



**SKID STEER LOADER VERSAPLOW
MODELS 4208, 4210**

OPERATOR'S MANUAL

DO NOT USE OR OPERATE THIS EQUIPMENT UNTIL THIS MANUAL
HAS BEEN READ AND THOROUGHLY UNDERSTOOD

PART NUMBER 27000355

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27000355

9/19

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TO THE PURCHASER

This product is designed and manufactured to give years of dependable service when properly maintained and used for the purpose for which it is intended. Never allow anyone to operate this equipment until they fully understand the complete contents of this manual. It is the responsibility of owners who do not operate this equipment to ensure the operator is properly instructed and understands the contents of this manual. It is also the owner's responsibility to ensure that anyone operating this equipment is mentally and physically capable of so doing.

Important information is contained in this manual to help ensure safe and efficient operation.

If you have any questions about this manual, or the equipment discussed herein, contact your snowplow dealer.



TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.



THIS SYMBOL MEANS:

- ATTENTION!
- BECOME ALERT!
- YOUR SAFETY IS INVOLVED!



SAFETY SIGNAL WORDS:

DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.

WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.

CAUTION: Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury, or damage to components.

NOTE: Addresses safety practices not related to personal safety.

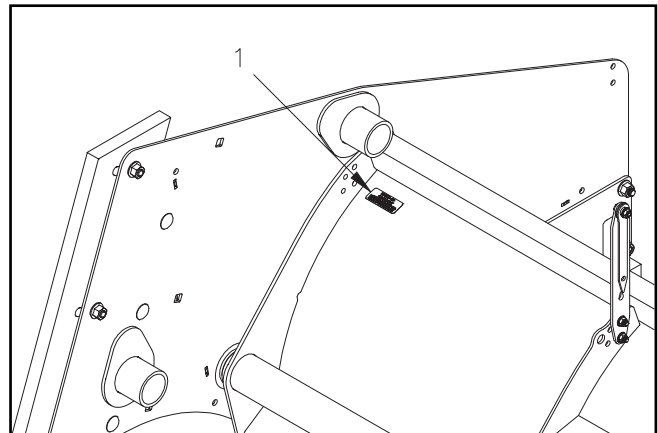
All references to Left or Right are defined as viewing the plow from the cab of the machine.

This Operator's Manual is shipped with this equipment. Contact your dealer for additional copies.

Always obtain original factory service parts. Substitute parts could adversely affect equipment performance and warranty.

Check that your dealer has forwarded the delivery report form along with the plow identification number because it helps maintain maximum service and warranty benefits. This does not put you on any mailing list, and information thereon is not available to others.

Your plow's identification number plate is at location (1) in the following illustration.



DWG NO. 7602

Record the following information for later reference when obtaining service parts:

Purchase Date _____

Purchaser's Name _____

Dealer's Name _____

Machine I.D. No. _____

SAFETY



This is a safety alert symbol. It alerts an operator to information concerning personal safety. Always observe and heed these symbols and instructions, otherwise death or serious injury can result.

Operator safety is a principle concern in equipment design and distribution. However, many accidents occur because a few seconds of thought, and a more careful approach to handling, were ignored. Accidents can be avoided by knowing and following the precautions cited in this manual.

GENERAL SAFETY

1. Read this manual thoroughly. Make sure the operator understands it and knows how to operate this equipment safely. This equipment can kill or injure an untrained or careless operator and bystanders. If you sell this equipment, ensure the new owner acknowledges receipt of this manual.
2. This manual **Does Not** instruct the operation or maintenance of the skid steer loader. Obtain training on control and function of the skid steer loader from your loader dealer.
3. This plow is intended for plowing snow only. Plowing gravel, rocks, etc., or using the plow for any purpose other than plowing snow could result in harm to the operator or bystanders or cause damage to the plow and will void the warranty.
4. Do not attempt to handle or service this equipment, or direct others to do the same, unless you know how to do it safely and have the proper tools for the job.
5. Do not service or otherwise handle a plow in the raised position unless it is securely blocked against unexpected falling.
6. Keep hands, feet, hair, and clothing away from moving parts.
7. Do not alter the equipment to the extent of compromising safety or performance.

BEFORE OPERATION

1. Discipline yourself to visually check for worn, damaged or cracked parts before starting use. Replace these with genuine factory service parts.
2. Escaping hydraulic oil under pressure can penetrate the skin, causing serious injury.

Do not use your hand to check for leaks. Use a piece of paper or cardboard to find suspected leaks. Tighten all connections before pressurizing hydraulic lines. If fluid is injected into the skin, get medical attention immediately to prevent serious infection.

3. Check all controls and operating functions of the machine in a safe area before starting to work.

DURING OPERATION

1. Always wear the seat belt and lower the seat bar, if equipped, when operating the loader.
2. Make sure all controls are in the neutral position before starting the loader.
3. Ensure everyone is clear of the machine, especially away from blind areas of the operator, before actuating hydraulics or operating this equipment.
4. Do not plow snow at excessively high speeds.
5. Avoid hitting objects that will damage your plow.
6. Set the brakes and stop the loader's engine before adjusting or servicing your plow.

AFTER OPERATION

1. Park the plow on a solid, level surface.

OPERATING PROCEDURES



IMPORTANT: To prevent damage to snowplow components, skid steer loaders with a “High Flow/Low Flow” hydraulic system must be operated in the Low Flow setting when the plow is attached.

ATTACHING PLOW

Mount the plow on the skid steer loader by driving the loader into the mount frame, then set the brakes and relieve hydraulic pressure before exiting the cab. Secure the plow frame to the loader as instructed in the loader manual. Make sure all latches are fully locked in place to prevent the plow from detaching.

Clean quick couplers of dirt before making hydraulic connections. Make sure quick couplers are fully engaged. If quick couplers do not fully engage, check that the couplers are the same size and type. Check also to see that hydraulic pressure has been relieved. See your loader or attachment dealer for coupler information.

Clean electrical connections then check that the pins and receptacles are aligned before plugging the connector on the plow into the connector on the loader.

Test the angling and rotating box end functions in a safe area before using the plow.

CONTROLLING PLOW FUNCTIONS

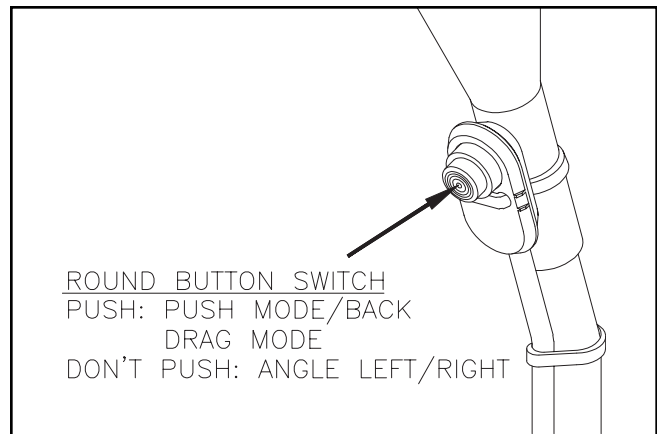
Raise and lower the plow by operating the loader arms as you would for any other attachment. Avoid tipping the mount plate forward to apply down pressure on the plow.

Angle the plow left and right by directing oil through the auxiliary hydraulic ports on the skid steer loader. Reverse oil flow to angle the blade the opposite direction.

Release the hydraulic flow controller to hold the blade at an angle position between full left or full right. If the plow angles opposite from what is expected, switch couplers on the two feed hoses that connect to the loader.

When using a 7 or 14 pin harness that operates the plow through the base machines internal controls operators need to push and hold the joystick button specific to each manufacturer which will activate a solenoid valve.

