

SWISHER®

VERSA

Commercial Pro Land Management System 50" Snow Plow Attachment

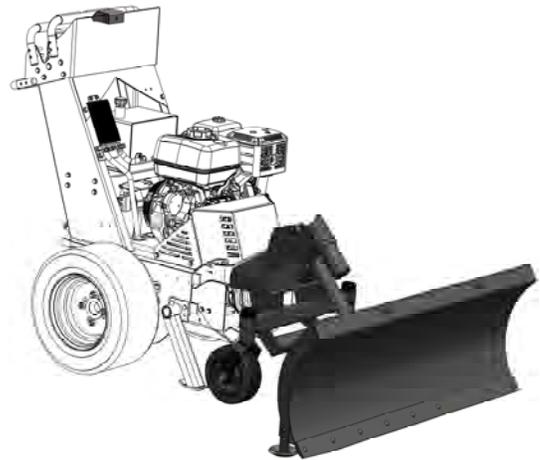
OWNER'S MANUAL

Safety • Set Up • Maintenance • Operation • Parts • Warranty

Model #: VSP50



For use with model VT389H Versa Walk Behind Tractor (sold separately).



Plow is also compatible with these other
Swisher Universal Plow Mount Kits:

2646 (ATV)

20096 (UTV)

10260 (ATV/UTV Front Hitch Receiver)

SWISHER ACQUISITION INC.

1602 Corporate Drive, Warrensburg Missouri 64093

Phone: 660-747-8183 FAX: 660-747-8650

Toll Free: 1-800-222-8183

Manufacturing quality lawn care equipment since 1945,

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STARTING SERIAL # L120-001001

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INTRODUCTION

Congratulations! Thank you for purchasing Swisher's Versa Snow Plow Attachment! The VSP50 Snow Plow is our Versa Land Management Systems latest addition for the VT389 Versa Tractor.

This manual is a valuable document. Following the instructions for use, service, maintenance, etc. can greatly increase the performance and life of your machine.



THIS SAFETY ALERT SYMBOL IDENTIFIES AN IMPORTANT SAFETY MESSAGE IN THIS MANUAL THAT HELPS YOU AND OTHERS AVOID PERSONAL INJURY OR EVEN DEATH. DANGER, WARNING, AND CAUTION ARE SIGNAL WORDS USED TO IDENTIFY THE LEVEL OF HAZARD. HOWEVER, REGARDLESS OF THE HAZARD, BE EXTREMELY CAREFUL.

- DANGER:** Indicates an **IMMINENTLY HAZARDOUS SITUATION!** If not avoided, **WILL** result in death or serious injury.
- WARNING:** Indicates a **POTENTIALLY HAZARDOUS SITUATION!** If not avoided, **COULD** result in death or serious injury.
- CAUTION:** Indicates a **POTENTIALLY HAZARDOUS SITUATION!** If not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.



WARNING: Be sure all users have read and understand the Operators Manual for the VT389H tractor before attempting to operate.

General:

IMPORTANT! In this operator's manual, left and right, backward and forward are used in relation to the normal operator's position on the tractor.

FIGURE references used throughout reflect the page number as the first number (e.g. FIG. 20.1 is on page 20, FIG. 15.2 is on page 15, etc.)

Read Before Operating:

- This attachment is constructed for plowing snow. The manufacturer's directions concerning operation, maintenance and repairs must be carefully followed.
- This machine must only be operated, maintained and repaired by persons who are familiar with the machine's special characteristics and who are well versed in safety instructions.
- Accident prevention regulations, other general safety regulations, occupational safety rules and traffic regulations must be followed without fail.
- Unauthorized modifications to the design of the machine may absolve the manufacturer from liability for any resulting personal injury or property damage and may void the warranty.
- Read and observe all safety instructions represented on decals and in the manual.

Refer to your VT389H tractor manual for the following instructions:

- Know how to set the parking brake – Push down on brake lever with foot until it locks in place.
- Know how to stop the engine – Turn key to off or flip shut off switch down.
- Know how to stop the unit – Return control handles to neutral.

SAFETY PRECAUTIONS

These instructions are for your safety. Read them thoroughly & carefully.



This Safety Alert Symbol indicates important messages in this manual. When you see this symbol, carefully read the message that follows and be alert to the possibility of personal injury.



General Use:

- Read all instructions in this operator's manual and on the machine before starting it. Ensure that you understand them and then abide by them. Be prepared to stop the engine quickly in an emergency.
- Learn how to use the machine, operate its controls safely, how to stop quickly and recognize safety decals.
- Only allow the machine to be used by adults who are familiar with its use and operation. If there are any questions about safety do not operate or allow others to operate this machine.
- Make sure nobody else is in the area of the machine when you start the engine, engage the drive or operate the machine.
- Stop the machine if someone enters the work area.
- Clear the area of any objects such as stones, toys, etc. that may be struck by the plow.
- **DO NOT use this machine without the Guards or Belt Covers in place.**
- Stop the engine and disconnect the spark plug before performing maintenance checks.
- Never attempt to inspect the PTO shaft with the engine running and always remove the ignition key and spark plug wires before clearing debris.
- Never take passengers. The machine is only intended for use by one person.
- Always look around before and during reversing maneuvers.
- Slow down before turning.
- Be careful when rounding fixed obstacles.
- Keep the machine a safe distance from holes or other irregularities in the ground.
- Never use the machine if you are tired, if you have consumed alcohol or if you are taking other drugs or medications that can affect your vision, judgment or coordination.
- Beware of traffic and pedestrians when working near or crossing roads, walkways, or parking lots.
- Never leave the machine unsupervised with the engine running.
- Always disengage the blades, engage the parking brake, stop the engine and remove the ignition key before leaving the machine.
- Never allow children or other persons not trained in the use of the machine to use or service it. Local laws may regulate the age of the user.

- Always make sure long hair is not left down when servicing and/or operating the machine. Make sure hair is out of the way of any moving parts or pinch points.
- Inspect the attachment and tractor before each use. Make sure all hardware is in place and tightened properly.
- Make sure this attachment is in good operating condition and properly connected and secured.
- Never use the machine when barefoot. Always wear protective shoes or boots.
- Always wear protective glasses or full visor and hearing protection when assembling or operating.
- Never wear loose clothing that can get caught in moving parts.
- Check that any safety or informational decals are in place and legible. Replace any damaged decals.

Slope Operation:

- Inspect the area and remove obstacles such as stones, tree branches, etc.
- With walk behind machines, operate across slopes, not up and down.
- Never drive the machine on terrain that slopes more than 15 degrees.
- Avoid starting or stopping on a slope. If the tires begin to slip, drive slowly straight down the slope.
- Always drive evenly and slowly on slopes.
- Do not make sudden changes in speed or direction.
- Avoid unnecessary turns on slopes. If it becomes necessary, turn slowly and gradually downward if possible.
- Watch for holes, ruts or bumps. On uneven terrain, the machine can tip more easily. Deep snow or other debris can hide obstacles.
- Drive slowly and use small movements of the steering controls.
- Do not plow snow or ice covered slopes. It is slippery, and the tires can lose their traction, allowing the machine to slide down the slope.

Safety instructions continue on next page...

Remember: The operator is responsible for avoiding dangers or accidents.

SAFETY PRECAUTIONS



These instructions are for your safety. Read them thoroughly & carefully.



Children:

- Children are often attracted to power equipment. Serious accidents may occur if you fail to be on guard for children in the area of the machine.
- Never assume that children will stay put where you last saw them.
- Keep children away from the work area and under close supervision by another adult.
- Shut off the machine if children enter the work area.
- Never allow a child to ride with you.
- Never allow children to operate the machine.
- Be extra cautious near corners, bushes, trees or other objects that **block your view**.

Operating Safely:

- **NEVER** Ride, Sit, or Stand on the plow. Do not allow others to do so.
- Snow and Ice is extremely slick. Use extreme caution when operating to avoid falling!
- If you do lose your footing while operating, release the directional controls immediately to avoid losing control of the machine or causing unintentional movements.
- Before using, always visually inspect to see that all parts are not worn or damaged. Replace worn or damaged parts immediately.
- Before using, always visually inspect to see that all bolts and nuts are secure.
- Never plow in the direction of people or property. Debris could be thrown out of the front that can cause serious injury and property damage.
- Keep a safe distance away from other operator if working together.
- Do not operate the machine in a confined space. The gasoline engine exhaust is harmful and can kill.
- Always disengage PTO, set parking brake, turn the engine off and remove the key when leaving the machine during operations.
- Never operate the machine near bodies of water, retaining walls, cliffs or tall curbs. Give the machine ample room to operate and turn around.
- Never operate the machine with defective guards or without safety protective devices in place.

Operating Safely:

- Disengage the PTO switch, set the brake, stop the engine, remove the ignition key and disconnect the spark plug wires:
 - Before checking, clearing or working on the machine.
 - After striking a foreign object, inspect the machine for damage and make repairs before restarting and operating the equipment.
 - If the machine starts to vibrate abnormally (check immediately).
 - Before making height adjustment unless adjustment can be made from the operator's position.

