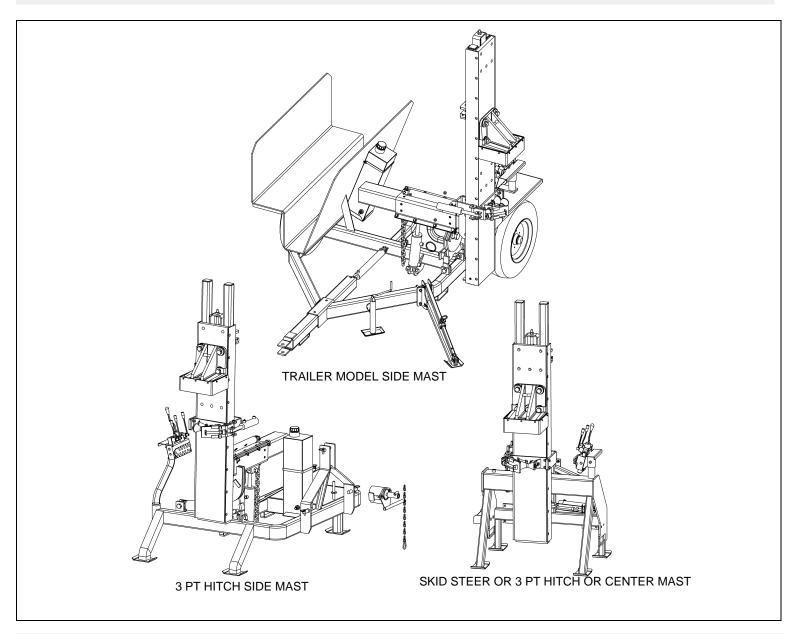


POST POUNDER

HIGH & HEAVY HITTER AND HIGH & HEAVY HITTER PLUS
OPERATION MANUAL





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: IM4 R1

Revised: 18/1/10

This product has been designed and constructed according to general engineering standards^a. Other local regulations may apply and must be followed by the operator. We strongly recommend that all personnel associated with this equipment be trained in the correct operational and safety procedures required for this product. Periodic reviews of this manual with all employees should be standard practice. For your convenience, we include this sign-off sheet so you can record your periodic reviews.

Date	Employee Signature	Employer Signature

a. Standards include organizations such as the American Society of Agricultural and Biological Engineers, American National Standards Institute, Canadian Standards Association, International Organization for Standardization, and/or others.

TABLE OF CONTENTS

1. Introduction	5
2. Safety First	7
2.1. General Safety	
2.2. Transport & Placement Safety	
2.3. Operation Safety	
2.4. Maintenance Safety	
2.5. Hydraulic Safety	12
2.6. Engine Safety	12
2.7. PTO Safety	12
2.8. Tire Safety	12
2.9. Safety Decal Locations	
2.9.1. Decal Installation	13
2.9.2. Decal Locations	13
3. Transport4. Placement	
5. Operation5.	21
5.1. Pre-Operation Checklist	
5.2. Drives & Lockouts	
5.3. Start-Up & Break-In	
5.4. Operating Procedure	
5.4.1. Shutdown	
O. Matatanana	
6. Maintenance	
6.1. Setting Relief Valve	21
6.2. Replacing the Mast Seal	
6.2.1. High and Heavy Hitter	
6.2.2. High and Heavy Hitter Plus	28
7. Storage	31
8 Troubleshooting	33

TABLE OF CONTENTS

9. Appendix	. 35
9.1. Bolt Torque Values	. 35
9.2. Tightening O-Ring Fittings	. 36
9.3. Specifications & Drive Options	
9.4. Parts	
9.4.1. HH/HH Plus Trailer	
9.4.2. HH/HH Plus 3-Point Side Mast	
9.4.3. Inline Hydraulic Oil Filter Post Pounder	. 47
9.4.4. Skid Steer / 3pt Center Mast Base Unit	
9.4.5. Kit - 3pt Center Mast W/ Self Contained Hydraulics	
9.4.6. Kit - 3pt Center Mast W/out Self Contained Hydraulics	
9.4.7. Kit - Skid Steer W/ Self Contained Hydraulics	
9.4.8. Kit - Skid Steer W/out Self Contained Hydraulics	
9.4.9. Gas Drive Components	
9.4.10. PTO Drive Components	
9.4.11. Hydraulic Control Valves	
9.4.12. Hydraulic Plumbing Trailer (PTO/Gas)	
9.4.13. Hydraulic Plumbing 3-Point Side Mast	
9.4.14. Hydraulic Plumbing Skid Steer W/ Self-Contained Hydraulics	
9.4.15. Hydraulic Plumbing Skid Steer W/out Self-Contained Hydraulics	
9.4.16. Hydraulic Plumbing 3pt Center Mast W/ Self-Contained Hydraulics	
9.4.17. Hydraulic Plumbing 3pt Center Mast W/out Self Contained Hydraulics .	
9.4.18. Hugger	
9.4.19. Outrigger Leg	
9.4.20. Optional Parts	. 77
Warranty Registration	. 81
Limited Warranty	. 83

1. Introduction

Congratulations on your choice of a Wheatheart Post Pounder to complement your operation. This equipment has been designed and manufactured to meet the needs of the discriminating buyer for the efficient installation of fence posts.

Safe, efficient, and trouble-free operation of your Post Pounder requires that you, and anyone else who will be involved with operating the unit, read and understand all safety instructions and procedures contained within this manual. This manual covers all Post Pounders manufactured by Wheatheart Manufacturing. A sign-off form is provided on the inside front cover for your convenience.

Keep this manual handy for frequent reference and to review with new personnel. Call your Wheatheart distributor or dealer if you need assistance, information, or additional copies of the manual.

Operator Orientation: The directions left, right, front, and rear, as mentioned throughout the manual, are as seen from the tractor, skid steer loader, or towing vehicle driver seat and facing in the direction of travel when the unit is being transported.



Trailer Model



Skid Steer Model



3PT Center Mast Model



3PT Side Mast Model

Serial Number:	

Date Purchased:

Dealer Name: _____

2. Safety First



The Safety Alert symbol to the left identifies important safety messages on the product and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety messages. Why is SAFETY important to you?

Three big reasons:

- Accidents disable and kill.
- Accidents cost.
- Accidents can be avoided.

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.

The Safety Alert symbol means ATTENTION, BE ALERT!, YOUR SAFETY IS INVOLVED.

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.

2.1. GENERAL SAFETY

Important:

The general safety section includes instructions that apply to all safety practices. Any instructions specific to a certain safety practice (e.g., assembly safety), can be found in the appropriate section. Always read the complete instructional sections and not just these safety summaries before doing anything with the equipment.

YOU are responsible for the **SAFE** use and maintenance of your equipment. **YOU** must ensure that you and anyone else who is going to work around the equipment understands all procedures and related SAFETY information contained in this manual.

Remember, **YOU** are the key to safety. Good safety practices not only protect you, but also the people around you. Make these practices a working part of your safety program.

- It is the equipment owner and the operator's responsibility to read and understand ALL safety instructions, safety decals, and manuals and follow them before assembling operating, or maintaining the equipment. All accidents can be avoided.
- Equipment owners must give instructions and review the information initially and anually with all personnel before allowing them to operate this product. Untrained users/operators expose themselves and bystanders to possible serious injury or death.
- Use this equipment for its intended purposes only.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety, and could affect the life of the equipment. Any modification to the equipment voids the warranty.
- Do not allow children, spectators, or bystanders within the work area.
- Have a first-aid kit available for use should the need arise, and know how to use it.
- Provide a fire extinguisher for use in case of an accident. Store in a highly visible place.
- Wear appropriate protective gear. This list includes, but is not limited to:
 - a hard hat
 - gloves
 - protective shoes with slip-resistant soles
 - protective goggles
 - hearing protection
- For Powered Equipment: before servicing, adjusting, or repairing powered equipment, unplug, place all controls in neutral or off position, stop the engine or motor, remove ignition key or lock out power source, and wait for all moving parts to stop.







IM4_{R1}

- Follow good shop practices:
 - · keep service area clean and dry
 - be sure electrical outlets and tools are properly grounded
 - use adequate light for the job at hand
 - Think SAFETY! Work SAFELY!



2.2. TRANSPORT & PLACEMENT SAFETY

- Check with local authorities regarding transport on public roads. Obey all applicable laws and regulations.
- Always travel at a safe speed. Use caution when turning corners or meeting traffic.
- Use extreme care and minimum ground speed when operating or transporting on hillsides, over rough ground, or near ditches or fences.
- 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 traffic.
- Do not allow riders on the equipment or towing vehicle during transport.
- Keep away from overhead and buried power lines / gas lines. Arcing and possible electrocution can occur without direct contact.
- Ensure that tires are inflated to the manufacturer's recommended pressure.
- Before transporting, postition the impact head into the fully retracted position. On skid steer / 3pt center mast units, ensure transport locks have hairpins installed with the mast centered and top cylinder retracted.



TRAILER MODEL



Figure 2.1

- Consult local utility companies before operating machine near overhead or buried power lines / gas lines.
- Review the work safety area diagram before starting work.

WARNING Ensure that all of the support legs of the skid steer or 3pt pounder are set firmly on the

ground before using pounder.

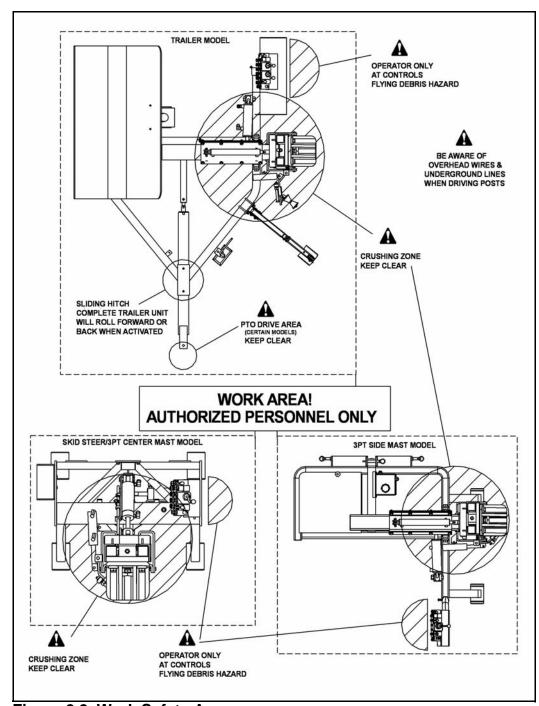


Figure 2.2 Work Safety Areas

2.3. OPERATION SAFETY

- Have another person nearby who can shut down the equipment in case of accident.
- Do not operate with any of the safety guards removed.
- Keep body, hair, and clothing away from moving parts. Stay away from intake during operation.
- Do not use damaged belts, there is a risk of flying debris.
- Hydraulic valve must be in the working positions (Figure 2.3). Failure to have valve positioned correctly will mean the orientation of the valve and instructional decal will be incorrect.

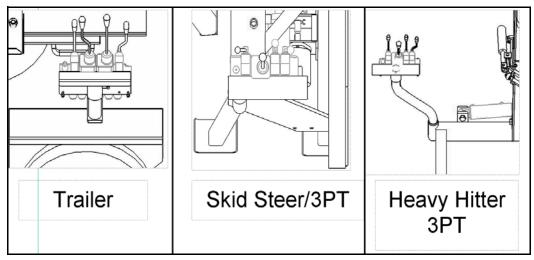


Figure 2.3 Hydraulic Valve Working Positions

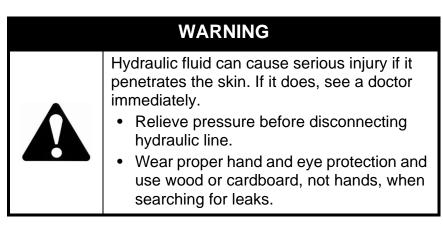
2.4. MAINTENANCE SAFETY

- Before applying pressure to a hydraulic system, make sure all components are tight and that hoses and couplings are in good condition.
- Relieve pressure from hydraulic circuit before servicing or disconnecting from tractor.
- Place stands or blocks under the frame before working beneath the machine.
- After maintenance is complete, replace and secure all safety guards and safety devices, and if applicable, service doors and cleanout covers.
- Remove all tools and unused parts from machine before operation.
- Remove buildup of grease, oil, and debris.
- Inspect all parts. Ensure parts are in good condition and installed properly.

Use only genuine Wheatheart replacement parts or equivalent. Replacement parts must meet ASAE standards or serious injury may result. Use of unauthorized parts will void the warranty. If in doubt, contact Wheatheart or your Wheatheart dealer.

2.5. HYDRAULIC SAFETY

- Always place all hydraulic controls in neutral and relieve system pressure before disconnecting or working on hydraulic system.
- Keep all components in the hydraulic system tightly secured and in good condition and clean.
- Replace any worn, cut, abraded, flattened, or crimped hoses.
- Do not attempt any makeshift repairs to the hydraulic fittings or hoses with tape, clamps, or concrete. The hydraulic system operates under extremely high pressure; such repairs will fail suddenly and create a hazardous and unsafe condition.
- Before moving a hydraulic cylinder, ensure that the attached component is safely secured.



2.6. ENGINE SAFETY

- Be sure to stop engine and remove key or lock out power before inspecting or servicing engine
- · Refer to engine operation manual for further details.

2.7. PTO SAFETY

- 1. Be sure to disengage the PTO control, turn off the tractor, remove key, and set park brake before inspecting or servicing the PTO.
- 2. Ensure that the PTO is attached securely to the tractor and the machine.
- 3. Make sure all PTO guards are in good repair and in place prior to hooking up the PTO.

Refer to the Agricultural Implement Drivelines Safety Manual by the Agricultural Driveline Manufacturers' Association for further details.

2.8. TIRE SAFETY

1. When replacing worn tires, ensure that they meet the original tire specifications. Never undersize the replacement tire.

- 2. Let a qualified tire repair shop perform all required tire replacement.
- 3. Ensure that the tires are properly inflated. See tire for details.

2.9. SAFETY DECAL LOCATIONS

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

2.9.1. DECAL INSTALLATION

- 1. Decal area must be clean and dry, with a temperature above 10°C (50°F).
- 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 sign backing paper.

2.9.2. DECAL LOCATIONS

Replicas of the safety decals that are attached to the equipment are shown below. Good safety 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.

