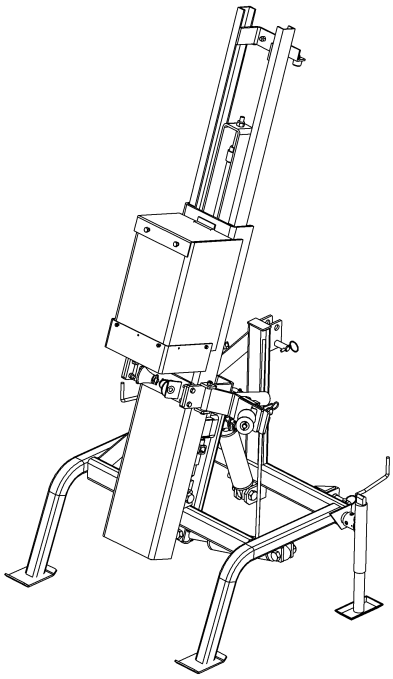
Bandit

Post Pounder
Operator's Manual

This manual applies to:

3PT Hitch Center Mast Model



Read this manual before using product. Failure to follow instructions and safety precautions can result in serious injury, death, or property damage. Keep manual for future reference.

Part Number: P302000079 R4

Revised: February 2021

Original Instructions

This product has been designed and manufactured to meet general engineering standards. Other local regulations may apply and must be followed by the operator. All personnel must be trained in the correct operational and safety procedures for this product. Use the sign-off sheet below to record initial and periodic reviews of this manual with all personnel.

Date	Employee Name and Signature	Employer Name and Signature

CONTENTS

1. Introduction

Thank you for your purchase. Follow the instructions in this manual for safe use of this post pounder. Following proper operation and maintenance will help to keep the post pounder running in optimal condition.

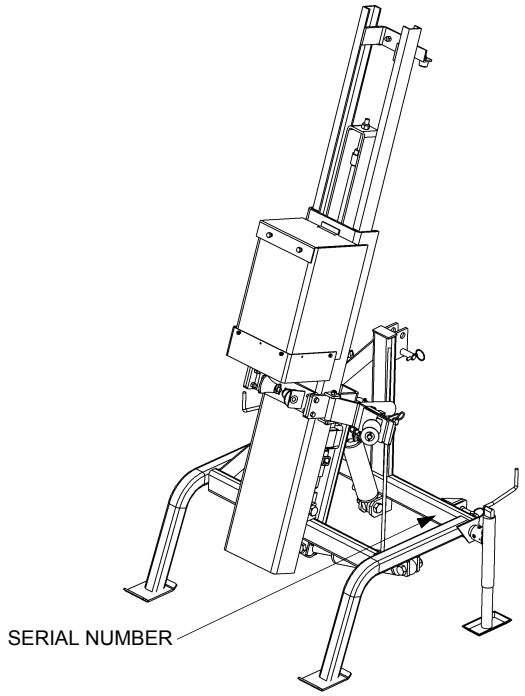
Keep this manual handy for frequent reference and to review with new personnel. A sign-off form is provided on the inside front cover for your convenience. If any information in this manual is not understood or if you need additional information, please contact AGI or your representative for assistance.

This manual should be regarded as part of the equipment.

1.1. Serial Number Location

The serial number location for your post pounder is shown in the figure below. Have the serial number ready when ordering parts or requesting service or other information. Record information in the table below for easy reference.

Model Number	
Serial Number	
Date Received	



1.2. Intended Use

The post pounder is intended for use as listed below and described throughout this manual. Use in any other way is considered contrary to the intended use and is not covered by the warranty.

Intended use for the post pounder:

- Installing standard round or square wood fence posts.
- Installing steel fence posts.

2. Safety

2.1. Safety Alert Symbol and Signal Words

This safety alert symbol indicates important safety messages in this manual. When you see this symbol, be alert to the possibility of injury or death, carefully read the message that follows, and inform others.

Signal Words: Note the use of the signal words **DANGER**, **WARNING**, **CAUTION**, and **NOTICE** with the safety messages. The appropriate signal word for each message has been selected using the definitions below as a guideline.

DANGER Indicates an imminently hazardous situation that, if not avoided, will result in serious injury or death.

WARNING Indicates a hazardous situation that, if not avoided, could result in serious injury or death.

CAUTION Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.

NOTICE Indicates a potentially hazardous situation that, if not avoided, may result in property damage.

2.2. Follow Safety Instructions

Read and understand all safety instructions, safety decals, and manuals and follow them when operating or maintaining the equipment.

- Owners must give instructions and review the information initially and annually with all personnel before allowing them in the work area. Untrained users/operators expose themselves and bystanders to possible serious injury or death.

- Use for intended purposes only.
- Do not modify the post pounder in any way without written permission from the manufacturer and is not covered by the warranty.
- Follow a health and safety program for your worksite. Contact your local occupational health and safety organization for information.
- Follow applicable local codes and regulations.

2.3. Pounding Posts

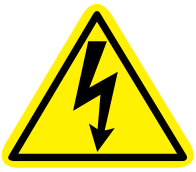
DANGER

- Keep body away when operating machine.
- Never put your hand between the post hugger and a post.
- Always use the post hugger to hold a post. Never hold a post with any part of your body.
- Never place any part of your body under the post pounder head when it is in the raised position.
- Always wear proper eye, hand, leg, foot, and head protection.
- Do not use damaged posts, flying debris could cause serious injury.

2.4. Overhead Power Lines

DANGER

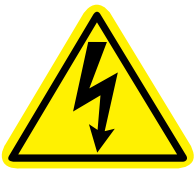
- When operating or moving, keep post pounder away from overhead power lines and devices.
- The post pounder is not insulated.
- Electrocution can occur without direct contact.



2.5. Underground Power Lines

DANGER

- When operating, keep post pounder away from underground power lines and devices.
- The post pounder is not insulated.
- Call the local utility company before operating to ensure there are no buried power lines where you will be working.
- If posts hit underground power lines you can be seriously injured or die from electrocution.



2.6. Underground Gas Lines

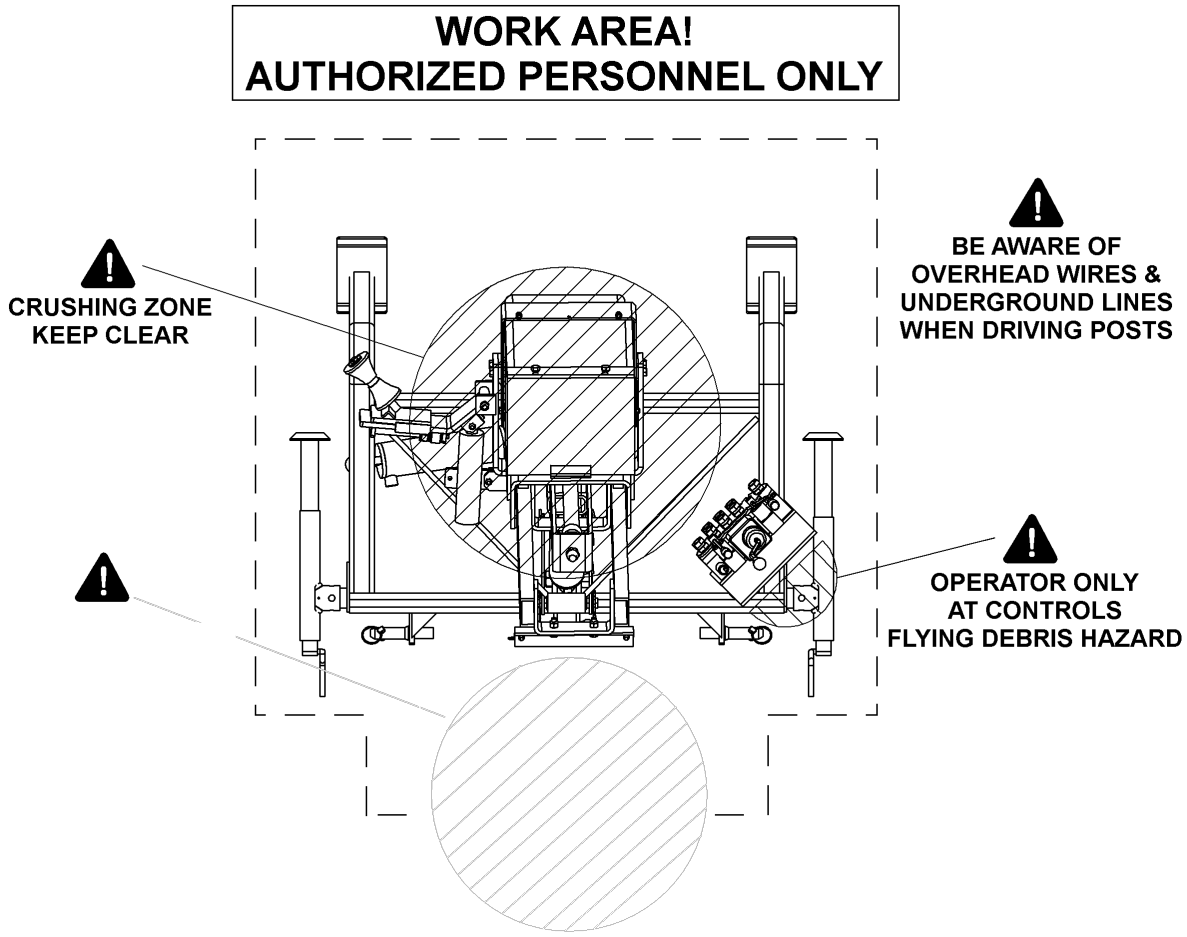
DANGER

- When operating or moving, keep the post pounder away from underground gas lines.

2.7. Work Area Safety

- Have another trained person nearby who can shut down the post pounder in case of accident.
- The work area should be kept clear of bystanders, including children.
- Keep the work area clean and free of debris.

Figure 1. Post Pounder Work Area



2.8. Guards Safety

⚠ WARNING

- Keep guards in place. Do not operate with guard removed.
- Do not walk on, step on, or damage guards.
- Lock out power before removing a guard.
- Ensure all guards are replaced after performing maintenance.

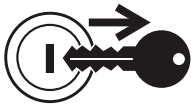
2.9. Transport on Roads

⚠ WARNING

- Check with local authorities regarding transport on public roads. Obey all applicable laws and regulations.
- Always travel at a safe speed, never exceeding 20 mph (32 km/h).
- Reduce speed on rough surfaces.
- Use extreme care and minimum ground speed when operating or transporting on hillsides, or near ditches or fences.
- Do not transport on slopes greater than 20°.
- Use caution when turning corners or meeting traffic.
- Make sure the SMV (slow moving vehicle) emblem and all the lights and reflectors that are required by local authorities are in place, are clean, and can be seen by all over-taking and oncoming traffic.
- Always use hazard-warning flashers on tractor/towing vehicle when transporting unless prohibited by law.
- Do not allow riders on the post pounder or towing vehicle during transport.
- Attach to towing vehicle with an appropriate pin and retainer. Always attach safety chain(s).
- Place the post pounder in the transport position before moving on roads.

