



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

- 2" bore, 8 3/8" stroke cylinders with 1 1/4" rods and 1 1/4" cylinder pins.
- Standard Cross Over Relief Valve helps protect plow from impacts.
- 1 9/16" diameter pivot pin, 2 1/4" diameter oscillation pin.
- Heavy duty frame with oscillation and adjustable skid shoes.
- Trip edge design featuring 4 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 greater than 1500 lb.
- Optional Rubber Edge available.
- Optional Poly Edge available.
- Optional Snow Blade Wings 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.



Attachment 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.

Attachment can also be Left Side Plumbed. Attachment can be converted to Left Side Plumb by using clamp near quick-tach on Frame Weldment (Item 1). Allow enough slack in hose to allow for movement of the Oscillation Weldment (Item 2). Angle of Elbows (Item 40) can be adjusted to improve hose routing. 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



Attachment 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.



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.

## **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.

## **Maintenance**

\*Every 10 hours of operation

- Grease pivot pin (2 fittings), oscillation pin, and cylinder pins (7 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. Never 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



5263PP – PINCH POINT WARNING LABEL

Always keep hands clear of snow blade when skid loader hydraulic system is operational.



5264PP – CRUSH HAZARD WARNING LABEL

Always stay clear of moldboard. Never inspect attachment with skid loader running or with the blade raised off of the ground/pavement.

# Warning Labels on Snow Blade Attachment (cont.)



## 5265PP – HYDRAULIC WARNING LABEL

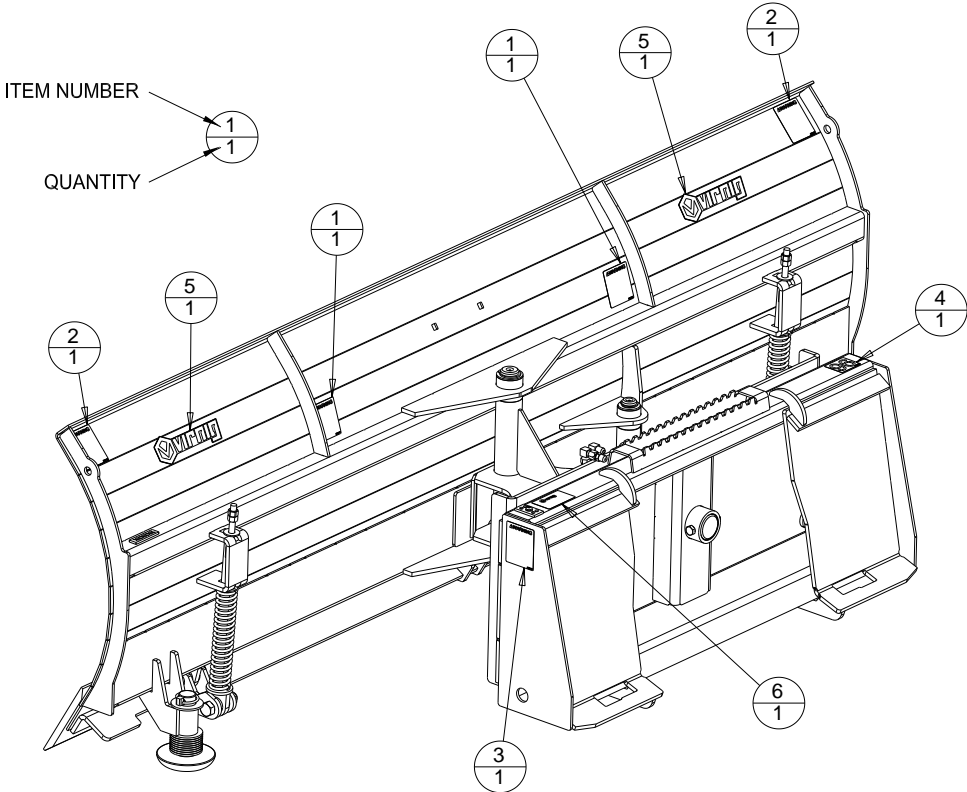
This label has several important instructions that must be followed for safe operation of this attachment.



