



# OWNER/OPERATOR'S MANUAL & PARTS LIST

## KV550 V-BLADE



**Get Attached... Get it DONE!!!**

REVISED 10/22/08  
09.10028



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: \_\_\_\_\_

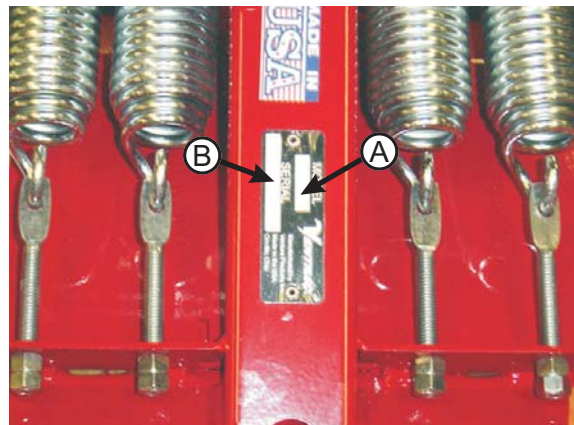
Dealer Phone Number: \_\_\_\_\_

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

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

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

Affix Part/Serial Number label here



Ventrac 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

---

<b>INTRODUCTION</b>	<b>SECTION A</b>
Description & Specifications . . . . .	A-1
<b>SAFETY</b>	<b>SECTION B</b>
Safety Symbols . . . . .	B-1
Decals . . . . .	B-2
General Safety Procedures . . . . .	B-3
Safety Operation & Techniques . . . . .	B-4
<b>OPERATION</b>	<b>SECTION C</b>
Leveling the Blade - Side to Side . . . . .	C-1
Leveling the Blade - Front to Back. . . . .	C-2
Adjusting the Skid Shoes . . . . .	C-2
Attaching and Detaching. . . . .	C-3
Spring Safety Trip Mechanism. . . . .	C-4
Tips and Techniques. . . . .	C-4
<b>MAINTENANCE/ADJUSTMENTS</b>	<b>SECTION D</b>
Maintenance Intervals . . . . .	D-1
<b>PARTS &amp; ILLUSTRATED DRAWINGS</b>	<b>SECTION E</b>
Blade & Frame. . . . .	E-1 & 2
Spring Safety Trip . . . . .	E-3 & 4
Blade Hydraulics. . . . .	E-5 & 6
<b>PARTS/OPTIONS</b>	<b>SECTION F</b>
Snow Containment Flap & Polyurethane Cutting Edge . . . . .	F-1 & 2
Flare Extension, Straight Extension, & Extension W/Flare . . . . .	F-3 & 4
<b>WARRANTY</b>	

# INTRODUCTION

---

## Product Description KV550 V-Blade

The KV550 V-Blade is designed for use on any Ventrac power unit and has all the capabilities of a conventional blade with the added versatility of being able to sweep both wings back for single pass clearing of sidewalks or sweeping both wings forward to easily clear large areas without the need for repeated clean-up passes.

Through the auxiliary control lever on the Ventrac power unit, each blade wing is able to angle forward or backward up to 30 degrees with infinite variability, each wing is independently controlled with a 12V electro-hydraulic valve activated by a toggle switch on the power unit.\*

Options include:

- 6" Wide Top Flare Extension
- 6" Straight Edge Extension
- 6" Extension With 6" Top Flare
- Snow Containment Flap (Rubber)
- Polyurethane Cutting Edge

\* To operate the KV550 V-Blade, the power unit must be equipped with one of the following 12V switch and plug kits:

<u>Model</u>	<u>Kit Number</u>
3000 - Serial Number HBA1347 and higher . . . . .	70.3007
3000 - Serial Number HBA1346 and lower . . . . .	70.3008
3100/3200. . . . .	70.3016
4100/4200. . . . .	70.4039
4000. . . . .	70.4046

## Ventrac KV550 Specifications

Height Overall . . . . .	24 inches
Length . . . . .	33 inches
Width - Straight . . . . .	55 inches
- Straight with 6" Extension Option . . . . .	67 inches
- "V" Forward/Backward . . . . .	48 inches
- "V" Forward/Backward with 6" Extension Option . . . . .	57 inches
Weight. . . . .	240 pounds
Blade wing height . . . . .	20 inches
Angling - Left and Right Blade . . . . .	30 degrees forwards & backwards
Skid Shoes . . . . .	Adjustable
Cutting Edge . . . . .	Reversible/Hardened

Venture Products, Inc. reserves the right to change these specifications without notice.

# SAFETY

---



## ATTENTION:

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

### SIGNAL WORD DEFINITIONS

#### **DANGER**

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

#### **WARNING**

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

#### **CAUTION**

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

# SAFETY

---

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



**A**



**B**

Decal	Page & Location	Description	Part Number
<b>A</b>	E-3, #8	Read Owners Manual	00.0217
<b>B</b>	E-3, #1 (2)	Warning - Pinch Point	00.0218

# SAFETY

---



## 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 tractor stationary on level ground and with the parking brake engaged.

If equipment is to be left unattended, stop the engine, remove the key, and make sure the parking brake is engaged.

