

**Operation & Maintenance Manual** 



# **Alpha**Plow™



HD Models 15,000 - 30,000 lb.



**REMEMBER**: Register your product! No claims for warranty shall be considered unless your product registration card is completed online within 30 days of purchase. Go to: snowwolfplows.com/registration.

### **MANUFACTURER'S WARRANTY**

### Two-Year Limited Warranty

SNOWWOLF International, hereinafter referred to as SNOWWOLF, warrants new SNOWWOLF SNOW PLOWS at the time of delivery to the original purchaser, to be free from defects in material and workmanship when properly set up and operated in accordance with the recommendations set forth by SNOWWOLF.

SNOWWOLF'S liability for any defect with respect to accepted goods shall be limited to repairing the goods at a SNOWWOLF designated location or at an authorized dealer location, or replacing them as SNOWWOLF shall elect. The above shall be in accordance with SNOWWOLF warranty adjustment policies. SNOWWOLF'S obligation shall terminate twenty-four (24) months after the delivery of the goods to original purchaser including cutting edge breakage or wear. This warranty shall not apply to any machine or attachment which shall have been repaired or altered outside the SNOWWOLF factory or authorized SNOWWOLF dealership or in any way so as in SNOWWOLF'S judgment, to affect its stability or reliability, nor which has been subject to misuse, negligence or accident beyond the Company recommended machine rated capacity.

#### Warranty Claim

To submit a warranty claim, a return authorization from SNOWWOLF must be obtained. The failed part may then be returned. Tampering with the failed part may void the warranty. This warranty does not include freight or delivery charges incurred when returning machinery for servicing. Dealer mileage, service calls, and pickup/delivery charges are the customers' responsibility.

### **Exclusions of Warranty**

Except as otherwise expressly stated herein, SNOWWOLF makes no representation or warranty of any kind, expressed or implied, AND MAKES NO WARRANTY OF MERCHANTABILITY IN RESPECT TO ITS MACHINERY AND/OR ATTACHMENTS ARE FIT FOR ANY PARTICULAR PURPOSE. SNOWWOLF shall not be liable for incidental or consequential damages for any breach of warranty, including but not limited to inconvenience, rental of replacement equipment, loss of profits or other commercial loss. Upon purchase, the buyer assumes all liability for all personal injury and property resulting from the handling, possession, or use of the goods by the buyer.

No agent, employee, or representative of SNOWWOLF has any authority to bind SNOWWOLF to any affirmation, representation or warranty concerning its machinery and/or attachments except as specifically set forth herein.

This warranty policy supersedes any previous documents.

No claims for warranty shall be considered unless warranty registration is sent to SNOWWOLF within 30 days of purchase!



15100 Business Parkway Rosemount, MN 55068 www.snowwolfplows.com



Introduction	3
Owner Information	
Serial Number Location	
Attachment Identification	6
Safety	7
Safety Information	9
Safe Operation Needs A Qualified Operator	
Operation	13
General Information	15
Pre-Operation Inspection	15
Attachment Inspection	16
Daily Inspection	
Monthly Inspection Attachment Installation	
Entering The Operator's Position	
Leaving The Operator's Position	
Connecting Attachment To The Machine	
Hydraulic Couplers	
Operating The Attachment.	
Operation	
Attachment Removal	21
Maintenance	23
Maintenance Safety	25
General Maintenance	
AlphaPlow Maintenance	27
Cutting Edge Replacement	
Troubleshooting	
Storage And Return To Service	
Parts	31
Models AlphaPlow 10.0, 12.0	
Parts	
Options	

## **5**7 SnowWolf

Hoses
Decal Identification
ActivEdge, AR400, 18" Sectional Blade
ActivEdge, AR400, 24" Sectional Blade
ActivEdge, Carbide, AR400, 18" Sectional Blade
ActivEdge, Carbide, AR400, 24" Sectional Blade
Spill Guard
Mount, MT100 Kit, CAT-IT
Mount, MT200 Kit, CAT-FUSION45
Mount, MT300 Kit, JRB-416
Mount, MT400 Kit
Mount, MT500 Kit, VOLVO
Mount, MT600 Kit, Universal Weld On49
Specifications
Attachment Specifications
Dimensions
Torque Specifications

Owner Information	.5
Serial Number Location	.5
Attachment Identification	.6



### **Owner Information**

Thank you for your decision to purchase a SnowWolf AlphaPlow. To ensure maximum performance of your equipment, it is mandatory that you thoroughly study the Operator's Manual and follow the recommendations. Proper operation and maintenance are essential to maximize equipment life and prevent personal injury.

Operate and maintain this equipment in a safe manner and in accordance with all applicable local, state, and federal codes, regulations and / or laws. Follow all on-product labeling and instructions.

Make sure that all personnel have read this Operator's Manual and thoroughly understand safe and correct operating, installation and maintenance procedures.

SnowWolf is continually working to improve its products. SnowWolf reserves the right to make any improvements or changes as deemed practical and possible without incurring any responsibility or obligation to make any changes or additions to equipment sold previously.

Although great care has been taken to ensure the accuracy of this publication, SnowWolf makes no warranty or guarantee of any kind, written or expressed, implied or otherwise with regard to the information contained within this manual. SnowWolf assumes no responsibility for any errors that may appear in this manual and shall not be liable under any circumstances for incidental, consequential or punitive damages in connection with, or arising from the use of this manual.

Keep this manual available for frequent reference. All new operators or owners must review the manual before using the equipment and annually thereafter. Contact your SnowWolf Attachments Dealer for assistance, information, or additional copies of the manual. Contact www.snowwolfplows.com or call 1-800-905-2265 for a complete list of dealers in your area.

### **Serial Number Location**

Please record attachment information in the space provided for future reference.

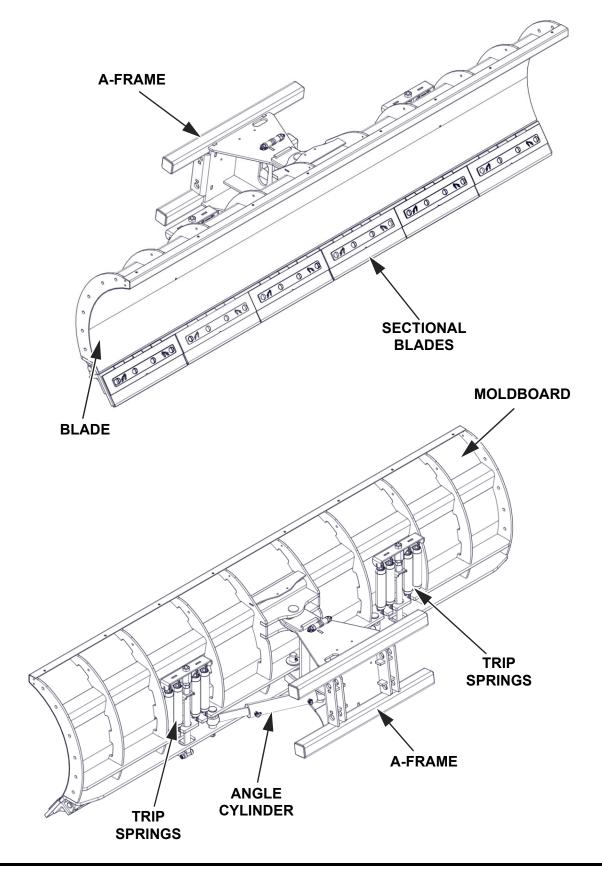
Model Number:
Serial Number:
Dealer Name:
Dealer Number:
Date of Burchase:

Always use the serial number of the AlphaPlow when requesting service information or when ordering parts. Early or later models (identification made by serial number) may use different parts, or may require a different procedure in doing a specific service operation.

#### NOTE: This document and the information provided are the property of SnowWolf and may only be used as authorized by SnowWolf.

The serial number plate is located on the rear of the AlphaPlow moldboard.