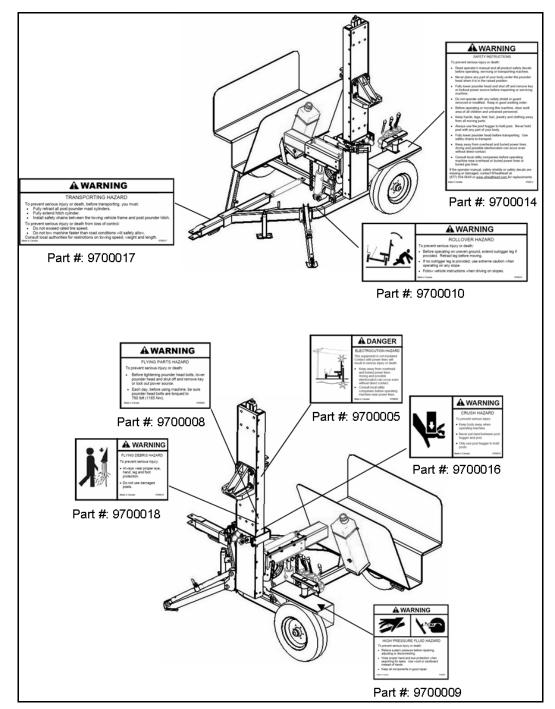


Figure 2.4 Safety Decal Locations (Trailer Pounder Shown)

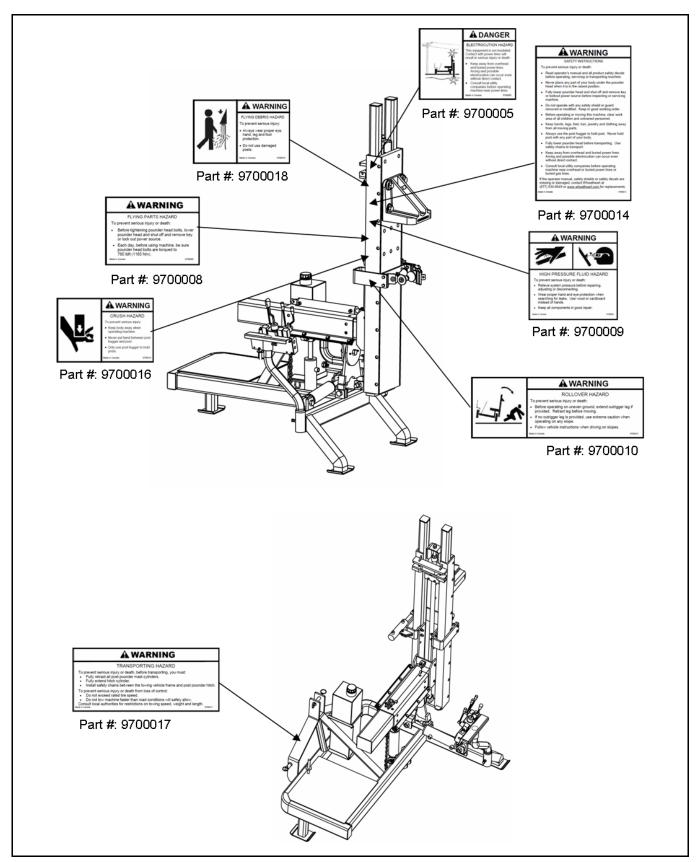


Figure 2.5 Safety Decal Locations (3PT Side Mast Pounder Shown)

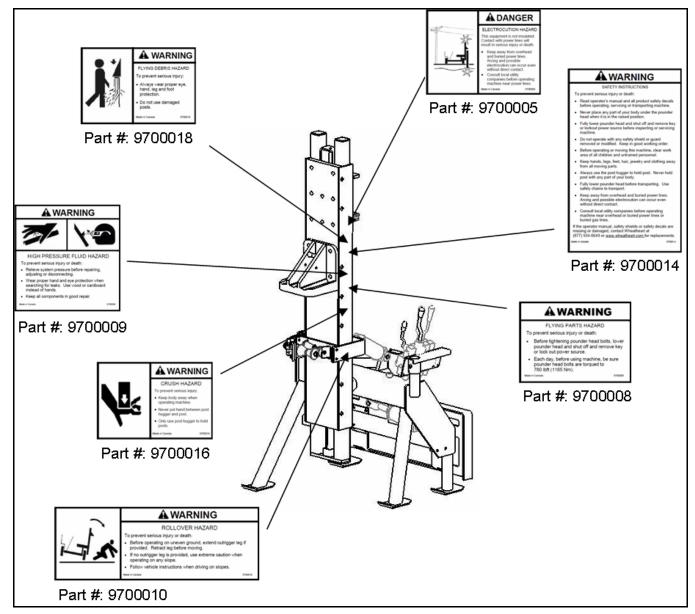


Figure 2.6 Safety Decal Locations (Skid Steer / 3PT Center Mast Pounder Shown)

3. Transport

Warning: Before continuing, please reread the safety information relevant to this section at the beginning of this manual. Failure to follow the safety instructions can result in serious injury, death, or property damage.

Follow this procedure when placing the unit into its transport position:

- 1. **Trailer Model**: attach the unit to the tractor/towing unit with a pin, retainer, and safety chain.
- 3pt Side Mast Model: attach the unit to Category II 3pt and secure with pins.
- 3pt Center Mast Model: attach the unit to Category I or II 3pt and secure with pins.
- Skid Steer Model: attach and pin to skid steer loader adapter.

Important: Use caution when turning corners or meeting traffic.

- 2. Before transporting, position the pounder mast head into the fully retracted position (Figure 2.1).
- Trailer Model: fully extend the hitch cylinder
- 3pt Models: fully raise 3-point hitch unit
 - Skid Steer / 3pt Center Mast Model: ensure transport locks have hairpins installed with the mast centered and top cylinder retracted
 - 3. Make sure the SMV (Slow Moving Vehicle) emblem and all the lights and reflectors that are required by the local authorities are in place, are clean, and can be seen clearly by all traffic.
 - 4. Consult with local authorities regarding transport on public roads. Obey all applicable laws and regulations.

WARNING



Skid steer pounder should only be raised high enough to allow for safe transport. DO NOT raise pounder above the skid steer loader cab. Refer to skid steer loader operation manual for further details.

WARNING



Do not attempt to move the unit by hand. Only move when hitched securely to tow vehicle, tractor, or skid steer loader.

WARNING



Use extreme care and use minimum ground speed when operating or transporting on hillsides, over rough ground, or near ditches or fences.

4. Placement

Warning: Before continuing, please reread the safety information relevant to this section at the beginning of this manual. Failure to follow the safety instructions can result in serious injury, death, or property damage.

Follow this procedure when placing the machine into its working position:

- 1. Review the work area safety diagram (Figure 2.2) for your model prior to starting work. Follow all set-up instructions and do not allow any unauthorized people into the working area.
- 2. Be sure there is enough clearance from overhead obstructions, power lines, or other equipment to move the machine into its working position.
- 3. Position machine in the desired post area.
- 4. Set the park brake on the towing unit, tractor, or skid steer loader before dismounting..

WARNING



Skid steer and 3pt pounders must have all support legs securely on the ground before using machine.

WARNING



Use extreme care and minimum ground speed when operating or transporting on hillsides, over rough ground, or near ditches or fences.

WARNING



Stay away from overhead or buried power lines. Arcing and possible electrocution can occur without direct contact.

Consult local utility companies before operating machine near power lines or buried gas lines.

5. Operation

Warning: Before continuing, please reread the safety information relevant to this section at the beginning of this manual. Failure to follow the safety instructions can result in serious injury, death, or property damage.

NOTICE

Ensure that the pounder is attached to equipment that has sufficient capacity to tow or lift the machine.

Refer to Section 9.3. for pounder specifications.

5.1. PRE-OPERATION CHECKLIST

Efficient and safe operation of this unit requires that each operator reads and understands the operating procedures and all related safety precautions outlined in this manual.

Before operating the unit, and each time thereafter, the following should be reviewed:

- Follow the service schedule.
- Check hydraulic system oil level.
- Ensure that all hydraulic lines are free from damage, and that all fittings are tight.
- Visually inspect the unit for damage to components. Replace or repair any damaged or questionable parts.
- Check the worksite and clean up the area, if needed.
- Use only a tractor, towing vehicle, or skid steer loader of adequate power and capacity to operate the machine.
- Check that all guards are installed, secured, and functioning as intended.
 Do not operate with missing or damaged guards. Keep guards in good working order.
- Ensure that the plastic slides are intact on the pounder mast (HH Plus only) and slide box.
- Ensure that the machine is securely attached to the towing vehicle, tractor, or skid steer loader.
- Consult local utility companies to identify the location of buried power/gas lines.
- Each day before using the machine, ensure that the pounder head bolts are torqued to 760 lb-ft.

WARNING



Shut off and remove key or lock out power source before inspecting or servicing the machine.

5.2. DRIVES & LOCKOUTS

This unit can be equipped with a gas motor / PTO driving a hydraulic pump or a tractor / skid steer loader supplying the hydraulic power to the machine's hydraulic valves.

Before performing any maintenance or servicing, ensure that the ignition key is removed or the power source is locked out, and the post pounder mast is in the down position.

5.3. START-UP & BREAK-IN

Although there are no operational restrictions on the machine when used for the first time, it is recommended that the following mechanical items be checked:

BEFORE STARTING:

- Read power unit operational manual.
- Inspect hydraulic hose fittings for leaks. Tighten if necessary, and replace worn or damaged hoses.
- Inspect hydraulic mount bolts for tightness.

DURING THE FIRST FEW MINUTES:

- Ensure unit is running properly.
- Some air may be trapped in the hydraulic system; slowly activate hydraulic control valves to ensure all air is out of the system.

AFTER OPERATING FOR 1/2 HOUR OR TRANSPORTING:

- Retorque all wheel bolts (if applicable).
- Retorque all fasteners and hardware.
- Check all safety decals are installed and legible. Apply new ones if needed.
- Check all guards are installed and working as intended.

AFTER 5 AND 10 HOURS:

- Check all hydraulic hoses and fittings for leaks. Tighten fittings where required, and replace worn or damaged hoses.
- Retorque all wheel bolts (if applicable), fasteners, and hardware.
- Grease all zerks; do not grease plastic slides or mast rails.

5.4. OPERATING PROCEDURE

Note: On Skid Steer / 3pt Center Mast models, remove hairpins on transport locks (Figure 2.1) before operating.

HUGGER:

1. Using the hydraulic controls, raise the impact head and open the hugger (Figure 5.1).

Note: See hydraulic valve instructional decal for control details Figure 5.5.



- Place the post standing up straight against the roller plate cones. Ensure that your hands are clear of the hugger. Close the hugger arm to clamp post in. Some adjustment of the roller arm may be required to hold the post firmly (Figure 5.2).
- 3. To adjust the hugger, turn the ACME bolt until the roller arm cones are centered on the post.
- 4. In the event that different size posts are going to be used, repeat steps 1.-3.
- 5. Post is now ready for driving.

OUTRIGGER LEG (HH PLUS ONLY):

- 1. With the post driver in the desired location, pull the spring pin allowing the outrigger leg to drop to the ground (Figure 5.3). The spring pin must engage with the stabilizer lower arm to lock the leg in the down position.
- 2. Raise the outrigger leg and lock in the upright position before moving the machine (Figure 5.4).

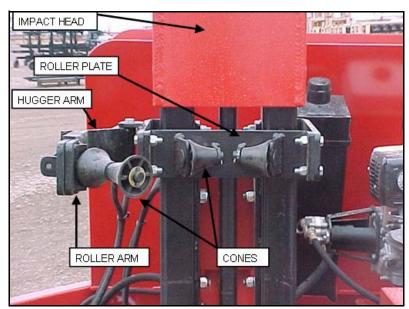


Figure 5.1 Hugger Open

Figure 5.2 Hugger Closed

Lower the outrigger leg (if equipped) to prevent machine rollover.



Figure 5.3 Outrigger Work Position



Figure 5.4 Outrigger Transport

DRIVING A POST:

- 1. Use the hydraulic control valves (Figure 5.5) to position the hammer in the desired position. With the post held in the hugger and the outrigger leg (HH Plus only) locked in the down position, raise the impact head approximately 1' to 2' above the post before driving the post down. This partial stroke is used to set the post.
- 2. **For large posts**: raise the impact head as much as needed to safely drive the post.
 - For small posts: use shorter strokes because full strokes will damage small posts.
- 3. Continue driving the post until the desired height is achieved.

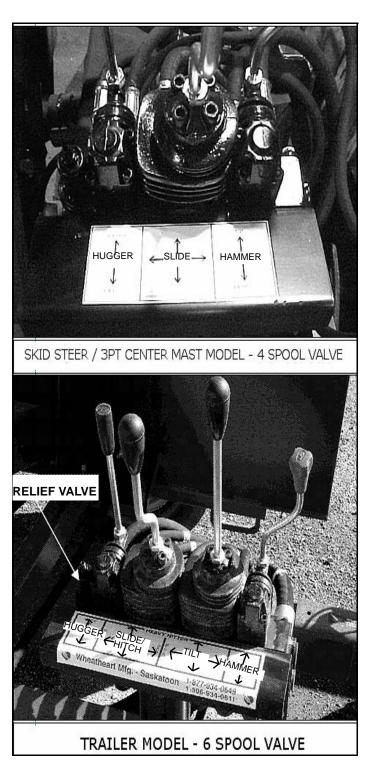


Figure 5.5 Hydraulic Valve Istructional Decal

NOTICE

If post becomes crooked, DO NOT use the hugger to straighten the post.

Damage to the hugger may result

5.4.1. SHUTDOWN

ENGINE MODEL:

- 1. After completing the job, ensure that the pounder mast is in the lowered position.
- 2. Lean the mast back into the transport position. Fully extend hitch cylinder.
- 3. Reduce engine speed to a low idle to allow motor to cool off.
- 4. Once motor has cooled down, shut engine off.

PTO Model

- 1. After completing the job, ensure that the pounder mast is in the lowered position.
- 2. Lean the mast back into the transport position. Fully extend hitch cylinder (if equipped).
- 3. Reduce PTO speed and turn off PTO/power source.

SKID STEER / TRACTOR SUPPLIED HYDRAULIC MODEL:

- 1. After completing the job, ensure that the pounder mast is in the lowered position.
- 2. Lean the mast back into the transport position.
- 3. Place the hydraulic control lever in neutral to shut off flow of oil to pounder hydraulic valve. Remove key or lock out power source and then install hairpins on the transport lock.

DO NOT let impact head free fall without pounding a post. If head must be lowered, shut off and lock out power source and gently actuate hydraulic valve to lower head.

6. Maintenance

Warning: Before continuing, please reread the safety information relevant to this section at the beginning of this manual. Failure to follow the safety instructions can result in serious injury, death, or property damage.

Before performing any maintenance on this unit, shut off and remove key or lock out power source, and ensure the mast is in the lowered and transport position.

Table 6.1

MAINTENANCE PROCEDURE	DAILY	WEEKLY	ANNUALLY
Check Head Bolts For Tightness (Figure 6.1) (Torque Should	√	-	-
Be 760 lb-ft)			
Check Cylinder Bolts For Tightness	✓	-	-
Tighten Cylinder Cap	✓	-	-
Check Hugger Plastic Rollers And Replace If Damaged	✓	-	-
Check Plastic Side Plates To Ensure In Place	✓	-	-
Grease All Areas	-	✓	-
Check Mast And Slide Bolts For Tightness	-	√	-
Check Hydraulic Filter	-	-	✓

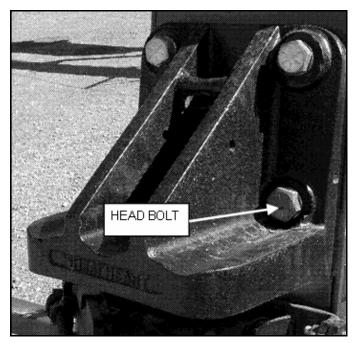


Figure 6.1 Head Bolt

6.1. SETTING RELIEF VALVE

• If unable to raise 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 an 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. See page 33 Section 8.

6.2. REPLACING THE MAST SEAL

6.2.1. HIGH AND HEAVY HITTER

See Figure 6.2.

The seal kit consists of the following:

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

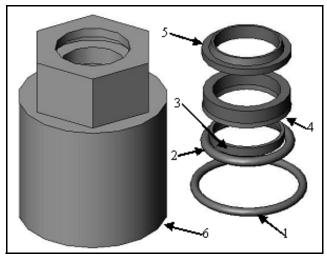


Figure 6.2 HH and HH Plus Mast Seal Kit

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 oring embedded into it faces the pressure side (down).
- 4. Insert the dust seal (5) into the top recession with tapered side facing up.

6.2.2. HIGH AND HEAVY HITTER PLUS

See Figure 6.3.

The seal kit consists of the following:

- large o-ring (1)
- polypak (2)
- dust seal (3)

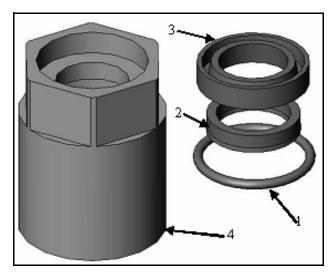


Figure 6.3 High and Heavy Hitter Plus Mast Seal Kit

Important:

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. Place the large oring (1) through the bottom (threaded side) of the mast cylinder cap (6) into the first groove above the threads.

- 1. 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 oring embedded into it faces the pressure side (down).
- 2. Place the mast cylinder cap (4) on a solid surface, then rest the dust seal (3) on top of the cap (4) with the open side up. Using a hammer, tap the seal into place.

7. Storage

Warning: Before continuing, please reread the safety information relevant to this section at the beginning of this manual. Failure to follow the safety instructions can result in serious injury, death, or property damage.

POST POUNDER STORAGE

To ensure a long, trouble-free life, the following procedure should be followed when preparing the unit for storage after the season's use.

- Lock out all power:
- Store the machine on a level surface, free of debris, and in an area away from human activity. Store in a dry place, or use a tightly secured tarp to protect the equipment from the weather.
- Ensure that the unit is in transport position.
- Remove all residual material and clean the machine thoroughly.
- Inspect the unit at stress points for cracks.
- Repair or replace any worn or damaged components to prevent any unnecessary downtime at the start of the next season.
- Touch up paint nicks and scratches to prevent rusting.
- Check hydraulic fittings, hoses, lines, couplers, and valves. Tighten any loose fittings. Replace any hose that is badly cut, nicked, abraded, or is separating from the crimped end of the fitting. Secure the hoses to the machine.
- Inspect and tighten all fasteners; replace fasteners if required.
- Grease all zerks on machine. Do not grease plastic slides or mast rails.
- Inspect mast cylinder head nut (Figure 7.1) and other hydraulic cylinders for leaks. Replace seals if necessary.
- See engine manual for storage instructions for the engine model units.
- On pounders equipped with a water spike kit, drain all water from the system to prevent damage.
- Check tire inflation.
- Retract all cylinders or grease exposed shafts.

