



SnowWolf

Operation & Maintenance Manual



AlphaBlower

Model 24-84-H & 24-84-P



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

One-Year Limited Warranty

SNOWWOLF International, hereinafter referred to as SNOWWOLF, warrants new SNOWWOLF SNOW BLOWERS 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 twelve (12) 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!

Manufactured By:



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Rosemount, MN 55068
www.snowwolfplows.com

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Owner Information

Thank you for your decision to purchase a SnowWolf AlphaBlower. 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 snow blower information in the space provided for future reference.

Model Number: _____

Serial Number: _____

Dealer Name: _____

Dealer Number: _____

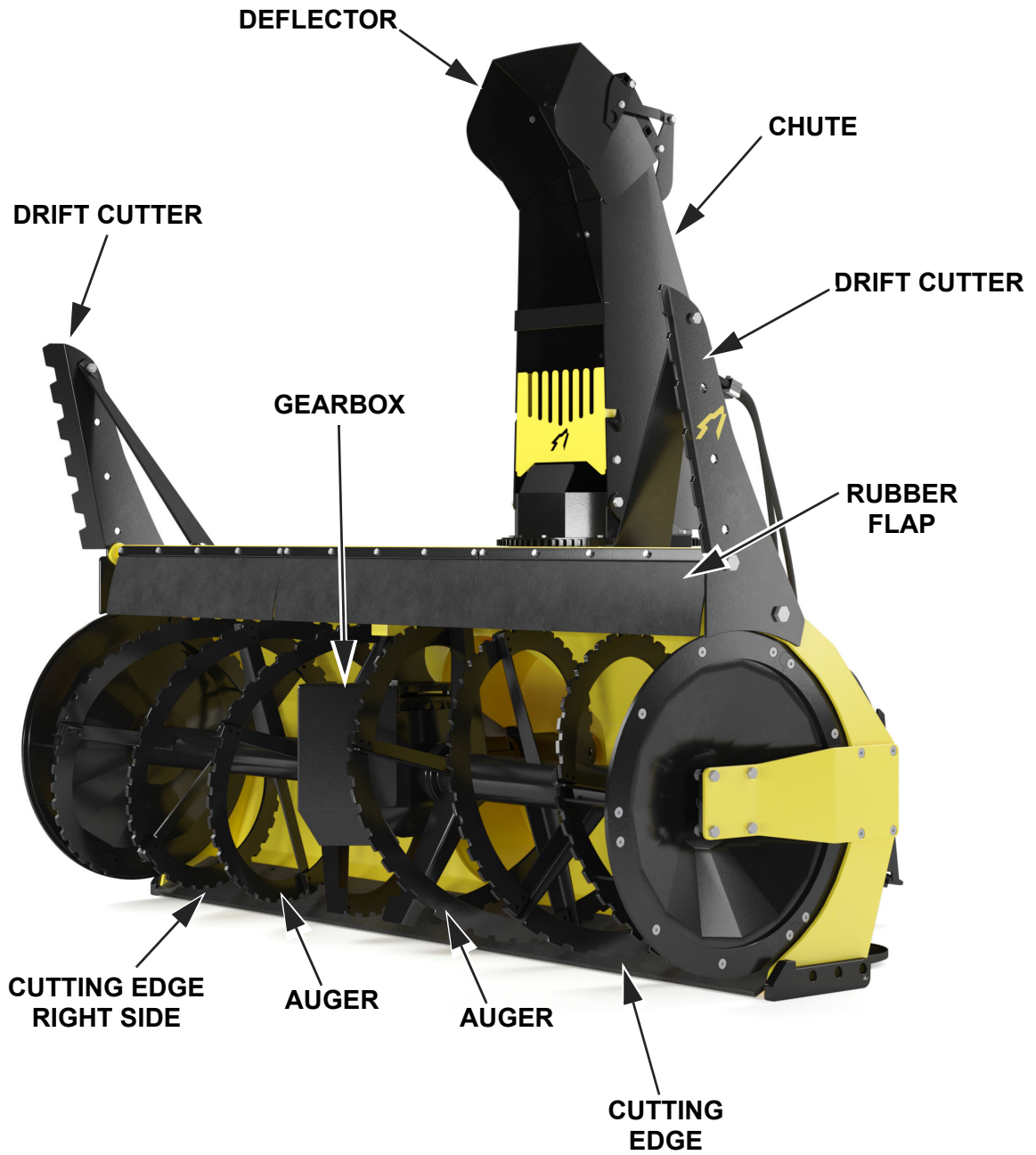
Date of Purchase: _____

Always use the serial number of the snow blower 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 snow blower serial number plate is located on the left side of the frame, below the discharge chute.

AlphaBlower Identification



AlphaBlower Identification (Cont'd)





Safety Information

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.

DANGER

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.

WARNING

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.

CAUTION

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

WARNING

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 equipment, and at least annually thereafter.

Importance of Safety

Operating Safety

- Read and follow instructions in this manual and the machine Operators Manual before operating.
- Operator must have instructions before operating the equipment. Untrained operators can cause injury or death.
- Be certain all equipment operators are aware of the dangers indicated by safety decals applied to the snow blower, and be certain they follow all safety decal instructions. Contact your authorized Distributor, Dealer Parts Department or SnowWolf for safety decal replacement.
- Operate the snow blower according to the Operator's Manual.
- The snow blower is intended for use in snow removal. Use in any other manner is considered to be contrary to the intended use of the snow blower.
- 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.
- Under no circumstances should young children be allowed to work with this equipment.
- The snow blower is dangerous to persons unfamiliar with its operation.
- Check for overhead power lines before operating snow blower (if applicable).
- Check that the snow blower is securely fastened to the machine.
- Make sure all the machine controls are in the NEUTRAL before starting the snow blower.
- 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 snow blower. Snow, ice rocks or debris can be thrown from the blower, causing injury to persons, cars, buildings or other objects.
- Rotating PTO shaft, augers, impeller can cause serious personal injury or death, make sure no-one is in the work area when operating the blower.
- The snow blower must be used ONLY on approved machines.
- Always stop the snow blower if any persons enter the work area.
- DO NOT modify the snow blower in any way. Unauthorized modification may impair the function and / or safety and could affect the life of the snow blower.
- DO NOT make any adjustments or repairs on the snow blower while the machine is running.
- Keep shields and guards in place. Replace if damaged.
- Prior to maintenance, repairs or clearing a plugged blower, the machine must be turned off or the snow blower must be disconnected from the machine.
- DO NOT operate the snow blower in poor visibility conditions such as fog, darkness, or any conditions that limit clear visibility.
- 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.
- Have a first-aid kit available for use should the need arise and train personnel on proper use of the kit.
- SnowWolf cannot anticipate every possible circumstance that may involve a potential hazard. The warnings in this owner's manual are not all inclusive.

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.
- Know where fire extinguishers are located and how to use them.

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 the machine or snow blower.
- If transporting the snow blower 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 snow blower before performing maintenance to the snow blower.
- 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.

WARNING



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

Before operating the snow blower 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 to operate the snow blower. (See Tractor or Skid Steer Requirements on page 13).
2. Check the snow blower and machine mounts for damage, loose or missing parts. Repair as needed before operation.
3. Lubricate the snow blower, see Lubrication on page 33.
4. Check that the PTO shaft telescopes easily and turns freely.
5. Check that the snow blower is properly attached to the machine. Be sure retainers are used on the mounting pins.
6. Check that wear shoes / gauge wheels (if equipped) are set at the same working depth.
7. Make sure that all guards and shields are in place, secured and functioning as designed.
8. Check oil level in machine hydraulic reservoir.
9. Check that the hydraulic hoses and couplers are securely attached to the machine. Make sure hoses are routed and secured to avoid pinch points or strain during movement of the machine / snow blower.
10. Check cutting blade for wear or damage.
11. Check hydraulic lines, connections and fittings for hydraulic oil leaks.
12. Check all electrical connections.

Snow Blower Operating Tips

- Make sure the snow blower is adjusted properly. (See “AlphaBlower Adjustment Skid Steer” on page 15) or (See “AlphaBlower Adjustment Tractor” on page 20.)

NOTE: Improper snow blower adjustment will cause increased wear to the cutting edge or wear shoes.

- Driving speed and gear selection are dependent on the snow conditions and the machine type. Do not choose too high a gear but make a selection so speed can be kept steady.
- Before disengaging the PTO it is important to wait until the blower has emptied out the snow. If the PTO is disengaged while the blower is full of snow, the chute will likely clog up when the PTO is re-engaged.
- If the blower is frequently used on gravel roads or asphalt, in conditions with little snow, it is recommended to use gauge wheels instead of wear shoes.
- Adjust throwing distance and the direction of the snow being removed, away from buildings, cars, or other objects to avoid causing damage.
- Always stop the snow blower before exiting the machine.

AlphaBlower Inspection

Daily Inspection

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

- Verify that the snow blower 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 the 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 snow blower to ensure that all components are secure and that all bolts and nuts are thoroughly tightened.
- Check the snow blower mounting hardware for wear or damage. Inspect the pins and mounts for wear or damage. Repair or replace damaged parts if necessary.
- Check that all bearings turn freely. Replace any that are rough or seized.
- Check that the PTO shaft is securely fastened to the snow blower and to the tractor.
- Check the oil level in the gearbox.

Monthly Inspection

Check the following items every 50 hours of operation:

- Inspect the snow blower, frame, and all welds for cracks, bends, or excessive wear.
- Check wear shoes and gauge wheels (if equipped) for wear.
- Check that all bolts are tight.
- Check the cutting edge and mounting plate for cracks or damage. Replace if necessary.
- Check the wing cutting edge's (if equipped) 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.



WARNING

AVOID SERIOUS INJURY OR DEATH

Before servicing the snow blower:

- **Always park on a flat level surface.**
- **Lower the tractor's three-point hitch or loader arms and place snow blower 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.**
- **Exit the machine.**

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

Tractor Requirements

REQUIREMENTS	
Power Input (min/max)	60- 150 HP
Hitch Type	Cat 2, 3 or 4

PTO Revolutions

NOTE: It is important to use the correct type of PTO shaft! The PTO shaft for towing and reversing is adapted for 540 rpm and must NOT be used for front mounting as this could result in the gearbox becoming overloaded. For front loading a PTO shaft with a shear pin adapted for 1000 rpm must be used.

	REVERSING	FRONT MOUNT
24-84-P	540 RPM	1000 RPM

Skid Steer Requirements

SKID STEER REQUIREMENTS	
Hydraulic Flow	32 - 45 GPM

Entering and Exiting the Machine

Entering The Operator’s Position

Use the machine’s safety treads, handles and steps to enter the operator’s position.

When in the operator’s position, fasten the seat belt, start the engine and release the parking brake.

Exiting The Operator’s Position



AVOID SERIOUS INJURY OR DEATH

Before servicing the snow blower:

- Always park on a flat level surface.
- Lower the skid steer’s loader arms and place snow blower 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.
- Exit the machine.

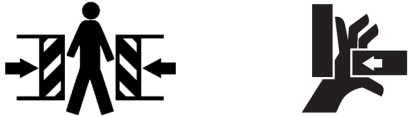
SEE MACHINE’S OPERATOR’S MANUAL FOR ADDITIONAL INFORMATION.

AlphaBlower Installation Skid Steer

Connecting The Snow Blower To A Skid Steer



WARNING



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 snow blower when approaching the snow blower for connecting.
- Keep fingers and hands out of pinch points when connecting and disconnecting snow blower.

Once connected to the universal plate and secure, shut down machine and exit operators position. Hook up the 3 couplers Be sure the case drain is installed properly as this could cause catastrophic failure of the hydraulic motor.

Install the electrical connector(s) for use on machine controls.

Before connecting to the snow blower, inspect the skid steer's universal mounting plate. (See the skid steer's Operator's Manual for inspecting the mounting frame).

Enter the operator's position, start the engine and release the parking brake. (See "Entering The Operator's Position" on page 13.)

Move the skid steer into position in front of the snow blower.

Move the skid steer forward, aligning the skid steer's universal plate and snow blower mount plate.

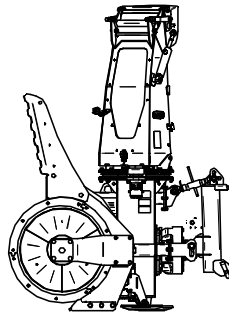
When the skid steer's universal plate is aligned with the snow blower's mounting plate, raise the arms and tip the plate back and engage the mounting pins.

AlphaBlower Adjustment Skid Steer

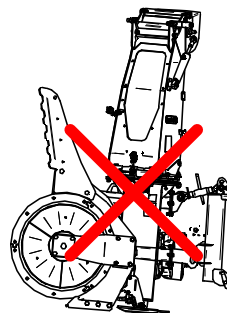


IMPORTANT

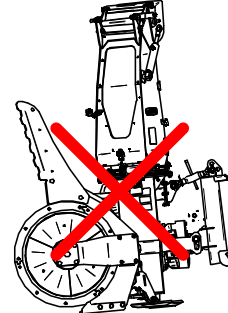
The snow blower must be adjusted so that it is level.



CORRECT



INCORRECT



INCORRECT

For the blower to penetrate all the way down to the asphalt it is very important that the blower is correctly adjusted to be level prior to operation.

NOTE: The blower is adjusted using the height adjustment for the wear shoes.

Incorrect adjustment of the wear shoes will result in high wear to replaceable edges.

If the blower is lifted at the front, a larger part of the blower weight will be transferred to the wear shoes, provided these have been adjusted correctly. This results in less wear to cutting edge.

1. Locate a level surface to adjust the blower.
2. Lift the blower using the machine's hydraulics. Adjust the underside of the wear shoes to approximately 2" higher than the underside of the cutting edge.
3. Lower the blower onto the surface. Blower is now level on the surface and resting on the cutting edge.

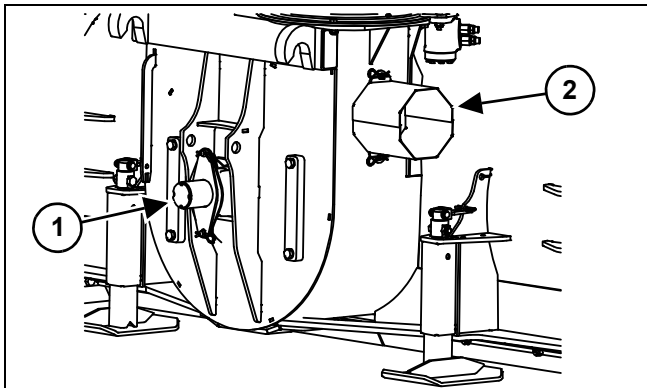
NOTE: The blower should now be resting on the cutting edge.

4. Adjust wear shoes so that these are flush with the surface.

AlphaBlower Installation To Tractor

NOTE: Ensure that the PTO shaft guard is always in place, that it is in proper condition and secured using the supplied chain to prevent rotation during use.

Figure 1



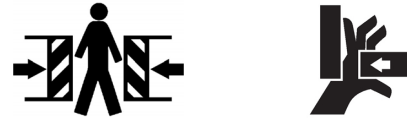
Towing Installation - Ensure that the guard (1) [Figure 1] has been installed over the PTO stub shaft protruding from the blower housing.

Reversing Installation - Replace the PTO stub shaft guard (Item 1) [Figure 1] with the axle guard (Item 2). Pull the axle guard onto the PTO shaft before connecting it.

Front Installation - Remove the PTO stub shaft guard (Item 1) before installing the gearbox. Pull the axle guard (Item 2) [Figure 1] onto the PTO shaft before connecting it and secure the axle guard to the gearbox.

Connecting The Snow Blower To The Tractor's Three-Point Hitch

WARNING



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 snow blower when approaching the snow blower for connecting.
- Keep fingers and hands out of pinch points when connecting and disconnecting snow blower.

Before connecting to the snow blower, inspect the tractor's three-point mounting frame. (See the tractor's Operator's Manual for inspecting the mounting frame).

Enter the operator's position, start the engine and release the parking brake. (See "Entering The Operator's Position" on page 13.)

Open the tractor's three-point hitch locking levers (if equipped). (See the tractor's operation manual for the correct procedure.)

