



**OPERATOR'S MANUAL
& PARTS DRAWINGS**

VERSA-LOADER

MODEL KH500

SERIAL NUMBER 1001-1279





500 Venture Drive
PO Box 148
Orrville, OH 44667
www.ventrac.com

**To the Owner
Contact Information and Product Identification**

If you need to contact an authorized Ventrac dealer for information on servicing your product, always provide the product model and serial numbers.

Please fill in the following information for future reference. See the picture(s) below to find the location of the identification numbers. Record them in the spaces provided.

Date of Purchase: _____

Dealer: _____

Dealer Address: _____

Dealer Phone Number: _____

Dealer Fax Number: _____

Model # (A): _____ Serial # (B): _____ <p style="text-align: center;">Affix Part/Serial Number label here.</p>
--



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INTRODUCTION



Venture Products Inc. is pleased to provide you with your new Ventrac KH500 versa-loader! We hope that Ventrac equipment will provide you with a ONE Tractor Solution.

Listed below are just some of the items that can provide you *versatility* as you use your KH500 versa-loader. Please visit our website, or contact your authorized Ventrac dealer for a complete list of items available for your new KH500 versa-loader.

Accessories	Item Description	Part Number
	Rear Weight Bar (receiver mount)	70.4144
	3-N-1 Hitch (for 3-point hitch)	39.56114
	Optional 9 ft ³ Bucket	62.0951
	Pallet Fork	39.55630
	Tine Fork	39.55620
	Lift Boom	39.55625
	KH150 Auger Drive	39.55640

Product Description

The Ventrac KH500 versa-loader is designed and built with all steel construction, making it strong and rugged. The versa-loader is equipped with a 5 cubic foot (.14 cubic meters) bucket and is capable of lifting up to 500 pounds (227 kg) over 6 feet (183 cm) high. The versa-loader can be attached or detached within minutes without tools or heavy lifting.

The loader functions are controlled using a joystick hydraulic valve. An optional speed and direction foot pedal control can be installed on the power unit to free both hands for steering the power unit and controlling the loader functions. Refer to your power unit operator's manual for the proper foot pedal option for your power unit model.

Why Do I Need an Operator's Manual?

This manual has been created to help you gain the important knowledge of what is needed to safely operate, maintain, and service your machine. It is divided into sections for convenient reference of the appropriate section.

You must read and understand the operator's manual for each piece of Ventrac equipment you own. Reading the operator's manual will help you become familiar with each specific piece of equipment. Understanding the operator's manual will help you, as well as others, avoid personal injury and/or damage to the equipment. Keep this manual with the machine at all times. The manual should remain with the machine even if it is sold. If this manual becomes damaged or unreadable, it should be replaced immediately. Contact your local Ventrac dealer for a replacement.

When using a Ventrac attachment, be sure to read and follow the safety and operating instructions of both the power unit and the attachment being used to ensure the safest operation possible.

The information in this manual provides the operator with the safest procedures to operate the machine while getting the maximum use out of the unit. Failure to follow the safety precautions listed in this manual may result in personal injury and/or damage to the equipment.

INTRODUCTION

Using Your Manual

Throughout this manual, you will encounter special messages and symbols that identify potential safety concerns to help you as well as others avoid personal injury or damage to the equipment.

SYMBOL DEFINITIONS



ATTENTION

This symbol identifies potential health and safety hazards. It marks safety precautions. Your safety and the safety of others is involved.

There are three signal words that describe the level of safety concern: Danger, Warning, and Caution. Safety should always be the #1 priority when working on or operating equipment. Accidents are more likely to occur when proper operating procedures are not followed or inexperienced operators are involved.

Note: Right-Hand and Left-Hand orientations may be referred to at different places throughout this manual. Right-Hand and Left-Hand is determined as if sitting on the power unit seat facing forward.

SIGNAL WORD DEFINITIONS

⚠ DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme cases.

⚠ WARNING

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

⚠ CAUTION

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

Manual Glossary

- Power Unit** A Ventrac tractor or other Ventrac engine powered device that may be operated by itself or with an attachment or accessory.
- Attachment** A piece of Ventrac equipment that requires a Power Unit for operation.
- Accessory** A device that attaches to a Power Unit or Attachment to extend its capabilities.
- Machine** Describes any "Attachment" or "Accessory" that is used in conjunction with a power unit.

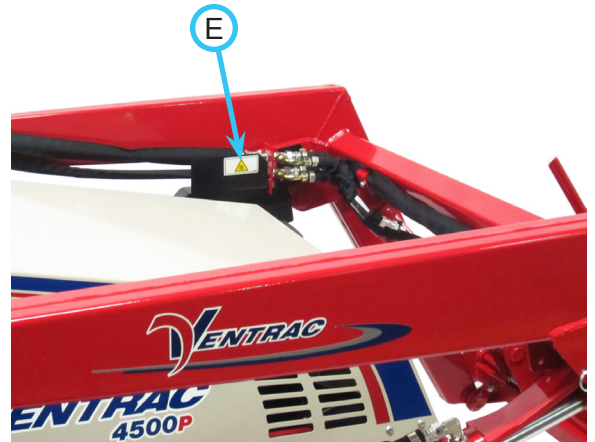
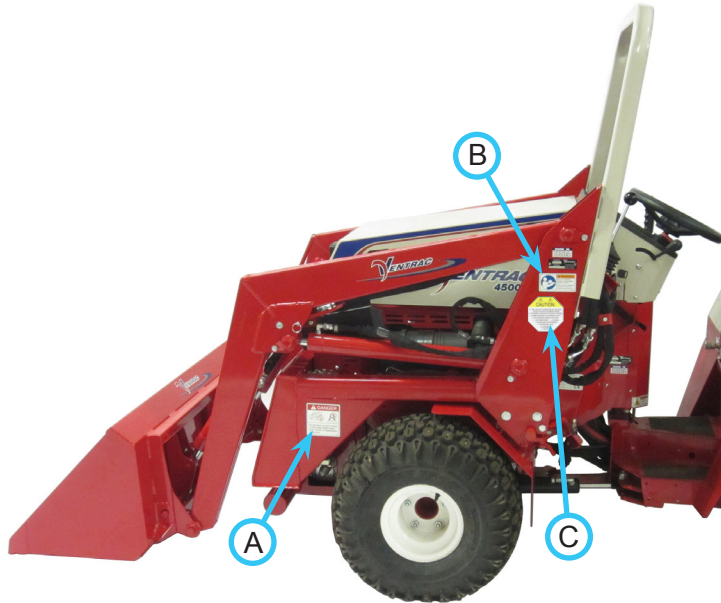
SAFETY

Safety Decals

The following safety decals must be maintained on your KH500 versa-loader.

Keep all safety decals legible. Remove all grease, dirt, and debris from safety decals and instructional labels. If any decals are faded, illegible, or missing, contact your dealer promptly for replacements.

When new components are installed, be sure that current safety decals are affixed to the replacement components.



SAFETY

A



DANGER

Do not place any part of body or limb under raised loader arms, bucket, or attachments at any time.

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B



WARNING

Read and understand operator's manual before using this machine.

Failure to follow operating instructions could result in death or serious injury.

PART NO. 00.0217

C



CAUTION:

- MAX. LOAD NOT TO EXCEED 500 LBS. INCLUDING BUCKET OR OTHER ATTACHMENT'S WEIGHT
- ATTACHMENT LOCKS MUST BE PROPERLY ENGAGED
- TURNING DECREASES COUNTERWEIGHT EFFECT
 - USE COMMON SENSE
 - NO RIDERS
- USE REQUIRED COUNTERWEIGHT
 - TIRE PRESSURE 15 PSI
 - NO RAMMING
 - BE ALERT

D

WARNING

00.0194

- Operate only in low range
- Turning reduces stability
- Maximum angle of slope operation is 5°
- In raised position, extra caution must be used to keep load level to prevent dumping/throwing material on the operator
- Always carry load low
- Always lower loader to ground before dismounting
- Maximum load not to exceed 500 pounds, including bucket or other tool

E



00.0374

Decal	Description	Part Number	Quantity
A	Danger, Loader	00.0193	2
B	Warning, Read Owner's Manual	00.0217	1
C	Caution, Loader Arms	00.0195	2
D	Warning, Loader Rollbar	00.0194	1
E	Warning, Hot Surface (Serial # 1248-)	00.0374	1

SAFETY



General Safety Procedures for Ventrac Power Units, Attachments, & Accessories



Training Required

- The owner of this machine is solely responsible for properly training the operators.
- The owner/operator is solely responsible for the operation of this machine and prevention of accidents or injuries occurring to him/herself, other people, or property.
- Do not allow operation or service by children or untrained personnel. Local regulations may restrict the age of the operator.
- Before operating this machine, read the operator's manual and understand its contents.
- If the operator of the machine cannot understand this manual, then it is the responsibility of this machine's owner to fully explain the material within this manual to the operator.
- Learn and understand the use of all controls.
- Know how to stop the power unit and all attachments quickly in the event of an emergency.



Personal Protective Equipment Requirements

It is the responsibility of the owner to be sure that the operators use the proper personal protective equipment while operating the machine. Required personal protective equipment includes, but is not limited to, the following list.



- Wear a certified ear protection device to prevent loss of hearing.
- Prevent eye injury by wearing safety glasses while operating the machine.
- Closed toe shoes must be worn at all times.
- Long pants must be worn at all times.
- When operating in dusty conditions, it is recommended that a dust mask be worn.

Operation Safety

- Inspect machine before operation. Repair or replace any damaged, worn, or missing parts. Be sure guards and shields are in proper working condition and are secured in place. Make all necessary adjustments before operating machine.
- Some pictures in this manual may show shields or covers opened or removed in order to clearly illustrate any instructions. Under no circumstance should the machine be operated without these devices in place.
- Alterations or modifications to this machine can reduce safety and could cause damage to the machine. Do not alter safety devices or operate with shields or covers removed.
- Before each use, verify that all controls function properly and inspect all safety devices. Do not operate if controls or safety devices are not in proper working condition.
- Check parking brake function before operating. Repair or adjust parking brake if necessary.
- Observe and follow all safety decals.
- All controls are to be operated from the operator's seat only.
- Always wear a seat belt if the machine has a roll cage/bar installed and in upright position.
- Ensure the attachment or accessory is locked or fastened securely to the power unit before operating.
- Ensure that all bystanders are clear of the power unit and attachment before operating. Stop machine if someone enters your work area.
- Always be alert to what is happening around you, but do not lose focus on the task you are performing. Always look in the direction the machine is moving.
- Look behind and down before backing up to be sure of a clear path.
- If you hit an object, stop and inspect the machine. Make all necessary repairs before operating machine again.
- Stop operation immediately at any sign of equipment failure. An unusual noise can be a warning of equipment failure or a sign that maintenance is required. Make all necessary repairs before operating machine again.

SAFETY



General Safety Procedures for Ventrac Power Units, Attachments, & Accessories



Operation Safety (continued)

- If equipped with a high/low range feature, never shift between high and low range while on a slope. Always move the machine to level ground and engage the parking brake before shifting range.
- Do not leave machine unattended while it is running.
- Always park the machine on level ground.
- Always shut off engine when connecting attachment drive belt to the power unit.
- Never leave the operator's seat without lowering the attachment to the ground, setting the parking brake, shutting off the engine, and removing the ignition key. Make sure all moving parts have come to a complete stop before dismounting.
- Never leave equipment unattended without lowering the attachment to the ground, setting the parking brake, shutting off the engine, and removing the ignition key.
- Only operate in well-lit conditions.
- Do not operate when there is a risk of lightning.
- Never direct the discharge of any attachment in the direction of people, buildings, animals, vehicles, or other objects of value.
- Never discharge material against a wall or obstruction. Material may ricochet back towards the operator.
- Use extra caution when approaching blind corners, shrubs, trees, or other objects that may obscure vision.
- Do not run the engine in a building without adequate ventilation.
- Do not touch the engine or the muffler while the engine is running or immediately after stopping the engine. These areas may be hot enough to cause a burn.
- Do not change the engine governor settings or over-speed the engine. Operating engine at excessive speed may increase the hazard of personal injury.
- To reduce the hazard of fire, keep the battery compartment, engine, and muffler areas free of grass, leaves, and excessive grease.

Preventing Accidents

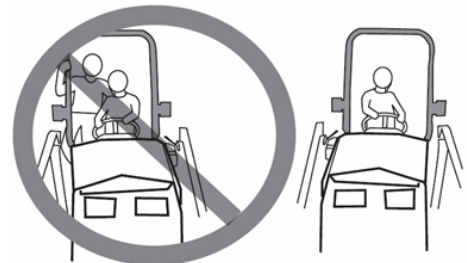


- Clear working area of objects that might be hit or thrown from machine.
- Keep people and pets out of mowing area.
- Know the work area well before operation. Do not operate where traction or stability is questionable.
- Reduce speed when you are operating over rough ground.
- Equipment can cause serious injury and/or death when improperly used. Before operating, know and understand the operation and safety of the power unit and the attachment being used.

- Do not operate machine if you are not in good physical and mental health, if you will be distracted by personal devices, or are under the influence of any substance which might impair decision, dexterity, or judgment.
- Children are attracted to machine activity. Be aware of children and do not allow them in the working area. Turn off the machine if a child enters the work area.

Keep Riders Off

- Only allow the operator on the power unit. Keep riders off.
- Never allow riders on any attachment or accessory.



