



2005 Assembly & Operation Manual Models: 760LT, 760, 800 & 860



INTRODUCTION/TABLE OF CONTENTS

Congratulations on purchasing the finest straight blade snowplow available! Blizzard straight blades are clearing new trails for innovative design, rugged durability, quality craftsmanship and superior performance. Our exclusive products are manufactured and tested in Michigan's Upper Peninsula, the snow capital of the Midwest. With an annual snowfall averaging over 250" we couldn't imagine building snow removal products anywhere else!

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Warranty	



Prior to operating your straight blade, review the WARNING! label at the passenger's side rear of the moldboard (shown below).



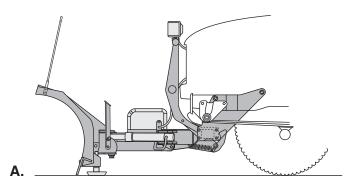
NOTE: Read and understand all warnings indicated in this manual prior t operating the snowplow. Warnings and cautions in the manual are indicated by the icons shown at left.

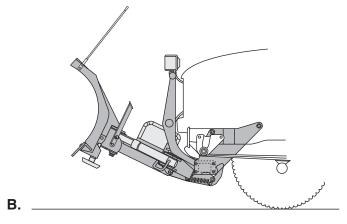
NOTE: If at any time the safety labels become illegible, promptly replace them.

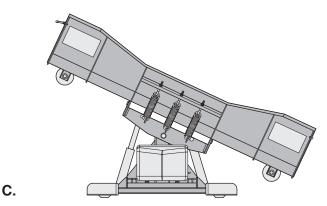
		IG
1. 2.	Properly mount the snowplow prior to moving the vehicle. To prevent accidental plow activation, turn the Power switch on the snowplow control to the "OFF" position when not in use.	
3.	Stand clear of the attachment area when mounting the snowplow to the undercarriage and operating the Power Hitch Connect/Disconnect switch. Failure to do so may result in serious injury or death.	STRAIGHT BLADES
4.	Securely position all mounting pins prior to operating your snowplow.	
5.	Do not position your body between the snowplow and the vehicle when servicing or operating.	READ
6.	Position snowplow in such a manner as to not block your vision or plow headlights while in transit.	OWNER'S
7.	Do not change the position of the snowplow while in transit.	MANUAL
8.	Do not exceed 40 mph when transporting the snowplow.	THOROUGHLY
9.	Do not exceed 10 mph when plowing.	PRIOR TO
10.	Always lower the snowplow when the vehicle is parked.	OPERATING
11.	Vehicles equipped with air bags are designed to be activated in a frontal collision equivalent to hitting a solid object or barrier at approximately 14 mph or more.	PLOW.
	Careless or high speed driving while plowing snow, which results in vehicle impact deceleration equivalent to or greater than the airbag deployment threshold described above, would deploy the airbag.	CORPORATION Calumet, MI 49913 BLZ 1024

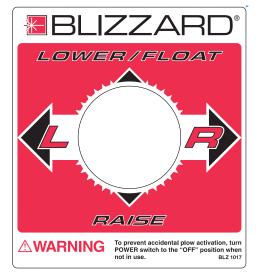
OPERATION

Your snowplow is the most advanced and versatile straight blade on the market. The easy-to-use joystick control allows you to automatically adjust the plow blade into an infinite number of plowing positions. Review the illustrations below for instruction on maneuvering your snowplow.









A. Lowered or Float Position

Pushing the joystick forward, toward the "Lower/Float" designation on the label, will lower your straight blade to the ground. Pushing and momentarily holding the joystick ahead will allow the snowplow to "float", or follow the contour of the ground when moving forward or backward.

B. Raised Position

Pulling the joystick back, toward the "Raise" designation on the label, will lift your straight blade off of the ground. To stop raising the plow, simply return the joystick to its "neutral" or center position. The snowplow has reached its maximum raised position when the blade stops lifting – return the joystick to its neutral position.

C. Angled Right Position

To angle your straight blade to the right, position the joystick toward the "R" on the label. To stop angling the plow, return the joystick to its "neutral" or center position. The snowplow has reached its maximum angled position when the blade stops moving to the right side.

D. Angled Left Position

To angle your straight blade to the left, position the joystick toward the "L" on the label. To stop angling the plow, return the joystick to its "neutral" or center position. The snowplow has reached its maximum angled position when the blade stops moving to the left side.

***** IMPORTANT *****

To prevent premature failure of the power contactor (solenoid), initiate the plow function and return the joystick to its neutral or center position—except float. DO NOT hold the joystick in any position that allows the pump to continuously run after the plow has reached its maximum degree of movement. This will reduce the useful life of the solenoid.

D.

UNPACKING & INSPECTION

Your Blizzard straight blade has been packaged to withstand transit and weather related damage. Fully inspect all components upon receipt of your plow. 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.
- 3. 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.
- 4. 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:

HYDRAULIC PUMP SERIAL NUMBER:

THIS SIDE UP Δ
SHIPPING INFORMATION AND PACKAGING CONTENTS
PACKAGING MAKE: FORD GMC/CHEVY DODGE OTHER
U.S. PATERT NO. 5.636.616 U.S. PATERT NO. 5.899.007 OTHER PATERTS PERDING
BLIZZARD POWER PLOW
MADE IN THE U.S.A.
POWER HITCH
FORKLIFT POINTS

Pallet Wrap End Panel

The tear-resistant, woven polyethylene pallet wrap contains a moisture barrier to help protect all packaged components and keep out the most inclement weather during shipping and storage. The end panel of the pallet cover contains important information regarding the snowplow model and the plow's serial number. Both of these numbers are given together. The first three (four) digits of the number indicated is always the plow model - 810 (or 8611) and the entire number is the serial number (Ex: 810-00001 or 8611-00001). The shipping document is also attached to the end panel. Be sure to retain this list for your records.

TECHNICAL SPECIFICATIONS

PART	SPECIFICATION	760 LT	760	800	860		
	Length	7'6"	7'6"	8'0"	8'6"		
	Thickness	12 gauge					
	Height	29"	" 31"				
MOLDBOARD	Reinforcement	4 ribs @ 3/16 "	6 r	/4"			
	Cutting Edge (1080)	3/8" X 6"		1/2" x 6	33		
	Finish	Po	owder C	oat Wh	ite		
	Trip Mechanism	· · /	(3) 3/8" hooked extension(4) 3/8" hooked extension				
A-FRAME	Material	Rectangular Tube & Channel Type					
A-FRAIVIE	Hitch Pins	3/4" x 6" Yellow Zinc					
	Finish	P	Powder Coat Black				
	Construction	Steel Housing w/ Clear Plastic Tank					
	Туре	Internal Gear Pump					
	Size		2.5cc				
	Motor	12V Starter					
PUMP	Weight			lb.			
	Mount		-frame lex head				
	Reservoir Capacity	2 qts.					
	Controls	Т	oggle &	Joystic	k		
MANIFOLD	Construction		Anodize		-		
	Valves	Electro-hydraulic cartridge					

PART	SPECIFICATION	760 LT	760	800	860		
	Angle Cylinders		2				
	Stroke	9- 3/8"	~ 10"				
	Ram Diameter	1-3/4"					
	Bore Diameter		2	2"			
CYLINDERS	Raise/Lower			1			
	Cylinders			1			
	Stroke		4-5	5/8"			
	Ram Diameter		1-1	/4"			
	Bore Diameter	2- 1/2" 3"					
	Туре	Low profile w/ turn signals					
	Measurements	12"W x 5"H x 5-1/4"D					
PLOW	Housing	Plastic Composite					
HEADLIGHTS	Bulb Type	High/Low Sealed Beam Halogen 12V Rectangular					
	Switch Type	Da	sh Mou	int, Tog	gle		
	Weight (lbs)*	601	752	769	778		
	Amperage Draw** (A)	145 135					
	Adjustable Plow Shoes (2)	Std.	Std. Heavy-Duty Cast Steel				
PLOW SPECS.	Mount Mechanism	Hydraulic Power Switch			witch		
	Standard Control Station		Joy	stick			
	Optional Control Station		Touchpad				

*Plow weight does not include vehicle undercarriage.

**Amperage draw specifications are based on the snowplow lift operation, at a shop temperature of 65°F, using Blizzard Snowplow Rapid Action Hydraulic Oil. Amperage will vary with temperature, oil viscosity and meter accuracy. Deadheading a plow function will result in significantly increased amperage.

Blizzard Corporation reserves the right, under its Continuous Improvement Policy, to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications.

TORQUE SPECIFICATIONS (For reference only)



10.9

Grade Identification Marking for J429-Grade 8 Bolt

8,116

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

Grade	e Identification Ma	arking for Metric-(Grade 8.8 Bolt	Grade	Identification Mar	king for Metric-G	rade 10.9 Bolt		
Diameter (mm)	Metric Class 8.8			Diameter		Metric Class 10.9			
	Clamp Loads	s Tightening Torque		(mm)	Clamp Loads	Tightenin	ig Torque		
	(Pounds)	"Lubricated"	"Dry"	(1111)	(Initi) (Pounds) "Lubri	"Lubricated"	"Dry"		
5	1,389	3 ft-lbs	5 ft-lbs	5	1,987	5 ft-lbs	7 ft-lbs		
6	1,965	6 ft-lbs	8 ft-lbs	6	2,812	8 ft-lbs	11 ft-lbs		
7	2,826	10 ft-lbs	13 ft-lbs	7	4,044	14 ft-lbs	19 ft-lbs		
8	3,579	14 ft-lbs	19 ft-lbs	8	5,121	20 ft-lbs	27 ft-lbs		
10	5 672	28 ft-lbs	37 ft-lbs	10	8 116	40 ft-lbs	53 ft-lbs		

Grade Identification Marking for J429-Grade 5 Bolt

8.8

1	2	8,243	49 ft-lbs	65 ft-lbs	12	1	1,796	
1	4	11,246	77 ft-lbs	103 ft-lbs	14	1	6,092	
1	6	15,882	125 ft-lbs	167 ft-lbs	16	2	1,970	
1	8	19,423	172 ft-lbs	229 ft-lbs	18	2	6,868	
2	0	24,784	244 ft-lbs	325 ft-lbs	20	34	4,284	
		37° IIC Ela	T					
			re Torque Values			0.	-Ring Boss	; То
Turns	Size	Ft-lbs min.max	Assembly steps		Size	● Ft-lbs min.max	Ring Boss Assembl	
Turns N/A	Size -02	Ft-lbs		id threads are	Size -02	Ft-lbs	Ū	y ste e port,

N/A	-02	6-7	 Make sure the tubing and threads are
N/A	-03	8-9	clean. 2. Lubricate the threads with 10W hydraulic
2	-04	11-12	oil.
2	-05	14-15	 Hand tighten the nut/sleeve to approx. 30 in-lbs.
1-1/2	-06	18-20	4. Make alignment marks on the nut and
1-1/2	-08	36-39	fitting.
1-1/2	-10	57-63	 Tighten to turn or torque specification. When fully tightened, make a 2nd set of
1-1/4	-12	79-88	alignment marks at the fully tighten
1	-14	94-103	positioned.
1	-16	108-113	NOTE: Torque values specified are for
1	-20	127-133	threads lubricated with 10W hydraulic oil.
1	-24	158-167	Over tightening will reduce the clamping force
1	-32	245-258	resulting in loss of seal and reduction of flow.

