



Doing Our Best to Provide You the Best

8E000045, Rev AF
10/23/18

COMBINE GRAIN TANK EXTENSION TIP-UP KIT

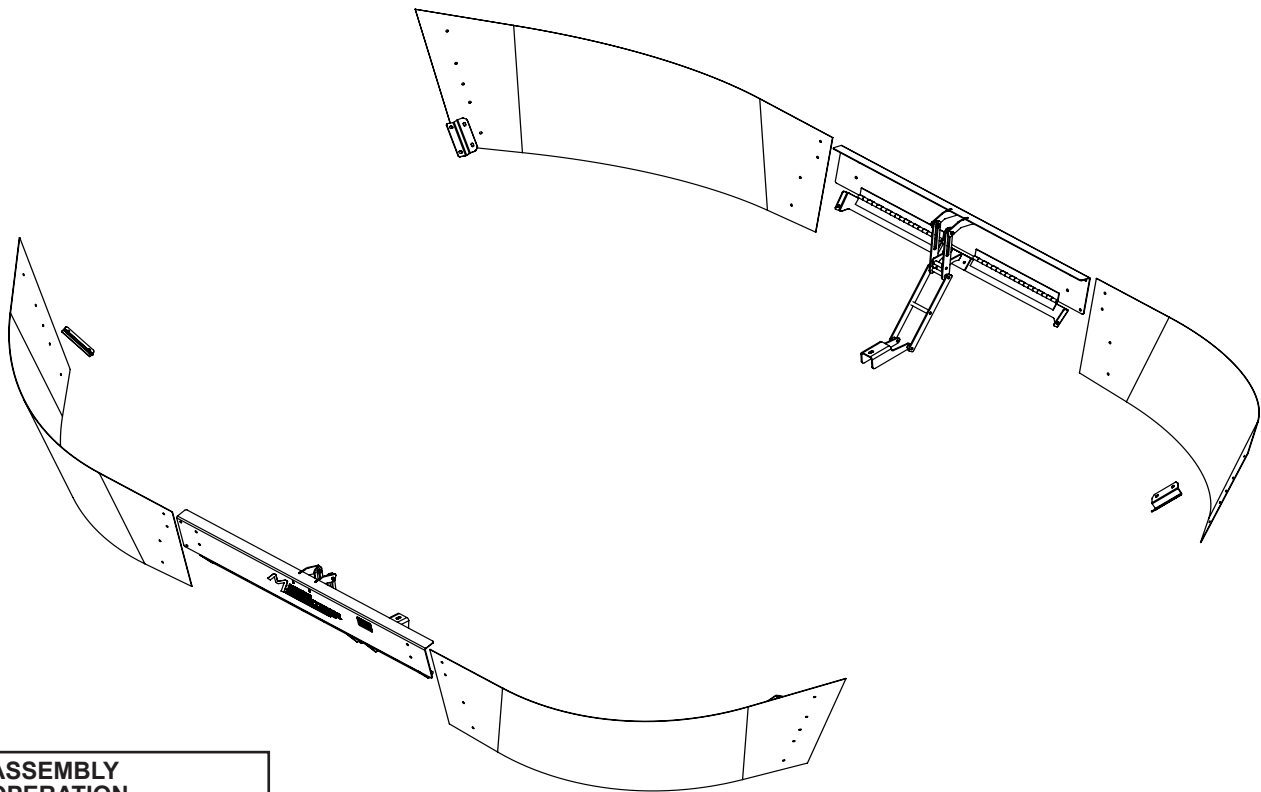
9E000049 - John Deere MS75E Tip-up

FITS: JOHN DEERE S680,S690,S780,S790 COMBINES

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



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



**ASSEMBLY
OPERATION
REPLACEMENT PARTS**

OPERATOR MANUAL

INTRODUCTION

Thank you for purchasing a Demco 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 Demco 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 Demco 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 Demco 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.

Table of Contents

General information	2
Safety, Signal Words.....	3
Product Safety Guidelines	4
Product Disclaimer.....	4
Safety Sign Locations	5
Safety Sign Care.....	5
Parts Breakdown.....	6-7
Assembly Instructions	7-9
Corner Plastic Installation	10-11
Initial Testing/Usage.....	12
Demco Hydraulic Cylinder	12
Troubleshooting	13

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.



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 Demco 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.