SAFETY

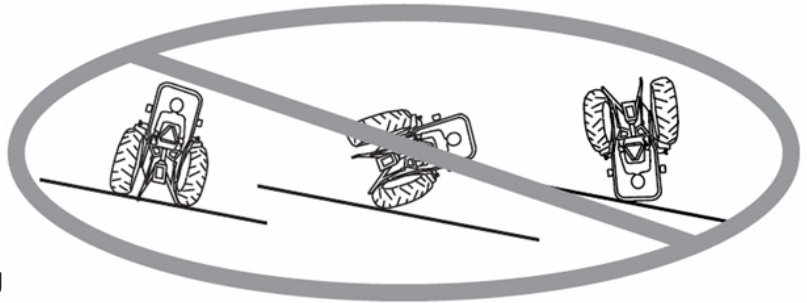


General Safety Procedures for Ventrac Power Units, Attachments, & Accessories



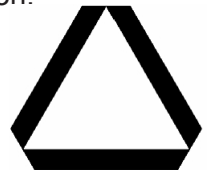
Operating On Slopes

- Slopes can cause loss-of-control and tip-over accidents, which can result in severe injury or death. Be familiar with the emergency parking brake, along with the power unit controls and their functions.
- If power unit is equipped with a fold down roll bar, it must be locked in the upright position when operating on any slope.
- Use low range (if equipped) when operating on slopes greater than 15 degrees.
- Do not stop or start suddenly when operating on slopes.
- Never shift between high and low range while on a slope. Always move the power unit to level ground and engage the parking brake before shifting range or placing the power unit in neutral.
- Variables such as wet surface and loose ground will reduce the degree of safety. Do not drive where machine could lose traction or tip over.
- Keep alert for hidden hazards in the terrain.
- Stay away from drop-offs, ditches, and embankments.
- Sharp turns should be avoided when operating on slopes.
- Pulling loads on hills decreases safety. It is the responsibility of the owner/operator to determine loads that can safely be controlled on slopes.
- Transport machine with attachment lowered or close to the ground to improve stability.
- While operating on slopes, drive in an up and down direction when possible. If turning is necessary while driving across slopes, reduce speed and turn slowly in the downhill direction.
- Assure a sufficient supply of fuel for continuous operation. A minimum of one-half tank of fuel is recommended.



Roadway Safety

- Operate with safety lights when operating on or near roadways.
- Obey all state and local laws concerning operation on roadways.
- Slow down and be careful of traffic when operating near or crossing roadways. Stop before crossing roads or sidewalks. Use care when approaching areas or objects that may obscure vision.
- If there is doubt of safety conditions, discontinue machine operation until a time when operation can be performed safely.
- When operating near or on roadways, have a Slow Moving Vehicle Emblem clearly displayed.



Truck Or Trailer Transport

- Use care when loading or unloading machine into a truck or trailer.
- Use full width ramps for loading machine into a truck or trailer.
- The parking brake is not sufficient to lock the machine during transport. Always secure the power unit and/or attachment to the transporting vehicle securely using straps, chains, cable, or ropes. Both front and rear straps should be directed down and outward from the machine.
- Shut off fuel supply to power unit during transport on truck or trailer.
- If equipped, turn the battery disconnect switch to the Off position to shut off electrical power.

SAFETY



General Safety Procedures for Ventrac Power Units, Attachments, & Accessories



Maintenance

- Keep all safety decals legible. Remove all grease dirt, and debris from safety decals and instructional labels.
- If any decals are faded, illegible, or missing, contact your dealer promptly for replacements.
- When new components are installed, be sure that current safety decals are affixed to the replacement components.
- If any component requires replacement, use only original Ventrac replacement parts.
- Always turn the battery disconnect to the Off position or disconnect the battery before performing any repairs. Disconnect the negative terminal first and the positive terminal last. Reconnect the positive terminal first and the negative terminal last.
- Keep all bolts, nuts, screws, and other fasteners properly tightened.
- Always lower the attachment to the ground, engage parking brake, shut off engine, and remove the ignition key. Make sure all moving parts have come to a complete stop before cleaning, inspection, adjusting or repairing.
- If the power unit, attachment, or accessory requires repairs or adjustments not instructed in the operator's manual, the power unit, attachment, or accessory must be taken to an authorized Ventrac dealer for service.
- Never perform maintenance on the power unit and/or attachment if someone is sitting in the operator's seat.
- Always use protective glasses when handling the battery.
- Check all fuel lines for tightness and wear on a regular basis. Tighten or repair them as needed.
- To reduce the hazard of fire, keep the battery compartment, engine, and muffler areas free of grass, leaves, and excessive grease.
- Do not touch the engine, the muffler, or other exhaust components while the engine is running or immediately after stopping the engine. These areas may be hot enough to cause a burn.
- Allow the engine to cool before storing and do not store near an open flame.
- Do not change the engine governor settings or over-speed the engine. Operating engine at excessive speed may increase the hazard of personal injury.
- Springs may contain stored energy. Use caution when disengaging or removing springs and/or spring loaded components.
- An obstruction or blockage in a drive system or moving/rotating parts may cause a buildup of stored energy. When the obstruction or blockage is removed, the drive system or moving/rotating parts may move suddenly. Do not attempt to remove an obstruction or blockage with your hands. Keep hands, feet, and clothing away from all power-driven parts.
- Dispose of all fluids in accordance with local laws.

Fuel Safety



- To avoid personal injury or property damage, use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive.
- Do not refuel machine while smoking or at a location near flames or sparks.
- Always refuel the machine outdoors.
- Do not store machine or fuel container indoors where fumes or fuel can reach an open flame, spark, or pilot light.
- Only store fuel in an approved container. Keep out of reach of children.
- Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.
- Remove machine from the truck or trailer and refuel it on the ground. If this is not possible, refuel the machine using a portable container, rather than from a fuel dispenser nozzle.
- Never remove fuel cap or add fuel with the engine running. Allow engine to cool before refueling.
- Never remove fuel cap while on a slope. Only remove when parked on a level surface.
- Replace all fuel tank and container caps securely.

SAFETY



General Safety Procedures for Ventrac Power Units, Attachments, & Accessories



Fuel Safety (continued)

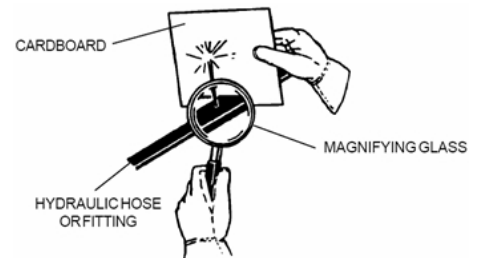
- Do not overfill fuel tank. Only fill to bottom of fuel neck, do not fill fuel neck full. Overfilling of fuel tank could result in engine flooding, fuel leakage from the tank, and/or damage to the emissions control system.
- If fuel is spilled, do not attempt to start the engine. Move the power unit away from the fuel spill and avoid creating any source of ignition until fuel vapors have dissipated.
- If the fuel tank must be drained, it should be drained outdoors into an approved container.
- Dispose of all fluids in accordance with local laws.
- Check all fuel lines for tightness and wear on a regular basis. Tighten or repair them as needed.
- The fuel system is equipped with a shut-off valve. Shut off the fuel when transporting the machine to and from the job, when parking the machine indoors, or when servicing the fuel system.

Hydraulic Safety

- Make sure all hydraulic connections are tight and all hydraulic hoses and tubes are in good condition. Repair any leaks and replace any damaged or deteriorated hoses or tubes before starting the machine.
- Hydraulic leaks can occur under high pressure. Hydraulic leaks require special care and attention.
- Use a piece of cardboard and a magnifying glass to locate suspected hydraulic leaks.



- Keep body and hands away from pinhole leaks or nozzles that eject high pressure hydraulic fluid. Hydraulic fluid escaping under high pressure can penetrate the skin causing serious injury, leading to severe complications and/or secondary infections if left untreated. If hydraulic fluid is injected into the skin, seek immediate medical attention no matter how minor the injury appears.



- Hydraulic system may contain stored energy. Before performing maintenance or repairs on the hydraulic system, remove attachments, engage parking brake, disengage weight transfer system (if equipped), shut off engine, and remove ignition key. To relieve pressure on the auxiliary hydraulic system, shut off the power unit engine and move the secondary S.D.L.A. lever left and right before disconnecting the auxiliary hydraulic quick couplers.
- Dispose of all fluids in accordance with local laws.

SAFETY



KH500 Safety Procedures



- Power unit must be set in low range for loader operation.
- The loader must be securely fastened to the power unit (front hitch and rear mounting bar) and the locking pins on the tool mount bar must be properly engaged to secure the accessory tool prior to operation.
- Maximum angle of slope operation is 5 degrees.
- Turning reduces power unit stability.
- Due to added length and weight, allow extra distance for turning and stopping.
- Maximum load must not exceed 500 pounds (227 kg), including the bucket or other tool.
- When the loader is raised, extra caution must be used to keep the load level to prevent dumping or throwing material back onto the power unit and/or operator.
- Do not contact overhead structures while raising the loader.
- Always carry the load low to the ground. Use extreme caution when loading, transporting, or dumping a load that impair the operator's line of sight.
- Lower the loader to the ground before leaving the operator's seat.
- Additional rear counterweight must be used when operating the loader. Use a Ventrac accessory weight bar equipped with six Ventrac weights. Accessory weight bars are listed in the introduction section of this manual.
- Remove rear counterweight prior to detaching the loader from the power unit.
- Remove dual wheels from the power unit prior to attaching the loader. Use of dual wheels in conjunction with the loader will void the warranty on all transaxle and axle components.
- When operating loader, inflate the tires to the upper range of the recommended tire pressure for your specific tire. Refer to the power unit operator's manual for maximum tire pressure for each tire type.
- Check and adjust (if necessary) tire pressure after detaching the loader. Refer to power unit operator's manual for tire pressure specifications.
- Do not place any part of body or limbs under raised loader arms, bucket, or accessory tool at any time. Do not allow any person to be underneath the raised loader and tool.
- Lower the loader arms completely before opening the power unit hood. Do not operate loader while the power unit hood is open or hood may be damaged.
- Do not use the loader as a jack to raise the power unit's front tires off the ground.
- An accessory tool must be attached to the loader before detaching from power unit.
- The loader hydraulic system may contain stored energy. Lower the loader to the ground, shut off power unit, and relieve pressure by moving the joystick control handle forward, backward, and side to side.
- The power unit's steering cylinder must be mounted in the outer holes in the rear frame when operating the loader.

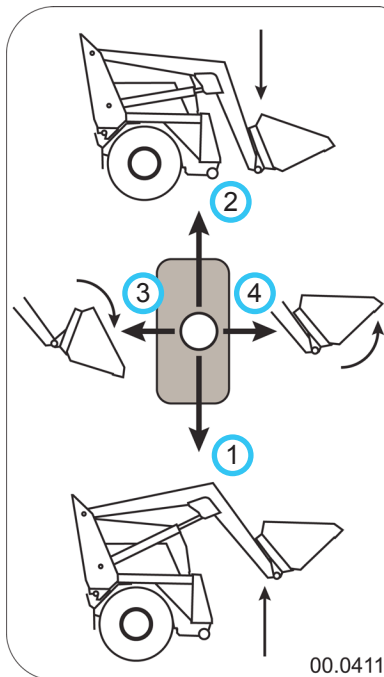
OPERATIONAL CONTROLS

Joystick Control Valve



The joystick control valve (A) controls the functions of the loader.

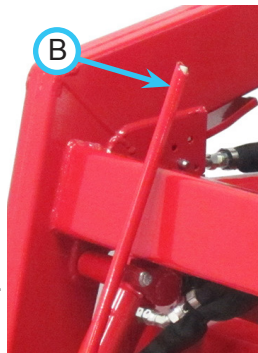
1. Pull back on the joystick to raise the loader.
2. Push the joystick forward to lower the loader.
3. Move the joystick to the left to dump the bucket.
4. Move the joystick to the right to roll back the bucket.



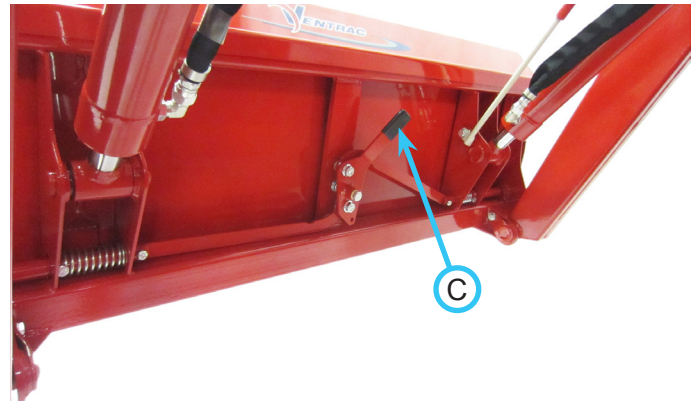
The loader arms can be allowed to float by pushing the joystick forward until it locks in place. This will allow the bucket to float on a hard working surface to reduce the amount of wear on the bucket and cutting edge. The float function can also be used help prevent mixing of surface material with stockpile material by reducing the chance of surface gouging when removing material.

Bucket Level Indicator

The loader is equipped with a level indicator rod (B) that shows when the bucket is approximately level when resting on the ground and not easily visible. The bucket is at a level position when the end of the indicator rod is visible in the angled end of the indicator tube.



Tool Bar Locking Lever

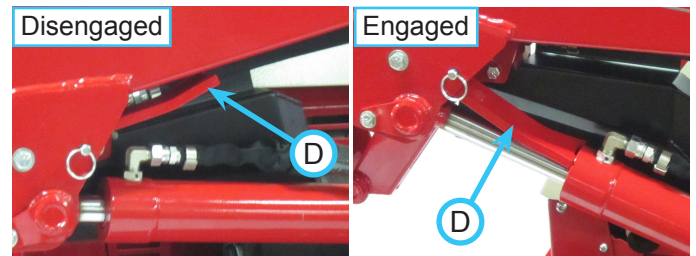


The tool bar locking lever (C) engages and disengages the pins that lock the tool to the tool attachment mount.