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

40 ft-lbs

70 ft-lbs

111 ft-lbs

173 ft-lbs

238 ft-lbs

338 ft-lbs

53 ft-lbs

92 ft-lbs

148 ft-lbs

231 ft-lbs

317 ft-lbs

450 ft-lbs

NC)TE	S	

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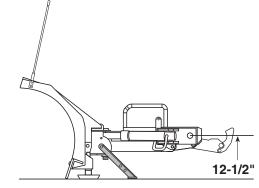
MOLDBOARD & A-FRAME ASSEMBLY

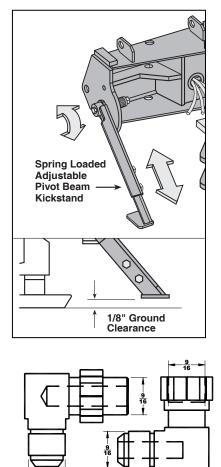
 Position the pivot beam and A-frame near the connecting points at the rear of the blade between the two center support ribs. Insert one 3/4" Dia. x 3" clevis pin through each mounting hole and secure with 1/4" Dia. x 1-1/2" cotter pin.

NOTE: Mount the kickstand to the end of the pivot beam (driver's side) using the 1/2"-13 x 4-1/2" bolt provided. The spring, bushing and lock nut are located on the inside of the pivot beam. Review the diagram to the right. To pivot the kickstand, pull the spring loaded leg out & rotate it until the pin locks into place. Adjust the foot on the stand arm so the height of the A-frame, at its mount points, is 12-1/2" to level ground. Tighten both of the top lock nuts on the kickstand.

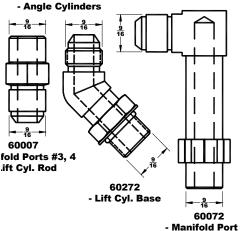
NOTE: To prevent the kickstand from hitting the ground before the snowplow cutting edges, causing stress on the kickstand, adjust the kickstand foot approximately 1/8" short of level ground. This procedure will provide clearance for the kickstand when the snowplow is lowered with the kickstand in the down position.

- 2. 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 with 3/4" Dia. x 5" clevis pin and 1/4" x 1-1/2" cotter pin. Extend each cylinder rod until the cylinder base mounting hole aligns with the hole on the Aframe angle cylinder bracket. Secure base with clevis pin and cotter pin.
- 3. Remove dust cap from both of the hydraulic angle cylinder ports and attach one 9/16"-18 x 9/16"-18 90° Adj. Elbow O.R.B. adapter to each port. NOTE: All of the hydraulic adapters can be found packaged with the manifold assembly, reference torque specifications. Each adapter should be angled toward the top of the moldboard. Connect the 3/8" x 24" hydraulic hose (60091) to the driver's side angle cylinder adapter. Be careful not to over tighten the hose connections. Route both hoses over the TOP of each angle cylinder. This will prevent them from hanging or being pinched.
- 4. Remove the plastic dust caps from the lift cylinder ports. Attach one 9/16"-18 x 9/16"-18 45° Adj. Elbow O.R.B. adapter to the driver's side port (base end) and one 9/16"-18 x 9/16"-18 male O.R.B. connector adapter to the passenger's side port (rod end). Once the adapters have been installed on the cylinder, connect the hoses. NOTE: Position the fittings in the cylinder port such that the hoses install directly in the center of the A-frame access holes. A hose installed too close to the edge of the opening may work itself free with the operation of the lift cylinder and/or movement of the plow. Connect the 3/8" x 17" hose (60273) to the 45° adapter. Connect the 45° angle on the hose to the hydraulic adapter on the cylinder. The male connector adapter requires a 3/8" x 15" hydraulic hose (60274). Tighten the 45° end of the hose to the hydraulic adapter on the cylinder. Both hoses should be routed through the triangular openings in the A-frame.





60005 - Manifold Port #1



60006

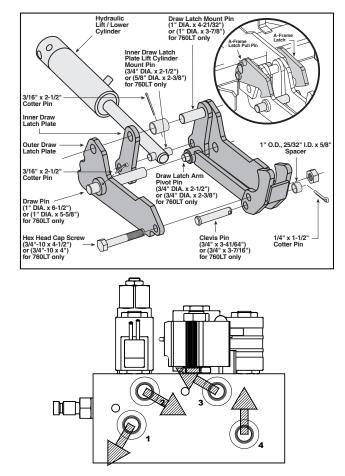
- Manifold Ports # 3, 4

MOLDBOARD & A-FRAME ASSEMBLY

- 5. Remove the draw latch mount pin, spacer & cotter pin from the draw latch assembly. By removing this pin, the inner draw latch plates can swing free. Remove the inner draw latch plate lift cyl. mount pin. Position the plates on either side of the lift/lower cylinder rod and insert the pin through the plates and cylinder rod. With the cylinder connected to the inner draw latch plates, rotate the draw latch assembly toward the draw latch mount holes on the A-frame. Align the holes in the outer draw latch plate with those of the inner draw latch plates and the Aframe. NOTE: The A-frame latch, located at the rear/center of the A-frame, should be raised up to insert the draw latch mount pin. Pull the Aframe latch pull pin out and rotate the latch counterclockwise if it is locked into position. Secure the assembly to the A-frame by replacing the draw latch mount pin, spacer and cotter pin. Reset the A-frame latch so the Aframe latch pull pin locks into place.
- 6. Assemble the manifold. The manifold, pump and coil harness have been connected at the factory; however, the manifold contains several components that you will need to install prior to securing the assembly to the A-frame. Each of the hose ports on the manifold are covered with stretch wrap. Remove the wrap and install the appropriate fitting in its respective port.

NOTE: DO NOT let any foreign objects enter into the open ports. The valves can become contaminated and greatly hinder the plow's performance. Torque to 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 hydraulic pump and manifold cover.



NOTE: The arrows shown on the manifold illustration indicate the direction the 90° adapters should be positioned to receive the hydraulic hoses.

MOLDBOARD & A-FRAME ASSEMBLY

7. Align the mount holes in the pump with the holes in the hinged bracket, located on the A-frame. *NOTE: Before mounting the pump, angle the hinged bracket as needed and tighten the bracket hardware to lock it in place.*

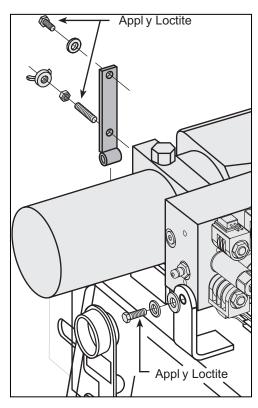
CAUTION: When installing the manifold between the mount brackets on the A-frame, hold the manifold at the sides of the block. Never handle the manifold by coils. Doing so can cause a solenoid cartridge to bend, causing the cartridge to stick when activated.

Secure with 3/8"-16 x 3/4" hex head cap screw and 3/8" flat washer through the top mount hole in the bracket and into the pump. Insert 3/8"-16 x 1-3/4" threaded stud with 3/8"-16 locknut through the bottom mount hole in the bracket and into the pump. The threaded stud should bottom out in the pump. *NOTE: A medium strength thread locker, such as Loctite* 242® should be used on both of the pump mount fasteners.

 All of the hoses shipped with the snowplow contain a printed label (with a part number) applied to the hose. Install the following hoses to their respective ports on the manifold: Hose P/N 60091 Ports #1 & #2, Hose P/N 60273 Port #3 & Hose P/N 60274 Port #4.

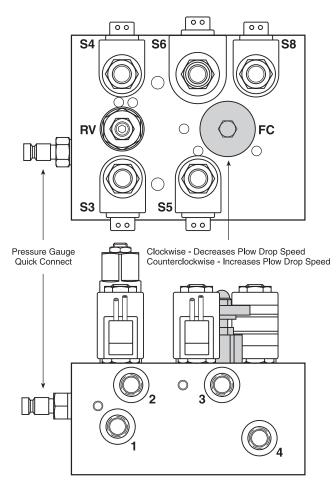
Install the driver's side lift cylinder hose (**60273**). Attach the straight end of the hose to the 9/16"-18 90° swivel elbow adapter on the manifold. Connect the passenger's side lower cylinder hose (**60274**) to Port #4. Loop the hose through the opening in the A-frame and connect the straight end of the hose to the 9/16"-18 90° swivel elbow adapter. Run both angle cylinder hoses (**60091**) over the A-frame angle and to their respective manifold ports. *NOTE: The lift cylinder hoses should be routed through the triangular openings in the A-frame*.

- **9.** Secure the manifold to the A-frame. Remove the washers, split lock washers and capscrews from the manifold and align the mount holes with the A-frame brackets. Properly replace and tighten all hardware. *NOTE: A medium strength thread locker, such as Loctite*®242®should be used to secure the manifold mount fasteners.
- 10. 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 with one 5/8" flat washer and one 5/8"-11 nylock nut. Tighten each nut until a piece of paper can pass between the 3rd & 4th coils on the spring.
- **11.** Install the blade guides at each end of the moldboard. Insert the capscrew through the holes at the top of the wing reinforcement rib. Tighten all screws with lock nuts.
- **12.** Install the plow harness.



***** IMPORTANT ***** Use Loctite®242 on bolt connections illustrated above.

Hydraulic Valve & Hose Port Guide



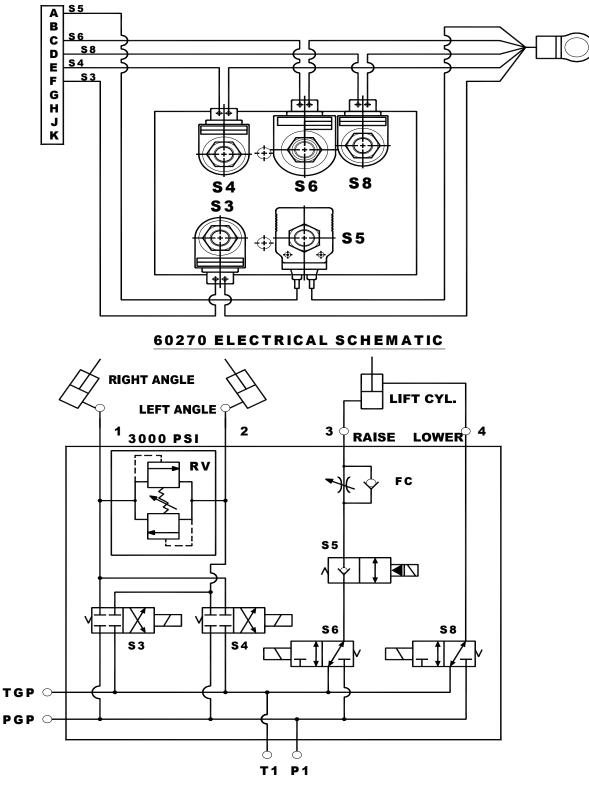
Models 760LT/760/800/860

НҮ	HYDRAULIC HOSES						
Port	Function						
1 2 3	Right Angle - Left Cylinder Left Angle - Right Cylinder Raise - Lift Cylinder (Base)						
4	Lower - Lift Cylinder (Rod)						
NOT sole	E: Energize the following noids for the functions:						
S3	Left Angle - Right Cylinder						
S4	Right Angle - Left Cylinder						
S5	Float						
S6	Raise - Lift Cylinder (Base)						
S5 & S8	Lower - Lift Cylinder (Rod)						
RV	Angle Relief Valve						
FC	Variable Flow Control Valve						



