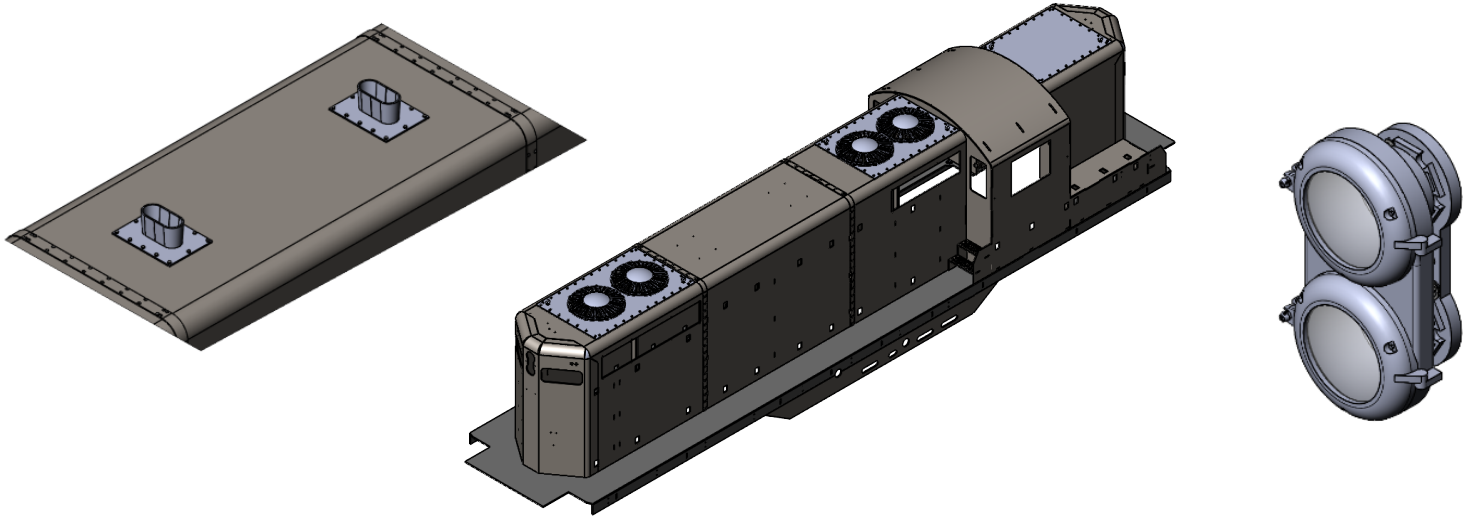
GP9 BODY DETAIL PARTS
FOR 1:8 SCALE



INSTRUCTION MANUAL

PACIFIC DESIGN SHOPS

REVISION: A
REVISION DATE: 9/21/25

KIT OVERVIEW

Tools you may need to assemble the kit:

- Welder
- Grinder
- Clamps
- Square
- Cordless Drill
- 2-56 Tap and #49 Drill Bit
- 4-40 Tap and #41 Drill Bit

Extra materials you may need:

- Blomberg Trucks (Pike River Shops)
- Paint
- Decals
- 3M DP420 Epoxy & Applicator
- Wires

Common acronyms:

- BOM - Bill of Material
- PDS - Pacific Design Shops
- PSC - Precision Steel Car
- MMC - McMaster Carr

Helpful Tips

- Assemble sections together before welding or gluing 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 or gluing.
- 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 commom 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.

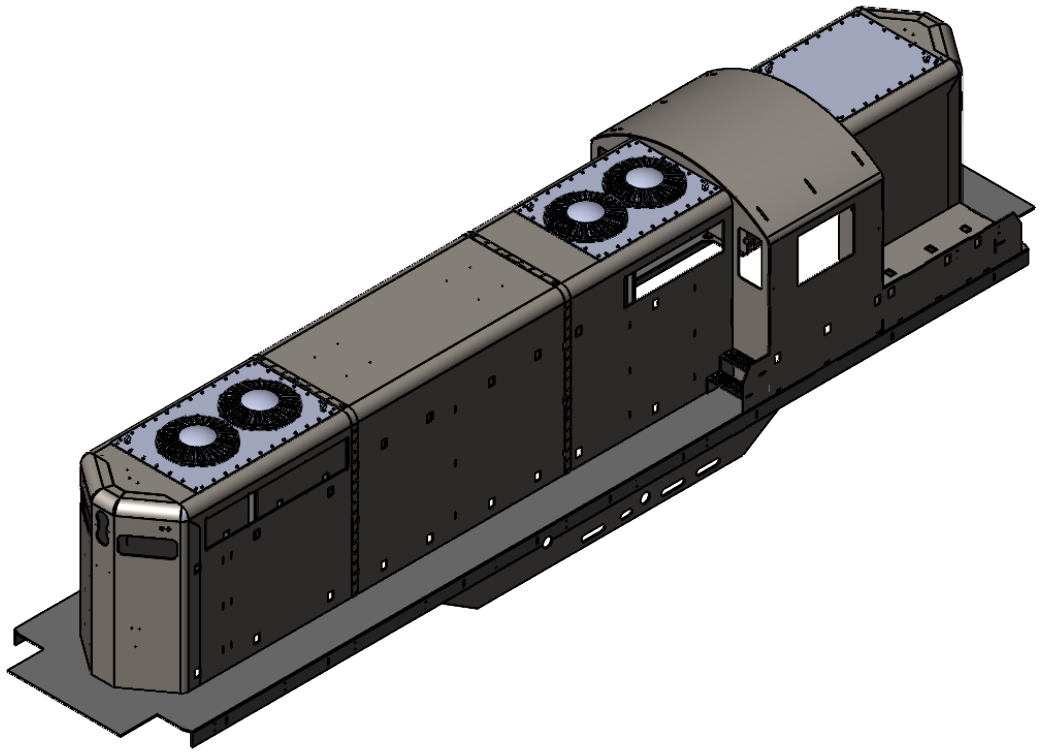
TABLE OF CONTENTS

SECTION 1: ROOF PLATES

Use the BOM below for pages 1-2 to 1-9.

All plates sit loose on roof using lift ring nuts to align position.

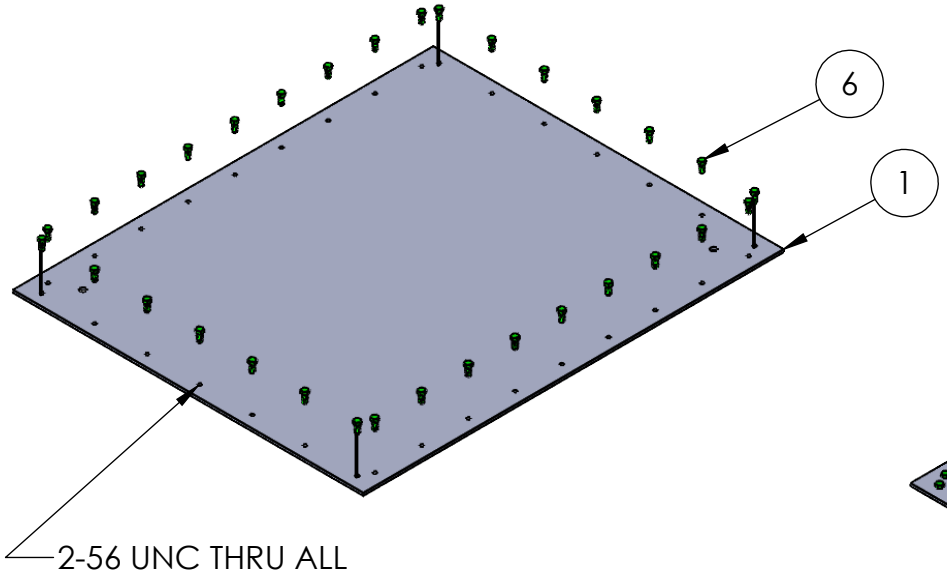
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GP9D75_ST16G_R1	Roof Plate Front	1
2	GP9D75_ST16G_S1	Roof Plate Mid	1
3	GP9D75_ST16G_T1	Roof Plate Rear	1
4	PSC_L-056	36" EMD Fan	4
5	PSC L-022	EMD Lift Ring w/ Nut	6
6	MMC_92314A401	2-56 x 3/16" Hex Screw	133

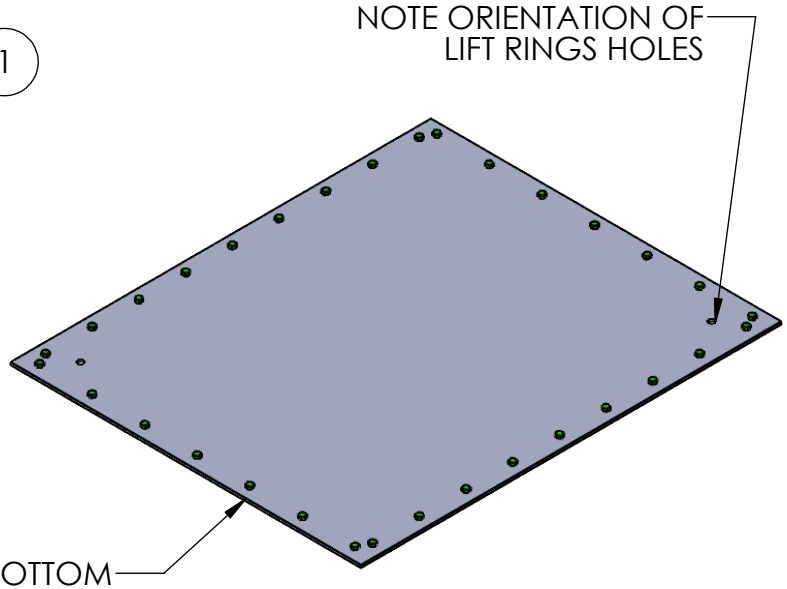


STEP 1: FRONT PLATE SCREWS

Tap front roof plate and assemble screws as shown below. Note orientation of lift rings holes.

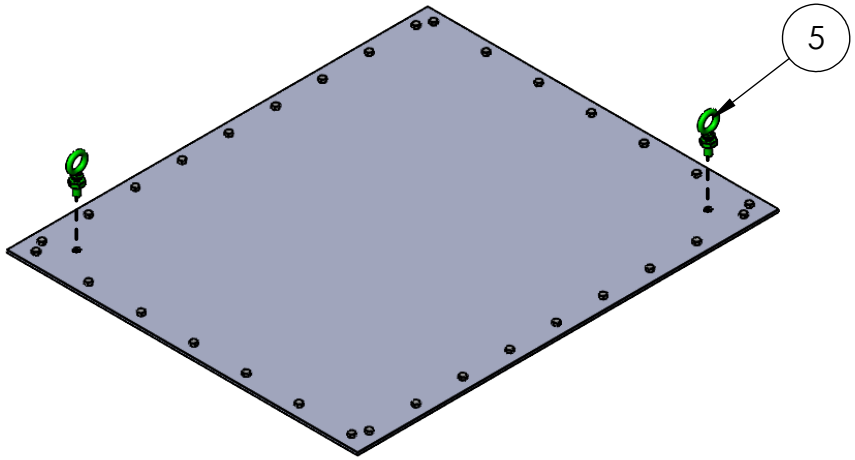
Grind screws flush with bottom of plate.

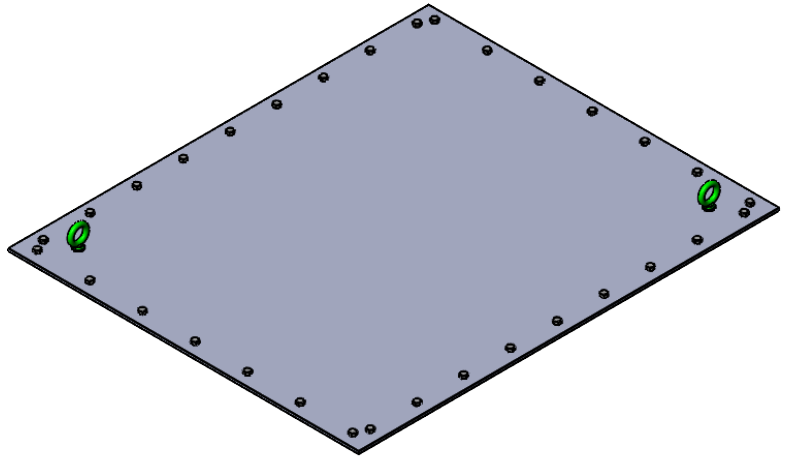




STEP 2: FRONT PLATE DETAILS

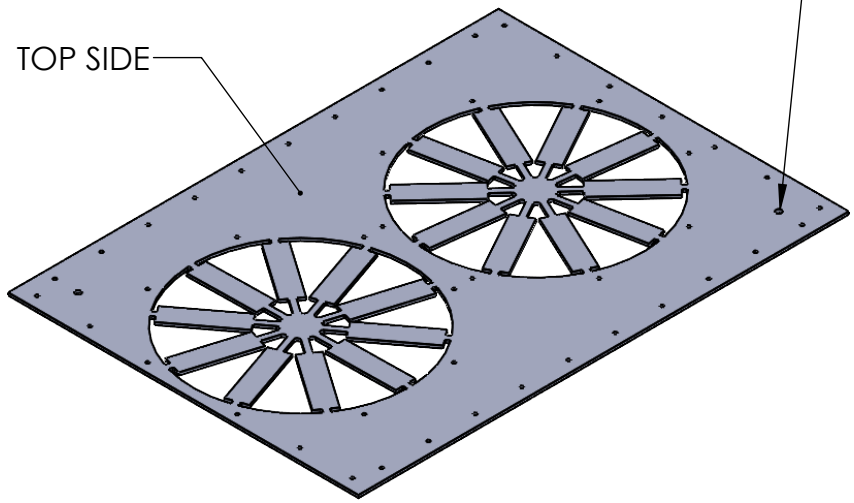
Assemble lift rings to front plate as shown below.

