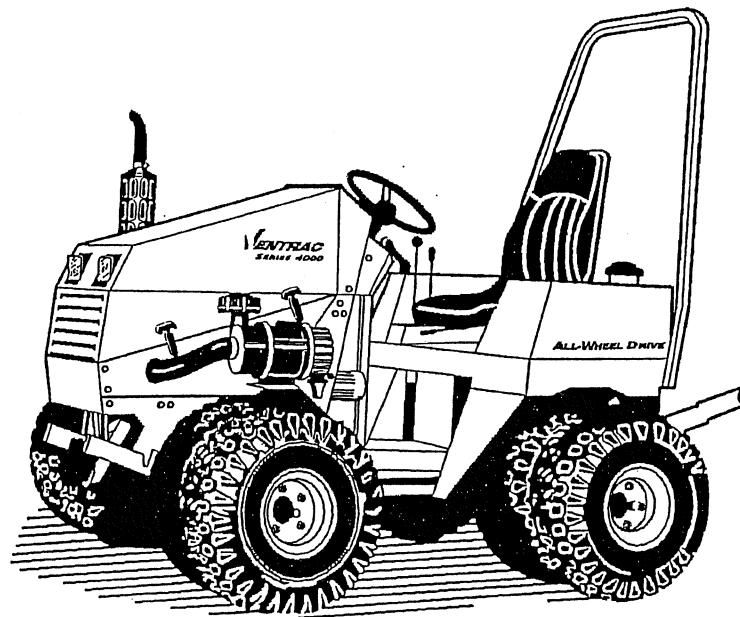




**OWNER/OPERATOR'S
MANUAL & PARTS
LIST**

**TRACTOR
4000**



REVISED 08-10-99
09.10015



12657 Church Road
P.O. Box 148
Orrville, OH 44667
Email: venture@venturepro.com
Web: <http://www.venturepro.com>
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TO THE OWNER

Congratulations on the purchase of a new VENTRAC 4000! The purpose of this manual is to assist you in parts ordering and maintenance of your tractor.

With proper usage and care, the tractor will provide many years of service. Keep this manual on file for future reference when ordering parts.

Please fill in the following information for future reference:

Date of Purchase: Month _____ Day _____ Year _____

Serial Number: _____

Dealer: _____

Dealer Address: _____

Dealer Phone Number: _____

Dealer FAX Number: _____

1st Edition Printing begins with serial # 1100
Earlier models may have minor variations. Please specify
serial # when ordering parts as additional information may
be necessary for filling orders.

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

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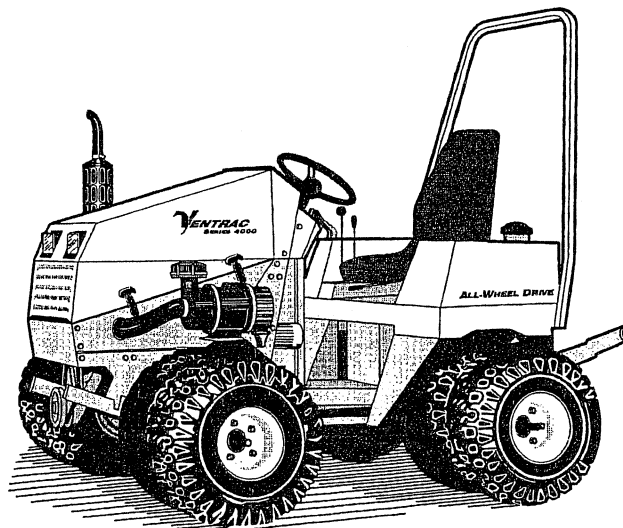
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Description

- * The Ventrac Series 4000 is a unique all wheel drive tractor that spreads its weight to four equal-sized flotation tires for excellent power, stability, traction, braking and maneuvering.
- * Performance is enhanced by a sturdy articulated chassis frame which oscillates to conform to ground contour and turns with ease via a hydraulic power steering system.
- * Hydrostatic transmission drive provides operator choice of speed, direction and attachment lift through one integrated control lever in "arm chair" position. A hydraulic accessory control lever follows in the "shadow" of the forward/reverse lever...always available and always ready for the operator's next selection.
- * Single high/low range selector lever enables operator to use low range for operating attachments and high range for transport.
- * Front-end fast hitch and optional category 1 three-point rear hitch makes the Ventrac 4000 a powerful mate for attachments and the master of many ground maintenance tasks.
- * Proper maintenance and safe operation assures long, efficient, and productive performance and provides enjoyment and satisfaction for operator, owner and customers served by this versatile, functional, ingenious all wheel drive machine.



SECTION A

INTRODUCTION

ENGINES: (22 to 31 hp Range)		Engines Displacement
Kawasaki:	Gasoline, Model FD661, 22 hp, 2 Cylinder, Liquid-Cooled	617 (cc)
Vanguard:	Diesel, Model DM850D, 23.6 hp, 3 Cylinder, Liquid-Cooled	850 (cc)
Kubota:	Gasoline, Model WG750G, 23.8 hp, 3 Cylinder, Liquid-Cooled	740 (cc)
Vanguard:	Diesel, Model DM950D, 26.5 hp, 3 Cylinder, Liquid-Cooled	952 (cc)
Vanguard:	Gasoline, Model DM950G, 31 hp, 3 Cylinder, Liquid-Cooled	952 (cc)
Electrical:	450 cold cranking amp battery and 30 to 40 amp alternators	
Powertrain :	Sauer Sundstrand Series 15 Hydraulic pump Hydraulic Motors connected in series Two Peerless Series 2600 Dual-Range Transaxles High Capacity Aluminum Oil Cooler Dual Hydraulic Oil Filters (one 10 and one 25 micron filter)	
Tires:	Standard Turf: Titan AT 22 x 12-8 (21-inch actual diameter) Optional Bar: Goodyear Rawhide III 22 x 11-8 (22-inch actual diameter)	
Dimensions:	Wheelbase:	41 inches
	Length:	77 inches
	Height to Top of Roll Bar:	67 inches
	Width with Single Turf Tires:	49 inches
	Width with Dual Turf Tires:	70 inches
	Width with Single Bar Tires:.....	48 inches
	Width with Dual Bar Tires:.....	69 inches
Weight:	Approx.	1400-1500 lbs
Travel Speed:	Turf Tires	
	Low Range	5.2 mph
	High Range	10 mph
	(speeds vary according to tire size and inflation pressure)	
Instrument Panel:	Tachometer/Hourmeter, Engine coolant Temperature Low Oil Indicator, Voltmeter, Glow Plug Light (Diesel) PTO Switch & Indicator Light	
Roll Bar:	Certified R.O.P.S.	

Definitions of the term "Compact Utility Tractor" may vary
 Venture Products reserves the right to make changes to design specifications without notice.

Revised 8/99



This symbol identifies potential health and safety hazards. It marks safety precautions!!

Before Operating:



Read and understand this manual before operating the Ventrac 4000 tractor. Study the operating section and take time to get familiar with all controls and their functions.

Always use proper safety precautions. Observe all safety decals.

Only experienced and mature personnel should operate equipment. No minors!



Inexperienced operators should be trained by experienced or qualified instructors.

Check engine fluid levels before starting.

Check brake action before operating and adjust or service as needed.



Inspect machine before operating. Be sure shields and guards are in good condition and securely in place. Be sure hardware is tight and repair or replace parts that are missing, badly worn or damaged. Check that wheel nuts are tight several times during the first 100 hours of operation.

Never Allow Riders:



Allow only the operator on the tractor. Riders have no designated or secure place on the machine. Riders also obstruct the operator's view.

Use Caution Around Children:



Never assume that children will remain where you saw them last...they are attracted to motion and noise; stay alert to their presence.

Before you back the machine, look behind you. Always be looking in the direction of travel.

When approached by others, stop the PTO and engage the park brake.



Safe Transport:

When driving on public roads, use a Slow Moving Vehicle sign. You should have extra flashing warning lights installed. Check local traffic laws.

Be careful around traffic when crossing roadways or operating near them.

Operate only during daylight or with good artificial light.

SECTION B SAFETY



This symbol identifies potential health and safety hazards. It marks safety precautions!!

Use Extra Care:



Stay alert for holes, hidden objects, and uneven terrain.

Use extra care when you come to shrubs, trees, or other objects that may block your vision.

Clear from work area objects that may be thrown.

Stop machine and inspect if you hit an object.



Avoid adverse ground conditions which can limit performance and stability of equipment and could result in serious injury or death.

Stay **away from** drop-offs.

DO NOT drive where machine could slide or upset.

Wet grass increases risk of sliding on banks and slopes.



DO NOT try to stabilize the tractor by putting your foot on the ground.

When pulling loads or using heavy equipment, use only the hitch points provided. Limit loads to those you can safely control and add counterweights or duals in more difficult situations.

Use **low range** on hills and slopes.



Slopes:

Drive up and down a hill...duals are recommended for mowing across slopes. Be careful when you change direction on a slope. Drive slowly.

Make allowances in speed selection for hills, slopes, and rough terrain. If the operator is uncomfortable or unsure of the unit's stability, the operator should slow down or cease operation.



When parking, stop the machine on a level surface whenever possible; block tractor tires if it must be parked in a location which is not level.

Be sure to have plenty of fuel in tank to avoid unplanned stoppage.



NEVER TURN ENGINE OFF ON A HILL OR SLOPE WITHOUT FIRST MAKING SURE THE PARKING BRAKE WILL HOLD THE TRACTOR IN PLACE. Before leaving the tractor, ensure that parking brake is set.

Use Common Sense!



This symbol identifies potential health and safety hazards. It marks safety precautions!!

Operator Personal Safety:



Be careful around rotating drivelines. Wear close fitting clothes and use appropriate safety equipment.

Wear earplugs or other protective device when needed.

DO NOT operate tractor if you are under the influence of alcohol or drugs or are not feeling well.

Engine muffler may be hot; **DO NOT** touch!!

Remain in operator's seat and operate all controls from operator's seat.



Always use seat belt with roll bar to minimize chance of injury from an accident.

Use caution when handling the battery. Shield eyes as explosive battery gases and acid can cause injury or blindness. Flush eyes immediately with water and seek medical attention. Keep sparks, flames and cigarettes away from battery and fuel tank area.



Before leaving tractor seat, stop PTO and set parking brake. Shut off engine if tractor is left unattended and remove ignition key.

Wait for engine and all moving parts to stop before leaving operator's seat.

Before adjusting, cleaning, or lubricating this machine, set the parking brake, shut down the engine and remove the ignition key. **NEVER** attempt to work on unit or attachments with engine running.

General Safety:



A safety switch requires the 3-position control selector to be in the park position to start the engine.

Always maintain adequate engine speed to prevent stalling during operation of the tractor.

Always LOOK before backing.

Never leave tractor seat without placing control lever in park position. If tractor is to be left unattended, shut off engine and remove key.



Shut off PTO when equipment is not in use.

Be alert for any sign or noise of equipment failure and take all precautions to immediately place the tractor under control and in a safe environment.

DO NOT make sharp turns at high speeds!

DO NOT tow!



Extreme sudden starts or stops can up-end the tractor. **Always use caution** when starting and stopping.

Use Common Sense!

SECTION B SAFETY



This symbol identifies potential health and safety hazards. It marks safety precautions!!

Seat Belt & Roll Bar:



Do not operate the tractor without the roll bar and safety belt engaged!

Tractor Settings:



Always make certain that the HIGH-LOW shift lever is completely set into the lock position at the ends of the shift stroke.

Note that freewheeling occurs in the middle of the shift stroke.

Towing is not recommended but in some cases the tractor may need to be pushed a short distance. Park brake is functional in freewheeling mode.



Use extreme caution in freewheeling mode. NEVER freewheel on a slope! Never shift the HIGH-LOW lever while moving, unloading, or on a slope. See page C-2 for further instructions.

The VENTRAC 4000 is a unique all-wheel drive, Compact Utility Tractor (CUT) (**Figure 1**). Its innovative design offers many advantages and some variables from conventional compact utility tractors. The differences make it VERY important for the operator to read and understand this operational manual in order to facilitate safe, enjoyable and effective operation of the VENTRAC 4000!