Calumet, Michigan 49913

BLZ 1054

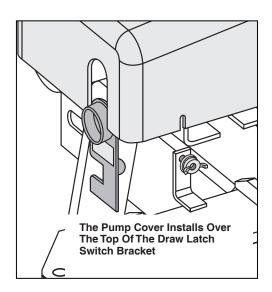


60270 HYDRAULIC SCHEMATIC

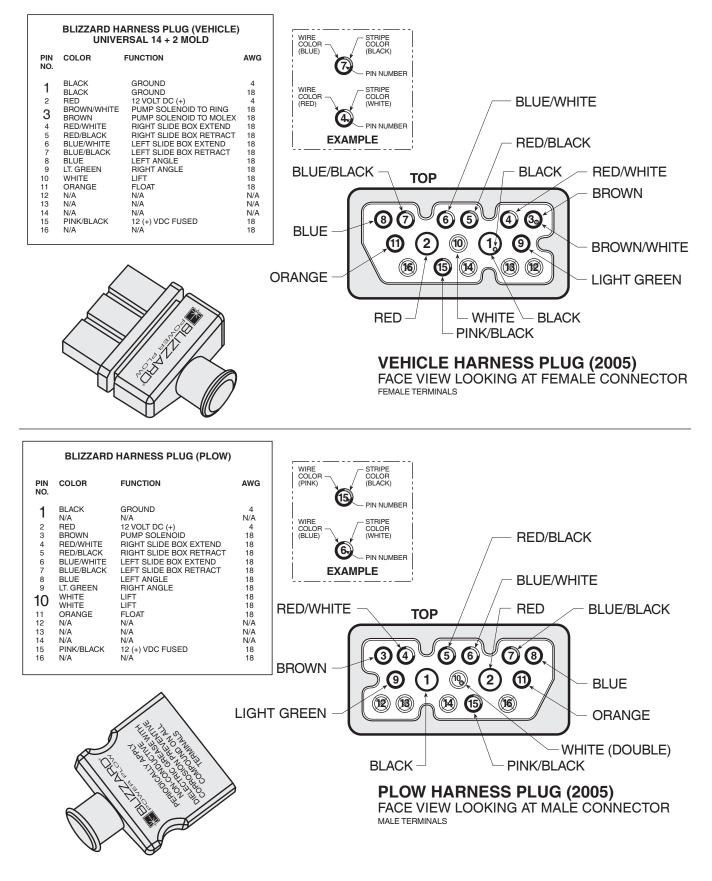
ELECTRICAL-PLOW SIDE

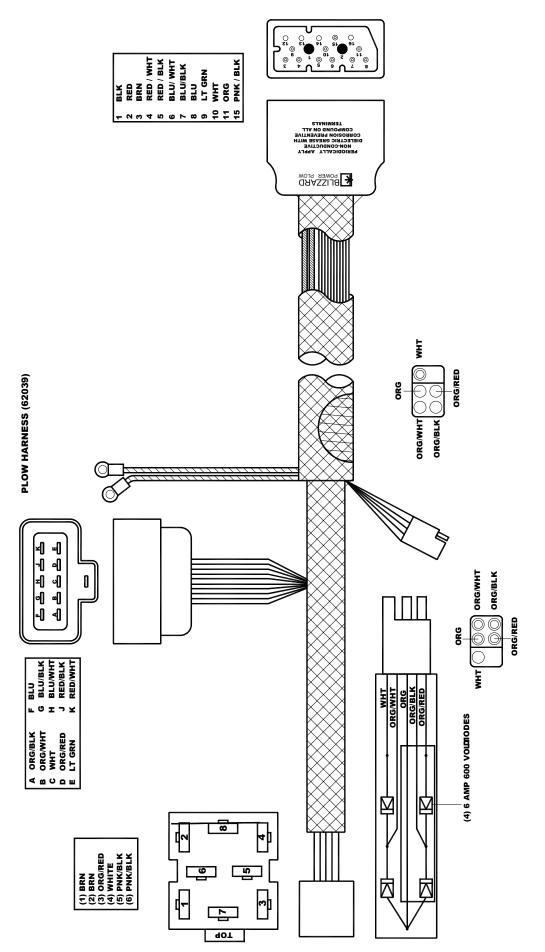
INSTALLATION INSTRUCTIONS

- 1. Connect the red power wire from the plow harness to the pump motor terminal stud. Hardware provided on pump.
- 2. Place the 3/8 lock washer, the black ground wire(from the harness) and the red ground wire on the coil harness (from the manifold) over the tapped hole on the pump and secure with 3/8"-16 x3/4" screw.
- 3. Remove the nut and washer from the Power Hitch[™] connect/disconnect toggle switch and insert it through the back of the mounting bracket on the A-frame. Align the notches on the switch and bracket. Replace the washer and nut and tighten until the switch is firmly in place. Attach the connector on the plow harness to the switch. *NOTE: Use caution when connecting, switches can break if done forcefully.*
- **4.** Attach the connector on the harness to the connector on the coil harness.
- 5. Position the harness braid in the notch on the switch bracket and secure it with a cable tie. *NOTE: The diode loop harness should be inside of the pump cover.*
- 6. Install the pump & manifold cover by aligning the notches in the cover with the welded bolts on the A-frame brackets. Secure with clamping knob. Verify the cover is positioned over the protective toggle switch hood. Pop the front of the cover on the threaded stud and secure it with the remaining knob.
- 7. Install the vehicle harness.

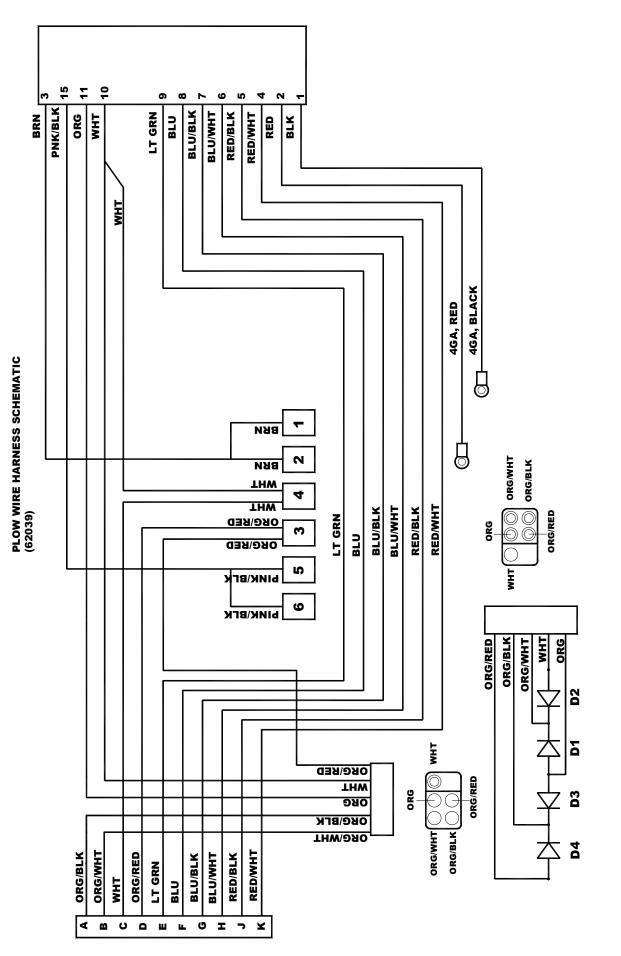


ELECTRICAL





16 64059 (760LT, HD StraightBlade).doc



ELECTRICAL-VEHICLE SIDE



CAUTION: Always attach the vehicle harness assembly with the vehicle off and the keys out of the ignition. Use caution when testing the electrical wires for the vehicle's headlight functions.

INSTALLATION INSTRUCTIONS

- 1. Insert the connector end of the harness through the driver's side firewall access panel into the vehicle cab. Loosely position the remaining portion of the harness over the driver's side fender well and place the plug end of the harness near the bumper. *NOTE: Keep the plow plug and vehicle connector pins lubricated with a liberal amount of dielectric grease. Always replace the protective weather caps when the plow is disconnected from the vehicle.*
- 2. Attach the power contactor (solenoid) to the driver's side wheel well or engine fan guard using 12-14 x 3/4" self-drilling screws. NOTE: Some model vehicles provide mounting locations for accessory components. Always mount the solenoid with the terminals facing up, for extended solenoid life. Connect the 24" black ground wire to either small terminal on the solenoid and attach the opposite end to the vehicle with a self-drilling screw. Cut the brown/white pump activation wire on the harness to length and crimp the eyelet terminal onto it. Attach the eyelet to the remaining small terminal on the contactor. Secure it with the hardware provided on the solenoid.
- 3. Connect the vehicle harness ground wire to the negative terminal on the vehicle's battery. Cut the wire to length and crimp a 3/8" ring terminal on the wire. It is also recommended that the ring terminal be soldered. *NOTE: The harness should be secured to the vehicle prior to taking the necessary measurement.* Measure the distance needed for the power wire to reach the solenoid and properly secure an end ring terminal to it. Connect the power wire to either large terminal on the solenoid.



CAUTION: Do not fasten the harness to areas that come in contact with moving engine parts or possess extreme heat. The harness could become tangled and/or melt causing electrical failure and vehicle damage.

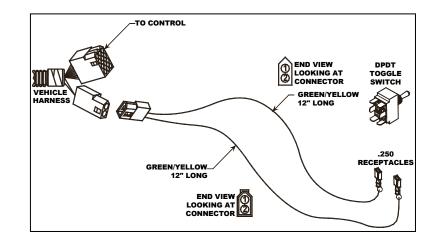
- 4. Attach and solder an end ring terminal to both ends of the remaining length of the red wire. Connect one end of the wire to the open terminal on the solenoid and the remaining end to the positive terminal on the battery.
- 5. Position the main lighting harness with both of the truck light connectors near each truck headlight and the plow light connectors near the grill of the vehicle.
- 6. Plug the headlight ground/relay connector from the vehicle harness into the connector on the main lighting harness. Plug each headlight relay into the receptacles. Securely mount the receptacles to the vehicle with the terminal wires facing down and the relays facing up. Installing the relays in this position will allow moisture to drain from the relay.
- 7. Remove the front signal light assembly from both sides of the vehicle. Feed the violet, turn light wire, and gray, run light wire, from the main lighting harness through the opening in the signal light housing. Use a test light or ohm meter to determine the proper wires in the vehicle's electrical system to splice into. Position one end of the turn or run light wire into the splice lock connector, and attach the vehicle wire into the opposite side. Complete the splice by pinching both wires together and locking the connector. Repeat the splice procedure for the remaining wire.
- 8. Connect the vehicle headlights to the main lighting harness using a light conversion harness kit. Due to differences in the construction of the kits, and the various make and model vehicles Blizzard snowplows are installed on, a light conversion kit is not packaged with your snowplow. Contact your local Blizzard dealer to obtain the appropriate conversion harness kit for your vehicle.
- **9.** Secure the braided harness to the vehicle. Safely route all harness lengths around the engine components and attach them to the vehicle with cable ties. Extend the plow headlight connectors, from the main lighting harness, through the grill of the vehicle and position the harness power plug and weather cap near the bumper. Cable tie the plug to the vehicle bumper or tow hook to keep the harness from hanging too low.