Maintenance & Storage:

- Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- Park machine on level ground.
- Disconnect the spark plug wires before doing any maintenance work.
- If storing equipment over long periods of time clean build up and debris from the equipment to prevent corrosion.
- Stop the engine and allow it to cool before storing.
- Drain the fuel tank outdoors only.
- Store fuel in approved containers away from anything that can create a flame or sparks and could ignite the gasoline fumes.
- Replace worn or damaged parts for continued safe operation.
- When machine is to be parked, stored or left unattended the parking brake should be set.
- Remove the ignition key to prevent unauthorized use.

Safety instructions continue on next page...



WARNING



TO CHECK OR ADD FUEL:

- **DO IT OUTDOORS**
- **STOP ENGINE AND ALLOW IT TO COOL.**
- **DO NOT SMOKE.**
- **DO NOT OVERFILL.**

SAFETY PRECAUTIONS



These instructions are for your safety. Read them thoroughly & carefully.



Training:

- Wear appropriate clothing, including safety goggles or safety glasses, footwear and long pants. Do not operate barefoot or while wearing sandals. Long hair, jewelry and loose clothing can become entangled in moving parts.
- Hearing protection should be worn.
- Rotating parts can kill or cause severe injury. Keep hands and feet away.

All users should seek and obtain professional and practical instruction. Such instruction should emphasize:

- The need for care and concentration when working with walk behind machines.
- How to properly connect and disconnect the tractor and attachments.
- How to properly drive, control and operate a ride-on or walk behind machine with an attachment connected.

WARNING



When using the machine, approved personal protective equipment shall be used. Personal protective equipment cannot eliminate the risk of injury, but it will reduce the degree of injury if an accident does occur. Ask your retailer for help in choosing the right equipment.

SAFETY • OPERATION • PRODUCT INFORMATION DECALS



OD99125 Decal - Swisher Logo



19976 Decal - Made in USA



19988 Decal -
Made in Missouri



OD33 Decal - 5 MPH



Serial # ID Tag

WARNING AVERTISSEMENT

AVOID SERIOUS INJURY OR DEATH • PRÉVENIR LES BLESSURES GRAVES OU MORTELLES

- Read owner's manuals, operating instructions, and warning labels before operation.
- Do not exceed 5 MPH (8KM/H) with blade installed.
- Contact with hidden stationary objects may cause sudden stop or loss of vehicle control.
- Do not operate on slopes greater than 10°.
- Do not stand or ride on plow at any time.
- Keep bystanders away from vehicle and blade when operating vehicle or adjusting blade.
- Before adjusting blade, stop engine, set park brake, raise blade, and lock blade in the up position.
- Do not attempt to raise blade by hand, use the lift mechanism only.
- Keep hands and feet away from the area under blade and away from moving parts.
- Lower the blade to down position when vehicle is not in use.
- Inspect plow mechanism before use. Replace all worn or damaged parts before operating.

- Lire les manuels du propriétaire, la notice d'utilisation et les étiquettes d'avertissement avant toute utilisation.
- Ne pas dépasser 5 mi/h (8 km/h) lorsque la lame est installée.
- Le contact avec des objets immobiles cachés peut provoquer l'arrêt soudain ou la perte de contrôle du véhicule.
- Ne pas utiliser sur des pentes de plus de 10°.
- Ne jamais se tenir debout ni rester sur la charrue.
- Ne laisser personne s'approcher du véhicule et de la lame lors de l'utilisation du véhicule ou du réglage de la lame.
- Avant de régler la lame, arrêter le moteur, serrer le frein de stationnement, relever la lame et la verrouiller en position relevée.
- Ne pas tenter de relever la lame manuellement; servir uniquement du mécanisme de relevage.
- Tenir les mains et les pieds à l'écart de la zone située au-dessous de la lame, et à l'écart des pièces mobiles.
- Abaisser la lame en position rabaisée lorsque le véhicule n'est pas utilisé.
- Inspecter le mécanisme de la charrue avant l'utilisation. Remplacer toutes les pièces usées ou endommagées avant l'utilisation.

OD19A-B1

OD19-A Decal – Danger Snow Blade Info



19977 Decal - Commercial Pro

FEATURES • LOCATION

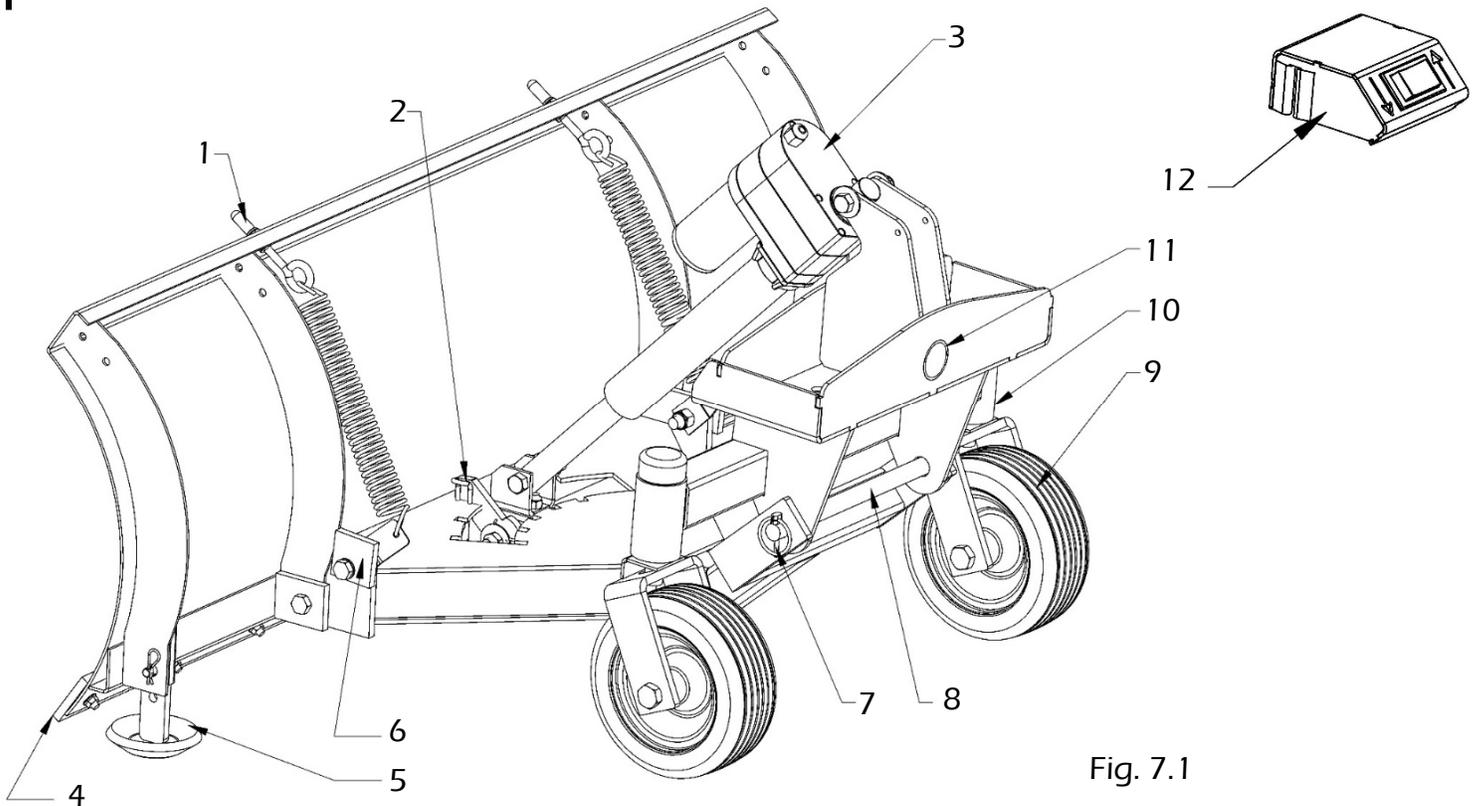


Fig. 7.1

1	Adjustable Spring Tension	7	Pin Lock
2	Plow Side-Angle Locking Lever	8	Quick Attach Pin
3	Heavy Duty Lift Actuator	9	Premium Flat Free Tires
4	Replaceable Plow Edge	10	Sealed Ball Bearing Caster
5	Adjustable Height Skid Shoes	11	Quick Mount Receiver
6	Tilt Block (Plow tilt angle adjustment)	12	Plow Height Control Switch

SPECIFICATIONS

SPECIFICATIONS	
PLOW WIDTH	50 INCH
PLOW FORWARD TILT	MANUAL - ADJUSTABLE
PLOW ANGLE	MANUAL - ADJUSTMENT, 5 POSITION - 15° INCREMENTS
TIRE SIZE (Plow Mount)	8 X 3 SOLID, FLAT FREE RUBBER, 5/8" BEARING BORE
PLOW HEIGHT	ADJUSTABLE - ELECTRIC ACTUATOR, 6" STROKE
UNIT MEASUREMENTS	LENGTH: 29" WIDTH: 50" HEIGHT: 20" WEIGHT: 159 lbs.