Move the locking lever to the right to engage the locking pins. The pins must extend through the holes in the sides of the tool frame.

Move the locking lever to the left to disengage the locking pins when attaching or detaching a tool.

Cylinder Stop Prop



The cylinder stop props (D) can be lowered to prop the loader arms in a partially raised position. The cylinder stop props must be engaged prior to detaching the loader from the power unit, in order for the loader to stay properly positioned for reattachment.

If maintenance or repairs cannot be performed with the loader completely lowered, engaging the cylinder prop stops will lock the loader arms to prevent them from lowering while service is performed.

GENERAL OPERATION

Daily Inspection

⚠ WARNING

Always set the parking brake, shut off power unit engine, remove the ignition key, and ensure all moving parts have come to a complete stop before inspecting components, or attempting any repair or adjustment.

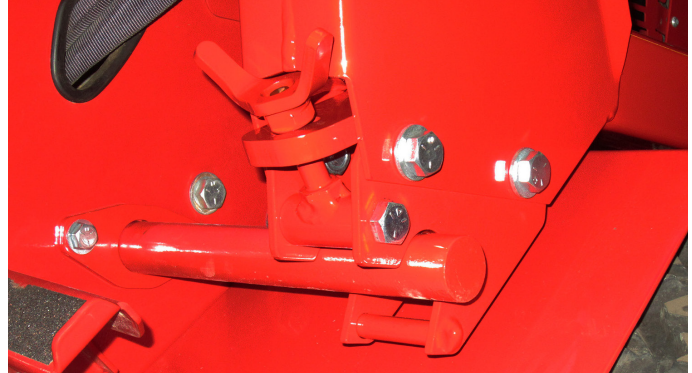
1. Park machine on a level surface, with the engine shut off and all fluids cold.
2. Perform a visual inspection of both the power unit and the versa-loader. Look for loose or missing hardware, damaged components, or signs of wear.
3. Inspect hydraulic hoses, hydraulic fittings, and fuel lines to ensure tight, leak free connections.
4. Check the loader's hydraulic oil level.
5. Inspect the drive belt condition and replace if damaged or worn.
6. Ensure tool is properly installed and locked onto the loader's tool attachment mount.
7. Ensure the rear anchor lock plates are tightened securely to clamp the rear frame of the loader to the rear anchor mounting shaft.
8. Ensure the pins at the loader pivot points and cylinder ends are securely fastened.
9. Refer to the power unit operator's manual. Check the power unit's engine oil, hydraulic oil, cooling system, tire pressure, and fuel level. Add fluid or service as required.
10. Test the power unit's operator safety interlock system*.

Attaching Loader to Power Unit

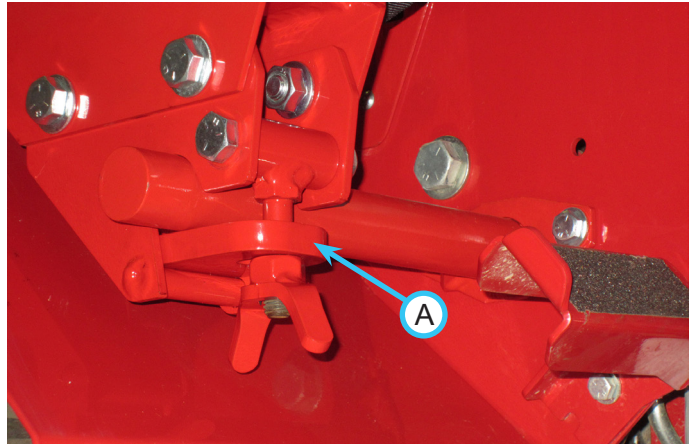
1. Align the power unit with loader and drive slowly forward into the loader hitch arms. Align the lift arms of the power unit with the loader hitch arms by raising or lowering the front hitch and complete the engagement.
2. Once completely engaged, close the front hitch locking lever.*
3. Engage the parking brake.*

* Refer to power unit operator's manual for operation of power unit controls.

4. Raise the front hitch until the rear loader mount brackets engage the rear anchor mounting shaft. NOTE: keep the rear anchor lock plates clear of the shaft to allow it to engage with the mating surfaces on the rear loader mount brackets.



5. Shut off the power unit engine.
6. Slip the lock plates (A) above the cross pins on the rear loader mount brackets and tighten the wing nuts to clamp the mounting shaft to the loader mount brackets.

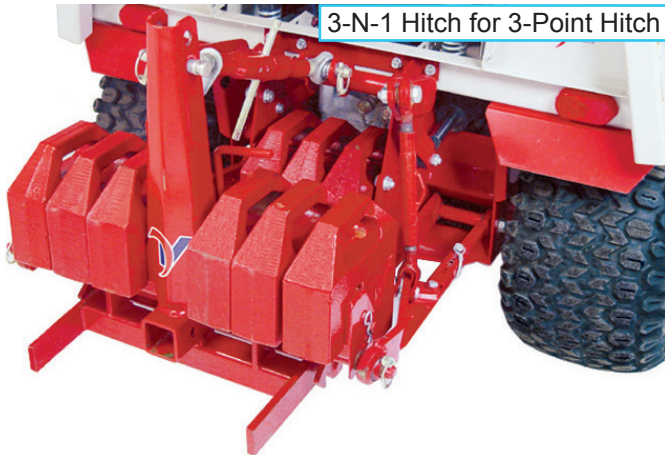
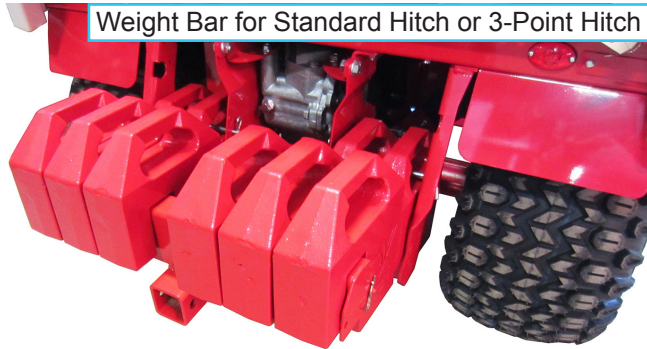


Initial Setup Only

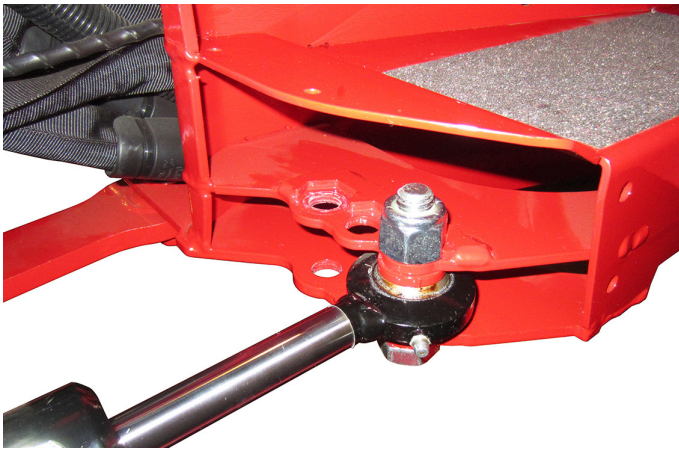
7. Tighten the 8) bolts that fasten the rear loader mount brackets to the loader frame. Torque to 75 ft-lbs (102 Nm). NOTE: Do not loosen these bolts when detaching loader from power unit.
8. Install the attachment belt onto the PTO drive pulley on the power unit. Ensure the belt is properly seated in each pulley.
9. Engage the PTO tension spring.

GENERAL OPERATION

10. Install counterweights on the rear of the power unit (six Ventrac weights or 250 pounds (113 kg).



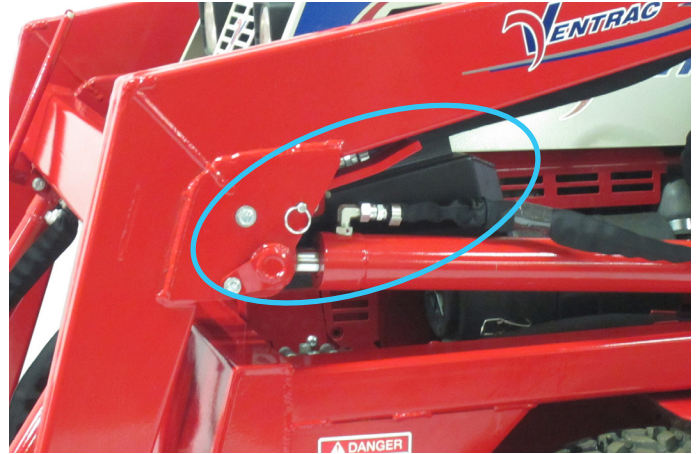
11. Move the power unit's steering cylinder to the outer hole position in the rear frame.



12. Adjust tire pressure to the upper range of the recommended tire pressure for your specific tire. Do not over-inflate. Refer to power unit operator's manual for maximum tire pressure.
13. Start the power unit engine, engage the PTO switch, and raise the loader slightly.

* Refer to power unit operator's manual for operation of power unit controls.

14. Remove the cylinder prop pins, lift the cylinder stop props up to the operating position, and reinstall the cylinder prop pins.



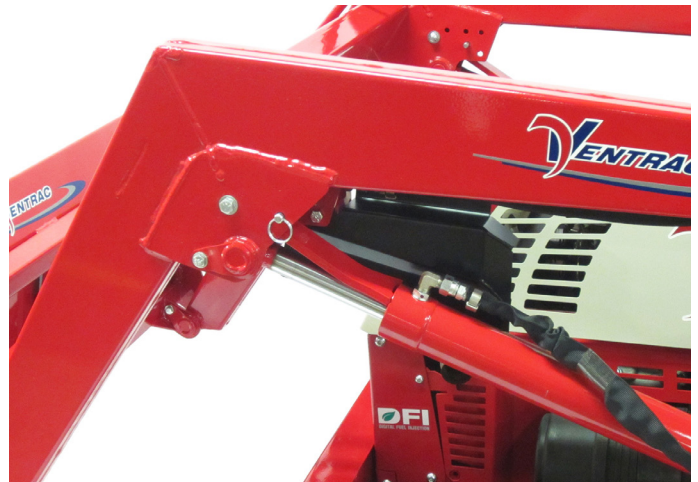
Detaching Loader from Power Unit



Attention

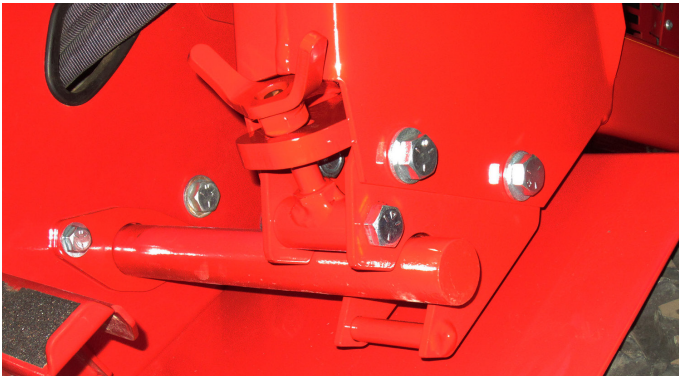
Do not remove the loader from the power unit without an accessory tool attached to balance the loader during storage.

1. Park the power unit on a level surface and set the parking brake.*
2. Rotate the bucket or tool until level (as shown by level indicator rod).
3. Raise the loader arms far enough for the cylinder prop stops to clear the end of the cylinders and slightly raise the power unit's front hitch.
4. Shut off power unit engine and engage the parking brake.
5. Remove the pins that hold the cylinder prop stops in the raised operating position and reinstall the pins after the stops have been lowered to the cylinder lock position.



GENERAL OPERATION

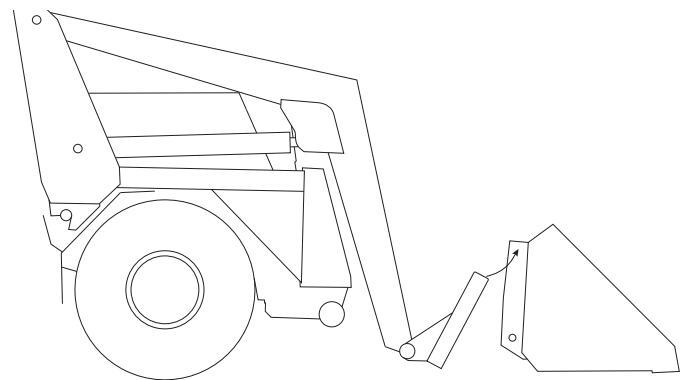
6. Push the loader joystick forward until it locks into the float position and allows the loader arms to lower until the cylinder prop stops contact the ends of the cylinders.
7. Remove counterweights from the rear of the power unit.
8. Loosen the wing nuts on the rear anchor lock plates and remove the lock plates from the cross pins on the rear loader mount brackets.



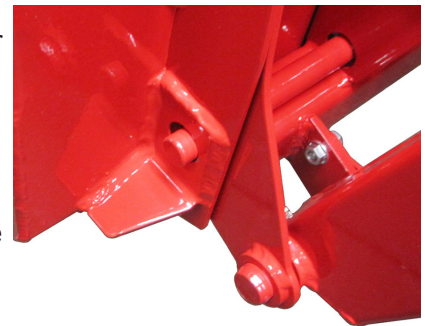
9. Disengage the PTO tension spring.
10. Remove the attachment belt from the PTO drive pulley of the power unit and hook in the notch on the loader frame.
11. Restart power unit and lower the front hitch until the loader sets on the ground.
12. Disengage the front hitch locking lever.*
13. Slowly back the power unit away from the loader. A side to side movement of the steering wheel may aid in disengagement.
14. Check tire pressure and adjust to your normal operating pressure.
15. Move the power unit's steering cylinder to the inner hole position, unless installing dual wheels or a weather cab.

