

SCHULTE®

SDX - 102

SNOW REMOVAL

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Part No. B102-010C

OPERATOR'S MANUAL



This Operator's Manual is an integral part of the safe operation of this machine and must be maintained with the unit at all times. **READ, UNDERSTAND, and FOLLOW** the Safety and Operation Instructions contained in this manual before operating the equipment. *C01-Cover str*



FC-S-0027

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To the Owner/Operator/Dealer

All implements with moving parts are potentially hazardous. There is no substitute for a cautious, safe-minded operator who recognizes the potential hazards and follows reasonable safety practices. The manufacturer has designed this implement to be used with all its safety equipment properly attached to minimize the chance of accidents.

BEFORE YOU START!! Read the safety messages on the implement and shown in your manual. Observe the rules of safety and common sense!

 DANGER			
FAILING TO FOLLOW SAFETY MESSAGES AND OPERATING INSTRUCTIONS CAN CAUSE DEATH OR SERIOUS INJURY TO OPERATOR OR OTHERS IN THE AREA.			
1. READ MANUAL. 	2. NO RIDERS, NO CHILDREN OPERATORS. 	3. USE SEATBELTS, ROPS AND PPE. 	4. BLOCKUP SECURELY BEFORE WORKING UNDER. 
<ol style="list-style-type: none">1. Study and understand Operator's Manuals, Safety Signs, and Instructional Decals for tractor & implement to prevent misuse, abuse & accidents. Learn how to stop engine suddenly in an emergency. Be alert for passers by and children.2. Allow no children on or near implement or tractor. Allow no riders on tractor or implement. Falling off can cause death or serious injury from being run over by tractor or implement or contact with rotating components.3. Operate only with tractor having Roll-Over Protective Structure (ROPS) and with seatbelt fastened securely and snugly to prevent death or serious injury from falling off tractor or tractor overturn. Personal Protective Equipment such as Hard Hat, Safety Glasses with side shields (marked to comply with ANSI Z87), Safety Shoes, and Ear Plugs are recommended.4. Block up or support raised machine and all lifted components securely before putting hands or feet under or working underneath any lifted component to prevent death or crushing injury from sudden inadvertent dropping. Make certain that area is clear before lowering.5. Before transporting, put Lift Lever in Lift (Detent) position and follow traffic codes. Slow down at night, in turns and on hillsides.6. Make certain that SMV sign, Warning Lights and Reflectors are clearly visible7. Do not back or operate implement in the reverse direction, possible rocks or debris can fly out and cause death or serious injury.8. Before dismounting, secure implement in transport position or lower to ground. Stop PTO, put tractor in park or set Brake, stop engine and remove key. Never mount or dismount a moving vehicle. Crushing from run over may cause death or serious injury. <p style="text-align: right;">226-331</p>			
5. TRANSPORT SAFELY. 	6. USE SMV, LIGHTS AND REFLECTORS. 	7. DO NOT OPERATE WITH UNIT RAISED 	8. DO NOT MOUNT OR DISMOUNT WHILE MOVING. 

WARRANTY INFORMATION:

Read and understand the complete Warranty Statement found in this Manual. Fill out the Warranty Registration Form in full and return it to within 30 Days. Make certain the Serial Number of the Machine is recorded on the Warranty Card and on the Warranty Form that you retain.

DEALER'S PREDELIVERY SERVICE GUIDE

for the SCHULTE SNOW BLOWER SDX-102

DETAILS OF ITEMS LISTED BELOW ARE COVERED IN THIS OPERATOR'S MANUAL

- Shipping damage corrected
 - Set up machine as outlined in the shipping instructions attached to these instructions.
 - Check that all safety decals are in good condition, replace if necessary.
 - Check that gearboxes have been filled with oil.
 - Check that all grease fittings have been lubricated.
-

DEALER'S DELIVERY GUIDE

for the SCHULTE SNOW BLOWER SDX-102

- Mounting and removal from tractor
- Operation
- Adjustments
- Lubrication
- Maintenance
- Operator's safety precautions
- User's responsibility and warranty
- Operator's manual delivered to owner
- Operator instructed on contents of owner's manual

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SAFETY SECTION

Safety Section 1-1

SAFETY

GENERAL SAFETY INSTRUCTIONS AND PRACTICES

A careful operator is the best operator. Safety is of primary importance to the manufacturer and should be to the owner/operator. Most accidents can be avoided by being aware of your equipment, your surroundings, and observing certain precautions. The first section of this manual includes a list of Safety Messages that, if followed, will help protect the operator and bystanders from injury or death. Read and understand these Safety Messages before assembling, operating or servicing this Implement. This equipment should only be operated by those persons who have read the manual, who are responsible and trained, and who know how to do so responsibly.



The Safety Alert Symbol combined with a Signal Word, as seen below, is used throughout this manual and on decals which are attached to the equipment. The Safety Alert Symbol means: "ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!" The Symbol and Signal Word are intended to warn the owner/operator of impending hazards and the degree of possible injury faced when operating this equipment.

Practice all usual and customary safe working precautions and above all--remember safety is up to YOU. Only YOU can prevent serious injury or death from unsafe practices.



Indicates an imminently hazardous situation that, if not avoided, WILL result in DEATH OR VERY SERIOUS INJURY.



Indicates an imminently hazardous situation that, if not avoided, COULD result in DEATH OR SERIOUS INJURY.



Indicates an imminently hazardous situation that, if not avoided, MAY result in MINOR INJURY.



Identifies special instructions or procedures that, if not strictly observed, could result in damage to, or destruction of the machine, attachments or the environment.

NOTE: *Identifies points of particular interest for more efficient and convenient operation or repair.* (SG-1) str

READ, UNDERSTAND, and FOLLOW the following Safety Messages. Death or serious injury may occur unless care is taken to follow the warnings and instructions stated in the Safety Messages. Always use good common sense to avoid hazards. (SG-2) str



Si no lee ingles, pida ayuda a alguien que si lo lea para que le traduzca las medidas de seguridad. (SG-3) str

¡ LEA EL INSTRUCTIVO!



SAFETY

SAFETY

OPERATOR SAFETY INSTRUCTIONS AND PRACTICES

WARNING

The rotating parts of this machine continue to rotate even after the PTO has been turned off. The operator should remain in the operator's seat for 60 seconds after the brake has been set, the PTO disengaged, the tractor turned off, and all evidence of rotation has ceased. (S3PT-10) str

10) str

"Wait a minute...Save a life!"

WARNING

Never crawl under a raised Implement supported solely by the Tractor 3-Point hitch. Release of the control lever or mechanical failure will result in the Implement falling and possible injury or death. Always securely block up the Implement before crawling underneath to perform repairs and service. (S3PT-19) str

DANGER

Never operate the Tractor or Implement until you have read and completely understand this Manual, the Tractor Operator's Manual, and each of the Safety Messages found in the Manual or on the Tractor and Implement. Learn how to stop the tractor engine suddenly in an emergency. Never allow inexperienced or untrained personnel to operate the Tractor or Implement without supervision. Make sure the operator has fully read and understood the manuals prior to operation.

(SG-4)str



WARNING

The operator and all support personnel should wear hard hats, safety shoes, safety glasses, and proper hearing protection at all times for protection from injury including injury from items that may be thrown by the equipment. (SG-16)str



CAUTION

PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PERMANENT HEARING LOSS! Tractors with or without an Implement attached can often be noisy enough to cause permanent hearing loss. We recommend that you always wear hearing protection if the noise in the Operator's position exceeds 80db. Noise over 85db over an extended period of time will cause severe hearing loss. Noise over 90db adjacent to the Operator over an extended period of time will cause permanent or total hearing loss. **NOTE:** *Hearing loss from loud noise [from tractors, chain saws, radios, and other such sources close to the ear] is cumulative over a lifetime without hope of natural recovery.* (SG-17)str



WARNING

Always read carefully and comply fully with the manufacturer's instructions when handling oil, solvents, cleansers, and any other chemical agent. (SG-22)str



SAFETY



KEEP AWAY FROM ROTATING ELEMENTS to prevent entanglement and possible death or serious injury. (SG-24)str



Never allow children to play on or around Tractor or Implement. Children can slip or fall off the Equipment and be killed or injured. Inadvertent contact with controls can cause the Implement to shift or fall crushing themselves or others. (SG-25) str



DO NOT use drugs or alcohol immediately before or while operating the Tractor and Implement. Drugs and alcohol will affect an operator's alertness and coordination and therefore affect the operator's ability to operate the equipment safely. Before operating the Tractor or Implement, an operator on prescription or over-the-counter medication must consult a medical professional regarding any side effects of the medication that would hinder their ability to operate the Equipment safely. NEVER knowingly allow anyone to operate this equipment when their alertness or coordination is impaired. Serious injury or death to the operator or others could result if the operator is under the influence of drugs or alcohol. (SG-27) str



Prolonged operation may cause operator boredom and fatigue affecting safe operation. Take scheduled work breaks to help prevent these potentially impaired operating conditions. Never operate the Implement and Tractor in a fatigued or bored mental state which impairs proper and safe operation. (SG-32) str



Use extreme caution when getting onto the Implement to perform repairs, maintenance and when removing accumulated material. Only stand on solid flat surfaces to ensure good footing. Use a ladder or raised stand to access high spots which cannot be reached from ground level. Slipping and falling can cause serious injury or death. (SG-33) str



DO NOT operate this Implement on a Tractor that is not properly maintained. Should a mechanical or Tractor control failure occur while operating, immediately shut down the Tractor and perform repairs before resuming operation. Serious injury and possible death could occur from not maintaining this Implement and Tractor in good operating condition. (SG-36) str



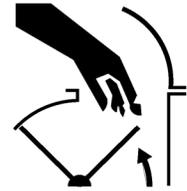
Do Not put hands or feet near the rotating auger. Auger contact can result in serious injury or even death. Stay away until all motion has stopped and the snow blower is securely blocked up before removing material, performing service, and making repairs. (SSB-5)str



SAFETY



Do not put hands or feet near the rotating fan. Fan contact can result in serious injury or even death. Stay away until all motion has stopped and the snow blower is securely blocked up before removing material, performing service, and making repairs. (SSB-6)str



Do not operate the implement while wearing loose fitting clothing. Entanglement of the clothing with the rotating elements can result in serious injury or even death. Stay clear of all rotating elements at all times. (SSP-03)str

SAFETY

EQUIPMENT OPERATION SAFETY INSTRUCTIONS AND PRACTICES



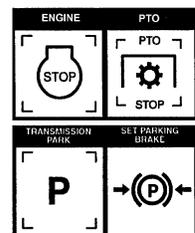
This Implement may be wider than the Tractor. Be careful when operating or transporting this equipment to prevent the Implement from running into or striking sign posts, guard rails, concrete abutments or other solid objects. Such an impact could cause the Implement and Tractor to pivot violently resulting in loss of steering control, death, or serious injury. Never allow the Implement to contact obstacles. (S3PT-12)str



Operate this Equipment only with a Tractor equipped with an approved roll-over-protective system (ROPS). Always wear seat belts. Death or serious injury could result from falling off the tractor, particularly during a turnover when the operator could be pinned under the ROPS. (SG-7)str



BEFORE leaving the tractor seat lower the implement, set the parking brake and/or set the tractor transmission in parking gear, disengage the PTO, stop the engine, remove the key, and wait for all moving parts to stop. Place the tractor shift lever into a low range or parking gear to prevent the tractor from rolling. Never dismount a Tractor that is moving or while the engine is running. Operate the Tractor controls from the tractor seat only. (SG-9)str



Never allow children or other persons to ride on the Tractor or Implement. Falling off can result in death or serious injury. (SG-10)str



SAFETY



Never allow children to operate, ride on, or come close to the Tractor or Implement. Usually, 16-17 year-old children who are mature and responsible can operate the implement with adult supervision, if they have read and understand the Operator's Manuals, been trained in proper operation of the tractor and Implement, and are physically large enough to reach and operate the controls easily. (SG-11) str



Do not mount or dismount the Tractor while the tractor is moving. Mount the Tractor only when the Tractor and all moving parts are completely stopped. Dismounting a moving power unit can result in a crushing hazard that can cause death or serious injury. (SG-12) str



Start tractor only when properly seated in the Tractor seat. Starting a tractor in gear can result in death or serious injury. Read the Tractor operators manual for proper starting instructions. (SG-13) str



Do not operate this Equipment with hydraulic oil or fuel leaking. Oil and fuel are explosive and their presence could present a hazard. Do not check for leaks with your hand! High-pressure oil streams from breaks in the line could penetrate the skin and cause tissue damage including gangrene. To check for a hose leak, SHUT the unit ENGINE OFF and remove all hydraulic pressure. Wear oil impenetrable gloves, safety glasses and use cardboard to check for evidence of oil leaks. If you suspect a leak, REMOVE the HOSE and have it tested at a Dealer. If oil does penetrate the skin, have the injury treated immediately by a physician knowledgeable and skilled in this procedure. (SG-15) str



Never run the Tractor engine in a closed building or without adequate ventilation. The exhaust fumes can be hazardous to your health. (SG-23) str



Do not exceed the rated PTO speed for the Implement. Excessive PTO speeds can cause Implement driveline or component failures resulting in serious injury or death. (SG-26) str



Operate the Tractor and/or Implement controls only while properly seated in the Tractor seat with the seat belt securely fastened around you. Inadvertent movement of the Tractor or Implement may cause death or serious injury. (SG-29)str



In case of mechanical difficulty during operation, place the transmission in the park position, set the parking brake, shut down all power, including the PTO and the engine and remove the key. Wait until all rotating motion has stopped before dismounting. (SG-39) str

SAFETY

WARNING

Never leave the Implement and Power Unit unattended while the Implement is in the raised position. Accidental operation of a lifting lever or a hydraulic failure may cause the implement to suddenly fall causing serious injury or possible death to anyone who might inadvertently be under the Implement. Lower the implement carefully to the ground. Do not put hands or feet under lifted components. (SPU-03) str

WARNING

Only operate the snow blower in conditions where you have clear visibility in daylight or with adequate artificial lighting. Never snow blow in darkness or in conditions where you cannot clearly see at least 100 yards in front and to the sides of the Tractor and Snow Blower. Make sure that you can clearly see and identify passersby, steep slopes, ditches, drop-offs, overhead obstructions, power lines, debris and foreign objects. If you are unable to clearly see these types of items, discontinue snow blowing. (SSB-1) str

WARNING

Extreme care should be taken when operating near loose objects such as gravel, rocks, wire and other debris. Foreign objects should be removed from the site to prevent machine damage and/or bodily injury or even death. Any object that cannot be removed must be clearly marked and carefully avoided by the operator. Stop snow blowing immediately if the auger or fan strikes a foreign object. Repair all damage before resuming snow blowing. (SSB-2) str



WARNING

Many varied objects, such as wire, cable, rope, or chains can become entangled in the operating parts of the Snow Blower. These items could then swing outside the housing at high speeds. Such a situation is extremely hazardous and could result in serious injury or even death. Inspect the work area for such objects before snow blowing. Remove any like object from the site. Never allow the auger to contact such items. (SSB-3) str

WARNING

Blow snow at the speed that you can safely operate and control the Tractor and Snow Blower. Safe speed depends on terrain and snow conditions. **Normal ground speed range is from 0.5 to 1.5 mph.** Use slow speeds when operating on or near steep slopes, ditches, drop-offs, overhead obstructions, power lines, or when debris and foreign objects are to be avoided. (SSB-4) str

DANGER

Snow Blowers are capable under adverse conditions of throwing objects for great distances (200 feet or more). Do not allow the snow stream to fall on passersby. Ice, debris and heavy snow thrown from the snow blower can cause serious injury or death. (SSB-7) str



STOP SNOW BLOWING IF PASSERSBY ARE WITHIN 200 FEET.

WARNING

When blowing snow with two machines in the same area be sure that windows are closed. (SSB-10) str

DANGER

There are obvious and hidden potential hazards in the operation of this Snow Blower. **REMEMBER!** This machine is often operated in deep snow where vision is reduced. The fan blades of this Snow Blower can throw objects for great distances. Serious injury or even death may occur unless care is taken to insure the safety of the operator, bystanders, or passersby in the area. Do not operate this machine with anyone in the immediate area. Stop Snow Blowing if anyone is within 200 feet of Snow Blower. (SSB-11) str

SAFETY

SAFETY

⚠ WARNING

Do not operate Snow Blower if excessive vibration exists. Shut down PTO and the Tractor engine. Inspect the Snow Blower to determine the source of the vibration. If blades are missing or damaged replace them immediately. Do not operate the Snow Blower until the blades have been replaced and the Blower operates smoothly. Operating the Snow Blower with excessive vibration can result in component failure and broken objects to be thrown outward at very high velocities. To reduce the possibility of property damage, serious injury, or even death, never allow the Snow Blower to be operated with blades missing. (SSB-12) str

⚠ DANGER

The rotating parts of this machine have been designed and tested for rugged use. However, the blades and rotating members could fail upon impact with heavy, solid objects such as metal guard rails and concrete structures. Such impact could cause the broken objects to be thrown outward at very high velocities. To reduce the possibility of property damage, serious injury, or even death, never allow the rotating blades to contact such obstacles. (SSB-13) str

⚠ DANGER

Always keep a careful lookout and use extreme care when working around utility lines. Heavy snow or ice storms can cause utility lines to sag or drop to the ground. Never allow the Snow Blower within 10 feet of any Utility power or gas line. When working close to Utility lines consult your electric or gas company for a safe code of operation. (SSB-15) str

⚠ WARNING

Before dismounting to clear a clogged machine, place the transmission in the park position, set the parking brake, shut down all power, including the PTO and the engine and remove the key. Wait until all rotating motion has stop before dismounting. (SSB-16) str

⚠ WARNING

Snow can cover and hide solid objects such as guard rails, curbs, concrete structures, large rocks, utility boxes, fire hydrants, etc. DO NOT allow the rotating parts of the Snow Blower to contact such items. Inspect the area before operating the Snow Blower. Mark all solid items clearly with a pole or flag. To reduce the possibility of property damage, serious injury, or even death, never allow the rotating blades to contact such obstacles. (SSB-20) str

⚠ WARNING

The Implement can block the operators vision directly in front of the Implement. Inspect the area before operating the Implement and make sure that there are no obstacles, passersby, or coworkers in the path of the Implement. (SSB-22) str

SAFETY

CONNECTING OR DISCONNECTING IMPLEMENT SAFETY INSTRUCTIONS AND PRACTICES



DO NOT use a PTO adapter to attach a non-matching Implement driveline to a Tractor PTO. Use of an adapter can double the operating speed of the Implement resulting in excessive vibration, thrown objects, and blade and implement failure. Adapter use will also change the working length of the driveline exposing unshielded driveline areas. Serious bodily injury and/or equipment failure can result from using a PTO adapter. Consult an authorized dealer for assistance if the Implement driveline does not match the Tractor PTO. (S3PT-14) str



Always shut the Tractor completely down, place the transmission in park, and set the parking brake before you or anyone else attempts to connect or disconnect the Implement and Tractor hitches. (S3PT-15) str



Never operate the Tractor and Snow Blower if the Implement input driveline is directly connected to the Tractor transmission. Tractor braking distances can be substantially increased by the momentum of the rotating Snow Blower blades driving the Tractor transmission even though the Tractor clutch has been disengaged. Install an over running clutch between the Tractor PTO and the Snow Blower driveline to prevent this potentially dangerous situation. (SSB-38) str



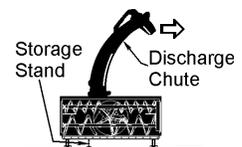
When attaching the Implement input driveline to the Tractor PTO, it is important that the connecting yoke spring activated locking collar slides freely and the locking balls are seated securely in the groove on the Tractor PTO shaft. Push and pull the driveline back and forth several times to ensure it is securely attached. A driveline not attached correctly to the Tractor PTO shaft could come loose and result in personal injury and damage to the Implement. (S3PT-17 str)



Before operating the Implement, check to make sure the Implement input driveline will not bottom out or become disengaged. Bottoming out occurs when the inner shaft penetrates the outer housing until the assembly becomes solid-it can shorten no more. Bottoming out can cause serious damage to the Tractor PTO by pushing the PTO into the Tractor and through the support bearings or downward onto the PTO shaft, breaking it off. A broken driveline can cause personal injury. (S3PT-18 str)



Before disconnecting Snow Blower swing discharge chute to side of Snow Blower, Lower and lock storage stand in place, Stay away from front of Snow Blower until equipment is stable and secured from falling. Sudden or inadvertant falling of equipment could result in serious injury or death. (SSB-35) str



SAFETY

TRANSPORTING SAFETY INSTRUCTIONS AND PRACTICES



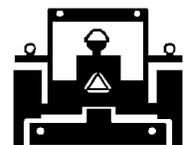
Be particularly careful when transporting the Implement with the Tractor. Turn curves or go up hills only at a low speed and using a gradual steering angle. Rear mounted implements move the center of gravity to the rear and remove weight from the front wheels. Make certain, by adding front ballast, that at least 20% of the tractor's weight is on the front wheels to prevent rearing up, loss of steering control or Tractor tip-over. Slow down on rough or uneven surfaces to prevent loss of steering control which could result in property damage or possible injury. Do not transport unless 3-Point lift lever is fully raised and in the latched transport position. Dropping implement in transport can cause serious damage to the tractor and/or Implement and possibly cause the operator or others to be killed or injured. (S3PT-02)str



Allow sufficient clearance for the Implement to swing outward while turning. Implements carried behind the Tractor will swing outside the tire path when making turns. Contacting a solid object while turning will cause equipment damage and possible injury. (S3PT-20) str



Make certain that the "Slow Moving Vehicle" (SMV) sign is installed in such a way as to be clearly visible and legible. When transporting the Equipment use the Tractor flashing warning lights and follow all local traffic regulations. (SG-6)str



Transport only at speeds where you can maintain control of the equipment. Serious accidents and injuries can result from operating this equipment at high speeds. Understand the Tractor and Implement and how it handles before transporting on streets and highways. Make sure the Tractor steering and brakes are in good condition and operate properly.



