



Models 810SS & 8611SS POWER PLOW® Snowplows

Installation Instructions & Owner's Manual

A CAUTION

See your BLIZZARD® sales outlet/Web site for specific vehicle application recommendations before installation. The Undercarriage Selection Guide has specific vehicle and snowplow requirements.

A CAUTION

Read this document before installing the snowplow.

A CAUTION

Read this document before operating or servicing snowplow.

This manual supersedes all editions with an earlier date.

PREFACE

Congratulations on purchasing the most advanced skid steer snowplow available! The POWER PLOW® snowplow is clearing new trails for innovative design, rugged durability, quality craftsmanship and superior performance. Our innovative products are tested all over the snowbelt.

This manual provides safety, operation and maintenance information for your new BLIZZARD® snowplow. To keep your snowplow in good condition, read and understand this manual and follow its recommendations. Failure to do so may affect your warranty coverage.

When service is necessary, your local BLIZZARD distributor knows your snowplow best. Contact your BLIZZARD outlet for maintenance, service or any other assistance you require.

If you have not already done so, please visit www.blizzardplows.com to register your new POWER PLOW snowplow!

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SAFETY DEFINITIONS

A WARNING

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

A CAUTION

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTE: Indicates a situation or action that can lead to damage to your snowplow and vehicle or other property. Other useful information can also be described.

WARNING/CAUTION & INSTRUCTION LABELS

Become familiar with and inform users about the warning and instruction labels on the back of the blade.

NOTE: If labels are missing or cannot be read, see your sales outlet.



LOWER BLADE WHEN VEHICLE IS PARKED.

DO NOT EXCEED GVWR OR GAWR INCLUDING BLADE AND BALLAST.

REMOVE BLADE ASSEMBLY BEFORE PLACING VEHICLE ON HOIST.

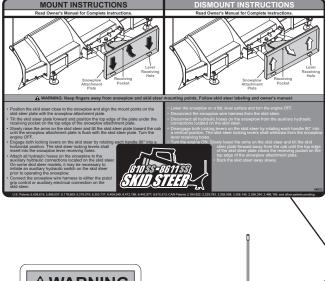


READ OWNER'S MANUAL BEFORE OPERATING OR SERVICING SNOWPLOW.

TRANSPORT SPEED SHOULD NOT EXCEED 45 MPH. FURTHER REDUCE SPEED UNDER ADVERSE TRAVEL CONDITIONS.

PLOWING SPEED SHOULD NOT EXCEED 10 MPH.

SEE YOUR SALES OUTLET/WEB SITE FOR SPECIFIC VEHICLE APPLICATION RECOMMENDATIONS.





SAFETY PRECAUTIONS

Improper installation and operation could cause personal injury, and/or equipment and property damage. Read and understand labels and the Owner's Manual before installing, operating or making adjustments.

A WARNING

Lower blade when vehicle is parked.
Temperature changes could change
hydraulic pressure, causing the blade to
drop unexpectedly or damaging hydraulic
components. Failure to do this could result in
serious personal injury.

A WARNING

The driver shall keep bystanders clear of the blade when it is being raised, lowered or angled. Do not stand between the vehicle and the blade or within 8 feet of a moving blade. A moving or falling blade could cause personal injury.

A WARNING

Do not exceed vehicle operative capacity including the blade. See vehicle rating label.

A WARNING

Never stand, work or reach under lift arms or lift cylinders without employing a lift arm stop or stand.

A WARNING

To prevent accidental movement of the blade, always turn the control OFF whenever the snowplow is not in use. The power indicator light will turn OFF.

A CAUTION

Read Owner's Manual before operating or servicing snowplow.

A CAUTION

Transport speed should not exceed vehicle manufacturer's recommendations. Further reduce speed under adverse travel conditions.

A CAUTION

Plowing speed should not exceed 10 mph.

HYDRAULIC SAFETY

A WARNING

Hydraulic fluid under pressure can cause skin injection injury. If you are injured by hydraulic fluid, get medical attention immediately.

- Always inspect hydraulic components and hoses before using. Replace any damaged or worn parts immediately.
- If you suspect a hose leak, DO NOT use your hand to locate it. Use a piece of cardboard or wood.

FUSES

The snowplow electrical and hydraulic systems contain several blade-style automotive fuses. If a problem should occur and fuse replacement is necessary, the replacement fuse must be of the same type and amperage rating as the original. Installing a fuse with a higher rating can damage the system and could start a fire. Fuse Replacement, including fuse ratings and locations, is located in the Maintenance Section of this Owner's Manual.

PERSONAL SAFETY

- Remove ignition key and put the vehicle in park or in gear to prevent others from starting the vehicle during installation or service.
- Wear only snug-fitting clothing while working on your vehicle or snowplow.
- Do not wear jewelry or a necktie, and secure long hair.
- Wear safety goggles to protect your eyes from battery acid, gasoline, dirt and dust.
- Avoid touching hot surfaces such as the engine, radiator, hoses and exhaust pipes.
- Always have a fire extinguisher rated BC handy, for flammable liquids and electrical fires.

FIRE AND EXPLOSION

A WARNING

Gasoline is highly flammable and gasoline vapor is explosive. Never smoke while working on vehicle. Keep all open flames away from gasoline tank and lines. Wipe up any spilled gasoline immediately.

Be careful when using gasoline. Do not use gasoline to clean parts. Store only in approved containers away from sources of heat or flame.

CELL PHONES

A driver's first responsibility is the safe operation of the vehicle. The most important thing you can do to prevent a crash is to avoid distractions and pay attention to the road. Wait until it is safe to operate Mobile Communication equipment such as cell phones or two-way radios.

VENTILATION

A WARNING

Vehicle exhaust contains lethal fumes. Breathing these fumes, even in low concentrations, can cause death. Never operate a vehicle in an enclosed area without venting exhaust to the outside.

BATTERY SAFETY

A CAUTION

Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow flames, sparks or lit tobacco to come near the battery. When charging or working near a battery, always cover your face and protect your eyes, and also provide ventilation.

Batteries contain sulfuric acid which burns skin, eyes and clothing.

Disconnect the battery before removing or replacing any electrical components.

NOISE

Airborne noise emission during use is below 70 dB(A) for the snowplow operator.

VEHICLE APPLICATION INFORMATION

A CAUTION

See your BLIZZARD® outlet for specific vehicle application recommendations before installation. The Undercarriage Selection Guide has specific vehicle and snowplow requirements.

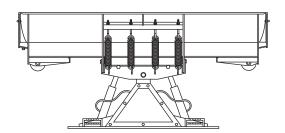
Vehicle application recommendations are based on the following:

- The vehicle with the snowplow installed must comply with applicable Federal Motor Vehicle Safety Standards (FMVSS).
- The vehicle with the snowplow installed must comply with the vehicle manufacturer's stated gross vehicle and axle weight ratings (found on the driver-side door cornerpost of the vehicle) and the front and rear weight distribution ratio. In some cases, rear ballast may be required to comply with these requirements.

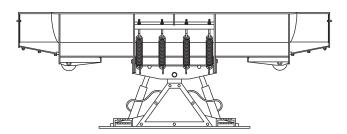
- BLIZZARD Undercarriage Selection Guide is based on available vehicle capacity for snowplow equipment on a representative vehicle equipped with options commonly used for snowplowing and with 300 lb of front seat occupant weight.
- Weights of front seat occupants can be adjusted above 300 lb but vehicle with snowplow must not exceed vehicle GVWR or GAWR.
- In some cases there may be additional limitations and requirements.
- Installation, modification and addition of accessories must comply with published BLIZZARD recommendations and instructions. Available capacity decreases as the vehicle is loaded with cargo or other truck equipment or snowplow accessories are installed.
- If there is uncertainty as to whether available capacity exists, the actual vehicle as configured must be weighed.

Your POWER PLOW® snowplow is the most advanced and versatile snowplow on the market. The easy-to-use controls allow you to automatically adjust the snowplow blade and wings into an infinite number of plowing positions. Review the illustrations below to determine the best position for your plowing needs.

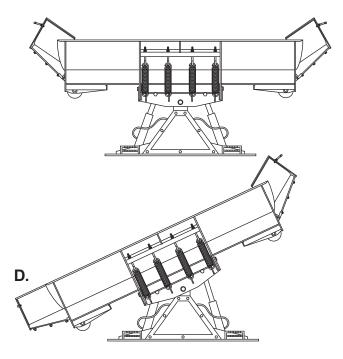
A.



