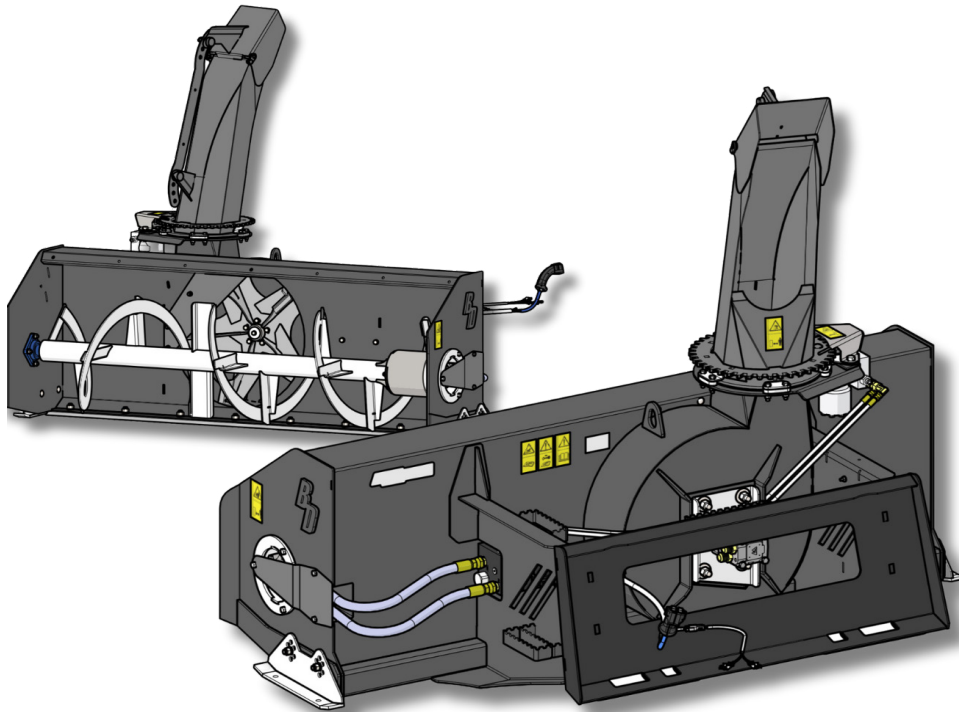




# Operator's Manual

## SKID STEER HEAVY DUTY SNOW BLOWER



Blue Diamond® Attachments  
4512 Anderson Road,  
Knoxville, TN 37918  
Tel: 888-376-7027  
[www.bluediamondattachments.com](http://www.bluediamondattachments.com)



Keep this manual with the machine at all times.  
Do not attempt to operate equipment without thoroughly reviewing this manual for safe and proper operation.

### Attachment Model Numbers

MODEL NUMBER	WIDTH	FLOW	CODE
119310	62 in.	14-17 GPM	A
119311		17-20 GPM	B
119312		20-22 GPM	B+
119315	66 in.	14-17 GPM	A
119316		17-20 GPM	B
119317		20-22 GPM	B+
119318		22-26 GPM	C
119320	76 in.	14-17 GPM	A
119321		17-20 GPM	B
119322		20-22 GPM	B+
119323		22-26 GPM	C
119324		26-33 GPM	C+
119325		33-40 GPM	D
119330	86 in.	22-26 GPM	C
119331		26-33 GPM	C+
119332		33-40 GPM	D
119335	96 in.	33-40 GPM	D

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## Warranty

### MANUFACTURER'S LIMITED WARRANTY

BLUE DIAMOND® ATTACHMENTS, a manufacturer of quality attachments, warrants new BLUE DIAMOND® ATTACHMENTS products and/or attachments 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 BLUE DIAMOND® ATTACHMENTS, LLC.

BLUE DIAMOND® ATTACHMENTS liability for any defect with respect to accepted goods shall be limited to repairing the goods at a BLUE DIAMOND® ATTACHMENTS designated location or at an authorized dealer location, or replacing them, as BLUE DIAMOND® ATTACHMENTS shall elect. The above shall be in accordance with BLUE DIAMOND® ATTACHMENTS warranty adjustment policies. BLUE DIAMOND® ATTACHMENTS obligation shall terminate twelve (12) months for the Heavy Duty Snow Blower after the delivery of the goods to original purchaser.

This warranty shall not apply to any machine or attachment which shall have been repaired or altered outside the BLUE DIAMOND® ATTACHMENTS factory or authorized BLUE DIAMOND® ATTACHMENTS dealership or in any way so as in BLUE DIAMOND® ATTACHMENTS 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 claim must be filed with BLUE DIAMOND® ATTACHMENTS before work is performed. The BLUE DIAMOND® PRODUCT SUPPORT TEAM will advise repairs and applicable parts exchanges. 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, BLUE DIAMOND® ATTACHMENTS 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. BLUE DIAMOND® ATTACHMENTS shall not be liable for incidental or consequential damages for any breach or 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 BLUE DIAMOND® ATTACHMENTS has any authority to bind BLUE DIAMOND® ATTACHMENTS 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. Please see [bluediamondattachments.com/warranty-policies](http://bluediamondattachments.com/warranty-policies) for the most up to date warranty information.

**NOTE:** Blue Diamond® Attachments is a trademark of BLUE DIAMOND® ATTACHMENTS

## Introduction

Thank you for purchasing your new **Blue Diamond® Skid Steer Heavy Duty Snow Blower**. Your implement has been designed and manufactured to give you many years of dependable service. The **Skid Steer Snow Blower** was built with bolt-on adjustable skid shoes, hand-welded augers made with high tensile steel ribbon flighting, a hydraulic rotator, and a five-blade fan to help you complete your snow clearing tasks safely and efficiently. With the **Skid Steer Snow Blower**, you also have the option to choose from a manual or hydraulic deflector and the option to add on a multi-hinge deflector to increase chute accuracy. For more information on these features, see **Product Features** on p.25.



### WARNING

- You, or any other person who will be assembling, operating, maintaining, or working with this product must read and completely understand the information and instructions contained in this manual.
- Keep this operator's manual available for reference by the operator and to pass on to new owners and operators.



### NOTE

- There are several options available for the **Skid Steer Snow Blower**. Follow the instructions that apply to the options you have purchased. For more information, see section **Product Features** on p.25, or contact your dealer.
- Assembly may be required depending on how you purchased your machine. Follow the assembly procedures as outlined in section **Assembly & Inspection** on starting on p.27.

### Intended Use:

---

**Blue Diamond's Skid Steer Snow Blower** was designed to clear snow from surfaces, such as driveways or sidewalks. When attached to the skid steer, its cutting edge cuts right to the surface to leave a leveled finish, the auger breaks up the snow, and the five-blade impeller throws it through the chute in the direction in which it is pointed.

## General Information

The purpose of this manual is to assist you in safely operating and maintaining your **Skid Steer Heavy Duty Snow Blower**. Read this manual carefully to obtain valuable information and instructions that will ensure you a safe, efficient, and trouble-free operation.



### NOTE

- The illustrations and data used in this manual were current at the time of printing, but due to possible engineering and/or production changes, this product may vary slightly in detail. **Blue Diamond® Attachments** reserves the right to update and/or change components as necessary without notification.

If you require further assistance, have questions related to this manual, or would like to order a new manual: contact the dealer from which this product was purchased using the information provided on the cover page.

### Terminology:

In this manual, the **Blue Diamond® Skid Steer Snow Blower** may be referred to as: snow blower, blower, equipment, machine, attachment or implement. The term “multi-hinge deflector” and “double deflector” are interchangeable. The “Skid Steer Loader” may also be referred to as “power unit”, and the “Skid Steer Mount Plate” may be referred to as the “Hitch Plate”. When a direction is mentioned, such as: front, rear, left or right, assume you are in the position of the operator; sitting and facing forwards.

### California Proposition 65:

You may see a warning like the following:

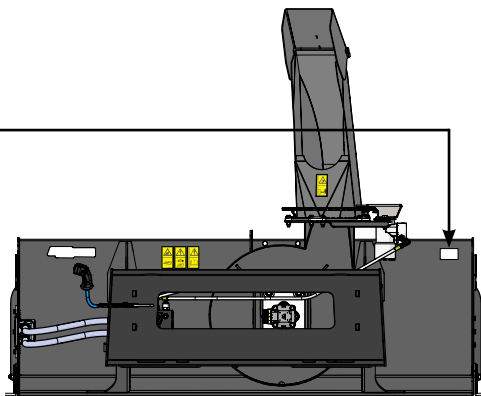


This warning is required by California Proposition 65 (Prop 65), which is meant to notify California residents of exposures to Prop 65-listed chemicals. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## Serial Number Location

The serial number and model number for your **Skid Steer Heavy Duty Snow Blower** is located on the back of the blower at the top right.

Please record your serial number here as a handy reference. In the case there is an issue with your implement, your dealer will need your serial number to verify your warranty.



Model Number: \_\_\_\_\_

Serial Number: \_\_\_\_\_

# Safety









The Safety Alert symbol means:  
**Attention!**  
**Become Alert!**  
**Your safety is involved!**

The Safety Alert symbol identifies important safety messages on the implement and in the manual. When you see this symbol, read and understand the message, be alert to the potential hazard, and follow the instructions in the safety message.

## Safety Messages:

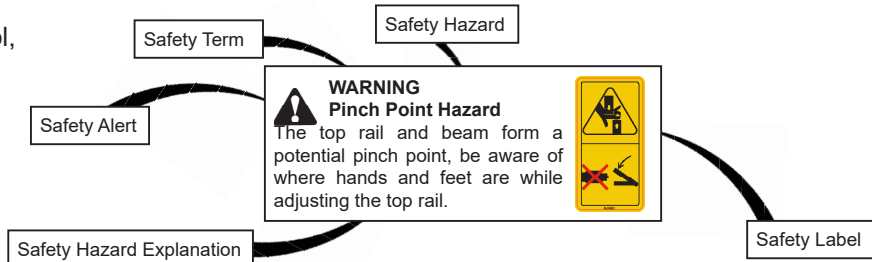
Throughout this manual, the terms in the table below are used to indicate the degree of hazard if safety procedures are not followed. The appropriate term for each message has been selected using the following guidelines:

Symbol	Alert	Description
	DANGER	Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury, and includes most extreme situations typically for implement components which, for functional purposes, cannot be guarded.
	WARNING	Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.
	CAUTION	Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
	IMPORTANT	Indicates a situation that could result in damage to the implement or other property.
	NOTE	Indicates additional information that may assist you in operating your machine safely.
	TIP	Indicates a helpful hint to improve the efficiency or ease of using your machine.

When applicable, you may also see the appropriate safety label displayed with the message as shown below.

In the owner's manual, when a hazard is present, you will see a safety message box. The box may contain:

- The safety alert symbol,
- The safety term
- The safety hazard
- The safety hazard explanation



The safety information given in this manual does not replace any safety codes, insurance needs, and government and local laws.



## Accident Prevention:

**Accidents can be prevented with your help!** You are responsible for the safe operation and maintenance of your implement. You must ensure that you and anyone else who is going to use, maintain, or work around the implement, be familiar with the work and related safety information contained in this manual. This manual will take you step-by-step through your working day and provide you with the best safety practices.



Remember, **YOU** are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices an effective part of your day to day work habits. Be certain that EVERYONE using this implement is familiar with the recommended maintenance and work procedures and follow all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

**The best accident prevention is a careful operator. Your dealer asks that YOU be that careful, responsible equipment operator.**

**Read the accident prevention guidelines below.**



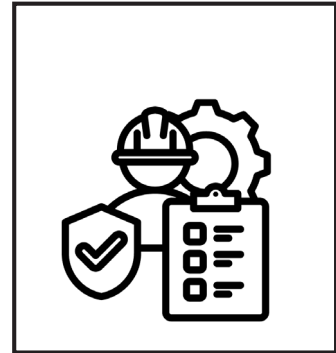
1. Familiarize yourself, and anyone else who will operate, maintain, or work around this product with the safety and operation information contained in this manual.
2. Read and understand the safety labeling which appears on the implement.
3. Have a first-aid kit available for use should the need arise and know how to use it.
4. Pay attention to the job at hand. Do not let your mind lose concentration on what you are doing. No accident prevention program can be successful without the whole-hearted cooperation of the person who is directly responsible for the operation of the implement.
5. Have a fire extinguisher ready for use should the need arise and know how to use it.
6. Reduce the risk of injury or death by following all safety precautions and by using good safety practices.
7. Never exceed the limits of the implement. Safety of the operator and safe operation are the main concerns in designing a safe product, however ignoring implement specifications by the operator can result in an accident which could have been prevented.
8. Do not allow riders on the implement, loaded or empty.
9. Do not operate this implement under the influence of drugs or alcohol.
10. Be responsible for the SAFE operation and MAINTENANCE of YOUR implement.
11. Wear appropriate personal protective equipment (PPE). This list includes but is not limited to:
  - Hard hat
  - Heavy gloves
  - Hearing protection
  - Protective footwear
  - Protective eyewear
  - Safety vest



## Safety Guidelines:

Safety of the operator and bystanders is one of the chief concerns when developing and designing equipment. However, every year many accidents that occur could have been avoided by only a few seconds of thought and a more cautious approach to handling the equipment.

You, the operator, can avoid many accidents by observing the precautions in this section. To avoid personal injury or death, study the following precautions and insist those working with you, or for you, follow them as well.



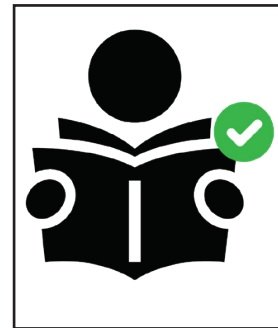
Your **Blue Diamond® Skid Steer Snow Blower** was designed and configured with safety labels and safety devices. However, hazard control and accident prevention are dependent upon the awareness, concern, and proper training of personnel involved in the *assembly, operation, transport, maintenance, and storage* of the implement. Refer to safety messages and operation instructions in each of the appropriate sections of the **skid steer** and implement manuals. Pay close attention to the safety labeling affixed to the implement.

Read through the safety guidelines below that must be followed at all times.

1. In order to provide a better view, certain illustrations in this manual may show an assembly with a safety device removed. However, equipment should never be used in this condition. Keep all safety devices in place; if removal becomes necessary for repairs, replace the device prior to use.
2. Replace any safety label or instruction sign that is unreadable or is missing. Location of safety signs is indicated in this manual.
3. Never use alcoholic beverages or drugs, which can hinder alertness or coordination, while using this implement. Consult your doctor about using this implement while taking prescription medications.
4. Under no circumstances should young children be allowed to work with this implement.
5. If the elderly are assisting with work, their physical limitations need to be recognized and accommodated. Assistants should be a responsible, properly trained, and physically-able person familiar with machinery and trained in this implement's operations.




6. Never exceed the limits of the implement. If its ability to do a job, or to do so safely, is in question - DON'T TRY IT.
7. Do not modify the implement in any way. Unauthorized modification may result in serious injury or death and may impair the function and life of the implement.
8. This implement is dangerous to persons unfamiliar with its operation. Do not allow persons to use or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and how it works. Review the safety instructions with all users annually.




### Safety Training:

Read through the safety training guidelines below that must be followed at all times.

1. Train all new personnel with the instructions alongside the implement. Be certain only a properly trained and physically-able person will use the machinery.
2. Working with unfamiliar equipment can lead to careless injuries. If this implement is used by any person other than yourself or is loaned or rented, it is the implement owner's responsibility to make certain that the operator, prior to using:
  - Reads and understands the operator's manuals.
  - Is instructed in safe and proper use of the implement.
3. If the elderly are assisting with the work, their physical limitations need to be recognized and accommodated.
4. Operators or maintenance personnel who are not fully able to read and understand this manual should not operate or work on the implement.
5. Make certain that all operators and maintenance personnel have a complete understanding of the full and exact contents of this manual and safety labeling.
6. ALL information contained in this manual and labeling on the implement must be conveyed CLEARLY and FULLY in order to be able to operate safely and knowledgeably.
7. Review the implement and instructions regularly with existing workers.
8. All trainees must be fully equipped with PPE, even when simply observing.

 **DANGER**

• *A person who has not been trained or has not read and understood all use and safety instructions is not qualified to use the implement. An untrained operator exposes himself and bystanders to possible serious injury or death.*



## Work Area Safety:

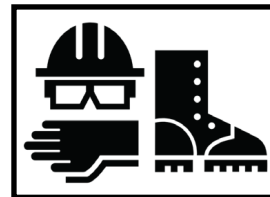
Not all work spaces are the same, but the principles presented here can be applied to any work space.

1. For worker safety, a pre-season site visit is recommended.
2. Make note of any nearby or overhead obstructions, knowing your work area will make the clearing job easier and safer.
3. Mark any potential hazards that cannot be removed such as tree stumps, rocks, holes, or posts. This is especially important when operating the **Snow Blower** since visibility can sometimes be limited by the weather conditions.
4. Ensure bystanders or anyone not directly involved with the work is only permitted outside of the work area to minimize hazards.
5. Workers helping the operator must wear the appropriate PPE and must always make eye contact with the operator before entering the work area. Unauthorized workers or bystanders are not allowed in the work area. Hazards are present.
6. Do not operate the **Snow Blower** outside of the designated work area.
7. **Danger:** If solid objects such as rocks, gravel, wire, chains, ice chunks, or other debris come into contact with the auger, they can cause damage to the implement and create a danger hazard. At high speeds, thrown objects are extremely dangerous and can cause injury or death to any bystanders or animals. Avoid this by marking objects that cannot be removed.
8. Mark off any steep slopes, hills, or icy areas before operating your **Snow Blower**. Unstable land can be extremely dangerous and cause you to lose control of your implement, resulting in property damage, personal injury, or death.

 **DANGER**

*• Objects thrown from snow blower at high speeds can cause property damage, injury, and death! Keep distance from machine, and keep deflector pointing away from yourself and others. Be aware of bystanders.*





 **WARNING**

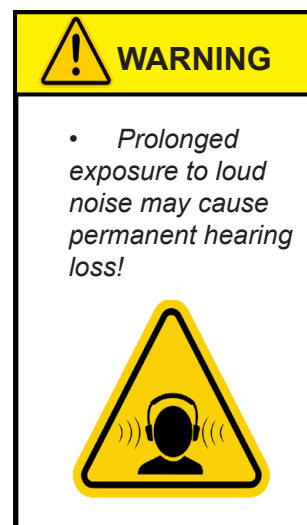
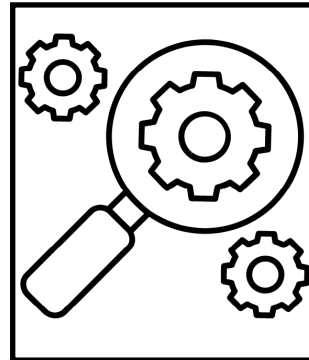
*• Sudden impact from obstacles hidden under the snow may cause injury or damage to your implement. Mark objects that cannot be removed before operating and clear debris from work area.*



## Assembly & Inspection Safety:

Read the safety guidelines below that must be followed when inspecting and assembling your machine.

1. Inspect implement for shipping damage. If damage does exist, do not use. Notify your dealer immediately to have damaged parts replaced or repaired.
2. Assembly may be required depending on how you purchased your equipment. Follow the assembly procedures as outlined in the manual.
3. Ensure all hardware is secure.
4. Visually inspect hydraulic system for leaks. See **Hydraulic Safety** on p.18.
5. Ensure hydraulic hoses are properly secured.
6. Inspect all fasteners are not loose or missing.
7. Ensure all fasteners and wheel bolts are torqued according to the **Bolt Torque Table** on p.56.
8. Ensure that all applicable safety decals are installed and legible. See section **Replacing Labels** on p.21.
9. Personal protection equipment (PPE) including hard hat, safety glasses, safety shoes, and gloves are recommended during *assembly, installation, operation, adjustment, maintaining, repairing, removal, cleaning, or moving* the unit. Do not allow long hair, loose fitting clothing, or jewelry to be around equipment.
10. Gas or diesel powered equipment can often be noisy enough to cause permanent or partial hearing loss. We recommend that you wear hearing protection on a full-time basis. Noise over 85dB on a long-term basis can cause severe hearing loss. Noise over 90dB adjacent to the Operator over a long-term basis may cause permanent, total hearing loss.
11. When not attached to the power unit, block the implement to prevent movement.



## Operation Safety:

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Read the safety guidelines below that must be followed when operating your machine.

