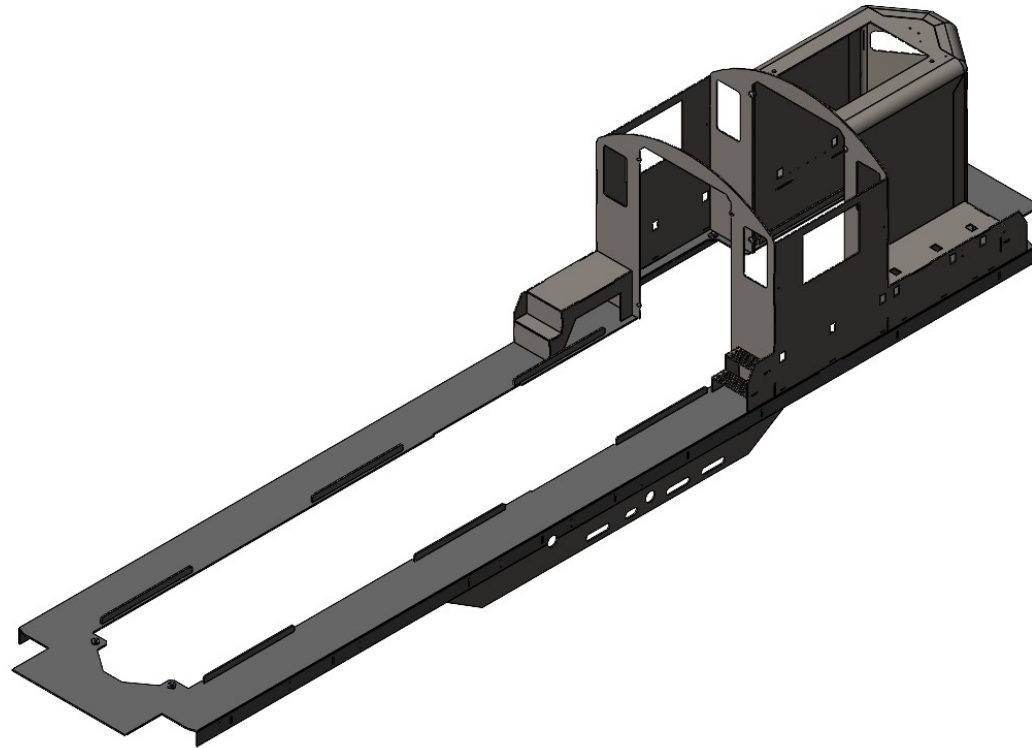


GP9 BODY SHORT SECTION  
FOR 1:8 SCALE



INSTRUCTION MANUAL

# KIT OVERVIEW

**THE INFORMATION CONTAINED IN THIS INSTRUCTION MANUAL IS THE SOLE PROPERTY OF PACIFIC DESIGN SHOPS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF PACIFIC DESIGN SHOPS IS PROHIBITED.**

Tools you may need to assemble the kit:

- Welder
- Grinder
- Clamps
- Square Cordless Drill
- 10-32 Tap and #18 Drill Bit
- #9 Drill Bit

Extra materials you may need:

- Frame & Trucks
- Detail Parts
- Paint
- Decals
- Common acronyms:
  - BOM - Bill of Material
  - PDS - Pacific Design Shops
  - PSC - Precision Steel Car
  - MMC - McMaster Carr

Helpful Tips

- Assemble kit together before welding to see how the parts go together.
- Tack weld the pieces together. It is easier to undo a tack than a bead.
- When applying the finishing welds, use skip welds instead of a continuous welding to avoid extreme warping and twisting.
- Weld from one end to the other to avoid warping.
- Use clamps to keep joints tight together when welding.
- Note locations of holes and mating parts, avoid welding in those areas to reduce need to come back and grind out.

See the FAQ page for more helpful tips and answers to common questions.

**We want your feedback!** If you see an area to improve either on the kit or the instructions, please let us know. Send your feedback to [info@pacificdesignshops.com](mailto:info@pacificdesignshops.com).

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# BOM OVERVIEW

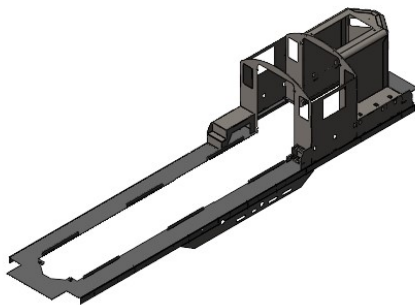
Use the BOM's below for pages 2-12.

## Sub Frame Weldment Parts

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GP9F75_ST12G_A1	Top Deck	1
2	GP9F75_ST12G_B2	Side Deck	2
3	GP9F75_ST12G_D2	Lower Side Deck	2
4	GP9F75_ST12G_E8	Side Deck Angle Small	8
5	GP9F75_ST12G_F10	Side Deck Angle Large	10
6	GP9F75_ST12G_G8	Body Tabs	8

## Hardware

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
24	MMC_93975A640	10-32 Weld Nut	8
25	MMC_92949A261	10-32 x 1/4" BHCS	4



