Hi-Speed Cotton Stalk Puller/Choppers are manufactured by Amadas Industries.

You can find us on the Web at: 
www.amadas.com

or e-mail us at: 
amadas@amadas.com

You can also contact us at:

P.O. Box 1833 / Suffolk, VA  23439
(mailing)
1100 Holland Road / Suffolk, VA  23434
(shipping)
(757) 539-0231 (phone)
(757) 934-3264 (FAX)

P.O. Box 3687 / Albany, GA  31701
(mailing)
1701 South Slappey Blvd. / Albany, GA  31706
(shipping)
(229) 439-2217 (phone)
(229) 439-9343 (FAX)
# Table of Contents

Welcome .................................................. iii  
Specifications ........................................ vi  
Dimensions ............................................. vii 

1. **Safety** ............................................. 1  
   Overview ............................................. 2  
   Safety Symbols Used ............................ 2  
   Protective Devices .............................. 2  
   Safety Symbols ................................... 3  
   Danger ............................................... 3  
   Warning ............................................. 3  
   Caution .............................................. 3  
   Safety Alert Symbol ............................ 3  
   Safety Instructions ............................. 3  
   Notes ............................................... 3  
   Safety Guidelines ................................ 4  
   Safety Decal ....................................... 5  
   Safety Decal Locations ....................... 6  

2. **Preparation** ....................................... 7  
   Overview ............................................. 8  
   Set Row Width .................................... 8  
   Different Model Numbers .................... 8  
   Dealer Preparation ............................. 9  
   Initial Inspection .............................. 9  
   Install Blades ................................... 10  
   Blade Positions .................................. 11  
   User Preparation ................................ 13  
   Tire Pressure .................................... 13  
   Weight Addition ................................ 14  
   Dirt Shield Kit (optional) ................... 15  

3. **Operation** .......................................... 17  
   Important Information .......................... 18  
   Speed .............................................. 18  
   Planting Lines .................................. 18  
   Ground Density ................................ 18  
   Transportation .................................. 19  
   Machine Operation ............................. 20
Introduction

Hi-Speed Cotton Stalk Puller/Chopper

Hitch ................................................ 20
Lower Hitch Points ...................... 20
Upper Hitch Points ...................... 20
Attach to Tractor .............................. 22
Adjust Height ................................... 22
Operate Machine.............................. 23

4. Adjustments ..................................... 25
Weight Addition .................................. 26
Inclination ....................................... 27
Tire Pressure .................................... 28
Rotor Distance from Pulling Wheels .... 29
Adjust the Rotor ............................... 30
Chain Tension .................................... 32
Change Row Width ............................. 33

5. Maintenance ..................................... 37
Maintenance ..................................... 38
Gearboxes ........................................ 38
  Change Oil .................................... 38
  Check Oil ..................................... 38
PTO Shafts ....................................... 38
  Lubricate .................................... 38
Double Universals ........................... 39
  Lubricate .................................... 39
Clutch ............................................ 39
  Lubricate .................................... 39
Chains ............................................. 39
  Lubricate .................................... 39
Rotor Bearings ............................... 40
  Lubricate .................................... 40
Blades ............................................ 41
Lubrication Schedule ....................... 42
End of Season Storage ..................... 43
Remove Wheels ............................... 43
Prepare Tanks ................................. 43
General Cleaning ............................ 44

6. Troubleshooting ............................... 45

Warranty Statement
Welcome To Amadas Industries

With origins dating back to 1963, Amadas Industries and its predecessors have a long history of providing high quality, reliable, innovative equipment for the farming industry. Amadas equipment is currently at work throughout the United States and in many other countries. This equipment includes machinery such as the Magnum Fource Peanut Combine, Reel Rain Traveler Irrigation System, Tree Bark Processing and Packaging Machinery, and the Hi-Speed Cotton Stalk Puller/Chopper.
Hi-Speed Cotton Stalk Puller/Chopper

Congratulations on your purchase of the AMADAS Hi-Speed Cotton Stalk Puller/Chopper (SPC). The SPC is a patented, uniquely integrated system used for extracting and chopping up cotton stalks and their roots.

This new system provides you with a significant advantage over conventional mowing and discing. The SPC removes each stalk's entire root system, effectively breaking up the life cycle of insects and diseases that overwinter in the remaining stalk and root usually left behind by shredders and mowers.

The effectiveness of the SPC lies in the two-part system that is incorporated into a single machine. The tandem, shaft-mounted, heavy-duty turf tires rotate against one another to grip the stalks, while the forward motion of the tractor pulls the stalks and root systems out of the ground and then releases them. The rotary blade cutting system at the rear of the machine then chops the stalks and roots into small pieces.

The AMADAS Hi-Speed Cotton Stalk Puller/Chopper is designed to operate at high speeds and handle the toughest stalks. The SPC-4 is adjustable for 36", 38", or 40" row widths; the SPC-6 is adjustable for 36" or 38" rows.
Benefits
Your AMADAS Hi-Speed Cotton Stalk Puller/Chopper will provide you with the following benefits:

- **Increased Residue Clearing Capability.** Removes and chops cotton stalks and their root systems in a single operation.

- **Enhanced Soil Aeration.** Double bevel blade design provides deep soil penetration.

- **High Speed Operation.** With the machine operating within its normal range of 6-10 MPH, you can easily cover over 100 acres per day.

