## Bale Grapple



Model Number BG

Serial Number $\qquad$ .

Phone: 320-393-7080

4/1/08
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## Features of Virnig Mfg. Inc. Bale Grapple include:

- 2 " bore x $83 / 8$ " stroke cylinders.
- Large jaw opening of 73 ".
- Replaceable bushings at all pivot points.
- Constructed with heavy plate for strength and durability.
- Recommended for skid loaders with a lift capacity over 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.


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.


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. See Table 1 for attachment weights.
- 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 (8 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.
*Every 50 hours of operation
- Check that all cylinder and hinge pins 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.


- 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 each side 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 grapple bucket. This label has several important instructions that must be followed for safe operation of this attachment.

## Bale Grapple (BG) Parts List

|  | ITEM | PART NO. | QTY | DESCRIPTION |
| :---: | :---: | :---: | :---: | :---: |
| A | 1 | 1012PP | 2 | ELBOW 90 6FJXTO 6MJ |
|  | 2 | 1013PP | 2 | TEE THREE WAY 6MJ |
|  | 3 | 1034PP | 8 | 1/4"-28 STRAIGHT GREASE ZERK |
|  | 4 | 1067PP | 4 | HOSE CLAMP FOR 1/4" HOSES |
|  | 5 | 1072PP | 1 | 1/16" DIA RESTRICTOR FITTING IN LINE 6 JIC |
|  | 6 | 1075PP | 2 | 3/8" LOCK WASHER |
|  | 7 | 1094PP | 8 | 11/4" X 10GA MACH BUSHING |
|  | 8 | 1095PP | 8 | 11/4" EXTERNAL SNAP RING |
|  | 9 | 1097PP | 4 | 19/16" X 10GA MACH BUSHING |
|  | 10 | 1098PP | 4 | 19/16" EXTERNAL SNAP RING |
|  | 11 | 1111PP | 8 | 1 1/4" DIA X 1 9/16" LG BUSH |
|  | 12 | 1116PP | 2 | 3/8"-16 X 3/4" LG HHCS |
|  | 13 | 1117PP | 4 | 5/16"-18 X 1 1/2" LG HHCS |
| B | 14 | --- | 4 | HYD HOSE 1/4" 6FJXTO 6 FJX |
|  | 15 | 1150PP | 2 | CYL 2" BORE X 8 3/8" STROKE |
|  | 16 | 2137VP | 4 | CYLINDER PIN |
|  | 17 | 9418VP | 1 | GRAPPLE BOLT ON CENTER STEP |
|  | 18 | 5586PP | 8 | 19/16" DIA X1 9/16" LG BUSH |
| B | 19 | ----- | 1 | BALE GRAPPLE BUCKET WELDMENT |
| B | 20 | ----- | 1 | BALE GRAPPLE JAW WELDMENT |
|  | 21 | 7311 VP | 2 | BALE GRAPPLE HINGE PIN |
| C | 22 | 1127PP | 2 | HYD HOSE 1/4" X 72" LG 6FJXTO 6FJX |
|  |  | 1126PP |  | HYD HOSE 1/4" X 80" LG 6FJXTO 6FJX |
|  |  | 1128PP |  | HYD HOSE 1/4" X 88" LG 6FJXTO 6FJX |
|  |  | 1142PP |  | HYD HOSE 1/4" X 96" LG 6FJX TO 6FJX |
|  |  | 1143PP |  | HYD HOSE 1/4" X 102" LG 6FJX TO 6FJX |
| C | 23 | 9333PP | 1 | COUPLER FEMALE STD 90 6MJ |
| C | 24 | 9334PP | 1 | COUPLER MALE STD 90 6MJ |

A - Used only on left side plumb.
B - See Table 1.
C - Item not shown.
Table 1

|  | BG54 | BG72 | BG84 |
| :--- | :---: | :---: | :---: |
| HYD HOSE | 1139 PP | 1125 PP | 1125 PP |
| BUCKET WELDMENT | 8301 WW | 7290 WW | 7872 VW |
| JAW WELDMENT | 8304 VW | 7302 VW | 7302 VW |
| WEIGHT (Ib.) | 900 | 1050 | 1150 |

## Main Component Assembly



## Hydraulic Routing and Installation



Note:

- Both right side cylinder ports must be plumbed together.
- Both left side cylinder ports must be plumbed together.
- Restrictor fitting (Item \#5), plumbed to rod ends of cylinders.