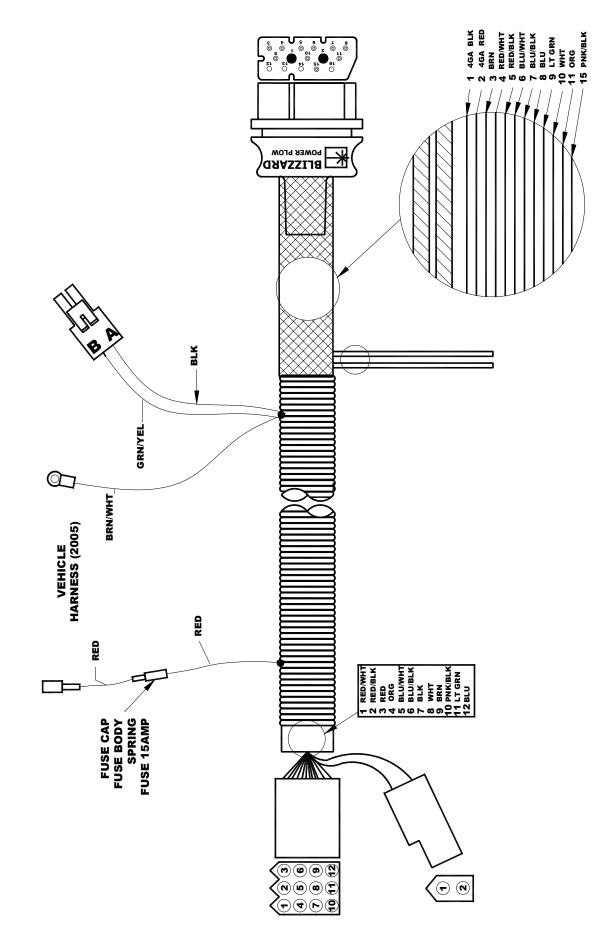
10. Install the remainder of the vehicle wire harness to the interior of the cab. Find an accessible location for the plow headlight toggle switch & bracket under the dashboard. Install the headlight bracket using two self-drilling screws. Insert the toggle switch through the bracket and secure it with the hardware provided.

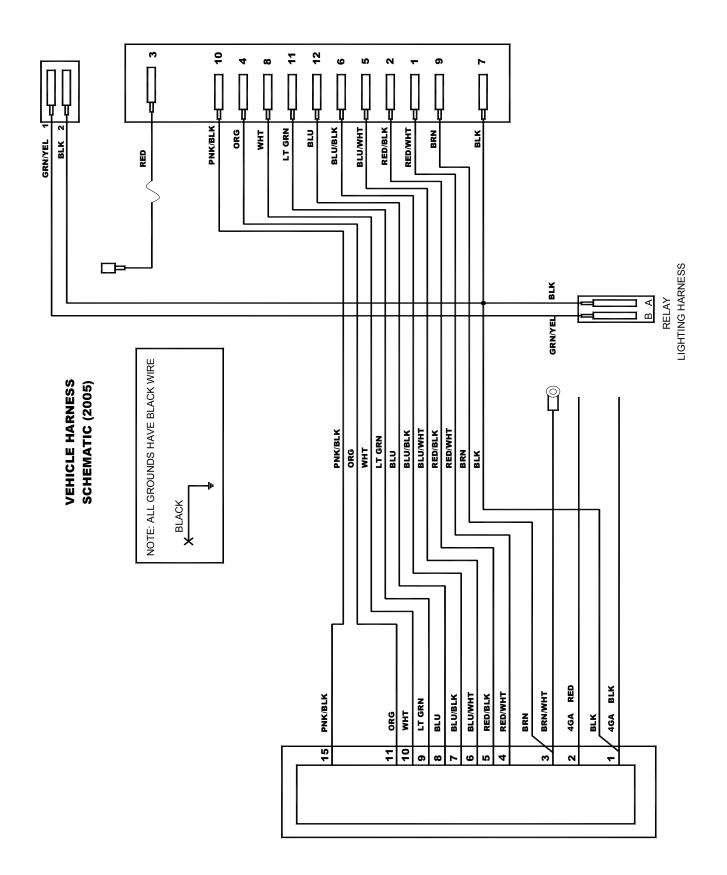
Plug both of the switch leads into the toggle switch. *NOTE: Both terminals should be inserted into the spades on the same side of the switch. One terminal should be positioned in the middle spade.* Plug both 2-pin connectors together and this will connect the toggle switch to the vehicle wire harness. See diagram below.

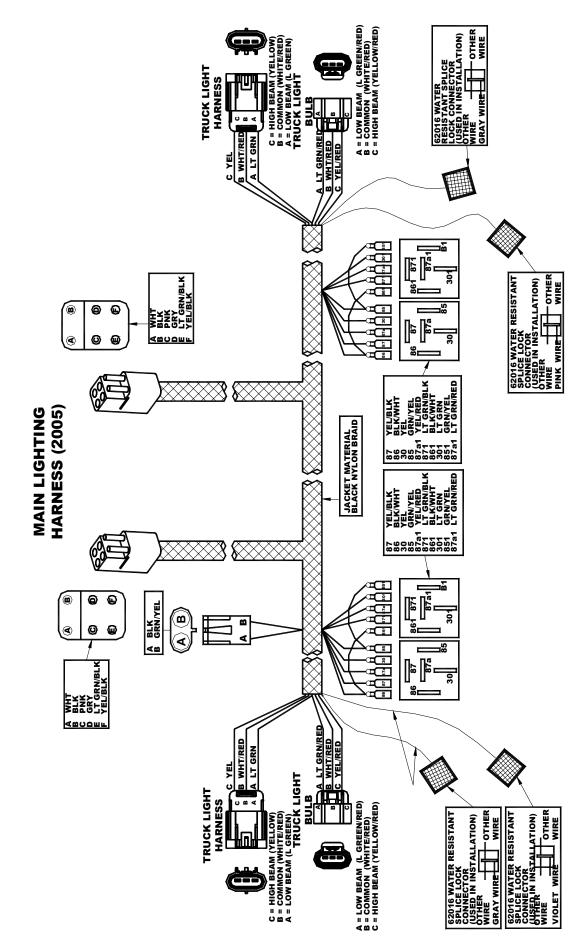
- **11.** Connect the power wire (with 15AMPFUSE) to a switched power source with a minimum of 15 amps. *NOTE: The red power wire MUST be fused and switched on and off with ignition.* Secure all loose wires under the dash.
- **12.** Install the light tower. Position the arms into the receiving pockets located on the undercarriage. Each pocket has a lock pin that secures both light tower arms. Pull out and twist each handle to temporarily unlock the pins. Place the light tower into the pockets and relock the pins. See your local Blizzard dealer for complete installation instructions for your vehicle undercarriage.
- **13.** Install the plow headlights. Align one headlight stud on the light tower tube with the mounting hole and insert the threaded stud through each. Secure the headlight with one 1/2" galvanized washer (neoprene facing up), one 7/16" external tooth lock washer and hex nut. *NOTE: All snowplows are shipped with two caps that install on the ends of the light tower.* Connect the terminals from the plow lights to the terminals on the main lighting harness.
- 14. Align the mount holes on the joystick control with the holes located on the mount pedestal. *NOTE: The radius on the pedestal should face the dashboard*. Secure the joystick to the pedestal with the 8-32 x 3/4" machine screws provided. Slide the Velcro® strap through the slots cut in the pedestal. The metal D-ring should be located on the side opposite of the radius. Wrap the strap around the bench and fasten. Connect the white power connector from the vehicle wire harness to the connector on the control station. The power switch should be in the "OFF" position.
- 15. Test your plow before using.

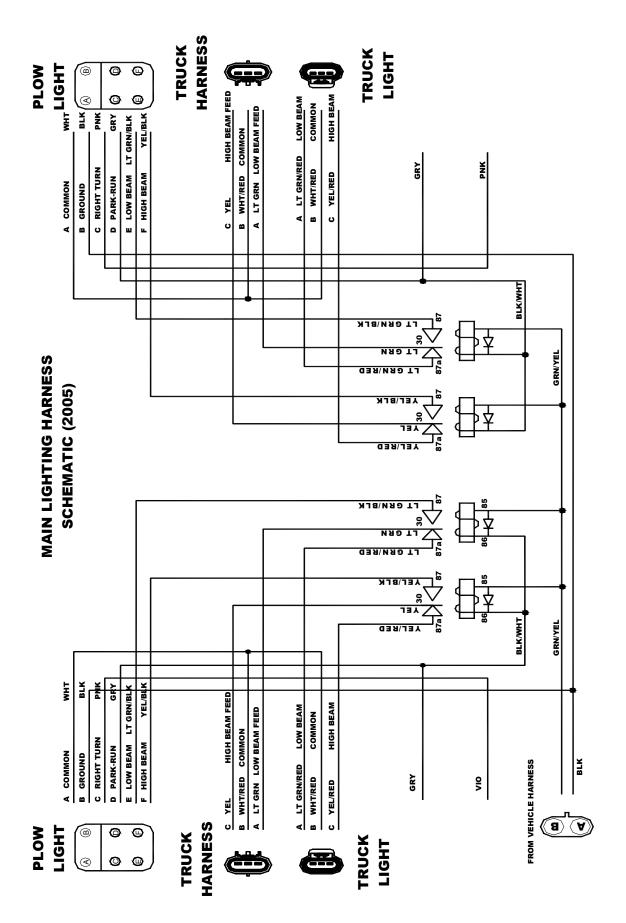








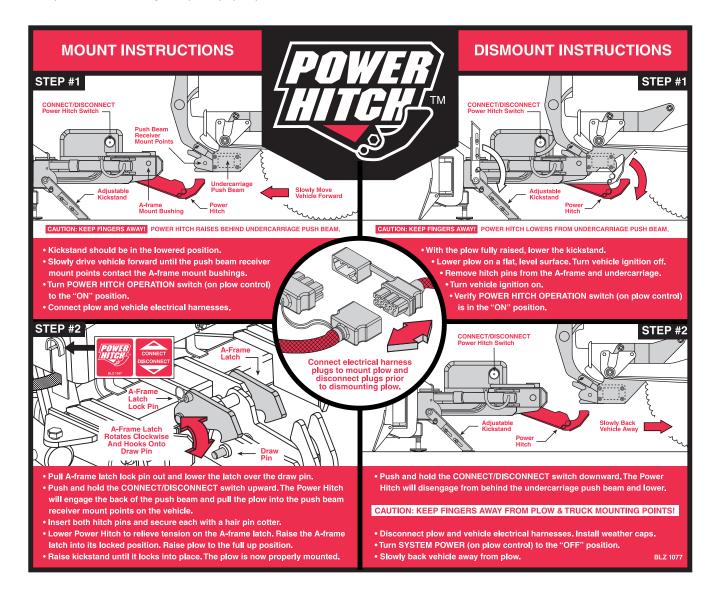




POWER HITCH™ INSTRUCTIONS

Prior to operating your straight blade snowplow, review the Mounting and Dismounting Instructions label on the back of the driver's side moldboard.

