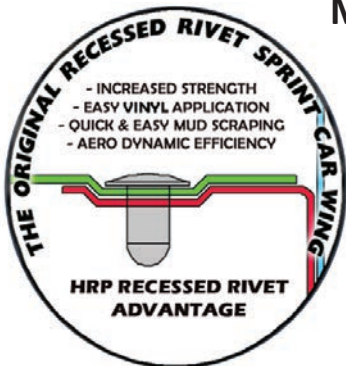


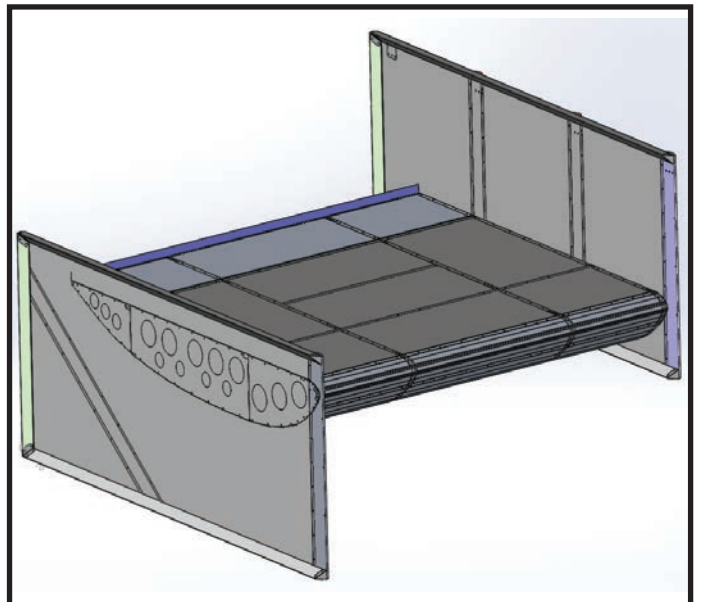


# HRP TOP WING ASSEMBLY INSTRUCTIONS FOR VFT TOP WING

MOST USED SPRINTCAR WING IN THE WORLD!



*Wind Tunnel Tested  
Cad Designed and Engineered  
Tested with Air Flow Simulations  
CNC Processed for Accuracy*



Please read these directions thoroughly and check for all parts before starting.

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Note: If a Specialty Side Board has been purchased, then read through the General Side Board Assembly Guides on pages 13 - 23 and assemble the specialty board similarly.

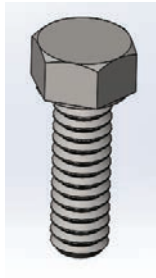
## FASTENER PARTS LIST



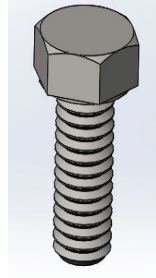
3/16" Rivets  
x200



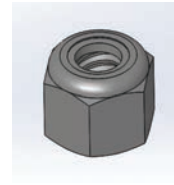
1/8" Rivets  
x1000



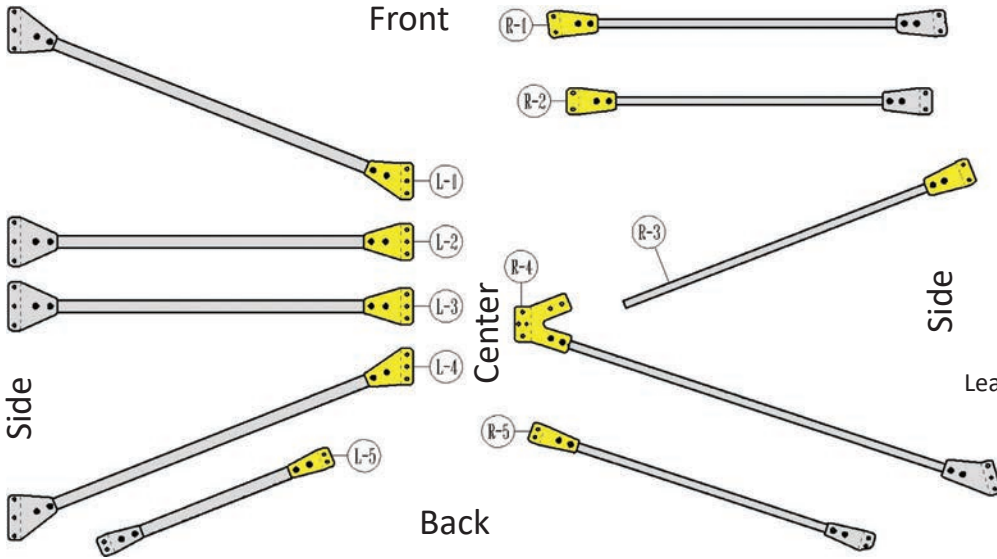
1/4-20 x5/8  
Bolt x8



1/4-20 x3/4  
Bolt x4



1/4-20  
Bolt x12



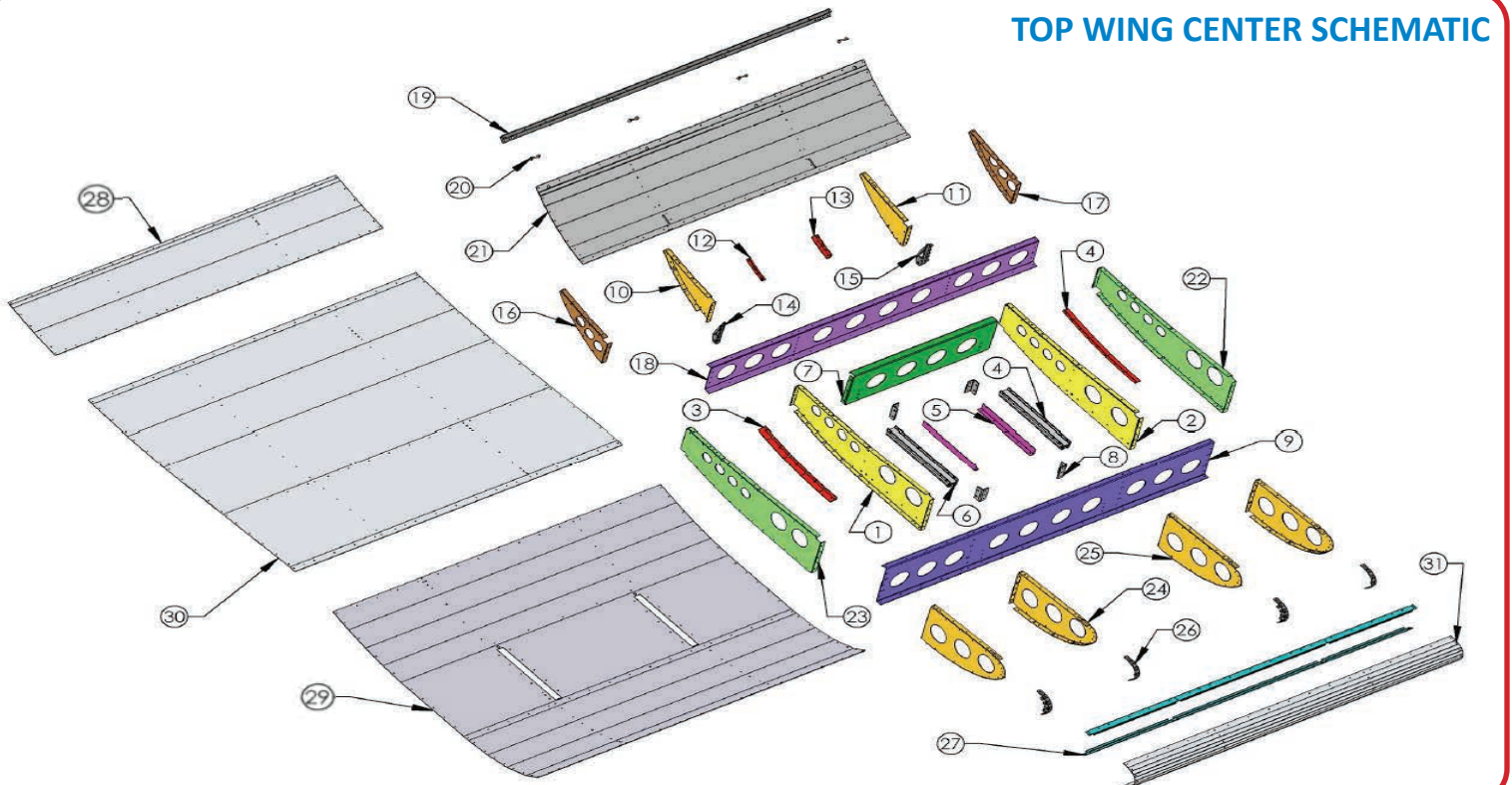
## BRACE KIT SCHEMATIC

Brace #  
Left or Right  
Wing Style

4 L SKD  
2.0

Lead of board or style  
of board

Yellow end should be labeled



## TOP WING CENTER SCHEMATIC

## TOP WING CENTER PARTS LIST

SKU #	HRP #	PART DESCRIPTION	QUA	CHECK
1	VFT5003-RH	RH Inner Center Profile	1	
2	VFT5003-LH	LH Inner Center Profile	1	
3	VFT5022-RH	RH Center Profile Strip	1	
4	VFT5022-LH	LH Center Profile Strip	1	
5	VFT5015	Center Skin Support	2	
6	VFT5016	Runner	2	
7	VFT5008	Middle Cross Rib	1	
8	VFT5023	Runner Supports	4	
9	VFT5009	Front Cross Rib	1	
10	VFT5005-RH	RH Inner Rear Profile	1	
11	VFT5005-LH	LH Inner Rear Profile	1	
12	VFT5013-RH	RH Back Brace	1	
13	VFT5013-LH	LH Back Brace	1	
14	VFT5014-RH	RH Rear Wing Mount	1	
15	VFT5014-LH	LH Rear Wing Mount	1	
16	VFT5004-RH	RH Outer Rear Profile	1	
17	VFT5004-LH	LH Outer Rear Profile	1	
18	VFT5007	Rear Cross Rib	1	
19	VFT5006	Back Edge	1	
20	HRP0301	D-Zeus Spring	4	
21	VFT5020	Bottom Rear Skin	1	
22	VFT5002-LH	LH Outer Center Profile	1	
23	VFT5002-RH	RH Outer Center Profile	1	
24	VFT5001-LH	LH Nose Profile	2	
25	VFT5001-RH	RH Nose Profile	2	
26	VFT5010	Nose Wrap	4	
27	VFT5011	Nose Backer	2	
28	VFT5019	Top Rear Skin	1	
29	VFT5017	Bottom Skin	1	
30	VFT5018	Top Skin	1	
31	VFT5012	Nose Cap	1	

## Side Board Type:

RH: \_\_\_\_\_ LH: \_\_\_\_\_

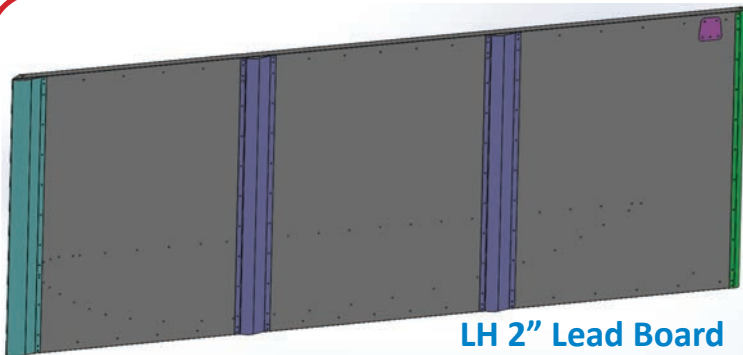
## BRACE PARTS LIST

SKU #	HRP #	PART DESCRIPTION	CHECK
L-1	VFT5110	LH #1 Brace	
L-2	VFT5111	LH #2 Brace	
L-3	VFT5112	LH #3 Brace	
L-4	VFT5113	LH #4 Brace	
L-5	VFT5114	LH #5 Brace	
R-1	VFT5115	RH #1 Brace	
R-2	VFT5116	RH #2 Brace	
R-3	VFT5117	RH #3 Brace	
R-4	VFT5118	RH #4 Brace	
R-5	VFT5119	RH #5 Brace	