Attaching Tool to Loader

1. Move the tool bar locking lever to the left to retract the locking pins.
2. Tilt the tool attachment mount forward.



3. Align the loader with the center of the tool and drive forward slowly while guiding the tool attachment mount into the mounting channel of the tool.
4. Raise the loader arms slightly to engage the top bar of the tool attachment mount into the mating channel on the tool.
5. Tilt the tool attachment mount back until the back of the tool engages the tool attachment mount.
6. Move the tool bar locking lever to the right to engage the locking pins. The locking pins must extend through both the left and right tool frame mount panels.



Detaching Tool from Loader

1. Tilt the tool back completely to prevent the locking pins from binding.
2. Move the tool bar locking lever to the left to retract the locking pins.
3. Tilt the tool attachment mount forward until the back of the tool swings away slightly from the tool attachment mount.
4. Lower the tool to the ground.
5. Lower the loader arms far enough to disengage the top bar of the tool attachment mount from the mating channel on the tool.
6. Back the power unit and loader away from the tool.

* Refer to power unit operator's manual for operation of power unit controls.

GENERAL OPERATION

Operating Procedures

Prior to operation, perform daily inspection and shift the power unit into low range. The roll bar must be locked in the upright position and the operator must wear a seat belt during loader operation.

The added length and weight of the loader affects turning ability and increases stopping distance. Start off driving slowly to determine how the power unit handles with the loader.

When filling the bucket, level the bucket to prevent surface gouging and drive forward slowly into the material. Do not use high speed to ram a pile of material. NOTE: pushing the joystick forward until it locks in the float position will reduce wear on the bucket when removing material from a hard surface, and will reduce surface gouging and mixing of stockpile and surface material when removing material from a softer surface.

Continue to fill the bucket by driving forward slowly while beginning to raise the loader arms. To complete the fill, roll the bucket back and raise the loader arms.

If your forward motion stalls while attempting to take a large scoop of material, stop or slightly reverse the power unit to reduce penetration force on the bucket, then take a smaller scoop of material.

While hauling the loaded material to another location, use speeds that are safe for the terrain and surface conditions. Carry the load as low as possible to keep the center of gravity low for maximum stability. Carrying the load low also allows the operator to have a clear forward view.

When lifting a load, keep the bucket positioned properly to avoid spilling material over the back of the bucket onto the power unit or operator. Tilt the bucket forward while raising the loader arms to maintain the bucket angle.

SERVICE

⚠ WARNING

Always set the parking brake, shut off power unit engine, remove the ignition key, and ensure all moving parts have come to a complete stop before inspecting components or attempting any repair or adjustment.



Attention

If any component requires replacement, use only original Ventrac replacement parts.

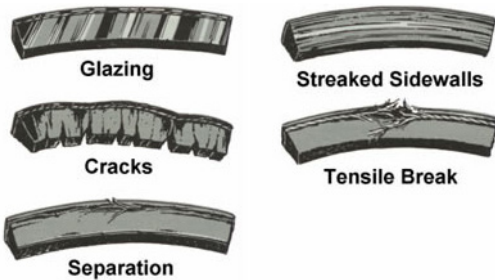
Cleaning and General Maintenance

For best results, and to maintain the finish of the loader, clean or wash the loader after each use to remove dirt, mud, stones, mulch, or other debris.

Belt Inspection

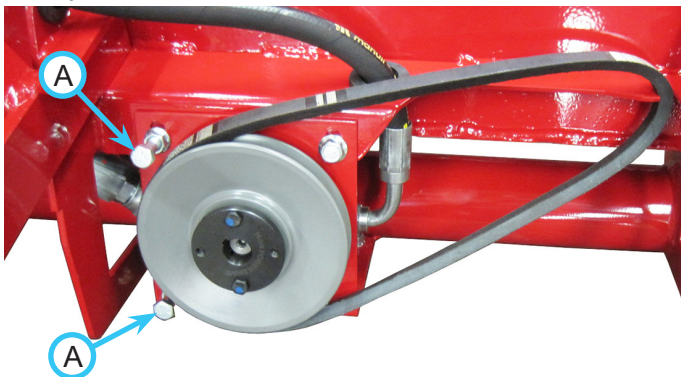
Inspecting the drive belt of the loader can prevent sudden belt failure by finding problems before they cause a belt to break.

Typical wear on a drive belt may result in the conditions shown in the diagram. If any of these conditions occur, the drive belt will require replacement.



Belt Replacement

1. Detach the loader from the power unit.
2. Remove the 2) belt retainer bolts (A) from the hydraulic pump mount plate.

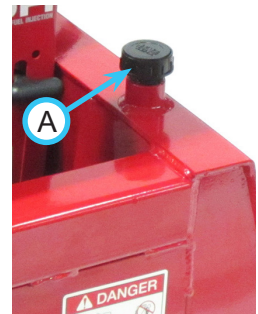


3. Remove the old drive belt and install the new drive belt onto the drive pulley.
4. Reinstall the belt retainer bolts.

Checking Hydraulic Oil Level

Check the hydraulic oil level before operating unit when the hydraulic system is cold. If the hydraulic system is warm, allow 1 hour for the hydraulic system to cool before checking. If the hydraulic oil is warm when the oil level is checked, it will produce an inaccurate oil level reading.

1. Park the power unit and loader on a level surface, roll back the bucket or tool, and lower the loader arms.
2. Allow time for the hydraulic system to cool, if necessary.
3. Remove the dipstick (A) from the hydraulic oil tank and wipe with a clean cloth.
4. Set the dipstick back into place without threading in.
5. Remove the dipstick and check the oil level. The level should be between the two notches on the dipstick.
6. If hydraulic oil level is low, add Ventrac Hydro-Torq XL synthetic hydraulic oil until the proper level is reached.
7. Reinstall the dipstick into the hydraulic oil tank.



Changing Hydraulic Oil

1. Park the power unit and loader on a level surface, roll back the bucket or tool, and lower the loader arms.
2. Place a drain pan of sufficient size under the drain plug on the bottom of the oil tank.
NOTE: the loader holds approximately 8 gallons (30.3 liters) of hydraulic oil.
3. Remove the drain plug to drain the oil.
4. After draining the oil, reinstall the drain plug into the oil tank.
5. Remove the dipstick from the oil tank and add Ventrac HydroTorq XL synthetic hydraulic oil until the proper level is reached.
6. Start the power unit, engage the PTO switch, and cycle the loader arms and attachment mount through their full range of motion 3 - 4 times to purge any air in the hydraulic lines.
7. Shut off the power unit and allow the loader to sit for a minimum of 5 minutes.
8. Check the hydraulic oil level and adjust level as necessary.

SERVICE

- Clean up any spilled oil and dispose of oil in accordance with local laws.

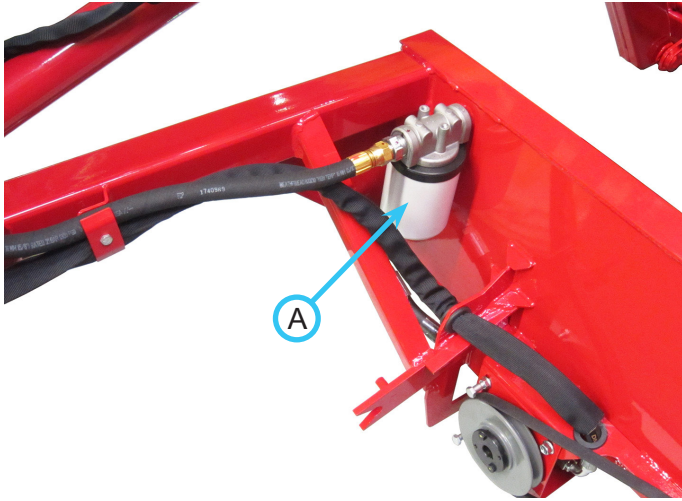
CAUTION

Oil is hazardous to the environment. Drain oil into an approved container and dispose of used oil in accordance with local laws.

- Proceed to the Changing Hydraulic Oil Filter section for filter replacement instructions.

Changing Hydraulic Oil Filter

- Detach the loader from the power unit.
- Place a drain pan beneath the filter area to catch any oil leakage.
- Remove the filter (A) from the loader.



- Wipe the filter mounting surface with a clean cloth.
- Apply a thin film of clean oil to the gasket on the new filter.
- Install the new filter. NOTE: turn the filter clockwise until the filter gasket makes contact with the mounting surface. Tighten 1/2 - 3/4 turn after gasket contact.

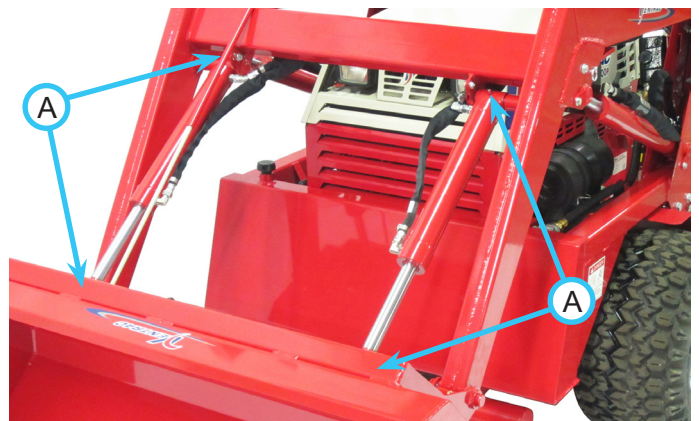
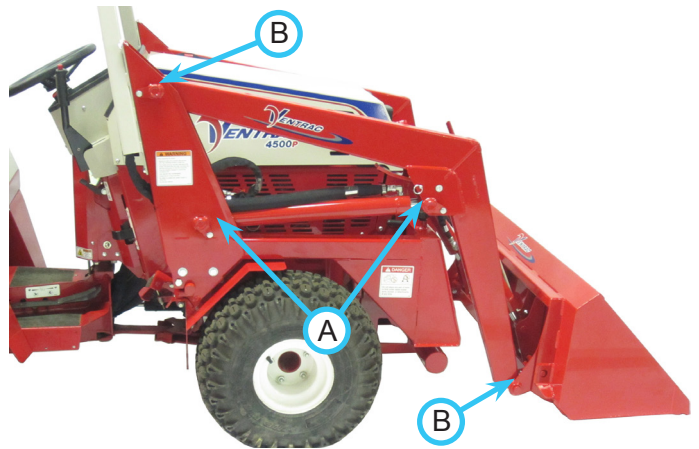
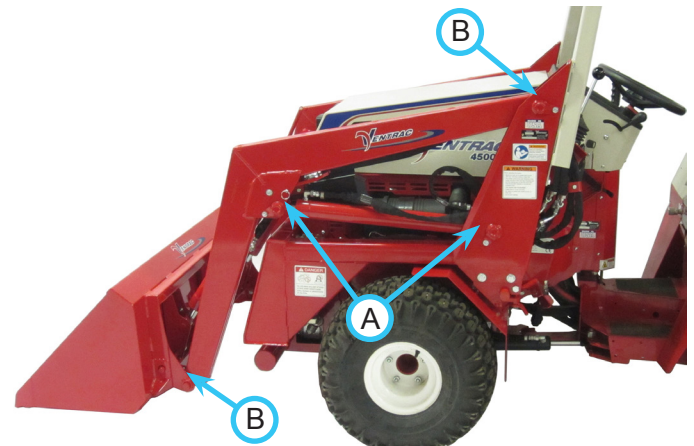
Lubrication Locations

Lubrication is required at the following locations using a lithium complex NLGI #2 grease. Refer to the maintenance schedule for service intervals and amount of grease.

Raise the loader arms and engage the cylinder lock stops. Tilt the tool attachment mount forward to access the grease fittings at the tool attachment mount. Wipe the grease fittings clean before applying grease.

Reference A = Cylinder End (8 places)

Reference B = Loader Arm Pivot (4 places)



SERVICE

Storage

Preparing the Loader for Storage

1. Clean the loader.
2. Inspect for loose or missing hardware, damaged components, or signs of wear.
3. Inspect safety decals. Replace any safety decals that are faded, illegible, or missing.
4. Inspect hydraulic hoses and fittings to ensure tight, leak free connections. Repair or replace any damaged or worn components.
5. Inspect drive belt for damage or wear and replace if necessary.
6. Service all grease points and inspect hydraulic oil level.
7. Wipe off all excess grease or oil.

Removing the Loader from Storage

1. Inspect, clean, and prepare loader for use.

SERVICE

Maintenance Schedule

Maintenance Schedule			# of Locations	# of Pumps	AS NEEDED	Daily	At 50 Hours	At 100 Hours	At 150 Hours	At 200 Hours	At 250 Hours	At 300 Hours	At 350 Hours	At 400 Hours	At 450 Hours	At 500 Hours	At 550 Hours	At 600 Hours	At 650 Hours	At 700 Hours	At 750 Hours	At 800 Hours	At 850 Hours	At 900 Hours	At 950 Hours	At 1000 Hours	5 Years or 500 Hrs.	5 Years or 2000 Hrs.	
	Grease & Lubrication: See Lubrication Section																												
Cylinder Ends	8	^	**			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Loader Arm Pivots	4	^	**			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hydraulic System																													
Check Hydraulic Oil Level					✓																								
Change Hydraulic Filter																											✓		
Change Hydraulic Oil																												✓	
Inspection																													
Inspect for Loose, Missing, or Worn Components.				✓																									
Inspect Drive Belt, Hydraulic Hoses, & Fittings				✓																									
Inspect Pivot Pins (Loader Pivot Points and Cylinder Ends)				✓																									
Inspect Safety Decals				✓																									
** Operation in severe conditions may require more frequent service intervals.																													
^ Grease until fresh grease is visible.																													

