



## OWNER/OPERATOR'S MANUAL & PARTS LIST

# KH150 AUGER DRIVE



Revised 04-23-08  
09.10019



Orrville, OH  
www.ventrac.com

**TO THE OWNER**

**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 picture below to find the location of the identification number. Record them in the spaces provided below.

Date of Purchase: Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

Dealer: \_\_\_\_\_

Dealer Address: \_\_\_\_\_  
\_\_\_\_\_

Dealer Phone Number: \_\_\_\_\_

Dealer FAX Number: \_\_\_\_\_

Model # (A): \_\_\_\_\_

Serial # (B): \_\_\_\_\_

Affix Part/Serial Number label here

Venture Products Inc. reserves the right to make changes in design or specifications without obligation to make like changes on previously manufactured products.

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## **WARRANTY**

# INTRODUCTION

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## Product Description

### KH150 AUGER DRIVE

The KH150 auger drive is an attachment, designed to give you, the owner, more versatility with your Ventrac tractor and versa-loader. The auger drive mounts to the KH500 Loader and provides the ability to drill holes for posts or poles and for transplanting trees.

The standard auger sizes are 6, 9, 12, 15, 18, and 24 inches in diameter.

The tree ball auger sizes are 24 and 30 inches in diameter.

Two different motors are available for the auger drive. The fast drive motor can be used with augers up to 12 inches in diameter. Augers over 12 inches must use the slow drive motor.

The maximum depth of the bore for standard augers is 42 inches deep. A 12 inch auger extension is available for added depth.

### Ventrac KH500 Specifications

Overall Height with Standard Auger . . . . .	55 inches
Overall Width. . . . .	43 inches
Overall Length. . . . .	29 inches
Weight without Auger . . . . .	168 pounds
Boring Depth with Standard Auger . . . . .	42 inches
Boring Depth with Auger Extension . . . . .	54 inches
Hole Diameter (Fast Drive) . . . . .	6-12 inches
Hole Diameter (Slow Drive) . . . . .	6-30 inches
Fast Drive RPM (3200 Tractor RPM) . . . . .	80 RPM
Slow Drive RPM (3200 Tractor RPM). . . . .	45 RPM
Valve Gallons/Minute at 3200 RPM . . . . .	9.5 GPM

# SAFETY

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## ATTENTION:

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

## 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.

# SAFETY

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## Safety Decals

The following decal must be maintained on your Ventrac posthole drive attachment. If any decals are faded or missing, contact your dealer promptly for replacements.



A

Decal	Page & Location	Description	Part Number
A	E-3, #13	Danger - Rotating Auger	00.0196

# SAFETY

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## General Safety Procedures for Ventrac Tractors, Attachments, & Accessories



Read and understand the operator's manual before operating this equipment.

Observe and follow all safety decals.

DO NOT let children or any untrained person operate the tractor or attachment. Make sure that all operators of this equipment are thoroughly trained in using it safely.

Never allow additional riders on the tractor or attachments.

DO NOT operate tractor or attachments if you are under the influence of alcohol, drugs, or medication that may impair judgment or cause drowsiness, or if you are not feeling well.

Operate all controls from the operator's seat only.

Before operating equipment, make sure all shields are in place and fastened.

Ensure the attachment or accessory is locked or fastened securely to the tractor before operating. See tractor manual for locking procedure.

Ensure that all bystanders are clear of the tractor and attachment before operating. Be especially careful and observant if other people are present. Never assume that bystanders will remain where you last saw them.

Always look in the direction the tractor is moving.

Never direct the discharge of any attachment in the direction of people, animals, buildings, vehicles, or objects of value.

Stop operation immediately at any sign of equipment failure and correct the problem before continuing to operate. An unusual noise can be a warning of equipment failure or a sign that maintenance is required.

Before adjusting, cleaning, lubricating, or changing parts on the tractor or attachment, engage the parking brake, lower the attachment to the ground, stop the engine, and remove the ignition key.

To prevent the risk of uncontrolled equipment movement on tractors equipped with 2 speed axles, always shift the transaxle range with the tractor stationary on level ground and with the parking brake engaged.

If equipment is to be left unattended, engage the parking brake, lower the attachment to the ground, stop the engine, and remove the ignition key.