B.



C.



A WARNING

Never use the snowplow attachment to carry people, as a man lift or as a work platform.

A WARNING

When plowing with down pressure, do not cause the front wheels on the skid steer/tractor to raise above ground.

A. Compact Position

(8' or 8'-6" Blade Width)

- Primary position when transporting the snowplow
- For use in heavy snow conditions with poor visibility, initial clearing and tight quarters
- Ideal application: residential driveways, small roads

B. WIDE PASS™ Position

(10' or 11'-3" Blade Width)

- Primary position for clearing large surfaces
- For use in light snow conditions with good visibility, final clearing and clean-up
- Ideal application: large parking lots, widening roadways

C. BUCKET BLADE™ Position

(9'-3" or 9'-10" Blade Width)

- Primary position for transporting snow
- For use in initial clearing with decent visibility, transporting large volumes of snow, final clean-up
- Ideal application: roadway intersections

D. WIDE PASS Position Angled with Wing Forward

- Primary position for accelerated angled plowing
- For use in directional plowing, cornering, diverting snow away from objects or buildings
- Ideal application: plowing adjacent to buildings, driveway/road intersections

UNPACKING & INSPECTION

Your POWER PLOW® snowplow has been packaged to withstand transit and weather related damage. Fully inspect all components upon receipt of your snowplow. In the event of shipping damage or missing parts, immediately contact our Customer Service Department at 1-888-680-8600.

Begin unpacking and inspection in the following order:

- 1. Remove the shipping document from the end panel of the pallet wrap. Retain all documentation for your records.
- 2. All wood framing and polyethylene material should be removed from the pallet for easy access to the snowplow.
- Due to the odd shaped components and size
 of several assembly parts, various cable ties
 and corrugated material are used for scratch
 resistance and package orientation. Please
 remove these items prior to assembly.
- Place the main blade assembly on a flat, level surface.

Once you have inspected all parts and removed all packaging materials, your snowplow is ready to be fully assembled.

Retain this information for your records.

Date of Purchase:
Dealer/Distributor:
Dealer Phone Number:
Snowplow Serial Number:

Register your snowplow online at www.blizzardplows.com.

TORQUE SPECIFICATIONS

TORQUE CHART

A CAUTION

Read instructions before assembling.
Fasteners should be finger tight until instructed to tighten according to the torque chart. Use standard methods and practices when attaching snowplow including proper personal protective safety equipment.



Grade Identification for J429-Grade 5 Bolt



Grade Identification for J429-Grade 8 Bolt

S	SAE J429 Grade 5 Torque Values				AE J429 Grade	8 Torque Value	es
Nominal	Clamp Loads	Tightenin	g Torque	Nominal	Clamp Loads	Tightenin	g Torque
Thread Size	(lb)	"Lubricated"	"Dry"	Thread Size	(lb)	"Lubricated"	"Dry"
1/4-20	2,000	6 ft-lb	8 ft-lb	1/4-20	2,850	9 ft-lb	12 ft-lb
5/16-18	3,350	13 ft-lb	18 ft-lb	5/16-18	4,700	18 ft-lb	25 ft-lb
3/8-16	4,950	23 ft-lb	31 ft-lb	3/8-16	6,950	32 ft-lb	44 ft-lb
7/16-14	6,800	37 ft-lb	50 ft-lb	7/16-14	9,600	53 ft-lb	70 ft-lb
1/2-13	9,050	57 ft-lb	75 ft-lb	1/2-13	12,800	80 ft-lb	107 ft-lb
9/16-12	11,600	82 ft-lb	109 ft-lb	9/16-12	16,400	115 ft-lb	154 ft-lb
5/8-11	14,500	113 ft-lb	151 ft-lb	5/8-11	20,300	159 ft-lb	211 ft-lb
3/4-10	21,300	200 ft-lb	266 ft-lb	3/4-10	30,100	282 ft-lb	376 ft-lb
7/8-9	29,435	321 ft-lb	430 ft-lb	7/8-9	41,550	454 ft-lb	606 ft-lb
1-8	38,600	482 ft-lb	640 ft-lb	1-8	54,540	680 ft-lb	900 ft-lb

(8.8) Grade Identification for Metric-Grade 8.8 Bolt

10.9 Grade	Identification	for Metric-	-Grade 1	0.9 E	3olt

Metric Class 8.8 Torque Values				N	Metric Class 10.	9 Torque Value	S
Diameter	Clamp Loads	Tightenin	g Torque	Diameter	Clamp Loads	Tightenin	g Torque
(mm)	(lb)	"Lubricated"	"Dry"	(mm)	(lb)	"Lubricated"	"Dry"
5	1,389	3 ft-lb	5 ft-lb	5	1,987	5 ft-lb	7 ft-lb
6	1,965	6 ft-lb	8 ft-lb	6	2,812	8 ft-lb	11 ft-lb
7	2,826	10 ft-lb	13 ft-lb	7	4,044	14 ft-lb	19 ft-lb
8	3,579	14 ft-lb	19 ft-lb	8	5,121	20 ft-lb	27 ft-lb
10	5,672	28 ft-lb	37 ft-lb	10	8,116	40 ft-lb	53 ft-lb
12	8,243	49 ft-lb	65 ft-lb	12	11,796	70 ft-lb	92 ft-lb
14	11,246	77 ft-lb	103 ft-lb	14	16,092	111 ft-lb	148 ft-lb
16	15,882	125 ft-lb	167 ft-lb	16	21,970	173 ft-lb	231 ft-lb
18	19,423	172 ft-lb	229 ft-lb	18	26,868	238 ft-lb	317 ft-lb
20	24,784	244 ft-lb	325 ft-lb	20	34.284	338 ft-lb	450 ft-lb

TORQUE SPECIFICATIONS

	37° JIC Flare Torque Values					
Turns	Size	ft-lb min-max	Assembly Steps			
N/A	-02	6–7	Make sure the tubing and threads are clean.			
N/A	-03	8–9	2. Lubricate the threads with 10W hydraulic fluid.			
2	-04	11–12	3. Hand tighten the nut/sleeve to approximately 30 in-lb.			
2	-05	14–15	4. Make alignment marks on the nut and fitting.			
1-1/2	-06	18–20	5. Tighten to turn or torque specification.			
1-1/2	-08	36-39	6. When fully tightened, make a second set of alignment marks at the fully tightened position.			
1-1/2	-10	57–63				
1-1/4	-12	79–88	NOTE: Torque values specified are for threads lubricated with 10W hydraulic fluid.			
1	-14	94–103	Overtightening will reduce the clamping force resulting in loss of seal and reduction of flow.			
1	-16	108–113				
1	-20	127–133				
1	-24	158–167				
1	-32	245–258				

	O-Ring Boss Torque Values					
Size	ft-lb min-max	Assembly Steps				
-02	6–7	1. Verify the port, O-ring, sealing surfaces and threads are clean and free of damage.				
-03	8–10	2. Lubricate the threads and the O-ring with 10W hydraulic fluid.				
-04	13–15	3. For an adjustable ORB, completely back off the locknut and washer.				
-05	17–21	4. Hand tighten the fitting until it contacts the port spotface. Point the elbow or tee in the desired				
-06	22–25	direction and hold.				
-08	40-43	5. Torque to specification.				
-10	43-57					
-12	68–75	NOTE: Torque values specified are for threads lubricated with 10W hydraulic fluid.				
-14	90-99					
-16	112–123					
-20	146–200					
-24	154–215					
-32	218–290					

MOLDBOARD & A-FRAME ASSEMBLY

 Remove dust cap from both of the slide box cylinders located at the center/rear of the moldboard. Attach adapters (B60007 for 810SS; B60272 for 8611SS) to both ports on each slide box cylinder. Tighten fittings per torque chart.

NOTE: All of the hydraulic adapters can be found packaged with the manifold assembly.

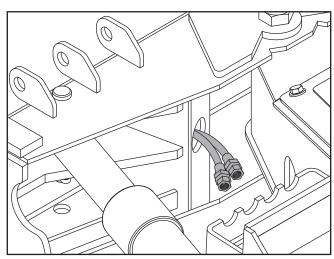


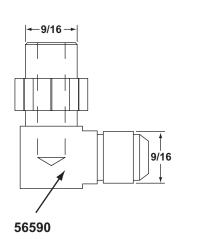
NOTE: The positions for the rod- and baseend slide box hoses. The hoses that operate the retract functions (rod) of the cylinders are closest to the base of each cylinder. The hoses that operate the extend functions (base) of the cylinders are closest to the rod of each cylinder.