Rotate the box ends (forward or backward) by pushing and holding the appropriate joystick button specific to each machine while directing oil through the auxiliary ports. Reverse rotation by pushing and holding the appropriate joystick button specific to each machine while reversing the oil flow direction through the auxiliary ports.



DWG NO. 7603

When using a Fox universal controller rotate box ends rearward by pushing and holding the round button switch while directing oil to the auxiliary ports on the skid steer loader putting the plow in back drag mode.

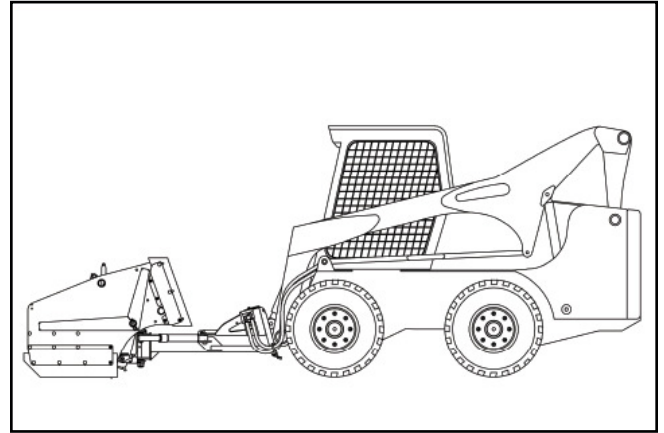
Rotate box ends forward by pushing and holding the round button switch while reversing the oil flow direction to the auxiliary hydraulic ports on the loader to put plow in push mode.

To hold box ends at an intermediate position between full forward or full back, release hydraulic flow controller, then release round button switch.

Box ends will move more freely if rotating box end functions are done with plow in raised position to avoid resistance from ground.

TRANSPORTING PLOW

Raise plow to a position where it does not block your view forward. Transport plow with hydraulic flow off or in neutral to prevent accidental lowering of plow. Never adjust blade position while driving.



DWG NO. 7742

PLOWING SNOW



WARNING: Always wear seat belt and lower seat bar, if equipped, when plowing snow. Sudden contact with a hidden object can result in serious personal injury.

Inspect areas to be plowed before snowfall for potential hazards, and mark obstructions with stakes that will be seen when snow covers the ground. Identify any emergency equipment and utility outlets that may need to be cleared in the event of a storm. Prepare a plan beforehand for clearing snow from tight or enclosed areas and locate sites for stacking snow.

Set the loader lift arms into the float mode so the plow can follow the contour of the ground and clean up low areas while plowing snow.

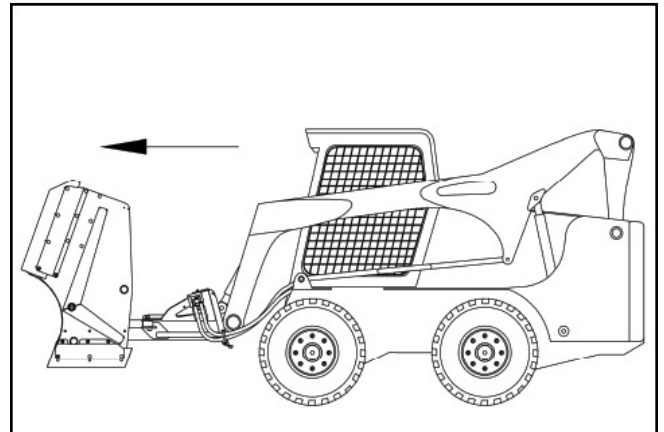
Always plow snow as it is accumulating. Wet snow may weigh about 12 pounds per cubic foot. The weight of snow being pushed by your plow may increase to several tons.

Allowing snow depth to grow to unmanageable levels can cause difficult removal problems and can be costly in terms of wear on equipment.



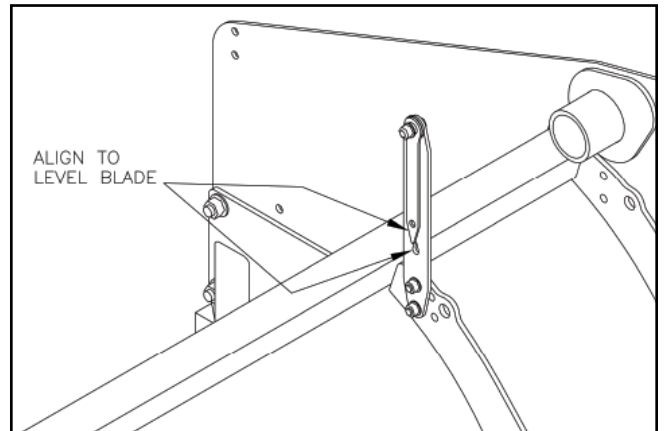
WARNING: Serious personal injury can result from plowing at excessive speeds, as well as costly damage to equipment and property, if an obstruction is encountered while plowing. Do not exceed 10 mph while plowing.

To back drag snow away from a parking stall or building, lift plow up off of ground and straighten plow across loader. Rotate box ends all the way rearward.



DWG NO. 7743

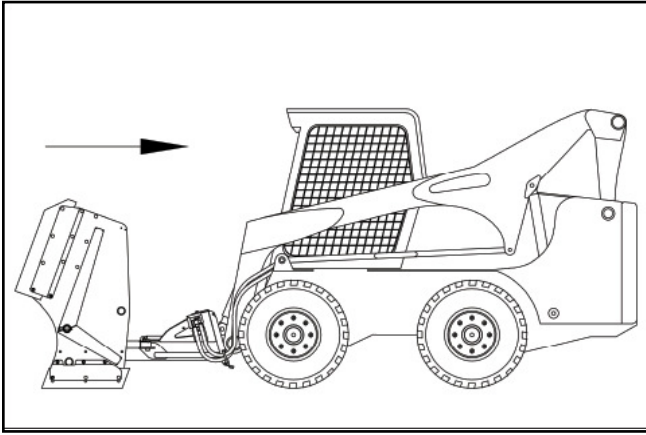
Slowly drive into area to be cleaned out lower cutting edge to ground.



DWG NO. 7744

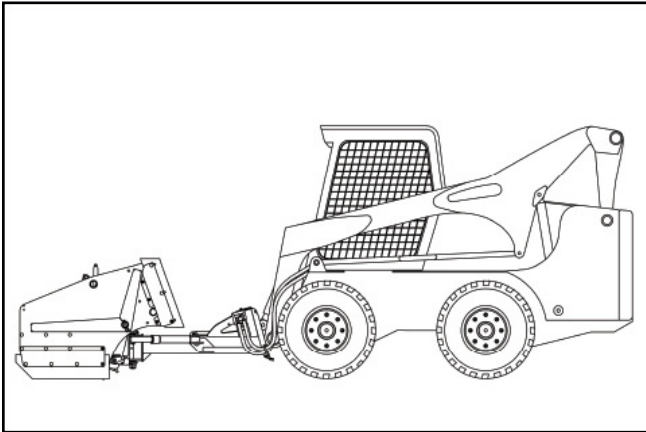
Tilt plow blade to align level indicators.

