Read this manual before using this product. Failure to follow the instructions and safety precautions in this manual can result in serious injury or death.
Model AR2200 Peanut Combines are manufactured by Amadas Industries:

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

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

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Albany, GA 31701

Shipping Addresses
1100 Holland Road
Suffolk, VA 23434
1701 South Slappey Blvd.
Albany, GA 31706

Owner’s Name ______________________________
Dealer’s Name ______________________________
Serial Number ______________________________ Model No. ______________________________
Date Purchased ______________________________

1100 Holland Rd. 1701 S. Slappey Blvd.
Suffolk, VA 23434 Albany, GA 31701
(757) 539-0231 (229) 439-2217
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Welcome To AMADAS Industries

With origins dating back to 1963, AMADAS Industries and its predecessors have a long history of providing high quality, reliable, and innovative equipment for the farming industry. AMADAS equipment is currently at work throughout the United States and in many other countries. This equipment ranges from the Self-Propelled Peanut Combine, Tree Bark Processing and Packaging Machinery, Hi-Speed Cotton Stalk Puller/Chopper, Reel Rain Traveler Irrigation Systems, to the AR2200 Advanced Rotary Peanut Combines.

Thank you for choosing AMADAS Industries. We are strongly committed to your satisfaction and safety. Our goal is for you to be satisfied with our machinery for many years and it is our hope that you will choose AMADAS again for your equipment needs.

We are confident you will experience many good years of service with your AMADAS combine. If any need should arise, we pledge the best efforts of our people and dealers to assist you.

One of the most important factors to both safety and maximum performance is for every machine operator to understand thoroughly the safe operation of this equipment. Please invest the time to read this manual to ensure that injuries are prevented and to receive the maximum productivity from your AMADAS machine.
Congratulations on your purchase of an AMADAS AR2200 Peanut Combine! At AMADAS Industries, we are proud of our equipment and our more than fifty years of service to peanut farmers.

AMADAS peanut combines are the culmination of our years of development, field testing, and continuous improvement.

In response to our customers’ needs and industry demands, the AMADAS peanut combine has evolved into the AR2200 peanut combine. The AR2200 is Amadas’ first ever combine equipped with our own advanced rotary technology. Rotary technology is a proven method in small grain harvesting and Amadas is leading the charge in pushing this highly efficient technology into the peanut industry!

**Rotary Benefits**

The proven performance of this new rotary technology within the all new AMADAS AR2200 provides the following benefits:

- Increased harvesting capacity
- Increased harvesting efficiency
- Reduced harvesting costs
- The highest of harvest quality
AR2200 Key Features

**Tongue**
- Increased articulation ability. A tighter turning radius can be achieved.
- Better header visibility.

**Header**
- Cam-less pickup head. Lower maintenance with gentler crop engagement.
- Single motor hydraulic drive system. Less hydraulic complexity.
- Stainless steel bands for smoother flow and longer life.
- Stronger pickup spring teeth for gentler crop engagement and longer life.
- Larger diameter auger floor slots for increased dirt extraction.

**Front Pre-conditioning Cylinders**
- Stronger cylinder spring teeth for increased durability.
- Hinged & supported front hood for better access
- Larger diameter concave slots for increased dirt extraction.

**Main Threshing Chamber (Dual Rotors)**
- Dual, 30” diameter rotors offer an unmatched throughput.
- Helix aligned, heavy duty spring teeth create a high-volume threshing capability without the need of any rotor adjustment.
- 150 square feet of rotor extraction concave pre-separates valuable product.
- Access is simple and direct with the raising of the basket.

**Separation**
- The “tried & true” disc separator is still used, but with a much simpler and dependable drive system. It now also features an integrated slip clutch to protect drive components.
- Heavy duty shaker arms for increased durability.

**Product Conveyance**
- Newly designed ductwork now features stainless steel, bolt in panels in high wear areas.
- The basket ductwork can now be replaced completely from the outside of the basket.
- The extended ductwork routing now allows for better basket filling.

**On Board Storage**
- The newly designed high capacity basket is capable of up to 8000 lbs. of product storage.
- High visibility basket side panels now allow for easier product viewing.
- Interior LED basket lighting.

**Off-Loading**
- Increased product offloading flowrate for shorter offload times.
- Shorter conveyor with a more compact stowed position for increased maneuverability.
- Increased conveyor extended angle for better offloading visibility.

**Miscellaneous**
- High intensity LED lighting package
- High capacity Radial tires.
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<td>One 20&quot; Ø accelerator rotor</td>
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<tr>
<td></td>
<td>One set of adjustable overhead teeth</td>
</tr>
<tr>
<td>Threshing</td>
<td>30&quot; Ø dual rotors</td>
</tr>
<tr>
<td>Separation</td>
<td>14&quot; Ø 24 blade cross induction fan</td>
</tr>
<tr>
<td></td>
<td>4800 sq. inch disc separator bed</td>
</tr>
<tr>
<td>Conveyance</td>
<td>12&quot; Ø collection auger to 9-1/2&quot; square duct</td>
</tr>
<tr>
<td></td>
<td>28&quot; Ø 12-blade centrifugal fan</td>
</tr>
</tbody>
</table>

## Recommended Lubricants

| Grease, Synthetic NLGI #2           | O.E.M equipped Permalube Xtreme Grease, p/n 81088 |
| Gear Oil, Synthetic 50WT            | O.E.M equipped Lubemaster Synthetic SAE 50, p/n 81087 |

<table>
<thead>
<tr>
<th><strong>Tire &amp; Wheel Fasteners Torque Specifications</strong></th>
<th>Diameter</th>
<th>Thread</th>
<th>Grade</th>
<th>Torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extensions/Spindles</td>
<td>7/8&quot;</td>
<td>14</td>
<td>8</td>
<td>668 ft/lb</td>
</tr>
<tr>
<td>Lug nuts</td>
<td>3/4&quot;</td>
<td>16</td>
<td>8</td>
<td>400 ft/lb</td>
</tr>
</tbody>
</table>
Dimensions

Figure 1: Dimensions Side View

Figure 2: Dimensions Front View
1. Safety

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Safety at All Times

Look for the Safety Alert Symbol!

This symbol means:
ATTENTION!
BECOME ALERT!
YOUR SAFETY IS INVOLVED!

The Safety Alert Symbol indicates a potential safety hazard to personnel and extra precaution must be taken. When you see this symbol on the machine, remain alert and read the message that follows it carefully. ALWAYS follow the recommended precautions and safe operating procedures accompanying this symbol. If you have any questions, please contact your dealer or the manufacturer.

⚠️ DANGER ⚠️

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

⚠️ WARNING ⚠️

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

⚠️ CAUTION ⚠️

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠️ NOTICE ⚠️

Used with messages not related to personal injury, such as related to property damage only.
Safety Practices

⚠️ Safety at All Times!

You, the operator, can help avoid accidents or injury by observing the precautions in this section and insisting that others working for or with you also follow them.

- Do NOT attempt to operate this equipment under the influence of drugs or alcohol, or prescription/over-the-counter drugs that may cause impairment.
- Never allow children and persons unfamiliar with this equipment to operate this machinery, or remain in its vicinity, while it operates.
- Make sure all bystanders are at a safe distance before operating or maintaining this equipment.
- Do not allow anyone to ride on any part of the equipment for any reason.
- Do NOT allow any person to operate or perform maintenance on this machine until he or she has read this manual and understands the safety precautions.
- Only a trained operator familiar with this machinery and trained in its operation should be allowed to operate this machine.
- Do not read, eat, drink, talk, text, or use a mobile phone while using this equipment.
- Use a tractor equipped with a Rollover Protective System (ROPS) to prevent injury or death.
- Do not paint over, remove, or deface any safety signs or warning decals on your equipment.
- NEVER exceed the limits of a piece of machinery. If its ability to perform a job safely is in question, DO NOT TRY TO DO THAT JOB.
- Stay clear of any moving parts such as; shafts, couplings, and universal joints.
- Make adjustments, if necessary, in small steps. Shut down all motions for each adjustment.

Prepare for Emergencies

- Be prepared if a fire starts.
- Keep a first aid kit and fire extinguisher handy.
- Keep emergency numbers near the phone for:
  - Doctors
  - Ambulance Service
  - Hospital
  - Fire Department

Wear Protective Clothing

- Wear close-fitting clothing.
- Use safety equipment appropriate to the job.
Safety Practices (cont.)

⚠️ Dispose of Waste Properly

Improperly disposing of waste can threaten the environment and ecology. Potentially harmful waste includes items such as oil, fuel, coolant, brake fluid, filters, and batteries.

- Use leak-proof containers when draining fluids.
- Do NOT use food or beverage containers that may mislead someone into eating or drinking from them.
- Do NOT pour waste onto the ground, down a drain, or into a water source.
- Inquire about the proper way to recycle or dispose of waste from your local environmental or recycling center, EPA, or from your AMADAS dealer.

⚠️ Read the Operator's Manual

- Read the Operator’s Manual before attempting to operate or perform maintenance on this machine.
- Keep a copy of the manual with the machine at all times.
- Contact your AMADAS dealer for a replacement or print a copy from www.amadas.com.

⚠️ Remove the Key

ALWAYS stop the combine, set the parking brake, shut the tractor motor off, and remove the key before you leave the tractor for any reason.
Safety Practices-Operator

⚠️ Work in Ventilated Area

Engine exhaust fumes can cause sickness or death.

- If it is necessary to run an engine in an enclosed area, remove the exhaust fumes from the area with an exhaust pipe extension.
- If you do not have an exhaust pipe extension, open the doors and get outside air into the area.

AMADAS DOES NOT RECOMMEND RUNNING ANY ENGINE IN AN ENCLOSED AREA EVEN WITH VENTILATION.

![Work in Ventilated Area](image)

⚠️ Handle Fuel Safely – Avoid Fires

- Handle fuel with care; it is highly flammable.
- Do NOT refuel the machine while smoking or when near open flame or sparks.
- Always stop engine before refueling machine.
- Fill fuel tank outdoors.
- Prevent fires by keeping machine clean of accumulated trash, grease, and debris.
- Always clean up spilled fuel.

![Handle Fuel Safely](image)

⚠️ Handle Chemical Products Safely

- Direct exposure to hazardous chemicals can cause serious injury. Potentially hazardous chemicals used with AMADAS equipment include such items as lubricants, coolants, paints, and adhesives.
- Before you start any job using a hazardous chemical, check the SDS so that you are aware of the risks and know how to proceed safely. Carefully follow all procedures, using only recommended equipment.
- See your AMADAS dealer for SDS on chemical products used with AMADAS equipment.

![Handle Chemical Products](image)
Safety Practices-Equipment

⚠️ Transport Machine Safely

- Comply with state and local laws.
- Be familiar with tractor operations and follow all safety instructions in the tractor’s manual.
- Before moving away, always check immediate vicinity (e.g., for children).
- NEVER exceed a maximum speed of 20 MPH.
- Always adapt ground speed to road or field conditions. Make sure you have adequate control of steering and stopping.
- Avoid sharp turns, holes, ditches, and obstructions which may cause the tractor to tip, particularly on hillsides.

- Use following tow load weight ratios as guidelines:
  - 20 MPH when weight is less than or equal to the weight of the tractor
  - 10 MPH when weight is more than weight of the tractor
  - NEVER tow a load more than double the weight of the tractor!
  - Sudden braking can cause a towed load to swerve and upset. Reduce speed if towed load is not equipped with brakes.

⚠️ Operate PT Combine Safely

- ALWAYS stay clear of the header pickup and header auger at all times.
- ALWAYS be sure that the combine is on solid, level ground before you dump the basket.

⚠️ Tow Combine Safely

- NEVER exceed the maximum towing speed of 10 MPH loaded and 20 MPH empty.
- NEVER tow the combine without attaching safety chains from the towing vehicle to the combine.
- These chains should have a minimum combined breaking strength of at least 40,000 pounds.
- If the combine were to separate from the towing vehicle, serious personal injury or death could result.
Safety Practices-Equipment (cont.)

**Use the Hitch Transport Safety Latch**
- Use a hitch transport latch chain to help control machinery if it separates from the tractor drawbar.
- The hitch transport latch chain should have a strength rating greater than the gross weight of the towed machine.
- Attach the chain to the tractor drawbar support, allowing only enough slack in the chain for turning.
- Do NOT use a safety chain for towing.

**Use Safety Lights and Devices**
Slow moving tractors, self-propelled equipment and towed implements or attachments can create hazards when driven on public roads. They are difficult to see, especially at night.
- Whenever you drive on public roads, use flashing lights and turn signals according to local regulations.
- To increase visibility, use the lights and devices provided with your machine.
- Keep safety items in good condition.
- Replace missing or damaged items.

