



212 North Evans Road; Evansdale, Iowa 50707; Phone (319)236-7977, Fax (319)236-7980

Owners Manual

VIKING-CIVES MW SERIES POWER REVERSING PLOW

Unit Serial Number: _____



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WARRANTY POLICY

Viking Cives, USA 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, USA.

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

The obligations of Viking Cives, USA 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, USA 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, USA.

Viking Cives, USA assumes no responsibility for engines, electrical equipment or any other equipment and accessories not manufactured by Viking Cives, USA beyond the warranty of the manufacturer of such equipment of accessories.

All warranty work done on Viking Cives USA equipment must have prior authorization from Viking Cives, USA along with a "Return Goods Authorization" number. All labor and parts issued by user for Viking Cives, USA 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/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 (USA) – 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, USA; require prior written authorization from Viking Cives, USA. 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, USA 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, USA customer service to obtain a Return Goods Authorization (RGA) number. Any product arriving at Viking Cives, USA 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, USA, and 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, USA.
 - c) Upon receiving the defective part(s) Viking Cives, USA 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, USA.** 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, USA facility that may be considered for warranty the following steps must occur. **Notification of Viking Cives, USA customer service must take place prior to the start of any repairs.**

- (1) Contact Viking Cives, USA 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, USA, attention Customer Service Department.
- (3) Once the WCF report has been reviewed warranty authorization will be granted or denied. **NOTE: Viking Cives, USA warranty labor rates will apply unless specifically determined otherwise.** Any part(s) involved in a WCF request must follow the Parts Warranty Consideration procedures.



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INTRODUCTION

This instruction/parts manual has operation and maintenance information for the Viking-Cives **MW Series Power Reversing Plow**. 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 **MW Series Power Reversing 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 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 and/or 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 with 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.
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. 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.



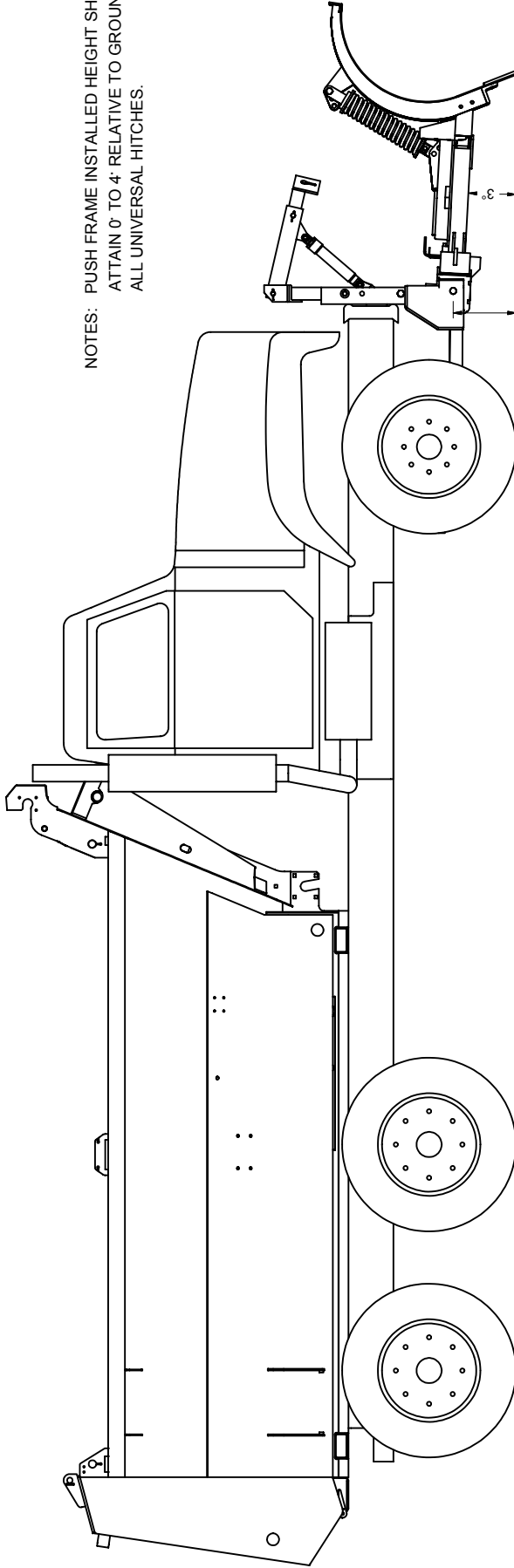
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OPERATING INSTRUCTIONS

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 arranged from left to right as the operator sees the plows.
 - Plow Lift: Front Plow (One-way, Reversible, etc.)
 - Plow ReverseAll levers are clearly marked as to the equipment/function they control.
3. To raise the plow, pull back on the appropriate control level, to lower the plow, 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 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 make 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 and/or nearest authorized dealer.



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NOTES: PUSH FRAME INSTALLED HEIGHT SHOULD ATTAIN 0° TO 4° RELATIVE TO GROUND FOR ALL UNIVERSAL HITCHES.

**VIKING-CIVES GROUP UNIVERSAL HITCH
-GENERAL MOUNTING PROCEDURE-**

14" MIN TO 15" MAX PIN HEIGHT

NOTES: HITCH SHOWN IS NOT REPRESENTED FOR ALL UNIVERSAL HITCHES.

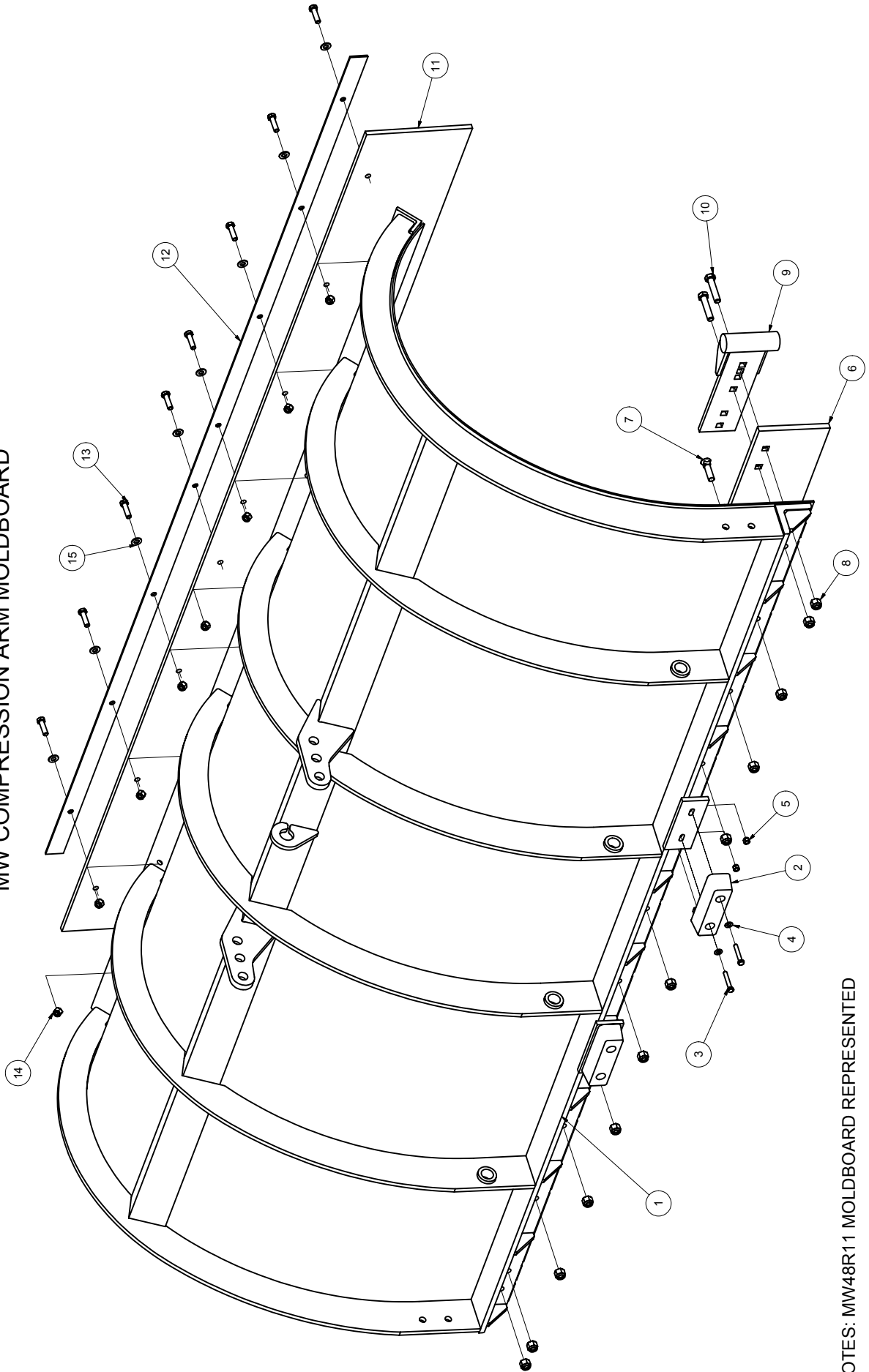
- STEP 1:** CENTER OPTIONAL BUMPER ANGLE (ITEM 00122027) ONTO EXISTING FRONT BUMPER; NEXT, LOCATE AND DRILL A MINIMUM OF THREE (3) 11/16" DIAMETER HOLES THROUGH THE BUMPER ANGLE AND EXISTING TRUCK BUMPER. BOLT THE BUMPER ANGLE IN PLACE WITH 5/8" DIAMETER BOLTS.
- STEP 2:** CENTER THE HITCH ONTO THE BUMPER ANGLE WITH AN APPROXIMATE PUSH HEIGHT CENTER OF 14" TO 15" FROM GROUND LEVEL; WELD HITCH TO BUMPER ANGLE.
- STEP 3:** LOCATE THE REAR CLIP ANGLE BRACKETS FROM OPTIONAL BRACE ARM KIT (ITEM 200122035) IN A SUITABLE LOCATION ON THE TRUCK FRAME BEHIND THE SPRING SHACKLE. NEXT, MARK AND DRILL FOUR (4) 11/16" DIAMETER HOLES ON EACH CLIP ANGLE. TRANSFER THE EXISTING HOLES FROM THE FRAME TO THE CLIP ANGLE WHERE POSSIBLE. BOLT IN PLACE WITH FOUR (4) 5/8" DIAMETER BOLTS. [NOTE: THE CLIP ANGLES MUST BE SET ACCORDING TO THE FRAME AND SPRING WIDTHS, ALLOWING CLEARANCE FOR THE THRUST ARM BRACES, PRIOR TO FINAL WELDING.]
- STEP 4:** LOCATE THE CONNECTING LUGS ON THE HITCH IN LINE WITH THE REAR CLIP ANGLES AND WELD IN PLACE.
- STEP 5:** MEASURE AND CUT BRACE BARS FROM OPTIONAL BRACE ARM KIT (200122035) TO SUIT. NEXT, MARK AND DRILL A 13/16" DIAMETER HOLE IN BRACE BAR TO MATCH CLIP ANGLE. BOLT IN PLACE WITH 3/4" DIAMETER BOLTS.

TO MAINTAIN OUR ON-GOING PRODUCT AND DEVELOPMENT IMPROVEMENT PROGRAM, VIKING-CIVES RESERVES THE RIGHT TO CHANGE EQUIPMENT & SPECIFICATION WITHOUT NOTICE.



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MW COMPRESSION ARM MOLDBOARD



NOTES: MW48R11 MOLDBOARD REPRESENTED

EQUIPMENT MAY NOT BE EXACTLY AS SHOWN. SOME COMPONENTS MAY BE OPTIONAL.
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(S7220) 01101633: MOLDBOARD ASB'Y MW36R10 REV PLOW

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|---|---------|----------|
| 1 | 201101604 | MOLDBOARD WELD'T MW36R10 ARM TRIP | 1 | |
| 2 | 280572C | RUBBER BUMPER MC21685T11 | 2 | |
| 3 | 3SK3588 | BOLT HEX 3/8 X 2 UNC ZINC | 4 | |
| 4 | 3SK3595 | FLATWASHER SAE 3/8 ZINC | 4 | |
| 5 | 3SK3591 | NUT HEX 3/8 UNC ZINC | 4 | |
| 6 | 280020D | BLADE 12 TP 5/8 X 8 X 120 | 1 | |
| 7 | 2N81074C | 5/8 X 2 1/2 PLOW BOLT | 12 | |
| 8 | 3SK3781 | 5/8 TOP LOCK NUT | 12 | |
| 9 | 2001795-92 | CURB SHOE WELD'T | 2 | * |
| 10 | 3SK3750 | 5/8 X 3-1/2 CARRAGE BOLT | 2 | * |
| 11 | 3SK7150 | DEFLECTOR RUBBER 3/8 X 12 X 120 PUNCHED | 1 | * |
| 12 | 201101490 | DEFLECTOR PLATE WASHER - 10FT | 1 | * |
| 13 | 3SK3600 | BOLT 1/2 X 1-1/2 GRADE 8 | 8 | * |
| 14 | 3SK3661 | FLATWASHER 1/2 SAE | 8 | * |
| 15 | 3SK3670 | NUT LOCK 1/2 MECH | 8 | * |

(S7230) 01101634: MOLDBOARD ASB'Y MW36R11 REV PLOW

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|---|---------|----------|
| 1 | 201101622 | MOLDBOARD WELD'T MW36R11 ARM TRIP | 1 | |
| 2 | 280572C | RUBBER BUMPER MC21685T11 | 2 | |
| 3 | 3SK3588 | BOLT HEX 3/8 X 2 UNC ZINC | 4 | |
| 4 | 3SK3595 | FLATWASHER SAE 3/8 ZINC | 4 | |
| 5 | 3SK3591 | NU HEX 3/8 UNC ZINC | 4 | |
| 6 | 280055A | BLADE 12 TP 5/8 X 8 X 132 | 1 | |
| 7 | 2N81074C | 5/8 X 2 1/2 PLOW BOLT | 13 | |
| 8 | 3SK3781 | 5/8 TOP LOCK NUT | 13 | |
| 9 | 2001795-92 | CURB SHOW WELD'T | 2 | * |
| 10 | 3SK3750 | 5/8 X 3-1/2 CARRAGE BOLT | 2 | * |
| 11 | 280573C | DEFLECTOR RUBBER 3/8 X 12 X 132 PUNCHED | 1 | * |
| 12 | 201101491 | DEFLECTOR PLATE WASHER - 11FT | 1 | * |
| 13 | 3SK3600 | BOLT 1/2 X 1-1/2 GRADE 8 | 8 | * |
| 14 | 3SK3661 | FLATWASHER 1/2 SAE | 8 | * |
| 15 | 3SK3670 | TOP LOCK 1/2 MECH | 8 | * |