### **Attachment Identification**



Safety Information	9	9
Safe Operation Needs A Qualified Operator	9	9
Importance of Safety	.10	)





### **Safety Information**

### A Safety Alert Symbol

This SAFETY ALERT SYMBOL identifies important safety messages on the equipment and in the owner's manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

## 

The signal word DANGER on the machine and in the manuals indicates a hazardous situation which, if not avoided, will result in death or serious injury.

## 

The signal word WARNING on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

## 

The signal word CAUTION on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

## ▲ IMPORTANT

The signal word IMPORTANT identifies procedures which must be followed to avoid damage to the machine.

Safe Operation Needs A Qualified Operator



#### AVOID SERIOUS INJURY OR DEATH

Operators must receive instructions before operating the machine. Untrained operators can cause serious injury or death.

For an operator to be qualified, he or she must not use drugs or alcoholic drinks which impair alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he or she can safely operate a machine and the equipment.

#### **Owner's Responsibility**

Operate and maintain this machine in a safe manner and in accordance with all applicable local, state, and federal codes, regulations and/or laws; and in compliance with on-product labeling and this owner's manual instructions.

Make sure that all personnel have read this owner's manual, and thoroughly understand safe and correct installation, operation and maintenance procedures

Give operating instructions to the operators before allowing them to operate the machine, and at least annually thereafter.



### Importance of Safety

#### **Operating Safety**

- Read and follow instructions in this manual and the machine's Operators Manual before operating.
- The AlphaPlow attachment is intended for use in snow removal. Use of this equipment in any other manner is considered to be contrary to the intended use of the attachment.
- Under no circumstances should children be allowed to work with this equipment.
- This equipment is dangerous to persons unfamiliar with its operation.
- Check for overhead and / or underground lines before operating equipment (if applicable).
- In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.
- Check that the attachment is securely fastened to the machine.
- Make sure all the machine controls are in the NEUTRAL before starting the machine.
- Operate the equipment only from the operator's position.
- Operate the equipment according to the Operator's Manual.
- When learning to operate the equipment, do it at a slow rate in an area clear of bystanders.
- DO NOT permit personnel to be in the work area when operating the equipment.
- The equipment must be used ONLY on approved machines.

- DO NOT modify the equipment in any way. Unauthorized modification may impair the function and / or safety and could affect the life of the equipment.
- DO NOT make any adjustments or repairs on the equipment while the machine is running.
- Keep shields and guards in place. Replace if damaged.
- DO NOT operate equipment in poor visibility conditions such as fog, darkness, or any conditions that limit clear visibility less than 300 feet (100 m) in front of and to the sides of the equipment.
- DO NOT operate in a work area that has not been inspected for foreign debris and obstacles.
- Remove any foreign objects and clearly mark any objects that cannot be removed.
- Wear safety glasses, gloves, hard hat, hearing protection and other protective clothing when operating or maintaining this equipment.



### Importance of Safety Cont'd

#### **Fire Prevention Safety**

 All fuels, most lubricants and some coolant mixtures are flammable. Flammable fluids that are leaking or spilled onto hot surfaces or onto electrical components can cause a fire.

#### **Transporting Safety**

- Comply with state and local laws governing highway safety and movement of machinery on public roads.
- Check local laws for all highway lighting and marking requirements.
- Always yield to oncoming traffic and move to the side of the road so any following traffic may pass.
- Never allow riders on either machine or equipment.
- If transporting the attachment on a truck or trailer, make sure it is properly secured to the transport vehicle.

#### **Hydraulic Safety**

- Always disconnect hydraulic connections between the machine and the AlphaPlow before performing maintenance to the AlphaPlow.
- Always clean fluid spills. Do not use gasoline or diesel fuel for cleaning parts. Use commercial nonflammable solvents.
- Check hydraulic tubes, hoses and fittings for damage and leakage. Never use open flame or bare skin to check for leaks. Hydraulic tubes and hoses must be properly routed and have adequate support and secure clamps. Tighten or replace any parts that show leakage.



Leaking fluids under pressure can enter the skin and cause serious injury or death. Immediate medical attention is required. Wear goggles. Use cardboard to check for leaks.



General Information Pre-Operation Inspection	
Attachment Inspection	16
Daily Inspection       Monthly Inspection	
Attachment Installation	17
Entering The Operator's Position Leaving The Operator's Position Connecting Attachment To The Machine Hydraulic Couplers Checking AlphaPlow Operation	17 17 18
Operating The Attachment	
Attachment Removal	21





### **General Information**

### **Pre-Operation Inspection**

Before operating the AlphaPlow for the first time and each time thereafter, use the following list as a guideline during equipment inspection.

- 1. Use only a machine of adequate power and weight to operate the AlphaPlow.
- 2. Check the AlphaPlow and machine's quick tach mounts for damaged, loose or missing parts. Repair as needed before operation.
- 3. Check that the AlphaPlow is properly attached to the machine. Be sure retainers are used on the mounting pins.
- 4. Check that wear shoes (if equipped) are set at the same working depth.
- 5. Make sure that all guards and shields are in place, secured and functioning as designed.
- 6. Check oil level in machine's hydraulic reservoir.
- 7. Check that the hydraulic hoses and couplers are securely attached to the AlphaPlow and to the machine. Make sure hoses are routed and secured to avoid pinch points or strain during movement of the machine/attachment.
- 8. Check cutting blade for wear or damage.
- 9. Check hydraulic lines, connections and fittings for hydraulic oil leaks.





Leaking fluids under pressure can enter the skin and cause serious injury or death. Immediate medical attention is required. Wear goggles. Use cardboard to check for leaks.

### **Attachment Inspection**

### **Daily Inspection**

NOTE: Inspect the attachment by performing a walk around daily before and after use. Use the following inspection checklist as a guideline.

Check the following items every 10 hours of operation:

- Verify that the AlphaPlow is properly connected to the machine.
- Check that all shields and guards are in place.
- Check for damaged or leaking hydraulic hoses or fittings. Replace if necessary.
- Check moldboard cutting edge for wear or damage. Replace if necessary.
- Check moldboard cutting edge for wear or damage. Replace if necessary.
- Check that all cotter pins that retain pivot/ anchor pins are in place and not damaged or missing.
- Check the AlphaPlow to ensure that all components are secure and that all bolts and nuts are thoroughly tightened.
- Check the AlphaPlow mounting hardware for wear or damage. Inspect the pins and mount (on the attachment) for wear or damage. Repair or replace damaged parts if necessary.

- Inspect the AlphaPlow for cracks, bends, or excessive wear.
- Check wear shoes (if equipped) for wear.
- Check that all bolts are tight.
- Check moldboard cutting edge and mounting plate for cracks or damage. Replace if necessary.
- Check hydraulic lines, connections and fittings for hydraulic oil leaks. Repair or replace damaged parts if necessary.
- Check for damaged or missing decals. Replace if necessary.
- Lubricate as required.



#### AVOID SERIOUS INJURY OR DEATH

Before servicing the attachment:

- Always park on a flat level surface.
- Lower lift arms and place attachment flat on the ground.
- Place all controls in NEUTRAL.
- Engage the park brake.
- Wait for all moving parts to stop.
- Stop the engine and remove the key.

SEE MACHINE'S OPERATOR'S MANUAL FOR ADDITIONAL INFORMATION.

### **Monthly Inspection**



### **Attachment Installation**

## 



See the machine's Operator's Manual for detailed information on operating the loader.

### **Entering The Operator's Position**

Use the attachment safety treads, handles and steps (on the machine) to enter the operator's position.

When in the operator's position, lower safety seat bar, start the engine and release the parking brake.

### Leaving The Operator's Position



#### AVOID SERIOUS INJURY OR DEATH

Before leaving the operator's position:

- Always park on a flat level surface.
- Lower lift arms and place attachment flat on the ground.
- Place all controls in NEUTRAL.
- Engage the park brake.
- Stop the engine and remove the key.
- Wait for all moving parts to stop.