## Short Body Weldment Parts

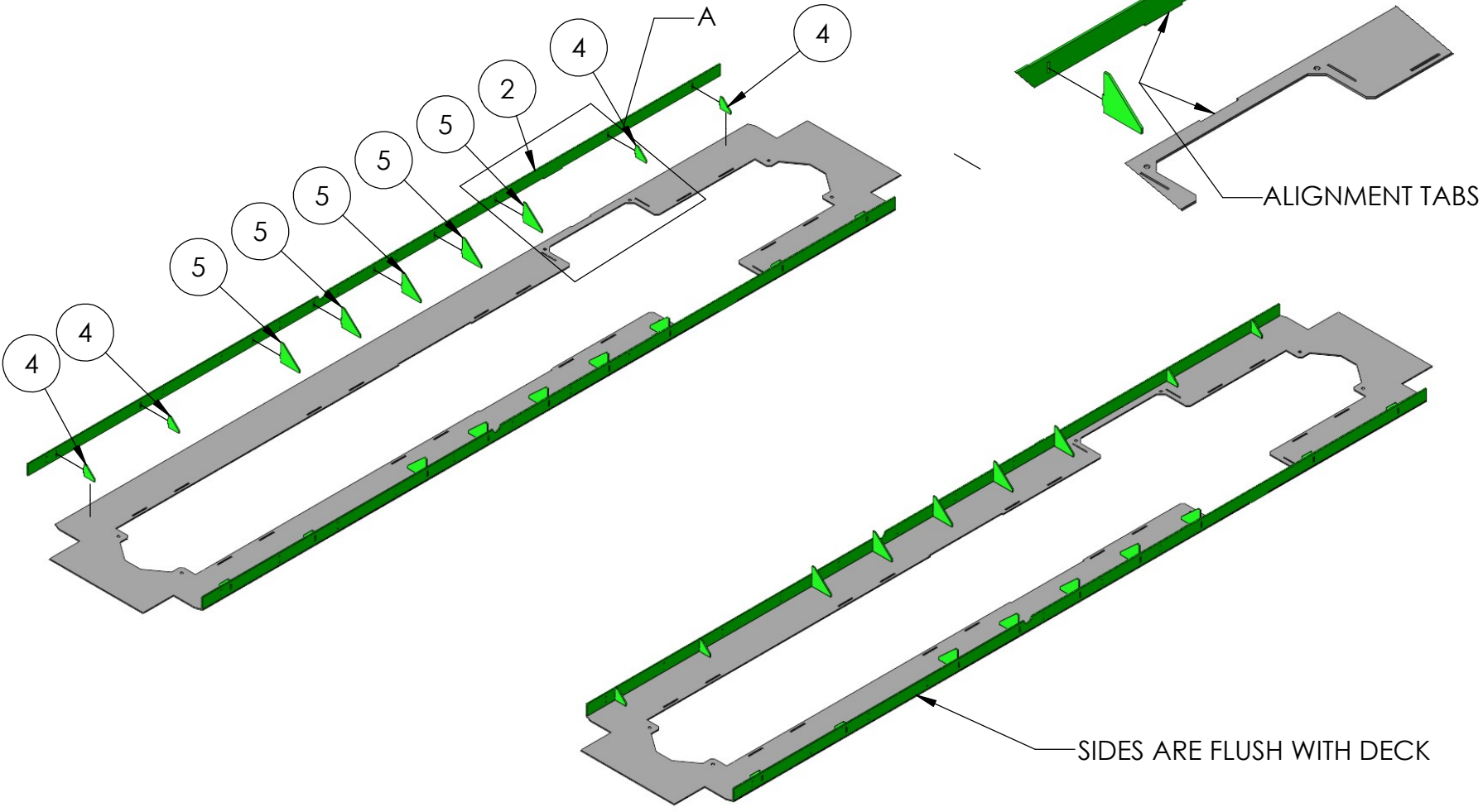
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
7	GP9B75_ST14G_J2	Cab Front/Back	2
8	GP9B75_ST14G_G1	Cab Right	1
9	GP9B75_ST14G_H1	Cab Left	1
10	GP9B75_ST14G_C1	Body Front End	1
11	GP9B75_ST14G_A1	Body Front End Nose	1
12	GP9B75_ST11G_A6	Body Supports	1
13	GP9B75_ST14G_L1	Cab Right Rear Step Back	1
14	GP9B75_ST14G_M2	Cab Right Rear Steps	2
15	GP9B75_ST14G_N1	Cab Left Rear Step Back	1
16	GP9B75_ST14G_P1	Cab Left Rear Step Top	1
17	GP9B75_ST14G_Q1	Cab Left Rear Step A	1
18	GP9B75_ST14G_R1	Cab Left Rear Step Mid	1
19	GP9B75_ST14G_S1	Cab Left Rear Step B	1
20	GP9B75_ST14G_T2	Cab Front Step Top	2
21	GP9B75_ST14G_U2	Cab Front Step	2
22	GP9B75_ST14G_V2	Cab Front Step Mid	2
23	GP9B75_ST16G_A4	Nose Filler Piece	2

**\*\*\*TACK WELD ONLY\*\*\***

# STEP 1: SUB FRAME SIDES

Assemble sub frame deck, sides, and supports as shown below. Note orientation of tabs to align sides to deck in **DETAIL A**.

Ensure sides are flush with deck down entire length.