Before transporting the Tractor and Implement, determine the proper transport speeds for you and the equipment. Make sure you abide by the following rules:

Test the tractor at a slow speed and increase the speed slowly. Apply the Brakes smoothly to determine the stopping characteristics of the Tractor and Implement. As you increase the speed of the Tractor the stopping distance increases. Determine the maximum transport speed not to exceed 20 mph (30 kph) for transporting this equipment.

Test the equipment at a slow speed in turns. Increase the speed through the turn only after you determine that the equipment can be operated at a higher speed. Use extreme care and reduce your speed when turning sharply to prevent the tractor and implement from turning over. Determine the maximum turning speed for you and this equipment before operating on roads or uneven ground.

Only transport the Tractor and Implement at the speeds which allow you to properly control the equipment.

Be aware of the operating conditions. Do not operate the Tractor with weak or faulty brakes or worn tires. When operating down a hill or on wet or rain slick roads, the braking distance increases: use extreme care and reduce your speed. When operating in traffic always use the Tractor's flashing warning lights and reduce your speed. Be aware of traffic around you and watch out for the other guy. (SG-19)str



Before transporting the Snow Blower, position the snow discharge chute in the center position to reduce the possibility of blocking the operator's vision. (SSB-21) str

SAFETY

WARNING

Your driving vision may be reduced or impaired by the tractor, cab, or implement. Before driving on public roadways identify any limited vision areas, and make adjustments to your operating position, mirrors, and the implement transport position so that you can clearly see the area where you will be traveling, and any traffic that may approach you. Failure to maintain adequate vision of the public roadway and traffic can result in serious injury or even death. (STI-10)

MAINTENANCE AND SERVICE SAFETY INSTRUCTIONS AND PRACTICES

DANGER

Make sure the PTO shield, integral driveline shields, and input shields are installed when using PTO-driven equipment. Always replace any shield if it is damaged or missing. (S3PT-8) str



WARNING

Relieve hydraulic pressure prior to doing any maintenance or repair work on the Implement. Place the Implement on the ground or securely blocked up, disengage the PTO, and turn off the tractor engine. Push and pull the Remote Cylinder lever in and out several times prior to starting any maintenance or repair work. (S3PT-09)str



WARNING

Always maintain the safety signs in good readable condition. If the safety signs are missing, damaged, or unreadable, obtain and install replacement safety signs immediately. (SG-5)str

WARNING

Do not modify or alter this Implement. Do not permit anyone to modify or alter this Implement, any of its components or any Implement function. (SG-8)str

DANGER

Never work under the Implement, the framework, or any lifted component unless the Implement is securely supported or blocked up to prevent sudden or inadvertent falling which could cause serious injury or even death. (SSB-33) str



WARNING

Never attempt to lubricate, adjust, or remove material from the Implement while it is in motion or while tractor engine is running. (SG-20)str

WARNING

Periodically inspect all moving parts for wear and replace when necessary with authorized service parts. Look for loose fasteners, worn or broken parts, and leaky or loose fittings. Make sure all pins have cotter pins and washers. Serious injury may occur from not maintaining this machine in good working order. (SG-21)str



DANGER

Do Not fill fuel tank while engine is running. Refuel only after engine has cooled down. If fuel is spilled, move machine away from the area of the spill and avoid creating any source of ignition until the spill has been cleaned up. (SG-28) str

SAFETY

SAFETY

⚠ WARNING

Perform service, repairs and lubrication according to the maintenance section. Ensure the unit is properly lubricated as specified in the lubrication schedule and all bolts and nuts are properly torqued. Failure to properly service, repair and maintain this Implement in good operating condition could cause component failure and possible serious injury or even death.

(SG-35str)

⚠ DANGER

Always disconnect the main PTO Driveline from the Tractor before performing service on the Snow Blower. Never work on the Snow Blower with the Tractor PTO driveline connected and running. The Fan, Auger or Drivelines could turn without warning and cause immediate entanglement, injury or death. (SSB-8) str

⚠ WARNING

All Safety Shields, Guards and Safety devices including (but not limited to) - the Chain Shield, Cross Shaft Shield, Gearbox Shields, and PTO integral shields must be used and maintained in good working condition. All safety devices should be inspected carefully at least daily for missing or broken components. Missing, broken, or worn items must be replaced at once to reduce the possibility of injury or death from entanglement. (SSB-9) str

⚠ WARNING

DO NOT weld or repair rotating Blower components. Welds and other repairs may cause severe vibration and/or component failure resulting in parts being thrown from the blower causing serious bodily injury. See your Authorized Dealer for proper repairs. (SSB-14) str

⚠ WARNING

Ensure any remote starting system is inoperative before servicing or cleaning the machine. Inadvertent engine start up could result in entanglement or runover causing serious injuries or death. (SSB-17) str

⚠ WARNING

Use only OEM specified shear pins as replacement pins. The use of incorrect shear pins can cause failures in the Snow Blower rotating components resulting in property damage and/or serious bodily injuries. (SSB-19) str

⚠ WARNING

Cancer and Reproductive Harm www.P65Warnings.ca.gov

SAFETY

PARTS SAFETY INSTRUCTIONS AND PRACTICES

PARTS INFORMATION

Use of genuine Schulte replacement parts is your guarantee that parts are of the same quality and are manufactured to the same standards as the original equipment. These parts are made and tested to Schulte specifications. Non-genuine "will fit" parts do not consistently meet these specifications. The use of "will fit" parts may reduce the performance, void Schulte warranties, and present a safety hazard. Use genuine Schulte parts for economy and safety. (SPSI-2) str

SEE YOUR SCHULTE DEALER

CONCLUDING SAFETY INSTRUCTIONS AND PRACTICES

In addition to the design and configuration of this Implement, including Safety Signs and Safety Equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of the machine. Refer also to Safety Messages and operation instruction in each of the appropriate sections of the Tractor and Equipment Manuals. Pay close attention to the Safety Signs affixed to the Tractor and Equipment. (SG-18)str

Operator's & Parts Manuals



www.algqr.com/spm

SAFETY

SAFETY

SAFETY

ITEM	PART NO.	QTY	TYPE	DESCRIPTION
1.	226-004	1	LOGO	FEMA Member
2.	226-017	1	DANGER	Rotating Blower
3.	226-018	2	DANGER	Rotating Auger
4.	226-081	1	IMPORTANT	Check Oil Level
5.	226-100	1	SERIAL PLT	Serial Number Plate
6.	226-117	3	LOGO	SCHULTE
7.	226-149	2	DANGER	Thrown Object
8.	226-153	2	REFLECT	Red Reflector, 2" x 9"
9.	226-154	2	REFLECT	Amber Reflector, 2" x 9"
10.	226-181	6	INSTRUCT	8 Hour Grease Interval
11.	226-182	4	INSTRUCT	50 Hour Grease Interval
12.	226-183	1	INSTRUCT	8 Hour Oil Interval
13.	226-331	1	DANGER	Multi-Hazard
14.	226-335	4	WARNING	Pinch Points
15.	226-339	1	INSTRUCT	No Step
16.	226-382	1	DANGER	Entanglement Hazard
17.	226-384	1*	DANGER	Multi-Decal
18.	226-414	1	DANGER	Crushing Hazard
19.	226-440	1**	DANGER	Driveline Hazard/540 RPM
20.	226-441	1**	DANGER	Driveline Hazard/1000 RPM
21.	226-442	2	DANGER	Guard Missing
22.	226-446	2	DANGER	Guard Missing (Cone)
23.	226-492	2	NAME	SDX-102
24.	226-513	1	WARNING	Use Genuine Schulte Parts
25.	226-560	1	IMPORTANT	Check Overlap/Bottom Out
26.	226-618	2	NOTICE	Blower Lifting Hole
27.	226-619	1	INFORMATION	No Step
28.	226-678	1	NOTICE	Arctice Moly 0 EP Grease
29.	226-679	1	NOTICE	Raising the Blower While Under Load
30.	226-013	1	REFLECT	SMV Emblem
31.	280-201	1	---	Canister
	B102-010C	1	---	Operator's Manual

NOTES:

* Decal used ONLY on Truck Loading Chute Models

** Decal used depending on RPM of Machine

NOTE: Schulte supplies safety decals on this product to promote safe operation. Damage to the decals may occur while in shipping, use, or reconditioning. Schulte cares about the safety of its customers, operators, and bystanders, and will replace the safety decals on this product in the field, free of charge (Some shipping and handling charges may apply). Contact your Schulte dealer to order replacement decals.

SAFETY

SAFETY

DECAL DESCRIPTION



! DANGER

AVOID BODILY INJURY FROM ROTATING BLOWER.

- Disengage power and shut off engine before unclogging discharge chute and ensure all parts have stopped moving

226-017



! DANGER

To avoid Death or Serious Injury:

- Keep hands, feet and clothing away from rotating auger.

226-018

! WARNING

AVOID PINCH POINTS THAT CAN RESULT IN SERIOUS INJURY



226-335

IMPORTANT

CHECK OIL LEVEL IN ALL GEARBOXES BEFORE OPERATION

226-081

SAFETY

SAFETY

! DANGER

KEEP AWAY - THROWN OBJECT HAZARD
To Prevent Serious Injury or Death

- Stay away from discharge area during operation. Keep others away.
- Do not operate if passers by are within 200 feet.
- Do not point discharge toward people, animals or property.

226-149

! DANGER

226-446

GUARD MISSING
To Avoid Death Or Serious Injury Do Not Operate

NOTICE

BE SURE TO OPERATE THE BLOWER AT THE DESIRED SET HEIGHT, RAISING THE BLOWER WHILE UNDER LOAD DURING OPERATION MAY RESULT IN MACHINE DAMAGE.

226-679

SAFETY

SAFETY

DANGER

FAILING TO FOLLOW SAFETY MESSAGES AND OPERATING INSTRUCTIONS CAN CAUSE DEATH OR SERIOUS INJURY TO OPERATOR OR OTHERS IN THE AREA.

<p>1. READ MANUAL.</p>	<p>2. NO RIDERS, NO CHILDREN OPERATORS.</p>	<p>3. USE SEATBELTS, ROPS AND PPE.</p>	<p>4. BLOCKUP SECURELY BEFORE WORKING UNDER.</p>
-------------------------------	--	---	---

1. Study and understand Operator's Manuals, Safety Signs, and Instructional Decals for tractor & implement to prevent misuse, abuse & accidents. Learn how to stop engine suddenly in an emergency. Be alert for passers by and children.

2. Allow no children on or near implement or tractor. Allow no riders on tractor or implement. Falling off can cause death or serious injury from being run over by tractor or implement or contact with rotating components.

3. Operate only with tractor having Roll-Over Protective Structure (ROPS) and with seatbelt fastened securely and snugly to prevent death or serious injury from falling off tractor or tractor overturn. Personal Protective Equipment such as Hard Hat, Safety Glasses with side shields (marked to comply with ANSI Z87), Safety Shoes, and Ear Plugs are recommended.

4. Block up or support raised machine and all lifted components securely before putting hands or feet under or working underneath any lifted component to prevent death or crushing injury from sudden inadvertent dropping. Make certain that area is clear before lowering.

5. Before transporting, put Lift Lever in Lift (Detent) position and follow traffic codes. Slow down at night, in turns and on hillsides.

6. Make certain that SMV sign, Warning Lights and Reflectors are clearly visible

7. Do not back or operate implement in the reverse direction, possible rocks or debris can fly out and cause death or serious injury.

8. Before dismounting, secure implement in transport position or lower to ground. Stop PTO, put tractor in park or set Brake, stop engine and remove key. Never mount or dismount a moving vehicle. Crushing from run over may cause death or serious injury.

226-331

<p>5. TRANSPORT SAFELY.</p>	<p>6. USE SMV, LIGHTS AND REFLECTORS.</p>	<p>7. DO NOT OPE.RATE WITH UNIT RAISED</p>	<p>8. DO NOT MOUNT OR DISMOUNT WHILE MOVING.</p>
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NOTICE

DO NOT USE FOR LIFTING, HOLE IS ONLY TO BE USED FOR ASSEMBLING THE MACHINE.

226-618

NOTICE

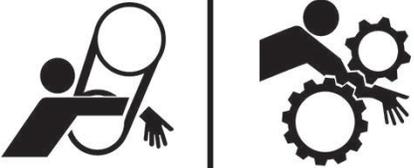
GREASE TELESCOPING DRIVESHAFT WITH ARCTIC MOLY 0 EP GREASE. FAILURE TO DO SO MAY RESULT IN MACHINE DAMAGE. SEE OPERATOR'S MANUAL.

226-678

SAFETY

SAFETY

DANGER



Entanglement Hazard

To prevent serious Injury

- Do Not operate if Shields or Guards are not secured in place.
- Stop operating implement if bystanders come within 10 feet.
- Do not approach, stand or climb on machine when is operating.
- Stop Tractor Engine, Shut off PTO, Disconnect Implement Driveline from Tractor before servicing, clearing blockage or entangled debris.

226-382

WARNING

TO AVOID DEATH OR SERIOUS INJURY:

- ONLY use genuine SCHULTE replacement parts, which have been validated and tested to use on Schulte equipment by the manufacturer.
- The equipment manufacturer cannot verify the material or structural integrity of third-party supplied non-genuine replacement parts.
- Using non-genuine parts can result in the part failing, creating hazardous conditions for operator and bystanders.

Contact local dealer or SCHULTE about repair parts at:
PO BOX 70, Englefeld,
Saskatchewan Canada S0K 1N0
Customer Service: 306-287-3715.
Email: info@schulte.ca



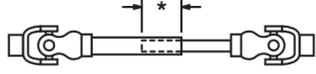
www.algqr.com/swe

WARNING

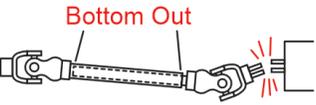
Cancer and Reproductive Harm

www.P65Warnings.ca.gov 226-513

IMPORTANT



*See manual for minimum overlap & minimum/maximum lengths.



Bottom Out

Before connecting to a tractor, be sure to check PTO driveshaft for minimum overlap & minimum/maximum lengths. Failure to do so may result in serious damage to the tractor or snow blower. Refer to operator's manual for procedures.

Make sure to check that the shaft will not "bottom out" at any time during use. Failure to do so may result in serious damage to the tractor or snow blower, refer to operator's manual for procedure.

226-560

SAFETY

SAFETY

⚠️ WARNING

For your safety and to guarantee optimum product reliability, always use Genuine SCHULTE replacement parts. The use of inferior "will-fit" parts will void Warranty of your SCHULTE implement and may cause premature or catastrophic failure which can result in death or serious injury. If you have any questions concerning the repair parts you are using, contact Schulte Industries Ltd. Englefeld stock Canada S0K 1N0 1-800-404-6044.



NOTICE

An OPERATOR'S MANUAL (with Repair Parts Listing) and a WARRANTY REGISTRATION CARD were attached to this Implement during final inspection at the factory. If they were not attached at the time of purchase, please contact your selling dealer at once.

1. Read and understand Manual before operation the implement
2. Complete, sign and mail the Warranty Registration Card in Today.

⚠️ WARNING



DO NOT OPERATE EQUIPMENT WITH OIL LEAKS

1. High pressure fluid can be invisible and can be injected into the body through the skin. Death or serious injury can result. A doctor familiar with this type of injury must surgically remove the injected fluid immediately.
2. You should visually inspect for hydraulic fluid leaks before using the equipment. Never use your hand to check for leaks. Wear oil impenetrable gloves, safety glasses with side shields (marked to comply with ANSI Z87), and use a piece of wood or cardboard to check for evidence of leaks. If you suspect a leak, Remove the hose and have it tested at a Dealer.
3. Inspect hoses regularly, frayed, torn, or crimped hoses may rupture suddenly and violently resulting in serious bodily injury from a flying hose end or from scalding, burn injuries, or oil penetration. Oil sprayed on hot equipment or components can result in fire. Repair or replace hoses as indicated to prevent unexpected failure and possible serious injury to operator or bystanders.

DISCONNECT Hydraulic Hoses From Tractor Before Un-jamming implement.

⚠️ DANGER

CRUSHING AND PINCH POINTS



MOVING MACHINERY PARTS CAN PINCH OR CRUSH OR FALL-WHICH MAY CAUSE DEATH OR SERIOUS INJURY.

⚠️ PELIGRO

LEA EL INSTRUCTIVO

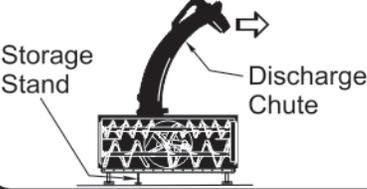


Si No Lee Inlges, Pida Ayuda a Alguien Que Se Lo Lea Para Que Le Traduzca las Medidas de Seguridad

226-384

SAFETY

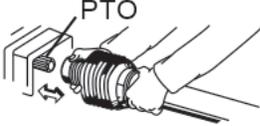
SAFETY

! WARNING	
	CRUSHING HAZARD Snow Blower can fall if discharge chute is facing forward. Serious Injury can result from contact with falling Snow Blower. 226-414
	Before Disconnecting Snow Blower Swing discharge chute to side of Snow Blower, Lower and lock storage stand in place, Stay away from front of Snow Blower until equipment is stable and secured from falling.

! DANGER
 226-442
GUARD MISSING To Avoid Death Or Serious Injury Do Not Operate

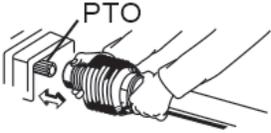
SAFETY

SAFETY

⚠ DANGER		
		
<p>TO AVOID DEATH OR SERIOUS INJURY FROM DRIVELINE CONTACT, DRIVELINE SEPARATION OR PTO STUB SHAFT FAILURE:</p> <ul style="list-style-type: none">● STOP, LOOK and LISTEN for rotating motion before approaching implement.● STAY AWAY and KEEP hands, feet and body AWAY from driveline & rotating parts until all moving elements have stopped.● ALWAYS shut off PTO before dismounting.● DO NOT operate if PTO shields are damaged or missing.● PUSH AND PULL on yoke until collar clicks and locks yoke in place.● CHECK driveline guards for free rotation and sufficient overlap to avoid unshielded areas.● DO NOT USE PTO ADAPTER <p style="text-align: right;">226-440_1</p>		
		
⚠ WARNING		
<p>OPERATE THIS MACHINE AT 540 RPM TRACTOR PTO SPEED ONLY. Overspeeding PTO may cause component failure resulting in bodily injury. TRACTOR PTO ROTATION: CLOCKWISE</p>	 <p style="text-align: right;">226-440</p>	

SAFETY

SAFETY

⚠ DANGER		
		
<p>TO AVOID DEATH OR SERIOUS INJURY FROM DRIVELINE CONTACT, DRIVELINE SEPARATION OR PTO STUB SHAFT FAILURE:</p> <ul style="list-style-type: none">● STOP, LOOK and LISTEN for rotating motion before approaching implement.● STAY AWAY and KEEP hands, feet and body AWAY from driveline & rotating parts until all moving elements have stopped.● ALWAYS shut off PTO before dismounting.● DO NOT operate if PTO shields are damaged or missing.● PUSH AND PULL on yoke until collar clicks and locks yoke in place.● CHECK driveline guards for free rotation and sufficient overlap to avoid unshielded areas.● DO NOT USE PTO ADAPTER <p style="text-align: right;">226-441_1</p>		
		
⚠ WARNING		
<p>OPERATE THIS MACHINE AT 1000 RPM TRACTOR PTO SPEED ONLY. Overspeeding PTO may cause component failure resulting in bodily injury. TRACTOR PTO ROTATION: CLOCKWISE</p>	 <p style="text-align: right;">226-441</p>	

SAFETY

FEDERAL LAWS AND REGULATIONS

This section is intended to explain in broad terms the concept and effect of federal laws and regulations concerning employer and employee equipment operators. This section is not intended as a legal interpretation of the law and should not be considered as such.

Employer-Employee Operator Regulations

U.S. Public Law 91-596 (The Williams-Steiger Occupational and Health Act of 1970) OSHA

This Act Seeks:

"...to assure so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve our human resources..."

DUTIES

Sec. 5 (a) Each employer-

(1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;

(2) shall comply with occupational safety and health standards promulgated under this Act.

(b) Each employee shall comply with occupational safety and health standards and all rules, regulations and orders issued pursuant to this Act which are applicable to his own actions and conduct.

OSHA Training Requirements

Title 29, Code of Federal Regulations Part 1928.57(a)(6). www.osha.gov

Operator instructions. At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee who operates an agricultural tractor and implements in the safe operating practices and servicing of equipment with which they are or will be involved, and of any other practices dictated by the work environment.

Keep all guards in place when the machine is in operation;

Permit no riders on equipment

Stop engine, disconnect the power source, and wait for all machine movement to stop before servicing, adjusting, cleaning or unclogging the equipment, except where the machine must be running to be properly serviced or maintained, in which case the employer shall instruct employees as to all steps and procedures which are necessary to safely service or maintain the equipment.