## SEE MACHINE'S OPERATOR'S MANUAL FOR ADDITIONAL INFORMATION.

Connecting Attachment To The Machine

## **MARNING**



**CRUSH HAZARD** 

- Before moving the machine, look in all directions and make sure no bystanders, especially small children are in the work area. Do not allow anyone between the machine and attachment when approaching the attachment for connecting.
- Keep fingers and hands out of pinch points when connecting and disconnecting attachment.

Before connecting to the attachment, inspect the machine's mounting plate. (See the machine's Operator's Manual for inspecting the mounting frame).

Enter the operator's position. See "Entering The Operator's Position" on page 17.

Lower the machine's lift arm and tilt the machine's mounting plate forward.

Drive the machine slowly forward until the top edge of the machine's mounting frame is completely under the mounting flange of the AlphaPlow mounting frame.

Slowly raise and tilt the machine's mounting plate back until the AlphaPlow is slightly off the ground and attachment mounting frame fully contacts the front of the machine's mounting plate.

## Connecting Attachment To The Machine (Cont'd)

## 

#### AVOID INJURY OR DEATH

Always shut off the machine's engine and apply the parking brake before exiting the machine.

Stop the engine and engage the parking brake.

Leave the operator's position. See "Leaving The Operator's Position" on page 17.

Engage machine's locking levers / wedges to securely fasten the attachment to the machine's mounting frame. (See the machine's Operation Manual for the correct procedure.)

Visually inspect that the wedge pins are securely fastened into the attachment mounting frame.

## 

#### AVOID SERIOUS INJURY OR DEATH

The locking pins / wedges must extend through the holes in the attachment mounting frame. Failure to secure locking pins / wedges can allow attachment to come off.

SEE MACHINE'S OPERATOR'S MANUAL FOR ADDITIONAL INFORMATION.

Engage machine's locking levers / wedges (See the machine's Operator's Manual for detailed information).

### **Hydraulic Couplers**

## ▲ IMPORTANT

• Thoroughly clean the quick couplers before making connections. Dirt can quickly damage the hydraulic system.



#### **AVOID BURNS**

Hydraulic fluid, fluid tubes, fittings and quick couplers can get hot when running the machine and attachments. Be careful when connecting and disconnecting quick couplers.

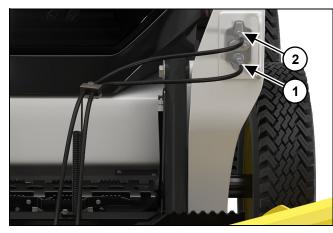
#### Connecting Hydraulic Couplers:

Remove any dirt or debris from the surface of both the male and female couplers, and from the outside diameter of the male coupler. Visually check the couplers for corroding, cracking, damage, or excessive wear. If any of these conditions exist, replace the coupler(s).

- NOTE: The QuattroPlow is supplied with flush face couplers.
- NOTE: DO NOT attach hoses to high flow lines on a machine equipped with the High Flow Option.
- NOTE: DO NOT hammer on or heat up couplers to connect or disconnect. Doing so will damage couplers resulting in leaks.

### Hydraulic Couplers (Cont'd)

#### Figure 1



**Install** the AlphaPlow male coupler (Item 1) **[Figure 1]** into the female coupler. Pull on the coupler connection to verify that the male and female couplers are securely fastened.

**Install the AlphaPlow female coupler (Item 2) [Figure 1]** onto the male coupler. Pull on the coupler connection to verify that the male and female couplers are securely fastened.

#### **Checking AlphaPlow Operation**

NOTE: After installing the AlphaPlow, test all functions before operating the AlphaPlow in the work area.



#### AVOID INJURY OR DEATH

- Never start the machine from outside the cab.
- Never operate the machine if any safety device is damaged, disconnected or missing.
- Never exit the machine with the engine running.

## **IMPORTANT**

It is the operator's responsibility to know which machine control operates each function of the attachment prior to operating the attachment in the work area.

Engage the machine's auxiliary hydraulics. (See the machine's Operation Manual for correct procedure).

Raise the engine RPM.

Check the controls of the AlphaPlow for proper operation.

Exit the machine. (See "Leaving The Operator's Position" on page 17.)

Move the machine and AlphaPlow to the work area.



### Operating The Attachment

### Operation



#### AVOID INJURY OR DEATH

While operating the machine:

- Always keep seat belt fastened.
- Safety seat bar lowered (if equipped)

Always keep your feet on the pedals or footrests and hands on the controls

Enter the machine. (See "Entering The Operator's Position" on page 17.)

Start the engine and release the parking brake.

Engage the machine's auxiliary hydraulics. (See the machine's Operation Manual for correct procedure.)

Raise the AlphaPlow slightly off the ground.

Set the desired left/right blade angle and up/down tilt.

Regulate the scraping ability of the AlphaPlow by increasing or decreasing the down pressure applied via the tilt cylinders. The angle of the AlphaPlow can be changed at any time by using the auxiliary circuit.

- NOTE: Always be sure the A-frame of your AlphaPlow is level (parallel) with the ground when plowing, to insure proper cutting edge wear.
- NOTE: The machine speed is determined by the depth and density of the material being moved.

NOTE: On extremely uneven ground, raise the boom arms slightly, lower the AlphaPlow to the ground using the tilt cylinders, then put the boom arms in the float position (if machine is equipped) to follow the contours of the ground.



#### AVOID SERIOUS INJURY OR DEATH

Always be aware of overhead obstacles or power lines when stacking snow.



### **Attachment Removal**

NOTE: Put the AlphaPlow on planks or blocks before removing it from the machine to prevent it from settling or sinking in soft / wet ground.

Park the machine and attachment on a flat level surface.

Lower the lift arms and put the AlphaPlow flat on the ground.

Stop the engine and engage the parking brake.

Relieve auxiliary hydraulic pressure. (See the machine's Operator's Manual for correct procedure.)

Leave the operator's position. (See "Leaving The Operator's Position" on page 17.)

Disconnect the auxiliary hydraulic hoses. (See "Hydraulic Couplers" on page 18.)

Disengage the attachment locking levers / wedges. (See the machine's Operator's Manual for correct procedure.)



#### **AVOID BURNS**

Hydraulic fluid, tubes, fittings and quick couplers can get hot during operation. Be careful when connecting and disconnecting hydraulic hoses.

Enter the machine. (See "Entering The Operator's Position" on page 17.)

Start the engine and release the parking brake.

Engage the machine's auxiliary hydraulics. (See the machine's Operation Manual for correct procedure.)

Slowly tilt the machine's mounting plate forward until the attachment mounting frame is free from the machine's mounting plate.

Drive the machine slowly backward, away from the attachment.



Maintenance Safety	.25
General Maintenance	.26
AlphaPlow Maintenance	.27
Cutting Edge Replacement	
Troubleshooting	
Storage And Return To Service	.30





### Maintenance Safety

## 

#### AVOID SERIOUS INJURY OR DEATH

Never operate the machine in a closed building. Proper ventilation is required when operating the machine under all circumstances.

## 

#### AVOID SERIOUS INJURY OR DEATH

Stop the engine, release auxiliary hydraulic pressure and disconnect the auxiliary hydraulic hose quick couplers before performing maintenance on the AlphaPlow.

- Always keep the work area clean and dry.
- Always use personal protection devices such as eye, hand and hearing protection when performing any service or maintenance.
- A fire extinguisher and first aid kit should be readily accessible while performing maintenance on this machine.
- Always relieve hydraulic system pressure before disconnecting the AlphaPlow.
- Always disconnect hydraulic connections between the machine and the AlphaPlow before performing maintenance.
- Before working or doing maintenance on this machine, shut off the engine and remove the key. Make sure the machine's wheels are blocked.
- Never work under the machine or attachment unless the machine or equipment is blocked or supported securely.

