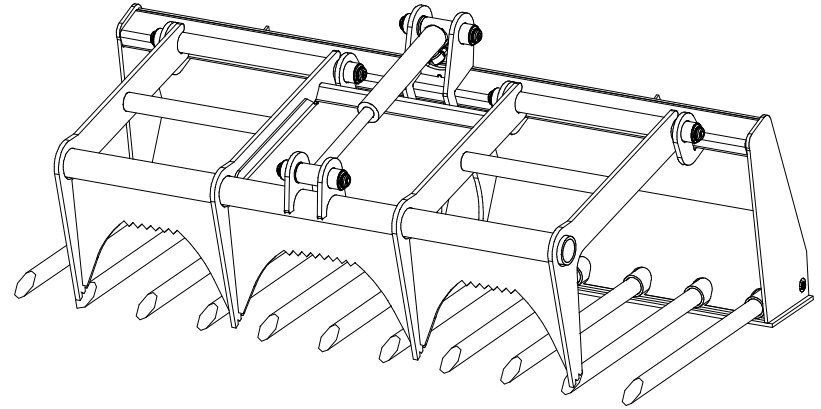


# Utility Fork with Grapple



Model Number \_\_\_\_\_ MGV \_\_\_\_\_.

Serial Number \_\_\_\_\_.

Phone: 320-393-7080

4/1/03  
Revised 1/1/13

MGV

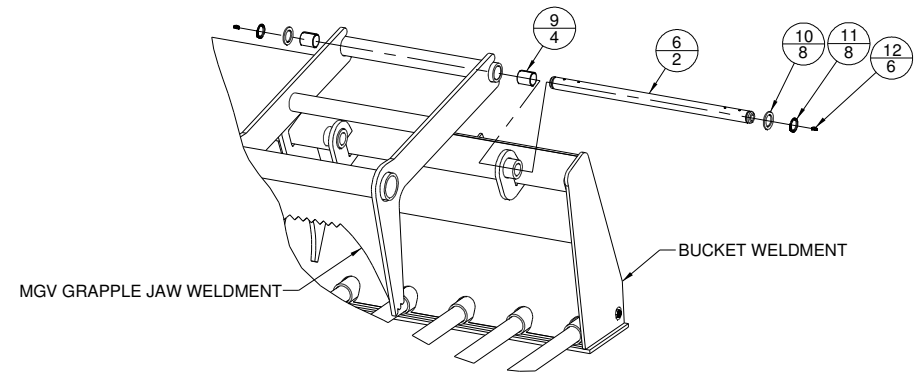
## Features of Virnig Mfg. Inc. Utility Fork with Grapple include:

- 2" bore x 8 3/8" stroke cylinder.
- 1 3/4" diameter x 33" long replaceable bucket tines.
- Jaw opening of 38".
- Replaceable bushings at grapple jaw hinge.
- Constructed with heavy plate for strength and durability.
- Recommended for skid loaders with a lift capacity under 2400 lb.