Make sure everyone is clear of machinery before starting the engine, engaging power, or operating the machine.

Employer Responsibilities:

To ensure employee safety during Tractor and Implement operation, it is the employer's responsibility to:

1. Train the employee in the proper and safe operation of the Tractor and Implement.
2. Require that the employee read and fully understand the Tractor and Implement Operator's Manual.
3. Permit only qualified and properly trained employees to operate the Tractor and Implement.
4. Maintain the Tractor and Implement in a safe operational condition and maintain all shields and guards on the equipment.
5. Ensure the Tractor is equipped with a functional ROPS and seat belt and require that the employee operator securely fasten the safety belt and operate with the ROPS in the raised position at all times.
6. Forbid the employee operator to carry additional riders on the Tractor or Implement.
7. Provide the required tools to maintain the Tractor and Implement in a good safe working condition and provide the necessary support devices to secure the equipment safely while performing repairs and service.
8. Require that the employee operator stop operation if bystanders or passersby come within 300 feet.

Child Labor Under 16 Years of Age

Some regulations specify that no one under the age of 16 may operate power machinery. It is your responsibility to know what these regulations are in your own area or situation. (Refer to U.S. Dept. of Labor, Employment Standard Administration, Wage & Home Division, Child Labor Bulletin #102.)

INTRODUCTION SECTION

Introduction Section 2-1

INTRODUCTION

INTRODUCTION



FC-S-0027

The SDX-102 Snow Blowers are designed for removing accumulations of snow from driveways, barnyards, roadways and parking lots. Check local regulations before operating on roadways. With proper maintenance as described in this manual, your Snow Blower will provide you with years of dependable service with a minimum of repairs.

It is recommended that all operators of this implement read this manual or be instructed of its contents as to safety, proper operation, and maintenance before beginning operation.

For the purpose of this Schulte equipment, the following definitions apply.

Left hand side: Side which is to the left when the operator is facing in the normal forward direction of the tractor.

Right hand side: Side which is to the right when the operator is facing in the normal forward direction of the tractor.

Literature Page



www.algqr.com/sle

INTRODUCTION

ATTENTION OWNER/OPERATOR

BEFORE OPERATING THIS MACHINE:

1. Carefully read the Operator's Manual, completely understand the Safety Messages and instructions, and know how to operate correctly both the tractor and implement.
2. Fill out the Warranty Card in full. Be sure to answer all questions, including the Serial Number of the implement. Mail within 30 days of delivery date of this implement.

NOTE: Warranties are honored only if completed "Owner Registration and Warranty" forms are received by Schulte within thirty days of delivery of the implement.

3. Record the Implement Model and Serial Numbers on the Warranty page at the front of the Operator's Manual. Keep this as part of the permanent maintenance file for the implement.

Special Notes:

The SDX-102 Snow Blower and its drive kits employ shear bolts to protect the auger, fan, and driveline. The specified shear bolts are listed below

The SDX-102 Snow Blower cross shaft shear bolt is: 3/8 x 2 Grade Two (2).

The SDX-102 specified PTO shear bolt is: Metric M10 x 60 Grade 8.8

NOTE: Both length and grade are important in this specification.

IMPORTANT: Replacement of a shear bolt with one of a grade, length or diameter other than the specified shear bolt will be considered unauthorized modification and warranty will be void.

Refer to the **Maintenance Section** of this Operator's Manual for help in properly identifying these grades of bolts

 **WARNING**

TO AVOID DEATH OR SERIOUS INJURY:

- ONLY use genuine SCHULTE replacement parts, which have been validated and tested to use on Schulte equipment by the manufacturer.
- The equipment manufacturer cannot verify the material or structural integrity of third-party supplied non-genuine replacement parts.
- Using non-genuine parts can result in the part failing, creating hazardous conditions for operator and bystanders.

Contact local dealer or SCHULTE about repair parts at:
PO BOX 70, Englefeld,
Saskatchewan Canada S0K 1N0
Customer Service: 306-287-3715.
Email: info@schulte.ca



www.algqr.com/swe

 **WARNING**

Cancer and Reproductive Harm

www.P65Warnings.ca.gov 226-513

INTRODUCTION



SCHULTE INDUSTRIES LIMITED - SDX-102 **GENERAL STATEMENT AFFECTING ALL SCHULTE WARRANTY**

Schulte Industries Ltd. warrants to the original purchaser only, that in the event of any defect in material or workmanship in the product sold by Schulte Industries, the subject of this warranty (“the goods”) during the warranty period mentioned below the manufacturer will provide the coverage specified below.

This warranty is in place of any other warranty or guarantee whether implied or expressed in any conditions of purchase of the buyer, and does not extend to impose any further liability on the manufacturer than set out below.

Any work done to the product without being authorized by Schulte, may not be covered by Schulte.

WARRANTY COVERAGE: All coverage applies to manufacturer’s defects only

For Commercial, Agricultural, and Government Use

- Structural Warranty is 1 year from the date of purchase.
- Component Warranty is 1 year from the date of purchase. (Coverage includes hydraulics, drivelines, and gearbox).

For Rental Use

- Component Warranty is 30 Days from the first in-service date.
- Structural Warranty is 30 Days from the first in-service date.
Only Schulte replacement parts qualify under this coverage.

Where legislation allows:

- The dealer is responsible for any labor charges exceeding a reasonable amount as determined by the manufacturer.
- The customer is responsible for the transportation costs of the product or parts to the dealer for repair.
- Ground freight charges for shipping new warrantable replacement parts to the dealer or customer will be covered by Schulte. **Only ground transportation will qualify for reimbursement.**

INTRODUCTION

CONDITIONAL COVERAGE

All warranty is conditional upon:

- Care, Maintenance and Operation in accordance with the manufacturer's specifications and recommendations (as set out, or referred to in the "Operator's Manual") supplied with the product.
- Submission of the Warranty Registration immediately upon sale of the product.
- The Pre-Delivery Inspection sheet must be sent with the Warranty Registration. Failure to comply will result in warranty claims being denied.

EXCLUSIONS

This warranty does not extend to:

- Damage or deterioration after delivery from the manufacturer not attributable to defective material or workmanship.
- Any goods which have sustained damage or deterioration due to encounters with foreign objects for which the product is not intended, inadequate or faulty assembly, improper or inadequate maintenance, neglect, or abuse.
- Shop supplies such as the use of tools, oil or grease used in the repair or replacement of a warrantable part or component.
- Normal wearing parts such as, but are not limited to safety chains, belting, clutch linings, blades and tire wear.

THE WARRANTY CLAIM PROCESS:

- All warranty claims must be submitted as a pre-approval with photos, claimed no later than 60 days after approval.
- The dealer must allow for the examination of the goods by the manufacturer or one of its agents, when requested by the manufacturer to verify that the goods are defective in material or workmanship.
- The Dealer must keep the failed part until the claim is processed, to allow Schulte Industries the option of further examination of the part.

Further examination may mean that pictures are sent, or that the part be returned to Schulte.

- A Return Goods Authorization (RGA) must be sent with any returned part.
- If a failed part is returned to Schulte for examination, Schulte will pay the freight, **Only ground transportation will qualify for reimbursement. Any other types of freight will not be paid, unless authorized on the RGA.**

NOTE: For warranty service or parts; the original owner must go through the dealership that the unit was purchased from:

Warranty Contacts:

All warranty questions can be emailed to info@schulte.ca or phone Schulte Industries at 1-800-404-6044.

Schulte reserves the right to change and modify this warranty policy at any time.

ASSEMBLY SECTION

Assembly Section 3-1

ASSEMBLY

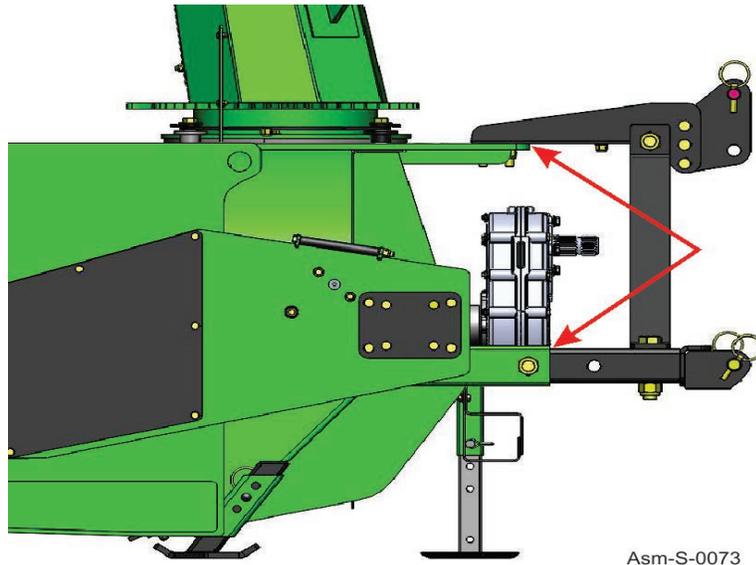
ASSEMBLY

3-POINT HITCH KIT MOUNTING

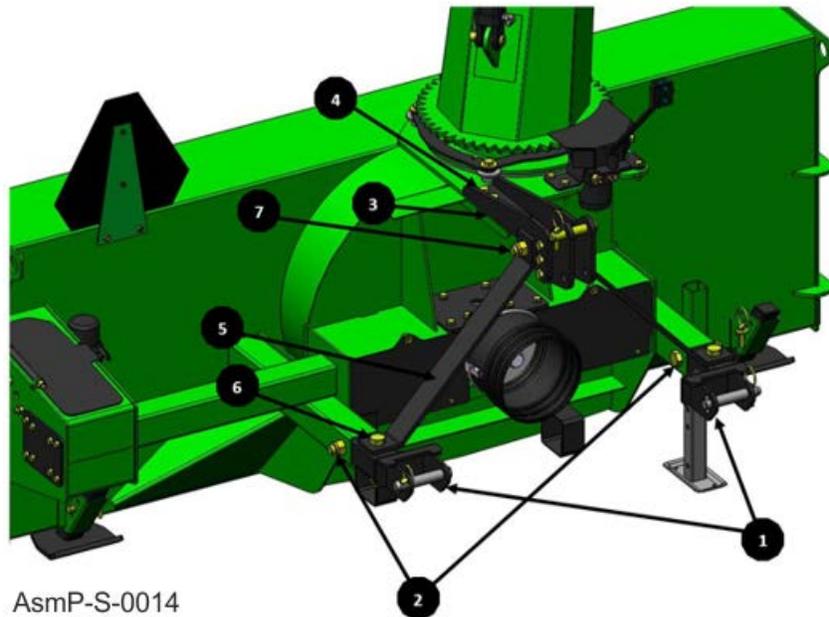
NOTE: Do not tighten any fasteners until the complete three-point hitch is in place. Refer to the illustration of the three point hitch in the part's manual for additional detail.

1. Insert Lower Link Arms (1) into the tubes of the housing and secure using two 1" x 5" bolts and locknuts (2).
2. Attach Top Link Arm (3) to the main frame using two 5/8" x 2" bolts and locknuts (4).

NOTE: For machines with the 1000RPM Reducer Gearbox, ensure the stake arms are fully extended as shown.



3. Assemble the two 3-point Hitch Braces (5) to the Lower Link Arms (1) using two 1" x 5" bolts and locknuts (6) and to the Top Link Arm using 1" x 6-1/2" bolt and locknut (7).

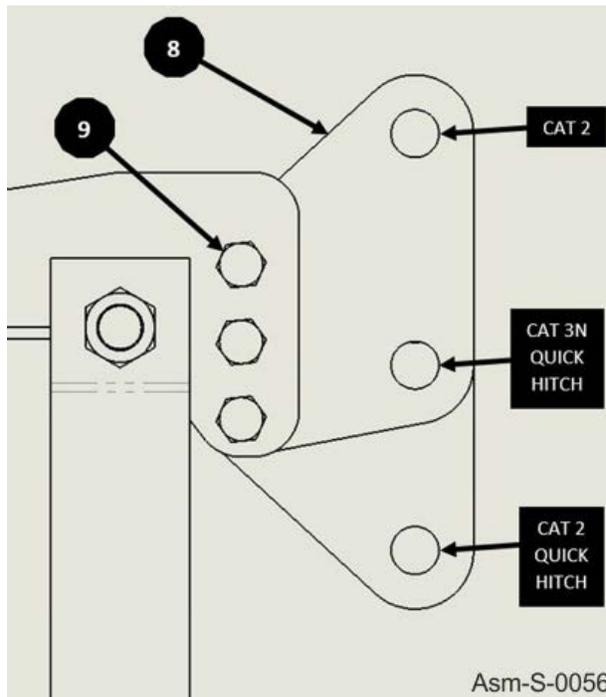


ASSEMBLY

4. Assemble the two Top Link Adapter Plates (8) using six 5/8" x 1-3/4" bolts and locknuts (9).

NOTE: Assemble the Top Link Adapter Plates in the proper orientation for your 3-point hitch as shown in the figure.

5. Tighten all bolts in the order they were installed.
6. Install the Top Link Pin in the hole that matches your 3-point hitch Category, and the two Lower Link Pins.
7. Separate the two universal joint halves and apply SAE (NGLI) #0 or #1 if below 0 Celsius (32° Fahrenheit) or SAE (NGLI) #2 if above 0 Celsius (32° Fahrenheit) to all sides of the sliding member. Reassemble the tractor shaft and lay to the side, do not reinstall it onto the snow blower at this time.
8. Attach the snow blower to the tractor and level the snow blower.



WARNING

Precautions must be taken when mounting the snow blower to your tractor to ensure that there is adequate clearance to allow the universal joint assembly to operate within its design slip range.

Failure to properly install the universal joint may cause the universal joint to separate during operation possibly resulting in personal injury or damage to equipment.

9. Carefully raise and lower the snow blower.

ASSEMBLY

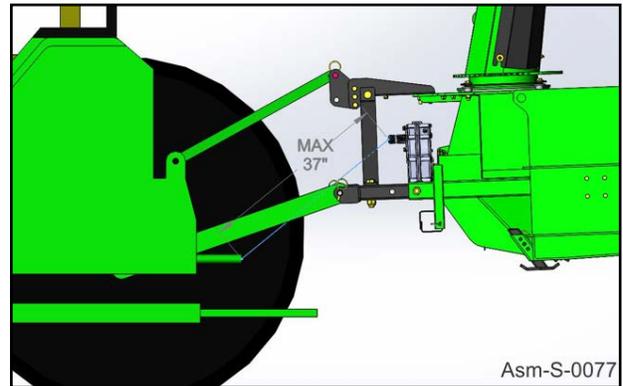
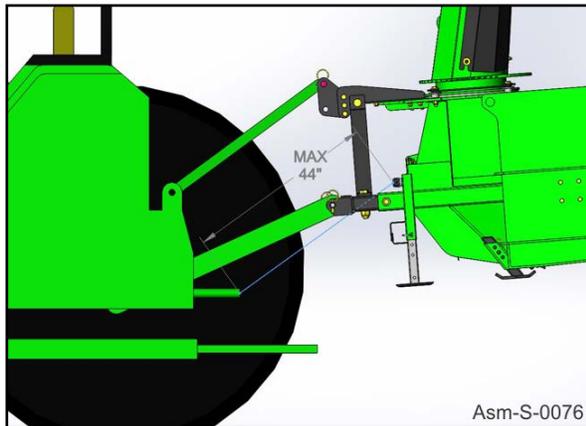
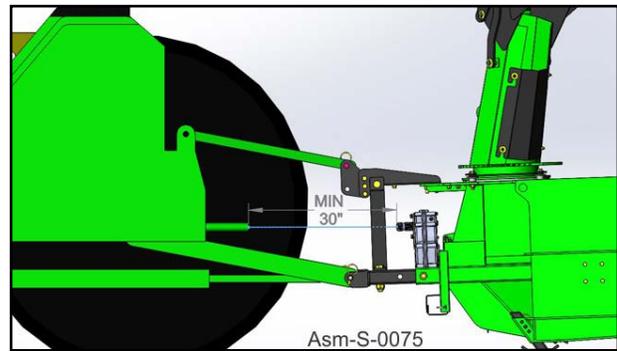
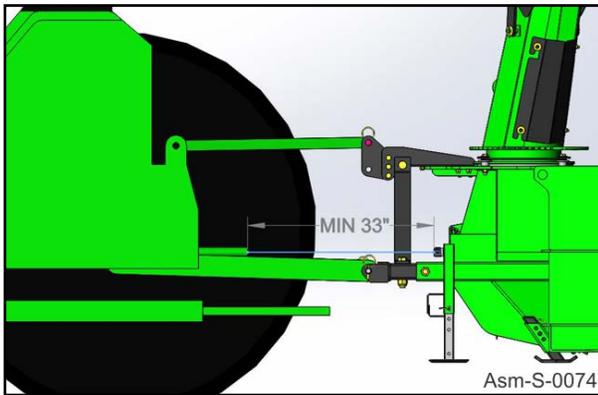
ASSEMBLY

10. Measure the distance between the end of the snow blower gearbox shaft and the tractor PTO shaft. At any point in the lifting cycle the two shaft ends must be within the limits of the table below.

	540 RPM	1000 RPM
Minimum	33" (840mm)	30" (760mm)
Maximum	44" (1,115mm)	37" (940mm)

540 RPM

1000 RPM



These dimensions will provide the required joint engagement and also ensure that the universal joint halves do not jam together. It is possible that the power shaft will be too long for some tractor installations. If the power shaft is too long, extend the 3-point link arms of your snow blower or consult your dealer for further assistance

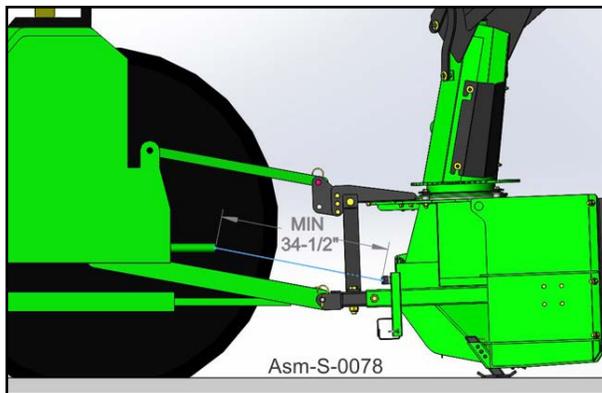
ASSEMBLY

NOTE: In order to be able to disconnect the power shaft while the snow blower is connected to the three point hitch, the distance between shaft ends must be above the minimum dimensions below, when the snow blower is on the ground.

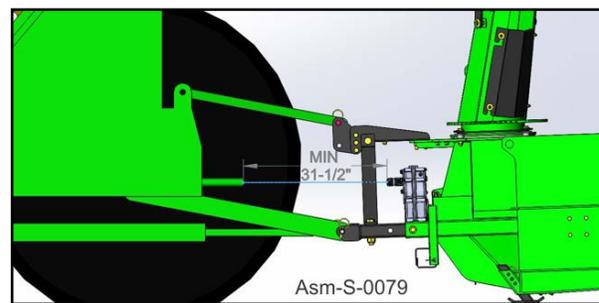
Minimum to Remove/Install Power Shaft

	540 RPM	1000 RPM
Minimum to Install	34-1/2" (875mm)	31-1/2" (800mm)

540 RPM



1000 RPM



11. Attach the tractor shaft assembly to the snow blower and tractor. Depress the lock pin and slide the yoke into place. Release the lock pin.

Important

Pull and push on the quick disconnect yokes several times to ensure that the yokes are properly connected to their respective shafts.

12. Check that the snow blower is level side to side. Adjust tractor lift link if necessary.

13. Check that the tractor three point hitch check chains are snug but not overly tight. Side sway should be kept to a minimum.

Important

Carefully raise and lower the snow blower and check for any possible interference between the snow blower and tractor. Turn discharge chute full length and right. Make adjustments if necessary.

Important

Before operating the snow blower carefully read the Safety and Operation Sections of this operator's manual.

OPERATION SECTION

Operation Section 4-1

OPERATION

SCHULTE SDX-102 OPERATION INSTRUCTIONS

SCHULTE SDX-102 Snow Blowers are manufactured with quality material by skilled workers. These snow blowers are designed for removing accumulations of snow from driveways, barnyards, roadways, and parking lots. The implement is equipped with enough protective gear to maintain the objects being thrown from SDX-102 Snow Blower to prevent injury to others, however, no shielding is 100% accurate. All shields and guards must be maintained in good operational condition

It is the operator's responsibility to be knowledgeable of all potential operating hazards and to take every reasonable precaution to ensure oneself, others, animals, and property are not injured or damaged by the SDX-102 Snow Blower, tractor, or a thrown object. Do not operate the implement if passersby, pets, livestock, or property are within 200 feet of the unit.

This section of the Operator's Manual is designed to familiarize, instruct, and educate safe and proper implement use to the operator. Pictures contained in this section are intended to be used as a visual aid to assist in explaining the operation of a SDX-102 Snow Blower and are not necessarily of a SDX-102 Snow Blower. Some pictures may show shields removed for picture clarity. **NEVER OPERATE** these implements without all shields in place and in good operational condition. The operator must be familiar with the SDX-102 Snow Blower and tractor operation and all associated safety practices before operating the SDX-102 Snow Blower and tractor. Proper operation of the SDX-102 Snow Blower, as detailed in this manual, will help ensure years of safe and satisfactory use

IMPORTANT: To avoid implement damage, re-torque all bolts after the first 10 hours of operation.

