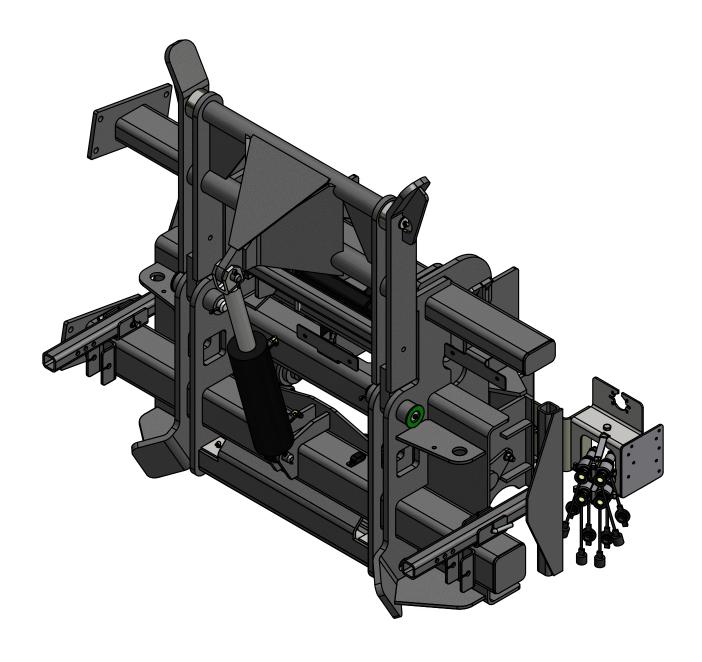


00101782 FRT HARNESS ASS'Y 500QD HD COMBO



EQUIPMENT MAY NOT BE EXACTLY AS SHOWN. SOME COMPONENTS MAY BE OPTIONAL.
TO MAINTAIN OUR ON-GOING PRODUCT DEVELOPMENT AND IMPROVEMENT PROGRAM, VIKING-CIVES LTD. RESERVES THE RIGHT TO CHANGE EQUIPMENT & SPECIFICATION WITHOUT NOTICE.



OPERATING INSTRUCTIONS

TO LIFT AND LOWER THE PLOW

To raise the plow, pull the plow lift lever. The plow lift lever activates a three-position valve. When you release the lever the valve will return to a neutral hold position and the plow will remain in that position.

To lower the plow, push the plow lift lever. When you release the lever, the valve will return to a neutral hold position.

NOTE: For plows with this lift valve arrangement, it is necessary to hold the plow lift lever in the down position for a few moments while plowing to allow the plow to seek its lowest level. After this has been accomplished you can release the lever and the plow will be properly set to follow the contour of the plowing surface. (Warning: Do not push lever too long or the J coupler will disengage.)

TO DETACH THE PLOW



DANGER

Moving heavy equipment can result in serious injury or death. Clear area of all personnel prior to operating equipment.

- 1. Disconnect any hydraulic hoses that may be present for hydraulic plow functions like power reverse or moldboard tilt functions.
- 2. Fully raise plow into the position shown. (See Figure 1)

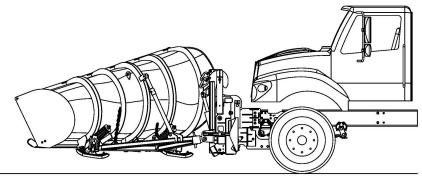


Figure 1: Plow in Fully Raised Position

3. Retract the hydraulic lock pins for the plow, located at the bottom of the J coupler. (Note: Do NOT retract hitch lock pins)



4. Lower the plow to the ground using the plow lift function. Continue to lower until the coupler is disengaged from the hitch top pivot portion. (See Figure 2)

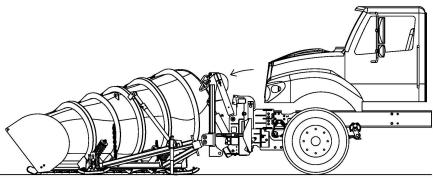


Figure 2: Plow Lowered to Ground

5. Slowly back the truck away, while ensuring that the couplers are fully disengaged. (See Figure 3)

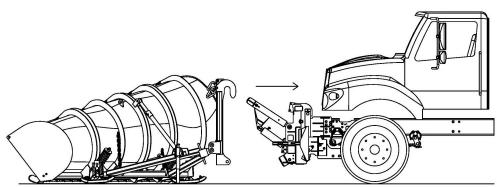


Figure 3: Back away from Plow

Note: Procedure applies to all plows, one way plow shown for reference. Attachment procedure is the reverse of above.