Maintenance Checklist

Maintenance Checklist			# of Locations	# of Pumps	At 50 Hours	At 100 Hours	At 150 Hours	At 200 Hours	At 250 Hours	At 300 Hours	At 350 Hours	At 400 Hours	At 450 Hours	At 500 Hours	At 550 Hours	At 600 Hours	At 650 Hours	At 700 Hours	At 750 Hours	At 800 Hours	At 850 Hours	At 900 Hours	At 950 Hours	At 1000 Hours	5 Years or 500 Hrs.	5 Years or 2000 Hrs.		
	Grease & Lubrication: See Lubrication Section																											
Cylinder Ends	8	^																										
Loader Arm Pivots	4	^																										
Hydraulic System																												
Check Hydraulic Oil Level																												
Change Hydraulic Filter																												
Change Hydraulic Oil																												
Inspection																												
Inspect for Loose, Missing, or Worn Components.																												
Inspect Drive Belt, Hydraulic Hoses, & Fittings																												
Inspect Pivot Pins (Loader Pivot Points and Cylinder Ends)																												
Inspect Safety Decals																												
** Operation in severe conditions may require more frequent service intervals.																												
^ Grease until fresh grease is visible.																												

SPECIFICATIONS

Dimensions

Overall Height (mounted on power unit)	67 inches (170 cm)
Overall Length (with bucket)	75 inches (190.5 cm)
Overall Length (loader, bucket, & power unit)	114 inches (290 cm)
Overall Width	48-1/2 inches (123 cm)
Weight (without tools)	508 pounds (230.5 kg)
Lift Capacity (including tool).	500 pounds (227 kg)
Lift Height at Pivot Pins	77 inches (196 cm)
Bucket Width	48 inches (122 cm)
Bucket Capacity (Struck)5 cubic feet (.14 cubic meters)
Hydraulic Oil Capacity	8-1/4 gallons (31.2 liters)

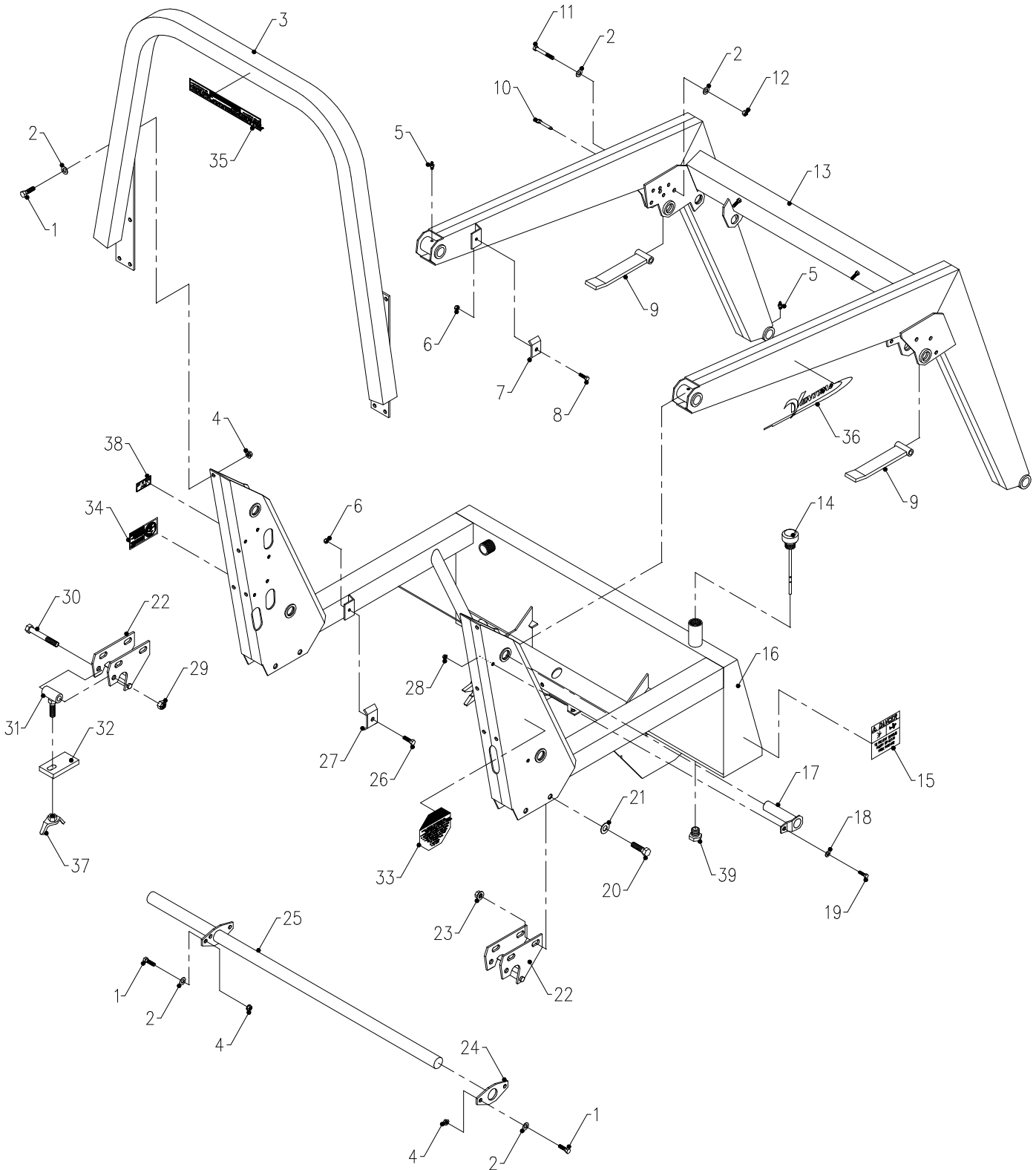
Features

- Ventrac mount system
- Quick attach tool attachment mount
- Intermediate roll bar for added operator protection
- Joystick valve control with float position
- 5 cubic foot bucket

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PARTS

ILLUSTRATED DRAWING Main Frame, Loader Arms, & Crossbar Mount



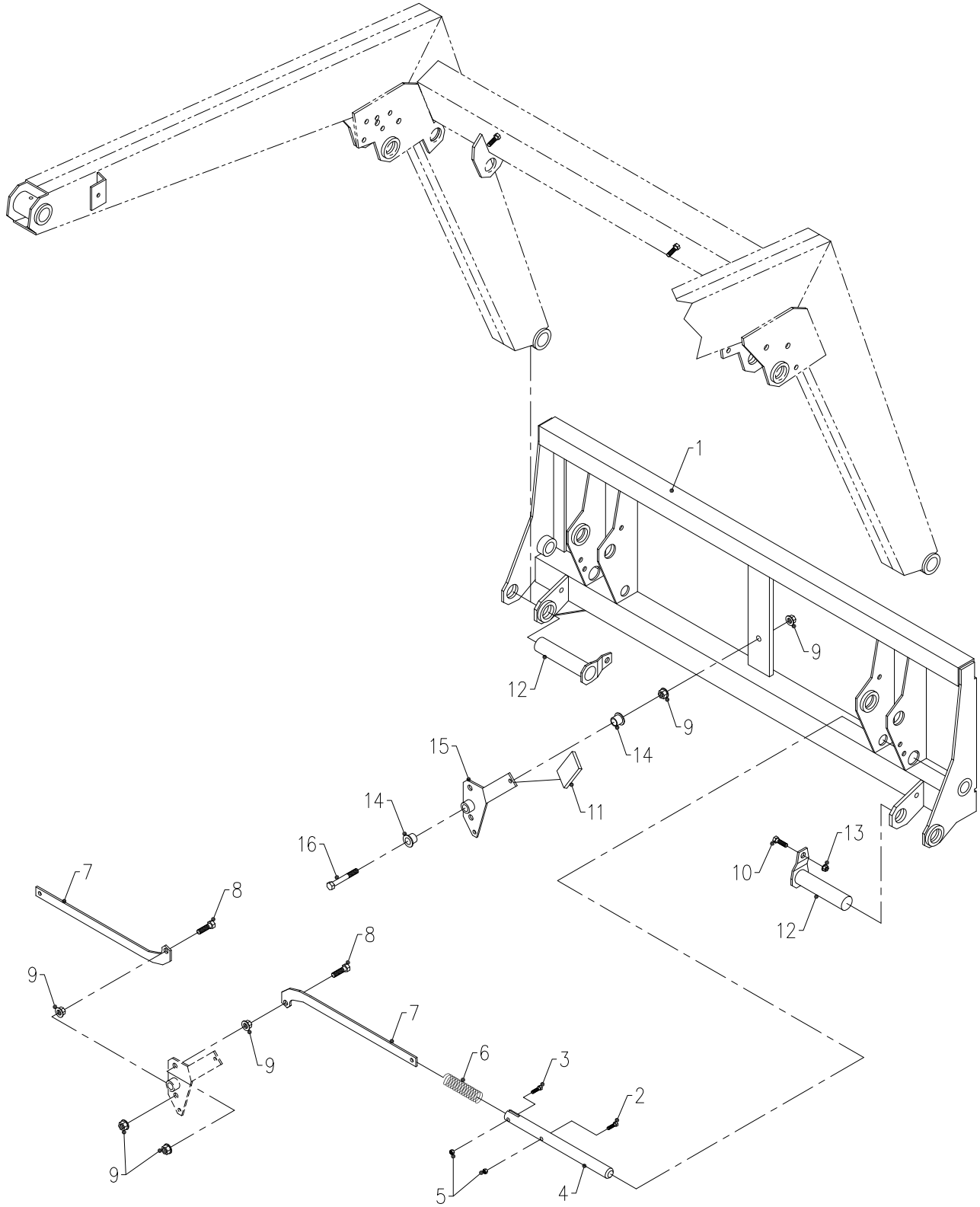
PARTS

Main Frame, Loader Arms, & Crossbar Mount

REF.	PART NO.	DESCRIPTION	QTY.
1	90.0606	.BOLT, 3/8-16 USS X 3/4	12
2	95.06	.WASHER, FLAT 3/8 SAE	16
3	62.0948	.FRAME, TOP CROSS BAR	1
4	99.SF06	.NUT, SRF 3/8-16 USS	12
5	29.GF0001	.GREASE FTG, 1/4 SAE ST	4
6	99.A04	.LOCKNUT, STOVER 1/4-20 USS	2
7	64.0826	.CLAMP, HYD HOSE	1
8	90.0410	.BOLT, 1/4-20 USS X 1 1/4	1
9	64.1021	.PROP, CYLINDER STOP	2
10	03.0011	.PIN, BALL 3/8 X 2-1/2	2
11	90.0624	.BOLT, 3/8-16 USS X 3	2
12	99.A06	.LOCKNUT, STOVER 3/8-16 USS	2
13	62.0946	.FRAME, LOADER LIFT ARMS	1
14	23.0127	.DIPSTICK, ASM 6-3/4" KH/LT	1
15	00.0193	.DECAL, DANGER LOADER	2
16	62.0945	.FRAME, MAIN STRUCTURE	1
17	64.1024	.PIN, 1" X 3-5/8L OFFSET TAB	2
18	95.05	.WASHER, FLAT 5/16 SAE	2
19	90.0506	.BOLT, 5/16-18 USS X 3/4	2
20	90.0808	.BOLT, 1/2-13 USS X 1	8
21	95.08	.WASHER, FLAT 1/2 SAE	8
22	62.0947	.BRACKET, REAR LOADER MOUNT	2
23	99.SF08	.NUT, SRF 1/2-13 USS	8
24	64.1029	.PLATE, REAR CLAMP CROSSBAR MT	1
25	42.0455	.SHAFT, REAR ANCHOR MOUNT	1
26	90.0412	.BOLT, 1/4-20 USS X 1 1/2	1
27	64.0673	.CLAMP, HYDRAULIC HOSE	1
28	99.SF05	.NUT, SRF 5/16-18 USS	2
29	99.A08	.LOCKNUT, STOVER 1/2-13 USS	2
30	90.0824	.BOLT, 1/2-13 USS X 3	2
31	42.0453	.BOLT, REAR ANCHOR LOC BOLT	2
32	64.1019	.PLATE, REAR ACHOR LOC	2
33	00.0195	.DECAL, CAUTION LOADER ARMS	2
34	00.0217	.DECAL, WARNING READ OWNERS MAN.	1
35	00.0194	.DECAL, WARNING LOADER ROLLBAR	1
36	00.0189	.DECAL, VENTRAC ORBITAL	2
37	64.1077	.NUT, REAR MOUNT WING NUT 1/2"	2
38	00.0100	.DECAL, MADE IN USA	1
39	29.P06H	.PIPE, PLUG 3/8 HEX ZP	1