# SAFETY

---

## KV550 Safety Procedures

### WARNING

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

### WARNING

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

- Operators should be familiar with the area they are clearing and make preparations ahead of time. Place guide stakes appropriately, remove stones, markers, or other debris that may be hidden after a snowfall. Curbs, offsets, steps, man hole covers, broken or raised pavement, etc. should be noted. Operators should map areas to be cleared before the winter season so they can review potential hazards prior to clearing snow in the area.
- If an area is to be cleared that is unfamiliar to the operator, travel slowly and use **EXTREME CAUTION**. Inquire of anyone who might know of potential hazards.
- The operator should never proceed if visibility is poor. If the tractor is equipped with a cab the windshield must be kept clean.
- Use caution when operating around objects that can obstruct your vision.
- Never travel at speeds that would cause injury to the operator or damage to the machine, if the machine were to be stopped suddenly by an unseen, immovable object.
- Always operate the blade with the safety trip mechanism in the unlock position, unless digging in dirt at very low speeds. (See C-4, Ref 1&2, Operation.)



# SETUP

---

## **⚠ WARNING**

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

If a function requires the tractor to be running, only operate while sitting on the seat.

### **Leveling the Blade – Side to Side**

1. Make sure that the tractor tires are inflated to the correct pressure.\*
2. With the blade attached to the tractor and the tractor on a level surface, move the right and left blade wings to the straight position (both sides perpendicular to the tractor.) (See page C-3 , Operation for attaching.)
3. If the tractor is equipped with a weight transfer, release the weight transfer system.\*
4. Lower the V-Blade to the ground and place the tractor's front lift in the float position.
5. Check to see if the cutting edges are making even contact with the ground. If they are not, raise the blade all the way up and support with safety stands. Loosen the five 1/2" bolts that fasten the center pivot frame (page E-1/ ref. 7) to the center pivot shaft (page E-1/ ref. 20) and to the center skid shoe. (page E-1, ref. 19)
6. Sliding the bottom of the center pivot frame left or right in relationship to the center pivot shaft will raise or lower the outside corners of the blade wings. Moving the bottom to the right will raise the right side of the blade and lower the left side and moving it to the left will do the opposite. It may be helpful to use a jack or hoist to pick up the appropriate side of the blade and then tighten the bolts that were loosened in step 5.
7. Repeat steps 4 and 5. If blade is still not level repeat step 6.
8. Once the blade is level, tighten the hardware that was loosened to 80 ft-lb.

**\*NOTE: See Tractor Operators Manual**

# SETUP

---

## Leveling The Blade – Front to Rear

1. Make sure that the blade is level side to side. (See page C-1, Setup)
2. With the blade attached to the tractor and the tractor on a level surface, move the right and left blade wings back into the V position.
3. If the tractor is equipped with a weight transfer, release the weight transfer system.\*
4. Lower the V-Blade and place the tractor front lift in the float position.
5. Check to see if the cutting edges are making even contact with the ground. If they are not, loosen the adjusting bolt jam nut (page E-1/ref. 8).
6. Turn the adjusting bolt in or out depending on which way the blade needs adjusted. Turning the bolt in will lower the outside corners of the blade and turning it out will do the opposite.
7. Once the cutting edges are making even contact with the ground, tighten the jam nut to 100 ft. Lbs.
8. Loosen the two 1/2" bolts holding the lockout plate (page E-1/ref. 13) to the hitch frame and slide the plate in the mounting slots until the lockout hole is aligned with the hole in the hitch frame. Use the lockout pin (page E-1/ref. 11) to make sure the holes are lined up and that the pin can be installed.

## Adjusting The Skid shoes

1. Make sure that the blade is level side to side. (See page C-1, Setup.)
2. With the blade attached to the tractor and the tractor on a level surface, move the right and left blade wings to the straight position (both sides perpendicular to the tractor.) (See page C-3, Attaching.)
3. If the tractor is equipped with a weight transfer, release the weight transfer system.\*
4. Lower the V-Blade to the ground and place the tractor front lift in the float position.
5. Loosen the bolts holding the skid shoes and slide the skid shoes down until they contact the ground. Re-tighten the bolts to 35 ft-lbs.

**Note:** If blade is to be used on gravel the shoes can be set lower than the cutting edge to keep gravel displacement to a minimum. To set the shoes lower than the cutting edge, place an appropriate spacer of the desired thickness under the cutting edge before lowering the blade to the ground. Loosen the skid shoe mounting bolts and slide the shoes down until they touch the ground. Re-tighten the mounting bolts to 35 ft-lbs.

**\*NOTE: See Tractor Operators Manual**

# OPERATION

---

## Attaching:

1. Drive the tractor forward slowly into the hitch arms of the blade. Align the hitch arms with the blade arms by raising or lowering the front hitch and complete the engagement.
2. Once completely engaged, close the front hitch latch.\*
3. Set the parking brake, shut off the tractor engine, and remove the key.\*
4. Wipe the ends of the hoses clean and connect to the tractor's hydraulic quick couplers.\* If equipped, connect the hoses and quick couplers so the red indicators are paired together and the yellow indicators are paired together.
5. Connect the 12V. plug to the outlet mounted just above the hydraulic quick couplers. NOTE: To be able to use the V-Blade, the tractor must be equipped with the 12V switch and plug. If it is not equipped with this kit, see your servicing Ventrac Dealer. (Refer to page A-1, for correct kit number.)
6. "Weight Transfer System" may be used. Adjust so that blade will go down in the float position.\*

## Detaching:

1. Park the tractor on a level surface and set the parking brake.\*
2. Lower the blade to the ground and retract both blade wings to the back position.
3. Shut off engine and remove key.
4. Disconnect the 12V plug from the outlet.
5. Move the auxiliary control lever side to side several times to release any hydraulic pressure in the hoses connected to the quick couplers.

**Note:** This will help prevent difficulty in connecting the hoses the next time the V-Blade is attached to the tractor.

6. Disconnect the hydraulic hoses from the quick couplers and insert them through the chain hook hole on the hitch frame to keep them out of the dirt.\*
7. Disengage hitch latch.\*
8. Restart the tractor and slowly back away from the blade.

