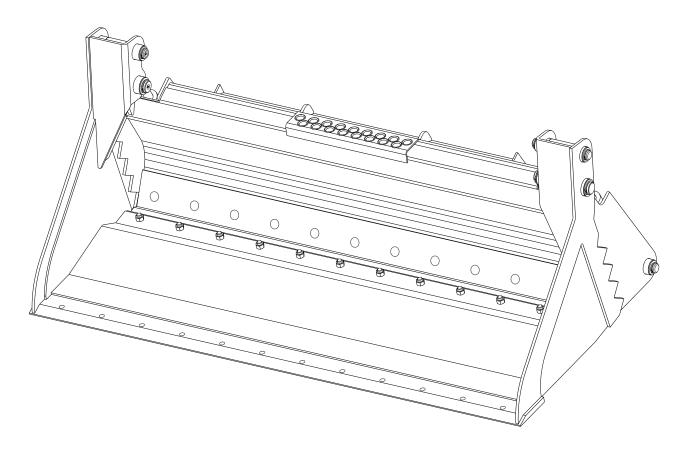
VIRNIG MFG INC. Multi Purpose Bucket



OWNERS/OPERATORS MANUAL

Model Number	MPV	<u>_</u> .
Serial Number	XXXXX	
Date of Manufacture	XX/XX/XX	

Phone: 320-393-7080

01/01/09

Warranty

Virnig Manufacturing, Inc. products are warranted to be free from defects, in workmanship, for one year from the end users date of purchase.

Purchased components on Virnig Manufacturing, Inc. products are subject to the warranty of original Manufacturer.

This warranty is void on products that have been <u>Modified or Repaired</u> without the prior consent of Virnig Manufacturing, Inc.

Virnig Manufacturing, Inc. does not warrant damage from misuse, accidents, or negligence nor damage to machine or surrounding environment.

Claims are limited to replacement parts and a reasonable labor amount. This warranty does <u>not</u> cover service mileage, downtime, or replacement of attachment.

Upon request for warranty claim an RGA number will be assigned and replacement parts sent prepaid ground freight and invoiced. Defective parts need to be returned prepaid to Virnig Manufacturing, Inc. for warranty consideration. Upon inspection, account will be credited for defective part.

Please call Virnig Manufacturing at 320-393-7080 with any questions regarding warranty.

Features of Virnig Mfg. Inc. Multi-purpose buckets include:

- 1. 2" bore x 8 3/8" stroke cylinders.
- 2. 5/8" x 6" Bolt-on edges at rear of clam and front of dozer.
- 3. Cylinder guards standard.
- 4. Clam opening of 33".
- 5. Replaceable bushings at pivot points.
- 6. Constructed with heavy plate for strength and durability.
- 7. Optional 5/8" x 8" bolt on edge on front of clam.
- 8. Recommended for skid loaders with a lift capacity under 2400 lbs.

Initial Use

- See following page for suggested hose routing.
- Check that quick-tach on bucket fits onto skid loader properly. Pins must engage through 3/8" plates at bottom of quick-tach.
- With bottom of attachment touching ground/floor, open clam and slowly roll back bucket. Make sure there is no interference between attachment and loader with clam open and attachment fully rolled back.
- Make sure hoses do not pinch during roll back.
- Slowly roll bucket fully forward. Check that hoses are long enough so they do not stretch or bind.
- Can loosen and adjust angle on elbow adapters to improve hose routing.
- Do not connect this attachment to high flow couplers.
- Cycle clam open/close. 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.
- Never attempt to lift more than the operating capacity (attachment weight and load) of skid loader. Attachment weight can be found in Table 1 in attachment parts list.
- Always follow all safety and operating instructions of skid loader.
- Always relieve pressure before disconnecting hydraulic hoses.
- Never hit or pound couplers.
- Never hook a chain on clam or bucket.
- With clam fully open, watch for tire interference when rolling attachment fully forward.
- Check for debris in quick-tach area before each hook-up.

Maintenance

*Every 10 hours of operation

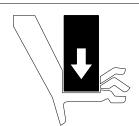
- Grease hinge pins and cylinder pins (6 grease fittings total).
- Inspect cylinders, hydraulic fittings, and hoses for leaks and damage.
 Replace as needed. Make sure skid loader is shut off and hydraulic pressure is relieved before checking for leaks. Never use hands to check for high pressure hydraulic leaks.
- Check for debris build up around cylinders. If necessary, remove cylinder guards and remove debris. Replace cylinder guards.

*Every 50 hours of operation

- Check that all cylinder and hinge pins are secure.
- Check that bolt-on edges are secure.
- Check for loose, worn, or missing parts. Repair or replace as needed.
- Contact your dealer for replacement parts.

