

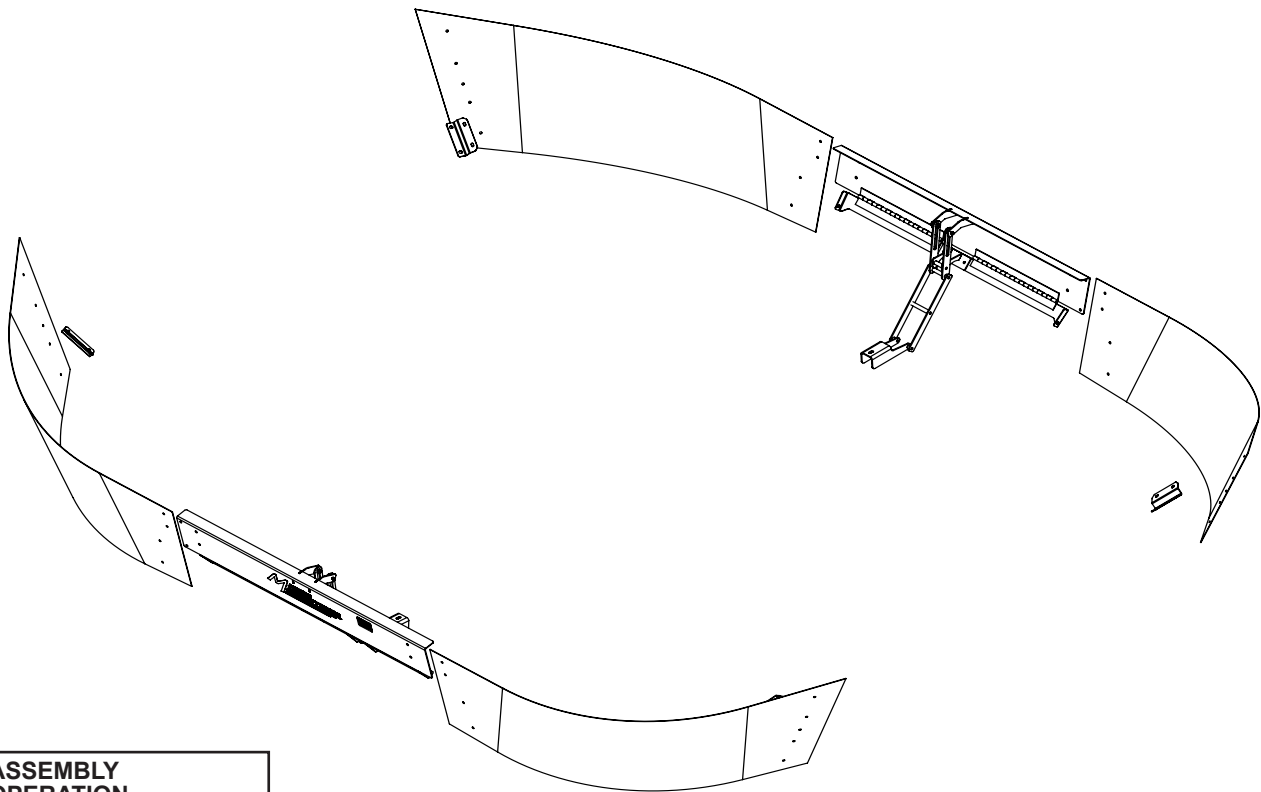
Combine Grain Tank Extension Tip-Up Kit MS75e

**FITS JOHN DEERE S680 & S690 COMBINES
OPERATORS / ASSEMBLY MANUAL**

**PLACE IN COMBINE CAB AFTER ASSEMBLY
FOR FUTURE REFERENCE.**



**FOR USE ON COMBINES WITH
POWER FOLD COVER ONLY**



**ASSEMBLY
OPERATION
REPLACEMENT PARTS**

INTRODUCTION

Thank you for purchasing a Maurer grain tank extension Tip-Up kit. Proper care and use will result in many years of service.



WARNING: TO AVOID PERSONAL INJURY OR DEATH, OBSERVE THE FOLLOWING INSTRUCTIONS:

Ensure that anyone present is clear before applying power to any machinery used in conjunction with a Maurer grain tank extension.

