



## OWNER/OPERATOR'S MANUAL & PARTS LIST

# VENTRAC

## HG100 GENERATOR





Orrville, OH

[www.ventrac.com](http://www.ventrac.com)

**TO THE OWNER**

*Congratulations on the purchase of a new VENTRAC **HG100 Generator!** The purpose of this manual is to assist you in its safe and effective operation and maintenance.*

*With proper usage and care, the **generator** will provide many years of service. Please read and understand this manual entirely before using the **generator**. Keep this manual on file for future reference.*

*Always give Model and Serial # when ordering service parts.*

*Please fill in the following information for future reference:*

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

Model Number: \_\_\_\_\_

Serial Number: \_\_\_\_\_

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

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

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

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

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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# INTRODUCTION

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## Product Description HG100 Generator

The Ventrac HG100 Generator is a front mounted attachment designed to give you electrical power wherever you go. The generator produces both 120 and 240 volts of current. It is equipped with seven outlets and four different styles of receptacles. Circuit breakers protect against overload.

### Ventrac HG100 Specifications

Overall Height . . . . .	24 inches
Overall Length . . . . .	38 inches
Overall Width . . . . .	27-1/2 inches
Weight . . . . .	196 pounds
Watts . . . . .	10,000/9,500
Voltage . . . . .	120/240
Amperage . . . . .	79.2/39.6
Hertz . . . . .	60
Phase . . . . .	1
Minimum Engine Horsepower. . . . .	16
Circuit Breakers . . . . .	Standard
Receptacles . . . . .	4) 120V, 20A Standard
. . . . .	1) 120V, 30A Twist Lock
. . . . .	1) 240V, 30A Twist Lock
. . . . .	1) 240V, 50A Range Receptacle

# SAFETY

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



A



B



C















D

Decal	Page & Location	Description	Part Number
A	D-3, #9	Danger - Shield Missing	00.0062
B	D-3, #6	Moving Part Hazard	00.0101
C	D-3, #5	Keep Hands & Feet Away	00.0123
D	D-3, #14	Serial Number Plate	N/A

# SAFETY

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

-  Please read and understand the operator's manual before operating any equipment.
-  Many different circumstances and situations can occur for which the operator must determine a safe way to operate the tractor and attachment. Always use proper safety precautions and always use common sense. Observe all safety decals.
-  DO NOT let children or any untrained person operate the tractor or attachment.
-  Never allow additional riders on the tractor or attachments.
-  DO NOT operate tractor or attachments if you are under the influence of alcohol, drugs, medication that may impair judgment or cause drowsiness, or if you are not feeling well.
-  Approach every task with an underlying consideration for your safety as well as the safety of anyone who happens to be near your work area. Make sure that all the operators of this equipment are thoroughly trained in using it safely.
-  All shields and guards must be in place during operation.
-  Ensure the attachment or accessory is locked or fastened securely to the tractor (power unit) before operating. See tractor manual for lock 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.
-  Be alert for any sign of equipment failure. An unusual noise can be a sign or warning of something needing immediate attention.


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





# SAFETY


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


 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.

 Always operate tractor and generator in an open well-ventilated area.

 Never leave the tractor and generator unattended. Stay in the general vicinity to observe electrical requirement and performance of the equipment.

 If utilizing existing home electric circuits in the event of a power outage, provide a means of insuring that the commercial power and portable generator power are never fed to the load at the same time. Never connect the generator output to any live home electric circuit. If the generator will be connected to existing home electric circuits during a commercial power outage a positive means of isolating the commercial and generator power must be provided. Consult a licensed electrical contractor for a proper and approved connection.

**Failure to do this will cause severe damage to the generator, and creates the possibility of an electrical fire, when commercial power is restored.**

 Included with your Ventrac manual is the manual from the manufacturer of the generator. Please read and understand all operation and safety procedures before operating the generator.

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



# OPERATION

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## Operating Instructions

### Attaching:

1. Drive the tractor forward slowly into the hitch arms of the generator. Align the hitch arms with the generator arms by raising or lowering the front hitch and complete the engagement.
2. Once completely engaged, close the front hitch latch.\*
3. Shut off the tractor engine and engage the parking brake.
4. Place attachment belt over the outside groove of the PTO drive pulley on the tractor. Ensure the belt is properly seated in each pulley.
5. Engage the PTO spring tension lever.\*

### Detaching:

1. Park the tractor on a level surface and set the parking brake.
2. Lower the generator to the ground.
3. Shut off tractor engine.
4. Disengage the PTO spring tension lever.\*
5. Remove the attachment belt from the PTO drive pulley on the tractor.
6. Disengage the hitch latch.\*
7. Restart the tractor and slowly back away from the generator.