READ AND UNDERSTAND THE ENTIRE OPERATING INSTRUCTIONS AND SAFETY SECTION OF THIS MANUAL AND THE TRACTOR MANUAL BEFORE ATTEMPTING TO USE THE TRACTOR AND IMPLEMENT. If you do not understand any of the instructions, contact your nearest authorized dealer for a full explanation. Pay close attention to all safety signs and safety messages contained in this manual and those affixed to the implement and tractor. *OPS-U- 0001str*

READ, UNDERSTAND, and FOLLOW the following Safety Messages. Death or serious injury may occur unless care is taken to follow the warnings and instructions stated in the Safety Messages. Always use good common sense to avoid hazards. (SG-2str)



PELIGRO

Si no lee ingles, pida ayuda a alguien que si lo lea para que le traduzca las medidas de seguridad. (SG-3str)

**¡ LEA EL
INSTRUCTIVO!**



OPERATION

1. STANDARD EQUIPMENT AND SPECIFICATIONS

	SDX-102
Cutting Width	102" (2.6 m)
Tractor Horsepower	85 - 140 HP
Cutting Height	35" (889 mm)
Overall Height	96" (2438 mm)
Auger Diameter	238" (584 mm)
Fan Diameter	30" (762 mm)
Fan Type	4 paddle
Fan Shaft Diameter	1-5/8" (41 mm)
Auger Drive Chain	#80
Weight	1675 lbs (760 kg)
Adjustable Double Linked Chute Deflector	Standard
Hydraulic Chute Rotation Mechanism	Standard
Replaceable Blade	Standard
Adjustable Replaceable Skid Shoes	Standard
Hitch Size	CAT II, CAT II Quick Hitch, CAT3N Quick Hitch
PTO SPEED	540 RPM or 1000 RPM (If equipped with reducing Gearbox)
Capacity: Dry Snow	388 tons/hour
Capacity: Wet Snow	1222 tons/hour

OPERATION

2. OPERATOR REQUIREMENTS

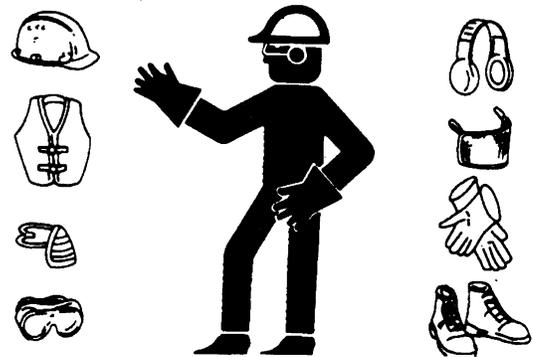
Safe operation of the unit is the responsibility of a qualified operator. A qualified operator has read and understands the implement and power unit Operator's Manuals and is experienced in implement and power unit operation and all associated safety practices. In addition to the safety messages contained in this manual, safety signs are affixed to the implement and power unit. If any part of the operation and safe use of this equipment is not completely understood, consult an authorized dealer for a complete explanation.

If the operator cannot read the manuals for themselves or does not completely understand the operation of the equipment, it is the responsibility of the supervisor to read and explain the manuals, safety practices, and operating instructions to the operator.

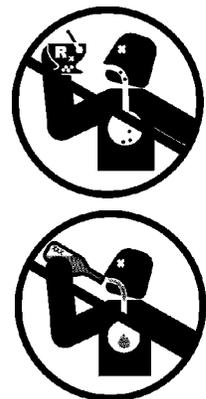
Safe operation of equipment requires that the operator wear approved Personal Protective Equipment (PPE) for the job conditions when attaching, operating, servicing, and repairing the equipment. PPE is designed to provide operator protection and includes the following safety wear:

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Always Wear Safety Glasses
- Hard Hat
- Steel Toe Safety Footwear
- Gloves
- Hearing Protection
- Close Fitting Clothing
- Respirator or Filter Mask (depends on operating conditions) OPS-U- 0002_Astr



DO NOT use drugs or alcohol immediately before or while operating the Tractor and Implement. Drugs and alcohol will affect an operator's alertness and coordination and therefore affect the operator's ability to operate the equipment safely. Before operating the Tractor or Implement, an operator on prescription or over-the-counter medication must consult a medical professional regarding any side effects of the medication that would hinder their ability to operate the Equipment safely. NEVER knowingly allow anyone to operate this equipment when their alertness or coordination is impaired. Serious injury or death to the operator or others could result if the operator is under the influence of drugs or alcohol. (SG-27) str



OPERATION

3. TRACTOR REQUIREMENTS

The tractor used to operate the snow blower must have the power capacity to lift, pull, and operate the Power Take Off (PTO) at the snow blower's rated speed while traveling at a ground speed between 2 and 5 MPH. Operating the snow blower with a tractor that does not meet the following requirements may cause tractor or snow blower damage and be a potential danger to the operator and passersby.

3.1 Tractor Requirements and Capabilities

- Certified approved Roll-Over Protective Structure (ROPS) or ROPS cab and seat belt.
- Tractor Safety Devices Slow Moving Vehicle (SMV) emblem, lighting, PTO master shield
- Tractor Horsepower - Recommended..... 85 - 140 HP
- Front End Weights As needed to maintain 20% weight on front axle
- Power Take Off Operating speed and shaft size should match the option equipped on the snow blower, 540 or 1000 RPM

3.2 ROPS and Seat Belt

The tractor must be equipped with a Roll-Over-Protective-Structure (ROPS) (tractor cab or roll-bar) and seat belt to protect the operator from falling off the tractor, especially during a roll over where the driver could be crushed and killed. Only operate the tractor with the ROPS in the raised position and seat belt fastened. Tractor models not equipped with a ROPS and seat belt should have these life saving features installed by an authorized dealer. OPS-U- 0003str



Operate this Equipment only with a Tractor equipped with an approved roll-over-protective system (ROPS). Always wear seat belts. Death or serious injury could result from falling off the tractor, particularly during a turnover when the operator could be pinned under the ROPS. (SG-7) str



3.3 Tractor Safety Devices

If transporting or operating the tractor and implement near a public roadway, the tractor must be equipped with proper warning lighting and a Slow Moving Vehicle (SMV) emblem which are clearly visible from the rear of the unit. Lights and a SMV emblem must be equipped directly on implements if the visibility of the tractor warning signals are obscured.

Maintain all manufacturer equipped safety shields and guards. Always replace shields and guards that were removed for access to connect, service, or repair the tractor or implement. Never operate the tractor PTO with the PTO master shield missing or in the raised position. OPS-U- 0004str

3.4 Tractor Horsepower

The horsepower required to operate the implement depends on several operating factors including terrain condition, operator experience, condition of the implement and tractor, and other factors. The recommended tractor HP for the snow blower SDX-102 is 85-140 HP. Operating the implement with a larger tractor will greatly increase the risk of damaging the implement

OPERATION

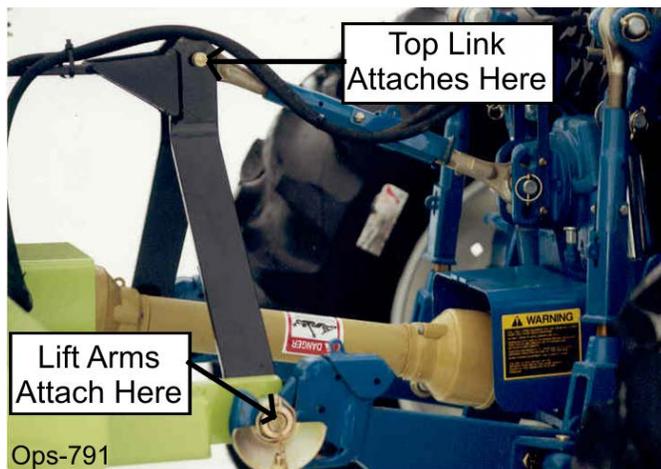
3.5 3-Point Hitch

The tractor 3-point hitch must be rated to lift at least 1675 lbs (760 kg.) when attaching a SDX-102.

The snow blower can attach to tractor's with a 3-pt. hitch frame. The snow blower comes with 3-pt. lower pins CAT 2-3 bushing and CAT 2 top pin..

Refer to the tractor operator's manual for the category of the tractor used. If the hitch does not conform to ASABE dimensions, the implement may not fit or raise properly. Consult an authorized dealer for possible modification procedures to mount nonconforming hitches

Use the correct hitch pins for the hitch being used.



A rear Implement can fall if not properly supported. Always use the stand on the front hitch (if equipped) or block up securely to prevent falling and possible crushing injury and/or other injury from holding or lifting heavy components. Use the stand to stabilize the implement during storage. (S3PT-3) str



Never crawl under a raised Implement supported solely by the Tractor 3-Point hitch. Release of the control lever or mechanical failure will result in the Implement falling and possible injury or death. Always securely block up the Implement before crawling underneath to perform repairs and service. (S3PT-19) str

3.6 Tractor Hydraulics

To be able to operate the hydraulic chute rotator, rotating drum, and chute deflector, the tractor requires 3 remote outlets. The hydraulic chute rotator, drum, and deflector allow you to blow snow at different angles. Be particularly careful when rotating the chute or drum at different angles. Be sure there are no bystanders or animals within 200ft. in the direction you are blowing snow. The chute deflector allows you to have a high shoot out of snow depending on where and what direction is needed. The drum allows you to direct the snow to either side of the machine as well.

3.7 Front End Weight

A minimum of 20% total tractor weight must be maintained on the tractor front end at all times. Front end weight is critical to maintain steering control and to prevent the tractor from rearing up while driving. If the front end is too light, add weight until a minimum of 20% total weight is reached on the front tires. Front weights and weight carriers can be purchased through an authorized tractor dealership. OPS-U-0005 str

OPERATION

3.8 Power Take Off (PTO)

The implement is shipped from the factory with either a 540 RPM gearbox or a 1000 RPM gearbox and reducer set. Identify which option your snowblower is equipped with before proceeding. Most tractors operate at either 540 RPM, 1000 RPM or a combination of the two PTO speeds. The operating speed of the implement and tractor can be determined by the number of splines on the driveline yoke and PTO output shaft. Those operating at 540 RPM will have a 1-3/8" diameter 6-spline shaft and those operating at 1000 RPM will have a 1-3/8" 21-spline shaft or a 1-3/4" 20 spline shaft. Refer to the tractor owner's manual for instructions to change PTO speeds on models that operate at more than one speed.

If operating an older model tractor where the tractor's transmission and PTO utilize one master clutch, an over-running clutch must be used between the PTO output shaft and the driveline of the implement. An authorized tractor dealer can provide the over-running clutch and its installation if needed.



DO NOT run a snowblower equipped with a 540 RPM gearbox on a 1000 RPM PTO. Running the implement at the incorrect speed can result in excessive vibration, thrown objects, and auger, fan and implement failure. Consult an authorized dealer for assistance if the implement driveline does not match the tractor PTO.



DO NOT use a PTO adapter to attach a non-matching Implement driveline to a Tractor PTO. Use of an adapter can double the operating speed of the Implement resulting in excessive vibration, thrown objects, and blade and implement failure. Adapter use will also change the working length of the driveline exposing unshielded driveline areas. Serious bodily injury and/or equipment failure can result from using a PTO adapter. Consult an authorized dealer for assistance if the Implement driveline does not match the Tractor PTO. (S3PT-14) str

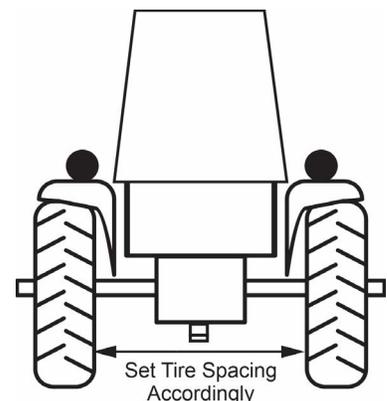


Always disconnect the main PTO Driveline from the Tractor before performing service on the Snow Blower. Never work on the Snow Blower with the Tractor PTO driveline connected and running. The Fan, Auger or Drivelines could turn without warning and cause immediate entanglement, injury or death. (SSB-8) str

3.9 Tire Spacing



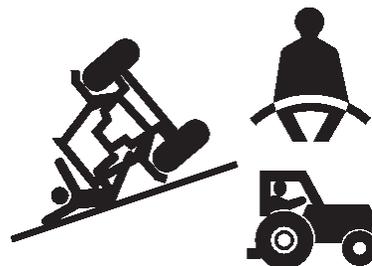
The tire spacing of the tractor must be sufficient to maintain stability on the type of terrain where it is intended to be operated and for the type of implement that is being operated. Always refer to the tractor Operator's Manual or consult the tractor's authorized dealer for instructions on sufficient tire spacing or to change tractor tire spacing. Operating without sufficient tire spacing to maintain stability can result in loss of control of the tractor, a rollover accident, or death or serious injury.



OPERATION

WARNING

Operate this Equipment only with a Tractor equipped with an approved roll-over-protective system (ROPS). Always wear a seat belt. Death or serious injury can result from falling off the tractor and/or becoming pinned or trapped under the tractor or implement particularly during a rollover accident.



OPERATION

4. GETTING ON AND OFF THE TRACTOR

Before getting onto the tractor, the operator must read and completely understand the implement and tractor operator manuals. If any part of either manual is not completely understood, consult an authorized dealer for a complete explanation. OPS-U- 0007str

DANGER

Do not mount the Power Unit while the Power Unit is moving. Mount the Power Unit only when the Power Unit and all moving parts are completely stopped. (SPU-18) str



4.1 Boarding the Tractor

Use both hands and equipped handrails and steps for support when boarding the tractor. Never use control levers for support when mounting the tractor. Seat yourself in the operator's seat and secure the seat belt around you.

Never allow passengers to ride on the tractor or attached equipment. Riders can easily fall off and be seriously injured or killed from falling off and being ran over. It is the operator's responsibility to forbid all extra riders at all times. OPS-U- 0008str

DANGER

Never allow children to operate, ride on, or come close to the Tractor or Implement. Usually, 16-17 year-old children who are mature and responsible can operate the implement with adult supervision, if they have read and understand the Operator's Manuals, been trained in proper operation of the tractor and Implement, and are physically large enough to reach and operate the controls easily. (SG-11) str



DANGER

Never allow children or other persons to ride on the Tractor or Implement. Falling off can result in death or serious injury. (SG-10)str



OPERATION

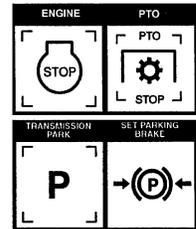
4.2 Dismounting the Tractor

Before dismounting, park the tractor and implement on a reasonably level surface, apply the parking brake, idle the engine down, disengage the PTO, and lower the implement to the ground. Shut down the tractor engine according to the operator's manual, remove the key, and wait for all motion to completely stop. Never leave the seat until the tractor, its engine and all moving parts have come to a complete stop.

Use hand rails and steps when exiting the tractor. Be careful of your step and use extra caution when mud, ice, snow or other matter has accumulated on the steps or hand rails. Use all handrails and steps for support and never rush or jump off the tractor. OPS-U- 0009 str



BEFORE leaving the tractor seat lower the implement, set the parking brake and/or set the tractor transmission in parking gear, disengage the PTO, stop the engine, remove the key, and wait for all moving parts to stop. Place the tractor shift lever into a low range or parking gear to prevent the tractor from rolling. Never dismount a Tractor that is moving or while the engine is running. Operate the Tractor controls from the tractor seat only. (SG-9)str



5.STARTING THE TRACTOR

The operator must have a complete understanding of the placement, function, and operational use of all tractor controls before starting the tractor. Review the tractor operator's manual and consult an authorized dealer for tractor operation instructions if needed.

Essential Tractor Controls:

- Locate the light control switch.
- Locate the engine shut off control.
- Locate the brake pedals and the clutch.
- Locate the PTO control.
- Locate the 3-point hitch control lever.
- Locate the hydraulic remote control levers

Before starting the tractor ensure the following:

- Conduct all pre-start operation inspection and service according to the tractor operator's manual.
- Make sure all guards, shields, and other safety devices are securely in place.
- The parking brake is on.
- The PTO control lever is disengaged.
- The 3-point hitch control lever is in the lowered position.
- The hydraulic remote control levers are in the neutral position.
- The tractor transmission levers are in park or neutral.

Refer to the tractor owner's manual for tractor starting procedures. Only start the tractor while seated and belted in the tractor operator's seat. Never bypass the ignition switch by short circuiting the starter solenoid.

After the tractor engine is running, avoid accidental contact with the tractor transmission to prevent sudden and unexpected tractor movement. OPS-U-0028str



Never run the Power Unit engine in a closed building or without adequate ventilation. The exhaust fumes can be hazardous to your health. (SPU-23) str

OPERATION



Start the Power Unit only when properly seated in the Power Unit seat. Starting a Power Unit in gear can result in injury or death. Read the Power Unit Operator's Manual for proper starting instructions. (SPU-19) str



6.CONNECTING THE SNOW BLOWER TO THE TRACTOR

Use extreme caution when connecting the snow blower to the tractor. The snow blower should be securely resting at ground level with the parking jack foot. Keep hands and feet out from under the snowblower and clear of pinch points between the tractor and snow blower.



Always shut the Tractor completely down, place the transmission in park, and set the parking brake before you or anyone else attempts to connect or disconnect the Implement and Tractor hitches. (S3PT-15) str

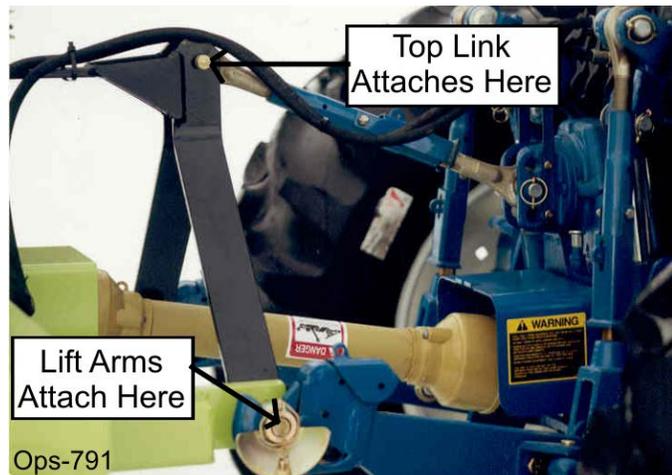
6.1 Connecting the Snow Blower to the Tractor

1. Make sure the tractor is equipped with the correct PTO shaft. Change shafts if needed.
2. Shorten or remove the tractor drawbar to avoid interference when raising and lowering the implement.
3. Board the tractor and start the engine. Position the tractor to the snow blower with the 3-point lift arms positioned to attach to the snow blower lower link pins. **Note:** Set the 3-point lift control to "Position Control" so that the lift arms maintain a constant height when attaching the snow blower. See the tractor Operator's Manual for correct settings when attaching 3-point equipment.



OPERATION

4. Turn off the tractor engine and dismount.
5. One lift arm at a time, align arm end hole between the set of A-frame lift lugs. Insert pitch pin through the lug and arm holes and insert retaining pin into hitch pin.
6. Walk around to opposite side and repeat procedure for remaining lift arm and hitch pin..
7. Extend or retract 3-point top link to align its end hole with the holes of the snow blower's top link. Insert the top link hitch pin and insert retaining pin into hitch pin.
8. Adjust any lower link check chains, guide blocks, or sway blocks to prevent the snow blower from swaying side to side and possible contact with tractor rear tires.



▲ DANGER

Always shut the Tractor completely down, place the transmission in park, and set the parking brake before you or anyone else attempts to connect or disconnect the Implement and Tractor hitches. (S3PT-15) str

▲ DANGER

Never work under the Implement, the framework, or any lifted component unless the Implement is securely supported or blocked up to prevent sudden or inadvertent falling which could cause serious injury or even death. (SSB-33) str



▲ WARNING

Never crawl under a raised Implement supported solely by the Tractor 3-Point hitch. Release of the control lever or mechanical failure will result in the Implement falling and possible injury or death. Always securely block up the Implement before crawling underneath to perform repairs and service. (S3PT-19) str

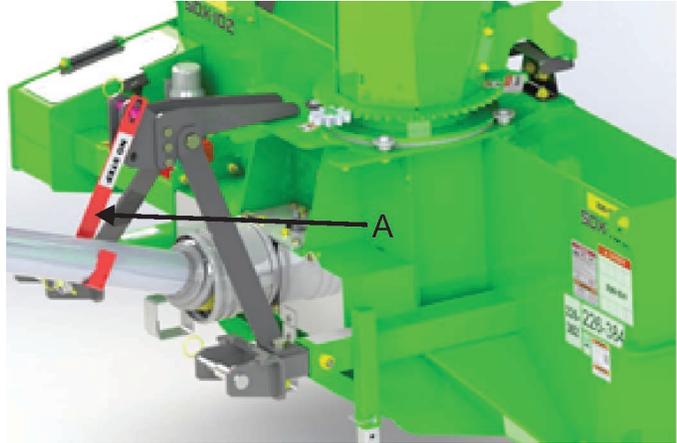
OPERATION

7. DRIVELINE ATTACHMENT

The driveline yoke and tractor PTO shaft must be dirt free and greased for attachment.