2.10. Drives and Lockout Safety

Inspect the power source(s) before using and know how to shut down in an emergency. Whenever you service or adjust your equipment, make sure you shut down the power source and unplug or remove the key (as applicable) to prevent inadvertent start-up and hazardous energy release. Know the procedure(s) that applies to your equipment from the following power source(s). Ensure that all personnel are clear before turning on power to equipment.



2.10.1 Hydraulic Power Safety

⚠ WARNING **Power Source**

- Refer to the rules and regulations applicable to the power source operating your hydraulic drive.
- Do not connect or disconnect hydraulic lines while system is under pressure.
- Keep all hydraulic lines away from moving parts and pinch points.
- Escaping hydraulic fluid under pressure will cause serious injury if it penetrates the skin surface (serious infection or toxic reaction can develop). See a doctor immediately if injured.
- Use metal or wood as a backstop when searching for hydraulic leaks and wear proper hand and eye protection.
- Check all hydraulic components are tight and in good condition. Replace any worn, cut, abraded, flattened, or crimped hoses.
- Clean the connections before connecting to equipment.
- Do not attempt any makeshift repairs to the hydraulic fittings or hoses with tape, clamps, or adhesive. The hydraulic system operates under extremely high pressure; such repairs will fail suddenly and create a hazardous and unsafe condition.

Lockout

- Always place all hydraulic controls in neutral and relieve system pressure before disconnecting or working on hydraulic system.

2.11. Personal Protective Equipment

The following Personal Protective Equipment (PPE) should be worn when operating or maintaining the equipment.

Safety Glasses

- Wear safety glasses at all times to protect eyes from debris.

Coveralls

- Wear coveralls to protect skin.

Hard Hat

- Wear a hard hat to help protect your head.

Steel-Toe Boots

- Wear steel-toe boots to protect feet from falling debris.

Work Gloves

- Wear work gloves to protect your hands from sharp and rough edges.

2.12. Safety Equipment

The following safety equipment should be kept on site.

Fire Extinguisher

- Provide a fire extinguisher for use in case of an accident. Store in a highly visible and accessible place.

First-Aid Kit

- Have a properly-stocked first-aid kit available for use should the need arise, and know how to use it.

2.13. Safety Decals

- Keep safety decals clean and legible at all times.
- Replace safety decals that are missing or have become illegible. See decal location figures that follow.
- Replaced parts must display the same decal(s) as the original part.
- Replacement safety decals are available **free of charge** from your distributor, dealer, or factory as applicable.

2.13.1 Decal Installation/Replacement

1. Decal area must be clean and dry, with a temperature above 50°F (10°C).
2. Decide on the exact position before you remove the backing paper.
3. Align the decal over the specified area and carefully press the small portion with the exposed sticky backing in place.
4. Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.
5. Small air pockets can be pierced with a pin and smoothed out using the decal backing paper.

2.13.2 Safety Decal Locations and Details

Replicas of the safety decals that are attached to the post pounder and their messages are shown in the figure (s) that follow. Safe operation and use of the post pounder requires that you familiarize yourself with the various safety decals and the areas or particular functions that the decals apply to, as well as the safety precautions that must be taken to avoid serious injury, death, or damage.

Figure 2. Safety Decal Locations

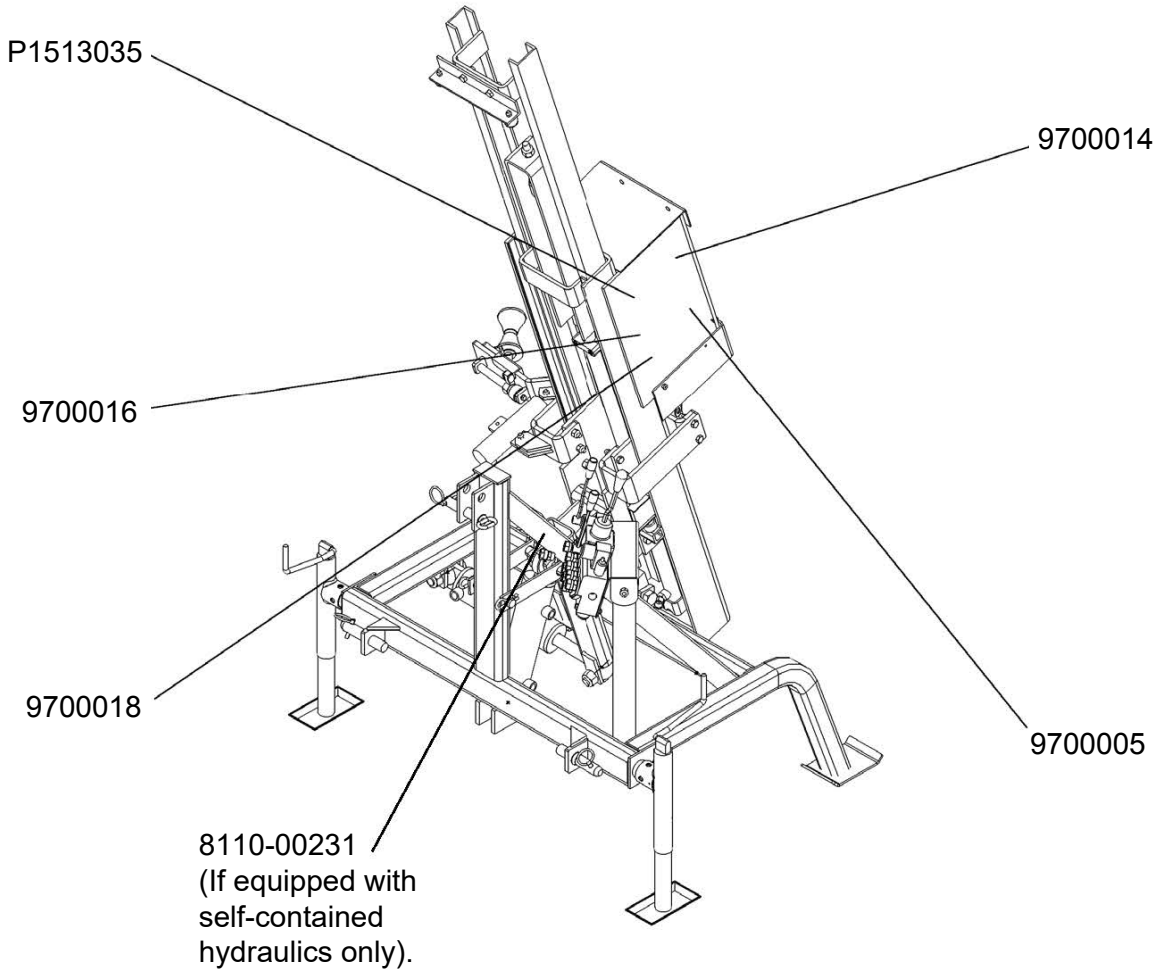


Table 1. Safety Decals

Part Number	Description
9700005	

Table 1 Safety Decals (continued)

Part Number	Description
P1513035	

Table 1 Safety Decals (continued)

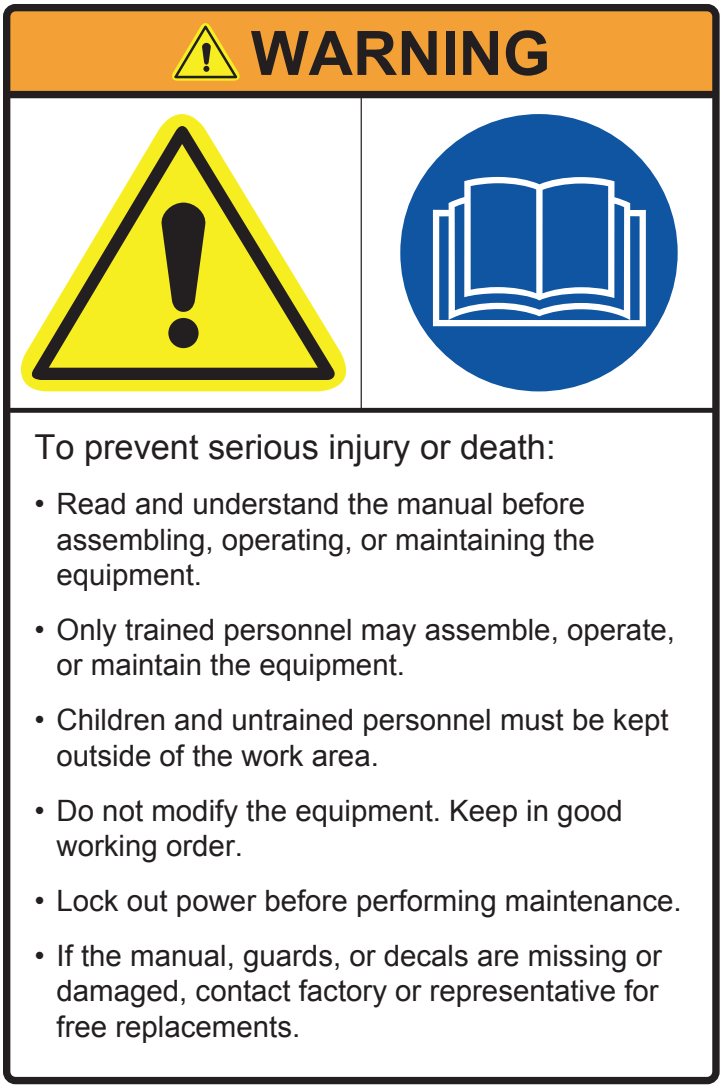
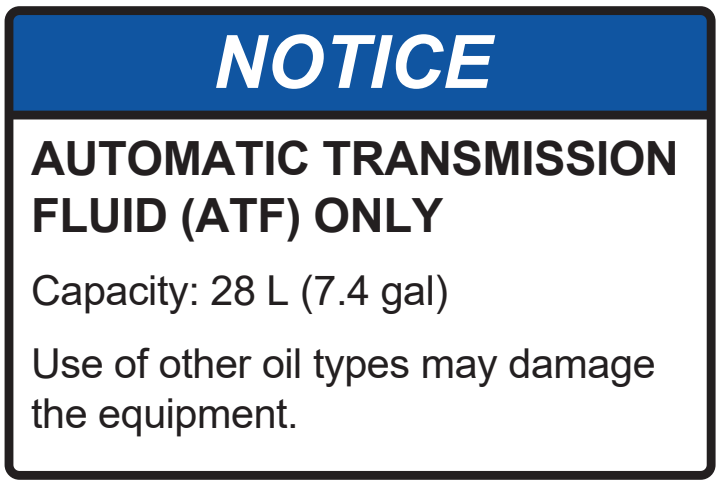
Part Number	Description
9700014	