Never allow anyone in or near the grain tank of a combine during loading or unloading of grain. The accumulation of grain is dangerous and can cause entrapment, resulting in serious injury or death by suffocation.

Adding a Maurer Bin Extension or Tip-Up increases the overall height of your combine. Use caution when operating around trees, buildings, power lines, and when approaching bridges and over passes. Pay attention to height restrictions.

Do not exceed advertised maximum capacity of a Maurer grain tank extension.

GENERAL INFORMATION

1. Read assembly instructions carefully. Study assembly procedures and all illustrations before you begin assembly. Note which parts are used in each step. This unit must be assembled in proper sequence or complications will result.
2. When placing a parts order, refer to this manual for proper part numbers and place order by **PART NO. and DESCRIPTION.**
3. Whenever terms “**LEFT**” and “**RIGHT**” are used in this manual it means from a position behind combine and facing forward.

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SAFETY

TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH!



**THIS SYMBOL MEANS
ATTENTION
BECOME ALERT
YOUR SAFETY IS INVOLVED!**

SIGNAL WORDS

Note use of following signal words **DANGER**, **WARNING**, and **CAUTION** with safety messages. The appropriate signal word for each has been selected using the following guidelines:

DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to most extreme situations typically for machine components which, for functional purposes, cannot be guarded.

WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION: Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

If you have questions not answered in this manual, require additional copies, or if your manual is damaged, please contact your dealer or Maurer, P.O. Box 160, 1300 38th Ave. West, Spencer, Iowa 51301, Ph: (712) 262-2992 Fax: (712) 262-1022 www.demco-products.com



PRODUCT SAFETY GUIDELINES

Every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury, study the following precautions and insist those working with you, or you yourself, follow them.

Replace any caution, warning, danger or instruction safety decal that is not readable or is missing. Location of such decals is indicated in this booklet.

Review safety instructions with all users annually.

Operator should be a responsible adult. **DO NOT ALLOW PERSONS TO OPERATE OR ASSEMBLE THIS UNIT UNTIL THEY HAVE DEVELOPED A THOROUGH UNDERSTANDING OF SAFETY PRECAUTIONS AND HOW IT WORKS.**

Do not paint over, remove, or deface any safety signs or warning decals on your equipment. Observe all safety signs and practice instructions on them.

Never exceed limits of a piece of machinery. If its ability to do a job, or to do so safely is in question **DON'T TRY IT.**

Adding a Maurer Bin Extension or Tip-Up increases the overall height of your combine. Use caution when operating around trees, buildings, power lines, and when approaching bridges and overpasses. Pay attention to height restrictions.

Fold and secure (if needed) the grain tank extension panels when transporting the combine to avoid contact with low power lines and other obstructions.

Ensure that any additional bracing and safety equipment has been installed according to this manual. (Some models do not require additional bracing or safety equipment)

Never exceed the maximum advertised capacity of the grain tank extension. By doing so you risk damage to the grain tank extension and combine.

