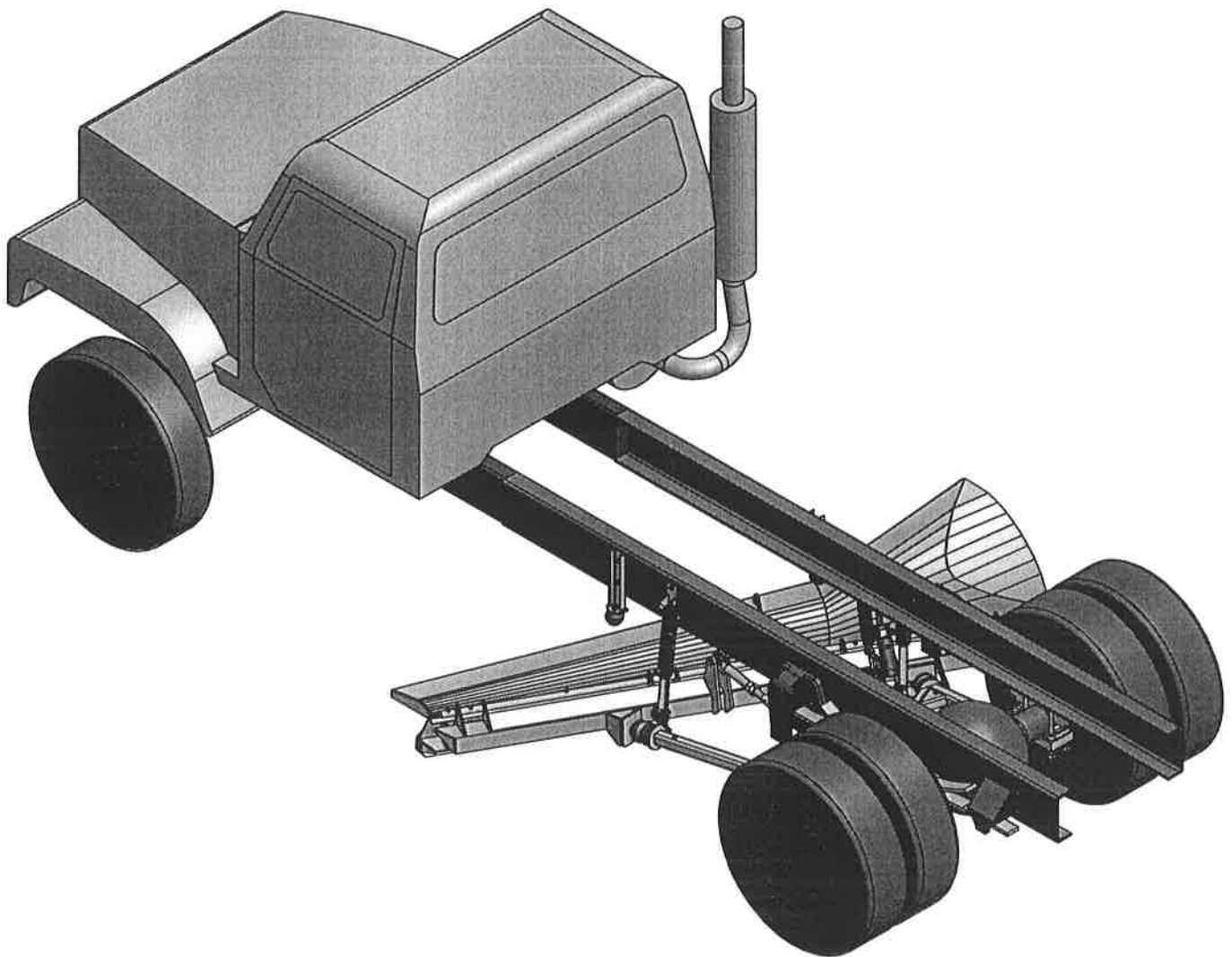


Owner's Manual

U-936 UNDERSLUNG PLOW



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.



INTRODUCTION - U-936 UNDER UNDERSLUNG PLOW

Congratulations and thank you for your purchase of new Viking-Cives Snow & Ice Control equipment. This manual has been created to provide you with installation, set-up, operation and maintenance information for the Viking-Cives U-936 **Underslung Plow**. It has been prepared to familiarize you or any other person who will be assembling, operating, maintaining, or working with this product with the design features, and to instruct you in the recommended operation and maintenance of the unit.

Read this manual carefully before you operate or service your **U-936 Underslung Plow**. Remember that you're working with heavy equipment that can injure you or someone else. You can help lessen the chance of injury by following the procedures in this manual, carefully.

