

Side Cut Saw



Owner's/Operator's Manual



WARNING

For safe operation, read these rules and instructions carefully to avoid accidents that could result in Death or Serious Injury.

TO THE OWNER/OPERATOR OF THIS IMPLEMENT

Please read this manual "before" unpacking or using this implement for the first time. This manual provides you with the necessary instructions to safely install and use your purchase. Do not let other people use this attachment without first being instructed how to safely use it.



AST Solutions LLC

PO Box 566

Galva, Ks. 67443

620-755-7970

Save this manual for future reference!

Thank You

Our sincere appreciation to you on the purchase of a quality Side Cut Tree Saw designed and manufactured in the USA by AST Solutions LLC. Extensive Product experience is the cornerstone of our company, and our goal is to provide you with a heavy duty product that will give you years of satisfaction and operation.

Our record of successful and satisfied customers is evidence of the concern for quality and designed strength that we place into each and every product we build.

As this manual expresses the need for safe operation of your acquisition from AST Solutions LLC., it is important that you and all operators of this implement become familiar with the operation, maintenance and safety instructions found in this manual, as well as in the manual that accompanied the skid steer machine that will power this attachment. Add some common sense to the items mentioned in these manuals as the recipe for safe operation.

We invite you to look at more innovative products at <http://www.sidecutsaw.com> or if in the area stop and visit our manufacturing facilities located in Galva Ks.

Sincerely,
Management & Employees
AST Solutions LLC

Information

Record product information here for future reference.

Model: SIDE CUT SAW ___ (X) Standard Hyd. Flow _____
S/N or MFG. Date _____
Dealer Name _____
Dealer Phone _____ - _____ - _____
Date of Purchase ___/___/_____

Importance of Safety

Accidents can be very costly to human life and property. As the operator is the #1 safety device on all types of vehicles or equipment, it is important that the operator read, learn and know all safety recommendations for this product. The user is responsible to his family, friends and co-workers to operate in a safe manner.

Ensure that everyone who operates or assists in the operation or maintenance of this product read and understand all the elements required to safely operate this piece of equipment.


This attachment has moving parts that include additional dangers.

Throughout this manual you will find safety notes which are very important to read and understand before operating this piece of equipment. These classifications alert you to situations that could be harmful to you or bystanders. When you see these alerts in the manual, carefully read and follow all instructions and also protect other workers from the same danger.

 **DANGER** Will result in Death or Serious Injury.


 **WARNING** Could result in Death or Serious Injury.


 **CAUTION** Could result in Minor or Serious Injury.


 **NOTICE** Not related to Personal Injury.


Operator Safety Training Tips


It is the responsibility of the operator using this attachment to be acquainted with the safe operation. In addition to reading this manual, it is important that the operator read the skid steer's operation manual and follow its manufacturer's recommendations!


 Before lifting or lowering the saw, make sure the area is clear of bystanders or objects.


 Machinery parts have sharp edges. Wear work gloves when moving parts. Always use caution around the saw blade as it has very sharp edges.


 Never use drugs or alcoholic drinks when operating or servicing this piece of equipment.


 Always wear the proper personal protection equipment when servicing or operating this piece of equipment. Never service or operate this attachment with bare feet, sandals, or other light footwear.


 Always use eye protection during operation. Mount this attachment on a skid steer equipped an enclosed cab


 Speed Kills! Operate this implement at a safe working speed. When transporting the implement, keep a safe speed to avoid losing control of the attachment or prime mover.


 Keep proper clearance between the implement and objects (utilities, tree stumps, large rocks, buildings, etc.). Contacting these objects with the implement could cause a loss of control or damage to the implement or property.


 Never attempt to operate this attachment from anywhere but when seated in the skid steer operators seat.


 Stop the engine on the skid steer to avoid the implement rolling forward or backwards while you are exiting.

 Store this implement in an area not frequented by children.

 Allow no riders on this attachment. Keep all bystanders clear of attachment during operation.

 Always replace worn, torn or missing safety decals before operating.


 Never operate the saw when bystanders are within 100 feet (30 m) of the work area.

 Cut only during daylight or well-lit artificial light.