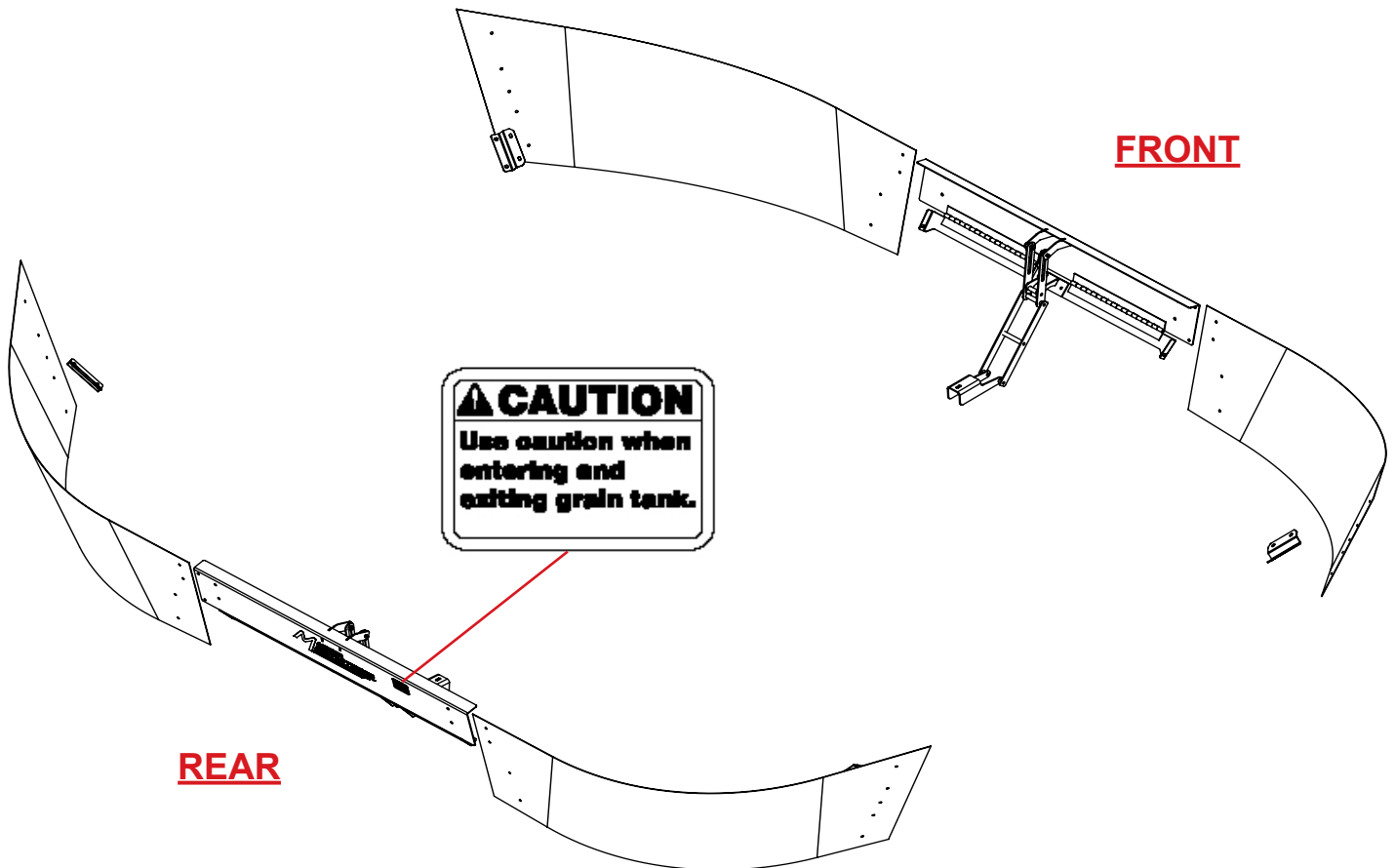
PRODUCT DISCLAIMER

Increasing the grain tank capacity of any combine by use of this product is at the discretion of the owner. Increasing the grain holding capacity of any combine may affect the structural aspects of the combine as well as drive line components and tires. Although Maurer has included additional support bracing on selected models, it does not assume liabilities, or make any warranties pertaining to the structural stability or performance of any combine. See the combine owners/operators manual for additional combine specifications and safety information not listed in this manual.



SAFETY SIGN LOCATIONS

Types of safety sign and locations on equipment are shown in illustration below. Good safety requires that you familiarize yourself with various safety signs, type of warning, and area or particular function related to that area, that requires your SAFETY AWARENESS.



SAFETY SIGN CARE

- Keep safety signs clean and legible at all times.
- Replace safety signs that are missing or have become illegible.
- Replacement parts that displayed a safety sign should also display current sign.
- Safety signs are available from the Spencer plant.