**Keep Riders off of Machine**
- Never allow riders on the machine. Riders obstruct the operator’s view, which results in the machine being operated in an unsafe manner.
- Riders are subject to injury such as being thrown off of the machine.
- Children should NEVER be allowed on the machine.

**Remove Crop Debris**
- The buildup of chaff and crop debris near moving parts or heat sources is a hazard.
- Check and clean these areas frequently.
- Before performing any inspection or service, engage parking brake, turn off engine, and remove key.

**Shields**
- Certain photographs or illustrations in this manual may show a safety shield removed. However, NEVER operate this machine without all shields correctly in place!
- If a shield must be removed to make a repair or adjustment, replace the shield prior to use.
Safety Practices-Equipment (cont.)

Avoid High Pressure Fluids

- Use extreme care when working with hydraulic components and high-pressure sprays.
- Escaping fluid or spray under pressure can penetrate the skin, causing serious injury.
- To avoid injury, relieve pressure before disconnecting hydraulic or other lines.
- Tighten all connections before applying hydraulic or spray pressure.
- Search hoses/connections for leaks with a piece of cardboard.
- Take appropriate safety measures to protect hands, body, and face from high pressure fluids.
- Always wear appropriate safety gear to protect hands, body and face from exposure to high pressure fluids.
- Never try to block the flow or search for leaks of high pressure fluids with your hands even if wearing gloves. High pressure fluids can penetrate gloves as well as your skin.
- Always avoid direct contact of any high-pressure fluid flow.
- If an accident occurs, respond as follows:
  - Seek medical treatment immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.
  - Alert the medical professionals that a fluid injection or high-pressure spray injury has occurred.
  - Give information on the type of fluid or spray and time the accident occurred. If known, include the amount of fluid injected and/or the system injection pressure.
  - Surgery will most likely be required, so no food or drink for the affected person.

Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available in English from Deere & Company Medical Department in Moline, Illinois, U.S.A., by calling 1-800-822-8262 or +1 309-748-5636.

VERY IMPORTANT!! In some cases there is little or no pain from an injection or high pressure spray accident.

THIS IS STILL A SERIOUS EVENT THAT MUST BE TREATED BY MEDICAL PROFESSIONALS!!!
Safety Practices-Equipment (cont.)

Avoid Electrical Power Lines
Contact with electrical lines will cause the operator to suffer severe electrical shock or possible death.

- Make sure all components are secured in the proper position before transporting machine (for example: off-loading conveyor, etc.).
- AVOID all lines, particularly low-hanging electrical cables, during transport.

Be Aware of Machine Height and Width With Conveyor Extended
Contact with an obstruction or overhead electrical line can cause electrocution, death, or serious personal injury.

- The combine height is up to 14'-11". With the conveyor extended, be aware the width can be as much as 27'-9".

Avoid Contact with Moving Parts

- Wear close-fitting clothing to avoid entanglement with moving parts.
- Keep hands, feet, and clothing away from power-driven parts.
- Never clean, lubricate or adjust machine when it is running.

Conveyor Safety

- NEVER drive on roads with the conveyor extended. Always make sure the conveyor is in stowed position on the conveyor rest before taking it on a road.
- Be aware of the length of the conveyor when traveling. Even when in the stored position, the conveyor extends several feet past the rear of the combine and presents a substantial hazard for hitting obstructions.
Safety Practices-Maintenance

⚠️ Practice Safe Maintenance

- Understand the service procedure before doing work. Use proper tools and refer to this Operator’s Manual.
- Keep service area clean and dry.
- Lower machine to ground, engage parking brake, turn off engine, and remove key before performing maintenance.
- Allow time for the machine to cool completely.
- Never lubricate, service, or adjust machine while it is moving.
- Keep hands, feet, and clothing from power-driven parts.
- Securely support any machine elements that must be raised for service work.
- Keep all parts in good condition and properly installed.
- Fix any damage immediately; replace worn or broken parts.
- Keep the machine free of any buildup of grease, oil, or debris.

⚠️ Maintain Your Machine

- It is crucial you maintain your machine in proper working condition.
- Check and clean these areas frequently.
- Before performing any inspection or service, engage parking brake, turn off engine, and remove key.

⚠️ Support Machine Properly

- Always lower the attachment or implement to the ground before you work on the machine. If the work requires that the machine or attachment be lifted, provide secure support for them. If left in a raised position, hydraulically supported devices can settle or leak down.
- Do NOT support the machine on cinder blocks, hollow tiles, or props that may crumble under continuous load.
- Do NOT work under a machine that is supported solely by a jack.
- Follow all safety procedures in this manual for supporting the machine.
- When implements or attachments are used with a machine, always follow safety precautions listed in the implement or attachment operator’s manual.
Safety Practices-Maintenance (cont.)

⚠️ Remove Paint/Protective Coating Before Welding or Heating

Avoid potentially toxic fumes and dust.
Hazardous fumes can be generated when paint or coatings are heated by welding, soldering, or by using a torch.
Do all work outside or in a well-ventilated area.

Remove paint/coatings before welding or heating:
If you sand or grind paint, avoid breathing the dust. Wear an approved respirator.
If you use solvent or paint stripper, remove stripper with soap and water before welding.
Remove solvent or paint stripper containers and other flammable material from the area.

• Allow any fumes to disperse for at least 15 minutes before welding or heating.
• Do NOT use a chlorinated solvent in areas where welding will take place.
• Do all work in an area that is well-ventilated to carry toxic fumes and dust away.
• Dispose of paint/coatings and solvent properly.

Avoid Using Heat Near Pressurized Fluid Lines

Flammable spray can be generated by heating near pressurized fluid lines, resulting in severe burns to yourself and bystanders.

• Do NOT heat by welding, soldering, or using a torch near pressurized fluid lines or other flammable materials. Pressurized lines can accidentally burst when heat goes beyond the immediate flame area.

⚠️ Service Drive Belts Safely

When servicing drive belts, always observe these precautions:

• Avoid serious injury from hand or arm entanglement. NEVER attempt to clean, check, or adjust belts while the machine is running. ALWAYS shut off the engine, set the parking brake and remove the key.
• Do NOT attempt to clean belts with flammable cleaning solvents.
Safety Practices-Maintenance (cont.)

⚠️ Service Tires Safely

Explosive separation of a tire and rim parts can cause serious injury or death.

- Do NOT attempt to mount a tire unless you have the proper equipment and experience to perform the job.
- Always maintain the correct tire pressure.
- Do NOT inflate the tires above the recommended pressure.
- Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion. Welding can structurally weaken or deform the wheel.

- When inflating the tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of over the tire assembly. Use a safety cage if available.
- Check wheels for low pressure, cuts, bubbles, damaged rims, or missing lug bolts and nuts. NEVER fill a damaged tire or one that is missing lug bolts or nuts.

⚠️ Service Combine Safely

Failure to use the basket safety strut properly can result in serious injury or death.

- Always install the basket safety strut over the cylinder ram before working under the raised bin.
Safety Decals

Safety Decals

- Replace any CAUTION, WARNING, DANGER, or instruction safety decal that is not readable or is missing.
- Do NOT paint over, remove, or deface any safety sign or warning decals.

Safety decals identify specific hazards, as well as general safety. A signal word (DANGER, WARNING, or CAUTION) is included on each decal to alert you to the severity of the hazard.

Please note the following about the decals:

- Keep them clean and legible.
- Never remove a safety decal from the machine.
- When you replace a part with a safety decal, also replace that decal.
- For replacement decals, call your AMADAS dealer.
- Replacement safety decals are available free of charge.

Safety decals used on this machine are shown on the following pages. Decal locations are also included.
Safety Decals (cont.)

**WARNING**

Read and understand operator’s manual before using this machine.
Failure to follow operating instructions could result in death or serious injury.

1 - 80935

**CAUTION**

1. Keep all shields in place.
2. Stop engine and remove key before leaving operator’s seat to adjust, lubricate, clean, unplug, or perform other work on the machine.
3. Wait for all motion to stop before servicing this machine.
4. Keep hands, feet, and clothing away from moving parts.
5. Keep off equipment unless seat or platform for operation is provided.
6. Keep all persons off of machine.
7. Make certain everyone is clear of machine before starting engine.

2 - 80936

**NOTICE**

If you do not have a copy of the Operator’s Manual or need replacement decals contact your AMADAS dealer.

Manuals are also available for printing at www.amadas.com.

3 - 81097

**DANGER**

Operating Machine Hazard

To prevent serious injury or death when this machine is in operation:
- Do not climb on the machine.
- Do not place hands or feet behind shields.

4 - 80933
Safety Decals (cont.)

5 - 81064

6 - 81062

7 - 80950

8 - 80932

9 - 81103

10 - 80946
Safety Decals (cont.)

11 - 80949

12 - 80934

13 - 81063

14 - 81099

15 - 81108

16 - 80867
Safety Decals (cont.)

**CAUTION**

CRUSH HAZARD PINCH POINT
Tensioner can contain stored energy.
- Stop engine and remove key before adjusting or cleaning.
- Keep hands away from potential moving parts.

17 -81095

**WARNING**

HYDRAULIC HAZARD
To avoid serious injury or death:
- Read the Operator’s Manual for instructions.
- Use the Hose ID Chart to connect hydraulic hoses.
- Wear Personal Protective Equipment.

18 -81096

**NOTICE**

TO PREVENT MACHINE DAMAGE
MAINTAIN PROPER TIRE INFLATION
800 / 65 R32 - Radial: 44 PSI
400 FT-LB LUG NUT torque (flanged)

19 -81093

**WARNING**

EXPLOSION HAZARD
Avoid serious injury or death from explosive separation of tire and rim part.
- Do not mount a tire unless you have the proper equipment and experience.
- Always maintain the correct tire pressure.

20 -81092

**WARNING**

DANGEROUS PEANUTS

TO AVOID MACHINE DAMAGE AND
ACHIEVE PROPER PEANUT FLOW AS
ILLUSTRATED:
- Keep within 20 gal/min hydraulic flow to OCS maximum.
- Set conveyor shaft speed to 250 RPM to avoid shelling and decreased life of components.
- Connect return line to direct-to-tank port, if possible.

21 -80970

**DANGER**

ENTANGLEMENT HAZARD
To avoid serious injury or death:
- Operate this machine only when all shields and guards are securely in place.

22 -80941
Safety Decals (cont.)

![Safety Decal]

- WARNING
  Never raise shield with the engine running. Stop engine and remove key.

- 790 PTO RPM
  24 -80563
Safety Decal Locations

![Diagram of Safety Decal Locations - Front View](image)

**Figure 3: Safety Decal Locations-Front View**

**Note:** The numbers are the first number of the safety decal illustrations in the previous section.
Safety Decal Locations (cont.)

Figure 4: Safety Decal Locations Front View–Hood Raised

Note: The numbers are the first number of the safety decal illustrations in the previous section.
Safety Decal Locations (cont.)

Figure 5: Safety Decal Locations-Tongue

Note: The numbers are the first number of the safety decal illustrations in the previous section.
Safety Decal Locations (cont.)

Figure 6: Safety Decal Locations-Left Side View

Note: The numbers are the first number of the safety decal illustrations in the previous section.
Safety Decal Locations (cont.)

Figure 7: Safety Decal Locations-Right Side View

Note: The numbers are the first number of the safety decal illustrations in the previous section.
Safety Decal Locations (cont.)

Figure 8: Safety Decal Locations-Top View

Note: The numbers are the first number of the safety decal illustrations in the previous section.
2. Preparation

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Overview

Go over the section, in this Chapter, titled “Pre-Delivery Checks” with your dealer to verify that the combine is ready for operation before operating the machine for the first time.

Every combine is test run at the AMADAS plant, however, a thorough pre-delivery inspection is important. Items may have shifted during shipping.

Chapter 3. Operation contains a “Daily Pre-Start Check” section. It is important that you perform these checks each day you intend to use your combine. These checks are intended to help you detect problems early, reduce downtime, and extend the life of your combine.

Basket Safety Strut

Read Chapter 1. Safety, before performing any checks on your machine. In addition, be aware of the basket safety strut that locks the basket in the open position.

Always use the basket safety strut as intended before checking or working around the open bin. The safety decal, shown below, is located below the strut and provides instructions for using the strut.

Tongue Transport Latch

The tongue transport latch is located under the main tongue frame. It connects the pivoting tongue frame to the header cross bar.

