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

# Owners Manual

**PLOW ASS'Y COMPLETE MW/MoDOT**

Unit Serial Number: \_\_\_\_\_



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

## WARRANTY POLICY

VIKING – CIVES LTD warrants products of its manufacture against defects in workmanship and material for a period of one year, from the date of shipment to the customer. In consequence of this warranty, any component part or parts of such products proving defective within the above specified time will be repaired or replaced F.O.B. factory. Providing such parts are returned, transportation prepaid, to the factory and found defective by VIKING – CIVES LTD.

This warranty will not apply to any product which has been repaired or altered outside of VIKING – CIVES LTD factory in any way, so as in VIKING – CIVES LTD's judgement, to affect its stability or reliability, nor which has been subject to misuse or accident.

The obligations of VIKING – CIVES LTD under this warranty are limited to the replacement of defective parts. Such obligations are exclusive and in lieu of all other remedies, warranties, guarantees of liabilities, expressed or implied, with respect to each product delivered, hereunder, arising by law or otherwise (including without limitation any obligation or liability by VIKING – CIVES LTD arising from negligence or with respect to fitness, merchantability, loss of use, revenue, or profit, or consequential damages or injuries).

This limited warranty shall not be extended, altered, or varied except by a written instrument signed by VIKING – CIVES LTD.

VIKING – CIVES LTD assumes no responsibility for engines, electrical equipment or any other equipment and accessories not manufactured by VIKING – CIVES LTD beyond the warranty of the manufacturer of such equipment of accessories.

All warranty work done on VIKING-CIVES LTD equipment must have prior authorization from VIKING-CIVES LTD along with a **“Return Goods Authorization”** number. All labor and parts issued by user for VIKING-CIVES LTD warranty without an authorization number and a signed authorization warranty form will be at the users own cost.

## ORDERING PARTS

Delays and errors can be eliminated when ordering instructions are followed correctly.

1. Place orders direct with Viking-Cives Group/nearest dealer.
2. State Company name, address, and postal/zip code.
3. Give the exact model and serial number of the equipment/unit (stamped on the unit identification plate.)
4. Furnish part number, description and quantities required.
5. Print or type order clearly.
6. Give specific shipping instructions.



**VIKING-CIVES (USA)** – RR2, Box 36-1/2; Harrisville, New York 13648; (315) 543-2321, (315) 543-2366 Fax

**VIKING-CIVES (USA) Midwest Division** – 212 North Evans Road; Evansdale, Iowa 50707; (319) 236-7977, (319) 236-7980 Fax

**VIKING-CIVES LTD.** – RR4, Box 1120; Mount Forest, Ontario, Canada N0G 2L0; (519) 323-4433, (519) 323-4608 Fax



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## WARRANTY REQUEST PROCEDURE

All repairs considered for warranty that are performed outside of VIKING – CIVES LTD; require prior written authorization from VIKING – CIVES LTD. Failure to obtain written warranty authorization prior to repairs may result in the rejection of the warranty claim. **To obtain warranty consideration one must provide all required VIKING – CIVES LTD with unit information including date of manufacture and serial numbers.** In most cases this information is easily obtained from the “Shipped Unit Tag” (located in most cases inside the driver’s side door) and/or individual unit serial tag.

### **(A) To obtain Parts Warranty Consideration:**

- (1) Contact VIKING – CIVES LTD customer service to obtain a Return Goods Authorization (RGA) number. Any product arriving at VIKING – CIVES LTD without a RGA number will be rejected and returned to the sender at his or her own expense.
- (2) Goods are to be shipped prepaid to VIKING – CIVES LTD, Mount Forest, Ontario Canada. **All items should be clearly marked with the appropriate RGA number.**
- (3) When a replacement item is shipped to replace a defective part for warranty consideration the following additional steps will occur:
  - a) An invoice will be generated for the value of the replacement item(s).
  - b) The defective part(s) must be returned (prepaid) to VIKING – CIVES LTD.
  - c) Upon receiving the defective part(s) VIKING – CIVES LTD will issue and process a Discrepant Material Report (DMR). Once the evaluation of the DMR report is complete and the parts are deemed warranty, a credit will be issued against the outstanding invoice. **If the part(s) are deemed Non-warranty the invoice will remain outstanding to be paid to VIKING – CIVES LTD.** Any part(s) to be returned to the customer will be at his or her own expense.