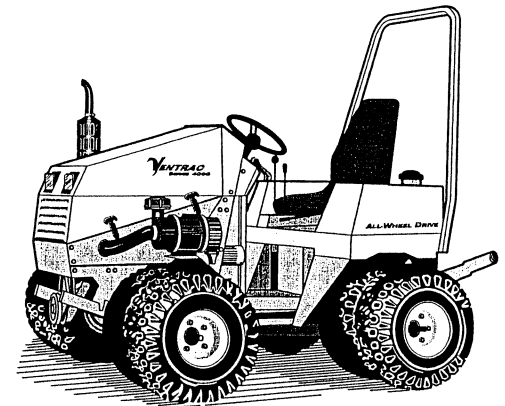


Figure 1

The first sight of the VENTRAC 4000 reveals its low profile, four (4) identical drive tires and the articulated frame. Less obvious is the easy-to-use fast hitch and PTO drive that makes frequent use of many different attachments a breeze!

The tractor is designed with a low bi-level foot platform and openness between dash and fenders to make easy entering and exiting for the operator from either side; however, right side entering and exiting is somewhat restricted by the control levers. Always put the Control Selector (**Figure 2**) DOWN in PARK BRAKE position before leaving the tractor seat. This assures the neutral locking of the directional control and park brake engagement.

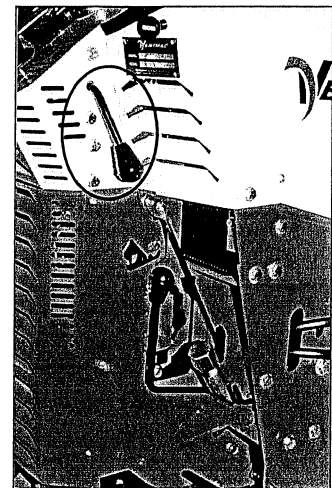


Figure 2

FRONT CONTROLS

Most controls are directly in front of the operator (**Figure 3**). All electrical switches and the throttle are on the left side of the steering column. Decals reveal their position, function and motion.

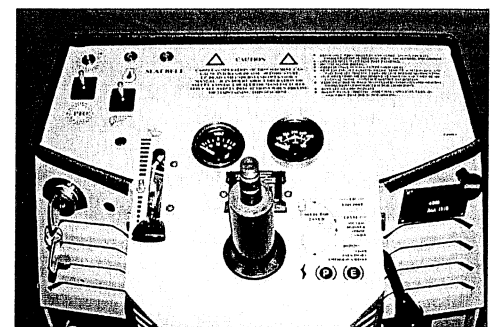


Figure 3

SECTION C OPERATION

The right side of the dash has IMPORTANT operational and safety instructions. A manual choke pull is located in the right lower corner for gasoline engine models. Just below the dash on the right side is a three- (3) position **Control Selector** (Figure 4).

1. **DOWN** – activates the park and emergency brake. ALWAYS return lever to this position when the tractor is not in use. The lever must be in this position to START the engine.

2. **LEVEL** – causes the directional control lever beside the operator to have a **spring-assist-to-neutral** action. This position makes neutral easy to find and maintain. If the tractor creeps when in neutral, see “Neutral Adjustment” (Figure 50).

3. **UP** – puts the directional control lever beside the operator into a **free** mode. This position is recommended only for open area operation where travel speed and direction is relatively constant and control is very easy to maintain. **Free** mode reduces operator arm fatigue.

HIGH-LOW RANGE

Opposite the three-position control selector is the HIGH-LOW transaxle shift lever (Figure 5). Forward is LOW range. Back is HIGH range. **NEVER SHIFT WHILE UNDER LOAD, MOVING, OR ON A SLOPE!** This shift lever shifts both transaxles simultaneously. Sometimes engagement of the transaxle gears is prevented by gear misalignment. Moving the directional control lever slightly one way or the other will move gears enough to complete the engagement. **Always make certain that the HIGH-LOW shift lever is completely set into the lock position at the ends of the shift stroke.**

Note that freewheeling occurs in the middle of the shift stroke. Towing is not recommended but in some cases the tractor may need to be pushed a short distance. Park brake is functional in freewheeling mode. **Use extreme caution in freewheeling mode. Never freewheel on a slope!**

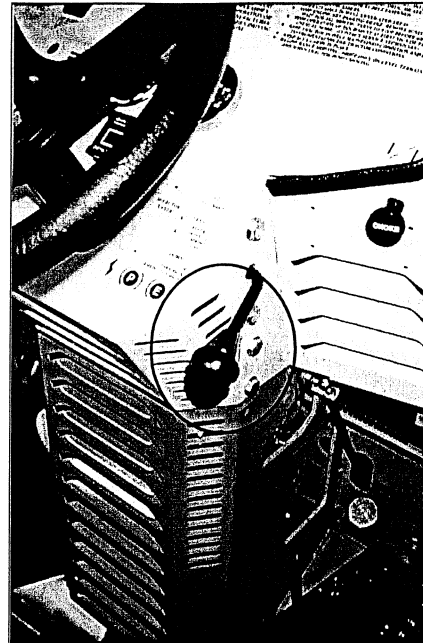


Figure 4

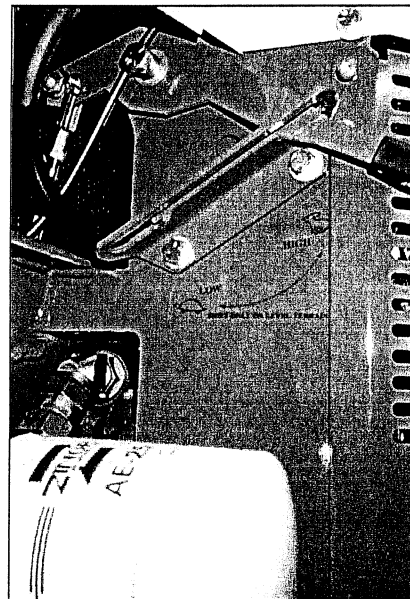


Figure 5

Low range is recommended for most pulling, pushing and slow travel jobs.

High range is for transport and light duty tasks.

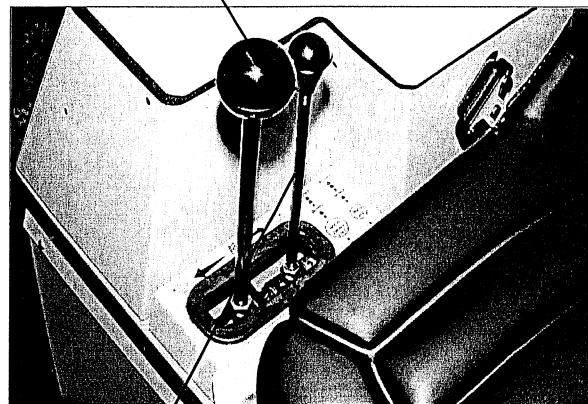
REAR CONTROLS

Right side directional and front hitch control (**Figure 6**) is standard on all VENTRAC 4000s. The primary lever with the large round knob is the directional control (sometimes called the Forward/Reverse lever, F/R) It has two distinct functions:

I.) Once in the seat with the seat belt engaged and the park brake released, the lever can be moved. Forward movement from the neutral position will cause the tractor to move forward. The farther the lever is moved, the faster the tractor will travel. Returning toward the neutral position will slow the tractor and in neutral it will stop. Note that the directional lever operates the same for reverse and always works equally well for starting and **STOPPING!** This shift-on-the-go feature with engine power and brake power to all four tires makes the VENTRAC 4000 an amazing performer in many situations. Yet extreme caution is critical to avoid unexpected and difficult situations that could cause serious injury or damage to operator or equipment.

II.) The second function of the primary lever controls the hydraulic front hitch. Pulling the lever to the left toward the operator raises the hitch. Moving it away (right) from the operator lowers the hitch. Continuing to the right puts the front hitch in the **FLOAT** position. **Always use the float position for mowing and other tasks where flotation of the attachments is desired or necessary.**

Directly behind the primary lever is a smaller lever (**Figure 7**) that controls the auxiliary hydraulic circuit. This lever activates attachments with functions that have hydraulic hoses to the front quick couplers. Placing the lever to the far right is the "float" position for the auxiliary function.



Figures 6 & 7

SECTION C OPERATION

FENDERS

The right fender serves as a toolbox. The cover opens outward. Operator should always close the cover before operating the tractor. Tractors with the 3-point hitch option have a modified cover and use the front part of the toolbox for the hydraulic valve and hoses (See 3-point hitch section).

The VENTRAC 4000 operator's manual is stored in a holder inside the tool box (**Figure 8**). It should be kept in a plastic cover for protection and always be readily available to any and all operators. Attachment manuals should also be stored in the holder. If a manual is missing, contact the dealer or factory immediately for replacement.

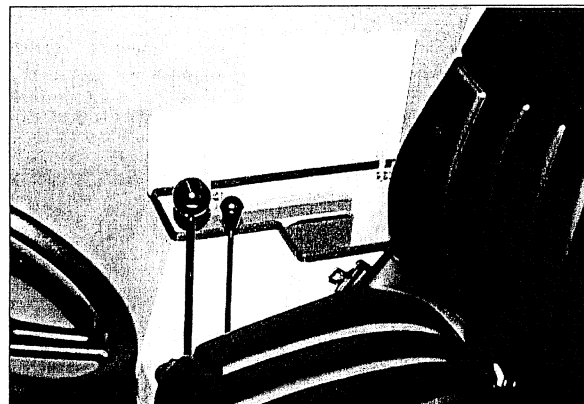


Figure 8

The left fender houses the 7.25 gallon fuel tank. **Always note the type of fuel: Unleaded gasoline or Diesel (Figure 9)**. If decal is missing or unreadable, contact your dealer or the factory for a replacement decal. Determine fuel type before ordering. **Never over fill!** Stop before fuel spills over the fill tube.

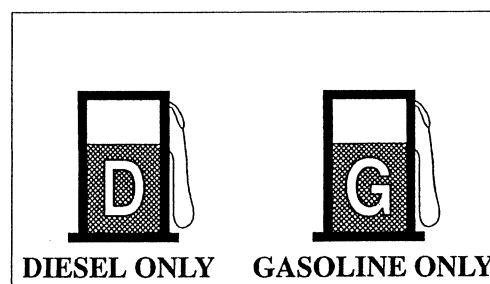


Figure 9

A long slot in the left fender at the front inside corner serves as a fuel gauge (**Figure 10**). Always keep sufficient fuel in the tank to prevent an unexpected engine shut-off. When operating on slopes, fuel level should be kept above the 1/4 mark.

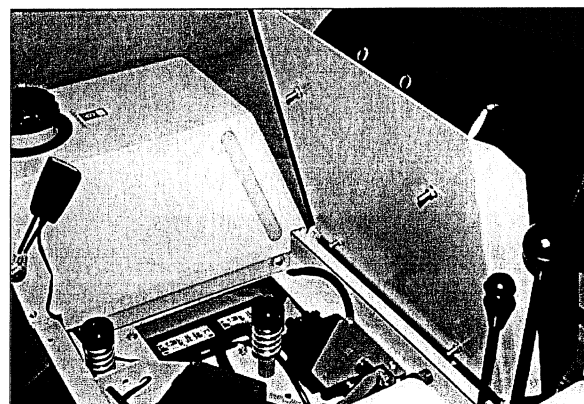


Figure 10

SEAT

Each VENTRAC 4000 has an adjustable seat — fore and aft. Each operator should adjust the seat for the greatest control and comfort to the steering wheel (Figure 11). The second consideration is to the directional control lever. The seat can also be tilted forward during nonuse for access underneath (Figure 12) or keeping the seat dry in inclement weather.

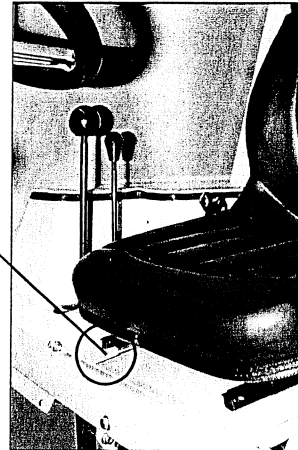


Figure 11

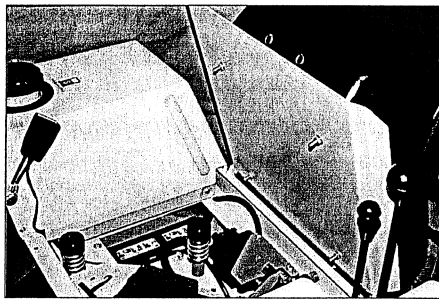


Figure 12

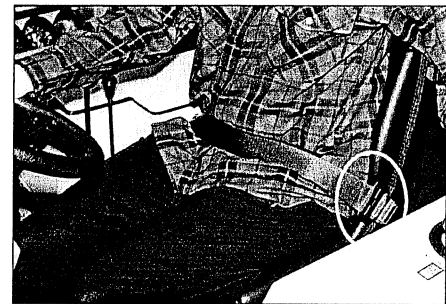


Figure 13

SEAT BELT/ROLL BAR

Certified seat belt anchor—#OSHA 1928.51

Certified ROPS roll bar—#OSHA 1928.52

Always use the seat belt (Figure 13) with the roll bar. Note that the seat belt must be engaged to activate the front PTO. **Do not operate the tractor without the roll bar and safety belt engaged!** They are there for your protection!