Table 1 Safety Decals (continued)

Part Number	Description
9700016	

Table 1 Safety Decals (continued)

Part Number	Description
9700018	
8110–00231	

3. Features

Figure 3. Main Bandit Components

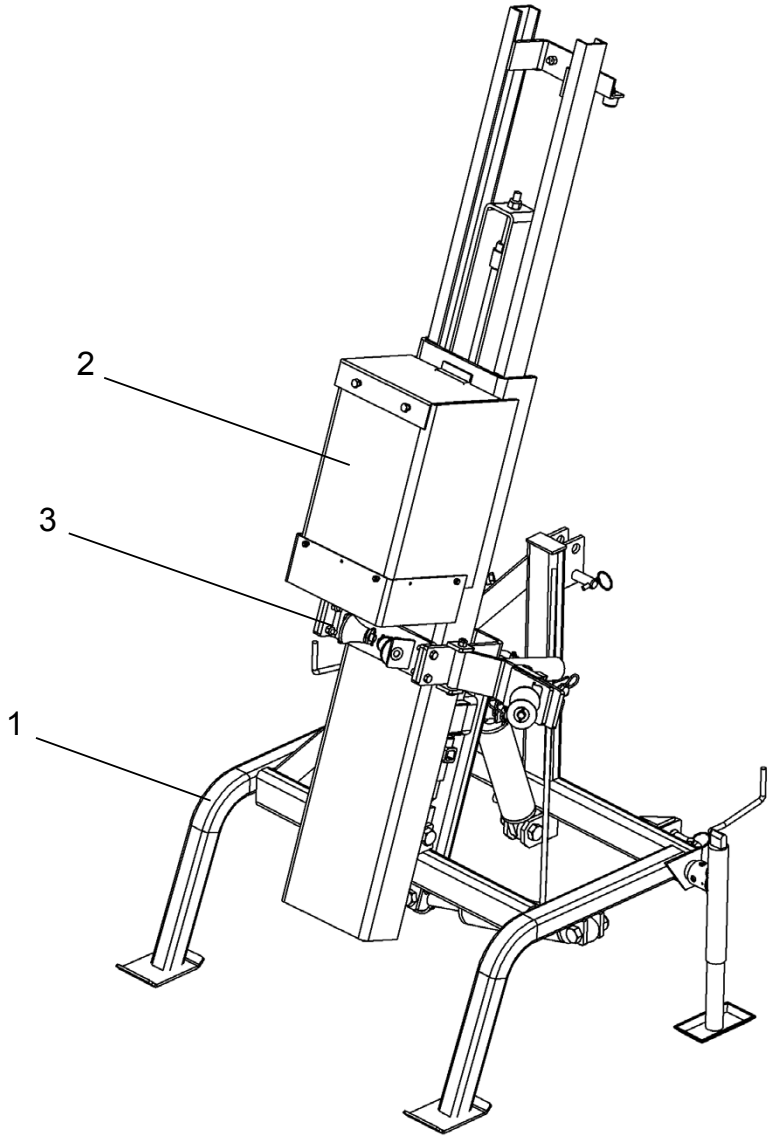


Table 2. Main Bandit Components

ITEM	DESCRIPTION
1	Frame Assembly
2	Mast Assembly
3	Hugger Assembly
4	PTO Kit (Optional)
5	Hammer Ballast Kit (Optional)

Frame Assembly

The frame assembly is shipped with all hydraulics pre-connected except the hydraulic hose that must be connected to the mast cylinder.

Figure 4. Frame Assembly

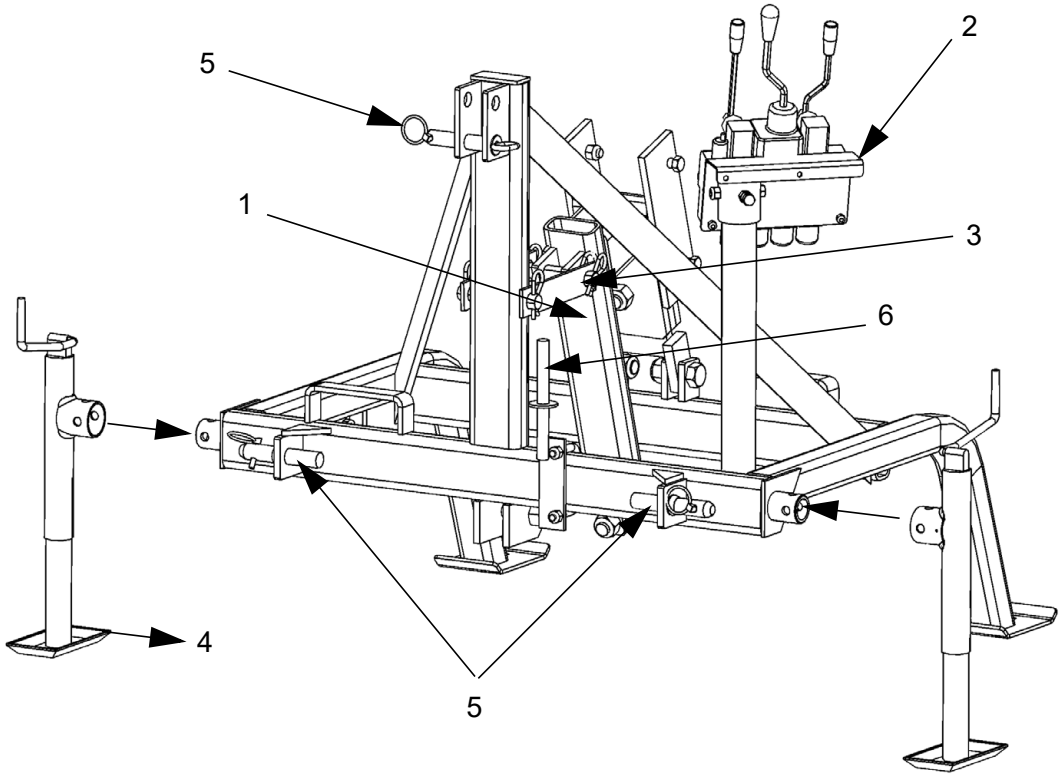


Table 3. Main Frame Components

ITEM	DESCRIPTION
1	Pivot Arm
2	Hydraulic Controls
3	Lock Bars
4	Jack Stand
5	Class II/III Three-Point Hitch Attachments
6	PTO Pump Support (Optional)

Mast Assembly

The mast assembly mounts on the frame assembly pivot arm, and contains the mast cylinder, ballast box and hammer, and hammer guard.

Figure 5. Mast Assembly

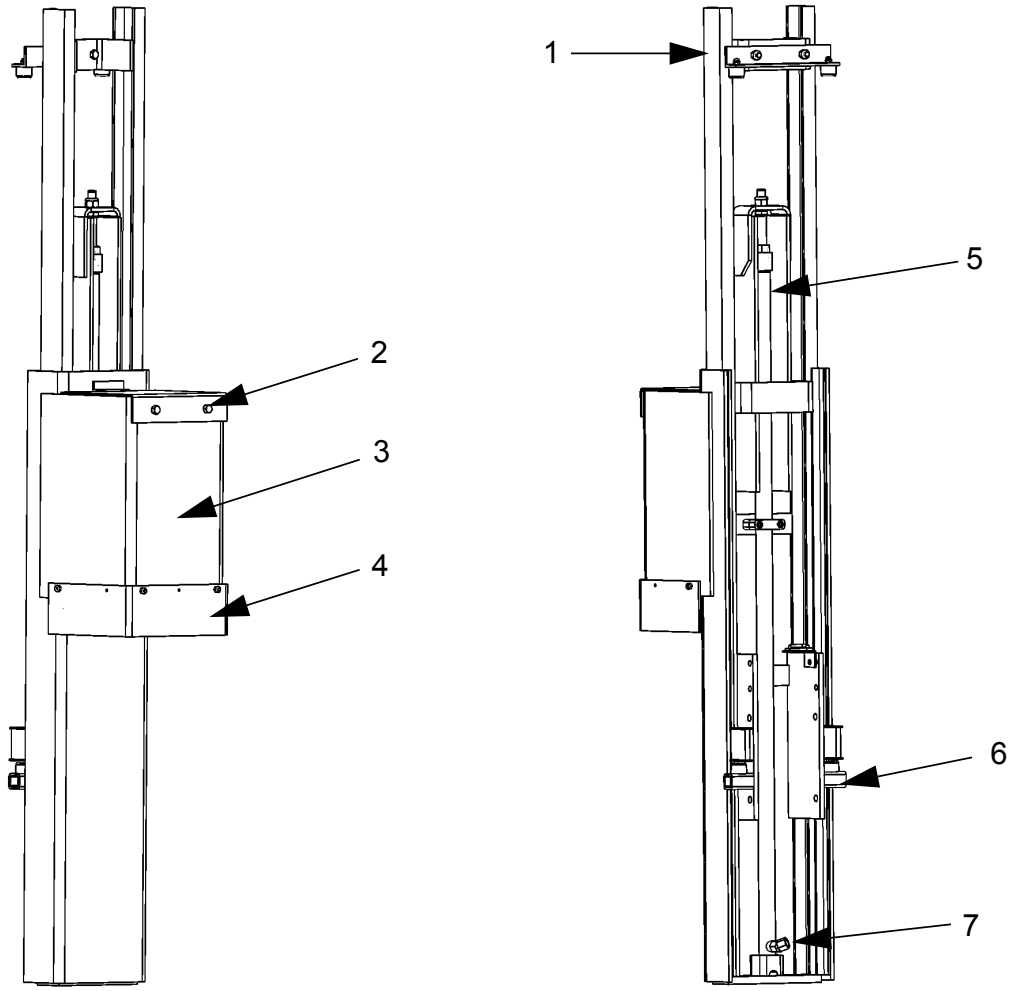


Table 4. Mast Assembly Components

ITEM	DESCRIPTION
1	Top Hammer Stop
2	Ballast Box Cover
3	Ballast Box
4	Hammer Guard
5	Mast Cylinder
6	Bottom Hammer Stop
7	Mast Cylinder Hydraulic Connector

Hugger Arm Assembly

The hugger arm assembly installs on the mast assembly. The hugger arm opens and closes hydraulically, and provides posts with support during operation.

