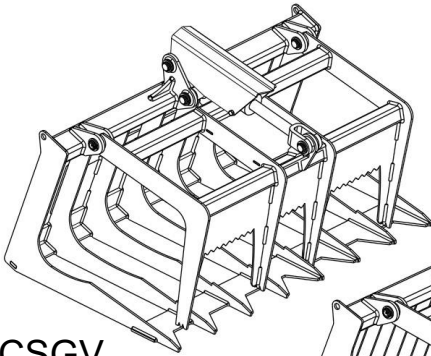
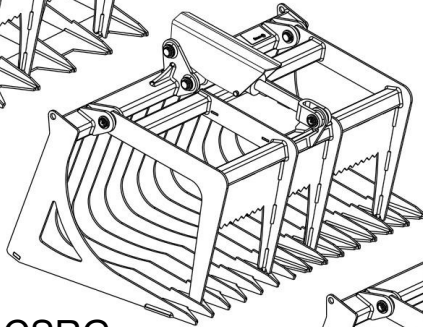


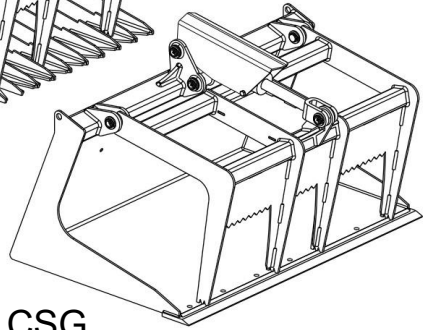
V20 1 Cylinder Grapples



CSGV



CSRG



CSG

Model Number _____.

Serial Number _____.

Serial Numbers 22651 and Greater
Manufacture Date 07/01/22 - Current

Phone: 320-818-4040

06/15/22
Revised 06/15/22

V20 1 CYL

Features of Virnig Mfg. Inc. V20 1 Cylinder Grapples include:

- 2" bore x 6" stroke cylinder.
- Protected cylinder ports.
- Jaw openings greater than 30" for all models.
- Greaseable pins at all pivot points.
- Skeleton style buckets have open back and bottom that allows dirt to fall through.
- Scrap style buckets have optional 1/2" x 6" reversible bolt on edge.
- Recommended for loaders with operating capacity greater than 500 lb.

Initial Use

- Check that quick-tach on grapple fits onto loader properly. Pins must engage through plates at bottom of quick-tach.
- With bottom of attachment touching ground/floor, open jaw and slowly roll back grapple. 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 grapple fully forward. Check that hoses are long enough so they do not stretch or bind.
- Hoses need to be secured so they do not get damaged during operation.
- 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 3800 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 loader.
- Always follow all safety and operating instructions of 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.

Attachment Weights (lbs.)

CSGV36-240

CSGV42-265

CSGV48-280

CSRG36-300

CSRG42-320

CSRG48-345

CSG36-325

CSG42-355

CSG48-380

Note: ASV mount adds approximately 30 lbs. and Bobcat mount adds 15 lbs. to above model weights.

Maintenance

*Every 10 hours of operation

- Grease hinge pins and cylinder pins (5 grease fittings total).
- Inspect cylinders, hydraulic fittings, and hoses for leaks and damage. Replace as needed. Make sure 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.

Labels on V20 1 Cylinder Grapple Attachments



5263PP – PINCH POINT WARNING LABEL

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



5264PP – CRUSH HAZARD WARNING LABEL

Always stay clear of grapple jaws. Never inspect grapple with loader running or with jaws open.

Labels on V20 1 Cylinder Grapple Attachments (cont.)