Fully raise the header to attach the tongue transport latch.
Pre-Delivery Checks

1. Remove any shipping fixtures, aids, or strapping.

2. Open all shields. Check chains and belts for proper tension. Refer to Chapter 7. Maintenance for details.

3. Check bushing bolts, set screws, and jam nuts on all sprockets, sheaves, shafts, etc., for tightness.

4. Torque all axle, extension, and spindle 7/8” fasteners to proper specifications (668 ft/lb).

5. Check that hose routing is free from pinch points and rotating parts.

6. Hitch the combine to a tractor. Apply the tongue transport latch. Verify latch is functioning.

7. Connect all hydraulic hoses to the tractor. Refer to the Hose ID Chart decal located on the combine tongue.

8. Check hydraulic lines for leaks. Follow the instructions in Chapter 1. Safety.


10. Swing conveyor. Verify that conveyor has proper hose routing.

**WARNING**

Escaping fluid or spray under pressure can penetrate the skin causing serious injury.

- Read “Avoid High Pressure Fluids” in Chapter 1. Safety.
- Relieve pressure before disconnecting hydraulic lines.
- Tighten all connections before applying hydraulic or spray pressure.
Pre-Delivery Checks (cont.)

11. Charge the OCS conveyor and basket augers.

12. Verify augers are turning in the correct direction.

**DANGER**

Contact with an obstruction, or high voltage power line, could result in death, or serious personal injury.

Check overhead clearance to ensure that no power lines, overhead limbs, or any other obstructions exist.

The Combine can be up to 14’-11” high and with combine extended, 27’-9” feet wide.

13. Raise the basket using tractor hydraulics.

**DANGER**

Death, or serious personal injury could result if the basket were to fail.

ALWAYS install the basket safety strut over the hydraulic cylinder before working around or under the raised bin.

14. Lock basket in raised position with basket safety strut.

15. Check the threshing chambers and inspect for foreign objects.

**NOTICE**

Misalignment between basket and elevator air duct will cause machine damage.

16. Lower the basket SLOWLY. Carefully check basket alignment with the duct.

17. If realignment is necessary, shorten or lengthen the two turnbuckles that support the duct as needed.

**Figure 15: Basket Safety Strut in Locked Position**

**Figure 16: Turnbuckles Duct Support Locations**
Pre-Delivery Checks (cont.)

18. Slowly raise and lower the basket and header several times to work out the air in the lines.

19. Open front hood and inspect for foreign objects in the pre-conditioning, front cylinder.

21. Remove the upper level plug on the side of the tongue gearbox. Check oil level. Add oil if necessary. Refer to the Recommended Lubricants table in Chapter 7. Maintenance.

22. Open cleaning fan adjustment to maximum.

23. Check the damper door opening on cleaning fan intake. It must be at least 10-0”.

Figure 17: Front Hood

Figure 18: Dual Rotor Gear Box Plugs

Figure 19: Tongue Gearbox Plug

Figure 20: Damper Door
Pre-Delivery Checks (cont.)

24. Verify all drives are free of foreign objects or shipping aids.

**DANGER**

Death or serious injury may result from entanglement if shields and guards are not in place.

Replace all shields before starting combine operation.

Driveline shields and guards must be in place anytime the combine is in operation.

25. Replace or close all shields.

26. Install the PTO driveline and grease. Make sure to set the tractor hitch pin at the specified length from the PTO output shaft. Refer to Figure 21.

![Figure 21: PTO Driveline Placement Measurements](image)

**NOTICE**

The PTO driveline should never bottom out or be overextended while turning.

27. Verify all driveline shielding is in place.

**DANGER**

Death or serious personal injury could result if anyone is in the vicinity during combine operations.

Always check the immediate area around the combine before start up.

Never allow riders on the machine.

Prepare the combine for operation.

1. Start the tractor.
2. Engage the PTO.
3. Increase slowly to operating speed (100%) or 790 PTO RPM.
4. Operate for twenty minutes before your first field operation.
**Pre-Delivery Checks (cont.)**

**Stop the combine and do final pre-checks.**

1. Check the tightness of all bolts, nuts, chains, belts, and sprockets.
2. Check all pulleys and belts for heat indicating looseness.
3. Check belt and chain alignments.
4. Check for overheated gearboxes and hot bearings.
5. Check machine to make sure all safety decals are in place.

**NOTICE**

TO PREVENT MACHINE DAMAGE MAINTAIN PROPER TIRE INFLATION.

800 / 65 R32 – Radial: 44 PSI

400 FT-LB LUG NUT torque (flanged)

6. Torque all the lug nuts to proper specifications. (400 ft/lb) See the Torque Specifications table on the Specification Charts page in the Welcome Section or at the end of Chapter 7. Maintenance.

7. Check tire pressure and inflate tires to recommended pressure:

   800 / 65 R32 – Radial: 44 PSI
NOTES:
3. Operation

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Combine Process

The AMADAS AR2200 Peanut Combine functions as follows:

- The combine removes peanut pods from peanut vines which have been dug and windrowed.

- Once separated and cleaned, the peanuts are conveyed into the peanut storage basket and vine material is passed out of the machine.

- The combine is pulled and powered by a farm tractor capable of speeds as low as 1 MPH while maintaining engine RPMs that will produce a combine speed readout of 100%.

- Optimum harvest conditions exist when windrows are harvested with peanut moisture content between 14% and 20%.

- Very dry or very wet conditions as well as excessive dirt and/or weeds in the windrow could reduce separation efficiency and cause an increase in loose shelled kernels (LSKs).

The steps of the threshing, separating and cleaning processes are outlined on the next page.
• The header pickup (1) lifts the peanuts and vines off of the ground. The header auger (2) feeds them into the preconditioning cylinders (3) and (4).

• The front 1st (3) and 2nd (4) preconditioning cylinders precondition the vines into an even crop mat. The concave floors are perforated for dirt extraction (7).

• The adjustable overhead teeth (5) over the 1st cylinder can be used to increase the pre-conditioning aggressiveness.

• The spring tined accelerator rotor (6) feeds the conditioned crop mat into the dual rotors (8).

• The spring tined dual rotors (8) serve as the main threshing and initial separation of the crop. 150 square feet of extraction concaves (not shown) surround the dual spring tine rotors. Centrifugal force generated by the rotors separate the pods from the vines.

• Vaned top covers (10) promote rearward movement of the vine material. The threshed vine is discharged at the end of the dual rotors (9).

• Pods expelled through the dual rotor extraction concaves are directed onto the front of the disc separator by an oscillating slide system (11) and (12).

• The cleaning fan (13) agitates the material on the disc separator to aid in separation and blows light material such as leaves, pops (unacceptable immature or diseased peanuts), and other light trash over the tail board and out of the back of the combine.

• The higher density good pods fall through to the stemmer section (14), while vine material and sticks advance across the disc separator and out of the back of the combine.

• As the good pods fall into the stemmer saws, their stems are removed. Cleaned peanuts fall into the collection auger (15) and are conveyed into the elevator air system, which sends them up to the storage basket (16).
Hitching Combine to Tractor

1. Set the tractor drawbar in the center fixed position with the hitch point centered behind the end of the PTO shaft.
   - 20” for 1-3/8” 21 spline CV shafts
   - 20” for 1-3/4” 20 spline CV shafts

2. Position the three-point hitch lower lift links in the FULLY raised position. The new tongue design allows for a much tighter turning radius, but in return requires additional PTO shaft clearances.

3. Engage the lift lock to prevent the tractor from inadvertently lowering if the tractor is equipped with this feature.

NOTICE

If the tractor is equipped with a quick hitch, we highly recommend that you remove it.

Failure to do so can cause damage to the PTO shaft and driveline.

4. The pin hitch can be used with a 1-1/2” or 2” diameter pin. If a 2” pin is used, remove the supplied hitch pin bushing.

5. Lower/raise the jack until the pin hitch is between the draw bar and the upper pin plate.

6. Install the pin through both the tractor and combine pin holes. Secure the tractor supplied pin retainer.

7. Using the jack, slowly lower the tongue until the pin hitch is resting on the drawbar.

8. Rotate the jack handle until the telescoping jack foot is completely raised.

9. Remove the jack securing pin and rotate the jack counter clockwise 90 degrees.

10. Reattach the jack securing pin and pin clip.

NOTICE

Be sure that the pin hitch pivot moves freely and is greased adequately.
Hitching Combine to Tractor (cont.)

**WARNING**

Escaping fluid or spray under pressure can penetrate the skin causing serious injury.

- Read “Avoid High Pressure Fluids” in Chapter 1. Safety.
- Relieve pressure before disconnecting hydraulic lines.
- Tighten all connections before applying hydraulic or spray pressure.
- Use the Hose ID Chart to identify hydraulic hose connections.

11. Attach the hydraulic hoses from the combine to the tractor remote hydraulic valves. Refer to the Hose ID Chart decal located on the combine tongue. All hoses are colored coded by function.

An OCS system equipped AR2200 will not function properly unless your tractor’s hydraulic pump capacity is at least 35 GPM @ 2500 PSI. Maximum harvesting performance requires at least 40 GPM @ 2500 PSI pump flow.

**WARNING**

Death or serious injury can result if the combine separates from the towing vehicle.

ALWAYS engage the tongue transport latch before towing the combine.

12. Raise the header fully and attach the tongue transport latch to the header cross bar as shown below.

**NOTICE**

Figure 26: Hose ID Chart

Figure 27: Tongue Transport Latch
**Attaching and Checking Driveline**

**IMPORTANT!** Your AMADAS AR2200 has been equipped with a constant velocity PTO driveline. Because of the double Cardan Joint incorporated into this shaft, you can expect a constant output shaft speed with minimal vibration.

Please read the section on lubrication in Chapter 7, *Maintenance* thoroughly. The PTO drive shaft has special requirements.

1. **REMOVE** the tractor key and keep in possession while working on, under, and around the tractor.

2. Make sure the tractor draw bar is set with the center of the hitch approximately 5" to 16" below the centerline of the tractor PTO output shaft.

3. Extend the tractor draw bar until the center of the pin hitch is approximately 20" from the end of the tractor PTO output shaft. Refer to Figure 28.

   ![Figure 28: PTO Driveline Placement Measurements](image)

4. Attach the driveline to the combine and tractor PTO. 1-3/8" 21 spline (optional) and 1-3/4" 20 spline (standard) ends are available.

**NOTICE**

Failure to check driveline length and clearance can cause damage to combine and tractor.

**DANGER**

Death or serious personal injury will result from entanglement.

ALWAYS make sure all drive shields and guards are in place when the combine is in operation.

**DANGER**

ALWAYS stop the combine, set the parking brake, shut the tractor motor off and remove the key before you leave the tractor for any reason.
Attaching and Checking Driveline (cont.)

5. Be certain that the driveline length does not exceed 47 inches when fully extended. Refer to Figure 30.

![Figure 30: Maximum PTO Driveline Length](image)

Note: If the driveline length is more than 47 inches, check the drawbar setting.

6. Start the tractor engine. Raise the pickup header to its highest position.

7. Refer to Chapter 1. Safety for safety measures before operation.

8. Turn the tractor slowly. At the tightest possible turn radius observe that the driveline is at the shortest length and fully collapsed.

![Figure 31: Turn Radius](image)

9. Turn the tractor off and remove the key.

10. Measure the driveline length. Refer to Figure 32.

![Figure 32: Minimum PTO Driveline Length](image)

11. Repeat steps 6-10 in opposite direction.

---

**NOTICE**

In most cases, the tractor will turn until the tire is very close to the combine tongue, without the telescoping shaft bottoming out.

If this is not possible with your tractor, do not exceed the observed limits or severe damage to the combine and tractor will occur, whether the PTO is engaged or disengaged.

---

**DANGER**

ALWAYS stop the combine, set the parking brake, shut the tractor motor off and remove the key before you leave the tractor for any reason.

---

**NOTICE**

Do NOT allow the tractor tire to touch the tongue, or the universal driveline to reach its closed (bottomed out) position during operation.

Do NOT allow the constant velocity joint to exceed 80 degrees. Severe damage to the driveline, tractor, or combine will occur.
**Daily Pre-Start Check**

**IMPORTANT!** Perform both external and internal daily pre-start inspections each day before taking the machine to the field.

These pre-start inspections will help detect problems early, reduce downtime, and extend the life of your combine.

Read these instructions, then use the Daily Pre-Start External and Internal Inspection Guides at the end of this section to do the checks. Also, a plastic guide for quick referral is shipped in the combine accessory case.

**Daily External Pre-Start Inspection:**

1. Clean built up dirt and debris from the machine. Refer to the External Inspection Guide’s general cleaning list. Figures 33 through 41 show some of the critical areas.

   - **Figure 33: OCS, Chassis, and Rotor Covers**
   - **Figure 34: Disc Separator Drives**
   - **Figure 35: Peanut Inspection Door**
   - **Figure 36: Ledge Above Cleaning Fan Housing**
   - **Figure 37: Dual Rotor Drives**
   - **Figure 38: PTO Drives**
Daily Pre-Start Check (cont.)