Figure 6. Hugger Arm Assembly

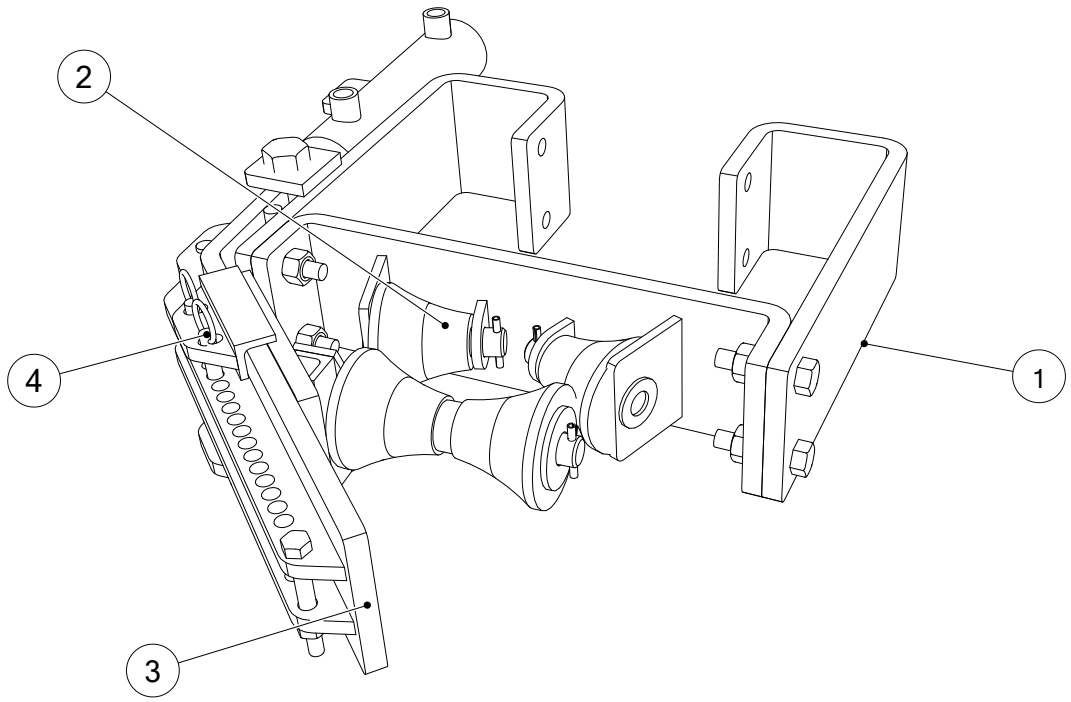


Table 5. Hugger Arm Components

ITEM	DESCRIPTION
1	Hugger Brackets
2	Front Roller Plate
3	Hugger Arm
4	Quick Pin

PTO Kit

The optional PTO Kit (Part Number 2311153) provides the S2000 Post Pounder with a hydraulic system powered by a hydraulic pump that connects to a tractor PTO shaft.

The kit contains:

- a hydraulic pump and storage post
- a hydraulic tank and support brackets
- a hydraulic oil filter, filter head, and support bracket
- a hydraulic hose

The PTO Kit's hydraulic pump provides adequate system pressure when installed and connected to a 540 RPM PTO.

Installation requires modifying an existing hydraulic hose and installing an additional hose.

Figure 7. PTO Kit

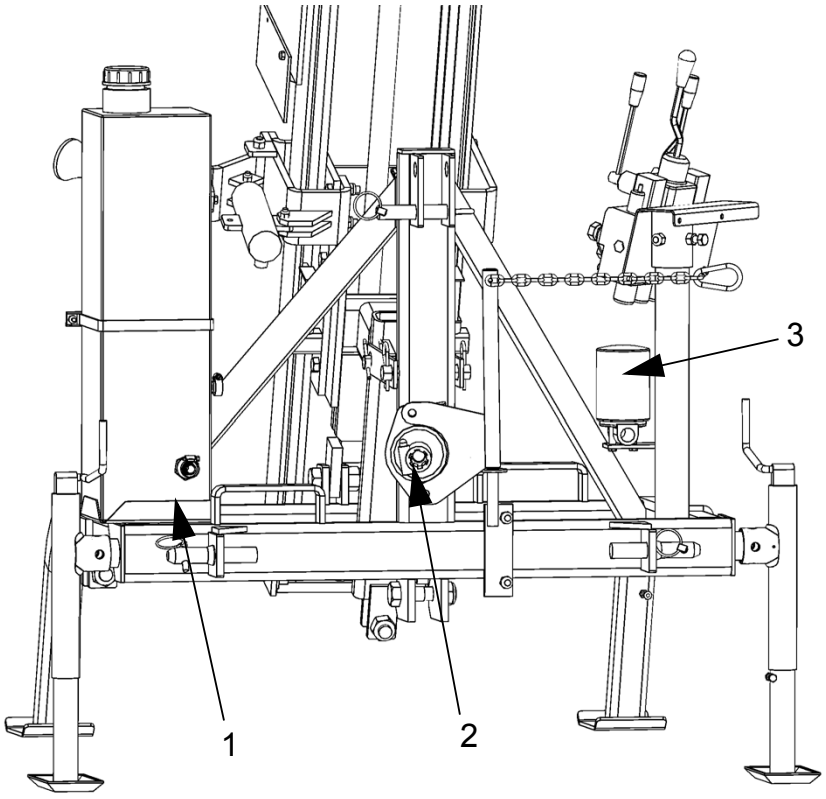


Table 6. PTO Kit Components

ITEM	DESCRIPTION
1	Hydraulic Tank
2	PTO Pump
3	Oil Filter

Hammer Ballast Kit

The post pounder is equipped with a ballast box that can be filled with various ballast weights, up to a maximum of 280 lbs.

The hammer ballast used should be heavy enough to drive the post a reasonable distance with each hammer drop, but not so heavy that the hammer blows risk damaging smaller posts.

AGI supplies a Hammer Ballast Kit (Part Number 2311154) that includes six “suitcase” shaped ballast weights. Table 7 shows a single ballast weight from the kit.

Each individual ballast weight is 45.4 lbs. Use of all six ballast weights meets the maximum ballast weight of 280 lbs.

Ballast weights should always be placed in the ballast box with the body first and the handle up. Failure to do so could damage the ballast weight or the ballast box during operation of the pounder.

Figure 8. Hammer Ballast Kit

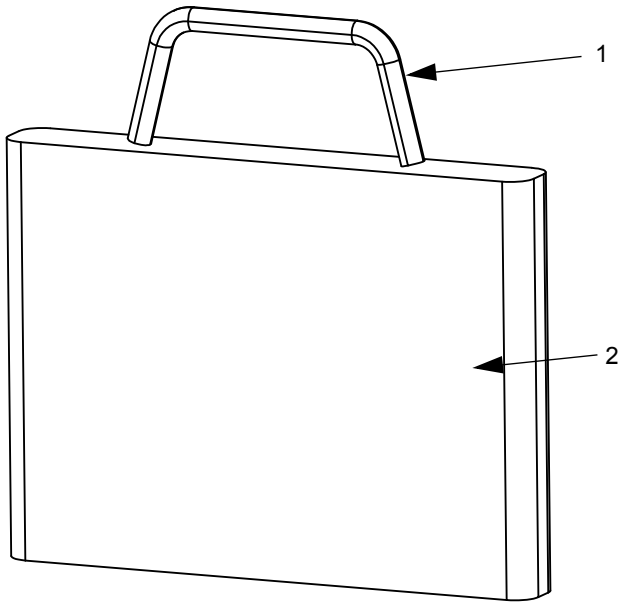


Table 7. Hammer Ballast Kit Detail

ITEM	DESCRIPTION
1	Ballast Weight Handle
2	Ballast Weight Body

4. Transport

Before continuing, ensure you have completely read and understood this manual's Safety section, in addition to the safety information in the section(s) below.

4.1. Transport Safety

WARNING

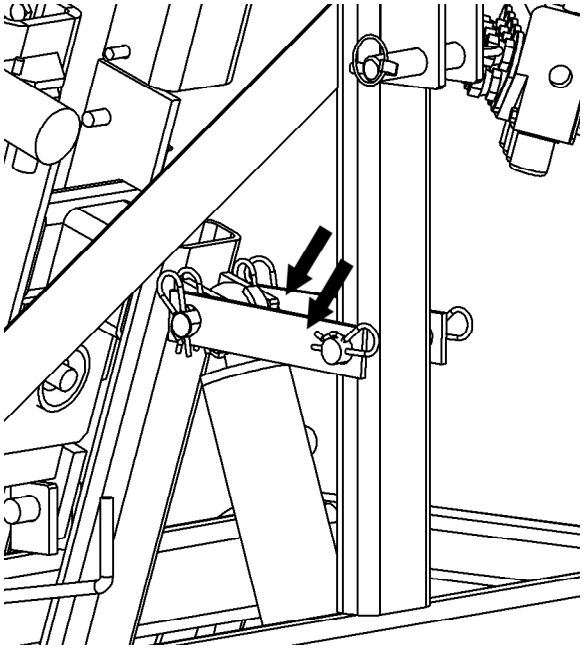
- Check with local authorities regarding transport on public roads. Obey all applicable laws and regulations.
- Do not transport on slopes greater than 20°.
- Place the post pounder in the transport position before moving on roads.
- Use extreme care and minimum ground speed when operating or transporting on hillsides, or near ditches or fences.

4.2. Transport Procedure

1. Slowly back the tractor up to the post pounder, leaving at least 6" clearance between Category II or III 3-point hitch and pounder.
2. Adjust the height of the 3-point hitch, ensuring that attach points on tractor are not lower than attach points on pounder.

   WARNING To prevent tipping the pounder and potential injury, ensure hitch connection points on tractor and pounder are level and aligned with each other before proceeding.
3. Ensure the hammer/ballast box is in its fully lowered position.
4. Ensure the mast is fully tipped back and secured by lock bars.

Figure 9. Transport Lock Bars



5. Attach the unit to a Category II or III 3-point hitch and secure with supplied pins.
6. Once pounder is fully attached to the tractor, lift jacks into transport position and secure with hairpins.
7. Raise the 3-point hitch just high enough to allow for safe transport. Refer to your tractor operation manual for further details.
8. Make sure the SMV (Slow Moving Vehicle) emblem and lights and reflectors that are required by the local authorities are in place, clean, and clearly visible to all traffic.

5. Placement

Before continuing, ensure you have completely read and understood this manual's Safety section, in addition to the safety information in the section(s) below.

5.1. Placement Safety

WARNING

- Keep away from overhead power lines. Arcing and possible electrocution can occur without direct contact.
- Consult local utility companies before operating post pounder near overhead or buried power lines or gas lines.
- Use extreme care and minimum ground speed when positioning the post pounder on hillsides, over rough ground, or near ditches or fences.
- Place post pounder on reasonably level ground before operating.
- Never attempt to increase height of the post pounder by positioning wheels on lumber, blocks, or by any other means.

