

## **PRODUCT MANUAL**

## AGT-ECSSRB Tree Shear With Grapper





- This equipment can not be installed, operated or repaired without reading instructions.
- Electricity must be hooked up by certified electrician.
- Do not use this equipment beyond its rated capacity.

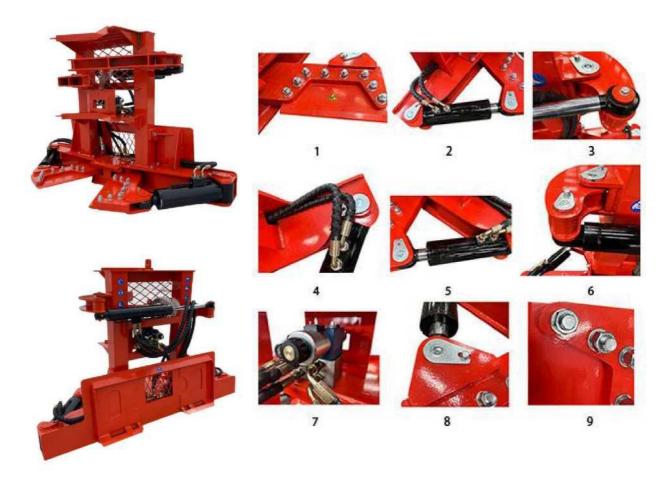
Missing parts or questions on assembly?

Pleasecontact sales@agrotkindustrial.com

https://www.agrotkindustrial.com/

# Directory

Product introduction 1/15	
Operator2/15	
Safety precautions3/15	)
Technical parameters 4/15	
Installation5/15	5
Handing safety8/1:	5
Limited Warranty15/1	5



## Product introduction

- 1. The shear shape equipped with blades driven by a pair of hydraulic cylinders to finish the shearing action, and cut off the tree trunk.
- 2. Tree Shears are available with two different styles of shear arms. These are the standard arm and extended arm designs.
- 3. Equipped with a guarded hard line to improve hose protection from abusive elements.
- 4. The proper tree diameter is  $0-15 \ 3/4$  in.
- 5. Tree Shear for skid steer loaders is the ideal tool for general land clearing.
- 6. Designed for general land clearing where materials are no more than 14 inches in diameter, Tree Shears feature solid cast shearing arms that deliver 60% stronger performance compared to competing products.

# Operator

Congratulations on owning this slip-loader heavy duty tree shears! Your skid steer heavy duty tree shears are carefully designed and manufactured to provide you with years of reliable service.

Your slip-loader heavy tree shears will need some minor maintenance to keep it in excellent working condition.

Please follow all safety precautions and maintenance procedures described in this manual.

Please read and understand the instructions in this manual carefully before operation. Please refer to the "Safety Labels" section for all instructions noted above.

No one is allowed to operate his equipment who has not fully read and understood this manual and has not been trained in safe deposit box operations.

Remember to use only parts replaced by the manufacturer.

Replacement parts may not meet the standards required for safe and reliable operation.

# Safety precautions

#### BEFORE OPERATION

- 1. The operator must read the operation manual carefully before installation, operation or maintenance. Improper operation will cause the machine damaged or the operator dead.
- 2. Read all the safe signs and safe declarations. Obey all the professional safe terms, local laws or the professional directions.
- 3. Familiar with the duty skid steer heavy duty tree shears about functions, specs and operation. Replace the to-be-damaged parts in time. Make sure all the hydraulic installations and couplings connect firmly, and all the safe signs stick on the suitable positions clearly.
  - 1. The operator should be familiar with all functions of the machine.
  - 2. Before operation, ensure that all tubing joints and signal switches are connected in place and fixed without falling off.
  - 3. Keep all personnel away from equipment and work areas.
  - 4. Dismounting from a moving unit may result in serious injury or death.
  - 5. Keep hands, feet and clothing away from power components.
  - 6. Remove tools and store them where children do not normally play.
  - 7. Secure tools with blocks and supports



Wear appropriate safety glasses, goggles or face masks Control Skid Steer Brush Cutter work, or any operation caused by dust, flying Debris, or any other hazardous material.