# Angle Snow Blade (SBS) Label Parts List

ITEM	PART NO.	QTY	DESCRIPTION
1	5263PP	2	PINCH POINT WARNING LABEL
2	5264PP	2	CRUSH HAZARD WARNING LABEL
3	5265PP	1	HYDRAULIC WARNING LABEL
4	9397PP	1	72 WIDTH LABEL
	9399PP		84 WIDTH LABEL
	9401PP		96 WIDTH LABEL
	9403PP		108 WIDTH LABEL
	9404PP		120 WIDTH LABEL
5	9527PP	2	VIRNIG LOGO LONG
6	SERIALTAG	1	SERIAL NUMBER TAG

## Label Locations



# Angle Snow Blade (SBS) Parts List

ITEM	PART NO.	QTY	DESCRIPTION	
	1	6626VW	1	SBS FRAME WELDMENT
	2	6632VW	1	SBS OSCILLATION WELDMENT
A	3	-----	1	SBS MOLDBOARD WELDMENT
A	4	-----	1	SBS EDGE HOLDER WDT
	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	7	1/4"-28 STRAIGHT GREASE ZERK
	9	6675VP	2	SNOW BLADE OSC RETENTION PLATE
	10	6676PP	4	1"-8 X 3 1/2" LG HHCS
	11	7246PP	4	1"-8 TOP LOCK NUT
	12	10339PP	4	1" X 3" CLEVIS PIN
	13	10567PP	4	3/16" X 1 1/2" COTTER PIN
	14	5146PP	4	1" X 10GA MACHINERY BUSHING
A	15	-----	1	BOLT ON EDGE 5/8" X 8"
A	16	-----	2	END BOLT ON EDGE 5/8" X 8"
A	17	1036PP	-	5/8"-11 X 2" LG PLOW BOLT
A	18	1008PP	-	5/8"-11 TOP LOCK NUT
	19	6673VP	1	SNOW BLADE PIVOT PIN STRAIGHT
	20	1097PP	2	1 9/16" X 10GA MACH BUSHING
	21	1098PP	2	1 9/16" EXTERNAL SNAP RING
	22	1112PP	4	1 9/16" DIA X 2" LG BUSHING
	23	6854PP	2	SNOW BLADE WEAR SHOE
	24	6862PP	26	1 3/8" SAE FLAT WASHER
	25	6863PP	2	7/16" X 1-3/4" LG LYNCH PIN
	26	2137VP	4	CYLINDER PIN
	27	1094PP	8	1 1/4" X 10GA MACH BUSHING
	28	1095PP	8	1 1/4" EXTERNAL SNAP RING
	29	10137PP	2	CYL 2" BORE X 8 3/8" STROKE
	30	6997PP	4	ELBOW 90 6MJ TO 6MB
	31	6867PP	3	HYD HOSE 1/4" X 28" LG 6FJX TO 6FJX
	32	1072PP	1	1/16" DIA RESTRICTOR FITTING IN LINE 6 JIC
	33	1067PP	1	HOSE CLAMP FOR 1/4" HOSES
	34	1117PP	1	5/16"-18 X 1 1/2" LG HHCS
	35	7670PP	2	5/16"-18 X 2" LG HHCS
	36	7671PP	2	5/16" FLAT WASHER
	37	7672PP	2	5/16"-18 REVERSE LOCK NUT

# Angle Snow Blade (SBS) Parts List (cont.)

ITEM	PART NO.	QTY	DESCRIPTION
38	10604PP	1	MANIFOLD CROSSOVER RELIEF SBS
39	7796PP	4	ADAPTER 6MJ TO 6MB
40	1012PP	2	ELBOW 90 6FJX TO 6MJ
41	6664VW	4	SNOW BLADE SPRING GUIDE WDT
42	6684PP	4	SPRING COMPRESSION SNOW BLADE
43	6680PP	4	3/4"-10 X 3 1/4" LG HHCS
44	1011PP	4	3/4"-10 TOP LOCK NUT
45	5148PP	4	1/2" USS FLAT WASHER
46	5237PP	8	1/2"-13 NUT
B 47	9333PP	1	COUPLER FEMALE STD 90 6MJ
B 48	9334PP	1	COUPLER MALE STD 90 6MJ
B 49	1127PP	2	HYD HOSE 1/4" X 72" LG 6FJX TO 6FJX
	1126PP		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.