- Disconnect the battery (both terminals) before welding on any part of the machine. Failure to do so may cause damage to electrical components.
- When working around batteries, remember that all of the exposed metal parts are "live". Never lay a metal object across the terminals because a spark, short circuit, explosion or personal injury may result.
- Battery posts, terminals and related accessories contain lead and lead compounds.
   Wash hands after handling.
- Never search for leaks with your hands. (See "Hydraulic Safety" on page 11.)
- When replacement parts are necessary, genuine factory replacement parts must be used to restore your equipment to original specifications. SnowWolf will not be responsible for injuries or damage caused by use of unapproved parts and / or accessories.
- When completing service or maintenance on this machine, make sure all shields and guards are installed before placing the machine into service.



#### **General Maintenance**

## 

#### AVOID SERIOUS INJURY OR DEATH

Before operating or servicing system: Read and understand the machine's owners manual. Follow the warnings and instructions in the manual when making repairs, adjustments, or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

To ensure efficient operation, you should inspect, lubricate, and make necessary adjustments and repairs at regular intervals. Keep good maintenance records and adequately clean your machine after each use.

Proper lubrication is important. Follow all lubrication instructions and schedules included in this section.

#### **Daily Inspection:**

- All components and hardware to ensure equipment is secure and thoroughly tightened.
- Frame and all welds for cracks or damage.
- Wear shoes (if equipped) for wear or damage.
- Mounting frame for proper operation and signs of damage or unusual wear.
- Safety signs and reflectors for damage. Replace any missing or damaged decals.
- Cutting edge for wear or damage.
- Hydraulic hoses and fittings for wear, damage or leaks.

#### NOTE: Repair or replace any damaged parts.

NOTE: After initial use, or repair/replacement of damaged parts, it is important to check the repaired or replaced parts for proper bolt torque, operation and leaks.



### AlphaPlow Maintenance

## 

#### AVOID SERIOUS INJURY OR DEATH

Always turn off and lockout power before servicing the attachment.

## **M** WARNING

#### AVOID SERIOUS INJURY OR DEATH

Always disconnect hydraulic connections between the attachment and the machine before performing any type of maintenance to the AlphaPlow.

## 

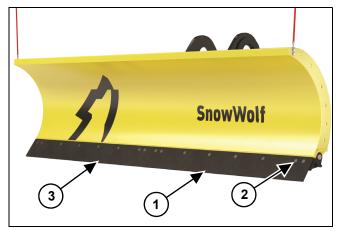
#### AVOID SERIOUS INJURY OR DEATH

Securely block up the attachment before working underneath.

### **Cutting Edge Replacement**

- NOTE: Replace or flip the bolt-on cutting edge when it wears within 1/2" - 3/4" of the bolt head securing it to the trip-edge. Replace only with genuine SnowWolf cutting edge and hardware.
- 1. Park the machine on a level surface with the AlphaPlow properly attached.
- 2. Lower the AlphaPlow approximately three to four inches off the ground.
- 3. Engage the parking brake.
- 4. Shut off the machine's engine, remove the ignition key (if equipped), wait for all moving parts to come to a stop and relieve all pressure in the hydraulic lines.
- 5. Block and/or support the AlphaPlow with proper lifting device capable of sufficiently supporting the unit's weight.
- 6. Disconnect hydraulic connections between the attachment and the machine.
- NOTE: The cutting edge and hardware quantity will vary depending upon the AlphaPlow model.

Figure 1



- 7. Block the cutting edge (Item 1) **[Figure 1]**, remove the fasteners (Item 2) and remove the cutting edge.
- NOTE: Be cautious as the cutting edge and hardware may be sharp.

- 8. Repeat procedure for the cutting edge (Item 3) **[Figure 1]**.
- 9. Properly dispose of the old cutting edge's and install the new cutting edge's by reversing the steps listed here.

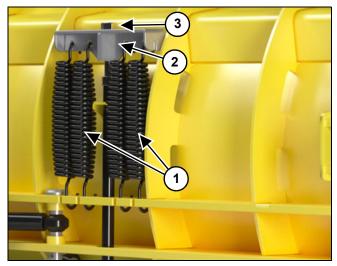
NOTE: Replace worn or damaged fasteners as needed.

### Cutting Edge Trip Spring Adjustment / Replacement



Set trip springs after first use, then twice per year thereafter.

#### Figure 2



Cutting edge trip springs (Item 1) **[Figure 2]** are adjusted by loosening the jam nut (Item 2) located on the rod between each spring, then tightening or loosening the threaded bolt (Item 3).

Springs are adjusted correctly when there is a .001" gap between the coils. Tighten jam nut.

## NOTE: Use grease or "Anti Seize" on the rod and jam nut to prevent rusting.

## NOTE: Adjust trip springs evenly on both sides.



## Troubleshooting

PROBLEM	CAUSE	SOLUTION	
AlphaPlow leaving snow behind.	Cutting edge worn or damaged.	Replace cutting edge.	
	Blade tilted too high.	Adjust machines lift and tilt controls.	
AlphaPlow does not rotate.	No hydraulic flow.	Check quick coupler connections.	
		Engage auxiliary hydraulics.	
	Plugged or kinked hose	Replace hose.	
	Hydraulic fluid low.	Check machine hydraulic oil level.	
AlphaPlow tilt/rotate functions inconsistent.	Hydraulic fluid low.	Check machine hydraulic oil level.	
	Faulty angle cylinder.	Replace cylinder.	



## Storage And Return To Service

### Storage

After the seasons use or when the AlphaPlow will not be in use for a period of time, perform the following steps.

- Thoroughly wash the AlphaPlow.
- Make sure all covers, guards and shields are installed.
- Inspect all components and hardware to ensure everything is secure and thoroughly tightened.
- Inspect the frame and all welds for cracks or damage.
- Apply a light coat of grease to the cylinder rods and pivot pins to prevent rust.
- Inspect the attachment mounting frame for wear or damage.
- Check that all decals and/or reflectors are in good condition and legible. Replace any damaged or missing decals.
- Cap all loose hose ends.
- Place the AlphaPlow in a dry protected shelter.

#### NOTE: Replace or repair any damaged parts

### **Return to Service**

After the AlphaPlow has been in storage, it is necessary to follow a list of items to return the AlphaPlow to service.

- Make sure all covers, guards and shields are installed.
- Inspect all components and hardware to ensure everything is secure and thoroughly tightened.
- Inspect the decals and reflectors for missing or damage.
- Install and operate the AlphaPlow and check for correct function.
- Check for leaks. Clean and repair as needed.



Models AlphaPlow 10.0, 12.0	.34
Parts	36
Hoses	38
Decal Identification	.38
ActivEdge, AR400, 18" Sectional BladeActivEdge, AR400, 24" Sectional Blade	
ActivEdge, Carbide, AR400, 18" Sectional Blade	.41
Spill Guard	43
Mount, MT100 Kit, CAT-IT	
Mount, MT300 Kit, JRB-416	
Mount, MT400 Kit	
Mount, MT600 Kit, Universal Weld On.	



