

OWNER/OPERATOR'S MANUAL & PARTS LIST

VENTRAC/SPYKER

ES220 SPREADER









Orrville, OH www.ventrac.com

TO THE OWNER

Product Identification

If you need to contact an Authorized Ventrac Dealer for information on servicing your product, always provide the Product Model and Serial numbers.

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

Date of Purchase: Month	Day	Year
Dealer:		
Dealer Address:		
Dealer Phone Number:		
Dealer FAX Number:		
Model # (A): Serial # (B): Affix Part/Serial Number label here	_	MODEL Manufactured by Venture Products inc. Made in the USA Chrylle, Ohio

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

TABLE OF CONTENTS

INTRODUCTION	SECTION A
Description & Specifications	A-1
SAFETY	SECTION B
Safety Symbols	B-2 B-3
SETUP	SECTION C
Setup Instructions	
OPERATION	SECTION D
Attaching	
PARTS & ILLUSTRATED DRAWINGS	SECTION E
Main Frame, Hopper, & Motor Control	E-3 & 4 E-5 & 6
OPTIONAL PARTS & ILLUSTRATED DRAWINGS	SECTION F
Weight Bar Hitch Mount, Curtain, Spinner Basket	F-1 & 2

WARRANTY

Warranty Information Spyker Warranty Ventrac Warranty

INTRODUCTION

Product Description ES220 Spreader

The Ventrac/Spyker ES220 Spreader was designed to be used with the Ventrac 4000 Series Tractor for broadcast spreading in many different applications. It can be rear mounted for spreading salt when a blade or snow blower is being used on the front. When used in combination with a Ventrac front tow hitch, the spreader can be mounted on the front while a rear attachment is being used.

The ES220 Spreader features:

- · a powerful gear reduction motor.
- 12 volt variable speed controls and motor.
- a control dial to set the gate opening.
- a 220 pound capacity.
- a clear plastic cover.
- stainless and plastic construction.
- · "accuway control" spread pattern equalizer.

Options:

- side containment curtains (70.8027) for sidewalk use.
- mulch spinner basket (07.20102) for pellet mulch.
- weight bar hitch (70.8028). This hitch is required to mount the spreader on the weight bar for tractor that are not equipped with a receiver tube hitch.

Ventrac ES220 Specifications

Overall Height
Overall Length
Overall Width
Weight
Hopper Capacity
Spinner RPM
Spread Pattern*
Spread Pattern with Optional Curtain

^{*}The spread pattern is subject to many different variables such as: spreader mounting height, wind conditions, type of material, spinner speed, etc.



ATTENTION:

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

SIGNAL WORD DEFINITIONS

A DANGER

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

A WARNING

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

A CAUTION

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

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



Α

Decal	Page & Location	Description	Part Number
Α	E-1, #14	Warning, Read Owner's Manual	00.0217



General Safety Procedures for Ventrac Tractors, Attachments, & Accessories



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

Observe and follow all safety decals.

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

Never allow additional riders on the tractor or attachments.

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

Operate all controls from the operators seat only.

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

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

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

Always look in the direction the tractor is moving.

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

Immediately stop at any sign of equipment failure and correct the problem before continuing to operate. An unusual noise can be a warning of equipment failure.

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

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

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

SAFETY

ES220 Safety Procedures

A WARNING

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

A WARNING

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

When using the spreader on the rear of the tractor, a front mounted attachment or a front weight bar (part# 39.56109) must be attached to the tractor to serve as counter ballast.

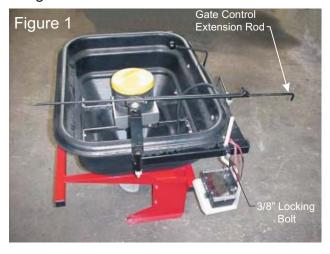
When using the spreader on the front of the tractor, rear counter weights (part# 47.0115) or a rear mounted attachment must be used for counter ballast.

When spreading material such as fertilizer, salt, or chemicals for snow and ice treatment, it is the operator's responsibility to ensure that the material is being applied in a manner consistent with environmentally safe practices.

The spreader must be securely fastened to the tractor. Ensure the pin is installed correctly when using the receiver hitch. When using the optional weight bar hitch, ensure the bolt is fastened through the spreader hitch and the tractor hitch.