WARNING LABELS ON ATTACHMENT

AWARNING



PINCH POINT

- •Keep hands clear during operation.
- Always shut off skid loader and relieve pressure before inspecting or repairing.
- •Failure to follow these instructions could result in injury or death.

This label is located near hinge area on the clam.

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

AWARNING

- NEVER use hands to check for oil leaks.
- ALWAYS relieve pressure before disconnecting hoses.
- •Read and understand all operating and safety instructions in owners manual.
- Attachment Weight and Load MUST NOT exceed Operating Capacity of Skid Loader (refer to skid loader manual for capacity).
- Attachment must be securely latched to skid loader.
- Check for loose or broken parts before operating, repair as needed.
- •Stay back 50 feet during operation.
- •ALWAYS follow skid loader safety and operating instructions.
- •Failure to follow these instructions could result in injury or death.



This label is located near hinge area on the clam.

Always stay clear of clam. Never inspect unit with skid loader running or with clam open.

This label is located on the dozer, near the mount plate.

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

MULTI-PURPOSE BUCKET (MPV) PARTS LIST

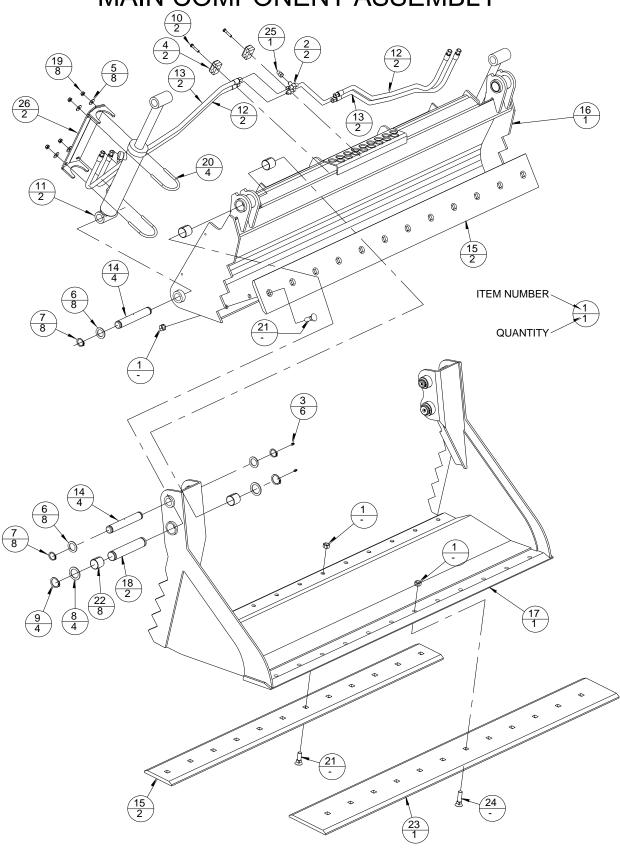
	ITEM	PART NO.	QTY	DESCRIPTION
С	1	1008PP	-	5/8" NC TOP LOCK HEX NUT
	2	1013PP	2	TEE, 3-WAY #6 JIC MALE (37° FLARE)
	3	1034PP	6	1/4"-28 UNF STRAIGHT GREASE FITTING
	4	1067PP	2	HOSE CLAMP ASSEMBLY
	5	1083PP	8	3/8" FLAT WASHER
	6	1094PP	8	1 1/4" DIA X 10 GAGE NARROW RIM MACH BUSHING
	7	1095PP	8	1 1/4" DIA HEAVY SNAP RING
	8	1097PP	4	1 9/16" DIA X 10 GAGE NARROW RIM MACH BUSHING
	9	1098PP	4	1 9/16" DIA HEAVY SNAP RING
	10	1117PP	2	5/16" NC X 1 1/2" LG HHCS
	11	1150PP	2	2" BORE X 8 3/8" STROKE CYLINDER
Α	12		2	INNER HYD HOSE, BOTH ENDS #6 JIC FEMALE (37° FLARE)
Α	13		2	OUTER HYD HOSE, BOTH ENDS #6 JIC FEMALE (37° FLARE)
	14	2137VP	4	CYLINDER PIN
Α	15		2	5/8" X 6" BOLT-ON DOZER/CLAM EDGE
Α	16		1	DOZER WELDMENT
Α	17		1	CLAM WELDMENT
	18	5194VP	2	CLAM PIVOT PIN
	19	6140PP	8	3/8" NC FLANGE LOCK NUT
	20	8331PP	4	3/8" NC X 2" U BOLT
С	21	5585PP	-	5/8" NC X 1 3/4" LG PLOW BOLT
	22	5586PP	8	1 9/16" DIA X 1 9/16" LONG BUSHING
В	23		1	BOLT-ON CUTTING EDGE (BEV)
C,B	24	1093PP	-	5/8" NC X 2 1/4" LONG PLOW BOLT
	25	1131PP	1	IN-LINE RESTRICTED FITTING, 3/32" DIAMETER ORIFICE
	26	8338VW	2	CYLINDER GUARD, STANDARD

A-SEE TABLE 1.
B-OPTIONAL EQUIPMENT.
C-SEE TABLE 1 FOR QUANTITY.