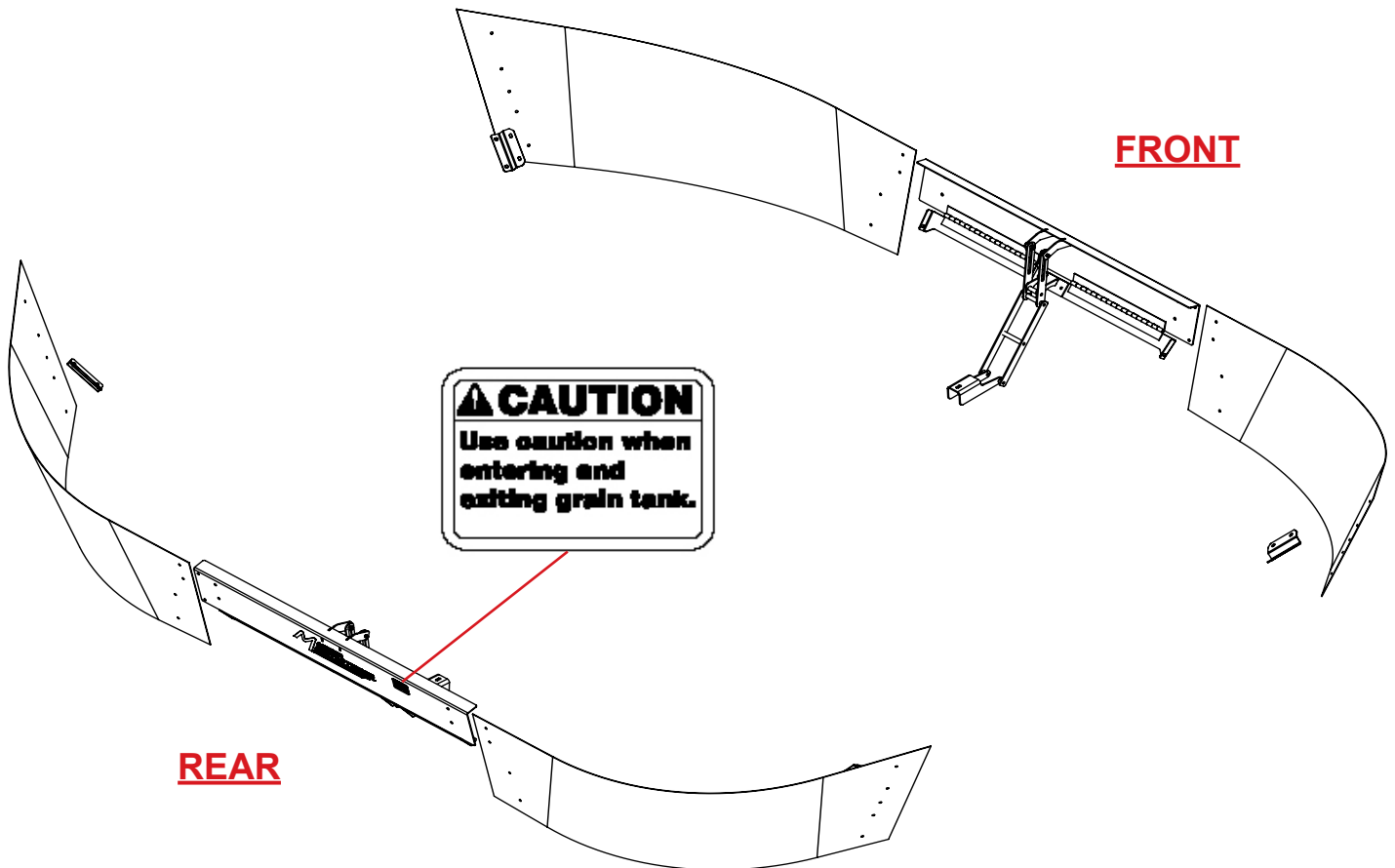
PRODUCT DISCLAIMER

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 Demco 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