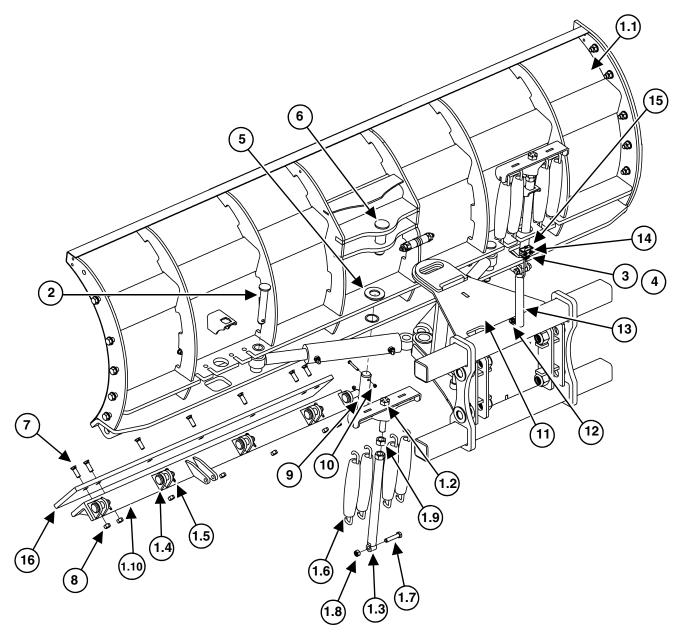


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## Models AlphaPlow 10.0, 12.0

### Parts



ITEM	PART #	DESCRIPTION	ALPHAPLOW 10 FT QTY	ALPHAPLOW 12 FT QTY
1	P80074	MOLDBOARD ASSEMBLY 120" 10FT HD	1	0
1	P80075	MOLDBOARD ASSEMBLY 144" 12FT HD	0	1
1.1	P80100	MOLDBOARD ONLY, 120" 10FT HD	1	0
1.1	P80101	MOLDBOARD ONLY, 144" 12FT HD	0	1
1.2	P80080	SPRING ADJUSTER ASSEMBLY, HD	2	2



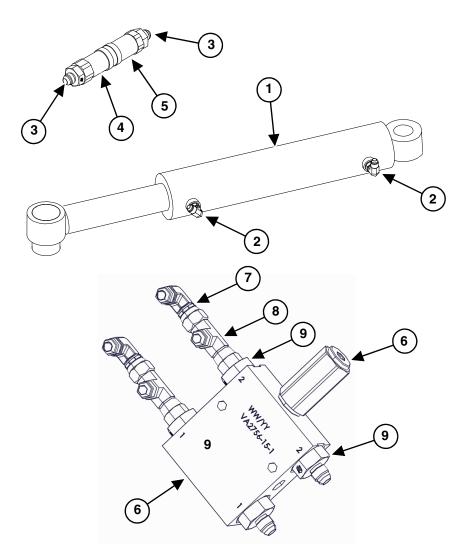
ITEM	PART #	DESCRIPTION	ALPHAPLOW 10 FT QTY	ALPHAPLOW 12 FT QTY
1.3	P80081	WELDMENT, SPRING BAR, HD	2	2
1.4	P40006	PIN, UPPER PIVOT/TRIP EDGE 1-3/16" x 3"	9	11
1.5	P40007	PIN, COTTER, 1/4" x 2", ZINC	9	11
1.6	P40010B	SPRING, TRIP, 6'-10' NEW STYLE	8	8
1.7	P40013	BOLT, HEX, 5/8-11 x 3, GR 8	2	2
1.8	P40012	NUT, LOCK, 5/8-11, GR C	2	2
1.9	P60065	JAM NUT, HEX, 1"- 8, GR 8	2	2
	P70008L-A	TRIP EDGE WELDMENT, LEFT HAND 120" (10FT)	1	0
1.10	P70008R-A	TRIP EDGE WELDMENT, RIGHT HAND 120" (10FT)	1	0
1.10	P70008L-B	TRIP EDGE WELDMENT, LEFT HAND 144" (12FT)	0	1
	P70008R-B	TRIP EDGE WELDMENT, RIGHT HAND 144" (12FT)	0	1
2	P80004	PIN, RAM ANCHOR 1.25 X 7.5 BLADE OR FRAME END	4	4
3	P60209	WASHER, FLAT, 1/2" USS	3	3
4	P60094	BOLT, HEX, 5/16-18 x 2-1/2", GR 5	1	1
5	P80116	WASHER, CUSTOM, LOWER PIVOT	1	1
6	P80002	PIN, UPPER PIVOT, 1.75" x 6.00"	1	1
7	P81011	BOLT, CARRIAGE, 5/8-11 x 2-1/2", ZINC GR 8	14	16
8	P60009	NUT, HEX, 5/8-11	14	16
9	P80003	PIN, LOWER PIVOT, 1.75" x 8.5"	1	1
10	P60211	NUT, HEX, NYLOCK, 3/8"-16	1	1
11	P80087	A-FRAME	1	1
12	P60088	WASHER, FLAT, 3/8"	6	6
13	P60084	SPRING, HOSE HOLDER	1	1
14	P60160	PLATE, HOSE CLAMP	1	1
15	P60159	HOSE CLAMP	1	1
	STANDARD BL	ADE		
16	P80011-A	CUTTING EDGE, 10' w/ HW	1	0
10	P80011-B	CUTTING EDGE, 12' w/ HW	0	1



ITEM	PART #	DESCRIPTION	ALPHAPLOW 10 FT QTY	ALPHAPLOW 12 FT QTY
	ActivEdge, AR40	00, SEE PAGES 39 & 40		
NS	P80011-A-SEC	10' COMPLETE KIT	1	0
NS	P80011-B-SEC	12' COMPLETE KIT	0	1
NS	P80011-A-REK	10' REPLACEMENT EDGES w/ HW	1	0
NS	P80011-B-REK	12' REPLACEMENT EDGES w/ HW	0	1
	CARBIDE Active	dge, AR400 WITH CARBIDE, SEE PAGES 41 & 42		
NS	P80124-A-SEC	10' COMPLETE KIT	1	0
NS	P80124-B-SEC	12' COMPLETE KIT	0	1
NS	P80124-A REK	10' REPLACEMENT CARBIDE EDGES w/ HW	1	0
NS	P80124-B-REK	12' REPLACEMENT CARBIDE EDGES w/ HW	0	1
	SPILL GUARD (	OPTION) SEE PAGE 43		
NS	P80102-K	SPILL GUARD, 10'	1	0
NS	P80103-K	SPILL GUARD, 12'	0	1



## Hydraulic Components



ITEM	PART #	DESCRIPTION	QTY
1	P80006-1	ANGLE CYLINDER, STEEL 3" BORE, DOUBLE ACTING	2
2	P60085	FITTING, 90 DEG, #6MORB-#6MJIC	4
3	P50009-A	FITTING, #8 MJIC X #12 MORB	2
4	P50010F	COUPLER,1/2" FEMALE FLAT FACE 1/2" BODY x 3/4" PORT	1
5	P50010M	COUPLER, 1/2" MALE FLAT FACE 1/2" BODY x 3/4" PORT	1
6	P60002	MANIFOLD, W/ CROSSOVER VALVE	1
7	P25063	FITTING, SWIVEL, 90DEG, #6FJIC-#6MJIC	2
8	P81002	FITTING, #6MJIC-#6MJIC-#6FJIC, SWIVEL, RUN TEE	2
9	P50009-B	FITTING, #6MJIC-#10MORB	4

## Hoses

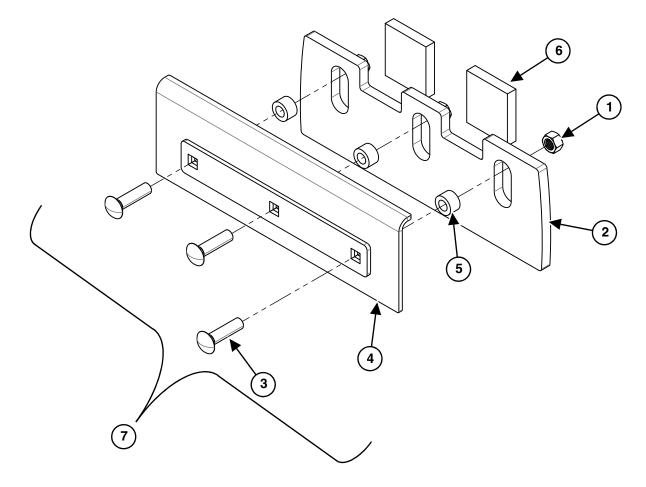
PART #	DESCRIPTION	ALPHA-10.0 QTY	ALPHA-12.0 QTY
P50008-D	HOSE, 3/8 x 94", 4800 PSI, 6FJIC-8FJIC,	2	2
P60082	HOSE, 3/8 x 38", 4800 PSI, 6FJIC-6FJIC	2	2
P80008	HOSE, 3/8 x 26", 4800 PSI, 6FJIC-6FJIC	1	
P50008-E	HOSE, 3/8 x 20", 4800 PSI, 6FJIC-6FJIC	1	