TO TILT THE PLOW HARNESS

The 500QD HD Combo harness has the added feature of hydraulic tilt to allow tilting of the chassis hood, giving easy access to the engine compartment

Controls may be located outside the cab on the left front corner of the unit or optionally inside the cab. Operation of the harness is the same regardless of the location of controls.

The operator should familiarize themselves with the location of the controls on the unit prior to attempting to operate.

- 1. Detach the front plow. (See plow detaching procedure)
- 2. Park the truck on a firm, level surface (such as a concrete floor or paved area) that is large enough to safely accommodate this product.
- 3. Ensure area in front of vehicle is completely free from any and all obstacles and/or obstructions.
- 4. Lower wing to the ground.
- 5. Locate controls for upper lock pins and tilt harness functions as noted above.
- 6. Release upper lock pins.
- Tilt hitch forward. (See Figure 4, Note: Hitch will not tilt with the plow attached)
- Stop the engine and secure the vehicle in accordance with lock out procedures prior to servicing.

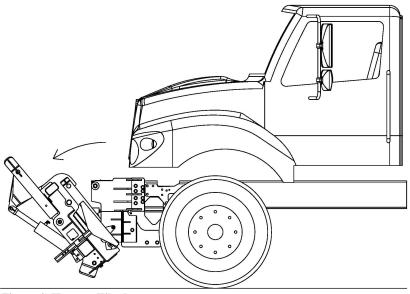


Figure 4: Harness Tilted



TO DETACH THE HARNESS



DANGER

Moving heavy equipment can result in serious injury or death. Clear area of all personnel prior to operating equipment.

- 1. Detach the front plow. (See plow detaching procedure)
- 2. Lower wing to ground. (Note: Wing should remain attached to harness.)
- 3. Detach hydraulic lines that power the front wing tower, and plow lift and lock functions.
- 4. Lower parking stands.
- Locate controls for upper lock pins, lower lock pins, and tilt harness.
- 6. Release lower lock pins.
- 7. Release upper lock pins.
- 8. Use tilt hitch function to lower push plate to the ground. (See Figure 5)
- Continue to lower the coupler while reversing the truck to allow the coupler to completely release from the push plate.
- 10. Back away from the front hitch and wing. (See Figure6)

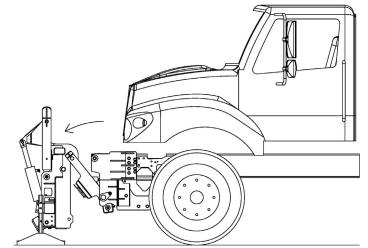


Figure 5: Push Plate Lowered to Ground

- 11. Raise coupler fully using tilt hitch function.
- 12. Engage upper and lower lock pins.
- 13. Visually inspect lock pins to ensure complete engagement.

Note: Attachment procedure is the reverse of above.