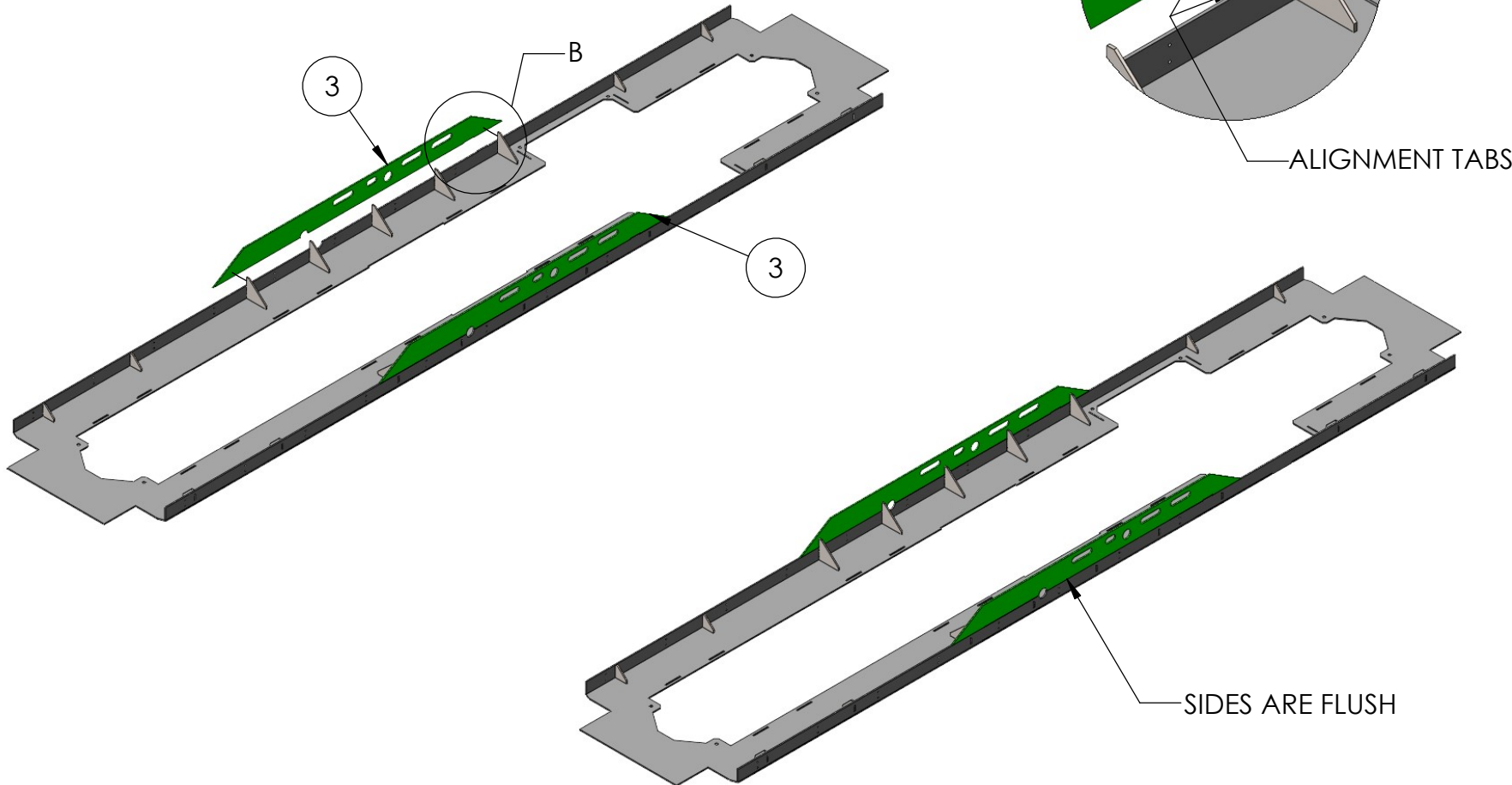


**\*\*\*TACK WELD ONLY\*\*\***

## STEP 2: SUB FRAME LOWER SIDES

Assemble lower sides to sides as shown below. Note orientation of tabs to align lower sides in **DETAIL B**.

Ensure lower sides are flush with sides down entire length.

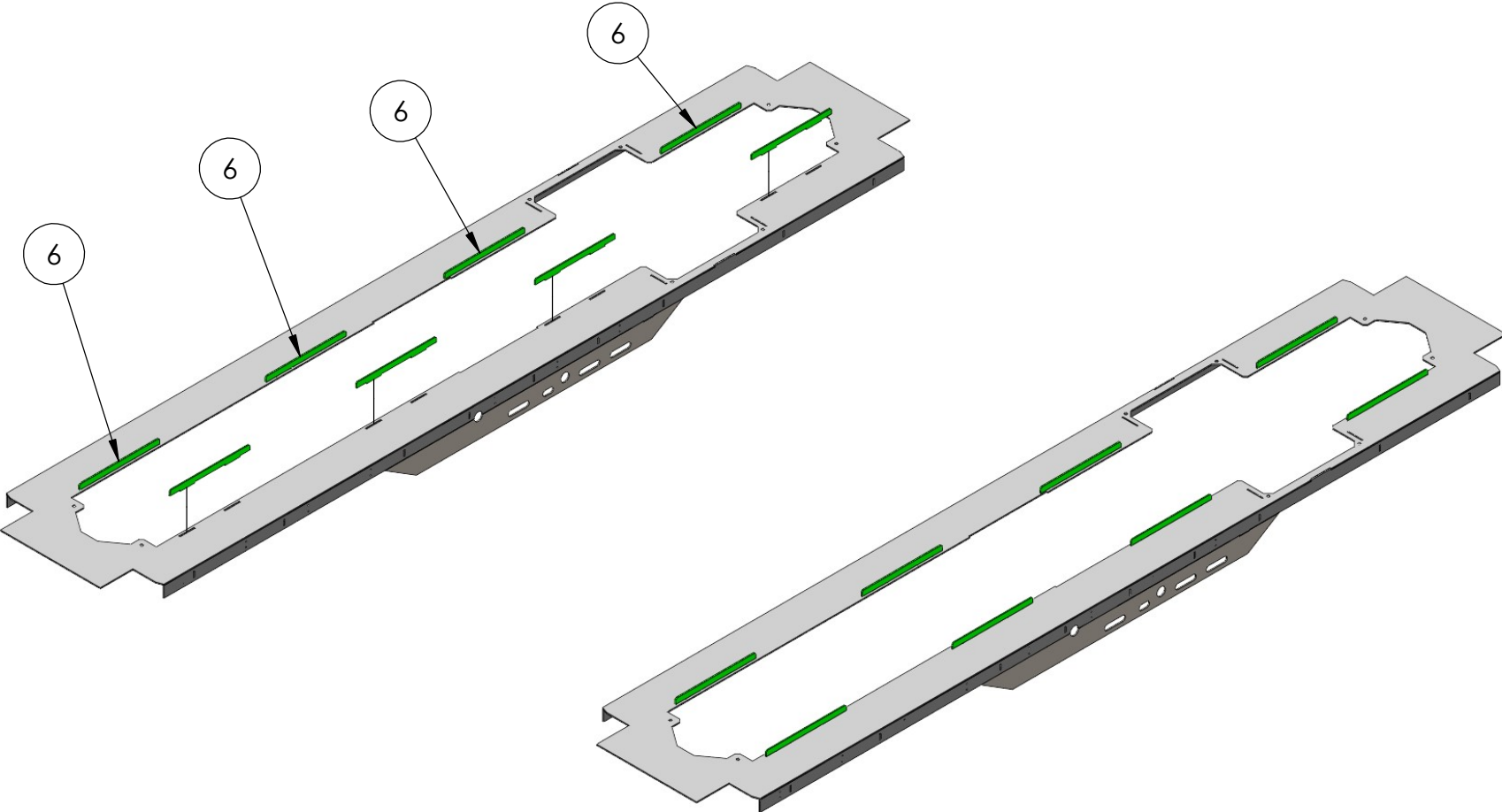


### STEP 3: SUB FRAME BODY TABS

**\*\*\*TACK WELD ONLY\*\*\***

Flip sub frame over, assemble body tabs to frame deck as shown below. Repeat on both sides.

