

OPERATOR'S MANUAL

TW-10RC Log Splitter



www.timberwolfcorp.com

TW-10RC Log Splitter Operation Manual

Fill out and submit Registration Form to ensure warranty coverage and receive product updates.
Register online at www.timberwolfcorp.com/warranty

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Timberwolf Manufacturing Corporation

Record your log splitter ID numbers here:

Model # _____

Serial # _____

Engine # _____

VIN # _____

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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.

Revised April, 2010
Every effort has been made to ensure the accuracy of this document.

About This Manual

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

Please study this manual before operating the unit as it contains important information relating to safety, operation and maintenance. Timberwolf Manufacturing Corporation strongly suggests you keep it safely stored within the provided container, conveniently located on the machine.

If you have questions regarding anything outlined in this manual, please call Timberwolf Manufacturing Corporation at **1-802-775-4227**.

Read Entire Manual Before Operating the Log Splitter

Safety Note



Please take time to read this manual and learn how to operate and maintain the log splitter safely. If you have any questions regarding assembly, use, safety, or maintenance, please call Timberwolf Manufacturing Corporation at 1-802-775-4227. 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.**



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 log splitter's engine is off. Escaping pressurized hydraulic fluid can penetrate skin and cause serious injury.

To release residual hydraulic energy:

1. Turn off the engine
2. Turn the key back to the on position
3. Press the green button to turn on the remote control unit
4. Press the forward button on the remote and hold it for 5 seconds then release
5. Push the reverse button on the remote and hold it for 5 seconds then release
6. Repeat steps 4 and 5 three times then push the red button on the remote to turn the unit off
7. Turn the key to the off position



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 Corporation.

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Timberwolf TW-10RC Log Splitter

Overview

This manual covers Timberwolf Manufacturing Corporation's TW-10RC Log Splitter.

The TW-10RC can accommodate logs up to 60" in diameter and 10' long. It is operated by a remote control to allow the operator to split logs from a loader/picker or from the ground. This log splitter is intended to be used to reduce very large logs into manageable pieces to either be processed further by grinders/mulchers or to be cut and split into firewood. This machine should not be used for any other purpose.

Misuse of this log splitter may cause serious injury or death.

All log splitter functions are hydraulically driven. The TW-10RC Log Splitter uses a diesel engine to drive the hydraulic pump. The TW-10RC is equipped with a 66HP John Deere engine, which delivers 63 tons of force to the push block. Hydraulic pressure is provided by a 60 gallon per minute pump pushing a 96"x8"x5" cylinder.

Use of the TW-10RC requires that the user have some means available to lift logs to the splitting trough, and to pick up and manage split sections.

The TW-10RC requires a 1 ton truck or larger to move or tow the log splitter.

Hazard Warnings

This machine was designed to split logs only. Timberwolf Manufacturing strongly recommends that this machine not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, do not use the machine until you have first contacted Timberwolf to determine if modifications can or should be performed on the product.



- Only qualified personnel may operate the log splitter and ONLY after reading this manual. Those who operate the log splitter who have not been properly trained or are unfamiliar with the log splitter risk serious injury to themselves and the equipment



- Before operating a log splitter, the user must familiarize themselves with proper emergency shut down procedures

- Do not stand on any part of the machine while it is running for any reason; pinching or crushing injury is possible



- Never operate a log splitter while under the influence of alcohol or drugs

- Never touch parts of the engine or burns can result



- Never operate the machine indoors or without adequate ventilation. Ensure that plenty of fresh air is available. Failure to do so could result in carbon monoxide poisoning

- You should always wear eye protection, hearing protection, snug fit clothing (loose clothing increases risk of snagging), work gloves, and steel toed boots when you operate or work near this machine



- Never allow anyone under age eighteen to operate the log splitter



Fire Hazard - Flammable

- Since this machine uses a diesel powered engine, there is a risk of fire. Read and follow all safety precautions outlined by the engine manufacturer or fire and serious injury may result
- Store fuel and oils in an approved flammable liquid storage container
- Dispose of waste liquids, spill-cleaning material and oil-soaked rags in an appropriate covered fireproof container(s) located at least 25 feet from the log splitter
- Only use dry powder, foam, or CO2 type fire extinguishers on or near the log splitter
- Never use water to extinguish any gasoline or oil fire