Skid Steer Requirements


Your Side Cut Tree Saw should only be used on a skid steer with a lift capacity of at least 1800 lbs. and with a weight of at least 6500# with the bucket removed. A skid steer equipped with tracks will provide superior stability in this application.

To protect the operator from any flying debris, it is important that the skid steer should be equipped with a thermoplastic polycarbonate windshield or similar material, and similar protection on the sides of the operator's cab.

 **CAUTION** Make sure your skid steer is in good working condition. Follow the operating instructions found in the manual that accompanied your skid steer. Failure to do so could result in Minor or Serious Injury.

Unpacking Your Shipment


Your attachment arrives from the factory banded and requires no final assembly before use.

 **CAUTION** Careless removal of the shipping bands that secure the implement to the pallet if used could result in Minor or Serious Injury.

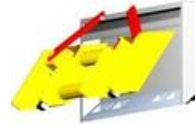
Clear the area of all bystanders and stand to the side when cutting the bands with a pair of sheet metal shears.

Using Your Implement

Connecting Saw to Skid Steer

 **DANGER** Never enter the area underneath the coupler or any part of the attachment when it is in the raised position to avoid an accident that will result in Death or Serious Injury.

Verify that the hydraulic hoses are clear from the front of the attaching plate on the attachment and that the mounting plate is free from dirt and debris. When clear, move the skid steer to proximity of attachment plate. Tilt skid steer coupler forward to align coupling point with the upper part on the back of the attachment plate and raise the coupler slightly.



Connecting Coupler to Attachment

When the top edge of the coupler is seated in the top part of the coupler plate, roll the skid steer tilt function back until the attaching plate is flat against the skid steer coupler. Lock down the coupler levers. Note: If your skid steer is equipped with a hydraulically operated coupler, activate the coupler lock at this time. Shut the Skid steer's engine off and release the pressure in the auxiliary circuit.

○

PLEASE NOTE:
Attachment and Machine-
side Couplings must be
**FREE OF DEBRIS
BEFORE INSTALLING.**
Failure to comply will void
warranty.

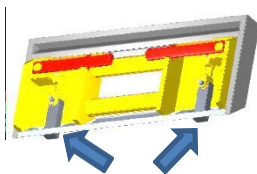
NOTICE *Wipe off any dirt or dust from the male or female hydraulic flat-face couplers with a clean rag before attaching hoses to keep contaminants from entering the hydraulic system.*

Connect the attachment hydraulic hoses to the auxiliary supply couplers located on your skid steer loader lift arm. The high flow model must have a case drain connection.

NOTICE *Do not operate a high flow skid steer while using this attachment. Operating a high flow saw may result in a machinery failure not covered under warranty.*

Check the surrounding area for bystanders and clear them before starting the skid steer or attachment.

Before operating the attachment, always visually inspect and verify that the coupler lock pins are fully engaged through the latch slots on the attachment plate.



Check Coupler Lock Engagement

Pre-Operation Walk-around Inspection

Before every use, it is important to perform a short inspection and certain maintenance on your tree saw.

	Item
✓	Check that all shields and guards are in place.
✓	Look for loose bolts and tighten them if necessary.
✓	Check that all safety decals are in place and can be read. Replace them if necessary.
✓	Check that the saw cutters are in good condition. Sharpen or replace, if necessary.
✓	Take care of our environment. Repair any hydraulic leaks.

Saw Boom Controls

Your Side Cut Tree Saw is designed to operate from the skid steer's auxiliary hydraulic system, and is operated by a control in the operator's cab. Consult your skid steer operator's manual for precise instructions on how to activate and deactivate the auxiliary circuit.

Height and tilt functions of the tree saw are operated with the control handles or pedals in the cab. Consult your skid steers operator's manual for precise instructions regarding these functions.

Engaging Saw the First Time

NOTICE If this is your initial startup with this attachment on this machine, check the skid steer's hydraulic oil level and add oil, if necessary, before and after doing steps 1- 3 below.

After starting the skid steer, lift the attachment 6" (152mm) off the ground surface:

1. With the skid steer engine RPMs just above idle, slowly engage the auxiliary hydraulic to rotate the saw. If the saw blade does not turn at all, check the hydraulic circuit connections between the saw and skid steer.
2. Lower the tree saw attachment to the ground, set the brake and shut off the skid steer's engine and exit the operator's compartment.
3. Check the skid steers hydraulic oil level, and add oil if necessary.
4. Inspect the tree saw's hydraulic plumbing for any noticeable leaks. Correct these leaks before continuing.