DANGER: If incorrectly used, this equipment can cause severe injury. Your chance of injury can be greatly reduced by following all safety decal notifications. All decals must be kept clean and complete. Replace any decals that are unreadable. Decals may be purchased directly from Viking-Cives Group and/or your nearest authorized dealer. All Operator/Service people should review this manual carefully and become familiar with its contents. **If anyone else beside you operates or services this equipment, make sure they read this manual and are instructed to follow all the safety procedures related to this equipment. Keep this manual available for reference whenever this product is being handled or used. Provide this manual to any new owners and/or operators.**

INSTALLATION

CHASSIS REQUIREMENTS

Chassis:

- Single axle truck with approximately 27,000 lbs GVW.
- Minimum cab to axle dimension CA = 84 inches minimum
- Clearance under drive shaft or hanger bearing to 52" maximum from center line of rear axle should be 22 inches.
- Clearance under drive shaft at 69 inches from rear axle should be 25 inches.
- Clearance under cab, side rails, steps or tank should be 25 inches.

Notes:

- Mufflers, exhaust pipes or other chassis components protruding below 25 inches ground clearance may need to be relocated.
- On trucks equipped with air brakes the rear air brake chambers and slack adjusters **MUST** face towards the rear of the truck in order to allow installation of plow mounting plates.

MOUNTING INSTRUCTIONS

Note: Because of the wide variety of trucks on which the underslung plow can be installed, mounting instructions given are for a medium sized, single axle truck of approximately 27,000 lbs GVW.

- 1) Remove nuts from the "U" clamps which hold the rear axle and suspension in place. See Figure 1. Install hinge plates to the lower portion of the "U" clamps with the lugs facing the front of the truck and replace the nuts. The drive lugs are shipped loose and are to be spaced and welded at time of assembly to allow proper pick up of the drive frame. The height of the drive lugs (mounting plate) from ground should be 16 inches \pm 1 inch.

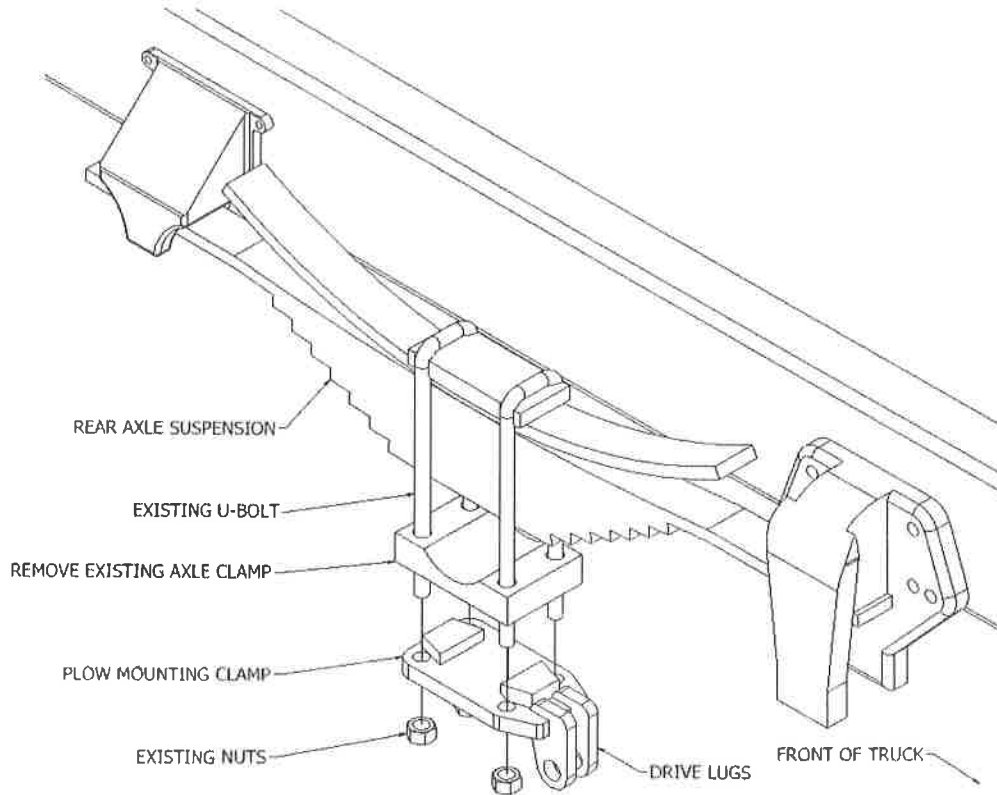


FIGURE 2: AXLE ATTACHMENT

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MOUNTING INSTRUCTIONS

- 2) Place plow assembly (moldboard and drive frame) under the chassis in approximate working position. Connect drive frame to plow mounting plates with drive pins supplied.
- 3) Connect the two double acting cylinders, see Figure 2, and lift bracket assemblies to the plow (One on each side of chassis side rails).
- 4) Connect all hydraulic hoses as shown in diagram included in Parts Diagrams section of this manual.
- 5) With hydraulic power fold moldboard into carrying position and retract lift cylinders fully. Raise plow to within one inch of drive shaft or other obstruction. Mark and drill holes using hanger brackets as templates. Bolt brackets to chassis side rail.