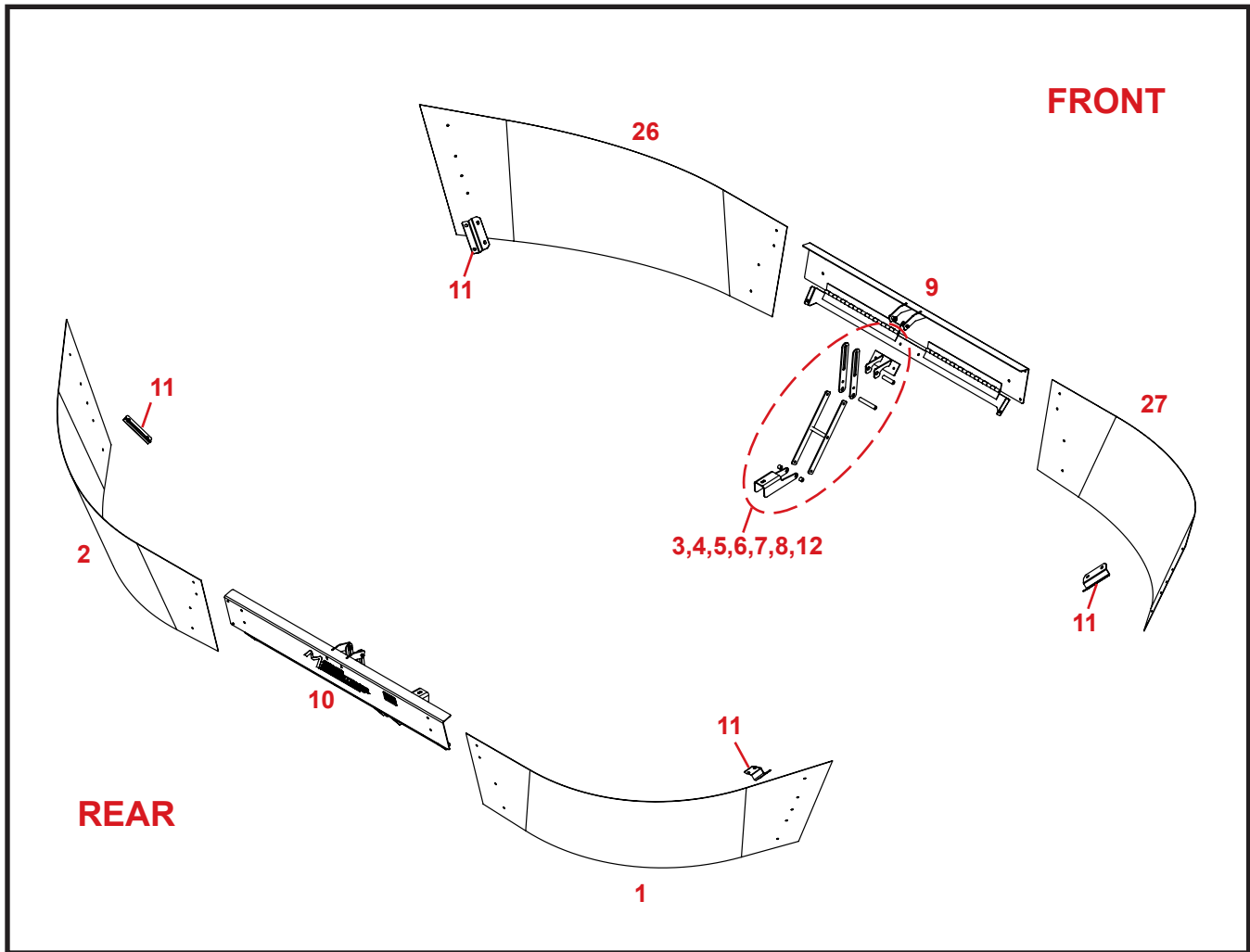


Figure 1

PARTS LIST

Please order replacement parts by PART NO. and DESCRIPTION.

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	1AR00000092	2	JD MS75e RR CORNER
2.	1AR00000093	2	JD MS75e LR CORNER
3.	1AU00000604	4	DRIVE RING RETAINER BUSHING
4.	R3E000298P0	2	PUSH BAR MOUNT
5.	R3E000299P0	4	PUSH BAR
6.	R3E000305P0	4	SLIDE BAR
7.	R3E000308P0	2	LINKAGE BUSHING, SHORT
8.	R3E000309P0	4	LINKAGE BUSHING, LONG
9.	R5E000189P0	1	FRONT PANEL ASSEMBLY
10.	R5E000190P0	1	REAR PANEL ASSEMBLY
11.	R3E000301P0	4	LEFT & RIGHT CORNER MOUNT
12.	R5E000192P0	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
26.	1AR00000101	1	JD MS75e LF CORNER
27.	1AR00000102	1	JD MS75e RF CORNER

ASSEMBLY INSTRUCTIONS

NOTE: Keep all fasteners that are removed.