# Technical parameters

Model:	ECSSRB
Max cutting diameter size:	11.9 "
Working pressure (MPa):	20
Total width:	74.9"
Total height:	49.5"
Total length:	33.9"
Total weight: (lb)	1609 磅
Suitable pressure (Mpa):	16 ~21
Suitable flow rate (L/min):	50 ~120

## Work environment:

Temperature: -  $20 \sim 50$  °C Height: 100 meters or less Relative humidity : 485%



## Installation

## 1. Unpack and check

Check for missing or damaged components according to the packing list. Ifyou have any questions, please contact the supplier. List of details

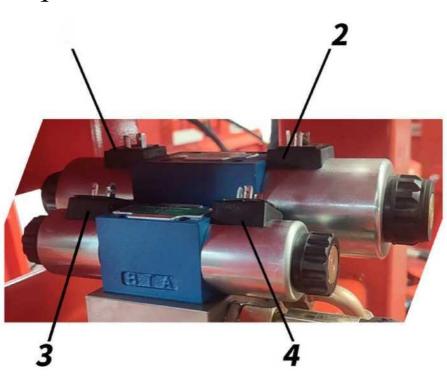
#### 2. Machine installation

Equipment must be installed on a solid concrete floor or similar. If the ground is not firm, it will not be able to connect to the loader. There should be a space around the device for easy operation.

## Installation

Note: this drawing does not represent the appearance of the equipment

For actual purchase, this figure is only for installation location reference.



1/2 Holding function (on/off)3/4 Clamp off function (on/off)

Data line connection: plug one end of the connection line attached to the product into the solenoid valve and the other end into the control box, so that the loader can control the tree shear.

## Installation

Note: this drawing does not represent the appearance of the equipment.

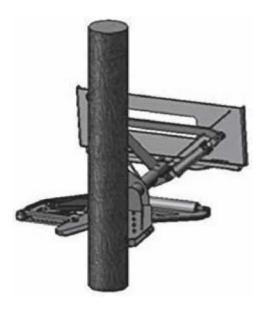
For actual purchase, this figure is only for installation location reference.

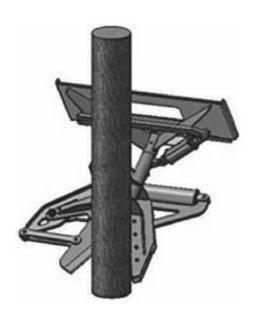


Tubing connection: the tree shear is equipped with 3 tubing, which are return tubing, inlet tubing and outlet tubing. Connect the tubing to the loader tubing connection.

IDEAL CUT: Shear frame and blade are squared to the axis of the tree. Wood grain is cut cleanly .

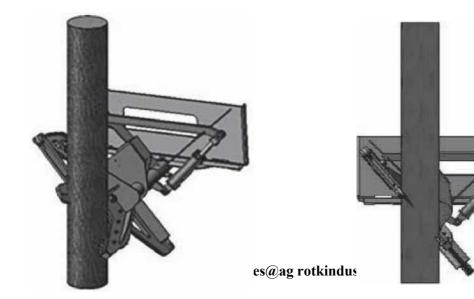
OK CUT: Blade cuts perpendicular to wood grain, but frame is not squared to the axis of the tree.





AVOID THIS CUT: Frame and blade are skewed to the axis of the tree. Blade damage will occur.

AVOID THIS CUT: (Closeup view). Notice that the wood grain will catch the blade and pull it out of plane. As this happens the frame will rotate and the blade will not pocket correctly. Blade damage and an incomplete cut will result



Felling trees, regardless of the method used, involves certain risks which must be identified, evaluated, and mitigated. Properly used, tree shears can be among the safest, cleanest, and effificient ways to cut trees. OSHA regulates logging operations under 29 CFR 1910.266, and it is worthwhile to review and understand those rules even if you are simply using your tree shear to remove a tree in your yard. You can find them at www.osha.gov on the Internet by using their search function to look for "1910.266" once the OSHA web site loads.

Your safety is of prime concern to AGT Attachments, and to help you understand your tree shear and to operate it safely, we have published the recommendations in this manual. If you have any questions or comments, we are available to take your call (+1 913-244-6269) and are interested in assisting you.