Moving the Log Splitter

- Only use suitable rated transport devices to move your log splitter
- The log splitter is heavy and requires the proper equipment to lift or move. Observe proper procedures for lifting and/or moving the log splitter
- Wear steel-toed boots when moving or operating the log splitter



Residual Risk

Residual Risk is defined as the portion of risk that remains after all safety measures have been taken. Although we have taken extensive measures to protect the operator and/or maintenance personnel from injury, all hazards cannot be removed. This manual provides graphical illustrations to aid in identifying potentially hazardous areas associated with your Timberwolf log splitter.



Crushing Hazard

Crush points are created when two moving objects move towards each other or when one object moves towards a stationary object. For example, the push block moving towards the splitting wedge.

To prevent being crushed or pinned, learn to recognize and avoid potentially dangerous situations.



Shear Hazard

Shear points are created when the edges of two moving objects move close or across one another with enough speed or force to cut a soft material. For example, shear points are hazardous because of their cutting force and they often move so rapidly that they may not be visible, so it is easy to forget they are there. Because some shear points cannot be guarded, it is important to be aware of their potential hazard and stay alert during operation.



Entanglement Hazard

Rotating shafts are the most common source of entanglement accidents, although any exposed machine part that rotates can be a potential entanglement hazard. A cuff, sleeve, pant leg, long hair, or just a thread can catch a rotating shaft and result in serious injury or death. Entanglement with a wrap point can pull you into the machine, or clothing may become so tightly wrapped that you are crushed or suffocated. In other cases, you could be thrown off balance and fall into other machine parts. Even a perfectly round shaft can be hazardous if there is enough pressure to hold clothing against the shaft. Hazards increase with shafts that are not round. Ends of the shafts that protrude beyond bearings are also dangerous. Check all equipment for potential entanglement points and be alert to their potential danger.



Drawing In/Trapping Hazard

Drawing In/Trapping points exist where objects are pulled into equipment, like when a log drops into the splitting chute. Machines are stronger and faster than people. Never attempt to hand-feed material into moving feed rollers. Always stop the equipment before attempting to remove an item that is stuck. Remember, guards cannot be provided for all situations, equipment must be able to function in the capacity for which it is designed.