- **Low Operating Costs.** Per acre costs are minimal, as removal and chopping processes are completed in one machine pass.

Features
The following are some of the significant features of the AMADAS SPC Hi-Speed Cotton Stalk Puller/Chopper.

**Pulling System**
For each row, tandem, shaft-mounted, 18” diameter turf tires rotate against each other to grip and hold the stalks, while the forward motion of the tractor pulls the root systems out of the ground.

**Chopping System**
Eight, drum mounted, double beveled, replaceable, hardened steel blades per row provide linear rotary cutting action.

Total number of blades: 32 (SPC-4); 48 (SPC-6)

Frame
The machine is made up of heavy-duty, welded box construction with a 6” x 10” main frame.

Drive System
The entire drive system is ground driven using heavy duty #80 chain drives, gear boxes, and telescoping drive lines. With the pulling wheels driven off of the rotor, the proper wheel speed is assured regardless of ground speed. Drive train safety is provided by a bi-directional ratchet clutch.
## Specifications

<table>
<thead>
<tr>
<th></th>
<th>SPC-4</th>
<th>SPC-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Rows:</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Row Widths:</td>
<td>36&quot;, 38&quot;, 40&quot;</td>
<td>36&quot;, 38&quot;</td>
</tr>
<tr>
<td>Recommended Speed Range:</td>
<td>6-12 MPH</td>
<td>6-12 MPH</td>
</tr>
<tr>
<td>Tractor Requirements:</td>
<td>Standard CAT III or CAT IVN 3-Point or Quick hitch</td>
<td>Standard CAT III or CAT IVN 3-Point or Quick hitch</td>
</tr>
<tr>
<td>Tractor Recommendation:</td>
<td>Minimum 160 HP tractor (geared to operate at 10+ MPH)</td>
<td>Minimum 190 HP tractor (geared to operate at 10+ MPH)</td>
</tr>
<tr>
<td>Overall Length:</td>
<td>13'3&quot; (159&quot;)</td>
<td>19'3&quot; (231&quot;)</td>
</tr>
<tr>
<td>Overall Width:</td>
<td>5'8&quot; (68&quot;)</td>
<td>5'8&quot; (68&quot;)</td>
</tr>
<tr>
<td>Overall Height:</td>
<td>5'2&quot; (62&quot;)</td>
<td>5'4&quot; (64&quot;)</td>
</tr>
<tr>
<td>Number of Blades:</td>
<td>32</td>
<td>60</td>
</tr>
<tr>
<td>Shipping Weight (approx.):</td>
<td>4,800 lbs</td>
<td>9,800 lbs</td>
</tr>
<tr>
<td>Operating Weight (approx.):</td>
<td>6,500 lbs</td>
<td>11,500 lbs</td>
</tr>
<tr>
<td>Drum Diameter:</td>
<td>12&quot;</td>
<td>16&quot;</td>
</tr>
</tbody>
</table>
Dimensions (SPC-4)

5'8"

5'2"
SPC-4

13'3"
1 Safety

Overview .................................................. 2
Safety Symbols Used .................................. 2
Protective Devices ...................................... 2
Safety Symbols ......................................... 3
Danger ...................................................... 3
Warning .................................................... 3
Caution .................................................... 3
Safety Alert Symbol .................................... 3
Safety Instructions ....................................... 3
Notes ....................................................... 3
Safety Guidelines ....................................... 4
Safety Decals ............................................. 5
Decal Locations ......................................... 6
### Overview

Safety is everyone’s responsibility! Although safety features are incorporated into the machine and dangerous areas are marked, ultimately, careful operation is the best way to prevent an accident. To reduce the risk of accidents, please read thoroughly and follow the safety instructions and messages included in this manual and on the machine.

### Safety Symbols Used

Three safety symbols are used on the machine and in this manual.

- **DANGER**
- **WARNING**
- **CAUTION**

Please familiarize yourself with each symbol and its meaning. It is crucial to your safety, and the safety of others, that you follow the safety precautions indicated by these symbols. The section beginning on the next page explains each of these symbols in detail.

### Protective Devices

Protective guards and shields have been installed to protect you from hazards.

*Never remove, tamper with, or modify guards or shields. To do so could result in serious personal injury or death!*
## Safety Symbols

<table>
<thead>
<tr>
<th><strong>Danger</strong></th>
<th><strong>DANGER</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>This symbol indicates an imminently hazardous situation, which if not avoided, will result in death or serious injury. The use of the word DANGER is limited to the most extreme situations. Extreme care should be taken when you near these areas. DANGER decals are located at or as near as possible to these areas.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Warning</strong></th>
<th><strong>WARNING</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>This symbol identifies areas or practices, which if not avoided, could result in serious personal injury. These injuries could range from minor cuts to dismemberment. Warning decals are located at or as near as possible to these areas.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Caution</strong></th>
<th><strong>CAUTION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>This symbol identifies a potentially hazardous situation, which if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices that could cause damage to the machine. Caution decals are located at or as near as possible to these areas.</td>
<td></td>
</tr>
</tbody>
</table>

## Safety Alert Symbol

This symbol alerts you to possible hazards. Follow the recommended precautions and safe operating procedures. If you have any questions, please contact your dealer or the manufacturer.

![Safety Alert Symbol]

## Safety Instructions

Safety features have been designed into the machine with hazardous areas marked. Please read and follow the instructions in this manual prior to operating, maintaining, or servicing this machine.

