



CAUTION: If your wood splitter is equipped with an internal combustion engine and intended for use near any unimproved forest, brush, or grass covered land, the engine exhaust should be equipped with a spark arrestor. Take fire fighting equipment with you. Make sure you comply with local, state and federal codes.



CAUTION: Ram type machines should be used only for splitting wood and only in the direction of the grain. If the manufacturer has attachments for other uses, follow their installation and safe operating instructions.



CAUTION: Always operate the wood splitter at manufacturer's recommended speed.



WARNING: Always keep hands and feet clear of moving parts.



CAUTION: Always shut off the engine while repairing or adjusting the wood splitter except as recommended by the manufacturer.



WARNING: When loading the wood splitter, place your hands on the sides of the log outside of the path for the wedge or ram. Never place your hands or any part of your body between a log and any part of the wood splitter.



CAUTION: On logs that are not cut square, the longest portion of the log should be rotated down and placed at the wedge end.



CAUTION: Never attempt to split more than one (1) log at a time unless the ram has been fully extended and a second log is needed to complete the separation of the first log.



CAUTION: Use only your hand to operate the wood splitter controls.



CAUTION: Do not refuel the engine until it has cooled for several minutes.



CAUTION: Clean debris and chaff from engine cylinder, cylinder head fins, blower housing rotating screen and muffler areas. If the engine is equipped with a spark arrestor muffler, clean and inspect it regularly. Follow manufacturer's service instructions. Replace, if damaged.



CAUTION: Be thoroughly familiar with all controls and with the proper use of the equipment.

1. Always wear "safety" shoes or heavy boots. A dropped log can seriously injure.
2. Always wear "safety" glasses or goggles to provide eye protection from flying splinters when operating the machine.
3. Avoid wearing jewelry or loose fitting clothing that might become entangled in moving or rotating parts of the machine.



WARNING: Make sure the wood splitter is on a level surface. Block the wheels securely before operating the machine to avoid possible injury from unexpected machine movement.



CAUTION: Never store the equipment with fuel in the tank inside a building where fumes might reach an open flame or spark. Allow the engine to cool before storing in any enclosure.



CAUTION: Always operate the wood splitter from the manufacturer's indicated operator zone to assure maximum operator safety.



CAUTION: Clean debris from movable parts, but only when the engine is shut off.



CAUTION: Logs to be split should be cut as squarely as possible to avoid unexpected movement of split wood.



CAUTION: Check to be sure all nuts and bolts are tight to assure the equipment is in proper working condition.



CAUTION: Never leave the wood splitter unattended with the power source operating.



WARNING: Pinch points. Keep hands away from ram, wedge and partially split wood - can cause injury. Stand clear and keep hands and feet from under wood splitter when changing height. Unexpected movement can cause injury.



CAUTION: Never operate the wood splitter when under the influence of alcohol, drugs or medication. Proper operation requires a clear head.



CAUTION: Hydraulically raised equipment block securely under the Wood Splitter before use. Failure of the hydraulic lift will cause the Wood Splitter to drop unexpectedly. Can cause injury.



CAUTION: The owner should instruct all operators how to properly operate a wood splitter.

IMPORTANT: Always install new decals whenever the old decals are destroyed, lost, painted over or illegible. When individual parts are replaced that have decals attached, be sure to install a new decal with the new part. Re-

INTRODUCTION

This Operator's Manual is for the Model J-32 Wood Splitter.

This Operator's Manual includes:

- a. Safety Rules
- b. Installation Procedure
- c. Operating Procedure
- d. Specifications
- e. Maintenance

Read this manual before operating your Wood Splitter. See your J I Case dealer for parts or repairs.

The words, "Right, Left, Front and Rear" as used in this manual indicate directions when you are in the tractor operator's seat in the normal operating position.

The J I Case Company reserves the right to make improvements in design or changes in specifications at any time, without incurring any obligation relating to such changes.

