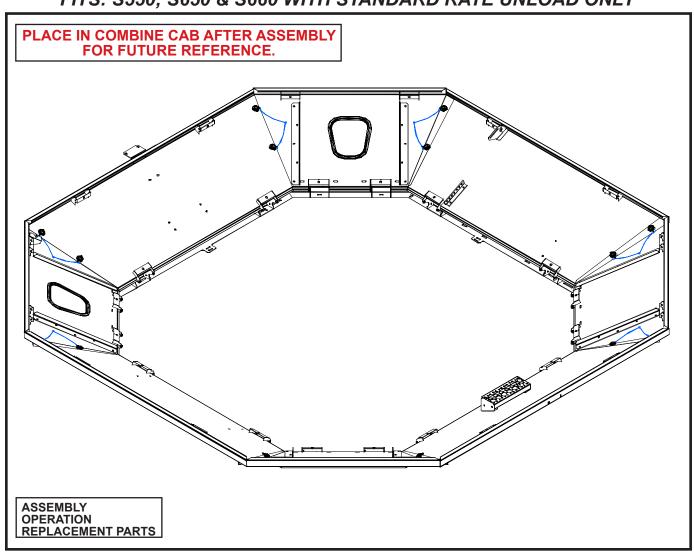




COMBINE GRAIN TANK EXTENSION

9E000033 - John Deere S550 Extension

FITS: S550; S650 & S660 WITH STANDARD RATE UNLOAD ONLY



OPERATOR MANUAL

INTRODUCTION

Thank you for purchasing a Demco grain tank extension. 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

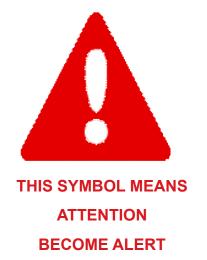
- Read assembly instructions carefully. Study assembly procedures and all illustrations before you begin assembly. Note which parts are used in each step. This unit must be assembled in proper sequence or complications will result.
- 3. Whenever terms "LEFT" and "RIGHT" are used in this manual it means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

Table of Contents

jeneral information	2
Safety, Signal Words	3
Equipment Safety Guidelines	4
Safety Sign Locations	5
Safety Sign Care	5
Product Disclaimer	5
Parts Breakdown	6
Parts List	7
Frame Assembly	8
Panel Assembly & Safety Step	8-9
Misc. Bracket Assembly	10
Completed Assembly	11
Mounting Instructions	12
Niring, and Tank Cap Installation	13
Handrail Installation	

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!



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:

YOUR SAFETY IS INVOLVED!

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.

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 it's 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, building, power lines, and when approaching bridges and over passes. 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.

Use the panel safety step to safely enter and exit the grain tank.

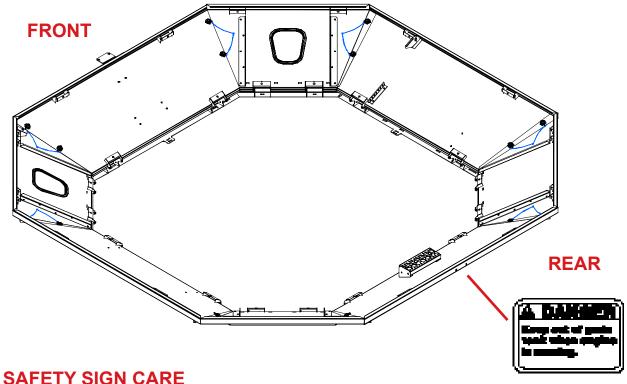
Ensure that any additional bracing and safety equipment have been installed according to this manual. (Some models do not require additional bracing or safety equipment)

Ensure that the grain tank extension frame has been properly mounted to the combine according to this manual.

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



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.

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.

