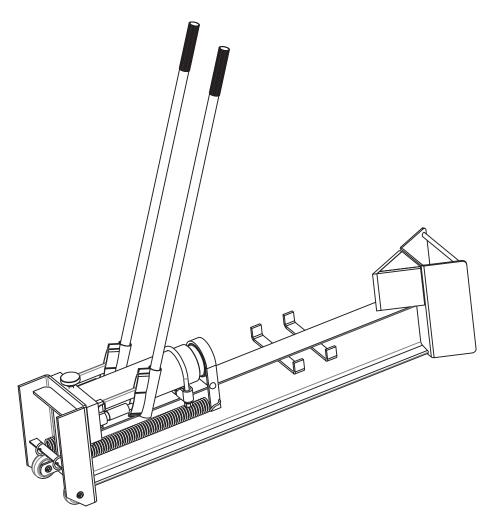
# **12 TON**

# MANUAL HYDRAULIC LOG SPLITTER

**Model TGS-12** 



# **OWNER'S MANUAL**

**INSTRUCTIONS FOR USE** 



## HYDRAULIC LOG SPLITTER

#### 12-TON SPLITTING FORCE | RAM FORCE

#### **OPERATOR'S MANUAL**

#### **Model TGS-12**

# **IMPORTANT!**Safety Instructions

# All Operators Must Read These Instructions Before Use

The operator must read and understand all safety and warning information, operating instructions, maintenance, and storage instructions before operating this equipment. Failure to properly operate and maintain the log splitter could result in serious injury to the operator or bystanders.

**DANGER!** This symbol indicates a hazardous situation, which, if not followed, will result in serious injury or death.

**WARNING!** This symbol indicates a hazardous situation, which, if not avoided, could result in serious injury or death.

**CAUTION!** This symbol indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.

## **General Safety Warnings!**

Anyone who intends to operate this tool must read and understand all the safety and other information contained in this manual before first use. Save this manual and review it frequently prior to using this tool and when instructing others on the proper operating procedures.

- Keep work area clean and well-lit Set up the equipment and use it only on a flat and level surface in an outdoor, well-ventilated area.
- Replacement parts When servicing this unit, use only identical replacement parts.
- 3. Keep children, bystanders, and pets away All spectators, including pets, should be kept a safe distance away from the work area.
- 4. Dress properly Do not wear loose clothing or jewelry as such articles can become caught in moving parts. Wear a protective covering to contain long hair. Wearing rubber gloves and substantial non-slip footwear is recommended when working outdoors.
- 5. Wear personal protective equipment When using this tool, wear safety glasses with side shields or goggles to provide necessary eye protection. Wear ear defenders to prevent hearing damage when necessary. Use a face or dust mask if the work environment is dusty.

- 6. Store idle tool indoors When not in use, the log splitter should be stored indoors in a dry and high or locked-up place out of the reach of children.
- 7. Maintain the log splitter with care Keep the log splitter clean for optimal performance and to reduce the risk of injury. Follow the additional recommendations described in the maintenance section of this manual.
- 8. Use the right tool Do not use the tool for any job except that for which it is intended.
- Stay alert Watch what you are doing. Use common sense. Do not operate the log splitter when you are tired or under the influence of drugs, alcohol, or other medication.

#### **Operation Warnings**

- Do not at any time carry passengers, sit, or stand on the log splitter.
- Do not allow children to play on, stand upon, or climb on the log splitter.
- Always inspect the log splitter before using to ensure it is in proper working order.
- Replace or repair damaged or worn parts immediately.
- Always use the splitter on a flat and level surface.
- Always check and tighten hardware and assembled parts before operation.
- Only use the log splitter for its intended purpose: splitting logs
- Do not exceed the maximum permitted log length of 17.7 inch (450mm) or the maximum permitted log diameter of 7.87 inch (200mm).
- Always split wood in the direction of the grain. Do not split wood against the grain.
- Do not exceed the equipment's maximum load capacity of 12 tons(24,000lbs).
- Never leave the log splitter unattended while operating the equipment.
- Keep area around the log splitter clear of debris to prevent injury.
- Always clear away wood pieces from the work area before splitting another log.
- Do not tow the log splitter with any motorized vehicles, such as lawn and garden tractors or ATVs.