**\*NOTE: See Tractor Operators Manual**

# OPERATION

## Spring Safety Trip Mechanism

The KV550 blade is equipped with a spring safety trip mechanism. This helps prevent sudden unexpected stops caused when contact is made with uneven sidewalk joints, rocks, or other immovable objects. The spring safety trip mechanism is unlocked when the pin is in the outer storage hole (see figure 1.) For heavy dozing, the pin can be installed in the lockout hole, locking the spring safety trip mechanism (see figure 2.) This position is recommended only for digging or scrapping at a very slow speed.



Figure 1



Figure 2

### ⚠ CAUTION

The V-Blade will not trip with the pin in the Lockout hole!!

### ⚠ CAUTION

On power units with a 2 speed transaxle, always use Low when the blade is in the locked position.

## Tips and Technique's

- Each blade wing may be angled independently of the other. The wings can be angled from 30° forwards, to 30° backwards.
- Each blade wing is controlled with a 12V solenoid valve on the blade. To select which blade wing is to be operated, simply change the position of the switch on the tractor. Then move the auxiliary lever until the blade reaches the desired angle.
- The V-Blade is equipped with adjustable skid shoes to allow ground clearance of different heights. They can be adjusted high enough to allow the cutting edge to scrape the surface being cleared or adjusted down to reduce the amount of displaced gravel during snow removal.
- If the skid shoes are used to determine the depth of dozing, use the float position.
- Prior to dozing, ensure the work area is clear of obstacles, hazards, and personnel.
- Down pressure may be used for digging or cleaning a hard surface, however, the tractor's steering ability may be reduced.
- Back dragging is ideal to spread loose material.
- Always lower the blade to the ground and retract both blade wings to the back position, when not in use. This keeps the hitch arms up for attaching.

# MAINTENANCE/ADJUSTMENTS

---

## BEFORE EACH USE

1. Check for loose, missing, or damaged parts.

## EVERY 25 HOURS

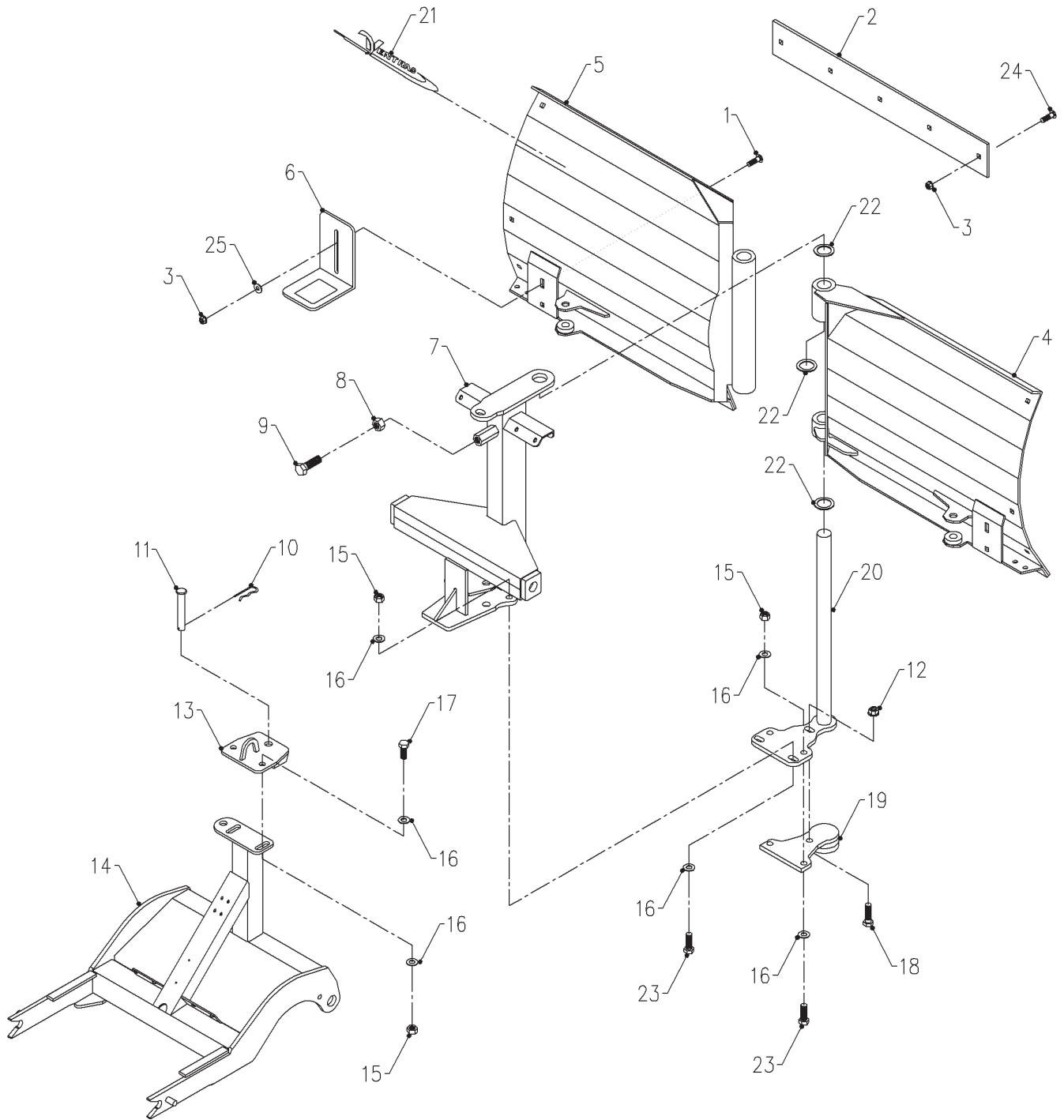
1. Oil the center hinge pin (page E-1/ref. 20) at each pivot bushing joint and at the top of the pin with any weight or grade of engine oil, or a penetrating lubricant.
2. Oil the safety trip pivot shaft (page E-3/ref. 11) on both sides where it goes through the center connecting frame (page E-3/ref. 2) with any weight or grade of engine oil, or a penetrating lubricant.
3. Grease each end of the hydraulic cylinders. Grease each joint until grease comes out top and bottom of the cylinder pivots.
4. Check for loose or missing hardware.
5. Check cutting edges for wear. Once the cutting edges wear down close to the blade structure, they will need reversed. Once both sides of the cutting edge are worn, they will need replaced. Always reverse or replace both cutting edges at the same time.