Impact Hazard

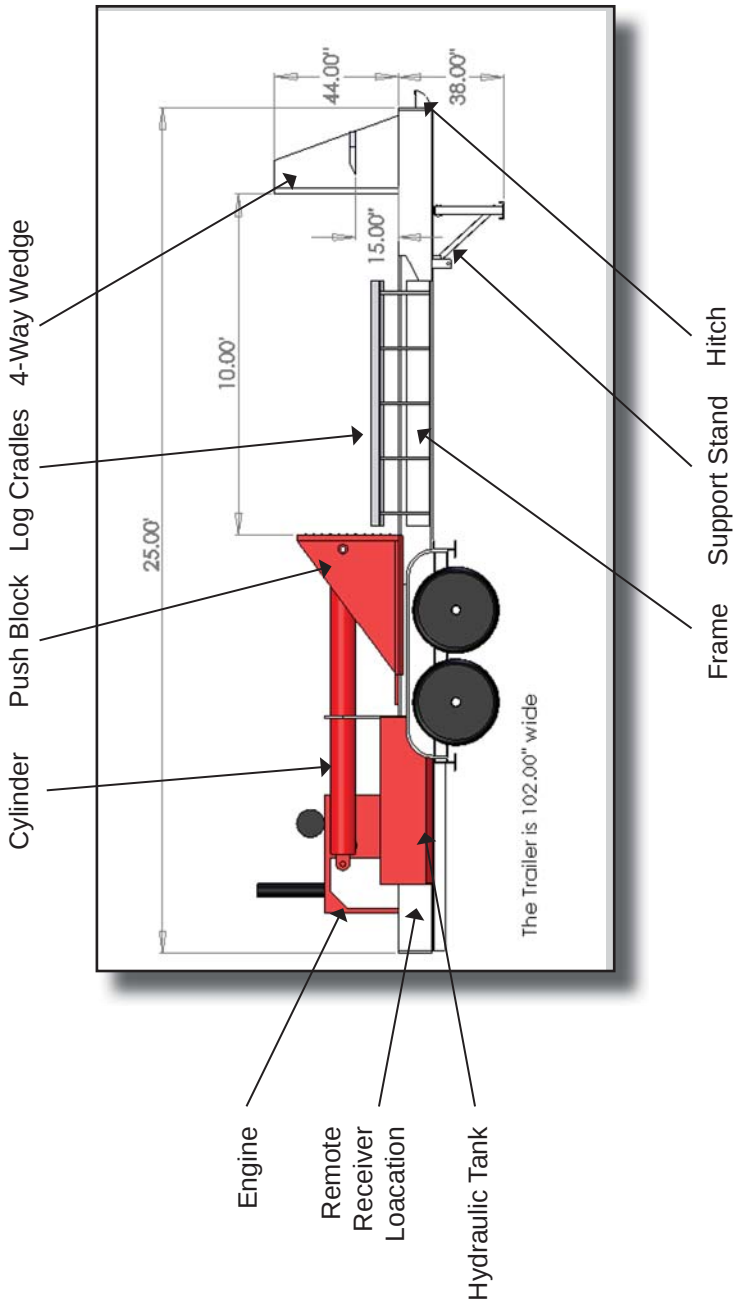
Impact hazards can be broken down into two categories: Forceful Collision and Contact. The first type of impact hazard; forceful collision, is the result of machinery or processes where any movement of tools, machine elements or particles could impact an operator. The second type of impact hazard; contact, refers to the movement of personnel that could result in collision with stationary or moving objects. For example, an operator could collide with a part of the log splitter while handling wood in preparation to splitting. Guarding may not be feasible for these types of hazards. Be aware of your surroundings, never place yourself in a situation where you are in the path of a moving piece of equipment.



Burn Hazard

The potential for burns exist in and around the engine. Be careful not to touch any of the surfaces covered in the manufacturer's safety warnings. Read the engine manufacturer's warnings and follow their instructions carefully.

Log Splitter
Component
Diagram



TW-10RC Specifications

Weight/Dim	11350lbs-84" H x 100"W x 324"L
Splitting Tons	63
Engine HP	66 John Deere
Pump (GPM)	60
Hydraulic Tank Capacity	100 Gal
Maximum Log Length	10 feet
Cylinder Size	96" x 8" x 5"
Cycle Time	46 Seconds
Frame Size	12" x 12"
Hitch	2 5/16th Ball Hitch Standard
4-Way Wedge	Standard
6-Way Wedge	Not Available
Pintel Hitch	Optional

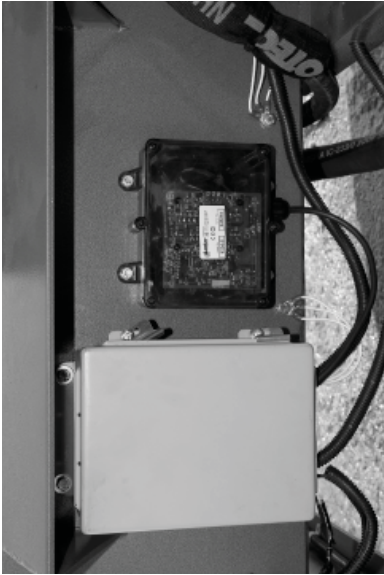
Specifications subject to change without notice

Remote Control



The TW-10RC remote control system consists of a remote hand held unit which is the transmitter and the receiver unit which is mounted on the right rear of the frame. There is a 9v battery that is serviceable in the remote. In your information packet which includes this manual, there is separate information about the remote system as provided by the manufacturer of the system.