2. Service the tractor and attach the combine.

3. Grease the PTO driveline as shown in Figure 42 (also see Lubrication Chart in Chapter 7: Maintenance).

4. Grease the combine hitch as shown in Figure 43.

5. Grease the front tongue u-joints as shown in Figure 44.

NOTICE

Use the grease listed in the Recommended Lubricants table at the beginning of this manual and in Chapter 7. Maintenance on all lubrication points to greatly extend the life of lubricated components.
Daily Pre-Start Check (cont.)

6. Rotate the rotor drive sheave decal to point towards the top/front of machine for ease of greasing access. Refer to the Lubrication Chart in Chapter 7, Maintenance.

7. Grease the dual rotor drive shaft as shown in Figure 45.

8. Check all chains and belts for proper tension and alignment. Refer to Chapter 7, Maintenance for detailed information on auto belt tensioners and chain tensioning systems.

9. Check sheaves and sprockets for excessive wear.

10. Check separator clutch for signs of slippage. Refer to Figure 46.

11. Check separator chain guide condition. Refer to Figure 47.

12. Check slide cam system condition. The location is shown in Figure 48 below.

---

**DANGER**

Death or serious personal injury will result from entanglement.

NEVER attempt to clean, check, or adjust belts while the machine is running.

ALWAYS shut off the engine, set the parking brake and remove the key.
Daily Pre-Start Check (cont.)

13. Check gearboxes for leaks. Refer to Figure 49 for gearbox locations.

![Figure 49: Dual Rotor Gearbox Locations](image)

14. Check tire pressures and lug nut torques according to specifications.

**NOTICE**

TO PREVENT MACHINE DAMAGE
MAINTAIN PROPER TIRE INFLATION.

- 800 / 65 R32 – Radial: 44 PSI
- 400 FT-LB LUG NUT torque (flanged)

**DANGER**

Improperly tightened lug nuts or incorrectly inflated tires can result in serious personal injury.

Make sure the lug nut torque and cold inflation tire pressure are at the required specifications.

**WARNING**

Escaping fluid or spray under pressure can penetrate the skin causing serious injury.

- Read “Avoid High Pressure Fluids” in Chapter 1. Safety.
- Relieve pressure before disconnecting hydraulic lines.
- Tighten all connections before applying hydraulic or spray pressure.

15. Check all hydraulic lines for leaks, adequate fluid, and signs of damage.

**DANGER**

Contact with an obstruction or high voltage power line could result in death or serious personal injury.

Check overhead clearance to make sure no power lines, overhead limbs, or any other obstructions exist.

The combine is 14’-11” high. With the conveyor fully extended, the AMADAS AR2200 stretches up to 27’-9” wide.

16. Verify there are no powerlines or other obstructions above the machine.
**Daily Pre-Start Check (cont.)**

17. Turn the tractor on and lift the basket to a fully raised position.

![DANGER]

**DANGER**

ALWAYS stop the combine, set the parking brake, shut the tractor motor off and remove the key before you leave the tractor for any reason.

18. Put the tractor in park, shut off the engine, and remove the key.

![DANGER]

**DANGER**

Death or serious personal injury could result if the basket falls.

Install the basket safety strut over the hydraulic cylinder before working around or under the raised bin.

19. Lock the basket in the raised position with the basket safety strut. Refer to Figure 50.

**Daily Internal Pre-Start Inspection:**

Refer to the Internal Inspection Guide at the end of this section.

1. Inspect internal systems/components for wear and damage.

2. Look for any foreign objects or buildup.

3. Use the "Daily Pre-Start Internal Inspection Guide" at the end of this section and do all the daily pre-start checks listed.

4. Remove the basket safety strut. Refer to Figure 50.

5. Lower the basket.
Daily Pre-Start Check (cont.)

**DANGER**

Death or serious personal injury could result if shields are not in place.

NEVER operate this machine without all shields correctly in place.

ALWAYS keep hands, feet, and clothing away from power-driven parts.

6. Replace all covers and shields.

Final External Pre-Start Inspection:

Refer to the Pre-Start External Inspection Guide at the end of this section.

1. Start the tractor, let the engine idle, and leave it in PARK.

2. Engage the PTO.

3. Listen for any noise which could indicate a problem, such as damaged or defective bearing.

4. Increase the tractor engine to the combine speed.

5. Listen again for any noises that may indicate damaged bearings, etc.

6. Continue with the operating procedure when:

   - The combine is attached to a tractor.
   - All of the daily pre-start checks have been performed.
   - Operating procedures are clearly understood by all operators.
# Daily Pre-Start Inspection Guides

![AMADAS Industries Logo]

**AR2200 DAILY PRE-START EXTERNAL INSPECTION GUIDE**

## General Cleaning:
- Between basket and top chassis rails.
- Dual rotor drive support frame. (under front hood)
- Dual rotor top covers.
- Header bands and springs.
- Cross auger door and duct work.
- Frame sides.
- Conveyor intake sealing area. (with basket)
- Front hood/landing area.

## PTO & Drivelines:
- Clean/grease tractor PTO driveline.
- Clean/grease the front tongue u-joints.
- Clean/grease dual rotor driveline.
- Clean/grease header reversing clutch.
- Clean/check tension on chains and belts.
- Check sheaves and sprockets for excessive wear.
- Check separator clutch for signs of slippage.
- Check/clean separator chain guide.
- Check slide system cam condition.
- Check gearboxes for leaks.
- Verify all shields are in place.

## PTO Connection:
- Listen for any unusual noise at tractor idle.
- Listen for any unusual noise at tractor engine increase.

## Hydraulics:
- Check fluid level in tractor.
- Check hose routing for damage.
- Inspect for leaks.

## Transport:
- Check tire pressures. (44 PSI)
- Check lug nut torque. (400 ft-lb torque)
- Verify tail lights and markers are operational and visible.
- Grease hitch and inspect condition.

**Note:** These pre-start checks will be available on cards in the AMADAS AR2200 Peanut Combine accessory case.
Daily Pre-Start Inspection Guides (cont.)

<table>
<thead>
<tr>
<th>Threshing Chamber:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• #1 &amp; #2 pre-conditioning cylinder springs and bars.</td>
</tr>
<tr>
<td>• #1 &amp; #2 pre-conditioning cylinder vine build up around bearing covers.</td>
</tr>
<tr>
<td>• Accelerator rotor springs and bars.</td>
</tr>
<tr>
<td>• Accelerator rotor vine build up around bearing covers.</td>
</tr>
<tr>
<td>• #1-cylinder overhead teeth.</td>
</tr>
<tr>
<td>• Concave condition under #1, #2, and accelerator rotor.</td>
</tr>
<tr>
<td>• Dual rotor drive system clean of dirt and debris build up.</td>
</tr>
<tr>
<td>• Dual rotor drive components in good condition.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dual Rotor/Extraction Chamber:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Dual rotor vine buildup around front nose.</td>
</tr>
<tr>
<td>• Dual rotor front flighting condition.</td>
</tr>
<tr>
<td>• Dual rotor spring tines.</td>
</tr>
<tr>
<td>ANY missing rotor springs decrease crop flow.</td>
</tr>
<tr>
<td>• Extraction concaves damage or blockage.</td>
</tr>
<tr>
<td>• Rotor top covers damage.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Slide System:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Stainless steel slide panels free of buildup and damage.</td>
</tr>
<tr>
<td>• Edge sealing of slide panels.</td>
</tr>
<tr>
<td>• Roller cam and roller bearing condition.</td>
</tr>
<tr>
<td>Front slide cams visible under front of machine.</td>
</tr>
<tr>
<td>Rear slide cams visible over disc separator.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disc Separator:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Check for any material buildup on, or in the cleaning fan, stemmer saws, or around disc separator shafts.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Air Lift System:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Elevator housing and peanut ductwork for any holes or buildup.</td>
</tr>
<tr>
<td>• Cross auger run out or flight damage.</td>
</tr>
<tr>
<td>(a bent cross auger will cause excessive LSKs)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Offloading System:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Basket duct for excessive wear.</td>
</tr>
<tr>
<td>• Basket duct vent free of debris.</td>
</tr>
<tr>
<td>• Foreign material buildup around augers.</td>
</tr>
<tr>
<td>• Conveyor intake seals.</td>
</tr>
<tr>
<td>• Conveyor belt damage and tracking.</td>
</tr>
<tr>
<td>• Infeed hopper bearing and wear plate.</td>
</tr>
</tbody>
</table>

**Note:** These pre-start checks will be available on cards in the AMADAS AR2200 Peanut Combine accessory case.
Operating Procedure

Make sure you have performed all of the daily pre-start checks before you operate the combine.

When setting the machine, set as least aggressive as possible while still allowing peanuts to be removed from the vines.

A too aggressive setting will overthresh the crop and make final separation more difficult.

Refer to the “AR2200 Combine Setting Guide”, p/n #0415, at the end of this chapter for quick reference to general settings.

1. For most conditions set the #1 cylinder adjustable overhead teeth to the “disengaged” position.

2. Securely tighten the T-handle.

**NOTICE**

If green vine material is present in the windrow engage the first cylinder overhead teeth fully.

This keeps the preconditioning cylinders clean, aids feeding, and prevents crushing peanuts.

**WARNING**

Serious personal injury can result from making adjustments while the combine is running.

NEVER make adjustments to the harvesting controls while the combine is running.

3. Set the cleaning air control handle one-third open and tighten the T-handle securely.

**Note:** Fine tune adjustment may be made after initial harvesting has begun.

Figure 51: Cleaning Air Control
Operating Procedure (cont.)

4. Set the elevator air control handle to 50% open on the in-cab display.

   **Note:** Fine tune adjustment may be made after initial harvesting has begun.

   ![](image)

   **Figure 52: Elevator Air Control Location**

5. Set the header height so that the pickup spring will be one to two inches above the soil.

6. Engage the PTO and set combine speed at 100% (790 RPM tractor PTO output). Refer to “PTO Speed Adjustment” in Chapter 5, **Controls and Adjustments** for more information.

Ground Speed

It’s important to be cautious and aware of the combine’s performance at the start of the day. That is the time when worn, damaged, or failed components are more likely to become apparent.

**Note:** The combine will usually work the hardest at the beginning of each day. The crop conditions you ended with on the previous day usually take far less threshing energy than what the next morning’s crop may require.

The AR2200 is a high capacity machine, but it’s best to start conservatively and slowly increase ground speed to the desired performance level.

In most scenarios start ~1 gear higher than other combines. Make small incremental ground speed adjustments from that point.

1. Move forward and harvest for 50 yards.

   ![DANGER]

   **DANGER**

   ALWAYS stop the combine, set the parking brake, shut the tractor motor off and remove the key before you leave the tractor for any reason.

   ![CAUTION]

   **CAUTION**

   It is important to perform checks for proper operation.

   To skip this step puts the combine at risk for machine damage and you at risk for personal injury.

   2. Stop and check for proper operation. Refer to “Proper Operation” at the end of this section.

   3. Make any necessary adjustments.

   4. Run the combine down the windrow approximately another 50 yards and check performance again.
Operating Procedure (cont.)

5. Set the controls as desired and continue to the end of the row.

6. Harvest the first few baskets of peanuts at moderate speed to become accustomed to the machine.

DANGER

Contact with an obstruction or high voltage power line could result in death or serious personal injury.

Check overhead clearance to make sure no power lines, overhead limbs, or any other obstructions exist.

The combine is 14’-11" high and with the conveyor extended stretches up to 27’-9" wide.

NOTICE

The offloading operation requires COMPLETE operator attention. It may be best to REDUCE ground speed when offloading.