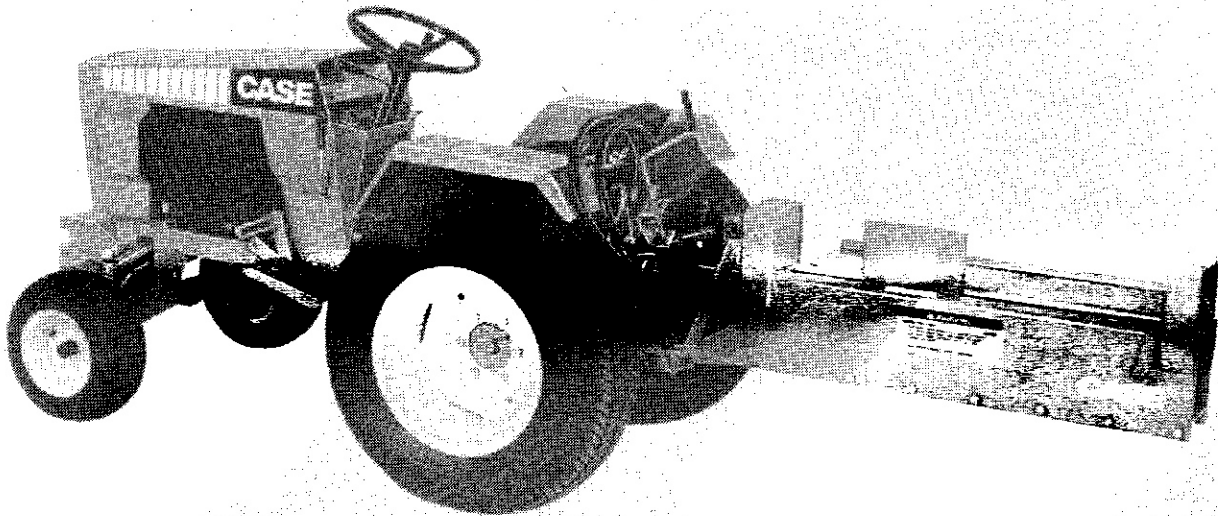


FIGURE 1 Model J-32 Wood Splitter Mounted on Model 446 Tractor with L-11 Front Weights, L-17 Hydraulic PTO, J-26 3-Point Hitch

ATTACHMENT APPLICATION

The Model J-32 Wood Splitter fits the following Model Tractors:

- | | |
|--------------------|---|
| 444 | Prior to PIN 9711027
PIN 9739739 and after |
| 446 | Prior to PIN 9728158
PIN 9742953 and after |
| 448, 644, 646, 648 | All |

NOTE: This excludes 1976 and 1977 year model tractors with the metal hydraulic reservoir under the battery. This reservoir does not have adequate oil volume or expansion space to accommodate this Wood Splitter.

Your tractor must be equipped with front end weights, hydraulic PTO and 3 point hitch before mounting the Model J-32 Wood Splitter.

