



MBR026003SAA.1

PTO Kit for item#
TMH13HYD

Owner's Manual

Instructions for Assembly

PTO Kit: Accessory for tractor mounted log splitter

WARNING

READ and UNDERSTAND this manual completely before using log splitter.

All operators of this equipment must read and completely understand all safety information, operating instructions, maintenance and storage instructions. Failure to properly operate and maintain the log splitter could result in serious injury to the operator and bystanders from moving parts that can crush or cut, flying objects, burns, fire or explosion, escaping high pressure hydraulic fluid, or carbon monoxide poisoning in particular, be aware of the following hazards.

Crush and Cut Hazards

Moving parts can crush and cut hands and fingers. Keep hands clear of endplate, wedge, logs, and log dislodger/strippers while splitting.

High Pressure Hydraulic Fluid Hazards

High fluid pressures and temperatures are developed in hydraulic log splitters. Hydraulic fluid escaping through even a pin-size hole opening can puncture skin and cause severe blood poisoning. Inspect hydraulic system regularly for possible leaks. Never check for leaks with your hand while the system is pressurized. Seek medical attention immediately if injured by escaping fluid.

Fire Hazards

- Keep a Class ABC fire extinguisher available as a precautionary measure when operating the log splitter in dry areas.

Any Questions, Comments, Problems, or Parts Orders
Call your dealer or I&O Customer Service at 1-800-817-1005

Summary of Important Safety information for Operation

Safety During Inspection/Maintenance

WARNING

The log splitter is very heavy. It can cause serious injury if it rolls out of control or tips over.

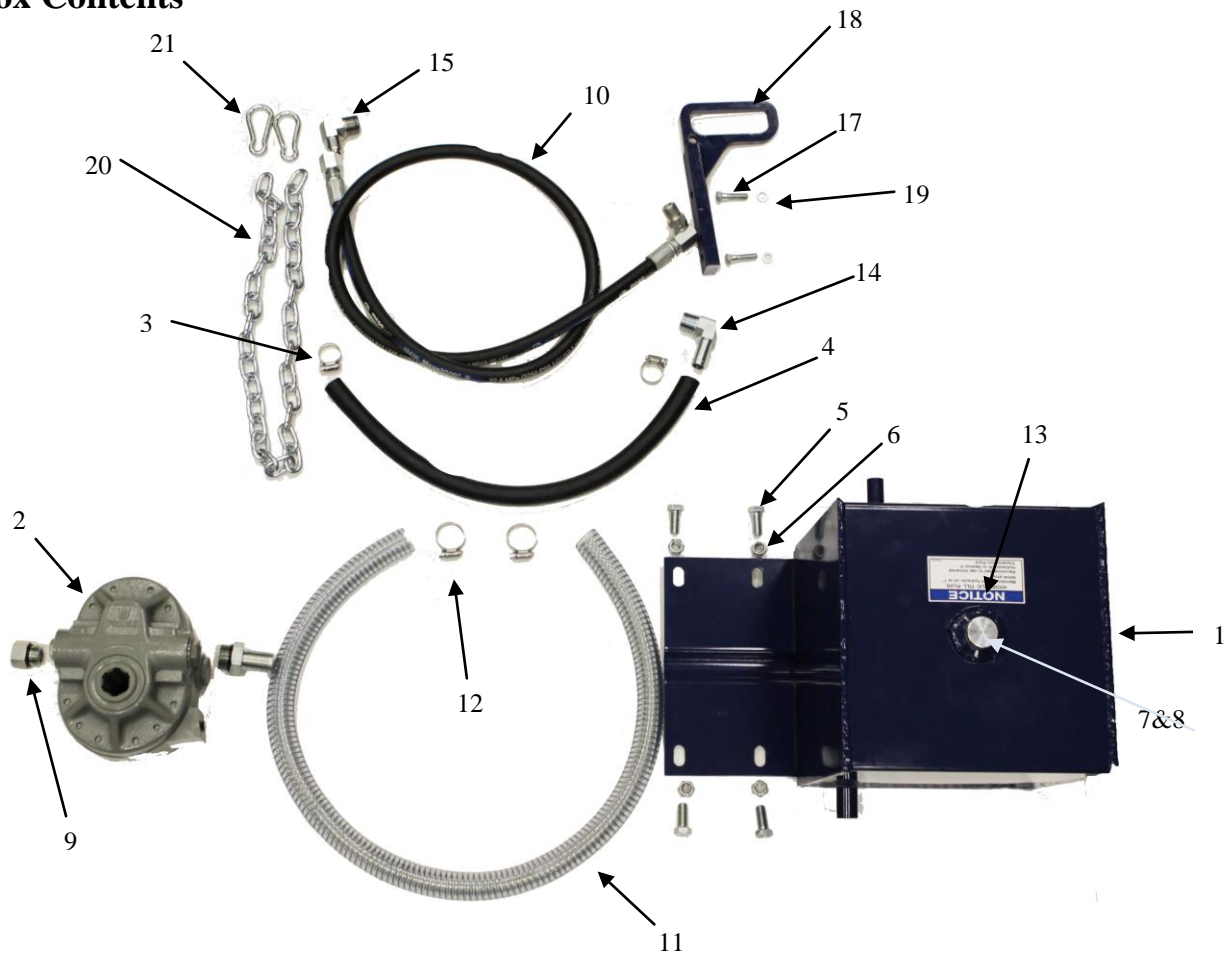
Follow the safety instructions below for safely moving the log splitter.