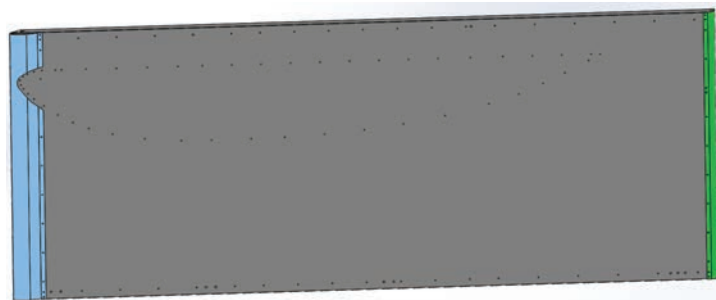
## HARDWARE PARTS LIST

HRP #	PART DESCRIPTION	QUA	CHECK
AD41-43BS	1/8" Rivet	1000	
AD62-64BS	3/16" Rivet	200	
HCS 1/4-20 5/8-Z	Hex Head Bolt 1/4-20 5/8	8	
HCS 1/4-20 3/4-Z	Hex Head Bolt 1/4-20 3/4	4	
NYLOCK 25-20_Zic	Nylock Nut 1/4 x 20	12	
HRP0310	D-ZEUS Button	4	
VFT5021	Entry Plate	2	
HRP8811- HD	Easy Glide Post	2	
HRP9003	8" Oval Sticker	2	
HRP9010	15" Oval Sticker	1	

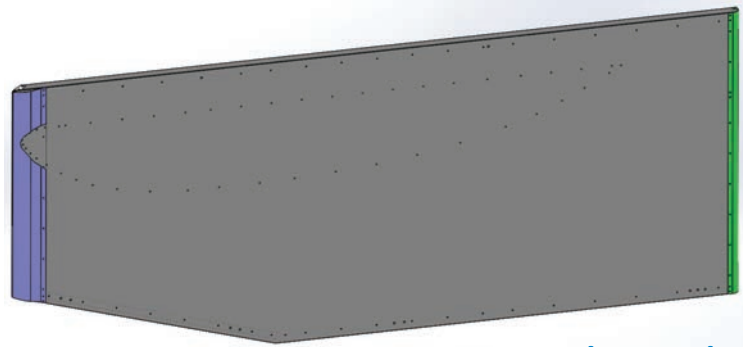
## COMMON SIDE BOARDS



LH 2" Lead Board



RH Super Board



RH Super Angle Board

## PRE ASSEMBLY PARTS CHECK



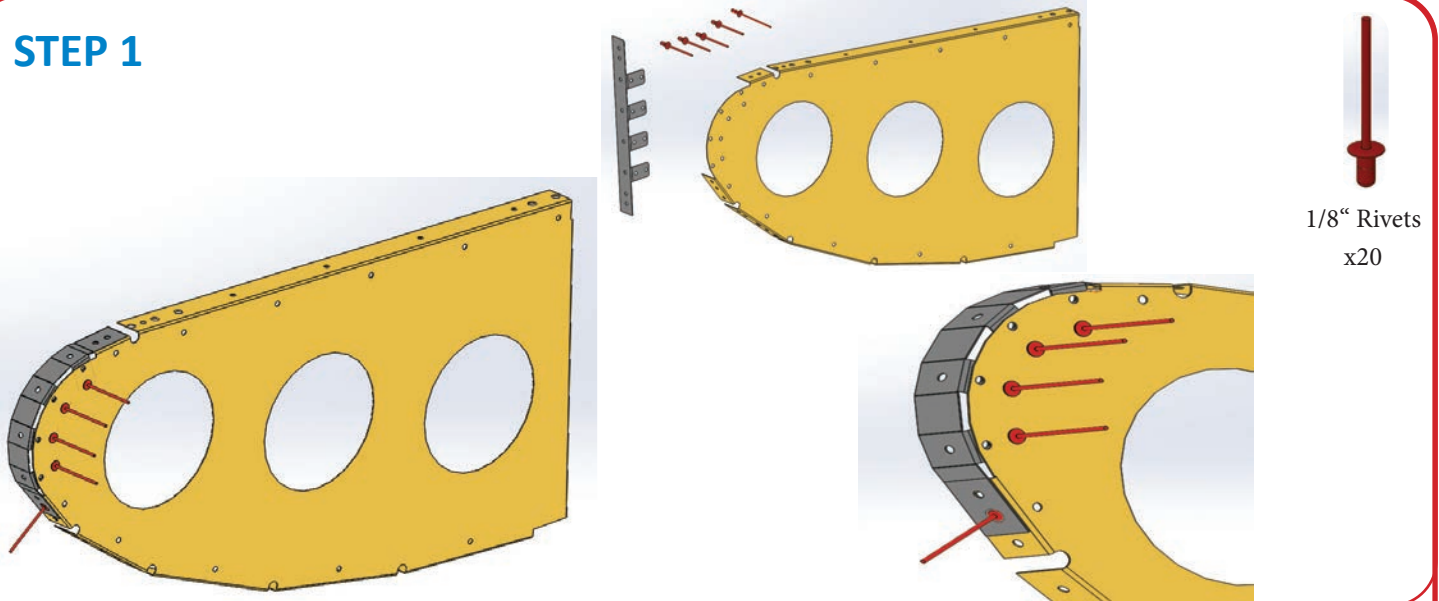
Verify that all quantities of parts are included by first checking them off of the checklist on page 4



## TOOLS NEEDED:

- Rivet Gun (1/8" & 3/16")
- Drill (1/8" & 3/16" Bits)
- 7/16" open Wrench
- 7/16" Socket Ratchet
- Hammer
- Pin Punch
- Large Clean Work Area

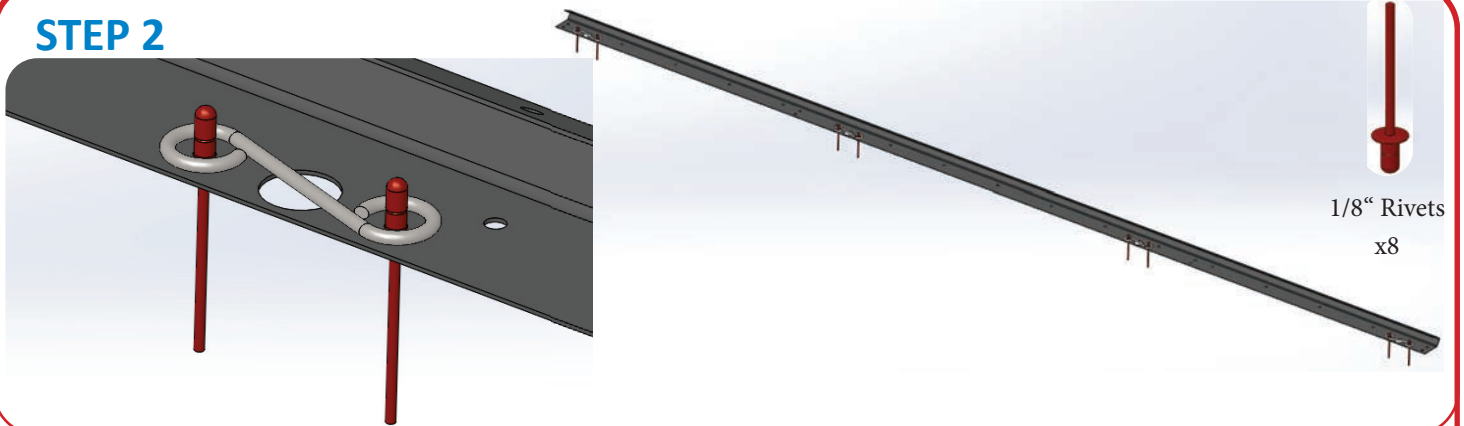
### STEP 1



Rivet the Nose Wrap (26) to the Nose Profile (24, 25)

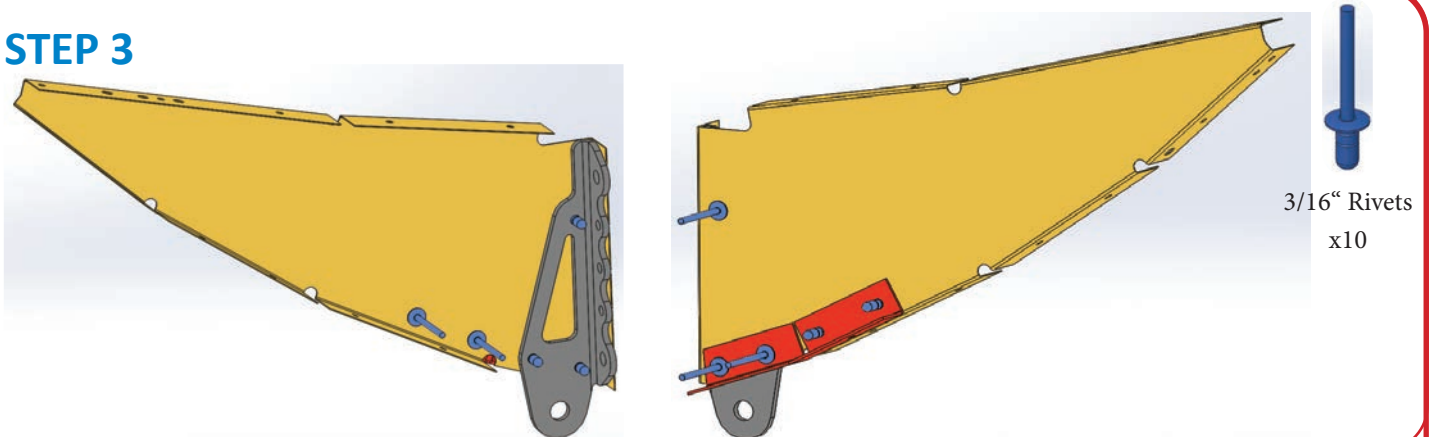
Repeat: 2x LH  
2x RH

### STEP 2



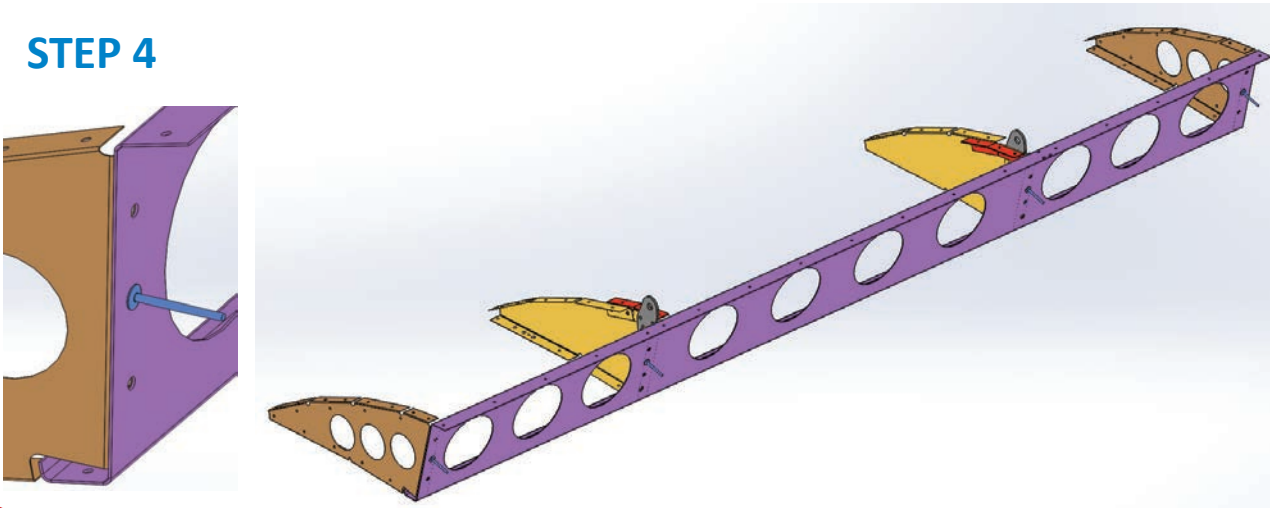
Rivet 4x D-ZEUS Springs (20) onto the Back Edge (19).