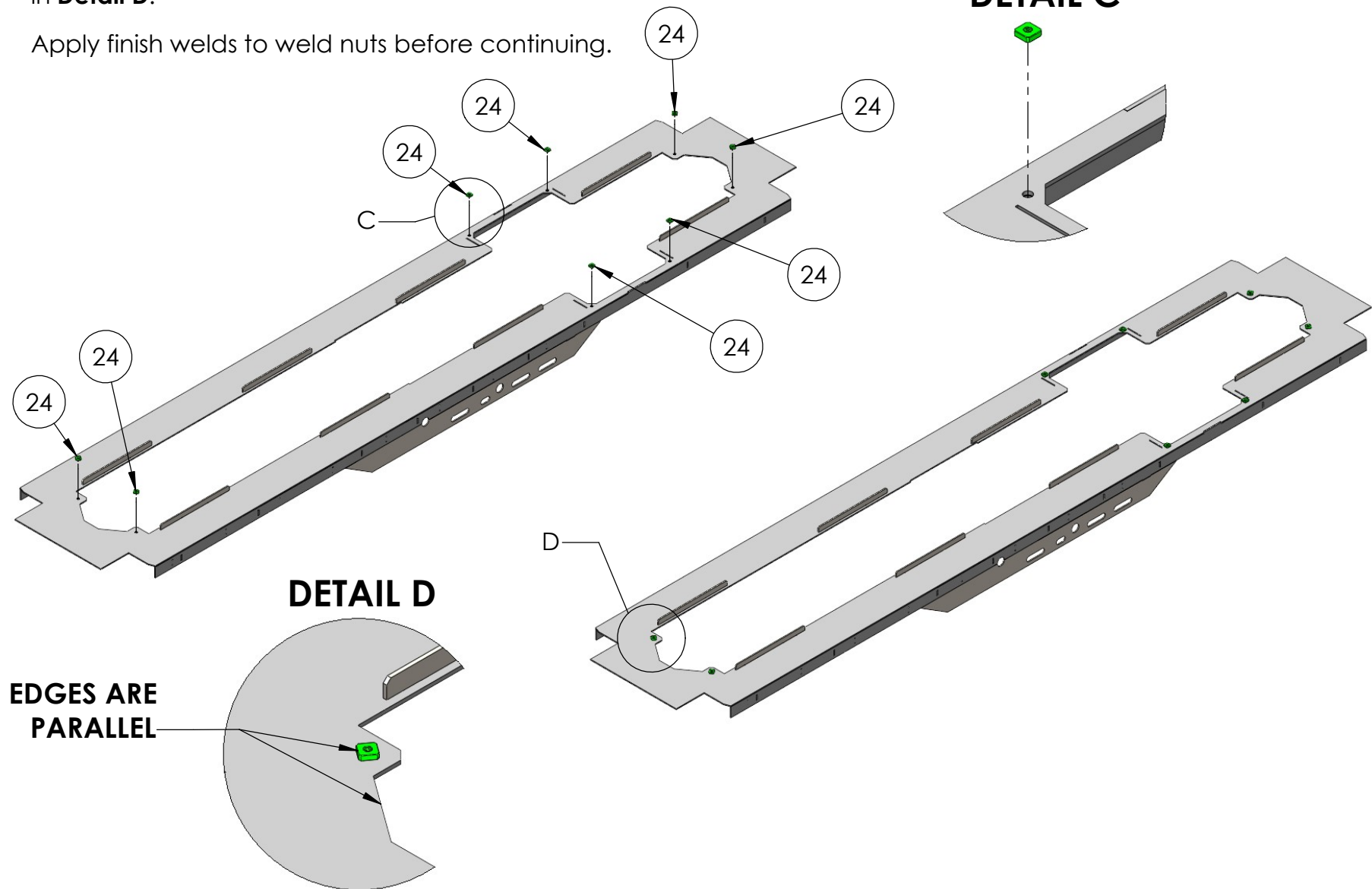
Apply tack welds to inside of body tabs **ONLY**.



## STEP 4: SUB FRAME WELDNUTS

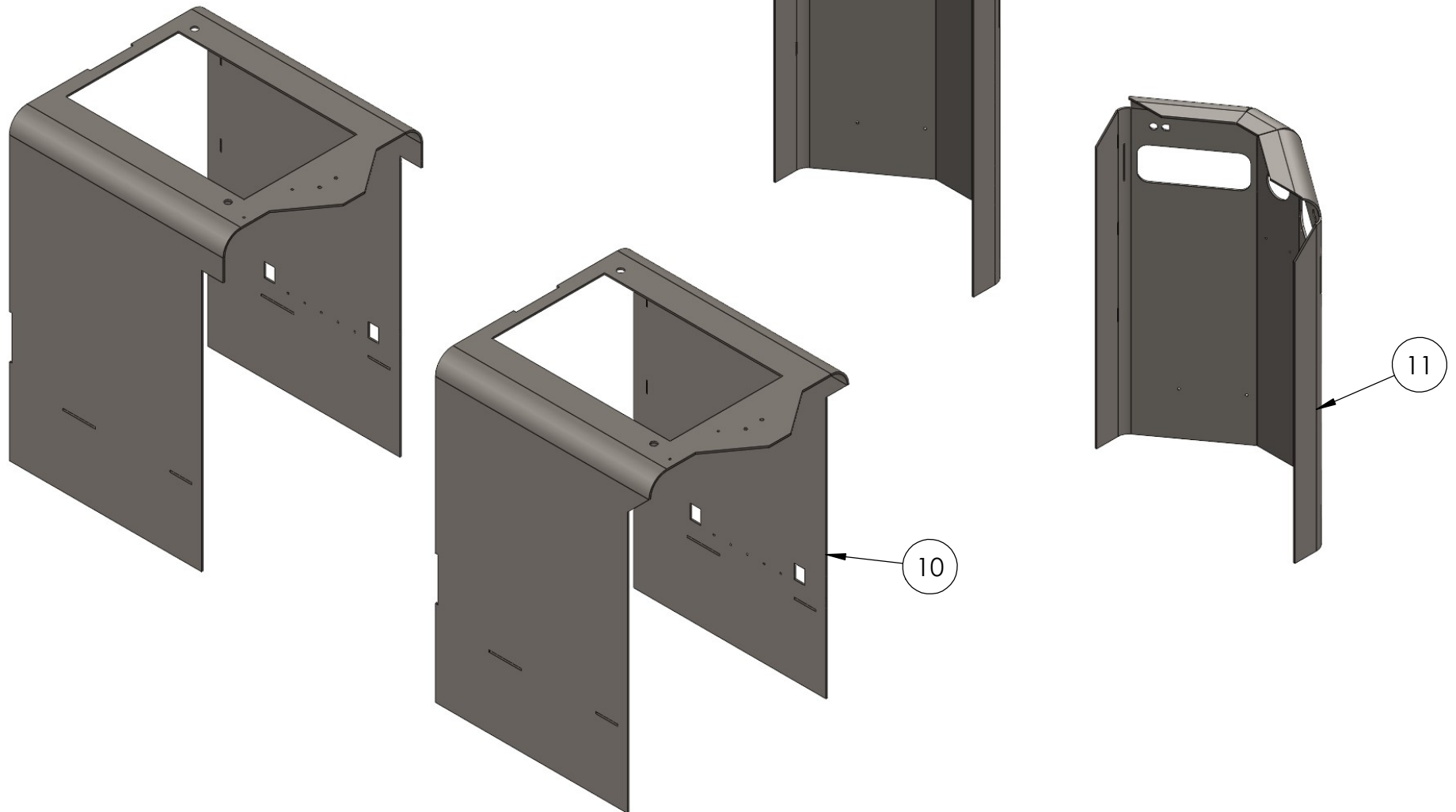
Attach weld nuts to sub of sub frame deck as shown below and in **Detail C**. Note orientation of weld nuts in **Detail D**.