Always inspect your log splitter before each use, and repair as needed, to keep it in safe working condition:

- **Engine off.** Always make sure the engine is off before cleaning, repairing or adjusting the splitter, except as recommended by the manufacturer.
- **Other debris.** Debris on moving parts can cause excess wear. With the engine off, clear debris from moving parts.
- **Fuel tank / lines.** Before each use, check fuel tank and fuel lines for leaks. Any fuel leak is a fire hazard. Fix any fuel leaks before starting engine.
- **Mechanical parts.** Check to be sure that all nuts and bolts are tight to make sure the log splitter is in safe working condition.
- **Hydraulic system.** Check the hydraulic system (hoses, tubing, clamps/fittings, pump, and cylinder) carefully before each use. Do not operate the log splitter with frayed, kinked, cracked or damaged hydraulic hoses, fittings, or tubing, or if oily residue is observed on any of the components. High fluid pressures and temperatures are developed in the log splitter. Hydraulic fluid escaping through a pin-hole sized opening can burn or puncture skin, resulting in wounds that could cause blood poisoning, infection, disability, gangrene, amputation, or death. Therefore, the following instructions should be heeded at all times when inspecting or servicing the hydraulic components of the log splitter:
 - Do not remove the hydraulic oil cap when the engine is running. Hot oil can escape causing severe burns. Allow log splitter to cool completely before removing hydraulic oil cap.
 - Do not adjust the pressure setting of the pump or valve.
 - Do not check for leaks with your hand. Leaks can be located by holding a piece of cardboard or wood (at least two feet long) with your hand at one end and passing the other end near the suspected area (wear eye protection). Look for discoloration of the cardboard or wood.
 - Stop the engine, disconnect the spark plug, and move all control valve handles back and forth to relieve pressure before changing or adjusting hydraulic system components such as hoses, tubing, fittings or other components.
 - If injured by escaping fluid, no matter how small the wound is, see a doctor immediately. A typical injection injury may be a small puncture wound that does not look serious. However, severe infection or reaction can result if proper medical treatment is not administered immediately by a doctor who is familiar with injection injuries.
- **Tires.** Be sure tires are fully inflated and in good operating condition before towing the splitter. When adding air to tires, do not over-inflate -- serious injury could occur if tire explodes.
- **Guards / shields.** Make sure all guards and shields are replaced after servicing the log splitter.
- **Replacement parts.** If a part needs replacement, only use parts that meet the manufacturer's specifications. Replacement parts that do not meet specifications may result in a safety hazard or poor operation of the log splitter.