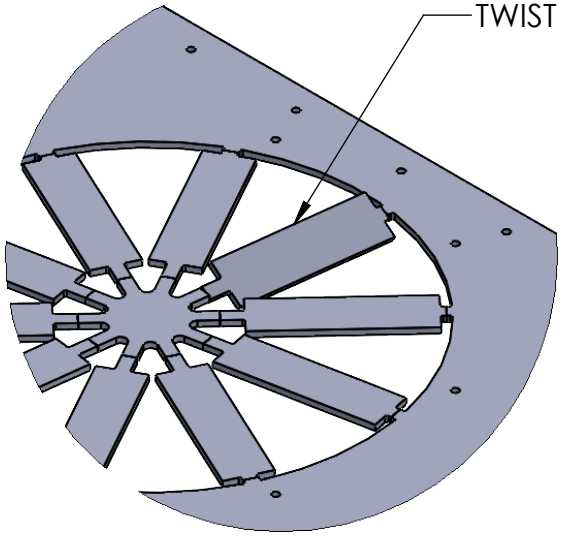


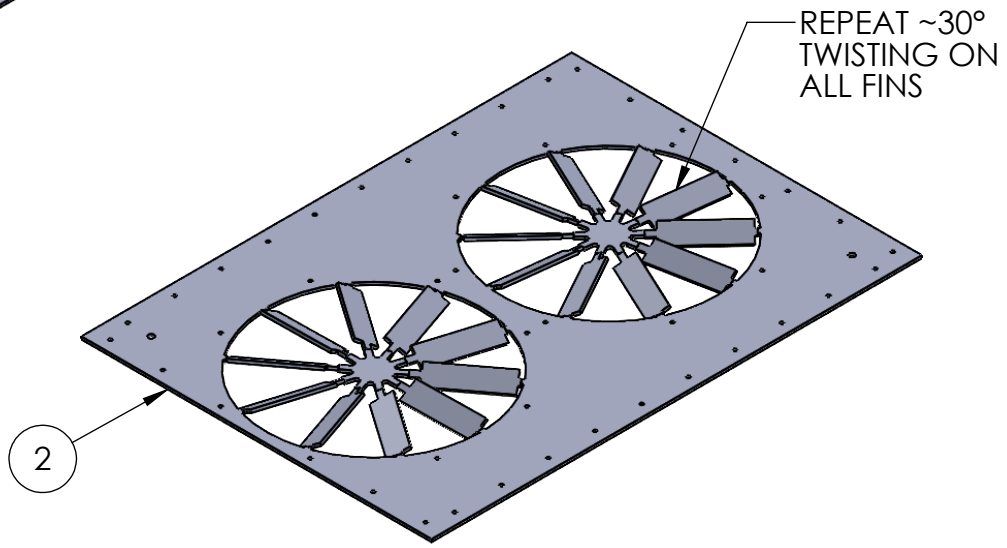


STEP 3: MID PLATE FINS

Note orientation of lift rings holes and top of plate.
With pliers, twist fins upwards ~30° as shown below.
Repeat the process on all the fins.



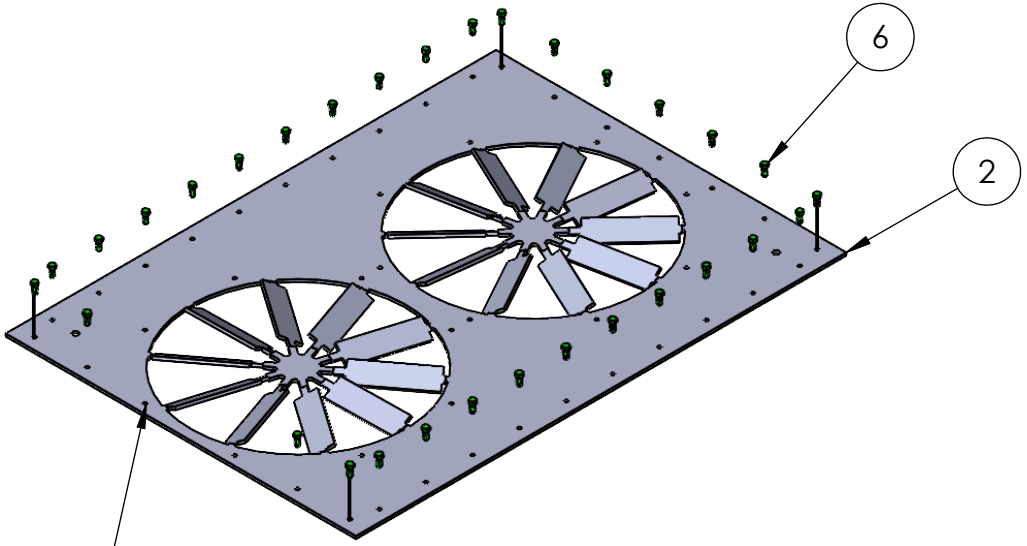


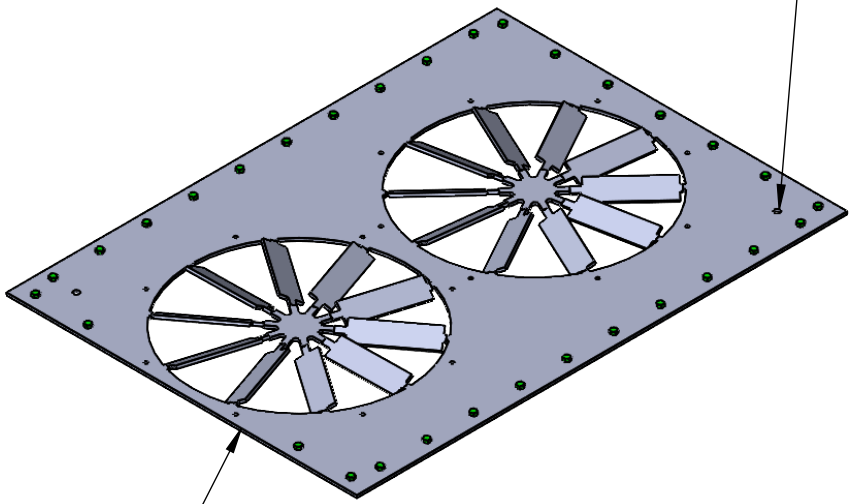


STEP 4: MID PLATE SCREWS

Tap mid roof plate and assemble screws as shown below. Note orientation of lift rings holes.

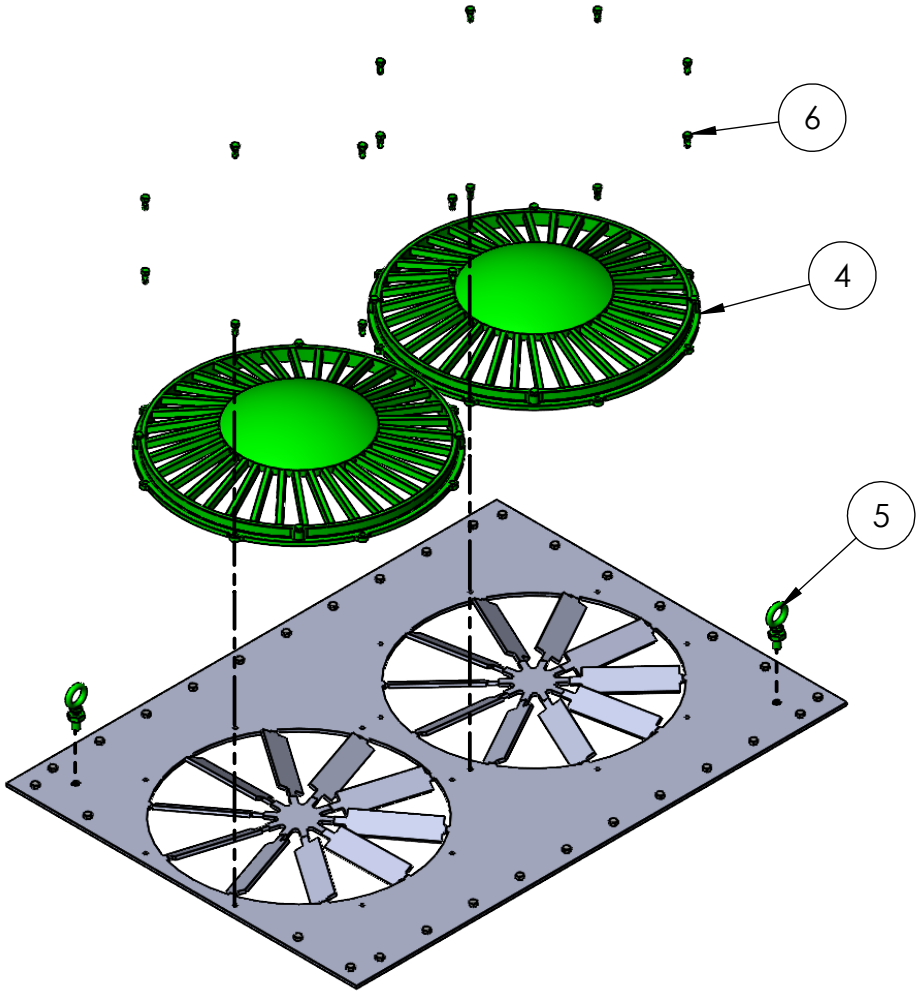
Grind screws flush with bottom of plate.

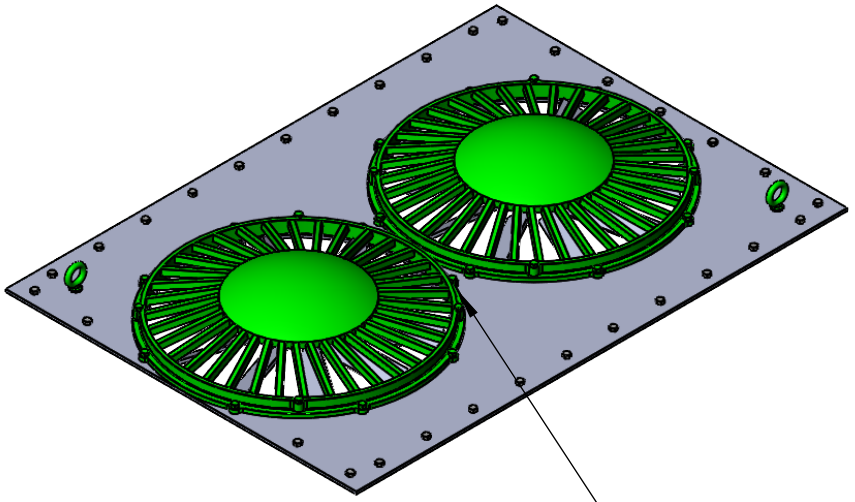




STEP 5: MID PLATE DETAILS

Assemble fans, lift rings, and hardware to mid plate as shown below.