5.2. Positioning the Post Pounder

To place the post pounder into its working position:

1. Lower the 3-point hitch and ensure that both of the post pounder's support legs are securely on the ground.

   WARNING To prevent tipping the pounder and potential injury, pounder must have both support legs securely on the ground before using the machine.

2. Set the park brake on the tractor before dismounting.
3. Remove all transport locks.
4. Place the hydraulic valve in the working positions, see Figure 1 on page 9. Failure to have valve positioned correctly will mean the orientation of the valve and instructional decal will be incorrect.

6. Operation

Before continuing, ensure you have completely read and understood this manual's Safety section, in addition to the safety information in the section(s) below.

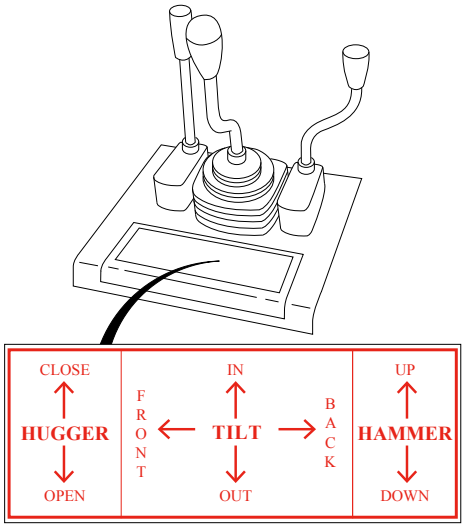
6.1. Operation Safety

WARNING

- Keep away from rotating and moving parts.
- Never put your hand between the post hugger and a post.
- Always use the post hugger to hold a post. Never hold a post with any part of your body.
- Never place any part of your body under the post pounder head when it is in the raised position.
- Always wear proper eye, hand, leg, foot, head, and hearing protection.
- Do not use damaged posts, flying debris could cause serious injury.
- Do not use damaged belts, there is a risk of flying debris.
- Always operate with guards, covers, and shields in place.
- Have another trained person nearby who can shut down the equipment in case of accident.
- Keep the work area clear of bystanders.
- Keep the work area clean and free of debris.
- Ensure maintenance has been performed and is up to date.

6.2. Operating Controls

Figure 10. Controls



6.3. Start-up and Break-in

Check the following items before operating the Post Pounder:

1. Visually inspect the post pounder, see Visual Inspection Section 7. – Maintenance on page 34.
2. Ensure that the post pounder is securely attached to the towing vehicle, tractor, or skid steer loader.
3. Use adequate power to operate the post pounder, refer to Section 9. – Specifications on page 41.
4. Start the post pounder and check the function of all hydraulics by extending and retracting all of the cylinders.
5. Operate the post pounder normally, refer to power source instructions and driving a post for further detail.
6. Stop the post pounder when work is complete and lower fully.

Important

After the initial start-up and inspection, the post pounder should be shut down and visually inspected (see Maintenance Section) after approximately ten hours of operation.

After operating 10 hours:

1. Retorque all wheel bolts (if applicable), fasteners, and hardware.
2. Grease all zerks; do not grease plastic slides or mast rails.
3. Check the level of hydraulic fluid in the reservoir.
4. Check the tightness of all hydraulic hoses and fittings.

6.4. Operation - Hydraulic Drive

➡ Direct connection to the tractor's hydraulic system:

1. Inspect all hydraulic lines, hoses, fittings, and couplers for tightness. Use a clean cloth to wipe any accumulated dirt from the couplers before connecting to the hydraulic system of the tractor.
2. Connect hydraulic hoses to the couplers.
3. Place all controls in neutral.
4. Start tractor and run at low idle.
5. Place hydraulic control lever in detent.
6. Increase engine speed to rated rpm to produce the required flow. For maximum recommended flow, refer to Section 9.1 – Bandit Post Pounder Specifications on page 41.
7. When operation is completed, fully lower the pounder mast.
8. Lean the mast back into the transport position.
9. Reduce the speed to low idle and lock out the PTO.
10. Place hydraulic control lever in neutral.
11. Shut off tractor engine.
12. Relieve hydraulic pressure before disconnecting couplers.
13. Disconnect hydraulics from tractor.

6.5. Operation - PTO Kit Option

➡ When Equipped with a PTO Kit:

1. Shut off the tractor and lock out the ignition.
2. Attach the PTO pump securely to the tractor. Ensure that the pump connector is firmly fastened using the connector's push-pin shaft lock and that the arm of the pump assembly is secured to the tractor.
3. Ensure the PTO drive on the tractor is in the off position before starting the tractor.
4. Start tractor engine at low idle, slowly engage the PTO with the tractor idling to prevent unneeded stress on the drive components and shear bolts.
5. If everything is operating normally, increase the speed to rated rpm to produce the required flow. For maximum recommended flow, refer to Section 9.1 – Bandit Post Pounder Specifications on page 41.
6. When operation is completed, fully lower the pounder mast.
7. Lean the mast back into the transport position.
8. Reduce the speed to low idle and lock out the PTO.
9. Disconnect the PTO pump from the tractor and secure to the PTO pump support.

6.6. Driving a Post

Important

Remove and store lock bars before operating.

Engage the Hugger

1. Using the hydraulic controls, raise the ballast box just enough to fit a post under it, see the hydraulic valve instructional decal for control details, see Section 6.2 – Operating Controls on page 28.
2. Open the hugger arm, see Figure 11.
3. Place the post standing up straight against the roller plate cones.
4. Close the hugger arm to clamp the post in. Some adjustment of the roller arm may be required to hold the post firmly, see Figure 11.
5. Adjust the hugger to hold the post snug by setting the two pins, which are holding the rollar arm on the hugger arm, in the proper pin holes. Make sure the roller arm cones are centered on the post.

   Note

   If various sizes of posts are to be used on a job, the hugger arm may need to be adjusted to fit at each substantial change of post size.

Figure 11. Hugger Open (Left) and Hugger Closed (Right)

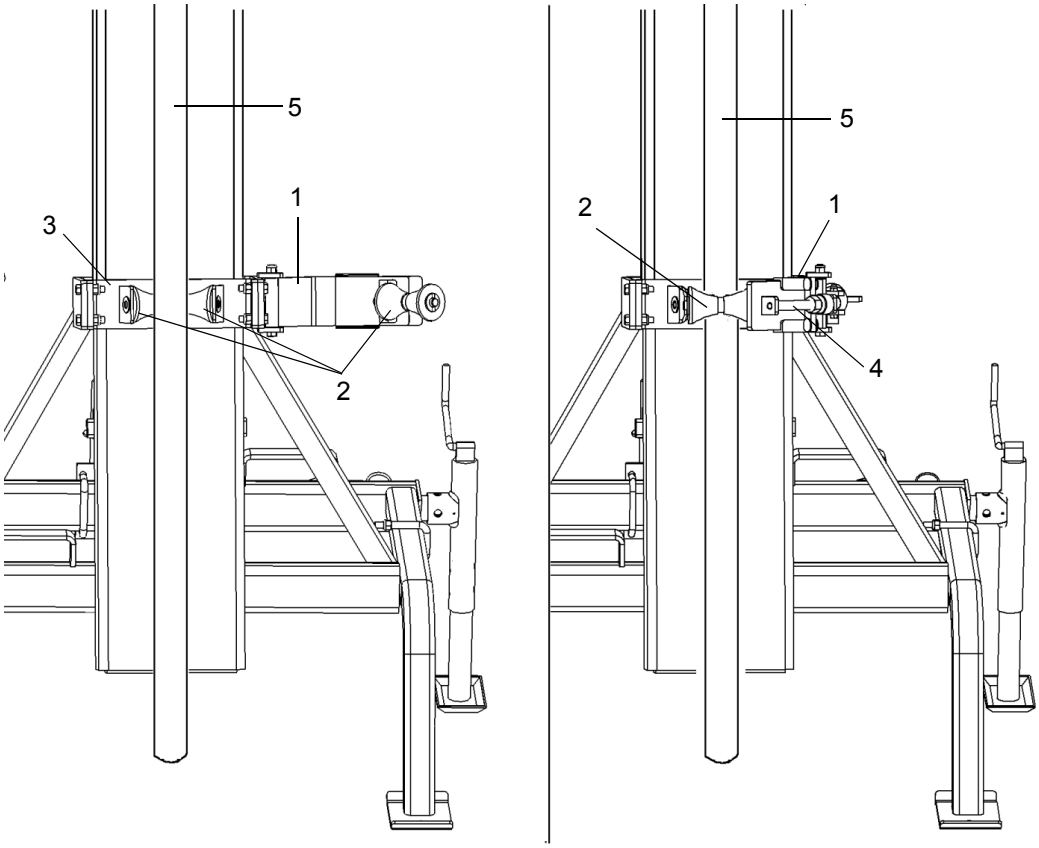


Table 8. Hugger Components

Item	Description
1	Hugger Arm
2	Cones
3	Front Roller Plate
4	Adjuster Bolt
5	Post

Driving a Post

⚠ WARNING Engage the park brake on tractor when pounding posts. If it is not engaged, the tractor and post pounder could move during pounder operation and injure the operator.

⚠ WARNING Do not operate the post pounder unless the hydraulic return line is firmly secured and draining to the tractor's fluid reservoir.

1. Use the hydraulic control valves to position the hammer in the desired position, see Section 6.2 – Operating Controls on page 28.
2. With the post held in the hugger, raise the ballast box approximately 1' to 2' above the post before driving the post down. This partial stroke is used to set the post.

⚠ WARNING Keep your hands clear of the hammer when driving a post. Use the post hugger to hold the post in position.

⚠ WARNING Do not place more than 280 lbs of weight in ballast box. An overloaded ballast will cause excessive stress on the hydraulic system and can damage the equipment and/or potentially injure operators.

3. Continue driving the post using the hydraulic control, raising the ballast box and dropping it onto the posts.
   a. **For large posts:** Raise the impact head as much as needed to safely drive the post.
   b. **For small posts:** Use shorter strokes because full strokes will damage small posts.

NOTICE Do not raise ballast box at excessive speed. Doing so could damage the hammer stop or mast frame. Always reduce the impact at the top hammer stop by slowing the hammer speed before it reaches the top.

4. Continue driving the post until the desired height is achieved.

NOTICE If a post becomes crooked, DO NOT use the hugger to straighten the post. Damage to the hugger may result.

⚠ WARNING DO NOT let ballast box free fall without pounding a post. If the hammer must be lowered without a post in place, slowly lower the hammer using the control lelver.

Note

If pounding posts with mast tilted near its maximum (both front-back and side-to-side tilt), one or both of the jacks may be lowered to provide extra stability.