1. NEVER allow helpers or bystanders under or near the machine.
2. Ensure the implement is securely attached to the power unit before moving.
3. Inspect all fastening devices; do not use if worn or damaged.
4. Make sure that bystanders and children are clear before using or moving the implement.
5. NEVER position yourself between the power unit and the implement while the power unit is running.
6. Avoid distractions: wait until it is safe to operate mobile communication equipment such as cell phones, text messaging devices, pagers, or two-way radios. Always give undivided attention to the machine, the job at hand, and your surroundings.
7. Keep body AWAY from all rotating parts, and NEVER put hands or feet near or under the **Snow Blower**.
8. Watch for traffic when driving near roadways.
9. Do not permit riders while operating this implement.
10. Exercise extreme caution when on or crossing drives, walks, or roads.
11. Where possible, avoid operating near ditches, embankments, and holes.
12. Operate the machine up and down the face of slopes.
13. Avoid changing direction on slopes; wait until you are on level ground if possible.
14. NEVER operate on slopes greater than 20 degrees or wet, icy, or slippery slopes.
15. NEVER park the power unit on a steep grade or slope.
16. Always wear the seat belt. Sudden contact with a hidden object can result in serious personal injury.
17. Before beginning the job, inspect areas of operation for potential hazards, and mark obstructions with stakes or flags that will be seen in tall snow.
18. NEVER operate the **Snow Blower** when under the influence of alcohol, drugs, or medication.



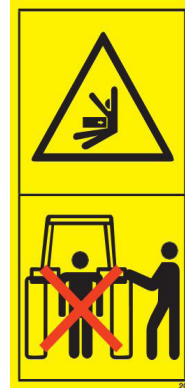
19. Keep all shields and guards in place.
20. Never dismount from your power unit while it is moving and never leave your implement unattended when the engine is running. Wait at least 60 seconds before dismounting your power unit so that all moving parts on the **Snow Blower** come to a complete stop.
21. Do not grease or oil attachment while it is in operation.
22. Always be aware of weather conditions before operating. Never operate the **Snow Blower** without good visibility and light. Dress appropriately, and use a **skid steer** with a cab to shelter you from the snow being blown.
23. Always dress appropriately for the job. Wear PPE and avoid loose clothing, jewelry, and clothing with pull strings. Clothing, accessories and long hair can become entangled in the **Snow Blower's** rotating parts which could result in severe personal injury or death.
24. Wear appropriate footwear for icy or slippery surfaces.
25. Avoid operating your **Snow Blower** when there is a layer of ice below the snow unless your power unit is properly equipped for those conditions. Do not exceed 15km/hour (10mph) when clearing snow. Higher speeds can lead to losing traction and steering control or encountering hidden objects with extreme force. Both situations can result in damage to the implement, personal injury, and death.
26. Obey all federal and local laws related to snow removal. Never pile up snow near handicap parking areas, electrical boxes, fire hydrants, water drains, shut-off valves, or mailboxes, and never pile snow on sidewalks, streets or other's property.
27. Never operate your **Snow Blower** in the dark or when visibility is compromised. Ensure there is adequate light and that you can see at least 300 feet away.
28. **STOP** operating immediately if bystanders are within 200 feet of you.
29. Ensure chute is never blowing snow towards bystanders, buildings, or vehicles. Ice, tough snow, or hidden objects can be propelled from the **Snow Blower** and cause severe injury.



30. Shut down the power unit immediately if the machine is making any unusual noises or if there is excessive vibration. This can be an indication that there are hidden objects underneath the **Snow Blower** and/or that parts of your implement have been damaged, broken, or clogged. Wait five (5) minutes for the engine to cool and rotating parts to come to a complete stop before dismounting from your power unit. When it is safe to do so, inspect the machine for clogs, loose parts, or damages.




31. Turn off the power unit immediately if the fan blades are broken or the auger begins to make contact with the housing. Broken or bent blades can break free while operating and can be a serious safety hazard. Continue operating only when all broken or damaged parts have been repaired or replaced.



### Transport Safety:

1. The safest way to transport the implement from job to job is with the use of a trailer attached to a motor vehicle.
2. Use a towing vehicle and trailer of adequate size and capacity.
3. Do not tow your equipment with a truck or passenger car.
4. Secure the attachment to your trailer using tie downs and chains.
5. The **Snow Blower** is not designed for travel on public roads or highway speeds. The loss of control can result in death, serious injury, or property damage.

 **DANGER**

- Do not drive the **skid steer** on public roads with your implement. Doing so could result in damage to your equipment, serious injury, or death.
- Do not tow a load that is more than double the weight of the vehicle towing the load.



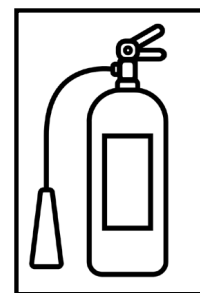
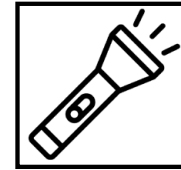
6. Adhere to all federal, state, and local laws when transporting equipment. When applicable, ensure slow moving vehicle (SMV) sticker and lights are working properly.
7. Drive at a lower speed if your trailer is not equipped with brakes. Sudden braking could cause the trailer to swerve or tip causing an accident or damage to the **Blower**.
8. Stay alert for overhead objects such as tree and wires.



## Maintenance Safety:

---

1. Good maintenance is your responsibility, follow the maintenance schedule. Poor maintenance is an invitation for trouble. Serious injury and possible death could occur from not maintaining your **Snow Blower**.
2. Follow good shop practices.
  - Keep service area clean and dry.
  - Be sure electrical outlets and tools are properly grounded.
  - Use adequate light for the job at hand.
  - Allow equipment to cool before working on it.
3. Stay away until all motion has stopped and the **Snow Blower** is securely blocked up before removing material, performing service, and making repairs. Contact with the rotating auger and fan could result in serious injury or death.
4. Use personal protection equipment (PPE) such as eye, hand, and hearing protectors.
5. Always have a fire extinguisher and first aid kit nearby.
6. Release hydraulic pressure from your machine prior to beginning any service or maintenance.
7. Never adjust, service, clean, or lubricate the implement until all power is shut off when attached to the tow unit.
8. Remove buildup of grease, oil, or debris.
9. Ensure hardware is torqued according to the **Bolt Torque Table** on p.56.
10. Use heavy gloves when handling heavy or sharp components.
11. Read and obey manufacture instructions when handling solvents, chemicals, or oils.
12. Collect and dispose of any waste material once repairs to the implement are completed.
13. Be cautious when using a ladder or raised stand to access high spots. Slipping or falling can result in serious injury and death. Stand on solid surfaces to ensure good footing, and consider asking someone for assistance.
14. Call your dealer or Blue Diamond® Product Support to replace any missing or broken parts. Attempting to use other parts or “makeshift” parts can cause damage to your implement and jeopardize your warranty.
15. Use gloves when handling heavy or sharp components.



## Hydraulic Safety:

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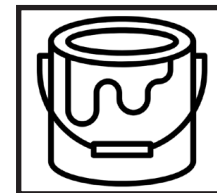
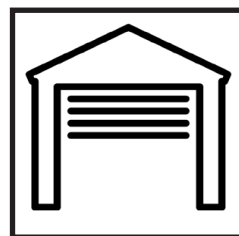
1. Make sure that all components in the hydraulic system are kept in good condition and are clean.
2. Before applying pressure to the system, **visually** inspect for leaks.
3. Ensure that all components, lines, hoses, connections, and couplings are not damaged and leak-free.
4. Do not attempt any makeshift repairs to the hydraulic lines, fittings, or hoses by using tapes, clamps, or cements. The hydraulic system operates under extremely high pressure. Such repairs will fail suddenly and create a hazardous and unsafe condition.
5. Wear proper hand and eye protection when searching for a high-pressure hydraulic leak. Use a piece of wood or cardboard as a backstop instead of hands to isolate and identify a leak.
6. If injured by a concentrated, high-pressure stream of hydraulic fluid, seek medical attention immediately. Serious infection or toxic reaction can develop from hydraulic fluid piercing through the skin.
7. Turn off the power unit and relieve pressure on hydraulic system before maintaining or working on system.
8. All hydraulic work must be done by qualified personnel.
9. Securely support or block hydraulic equipment when conducting service or maintenance to the implement. Hydraulic equipment can accidentally lower or leak, which can result in severe injury or death. Always avoid working under hydraulic equipment.



## Storage Safety:

---

1. Store the unit in an area away from human activity.
2. Do not allow children to play on or around the stored implement.
3. Store the unit in a dry, level area. Cover if stored outside.
4. Guard any sharp corners.
5. Ensure components and safety features are not damaged and in good condition before storing the implement. Make repairs now to be ready for the following season.
6. Secure the implement to prevent unwanted movement.



## Safety Labels

Safety labelling is an important part of the overall safe use of the implement. Safety labelling can alert and warn you of potential injury or death. It is important to follow these points to help keep your implement safe for you and others who may be using it.

- Keep safety signs clean and legible at all times.
- Replace safety signs that are missing or that have become illegible.
- Replaced parts that displayed a safety sign should also display the current sign.
- Safety signs are available from your authorized dealer or Blue Diamond® Product Support.

### Safety Label Descriptions:



#### CAUTION

- *Read and understand all safety and operating instructions in the manual. Read and understand ALL safety labels located on the machine. The most important safety device on this equipment is an informed SAFE operator.*



#### CAUTION

- *Personal Protection Equipment (PPE) is required when operating or maintaining this machine. Failure to wear PPE will result in personal injury.*

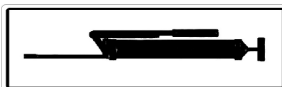


#### NOTE

- *This label is required by California Proposition 65 (Prop 65), which is meant to notify California residents of exposures to prop 65-listed chemicals.*



#### IMPORTANT



- *The grease gun label indicates grease zerk locations on the machine.*



### WARNING

- Hydraulic leaks could develop without warning! Never check for leaks with your hands or fingers while the system is pressurized. Hydraulic fluid under pressure may cause serious injury if it comes in direct contact with the skin or eyes. Any hydraulic maintenance or repairs must be done by a qualified professional.



### WARNING

- Keep hands and limbs away from rotating parts. Do not operate machine without shields in place. If shield is removed, replace it before operating machine. Risk of crushing or amputation could result.



### WARNING

- Risk of injury from flying objects. Stay clear of the snow blower's auger and chute while it is in use. Machine can expel objects fast enough to cause injury. Impact or impalement could result.



### WARNING

- Keep body away from rotating auger. Wait for all moving parts to come to a complete stop before clearing obstructions. Risk of amputation, severe injuries, or death.



### CAUTION

- Shut off engine and remove key before performing maintenance or repair work.

## Replacing Labels:

Follow the instructions below if a label needs to be replaced.

1. Be sure that the installation area is clean and dry.
2. Be sure temperature is above 50 °F (10 °C).
3. Determine exact position before you remove the backing paper.
4. Remove the smallest portion of the split backing paper.
5. Align the sign over the specified area and carefully press the small portion with the exposed sticky backing in place.
6. Slowly peel back the remaining paper, and carefully smooth the remaining portion of the sign in place.
7. Small air pockets can be pierced with a pin and smoothed out using the piece of sign backing paper.



### NOTE

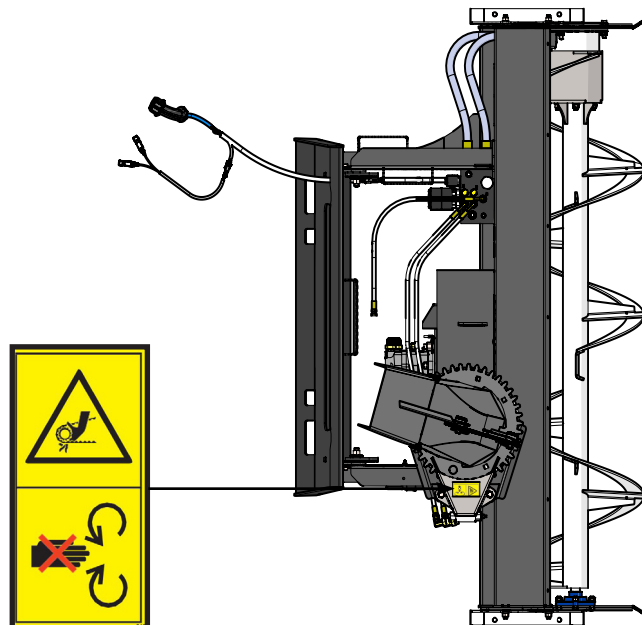
- If safety labels have been damaged or removed, new labels must be applied. Contact your dealer for new safety signs.



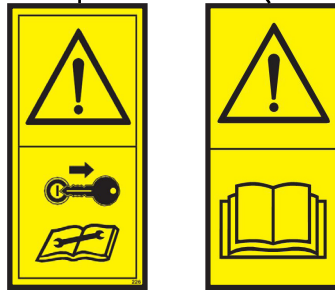
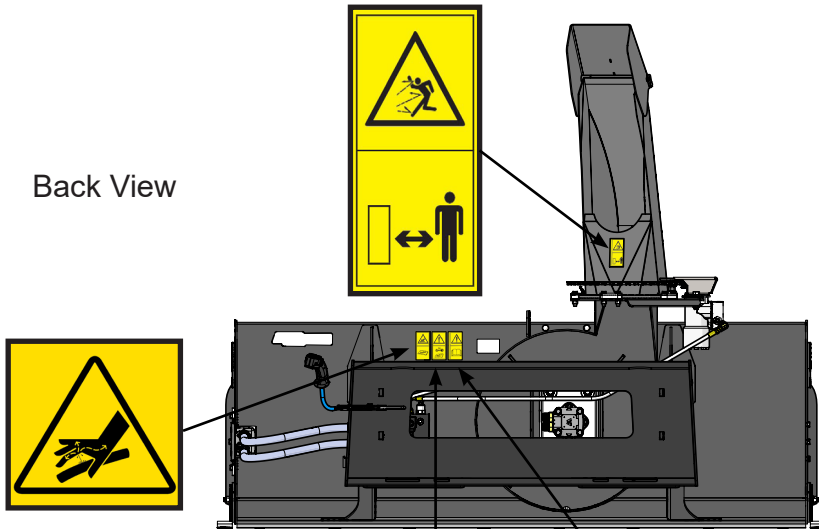
## Safety Label Layout:

Safety signs and locations on the equipment are shown in the illustrations below. Good safety practice requires that you familiarize yourself with the label and the safety message it is delivering. See p.19 for a description of the safety labels.

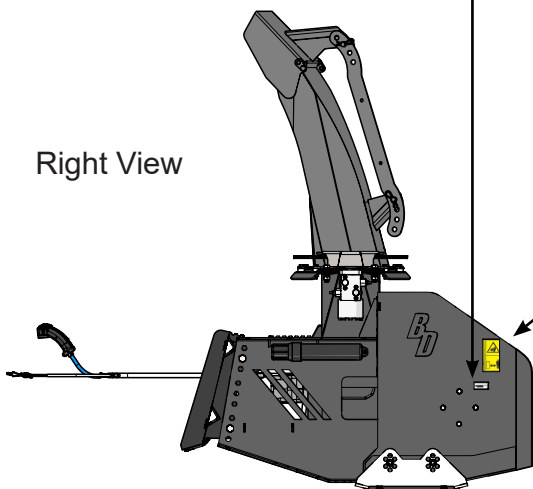
Top View



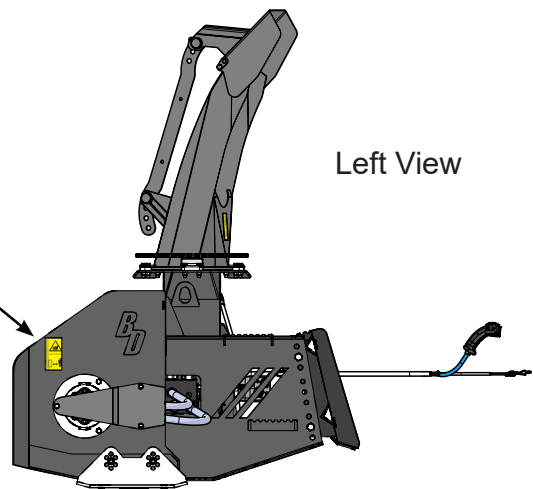
Back View



Right View



Left View



## Components & Features

Read this section carefully to learn about components and features that allow you to adjust and operate your **Skid Steer Snow Blower** safely and efficiently.

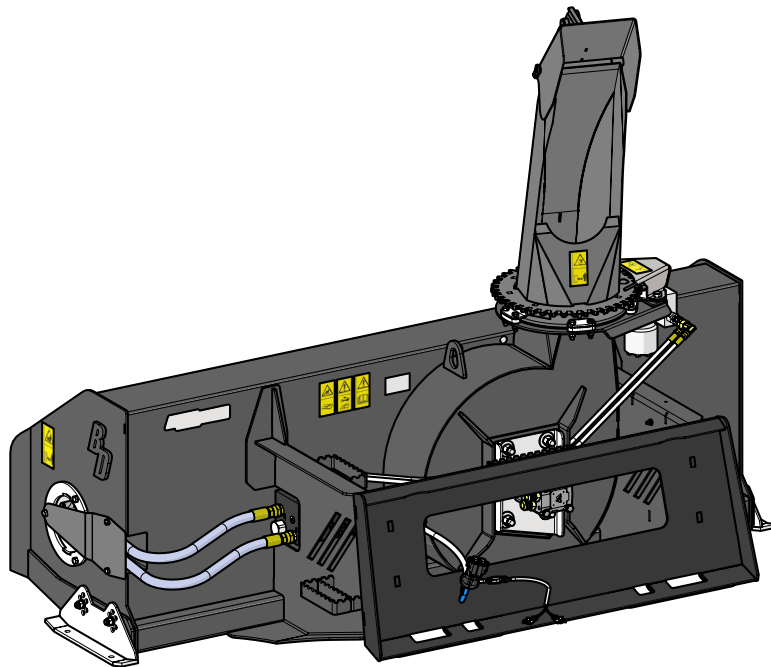


### WARNING

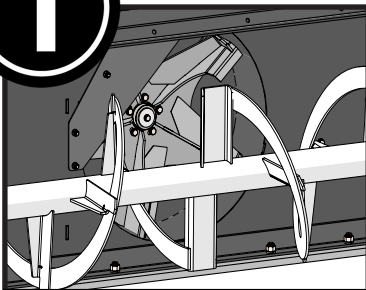
- Do not operate if you are not familiar with the components and features of your implement.

Review the names of the components and the feature descriptions. These names will be used to describe where they are and how they work throughout the manual. The **black** numbered components are **standard** parts, and the **blue** numbered parts are **optional** features.

### Skid Steer Snow Blower Components:

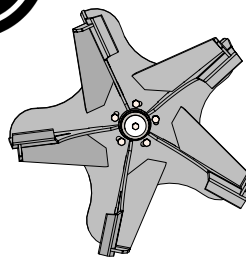


1



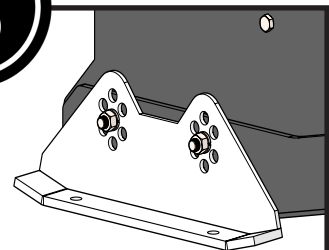
High Tensile Steel  
Ribbon Flighting

2



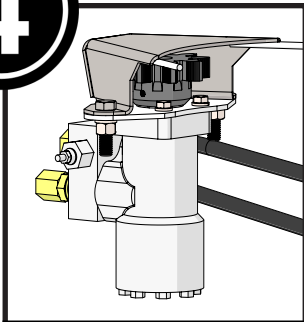
Five-Blade Fan

3



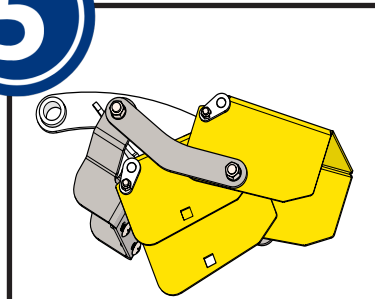
Adjustable  
Skid Shoes

4



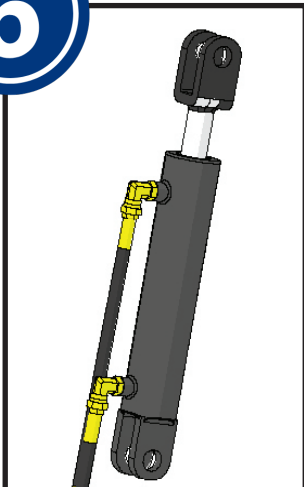
Hydraulic Rotator

5



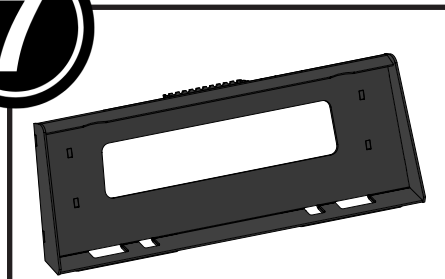
Multi-Hinged Deflector

6



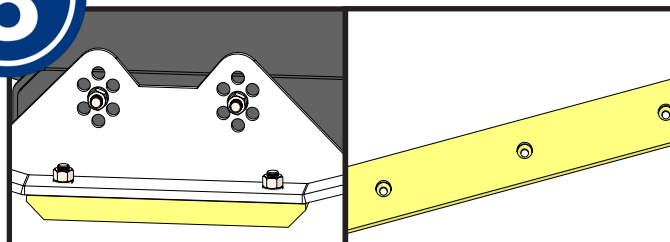
Hydraulic Deflector

7



Height Adjustable Hitch Plate

8



Tivar Wear



## Product Features:

1

### High Tensile Steel Ribbon Flighting:

- To deliver even the heaviest wet snow to the awaiting fan, the **blower** uses machine-formed, hand-welded augers made with high tensile steel ribbon flighting to provide strength & durability for years to come.