![Safety Instructions]

## Notes

Throughout the manual, information that needs to be emphasized is set apart with either a "NOTE!" or "IMPORTANT!" heading. Please be sure to carefully read this information, as it usually indicates a situation that could cause machine damage. Example:

| **NOTE!** | Do not exceed 32 PSI for the tires. If 32 PSI is not enough for pulling stalks, you will need to wait until soil conditions change (e.g., it rains a little and the soil softens). |

---

6/5/2011 3 MAN120
Many accidents can be prevented by your knowledge of safety. Prevent injuries by reading and following the safety warnings in this manual and on the machinery. Alert others to potential hazards.

Remember all machinery can be dangerous if used incorrectly. Please operate carefully. Safety is only a word until it is put into practice!

When operating this machine:
- Do NOT climb or ride on this machine at any time.
- Do NOT let anyone stand between the machine and the tractor.
- Make sure that everyone is clear of the machine prior to and during operation.
- Keep all shields in place.
- Keep all fingers, feet, and loose clothing away from moving parts.
- Do NOT make adjustments or attempt any maintenance while the machine is in operation.

When working on this machine:
- Periodically check all nuts and bolts for tightness.
- Make sure the SPC is supported using its storage legs, even when the machine is attached to the tractor.
- Use extreme caution when changing and handling blades. New blades are extremely sharp, and even used blades can cut if handled incorrectly.

When hooking up this machine:
- Do NOT let anyone stand between the machine and the tractor.
- Do NOT raise the support legs until after the machine is attached to the tractor.
**Safety Decals**

Safety decals identify specific hazards as well as promote general safety. Please note the following about the decals:

- **ALWAYS** keep decals clean and legible.
- **NEVER** remove a safety decal from the machine.
- If you replace a part with a decal, **ALWAYS** replace that decal.
- For replacement decals, call your AMADAS parts representative.

The decals included on the RMH, along with their locations, are shown below and on the following pages.
Decal Locations

8547
INSIDE SHIELD

8343

8190

8191

8547
INSIDE SHIELD

8547
2

Preparation

Overview .................................................. 8
Set Row Width ........................................ 8
Different Model Numbers ...................... 8
Dealer Preparation ............................... 9
   Initial Inspection ............................ 9
   Install Blades .................................. 10
      Blade Positions ......................... 11
User Preparation .................................... 13
   Tire Pressure ................................... 13
   Weight Addition ............................... 14
   Dirt Shield Kit (Optional) ................. 15
Overview
Your Hi-Speed Cotton Stalk Puller/Chopper has been carefully prepared prior to being shipped. Additional preparation is required, however, before the machine is ready for use. Some of this preparation is usually performed by the dealer; the rest will need to be done by you, the user. Please follow the instructions in this chapter to inspect your SPC and prepare it for use.

Information in this chapter is intended to prepare your SPCr for general use. Chapter 4, Adjustments, provides suggestions for adjusting the machine to meet your specific farming needs.

Set Row Width
Amadas Hi-Speed Cotton Stalk Puller/Choppers are delivered from the factory pre-set. The SPC-4 is set for 36", 38", or 40" rows; the SPC-6 is set for 36" or 38" rows. When you order a machine, you specify the desired row width. If the row width of machine needs to be changed, refer to Chapter 4, Adjustments, for specific instructions. On a new machine, this procedure takes approximately four man hours to complete. Allow several additional man hours for changing the row width on a used machine.

Different Model Numbers
This manual covers Hi-Speed Cotton Stalk Puller/Choppers manufactured under model numbers:

- CSP01-4
- CSP02-4
- SPC-4
- SPC-6

Minor differences exist between the various models with regard to safety shielding. In addition, the SPC-6 contains six rotors, rather than four, as on the other three models. While the SPC-4 is the model used in most of the pictures and sketches in this manual, the information and instructions apply to all models.

If you have a CSP01 or CSP02, please refer to your parts catalog for information on the safety shields specific to your model.
**Dealer Preparation**

**Initial Inspection**
Upon receiving the Hi-Speed Cotton Stalk Puller/Chopper, perform the following inspection:

1. Examine the machine for transport damage. If the machine is damaged in any way, contact **Amadas Industries** at once.

2. Open the top covers and visually inspect all gearboxes for oil leaks.

3. Remove the left side shield (facing machine) and visually inspect the tension of the chain. The chain should have 1/2" to 1" play or movement in the slack side.

4. Remove the lower shield and inspect the lower chain. The chain should have 1/2" to 1" play or movement in the slack side.

---

**WARNING**
Replace shields!! Never operate machine without shields!!
**Install Blades**

1. Determine if the blades are to be installed for 36", 38", or 40" rows for the SPC-4 (top and middle photo) or 36" or 38" rows for the SPC-6.

2. Determine which bolt holes to use for the correct row width.

3. Install the blades with the flat side pointing toward the tires. The blade cuts and sharpens itself better with the flat side "leading." In the following photo, blades are installed for 40" rows.

4. Install bolts from the flat side of the blades and torque to 90 ft-lbs.

**WARNING**

Use caution when tightening the bolts. The edges of the blades are sharp and if your hand slips while tightening, you can seriously cut yourself.