6 Operating Procedures



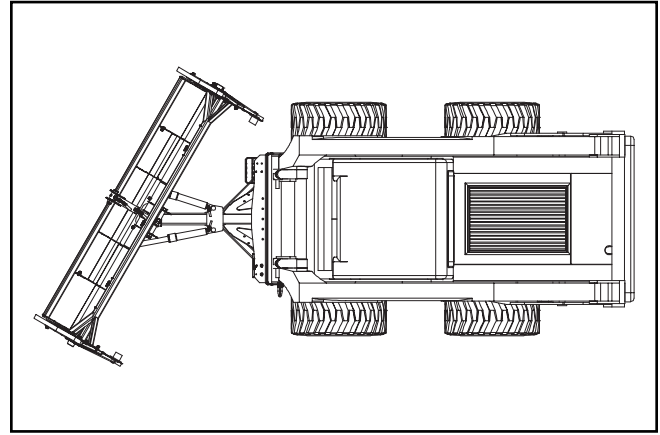
DWG NO. 7745

Slowly back drag snow away from parking stall or building to an open area.



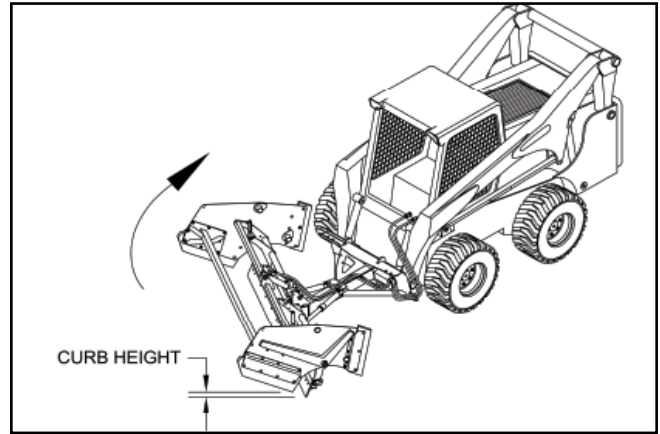
DWG NO. 7742

After back dragging successive passes to accumulate a pile of snow. Rotate box ends all the way forward. Verify leveling bars are plumb and adjust loader mount plate angle as needed. Push and stack snow in a clear area away from the path of vehicle travel.



DWG NO. 7608

Clear large lots by angling blade and creating a single path. Push snow to outer edges of lot by taking successive passes with blade angled.



DWG NO. 7747

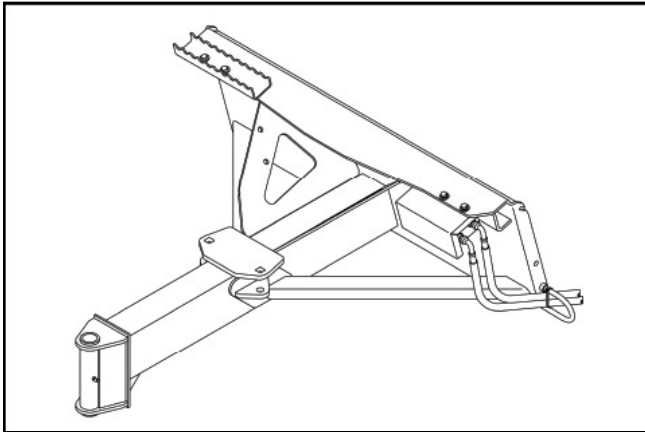
Plow box ends can be rotated slightly rearward allowing operator to clean curbs easier in plow angled position. Rotate sides so lowest point is higher than curb. Partially rotated sides also help contain large amounts of snow while windrowing large parking lots.

When plowing very deep snow, it may be necessary to raise blade and shear off layers of snow until a working area is cleared. Work small areas in multiple passes to push snow to outer edges.

Generally, 6 inch snow accumulation can be plowed with the entire blade width; 9 inch snow accumulation with $\frac{3}{4}$ of the blade width; 12 inch snow accumulation with $\frac{1}{2}$ of the blade width. Local conditions will determine how much work can be done before stalling or losing tire traction.

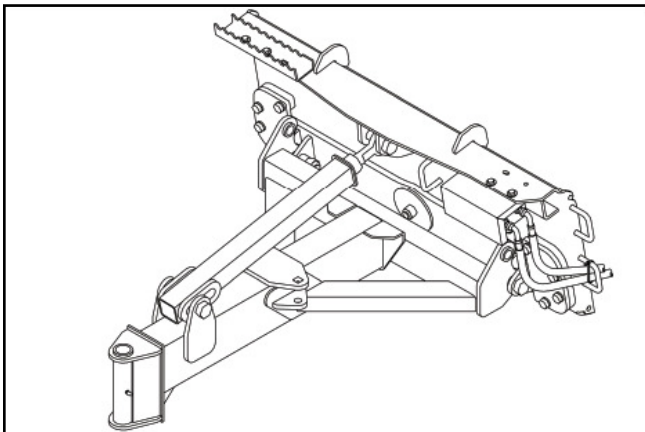
HITCH OPTIONS

There are (2) hitch options for the VersaPlow, fixed and floating.



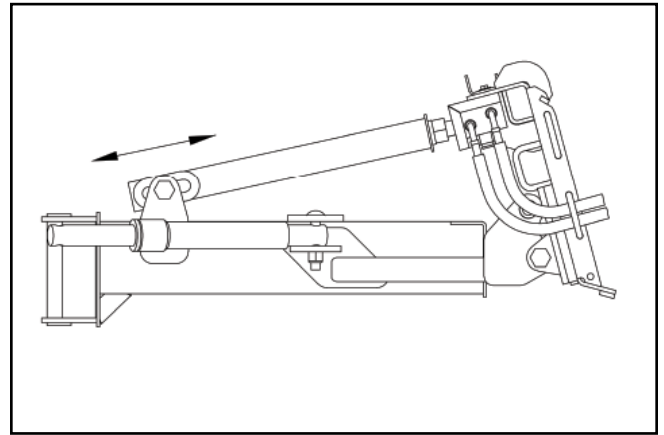
DWG NO. 7748

The fixed hitch is recommended for rear wheel and (4) wheel drive vehicles including skid steers, Toolcats, etc.



DWG NO. 7749

The other option is a floating hitch which has a floating upper link to allow the plow to ride on the contour of the ground. This option makes it more difficult to put down pressure on plow.

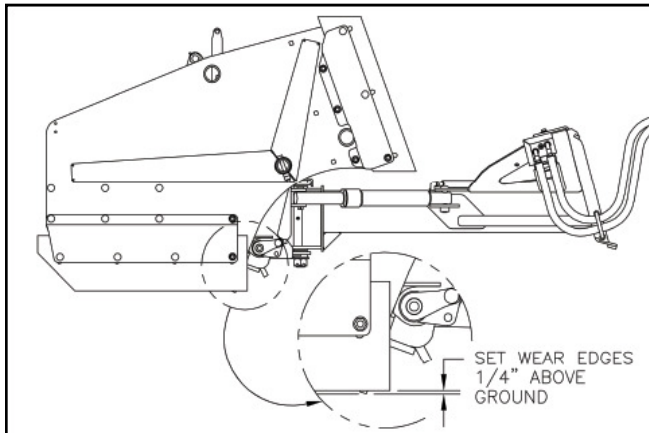


DWG NO. 7750

This hitch is recommended for front wheel drive and some 4 wheel drive vehicles where slight down pressure on plow can cause operators to have a difficult time steering and getting traction during snowplowing. Another advantage is cutting edges last longer with reduced down pressure on them.

ADJUSTING OUTER CUTTING EDGES

Periodically after finishing snowplowing check height of box end urethane cutting edges in both push and back drag mode with respect to main cutting edge. It is recommended to have the box end cutting edges 1/4" higher than the main cutting edge. If the box end edges are higher than 1/4" off the ground or are lifting the main cutting edge off the ground, the box end or main cutting edges need to be adjusted.