### **(B) To obtain Labor Parts Repair Warranty Consideration:**

In the event that repairs are required outside of VIKING – CIVES LTD facility that may be considered for warranty the following steps must occur. **Notification of VIKING – CIVES LTD customer service must take place prior to the start of any repairs.**

- (1) Contact VIKING – CIVES LTD customer service to obtain a Warranty Claim Form (WCF) and warranty authorization number.
- (2) Fill out all required WCF information and fax or mail the completed form to VIKING – CIVES LTD, attention Customer Service Department.
- (3) Once the WCF report has been reviewed warranty authorization will be granted or denied. **NOTE: VIKING – CIVES LTD warranty labor rates will apply unless specifically determined otherwise.** Any part(s) involved in a WCF request must follow the Parts Warranty Consideration procedures.

### **For Customer Service and/or Parts requests please contact:**

Customer Service:

Ron Grant – Customer Service Manager ([rgrant@viking-cives.ca](mailto:rgrant@viking-cives.ca))  
Ph. (519) 323-4433; Fax (519) 323-4608

Parts Service:

Kevin Paczay – Parts Sales ([kpaczay@viking-cives.ca](mailto:kpaczay@viking-cives.ca))  
Ph. (519) 323-4433; Fax (519) 323-4608



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## INTRODUCTION

This instruction/parts manual has operation and maintenance information for the Viking-Cives (**insert equipment Type**). It has been prepared to familiarize you with the design features of the unit, and to instruct you in its proper operation and maintenance.

Read this manual carefully before you operate or service your (**insert equipment Type**). 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 caution/warning 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 the 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 the safety procedures related to this equipment.**

## PERIODIC MAINTENANCE INSPECTION DAILY INSPECTION AND LUBRICATION

Daily inspection along with periodic preventive maintenance will reduce the chance of any major repairs and down time during equipment use.

1. Check the fluid level in the hydraulic oil reservoir. If the sight indicates low oil level, add the appropriate amount of the specified hydraulic fluid.
2. Grease all required components:
  - All plow harness sheave nipples.
  - All pump drive shaft nipples.
  - Front and Rear tower sheave swivel blocks.
  - Wing extension arm nipples.
  - Front and Rear tower guide tracks.
  - All front harness pivot points.
3. Check all components for loose and/or missing fasteners, if required tighten and/or replace.
4. Visually inspect all hydraulic connections and hoses for cracks and/or leaks.
5. Check all cables, chains and sheaves for excessive wear or damage.
6. Visually inspect plow and wing units. Check cutting edges and wear shoes. If cutting edge has excessive wear remove and rotate, or if required replace. **CAUTION:** Do not allow cutting edge to wear down to mounting angle. Any wear to the mounting angle may affect the operation and safety of the equipment. Replacement is costly.
7. At the beginning of each shift visually inspect all caution and warning decals. All decals should be complete and legible. If decals are not legible, clean them. If cleaning the decals does not make them legible, install new decals.



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## GENERAL OPERATING INSTRUCTIONS

1. The operator should familiarize himself with all equipment prior to operation. The in cabs 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 arranged from left to right as the operator sees the plows.
  - First lever: Front Plow (One-way, Reversible, etc.)
  - Second lever: Front of Wing
  - Third lever: Rear of Wing
  - Fourth lever: Wing Brace (Slider)All levers are clearly marked as to the equipment/function they control.
3. To raise the plow or wing, pull back on the appropriate control level, to lower the plow or wing, 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 Group and/or the nearest authorized dealer.