# SAFETY

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## KH150 Safety Procedures

### WARNING

Before making any repairs or adjustments, lower attachment to the ground, set parking brake, shut the engine off, and remove the key.

### WARNING

Read and understand the operator's manual before operating this equipment.

Serious injury or death can occur from improper use of this auger. Stay away from the auger when it is turning. Keep others away from auger.

Rear counterweight must be used when operating loader and auger drive.

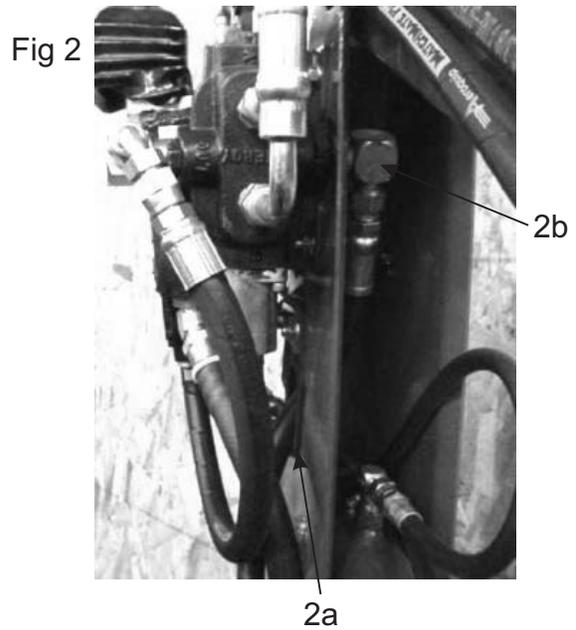
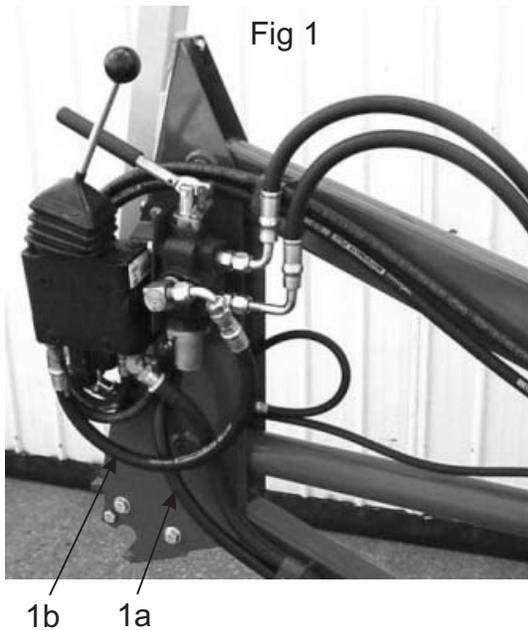
**Call before you dig.** If there is any possibility of buried cables or gas lines in the area you are working, call the your local utilities before digging. There should be an 800 number to call listed in the front of your telephone directory.

# SETUP & OPERATION

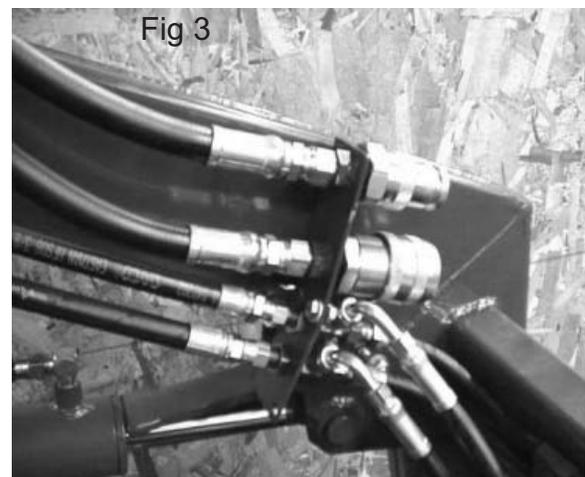
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## Setup of Valve Kit:

1. Fasten valve mounting plate to the loader frame as shown (Fig 1 & 2) using 5/16 x 3/4 bolts and flange nuts.
2. Install rubber grommet in slot in loader frame. (Fig 2a)
3. Remove pressure line hose (Fig 1a) that connects the pump to the joystick valve, thread through the grommet and onto valve fitting (Fig 2b) inside the loader frame.
4. Install new 1/2" hose as shown. (Fig 1b)



5. Mount quick coupler bracket (Fig 3) using two 5/16 x 3/4 bolts and flange nuts along with a 1/4 x 1/2 bolt, washer, and flange nut.
6. Fasten hoses to welded fittings in coupler bracket. (Fig 3)



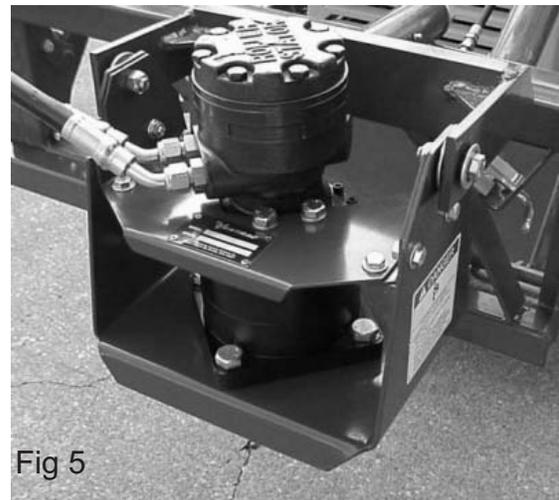
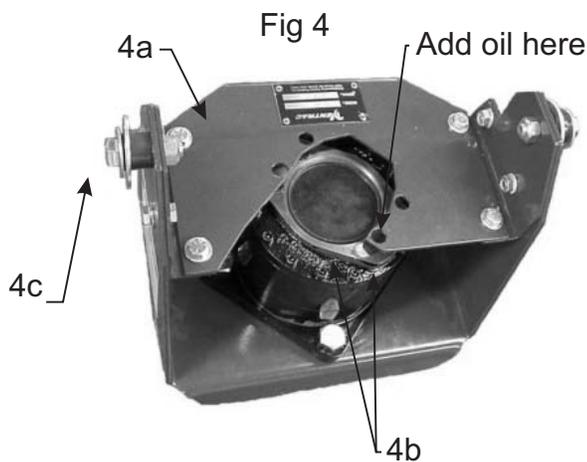
## Operation of Valve:

1. The valve and auger drive hoses should be routed so that moving the lever down rotates the auger clockwise to dig.
2. Wipe the quick couplers clean before coupling to auger drive.

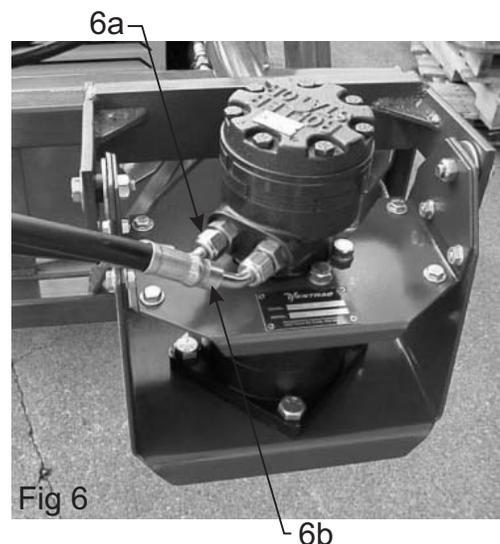
# SETUP & OPERATION

## Setup of Auger Drive

1. Attach the main frame to the loader toolbar. Raise the loader so the top of the frame is approximately 4 feet off the floor. The 1-1/4" pivot tube should be parallel to the floor.
2. Insert the yoke bolt into the tube on top of the frame and install the 1-1/4" locknut. Do not over tighten the nut against the tube. The yoke should swing freely.
3. Remove the bolts (4c) from the auger drive mount, and bolt the drive mount to the yoke. (See figures 5 & 6, also page E-3)
4. Remove the motor mount plate (4a) by removing 4 - 3/8 x 3/4 bolts.
5. Remove the bolt plugs and cap (4b) from the top of the gearbox and pour in the supplied 75W-140 synthetic gear oil (12-12.5 oz.). (See figure 4)