Table 1

MODEL	SBS72	SBS84	SBS96	SBS108	SBS120
SBS MOLDBOARD WELDMENT	7640VW	6942VW	6641VW	6950VW	7149VW
SBS EDGE HOLDER WELDMENT	9664VW	9667VW	9670VW	9673VW	9676VW
BOLT ON EDGE 5/8" X 8"	1329VP	1331VP	1332VP	1329VP	1329VP
END BOLT ON EDGE 5/8" X 8"	N/A	N/A	N/A	6957VP	7156VP
# OF BOLTS AND NUTS	12	14	16	18	20
REPLACEMENT STEEL EDGE KIT	SEK72	SEK84	SEK96	SEK108	SEK120

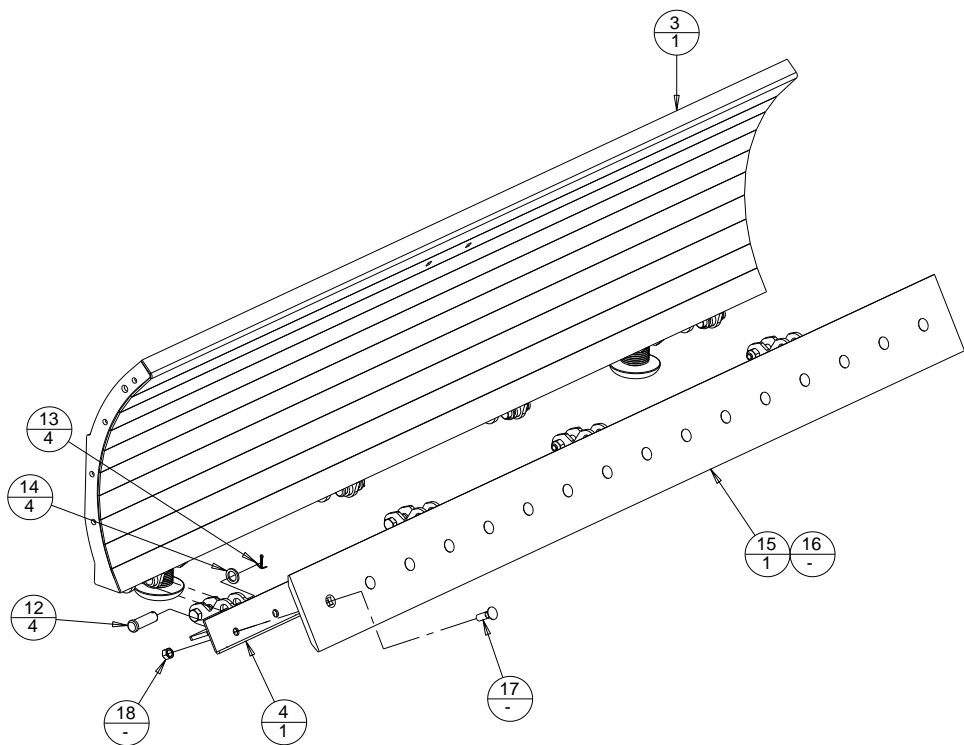
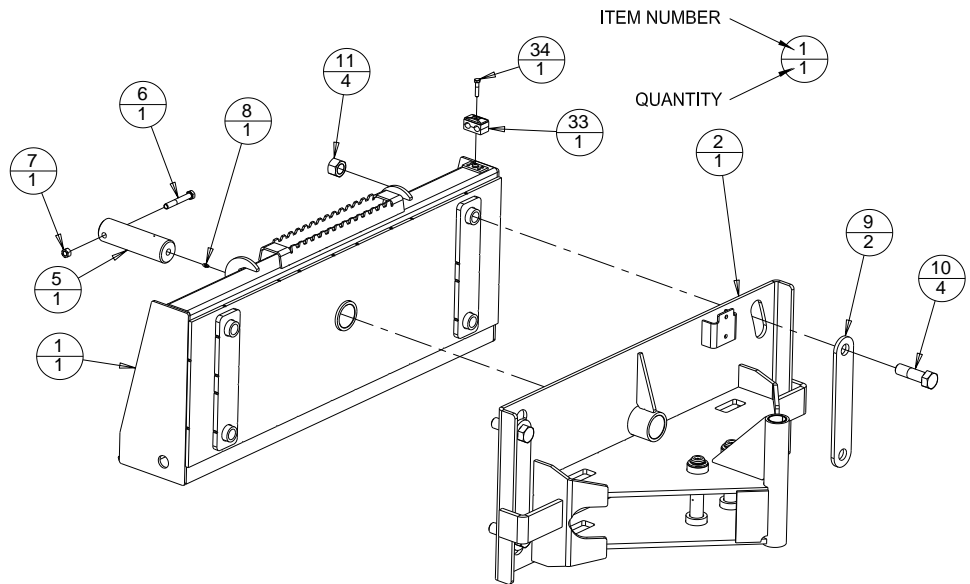
Items 15 through 18 are available as a Replacement Steel Edge Kit.