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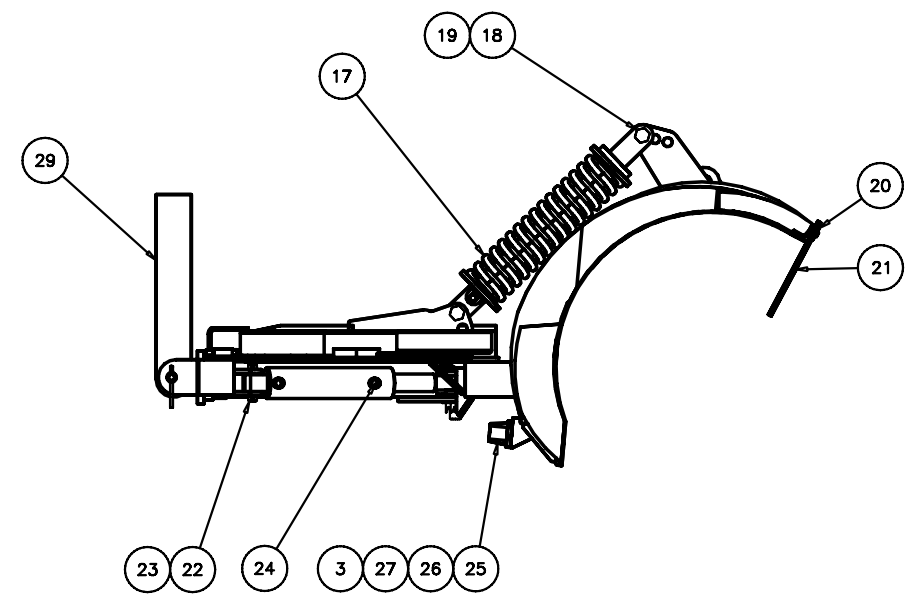
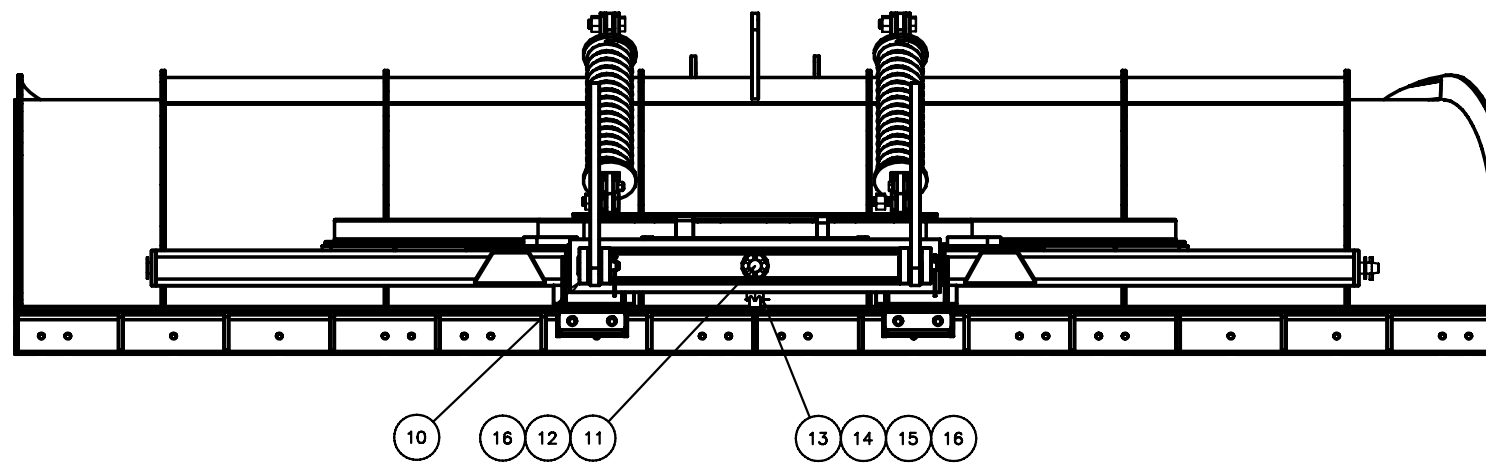
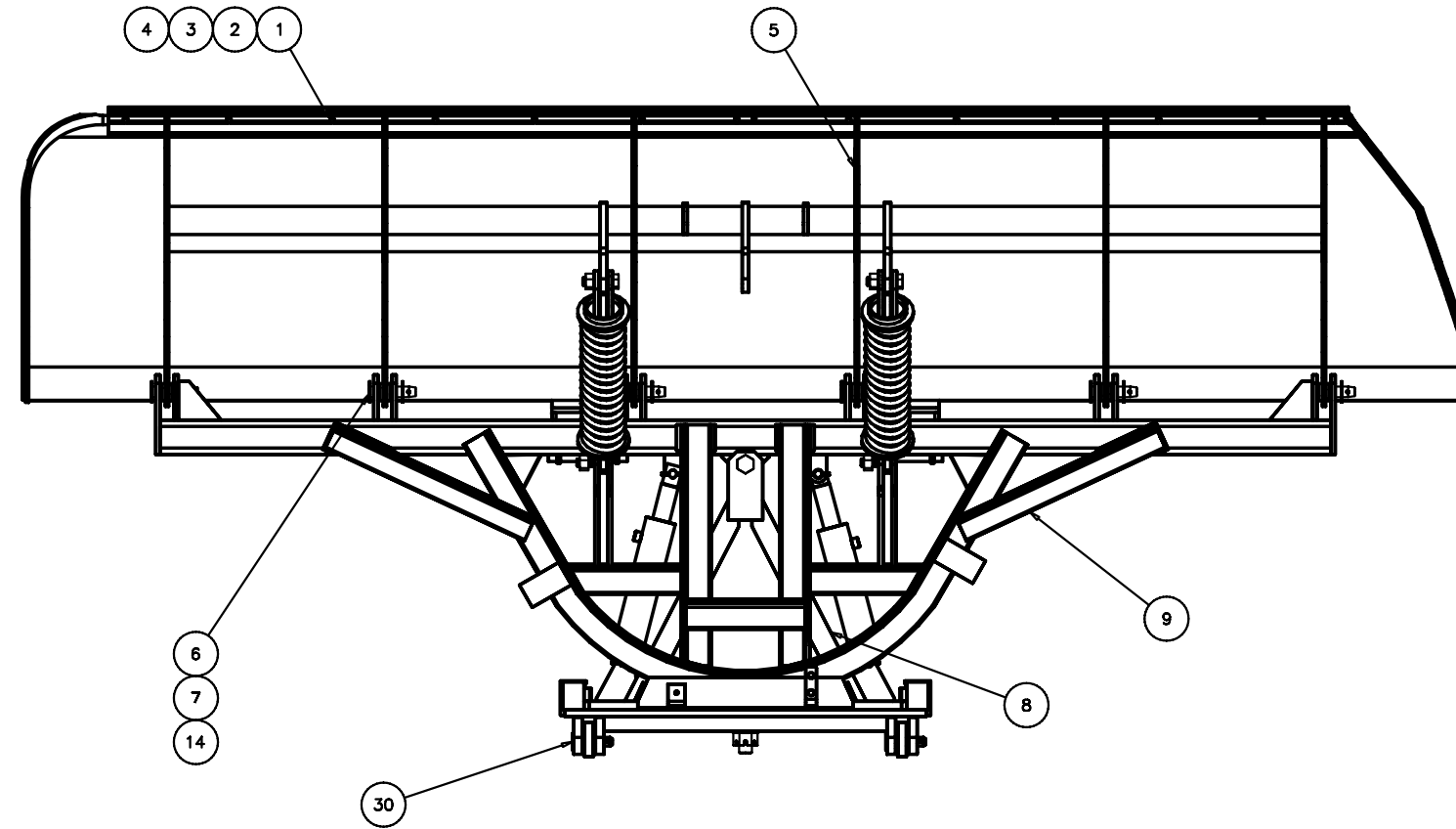
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01101694: PLOW ASS'Y COMPLETE MW/MoDOT - 14FT