Grease applied to PTO Shaft should meet the following recommendations: Use EP 0, Lithium Complex Grease

To connect the snow blower driveline to the tractor, lift the PTO output shaft off of the PTO holder A.



Twist the driveline yoke collar and align the grooves and spines of the yoke with those of the PTO shaft, release the locking collar, and position the yoke until the locking collar balls are seated onto the PTO shaft. Push and pull the driveline back and forth several times to ensure a secure attachment.



Ops-1144

Remove the PTO holder from the Top Link pin, place the PTO holder into storage, secure with Lynch Pin.



Ops-2665

OPERATION

OPERATION

⚠ DANGER

There are obvious and hidden potential hazards in the operation of this Implement as in all power-driven or pulled equipment. **REMEMBER!** This machine is often operated in rough terrain conditions that include gullies, holes, slopes, hidden obstructions and the like. Serious injury or even death may occur unless care is taken to assure the safety of the operator and bystanders in the area. Do not operate this machine with anyone in the immediate area. Stop operating if anyone comes within 200 feet of the equipment. . (SSB-34) str

⚠ WARNING

When attaching the Implement input driveline to the Tractor PTO, it is important that the connecting yoke spring activated locking collar slides freely and the locking balls are seated securely in the groove on the Tractor PTO shaft. Push and pull the driveline back and forth several times to ensure it is securely attached. A driveline not attached correctly to the Tractor PTO shaft could come loose and result in personal injury and damage to the Implement. (S3PT-17 str)

7.1 Driveline Length Check

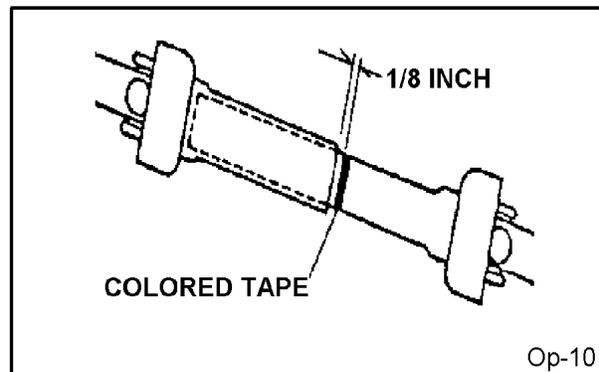
⚠ WARNING

Before operating the Implement, check to make sure the Implement input driveline will not bottom out or become disengaged. Bottoming out occurs when the inner shaft penetrates the outer housing until the assembly becomes solid-it can shorten no more. Bottoming out can cause serious damage to the Tractor PTO by pushing the PTO into the Tractor and through the support bearings or downward onto the PTO shaft, breaking it off. A broken driveline can cause personal injury. (S3PT-18 str)

When fitting the Snow Blower to the tractor, the telescoping driveline must be inspected to ensure that at its most compressed position, the profiles do not “bottom out”, and when at its farthest extended position, there is sufficient engagement between the profiles to operate safely. At its shortest length, there must be at least a 1” clearance between each profile end and opposite profile universal joint. At its farthest extension, a minimum profile engagement of 6” must be maintained for a Constant Velocity (CV) tube type driveline and a minimum engagement of 6” for non-CV solid shaft drivelines.

7.2 “Bottoming Out” Check Procedures

- Disconnect driveline from the tractor and slide the profiles together until fully compressed.
- Place a mark on the inner shield 1/8” from the end of the outer shield and reattach the driveline to the PTO shaft.
- With the **PTO NOT TURNING**, slowly drive the tractor with blower attached through the sharpest turn possible and watch shaft movement. With the **PTO NOT TURNING**, slowly drive the tractor with the blower attached through the most severe terrain conditions expected and watch shaft movement.
- If the distance between the mark and the outer shield becomes less than 2” at any point there is a potential problem bottoming out the driveline and the driveline should be replaced with shorter driveline. Contact your local dealer or Technical Service for proper directions. OPS-R-0004_K str



Driveline in maximum compressed position

NOTE: If tractor has a 540 RPM PTO, adjusting to a 16 inch position will gain additional 2 inches of telescoping length.

OPERATION

7.3 Engagement Check Procedure

- With the driveline attached, position the Snow Blower to the point where the telescoping driveline is at its maximum extension. Completely shut down the tractor and secure in position.
- Mark the inner driveline shield 1/8" from the end of the outer shield.
- Disconnect the driveline from the tractor and separate the two driveline halves.
- Measure the distance from the mark to the end of the inner profile. This length is the amount the driveline profiles were engaged.
- If the engaged length is less than 6", the shaft is considered too short and should be replaced with a longer shaft. Consult an authorized dealer to purchase the required driveline length.

NOTE: If the driveline cannot be shortened and still maintain the required profile engagement, the operator must be made aware of terrain conditions and avoid situations which pose a potential problem to avoid damaging the driveline or move drawbar to 16" or 20" position for required clearance.

IMPORTANT: Scan this QR Code with your smart phone to link to the ADMA Driveline Safety Manual for more information on the safe use of a driveline during normal operation and maintenance. Or type in your internet browser the following web address: www.algqr.com/dme_Ops-0009-MISC_str



7.4 Connecting Snow Blower Hydraulic Lines to the Tractor

With the tractor shut down and secured in position, relieve hydraulic pressure from the tractor by moving the control levers back and forth several times or placing the levers in the float position. Keep implement hydraulic lines, hoses, quick couplers, and swivels free of contamination. Never leave a disconnected hose end open and cap the tractor hydraulic outlet ports when not in use. If the tractor ports, Snow Blower ports and hydraulic hose ends become contaminated, wipe clean with a rag before connecting.



Do not operate this Equipment with hydraulic oil or fuel leaking. Oil and fuel are explosive and their presence could present a hazard. Do not check for leaks with your hand! High-pressure oil streams from breaks in the line could penetrate the skin and cause tissue damage including gangrene. To check for a hose leak, SHUT the unit ENGINE OFF and remove all hydraulic pressure. Wear oil impenetrable gloves, safety glasses and use cardboard to check for evidence of oil leaks. If you suspect a leak, REMOVE the HOSE and have it tested at a Dealer. If oil does penetrate the skin, have the injury treated immediately by a physician knowledgeable and skilled in this procedure. (SG-15) str



7.5 Hydraulic Cylinder Priming

Hydraulic Cylinder must be filled with hydraulic oil before operating. Hydraulic cylinders and lines are filled by holding the valve control levers in the extended position until the cylinder fully retracts and extends. Place control levers in the float position and repeat process several more times to purge all air from the system.

OPERATION

8. PRE-OPERATION INSPECTION AND SERVICE

Before each use, a pre-operation inspection and service of the snow blower and tractor must be performed. This includes routine maintenance and scheduled lubrication, inspecting that all safety devices are equipped and functional, and performing needed repairs. Do not operate the snow blower and tractor if the pre-operation inspection reveals any condition affecting safe operation. Perform repairs and replacement of damaged and missing parts as soon as noticed. By performing a thorough pre-operation inspection and service, valuable down time and repair cost can be avoided.



Always disconnect the main PTO Driveline from the Tractor before performing service on the Implement. Never work on the Implement with the tractor PTO driveline connected and running. Rotating Parts, Blades or Drivelines could turn without warning and cause immediate entanglement, injury or death. (S3PT-11)str



Never work under the Implement, the framework, or any lifted component unless the Implement is securely supported or blocked up to prevent sudden or inadvertent falling which could cause serious injury or even death. (SSB-33) str



Periodically inspect all moving parts for wear and replace when necessary with authorized service parts. Look for loose fasteners, worn or broken parts, and leaky or loose fittings. Make sure all pins have cotter pins and washers. Serious injury may occur from not maintaining this machine in good working order. (SG-21)str



OPERATION

8.1 Tractor Pre-Operation Inspection/Service

Refer to the tractor operator's manual to ensure a complete pre-operation inspection and scheduled service is performed according to the manufacturers recommendations. The following are some of the items that require daily service and inspection:

- Tire condition/air pressure
- Wheel lug bolts
- Steering linkage
- PTO shield
- SMV sign is clean and visible
- Tractor's lights are clean and functional
- Tractor Seat belt is in good condition
- ROPS is in the raised position
- No tractor oil leaks
- Radiator free of debris
- Engine oil level and condition
- Engine coolant level and condition
- Power brake fluid level
- Power steering fluid level
- Fuel condition and level
- Sufficient lubrication at all lube points
- Air filter condition OPS-U-0030 str



8.2 Snow Blower Pre-Operation Inspection/Service

Before each implement use, a complete inspection and service is required to ensure the implement is in a good and safe working condition. Damaged and/or broken parts should be repaired and/or replaced immediately. To ensure the implement is ready for operation, conduct the following

The operator's manual and safety signs affixed on the unit contain important instructions on the safe and proper use of the equipment. Maintain these important safety features on the implement in good condition to ensure the information is available to the operator at all times.

- Ensure the manual canister is secured to the equipment with the operator's manual inside.
- Ensure all safety signs are in place and legible. Replace missing, damaged, and illegible decals. OPS-U- 0011 str



OPERATION

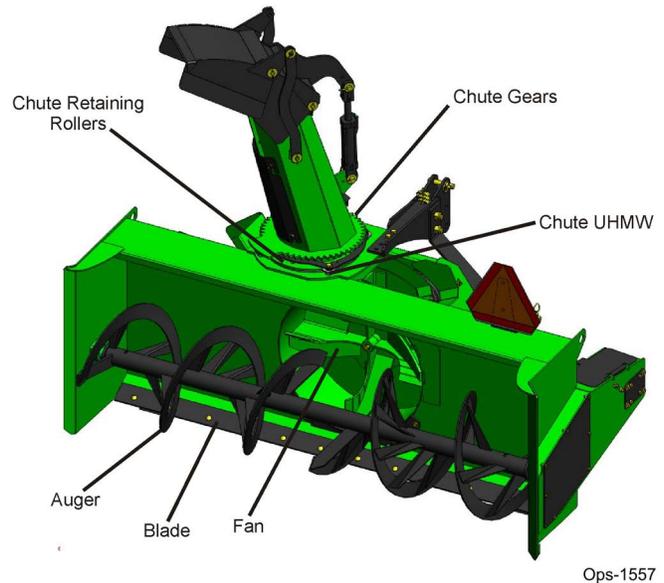
- Check that the main driveline is securely attached to the tractor and the locking collar is seated in the groove of the PTO Shaft.
- Inspect that the snow blower pivot pins are the proper size, correctly installed, and secured to the tractor lift arms with retaining pins inserted.



WARNING

When attaching the Implement input driveline to the Tractor PTO, it is important that the connecting yoke spring activated locking collar slides freely and the locking balls are seated securely in the groove on the Tractor PTO shaft. Push and pull the driveline back and forth several times to ensure it is securely attached. A driveline not attached correctly to the Tractor PTO shaft could come loose and result in personal injury and damage to the Implement. (S3PT-17 str)

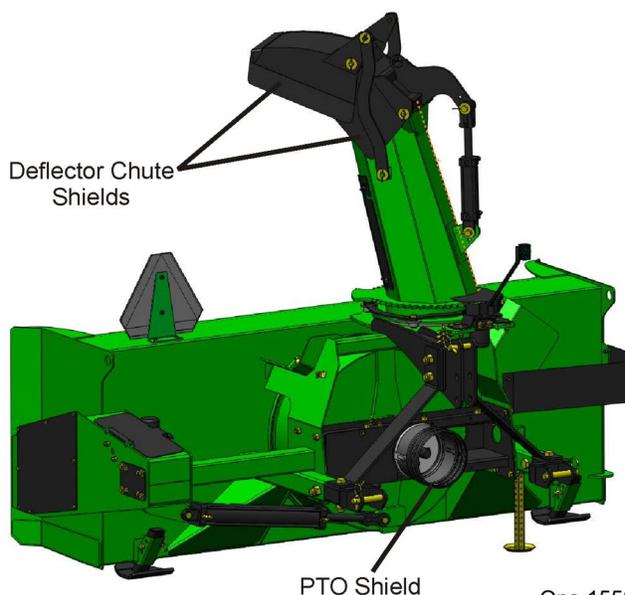
- Ensure the augers and fan are in good working condition and rotate freely..
- Ensure the chute UHMW is not damaged or worn and the chute rotates freely.
- Ensure the chute drive gears are not damaged or worn.
- Ensure the chute retaining rollers rotate freely.
- Ensure the driveline integral shields are in good condition and rotate freely.



OPERATION

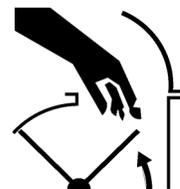
OPERATION

- Inspect that all bolts and screws are in position and are properly torqued..
- Check blade wear and if worn reverse it or replace.
- Ensure the deflector chute shields are in good condition.
- Ensure the tractor PTO shield is in place and in good condition..
- Inspect the condition of the auger drive chain and tensioner.



DANGER

Do not put hands or feet near the rotating fan. Fan contact can result in serious injury or even death. Stay away until all motion has stopped and the snow blower is securely blocked up before removing material, performing service, and making repairs. (SSB-6)str



DANGER

Do Not put hands or feet near the rotating auger. Auger contact can result in serious injury or even death. Stay away until all motion has stopped and the snow blower is securely blocked up before removing material, performing service, and making repairs. (SSB-5)str



DANGER

Never work under the Implement, the framework, or any lifted component unless the Implement is securely supported or blocked up to prevent sudden or inadvertent falling which could cause death or serious injury. (SG-14)str



- Perform scheduled lubrication as specified in the Maintenance Section
- Inspect the oil level in all gearboxes. A low oil level is a warning sign that the gearbox may be cracked or its seal is damaged and needs to be replaced.
- Ensure all gearbox vents are in place and free from clogs.
- If the fan must be removed from the gearbox, anti-seize must be added prior to installation.
- Ensure the hydraulic cylinder and hydraulic motors are installed and retained correctly. Ensure the proper size pins are used to retain the cylinder in place and are secured with pins. Ensure the bolts used to retain the hydraulic motor are secured and that the pinions attached to the motor are secured and not worn.
- Check for hydraulic leaks on the cylinder, motors, along the hydraulic lines, and at the tractor hydraulic ports.

OPERATION

⚠ WARNING

Do not operate this Equipment with hydraulic oil or fuel leaking. Oil and fuel are explosive and their presence could present a hazard. Do not check for leaks with your hand! High-pressure oil streams from breaks in the line could penetrate the skin and cause tissue damage including gangrene. To check for a hose leak, SHUT the unit ENGINE OFF and remove all hydraulic pressure. Wear oil impenetrable gloves, safety glasses and use cardboard to check for evidence of oil leaks. If you suspect a leak, REMOVE the HOSE and have it tested at a Dealer. If oil does penetrate the skin, have the injury treated immediately by a physician knowledgeable and skilled in this procedure. (SG-15) str



OPERATION

OPERATION

TRACTOR PRE-OPERATION INSPECTION



Tractor ID# _____

Date: _____

Make : _____

Shift: _____



Before conducting the inspection, make sure the tractor engine is off, all rotation has stopped and the tractor is in park with the parking brake engaged. Make sure the implement is resting on the ground or securely blocked up and all hydraulic pressure has been relieved.

OPERATION

Item	Condition at Start of Shift	Specific Comments if not OK
The flashing lights function properly		
The SMV Sign is clean and visible		
The tires are in good condition with proper pressure		
The wheel lug bolts are tight		
The tractor brakes are in good condition		
The steering linkage is in good condition		
There are no visible oil leaks		
The hydraulic controls function properly		
The ROPS or ROPS Cab is in good condition		
The seatbelt is in place and in good condition		
The 3-point hitch is in good condition		
The drawbar pins are securely in place		
The PTO master shield is in place		
The engine oil level is full		
The brake fluid level is full		
The power steering fluid level is full		
The fuel level is adequate		
The engine coolant fluid level is full		
The radiator is free of debris		
The air filter is in good condition		
Proper hourly greasing is done per Operator's Manual		

Operator's Signature: _____

DO NOT OPERATE an UNSAFE TRACTOR or IMPLEMENT

OPERATION

SNOW BLOWER PRE-OPERATION INSPECTION



Implement ID# _____
 Date: _____
 Make: _____
 Shift: _____

IMPORTANT: Scan this QR Code for an electronic copy of this inspection sheet.

Inspection Sheets



www.algqr.com/sbi



Before conducting the inspection, make sure the skid steer engine is off, all rotation has stopped and the skid steer is in park with the parking brake engaged. Make sure the implement is resting on the ground or securely blocked up and all hydraulic pressure has been relieved.

OPERATION

Item	Condition at Start of Shift	Specific Comments if not OK
The Operator's Manual is in the canister on the mower		
All safety decals are in place and legible		
The SMV sign is in place and is clean and visible.* If applicable		
3-Pt. Hitch or Skid Steer connections, bolts & pins are secure.		
There are no signs of cracks or stress on machine.		
The 3-Pt. Hitch sway bar/chains are secure & tight.* If applicable.		
The hydraulic hose connections are securely attached.		
There are no leaks or damaged hoses		
The hydraulic cylinder pins are secure.		
The snow blower discharge shoot is clear of ice/debris.		
Snow discharge shoot is in place & in good condition.		
PTO Driveline/Gearbox shields are in good condition.		
Driveline yokes are securely attached to Tractor PTO and blower.* If applicable.		
Gearbox mounting bolts are tight.		
Gearbox oil is at the proper level.		
Snow blower fan blades are not chipped, cracked or bent.		
Machine is lubricated as per Operator's Manual.		

Operator's Signature: _____

DO NOT OPERATE an UNSAFE TRACTOR or IMPLEMENT

OPERATION

9. DRIVING THE TRACTOR AND SNOW BLOWER

Safe tractor transport requires the operator possess a thorough knowledge of the model being operated and precautions to take while driving with an attached implement. Ensure the tractor has the capacity to handle the weight of the implement and the tractor operating controls are set for safe transport. To ensure safety while driving the tractor with an attached implement, review the following.

WARNING

Transport only at speeds where you can maintain control of the equipment. Serious accidents and injuries can result from operating this equipment at high speeds. Understand the Tractor and Implement and how it handles before transporting on streets and highways. Make sure the Tractor steering and brakes are in good condition and operate properly.



Before transporting the Tractor and Implement, determine the proper transport speeds for you and the equipment. Make sure you abide by the following rules:

Test the tractor at a slow speed and increase the speed slowly. Apply the Brakes smoothly to determine the stopping characteristics of the Tractor and Implement. As you increase the speed of the Tractor the stopping distance increases. Determine the maximum transport speed not to exceed 20 mph (30 kph) for transporting this equipment.

Test the equipment at a slow speed in turns. Increase the speed through the turn only after you determine that the equipment can be operated at a higher speed. Use extreme care and reduce your speed when turning sharply to prevent the tractor and implement from turning over. Determine the maximum turning speed for you and this equipment before operating on roads or uneven ground.

Only transport the Tractor and Implement at the speeds which allow you to properly control the equipment.

Be aware of the operating conditions. Do not operate the Tractor with weak or faulty brakes or worn tires. When operating down a hill or on wet or rain slick roads, the braking distance increases: use extreme care and reduce your speed. When operating in traffic always use the Tractor's flashing warning lights and reduce your speed. Be aware of traffic around you and watch out for the other guy. (SG-19)str



DANGER

This Implement may be wider than the Tractor. Be careful when operating or transporting this equipment to prevent the Implement from running into or striking sign posts, guard rails, concrete abutments or other solid objects. Such an impact could cause the Implement and Tractor to pivot violently resulting in loss of steering control, death, or serious injury. Never allow the Implement to contact obstacles. (S3PT-12)str

OPERATION

9.1 Starting the Tractor

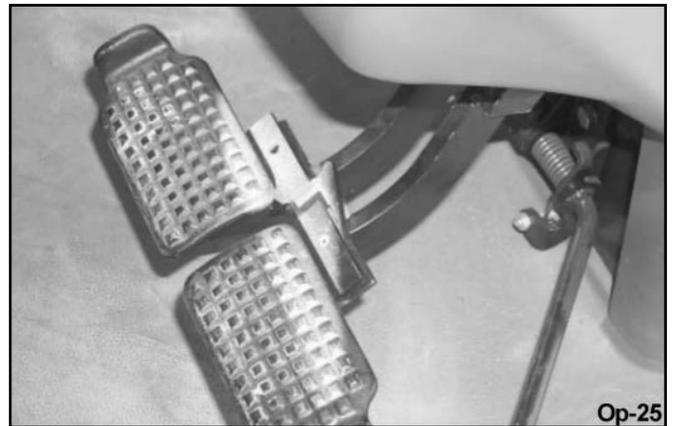
The procedure to start the tractor is model specific. Refer to the tractor operator's manual for starting procedures for your particular tractor. Consult an authorized dealer if the starting procedure is unclear. Ensure the 3-point control lever is in the lowered position and the PTO is disengaged before starting the tractor.



9.2 Brake Lock and Differential Setting

Make sure the tractor brakes are in good operating condition. Tractor brakes can be set to operate independently allowing single rear wheel braking action or locked together to provide simultaneous rear wheel braking. FOR MOST DRIVING AND OPERATING CONDITIONS, THE BRAKE PEDALS SHOULD BE LOCKED TOGETHER TO PROVIDE THE MOST EFFECTIVE BRAKING ACTION.

Always disengage the tractor differential lock when turning. When engaged the differential lock will prevent or limit the tractor from turning. During normal cutting conditions, locking the differential provides no benefit and should not be used.