Apply finish welds to weld nuts before continuing.



## STEP 5A: FRONT NOSE

Locate laser etch lines on Front Nose and Front Body section in locations shown below. Using grinder with a cutoff discs, cut along lines. Mate part together to check for fitment.

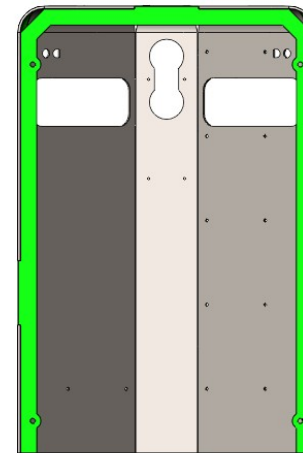


## STEP 5B: FRONT NOSE

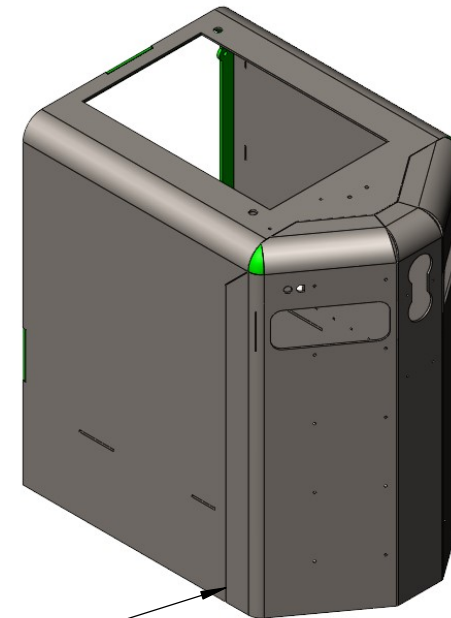
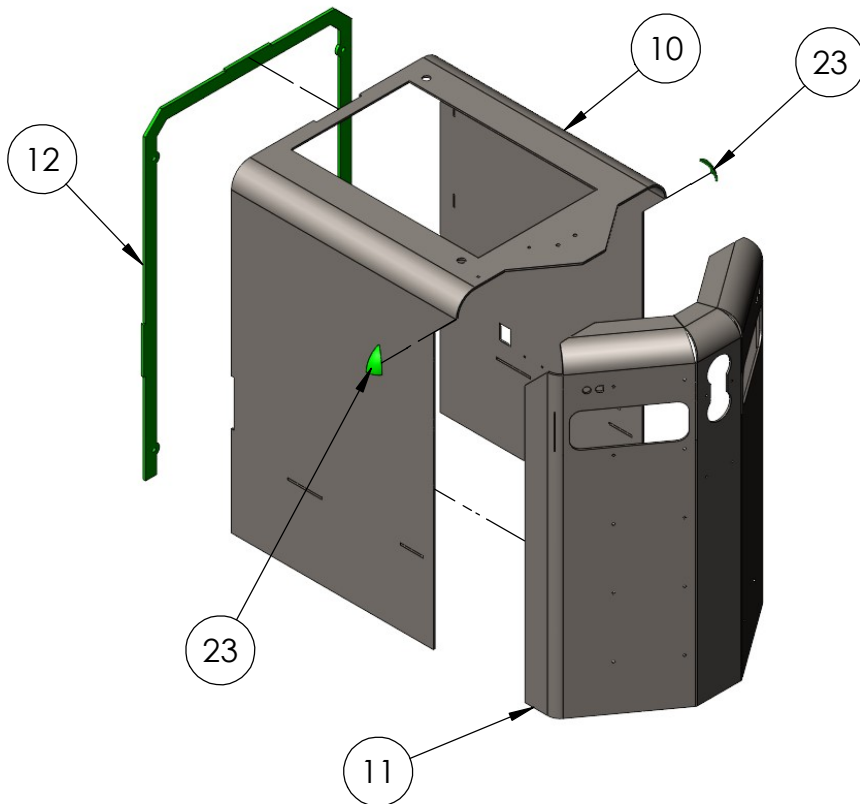
Assemble front nose as shown below keeping a  $\sim 1/32$ " gap between all seams.

Recommended to tack weld seams every 3-4" and avoid stitch welding seams. Apply tack welds on inside of body to reduce grinding.

**\*\*\*TACK WELD ONLY\*\*\***



4X 10-32 UNF THRU ALL



GAPS ALL SEAMS  $\sim 1/32$ "

