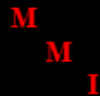
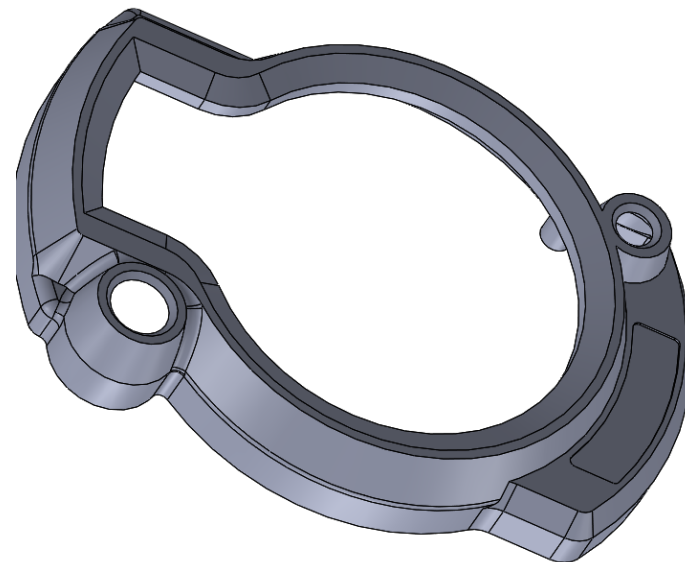


# DESIGN FOR MANUFACTURABILITY: Deluxe Fish Finder

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Matthew Walsh  