# **Decal Identification**

PART #	DESCRIPTION	ALPHA-10.0 QTY	ALPHA-12.0 QTY
DC1	DECAL, ALPHAPLOW, ALPHA-10.0	1	0
DC2	DECAL, ALPHAPLOW, ALPHA-12.0	0	1
DC77	DECAL, "PATENTS PENDING" BLACK	2	2
DC79	DECAL, WOLFHEAD, LARGE, LEFT SIDE	1	1
DC28	DECAL, SNOWWOLF, MOLDBOARD LEFT	1	1
DC29	DECAL, WOLFHEAD, MOLDBOARD RIGHT	1	1
DC68	DECAL, TAG US, BLACK W/YELLOW	1	1
P20019	DECAL, "DANGER PINCH AREA"	4	4
SWSN	DECAL, SERIAL #	1	1



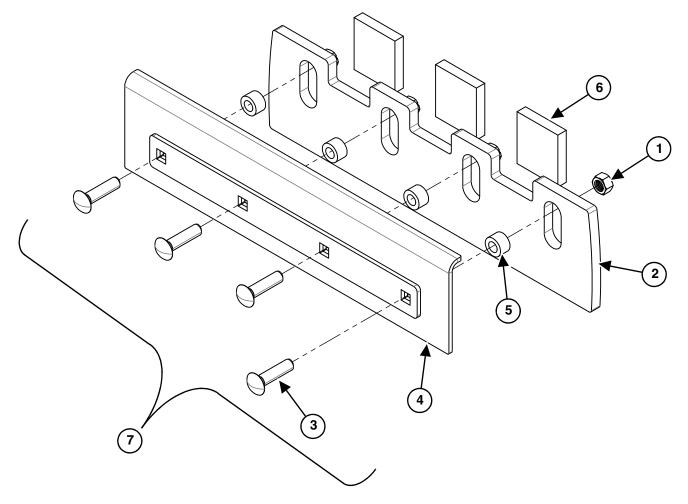
## ActivEdge, AR400, 18" Sectional Blade



ITEM	PART #	DESCRIPTION	QTY
1	P40012	NUT, LOCK, 5/8-11, ZINC	3
2	P80109	BLADE, 18"	1
3	P80036	BOLT, CARRIAGE, 5/8-11 x 3"	3
4	P60255	RETAINING WELDMENT, 18"	1
5	P80107	BUSHING, STANDOFF	3
6	P80108	SPRING, RUBBER	2
7	P80112-K	KIT, 18" SECTION (kit includes items 1, 2, 3, 4, 5, & 6)	1

**57** SnowWolf

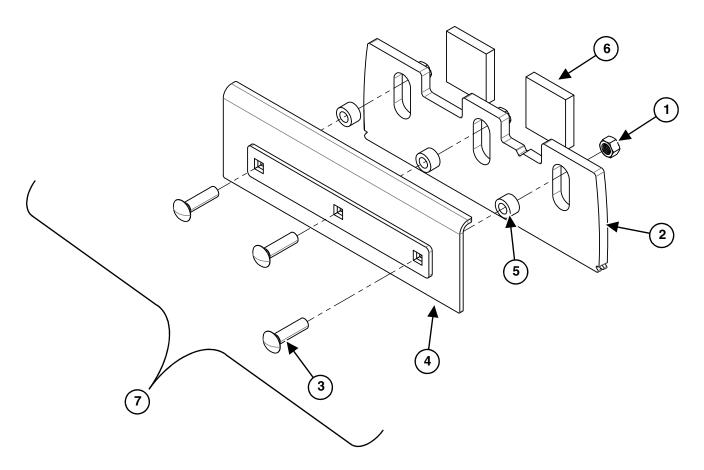
#### ActivEdge, AR400, 24" Sectional Blade



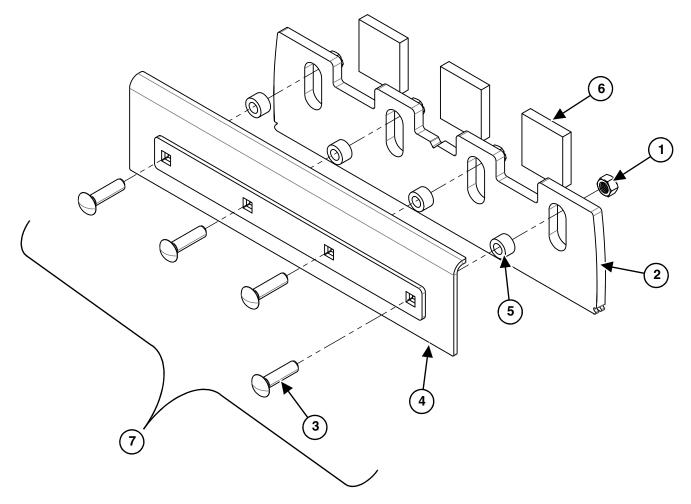
ITEM	PART #	DESCRIPTION	QTY
1	P40012	NUT, LOCK, 5/8-11	4
2	P80106	BLADE, 24"	1
3	P80036	BOLT, CARRIAGE, 5/8-11 x 3"	4
4	P60252	RETAINING WELDMENT, 24"	1
5	P80107	BUSHING, STANDOFF	4
6	P80108	SPRING, RUBBER	3
7	P80110-K	KIT, 24" SECTION (kit includes items 1, 2, 3, 4, 5, & 6)	1



## ActivEdge, Carbide, AR400, 18" Sectional Blade



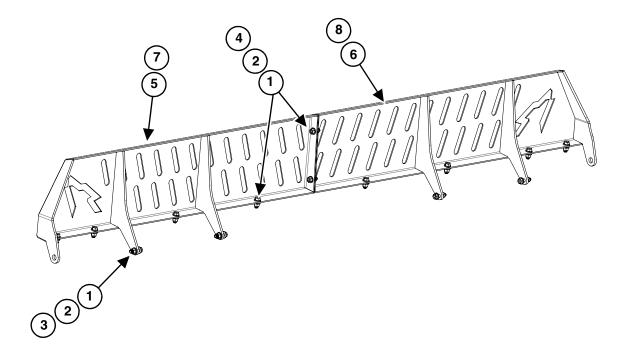
ITEM	PART #	DESCRIPTION	QTY
1	P40012	NUT, LOCK, 5/8-11	3
2	P80109-CARB	BLADE, 24"	1
3	P80036	BOLT, CARRIAGE, 5/8-11 x 3"	3
4	P60255	RETAINING WELDMENT, 18"	1
5	P80107	BUSHING, STANDOFF	3
6	P80108	SPRING, FOAM	2
7	P80112-CARB-K	KIT, 18" SECTION (kit includes items 1, 2, 3, 4, 5, & 6)	1



ITEM	PART #	DESCRIPTION	QTY
1	P40012	NUT, LOCK, 5/8-11	4
2	P80106-CARB	BLADE, 24"	1
3	P80036	BOLT, CARRIAGE, 5/8-11 x 3"	4
4	P60252	RETAINING WELDMENT, 24"	1
5	P80107	BUSHING, STANDOFF	4
6	P80108	SPRING, FOAM	3
7	P80110-CARB-K	KIT, 24" SECTION (kit includes items 1, 2, 3, 4, 5, & 6)	1