The roll bar (Figure 14) is mounted with four 3/8 x 1- grade 5 hex bolts with 3/8 SF nuts on each side. **Note:** Roll bar flange is on the inside of fender panel. All VENTRAC 4000s are shipped with roll bar and hardware. **Roll bar must be installed before operating tractor!** Roll bar is furnished unmounted for shipping convenience.

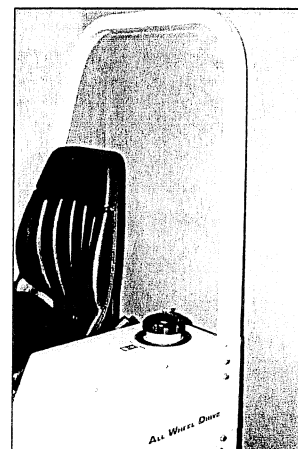


Figure 14

SECTION C OPERATION

BATTERY

The battery is located under the seat. Tilting the seat forward gives access to the top of the battery. **Before using jumper cables or connecting a battery charger, always check polarity (Figure 15).** The RED cover means POSITIVE. The BLACK cover means NEGATIVE. The negative wire should always be connected to the ground (the frame)!

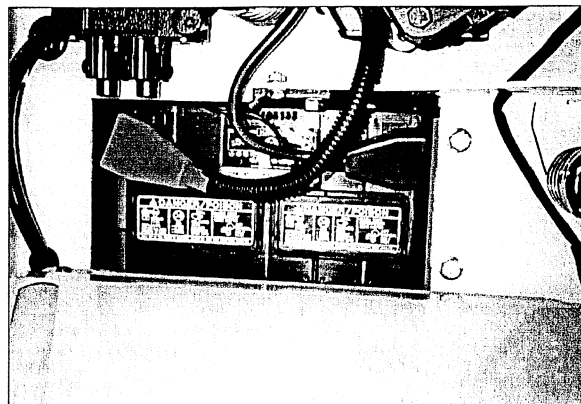


Figure 15

STEERING RADIUS

The steering radius can be adjusted to three different settings (**Figure 16**). Note the three positions under the left front corner of the foot platform. Factory setting uses the inside hole. Dual wheels require the middle hole setting. The weather cab requires the outside hole setting. The outer settings reduce the turning radius. This prevents tire and frame interference.

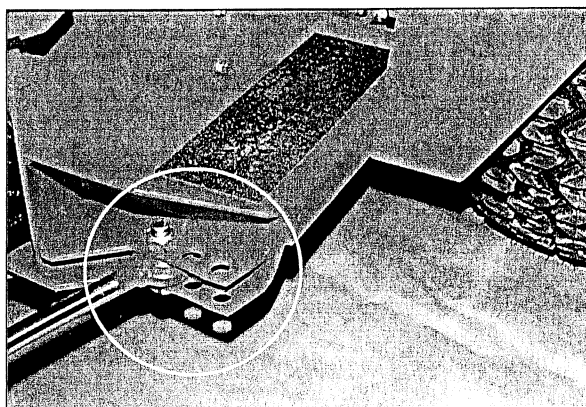


Figure 16

COUNTER WEIGHTS

Four 45 pound counter weights are standard equipment on the VENTRAC 4000. Three 45 pound weights are standard on 3-point hitch models. The weights are mounted close-in as shown in (**Figure 17**) with a 3/8 x 7" retainer bolt and lock nut. Counter weights are important for stability and traction with front mount attachments. When using the tractor with no front attachment, the weights may be removed.

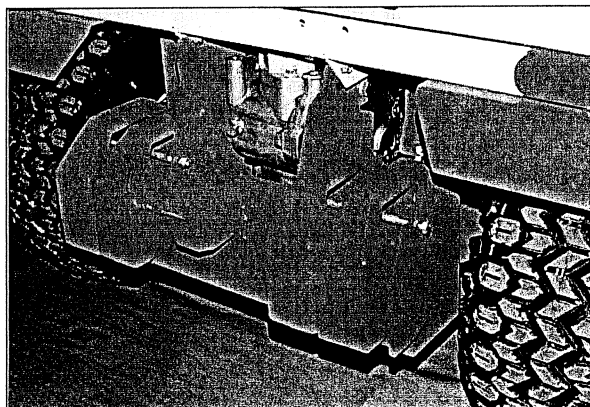


Figure 17

FRONT HITCH AND PTO CONTROLS

(Power-Take-Off)

At the right side of the operator on the front frame of the tractor, are three levers just above the foot platform area.

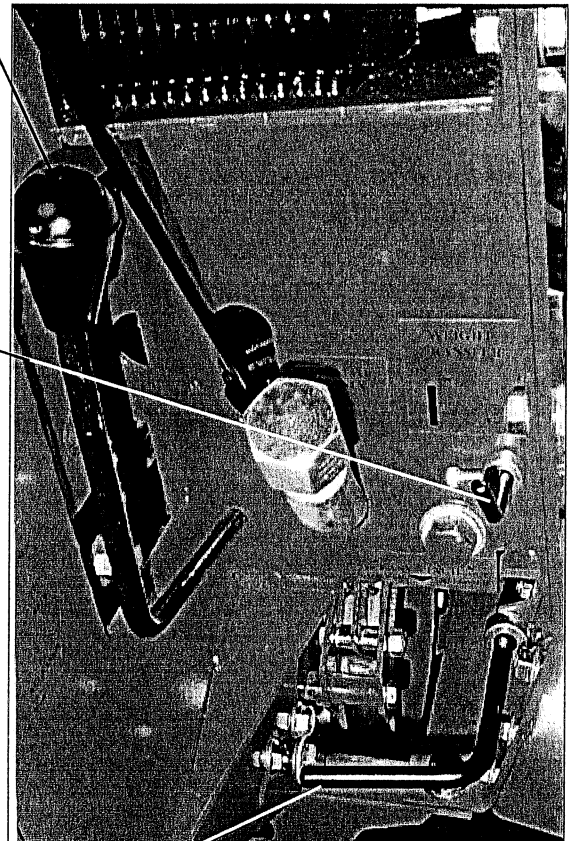
PTO BELT TENSION LEVER

The lever located on the center column side is the PTO belt tension lever (**Figure 18**). Clockwise rotation releases the belt tension allowing the operator to remove or install the PTO belt at the front of the tractor. **This procedure should be done only with the engine shut-off and the park brake engaged.**

WEIGHT TRANSFER

On the far right is the weight transfer lever (**Figure 19**). This lever will engage or disengage the right extension spring. To connect, turn the lever up to "ON" then raise the hitch to its full height for engagement. To disengage, turn the lever outward and raise the hitch to its full height. If hitch is at full height when making a weight transfer change, either lower the hitch first or pull the lever out till it stops before rotating it to the changed position.

There is a corresponding weight transfer lever on the left side. This engages or disengages the left weight transfer spring.



Figures 18-20

EASY-TACH

Below the weight transfer lever is the "EASY-TACH" lock/release lever (**Figure 20**). Clockwise rotation releases the mechanical lock holding the attachment. Counter-clockwise rotation reverses the action and secures the attachment to the hitch. NOTE: The attachment must be fully engaged on both sides before the lock can be secured.

SECTION C OPERATION

FRONT HITCH & PTO

The two rail, EASY-TACH, front hitch (**Figure 21**) is the secret of stable, secure and safe mounting of attachments to the husky, all-wheel-drive VENTRAC 4000! Just align the two rails to the two corresponding hitch arms on the attachment. Raise or lower the tractor hitch for the initial contact with the attachment arm tabs. Lift the tractor hitch to an in-line relationship and complete the engagement. Rotate the EASY-TACH lever to the “LOCK IN” position.

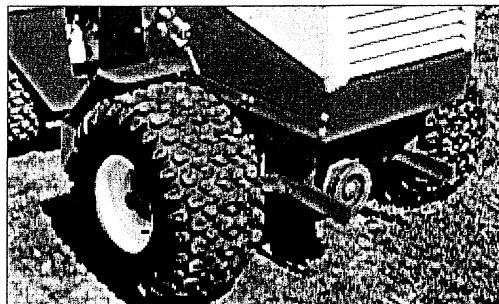


Figure 21

Attachments that require the use of a PTO belt must have the PTO belt installed over the left hitch arm before engaging the attachment arms (**Figure 22**). Generally this happens naturally because the attachment pulley and guard hold the belt in place. After the EASY-TACH lever has been “locked,” with engine stopped, simply put the PTO belt over the outside groove of the PTO idler pulley and engage the tension lever.

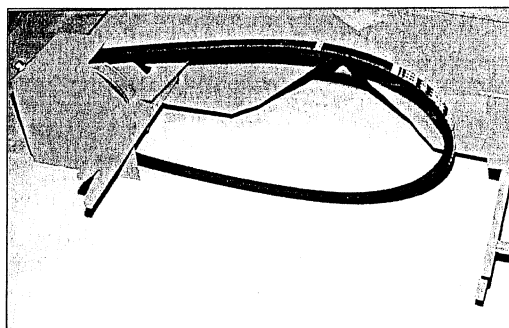


Figure 22

After a little practice and some break-in time on the equipment, changing attachments will become a very simple procedure. Some non-PTO driven attachments can actually be attached and detached without getting off the tractor. Others like the mower can be partly engaged and aligned from the tractor and then a slight push against the front of the mower will complete the engagement. Then lock the EASY-TACH lever, put the PTO belt over the PTO idler pulley, engage the belt tension lever. Reverse the procedure to remove the attachment.

Note for mower hook up—If mower arms are too low for the initial engagement, lift the mower cutting height to a high position. This will position the hitch arms high enough for drive-in contact.

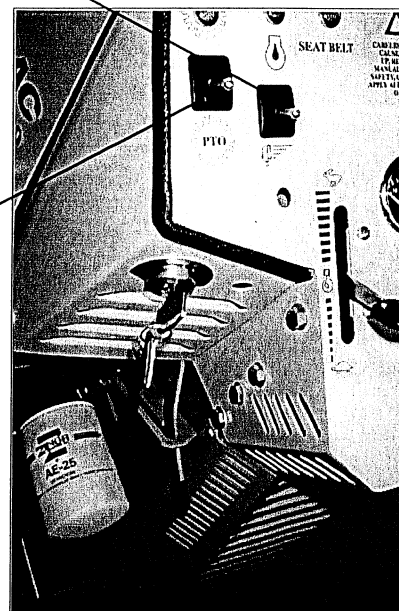
LIGHTS

(Figure 23)

Head and taillights improve safety and operational visibility. Their use is highly recommended especially at dawn or dusk and at night. The headlights can be adjusted to the operator's preference by loosening, from inside the hood, the mounting bolt directly under each light fixture. The fixture can be moved so that the light beam moves up or down, right or left. Once in the desired position, retighten the mounting bolt.

PTO ENGAGEMENT

When engaging power to the front attachment, it is necessary for the operator to be seated and the seat belt fastened. Increase the engine speed to at least 2500 RPM's. (See RPM indicator on the dash). Check that all is clear before engaging the PTO switch (Figure 24). When the PTO switch is engaged, an operation light will come on. When the engine is cold, stalling is possible at the moment of engagement. Increase the engine RPM's and/or increase the warm-up time and try again. The VENTRAC 4000 is equipped with a heavy-duty electric clutch causing potential engine stalls by the abrupt and forceful transfer of power. An integral brake system stops the PTO within 7 seconds when the switch is moved to OFF or the seat belt is disconnected.