ITEM ID	ITEM NO	DESCRIPTION	QTY REQ	OPTIONAL
1	HW40A-0612	BOLT HEX 3/8 X 1 1/2 UNC ZINC	13	
2	HW30A-06	NUT HEX 3/8 UNC ZINC	13	
3	HW14A-06	FLATWASHER SAE 3/8 ZINC	30	
4	HW14C-06	LOCKWASHER SPLIT 3/8 ZINC	13	
5	01101693	MOLDBOARD WELD'T MW/MoDOT - 14FT	1	
6	00900111	PIN 1.250 DIA X 4.375	6	
7	HW13B-1240	ROLL PIN 3/8 X 2 1/2 ZINC	6	
8	01101683	CENTER SPRING MOUNT WELD'T	1	
9	01101689	PIVOT FRAME WELD'T - MW/MoDOT	1	
10	HW40A-1220	BOLT HEX 3/4 X 2 1/2 UNC ZINC	8	
11	HW14B-12	FLATWASHER USS 3/4 UNC ZINC	16	
12	HW36D-12	NUT HEX ELASTIC 3/4 ZINC	8	
13	01101686	PUSH FRAME WELD'T MW/MoDOT	1	
14	21100035	VERTICAL PIVOT BAR WELDMENT	1	
15	00900274	BOLT DRILL 1.500 X 6.000	1	
16	HW30C-24	NUT HEX SLOTTED 1 1/2 UNC ZINC	1	
17	00900141	BOLT DRILLED 1.250 X 6.063	1	
18	HW14B-20	FLATWASHER USS 1 1/4 ZINC	7	
19	HW30C-20	NUT HEX SLOTTED 1 1/4 UNC ZINC	1	
20	HW13A-0840	COTTER PIN 1/4 X 2 1/2 ZINC	2	
21	01101614	COMPRESSION ARM ASS'Y TYPE 23	3	
22	HW40A-1628	BOLT HEX 1 X 3 1/2 UNC ZINC	6	
23	HW36D-16	NUT HEX ELASTIC 1 UNC ZINC	6	
24	01101748	RUBBER DEFLECTOR PLATE 14 FT 10 GA	1	
25	05200026	RUBBER DEFLECTOR 14 FT MoDOT	1	
26	00900140	PIN 1.000 DIA X 3.500	4	
27	HW13B-1232	ROLL PIN 3/8 X 2 ZINC	8	
28	0540007	CYLINDER HYD DA 3 X 9 1/4	2	
29	180572C	RUBBER BUMPER MC21685T11	2	
30	HW36D-06	NUT HEX ELASTIC 3/8 UNC ZINC	4	
31	HW40A-0618	BOLT HEX 3/8 X 2 1/4 UNC ZINC	4	

Ordering Note:

An alpha designation in the Item ID column indicates a sub-component for that parent item. When placing parts orders reference the parent item to receive a complete assembly. Individual items can be ordered separately if required by ordering the alpha designated item number.