6. Install the o-ring onto the motor and seat into o-ring groove.
7. Set the motor on the gearbox with the hose ports turned to the front. Install the motor mount plate on top of the motor flange and reinstall the 3/8 x 3/4 bolts removed earlier. Do not tighten.
8. Apply thread lock or a quality thread sealer to 4) 1/2 x 1-1/2 bolts and bolt the motor plate and motor to the gearbox. Torque to 55-60 foot-pounds. (See figures 5 & 6)
9. Tighten the 4 - 3/8 x 3/4 bolts holding the motor plate to the auger drive frame.
10. Remove the plugs from the hydraulic motor and install the hydraulic fittings.
11. Install the hoses onto the motor fittings as shown in figure 6. **6a** is the hose with the male quick coupler. **6b** is the hose with the female quick coupler.



## SETUP & OPERATION

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### Operating Techniques and Tips:

Move the valve handle down to start auger drive. Lower the auger into the soil to begin digging.

In some soil conditions, the loader arms can be put in float while digging. This allows the auger to drill into the soil at its own speed.

When digging in hard, stony soil or where tree roots are present, slowly lowering the loader arms manually may be required.

If the auger becomes jammed on a rock or tree root, move the valve handle to the upper position to reverse the auger rotation and back it away from the object on which it is caught.

When storing or transporting the auger drive, lift the rotation latch (Figure 7) and swivel the auger to the opposite side of the frame. Wrap the chain around the auger and secure to the chain hook.



Fig 7



Always wait for parts to stop moving and lower the auger to the ground before dismounting from the tractor.



**CAUTION:** Always shift transaxle range with the tractor parked on **LEVEL ground**. Never shift on a slope since all hydraulic braking capacity will be lost during the shifting process.



Different circumstances and situations can occur for which the operator must determine a safe way to operate the tractor and auger drive.

**Always follow safety procedures and always use common sense.**



**Approach every task with consideration for your safety as well as for the safety of anyone who happens to be near the work area. Make sure that all operators of this equipment are thoroughly trained in using it safely.**

# MAINTENANCE & SERVICE

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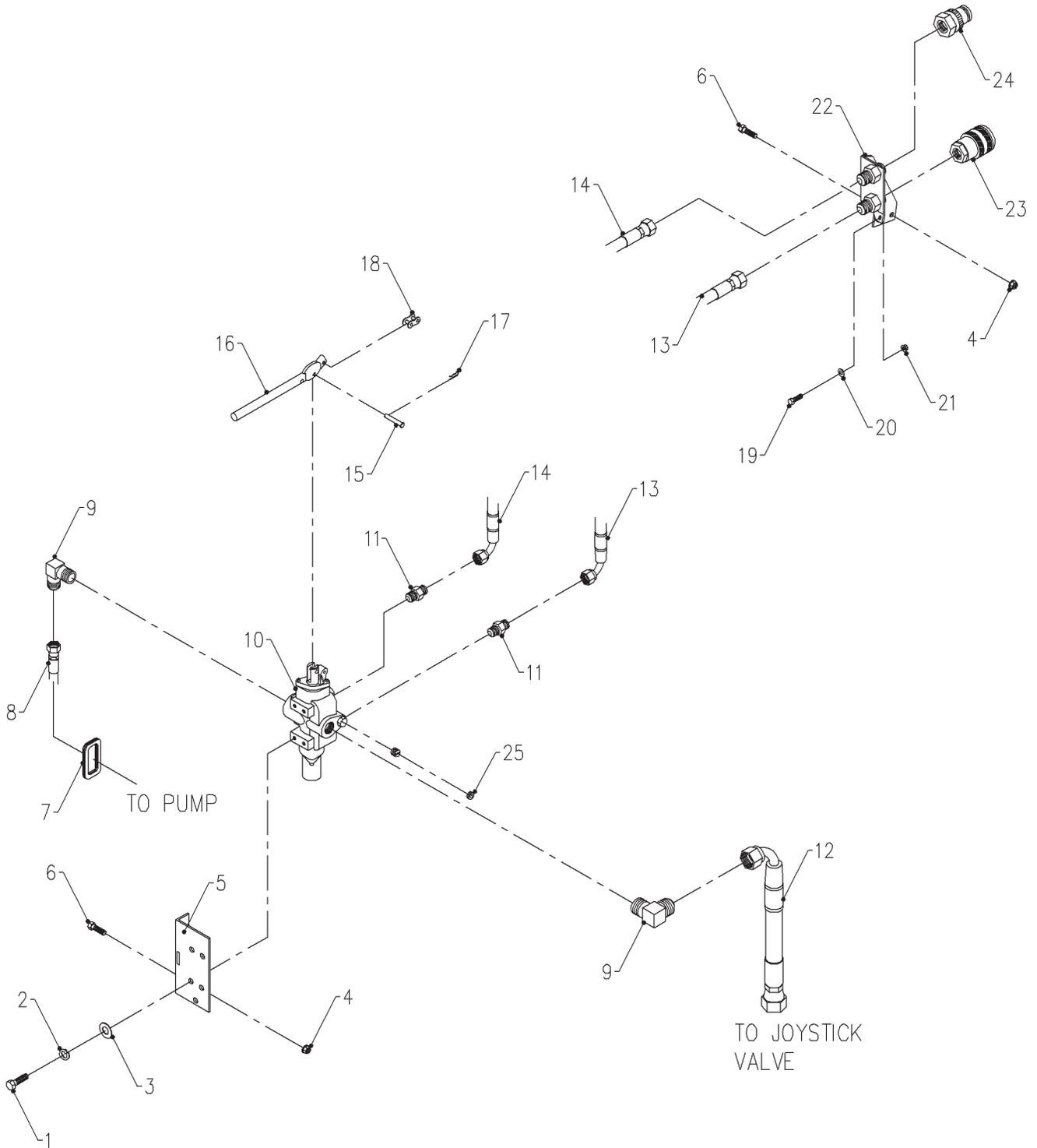
## Maintenance