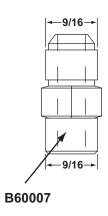
Connect hoses (B60224) to each of the hydraulic adapters on the cylinders. Tighten hoses per torque chart.

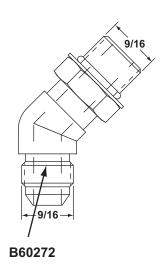
NOTE: Review the label on each hose for the appropriate part number.

 Position the pivot beam and A-frame near the mount locations at the rear of the blade. Place the right and left group of hydraulic hoses (connected to the slide box cylinders) through the 1-1/2" diameter rubber grommet openings in the front face of the pivot beam.



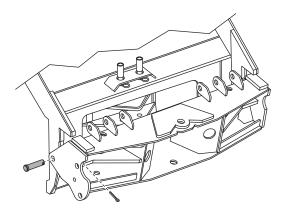




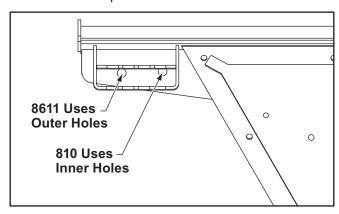


MOLDBOARD & A-FRAME ASSEMBLY

4. Position the pivot beam between the two support ribs until the connecting points on the beam align with those on the snowplow. Insert one 3/4" x 3" clevis pin (B50069) through each mounting hole and secure it with a 1/4" x 1-1/2" cotter pin (90601).



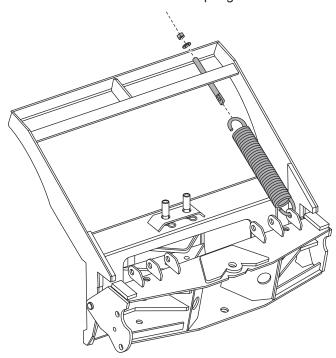
5. Position each angle cylinder with the rod end of the cylinder in the pivot beam and the hydraulic hose port facing away from the A-frame. Secure the cylinder to the pivot beam with a 3/4" x 5" clevis pin (95739) and a 1/4" x 1-1/2" cotter pin (90601). Extend each cylinder rod until the cylinder base mounting hole aligns with the hole on the A-frame angle cylinder bracket. Insert another clevis pin and secure it with a cotter pin.



NOTE: The 810SS and 8611SS models use the same A-frame but use different mounting points for the angle cylinders due to different stroke lengths on the cylinders. Be sure to use the proper mounting point when replacing or installing cylinders.

NOTE: The cylinder ports should be facing away from the A-frame.

6. Hook each extension spring to the receiving holes on the pivot beam and attach the opposite end of the spring to its respective spade bolts. Install the spade bolts through the extension spring mounting angle on the top rear of the blade. Secure each spade bolt by placing one 5/8" flat washer on the bolt and thread one 5/8" locknut. Tighten each locknut until a piece of paper can pass between the 3rd and 4th coils on the spring.

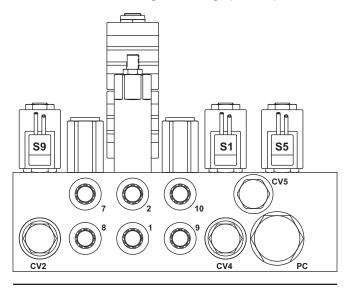


 Install the blade guides at each end of the moldboard. Insert the cap screw through the holes at the top of the wing reinforcement rib. Tighten all screws with locknuts.



MOLDBOARD & A-FRAME ASSEMBLY

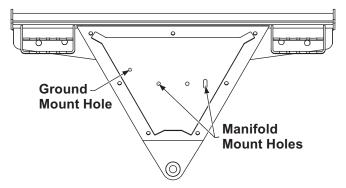
8. Assemble the manifold. Each of the hose ports on the manifold is covered with stretch wrap. Remove the wrap and install adapter (**B60272**) in ports #1, 2, 7, 8, 9 and 10. Tighten fittings per torque chart.



NOTE: DO NOT let any foreign objects enter into the open ports. The valves can become contaminated and greatly hinder the snowplow's performance. Torque to proper specifications.

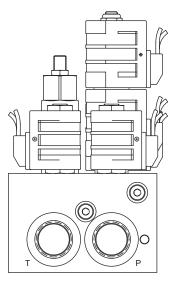
NOTE: All ports are identified by a stamped number on the manifold. The numbers also identify the hydraulic functions, which can be referenced on the label under the manifold cover.

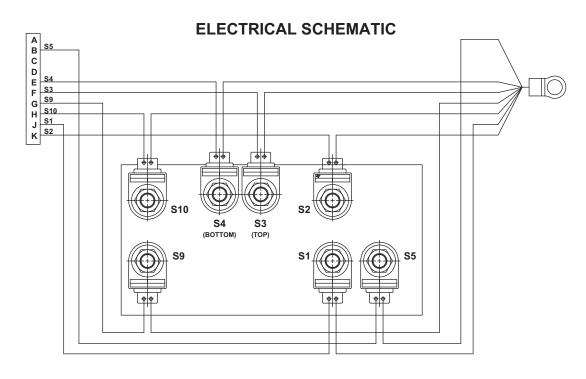
- 9. Remove the A-frame cover to gain access to the inside of the manifold compartment.
- Attach the manifold to the A-frame using cap screws (B61514), washers (29233) and locknuts (B61034).



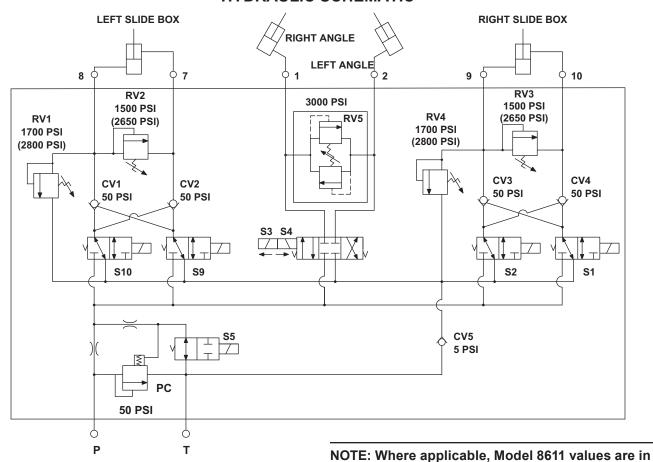
NOTE: When handling the manifold, hold the manifold at the sides of the block. Never handle the manifold by coils. Doing so can cause a solenoid cartridge to bend, causing the cartridge to stick when activated.

- 11. Route the hydraulic hose groupings from the pivot beam to the access holes located on the sides of the A-frame. Connect the hoses to their respective adapters on the manifold.
- 12. Remove the dust cap from both of the hydraulic angle cylinder ports and attach one 9/16" 90° adjustable elbow ORB adapter to each port. Each adapter should be angled toward the top of the moldboard. Connect one 3/8" x 26" (36" for 8611) hydraulic hose (**B60223** or **B60224**) to each angle cylinder adapter. Be careful not to overtighten the hose connections. Tighten fittings and hoses per torque chart.
- 13. Connect the hoses to their respective adapters on the manifold. Tighten hoses per torque chart.
- Install adapters (B60089) to ports "T" and "P" on the manifold. Connect a hydraulic hose (B60086) to each adapter. Tighten fittings and hoses per torque chart.





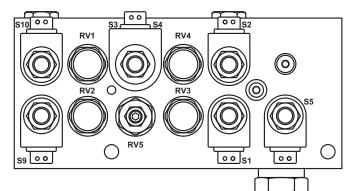
HYDRAULIC SCHEMATIC

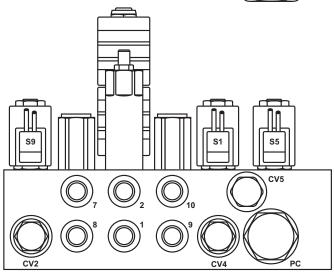


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Hydraulic Valve & Hose Port Guide

Models 810ss & 8611ss





NOTE: Check valves CV1 & CV3 are not illustrated. Both valves are located on the opposite side of the manifold in the diagram shown above.

