Table of Contents

SAFETY PRECAUTIONS ........................................................................................................... 3
INSTALLATION .................................................................................................................. 5
PREFLIGHT CHECK LIST .................................................................................................... 7
BASIC SAW OPERATION ...................................................................................................... 8
CUTTING OPERATIONS ...................................................................................................... 10
REMOVAL AND STORAGE .................................................................................................. 11
LIFTING/SLINGING THE TREE SAW .................................................................................. 12
REPLACING TEETH ............................................................................................................ 12
LUBRICATION POINTS & PROCEDURES ......................................................................... 15
BLEED PROCEDURE FOR TILT CIRCUIT ......................................................................... 16
TROUBLESHOOTING GUIDE .............................................................................................. 18
ONE YEAR LIMITED WARRANTY ......................................................................................... 19

MODEL NUMBER: __________________________

SERIAL NUMBER: __________________________
(Located on data plate attached to top of unit)

DATE PURCHASED: _______________________
INTRODUCTION

SYMBOLS USED IN THIS OWNER’S MANUAL

Throughout this owner’s manual (and on the attachment itself) there are universal safety symbols. They are commonly used in the equipment and attachment manufacturing industries. These symbols are meant to alert users to possible dangers when used the attachment. Please pay careful attention to any section of this owner’s manual with one of these symbols.

BEFORE INSTALLATION AND OPERATION:

Be sure to read this owner’s manual and understand its contents prior to installation and operation of the Sidney Land Shark Power Rotating Saw. If there is anything in this manual you do not understand, please contact your authorized dealer, or the Sidney Customer Service Department at 866-567-9618. We will be glad to answer your questions.

Sidney Manufacturing cares about your safety, and the safety of others who operate or are in the vicinity of the Land Shark Power Rotating Saw attachment. Sidney Manufacturing takes great pride in engineering and building quality attachments with the operator’s safety in mind, but the responsibility for the safe use of this attachment ultimately belongs to the operator.

Never let anyone operate the Sidney Land Shark Power Rotating Saw attachment unless they have first read this owner’s manual.

SPECIAL NOTE: The information and illustrations contained in this Land Shark Power Rotating Saw owner’s manual were current at the time of publication. Sidney Manufacturing reserves the right to redesign all or any portion of this attachment and the owner’s manual at any time without notification. For questions or concerns, or to inquire about updates, please contact your authorized dealer or the Customer Service Department at 866-567-9618.

SAFETY PRECAUTIONS

GENERAL SAFETY PRECAUTIONS

Sidney Manufacturing wants users to have many years of safe, low-maintenance use from the Land Shark Power Rotating Saw attachment. Please read the following section regarding safety thoroughly and follow all precautions each time the Sidney Land Shark Power Rotating Saw attachment is used.

SAFETY STARTS WITH YOU

If you operate or work near skid-steer loaders, take these steps to protect yourself.

This information is from the National Institute for Occupational Safety and Health at www.cdc.gov/niosh/docs/98-117

1. Follow safe operating procedures:

   • Operate the loader from the operator’s compartment — never from the outside.
   • Stay seated when operating the loader controls.
   • Work with the seat belt fastened and the restraint bar in place.
   • When possible, plan to load, unload, and turn on level ground.
   • Travel and turn with the bucket in the lowest position possible.
   • Operate on stable surfaces only.
   • Do not travel across slopes. Travel straight up and down slopes, with the heavy end of the machine pointed uphill.
   • Keep bystanders away from the work area.
   • Never disable safety devices.

2. Enter and exit from the loader safely:

   • Enter the loader only when the attachment is flat on the ground — or when the lift arm support is in place.
   • When entering the loader, face the seat and keep a three-point contact with handholds and steps.
   • Never use foot or hand controls as steps or handholds.
   • Keep all walking and working surfaces clean and clear.
   • Before leaving the operator’s seat:
     — lower the attachment flat to the ground,
     — set the parking brake, and
     — turn off the engine.
3. Maintain the machine in safe operating condition:

- Follow the manufacturer’s instructions.
- Keep the foot controls free of mud, ice, snow and debris.
- Regularly inspect and maintain:
  - Interlocked controls
  - Seat belts
  - Restraint bars
  - Side screens
  - Rollover protective structures (ROPS)
  - Falling object protection structure (FOPS)
- NEVER modify or bypass safety devices.
- If you must perform service under a raised attachment, use the lift arm supports.