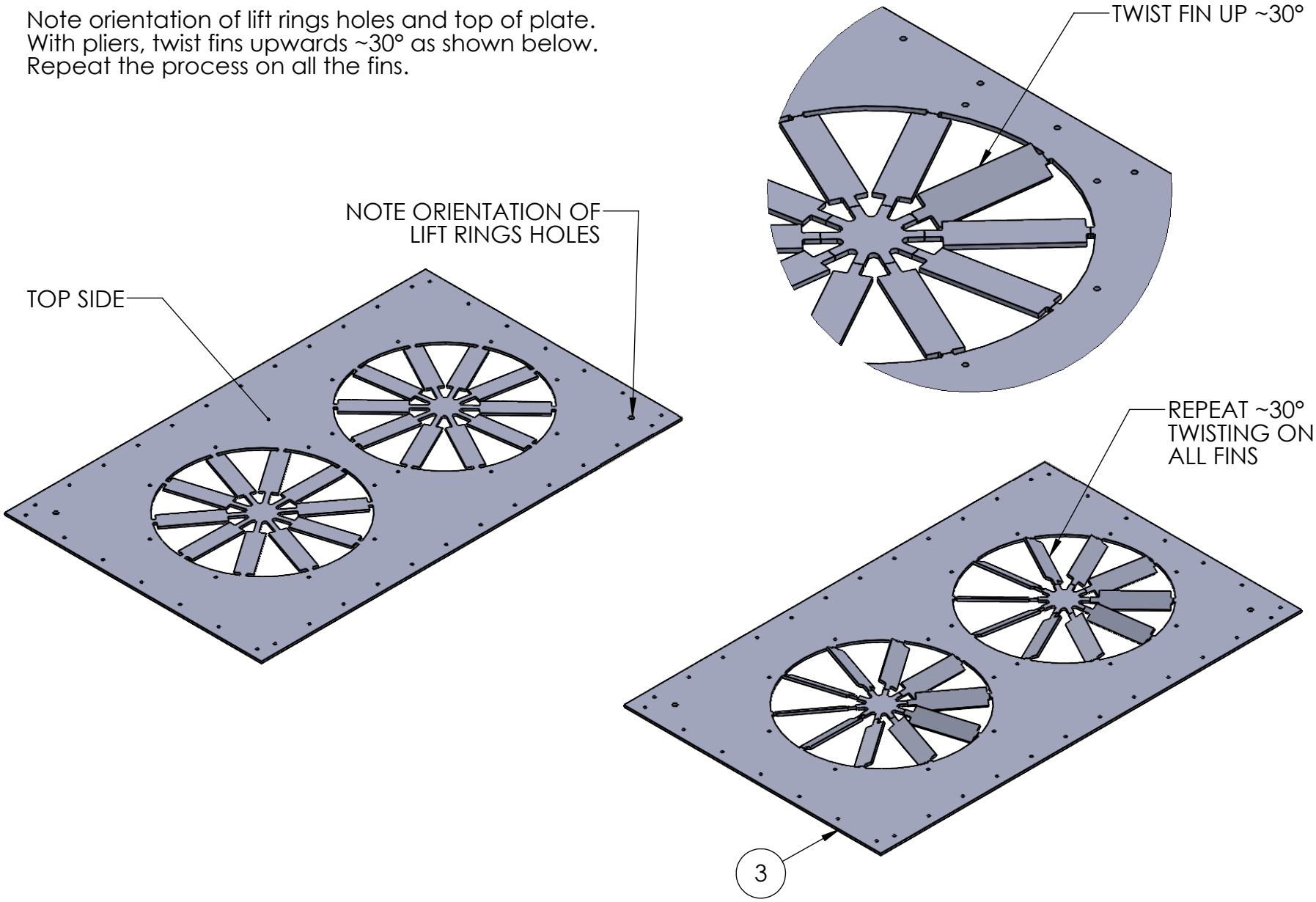




FANS MAY REQUIRE GRINDING IN MIDDLE TO ALIGN MOUNTING HOLES

STEP 6: REAR PLATE FINS

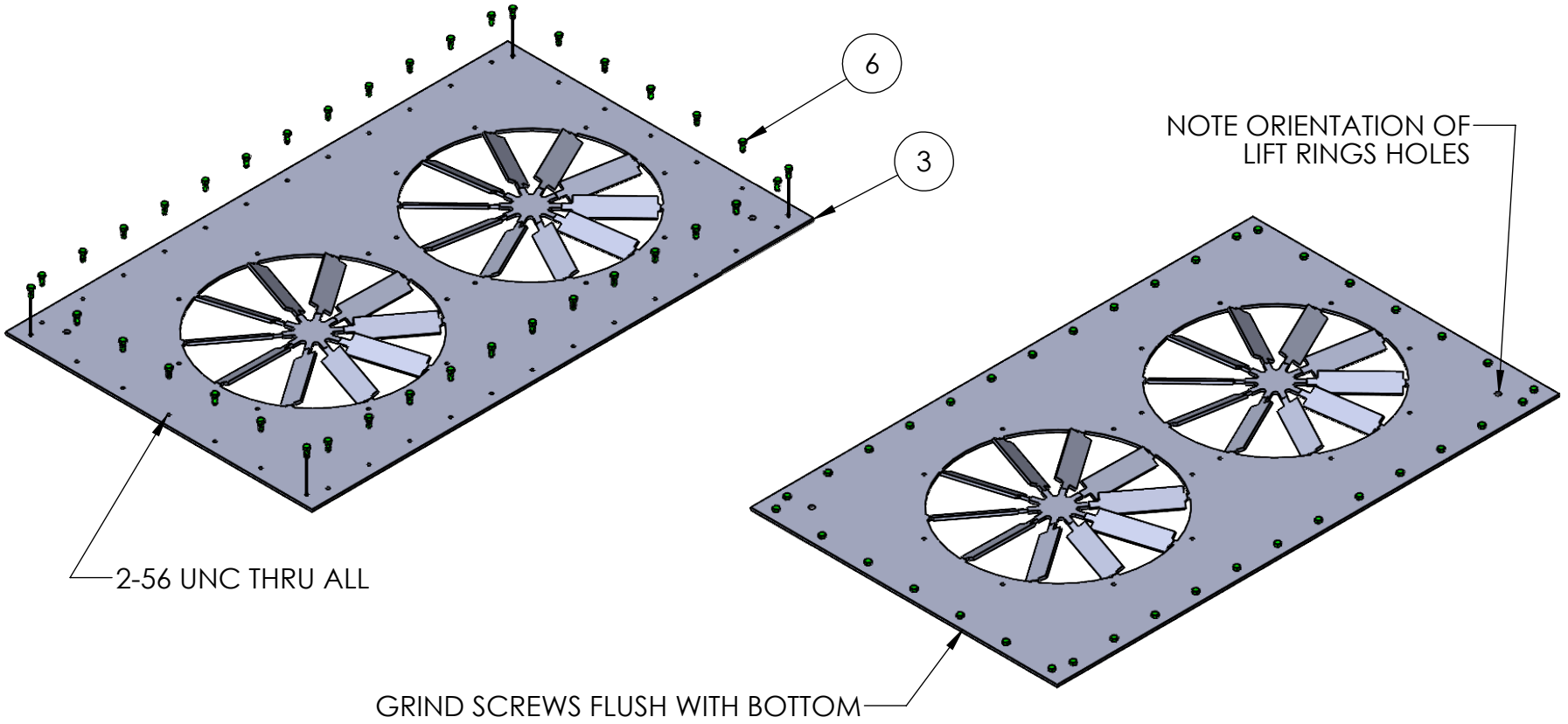
Note orientation of lift rings holes and top of plate.
With pliers, twist fins upwards ~30° as shown below.
Repeat the process on all the fins.



STEP 7: REAR PLATE SCREWS

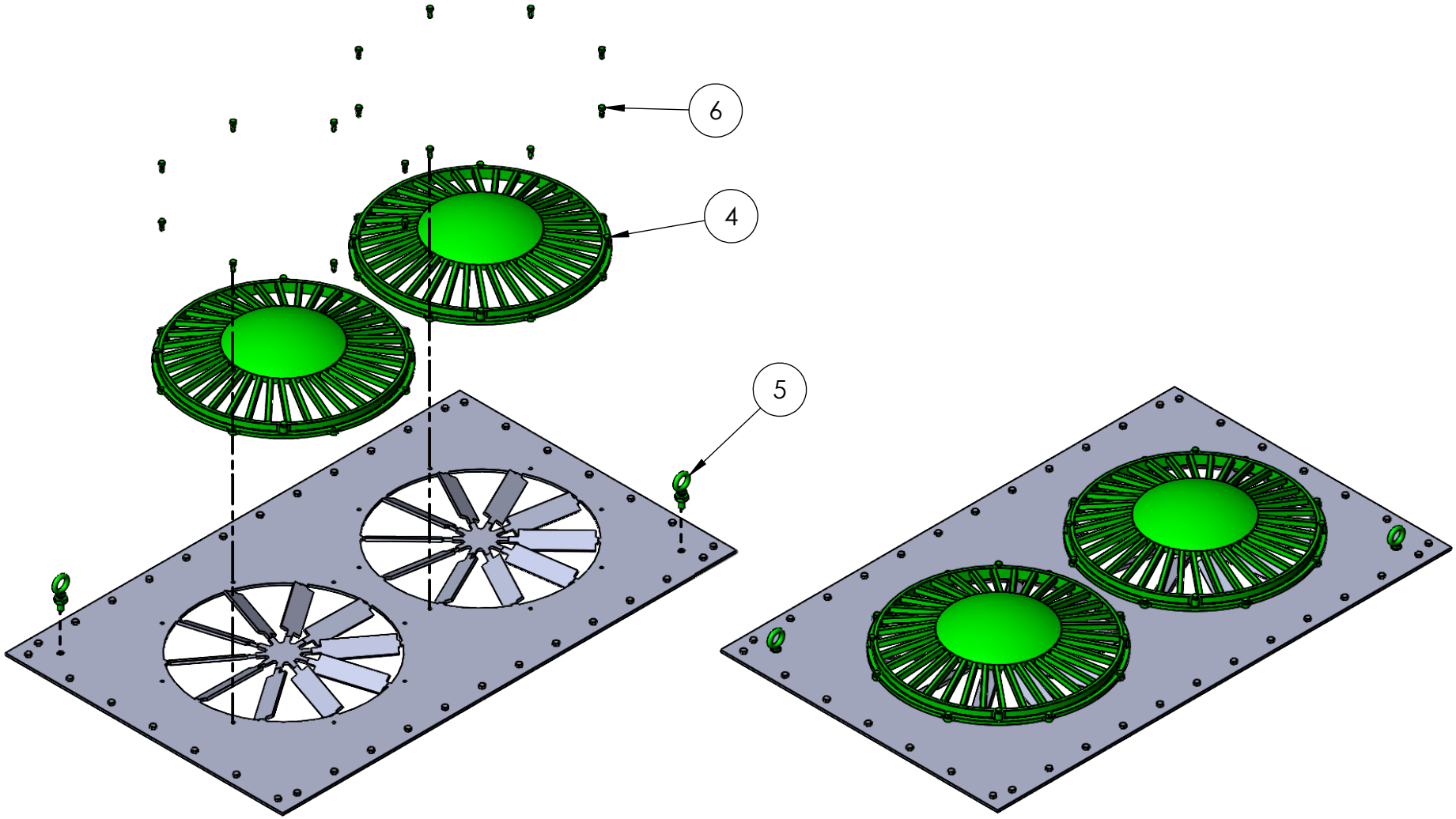
Tap rear roof plate and assemble screws as shown below. Note orientation of lift rings holes.

Grind screws flush with bottom of plate.



STEP 8: REAR PLATE DETAILS

Assemble fans, lift rings, and hardware to rear plate as shown below.

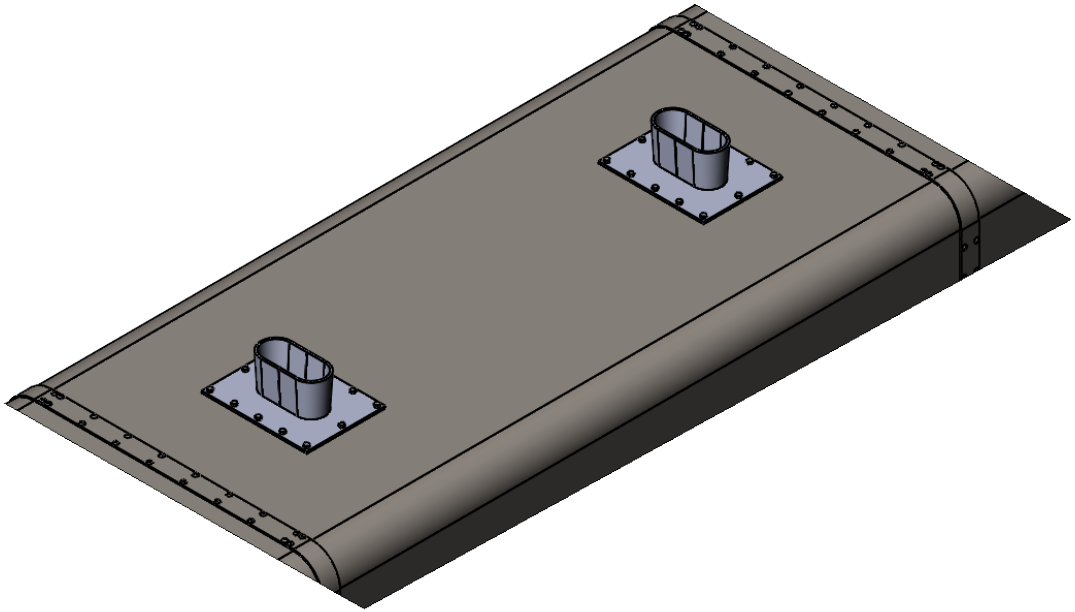


SECTION 2: EXHAUST STACKS

Use BOM below for pages 2-2 to 2-4.

NOTE: Stack is designed to taper out in both directions to match prototype. Sides will not be perpendicular to plate.