Recommended for machines equipped with auxiliary hydraulics having a flow rated at 4–30 gallons per minute (gpm) and a maximum pressure rating of 3,000psi.

	HYDRAULIC HOSES				
Port	Function				
1	Angle Right – Driver-Side Cylinder				
2	Angle Left – Passenger-Side Cylinder				
7	Driver-Side Slide Box Retract				
8	Driver-Side Slide Box Extend				
9	Passenger-Side Slide Box Extend				
10	Passenger-Side Slide Box Retract				
	RELIEF & CHECK VALVES				
Valve	Function				
RV1	Driver-Side Wing Pressure Relief				
RV2	Driver-Side Wing Anti-Cavitation				
RV3	Passenger-Side Wing Anti-Cavitation				
RV4	Passenger-Side Wing Pressure Relief				
RV5	Angle Relief				
CV1	Driver-Side Slide Box Retract Check Valve				
CV2	Driver-Side Slide Box Extend Check Valve				
CV3	Passenger-Side Slide Box Retract Check Valve				
CV4	Passenger-Side Slide Box Extend Check Valve				
CV5	Back Pressure Check Valve				
NOTE: E	NOTE: Energize the following solenoids for the functions:				
S1	Passenger-Side Slide Box Retract				
S2	Passenger-Side Slide Box Extend				
S3	Angle Left – Passenger-Side Cylinder				
S4	Angle Right – Driver-Side Cylinder				
S9	Driver-Side Slide Box Retract				
S10	Driver-Side Slide Box Extend				

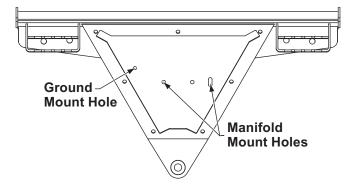


Milwaukee, Wisconsin 53224

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ELECTRICAL INSTALLATION

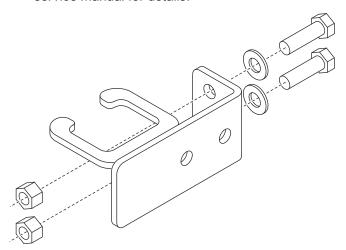
- Connect the manifold coil harness to the snowplow harness. Feed the opposite end of the snowplow harness through the top access hole in the A-frame (same as 3/4" tank hydraulic hose) located on the driver's side.
- 2. Attach the grounds on the coil wire harness and snowplow harness with a 3/8" x 1-1/2" cap screw and 3/8" tooth lock washer to the A-frame. Secure the wires with a locknut. Review the diagram for the proper ground location.



 Connect the snowplow harness to the vehicle harness, and then the vehicle harness to the pistol grip control harness. Attach the ground wire from the vehicle harness to the cab of the skid steer. The pink/black power wire connects to a switched power source with a minimum of 12 volts.

NOTE: The pink/black power wire MUST be switched ON and OFF with the ignition.

- Position the vehicle harness mount bracket in an accessible location for easy on-and-off installation inside the skid steer. Secure the vehicle side harness in the notch on the bracket.
- 5. Find an accessible location inside the skid steer for the control harness mount bracket, either positioned vertically or horizontally depending on user preference. When choosing a location for your bracket, it should be mounted in easy reach of the vehicle operator and not restricting access to vehicle controls or vehicle instrumentation. The bracket should also not interfere with any safety devices or be positioned so that the control might rotate in front of the operator. Do not mount the bracket in areas prohibited by the vehicle manufacturer. See the vehicle's owner's manual or service manual for details.



Secure the bracket with hardware provided.

- 6. Complete the assembly by reattaching the A-frame cover. Align the holes in the cover with those on the A-frame and secure it with 3/8" x 1-1/2" cap screws and 3/8" washers.
- 7. After completing the mechanical and electrical installations, test all snowplow and lighting functions before attempting to drive or plow.

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S2

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R. EXTEND

Customer Supplied

1 ≥ +

S10

S2

89

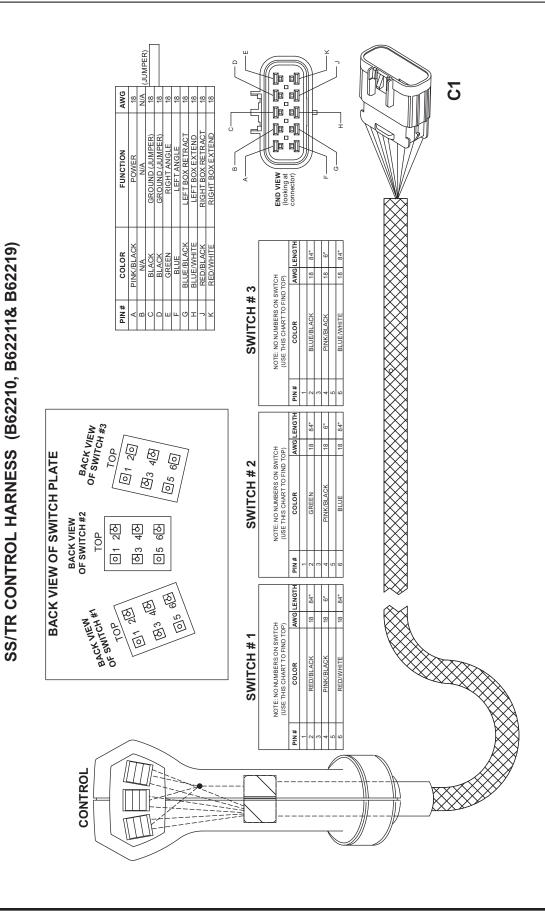
0 0 0 0 0 0 **DUMP SOLENOID** GROUND GROUND GROUND R. RETRACT L. RETRACT L. EXTEND R. ANGLE L. ANGLE Includes B62132, B62133, B62134, B62135, B62136, B62210, B62211 & B62219 RED 2 \mathbb{S} BROWN BLUE/BLACK M2 Σ RED/BLACK C2 \mathcal{C} BLUE/WHITE GREEN RED/BLACK PINK/BLACK 2 LEFT BOX RETRACT POWER RIGHT BOX RETRACT

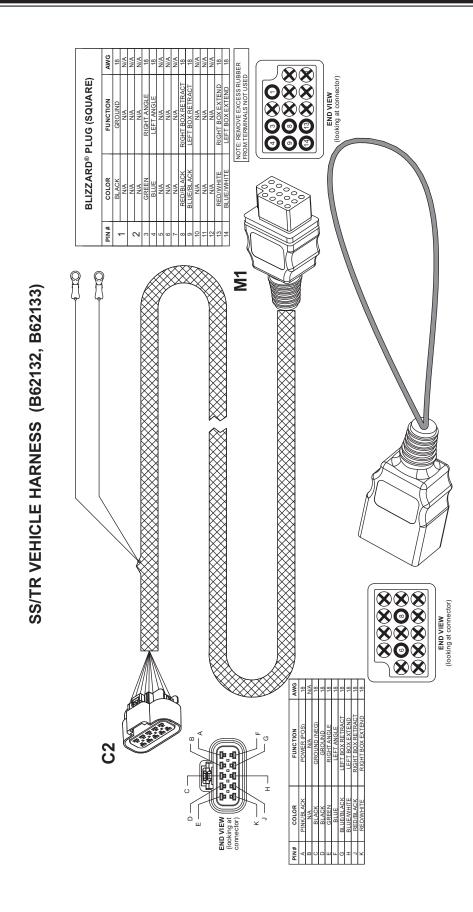
SS/TR PISTOL GRIP CONTROL HARNESS SCHEMATIC (B62131)