# **Safety Symbols**

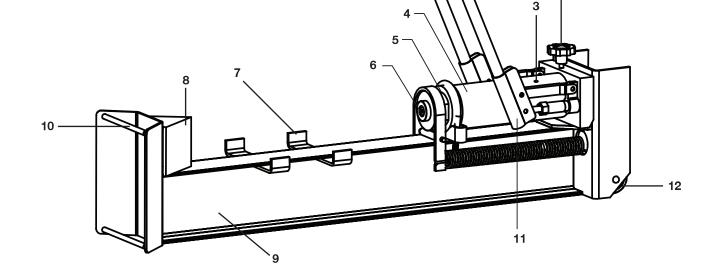
The following table depicts and describes safety symbols that may appear on this product. Read, understand, and follow all instructions on the machine before attempting to assemble and operate.

Symbols	Descriptions	Symbols	Descriptions
	READ THE OPERATOR'S MANUAL(S) – Read, understand, and follow all instructions in the user manual(s) before attempting to assemble and operate.		Keep bystanders and children a safe distance away.
<u></u>	SAFETY ALERT – Indicates a precaution, a warning, or a danger.		<b>WARNING!</b> Do not expose the unit to rain or wet conditions.
	<b>WARNING!</b> Always be aware of the movement of the log splitter.		WEAR EYE AND HEARING PROTECTION – For protection against injury, wear ear defenders and safety goggles.
	Moving parts can crush and cut hands and fingers. Keep hands clear of the ram plate, wedge, and logs while splitting.		Wear heavy-duty gloves and steel- toed boots when using the machine and handling debris.

# **Know Your Log Splitter**

Read the owner's manual and safety instructions carefully before operating the log splitter. Compare the illustration below to the log splitter in order to familiarize yourself with the location of the various controls and adjustments. Save this manual for future reference.

- 1. Operating handles
- 2. Hand wheel
- 3. Oil plug
- 4. Hydraulic pump
- 5. Piston rod
- 6. Ram plate
- 7. Log cradle
- 8. Wedge
- 9. Beam
- 10. Log splitter handle
- 11. Socket
- 12. Wheels



#### **Technical Data**

Splitting Force Max	12 ton
Ram Force/Continuous Force	12 ton
Material	Steel
Log Length Max	17.7in. (45 cm)
Log Length Min	13.5 in. (34.3 cm)
Log Diameter Max	7.78 in. (20 cm)
Wedge Height	3.9 in. (10 cm)
Beam Height	5.5 in. (14 cm)

Hydraulic Cylinder Size	10.1 in. x 2.2 in.
(Length x Diameter)	(25.6 cm x 5.5 cm)
Hydraulic Rod Size	12 in. x 1.8 in.
(Length x Diameter)	(30.5 cm x 4.5 cm)
Hydraulic Capacity	22 fl. oz. (0.75 l)
Wheel Size	2.48 in. (6.3 cm)
Net Weight	84.66 lbs (38.4 kg)

# **Unpacking**

#### **Carton Contents**

- · Log splitter
- · Operating handles (2)
- · Manual with registration card

**IMPORTANT!** The equipment and packaging material are not toys. Do not let children play with plastic bags, foils, or small parts. These items can be swallowed and pose a suffocation risk!

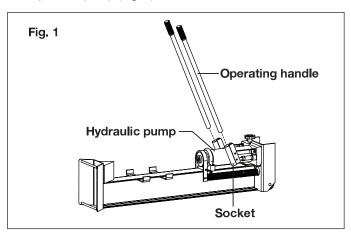
# **Assembly**

**IMPORTANT!** This product requires some assembly before use. Due to the weight and/or size of the log splitter, it is recommended that another adult be present to assist with the assembly.

**CAUTION!** Read and follow all instructions for assembly and operation. Failure to properly assemble this log splitter could result in serious injury to the user or bystanders, or cause equipment damage.

## **Attaching the Handles**

**1.** Insert the operating handles into the sockets on the hydraulic pump (Fig. 1).



## **Operation**

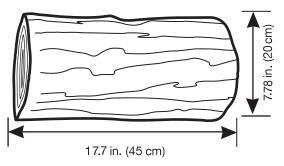
**WARNING!** Before using the log splitter, review the instructions below and all safety information. Failure to follow these instructions may result in property damage or injury to the operator or bystanders.

# Splitting Operation + Additional Safety Instructions

Follow these instructions to operate the log splitter:

1. Ensure all logs meet the proper size requirements [(max log diameter: 7.78 inch (20 cm); max log length: 17.7 inch (45 cm); min log length: 13.5 inch (34.3 cm)].

**IMPORTANT!** Logs vary in hardness and structure. Small logs with knots or harder wood may be more difficult to split. Larger logs with less hardness may not be difficult to split. Do not force the log splitter if the log fails to split on the first attempt.