Project Manager / Engineer

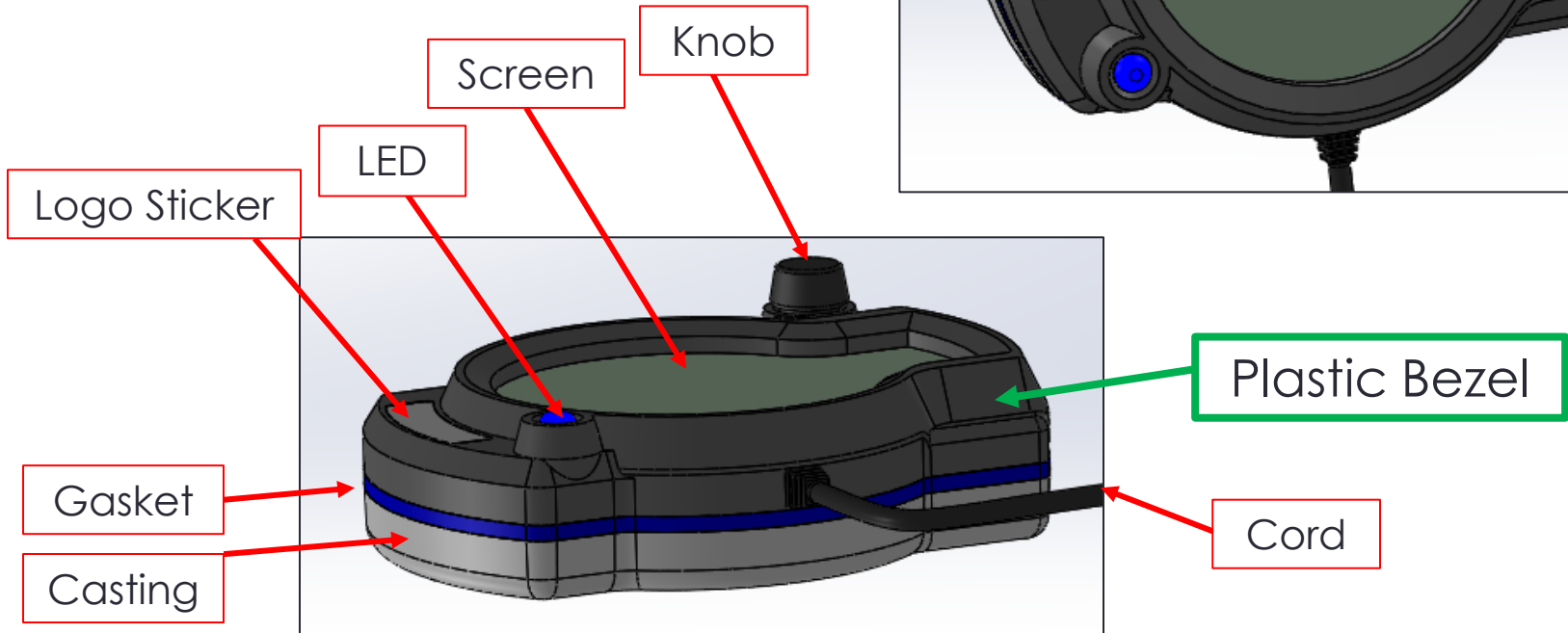
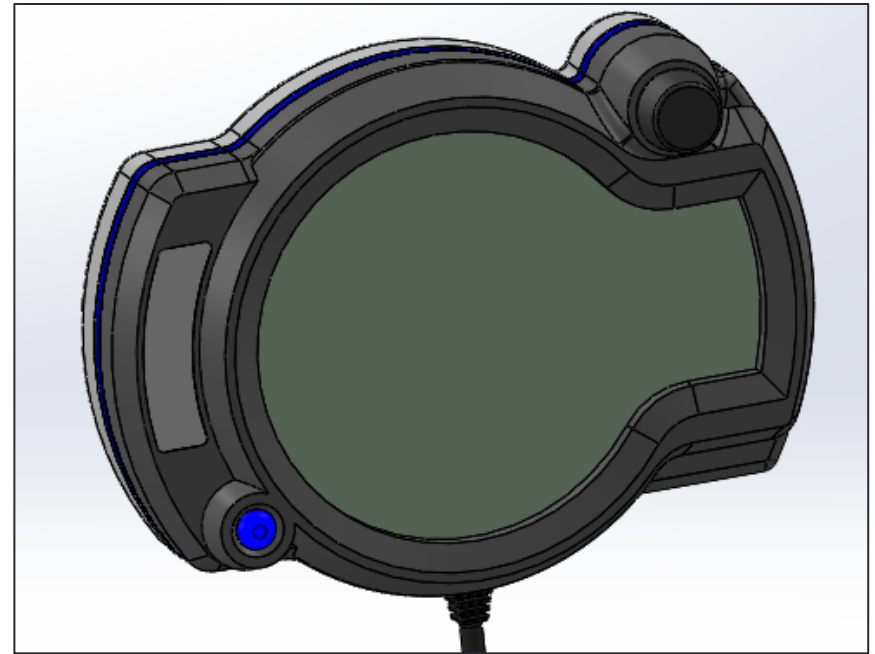
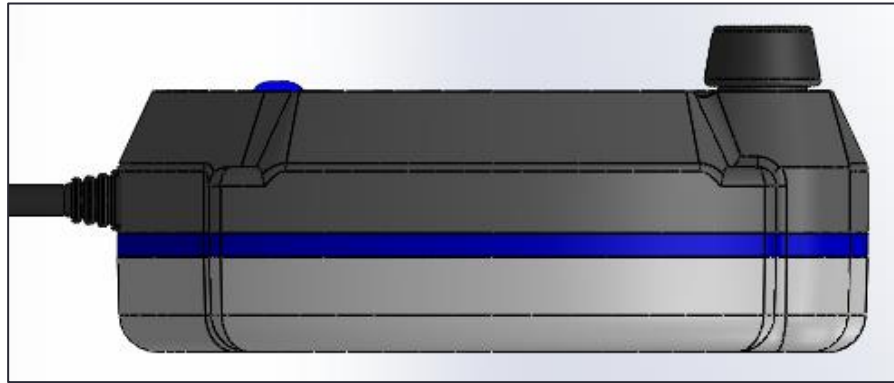
**Modern Molding, Inc.**  
(763) 972-6761