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

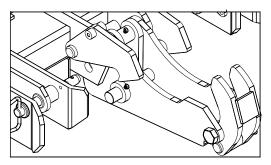


TESTING YOUR PLOW

- Fill the hydraulic pump reservoir with BLIZZARD SNOWPLOW RAPID ACTION HYDRAULIC OIL until it is approximately 3/4" from the top of the tank. Replace the cap on the reservoir. Remove the weather caps from each of the plow and vehicle harnesses and connect the plugs.
- 2. To raise the POWER HITCH on the snowplow, turn the power switch on the control station to the "UP" or "ON" position. Push and hold the toggle switch on the A-frame upward into the "CONNECT" position. Notice the action of the fluid in the reservoir. By activating the initial hydraulic function, the fluid begins to fill the system. Push and hold the toggle switch in the "DISCONNECT" position, the Power Hitch will lower. Refill the reservoir until the fluid is approximately 3/4" from the top of the tank.
- **3.** Align the Power Hitch on the A-frame below the push beam, with the receiver plates in line with the receiver plates on the undercarriage. Pull out the A-frame latch pin and rotate the A-frame latch clockwise until the latch is resting on the draw pin. Move the snowplow in position by activating the Power Hitch connect switch and release.
 - WARNING: Always use caution when operating the Power Hitch CONNECT/DISCONNECT switch. Keep your hands and feet away from the operation of the Power Hitch and the main blade. The action of the Power Hitch moves the snowplow in position for proper attachment to the vehicle. Failure to follow this caution may result in serious injury or death.

The Power Hitch will rise until it hits the push beam and the draw latch fingers will pull the plow into the vehicle. The receiver plates on the plow and vehicle are now positively aligned. Rotate the A-frame latch counterclockwise until the latch is in the raised position. *NOTE: The A-frame latch pin should always lock in place. Do not set the pin past the lock point on the A-frame.* Insert the two hitch pins through the mounting holes on the A-frame and secure each with one hair pin cotter.

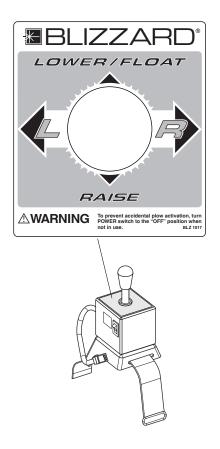




Draw Latch in Transport Position

TESTING YOUR PLOW

- 4. Return to the interior of the vehicle. The system power on the control station should be in the "ON" position. Raise the plow to its maximum height by pulling the joystick back (or down). Angle the snowplow to the left by moving the joystick toward the "L" (left angle) on the label. If the plow function is slow or delayed, the hydraulic fluid is filling the cylinder and replacing the air in the system. Test the remaining functions of the snowplow. Monitor the fluid level in the reservoir and fill to 3/4" from the top of the tank if needed. Also, look for any hydraulic fluid leaks around the manifold, pump, hydraulic hoses and all cylinders.
- 5. Check that the vehicle and plow headlights are in proper working condition including the turn signals. If necessary, adjust the plow headlight beams with the plow in the raised position.



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 & 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. <i>NOTE: Do not discard plow shoe washers, these should be retained for different shoe adjustments.</i>	Х	
Clean and lubricate all electrical plugs and connections with dielectric grease. Clean and install all dust caps prior to storing.	×	Х
Lubricate all pins, bushings and A-frame latch with NLGI Grade 2 multi- purpose lithium complex grease with molybdenum (MPGM)) to maintain consistent operation	Х	Х
Clean and paint all scratches or exposed metal with Blizzard touch-up paint	x	Х
Check the hydraulic oil level. Fill with fluid to 3/4" from the top of the reservoir. Do not exceed this level. Never mix different types of fluid.	x	
Remove and properly discard the fluid from the pump reservoir. Clean the pump filter and replace the hydraulic oil to within 3/4" from the top of the reservoir. Changing the fluid annually will prolong the life of your pump and manifold. Never mix different types of hydraulic oil.		Х
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.	x	
Clean snow & ice build-up from the pump and manifold cover.	Х	
Pressure wash and dry the entire snowplow prior to storing		Х
Cover the snowplow with a tarp if stored outside. This will protect your plow from sun fading and inclement weather which can lead to accelerated corrosion.		Х

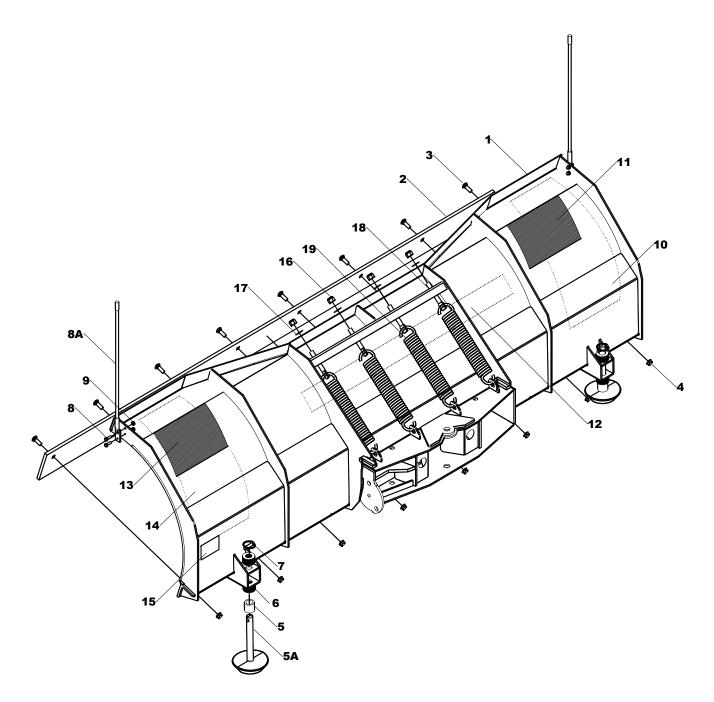
REMOVING FROM STORAGE

- **1.** Perform all regular maintenance.
- 2. Replace the hydraulic oil in the pump reservoir. Prolonged storage could result in condensation build-up.
- 3. Follow the mounting procedure on the Power Hitch[™] label.
- **4.** Initiate all of the functions. Monitor the fluid level in the reservoir and fill to 3/4" from the top of the tank as necessary.
- **5.** Adjust the snowplow headlights as needed.

TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
	Plow harness may not be properly connected to the vehicle harness.	Verify the harnesses are properly connected.
Pump will not run.	Power or ground cables to the battery, pump or solenoid may not be properly connected.	Properly connect all cables. Clean and lubricate with dielectric grease. If power does not resume, check the continuity of all cables to find the break.
Pump will not run, power to the solenoid.	The black ground wire and brown/white activation wire on the solenoid are not properly connected.	Properly connect both cables. Test for power by initiating any joystick function except the float. NOTE: The POWER rocker switch must be in the "ON" position to properly test any plow function. If the solenoid is grounded and no power exists, diagnose the plow & truck harnesses.
Pump will not run with power to the solenoid. Brown/white activation wire and ground are properly connected.	The red, hot wire to the pump motor is not properly connected.	Connect red wire and check the black ground wire. If problem is not resolved, the solenoid could be inoperable or the pump motor may be worn. Replace the solenoid if there is no power to the pump. Replace the pump motor if it is receiving power.
Pump will not turn off. Do not allow the pump motor to run continuously. Unplug the harness until the solenoid	Solenoid may be damaged.	Disconnect the brown/white activation wire from the solenoid. If the problem is not resolved, replace the solenoid.
can be tested or a Blizzard Dealer can diagnose the problem.	Short in the joystick control or wire harness.	Disconnect the joystick in the cab. If the pump turns off, there is a short in the electrical system.
	Fluid level in the pump reservoir is low. Fluid is leaking.	Add fluid to within 3/4"from the top of the tank. Check for leaks around the pump, manifold and cylinders.
Pump runs but plow functions are slow.	System pressure may be set too low. Increasing the pressure excessively will increase the amperage draw. This could damage the vehicle harness.	Adjust the pressure. Remove the hex cap on top of the pump and turn the screw clockwise. Proper system pressure should be set at 2400PSI. Test functions and repeat procedure as needed.
	Amperage from the vehicle's alternator is too low.	Repair or replace vehicle alternator. System amperage draw is 155A (175A for 8611) at 1500PSI.
	Pump filter may be clogged.	Remove the pump tank and thoroughly clean the filter.
A-frame latch will not move.	Draw latch is binding the A-frame latch.	Lower the draw latch to relieve binding on the A-frame latch and reposition the A-frame latch as needed.
	Control station in the cab may not be properly connected	Connect the power connector from the control to the vehicle harness.
Plow will not lift. Pump works properly.	A-frame latch is in the (down) locked position.	Lift the A-frame latch into the raised position.
	Diode loop harness may be corroded or could have failed.	Clean diode loop harness thoroughly and/or replace.

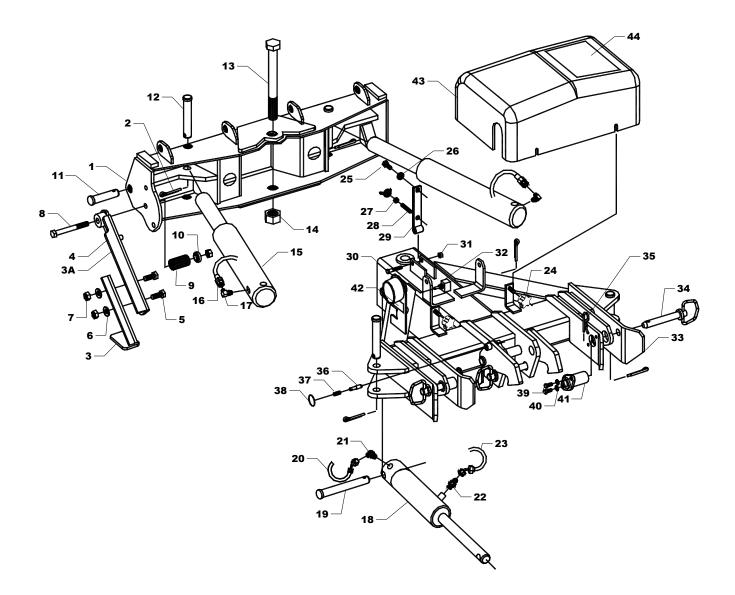
PROBLEM	CAUSE	SOLUTION
Plow will not lift. Pump works properly.	Coils on the manifold may be damaged.	Remove the S6 coil from the cartridge valve. Position a screwdriver inside of the coil and push the draw latch connect/disconnect toggle switch upward. The screwdriver should be magnetically drawn to the coil. Replace the coil if there is no action.
Plow will not lift with magnification to	Hydraulic lock in the manifold. This occurs if the voltage is too low on the coils –should be 11.8 volts.	Loosen cartridge valve S6 to relieve pressure and retighten. DO NOT OVER TIGHTEN! Valves should be torqued to a maximum of 24 ft-lbs.
the S6 coil.	Solenoid cartridge valve may be contaminated.	Remove any foreign objects that may be obstructing proper valve operation. Replace if not operating properly after cleaning.
Plow 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 plow. Do not set the pressure relief greater than 3000 PSI.	Check the pressure relief by testing the valve inline with the cylinder. Attach a tee fitting to the angle cylinder hydraulic adapter and connect the hose and pressure gauge to the tee. NOTE: The setting should not exceed 3000PSI.
Plow will not angle, pump works.	Review all probable causes above.	NOTE: Verify coils S3 & S4 for angle functions.
Plow lowers too slow.	Variable flow control valve is not adjusted properly.	Turn flow control valve counterclockwise in small increments and test. <i>NOTE: Never make</i> <i>adjustments when the plow is in the</i> <i>raised position!</i> Fluid pressure will make the valve difficult to adjust and serious injury or death can occur from a falling plow.
	Review all probable causes for plow will not lift	Verify S5 coil (float) or S5 & S8 coils (disconnect) for magnetism.
Plow drops sporadically.	Variable flow control valve is opened too far.	Turn clockwise 1/16 of a turn and test. NOTE: Never make adjustments when the plow is in the raised position! Fluid pressure will make the valve difficult to adjust and serious injury or death can occur from a falling plow.
Headlights will not switch from the vehicle to the snowplow.	No power or ground to the headlight relay.	Verify the headlight/ground relay connector is connected. If the connector is properly attached replace the headlight relay(s).