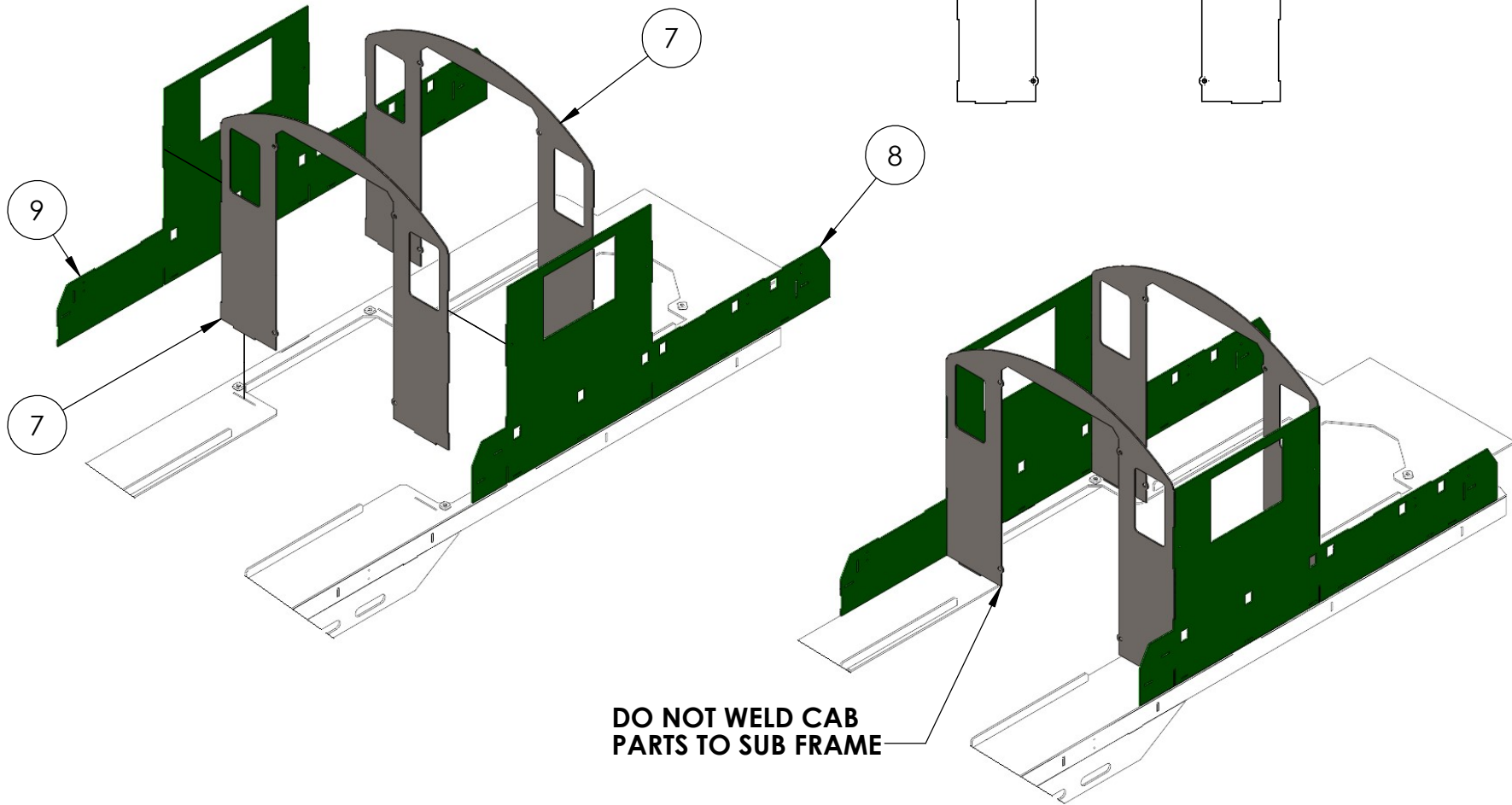
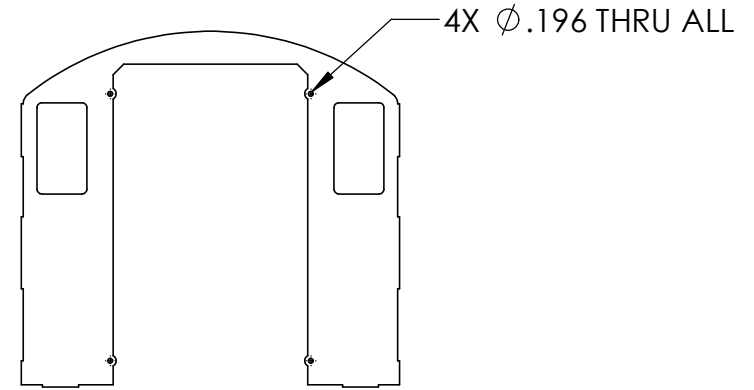
## STEP 6: CAB

Prior to welding, drill holes in cab ends as shown.

Assemble cab as shown below. Using sub frame to locate and square front and rear cab. Note orientation of sides.

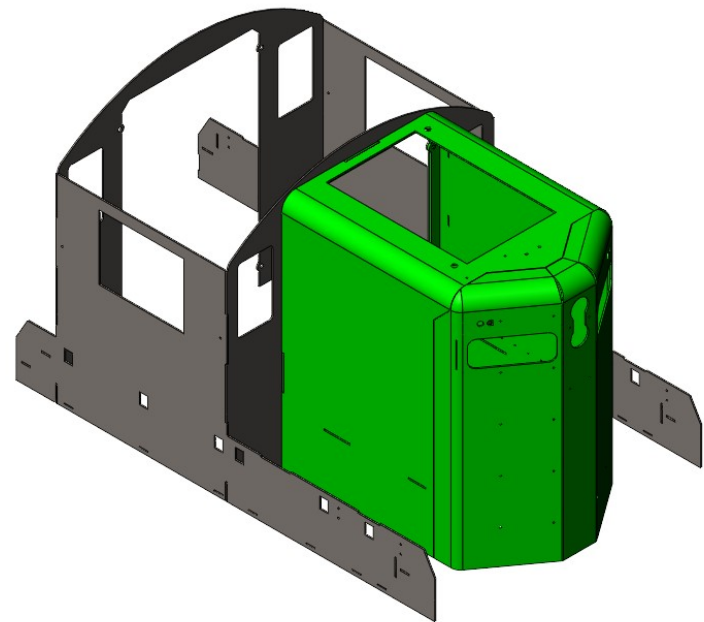
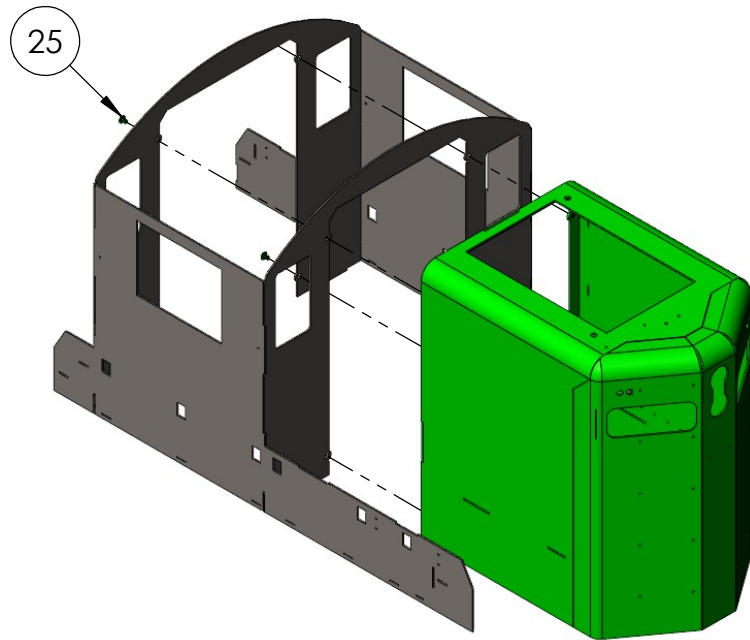
**DO NOT WELD CAB PARTS TO SUB FRAME.**

**\*\*\*TACK WELD ONLY\*\*\***



## STEP 7: FRONT NOSE TO CAB

Assemble front nose to cab using 10-32 hardware as shown below.