Replacement Steel Edge Kit part numbers are listed in Table 1.

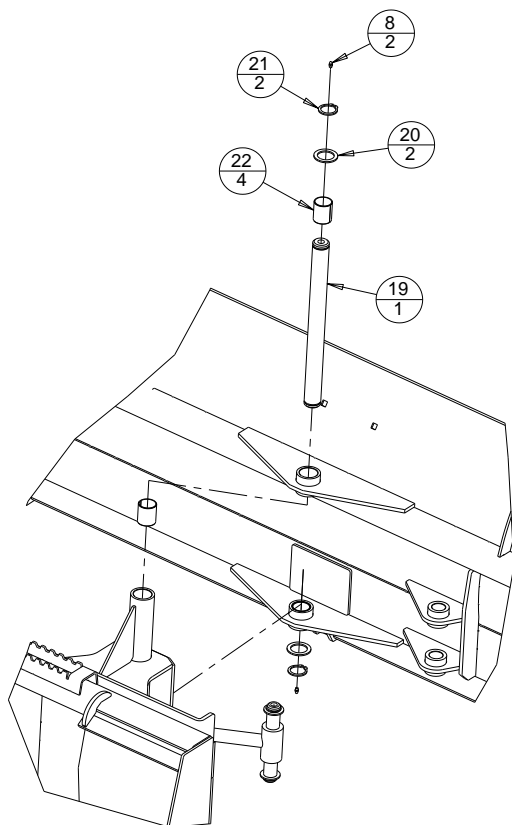
Replacement Steel Edge Kits include width specific Steel Cutting Edges and required mounting hardware.

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

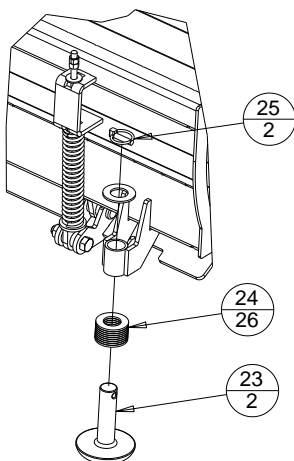
# Main Component Assembly



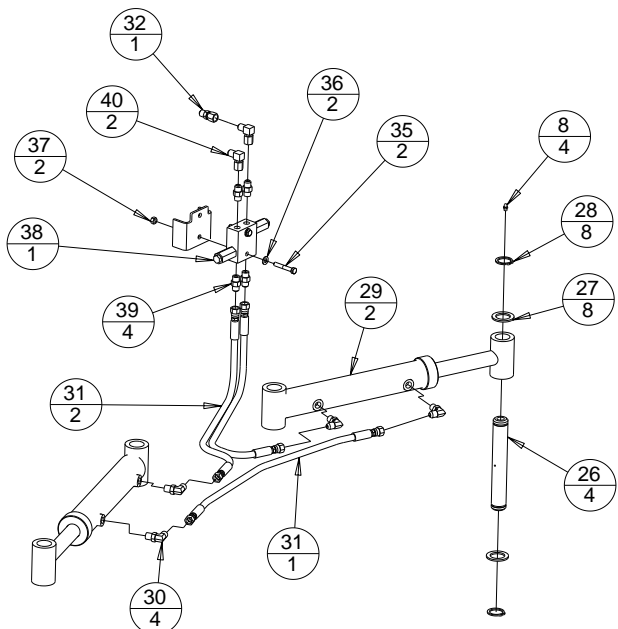
## Pivot Pin Installation



## Wear Shoe Installation

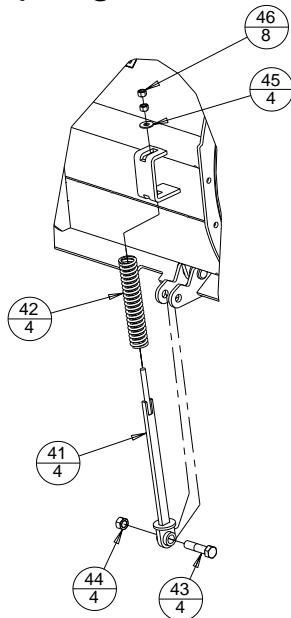


# Hydraulic Installation



Note: Restrictor Fitting (Item #32), plumbed to barrel end of cylinders.