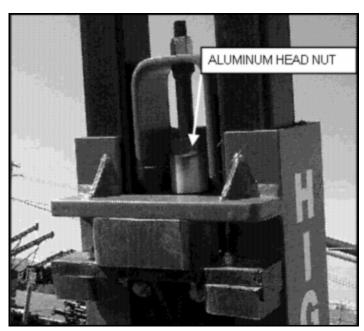


Figure 7.1 Mast Cylinder Nut

WATER SPIKE KIT STORAGE

- When storing the water spike kit option in freezing temperatures, run an environmentally safe anti-freeze solution mixed to the manufacturer's specifications through the water pump.
- Drain fluid from the tank and hose and dispose of safely.

8. Troubleshooting

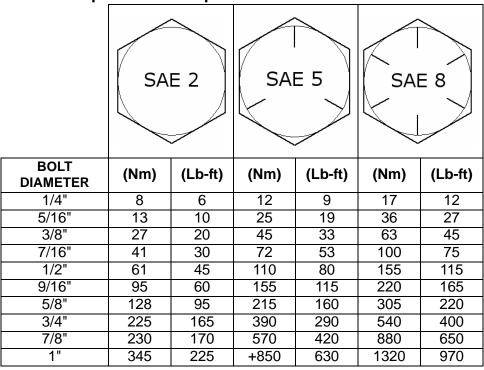
PROBLEM	CAUSE SOLUTION	
	 loose/cracked fittings 	 tighten/replace fittings
Valve is leaking.	worn hose	replace hose
	 valve spools are worn 	replace valve
	oil is hot	check oil level and add oil if
		required
	 blockage in hydraulic lines 	suction hose blocked or kinked
Machine operates slowly.	 tractor / skid steer loader is not producing enough oil volume and/or pressure filter plugged (if equipped) 	 either speed up the engine to produce more flow/pressure, or the power unit does not have enough capacity change filter
	mast is bent	 check mast for alignment or obstructions
Hammer goes part way up, sticks, and stops.	oil level is too low	 cylinder ran out of oil; check oil level
	 pump is worn out 	replace pump
	 relief valve set too low 	adjust relief valve
Hydraulic cylinder leaking.	worn seal	replace seal
Mast Cylinder is leaking.	 aluminium head nut is loose 	tighten nut
	worn seal	replace seal
Extreme trailer bounce when operating. (Trailer Models Only)	low tire pressure	inflate tires to tire specifications
	 plastic sliders are worn 	replace plastic sliders
Excess movement in square slide box.	washers are spacing box too far apartoil low	 remove one washer per bolt and retighten check oil level as this engine has
Honda motor won't start. (Gas Models Only)		an oil alert and will not run when the oil is low; refer to engine man- ual for more details
	slider box is too tight	 lubricate the slider tube and box with a dry silicone lubricant loosen bolts on slider tube until the tube starts to slide, work back and
Slider tube gets stuck in slider box.		forth until loosened up and then retighten bolts; if still sticking, add another washer
	relief valve is set too low	 adjust relief valve by loosening the nut and turning the set screw clockwise 1/8 of a turn; if still stick- ing, try again

9. Appendix

9.1. BOLT TORQUE VALUES

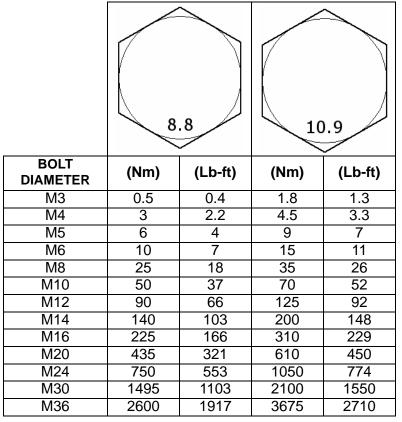
The tables shown below give correct torque values for various bolts and capscrews. Tighten all bolts to the torque specified in the chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as your guide. Replace hardware with the same strength bolt.

Table 9.1 Imperial Bolt Torque



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

Table 9.2 Metric Bolt Torque



9.2. TIGHTENING O-RING FITTINGS

- 1. Inspect o-ring and seat for dirt or obvious defects.
- 2. On the angle fittings, back the lock nut off until washer bottoms out at top of groove.
- 3. Hand-tighten fitting until back up washer or washer face (if straight fitting) bottoms on face and o-ring is seated.
- 4. Position angle fittings by unscrewing no more than one turn.
- 5. Tighten straight fittings to torque shown.
- 6. Tighten while holding body of fitting with a wrench.

Table 9.3 "O" Ring Fittings

Tube Size OD (in.)	Nut Size Across Flats (in.)	Torque Values (Nm)	Torque Values (Lb-ft)	# of Turns to Tighten (Flats)	(After Finger Tightening) (Turn)
3/8	1/2	8	6	2	1/3
7/16	9/16	12	9	2	1/3
1/2	5/8	16	12	2	1/3
9/16	11/16	24	18	2	1/3
3/4	7/8	46	34	2	1/3
7/8	1	62	46	1-1/2	1/4
1-1/16	1-1/4	102	75	1	1/6
1-3/16	1-3/8	122	90	1	1/6
1-5/16	1-1/2	142	105	3/4	1/8
1-5/8	1-7/8	190	140	3/4	1/8
7/8	2-1/8	217	160	1/2	1/12

9. APPENDIX 9.2. TIGHTENING O-RING FITTINGS

* The torque values shown are based on lubricated connections as in reassemble.

9.3. SPECIFICATIONS & DRIVE OPTIONS

MODEL	HIGH & HEAVY HITTER TRAILER	HIGH & HEAVY HITTER 3-POINT HITCH SIDE	HIGH & HEAVY HITTER PLUS
		MAST	TRAILER
TOTAL WT. (W/HUGGER)	2580 lb (1170 kg)	ν σ,	2930 lb (1329 kg)
HAMMER WEIGHT	660 lb (299 kg)	660 lb (299 kg)	720 lb (326 kg)
TRANS. HT. (2 - POSITION*)	8' 2", 8' 10" (249 cm, 269 cm)	-	8' 9", 9' 5" (267 cm, 287 cm)
SHIPPING HT. (2 - POS.*)	-	8' 2", 8' 10" (249 cm, 269 cm)	-
WIDTH (TRANSPORT)	7' 2" (218 cm)	6' 2" (188 cm)	7' 2" (218 cm)
LENGTH	10' 1" (307 cm)	5' 4" (163 cm)	10' 6" (320 cm)
	9' 6"-11' 11" (290 cm-	9' 6"-11' 11" (290 cm-	9' 8" - 14' 5" (295 cm-
HAMMER HT. MAX (ADJ.**)	363 cm)	363 cm)	439 cm)
HAMMER HEIGHT MIN	4' 2" (127cm)	4' 2" (127cm)	4' 2" (127cm)
STROKE	64" (163cm)	64" (163 cm)	66" (168 cm)
DRIVE	PTO PUMP DRIVE GAS (9 HP HONDA)	PTO PUMP DRIVE	PTO PUMP DRIVE OR GAS (13 HP HONDA)
HYD. REQ. (MINIMUM)	-	-	-
TILT ADJ FRONT/BACK			50° (25° FROM VERT.)
TILT ADJ LEFT/RIGHT		30° (15° FROM VERT.)	30° (15° FROM VERT.)
TIRES	15"	_	15"
	10		10
MODEL	HIGH & HEAVY HITTER PLUS 3-POINT HITCH SIDE	HIGH & HEAVY HITTER SKID STEER	HIGH & HEAVY HITTER 3-POINT HITCH
	HIGH & HEAVY HITTER PLUS	HITTER SKID STEER	HIGH & HEAVY HITTER
MODEL TOTAL WT. (W/HUGGER)	HIGH & HEAVY HITTER PLUS 3-POINT HITCH SIDE MAST 2450 lb (1111 kg)	HITTER	HIGH & HEAVY HITTER 3-POINT HITCH
MODEL TOTAL WT. (W/HUGGER) HAMMER WEIGHT	HIGH & HEAVY HITTER PLUS 3-POINT HITCH SIDE MAST	HITTER SKID STEER	HIGH & HEAVY HITTER 3-POINT HITCH CENTER MAST
MODEL TOTAL WT. (W/HUGGER)	HIGH & HEAVY HITTER PLUS 3-POINT HITCH SIDE MAST 2450 lb (1111 kg) 720 lb (326 kg)	HITTER SKID STEER 1500 lb (680 kg) 660 lb (299 kg)	HIGH & HEAVY HITTER 3-POINT HITCH CENTER MAST 1410 lb (640 kg)
MODEL TOTAL WT. (W/HUGGER) HAMMER WEIGHT	HIGH & HEAVY HITTER PLUS 3-POINT HITCH SIDE MAST 2450 lb (1111 kg)	HITTER SKID STEER 1500 lb (680 kg) 660 lb (299 kg)	HIGH & HEAVY HITTER 3-POINT HITCH CENTER MAST 1410 lb (640 kg)
MODEL TOTAL WT. (W/HUGGER) HAMMER WEIGHT TRANS. HT. (2 - POSITION*)	HIGH & HEAVY HITTER PLUS 3-POINT HITCH SIDE MAST 2450 lb (1111 kg) 720 lb (326 kg) - 8' 9", 9' 5" (267cm, 287	HITTER SKID STEER 1500 lb (680 kg) 660 lb (299 kg)	HIGH & HEAVY HITTER 3-POINT HITCH CENTER MAST 1410 lb (640 kg) 660 lb (299 kg) -
MODEL TOTAL WT. (W/HUGGER) HAMMER WEIGHT TRANS. HT. (2 - POSITION*) SHIPPING HT. (2 - POS.*)	HIGH & HEAVY HITTER PLUS 3-POINT HITCH SIDE MAST 2450 lb (1111 kg) 720 lb (326 kg) - 8' 9", 9' 5" (267cm, 287 cm)	HITTER SKID STEER 1500 lb (680 kg) 660 lb (299 kg) - 8'2" (249 cm)	HIGH & HEAVY HITTER 3-POINT HITCH CENTER MAST 1410 lb (640 kg) 660 lb (299 kg) - 8'2" (249 cm)
MODEL TOTAL WT. (W/HUGGER) HAMMER WEIGHT TRANS. HT. (2 - POSITION*) SHIPPING HT. (2 - POS.*) WIDTH (TRANSPORT)	HIGH & HEAVY HITTER PLUS 3-POINT HITCH SIDE MAST 2450 lb (1111 kg) 720 lb (326 kg) - 8' 9", 9' 5" (267cm, 287cm) 6' 2" (188 cm) 5' 4" (163 cm) 9' 8" - 14' 5" (295 cm-	HITTER SKID STEER 1500 lb (680 kg) 660 lb (299 kg) - 8'2" (249 cm) 36" (91 cm) 43" (109 cm) 9' 6"-11' 3" (290 cm-	HIGH & HEAVY HITTER 3-POINT HITCH CENTER MAST 1410 lb (640 kg) 660 lb (299 kg) - 8'2" (249 cm) 36" (91 cm)
MODEL TOTAL WT. (W/HUGGER) HAMMER WEIGHT TRANS. HT. (2 - POSITION*) SHIPPING HT. (2 - POS.*) WIDTH (TRANSPORT) LENGTH	HIGH & HEAVY HITTER PLUS 3-POINT HITCH SIDE MAST 2450 lb (1111 kg) 720 lb (326 kg) - 8' 9", 9' 5" (267cm, 287cm) 6' 2" (188 cm) 5' 4" (163 cm) 9' 8" - 14' 5" (295 cm- 439 cm)	HITTER SKID STEER 1500 lb (680 kg) 660 lb (299 kg) - 8'2" (249 cm) 36" (91 cm) 43" (109 cm) 9' 6"-11' 3" (290 cm- 363 cm)	HIGH & HEAVY HITTER 3-POINT HITCH CENTER MAST 1410 lb (640 kg) 660 lb (299 kg) - 8'2" (249 cm) 36" (91 cm) 43" (109 cm) 9' 6"-11' 3" (290 cm- 363 cm)
MODEL TOTAL WT. (W/HUGGER) HAMMER WEIGHT TRANS. HT. (2 - POSITION*) SHIPPING HT. (2 - POS.*) WIDTH (TRANSPORT) LENGTH HAMMER HT MAX (ADJ.**)	HIGH & HEAVY HITTER PLUS 3-POINT HITCH SIDE MAST 2450 lb (1111 kg) 720 lb (326 kg) - 8' 9", 9' 5" (267cm, 287cm) 6' 2" (188 cm) 5' 4" (163 cm) 9' 8" - 14' 5" (295 cm-	HITTER SKID STEER 1500 lb (680 kg) 660 lb (299 kg) - 8'2" (249 cm) 36" (91 cm) 43" (109 cm) 9' 6"-11' 3" (290 cm-	HIGH & HEAVY HITTER 3-POINT HITCH CENTER MAST 1410 lb (640 kg) 660 lb (299 kg) - 8'2" (249 cm) 36" (91 cm) 43" (109 cm) 9' 6"-11' 3" (290 cm-
MODEL TOTAL WT. (W/HUGGER) HAMMER WEIGHT TRANS. HT. (2 - POSITION*) SHIPPING HT. (2 - POS.*) WIDTH (TRANSPORT) LENGTH HAMMER HT MAX (ADJ.**) HAMMER HEIGHT MIN	HIGH & HEAVY HITTER PLUS 3-POINT HITCH SIDE MAST 2450 lb (1111 kg) 720 lb (326 kg) - 8' 9", 9' 5" (267cm, 287cm) 6' 2" (188 cm) 5' 4" (163 cm) 9' 8" - 14' 5" (295 cm-439 cm) 4' 2" (127 cm)	HITTER SKID STEER 1500 lb (680 kg) 660 lb (299 kg) - 8'2" (249 cm) 36" (91 cm) 43" (109 cm) 9' 6"-11' 3" (290 cm- 363 cm) 4' 2" (127 cm) 64" (163 cm) ***SKID STEER HYD. †SELF CONTAINED HYD.	HIGH & HEAVY HITTER 3-POINT HITCH CENTER MAST 1410 lb (640 kg) 660 lb (299 kg) - 8'2" (249 cm) 36" (91 cm) 43" (109 cm) 9' 6"-11' 3" (290 cm- 363 cm) 4' 2" (127 cm) 64" (163 cm) ***TRACTOR HYD. ††SELF CONTAINED HYD.
MODEL TOTAL WT. (W/HUGGER) HAMMER WEIGHT TRANS. HT. (2 - POSITION*) SHIPPING HT. (2 - POS.*) WIDTH (TRANSPORT) LENGTH HAMMER HT MAX (ADJ.**) HAMMER HEIGHT MIN STROKE	HIGH & HEAVY HITTER PLUS 3-POINT HITCH SIDE MAST 2450 lb (1111 kg) 720 lb (326 kg) - 8' 9", 9' 5" (267cm, 287cm) 6' 2" (188 cm) 5' 4" (163 cm) 9' 8" - 14' 5" (295 cm-439 cm) 4' 2" (127 cm) 66" (168 cm)	HITTER SKID STEER 1500 lb (680 kg) 660 lb (299 kg) - 8'2" (249 cm) 36" (91 cm) 43" (109 cm) 9' 6"-11' 3" (290 cm- 363 cm) 4' 2" (127 cm) 64" (163 cm) ***SKID STEER HYD. †SELF CONTAINED HYD.	HIGH & HEAVY HITTER 3-POINT HITCH CENTER MAST 1410 lb (640 kg) 660 lb (299 kg) - 8'2" (249 cm) 36" (91 cm) 43" (109 cm) 9' 6"-11' 3" (290 cm- 363 cm) 4' 2" (127 cm) 64" (163 cm) ***TRACTOR HYD. ††SELF
MODEL TOTAL WT. (W/HUGGER) HAMMER WEIGHT TRANS. HT. (2 - POSITION*) SHIPPING HT. (2 - POS.*) WIDTH (TRANSPORT) LENGTH HAMMER HT MAX (ADJ.**) HAMMER HEIGHT MIN STROKE DRIVE	HIGH & HEAVY HITTER PLUS 3-POINT HITCH SIDE MAST 2450 lb (1111 kg) 720 lb (326 kg) - 8' 9", 9' 5" (267cm, 287cm) 6' 2" (188 cm) 5' 4" (163 cm) 9' 8" - 14' 5" (295 cm-439 cm) 4' 2" (127 cm) 66" (168 cm) PTO PUMP DRIVE - 30° (15° FROM VERT.)	HITTER SKID STEER 1500 lb (680 kg) 660 lb (299 kg) - 8'2" (249 cm) 36" (91 cm) 43" (109 cm) 9' 6"-11' 3" (290 cm- 363 cm) 4' 2" (127 cm) 64" (163 cm) ***SKID STEER HYD. †SELF CONTAINED HYD. 10 gpm @ 1500 psi (38 L/m @103 bar) 26° (13° FROM VERT.)	HIGH & HEAVY HITTER 3-POINT HITCH CENTER MAST 1410 lb (640 kg) 660 lb (299 kg) - 8'2" (249 cm) 36" (91 cm) 43" (109 cm) 9' 6"-11' 3" (290 cm- 363 cm) 4' 2" (127 cm) 64" (163 cm) ***TRACTOR HYD. ††SELF CONTAINED HYD. 10 gpm @ 1500 (38 L/ m @103 bar) 26° (13° FROM VERT.)
MODEL TOTAL WT. (W/HUGGER) HAMMER WEIGHT TRANS. HT. (2 - POSITION*) SHIPPING HT. (2 - POS.*) WIDTH (TRANSPORT) LENGTH HAMMER HT MAX (ADJ.**) HAMMER HEIGHT MIN STROKE DRIVE HYD. REQ. (MINIMUM)	HIGH & HEAVY HITTER PLUS 3-POINT HITCH SIDE MAST 2450 lb (1111 kg) 720 lb (326 kg) - 8' 9", 9' 5" (267cm, 287cm) 6' 2" (188 cm) 5' 4" (163 cm) 9' 8" - 14' 5" (295 cm-439 cm) 4' 2" (127 cm) 66" (168 cm) PTO PUMP DRIVE - 30° (15° FROM VERT.)	HITTER SKID STEER 1500 lb (680 kg) 660 lb (299 kg) - 8'2" (249 cm) 36" (91 cm) 43" (109 cm) 9' 6"-11' 3" (290 cm- 363 cm) 4' 2" (127 cm) 64" (163 cm) ***SKID STEER HYD. †SELF CONTAINED HYD. 10 gpm @ 1500 psi (38 L/m @103 bar) 26° (13° FROM VERT.)	HIGH & HEAVY HITTER 3-POINT HITCH CENTER MAST 1410 lb (640 kg) 660 lb (299 kg) - 8'2" (249 cm) 36" (91 cm) 43" (109 cm) 9' 6"-11' 3" (290 cm- 363 cm) 4' 2" (127 cm) 64" (163 cm) ***TRACTOR HYD. ††SELF CONTAINED HYD. 10 gpm @ 1500 (38 L/ m @103 bar)