DWG NO. 7746

Using a 1/4" thick block of wood or other shimming material, loosen box end cutting edge bolts and raise plow slightly if necessary, and insert 1/4" shim blocks under box end urethane cutting edges. Lower main plow cutting edge to the ground, with plow edge on ground and 1/4" shims under box wing cutting edges.

Tighten 1/2" carriage bolts until metal on outside plates slightly deforms into slots of cutting edges. This will prevent cutting edges from sliding up or down during operation.

Perform similar procedure to check back drag cutting edge heights. Adjust as needed and again tighten hardware so outside plates slightly deform to hold urethane cutting edge in place.

REMOVING PLOW

Park the plow on a solid level surface with the blade straight across the loader.

Lower the blade to the ground, relieve hydraulic pressure and set the brakes on the loader.

Uncouple the hydraulic feed lines from the loader and unplug the electrical connector. Replace any dust caps at this time.

Unlatch the attachment mechanism at the front of the loader then slowly drive the loader back away from the plow.

MAINTENANCE



WARNING: Do not service or otherwise handle a plow in the raised position unless it is securely blocked against unexpected falling.

Dependable snowplow operation is the result of following good maintenance procedures. Inspect your plow frequently to ensure that all parts are working smoothly, and develop a schedule for maintenance at required intervals.

GENERAL

Wash salt and dirt off the plow before storage. Do not power wash hydraulic cylinders, as high pressure can damage seals and cause cylinder failure. Touch-up any chips or scratches in the paint and apply a light coating of grease to extended cylinder rods to prevent corrosion.

MECHANICAL COMPONENTS

Prior to the operation of a new snowplow, or one which has been stored, inspect all hardware and verify proper torque on all bolts and nuts in accordance with the recommended torque specifications.

GRADE 5 TYPE B & F LOCK NUT TORQUES

Size	Ft-lbs.	N-m
5/16"	13-18	17-25
3/8"	23-33	31-44
1/2"	58-82	79-112
5/8"	117-165	158-223

GRADE 5 BOLT TORQUES*

Size	Ft-lbs.	N-m
1/4"	8-12	11-16
3/8"	29-41	39-56
1/2"	73-103	99-140
5/8"	146-206	198-279

*Applications without lock nuts.

Loose bolts can cause hole elongation and part failure resulting in dangerous operating conditions and equipment breakdown.

Check all hardware periodically during operation and keep tightened to specified torques. Replace worn bolts and lock nuts with grade 5 bolts and equivalent type B or type F lock nuts. Type B lock nuts are plain hex; type F lock nuts are flanged hex.

Inspect wear of cutting edges before every plowing season and frequently throughout the season. Adjust or replace cutting edges before wear reaches the main plow blade.

ELECTRICAL MAINTENANCE

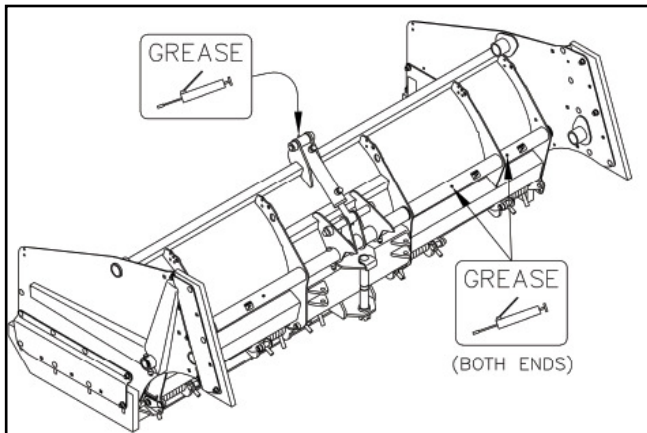
Periodically check all electrical connections for proper fit and remove any contamination, that may be present.

To prevent contamination, always place dust caps on connectors when not in use. This is particularly important when the plow is being stored. The use of dielectric grease is recommended to reduce corrosion of the contacts and to make connecting and disconnecting easier.

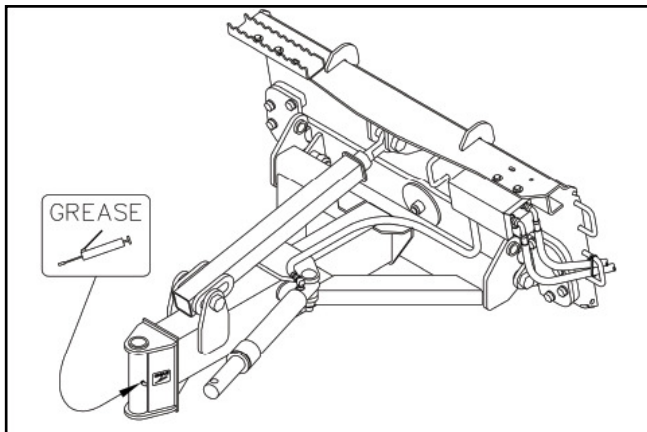
Before each season check loader battery and electrical system for proper operation. A weak battery, dirty terminals, or faulty charging system may cause improper operation.

LUBRICATION

Periodically throughout the year between snowfalls, grease all pivot points on plow as shown in diagrams. Look for grease decals to help with zerk locations.



DWG NO. 7751



DWG NO. 7752

TROUBLE SHOOTING

GENERAL

1. Check to see that the plow and loader are wired correctly with clean, tight connections at the battery. Check for proper voltage.
2. Check that hydraulic quick couplers are fully engaged and electrical connection is tight at the front of the loader.
3. Check the hydraulic oil level in the skid steer loader.
4. Check for external leakage at cylinders, hoses and valve manifold.

PROBLEM	POSSIBLE CAUSE	REMEDY
1. Hydraulic cylinder does not function or functions slowly when hydraulics are activated.	A. Weak or defective loader battery.	A. Charge or replace battery.
	B. Oil level low.	B. Add oil (do not overfill).
	C. Hydraulic connection leak.	C. Tighten or redo connection.
	D. Solenoid valve not opening properly.	D. Replace valve.
2. Plow angles opposite expected direction.	A. Feed hoses reversed.	A. Switch quick couplers on feed hoses.
3. Oil leaks from cylinder(s).	A. Loose packing.	A. Tighten packing nut 1/8 turn.
	B. Defective cylinder.	B. Repack or replace cylinder.
4. Angling cylinders relieve too easily or too difficultly while plowing.	A. Relief pressure set too low or too high.	A. Have relief pressure adjusted by skidsteer dealer.
5. Plow does not clean-up snow from low areas.	A. Loader arms not in float mode.	A. Loader arms should be in float mode.
6. Battery goes dead with power on the loader.	A. Short in wiring.	A. Locate and repair.
7. Hydraulic quick couplers don't connect.	A. Wrong size or type of couplers.	A. Verify matching couplers.
	B. Oil pressure in loader lines.	B. Relieve hydraulic pressure in loader.

VERSAPLOW ASSEMBLY

GENERAL INFORMATION

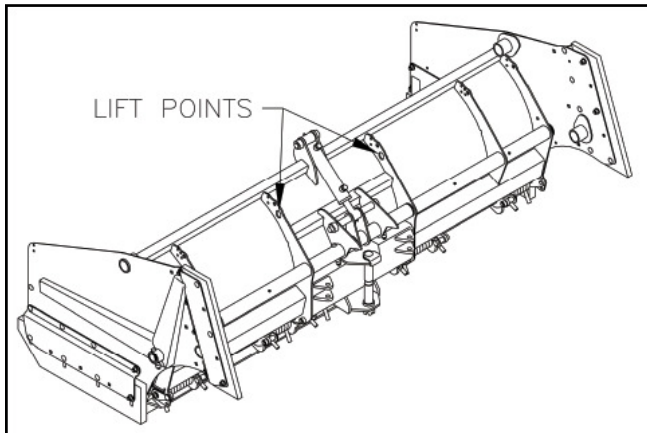


WARNING: To prevent personal injury or death, be certain to keep clear of any parts that may drop when removing bundling straps, wires or brackets. Support heavy sections with hoist or blocks before removing wires or straps.