Figure 6: Back away from Push Plate



00101782: FRT HARNESS ASS'Y 500QD HD COMBO

ITEM ID	ITEM NO	DESCRIPTION	QTY REQ
1	00101161	BOTTOM LOCK ASS'Y HYD D & PWR T	1
2	00101163	END PLATE - HOUSING HYD D & PWR T	2
3	00101174	INNER HOUSING WELD'T HYD D & PWR T	1
4	00101194	CLAMP POLYMER HYD D & PWR T	2
5	00101195	HYDDTH STOP PLATE HYD LOCK	2
6	00101280	HARNESS LOCK PIN, TOP OVERSIZE	2
7	00101719	HYDDTH QD & VALVE BRKT 30 DEG WELD'T LTH	1
8	00101783	HYD PIN KIT 500QD HD COMBO	1
9	00101784	PUSHFRAME TUBE WELD'T 500QD HD COMBO	1
10	00101790	QCK HTCH MALE PVT ASS'Y 500QD HD COMBO	1
11	00101792	SWING ARM WELD'T QD HD COMBO HITCH	1
12	00101795	PARKING STAND WELD'T 500QD HD COMBO	2
13	00101798	HYDDTH QD & VALVE BRKT EXTENSION BRACKET	1
14	00401690	POLY BUSHING 3.000N 2.125M 0.250S	2
15	00900003	PIN 1.000 DIA X 2.563 WELD'T	1
16	00900113	PIN 1.000 DIA X 4.625 WELD'T	2
17	00900119	PIN 2.125 DIA X 7.125 WELD'T	2
18	00900162	PIN 1.000 DIA X 3.000 WELD'T	1
19	00900327	PIN 1.500 DIA X 6.625 WELD'T W/ GREASE	2
20	01501435	HOSE HYD 3/8 100R2 0630031-16-0630116	2
21	01900238	SAFEWAY QUICK DISC. KIT	2
22	0540002	CYLINDER HYD DA 2 X 5 7/16 HYD DETACH	1
23	0540006	CYLINDER HYD DA 2 1/2 X 6 FRONT LIFT	2
24	0540040	CYLINDER HYD DA 4 X 10 FRONT LIFT	1
25	0630016	HYD ADAPTER 3/8 SAE 90 3/8 JIC	7
26	0630019	HOSE CLAMP 3/8 SINGLE HOSE INSULATED	3
27	0630020	HOSE CLAMP 3/8 DOUBLE HOSE INSULATED	6
28	0630028	HYD ADAPTER 3/8 JIC 3/8 OR STRAIGHT	3
29	0630041	HYD ADAPTER 1/2 MNPT 3/8 JIC STR	4
30	0630587	HYD ADAPTER 3/8 RUN TEE SWIVEL	2
31	HW13A-0840	COTTER PIN 1/4 X 2 1/2 ZINC	2
32	HW13A-1032	COTTER PIN 5/16 X 2 ZINC	2
33	HW13A-1040	COTTER PIN 5/16 X 2 1/2	2
34	HW13B-1032	ROLL PIN 5/16 DIA X 2 LG	2
35	HW13S-1648	PIN BENT PULL 1/2 X 3 ZINC	2
36	HW14A-06	FLATWASHER SAE 3/8 ZINC	8
37	HW14C-08	LOCKWASHER SPLIT 1/2 ZINC	8
38	HW14D-08	FLATWASHER HARDENED 1/2 ZINC	4
39	HW29A-02	GREASE FITTING 1/8 NPT STR	2
40	HW29B-02	GREASE FITTING 1/8 NPT 90 DEG	4



00101782: FRT HARNESS ASS'Y 500QD HD COMBO

ITEM ID	ITEM NO	DESCRIPTION	QTY REQ
41	HW30A-08	NUT HEX 1/2 UNC ZINC	2
42	HW36D-06	NUT HEX ELASTIC 3/8 UNC ZINC	8
43	HW36D-08	NUT HEX ELASTIC 1/2 UNC ZINC	2
44	HW36D-16	NUT HEX ELASTIC 1 UNC ZINC	2
45	HW40A-0612	BOLT HEX 3/8 X 1 1/2 UNC ZINC	8
46	HW40A-0810	BOLT HEX 1/2 X 1 1/4 UNC ZINC	2
47	HW40A-0816	BOLT HEX 1/2 X 2 UNC ZINC	2
48	HW40A-1648	BOLT HEX 1 X 6 UNC ZINC	2
49	HW50E-0812	CAP SCREW SOCKET HEAD 1/2X1 1/2NC BLACK	6



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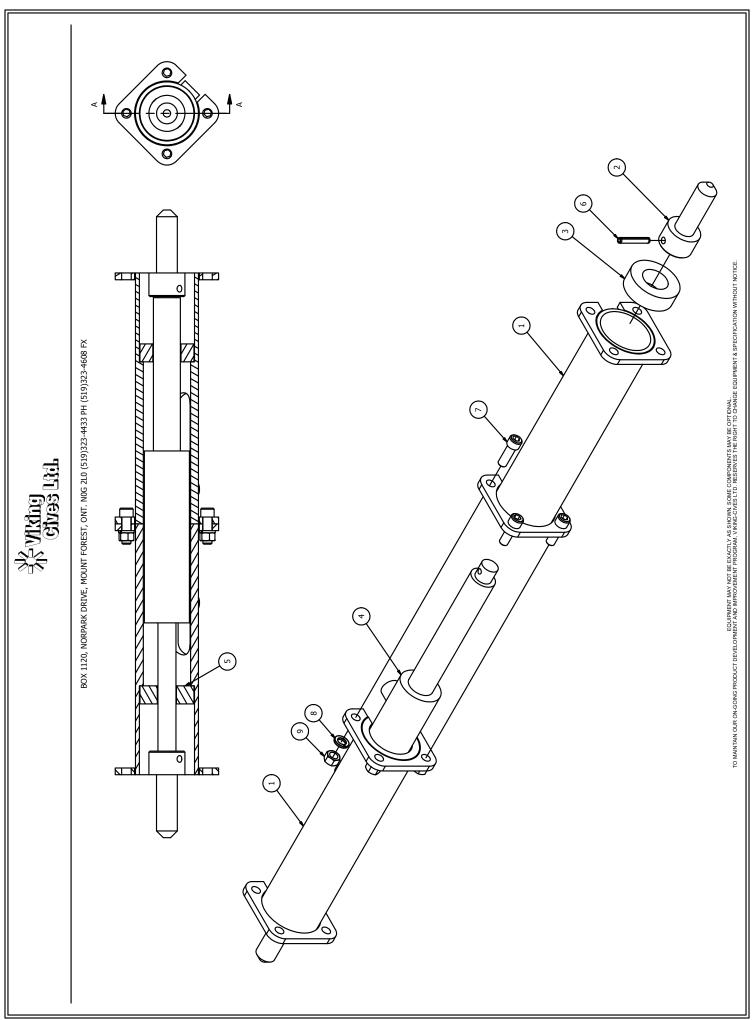