^{* 2-}Position adjustable mast on Heavy Hitter & Plus

 $^{^{**}4}$ Position adjustable bolt on cast head on Heavy Hitter & Skid steer pounder, 3 Position adjustable bolt on cast head on Plus

The hugger to help align posts is standard equipment on all post pounders for added safety and convenience.

HIGH & HEAVY HITTER PLUS

All of the same great features of the High & Heavy Hitter post pounder plus:

- 720 lb heavy duty hammer
- additional weight to ballast box for greater stability
- PTO pump drive or 13 hp honda motor on trailer mount
- hammer height adjustable from 9' 8" to 14' 5" in raised position

SKID STEER / 3pt CENTER MAST POST POUNDERS

Includes inline hydraulic oil filter on return line (self contained units only).

- *** Requires return line plumbed directly into skid steer / tractor hydraulic oil resevoir.
- † Self contained hydraulics has on-board oil resevoir with pump and hydraulic motor driven by skid steer hydraulics.

††Self contained hydraulics has on-board oil resevoir with PTO pump driven by tractor PTO.

9.4. PARTS

9.4.1. HH/HH PLUS TRAILER

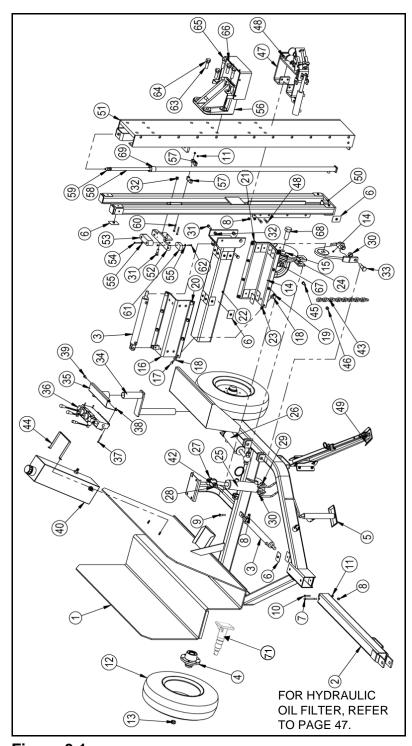


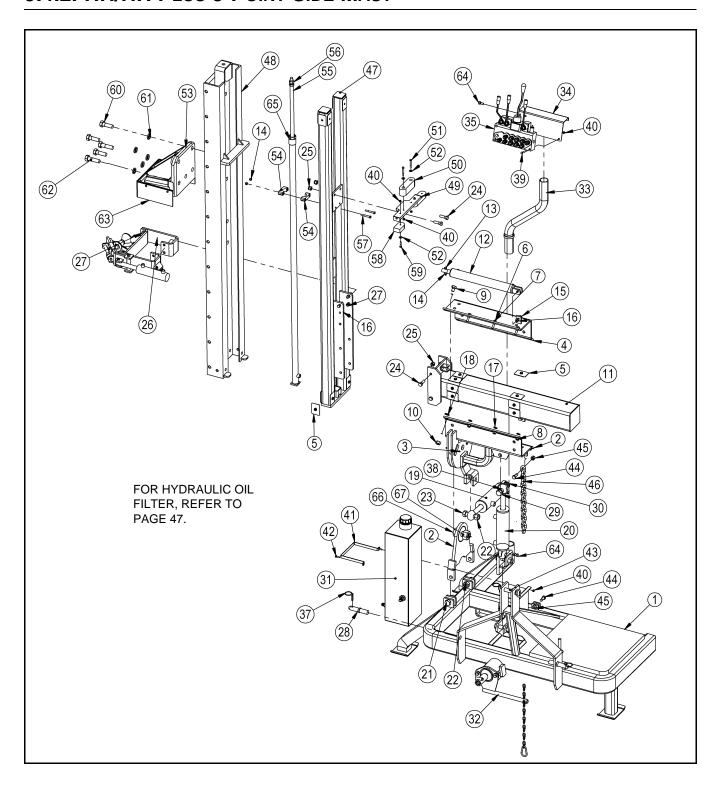
Figure 9.1

For diagram of Inline Hydraulic Oil Filter Post Pounder seeFigure 9.2 on page 47

ITEM	PART NO.	DESCRIPTION	QTY
1	2300149X	TRAILER FRAME, HEAVY HITTER PLUS, GAS (SHOWN)	1
	2300149	TRAILER FRAME, HEAVY HITTER, GAS	1
	2300149XP	·	1
	2300149P	TRAILER FRAME, HEAVY HITTER, PTO	1
2	2300013	HITCH DRAWBAR	1
3	0200308	CYL, 2 x 15.625 x 1.125 ROD, 1 @ END	1
	2300158	SEAL KIT (2" BORE)	2
4	0500706B	HUB, HA614, BRGS, CAP, SEAL, WSHR, COTTERPIN	-
5	2300014	JACK, 2000LB, 10", TOP WIND	2
6	2300068	SLIDE WEAR PLATE, HH PLUS	1
	2300068	SLIDE WEAR PLATE, HH	32
7	9900564	BOLT, 1/2 x 5 UNC GR5 PLD	20
8	9900538	NUT NYLOCK 1/2 UNC GR5 PLT	1
9	9900560	BOLT, 1/2 x 2-1/4 UNC GR5 PLD	11
10	9900510	BOLT, 3/8 x 2-1/4 UNC GR5 PLD	2
11	0601007	NUT NYLOCK 3/8 UNC GR5 PLT	2
12	2300072	ASSEMBLY, TIRE, 15", COMPLETE	4
	2300005	RIM, 15 x 6 HOLE	2
13	0500704	NUT, CASTELLATED 1-14 UNS	
14	2300111	ASSEMBLY, PIVOT (INC. LOWER SLIDER & MAST PIVOT)	2
	2300102	MAST PIVOT	1
	2300102	LOWER HALF SLIDER HOLDER	1
15	2300028	GREASE ZERK 5/16" DRIVE FIT	1
16	2300108	SLIDER HOLDER, UPPER	4
17	9900628	BOLT, 1/2 x 2 UNF GR8 PLD	1
18	9900555	WASHER FLAT 7/16 PLD	6
19	9900690	NUT NYLOCK 1/2 UNF GR5 PLT	12
20	9900580	BOLT, 3/4 x 2 UNF GR8 PLT	6
21	9900698	NUT NYLOCK 3/4 UNF GR8 PLT	2
22	2300121	SLIDER TUBE	2
23	9900951	WASHER MACHINE 18GA x 1/2 x 1	1
24	9900525	WASHER MACHINE 18GA x 3/4 x 1.25	24
25	2300076	HYD CYL, 3 x 8 (REINFORCED)	8
25	2300076	SEAL KIT (3' BORE)	1
26	2300033	HYD CYL 3 x 8	<u> </u>
20	2300010	SEAL KIT (3' BORE)	1
27	9900625	BOLT, 1 x 5 UNF GR8 PLD	
28	9900625	NUT JAM NYLOCK 1 UNF GR5 PLT	1
29	9900942	BOLT, 1 x 4-1/2 UNF GR8 PLD	3
30	9900942	NUT NYLOCK 1 UNF GR5 PLT	3
31		BOLT, 5/8 x 2 UNF GR8 PLD	5
	9900627	NUT NYLOCK 5/8 UNF GR5 PLT	
32	9900638	BOLT, 1 x 3 x 1-1/4THD UNF GR8 PLD	6
33 34	9900241	STAND, VALVE BODY	2
	2300163	MOUNT, VALVE BODY	
35 36	2300162		1
30	1600031	6 SPL HYD VALVE, W/LEVERS, NO FTG	1
27	1600031-1	6 SPL HYD VALVE, NO LEVERS/FITTINGS	1
37	2300022	BOLT, 5/16 x 3 UNC GR5 PLD	3
38	9900520	NUT NYLOCK 5/16 UNC GR5 PLT	9
39	9900558	BOLT, 1/2 x 1 UNC GR5 PLD	2
40	2300016	TANK, 24L RESERVOIR, BK, PNDR, W/FTG	1
41	2301011	KIT, HOSE, POUNDER TRAILER BASE, W/HUGGER	1

ITEM	PART NO.	DESCRIPTION	QTY
42	2300187-2	CYLINDER SPACER	2
43	2300123	CHAIN, 7/16 x 16 LINKS	1
44	2300019	STRAP, RESERVOIR	1
45	9900675	BOLT, 5/8 x 2-1/2 UNC GR8 PLD	2
46	9900831	NUT NYLOCK 5/8 UNC GR5 PLD	2
47	2301004	ASSEMBLY, HUGGER, see page 74	1
48	9900559	BOLT, 1/2 x 2 UNC GR5 PLD	8
49	2308006	DOWNRIGGER, POST POUNDER, see page 76	1
50	2308001	MAST, HH PLUS (SHOWN)	1
	2300190	MAST, HH	1
51	2308002	IMPACT HEAD, HH PLUS	1
	2300188	IMPACT HEAD, HH	1
52	2300189	STOP PLATE	1
53	2300117-1	BUMPER, BIG, NOT CUT	1
54	9900524	BOLT, 5/16 x 2-1/2 UNC GR5 PLD	2
55	9900529	WASHER FLAT 5/16 PLD	4
56	2300116A	HEAD,CAST,1-1/8" HOLES	1
57	2300081C	GUIDE, CYLINDER, MAST, HH PLUS	2
	2300081A	GUIDE, CYLINDER, MAST, HH	2
58	2308003	HYD CYLINDER, MAST, HH PLUS	1
	2308020	SEAL KIT MAST CYL (1" BORE), HH PLUS	-
	2300187	HYD CYLINDER, MAST, HH (7/8" BORE)	1
	2300157	SEAL KIT, MAST CYL. 98+ (7/8" BORE), HH, INCLUDES	
		LARGE O-RING, WIPER, SMALL O-RING, BUFFER & POLYPACK	
	2300155	SEAL KIT, MAST CYL.97, INCL. POLYPACK, WIPER & LARGE O-RING	
	2300054	SEAL KIT, MAST CYL. 95-96, INCL. WIPER & POLYPACK	
59	9900695	NUT NYLOCK 3/4 UNC GR5 PLT	1
60	9900697	BOLT, 3/8 x 2-3/4 UNC GR5 PLD	2
61	2300118	BUMPER, SMALL, CUT	2
62	9900586	BOLT, 5/16 x 1-1/2 UNC GR5 PLD	2
63	9900665	BOLT, 1 x 3 UNF GR8 PLD	3
	9900623	BOLT, 7/8 x 2-1/2 UNF GR8 PLD (95-98 MODELS)	5
64	9900666	WASHER LOCK 1 PLD	7
65	9900756	BOLT, 1 x 3-1/2 UNF GR8 PLD	2
66	2300101	HAMMER SKIRT ASSEMBLY	1
67	9900269	NUT NYLOCK 1-1/2 UNF GR8	1
68	9900267	BOLT HEX 1-1/2 x 3-1/2 UNF GR8 PLT, 1-3/4 THD	1
69	2308004	CAP, ALUMINUM, MAST, CYL, HH PLUS	1
	2300075	CAP, ALUMINUM, MAST, CYL, HH	1
70	2300015	HOSE HOLDER	1
71	2300002	SPINDLE WELDMENT (NOT SHOWN)	2

9.4.2. HH/HH PLUS 3-POINT SIDE MAST



ITEM	PART NO.	DESCRIPTION	QTY
1	2307003	FRAME, 3PT HIGH & HEAVY HITTER PLUS	1
•		FRAME, 3PT HIGH & HEAVY HITTER	1
2		ASSEMBLY, PIVOT	1
_		MAST PIVOT	<u>'</u>
		LOWER HALF SLIDER	
3		GREASE ZERK 5/16" DRIVE FIT	4
4		SLIDER HOLDER, UPPER	1
5		SLIDE WEAR PLATE (HH PLUS)	28
0		SLIDE WEAR PLATE (HH)	16
6		BOLT, 1/2 x 2 UNF GR8 PLD	6
7		WASHER FLAT 7/16 PLD	12
8		NUT NYLOCK 1/2 UNF GR5 PLT	6
9		BOLT, 3/4 x 2 UNF GR8 PLT	2
10		NUT NYLOCK 3/4 UNF GR8 PLT	2
11		SLIDER TUBE	1
12		CYL, 2 x 15.625 x 1.125 ROD, 1 @ END	1
12		SEAL KIT (2" BORE)	-
13		BOLT, 3/8 x 2-1/4 UNC GR5 PLD	1
14		NUT NYLOCK 3/8 UNC GR5 PLT	3
15		BOLT, 1/2 x 2-1/4 UNC GR5 PLD	1
16		NUT NYLOCK 1/2 UNC GR5 PLT	9
17		WASHER MACHINE 18GA x 1/2 x 1	24
		WASHER MACHINE 18GA x 3/4 x 1.25	
18			8
19		HYD CYL 3 x 8	
20		SEAL KIT (3" BORE)	1
20		HYD CYL, 3 x 8 (REINFORCED)	1
04		SEAL KIT (3" BORE)	2
21		BOLT, 1 x 3 x 1-1/4THD UNF GR8 PLD	2
22		NUT NYLOCK 1 UNF GR5 PLT	5
23		BOLT, 1 x 4-1/2 UNF GR8 PLD	3
24		BOLT, 5/8 x 2 UNF GR8 PLD	6
25		NUT NYLOCK 5/8 UNF GR5 PLT	6
26		ASSEMBLY, HUGGER	1
27	9900559	BOLT, 1/2 x 2 UNC GR5 PLD	8
28	2306016	PIN, 3 POINT, CAT2	2
29		BOLT, 1 x 5 UNF GR8 PLD	1
30		NUT JAM NYLOCK 1 UNF GR5 PLT	1
31		TANK, 24L RESERVOIR, BK, PNDR, W/FTG	1
32		KIT, PTO, 3 POINT	1
33	2306019	VALVE PLATE MOUNT BRACKET, 3PT	1
34		MOUNT, VALVE BODY	1
35		HYD VALVE BODY, 5 SPL, W/FITTINGS/LEVERS	1
66		VALVE, 5 SPL, JOYSTICK, NO LEVERS/FTGS	1
36		KIT, HOSE, 3 POINT W/PTO & HUGGER	1
37		PIN, LINCH, 7/16 x 1 3/4	3
38		PIPE, 1 SCH40 BK x 5/8 (PNDR CYL SPACER)	2
39	2300022	BOLT, 5/16 x 3 UNC GR5 PLD	3
40	9900520	NUT NYLOCK 5/16 UNC GR5 PLT	9
41	2300019	STRAP, RESERVOIR	1
42	9900839	BOLT, 5/16 x 1 UNC GR5 PLD	2
43	2310041	PIN, 1 x 4-3/4, 7/16 x 1, 3PT TOP LINK	1
44	9900675	BOLT, 5/8 x 2-1/2 UNC GR8 PLD	2
45	9900831	NUT NYLOCK 5/8 UNC GR5 PLT	2
46	2300123	CHAIN, 7/16 x 16 LINKS	1
47	2308001	MAST, HH PLUS	1
	2300190	MAST, HH	1