5. To verify that the blades are in the correct holes, make sure the center of each blade is lined up with the compressed portion of the tires. Refer to the drawings on the following page for blade positions.
Blade Positions

36" row

38" row
Blade Positions
40" row (SPC-4 only)
User Preparation

Tire Pressure

Generally, 26-32 PSI is required to hold stalks and prevent them from slipping through the wheels. In softer soil, and with shorter cotton, less pressure is required than in harder soil and with taller cotton.

1. As a starting point, inflate tire pressure to 26 PSI.

2. Increase the tire pressure until the machine is pulling stalks out of the ground.

NOTE! Do not exceed 32 PSI for the tires. If 32 PSI is not enough air pressure for pulling stalks, you will need to wait until soil conditions change (e.g., it rains a little and the soil softens).

While you may need to wait for the soil to soften, wet stalks are more difficult for the machine to remove. Early morning dew, rain, or other wet conditions can cause the stalks to slip in the tires and we recommend that you not try to pull and chop stalks while they are wet.

Operating with a lower tire pressure will make the machine easier to pull through the field. We recommend operating at the lowest tire pressure needed to do the job.
Weight Addition
The additional amount of weight required to chop the stalks depends on the type of soil, soil hardness, and the size of the cotton stalks.

We recommend starting with the rotor filled and the upper tank empty, unless you are working with very hard "sunbaked" soils and/or large cotton stalk diameters. Use an ordinary hose to add the water.

IMPORTANT! Before adding water, determine how much anti-freeze needs to be added to the tank. Use the chart on the back of the anti-freeze bottle to figure the amount needed, based on your weather conditions. Generally, a 50% mixture will be more than adequate for most regions.

For the SPC-4, the upper tank holds 87 gallons of water; the rotor tank holds 66 gallons. The SPC-6 tanks hold 1.5 times as much water.

If you choose not to use anti-freeze, it is imperative that you drain all water from the tank before the temperature reaches freezing. If the water freezes, serious damage will result to the tanks from the expansion of the frozen water.
Dirt Shield Kit (Optional)
A dirt shield kit is available for purchase from your dealer. This kit is used only to keep wheel wells clean and will not affect the performance of your machine.

Generally, the dirt shield kit will have been installed at the factory. If you will be installing this kit yourself, refer to the following instructions and the sketch:

For each wheel:

1. Remove the wheel.
2. Install the snap ring onto the shaft.
3. Slide the metal disk onto the shaft.
4. Bolt the wheel back in place.
5. Repeat for each axle.
3

Operation

Important Information ......................... 18
  Speed................................................. 18
  Planting Lines .............................. 18
  Ground Density ............................. 18
Transportation ................................. 19
Machine Operation ............................ 20
  Hitch............................................... 20
  Lower Hitch Points ...................... 20
  Upper Hitch Point .................... 20
Attach to Tractor ............................. 22
Adjust Height .................................. 22
Operate Machine ............................. 23
Important Information
Please read the following information before operating your Hi-Speed Cotton Stalk Puller/Chopper. This information will assist you in getting the most efficient performance from your machine.

Speed
The Hi-Speed Cotton Stalk Puller/Chopper usually performs best when operated between 6 and 10 MPH. Although it works well at slower speeds, the percentage of stalks pulled is usually highest when operated in this range. This is due, in part, to the “zipper” effect that occurs as the stalks are pulled from the ground. As the ground speed increases, the velocity of the stalks exiting the ground increases. The result is increased soil disturbance in all directions. Depending on the plant density, this disturbance can actually decrease the pulling force required for each plant as well as improve the chopping action of the machine in hard soil conditions.

We do NOT recommend running at speeds in excess of 10 MPH in most conditions. At very high speeds, many operators have difficulty keeping the pulling wheels in line with the rows. If the operator veers too far off of the row centers, the cotton stalks will pass beside the pulling wheels rather then through them. The result is stalks that are cut off near the base rather than pulled out of the soil along with their roots. Regrowth can occur under this condition.

Planting Lines
The four-row Cotton Stalk Puller/Chopper (SPC-4) works best when operated in fields planted with 4, 8, or 12 row planters. In fields planted with 6 row planters, you have the problem of 2 odd rows to be picked. Typically, a high percentage of stalks in the odd rows will be chopped off near the base of the plant but will not be pulled due to row spacing inaccuracies between the two sets of odd rows. One solution to this problem is to make a pass to pick up just the two odd rows before doing another four row pass. We recommend you avoid running the machine in a way that creates "odd rows.

The six-row Cotton Stalk Puller/Chopper (SPC-6) works best with 6 or 12 row planters.

Ground Density
The SPC performs best when the ground is neither extremely wet nor bone dry. In wet soil conditions, the ground can actually be so soft that the chopping blades push the stalk down into the ground, rather than shear them into pieces. In hard, sun-baked soil conditions, the ground can be so hard that the stalks break off at the base rather then pull out from the ground. The best solution in either case is to wait until conditions improve. Refer to Chapter 4, Adjustments, for guidelines when operating in extreme conditions.
**Transportation**

The SPC-4 Cotton Stalk Puller/Chopper is 13’3” (159”) wide. The SPC-6 is significantly wider. Please be aware of this width when you transport the machine behind your tractor.

Do **NOT** exceed 25 MPH when towing your SPC. If you have questions about transporting your machinery while it is attached to your tractor, please refer to the owner's manual for your tractor.