Tip-Up Kit Parts Breakdown

MS75e Tip-Up Kit for John Deere S680 & S690 w/ power fold extension

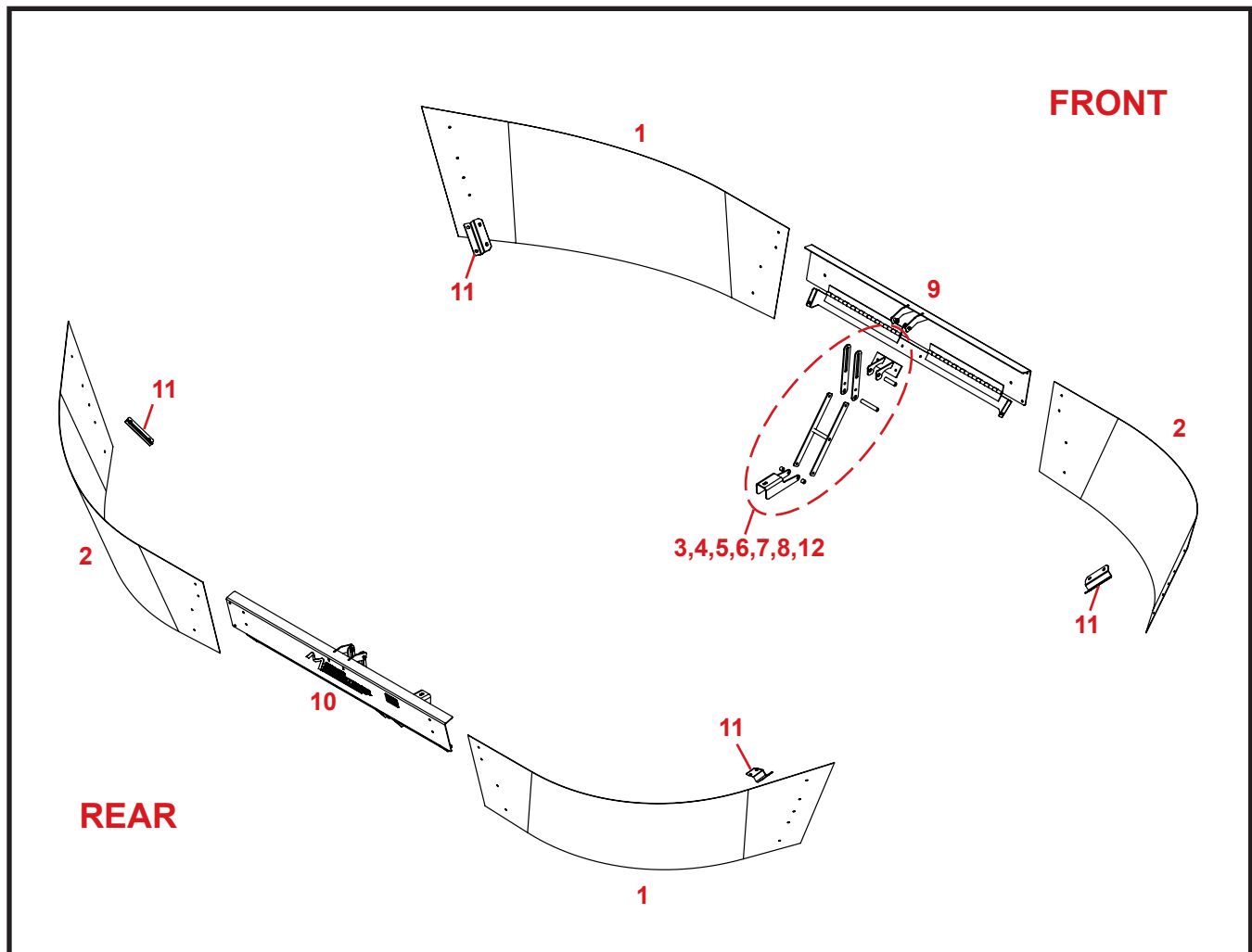


Figure 1

PARTS LIST

Please order replacement parts by PART NO. and DESCRIPTION.