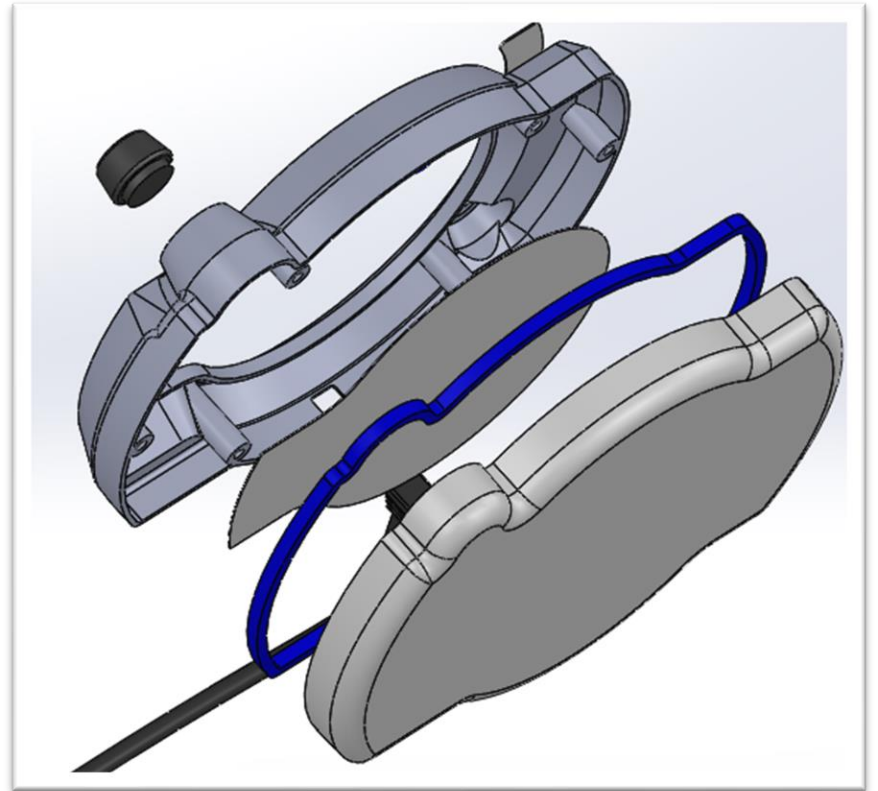
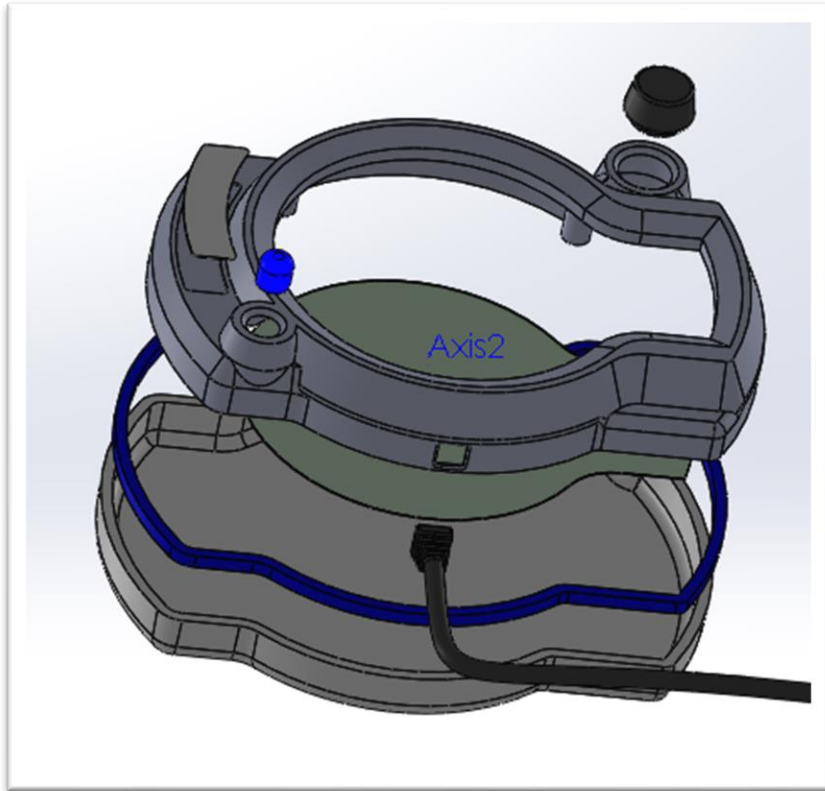
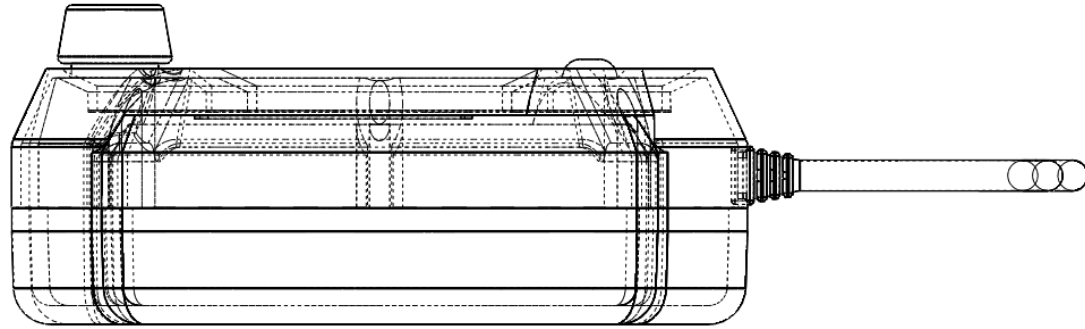