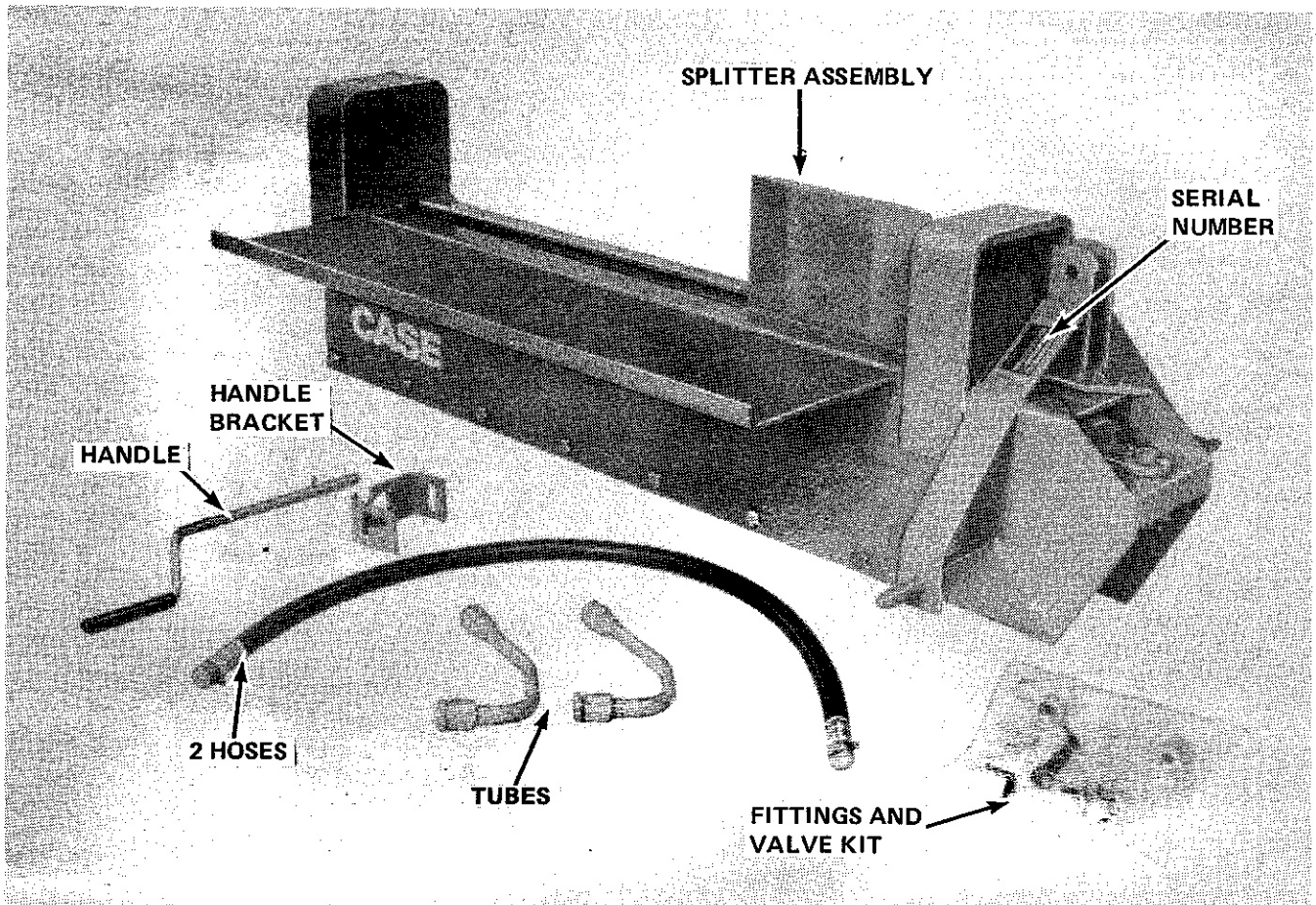


FIGURE 2
Model J-32 Wood Splitter Disassembled

SPECIFICATIONS

Cycle Time (out & return)...	12.8 seconds
Maximum Opening.....	25" (635 mm)
Splitting Stroke.....	24" (609 mm)
Splitting pressure	
outward stroke.....	12 tons (106,750 N)
return stroke.....	9.8 tons (87,180 N)
Relief Valve Setting.....	2500 PSI (17,236 kPa)
Hydraulic Cylinder.....	3.5" (88 mm)
Rod.....	1.5" (38 mm)
Shipping Weight.....	341 lb. (154.7 kg)

SERIAL NUMBER

When you need parts or information always give the:

a. Wood Splitter Model Number: J-32

b. Wood Splitter Serial Number: _____

Refer to Figure 2.

ASSEMBLY

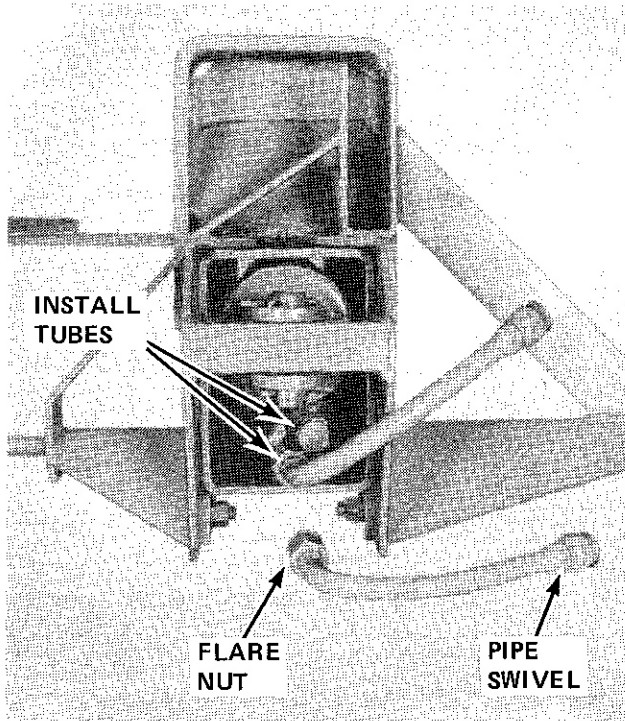


FIGURE 3

1. Refer to Figure 3. Install and tighten the two "U" shaped tubes to the fittings at the front of the Wood Splitter. The end with the pipe thread swivel nut must face the right side as viewed from the front end.

Make sure the tubes are not contacting the steel edge of the Wood Splitter. Install the "hose clamp" around the tubes close to the cylinder fittings.

2. See Figure 4. The following parts must be installed on the hydraulic PTO valve to use with the J-32 Wood Splitter on Model 444, 446 and 448 tractors. For Model 644, 646 and 648 install parts "d" through "h" only and follow installation steps 6 through 11. The valve does not have to be removed to make the installation.

- a) the handle
- b) the handle bracket
- c) the handle bracket screws
- d) the spool collar
- e) the centering spring
- f) the flat washer
- g) the end cap (or bonnet)
- h) the 4 screws to secure the end cap