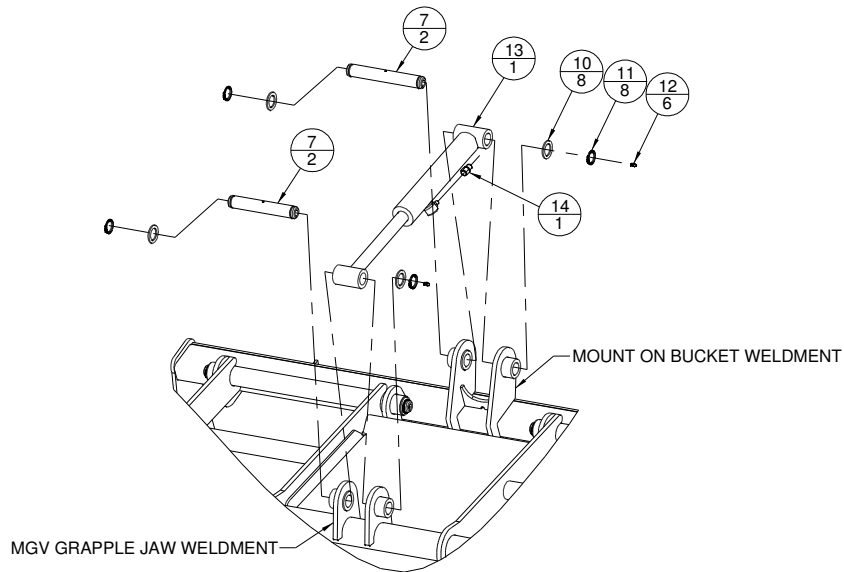
## Initial Use

- See following pages for suggested hose routing.
- Check that quick-tach on grapple 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 jaw and slowly roll back bucket. Make sure there is no interference between attachment and loader with grapple jaw 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.
- Do not connect this attachment to high flow couplers.
- Cycle jaw 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.

## Hinge Pin Installation



## Cylinder Installation



Note: Restrictor fitting (Item #14), plumbed to rod end of cylinder.



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.

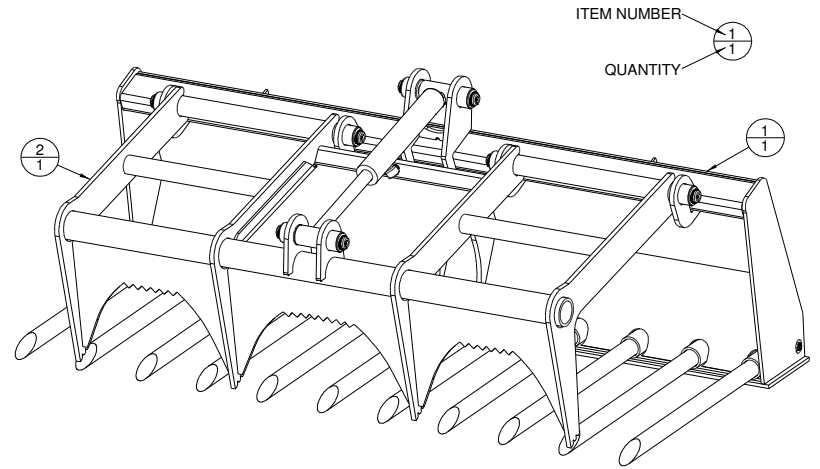
Grapple can also be Left Side Plumbed. Grapple can be converted to Left Side Plumb by following instructions located in this manual. Please see picture on the next page showing Left Side Plumb. Hoses should be run through the bracket on the skid loader arm, as shown, or the hoses can be tied or bungeed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



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

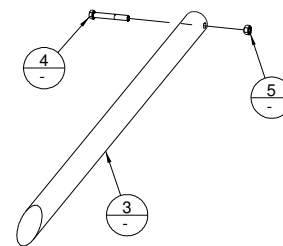
If there is too much slack hose, the amount of slack can be adjusted using the clamp on the attachment near the mount plate.