ITEM	PART NO.	DESCRIPTION	QTY
48	2308002	IMPACT HEAD, HH PLUS	1
	2300188	IMPACT HEAD, HH	1
49	2300189	STOP PLATE	1
50	2300117-1	BUMPER, BIG, NOT CUT	1
51	9900524	BOLT, 5/16 x 2-1/2 UNC GR5 PLD	2
52	9900529	WASHER FLAT 5/16 PLD	4
53			1
54	2300081C	GUIDE, CYLINDER, MAST, HH PLUS	2
	2300081A	GUIDE, CYLINDER, MAST, HH	2
55	2308003	HYD CYLINDER, MAST, HH PLUS	1
	2308020	SEAL KIT MAST CYL (1" BORE), HH PLUS	-
	2300187	HYD CYLINDER, MAST HH (7/8" BORE)	1
	2300157	SEAL KIT, MAST CYL. 98+ (7/8" BORE), HH, INCLUDES LARGE & SMALL O-	
	2300137	RING, WIPER, BUFFER & POLYPACK	_
	2300157	SEAL KIT, MAST CYL. 98+ (7/8" BORE), HH, INCLUDES LARGE & SMALL O-	
	2300137	RING, WIPER, BUFFER & POLYPACK	_
	2300155	SEAL KIT, MAST CYL.97, INCL. POLYPACK, WIPER & LARGE O-RING	-
	2300054	SEAL KIT, MAST CYL. 95-96, INCL. WIPER & POLYPACK	-
56	9900695	NUT NYLOCK 3/4 UNC GR5 PLT	1
57	9900697	BOLT, 3/8 x 2-3/4 UNC GR5 PLD	2
58	2300118	BUMPER, SMALL, CUT	2
59	9900586	BOLT, 5/16 x 1-1/2 UNC GR5 PLD	2
60	9900665	BOLT, 1 x 3 UNF GR8 PLD	3
61	9900666	WASHER LOCK 1 PLD	7
62	9900756	BOLT, 1 x 3-1/2 UNF GR8 PLD	2
63	2300101	HAMMER SKIRT ASSEMBLY	1
64	9900558	BOLT, 1/2 x 1 UNC GR5 PLD	2
65	2308004	CAP, ALUMINUM, MAST, CYL, HH PLUS	1
	2300075	CAP, ALUMINUM, MAST, CYL, HH	1
66	9900267	BOLT HEX 1-1/2 x 3-1/2, 1-3/4 THD, UNF GR8	1
67	9900269	NUT NYLOCK 1-1/2 UNG GR8	1

9.4.3. INLINE HYDRAULIC OIL FILTER POST POUNDER

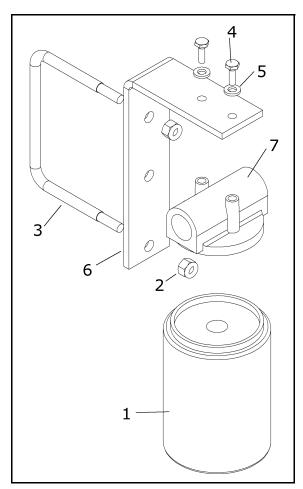
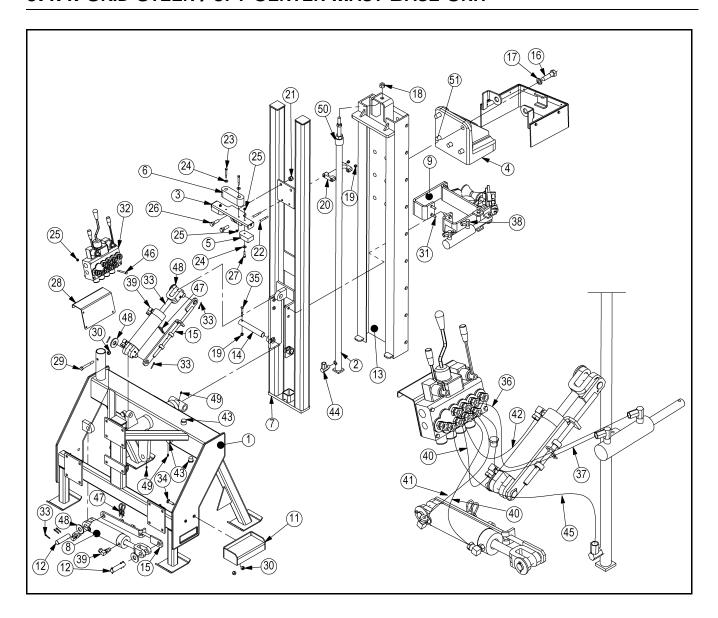


Figure 9.2 Inline Hydraulic Oil Filter Post Pounder

Table 9.4

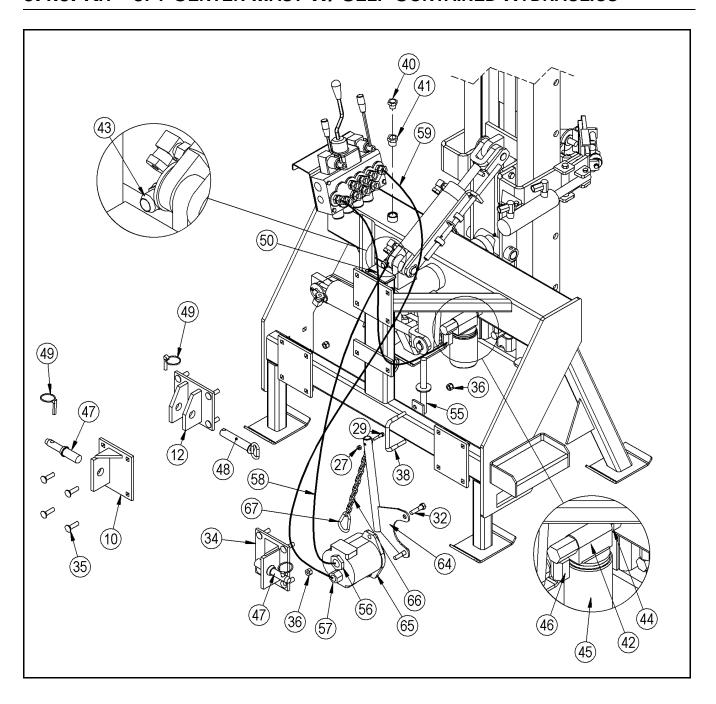
ITEM	PART NO.	QTY	DESCRIPTION
1	9900994	1	FILTER HYD, 10 MICRON, 3/4" FNPT
2	0601007	2	NUT NYLOCK 3/8 UNC PLT
3	9900038	1	UBOLT SQ 3/8NCX2-5/8X3-3/4X1-1/ 4THD
4	9900800	2	BOLT HEX 1/4 X 3/4 UNC GR5 PLT
5	9900783	2	WASHER LOCK 1/4 PLT
6	2300202	1	FILTER MOUNT
7	9900993	1	FILTER HEAD, INLINE, 3/4" FNPT

9.4.4. SKID STEER / 3PT CENTER MAST BASE UNIT



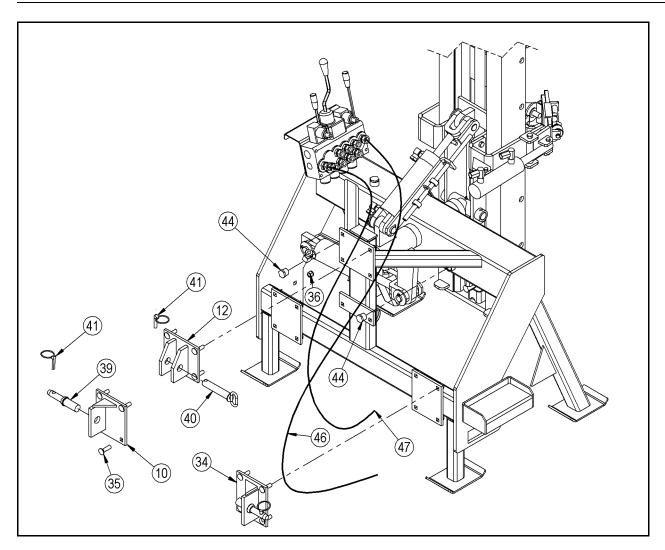
ITEM	PART NO.	DESCRIPTION	QTY
1	2318064	POUNDER FRAME-SKID STEER	1
2	2300187	HYD CYLINDER, MAST, HH	1
3	2300189	STOP PLATE	1
4	2300116A	HEAD, CAST 1-1/8" HOLES (RAW)	1
5	2300118	BUMPER, SMALL (CUT)	2
6	2300117-1	BUMPER, BIG, NOT CUT	1
7	2318029	MAST- SKID STEER	1
8	9900185	HYD CYL 3" x 6"	2
9	2318070	ASSEMBLY, HUGGER, SS	1
10	9900873	BOLT, 3/4 x 4-1/2 UNC GR5 PLD	1
11	2318033	SKID STEER STEP	1
12	2318068	PIN, 1-1/16" x 4-1/4", 3/16" ø x 3	4
13	2300188	IMPACT HEAD, HH	1
14	2318069	PIN, 1-1/4" x 8", 3/8" ø x 1	1
15	2318052	CYLINDER SAFETY LOCK	2
16	9900665	BOLT, 1 x 3 UNF GR8 PLD	3
17	9900666	WASHER LOCK 1 PLD	7
18	9900695	NUT NYLOCK 3/4 UNC GR5 PLT	1
19	0601007	NUT NYLOCK 3/8 UNC GR5 PLT	3
20	2300081A	GUIDE, CYLINDER, MAST, 1-1/2ID x 1-1/8	2
		NUT NYLOCK 5/8 UNF GR5 PLT	2
21 22	9900638		2
	9900697	BOLT, 3/8 x 2-3/4 UNC GR5 PLD	
23	9900524	BOLT, 5/16 x 2-1/2 UNC GR5 PLD	2
24	9900529	WASHER FLAT 5/16 PLD	4
25	9900520	NUT NYLOCK 5/16 UNC GR5 PLT	7
26	9900627	BOLT, 5/8 x 2 UNF GR8 PLD	2
27	9900586	BOLT, 5/16 x 1-1/2 UNC GR5 PLD	2
28	2318030	VALVE PLATE-SKID STEER	1
29	9900647	BOLT, 1/2 x 4 UNC GR5 PLD	1
30	9900538	NUT NYLOCK 1/2 UNC GR5 PLT	11
31	9900559	BOLT, 1/2 x 2 UNC GR5 PLD	4
32	1600036	4 SPL HYD VALVE,W/FTGS, LEVERS	1
33	9900970	COTTER PIN 3/16 x 1 1/2	12
34	9900913	BOLT CARR 1/2 x 1-1/2 UNC GR.5 PLT	2
35	9900512	BOLT, 3/8 x 2-1/2 UNC GR5 PLD	1
36	H38X40	HOSE, 3/8 x 40" 8MP 6MP	1
37	H38X36	HOSE, 3/8 x 36" 8MP 6MP	1
38	9900761	FITTING, ELBOW 90, 6MP TO 6FNPSM	2
39	9900012	FTG, STL, ELB, 8MORB x 1/2FNPSM	4
40	H12X24P	HOSE, 1/2 x 24" C/W 8MP x 8MP	2
41	H12X32	HOSE, 1/2 x 32" C/W 8MP x 8MP	1
42	H12X28	HOSE, 1/2 x 28" 8MP 8MP	1
43	9900997	FTG PLUG 12MNPT	4
44	9900331	FITTING, ELBOW 90, 8MP TO 8FNSPM	1
45	H12X48P2W	HOSE, 1/2 x 48" C/W 8MP x 8MP, 2W	1
46	9900114	BOLT, 5/16 x 2-3/4 UNC GR5 PLD	3
47	4500070	HAIRPIN, 3-1/4 x 3/16 WIRE	3
48	9900754	WASHER FLAT 1 BK	8
49	2300028	GREASE ZERK, 5/16	"3
50	2300025	CAP, ALUM, MAST CYLINDER	1
51	230075	BOLT, 1 x 3-1/2 UNF GR8 PLD	2
52	2300730	HAMMER SKIRT	1

9.4.5. KIT - 3PT CENTER MAST W/ SELF CONTAINED HYDRAULICS



	PART NO.	DESCRIPTION	QTY
10	2318057	LOWER 3PT TAB	1
12	2318060	UPPER 3PT TAB	1
27	9900520	NUT NYLOCK 5/16 UNC GR5 PLT	8
29	9900586	BOLT, 5/16 x 1-1/2 UNC GR5 PLD	3
32	9900559	BOLT, 1/2 x 2 UNC GR5 PLD	6
34	2318062	LOWER 3PT TAB	1
35	9900913	BOLT CARR 1/2 x 1-1/2 UNC GR.5 PLT	12
36	9900538	NUT NYLOCK 1/2 UNC GR5 PLT	16
38	9900991	U-BOLT SQ 1/2 NC x 4-1/16 x 3 Gr.5 PLT	1
40	9900163	FTG, STL, VENT, 1/2NPT	1
41	9900752	FTG, 3/4MNPT x 1/2FNPT	1
42	9900993	FILTER HEAD, INLINE, 3/4" NPT	1
43	9900996	FTG, STL, 12MNPT x 12MJIC	1
44	9900995	FTG, STL, NIPPLE, 12MPT x 12MPT	1
45	9900994	FILTER HYD, 10 MICRON, 3/4" FNPT	1
46	9900992	FITTING, ELBOW 90, 12MP TO 12FPX	1
47	2306016	PIN, 3 POINT, CAT2	2
48	2310041	PIN, 1 x 4-3/4, 7/16 x 1, 3PT TOP LINK	1
49	2306020	PIN, LINCH, 7/16 x 1 3/4	3
50	H34X50	HOSE, 3/4 x 50" 8MP 12MP	1
55	2318042	MT, PTO PUMP STORAGE, 4" TBG	1
56	2300159	HYD FIT 20MB-16FP	1
57	9900885	HYD FIT 12MB-8FP	1
58	H34X52	HOSE, 3/4" x 52" C/W 12FJICS x 16MNPT	1
59	H12X64P	HOSE, 1/2 x 64" C/W 8MP x 8MP	1
64	2300043A	BRACKET, PTO PUMP	1
65	2300178	PUMP, GEAR, M14AA1D	1
66	2300043-5	CHAIN, 3/16 x LINKS (16.25" W/ CUT LINK)	1
67	2300043-2	SNAP LINK, 5/16 x 3-3/16	1
68	2300050	COUPLER, QUICK, PTO	1

9.4.6. KIT - 3PT CENTER MAST W/OUT SELF CONTAINED HYDRAULICS



ITEM	PART NO.	DESCRIPTION	QTY
10	2318057	LOWER 3PT TAB	1
12	2318060	UPPER 3PT TAB	1
34	2318062	LOWER 3PT TAB	1
35	9900913	BOLT CARR 1/2 x 1-1/2 UNC GR.5 PLT	12
36	9900538	NUT NYLOCK 1/2 UNC GR5 PLT	12
39	2306016	PIN, 3 POINT, CAT2	2
40	2310041	PIN, 1 x 4-3/4, 7/16 x 1, 3PT TOP LINK	1
41	2306020	PIN, LINCH, 7/16 x 1 3/4	3
46	H12X96P	HOSE, 1/2 x 96" C/W 8MP x 8MP	1
47	H34X168	HOSE, 3/4" x 168" C/W 8MP ONE END	1