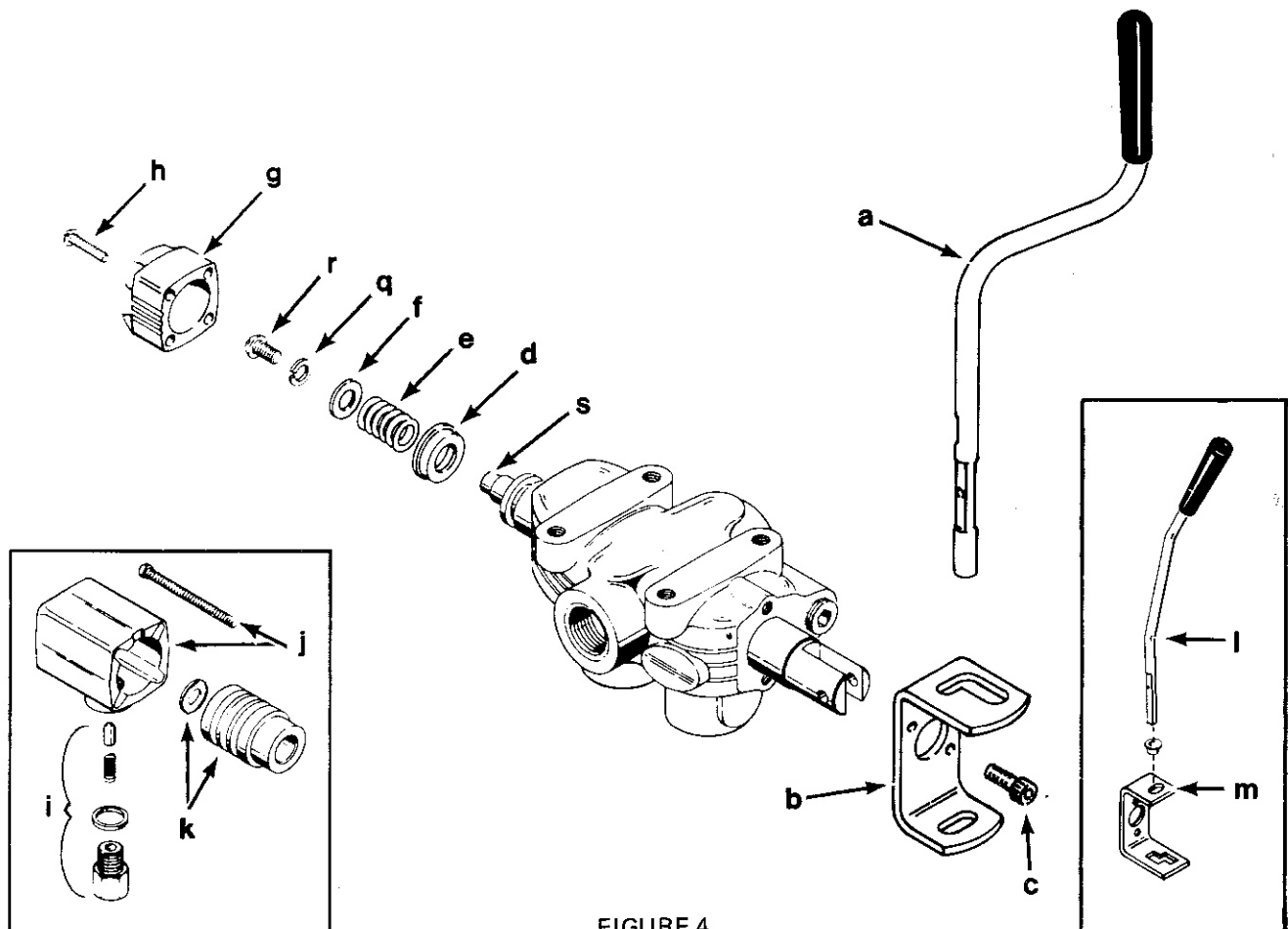


FIGURE 4

The installation of these parts will allow the valve to return to neutral automatically when the handle is released.

3. Remove the handle (l) and handle bracket (m) from the rear of the hydraulic PTO valve.
4. Install the new handle bracket (b) using the new socket head screws (c) and old lock washers.
5. Install the new handle (a) with the offset facing rearward. Use the click pin provided to secure the handle to the spool.

NOTE: If using a roto-tiller, the handle must be installed with the offset facing forward. This will allow the handle to lock into the tiller drive position.

6. Remove the detent cap, spring and plunger (i).

7. Remove the four screws and the old bonnet (j).

8. Remove the screw (r), lockwasher (q), flat washer and spool adapter (k) from the end of the spool (s). Do not remove the spool from the valve body.

9. Install the spool collar (d), the centering spring (e), the new flat washer (f), the old lock washer (q) and bolt (r).

IMPORTANT: Make certain that the new flat washer (f) centers over the end of the spool (s).

10. Install the end cap (g) with the four shorter screws (h) provided.

11. Carefully stroke the handle several times in each direction. The centering spring will automatically return the spool to neutral when the handle is released.

INSTALLATION

1. Your tractor must be equipped with front end weights, hydraulic PTO and 3 point hitch before mounting the Model J-32 Wood Splitter.
2. Put the front of the Wood Splitter up on approximately 4" of blocking. Carefully back the tractor up to the Wood Splitter and raise or lower the 3 point hitch to align the mounting points. Secure the hitch pins with the retaining clips provided.

Adjust the top link and right hand link so the Wood Splitter lifts straight.

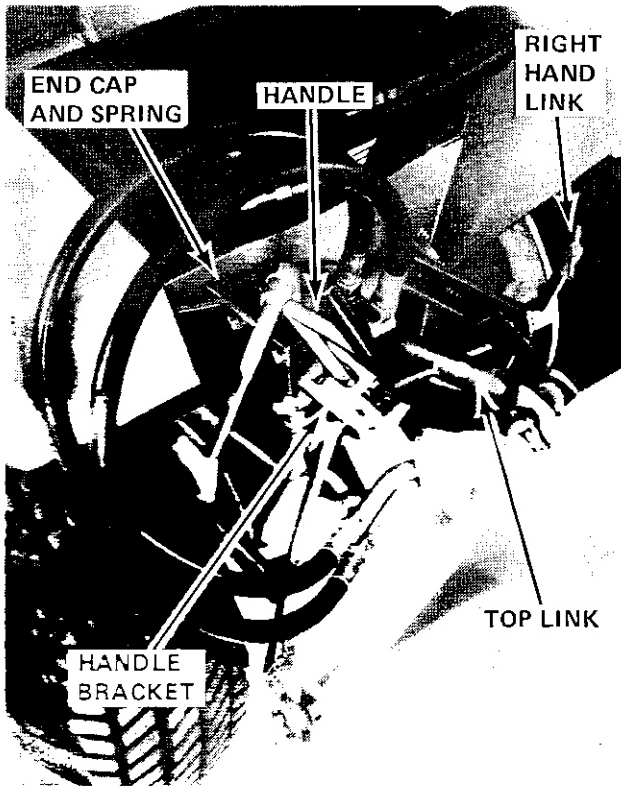


FIGURE 5

3. Connect the hydraulic hoses.

The hose from the front work port of the PTO valve **MUST** be connected to the upper (piston end) tube on the Wood Splitter.