**MODERN MOLDING, INC.**

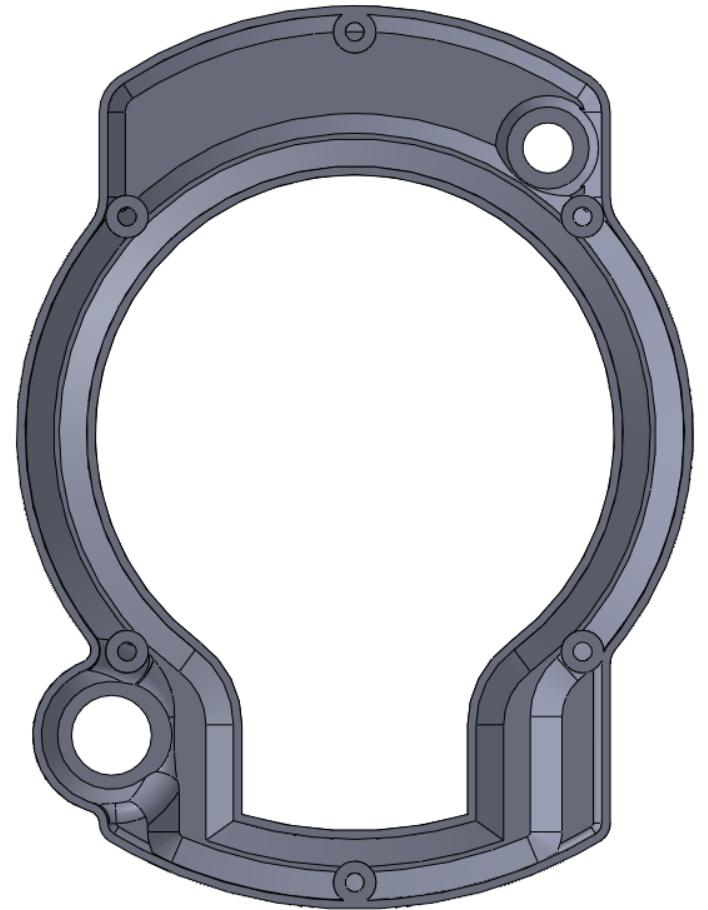
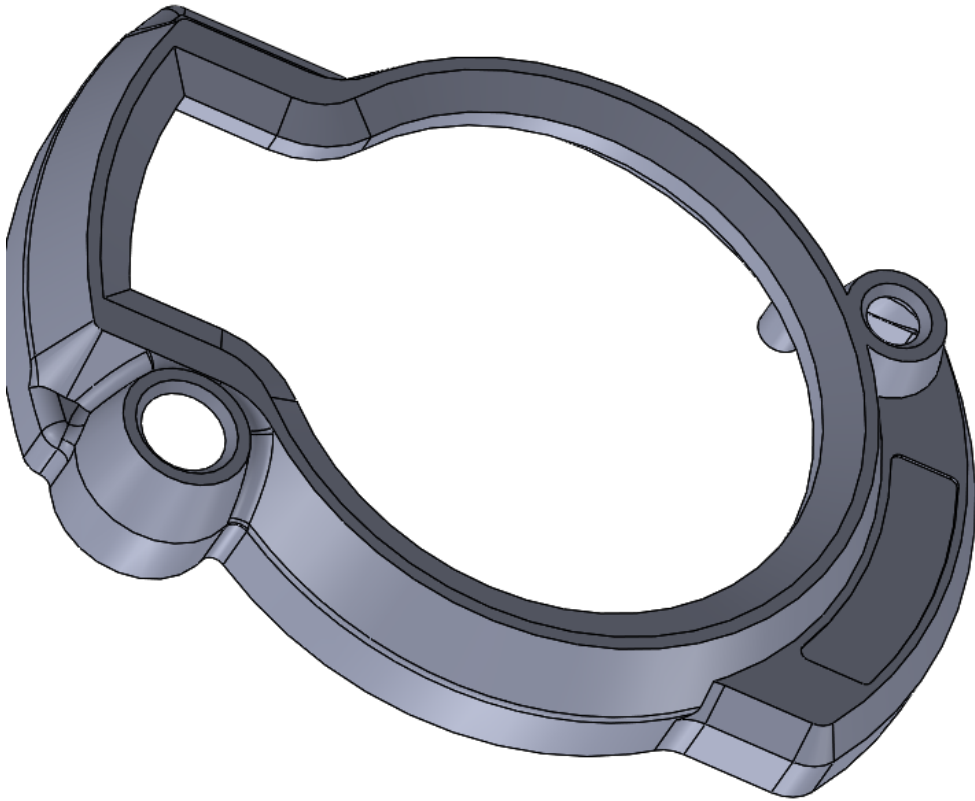
CUSTOM INJECTION MOLDING

# Part Overview:





# RFQ: 3D CAD (STEP), No Print



Part  
background

What type of material?

Is there stress?

Color?

UV?

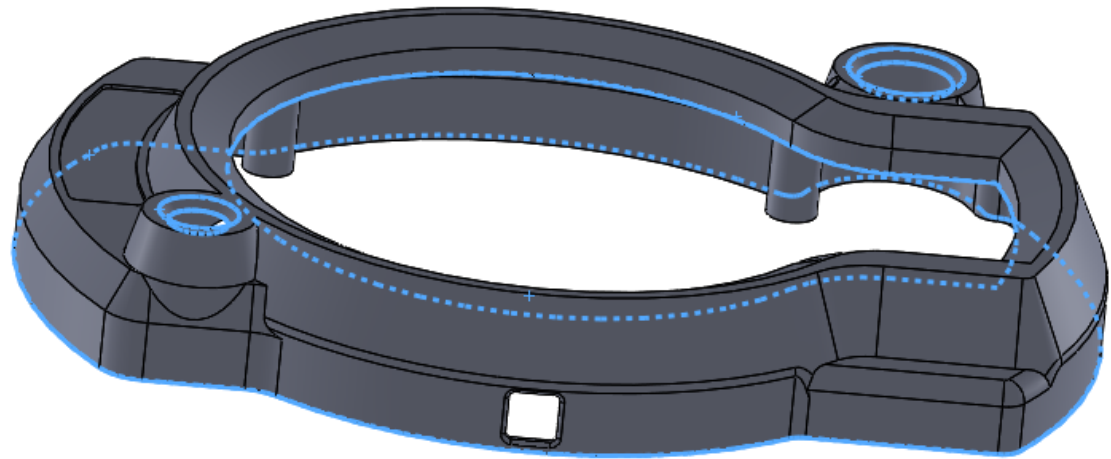
Suggestion: PC/ABS

## Parting Line

Are you familiar with what a parting line is?  
-Where two halves of the mold meet

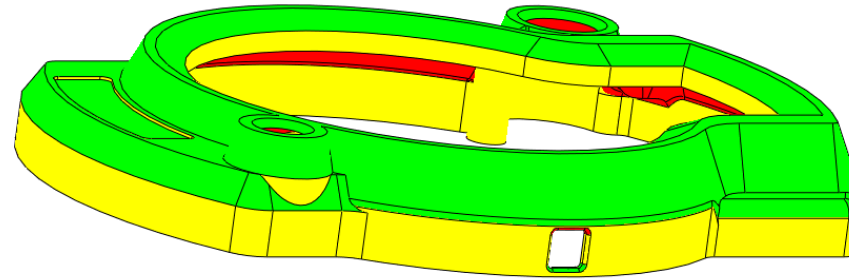
Based on the part geometry we think the lines shown are the best locations for parting lines




There is a potential for flash to exist at the parting lines. There could be up to 0.010" of flash at these locations during the life of the tool.