- Grease the fitting on the drive swivel every 50 hours.
- The gear box is sealed, so the oil level does not need to be checked unless the gear box is leaking. Check the gear box for leaks before and after each use.
- Store auger drive in a clean dry environment.
- When storing auger drive, **do not** allow quick couplers to lay on the ground. Clean the quick couplers each time before they are reconnected.

# PARTS MANUAL

# PARTS

## ILLUSTRATED DRAWING HYDRAULIC VALVE KIT



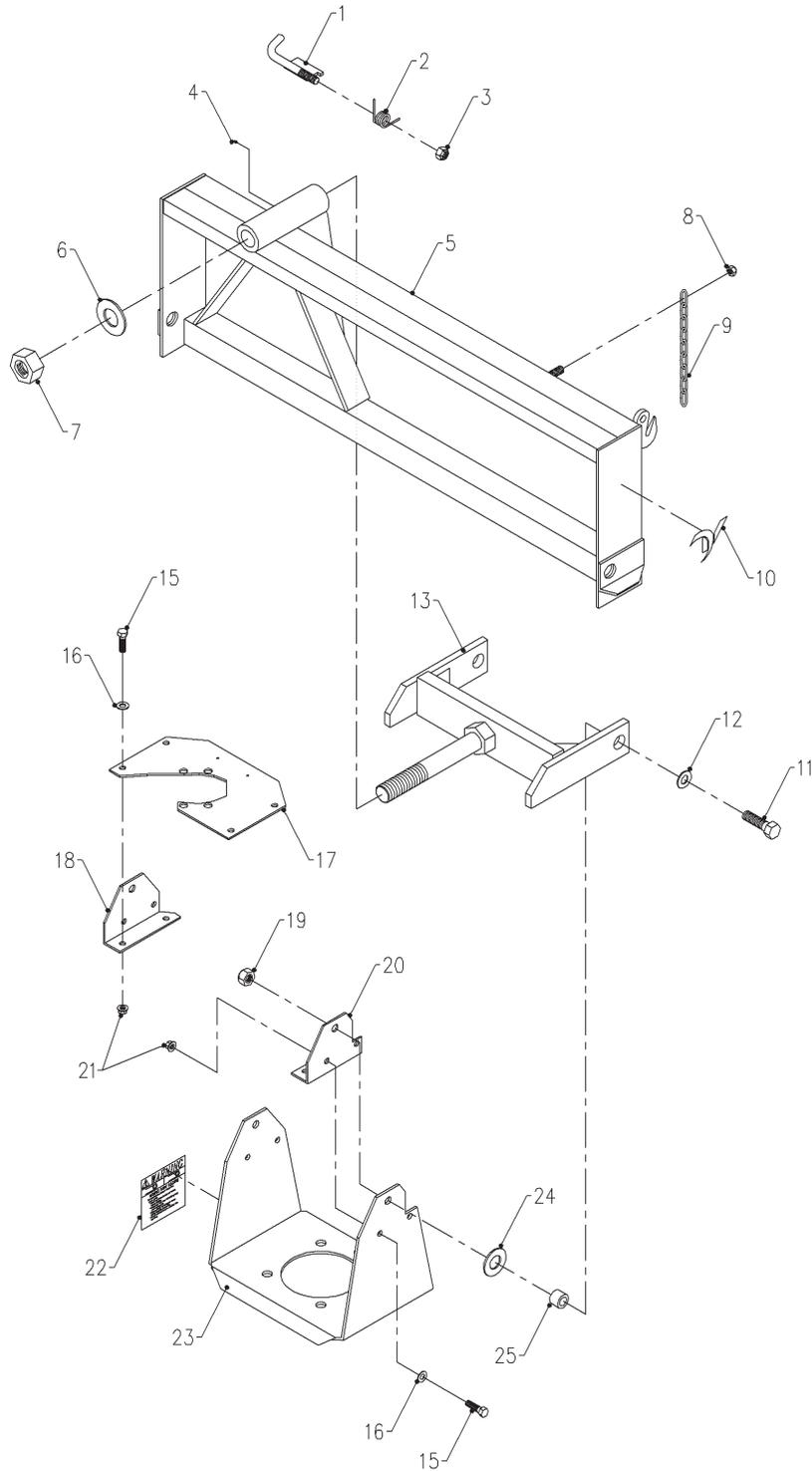
# PARTS

## HYDRAULIC VALVE KIT

REF.	PART NO.	DESCRIPTION	QTY.
1	90.0606	3/8-16 x 3/4 Bolt	4
2	96.06	3/8 Lock Washer	4
3	95.06	3/8 SAE Flat Washer	4
4	99.SF05	5/16-18 Flange Nut	4
5	64.1035	Valve Plate	1
6	90.0506	5/16-18 x 3/4 Bolt	4