Note: If the blade is used extensively in the scooped forward position or in the left or right angled positions it is normal for the forward corners of the cutting edge to wear faster than the rest of the edge. To help minimize this effect make sure the blade is level side to side and that the skid shoes are adjusted properly. See set up procedure page C-1)

6. Check skid shoes for wear. Adjust or replace as needed. Shoes should be replaced once 75% of the wear surface thickness is worn away.
7. Check the center skid plate for wear (page E-1/ref. 19). Replace as needed or with every cutting edge replacement.

# PARTS

## ILLUSTRATED DRAWING BLADE & FRAME



# PARTS

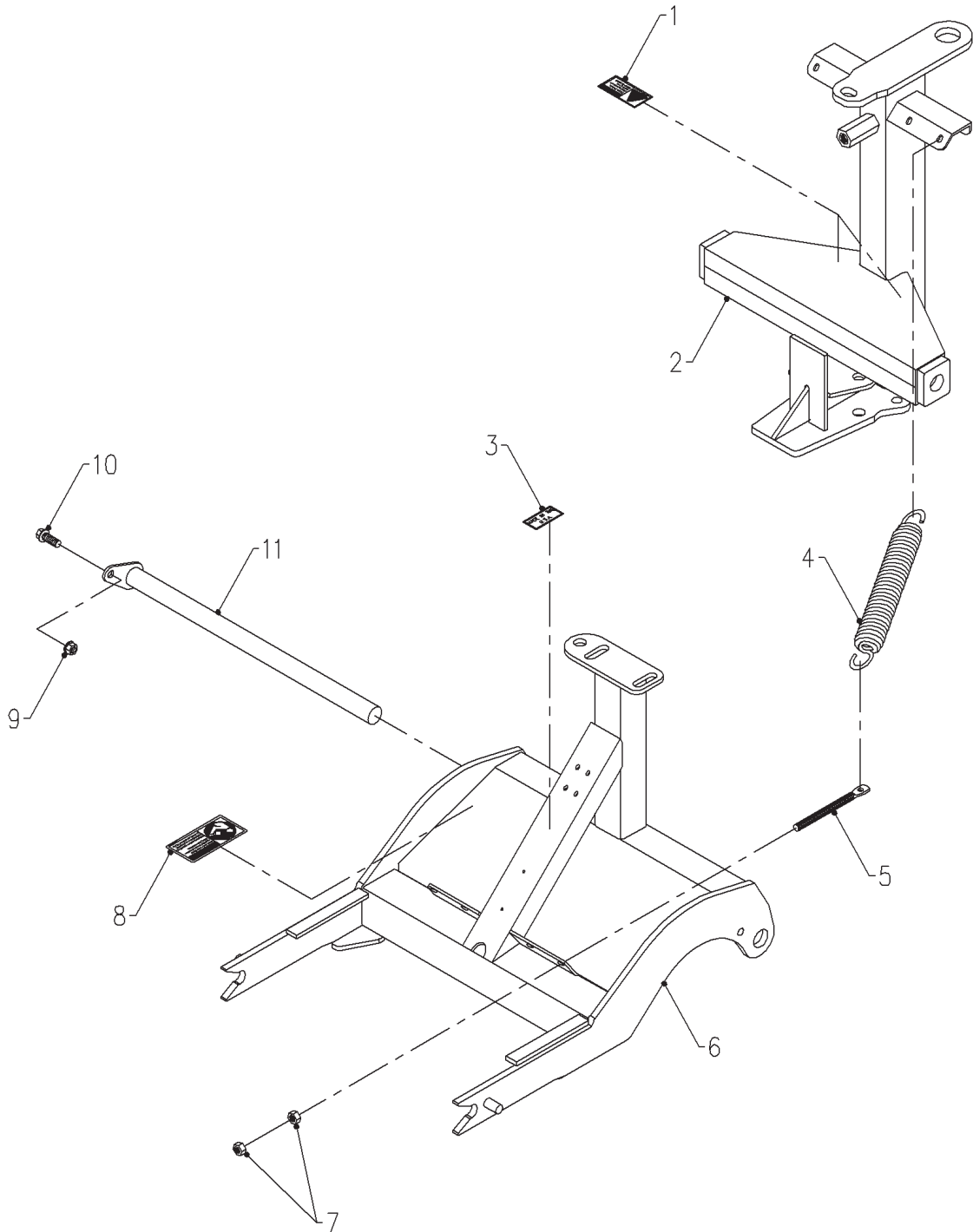
## BLADE & FRAME

REF.	PART NO.	DESCRIPTION	QTY.
1	97.0608	3/8-16 x 1 Carriage Bolt	4
2	78.0055	Cutting Edge, Hardened	2
3	99.SF06	3/8-16 Flange Nut	14
4	62.1022	Right Wing Frame (Serial # 1003-1124)	1
	62.1250	Right Wing Frame (Serial # 1125 -)	1
5	62.1023	Left Wing Frame (Serial # 1003-1124)	1
	62.1251	Left Wing Frame (Serial # 1125 -)	1
6	64.0677	Skid Shoe	2
7	62.1025	Center Cylinder Mount Frame (Serial # 1003-1124)	1
	62.1252	Center Cylinder Mount Frame (Serial # 1125 -)	1
8	99.E0076	5/8-11 Jam Nut	1
9	90.1016	5/8-11 x 2 Bolt	1
10	02.HP0416	1/8 x 2 Hairpin	1
11	03.1020	5/8 x 2-1/2 Clevis Pin	1
12	99.SF08	1/2-13 Flange Nut	1
13	64.1134	Safety Trip Lock Plate	1
14	62.1024	Hitch Frame	1
15	99.A08	1/2-13 Lock Nut	6
16	95.08	1/2 SAE Flat Washer	12
17	90.0810	1/2-13 x 1-1/4 Bolt	2
18	90.0814	1/2-13 x 1-3/4 Bolt	1
19	64.1135	Center Skid Plate	1
20	80.0351	Center Hinge Shaft	1
21	00.0189	Decal, Ventrac	1
22	99.B0078	14 ga. x 1-1/4 Mach. Washer	3
23	90.0812	1/2-13 x 1-1/2 Bolt	4
24	97.0610	3/8-16 x 1-1/4 Carriage Bolt	10
25	94.05	5/16 USS Flat Washer	4