TABLE 1

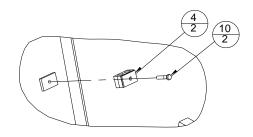
MODEL	MPV60	MPV66	MPV72
DOZER WELDMENT	7610VW	7509VW	7502VW
CLAM WELDMENT	7611VW	7512VW	7505VW
DOZER/CLAM EDGE	7607VP	5168VP	5110VP
NO. OF NUTS AND BOLTS	20	22	24
INNER HYD HOSE	7797PP, 41 1/2" LG.	1136PP, 44 1/2" LG.	1136PP, 44 1/2" LG.
OUTER HYD HOSE	7797PP, 41 1/2" LG.	1136PP, 44 1/2" LG.	1137PP, 47 1/2" LG.
FRONT BOLT-ON EDGE (BEV)	BEV60	BEV66	BEV72
NO. OF NUTS AND BOLTS	10	11	12
WEIGHT (lbs)	840	915	960

MAIN COMPONENT ASSEMBLY



PLUMBING AND INSTALLATION NOTES

CLAMP INSTALLATION



NOTE: BOTH RIGHT SIDE CYLINDER PORTS MUST BE PLUMBED TOGETHER.
BOTH LEFT SIDE CYLINDER PORTS MUST BE PLUMBED TOGETHER.

RESTRICTED FITTING (ITEM #25), PLUMBED TO BARREL ENDS OF CYLINDERS.

CENTER PLUMB

LEAD HOSES WITH ADAPTERS AND COUPLERS ARE CONNECTED TO ONE TEE (ITEM #2) AND THE SECOND TO THE RESTRICTED FITTING (ITEM #25).

(PART NUMBERS CAN BE FOUND IN INITIAL USE SECTION OF THIS MANUAL.)

NOTE: TEES (ITEM #2) CAN BE POINTED DOWNWARD FOR BETTER ROUTING OF LEAD HOSES FROM ATTACHMENT TO SKID LOADER.

LEFT SIDE OR RIGHT SIDE PLUMB

2-90 DEGREE #6 JIC FEMALE SWIVEL ELBOWS (VIRNIG PART NUMBER 1012PP)
ARE USED FOR LEFT SIDE OR RIGHT SIDE PLUMB. ONE IS CONNECTED TO A TEE (ITEM #2)
THE OTHER IS CONNECTED TO THE RESTRICTED FITTING (ITEM #25).

LEAD HOSES WITH ADAPTERS AND COUPLERS ARE CONNECTED TO THE TWO ELBOWS. (PART NUMBERS CAN BE FOUND IN <u>INITIAL USE</u> SECTION OF THIS MANUAL.)

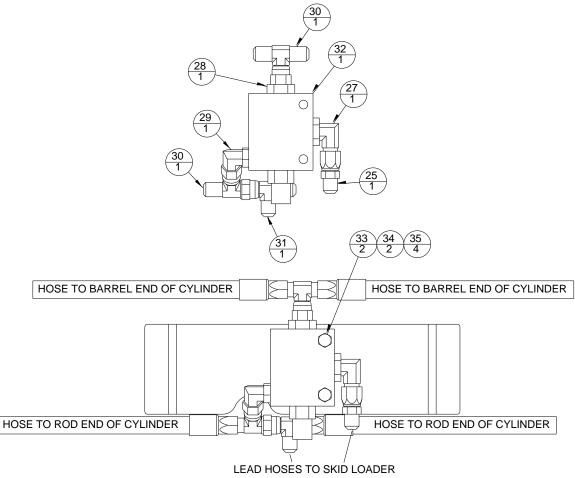
LEAD HOSES ARE THEN ROUTED FROM THE ELBOWS, THROUGH THE FORMED CHANNEL, THEN TO THE LOADER BETWEEN THE MOUNT PLATE AND CYLINDER MOUNTS.