Stopping the Saw

The saw blade quits rotating when the auxiliary control is neutralized. When you are done cutting, stop the saw blade's rotation before exiting the operator's cab.

Getting Familiar with the Attachment

⚠ DANGER Never operate the saw when bystanders are within 100' (30 m) of your work area. Flying &

falling debris could result in Death or Serious Injury.

⚠ CAUTION Be cautious when operating on un-level ground surfaces. A machine roll over could result in Minor or Serious Injury. Always wear your seat belt when operating this type of machinery.

Before starting the skid steer engine with this saw attached, make sure you are knowledgeable and comfortable with the operation of the tree saw controls as outlined in the previous and following sections of this manual.

Always be aware of your surroundings. While watching the saw, also pay attention to what obstacles or terrain are in front of the saw and prime mover's wheels.

⚠ CAUTION Cutting tree branches with the saw in an elevated position could result in Death or Serious Injury if the skid steer becomes unstable. Never raise the saw more a few feet off the ground when working on slopes or uneven terrain.

Adjusting Saw Height & Level

Use the skid steer loader lift to adjust the elevation of the saw. The fore & aft leveling can be accomplished by using the skid steer's attachment tilt cylinders.

⚠ CAUTION *Avoid making saw side movement adjustments during a cut that could result in damage to the saw blade and could result in Minor or Serious Injury.*

Starting the Job

⚠ DANGER *Never cut trees in the proximity of any above-ground utilities. Felling a tree on electrical power lines and making contact with your skid steer or bystanders even at an assumed safe distance will result in Death or Serious Injury.*

Never fell trees in the direction of overhead power or communication lines. Never cut a tree unless it is twice the tree's height away from the overhead lines.

⚠ WARNING *Moving or engaging the tree saw with bystanders in the area could result in Death or Serious Injury. Before engaging the tree saw hydraulics, always make sure the area is clear of bystanders.*

Before cutting your first tree, always visually inspect the surrounding area for any objects that could be damaged if a tree fell on it. Tree top branches could entangle with other tree branches and alter the course of the tree fall.

To avoid a tree that falls in an unexpected direction, always be ready to move the skid steer quickly away from the impending danger.

⚠ WARNING *Exposure to crystalline silica dust along with other hazardous dusts may cause serious or fatal respiratory disease. It is recommended to use dust suppression, dust collection and if necessary personal protective equipment during the operation of any attachment that may cause a high level of dust.*

Felling a Tree

⚠ CAUTION *Never operate this attachment when bystanders are in proximity of the work area that could result in Minor or Serious Injury from flying debris, falling trees or branches.*

⚠ CAUTION *Use care when operating on uneven terrain or any type of sloped surface. Keep your saw low to the ground when working in these conditions to avoid a roll over that could result in Minor or Serious Injury.*

1. Assess the size of the tree. Do not exceed the capacity for this attachment (8").
2. Decide the direction of the tree fall, and approach the tree from the side behind the intended fall direction.
3. Align the saw blade with the side of the tree, but do not start the cut until the blade comes up to operating speed.
4. Slowly approach the tree and ease the saw blade down into the side of the tree.
5. Listen to the sound of the skid steer. If the engine begins to bog down and or the saw blade slows, pause the downward advance into the tree.
6. As the saw nears the completion of the cut, allow the branch to hang and then complete the remainder of the cut.
7. Operate at a safe pace that will allow you to watch the area around the attachment & loader.
8. Your Side Cut Tree Saw is capable of cutting trees and other vegetation of up to 8" (254mm) in diameter. Learn and realize

which way the tree is likely to fall so it does not end up crashing onto you in the skid steer

Delimiting & Trimming

⚠ WARNING *Your skid steer should be equipped with forestry screen guards to prevent falling limbs from entering the cab area, preventing an accident that could result in Death or Serious Injury.*

Delimiting and trimming branches is a skilled operation requiring careful safety planning. Limbs falling on your skid steer are unsafe

Maintaining your Attachment

Modifications

Modifications to the original design by the end user may result in weakening the designed structure and integrity of this attachment and will void any warranty.