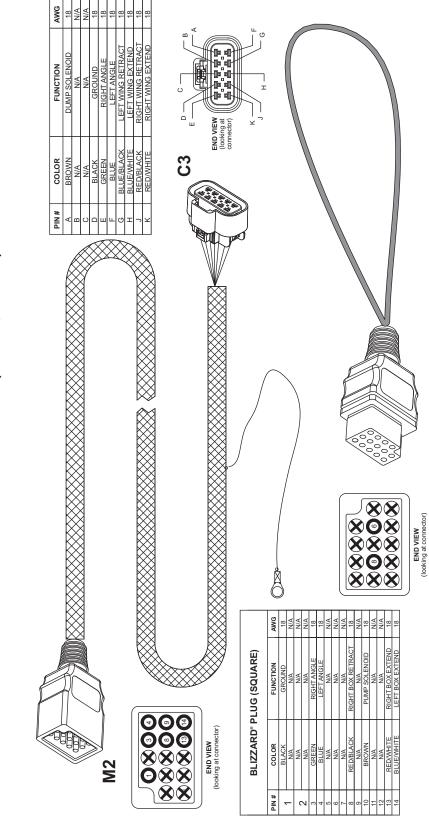
SWITCH #1

SWITCH #2

SWITCH #3

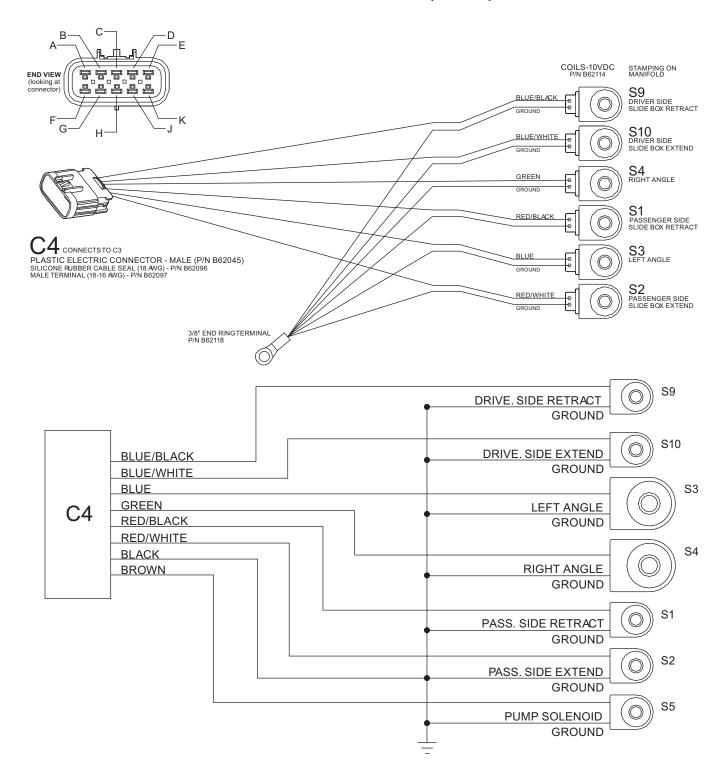


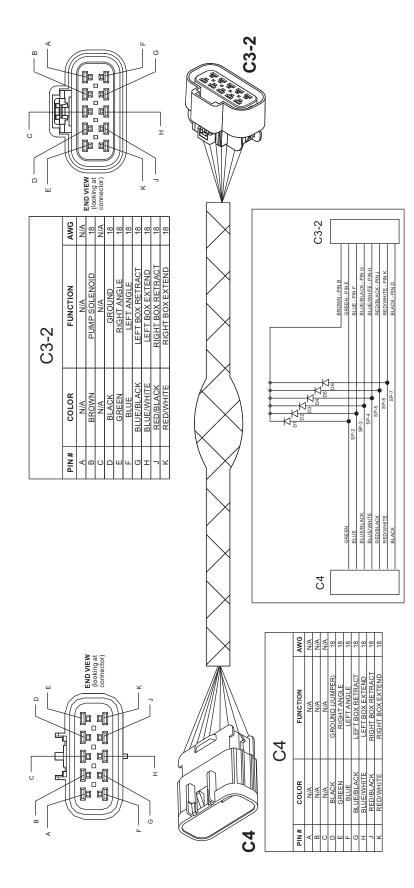




SS/TR PLOW HARNESS (B62134, B62135)

SS/TR COIL HARNESS (B62136)



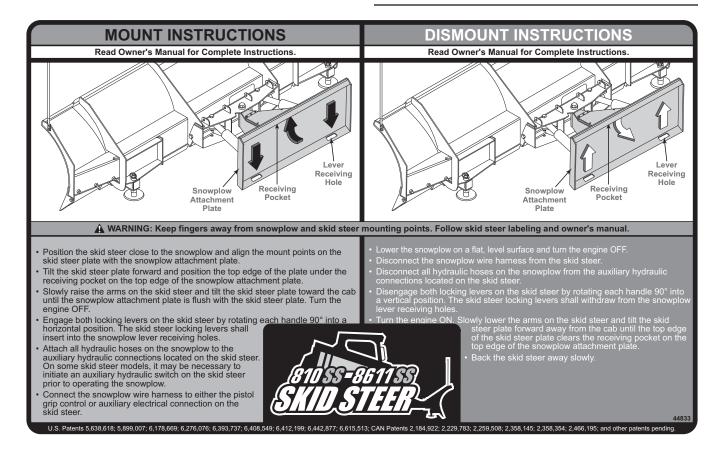


AUXILIARY CONTROL HARNESS W/ DIODES (B62162)

MOUNTING & DISMOUNTING INSTRUCTIONS

Prior to operating your POWER PLOW® snowplow, review the Mounting and Dismounting Instructions label on the back of the driver-side moldboard.

NOTE: If at any time the Mounting and Dismounting Instructions label, or any other label attached to your snowplow becomes illegible, promptly replace them.



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TESTING YOUR SNOWPLOW

- To test all of the functions on the POWER PLOW® snowplow, your snowplow needs to be properly attached to the skid steer. Refer to the Mounting and Dismounting label on the back of the snowplow.
- Complete the hydraulic connections with the skid steer turned OFF.

NOTE: Due to the various makes and models of skid steers available, hydraulic couplings for the auxiliary hydraulic connections are not provided. Consult your skid steer's owner's manual for the appropriate couplings needed.

Connect the couplings to the hoses for the pressure port ("P") and the tank port ("T") on the manifold. Complete the hydraulic installation by making the appropriate connections at the skid steer.

Start the skid steer and begin to initiate the blade functions.

NOTE: Depending on the skid steer model, it may be necessary to turn ON the skid steer's auxiliary hydraulic switch prior to operating the snowplow. The left switch on the control operates the driver-side wing. Push the switch "UP" to extend the wing and "DOWN" to retract the wing. Push the center switch "UP" to angle left and "DOWN" to angle right. The right switch operates the passenger-side wing and works the same as the left switch. Upon initiating the switches on the pistol grip control, you may notice a snowplow function is slow or delayed. The hydraulic fluid is filling the cylinders and replacing air in the system. Monitor the hydraulic fluid level in your skid steer, and fill as necessary.

(No LED Float Light or Indicator Light)



NOTE: This snowplow uses the skid steer controls for an emergency stop. See skid steer manual for details.

MAINTENANCE

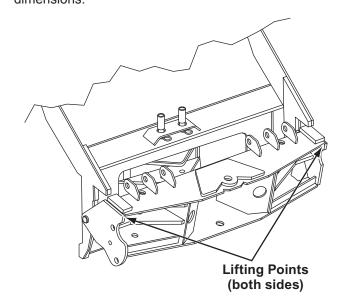
Maintenance	Periodically	Yearly
Check fasteners for tightness. Torque to specifications.	Х	
Check hoses for wear and leaks.	Х	
Check cylinders for leaks, inspect rod ends for corrosion and pitting.	Х	
Lubricate all exposed cylinder rod ends with liquid white lithium grease to prevent corrosion.		Х
Check cutting edges and plow shoes for wear. NOTE: Do not discard plow shoe washers, these should be retained for different shoe adjustments.	Х	
Clean and lubricate all electrical plugs and connections with dielectric grease. Clean and install all dust caps prior to storing.	Х	Χ
Lubricate all pins and bushings, inner slide box and A-frame latch with NLGI Grade 2 multi-purpose lithium complex grease with molybdenum (MPGM) to maintain consistent	х	Х
operation. Clean and paint all scratches or exposed metal with BLIZZARD® touch-up paint.	X	X
Check the hydraulic fluid level. Fill with fluid to 3/4" from the top of the reservoir. Do not exceed this level. Never mix different types of fluid.	Х	
Change the hydraulic fluid as specified in your skid steer Owner's Manual.		X
Check the trip spring adjustment. Properly adjusted tension will allow a sheet of paper to pass between the 3rd and 4th coils of the spring.	Х	
Adjust the wing spring as needed or install an optional second extension spring for increased return speed.	X	
Pressure wash and dry the entire snowplow prior to storing.		X
Cover the snowplow with a tarp if stored outside. This will protect your snowplow from sun fading and inclement weather which can lead to accelerated corrosion.		X

REMOVING FROM STORAGE

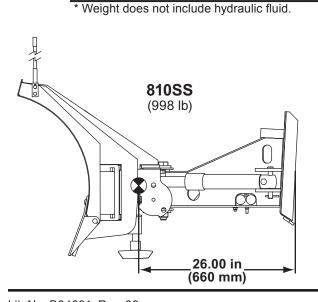
- 1. Perform all regular maintenance.
- 2. Replace the hydraulic fluid in the hydraulic system. Prolonged storage could result in condensation build-up.
- 3. Follow the mounting procedure on the Mounting and Dismounting label.
- 4. Initiate all of the functions and test before using.