\*Refer to tractor manual for operation of controls.

### Operating Techniques and Tips:

Before using the generator, disengage the weight transfer system on the tractor.

To begin using the generator, the seat safety switch will need to be depressed in order to keep the PTO running to power the generator. To activate the seat switch, remove one of the rear weights from the tractor or use a smooth object that weighs 20-30 pounds and place on the center of the tractor seat.

Engage the PTO with the engine at 2000-2500 RPM.

During operation of the generator, the engine should operate between 3000-3200 RPM to get the proper output of 220-240 volts on the voltmeter gauge. The gauge should be checked periodically to make sure it is operating in the correct parameters. Under load, the voltage may drop. If the gauge reads low, speed the tractor engine up. If the gauge reads high, slow the engine down.

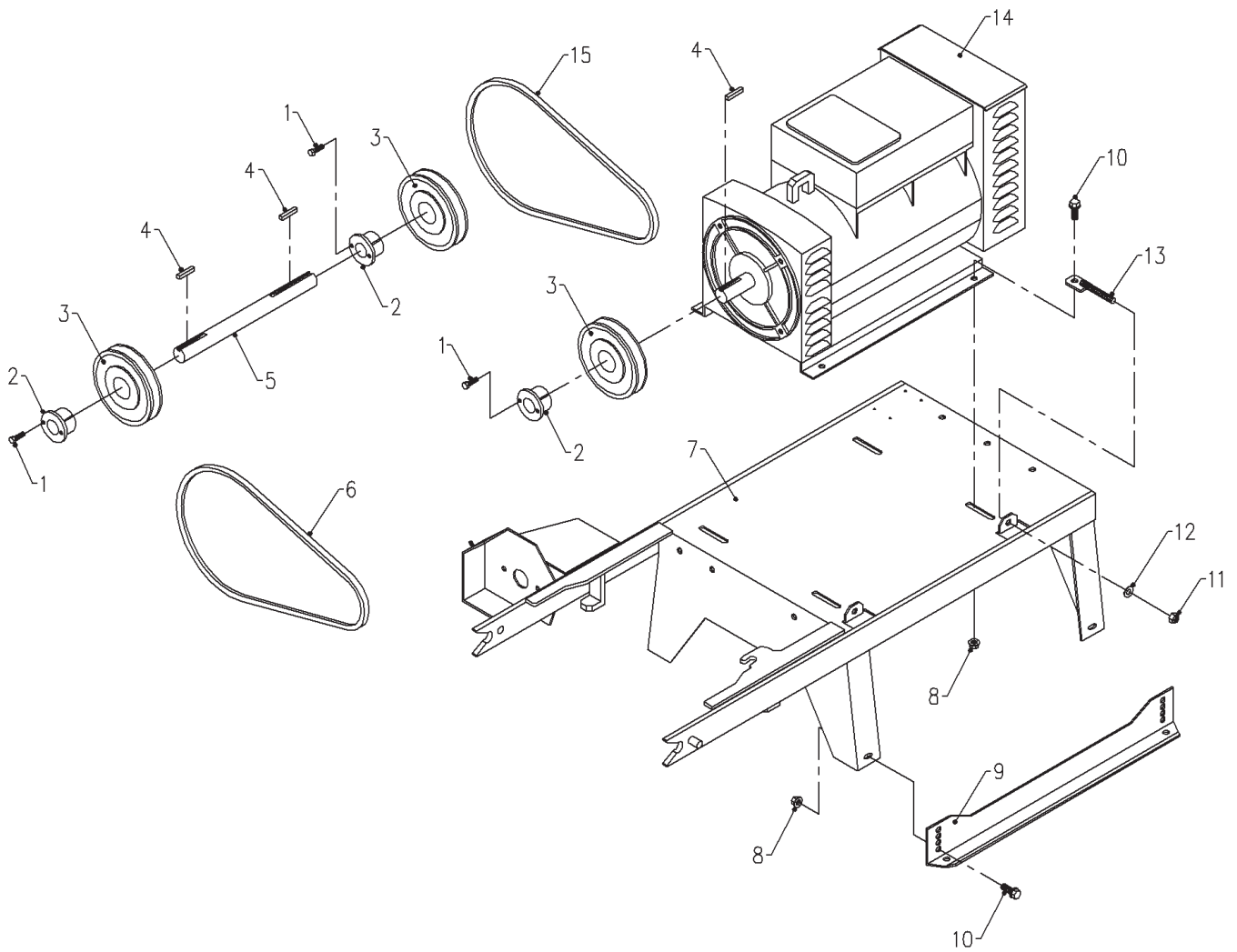
Even though the voltmeter gauge reads 220-240 volts, the correct amount of current is directed to each receptacle. (120V to a 120V receptacle, 240V to a 240V receptacle)