Figures 23 & 24

SECTION C OPERATION

STARTING PROCEDURE

(Figure 25)

1. Check engine oil, water, and fuel levels.
 2. Read "CAUTION" and instructions on dash.
 3. Operator should be sitting on the seat.
 4. Fasten seat belt.
 5. Make sure the right side, three-(3) position Control selector is down.
 6. Move throttle forward about 1/4 stroke. (Engines vary)
 7. For gasoline models, pull the choke out. For diesel models, turn the key counter-clockwise and hold until the glow light goes off.
 8. Turn the key clockwise until the engine starts. If the engine fails to start in 15 seconds, stop. Check if there is fuel to the engine:
 - a. listen for electric fuel pump with key turned to "on" position.
 - b. loosen hose line clamp near the engine enough to confirm the presence of fuel.
- Make several more attempts to start. If the engine does not start, contact a mechanic or the dealer.
9. Once the tractor is started, let the engine and transmission system warm up a minute or two. Always check to see if the steering system is responsive before attempting to drive the tractor. This assures that the hydraulic system is fully charged. In cold weather conditions, continue the warm-up period for 3 or 4 minutes.

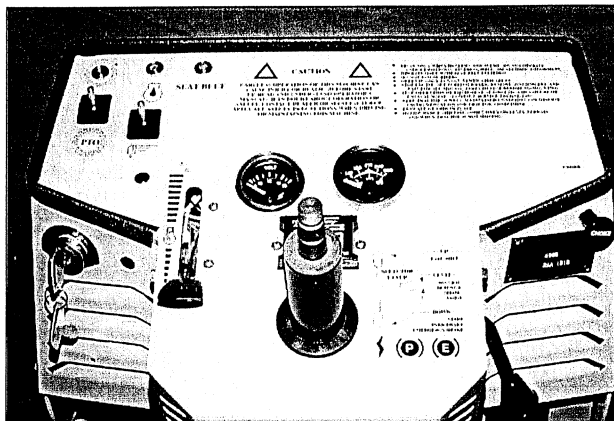



Figure 25

ATTACHING ATTACHMENTS

Most front mounted attachments can be positioned so that it is convenient to drive into the hitch harness with nearly correct alignment (**Figure 26 & 27**). Slight adjustment may be required to complete the hitch engagement.

When completely engaged, turn the “Easy Tach” lever to “lock” position. If lever will not move into “lock” position, check the attachment for complete engagement.

Mower attachments have a floating hitch (**Figure 26 & 27**). If mower cutting height is set near the highest position, the tractor can be driven into the hitch arm. Then raise the hitch until the mating arms are parallel. **Complete the engagement:**

-  **1. Shut off the engine and engage the park brake.**
2. Walk to the front of the mower and push it into the tractor as far as the hitch will allow. Make sure both sides are against the stop (**Figure 28**).
3. Place the mower PTO belt over the outside groove of the idler pulley (**Figure 29**).
4. Return to the tractor seat. Engage the “Easy Tach” lever into the “lock” position and the PTO tension lever up into the “tightened” position.

Note:

1. Attachment changing is made easier and safer by always using level clean surfaces.
2. Heavy duty, close tolerance latch hooks (**Figure 30**) make complete engagement of attachment hitch necessary on both sides before “Easy Tach” lock can be activated. The result is a strong, well fitted connection for optimum control and performance.

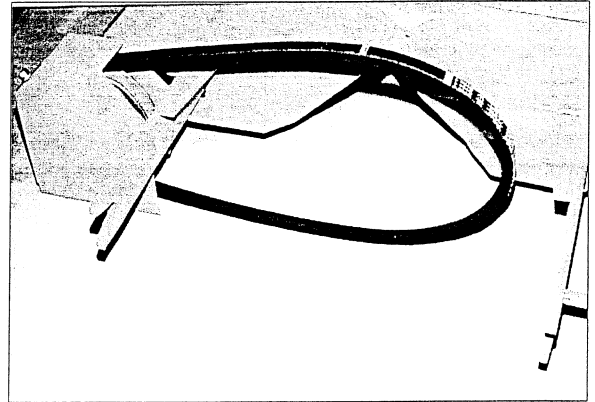


Figure 26

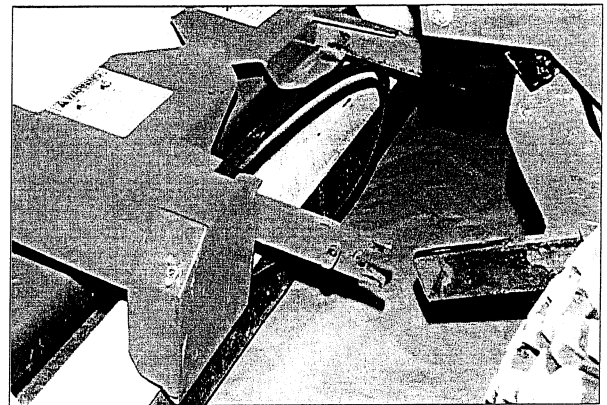
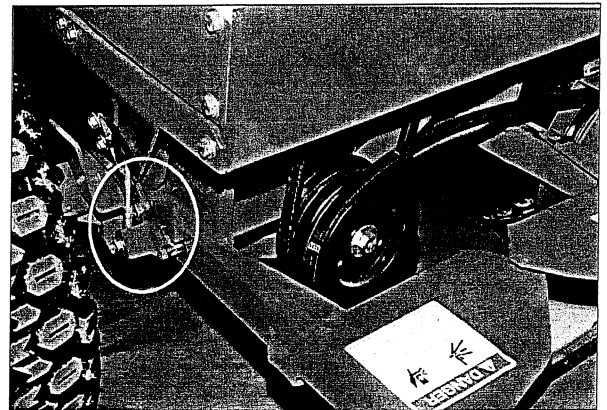


Figure 27



Figures 28-30

SECTION C OPERATION

DUAL WHEEL MOUNTING/OPERATION

Duals are an option available for the VENTRAC 4000. They are useful for increasing stability on slopes and for reduction of soil compaction. Once the dual brackets have been installed in each wheel, the duals can be mounted and dismounted quickly by the single, center bolt connection. Duals can be used on any or all four wheels. Keeping the center mounting bolt tight, the inflation pressure to a max of 4 lbs psi and operational gentleness are critical for successful, safe and continuous performance of the duals.

Duals are recommended for sandy soils or where a broad distribution of tractor weight is desired, including when driving sideways on slopes greater than 20 degrees. Duals are only one of numerous considerations for safety on slopes. Speed, terrain, irregularities, and even the potential for equipment stoppage are serious factors to consider for safe operation of the tractor.

INITIAL MOUNTING INSTRUCTIONS:

1. Park tractor on a level surface, engage park brake, remove key, block one or two wheels, jack one wheel or axle just high enough to clear the ground.
2. Remove lug nuts on one suspended wheel (**NOTE:** lug nuts may be loosened before tires are off the ground to prevent rotation.) and remove the wheel.
3. Tap the 5 bolts out of the wheel hub. Insert 5 longer bolts (7/16 NF x 3 Hex Head Cap). Tap them into the counter bore of the hub with a hammer.
4. Remount the tire and reuse the flared lug nuts. Tighten to 55 foot pounds.
5. Install the 5 hole bracket (**Figure 31**) with 5 tabs over the bolts and against the lug nuts.
6. Add 5 7/16 NF standard hex nuts to the wheel hub bolts and tighten to approx. 55 foot pounds.
7. Install the spacer tube with 5 bolts into the dual wheel. Fasten with 5 flared lug nuts and tighten to approx. 55 foot pounds (**Figure 32**).

Note: Valve stem needs to face outward from tractor.

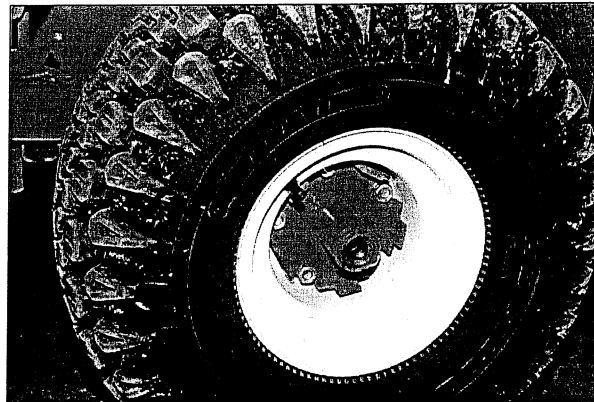


Figure 31

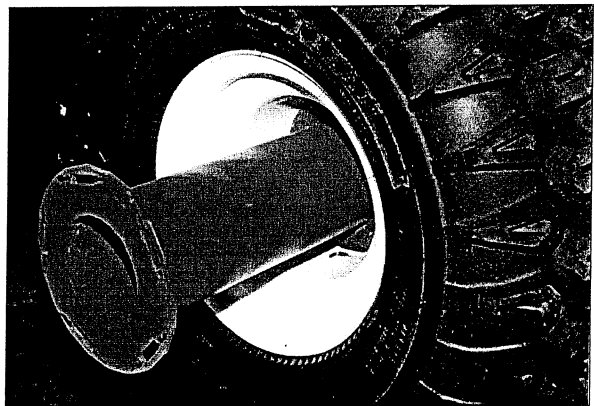


Figure 32

Revised 3/26/01

Dual Mounting Instructions (Cont.):

8. Carefully guide the spacer tube with the outside tire into the center of the mounted tire and align it with the mating tabs. Once engaged, hold wheel assembly squarely against the inside brackets so that the center bolt can be threaded into the center hole. Once started, use a 1-1/8" wrench and tighten to approx. 100 foot pounds. **Do not use impact wrench.**

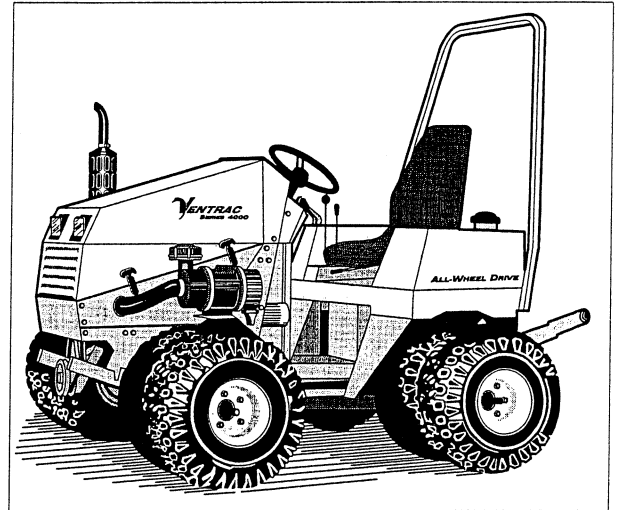
9. Repeat this procedure for the initial installation of each dual.

10. After the duals have been installed and the jack, tools and blocking moved away, drive the tractor on the level for a few minutes with or without an attachment. Then recheck the center mounting bolt for proper torque.

11. Repeat this check after 30 minutes of use or at any time a sound or sight suggests the dual might be loose. Generally after several hours of use, the assembly is broken in and well fitted so the check procedure is less necessary.

12. If tightening the center bolt does not eliminate an apparent looseness of the duals, reverse the above procedure and recheck the first 5 flared lug nuts on the inside wheel.

Note: After the initial mounting of the dual wheel kit brackets to the inside wheel, the outer duals can be mounted or removed by driving the inside tire(s) on to a small block(s). This raises the axle enough for the necessary clearance to align the outer dual wheels.

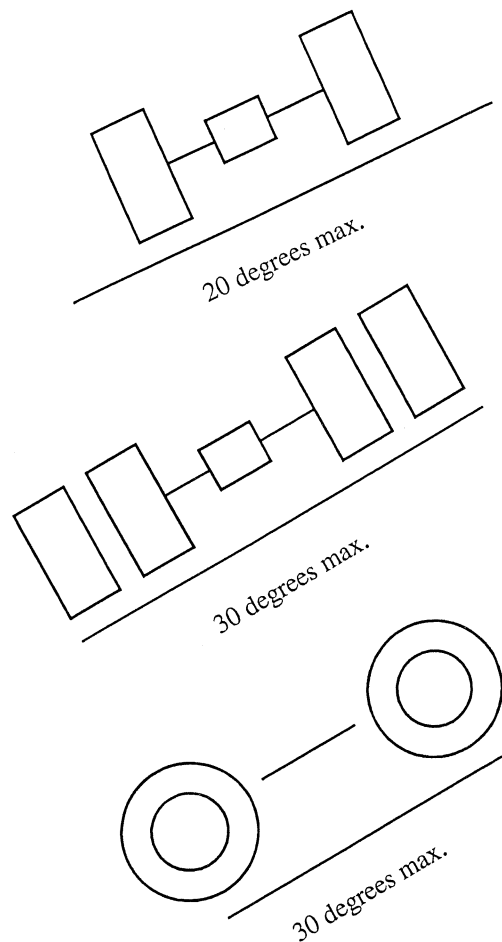


SECTION C OPERATION

OPERATING ON SLOPES

Operation on slopes decreases tractor stability and increases the possibility for unexpected difficulties. Only experienced VENTRAC 4000 operators should operate the tractor on slopes and extra caution should be applied that include: (See drawings at right.)