Grain Tank Extension Breakdown

John Deere S-550 Grain Tank Extension

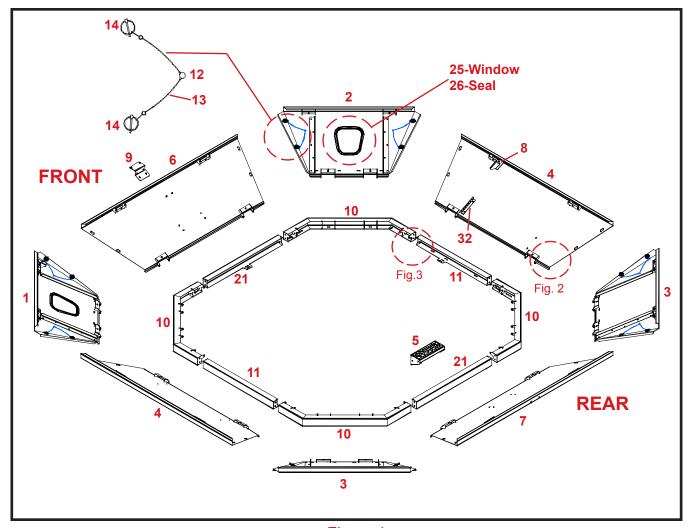


Figure 1

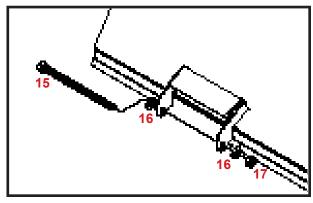


Figure 2

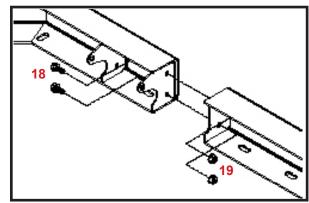
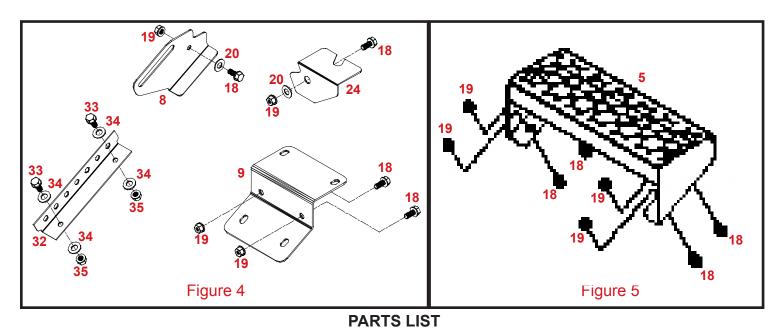


Figure 3



Please order replacement parts by PART NO. and DESCRIPTION.

REF.	PART NO.	QTY.	DESCRIPTION				
<u> </u>		•					
1.	R5E000011P0	1 1	Front Left Corner Panel				
2. 3.	R5E000003P0	1 2	Front Right Corner Panel Rear Corner Panel				
	R5E000005P0	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$					
4. 5.	R5E000114P0		Side Panel (S-550)				
6.	R5E000006P0	1 1	Extension Safety Step				
7.	R5E000004P0		Front Panel (STS)				
	R5E000010P0		Rear Panel (STS) Base Sensor Bracket				
8.	R3E000019P0						
9.	R3E000022P0	1 1	Base GPS Bracket				
10.	R5E000007P0 R5E000111P0	4 2	Frame Corner Assembly				
12.		8	Side Frame Splice Assembly (S-550) Press Rivet				
13.	1AF032D0000 1AF031DKA00	16					
14.	1AF031DKA00	16	Nylon Lanyard 3/16" x 1-9/16" Lynch Pin				
15.	1AFC12FFA05	16	3/8" x 6.00 Hex Bolt				
16.	1AF009E000C	32	3/8" SAE Flat Washer				
17.	1AFC18F0000	16	3/8" Nylon Lock Nut				
18.	1AFC37E00L0	32	5/16" x 3/4" Serrated Flange Bolt				
19.	1AFC08E0000	40	5/16" Serrated Flange Nut				
20.	1AF046EAAD0	2	5/16" x 1-1/4" x .120 Washer				
21.	R5E000110P0	2	Front & Rear Frame Splice (S-550)				
*22.	R5E000055P0		Complete Handrail Assembly				
*23.	1AFC37EAA05	8	5/16" x 1" Serrated Flange Bolt				
24.	R3E000003P0	1 1	Base Light Bracket				
25.	1AWALACKAMC	2	Window				
26.	R3E000026P0	2	Window Seal				
27.	R3E000195P0	2	Deere Front Tank Cap (S-550)				
28.	R3E000197P0		Deere Right Rear Tank Cap (S-550)				
29.	R3E000196P0		Deere Left Rear Tank Cap (S-550)				
*30.	1AEX0015241		Two-way Deere Sensor Wire Harness				
*31.	1AFC35CAA00	16	#12 X 1" Self Tapping Screw				
32.	R3E000143P0	1 1	M60 Additional Sensor Bracket				
33.	1AFC12DAA05	2	1/4" x 1" Hex Bolt				
34.	1AF009D0000	4	1/4" Flat Washer				
35.	1AFC05D0000	2	1/4" Center Lock Nut				
*36.	1AU0000E021	3	Frame Spacers				
	* Indicates items not shown in illustrations						