If you have questions about setting up or troubleshooting this system, please consult the manufacturer of the unit. If there are any other questions that you have about operation, please call us at (802) 775-4227.



Operating Distance

The TW-10RC is operated by a remote control unit shown in the image to the right. It is extremely important that the operator remains at a safe distance while operating the machine. **Large logs can roll off the machine and cause serious injury or death.** Operator should stay at least 25' from the machine during the splitting operation. The effective range of the remote unit is 200 feet.



Using the Remote Control Unit

- Green button (upper right) turns the remote on
- Red button (upper left) turns the remote off
- **The down arrow button is the emergency kill switch**
- The up arrow is to stop the cylinder when it is in detent mode in reverse
- The left arrow is to move the cylinder forward
- The right arrow is to move the cylinder into detent and move the cylinder in reverse



Operating Instructions	
Start Up Procedure	First, walk-around the entire machine and prepare the work area • Check: • Fluid levels: • Diesel fuel – start the day with a full tank • Plan to use one gallon per cord of firewood • Use diesel 911 in winter weather (30° F and below) • Hydraulic oil – Timberwolf Manufacturing recommends ISO 46 • Make sure fuel and hydraulic oil petcocks are in the open position • Hydraulic line condition – keep track of wear; save on downtime by replacing hoses before they fail • Nuts, bolts, and fittings – make sure all are tight and secure, especially on the push block • Welds – check high-stress joints
Engine Start Up	Diesel engine start up procedure: • Make sure: • Petcocks are open • No one is near any moving parts

Engine Start Up (cont.)

- Start the engine, following the instructions in the engine operating guide.

- Allow engine to warm up at idle before you start to split logs

- Always warm up for at least ten minutes

- In winter weather (30° F and below) warm up until hydraulic oil is at 80° F or higher.

Don't try to operate the log splitter before engine and hydraulic fluid are properly warmed up. Take care of other tasks during warm up.

When the system is warmed up, return to the engine control panel and increase the engine speed.



Hydraulic Oil Temp Gauge



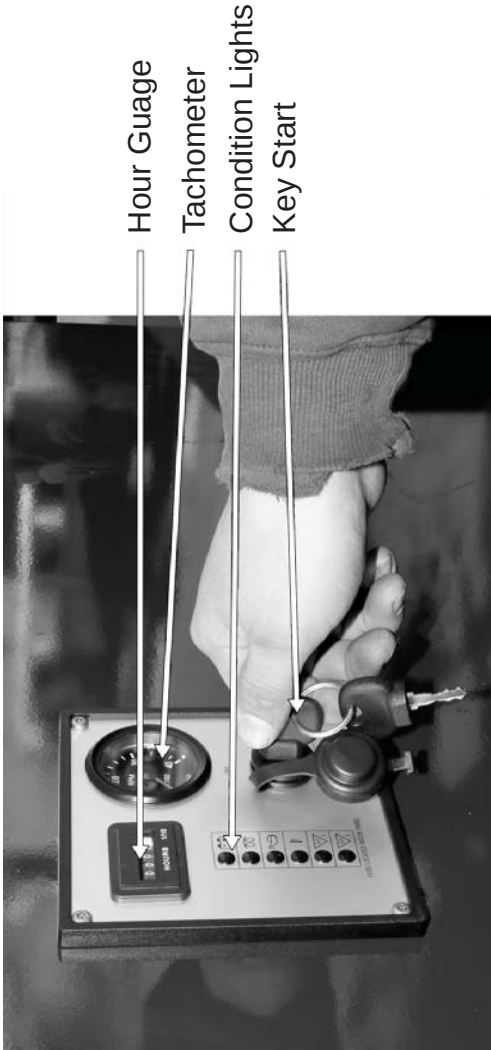
Engine Throttle Control

Engine Start
Up (cont.)

Engine should run between 2200 and 2500 RPM. Set a speed you're comfortable with in that range, based on your experience and judgement. Regulate engine speed by checking the tachometer.