⚠️ WARNING

Be aware of the operating conditions. Do not operate the Tractor with weak or faulty brakes. When operating down a hill or on wet or rain slick roads, the braking distance increases. Use extreme care and reduce your speed in these conditions. When operating in traffic, always use the Tractor's flashing warning lights and reduce your speed. Be aware of traffic around you and watch out for the other guy. OPS-U- 0013 str

OPERATION

OPERATION

9.3 Driving the Tractor and Snow Blower

Start off driving at a slow speed and gradually increase your speed while maintaining complete control of the tractor and snow blower. Moving slowly at first will also prevent the tractor from rearing up and loss of steering control. The tractor should never be operated at speeds that cannot be safely handled or which will prevent the operator from stopping quickly during an emergency. If the power steering or engine ceases operating, stop the tractor immediately as the tractor will be difficult to control.

WARNING

Allow sufficient clearance for the Implement to swing outward while turning. Implements carried behind the Tractor will swing outside the tire path when making turns. Contacting a solid object while turning will cause equipment damage and possible injury. (S3PT-20) str

Perform turns with the tractor and snow blower at slow speeds to determine how the tractor with the attached implement handles a turn. When operating the snow blower the overall working length of the unit is increased. Allow additional clearance for the snow blower when turning. Extra precaution should be taken to avoid hitting parked vehicles, sign, road structures, bystanders, and animals due to the overall length and width of the implement

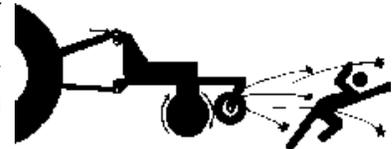


To avoid overturns, drive the tractor with care and at safe speeds, especially when operating over rough ground, crossing ditches or slopes, and turning corners. Rear tractor tire spacing should be increased when working on inclines or rough ground to reduce the possibility of tipping.

Use extreme caution when operating on steep slopes. Keep the tractor in a low gear when going downhill. DO NOT coast or free-wheel downhill.

WARNING

Do not let the auger turn when the implement is raised for any reason, including clearance or for turning. Raising the implement exposes the auger which creates a potentially serious hazard and could cause serious injury or even death from objects thrown from the auger.



OPERATION

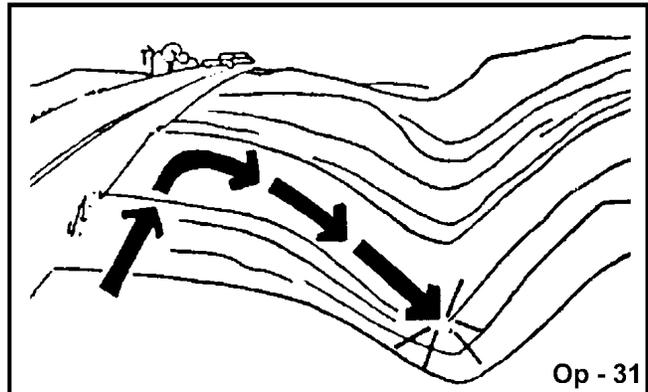
9.4 Crossing Ditches and Steep Inclines

WARNING

Damage resulting from over-collapse of the driveline's inner profile and its outer housing may allow the driveline to come loose from the Tractor which could cause bodily injury to the operator or bystanders and/or extensive damage to the Tractor or Implement.

When confronted with an incline or ditch, do not approach from an angle which is perpendicular or straight on as damaged to over collapse of the driveline may occur.

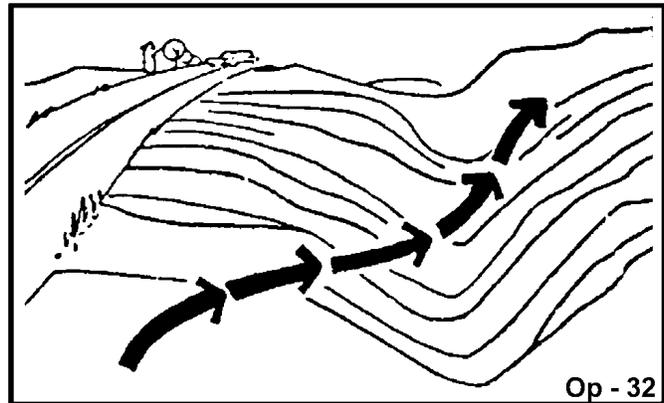
When crossing such terrain, the implement should be fully lowered for a lower center of gravity and added stability. OPS-R-0021 str



INCORRECT: DO NOT approach ditch straight on

Inclines and ditches should be approached along a line which is at an angle as shown. This type of path will reduce the possibility of over-collapse of the driveline and resulting damage. If the gradient is so steep that such an approach increases the possibility of a tractor roll-over, select an alternate crossing path.

When operating the tractor and implement across slopes and inclines, through ditches, and other uneven terrain conditions, it is important to maintain sufficient deck to ground clearance. If too much snow is being carried into the snow blower, reduce the working depth. Ground contact also produces a severe shock load on the snow blower drive and resulting in possible damage and premature wear. OPS-SB-0024 str



CORRECT: Approach ditch at an angle

OPERATION

10. OPERATING THE TRACTOR AND SNOW BLOWER

THE OPERATOR MUST COMPLETELY UNDERSTAND HOW TO OPERATE THE TRACTOR AND SNOW BLOWER AND ALL CONTROLS BEFORE ATTEMPTING TO OPERATE. The operator must read and understand the Safety and Operation Sections of the snow blower and tractor operator's manuals. These manuals must be read and explained to any operator who cannot read. Never allow someone to operate the snow blower and tractor without complete operating instructions.



Before starting any operation, the operator must become familiar with the area to be snow blown and any obstacles and hazards contained within to ensure safety to the operator, bystanders, and equipment. Special attention should be paid to foreign debris, rough terrain, steep slopes, and passersby and animals in the area.

⚠ WARNING

Many varied objects, such as wire, cable, rope, or chains, can become entangled in the rotating parts of the Implement. These objects could then swing outside the housing at great velocity. Such a situation is extremely hazardous and could result in serious injury or even death. Inspect the area for such objects before working in the area. Remove any such objects from the site. Never allow the implement to contact such objects. (STL-6) str

10.1 Foreign Debris Hazards

Before blowing snow, inspect the area to make sure there are no objects larger than 2" to be snow blown or debris that can get entangled on the auger. Remove all foreign objects and debris. If objects are too big to remove, mark them clearly and be sure to prevent the implement from contacting them.



If you hit a solid object or foreign debris that is larger than 2", stop the implement and tractor at once. Immediately idle the engine speed and disengage the PTO. Wait for all rotating motion to stop, then raise the implement and move the tractor and implement off the object. Inspect the area and mark the location of the debris. Inspect the condition of the implement and make any needed repairs immediately. Make sure the auger is not damaged before resuming operation.

Always wear your seat belt securely fastened and only operate the tractor and snowblower with the ROPS in the raised position. If the tractor or snow blower hits a tree stump or bump, a sudden movement could throw you off of the seat and under the tractor and snowblower. The seat belt is your best protection from falling off the tractor and the ROPS provides protection from being crushed during a tractor roll-over. OPS-SB-0016_A str

OPERATION



WARNING

Be sure you have adequate knowledge of the property you will be working on. Take time to make yourself aware of any area underwater or underground lines or cables. Contact with buried lines or cable could result in serious injury or death. (STL-1) str



DANGER

There are obvious and hidden potential hazards in the operation of this Implement as in all power-driven or pulled equipment. REMEMBER! This machine is often operated in rough terrain conditions that include grass, weeds, gullies, holes, slopes, hidden obstructions and the like. Serious injury or even death may occur unless care is taken to assure the safety of the operator and bystanders in the area. Do not operate this machine with anyone in the immediate area. Stop operating if anyone comes within 25 feet of the equipment. (STL-4) str

10.2 Engaging the Power Take Off (PTO)

Before engaging the PTO, make certain that the area is clear of bystanders and passersby. Set the tractor engine speed at approximately 540 RPM before engaging the PTO. Shift the PTO control to the ON position, and slowly increase the engine speed until the PTO is operating at the rated speed. If you here unusual noises or feel abnormal vibrations, disengage the PTO immediately. Inspect the snow blower to determine the cause of the noise or vibration and repair the abnormality. OPS-SB-0017_A str



WARNING

Do not put hands or feet under rotating auger. Auger contact can result in serious injury or even death. Stay away until all motion has stopped and the frame is securely blocked up.



DANGER

Make sure the PTO shield, integral driveline shields, and input shields are installed when using PTO-driven equipment. Always replace any shield if it is damaged or missing. (S3PT-8) str



10.3 PTO RPM Ground Speed

Ground speed for snowblower will depend upon the condition of the area to be snow blown. Recommended speed for efficient snow blower performance is 1.5 mph. **However, the speed at which the snow blower will operate at peak performance is dependent upon terrain and snow conditions.** Reduce ground speed when operating in heavy or wet snow conditions. Operate the implement at its full rated PTO speed to maintain speed for snow blower operation. Refer to the tractor operator's manual or the tractor instrument panel for the engine speed and gear to provide the required PTO and desired ground speed. Make sure that the snowblower is operating at its full rated speed before entering the field or paved areas to be snow blown. If it becomes necessary to temporarily regulate engine speed, increase or decrease the throttle gradually.

Ground speed is achieved by transmission gear selection and not by the engine operating speed. The operator may be required to experiment with several gear range combinations to determine the best gear and range which provides the most ideal performance from the snowblower and most efficient tractor operation. As the severity of operation conditions increase, the ground speed should be decreased by selecting a lower gear to maintain the proper operating PTO speed.



WARNING

Blow snow at the speed that you can safely operate and control the Tractor and Snow Blower. Safe speed depends on terrain and snow conditions. **Normal ground speed range is from 0.5 to 1.5 mph.** Use slow speeds when operating on or near steep slopes, ditches, drop-offs, overhead obstructions, power lines, or when debris and foreign objects are to be avoided. (SSB-4) str

OPERATION

11. OPERATING THE SNOW BLOWER

When ready for field use, stop the snow blower and set the chute deflector to the desired position. Next, adjust the snow blower skid shoes. Remove the pin, adjust the shoe so that the blade is at the desired height then reinstall the pins. If using the optional gage wheels, remove the adjustment pin, adjust the wheel height, and reinstall the adjustment pin. Make sure that the blade is running at an even height at both ends. Scraper blade clearances of about 1/4" are sufficient for paved surfaces..



Before operating the snow blower recheck that all fasteners, nuts, bolts, screws and cotter pins are in place and all bolts are torqued to specification.



⚠ WARNING

Only operate the snow blower in conditions where you have clear visibility in daylight or with adequate artificial lighting. Never snow blow in darkness or in conditions where you cannot clearly see at least 100 yards in front and to the sides of the Tractor and Snow Blower. Make sure that you can clearly see and identify passersby, steep slopes, ditches, drop-offs, overhead obstructions, power lines, debris and foreign objects. If you are unable to clearly see these types of items, discontinue snow blowing. (SSB-1) str

⚠ DANGER

DO NOT operate this Implement on a Tractor that is not properly maintained. Should a mechanical or Tractor control failure occur while operating, immediately shut down the Tractor and perform repairs before resuming operation. Serious injury and possible death could occur from not maintaining this Implement and Tractor in good operating condition. (SG-36) str

OPERATION



When blowing snow with two machines in the same area be sure that windows are closed. (SSB-10) str



If removing snow from other than paved or hard surfaced areas, move deflector to the low position to minimize the distance that gravel or foreign material is ejected.



Never direct discharge of snow towards people, pets, or property.



Excessive speed of drop may cause damage or injury. Fully lowering implement should require at least two seconds.



Do not operate the snow blower PTO drive in the fully raised position.



Stop engine, disengage power take-off, and remove ignition key whenever leaving tractor operating position

When implement is ready to snow blow do not use the snow blower to **PUSH SNOW!** Let the machine work its way through deep drifts and hard packed snow. For best results keep the snow blower fan running at rated PTO speed. If the tractor engine starts to labor, gear down.

Do not continuously operate the snow blower in transport position, as this will shorten the life of the universal joints.

Tractor chains and weighted tires will increase traction and improve performance especially in icy conditions.

The discharge chute should not plug during normal operation. However, if fan RPM is allowed to drop drastically in wet, sticky conditions, or if a shear bolt breaks in the fan the chute may plug. If the chute should plug, try raising the snow blower to transport position and the dropping it suddenly, if this fails to clear blockage, the chute will have to be manually cleared. To prevent blockage, when the RPM drops, rotate the drum to eject the snow through the side of the plow. This will empty the drum, and the chute will not plug as easily.



Do not allow snow or ice to build up around the chute rotation mechanism as this may cause damage to snow blower chute or the chute rotator mechanism.

When operating the snow blower, occasionally rotate the chute left then right to clear the front housing of snow.



Snow Blowers are capable under adverse conditions of throwing objects for great distances (200 feet or more). Do not allow the snow stream to fall on passersby. Ice, debris and heavy snow thrown from the snow blower can cause serious injury or death. (SSB-7) str



STOP SNOW BLOWING IF PASSERSBY ARE WITHIN 200 FEET.



Operate the Tractor and/or Implement controls only while properly seated in the Tractor seat with the seat belt securely fastened around you. Inadvertent movement of the Tractor or Implement may cause death or serious injury. (SG-29)str

OPERATION

OPERATION

Use extreme care when transporting the snow blower on public highways and roads. The combination of snow blower and the tractor is longer in length. The implement is also wider than the tractor. Allow ample clearance when transporting the tractor and implement to insure that they do not contact any bystanders, signs, road structures, or other vehicles.

Never raise the implement entirely while the auger is turning. If the implement must be raised higher than 12" from ground level, disengage the tractor PTO and wait for all implement rotation to come to a complete stop before proceeding to raise the implement. If implement is raised to high while the unit is running there is a possibility of damaging the driveline.



11.1 Shutting Down the Implement

Tractor and Snow Blower

To shut down the implement, first bring the tractor to a complete stop. Then slow down the snow blower by reducing the engine speed before disengaging the PTO. Wait for all rotating motion to stop before proceeding to drive or shut down the tractor.

Park the tractor on a level surface, place the transmission in park or neutral and apply the parking brake, lower the attached implement to the ground, shut down the engine, remove the key, and wait for all motion to come to a complete stop before exiting the tractor



12.DISCONNECTING THE SNOW BLOWER FROM THE TRACTOR



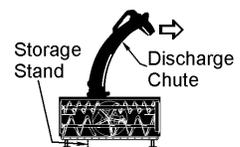
DANGER

Always shut the Tractor completely down, place the transmission in park, and set the parking brake before you or anyone else attempts to connect or disconnect the Implement and Tractor hitches. (S3PT-15) str



WARNING

Before disconnecting Snow Blower swing discharge chute to side of Snow Blower, Lower and lock storage stand in place, Stay away from front of Snow Blower until equipment is stable and secured from falling. Sudden or inadvertant falling of equipment could result in serious injury or death. (SSB-35) str



OPERATION

DANGER

Never stand or allow another person to stand between a running Tractor and the Unit when disconnecting the Implement from the Tractor 3-point hitch. Always shut the Tractor off completely and set the parking brake before attempting to disconnect the Implement pins from the Tractor hitch.

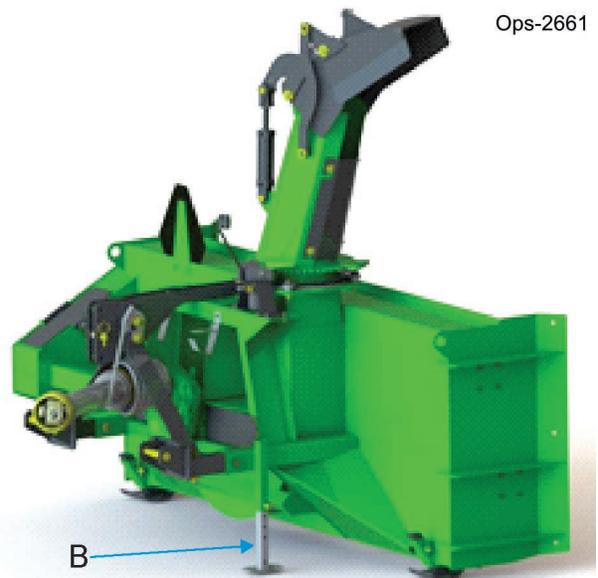
WARNING

Never crawl under a raised Implement supported solely by the Tractor 3-Point hitch. Release of the control lever or mechanical failure will result in the Implement falling and possible injury or death. Always securely block up the Implement before crawling underneath to perform repairs and service. (S3PT-19) str

Before disconnecting the implement, the PTO must be disengaged and auger rotation must be at a complete stop. Move the implement to a level storage location and lower the implement to the ground. If the implement is not resting securely on the ground, block the implement up securely before attempting to disconnect it from the tractor. Engage the park brake.

Use extreme care to keep feet and hands out from under the implement and clear of any pinch points when disconnecting the unit from the tractor.

Ensure that the Storage Stand "B" is lowered.



OPERATION

OPERATION

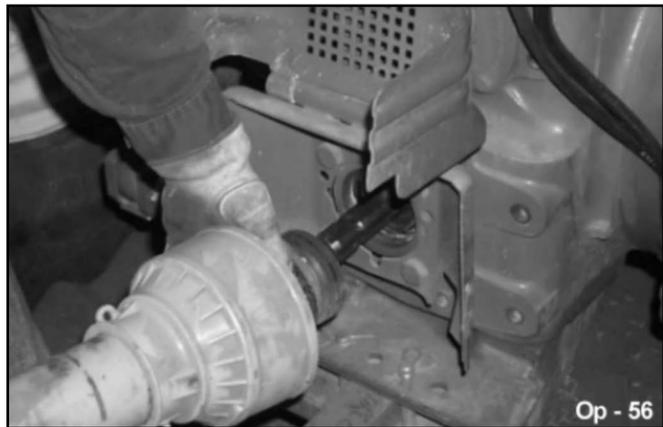
To disconnect the implement, first extend the tractor 3-point hitch top link to remove tension on the top link hitch pin. When the pin is loose and easy to rotate, remove the pin from the implement. Next remove both lower hitch pins.



Lift and rotate the PTO storage holder into the PTO storage position.



After disconnecting the 3 lift points, remove the implement driveline from the tractor PTO shaft. Lay the driveline down carefully to avoid damaging the driveline or its shield. Do not let the driveline fall into mud or dirt, which can contaminate the bearing and shorten the life of the driveline.



OPERATION



Never work under the Implement, the framework, or any lifted component unless the Implement is securely supported or blocked up to prevent sudden or inadvertent falling which could cause death or serious injury. (SG-14)str



Relieve hydraulic pressure prior to doing any maintenance or repair work on the Implement. Place the Implement on the ground or securely blocked up, disengage the PTO, and turn off the tractor engine. Push and pull the Remote Cylinder lever in and out several times prior to starting any maintenance or repair work. (S3PT-09)str



13.SNOW BLOWER STORAGE

Properly preparing and storing the snow blower at the end of the season is critical to maintaining its appearance and to help ensure years of dependable service. The following are suggested storage procedures:

1. Thoroughly clean all debris off the implement to prevent damage from standing water.
2. Lubricate all implements points and fill gearbox oil levels as detailed in the maintenance section.
3. Tighten all bolts and pins to the recommended torque.
4. Check the implement for worn and damaged parts. Perform repairs and make replacements immediately so that the implement will be ready for use at the start of the next season.
5. Store the implement in a clean, dry place with the implement resting securely on blocks or at ground level.
6. Keep the driveline's yokes or hydraulic hoses from sitting in water, dirt and other contaminants.
7. Use spray touch-up enamel where necessary to prevent rust and maintain the appearance of the implement.



Ops-1559

NOTE: If equipped with the truck-loading chute, ensure the chute is rotated to the side. If the chute is facing forward, the blower may tip over.



Never allow children to play on or around Tractor or Implement. Children can slip or fall off the Equipment and be killed or injured. Inadvertent contact with controls can cause the Implement to shift or fall crushing themselves or others. (SG-25) str

14.TRANSPORTING THE TRACTOR AND SNOW BLOWER

Inherent dangers of operating the tractor and implement and the possibility of accidents are not left behind when you finish snow blowing an area. Therefore, the operator must employ good judgement and safe operation practices when transporting the tractor and implement between locations. By using good judgement and following safe transport procedures, the possibility of accidents while moving between locations can be substantially minimized. OPS-SB-0022 str

OPERATION



Never allow children or other persons to ride on the Tractor or Implement.
Falling off can result in death or serious injury. (SG-10)str



OPERATION

Before transporting the tractor on a public roadway or boarding a trailer for transport, the tractor brake pedals should be locked together. Locking the pedals ensures that both wheels brake simultaneously while stopping, especially when making an emergency stop.



Op-25

Use extreme caution and avoid hard applications of the tractor brakes when towing heavy loads at road speeds. Never tow the implement at speeds greater than 20 MPH (32 kph). OPS-U- 0018 str
If the tractor's hydraulic pump is not independent of the tractor PTO, or if the tractor PTO has to be run to have hydraulic power, disconnect the snow blower driveline from the tractor PTO output shaft. Secure the driveline to the snow blower deck to prevent driveline damage or loss during transport.

