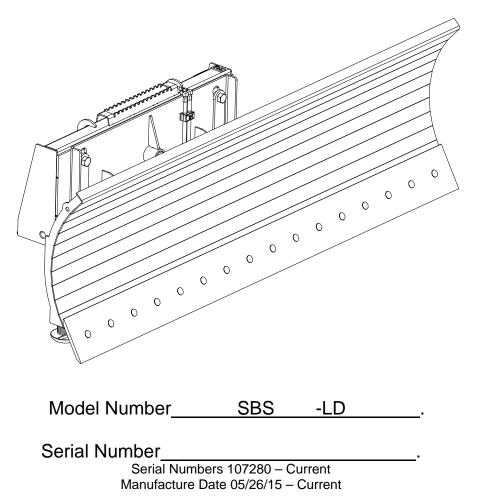
## Light Duty Angle Snow Blade



Phone: 320-393-7080

1/6/07 Revised 05/26/15

SBS-LD

# Features of Virnig Mfg. Inc. Light Duty Angle Snow Blade include:

- 2" bore, 8 3/8" stroke cylinder with 1 ¼" rods and 1 ¼" cylinder pins.
- 1 9/16" diameter pivot pin, 2 ¼" diameter oscillation pin.
- Heavy duty frame with oscillation and adjustable skid shoes.
- Trip edge design featuring 2 compression springs.
- 5/8" x 8" double bevel, reversible wear edge.
- 30° blade angle, left or right discharge.
- Recommended for skid loaders with a lift capacity less than 1800 lb.
- Rubber Edge option available.
- Poly Edge option available.

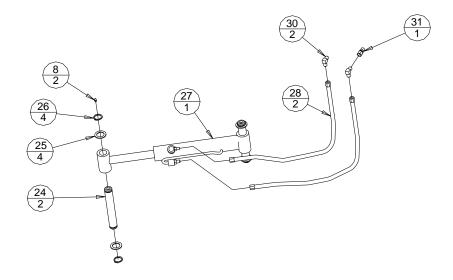
#### Initial Use

- See following pages for suggested hose routing.
- Check that the quick-tach of the snow blade fits onto skid loader properly. Pins must engage through 3/8" plates at bottom of quick-tach.
- With bottom of the blade touching ground/floor, slowly roll back attachment. Make sure there is no interference between attachment and loader.
- Make sure hoses do not pinch during roll back.
- Slowly roll attachment fully forward. Check that hoses are long enough so they do not stretch or bind.
- Do not connect this attachment to high flow couplers.
- Cycle blade left/right. Check for oil leaks per instructions in "Maintenance" section.
- Read and understand all warning information in this manual before operating this attachment.
- Never exceed the maximum attachment operating pressure of 3500 psi.

#### **Operation**

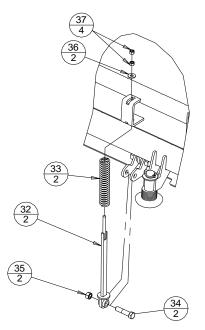
- Always follow safety information.
- Keep bystanders back 50 feet.
- Always follow all safety and operating instructions of skid loader.
- Always relieve pressure before disconnecting hydraulic hoses.
- Never hit or pound couplers.
- Never ram piles, damage to blade and/or skid loader may occur.
- Care should be taken to avoid hidden obstructions (curb, posts, etc.), damage to blade and/or skid loader may occur.
- Never use this attachment to push any material other than snow.
- Never hook a chain on this attachment.
- Check for debris in quick-tach area before each hook-up.

#### Hydraulic Installation

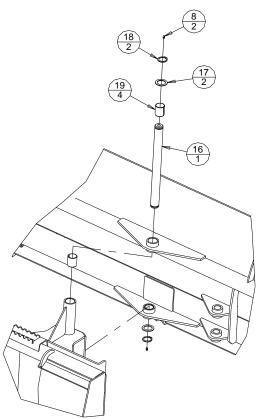


Note: Restrictor fitting (Item #31), plumbed to barrel end of cylinder.