PARTS

ILLUSTRATED DRAWING Tool Attachment Mount



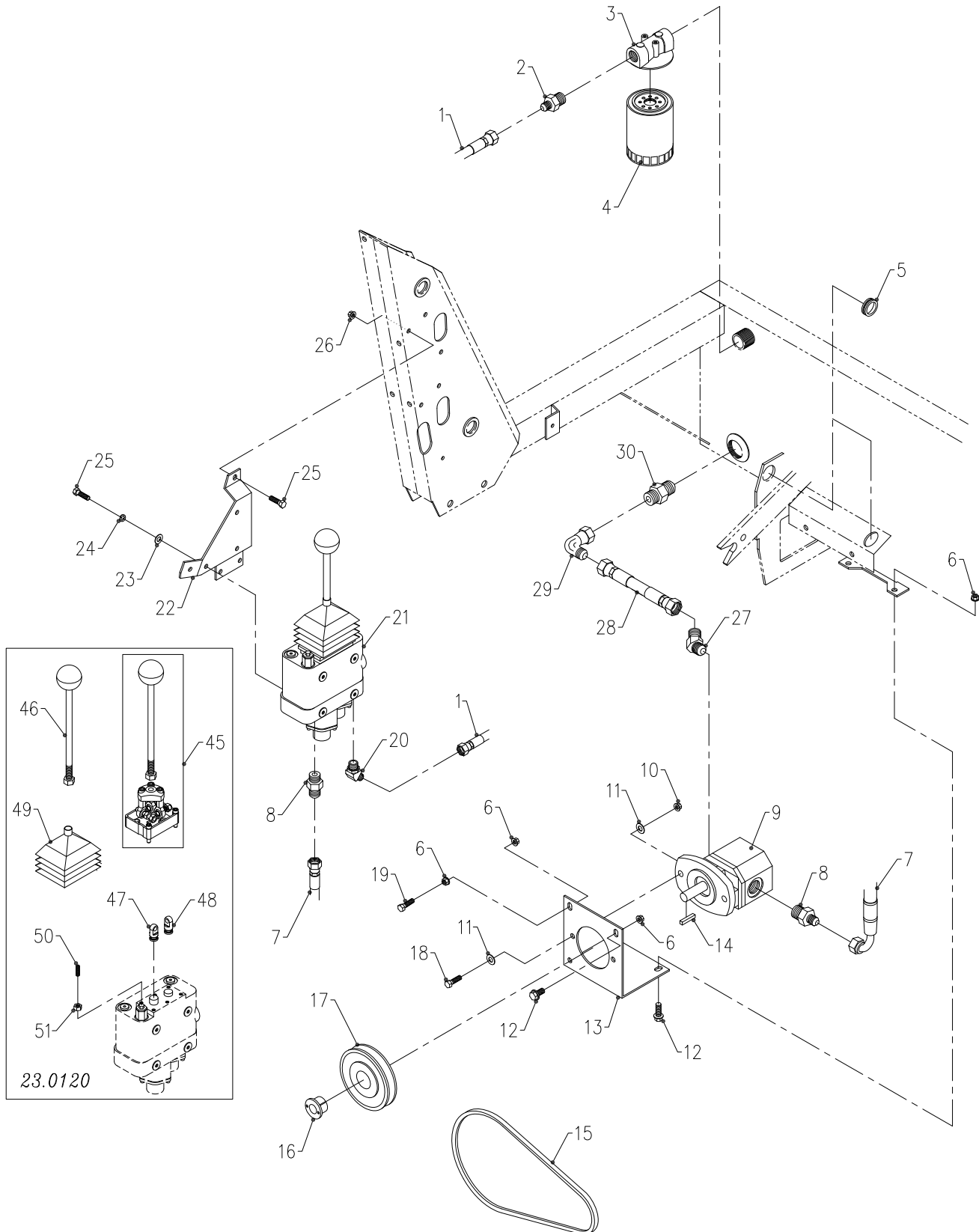
PARTS

Tool Attachment Mount

REF.	PART NO.	DESCRIPTION	QTY.
1	62.0949	.MOUNT, TOOL ATTACHMENT	1
2	90.0410	.BOLT, 1/4-20 USS X 1 1/4	2
3	90.0408	.BOLT, 1/4-20 USS X 1	2
4	64.1027	.PIN, 3/4 X 9-5/8L TOOL BAR LOC	2
5	99.A04	.LOCKNUT, STOVER 1/4-20 USS	4
6	41.0073	.SPRING, COMP 13/16 ID X 2-1/2L	2
7	42.0454	.LINK, TOOL BAR ATTACH PIN	2
8	90.0608	.BOLT, 3/8-16 USS X 1	2
9	99.SF06	.NUT, SRF 3/8-16 USS	6
10	90.0506	.BOLT, 5/16-18 USS X 3/4	2
11	06.0051	.CAP, 3/16 X 15/16 X 1-3/4 FE	1
12	64.1025	.PIN, 1" X 4-1/4L OFFSET TAB	2
13	99.SF05	.NUT, SRF 5/16-18 USS	3
14	85.B0068	.BUSHING, 3/8 X 1/2 OD X 1/2 LG	2
15	40.0305	.LEVER, TOOL LOCKING PIN	1
16	90.0620	.BOLT, 3/8-16 USS X 2 1/2	1

PARTS

ILLUSTRATED DRAWING Hydraulic Pump & Valve



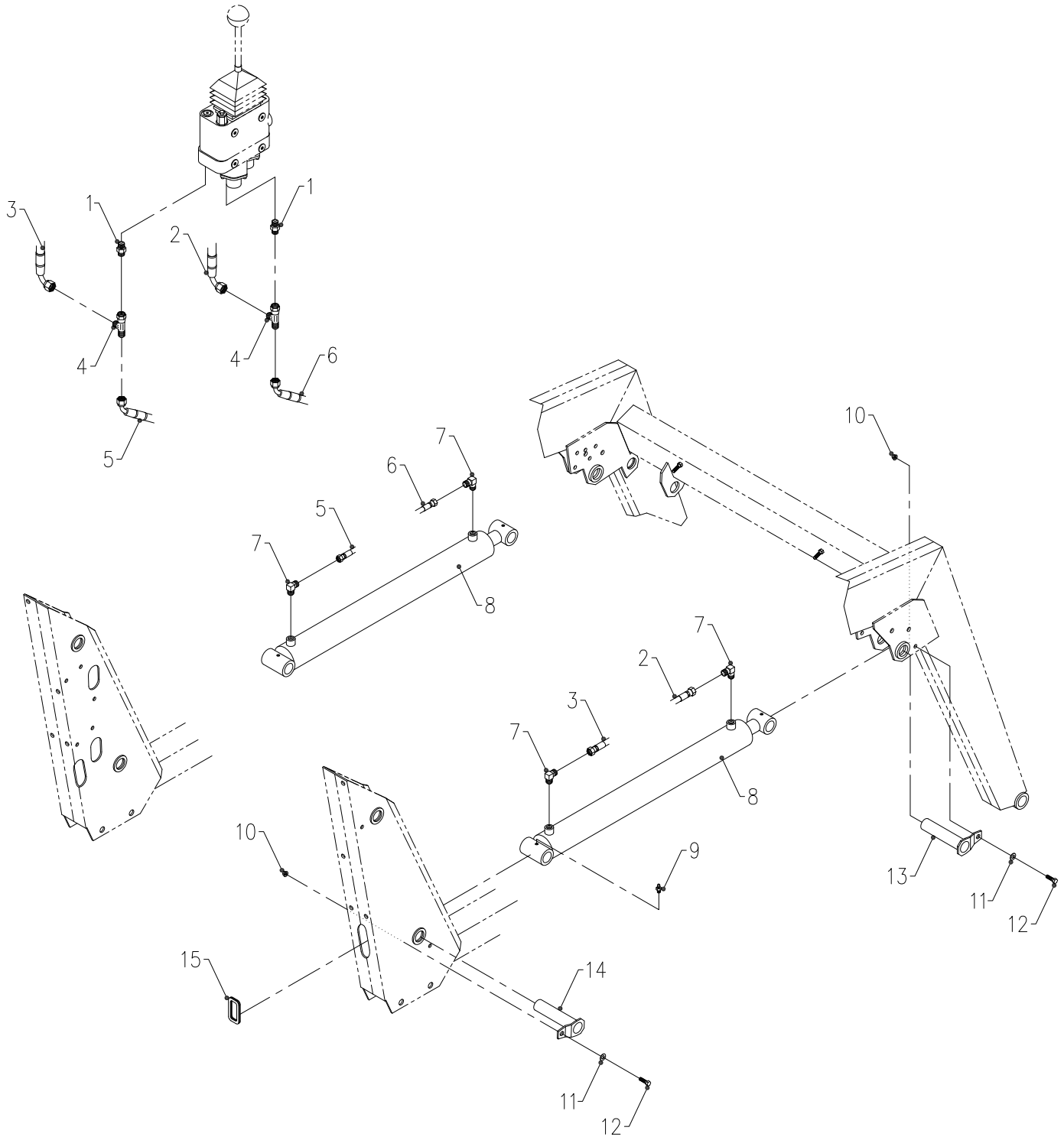
PARTS

Hydraulic Pump & Valve

REF.	PART NO.	DESCRIPTION	QTY.
1	22.0035	.HOSE, 5/8X28.00 PLK 250PSI NBR	1
2	25.2404-10-12	.FITTING, M CONN 5/8 X 3/4	1
3	21.0057	.FILTER, HEAD 3/4" NPT PORTS	1
4	21.0078	.FILTER, HYDRAULIC 10 MICRON	1
5	05.0060	.GROMMET, 1-1/8 ID, 1-3/4 OD	2
6	99.SF06	.NUT, SRF 3/8-16 USS	7
7	20.0192	.HOSE, 1/2X54.00 SAE 100R17 AR	1
8	25.6400-08-10	.FITTING, M CONN 1/2 X 5/8	2
9	21.0105	.PUMP, HYD. BARNES KH CW 10 CCR	1
	89.0078	.KIT, SEAL FOR 21.0103, 21.0105	1
10	99.A06	.LOCKNUT, STOVER 3/8-16 USS	2
11	95.06	.WASHER, FLAT 3/8 SAE	4
12	99.SF0606	.BOLT, SRF 3/8-16 USS X 3/4	3
13	64.1032	.PLATE, HYD. PUMP MOUNT	1
14	85.K0310	.KEY, 3/16 X 1 1/4	1
15	81.B033	.BELT, B33	1
16	83.H12	.BUSHING, 3/4" H	1
17	83.BK60H	.PULLEY, 6" H-BUSH	1
18	90.0608	.BOLT, 3/8-16 USS X 1	2
19	90.0614	.BOLT, 3/8-16 USS X 1 3/4	2
20	25.6802-10-10	.FITTING, 45 ME 5/8 X 5/8	1
21	23.0120	.VALVE, HYD 2SPL JOYSTICK KH	1
22	64.1033	.PLATE, VALVE MOUNT	1
23	95.05	.WASHER, FLAT 5/16 SAE	3
24	96.05	.WASHER, LOCK 5/16	3
25	90.0506	.BOLT, 5/16-18 USS X 3/4	6
26	99.SF05	.NUT, SRF 5/16-18 USS	3
27	25.6802-12-12	.FITTING, 45 ME 3/4 X 3/4	1
28	22.0036	.HOSE, 3/4X10.00 PLK 250PSI NBR	1
29	25.6500-12-12	.FITTING, 90 MFE 3/4 X 3/4	1
30	25.2404-12-12	.FITTING, M CONN 3/4 X 3/4	1
45	23.0120-1	.KIT, JOYSTICK FOR 23.0120	1
46	23.0120-3	.KIT, HANDLE FOR 23.0120	1
47	23.0120-5	.ADAPTER, SPOOL SHORT - 23.0120	1
48	23.0120-4	.ADAPTER, SPOOL LONG - 23.0120	1
49	23.0120-2	.KIT, BOOT FOR 23.0120	1
50	85.SS28	.SET SCREW, 1/4-28 X 1" SS	1
51	93.04H-3	.NUT, HEAVY 1/4-28 SS	1