CAUTION

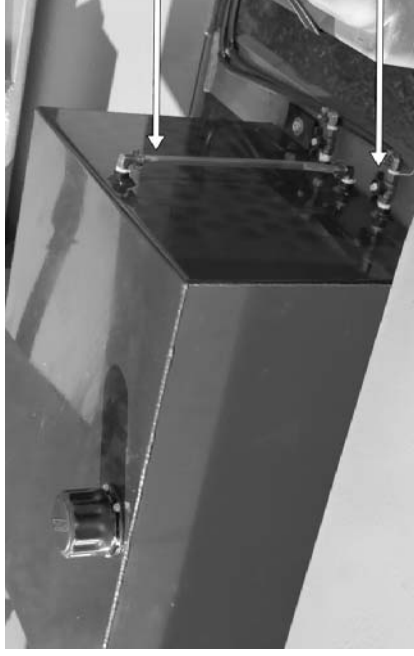
Never let anyone within 50 feet of the log splitter or log pile, with the exception of the operator, while the log splitter is in operation.



Fluid Guages

Check the sight glass on the fuel tank and add fuel if necessary.

Make sure the fuel tank shut-off petcock is open.

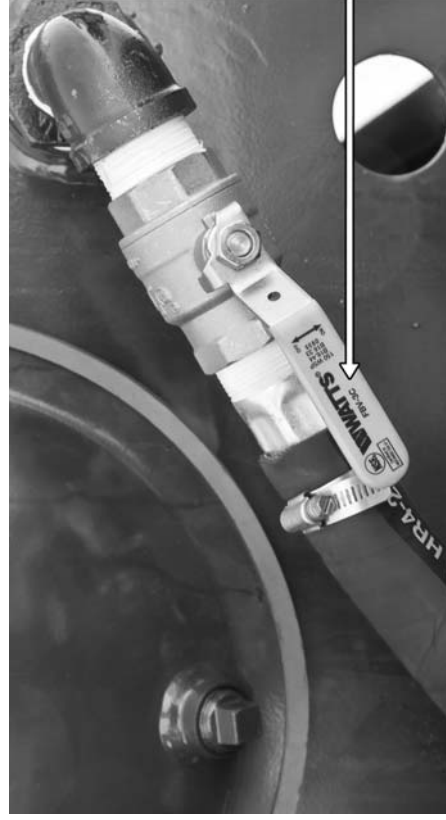


Fuel Tank and Sight Glass Guage

Shutoff Petcock

Hydraulic Tank
Shutoff Lever

Make sure the hydraulic oil pump's shut-off is open.



Hydraulic Tank Shut off Valve

Splitting Wood with the TW-10RC General Guidelines	Maximum practical log diameter is 60 inches. The TW-10RC can handle logs up to 10 feet long. See previous section on remote control operation for directions about controlling the splitting cycle. Logs should be as smooth as possible and free of knots, bumps, and branches. Always try to point the butt end toward the push block. Use good judgment about log lengths, size, and straightness. The log splitter's production rate depends chiefly on the size of the wood being split and your ability to run the machine efficiently. A maple log that is 60" in diameter by 10' long weighs approximately 12,000 pounds, so it is extremely important that the operator stand clear of the machine while operating and that no persons should be within 50' of any part of the machine while it is in operation. Operators should always anticipate where the split wood will fall and ensure that the area is free of obstructions or obstacles that might impede the split logs from falling properly. After the log has been split it is very important to stay away from the splitter until all pieces have been removed or are flat on the ground. Even after the splitter has been shut down a loose piece could fall and pin, hurt or even kill anybody within the 25' distance. Failure to do so could result in serious injury or death.
Processing Crooked Logs	Processing crooked logs takes judgement and experience. Most crooked logs can feed through the 4-way wedge without problems when handled correctly. Less experienced operators should avoid them because they can cause problems: • If possible, always put the butt end of your log towards the push block • Crooked logs often result in uneven splits • Square off the ends of your logs before splitting

Maintenance

General

Good maintenance extends the log splitter's life and helps to ensure efficient operation.