Installation Instructions

Box Contents



REF	ITEM #	DESCRIPTION	QTY
1	BR026003	Hydraulic Tank	1
2	BR002004C	PTO Pump	1
3	17141	#12 Hose Clamp	2
4	BR005009	3/4" Low-Pressure Hose	1
5	82329	1/2"-13 x 1.25 Bolt	4
6	82037	1/2"-13 Lock Nut	4
7	BR001021-D	Fill Plug	1
8	BR001025	O-Ring: 0.932" ID	1
9	BR001027	Straight Fitting	1
10	BR005103	High-Pressure Hose	1
11	791766	Low-Pressure Feed Hose (Clear)	1
12	777835	#16 Hose Clamp	2
13	BR002652	Hydraulic Fill Decal	1
14	BR001011	Low Pressure 90° Fitting	1
15	BR001017	High Pressure 90° Fitting	1
16	82160	33" Natural Cable Tie (Not Pictured)	1
17	82498	3/8"-16 x 1.5" Grade 5 Zinc HH Bolt	2
18	BR020089	Pump Handle	1
19	82345	3/8" Zinc Lock Washer	2
20	BR008509	1/4" x 40" Chain	1
21	BR008510	Snap Spring Clip	2

Installation Instructions

Step 1 – Engine Off / Relieve Pressure

Perform all inspections/repairs with the engine off and hydraulic system pressure relieved.

- Shut off tractor's engine and set parking brake
- Relieve all hydraulic system pressure by moving the Split Control Lever back and forth several times

Tools Needed

- None

WARNING

ALWAYS shut off the engine, disconnect the spark plug, and relieve system pressure before inspecting, cleaning, adjusting, or repairing the splitter. Relieve system pressure by moving Split Control Lever back and forth several times.

Installation Instructions

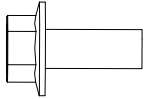
Step 2 – Install hydraulic tank

- Attach hydraulic tank to the log splitter using (4) ½-13 x 1.25” bolts and (4) ½”-13 lock nuts
- Torque to 83 ft-lbs

Tools Needed

- Ratchet
- ¾” Socket
- ¾” Wrench

Fasteners Needed:



½-13 x 1.25” Bolt
Qty 4



½-13 Lock Nut
Qty 4



Installation Instructions

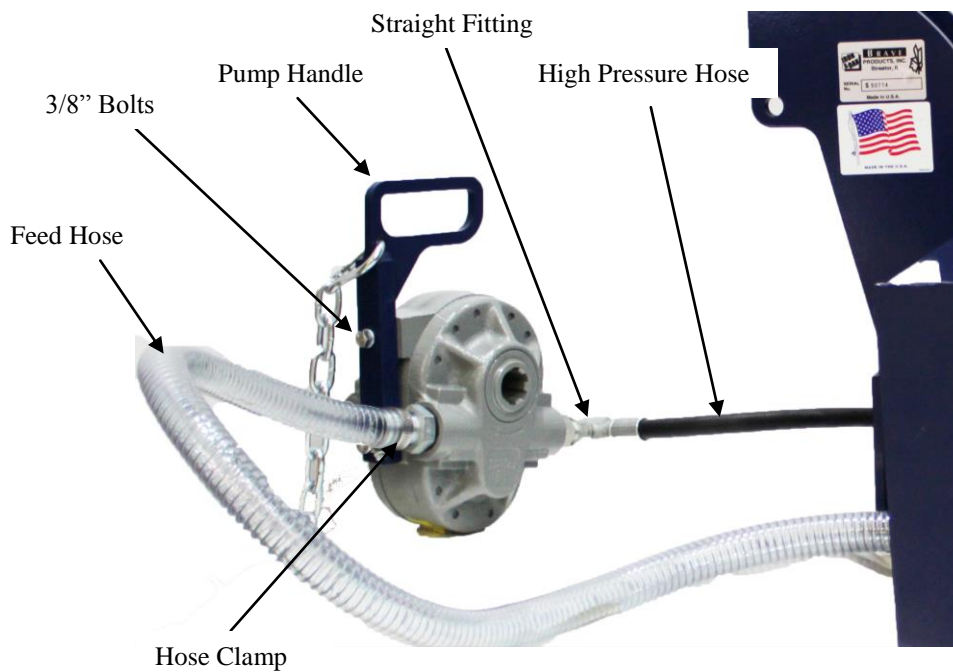
Step 3 – PTO pump assembly

- Attach the low pressure feed hose to the PTO pump. Clamp the feed hose using the supplied hose clamp.
- Attach the straight fitting to the PTO pump, then attached the high pressure hose to the fitting.
- Attach pump handle using (2) 3/8"-16 x 1.5" Bolts and (2) 3/8" Zinc Lock Washer

Note: After the hoses and handle have been installed they may remain installed, even when removing the pump from the tractor

Tools Needed

- Ratchet
- 3/4" Socket
- 3/4" Wrench
- Flathead Screwdriver
- Crescent Wrench



Installation Instructions

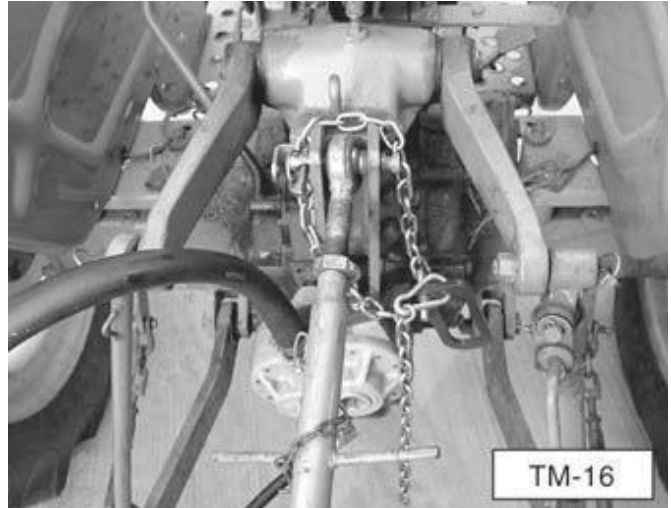
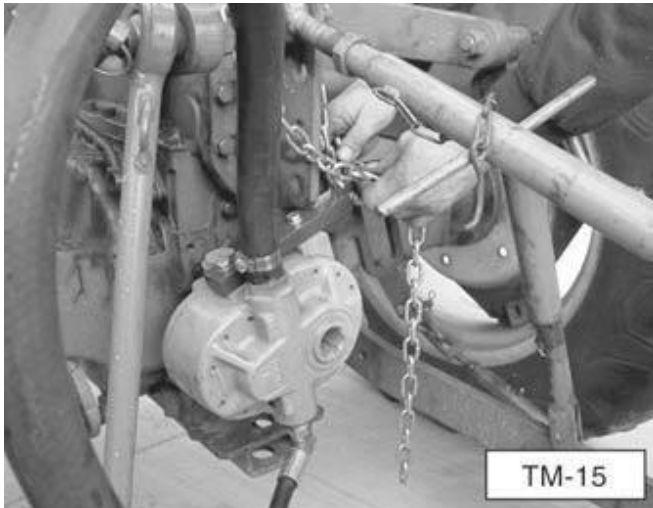
Step 4 – Install PTO pump

- Slide PTO pump onto the PTO shaft of the tractor. Make sure the rotation arrow on the pump is facing rearward. Attach one end of the chain to the torque arm bracket and the other to a stationary part of the tractor (axle, 3 point arm, etc.). Make sure the chain does not interfere with raising and lowering the unit.