UNCRATING AND ASSEMBLY



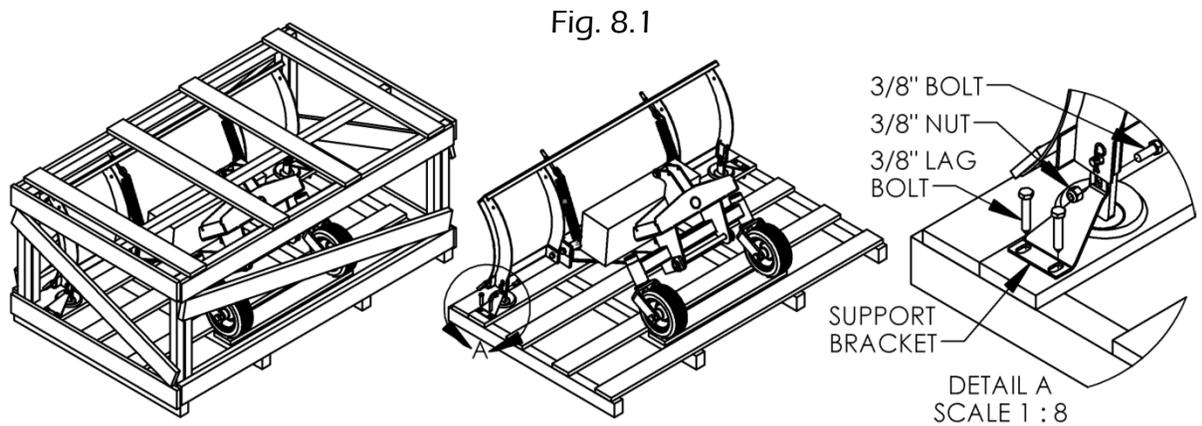
	Qty.	Size
	(2)	9/16"
	(2)	3/4"
	Pry Bar	
	Claw Hammer	
	Safety Glasses	
	Gloves	

GENERAL RECOMMENDATIONS

- Use at least two people to uncrate & assemble the unit. Some components are heavy.
- Refer to page 18 for recommended hardware torque values.

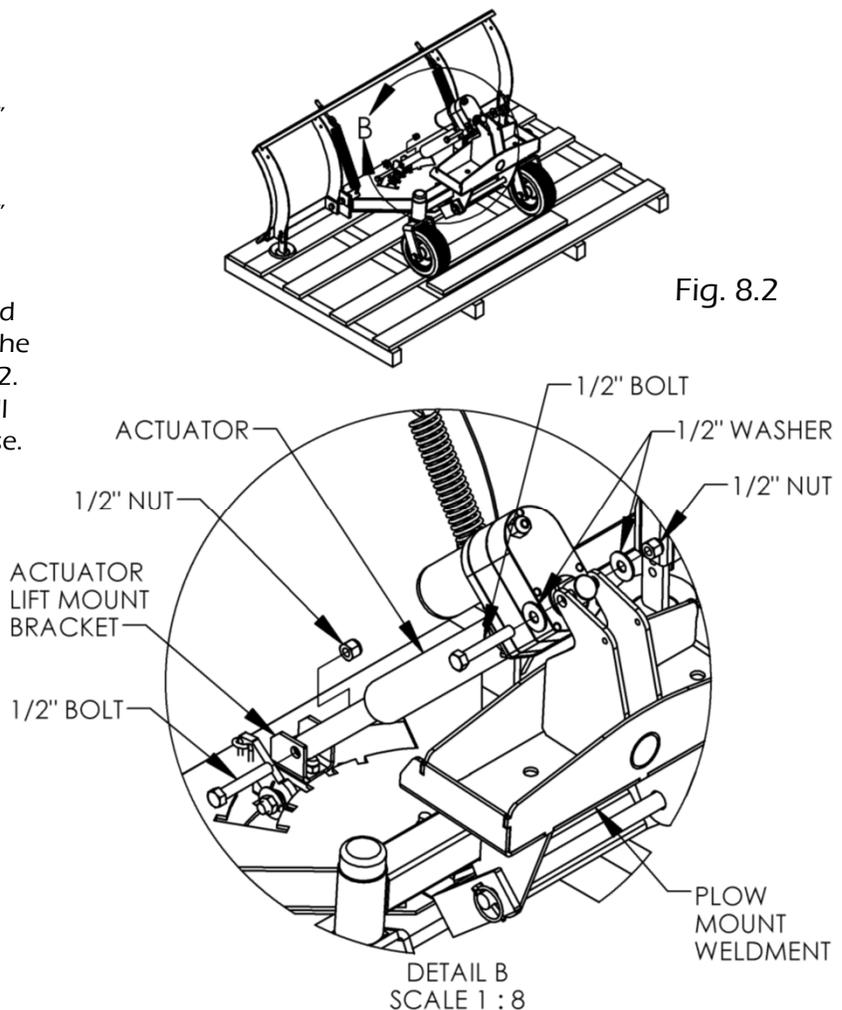
UNCRATING

- Always wear gloves and safety glasses when disassembling the crate.
- Using a hammer and pry bar, separate the crate top, sides and ends. Use caution to not damage the equipment inside the crate.
- Staples are used to fasten the crate together and are sharp. Use Caution!
- Remove all zip ties holding the unit to the crate base.
- Using 9/16" wrenches, remove the 3/8" Nut and Bolt and 3/8" Lag Bolts that fasten the Support Brackets on each side of the Plow as shown in Fig. 8.1.



ASSEMBLY DIRECTIONS

1. Using 3/4" wrenches, remove the 1/2" Nut and Bolt from the Actuator Lift Mount Bracket and set aside.
2. Using 3/4" wrenches, remove the 1/2" Nut, Bolt and Washers from the Plow Mount Weldment and set aside.
3. Remove the Actuator from the box and assemble it using the hardware from the previous two steps as shown in Fig. 8.2.
4. Use at least two people to carefully roll the assembled unit off of the crate base.



UNCRATING AND ASSEMBLY

Connecting and Disconnecting Implements

- Always make sure that the tractor and attachment are both on flat ground before attempting to connect or disconnect the units.
- Always check that there are no children around that can be harmed when connecting or disconnecting units.
- Always check that there are no other persons around the immediate area that could potentially activate the tractor.

Connecting

1. Align and insert the PIVOT SHAFT of the tractor in to the RECEIVER TUBE of the attachment. The tractor can be driven to maneuver it into position or it may be necessary to assist the connection by applying the brake to the tractor and sliding the attachment onto the shaft.
2. Once the pivot shaft and receiver tube are fully engaged, secure the attachment by installing the locking collar and pin onto the pivot shaft. (See FIG. 9.1)
3. Slide the CONTROL SWITCH over the edge of the tractor console and route the Battery wire harness lead with the 2-Pin molded connector thru the access hole in the console base located just above the engine choke control knob. (See FIG. 9.2)
4. To reduce the risk of short circuiting the battery for the next step, remove the battery cover and disconnect the BLACK - (negative) ground cable and wires from the battery first and keep all cables/wires together.
5. Connect the short battery wire harness with the 2-Pin molded connector and ring terminals to the battery. Connect the RED +(Positive) lead first. The ring terminal on the RED wire should connect to the battery + (Positive) post.
6. The ring terminal on the BLACK wire should connect to the battery -(Negative) post along with the main ground cable and black wires that were disconnected in step 4.
7. Replace the battery cover and connect the molded connectors from the short battery wire harness to the molded connector from the plow control switch.
8. To connect the Electric Actuator on the plow to the Control Switch first route the remaining lead from the control switch with the plastic connector over the console and along the right hand side of the engine OPPOSITE OF THE EXHAUST. Connect the plastic connector to the mating connector of Electric Actuator. (See FIG. 9.2 & 9.3)

Disconnecting

1. On level ground, adjust the height of the plow blade so it is resting on the ground and the tractor is level.
2. Unplug the control switch from the molded connector harness for the 12V battery. Remove the switch from the tractors console. The switch can remain connected to the electric actuator on the plow.
3. Fold the kickstand of the tractor to the down position if desired or if not immediately reconnecting the tractor to another attachment.
4. Unpin the locking collar and remove it from the pivot shaft.
5. Carefully slide the tractor and attachment apart. The tractor can be running and driven away from the attachment if necessary.