The hose from the rear work port of the PTO valve **MUST** be connected to the lower (rod end) on the Wood Splitter.

4. Test for proper direction of ram movement. Run the engine at low idle. Move the handle rearward - the ram must move rearward. Move the handle forward - the ram must move forward.

IMPORTANT: Make sure the Wood Splitter control valve (hydraulic PTO valve) is in neutral position before attempting to start the engine.

VERY IMPORTANT: Always check the oil level in the hydraulic reservoir when the Wood Splitter cylinder is fully retracted (wedge closest to rear of tractor).

Filling the reservoir when the cylinder is extended will cause the reservoir to overflow and/or be damaged when the cylinder is retracted.



CAUTION Extremely high fluid pressures are developed in hydraulic wood splitters. Pressurized hydraulic fluid escaping through a pin hole opening can puncture skin and cause severe blood poisoning. Therefore, the following instructions should be heeded at all times.

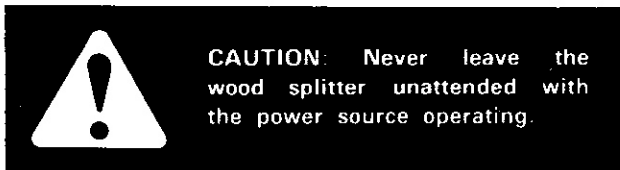
- 1 Do not operate the wood splitter with frayed, kinked, cracked or damaged hoses, fittings or tubing.
- 2 Stop the engine and relieve hydraulic system pressure by stroking the valve handle both ways several times before changing or adjusting fittings, hoses, tubing or other system components.
- 3 Do not adjust the pressure settings of the pump or valve.
- 4 Do not check for leaks with your hand. Leaks can be located by passing cardboard or wood over the suspected area. Look for discoloration. If injured by escaping fluid, see a doctor at once. Serious infection or reaction can develop if proper medical treatment is not administered immediately.

5. Fill the tractor hydraulic reservoir. Check your tractor Operator's Manual or the decal on the reservoir for the correct oil level and type.
6. Start the tractor engine. Run the engine at low idle speed.
7. Move the Wood Splitter control handle rearward until the cylinder is fully extended. Release the handle.

8. Move the Wood Splitter control handle forward until the cylinder is fully retracted. Release the handle.
9. Refill the tractor hydraulic reservoir.
10. Cycle the ram several times and recheck the reservoir. Refill if necessary.

REMOVAL

1. Park the tractor/splitter in the splitter storage area.
2. Lower the splitter on wooden storage blocks. One 2 x 4 or 2 x 6 block placed flatways under each end of the splitter works best.
3. Retract the cylinder fully for storage.
4. Remove the 3-point hitch links from the splitter.
5. Stop the engine.



6. Relieve static hydraulic pressure by stroking the Wood Splitter control handle in both directions several times.
7. Remove the hydraulic hoses. Loop one hose between the valve workports. Loop the other hose between the tubes on the Wood Splitter.

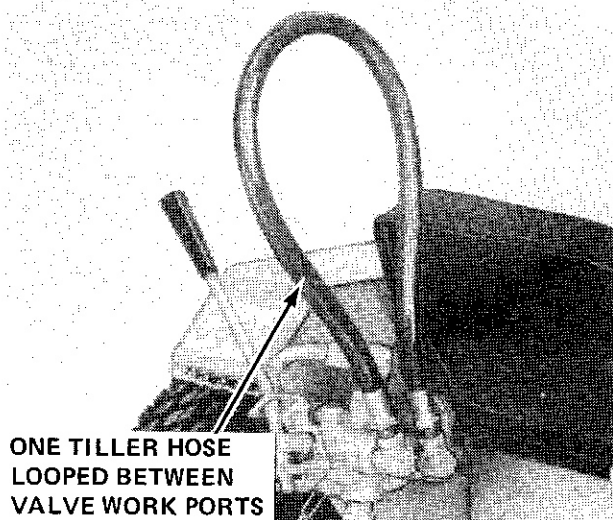


FIGURE 6

VERY IMPORTANT: Always loop one hose between the Wood Splitter control valve (hydraulic PTO valve) work ports when the Wood Splitter is removed. Failure to observe this procedure will result in oil loss (ports left open) or pump damage (ports plugged) if the valve is actuated.

If you will be removing and installing your Wood Splitter frequently, you may want to add hydraulic quick couplers.

Hydraulic Quick Couplers can be purchased from your Case dealer and added to the hydraulic hoses on your Wood Splitter. Use the following diagram for their installation.