7	05.0056	Rubber Grommet	1
8	20.0192	Hydraulic Hose Assembly - 1/2 x 54.	1
9	25.2501-08-12	Hydraulic Fitting, 90° - 1/2 x 3/4	2
10	23.0121-1	Hydraulic Valve without Handle	1
11	25.2404-08-08	Hydraulic Fitting, Connector - 1/2 x 1/2	2
12	20.0197	Hydraulic Hose Assembly - 1/2 x 25.	1
13	20.0199	Hydraulic Hose Assembly - 1/2 x 34.	1
14	20.0198	Hydraulic Hose Assembly - 1/2 x 34.	1
15	03.0410	1/4 x 1-1/4 Clevis Pin	1
16	23.0121-3	Valve Handle	1
17	02.CP0304	3/32 x 1/2 Cotter Pin.	1
18	81.0024	#60 Connector Link	1
19	90.0404	1/4-20 x 1/2 Bolt	1
20	95.04	1/4 SAE Flat Washer	1
21	99.SF04	1/4-20 Flange Nut	1
22	64.1034	Hydraulic Fitting Bracket	1
23	23.0124	1/2" Female Quick Coupler	1
24	23.0125	1/2" Male Quick Coupler.	1
25	85.SS22	Set Screw, 1/2-20 X 1/4"	1