2

### Five-Blade Fan:

- The **Snow Blower** features a 5-blade fan to evacuate high volumes of snow quickly and to increase the velocity of snow exiting the chute.

3

### Adjustable Skid Shoes:

- The **Blower** comes equipped with adjustable skid shoes, extending the life of the cutting edge and helping to protect surfaces from damage commonly associated with snow removal.

4

### Hydraulic Rotator:

- The hydraulic rotator is the ideal for making frequent adjustments while remaining comfortable in your cab.

5

### Multi-Hinged Deflector:

- The optional multi-hinged deflector is available for most models and allows increased precision in where snow is blown, allowing snow to be placed closer to the blower or into a truck to be hauled away.

6

### Hydraulic Deflector:

- Hydraulic deflectors control the distance and arc of the thrown snow and are available for all models.

7

### Height Adjustable Hitch Plate:

- The hitch plate can be adjusted to adapt to your Skid Steer and to be the right level for your snow blowing tasks. See **Adjusting Hitch Plate** on p.46. The hitch plate can also pivot, making it easier to maneuver.

8


### Tivar Wear:

- Tivar is a wear-resistant plastic that replaces steel cutting edges and bolts onto parts. The tivar is gentler on the surface when clearing snow, which is ideal for interlocking brick and decorative stone. On this product, it is available for the skid shoes and cutting edge.

## Specifications & Dimensions

The table below specifies characteristics for each of the **Blue Diamond® Skid Steer Snow Blower** models.

AVAILABLE CODES	A, B, B+	A, B, B+, C	A, B, B+, C, C+, D	C, C+, D	D
Cutting Edge	1/2" x 4"				
Cutting Width	62"	66"	76"	86"	96"
Auger Tube	3 1/2" Round				
Auger Flighting	5/16" x 2 1/4"				
Auger Diameter	19"				
GPM (min)	14		23		33
Mounting	Universal Skid Steer Attach				
Chute Rotation	Hydraulic				
Chute Diameter	10"				
Main Body Height	27 1/2"				
Chute Deflector	Manual Std/Hydraulic Opt				
Fan Diameter	24"			26"	
Fan Depth	8"				
Weight (lbs)	910	928	970	1000	1085

Flow Rates	HP	Code	 <b>NOTE</b>
14-17 GPM	22	A	<ul style="list-style-type: none"> <li>HP is calculated at 2500 PSI.</li> <li>Code "D" high flow package is recommended on the 96" model.</li> </ul>
17-20 GPM	27	B	
20-22 GPM	30	B+	
22-26 GPM	35	C	
26-33 GPM	43	C+	
33-40 GPM	52	D	

## Assembly & Inspection

The **Blue Diamond® Heavy Duty Snow Blower** models were designed to fit a variety of Skid Steers. Although the size of our models may differ, assembly instructions remain consistent. The chute and deflector are packaged separately and require assembly. Depending on how you received your implement, the hydraulic rotator may also require assembly. If you purchased optional features such as the hydraulic deflector, and/or the multi-hinged deflector, these items may also require assembly. Follow the instructions that apply to your implement and power unit in the order they are presented.

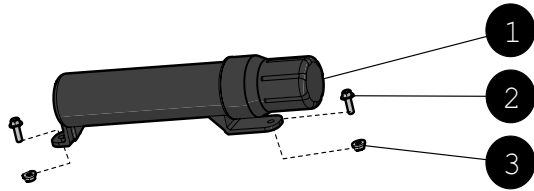
### Inspection Steps:

Before operating, it is important to inspect your machine. Doing so can prevent accidents, damage to equipment, and personal injury.



Inspection Checklist	<input checked="" type="checkbox"/>
Review section <b>Assembly &amp; Inspection Safety</b> on p.13.	<input type="checkbox"/>
The power unit engine is turned off, and the implement is on ground level.	<input type="checkbox"/>
The Operator's Manual is in the canister.	<input type="checkbox"/>
All safety decals are in place and legible.	<input type="checkbox"/>
There are no signs of cracks or stress on machine.	<input type="checkbox"/>
The auger and impeller are free from debris.	<input type="checkbox"/>
All bolts and pins are secure.	<input type="checkbox"/>
Cutting edge, auger flighting, impeller, and skid shoes are in good condition.	<input type="checkbox"/>
Skid shoes have been adjusted for the task at hand. See p.47.	<input type="checkbox"/>
The hitch plate has been adjusted for the task at hand. See p.46.	<input type="checkbox"/>
Controller is properly secured to the Skid Steer.	<input type="checkbox"/>
Check shear sprocket, idler sprocket, and auger sprocket for wear. Replace if worn.	<input type="checkbox"/>
No bent impellers or auger flighting that could break off and become dangerous.	<input type="checkbox"/>
Work area is clear of obstacles and hidden objects.	<input type="checkbox"/>
Work area is clear of bystanders.	<input type="checkbox"/>
Operator is wearing all necessary PPE and weather-appropriate clothing.	<input type="checkbox"/>
All components, lines, hoses, connections, and couplings are not damaged, are leak-free, and will not come into contact with moving parts.	<input type="checkbox"/>
The connecting points on hoses and fittings are free from debris.	<input type="checkbox"/>
Hydraulic hoses are routed correctly and not kinked, pinched, or twisted.	<input type="checkbox"/>
Wiring harness is routed correctly and connection points are secure.	<input type="checkbox"/>
Wires are not frayed, pinched, or broken and are away from moving parts.	<input type="checkbox"/>
Weather conditions and visibility allow you to see 300 feet away.	<input type="checkbox"/>

## Operator's Manual Assembly:

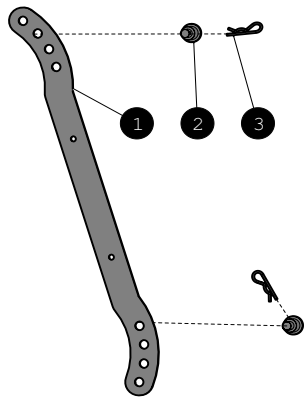


Item	Description
1	Operator's Manual Tube
2	1/4" x 3/4" Flange Serrated Screw
3	1/4"-20 Flange Serrated Nut

## Operator's Manual Assembly Steps

Step	Before	After
Bolt the operator's manual canister (1) to the outside of the snow blower's frame, using the 1/4" x 3/4" flange serrated screws (2) and 1/4"-20 flange serrated nuts (3).		

## Manual Deflector Assembly:

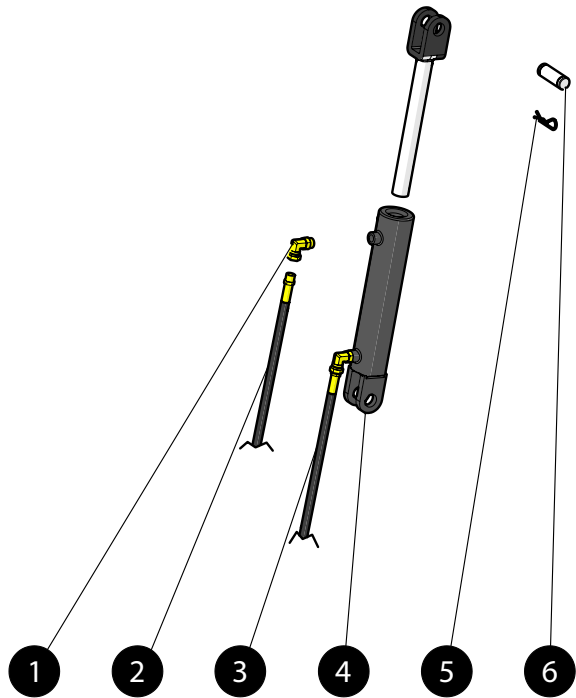


Item #	Description
1	Deflector Adjuster Bar
2	Deflector Adjuster Pins
3	Hair Pins

## Manual Deflector Assembly Steps

Step	Before	After
Attach the deflector adjuster bar (1) to the chute using the deflector adjuster pins (2) and hair pins (3).		

## Hydraulic Deflector Assembly:

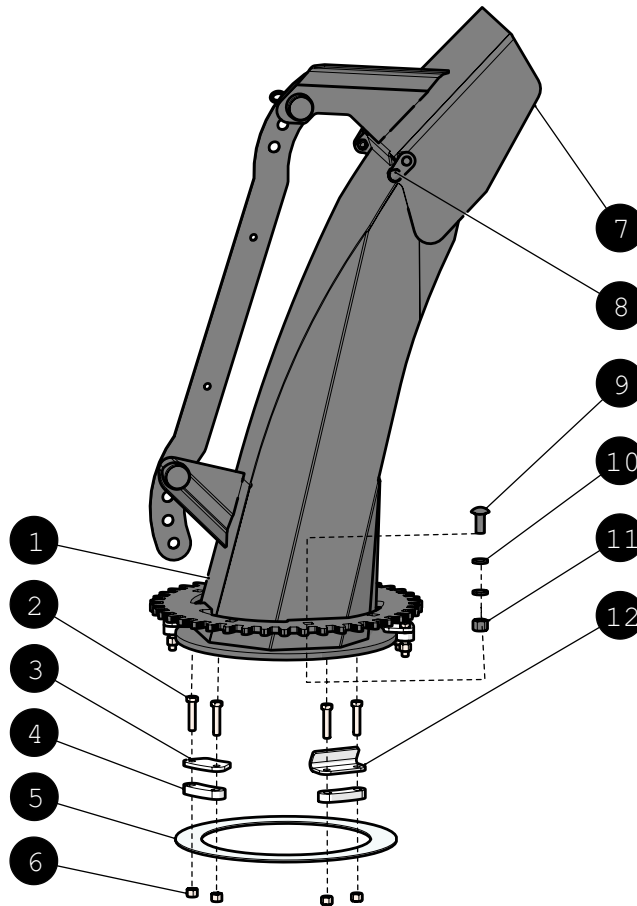


Item #	Description
1	90° Elbow
2	Hydraulic Hose
3	Cylinder
4	Hair Pin
5	Cylinder Pin

### Hydraulic Deflector Assembly Steps

Step	Before	After
<p><b>1. Attach Deflector</b></p> <p>Attach the hydraulic deflector to the chute by inserting the cylinder pins (5) followed by the hair pins (4).</p>		
<p><b>2. Attach hoses</b></p> <p>See <i>Hydraulic Safety</i> on p.18. Attach the hydraulic hoses on the deflector to the manifold block. See p.42.</p>		

## Chute Assembly:

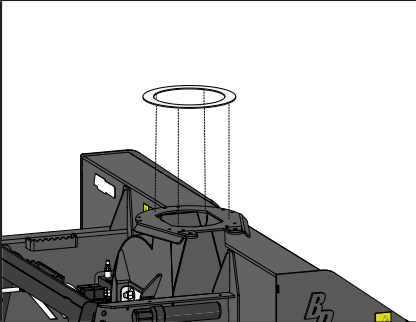
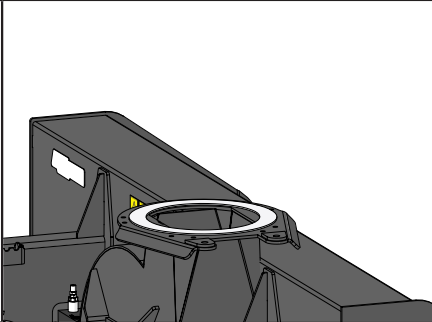
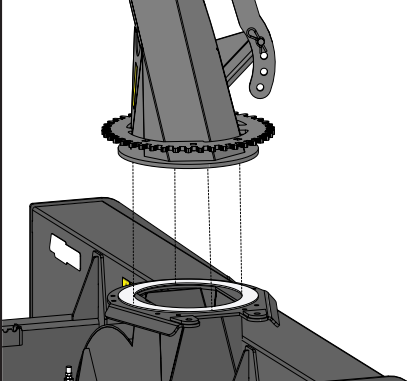
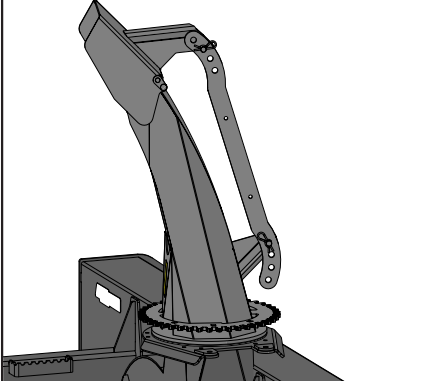
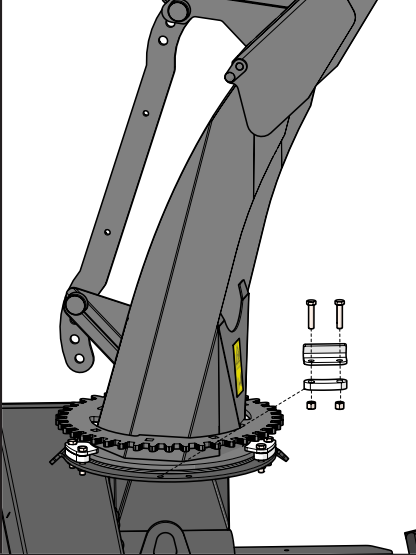
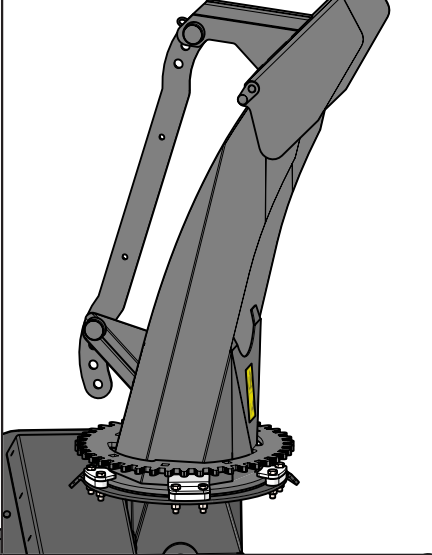
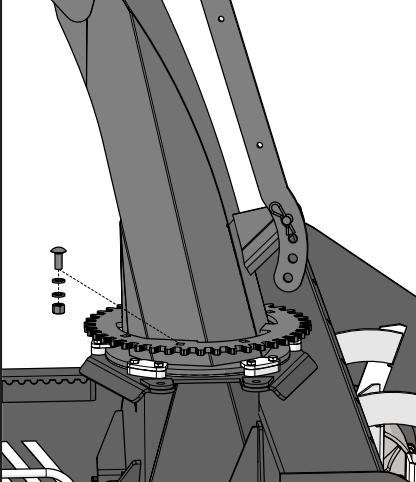
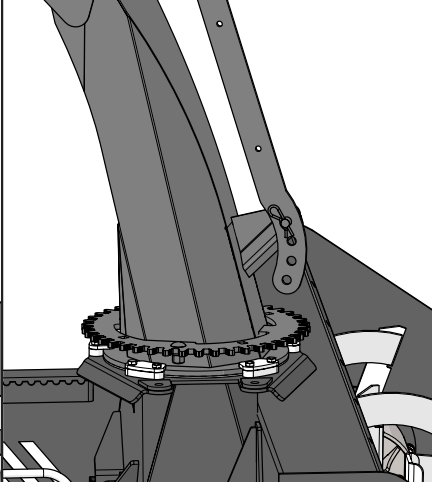


Item #	Description
1	Chute
2	3/8"-16 x 1 3/4" Bolt
3	Chute Holder
4	Chute Slide
5	UHMW Ring
6	3/8"-16 Nylock Nut
7	Deflector
8	Hinge Pin
9	1/2" x 1 1/4" Carriage Bolt
10	1/2" Lock Washer
11	1/2"-13 Nylock Nut
12	Chute Stop

### IMPORTANT

- Follow the chute assembly steps table in the order they are presented. The **chute stop** prevents the chute from rotating towards the operator and prevents the hydraulic hoses/electric wires (when used) from getting wound around the chute. If installed incorrectly, it could damage the machine or cause a safety hazard.

## Chute Assembly Steps

Step	Before	After
<p><b>1. Place Ring</b></p> <p>Set the ring (5) down on the hood base.</p>		
<p><b>2. Place Chute</b></p> <p>Place the chute (1) directly on top of the ring (5).</p>		
<p><b>3. Bolt Chute</b></p> <p>Place the chute holders (3) on top of the chute slides (4) so that they attach the chute to the hood base. Make sure the chute slides (4) and chute holders (3) are aligned with the holes on the hood base. Start by bolting the chute stop piece (12) to the side that faces opposite of the chute rotator. Use the 3/8"-16 x 1 3/4" bolts (2), and the 3/8"-16 nylock nuts (6).</p>		
<p><b>4. Bolt Chute Stop</b></p> <p>Make sure the chute stop <i>bolt</i> (9) is bolted on the opposite side of the chute stop <i>piece</i> (12). Use the 1/2" x 1 1/4" carriage bolt (9), 1/2" lock washer (10) and 1/2"-13 nylock nut (11).</p>		

## Multi-Hinged Deflector Assembly:

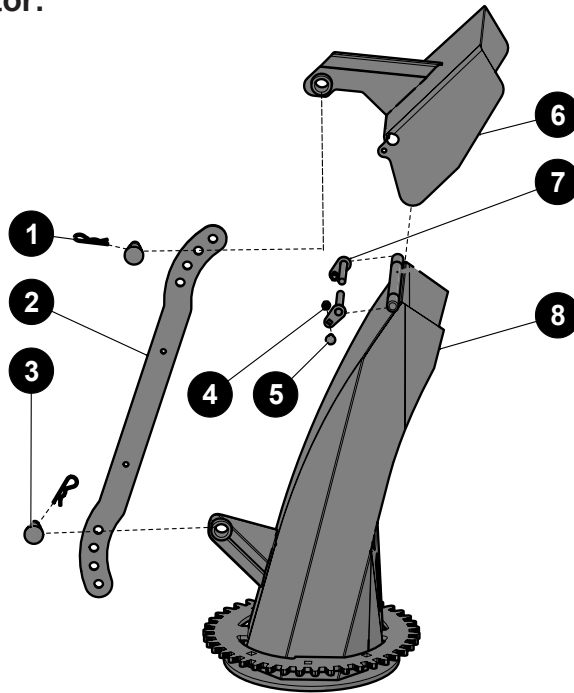
### NOTE

- The multi-hinged deflector is available as an add-on option for all **Skid Steer Snow Blower** models.

### IMPORTANT

- Depending on how you received your multi-hinge deflector, certain steps may have been completed for you. The steps and illustrations in the **Multi-Hinge Deflector Assembly** table explain how to assemble the multi-hinge deflector from start to finish. Follow the steps that pertain to you.