Be certain that hydraulic hoses and electrical wires are safely routed and allow full motion of moving parts. Secure loose hoses and wires with plastic tie straps.

PLOW ASSEMBLY

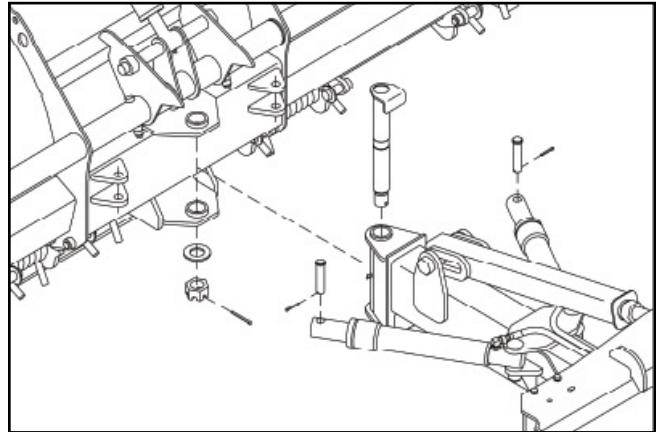
1. Lift moldboard assembly by hooking to inner ribs and bring to a clear level area.



DWG NO. 7753

2. Remove shipping brackets and shipping stop brackets from outside ribs if supplied with moldboard assembly.
3. Stabilize moldboard assembly using blocks or secure on lifting mechanism. Move the hitch frame to the back of the moldboard and align pivot pin bushings.

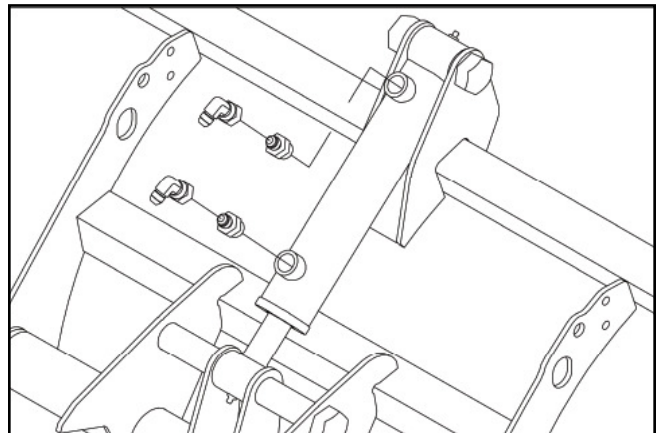
Insert main pivot pin so formed lip is pointing rearward. Slide the washer onto the bottom of the pin, then secure the assembly with the slotted nut and cotter pin. Tighten the nut so the assembly is secure, but pivots freely.



DWG NO. 7754

Pin rod ends between lugs on the moldboard with 3/4 inch x 3 1/4 inch clevis pin and cotter pins from the parts box.

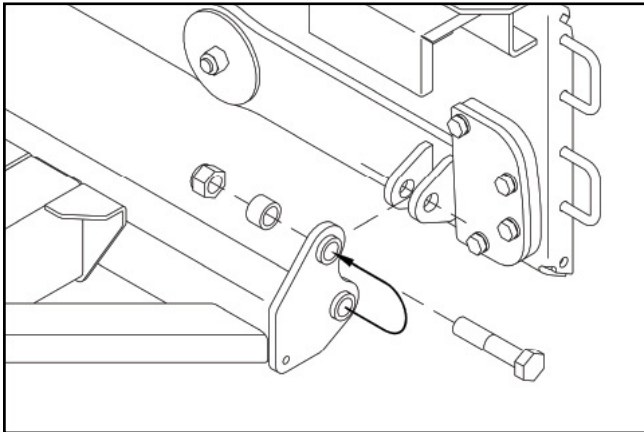
4. Install two straight hydraulic adapters from the parts box into both ports of the rollover cylinder.



DWG NO. 7755

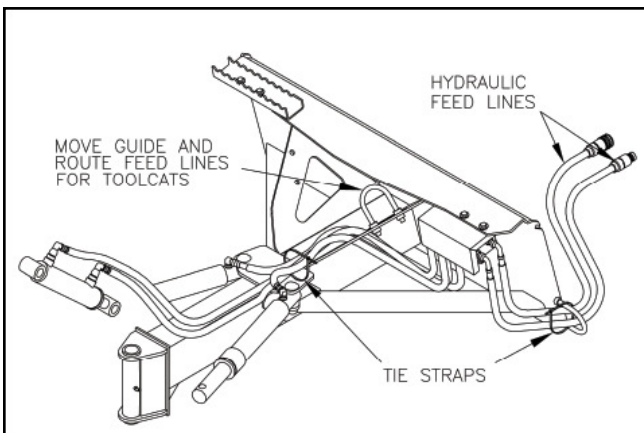
Tighten two 90° Flare/Swivel nut adapter onto straight fittings, directed as shown.

- When installing a Versa Plow with the oscillating/floating hitch option on a loader with taller snow tires, remove and reinstall two rear push frame bolts through the upper set of holes to allow more downward travel of the blade.

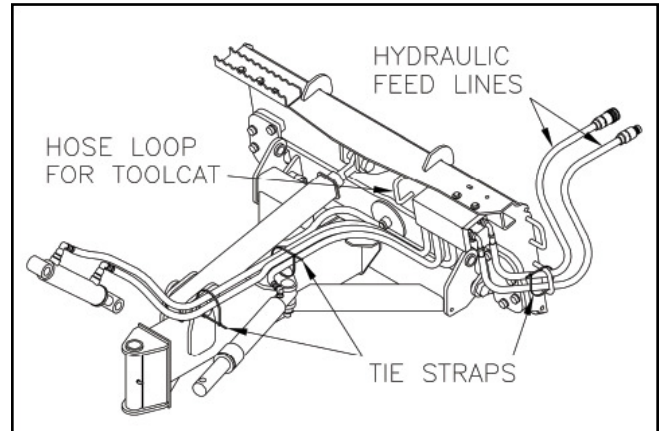


Floating Hitch Height Adjustment DWG NO. 7756

- Refer to the appropriate drawing below for hose routing along the different hitch frames.



Fixed Hitch Hose Routing DWG NO. 7757



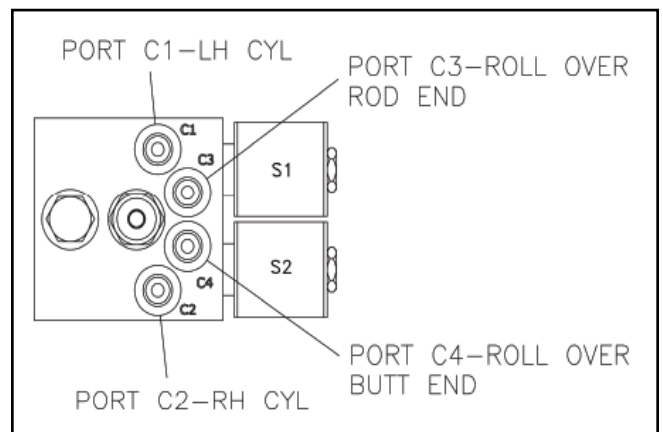
Oscillating Hitch Hose Routing DWG NO. 7758

Tie hoses together and route along the frame, as shown. Ensure hoses have adequate length for cylinder extension/retraction, and will not be pinched in rotating stop plates before securing to the frame with plastic tie straps.

