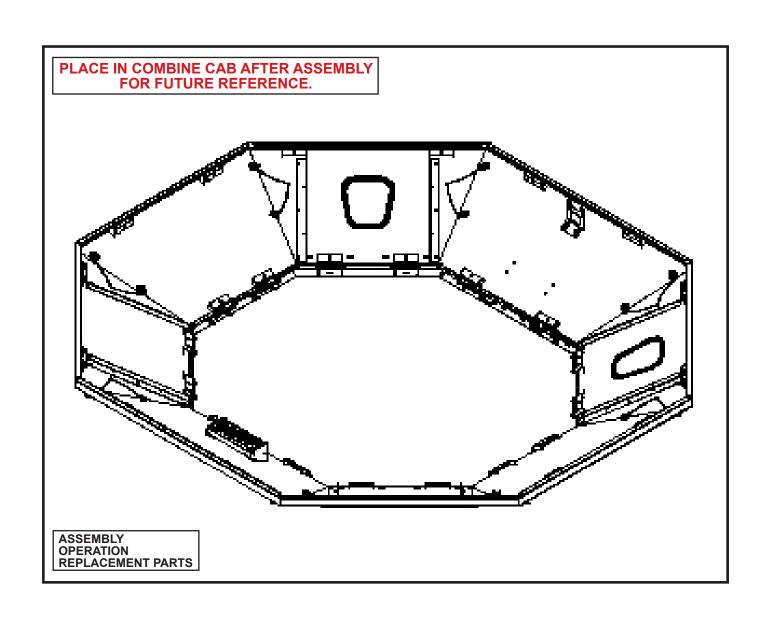


# **COMBINE GRAIN TANK EXTENSION**

9E000005 - Case IH Series Regular Extension - Red



#### 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**

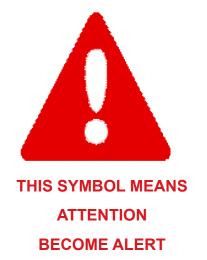
- Read assembly instructions carefully. Study assembly procedures and all illustrations before you begin assembly. Note which parts are used in each step. This unit must be assembled in proper sequence or complications will result.
- 2. Whenever terms "**LEFT**" and "**RIGHT**" are used in this manual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

#### TABLE OF CONTENTS

General Information	2
Safety, Signal Words	3
Product Safety Guidelines	4
Safety Sign Locations	5
Safety Sign Care	5
Product Disclaimer	5
Parts Breakdown	6
Parts List	
Frame Assembly	
Panel Assembly	
Misc. Bracket Assembly/Complete Assembly	10
Mounting Instructions/Internal Cover Plate/Tank Cap	
Tank Cap cont., Wiring	

#### 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.



### **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 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, buildings, 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.

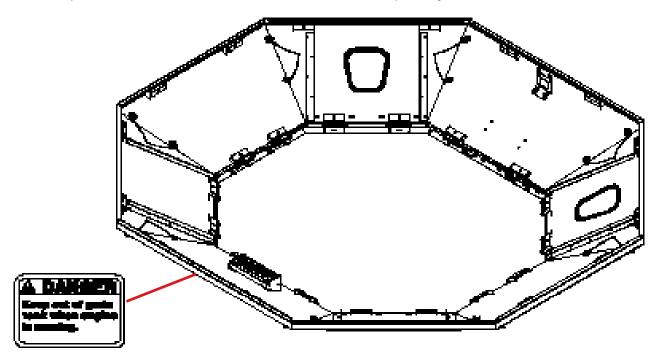
Ensure that any additional bracing and safety equipment have been installed according to this manual. (Some models do not require additional bracing or safety equipment)

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 Mfg. 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**