# PARTS MANUAL

# PARTS

## ILLUSTRATED DRAWING MAIN FRAME, DRIVE, & GENERATOR



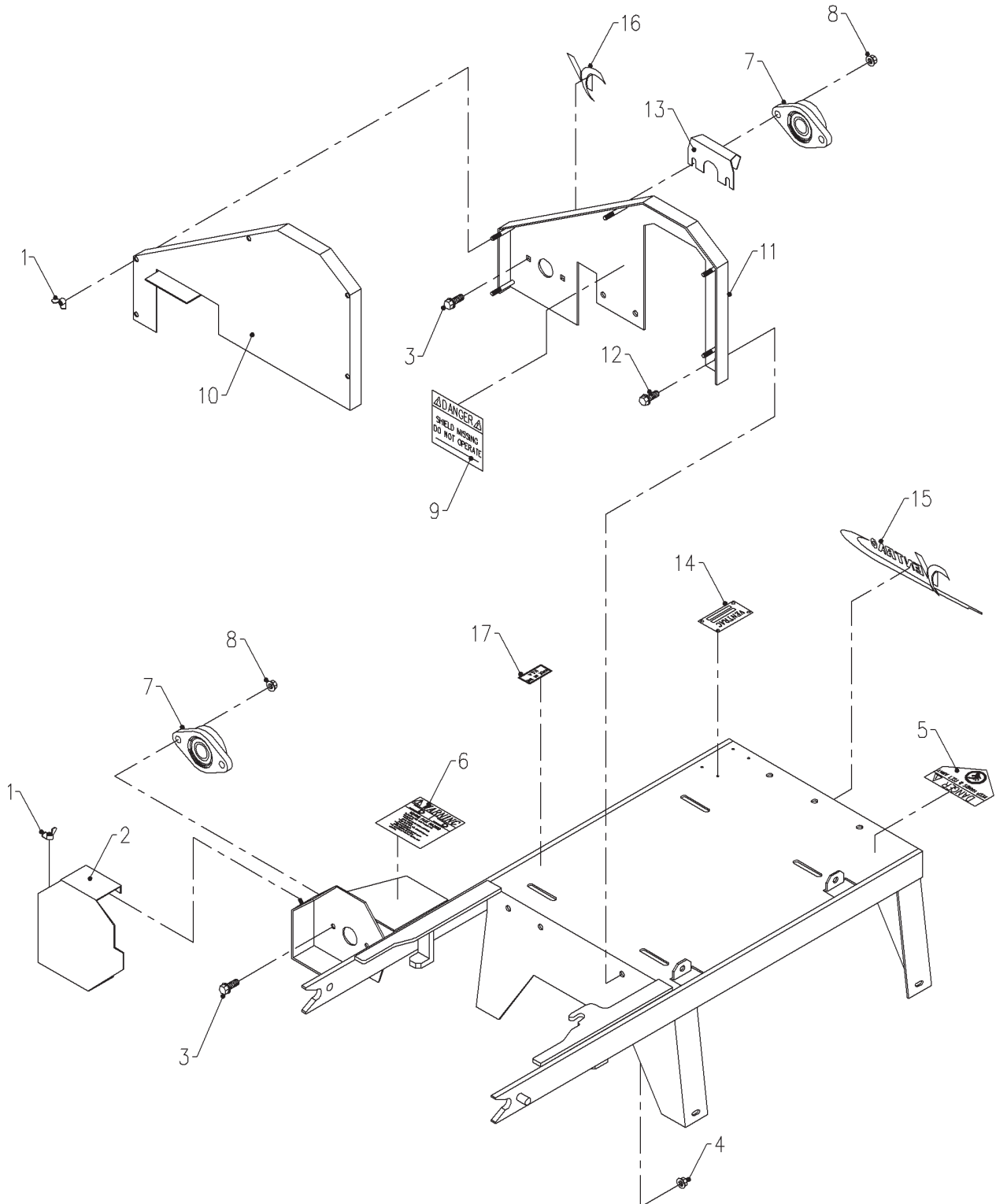
# PARTS

## MAIN FRAME, DRIVE, & GENERATOR

REF.	PART NO.	DESCRIPTION	QTY.
1 . . . . .	90.0406 . . . . .	1/4-20 x 3/4 Bolt . . . . .	6
2 . . . . .	83.H16S . . . . .	1" Split Bushing . . . . .	3
3 . . . . .	83.BK55H . . . . .	5-1/2" H-Bushing Pulley . . . . .	3
4 . . . . .	85.K0410 . . . . .	1/4 x 1-1/4 Key . . . . .	3
5 . . . . .	80.0295 . . . . .	Drive Shaft . . . . .	1
6 . . . . .	81.B045 . . . . .	B45 Belt. . . . .	1
7 . . . . .	62.0795 . . . . .	Generator Frame . . . . .	1
8 . . . . .	99.SF06 . . . . .	3/8-16 Flange Nut . . . . .	8
9 . . . . .	64.0747 . . . . .	Skid Plate . . . . .	2
10 . . . . .	99.SF0606 . . . . .	3/8-16 x 3/4 Flange Bolt . . . . .	8
11 . . . . .	99.A06 . . . . .	3/8-16 Lock Nut. . . . .	2
12 . . . . .	94.06 . . . . .	3/8 USS Flat Washer . . . . .	2
13 . . . . .	42.0407 . . . . .	Belt Adjuster . . . . .	2
14 . . . . .	37.0047 . . . . .	Generator. . . . .	1
15 . . . . .	81.B040 . . . . .	B40 Belt. . . . .	1

# PARTS

## ILLUSTRATED DRAWING BEARINGS, SHIELDS, & DECALS



# PARTS

## BEARINGS, SHIELDS, & DECALS

REF.	PART NO.	DESCRIPTION	QTY.
1 . . . . .	99.E0004 . . . . .	1/4-20 Wing Nut . . . . .	6
2 . . . . .	60.0665 . . . . .	Drive Pulley Shield . . . . .	1