### STEP 3



Rivet Rear Wing Mount (14, 15) and Back Brace (11, 15) onto the Inner Rear Profile (12, 13) Repeat: 1x LH  
1x RH

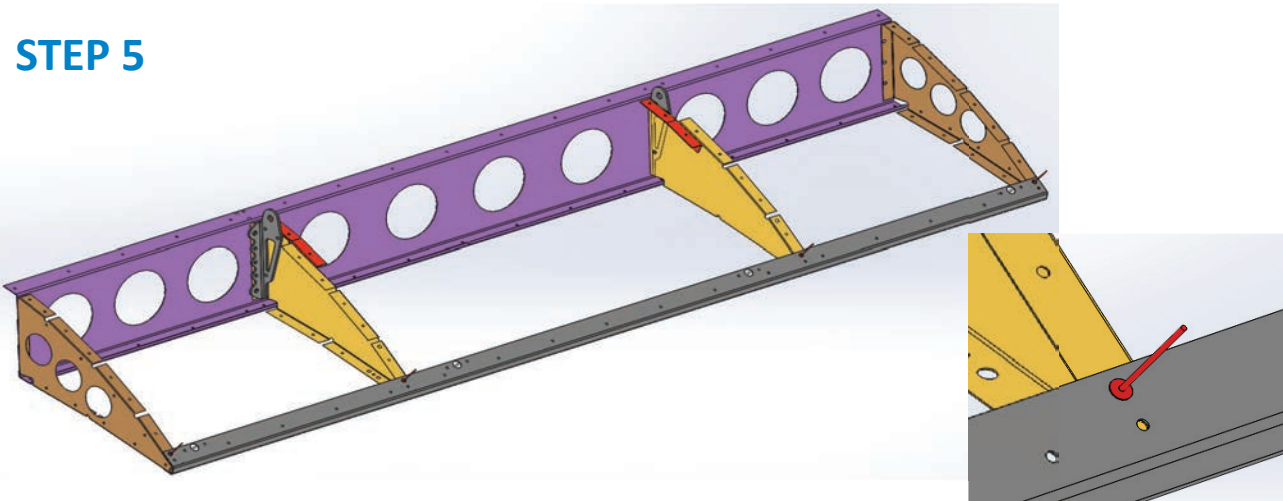
## STEP 4



  
3/16" Rivets  
x4

Attach Step 3 Assemblies and Outer Rear Profiles (16, 17) to the Rear Cross Rib (128)

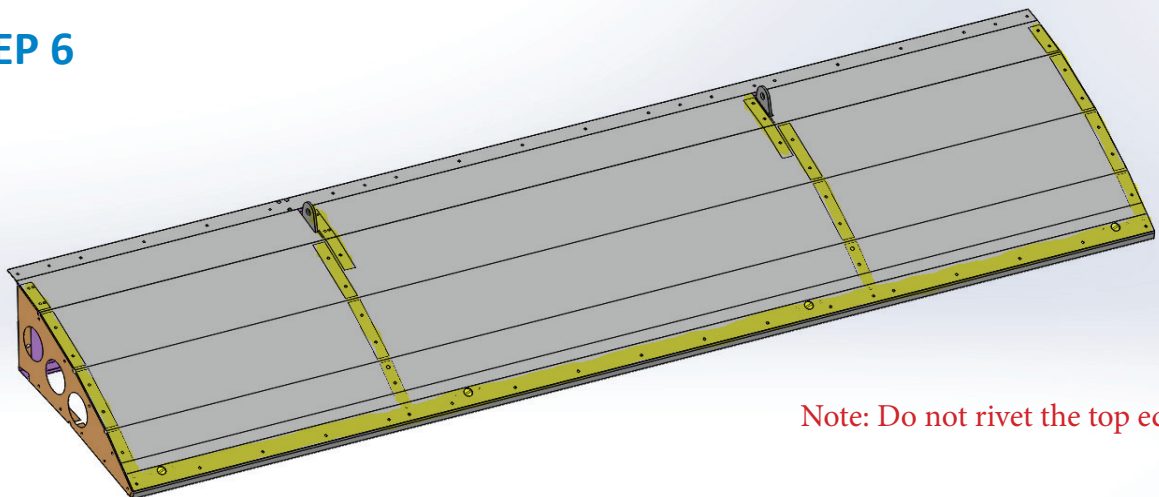
## STEP 5



  
1/8" Rivets  
x4

Attach Step 2 to Step 4

## STEP 6

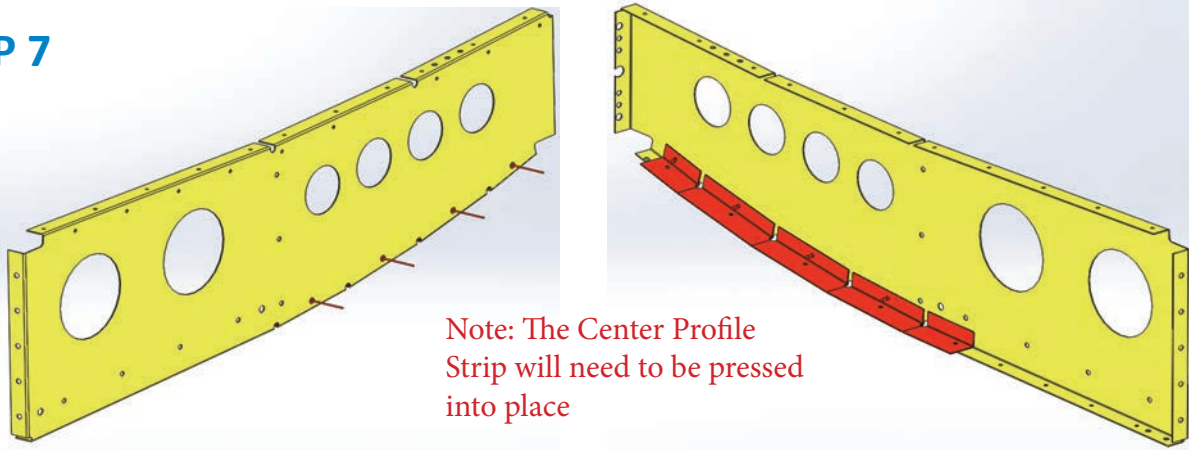


  
1/8" Rivets

Note: Do not rivet the top edge

Attach the Bottom Rear Skin (21) onto Step 5 by riveting the 1/8" holes highlighted

## STEP 7



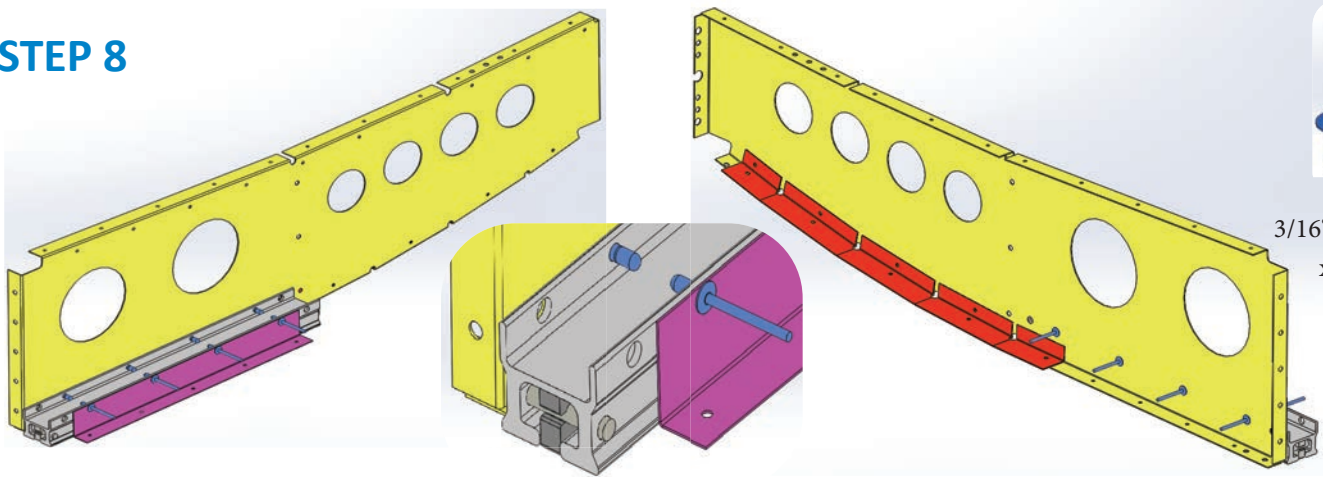
1/8" Rivets  
x8

Note: The Center Profile Strip will need to be pressed into place

Rivet the Center Profile Strip (3, 4) onto the Inner Center Profile (1, 2)

Repeat: 1x LH  
1x RH

## STEP 8

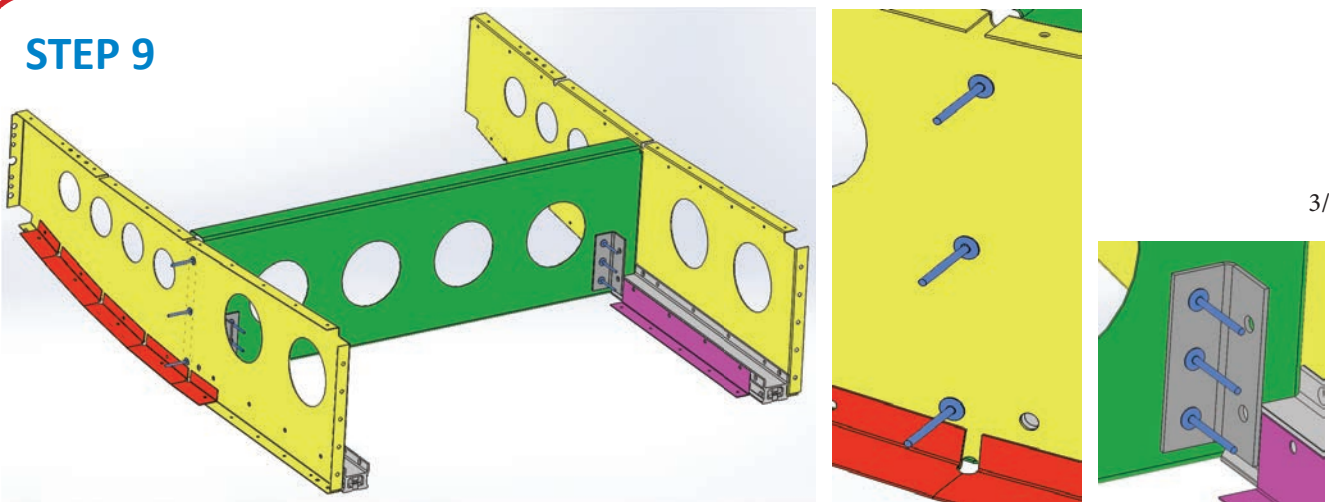


3/16" Rivets  
x16

Rivet the Center Skin Support (5) to the Runner (4), and lastly, rivet the Runner Assembly to Step 7

Repeat: 1x LH  
1x RH

## STEP 9

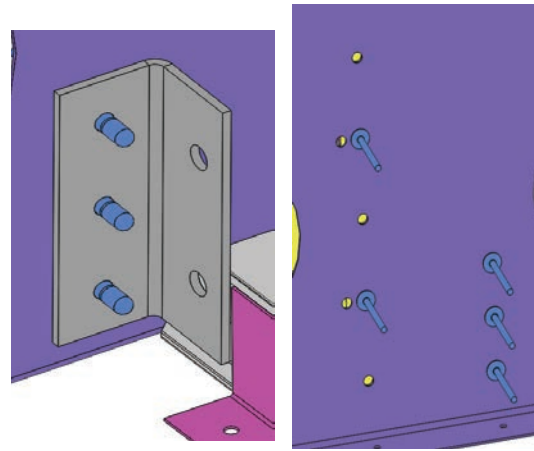
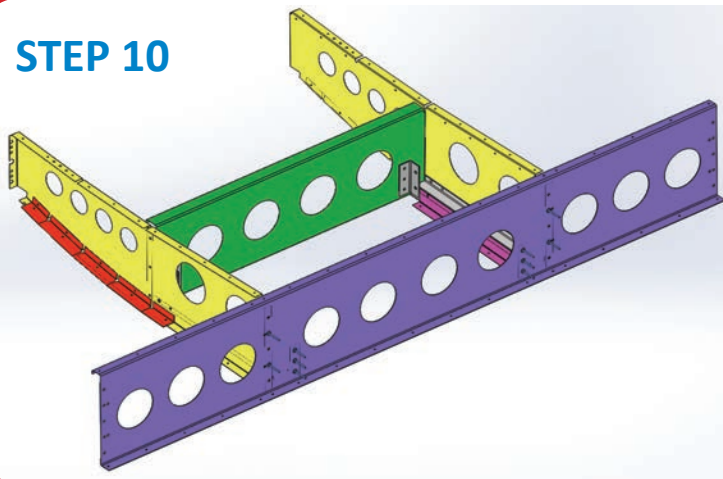


3/16" Rivets  
x12

Rivet Step 8 to the Middle Cross Rib (7), then rivet on x2 Runner Supports (8) to the Middle Cross Rib (7)



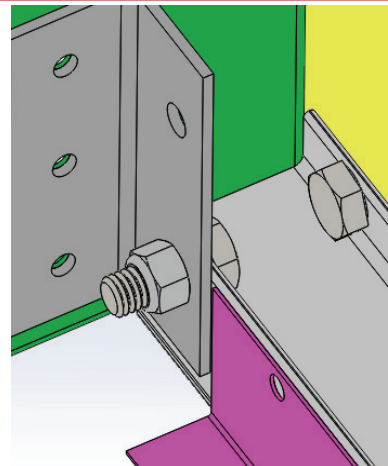
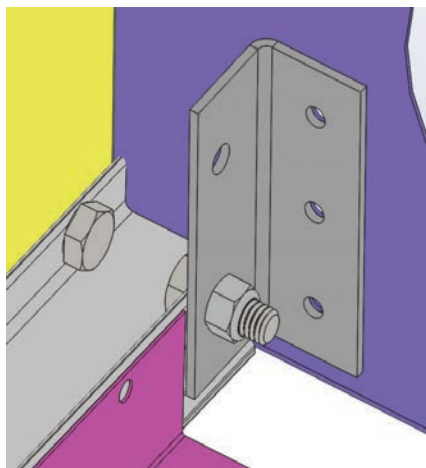
### STEP 10