Move the tractor into position in front of the snow blower.

Move the tractor backwards, aligning the tractor's three-point hitch and snow blower three-point mounts.

When the tractor's three-point hitch is aligned with the snow blower three-point mounts, raise the tractor's three-point hitch until the snow blower three-point mount pins are fully seated into the tractor's three-point hitch.

Connecting The Snow Blower To The Tractor's Three-Point Hitch (Cont'd)

NOTE: Tractor hitch type may require a different procedure for pin installation. (See the tractor's operation manual for the correct procedure.)

Exit the operator's position. (See "Entering The Operator's Position" on page 13.)

Close the tractor's three-point hitch locking levers (if equipped). (See the tractor's operation manual for the correct procedure.)

NOTE: Always use implement mounting pins of adequate size and strength and a retaining pin with a locking device.

Adjust the top link until it aligns with the snow blower upper mount pin or mounting hole. (See the tractor's operation manual for the correct procedure.)

PTO Installation

Install the PTO shaft from the blower to the tractor.



IMPORTANT

The angle of the PTO should not exceed 20 degrees. Angles greater than 20 degrees result in excessive wear and reduce service life of PTO shafts.

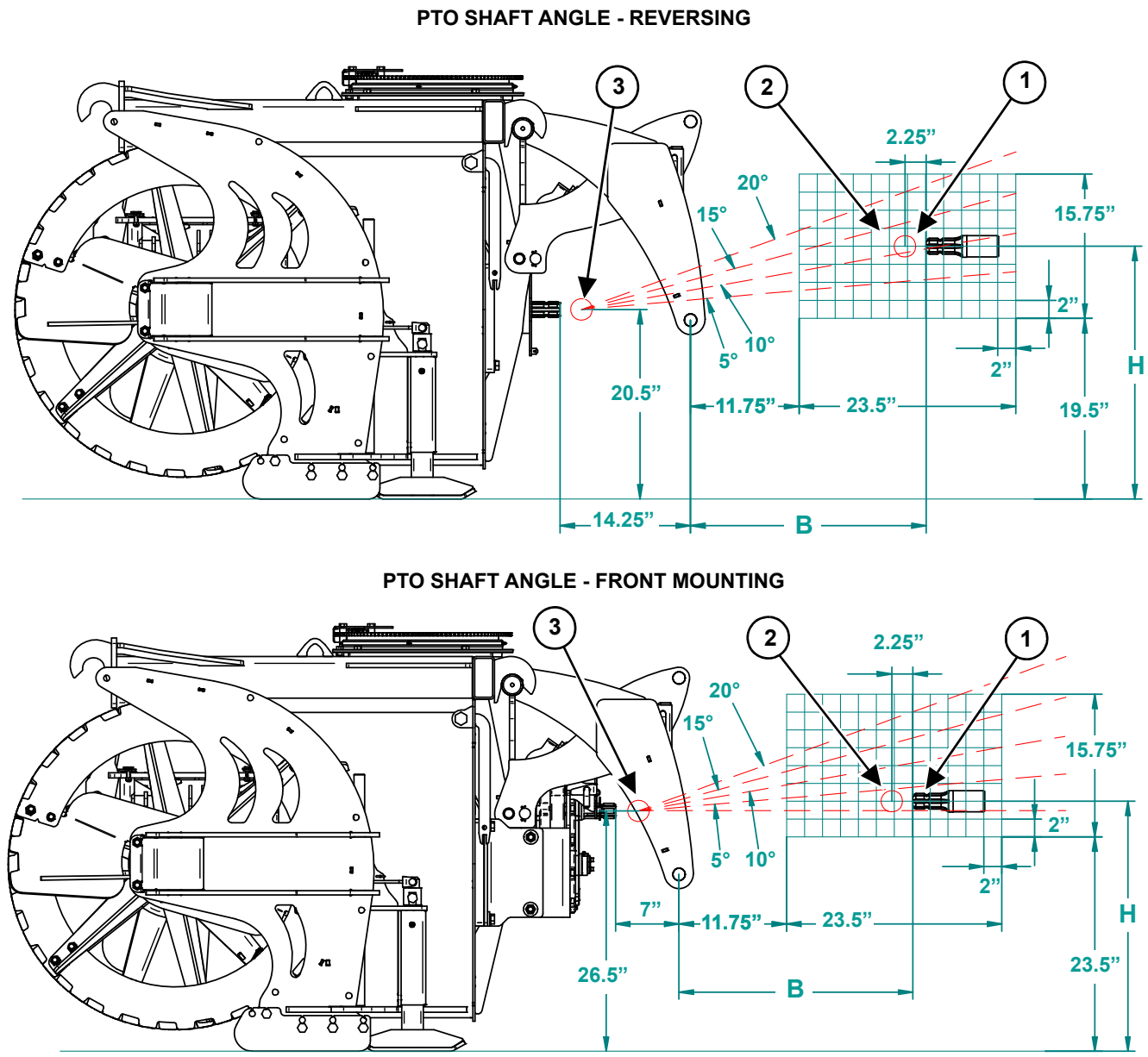
7. Install the axle and check the adaptation carefully and at all heights and movements.

For reversing: See 1-7.

For front mounting: Mount the snow blower without the PTO, and see 2- 7.

1. Install the blower on the tractor for reversing **[Figure 2]**. The PTO stub shaft on the snow blower is situated slightly closer to the tractor drawbar for reversing. Do not install the PTO shaft immediately. First ensure that there is sufficient clearance between the tractor wheel and the wing cutting edges of the blower at all lifting heights, including during active use of top links.
2. Locate the setting at which the PTO stub shafts have the shortest spacing. Pull the PTO shaft apart and insert the prongs on each PTO stub shaft so that the pipes are situated next to each other.
3. Mark the pipe for cutting, calculate at least 0.394" in for end clearance.
4. Verify the longest distance between the PTO stub shafts. If this is in a working position, the telescoping tubes must continue to overlap with half the pipe length.
5. When all of the above has been verified, the axle can be cut. All pipes must be cut in the same way.
6. File all cut edges that could inhibit sliding, clean and lubricate the telescoping tubes using grease.

Figure 2



[Figure 2] shows the relation between the height (H) of the tractor’s PTO and the angle of the PTO shaft during reversing and front mounting respectively.

Use the diagram as follows:

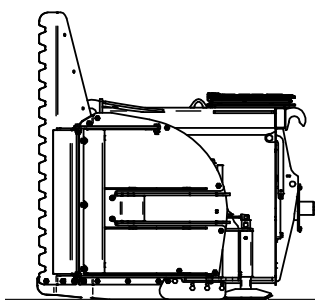
1. Measure the height H from ground level up to the center of the tractor’s PTO stub shaft (Item 1).
2. Measure the horizontal distance B from the end of the tractor’s PTO stub shaft to the tractor drawbar ball.
3. Mark the position of the PTO stub shaft end (Item 1) in the diagram for the figures. Grid pattern is 2" x 2".
4. Mark the link (Item 2) at a distance of 2.3" from the end of the PTO stub shaft.
5. Read the angle using the dashed angle lines. Angles greater than 20° result in abnormally high wear and reduced service life of PTO shafts.

AlphaBlower Adjustment Tractor

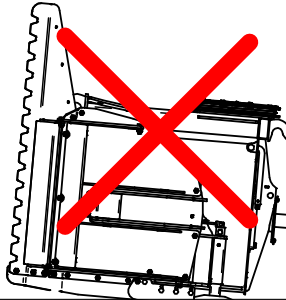


IMPORTANT

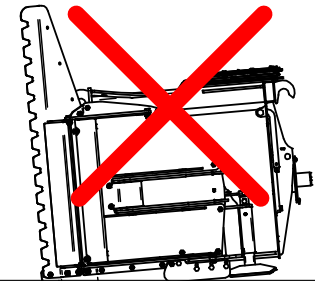
The snow blower must be adjusted so that it is level.



CORRECT



INCORRECT



INCORRECT

For the blower to penetrate all the way down to the asphalt it is very important that the blower is correctly adjusted prior to operation. The blower must be adjusted so that it is level.

NOTE: The blower is adjusted using the length of the top link and the stepless height adjustment for wear shoes / gauge wheels.

Incorrect adjustment of top link or wear shoes / gauge wheels will result in high wear to replaceable edges.

If the top link is shortened the blower will tilt forward. This will result in increased wear to cutting edge at the front of the blower housing.

If the top link is lengthened the blower will be lifted at the front. A larger part of the blower weight will be transferred to the wear shoes / gauge wheels, provided these have been adjusted correctly. This results in less wear to cutting edge.

1. Locate a level surface to adjust the blower.
2. Lift the blower using the machine's hydraulics. Adjust the underside of the wear shoes / gauge wheels or loader arms to approximately 2" higher than the underside of the cutting edge.
3. Lower the blower onto the surface. Unload the top link so that the top link bolt is completely loose. The blower is now level on the surface and resting on the cutting edge.
4. Adjust wear shoes / gauge wheels so that these are flush with the surface. Then tighten the adjustment bolt slightly more so that the wear shoes / gauge wheels are pushed down against the surface.
5. Now adjust the top link outwards a little. The blower will now lift a little at the front. The weight of the blower will now be distributed across cutting edge and wear shoes / gauge wheels.

NOTE: The blower should now be resting on the cutting edge.

AlphaBlower Adjustment Tractor (Cont'd)

6. Adjust wear shoes / gauge wheels so that these are flush with the surface. Then tighten the adjustment bolt slightly more so that the wear shoes / gauge wheels are pushed down against the surface.
7. Adjust the top link outward slightly. The blower will now lift a little at the front. The weight of the blower will now be distributed across cutting edge and wear shoes / gauge wheels.

NOTE: Lock / pin the tractor's lower three-point lift arms to keep the snow blower from moving side to side during operation. (See the tractor's operation manual for the correct procedure.)

Hydraulic Couplers



IMPORTANT

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



WARNING

AVOID BURNS

Hydraulic fluid, fluid tubes, fittings and quick couplers can get hot when running the machine and snow blower. 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: Do NOT hammer on or heat up couplers to connect or disconnect. Doing so will damage couplers resulting in leaks.

Install the snow blower male coupler into the female coupler. Pull on the coupler connection to verify that the male and female couplers are securely fastened.

Install the snow blower female coupler onto the male coupler. Pull on the coupler connection to verify that the male and female couplers are securely fastened.

Install the case drain coupler and pull the coupler connection to verify that the male and female couplers are securely fastened.

Checking AlphaBlower Operation

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

WARNING

AVOID INJURY OR DEATH

- Never start the machine from outside the cab.
- Never operate the snow blower 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 snow blower prior to operating the snow blower in the work area.

Engage the machine's auxiliary hydraulics. (See the machine's operation manual for correct procedure.)

Auger Rotation

Start auger rotation.

Raise the engine RPM.

Allow the snow blower auger to rotate for a short time (approximately one minute).

Stop auger rotation.

Chute Rotation

Rotate the discharge chute in both directions. The discharge chute should rotate freely.

Deflector Operation

Raise and lower the deflector multiple times. The deflector should move up and down freely.

Lower the engine RPM.

Disengage the machine's auxiliary hydraulics.

Lower the snow blower to the ground.

Place all controls in neutral, engage the park brake and exit the machine. (See "Entering The Operator's Position" on page 13.)

NOTE: Adjust the snow blower so that it is level. (See "AlphaBlower Adjustment Skid Steer" on page 15) or (See "Connecting The Snow Blower To The Tractor's Three-Point Hitch" on page 16.)

Operating The AlphaBlower

Operation

WARNING

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

WARNING

AVOID SERIOUS INJURY OR DEATH

Always be aware of overhead obstacles or power lines when operating the snow blower.

WARNING

AVOID SERIOUS INJURY OR DEATH

Never direct discharge toward bystanders, buildings or other property. Debris can be thrown great distances.

WARNING

AVOID SERIOUS INJURY OR DEATH

If the auger / chute becomes clogged with snow, Turn the machine's engine off. Use a clearing rod, never insert hands or feet into the chute or auger opening.

Enter the machine. (See "Entering The Operator's Position" on page 13.)

Start the engine and release the parking brake.

Raise the snow blower slightly off the ground.

Move to the work area.

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

Set the snow blower at the recommended working position.

Raise the engine RPM.

Rotate the snow blower discharge chute to the desired position. The discharge chute can be rotated at any time by using the auxiliary circuit.

Adjust the deflector to control the distance the snow is thrown.

NOTE: Always be sure the snow blower is level (parallel) with the ground when operating, to ensure proper cutting edge and wear shoe wear.

NOTE: The machine speed is determined by the depth and density of the snow being moved. Adjust speed as required.

Clearing a Plugged AlphaBlower

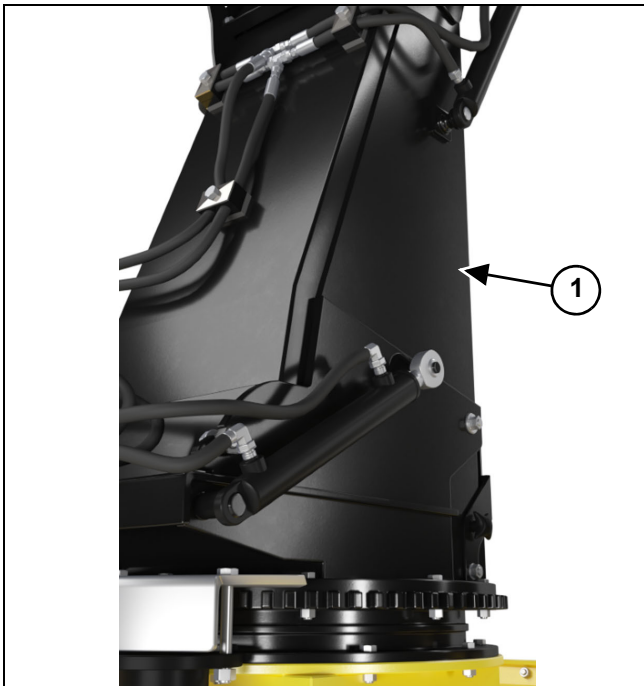
WARNING

AVOID SERIOUS INJURY OR DEATH

If the auger / chute becomes clogged with snow, turn the machine's engine off. Use a clearing rod, never insert hands or feet into the chute or auger opening.

NOTE: If the AlphaBlower is equipped with the hydraulic tip down option the chute can be tilted down to remove snow from the impeller housing.

Figure 3



Remove as much snow as possible before the chute (Item 1) [Figure 3] is rotated down.

NOTE: Be aware of the risk of crushing between the chute and the fixing bracket when the chute is tilted down or raised up again.

AlphaBlower Removal Skid Steer

NOTE: Put the snow blower 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 snow blower on a flat level surface.

Lower the snow blower until it is 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.)

Exit the operator's position. (See "Exiting The Operator's Position" on page 13.)

NOTE: Be aware of all pinch points when disconnecting the snow blower from the machine.

Disconnect the auxiliary hydraulic hoses. (See "Hydraulic Couplers" on page 22.)

Disconnect the electrical connector (if applicable).

WARNING

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 13.)

Start the engine and release the parking brake.

Disengage mounting pins, lower the arms and tip the plate forward. Drive the machine slowly away from snow blower.

NOTE: Make sure the snow blower is free from the machine.

AlphaBlower Removal Tractor

NOTE: When the connection frame has been installed for towing, the support jack must always be installed before the snow blower is disconnected from the machine. Otherwise there is a risk of the snow blower tilting, resulting in serious risk of crushing to persons. The risk of tilting is increased if the snow blower is parked on an uneven or non-permanent surface.

NOTE: Put the snow blower 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 snow blower on a flat level surface.

Lower the snow blower and put the snow blower 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.)

Exit the operator's position. (See "Entering The Operator's Position" on page 13.)

NOTE: Be aware of all pinch points when disconnecting the snow blower from the machine.

Disconnect the PTO shaft.

Disconnect the auxiliary hydraulic hoses. (See "Hydraulic Couplers" on page 22.)

Disconnect the electrical connector (if applicable).

Disengage the tractor's locking levers (if equipped). Remove three-point mounting pins. (See the tractor's Operator's Manual for correct procedure.)

WARNING

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 13.)