---

**NOTE!** Your SPC was equipped with Slow Moving Vehicle symbols at the factory. Please make sure these symbols are kept in good condition, and that they are cleaned before you transport the machine.
Machine Operation

Hitch
AMADAS Hi-Speed Cotton Stalk Puller/Choppers are compatible with the following hitches:

CAT III, CAT IVN

After reading the information on this page, refer to the photos on the next page for hitch point positioning.

Lower Hitch Points
There is a narrow end and a wide end on each of the pins for the two lower hitch points. Use these pins as follows:

CAT III Hitch
Use the narrow end of the pin

CAT IVN Hitch
Use the wide end of the pin

Upper Hitch Point
There are two hitch links on the upper hitch point as shown in the picture. Use as follows:

CAT III Hitch
Use lower link

CAT IVN Hitch
Use upper link
CAT III Hitch

Use lower link

Use the narrow ends of the pins

CAT IVN Hitch

Use upper link

Use the wider ends of the pins
### Attach to Tractor
1. Place the pin for the "top link" in the upper hole.
2. Back the tractor up to the machine and lift it with the quick hitch.
3. Secure the latches on the quick hitch.
4. Lift machine slightly, following safe lifting procedures.
5. Remove the pin(s) on the support legs, raise them all the way and replace the pin(s).

### Adjust Height
Adjust the top link of the three point hitch so that the frame of the machine is parallel to the ground.

The angle of the machine to the ground affects its performance. See Chapter 4, *Adjustments*, under "Inclination" for more information on machine angle.
Operate Machine

**IMPORTANT!** To make sure you are using your Cotton Stalk Puller/Chopper properly and effectively, read the “Important Information” section at the beginning of this chapter before operating the machine.

1. Lower the machine.

2. Go forward, accelerating as fast as possible. The machine is more effective at high speeds. The sooner the machine is moving quickly, the more efficiently it works.

3. Lift the machine to turn. If a turn is made with the roller still in the ground, it can cause substantial side loading on the lower bearing housings. This can break the lower bearing housings.

4. Make the turn and lower the machine again.
4 Adjustments

Weight Addition ........................................ 26
Inclination ................................................. 27
Tire Pressure ............................................ 28
Rotor Distance from Pulling Wheels ......... 29
Adjust the Rotor.......................................... 30
Chain Tension ............................................ 32
Change Row Width...................................... 33
Weight Addition

The amount of weight required by the SPC depends on the type of soil, soil hardness, and the size of the cotton stalks. Generally, we recommend starting out with the rotor filled and the upper tank empty. Adjust the weight under the following conditions.

**IMPORTANT!** Before adding water, determine how much anti-freeze needs to be added to the tank. Use the chart on the back of the anti-freeze bottle to figure the amount needed, based on your weather conditions. Generally, a 50% mixture will be more than adequate for most regions.

For the SPC-4, the upper tank holds 87 gallons of water; the rotor tank holds 66 gallons. The tanks of the SPC-6 hold 1.5 times as much as the SPC-4.

If you choose not to use anti-freeze, it is imperative that you drain all water from the tank before the temperature reaches freezing. If the water freezes, serious damage will result to the tanks from the expansion of the frozen water.

<table>
<thead>
<tr>
<th>If...</th>
<th>Then...</th>
</tr>
</thead>
<tbody>
<tr>
<td>the soil is very hard or &quot;sun baked&quot;</td>
<td>add more weight by filling the upper tank.</td>
</tr>
<tr>
<td>the diameter of the cotton stalk is large</td>
<td>add more weight by filling the upper tank</td>
</tr>
<tr>
<td>the machine is pulling stalks out of the ground but not chopping them</td>
<td>check condition of blades; if worn replace blades</td>
</tr>
<tr>
<td></td>
<td>Check soil conditions; if too wet, wait for dryer</td>
</tr>
<tr>
<td></td>
<td>conditions Check rotor engagement; lengthen top link if rotor needs to be lower</td>
</tr>
</tbody>
</table>

For the SPC-4, the upper tank holds 87 gallons of water; the rotor tank holds 66 gallons. The tanks of the SPC-6 hold 1.5 times as much as the SPC-4.

If you choose not to use anti-freeze, it is imperative that you drain all water from the tank before the temperature reaches freezing. If the water freezes, serious damage will result to the tanks from the expansion of the frozen water.
**Inclination**

Generally, the top link on the three point hitch should be adjusted so that the frame of the machine is parallel to the ground (top sketch). Keep in mind the following:

- If the cotton stalks are very short or have been standing for a long period and become brittle, you may need to shorten the top link until the bottom of the pulling wheels are 2 to 3" above the ground (middle sketch). This should result in improved performance.

- Take care when shortening the link. With the tires lowered, the wheels are more likely to hit the ground on uneven terrain. Potentially, damage to the wheels and/or shafts could occur.

- If the link is too long, the wheels will be raised up and not be able to grasp shorter stalks (bottom sketch).
Tire Pressure
Generally, 26-32 PSI is required to hold the stalks and prevent them from slipping. In softer soil and with shorter cotton, less pressure is required than in harder soil and with taller cotton.

As a starting point, inflate tire pressure to 26 PSI. Increase tire pressure as needed until the machine is pulling stalks.

NOTE! Do NOT exceed 32 PSI for the tires. If 32 PSI is not enough air pressure for pulling stalks, you will need to wait until soil conditions change (e.g., it rains a little and the soil softens).

While you may need to wait for the soil to soften, wet stalks are more difficult for the machine to remove. Early morning dew, rain, or other wet conditions can cause the stalks to slip in the tires and we recommend that you not try to pull and chop stalks while they are wet.