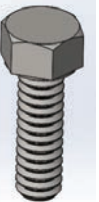
3/16" Rivets  
x10

Rivet the Front Cross Rib (9) to Step 9, then rivet on x2 Runner Supports (8) to the Front Cross Rib (9)

### STEP 11



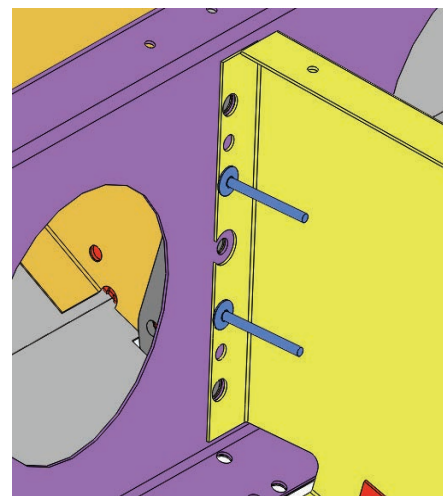
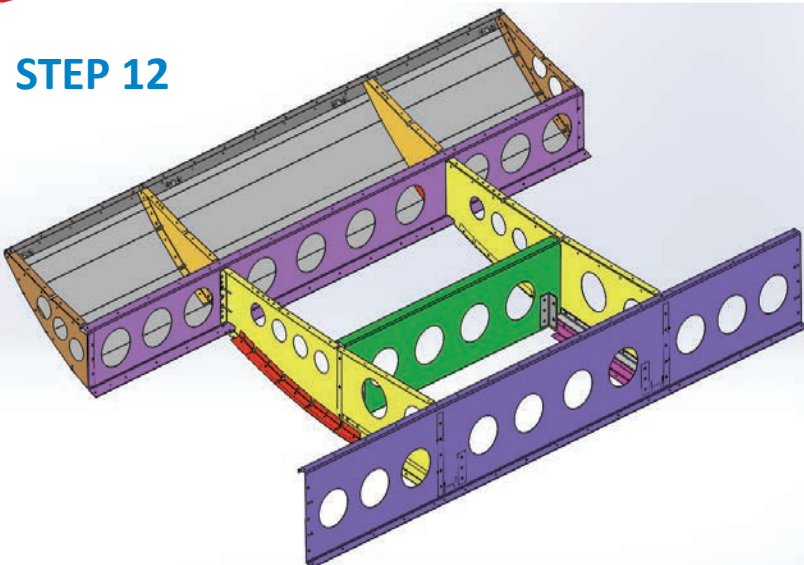
1/4-20  
Lock Nut  
x8



1/4-20  
x5/8 Bolt  
x8

Install the 1/4-20 x5/8 Bolts and Nuts to each corner of the runners

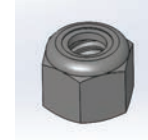
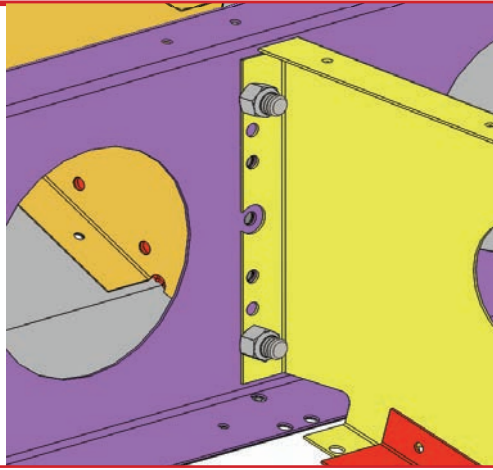
### STEP 12



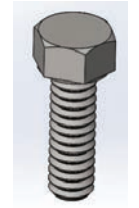
3/16" Rivets  
x4

Rivet Step 6 to Step 11

### STEP 13



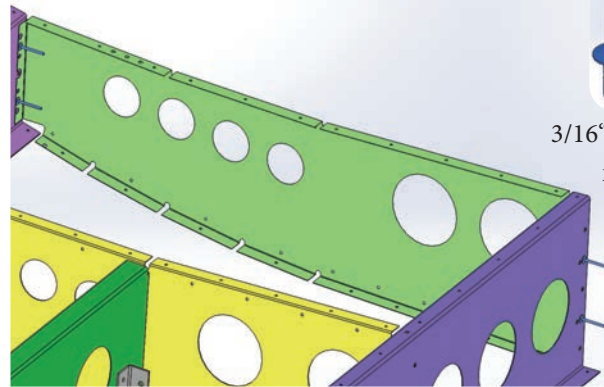
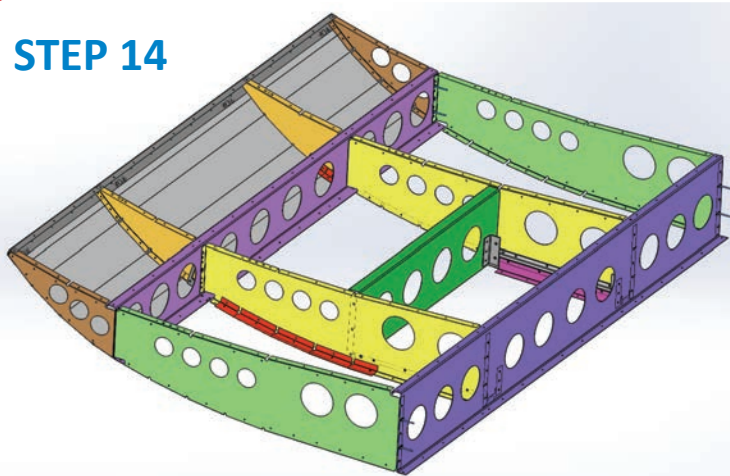
1/4-20  
Lock Nut  
x4



1/4-20  
x3/4 Bolt  
x4

Install the 1/4-20 x3/4 Bolts and Nuts to strengthen Step 12


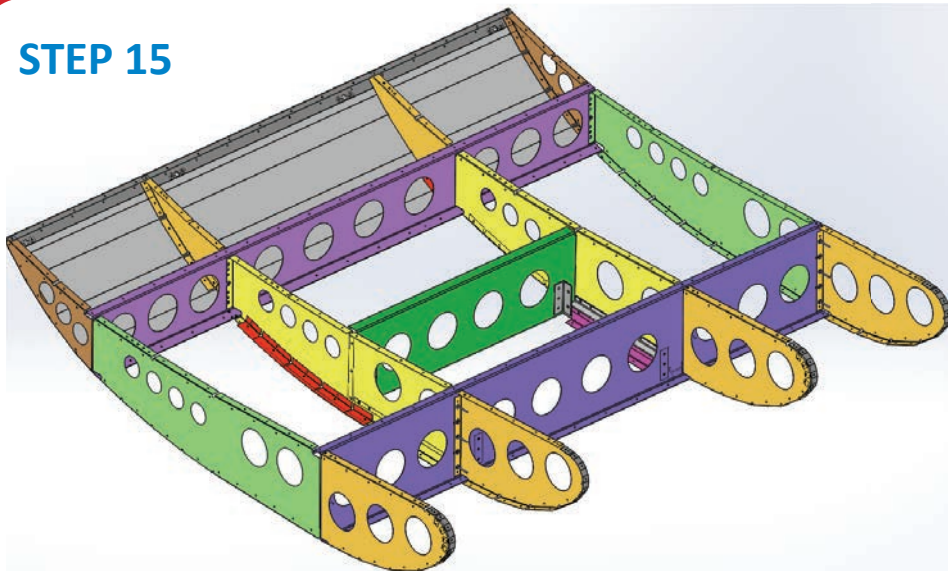
### STEP 14



3/16" Rivets  
x8

Rivet the Center Outer Profiles (22, 23) to Step 13

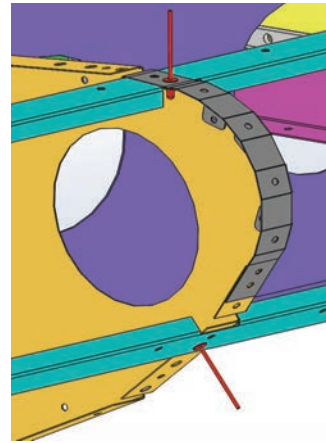
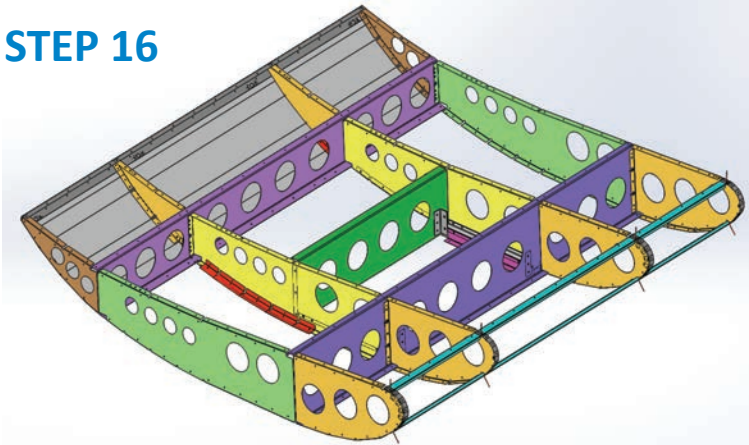
### STEP 15