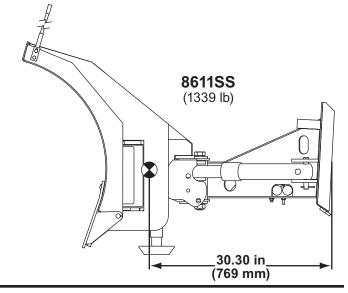
LIFTING

To lift and move this snowplow, attach chain fall grab hooks to outside pivot beam area shown. Always follow recommended lift warnings and procedures. See following page for snowplow weights and dimensions.



Part	Specification	810SS	8611SS	
	Length	96" (8')	102" (8'-6")	
	Thickness	12 ga	11 ga	
	Height	31"	34"	
Moldboard	Reinforcement	4 Ribs	@ 1/4"	
	Cutting Edge	1/2" x 6"	5/8" x 6"	
	Finish	Powder C	oat White	
	Trip Mechanism	(4) 3/8" Hooked Extension	(6) 3/8" Hooked Extension	
	Length	12"	23"	
	Thickness	11 ga	7 ga	
Wings	Height	31"	34"	
vviligs	Reinforcement	1 Rib	@ 1/4"	
	Cutting Edge	1/4" x 10" T1	3/8" x 12-1/2" T1	
	Finish	Powder C	oat White	
	Material	1/4" and 5/1	6" Mild Steel	
A-Frame	Cover		Non-Skid Texture	
	Finish		Coat Black	
Manifold	Construction Clear Anodized Aluminum G			
Marillolu	Valves	Electro-Hydraulic Cartridge		
	Angle Cylinders	2		
	Stroke	10"	12"	
	Ram Diameter	1-3/4"	2"	
Cylinders	Bore Diameter	2"	2-1/4"	
Cyllilders	Slide Box Cylinders	2	2	
	Stroke	13-15/16"	18-7/16"	
	Ram Diameter	1"	1-1/8"	
	Bore Diameter	1-1/2"	1-3/4"	
	Weight*	998 lb	1339 lb	
	Compact Width	96" (8')	102" (8'-6")	
	WIDE PASS™ Width	120" (10')	132" (11'-3")	
Snowplow	BUCKET BLADE™ Width	111" (9'-3")	118" (9'-10")	
Specs	Adjustable Plow Shoes		ity Cast Steel	
	Mount Mechanism	Universal Atta	achment Plate	
	Standard Control Station	andard Control Station Pistol Grip w/3 Switches		
	Optional Integrated Control	Auxiliary Harness w/Diodes		

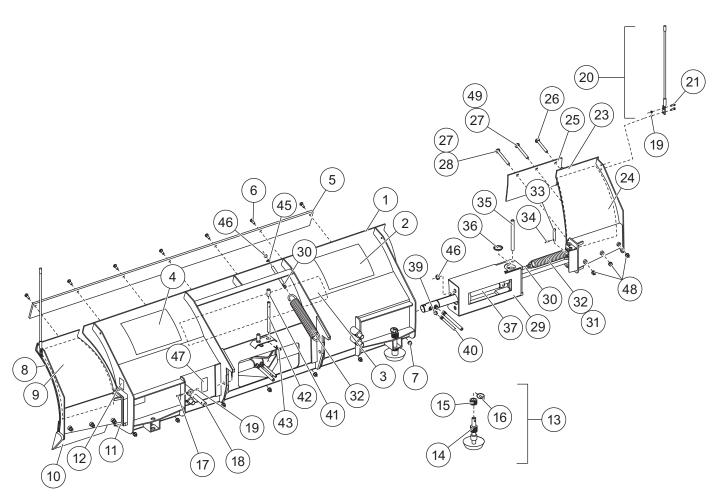




TROUBLESHOOTING

Problem	Cause	Solution
	S5 coil is not magnetizing.	S5 coil should magnetize with each function.
Snowplow functions will not work after all connections are made or snowplow functions are slow.	Solenoid cartridge valve may be contaminated or damaged. A bent or overtorqued cartridge will not allow the valve to move freely inside of the cartridge.	Determine a damaged cartridge valve by reversing the driver-side and passenger-side cartridge valves one at a time. Replace valve if necessary.
Snowplow functions start and terminate suddenly.	Skid steer hydraulic fluid flow is set to variable flow.	For snowplow functions to work, the skid steer hydraulic fluid flow should be set to continuous flow. Review your skid steer operation manual for proper flow settings.
Multiple valves function	Diodes may be corroded or damaged.	Clean diodes thoroughly and/or replace.
simultaneously.	Wire harness may be damaged.	Verify harness is not damaged. Review schematic(s) to troubleshoot connection(s). Replace if needed.
Snowplow functions are reversed (e.g. driver-side wing extends when passenger-side wing is activated from the control).	Hydraulic hoses are connected wrong or coils and wiring are incorrect.	Review the Hydraulic Valve and Hose Port Identification Guide under the A-frame cover for proper port locations and/or place respective coils over correct valves.
Both wings extend when the skid steer hydraulics are turned ON.	Pressure (P) and tank (T) hoses are installed in the wrong position on the skid steer.	Review the skid steer operation manual to determine the pressure and tank connections.
Snowplow angles only one way.	Skid steer computer conflicts with cylindrical connection.	Using a jumper wire, connect pin K to pin L at the back of the cylindrical connector (cylindrical connector only).
Wing will not stay angled when plowing.	The wing pressure relief valve is contaminated.	Test the wing pressure relief. Attach a T-fitting with a fluid psi gauge to the base end of the wing cylinder. Pressure relief should not be greater than 1700 psi (2800 psi for 8611SS) Replace if less than 1500–1700 psi (2600–2800 psi for 8611SS).
Snowplow will not stay angled when plowing.	The angle pressure relief valve is set too low. NOTE: Increasing the pressure relief valve will cause damage to your snowplow. Do not set the pressure relief greater than 3000 psi.	Follow the guidelines indicated above; however, the psi setting should not exceed 3000 psi. NOTE: If the snowplow is floating back when angled to the right, adjust the left pressure relief valve and vice versa.
	Control station, harness or cables may be loose or improperly connected.	Verify control station, harness and all cables are securely connected. Clean if necessary.
	No power to the cartridge valve.	Verify S9 and S10 coils (passenger-side slide box retract and extend) and S1 and S2 (driver-side slide box retract and extend) are connected properly. Diagnose the wire harness. Review all wire harness schematics. If power is present, review the next step.
Wing will not move.	Coils are receiving power.	Verify coils are magnetizing. Position a screwdriver inside of the coil. When the respective function is activated, the screwdriver is drawn to the side of the coil. If the coil is not drawn to the screwdriver, replace the coil. If power is present, review the next step.
	Solenoid cartridge may be contaminated or damaged. A bent cartridge will not allow the valve to move freely inside of the cartridge.	Determine a damaged cartridge valve by reversing the driver-side and passenger-side cartridge valves. Replace valve if necessary.
Snowplow will not angle.	Review all probable causes above.	NOTE: Verify coils S3 and S4 for angle functions.