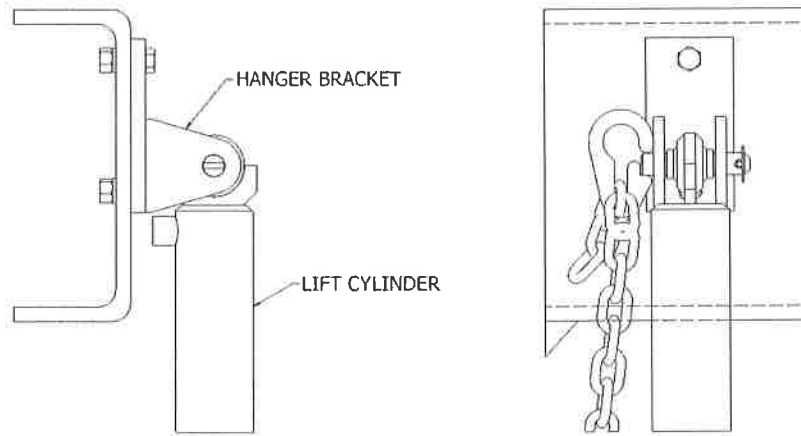


FIGURE 2: CYLINDER SETUP

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OPERATING INSTRUCTIONS

1. The operator should familiarize himself with all equipment prior to operation. The in cab controls are placed at a comfortable reach of the operator, with an allowable amount of adjustment. If necessary, the controls can be adjusted for either driver or passenger use.
2. The in cab control levers are clearly marked as to the equipment/function they control.
3. To raise the scraper, pull back on the appropriate control level, to lower the scraper, push the control level forward.
NOTE: The in cab controls are proportional to the hydraulic valve, therefore the further the control lever is moved the faster the plow or wing will raise or lower.
4. Before putting any equipment into use, check for any worn, damaged or loose components, if necessary repair or replace. Listen for any unusual sounds, if necessary repair and/or replace worn or damaged parts.
5. Before operating any equipment be sure to read and fully understand all caution and safety warnings. Familiarize yourself and others with all caution/warning labels and their locations. Make sure all labels are complete and legible. Replace any labels that have become unreadable and/or missing. Replacement labels can be purchased directly from Viking-Cives or nearest authorized dealer.