- 1.— avoiding uneven, loose or wet terrain.
- 2.— staying clear of drop-offs, holes, ditches, rocks, or objects that could cause a sudden and/or unexpected force on the tractor.
- 3.—using low range and slow speed. Use sufficient engine rpms. to prevent engine stall.
- 4.—using sufficient fuel in tank to assure continuous operation.
- 5.—making slow and cautious starts, stops, and turns.
- 6.—using the traction transfer system with attachments.
- 7.— No “horse play!”
- 8.— using duals when traveling across slopes of more than 20 degrees.
- 9.—ceasing operation if tractor instability is suspected or evident, or if the operator is uncomfortable or unsure of continuing safe operation.



Keep engine oil level near full mark when operating on slopes.

Engines are designed for continuous operation at 25 degrees or less.

**The ultimate responsibility for safe operation on slopes is the responsibility of the operator!
IF IN DOUBT...DON'T!!**

SECTION D SERVICE & MAINTENANCE

Each day's operation of the tractor should begin with an oil, water, and fuel check.

CRANKCASE OIL

Each engine is equipped with a dipstick to check the crankcase oil level. Check the engine manual for specific instruction about the engine. Oil level should be in the range between the high and low mark. If working the tractor on slopes, oil level should be kept near the full mark. The capacities and filter part numbers are shown in the chart to the right (Figure 33). Regular and proper maintenance will greatly extend the life and performance of the engine.

Changing oil—The crankcase oil drain is located a few inches ahead of the left front axle housing and about 2" under the side frame (Figure 34). It requires an 11/16" wrench. Oil stream will be directed nearly straight down. Nearby is a hose that will drain the spilled oil from the oil filter. It's designed to drain into the same waste container.

See engine manual for oil specifications

	Vanguard	Kubota	Kawasaki
Capacity	3.5 qts.	3 qts.	2 qts.
Filter #	13.057	13.055	13.063

See engine manual for details

Figure 33



Figure 34

RADIATOR

The fluid or coolant level can be checked visually in the overflow bottle (Figure 35). High and low marks are shown on the plastic bottle. If low, a 50-50 mixture of water and antifreeze should be added. Check the radiator core for debris. Screen can be removed by lifting it about 3 inches, clearing the screen track and tilting it slightly. If the radiator cores are partially plugged, use a water or air hose to remove the debris. Reinstall the radiator screen. Check radiator screen frequently when working in dirty conditions or when the temperature gauge moves above 220 degrees. Do not spray or wash a hot engine with cold water.

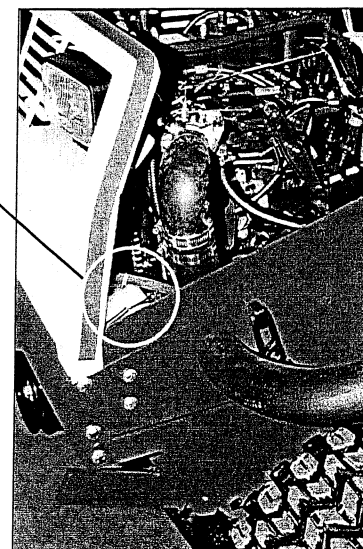


Figure 35

SECTION D SERVICE & MAINTENANCE

AIR INTAKE FILTER

The air intake filter on some engine models is located on the left fender (**Figure 36**). This external filter assembly has 4 stages of filtration. **1**) An intake turbo. **2**) A dust unloading valve. (1 & 2 require no servicing.) **3**) A prefilter (accessible by pushing the large rear cover in and turning counter-clockwise.) **4**) a final cylinder element. Replace 3 and 4 as needed.

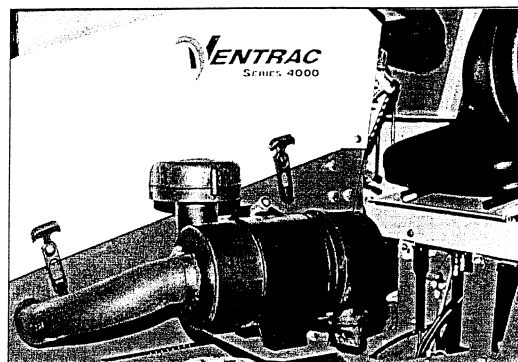


Figure 36

Engine air intake filters located on the top of the engine have a prefilter band over a paper element. Applying a light film of a light oil increases the effectiveness of the prefilter. The paper element should be changed if its appearance is dirty or light is no longer visible at any point through the element when held up to a light source. See engine manual for more details.

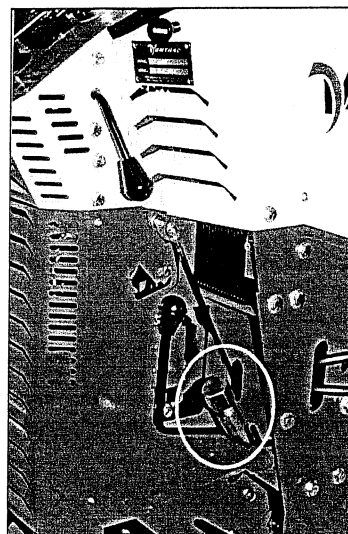


Figure 37

HYDROSTATIC TRANSMISSION OIL

The front transaxle is the oil reservoir for the hydrostatic transmission oil. The fill tube is located below the steering wheel on the right side of the tractor (**Figure 37**). Look for the “Hydrostatic Oil Only” decal. The hex head cap requires a 1-1/4” wrench for removal. The chart at the right shows the required fluid specifications. This is critical for proper performance and life of the hydrostatic system. **NOTE: Non-compliance to this specification may void the VENTRAC 4000 warranty.**

REQUIRED OIL SPECIFICATION
A M S O I L Synthetic Hydraulic Transmission Oil TYPE ATH SAE 30
System Capacity: Front—8 quarts Rear—2 quarts

Hydrostatic Transmission Oil (Cont.)

The hydrostatic transmission oil level is checked at the horizontal tube just in front of the left front axle housing (Figure 38). A 9/16" wrench is required. Set tractor in a level position and allow it to set a few minutes before checking. If the oil level is full, oil will run out the horizontal tube. If oil does not run out, add a pint at the fill tube. After 10 seconds if no oil comes out the horizontal tube, add another pint. Repeat until oil flows from the horizontal tube. **REINSTALL BOTH HEX CAPS and tighten them moderately!**

Note: Generally the hydrostatic oil level remains constant except when:

- 1) New attachments are added that use the auxiliary oil circuit.
- 2) There is an oil leak.

NOTE: Replacement of hydrostatic oil is not recommended except in the event of contamination.

REAR TRANSAXLE

The rear transaxle oil is captive and remains constant unless there is a leak. For convenience, the same oil is recommended that is used in the front transaxle. Oil can be added through the plug from the rear (Figure 39). It is located above the rear hitch and slightly to the left. To check the oil level, remove the foot platform cover and find the *full-level* plug in the transaxle a few inches above the floor of the service tunnel. If no rear transaxle leaks are observed, this level should be checked every 250 hours or annually.



Figure 38

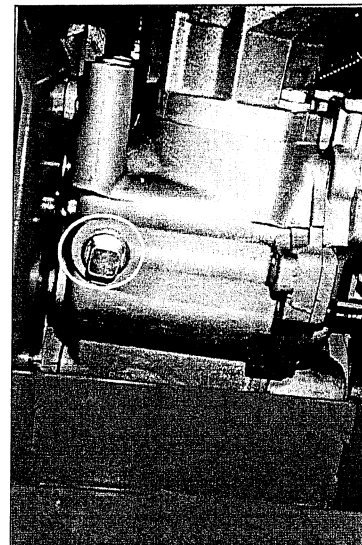


Figure 39—fill tube

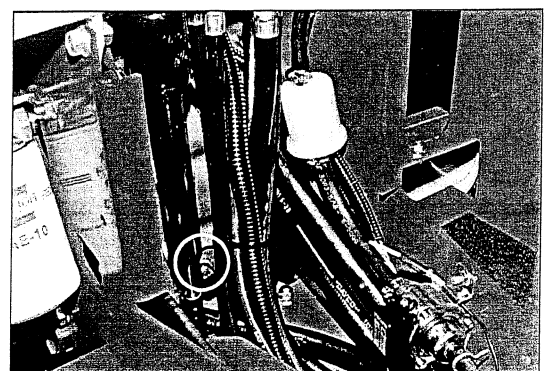


Figure 39—checkpoint

SECTION D SERVICE & MAINTENANCE

HYDROSTATIC OIL FILTERS

Two filters protect the hydrostatic transmission system.

1) A 25-micron (suction) non-bypass filter located above the operator's left foot on the front frame of the tractor (**Figure 40**). Part # 21.001

2) A 10-micron (pressure) filter located behind the right foot of the operator on the rear frame of the tractor (**Figure 41**). Part # 21.078

These filters do not need to be changed unless the system is contaminated or the operator experiences noticeable loss of steering when the hydrostatic oil level is properly maintained. If this symptom occurs, change both filters.

Replacement of oil filters may create some oil spill, especially the front filter. A shallow pan or towel can be helpful in containing the oil spill.

FUEL LINE FILTER (S)

IN-LINE FUEL FILTER

All VENTRAC 4000's have an in-line fuel filter (**Figure 42**) located inside the foot platform cover.

Always use clean, fresh fuel. Keep the fill area clean and the fuel cap in place except for filling. If or when any of the above conditions are not met or the engine lacks power, especially under load, the fuel filter should be checked. If the in-line filter needs to be replaced, be sure to install the new one with the flow arrow pointing toward the engine. Part # 13.053

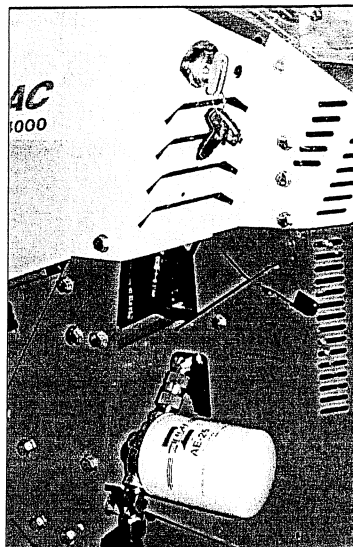


Figure 40

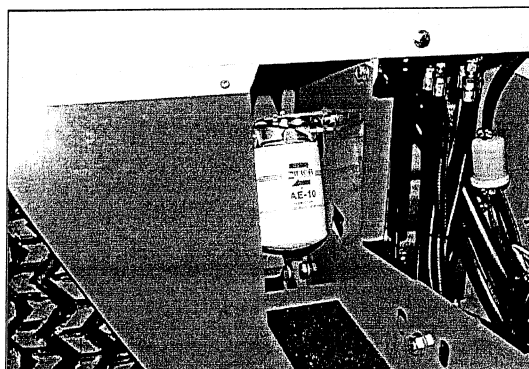


Figure 41

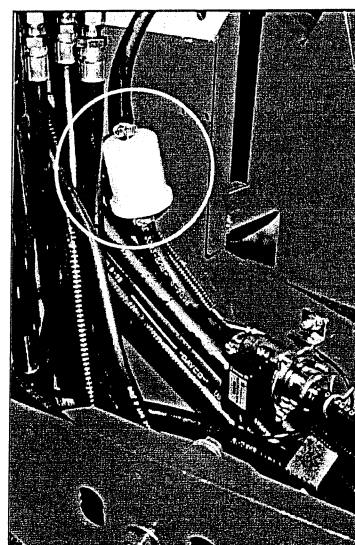


Figure 42

DIESEL FUEL/WATER SEPARATOR

Diesel models have a filter/water separator located next to the High/Low shift lever (**Figure 43**). Water and sediment can be observed through the glass. Drain water through the small black valve. Remove sediments through the white plug opening. Any time the fuel line to the diesel engine is opened or run empty, the system needs to be purged of air. Self-purging should occur by turning the ignition to “on” for about 30 seconds. The operator should hear the fuel pump (**Figure 44**) operating. Purging should be done before attempting to start the tractor.