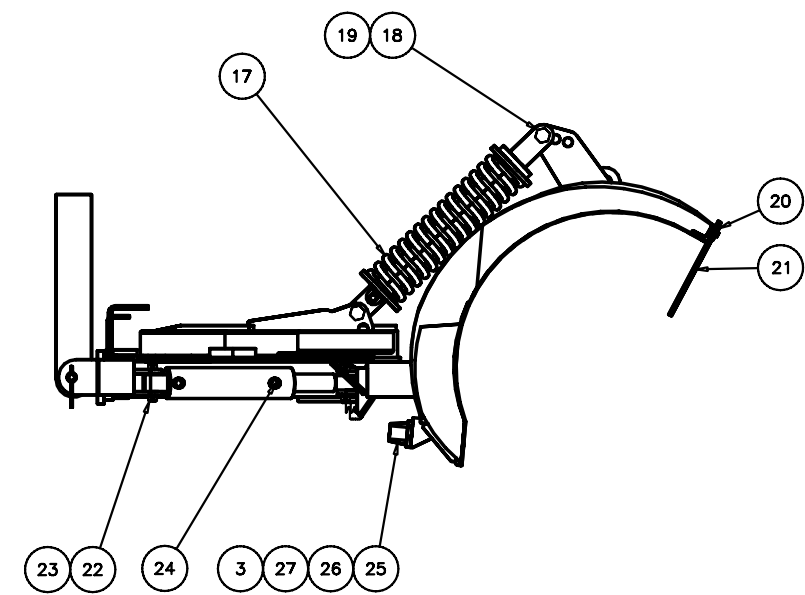
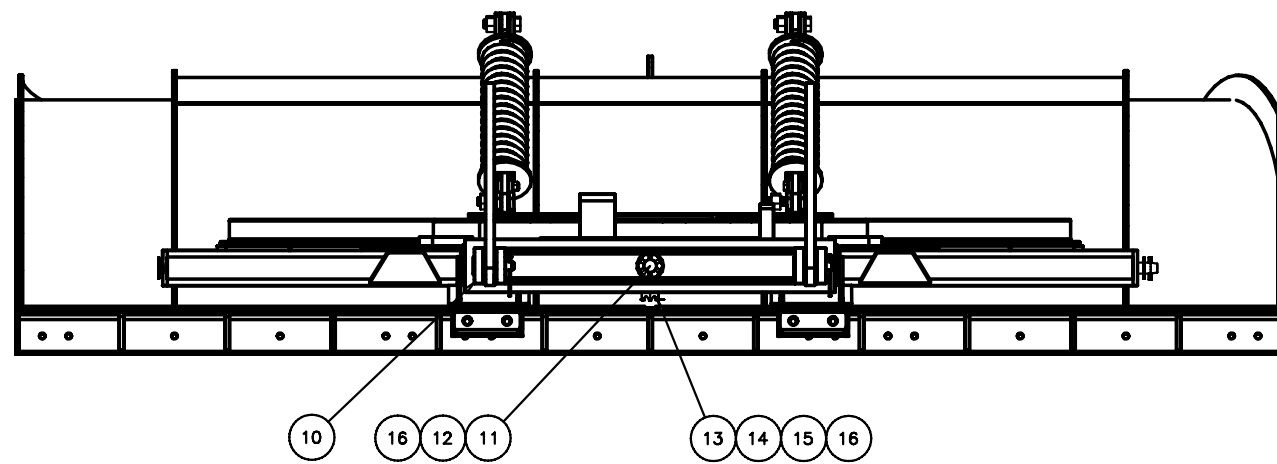
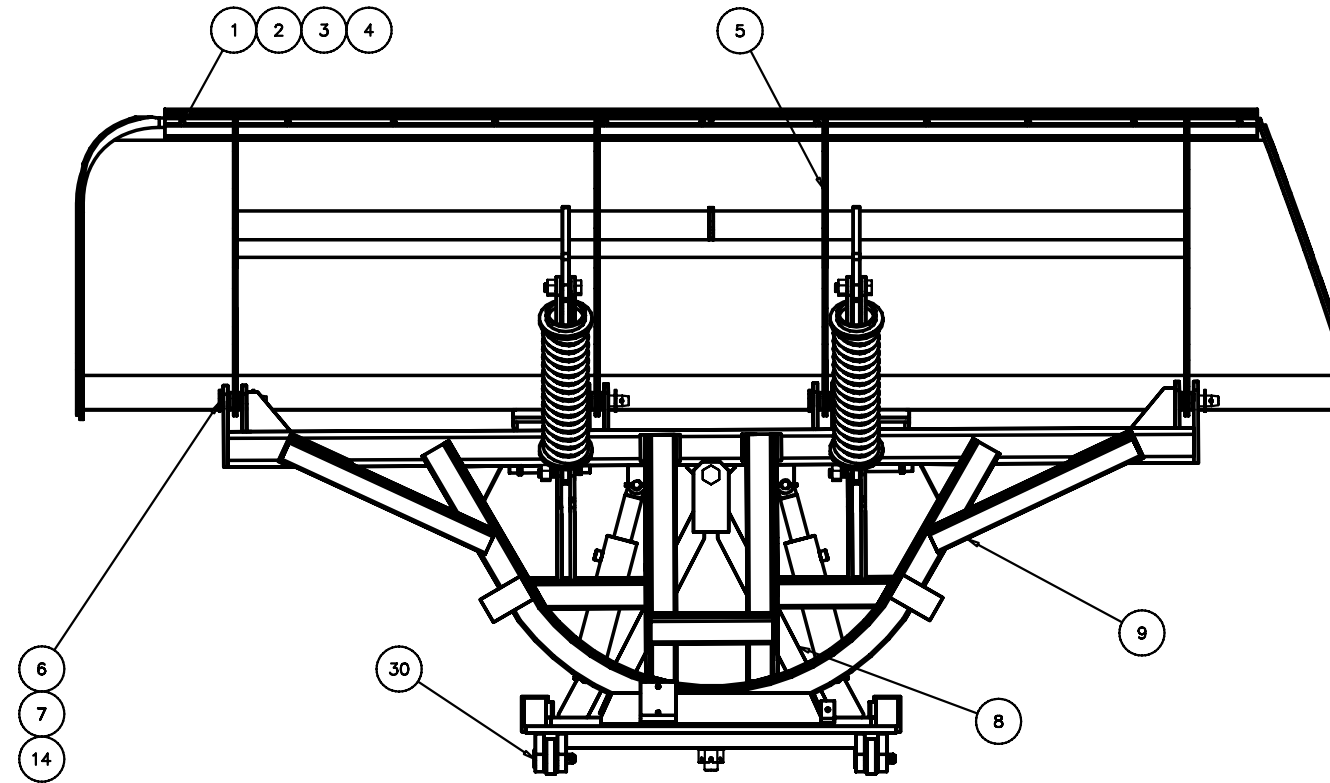
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01101746: PLOW ASS'Y COMPLETE MW/MoDOT - 12FT