# Spring Installation

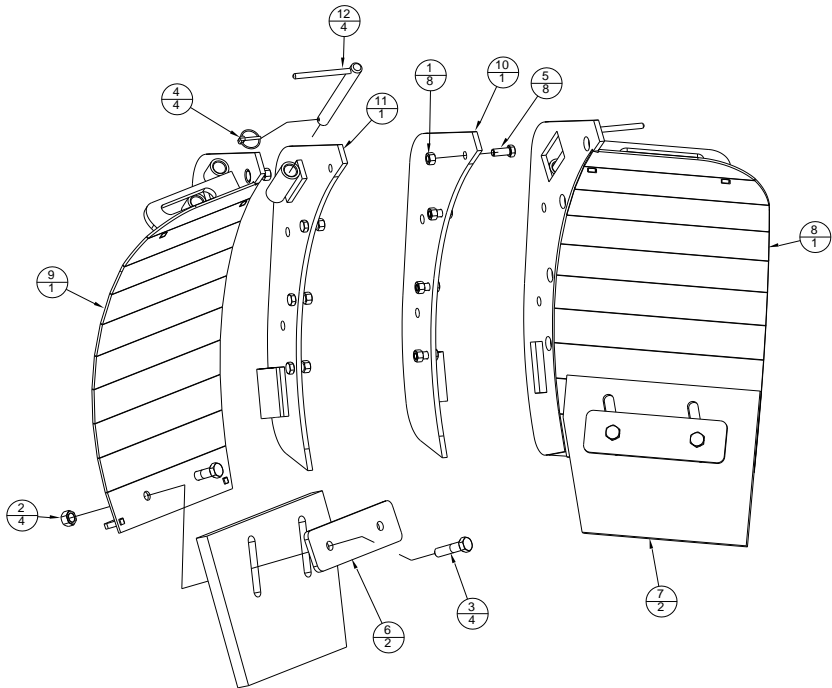


# Optional Snow Blade Wings

## Snow Blade Wings (WGS) Parts List

ITEM	PART NO.	QTY	DESCRIPTION
1	1003PP	8	1/2"-13 REVERSE LOCK NUT
2	1008PP	4	5/8"-11 TOP LOCK NUT
3	5130PP	4	5/8"-11 X 2 1/2" LG HHCS
4	6723PP	4	3/16" X 1" LG LYNCH PIN
5	7487PP	8	1/2"-13 X 1 1/4" LG HHCS
6	9248VP	2	RUBBER EDGE RETAINER SHORT
7	9957PP	2	SNOW WING URETHANE WEAR EDGE
8	9961VW	1	WGS WING WELDMENT LH
9	9962VW	1	WGS WING WELDMENT RH
10	9963VW	1	WING BOLT PLATE WELDMENT LH
11	9964VW	1	WING BOLT PLATE WELDMENT RH
12	9967VW	4	WING PIN WELDMENT

## Main Component Assembly



## **Installation**

- Install Wing Bolt Plate Weldments (Items #10 and #11) to plow with ½" bolts (Item #5) and nuts (Item #1).
- Install wings by positioning the mount pipes of each wing aligned with the mount pipes on the Wing Bolt Plate Weldments. Secure each wing with two Wing Pin Weldments (#12) and two lynch pins (#4).
- Two additional holes are located in each Wing Bolt Plate Weldment and wing for installation of 5/8" bolts (not included). If wings are not going to be removed for long periods of time, the additional bolts can be used to attach wings to plow more securely, if desired.

## **Operation**

- Urethane Wear Edges (Item #7) can be adjusted by loosening 5/8" bolts (Item #3) and nuts (Item #2). For best Urethane Wear Edge adjustment, install plow onto loader, loosen 5/8" bolts and nuts, drive loader onto a flat floor/surface, lower loader boom to stops and use loader tilt function to position plow flat on the floor/surface. Adjust Urethane edges to contact floor/surface. Tighten 5/8" hardware. Can repeat this process as needed, especially after flipping main edge of plow.
- Wings can be removed from plow by removing lynch pins and Wing Pin Weldments. Wing Bolt Plate Weldments can stay attached on plow.

## **Snow Blade Wings Edge Kit (WGSEK)**

Items 2, 3, 6 and 7 are available as a replacement edge kit. Replacement edge kit includes two Urethane wear edges, two retainers and required mounting hardware.

Snow Blade Wings Edge Kit part number: WGSEK