Start the engine and release the parking brake.

Drive the machine slowly away from the snow blower.

NOTE: Make sure the snow blower is free from the machine.



Maintenance Safety

WARNING

AVOID SERIOUS INJURY OR DEATH

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

WARNING

AVOID SERIOUS INJURY OR DEATH

Stop the engine, release auxiliary hydraulic pressure, disconnect the auxiliary hydraulic hose quick couplers from the skid steer before performing maintenance on the snow blower.

- Always keep the work area clean and dry.
- Always use personal protection equipment 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 the snow blower.
- Always relieve hydraulic system pressure before disconnecting the snow blower.
- Always disconnect hydraulic connections between the machine and the snow blower before performing maintenance.
- Before working or doing maintenance on the snow blower, make sure the skid steer's wheels are blocked.
- Never work under the snow blower unless the snow blower is blocked or supported securely.

- Disconnect the battery (both terminals) before welding on any part of the snow blower or 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 9.)
- When replacement parts are necessary, genuine factory replacement parts must be used to restore your snow blower 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 the snow blower, make sure all shields and guards are installed before placing the snow blower into service.

General Maintenance

 **WARNING**

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 the snow blower after each use.

Proper lubrication is important. Follow all lubrication instructions and schedules.

Daily Inspection:

- All components and hardware to ensure equipment is secure and thoroughly tightened.
- Frame and all welds for cracks or damage.
- Wear shoes/ gauge wheels (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.

AlphaBlower Maintenance

WARNING

AVOID SERIOUS INJURY OR DEATH

Always turn off and lockout power on the machine before servicing the snow blower.

WARNING

AVOID SERIOUS INJURY OR DEATH

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

WARNING

AVOID SERIOUS INJURY OR DEATH

Securely block up the snow blower before working underneath.

WARNING



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.

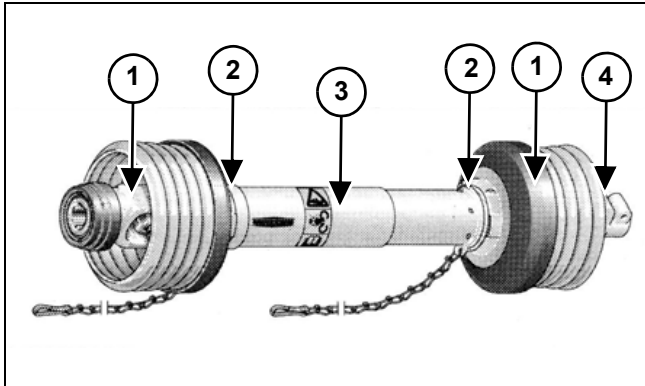
Maintenance Schedule

DESCRIPTION	SERVICE PROCEDURES			
	Check	Grease	Oil Lube	Change
Daily Maintenance (or every 10 hrs)				
Wear Shoe	X			
Gauge Wheel	X			
Weekly Maintenance (or every 40 hrs)				
PTO Shaft		X		
Axle Ball Bearings		X		
Chute Fixing Bolts	X			
Check Hydraulic Hoses	X			
Snow Blower Frame	X			
Hardware	X			
Monthly Maintenance (or every 170 hrs)				
Auger Bearings		X		
Impeller Bearings		X		
Impeller Axle		X		
Slew Ring		X		
Chute Movable Joints			X	
Wear Shoe Height Adjustment			X	
Gauge Wheel Height Adjustment			X	
Gauge Wheel Bearings		X		
PTO Shaft (located by shear bolt)		X		
Cutting Edge	X			
Auger Fixing Bolts	X			
Gearbox Fixing Bolts	X			
Gearbox Oil Level	X			
Gearbox Oil Level - Front-Mounted	X			
Yearly Maintenance (or every 500 hrs)				
Gearbox. First change after 50 hours. (See "Gearbox Oil Change" on page 34.)				X
Gearbox - front-mounted. First change after 50 hours. (See "Gearbox Oil Change for Front Mounted Units" on page 34.)				X
Gearbox Front Mount - Spline Pins		X		
Connection Frame the Locking Bolt				X

Lubrication

PTO Shaft

Figure 1



Grease the PTO shaft fittings (Item 1), bearing for the guard (Item 2) and telescoping tubes (Item 3) **[Figure 1]** every 40 hours of operation.

NOTE: For lubrication of the telescoping tubes (Item 3) the PTO shaft must be pulled apart.

Grease the bearings (Item 4) **[Figure 1]** by the shear bolt every 170 hours of operation.

PTO Stub Splines

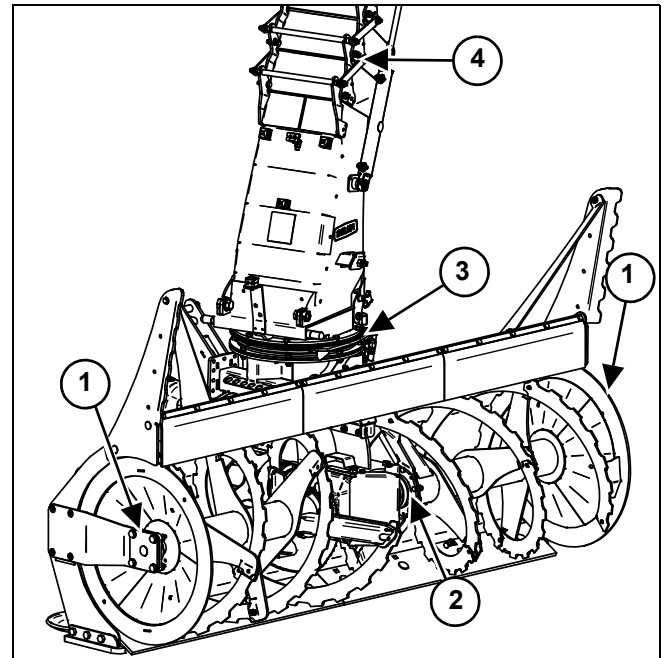
Lubricate the splines on the PTO stub using grease before the snow blower is placed in storage after the end of the season. Lubricate the locking bolt on the connection frame using oil.

Spline Pins Front Mount Gearbox

Grease the zerk between the gearbox and where augers attach.

Blower Grease Points

Figure 2



The snow blower is equipped with three ball bearings (Item 1) **[Figure 2]** for the axle suspension, and three flexible couplings on the gearbox (Item 2) **[Figure 2]**. The bearings are equipped with grease zerks and filled with grease and have integrated seals. Push the grease (Mobil Mobilith SHC 220 or equivalent) in carefully to avoid damage to the seals. Stop when there is resistance in the grease press.

The slew ring (Item 3) **[Figure 2]** is equipped with four grease zerks. Use grease of the type Mobil Mobilith SHC 220 or equivalent. Rotate the chute around and grease repeatedly to distribute the grease around the entire slew ring. Too much or the wrong type of grease could result in the slew ring moving slowly during very cold weather.

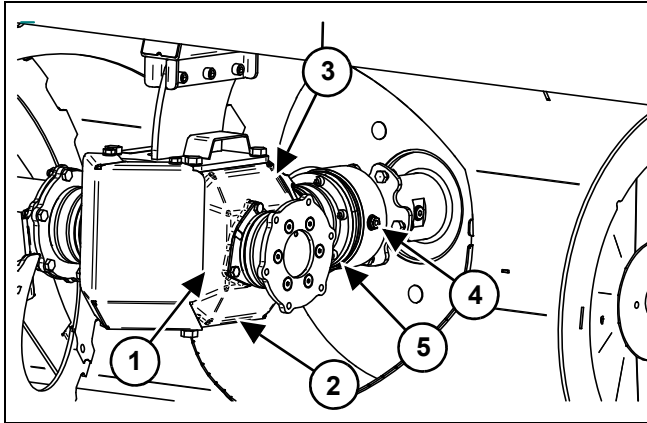
If the clearance between the chute and the fixing bracket for the chute is too large (or if the contact face facing the slew ring is uneven) this could result in an uneven load on the slew ring, resulting in slow operation or inability to rotate. If this happens, loosen all the bolts on the slew ring. Fill any clearances using shims or washers before tightening the bolts again.

Lubricate all moving parts of the chute (Item 4) **[Figure 2]** with oil on a regular basis.

Lubrication (Cont'd)

Gearbox Oil Change

Figure 3



NOTE: Make sure the snowblower is level.

Change the oil for the gearboxes (Item 1) [Figure 3] for the first time **after 50 hours/first season**. Thereafter oil should be changed every 500 hours or at least once per year.

Remove the drain plug (Item 2) [Figure 3] located on the bottom of the gearbox and the filling / level plug (Item 3). Drain oil into a container and dispose of properly.

Install the drain plug and add gear oil (main gearbox, L30-029: 3,9 liters gear oil, Mobil SHC Gear 220) until the oil is level with the bottom of the fill / level plug hole. Install the plug.



IMPORTANT

Fluid such as engine oil, hydraulic fluid, coolants, grease, etc. must be disposed of in an environmentally safe manner. Some regulations require that certain spills and leaks on the ground must be cleaned in a specific manner. See local, state and federal regulations for the correct disposal.

Gearbox Oil Change for Front Mounted Units

Follow the same procedure above for the front mounted gearbox.

PTO Gearbox

Oil PTO gearbox, L30-030: 1,4 liters gear oil, Mobil SHC Gear 220. (models: 24-84-PA, 24-84-PB)

Oil Change on the Cut Out Clutch

Change the oil for the cut out clutch every 500 hours or at least once per year. (Item 4) [Figure 3] using oil.

Oil: 170ml oil, EP 85W 90

Fan Shaft Splines

Between the main gear box and the cut out clutch, there is an adapter plate (Item 5) [Figure 3] with an integrated grease zerk. Grease every 40 hours and at the end of the season.

Auger Axle Couplings

Check the couplings between the gearbox and the auger axle for wear. If there is significant wear, the bushings in the coupling must be replaced. Check that the cup springs are not damaged. Replace if necessary. Cup springs must be installed in pairs with the curved side facing outwards. Please be aware that the two nuts must not be screwed all the way in. This will cause the cup springs to be pushed all the way together preventing movement in the coupling.

Gearbox Adjusting Bolts

The adjusting bolts for the gearbox must be tightened with a torque of 184 ft lbs and secured using locking washers. Ensure that the locking washer is in place and in good condition. Beneath the head of each fixing bolt there is a friction washer to maintain the initial load on the bolt. The friction washer must be installed with the curved side facing upwards.

Hydraulic Hoses

Check that there is no damage to hydraulic hoses. Replace any damaged hoses. Also check for any leakages in hose connections and couplings.

 **WARNING**



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.

Cutting Edge Replacement

NOTE: Replace or flip the bolt-on cutting edge when it wears within 1/2" - 3/4". Replace only with genuine SnowWolf cutting edge and hardware.

1. Park the machine on a level surface with the snow blower properly attached.
2. Lower the snow blower 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 snow blower with proper lifting device capable of sufficiently supporting the unit's weight.
6. Disconnect PTO and hydraulic connections between the snow blower and the tractor.
7. Block the cutting edge, remove the fasteners and remove the cutting edge.

NOTE: Be cautious as the cutting edge and hardware may be sharp.

8. 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.

Troubleshooting

24-84-P

PROBLEM	CAUSE	SOLUTION
Snow blower leaving snow behind.	Snow Blower not adjusted properly.	Adjust the snow blower.
	Cutting edge worn or damaged.	Replace cutting edge / wing cutting edges.
Auger will not turn.	Gearbox faulty.	Repair or replace.
	Bolt in PTO shaft sheared.	Replace bolt.
	Hydraulic fluid low.	Check machine hydraulic oil level.
Chute does not rotate.	Damaged hydraulic motor.	Repair or replace.
	Damaged hose.	Repair or replace.
Deflector does not adjust.	Damaged hydraulic cylinder.	Repair or replace.
	Damaged hose.	Repair or replace.

24-84-H

PROBLEM	CAUSE	SOLUTION
Snow blower leaving snow behind.	Snow Blower not adjusted properly.	Adjust the snow blower.
	Cutting edge worn or damaged.	Replace cutting edge / wing cutting edges.
Auger will not turn.	Gearbox faulty.	Repair or replace.
	Plugged or kinked hose.	Replace hose.
	Hydraulic fluid low.	Check machine hydraulic oil level.
Chute or deflector not functioning.	Solenoid or Spool Failure.	Repair or replace.
	Electrical system failure.	Check connections and that signal is being received. Repair or replace.
	Damaged hydraulic motor or cylinder.	Repair or replace.
	Damaged hydraulic hose.	Repair or replace.

Storage And Return To Service

Storage

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

- Thoroughly wash the snow blower.
- 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 snow blower 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 snow blower in a dry protected shelter.

NOTE: Replace or repair any damaged parts.

Return to Service

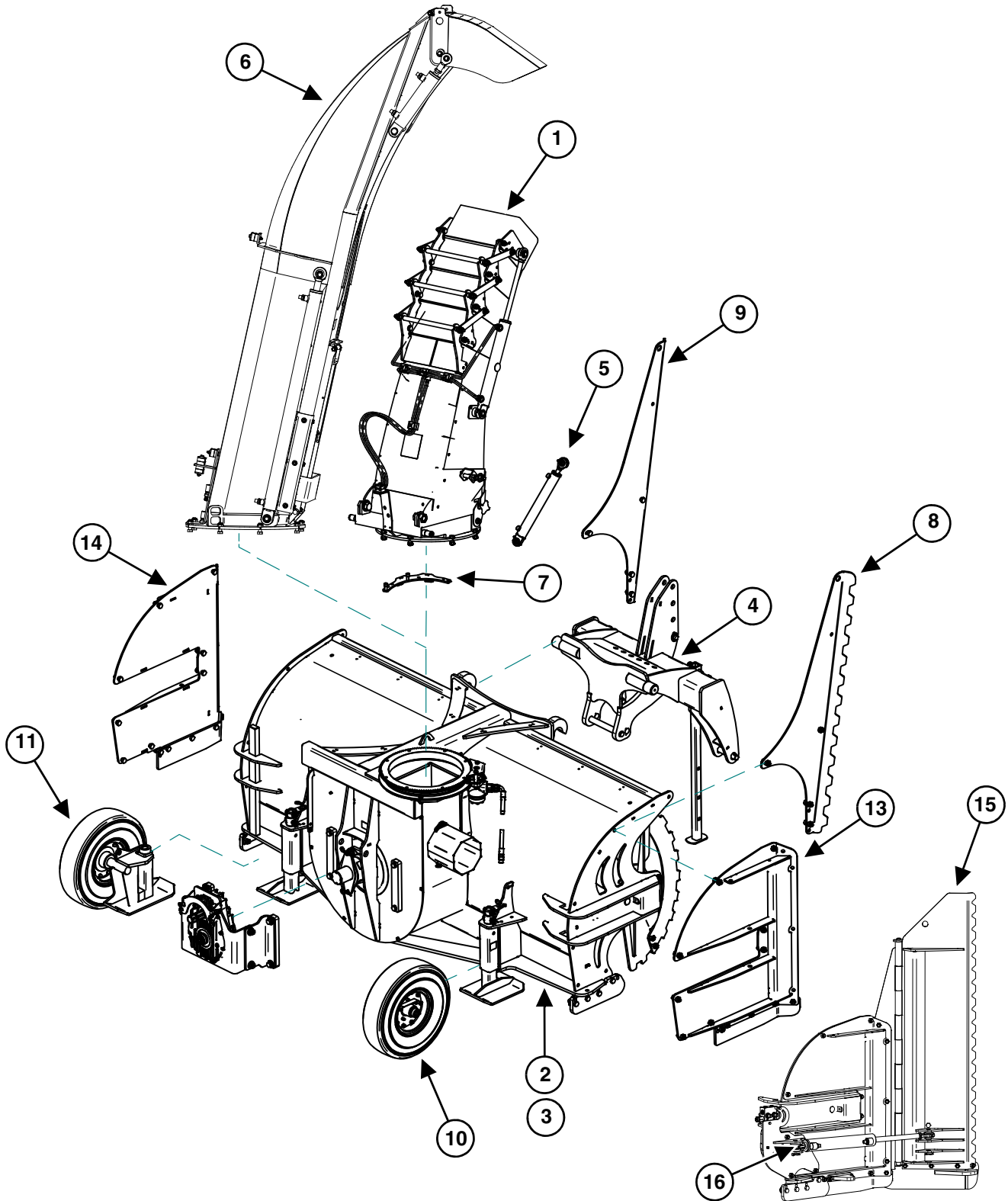
After the snow blower has been in storage, it is necessary to follow a list of items to return the snow blower to service.