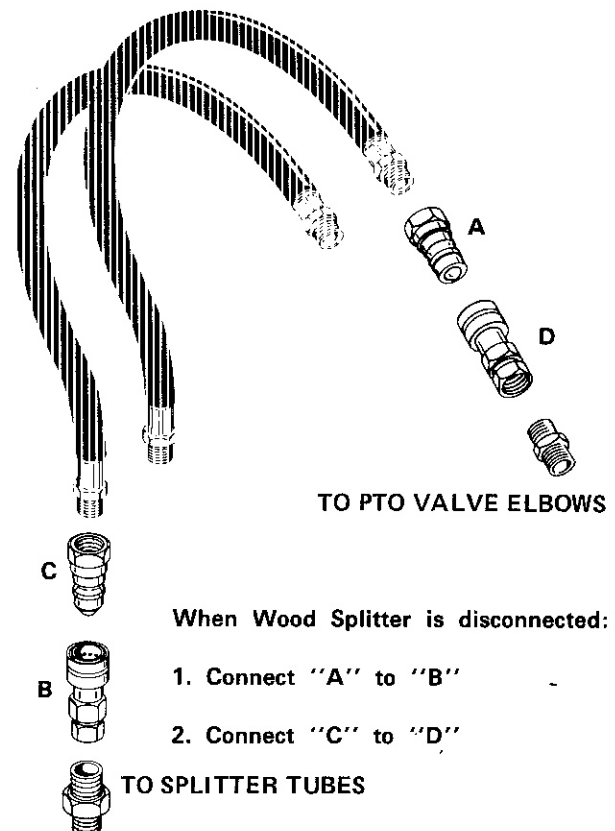


FIGURE 7 Quick Couplers

OPERATION

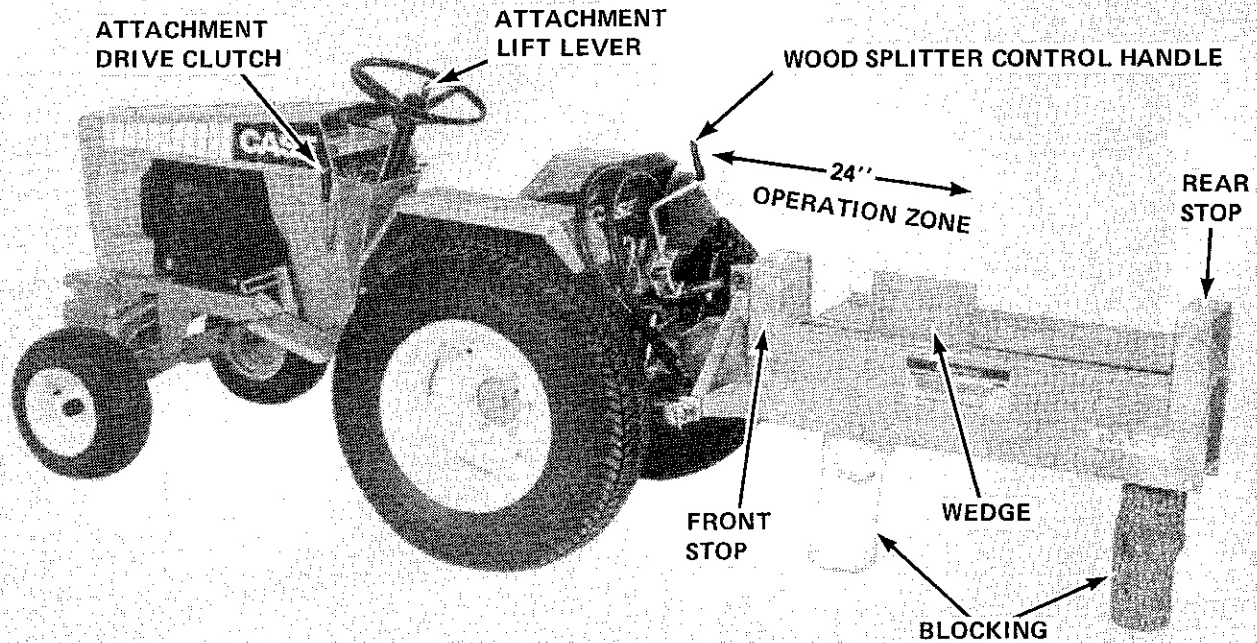


FIGURE 8

OPERATING CONTROLS

WOOD SPLITTER CONTROL HANDLE

1. Move the handle rearward to extend the ram (wedge moves rearward).
2. Move the handle forward to retract the ram (wedge moves forward).

ATTACHMENT LIFT LEVER

1. Move the lever rearward to raise the Wood Splitter.
2. Move the lever forward to lower the Wood Splitter.
3. Place logs under the Wood Splitter to stabilize it while in operation.



CAUTION: Hydraulically raised equipment block securely under the Wood Splitter before use. Failure of the hydraulic lift will cause the Wood Splitter to drop unexpectedly. Can cause injury.

ATTACHMENT DRIVE CLUTCH

If no belt driven attachment is mounted, engage the attachment drive clutch when using the Wood Splitter. This will reduce wear on the clutch hub. (Remember the attachment drive clutch must be in the "off" position to start the tractor engine.)