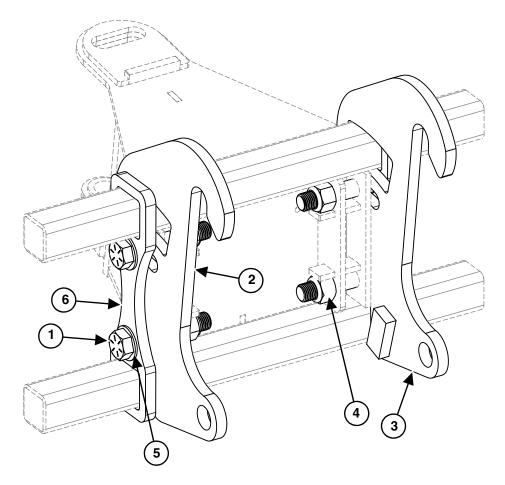


## Spill Guard



ITEM	PART #	DESCRIPTION	QTY
1	P25045	NUT, LOCK, 1/2"	14
2	P60222	WASHER, FLAT, 1/2"	28
3	P60233	BOLT, 1/2" x 2", GR8	4
4	P60232	BOLT, 1/2" x 1-1/2", ZINC, GR8	10
	P80102-K	SPILL GUARD KIT 10 FT for AlphaPlow 146 w/ HW	1
5	P80102-L	SPILL GUARD, LEFT 10 FT.	1
6	P80102-R	SPILL GUARD, RIGHT 10 FT.	1
	P80103-K	SPILL GUARD KIT 12 FT for AlphaPlow 170 w/ HW	1
7	P80103-L	SPILL GUARD, LEFT 12 FT.	1
8	P80103-R	SPILL GUARD, RIGHT 12 FT.	1

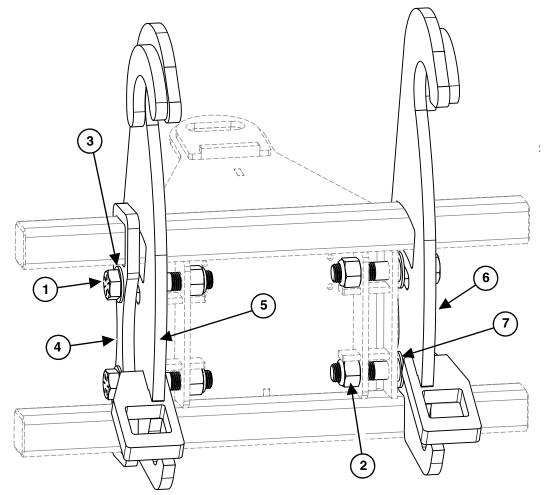
## Mount, MT100 Kit, CAT-IT



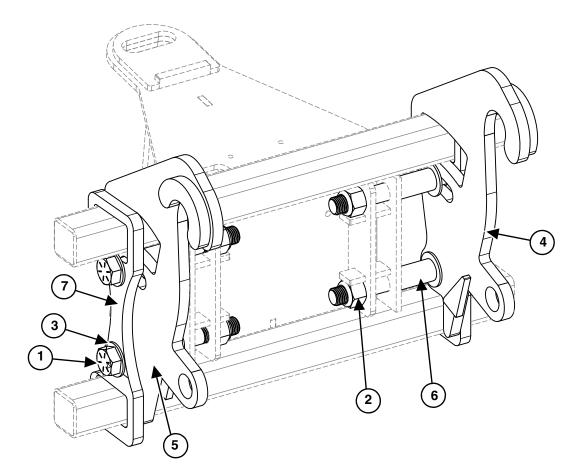
ITEM	PART #	DESCRIPTION	QTY
1	P80048	BOLT, HEX, 1-1/2"-6 X 8", GRADE 8	4
2	P80072	MOUNT PLATE, ALPHA CAT IT LEFT SIDE	1
3	P80073	MOUNT PLATE, ALPHA CAT IT RIGHT SIDE	1
4	P80088	NUT, HEX, NYLOCK, 1-1/2"-6	4
5	P80089	WASHER, FLAT, 1-1/2"	4
6	P80096	WISHBONE, MOUNTING PLATE KEEPER	2

**51** SnowWolf

#### Mount, MT200 Kit, CAT-FUSION



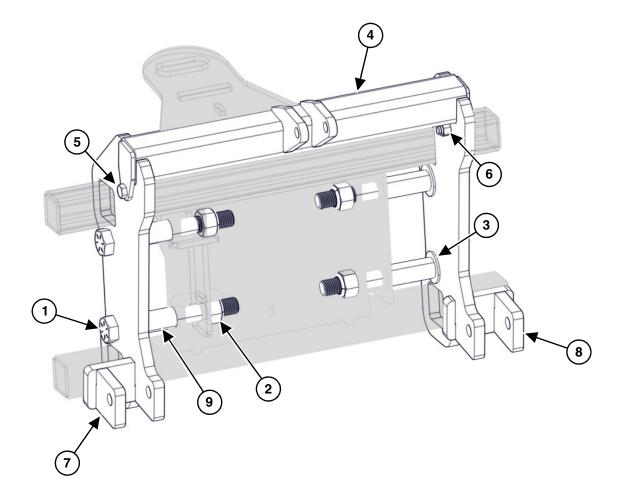
ITEM	PART #	DESCRIPTION	QTY
1	P80048	BOLT, HEX, 1-1/2"-6 X 8", GRADE 8	4
2	P80088	NUT, HEX, NYLOCK, 1-1/2"-6	4
3	P80089	WASHER, FLAT, 1-1/2"	8
4	P80096	WISHBONE, MOUNTING PLATE KEEPER	2
5	P80094	MOUNT PLATE, CAT FUSION, LEFT HAND	1
6	P80095	MOUNT PLATE, CAT FUSION, RIGHT HAND	1
7	P81008	MOUNT SPACER, CAT FUSION	4



ITEM	PART #	DESCRIPTION	QTY
1	P80053	BOLT, HEX, 1-1/2"-6 X 12", GRADE 8	4
2	P80088	NUT, HEX, NYLOCK, 1-1/2"-6	4
3	P80089	WASHER, FLAT, 1-1/2"	8
4	P80090	MOUNT PLATE, JRB, RIGHT HAND	1
5	P80091	MOUNT PLATE, JRB, LEFT HAND	
6	P80092	MOUNT SPACER, JRB	4
7	P80096	WISHBONE, MOUNTING PLATE KEEPER	2

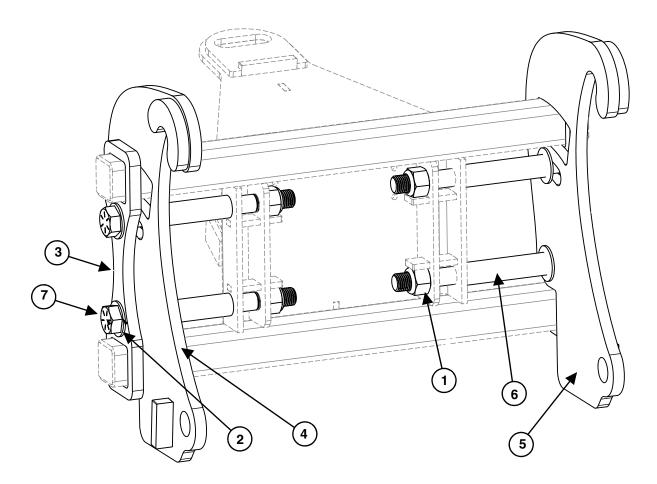


## Mount, MT400 Kit



ITEM	PART #	DESCRIPTION	QTY
1	P80053	BOLT, HEX, 1-1/2"-6 X 12", GRADE 8	4
2	P80088	NUT, HEX, NYLOCK, 1-1/2"-6	4
3	P80089	WASHER, FLAT, 1-1/2"	4
4	P80120	UPPER BRACKET CROSSMEMBER	1
5	P80039	BOLT, HEX, 3/4"-10 X 2-1/2"	
6	P20028	NUT, LOCK, 3/4"-10	
7	P80122	3-POINT HITCH, LEFT SIDE	1
8	P80121	3-POINT HITCH, RIGHT SIDE	
9	P81010	MOUNT SPACER, 3-POINT	4