7. Always check for proper clearance above and around machine before offloading.
Proper Operation

Important! Make these following checks once your combine has been put into operation:

### AR2200 COMBINE SETTING GUIDE

<table>
<thead>
<tr>
<th>VINE CONDITIONS</th>
<th>GREEN (TOUGH)</th>
<th>NORMAL</th>
<th>DRY (BRITTLE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTO RPM</td>
<td>820</td>
<td>790</td>
<td>770</td>
</tr>
<tr>
<td>GROUND SPEED</td>
<td>&lt;1.0 MPH</td>
<td>2.0 MPH</td>
<td>&gt;3.0 MPH</td>
</tr>
<tr>
<td>OVERHEAD TEETH</td>
<td>100% ENGAGED</td>
<td>50% ENGAGED</td>
<td>0% ENGAGED</td>
</tr>
<tr>
<td>TAIL BOARD</td>
<td>50% UP</td>
<td>75% UP</td>
<td>100% UP</td>
</tr>
<tr>
<td>ROTOR DISCHARGE BOARD</td>
<td>0% DOWN</td>
<td>25% DOWN</td>
<td>50% UP</td>
</tr>
<tr>
<td>CLEANING AIR</td>
<td>Position 5-7</td>
<td>Position 6-8</td>
<td>Position 8-10</td>
</tr>
</tbody>
</table>

**BEHIND COMBINE**

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>PEANUTS ON VINE</th>
<th>PEANUTS OFF VINE IN HAY</th>
<th>HULLS</th>
<th>VINE KNOTS</th>
<th>L.S.K.</th>
<th>STICK TRASH</th>
<th>LIGHT TRASH</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTO RPM</td>
<td>INCREASE</td>
<td>DECREASE</td>
<td>DECREASE</td>
<td>INCREASE</td>
<td>DECREASE</td>
<td>DECREASE</td>
<td>INCREASE</td>
</tr>
<tr>
<td>GROUND SPEED</td>
<td>DECREASE</td>
<td>DECREASE</td>
<td>INCREASE</td>
<td>DECREASE</td>
<td>INCREASE</td>
<td>DECREASE</td>
<td>DECREASE</td>
</tr>
<tr>
<td>OVERHEAD TEETH</td>
<td>INCREASE</td>
<td>NO ADJUSTMENT</td>
<td>DECREASE</td>
<td>INCREASE</td>
<td>DECREASE</td>
<td>DECREASE</td>
<td>DECREASE</td>
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<tr>
<td>TAIL BOARD</td>
<td>NO ADJUSTMENT</td>
<td>INCREASE</td>
<td>NO ADJUSTMENT</td>
<td>NO ADJUSTMENT</td>
<td>NO ADJUSTMENT</td>
<td>DECREASE</td>
<td>NO ADJUSTMENT</td>
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<tr>
<td>ROTOR DISCHARGE BOARD</td>
<td>INCREASE</td>
<td>INCREASE</td>
<td>NO ADJUSTMENT</td>
<td>DECREASE</td>
<td>DECREASE</td>
<td>DECREASE</td>
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</tbody>
</table>

**ELEVATOR AIR**

<table>
<thead>
<tr>
<th>SPOT CHECK AREAS</th>
<th>FRONT TEETH</th>
<th>ROCKET TEETH</th>
<th>HEADER SPEED (IF PEANUTS ARE UNDER HAY)</th>
<th>BELT TENSIONS (IF BLOCKAGE)</th>
<th>FRONT TEETH</th>
<th>ROCKET TEETH</th>
<th>BELT TENSIONS (IF BLOCKAGE)</th>
<th>FRONT TEETH</th>
<th>DUCTWORK</th>
<th>BELT TENSION</th>
<th>ROCKET CONCANGE</th>
<th>SEP DRIVE</th>
<th>C. FAN BELT</th>
<th>G. FAN BELT</th>
<th>C. FAN DUCTWORK</th>
<th>C. FAN BLADES</th>
<th>STEMMER SAW</th>
<th>FOR BLOCKAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLEANING AIR</td>
<td>DECREASE</td>
<td>DECREASE</td>
<td>NO ADJUSTMENT</td>
<td>NO ADJUSTMENT</td>
<td>NO ADJUSTMENT</td>
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<tr>
<td>ELEVATOR AIR</td>
<td>NO ADJUSTMENT</td>
<td>NO ADJUSTMENT</td>
<td>NO ADJUSTMENT</td>
<td>NO ADJUSTMENT</td>
<td>NO ADJUSTMENT</td>
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</tbody>
</table>

**Note:** These cards are available in the AMADAS AR2200 Peanut Combine accessory case.
### AR2200 Shaft Speeds at 100%

<table>
<thead>
<tr>
<th>Shaft Description</th>
<th>Speed (RPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTO</td>
<td>790</td>
</tr>
<tr>
<td>Tongue Jackshaft</td>
<td>790</td>
</tr>
<tr>
<td>Main Jackshaft</td>
<td>592</td>
</tr>
<tr>
<td>Front Shaker Shaft</td>
<td>175</td>
</tr>
<tr>
<td>Rear Shaker Shaft</td>
<td>175</td>
</tr>
<tr>
<td>Rotor Drive Shaft</td>
<td>282</td>
</tr>
<tr>
<td>#1 Preconditioning</td>
<td>104</td>
</tr>
<tr>
<td>#2 Preconditioning</td>
<td>139</td>
</tr>
<tr>
<td>Accel Rotor</td>
<td>174</td>
</tr>
<tr>
<td>Cleaning Fan</td>
<td>1316</td>
</tr>
<tr>
<td>Elevator Fan</td>
<td>2314</td>
</tr>
<tr>
<td>Disc Separator Shafts</td>
<td>200</td>
</tr>
<tr>
<td>#1 Stemmer</td>
<td>202</td>
</tr>
<tr>
<td>#2 Stemmer</td>
<td>250</td>
</tr>
<tr>
<td>Collection Auger</td>
<td>102</td>
</tr>
<tr>
<td>Vine Spreader</td>
<td>179</td>
</tr>
</tbody>
</table>
4. Off-Loading Conveyor System

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Before Using the Off-Loading Conveyor System

Your AMADAS AR2200 is equipped with the Off-load Conveying System (OCS) and comes with an unloading conveyor. The conveyor operates as follows:

- The conveyor is controlled by two tractor remotes, one to extend and store the conveyor, and one to power it.

- A container is placed underneath the conveyor whenever it is turned on.

  Note: Running the conveyor without a container will cause you to dump product on the ground.

Conveyor Safety

⚠️ DANGER

Contact with an obstruction or high voltage power line could result in death or serious personal injury.

Check overhead clearance and around combine, to make sure no power lines, overhead limbs, or any other obstructions exist.

The combine is 14'-11" high. With the conveyor fully extended, the AMADAS AR2200 stretches up to 27'-9" wide.
Before Using the Off-Loading Conveyor System (cont.)

DANGER

To prevent death or serious personal injury NEVER drive on roads with the conveyor extended.

Always make sure the conveyor is in stowed position on the conveyor rest before taking it on a road.

Be aware of the length of the conveyor when traveling. Even when in the stored position, the conveyor extends several feet past the rear of the combine and presents a substantial hazard for hitting obstructions.

It is important to remember the following safety items when your combine is equipped with the OCS option:

- Always keep in mind the length of the conveyor and how far out it extends, even when in the stored position.
- Be careful when backing the combine, as the conveyor extends several feet past the rear of the combine.
- When not using the conveyor, retract it into the stowed position. Make sure the conveyor is in place on the conveyor rest.
- Always make sure the conveyor is in the stowed position when you drive it on a road.
Using the Conveyor

The OCS system requires that your tractor be equipped with at least five remotes. Three are required to operate your Off-load Conveyor System.

- One to position the conveyor in the offloading position.
- One to operate the unloading augers and conveyor.
- One to raise the basket for clean out and maintenance.

NOTICE

An OCS system equipped AR2200 will not function properly unless your tractor’s hydraulic pump capacity is at least 35 GPM @ 2500 PSI.

Maximum harvesting performance requires at least 40 GPM @ 2500 PSI pump flow.

For proper peanut flow:

NOTICE

- Do NOT exceed a rate of 20 gallons/minute hydraulic flow to the OCS system.
- Make certain the shaft speed remains consistent at 250 RPM. Higher speeds result in shelling and may damage hydraulic motor seals.
- If possible, make sure the return line is connected to the direct-to-tank port.
- If properly set peanut flow is as follows:

Charging the OCS Hydraulics

1. Refer to the safety information at the beginning of this chapter when operating your conveyor.
2. Connect the OCS hydraulic hoses to your tractor hydraulics.
3. Operate the remote for the swing out cylinder until all air has been removed from the system.
4. Put the conveyor in the storage position.
5. Check your tractor’s hydraulic oil level.
6. Fill to required level if necessary.

WARNING

Escaping fluid or spray under pressure can penetrate the skin causing serious injury.

- Read “Avoid High Pressure Fluids” in Chapter 1. Safety.
- Relieve pressure before disconnecting hydraulic lines.
- Tighten all connections before applying hydraulic or spray pressure.
- Use the Hose ID Chart to identify hydraulic hose connections.
**Conveyor Tracking**

Check conveyor tracking by having the operator engage the tractor remotes. Observe the tracking of the belt at both the head and tail pulley. The conveyor belt should be running centered to pulleys. A deviation of +/- 3/4" is the allowable limit.

To adjust the tracking:

1. Locate the tracking rod at the lower end of the conveyor.

2. Extend the rod to push the belt away from that side or shorten the rod to bring closer.

3. Adjust the tension rods on each side at the upper end of the conveyor if the tracking rod adjustment is not enough to correct.

---

**WARNING**

Serious personal injury can result from making adjustments while on the conveyor.

NEVER use the conveyor as a means of access.

Use a ladder or other safe means to access the tension rods.

STOP the conveyor. Make minor adjustments then engage the conveyor and observe the results.

---

**Figure 53: Tracking Rod Location**

**Figure 54: Tension Rod Location**
**Conveyor Maintenance**

**Lubrication:**

Lubricate grease points weekly. One or two pumps at each point is sufficient.

- Grease bearings on each side of the top end and bottom end of the conveyor.

**Inspection:**

**Daily:**

- Clean area around infeed hopper bearing and wear plate.

**Weekly (for signs of excessive wear):**

- Inspect infeed hopper bearing and wear plate.

- Inspect the three guide wheels around the edge of infeed hopper.

- Inspect the conveyor belt and tracking. If adjustments are necessary, refer to the ‘Conveyor Tracking Section’ in this chapter.
Using the Basket

Adjusting peanut off-load flow rate

Auger shields are assembled at the factory in the lowest position to decrease shelling.

The following may increase peanut flow rate:

- Raise the auger shields outside the basket and at the conveyor end.

- Adjust the infeed hopper deflector shields inside the basket.
Using the Basket (cont.)

To prevent shelling:

- Adjust elevator air flow to minimum required to fill conveyor hopper.

![Elevator Fan Control]

**Figure 64: Elevator Air Adjustment**

**Important!** To prevent peanut loss do not overfill basket. Monitor the highest row of bin side slots. The peanut depth will most rapidly fill in that region.

**Note:** It is not necessary to fill the basket completely to start offloading.

To achieve maximum harvesting efficiency, it may benefit to offload product whenever time is available.
Basket Maintenance

**Lubrication:**
- Grease basket pivot point two pumps weekly.

![Basket Pivot Point Grease Location](image1)

- Grease on hydraulic arm pivot point two pumps weekly.

![Hydraulic Arm Pivot Point Grease Location](image2)

**Inspection:**
- Inspect infeed hopper deflector shields weekly for excessive wear.

![Infeed Hopper Deflector Shields](image3)

- Check tightness of swing cylinder lug mounting bolts. Torque to 212 ft/lb.

![Swing Cylinder Mounting Bolts](image4)
Basket Covers

Basket covers may be removed to gain access to the interior of the basket.

Figure 69: Basket Cover Bolt Locations

Basket Safety Strut

Death, or serious personal injury could result if the basket were to fall.

ALWAYS install the basket safety strut over the hydraulic cylinder before working around or under the raised bin.

Always use the basket safety strut as intended before checking or working around the open bin.

Important! Basket must be empty.

1. Lift basket using appropriate remote.

Figure 70: Basket Safety Strut in Stowed Position

2. Rotate basket safety strut into locked position shown in Figure 71.

Figure 71: Basket Safety Strut in Locked Position
**OCS Troubleshooting**

---

**DANGER**

ALWAYS stop the combine, set the parking brake, shut the tractor motor off and remove the key before you leave the tractor for any reason.

---

**If the conveyor is not working correctly:**

1. Make sure sufficient hydraulic oil is available in your tractor hydraulic reservoir.

2. Make sure all quick disconnects on conveyor hoses are properly connected. Refer to Figure 72 below for location.

3. Change conveyor hoses to another tractor remote that is functioning properly.

   If the conveyor operates properly, then the remote is the problem. Contact your tractor dealer for service to the tractor.

4. Check for a foreign object (e.g., rock, etc.) under the conveying augers.

   If an auger is stalled, the conveyor will also stall.

5. Check for bridging of material at the point where material is emptied from the basket onto the augers.

   Dislodge any packed material and check for foreign objects.

---

**Figure 72: Conveyor Quick Disconnects Location**
NOTES:
5. Controls and Adjustments

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## Overview

The AMADAS AR2200 Peanut Combine performs efficiently over a wide range of peanut varieties and windrow conditions with only a few changes required in operational controls.

To maximize combine performance there are primarily two major areas to consider for adjustment.

- Threshing
- Separation

Some controls and adjustments MAY affect both areas.

### WARNING

Serious personal injury can result from making adjustments while the combine is running.

NEVER make adjustments to the harvesting controls while the combine is running.

Once the controls and adjustments are set for average conditions, adjusting the ground and PTO speed is usually adequate for efficient performance (when harvesting peanuts of similar varieties under similar conditions).