## **Case IH Series Grain Tank Extension**

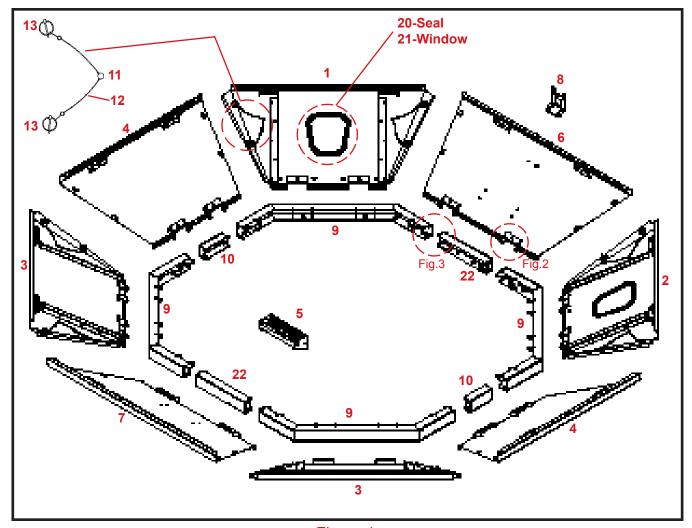


Figure 1

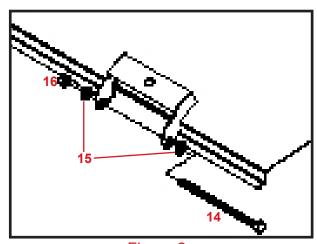


Figure 2

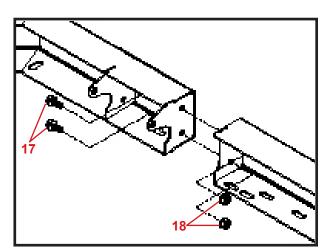
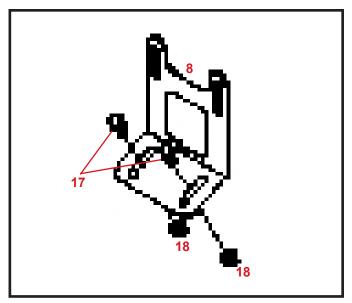


Figure 3



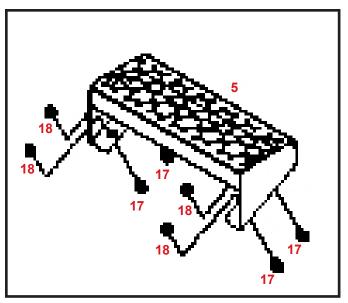


Figure 4 Figure 5

## PARTS LIST

Please order replacement parts by PART NO. and DESCRIPTION.

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	R5E000011_0	1	Front Left Corner Panel
2.	R5E000003_0	1	Front Right Corner Panel
3.	R5E000005_0	2	Rear Corner Panel
4.	R5E000020_0	2	Side Panel (Case IH/9000 Series)
5.	R5E000006_0	1	Extension Safety Step
6.	R5E000028_0	1	Front Panel (Case IH Series)
7.	R5E000029_0	1	Rear Panel (Case IH Series)
8.	R3E000015_0	1	Base Sensor Bracket
9.	R5E000007_0	4	Frame Corner Assembly
10.	R5E000024_0	2	Frame Splice Side Assembly
11.	1AF032D0000	8	Press Rivet
12.	1AF031DKA00	16	Nylon Lanyard
13.	1AF034CAAI0	16	3/16" x 1-9/16" Lynch Pin
14.	1AFC12FFA05	16	3/8" x 6" Hex Bolt
15.	1AF009E000C	32	3/8" SAE Flat Washer
16.	1AFC18F0000	16	3/8" Nylon Lock Nut
17.	1AFC37E00L0	40	5/16" x 3/4" Serrated Flange Bolt
18.	1AFC08E0000	40	5/16" Serrated Flange Nut
19.	*1AEX0015242	1	Case IH Wire Harness
20.	R3E000026_0	2	Window Seal
21.	1AWALACKAMC	2	Window
22.	R5E000030_0	2	Frame Splice Front & Rear Assembly
23.	*1AFC35CAA00	26	#12 x 1" Self Tapping Screw
24.	R3E000060_0	1	Case IH Internal Cover Plate
25.	R3E000061_0	1	Case IH Left Front Tank Cap (88)
26.	R3E000062_0	1	Case IH Right Front Tank Cap
27.	R3E000063_0	2	Case IH Left Rear (Front 66) Tank Cap
28.	R3E000064_0	1	Case IH Right Rear Tank Cap
29.	R3E000067_0	1	Case IH Right Front Tank Cap (66)
30.	R3E000089_0	1	Case IH Internal Cover Plate, Small (66)

\_ Substitute "S" for Red or "L" for Black

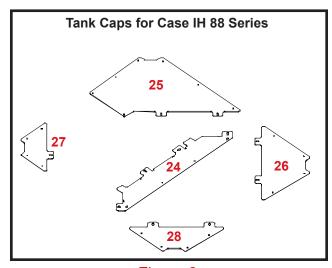


Figure 6

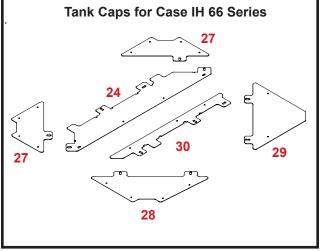


Figure 7

<sup>\*</sup> Indicates items not shown in illustrations

**NOTE:** In order to simplify the assembly process, we 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 8. The frame corner with the serial number decal is the left front frame corner. 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 8A.