# PARTS

## ILLUSTRATED DRAWING POSTHOLE DRIVE FRAME



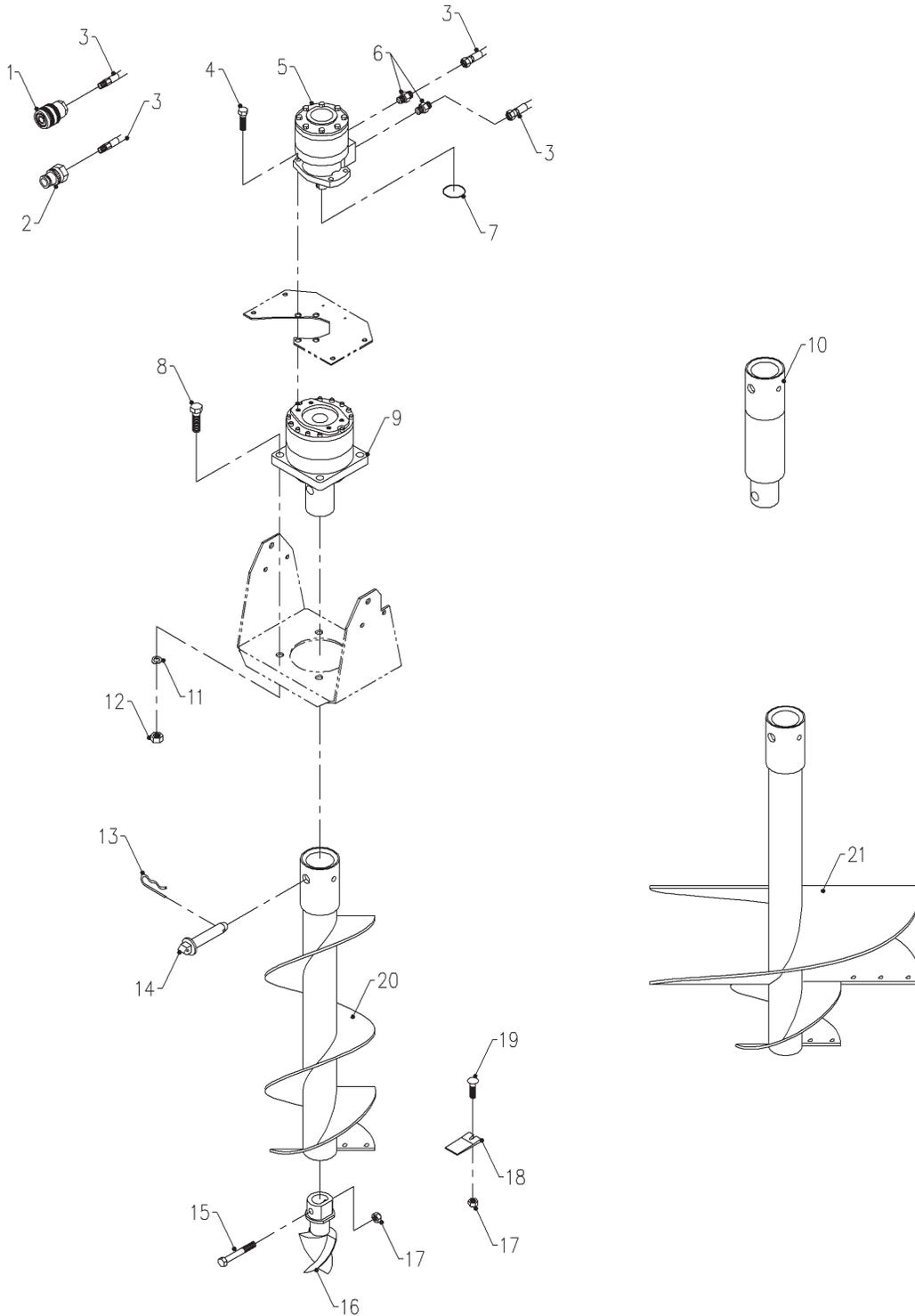
# PARTS

## POSTHOLE DRIVE FRAME

REF.	PART NO.	DESCRIPTION	QTY.
1 . . . . .	64.1046 . . . . .	Rotation Stop Latch . . . . .	1
2 . . . . .	41.0074-1 . . . . .	Latch Spring . . . . .	1
3 . . . . .	99.A06 . . . . .	3/8-16 Lock Nut . . . . .	1
4 . . . . .	29.GF0001 . . . . .	1/4-28 Grease Fitting . . . . .	1
5 . . . . .	62.0953 . . . . .	Posthole Drive Frame . . . . .	1
6 . . . . .	95.20 . . . . .	1-1/4 SAE Flat Washer . . . . .	1
7 . . . . .	99.A20 . . . . .	1-1/4-7 Lock Nut. . . . .	1
8 . . . . .	99.A07 . . . . .	7/16-14 Lock Nut . . . . .	1
9 . . . . .	81.0142 . . . . .	1/4" Chain x 28 . . . . .	1
10. . . . .	00.0192 . . . . .	Decal, V . . . . .	2
11. . . . .	90.0814 . . . . .	1/2-13 x 1-3/4 Bolt. . . . .	2
12. . . . .	94.08 . . . . .	1/2 USS Flat Washer . . . . .	2
13. . . . .	62.0954 . . . . .	Pivot Yoke . . . . .	1
15. . . . .	90.0606 . . . . .	3/8-16 x 3/4 Bolt . . . . .	8
16. . . . .	95.06 . . . . .	3/8 SAE Flat Washer . . . . .	8
17. . . . .	64.1037 . . . . .	Motor Mount Plate. . . . .	1
18. . . . .	64.1045 . . . . .	Left Motor Mount Anchor Bracket . . . . .	1
19. . . . .	99.A08 . . . . .	1/2-13 Lock Nut . . . . .	2
20. . . . .	64.1044 . . . . .	Right Motor Mount Anchor Bracket . . . . .	1
21. . . . .	99.SF06 . . . . .	3/8-16 Flange Nut . . . . .	8
22. . . . .	00.0196 . . . . .	Decal, Danger - Rotating Auger . . . . .	2
23. . . . .	64.1036 . . . . .	Auger Drive Mount . . . . .	1
24. . . . .	95.16 . . . . .	1" SAE Flat Washer . . . . .	2
25. . . . .	64.1041 . . . . .	9/16 ID x 1" OD x 3/4 Bushing. . . . .	2