5265PP – HYDRAULIC WARNING LABEL

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

V20 1 Cylinder Grapple Label Parts List

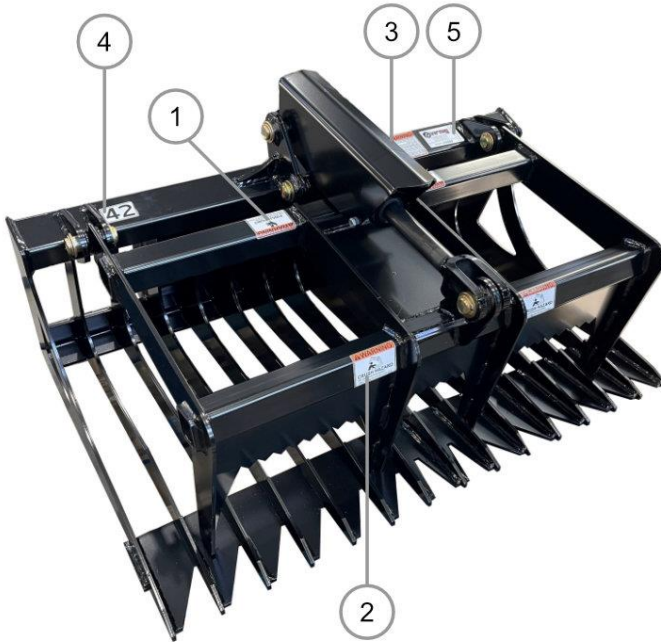
ITEM	PART NO.	QTY	DESCRIPTION
1	5263PP	2	PINCH POINT WARNING LABEL
2	5264PP	2	CRUSH HAZARD WARNING LABEL
3	5265PP	1	HYDRAULIC WARNING LABEL
4	9390PP	1	36 WIDTH LABEL
	13157PP		42 WIDTH LABEL
	10259PP		48 WIDTH LABEL
5	SERIALTAG	1	SERIAL NUMBER TAG