3/16" Rivets  
x12

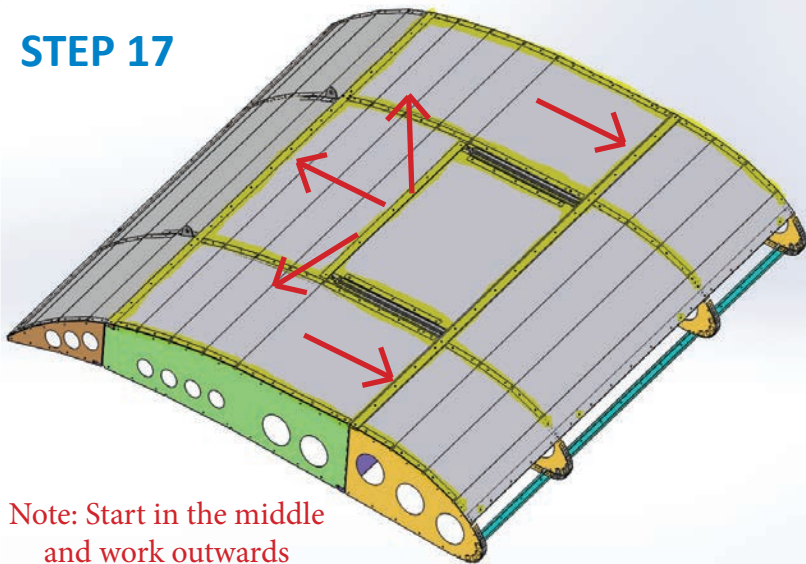
Rivet Step 1 to Step 14

## STEP 16

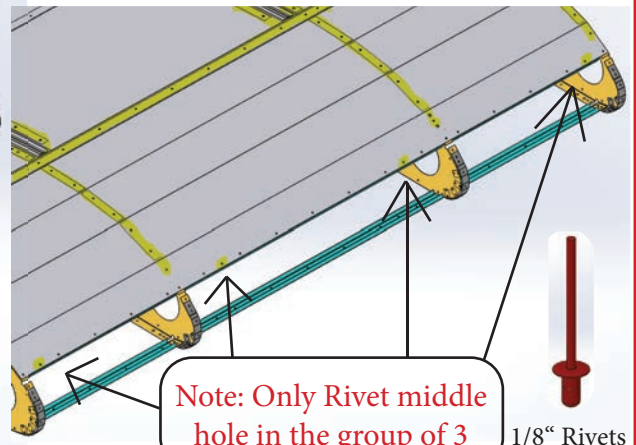


Rivet on x2 Nose Backers (27) to Step 15

## STEP 17



Note: Start in the middle  
and work outwards

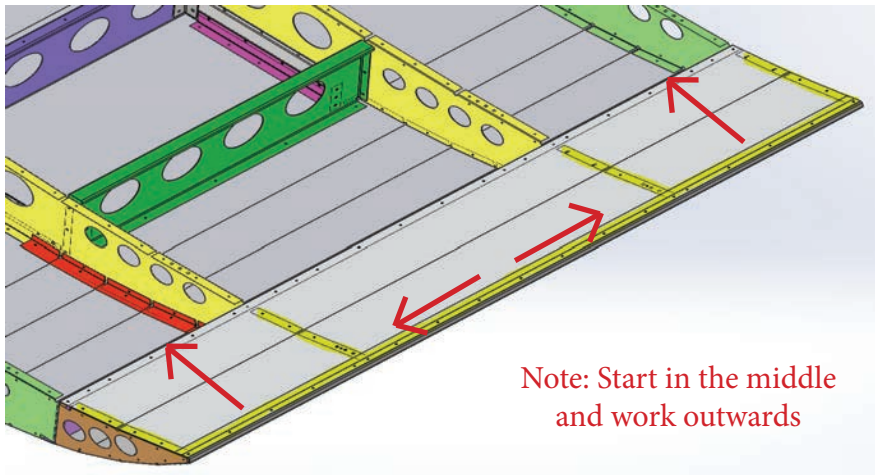


Note: Only Rivet middle  
hole in the group of 3

1/8" Rivets

Attach the Bottom Skin (28) to Step 16 by riveting the 1/8" holes highlighted

## STEP 18

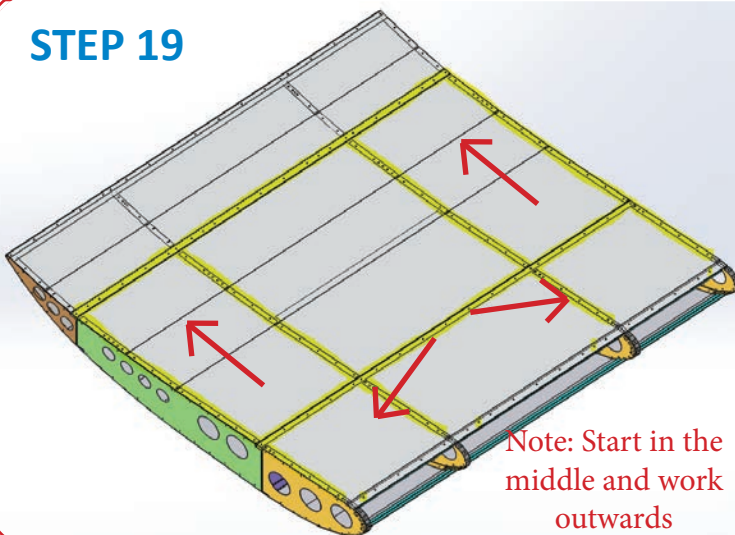


1/8" Rivets

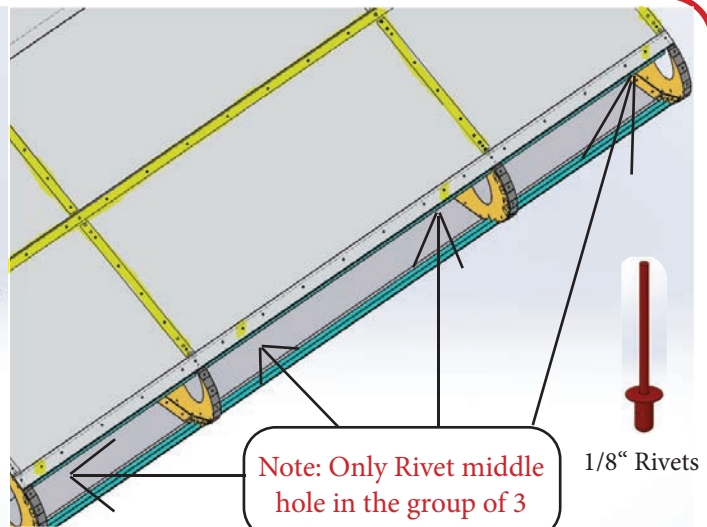
Note: Start in the middle and work outwards

Rivet the Top Rear Skin (29) to Step 17 by riveting the 1/8" holes highlighted

## STEP 19



Note: Start in the middle and work outwards

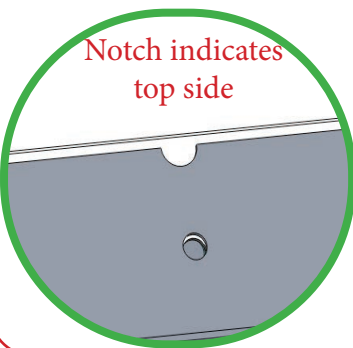


1/8" Rivets

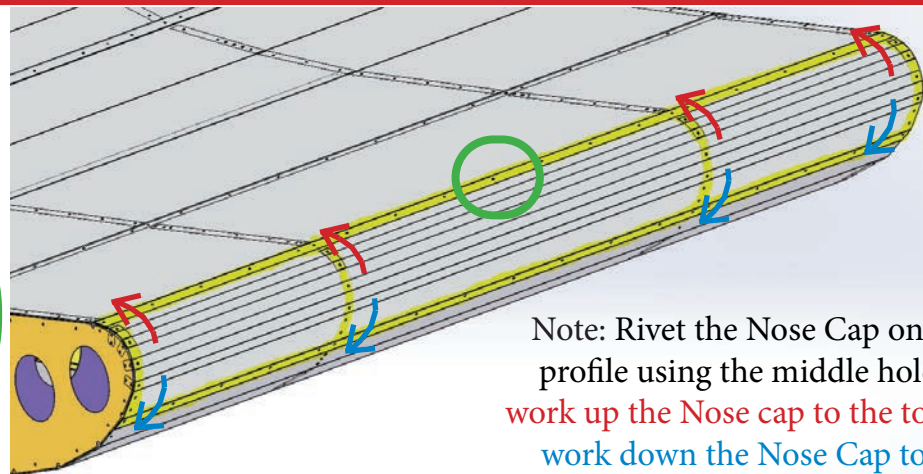
Note: Only Rivet middle hole in the group of 3

Rivet the Top Skin (30) to Step 18 by riveting the 1/8" holes highlighted

## STEP 20



Notch indicates top side

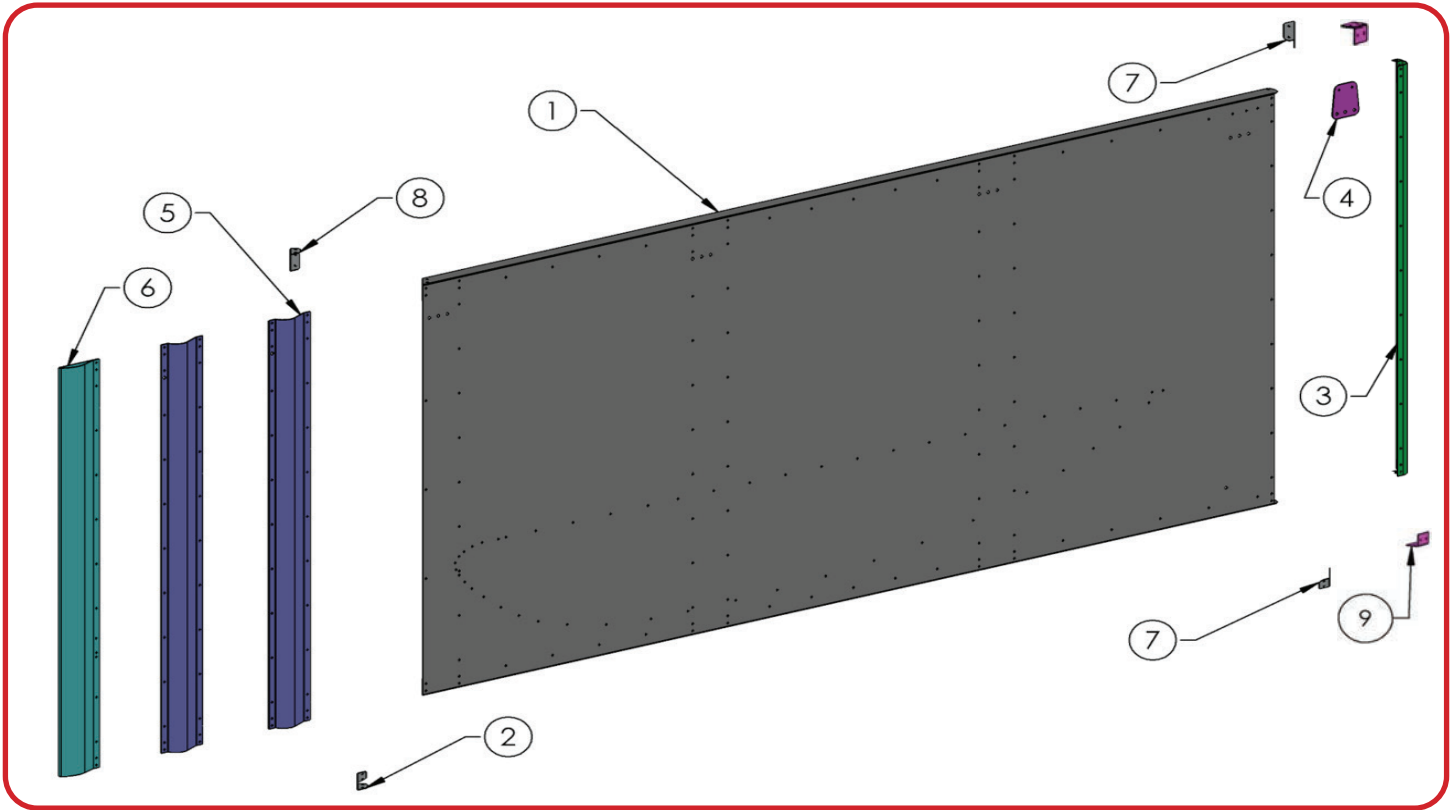


1/8" Rivets

Note: Rivet the Nose Cap onto each profile using the middle hole, then work up the Nose cap to the top. Lastly, work down the Nose Cap to finish

Rivet the Nose Cap (31) to Step 19 by riveting the 1/8" holes highlighted

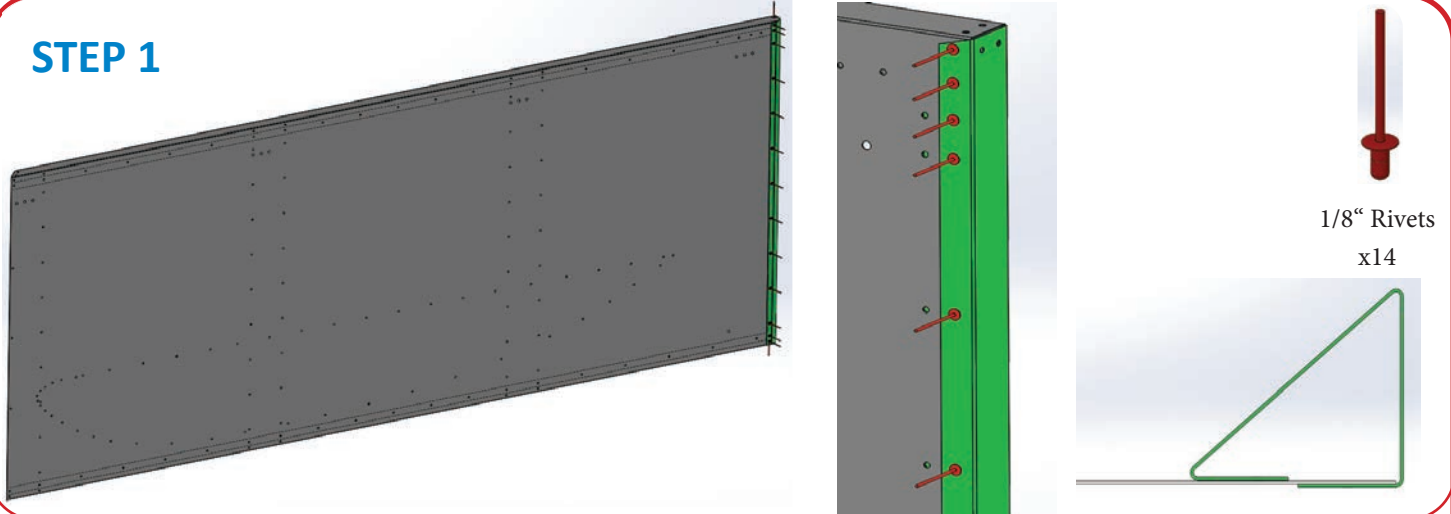
## LH 2" LEAD Board Schematic and Checklist