POSITION THE TRACTOR

1. Position the tractor on a level surface free of obstructions that may cause you to lose your footing.



CAUTION: Keep the operator zone and adjacent area clear for secure footing.

2. Place the two-speed transaxle in neutral.
3. Apply the parking brake and block both sides of both rear wheels.



WARNING: Make sure the wood splitter is on a level surface. Block the wheels securely before operating the machine to avoid possible injury from unexpected machine movement.

SELECT THE HEIGHT OF THE WOOD SPLITTER

The Wood Splitter can be positioned close to the ground so heavy logs can be easily rolled on, or at any height within the lifting range of the 3 point hitch.

BLOCK THE WOOD SPLITTER

Place a log(s) under the Wood Splitter when in use. This will improve the stability of the Wood Splitter and reduce the strain on the mounting bracket.

PREPARATION

Be thoroughly familiar with all controls and with the proper use of the equipment.



CAUTION: Read the operator's manual completely before attempting to use this wood splitter.



CAUTION: Before starting this wood splitter, review the "Rules for Safe Operation". Failure to follow these rules may result in serious injury to the operator or bystanders.



CAUTION: Do not allow anyone to operate your wood splitter who has not read the operator's manual or has not been instructed on the proper use of the wood splitter.

1. Always wear safety shoes or heavy boots. A dropped log can seriously injure your foot.
2. Always wear safety glasses or goggles to provide eye protection from flying splinters when operating the machine.
3. Avoid wearing jewelry or loose fitting clothing that might become entangled in moving or rotating parts of the machine.
4. Make sure the Wood Splitter is on a level surface. Block the wheels securely before operating the machine to avoid possible injury from unexpected machine movement.

Always operate the Wood Splitter from the manufacturer's indicated operator zone to assure maximum operator safety.



CAUTION: Logs to be split should be cut as squarely as possible to avoid unexpected movement of split wood.

SPLIT WOOD

1. Set engine throttle between 1/2 of full speed and full speed.



CAUTION: Always operate the wood splitter at manufacturer's recommended speed.



CAUTION: Never allow children or untrained adults to operate this wood splitter.

2. Move the handle forward until the opening between the wedge and the stop is large enough to accept the log.



WARNING: When loading the wood splitter, place your hands on the sides of the log outside of the path for the wedge or ram. Never place your hands or any part of your body between a log and any part of the wood splitter.

3. Place a log on the Wood Splitter bed.
 - a. Never attempt to split more than one (1) log at a time unless the ram has been fully extended and a second log is needed to complete the separation of the first log.
 - b. On logs that are not cut square, the longest portion of the log should be rotated down and placed at the wedge end.
 - c. Use only your hand to operate the Wood Splitter controls.
4. Move the handle rearward and hold it in that position for the splitting stroke. The handle will return to neutral automatically when released.

IMPORTANT: The handle must always be allowed to return to neutral automatically when released. Do not force it into the locking slot in the handle bracket when pushing the handle rearward.

5. Place another log on the Wood Splitter bed between the wedge and the front stop (or 1/2 of the first log if splitting in fourths, etc.).

6. Move the handle forward and hold it in that position for splitting on the return stroke. The handle will return to neutral automatically when released.

7. Repeat the cycle.



CAUTION: Most accidents occur when more than one (1) person operates the wood splitter. If a helper is assisting in loading logs to be split, never actuate controls until the helper is clear of the area.



CAUTION: The owner should instruct all operators how to properly operate a wood splitter.

WOOD SPLITTING HINTS

LARGE DIAMETER LOGS AND STRINGY LOGS

Large diameter or stringy logs may not readily split down the center. They split more easily at the outside or bark side. Place the bark side down on the Wood Splitter bed after the first split is made.

The entire outer circumference of the log may have to be split away before a successful split through the middle can be made.

STRINGY LOGS

Stringy logs may not completely separate when the ram has reached the end of its stroke. Move the log back from the stop, insert a short log between the stop and the log to be split and complete the splitting stroke. If possible, select a short log with a "natural" handle for this purpose and save it.

TREE CROTCHES AND BRANCH FORKS

Tree crotches and branch forks split easier from the bottom upwards in the direction of the growth.