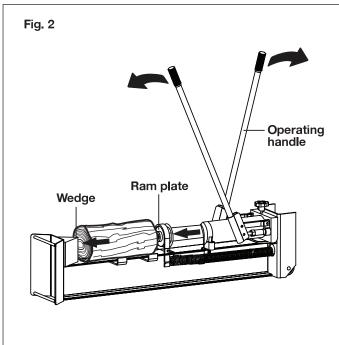
- When loading or positioning a log, always handle the bark side; never handle the ends. Never place your hands or body parts between the log and the splitter.
- 3. Never load or unload logs while the ram is moving.
- 4. Do not pile logs to be split in a place where you need to reach across the splitter in order to load them.
- 5. Log ends need to be cut square (at a 90° angle) so that they do not slide out when splitting and cause a safety hazard, and so that they do not exert excessive force on the log splitter components. Use a chain saw (not included), to cut the logs ends square before attempting to split them.
- 6. Never attempt to split more than one log at a time. A piece of a log can unexpectedly be thrown from the machine, which can result in severe personal injury.
- Do not use if there is any indication of damage to the hydraulic cylinder.
- **8.** Do not use the splitter to split logs across the grain or against the bark. Doing so will damage the log splitter and could cause log pieces to be thrown, injuring the operator or bystanders.

⚠ WARNING! Accidents occur when there is more than one person involved in loading and operating the log splitter; only one person should operate the splitter. If a second person is assisting in loading the splitter, NEVER allow an assistant to hold the log in place while the operator is using the unit.

#### Using the 12-Ton Log Splitter

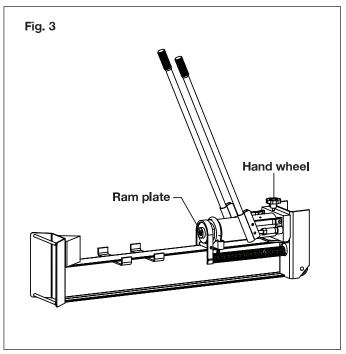
- Load the log lengthwise into the unit between the wedge and the ram plate. Be sure that the split will be along the grain.
- 2. Grip one handle in each hand and pump the handles back and forth in opposite directions. This contrary motion will force the log against the wedge (Fig. 2).

**DANGER!** Always operate the unit from the side of the operation handles, furthest from the wedge and the splitting log.



- 3. Remove the split pieces.
- **4.** Turn the hand wheel counterclockwise no more than one full turn to relieve the pressure and retract the ram (Fig. 3).

5. Turn the hand wheel clockwise until it is snug (Fig. 3). You are now ready to split the next log.

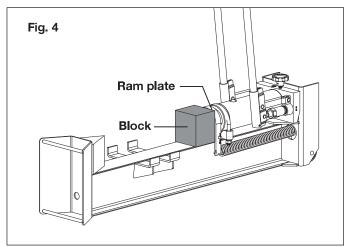


**WARNING!** NEVER attempt to remove a stuck log from the splitter by forcing the use of the hydraulic ram to split the log.

**WARNING!** NEVER modify the log splitter.

## **Splitting a Short Log**

This log splitter is designed to split logs between 13.5 inch (34.3 cm) and 18 inch (46 cm) in length. When the log is shorter than 13.5 inch, the ram plate may not be able to reach the log. In this case, place a wood block with flat surfaces in front of the ram plate before operating (Fig. 4). Very short logs may require an additional block.



**NOTE:** The block(s) used for extending the piston rod must be flat on all surfaces.

#### Removing a Jammed Log

If the log gets stuck on the wedge base, or the wedge becomes embedded in the log and will not completely split or separate from the log, follow the directions below to remove the log:

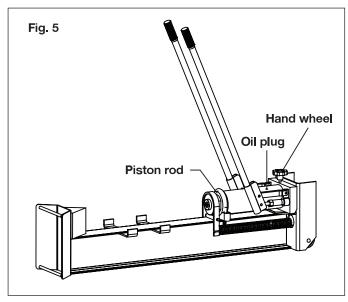
- 1. Fully retract the ram.
- **2.** Remove the jammed log from the wedge manually with a pry bar.

**CAUTION!** Be extremely careful as log pieces may fly off as they separate from the wedge.

- **3.** Do not attempt to re-split a jammed log once it has been removed from the wedge.
- Manually split the log with a maul or cut it with a chain saw.

#### **Bleeding the Log Splitter**

- 1. Extend the ram to its maximum length.
- Remove the oil plug and make sure the oil level is full. If needed, add more hydraulic oil to the hydraulic pump (Fig. 5).