### LH 2" LEAD BOARD PARTS LIST

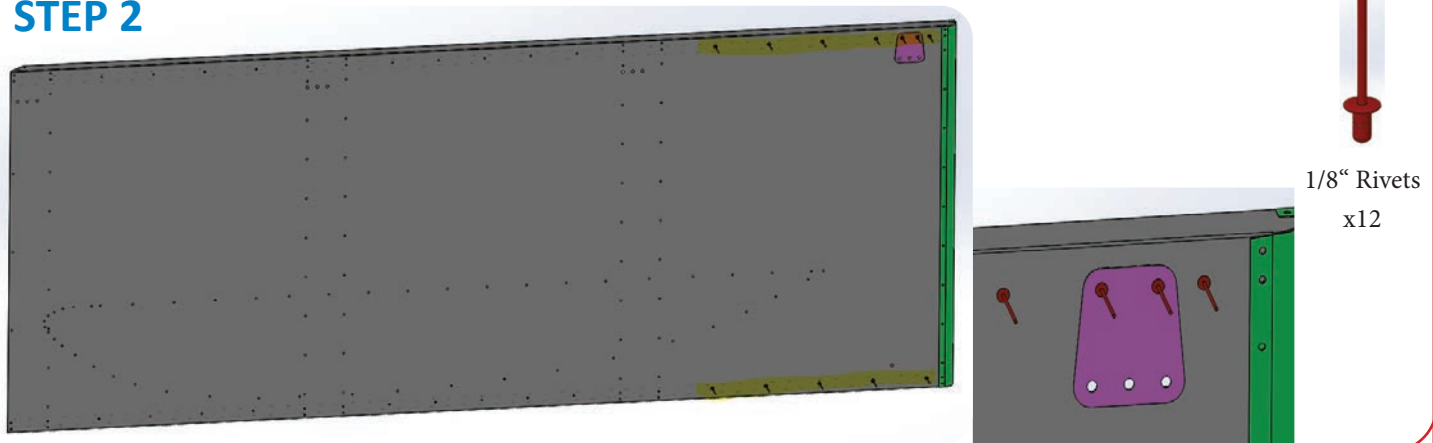
SKU #	HRP #	PART DESCRIPTION	QUA	CHECK
1	VT5083-200	Side Board	1	
2	VFT5097	Front Bottom Cap	1	
3	VFT5085	Back Edge	1	
4	VFT5085	Brace Stiffener	1	
5	VFT5081	Upright	2	
6	VFT5082-200	Front Edge	1	
7	VFT5095	Back Stiffener	2	
8	VFT5096	Front Top Cap	1	
9	VFT5094	Back Outer Stiffener	2	

### STEP 1



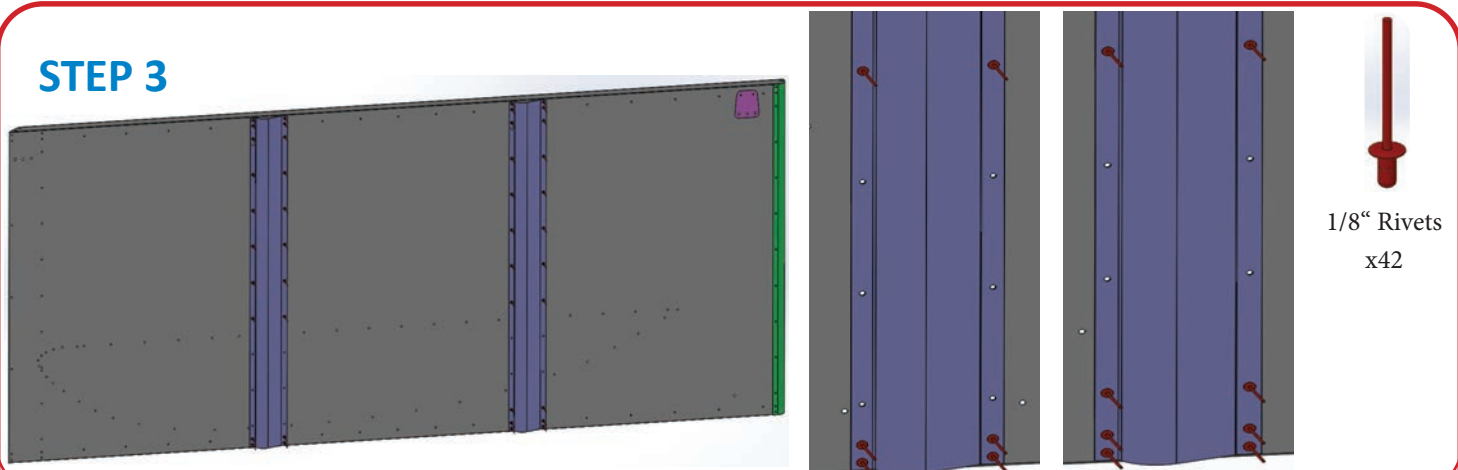
Rivet the Back Edge (3) to the Side Board (1)

### STEP 2



Rivet the Brace Stiffener (4) to Step 1 and then rivet the bottom and top edges of the back half of Step 1 by riveting the 1/8" holes highlighted

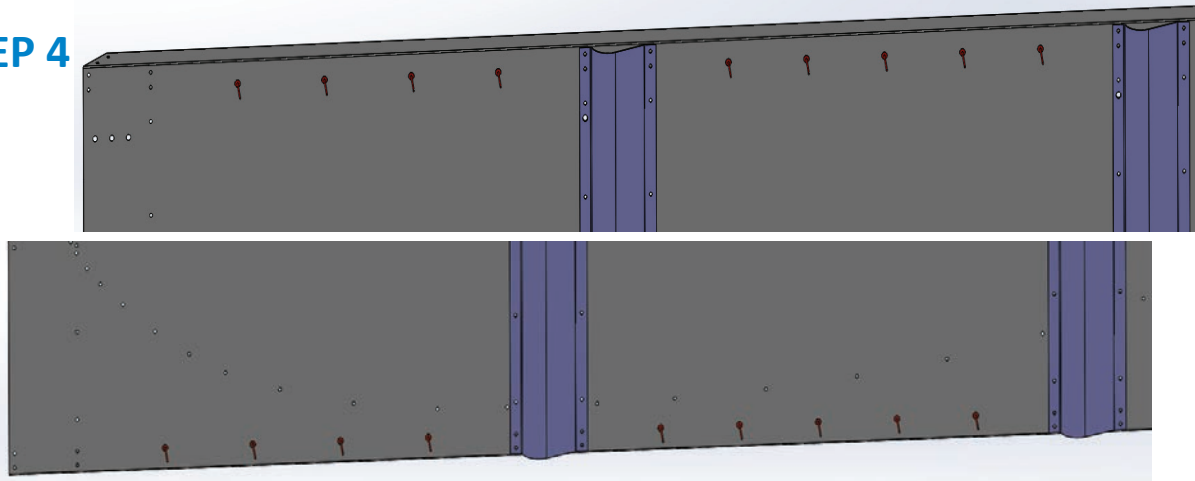
### STEP 3



Rivet the x2 Upright (5) to Step 2

Note: There are no rivets on the Cross Brackets where the wing profile is

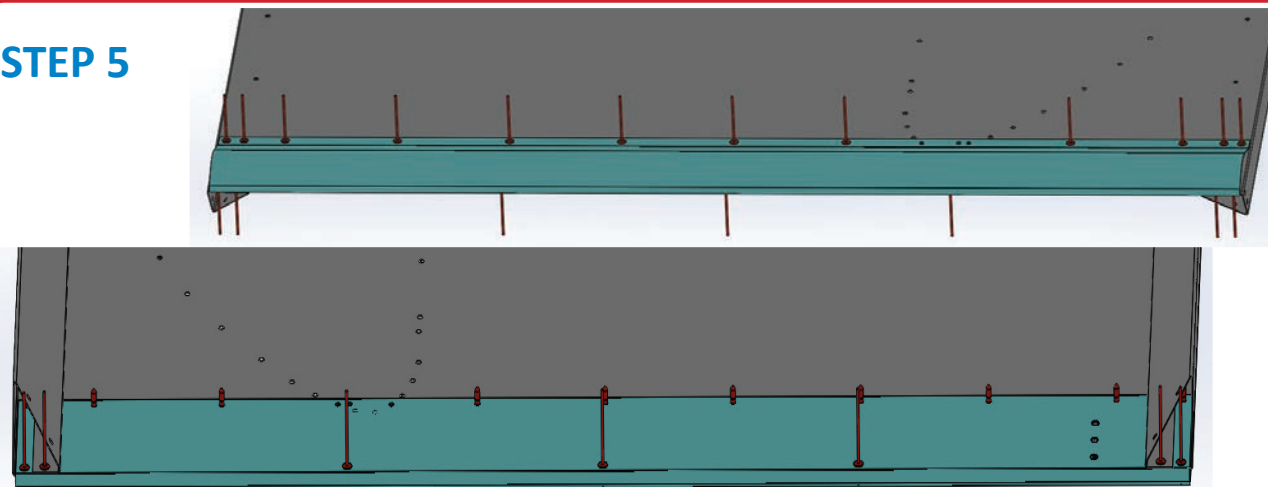
## STEP 4



1/8" Rivets  
x18

Rivet the rest of the bottom and top edges of Step 3 leaving the holes in the front where the Front Edge (6) is attached

## STEP 5

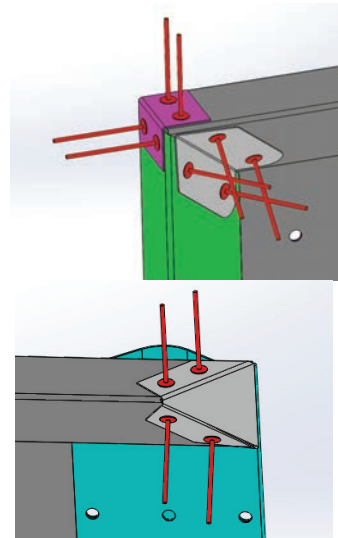
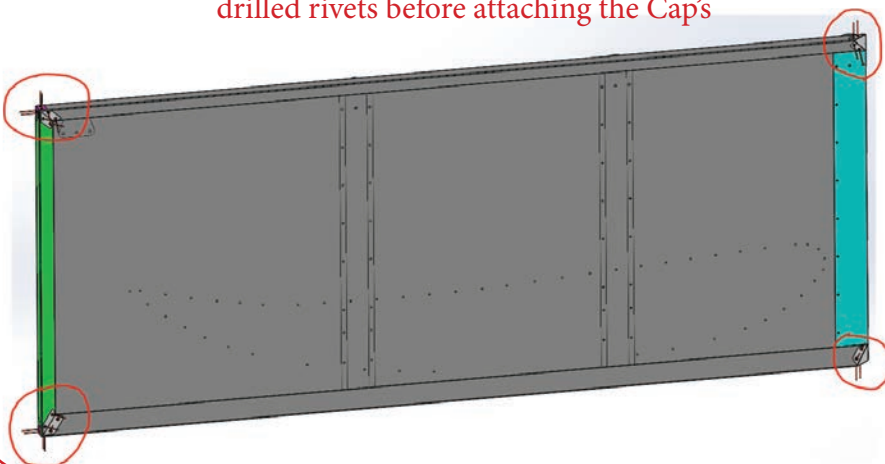


1/8" Rivets  
x19

Rivet on the Front Edge (6) to Step 4

## STEP 6

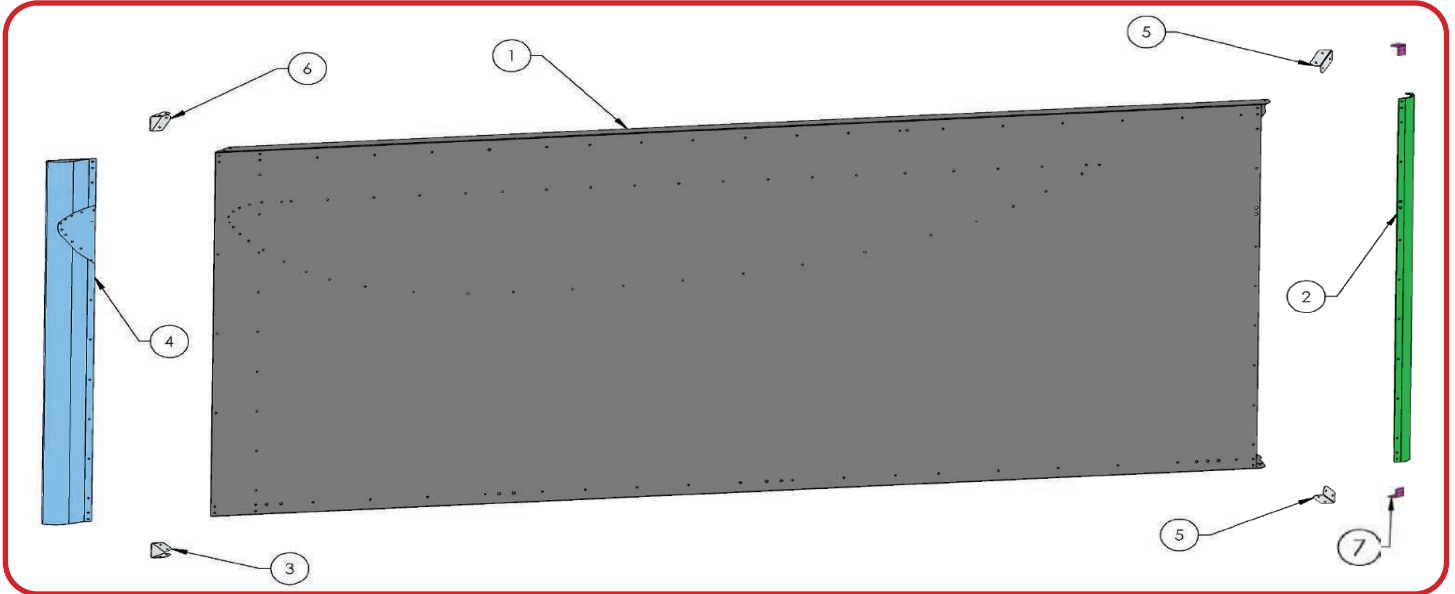
Note: Empty out any shavings from drilled rivets before attaching the Cap's