---

# PARTS

## ILLUSTRATED DRAWING SPRING SAFETY TRIP





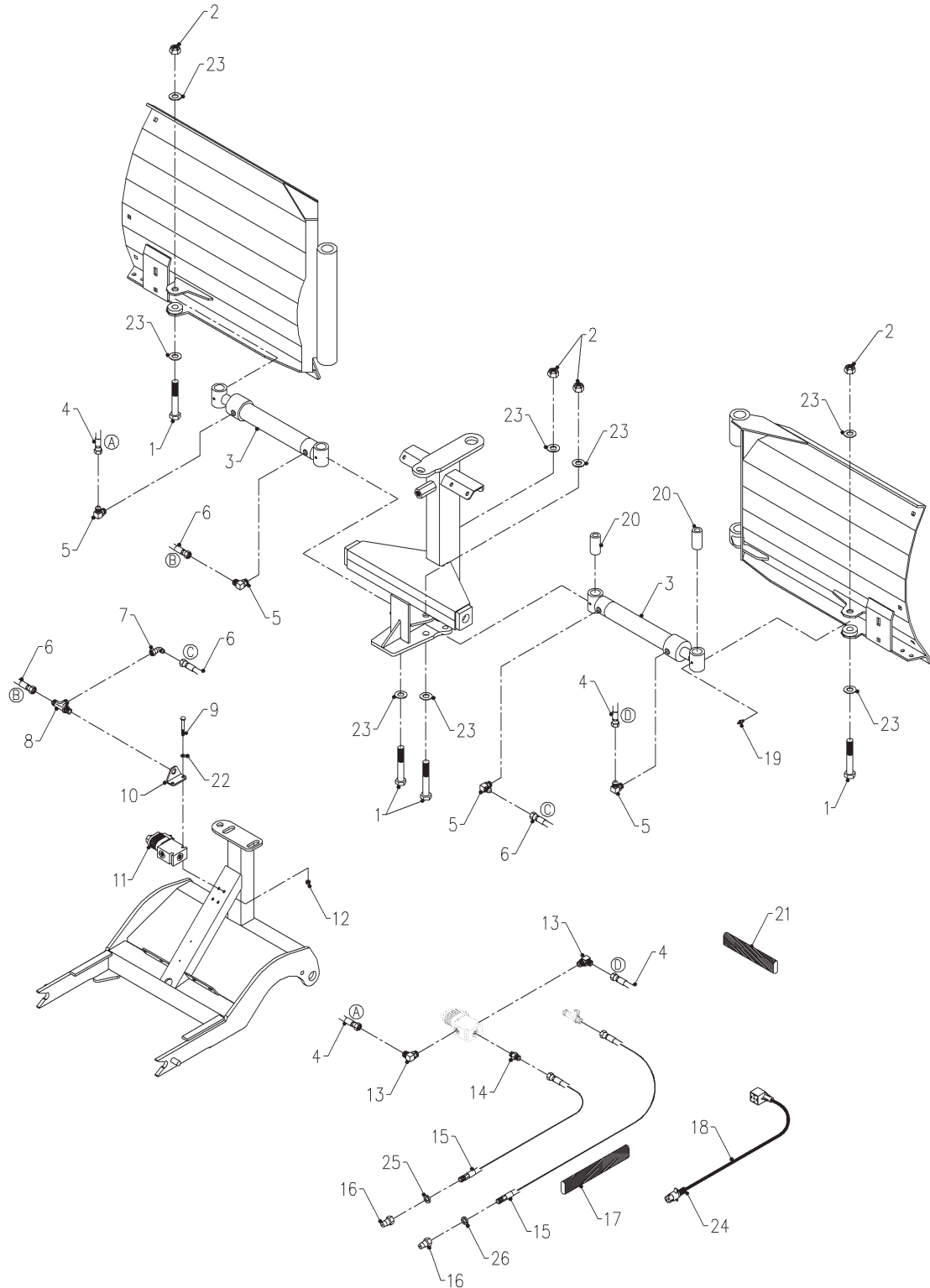
# PARTS

## SPRING SAFETY TRIP

REF.	PART NO.	DESCRIPTION	QTY.
1	00.0218	Decal, Danger - Pinching Hazard	2
2	62.1025	Center Cylinder Mount Frame (Serial # 1003-1124)	1
	62.1252	Center Cylinder Mount Frame (Serial # 1125 -)	11
3	00.0100	Decal, Made in USA	1
4	41.0076	Extension Spring, 2" OD x 12-3/8	4
5	99.K0094	3/8-16 x 4-1/4 Hanger Bolt	4
6	62.1024	Hitch Frame	1
7	92.06	3/8-16 Nut	8
8	00.0217	Decal, Warning - Read Owner's Manual	1
9	99.SF06	3/8-16 Flange Nut	1
10	99.SF0608	3/8-16 x 1 Flange Bolt	1
11	80.0352	Safety Trip/Pivot Shaft	1

# PARTS

## ILLUSTRATED DRAWING BLADE HYDRAULICS



# PARTS

## BLADE HYDRAULICS

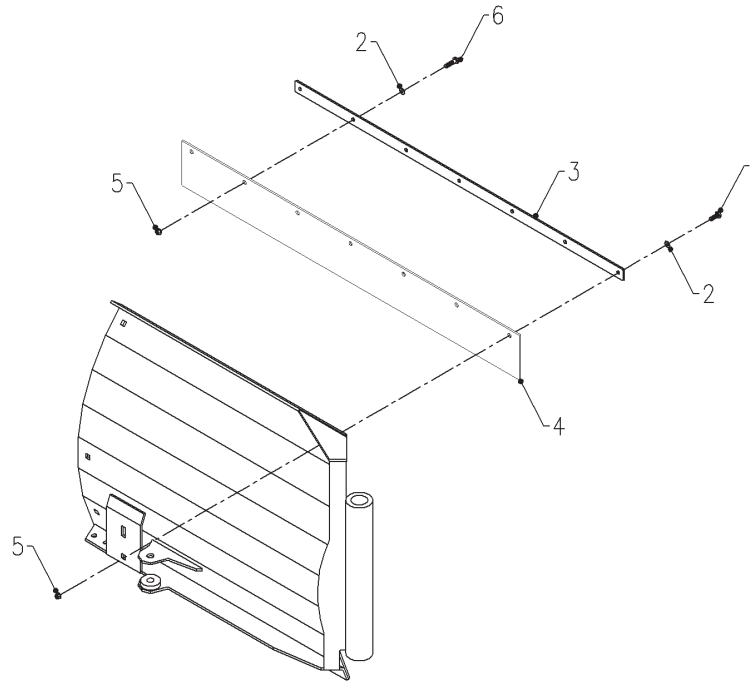
REF.	PART NO.	DESCRIPTION	QTY.
1	90.0828	1/2-13 x 3-1/2 Bolt (Serial # 1003-1124)	4
	90.1032	5/8-11 x 4 Bolt (Serial # 1125 -)	4
2	99.A08	1/2-13 Lock Nut (Serial # 1003-1124)	4
	99.A10	5/8-11 Lock Nut (Serial # 1125 -)	4
3	23.0137	Cylinder, 1-1/2 x 8 x 1 Rod	2
4	20.0112	Hydraulic Hose Assembly - 1/4 x 28	2
5	25.6801-06-06	Hydraulic Fitting, 90 ME - 3/8 x 3/8	4