00101161

BOTTOM LOCK ASS'Y HYD D & PWR T

ITEM	DRAWING NO.	DESCRIPTION	QTY
1	00101162	HOUSING WELD'T HYD D & PWR T	2
2	00900210	PIN 1.156 DIA X 3.500 BODY	2
3	00401361	TUBE RD 3.000N 1.563D 1.000S	1
4	0540003	CYLINDER HYD DA 2 X 5 1/4 HYD DETACH	1
5	00401362	TUBE RD 3.000N 1.063D 1.000S	1
6	HW13B-1032	ROLL PIN 5/16 DIA X 2 LG	2
7	HW50E-0812	CAP SCREW SOCKET HEAD 1/2X1 1/2NC BLACK	4
8	HW14C-08	LOCKWASHER SPLIT 1/2 ZINC	4
9	HW30A-08	NUT HEX 1/2 UNC ZINC	4

00101782-M 10/23/2013





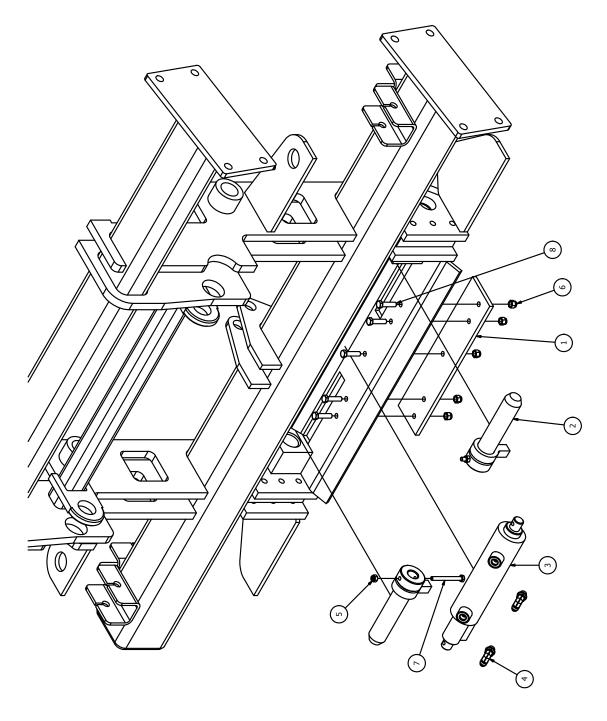
00101783

HYD PIN KIT 500QD HD COMBO

	DD A WING NO	DESCRIPTION	OTV
ITEM	DRAWING NO.	DESCRIPTION	QTY
1	00101495	PLATE 3.500 X 15.188 X 0.375	1
2	00900330	PIN 1.500 DIA X 6.000 STOP LUG	2
3	0540002	CYLINDER HYD DA 2 X 5 7/16 HYD DETACH	1
4	0630016	HYD ADAPTER 3/8 SAE 90 3/8 JIC	2
5	HW36D-05	NUT HEX ELASTIC 5/16 UNC ZINC	2
6	HW36D-06	NUT HEX ELASTIC 3/8 UNC ZINC	5
7	HW40A-0524	BOLT HEX 5/16 X 3 UNC ZINC	2
8	HW40A-0612	BOLT HEX 3/8 X 1 1/2 UNC ZINC	5

00101782-M 10/24/2013

BOX 1120, NORPARK DRIVE, MOUNT FOREST, ONT. NGG 2L0 (519)323-4433 PH (519)323-4608 FX





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