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	1AR00000092	2	JD MS75e LF/RR CORNER
2.	1AR00000093	2	JD MS75e RF/LR CORNER
3.	1AU00000604	4	DRIVE RING RETAINER BUSHING
4.	R3E000298PO	2	PUSH BAR MOUNT
5.	R3E000299PO	4	PUSH BAR
6.	R3E000305PO	4	SLIDE BAR
7.	R3E000308PO	2	LINKAGE BUSHING, SHORT
8.	R3E000309PO	4	LINKAGE BUSHING, LONG
9.	R5E000189PO	1	FRONT PANEL ASSEMBLY
10.	R5E000190PO	1	REAR PANEL ASSEMBLY
11.	R3E000301PO	4	LEFT & RIGHT CORNER MOUNT
12.	R5E000192PO	2	SLIDE BAR MOUNT ASSEMBLY

PARTS LIST CONTINUED

Please order replacement parts by PART NO. and DESCRIPTION.

REF. NO.	PART NO.	QTY.	DESCRIPTION
13.	1AF009E0000	40	5/16" FLAT WASHER
14.	1AF009F0000	20	3/8" FLAT WASHER
15.	1AFC08E0000	25	5/16" FLANGE NUT
16.	1AFC08F0000	10	3/8" FLANGE NUT
17.	1AFC12FDA05	2	3/8" x 4" HEX BOLT
18.	1AFC12FEAH5	6	3/8" x 5.5" HEX BOLT
19.	1AFC18F0000	15	3/8" HEX NUT NYLOCK
20.	1AFC37EAA05	20	5/16" x 1" FLANGE BOLT
21.	1AFC37EAAD5	5	5/16" x 1-1/4" FLANGE BOLT
22.	1AFC37FAA05	10	3/8" x 1" FLANGE BOLT
23.	1AFC62H00H0	4	1/2" x 1/2" SHOULDER BOLT, 3/8" THREAD
24.	1AFZ74FBA00	4	3/8" x 2" LAG BOLT
25.	R5E00021700	1	MS75e HYDRAULIC CYLINDER

ASSEMBLY INSTRUCTIONS

NOTE: Keep all fasteners that are removed.

STEP 1:

To install the Maurer MS75e Front Panel to the JD factory front panel you will need to remove all nuts and washers fastened to the corners from the corner channels using a 13mm wrench. You will also need to remove a nut & bolt from the top of each corner channel. See Figure 2.

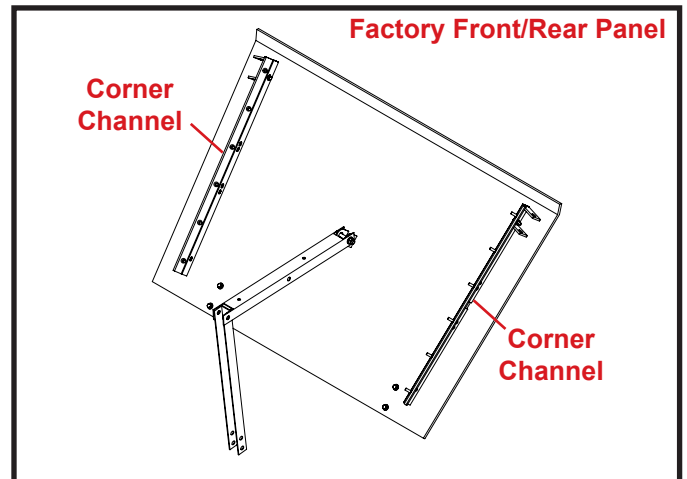


Figure 2

STEP 2:

Install the Maurer MS75e Front Panel by sliding the hinge bracket down between the corner channels and fastening it to the corner channels using the nuts and bolts that were removed in Step 1. See Figure 3.

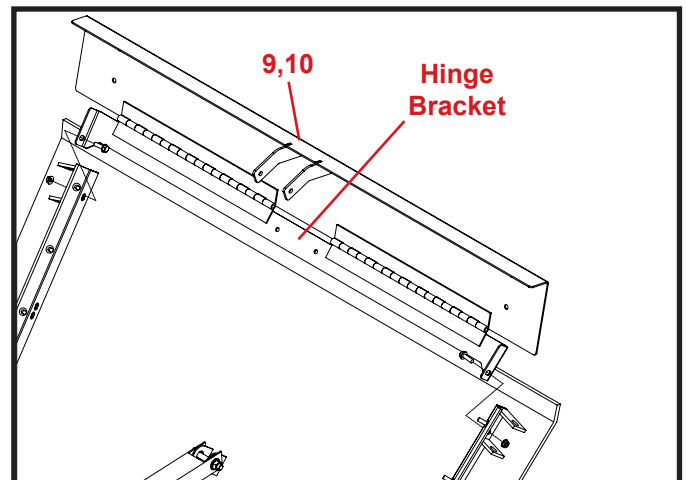


Figure 3



ATTENTION: During assembly ensure the following safety decals are located correctly. See illustration on page 5.