1/8" Rivets  
x24

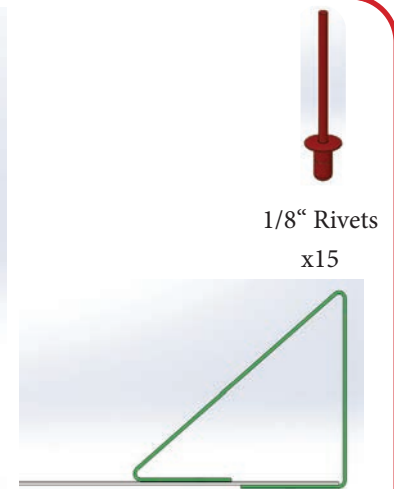
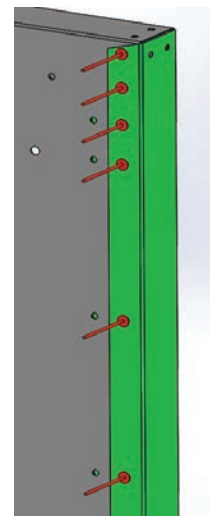
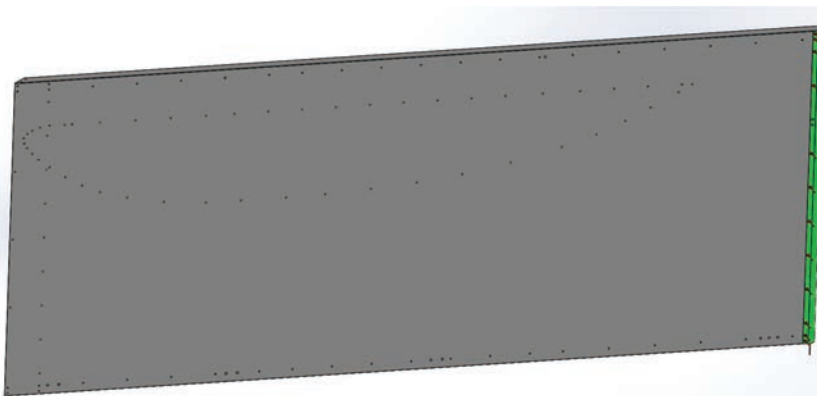
Rivet the x2 Back Stiffeners (7) and x2 Back Outer Stiffeners (9) to Step 5 and then rivet the Front Bottom Cap (2) and Front Top Cap (8) to Step 5

# RH Super Board and Standard Board Schematic and Checklist



RH SUPER BOARD PARTS LIST					STANDARD BOARD PARTS LIST	
SKU #	HRP #	PART DESCRIPTION	QUA	CHECK	HRP #	CHECK
1	VFT5090-S050	Side Board	1		VFT5090-***	
2	VFT5087-S	Back Edge	1		VFT5087	
3	VFT5097	Front Bottom Cap	1		VFT5097	
4	VFT5089-S050	Front Edge	1		VFT5089-***	
5	VFT5095	Back Stiffener	2		VFT5095	
6	VFT5096	Front Top Cap	1		VFT5096	
7	VFT5094	Back Outer Stiffener	2		VFT5094	

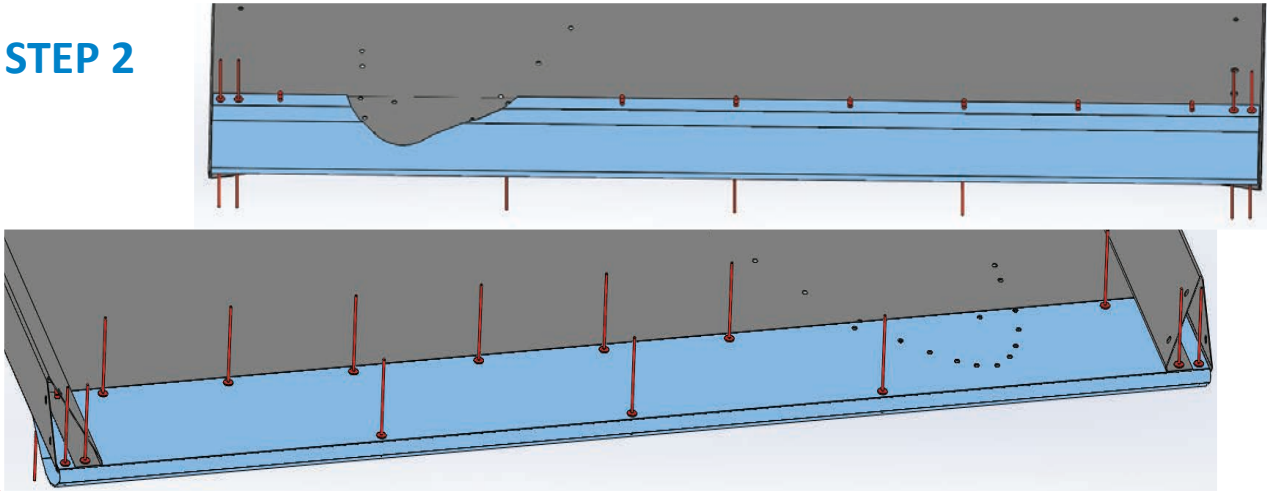
## STEP 1



Rivet the Back Edge (2) to the Side Board (1)



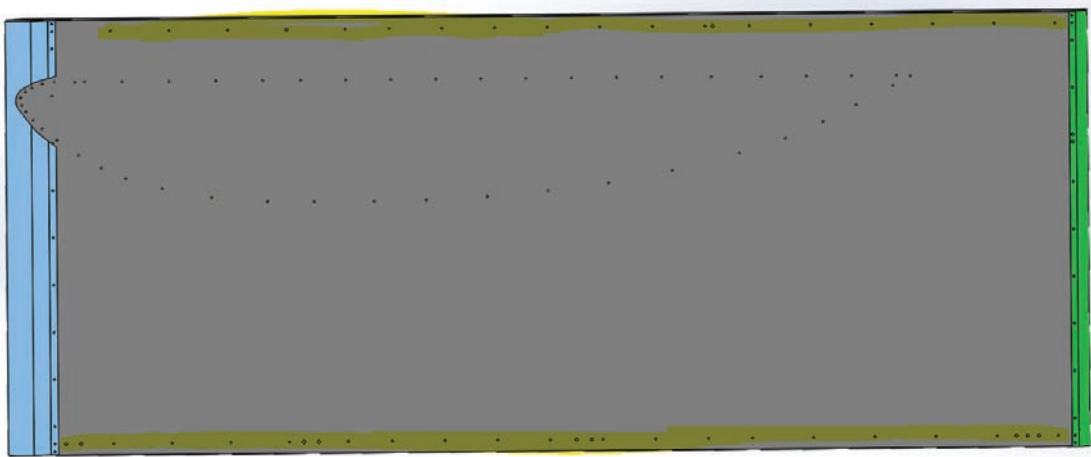
## STEP 2



1/8" Rivets  
x17

Rivet on the Front Edge (4) to Step 1

## STEP 3

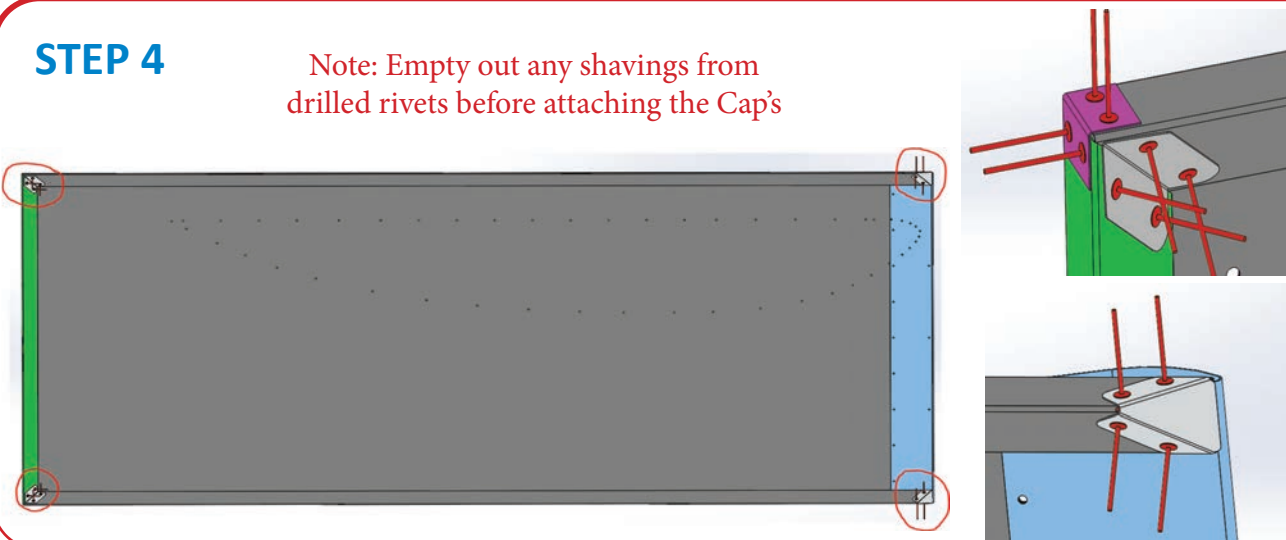


1/8" Rivets

Rivet the 1/8" holes highlighted

## STEP 4

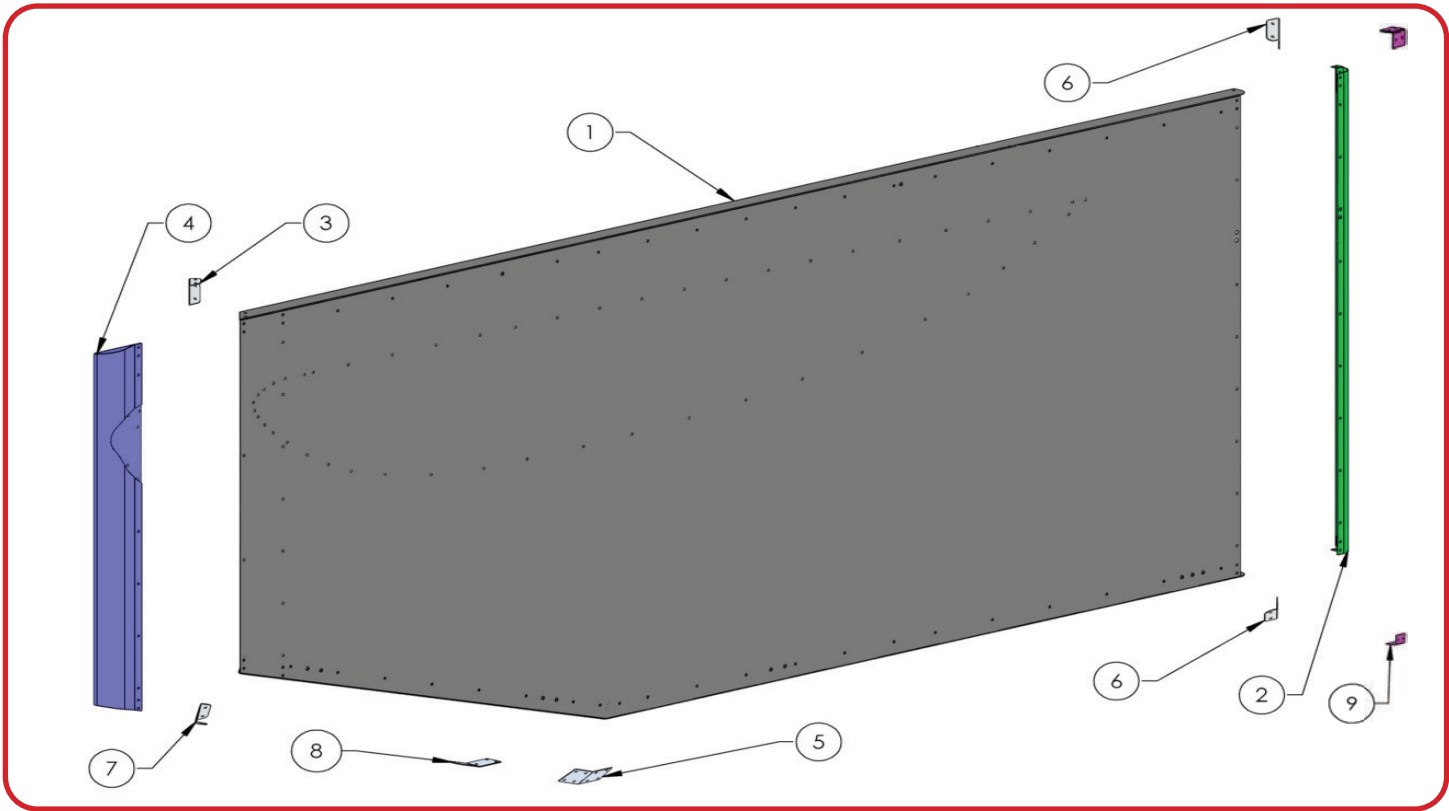
Note: Empty out any shavings from drilled rivets before attaching the Cap's