#### Preparing to use a tree shear

Preparation is essential to avoiding or minimizing what may otherwise become a dangerous situation. Please consider the following:

- 1. Inspect your machine according to the manufacturer's recommendations for items such as:
  - a. Tire pressure
  - b. Proper fluid levels
  - c. Damage
  - d. Ensure that ROPS/FOPS and operator protection complies with standards for forestry use.
- 2. Inspect your tree shear using the inspection schedule in this manual.
- 3. Provide a properly serviced fifi re extinguisher on the machine.
- 4. Consider bringing the following items into the cab of the machine while operating the shear:
  - a. Communication device (cell phone, 2-way radio, CB, etc.)
  - b. First aid kit (see kit contents guide in this manual)
  - c. Ensure that these items are securely stowed and cannot interfere with machine controls
- 5. Personal protective equipment may be required. Felled trees often have sharp edges, tripping hazards, and unstable surfaces.
  - a. Steel toed boots
  - b. Work gloves
  - c. Safety glasses
  - d. Perform a Hazard Assessment to determine if further PPE is needed
- 6. Sidney Manufacturing recommends working with a spotter to increase situational awareness. During cutting, the spotter must not be closer to the machine than 2 times the height of the tree. Leave more room if the terrain or other conditions may cause the tree to roll or slide.

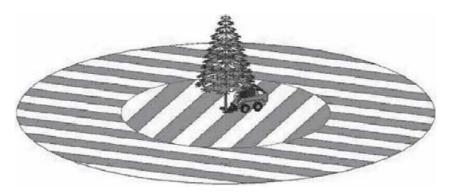


Figure 1: Hazard Zone per OSHA 29 CFR 1910.266 (d)(G)(i i)

# Shear Safety OSHA 1910.266 Appendix A - First-aid Kits

Source: http://www.osha.gov/pls/oshaweb/owadisp.show\_document?p\_table=STANDARDS&p\_id=9863. Accessed: 16 Dec 09

The first-aid kit information below was directly obtained from OSHA regulations. Having a kit available at the job site is required by OSHA for logging operations and is highly recommended by Sidney Manufacturing.

The following list sets forth the minimally acceptable number and type of first-aid supplies for first-aid kits required under paragraph (d)(2) of the logging standard. The contents of the first-aid kit listed should be adequate for small work sites, consisting of approximately two to three employees. When larger operations or multiple operations are being conducted at the same location, additional first-aid kits should be provided at the work site or additional quantities of supplies should be included in the first-aid kits:

- 1. Gauze pads (at least 4x4 inches).
- 2. Two large gauze pads (at least 8x10 inches).
- 3. Box adhesive bandages (band-aids).
- 4. One package gauze roller bandage at least 2 inches wide.
- 5. Two triangular bandages.
- 6. Wound cleaning agent such as sealed moistened towelettes.
- 7. Scissors.
- 8. At least one blanket.
- 9. Tweezers.
- 10. Adhesive tape.
- 11. Latex gloves.
- 12. Equipment such as resuscitation bag, airway, or pocket mask.
- 13. Two elastic wraps.
- 14. Splint.
- 15. Directions for requesting emergency assistance.

## Tree Shear Inspection Checklist

This checklist is to be completed prior to every use of the tree shear. DO NOT use a tree shear that fails inspection until it has been repaired.

Check for damaged hoses or hydraulic leaks. See hydraulic safety precautions in this manual. Grease all Imbrication points. See lubrication point diagram in this manual.

Check the blade cutting edge. Note: minor blade damage will not affect the operation of the shear.

Dress with a grinder periodically.

Check for cracked welds.

Check for bent or damaged components.

Check for damaged cylinder pins.

Check for missing or loose fasteners (bolts, nuts, snap rings, etc.)

Inspecto	or Name	Date
inspect	or runne	Dan

#### **IMPORTANT**

If you are using your tree shear as part of a commercial operation it is HIGHLY recommended that you keep a copy of all inspections performed on the machine and the tree shear. Also maintain records of repairs that are performed as a result of failed inspections. OSHA inspectors will likely ask for proof that you are taking steps to mitigate risks and to comply with OSHA regulations. Refer to www.osha.gov on the Internet and search for "1910.266" to display regulations specific to logging operations.

## Safely Checking for Hydraulic Leaks

#### WARNING:

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

- The tremendous energy used to operate the machine and attachments can be stored in the hydraulic system even when the machine engine is off.
- Very 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 loader arms and other moving components to prevent accidental movement.

Always use appropriate PPE (Personal Protective Equipment) when working on/around machinery.