^{*} Indicates items not shown in illustrations

NOTE: In order to simplify the assembly process, we **do not** recommend that the grain tank extension be assembled on the ground and hoisted to the top of the combine.

FRAME ASSEMBLY

Arrange the frame components as shown in figure 6. The frame corner with the serial number decal is the left front frame corner. The straight frame sections with multiple slots in the bottom MUST be installed on the Left and Rigtht sides of the bin extension frame. Fasten the frame joints together with two 5/16" x 3/4" serrated flange bolts and two 5/16" serrated flange nuts per joint. See figure 6A.

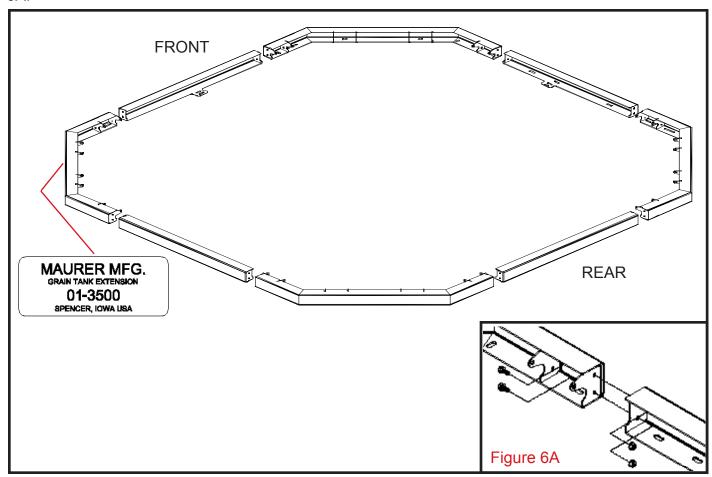


Figure 6

PANEL ASSEMBLY

STEP 1:

Using one 3/8" x 6" hex bolt, two 5/16" washers and one 3/8" nylon lock nut per hinge point, attach the extension corner panels to the frame of the grain tank extension. See figure 7A.

NOTE: DO NOT over tighten nuts and distort hinge component, but ensure nylon lock nut fully engages bolt threads.

STEP 2:

Assemble all four corner panels to the frame (panels with windows are to be fastened to the front) and slowly fold the panels outward to accept the front, rear, and side panels. The corner panel with the Demco logo on the back side is the <u>left</u> front corner. See figure 7.



ATTENTION: DAMAGE TO CORNER PANEL CAN OCCUR IF NOT FOLDED OUTWARD SLOWLY!