9.4.7. KIT - SKID STEER W/ SELF CONTAINED HYDRAULICS

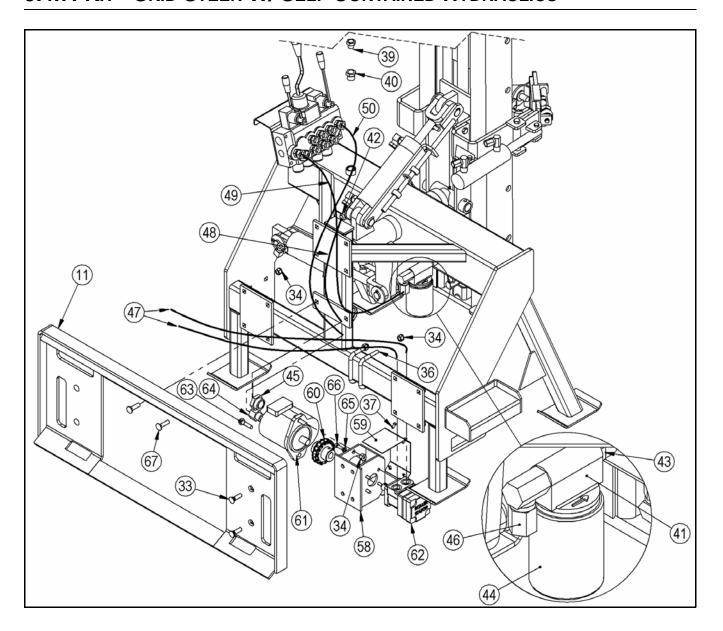
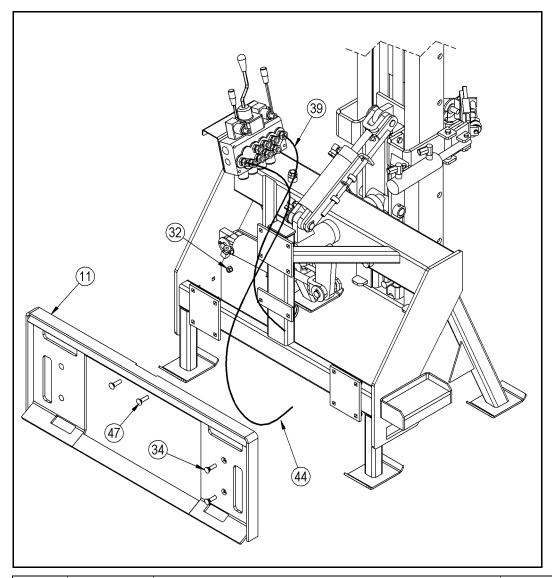


Table 9.5

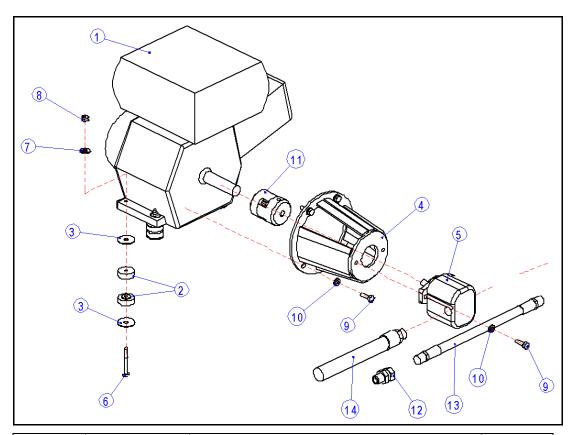
ITEM	PART NO.	DESCRIPTION	QTY
11	2318045	SKID STEER ADAPTER (s/n 201620-202198)	1
	2318097	SKID STEER ADAPTER (s/n 202639+)	1
33	9900231	BOLT,PLOW,1/2 X 1-3/4 UNC GR5 PLD	4
34	9900538	NUT NYLOCK 1/2 UNC GR5 PLT	12
36	9900991	U-BOLT SQ 1/2 NC x 4-1/16 x 3 Gr.5 PLT	2
37	9900132	SCREW SHEET METAL, 1/4" X 5/8"	4
39	9900608	FTG, STL, VENT, 1/2NPT	1
40	9900752	FTG,3/4MNPTX1/2FNPT	1
41	9900993	FILTER HEAD, INLINE, 3/4" NPT	1
42	9900996	FTG, STL, 12MNPT X 12MJIC	1
43	9900995	FTG, STL, NIPPLE, 12MPT X 12MPT	1
44	9900994	FILTER HYD, 10 MICRON, 3/4" FNPT	1
45	2300159	HYD FIT 20MB-16FP	1
46	9900992	FITTING, ELBOW 90, 12MP TO 12FPX	1
47	H12X64P	HOSE, 1/2 X 64" C/W 8MP X 8MP	2
48	H34X24	HOSE, 3/4" X 24", 12FJICS X 16MNPT	1
49	H34X50	HOSE, 3/4 X 50" 8MP 12MP	1
50	H12X42P	HOSE, 1/2 X 42" 8 MP 8MP	1
58	2318037	MT,HYD MOTOR/PTO PUMP,SELF-CONT HYD	1
59	2318044	GUARD,SELF-CONT. PUMP & HYD MOTOR	1
60	2318066	CPLR,CHN,16T,1/4 KEY, 7/8" X 1" BORES	1
61	2300178	PUMP, GEAR, M14AA1D	1
62	9901001PK	MOTOR,HYD,4.6 RS,1/2NPTF,1/4" KEY	1
63	9900133	BOLT, 1/2 X 1-3/4 UNC GR5 PLD	2
64	9900885	HYD FIT 12MB-8FP	1
65	9900528	WASHER LOCK 3/8 PLD	4
66	9900699	BOLT, 3/8 X 1 UNC GR5 PLD	4
67	9900913	BOLT CARR 1/2 X 1-1/2 UNC GR.5 PLT	2

9.4.8. KIT - SKID STEER W/OUT SELF CONTAINED HYDRAULICS



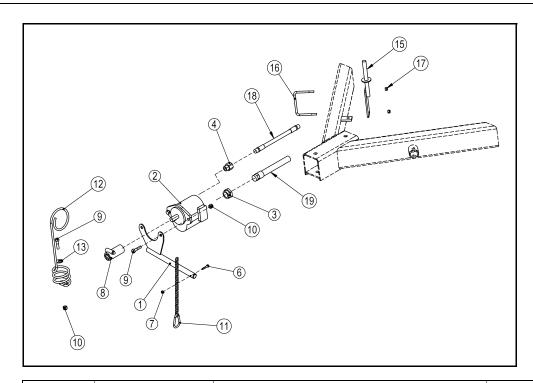
ITEM	PART NO.	DESCRIPTION	QTY
11		SKID STEER ADAPTER (s/n 201620-202198)	1
	2318097	SKID STEER ADAPTER (s/n 202639+)	
33		4 SPL HYD VALVE, W/FTGS, LEVERS	1
38		FTG, 3/4MNPTx1/2FNPT	1
43		FITTING, ELBOW 90, 8MP TO 8FPX	1
46		WASHER FLAT 1 BK	4
47	9900913	BOLT CARR 1/2 x 1-1/2 UNC GR.5 PLT	2

9.4.9. GAS DRIVE COMPONENTS



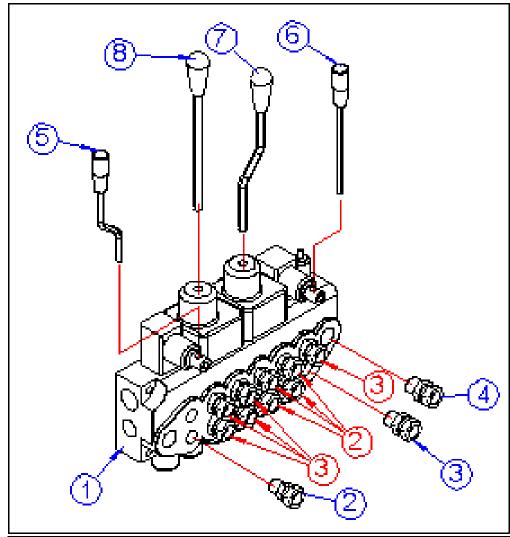
ITEM	PART NO.	DESCRIPTION	QTY
1	1220000	ENGINE HONDA 9HP, HH	1
	1222000	ENGINE HONDA 13HP, HH PLUS	1
2	0103417	MOUNT, MOTOR, RUBBER	8
3	9900757	WASHER FENDER 5/16 PLD	8
4	2300144	PUMP MOUNT	1
5	2300184	HYD, PUMP D17AA2A	1
6	9900524	BOLT, 5/16 x 2-1/2 UNC GR5 PLD	4
7	9900529	WASHER FLAT 5/16 PLD	4
8	9900520	NUT NYLOCK 5/16 UNC GR5 PLT	4
9	9900699	BOLT, 3/8 x 1 UNC GR5 PLD	6
10	9900528	WASHER LOCK 3/8 PLD	6
11	2300145	COUPLER, 1/2"-1", KEYED	1
12	9900228	HYD FIT 8MB-8FPX	1
13	H12X48P	HYD HOSE 1/2 x 48 8MP-8MP 1W	1
14	H34X32P	HYD HOSE 3/4 x 32 10MB 1W	1

9.4.10. PTO DRIVE COMPONENTS

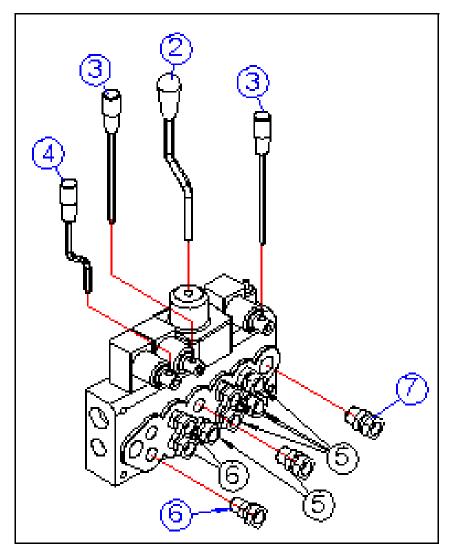


ITEM	PART NO.	DESCRIPTION	QTY
1	2300043A	BRACKET, PTO PUMP	1
2	2300178	PUMP, GEAR	1
3	2300159	HYD FIT 20MB-16FP	1
4	9900885	HYD FIT 12M-8FP	1
5	2300043-5	CHAIN, 3/16 x 16 LINKS	1
6	9900586	BOLT, 5/16 x 1-1/2 UNC GR5	1
7	9900520	NUT NYLOCK 5/16 UNC GR5	1
8	2300050	COUPLER, QUICK, PTO	1
9	9900559	BOLT, 1/2 x 2 UNC GR5 PLD	3
10	9900538	NUT NYLOCK 1/2 UNC GR5	3
11	2300043-2	SNAP LINK, 5/16 x 3-3/16	1
12	2300015	HOLDER, HOSE	1
13	9900565	WASHER FLAT 1/2 PLD	1
15	2306026	MT, PTO PUMP STORAGE	1
16	9900138	U-BOLT SQ3/8 NC x 5-1/8 x 4	1
17	0601007	NUT NYLOCK 3/8 UNC GR5	2
18	H12X180P	HYD HOSE 1/2" x 180"	1
19	H34X120P	HYD HOSE 3/4" x 120"	1

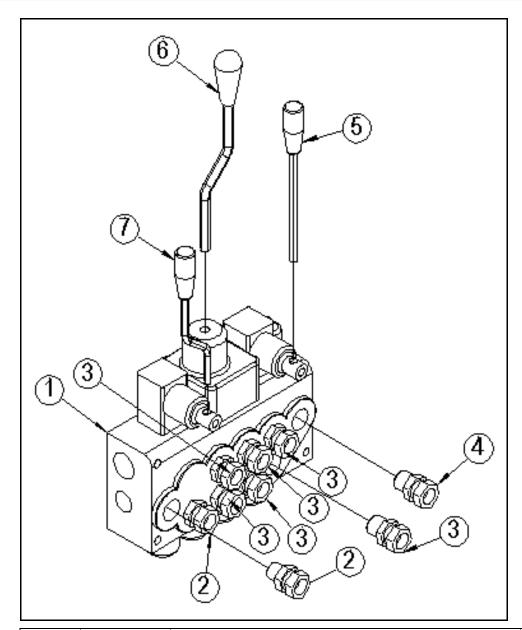
9.4.11. HYDRAULIC CONTROL VALVES



ITEM	PART NO.	DESCRIPTION	QTY
1	1600031-1	VALVE, 6 SPOOL	1
2	9900054	HYD FIT 8MB - 8FPX	5
3	9900909	HYD FIT ORIFICE 1/16", 8MB-8FPX	6
4		HYD FIT 10MB-8FPX	1
5	2300063	LEVER, CONTROL, CONTOURED, RED	1
6	2300078	LEVER, CONTROL	1
7	1600030X	LEVER, JOYSTICK, CONTOURED	1
8	1600030	LEVER, JOYSTICK	1

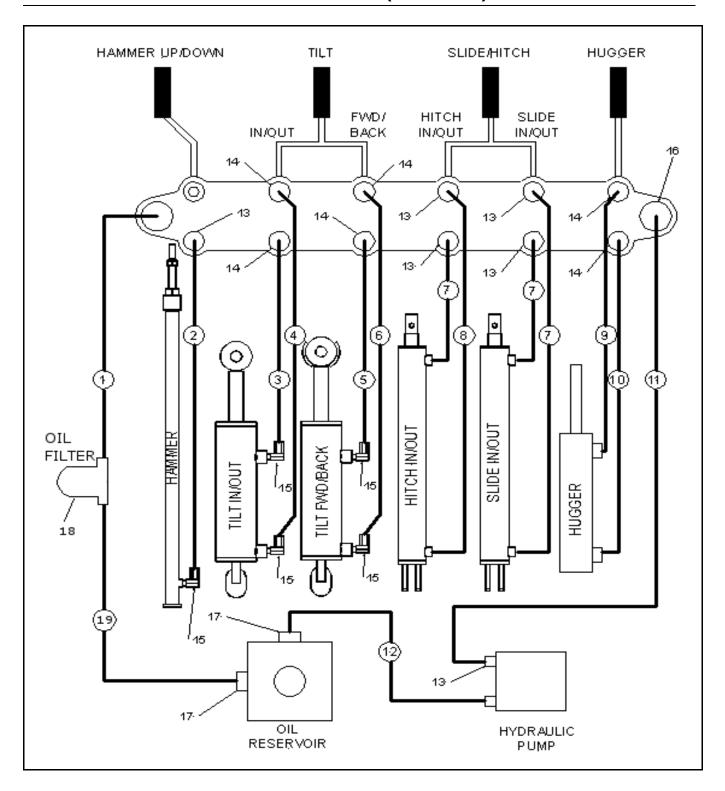


ITEM	PART NO.	DESCRIPTION	QTY
1		VALVE, 5 SPOOL	1
2	1600030X	LEVER, JOYSTICK, CONTOURED	1
3		LEVER, CONTROL	2
4		LEVER, CONTROL, CONTOURED, RED	1
5		HYD FIT ORIFICE 1/16", 8MB-8FPX	6
6	9900054	HYD FIT 8MB - 8FPX	3
7	9900204	HYD FIT 10MB-8FPX	1



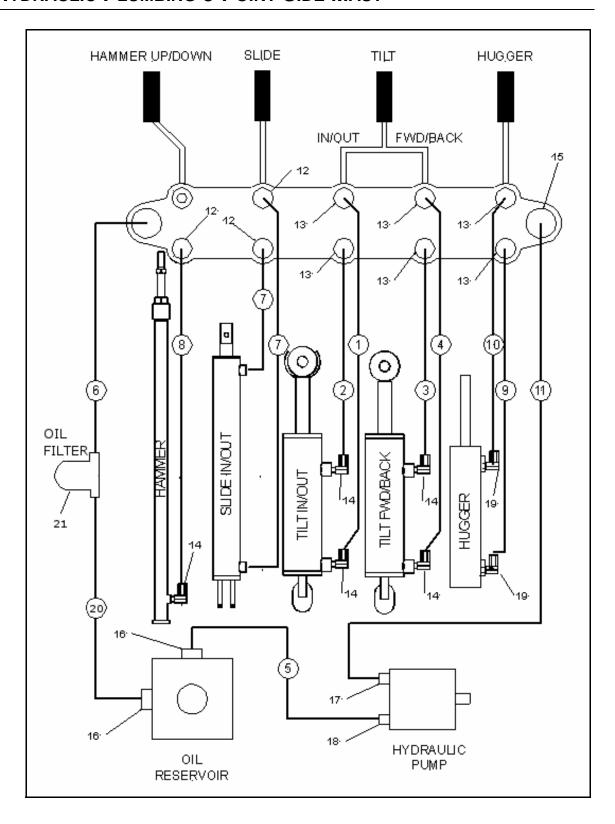
ITEM	PART NO.	DESCRIPTION	QTY
1		VALVE, 4 SPOOL	1
2	9900228	HYD FIT 8MB-8FPX	2
3		HYD FIT ORIFICE 1/16", 8MB-8FPX	6
4	9900204	HYD FIT 10MB-8FPX	1
5		LEVER, 5/6 SPOOL VLV,STRAIGHT,BK	1
6		LEVER, JOYSTICK, CONTOURED	1
7	2300063	LEVER, CONTOURED, HAMMER, RED	1