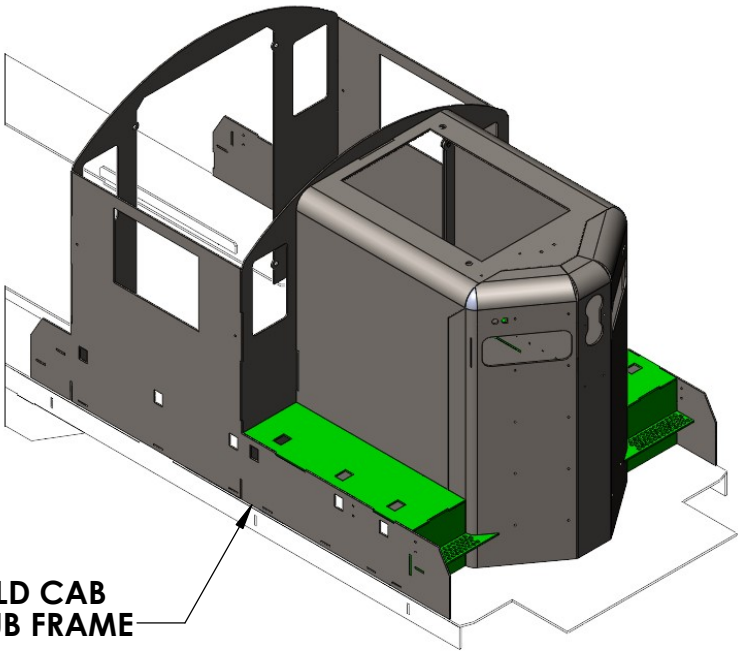
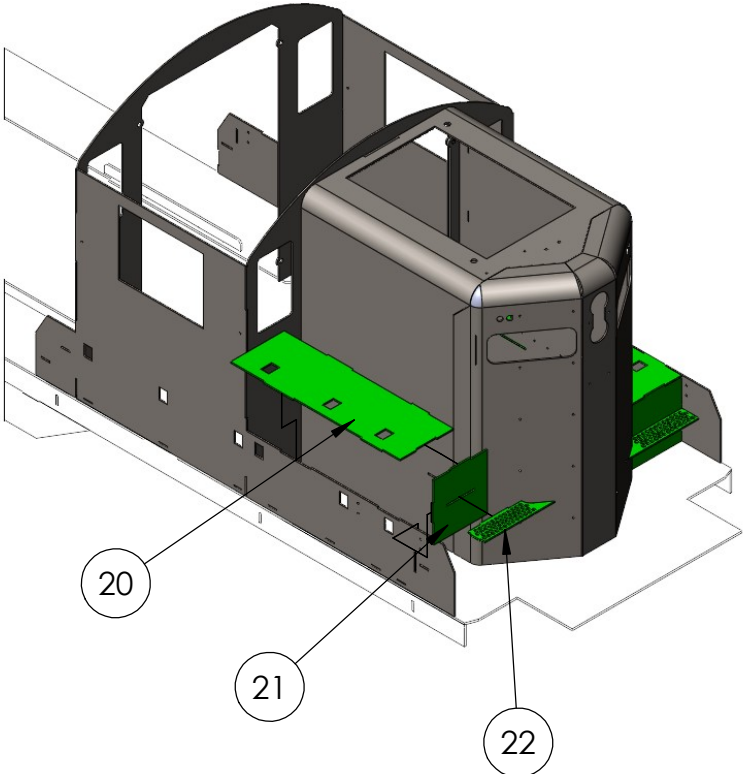


**\*\*\*TACK WELD ONLY\*\*\***

# STEP 8: FRONT NOSE PLATFORMS

Assemble front cab walkways as shown below.  
Repeat on both sides of engine.

Recommend to remove from sub frame and weld  
from underneath for stronger welds.