PARTS

ILLUSTRATED DRAWING Hydraulic Lift



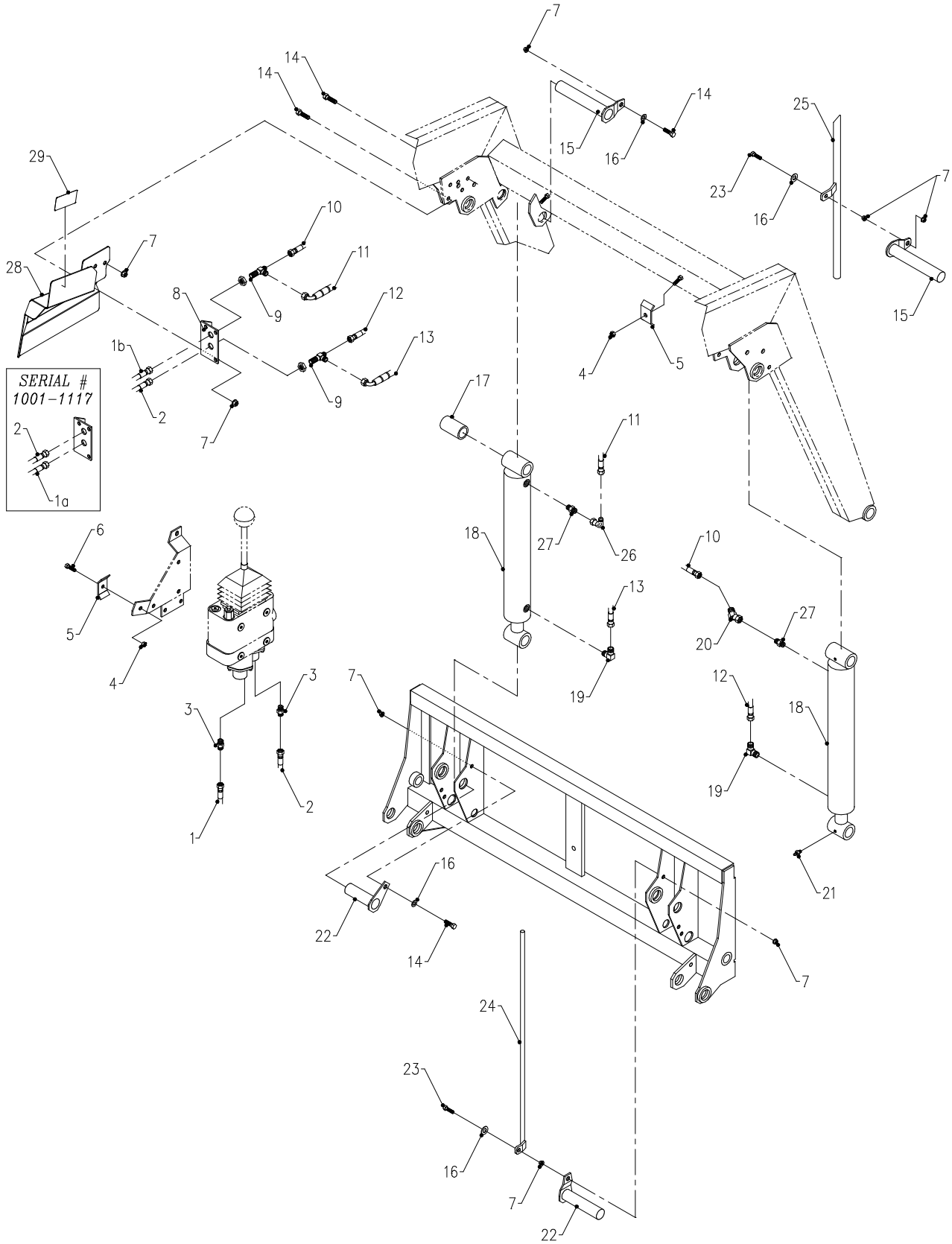
PARTS

Hydraulic Lift

REF.	PART NO.	DESCRIPTION	QTY.
1	25.6400-06-08	.FITTING, M CONN 3/8 X 1/2	2
2	20.0190	.HOSE, 3/8X130.00 SAE 100R17 AR	1
3	20.0189	.HOSE, 3/8X122.00 SAE 100R17 AR	1
4	25.6602-6-6-6	.FITTING, TEE SINGLE SWIVEL 3/8	2
5	20.0201	.HOSE, 1/4X27.00 SAE 100R17 AR	1
6	20.0188	.HOSE, 1/4X30.00 SAE 100R17 AR	1
7	25.2501-06-04	.FITTING, 90 ME 3/8 X 1/4 (Serial 1001-1050)	4
7	25.6801-06-06	.FITTING, 90 ME 3/8 X 3/8 (Serial 1051-)	4
8	23.0118	.CYLINDER, 2" X 20" CROSSTUBE (Serial 1001-1050)	2
8	23.0132	.CYLINDER, 2" X 20" CROSSTUBE (Serial 1051-)	2
9	29.GF0001	.GREASE FTG, 1/4 SAE ST	4
10	99.SF05	.NUT, SRF 5/16-18 USS	4
11	95.05	.WASHER, FLAT 5/16 SAE	4
12	90.0506	.BOLT, 5/16-18 USS X 3/4	4
13	64.1022	.PIN, 1" X 3-1/4L OFFSET TAB	2
14	64.1024	.PIN, 1" X 3-5/8L OFFSET TAB	2
15	05.0056	.GROMMET, 2-1/8ID,2-7/8OD,7/16T	1

PARTS

ILLUSTRATED DRAWING Hydraulic Tilt



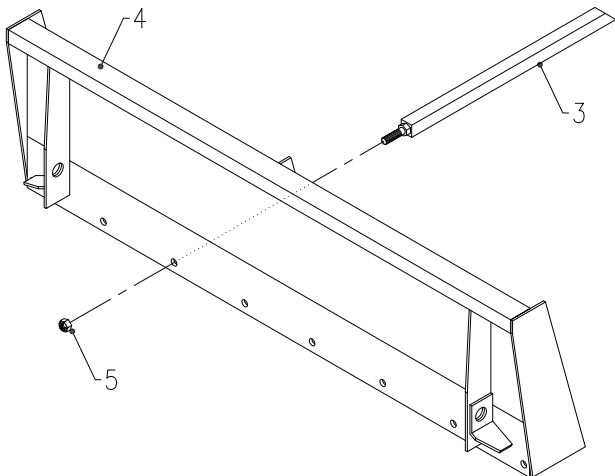
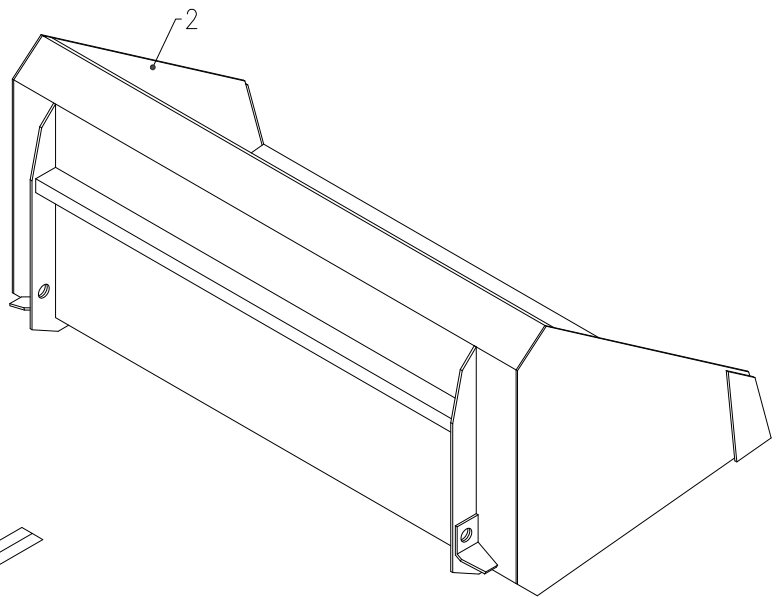
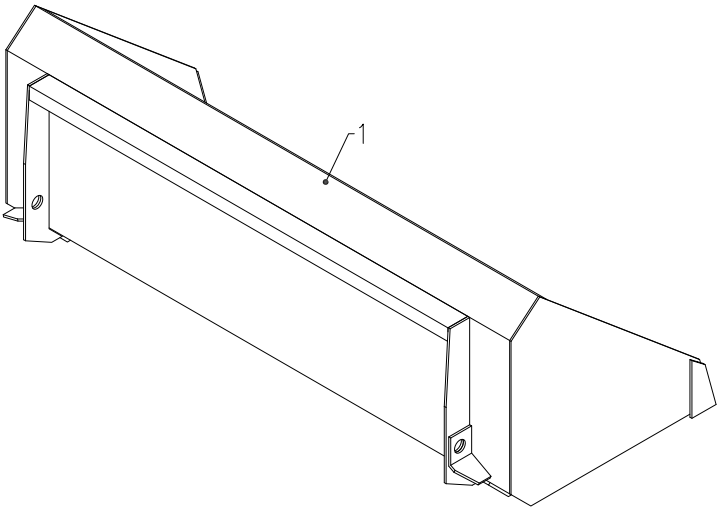
PARTS

Hydraulic Tilt

REF.	PART NO.	DESCRIPTION	QTY.
1a	20.0202	.HOSE, ASM X 54" 3/8-2500 (Serial 1001-1117)	1
1b	20.0241	.HOSE, 3/8X60.00 SAE 100R17 AR (Serial 1118-)	1
2	20.0191	.HOSE, 3/8X58.00 SAE 100R17 AR	1
3	25.6400-06-08	.FITTING, M CONN 3/8 X 1/2	2
4	99.A04	.LOCKNUT, STOVER 1/4-20 USS	2
5	64.0826	.CLAMP, HYD HOSE	2
6	90.0410	.BOLT, 1/4-20 USS X 1 1/4	1
7	99.SF05	.NUT, SRF 5/16-18 USS	9
8	64.1031	.BRACKET, BULKHEAD FITTING MT	1
9	25.2704-6-6-6LN	.FITTING, BULKHEAD T 3/8 W/LNUT	2
	25.306-06	.LOCKNUT, 3/8 BULKHEAD FITTING	2
10	20.0273	.HOSE, 1/4X31.50 SAE 100R17AR	1
11	20.0195	.HOSE, 1/4X11.00 SAE 100R17 AR	1
12	20.0193	.HOSE, 1/4X44.50 SAE 100R17 AR	1
13	20.0196	.HOSE, 1/4X24.75 SAE 100R17 AR	1
14	90.0506	.BOLT, 5/16-18 USS X 3/4	5
15	64.1026	.PIN, 1" X 6L OFFSET TAB	2
16	95.05	.WASHER, FLAT 5/16 SAE	4
17	64.1028	.PIPE, SCH 40 1 X 2-1/4L SPACER	2
18	23.0119	.CYLINDER, 2" X 12" CROSSTUBE (Serial 1001-1050)	2
18	23.0133	.CYLINDER, 2" X 12" CROSSTUBE (Serial 1051-)	2
19	25.2501-06-04	.FITTING, 90 ME 3/8 X 1/4 (Serial 1001-1050)	2
19	25.6801-06-06	.FITTING, 90 ME 3/8 X 3/8 (Serial 1051-)	2
20	25.2503-06-04	.FITTING, 45 MFE 3/8 X 1/4 (Serial 1001-1050)	1
20	25.6502-06-06	.FITTING, 45 MFE 3/8 X 3/8 (Serial 1051-)	1
21	29.GF0001	.GREASE FTG, 1/4 SAE ST	4
22	64.1023	.PIN, 1" X 3-1/4L STRAIGHT TAB	2
23	90.0510	.BOLT, 5/16-18 USS X 1 1/4	2
24	42.0460	.ROD, LEVEL INDICATOR KH (Serial 1001-1081)	1
24	42.0469	.ROD, LEVEL INDICATOR (Serial 1082-)	1
25	62.0979	.TUBE, LEVEL INDICATOR KH (Serial 1001-1081)	1
25	62.1032	.TUBE, LEVEL INDICATOR (Serial 1082-)	1
26	25.2501-06-04	.FITTING, 90 ME 3/8 X 1/4 (Serial 1001-1050)	1
26	25.6801-06-06	.FITTING, 90 ME 3/8 X 3/8 (Serial 1051-1081)	1
26	25.6500-06-06	.FITTING, 90 MFE 3/8 X 3/8 (Serial 1082-)	1
27	25.6400-06-06	.FITTING, M CONN 3/8 X 3/8	2
28	60.1245	.SHIELD, EXHAUST HEAT (Serial 1248-)	1
29	00.0374	.DECAL, HOT SURFACE (Serial 1248-)	1

PARTS

ILLUSTRATED DRAWING Buckets & Tine Fork



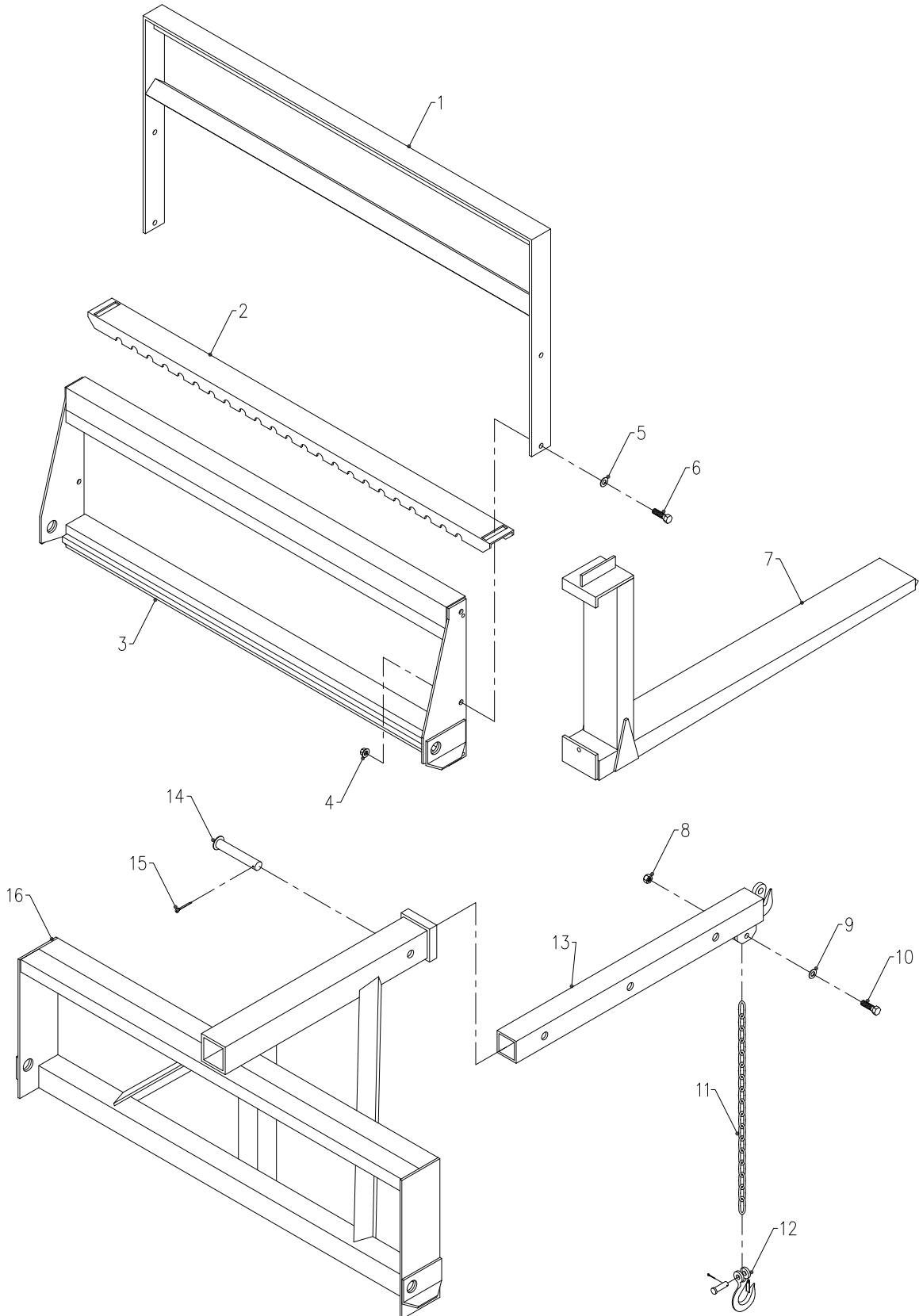
PARTS

Buckets & Tine Fork

REF.	PART NO.	DESCRIPTION	QTY.
1	62.0950	.BUCKET, STANDARD 5 CUBIC FT	1
2	62.0951	.BUCKET, OPTIONAL 9 CU FT KH	1
3	78.0046	.TINE, FORK KH	8
4	62.0952	.FRAME, FORK TINE KH	1
5	99.A08	.LOCKNUT, STOVER 1/2-13 USS	8