MOLDBOARD PARTS

REF	PART	QUANTITY				DESCRIPTION
REF	NUMBER	760LT	760	800	860	DESCRIPTION
	81006	1	-	-	-	
1	84006	-	1	-	-	Moldboard Weldment
	80006	-	-	1	-	
	80020	-	-	-	1	
	61165	1	-	-	-	
2	61168	-	1	-	-	Cutting Edge
2	61164	-	-	1	-	
	61528	-	-	-	1	
3	61196	8	8	8	8	Bolt, Carriage, 1/2"-13 x 1-1/2" Gr8 P
4	61365	8	8	8	8	Nut, 1/2"-13 Flanged Lock Z
5A	61098	2	-	-	-	Plow Shoe Assembly, Standard (7-3/4" Shaft) Includes Ref 5-7
5A	61220	-	2	2	2	Plow Shoe Assembly, Heavy-Duty (8-3/8" Shaft) Includes Ref 5-7
5	61102	2	2	2	2	Spacer, 1-1/8" I.D., 1-5/8" O.D. x 1-1/2" YZ
6	61101	36	36	36	36	Washer, 1" Flat YZ
7	61103	2	2	2	2	Pin, Linch, 7/16" x 1-3/4" YZ
8A	61049	2	2	2	2	Plow Guide Assembly Includes Ref 8 & 9
8	61051	4	4	4	4	Screw, 5/16"-18 x 1" HHCS Gr5 Z
9	61052	4	4	4	4	Nut, 5/16"-18 Nylock Z
10	61176	1	1	-	-	Decal. Passenger's Side Moldboard
10	61178	-	-	1	1	Decal, Passeliger's Side Moluboard
11	61181	1	1	1	1	Label, WARNING! (Blz1024)
12	63163	1	1	1	1	Decal, Center Moldboard
13	63167	1	1	1	1	Label, Power Hitch™ Mounting & Dismounting (Blz1077)
14	61177	1	1	-	-	Decal, Driver's Side Moldboard
14	61179	-	-	1	1	Decal, Driver's Side Moldboard
15	63063	1	1	1	1	Label, Serial Number, Sequentially Numbered (Blz1049)
16	61188	3	4	4	4	Nut, Nylock, 5/8"-11 Type NE
17	61064	3	4	4	4	Washer, 5/8" SAE Hardened YZ
18	61201	3	4	4	4	Bolt, Spade, 5/8"-11 x 4-3/8" Grade 8 Z
19	61167	3	-	-	-	Spring, Extension, 12-15/16" O.A.L. x 2-3/8" O.D. x 3/8"
19	61099	-	4	4	4	Spring, Extension, 15-1/4" O.A.L. x 2-3/8" O.D. x 3/8"

NOTE: Unless otherwise specified, quantities are the same for all models.

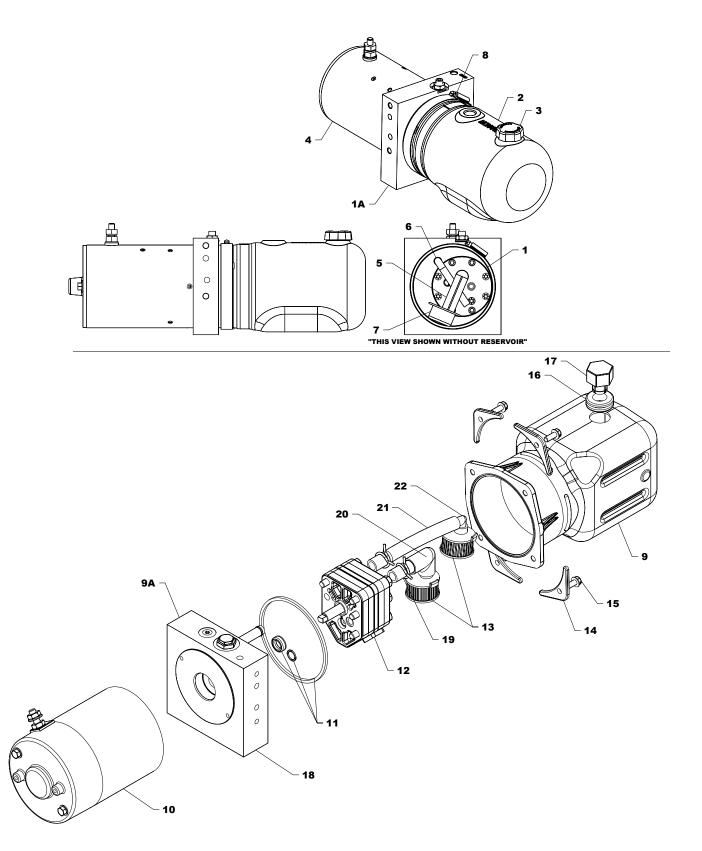


	PART	QUAN	VTITY		
REF	NUMBER	760LT	HD	DESCRIPTION	
1	83000	1	-	Divet Doom Weldment	
1	41041	-	1	Pivot Beam Weldment	
2	61357	7	7	Pin, Cotter, 1/4" x 1-1/2" Z	
3A	41039	1	1	Kickstand Assembly Includes Ref 3-10	
3	41047	1	1	Kickstand Foot Weldment	
4	41038	1	1	Kickstand Leg Weldment	
5	61057	2	2	Screw, 1/2"-13 x 1-1/4" HHCS Gr8 YZ	
6	61026	2	2	Washer, 1/2" Flat SAE Hardened	
7	61020	3	3	Nut, 1/2"-13 Top Lock Z	
8	61152	1	1	Screw, 1/2"-13 x 4-1/2" HHCS Gr8 YZ	
9	61293	1	1	Spring, Compression, 2" O.A.L. x 1.101" O.D. x 0.207" Dia.	
10	41037	1	1	Bushing, 1.13" O.D. x 0.53" I.D. x 3/8" Stepped	
11	50069	2	2	Pin, 3/4"Dia. x 3" Clevis YZ	
12	41051	4	4	Pin, 3/4"Dia. x 5" Clevis YZ	
40	61331	1	-	Screw, 1"-8 x 8-1/2" HHCS Gr8 P	
13	61330	-	1	Screw, 1"-8 x 9" HHCS Gr8 P	
14	61008	1	1	Nut, 1"-8 Top Lock Z	
4.5	60065	2	-		
15	60029	-	2	Hydraulic Cylinder, Plow Angle	
16	60091	2	2	Hydraulic Hose, 3/8" x 24" Plow Angle (Ports #1 )	
17	60005	3	3	Hydraulic Adapter, 9/16"-18 x 9/16"-18 90° Adjustable Elbow O.R.B.	
40	60236	1	-	I badreadie Odieden Diese Beier (Lessen	
18	60255	-	1	Hydraulic Cylinder, Plow Raise/Lower	
10	82061	1	-	Pin, 5/8" Dia. x 5-3/4"" Clevis YZ	
19	40124	-	1	Pin, 3/4" Dia. x 6" Clevis YZ	
20	60273	1	1	Hyd. Hose (Port #3), Straight/45°, 3/8" x 17" - Raise/Lower, Extend	
21	60272	1	1	Hydraulic Adapter, 9/16"-18 x 9/16"-18 45° Adjustable Elbow O.R.B.	
22	60007	3	3	Hydraulic Adapter, 9/16"-18 x 9/16"-18 Male O.R.B.	
23	60274	1	1	Hyd. Hose (Port #4), Straight/45°, 3/8" x 15" - Raise/Lower, Retract	
24	61628	3	3	Knob, 3/8-16 Nylock Clamping	
25	61012	2	2	Screw, 3/8"-16 x 3/4" HHCS Gr8 YZ	
26	61016	3	3	Washer, 3/8" SAE Hardened	
27	61014	1	1	Nut, 3/8"-16 Jam Nylock Z, Type NTE	
28	61629	1	1	Stud, 3/8"-16 x 2-1/8" Threaded	
29	40004	1	1	Hinge Weldment, Pump Mount	
30	61218	1	1	Screw, 3/8"-16 x 2" HHCS Gr8 YZ	
31	61034	1	1	Nut, 3/8"-16 Top Lock Z	
32	62038	1	1	Switch, Toggle, DPDT, (On)-Off-(On), 16 Amps, 115V AC	
	82043	1	-		
33	40091	-	1	A-frame Weldment	
34	61426	3	3	Pin, 3/4" x 6" Hitch YZ	
35	61105	3	3	Pin, 9/64" DIA. x 2-11/16" Hair Cotter Z	
36	40079	3	3	Pin, 3/8" DIA. x 1-3/4" SS	
37	61000	3	3	Spring, 0.94" O.A.F.L. x 0.36" O.D., 0.029" Wire Dia. Compression SS	
38	61309	3	3	Ring, Standard Split SS	
39	61312	4	4	Screw, 5/16"-18 x 3/4" HHCS Gr8 YZ	
40	61011	4	4	Washer, 5/16" Split Lock YZ High-Alloy	
41	40088	2	2	Bushing, A-frame Pivot, Replaceable	
42	61295	1	1	Label, Power Hitch Connect/Disconnect Switch (Blz1037)	
43	40119	1	1	Cover, Hyd. Pump & Manifold	
44	63099	1	1	Label, Hyd. Hose Identification Guide (BLZ1054)	
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NOTE: Unless otherwise specified, parts for the 760, 800 & 860 Straight Blades listed as HD (Heavy Duty).

POWER UNIT PARTS

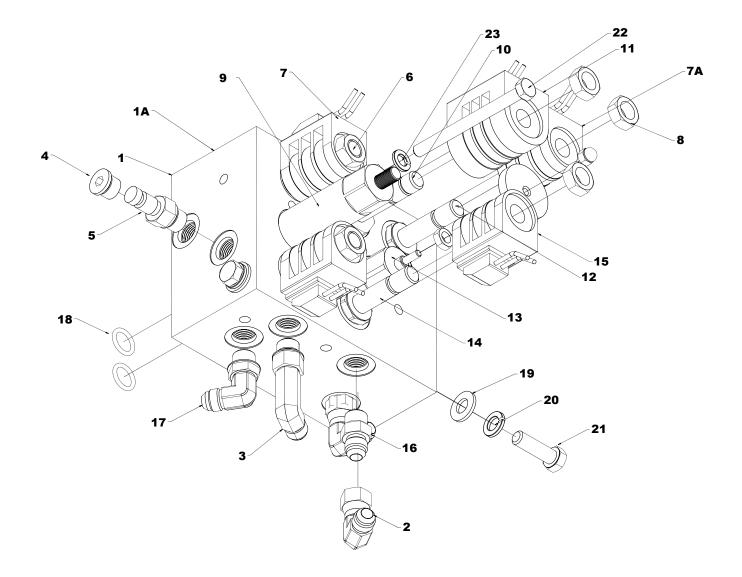
NOTE: Some of the 760LT's will use the top pump assembly of this illustration. The rest of the 760LT's and ALL of the 760, 800 & 860's will use the bottom pump assembly. Please order parts accordingly.