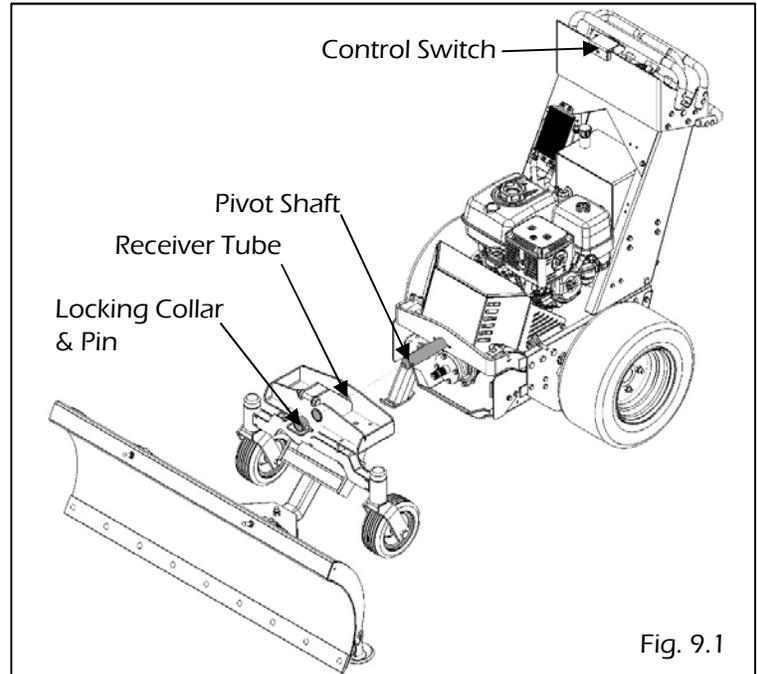


Fig. 9.1

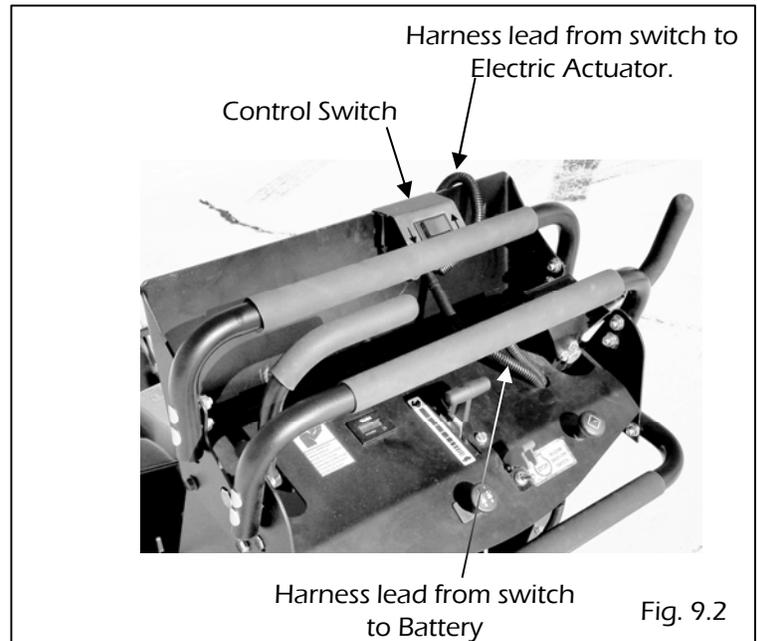


Fig. 9.2

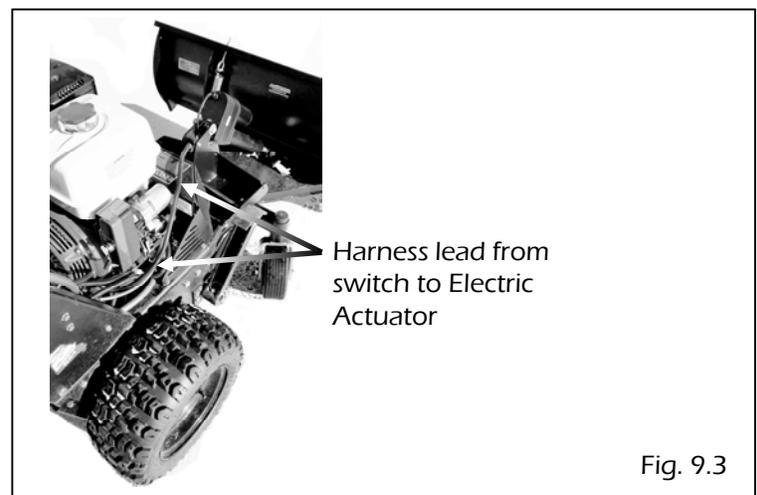


Fig. 9.3

CUSTOMER RESPONSIBILITIES • OPERATION

Operator Presence System:

- Refer to you owner’s manual for the VT389H tractor and be sure to check that the operator presence and interlock systems are working properly before every use. If your Tractor does not function as described, repair the problem immediately.
- The Control Levers must be in the neutral position in order for the machine to start. If the controls are not exactly at neutral the unit will not start.
- The snow plow does not require a PTO shaft, activating the PTO control switch with the plow attached should have no effects and the PTO clutch should not activate.

Tires:

- Maintain proper air pressure in all tires (SEE VT389H operators manual SPECIFICATIONS section).
- Keep tires free of gasoline, oil or insect control chemicals which can harm rubber.
- Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.
- If operating in an area with thorns, it is recommended to fill the tires with sealant.

Driving & Transport on Public Roads:

- Check applicable road traffic regulations before driving and transporting on public roads.
- If the machine is transported, you should always use adequate fastening equipment such as chains and or nylon ratchet straps and ensure that the machine is well anchored to the towing vehicle or trailer.
- The plow attachment should also be lowered to the lowest position and the parking brake engaged during transport.

Plow Maintenance:

- Keep all hardware tightened securely.
- Thoroughly clean the plow attachment to remove debris build up, especially if used in an area where ice-melt salts have been used to prevent corrosion and rust.
- Grease the Pivot Tube using a good quality trailer bearing grease to prevent corrosion and reduce wear.
- Rotate or replace the plow edge as needed to prevent damage to the plow frame.



Starting:

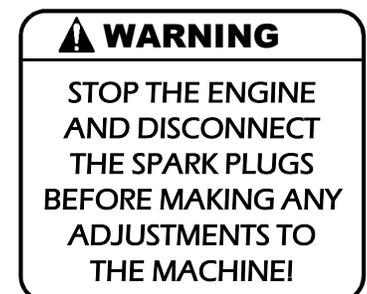
- Refer to the VT389H owner’s manual for complete instructions.
- Before starting the tractor, be sure the area is clear of any people or animals.
- Control handles must be in the neutral lockout position.
 - PTO switch must be in the disengaged position (pushed down).
 - Turn ignition key until engine starts. If the engine struggles to start, engage the choke until the engine fires, then disengage the choke when the engine warms up.
- Once started, increase the engine RPM to desired speed.

Before Operating the Plow

- Before operating this plow attachment make sure you are familiar and comfortable with the tractor controls and operation and have read the tractor owner’s manual.
- Make sure there are no bystanders in the area.
- It is recommended to first drive around in a clear level area to become familiar with the operation and feel of the machine. This machine is heavy and will effect maneuvering at different speeds.
- The correct ground speed for plowing depends on the terrain conditions and material density. Traveling too fast can cause a loss of control and traction.
- Always be aware of your surroundings while operating the plow.
- Inspect the work area before operating to make sure there are no hidden obstacles.

VSP50 Maintenance Schedule	Hours				
	Before Each Use	25	100	Season	Before Storage
Check for Loose Fasteners	X		X		X
Grease Pivot Tube		X ¹			X
Clean off Any Dirt or Debris	X ²			X	X
Check Plow Edge for Wear		X			

1 – Service more often when operating in wet, dirty or dusty conditions.
2 – Clean off more frequent when operating in corrosive conditions.



OPERATION

Adjusting the Plow Height

- The control switch for the electric actuator should be placed on the front hand guard (console) of the tractor steering controls. (Fig. 11.1)
- To raise and lower the plow depress the rocker switch in the direction indicated next to the switch.

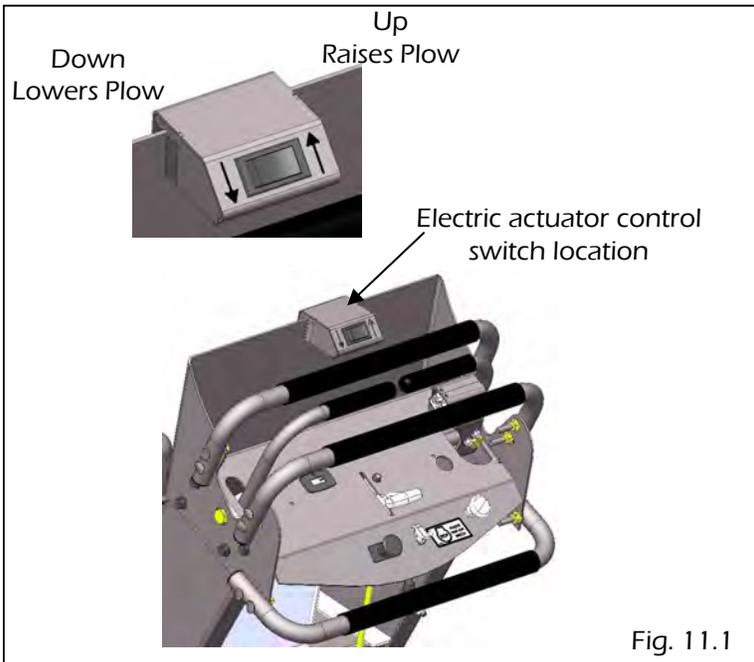


Fig. 11.1

CAUTION

Plow Springs are under tension. Use extreme caution when working near or on the Plow Springs!