### NOTICE

IMPORTANT! Make only one adjustment at a time between performance checks.

This will allow you to determine which adjustment is actually improving the combine’s performance.
Control Locations

Figure 73: Control Locations
Controls and Adjustments

Adjustable Overhead Teeth

The adjustable overhead teeth handle controls the degree of aggressiveness of the overhead spring tooth bar.

Most crop conditions other than very green, tough vines will not require the use of overhead teeth.

Engaging the overhead teeth helps clean wrapped vines from the #1 preconditioning cylinder increasing the combine’s throughput.

Always start with the control handle in the disengaged position. Make adjustments as follows:

- If the vines are green and/or tough, engage the overhead teeth to reduce vine wrapping potential.

- If you notice excessive shelling from the rear combine discharge and no vine wrapping is present disengage the overhead teeth.

Figure 74: Overhead Teeth Control
**Rotor Discharge Board Adjustment**

The rotor discharge boards control the retention time of material in the dual rotors.

Most crop conditions will favor the boards in their lowest position.

Raise or lower the boards to aid in achieving maximum performance if the following conditions are present:

- If the vines are very “brittle” the boards may be raised to keep threshed, loose pods from being discharged out of the dual rotors.

  **Note:** Be aware that this can also cause additional material to enter the disc separator system.

- In “tough” conditions the boards may be raised to allow more time for the pods to be fully threshed from the vines.

  **Note:** Be aware that this may cause congestion in the precondition chamber.

- If twisted, knotted vines are present behind the combine the boards may be lowered.

Access boards under the rear hood, directly behind the disc separator. Use a 9/16” wrench or socket to adjust. Refer to Figure 75.

There are two independent rotor discharge boards for the left and right rotor. Adjust ONE board at a time. Observations can be made between the two dual rotors.
Cleaning Air Control

The AR2200 combine does not require as much separation air as older, conventional machines.

**WARNING**

Serious personal injury can result from making adjustments while the combine is running.

NEVER make adjustments to the harvesting controls while the combine is running.

Set the cleaning air control as follows:

- For average conditions set the cleaning air control handle at the 1/3 open position.

To make adjustments:

- Set the air higher than needed and then adjust it back until no good peanuts are being blown out the back of the machine.

**Note:** If the air is set too low, proper separation will not occur and peanuts may ride over the disc separator with the vines.

- Open the cleaning air control handle more to remove pods containing small shriveled peanuts.

Always operate with the cleaning air control set no higher than necessary to save all peanuts of value while still providing a clean sample.

10-0” The maximum opening of the air fan door should be at least 10-0”.

**Figure 76: Cleaning Air Control**

**Figure 77: Cleaning Air Fan Door**
Tailboard Adjustment

The tailboard affects the flow of material from the stemmer bottom out the back of the combine. Raising the tailboard makes it harder to blow material out of the stemmer bottom, while lowering the tailboard makes it easier.

Figure 78: Tailboard Location

Under normal conditions, set the tailboard in the 3/4th raised position (the top of the tailboard is midway the disc separator shaft).

Usually, the tailboard is adjusted only if the cleaning air or other adjustments do not produce the desired response. If adjustments are needed, make them as follows:

- Use a 7/16 wrench to loosen the seven 1/4" fasteners and evenly raise or lower the tailboard across the width of the machine.

Figure 79: Tailboard Fasteners Location

- Raise the tailboard in wet or heavy vines where more cleaning air is needed. This allows the use of more cleaning air by making it more difficult to blow good peanuts out of the stemmer bottom. Raising the tailboard increases agitation of the material load on the disc separator to aid in separation.

Note: Raising the tailboard in fields where heavy foreign material exists (stones, melons, wood, etc.) increases the chance for the foreign material to get into the bin.

- Lower the tailboard in very dry conditions. If dry, brittle vines are getting shredded up into small sticks that can penetrate the disc separator openings, lower the tailboard to make it easier to blow this light, small trash out of the stemmer bottom.
Elevator Air Control

As part of the “Peanut Tech” package, the elevator air is controlled by the in-cab display that has a position indicator. Refer to Chapter 8. “Peanut Tech” Monitoring and Control.

The elevator air control is normally set so that peanuts are conveyed about 3/4 of the way across the bin. For maximum performance apply only as much air as necessary to fully fill the basket.

Make adjustments as follows:

- Raise the air if peanuts are very dirty or high yield.
  
  **Note:** Excessive airflow will cause LSKs.

- Lower the air if peanuts are very light/fragile or dry.

- Lower the air if LSKs or empty hulls are in the bin.
  
  **Note:** Too low a setting can block the elevator air system.

Fixed Position Elevator

The elevator damper may be manually set and fixed into position with a 5/16th nut if the actuator fails or the operator wishes to set the controls in a locked position.

**Note:** If this is done unplug or unbolt the actuator from the elevator damper.

---

**Note:** On a new machine, or one that has been sitting idle, some LSKs may be seen in the basket due to roughness in the air ducts. Once the air ducts smooth out, the number of LSKs should decrease.

**Note:** If the elevator actuator is replaced the system must be recalibrated. For calibration information refer to Chapter 8. “Peanut Tech” Monitoring and Control.
Fixed Bar Header Pickup Speed Control

Pickup header speed is controlled by your tractor’s hydraulic remote setting. This all new pickup design features a camless style design.

Set the header speed so that the header picks up the windrow completely as the combine travels down the field. If the header is too slow, it will push the vines before adequate lift is achieved, causing peanut loss. If operated too fast, the windrow will pull apart before entering the combine and loss could also occur.

Dry vines typically require lower pickup speeds than green vines.

If the windrows have excessive dirt, increase the header speed slightly to help dirt removal before it enters the machine.

WARNING

Serious personal injury can result from working with hot oil.

Do NOT work on hydraulic system if oil temperature exceeds 100°F.

Before working with hydraulics, read hydraulics warning in Chapter 1. Safety.
Remote Auger Reverse

Remote reversing auger and header speed control are standard features built into the hydraulic package on the AMADAS AR2200.

The remote auger reverse system consists of a bi-directional hydraulic motor and a one-way reversing clutch.

When the header is reversed by the hydraulic remote the one-way clutch free wheels, stopping the pickup while the auger reverses allowing material to be discharged from the header.

**NOTICE**

Failure to grease the header reversing clutch may cause damage to the header pickup.

**DANGER**

NEVER remove material from the header/auger while the tractor engine and combine are running.

ALWAYS stop the combine, set the parking brake, shut the tractor motor off, and remove the key before unclogging any part of the combine.
PTO Speed Adjustment

Proper PTO speed is essential to efficient operation. PTO speed functions as follows:

A combine speed monitor, which monitors combine speed from the tractor cab, is included with the tech package and should be mounted in the tractor. Refer to Chapter 8. “Peanut Tech” Monitoring and Control for details.

The combine speed monitor measures combine speed as a percentage of machine design speed.

A magnetic pickup assembly senses combine speed. This pickup reads a disc separator and should be adjusted to have a clearance of approximately 1/16” or less between the ring tooth and sensor head.

**NOTICE**

Make sure that the tone ring never actually contacts the pickup. This may cause the pickup to be damaged and rendered inoperable.

The AMADAS AR2200 is designed to operate with 790 PTO RPM input, so the tractor will not be required to run at its full “PTO speed”.

At machine design speed, the tractor PTO output should be 790 RPM and the combine speed monitor should read 100%.

Consistent combine speed is important for the best harvesting performance. If the combine speed fluctuates, check the combine drive belts and tractor PTO system for the source of problem.
PTO Speed Adjustment (cont.)

The normal operational range of the combine is 90% to 110% of the design speed as shown on the digital speed indicator. The tractor PTO should operate from 710 RPM (90%) to 870 RPM (110%).

Note: If the PTO speed drops below 85% or goes past 110% an alarm will sound.

- For very dry peanuts, reduce the combine speed to below 100% to aid in performance.

  Note: Cleaning air and elevator air may need to be increased to maintain performance.

- For tough or wet conditions, raise the combine speed over 100% to increase aggressiveness and aid in performance.

  Note: To avoid loss or damage cleaning and elevator air may need to be lowered.

For more information, see instructions in Chapter 10. "Peanut Tech" Monitoring and Control.

**NOTICE**

Serious machine damage **WILL** result if you exceed 110% of the design speed. **NEVER** exceed 110% of the design speed.
Pickup Header Height Adjustment

The pickup header height is controlled with a pair of hydraulic lift cylinders.

Adjust the assigned tractor remote to slowly and smoothly pickup and lower the header.

**NOTICE**

Too high a flowrate will cause small header adjustments to be abrupt, potentially causing damage to the combine and/or tractor.

Operate the header low enough to pick up all the vines in the windrow, but high enough to allow dirt clods, soil, and other debris to fall out. This reduces the amount of foreign material entering the combine.

**NOTICE**

To reduce excessive wear, avoid dragging pickup teeth in the soil.
Header Auger Adjustment

The header auger is manually height adjustable. It can be raised or lowered to help feeding in varied crop conditions. The header auger adjustment functions as follows:

- If the header stalls often (but the hydraulic system is operating properly), the header auger may need to be raised for additional crop clearance.

- Raise the auger until the finish of the auger has become polished, when the machine is new, for less resistance moving the crop.

- Under normal conditions, the header auger is set in the middle of overall adjustment

- Use the adjustable bearing mount plates on each end of the header to make adjustments.

- The auger height is adjusted by loosening the four outer bolts holding the bearing mount plate and then turning the top mounted adjuster screw to raise or lower the auger.

**Figure 86: Adjustable Bearing Mount Plate**

**Note**: It is important to keep the header auger level, so both ends should be adjusted to the same relative position.

- Make sure all bolts are retightened after the adjustments are made.
**Rotor Speed Adjustment**

The AMADAS AR2200 is equipped with two main dual rotors. These rotors are mechanically driven by a tractor PTO.

The dual rotor speed is directly related to combine speed.

<table>
<thead>
<tr>
<th>Combine Speed</th>
<th>Dual Rotor RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>90%</td>
<td>254</td>
</tr>
<tr>
<td>100%</td>
<td>282</td>
</tr>
<tr>
<td>110%</td>
<td>310</td>
</tr>
</tbody>
</table>

By design, adjustment of combine speed also automatically adjusts dual rotor speed.

Both dual rotors are equipped with speed sensors on the tail shafts. The sensors allow the operator to be aware of any mechanical malfunction of the main threshing system (dual rotors).

The onboard display will alarm the operator if the combine speed does not match either or both dual rotor speeds.

An alarm can indicate a problem with:

- Main drive belts (left or right side) slippage.
- Dual rotor gearbox damage
- Dual rotor driveshaft damage
- Dual rotor speed sensor misadjustment or damage.
- Stalled dual rotors
Variable Pitch Vine Spreaders

In certain conditions, or with certain headers, the standard vine spreader setup may throw vines too far and onto unharvested rows.

To help reduce this problem, a set of variable pitch flails has been designed.

To make adjustments, remove the inner flail mounting bolt and rotate the flail around the outer bolt as shown in the diagram.

- **Medium throw** reduces vine travel 1 to 2 feet each side.
- **Short throw** reduces vine travel 2 to 3 feet each side.

Figure 87: Vine Spreaders
6. Performance

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**Fine Tuning Operation**

This chapter describes ways you can fine tune your combine’s performance. Also refer to Chapter 7, *Controls and Adjustments*, for more information on fine tuning your combine using the combine’s standard controls.

Be sure to refer to Chapter 3, *Safety* and follow all safety guidelines when working on the combine.

---

**DANGER**

MOVING PARTS HAZARD

To prevent serious injury or death when performing maintenance on this machine:

- Put the tractor in park.
- Shut off the engine.
- Remove the key.

---

Figure 88: AR2200 Advanced Rotary Peanut Combine
Achieving Maximum Ground Speed

Moisture, dirt clods, grass, weeds, peanut maturity, yield, stem characteristics, vine type and many other variables determine the most efficient ground speed.

If maximum ground speed is desired:

1. Shift the tractor into the next higher gear.

2. Operate machine for 50-70 yards and check for harvesting loss.

3. Continue to increase tractor ground speed by shifting to the next higher gear speed if the performance check shows the machine performed satisfactorily at the last speed tried.

   **Note:** The header auger may be subject to clogging at higher ground speed. Be sure the elevator air is sufficient to elevate increased peanut volume.

4. When performance deteriorates, incomplete threshing, or excessive separator loss is seen, drop back to the next lower gear selection that offered satisfactory performance. This is the maximum efficient ground speed for existing conditions.