- 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 snow blower and check for correct function.
- Check for leaks. Clean and repair as needed.

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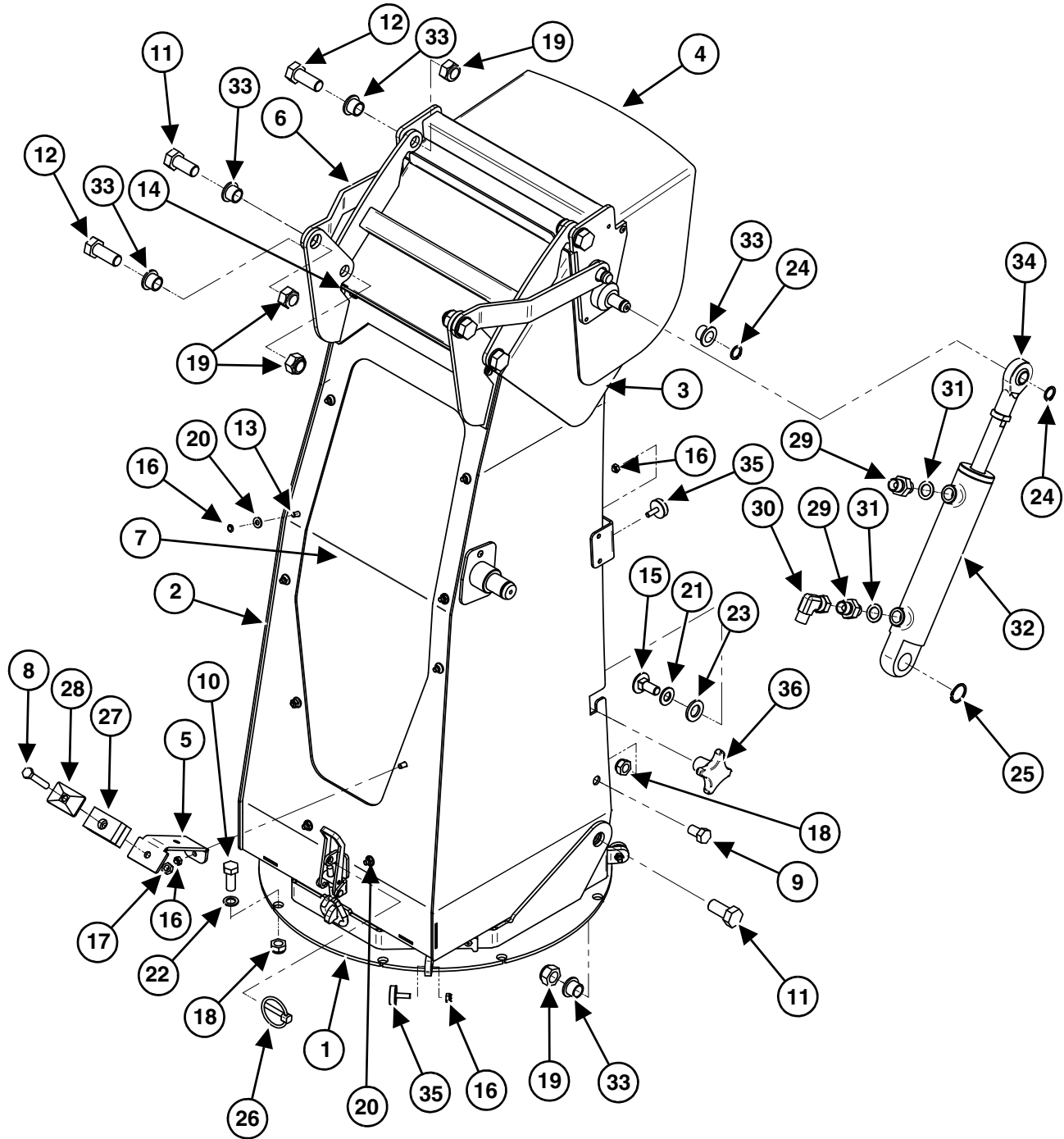
AlphaBlower

AlphaBlower Parts



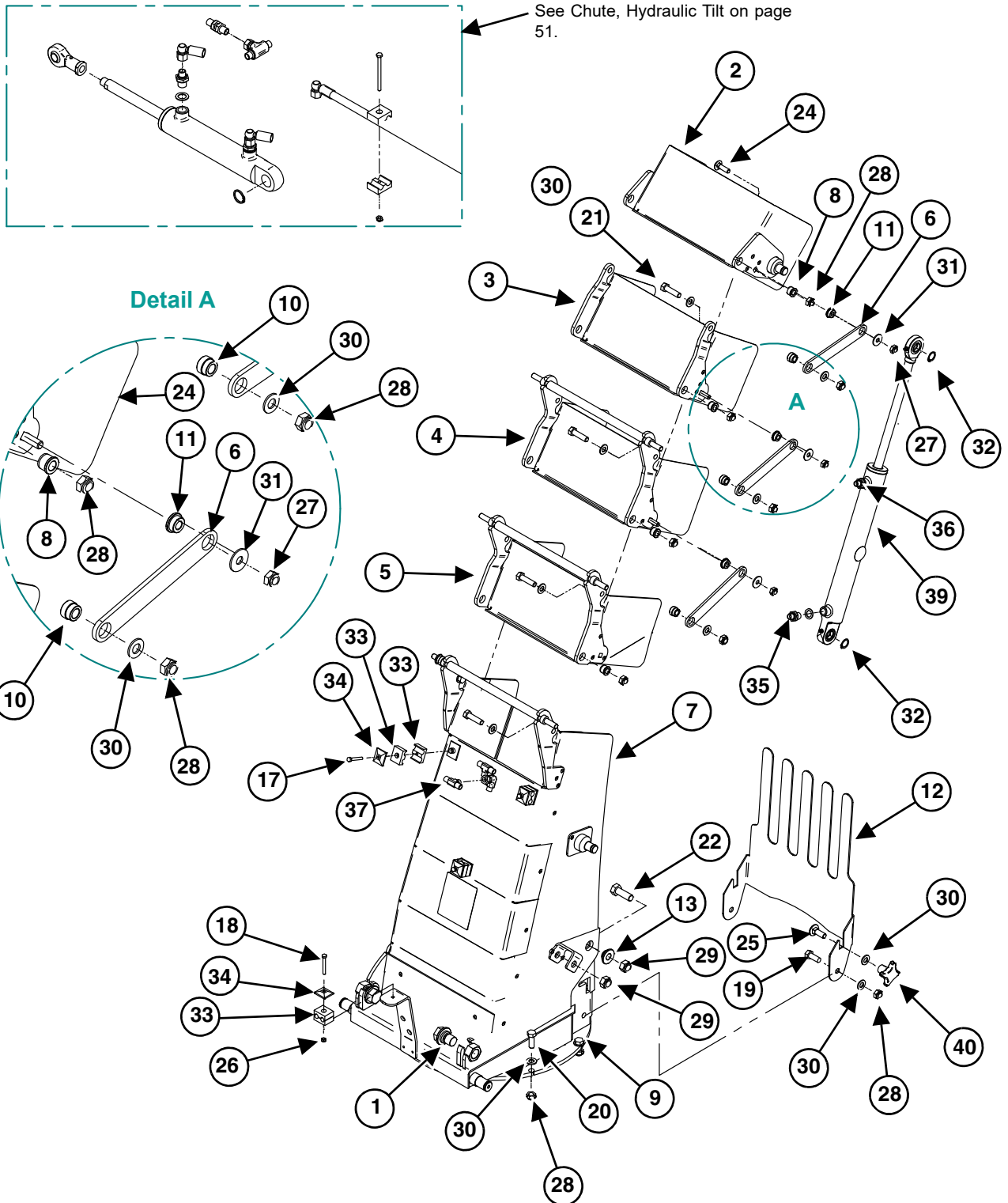
ITEM	PART #	DESCRIPTION	QTY
1	1900-010	Standard Chute w/ HYD 4 Flaps	1
2		Snow Blower, 540 rpm	1
3		Snow Blower, 1000 rpm	1
4	2014-400TP	Connection Frame, 3-Point	1
5	0990-300	Cylinder, Hydraulic Tilt	1
6	0994	Chute, Telescopic (Optional)	1
7	2006-550	Swivel Stopper	1
8	2011-560H	Drift Cutter, Right	1
9	2011-560V	Drift Cutter, Left	1
10, 11	2012-550	Gauge Wheel Set	1
10	2012-550H	Gauge Wheel with Shoe, Right	1
11	2012-550V	Gauge Wheel with Shoe, Left	1
13	2013-250H	Side Panel, Right	1
14	2013-250V	Side Panel, Left	1
MISCELLANEOUS			
-	L01-125	PTO Shaft (1000 rpm), (For Towing) (Model 24-84-P Only)	
-	L01-126	Shear Bolt, (For Front Mount) (Model 24-84-P Only)	

Chute



ITEM	PART #	DESCRIPTION	QTY
1	2116-711	Chute, Bottom Plate	1
2	2116-712	Chute, Body	1
3	2116-713	Lower Flap	1
4	2116-714	Upper Flap	1
5	2116-716	Support Plate	1
6	2116-742	Parallel Rod	2
7	2116-744	Wear Plate, Hardox	1
8	F102-08050	Hexagon Screw, M8 x 50	1
9	F102-12020	Hexagon Screw, M12 x 20	2
10	F102-12030	Hexagon Screw, M12 x 30	8
11	F102-16035	Hexagon Screw, M16 x 35	4
12	F102-16040	Hexagon Screw, M16 x 40	4
13	F112-06016	Locking Screw, M6 x 16	10
14	F112-06020	Locking Screw, M6 x 20	2
15	F112-12030	Locking Screw, M12 x 30	2
16	F312-06	Locking Nut, M6	16
17	F312-08	Locking Nut, M8	1
18	F312-12	Locking Nut, M12	10
19	F312-16	Locking Nut, M16	8
20	F402-06	Seating Washer, 6,5 DIN125	11
21	F402-13	Seating Washer, 13 DIN125	2
22	F402-13D	Seating Washer, 13 20 2	8
23	F402-17	Seating Washer, 17	2
24	F430-16	Retaining Ring, A-16x1	3
25	F430-25	Retaining Ring, A-25x2	1
26	F470-06	Linch Pin ,6 NS 555	1
27	F611-012	Double Clamp Ø15	1
28	F611-013	Upper Plate for Double Clamp	1
29	G01-003	Transition Nipple, M16 X 1,5-3/8" R	2
30	G01-112	Angled Nipple, 90 deg. Swivel 3/8"	2
31	G50-062	Steel / Rubber Gasket for M16	2
32	H05-011	Hydraulic Cylinder	1
33	K03-18	Slide Bearing, Ø16 x 20 x 15,5, Nylon-66	9
34	K05-008	Rod Eye, Ø16 M16 x 1,5	1
35	K08-023	Rubber Damper, Ø20 x 23	4
36	K09-019LAKK	K09-019 (Fastener) Painted	2

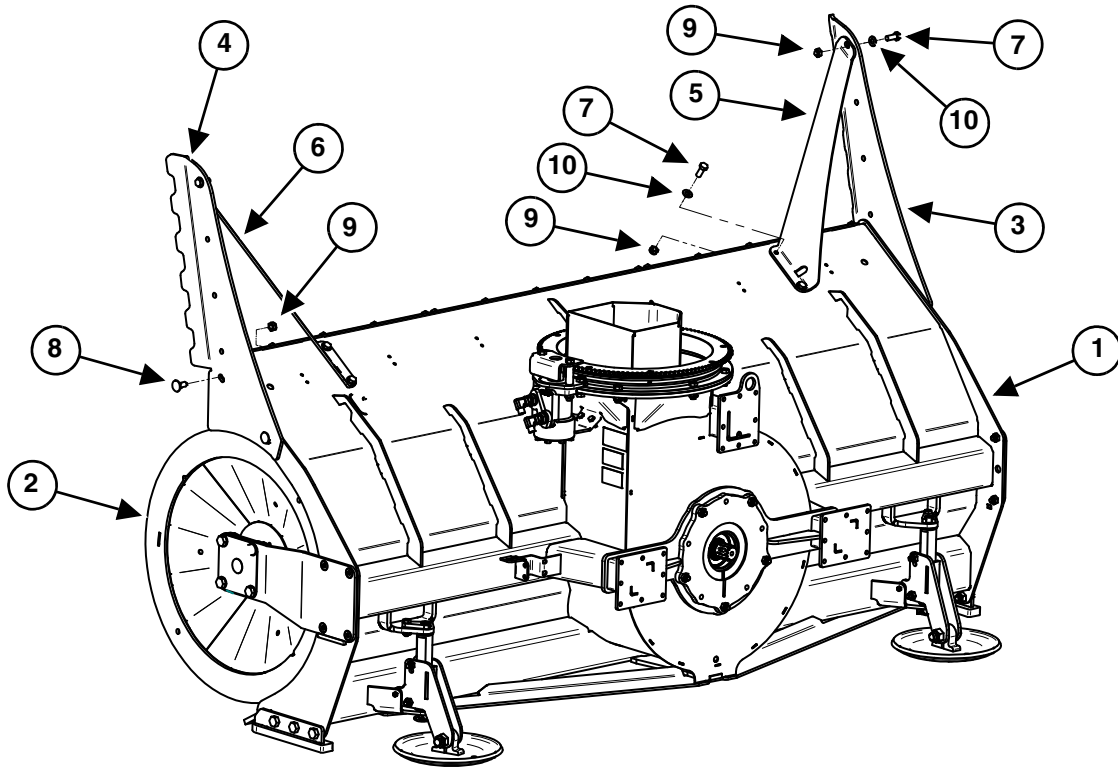
Deluxe Chute, 4-Stage



ITEM	PART #	DESCRIPTION	QTY
1	0991-016	BOLT, HEX, M24	2
2	1900-040	FLAP 4	1
3	1900-045	FLAP 3	1
4	1900-050	FLAP 2	1
5	1900-055	FLAP 1	1
6	1900-073	ROD	6
7	1900-075	CHUTE	1
8	1900-079	SLEEVE	8
9	1900-080	CHUTE ATTACHMENT	1
10	1900-085	SLEEVE	6
11	1900-086	SLEEVE	6
12	1900-090	GUARD	1
13	1900-140	SLEEVE	2
14	1900-208	HOSE, HYDRAULIC	2
15	1900-210	HOSE, HYDRAULIC	2
16	1900-212	HOSE, HYDRAULIC	2
17	F102-06045	BOLT, HEX, M6 x 45	3
18	F102-06050	BOLT, HEX, M6 x 50	1
19	F102-12030	BOLT, HEX, M12 x 30	2
20	F102-12035	BOLT, HEX, M12 x 35	7
21	F102-12045	BOLT, HEX, M12 x 45	8
22	F102-16045	BOLT, HEX, M16 x 45	2
24	F112-10035	BOLT, CARRIAGE, M10 x 35 - 8.8	6
25	F112-12035	BOLT, CARRIAGE, M12 x 35 - 8.8	2
26	F312-06	NUT, LOCK, M6	1
27	F312-10	NUT, LOCK, M10	6
28	F312-12	NUT, LOCK, M12	28
29	F312-16	NUT, LOCK, M16	4
30	F402-13	WASHER, SEATING, 13 DIN125	26
31	F410-10	WASHER, SEATING, 10 DIN9021	6
32	F430-20	RETAINING RING, A-20 x 1.2	4
33	F611-027	CLAMP, DOUBLE	4
34	F611-028	CLAMP, DOUBLE, UPPER PLATE	4
35	P81053	FITTING, ADAPTER, #6MJIC-16METRIC	4
36	P81052	FITTING, ELBOW, #6MJIC-16METRIC	1
37	P81045	FITTING, TEE, UNION	2
39	H05-016	CYLINDER, HYDRAULIC	2
40	K09-019	FASTENER	2