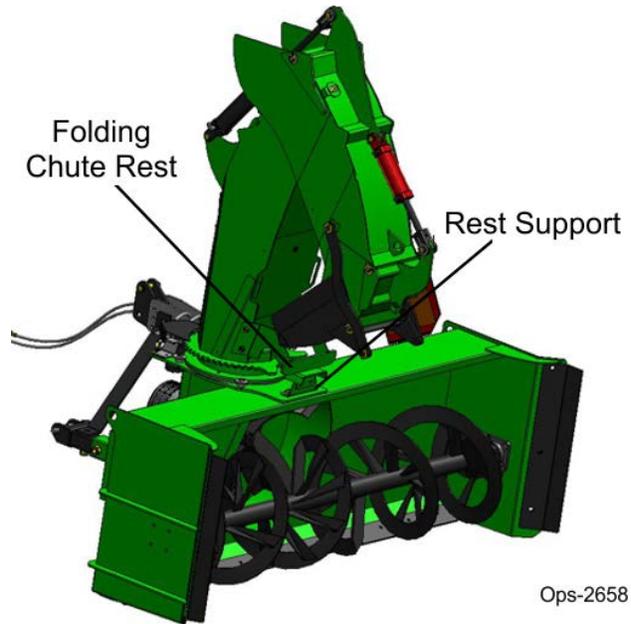


Op-37

OPERATION

If the Snow Blower is equipped with a Folding Truck Loading Chute always follow these steps before transporting the snow blower or putting it into storage.

1. Rotate the chute so it faces fully forward so the folding chute rest sits fully on the rest support.
2. Retract the upper chute section and deflector until the deflector comes to rest in the notches of the folding chute rest. This provides additional stability to the chute during transport.



WARNING

In wet conditions where there is a likelihood of material collecting on the Implement, make certain that this material is removed before traveling on public roadways. (STL-7) str

14.1 Transporting on Public Roadways

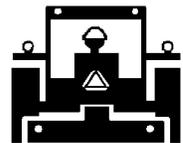
DANGER

Never allow children or other persons to ride on the Tractor or Implement. Falling off can result in death or serious injury. (SG-10)str



WARNING

Make certain that the "Slow Moving Vehicle" (SMV) sign is installed in such a way as to be clearly visible and legible. When transporting the Equipment use the Tractor flashing warning lights and follow all local traffic regulations. (SG-6)str



OPERATION

Extreme caution should be used when transporting the tractor and implement on public roadways. The tractor must be equipped with all required safety warning features including a SMV emblem and flashing warning lights to alert drivers of the tractor's presence. Remember that roadways are primarily designed for automotive drivers and most drivers will not be looking out for you, therefore, you must look out for them. Check your side view mirrors frequently and remember that vehicles will approach quickly because of the tractor's slower speed.



The SMV (Slow-Moving Vehicle) emblem is universal symbol used to alert drivers of the presence of equipment traveling on roadways at a slow speed. SMV signs are a triangular bright orange with reflective red trim for both easy day and night visibility. Make sure the SMV sign is clean and visible from the rear of the unit before transporting the tractor and implement on a public roadway. Replace the SMV emblem if faded, damaged, or no longer reflective. OPS-U- 0020str



Make sure that all tractor flashing warning lights, headlights, and brake/taillights are functioning properly before proceeding onto public roads. While newer model tractors have plenty of lighting to provide warning signals and operating lighting, most older models were only equipped with operating lights. Consult an authorized tractor dealer for lighting kits and modifications available to upgrade the lighting on older tractor models

When operating on public roads, have consideration for other road users. Pull to the side of the road occasionally to allow following traffic to pass. Do not exceed the legal speed limit set in your area for agricultural tractors. Always stay alert when transporting the tractor and implement on public roads. Use caution and reduce speed if other vehicles or pedestrians are in the area.

OPERATION

Reduce speed before turning or applying the brakes. Ensure that both brake pedals are locked together when operating on public roads. *OPS-U-0023 str*



▲ DANGER

This Implement may be wider than the Tractor. Be careful when operating or transporting this equipment to prevent the Implement from running into or striking sign posts, guard rails, concrete abutments or other solid objects. Such an impact could cause the Implement and Tractor to pivot violently resulting in loss of steering control, death, or serious injury. Never allow the Implement to contact obstacles. *(S3PT-12)str*

▲ WARNING

Allow sufficient clearance for the Implement to swing outward while turning. Implements carried behind the Tractor will swing outside the tire path when making turns. Contacting a solid object while turning will cause equipment damage and possible injury. *(S3PT-20) str*

▲ DANGER

Be particularly careful when transporting the Implement using the tractor. Turn curves or go up or down hills only at a low speed and at a gradual steering angle. Make certain that at least 20% of the tractor's weight is on the front wheels to maintain safe steering. Slow down on rough or uneven surfaces. *(STI-01) str*

OPERATION

WARNING

Transport only at speeds where you can maintain control of the equipment. Serious accidents and injuries can result from operating this equipment at high speeds. Understand the Tractor and Implement and how it handles before transporting on streets and highways. Make sure the Tractor steering and brakes are in good condition and operate properly.



Before transporting the Tractor and Implement, determine the proper transport speeds for you and the equipment. Make sure you abide by the following rules:

Test the tractor at a slow speed and increase the speed slowly. Apply the Brakes smoothly to determine the stopping characteristics of the Tractor and Implement. As you increase the speed of the Tractor the stopping distance increases. Determine the maximum transport speed not to exceed 20 mph (30 kph) for transporting this equipment.

Test the equipment at a slow speed in turns. Increase the speed through the turn only after you determine that the equipment can be operated at a higher speed. Use extreme care and reduce your speed when turning sharply to prevent the tractor and implement from turning over. Determine the maximum turning speed for you and this equipment before operating on roads or uneven ground.

Only transport the Tractor and Implement at the speeds which allow you to properly control the equipment.

Be aware of the operating conditions. Do not operate the Tractor with weak or faulty brakes or worn tires. When operating down a hill or on wet or rain slick roads, the braking distance increases: use extreme care and reduce your speed. When operating in traffic always use the Tractor's flashing warning lights and reduce your speed. Be aware of traffic around you and watch out for the other guy. (SG-19)str



OPERATION

14.2 Hauling the Tractor and Snow Blower

Before transporting a loaded tractor and implement, measure the height and width dimensions and gross weight of the complete loaded unit. Ensure that the load will be in compliance with the legal limits set for the areas that will be traveled through. OPS-U- 0024str



OPERATION

Use adequately sized and rated trailers and equipment to transport the tractor and implement. Consult an authorized dealer to determine the proper equipment required. Using adequately sized chains, heavy duty straps, cables and/or binders, securely tie down both the front and rear of the tractor utilizing the proper tie down locations as specified by the tractor manufacturer. OPS-U-0025 str



Arrange the chains so that when tightened, the chains are pulling downward and against themselves. Carefully tighten the securing chains or other fasteners using boomers or binders to apply maximum tension. Use extreme care when attaching and removing the securing devices as the extreme tension involved when released has the potential to inflict serious injury.



While hauling the tractor and implement, make occasional stops to check that the tractor and implement have not moved or shifted and that the securing chains have maintained tension. If during transport a hard braking, sharp turning, or swerving action was performed, stop at the next safe location to inspect the security of the load. OPS-U-0026str

OPERATION

OPERATION

15. TROUBLESHOOTING GUIDE

Problem	Possible Cause	Remedy
Auger Does Not Operate	Cross shaft shear bolt broken.	Replace shear bolt.
Excessive Power Required to Operate Snow Blower	Operating in too high of gear.	Gear down tractor.
	Blade scraping ground.	Adjust skid shoes.
Tractor Wheel Slippage	Ballast or traction.	Install chains.
Excessive Mechanical Noise	Loose bolts.	Tighten bolts.
	Worn universal joint bearings,	See your dealer.
	Worn bearings.	See your dealer.
Drum Does Not Throw Snow	Chute plugged.	Remove obstruction.
Chute Does Not Rotate	Chute frozen.	Remove ice.
	Leaking hydraulic hose.	Replace hose.
	Hoses unhooked from tractor.	Hook hoses to tractor.

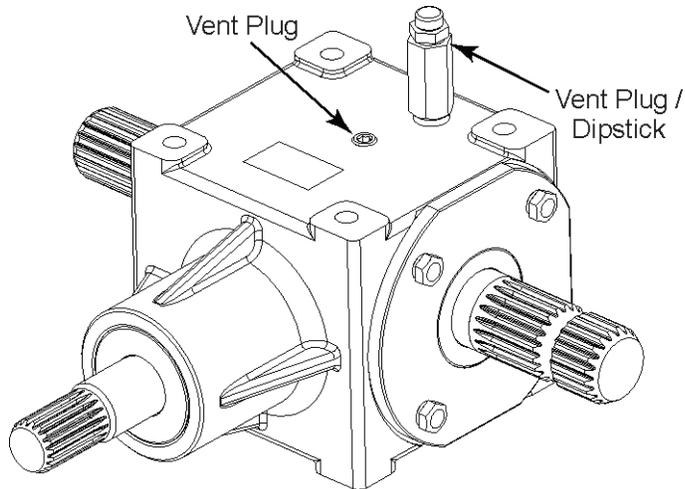
MAINTENANCE SECTION

Maintenance Section 5-1

MAINTENANCE

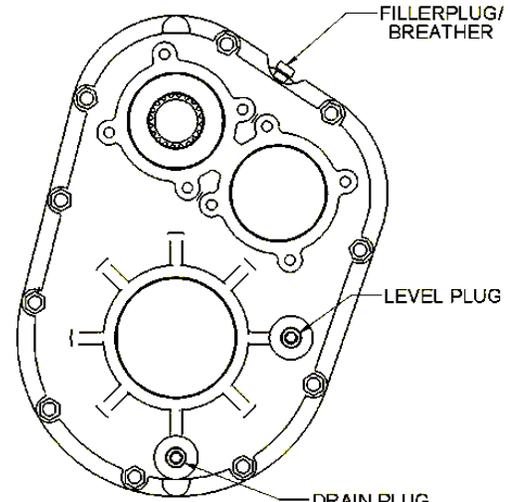
LUBRICATION

1. **IMPORTANT:** Remember to check oil level in all gearboxes.



Mnt-SB-0034

Drain Plug on Underside
of Gearbox



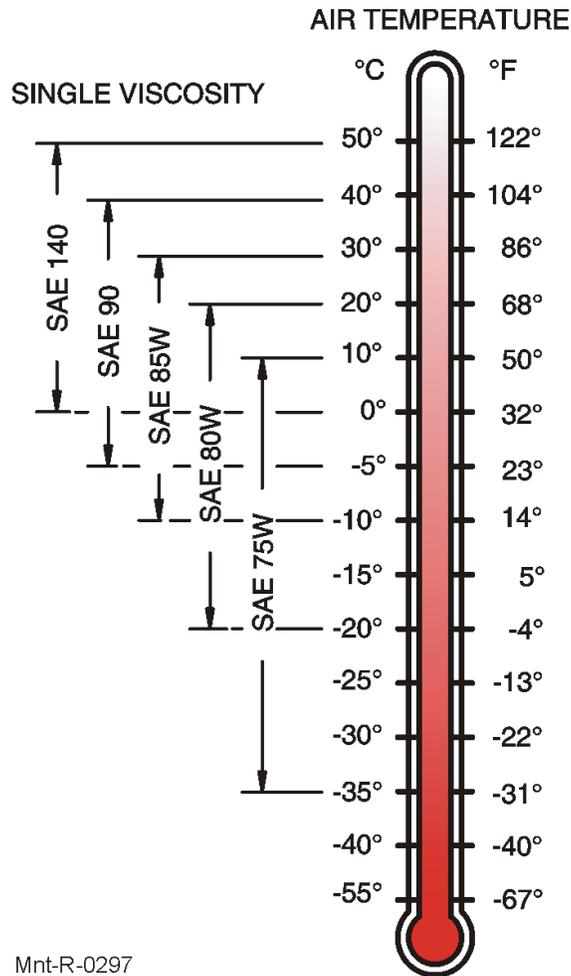
Mnt-SB-0024

1000 RPM Option Only

2. Replace gear oil in all gearboxes after the first 50 hours of operation, then yearly.
3. Check gearbox oil levels frequently.
4. Procedure for refilling a gearbox:
 - Park unit on level surface
 - Remove the drain plug from underside of gearbox and drain out oil.
 - Reinstall drain plug
 - Remove the vent plug/dipstick from the top of the gearbox.
 - Fill gearbox until oil runs out the level plug hole. Gearbox capacity is approximately 1.27 qt. (1.2 L) in the input box and 1.27 qt (1.2 L) in the output box.
Capacity is approximately 0.9 liters (.9 qt) for T-Box
Capacity is approximately 1.2 liters (1.27 qt) for Reducer Box
 - Reinstall the vent plug/dipstick. Dispose of old oil in accordance with local regulations.
5. If the fan must be removed from the gearbox, antifreeze must be added to the shaft prior to installation.
6. Gear case oil should meet the following specifications:
 - API Service Classifications GL 5
 - Military Specification MIL L 2105C

MAINTENANCE

Consult the following chart for the oil viscosity recommendations:



Grease Schedule

Grease should meet the following recommendations:

SAE Multi Purpose Grease

SAE Multi Purpose Grease containing 3 to 5 percent molybdenum disulfide

Below 0°C (32°F) use SAE (NLGI) #0 or #1

Above 0° C (32°F) use SAE (NLGI) #2

Grease applied to PTO shaft should meet the following recommendations:

Use EP 0, Lithium Complex Grease

MAINTENANCE

1000 RPM REDUCER GEASRBOX REMOVAL/INSTALLATION

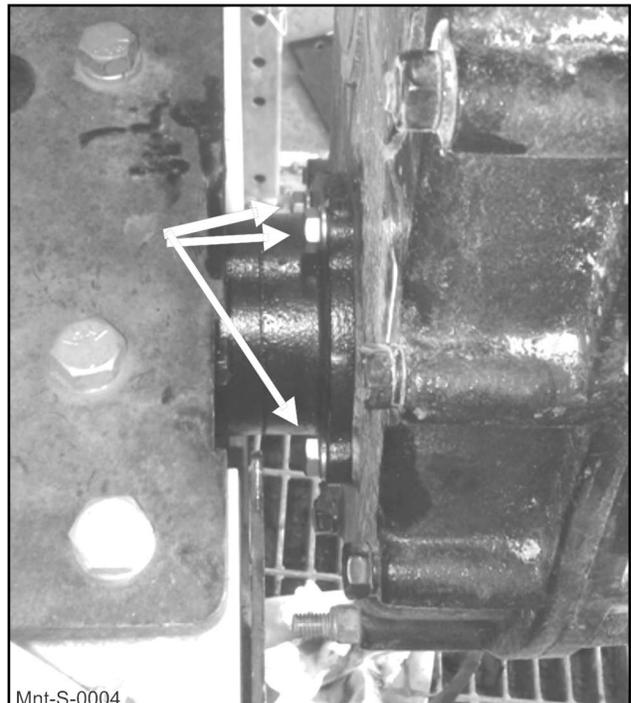
Reducer Gearbox Removal

1. Disconnect all components from the snowblower and disconnect the snowblower from the tractor
2. Disconnect the driveline from the gearbox spline shaft, and remove the cone.



3. Remove the four bolts that hold the Reducer Gearbox onto the coupler.

NOTE: BE CAREFUL TO SUPPORT THE GEARBOX WHEN YOU REMOVE THE BOLTS. IT WILL ROTATE DOWN POTENTIALLY CAUSING INJURY.



MAINTENANCE

4. Slide the Reducer Gearbox off of the shaft.
5. Remove the four bolts that hold the coupler to the gearbox and remove the coupler.



Installing the Reducer Gearbox

1. Slide the Reducer Gearbox off of the shaft.



2. Apply High Heat Silicone to the face of the coupler.

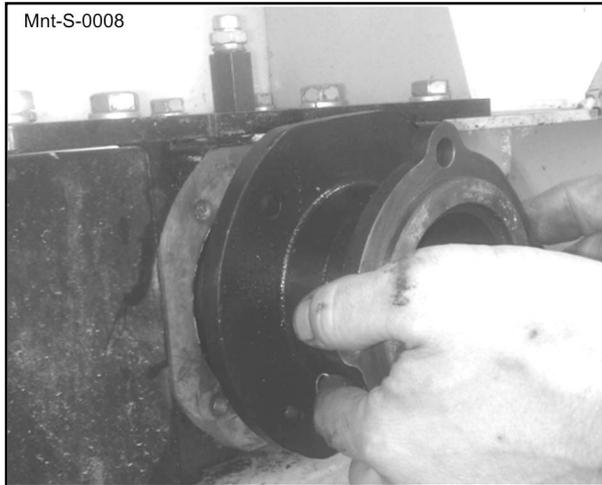


3. Press the Coupler into place on the Snowblower Gearbox. (The round side should go towards the chain case).

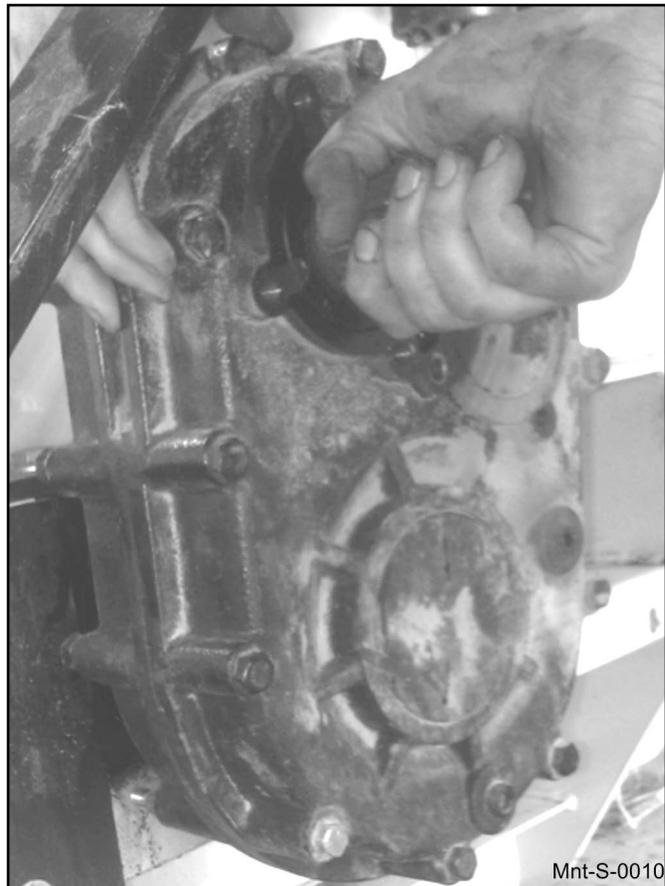
MAINTENANCE

MAINTENANCE

4. Apply locktite® to the 1/2" bolts and install them with lock washer. Tighten all 4 bolts.

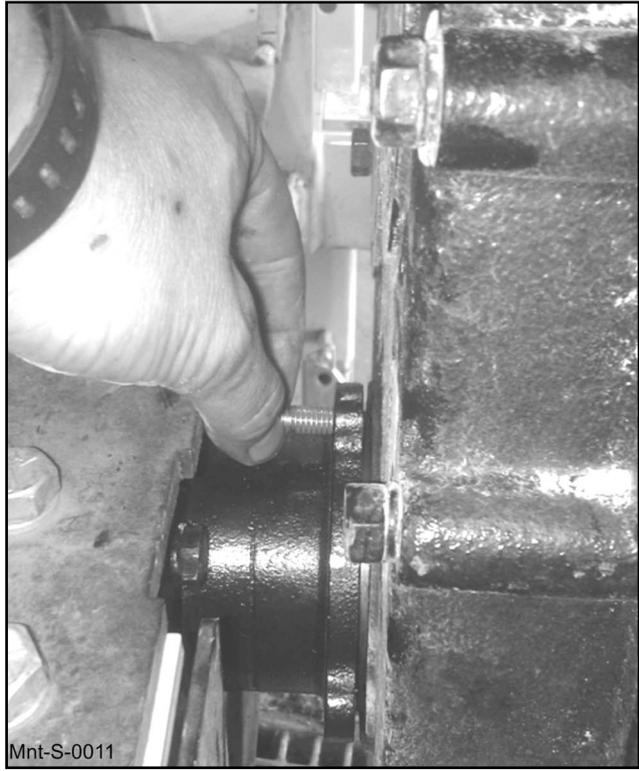


5. Prepare the other four 1/2" bolts with lock washers and locktite®.
6. Slide the Reducer Gearbox onto the exposed spline shaft. Be careful when lifting heavy parts. When installed on the shaft, the gearbox will want to rotate downward. It may be easier to install Reducer Box in a downward orientation and rotate it up to meet the bolt holes.



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7. Install the four 1/2" bolts and lock washers that you have prepared with locktite© in step 5. Tighten all four bolts to 75 ft. lbs.