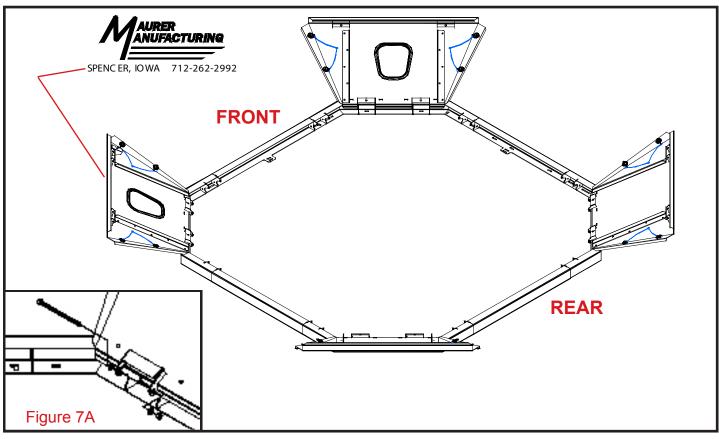


Figure 7

STEP 3:

Assemble the front, rear, and side panels the same as the corner panels. Please ensure that the panel with DANGER decal is the rear panel. This panel will also receive the safety step.

STEP 4:

Remove the partial cut slugs near the bottom of the rear panel, and fasten the safety step to the rear panel using 5/16" x 3/4" serrated flange bolts and 5/16" serrated flange nuts. When mounting, place the nuts to the inside. See figure 8.

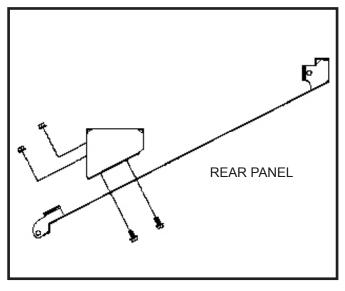


Figure 8



ATTENTION: DANGER decal must be facing the rear of the combine!

STEP 5:

Fasten the M60 additional sensor bracket to the bottom of right side panel using two 1/4" x 1" hex bolt, two 1/4"-20 center lock nuts, and four 1/4" flat washers. Factory sensor will attach to this bracket with original sensor bracket and harware. See figure 9 and 9a.

STEP 6:

Fasten the tank full sensor bracket to the top of the right side panel using one 5/16" x 3/4" serrated flange bolt, one 5/16" serrated flange nut, and one 5/16" x 1-1/4" x .120 washer. See figure 9.

STEP 7:

Fasten the provided light bracket to the left front corner using one 5/16" x 3/4" serrated flange bolt, one 5/16" serrated flange nut, and one 5/16" x 1-1/4" x .120 washer. See figure 10.

STEP 8:

Remove the partial cut slugs from the vertical leg of the front panel, and mount the base GPS bracket using 5/16" x 3/4" serrated flange bolts and 5/16" serrated flange nuts. See figure 11.

STEP 9:

Align two nylon lanyards with one press rivet and fasten together. Loop and lock the ends of the lanyards around one lynch pin each. Fasten the complete assembly to the two small holes located on the corner panels. See figure 12.