Setup Instructions for the ES220 Spreader

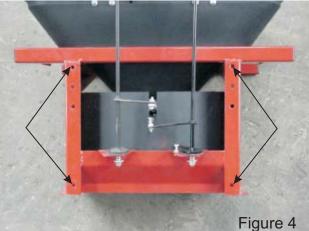
After removing the spreader from the crate, loosen the 3/8" locking bolt that holds the electrical control box in place and slide the control box out the bottom. (Figure 1) Re-install the control box from the top. (Figure 2) Adjust the control box to the desired height.





Insert the gate control extension rod into tube and tighten the thumb screw. (Figure 1) After unit is installed on the tractor, the control rod can be adjusted to desired length.





Tip the spreader down on the rear crossbar. (Figure 3) Locate the hitch and attach to the spreader using four $3/8 \times 3/4$ bolts. (Figures 4 & 5) The hitch can be mounted at three different heights. For first time setup, Venture Products recommends using the holes indicated in Figure 4.

Tractors manufactured before serial number XBB1388 do not have a receiver style hitch. A weight bar hitch (Kit# 70.8028) is required for mounting the spreader on these tractors.

NOTE: If the tractor is equipped with a 3-point hitch, it will need to be determined which type of hitch is required.

SETUP





Insert the $3/8 \times 4-1/2$ " bolt into the bottom of the main frame. (Figure 6) These act as legs for the spreader to set on when not in use.

For mounting the spreader onto the tractor, refer to the operating instructions on page D-1.

Installation Instructions for ES220 Curtain Option Kit Number 70.8027

Assembly:

Refer to drawing on page F-1 for assembly of curtain.

Installation:

- 1. Hook the center bracket of the curtain over the rear crossbar of the spreader. (See figure 1)
- 2. Move the ends of the curtains into place one at a time, aligning the holes on the curtain bracket with the hole on the flange near the front crossbar. Insert the two 3/8" ball pins through the curtain bracket securing the curtain to the spreader. (See figure 2)





Figure 1 Figure 2

OPERATION

Operating Instructions

Attaching to the rear of the tractor:

If the tractor is equipped with a receiver tube hitch, remove the 5/8" pin and the receiver hitch. Slide the spreader into the receiver tube and install the 5/8" pin.

If the tractor is not equipped with a receiver tube hitch, an optional weight bar hitch (kit# 70.8028) needs to be used to attach the spreader to the weight bar. Place the hitch over the weight bar of the tractor. Four small angle clips are supplied with each weight bar hitch. If the spreader does not mount level, use one or two clips per side as spacers to bring the rear of the spreader up. (F-1, Ref. 5) Insert the 1/2" bolt through the tractor hitch. Hand tighten 1/2" nut and then tighten one full turn using a wrench. Lock with double nut.

Insert the 4-pin plug into the 4-pin socket in tractor tool box. (Tractor must be equipped with a 70.4087 KT 12V Rear Kit.)

Attaching to the front of the tractor:

When attaching the spreader to the front of the tractor, the tractor must be equipped with a Ventrac front tow hitch (part# 39.56109). Slide the hitch tube into the receiver of the tow hitch and install retainer pin..

Plug electric cord into the 4-pin socket on tractor located above the quick couplers. If the tractor is not equipped with the four pin outlet, 70.4039 KT 12V front Switch & Plug Kit can be purchased and installed.

Operating Tips:

Enclosed with each spreader is Spyker's own manual for the spreading chart, operation guide, service manual, and parts list. Refer to it for instruction on these procedures as well as instruction on settings, maintenance, and other important information about the Spyker advantage. The Ventrac uses the Spyker model 220.

An optional agitator wire is supplied with each spreader. It is only to be used for seed or pellet mulch.

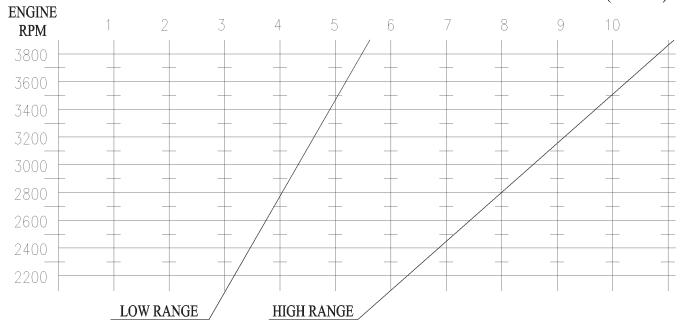
OPERATION

Operating Tips, Continued:

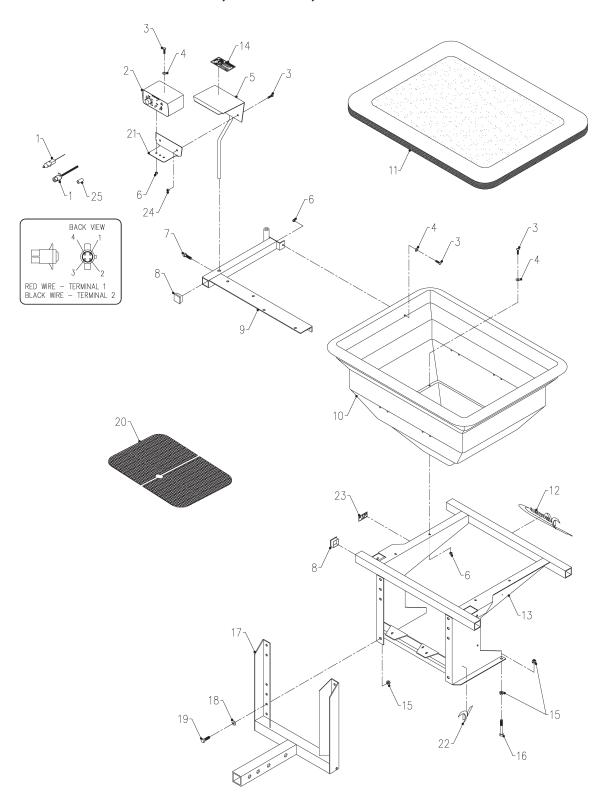
Refer to the following chart to determine the approximate ground speed of the tractor.

SPEED CHART FOR THE VENTRAC 4000, 4100, & 4200 TRACTORS

MILES PER HOUR AT FULL SDLA STROKE WITH STANDARD TIRES (22-12-8)



ILLUSTRATED DRAWING MAIN FRAME, HOPPER, & MOTOR CONTROL

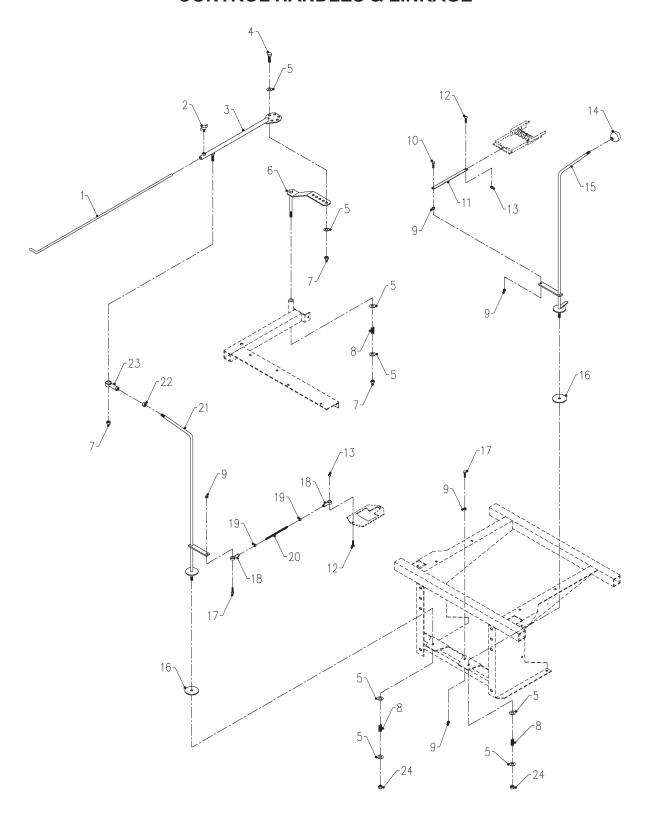


MAIN FRAME, HOPPER, & MOTOR CONTROL

REF.	PART NO.	DESCRIPTION QTY.
1 2 3 4 5		Plug, Trailer 4-Pin Male (Serial # 1289-) 1 Control, Motor Variable Speed 1 1/4-20 x 3/4 SS Machine Screw 12 1/4 Nylon Washer 10 Box, Electric Control 1
8 9 10	90.0608	Square Plug 5 Control Arm Sub-frame 1 Hopper 1 Hopper Cover 1
14 15 16 17	62.0995	Decal, Warning Read Owner's Manual 1 3/8-16 Flange Nut 8 3/8-16 x 3-1/2 Bolt 2 Receiver Tube Hitch 1
20 21 22 23	00.0192	Two Piece Screen 1 Mount, Control Box ES220 1 Decal, V Decal Die Cut Blue 1 Decal, Made in USA 1
25	27.T06-2*	Tube, PVC Clear 3/8 OD x 1/4 ID x 1"

^{*27.}T06-2 is sold by the foot. Specify length when ordering.