Located on outside of rear panel.

STEP 3:

Drill two 5/16" holes through the factory panel to attach the Slide Bar Mount and the Hinge Bracket to the panel. Fasten the Slide Bar Mount and the Hinge bracket to the factory panel using the 5/16" x 1-1/4" flange bolts, washers, and flange nuts provided. See Figure 4.

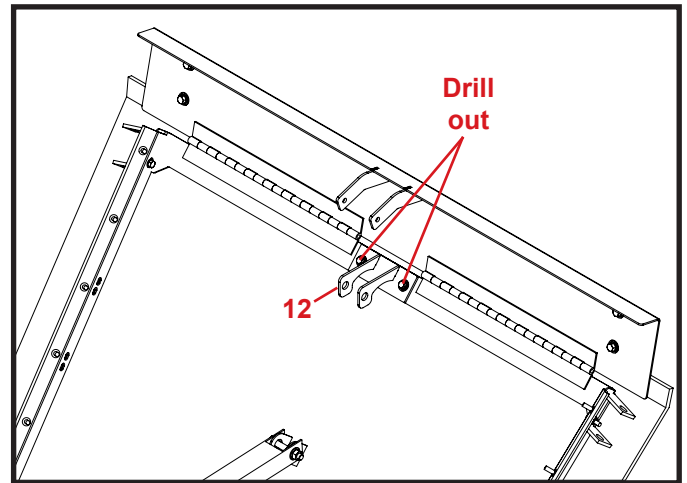


Figure 4

STEP 4:

Insert the Short Linkage Bushing into the Slide Bar mount. Next, on each of the Slide Bars insert a Shoulder Bolt through the slot and mount it to the dog leg on the Front Panel using a nylock nut to secure it. Use a 3/8" x 4" hex bolt and nylock nut to fasten the Slide Bars to the Slide Bar Mount. Get the nut snug and then back it off 1/4 turn. See Figure 5.

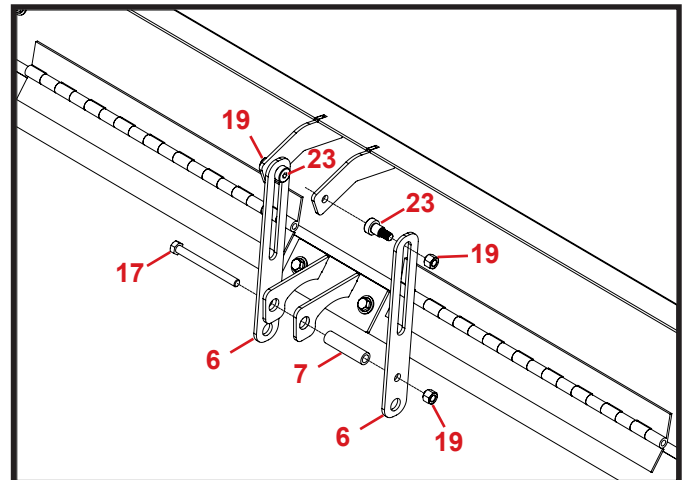


Figure 5

STEP 5:

Insert a Long Linkage Bushing through the Slide Bars. Fasten the Push Bars to the Slide Bars using a 3/8" x 5.5" hex bolt and nylock nut provided. Next, fasten another Long Linkage Bushing to the center of the Push Bars using the same size nut and bolt mentioned earlier. Get the nylock nuts snug and then back them off 1/4 turn. See Figure 6.