ITEM ID	ITEM NO	DESCRIPTION	QTY REQ	OPTIONAL
1	HW40A-0612	BOLT HEX 3/8 X 1 1/2 UNC ZINC	11	
2	HW30A-06	NUT HEX 3/8 UNC ZINC	11	
3	HW14A-06	FLATWASHER SAE 3/8 ZINC	26	
4	HW14C-06	LOCKWASHER SPLIT 3/8 ZINC	11	
5	01101743	MOLDBOARD WELD'T MW/MoDOT - 12FT	1	
6	00900111	PIN 1.250 DIA X 4.375	4	
7	HW13B-1240	ROLL PIN 3/8 X 2 1/2 ZINC	4	
8	01101689	PIVOT FRAME WELD'T - MW/MoDOT	1	
9	01101745	PUSH FRAME WELD'T MW/MoDOT 12 FT	1	
10	21100035	VERTICAL PIVOT BAR WELDMENT	1	
11	00900274	BOLT DRILL 1.500 X 6.000	1	
12	HW30C-24	NUT HEX SLOTTED 1 1/2 UNC ZINC	1	
13	00900141	BOLT DRILLED 1.250 X 6.063	1	
14	HW14B-20	FLATWASHER USS 1 1/4 ZINC	5	
15	HW30C-20	NUT HEX SLOTTED 1 1/4 UNC ZINC	1	
16	HW13A-0840	COTTER PIN 1/4 X 2 1/2 ZINC	2	
17	01101614	COMPRESSION ARM ASS'Y TYPE 23	2	
18	HW40A-1628	BOLT HEX 1 X 3 1/2 UNC ZINC	4	
19	HW36D-16	NUT HEX ELASTIC 1 UNC ZINC	4	
20	01101747	RUBBER DEFLECTOR PLATE 12 FT 10 GA	1	
21	05200024	RUBBER DEFLECTOR 12 FT MoDOT	1	
22	00900140	PIN 1.000 DIA X 3.500	4	
23	HW13B-1232	ROLL PIN 3/8 X 2 ZINC	8	
24	0540007	CYLINDER HYD DA 3 X 9 1/4	2	
25	180572C	RUBBER BUMPER MC21685T11	2	
26	HW36D-06	NUT HEX ELASTIC 3/8 UNC ZINC	4	
27	HW40A-0618	BOLT HEX 3/8 X 2 1/4 UNC ZINC	4	