NOTE: On some tractors a PTO shaft extension may be necessary in order to connect the PTO to the pump. If an extension is necessary, contact your local implement dealer.

Tools Needed

- None



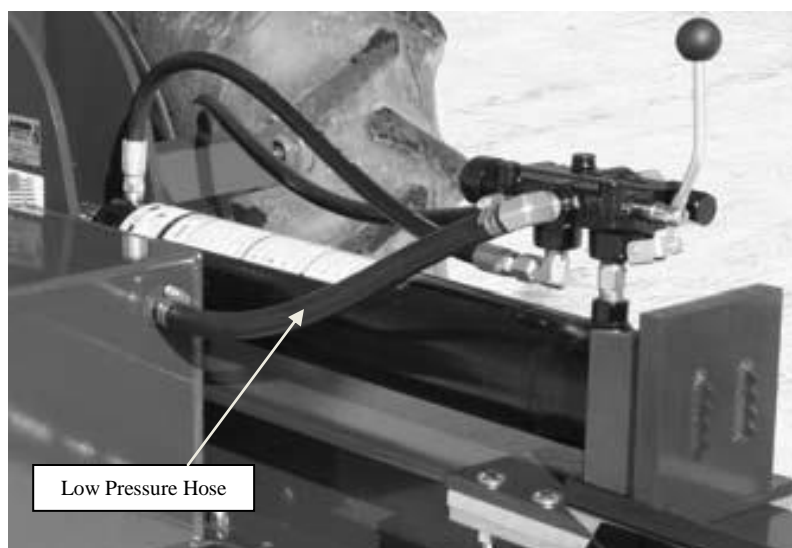
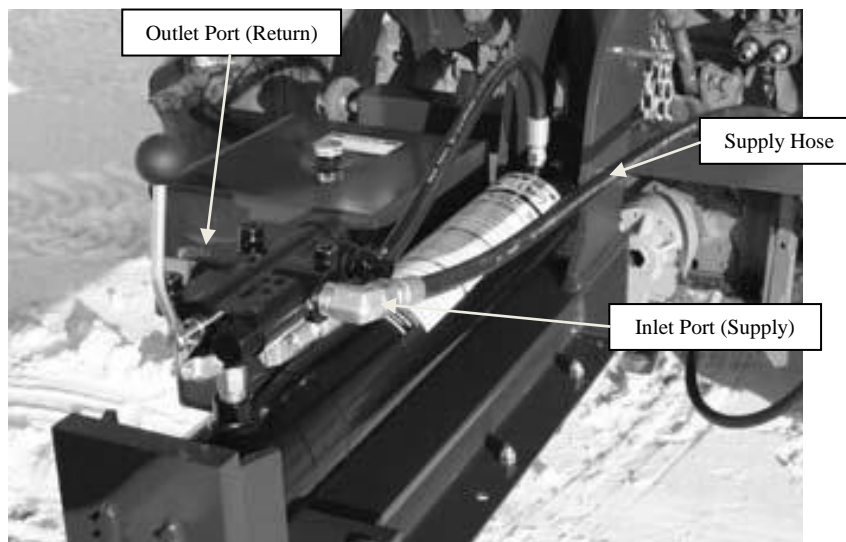
Installation Instructions

Step 5 – Install high-pressure and low-pressure hoses

- Apply a small amount of the supplied thread lock to the high-pressure 90° fitting and attach it to the inlet (supply) port of the valve. Connect the high-pressure hose from the PTO pump to the high-pressure fitting on the valve. Use the supplied zip tie to secure the hose to the hitch bracket weldment.
- Apply a small amount of the supplied thread lock to the low-pressure 90° fitting and attach it to the outlet (return) port of the valve. Connect the low-pressure hose to the tank and to the low-pressure fitting on the valve.