### Single Deflector:

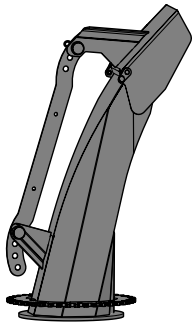
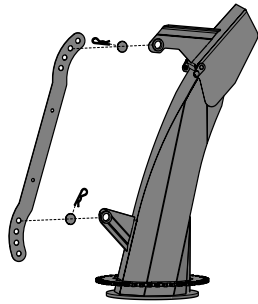
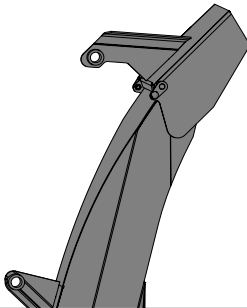
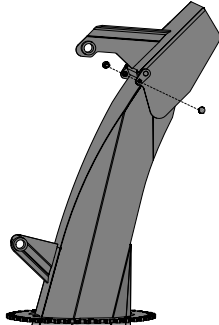
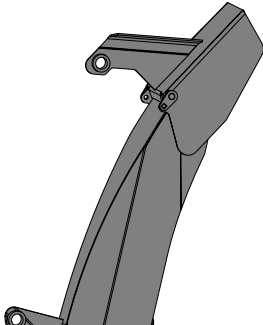
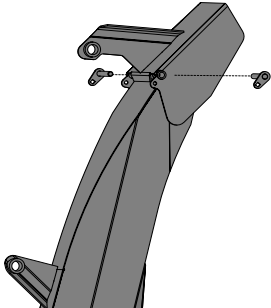
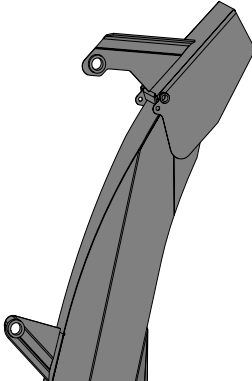
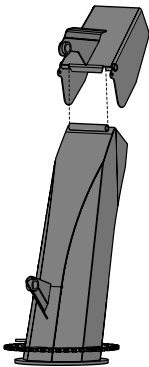


Item #	Description
1	Hair Pin
2	Deflector Adjuster Bar
3	Deflector Adjuster Pin
4	5/16"-18 Nylock Nut
5	5/16"-18 x 1.0" Carriage Bolt
6	Single Deflector
7	Hinge Pin
8	Chute Weldment



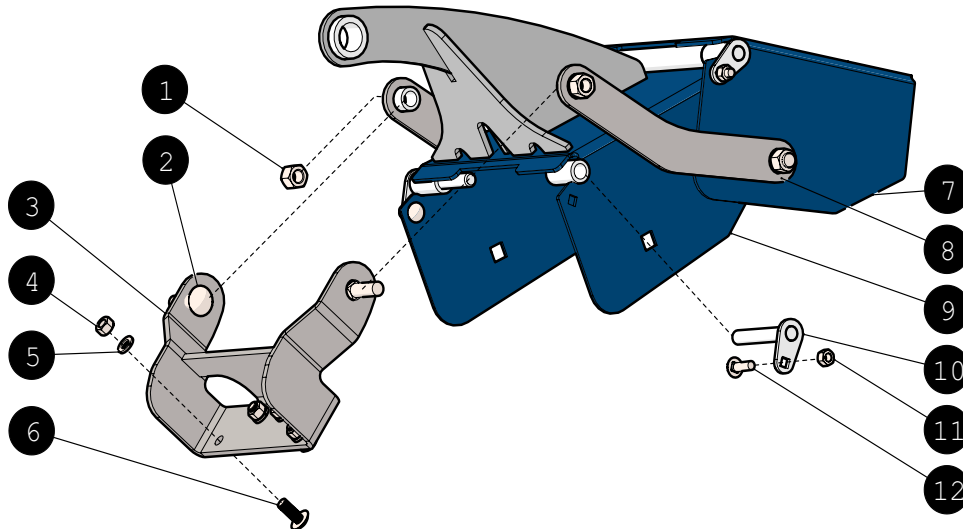
If you purchased the multi-hinge deflector as an add-on option, you will need to follow the steps in the **Remove Single Deflector Steps Table** below before continuing to the **Multi-Hinge Deflector Assembly Steps** table on p.35.

### Remove Single Deflector Steps

Step	Before	After
<p><b>1. Remove Deflector Adjuster Bar</b></p> <p>Remove the manual or hydraulic deflector adjuster from your chute by taking out the hair pins (1) and chute pins (3).</p>		
<p><b>2. Remove Hinge Pin Bolts</b></p> <p>Remove bolts (5) and nuts (4) from both sides of the single deflector.</p>		
<p><b>3. Remove Hinge Pins</b></p> <p>Remove the hinge pins (7) from both sides of the chute (9).</p>		
<p><b>4. Remove Single Deflector</b></p> <p>Remove the single deflector (6) from the chute, and proceed to follow the steps in the <b>Multi-Hinge Deflector Assembly Steps</b> table.</p>		

Before installing the multi-hinged deflector onto the chute, ensure the steps in the **Remove Single Deflector Steps Table** on p.33 have been completed.

**Multi-Hinge Deflector:**



Item #	Description
1	1/2"-13 Nylock Nut
2	1/2" x 1 3/4" Carriage Bolt
3	Hinge Bracket Double Deflector
4	3/8" Nut
5	3/8" Lock Washer
6	3/8" x 1" Truss Head Machine Screw
7	First Deflector
8	Hinge Tie Plate
9	End Deflector
10	Hinge Pin
11	5/16"-18 Nylock Nut
12	5/16" x 1" Carriage Bolt Zinc

 **NOTE**

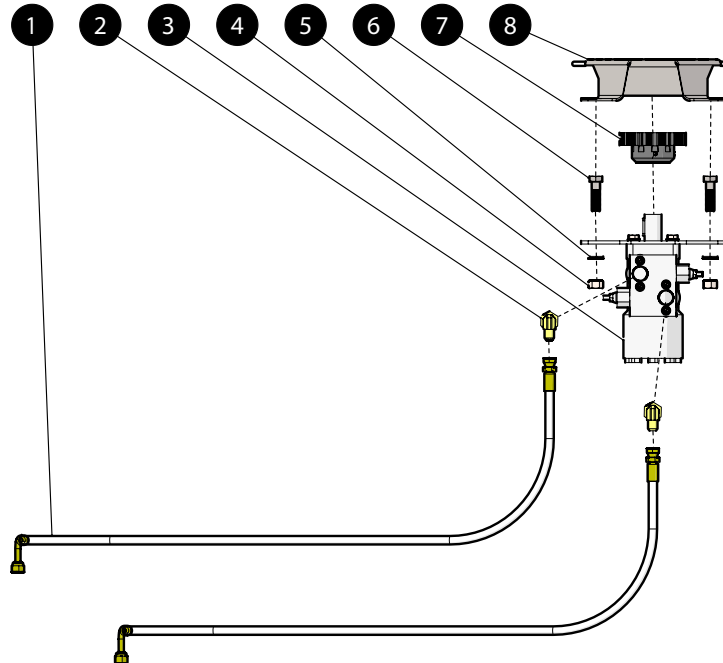
- *If you purchased the multi-hinge deflector with the manufacturing of your snow blower, the bracket may be attached to the chute for you and no drilling is required. Proceed to step 3.*
- *If you purchased the multi-hinge deflector as an add-on option, additional steps are required.*

## Double-Deflector Assembly Steps

Step	Before	After
<p><b>1. Place and Drill Bracket</b></p> <p>See note on p.34. Place the hinge bracket (3) right below the hinge tube. Use a power drill to drill 4 holes into the bottom of the bracket (3) and through the chute as shown in the illustration.</p>		
<p><b>2. Bolt Bracket to Chute</b></p> <p>Bolt the bracket (3) to the chute using the 3/8" x 1" truss head machine screws (6), 3/8" lock washers (5), and 3/8" nuts (4).</p>		
<p><b>3. Remove Hinge Pins</b></p> <p>Remove the hinge pins (10) along with their 5/16" x 1" carriage bolts (12) and 5/16"-18 nylock nuts (11) from the end deflector (9).</p>		
<p><b>4. Place Double Deflector</b></p> <p>Slide the hinge tie pieces (8) that are connected to the end deflector (9) onto the bracket's welded bolts (2). Secure the hinge tie pieces (8) with the 12-13 nylon locknuts (1).</p>		
<p><b>5. Re-Insert Hinge Pins</b></p> <p>Re-insert the hinge pins (10) through the hinge tube and secure them with 5/16" x 1" carriage bolts (12) and 5/16"-18 nylon locknuts (11).</p>		
<p><b>6. Re-attach Deflector Adjuster Bar</b></p> <p>Re-attach your manual or hydraulic deflector adjuster with its chute pins and hair pins.</p>		

## Chute Rotator Assembly:

The hydraulic rotator uses a hydraulic motor and can be manipulated by the operator's controller. When connected to a power source, the electro-hydraulics rotate the chute. Follow the instructions in the **Chute Rotator Assembly Steps** table.

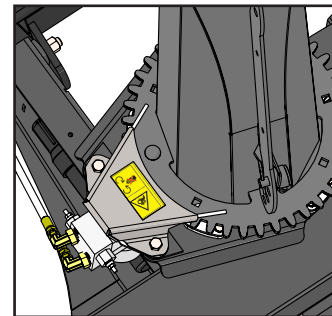


Item #	Description
1	Hose
2	Elbow
3	Chute Rotator
4	1/2"-20 Locknut
5	1/2" Lock Washer
6	1/2"-20 x 2" Bolt
7	Gear
8	Shield



### TIP

- The chute rotator's shield has rods that act as guides for the deflector. All shields are manufactured with the rods straight. However, rods may need to be bent in for smaller blowers and bent out for larger blowers.
- **To bend the rod:** use a short piece of 3/8" pipe for a lever, or an adjustable wrench to bend the rod. Do not use a hammer as it has less control of the bend. Keep the height of the rod the same, only bend it inwards or outwards.



- The rods should be slightly inside the root of the gear teeth as shown in the illustration above.



### WARNING

- Route and secure hoses so they do not come in contact with rotating chute or get pinched when operating. Ensure the hoses do not get too tight or rub on the frame when the blower is raised or lowered.

## Chute Rotator Assembly Steps

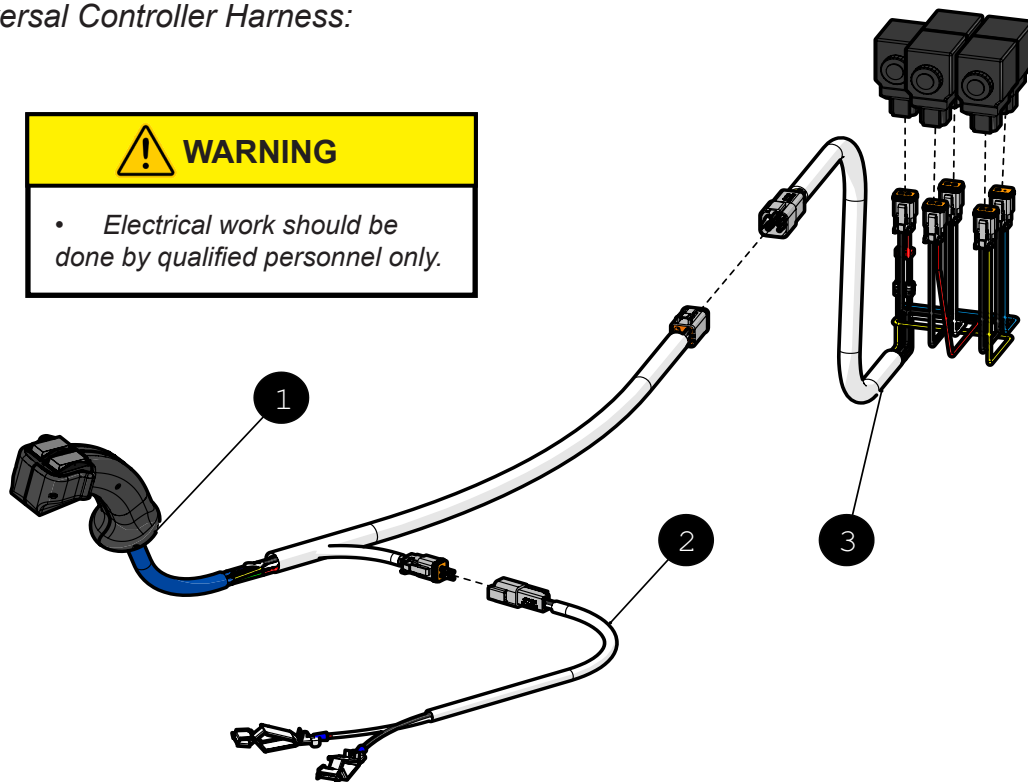
Step	Before	After
<p><b>1. Place Rotator</b></p> <p>Place the chute rotator (3) so its holes line up with the holes on the hood base.</p>		
<p><b>2. Place Shield</b></p> <p>Place the shield (8) on top of the gear (7).</p>		
<p><b>3. Bolt Rotator</b></p> <p>Attach the chute rotator (3) and shield (8) to the hood base using the 1/2"-20 x 2" bolts (6), 1/2" lock washers (5) and 1/2"-20 locknuts (4).</p>		
<p><b>5. Attach Hoses to Rotator</b></p> <p>See <b>Hydraulic Safety</b> on p. 18. When installing the hydraulic elbows (2), turn them until nearly snug, then tighten the jam nut to secure the elbow in the direction you want it to go in.</p>		
<p><b>6. Attach Couplers to Hoses</b></p> <p>Route hoses away from moving parts. Attach the hoses to the manifold; see p. 42. The relief valves are factory preset at 900 PSI.</p>		

## Wire Harness Assembly:

The hydraulic chute rotator and deflector are controlled with electro-hydraulics, using 12 volt power from the battery to a hydraulic diverter valve and used by the operator through a control handle or through machine controls.

Depending on how you received your **Skid Steer Snow Blower**, the electrical harness may have already been assembled for you. Ensure there is no power flowing to the valve box and the skid steer is powered off when assembling the electrical harness. Follow the assembly steps and refer to the illustrations for guidance.

### Universal Controller Harness:



Item	Part Number	Description	QTY
1	219707	Universal Joystick Control Harness	1
2	219708	8' Battery Connection with Clamps	1
3	219709	Attachment Side Solenoid Connections	1
NS	219706	Extension	1

**NOTE:** All units ship with the universal joystick control harness, battery clamp connection, attachment side harness, and an extension between the attachment side harness and the universal control harness.

The machine control harnesses are ordered separately, and these replace the universal control harness and battery clamp connection.

## Wire Harness Assembly Cont'd:

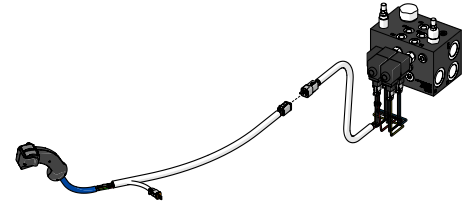
### Machine Control Harness Options:

Host Machine Connection	Wire Harness	Pins Used
Bobcat*, CASE, Gehl, JCB, Kubota, New Holland, Volvo, Wacker Neuson 14-Pin	219703	C, D, E, F
John Deere 14-Pin	219704	C, D, E, G
CAT D Series 14-Pin	219705	C, D, E, F (Jumper from K to B for XPS high flow option)
CAT B & C Series 8-Pin	219701	B, C, D (C & D are connected via re- lay to 2 functions each. Press and HOLD B while pressing C or D to engage each alternate function)
Terex 8-Pin	219702	C, D, G (C and D are connected via relay to 2 functions each. Press and HOLD G while pressing C or D to engage each alternate function.)
*Bobcat 7-Pin requires 160416 adapter.		

## Wire Harness Assembly Steps

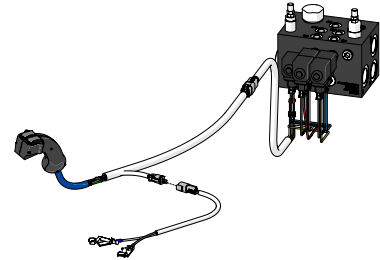
### 1. Connect Wire Kit to Control Harness

Connect the solenoid valve wire kit to the universal controller or machine control harness (1) by inserting the Deutsch wedgelock 6-way male plug into the Deutsch wedgelock 6-way female plug.



### 2. Connect Battery Connection to the Universal Controller

Connect the controller (1) to the battery clamp wire (2) by inserting the Deutsch 2-way male housing with wedgelock into the Deutsch wedgelock 2-way female plug.



### 3. Attach to Power Source

Attach the battery clamps to the skid steer battery or to an available 25 amp 12v power source. The positive clamp wire will always be **black** sleeved.

### 4. Mount Controller

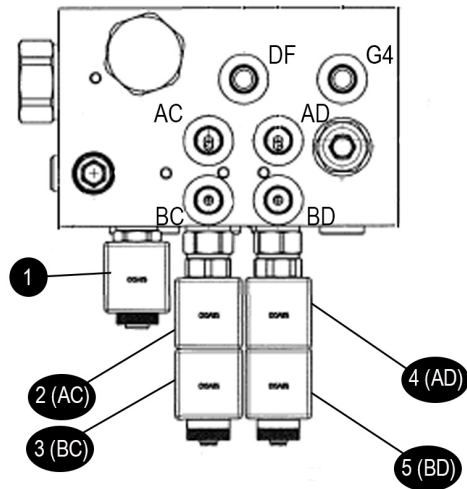
Mount the controller in a convenient location in your skid steer cab or connect the machine control harness to the skid steer's auxiliary electrical connection.

### 5. Connect Wire Kit to Valve Box

**NOTE:** If the **Snow Blower** does not have the optional hydraulic deflector adjustment cylinder installed, solenoid connections 2 (AC) and 3 (BC) will not be used, and only three wire harness connectors will be required.

**⚠ WARNING**

- Never rearrange wires while the cables are connected to a power source. Always make sure the power unit is turned off before doing any service or maintenance on your Snow Blower.



Solenoid Plug	Solenoid Function
1	Hydraulic Circuit Activation
2	Deflector Down
3	Deflector Up
4	Chute Left
5	Chute Right



## Wire Harness Assembly Steps Cont'd

### 5. Connect Wire Kit to Valve Box Cont'd

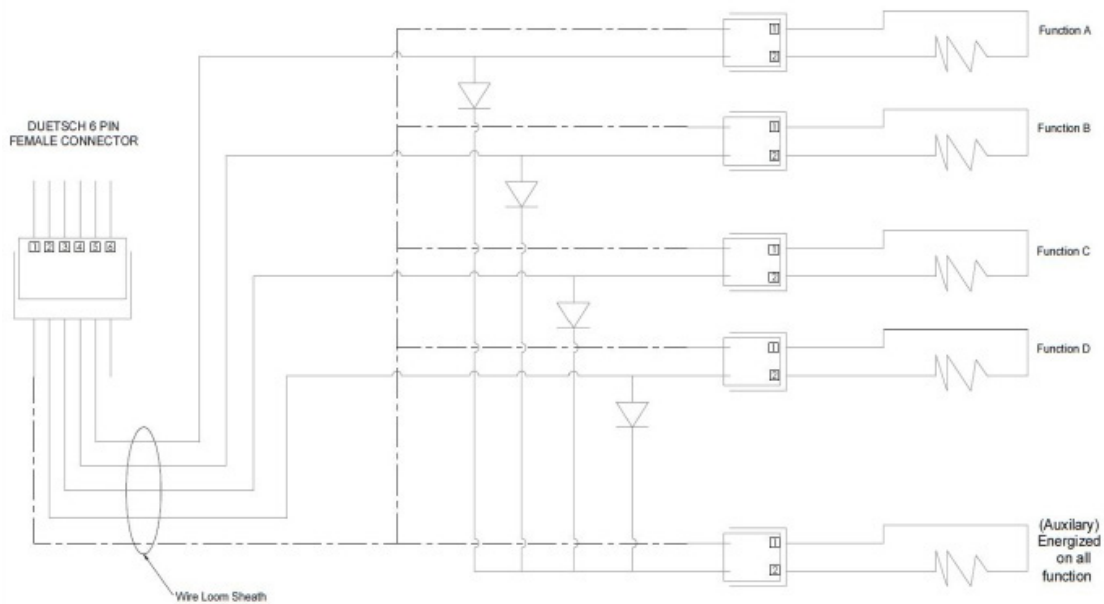
Pin Instructions:

1. Connect the red harness connector to the circuit activation solenoid coil.
2. Connect the function control connectors.
  - Connect one harness connector to any solenoid coil.
  - Manipulate the joystick control harness switches or host machine joystick buttons to determine which button controls the connected function wire.
  - If you wish to change which Snow Blower function is controlled by the joystick button, refer to the Valve Connections diagram and chart above to change the wire harness connector to the solenoid coil for the desired function.
  - Repeat for the remaining harness connections.

### 6. Check Wires

Ensure there are no snags or frays and that wires and cables are secured and away from moving parts before proceeding.