Adjusting the Tilt Spring Tension

- The Tilt Springs allow the blade to “Trip” or “break over” forward in the event that the plow strikes and unseen crack, curb, or other unseen obstacle. This helps prevent damage and causing the operator to come to an unexpected stop. If “tripped”, back up slightly and the plow will return when the pressure is released.
 - Loosening or tightening the tension on the springs will change how much force it takes to “trip” the plow blade. (Refer to FIG. 11.3)
1. Remove the Thread Cap.
 2. Loosen the Top Lock Nut and the Bottom Nut.
 3. To INCREASE the tension and increase the force needed to trip the plow blade, run both nuts down the eyebolt towards the spring. To DECREASE the tension, run both nuts up the eyebolt away from the spring.
 4. Adjust both springs the same amount. You can measure the length of the threaded eyebolt above the top lock nut as a reference.
 5. Securely tighten the nuts and replace the thread cap

Adjusting the Plow Tilt

- The forward tilt angle of the plow can be set to 4 different angles. There is a Tilt Block located on both sides of the plow. (See features on page 7, Item number 6 & Fig 11.2).
 - Changing the angle will effect how the material rolls off of the plow blade and also how aggressively the plow “digs” under the snow. Change the angle to suit the conditions and your preference.
1. Loosen the retaining bolt and nut enough to allow the Tilt Blocks to rotate.
 2. Once the bolt has been loosened the plow blade can be pulled forward from the top of the plow to extend the springs.
 3. Rotate the block to set the desired tilt angle. The hole in the block is offset in two directions allowing a different angle according to which side of the block is used to stop the plow blade rotation toward the springs.
 4. Retighten the retaining bolt.

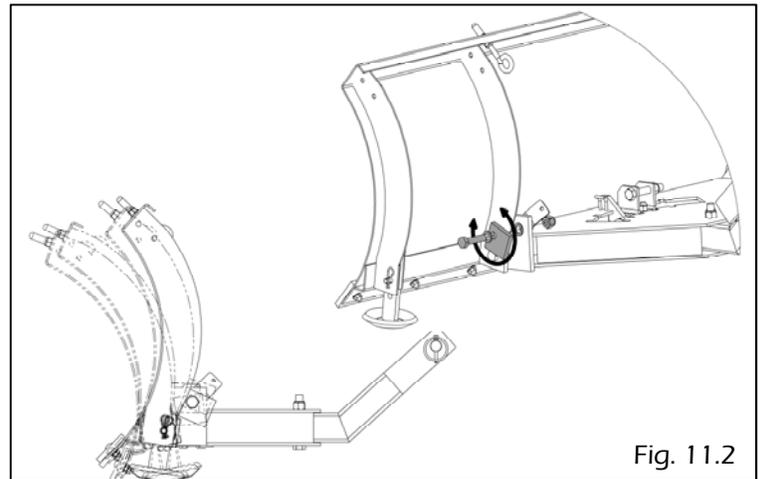


Fig. 11.2

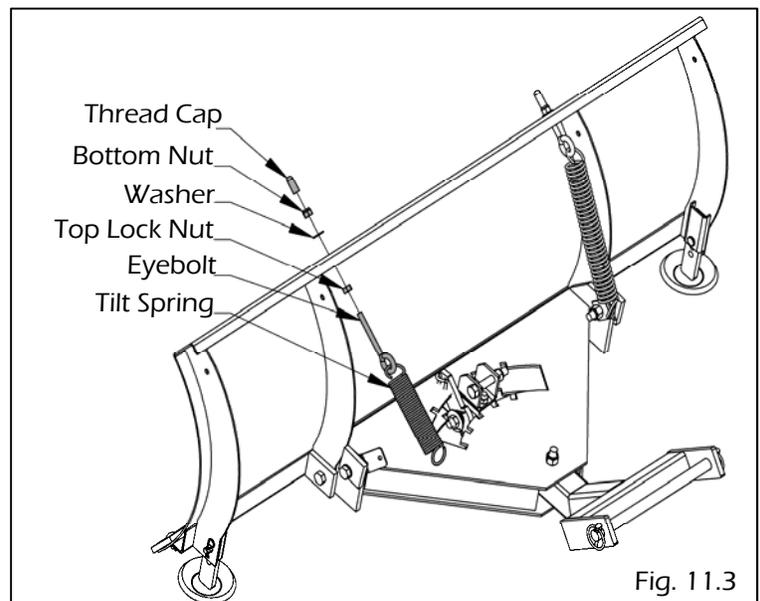
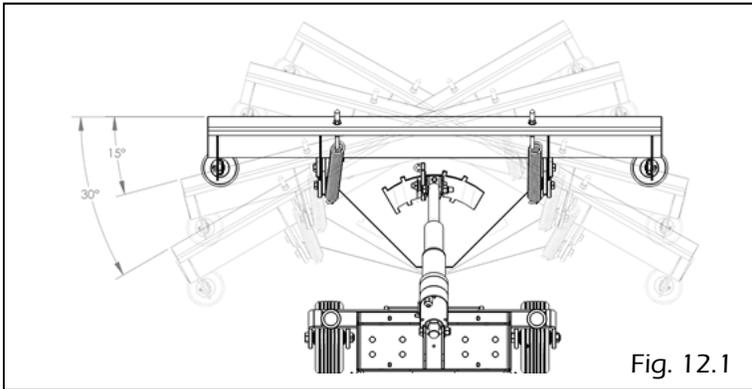


Fig. 11.3

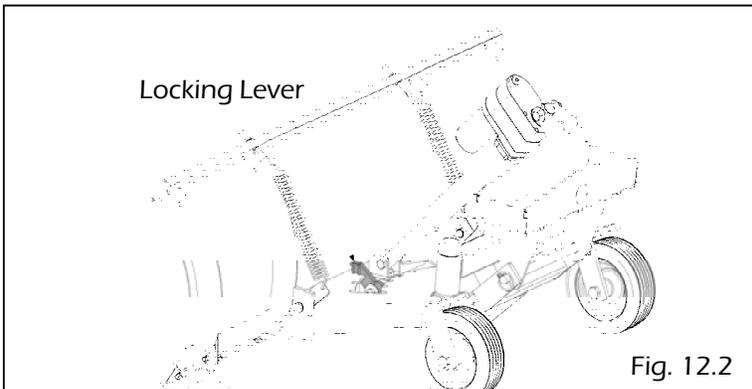
OPERATION

Adjusting the Plow Angle

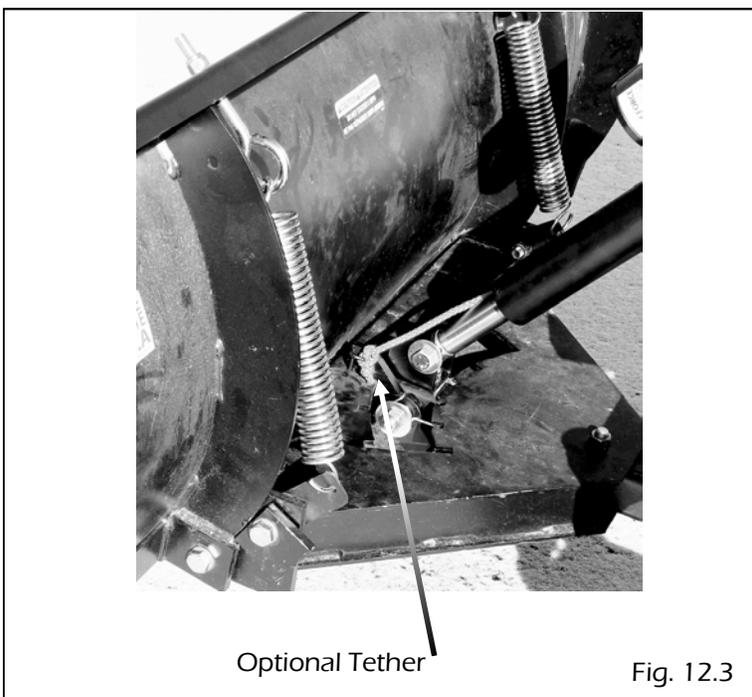
- The angle of the plow can be adjusted straight ahead or in 15° degree increments to the left or to the right.



- The angle of the plow is locked in place by a spring loaded Locking Lever. (See FIG. 12.2)



- An optional tether is supplied with the plow to allow the operator to release the locking lever from the operator's position if desired. (FIG. 12.3)



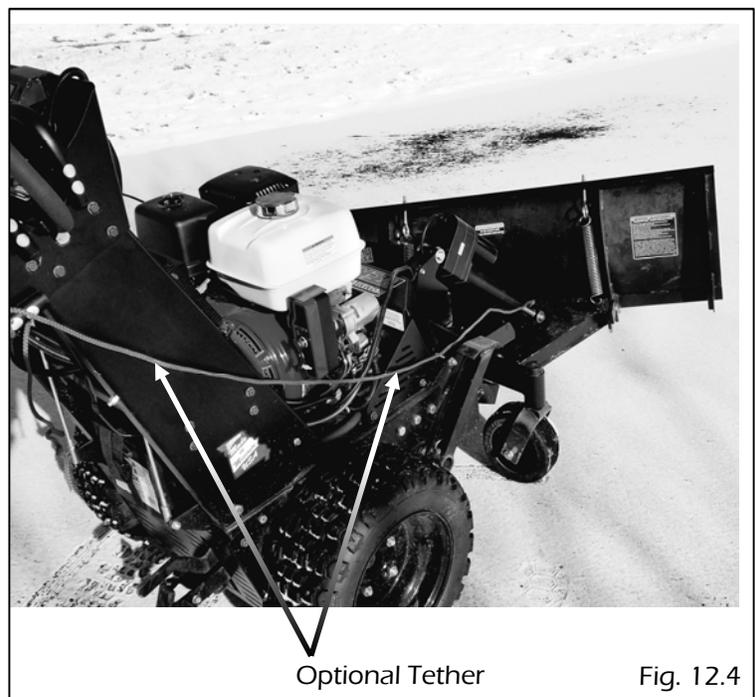
- If using the option Tether, it should be tied to the steel loop provided on the Locking lever. The Tether should then be routed along the Right-Hand side of the tractor (opposite of the engine exhaust) and can be tied to the lower handle of the console. (See FIG. 12.3 & 12.4).