## Main Component Assembly

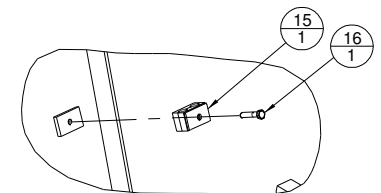


MGV172 Shown

## Tooth Assembly



## Clamp Installation



## Utility Fork with Grapple Parts List

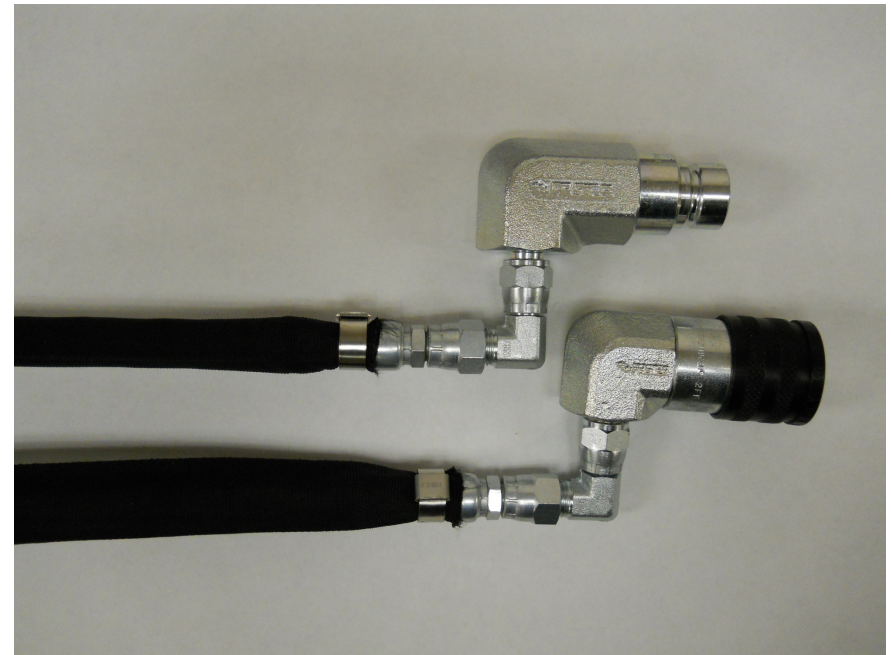
ITEM	PART NO.	QTY	DESCRIPTION
A	1	1	MGV BUCKET WELDMENT
	2	1	MGV JAW WELDMENT
A	3	-	1 3/4" MV/MGV TOOTH
A	4	-	7/16"-14 X 2 3/4" LG HHCS
A	5	-	7/16"-14 REVERSE LOCK NUT
	6	2	MANURE GRAPPLE HINGE PIN
	7	2	CYLINDER PIN
B	8A	1	COUPLER FEMALE STD 90 6MJ
B	8B	1	COUPLER MALE STD 90 6MJ
	9	4	1 1/4" DIA X 1 9/16" LG BUSH
	10	8	1 1/4" X 10GA MACH BUSHING
	11	8	1 1/4" EXTERNAL SNAP RING
	12	6	1/4"-28 STRAIGHT GREASE ZERK
	13	1	CYL 2" BORE X 8 3/8" STROKE
	14	1	1/16" DIA RESTRICTOR FITTING IN LINE 6 JIC
	15	1	HOSE CLAMP FOR 1/4" HOSES
	16	1	5/16"-18 X 1 1/2" LG HHCS
	1128PP		HYD HOSE 1/4" X 88" LG 6FJX TO 6FJX
B	17	2	HYD HOSE 1/4" X 96" LG 6FJX TO 6FJX
	1143PP		HYD HOSE 1/4" X 102" LG 6FJX TO 6FJX

A - See Table 1.

B - Item not shown.

Table 1

MODEL	MGV160	MGV166	MGV172	MGV178
BUCKET WELDMENT	5631VW	5632VW	5633VW	5634VW
# OF TINES	9	10	11	12
WEIGHT (lb.)	875	905	950	990



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.
- 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 ram piles with jaw closed.
- Never hook a chain on jaw or bucket.
- Never use grapple jaw for hooking and/or pulling. Material should be clamped securely.
- 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 cylinder, 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 all cylinder and hinge pins are secure.
- Check that all bucket teeth are secure.
- Check for loose, worn, or missing parts. Repair or replace as needed.
- Contact your dealer for replacement parts.

## Warning Labels on Grapple Attachment



This label is located near hinge area on grapple. Always keep hands clear of grapple when skid loader hydraulic system is operational.



This label is located on the front of the grapple jaw. Always stay clear of grapple jaw. Never inspect grapple with skid loader running or with jaw open.



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