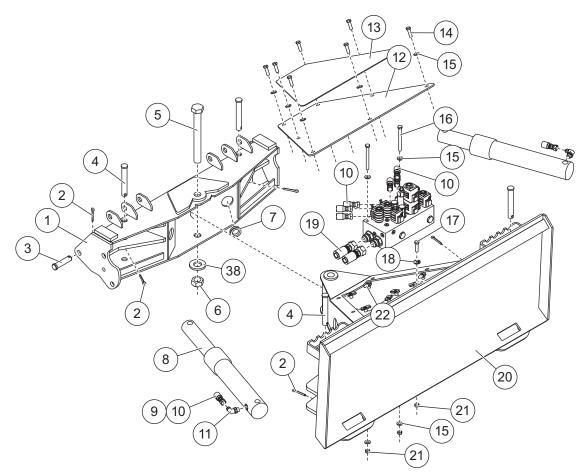
Lit. No. B64091, Rev. 09 28 June 15, 2010

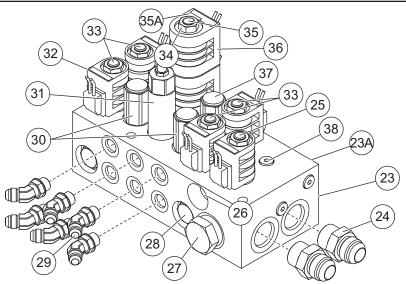


		Qty			
Item	Part			Description	
1	B52074	1	_	Moldboard	
	B52085	_	1	Moldboard	
2	59900	1	1	Label – Information (Warning)	
3	B63160	1	1	Decal – Center Moldboard	
4	44833	1	1	Label – Skid Steer Mounting & Dismounting	
5	B61292	1	_	Cutting Edge, Moldboard (1080)	
	B52139	_	1	Cutting Edge, Moldboard (1080)	
6	B61196	7	_	1/2-13 x 1-1/2 Carriage Bolt G8	
İ	80238	_	7	5/8-11 x 2 Carriage Bolt G8	
7	B61365	13	6	1/2-13 Flanged Locknut	
	B61626	_	7	5/8-11 Flanged Locknut	
8	B51042	1	_	Wing – DS	
İ	B51100	_	1	Wing – DS	
9	96325	1	_	Wing Decal – DS	
	96329	_	1	Wing Decal – DS	
10	B51048	1	_	Cutting Edge, Driver-Side Wing (T1)	
	B51069	_	1	Cutting Edge, Driver-Side Wing (T1)	
G = Grade					

MOLDBOARD & WING PARTS – ALL MODELS

		Qty			
Item	Part		-	Description	
11	B50057	1	_	Slide Box – DS	
	B50075	_	1	Slide Box – DS	
12	29593	2	2	Label – Multiple Pinch Points	
13A	49071	2	2	HD Disc Shoe Assy	
13	60045	2	2	1-1/8 ID, 1-5/8 OD x 1-1/2 Spacer	
14	91192	44	28	1" Flat Washer	
15	93010	2	2	7/16 x 1-3/4 Linchpin	
17	B61383	4	4	5/16-18 x 2-1/4 Hex Cap Screw G8	
18	B61681	4	4	1 x 4-1/8 Slide Box Stop Pin	
19	B61384	4	4	5/16-18 Locknut G8	
20A	B61049	1	1	Plow Guide Assy (Set of 2)	
20	68494	4	4	5/16-18 x 1 Hex Cap Screw G5	
21	91332	4	4	5/16-18 Locknut GB	
22	B51043	1	_	Wing – PS	
	B51101	_	1	Wing – PS	
23	96326	1	_	Wing Decal – PS	
	96330	_	1	Wing Decal – PS	
24	B51047	1	_	Cutting Edge – PS (T1)	
	B51070	_	1	Cutting Edge – PS (T1)	
25	B61418	2	_	1/2-13 x 3-1/2 Carriage Bolt G8	
	B61360	_	2	1/2-13 x 5 Carriage Bolt G8	
26	B61419	2	2	1/2-13 x 4-1/2 Carriage Bolt G8	
27	B61622	2	2	1/2-13 x 5-3/4 Carriage Bolt G8	
28	B61362	_	2	1/2-13 x 6-1/2 Carriage Bolt G8	
29	B50058	1	_	Slide Box – PS	
	B50074	_	1	Slide Box – PS	
30	B61416	6	8	5/8-11 x 7-3/8 Spade Bolt G8	
31	B61398	2	_	13 OAL x 2 OD x 5/16 Extension Spring	
32	23039	4	8	Trip Spring	
33	B61385	2	2	5/8 x 3 Clevis Pin	
34	90601	2	2	1/4 x 1-1/2 Cotter Pin	
35	B51009	2	_	3/4 x 9 Wing/Slide Box Pivot Pin	
	B13307	_	2	1 x 11-1/8 Wing/Slide Box Pivot Pin	
36	B61425	2	_	2-51/64 OD, 2-9/32 ID x 1/2 Black Polyethylene Plug	
37	B60347	2	_	Hydraulic Cylinder, Slide Box Extend/Retract	
	B60207	_	2	Hydraulic Cylinder, Slide Box Extend/Retract	
38	91337	2	8	5/8-11 Locknut	
39	B60007	4	_	9/16-18 Male ORB Hydraulic Adapter	
	B60272	_	4	9/16-18 45° Adjustable Elbow ORB Hydraulic Adapter	
40	B60272	4	4	3/8 x 36 Slide Box Extend/Retract Hydraulic Hose	
41	B61198	2	2	5/8 ID, 3/4 OD x 1 Black Vinyl Cap	
42	B11989	2	2	5/8 x 11-1/2 Slide Box Extend/Retract Hydraulic Cylinder Base End Pin	
43	B61030	2	2	1/8 x 2-5/8 Hair Cotter Pin	
45	90576	4	6	5/8 Hardened Washer	
		•		G = Grade	
0 01440					



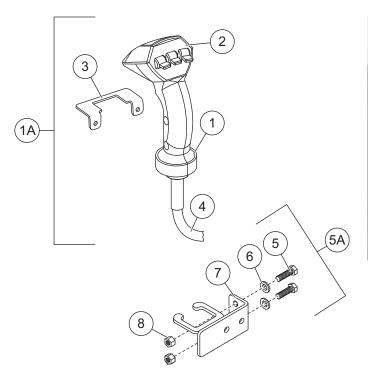


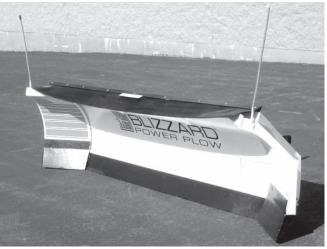
		Qty		
Item	Part	810SS	8611SS	Description
1	B52141	1	-	Pivot Beam
	B41052	_	1	Pivot Beam
2	90601	4	4	1/4 x 1-1/2 Cotter Pin
G = Grade				

A-FRAME, PIVOT BEAM & MANIFOLD PARTS – ALL MODELS

			ty		
Item	Part		-	Description	
3	B50069	2	2	3/4 x 3 Clevis Pin	
4	95739	4	4	3/4 x 5 Clevis Pin	
5	B61330	1	1	1-8 x 9 Hex Cap Screw G8	
6	B61008	1	1	1-8 Top Locknut GC Distorted Thread	
7	B61217	4	4	1-1/2 ID, 2-1/8 OD Black Rubber Grommet, 60 Durometer	
8	B60029	2	_	Hydraulic Cylinder, Snowplow Angle	
	B60324	_	2	Hydraulic Cylinder, Snowplow Angle	
9	B60223	2	_		
10	B60224	4	6	3/8 x 26 Snowplow Angle Hydraulic Hose 3/8 x 36 Snowplow Angle Hydraulic Hose	
11	56590	2	2	9/16-18 90° Adjustable Elbow Hydraulic Adapter ORB	
12	B70143	1	1	A-Frame Rubber Mat	
13	B70143	1	1	A-Frame Cover Plate	
14	90055	3	3	3/8-16 x 1-1/4 Hex Cap Screw G8	
15	29233	7	7	3/8 SAE Hardened Washer	
16	B61514	2	2	3/8-16 x 4 Hex Cap Screw G5	
17	66439	1	1	3/8-16 x 1-1/2 Hex Cap Screw G5	
18		1		3/8 Internal/External Tooth Lock Washer	
19	B61307	2	1 2	3/4 x 78 Hydraulic Hose	
	B60086	1		•	
20	B70132		1	A-Frame	
21	B61034	3 7	3	3/8-16 Hex Locknut GC	
22	B61275		7	3/8-16 U-Nut	
23A	B60341	1	_	Manifold Assy	
	B60342	_	1	Manifold Assy	
ns	B60491	1	1	Pump/Manifold Kit (Incl. B60402 [1], B60447 [1], B60448 [1], B62039 [1], B61011 [2], B61412 [2], B61312 [2], B61637 [2], 56805 [4])	
23	B60354	1	_	Manifold Block (with Cross Port Relief), Clear Anodized Aluminum	
	B60355	_	1	Manifold Block (with Cross Port Relief), Gold Anodized Aluminum	
24	B60089	2	2	1-1/16-12 Male ORB Connector Hydraulic Adapter	
25	B60320	1	1	Spool Valve 2-Way	
26	B60356	1	1	Back Pressure Check Valve 5 psi	
27	B60183	1	1	Pressure Compensation Regulation Valve	
28	B60225	4	4	Check Valve 50 psi	
29	B60272	6	6	9/16-18 Adjustable Elbow Hydraulic Adapter	
30	B60279	2	_	Relief Valve, 1500 psi	
	B60227	_	2	Relief Valve, 2650 psi	
31	B60168	1	1	Relief Valve, 3000 psi	
32	B62163	5	5	Coil, PDL 12V DC	
33	B60166	4	4	Spool Valve, 3-Way, 2-Position	
34	B60052	5	5	1/2-20 Hex Jam Nut	
35A	B62161	1	1	Coil Harness Assy (Incl. Items B62045, B62118 [2], B62116 [5], B62096 [7], B62097 [7], Items 32–36)	
35	B60321	1	1	Spool Valve, 4-Way, 3-Position	
36	B62164	2	2	Coil, LDL 12V DC	
37	B60278	2	_	Relief Valve 1700 psi	
] 3,	B60276	_	2	Relief Valve 2800 psi	
38	B60049	2	2	SAE Hollow Hex Plug ORB	
39	B61203	1	1	1" Washer	
	B63196	1	1	Label – SS/TR Hydraulic Hose Guide	
ns	B60322	2	2	Piston Assy	
ns	DUUJZZ		= Grade	ns = not shown	
		G	- Graue	115 – HOL SHOWH	