Take an approved safety course related to hydraulic systems. Local university extension programs and equipment dealers will offer training on hydraulic safety.

#### DO NOT

Do not use your hands, or other body parts, to inspect for hydraulic leaks.

Do not position yourself in pinch points when the machine has not been properly blocked, locked out and tagged out.

Do not "crack" a hydraulic fitting to release hydraulic pressure. Severe risk of injection.

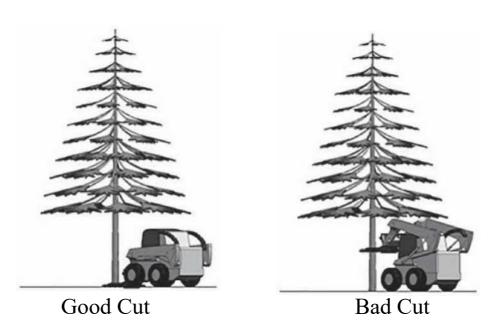
Do not tighten or loosen hydraulic components when the system is pressurized.

Do not assume that the system is depressurized

# Shear Safety Safety During Operations

The operator must exercise judgment and experience when cutting trees with a tree shear. Conditions at the job site vary widely and the ability to recognize and avoid hazards is important. Below are recommendations based upon the intended use of a tree shear.

#### Cut at ground level - do not leave a tall stump



Keep loads centered And do not exceed lift capacity of machine



Tipping Hazard
Over stressed Tree Shear

### Safety During Operations (continued)

#### Be aware of conditions affecting direction of fall'

- Trees typically fall in the direction of shear blade travel
- Some conditions cause the tree to fall elsewhere such as Wind

- Sloping ground Tree trunk not vertical Obstructions such other trees
- Position the machine to avoid trees falling overhead

#### Backhoes and Excavators:

### Drag the tree closer to increase lift capacity before lifting



## Draw the load close and center it before lifting Beware of "Strain Energy"

- Trees and branches under a load are like compressed springs
- Leaning trees Heavy branches
- The energy released when the support is cut can be significant Thrown objects (not just the tree)
  Trunk or branches springing suddenly

# Limited Warranty

The goal of agrotkindustrial. ("AGT") warranty policy is to assure confidence, reduce downtime and minimize cost of ownership. Should you want to verify warranty, or should potential issues arise, please contact your authorized dealer or AGT's Customer Service Team at service@agrotkindustrial.com, +1 913-244-6269 and we will strive to resolve any issues in a timely manner.

AGT Attachments ("AGT") offers a Limited Warranty on Shear, Grapple, and Puller Attachments delivered hereunder against faulty workmanship and use of defective materials for a period of twenty four (24) months from the date of shipment to the original purchaser from USA and/or USA Authorized Dealers. AGT offers a Limited Warranty on Saw Attachments against faulty design, material, and workmanship for normal use when properly maintained for a period of twelve (12) months from date of shipment. The Warranty for all products listed above and delivered hereunder to Rental users is for a period of six (6) months from the date of shipment to the original purchaser. Seller offers a Limited Warranty for miscellaneous parts and accessories such as cylinders, hoses, switches, valves and wiring delivered hereunder against faulty workmanship and use of defective materials for a period of three (3) months from the date of shipment. This warranty does not include, and there in hereby excludes, maintenance parts and consumables including but not limited to hydraulic fluid, oil, belts, teeth, blades, filters and other similar items.

AGT offers a Limited Warranty on Auger Attachments against faulty design, material, and workmanship for normal use when properly

Auger Gearboxes are warranted for a period of sixty (60) months from date of shipment, Auger Motors are warranted for twenty four (24) months from date of shipment. Auger Bits, Frames and Cradles are warranted for a period of twelve (12) months from date of shipment. Refer to the Product Manual for proper maintenance procedures. Spare, Replacement and After Warranty Parts including hoses and components are warranted for three (3) months. AGT Auger Teeth, Pilots, Adaptors and Extensions are manufactured with a patented design to interface with AGT Auger attachments extensions and adaptors. The use of attachments other than AGT Auger Teeth, Pilots, attachments, extensions and/or adaptors, will void all warranty on Auger Drive and Bits. The use of AGT adaptors on unapproved attachments is not sanctioned. A "home-made" or non-standard attachment outside the specifications for the machine will void the warranty.