# PARTS

## ILLUSTRATED DRAWING AUGERS & DRIVES



# PARTS

## AUGERS & DRIVES

REF.	PART NO.	DESCRIPTION	QTY.
1	23.0124	1/2" Female Quick Coupler	1
2	23.0125	1/2" Male Quick Coupler	1
3	20.0200	Hydraulic Hose Assembly - 1/2 x 72.	2
4	90.0812	1/2-13 x 1-1/2 Bolt	4
5	21.0107	Hydraulic Motor (Slow)	1
	21.0108	Hydraulic Motor (Fast)	1
6	25.6400-08-10	Hydraulic Fitting, Connector - 1/2 x 5/8	2
7	26.0020	3/32 x 3-1/4 ID O-Ring	1
8	90.1016	5/8-11 x 2 Bolt	4
9	87.0202	Gear Reducer	1
10	80.0327	12" Auger Extension	1
11	96.10	5/8 Lock Washer	4
12	92.10	5/8-11 Nut	4
13	02.HP0524	5/32 x 2-11/16 Hairpin	1
14	03.0012	7/8 x 4-1/4 Hitch Pin	1
15	90.0832	1/2-13 x 4 Bolt	1
16	79.0061	Tri-flow Pilot Bit	1
17	99.A08	1/2-13 Lock Nut	as req'd
18	79.0062	40°/50° Auger Tooth	as req'd
19	97.0812	1/2-13 x 1-1/2 Carriage Bolt	as req'd
20	80.0326-06	6" Auger	1
	80.0326-09	9" Auger	1
	80.0326-12	12" Auger	1
	80.0326-15	15" Auger	1
	80.0326-18	18" Auger	1
	80.0326-24	24" Auger	1
21	80.0328-24	24" Tree Ball Auger	1
	80.0328-30	30" Tree Ball Auger	1



## 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 1<sup>st</sup> 2005, *Ventrac* warranty on Tractors & Attachments (excluding the HG100/HG150 generator) for **Residential use only** is limited to **Three (3) years** from original purchase date. *Ventrac* Tractors & 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* Tractors & 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



## LIMITED WARRANTY – VENTRAC TURF EQUIPMENT

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 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 or 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.