SAFELY CHECKING FOR HYDRAULIC LEAKS

WARNING: There is significant risk of injection from the high pressure spray at hydraulic leaks.

- The energy used to operate the machine and attachments can be stored in the hydraulic system, even when the machine engine is off.
- Serious injuries from hydraulic fluid injection can seem insignificant at first. Often it can seem like a pin prick or tingling, but later it may require amputation.
- HIGH PRESSURE LEAKS ARE OFTEN INVISIBLE.
- Hydraulic system injuries can include:  
  - Burns from hot fluid
  - Injection of hydraulic fluid
  - Trauma from energized components or flailing lines

DO

- Always Lock Out, Tag Out machine controls before working on the machine or attachment.
- Always use the methods recommended by the manufacturer to block lift arms and other moving components, to prevent accidental movement.
- Always use appropriate PPE (Personal Protective Equipment) when working on or around machinery.
- Take an approved safety course related to hydraulic systems. Local university extension programs and equipment dealers may offer training on hydraulic safety.

DO NOT

- DO NOT use hands, or other body parts, to inspect for hydraulic leaks. Instead, use a piece of paper or wood.
- DO NOT place hands or other body parts in pinch points when the machine has not been properly blocked and locked out.
- DO NOT “crack” a hydraulic fitting to release hydraulic pressure. Severe risk of injection.
- DO NOT tighten or loosen hydraulic components when the system is pressurized.
- DO NOT assume that the system is depressurized.

INSTALLATION

Connecting the machine to the saw

- The standard Sidney Land Shark Power Rotating tree saw is equipped with a universal skid steer mount which will fit the majority of modern skid steer loaders and a variety of other types of machines. Other mounts are available on a case-by-case basis. To connect the saw to the machine, roll the machine hitch forward and approach the back of the saw, being careful to line up on the centerline of the saw with the machine hitch squared up to the saw hitch. Guide the top of the machine hitch under the hook bar and raise the loader arms until the back of the saw is slightly off the ground. Roll the machine hitch back until the front of the saw lifts off the ground and then engage the 2 latches.

Connecting the hydraulic lines

- IMPORTANT: case drain is required — not using the case drain will void the manufacturer’s warranty.
- There are 3 hydraulic lines on the Land Shark tree saw, 2 of which are for hydraulic fluid supply and return, and the third smaller line is a case drain for the motor. The hydraulic couplers on each line are distinct from the others, so it is not likely that they will be connected incorrectly. It is important that all three lines are connected to the loader’s hydraulic system or there will be no power to the motor. The couplers are seated properly — make sure that the couplers have latched and cannot be pulled off without disengaging the latch. The case drain is REQUIRED to protect the hydraulic motor from overpressure which could damage the motor seal or the motor case.

Connecting the electrical lines

- The Land Shark tree saw requires electrical connections to the machine in order to respond to switches pressed by the operator. The standard configuration requires several harnesses to be installed on the machine (see illustration page 6). Optional configurations available are the 7-pin and 14-pin "Plug-and-Play" connectors which allow the Land Shark to interface directly with the OEM controls in the cab of the machine without installing additional harnesses. There are 3 wires that supply +12VDC to various solenoids and pumps for tilting and spraying (if installed), the 4th wire is the ground. All of these connections are made when the connector at the top of the supply hose assembly is plugged into a properly installed wiring system on the machine.