1/8" Rivets  
x24

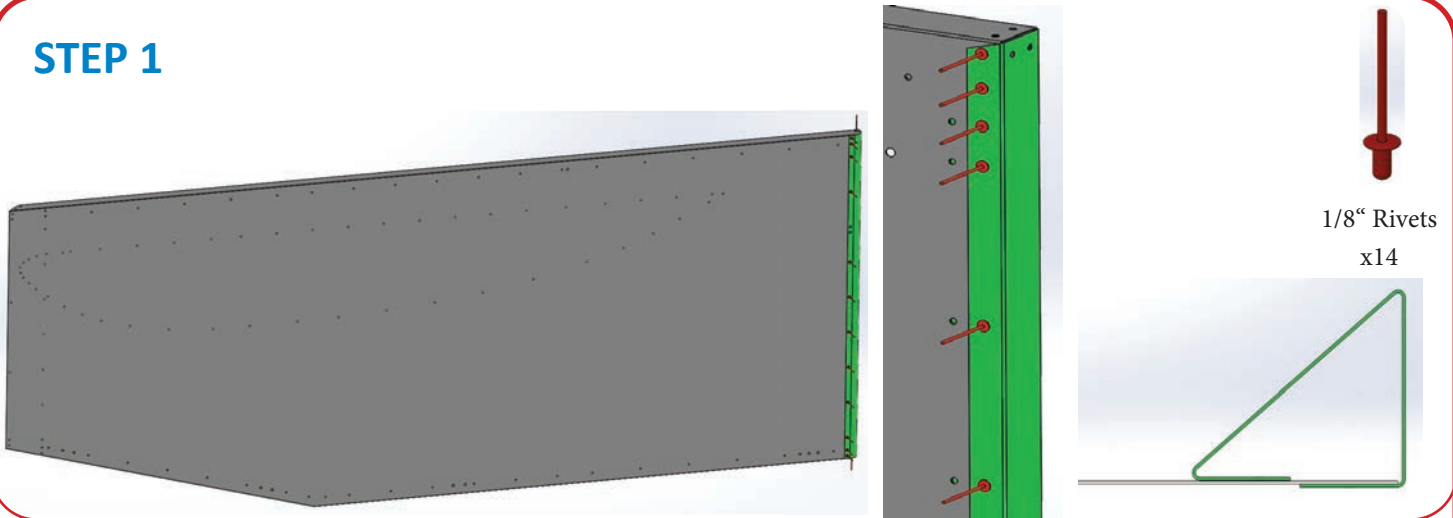
Rivet the x2 Back Stiffener (5) and x2 Back Outer Stiffeners (8) to Step 3 and then rivet the Front Bottom Cap (3) and Front Top Cap (6) to Step 3

# RH Super Angle Board Schematic and Checklist



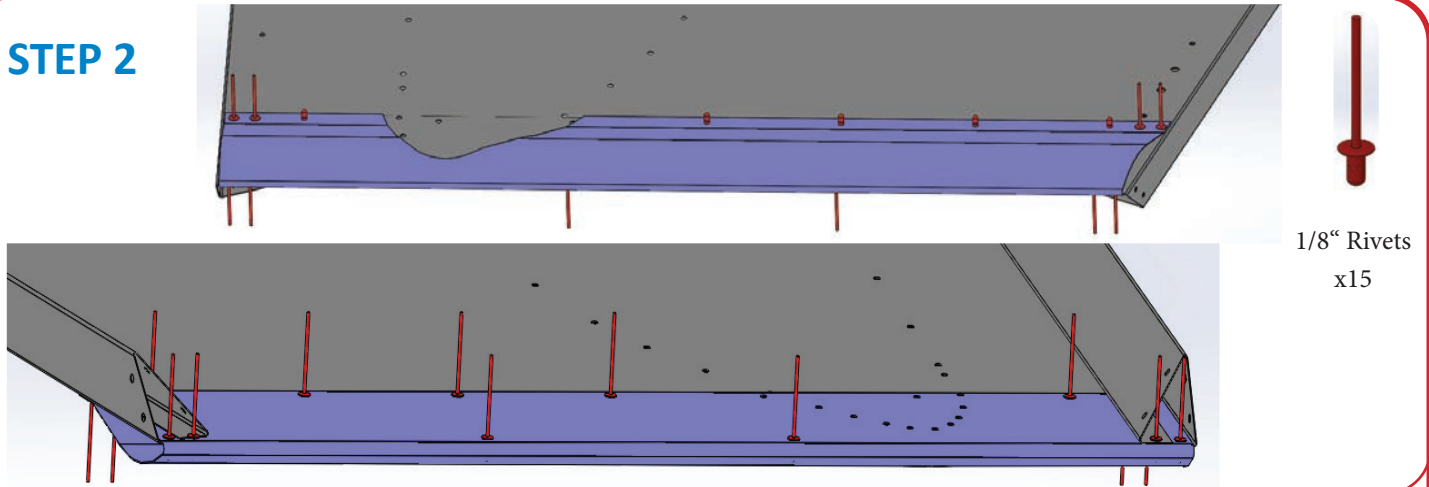
RH SUPER ANGLE BOARD PARTS LIST				
SKU #	HRP #	PART DESCRIPTION	QUA	CHECK
1	VFT5090-S050-ANG	Side Board	1	
2	FLT5086-S	Back Edge	1	
3	VFT5096	Front Top Cap	1	
4	VFT5089-SANG	Front Edge	1	
5	AF03350V	Inner Angle Stiffener	1	
6	VFT5095	Back Stiffener	2	
7	VFT5097	Front Bottom Cap	1	
8	AF03349V	Outer Angle Stiffener	1	
9	VFT5094	Back Outer Stiffener	2	

### STEP 1



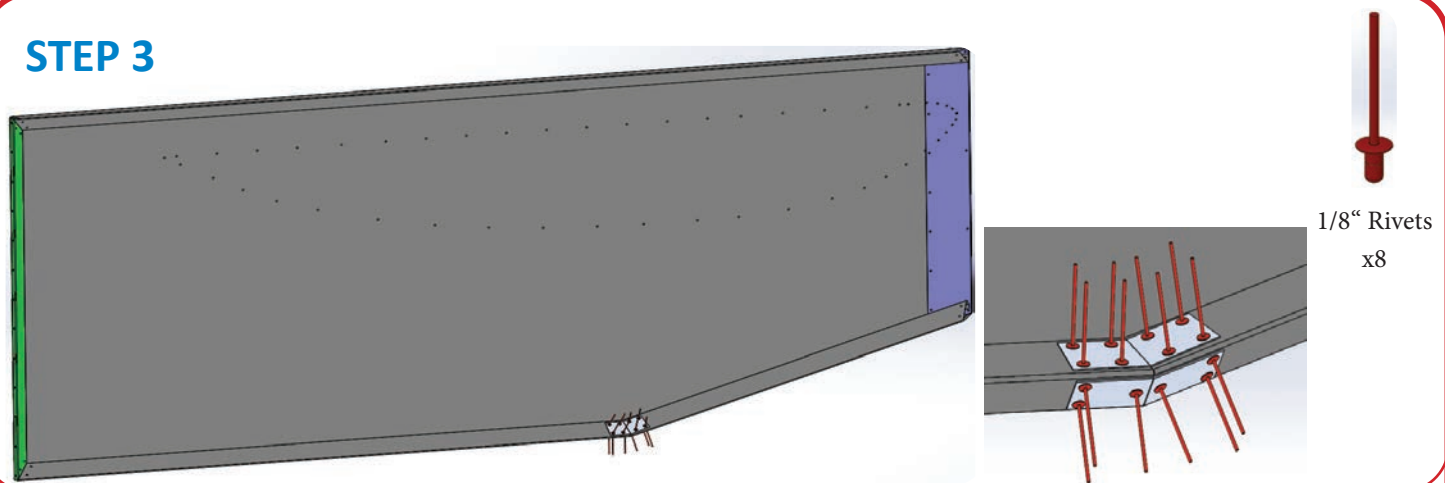
Rivet the Back Edge (2) to the Side Board (1)

### STEP 2



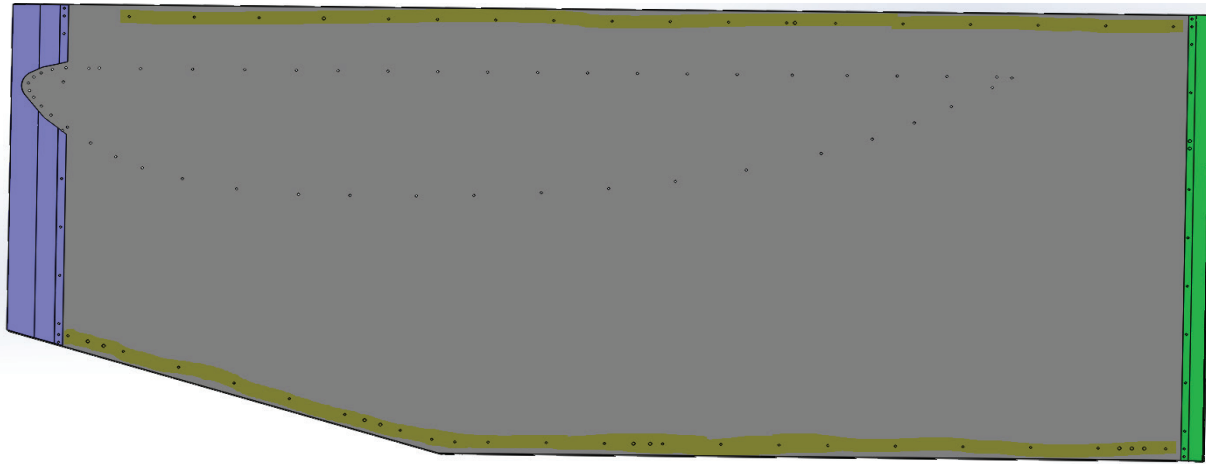
Rivet on the Front Edge (4) to Step 1

### STEP 3



Rivet the Inner Angle Stiffener (5) and Outer Angle Stiffener (8) to Step 2

## STEP 4

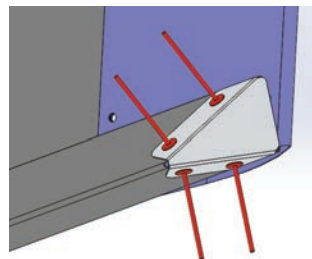
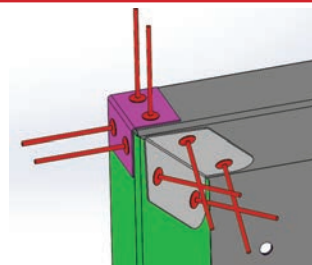
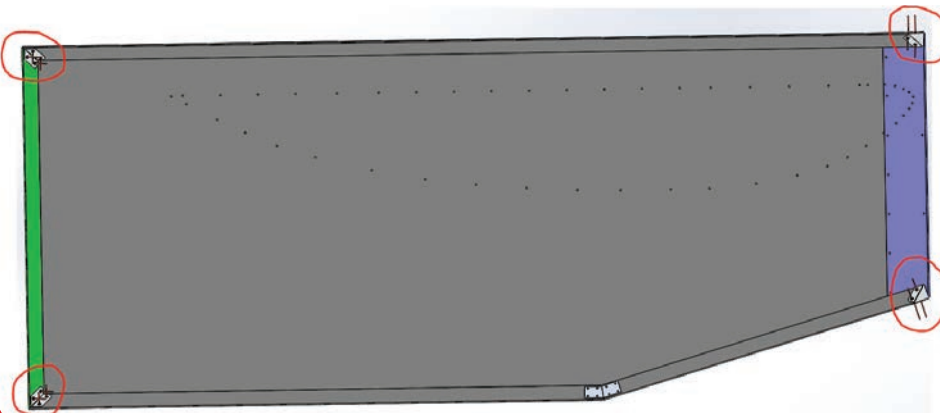


1/8" Rivets

Rivet the 1/8" holes highlighted

## STEP 5

Note: Empty out any shavings from drilled rivets before attaching the Cap's



1/8" Rivets  
x24

Rivet the x2 Back Stiffeners (6) and x2 Back Outer Stiffeners (9) to Step 4 and then rivet the Front Bottom Cap (7) and Front Top Cap (3) to Step 4