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(S7225) 01101635: MOLDBOARD ASB'Y MW41R10 REV PLOW

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|---|---------|----------|
| 1 | 201101617 | MOLDBOARD WELD'T MW41R10 ARM TRIP | 1 | |
| 2 | 280572C | RUBBER BUMPER MC21685T11 | 2 | |
| 3 | 3SK3588 | BOLT HEX 3/8 X 2 UNC ZINC | 4 | |
| 4 | 3SK3595 | FLATWASHER SAE 3/8 ZINC | 4 | |
| 5 | 3SK3591 | NUT HEX 3/8 UNC ZINC | 4 | |
| 6 | 280020D | BLADE 12 TP 5/8 X 8 X 120 | 1 | |
| 7 | 2N81074C | 5/8 X 2 1/2 PLOW BOLT | 12 | |
| 8 | 3SK3781 | 5/8 TOP LOCK NUT | 12 | |
| 9 | 2001795-92 | CURB SHOE WELD'T | 2 | * |
| 10 | 3SK3750 | 5/8 X 3-1/2 CARRAGE BOLT | 2 | * |
| 11 | 3SK7150 | DEFLECTOR RUBBER 3/8 X 12 X 120 PUNCHED | 1 | * |
| 12 | 201101490 | DEFLECTOR PLATE WASHER - 10FT | 1 | * |
| 13 | 3SK3600 | BOLT 1/2 X 1 1/2 GRADE 8 | 8 | * |
| 14 | 3SK3661 | FLATWASHER 1/2 SAE | 8 | * |
| 15 | 3SK3670 | TOPLOCK 1/2 MECH | 8 | * |

(S7235) 01101636: MOLDBOARD ASB'Y MW41R11 REV PLOW

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|-----------------------------------|---------|----------|
| 1 | 201101619 | MOLDBOARD WELD'T MW41R11 ARM TRIP | 1 | |
| 2 | 280572C | RUBBER BUMPER MC21685T11 | 2 | |
| 3 | 3SK3588 | BOLT HEX 3/8 X 2 UNC ZINC | 4 | |
| 4 | 3SK3595 | FLATWASHER SAE 3/8 ZINC | 4 | |
| 5 | 3SK3591 | NUT HEX 3/8 UNC ZINC | 4 | |
| 6 | 280055A | BLADE 12 TO 5/8 X 8 X 132 | 1 | |
| 7 | 2N81074C | 5/8 X 2 1/2 PLOW BOLT | 13 | |
| 8 | 3SK3781 | 5/8 TOP LOCK NUT | 13 | |
| 9 | 2001795-92 | CURB SHOE WELD'T | 2 | * |
| 10 | 3SK3750 | 5/8 X 3-1/2 CARRAGE BOLT | 2 | * |
| 11 | 280573C | DEFLECTOR RUBBER 3/8 X 12 144 | 1 | * |
| 12 | 201101491 | DEFLECTOR PLATE WASHER - 11FT | 1 | * |
| 13 | 3SK3600 | BOLT 1/2 X 1 1/2 GRADE 8 | 8 | * |
| 14 | 3SK3661 | FLATWASHER 1/2 SAE | 8 | * |
| 15 | 3SK3670 | NUT LOCK 1/2 MECH | 8 | * |



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(S7240) 01101637: MOLDBOARD ASB'Y MW41R12 REV PLOW

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|---|---------|----------|
| 1 | 201101623 | MOLDBOARD WELD'T MW41R12 ARM TRIP | 1 | |
| 2 | 280572C | RUBBER BUMPER MC21685T11 | 2 | |
| 3 | 3SK3588 | BOLT HEX 3/8 X 2 UNC ZINC | 4 | |
| 4 | 3SK3595 | FLATWASHER SAE 3/8 ZINC | 4 | |
| 5 | 3SK3591 | NUT HEX 3/8 UNC ZINC | 4 | |
| 6 | 280008B | BLADE 12 TP 5/8 X 8 X 144 | 1 | |
| 7 | 2N81074C | 5/8 X 2 1/2 PLOW BOLT | 14 | |
| 8 | 3SK3781 | 5/8 TOP LOCK NUT | 14 | |
| 9 | 2001795-92 | CURB SHOE WELD'T | 2 | * |
| 10 | 3SK3750 | 5/8 X 3-1/2 CARRAGE BOLT | 2 | * |
| 11 | 280573C | DEFLECTOR RUBBER 3/8 X 12 X 144 PUNCHED | 1 | * |
| 12 | 201101492 | DEFLECTOR PLATE WASHER - 12FT | 1 | * |
| 13 | 3SK3600 | BOLT 1/2 X 1 1/2 GRADE 8 | 10 | * |
| 14 | 3SK3661 | FLATWASHER 1/2 SAE | 10 | * |
| 15 | 3SK3670 | NUT LOCK 1/2 MECH | 10 | * |



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(S7227) 01101815: MOLDBOARD ASB'Y MW48R10 REV PLOW

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|-----------------------------------|---------|----------|
| 1 | 201101735 | MOLDBOARD WELD'T MW48R10 ARM TRIP | 1 | |
| 2 | 280572C | RUBBER BUMPER MC21685T11 | 2 | |
| 3 | 3SK3588 | BOLT HEX 3/8 X 2 UNC ZINC | 4 | |
| 4 | 3SK3595 | FLATWASHER SAE 3/8 ZINC | 4 | |
| 5 | 3SK3591 | NUT HEX 3/8 UNC ZINC | 4 | |
| 6 | 280020D | BLADE 12 TP 5/8 X 8 X 120 | 1 | |
| 7 | 2N81074C | 5/8 X 2 1/2 PLOW BOLT | 12 | |
| 8 | 3SK3781 | 5/8 TOP LOCK NUT | 12 | |
| 9 | 2001795-92 | CURB SHOE WELD'T | 2 | * |
| 10 | 3SK3750 | 5/8 X 3-1/2 CARRAGE BOLT | 2 | * |
| 11 | 3SK7150 | RUBBER DEFLECTOR 10FT | 1 | * |
| 12 | 201101490 | DEFLECTOR PLATE WASHER - 10FT | 1 | * |
| 13 | 3SK3600 | BOLT 1/2 X 1 1/2 GRADE 8 | 8 | * |
| 14 | 3SK3661 | FLATWASHER 1/2 SAE | 8 | * |
| 15 | 3SK3670 | NUT LOCK 1/2 MECH | 8 | * |

(S7236) 01101801: MOLDBOARD ASB'Y MW48R11 REV PLOW

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|---|---------|----------|
| 1 | 201101718 | MOLDBOARD WELD'T MW48R11 ARM TRIP | 1 | |
| 2 | 280572C | RUBBER BUMPER MC21685T11 | 2 | |
| 3 | 3SK3588 | BOLT HEX 3/8 X 2 UNC ZINC | 4 | |
| 4 | 3SK3595 | FLATWASHER SAE 3/8 ZINC | 4 | |
| 5 | 3SK3591 | NUT HEX 3/8 UNC ZINC | 4 | |
| 6 | 280055A | BLADE 12 TO 5/8 X 8 X 132 | 1 | |
| 7 | 2N81074C | BOLT PLOW 5/8 X 2 1/2 UNC ZINC | 13 | |
| 8 | 3SK3781 | NUT HEX 5/8 UNC ZINC | 13 | |
| 9 | 2001795-92 | CURB SHOE WELD'T | 2 | * |
| 10 | 3SK3750 | 5/8 X 3-1/2 CARRAGE BOLT | 2 | * |
| 11 | 280573C | DEFLECTOR RUBBER 3/8 X 12 X 132 PUNCHED | 1 | * |
| 12 | 201101491 | DEFLECTOR PLATE WASHER - 11FT | 1 | * |
| 13 | 3SK3600 | BOLT 1/2 X 1 1/2 GRADE 8 | 8 | * |
| 14 | 3SK3661 | FLATWASHER 1/2 SAE | 8 | * |
| 15 | 3SK3670 | NUT LOCK 1/2 MECH | 8 | * |



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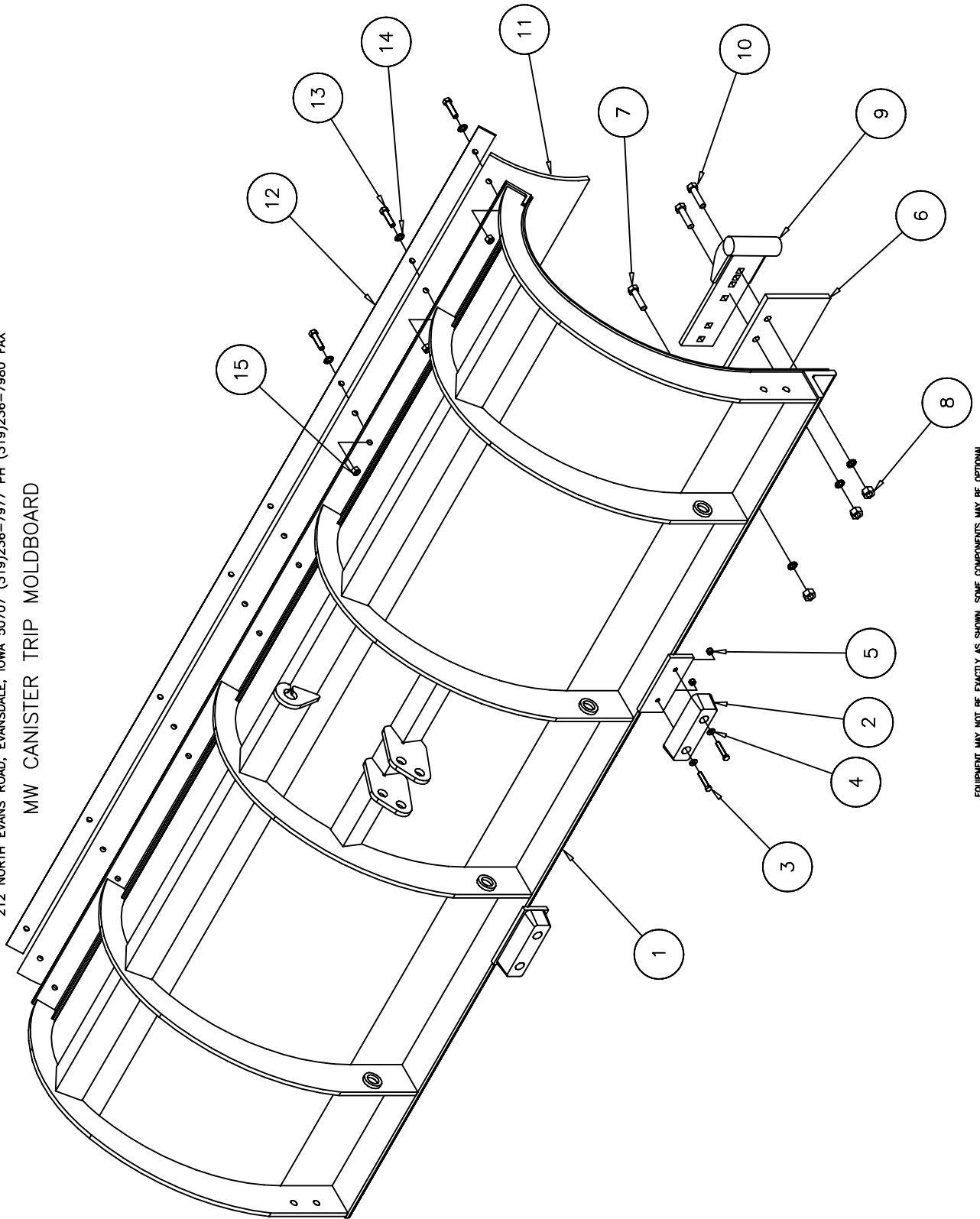
(S7245) 01101802: MOLDBOARD ASB'Y MW48R12 REV PLOW

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|---|---------|----------|
| 1 | 2011011799 | MOLDBOARD WELD'T MW48R12 ARM TRIP | 1 | |
| 2 | 280572C | RUBBER BUMPER MC21685T11 | 2 | |
| 3 | 3SK3588 | BOLT HEX 3/8 X 2 UNC ZINC | 4 | |
| 4 | 3SK3595 | FLATWASHER SAE 3/8 ZINC | 4 | |
| 5 | 3SK3591 | NUT HEX 3/8 UNC ZINC | 4 | |
| 6 | 280008B | BLADE 12 TP 5/8 X 8 X 144 | 1 | |
| 7 | 2N81074C | BOLT PLOW 5/8 X 2 1/2 UNC ZINC | 14 | |
| 8 | 3SK3781 | 5/8 TOP LOCK NUT | 14 | |
| 9 | 2001795-92 | CURB SHOE WELD'T | 2 | * |
| 10 | 3SK3750 | 5/8 X 3-1/2 CARRAGE BOLT | 2 | * |
| 11 | 280573C | DEFELCTOR RUBBER 3/8 X 12 X 144 PUNCHED | 1 | * |
| 12 | 201101492 | DEFLECTOR PLATE WASHER - 12FT | 1 | * |
| 13 | 3SK3600 | BOLT 1/2 X 1 1/2 GRADE 8 | 10 | * |
| 14 | 3SK3661 | FLATWASHER 1/2 SAE | 10 | * |
| 15 | 3SK3370 | NUT LOCK 1/2 MECH | 10 | * |