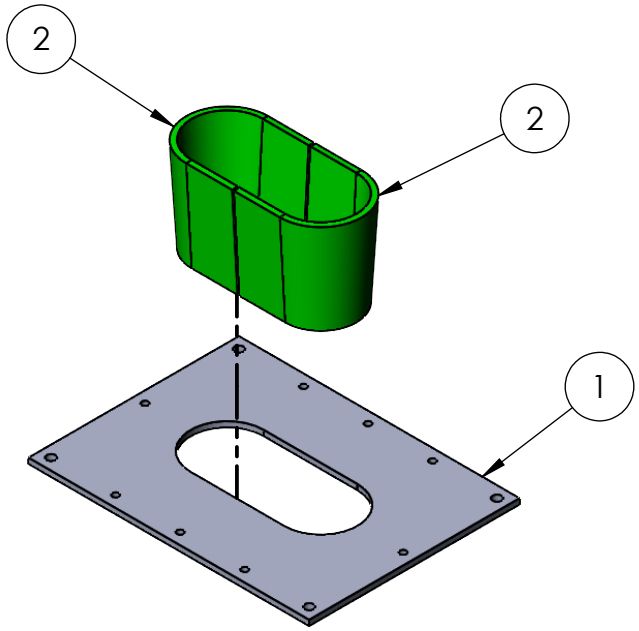
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GP9E75_ST16G_A2	Roof Plate Exhaust	2
2	GP9E75_ST16G_B4	Exhaust Stack	4
3	MMC_92314A401	2-56 x 3/16" Hex Screw	24

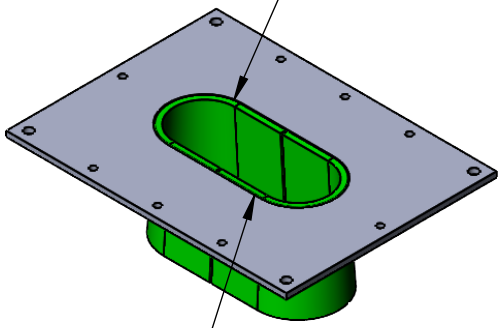


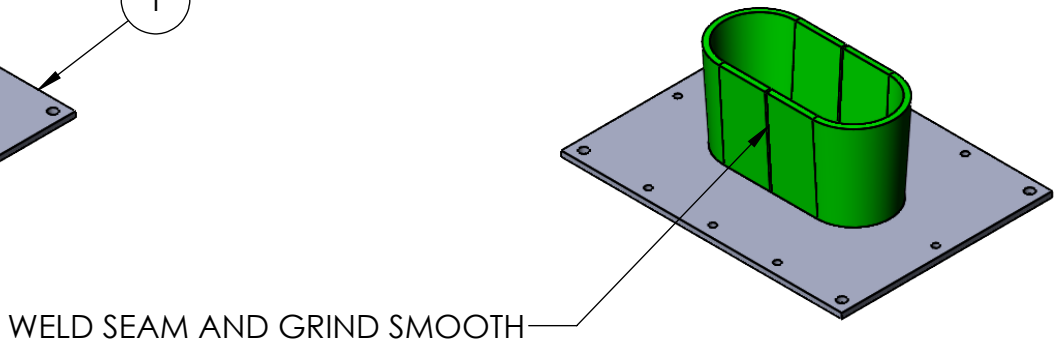
STEP 1: EXHAUST STACK

Assemble exhaust stacks to plate as shown below.

Weld seams and grind smooth.





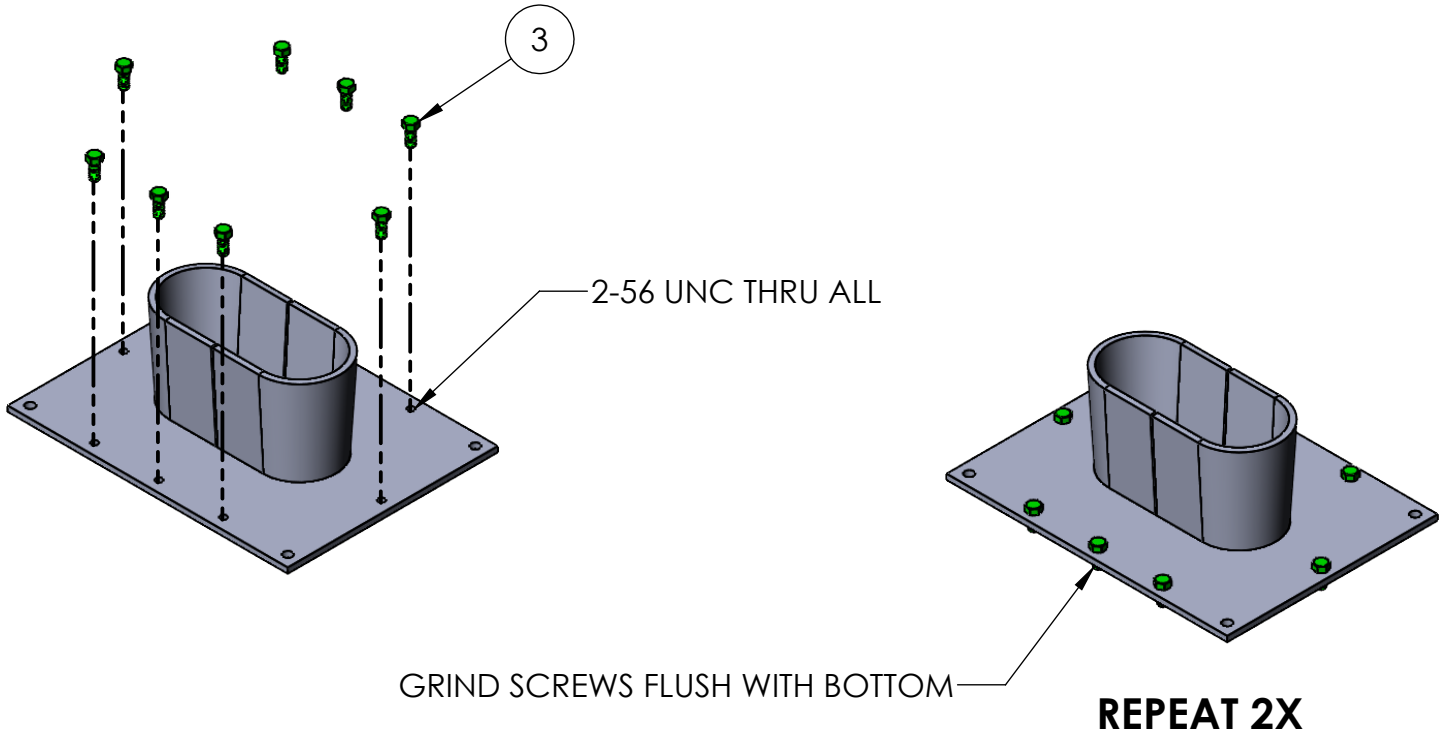


REPEAT 2X

STEP 2: EXHAUST PLATE SCREWS

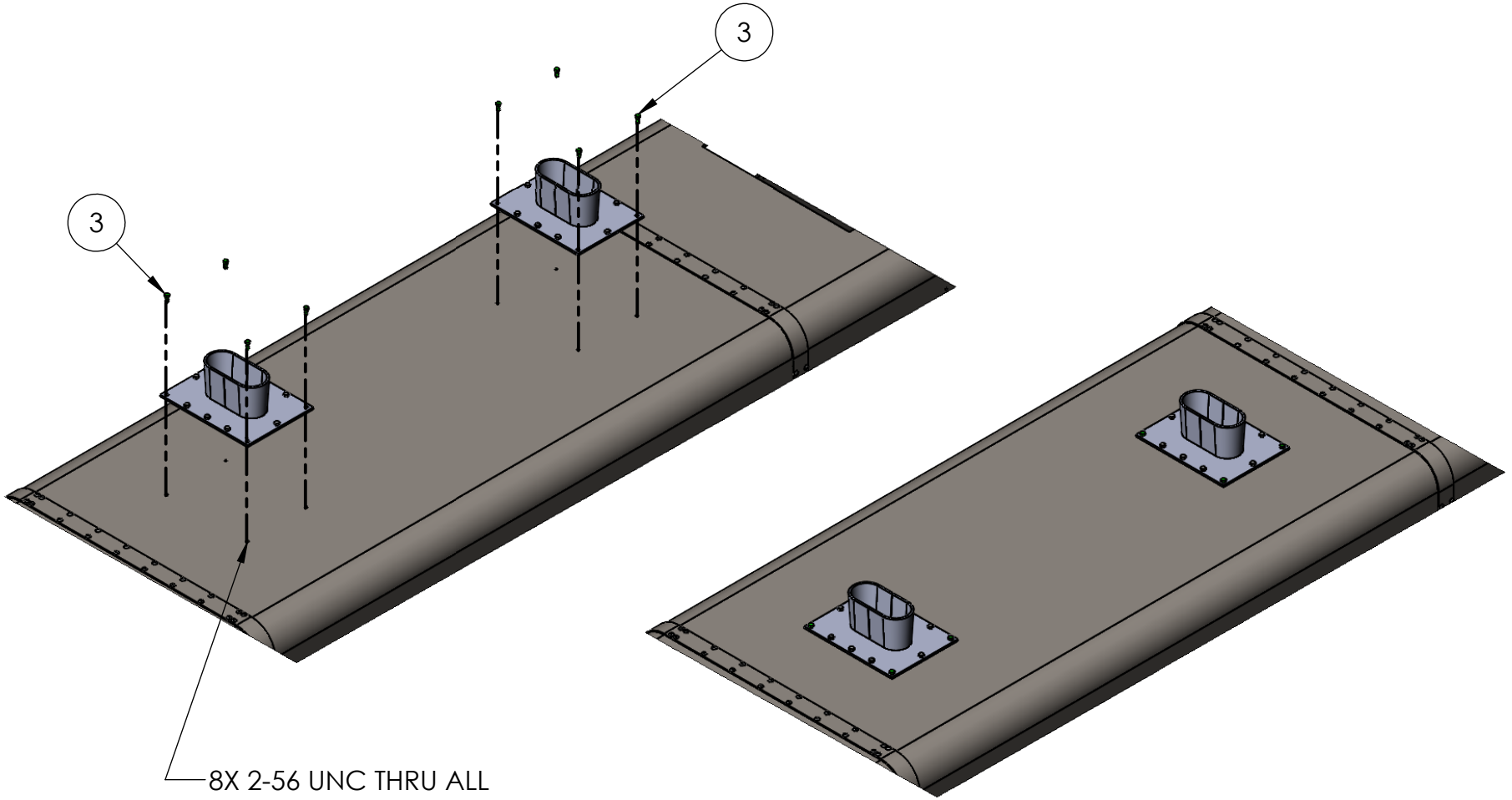
Tap exhaust plate and assemble screws as shown below.

Grind screws flush with bottom of plate.



STEP 3: EXHAUST STACK MOUNTING

Drill and tap holes in Body Mid A and assemble screws as shown below.



SECTION 3: SIDE DOORS

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SEE NEXT PAGE	GP9 Doors	1
2	MMC_92314A401	2-56 x 3/16" Hex Screw	10

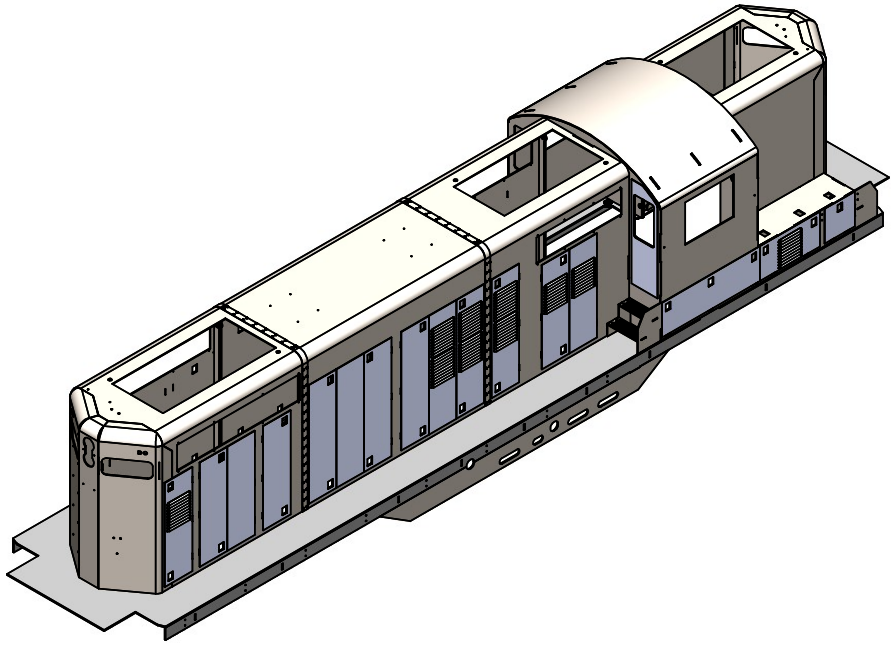
Use BOM below for pages 3-2 to 3-5.