6	20.0136	Hydraulic Hose Assembly - 1/4 x 36	2
7	25.6500-06-06	Hydraulic Fitting, 90 MFE - 3/8 x 3/8	1
8	25.2704-6-6-6LN	Bulkhead T Fitting, 3/8 w/Lock Nut	1
9	90.0416	1/4-20 x 2 Bolt	2
10	64.1136	Hydraulic Fitting Mount Bracket	1
11	23.0136-1	Directional Control Valve, 12 v	1
12	99.SF04	1/4-20 Flange Nut	2
13	25.6801-06-04	Hydraulic Fitting, 90 ME - 3/8 x 1/4	2
14	25.6400-06-04	Hydraulic Fitting, M Connector - 3/8 x 1/4	1
15	20.0209	Hydraulic Hose Assembly - 1/4 x 45	2
16	23.0104	Male Quick Coupler	2
17	56.0060-36	Hose Sleeve, 1.25 x 36	1
18	34.1400-1011	Wire Assembly, 14 ga. Cord x 52	1
	23.0136-2	14 ga. Cord with 12V Control Valve Plug only	-
	30.0218	4 Pin Male Plug only	-
19	29.GF0001	1/4-28 Grease Fitting	4
20	64.1137	Bushing, 9/16 x 1" x 2-1/16 (Serial # 1003-1124)	4
	64.1248	Bushing, 21/32 x 1" x 2-1/16" (Serial # 1125 -)	4
21	56.0060-24	Hose Sleeve, 1.25 x 24	2
22	95.04	1/4 SAE Flat Washer	2
23	95.10	5/8 SAE Flat Washer (Serial # 1125 -)	8
24	27.A04*	Hose, Neop Black 1/4 X 7/16 x 1"	1
25	05.0117	Washer, .544ID x .817 x.14 Yel	1
26	05.0116	Washer, .544ID x .817 x.14 Red	1

\*27.A04 is sold by the foot. Specify length when ordering.