3 . . . . .	97.0508 . . . . .	5/16-18 x 1 Carriage Bolt . . . . .	4
4 . . . . .	99.SF06 . . . . .	3/8-16 Flange Nut . . . . .	3
5 . . . . .	00.0123 . . . . .	Decal, Keep Hands & Feet Away . . . . .	1
6 . . . . .	00.0101 . . . . .	Decal, Hazard - Moving Part . . . . .	1
7 . . . . .	55.FB16016 . . . . .	1" Flange Block Bearing . . . . .	2
8 . . . . .	99.SF05 . . . . .	5/16-18 Flange Nut . . . . .	4
9 . . . . .	00.0062 . . . . .	Decal, Danger - Shield Missing . . . . .	1
10 . . . . .	64.0755 . . . . .	Belt Shield . . . . .	1
11 . . . . .	62.0796 . . . . .	Belt/Pulley Housing . . . . .	1
12 . . . . .	99.SF0606 . . . . .	3/8-16 x 3/4 Flange Bolt . . . . .	3
13 . . . . .	60.0698 . . . . .	Bearing Shield . . . . .	1
14 . . . . .	00.0128 . . . . .	Serial Number Plate . . . . .	1
15 . . . . .	00.0189 . . . . .	Decal, Ventrac . . . . .	1
16 . . . . .	00.0192 . . . . .	Decal, V. . . . .	1
17 . . . . .	00.0100 . . . . .	Decal, Made in USA . . . . .	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> 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

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

\*3<sup>rd</sup> year prorated for consumer application – 50% of parts & labor

\*2<sup>nd</sup> 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