Label Locations

ITEM NUMBER



QUANTITY



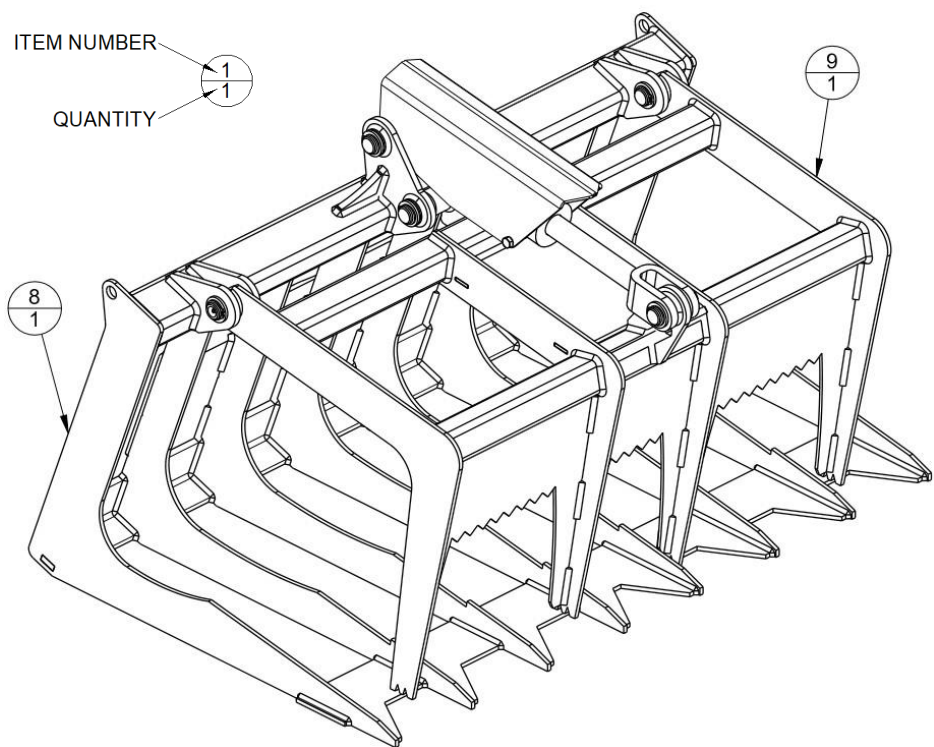
V20 1 Cylinder Grapple Parts List

ITEM	PART NO.	QTY	DESCRIPTION
1	1034PP	5	1/4"-28 STRAIGHT GREASE ZERK
A 2	13863PP	1	HYD HOSE 1/4" X 54" LG 6FJX TO 6FJX W/ SLEEVE
	10488PP		HYD HOSE 1/4" X 60" LG 6FJX TO 6FJX W/ SLEEVE
	10489PP		HYD HOSE 1/4" X 68" LG 6FJX TO 6FJX W/ SLEEVE
	1128PP		HYD HOSE 1/4" X 88" LG 6FJX TO 6FJX W/ SLEEVE
3	1072PP	1	1/16" DIA RESTRICTOR FITTING IN LINE 6 JIC
4	10884PP	1	2" BORE 6" STROKE CYLINDER
5	1145PP	2	ADAPTER 6MJ TO 8MB
6	12234VW	1	CUL HYD GUARD WDT
A 7	12174PP	1	HYD HOSE 1/4" X 46" LG 6FJX TO 6FJX W/ SLEEVE
	13863PP		HYD HOSE 1/4" X 54" LG 6FJX TO 6FJX W/ SLEEVE
	10488PP		HYD HOSE 1/4" X 60" LG 6FJX TO 6FJX W/ SLEEVE
	1126PP		HYD HOSE 1/4" X 80" LG 6FJX TO 6FJX W/ SLEEVE
8	-----	1	BUCKET WELDMENT
9	13919VW	1	CUL GRAPPLE JAW WELDMENT
10	5093VP	2	HINGE PIN
11	5094VP	3	CYLINDER PIN
12	5146PP	10	1" X 10GA MACHINERY BUSHING
13	5147PP	10	1" EXTERNAL SNAP RING
14	6140PP	1	3/8"-16 TOP LOCK FLANGE NUT
15	6997PP	2	ELBOW 90 6MJ TO 6MB
16	8468PP	1	3/8"-16 X 3 3/4" LG HHCS
17	8494PP	1	COUPLER FEMALE 8FB
18	8495PP	1	COUPLER MALE 8FB
19	9333PP	1	COUPLER 90 ELBOW FEMALE 6MJ
20	9334PP	1	COUPLER 90 ELBOW MALE 6MJ

A: Hose lengths vary with loader brand.

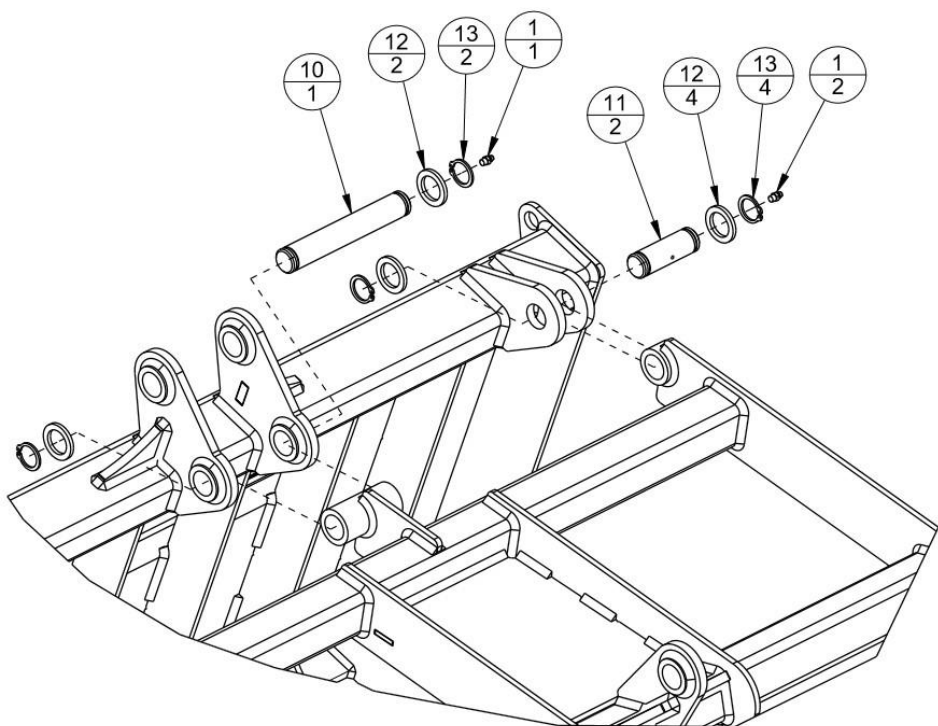
Note: For ASV loaders, replace straight couplers (item #17 and #18) and adapter (item #5) with 90 elbow couplers (item #19 and #20).