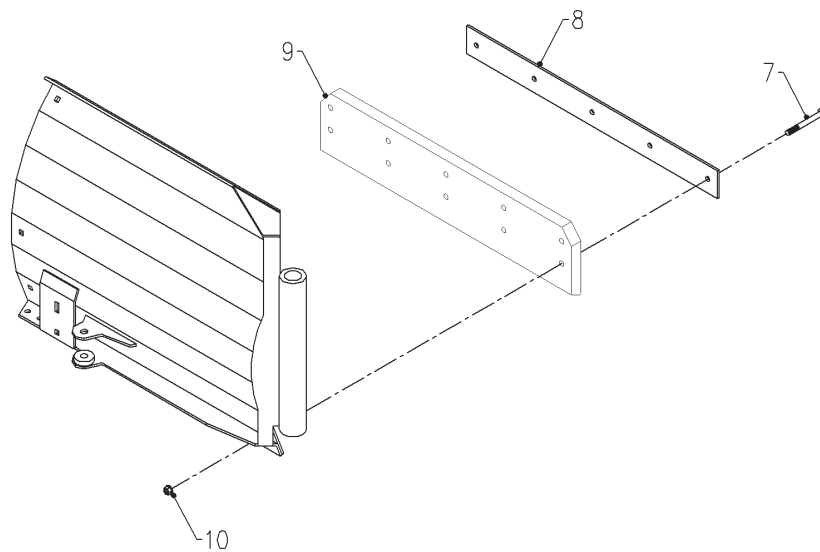
# PARTS

## ILLUSTRATED DRAWING SNOW CONTAINMENT FLAP & POLYURETHANE CUTTING EDGE

KIT# 70.8044 SNOW CONTAINMENT FLAP



KIT# 70.8048 POLYURETHANE CUTTING EDGE



# PARTS

## KIT# 70.8044 SNOW CONTAINMENT FLAP

REF.	PART NO.	DESCRIPTION	QTY.
1	90.0406	1/4-20 x 3/4 Bolt	10
2	95.04	1/4 SAE Flat Washer	14*
3	64.1143	Backing Strap	2
4	44.0216	Rubber Flap	2
5	99.SF04	1/4-20 Flange Nut	14*
6	90.0408	1/4-20 x 1 Bolt	4*

\*Ref. 6 and four each of Ref. 2 and 5 are used with blade extension only.

## KIT# 70.8048 POLYURETHANE CUTTING EDGE

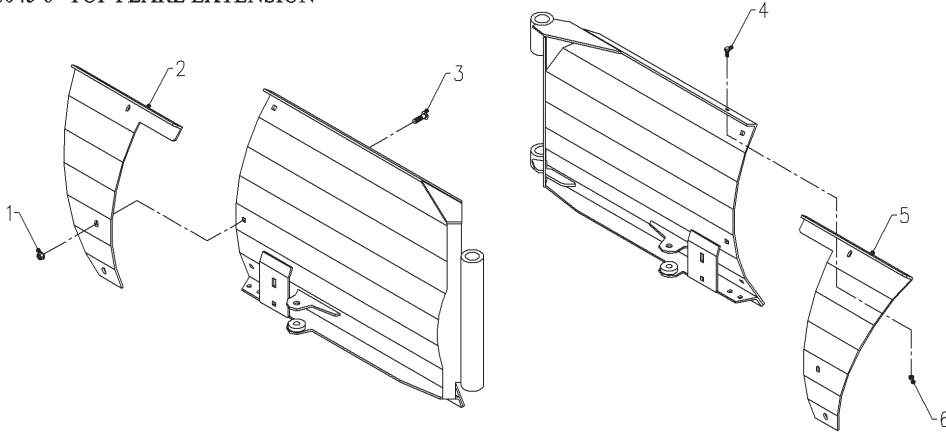
REF.	PART NO.	DESCRIPTION	QTY.
7	97.0616	3/8-16 x 2 Carriage Bolt	10
8	64.1144	Clamp Plate	2
9	44.0217	Polyurethane Cutting Edge	2
10	99.SF06	3/8-16 Flange Nut	10