Tools Needed

- Crescent Wrench



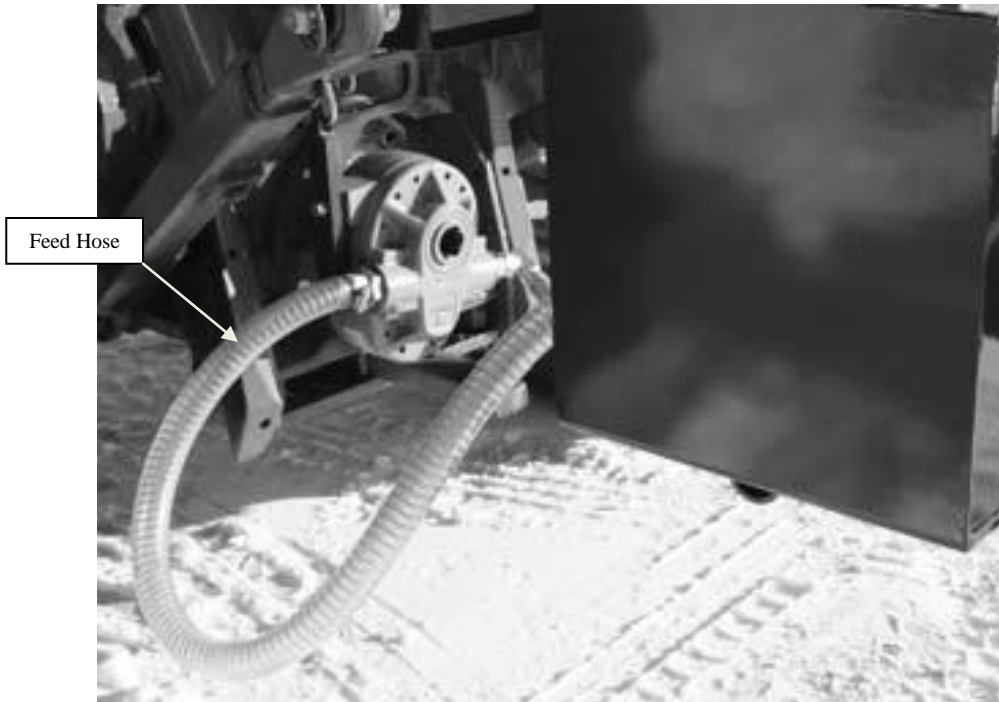
Installation Instructions

Step 6 – Install feed hose

- Attach the clear, low-pressure feed hose to the hydraulic fluid tank with the supplied hose clamp

Tools Needed

- Flathead Screwdriver



Installation Instructions

Step 7 – Fill hydraulic tank

- Before running the PTO pump, remove the fill cap and fill the hydraulic tank with approximately 7 gallons SAE 1-W tractor hydraulic oil or automatic transmission fluid, such as Dextron III. The tank is full when the oil level is at the bottom of the filler neck. **DO** not tighten the fill cap at this time.
- Slowly rotate the tractor's PTO shaft to fill the PTO pump with oil
- Once the pump is filled with oil, increase the rpm of the PTO shaft. Now, push the valve control handle to the forward position (towards the front of the cylinder) until the cylinder piston moves forward. (Keep everything away from the splitting wedge during this step.)

NOTE: Extending the cylinder piston draws the hydraulic fluid through the system and expels any trapped air in the system.

- Cycle the log splitter several times.
- Push the valve control handle to the retract position and retract the cylinder piston. The cylinder valve will automatically stop the cylinder from retracting when it reaches the end of its stroke.
- Check the fluid level in the hydraulic tank and add oil as needed. Replace and tighten the fill cap.

NOTE: The total hydraulic system oil capacity for this unit is approximately 8 gallons.

Tools Needed

- None

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