Before Every Use

Check that all fasteners (nuts, bolts, pins, keepers) are in their right place and are tight.

There are no lubrication points on the saw. If leaking is experienced in the zero max gear box it will need replaced..

Inspect and replace any worn, torn or missing safety decals.

Investigate the location of any oil leaks and repair.

Every Week

Check the condition of the blade and cutters. Lower the attachment to the ground.

Inspect the saw blade for any damage or missing cutters. Sharp cutters will cut more efficiently than dull cutters.

With heavy use, check the hydraulic motor for leaks .

After Every Season

Inspect the implement for any loose or worn parts that may need to be replaced prior to the next cutting season.

Visually inspect the cutting blade. Sharpen or replace it, if necessary.

DO NOT add gear oil in the bearing housing. The correct amount of lubricant has been installed from the factory.

Clean, sand & repaint any area that looks worn or scratched to prevent further rusting. Use an equipment-paint found at your local hardware store or building center.

Lubricate all the pivot joints before storage. If storing in a saltwater environment, apply grease to the exposed fitting(s).

Store your implement in a shed or cover with a water-proof tarp to protect it from the weather. Store in an area not frequented by children.

Blade Rotation/ Replacement

Each saw tooth on the blade are fixed and can not be removed. A low cost Blade replacement can be purchased from the factory

Parts

<i>Part</i>	<i>Description</i>	<i>Part Number</i>
Motor	9.4 Geroler 19-23 gpm	SCS-0001
Gear Box	Zero Max 210	SCS-0002
Check Valve Assy	3500 PSI -15 Cracking	SCS-0003
Boom Hose	1/2" npt-96" 4000psi	SCS-0004
Skid Hose	1/2" npt-72" 4000psi	SCS-0005
Boom Bolt	1/2"x3" Course	SCS-0006
Blade Assembly w/hut	20" Hardened steel CT	SCS-0007

**For any further parts or information
please contact the Dealer or
Manufacturer**

Specifications

Weight	350 lbs.
Cutting Capacity	8"
Fell Direction	Down
Lube Points	Not Required
Blade Thickness	.0625
Blade Material	Hardened Steel
Min. SSL Power	45 HP (34 kW)
Hyd. Relief Setting	3000 PSI (207 bar)
Warranty	90 Days - See complete Warranty Statement for details

**Think 'Safety'
Every Day!**

AST Solutions
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Galva, Ks. 67443

Owner's Manual
SIDE CUT
SAW

Website
www.sidecutsaw.com
For More Information, Contact
justin@sidecutsaw.com
Phone: 620-755-7970

Limited Warranty

AST Solutions LLC products are warranted to be free from defects in workmanship or materials for period of (3) months from initial sale, lease or rental date.

Warranty Exclusions

This warranty does not cover normal wear items, including but not limited to, bearings, hoses, engaging parts such as, teeth, blades, cutting edges, pilot bits, auger teeth and broom bristles. This warranty does not cover maintenance, service or adjustments. This warranty does not cover damage due to misuse, negligence, accidents, or improper maintenance. This warranty does not cover damage due to improper application, installation, contamination, adjustment or setup. This warranty does not cover improper modifications of product. This warranty is void if any components have been disassembled, i.e. pumps, gear boxes, motors.

This warranty does not cover replacement parts not supplied by AST Solutions.

Warranty Statement

Our obligation under this Limited Warranty shall be solely limited to repairing or replacing any part (see non-covered items) free of charge that, according to our judgment, show evidence of a defect in quality of workmanship or materials for the stated (3) month warranty period. All defective parts must be routed directly to AST Solutions with freight or delivery charges to be prepaid. This Limited Warranty shall not be interpreted to render AST Solutions liable for any injury or damage to persons, business or property of any kind nor expenses or losses incurred for labor, supplies, substitute machinery rental, or for any other reason. Repair or replacement parts are subject to the supply conditions at the time of repair or replacements, which may directly affect our ability to obtain material and/or replacements parts. AST Solutions reserves the right to make improvements in design or changes in specifications at any time without incurring any obligations to owners of previously purchased units. No one but AST Solutions is allowed to alter, modify or enlarge this warranty nor the exclusions, limitation and reservation at any time.