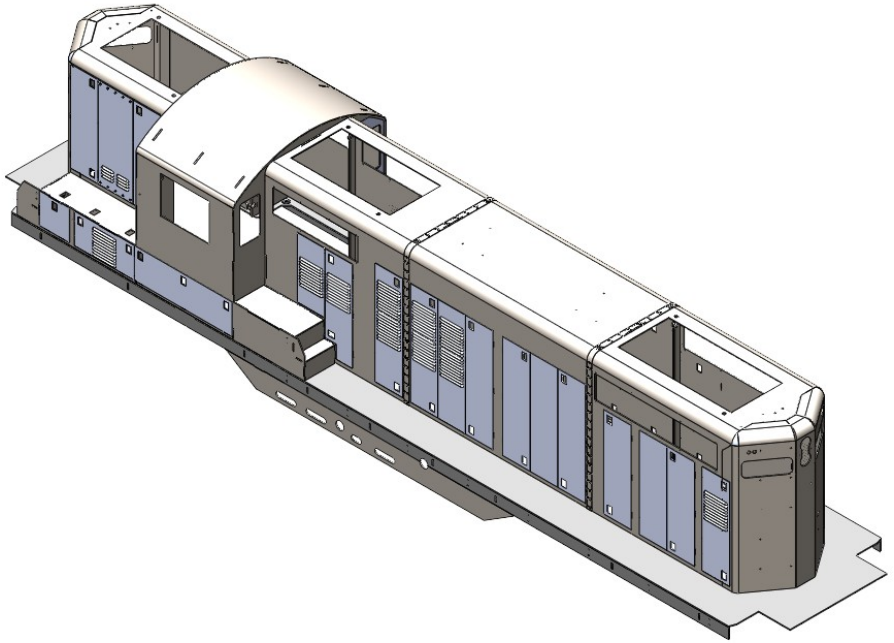
Recommended process for assembly is to glue doors to sides of body w/ **3M DP420 Epoxy**. Follow manufacturer instructions for surface prep, mixing and curing times. Clamp doors to body during curing time.

Recommended to glue hinges and latches in place during door gluing process. See Section 4 for latch/hinge assembly instructions.

*****IMPORTANT NOTE*****

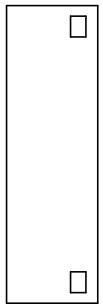
Using self etching primer, paint back of doors and body where parts interact to prevent rust.



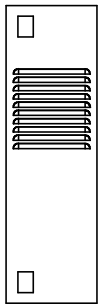


STEP 1: DOOR STYLES

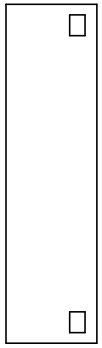
Overview of doors used. Note orientation of door latch cutouts on louvered doors.



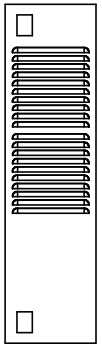
DOOR **A**
QTY: 6



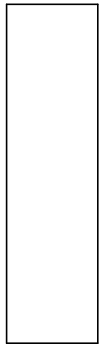
DOOR **B**
QTY LH: 1
QTY RH: 2
LH SHOWN



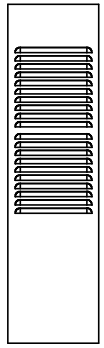
DOOR **C**
QTY: 6



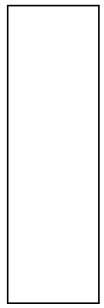
DOOR **D**
QTY LH: 2
QTY RH: 2
LH SHOWN



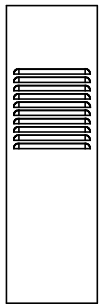
DOOR **E**
QTY: 2



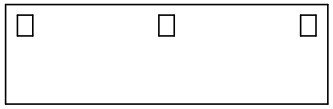
DOOR **F**
QTY: 2



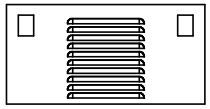
DOOR **G**
QTY: 2



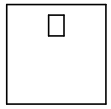
DOOR **H**
QTY: 1



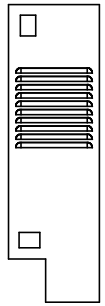
DOOR **J**
QTY: 2



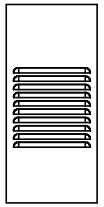
DOOR **K**
QTY: 2



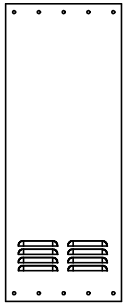
DOOR **L**
QTY: 2



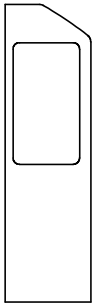
DOOR **M**
QTY: 1



DOOR **N**
QTY: 1



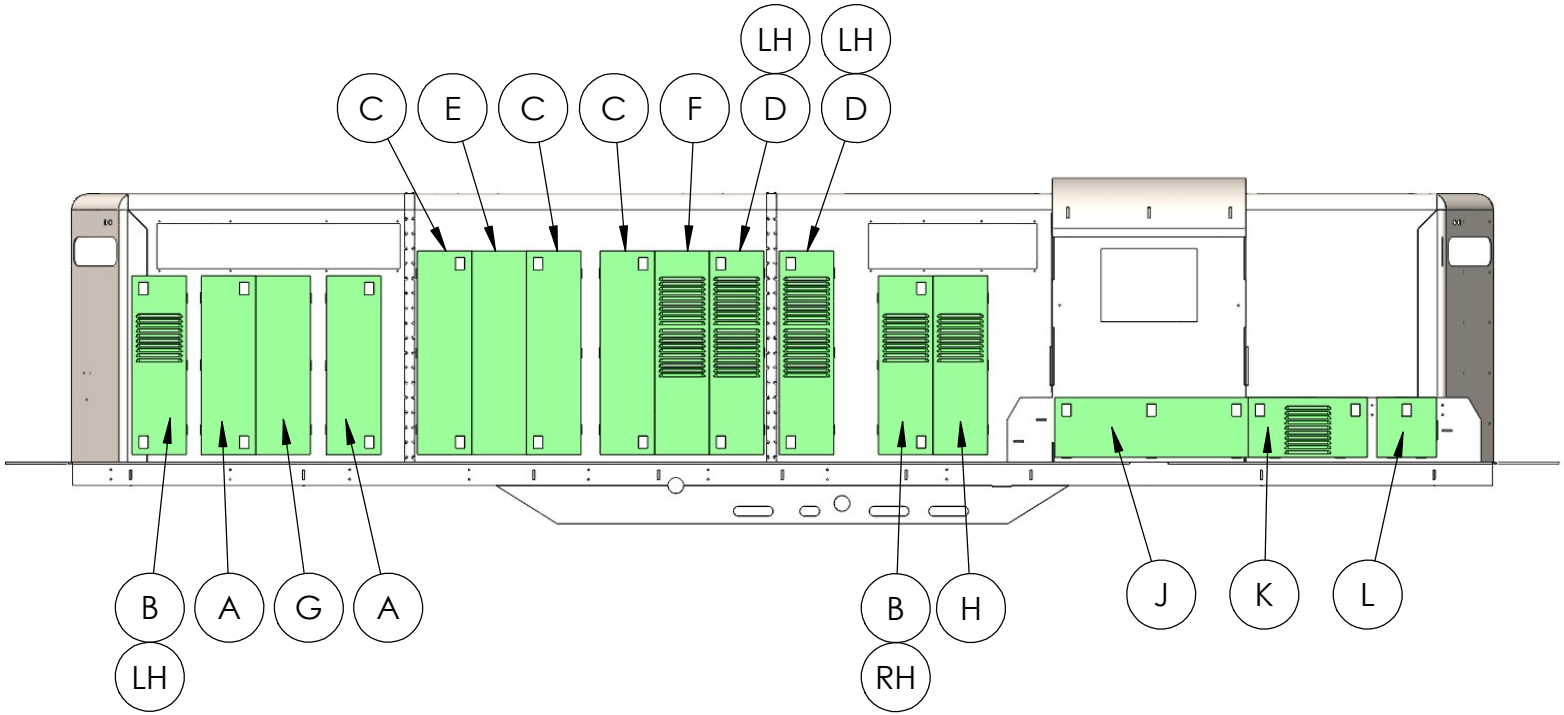
DOOR **P**
QTY: 1



DOOR **Q**
QTY: 2

STEP 2: RIGHT SIDE DOORS

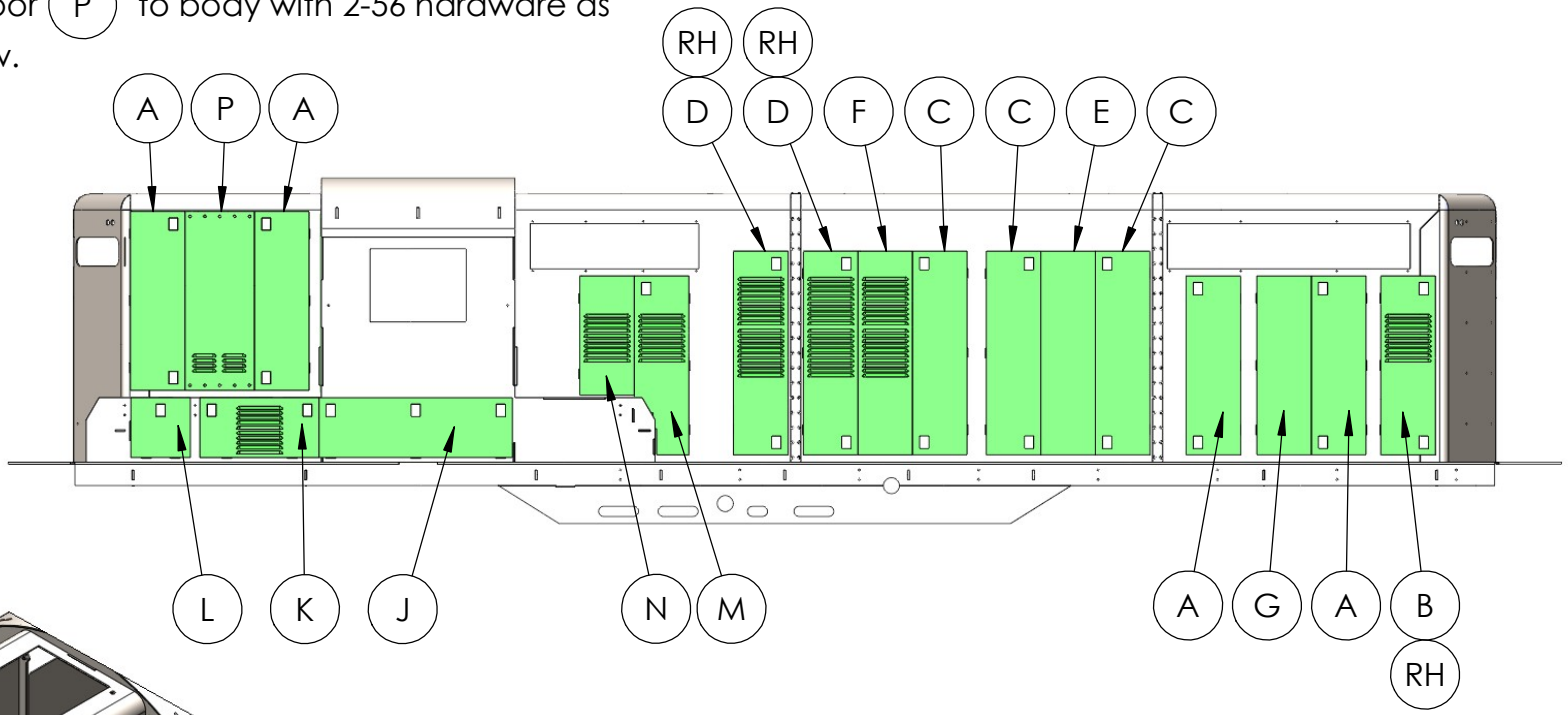
Assemble the doors to the right side of the body as shown below. Use the door latch openings to align door locations.

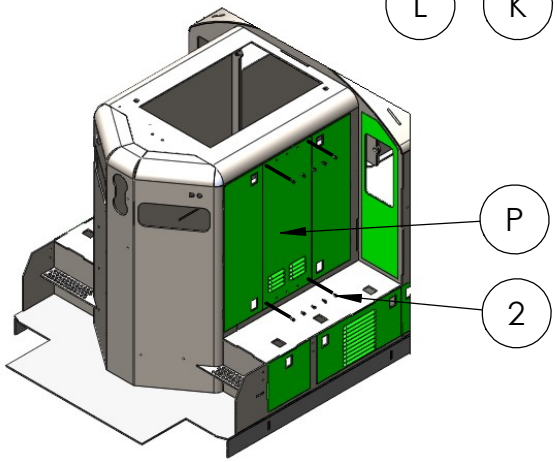


STEP 3: LEFT SIDE DOORS

Assemble the doors to the left side of the body as shown below. Use the door latch openings to align door locations.