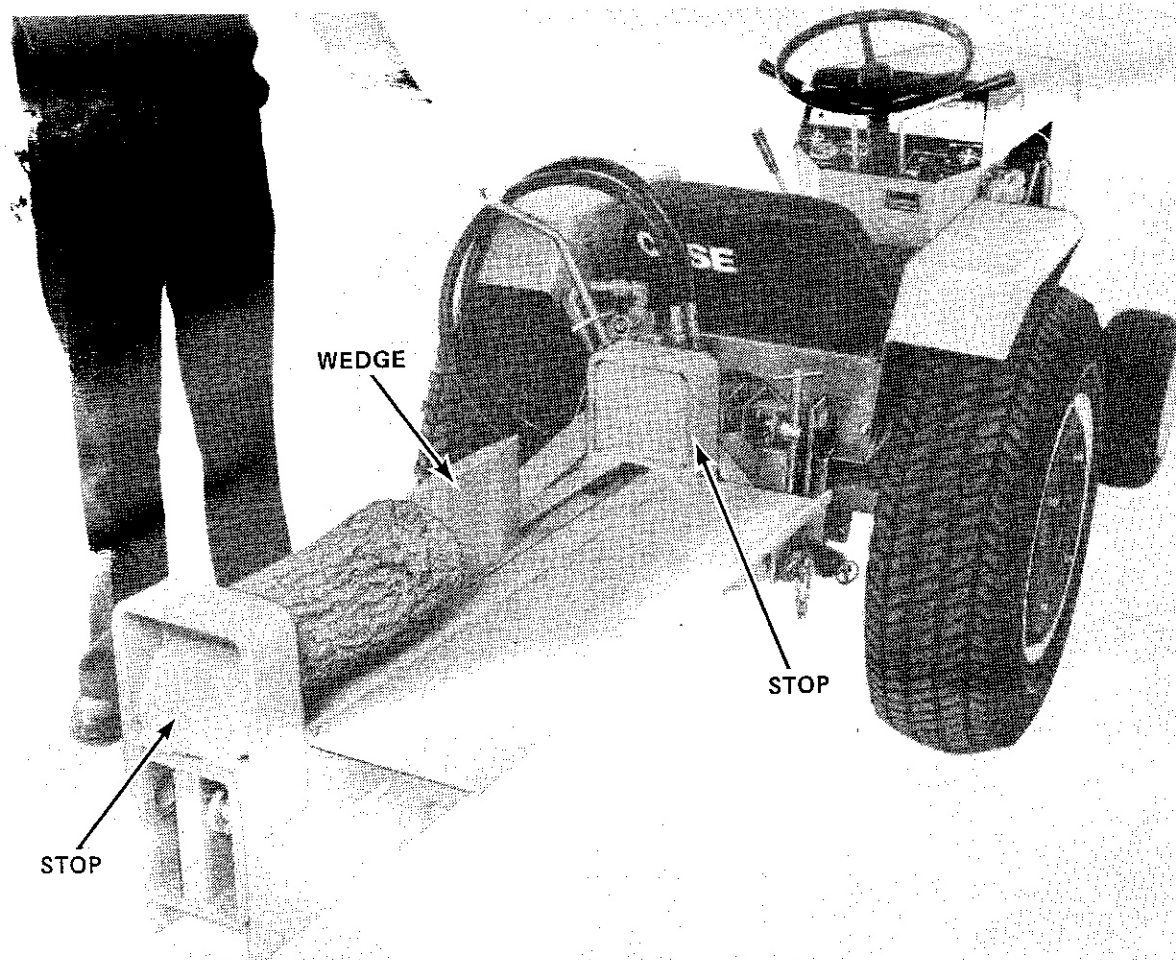


FIGURE 9



CAUTION: Ram type machines should be used only for splitting wood and only in the direction of the grain. If the manufacturer has attachments for other uses, follow their installation and safe operating instructions.

REACHING THE RELIEF VALVE MAXIMUM PRESSURE

The Wood Splitter control handle must be released immediately upon hearing the "squealing" sound of the relief valve. This sound indicates that the Wood Splitter wedge has stalled and no further splitting action is happening.

After the Wood Splitter has stalled, the wedge should be retracted, the log repositioned on the wedge, and a new attempt made.

Develop the habit of releasing the Wood Splitter control handle just before the ram reaches the end of its stroke.

This method of operation will:

1. Prevent the hydraulic pressure from reaching its relief valve setting.
2. Allow the hydraulic system to operate at cooler temperatures.
3. Increase the life expectancy of the hydraulic system.

VERY IMPORTANT: Operating over relief valve generates heat rapidly in the hydraulic system and can cause component damage.

REMOVING A STUCK LOG FROM THE WEDGE

Use a second log to push the stuck log off the wedge.



CAUTION: Never attempt to split more than one (1) log at a time unless the ram has been fully extended and a second log is needed to complete the separation of the first log.

1. Position a strong log (or split piece of log) against the stop opposite the one being used in the splitting stroke.

A log or split piece of log that is strong, appropriate in length and small in diameter works best.

2. Carefully stroke the wedge, guiding the "push off log" to one side of the wedge and against the stuck log.
3. Continue the stroke to push the stuck log from the wedge.
4. Reposition the log and make another attempt. The Wood Splitter has more splitting force when the wedge moves rearward. Make your most difficult splits in that direction.

MAINTENANCE

Check nuts, bolts and hydraulic connections for tightness before each use.



CAUTION: Check to be sure all nuts and bolts are tight to assure the equipment is in proper working condition.

The ram should not be lubricated. Grease tends to hold grit (abrasives) resulting in rapid wear.

Inspect the splitting edge of the wedge frequently. Use a file to remove burrs and sharpen the splitting edge when necessary.

Paint or lightly oil exposed parts when your Wood Splitter is put into storage.



CAUTION: Always shut off the engine while repairing or adjusting the wood splitter except as recommended by the manufacturer.

IMPORTANT: Always install new decals whenever the old decals are destroyed, lost, painted over or illegible. When individual parts are replaced that have decals attached, be sure to install a new decal with the new part. Replacement decals are available from your Case Dealer.