PARTS

ILLUSTRATED DRAWING Pallet Fork & Lift Boom



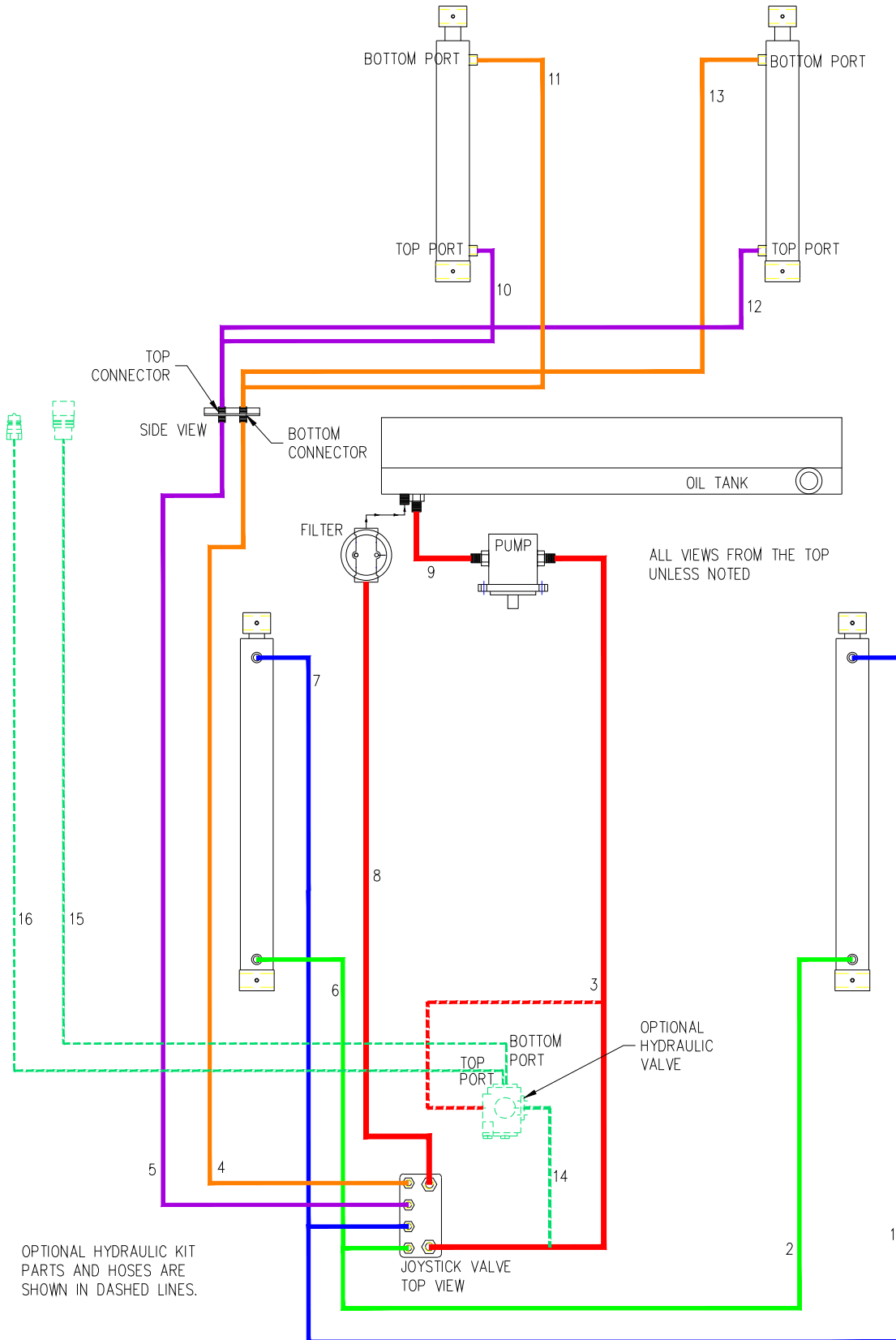
PARTS

Pallet Fork & Lift Boom

REF.	PART NO.	DESCRIPTION	QTY.
1	62.0966	.FRAME, TOP GUARD	1
2	60.0859	.PLATE, FORK POSITION LOCK	1
3	62.0964	.FRAME, MAIN PALLET	1
4	99.SF06	.NUT, SRF 3/8-16 USS	2
5	95.06	.WASHER, FLAT 3/8 SAE	4
6	90.0608	.BOLT, 3/8-16 USS X 1	4
7	62.0965	.FORK, PALLET	2
8	99.A06	.LOCKNUT, STOVER 3/8-16 USS	1
9	95.06	.WASHER, FLAT 3/8 SAE	1
10	90.0612	.BOLT, 3/8-16 USS X 1 1/2	1
11	81.0146	.CHAIN, 1/4 X 36"	1
12	45.0045	.HOOK, 1/4" CLEVIS SLIP	1
13	62.0983	.EXTENSION, LOADER BOOM	1
14	03.1024	.CLEVIS PIN, 5/8 X 3 OAL	1
15	02.HP0420	.HAIRPIN, 1/8 X 2 1/2	1
16	62.0982	.FRAME, MAIN - LOADER BOOM	1

PARTS

ILLUSTRATED DRAWING Hydraulic Diagram



OPTIONAL HYDRAULIC KIT PARTS AND HOSES ARE SHOWN IN DASHED LINES.

PARTS

Hydraulic Diagram

REF.	PART NO.	DESCRIPTION	QTY.
1	20.0190	.HOSE, 3/8X130.00 SAE 100R17 AR	1
2	20.0189	.HOSE, 3/8X122.00 SAE 100R17 AR	1
3	20.0192	.HOSE, 1/2X54.00 SAE 100R17 AR	1
4	20.0191	.HOSE, 3/8X58.00 SAE 100R17 AR	1
5	20.0241	.HOSE, 3/8X60.00 SAE 100R17 AR	1
6	20.0201	.HOSE, 1/4X27.00 SAE 100R17 AR	1
7	20.0188	.HOSE, 1/4X30.00 SAE 100R17 AR	1
8	22.0035	.HOSE, 5/8X28.00 PLK 250PSI NBR	1
9	22.0036	.HOSE, 3/4X10.00 PLK 250PSI NBR	1
10	20.0195	.HOSE, 1/4X11.00 SAE 100R17 AR	1
11	20.0196	.HOSE, 1/4X24.75 SAE 100R17 AR	1
12	20.0273	.HOSE, 1/4X31.50 SAE 100R17AR	1
13	20.0193	.HOSE, 1/4X44.50 SAE 100R17 AR	1
14	20.0197	.HOSE, 1/2X25.00 SAE 100R17 AR	1
15	20.0199	.HOSE, 1/2X34.00 SAE 100R17 AR	1
16	20.0198	.HOSE, 1/2X34.00 SAE 100R17 AR	1

WARRANTY



LIMITED WARRANTY - VENTRAC TURF EQUIPMENT

Venture Products, Inc. (shall be referred to as V.P.I.) warrants on the terms and conditions herein, that it will repair, replace, or adjust any part manufactured by Venture Products Inc. and found by Venture Products Inc. to be defective in material and / or workmanship.

Effective September 1st 2005, Ventrac warranty on power units & attachments (excluding the HG100/HG150 generator) for **residential use only** is limited to **three (3) years** from original purchase date. Ventrac power units & attachments used **commercially or for any income-producing purpose** is limited to **two (2) years** from original purchase date. Ventrac ET200 turbine blower (turbine only) is limited to **two (2) years** from original purchase date. Ventrac HG100/HG150 generator is limited to **one (1) year** from original purchase date. Ventrac power units & attachments used for **rental** is limited to **180 days** from original purchase date. (**NOTE:** All accessories such as: 3-point hitch, foot pedal, dual wheel kit, etc. will be covered under the above warranty periods as they would apply provided they are installed by an authorized Ventrac dealer.) This warranty may be transferred and will carry the remainder of the warranty starting from the original purchase/registration date with the dealership and/or V.P.I. In the event that product/s originally registered as **(3) year residential use** are to be transferred to a commercial user, the warranty would change to the remainder of **(2) year commercial use** starting from the original purchase/registration date with the dealership and/or V.P.I.

If this warranty covers a consumer product as defined by the Magnusson-Moss warranty act, no warranties, express or implied, (including, but not limited to, the warranty of merchantability or fitness for a particular purpose) shall extend beyond the applicable time period stated in bold face type above.

If this warranty covers a product used commercially or for any income producing purpose, the foregoing warranties are in lieu of all other warranties and no representations, guarantees or warranties, express or implied, (including, but not limited to, a warranty of merchantability or fitness for a particular purpose), are made by V.P.I. in connection with the manufacture or sale of its products.

The engine warranty is covered by its respective engine manufacturer. Please refer to the engine manufacturer's warranty statement that is included in the owner's manual.

The Ventrac turf equipment, including any defective parts, must be returned to an authorized Ventrac dealer within the warranty period. The warranty shall extend to the cost to repair or replace (as determined by V.P.I.) the defective part. **The expense of pickup and delivery of equipment, service call drive time or any transportation expense incurred for warranty repair is the sole responsibility of the owner and is not covered under warranty by Ventrac and/or V.P.I.** V.P.I.'s responsibility in respect to claims is limited to making the required repairs or replacements, and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Ventrac equipment. Proof of purchase may be required by the dealer to substantiate any warranty claim. Only warranty work performed and submitted by an authorized Ventrac dealer may be eligible for warranty credit.

This warranty extends only to Ventrac turf equipment operated under normal conditions and properly serviced and maintained. The warranty expressly does **not** cover: (a) any defects, damage or deterioration due to normal use, wear and tear, or exposure; (b) normal maintenance services, such as cleaning, lubrication, oil change; (c) replacement of service items, such as oil, lubricants, spark plugs, belts, rubber hoses or other items subject to normal service replacement; (d) damage or defects arising out of, or relating to abuse, misuse, neglect, alteration, negligence or accident; (e) repair or replacement arising from operation of, or use of the turf equipment which is not in accordance with operating instructions as specified in the operator's manual or other operational instructions provided by V.P.I.; (f) repair or replacement arising as a result of any operation from Ventrac turf equipment that has been altered or modified so as to, in the determination of V.P.I., adversely affect the operation, performance or durability of the equipment

WARRANTY



LIMITED WARRANTY - VENTRAC TURF EQUIPMENT

or that has altered, modified or affected the turf equipment so as to change the intended use of the product; (g) repair or replacement necessitated by the use of parts, accessories or supplies, including gasoline, oil or lubricants, incompatible with the turf equipment or other than as recommended in the operator's manual or other operational instructions provided by V.P.I.; (h) repairs or replacements resulting from parts or accessories which have adversely affected the operation, performance or durability of the turf equipment; or (i) damage or defects due to or arising out of repair of Ventrac turf equipment by person or persons other than an authorized Ventrac service dealer or the installation of parts other than genuine Ventrac parts or Ventrac recommended parts.

The sole liability of V.P.I. with respect to this warranty shall be repair and replacement as set forth herein. V.P.I. shall have no liability for any other cost, loss, or damage. In particular V.P.I. shall have no liability or responsibility for: (i) expenses relating to gasoline, oil, lubricants; (ii) loss, cost, or expense relating to transportation or delivery of turf equipment from the location of owner or location where used by owner to or from any authorized Ventrac dealer; (iii) travel time, overtime, after hours time or other extraordinary repair charges or charge relating to repairs or replacements outside of normal business hours at the place of business of an authorized Ventrac dealer; (iv) rental of like or similar replacement equipment during the period of any warranty repair or replacement work; (v) any telephone or telegram charges; (vi) loss or damage to person or property other than that covered by the terms of this warranty; (vii) any claims for lost revenue, lost profit or additional cost or expense incurred as a result of a claim of breach of warranty; or (viii) attorney's fees.

The remedies of buyer set forth herein are exclusive and are in lieu of all other remedies. The liability of V.P.I., whether in contract, tort, under any warranty, or otherwise, shall not extend beyond its obligation as set forth herein. V.P.I. shall not be liable for cost of removal or installation nor shall V.P.I. be responsible for any direct, indirect, special or consequential damages of any nature. In no event shall V.P.I. be liable for any sum in excess of the price received for the goods for which liability is claimed.

There are no representations or warranties which have been authorized to the buyer of the turf equipment other than set forth in this warranty. Any and all statements or representations made by any seller of this equipment, including those set forth in any sales literature or made orally by any sales representative, are superseded by the terms of this warranty. Any affirmation of fact or promise made by V.P.I. or any of its representatives to the buyer which relates to the goods that are the subject to this warranty shall not be regarded as part of the basis of the bargain and shall not be deemed to create any express warranty that such goods shall conform to the affirmation or promise.

No employee, distributor, or representative is authorized to change the foregoing warranties in any way or grant any other warranty on behalf of V.P.I.

Some states do not allow limitations on how long an implied warranty lasts or allow the exclusion on limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty applies to all Ventrac turf equipment sold in the United States and Canada.