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MW CANISTER TRIP MOLDBOARD



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01101639: MOLDBOARD ASB'Y MW36R10 CANNON TRIP

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|---|---------|----------|
| 1 | 201101629 | MOLDBOARD WELD'T MW36R10 CANNON TRIP | 1 | |
| 2 | 280572C | RUBBER BUMPER MC21685T11 | 2 | |
| 3 | 3SK3588 | BOLT HEX 3/8 X 2 UNC ZINC | 4 | |
| 4 | 3SK3595 | FLATWASHER SAE 3/8 ZINC | 4 | |
| 5 | 3SK3591 | NUT HEX 3/8 UNC ZINC | 4 | |
| 6 | 280020D | BLADE 12 TP 5/8 X 8 X 120 | 1 | |
| 7 | 2N81074C | 5/8 X 2 1/2 PLOW BOLT | 12 | |
| 8 | 3SK3781 | 5/8 TOP LOCK NUT | 12 | |
| 9 | 2001795-92 | CURB SHOE WELD'T | 2 | * |
| 10 | 3SK3750 | 5/8 X 3-1/2 CARRAGE BOLT | 2 | * |
| 11 | 3SK7150 | DEFLECTOR RUBBER 3/8 X 12 X 120 PUNCHED | 1 | * |
| 12 | 201101490 | DEFLECTOR PLATE WASHER - 10FT | 1 | * |
| 13 | 3SK3600 | BOLT 1/2 X 1 1/2 GRADE 8 | 8 | * |
| 14 | 3SK3661 | FLATWASHER 1/2 SAE | 8 | * |
| 15 | 3SK3670 | NUT LOCK 1/2 MECH | 8 | * |

01101640: MOLDBOARD ASB'Y MW36R11 CANNON TRIP

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|---|---------|----------|
| 1 | 201101630 | MOLDBOARD WELD'T MW36R11 CANNON TRIP | 1 | |
| 2 | 280572C | RUBBER BUMPER MC21685T11 | 2 | |
| 3 | 3SK3588 | BOLT HEX 3/8 X 2 UNC ZINC | 4 | |
| 4 | 3SK3595 | FLATWASHER SAE 3/8 ZINC | 4 | |
| 5 | 3SK3591 | NUT HEX 3/8 UNC ZINC | 4 | |
| 6 | 280055A | BLADE 12 TP 1/2 X 8 X 132 | 1 | |
| 7 | 2N81074C | 5/8 X 2 1/2 PLOW BOLT | 13 | |
| 8 | 3SK3781 | 5/8 TOP LOCK NUT | 13 | |
| 9 | 2001795-92 | CURB SHOE WELD'T | 2 | * |
| 10 | 3SK3750 | 5/8 X 3-1/2 CARRAGE BOLT | 2 | * |
| 11 | 280573C | DEFLECTOR RUBBER 3/8 X 12 X 132 PUNCHED | 1 | * |
| 12 | 201101491 | DEFLECTOR PLATE WASHER - 11FT | 1 | * |
| 13 | 3SK3600 | BOLT 1/2 X 1 1/2 GRADE 8 | 8 | * |
| 14 | 3SK3661 | FLATWASHER 1/2 SAE | 8 | * |
| 15 | 3SK3670 | NUT LOCK 1/2 MECH | 8 | * |



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01101641: MOLDBOARD ASB'Y MW41R10 CANNON TRIP.

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|---|---------|----------|
| 1 | 201101631 | MOLDBOARD WELD'T MW41R10 CANNON TRIP | 1 | |
| 2 | 280572C | RUBBER BUMPER MC21685T11 | 2 | |
| 3 | 3SK3588 | BOLT HEX 3/8 X 2 UNC ZINC | 4 | |
| 4 | 3SK3595 | FLATWASHER SAE 3/8 ZINC | 4 | |
| 5 | 3SK3591 | NUT HEX 3/8 UNC ZINC | 4 | |
| 6 | 280020D | BLADE 12TP 5/8 X 8 X 120 | 1 | |
| 7 | 2N81074C | 5/8 X 2 1/2 PLOW BOLT | 12 | |
| 8 | 3SK3781 | 5/8 TOP LOCK NUT | 12 | |
| 9 | 2001795-92 | CURB SHOE WELD'T | 2 | * |
| 10 | 3SK3750 | 5/8 X 3-1/2 CARRAGE BOLT | 2 | * |
| 11 | 3SK7150 | DEFLECTOR RUBBER 3/8 X 12 X 120 PUNCHED | 1 | * |
| 12 | 201101490 | DEFLECTOR PLATE WASHER - 10FT | 1 | * |
| 13 | 3SK3600 | BOLT 1/2 X 1 1/2 GRADE 8 | 8 | * |
| 14 | 3SK3661 | FLATWASHER 1/2 SAE | 8 | * |
| 15 | 3SK3670 | NUT LOCK 1/2 MECH | 8 | * |



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01101726: MOLDBOARD ASB'Y MW36R11 POLY – 12 IN

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|---|---------|----------|
| 1 | 201101723 | MOLDBOARD WELD'T MW36R11 POLY ARM TRIP | 1 | |
| 2 | 280572C | RUBBER BUMPER MC21685T11 | 2 | |
| 3 | 3SK3588 | BOLT HEX 3/8 X 2 UNC ZINC | 4 | |
| 4 | 3SK3595 | FLATWASHER SAE 3/8 ZINC | 4 | |
| 5 | 3SK3591 | NUT HEX 3/8 UNC ZINC | 4 | |
| 6 | 280055A | BLADE 12 TP 5/8 X 8 X 132 | 1 | * |
| 7 | 2N81074C | 5/8 X 2 1/2 PLOW BOLT | 13 | * |
| 8 | 3SK3781 | 5/8 TOP LOCK NUT | 13 | * |
| 9 | 2001795-92 | CURB SHOE WELD'T | 2 | * |
| 10 | 3SK3750 | 5/8 X 3-1/2 CARRAGE BOLT | 2 | * |
| 11 | 280573C | DEFLECTOR RUBBER 3/8 X 12 X 132 PUNCHED | 1 | * |
| 12 | 201101491 | DEFLECTOR PLATE WASHER - 11FT | 1 | * |
| 13 | 3SK3600 | BOLT 1/2 X 1 1/2 GRADE 8 | 8 | |
| 14 | 3SK3661 | FLATWASHER 1/2 SAE | 8 | |
| 15 | 3SK3670 | NUT LOCK 1/2 MECH | 8 | |
| 16 | 201101724 | POLYMER MOLDBOARD SKIN MW36R11 | 1 | |
| 17 | 201101712 | POLYMER RETAINER ANGLE - 11FT | 1 | |
| 18 | 3SK3660 | BOLT 1/2 X 1 1/2 UNC ZINC | 7 | |
| 19 | 3SK3661 | FLATWASHER SAE 1/2 UNC ZINC | 7 | |
| 20 | 3SK3670 | NUT HEX TOPLOCK 1/2 UNC ZINC | 7 | |



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01101753: MOLDBOARD ASB'Y MW41R11 POLY – 12 IN

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|--|---------|----------|
| 1 | 201101750 | MOLDBOARD WELD'T MW41R11 POLY – ARM TRIP | 1 | |
| 2 | 280572C | RUBBER BUMPER MC21685T11 | 2 | |
| 3 | 3SK3588 | BOLT HEX 3/8 X 2 UNC ZINC | 4 | |
| 4 | 3SK3595 | FLATWASHER SAE 3/8 ZINC | 4 | |
| 5 | 3SK3591 | NUT HEX 3/8 UNC ZINC | 4 | |
| 6 | 280055A | BLADE 12 TP 5/8 X 8 X 132 | 1 | * |
| 7 | 2N81074C | 5/8 X 2 1/2 PLOW BOLT | 13 | * |
| 8 | 3SK3781 | 5/8 TOP LOCK NUT | 13 | * |
| 9 | 2001795-92 | CURB SHOE WELD'T | 2 | * |
| 10 | 3SK3750 | BOLT HEX 5/8 X 3 UNC ZINC | 2 | * |
| 11 | 280573C | DEFLECTOR RUBBER 3/8 X 12 X 132 PUNCHED | 1 | * |
| 12 | 201101491 | DEFLECTOR PLATE WASHER - 11FT | 1 | * |
| 13 | 3SK3600 | BOLT 1/2 X 1 1/2 GRADE 8 | 8 | |
| 14 | 3SK3661 | FLATWASHER 1/2 SAE | 8 | |
| 15 | 3SK3670 | NUT LOCK 1/2 MECH | 8 | |
| 16 | 201101752 | POLYMER MOLDBOARD SKIN MW41R11 | 1 | |
| 17 | 201101712 | POLYMER RETAINER ANGLE - 11FT | 1 | |
| 18 | 3SK3660 | BOLT 1/2 X 1 1/2 UNC ZINC | 7 | |
| 19 | 3SK3661 | FLATWASHER SAE 1/2 UNC ZINC | 7 | |
| 20 | 3SK3670 | NUT HEX TOPLOCK 1/2 UNC ZINC | 7 | |



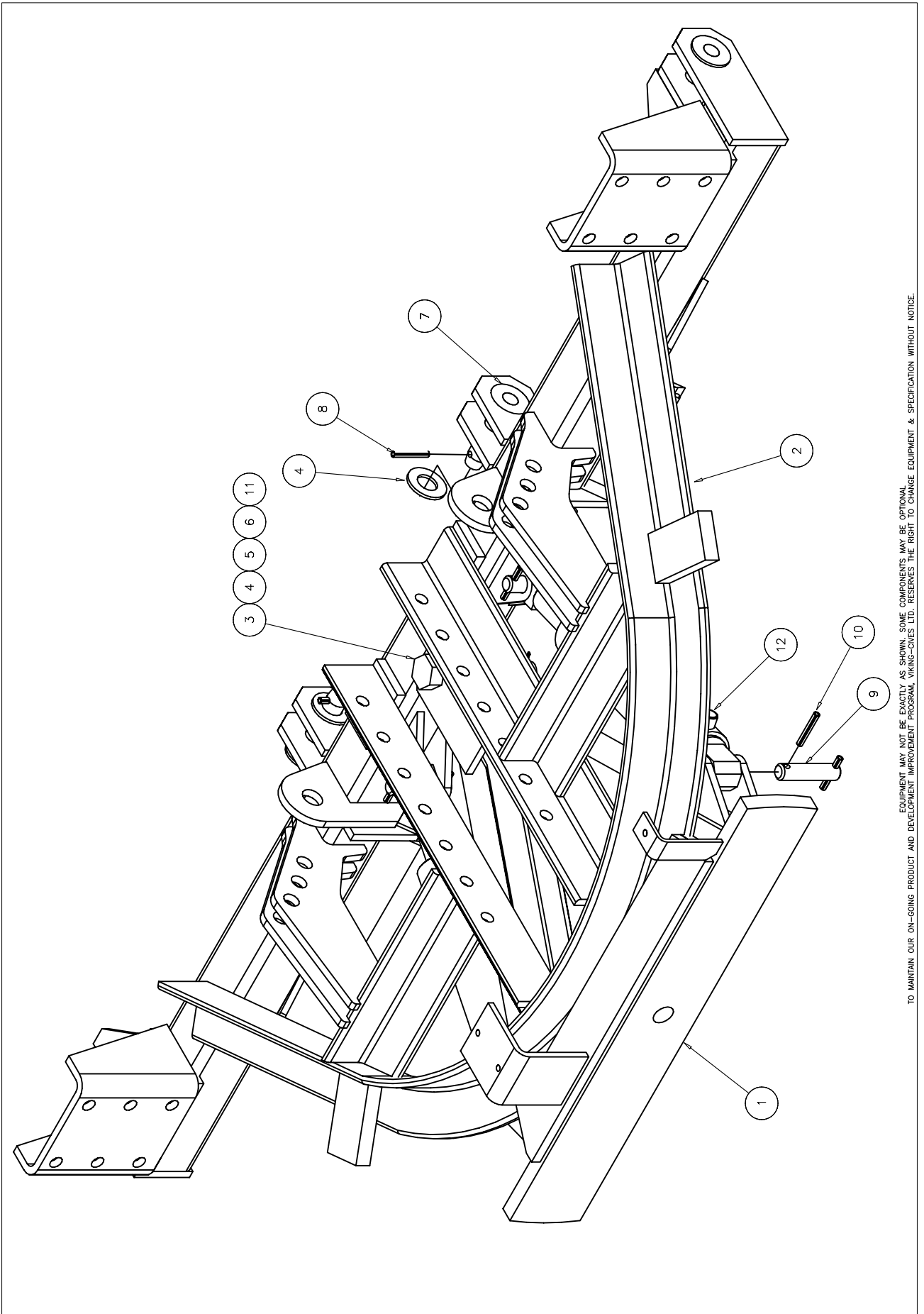
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01101757: MOLDBOARD ASB'Y MW41R12 POLY – 12 IN

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|--|---------|----------|
| 1 | 201101754 | MOLDBOARD WELD'T MW41R12 POLY – ARM TRIP | 1 | |
| 2 | 280572C | RUBBER BUMPER MC21685T11 | 2 | |
| 3 | 3SK3588 | BOLT HEX 3/8 X 2 UNC ZINC | 4 | |
| 4 | 3SK3595 | FLATWASHER SAE 3/8 ZINC | 4 | |
| 5 | 3SK3591 | NUT HEX ELASTIC 3/8 UNC ZINC | 4 | |
| 6 | 28008B | BLADE 12 TP 5/8 X 8 X 144 | 1 | * |
| 7 | 2N81074C | 5/8 X 2 1/2 PLOW BOLT | 14 | * |
| 8 | 3SK3781 | 5/8 TOP LOCK NUT | 14 | * |
| 9 | 2001795-92 | CURB SHOE WELD'T | 2 | * |
| 10 | 3SK3750 | 5/8 X 3-1/2 CARRAGE BOLT | 2 | * |
| 11 | 280573C | DEFLECTOR RUBBER 1/2 X 12 X 132 PUNCHED | 1 | * |
| 12 | 201101492 | DEFLECTOR PLATE WASHER - 12FT | 1 | * |
| 13 | 3SK3600 | BOLT 1/2 X 1 1/2 GRADE 8 | 10 | |
| 14 | 3SK3661 | FLATWASHER 1/2 SAE | 10 | |
| 15 | 3SK367 | NUT LOCK 1/2 MECH | 10 | |
| 16 | 201101756 | POLYMER MOLDBOARD SKIN MW41R12 | 1 | |
| 17 | 201101758 | POLYMER RETAINER ANGLE - 12FT | 1 | |
| 18 | 3SK3660 | BOLT 1/2 X 1 1/2 UNC ZINC | 7 | |
| 19 | 3SK3661 | FLATWASHER SAE 1/2 UNC ZINC | 7 | |
| 20 | 3SK3670 | NUT HEX TOPLOCK 1/2 UNC ZINC | 7 | |