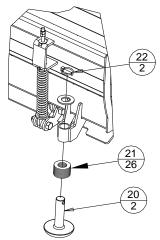
### **Spring Installation**



#### **Pivot Pin Installation**



Wear Shoe Installation





## Grapple shown Center Plumb works for Case, John Deere, New Holland, Mustang, Takeuchi, and Gehl skid loaders.

Hoses need to be secured so they do not get damaged during operation. Hoses can be routed as shown in the picture above. Hoses can also be tied or bungeed to the skid loader cross member (close to the lower pivot) to hold them from getting pinched or stretched.

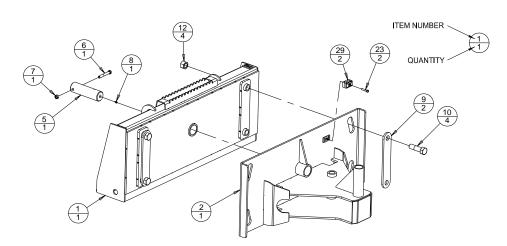
Grapple can also be Left Side Plumbed. Grapple can be converted to Left Side Plumb by following instructions located in this manual. Please see picture on the next page showing Left Side Plumb. Hoses should be run through the bracket on the skid loader arm, as shown, or the hoses can be tied or bungeed to the skid loader arm.

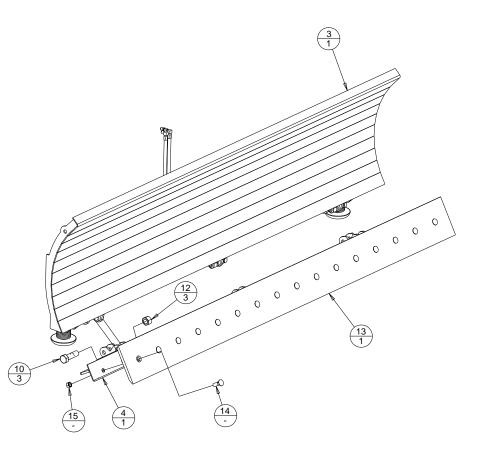


Grapple shown Left Side Plumb, works for Cat, Bobcat, Kubota, Terex and ASV.

If there is too much slack hose, the amount of slack can be adjusted using the clamp on the attachment near the mount plate.

Main Component Assembly





### Light Duty Snow Blade (SBS-LD) Parts List (cont.)

Table 1

MODEL	SBS60-LD	SBS72-LD	SBS84-LD	SBS96-LD
SBS MOLDBOARD WELDMENT LD	8606VW	7070VW	7160VW	7593VW
SBS EDGE HOLDER WDT LD	9679VW	9682VW	9684VW	9686VW
BOLT ON EDGE 5/8" X 8"	1327VP	1329VP	1331VP	1332VP
# OF BOLTS & NUTS	10	12	14	16
REPLACEMENT STEEL EDGE KIT	SEK60	SEK72	SEK84	SEK96

Items 13 through 15 are available as a Replacement Steel Edge Kit. Replacement Steel Edge Kit part numbers are listed in Table 1. Replacement Steel Edge Kits include width specific Steel Cutting Edges and required mounting hardware.

Optional Rubber Edge Kit and optional Poly Edge Kit are available; contact your dealer for details.



If needed, additional small elbows (Part No. 1012PP) are zip tied to the attachment and can be installed between hoses and couplers, as shown above, to improve hose routing at hydraulic coupler interface on loader. The additional elbows will not be required for most brands of skid loaders.

#### **Maintenance**

\*Every 10 hours of operation

- Grease pivot pin (2 fittings), oscillation pin, and cylinder pins (5 grease fittings total).
- Inspect springs and fasteners. Make sure they are in place and holding mating parts securely.
- Inspect cylinders, hydraulic fittings, and hoses for leaks and damage. Replace as needed. Make sure skid loader is shut off and hydraulic pressure is relieved before checking for leaks. <u>Never</u> use hands to check for high pressure hydraulic leaks.

\*Every 50 hours of operation

- Check that cylinder, pivot and oscillation pins are secure.
- Check for loose, worn, or missing parts. Repair or replace as needed.
- Check cutting edge wear. Reverse or replace edge as needed.
- Contact your dealer for replacement parts.

Warning Labels on Snow Blade Attachment



This label is located near the pivot pin area on the moldboard. Always keep hands clear of snow blade when skid loader hydraulic system is operational.