POWER UNIT PARTS

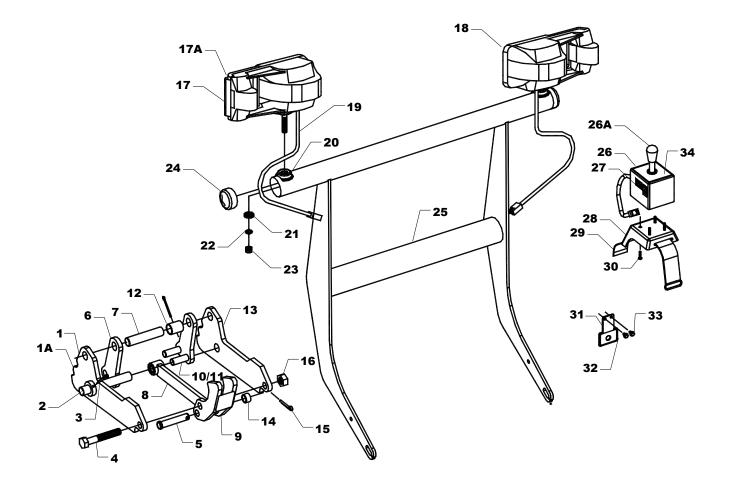
REF	PART	QUANTITY		DESCRIPTION	
REF	NUMBER	760LT	HD		
1A	60395	1	-	Power Unit-Pump Motor Tank Assembly (Monarch) Includes Ref 1-8	
1	60396	1	-	Pump-0.138 in3/rev	
2	60397	1	-	Reservoir-Ø4.5x8"Lg.	
3	60398	1	-	Fill Cap/Breather-3/8NPT	
4	60399	1	-	Motor-12VDC, 4.5", 1Terminal	
5	60404	1	-	Tube-Suction, 90°, 3/8NPT	
6	60405	1	-	Tube-Return, 90°, 1/8NPT	
7	60406	1	-	Filter Screen Suction	
8	60407	1	-	Clamp-Worm Gear	
-	60400	1	-	Brush Kit-for 60399 Motor	
9A	60402	1	1	Hydraulic Pump Assembly Includes Ref 9-10 & 12-22 (MTE)	
9	60433	1	1	Reservoir	
10	60434	1	1	Motor, 12VDC	
11	60435	1	1	Seal Kit	
12	60436	1	1	Pump Assembly, 1.47CC/REV	
13	60437	2	2	Filter	
14	60438	4	4	Clamp, Reservoir	
15	60439	4	4	Reservoir, Screw	
16	60345	1	1	Grommet	
17	60346	1	1	Breather	
18	60440	1	1	Relief Valve Asm.	
19	60441	1	1	Tube, Plastic Suction	
20	60442	1	1	Elbow	
21	60443	1	1	Tube, Plastic Return	
22	60444	1	1	Elbow	
-	60445	1	1	Brush Kit-for 60434 Motor	

NOTE: Unless otherwise specified, parts for the 760, 800 & 860 Straight Blades listed as HD (Heavy Duty).



1A	60270		DESCRIPTION			
	00270	1	Manifold Assembly Includes Ref 1-7A, 8-10, 12-14, 16 & 17			
1	60269	1	Manifold Block (with Cross Port Relief), Red Anodized Aluminum			
2	60006	2	Hydraulic Adapter, 9/16"-18 90° Swivel Elbow			
3	60072	1	Hydraulic Adapter, 9/16"-18 x 9/16"-18 Male Extra Long Elbow			
4	60050	2	Plug, -6 SAE Hollow Hex			
5	60173	1	Coupling, Test Port, 7/16"-20 O.R.B.			
6	60167	2	Valve, Spool, Four-Way, Two Position C.C.			
7A	62148	1	Coil Harness Assembly Includes Ref 7, 11 & 15, 62045, 62096, 62097, 62116 & 62117			
-	62045	1	Connector, Electric, Male, Plastic			
-	62096	15	Seal, Cable, Silicone, Orange (18 AWG)			
-	62097	5	Terminal, Male (18-16 AWG)			
-	62116	5	Silicone Cavity Plug, White (18-16 AWG)			
-	62117	1	Terminal, End Ring, 3/8" I.D. Copper, 8 Gauge			
7	62114	3	Coil, PDL 10V DC			
8	60052	5	Nut, 1/2"-20 Hex Jam YZ			
9	60168	1	Valve, Relief, 3000 PSI			
10	60170	1	Valve, Spool, Three-Way, Two Position			
11	62115	1	Coil, DDL 10V DC			
12	60166	1	Valve, Spool, Three-Way, Two Position			
13	61069	1	Valve, Flow Control			
14	60165	1	Valve, N.C., Two-Way			
15	62176	1	Coil, PDL 12V DC, Delta (waterproof, w/ O-rings)			
16	60007	2	Hydraulic Adapter, 9/16"-18 x 9/16"-18 Male O.R.B. Connector			
17	60005	1	Hydraulic Adapter, 9/16"-18 x 9/16"-18 90° Adjustable Elbow O.R.B.			
18	60038	2	O-ring, 3/32" C.S.W. 9/16" I.D., 3/4" O.D. Neoprene, 70 Durometer			
19	61016	2	Washer, 3/8" SAE Hardened			
20	61222	2	Washer, 3/8" Split Lock YZ			
21	61214	2	Screw, 3/8"-16 x 1-1/4" HHCS Gr8 YZ			
22	61010	2	Screw, 5/16"-18 x 3-3/4" HHCS Gr8 YZ			
23	61011	2	Washer, 5/16" Split Lock YZ			

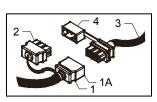
NOTE: Unless otherwise specified, quantities are the same for all models.



DRAW LATCH, CONTROLS & LIGHTS PARTS

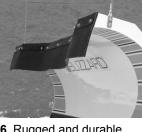
REF	PART QUANTITY		NTITY	DESCRIPTION		
REF	NUMBER	760LT	HD	DESCRIPTION		
1A	82049	1	-	Draw Latch Assembly Includes Ref 1-16		
	40109 82035	- 1	1			
1	40080	-	1	Outer Draw Latch Plate Weldment, Driver's Side		
2	82050	1	-	Pin, Draw, 1" Dia. x 5-5/8" (with 13/64" Dia. Cotter Pin Hole) BZ		
	40110	-	1	Pin, Draw, 1" Dia. x 6-1/2" (with 13/64" Dia. Cotter Pin Hole) YZ		
3	61363	2	2	Pin, Cotter, 3/16" Dia. x 2-1/2" Z		
4	61200	1	-	Screw, 3/4"-10 x 4" HHCS Gr8 YZ		
	61004 82055	- 1	1	Screw, 3/4"-10 x 4-1/2" HHCS Gr8 YZ Pin, 3/4" Dia. x 3-7/16" Clevis YZ		
5	50071	-	- 1	Pin, 3/4" Dia. x 3-41/64" Clevis YZ		
	82014	2	-			
6	40074	-	2	Inner Draw Latch Plate		
7	82027	1	-	Pin, 1" x 3-7/8" Draw Latch Mount (To A-frame) YZ		
7	40070	-	1	Pin, 1" x 4-21/32" Draw Latch Mount (To A-frame) YZ		
8	82054	1	-	Draw Latch Arm Weldment		
0	40114	-	1			
9	82058	1	-	Draw Latch Finger Weldment		
	40123	-	1			
10	82033 40042	1	-	Pin, 5/8" x 2-3/8" Inner Draw Latch Plate/Hydraulic Cylinder Rod End		
11	82024	- 1	2	Pin, 3/4" x 2-1/2", Draw Latch Arm Pivot Pin/Hydraulic Cylinder Rod End Pin, 3/4" x 2-3/8", Draw Latch Arm Pivot		
12	40093	1	- 1	Bushing, 1-1/4" O.D. x 1-1/16" I.D. x 1-1/2" YZ		
	82036	1	-			
13	40081	-	1	Outer Draw Latch Plate Weldment, Passenger's Side		
14	40116	1	1	Spacer, 1" O.D. x 25/32" I.D. x 5/8" YZ		
15	61357	1	1	Pin, Cotter, 1/4" x 1-1/2" Z		
16	61006	1	1	Nut, 3/4"-10 Top Lock Z		
17A	61106	2	2	Headlight Assembly, Plow Includes Ref 17-23 & 62061		
17	61107	1	1	Headlight, Driver's Side		
18	61108	1	1	Headlight, Passenger's Side		
19	62032 62108	2	2	Harness (with 6-pin plug), Plow Headlight Side		
-	62061	2	2	Lighting Harness Repair Kit, Harness Side Bulb, Sealed Beam Halogen (H6545/H4666)		
-	62062	1	1	Corrosion Preventive Compound (2fl.oz.)		
20	61231	1	1	Adapter, Headlight Ball Stud Mount		
21	61550	2	2	Washer, 1/2" I.D. x 1"O.D. Neoprene Backing Galvanized		
22	61112	2	2	Washer, 7/16" Ext. Tooth Lock YZ		
23	61111	2	2	Nut, 7/16"-14 Hex Gr8 YZ		
24	61427	2	2	Cap, 2-1/4" I.D., 2-3/8" O.D. x 3/4", Black Vinyl		
25	39034	1	-	Light Tower		
	39032	-	1			
26A	62073	1	1	Control Station Assembly, Joystick Includes Ref 26, 27 & 34 Control Station, Joystick		
26 27	62074 63106	1	1	Label, Plow Power Switch, On/Off (Blz1061)		
28	61185	1	1	Base Plate, Joystick Control Station 1/8" ABS Plastic		
20	61127	1	1	Strap, (Velcro® with 2" Metal D-Ring) 61" Black		
30	61254	4	4	Screw, 8-32 x 3/4" Pan Head Machine Z		
31	61041	1	1	Bracket, Plow/Vehicle Headlight Toggle Switch		
32	61088	1	1	Label, Plow/Vehicle Headlight Toggle Switch Bracket (Blz1008)		
33	61031	5	5	Screw, 12-14 x 3/4" Hex Washer Self-Drilling		
34	61174	1	1	Label, Control Station, Joystick (Blz1017)		
-	62185	1	1	Switch-Rocker SPDT On-Off-On - Straight Blade Joystick Control Switch		
-	62186	1	1	Switch-Straight Blade Joystick Functions		
-	62187	1	1	Relay-Straight Blade Joystick		
-	62188	1	1	Switch Actuator		
-	62189 62190	1	1	Kit-Handle Straight Blade Joystick (Includes Shaft, Sleeve, E-Ring). Mounting Plate		
-	02190					

HARNESSES, ACCESSORIES & KITS





5. Help channel air flow to your truck radiator during the long haul over the road. Mounted front and center, our custom airfoil redirects air over the top of the blade and into the grill of your vehicle. The airfoil is shipped with complete mounting hardware.



6. Rugged and durable, the one piece 3/8"thick rubber design, 2-ply construction keeps snow off of your windshield and in its place—on the ground! The deflector is shipped with complete mounting hardware.