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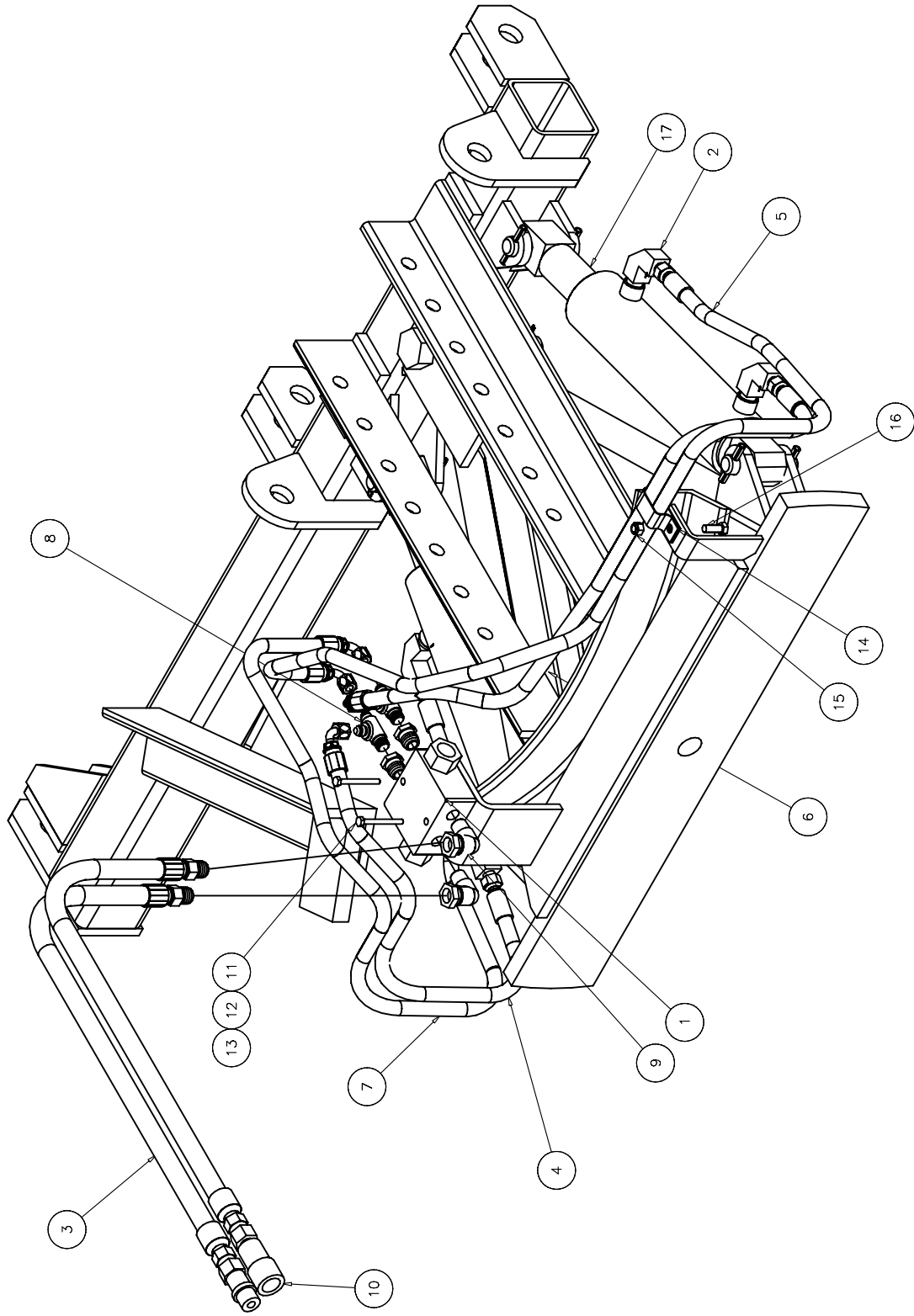
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01101607: REVERSIBLE PUSHFRAME ASB'Y

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|-----------|--------------------------------|---------|----------|
| 1 | 201101381 | PIVOT FRAME WELD'T | 1 | |
| 2 | 201101608 | REVERSIBLE PUSHFRAME WELD'T | 1 | |
| 3 | 20P108 | PIN 1 ¼ X 6 1/16 UH 7 OA BOLT | 1 | |
| 4 | 281015A | FLATWASHER 1 ¼ SAE | 5 | |
| 5 | 281006 | NUT HEX SLOTTED 1 1/4 UNC ZINC | 1 | |
| 6 | 280507 | COTTER PIN 1/4 X 3 | 1 | |
| 7 | 20P010 | 1 ¼ X 4 3/8 CH6 PIN | 4 | |
| 8 | 280569A | ROLL PIN 3/8 X 2 1/2 ZINC | 4 | |
| 9 | 20P049 | PIN CYLINDER 1 X 4 ¼ | 4 | |
| 10 | 280569A | ROLL PIN 3/8 X 2-1/2 ZINC | 8 | |
| 11 | 280577A | GREASE FITTING 1/8 NPT 90 DEG | 1 | |
| 12 | 2W85 | MW PUSHFRAME HYD KIT | 1 | |



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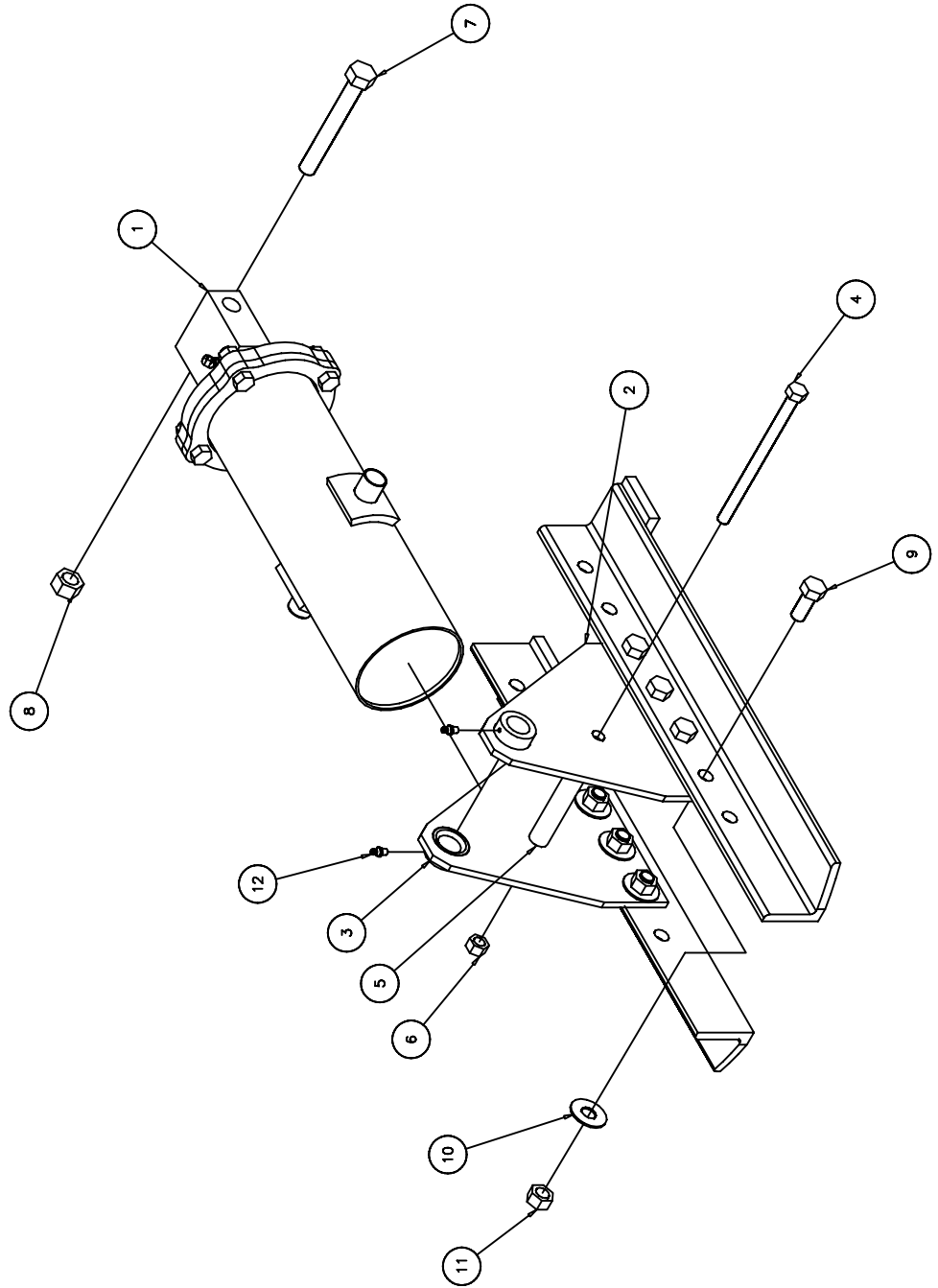
MW PUSHFRAME HYD PARTS

MW PUSHFRAME HYD. KIT SOLD AS COMPLETE KIT ONLY; ITEM ID NUMBERS 2-16.

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|-----------------|---------------------------|---------|----------|
| 1 | 2180244 | VALVE CUSHION DXV-50-200 | 1 | |
| 2 | 2C5515 X 6 X 8 | ELBOW 90 DEGREE | 4 | |
| 3 | | 56 1/2" HOSE | 2 | |
| 4 | | 24" HOSE | 1 | |
| 5 | | 57" HOSE | 1 | |
| 6 | | 42" HOSE | 1 | |
| 7 | | 38" HOSE | 1 | |
| 8 | 2TF5755 X 4 X 4 | MRT | 2 | |
| 9 | 3SK4130 | SWIVEL 3/8 90 | 2 | |
| 10 | 2S56-4 | QUICK DISC SET 1/2 | 1 | |
| 11 | 3SK3495 | BOLT 5/16 X 2 1/2 GRADE 5 | 2 | |
| 12 | 3SK3498 | FLAT WASHER 5/16 USS HARD | 2 | |
| 13 | 3SK3497 | NUT 5/16 18 TOP LOCK | 2 | |
| 14 | 2HK1913 | HOSE CLAMP | 2 | |
| 15 | 3SK3591 | NUT HEX 3/8 TOPLOCK UNC | 2 | |
| 16 | 3SK3580 | BOLT 3/8 X 1 1/4 GRADE 5 | 1 | |
| 17 | 280153 | CYLINDER HYD DA 3 X 9 1/4 | 2 | |
| 17 | 280174 | CYLINDER HYD DA 4 X 9 1/4 | 2 | * |



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201109600: COMPRESSION TRIP CANISTER ASB'Y – 6IN

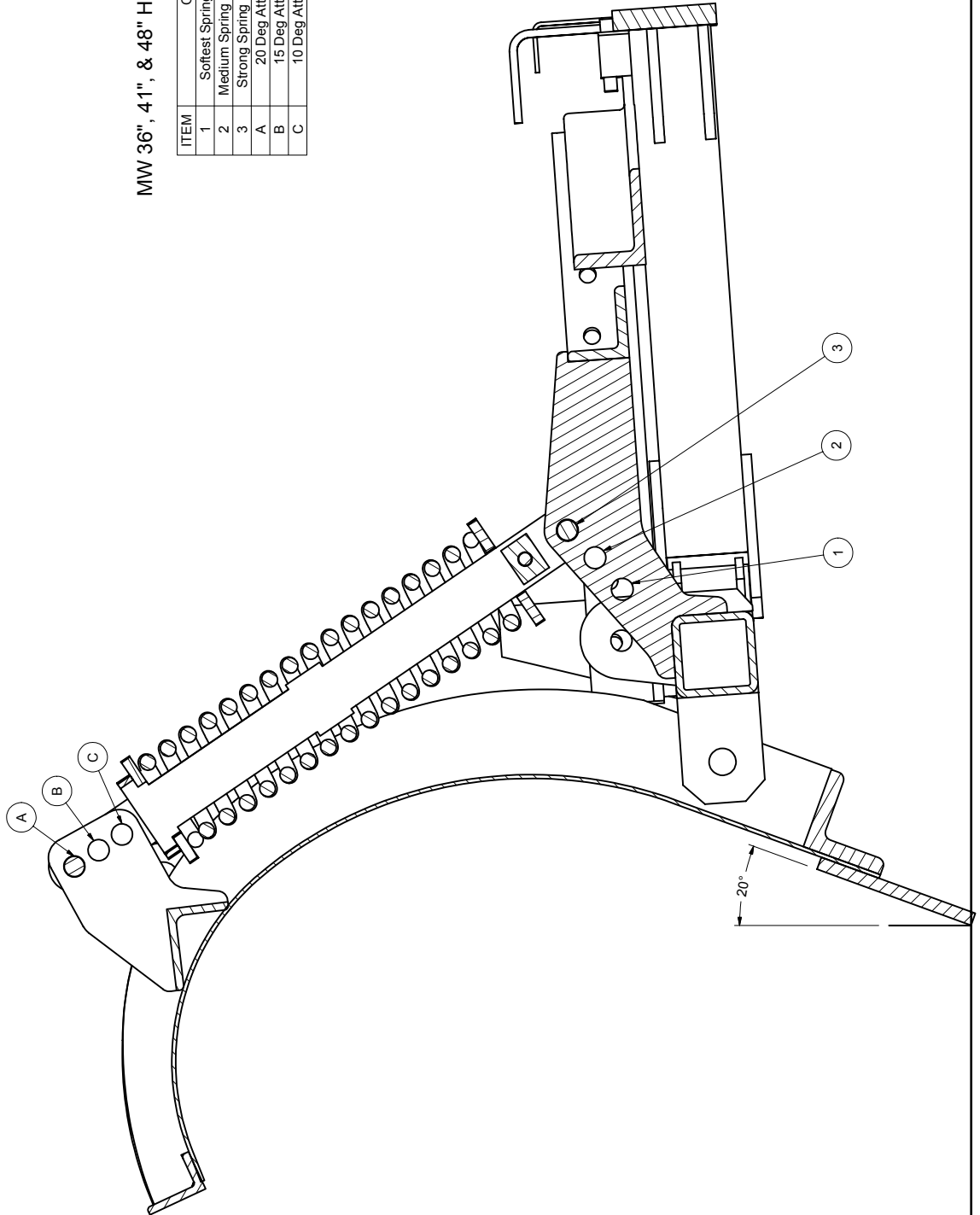
| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|-----------|---------------------------------------|---------|----------|
| 1 | 201109600 | COMPRESSION TRIP CANISTER ASS'Y - 6IN | 1 | |
| 2 | 2008052 | TRUNNION PLATE RTH WELD'T | 1 | |
| 3 | 2008052A | TRUNNION PLATE LTH WELD'T | 1 | |
| 4 | 281113 | BOLT HEX 5/8 X 9 UNC ZINC | 1 | |
| 5 | 20R488 | TUBE RD 1.050N 0.824N 7.250C | 1 | |
| 6 | 3SK3785 | NUT HEX 5/8 UNC ZINC | 1 | |
| 7 | 281046 | 7/8 X 6 1/2 BOLT | 1 | |
| 8 | 281040B | 7/8 NUT | 1 | |
| 9 | 3SK3795 | BOLT HEX 3/4 X 2 UNC ZINC | 8 | |
| 10 | 3SK3781 | 3/4 NYLOCK NUT | 8 | |
| 11 | 28057A | GREASE FITTING 1/8 NPT STR | 2 | |