# PARTS

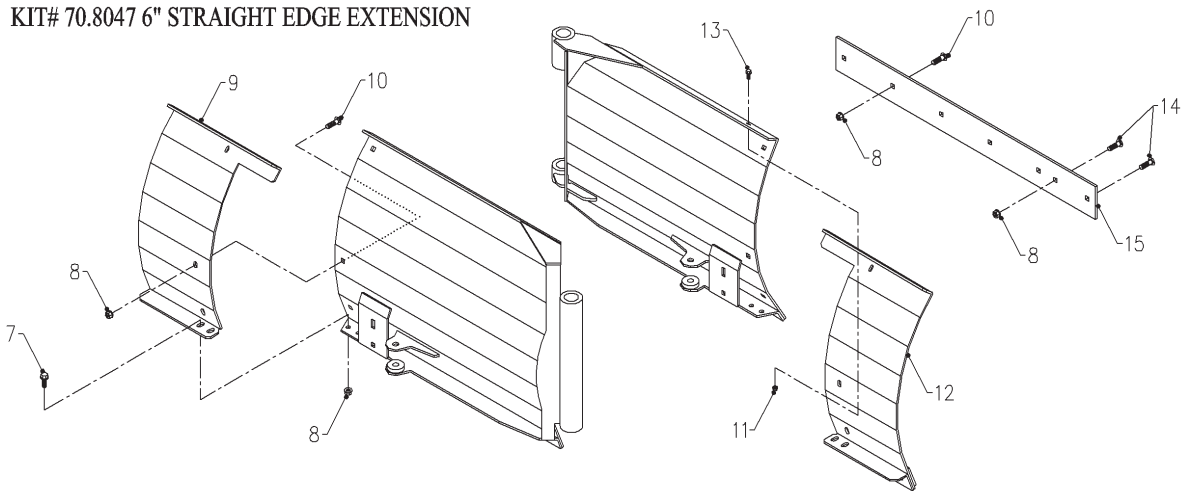
## ILLUSTRATED DRAWING

### FLARE EXTENSION, STRAIGHT EXTENSION, & EXTENSION W/FLARE

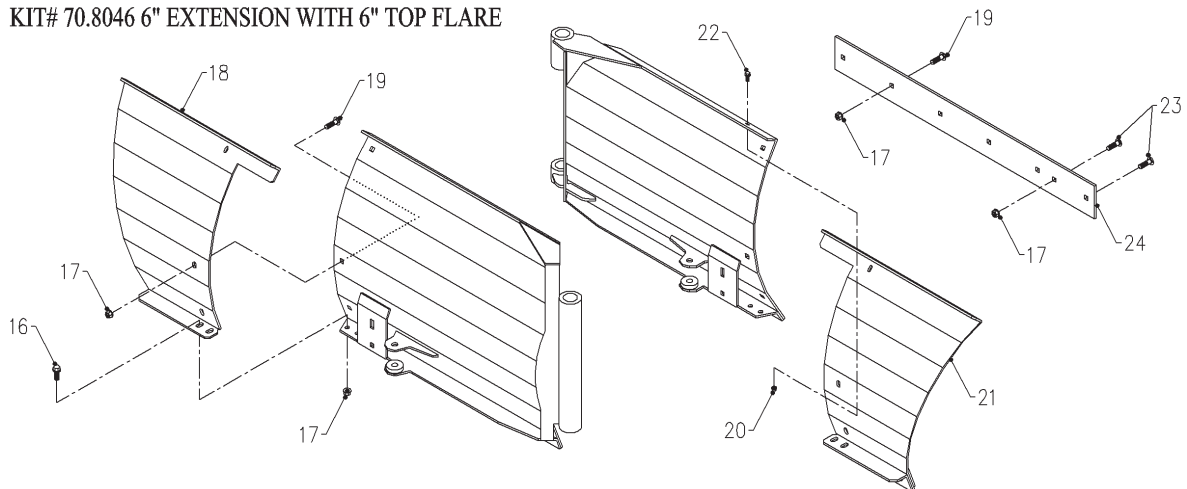
KIT# 70.8045 6" TOP FLARE EXTENSION



KIT# 70.8047 6" STRAIGHT EDGE EXTENSION



KIT# 70.8046 6" EXTENSION WITH 6" TOP FLARE



# PARTS

## KIT# 70.8045 6" TOP FLARE EXTENSION

REF.	PART NO.	DESCRIPTION	QTY.
1	99.SF06	3/8-16 Flange Nut	6
2	60.0890	Top Flare Extension, Left	1
3	97.0608	3/8-16 x 1 Carriage Bolt	6
4	99.SF0406	1/4-20 x 3/4 Flange Bolt	4
5	60.0889	Top Flare Extension, Right	1
6	99.SF04	1/4-20 Flange Nut	4

## KIT# 70.8047 6" STRAIGHT EDGE EXTENSION

REF.	PART NO.	DESCRIPTION	QTY.
7	99.SF0606	3/8-16 x 3/4 Flange Bolt	4
8	99.SF06	3/8-16 Flange Nut	24
9	62.1029	6" Straight Extension, Left	1
10	97.0608	3/8-16 x 1 Carriage Bolt	16
11	99.SF04	1/4-20 Flange Nut	4
12	62.1028	6" Straight Extension, Right	1
13	99.SF0406	1/4-20 x 3/4 Flange Bolt	4
14	97.0610	3/8-16 x 1-1/4 Carriage Bolt	4
15	78.0056	Cutting Edge, Hardened 6" Extended	2

## KIT# 70.8046 6" EXTENSION WITH 6" TOP FLARE

REF.	PART NO.	DESCRIPTION	QTY.
16	99.SF0606	3/8-16 x 3/4 Flange Bolt	4
17	99.SF06	3/8-16 Flange Nut	24
18	62.1031	6" Extension with 6" Top Flare, Left	1
19	97.0608	3/8-16 x 1 Carriage Bolt	16
20	99.SF04	1/4-20 Flange Nut	4
21	62.1030	6" Extension with 6" Top Flare, Right	1
22	99.SF0406	1/4-20 x 3/4 Flange Bolt	4
23	97.0610	3/8-16 x 1-1/4 Carriage Bolt	4
24	78.0056	Cutting Edge, Hardened 6" Extended	2



## LIMITED WARRANTY – VENTRAC TURF EQUIPMENT

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

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

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

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

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

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

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





## LIMITED WARRANTY – VENTRAC TURF EQUIPMENT

operation of, or use of the turf equipment which is not in accordance with operating instructions as specified in the operator's manual or other operational instructions provided by *V.P.I.*; (f) repair or replacement arising as a result of any operation from Ventrac turf equipment that has been altered or modified so as to, in the determination of *V.P.I.*, adversely affect the operation, performance or durability of the equipment or that has altered, modified or affected the turf equipment so as to change the intended use of the product; (g) repair or replacement necessitated by the use of parts, accessories or supplies, including gasoline, oil or lubricants, incompatible with the turf equipment or other than as recommended in the operator's manual or other operational instructions provided by *V.P.I.*; (h) repairs or replacements resulting from parts or accessories which have adversely affected the operation, performance or durability of the turf equipment; or (i) damage or defects due to or arising out of repair of *Ventrac* turf equipment by person or persons other than an authorized *Ventrac* service dealer or the installation of parts other than genuine *Ventrac* parts or *Ventrac* recommended parts.

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

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

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

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

Some states do not allow limitations on how long an implied warranty lasts or allow the exclusion 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.