Ordering Note:

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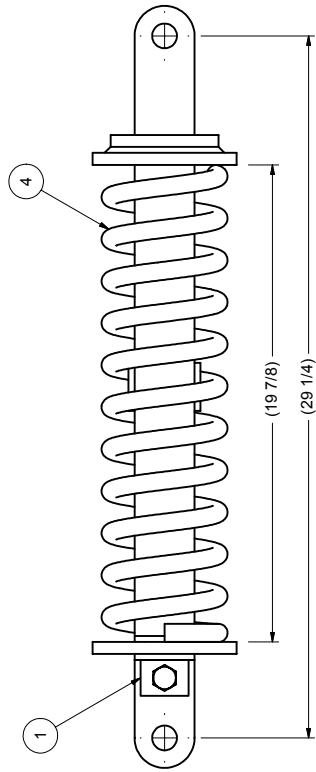
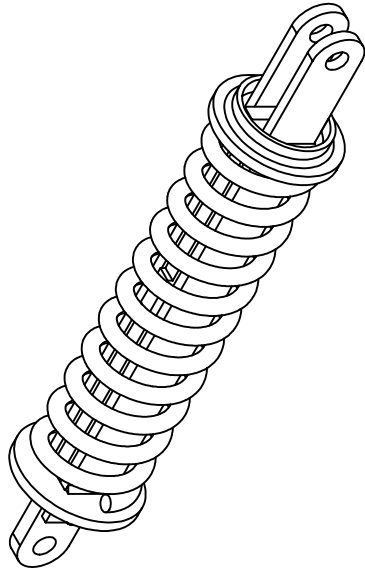
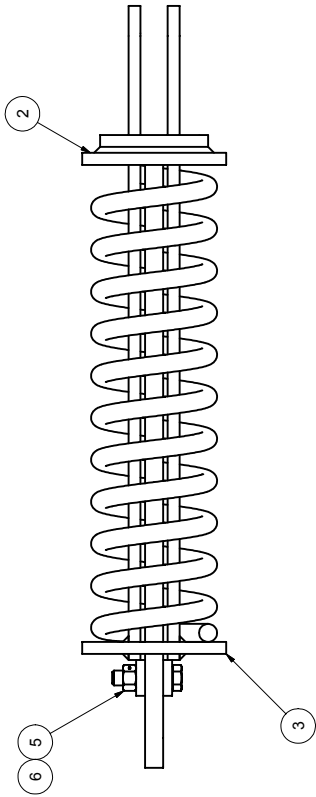
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01101614: COMPRESSION TRIP ARM ASS'Y – 29.125

ITEM ID	ITEM NO	DESCRIPTION	QTY REQ	OPTIONAL
1	00401480	LUG RS 0.68P 0.75X1.00Y 1.50W2.00H 0.38T	2	
2	01101609	INNER ARM WELD'T	1	
3	01101610	OUTER ARM WELD'T	1	
	0580025	SRPING COMP 5 3/8 ID X 23 1/4	1	
5	HW40A-1020	BOLT HEX 5/8 X 2 1/2 UNC ZINC	1	
6	HW36D-10	NUT HEX ELASTIC 5/8 UNC ZINC	1	