➤ To Change the Plow Angle without the tether:

1. Raise the plow above the ground so it will pivot freely.
2. Set the Parking Brake.
3. Use one hand to pull back the Locking Lever and use your other hand to pivot the plow blade to the desired position.
4. Release the Locking Lever and make sure it engages the associated slot to lock the plow in place.
5. Release the Parking Brake.

➤ To Change the Plow Angle from operators position with the tether:

1. Lower the plow so it is touching the ground.
2. Pull the tether to release the Locking Lever and place you hands on the tractor controls (still holding tension on the tether). Steer the Tractor left or right. Release the tether at the desired angle and the locking lever will latch back in to the desired angled slot.



OPERATION

Adjusting The Skid Shoes

- Skid shoes located on both ends of the plow are adjustable and are designed to limit how close the plow edge is to the surface you are plowing.
- Skid shoes may be removed to plow smooth surfaces with out large cracks or gravel but it is recommended they are used to reduce wearing the plow edge and also to prevent the plow edge from damaging the surface or catching on cracks or embedded rocks which could cause the plow to trip forward. Catching a large crack in concrete or asphalt surfaces may also cause the plow to damage the edge of the concrete/asphalt causing the crack to become larger. Caution should be used to prevent damaging the surface you are plowing.
- Using the skid shoes to plow gravel surfaces such as driveways can help keep the gravel in the driveway and not become pushed off in to the grass or ditches.

To Adjust the Skid Shoe Height:

1. Refer to FIG. 7.1 item number 5 & FIG. 12.2 for skid shoe location.
2. Raise the plow high enough to allow the skid shoes to be lowered to the desired position.
3. Remove the pins from the skid shoe that hold them in place.
4. Raise or lower the skid shoe to the desired position.
5. Replace the pins.
6. Repeat the steps for the skid shoe on the opposite end of the plow.

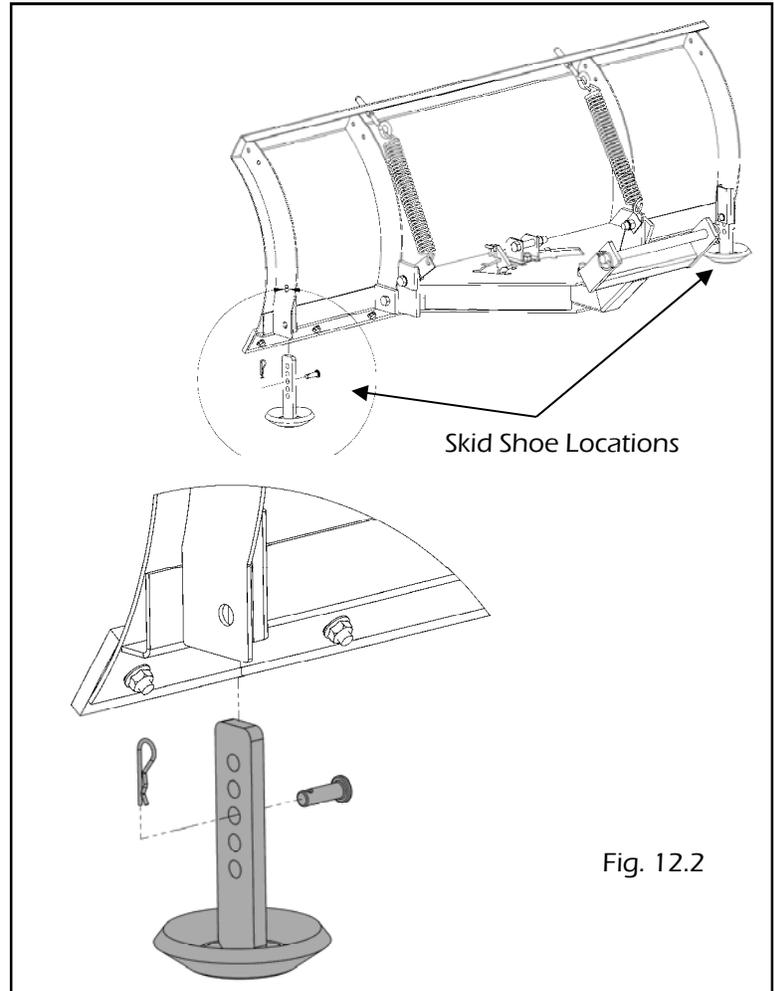
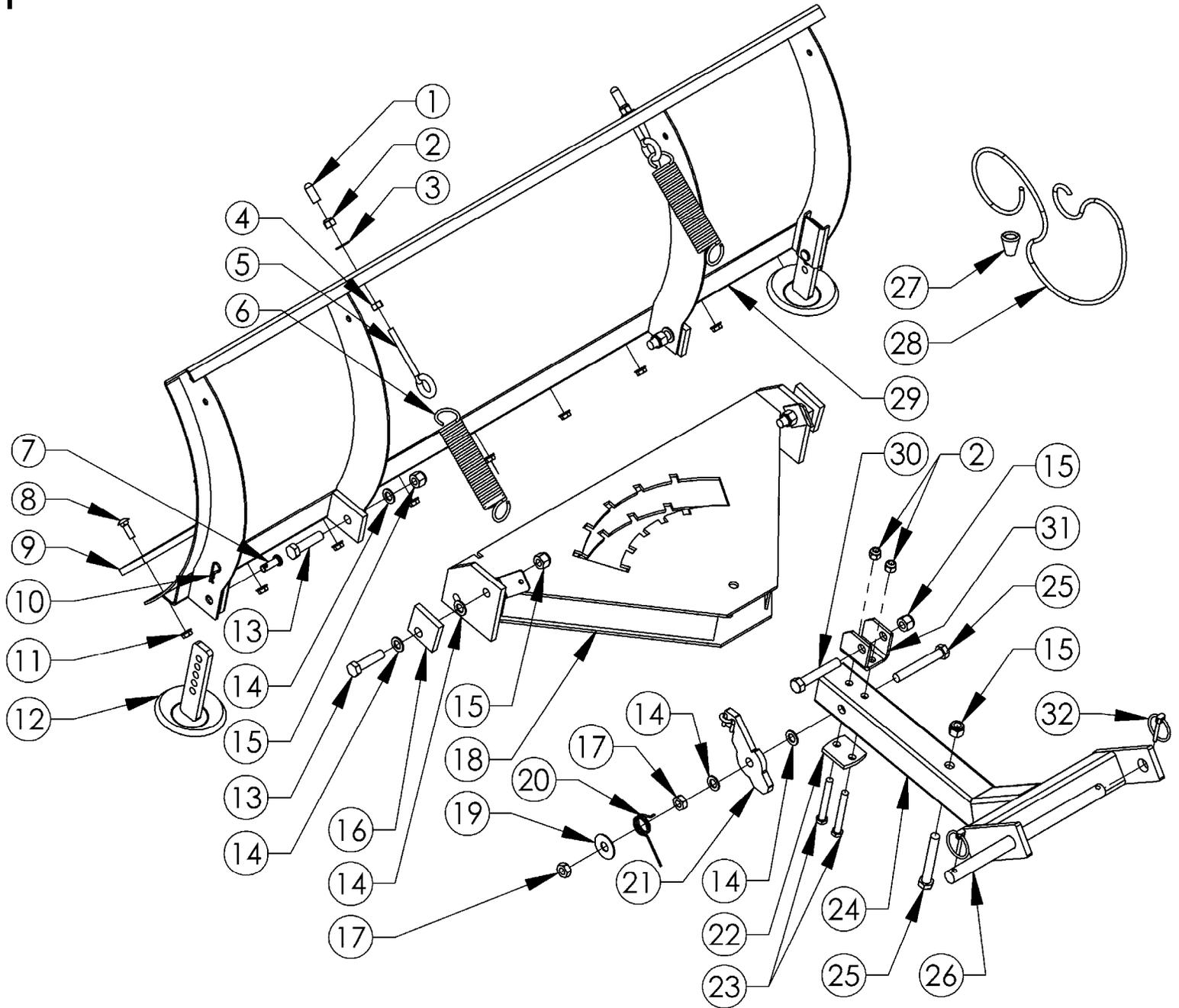


Fig. 12.2

Plowing Instructions and Guidelines:

- This plow is intended to move fresh fallen snow.
 - Plow after every 3" of heavy snowfall. Snow may accumulate rapidly and make it more difficult to plow if you wait until the snow has stopped.
 - Avoid ramming the plow into piles of snow.
 - When plowing large areas, angle the plow to one side and create a single path in the center. Push the snow to the outer edges in successive passes.
 - In deep or heavier "wet" snow, use only 1/2 to 3/4 of the plow blade length and overlap each pass to help keep traction as well as to keep snow from falling outside of the plow edge.
 - When done with a plowing pass, back up slightly from the snow pile before raising the plow blade.
 - The plow cannot break through ice.
 - Use the "Straight Position" to plow straight paths and leave the pile of snow at the end of each row.
 - Be aware of immovable objects that could be hidden from view.
1. Begin plowing by adjusting the plow to the best angle so the snow rolls off the plow to the side in the desired direction.
 2. Lower the plow so it contacts the surface and will follow the ground contour, the front caster wheels may raise up off of the ground giving the plow extra down pressure.
 3. Clear the area by pushing the snow to the ends of drives or around perimeters.
 4. Treat the surface after plowing with snow and ice melt materials as needed.