Checking for proper installation and operation

- See the “pre-flight” checklist (page 7) for proper control activation and directions.
Inspect Saw Prior to Every Cutting Session

BEFORE starting machine:

- Look for obvious damage to saw structure — welds, dents, loose fasteners, etc.
- Check hydraulics for abrasion, leaks, kinks, etc. — DO NOT inspect pressurized hydraulics without using precautions — injection risk
- Inspect hydraulic and electrical connections to machine

Start machine, raise the saw, tilt the head 90 degrees, and gently lower the saw to ground.

- Turn off the machine
- Inspect the blade for damage
  - Bending — DO NOT attempt to repair a bent blade
  - Broken or missing teeth — DO NOT OPERATE with missing tooth holders
  - Cracks, particularly near the hub and/or tooth slots

Start the machine and check for smooth operation of all functions:

- Blade spin in horizontal position
- Tilt to both sides
- Blade spin in tilted position
BASIC SAW OPERATION

Blade

- The saw blade will spin whenever the auxiliary hydraulic flow is activated if the saw is properly connected to the machine.

Tilt

- With the blade spinning, tilting the saw head is accomplished by pressing and holding one of two controls in the machine. The standard harness configuration is supplied with two trigger switches that are mounted in the cab, and each switch will tilt the saw head in one direction. The “Plug-and-Play” options allow the operator to use OEM switches located on the existing control sticks. The head will tilt 90 degrees to each side for trimming branches, cross-cutting logs, or ripping logs.

Spray

- When the Land Shark is purchased with a sprayer option, an additional switch harness is supplied that plugs into the saw harnesses already installed on the machine. This provides a third trigger switch (in addition to the two trigger switches for tilting) to operate the spray pump. Simply pressing the third trigger switch will run the spray pump as long as the switch is held. The spray nozzle is mounted inside the saw body and directs a jet of fluid downward through a hole in the bottom of the body approximately 1 foot rearward of the trailing edge of the blade guard (see illustration page 9).
General safety considerations

- OSHA clear zone (see Figure 1)

- Flying objects — WARNING: Flying debris may be created when using this attachment. Use personal protective equipment and keep all bystanders at a safe distance.

- Falling trees and branches

- Saw blade

- Machine movement

- Pressurized hydraulic fluid — There is significant risk of injection from the high pressure spray at hydraulic leaks (see page 4). Please read all Safety Precautions before operating the attachment.

Felling

- Felling of standing trees requires care and planning. Be aware of wind, slopes, leaning stems, and other factors that may indicate the probable direction that the tree will fall once cut. Even with careful observation, the tree may fall in any direction, so it is important to use a machine with proper ROPS/FOPS protection and to be very vigilant when felling.

- Start the hydraulic flow to spin the blade. Use the switches in the cab and tilt the head into a position that is roughly perpendicular to the stem of the tree. Approach the tree slowly and “sneak into the cut” only applying more cutting force once the blade is already cutting wood. It is often preferable to progress through the cut by rotating the machine rather than driving forward, but field conditions will dictate which to use. As the cut gets deeper listen to the sound of the saw to anticipate if the blade is becoming pinched. If the saw begins to slow down, ease off on the cutting force or back out of the tree and cut from another direction.

- As the cut nears completion, be aware of the direction that the tree is tending to fall and be prepared to respond.

Trimming

- Branches may be trimmed by tilting the saw head roughly perpendicular to the branch, and proceeding to trim. Be aware that the saw dust will be propelled in a certain direction depending upon which way the head is tilted and what part of the blade is used to cut the branch. Plan your cut to avoid spraying saw dust on the machine. Also be aware of the falling branch and do not position the machine under the branch where it will be struck.

Cross cutting

- Once the tree is on the ground, it may be sectioned into manageable logs or rounds by cross-cutting. Approach perpendicular to the stem, tilt the head to one side and proceed to cross-cut. Care should be taken to avoid spraying saw dust on the machine, and to avoid driving the blade into the ground. The teeth on the blade will generally stand up to dirt and mud, but rocks or other hard objects will chip the inserts.

Ripping

- Trees on the ground may also be ripped along their length if the machine can straddle the log without contact. Lift the head to one side, approach the stem from the end, and proceed to cut. Rip cutting will produce very long and stringy chips of wood, and care should be taken to avoid spraying chips on the machine.