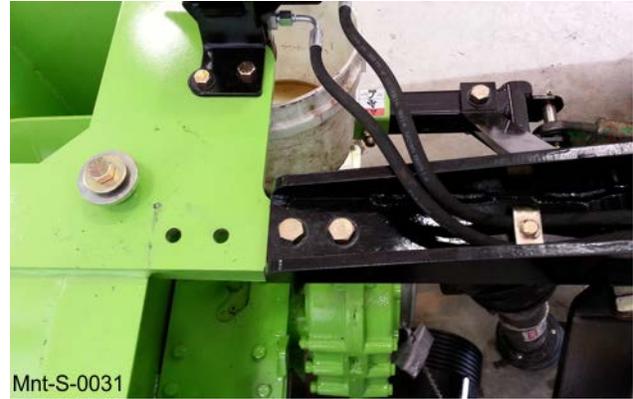


8. Install cone over the spline shaft of the Reducer Box.
9. Replace all shielding before operation of the machine.



MAINTENANCE

10. Insure that Stake Arms and Top arm are in the correct position (as shown) using the 1000 RPM option.



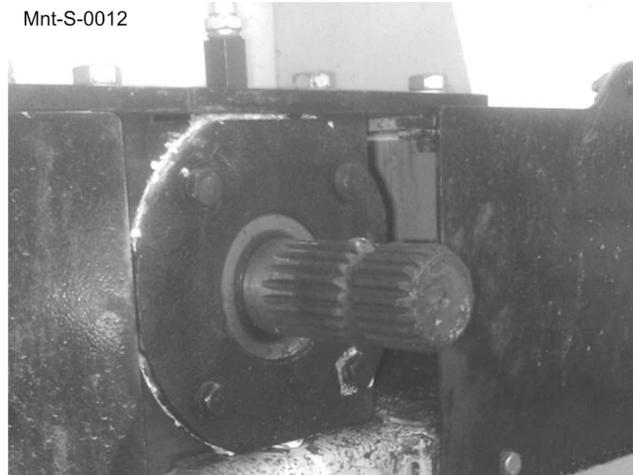
Installing the 1000 RPM Reducer Gearbox onto a 540 RPM Snow Blower

1. Disconnect all components from the snowblower and disconnect the snowblower from the tractor.

NOTE: ENSURE THE MACHINE IS FULLY SUPPORTED AND WILL NOT TIP OVER.

2. Remove the Cone and Mounting Plate to expose the Gearbox Cap Plate.

Mnt-S-0012



3. Remove the four 1/2" bolts and lock washers and remove the Gearbox Cap Plate.

NOTE: This job may be easier if the right hand shield is removed.

4. Clean the face of the gearbox to ensure all grease and dirt is removed.
5. Follow the Reducer Gearbox installation instructions to complete the conversion. A new seal will be needed for installation into the coupler. A new Bearing Race should be used as well.

Mnt-S-0013



MAINTENANCE

INSTRUCTIONS FOR CHANGING ROTATION ON 330-680 PARALLEL GEARBOXES

1. Drain Oil
2. Gearboxes are separated from each other already for ease of illustration rotation change.
3. Support gearbox slightly off workspace.



4. Remove 10 bolts to separate gearbox halves.
5. Insert bar in slot provided on either side of gearbox to pry apart..



MAINTENANCE

MAINTENANCE

6. Lift out idler gear and bearing cones as one assembly and set aside.



7. Lift out input driveshaft and bearing cones as an assembly and place in bearing cup where idler assembly was.



MAINTENANCE

8. Install idler assembly where input drive assembly was originally.



9. Remove existing seal in the cover plate removed earlier and replace it with plug #331-827 using proper driver.



MAINTENANCE

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10. Remove existing plug in the cover plate and replace with seal #331-858 using the proper seal driver.



MAINTENANCE

11. Clean both machined surfaces of gearbox halves.



12. Clean both machined surfaces of gearbox halves.
13. Reinstall cover carefully aligning dowel pins. (Gearbox halves should go together easily). **DO NOT FORCE TOGETHER.**



MAINTENANCE

MAINTENANCE

14. Install bolts previously removed and torque to 35 ft. lbs.



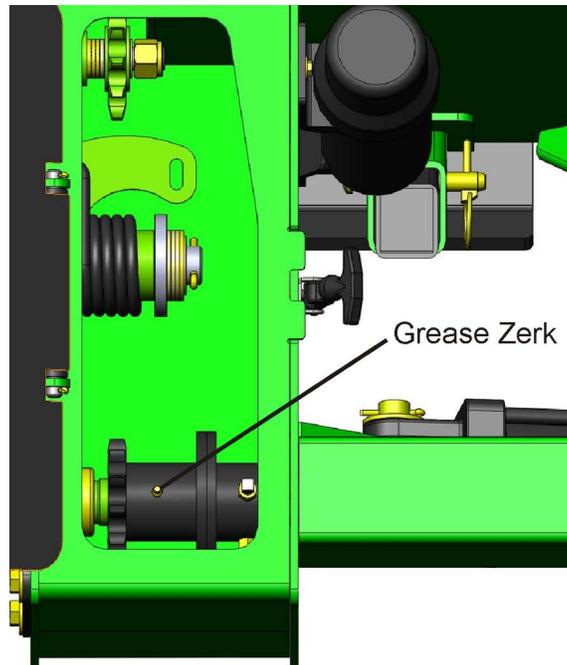
15. Turn input shaft to ensure there is no binding inside the gearbox.



MAINTENANCE

AUGER DRIVE SHEAR PLATE

Apply grease to the auger shear plate whenever a shear bolt breaks.



Mnt-SB-0019

Auger Drive Chain

Apply oil every 8 hours of operation (minimum) with a brush or spout can. Volume and frequency should be enough to prevent discoloration of the lubricant in the chain joints. Use SAE30 oil as heavier oils and greases are generally too stiff to enter and fill the chain joints.

Universal Joint Assemblies

Apply grease to the grease nipple on the slip sleeve of the universal assembly every 5 hours of operation.

Grease applied to PTO shaft should meet the following recommendations: Use EP 0, Lithium Complex Grease.

NOTE: The snow blower may have to be raised or lowered and the safety shields rotated to fully expose the grease nipple.

Occasionally pull the universal joints apart and apply grease to all sides of the slip shaft.

IMPORTANT: If the universal joint sliding members are allowed to dry out to the point where two halves cannot slip freely, damage to the snow blower or tractor may occur.

Universal Joint Cross Kits

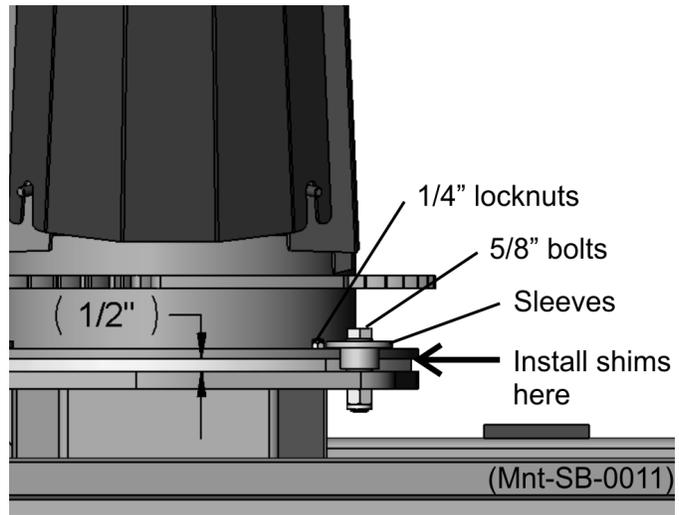
Every 5 hours of operation (minimum) lubricate the grease fittings on the universal joint cross kits. If grease is seen leaking out of the cross kit bearings, this is an indication that bearings are running hot. Under these conditions regrease the cross kits more frequently. Apply only one or two strokes from a hand type grease gun. If fittings are over lubricated seals may be damaged.

MAINTENANCE

Chute Ring

The UHMW ring requires no lubrication. However it must be inspected for wear. The distance between the chute and the base should always be about 1/2". If wear is found, a shim kit can be purchased from your local Schulte dealer. To install the shim kit:

1. Remove the 5/8" bolts holding the guide sleeves to the chute base
2. Remove the 1/4" locknuts fixing the UHMW to the chute.
3. Safely lift the chute and install the shims onto the UHMW, around the brass bolts.
4. Lower the chute onto the shims and reinstall the 1/4" locknuts.
5. Reinstall the guide sleeves and tighten the 5/8" bolts. Do not overtighten. The guide sleeves should be able to be turned by hand.



NOTE: If excessive wear is found, replace the UHMW ring. The guide sleeves must be inspected for wear as well. If wear on the brass bushing or outer sleeve is found, please replace.

REVERSING OR REPLACING BLADE

1. Occasionally check the blade for wear. If the blade has worn to the point where the moldboard is starting to wear then reverse it or replace it.
2. Remove the carriage bolts which attach the blade. Reverse or replace the blade.

NOTE: If the lock nuts are damaged or worn replace them also.

DRUM

1. The UHMW bearing holding the drum in place at the front of the plow requires no lubrication. If excessive wear is found on this bearing, i.e. the drum moves more than 1/8" laterally in one direction, the UHMW should be replaced.
2. The Nylatron bearing at the rear of the drum requires no lubrication. If excessive wear is found on this bearing, i.e. the drum moves more than 1/8" laterally in one direction, the Nylatron bearing should be replaced.

STORAGE

1. Wash any dirt or salt off the snow blower.
2. Remove drive chains and submerge in oil.
3. Smear grease over any exposed hydraulic cylinder shafts.

MAINTENANCE

MAINTENANCE

NUTS AND BOLTS

Check all nuts and bolts for tightness after the first 5 hours of operation then yearly.

Important

Shear bolts should not be over tightened, as this may cause unpredictable shearing action.

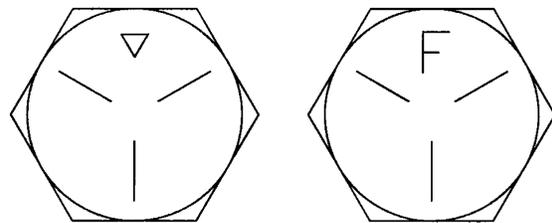
Bolt Grades and Torque

When replacing damaged bolts use only plated Grade 5 bolts unless otherwise specified. Use only bolts of the correct length [Refer to the "Parts" section]. Do not replace lock nuts with nuts and lock washers. Use only original equipment lock nuts.

Recommended Torques in foot pounds for SAE Grade 5 bolts, based on dry assembly:

Bolt Size	UNC		UNF	
	Ft-lbs	Nm	Ft-lbs	Nm
1/4"	8	11	10	14
5/16"	17	23	19	26
3/8"	31	42	35	47
7/16"	49	66	55	75
1/2"	75	102	85	115
5/8"	150	203	170	230
3/4"	269	365	297	403
1"	644	873	704	954
1-1/4"	1255	1700	1380	1870

GRADE (5) Bolt Head



Mnt-R-0285

IMPERIAL TO METRIC CONVERSION TABLE

Diameter of Bolts

Inches	Inches	Millimeters
0.25	1/4	6
0.3125	5/16	8
0.375	3/8	10
.05	1/2	12
0.625	5/8	16
0.75	3/4	20
1	1	24
1.25	1-1/4	30
1.5	1-1/2	36

Length of Bolts

Inches	Inches	Millimeters	Inches	Inches	Millimeters
0.5	1/2	12	5.25	5-1/4	130
0.625	5/8	16	5.5	5-1/2	140
.075	3/4	20	5.75	5-3/4	150
1	1	25	6	6	150
1.25	1-1/4	35	6.25	6-1/4	160
1.5	1-1/2	40	6.5	6-1/2	170
1.75	1-3/4	45	6.75	6-3/4	170
2	2	50	7	7	180
2.25	2-1/4	60	7.25	7-1/4	190
2.5	2-1/2	65	7.5	7-1/2	190
2.75	2-3/4	70	7.75	7-3/4	200
3	3	75	8	8	200
3.25	3-1/4	80	8.25	8-1/4	210
3.5	3-1/2	90	8.5	8-1/2	220
3.75	3-3/4	100	8.75	8-3/4	220
4	4	100	9	9	230
4.25	4-1/4	110	9.25	9-1/4	240
4.5	4-1/2	120	9.5	9-1/2	240
4.75	4-3/4	120	9.75	9-3/4	250
5	5	130	10	10	260

Grade / Class

Imperial		Metric	
	Gr 5	Cl 8.8	
	Gr 8	Cl 10.9	

NOTE: This conversion sheet should only be used when all options to use correct hardware have been exhausted.

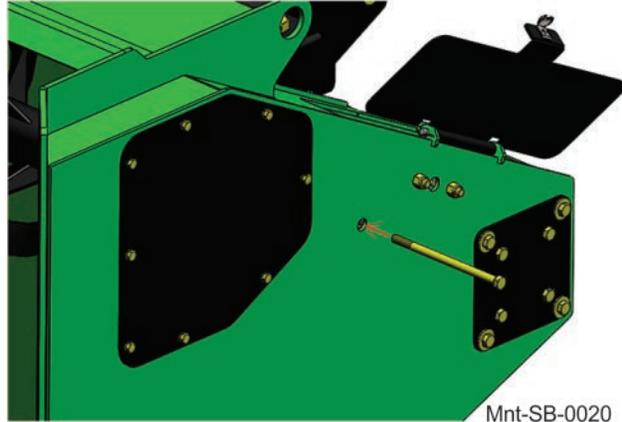
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MAINTENANCE

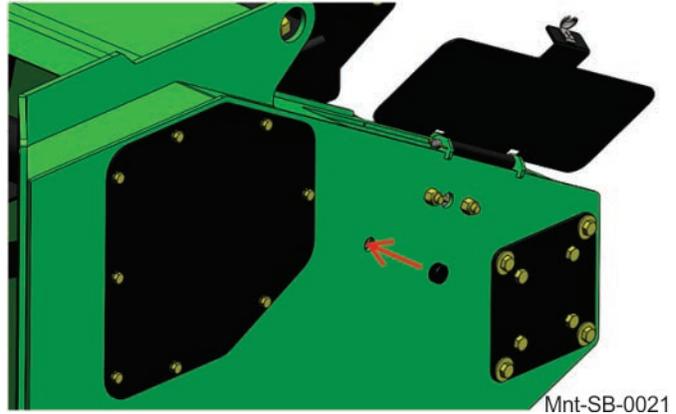
MAINTENANCE

AUGER DRIVE CHAIN

1. Re-tighten the auger drive chain when slack exceeds 3/4 inch at the center of the bottom chain section.
2. When Removing/Installing the auger drive chain, remove rubber plugs and prop the idler using the bolt provided in the manual canister.
3. When complete, remove the bolt and return to storage in the manual canister.

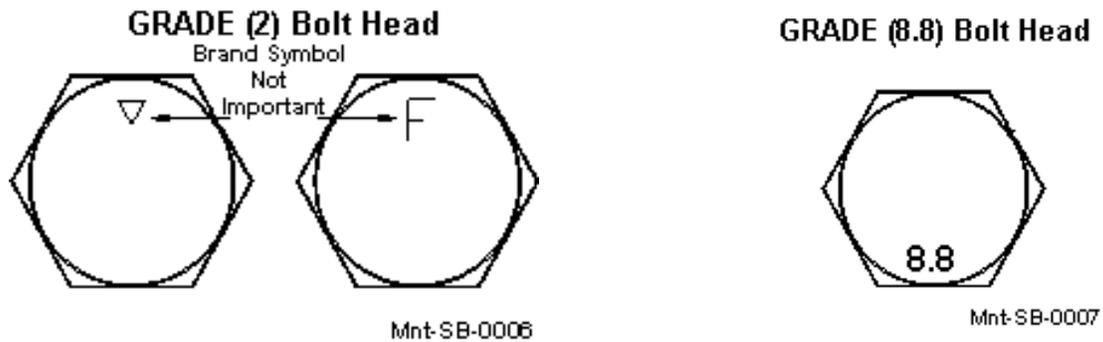


4. BE SURE TO REPLACE RUBBER PLUGS. Leaving the plug holes open will result in snow entering the chain case potentially causing premature wear



MAINTENANCE

PTO SHEAR BOLT



Important

If the PTO shear bolt breaks immediately shut down the tractor and replace the shear bolt.

1. The shear bolts used on this Schulte snow blower and mounting kits are either Grade 2 or Metric Grade 8.8. Refer to the illustrations for help in identification of these grades of bolts.
2. Specified shear bolts and their locations are listed below:
Auger: 3/8-16 UNC, 2" long, Grade 2
PTO Shaft: M10 METRIC, 60mm, Grade 8.8

NOTE: Both length and grade are important in this specification.

3. Remove the broken shear bolt and replace.

Important

Tighten the 3/8" auger shear bolt to 31 ft./lbs. Tighten the M10 PTO shaft shear bolt to 34 ft./lbs.

Occasionally apply grease to the shear plates.

Important

Replacement of the shear bolt with one of any other grade or size will be considered an unauthorized modification and the warranty will be void.

MAINTENANCE

MAINTENANCE

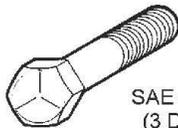
TORQUE SPECIFICATIONS - DRY TORQUE

Proper torque for American fasteners.
Recommended Torque in Foot Pounds (Newton Meters).*

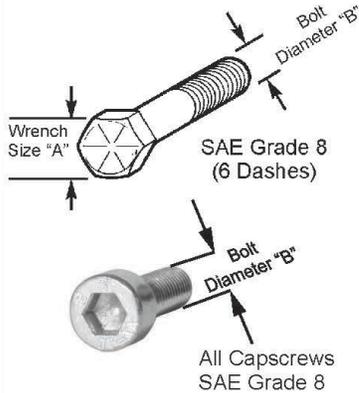
AMERICAN Bolt Head Markings



SAE Grade 2
(No Dashes)



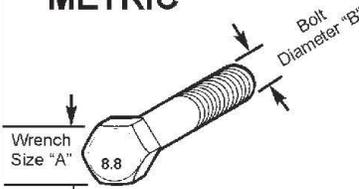
SAE Grade 5
(3 Dashes)



SAE Grade 8
(6 Dashes)

WRENCH SIZE (IN.) "A"	BOLT DIAMETER (IN.) "B" AND THREAD SIZE	SAE GRADE 2	SAE GRADE 5	SAE GRADE 8
7/16	1/4 - 20 UNC	6 (7)	8 (11)	12 (16)
7/16	1/4 - 28 UNF	6 (8)	10 (13)	14 (18)
1/2	5/16 - 18 UNC	11 (15)	17 (23)	25 (33)
1/2	5/16 - 24 UNF	13 (17)	19 (26)	27 (37)
9/16	3/8 - 16 UNC	20 (27)	31 (42)	44 (60)
9/16	3/8 - 24 UNF	23 (31)	35 (47)	49 (66)
5/8	7/16 - 14 UNC	32 (43)	49 (66)	70 (95)
5/8	7/16 - 20 UNF	36 (49)	55 (75)	78 (106)
3/4	1/2 - 13 UNC	49 (66)	76 (103)	106 (144)
3/4	1/2 - 20 UNF	55 (75)	85 (115)	120 (163)
7/8	9/16 - 12 UNC	70 (95)	109 (148)	153 (207)
7/8	9/16 - 18 UNF	79 (107)	122 (165)	172 (233)
15/16	5/8 - 11 UNC	97 (131)	150 (203)	212 (287)
15/16	5/8 - 18 UNF	110 (149)	170 (230)	240 (325)
1-1/8	3/4 - 10 UNC	144 (195)	266 (360)	376 (509)
1-1/8	3/4 - 16 UNF	192 (260)	297 (402)	420 (569)
1-5/16	7/8 - 9 UNC	166 (225)	430 (583)	606 (821)
1-5/16	7/8 - 14 UNF	184 (249)	474 (642)	668 (905)
1-1/2	1 - 8 UNC	250 (339)	644 (873)	909 (1232)
1-1/2	1 - 12 UNF	274 (371)	705 (955)	995 (1348)
1-1/2	1 - 14 UNF	280 (379)	721 (977)	1019 (1381)
1-11/16	1-1/8 - 7 UNC	354 (480)	795 (1077)	1288(1745)
1-11/16	1-1/8 - 12 UNF	397 (538)	890 (1206)	1444 (1957)
1-7/8	1-1/4 - 7 UNC	500 (678)	1120 (1518)	1817 (2462)
1-7/8	1-1/4 - 12 UNF	553 (749)	1241 (1682)	2013 (2728)
2-1/16	1-3/8 - 6 UNC	655 (887)	1470 (1992)	2382 (3228)
2-1/16	1-3/8 - 12 UNF	746 (1011)	1672 (2266)	2712 (3675)
2-1/4	1-1/2 - 6 UNC	870 (1179)	1950 (2642)	3161 (4283)
2-1/4	1-1/2 - 12 UNF	979 (1327)	2194 (2973)	3557 (4820)

METRIC



Numbers appearing on bolt heads indicate ASTM class.

Proper torque for Metric fasteners.
Recommended torque in Foot Pounds (Newton Meters).*

WRENCH SIZE (mm) "A"	BOLT DIA. (mm) "B"	ASTM 4.6	ASTM 8.8	ASTM 9.8	ASTM 10.9
8	5	1.8 (2.4)		5.1 (6.9)	6.5 (8.8)
10	6	3 (4)		8.7 (12)	11.1 (15)
13	8	7.3 (10)		21.1 (29)	27 (37)
16	10	14.5 (20)		42 (57)	53 (72)
18	12	25 (34)	74 (100)	73 (99)	93 (126)
21	14	40 (54)	118 (160)	116 (157)	148 (201)
24	16	62 (84)	167 (226)	181 (245)	230 (312)
30	20	122 (165)	325 (440)		449 (608)
33	22		443 (600)		611 (828)
36	24	211 (286)	563 (763)		778 (1054)
41	27		821 (1112)		1138 (1542)
46	30	418 (566)	1119 (1516)		1547 (2096)

*Use 75% of the specified torque value for plated fasteners. Use 85% of the specified torque values for lubricated fasteners.

Mnt-B-0005