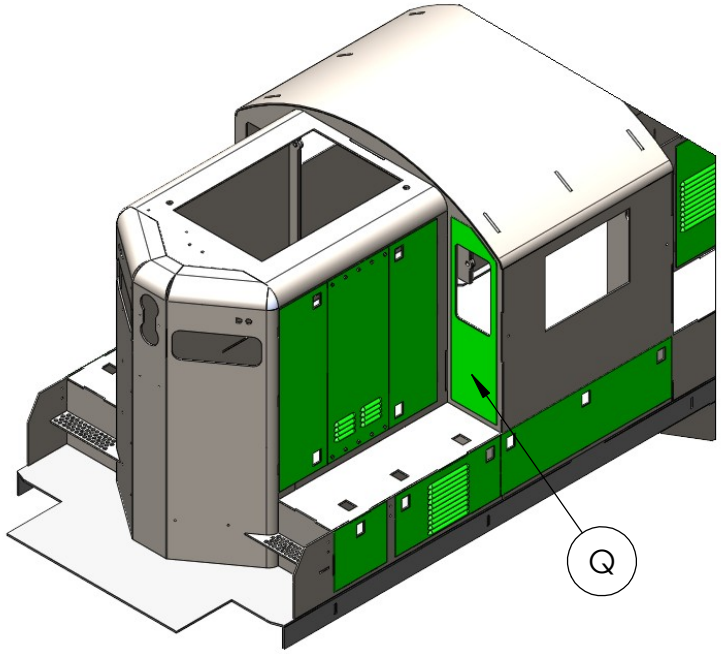
Assemble door (P) to body with 2-56 hardware as shown below.

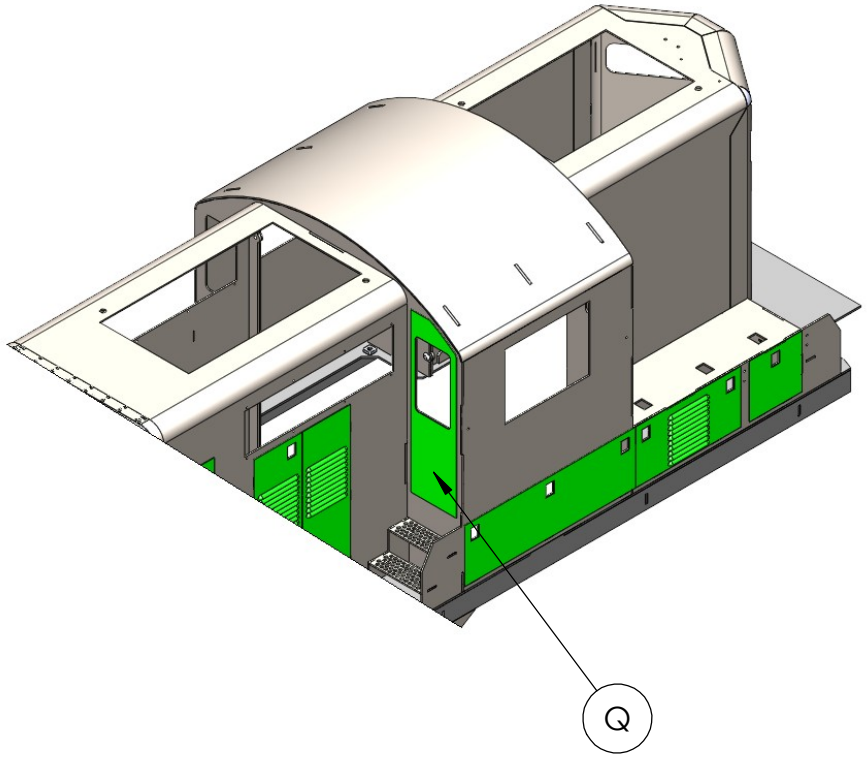




STEP 4: CAB DOORS

Assemble the cab doors to the cab as shown below.
Use the window openings to align door locations.





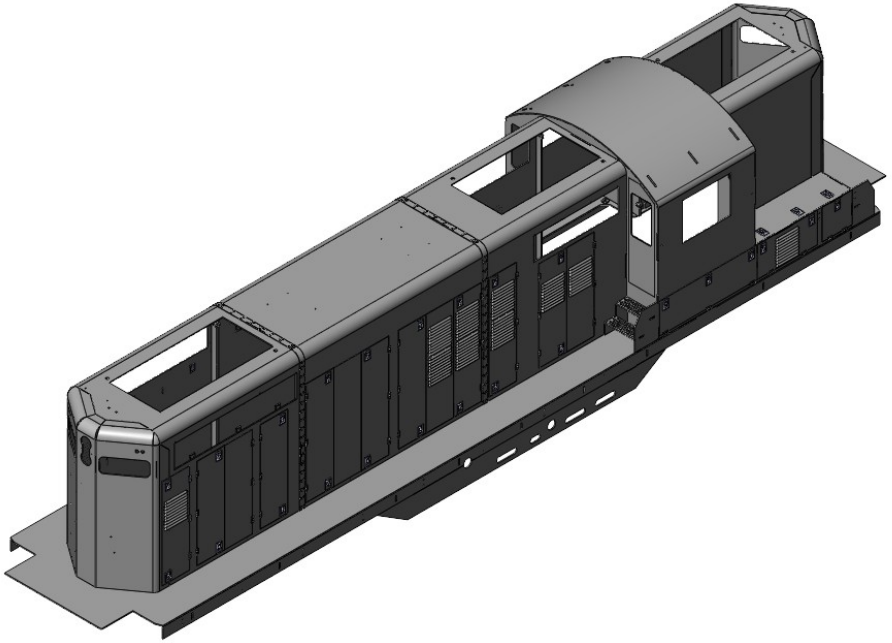
SECTION 4: HINGES & LATCHES

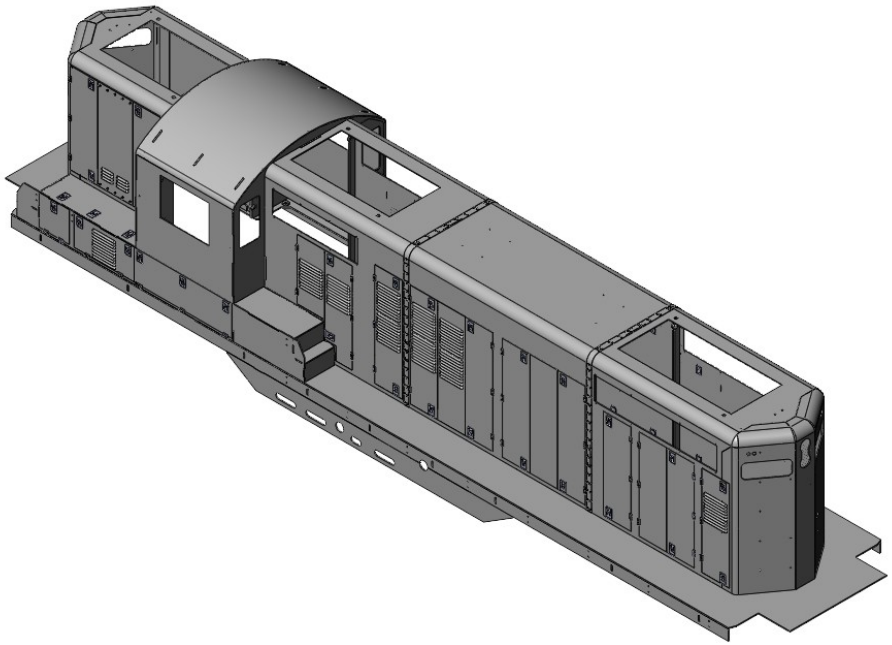
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	PSC_L-025	Door Hinge	85
2	PSC_L-005	EMD Door Latch	58

Use BOM below for pages 4-2 to 4-7.

Recommended process for assembly is to glue hinges and latches to sides of body and doors w/ **3M DP420 Epoxy**. Follow manufacturer instructions for surface prep, mixing and curing times.

Recommended to glue hinges and latches in place during door gluing process. See Section 3 for door assembly instructions.





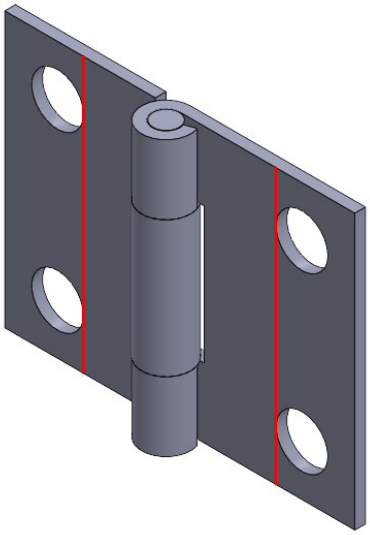
STEP 1: HINGE PREP

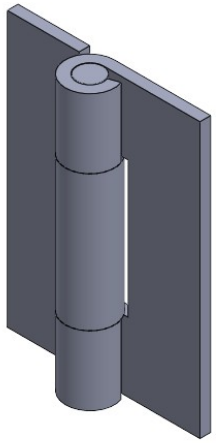
Prior to gluing, prepare door hinges as shown below.

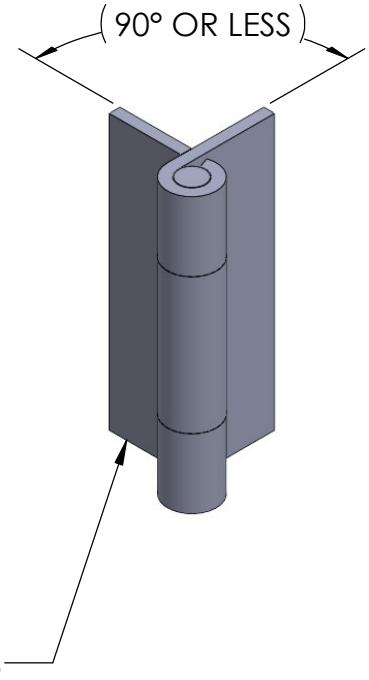
Using Diagonal Flush Cutters (or equivalent cutter), trim edges of hinge along redline as shown below.

After trimming, bend hinge as shown below.

Using sander, roughly sand glue faces for better adhesion.