### Attachment Side Harness Schematic



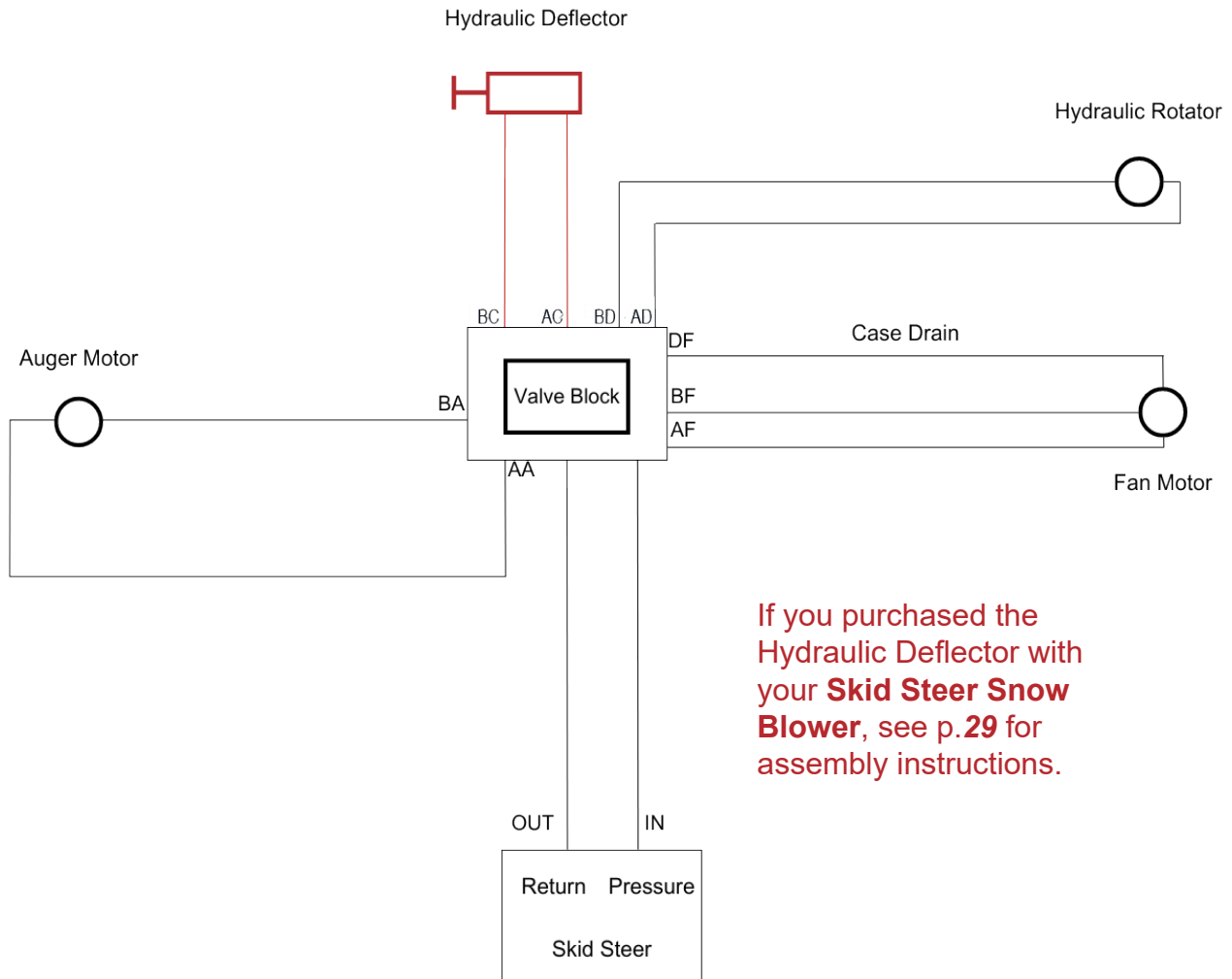
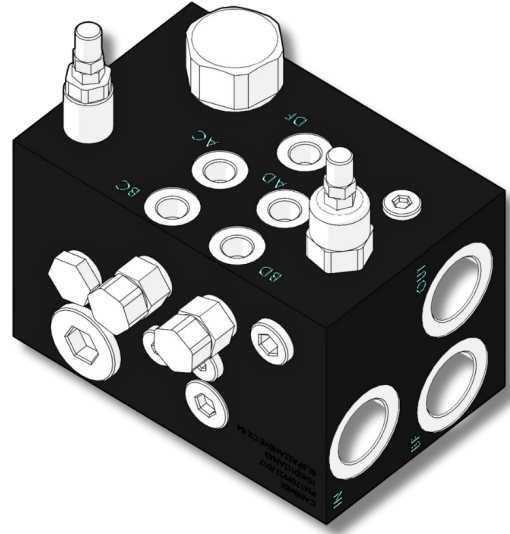
## Hydraulic Hose Assembly:

Depending on how you received your **Skid Steer Snow Blower**, most of the hydraulic and electrical set-up should have been completed for you. Review **Hydraulic Safety** on p.18 before connecting or disconnecting any hydraulic hoses.

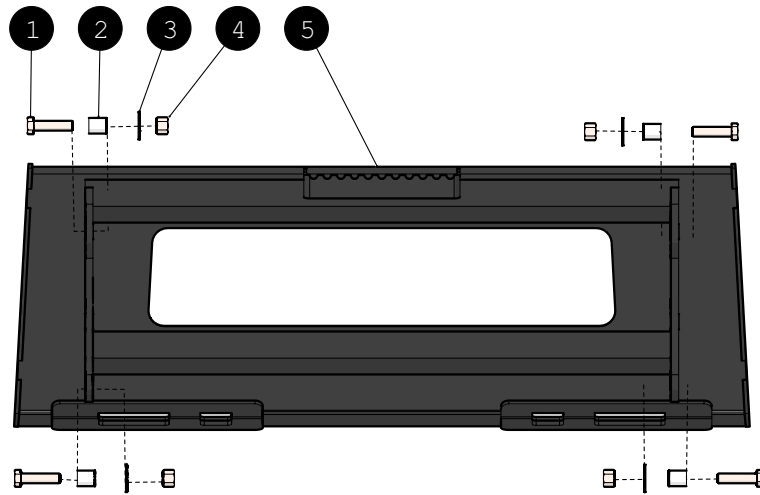
There are several hose kits available based on the flow rate of your blower. The set-up for all hose kits is the same. For information on:

- Flow Rate Options, see p.26.
- Hose Kit Components, see p.71.

The hydraulic hoses connect all of the hydraulic parts on the blower to the skid steer through the valve block. All ports on the valve block are labeled as shown in the illustration. Review the schematics below to ensure all of your hydraulic hoses are connected properly.



## Skid Steer Mount Plate Assembly:



Item	Description
1	5/8" x 2 1/2" Bolt
2	Attachment Mount Bushing
3	5/8" Flat Washer
4	5/8"-11 Nylock Nut
5	Mount Plate

### Skid Steer Mount Plate Assembly Steps

Step	Before	After
<p>Attach the skid steer mount plate to the <b>Snow Blower</b> by inserting the attachment mount bushing (2) and bolting the plate using the 5/8" x 2 1/2" bolt (1), 5/8" flat washer (3), and 5/8"-11 nylock nut (4). Repeat for all four holes. See <b>Adjusting Mount Plate</b> on p.46 for information on how to best adjust your plate.</p>		

## Operation

This section describes how to operate your **Blue Diamond® Skid Steer Snow Blower** and the procedures necessary to complete various tasks safely and efficiently. Not all situations will be addressed; proceed with caution and use the safety guidelines. Following the procedures below will help provide a safe working environment for the operator, bystanders, and anyone else on the work site.

The owner or operator has the responsibility of being familiar with the operation of the implement and must train all other operators before they start working with the machine.



### DANGER

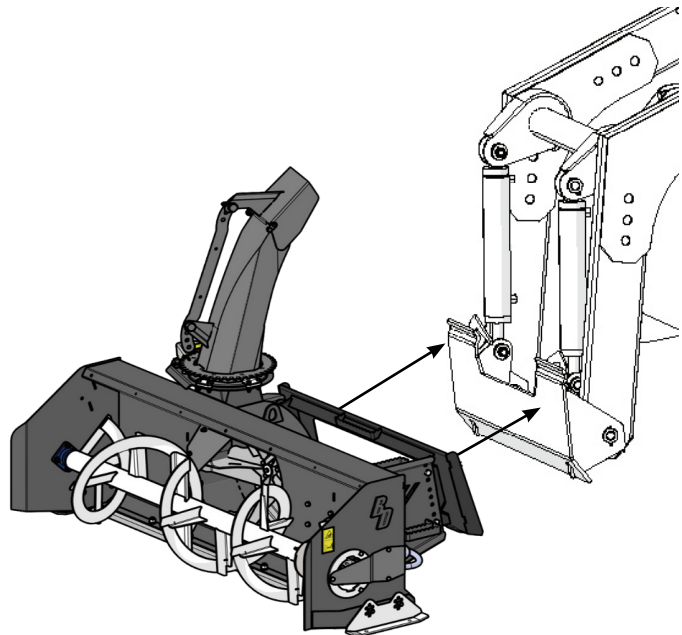
- *First time operators must read and completely understand the material in this manual before operating the **Skid Steer Snow Blower**, and review this manual at least once per season there after.*

- *Attaching the **Snow Blower** will add extra weight to your power unit. Add weight to your power unit on the opposite side of the attachment to keep the machine balanced. If the skid steer is unbalanced, there is a risk of tipping over or losing steering control, which could result in property damage, personal injury, or death.*

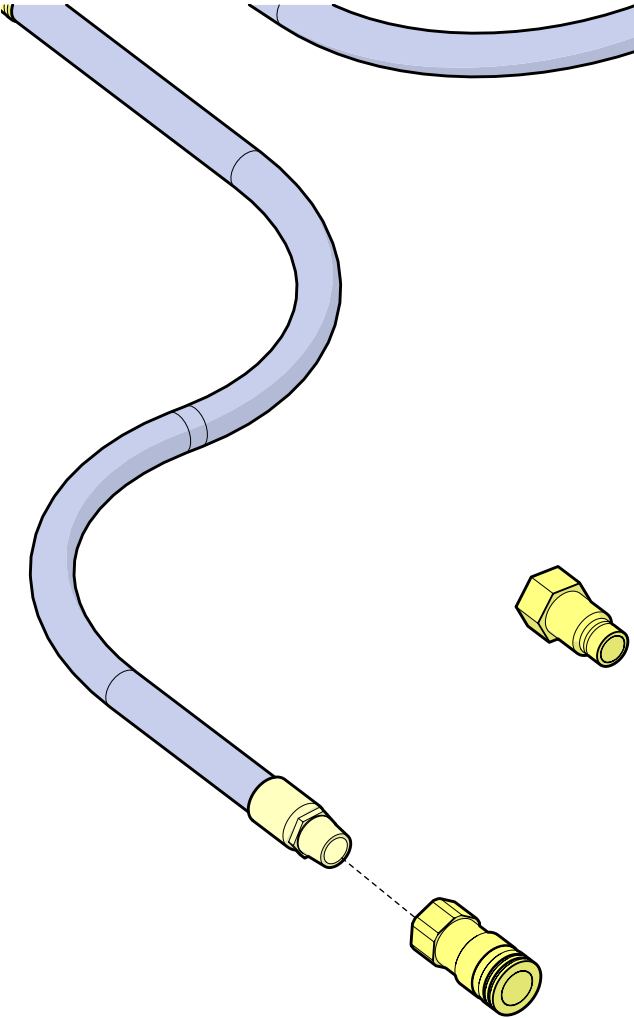


### Attaching Snow Blower to Skid Steer:

1. Ensure Skid Steer Mount Assembly has been completed. See p.43.
2. Ensure height of mount plate has been adjusted. See p.46.
3. Drive the Skid Steer forwards to the **Snow Blower** that is on level ground.
4. Line up the skid steer arms and coupler with the **Snow Blower's** Mount Plate.
5. If your skid steer has quick attach capabilities, press and hold the quick attach engagement button on your side panel until the implement is secured. If your skid steer does not have quick attach capabilities, turn off the power unit before proceeding.
6. To manually attach the skid steer to the **Snow Blower**, use the latch pins on the quick attach plate.



## Attach Hydraulic Hoses to Skid Steer:

- 1 Make sure the couplers and fittings are free from debris.
  - 2 Connect the hose ends to their corresponding couplers.
  - 3 Attach the flat face couplers to the skid steer loader by pushing them in the corresponding ports until they lock. If you are unsure of which ports to attach the hoses to, refer to your power unit's operator's manual.
  - 4 Avoid twisting or crossing the hoses. Doing so could interfere with the hydraulic pressure. The hoses should always be away from rotating parts. Direct them away from the chute, auger, and fan.
  - 5 Use hose clamps or zip ties to secure the hoses to the **Snow Blower** if there is extra length after attaching.
  - 6 Once the hoses are securely attached, turn on your power unit and test the hydraulic system. If there are abnormal noises, excessive bulging, or improper functioning, turn off the power unit immediately, wait for rotating parts to come to a complete stop, and **visually** inspect the attachments before repeating these steps.
- 

## Adjusting Mount Plate:

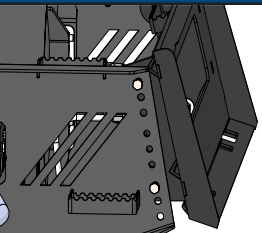
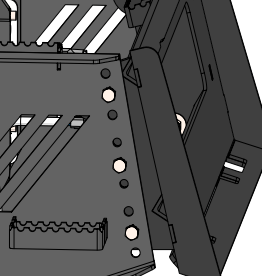
The mount plate was made adjustable with several holes to fit a variety of skid steers at different heights. Unbolt, adjust, and re-bolt your plate to best fit your skid steer before beginning operation.

The skid steer mount plate was designed with the ability to pivot. This floating-plate design follows the contour of the ground better, ensuring quality clean-up even when the ground is uneven.

The mount plate was also designed with a third, center hole to allow you to use a rigid-plate design as a preference instead.

For more information on:

- Skid Steer Mount Plate Assembly, see p.43.
- Skid Steer Mount Plate Parts, see p.63.

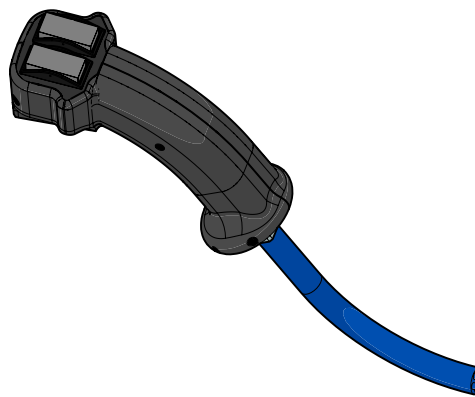
Design	Adjustment	Loader Plate
<b>Floating</b>	Bolt plate to fit the height of your skid steer.	
<b>Rigid</b>	Use the center hole on the loader plate to insert an additional bolt on both sides. This will make the design rigid instead of floating and help keep the ground leveled.	

### NOTE

- *The bolts and nuts for a rigid-plate design are not included in the purchase of this snow blower.*

## Operating the Controller:

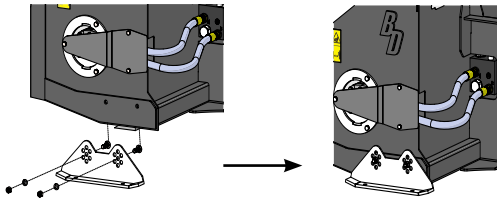
Before operating, test the deflector and chute rotation by using the controller.



## Adjusting Skid Shoes:



The skid shoes on the **Skid Steer Snow Blower** are designed with several holes so that you can manually adjust the height and angle of your skid shoes. Adjust one skid shoe at a time by following the steps below:

1. Ensure power unit is turned off and no parts are moving.
2. The **Snow Blower** is blocked up, and securely attached to the skid steer.
3. Remove 1/2"-13 x 1 3/4" bolts, 1/2" lock washers and 1/2"-13 locknuts.
4. Adjust skid shoes.
5. Re-insert bolts, washers, and nuts.

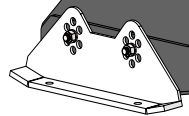
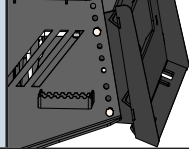
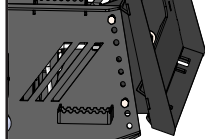
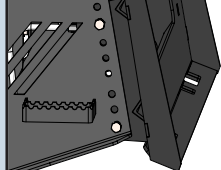
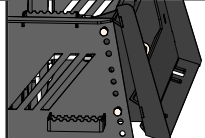


**⚠ DANGER**

- *Do not begin adjustments to the implement until it has been securely attached to the power unit, and the unit is turned off.*
- *Never go under the machine to make adjustments. Never take the risk of placing yourself beneath a hydraulic system. Use heavy gloves when moving or adjusting heavy or sharp parts.*

When the skid shoes are moved up, the cutting edge is closer to the ground. When the skid shoes are moved down, the cutting edge is further from the ground. The following table provides suggestions on how to adjust your skid shoes based on the condition of your work area.

Condition	Adjustment	Skid Shoe
<b>Ground is Level</b>	Bolt the skid shoes in the center holes on both sides.	
<b>Light Snow (gravel, soil or rocky pathways)</b>	Move skid shoes down so the cutting edge is further away from the ground. This will help avoid hitting objects or getting material other than snow in the auger, fan, or chute.	
<b>Light Snow (paved or cement pathways)</b>	Move skid shoes up so cutting edge is lower to the ground. The cutting edge will completely clear the surface from snow and ice.	
<b>Heavy Wet/ Packed Snow</b>	Move skid shoes down so cutting edge is higher from the ground. This will avoid overloading the snow blower and slowing you down. Go over a section several times, re-adjusting skid shoes if needed.	
<b>Ice or Frozen Snow</b>	Move up skid shoes so the cutting edge can make contact with the ground and scrape the hard ice and snow.	

## Best Practices:

The **Skid Steer Snow Blower** is intended to clear light or packed snow from the surface. Unintended use risks damaging your implement. Review **Intended Use** on p.6. The following procedures explain how to safely operate your **Snow Blower** when completing specific tasks and how to avoid damaging your machine.

## Before Operating:

Before operating your snow blower, it is important to test your equipment. Follow the Pre-Operation Checklist below.

Pre-Operation Checklist	<input checked="" type="checkbox"/>
<b>Inspection Checklist</b> is complete. See p.27.	
Review <b>Work Area Safety</b> on p.12.	
Review <b>Operation Safety</b> on p.14.	
All hydraulic hoses and electric connections are secured and in their proper locations. See p.38 and p.42.	
Use foot steps to safely climb into the skid steer cab, turn on power unit, and allow it a few minutes to warm up.	
Carefully raise and lower the snow blower, noting any pinch, stretch, or kink points in the hydraulic hoses or electric harness.	
Adjust any strained or loose hoses and/or wires.	
Test chute rotator; see Operating the Controller on p.46.	
Test chute deflector; see Operating the Controller on p.46.	
Adjust hitch plate and skid shoes for the task at hand. See pages 46 - 47.	

## Begin Operation:

Follow the steps below to operate your **Skid Steer Snow Blower**.

1. Adjust the chute deflector so the snow is going in the direction you want it to go.
2. Select a slow forward gear and start driving forward.
3. Adjust the chute rotator as you operate your snow blower so that the snow is always pointing in the direction you want it to go.
4. Pick up speed when certain all parts are functioning properly, and all adjustments made are correct for the job at hand.



### TIP

- Adjust the chute rotator and deflector so the snow is going the same direction as the wind.



### DANGER

- Objects thrown from snow blower at high speeds can cause property damage, injury, and death! Keep distance from machine, and keep deflector pointing away from yourself and others. Be aware of bystanders.






## Gravel Driveways:


For gravel driveways, it is important to remain cautious during operation. If your **Snow Blower** is too close to the ground, there is a risk of the auger picking up loose gravel instead of snow, which could damage the equipment and become a safety hazard.

### To avoid picking up loose gravel:

1. Ensure the loader plate is adjusted to the height of your skid steer and adopting the floating plate design. See p.46.
2. Drive slowly to assess the operation, and ensure only snow is being caught by the auger and thrown through the chute.
3. Adjust the skid shoes to raise the blower above the gravel. See **Adjusting Skid Shoes** on p.47.


 **WARNING**

- *Sudden impact from obstacles hidden under the snow may cause injury or damage to your implement. Mark objects that cannot be removed before operating and clear debris from work area.*



## Paved Driveways:

1. Ensure the mount plate is adjusted to the height of your skid steer. See p.46.
2. Drive slowly to ensure snow blower is properly leveled.
3. If needed, adjust the skid shoes to lower the cutting edge closer to the pavement. See **Adjusting Skid Shoes** on p.47.

 **TIP**

- *For a deep layer of heavy snow, go over your work area several times and adjust the skid shoes when needed. This will prevent you from losing speed and putting stress on your machine.*

## Stop Operating:

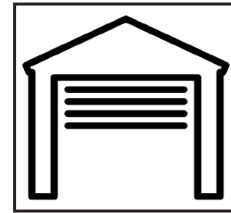
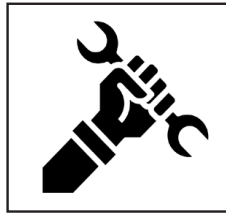
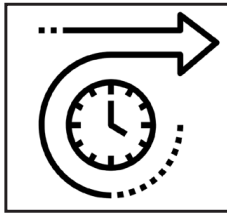
When stopping your operation, follow the checklist below.