CENTER PLUMB WITH OPTIONAL HOLDING VALVE

ITEM	PART NO.	QTY	DESCRIPTION
27	1144PP	1	90° ELBOW, #8 SAE O-RING MALE TO #6 JIC MALE
28	1145PP	1	ADAPTER, 6MJ-8MB
29	6997PP	1	90° ELBOW, #6 SAE O-RING MALE TO #6 JIC MALE, SHORT
30	7590PP	2	#6 JIC FEMALE BRANCH TEE, 6MJ-6MJ-6FJX
31	7591PP	1	#6 JIC FEMALE RUN TEE, 6MJ-6FJX-6MJ
32	7669VP	1	MULTI PURPOSE HOLDING VALVE, WITH BODY
33	7670PP	2	5/16" NC X 2" LONG HCS
34	7672PP	2	5/16" NC REV. LOCK NUT
35	7671PP	4	5/16" FLAT WASHER

OPTIONAL HOLDING VALVE REQUIRES THE ABOVE PARTS.

WITH HOLDNG VALVE AND REQUIRED PARTS INSTALLED, ITEMS #2, 4 AND 10 ARE NOT USED. HOLDING VALVE PRESSURE IS PRE-SET. PLEASE CALL VIRNIG MFG. WITH ANY QUESTIONS OR PROBLEMS.



ITEMS IN ABOVE TABLE ARE AVAILABLE AS A KIT. HOLDING VALVE KIT PART NUMBER, CENTER PLUMB - 7483VA.

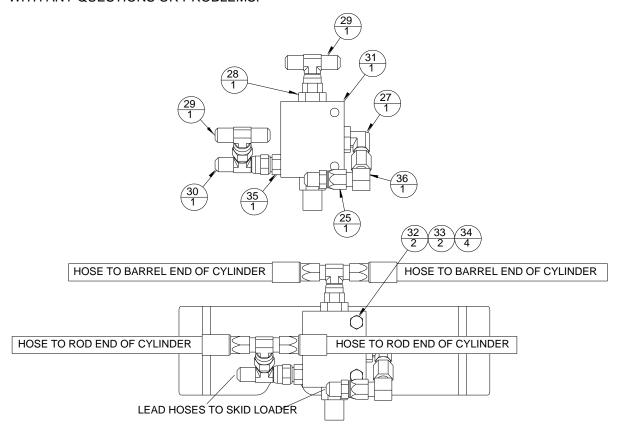
WHEN INSTALLING HOLDING VALVE KIT, TEES (ITEM #2), CLAMPS (ITEM #4) AND BOLTS (ITEM #10) ARE NOT RE-USED. RESTRICTED FITTING (ITEM #25) WILL BE RE-USED.

LEFT SIDE OR RIGHT SIDE PLUMB WITH OPTIONAL HOLDING VALVE (LEFT SIDE PLUMB SHOWN)

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ITEM	PART NO.	QTY	DESCRIPTION
27	1144PP	1	90° ELBOW, #8 SAE O-RING MALE TO #6 JIC MALE
28	1145PP	1	ADAPTER, 6MJ-8MB
29	7590PP	2	#6 JIC FEMALE BRANCH TEE, 6MJ-6MJ-6FJX
30	7591PP	1	#6 JIC FEMALE RUN TEE, 6MJ-6FJX-6MJ
31	7669VP	1	MULTI PURPOSE HOLDING VALVE, WITH BODY
32	7670PP	2	5/16" NC X 2" LONG HCS
33	7672PP	2	5/16" NC REV. LOCK NUT
34	7671PP	4	5/16" FLAT WASHER
35	7796PP	1	ADAPTER, 6MJ-6MB
36	1012PP	1	90° FEMALE SWIVEL ELBOW, #6 JIC

OPTIONAL HOLDING VALVE REQUIRES THE ABOVE PARTS.

WITH HOLDNG VALVE AND REQUIRED PARTS INSTALLED, ITEMS #2, 4 AND 10 ARE NOT USED. HOLDING VALVE PRESSURE IS PRE-SET. PLEASE CALL VIRNIG MFG. WITH ANY QUESTIONS OR PROBLEMS.



ITEMS IN ABOVE TABLE ARE AVAILABLE AS A KIT. HOLDING VALVE KIT PART NUMBER, CENTER PLUMB - 7483VAL.

WHEN INSTALLING HOLDING VALVE KIT, TEES (ITEM #2), CLAMPS (ITEM #4) AND BOLTS (ITEM #10) ARE NOT RE-USED. IF UNIT HAS ELBOWS ATTACHED TO TEES (USED FOR LEFT/RIGHT SIDE PLUMB WITHOUT HOLDING VALVE), THEY WILL NOT BE RE-USED. RESTRICTED FITTING (ITEM #25) WILL BE RE-USED.

NOTES