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MW 36", 41", & 48" HOLE POSITION LAYOUT

| ITEM | OUTCOME |
|------|---------------------------------------|
| 1 | Softest Spring Setting (Trips Easy) |
| 2 | Medium Spring Setting (Trips Hardest) |
| 3 | Strong Spring Setting (Trips Hardest) |
| A | 20 Deg Attack Angle At Rest |
| B | 15 Deg Attack Angle At Rest |
| C | 10 Deg Attack Angle At Rest |

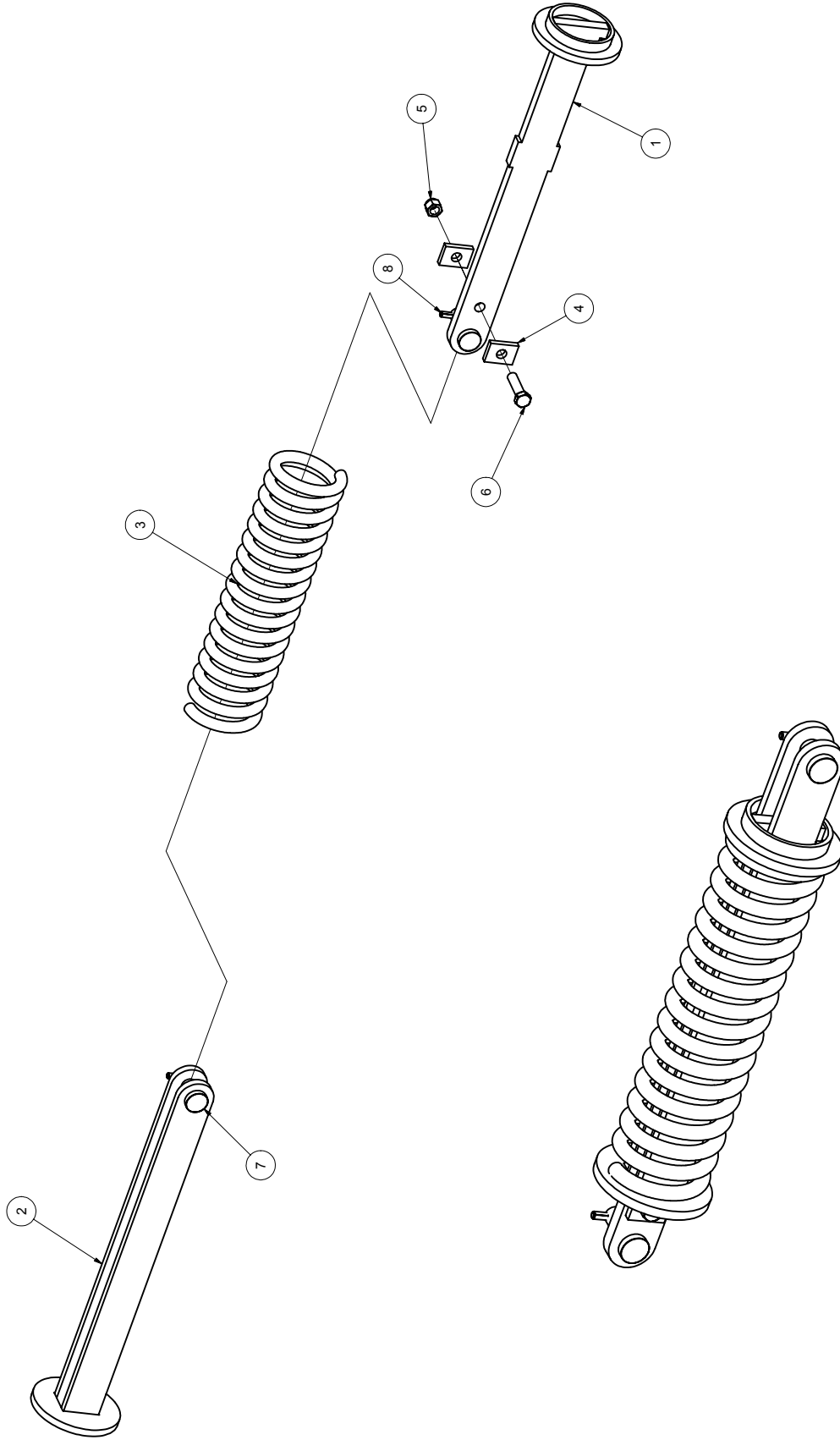


MW 36R MOLDBOARD REPRESENTED IN DRAWING

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01101614: COMPRESSION ARM ASB'Y TYPE 23 (11/12/01)

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|-----------|-------------------------------|---------|----------|
| 1 | 201101609 | INNER ARM WELD'T TYPE 23 | 1 | |
| 2 | 201101610 | OUTER ARM WELD'T TYPE 23 | 1 | |
| 3 | 20580025 | SRPING COMP 5 3/8 ID X 23 1/4 | 1 | |
| 4 | 201101611 | SPRING ARM STOP LUG TYPE 23 | 2 | |
| 5 | 3SK3711 | BOLT HEX 5/8 X 2 1/2 UNC ZINC | 1 | |
| 6 | 3SK3781 | NUT HEX TOPLOCK 5/8 UNC ZINC | 1 | |
| 7 | 20P148A | PIN 1 X 3 COMP ARM | 2 | |
| 8 | 280569A | ROLL PIN 3/8 X 2-1/2 | 2 | |

01101415: TRIP SPRING ARM ASB'Y (05/30/00)

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|-----------|--|---------|----------|
| 1 | 201101410 | INNER BAR WELD'T | 1 | |
| 2 | 201101409 | OUTER BAR WELD'T | 1 | |
| 3 | 280418A | SPRING COMP 5 3/8 OD X 3 7/8 ID X 26 | 1 | |
| 4 | 200401480 | LUG RS 0.68P 0.75X1.00Y 1.50W2.00H 0.38T | 2 | |
| 5 | 3SK3710 | BOLT HEX 5/8 X 2 1/2 UNC ZINC | 1 | |
| 6 | 3SK3781 | NUT HEX TOPLOCK 5/8 UNC ZINC | 1 | |
| 7 | 20P148A | PIN 1 X 3 COMP ARM | 2 | |
| 8 | 280569A | ROLL PIN 3/8 X 2-1/2 | 2 | |



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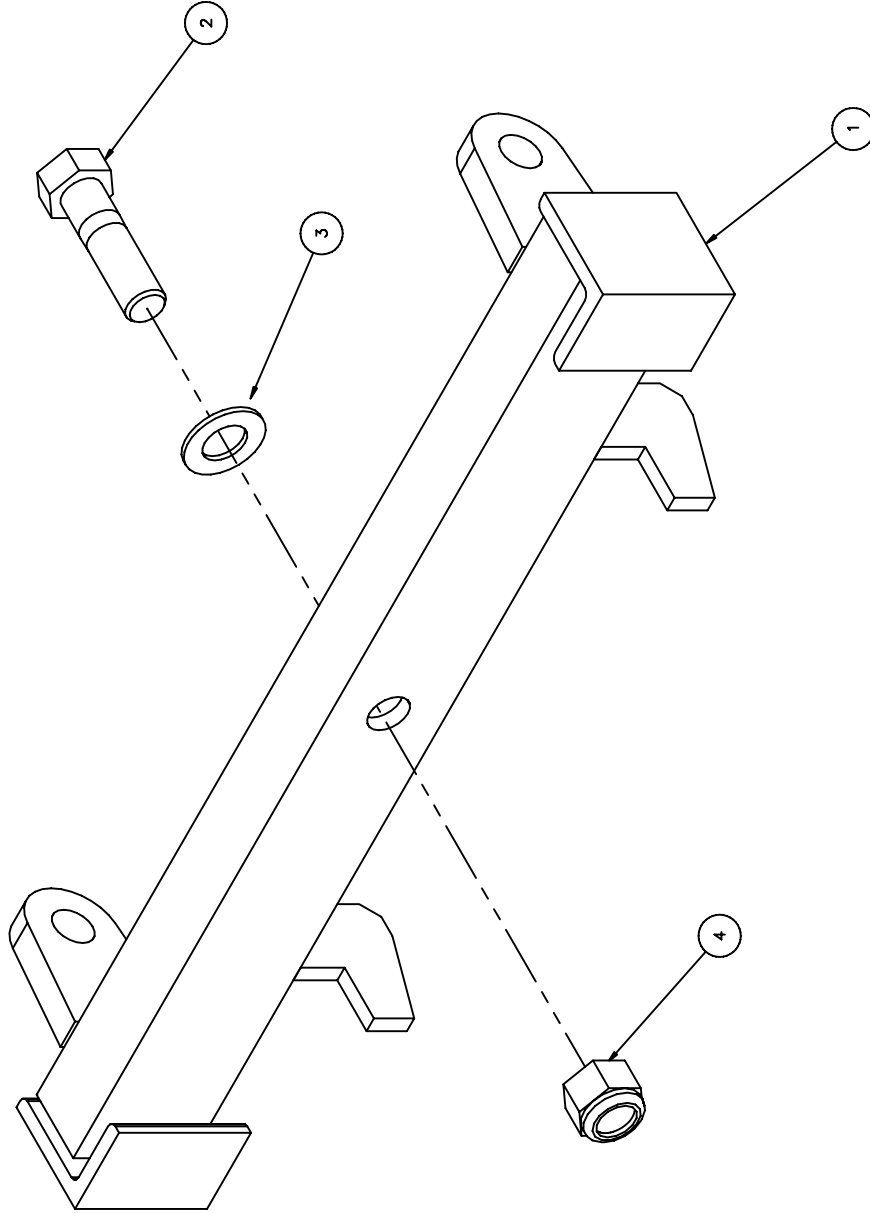
01105200: TRIP SPRING ARM ASB'Y (01/19/98)

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|-----------|--|---------|----------|
| 1 | 201105205 | INNER BAR WELD'T | 1 | |
| 2 | 201105204 | OUTER BAR WELD'T | 1 | |
| 3 | 2180418A | SPRING COMP 5 3/8 OD X 3 7/8 ID X 26 | 1 | |
| 4 | 200401480 | LUG RS 0.68P 0.75X1.00Y 1.50W2.00H 0.38T | 2 | |
| 5 | 3SK3710 | BOLT HEX 5/8 X 2 1/2 UNC ZINC | 1 | |
| 6 | 3SK3781 | NUT HEX TOPLOCK 5/8 UNC ZINC | 1 | |
| 7 | 20P148A | PIN 1 X 3 COMP ARM | 2 | |
| 8 | 280569A | ROLL PIN 3/8 X 2-1/2 | 2 | |



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SWIVEL BRACKET 30 1/2 WELDMENT