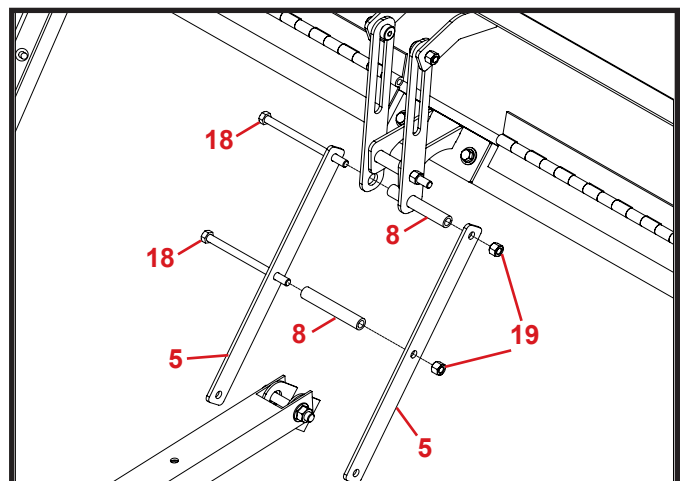


Figure 6

STEP 6:

Place the Push Bar Mount on the horizontal folding arm of the factory panel. Fasten the Push Bars to the Push Bar Mount using a 3/8" x 5.5" hex bolt and nylock nut provided. The bolt should go under the folding arm and have a Retainer Bushing on the inside of each Push Bar. The slot on the Push Bar Mount will line up with a hole on the folding arm. Secure the Push Bar mount in place using a 3/8" x 1" flange bolt, washer, and flange nut provided.

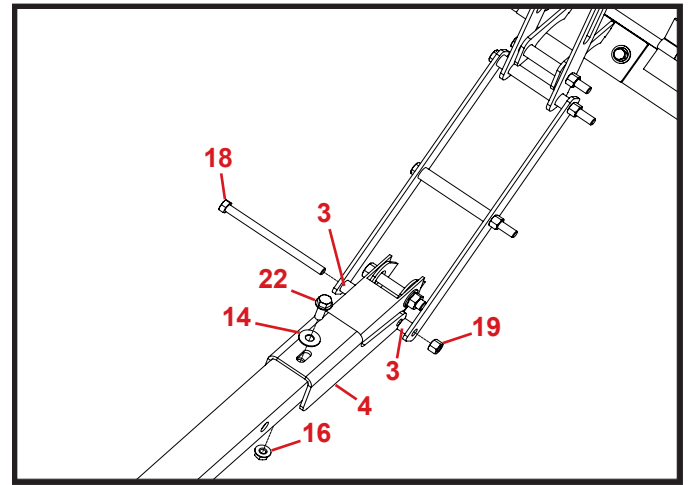


Figure 7

NOTE: See page 10 if the combine is not equipped with a hole on the folding arm.*

STEP 7:

Place the Corner Mounts parallel, inline with, and 3/4" above the factory corner channel. Mark the slots on the Corner Mount and drill two 7/16" holes thru the cover. Fasten the Corner Mounts with the 3/8" x 1" flange bolts, washers, and flange nuts provided. Repeat step at rear of cover. See Figure 8.

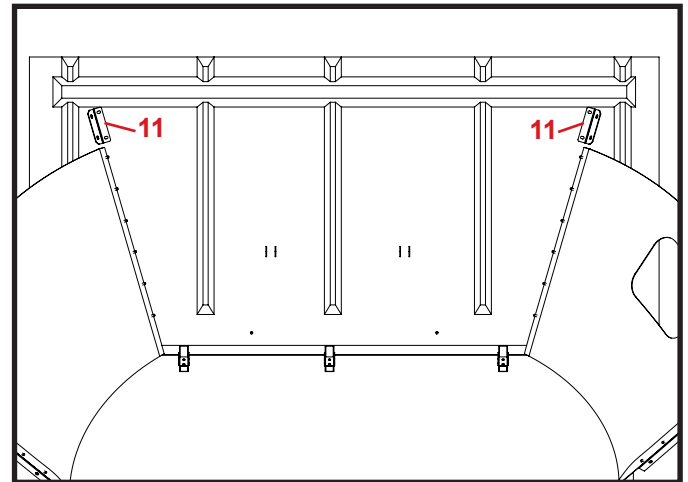


Figure 8

STEP 8:

Starting with the front left corner; remove the top two flange nuts and washers from each of the factory corner channels. Attach the Maurer corner to the Corner Mount and cover using the lag bolt, 5/16" x 1" flange bolts, washers, and flange nuts provided. Use the 5/16" x 1" flange bolts, washers, and flange nuts provided to attach the Maurer corner to the Front Panel. Fit corner over factory bolts and replace the flange nuts and washers. Repeat step with the rear left corner. See Figure 9.

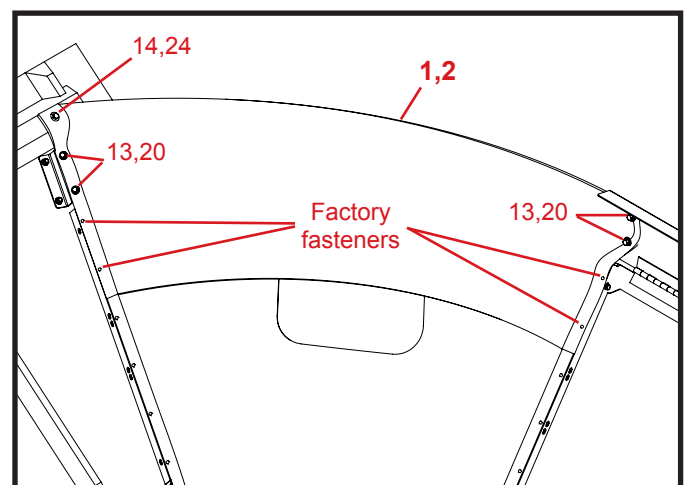


Figure 9

STEP 9:

Repeat steps 1-8 for the rear panel and right cover.

***Use the following pictures to locate and drill a hole on the folding arm to fit a 3/8” bolt.**



****AFTER INSTALLING YOUR NEW MAURER TIP-UP KIT, TEST THE MACHINE TO MAKE SURE IT FOLDS DOWN AND UP FREELY WITHOUT ANY ISSUES AND THAT PARTS DO NOT INTERFERE WITH ONE ANOTHER.**



WARNING!

- The hydraulic system pressure will need to be increased 80-100 lbs.
- Testing the folding function of the grain bin extension should be performed outdoors in a clear setting away from power lines and other obstructions.
- Beware of bystanders, particularly children and keep them away from the machine while it is running.
- Operator should remain in the driver seat while performing this test.
- If the grain bin extension struggles to open, abort the test and refer to Page 11.



TROUBLESHOOTING:

Before operating the power fold grain tank covers, adjustments to grain tank components may need to be made. Refer to John Deere DTAC Solution Number: 92336

Summary:

- Setting the eye bolt on the loading auger
- Adjusting the loading auger linkage
- Relieving clamp load on pillow blocks for the grain tank cover rockshafts
- Verify and adjust as required after 5-hour break-in period
- Additional information
 - Verify front and rear doors hinges are not clamped
 - Loading auger strut is not hooked to the wrong side
 - Check for interference between doors and folding arms
 - Verify self-tapper hardware is fully seated on rockshaft support brackets attached to the grain tank
 - Inspect for rubbing between stop on the rockshaft and weld studs on the doors
 - Verify rockshaft ball-joint turnbuckles are set to factory specs (2.5" on left side, ¾" on right)
 - Front and rear rockshafts should be set all the way to the right hand side
 - Verify correct number of spacers (HXE11083) used on hinges

After completing the DTAC adjustments, the following steps can be used to ensure that the Maurer MS75E tip-up functions correctly:

- Test if panels are functioning properly by removing the rear tip-up panel to test the front & vice versa. (There should be enough power to lift one tip-up panel at a time before increasing hydraulic pressure)
- Check push bar mount hole locations on factory folding arms are around 6.5" (Page 10 in manual)
- Increase system hydraulic pressure to 3,300 PSI
- Operate covers with machine at high throttle