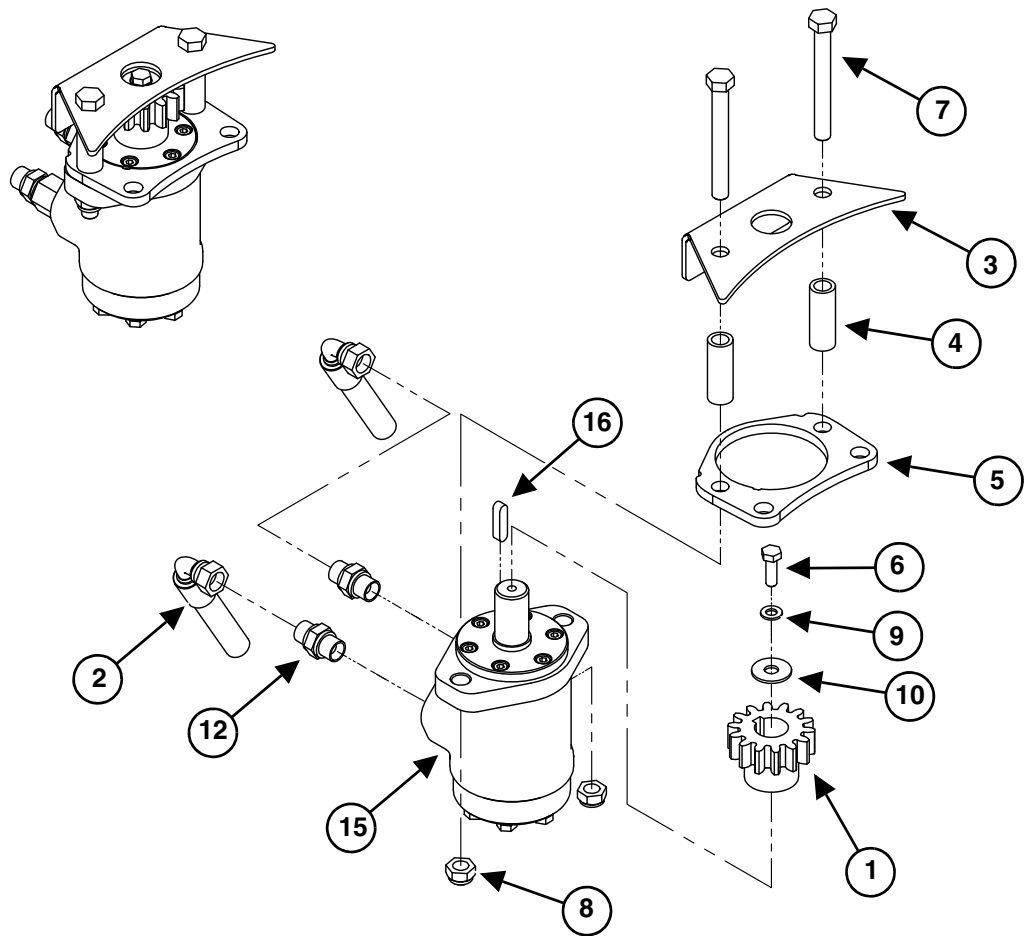
ITEM	PART #	DESCRIPTION	QTY
1	0994-003	BOLT	1
2	0994-020	LOADING SECTION, LOWER	1
3	0994-040	BRACKET, SLIDING	6
4	0994-050	HATCH	1
5	0994-060	ARM, LOCKING	1
6	0994-100	LOADING SECTION, UPPER	1
7	0994-150	DEFLECTOR, ADJUSTABLE	1
8	0994-160	BRACKET	1
9	P81061	HOSE, 1/4 x 118", 4800PSI, #4FJIC-#4FJIC	2
10	P81060	HOSE, 1/4 x 176", 4800PSI, #4FJIC-#4FJIC	1
11	P81059	HOSE, 1/4 x 183", 4800PSI, #4FJIC-#4FJIC	1
12	P81056	HOSE, 1/4 x 48", 4800PSI, #4FJIC-#4FJIC	2
13	P81055	HOSE, 1/4 x 33", 4800PSI, #4FJIC-#4FJIC	4
14	P81057	HOSE, 1/4 x 15-1/4", 4800PSI, #4FJIC-#4FJIC	2
15	F102-06040	BOLT, HEX, M6 x 40	1
16	F102-06080	BOLT, HEX, M6 x 90	1
17	F102-10035	BOLT, HEX, M10 x 35	6
18	F102-10040	BOLT, HEX, M10 x 40	2
19	F102-12035	BOLT, HEX, M12 x 35	1
20	F102-12040	BOLT, HEX, M12 x 40	2
21	F111-06045	BOLT, CARRIAGE, M6 x 45	1
22	F173-08016	SCREW, FLAT, INT. HEX	18
23	F302-10	NUT, LOCK, M10	4
24	F312-06	NUT, LOCK, M6	2
25	F312-08	NUT, LOCK, M8	18
26	F312-10	NUT, LOCK, M10	6
27	F312-12	NUT, LOCK, M12	8
28	F430-16	RETAING RING	2
29	F430-20	RETAING RING	4
30	F430-25	RETAING RING	2
31	F471-12	CLIP	1
32	F611-027	CLAMP, DOUBLE	8
33	F611-028	CLAMP, DOUBLE, UPPER PLATE	4
34	P81065	FITTING, ADAPTER, #4MJIC-#4MBP (3820-04-04)	4
35	P81052	FITTING, ELBOW, #6MJIC-16METRIC	4
36	G01-103	FITTING, TEE, 90 DEG. 1/4" BSP/BSPT/BSP	4
37	P81064	FITTING, ELBOW, #4MJIC-#4MBPP (3801-04-04)	4
39	H05-011	CYLINDER, HYDRAULIC	2
40	H05-021	CYLINDER	2
41	K05-008	ROD EYE	2

Blower Parts



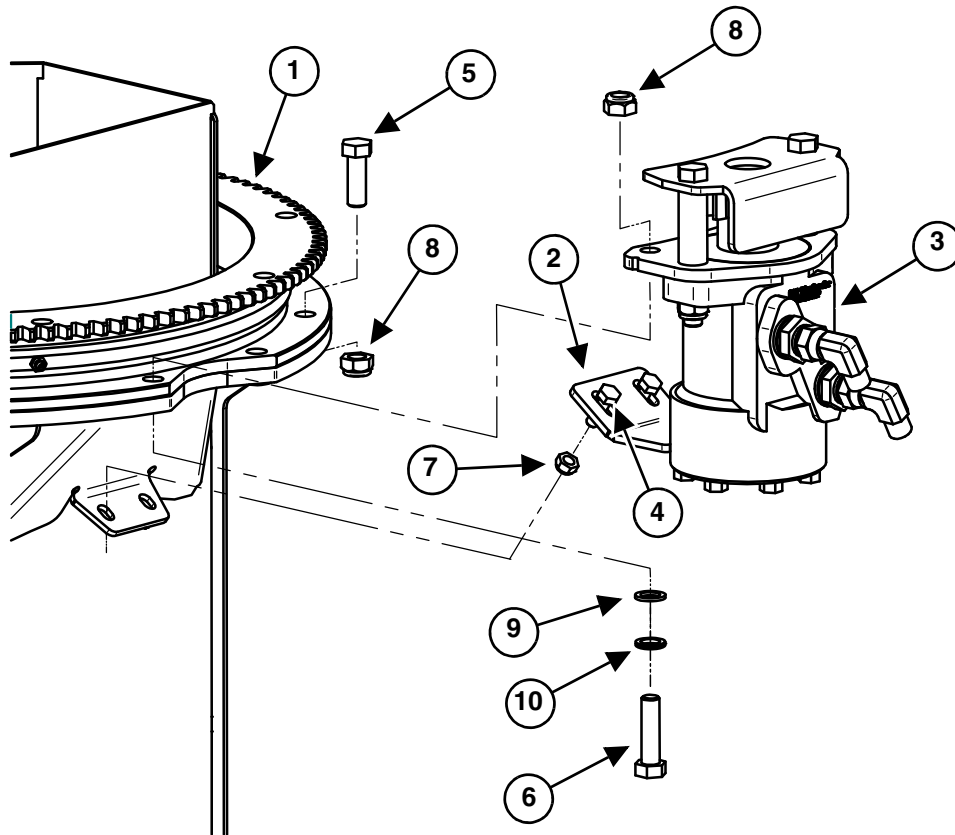
ITEM	PART #	DESCRIPTION	QTY
1	2116-100	Blower Housing, Welded	1
2	2116-350VB	Auger Left	1
	2116-350HB	Auger Right (not shown)	1
3	2116-561H	Drift Cutting Edge Right	1
4	2116-561V	Drift Cutting Edge Left	1
5	2116-562H	Support Right	1
6	2116-562V	Support Left	1
7	F102-12030	Bolt, Hex, M12 x 30	11
8	F112-12030	Bolt, Carriage, M12 x 30	4
9	F312-12	Nut, Lock, M12	40
10	F402-13	Seating Washer 13 DIN125	6

Hydraulic Swivel Motor



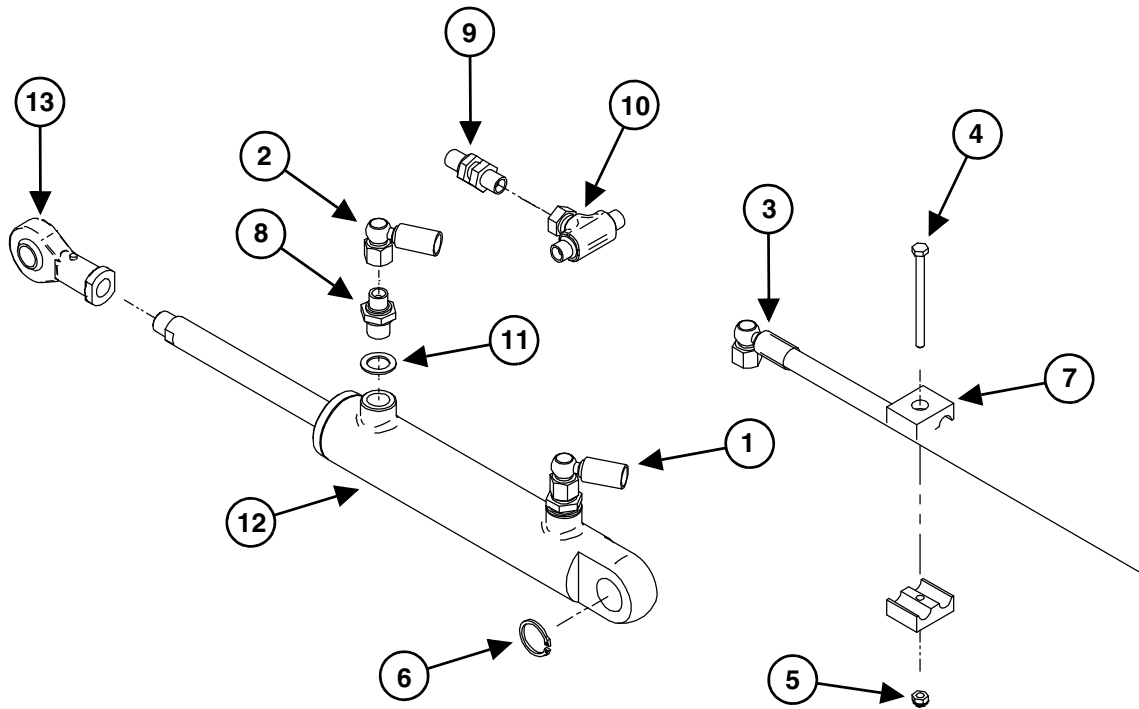
ITEM	PART #	DESCRIPTION	QTY
	2116-805	HYDRAULIC SWIVEL MOTOR	
1	0984-301C	COG WHEEL	1
2	P81058	HOSE, HYDRAULIC	2
3	2116-758	COVER	1
4	0984-604	SLEEVE, SPACER	2
5	2116-757	ENGINE SUPPORT SLEW RING	1
6	F102-08025	BOLT, HEX, M8 x 25	1
7	F102-12100	BOLT, HEX, M12 x 100	2
8	F312-12	NUT, LOCK, M12	2
9	F402-08	WASHER, SEATING	1
10	F410-10	WASHER, SEATING	1
12	P81066	FITTING, ELBOW, #6MJIC-#8MBPP	2
15	H01-055	MOTOR, HYDRAULIC	1
16	F600-001	KEY, SUNK TAPERED A 8 x 7 x 32	1

Hydraulic Swivel Motor Assembly



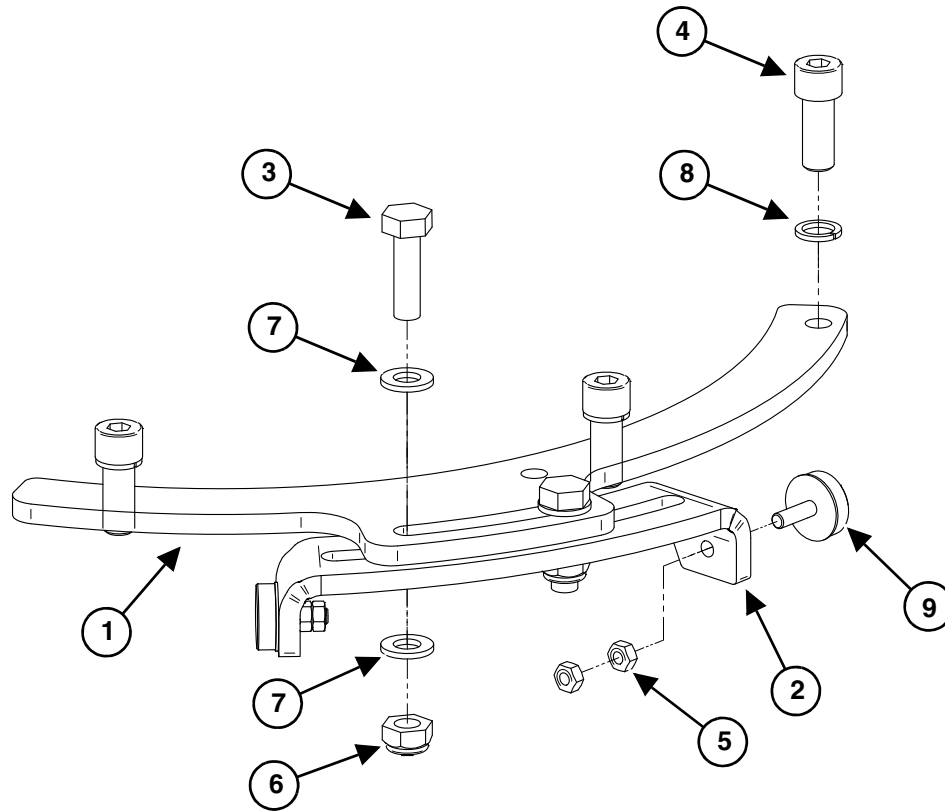
ITEM	PART #	DESCRIPTION	QTY
1	0984-510	Slew Ring Ø500 toothed	1
2	2116-144B	Support Bracket	1
3	2116-805	Hydraulic Swivel Motor	1
4	F102-08025	Bolt, Hex, M8 x 25	2
5	F102-12035	Bolt, Hex, M12 x 35	7
6	F102-12045	Bolt, Hex, M12 x 45	2
7	F312-08	Nut, Lock, M8	2
8	F312-12	Nut, Lock, M12	9
9	F402-13D	Washer, Seating, 13 20 2	2
10	F422-12	Washer, Lock, 12 mm, Nordlock	5