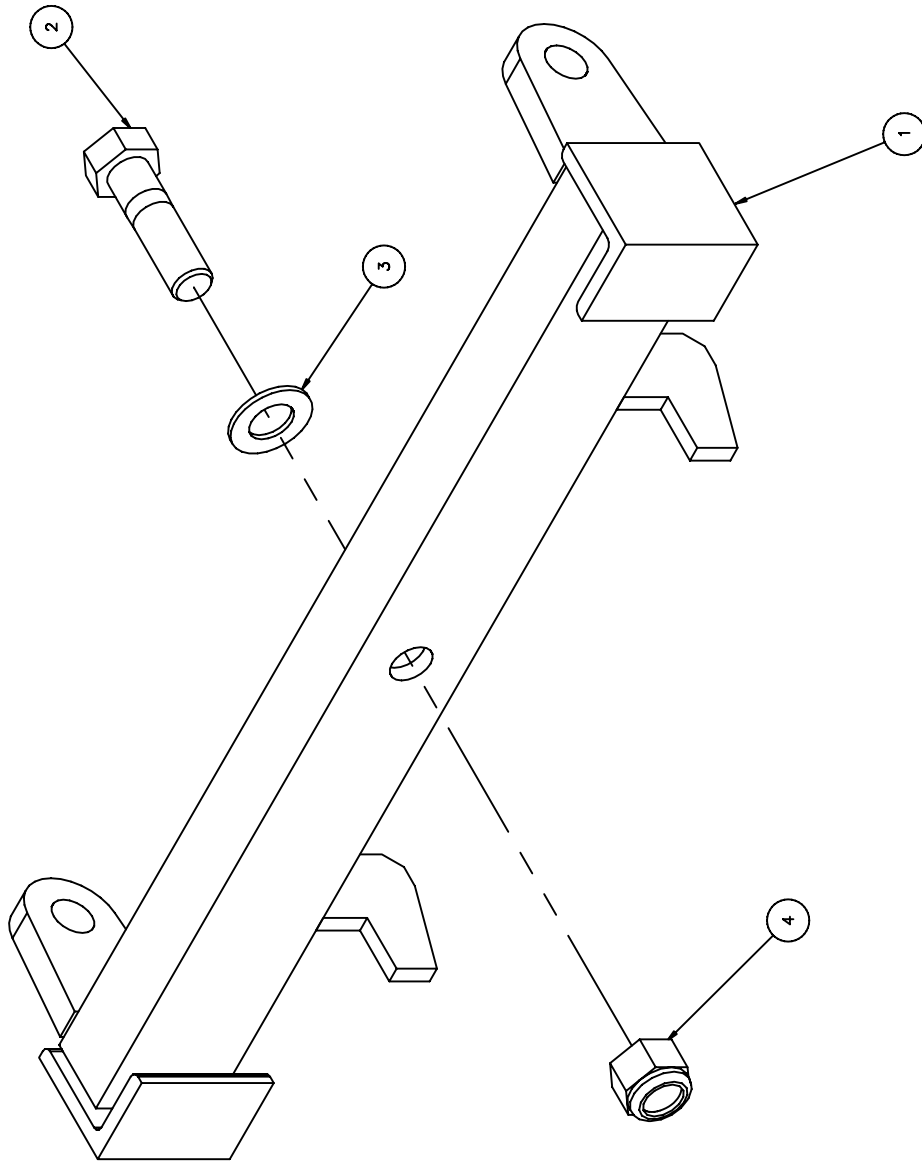


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SWIVEL BRACKET 33 5/8 WEDMENT

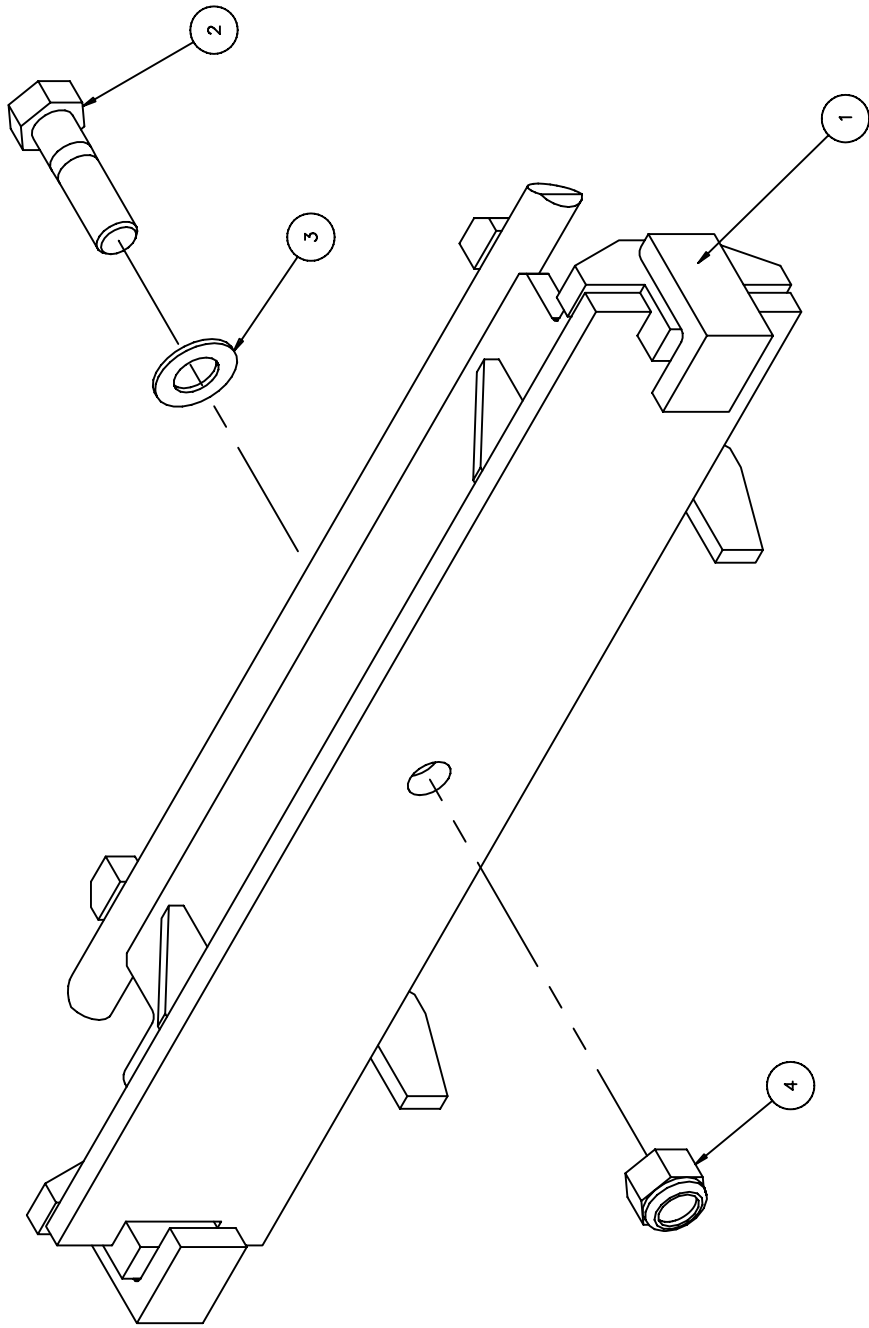


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QUICK HITCH WELDMENT VCL STYLE



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DRIVE SWIVEL OPTIONS

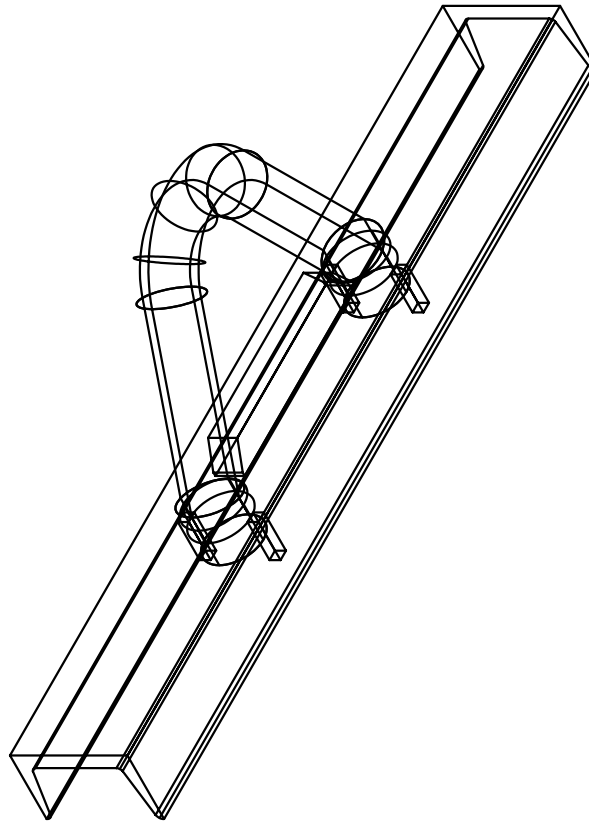
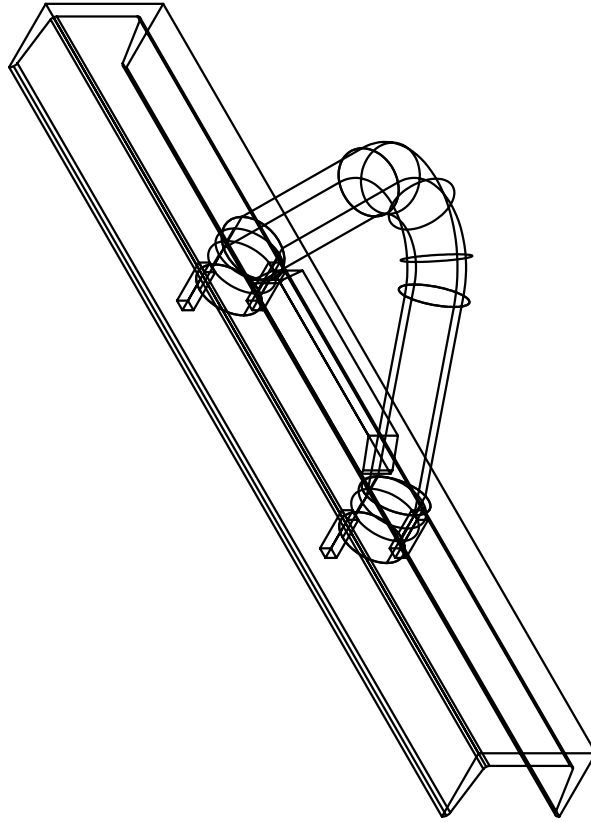
| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|-----------|---------------------------------|---------|----------|
| 1 | 202600097 | SWIVEL BRACKET 30 1/2 WELD'T | 1 | |
| 2 | 281028A | BOLT HEX 1 1/4 X 4 1/2 UNC ZINC | 1 | |
| 3 | 281015A | FLATWASHER USS 1 1/4 ZINC | 1 | |
| 4 | 281007B | NUT HEX TOPLOCK 1 1/4 UNC ZINC | 1 | |

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|-----------|---------------------------------|---------|----------|
| 1 | 2008179-V | SWIVEL BRACKET 33 5/8 WELD'T | 1 | |
| 2 | 281028A | BOLT HEX 1 1/4 X 4 1/2 UNC ZINC | 1 | |
| 3 | 281015A | FLATWASHER USS 1 1/4 ZINC | 1 | |
| 4 | 281007B | NUT HEX TOPLOCK 1 1/4 UNC ZINC | 1 | |

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|-----------|--------------------------------------|---------|----------|
| 1 | 202600100 | QUICK HITCH WELD'T VCL REV PUSHFRAME | 1 | |
| 2 | 281028A | BOLT HEX 1 1/4 X 4 1/2 UNC ZINC | 1 | |
| 3 | 281015A | FLATWASHER USS 1 1/4 ZINC | 1 | |
| 4 | 281007B | NUT HEX TOPLOCK 1 1/4 UNC ZINC | 1 | |



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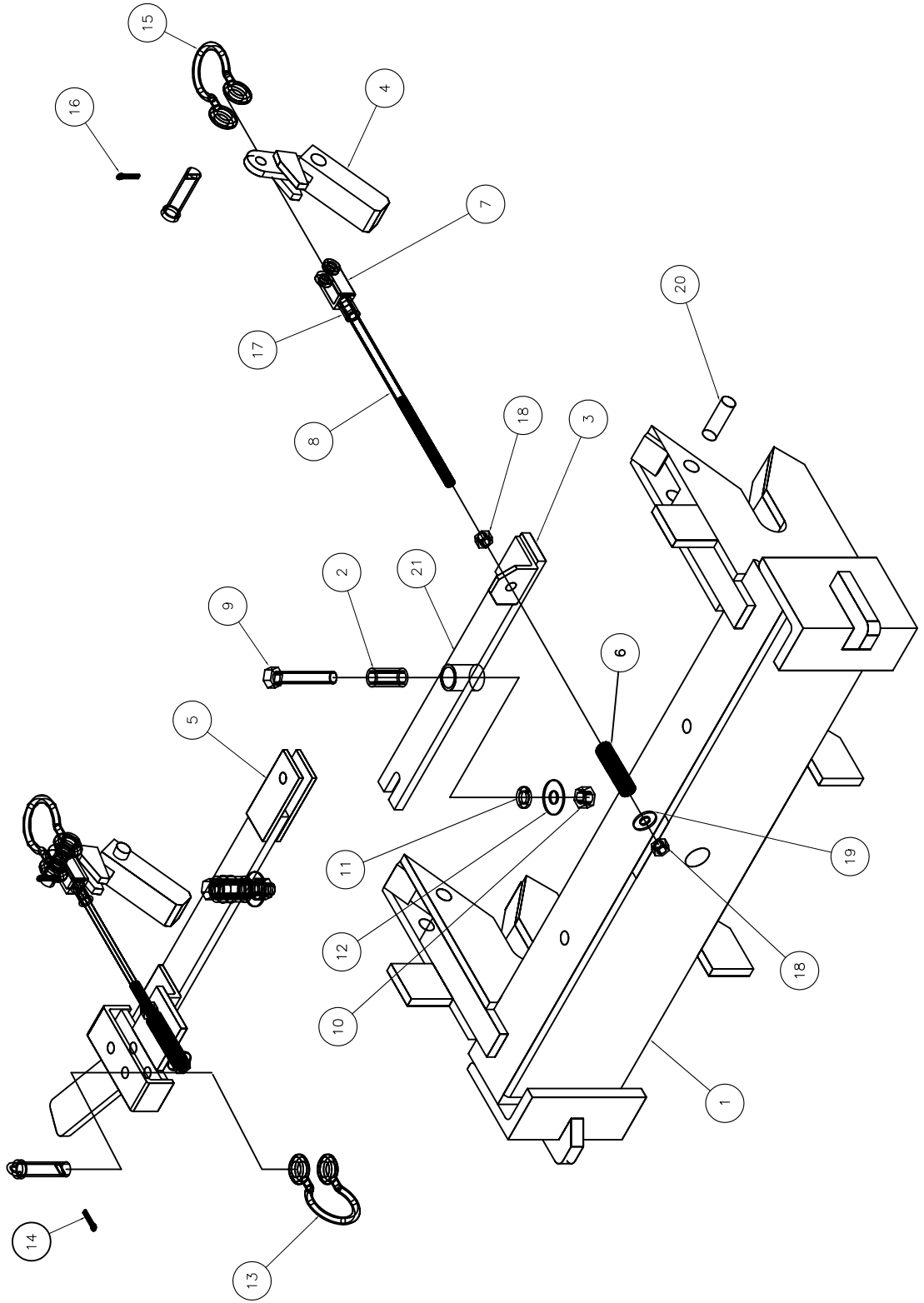
212 North Evans Road; Evansdale, Iowa 50707; Phone (319)236-7977, Fax (319)236-7980