Main Component Assembly

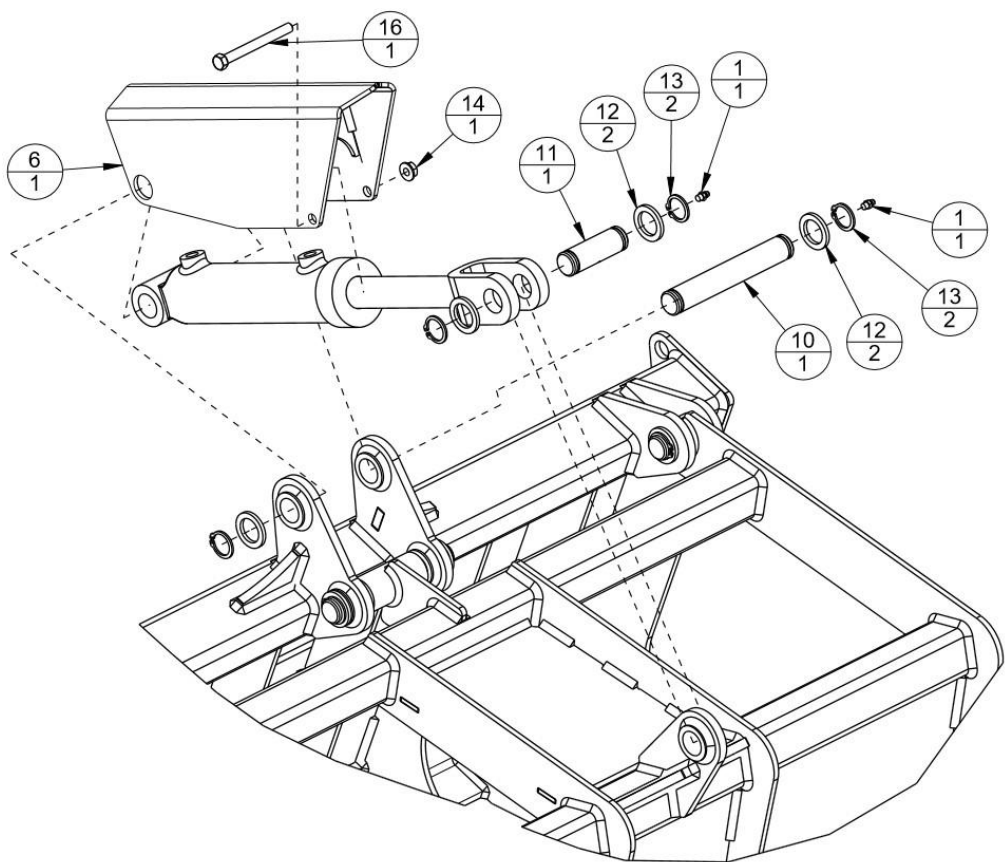


CSGV42 Shown

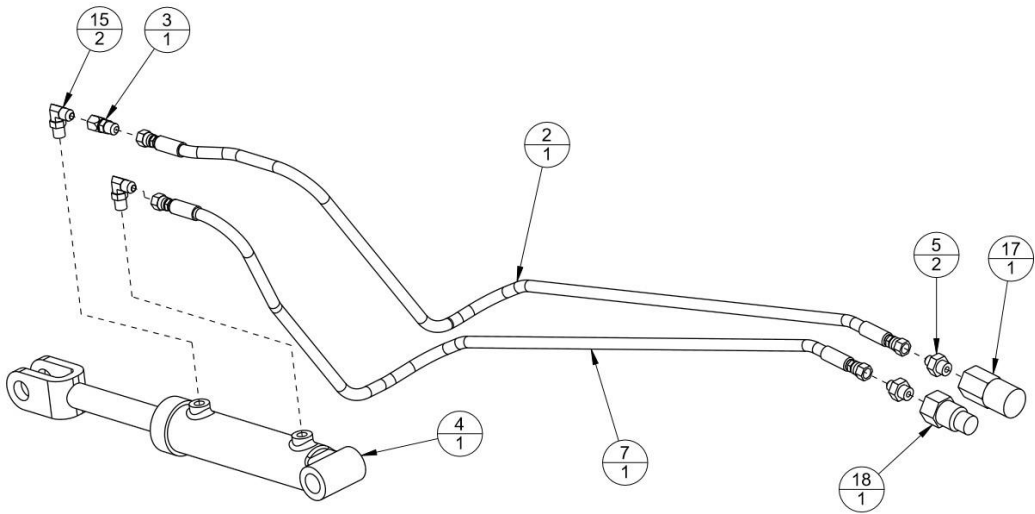
Hinge Pin Installation



Cylinder Pin Installation



Hydraulic Routing and Installation



Note:

- Restrictor fitting (Item #3), plumbed to rod end of cylinder.
- Hose loop on grapple (if equipped) can be used to best route hoses to loader.
- Hoses to loader can be routed toward the right or left.
- Hose loop on loader (if equipped) can be used to help secure hoses.

Optional Bolt on Edge

(Used on CSG models)

MODEL WIDTH	BOLT ON EDGE	HARDWARE QTY*
36	CBEK36	6
42	CBEK42	7
48	CBEK48	8

*1/2"-13 x 1 3/4" LG PLOW BOLT (14037PP) with 1/2"-13 REV LOCK NUT (1003PP).