Chute, Hydraulic Tilt



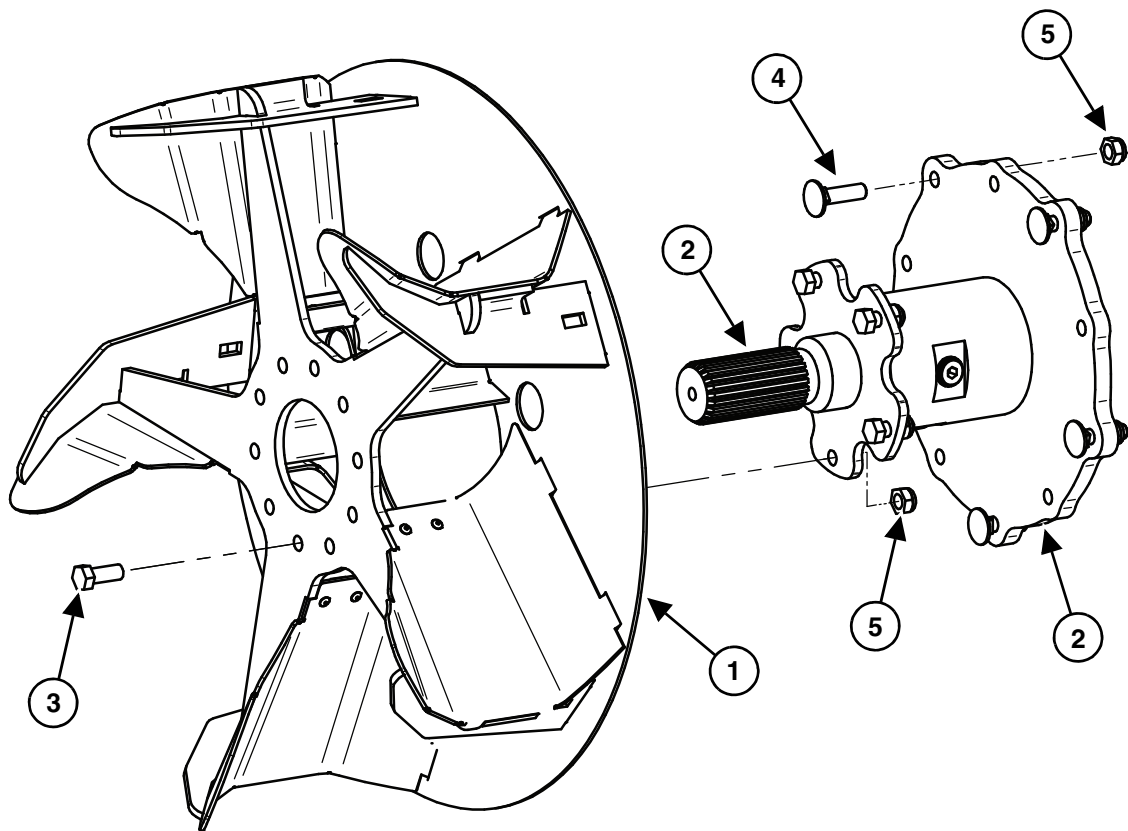
ITEM	PART #	DESCRIPTION	33-106-P QTY
1	1900-200	Hose, Hydraulic	2
2	1900-205	Hose, Hydraulic	2
3	1900-206	Hose, Hydraulic	2
4	F102-06080	Bolt, Hex	1
5	F312-06	Nut, Locking	1
6	F430-16	Retaining Ring	2
7	F611-027	Clamp, Double	1
8	G01-076	Nipple	4
9	G01-080	Nipple	2
10	G01-091	T-nipple	2
11	G50-062	Gasket, Steel / Rubber	4
12	H05-011	Cylinder, Hydraulic	2
13	K05-008	Piston, Rod End	2

Chute, Swivel Stopper



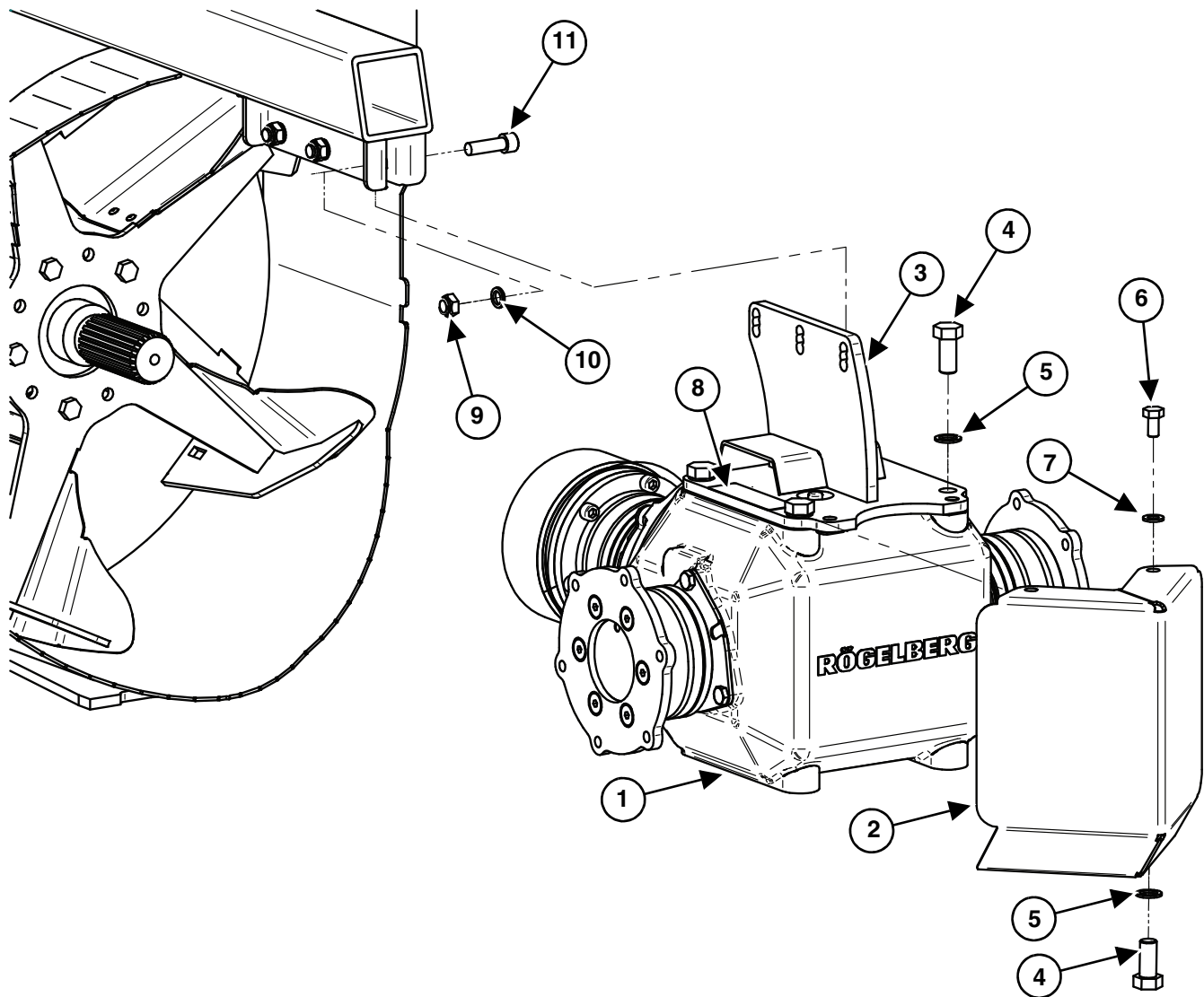
ITEM	PART #	DESCRIPTION	QTY
1	0984-551	Bracket	1
2	0984-552	Bracket	1
3	F102-10035	Bolt, Hex, M10 x 35	2
4	F169-12030	Bolt, Socket Head, M12 x30	3
5	F302-06	Nut, Hex, M6	4
6	F312-10	Nut, Locking, M10	2
7	F402-10	Washer, Seating, 10.5 DIN125	4
8	F420-12	Washer, Seating, B12	3
9	K08-023	Rubber Damper	2

Blower Fan



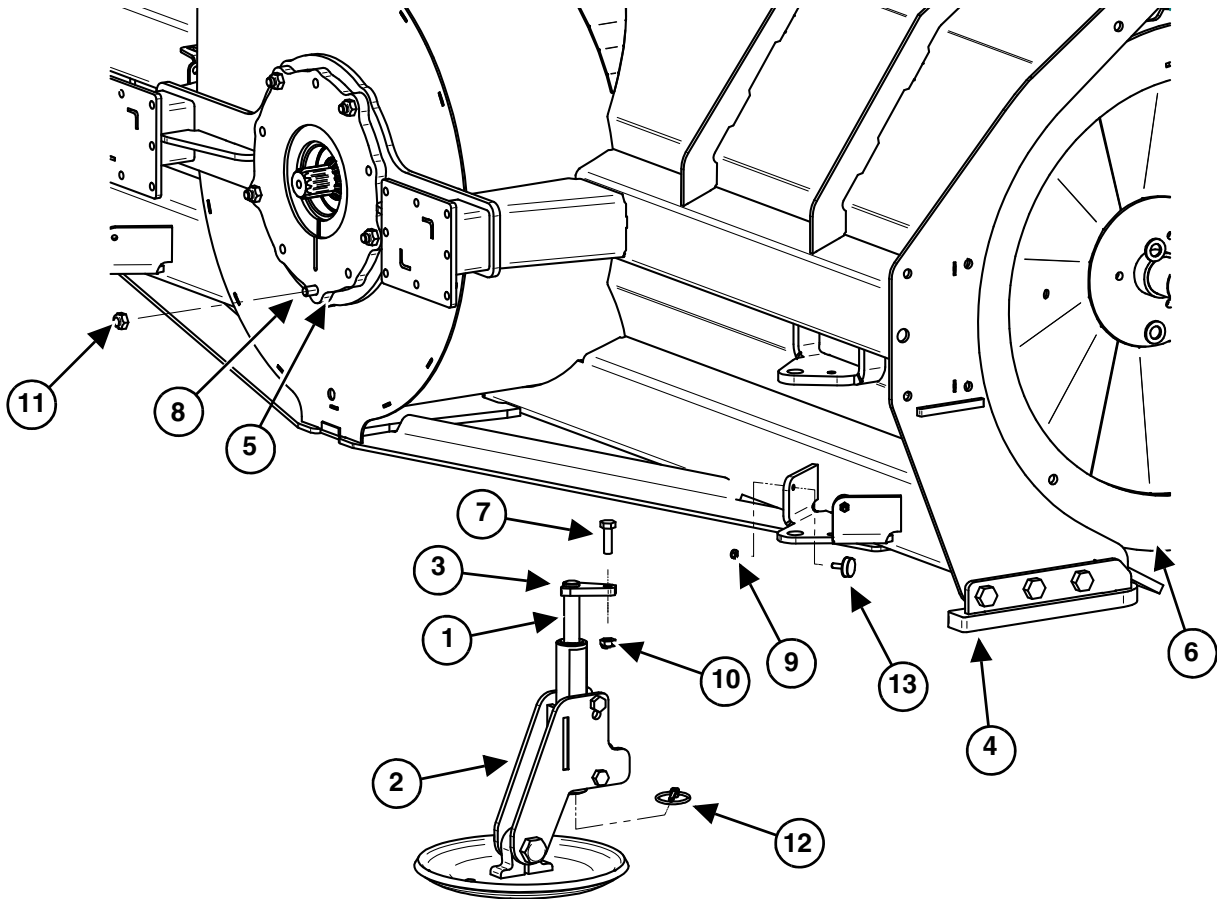
ITEM	PART #	DESCRIPTION	QTY
1	2116-300	Fan, Welded	1
2	2116-320	Bearing House, Welded	1
3	F102-12030	Bolt, Hex, M12 x 30	11
4	F112-12045	Bolt, Carriage, M12 x 45 - 8.8	5
5	F312-12	Nut, Locking, M12	40

Gearbox Mounting



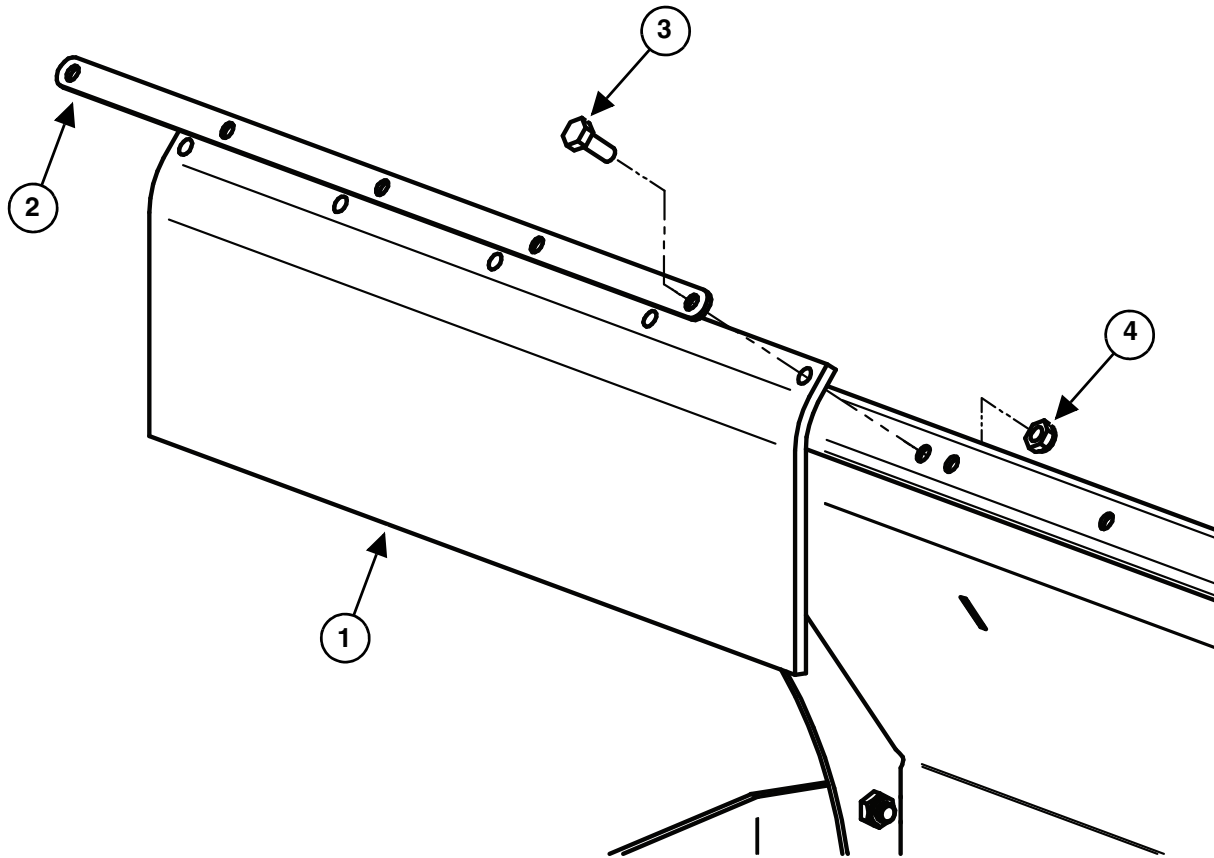
ITEM	PART #	DESCRIPTION	QTY
1	2116-340	Gear Box, Mounted	1
2	2116-256	Gear Box, Guard	1
3	2116-020B	Gear Box Mount, Welded	1
4	F102-16035	Bolt, Hex, M16 x 35	12
5	F422-16	Washer, Locking, 16 mm Nordlock	6
6	F102-10020	Bolt, Hex, M10 x 20	2
7	F402-10	Seating Washer, 10,5 DIN125	2
8	R91-081	Sticker, "Read the User Manual"	1
9	F312-12	Nut, Locking, M12	40
10	F422-12	Washer, Locking, 12 mm Nordlock	5
11	F169-12040F	Bolt, Socket Head, 12 x 40	3

