident involving the HWP-100TR.
- Consequences of service performed by someone other than a party authorized to perform warranty service, if such service, in Halverson Wood Products' judgment, has adversely affected the performance or reliability of the processor.
- Consequences of any modification or alteration of the machine or the attachment not approved by Halverson Wood Products Inc. These include, but are not limited to, hydraulic pressure settings, contamination of the hydraulic system, changes to the main frame, saw pivot and wedge mounts.
- The effects of hydraulic system neglect as manifested in hydraulic motor pitting, scoring, erosion, valve spool sticking and other internal component caused by cavitations, contamination, high oil temperatures and excessive hydraulic pressure.
- Any premium for overtime labor requested by the purchaser.
- Costs of transporting the processor to and from the location at which the warranty service is performed.

## WARRANTY, CONTINUED

### **Purchaser's Responsibilities, continued**

- Cost incurred in gaining access to the machines or attachments. Overcoming physical barriers such as walls, fences, ditches, streams, or similar structures impeding access to the HWP-100TR or rental of cranes or similar construction of ramps or lifts.
- Incidental travel costs including tolls, meals, lodging and similar expense.
- Service outlet costs incurred in solving or attempting to solve non-warranty problems.
- Services performed by a party other than authorized Halverson Wood Products Inc. personnel.
- Charges by dealers for initial machine set up, installation, start up and inspection deemed unnecessary by Halverson Wood Products Inc. when operation and maintenance instructions supplied with the HWP-100TR are followed.
- Cost of interpreting or translating services.

### **No Representation or Implied Warranty**

Where permitted by law, neither Halverson Wood Products Inc. nor any company affiliated with it makes any guaranties, warranties, conditions, representations or promises expressed or implied, oral or written, as to the non-occurrence of any defect or the quality of performance of it's machines or attachments other than those set forth in the document and DOES NOT MAKE ANY IMPLIED WARRANTY OR CONDITIONS OF MERCHANTABILITY OR FITNESS otherwise provided in the Uniform Commercial Code or required by any Sale of Goods Act or any other statute. This exclusion includes fundamental terms. In no event will a Halverson Wood Products Inc. authorized dealer or a Halverson Wood Products Inc. authorized service facility, or Halverson Wood Products Inc. or any company affiliated with Halverson Wood Products Inc., be liable for incidental or consequential damages or injuries including, but not limited to, loss of profits, loss of firewood contracts, rental of substitute equipment or other commercial loss or damage suffered by the purchaser as a result of any fundamental breach of contract or breach of fundamental terms unless such damages are caused by the gross negligence or intentional acts of the foregoing parties.

### **Remedy Limitations**

The remedies set forth in this warranty are the purchaser's exclusive remedies in connection with the performance of or any breach of guaranty, condition, or warranty in respect of the Halverson Wood Products Inc. firewood processors. In the event that the above warranty fails to correct purchaser's performance problems caused by defects in workmanship and or materials, purchaser's exclusive remedy shall be limited to payment by Halverson Wood Products Inc. of actual damages in an amount not to exceed the cost of the HWP-100TR Firewood Processor.

### **No Sellers Warranty**

No person or entity other than Halverson Wood Products Inc. who sells the HWP-100 firewood processor makes any guaranty or warranty of its own on any processor warranted by Halverson Wood Products Inc. unless it delivers to the purchaser a separate written guaranty certificate specifically guaranteeing the processor, in which case, Halverson Wood Products Inc. will have no obligation to the purchaser. Neither equipment distributors, equipment dealers, nor any other person or entity, has the authority to make a representation or promise on the behalf of Halverson Wood Products Inc. or to modify its terms in any way.

### **Replacement Parts Warranty**

New Halverson Wood Products Inc. parts installed during firewood processor warranty service are warranted for 90 days (certain major parts may be warranted for longer periods) or the remaining warranty period of the processor, whichever is longer. A new processor replacing a failed processor is warranted for the remaining period of the original processor.

## WARRANTY, CONTINUED

### Warranty Transfer

The remainder of the original warranty may be transferred to the subsequent owner of the HWP-100TR only by express written consent. Please report the transfer of ownership to Halverson Wood Products Inc. by phone at 218-587-2065 or by email.

E-mail: [halversonwoodproducts@halversonwp.com](mailto:halversonwoodproducts@halversonwp.com)

## TROUBLE SHOOTING

<b>Problem</b>	<b>Possible Cause</b>	<b>Solution</b>
<b>SAW STALLS WHEN LOWERED:</b>		
	RPM too low	Increase Engine RPMs
	Bar is not getting oil	Decrease downward force
	Too much downward force	
<b>OILER WILL NOT OIL:</b>		
	Low oil	Fill Oil
	Hose to saw bar is kinked or cut	Straighten or replace
	Oiler is plugged	Inspect oil port in saw bar
<b>OIL RESERVOIR DRAINS OUT OVERNIGHT:</b>		
	Oil shut off valve open	Close shut off valve
<b>SAW COMES DOWN AND CHAIN IS SPINNING BUT DOES NOT CUT:</b>		
	Chain dull	Sharpen or replace
	Bar is rough on edges	Replace bar

Serial #: \_\_\_\_\_

Date Purchased: \_\_\_\_\_

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# Manual Release Form

***By signing below, the Customer (Purchaser) acknowledges the following:***

I have received the HWP-100TR Operations/Safety Manual.

I have read and understand the HWP-100TR Operations/Safety Manual.

Halverson Wood Products Inc accepts no responsibility for misuse of the HWP-100TR Firewood Processor.

Any modifications to the HWP-100TR Firewood Processor not performed by authorized service technicians will void warranty.

\_\_\_\_\_  
*Signature*

\_\_\_\_\_  
*Date*

## Warranty Registration

Model # HWP-100TR Firewood Processor

Date Purchased:

\_\_\_\_\_

Serial Number:

\_\_\_\_\_

Purchased By:

\_\_\_\_\_

Company (if applicable):

\_\_\_\_\_

Address:

\_\_\_\_\_

City, State, Zip:

\_\_\_\_\_

Phone:

\_\_\_\_\_

Email:

\_\_\_\_\_

Return to:

**Halverson Wood Products Inc  
205 College St  
Pine River, MN 56474**