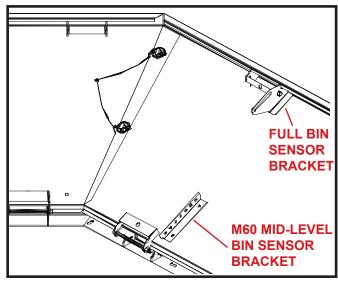


Figure 9

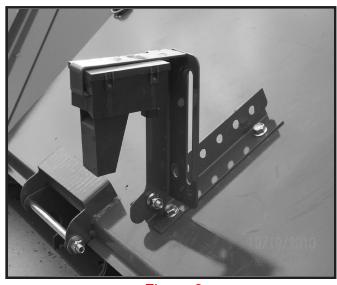


Figure 9a

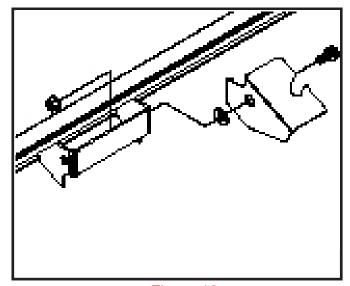


Figure 10

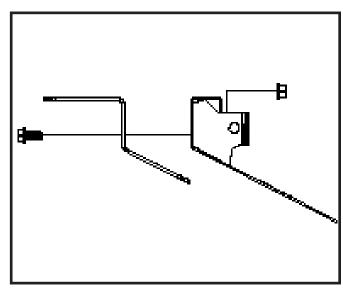


Figure 11

Completed Grain Tank Extension Assembly

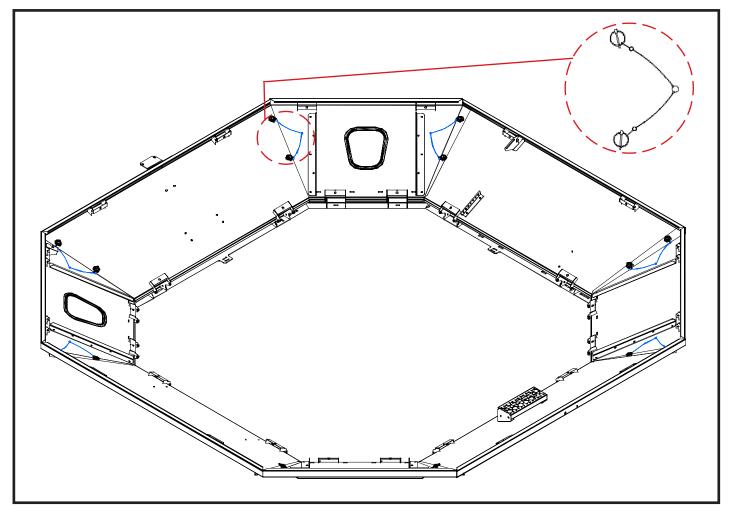


Figure 12

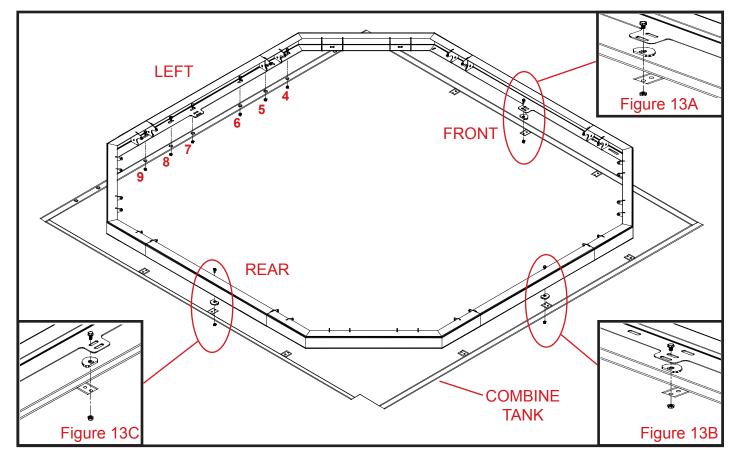


Figure 13

MOUNTING INSTRUCTIONS FOR S-550 & S-660 COMBINES WITH STANDARD UNLOADING AUGER

STEP 1:

Remove all of the Deere factory installed vertical tip-up boards from the top of the S550 combine. Then on the left side of the combine tank you will notice (11) bolt heads. Using a rachet with 15mm socket and 15mm wrench, remove and save bolts 4-9 as shown in figure 13. The bolts removed will be used later to fasten the Demco bin extension to the combine tank.

STEP 2:

Start on the left side of the tank and work the frame clock-wise. Leave all bolts loose until the frame is complete. Follow steps 3 & 4 for details.

STEP 3:

Align the slots on the bottom left side of the extension frame with the (6) bolt holes along the left side of the combine tank. Fasten the extension to the left side of the combine tank using the original 6 bolts that you removed in Step 1 above.

STEP 4:

Using the top holes of the existing front, rear, and right side tank brackets. Slide the provided frame spacers between the bin extension frame and the existing tank bracket. Bolt through the frame, spacer, and tank bracket with 5/16" x 1" serrated flange bolt and 5/16" serrated flange nut. We recommend that the tasks explained in this step be preformed where areas are circled in Figure 13. See figures 13A, 13B, and 13C for exact details.