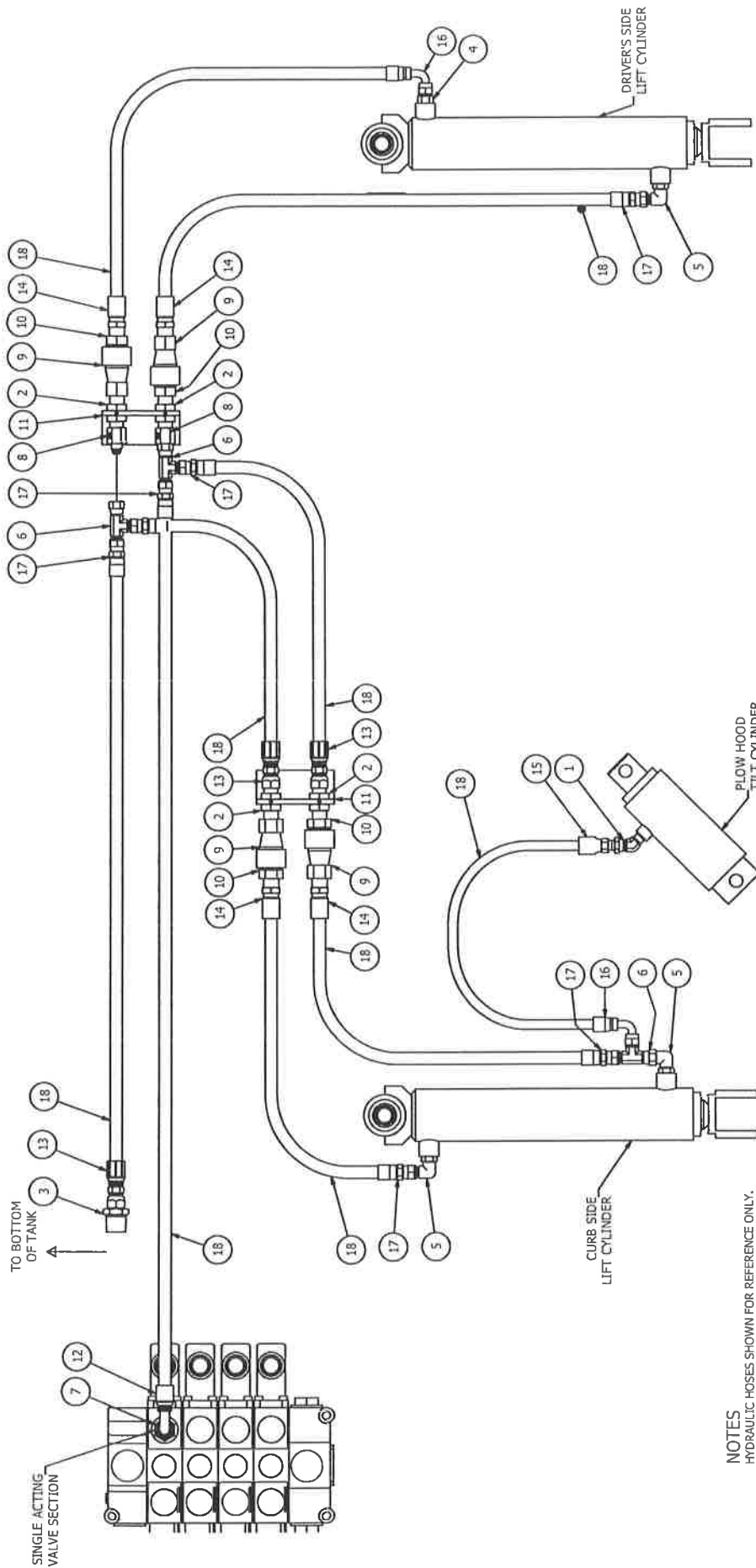
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HYDRAULIC INSTALL KIT U-936

ITEM ID	ITEM NO.	DESCRIPTION	QTY REQ
1	HH-00915-001	FITTING 1/4 M X 1/4 FM SWIVEL 45 DEG	1
2	0630473	HYD ADAPTER 1/2 MNPT X 1/2 MJIC STR BH	4
3	0630083	HYD ADAPTER 3/4 MNPT 1/2 JIC	1
4	0630028	HYD ADAPTER 3/8 JIC 3/8 OR STRAIGHT	1
5	0630082	HYD ADAPTER 3/8 ORB 3/8 JIC	3
6	0630587	HYD ADAPTER 3/8 RUN TEE SWIVEL	3
7	0630087	HYD ADAPTER 5/8 ORB 1/2 JIC	1
8		HYD ADAPTER REDUCER 1/2 FJIC 3/8 MJIC	2
9	0630059	HYD QUICK DISC 1/2 COUPLING	4
10	0630058	HYD QUICK DISC 1/2 MALE	4
11	01900232	QUICK DISCONNECT MTG PLT	2
12	0630122	HYD HOSE END 1/2 JIC F SWIV 90 3/8 HOSE	REF
13	0630123	HYD HOSE END 1/2 JIC FEM SWIV 3/8 HOSE	REF
14	0630284	HYD HOSE END 1/2 MNPT 3/8 HOSE	REF
15	0630117	HYD HOSE END 1/4 MNPT TO 3/8 HOSE	REF
16	0630031	HYD HOSE END 3/8 FEM JIC 37 DEG SWIV 90	REF
17	0630116	HYD HOSE END 3/8 FEM JIC SWIVEL	REF
18	0630001	HOSE HYD 3/8 100R17	REF



BOX 1120, NORPARK DRIVE, MOUNT FOREST, ONT. N0G 2L0 (519)323-4433 PH (519)323-4608 FX



NOTES
 HYDRAULIC HOSES SHOWN FOR REFERENCE ONLY.
 HOSE ASSEMBLIES ARE NOT INCLUDED IN THIS KIT.

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MAINTENANCE

In preparation for the snowplowing season and after every eight (8) hours of operation, a visual equipment inspection must be performed. Look for any damaged components, bends, cracked welds, hydraulic leaks, etc. Inspect all fasteners; tighten any that have loosened and replace any that are damaged. Check all hydraulic hoses for cuts, cracks and/or leaks.

Periodically during plowing, stop to inspect plow cutting edges for wear. At the first sign of excessive wear, discard and replace with new parts.