STEP 1:

To install the Demco 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.

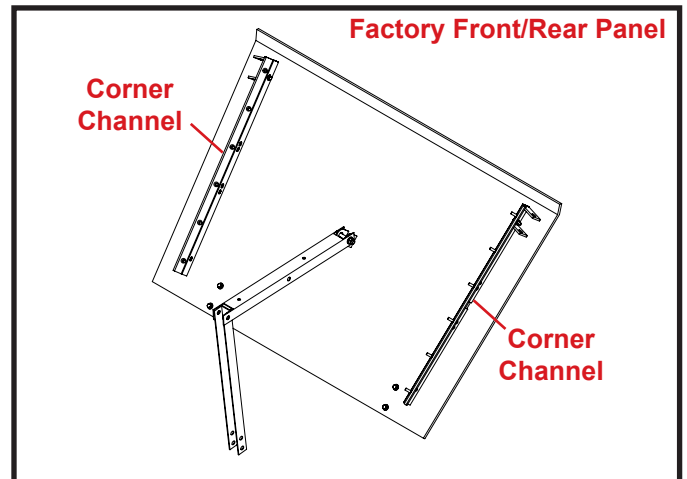


Figure 2

STEP 2:

Install the Demco 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.

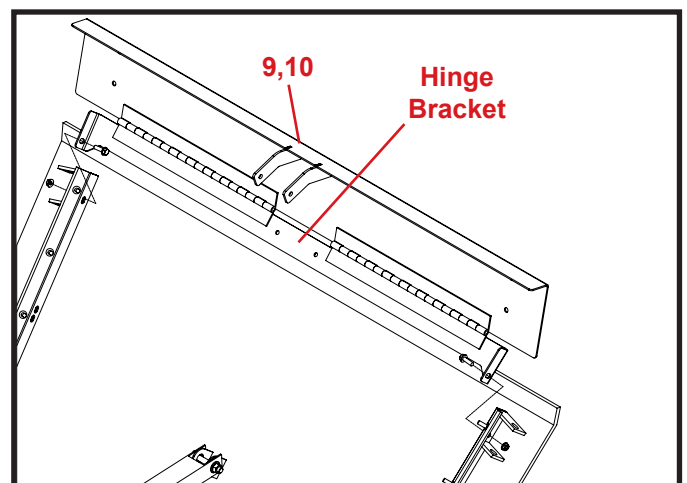


Figure 3



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.

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.

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.

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. See Figure 7.