S7315 LOOP PIN & LOOP HITCH

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|-----------|---------------------|---------|----------|
| 1 | 202600030 | LOOP FOR PIN & REC. | 1 | |



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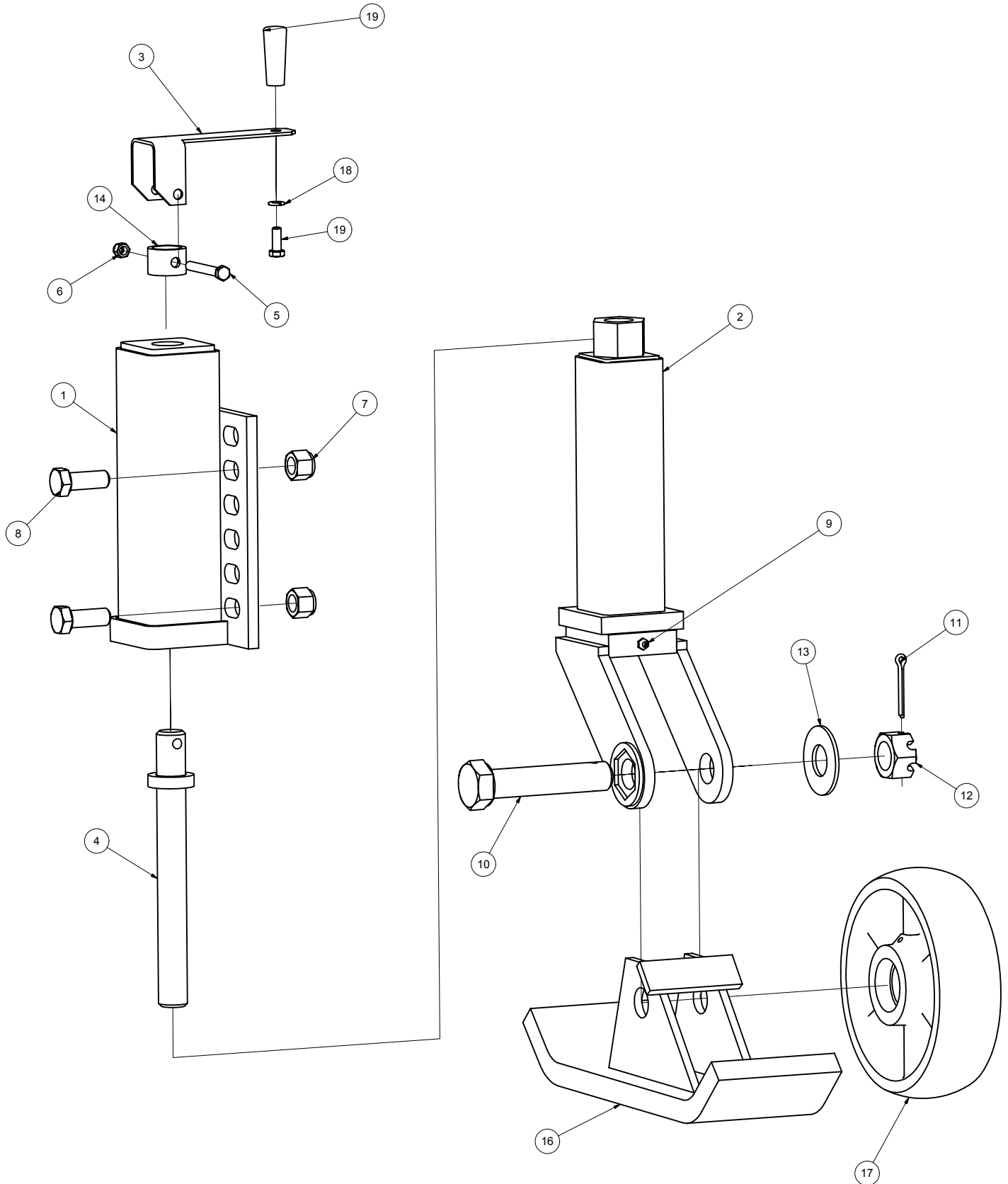


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2002505: QUICK HITCH COMPLETE ASB'Y

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|-----------|--|---------|----------|
| 1 | 200101074 | QUICK HITCH WELD'T | 1 | |
| 2 | 200250535 | TUBE RD 0.938M 0.625N 1.875S | 2 | |
| 3 | 200250512 | CONNECTING LINK WELD'T | 1 | |
| 4 | 200250513 | LOCKING BAR WELD'T | 2 | |
| 5 | 200250514 | HANDLE LINK WELD'T | 1 | |
| 6 | 280385A | SPRING COMPRESSION UTILITY 7/8 RD X 2 LG | 2 | |
| 7 | 280493 | CHAIN CLEVIS YOKE ADJ 1/2 | 2 | |
| 8 | 2002505-9 | STUD 0.50X11.00 0.50NF2.75 0.50NC4.50 | 2 | |
| 9 | 3SK3722 | BOLT HEX 5/8 X 3 1/2 UNC ZINC | 2 | |
| 10 | 3SK3785 | NUT HEX 5/8 UNC ZINC | 2 | |
| 11 | 3SK3772 | LOCKWASHER SPLIT 5/8 ZINC | 2 | |
| 12 | 3SK3770 | FLATWASHER USS 5/8 ZINC | 2 | |
| 13 | 280515B | CHAIN CLEVIS 1/2 RD X 2 1/4 LG | 1 | |
| 14 | 345281 | COTTER HAIR PIN 1/8 X 2 3/8 ZINC | 1 | |
| 16 | 280517D | COTTER PIN 1/8 X 1 ZINC | 2 | |
| 17 | 281079B | NUT HEX 1/2 UNF ZINC | 2 | |
| 18 | 21136410 | NUT HEX 1/2 UNC ZINC | 6 | |
| 19 | 3SK3660 | FLATWASHER USS 1/2 ZINC | 2 | |
| 20 | 200250533 | BAR 0.750 DIA X 2.375 | 2 | |
| 21 | 200250534 | BAR 0.500 DIA X 0.750 | 1 | |

CASTER ASSEMBLY SCREW ADJUSTABLE



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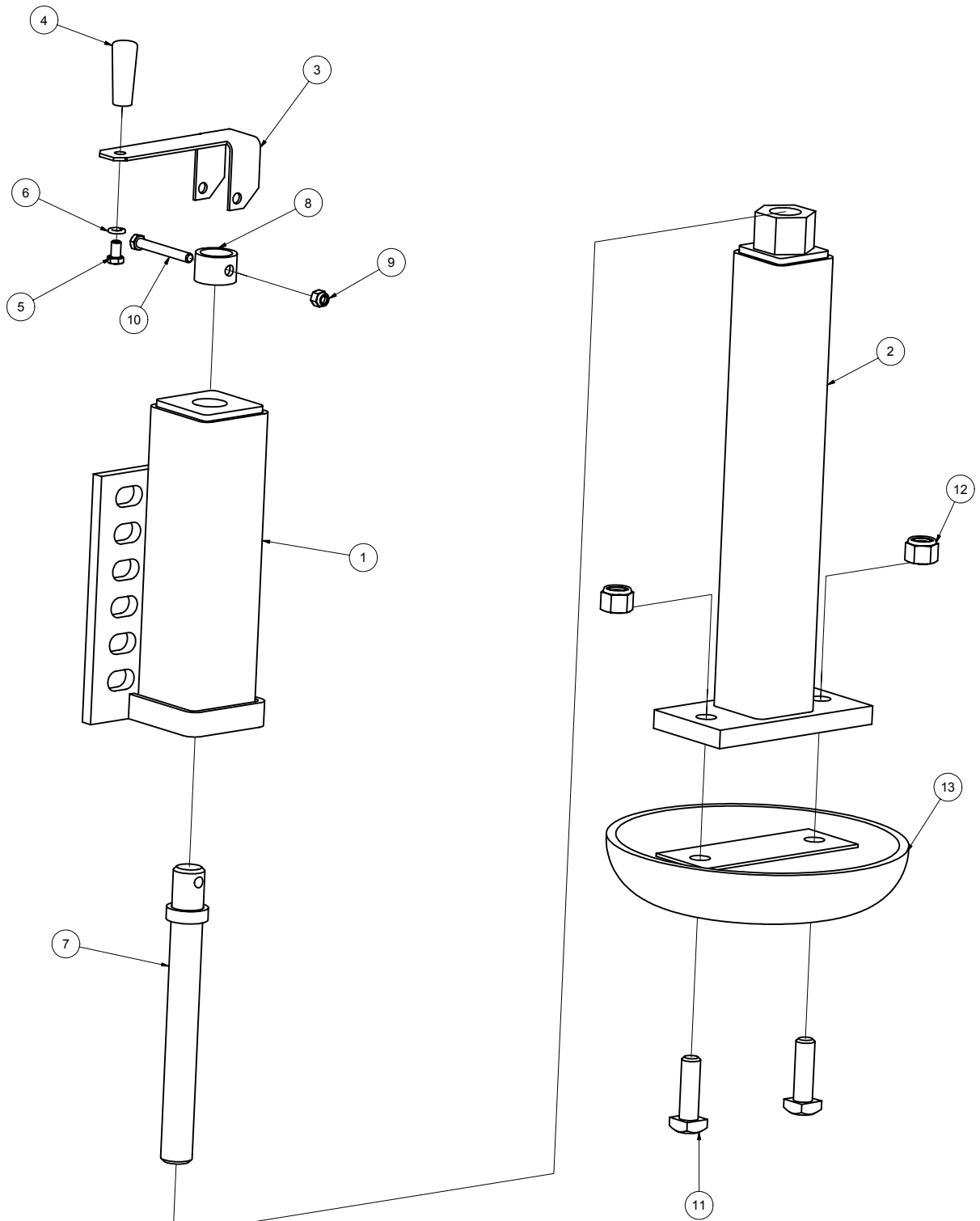


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01101424: CASTER ASB'Y SCREW ADJUSTABLE

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|--------------|--|---------|----------|
| 1 | 201101384 | OUTER TUBE WELD'T | 1 | |
| 2 | 201101399 | INNER TUBE WELD'T | 1 | |
| 3 | 201101441 | HANDLE ASS'Y | 1 | |
| 4 | 201101321 | ADJUSTING BOLT WELD'T | 1 | |
| 5 | 3SK3597 | BOLT HEX 3/8 X 3 UNC ZINC | 1 | |
| 6 | 3SK3591 | NUT HEX TOPLOCK 3/8 UNC ZINC | 1 | |
| 7 | 3SK3811 | NUT HEX TOPLOCK 3/4 | 4 | |
| 8 | 3SK3805 | BOLT 3/4 X 2-1/4 GRADE 8 HEX HD | 4 | |
| 9 | 280577 | GREASE FITTING 1/8 NPT STR | 1 | |
| 10 | 200401578 | AXLE BOLT 1 1/4 X 5 5/16 CH | 1 | |
| 11 | 280508A | COTTER PIN 1/4 X 2-1/2 | 1 | |
| 12 | 2HW31C-20 | NUT HEX SLOTTED 1 1/4 UNF ZINC | 1 | |
| 13 | 281015A | FLATWASHER USS 1 1/4 ZINC | 1 | |
| 14 | 201101324 | STOP COLLAR | 1 | |
| 15 | 201101329 | SHOE WELD'T - 1 IN AXLE BOLT | 1 | * |
| | 201101329-A | SHOE WELD'T - 1 1/4 IN AXLE | 1 | * |
| 16 | 201101329A-C | SHOE WELD'T - 1-1/4 W/CARBIDE INSERTS | 1 | |
| 17 | 2180122 | CASTER WHEEL 10 IN WITH BEARING CUP | 1 | * |
| 18 | 280120 | CASTER WHEEL 8 IN WITH BEARING CUP | 1 | * |
| | 2180120A | CASTER WHEEL 8 IN WITH OUT BEARING CUP | 1 | |
| 19 | 280593 | BEARING CONE ASBY | 2 | * |
| 20 | 280594 | BEARING CUP | 2 | * |
| 21 | 233688 | LOCKWASHER SPLIT 3/8 ZINC | 1 | |
| 22 | 215105 | BOLT HEX 3/8 X 1 UNC ZINC | 1 | |