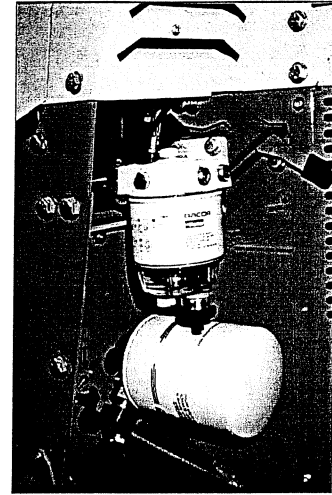


Figure 43

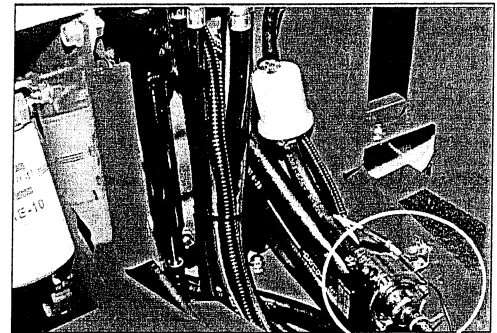


Figure 44

BATTERY

When it is necessary to remove and/or replace the battery, remove both cables. Then remove the bracket (**Figure 45**) near the left side of the foot platform and slide the battery forward and out. To install the new battery, repeat the above instructions in reverse. Be sure the new battery has the same dimensions, has top terminals, and is installed with the terminals on the side toward the center of the tractor.

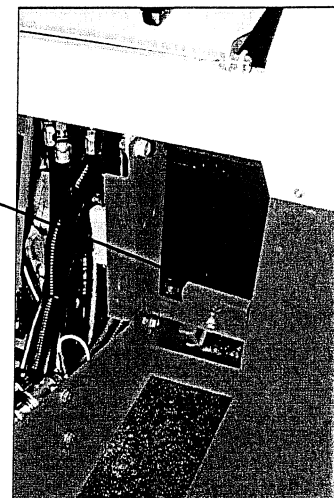


Figure 45

SECTION D SERVICE & MAINTENANCE

BRAKE ADJUSTMENT

A 6" diameter brake band is activated by the 3-position control selector. The brake holds only when the lever is in the **down** position. If brake is not holding sufficiently, tighten the 1/4" nut on the rod just below the dash on the right side (**Figure 46**). Turn the lock nut clockwise several turns. Check if sufficient pressure is applied for brake to hold. Adjust lock nut until the brake hold is firm. If the brake adjustment is too tight, it will be difficult to engage the control selector in park position.

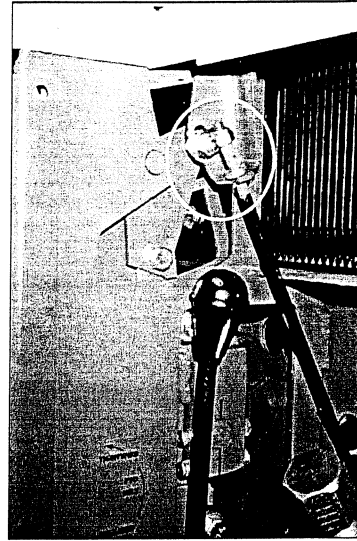


Figure 46

RADIATOR SCREEN REMOVAL

A corrugated screen (**Figure 47**) is held in place by a full length slide on the right side and a short slide on the left side.

1. Lift the screen approximately 3 inches to free it from the left slide track.
2. Pull screen to the left about an inch to free it from the right slide track.
3. Tilt the screen and remove.
4. Clean debris from screen and radiator.
5. Reinstall screen (use the above procedure in reverse). Make certain that the screen is set correctly in both right and left slide tracks.

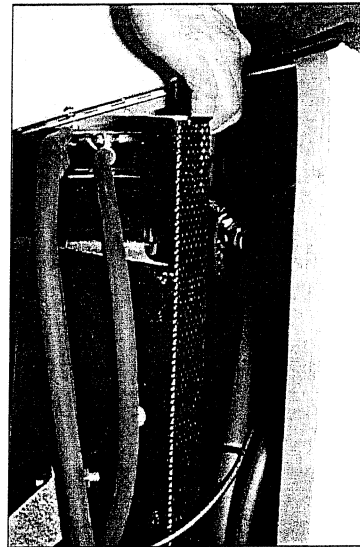


Figure 47

ELECTRICAL

Circuit breakers and relays are conveniently located just under the dash and accessible with the hood open (**Figure 48**). See wiring diagram.

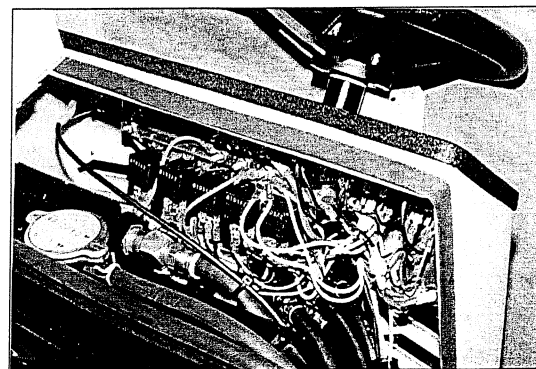


Figure 48

Neutral Adjustment

The tractor should always come to a complete stop when the **Control Selector** is in the “park brake” position (down) or the “spring assist to neutral” position (level) when the Directional Control lever is in neutral. If the tractor consistently wants to creep while in neutral, an adjustment must be made to the neutral device.

NOTE: Caution should be used when making this adjustment. During the correction process, the tendency to creep can be increased and the tractor could actually begin to move. To prevent this possibility, jack up the right front and right rear of the tractor so the tires are off the ground. This has two advantages: 1) SAFETY, because the tractor has no traction to move and 2) neutral can easily be determined when tire rotation stops.

NOTE: The neutral adjustment procedure is recommended with the engine running around 2000 RPMs.

Place the selector control in the level, “spring assist to neutral” position (**Figure 49**). Located on the bottom right side of the steering column is a bolt (5/16) located in a slot (**Figure 50**). Loosen the nut just enough to free the grip of the bolt from the slot. Move the bolt slightly in either direction until the tendency to creep stops. Retighten the bolt. If it seems that this bolt has not been retaining its proper position, a little extra tightening will be necessary.

NOTE: If in doubt about this procedure or your efforts fail to remedy the problem, contact your VENTRAC dealer.

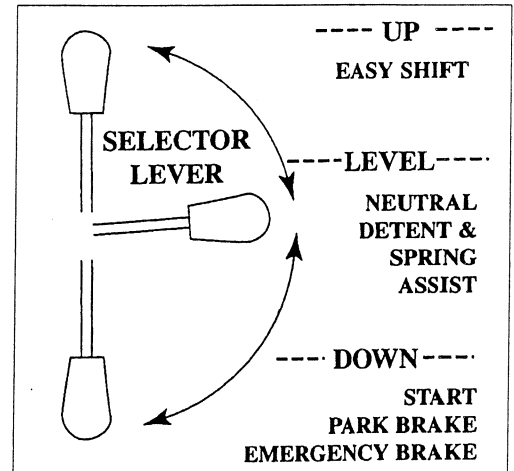


Figure 49

2000 RPMs

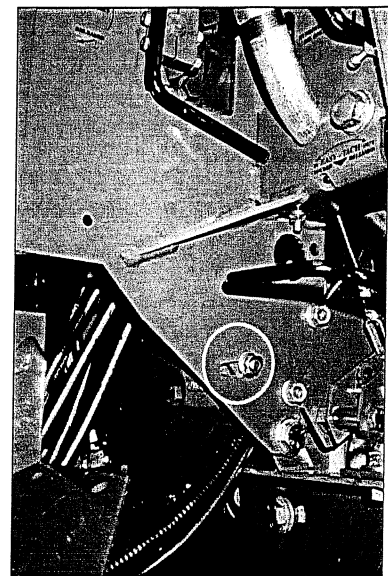


Figure 50

SECTION D SERVICE & MAINTENANCE

PLATFORM COVER

(Figure 51)

To Remove:

1. Remove bolt at the front of the cover.
2. Pull the cover forward enough to disengage the 2 tabs at the lower rear end of the cover.
3. Lift rear part of cover to free the top 2 tabs from the chassis.
4. Continue to raise the rear part of the cover until it can be freely removed from the platform.

To install, repeat the above procedures in reverse.



Figure 51

PTO BELT CHANGE

(Engine to Idler)

Steps:

1. Remove belt from lower PTO idler pulley.
2. Remove nut from bottom flange on front grille (torque rod). (Figure 52)
3. Disconnect the 2 wire plug to clutch assembly (on service cord about 6 to 10 inches from clutch assembly).
4. Rotate clutch brake assembly to maximize the clearance between clutch and grille. (Figure 53)
5. Lift belt off clutch pulley. Turn belt sideways and slip belt down between clutch assembly and grille.
6. Replace with new belt by reversing the procedure (size B38). **Note:** This belt size requires lower idler to be mounted in the middle hole of idler bracket.
7. Reinstall spring and nut on the torque rod to prevent clutch/brake assembly from rotating. (Figure 52) This rod must be well secured. Extensive damage will occur to the clutch if not secured.

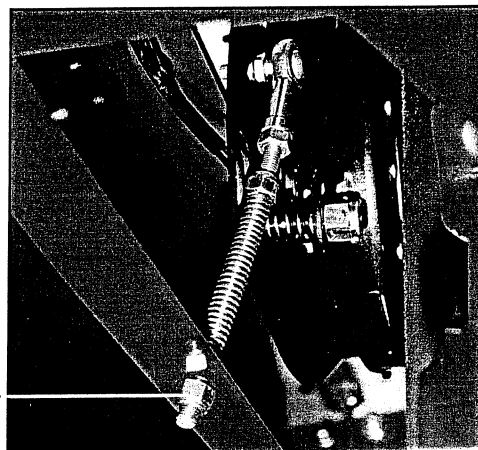


Figure 52

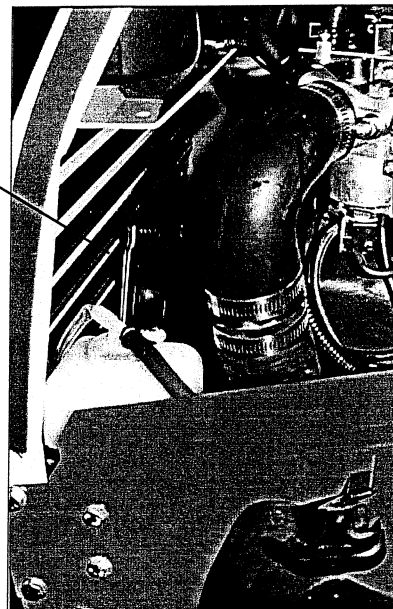


Figure 53

Note: Kawasaki engine models do not require steps 2, 3, 4, and 7

Revised 8/99

Service Schedule

The operator's manual and decals should be read and understood before operating the tractor, attachments, or implements. This manual should be reviewed periodically or when in doubt about any function, procedure, or safety factor on this equipment.

Daily

Check the oil and water levels daily in the engine. Fuel level needs to be checked every couple hours. When working on slopes, keep a minimum of 1/4 tank of fuel. Radiator screen should be checked frequently when working in a dirty environment. Temperature gauge can alert operator to over heating due to clogged radiator screen. Air intake filter should be checked daily when operating in dirty conditions. Change when needed. Keep equipment clean. Accumulated debris can restrict performance, cause equipment failure and be a safety hazard.

Visual

Many equipment conditions are visible before operating. For example, oil leaks, low tire inflation, obstructed radiator screen, loose or missing hardware, shields or something broken. These should be repaired or replaced before operating!

Some equipment conditions are not evident until operating. For example, a failing bearing, broken electrical wire, faulty switch or loose part. These should be corrected as soon as possible. Operation should cease immediately if an unsafe condition is observed!

Operators should always be alert for potential problems. Personal safety and the safety of others as well as the performance of the equipment depend on the operator's care and repair of the machine and continuous caution and control of the same.

Oil and Filter Change

Kawasaki — Initial change at 8 hours and every 50 hours thereafter.
Kubota — Initial change at 50 hours and every 100 hours thereafter.
Vanguard — Initial change at 50 hours and every 100 hours thereafter.
Note: refer to engine manual for further details.