- 3. Turn the hand wheel counterclockwise as fast as possible. The piston rod will retract into the hydraulic pump and push the air out of the cylinder via the oil plug hole.
- Check the oil level again, and if needed, add more hydraulic oil.
- **5.** Replace the oil plug and repeat steps 1-3 as needed.
- To add oil, remove the oil plug and add oil to just below the fill plug.
- 7. Replace the oil plug completely.

#### **Maintenance**

**WARNING!** Periodically apply a light coat of rust-resistant oil, such as 3-in-1 oil or WD-40, to the springs to keep them in proper working order.

- · Periodically check all fasteners for tightness.
- · Annually clean and lightly lubricate parts.
- Use a glossy enamel spray paint to touch up scratched or worn painted metal surfaces.
- Never exceed the load capacity rating of 10 tons; doing so will damage the log splitter and void the manufacturer's warranty.

**IMPORTANT!** If a part needs replacement, only use parts that are specifically recommended by the manufacturer. Replacement parts that do not meet these specifications may result in a safety hazard, may compromise the tool's performance, and will void the manufacturer's warranty.

## **Storage**

- Before storing, make sure the log splitter is clean and dry.
   Such upkeep is necessary to ensure years of trouble-free performance.
- Make sure the ram is completely retracted prior to storing the unit. Relieve any pressure by turning the hand wheel counterclockwise, then retighten by turning the hand wheel clockwise.
- · Lightly lubricate all metal surfaces before storing.
- Store indoors or in a dry, protected area during severe weather and during the winter months.

# **Service and Support**

This equipment is covered under a 1-year limited warranty when used as recommended. Only those items listed with a Part # are available for purchase. For assistance with the operation or the availability of replacement parts, contact our Parts and Warranty Department at 1-888-44-TORIN (1-888-448-6746). Please have available a copy of your receipt, the model number of the product, serial number, and specific details regarding your question. Not all equipment components are available for replacement; illustrations provided are a convenient reference of location and position in the assembly sequence.

The manufacturer reserves the rights to make design changes and or improvements to product lines and manuals without notice; We want to know If you have any concerns with our products. If so, please call toll-free for Immediate assistance. For additional web customer support help inquiries visit the Customer Service section at: http://www.torin-usa.com.

# **Troubleshooting**

Problem	Possible Cause	Solution
Ram will not move.  Slow ram speed when extending or retracting.	<ol> <li>Hand wheel is open.</li> <li>Wedged wood under ram.</li> <li>Blocked hydraulic lines.</li> <li>Blocked control valve.</li> <li>Damaged control valve.</li> <li>Damaged cylinder piston.</li> </ol> 1. Slow pumping of the operating handles. <ol> <li>Air or air bubbles in oil reservoir.</li> </ol>	<ol> <li>Turn hand wheel clockwise until snug.</li> <li>Remove any foreign objects from below the ram.</li> <li>Flush and clean the splitter's hydraulic system.</li> <li>Flush and clean the splitter's control valve.</li> <li>Contact the Torin Parts and Warranty Department at 1-888-44-TORIN (1-888-448-6746)</li> <li>Contact the Torin Parts and Warranty Department at 1-888-44-TORIN (1-888-448-6746)</li> <li>Move operating handles at a faster pace.</li> <li>Purge air from the splitter's hydraulic system.</li> <li>Contact the Torin Parts and Warranty Department at</li> </ol>
	<ul><li>3. Damaged control valve.</li><li>4. Internal control valve leak.</li><li>5. Internally damaged cylinder.</li></ul>	1-888-44-TORIN (1-888-448-6746) 4. Contact the Torin Parts and Warranty Department at 1-888-44-TORIN (1-888-448-6746) 5. Contact the Torin Parts and Warranty Department at 1-888-44-TORIN (1-888-448-6746)
Wood will not split, or splits extremely slowly.	<ol> <li>Air or air bubbles in oil reservoir.</li> <li>Excessive control valve inlet vacuum.</li> <li>Low control valve setting.</li> <li>Internal control valve leak.</li> <li>Internally damaged cylinder.</li> </ol>	<ol> <li>Check for excessive air in hydraulic reservoir.</li> <li>Check control valve inlet hose for blockage or kinks.</li> <li>Contact the Torin Parts and Warranty Department at 1-888-44-TORIN (1-888-448-6746)</li> <li>Contact the Torin Parts and Warranty Department at 1-888-44-TORIN (1-888-448-6746)</li> <li>Contact the Torin Parts and Warranty Department at 1-888-44-TORIN (1-888-448-6746)</li> </ol>

Distributed by / Distribuido por:

# TORIN INC. Ontario, CA 91761

FOR CUSTOMER SERVICE PARA EL SERVICIO PARA EL

# www.torin-usa.com/support

Made in China / Hecho en China www.torin-usa.com