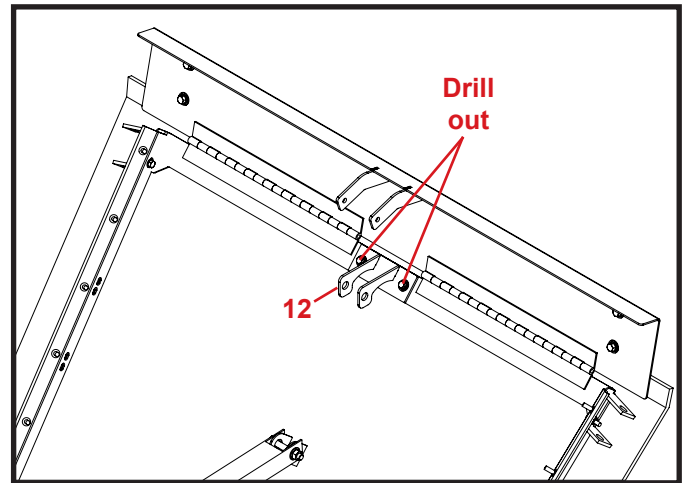


Figure 4

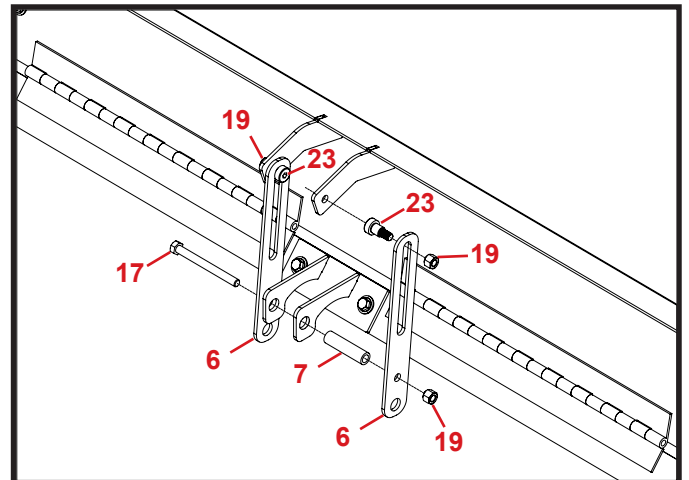


Figure 5

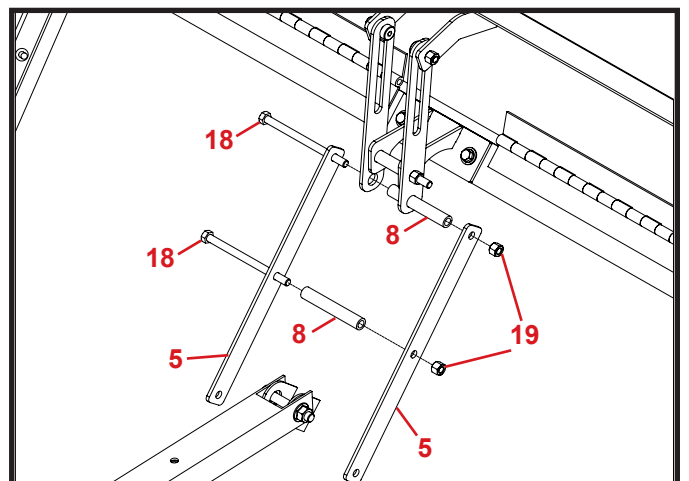


Figure 6

NOTE: See page 12 if the combine is not equipped with a hole on the folding arm.*

STEP 7:

Place the Corner Mounts parallel, in line 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.

NOTE: For the following steps make sure that each corner is in it's proper location:

1AR0000092 - Right Rear

1AR0000093 - Left Rear

1AR00000101 - Left Front

1AR00000102 - Right Front

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 Demco 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 Demco 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.

NOTE: The distance from the top bolt on the steel tip-up panel to the lag bolt should be approximately 64" straight across. See Page 11.

STEP 9:

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

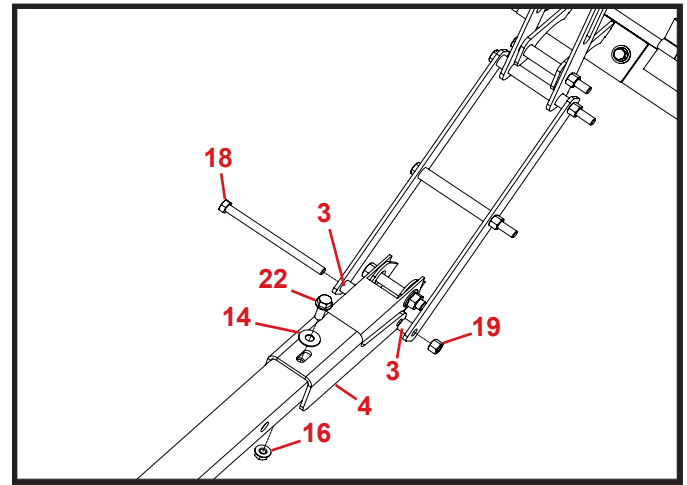


Figure 7

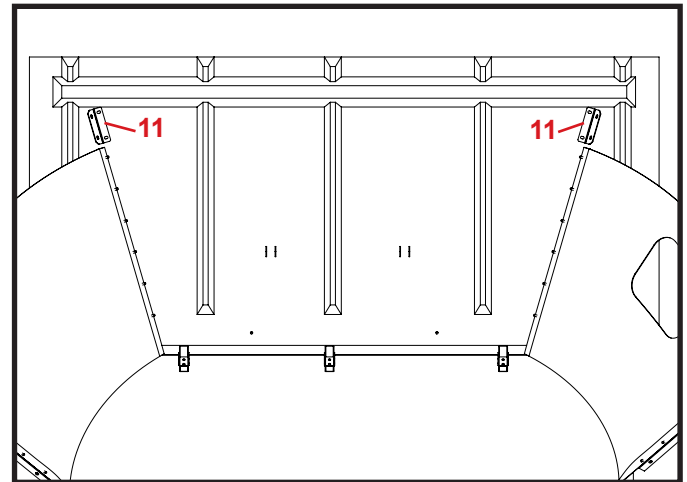


Figure 8

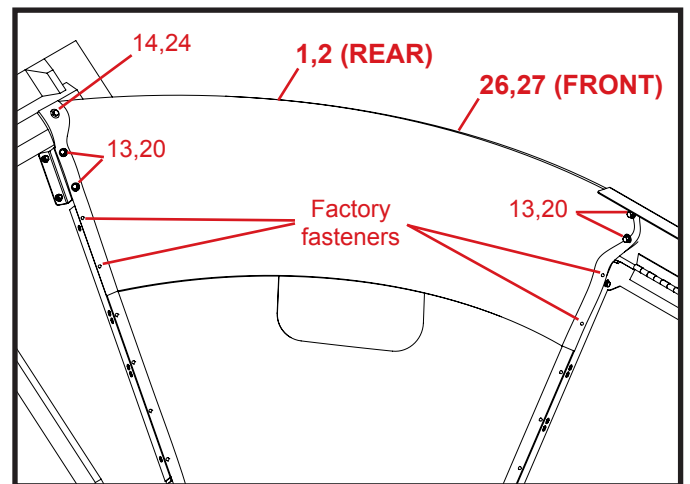


Figure 9

CORNER PLASTIC INSTALLATION INSTRUCTIONS



The following steps will require drilling through the Demco corners if they do not have grommets to mount the plastic stiffeners. If the corners contain grommets to mount the corner plastics use these steps and the pictures on Page 11 as a reference.

NOTE: Make sure that Demco corners are tight and that the lag bolt is placed at it's approximate distance before mounting the plastics. See top picture on Page 11.

STEP 1:

Starting on the outside of the left rear, find the top center of the Demco tarp corner and mark it.

STEP 2:

On the center mark from STEP 1 place the plastic stiffener perpendicular with the tarp and approximately 1/2" down from the top. Mark all three holes from the stiffener onto the Demco corner and the John Deere OEM corner.

NOTE: Make sure that the 2 holes closest to each other are towards the bottom. See pictures on Page 11.

STEP 3:

Drill out the top hole and loosely bolt the plastic to the tarp with the nuts, bolts, and washers provided.

STEP 4:

Drill holes for the center and bottom bolts. These holes should go through the OEM corner and the Demco corner.

STEP 5:

Add nuts, bolts, and washers to the center and bottom holes of the plastic stiffener and tighten all three bolts.

STEP 6:

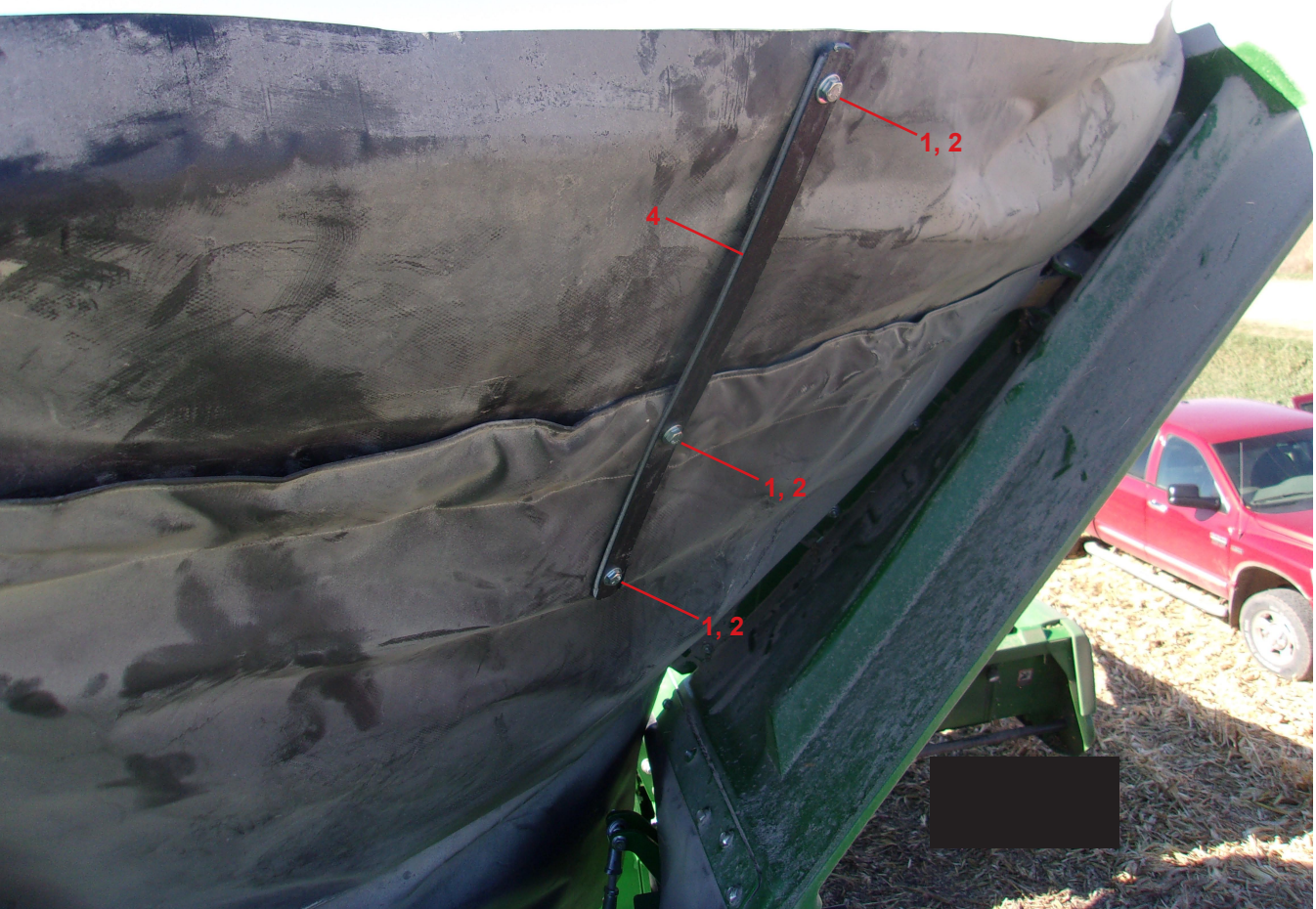
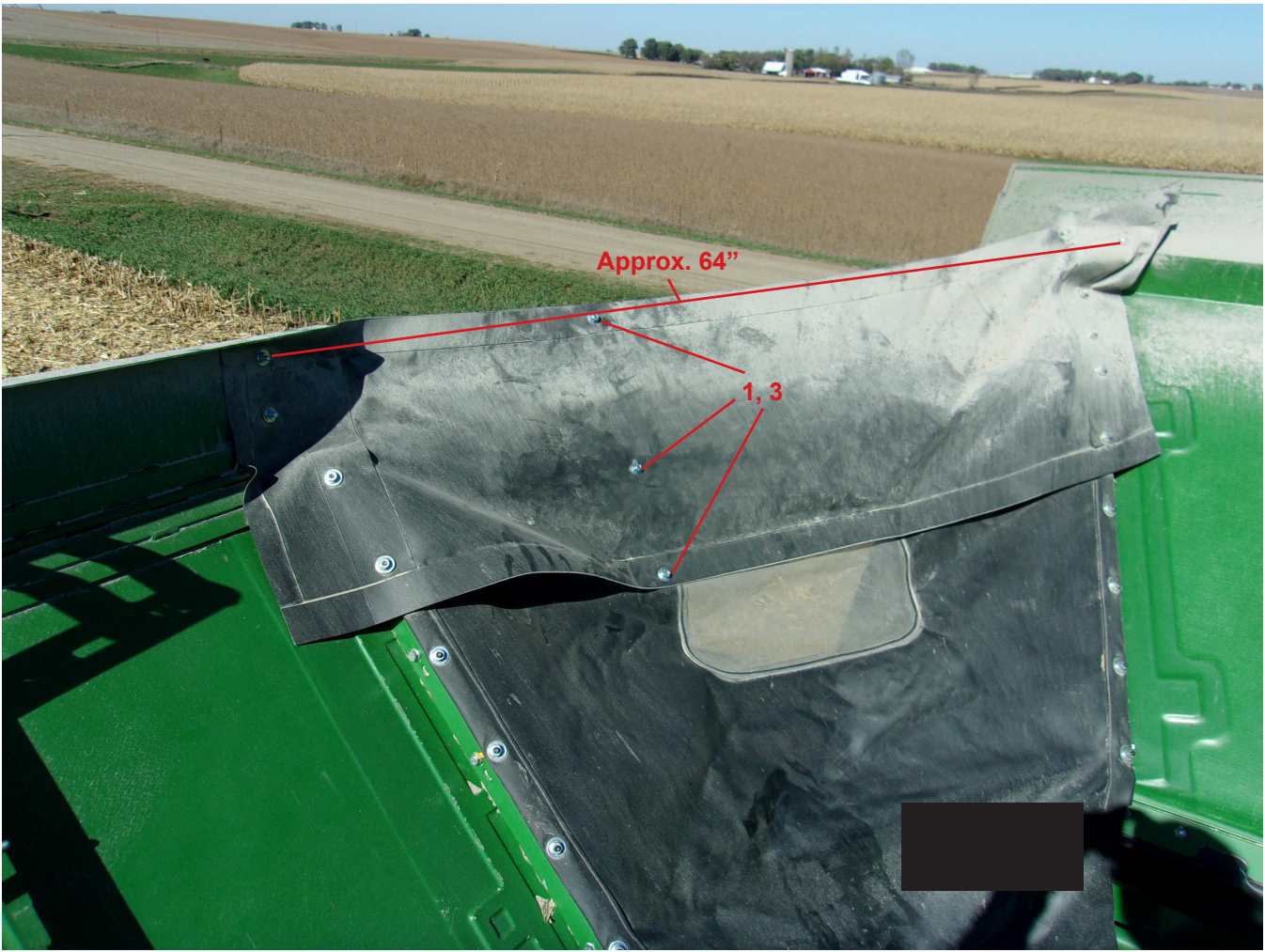
Repeat steps 1-5 on the remaining corners.