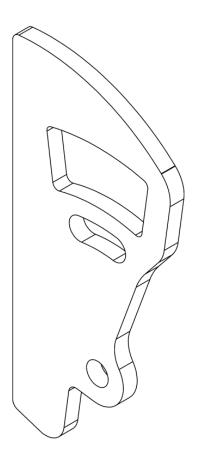
## Mount, MT500 Kit, VOLVO



ITEM	PART #	DESCRIPTION		
1	P80088	NUT, HEX, NYLOCK, 1-1/2"-6	4	
2	P80089	WASHER, FLAT, 1-1/2"		
3	P80096	WISHBONE, MOUNTING PLATE KEEPER		
4	P80098	MOUNT PLATE, VOLVO, LEFT HAND		
5	P80099	MOUNT PLATE, VOLVO, RIGHT HAND		
6	P81005	MOUNT SPACER, VOLVO	4	
7	P81006	BOLT, HEX, 1-1/2"-6 X 16"	4	



#### Mount, MT600 Kit, Universal Weld On



ITEM	PART #	DESCRIPTION	ALPHAPLOW 10 FT QTY	ALPHAPLOW 12 FT QTY		
	UNIVERSAL WELD ON MOUNT (MT600 KIT) (UNPAINTED)					
NS	P80048	BOLT, HEX, 1-1/2"-6 x 8"	4	4		
NS	P80088	NUT, HEX, NYLOCK, 1-1/2"-6	4	4		
NS	P80089	WASHER, FLAT, 1-1/2"	8	8		
NS	P80096	WISHBONE	2	2		
NS	P81008	MOUNT SPACER	4	4		
NS	P81012	MOUNT PLATE, FOR UNIVERSAL	2	2		

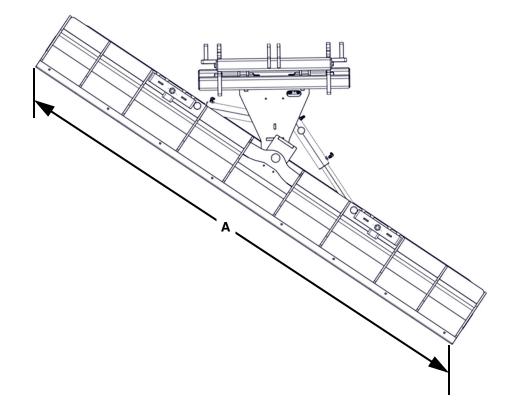


Attachment Specifications	53
Dimensions	54
Torque Specifications	55





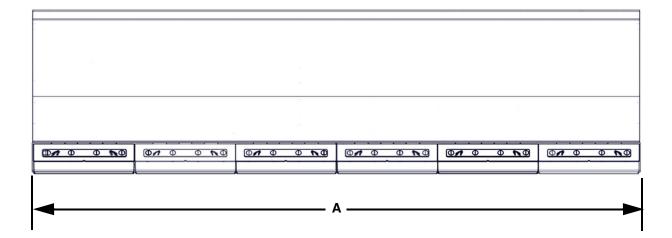
# **Attachment Specifications**

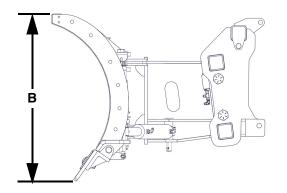


DESCRIPTION	FOR MACHINES WEIGHING 15,000 TO 30,000 LBS.				
DESCRIPTION	ALPHAPLOW 10 FT	ALPHAPLOW 12 FT			
Blade Width	10.0'	12.0'			
Clearing Width at Wide Angle (A)	93.3" (12')	11.0"			
Weight (Ibs.)	1,920	2,217			
Moldboard Gauge	10 ga.	10 ga.			
Trip Springs	8 Ext.	8 Ext.			
Wear Shoes	N/A	N/A			
Moldboard Cutting Edge	3/4" x 8" Top Punch High Carbon Standard (Carbide Insert Optional)				
Angle Rams	3" x 13" D/A Steel-Do	ouble Acting Cylinder			
Vertical Ribs	8	10			
Moldboard Radius	19"	19"			
Full Down Pressure	Yes	Yes			
Universal Skid Steer Compatible	N/A				
Crossover Relief Value	Standard				



## **Dimensions**





DESCRIPTION	ALPHAPLOW 10 FT	ALPHAPLOW 12 FT
Blade Width (A)	10'	12'
Blade Height (B)	39"	39"

# **Torque Specifications**

#### **Standard Hardware And Lock Nuts**

BOLT TYPE	SAE GRADE 5		SAE GRADE 8		LOCK NUTS			
Nominal	Plated or	Plated W /	Plated or	Plated W /	Plated or	Plated W /	W / Grade	W / Grade
Size	Unplated	ZnCr	Unplated	ZnCr	Unplated	ZnCr	5 Bolt	8 Bolt
	Silver	Gold	Silver	Gold	Silver	Gold	0 Don	0 Don
1/4	55 in / lb	72 in / lb	86 in / lb	112 in / lb	121 in / lb	157 in / lb	61 in / lb	86 in / lb
	(6.2 N•m)	(8.1 N•m)	(9.7 N•m)	(12.6 N•m)	(13.6 N•m)	(17.7 N•m)	(6.9 N•m)	(9.8 N•m)
5/16	115 in / lb	149 in / Ib	178 in / Ib	229 in / Ib	250 in / lb	325 in / lb	125 in / lb	176 in / lb
	(13 N•m)	(17 N•m)	(20 N•m)	(26 N•m)	(28 N•m)	(37 N•m)	(14 N•m)	(20 N•m)
3/8	17 ft / lb	22 ft / lb	26 ft / lb	34 ft / lb	37 ft / lb	48 ft / lb	19 ft / Ib	26 ft / lb
	(23 N•m)	(30 N•m)	(35 N•m)	(46 N•m)	(50 N•m)	(65 N•m)	(26 N•m)	(35 N•m)
7/16	27 ft / lb	35 ft / lb	42 ft / lb	54 ft / lb	59 ft / lb	77 ft / lb	30 ft / lb	42 ft / lb
	(37 N•m)	(47 N•m)	(57 N•m)	(73 N•m)	(80 N•m)	(104 N•m)	(41 N•m)	(57 N•m)
1/2	42 ft / lb	54 ft / lb	64 ft / lb	83 ft / lb	91 ft / lb	117 ft / Ib	45 ft / lb	64 ft / lb
	(57 N•m)	(73 N•m)	(87 N•m)	(113 N•m)	(123 N•m)	(159 N•m)	(61 N•m)	(88 N•m)
9/16	60 ft / lb	77 ft / lb	92 ft / lb	120 ft / lb	130 ft / lb	169 ft / Ib	65 ft / lb	92 ft / lb
	(81 N•m)	(104 N•m)	(125 N•m)	(163 N•m)	(176 N•m)	(229 N•m)	(88 N•m)	(125 N•m)
5/8	83 ft / lb	107 ft / lb	128 ft / Ib	165 ft / lb	180 ft / lb	233 ft / Ib	90 ft / lb	127 ft / lb
	(112 N•m)	(145 N•m)	(174 N•m)	(224 N•m)	(244 N•m)	(316 N•m)	(122 N•m)	(172 N•m)
3/4	146 ft / lb	189 ft / lb	226 ft / Ib	293 ft / lb	319 ft / lb	413 ft / lb	160 ft / Ib	226 ft / lb
	(198 N•m)	(256 N•m)	(306 N•m)	(397 N•m)	(432 N•m)	(560 N•m)	(217 N•m)	(306 N•m)
7/8	142 ft / lb	183 ft / lb	365 ft / lb	473 ft / lb	515 ft / lb	667 ft / lb	258 ft / lb	364 ft / lb
	(193 N•m)	(248 N•m)	(495 N•m)	(641 N•m)	(698 N•m)	(904 N•m)	(350 N•m)	(494 N•m)
1	213 ft / lb	275 ft / lb	547 ft / lb	708 ft / lb	773 ft / lb	1000 ft / lb	386 ft / lb	545 ft / Ib
	(289 N•m)	(373 N•m)	(742 N•m)	(960 N•m)	(1048 N•m)	(1356 N•m)	(523 N•m)	(739 N•m)





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