Blower Housing / Wear Shoes



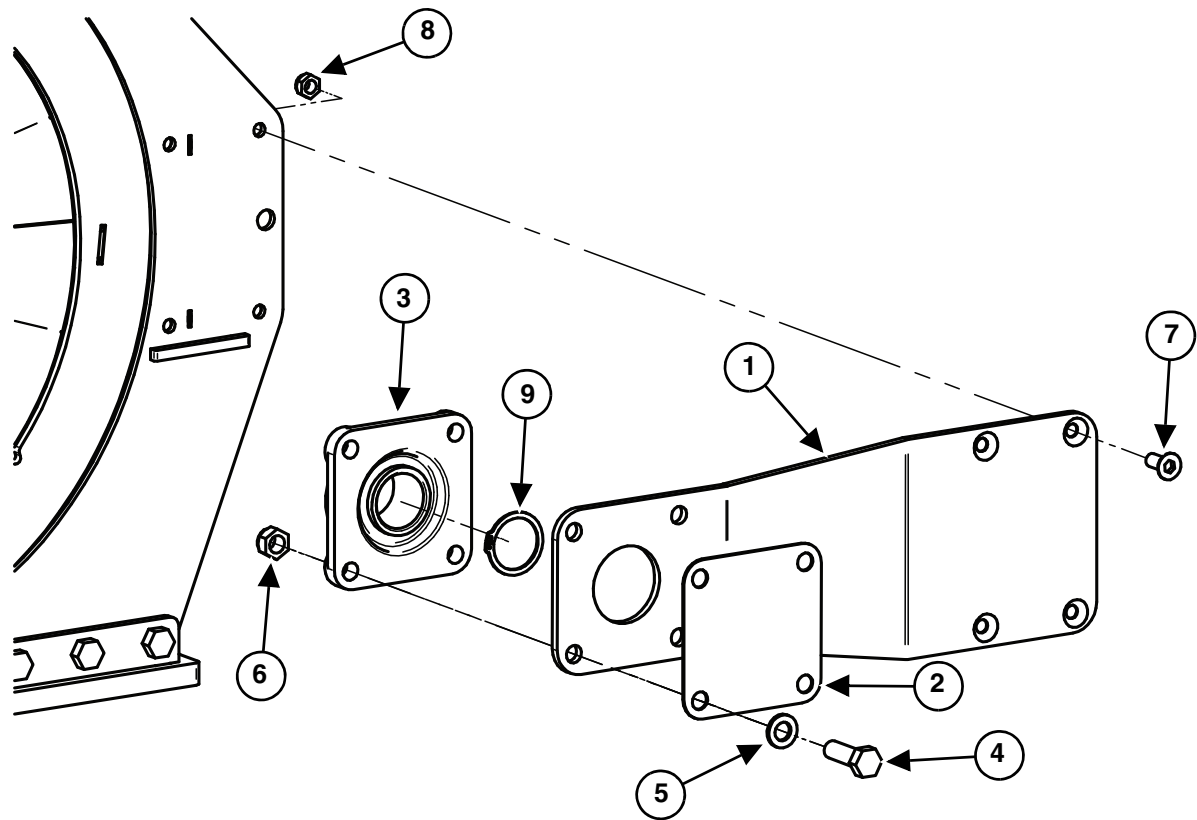
ITEM	PART #	DESCRIPTION	QTY
1	2116-211	Axle	2
2	2116-215	Wear Shoes, Mounted	2
3	2116-219	Plate, Fixing	2
4	2116-250H	Wear Shoe, Right	1
	2116-250V	Wear Shoe, Left (not shown)	1
5	2116-320	Bearing, Housing	1
6	2116-350HB	Auger, Right	1
	2116-350VB	Auger, Left (not shown)	1
7	F102-10035	Bolt, Hex, M10 x 35	14
8	F112-12045	Bolt, Carriage, M12 x 45 - 8.8	5
9	F312-06	Nut, Lock, M6	4
10	F312-10	Nut, Lock, M10	29
11	F312-12	Nut, Lock, M12	40
12	F470-06	Linch Pin, 6 NS 555	2
13	K08-023	Rubber Damper Ø20x23	4

Rubber Flap Parts



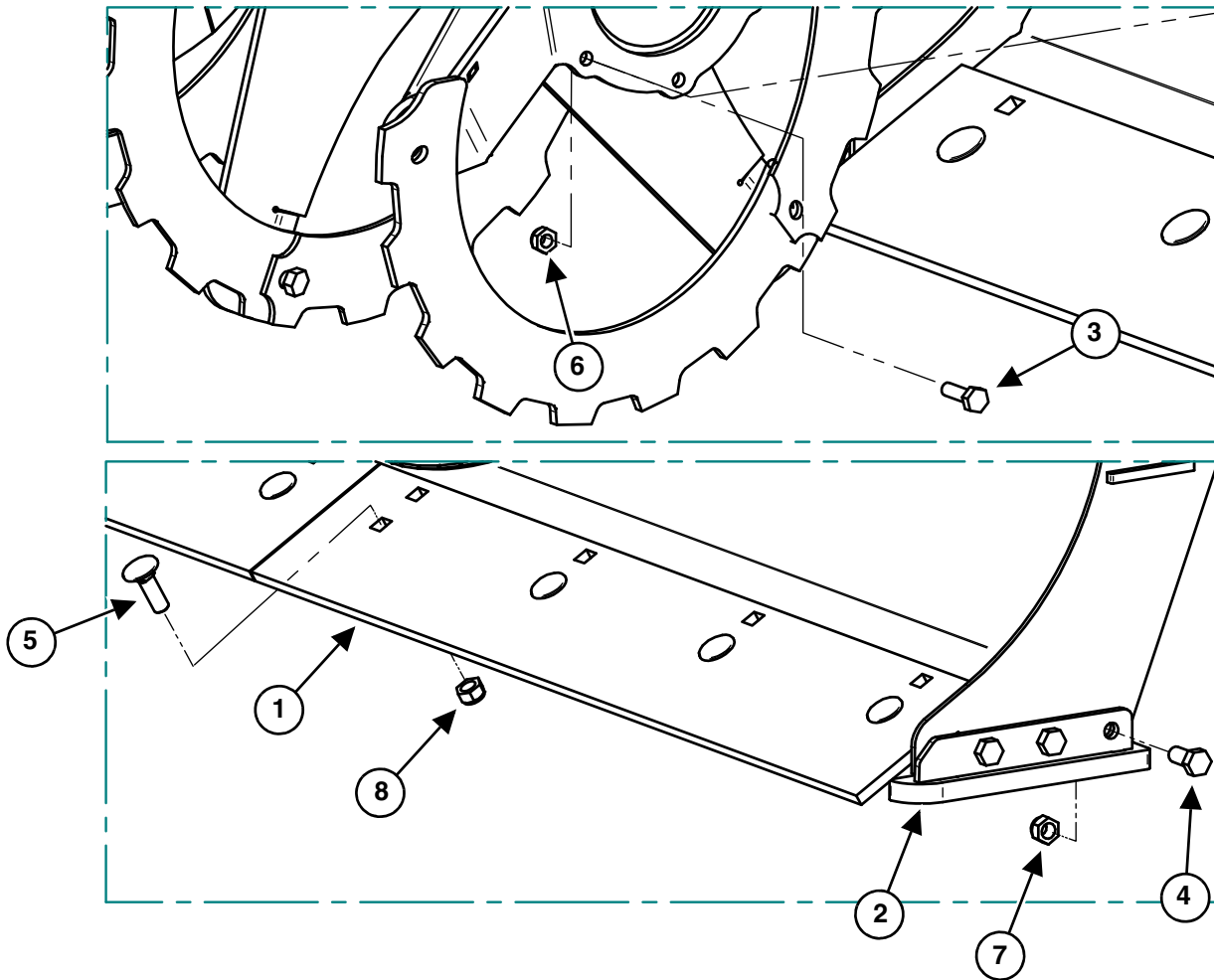
ITEM	PART #	DESCRIPTION	QTY
1	2116-553	Rubber Flap	3
2	2116-554	Clamping Plate	3
3	F102-10025	Bolt, Hex, M10 x 25	15
4	F312-10	Nut, Locking, M10	29

Auger Axle Parts



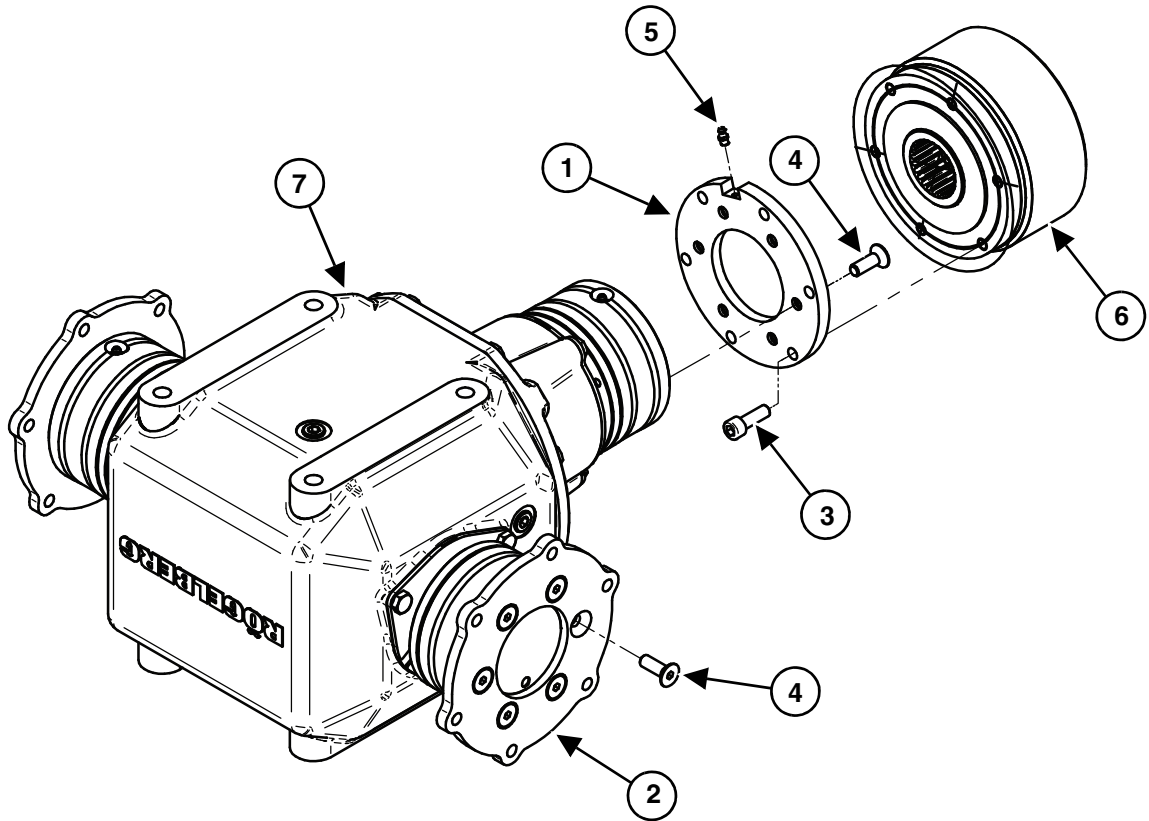
ITEM	PART #	DESCRIPTION	QTY
1	2116-254	Bracket	2
2	2116-253	Bearing, Guard	2
3	K02-003	Flanged Bearing, UCF210	2
4	F102-16050	Bolt, Hex, M16 x 50	8
5	F402-17	Seating, Washer, 17	8
6	F312-16	Nut, Locking, M16	14
7	F173-12030A	Bolt, Socket, Flat Head, M12 x 30	8
8	F312-12	Nut, Locking, M12	40
9	F430-50	Retaining Ring, A50x2	2

Cutting Edge / Axle Parts



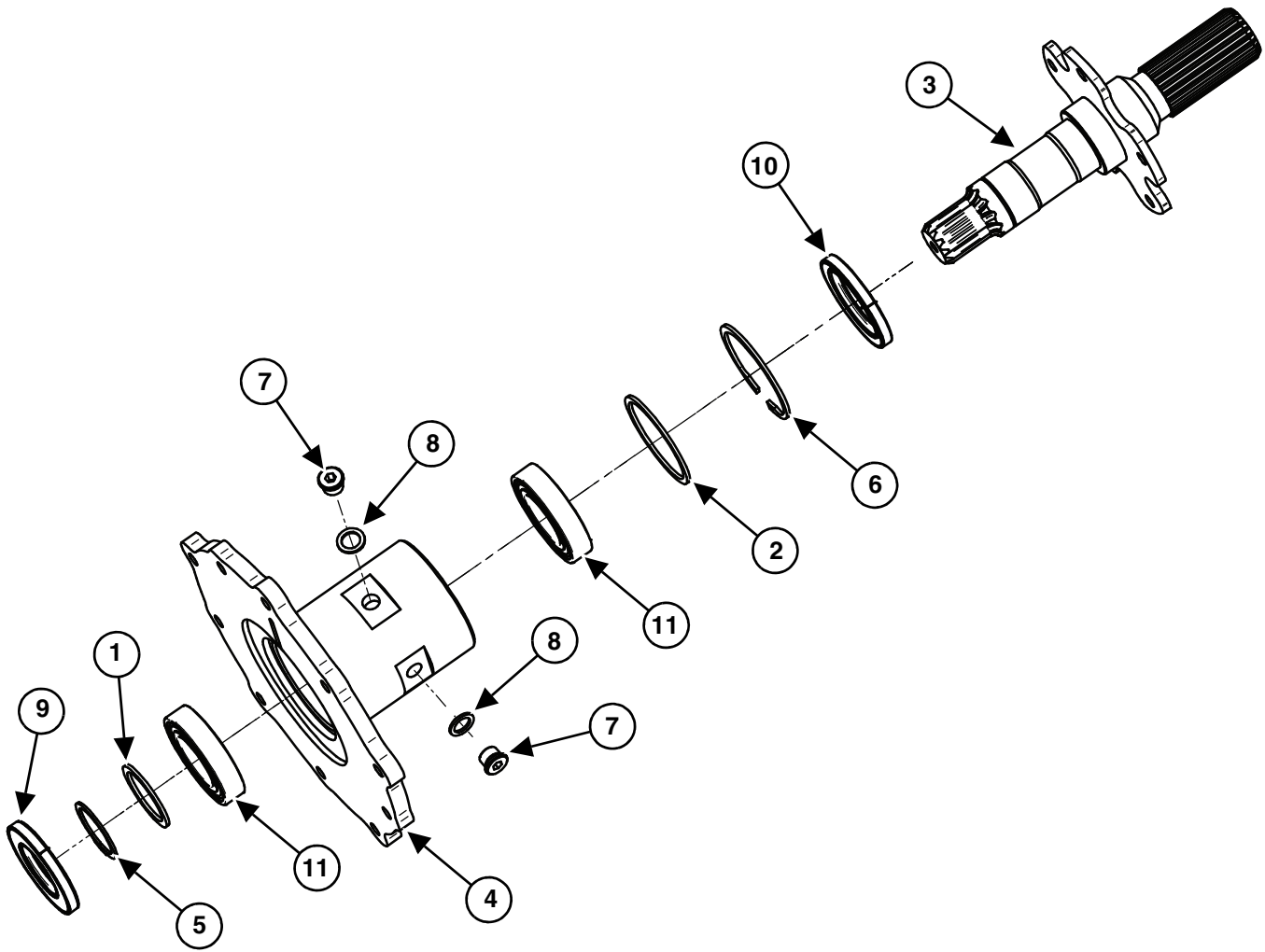
ITEM	PART #	DESCRIPTION	QTY
1	2110-501	Cutting Edge,	2
2	2116-250V	Wear Shoe, Left	1
	2116-250H	Wear Shoe Right, (not shown)	1
3	F102-10035	Bolt, Hex, M10 x 35	14
4	F102-16035	Bolt, Hex, M16 x 35	6
5	F113-16050	Bolt, Carriage, M16 X 50 -10.9	8
6	F312-10	Nut, Lock, M10	14
7	F312-16	Nut, Lock, M16	6
8	F313-16N	Nut, Nyloc, M16, 10.9	8