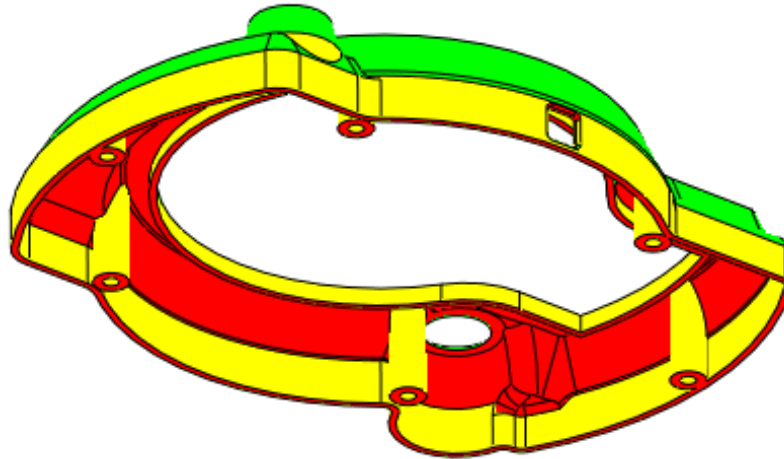


# Draft

- Yellow areas have no draft, we would advise adding positive draft
- Texture? If so amount of draft discussion?
- What type? How about MT-11040?
- 3 degrees minimum of draft for MT-11040