REMOVAL AND STORAGE

To remove the saw for storage:

- Lift the saw head so that the blade is in a horizontal position.

- Ensure that the hydraulic flow has been turned off and that the blade is not spinning.

- Place the saw on a pallet or other storage location.

- Disengage the latches on the hitch.

- Roll the loader hitch forward and lower the arms until the machine hitch clears the hook bar on the saw hitch.

- Back away from the saw JUST A FEW INCHES.

- TURN THE MACHINE OFF.

- Disconnect the hydraulic lines and electrical line from the saw and store them where dirt will not collect on the connectors.

- Drive the machine away.
LIFTING/SLINGING THE TREE SAW

It is recommended that the user sling the Sidney Land Shark rotating power saw around the neck near the CG location (see Figure 2) and balance by hand.

A second method is to sling the saw around the fins on the head, and around the base of the brush guard with a separate sling (see Figure 2).

DO NOT lift or sling the saw in any manner that might damage a hydraulic component.

REPLACING TEETH

Saw teeth are consumable items which are inexpensive and easy to replace. The special tool required for servicing the teeth is supplied with the saw and can be found inside the saw body bolted to the right side. Remove this tool and acquire a set of teeth. **THE SAW MUST NEVER BE OPERATED WITH ANY TOOTH HOLDERS MISSING.**

The saw will operate with chipped inserts, but the tooth holders must be in place to stabilize the rim of the blade.

Use the bolt with the narrow point to drive out the soft rivet on the tooth holder. Slide the tooth out and slide in a new one. Use the bolt with the broad flat tip to swage a new rivet in place. **DO NOT REUSE OLD RIVETS.**
LUBRICATION POINTS & PROCEDURES

Tilt shaft
- The hinge point around which the head tilts consists of a hinge tube and a large shaft. There are two grease points on the tube.
- Lubrication interval:
  - Once per season under casual use
  - Lubricate weekly under heavy use, or under adverse conditions such as rain, snow/ice, etc.
- Procedure:
  - Remove the inspection panel on the side of the saw frame. The panel is located on the side of the necked down portion of the frame.
  - Use a grease gun to apply grease to both zerkys provided.
  - Wipe away excess grease to prevent attracting dirt which tends to infiltrate the hinge and cause wear.

Bearing Assembly
- The bearing assembly inside the head contains gear oil.
- Lubrication interval:
  - Once every 200-300 hours under casual use.
  - Once per season under heavy use.
  - Inspect periodically for leaks (gear oil has a distinctive odor compared with hydraulic fluid) and change the oil as required.
- Procedure:
  - Elevate the saw and place on a table, jack stands, or other stable surface.
  - Tilt the head so that the blade is horizontal.
  - Turn OFF the machine.
  - Remove one of the side inspection panels from the saw frame.
  - Remove all 8 bolts holding the shaft to the rotary actuator – DO NOT remove or loosen the bolts on the feet of the rotary actuator – to do so may affect the alignment of the tilt mechanism resulting in bolt failures.
  - Remove the fins and head cover from the head of the saw.
  - Locate the fill/drain plugs near each side of the motor base (see illustration page 14)
  - Remove both plugs and screw a drain hose into one of the ports. One or both of the plugs is magnetic. Inspect the plugs for metal fines or other debris. *** This may be an indication of bearing failure ***
  - Manually tilt the head toward the side with the drain hose, and wait for all of the oil to drain out.
  - Using the drain hose, pour 8 ft oz of SAE 90W gear oil into the bearing assembly.
  - Replace the drain plugs. Use a small amount of Teflon tape to seal the plugs.
  - Replace the bolts fastening the shaft to the rotary actuator. Torque: 22 ft-lb (lubed), 44 ft-lb (dry).
  - Replace the inspection panel.
  - Run the saw for a few minutes and then turn off the machine. Inspect for leaks.
  - Replace the head cover and fins.
BLEED PROCEDURE FOR TILT CIRCUIT