Operating with a lower tire pressure will make the machine easier to pull through the field. We recommend operating at the lowest tire pressure needed to do the job.
Rotor Distance from Pulling Wheels

For average stalks and soil conditions, the factory setting should be satisfactory to completely pull and chop the stalks.

If the stalks are not being pulled and chopped, however, you may need to change the distance between the rotor and the pulling wheels. Generally, the longer the root, the further back the rotor needs to be from the pulling wheels. Instructions for moving the rotor are on the following page.

<table>
<thead>
<tr>
<th>If...</th>
<th>Then...</th>
</tr>
</thead>
<tbody>
<tr>
<td>stalks are flying over the rotor and not being chopped</td>
<td>move the rotor towards the tractor.</td>
</tr>
<tr>
<td>the stalks are being chopped before they are completely pulled</td>
<td>move the rotor away from the tractor.</td>
</tr>
</tbody>
</table>

Additionally, check your stalks by examining the root. If the information on this page does not solve the problem, refer to Chapter 6, Troubleshooting.

<table>
<thead>
<tr>
<th>If...</th>
<th>Then...</th>
</tr>
</thead>
<tbody>
<tr>
<td>the root is tight in the ground but chopped</td>
<td>it is slipping through the pulling wheels, is breaking off, or completely missing the wheels.</td>
</tr>
<tr>
<td>the root is in place (facing down) but loose in the soil</td>
<td>it is starting to pull but the blade is catching the stem before it is extracted from the ground. Or, the stalk could be slipping through the wheels slightly. Another possibility is that the tires have worn to the point that they no longer have sufficient grip.</td>
</tr>
</tbody>
</table>
Adjust the Rotor

**CAUTION**

Take extreme caution when you change the rotor position. Due to the weight of the machine, this procedure must be done with the tractor attached to the Stalk Puller/Chopper. Two people are required to perform this adjustment.

1. Remove the shield covering lower chain.

2. Loosen the idler and push it back as far as possible.

3. Remove two shield bolts holding chain drive shield.

4. Remove the four bolts securing the rotor to the frame.

**NOTE!** If you are moving the rotor more than two holes, also remove the idler and chain.
Adjust the Rotor
5. Start the tractor and raise the machine slightly to minimize the weight of the machine on the bearings. Make sure the weight is not totally off of the bearings.

6. Move the tractor straight forward or backwards by inches until the hole in the bearing lines up with the desired hole in the frame.

7. Put a bolt in the hole and install the nut. Do NOT tighten.

8. Pull forward slightly with the tractor so that the bearings are set to the back of the slot.

9. Lower the machine so that the full weight of the machine is on the rotor.

10. On the opposite side of the machine, put the bolt and nut in but do NOT tighten. It may be necessary to inch the tractor forward or backward to line up the holes.

11. Install the remaining two bolts.

12. Tighten the four bolts.

13. Replace the chain and idler if removed.

14. Re-tension the chain. If the rotor has been moved all the way forward, it may be necessary to shorten the chain several links.

15. Replace all shields.

**WARNING**
Replace all shields before operating your machine!!
Chain Tension

Both upper and lower chains should have between 1/2" to 1" of movement in the slack side of the chain. If there is more slack than the recommended 1/2 to 1", adjust the tensioner until there is the correct amount of slack.

To access the upper chain, remove the left hand shield.

To access the lower chain, remove the smaller shield. The lower chain tensioner is shown below:

WARNING

Replace all shields before operating your machine!
**Change Row Width**

Before beginning this procedure, be sure to have the correct length input shaft. If not, order the appropriately sized shaft from the dealer, specifying the row width you want to change the Cotton Stalk Puller to - 36", 38" or 40" for the SPC-4, or 36" or 38" for the SPC-6. (Refer to the *Parts Catalog* for the part number of the shaft needed.)

1. Remove upper shield.

2. Remove the upper idler

3. Remove the upper chain.

4. Measure distance from frame edge to inside edge of sprocket (top photo).

5. Remove sprocket.

**WARNING**

Replace all shields before operating your machine!
Change Row Width

6. Remove bearing lock collar behind sprocket. (Photo shows both sprocket and lock collar removed.)

7. Open top cover.

8. Remove set screw on clutch yoke.

9. Remove the main drive shaft.

10. Remove the clutch assembly (middle photo).

11. Remove all remaining drive lines.
**Change Row Width**

12. Remove shield covering both universals.

13. Referring to the sketch, remove the five bolts on the head unit indicated by the arrows on the sketch. (The sketch shows the bolt pattern for the SPC-4. The SPC-6 is similar, but only has the 36” and 38” holes.)

14. Loosen, but don’t remove, the sixth bolt indicated by double arrows on the sketch and in the bottom photo.

15. Remove four bolts holding gearbox.

16. Remove shims.
**Change Row Width**
17. Referring to sketch below, move the gearbox and head unit to the correct row width position. (The sketch shows the SPC-4 row widths. The SPC-6 is similar, but does not have the 40” row spacing.)

18. Replace and tighten all bolts for head unit.
19. Replace shims for gearbox.
20. Replace and tighten bolts for gearbox.
21. Repeat Steps 13-22 for remaining head units.
22. Replace drive lines. Make sure all grease fittings line up.
23. Replace clutch.