9.4.12. HYDRAULIC PLUMBING TRAILER (PTO/GAS)



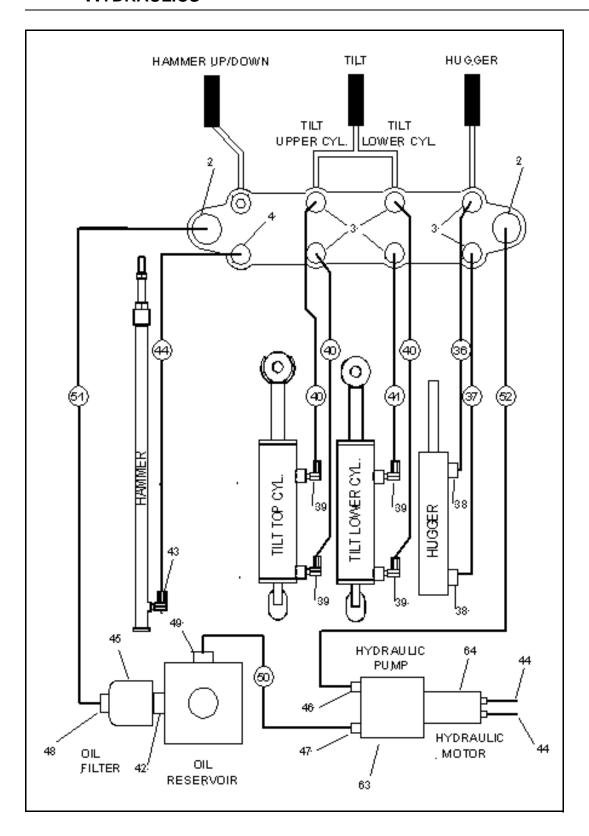
ITEM	PART NO.	DESCRIPTION	QTY
1	H34X84P	HYD HOSE 3/4 x ?? 10MB 1W	1
2	H12X110P2W	HYD HOSE 1/2 x 110 8MP-8MP 1W	1
3	H12X52P	HYD HOSE 1/2 x 52 8MP-8MP 1W	1
4	H12X42P	HYD HOSE 1/2 x 42 8MP-8MP 1W	1
5	H12X58P	HYD HOSE 1/2 x 58 8MP-8MP 1W	1
6	H12X60P	HYD HOSE 1/2 x 60 8MP-8MP 1W	1
7	H38X96P	HYD HOSE 3/8 x 96 6MP-8MP 1W	3
8	H38X78P	HYD HOSE 3/8 x 78 6MP-8MP 1W	1
9	H38X104P	HYD HOSE 3/8 x 104 6MP-8MP 1W	1
10	H38X100P	HYD HOSE 3/8 x 100 6MP-8MP 1W	1
11	H12X48P	HYD HOSE 1/2 x 48 8MP-8MP 1W (GAS)	1
	H12X180P	HYD HOSE 1/2 x 180 8MP-8MP 1W (PTO)	1
12	H34X32P	HYD HOSE 3/4 x 32 10MB 1W (GAS)	1
	H34X120P	HYD HOSE 3/4 x 120 16MP 1W (PTO)	1
13	9900054	HYD FIT 8MB-FPX	5
14	9900909	HYD FIT ORIFICE 1/16", 8MB-FPX	6
15	9900331	HYD FIT ELBOW 8MP-8FPx90	5
16	9900204	HYD FIT 10MB-8FPX	1
17	9900021	FTH, AL, 1 BLKHD x 3 x 4 HB	2
18	_	OIL FILTER (see page 47)	1
19	H34X84P	HYD HOSE 3/4 x ?? 10MB 1W	1

9.4.13. HYDRAULIC PLUMBING 3-POINT SIDE MAST



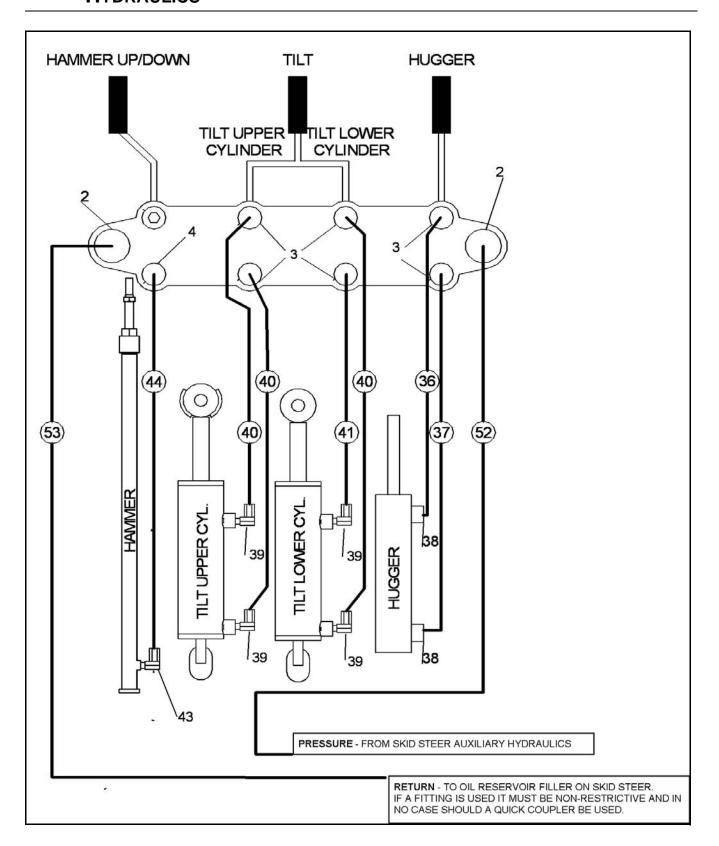
ITEM	PART NO.	DESCRIPTION	QTY
1	H12X34P	HYD HOSE 1/2 x 34 8MP-8MP 1W	1
2	H12X42P	HYD HOSE 1/2 x 42 8MP-8MP 1W	1
3	H12X58P	HYD HOSE 1/2 x 58 8MP-8MP 1W	1
4	H12X60P	HYD HOSE 1/2 x 60 8MP-8MP 1W	1
5	H34X70P	HYD HOSE 3/4 x 70 16MP 1W	1
6	H34X78P	HYD HOSE 3/4 x ?? 10MB 1W	1
7	H38X78P	HYD HOSE 3/8 x 78 6MP-8MP 1W	2
8	H12X84P2W	HYD HOSE 1/2 x 84 8MP-8MP 1W	1
9	H38X100P	HYD HOSE 3/8 x 100 6MP-8MP 1W	1
10	H38X104P	HYD HOSE 3/8 x 104 6MP-8MP 1W	1
11	H12X132P	HYD HOSE 1/2 x 132 8MP-8MP 1W	1
12	9900054	HYD FIT 8MB-FPX	3
13	9900909	HYD FIT ORIFICE 1/16", 8MB-FPX	6
14	9900331	HYD FIT ELBOW 8MP-8FPX90	5
15	9900204	HYD FIT 10MB-8FPX	1
16	9900021	FTH, AL, 1 BLKHD x 3x4 HB	2
17	9900885	HYD FIT 12ORBx8FNPT	1
18	2300159	HYD FIT 20ORBx1FNPT	1
19	9900761	HYD FIT ELB, 3/8MNPTx3/8FNPSM	2
20	H34X78P	HYD HOSE 3/4 x ?? 10MB 1W	1
21		OIL FILTER (see page 47)	1

9.4.14. HYDRAULIC PLUMBING SKID STEER W/ SELF-CONTAINED HYDRAULICS



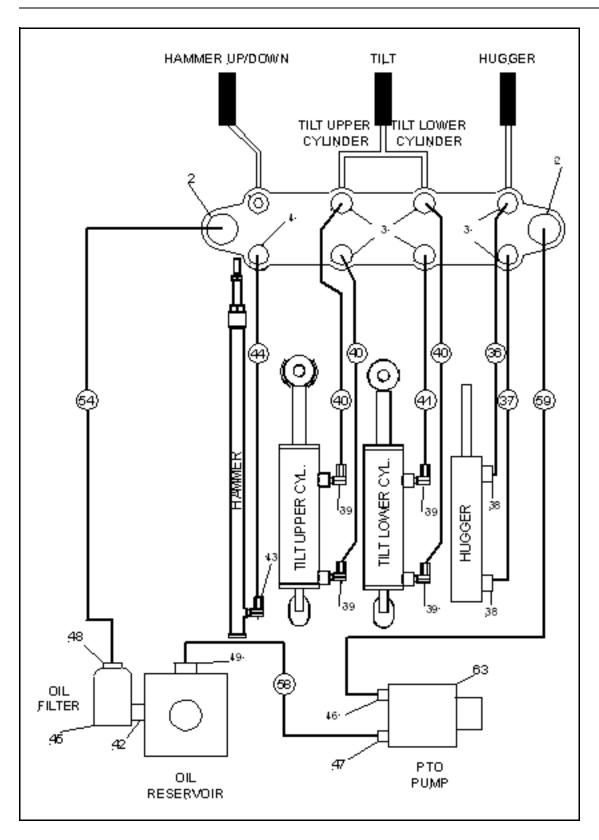
ITEM	PART NO.	DESCRIPTION	QTY
2	9900204	FTG 10MB-8FPX	2
3	9900909	FTG ORIFICE 1/16", 8MB-8FPX	6
4	9900228	FTG 8MB-8FPX	1
36	H38X40	HOSE 3/8 x 40 8MP-6MP	1
37	H38X36	HOSE 3/8 x 36 8MP-6MP	1
38	9900761	FTG, ELB, 3/8MNPTx3/8FNPSM	
39	9900012	FTG, STL, ELBOW, 8MORBx1/2NPSM	4
40	H12X28	HOSE, 1/2x28" 8MPx8MP	3
41	H12X32	HOSE, 1/2x32" 8MPx8MP	1
42	9900995	FTG, NIPPLE, 12MPTx12MPT	1
43	9900331	FTG, STL, ELB, 1/2MNPTx1/2FNPSM	1
44	H12X48P2W	HOSE 1/2 x 54, 8MP-8MP	3
45	9900994	FILTER HYD., 10 MICRON,	1
46	9900885	FTG 12MB-8FP	2
47	2300159	FTG 20MB-16FP	2
48	9900992	FTG, ELB, 3/4MNPTx3/4FNPSM	1
49	9900996	FTG, 12MNPTx12MJIC	1
50	H34X24	HOSE, 3/4"x24", 12FJICSx16MNPT	1
51	H34X50	HOSE, 3/4"x50, 8MPx12MP	1
52	H12X43P	HOSE,1/2x43 8MPx8MP	1
63	2300178	PUMP, M14AA1D	1
64	9901001PK	HYD MOTOR, 4.6	1

9.4.15. HYDRAULIC PLUMBING SKID STEER W/OUT SELF-CONTAINED HYDRAULICS



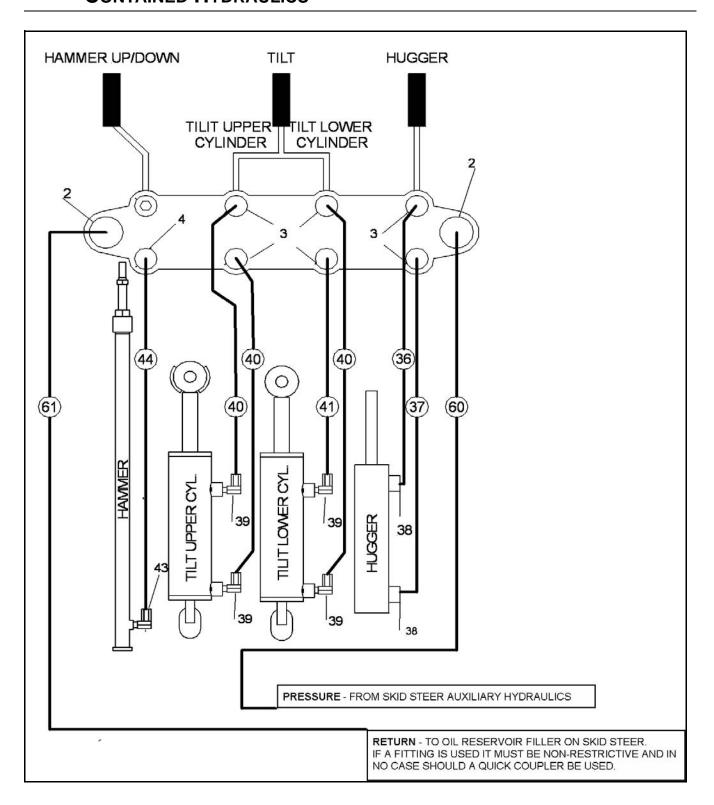
ITEM	PART NO.	DESCRIPTION	QTY
2	9900204	FTG 10MB-8FPX	2
3	9900909	FTG ORIFICE 1/16", 8MB-8FPX	6
4	9900228	FTG 8MB-8FPX	1
36	H38X40	HOSE 3/8 x 40 8MP-6MP	1
37	H38X36	HOSE 3/8 x 36 8MP-6MP	1
38	9900761	FTG, ELB, 3/8MNPTx3/8FNPSM	2
39	9900012	FTG, STL, ELBOW, 8MORBx1/2NPSM	4
40	H12X28	HOSE, 1/2x28" 8MPx8MP	3
41	H12X32	HOSE, 1/2x32" 8MPx8MP	1
43	9900331	FTG, STL, ELB, 1/2MNPTx1/2FNPSM	1
44	H12X48P2W	HOSE, 1/2 x 54, 8MP-8MP	2
52	H12X43P	HOSE,1/2 x 43 8MPX8MP	1
53	H34X168	HOSE, 3/4 x 168" C/W 8MP ONE END	1

9.4.16. HYDRAULIC PLUMBING 3PT CENTER MAST W/ SELF-CONTAINED HYDRAULICS



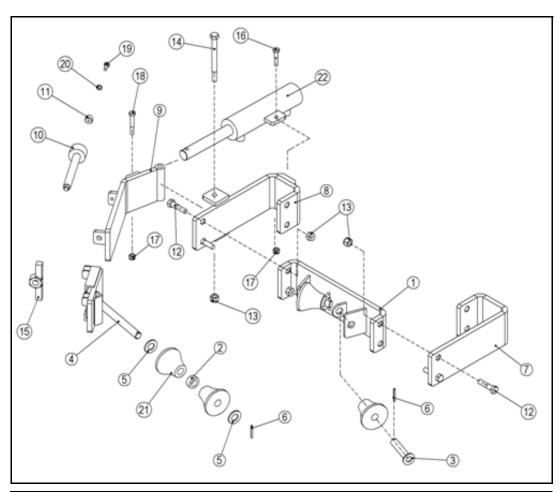
ITEM	PART NO.	DESCRIPTION	QTY
2	9900204	FTG 10MB-8FPX	2
3	9900909	FTG ORIFICE 1/16", 8MB-8FPX	6
4	9900228	FTG 8MB-8FPX	1
36	H38X40	HOSE 3/8 x 40 8MP-6MP	1
37	H38X36	HOSE 3/8 x 36 8MP-6MP	1
38	9900761	FTG, ELB, 3/8MNPTx3/8FNPSM	2
39	9900012	FTG, STL, ELBOW, 8MORBx1/2NPSM	4
40	H12X28	HOSE, 1/2x28" 8MPx8MP	3
41	H12X32	HOSE, 1/2x32" 8MPx8MP	1
42	9900995	FTG, NIPPLE, 12MPTx12MPT	1
43	9900331	FTG, STL, ELB, 1/2MNPTx1/2FNPSM	1
44	H12X48P2W	HOSE 1/2 x 54, 8MP-8MP	1
45	9900994	FILTER HYD., 10 MICRON,	1
46	9900885	FTG 12MB-8FP	2
47	2300159	FTG 20MB-16FP	2
48	9900992	FTG, ELB, 3/4MNPTx3/4FNPSM	1
49	9900996	FTG, 12MNPTx12MJIC	1
54	H34X50	HOSE, 3/4x50" 8MP 12MP	
58	H34X70	HOSE, 3/4x70" C/W 12FJICSx16MNPT	
59	H12X96P	HOSE, 1/2x96" C/W 8MPx8MP	
63	2300178	PUMP, M14AA1D	1