6.7. Shutdown

1. Lower the hammer/ballast box completely.
2. Lean mast back into transport position.
3. **With standard hydraulics:** Shut off flow of oil from the tractor to the post pounder (standard hydraulics).
4. **With PTO Kit:** Turn off the tractor's PTO.
5. Turn off and lock out the tractor ignition.
6. Reattach lock bars to mast assembly and secure with hairpins.
7. **With standard hydraulics:** Disconnect hydraulic lines between the post pounder and the tractor, and secure them to the pounder.
8. **With PTO Kit:** Disconnect the hydraulic pump from the tractor's PTO, and place it on the PTO storage post.
9. Ensure the jack stands are secured in storage position with a lockpin.

6.8. Storage

After the season's use, the post pounder should be thoroughly inspected and prepared for storage. Repair or replace any worn or damaged components and perform maintenance as described in the Maintenance section to prevent any unnecessary downtime at the start of the next season.

1. Wash the entire post pounder thoroughly using a water hose or pressure washer to remove all dirt, mud, debris, or residue.
2. Touch up all paint nicks and scratches to prevent rusting.

3. Inspect the post pounder for cracks, tightness of fittings and fasteners, hydraulic hose cracks. Have required repairs performed to replace worn or damaged components and complete required annual maintenance.
4. Store in an area that is dry, level, free of debris, and away from human activity. Store inside if possible.
5. Cover the motor (if applicable) with waterproof tarpaulin if stored outside to protect from weather.
6. Place the post pounder in transport position, see Section 4. – Transport on page 25.
7. Grease all zerks on the post pounder. Do not grease plastic slides or mast rails.
8. Inspect the mast cylinder head nut and other hydraulic cylinders for leaks. Replace seals if necessary.
9. Ensure the jack stands are secured in storage position with a lockpin.

7. Maintenance

Before continuing, ensure you have completely read and understood this manual's Safety section, in addition to the safety information in the section(s) below.

7.1. Maintenance Safety

WARNING

- Keep components in good condition. Follow the maintenance procedures.
- Ensure the service area is clean, dry, and has sufficient lighting.
- Do not modify any components without written authorization from the manufacturer. Modification can be dangerous and result in serious injuries.
- Shut down and lock out power before maintaining equipment.
- Lower the post pounder fully.
- Secure mast with lock bars.
- After maintenance is complete, replace all guards, service doors, and/or covers.
- Use only genuine AGI replacement parts or equivalent. Use of unauthorized parts will void warranty. If in doubt, contact AGI or your local dealer.
- Before applying pressure to a hydraulic system, make sure all components are tight and that hoses and couplings are in good condition.

7.2. Maintenance Schedule

Proper maintenance habits mean a longer life, better efficiency, and safer operation. Please follow the Maintenance Schedule below. Keep good records of the hours the post pounder has been operated and the maintenance performed.

Daily:
Section 7.3 – Visually Inspect the Equipment on page 35
Weekly:
Section 7.4 – Lubricate the Equipment on page 35
Annually:
Section 7.6 – Check the Hydraulic Filter on page 36
Section 7.7 – Clean and Wash the Equipment on page 36

As Required:
Section 7.8 – Set the Relief Valve on page 36
Section 7.9 – Replace the Mast Seal on page 37

7.3. Visually Inspect the Equipment

Check the following during a visual inspection:

- Ensure all guards are in place and in good working order.
- Be sure all safety decals are in place and are legible.
- Inspect the post pounder for damage or unusual wear.
- **Models with PTO Kit**: Check the hydraulic oil level and condition. Inspect the PTO pump condition.
- Inspect hydraulic hoses and fittings for leaks and wear. Fix or replace where necessary.
- Check the hugger cast rollers and replace if damaged.
- Check tightness of all bolts/nuts, fasteners, and hardware (re-torque if necessary).
- Inspect all moving or rotating parts to see if anything has become entangled in them. Remove any entangled material.
- Tighten the mast cylinder cap.

7.4. Lubricate the Equipment

Your post pounder can operate at top efficiency only if clean fluids and lubricants are used. Use clean containers to handle all fluids and lubricants. Store them in an area protected from dust, moisture, and other contaminants.

1. Wipe the grease fittings with a clean cloth before greasing to avoid injecting dirt and grit.
2. Use a hand-held grease gun for all greasing.
3. If fittings will not take grease, remove and clean thoroughly.
4. Replace fittings if they are broken or will not accept grease after cleaning.

Use SAE multi-purpose high-temperature grease with extreme pressure (EP) performance. SAE multi-purpose lithium-based grease is also acceptable.

7.5. Inspect Hydraulic Hoses and Fittings

1. Visually inspect the system before pressurizing for any cuts, nicks, or damage to the hoses or fittings.
2. Pressurize the system.
3. Check for leaks using a piece of cardboard or wood by running it along the length of the hose and around all fittings.

   ⚠ WARNING Escaping hydraulic fluid under pressure will cause serious injury if it penetrates the skin surface.
4. Replace the hose, or tighten/replace the fitting if a leak is found.

5. Replace any hose that is badly cut, nicked, abraded, or is separating from the crimped end of the fitting.
6. Secure hoses to the machine.
7. Relieve pressure from the system after inspection is complete.

Note

If equipped with self-contained hydraulics, use automatic transmission oil (ATF) in the hydraulic system. If not equipped with self-contained hydraulics, use HVI 36 or equivalent.

7.6. Check the Hydraulic Filter

Before changing the filter, ensure the equipment is off, and place a drip pan underneath to catch oil.

1. Unscrew filter from receptacle.
2. Check for buildup; clean, if necessary.
3. Install new filter.

Note

AGI ships the Bandit Post Pounder equipped with an LHA Products SPE-15-10, 10-micron filter (rating Beta 10>2). This filter can be replaced by the same product, or by an oil filter of equivalent performance and physical characteristics.

LHA recommends that you replace the filter after the first 100 hours of operation, and then after every 250 hours of use. Replacement recommendations for equivalent filters may differ.

NOTICE Failure to replace the oil filter regularly will contribute to wear of hydraulic components, and may decrease the effective life span of the hydraulic fluid.

7.7. Clean and Wash the Equipment

1. Wash the post pounder with a water hose or pressure washer until all dirt, mud, debris, or residue is gone.
2. Provide sufficient time for drying.

7.8. Set the Relief Valve

If you are unable to raise the post pounder mast, the relief valve may need to be adjusted. To do this, loosen the nut using a 1/2" wrench, then using a 5/32" Allen wrench, turn the set screw clockwise 1/8 of a turn. Repeat until mast moves freely.

NOTICE Do not set the relief valve too high as damage to equipment may result.

If more than 2 complete turns are necessary, install a pressure gauge at the inlet to the valve to ensure that the pressure is NOT exceeding 2000 psi.

Figure 12. Bandit Hydraulic Control Valve

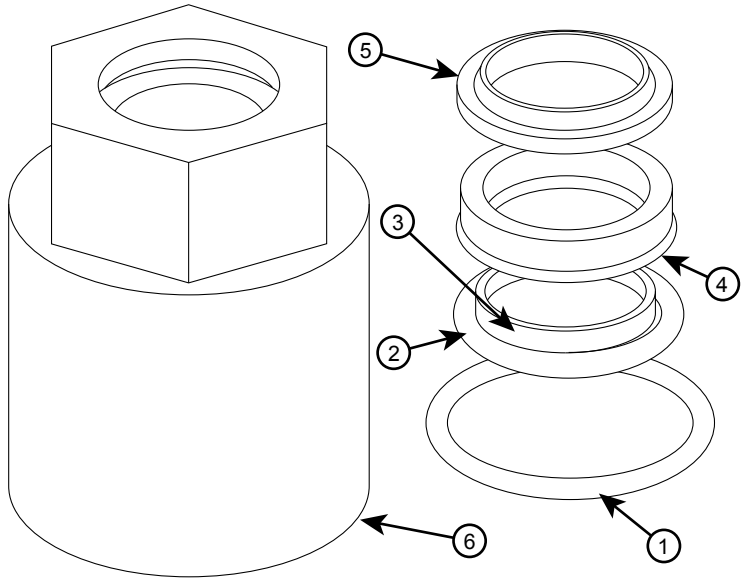
Item	Description
1	Relief Valve

7.9. Replace the Mast Seal

The seal kit consists of the following:

- large o-ring (1)
- small o-ring (2)
- buffer (3)
- polypak (4)
- dust seal (5)

Figure 13. Bandit Post Pounder Mast Seal Kit



Note

Ensure that o-rings are not twisted when placed into the cylinder mast cap. Twisted o-rings will result in a faulty seal and may cause leaks.

1. Place the large o-ring (1) through the bottom (threaded side) of the mast cylinder cap (6) into the first groove above the threads.
2. Through the bottom of the mast cylinder cap (6), install the small o-ring (2) and the buffer (3) into the next recession above the large o-ring (1).

Important

Ensure that the lip on the buffer faces the pressure side (down).

3. Install the polypak (2) into the second groove from the top (wrench side) of the mast cylinder cap (4). Ensure that the side of the polypak (2) with the o-ring embedded into it faces the pressure side (down).
4. Insert the dust seal (5) into the top recession with tapered side facing up.

8. Troubleshooting

⚠ WARNING Shut down and lock out all power sources before diagnosing any of the causes or attempting any of the solutions below.

In the following section, we have listed some causes and solutions to some of the problems you may encounter.

If you encounter a problem that is difficult to solve, even after having read through this section, please contact your local dealer or distributor. Before you contact them, please have this operation manual and the serial number from your machine ready.

Problem	Cause	Solution
Valve is leaking	Loose/cracked fittings	Tighten/replace fittings
	Worn hose	Replace hose
	Valve spools are worn	Replace valve
Hydraulic cylinder leaking	Worn seal	Replace seal
	Loose cylinder cap	Tighten cap bolts and monitor leak. If leak persists, replace cylinder seal
Mast cylinder is leaking	Head nut is loose	Tighten nut
	Worn seal	Replace seal
Mast tilts too slowly	Low system flow/pressure	Increase PTO speed (for the pounder with PTO Kit option) or hydraulic flow from tractor
	Hydraulic oil level is low	Check oil level and add oil if required
	Hydraulic line blocked or kinked	1) Suction blocked hose(s) 2) Replace kinked hose(s)
	Mechanical binding	Check for any obstructions to mast movement, including hoses, lock bars.
Hammer rises too quickly	Excessive system flow/ pressure	Decrease PTO speed (for the pounder with PTO Kit option) or hydraulic flow from tractor
Hammer rises too slowly or Hammer raises part way, sticks, and stops	Low system flow/pressure	Increase PTO speed (for the pounder with PTO Kit option) or hydraulic flow from tractor
	Oil too hot	Tank level low, wrong oil used, oil is contaminated, or ambient temperature is high for rate of operation.
	Hydraulic line blocked or kinked	1) Suction blocked hose 2) Replace kinked hose

Problem	Cause	Solution
	Mechanical binding	Check for any cause of binding or obstruction between mast parts. Check mast assembly for misalignment, bent mast, broken welds, loose or missing bolts, misaligned components.
	Excessive ballast	Reduce ballast weight to 280 lbs or less
Hammer drops too slowly	Mechanical binding	Check for any obstructions to mast movement, including hoses, lock bars.
	Return line restricted (blocked, kinked, or otherwise impeded)	Suction out blocked lines, and replace kinked hoses or non-Wheatheart connectors that might obstruct flow.
Hammer drops quickly, but does not deliver enough force to drive post	Ballast too light	Increase ballast weight, but do not exceed 280 lbs.
	Hidden obstruction in soil	Large tree roots or rocks can impede or stop post from being driven. Reposition post and attempt again.
	Soil too hard, post too large	It is possible that some combinations of very hard soils combined with large post diameters will make pounding a post slow or impossible. Solution: pre-drill post holes or cut a point on the end of the post.