Whenever the hydraulic circuit is disassembled air may become trapped in the lines, the rotary actuator, or the valve manifold. Since air is compressible, and hydraulic fluid is not, this entrapped air prevents the tilt function on the saw from operating smoothly, or at all. Follow the following procedure to remove the air and restore proper function:

1. Obtain a short jumper hose and two straight fittings. Specifications are provided in Figure 3 above.
2. Remove the 3 inspection panels from the neck of the saw to expose the rotary actuator.
3. The hoses running back to the valve manifold should be left in place.
4. Remove the 2 plugs from the ports on the top of the actuator and install the straight fittings and the jumper hose.
5. Make sure personnel are clear from the saw area and then start the machine.
6. Press one of the tilt buttons and activate the hydraulics as if attempting to tilt the saw head.
7. Run the hydraulics in this configuration for 30-45 seconds and then shut down the machine.
8. Remove the jumper hose and straight fittings. Retain for future use.
9. Reinstall the plugs in the top of the rotary actuator.

Note that the saw head may not move much during this procedure.
# Troubleshooting Guide

<table>
<thead>
<tr>
<th>Description of Problem</th>
<th>Possible Cause</th>
<th>Suggested Investigation/Repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blade will not spin</td>
<td>No hydraulic flow</td>
<td>1. Check the fluid level in the machine reservoir. Fill if necessary. 2. Ensure that the machine’s auxiliary hydraulic function has been activated. Sometimes there is a switch.</td>
</tr>
<tr>
<td></td>
<td>Reversed supply lines</td>
<td>Remove the two large hydraulic couplers from the ends of the supply lines, and reinstall them on the opposite hose. Reconnect to machine.</td>
</tr>
<tr>
<td></td>
<td>Relief valve stuck</td>
<td>Remove relief valve cartridge from the valve manifold and inspect.</td>
</tr>
<tr>
<td>Blade spins wrong direction</td>
<td>Reversed hydraulic lines between the motor and the valve manifold</td>
<td>Remove the two large hydraulic lines from the top of the motor and reinstall them in the opposite ports.</td>
</tr>
<tr>
<td>Head will not tilt at all – no movement</td>
<td>Broken bolts between shaft and Helac</td>
<td>These bolts are designed to shear to prevent damage to the saw head in the event of an overload. Replace bolts with 3/8-16NC x 1 1/2 Grade 8 flange head cap screws. Use a lock washer, but DO NOT use thread locking fluid. Torque to 229-lb (lubed), 448-lb (dry).</td>
</tr>
<tr>
<td></td>
<td>No electrical output to solenoids</td>
<td>Unplug the 3 connectors from the solenoids and use a 12VDC test light to verify that they get power when the tilt buttons in the machine are pressed. Note: the “Block” circuit must activate when tilting both right and left.</td>
</tr>
<tr>
<td></td>
<td>Electrical ground problem</td>
<td>The ground may be sufficient to light a test light, but it may not be enough to run a larger load such as one of the solenoids in the saw. Use a multimeter to measure the resistance in the ground circuits. Repair or replace wires/connectors as required.</td>
</tr>
<tr>
<td></td>
<td>“Block” valve failure</td>
<td>Remove “block” cartridge from the valve manifold and inspect.</td>
</tr>
<tr>
<td></td>
<td>No hydraulic flow</td>
<td>1. Check the fluid level in the machine reservoir. Fill if necessary. 2. Ensure that the machine’s auxiliary hydraulic function has been activated. Sometimes there is a switch.</td>
</tr>
<tr>
<td>Head tilt is jerky and/or incomplete, or the head tries to tilt but just barely moves</td>
<td>Air in the hydraulic circuit</td>
<td>Bled the tilt circuit. See procedure for required tools and instructions.</td>
</tr>
<tr>
<td>Motor seal or case failure</td>
<td>Case drain blocked or not used</td>
<td>Hydraulic fluid will leak inside the saw head. Inspect the motor case for cracks. Replace the motor seal and/or the motor as required. Note: the bearing used SAE 90W gear oil which has a distinct smell and indicates a problem with the bearing rather than a motor problem.</td>
</tr>
<tr>
<td>Bearing failure</td>
<td>No lubricant</td>
<td>Remove the motor from the top of the bearing and check inside the bearing for proper lubricant level. Oil should be approximately 1.5&quot; below the top of the bearing. Fill to this level with SAE 90W gear oil, or replace the bearing assembly if damaged.</td>
</tr>
<tr>
<td>Bearing seal failure</td>
<td>Remove the bearing from the saw head and replace the seal. Reinstall bearing in saw. Fill to 1.5&quot; below the top of the bearing housing with SAE 90W gear oil.</td>
<td></td>
</tr>
<tr>
<td>Saw teeth worn or broken</td>
<td>Normal operating condition – teeth are consumable items</td>
<td>Use tool supplied with the saw to replace the teeth. The bolt with the narrow point is used to drive the rivet out of the tooth holder. The bolt with the wide head is used to swage the new rivet in place once the tooth has been replaced.</td>
</tr>
</tbody>
</table>