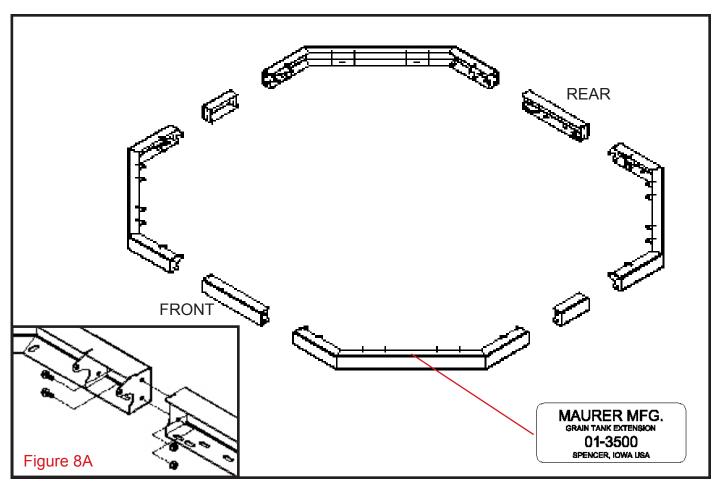


Figure 8

# PANEL ASSEMBLY

# **STEP 1:**

Using one 3/8" x 6" hex bolt, two 3/8" 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 9A.

# 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 left front corner. See figure 9.

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



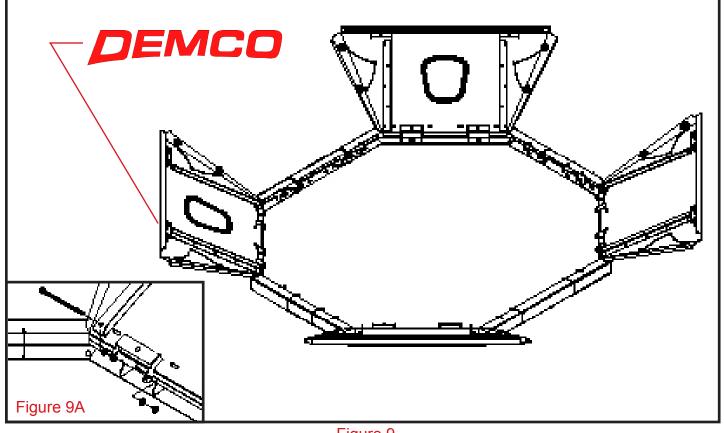


Figure 9

### **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 10.

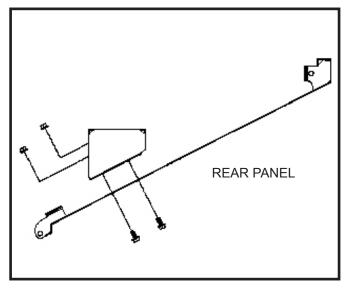


Figure 10



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

#### STEP 5:

Remove the partial cut slugs near the top of the front panel and fasten the tank full sensor bracket to the front panel using two 5/16" x 3/4" serrated flange bolts and two 5/16" serrated flange nuts. See figure 11.

**NOTE:** If installing Tip-Up unit with base extension unit, <u>do not</u> remove slugs. Sensor will be located on Tip-Up unit.

### STEP 6:

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.

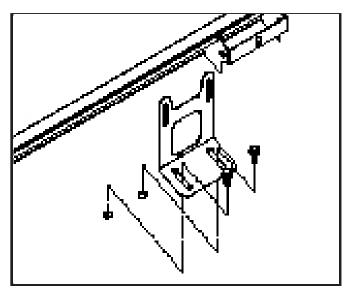


Figure 11

## **Completed Grain Tank Extension Assembly**

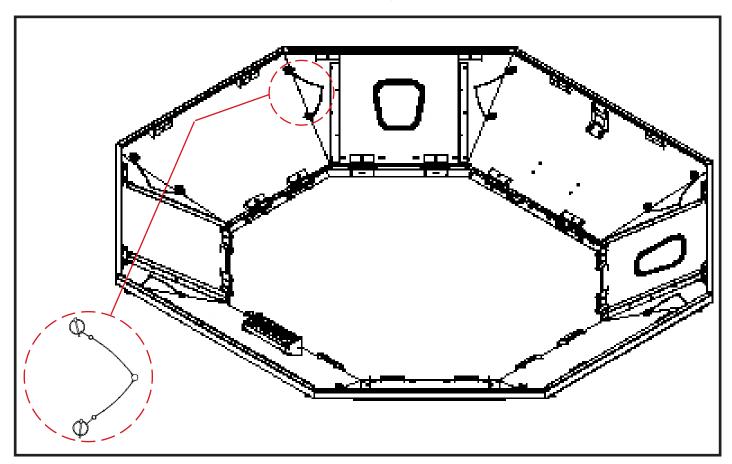


Figure 12

#### **MOUNTING INSTRUCTIONS**

### STEP 1:

Hoist the assembled grain tank extension to the top of the combine. Position over the grain tank and carefully lower into place with the window panels facing front.