7. This kit includes the most common replacement parts: Angle cylinder hose, lift cylinder hose, hitch pin w/hair pin cotter, angle cylinder clevis pin w/cotter, 90° angle cylinder fitting, solenoid, Power Hitch™ toggle switch, corrosion preventive compound (2 oz.) and 10A fuse. The compact & durable plastic case (13.5"x9"x3.3") allows for easy storage behind or under your seat.



8. Blizzard hydraulic oil is specially formulated for use in Blizzard snowplows and can significantly enhance the operation and performance of the hydraulic system. Blizzard zinc-free hydraulic oil maintains its viscosity to temperatures as low as -60°F.Blizzard oil is available by the quart, gallon, case or drum.



9. Our easy-to-install, adjustable pedestal mount will position your straight blade snowplow control station how you want it! Ideal for bucket seat vehicles with low center consoles. Pedestal accessory shipped with complete hardware and adapter plate.



10. The straight blade snowplow touch pad control offers ergonomic comfort behind the wheel. Whether you hold it in your hand, strap it on your leg, wrap it around your seat or mount it to the dashboard, this control will provide the flexibility you need! Control is shipped with a molded plastic leg tray, adjustable Velcro® strap and extra Velcro® patches. Measures 3-1/4" x 3-1/4" x 1-5/16".



11. Get the response you demand from your plow with this easy-to install add-on and experience increased power and speed to all of the plow hydraulic functions! The auxiliary manifold bolts right up to the existing manifold and pump bracket without any modifications needed. Manifold provides up to 30 gpm input (4000 psi max.) from the vehicle pump and 2-3 gpm output (2500 psi max.).



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



13. This adjustable bracket mounts easily to your straight blade joystick control and installs quickly onto any door panel. Ideal for left-hand joystick operation or for vehicles with center consoles. The window mount bracket is shipped complete with hardware. Some assembly required.



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

	PART		QUANTITY			11
REF	NUMBER	760LT	760	800	860	DESCRIPTION
1A	62039	1	1	1	1	Harness Assembly, Plow Includes Ref 1,2 & 62046, 62093, 61439, 62167
1	62057	1	1	1	1	Harness, Plow
2	62001	1	1	1	1	Weather Cap, Rubber, Plow Side
-	62046	1	1	1	1	Connector, Electric, Female, Plastic
-	62093	10	10	10	10	Terminal, Female (18-16AWG)
-	61439	2	2	2	2	Cable Tie, Black, 15" Nominal Length Heavy Duty - 120psi Min Tensile3" Wide
-	62167	1	1	1	1	Harness, Diode Loop
3	62150	1	1	1	1	Harness, Vehicle
4	62000	1	1	1	1	Weather Cap, Rubber, Vehicle Side
-	62124	1	1	1	1	Fuse, 1/4" Dia. x 1-1/4" BUSS ARC 15A, 32V
-	62212	1	1	1	1	Harness, Main Lighting
-	62035	2	2	2	2	Weather Cap, Rubber, Lighting Harness
-	62144	4	4	4	4	Headlight Relay, CB1-D-12V,
	62042	1	-	-	-	Power Contactor (Solenoid), 12 v Continuous
-	62178	-	1	1	1	Power Contactor (Solenoid), 12VDC-225A
-	62056	1	1	1	1	Ground Wire, Power Contactor, 24"
_	62072	4	4	4	4	Terminal, End Ring, 3/8" I.D. Copper, 4 Gauge
-	62008	1	1	1	1	Fuse Clip, Mini
-	62009	1	1	1	1	Fuse Clip, Auto Blade
	62003	4	4	4	4	Connector, Splice Lock (18-14 WAG)
	61031	3	3	3	3	Screw, 12-14 x 3/4"Hex Washer Self-Drilling
	81041	1	-	-	-	
5	52093	-	1	1	1	Snowplow Airfoil
	61243	- 1	-	-	-	
	61243	-	- 1	-	-	
6	61260	-	-	- 1	-	Rubber Snow Deflector w/ hardware
	61545	-	-	-	- 1	
7	63074	- 1	- 1	- 1	1	Emergency Parts Kit
1	63074	1	1	1		Blizzard Rapid Action Hydraulic Oil-Quart
					1	
0	63071	1	1	1	1	Case (12 quarts)
8	63072	1	1	1	1	Gallon
	63069	1	1	1	1	Case (4 gallons)
0	63091	1	1	1	1	Drum (55 gallons)
9	63078	1	1	1	1	12" Adjustable Pedestal Mount
10	62142	1	1	1	1	Touch Pad Control Station
11	60310	1	1	1	1	Central Hydraulic Valve Block
40	61544	1	1	-	-	
12	61543	-	-	1	-	Polyurethane Moldboard Cutting Edges (with Hardware)
40	61542	-	-	-	1	Oberinkt Die der Leursfels Münd – M. – CD – L. C
13	61261	1	1	1	1	Straight Blade Joystick Window Mount Bracket
14	61219	1	1	1	1	Blizzard Power Plow High Performance 12 Oz. Spray Paint, Gloss White
	63073	1	1	1	1	Blizzard Power Plow High Performance 12 Oz. Spray Paint, Gloss Black
KITS	01051	4				
-	61354	1	-	-	-	Kit, Hardware, Snowplow Assembly Parts
-	61353	-	1	1	1	
-	60276	1	1	1	1	Kit, Hydraulic Adapter Includes 60005 (3), 60006 (2), 60007 (3), 60072 (1) & 60272 (1)
-	60281	1	1	1	1	Kit, Hydraulic Hose Includes 60091 (2), 60273 (1), 60274 (1)
-	61255	1	1	1	1	Kit, Hardware, Moldboard Cutting Edge
-	61256	1	-	-	-	
-	61258	-	1	-	- Kit Cutting Edge Moldboard w/Hardware	Kit, Cutting Edge, Moldboard w/Hardware
-	61259	-	-	1	-	
-	61532	-	-	-	1	
-	60360	1	1	1	1	Combo Seal Kit, Cyl 60029/60065
-	60368	1	-	-	-	Combo Seal Kit, Cyl 60236
-	60371	-	1	1	1	Combo Seal Kit, Cyl 60255
-	62195	1	1	1	1	Kit, Headlamp 61106 (1-sealed beam, 1-rim , 4-spacer bumpers, 4-screws)
	62196	1	1	1	1	Kit, Headlamp 61106 Signal (1-bulb, 1-turn signal lens, 1- gasket, 2-screws)



This warranty covers defects in material and workmanship except as set forth below.

WARRANTED PARTY:

This warranty applies only to the "Original Purchaser" who purchased this plow from an Authorized Blizzard Dealer, for personal, family or household use.

TERM OF WARRANTY:

This Blizzard snowplow is warranted for the following period: Parts and labor are warranted for one year from date of purchase.

BLIZZARD CORPORATION'S WARRANTY REMEDY:

Blizzard Corporation will, at its sole discretion, repair or replace defective parts at no charge.

CUSTOMERS RESPONSIBILITY:

To obtain warranty service, the purchaser must return the defective snowplow to any Authorized Blizzard Dealer. The purchaser must verify the original purchase date. Transportation costs to and from the dealer will be the responsibility of the purchaser.

ITEMS NOT COVERED UNDER THIS WARRANTY:

- 1. Expendable parts such as cutting edges, plow shoes, hoses, fasteners, blade guides, paint finish, etc.
- 2. Any snowplow or part thereof which has been repaired or altered by anyone other than an Authorized Blizzard Dealer.
- Any snowplow or part thereof which has been subject to neglect, misuse, accident, improper installation, maintenance, or storage. This includes, but is not limited to, corrosion of any electrical components.
- Snowplows mounted on vehicles other than those for whom Blizzard Corporation has provided a specific mount system.
- 5. Blizzard Corporation does not assume liability for damage to the purchaser's vehicle resulting from the attachment and use of a Blizzard snowplow. Vehicle risk is the sole responsibility of the purchaser.

WARRANTY LIMITATIONS:

THIS WARRANTY IS OFFERED IN LIEU OF ANY OTHER EXPRESS WARRANTY.

THE DURATION OF ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS WARRANTY.

BLIZZARD CORPORATION'S LIABILITY IS EXPRESSLY LIMITED TO REPAIR OR REPLACEMENT OF DEFECTIVE PARTS. BLIZZARD CORPORATION SHALL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL OR CONTINGENT DAMAGES WHATSOEVER, EVEN IF DAMAGES ARE CAUSED BY THE NEGLIGENCE OR FAULT OF BLIZZARD CORPORATION.

State Laws: Some states do not allow exclusion of incidental or consequential damages or the limitations on how long an implied warranty lasts, so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

This warranty does not apply if you purchased your snowplow for other than personal, family, or household use. If purchased for other than personal, family or household use, refer to the Blizzard Snowplow Commercial Warranty.



95 AIRPARK BOULEVARD CALUMET, MICHIGAN 49913 [906] 482-5555

1410-4-05 REV 4/05



COMMERCIAL WARRANTY

This warranty covers defects in material and workmanship except as set forth below.

WARRANTED PARTY:

This warranty applies only to the "Original Purchaser" who purchased this plow from an Authorized Blizzard Dealer, for commercial use.

TERM OF WARRANTY:

This Blizzard snowplow is warranted for the following period: Parts and labor are warranted for one year from date of purchase.

BLIZZARD CORPORATION'S WARRANTY REMEDY:

Blizzard Corporation will, at its sole discretion, repair or replace defective parts at no charge.

CUSTOMERS RESPONSIBILITY:

To obtain warranty service, the purchaser must return the defective snowplow to any Authorized Blizzard Dealer within the warranty period. The purchaser must verify the original purchase date. Transportation costs to and from the Dealer will be the responsibility of the purchaser.

ITEMS NOT COVERED UNDER THIS WARRANTY:

- 1. Expendable parts such as cutting edges, plow shoes, hoses, fasteners, blade guides, paint finish, etc.
- 2. Any snowplow or part thereof which has been repaired or altered by anyone other than an Authorized Blizzard Dealer.
- 3. Any snowplow or part thereof which has been subject to neglect, misuse, accident, improper installation, maintenance, or storage. This includes, but is not limited to, corrosion of any electrical components.
- 4. Snowplows mounted on vehicles other than those for whom Blizzard Corporation has provided a specific mount system.
- 5. Blizzard Corporation does not assume liability for damage to the purchaser's vehicle resulting from the attachment and use of a Blizzard snowplow. Vehicle risk is the sole responsibility of the purchaser.

LIMITS OF BLIZZARD CORPORATION'S LIABILITIES:

BLIZZARD CORPORATION'S LIABILITY IS EXPRESSLY LIMITED TO REPAIR OR REPLACEMENT OF DEFECTIVE PARTS. BLIZZARD CORPORATION SHALL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL OR CONTINGENT DAMAGES WHATSOEVER, EVEN IF DAMAGES ARE CAUSED BY THE NEGLIGENCE OR FAULT OF BLIZZARD CORPORATION.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESSED AND IMPLIED WARRANTIES INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

This warranty does not apply if you purchased your snowplow for personal, family, or household use. In this case, refer to the Blizzard Snowplow Limited Consumer Warranty.



95 AIRPARK BOULEVARD CALUMET, MICHIGAN 49913 [906] 482-5555

1410-4-05 REV 4/05

760LT, 760, 800 & 860 STRAIGHT BLADES



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