9.4.17. HYDRAULIC PLUMBING 3PT CENTER MAST W/OUT SELF CONTAINED HYDRAULICS



ITEM	PART NO.	DESCRIPTION	QTY
2	9900204	FTG 10MB-8FPX	2
3	9900909	FTG ORIFICE 1/16", 8MB-8FPX	6
4	9900228	FTG 8MB-8FPX	1
36	H38X40	HOSE 3/8 x 40 8MP-6MP	1
37	H38X36	HOSE 3/8 x 36 8MP-6MP	1
38	9900761	FTG, ELB, 3/8MNPTx3/8FNPSM	2
39	9900012	FTG, STL, ELBOW, 8MORBx1/2NPSM	4
40	H12X28	HOSE, 1/2x28" 8MPx8MP	3
41	H12X32	HOSE, 1/2x32" 8MPx8MP	1
43	9900331	FTG, STL, ELB, 1/2MNPTx1/2FNPSM	1
44	H12X48P2W	HOSE 1/2 x 54, 8MP-8MP	1
60	H12X96P	HOSE, 1/2x96" C/W 8MPx8MP	1
61	H34X168	HOSE, 3/4x168" C/W 8MP ONE END	1

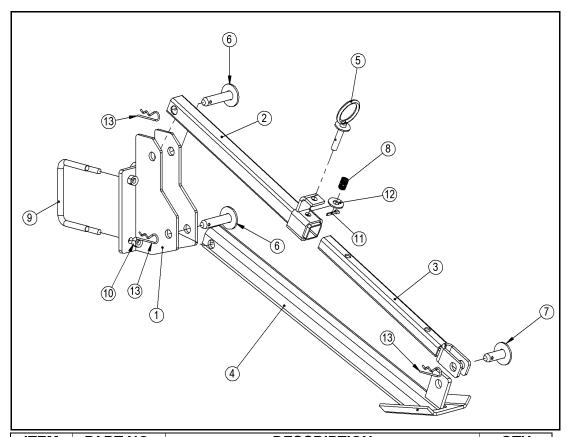
9.4.18. HUGGER



ITEM	PART NO.	DESCRIPTION	QTY
1	2300167	PLATE, ROLLER, STATIONARY	1
2	2300168-1	TUBE, DOM 1-1/4 x.240W x 1/2	1
3	2300169	PIN, 3/4 X 3-7/32, 3/16 x 1	2
4	2300171	ARM, ROLLER, HUGGER	1

ITEM	PART NO.	DESCRIPTION	QTY
5	9900713	WASHER FLAT SAE 3/4 PLD	2
6	9900663	PIN SPRING 3/16 x 1-1/2	3
7	2300185	MOUNT, HUGGER (BENT PLATE)	1
8	2300186	MOUNT, CYL, HUGGER	1
9	2300170	ARM, HUGGER	1
10	2300173	ADJUSTER, HUGGER	1
11	2300170-7	KNOB, SLEEVE	1
12	9900559	BOLT, 1/2 x 2 UNC GR5 PLD	4
13	9900538	NUT NYLOCK 1/2 UNC GR5 PLT	5
14	9900905	BOLT, 1/2 x 5-1/2 UNC GR5 PLD	1
15	2300174	NUT, ADJUSTING	1
16	9900715	BOLT, 3/8 x 1-3/4 UNC GR5 PLD	1
17	0601007	NUT NYLOCK 3/8 UNC GR5 PLT	2
18	9900512	BOLT, 3/8 x 2-1/2 UNC GR5 PLD	1
19	9900797	BOLT, 5/16 x 3/4 UNC GR5 PLD	1
20	9900523	WASHER LOCK 5/16 PLD	1
21	2300168	ROLLER, CONE, HUGGER	4
22	2300166	CYL, 2 x 5.5 x 1.125 ROD,W/TAB	1
	9900271	CYL, 2 x 5.5 x 1.125 ROD,W/TAB, SS	
	2300158	SEAL KIT (2" BORE)	-

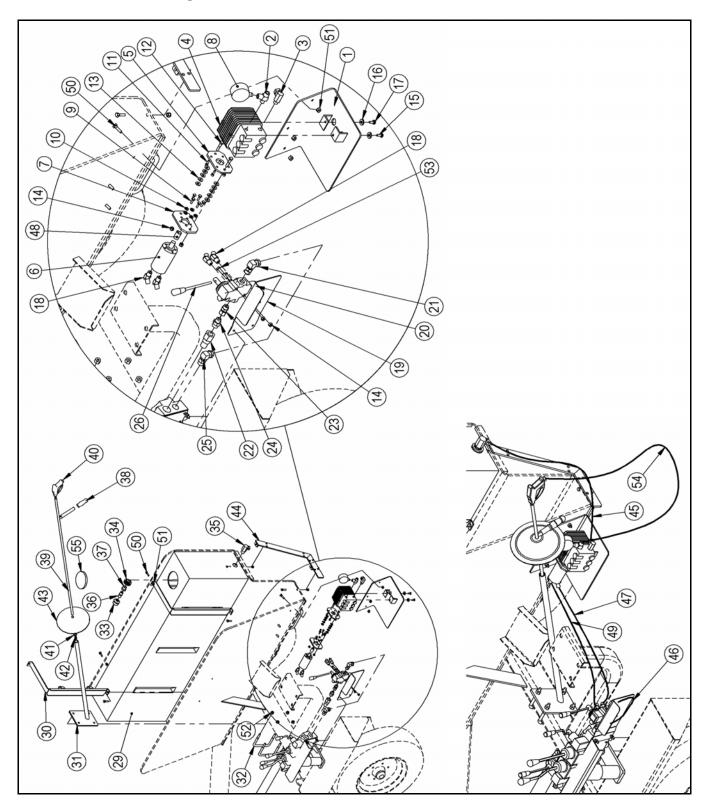
9.4.19. OUTRIGGER LEG



ITEM	PART NO.	DESCRIPTION	QTY
1	2308007	MOUNTING BRACKET, DOWNRIGGER	1
2	2308008	DOWNRIGGER UPPER ARM	1
3	2308009	DOWNRIGGER LOWER ARM	1
4	2308010	DOWNRIGGER LEG	1
5	2308011	SPRING PIN, DOWNRIGGER	1
6	2308012	PIN, 3/4 x 3	2
7	2308013	LOCKING HITCH PIN, 3/4" x 2"	1
8	2308014	SPRING	1
9	9900896	U-BOLT SQ 1/2 NC x 5 x 4-1/2 Gr.5 PLT	2
10	9900538	NUT NYLOCK 1/2 UNC GR5 PLT	4
11	9900044	COTTER PIN, 3/16 x 1-1/4	1
12	9900565	WASHER FLAT 1/2 PLD	1
13	0309027-2	HAIRPIN - 7/16 - 3/4, 1/8 DIA	3

9.4.20. OPTIONAL PARTS

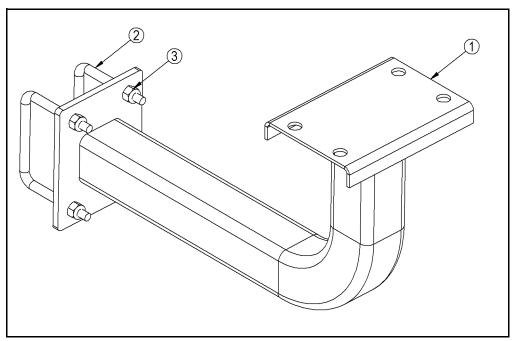
WATER SPIKE KIT



ITEM	PART NO.	DESCRIPTION	QTY
1	2309012	PUMP/MOTOR MOUNTING BRACKET	1
2	9900918	HYD, TEE, 4MP - 4FP - 4FP	1
3	1100625	FITTING, ELBOW 90, 3/8MP TO 1/2FPX	1
4	2309002	PUMP	1
5	2309015	PL, PUMP/MOTOR ADAPT, 7 HOLE	1
6	1290292	MOTOR HYD,	1
7	2309016	PL, MOTOR/PUMP ADPT, 8 HOLE	1
8	9900860	GAUGE WATER PUMP 3000 PSI	1
9	9900921	BOLT, M6 x 1 x 20 GR8.8 PLD	5
10	9900783	WASHER LOCK 1/4 PLD	5
11	no p/n	SOCKET HEAD, M6x1x18 C/W 2309002	4
12	9900586	BOLT, 5/16 x 1-1/2 UNC GR5 PLD	2
13	9900683	WASHER FLAT 1/4 PLD	10
14	9900520	NUT NYLOCK 5/16 UNC GR5 PLT	4
15	9900978	BOLT, M8 x 1 x 20 GR8.8 PLD	2
16	9900529	WASHER FLAT 5/16 PLD	4
17	9900523	WASHER LOCK 5/16 PLD	2
18	0200326	FITTING, ELBOW 45, 6ORB TO 6MJIC	4
19	2309013	MOUNT SINGLE SPOOL VALVE	1
20	2309010	VALVE SINGLE SPOOL	1
21	990012	FFTG, STL, 8 MORB x 1/2 NPSM	1
22	2309010-2	POWER BEYOND FTG.	1
23	2309009	FTG, STL, 8 MORB x 8 FJIC SWVL	1
24	2309008	FTG, STL, 8 MORB x 8 MJIC	1
25	9900096	FTG, STL, 10 MORB x 8 FJIC SWVL	1
26	2309010-1	LEVER, CONTROL	1
29	2309006	TANK 246L (65 GAL) RED (W/LID)	1
30	2309014	STRAP, TANK MT	2
31	2309017	HOLDER WAND WATER SPIKE	1
32	9900896	U-BOLT SQ 1/2 NC x 5 x 4-1/2 x 1-1/2 Thd Gr.5 PLT	2
33	9900207	STRAINER	1
34	9900602	FTG AL BLKHD W/STL LHT NUTx3/4 FNPT	1
35	9900604	FITTING, EBLOW 90, 3/4MP TO 1/2FPX	1

ITEM	PART NO.	DESCRIPTION	QTY
36	9900608	FTG, STL, NIPPLE, 8MPT x 8MPT	1
37	9900752	FITTING, 12MP TO 8 FP	1
38	0200007-4	HANDLE GRIP	1
39	2309005	WAND WLDT	1
40	2309011	TRIGGER GUN	1
41	9900865	FTG STL CPLR 1/4" NPT	1
42	2309003	NOZZLE #2.0	1
43	2309005-4	SPLASH GUARD	1
44	2309022	PROTECTOR WATER SPIKE HOSE	1
45	H12X32	HOSE, 1/2 x 32" C/W 8MP x 8MP	1
46	H12X16	HOSE, 1/2 x 16" C/W 8MP x 8MP	1
47	H38X80	HOSE, 3/8 x 80" C/W 6FJIC x 6FJIC	1
48	9900102	SLEEVE, HYD MOTOR (1290292)	1
49	H38X78	HOSE, 3/8 x 78" C/W 6FJIC x 6FJIC	1
50	9900531	BOLT, 3/8 x 1-1/4 UNC GR5 PLD	9
51	0601007	NUT NYLOCK 3/8 UNC GR5 PLT	9
52	9900538	NUT NYLOCK 1/2 UNC GR5 PLT	4
53	9900514	BOLT, 5/16 x 2 UNC GR5 PLD	2
54	H14X120	HOSE, 1/4 x 120" C/W 4MPX(LIVE)-6MP 1W	1
55	2309006A	TANK LID, 65 GAL	1

BOLT ON ENGINE MOUNT KIT



ITEM	PART NO.	DESCRIPTION	QTY
1	2300149-27	ENGINE MOUNT, TRAILER POUNDER	1
2	9900896	U-BOLT SQ 1/2 NC x 5 x 4-1/2, Gr.5 PLT	2
3	9900538	NUT NYLOCK 1/2 UNC GR5 PLT	4

BALL HITCH ADAPTER, 2"

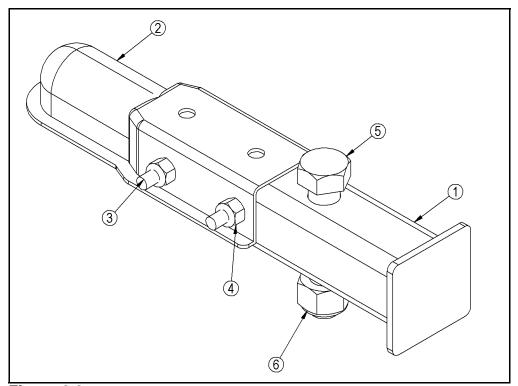


Figure 9.3

ITEM	PART NO.	DESCRIPTION	QTY
1		HITCH COUPLER MT, WELDMENT	1
2	2300036	HITCH COUPLER, 2" BALL	1
3	9900647	BOLT, 1/2 x 4 UNC GR5 PLD	2
4		NUT NYLOCK 1/2 UNC GR5 PLT	2
5		BOLT, 1 x 5 UNC GR5 PLD	1
6	9900639	NUT NYLOCK 1 UNF GR5 PLT	1

WARRANTY REGISTRATION

Wheatheart congratulates you on your new equipment purchase.

The warranty registration form must be filled out within thirty (30) days from delivery date and sent to:

Wheatheart Manufacturing

3455 Idylwyld Dr. N., Saskatoon, Saskatchewan S7L 6B5

CUSTOMER COPY (Retain this card for warranty and record purposes.)			
PRODUCT: DEALER'S NAME:			
SERIAL #:	ADDRESS:		
DELIVERY DATE:	ADDRESS.		
OWNER'S NAME:	PHONE #:		
ADDRESS:	SIGNATURE:		
ADDITESS.	INVOICE #:		
PHONE #:	(Please refer to invoice # when filing claim)		

DEALER COPY (Retain this card for warranty and record purposes.)				
PRODUCT: DEALER'S NAME:				
SERIAL #:	ADDRESS:			
DELIVERY DATE:	ADDITESS.			
OWNER'S NAME:	PHONE #:			
ADDRESS:	SIGNATURE:			
ADDICESS.	INVOICE #:			
PHONE #:	(Please refer to invoice # when filing claim)			

WARRANTY REGISTRATION (Must be filled out and returned to Wheatheart within 30 days of delivery.)			
OWNER'S NAME:	DEALER'S NAME:		
ADDRESS:	ADDRESS:		
PHONE #:	PHONE #:		
SIGNATURE:	SIGNATURE:		
(I acknowledge the product to be whole and in proper working order.)	(I acknowledge the product to be whole and in proper working order. The owner has been given an operation manual and has been informed on proper operation and maintenance.)		
PRODUCT: SERIAL #: INVOICE #:	DELIVERY DATE: GAS MOTOR SERIAL #:		

LIMITED WARRANTY

Wheatheart warrants to the buyer that the new machinery is free from defects in material and workmanship.

This warranty is only effective for any new machinery that has not been altered, changed, repaired, or treated since its delivery to the buyer, other than by Wheatheart or its authorized dealers or employees, and does not apply to accessories, attachments, tools, or parts sold or operated with the new machinery if they have not been manufactured by Wheatheart.

Wheatheart shall only be liable for defects in the material or workmanship attributed to faulty material or bad workmanship that can be proved by the buyer, and specifically excludes liability for repairs arising as a result of normal wear and tear of the new machinery or in any other manner whatsoever, and without limiting the generality of the foregoing, excludes application or installation of parts not completed in accordance with Wheatheart operation manual, specifications, or printed instructions.

A Warranty Registration Form and Inspection Report must be completed at the time of delivery and returned to Wheatheart Manufacturing within thirty (30) days.

Warranty Period

Private Farm Use One (1) year from date of purchase.

Commercial, Custom, or Rental Use Ninety (90) days from date of purchase.

Replacement Parts Ninety (90) days from date of replacement

Defective parts are subject to inspection by a Wheatheart representative prior to approval of a warranty claim. All returned parts must be sent to the factory, freight pre-paid, in order to qualify for warranty replacement. Repaired or replaced parts will be returned freight collect.

If these conditions are fulfilled, Wheatheart shall at its own cost and its own option either repair or replace any defective parts provided that the buyer shall be responsible for all expenses incurred as a result of repairs, labor, parts, transportation, or any other work, unless Wheatheart has authorized such expenses in advance. Normal wear and service items such as belts, hoses, flashing, etc. are excluded from warranty.

The warranty shall not extend to any repairs, changes, alterations, or replacements made to the new equipment other than by Wheatheart or its authorized dealers or employees.

This warranty extends only to the original owner of the new equipment.

This warranty is limited to the terms stated herein and is in lieu of any other warranties whether expressed or implied, and without limiting the generality of the foregoing, excluded all warranties, expressed or implied, or conditions whether statutory or otherwise as to quality and fitness for any purpose of the new equipment, Wheatheart disclaims all liability for incidental or consequential damages.

This machine is subject to design changes and Wheatheart shall not be required to retro-fit or exchange items on previously sold units except at its own option.

WARRANTY VOID IF NOT REGISTERED



Wheatheart is a Division of Ag Growth Industries LP
Part of the Ag Growth International Inc. Group
3455 Idylwyld Drive North
Saskatoon, Saskatchewan, Canada

Phone: (306) 934-0611

Fax: (306) 934-6020

Toll Free: (877) 934-0649 (Canada & USA)

website: www.wheatheart.com

email: sales@wheatheart.com

© Ag Growth Industries Limited Partnership 2009

Printed in Canada