NOTE: The front corners will require a different mounting location than the rears to avoid damaging the windows. See pictures on page 11 for reference.

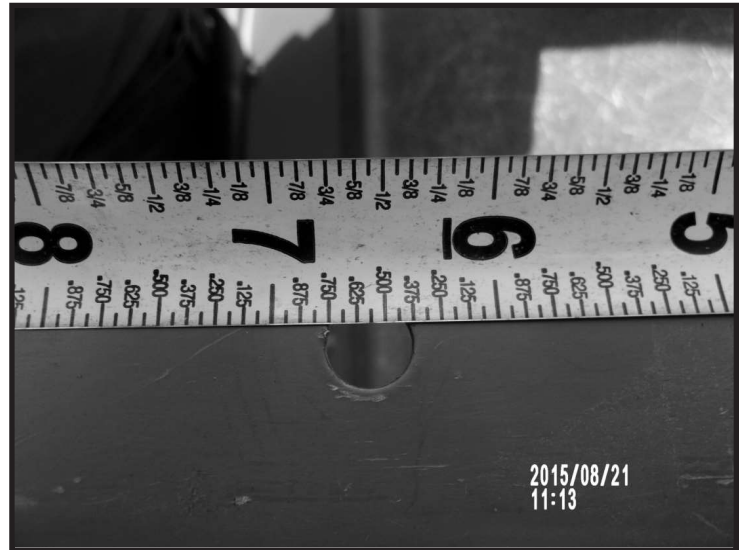
PARTS LIST

Please order replacement parts by PART NO. and DESCRIPTION.

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	1AF009E0000	24	5/16" FLAT WASHER
2.	1AFC12EAA05	12	5/16" x 1" HEX BOLT
3.	1AFC18E0000	12	5/16" NYLOCK NUT
4.	1AR00000028	4	JD MS75E CORNER PLASTIC



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



****AFTER INSTALLING YOUR NEW DEMCO 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!

- 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.

DEMCO HYDRAULIC CYLINDER

1. Demco has included a new hydraulic cylinder with this kit to lift the additional weight of the grain tank.
2. The Demco cylinder replaces the OEM cylinder located under the right rear corner of the grain tank.
3. Fold factory extension outward to the harvesting position so the cylinder is contracted.
4. Loosen hydraulic lines on existing cylinder to relieve pressure and disconnect both lines.
5. Remove existing cylinder from combine.
6. Install provided fittings in new cylinder.
7. Install new cylinder.
8. Connect hydraulic line to new cylinder.
9. Test the bin extension folding it up & down 3-4 times to work any air out of hydraulic system.



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)
- Operate covers with machine at high throttle

DEMCO

4010 320th St., Boyden, IA. 51234

Phone: (712) 725-2311

Fax: (712) 725-2380

Toll Free: 1-800-54DEMCO (1-800-543-3626)

**Demco warranty policies, operator manuals, and product registration
can be found online:**

www.demco-products.com