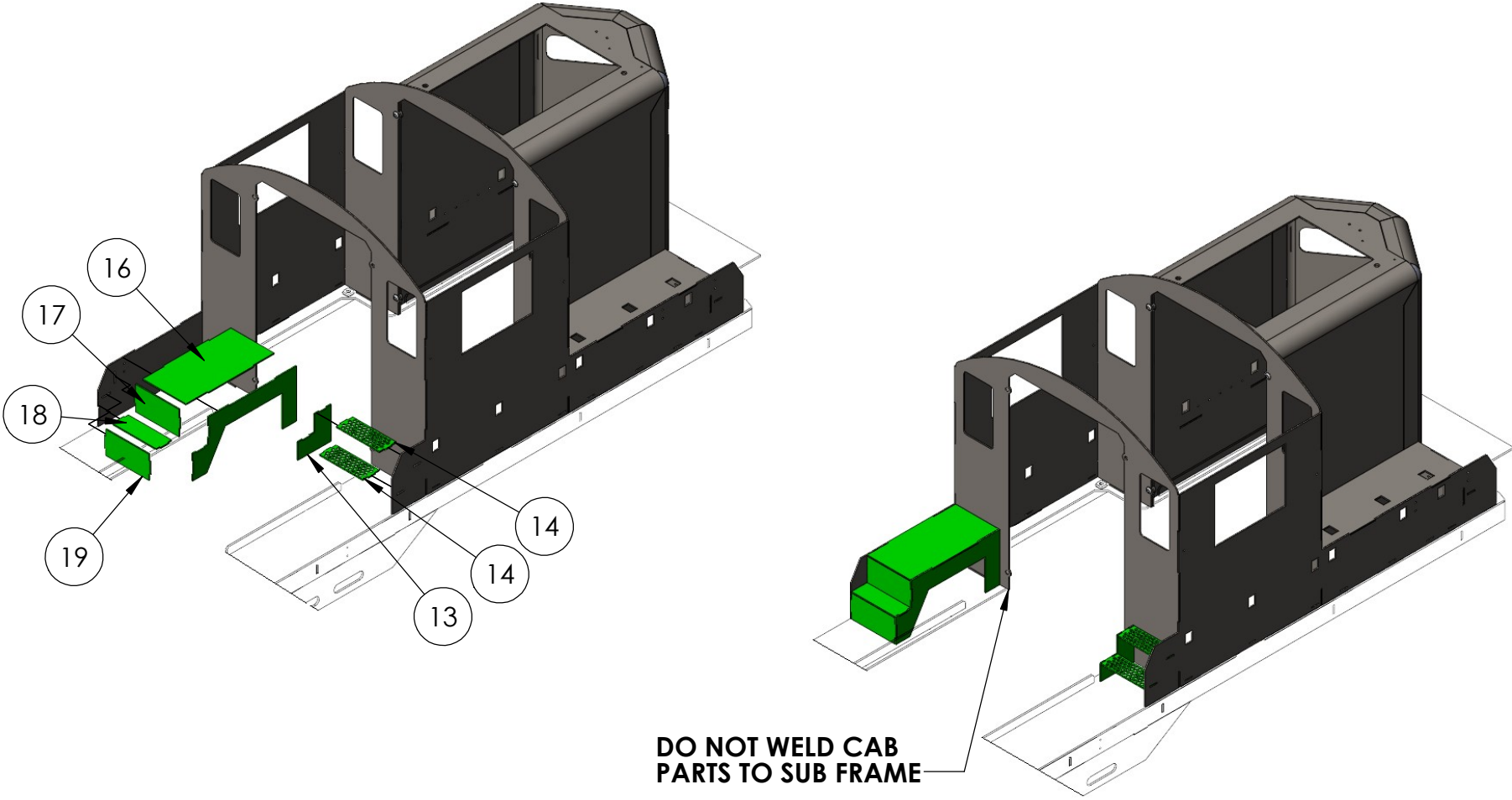


**DO NOT WELD CAB PARTS TO SUB FRAME**

**\*\*\*TACK WELD ONLY\*\*\***

# STEP 9: REAR CAB STEPS

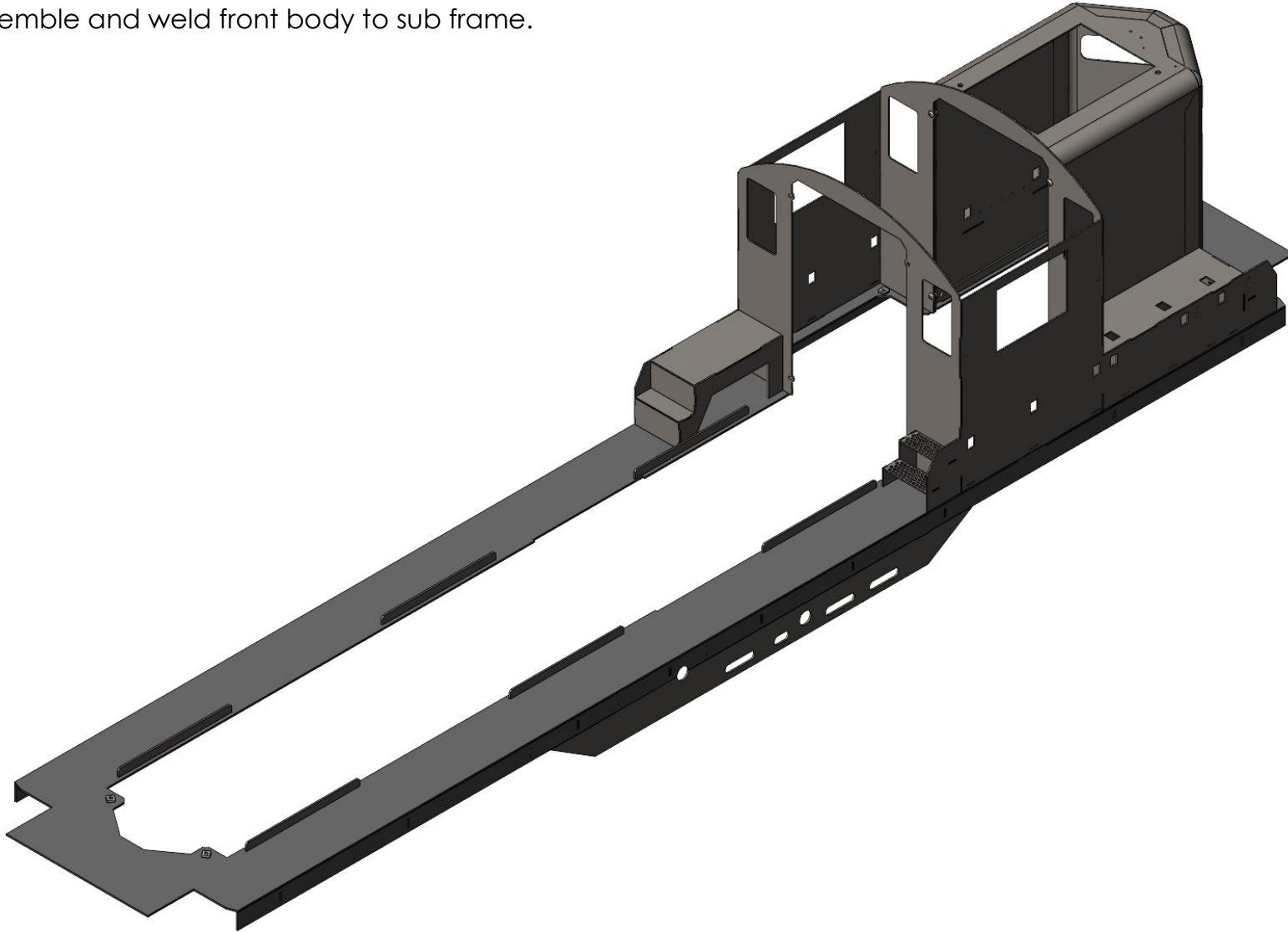
Assemble rear cab walkways as shown below.  
Recommend to remove from sub frame and weld from underneath for stronger welds.



## STEP 10: SHORT BODY TO SUB FRAME

Apply final welds to front body before continuing.

Assemble and weld front body to sub frame.



## FREQUENTLY ASKED QUESTIONS

**Q: My sub frame and body isn't fitting together and there are gaps, what is going on?**

**A:** Care was taken in the design to incorporate tab and slot construction to avoid having to use jigs or special clamps to hold items in the correct positions for welding but that also increases the locations for interferences to occur. Wiping down all the parts prior to welding is a good first step to remove grit from mating surfaces that may have accumulated from storage or the manufacturing process. Because of the laser cutting process used to cut out the parts, there may be some burrs on the corners. Use a file or grinder to remove them. Making sure to fit all the parts together before welding will help you locate where a problem is before items are welded together. During welding, weld BB's may get stuck to faces and should be grinded off as the steps are followed.