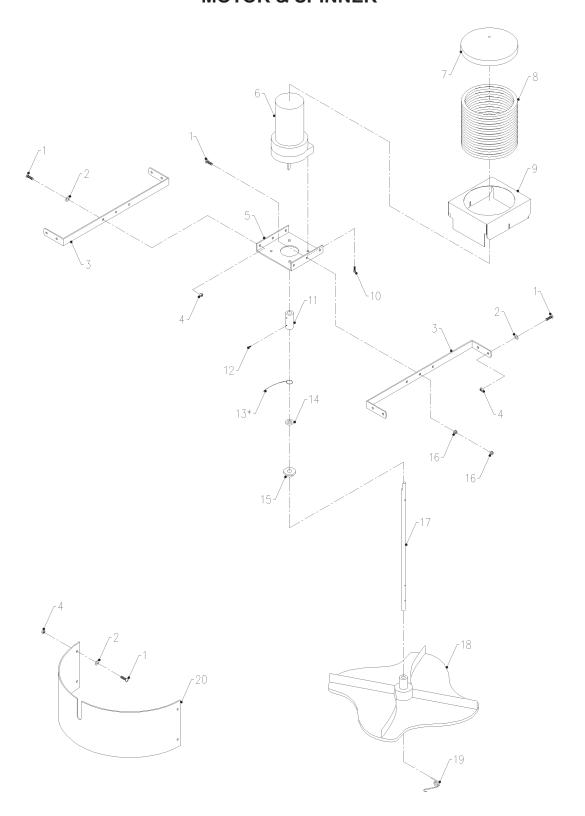
ILLUSTRATED DRAWING CONTROL HANDLES & LINKAGE



CONTROL HANDLES & LINKAGE

REF.	PART NO.	DESCRIPTION	QTY.
2 3 4	62.0997	Thumb Screw	1 1 1 8
8 9 10 11	99.SF04	9/16 OD x 5/8 Compression Spring	3 5 1 1
14 15 16 17	40.0315	1-3/8 DIA. Knob	1 1 2 2
20 21 22 23	99.J0440NFSS	Gate Control Arm	1 1 1

ILLUSTRATED DRAWING MOTOR & SPINNER

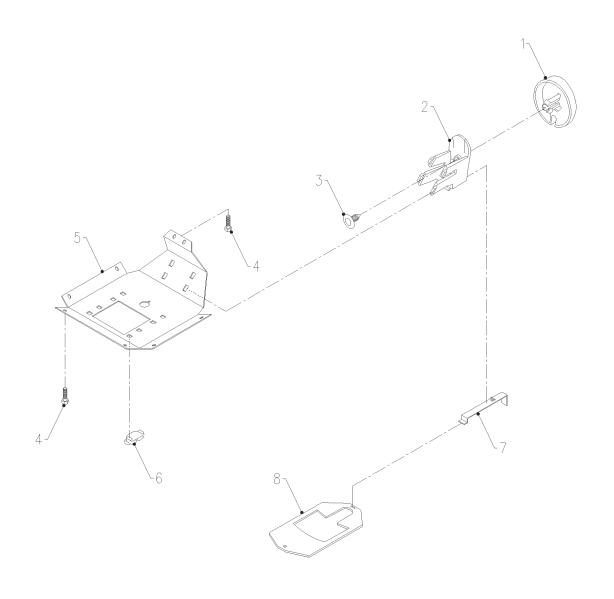


MOTOR & SPINNER

REF.	PART NO.	DESCRIPTION	QTY.
2 3 4 5	05.0099	1/4-20 x 3/4 SS Machine Screw. 1/4 Nylon Washer	. 16 . 2 . 16 . 1
8 9 10 11	47.0230	Vinyl Cap	. 1 . 1 . 2 . 1
13 14 15 16	07.20119*	1/4-20 x 3/8 SS Set Screw Agitator Wire*. Felt Washer. Hopper Bottom Bearing. 1/4-20 SS Flange Nut. Spinner Shaft.	. 1 . 1 . 3 . 4
19	07.20122	Spinner	. 1

^{*} For use with seed and pellet mulch only.