---

# ONE YEAR LIMITED WARRANTY

The goal of Sidney Manufacturing’s warranty policy is to assure confidence and reduce downtime. Should issues arise, please contact your authorized dealer or Sidney’s Customer Service Department directly at 866-567-9618, and we will work with you to resolve the issues in a timely manner.

Sidney’s normal hours of operation are Monday through Friday, 8:00 a.m. to 5:00 p.m., CST. If calling after hours, you may leave a message and we will return your call as soon as possible. Sidney is closed for most US national holidays.

Sidney Manufacturing offers a One Year Limited Warranty on the Land Shark Power Rotating Saw attachment. No warranties are expressed or implied as to the fitness of the equipment on which the attachment or accessory is installed. The purchaser is responsible for promptly informing Sidney Customer Service of any suspected operational deficiencies or failures. Sidney is the sole party responsible for analysis of reported deficiencies or failures. Replacement or repair will be at the discretion of Sidney Manufacturing.

In some cases, Sidney may approve field repairs. Compensation for field repairs will be negotiated without prior approval by Sidney Customer Service may invalidate the warranty. Please see general (below) for additional warranty information, and the return procedure for details on how to initiate a claim.

## General

The Sidney Limited Warranty is extended only to the original purchaser and may be void in the event that the product is sold or otherwise transferred. No warranty will apply to any product that has been (i) modified, altered or adapted without Sidney’s written consent, (ii) abused or misused, (iii) repaired by any third party in a manner that fails to meet Sidney’s repair standards, (iv) improperly installed, or (v) used with any device or implement not covered by this warranty. This warranty does not include and hereby excludes normal maintenance parts and consumables, including but not limited to hydraulic fluid, hoses and similar items.

The warranties set forth herein are in lieu of any and all other warranties, express or implied, including the warranties of merchantability and fitness for a particular purpose. The purchaser acknowledges that no other representations or warranties were made or relied on in connection with the purchase of the Sidney Land Shark Power Rotating Saw Attachment. No person is authorized to vary, modify or change the terms of this limited warranty.

Neither party shall be liable for any indirect, punitive, special, incidental or consequential damage in connection with or arising out of the use of the property sold to the purchaser, including without limitation, loss of business, revenue, profits, goodwill, consequential damages, whether in contract or tort, including negligence.

Nothing in this warranty affects any statutory rights of consumers or other purchasers that cannot be waived or limited by contract. This limited warranty gives you specific legal rights, and you may have other rights, which vary from state to state.

## Return Procedure


Customer manufactured attachments that do not fit because of incorrectly provided specifications are non-cancellable and non-returnable.

Goods not returned within 30 days of the issuance of the Return Authorization will not be accepted. Unauthorized returns may be reshipped to the customer freight-collect. Restocking of returns are subject to a 15% restock fee.