Route hydraulic supply and return hoses through U-Bolts on the mount plate up to couplers on the loader. Tie hoses where they will not drag on the ground or get caught in loader tires.

- Assemble hose ends to rollover cylinder as follows:

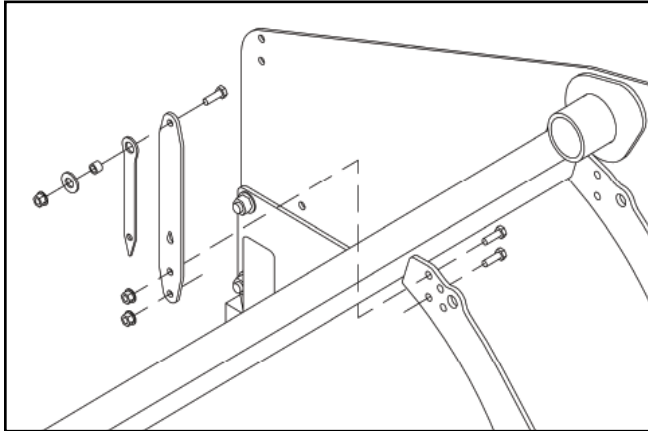
- Port C3 to rotation cylinder rod end.
- Port C4 to rotation cylinder fixed end.



DWG NO. 6694

Refer to labels on hose ends to ensure hoses are connected correctly.

- Attach two leveling bars onto the ribs using provided 5/16 hardware.



DWG NO. 7759

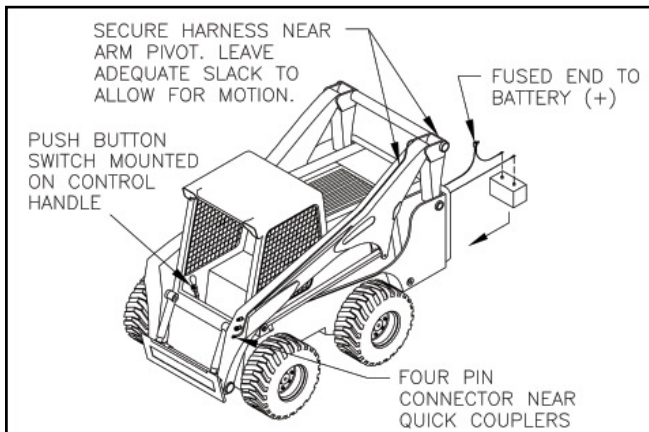
Verify top bar rotates freely on bushing after assembly.

QUICK COUPLERS

Select and install hydraulic quick couplers and adapter fittings on VersaPlow feed lines according to the size and type (i.e. flat face or poppet style) of couplers on customer's machine. Hoses supplied on VersaPlow have 9/16-18 JIC female swivel ends for 9/16-18 JIC male adapters.

UNIVERSAL CONTROLLER ELECTRICAL WIRING

Identify the electrical control cable purchased with the snowplow. It has a square 4-pin weather pack connector on the first end, two ring terminals on the second end, and a single push button switch on the third end.



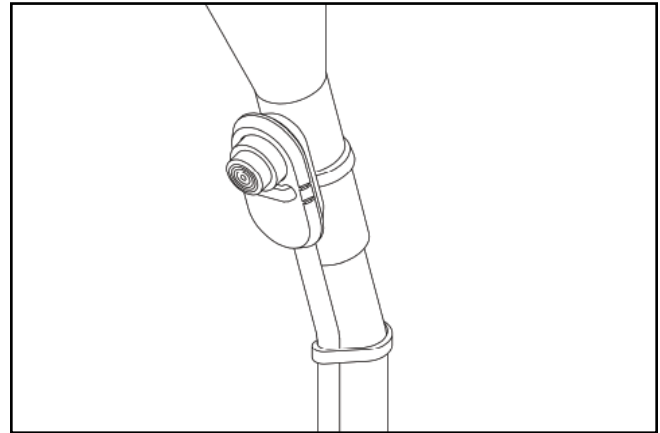
DWG NO. 7627



IMPORTANT: Damage to the wiring harness will occur if adequate cable length is not provided to allow for full motion of the loader arms. Use plastic tie straps to secure the wiring harness to the loader arm immediately adjacent to the loader arm pivot point.

Refer to drawing number 7627. Fasten the square connector next to the hydraulic quick couplers. Route the cable along the skid-steer arm to the pivot point of the arm and secure with the supplied plastic tie straps. It is especially important to leave adequate cable at the pivot point to allow for arm movement.

Next, the switch cable needs to be routed into the cab. Attach the switch to the control arm using a plastic tie strap as shown in drawing number 4284.



DWG NO. 4284

Route the third length of the cable to the battery. Connect the red fused wire ring terminal to the positive post of the battery and the black wire ring terminal to the negative post of the battery.

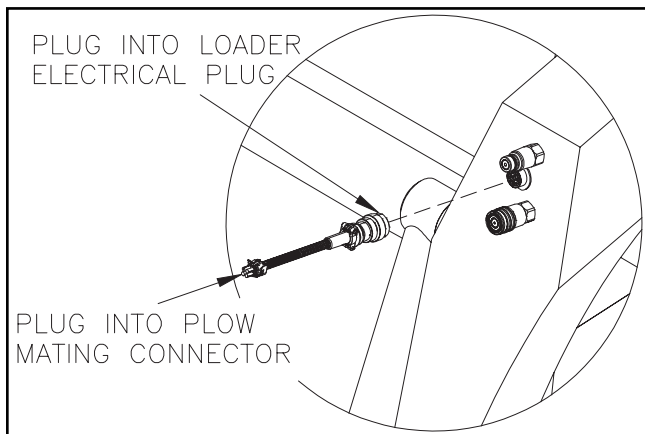
Ensure all wires are away from hot or moving parts, and secured with plastic ties to prevent damage.

The wiring on the plow comes preinstalled. The connectors to the solenoids should be firmly seated. The connectors are interchangeable, as both solenoids are activated at the same time when the push button switch is pressed.

Refer to Operating Procedures section for attaching and operating the plow. Test that all functions are working properly and that cabling is not being stretched or pinched.

14 PIN OR 7 PIN ELECTRICAL HARNESS

Locate 7 or 14 pin wiring harness purchased with plow. Insert 4 pin plug into mating connection from plow. Electrical wiring from plow is inside sleeve of hydraulic hose, and connector is located near hydraulic couplers from plow. Insert 14 or 7 pin connectors into machines mating connector.



DWG NO. 7629

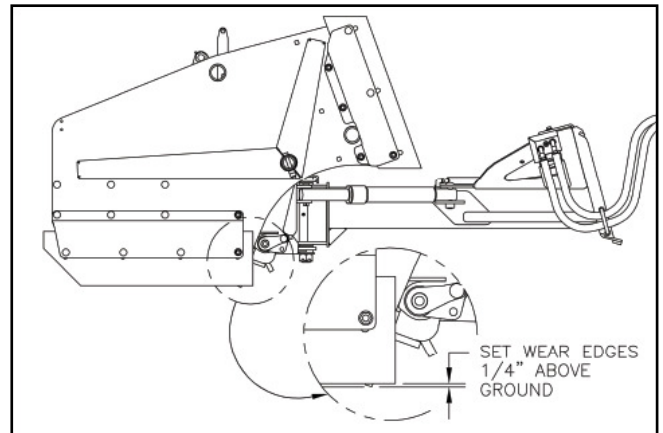
Refer to loader operator's manual for list of functions on proper attachment control.