ILLUSTRATED DRAWING DIAL CONTROL & GATE

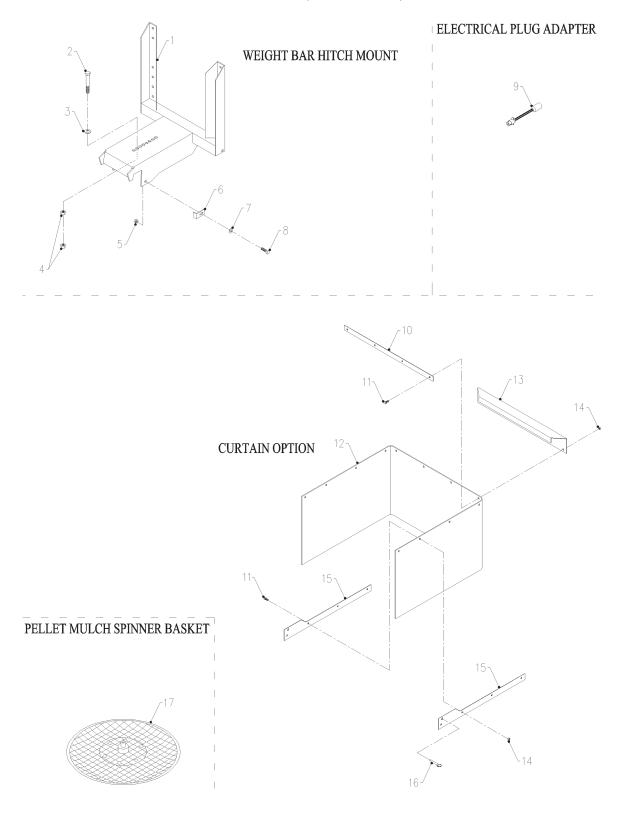




DIAL CONTROL & GATE

REF.	PART NO.	DESCRIPTION	QTY.
2 3 4 5	07.20118	Dial Dial Mount Pine Tree Clip. 1/4-20 x 1/2 SS Bolt Hopper Bottom Plate Rate Gate & Diffuser Guide.	1 1 8 1
8	07.20114	Rate Gate Linkage	1

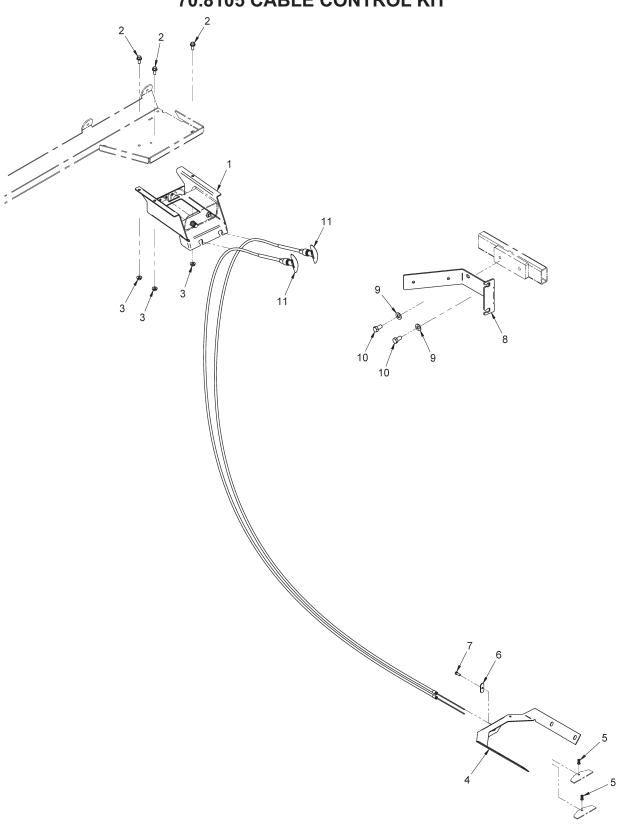
ILLUSTRATED DRAWING WEIGHT BAR HITCH MOUNT, CURTAIN, SPINNER BASKET



WEIGHT BAR HITCH MOUNT, CURTAIN, SPINNER BASKET

REF.	PART NO.	DESCRIPTION	QTY.
2 3 4 5 6 7 8 9	94.08	1/2-13 x 3 Bolt (Standard Hitch) 1/2-13 x 6 Bolt (3-Point Hitch) 1/2 USS Flat Washer 1/2-13 Nut 3/8-16 Flange Nut Height Adjustment Shim 3/8 SAE Flat Washer 3/8-16 x 1 Bolt Electrical Plug Adapter	1 1 2 2 2 4 2 2 1
	99.A04	Curtain	1 12 4 2