   **Note:** Normally the cleaning air system is unaffected by the other components of the machine. If you experience peanut loss, determine whether the loss is resulting from the cleaning air systems or the dual rotor cylinder section before adjusting the cleaning air controls. Refer to Chapter 7. Controls and Adjustments.
Increasing Separating Capacity

The separating capacity can be increased by more aggressively engaging the overhead teeth or increasing the tractor PTO speed.

Note: Each of these adjustments increases aggressiveness and may cause some shelling. You must decide if higher capacity is worth a possible increase in shelling.

The best separating efficiency can typically be achieved when peanut kernel moisture is 14% to 20%.

Making Adjustments:

1. Start with the overhead teeth. Engage in 1” increments. If fully engaged and separation is still not sufficient go to the next step.

2. Increase PTO speed in 2% to 3% increments. If separation is still incomplete go to the next step.

3. Begin raising the rotor discharge boards one at a time in 1/2” increments.

DANGER

MOVING PARTS HAZARD

To prevent serious injury or death when performing maintenance on this machine:

• Put the tractor in park.
• Shut off the engine.
• Remove the key.

NOTICE

IMPORTANT: Make only one adjustment at a time between performance checks.

This will allow you to determine which adjustment is actually improving the combine’s performance.

NOTE

Serious machine damage WILL result if you exceed 110% of the design speed.

NEVER exceed 110% of the design speed.
Harvesting Under Wet Conditions

More aggressive combine settings are typically needed in wet conditions.

If water droplets are present on or under peanut vines when harvested, the surfaces of all components in the combine can become coated in a layer of material composed of soil and vine fiber.

Proceed at a ground speed lower than normal if it is not possible to lift the windrows or wait until they dry before harvesting.

Check stemmer saws, elevator air ducts, and other surfaces subject to material coating frequently for residue buildup.

After harvesting peanuts where buildup occurs, it is important to:

1. Clean the stemmer saw with a wire brush and scrape out the stemmer bottom.
2. Remove the elevator duct work and clean thoroughly to remove buildup.
3. Clean the collection shaker pans.
4. Remove the inspection cover located under the first few disc separator shafts. Use a flashlight and visibly inspect the area in front of and around the first disc separator shaft (front shaft). If any debris is present, thoroughly clean this area.
   Note: A long stick with a hook or compressed air is helpful in this step.
5. Replace inspection cover when finished.

Important! Failure to keep this area clean will adversely affect peanut separation.
## Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good peanuts attached to vines being discharged from combine.</td>
<td>Main drive belt slips under surge loads.</td>
<td>Tighten belt and reduce ground speed.</td>
</tr>
<tr>
<td></td>
<td>Combine not at or near design speed.</td>
<td>Adjust RPMs and observe combine speed monitor.</td>
</tr>
<tr>
<td></td>
<td>Ground speed too fast for conditions.</td>
<td>Shift tractor into a lower gear.</td>
</tr>
<tr>
<td></td>
<td>Moisture level in windrows is too high.</td>
<td>Lift windrows and/or wait for moisture to dissipate.</td>
</tr>
<tr>
<td></td>
<td>Adjustable overhead teeth not engaged enough.</td>
<td>Engage overhead teeth slightly (in 1” increments).</td>
</tr>
<tr>
<td>Loose peanuts being discharged from dual rotors.</td>
<td>Combine PTO not at or near design speed.</td>
<td>Adjust and observe combine speed monitor.</td>
</tr>
<tr>
<td></td>
<td>Ground speed too high for conditions.</td>
<td>Shift tractor to lower gear.</td>
</tr>
<tr>
<td></td>
<td>Rotor discharge boards too low.</td>
<td>Raise rotor discharge boards in 1/2” increments.</td>
</tr>
<tr>
<td>Good peanuts being discharged over disc separator.</td>
<td>Ground speed too high for conditions.</td>
<td>Shift tractor to lower gear.</td>
</tr>
<tr>
<td></td>
<td>Cleaning air control improperly set.</td>
<td>Lower air setting if peanuts are being blown out. Raise air setting if peanuts are riding out in the vines/hay.</td>
</tr>
<tr>
<td></td>
<td>Combine settings are not aggressive enough.</td>
<td>Engage overhead teeth (1” increments).</td>
</tr>
<tr>
<td>Lightweight foreign material in bin.</td>
<td>Main drive belt slips under surge loads.</td>
<td>Tighten belt and reduce ground speed.</td>
</tr>
<tr>
<td></td>
<td>Combine PTO not at or near design speed</td>
<td>Adjust and observe combine speed monitor.</td>
</tr>
<tr>
<td></td>
<td>Cleaning air control set too low.</td>
<td>Adjust to a higher setting</td>
</tr>
<tr>
<td></td>
<td>Separator section drive or cleaning air control air drive belts are slipping.</td>
<td>Tighten belts.</td>
</tr>
<tr>
<td></td>
<td>Stemmer bottom is blocked by trash</td>
<td>Clean foreign material out of stemmer bottom.</td>
</tr>
<tr>
<td>Problem</td>
<td>Cause</td>
<td>Correction</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>Lightweight foreign material in bin. (cont.)</td>
<td>Moisture level in windrows too high.</td>
<td>Lift windrows and/or wait for moisture to dissipate.</td>
</tr>
<tr>
<td>Rotor discharge board too high.</td>
<td>Lower boards in 1/2&quot; increments.</td>
<td></td>
</tr>
<tr>
<td>Cylinders are wrapping in tough, green conditions</td>
<td>Engage overhead teeth</td>
<td></td>
</tr>
<tr>
<td>Main drive belt slips under surge.</td>
<td>Tighten belts.</td>
<td></td>
</tr>
<tr>
<td>Excessive amounts of LSKs in bin.</td>
<td>Combine PTO over design speed.</td>
<td>Adjust and observe combine speed monitor.</td>
</tr>
<tr>
<td>Moisture content in peanuts too low.</td>
<td>Minimize aggressive settings, reduce combine RPM. Increase to a higher tractor gear and ground speed if needed.</td>
<td></td>
</tr>
<tr>
<td>Moisture level in windrows too high.</td>
<td>Lift windrows or wait for moisture to dissipate.</td>
<td></td>
</tr>
<tr>
<td>Obstruction in elevator air duct.</td>
<td>Shut off tractor, disassemble duct and remove obstruction.</td>
<td></td>
</tr>
<tr>
<td>Very dry harvest conditions.</td>
<td>Decrease aggressive settings, increase ground speed. Decrease PTO if necessary.</td>
<td></td>
</tr>
<tr>
<td>Windrows have been run over and the peanuts shell easily.</td>
<td>None.</td>
<td></td>
</tr>
<tr>
<td>Elevator air set too high.</td>
<td>Lower elevator air setting.</td>
<td></td>
</tr>
<tr>
<td>Peanuts cannot be blown into basket.</td>
<td>Excessive dirt in windrow.</td>
<td>Reshake windrow.</td>
</tr>
<tr>
<td>Pickup header is being operated too low.</td>
<td>Raise header so that spring tips run just above the ground.</td>
<td></td>
</tr>
<tr>
<td>Combine PTO not at or near design speed.</td>
<td>Adjust and observe combine speed monitor.</td>
<td></td>
</tr>
<tr>
<td>Main drive or cleaning air belts are slipping.</td>
<td>Tighten belts and check elevator fan belt and V-sheave for wear.</td>
<td></td>
</tr>
<tr>
<td>Ground speed too fast for conditions.</td>
<td>Shift tractor into a lower gear.</td>
<td></td>
</tr>
<tr>
<td>Problem</td>
<td>Cause</td>
<td>Correction</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>Peanuts cannot be blown into basket. (cont.)</td>
<td>Obstruction in elevator air duct.</td>
<td>Inspect duct and remove obstruction.</td>
</tr>
<tr>
<td></td>
<td>Elevator fan or main drive belts are slipping.</td>
<td>Tighten belts and check the elevator fan belt and V-sheave for wear.</td>
</tr>
<tr>
<td></td>
<td>Combine PTO not at or near design speed.</td>
<td>Adjust and observe combine speed monitor.</td>
</tr>
<tr>
<td></td>
<td>Animals have built nests in high pressure section of elevator system.</td>
<td>Remove inspection door in jet tunnel and remove nest.</td>
</tr>
<tr>
<td>Tractor PTO load excessive.</td>
<td>Tractor PTO not at or near design speed.</td>
<td>Adjust and observe combine speed monitor.</td>
</tr>
<tr>
<td></td>
<td>Ground speed too fast for conditions.</td>
<td>Shift tractor into a lower gear.</td>
</tr>
<tr>
<td></td>
<td>Threshing chamber jammed.</td>
<td>Stop, shut off tractor, and remove excess material.</td>
</tr>
<tr>
<td>Hay is torn up excessively under dry conditions.</td>
<td>Adjustable overhead teeth set too aggressively.</td>
<td>Disengage overhead teeth in 1&quot; increments between checks.</td>
</tr>
<tr>
<td></td>
<td>Rotor discharge board set too high.</td>
<td>Lower rotor discharge board in 1/2&quot; increments.</td>
</tr>
<tr>
<td></td>
<td>Combine is being operated above suitable PTO speed level.</td>
<td>Reduce combine speed to lower speed level.</td>
</tr>
<tr>
<td></td>
<td>Very dry harvest conditions.</td>
<td>Disengage aggressive overhead settings, increase ground speed and decrease PTO if necessary.</td>
</tr>
</tbody>
</table>

**Note:** For OCS troubleshooting refer to Chapter 4. *Off-Loading Conveyor System.*
7. Maintenance

- Belt Adjustment .................................................. 94
- Chain Adjustment .............................................. 96
- Lubrication .......................................................... 97
  - PTO and Driveline .............................................. 98
- Schedule & Lubricants ............................................ 99
- Lubrication Locations ........................................... 101
- Post Season Maintenance ....................................... 102
- Tire & Wheel Fasteners Torque ............................... 103
Belt Adjustment

V-belt drives power the fans, separating section, and stemmer saws. The belts also transmit power from the PTO input gearbox to the main jackshaft.

Important! Properly maintaining the belts is essential to ensure efficient machine operation.

Some drive belts are equipped with automatic tensioners. Check and adjust the belts as follows:

1. Make sure the tractor engine is shut off.
2. Open shields covering drive belts. Latch shields open.
3. Check belts and sheaves for wear. Replace if necessary.
4. Check the main drive belt in the middle. There should be no more than 1/2” deflection.

![Figure 91: Access Drive Belts](image)

5. Adjust the main drive belts, if necessary, as follows:

Refer to Figure 92 and Figure 93.

a. Locate the tensioner on the left side of the combine.

b. Use the wrench, part number 63190 attached to the machine, to loosen the hex bolt at the center of the tensioner.

c. Rotate the tensioner until the roller contacts the main drive belt as shown in Figure 93.

d. Use the other end of the wrench, to turn the tensioner three ratchet clicks and advance the pawl approximately 22 degrees.

Note: One click advances the pawl along one tooth of the ratchet.

e. Tighten the hex bolt securely 330 ft/lbs to fix the tensioner in place.

f. Repeat steps 5.b. through 5.e. on the right side.
Belt Adjustment (cont.)

Figure 92: Left Side Tensioning System

**CAUTION**

CRUSH HAZARD

Tensioner can contain Stored energy.
Stop engine and remove key before adjusting or cleaning.

**DANGER**

Death or serious personal injury may result if shields are not in place.
Replace all shields before starting operation of combine.

6. Make sure that idlers are aligned and fasteners are tight.
7. Replace shields before operating the machine.

Figure 93: Belt Adjustment
Chain Adjustment

The chain drives must be properly maintained for the combine to function correctly.

**Important!** Proper chain alignment and tension are very important.

To check and adjust the chains:

1. Make sure the tractor engine is shut off.
2. Open the shields which cover the chains.
3. Check chains and sprockets for wear. Replace if necessary.
4. The chains should have no more than one inch of play when checked in the middle. Use the chain idlers.
5. Lubricate chains if needed. Refer to the Lubrication Schedule in this chapter.
6. Make sure all idlers are tight and aligned.
7. Replace all shields before operating the machine.

**DANGER**

MOVING PARTS HAZARD
To prevent serious injury or death when performing maintenance on this machine:
- Put the tractor in park.
- Shut off the engine.
- Remove the key.

**NOTICE**

NEVER replace a chain only without checking for sprocket wear. New chains must run on sprockets with no visible wear to prevent premature wear of chains and/or sprockets.

Death or serious personal injury may result if you start the machine with shields open.

Replace all shields before starting operation of combine.

Replace all shields before operating the machine.
**Lubrication**

There are some components on the combine that require regular lubrication in order to continue functioning correctly. These items and their lubrication intervals are shown on the lubrication table and chart.

**DANGER**

Death or serious personal injury may result if you lubricate the combine while it is operating.