	Positive draft
	Requires draft
	Negative draft

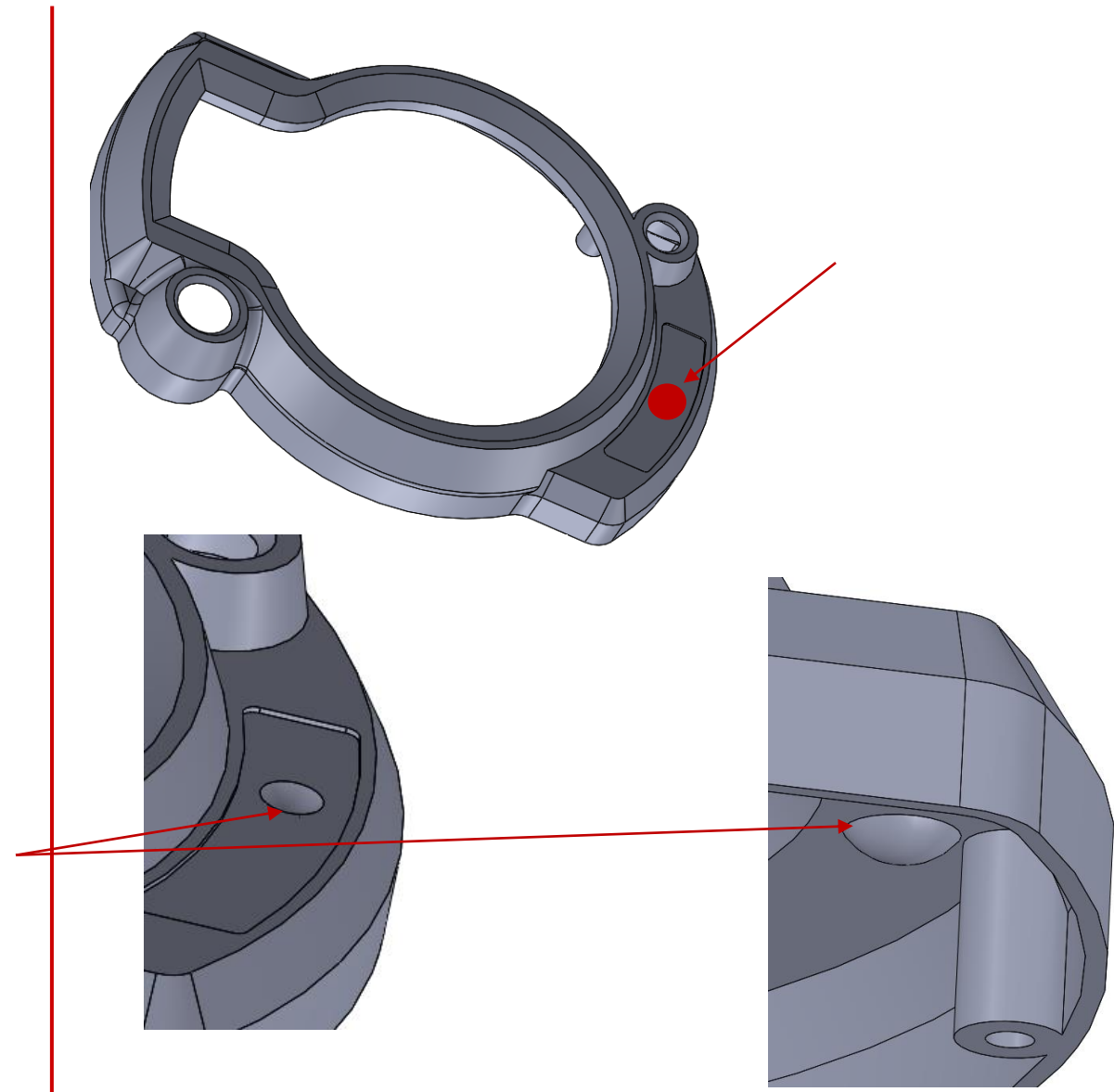


A Side

B Side

## Probable gate location

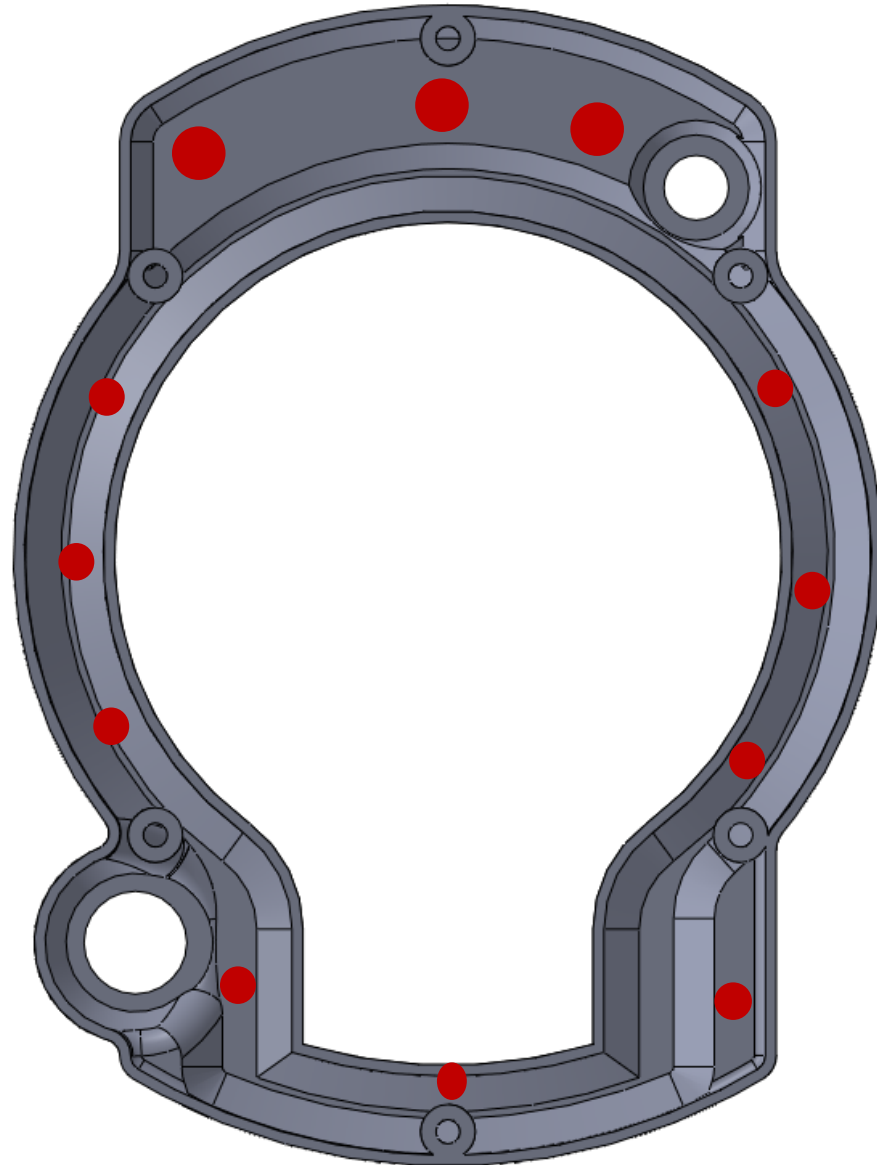
- There are many places we could gate
- Location shown in red is a possible gate location via hot tip system
- The addition of a logo sticker in this location would mask the gate mark
- May we add a gate dimple here?