#### STEP 2:

Position the extension frame as far to the right as possible without creating a gap in which grain could leak from. Once positioned square the unit front to rear.

#### STEP 3:

Secure the extension frame to the top of the grain tank using four 5/16" x 3/4" serrated bolts and four 5/16" serrated nuts. (Two holes in both the front and rear of the tank will align with slots in the frame)

### **INTERNAL COVER PLATE / TANK CAPS**

### **STEP 1:** (88 & 66 series)

Using four 5/16" x 3/4" serrated flange bolts and four 5/16" serrated flange nuts fasten the internal cover plate to the inside bottom lip of the of the extension frame. Once the cover plate is secured to the frame, complete by screwing the plate to the tank using #12 x 1" self tapping screws. See figure 13.

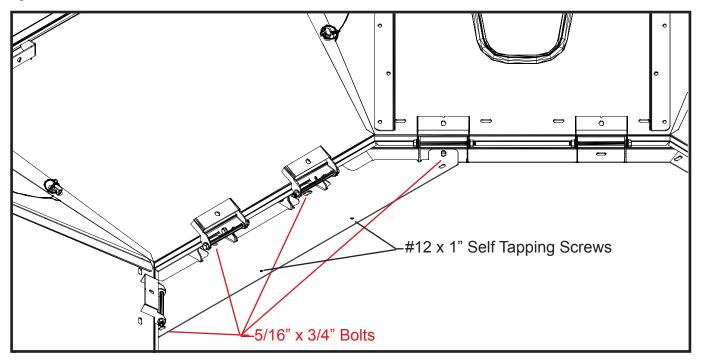


Figure 13

**NOTE:** When installing a grain tank extension on 66 series combine the internal cover plate and tank caps will fasten to the previously installed Demco Riser unit. You can use two 5/16" x 3/4" serrated flange bolts and two 5/16" serrated flange nuts to fasten the internal cover plate to the riser unit as well near the frame.

#### **STEP 2:** (66 series only)

Using three 5/16" x 3/4" serrated flange bolts and three 5/16" serrated flange nuts fasten the small internal cover plate to the inside bottom lip of the of the extension frame over the large cut-out of the riser. Once the cover plate is secured to the frame, complete by screwing the plate to the tank using #12 x 1" self tapping screws. See figure 14.

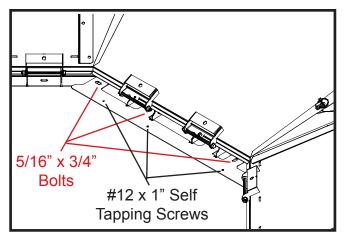
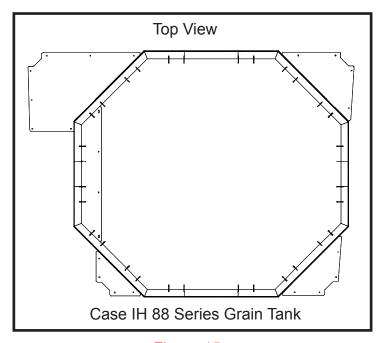


Figure 14

#### STEP 3:

Fasten the Tank Caps to the extension frame corners using 5/16" x 3/4" serrated flange bolts and 5/16" serrated nuts. (Tabs will be on the under side of the frame) Complete by screwing the Tank Caps to the outer rim of the tank using #12 x 1" screws. See figure 15. If installing on 66 series combine Tank Caps will screw to Demco Riser Unit. See figure 16.



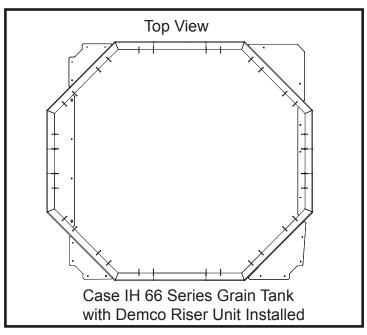


Figure 15

Figure 16

**NOTE:** Not all parts will be used depending on the model of combine. (Also see page 7, fig. 6 & 7)

#### TANK FULL SENSOR

Mount the sensor to the slots in the bracket using the original hardware. Use the provided wire harness to connect the sensor to the OEM wiring.