Stop Operation Checklist	<input checked="" type="checkbox"/>
Lower any raised hydraulic equipment.	<input type="checkbox"/>
Place skid steer in park on a flat surface and turn off the engine.	<input type="checkbox"/>
Remove switch key; wait approximately 5 minutes for machine to cool down.	<input type="checkbox"/>
Do not exit the cab until all moving parts have come to a complete stop.	<input type="checkbox"/>

## Storage

After the season's use or when the machine will not be used for a period of time, completely inspect all parts of the **Snow Blower**. Replace or repair any damaged components to prevent any unnecessary down time at the beginning of the next season.

Your implement is an important investment. Spending some time to protect it from rust and corrosion will result in a safer, longer service life and better performance.



Storage Checklist	<input checked="" type="checkbox"/>
Review section <b>Storage Safety</b> on p. 18.	
Carefully remove any excess snow that may be clogging the <b>Snow Blower</b> .	
Remove all remaining materials from around the machine.	
Check the cutting edge and plow bolts for wear and follow the replacement instructions. See <b>Replacing Cutting Edge</b> on p. 52.	
Inspect the <b>Snow Blower</b> for any loose, worn, or damaged parts. Tighten and replace as necessary.	
Sand down scratches and the edges of areas that are missing paint.	
Repaint any chipped or scraped areas to prevent rust and corrosion.	
Replace any safety decals that are missing or not readable. See section <b>Safety Labels</b> on p. 19.	
Remove controller from skid steer, and store wire harness in a dry place until next season.	
Guard any sharp corners.	
Ensure all pins, latches, and locks are secure.	
Store your implement on a level surface, in a clean and dry area. If that is not possible, cover your <b>Snow Blower</b> with a waterproof tarpaulin and tie it down securely.	
Block the implement to prevent any unwanted movement.	
Service all grease and lubrication points. See p. 53.	
Ensure hydraulic hose ends are covered to prevent contamination.	

**CAUTION**

- Use caution when spraying near the edges of safety decals or spraying near torn or damaged safety decals as water-spray could peel them off.



## Service & Maintenance

Good maintenance is your responsibility. To keep your **Snow Blower** in good condition, we suggest carefully following a service and maintenance program.

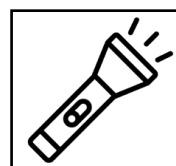
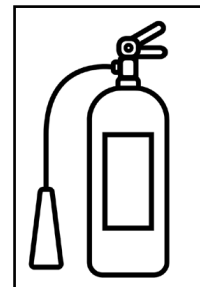
Review the maintenance checklist before beginning any service or maintenance on your **Skid Steer Snow Blower**.



Maintenance Checklist	<input checked="" type="checkbox"/>
Review section <b>Maintenance Safety</b> on p.17.	
Release hydraulic pressure before doing any maintenance.	
Keep service area clean and dry.	
Use adequate light for the job at hand.	
All electrical outlets and tools are properly grounded.	
All rotating parts, including the auger and fan, are at a complete stop.	
<u>Never work under equipment</u> unless it is blocked up securely to prevent any movement.	
A fire extinguisher and first aid kit are readily accessible.	
Parts replacement <b>should only be performed by qualified personnel</b> to ensure safe and complete installation.	
Always use PPE such as eye, hand, foot, and hearing protectors.	
Use heavy gloves when handling heavy or sharp components.	
The power unit is turned off prior to beginning any service, cleaning, lubrication, or maintenance on your implement.	
The hydraulic system, hoses, and couplings are free of debris and leaks.	
Hoses that are rubbing, pinched, or crimped have been re-routed.	
All nuts, bolts, and screws have been torqued according to the <b>Bolt Torque Chart</b> on p.56.	

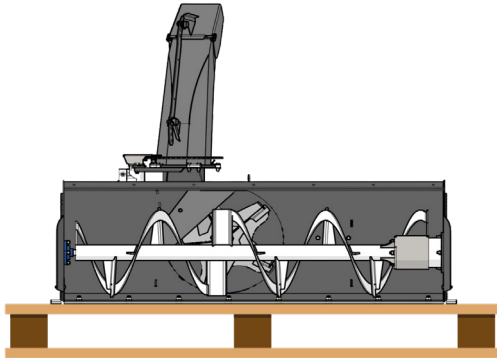
### WARNING

- The service & maintenance instructions are only to be followed by qualified personnel.



## Blocking Up Skid Steer Snow Blower:

1. Place two 6" x 6" blocks under each side of the **Snow Blower** or a large enough skid.
2. Lower the **Snow Blower** until it is securely placed on the blocks to stop movement.



### NOTE

- To service the **Snow Blower** while it is attached to the power unit, it must be blocked up off the ground. Do not block higher than needed.



### DANGER

- When adjusting or replacing parts, do not place yourself or other persons or any part of your body under a raised **Snow Blower**!

## Replacing Cutting Edge:

Follow the steps below to remove and replace cutting edge. Only replace cutting edge when both the top and bottom are worn out. Block up your implement before beginning, and use the parts pages as a reference.

1. Block up Snow Blower.
2. Remove 5/8" x 1 3/4" plow bolts, 5/8" lock washers and 5/8"-11 locknuts.
3. Replace the cutting edge.
4. Re-insert bolts, washers, and nuts.



### WARNING

- Cutting edge is heavy!  
Handle with care and use heavy gloves!



## Reversing & Replacing Skid Shoes:

Overtime the front of the skid shoes may wear down. When the front of both skid shoes have lost 1/2 of their metal thickness, they need to be reversed or replaced to perform properly and to avoid damaging the frame of your **Snow Blower**. If the front of the skid shoes are worn down and the backs are in good condition, follow the steps below to reverse them. Ensure the **Snow Blower** is blocked up to prevent movement.

1. Block up **Snow Blower**, and remove one skid shoe at a time.
2. Remove 1/2" x 1 3/4" bolts, 1/2" lock washers and 1/2"-13 locknuts.
3. Reverse the skid shoes by switching them to opposite sides of the **Snow Blower** (ensuring they are both still on the outside). If worn, replace the skid shoes.
4. Re-insert bolts, washers, and nuts.

## Hydraulic Oil:

Hydraulic oil is an important part of your **Snow Blower**. Monitoring your hydraulic oil will prevent hydraulic failures and result in long-lasting equipment with good performance. Hydraulic oil level in the power unit should be checked daily, and the quality of the oil should be inspected every 50 hours. If the oil is dirty or smells burnt, it should be replaced. Be sure to relieve the system of pressure before performing any service on the hydraulic system.



### WARNING

- *Be aware that hydraulic leaks could develop without warning. Do not check for leaks with your hands or fingers while the system is pressurized.*



### WARNING

- *Personal injury can result from hydraulic oil pressure and hot oil. Hydraulic oil pressure can remain in the hydraulic system after the engine has been stopped. Serious injury can be caused if this pressure is not released before any service is done on the hydraulic system. Make sure all of the attachments have been lowered and the oil is cool before removing any components or lines. All hydraulic parts replacement should be performed by qualified personnel.*

## Lubrication:





To keep your **Skid Steer Snow Blower** in good condition, there are several areas that need to be lubricated on a regular basis and before entering storage. Use the legend below to determine lubrication spots and the type of lubrication required.

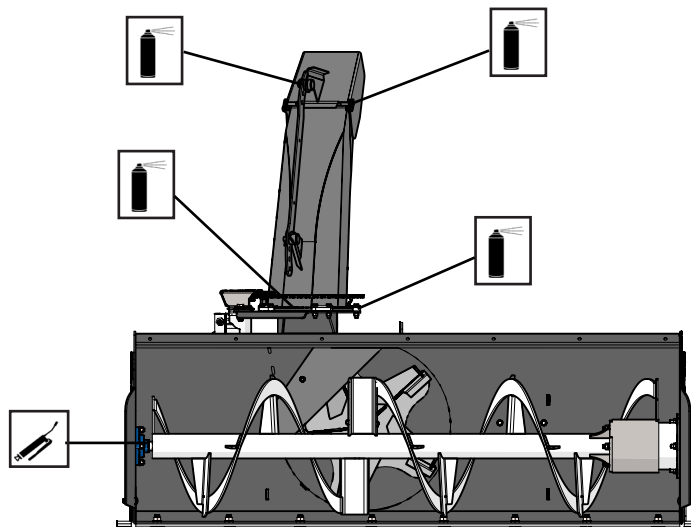


### CAUTION

- *Unusual play or noise could be an indication of worn parts. Inspect components before each use. Parts replacement should be done only by qualified personnel.*

### Lubrication Legend

	Multi-Purpose Spray Lube
	Multi-Purpose Oil Lube
	Multi-Purpose Grease Lube
	Intervals at which lubrication is required



**Grease:**

To prevent premature wear, use the table and images below that indicate which parts require grease lubrication at which frequency. Follow the Grease Lubrication Checklist.

Item	Description	Frequency (hrs)
1	Auger Bearing	20-40

Grease Lubrication Checklist		<input checked="" type="checkbox"/>
Lubricate with a good Lithium EP2 grease or equivalent.		
Use hand-held grease gun for all greasing. One shot of grease is adequate.		
Wipe grease zerk with a clean cloth before greasing, to avoid injecting dirt and grit.		
Replace any broken zerk fittings immediately.		
If grease zerk will not take grease, remove and clean thoroughly. Also clean lubricant passageway.		
Replace zerk fittings if necessary.		

**WARNING**


- Do not run the machine without the guard in place. The auger and fan are in motion and serious injury could result. Possible entanglement and amputation hazard.

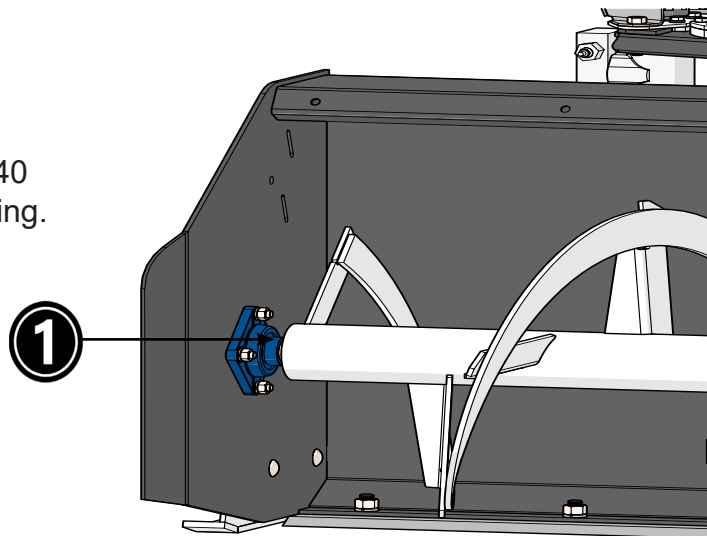


**CAUTION**

- Do not over-grease parts. Using too much grease can cause the seals to be forced off and allow dirt and debris to contaminate the bearing.



 Apply grease every 20-40 hours to the auger bearing.



## Oil Spray:

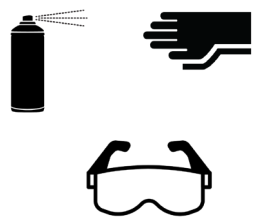
To ensure freedom of movement and prevent corrosion, use the table and images below that indicate which parts require oil lubrication at which frequency. Follow the Oil Lubrication Checklist.

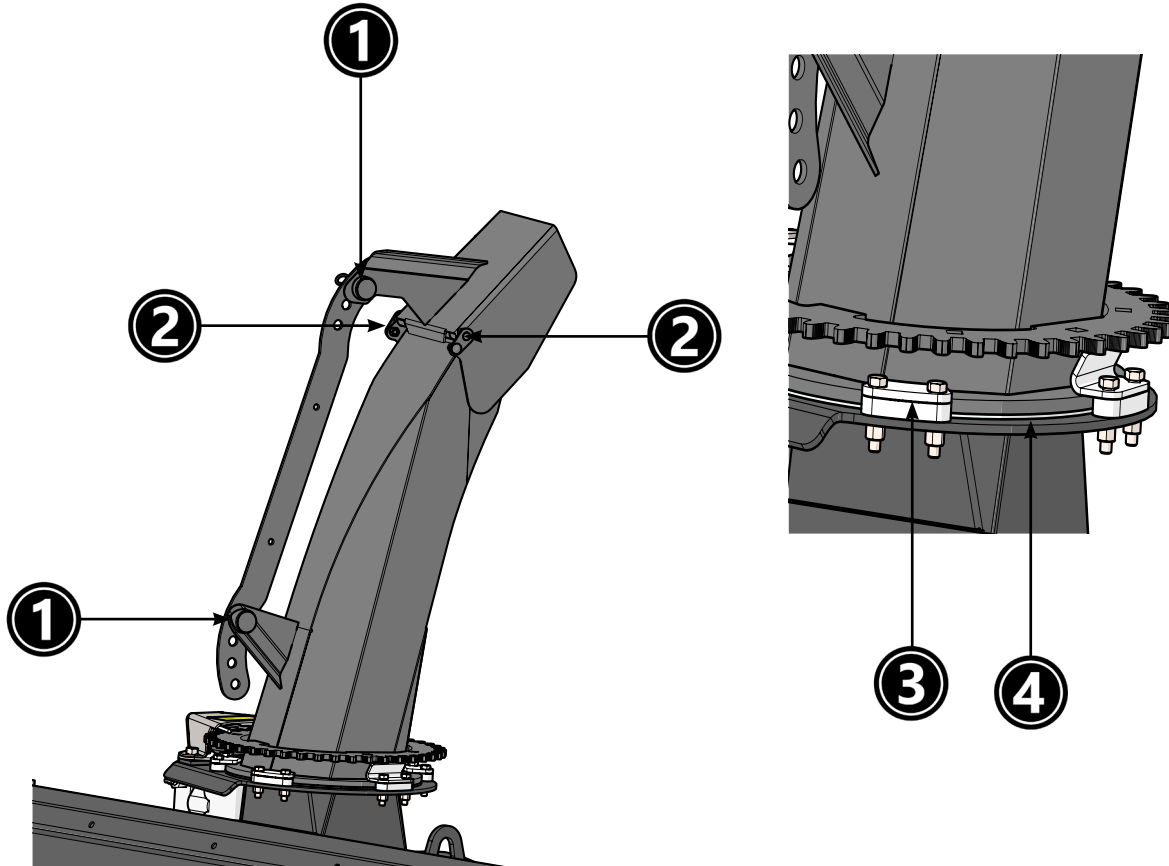
Item	Description	Frequency (hrs)
1	Deflector Adjuster Pins (x2)	50
2	Chute Deflector (x2)	50
3	Chute Slides (x5)	50
4	UHMW Ring	50

Oil Lubrication Checklist	<input checked="" type="checkbox"/>
Use a light oil or lubricating spray.	
Avoid contact with eyes. Wash off any oil that makes contact with skin or eyes immediately.	
Ensure you are in a well-ventilated area to avoid breathing in any harmful chemicals.	
When finished with application, return oil or spray to a dry location away from heat and sunlight.	

**⚠ WARNING**

- Lubricating spray can be harmful to eyes and skin. If contact is made, wash immediately. Wear PPE such as safety glasses and gloves to avoid personal injury.





## Bolt Torque Table

BOLT TYPE	SAE GRADE 5		SAE GRADE 8		LOCK NUTS			
	Nominal Size	Plated or Unplated Silver	Plated W/ ZnCr Gold	Plated or Unplated Silver	Plated W/ ZnCr Gold	Plated or Unplated Silver	Plated W/ ZnCr Gold	W/ Grade 5 Bolt
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)



## Troubleshooting

The following tables describes issues you could encounter with your **Skid Steer Snow Blower**, the possible cause, and the proposed solution. For any issue not listed below, call your local dealer.

Issue	Possible Cause	Solution
Chute will not rotate.	Hydraulic hose has a break, is obstructed, or is not connected properly.	See <b>Stop Operating</b> on p.48 and <b>Hydraulic Safety</b> on p.18. Visually inspect hose and connection. Replace hose if needed.
	Wire harness connection is loose.	See <b>Stop Operating</b> on p.49 and re-connect harness. Replace if wiring is damaged.
	There is ice built-up around the base of the chute.	See <b>Stop Operating</b> on p.49 and carefully remove ice.
Chute is getting clogged.	Auger is rotating too fast.	Decrease motor speed.
	Skid steer is moving too fast.	Decrease ground speed.
Discharge chute throws snow at the operator.	The chute was assembled incorrectly and the chute stop is not in it's proper location.	See <b>Stop Operating</b> on p.49 and re-assemble chute. See <b>Chute Assembly</b> on p.32.
Deflector does not throw snow the preferred distance.	Deflector angle has not been adjusted.	Adjust manual or hydraulic deflector.
Auger and/or impeller stalls (will not turn).	Hidden objects are stuck in auger or blower housing.	See <b>Stop Operating</b> on p.49 and carefully clear objects manually. See <b>Work Area Safety</b> on p.12.
Impeller is throwing small amounts of snow.	Inadequate snow to fill the impeller.	This is normal when clearing shallow snow.
	Skid steer is moving too slow.	Gradually increase ground speed.
Skid shoes are wearing too fast	Snow Blower is not parallel to ground.	See <b>Stop Operating</b> on p.49 and ensure blower is leveled.
Snow Blower makes intermittent clicking noise.	Auger flighting or fan blades are bent or broken.	Stop operation immediately. See <b>Stop Operating</b> on p.49. Repair/replace damaged parts.
Jerky or unwanted movements from hydraulic components.	Hydraulic pressure was not relieved before starting operation.	Ensure all air has been removed from hydraulic hoses. Verify case drain line is properly connected and free of debris.
Snow is left on the ground.	Skid shoes are too low to the ground.	See p.47 to re-adjust skid shoes.
	Skid steer loader plate is adjusted incorrectly.	Ensure skid steer mount plate is adjusted to the height of your skid steer. See p.46.

Snow Blower makes excessive noises or vibrates excessively.	Auger is making contact with the ground.	Adjust snow blower so that it is level with the ground or see p.47 to adjust skid shoes.
	Dirty or frozen snow is making contact with the auger.	Wait for snow to become softer and refrain from operating in unsafe weather conditions.
	Auger is making contact with hidden objects or material other than snow (ex. gravel).	See <b>Stop Operating</b> on p.49 and carefully clear objects manually. See <b>Work Area Safety</b> on p.12.
	Auger or fan is damaged.	Stop operation immediately, see p.49. Repair/replace damaged parts.

## Parts

The following pages contain illustrations of parts of the **Blue Diamond® Skid Steer Snow Blower** along with the part descriptions, numbers, and quantities for each of their respective models.