**NOTICE**

Damage to bearing seals may occur if you use a power grease gun or exceed the specified lubrication intervals.

Do NOT use a power grease gun and do NOT exceed the specified lubrication intervals.

**Note:** Some sealed bearings contain no grease fittings. They are lubricated for life and require no further lubrication.

**Note:** For OCS lubrication requirements refer to Chapter 4. *Off-loading Conveyor System.*
PTO and Driveline

Daily greasing of the PTO is essential for proper operation. Refer to Figure 96 for PTO grease points.

NOTICE

The driveline will fail if not lubricated on a periodic basis.

Daily lubrication of the CV driveline is essential to driveline longevity.

Figure 96: PTO Lubrication Points
PTO and Driveline (cont.)

Right Axial Rotor

282 RPM Output

Left Axial Rotor

V-Belt Drive

Separation Systems

Note: Driveline lubrication points are circled.

Figure 97: Driveline Lubrication Points

790 RPM PTO

Note:

Driveline lubrication points are circled.
## Schedule & Lubricants

### LUBRICATION SCHEDULE

<table>
<thead>
<tr>
<th>Action / Component</th>
<th>Type of Lube</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Before Each Use</td>
</tr>
<tr>
<td>Lubricate Hitch Assembly</td>
<td>A</td>
<td>X</td>
</tr>
<tr>
<td>Lubricate PTO Shaft</td>
<td>A</td>
<td>X</td>
</tr>
<tr>
<td>Lubricate U-Joint (on gearbox output)</td>
<td>A</td>
<td>X</td>
</tr>
<tr>
<td>Lubricate Basket Pivot Points</td>
<td>A</td>
<td>X</td>
</tr>
<tr>
<td>Lubricate Bearings</td>
<td>A</td>
<td>X</td>
</tr>
<tr>
<td>Check Gearbox Oil Level</td>
<td>D</td>
<td>X</td>
</tr>
<tr>
<td>Oil Chains</td>
<td>C</td>
<td>X</td>
</tr>
<tr>
<td>Lubricate Wheel Bearings</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Lubricate Header Reversing Clutch</td>
<td>A</td>
<td>X</td>
</tr>
</tbody>
</table>

A = Multi-Purpose Grease (EP2 rated)
B = SAE 10 Wt. Hydraulic Fluid
C = Chain Lube
D = Gear Oil, Synthetic 50 Wt.

**Note:** For OCS equipped (conveyor) combines, refer to the OCS section for additional lubrication points and schedule.

### Recommended Lubricants

<table>
<thead>
<tr>
<th>Grease, Synthetic NLGI #2</th>
<th>O.E.M equipped Permalube Xtreme Grease, p/n #81088</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gear Oil, Synthetic 50WT</td>
<td>O.E.M equipped Lubemaster Synthetic SAE 50, p/n #81087</td>
</tr>
</tbody>
</table>
Lubrication Locations

Note: For OCS equipped (conveyor) combines, refer to the OCS section for additional lubrication points and schedule.
Post Season Maintenance

To extend the life of your combine, take the time to prepare it properly for the long non-use period.

Follow these storage suggestions at the end of each season.

1. Clean the combine thoroughly to remove all dirt and moisture-holding materials.

2. Flush out the slots below the disc separator shafts with an air hose or blower to remove all trash and dirt.

   **Note:** If dirt is packed tightly, it can be loosened with prodding.

3. Repaint worn and scratched parts.

4. Coat the internal parts of the combine with light oil or another rust inhibitor.

5. Release tension on all belts.

6. Remove and clean all chains. Store in a container of oil or oil/diesel mix, if possible. If not, reinstall but do not tension.

7. Grease all fittings and driveline.

8. Store the combine under shelter.

9. Collapse all hydraulic cylinders to prevent them from rusting or pitting.

**NOTICE**

Do NOT use high-pressure water or air directly on the bearing seals.

Do NOT use high-pressure water or air around electrical components.

Contaminant or moisture penetration may occur, which can dramatically shorten part life.

Use protective eye gear.
## Tire & Wheel Fasteners Torque

<table>
<thead>
<tr>
<th>Torque Specifications</th>
<th>Diameter</th>
<th>Thread</th>
<th>Grade</th>
<th>Torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extensions/Spindles</td>
<td>7/8&quot;</td>
<td>14</td>
<td>8</td>
<td>668 ft/lb</td>
</tr>
<tr>
<td>Lug nuts</td>
<td>3/4&quot;</td>
<td>16</td>
<td>8</td>
<td>400 ft/lb</td>
</tr>
</tbody>
</table>

Tire pressure: 800 / 65 R32 – Radial: 44 PSI
8.

“Peanut Tech” Monitoring and Control

Key Features ....................................... 106
Home Screen Functions and Controls .. 108
Help/Basic Instruction Screens .......... 109
All Information Screen Function and Controls ..............................................110
Key Features

As part of Amadas’ commitment to continuous product improvement, we are pleased to include the “Peanut Tech” package on AR2200 Peanut Combines.

This helps determine harvest speed and helps prevent overloading the combine.

A visual and audible alarm will activate to warn the operator the system is reaching capacity when the load reaches 80% of design load. This helps prevent “plugging the duct”.

Combine Speed:

Combine speed is monitored and displayed. If the speed drops below 85% or goes beyond 110% of the design speed, both a visual and audible alarm will activate.

Duct Air:

In-cab control and position display of the Elevator Air Control actuator meters the volume of air in the peanut elevator duct (shown as Duct Air).

Duct air is controlled manually using the up and down buttons on the display.

Peanut Duct Load:

The controller monitors duct air pressure, combine speed, and elevator air actuator position to determine the amount of load placed on the Peanut Elevator system.

The Peanut Door is located on the left side of the combine above the collection auger. Refer to Figure 101.
**Key Features (cont.)**

**Peanut Door Alarm (cont.):**

The peanut door opens to release peanuts that continue to be harvested when the elevator duct “plugs” due to overloading or the introduction of foreign objects.

This will reduce machine damage but peanut loss will continue until the combine is stopped.

When an overload happens the Amadas Logo will be replaced with a flashing “Peanut Door” display along with an audible alarm.

---

**Rotor Speed Alarm:**

If the rotor speed drops below design speed, or if one rotor is running slower than the other a visual rotor speed alarm will flash and an audible alarm will sound.

**Service Hours:**

Resettable service hours function keeps track of the combine run time since the last service was performed.

---

![Peanut Door Alarm Display on Home Screen](image)
**Home Screen Functions and Controls**

1. Displays combine speed and background flashes if combine speed is below 85% or above 110% design speed.

2. Displays position of the actuator that controls the elevator air.

3. Displays peanut duct load and will flash a visual and sound an audible alarm once it reaches 80% of design load.

4. Accesses the ALL INFORMATION screen. Provides more detailed sensor and settings readings.

5. Mutes the audible portion of an alarm for 5 minutes. Unmutes the audible portion of an alarm during the 5 minutes.

6. Returns to the home screen from the help screen. [Button 10 also]

7. Decreases elevator air.

8. Increases elevator air.

9. Displays “Peanut Door” if peanut door opens.

10. Returns to the home screen from the help screen. [Button 6 also]

11. Accesses the help (basic instructions) from the home screen.

12. Indicates power is being supplied to the controller.
Help/Basic Instruction Screens

Page 1:
This screen displays basic instructions for the “Peanut Tech” System.

1. Return to home screen.
2. Return to home screen.
3. Use to go to Page 1 of instructions.

Page 2:
This screen displays more basic instructions for the “Peanut Tech” System.

1. Return to home screen.
2. Return to home screen.
3. Use to go to Page 2 of instructions.
Function and Controls

Left column:

- Service hours since last reset
  - Speed of the left and right rotor
- Rotor speed #1
  - RPM of left rotor
- Rotor speed #2
  - RPM of right rotor
- State of peanut door
  - Backlit in green – door closed
  - Backlit in red; audible alarm – door open
- State of PTO
  - Backlit in green – running from 85% to 110%.
  - Backlit in red; audible alarm – below 85% or above 110%.
- Actuator up
  - Backlit in green – if air is being increased.
- Actuator down
  - Backlit in green – if air is being decreased.

Right column:

- Service hours since last reset
  - Speed of the left and right rotor
- State of peanut door
  - Backlit in green – door is closed.
  - Backlit in red; audible alarm – door is open.
- State of PTO
  - Backlit in green – above 85%.
  - Backlit in red; audible alarm – below 85%.
  - Backlit in red; audible alarm – above 110%.
- State of Actuator UP [more air]
  - Backlit in green – actuator is increasing air at that time.
- State of Actuator DOWN [less air]
  - Backlit in green – actuator is decreasing air at that time.

Control Buttons:

1. Return to the home screen.
2. Reset the service hours displayed in the upper right corner of the screen.
3. Increase elevator air.
4. Decrease elevator air.
5. Mute an audible alarm for 5 minutes. Unmute the audible alarm during the 5 minutes.
6. Return to home screen.

Figure 106: “Peanut Tech” All Information Screen
Appendix A

Non-Safety Related Decal Chart........ 113
Non-Safety Decal Locations ............... 114
Non-Safety Related Decals:

<table>
<thead>
<tr>
<th>Decal P/N</th>
<th>Description</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>8519</td>
<td>SLOW MOVING VEHICLE</td>
<td>1</td>
</tr>
<tr>
<td>80680</td>
<td>CLEANING AIR; CLOSED/OPEN</td>
<td>1</td>
</tr>
<tr>
<td>80684</td>
<td>RED/WHITE STRIPE; 5&quot;WIDE (\text{NOT Displayed})</td>
<td>2</td>
</tr>
<tr>
<td>80787</td>
<td>FAN DAMPER OPEN/CLOSED</td>
<td>1</td>
</tr>
<tr>
<td>80902</td>
<td>TAPE,2&quot;X9&quot; YELLOW REFLECTIVE</td>
<td>2</td>
</tr>
<tr>
<td>80903</td>
<td>TAPE,2&quot;X9&quot; RED REFLECTIVE</td>
<td>2</td>
</tr>
<tr>
<td>80904</td>
<td>TAPE,2&quot;X9&quot; ORANGE REFLECTIVE</td>
<td>2</td>
</tr>
<tr>
<td>81041</td>
<td>VARIABLE PITCH VINE SPRD</td>
<td>1</td>
</tr>
<tr>
<td>81058</td>
<td>PTO LUBE; BONDIOLI</td>
<td>1</td>
</tr>
<tr>
<td>81066</td>
<td>ENGAGED/OVERHEAD TEETH</td>
<td>1</td>
</tr>
<tr>
<td>81094</td>
<td>HOSE ID</td>
<td>1</td>
</tr>
<tr>
<td>81097</td>
<td>NOTICE: COMPANY INFO</td>
<td>1</td>
</tr>
<tr>
<td>81098</td>
<td>GREASE FITTING</td>
<td>1</td>
</tr>
<tr>
<td>81110</td>
<td>AR2200 FLAG, LARGE (\text{NOT DISPLAYED})</td>
<td>1</td>
</tr>
<tr>
<td>81111</td>
<td>AR2200 FLAG, SMALL (\text{NOT DISPLAYED})</td>
<td>1</td>
</tr>
<tr>
<td>81112</td>
<td>AR2200 TWIN ROTOR (\text{NOT DISPLAYED})</td>
<td>2</td>
</tr>
</tbody>
</table>

**Note:** For additional information on decals refer to the AMADAS AR2200 Parts Catalog. Decals 80684, 81110, 81111 & 81112 are located on the outer shields of the AR2200.
Non-Safety Decal Locations

Figure 107: Non-Safety Related Decal Locations-Left Side View
Non-Safety Decal Locations (cont.)

Figure 108: Non-Safety Related Decal Locations-Right Side View
Non-Safety Decal Locations (cont.)

Figure 109: Non-Safety Related Decal Locations-Top Side View
Non-Safety Decal Locations (cont.)

Figure 110: Non-Safety Related Decal Locations-Back Side View
TWO-YEAR LIMITED WARRANTY
For AMADAS INDUSTRIES Pull-Type Peanut Combine

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 pull-type peanut combine. AMADAS will repair or replace, at its option,
y any part covered under warranty which is found to be defective in material or workmanship during the applicable period of
warranty.

B. What is Warranted?
All parts of any new AMADAS pull-type peanut combine, except tires, tubes, belts, chains, picking and header
springs, and PTO drivelines are warranted for 24 months. The warranty period will begin when the combine 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. Tires, tubes, belts, chains, picking and header springs, and PTO drivelines are not warranted
by AMADAS beyond that offered by the items original manufacturer.

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 combine 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 peanut combine, and (3) make the combine 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 REPRE-
SENTATIONS 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 peanut combine, 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 limitation 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 INDUSTRIES

Revised 03/17