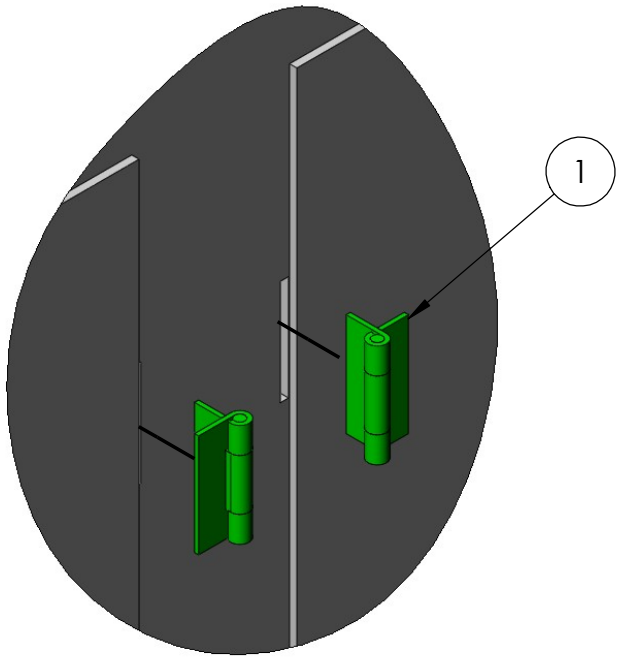


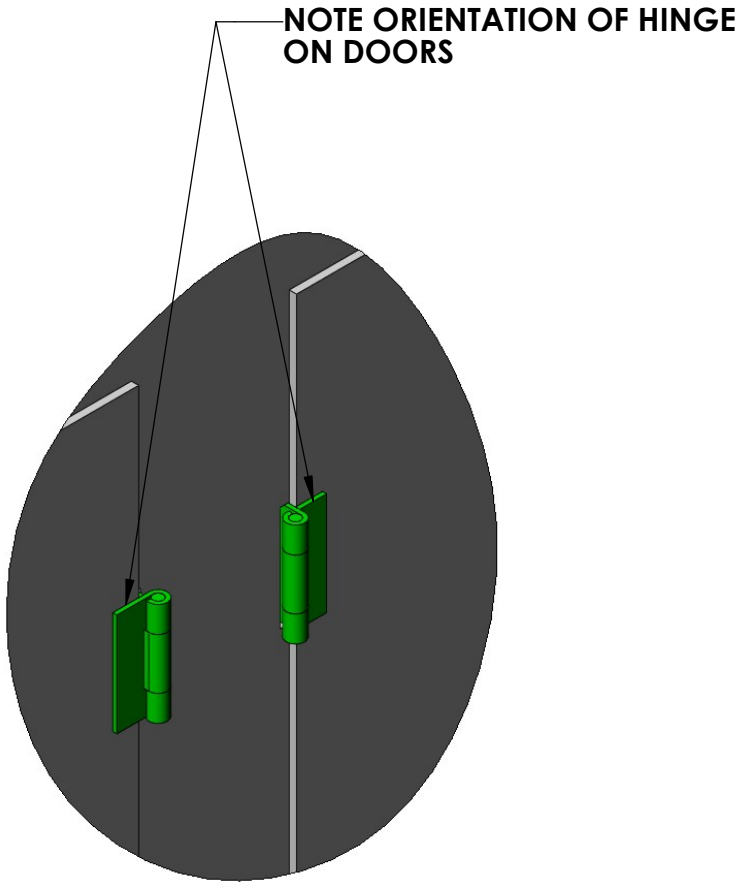




STEP 2A: HINGE ASSEMBLY

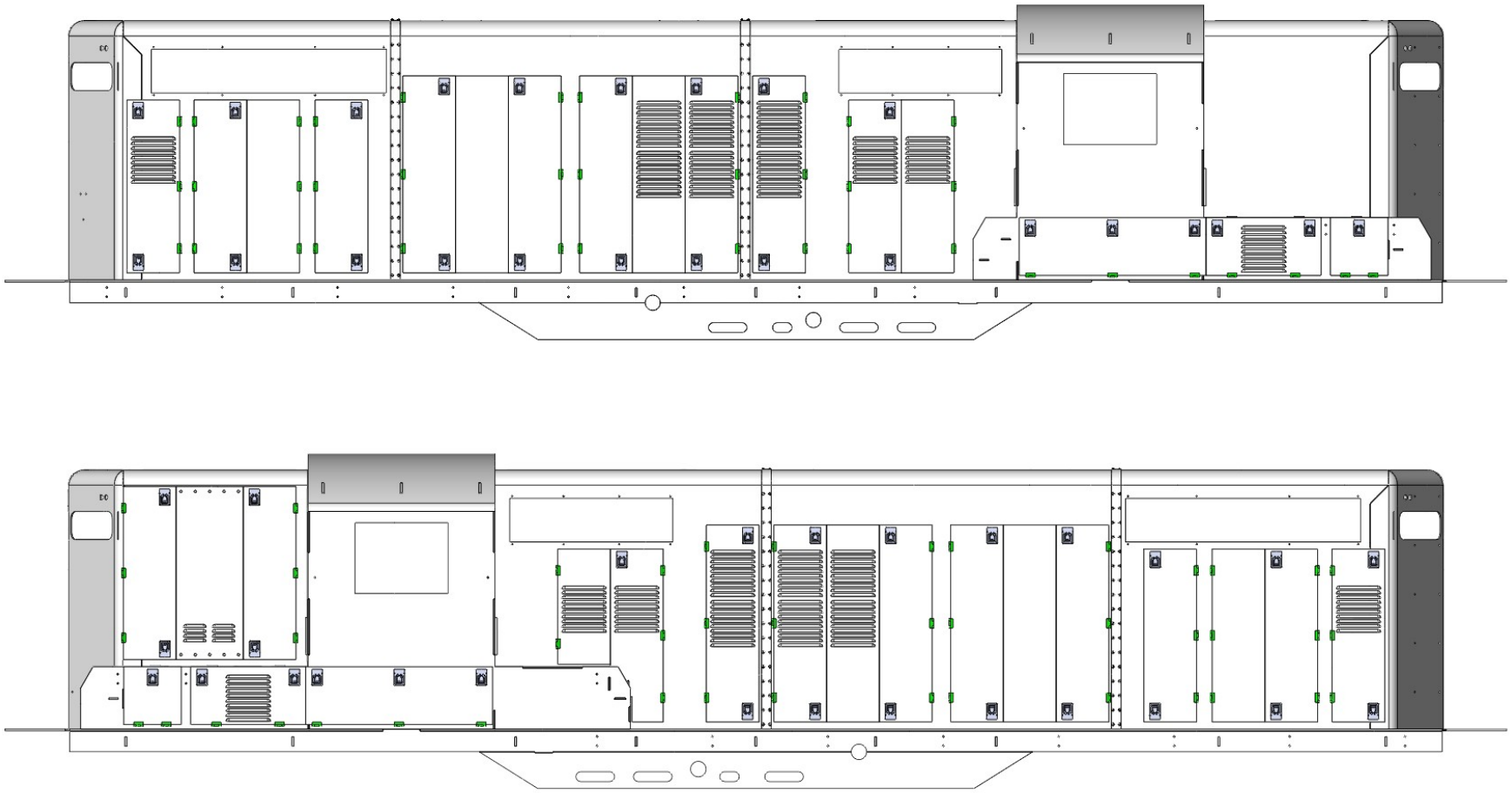
Assemble hinges into slots on body as shown below.
Apply glue to mating surfaces.





STEP 2B: HINGE ASSEMBLY

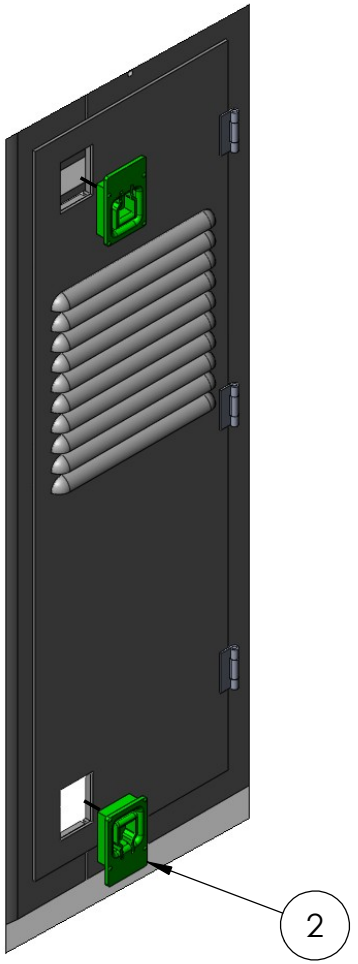
Assemble hinges into slots in all locations shown in GREEN below.

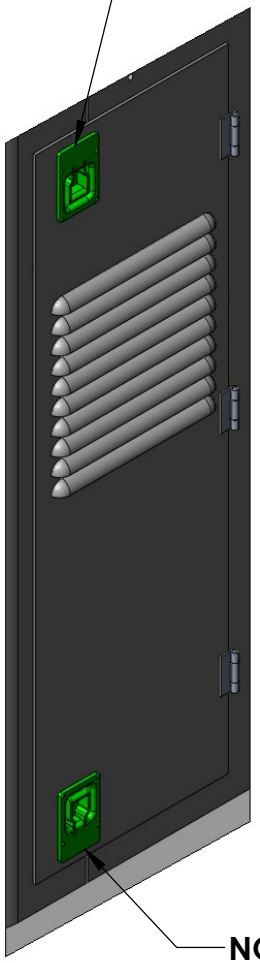


STEP 3A: LATCH ASSEMBLY

Prior to assembly, roughly sand glue faces on latches for better adhesion.

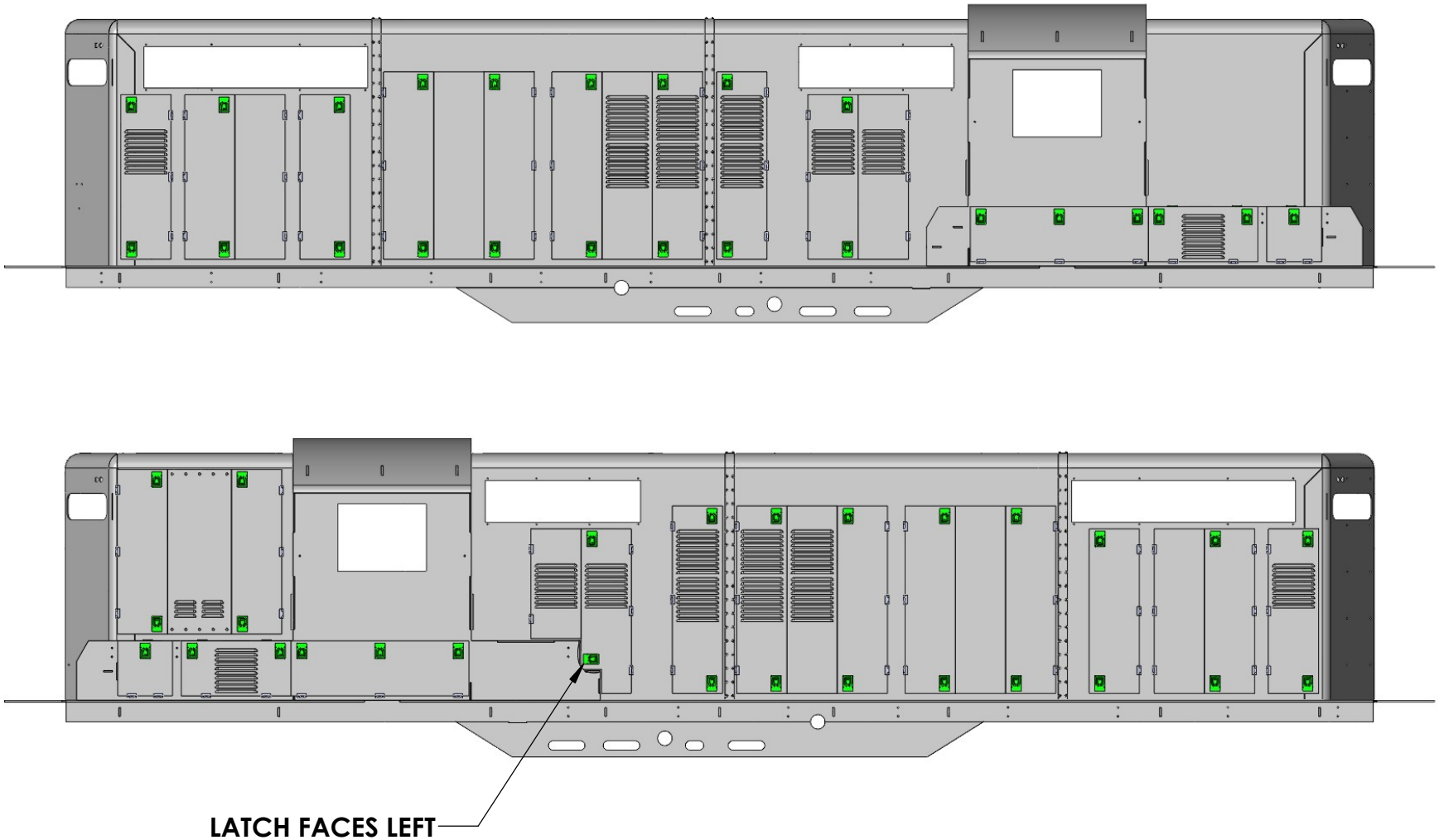
Assemble latches into cutouts on body/doors as shown below. Apply glue to mating surfaces.





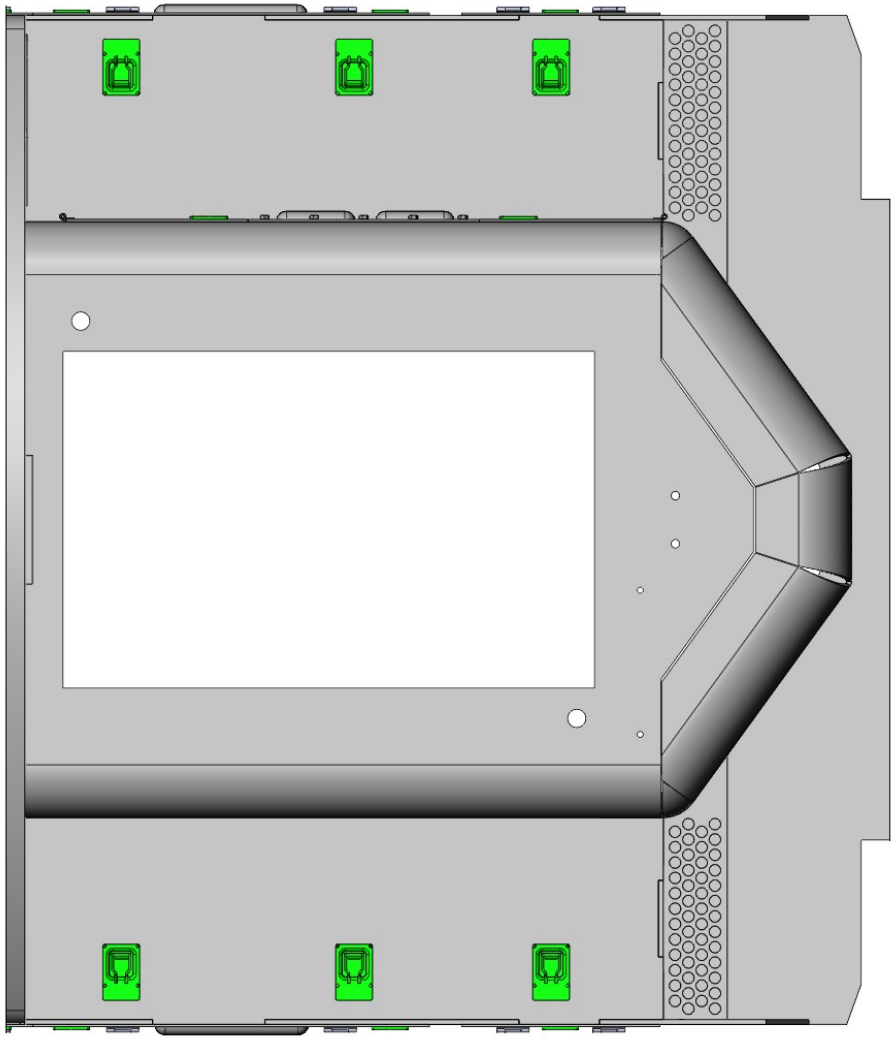
STEP 3B: LATCH ASSEMBLY

Assemble latches into slots in all locations shown in GREEN below.



STEP 3C: LATCH ASSEMBLY

Assemble latches into slots in all locations shown in GREEN below.