PARTS IDENTIFICATION

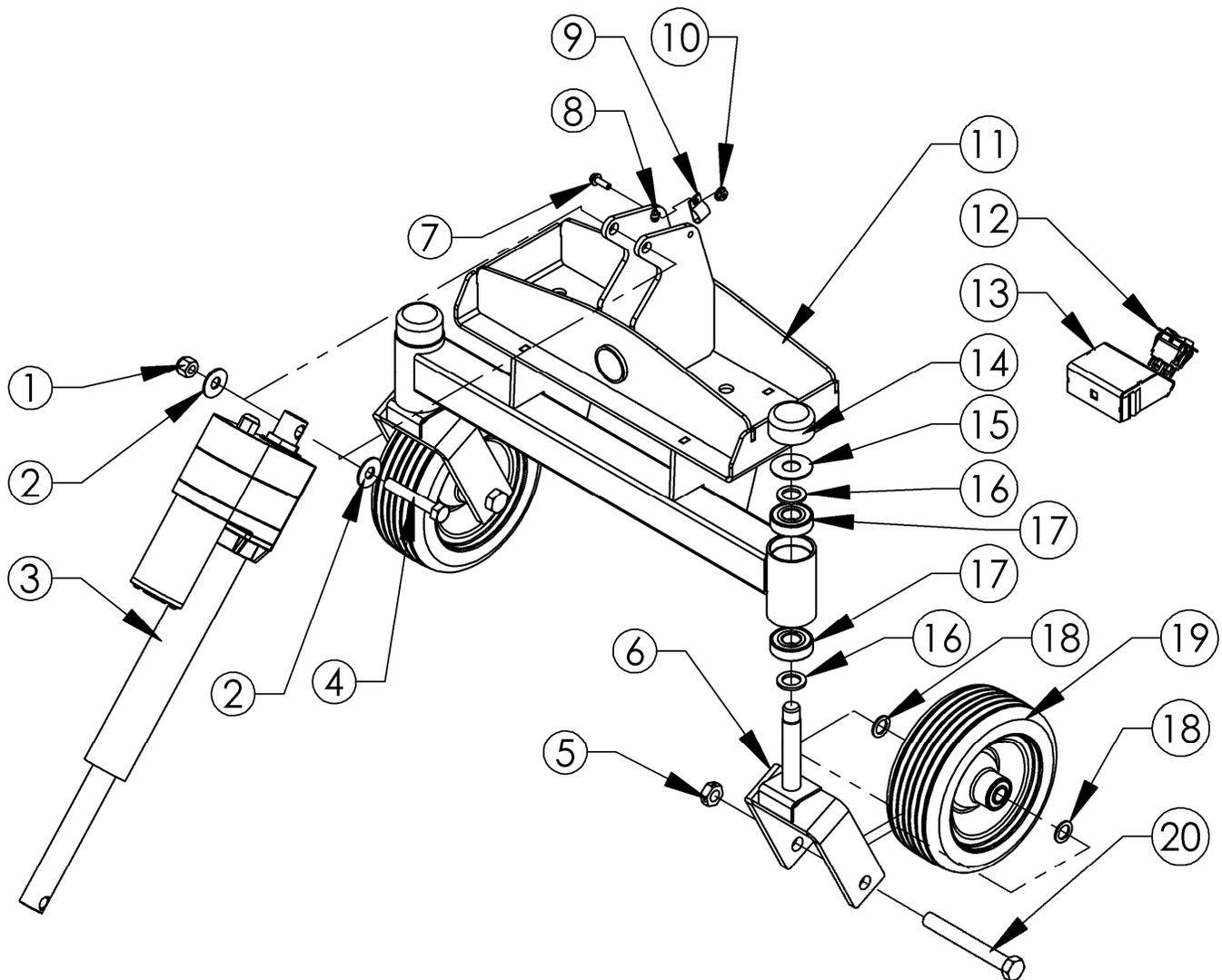


Item #	Part #	Description	Item #	Part #	Description
1	AS125	Cap - Round Vinyl, Black	17	NB121	Nut - Jam Lock, 1/2-13 2-Way
2	NB182	Nut - Nyloc 3/8-16	18	2323*	Pivot - Weldment
3	NB272	Washer - SAE Flat 3/8	19	TR150W	Washer - .531 X 1 1/2 X .062
4	NB212	Nut - HNC, 3/8-16	20	2336	Spring - Pivot
5	NB635	Eyebolt - Turned 3/8-16 X 3	21	2319*	Latch - Lever Assembly
6	2335	Spring - Tilt	22	2310*	Bracket - Support; Plow
7	NB300	Pin - Clevis, 3/8 X 1 1/8	23	NB150	Bolt - 3/8-16 X 3 HCC
8	10197	Bolt - Carriage 5/16-18 X 1	24	2588*	Mount - Plow Weldment
9	20084*	Edge - Cut, Reversible .375 X 2.5 X 50	25	NB577	Bolt - 1/2-13 X 3 1/2
10	NB127	Pin - Hair, #39	26	2642*	Pin - Plow Mount, 3/4 X 12
11	NB170	Nut - Serrated Flange 5/16-18	27	H7K	Knob - Rope
12	10068*	Skid - Weldment	28	H9B	Rope - Red
13	NB509	Bolt - 1/2-13 X 2 HCC	29	2150*	Blade - Rolled Weldment, 50
14	NB177	Washer - Mach 1/2	30	NB131	Bolt - 1/2-13 X 3 HCC
15	NB281	Nut - Nyloc 1/2-13	31	22131*	Bracket - Actuator Lift Mount
16	2331*	Block - Tilt	32	NB506	Pin - Lynch, 3/16

When ordering replacement parts

*USE PAINT CODE: GT=GREY TK=BLACK

PARTS IDENTIFICATION



ITEM NO.	PART #	DESCRIPTION	ITEM NO.	PART #	DESCRIPTION
1	NB281	Nut - Nyloc 1/2-13	11	22052*	Plow Mount Weldment
2	NB555	Washer - USS Flat, 1/2 ZY	12	19978	Switch - DPDT, 30A, On-Off-On MOM
3	22130	Actuator-12VDC,20:1, 6",1000#,17.7x23.7	13	22062*	Switch Box
4	NB131	Bolt - 1/2-13 X 3 HCC	14	094618	Bearing Cap
5	NB595	Nut - Lock Jam, 5/8-11 2 Way Grade A	15	17X195	Washer - .768 X 1.814 X .060
6	22060*	Caster Weldment	16	NB195	Washer - 13/16 X 1 1/4 X 1/8 ZY
7	NB690	Bolt - Serr Flange, 1/4-20 X 3/4 GR5 ZY	17	B98	Bearing, 6204-2RS, 20mm Bore
8	15355	Fitting - Grease Zerk	18	NB149	Washer - 5/8 ID X 1 OD 14 GA ZY
9	14316	Wire Clamp, 3/8" x 1/4" Hole	19	21284	Tire/Wheel With Bearing - 8 X 3, Solid
10	NB524	Nut - Serr Flange, 1/4-20 Grade 5 ZY	20	19642	Bolt - 5/8-11 X 5 GR5 ZY

When ordering replacement parts

*USE PAINT CODE: GT=GREY TK=BLACK

PRODUCT IDENTIFICATION

Attachment Identification

Each attachment has its own model number and serial number. The number for the attachment can be found on the side of the upper mounting plate for the electric actuator (refer to Symbols & Decal section for reference). All parts listed herein may be ordered directly from Swisher or your nearest Swisher dealer.

Unauthorized Replacement Parts

Use only Swisher replacement parts. The replacement of any part on this unit with anything other than a Swisher authorized replacement part may adversely affect the performance, durability and safety of this unit and may void the warranty. Swisher disclaims liability for any claims or damages, whether warranty, property damage, personal injury or death arising out of the use of unauthorized replacement parts.