In some cases 14 pin plug layout needs to be modified for specific machines. Refer to table on page 19 for pin layout.

If pin layout needs to be modified refer to instruction sheet with 14 pin harness for instructions to change pin layout. Refer to loaders wiring diagram on pin layout.

ADJUSTING OUTER CUTTING EDGES

Check height of box end urethane cutting edges in both push and back drag mode with respect to main cutting edge. Box end cutting edges should be 1/4" higher than the main cutting edge. If the box end edges are more than 1/4" off the ground or are lower than the main cutting edge adjust the cutting edges, as follows.



DWG NO. 7746

Using a 1/4" thick block of wood or other shimming material, loosen box end cutting edge bolts and raise plow slightly if necessary, then insert 1/4" shim blocks under box end urethane cutting edges. Lower main plow cutting edge to the ground, with plow edge on ground and 1/4" shims under box wing cutting edges.

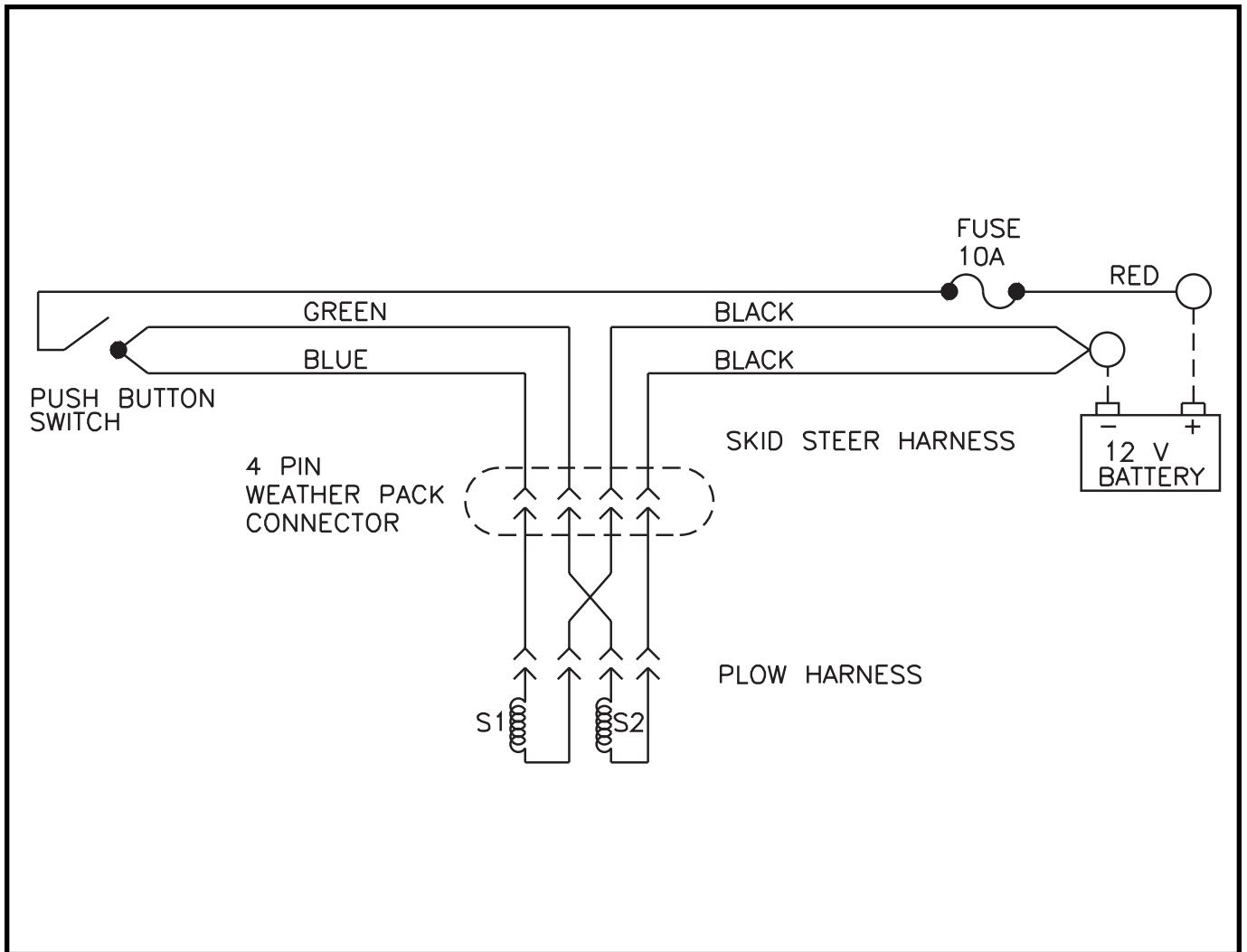
Tighten 1/2" carriage bolts until metal on outside plates slightly deforms into slots of cutting edges. This will prevent cutting edges from sliding up or down during operation.

Perform similar procedure to check back drag cutting edge heights. Adjust as needed and again tighten hardware so outside plates slightly deform to hold urethane cutting edge in place.

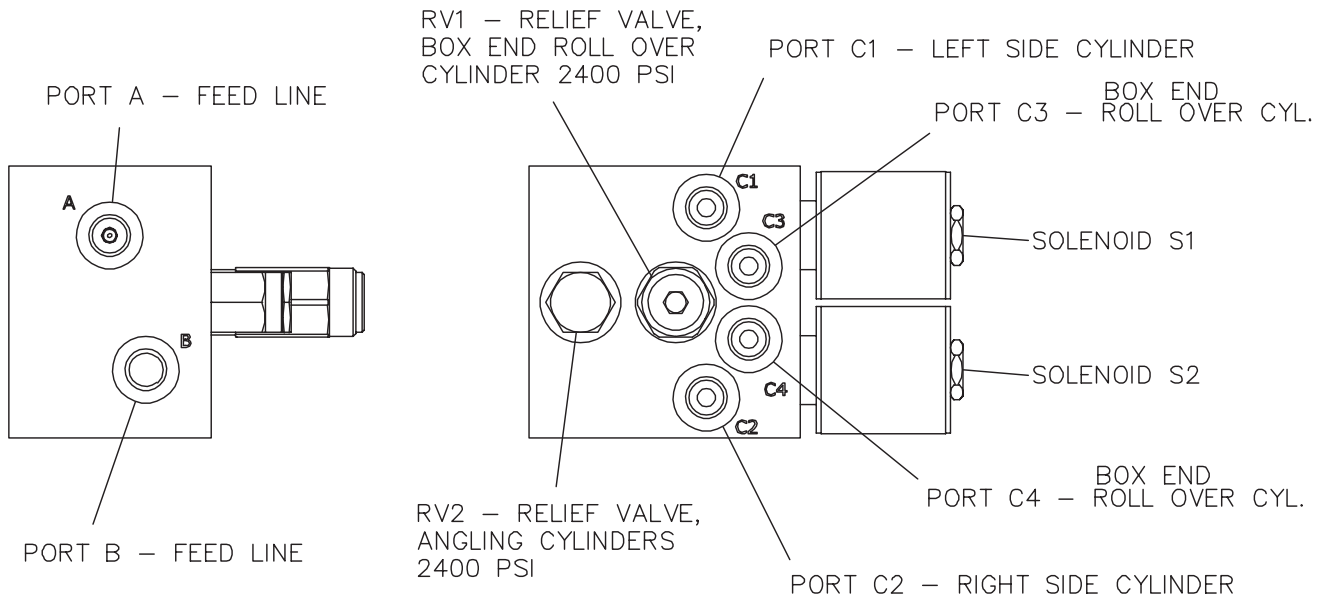
SPECIFICATIONS

Models	4108	4208	4110	4210
Blade Width	8'	8'	10'	10'
Overall Width	8' 8"	8' 8"	10' 8"	10' 8"
Blade Height	30 1/2"	30 1/2"	30 1/2"	30 1/2"
Weight (Moldboard & Wings Only)	807 lbs.	938 lbs.	911 lbs.	1,075 lbs.
Weight Fixed Hitch	311 lbs.			
Weight Floating Hitch	474 lbs.			
Cutting Edge	1 1/2" x 8" Polyurethane	1/2" x 6" Steel	1 1/2" x 8" Polyurethane	1/2" x 6" Steel
Feed Hose Ends	9/16-18 JIC Female Swivel			
Wiring Harness Fuse	10 AMP			