9. Specifications

9.1. Bandit Post Pounder Specifications

Table 9. Bandit Post Pounder Specifications

Hammer Weight (without ballast)	320 lbs
Maximum Ballast	280 lbs
Total Weight (without ballast)	720 lbs
Transport Weight (with ballast)	1,000 lbs
Transport Height	8’ 8”
Width	4”1”
Length	3”4”
Hammer Height (Max)	9”4”
Hammer Height (Min)	4’
Hammer Stroke	5’4”
Maximum Post Size (Hugger)	12” diameter
Hydraulic Requirements	7 GPM@1500 PSI
Hydraulic Fluid (recommended)	If the Bandit is equipped with Self Contained Hydraulics, use ATF only. If not Self Contained, use “HVI 36” or equivalent.
Hammer Tilt Adjustment (front/back)	17° front/back from vertical
Hammer Tilt Adjustment (side-to-side)	16° left/right from vertical

9.2. Standard Hydraulic Hose Connections

Figure 14. Bandit Post Pounder Standard Hydraulic Diagram

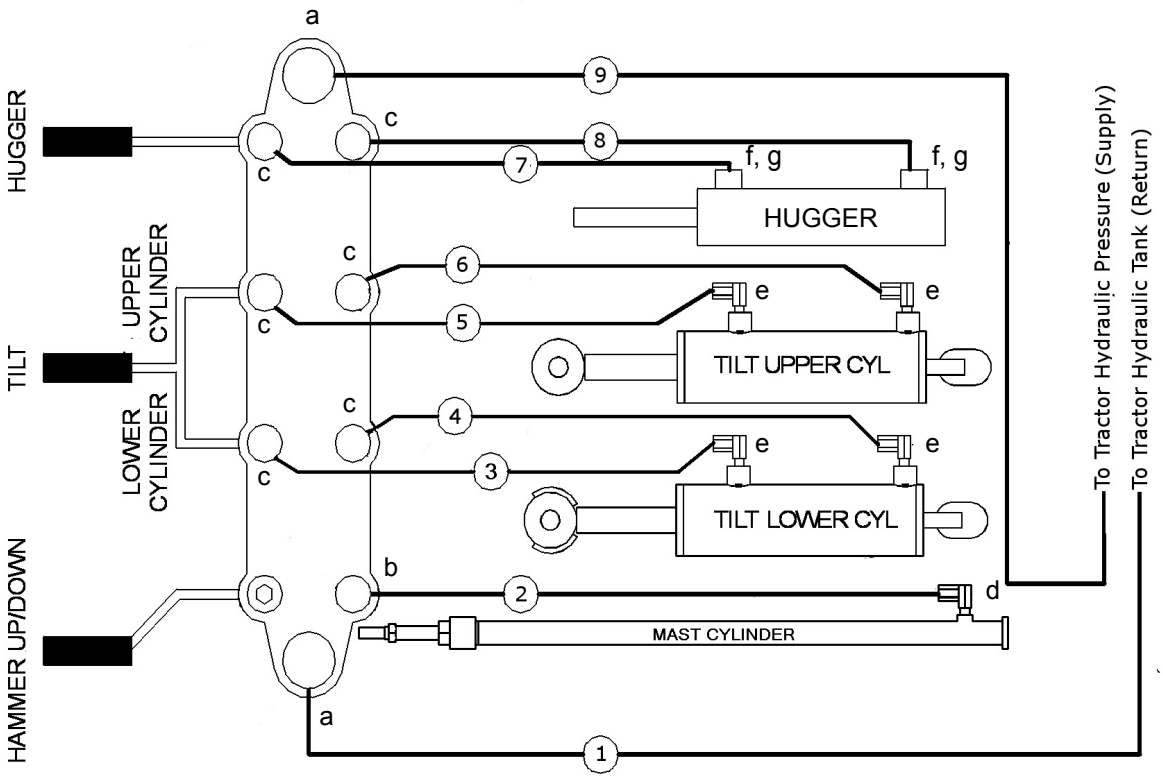


Table 10. Hydraulic Hose Connections and Fittings, Standard Model

ITEM	PART NO.	DESCRIPTION	LOCATION
a	9900204	FTG,STL,10MORB X 1/2NPSM	between the valve and hoses 1 & 9
b	9900228	FTG,STL,8MORB X 1/2NPSM	between the valve and hose 2
c	9900909	FTG,STL,1/2MORB X 1/2FNPSM X 1/16 ORIFICE	between the valve and hoses 3 - 8
d	9900331	FTG,STL,ELB, 1/2MNPT X 1/2FNPSM	between the mast cylinder and hose 2
e	9900012	FTG,STL,ELB,8MORB X 1/2FNPSM	between the tilt cylinders and hoses 3 – 6
f	9900761	FTG,STL,ELB, 3/8MNPT X 3/8FNPSM	between hugger cylinder and hoses 7 & 8
g	9900302	FTG,STL, 6MORB X 3/8FNPSM	**Note** sequence: the hose – 9900761 – 9900302 – hugger cylinder
1	H34X84	3/4X84, 1/2MNPT X 3/4MNPT	return, valve to tractor
2	H12X48P2W	1/2X48, 1/2MNPT X 1/2MNPT	valve to mast cylinder
3	H38X52	3/8X52, 1/2MNPT X 1/2MNPT	tilt cylinder lower, rod end
4	H38X55	3/8X55, 1/2MNPT X 1/2MNPT	tilt cylinder lower, cap end
5	H38X40P1	3/8X40, 1/2MNPT X 1/2MNPT	tilt cylinder top, rod end
6	H38X40P1	3/8X40, 1/2MNPT X 1/2MNPT	tilt cylinder top, cap end
7	H38X69	3/8X69, 3/8MNPT X 1/2MNPT	hugger, rod end
8	H38X65	3/8X65, 3/8MNPT X 1/2MNPT	hugger, cap end
9	H12X72P	1/2X72, 1/2MNPT X 1/2MNPT	pressure, valve to tractor

9.3. Hydraulic Hose Connections with PTO Kit

Figure 15. Bandit Post Pounder Hydraulic Diagram with PTO Kit

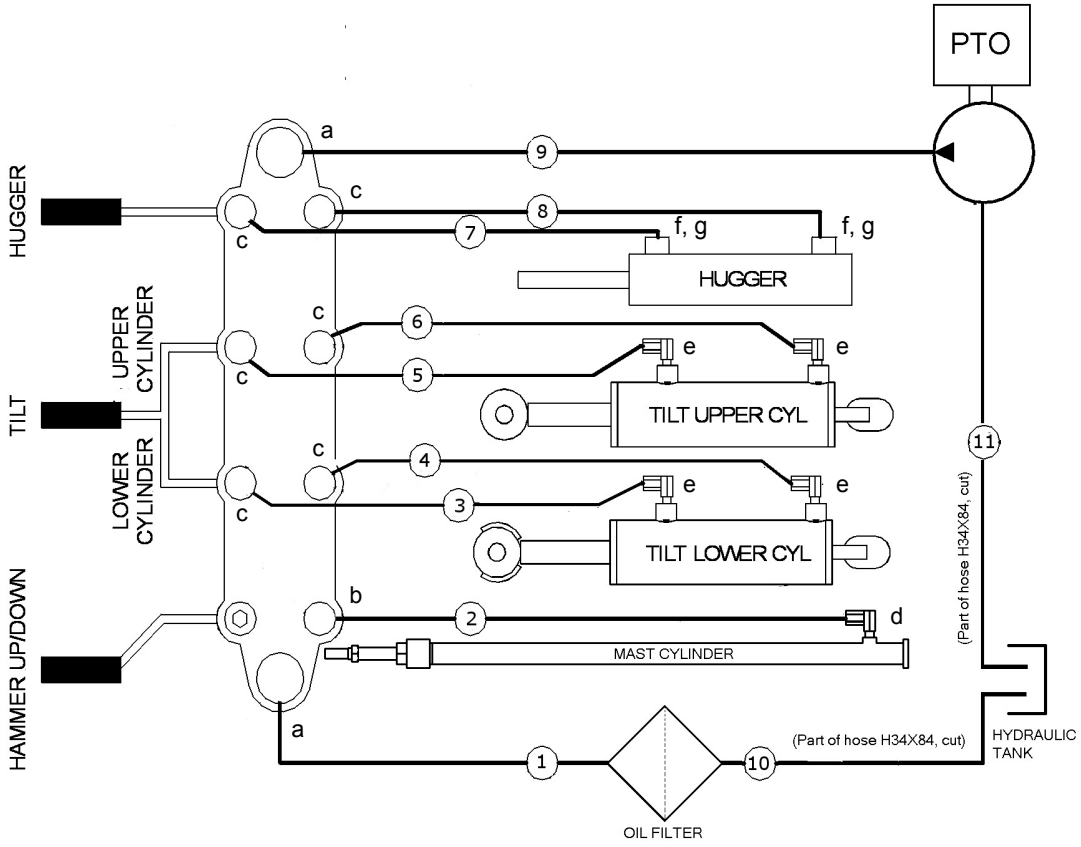


Table 11. Hydraulic Hose Connections and Fittings, with PTO Kit

ITEM	PART NO.	DESCRIPTION	LOCATION
a	9900204	FTG,STL,10MORB X 1/2NPSM	between the valve and hoses 1 & 9
b	9900228	FTG,STL,8MORB X 1/2NPSM	between the valve and hose 2
c	9900909	FTG,STL,1/2MORB X 1/2FNPSM X 1/16 ORIFICE	between the valve and hoses 3 - 8
d	9900331	FTG,STL,ELB, 1/2MNPT X 1/2FNPSM	between the mast cylinder and hose 2
e	9900012	FTG,STL,ELB,8MORB X 1/2FNPSM	between the tilt cylinders and hoses 3 – 6
f	9900761	FTG,STL,ELB, 3/8MNPT X 3/8FNPSM	between hugger cylinder and hoses 7 & 8 **Note** sequence: the hose – 9900761 – 9900302 – hugger cylinder
g	9900302	FTG,STL, 6MORB X 3/8FNPSM	
1	H34x31	3/4X31,1/2MNPT X 3/4MNPT	return, valve to filter
2	H12X48P2W	1/2X48,1/2MNPT X 1/2MNPT	valve to mast cylinder
3	H38X52	3/8X52,1/2MNPT X 1/2MNPT	tilt cylinder lower, rod end
4	H38X55	3/8X55,1/2MNPT X 1/2MNPT	tilt cylinder lower, cap end
5	H38X40P1	3/8X40,1/2MNPT X 1/2MNPT	tilt cylinder top, rod end
6	H38X40P1	3/8X40,1/2MNPT X 1/2MNPT	tilt cylinder top, cap end