ILLUSTRATED DRAWING 70.8105 CABLE CONTROL KIT



70.8105 CABLE CONTROL KIT

REF.	PART NO.	DESCRIPTION	QTY.
2 3 4 5	99.SF0405-1	Bracket, KW350 ES220 Cable	3 3 1 2
8 9 10	64.1508	Bolt, 10-32 x 1/2 SS	1 2 2

WARRANTY

Warranty Information

All Spyker purchased or manufactured components supplied to Venture Products Inc. are covered under Spyker warranty.

All Ventrac purchased or manufactured parts, <u>excluding</u> the Spyker components, are covered under the Venture Products Inc. warranty policy.

Spyker Warranty

LIMITED WARRANTY

This is warranted to the original purchaser only, other than used commercially, against defects in materials and workmanship, for a period of ninety (90) days* from the date of purchase.

*For Spyker Spreaders LLC, products employing metal gear systems, pinion and bevel, these metal gears, only, not inclusive of any other parts or materials, are warranted for for the life of the spreader; not to be used for replacement or repair past original purchase.

*For Spyker Spreaders LLC, products employing an electric motors and/or an electric motor controller (Model 120 and Model 220, only) not inclusive of any other parts or materials, are warranted for the period of one year from the original date of purchase; not to be used for replacement or repair past original purchase.

Spyker Spreaders LLC, will not be liable for any loss, damage or expense including, but not limited to, consequential or incidental damages, arising from the operation, condition, or use of the item. The sole and exclusive remedy against Spyker Spreaders LLC, being the replacement of the defective parts. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

THIS EXPRESS WARRANTY, WHICH IS APPLICABLE ONLY TO THE ORIGINAL PURCHASE, IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING ANY WARRANTY OF MERCHANTIBILITY OR FITNESS FOR PARTICULAR PURPOSE.

Spyker Spreaders LLC

P.O. Box 7 / 140 Mill St. Urbana, IN 46990 U.S.A.



Daniel E. Speicher, III. President, Spyker Spreaders LLC

zităkiis



LIMITED WARRANTY – VENTRAC TURF EQUIPMENT

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

Effective September 1st 2005, *Ventrac* warranty on Tractors & Attachments (excluding the HG100/HG150 generator) for **Residential use only** is limited to **Three (3) years** from original purchase date. Ventrac Tractors & Attachments used **Commercially or for any income producing purpose** is limited to **Two (2) years** from original purchase date. *Ventrac* ET200 turbine blower (turbine only) is limited to **Two (2) years** from original purchase date. *Ventrac* HG100/HG150 generator is limited to **One (1) year** from original purchase date. *Ventrac* Tractors & Attachments used for **Rental** is limited to **180 days** from original purchase date. (**NOTE:** All accessories such as: 3-point hitch, foot pedal, dual wheel kit, etc. will be covered under the above warranty periods as they would apply provided they are installed by an Authorized *Ventrac* Dealer.) This warranty may be transferred and will carry the remainder of the warranty starting from the Original Purchase/Registration date with the dealership and/or *V.P.I*. In the event that product/s originally registered as (3) year Residential use are to be transferred to a commercial user the warranty would change to the remainder of (2) year Commercial use starting from the Original Purchase/Registration date with the dealership and/or *V.P.I*.

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

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

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

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

This warranty extends only to *Ventrac* turf equipment operated under normal conditions and properly serviced and maintained. The warranty expressly does **NOT** cover: (a) any defects, damage or deterioration due to normal use, wear and tear, or exposure; (b) normal maintenance services, such as cleaning, lubrication, oil change; (c) replacement of service items, such as oil, lubricants, spark plugs, belts, rubber hoses or other items subject to normal service replacement; (d) damage or defects arising out of, or relating to abuse, misuse, neglect, alteration, negligence or accident; (e) repair or replacement arising from



LIMITED WARRANTY – VENTRAC TURF EQUIPMENT

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 superceded 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.