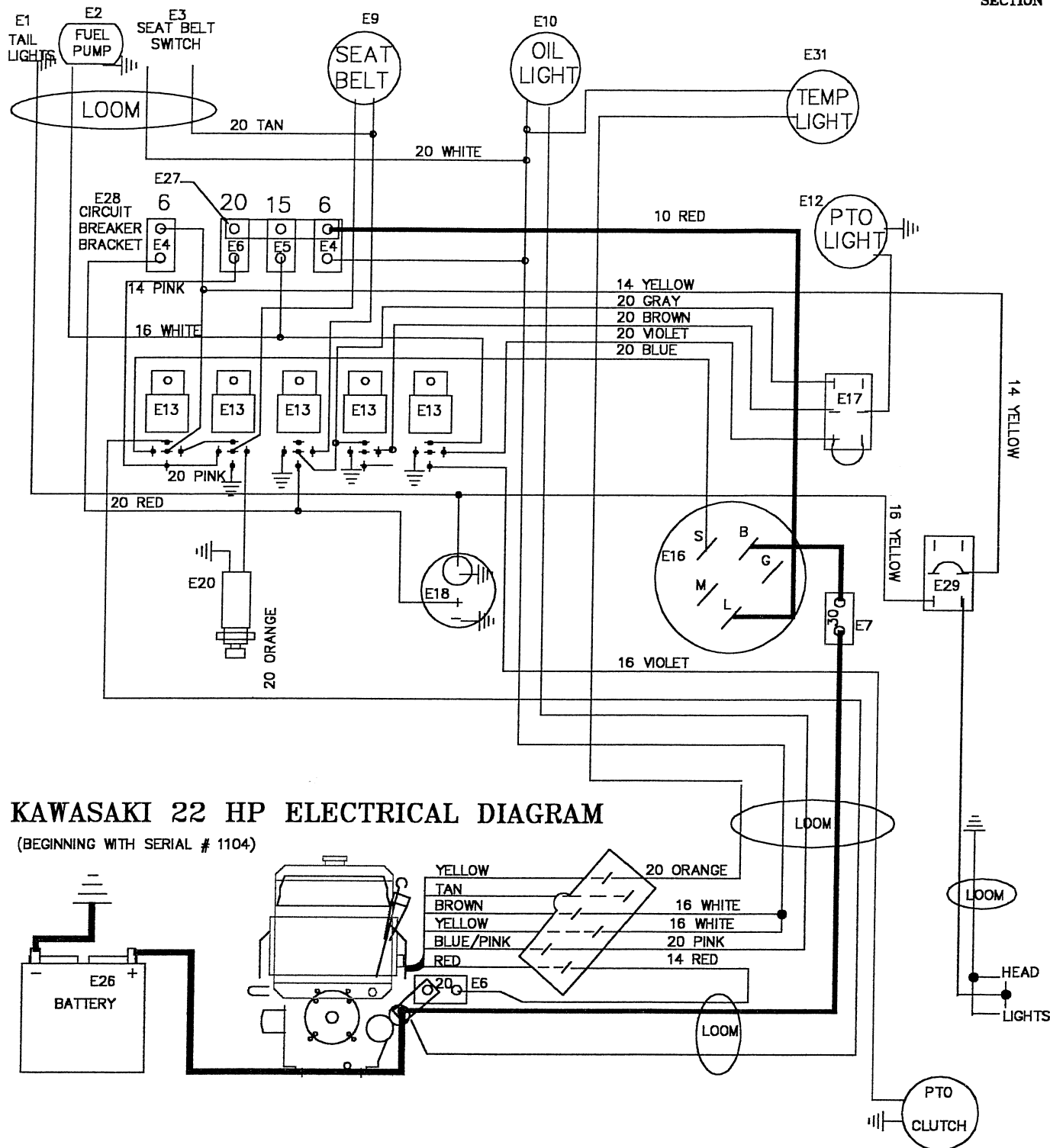
Transaxle Oil and Filters

Change oil filters only if there is a noticeable loss of power steering (assuming proper oil level has been maintained). Change oil and oil filters only if the system has been contaminated. Check oil levels every 100 hours. If there is an oil leak or new attachments have been used that require "priming", the front transaxle oil level should be checked at that time.

Storage

Drain fuel tank, check for proper tire inflation and remove battery (original battery is maintenance free) but maintain charge during stored time. A 50-50 mixture of antifreeze and water is required for the radiator. This ratio is necessary for proper cooling and cold weather protection. If in doubt, use an antifreeze tester to test before storing.

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KAWASAKI 22 HP ELECTRICAL DIAGRAM

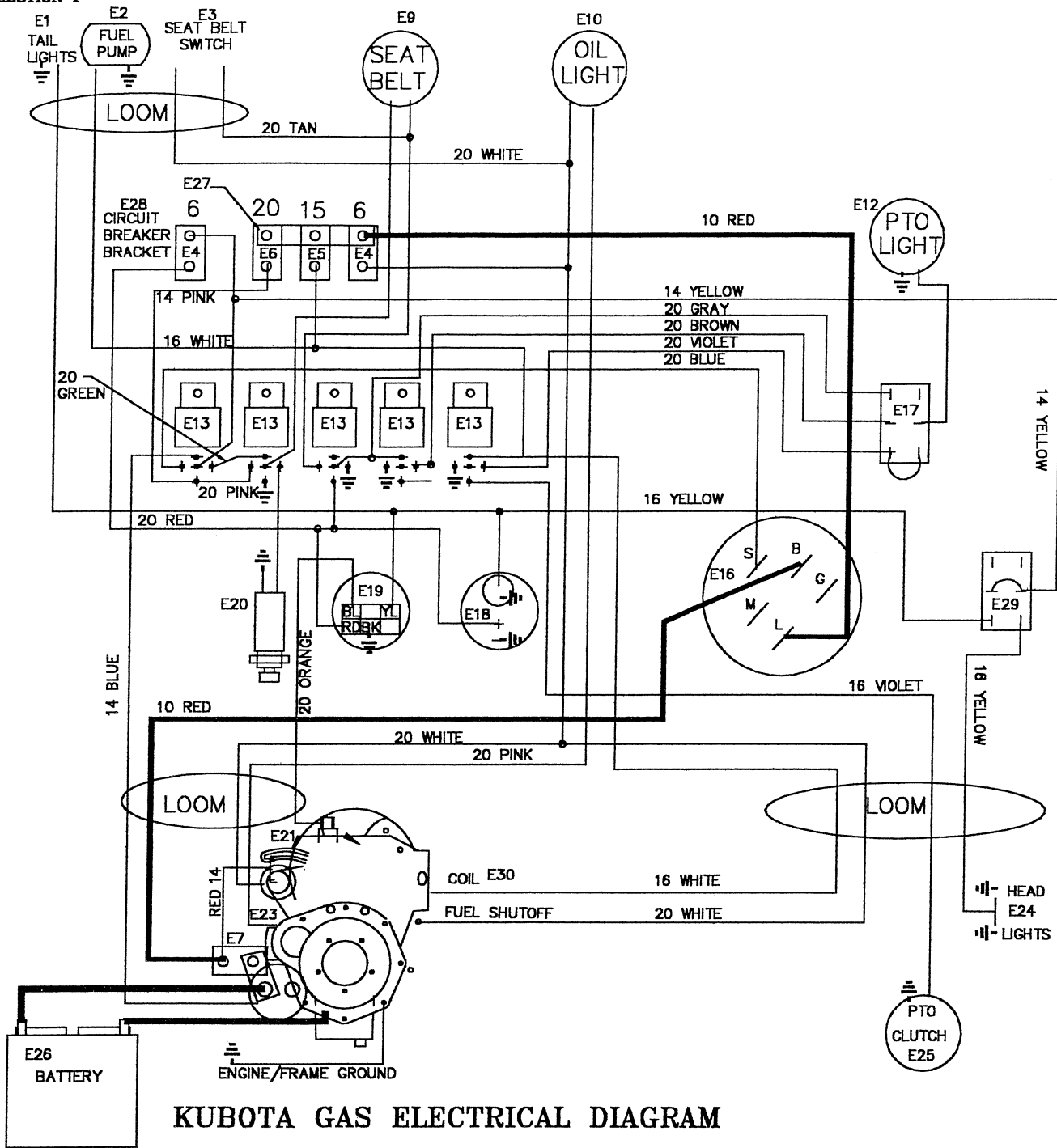
(BEGINNING WITH SERIAL # 1104)

ITEM	#	PART #	DESCRIPTION
E1	2	33.022	TAIL LIGHT
E2	1	13.077	FUEL PUMP
E3	1	47.104	SEAT BELT SWITCH
E4	2	30.153	CIRCUIT BREAKER 6 AMP
E5	1	30.114	CIRCUIT BREAKER 15 AMP
	2	30.119	CIRCUIT BREAKER 20 AMP
E7	1	30.120	CIRCUIT BREAKER 30 AMP
E8			
E9	1	33.031	SEAT BELT LIGHT
E10	1	33.031	OIL LIGHT
E11			
E12	1	33.020	PTO LIGHT
E13	5	35.089	5 POLE RELAY
E14			
E15			
E16	1	13.078	IGN. SWITCH
E17	1	31.022	PTO SWITCH
E18	1	35.087	VOLT METER

ITEM	#	PART #	DESCRIPTION
E19		35.094	TEMPERATURE GAUGE
E20	1	31.031	NEUTRAL SWITCH
E21	1	13.075	TEMP SENDER
E22			
E23	1	12.076	OIL SENDER
E24	2	33.021	HEAD LIGHT
E25	1	37.081	PTO CLUTCH
E26	1	33.030	BATTERY
E27	1	30.125	3 GANG BUSS BAR
E28	1	30.124	6 GANG CIRCUIT BREAKER BRACKET
E29	1	31.022	LIGHT SWITCH
E30			
E31	1	33.031	TEMPERATURE LIGHT
E32			
E33			
E34			
E35			
E36			