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





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# APPENDIX



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

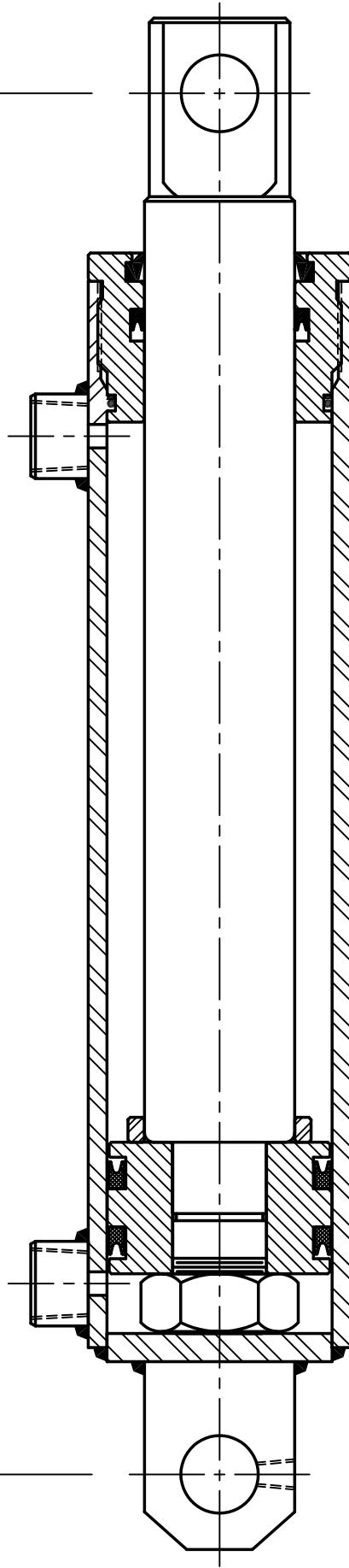
## HYDRAULIC CYLINDERS

ITEM NO	SEAL KIT	DESCRIPTION	QTY REQ	OPTIONAL
0540007		CYLINDER HYD DA 3 X 9 1/4 2IN ROD DIA		



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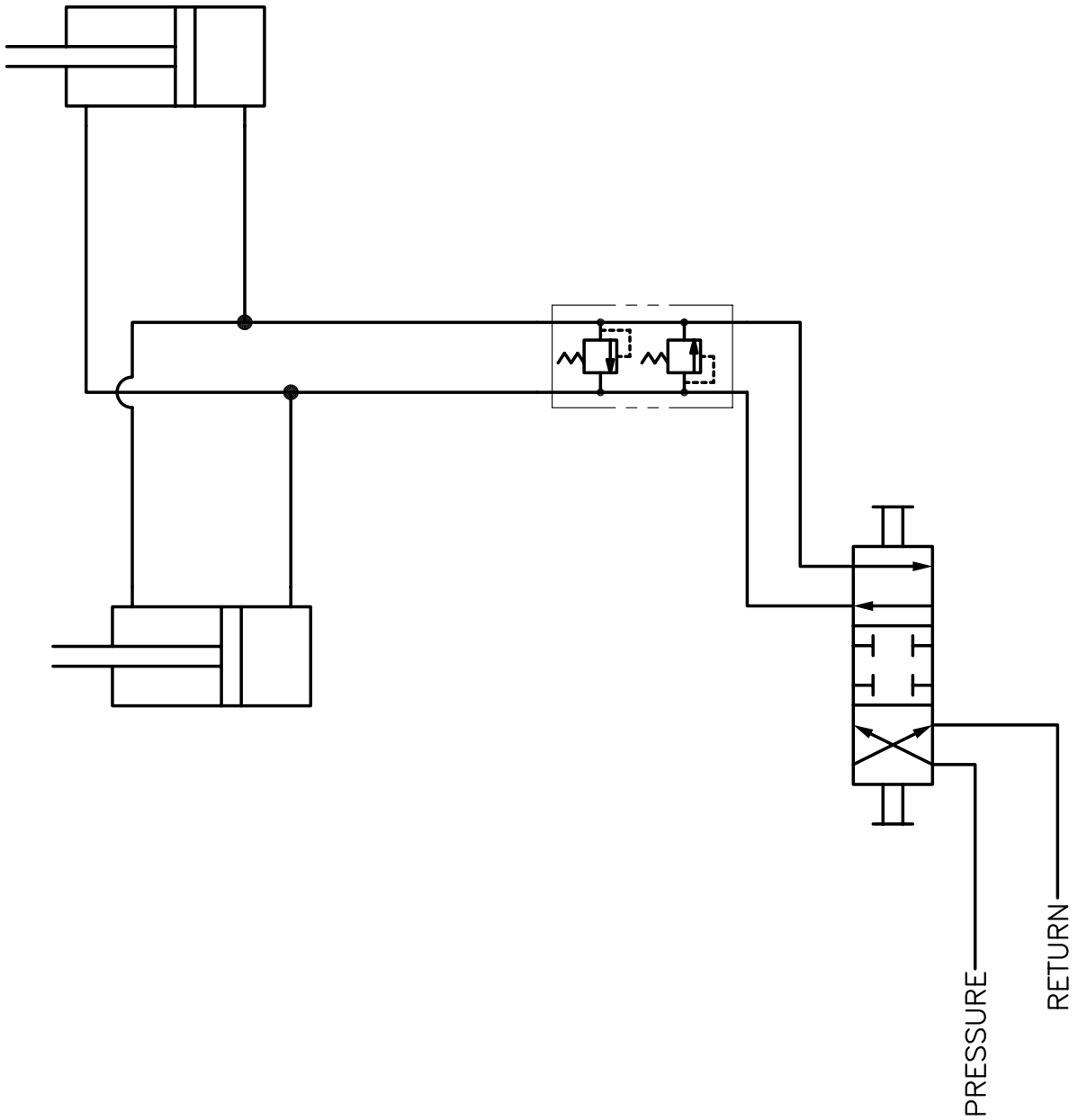
18.375 RETRACTED  
27.625 EXTENDED



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