25. Tighten bearing lock collar.
26. Replace sprocket.
28. Replace chain.
29. Replace idler.
30. Re-tension chain.
31. Replace shield.
32. Move or install blades on rotor to correct row width.

**CAUTION**
Complete all instructions for changing row width and replace all shields before attempting to use the machine.
5

Maintenance

Maintenance ............................................. 38
Gear Boxes ........................................... 38
Change Oil ........................................... 38
Check Oil ............................................. 38
PTO Shafts ........................................... 38
   Lubricate ........................................ 38
Double Universals ................................. 39
   Lubricate ........................................ 39
Clutch .................................................... 39
   Lubricate ........................................ 39
Chains ................................................... 39
   Lubricate ........................................ 39
Rotor Bearings ...................................... 40
   Lubricate ........................................ 40
Blades ................................................... 41
Lubrication Schedule ................................ 42
End of Season Storage ............................. 43
   Remove Wheels ................................... 43
Prepare Tanks ....................................... 43
General Cleaning .................................... 44
## Maintenance

### Gear Boxes

#### Change Oil

| After initial 50 hours | Every 500 hours | Use a standard 90 weight non foaming oil with EP additives and fill to the bottom of fill plug (see photo) |

#### Check Oil

| Beginning of season | Every 50 hours (visually inspect daily for oil leaks) | End of season after cleaning |

### PTO Shafts

#### Lubricate

| 6 grease points | Use a standard multi-purpose grease. |

| Beginning of season | Daily (every 10 hours) | End of season, after cleaning |
# Double Universals

**Lubricate**
2 grease points per universal

- Beginning of season
- Every 50 hours
- End of season, after cleaning

Use a standard multi-purpose grease.

---

# Clutch

**Lubricate**
2 grease points

- Beginning of season
- Daily (every 10 hours)
- Anytime the ratchet clutch has been activated for extended periods
- End of season, after cleaning

Use a standard multi-purpose grease.

---

# Chains

**Lubricate**

- Beginning of season
- Every 50 hours
- End of season, after cleaning

Use a standard 30 weight oil.
## Rotor Bearings

### Lubricate

2 grease points

- Beginning of season
- Every 50 hours
- End of season, after cleaning

Use a standard multi-purpose grease.
**Blades**

Typically, blades need to be replaced every 500-1000 acres. Ground conditions will also affect the life of the blades. New blades are shown in the photo.

Generally, replace blades when:

- the cutting edge is paper thin and/or
- the cutting edge begins to curl or bend.
## Lubrication Schedule

<table>
<thead>
<tr>
<th>Location</th>
<th>Type of Lubricant</th>
<th>Beginning of Season</th>
<th>Daily</th>
<th>End of Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTO Shafts</td>
<td>Multi-purpose grease</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Double Universals</td>
<td>Multi-purpose grease</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Clutch</td>
<td>Multi-purpose grease</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Chains</td>
<td>30 weight oil</td>
<td>X</td>
<td>Every 50 hours</td>
<td>X</td>
</tr>
<tr>
<td>Bearings</td>
<td>Multi-purpose grease</td>
<td>X</td>
<td>Every 50 hours</td>
<td>X</td>
</tr>
</tbody>
</table>
End of Season Storage

Remove Wheels
1. Deflate tires.
2. Remove valves from valve stems.
3. Remove all four lug bolts from each wheel.
4. Remove wheels.
5. Replace valves in valve stems.
6. Reinflate tires to approximately 5 PSI.
7. Store indoors (out of direct sunlight) for maximum life.

Prepare Tanks
Prepare tanks for storage by preventing the water from freezing by one of the following:

Drain all water from the tanks. The upper tank drain plug is shown in the photo. For the rotor, remove the fill plug and rotate the rotor until the plug is pointing toward ground.

Or
Add anti-freeze to water. Refer to back of anti-freeze bottle for proper mixture for your region. Generally, a 50% solution should be more than adequate. For the SPC-4 model, the capacity of the rotor is 66 gallons; the weight tank holds 87. The SPC-6’s tanks hold 1.5 as much as the SPC-4.
**General Cleaning**

1. Remove the wheels and reinstall lug bolts into hubs.

2. Remove the shields covering the double universals.

3. Remove the shields covering the upper and lower chains.

4. Open all other shields.

5. Using pressurized air, blow entire machine to remove all dirt/debris.

6. Once majority of debris is removed by air, using a low pressure water hose or indirect water pressure, clean machine.

**IMPORTANT!** If using pressure washer, do NOT direct water spray at bearings. This can damage their seals, causing premature failure.

7. Spray (at low water pressure) the cavities in the stalk puller heads until the water discharge from the drain hole is clear.