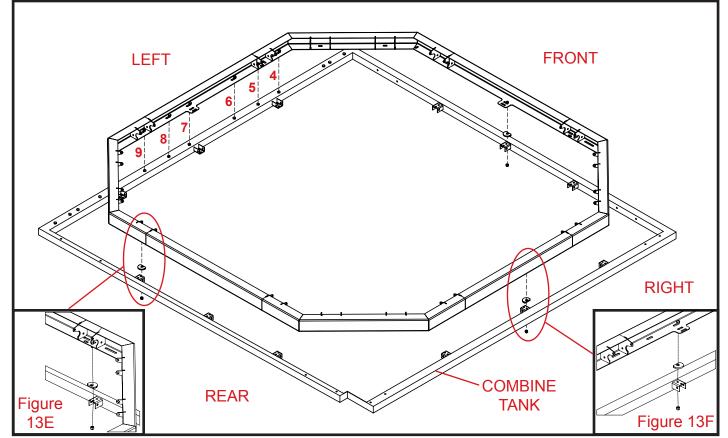


Figure 13D

MOUNTING INSTRUCTIONS FOR S-650 COMBINES WITH STANDARD UNLOADING AUGER

STEP 1:

Remove all of the Deere factory installed vertical tip-up boards from the top of the S650 combine. Then on the left side of the combine tank you will notice (13) bolt heads. Using a rachet with 15mm socket and 15mm wrench, remove and save bolts 4-9 as shown in figure 13D. The bolts removed will be used later to fasten the Demco bin extension to the combine tank.

STEP 2:

Start on the left side of the tank and work the frame clock-wise. Leave all bolts loose until the frame is complete. Follow steps 3 & 4 for details.

STEP 3:

Align the slots on the bottom left side of the extension frame with the (6) bolt holes along the left side of the combine tank. Fasten the extension to the left side of the combine tank using the original 6 bolts that you removed in Step 1 above.

STEP 4:

Using the top holes of the existing front, rear, and right side tank brackets. Slide the provided frame spacers between the bin extension frame and the existing tank bracket. Bolt through the frame, spacer, and tank bracket with 5/16" x 1" serrated flange bolt and 5/16" serrated flange nut. We recommend that the tasks explained in this step be preformed where areas are circled in Figure 13D. See figures 13E and 13F for exact details.

SENSOR AND LIGHT WIRING STEP 1:

Mount the OEM light to the previously mounted light bracket on the left front corner. Fasten with the original hardware. Clip and extend the wiring for the tank light, including ground wire.

STEP 2:

Mount the tank full sensor to the slot in the sensor bracket located at the top of the right side panel, using the original hardware. Use the provided wire harness to connect the sensor to the OEM wiring.

TANK CAP INSTALATION

Layout the Tank Caps according to figure 14. Fasten Tank Caps to the bottom side of the extension frame corners using 5/16" x 3/4" serrated bolts and nuts. Some knock outs may need to be removed to fit over tank bolts. Complete by screwing the Tank Caps to the outer rim of the tank with $#12 \times 1$ " self tapping screws.

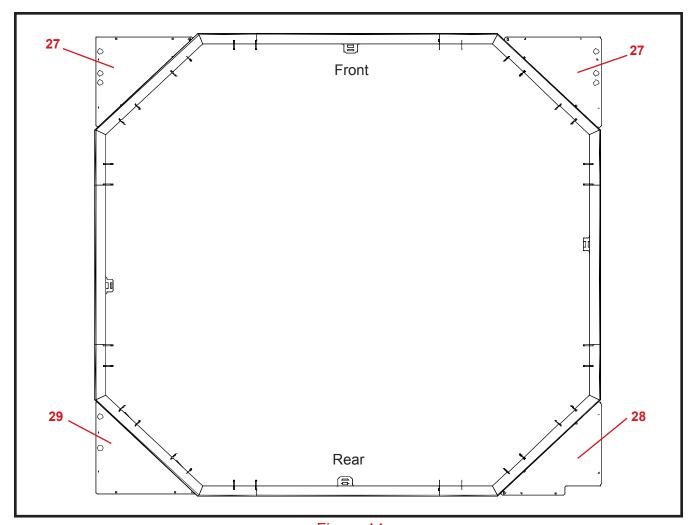


Figure 14

HANDRAIL INSTALLATION

NOTE: Use the factory handrail on the S650 & S660

WARNING



FAILURE TO REPLACE HANDRAIL COULD RESULT IN SERIOUS INJU-RY OR DEATH!