This label is located near both ends of the moldboard. Always stay clear of moldboard. Never inspect this attachment with skid loader running or with the blade raised off of the ground/pavement.

## A WARNING

NEVER use hands to check for oil leaks.

 ALWAYS relieve pressure before disconnecting hoses.

 Read and understand all operating and safety instructions in Owner's Manual.

Attachment weight and load MUST NOT exceed operating capacity of loader (refer to loader manual for capacity).

Attachment must be securely latched to loader. Check for loose or broken parts before

operating, repair as needed.

- Stay back 50 feet during operation.
  ALWAYS follow loader safety and operating instructions.
- Failure to follow these instructions could result in injury or death.

This label is located on the frame near the quick-tach. This label has several important instructions that must be followed for safe operation of this attachment.

#### Light Duty Snow Blade (SBS-LD) Parts List

	ITFM	PART NO.	QTY	DESCRIPTION	
	1	6626VW	1	SBS FRAME WELDMENT	
	2	7158VW	1	SBS OSCILLATION FRAME WDT LD	
А	3		1	SBS MOLDBOARD WELDMENT LD	
A	4		1	SBS EDGE HOLDER WDT LD	
	5	6674VP	1	SNOW BLADE OSCILLATION PIN	
	6	1077PP	1	1/2"-13 X 3 1/2" LG HHCS	
	7	1003PP	1	1/2"-13 REVERSE LOCK NUT	
	8	1034PP	5	1/4"-28 STRAIGHT GREASE ZERK	
	9	6675VP	2	SNOW BLADE OSC RETENTION PLATE	
	10	6676PP	7	1"-8 X 3 1/2" LG HHCS	
В	11A	9333PP	1	COUPLER FEMALE STD 90 6MJ	
В	11B	9334PP	1	COUPLER MALE STD 90 6MJ	
	12	7246PP	7	1"-8 TOP LOCK NUT	
А	13		1	BOLT ON EDGE 5/8" X 8"	
А	14	1036PP	-	5/8"-11 X 2" LG PLOW BOLT	
А	15	1008PP	-	5/8"-11 TOP LOCK NUT	
	16	6673VP	1	SNOW BLADE PIVOT PIN STRAIGHT	
	17	1097PP	2	1 9/16" X 10GA MACH BUSHING	
	18	1098PP	2	1 9/16" EXTERNAL SNAP RING	
	19	1112PP	4	1 9/16" DIA X 2" LG BUSHING	
	20	6854PP	2	SNOW BLADE WEAR SHOE	
	21	6862PP	26	1 3/8" SAE FLAT WASHER	
	22	6863PP	2	7/16" X 1-3/4" LG LYNCH PIN	
	23	1117PP	2	5/16"-18 X 1 1/2" LG HHCS	
	24	2137VP	2	CYLINDER PIN	
	25	1094PP	4	1 1/4" X 10GA MACH BUSHING	
	26	1095PP	4	1 1/4" EXTERNAL SNAP RING	
	27	1150PP	1	CYL 2" BORE X 8 3/8" STROKE	
	28	7231PP	2	HYD HOSE 1/4" X 32" LG 6FJX TO 6FJX	
	29	1067PP	2	HOSE CLAMP FOR 1/4" HOSES	
	30	6868PP	2	ELBOW 90 SOLID 6MJ BOTH ENDS	
	31	1072PP	1	1/16" DIA RESTRICTOR FITTING IN LINE 6 JIC	
	32	6664VW	2	SNOW BLADE SPRING GUIDE WDT	
	33	6684PP	2	SPRING COMPRESSION SNOW BLADE	
	34	6680PP	2	3/4"-10 X 3 1/4" LG HHCS	
	35	1011PP	2	3/4"-10 TOP LOCK NUT	
	36	5148PP	2	1/2" USS FLAT WASHER	
	37	5237PP	4	1/2"-13 NUT	
		1125PP		HYD HOSE 1/4" X 64" LG 6FJX TO 6FJX	
В	38	38 1127PP		HYD HOSE 1/4" X 72" LG 6FJX TO 6FJX	
2	00	1126PP	2	HYD HOSE 1/4" X 80" LG 6FJX TO 6FJX	
		1128PP		HYD HOSE 1/4" X 88" LG 6FJX TO 6FJX	

A - See Table 1.

B - Item not shown.