WHEN ORDERING PARTS, PLEASE HAVE THE FOLLOWING INFORMATION AVAILABLE:

- MODEL NUMBER - _____
- SERIAL NUMBER - _____
- DATE PURCHASED - _____
- PURCHASE FROM - _____
- PART NUMBER (W/ PAINT CODE) - _____
- PART DESCRIPTION - _____

S.A.I.
1602 CORPORATE DRIVE
WARRENSBURG, MO 64093

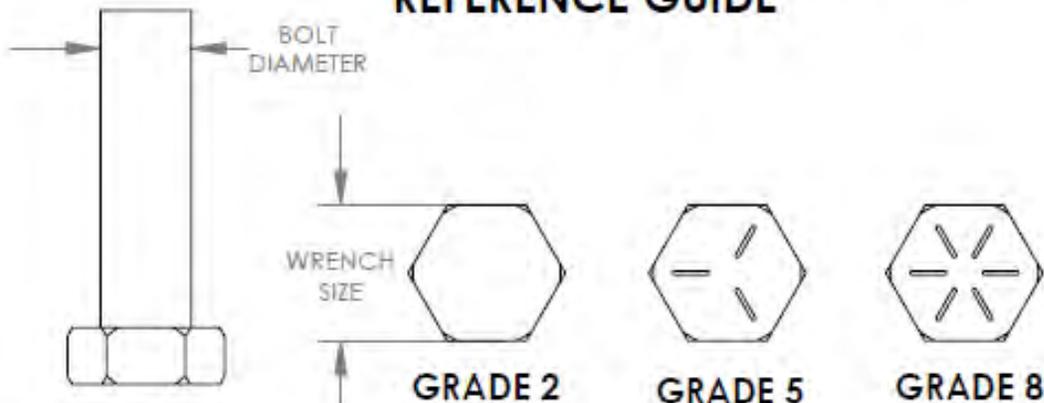
www.swisherinc.com
TELEPHONE - 1-800-222-8183
FAX - 1-660-747-8650

cust.serv@swisherinc.com

NOTES

TORQUE REFERENCE GUIDE

TORQUE SPECIFICATIONS REFERENCE GUIDE



Bolt Diameter (INCH)	Wrench Size	SAE GRADE 2		SAE GRADE 5		SAE GRADE 8	
		lb-ft	(Nm)	lb-ft	(Nm)	lb-ft	(Nm)
1/4	7/16	5.5	(7)	9	(12)	12.5	(17)
5/16	1/2	11	(15)	18	(24)	26	(35)
3/8	9/16	20	(27)	33	(45)	46	(62)
7/16	5/8	32	(43)	52	(70)	75	(102)
1/2	3/4	50	(68)	80	(108)	115	(156)
9/16	7/8	70	(95)	115	(156)	160	(217)
5/8	15/16	100	(136)	160	(217)	225	(305)
3/4	1-1/8	175	(237)	280	(380)	400	(542)
7/8	1-5/16	175	(237)	450	(610)	500	(678)
1	1-1/2	270	(366)	540	(732)	750	(1017)
1-1/8	1-11/16	300	(407)	675	(915)	1075	(1457)
1-1/4	1-7/8	425	(576)	950	(1288)	1500	(2034)

Torque values are for reference. 10% variance is allowable. Use these values unless specific torque values are given for a specific application.

Fasteners should be replaced with the same grade. Make sure fasteners threads are clean and that you properly start thread engagement. This will prevent them from failing when tightening.

Tighten toothed or serrated-type lock nuts to the full torque value.

LIMITED WARRANTY

The manufacturer's warranty to the original consumer purchaser is:

This product is free from defects in materials and workmanship for a period of three (3) years for residential use and one (1) year for commercial use from the date of purchase by the original consumer purchaser.

We will repair or replace, at our discretion, parts found to be defective due to materials or workmanship. This warranty is subject to the following limitations and exclusions:

1) Limitations

This warranty applies only to products which have been properly assembled, adjusted, and operated in accordance with the instructions contained within this manual. This warranty does not apply to any product of Swisher that has been subject to alteration, misuse, abuse, improper assembly or installation, shipping damage, or to normal wear of the product.

2) Exclusions

Excluded from this warranty are normal wear, normal adjustments, normal maintenance,

In the event you have a claim under this warranty, you must deliver the product to an authorized service dealer. All transportation charges, damage or loss incurred during transportation of parts submitted for replacement or repair under this warranty shall be borne by the purchaser. Should you have any questions concerning this warranty, please contact us toll-free at 1-800-222-8183. The model number, serial number, date of purchase and the name of the authorized Swisher dealer from whom you purchased the mower will be needed before any warranty claim can be processed.

THIS WARRANTY DOES NOT APPLY TO ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES AND ANY IMPLIED WARRANTIES ARE LIMITED TO THE SAME TIME PERIODS STATED HEREIN FOR ALL EXPRESSED WARRANTIES. Some states do not allow the limitation of consequential damages or limitations on how long an implied warranty may last, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may have other rights, which vary from state-to-state. This is a limited warranty as defined by the Magnuson-Moss Act of 1975.

Accessories

The plow of the VERSA VSP50 may be disconnected from the mount by removing the Quick Attach Pin And the bottom actuator bolt to be used on these other quality mounting system for your ATV or UTV.

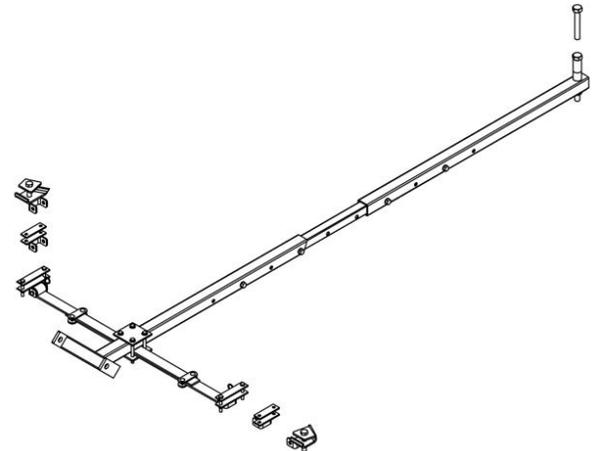
Universal Mounting Kit 2646

- Fits most ATV's
- Leaf spring frame
- Attaches to rear hitch and front A-arms
- Frame is super-duty steel square tubing
- No ground clearance issues
- Durable powder coat finish
- Used in conjunction with Swisher Plow Blades or Swisher Dump Bucket .



Universal Mount Kit, UTV Comm. Pro - 20096

- Fits most UTV's
- Leaf spring frame
- Attaches to rear hitch and front A-arms
- Frame is super-duty steel square tubing
- No ground clearance issues
- Durable powder coat finish
- Used in conjunction with Swisher Plow Blades or Swisher Dump Bucket.



UTV Universal Mounting Kit 10260

- Attaches to atv or UTV front 2"x2" receiver hitch
- Heavy duty steel tubing
- Tough powder coat finish
- One pin attachment to interchange accessories



SWISHER HISTORY



The first Riding Lawn Mower (1955) by Swisher.



The first Self-Propelled Mower (1945) by Swisher.

Back before electricity came to rural Missouri Max Swisher was producing lawn mowers from his mother's chicken house. Max never liked to mow grass. He installed a gearbox on his family's lawn mower creating a self-propelled unit. By tying one end of a rope to the mower and the other end to a tree in the center of the yard the mower circled the tree, shortening the rope and guiding the mower in concentric circles. Max enjoyed relaxing under a shade tree while his invention did all the work.

Max had designed his first self-propelled rotary lawn mower to do his dirty work for him. Neighbors noticed his new invention and began asking him to make more. Today, over 70 years later, Swisher is still producing innovative lawn and garden and ATV/UTV equipment designed to give us all more "relaxing in the shade" time.

Swisher products have been featured nationally on television programs such as *Regis and Kathie Lee* and seen in publications like *ATV Magazine*, *Country Journal*, *Popular Mechanics Magazine* and others. In January 2000 *Popular Mechanics Magazine* named Max's zero turning radius riding mower one of the 20th century's top household inventions.

Swisher offers value and function in its products to meet your grounds maintenance needs.

**CELEBRATING 75 YEARS OF INNOVATION
SINCE 1945**



www.swisherinc.com

OWNER'S MANUAL

MODEL NO.
VSP50



IMPORTANT

Read and follow all
Safety Precautions
and Instructions
before operating this
equipment.

Commercial Pro Land Management System **VERSA** 50" Snow Plow Attachment

Each attachment has its own model number. The model number for the VSP50 Plow System can be found on the side of the upper mounting plate for the electric actuator . All attachments parts listed herein may be ordered directly from Swisher or your nearest Swisher dealer.

WHEN ORDERING PARTS, PLEASE HAVE THE
FOLLOWING INFORMATION AVAILABLE:

PRODUCT - VSP50 Plow Attachment
SERIAL NUMBER - _____
MODEL NUMBER - _____
PART NUMBER - _____
PART DESCRIPTION - _____

TELEPHONE - 1-800-222-8183
FAX - 1-660-747-8650

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