WARNING

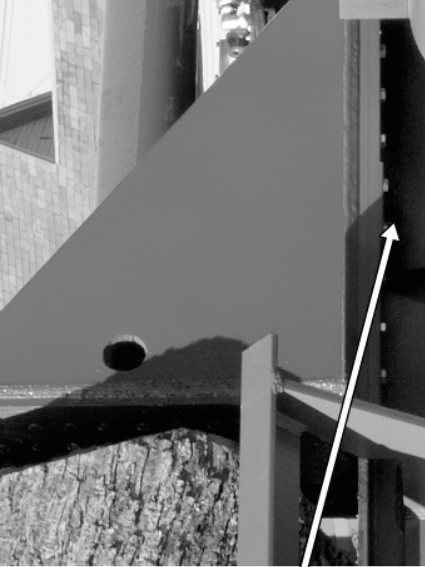
Make sure engine is shut off and hydraulic system is depressurized before you perform any maintenance. Read “Releasing Residual Hydraulic Energy” section of this manual before performing any repairs.

For engine maintenance schedules, consult the engine owner's manual.

Daily Maintenance

Make maintenance a regular part of daily operation.

- Check:
 - Fluid levels
 - Diesel fuel – start the day with a full tank
 - Use diesel 911 in winter weather (30° F and below)
 - Hydraulic oil
 - Splitter wedge – sharpen as needed
 - Hydraulic line condition – keep track of wear; save on downtime by replacing hoses before they fail
 - Nuts, bolts, and fittings – make sure all are tight and secure, especially wear plate bolts on the push block
 - Welds – check high-stress joints
 - Check all grease points and grease as necessary
 - Test emergency shut off switch on remote unit

Hydraulic Fluid	Timberwolf Manufacturing recommends ISO 46 hydraulic fluid. Change hydraulic fluid annually under normal conditions. Change it immediately if it becomes contaminated. Replace the pump suction strainer in the tank suction outlet when changing hydraulic fluid. Plan to replace hydraulic line filters every 150 hours of operation (roughly monthly).
Emergency Shut Off Switch	Check the Emergency Shut Off switch (“panic button”) every day, using the following procedure: 1. Start the log splitter 2. Press green button to turn on remote 3. Depress and hold the emergency shut off button on the remote 4. The power plant should shut down immediately If the emergency shut off switch fails to function correctly, contact Timberwolf Manufacturing immediately at (802) 775-4227. 
Push Block	Good maintenance keeps the Push Block sliding smoothly for efficient operation and reduced wear. Grease the push block and check the wear plate bolts every 4 hours. Tighten the bolts as needed. 

Filters	Changing hydraulic and engine filters regularly can help keep the log splitter running well and reduces downtime.
Hydraulic	There are two hydraulic oil filters, one where each return line enters the hydraulic tank: • Hydraulic Oil Filter096-019
John Deere Engine	The diesel engine for TW-10RC Log Splitter uses the following filters: • Engine Oil Filter..... RE518977 • Fuel Filter RE508202 • Fuel Element T111383 • Air Filter P829332 

Specifications subject to change without notice

Limited Warranty

Product Covered	This warranty is for Timberwolf log splitters.
Date Warranty Begins	The warranty begins on the date of sale and is warranted by Timberwolf Manufacturing Corporation 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 purchaser for a period of time of one year.
What Is Not Covered By This Warranty	This warranty does not apply to parts that have been damaged by accident, alteration, misuse, abuse or improper lubrication. Charges for pickup, delivery, and service calls are not covered by this warranty. The engine is warranted separately by the engine manufacturer.
Limited Rental Use Warranty	If used for rental purposes (to produce an income by renting this equipment), 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 rental use is warranted separately by the engine manufacturer.
How To Get Service	To obtain service, contact our nearest dealer, or Timberwolf Manufacturing Corporation at 126 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 Manufacturing Corporation 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.

Limited Warranty (Continued)

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 rental 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.

Please return your warranty card or you can register your splitter online @ www.timberwolfcorp.com/warranty

Maintenance Log

[illegible]

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OPERATOR'S MANUAL



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