CONTROL, ACCESSORIES & KITS - ALL MODELS





2. Rugged and durable, the 3/8" thick, 2-ply construction keeps snow off your windshield and in its place—on the ground! The one piece rubber design allows for wing clearance and provides optimum snow deflection. The deflector is shipped with a POWER PLOW® vinyl decal and complete mounting hardware.

Control						
		Qty				
Item	Part	810SS	8611SS	Description		
1A	B62131	1	1	Pistol Grip Control Wire Harness Assy (Incl. Item	ns 1–5A)	
ns	B62132	1	1	Wire Harness Extension, Vehicle-Side		
ns	B62133	1	1	Weather Cap, Vehicle-Side Wire Harness Exten	sion	
ns	B62134	1	1	Wire Harness Extension, Snowplow-Side		
ns	B62135	1	1	Weather Cap, Snowplow-Side Wire Harness Ext	tension	
ns	B62045	2	2	Connector, Electric, Male, Plastic		
ns	B62097	17	17	Terminal, Male (18–16 AWG)		
ns	B62096	35	35	Seal, Cable, Silicone, Orange (18 AWG)		
ns	B62116	5	5	Plug, Cavity, Silicone, White (18–16 AWG)		
ns	B62046	2	2	Connector, Electric, Female, Plastic		
ns	B62100	2	2	Terminal, Ring #10 (22–18 AWG)		
ns	B62093	18	18	Terminal, Female (18–16 AWG)		
ns	B62118	1	1	3/8 End Ring Terminal		
ns	B62072	1	1	3/8 End Ring Terminal Snowplow Side Wire Har	ness Extension	
ns	B62218	1	1	Harness, SS Snowplow Side Extension 4'		
1	B62219	1	1	Housing, SS Pistol Grip 2 Halves w/Screws (B61	1613)	
2	B62211	1	1	Circuit Board and 3-Switch Assy		
3	B70040	1	1	Mount Bracket, Vehicle Side		
4	B62210	1	1	Harness, Control w/Pipe SS		
5A	B70048	1	1	Pistol Grip Control Mount Bracket Kit (Incl. Items	s 5–8)	
5	90055	2	2	3/8-16 x 1-1/4 Hex Cap Screw G8		
6	29233	2	2	3/8 Hardened Washer		
7	B70049	1	1	Mount Bracket, Pistol Grip Control		
8	91333	2	2	3/8-16 Hex Locknut GB		
	G =	Grade		SS = Stainless Steel	ns = not shown	

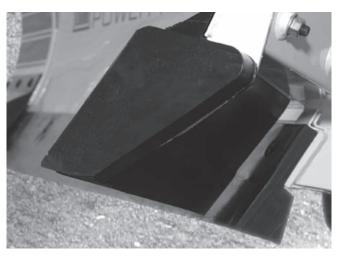
CONTROL, ACCESSORIES & KITS - ALL MODELS



10. Integrate all snowplow controls into your skid steer using an optional auxiliary control harness. This 7-foot braided harness connects easily to your existing manifold harness on one end and your skid steer on the other. Assembly of the harness wiring to your skid steer-specific auxiliary electrical controls required. Electrical connector not provided with harness.



11. Beef-up your POWER PLOW® snowplow with our 3/8" thick wing cutting edges. These edges are built to withstand heavy snowplow use on the roughest road surfaces and also provide added material for protection against sidewalk curb wear. Mounting hardware included.



12. Durable and long lasting, the POWER PLOW polyurethane moldboard and wing cutting edges will keep you plowing longer and safer! Specially formulated for snow plowing applications, BLIZZARD® poly edges resist gouging, provide superior wear life and effectively reduce plowing noise. Ideal for all plowing conditions. Edges are shipped with mounting hardware.



13. Putting your snowplow away for the winter? Have a deep scratch to cover? Clean up your blade and snowplow parts with our gloss spray paints. BLIZZARD touch-up paint provides an excellent finish to help keep your snowplow looking its best. Paint provided in 12 oz spray cans.

CONTROL, ACCESSORIES & KITS – ALL MODELS

	Accessories					
		Qty				
Item	Part	810SS	8611SS	Description		
9	B61241	1	-	Rubber Snow Deflector w/Hardware		
	B52087	-	 1 Rubber Snow Deflector w/Hardware 			
10	B62162	1	1	Auxiliary Control Harness w/Diodes		
11	B61288	1	-	3/8" Wing Cutting Edges w/Hardware (T1)		
12	B61536	1	_	Polyurethane Moldboard and Wing Cutting Edges w/Hardware		
	B61539	_	1	Polyurethane Moldboard and Wing Cutting Edges w/Hardware		
13	B61219	1	1	POWER PLOW® High Performance 12 oz Spray Paint, Gloss White		
	B63073	1	1	POWER PLOW High Performance 12 oz Spray Paint, Gloss Black		
				Kits		
ns	B61277	1	_	Hardware Kit, Snowplow Assy Parts		
	B61479	_	1	Hardware Kit, Snowplow Assy Parts		
ns	B60454	1	 Hydraulic Adapter Kit (Incl. Items B60005 [2], B60007 [4], B60089 [2], B60272 [6 			
	B60453	-	1	Hydraulic Adapter Kit (Incl. Items B60005 [2], B60089 [2], B60272 [10])		
ns	B60456	1	-	Hydraulic Hose Kit (Incl. Items B60086 [2], B60223 [2], B60224 [4])		
	B60455	-	1	Hydraulic Hose Kit (Incl. Items B60086 [2], B60224 [6])		
ns	B61430	1	1 Hardware Kit, Moldboard Cutting Edge			
ns	B52067	1 – Cutting Edge Kit, Moldboard w/Hardware		Cutting Edge Kit, Moldboard w/Hardware		
	B52095	 1 Cutting Edge Kit, Moldboard w/Hardware 		Cutting Edge Kit, Moldboard w/Hardware		
ns	B61431	1	_	Hardware Kit, Wing Cutting Edge		
	B61387	_	1	Hardware Kit, Wing Cutting Edge		
ns	B51104	1	_	Kit, Wing Cutting Edges w/ Hardware		
	B51103	_	1	Kit, Wing Cutting Edges w/ Hardware		
ns	B60360	1	_	Combo Seal Kit, Cyl B60029/B60065		
ns	B60365	_	1	Combo Seal Kit, Cyl B60207		
ns	B60366	_	1	Combo Seal Kit, Cyl B60221/B60324		
ns	B60373	1	-	Combo Seal Kit, Cyl B60347		
ns	96028	1	-	Moldboard Label Pack		
ns	96032		1	Moldboard Label Pack		
ns = not shown						



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