MUSHROOM ASSEMBLY SCREW ADJUSTABLE



**ITEM #13 IS SOLD UNDER PART
#280109A OR #280110A NOT
WITH REST OF ASSEMBLY**



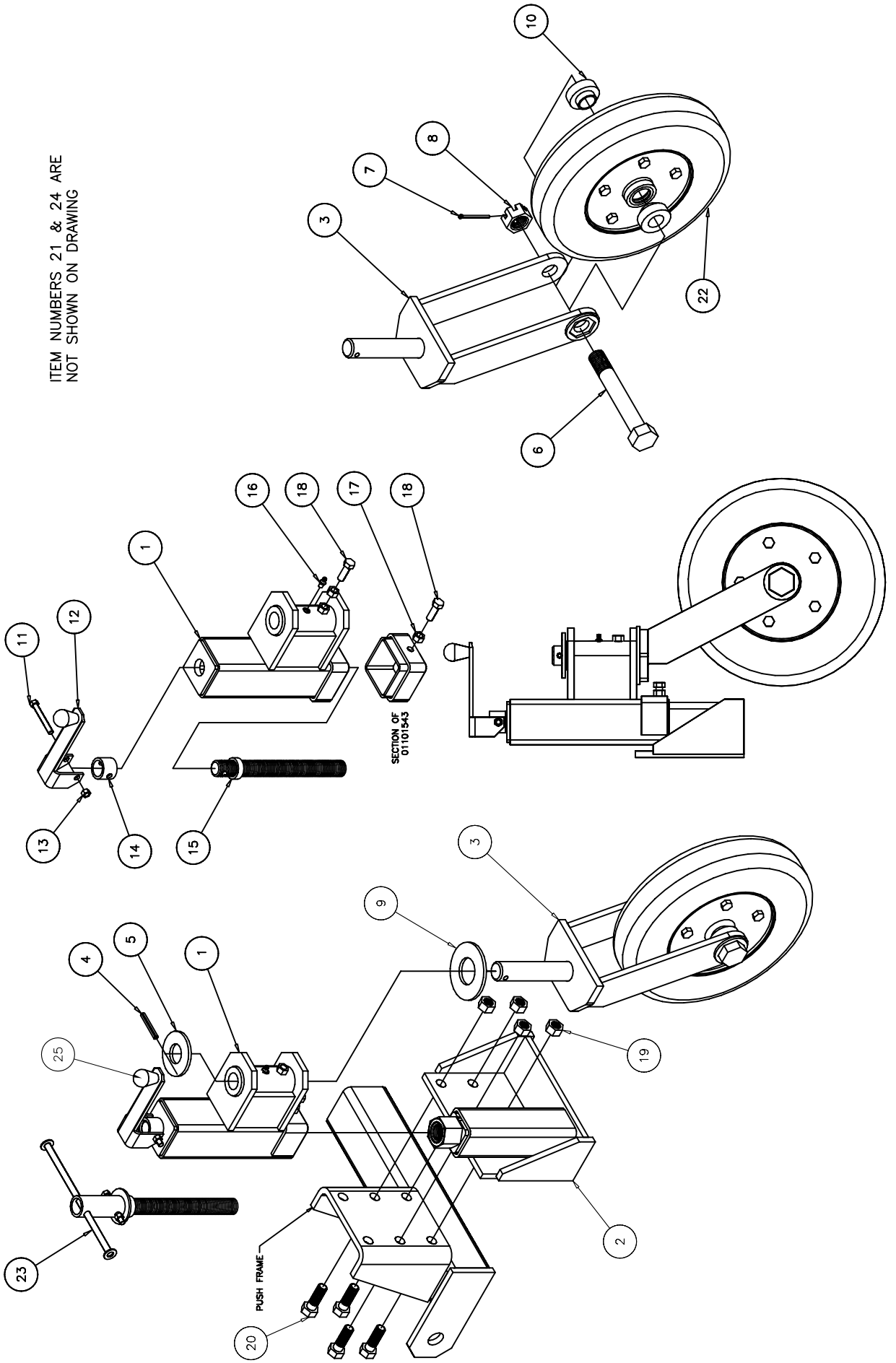
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201101846: MUSHROOM ASB'Y SCREW ADJUSTABLE

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|--------------------|---|---------|----------|
| 1 | 01101384 | OUTER TUBE WELDMENT | 1 | * |
| 2 | 201101784 | TUBE ASB'Y INNER | 1 | * |
| 3 | 301101305 | ADJUSTING HANDLE WELDMENT | 1 | * |
| 4 | 20620005 | HANDLE | 1 | * |
| 5 | 215105 | BOLT 3/8 X 1 HCS | 1 | * |
| 6 | 3SK3595 | 3/8 FLATWASHER | 1 | * |
| 7 | 201101321 | ADJUSTING BOLT WELDMENT | 1 | * |
| 8 | 201101324 | STOP COLLAR | 1 | * |
| 9 | 3SK3591 | NUT 3/8 16 TOP LOCK | 1 | * |
| 10 | 3SK3597 | BOLT 3/8 X 3 GRADE 5 HCS | 1 | * |
| 11 | 281065B | BOLT 3/4 X 2 1/2 NC SQ HD GRADE 5 | 2 | * |
| 12 | 3SK3811 | NUT 3/4 TOP LOCK | 2 | * |
| 13 | 280109A 280110A | SHOE 12 DIA MUSHROOM ALLOY SHOE 12 DIA MUSHROOM NIHARD | 1 | * |



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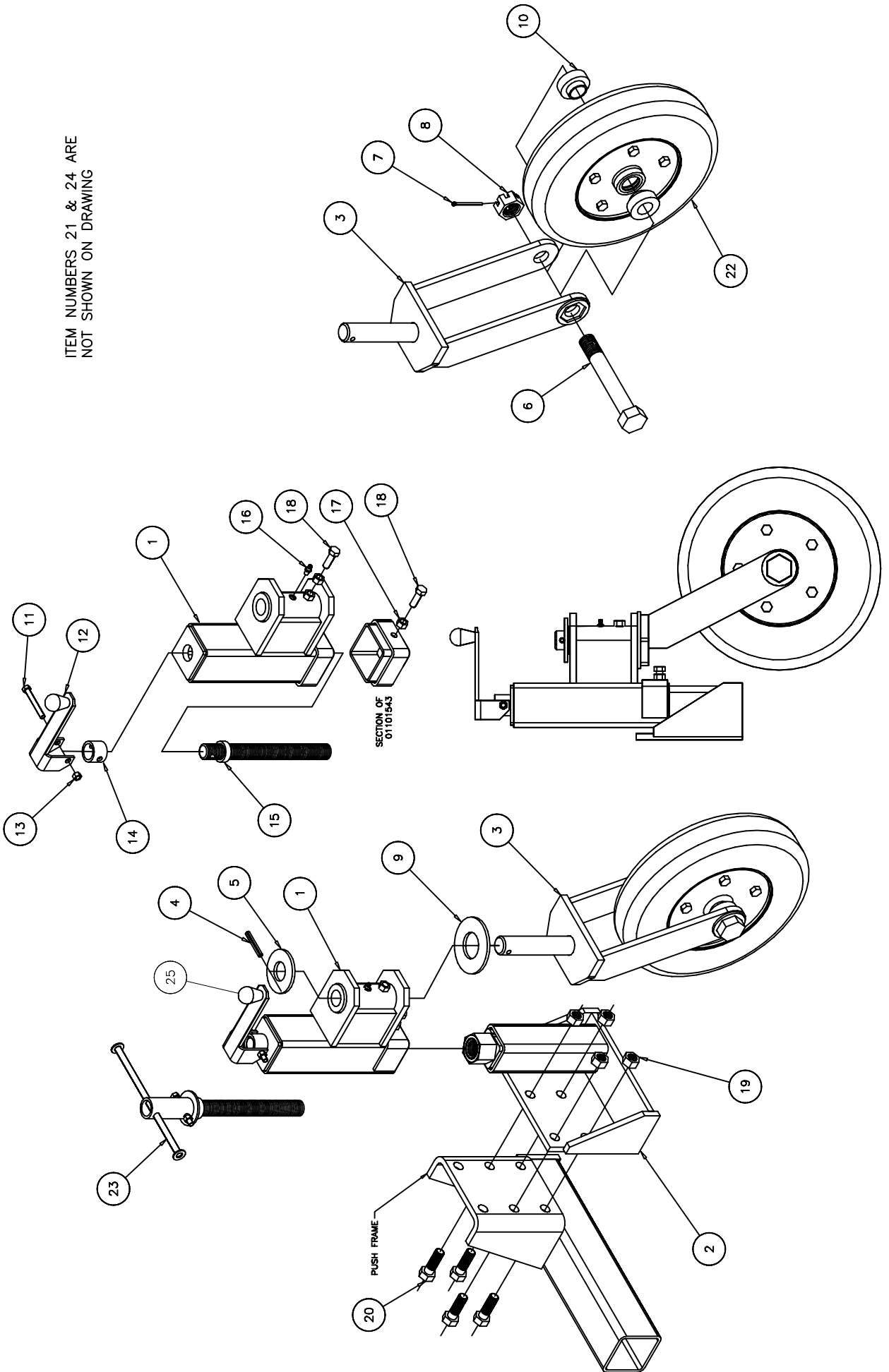
01101695: PNEUMATIC CASTER WHEEL ASB'Y LTH

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|--------------------------------------|---------|----------|
| 1 | 201101543 | OUTER TUBE WELD'T, PNEUMATIC CASTOR | 1 | |
| 2 | 200101532 | 4 BOLT PNEUMATIC WHEEL MTG BRK'T LTH | 1 | |
| 3 | 201101325 | WHEEL FORK WELD'T | 1 | |
| 4 | 280569A | ROLL PIN 3/8 X 2 1/2 ZINC | 1 | |
| 5 | 3SK3860 | FLATWASHER USS 1 1/2 ZINC | 1 | |
| 6 | 200900067 | PIN 1.2500 DIA X 7.500 | 1 | |
| 7 | 280508A | COTTER PIN 1/4 X 2 ZINC | 1 | |
| 8 | 281006 | NUT HEX SLOTTED 1 1/4 UNC ZINC | 1 | |
| 9 | 233812 | FLATWASHER SAE 2" ZINC | 1 | |
| 10 | 201102005 | FORK AXLE BUSHING | 2 | |
| 11 | 3SK3597 | BOLT HEX 3/8 X 3 UNC ZINC | 1 | |
| 12 | 201101305 | HANDLE ASSEMBLY | 1 | |
| 13 | 3SK3591 | NUT HEX TOPLOCK 3/8 UNC ZINC | 1 | |
| 14 | 201101324 | STOP COLLAR | 1 | |
| 15 | 201101321 | ADJUSTING BOLT WELD'T | 1 | |
| 16 | 280577 | GREASE FITTING 1/8 NPT STR | 1 | |
| 17 | 21136410 | NUT HEX 1/2 UNC ZINC | 2 | |
| 18 | 3SK3600 | BOLT HEX 1/2 X 1 1/2 UNC ZINC | 2 | |
| 19 | 3SK3811 | NUT TOPLOCK 3/4 UNC ZINC | 4 | * |
| 20 | 3SK3805 | BOLT HEX 3/4 X 2 1/4 UNC ZINC | 4 | * |
| 21 | 2GS-4 | GREASE SEAL | 2 | |
| 22 | 2DM408C-51 | TIRE & WHEEL ASS'Y | 1 | * |
| 23 | 201101714 | HANDLE ASSEMBLY T-STYLE | 1 | * |
| 24 | 2H812 | HUB ASSEMBLY | 1 | |
| 25 | 20620005 | KNOB | 1 | |



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ITEM NUMBERS 21 & 24 ARE NOT SHOWN ON DRAWING



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01101696: PNEUMATIC CASTER WHEEL ASB'Y RTH

| ITEM ID | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|------------|--------------------------------------|---------|----------|
| 1 | 201101543 | OUTER TUBE WELD'T, PNEUMATIC CASTOR | 1 | |
| 2 | 200101649 | 4 BOLT PNEUMATIC WHEEL MTG BRK'T RTH | 1 | |
| 3 | 201101325 | WHEEL FORK WELD'T | 1 | |
| 4 | 280569A | ROLL PIN 3/8 X 2 1/2 ZINC | 1 | |
| 5 | 3SK3860 | FLATWASHER USS 1 1/2 ZINC | 1 | |
| 6 | 200900067 | PIN 1.2500 DIA X 7.500 | 1 | |
| 7 | 280508A | COTTER PIN 1/4 X 2-1/2 ZINC | 1 | |
| 8 | 281006 | NUT HEX SLOTTED 1 1/4 UNC ZINC | 1 | |
| 9 | 233812 | FLATWASHER SAE 2" ZINC | 1 | |
| 10 | 201102005 | FORK AXLE BUSHING | 2 | |
| 11 | 3SK3597 | BOLT HEX 3/8 X 3 UNC ZINC | 1 | |
| 12 | 211101016 | HANDLE ASSEMBLY | 1 | |
| 13 | 3SK3591 | NUT HEX TOPLOCK 3/8 UNC ZINC | 1 | |
| 14 | 201101324 | STOP COLLAR | 1 | |
| 15 | 201101321 | ADJUSTING BOLT WELD'T | 1 | |
| 16 | 280577 | GREASE FITTING 1/8 NPT STR | 1 | |
| 17 | 21136410 | NUT HEX 1/2 UNC ZINC | 2 | |
| 18 | 3SK3600 | BOLT HEX 1/2 X 1 1/2 UNC ZINC | 2 | |
| 19 | 3SK3811 | NUT TOPLOCK 3/4 UNC ZINC | 4 | * |
| 20 | 3SK3805 | BOLT HEX 3/4 X 2 1/4 UNC ZINC | 4 | * |
| 21 | 2GS-4 | GREASE SEAL | 2 | |
| 22 | 2DM408C-51 | WHEEL & HUB ASS'Y | 1 | * |
| 23 | 201101714 | HANDLE ASSEMBLY T-STYLE | 1 | * |
| 24 | 2H812 | HUB ASSEMBLY | 1 | |
| 25 | 20620005 | KNOB | 1 | |



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RUBBER DEFLECTOR OPTIONS

| ASSEMBLY NO. | ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|--------------|---------|---------------------------------|---------|----------|
| N/A | S7350 | RUBBER DEFLECTOR 10FT INSTALLED | 1 | * |
| N/A | S7351 | RUBBER DEFLECTOR 11FT INSTALLED | 1 | * |
| N/A | S7352 | RUBBER DEFLECTOR 12FT INSTALLED | 1 | * |

NOTE: All Deflector Installation Kits include the following standard items:

- 3/8 X 12 inch 3 PLY Rubber deflector (length as required)
- 3/16 X 2 inch Deflector plate washer (length as required)
- All required mounting hardware



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APPENDIX



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HYDRAULIC CYLINDERS

| ITEM NO | DESCRIPTION | QTY REQ | OPTIONAL |
|---------|---------------------------------------|---------|----------|
| 280153 | CYLINDER HYD DA 3 X 9 1/4 2IN ROD DIA | 1 | |
| | | | |