8. Pressure wash the pulling wheels after they are removed.

9. Spray all drivelines, universal joints, and exposed shafts with a lightweight oil.

10. Replace all shields before storing machine.
6

Troubleshooting
<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>A large number of stalks are being chopped off near the base but not pulled out</td>
<td>Rows are planted in something other than 4, 8, or 12 row planters (SPC-4) or 6 or 12 row planters (SPC-6) and passes are being made over an odd number of rows.</td>
<td>Operate machine over four rows, then make a pass to pick up odd rows before making another four row pass.</td>
</tr>
<tr>
<td>Stalks are being pulled out, but pushed into the ground instead of chopped</td>
<td>Soil is too hard</td>
<td>Wait for rain or irrigation to soften soil</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Add more weight to the machine by filling the upper tank with water.</td>
</tr>
<tr>
<td>Stalks are breaking off before being pulled out</td>
<td>Ground is too soft or soil too wet</td>
<td>Wait for soil to dry some and ground to harden.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduce weight by letting some of the water out of the machine.</td>
</tr>
<tr>
<td>Wheels are hitting the ground</td>
<td>Top link of hitch is shortened too much</td>
<td>Lengthen top link so that wheels are further off ground.</td>
</tr>
<tr>
<td>Stalks are flying over the rotor and not being chopped</td>
<td>Rotor is too far from the pulling wheels</td>
<td>Move rotor closer to tractor.</td>
</tr>
<tr>
<td>Stalks are being chopped before they are completely out of the ground</td>
<td>Rotor is too close to the pulling wheels</td>
<td>Move the rotor further away from the tractor.</td>
</tr>
<tr>
<td></td>
<td>Stalk is missing wheels completely</td>
<td>Make sure machine is operating over four rows.</td>
</tr>
<tr>
<td>Problem</td>
<td>Cause</td>
<td>Correction</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Root is still in the ground but stalk is chopped</td>
<td>Stalk is slipping through the pulling wheels</td>
<td>Inflate tires more (do not exceed 32 PSI)</td>
</tr>
<tr>
<td></td>
<td>Stalk is breaking off</td>
<td>Make sure ground is soft enough and enough weight is in tanks</td>
</tr>
<tr>
<td>Root is in place (facing down) but loose in soil</td>
<td>The blade is catching the stem before it is pulled from the ground</td>
<td>Move rotor away from pulling wheels</td>
</tr>
<tr>
<td></td>
<td>Stalk is slipping through the wheels</td>
<td>Inflate tires more (do not exceed 32 PSI)</td>
</tr>
<tr>
<td></td>
<td>Tires are too worn to grip stalks</td>
<td>Replace tires</td>
</tr>
</tbody>
</table>
ONE-YEAR LIMITED WARRANTY
For AMADAS INDUSTRIES STALK PULLER/CHOPPER

A. General Provisions
The Warranties described below are provided by AMADAS INDUSTRIES ("AMADAS") through its authorized dealers to the original purchaser of each new AMADAS Stalk Puller / Chopper. AMADAS will repair or replace, at its option, any part covered under warranty which is found to be defective in material or workmanship during the applicable period of warranty. This warranty is applicable only to the cost of the part replaced or repaired and does not cover labor costs involved in installing the replaced or repaired defective part.

B. What is Warranted?
All parts of any new AMADAS Stalk Puller / Chopper are warranted for 12 months. The warranty period will begin when the Stalk Puller / Chopper is delivered to the purchaser. AMADAS will repair or replace, at its option, any new part or component under the above warranty, if a defect in material or workmanship appears in such part or component and is reported to AMADAS before the expiration of the applicable equipment warranty.

Used equipment is not warranted by AMADAS unless it is specifically covered by a separate warranty document. The above warranties cover only defective material and workmanship. The warranties do not cover any depreciation or failure caused by normal wear, lack of proper maintenance or use, misuse, lack of proper protection during storage, or accident. The purchaser shall pay all costs of routine maintenance and/or replacement of maintenance and wear items.

C. Unapproved Service or Modification
All Obligations of AMADAS under this warranty are terminated if the Stalk Puller / Chopper is modified or altered in ways not approved by AMADAS.

D. Securing Warranty Service
To secure warranty service, the purchaser must (1) report the product defect and request repair within the applicable warranty period, (2) present evidence of the date of delivery of the Stalk Puller / Chopper, and (3) make the Stalk Puller / Chopper available to an AMADAS authorized dealer within a reasonable period of time.

E. No Dealer Warranty
The selling dealer makes no warranty of his own on any item warranted by AMADAS, and makes no warranty on other items. The dealer has no authority to make any representation or promise on behalf of AMADAS, or to modify the terms or limitations of this warranty in any way.

F. What are your Responsibilities?
   a. Read the operator’s manual before operating the equipment.
   b. Perform all necessary maintenance as described in the operator’s manual.
   c. Deliver the machine to an AMADAS authorized dealer at your expense during normal working hours for any needed warranty services.
   d. Contact an AMADAS authorized dealer promptly on any claim for warranty service.
   e. Sign the AMADAS machinery delivery form, which will be given to you by the dealer.

G. Disclaimer
There are no warranties that extend beyond the description here. ANY WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE ARE SPECIFICALLY DISCLAIMED AS ARE ALL OTHER REPRESENTATIONS TO THE PURCHASER. AMADAS specifically excludes any liability on behalf of the company for any incidental or consequential damages including, but not limited to, crop loss, loss of profits, rental of substitute equipment, or other commercial losses. AMADAS shall not be responsible for expenses or inconveniences that you might incur or experience with respect to the AMADAS Stalk Puller / Chopper, nor shall AMADAS be liable for defects, damage, or failures caused by improper storage, unreasonable use, or abuse, or accident, including the failure to provide reasonable and specified maintenance. This warranty applies only to the original purchaser of the equipment. Because some states do not allow the exclusion of limitations of incidental or consequential damages, the above limitations may not apply to you. This warranty gives you specific legal rights. You may also have other rights, which vary from state to state. Where there is a conflict between a provision of this warranty and the provision of any state, the state legislation prevails.

AMADAS