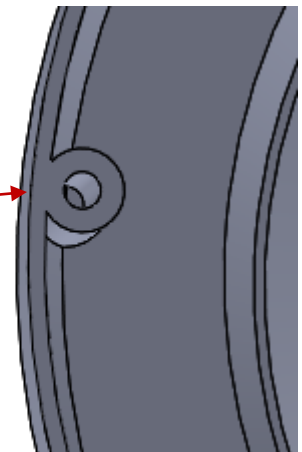
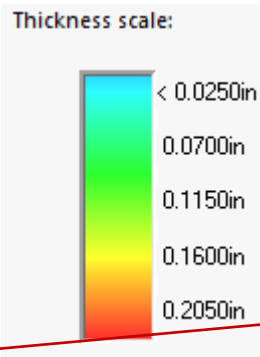
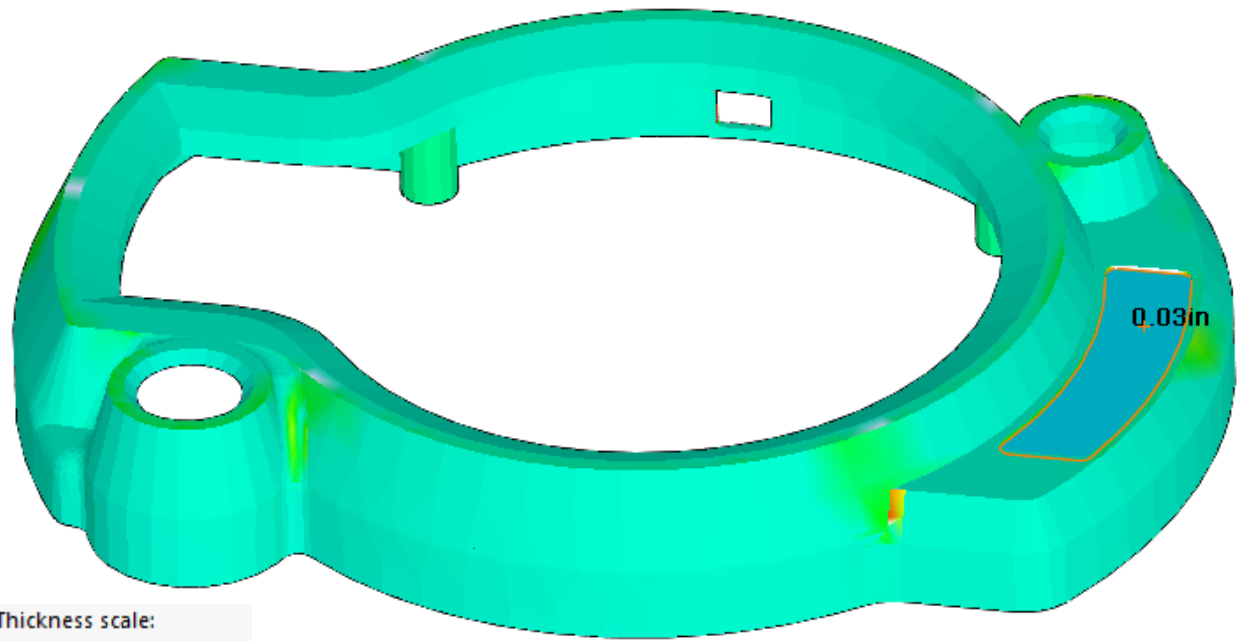
## Ejection location

- Possible ejector pin locations shown in red
- Would like this side to be the B side due to cosmetics
- Are the heights of the screw bosses critical? Can we put sleeve ejectors on it?