Table 11 Hydraulic Hose Connections and Fittings, with PTO Kit (continued)

ITEM	PART NO.	DESCRIPTION	LOCATION
7	H38X69	3/8X69,3/8MNPT X 1/2MNPT	hugger, rod end
8	H38X65	3/8X65,3/8MNPT X 1/2MNPT	hugger, piston end
9	H12X72P	1/2X72,1/2MNPT X 1/2MNPT	pressure, valve to PTO pump
10	H34X84* (partial)	3/4X37,1/2MNPT	return, to tank from filter
11	H34X84** (partial)	3/4X47,3/4MNPT	supply, from tank to PTO pump
*First part of hose H34X84, cut 37 inches from the 1/2” NPT connector **Second part of hose H34X84, approximately 47” in length.			

10. Appendix

10.1. Bolt Torque

Table 12 gives the correct torque values for various hardware. Tighten all bolts to the torque specified, unless otherwise noted. Check tightness periodically, using Table 12 as a guide. Replace the hardware with the same strength bolt, contact AGI if you are unsure.

Table 12. Recommended Bolt Torque[1]

Size	Dry or Lubricated	Threads per inch (Course/ Fine)	Area of Bolt (sq in.)		Recommended Torque (ft-lb)							
					Grade 2		Grade 5		Grade 8		8.8 S/S	
			Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine
1/4"	Dry	20/28	0.0318	0.0364	5.5	6.3	8	10	12	14	6.3	7.8
	Lubricated				6.3	4.7	6.3	7.2	9	10	-	-
5/16"	Dry	18/24	0.0524	0.058	11	12	17	19	24	27	11	11.8
	Lubricated				8	9	13	14	18	20	-	-
3/8"	Dry	16/24	0.0775	0.0878	20	23	30	35	45	50	20	22
	Lubricated				15	17	23	25	35	35	-	-
7/16"	Dry	14/20	0.1063	0.1187	32	36	50	55	70	80	31	33
	Lubricated				24	27	35	40	50	80	-	-
1/2"	Dry	13/20	0.1419	0.1599	50	55	75	85	110	120	43	45
	Lubricated				35	40	55	65	80	90	-	-
9/16"	Dry	12/18	0.182	0.203	70	80	110	120	150	170	57	63
	Lubricated				55	60	80	90	110	130	-	-
5/8"	Dry	11/18	0.226	0.256	100	110	150	170	210	240	93	104
	Lubricated				75	85	110	130	160	180	-	-
3/4"	Dry	10/16	0.334	0.373	175	200	260	300	380	420	128	124
	Lubricated				130	140	200	220	280	310	-	-
7/8"	Dry	9/14	0.462	0.508	170	180	430	470	600	670	194	193
	Lubricated				125	140	320	350	180	180	-	-
1"	Dry	8/14	0.606	0.679	250	280	640	720	910	1020	287	289
	Lubricated				190	210	480	540	680	760	-	-
1-1/8"	Dry	7/12	0.763	0.856	350	400	790	890	1290	1440	288	290
	Lubricated				270	300	590	670	970	1080	-	-
1-1/4"	Dry	7/12	0.989	1.073	500	550	1120	1240	1820	2010	289	291
	Lubricated				380	420	840	930	1360	1510	-	-
1-1/2"	Dry	6/12	1.405	1.581	870	960	1950	2200	3160	3560	-	-
	Lubricated				650	730	1460	1640	2370	2670	-	-

1. Torque value for bolts and cap screws are identified by their head markings. Established at 75% of yield strength of bolt given the cross-sectional area.

Note

Torque figures in table are valid for non-greased or non-oiled threads and head unless otherwise specified. Therefore, do not grease or oil bolts or cap screws unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

10.2. Fittings Torque Values

These specifications are for carbon steel. With Zinc plating always lubricate threads and seals. For stainless steel, use the high value of the torque range of steel. For brass, use 70% of the torque value of steel. For mixed metals, use the torque of the lower of the two metals. Torque range is normally calculated +/- 10%.

Table 13. Pipe Rigid - Tapered Pipe Threads (NPTF, N/NF) - Carbon Steel

Pipe Size	Turns-from-finger	Max ft-lbs	Max N-m
1/8" (-2)	3/4 - 1 3/4	12	16
1/4" (-4)	3/4 - 1 3/4	25	34
3/8" (-6)	3/4 - 1 3/4	40	54
1/2" (-8)	1/2 - 1 1/2	54	73
3/4" (-12)	1/2 - 1 1/2	78	106
1" (-16)	1/2 - 1 1/2	112	152
1 1/4" (-20)	1/2 - 1 1/2	154	209
1 1/2" (-24)	1/2 - 1 1/2	211	286
2" (-32)	1/2 - 1 1/2	300	407

Table 14. Pipe Swivel - Straight Pipe Threads (NPSM, N/NFS) - Carbon Steel

Pipe Size	Max ft-lbs	Max N-m
1/8" (-2)	12	16
1/4" (-4)	25	3
3/8" (-6)	40	54
1/2" (-8)	54	73
3/4" (-12)	78	106
1" (-16)	112	152
1 1/4" (-20)	154	209
1 1/2" (-24)	211	286
2" (-32)	300	407
Note: seals on an internal male 30° seat		

Table 15. Stud End O-Ring Boss (ORB) SAE (U/UF) – Carbon Steel

Tube Size	Thread UNF-2A	Max ft-lbs	Max N-m
-2	5/16" - 24	6-7	8-9
-3	3/8" - 24	8-9	11-12
-4	7/16" - 20	13-15	18-20
-5	1/2" - 20	17-19	23-26

Table 15 Stud End O-Ring Boss (ORB) SAE (U/UF) – Carbon Steel (continued)

Tube Size	Thread UNF-2A	Max ft-lbs	Max N-m
-6	9/16" - 18	22-24	29-33
-8	3/4" - 16	40-43	49-53
-10	7/8" - 14	43-48	59-64
-12	1 1'16" - 12	68-75	93-102
-14	1 3/16" - 12	90-99	122-134
-16	1 5/16" - 12	112-123	151-166
-20	1 5/8" - 12	146-161	198-218
-24	1 7/8" - 12	154-170	209-231

Table 16. JIC 37° Flare Tube Fitting (J/JFS)

Tube Size	Thread UNF-2A	Torque ft-lbs	Torque N-m
-2	5/16 - 24	6-7	8-9
-3	3/8 - 24	8-9	11-12
-4	7/16 - 20	11-12	15-16
-5	1/2 - 20	14-15	19-21
-6	9/16 - 18	18-20	24-28
-8	3/4 - 16	36-39	49-53
-10	7/8 - 14	57-63	77-85
-12	1 1/16 - 12	79-88	107-119
-14	1 3/16 - 12	94-103	127-140
-16	1 5/16 - 12	108-113	147-154
-20	1 5/8 - 12	127-133	172-181
-24	1 7/8 - 12	158-167	215-226
-32	2 1/2 - 12	245-258	332-350

11. Limited Warranty

This warranty relates to Post Pounders (the "Product") sold by AGI (referred to herein as the "Seller") and applies only to the first user of the Product (meaning a purchaser directly from the Seller or from an authorized dealer or distributor of the Product, referred to herein as the "Buyer").

This warranty shall only be effective if properly registered with the Seller in accordance with information provided to the Buyer at the time of sale.

1. The Seller warrants to the Buyer that the Product is free from defects in material and workmanship **under normal and reasonable use** and in accordance with manufacturer's manual.
2. This warranty applies only to defects in materials and workmanship and not to damage incurred in shipping or handling, through normal wear and tear, or damage due to causes beyond the control of the Seller such as lightning, fire, flood, wind, earthquake, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration, improper assembly, improper installation, improper maintenance or improper repair of the Product.
3. **The warranty period for the Product shall be two years from delivery of the Product to the Buyer where the Product is used in a normal farm operation. First year of warranty coverage of parts and repair labour, second year warranty coverage of parts only. Warranty period for the Product shall be 90 days from delivery of the Product to the Buyer where the Product is used in a commercial operation.** In the event that any part incorporated into the Product is manufactured and sold to the Seller by a third party vendor, such part is only warranted to the extent of the warranty given by that third party.
4. This warranty does not obligate the Seller to bear costs of travel in replacing defective parts.
5. The obligations set forth in this warranty are conditional upon the Buyer promptly notifying the Seller of any defect and completing reasonably required documentation and, if required, promptly making the Product available for correction.
6. The total liability of the Seller on any claim, whether in contract, tort or otherwise, arising out of, connected with, or resulting from the manufacture, sale, delivery, repair, replacement or use of the Product or any part thereof **shall not exceed the price paid for the Product** and the Seller shall not be liable for any special indirect, incidental or consequential damages caused by reason of the installation, modification, use, repair, maintenance or mechanical failure of the Product. **Consequential or special damages as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs and operational inefficiencies.**
7. The foregoing warranty is the entire warranty of the Seller to the Buyer and the Buyer shall not be entitled to rely upon any representation or warranty contained in any marketing material of the Seller in respect of the Product. The Seller neither assumes, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning the Product.

WARRANTY VOID IF NOT REGISTERED

Shipping: 201 Industrial Drive, Swift Current, Saskatchewan S9H 5R4, CANADA
Mailing: P.O. Box 1750, Swift Current, Saskatchewan S9H 4J8, CANADA
Toll-Free: (877) 667-7421 (Canada & USA)
Phone: (306) 773-7779 Fax: (306) 778-2524

Website: www.aggrowth.com
Email: sales@batco-rem.com

Printed in Canada

If you have any comments or questions on this manual, or find an error, email us at comments@aggrowth.com.
Please include the part number listed on the cover page in your message.