HTE036 R

SECTION F



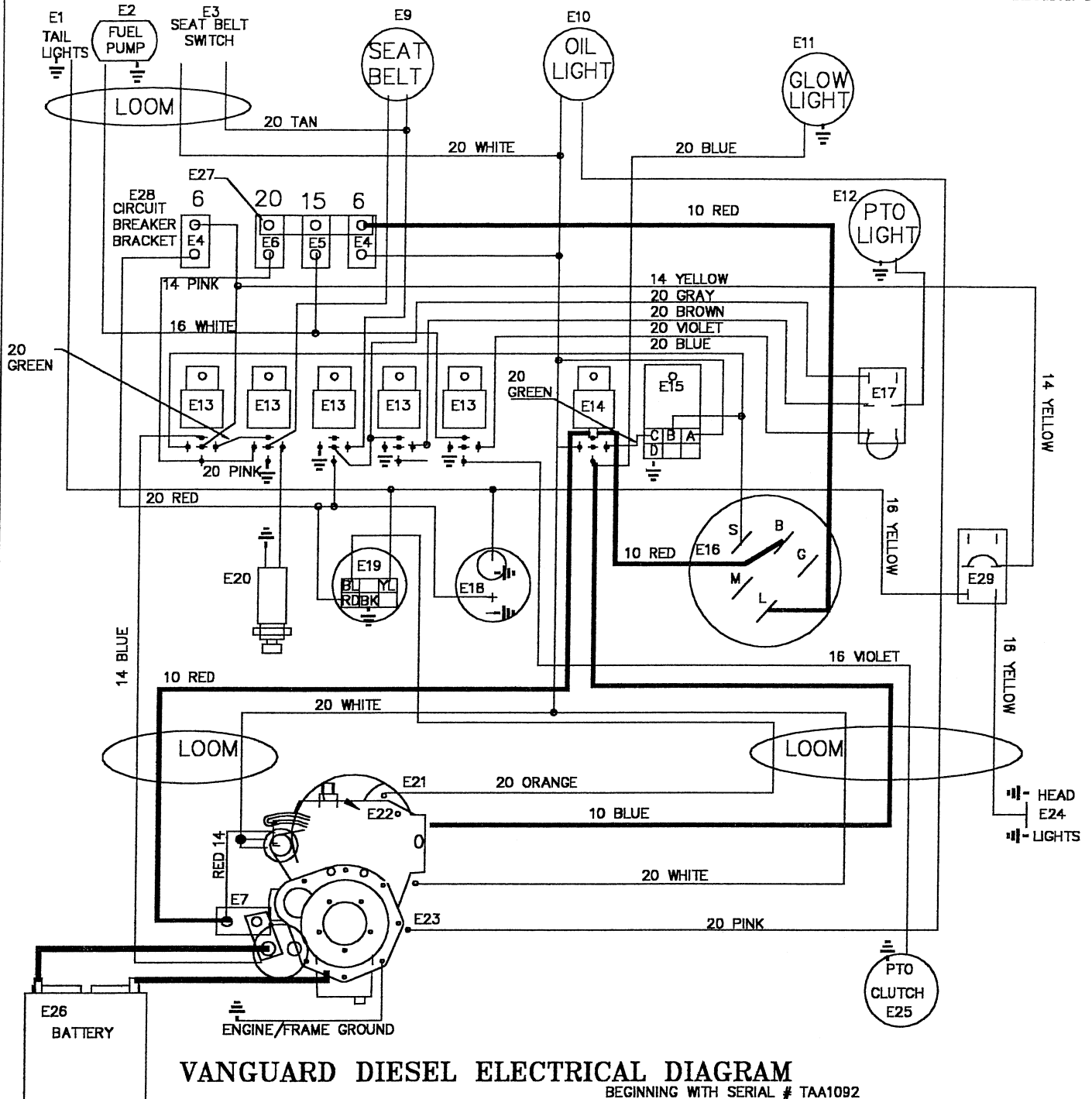
KUBOTA GAS ELECTRICAL DIAGRAM

BEGINNING WITH SERIAL # 1106

ITEM #	PART #	DESCRIPTION
E1	2	33.022 TAIL LIGHT
E2	1	13.058 FUEL PUMP
E3	1	47.104 SEAT BELT
E4	2	30.153 CIRCUIT BREAKER 6 AMP
E5	1	30.114 CIRCUIT BREAKER 15 AMP
E6	1	30.119 CIRCUIT BREAKER 20 AMP
E7	1	30.120 CIRCUIT BREAKER 30 AMP
E8		
E9	1	33.031 SEAT BELT SWITCH
E10	1	33.031 OIL LIGHT
E11		
E12	1	33.020 PTO LIGHT
E13	5	35.089 5 POLE RELAY
E14		
E15		
E16	1	13.078 IGN. SWITCH
E17	1	31.022 PTO SWITCH
E18	1	35.087 VOLT METER

ITEM #	PART #	DESCRIPTION
E19	1	35.094 TEMPERATURE GAUGE
E20	1	31.031 NEUTRAL SWITCH
E21	1	13.066 TEMP SENDER
E22		
E23	1	13.070 OIL SENDER
E24	2	33.021 HEAD LIGHT
E25	1	37.081 PTO CLUTCH
E26	1	33.030 BATTERY
E27	1	30.125 3 GANG BUSS BAR
E28	1	30.124 6 GANG CIRCUIT BREAKER BRACKET
E29	1	31.022 LIGHT SWITCH
E30	1	33.021 COIL
E31		
E32		
E33		
E34		
E35		
E36		

HTE034^R

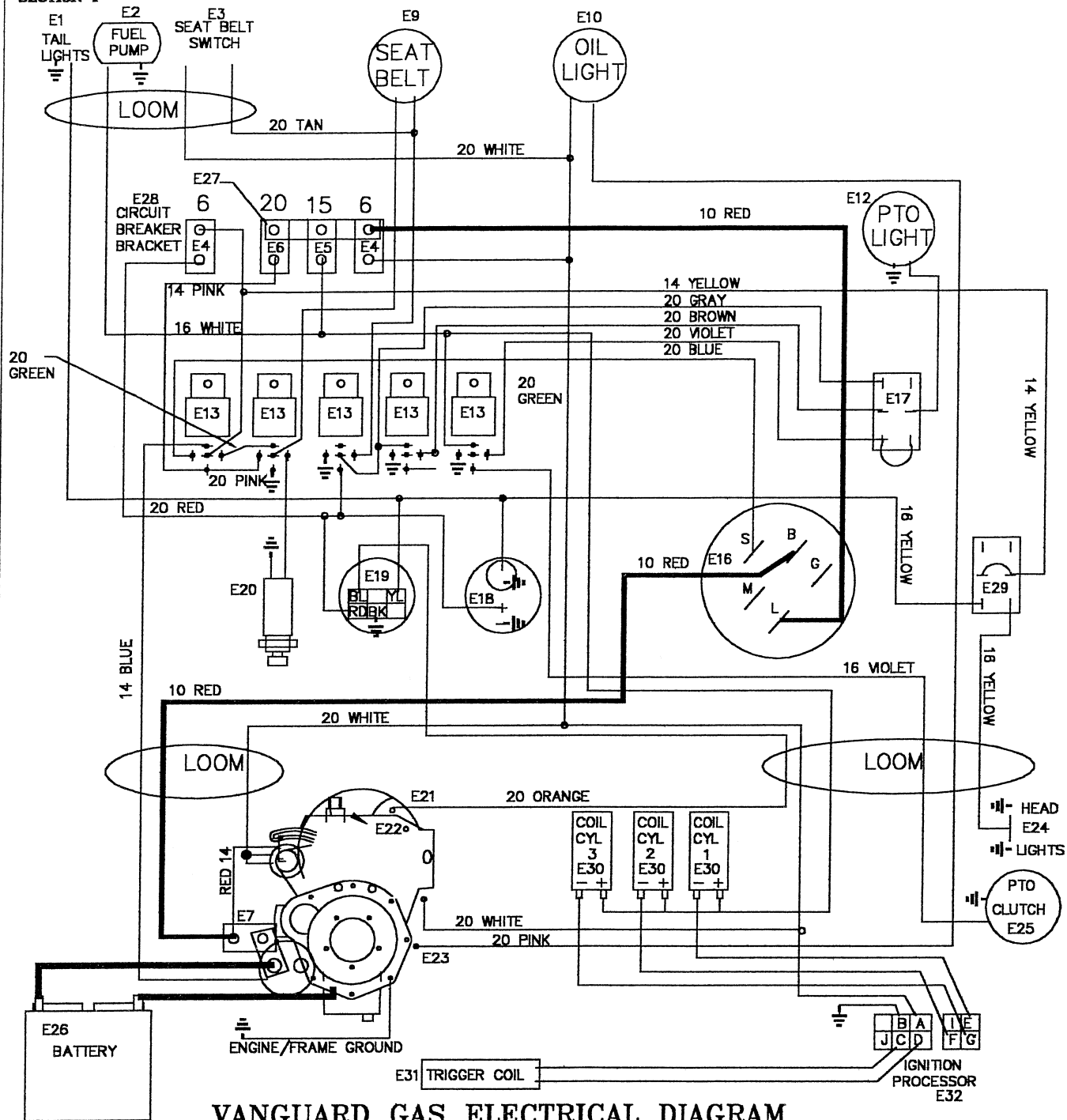


ITEM #	PART #	DESCRIPTION
E1	2	33.022 TAIL LIGHT
E2	1	13.058 FUEL PUMP
E3	1	47.104 SEAT BELT
E4	2	30.153 CIRCUIT BREAKER 6 AMP
E5	1	30.114 CIRCUIT BREAKER 15 AMP
E6	1	30.119 CIRCUIT BREAKER 20 AMP
E7	1	30.120 CIRCUIT BREAKER 30 AMP
E8		
E9	1	33.031 SEAT BELT LIGHT
E10	1	33.031 OIL LIGHT
E11	1	33.032 GLOW PLUG LIGHT
E12	1	33.020 PTO LIGHT
E13	5	35.089 5 POLE RELAY
E14	1	35.097 4 POLE RELAY
E15	1	13.071 GLOW PLUG TIMER
E16	1	13.078 IGN. SWITCH
E17	1	31.022 PTO SWITCH
E18	1	35.087 VOLT METER

ITEM #	PART #	DESCRIPTION
E19	1	35.094 TEMPERATURE GAUGE
E20	1	31.031 NEUTRAL SWITCH
E21	1	13.066 TEMP SENDER
E22	3	13.067 GLOW PLUGS
E23	1	13.069 OIL SENDER
E24	2	33.021 HEAD LIGHT
E25	1	37.081 PTO CLUTCH
E26	1	33.030 BATTERY
E27	1	30.125 3 GANG BUSS BAR
E28	1	30.124 6 GANG CIRCUIT BREAKER BRACKET
E29	1	31.022 LIGHT SWITCH
E30		
E31		
E32		
E33		
E34		
E35		
E36		

HTE027 R 4

SECTION F



VANGUARD GAS ELECTRICAL DIAGRAM

BEGINNING WITH SERIAL # 1108

ITEM #	PART #	DESCRIPTION
E1	2	33.022 TAIL LIGHT
E2	1	13.058 FUEL PUMP
E3	1	47.104 SEAT BELT SWITCH
E4	2	30.153 CIRCUIT BREAKER 6 AMP
E5	1	30.114 CIRCUIT BREAKER 15 AMP
E6	1	30.119 CIRCUIT BREAKER 20 AMP
E7	1	30.120 CIRCUIT BREAKER 30 AMP
E8		
E9	1	33.031 SEAT BELT LIGHT
E10	1	33.031 OIL LIGHT
E11	1	
E12	1	33.020 PTO LIGHT
E13	5	35.089 5 POLE RELAY
E14	1	
E15	1	
E16	1	13.078 IGN. SWITCH
E17	1	31.022 PTO SWITCH
E18	1	35.087 VOLT METER

ITEM #	PART #	DESCRIPTION
E19	1	35.094 TEMPERATURE GAUGE
E20	1	31.031 NEUTRAL SWITCH
E21	1	13.066 TEMP SENDER
E22		
E23	1	13.069 OIL SENDER
E24	2	33.021 HEAD LIGHT
E25	1	37.081 PTO CLUTCH
E26	1	33.030 BATTERY
E27	1	30.125 3 GANG BUSS BAR
E28	1	30.124 6 GANG CIRCUIT BREAKER BRACKET
E29	1	31.022 LIGHT SWITCH
E30	3	13.122 COIL
E31	1	13.123 TRIGGER COIL
E32	1	13.124 IGN. PROCESSOR
E33		
E34		
E35		
E36		

HTE031 R



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 2004, *Ventrac* warranty on Tractors & Attachments 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* 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. *V.P.I.* does not handle warranty adjustments on engines. Engine warranties should be referred to the nearest authorized service outlet of the engine manufacturer.

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 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.

Ventrac Engine & Component Warranties

VENDOR	VENTRAC PRODUCT	VENDOR WARRANTY	WARRANTY PROCEDURE
Kawasaki (Engines)	3000 Series 4200, 4100 Series	Two (2) years	Claim processed by a Kawasaki authorized servicing dealer to Kawasaki
Vanguard (Engines)	4200, 4100 Series	Two (2) years 3 rd year on major parts only (See engine owner's manual)	Claim processed by a Vanguard authorized servicing dealer to local distributor
Peerless Gear & Machine Division of Tecumseh (Transaxles)	4200, 4100 Series	Two (2) years for consumer application One (1) year for commercial application	Claim processed by an authorized Tecumseh servicing dealer to Tecumseh
Sauer-Danfoss (Hydraulic pumps & motors)	4200, 4100 Series	Three (3) years for consumer *3 rd year prorated Two (2) year for commercial *2 nd year prorated	Venture Products processes warranty claim
Sauer-Danfoss (Steering & Control Valves)	3000 Series 4200, 4100 Series	Three (3) years for consumer *3 rd year prorated Two (2) year for commercial *2 nd year prorated	Venture Products processes warranty claim
Hydro-Gear (Transaxles)	3000 Series	Two (2) years for consumer application One (1) year for commercial application	Venture Products processes warranty claim
Titan Tire	3000 Series 4200, 4100 Series	Three (3) years; prorated after first year for original owner only	Claims processed by Titan Tire authorized dealer
Carlisle Tire	4200, 4100 Series	Two (2) years for original owner	Claim processed by Carlisle Tire authorized dealer

*3rd year prorated for consumer application – 50% of parts & labor

*2nd year prorated for commercial application – 50% of parts & labor

Contacts for locating local authorized dealer for the following:

Briggs & Stratton Corp.
PO Box 702
Milwaukee, WI 53201
800-444-7774

Kawasaki Motors Corp.
Grand Rapids, MI 49512
(800) 433-5640

Tecumseh/Peerless Products Corp
Engine and Gear Service Division
Grafton, WI 53024
800-558-5402

Carlisle Tire Corp.
23 Windham Boulevard
Aiken, SC 29805
800-260-7959 Warranty

Titan Tire Corp
2345 E. Market St.
Des Moines, IA 50317
800-872-2327 Warranty