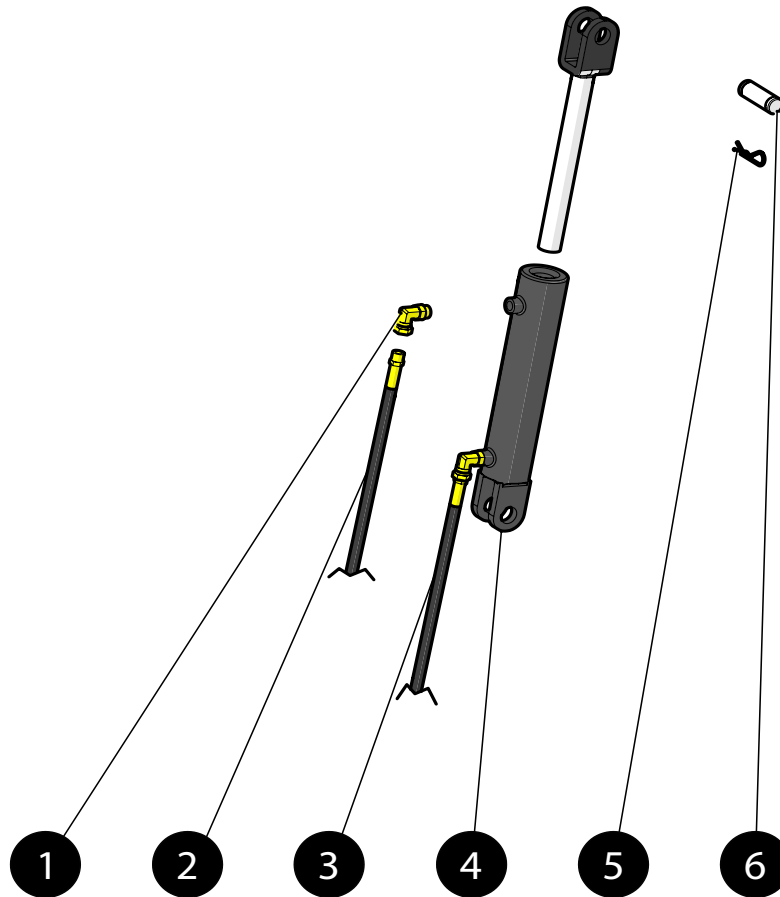
<b>Part</b>	<b>Page #</b>
<i>Hydraulic Deflector</i> .....	59
<i>Chute</i> .....	60
<i>Multi-Hinge Deflector</i> .....	62
<i>Skid Steer Mount Plate</i> .....	63
<i>Chute Rotator Assembly</i> .....	64
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<i>Fan Motor</i> .....	68
<i>Auger Motor</i> .....	70
<i>Hose Kit Components</i> .....	71
<i>Tivar Parts (Optional)</i> .....	74
 <i>Wire Harness</i> .....	 38



### NOTE

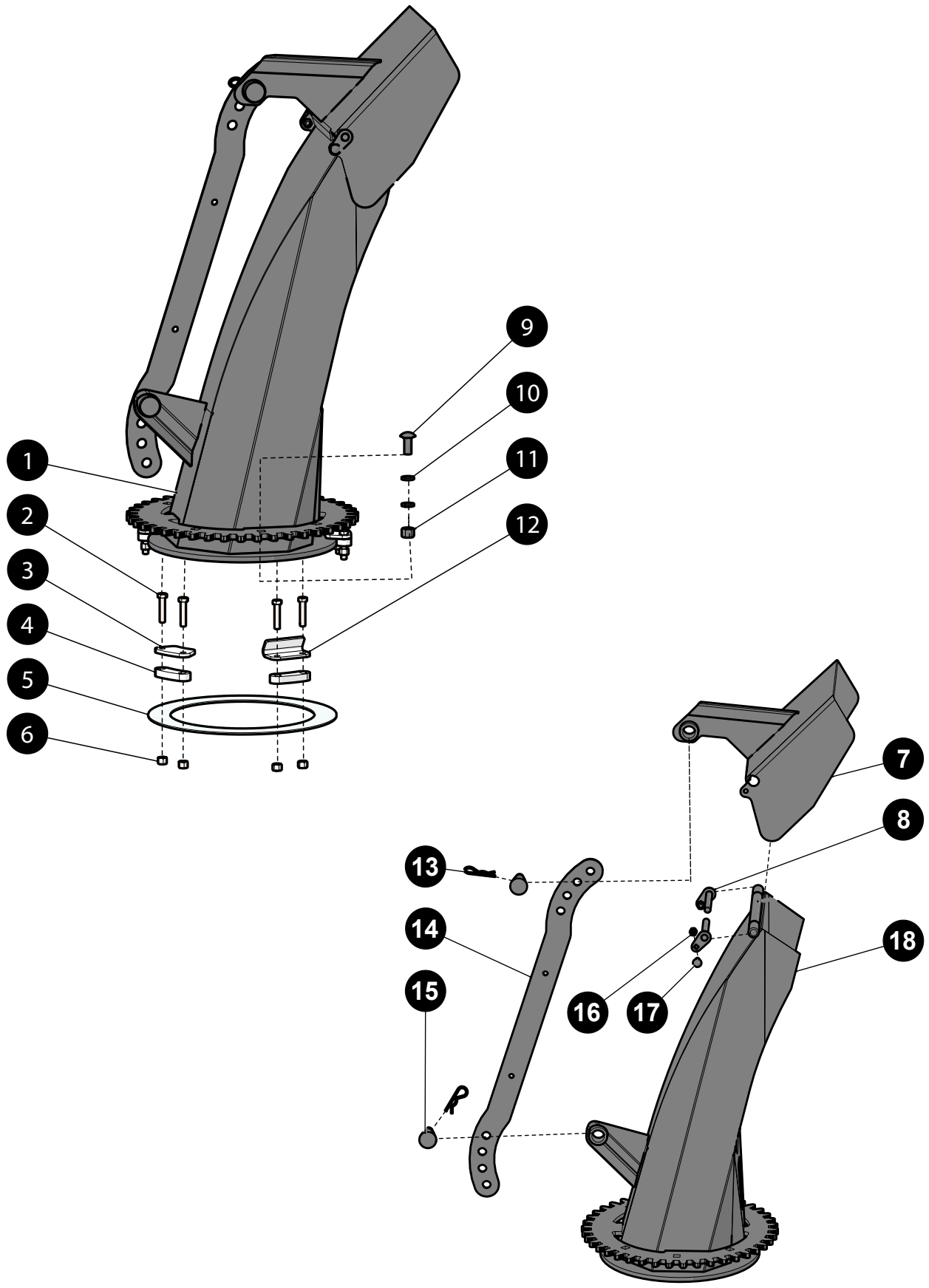
- In some cases, the quantity of a part may not be listed. Instead, it will say “n/a” or “—” in the qty column. This indicates that the part is being used in multiple places and the quantity has already been accounted for.

## Hydraulic Deflector:



Item	Part Number	Description	QTY				
			62"	66"	76"	86"	96"
1	295030-M08ORB-F06NPSM	Hydraulic 90 Degree Fitting Male #8 O-Ring Boss x Female #6 NPSM Swivel			2		
2	219782	Long Hose 95" OAL 3/8" ID Straight Male #6 NPT to 90 Degree Female #6 JIC Swivel			2		
3	219783	Long Hose 84" OAL 3/8" ID Straight Male #6 NPT to 90 Degree Female #6 JIC Swivel			2		
4	219784	Deflector Cylinder 2 1/2" x 8.0"			1		
5	—	5/32" x 3.0" R-Clip Cotter Pin			2		
6	219789	Deflector Cylinder Pin with Clips			2		

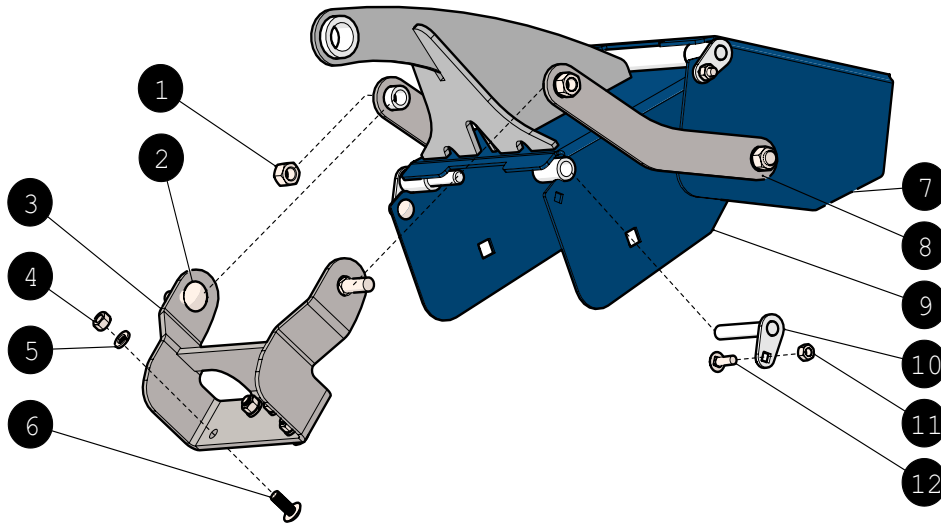
Chute:



**Chute Cont'd:**

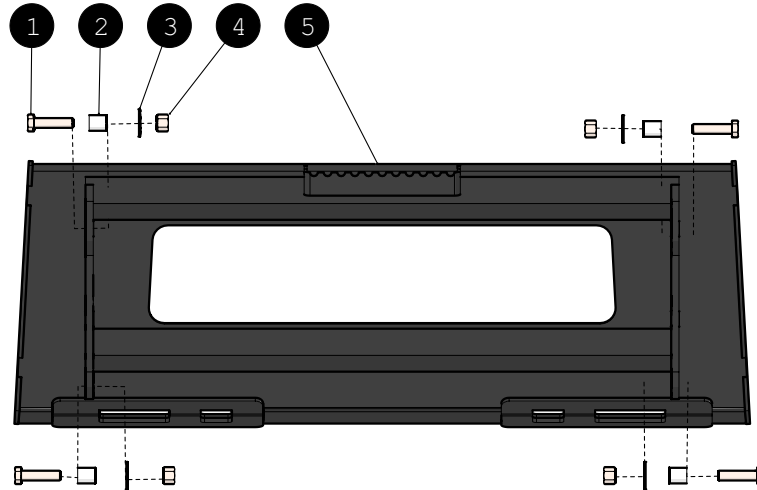
Item	Part Number	Description	QTY				
			62"	66"	76"	86"	96"
1	219785	Chute Assembly Manual Adjustment with Single Deflector			1		
2	299419	3/8"-16 x 1 3/4" Bolt Hex Head			10		
3	219712	Chute Holder			4		
4	219713	Chute Slide			5		
5	219714	UHMW Ring			1		
6	299625	3/8"-16 Nylock Nut Hex Head			10		
7	219715	Deflector			1		
8	219716	Hinge Pin			2		
9	—	1/2"-13 x 1 1/4" Carriage Bolt			1		
10	299830	1/2" Lock Washer Grade 8			2		
11	299618	1/2"-13 Nylock Nut Hex Head			1		
12	219717	Chute Stop			1		
13	—	5/32" x 3.0" R-Clip Cotter Pin			2		
14	219710	Deflector Manual Adjuster Bar 8.0" Range			1		
15	219711	Deflector Manual Adjustment Bar Pin			3		
16	—	5/16"-18 Nylock Nut			2		
17	—	5/16"-18 x 1.0" Carriage Bolt			2		
18	219790	Chute Weldment			1		

## Multi-Hinge Deflector:



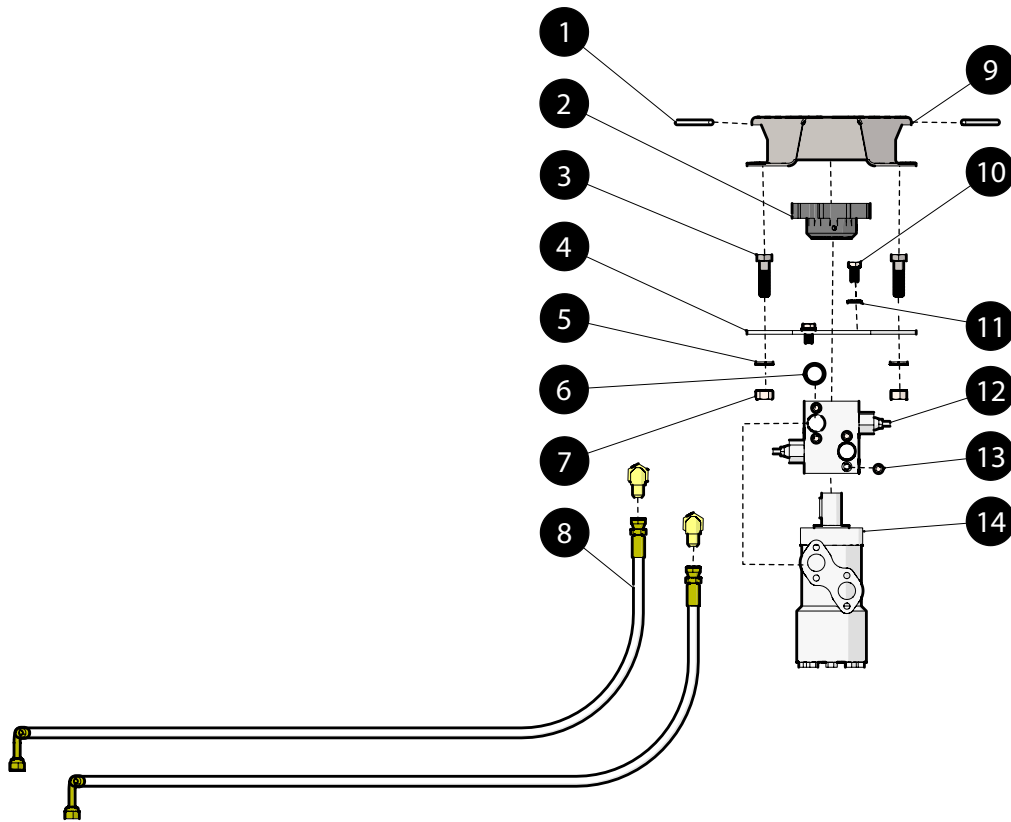
Item	Part Number	Description	QTY				
			62"	66"	76"	86"	96"
1	299618	1/2"-13 Nylock Nut Hex Head			4		
2	299337	1/2"-13 x 1 3/4" Carriage Bolt			4		
3	219778	Hinge Bracket			1		
4	299572	3/8"-16 Nut Hex Head			4		
5	299825	3/8" Lock Washer			4		
6	—	3/8"-16 x 1.0" Machine Bolt Slot Drive			4		
7	219779	First Deflector			1		
8	219780	Hinge Tie Plate			2		
9	219781	End Deflector			1		
10	219716	Hinge Pin			2		
11	299620	5/16"-18 Nylock Nut Hex Head			4		
12	—	5/16"-18 x 1.0" Carriage Bolt			4		
—	219786	Multi-Hinge Deflector Assembly			1		

## Skid Steer Mount Plate:



Item	Part Number	Description	QTY				
			62"	66"	76"	86"	96"
1	299443	5/8"-11 x 2 1/2" Cap Screw Socket Head	4				
2	219718	Bolt Bushing	4				
3	299847	0.134" x 5/8" x 1 3/4" Flat Washer	4				
4	299627	5/8"-11 Nylock Nut Hex Head	4				
5	219719	Mount Plate	1				

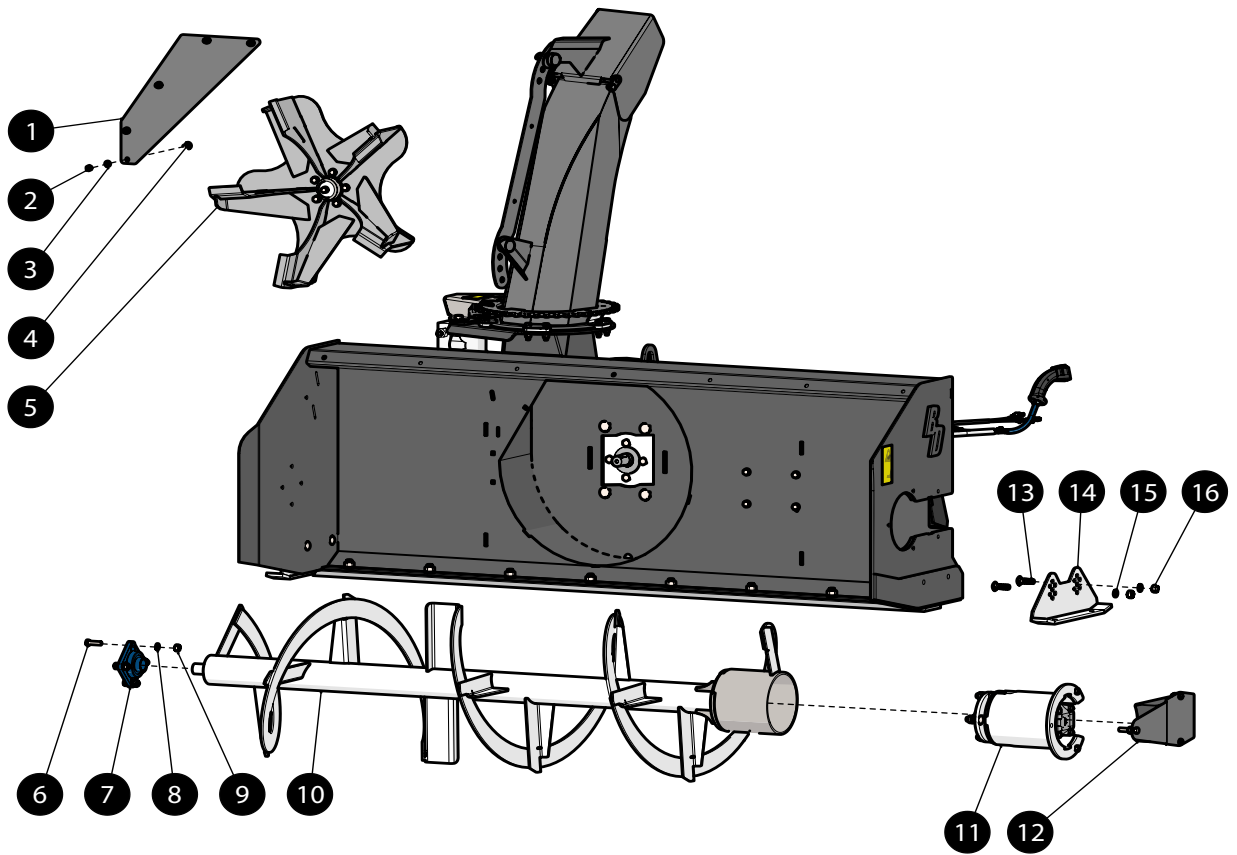
## Chute Rotator Assembly:



Item	Part Number	Description	QTY				
			62"	66"	76"	86"	96"
1	219720	9 Tooth Gear			1		
2	—	1/2"-20 x 2.0" Bolt Hex Head Fine Thread			2		
3	219721	Motor Mount			1		
4	299830	1/2" Lock Washer			2		
5	219763	O-Ring Motor to Valve Block			2		
6	299574	1/2"-13 Nut Hex Head			2		
7	see p.65	Hose Kit			1		
8	219722	Shield			1		
9	299424	3/8"-16 x 3/4" Bolt Hex Head			4		
10	299825	3/8" Lock Washer Zinc			4		
11	219787	Motor with Crossover Relief Valve Block			1		
12	—	5/16"-18 x 1 1/2" Bolt Socket Head			4		



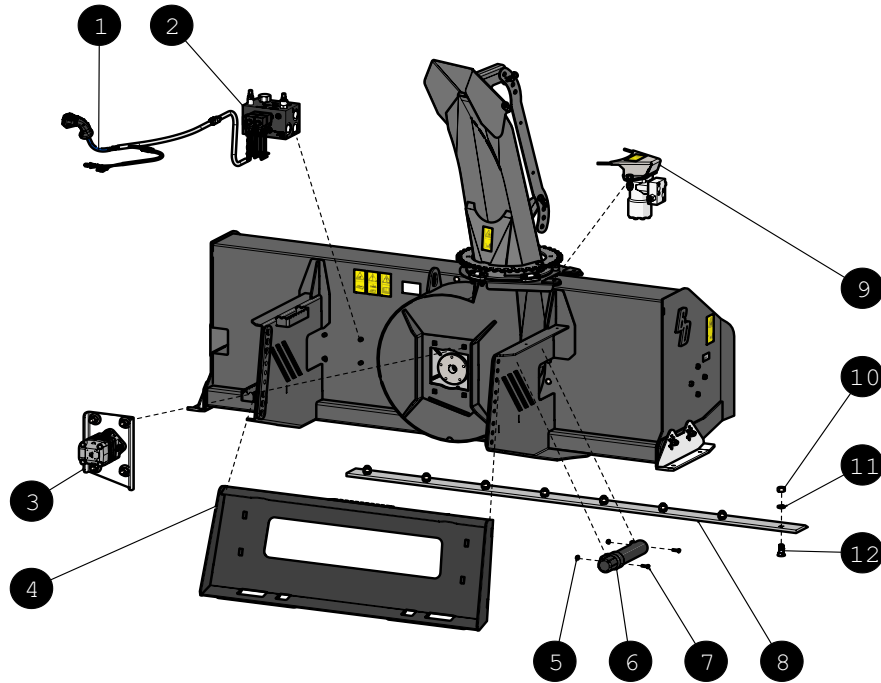
# Skid Steer Snow Blower - Front View:



**Skid Steer Snow Blower - Front View Cont'd:**

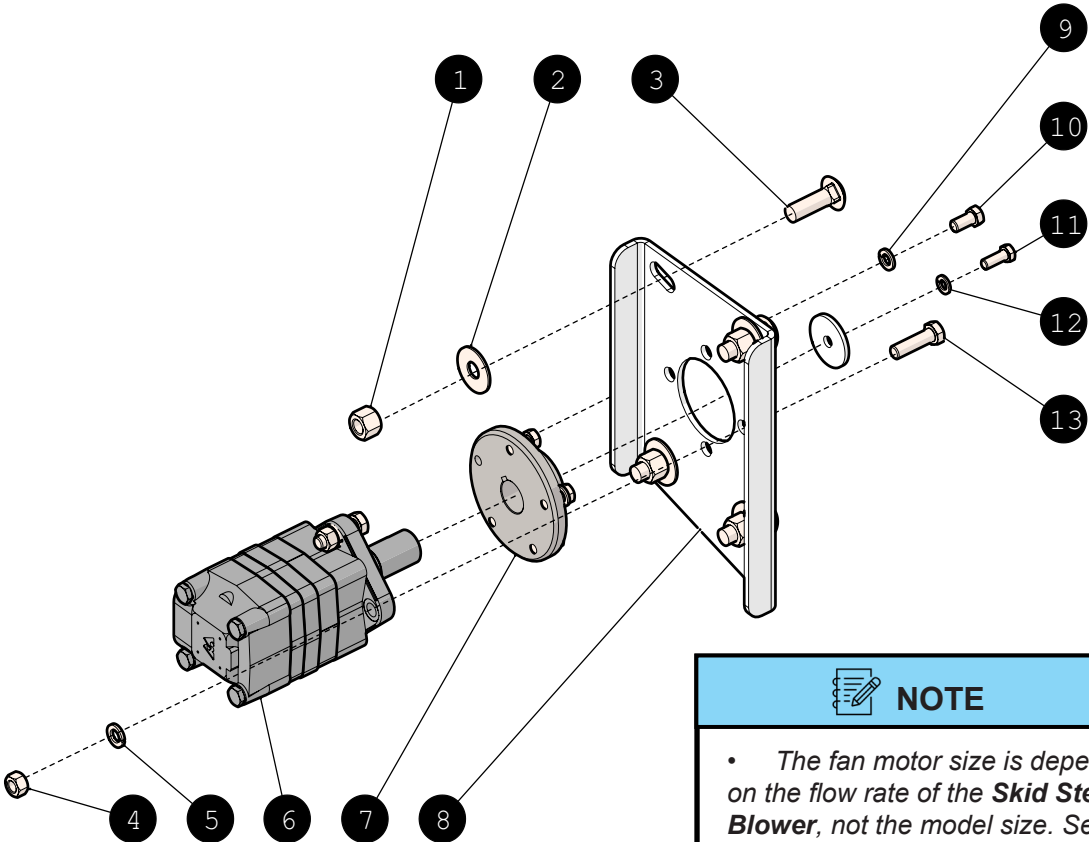
Item	Part Number	Description	QTY				
			62"	66"	76"	86"	96"
1	219723	24" Fan Cover	1	1	1	—	—
	219724	26" Fan Cover	—	—	—	1	1
2	299625	3/8"-16 Nylock Nut Hex Head	10				
3	299825	3/8" Lock Washer	12				
4	299403	3/8"-16 x 1.0" Carriage Bolt Grade 8 Zinc Yellow Chromate Plated	5				
5	219725	24" Fan	1	1	1	—	—
	219726	26" Fan	—	—	—	1	1
6	299450	7/16"-14 x 1 1/2" Bolt Hex Head	4				
7	219727	Rotor Bearing Non-Drive Side	1				
8	299573	7/16"-14 Nut Hex Head	7				
9	299835	0.109" x 7/16" x 0.776" Lock Washer	11				
10	219728	62" Auger Weldment	1	—	—	—	—
	219729	66" Auger Weldment	—	1	—	—	—
	219730	76" Auger Weldment	—	—	1	—	—
	219731	86" Auger Weldment	—	—	—	1	—
	219732	96" Auger Weldment	—	—	—	—	1
11	see p. 63	Auger Motor Assembly	1				
12	see p. 63	Auger Hose Cover	1				
13	299337	1/2"-13 x 1 3/4" Carriage Bolt	8				
14	219733	Skid Shoe	2				
15	299830	1/2" Lock Washer	14				
16	299574	1/2"-13 Nut Hex Head	12				

## Skid Steer Snow Blower - Back View:



Item	Part Number	Description	QTY				
			62"	66"	76"	86"	96"
1	see p. 38	Wire Harness	1				
2	219764	Manifold Block Assembly	1				
3	see p. 68	Fan Motor	1				
4	see p. 63	Skid Steer Mount Plate	1				
5	299560	1/4"-20 Nut Serrated Flange	2				
6	216401	Operator's Manual Tube	1				
7	—	1/4"-20 X 1.0" Bolt Phillips Pan Head	2				
8	219734	1/2" x 4.0" x 62.0" Single Bevel Cutting Edge	1	—	—	—	—
	219735	1/2" x 4.0" x 66.0" Single Bevel Cutting Edge	—	1	—	—	—
	219736	1/2" x 4.0" x 76.0" Single Bevel Cutting Edge	—	—	1	—	—
	219737	1/2" x 4.0" x 86.0" Single Bevel Cutting Edge	—	—	—	1	—
	219738	1/2" x 4.0" x 96.0" Single Bevel Cutting Edge	—	—	—	—	1
9	see p. 64	Chute Rotator Assembly	1				
10	299575	5/8"-11 Nut Hex Head	7	7	8	9	10
11	299845	5/8" Lock Washer	7	7	8	9	10
12	—	5/8"-11 x 1 3/4" Plow Bolt	7	7	8	9	10

Fan Motor:



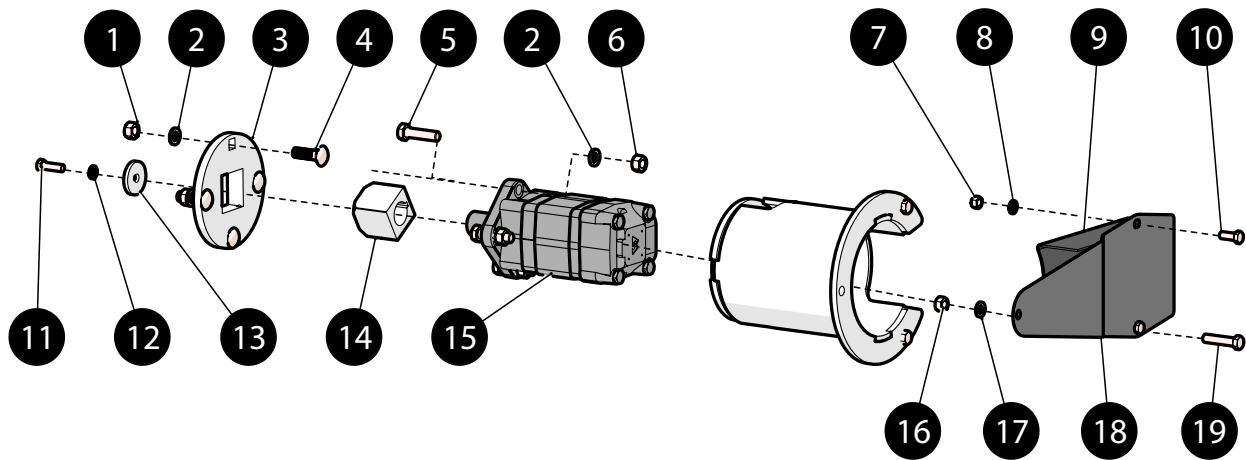
**NOTE**

- The fan motor size is dependent on the flow rate of the **Skid Steer Blower**, not the model size. See p.26 for information on which package is best suited for each flow rate.

**Fan Motor Cont'd:**

Item	Part Number	Description	QTY					
			A	B	B+	C	C+	D
1	299627	5/8"-11 Nylock Nut Hex Head	4					
2	299847	0.134" x 5/8" x 1 3/4" Flat Washer	4					
3	220827	5/8"-11 x 2.0" Carriage Bolt	4	4	4	—	—	—
	299481	5/8"-11 x 2 1/2" Carriage Bolt	—	—	—	4	4	4
4	299574	1/2"-13 Nut Hex Head	4					
5	299830	1/2" Lock Washer	4					
6	219765	Fan Drive Motor (14-17 GPM)	1	—	—	—	—	—
	219766	Fan Drive Motor (17-20 GPM)	—	1	—	—	—	—
	219767	Fan Drive Motor (20-22 GPM)	—	—	1	—	—	—
	219768	Fan Drive Motor (23-26 GPM)	—	—	—	1	—	—
	219769	Fan Drive Motor (27-33 GPM)	—	—	—	—	1	—
	219770	Fan Drive Motor (33-40 GPM)	—	—	—	—	—	1
7	219739	Fan Hub 1.25 Keyed (14-22 GPM Models)	1	1	1	—	—	—
	219740	Fan Hub 1.5 Keyed (23-40 GPM Models)	—	—	—	1	1	1
8	219771	Fan Motor Mount (14-22 GPM Models)	1	1	1	—	—	—
	219741	Fan Motor Mount (23-40 GPM Models)	—	—	—	1	1	1
9	299835	0.109" x 7/16" x 0.776" Lock Washer	5					
10	—	7/16"-14 X 7/8" Bolt Hex Head	5					
11	299423	3/8"-16 x 1.0" Bolt Hex Head	1	1	1	—	—	—
	299426	3/8"-16 x 1 1/4" Bolt Hex Head	—	—	—	1	1	1
12	299825	3/8" Lock Washer	1					
13	299439	1/2"-13 x 1 3/4" Bolt Hex Head	4	4	4	—	—	—
	231065	1/2"-13 X 3.0" HCS Bolt	—	—	—	4	4	4

## Auger Motor:

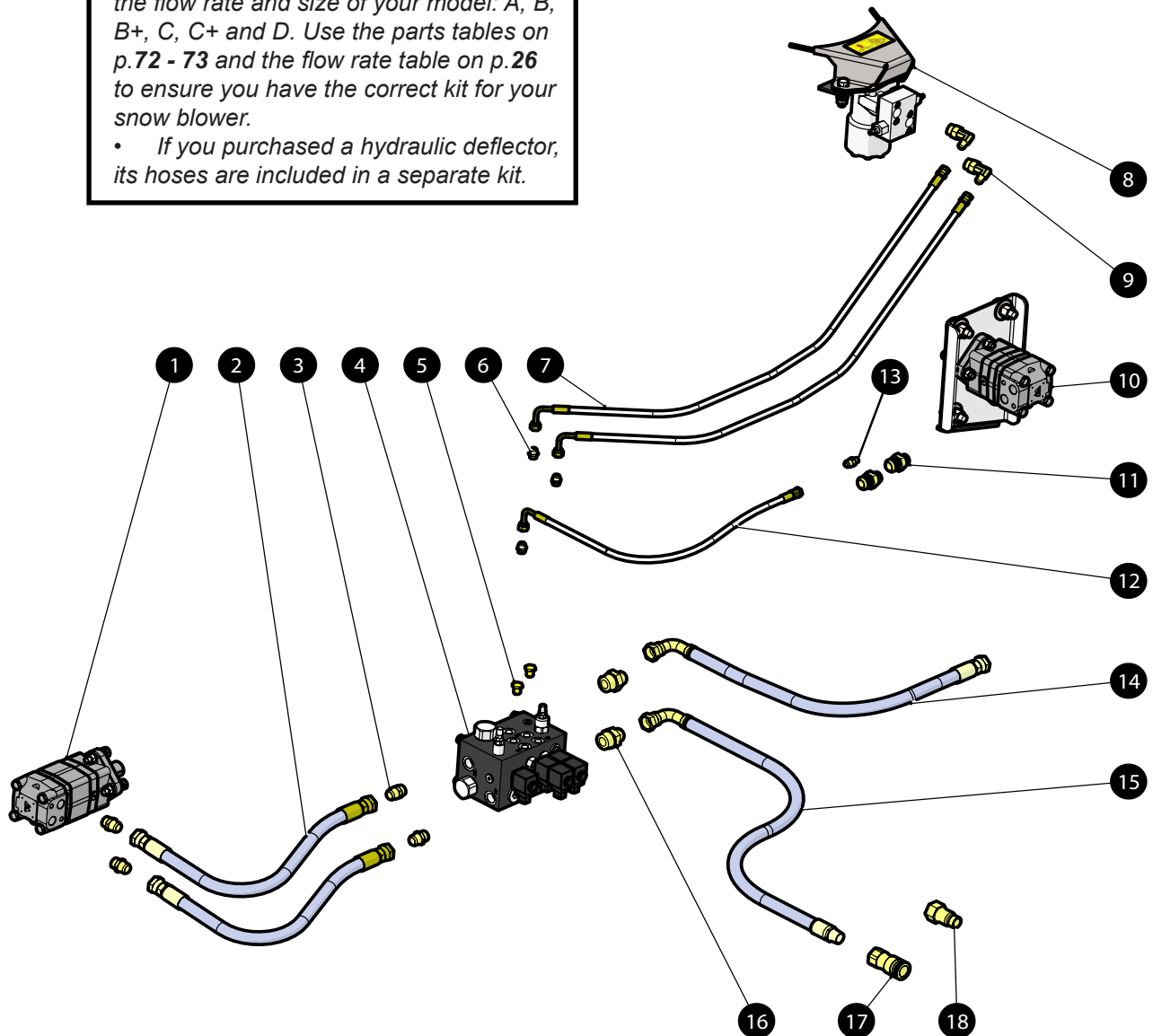


Item	Part Number	Description	QTY				
			62"	66"	76"	86"	96"
1	299574	1/2"-13 Nut Hex Head			12		
2	299830	1/2" Lock Washer			14		
3	219742	Square Drive Plate			1		
4	299337	1/2"-13 x 1 3/4" Carriage Bolt			8		
5	232265	1/2"-13 x 2.0" Bolt			4		
6	299574	1/2"-13 Nut Hex Head			—		
7	299572	3/8"-16 Nut Hex Head			7		
8	299825	3/8" Lock Washer			12		
9	219743	Hose Housing			1		
10	299423	3/8"-16 x 1.0" Bolt Hex Head			6		
11	299426	3/8"-16 x 1 1/4" Bolt Hex Head			1		
12	299725	3/8" Flat Washer			—		
13	219744	Auger Drive Washer			1		
14	219745	Square Coupler for 1 1/4 Keyed Shaft Motor			1		
15	219772	Auger Motor 1 1/4 Keyed Shaft			1		
16	299573	7/16"-14 Nut Hex Head			7		
17	299835	0.109" x 7/16" x 0.776" Lock Washer			11		
18	219746	Hose Guard			1		
19	299452	7/16"-14 x 2.0" x 1 1/8" Bolt Hex Head			3		

## Hose Kit Components:

### NOTE

- There are 6 different hydraulic hose kit packages that are provided based on the flow rate and size of your model: A, B, B+, C, C+ and D. Use the parts tables on p.72 - 73 and the flow rate table on p.26 to ensure you have the correct kit for your snow blower.
- If you purchased a hydraulic deflector, its hoses are included in a separate kit.



## Hose Kit Components Cont'd:

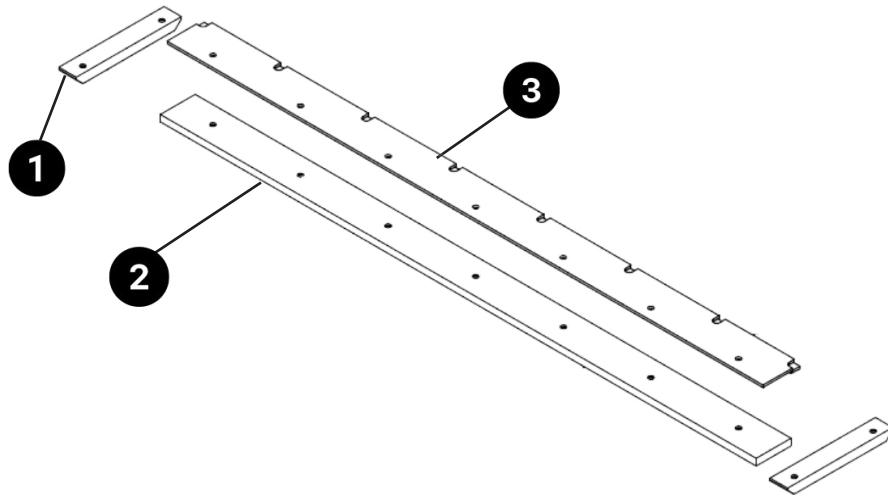
Item	Part Number	Description	QTY					
			A	B	B+	C	C+	D
1	see p.70	Auger Motor	1					
2	219747	62" & 66" Auger Motor Hose 19" OAL, 3/4" ID Straight Female #10 JIC Swivel Both Ends	There are two (2) auger motor hoses for each model size. See note on p. 71.					
	219748	76" Auger Motor Hose 24" OAL, 3/4" ID Straight Female #10 JIC Swivel Both Ends						
	219749	86" Auger Motor Hose 29" OAL, 3/4" ID Straight Female #10 JIC Swivel Both Ends						
	219750	96" Auger Motor Hose 37" OAL, 3/4" ID Straight Female #10 JIC Swivel Both Ends						
3	295010-M10ORB- M10JIC	Hydraulic Straight Fitting Male #10 O-Ring Boss x Male #10 JIC	4					
4	219764	Manifold Block Assembly	1					
NS	see p.38	Wire Harness	1					
5	295005-M06ORB	Hydraulic Hex Plug Fitting Male #6 O-Ring Boss	2					
6	295010-M06JIC- M06ORB	Hydraulic Straight Fitting Male #6 JIC x Male #6 O-Ring Boss	3					
7	219751	Chute Rotator Hose 50" OAL 1/4" ID 90 Degree Female #6 JIC Swivel to Straight Female #6 JIC Swivel	2					
8	see p.64	Chute Rotator Assembly	1					
9	295030-M10ORB- M06JIC	Hydraulic 90 Degree Fitting Male #10 O-Ring Boss x Male #6 JIC	2					
10	see p.68	Fan Motor Assembly	1					
11	295010-M12JIC- M10ORB	Hydraulic Straight Fitting Male #12 JIC x Male #10 O-Ring Boss	1	1	1	—	—	—
	295010-M12JIC- M12ORB	Hydraulic Straight Fitting Male #12 JIC x Male #12 O-Ring Boss	—	—	—	1	1	—
	295010-M16JIC- M12ORB	Hydraulic Straight Fitting Male #16 JIC to Male #12 O-Ring Boss	—	—	—	—	—	1



### Hose Kit Components Cont'd:

Item	Part Number	Description	QTY					
			A	B	B+	C	C+	D
12	219752	Fan Motor Case Drain Hose 30" OAL 1/4" ID 90 Degree Female #6 JIC Swivel to Straight Female #6 JIC Swivel	1					
13	295010-M06JIC- M04ORB	Case Drain Hydraulic Straight Fitting Male #6 JIC x Male #4 O-Ring Boss	1	1	1	1	1	—
	295010-M06JIC- M06ORB	Case Drain Hydraulic Straight Fitting Male #6 JIC x Male #6 O-Ring Boss	—	—	—	—	—	1
14	219753	Fan Motor Hose 26" OAL 3/4" ID 90 Degree Female #12 JIC Swivel to Straight Female #12 JIC Swivel (14-33 GPM Models)	2	2	2	2	2	—
	219754	Fan Motor Hose 24" OAL 1.0" ID 90 Degree Female #16 JIC Swivel to Straight Female #16 JIC Swivel (33-40 GPM Models)	—	—	—	—	—	2
15	219755	Machine Hose 84" OAL 3/4" ID 90 Degree Female #12 JIC Swivel to Straight Male #12 NPT (14-33 GPM Models)	2	2	2	2	2	—
	219756	Machine Hose 84" OAL 1.0" ID 90 Degree Female #16 JIC Swivel to Straight Male #16 NPT (33-40 GPM Models)	—	—	—	—	—	2
16	295010-M12JIC- M16ORB	Hydraulic Straight Fitting Male #12 JIC x Male #16 O-Ring Boss	4	4	4	4	4	—
	295010-M16ORB- M16JIC	Hydraulic Straight Fitting Male #16 O-Ring Boss x Male #16 JIC	—	—	—	—	—	4
17	224022	Coupler Female Flat Face 1/2" Body 3/4" Female NPT	1	1	1	1	1	—
	224024	Coupler Female Flat Face 3/4" Body 1.0" Female NPT	—	—	—	—	—	1
18	224023	Coupler Male Flat Face 1/2" Body 3/4" Female NPT	1	1	1	1	1	—
	224025	Coupler Male Flat Face 3/4" Body 1.0" Female NPT	—	—	—	—	—	—

**Tivar Parts:**



Item	Part Number	Description	QTY				
			62"	66"	76"	86"	96"
1	219757	Tivar Skid Shoe	2				
2	219758	62" Tivar Cutting Edge	1	—	—	—	—
	219759	66" Tivar Cutting Edge	—	1	—	—	—
	219760	76" Tivar Cutting Edge	—	—	1	—	—
	219761	86" Tivar Cutting Edge	—	—	—	1	—
	219762	96" Tivar Cutting Edge	—	—	—	—	1
3	219773	62" Backing Plate	1	—	—	—	—
	219774	66" Backing Plate	—	1	—	—	—
	219775	76" Backing Plate	—	—	1	—	—
	219776	86" Backing Plate	—	—	—	1	—
	219777	96" Backing Plate	—	—	—	—	1

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