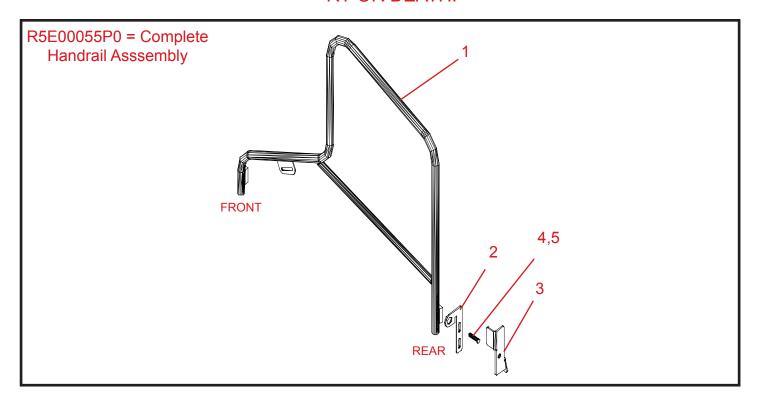


Figure 15

PARTS LIST

REF.#	PART#	QTY.	DESCRIPTION
1.	R5E000053P0	1	JD STS Handrail Assy - 2006
2.	R3E000109P0	1	JD STS Handrail Slide Latch
3.	R3E000110P0	1	JD STS Handrail Latch Bracket
4.	1AF006HAAL0	1	1/2" x 1-3/4" Clevis Pin
5.	1AF013A2170	1	.080 Hair Pin Cotter #217
6.	1AFC37E00L	01	5/16" x 3/4" Flange Bolt
7.	1AFC08E0000	1	5/16" Serrated Flange Nut

Please order replacement parts by PART NO. and DESCRIPTION.

Installation of Handrail on S-550 Combines built in 2011 and up.

STEP 1:

Remove the two cotter pins and 1/2" pins that fasten the factory handrail to the combine. The factory handrail will no longer be utilized.

STEP 2:

Fasten the handrail latch bracket to the rear factory mounting bracket with the 5/16" x 3/4" flange bolt and nut. As shown in Figure 17.

STEP 3:

Fasten the slide latch to the rear side of the Demco handrail with

the 1/2" x 1-3/4" clevis pin and .080 hair pin. Use the third hole from the bottom of the handrail, as shown in Figure 18.

STEP 4:

Slide the Demco handrail and slide latch inside the factory Deere mounting brackets. Line the second hole from the bottom of the handrail up with the holes in the front and rear mounting bracket. Attach the handrail to the factory mounting brackets with the 1/2" pins you removed in STEP 1. The rear pin must go thru the lower slot of the slide latch.

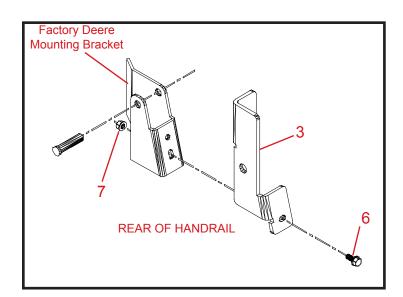


Figure 17

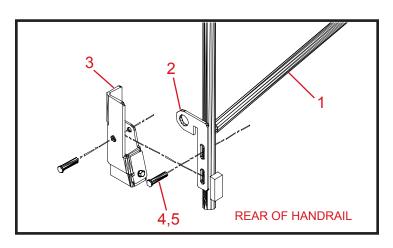


Figure 18



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