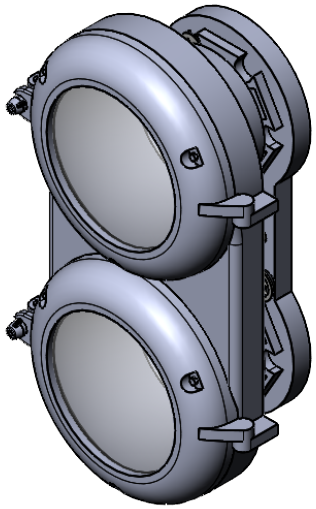
SECTION 8: HEADLIGHT

Use BOM for pages 8-2 to 8-6

NOTE: LED's in kit are not 12V. Use an LED Driver with an output of 2.85-3.5V DC power.

If using wireless system sold by Pacific Design Shops, LED driver is pre-installed on control board.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	PDS-1002C	Pyle Dual Beam Casting	1
2	-	Glass Bezel	2
3	-	Reflector	2
4	-	LED	2
5	-	Aluminum Heatsink	1
6	MMC_91099A101	2-56 x 3/16" PFHS	4
7	MMC_98449A003	#2 Int Tooth Lock Washer	4
8	MMC_91773A076	2-56 x 3/16" RHPS	2
9	MMC_91772A082	2-56 x 5/8" PHPS	2



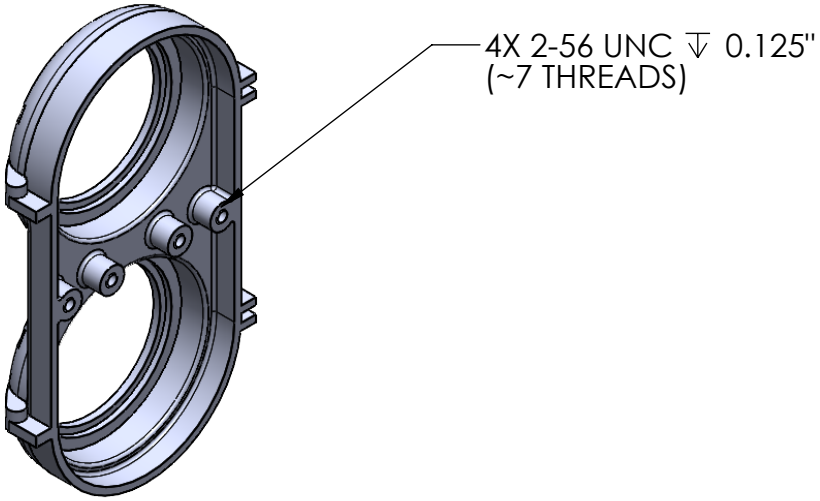
QUANTITIES LISTED FOR 1 HEADLIGHT

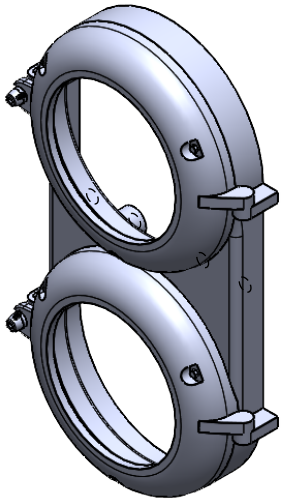
DOUBLE ALL QUANTITES FOR 1 ENGINE

STEP 1: HEADLIGHT CASTING

Tap holes in headlight casting.

Clean and prep for painting. Complete painting of casting before continuing. Mask off interior edges and faces.





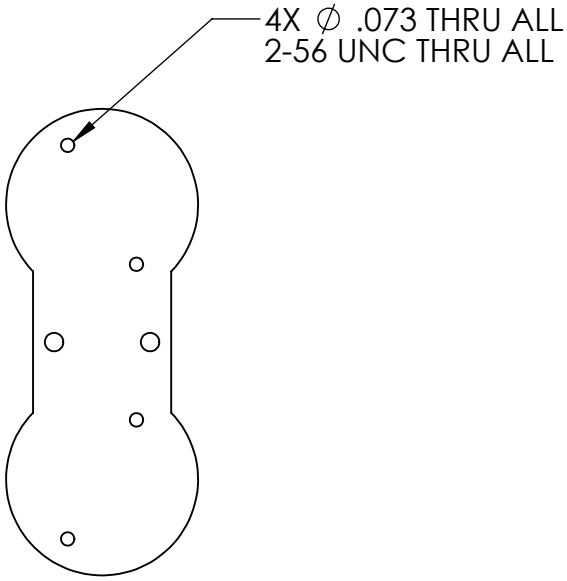
REPEAT 2X

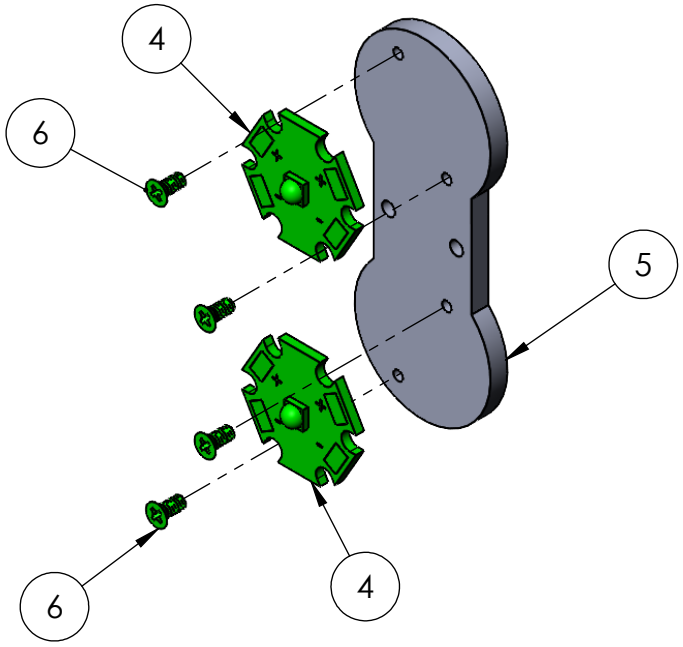
STEP 2: HEATSINK

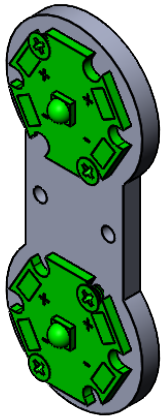
Drill and tap holes in heatsink as shown.

Assemble LED's to heatsink as shown below. Solder wire connections as shown using 22 AWG stranded wire.

NOTE: Wire connections shown are for wireless system sold by Pacific Design Shops. Adjustments may be required for other systems.

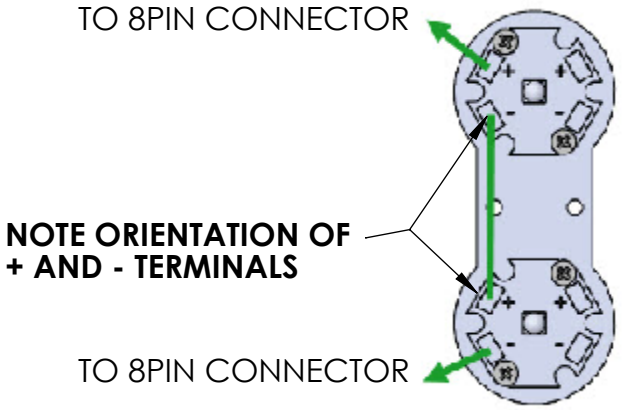






REPEAT 2X

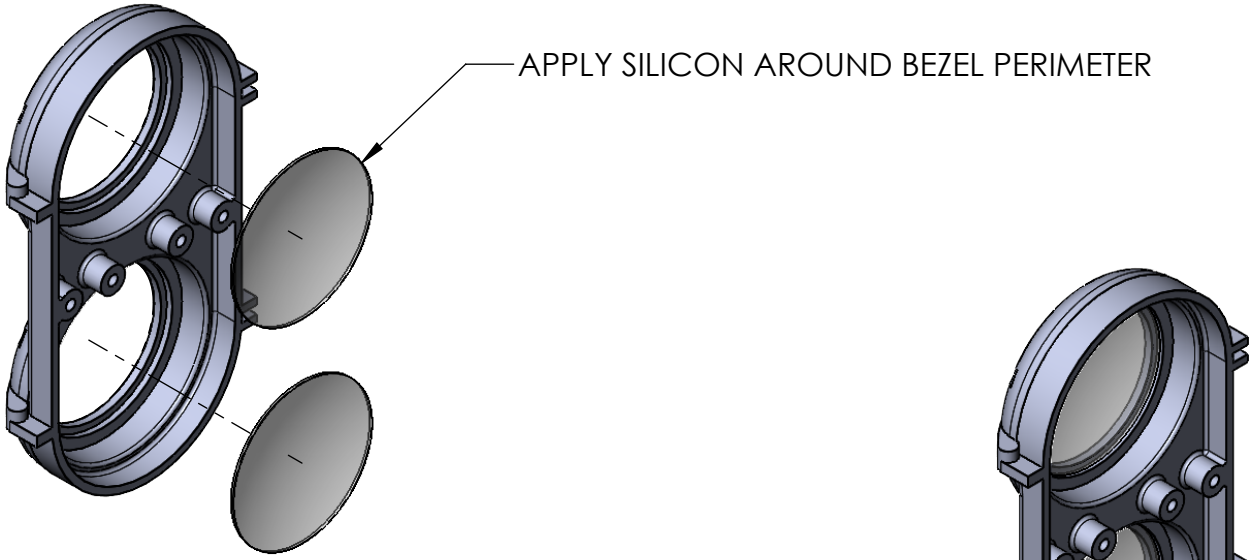
FRONT HEADLIGHT: GREEN WIRES
REAR HEADLIGHT: BLUE WIRES



STEP 3: GLASS BEZEL

Assemble glass bezels to painted headlight casting as shown below.

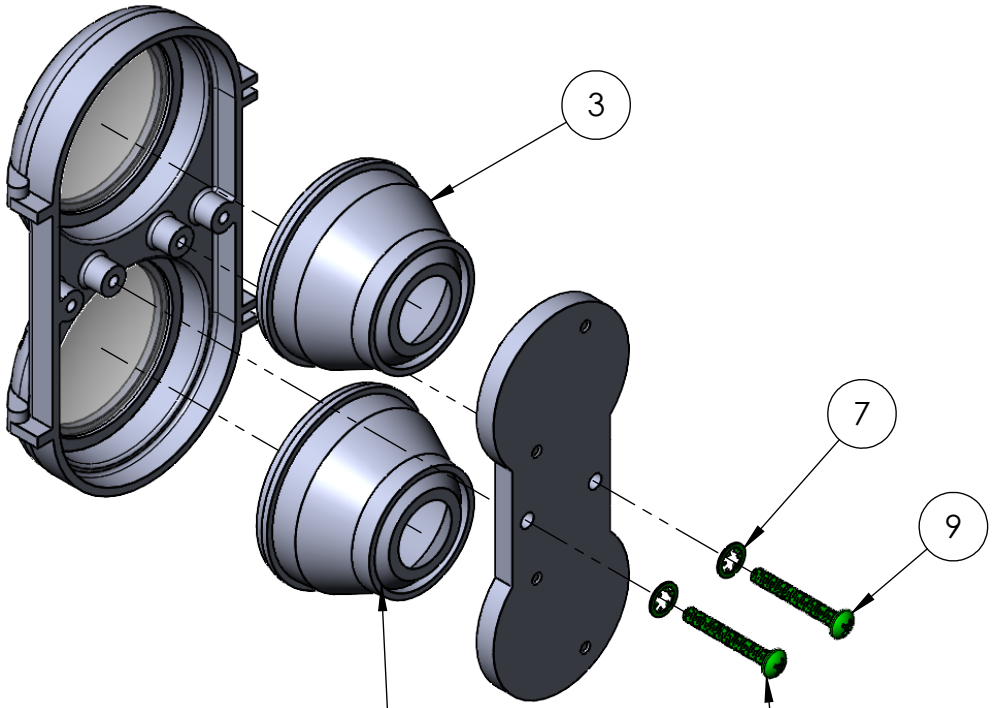
Use exterior rated clear silicon to retain bezels. DO NOT use epoxy or glue.

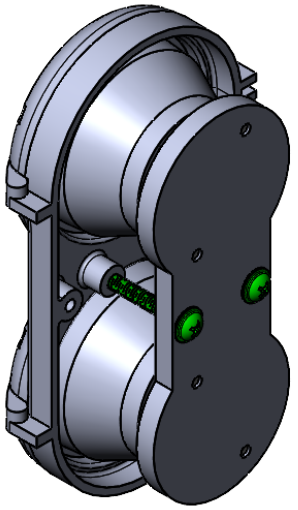


REPEAT 2X

STEP 4: HEADLIGHT ASSEMBLY

Assemble reflectors and heat sink assembly to headlight casting as shown below. File or notch the reflector to clear wires.





REPEAT 2X

STEP 5: ENGINE ASSEMBLY

Assemble headlight to engine as shown below.

Repeat assembly for other end of GP9.