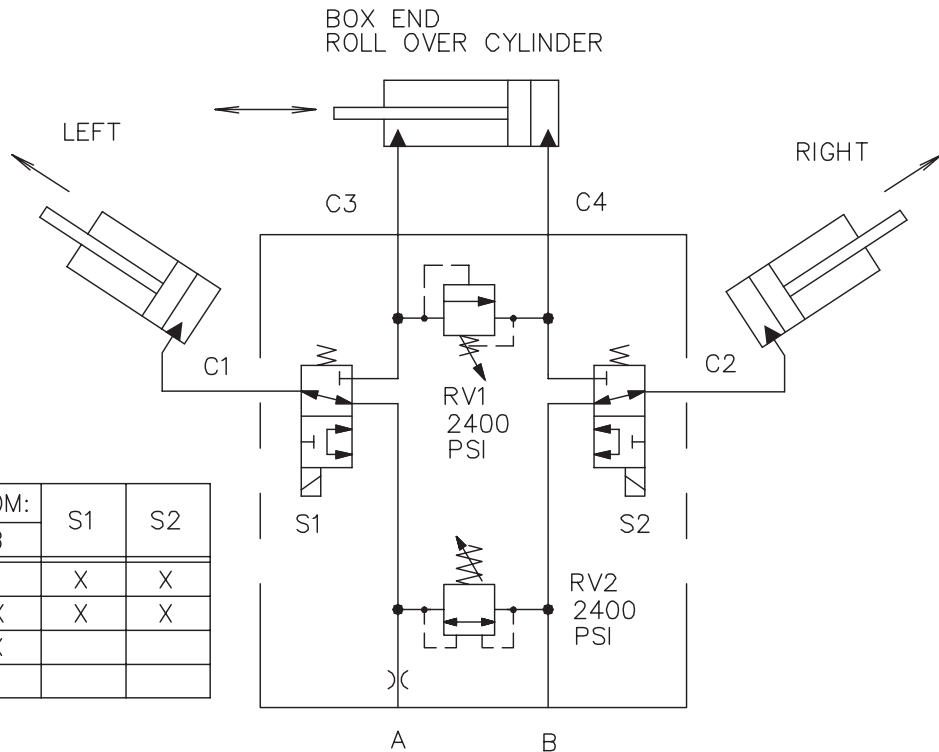
UNIVERSAL CONTROLLER WIRING DIAGRAM



VERSAPLOW VALVE MANIFOLD



VALVE MANIFOLD HYDRAULIC CIRCUIT DIAGRAM



FUNCTION	FLOW FROM:		S1	S2
	A	B		
PUSH	X		X	X
BACK DRAG		X	X	X
ANGLE LEFT		X		
ANGLE RIGHT	X			

Skid Steer Electronic Pin Layout				
Pin	A	B	C	D
Bobcat 14 Pin	LH L/R	(-) Gnd	LH Center L	LH Center R
Case 14 Pin	N/A	(-) Gnd	Button 2 LH Handle Dn	Button 2 LH Handle Up
Cat 14 Pin	LH Trigger Aux 7	(-) Gnd	C-Control Aux 5	C+ Control - Aux 6
JCB/Volvo 14 Pin	N/A	(-) Gnd	C-SW FWD	C-SW BWD
John Deere	(-) Gnd	N/A	Right Down	Left Down
Kubota 14 Pin SVL75/90/95 Standard	N/A	(-) Gnd	LH Switch	RH Switch
Kubota Extended 14 Pin Add-On Kit	N/A	(-) Gnd	Button #1	Button #2
New - NH 14 Pin	N/A	(-) Gnd	LH #3 - Dn	LH #3 - Up
Old - NH 14 Pin	N/A	(-) Gnd	SW3 MOM Dn	SW MOM Up
Takeuchi	N/A	(-) Gnd	SW1 Up R Joy/L Up	SW 1 Dn R Joy/L Down
Yanmar	N/A	(-) Gnd	SW1 Up	SW 1 Dn
Mustang	N/A	(-) Gnd	SW1 Up	SW 1 Dn
Gehl	SW 4	(-) Gnd	SW1 Up	SW 1 Dn
Terex	(-) Gnd	LH-SW Dn	LH - Right	LH - Left
Wacker 14 Pin	N/A	(-) Gnd	LH Center L	LH Center R

NOTES: _____

HINIKER WARRANTY

SKID STEER SNOWPLOW LIMITED WARRANTY

The only warranty Hiniker gives and the only warranty that any Hiniker dealer is authorized to give on behalf of Hiniker is as follows: **(NO EMPLOYEE OR REPRESENTATIVE IS AUTHORIZED TO CHANGE THIS WARRANTY IN ANY WAY OR GRANT ANY OTHER WARRANTY.)**

Hiniker warrants to the original purchaser of a Hiniker snowplow that Hiniker will repair or replace any defects in material and workmanship that occur within one year from date of retail delivery.

Hiniker's obligation and liability under this warranty is expressly limited to repairing or replacing, at Hiniker's option, at an authorized Hiniker dealer location, the defective parts at no charge to the original purchase. **Hiniker MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED AND MAKES NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE.**

HINIKER'S OBLIGATION UNDER THIS WARRANTY SHALL NOT INCLUDE ANY TRANSPORTATION CHARGES TO OR FROM THE AUTHORIZED HINIKER DEALER LOCATION OR ANY LIABILITY FOR INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGE OR DAMAGES OF ANY KIND FOR LOST PROFITS OR DELAY. If requested by Hiniker, products or parts for which a warranty claim is made are to be returned freight prepaid to our factory. Any improper use, operation beyond rated capacity, substitution of parts not approved by Hiniker, or any alteration or repair in such manner as in our judgment affects the product materially and adversely shall void this warranty.

Hiniker reserves the right to make improvements or changes to any of its products without notice. Such improvements or changes shall not trigger any obligation by Hiniker to update, modify or change any products previously sold by Hiniker.

Hiniker does not warrant the following:

1. Used products.
2. Any product that has been repaired, modified or altered in a way not approved by Hiniker.
3. Depreciation or damage caused by normal wear, lack of reasonable and proper maintenance, failure to follow Operators Manual Instructions, misuse, lack of proper protection during storage, or accident.
4. Parts replacement and service necessitated by normal wear or maintenance including, but not limited to, cutting edges, hoses, and hardware.
5. Paint finish damage caused by normal wear.

Hiniker does not assume any liability for any damage to a vehicle resulting from the attachment or use of a Hiniker snowplow. Attachment of a Hiniker snowplow to a vehicle is at the risk of the purchaser.

It is the responsibility of the original snowplow purchaser to verify the original date of purchase.

A DELIVERY REPORT FORM must be filled out and received by Hiniker with 30 days of retail delivery at the address below to initiate the warranty coverage.

HINIKER COMPANY
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MANKATO, MN 56002
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