Gearbox



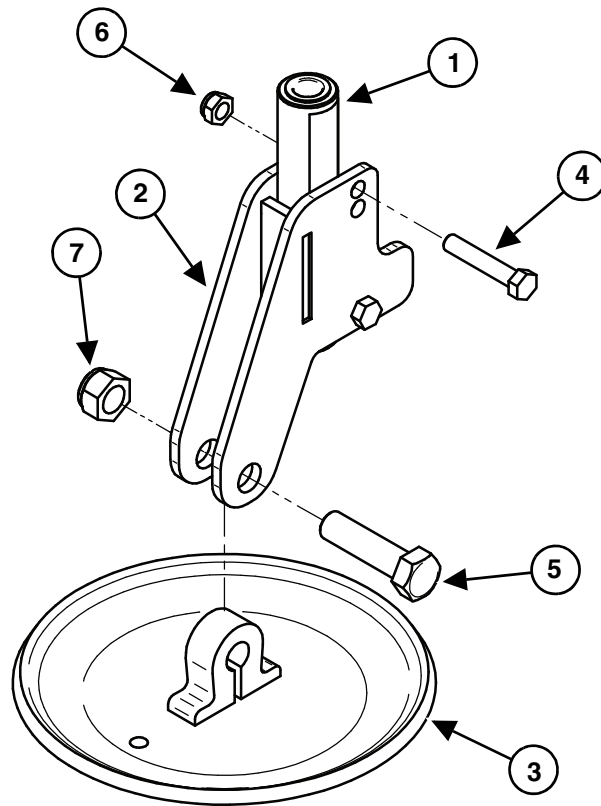
ITEM	PART #	DESCRIPTION	QTY
	2116-340	Gearbox	
1	2116-341	Adapter	1
2	2116-358	Auger Attachment	2
3	F169-10030	Bolt, Socket Head, 12.9 M10 x 30	6
4	F173-10030	Bolt, Socket Head, 10.9 M10 x 30	18
5	K99-022	Greasing Zerk, Straight M6	1
6	L01-344	EHTC 10/21 L	1
7	L30-029	Gearbox, 9400A 3:1	1

Fan Axle Parts



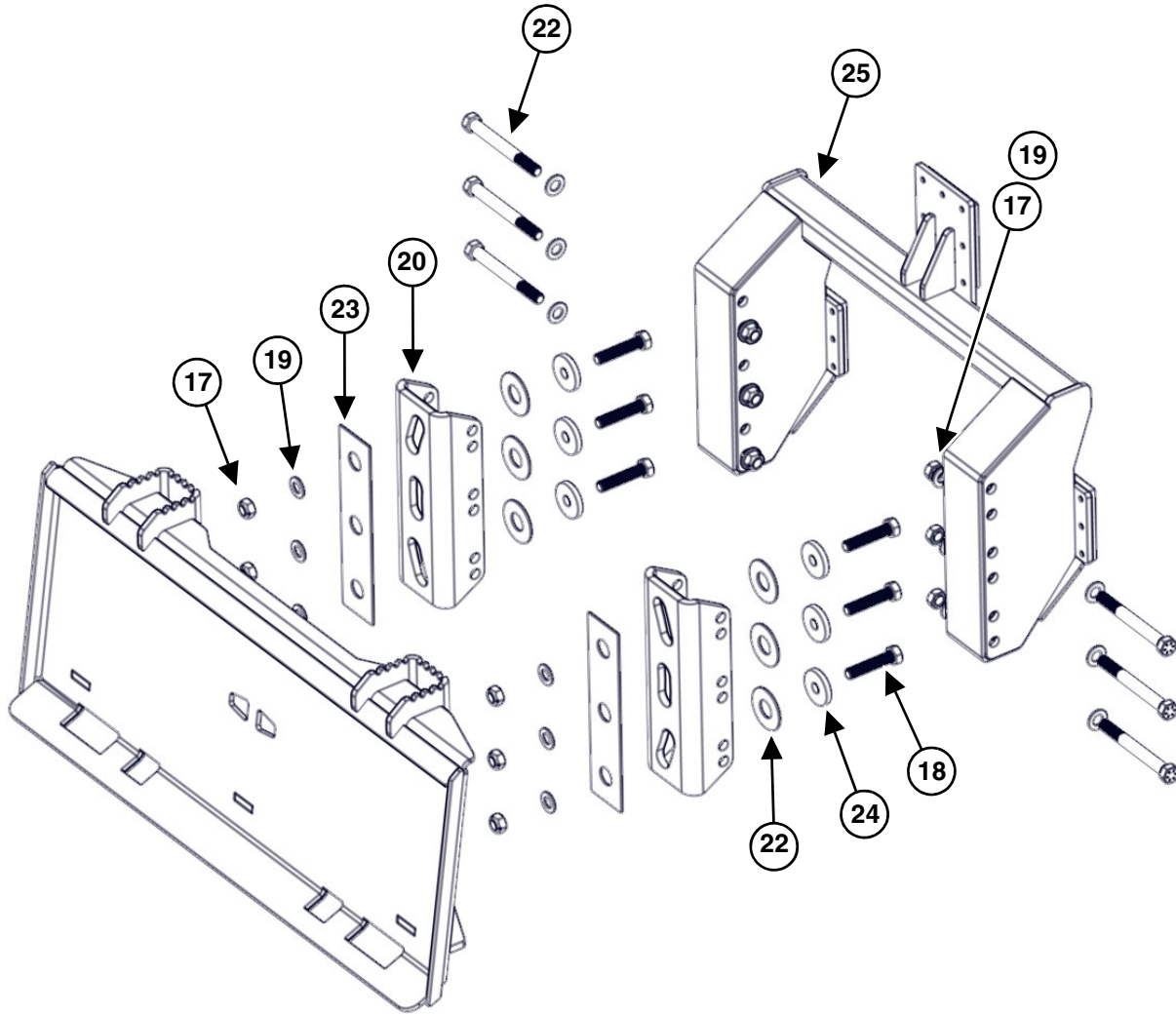
ITEM	PART #	DESCRIPTION	QTY
1	2116-138	Supporting Ring, Inner	1
2	2116-139	Supporting Ring	1
3	2116-304B	Fan Axle	1
4	2116-321	Bearing Housing, Welded	1
5	F430-50	Retaining Ring, A50 x 2	1
6	F435-90	Retaining Ring, I - 90 x 2.5	1
7	G01-017	Plug 3/8" R w/flange, DIN910	2
8	G50-057	Steel / Rubber Gasket for 3/8"BSP	2
9	G53-5004	Rotary Seal, 50 x 90 x 10	1
10	G53-6501	Rotary Seal, 65 x 90 x 10	1
11	K01-6210	Ball Bearing, 6210 2RS	2

Wear Shoe



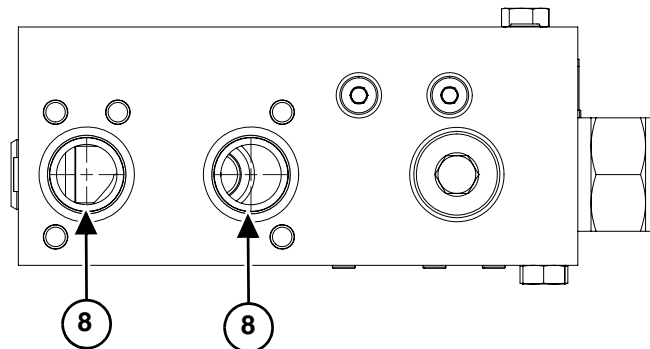
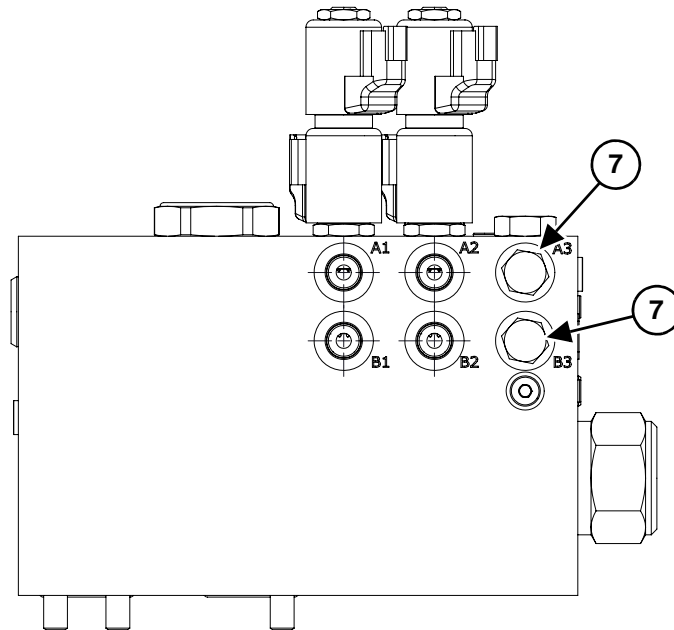
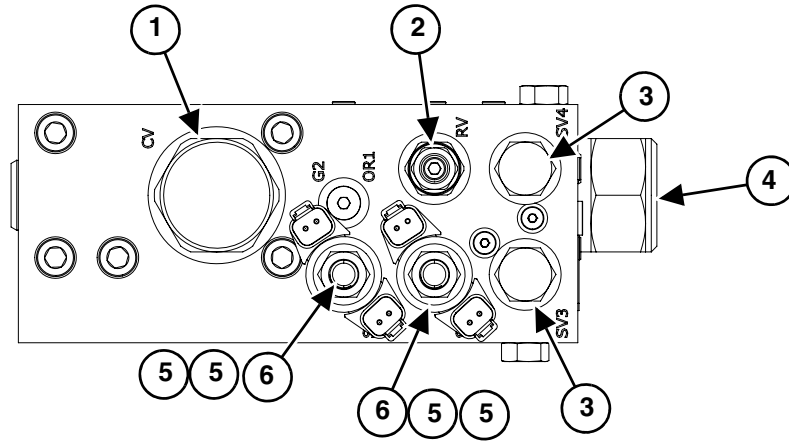
ITEM	PART #	DESCRIPTION	QTY
1	2116-213	Sleeve w/bearing	1
2	2116-214	Bracket, Welded	1
3	2116-260	Support Disc	1
4	F102-12065	Bolt, Hex, M12 x 65	2
5	F102-20075	Bolt, Hex, M20 x 75	1
6	F312-12	Nut, Locking, M12	2
7	F312-20	Nut, Locking, M20	1

Blower Skidsteer Mount



ITEM	PART #	DESCRIPTION	QTY
	P81000	BLOWER SKIDSTEER MOUNT	
17	P20028	NUT, LOCK, 3/4"-10 GRADE C, STOVER	12
18	P60230	BOLT, HEX, 3/4 x 3-1/2" YELLOW ZINC, GR8	6
19	P60296	WASHER, 3/4" SAE, GR8	18
20	P81100	ADJUSTER PIVOT PLATE FOR MOUNT ON 24-84	2
21	P81102	THRUST WASHER, SS BLOWER	6
22	P81104	BOLT, HEX, 3/4-10 x 7" ZINC, GR8	6
23	P81105	THRUST STRIP, SS BLOWER MOUNT	2
24	P81106	RETAINING WASHER, SS BLOWER MOUNT	6
25	P81101	HOUSING TO MOUNT ADAPTER FOR 24-84	1

Hydraulic Manifold, Motor

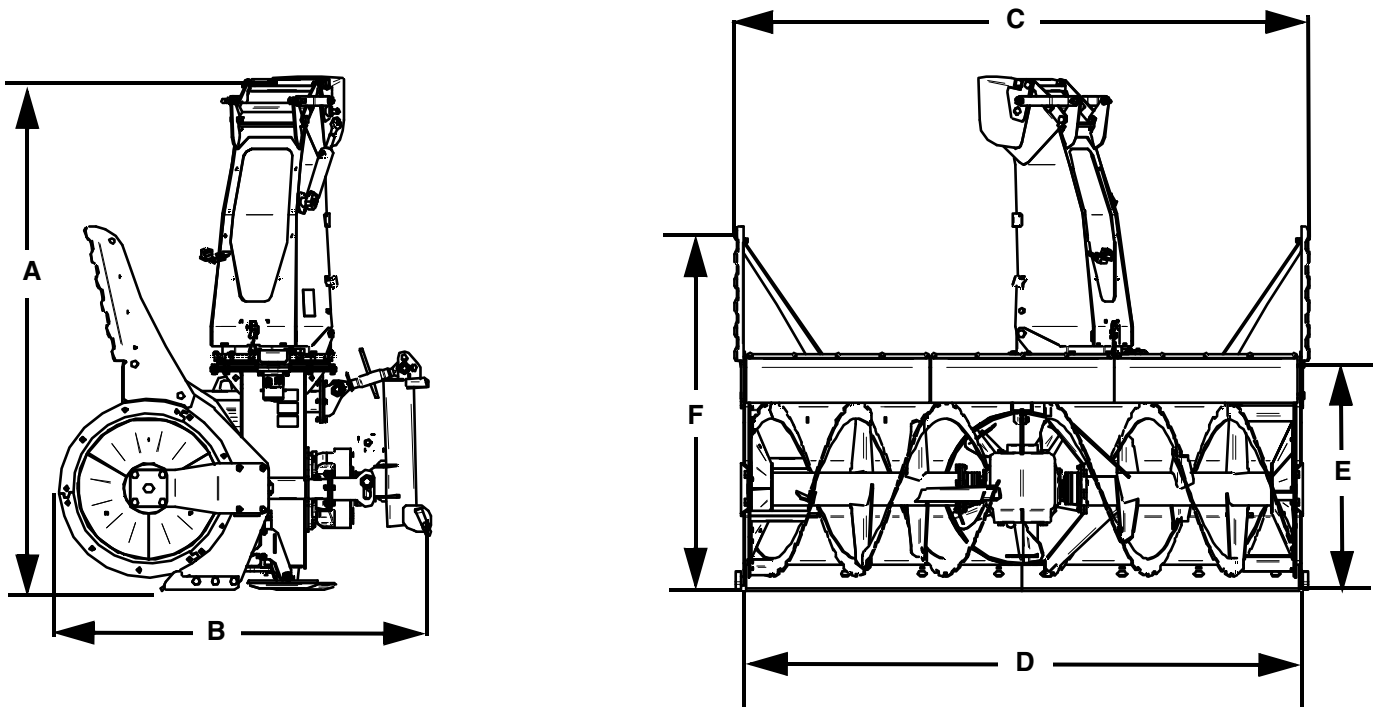


ITEM	PART #	DESCRIPTION	QTY
	P30118	Manifold Assembly With Fittings (includes items 1-8)	
1	P38232	Cartridge, Check Valve	1
2	P38229	Cartridge, Relief Valve Differential 100-1500 PSI	1
3	N/A	Plug, SAE-8 Hex Head	2
4	P38228	Spool Valve, (Torque to 70 FT. LBS)	1
5	P38231	Coil, P Series, 12 VDC, Deutsch	4
6	P38230	Cartridge, Solenoid, 4W3P Tandem Center	2
7	N/A	Plug, SAE-6, Hex Head	4
8	N/A	O-ring, Buna N 90 Duro -219	2
NS	1000181	Motor, FS30 Series, 24-84	1

Decal Identification

PART #	DESCRIPTION	QTY
DC121	DECAL, PTO 1000 RPM	1
DC122	DECAL, PTO 540 RPM	1
DC120	DECAL, OIL	2
DC119	DECAL, GREASE POINT	4
DC125	DECAL, CAUTION HYDRAULICS	1
DC124	DECAL, READ MANUAL	1
DC126	DECAL, STAY CLEAR	1
DC123	DECAL, CRUSH HAZARD	2
DC127	DECAL, 3 in 1 WARNING	1
DC28	DECAL, SNOWWOLF	1
DC29	DECAL, WOLHEAD	1
SWSN	DECAL, SERIAL #	1
	24-84-H	1
	24-84-P	1

AlphaBlower Specifications



DESCRIPTION	INCH (MM)
Overall Height (A)	81" (2050 mm)
Overall Length (B)	58" (1480 mm)
Overall Width (C)	91" (2300 mm)
Cutting Width (D)	87" (2200 mm)
Cutting Height Without Upper Cutting Edge (E)	37" (940 mm)
Cutting Height With Upper Cutting Edge (F)	57" (1450 mm)
Weight (Approx)	2,400lbs (1,089kg)
Impeller Diameter (Approx)	23.6" (60 cm)
Auger Diameter (Approx)	27.6" (70 cm)

*** With Cat Fusion Mount**

Torque Specifications

Standard Hardware And Lock Nuts

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



15100 Business Parkway, Rosemount, MN 55068
1-800-905-2265 / snowwolfplows.com