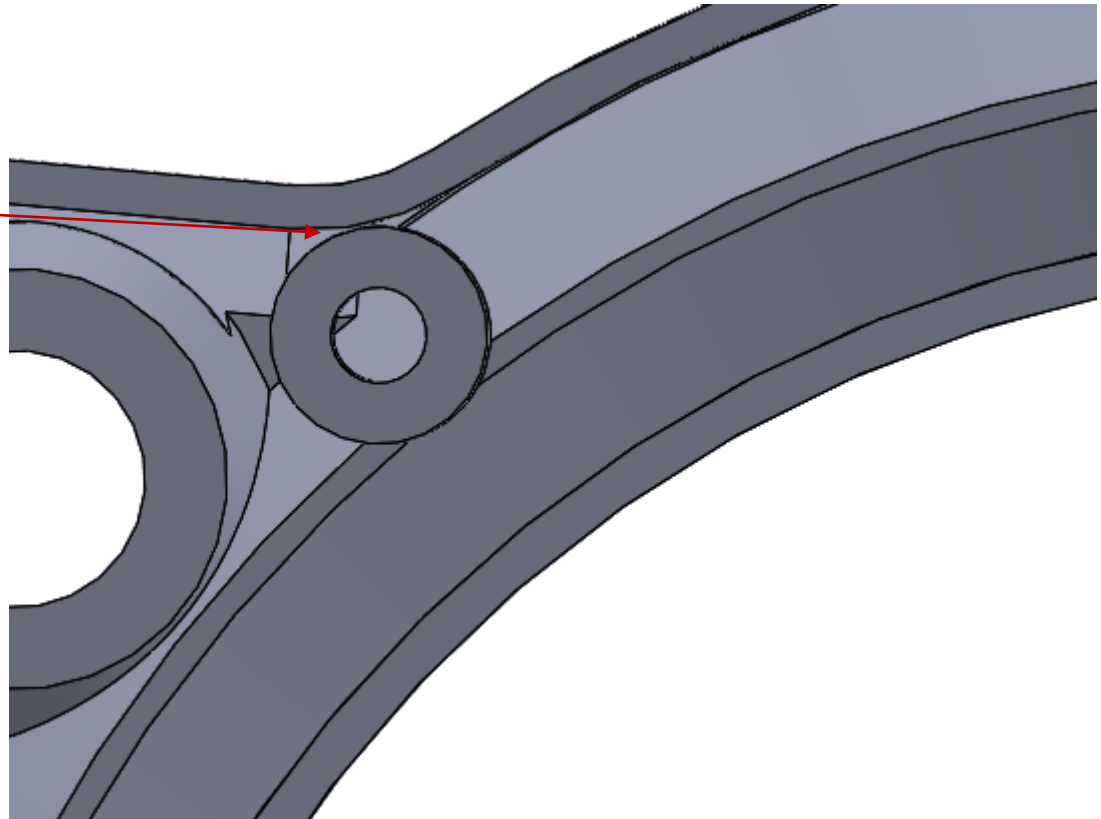
# Thickness analysis

- Wall sections appear to be uniform
- Thinnest region shown (0.03")
- PC/ABS is a nice material, and shouldn't have any sink concerns.
- The .030" wall section is a little thin, we would recommend thicken it up to .060" to match nominal wall section.
- There is a thick area located at the screw boss and wall intersection here
- Possibly remove material and rib for strength?



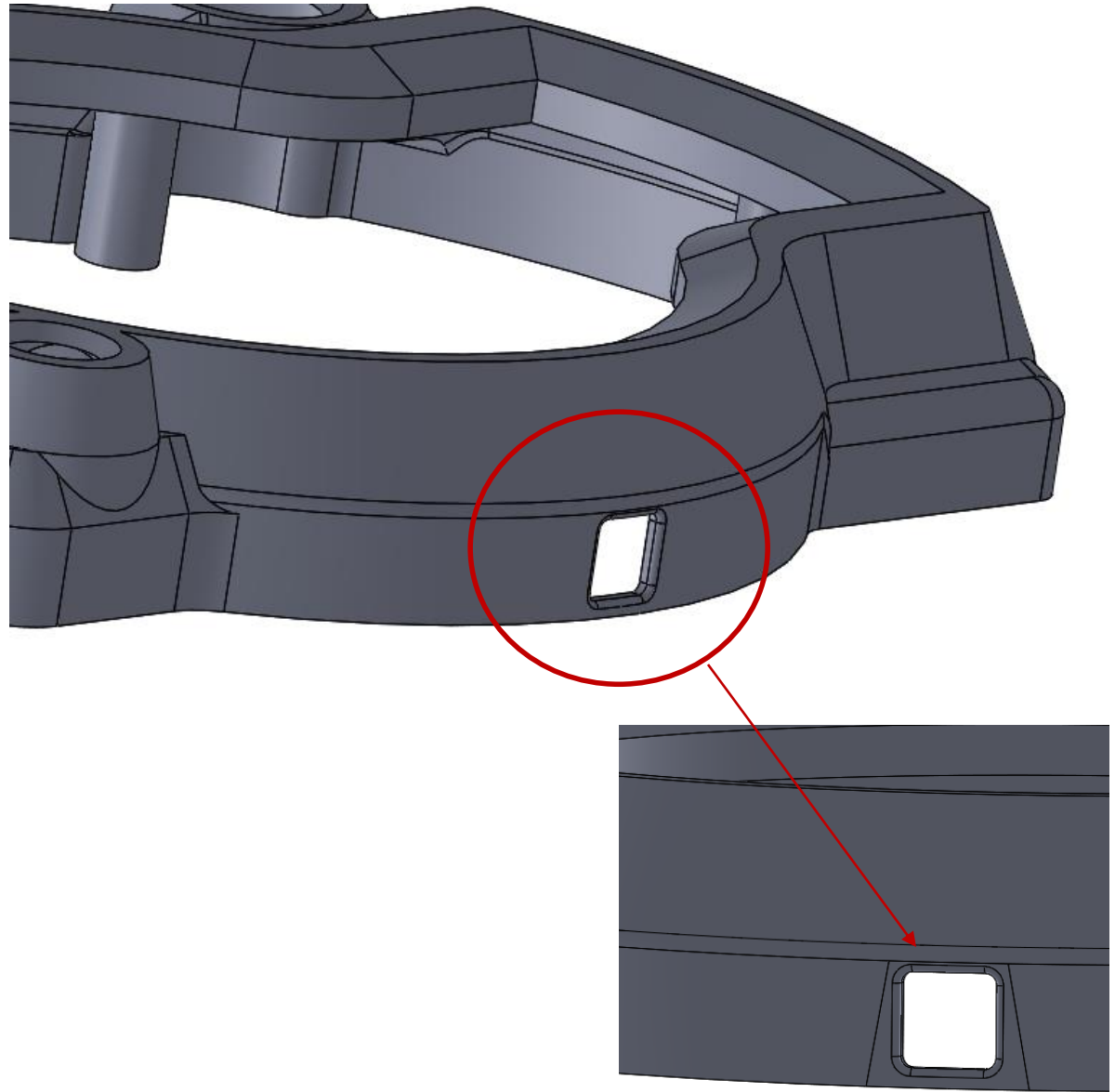
## Other items for note

- Thin steel conditions here could be problematic in the future
- Can we move this boss further from the wall?



## Other items for note

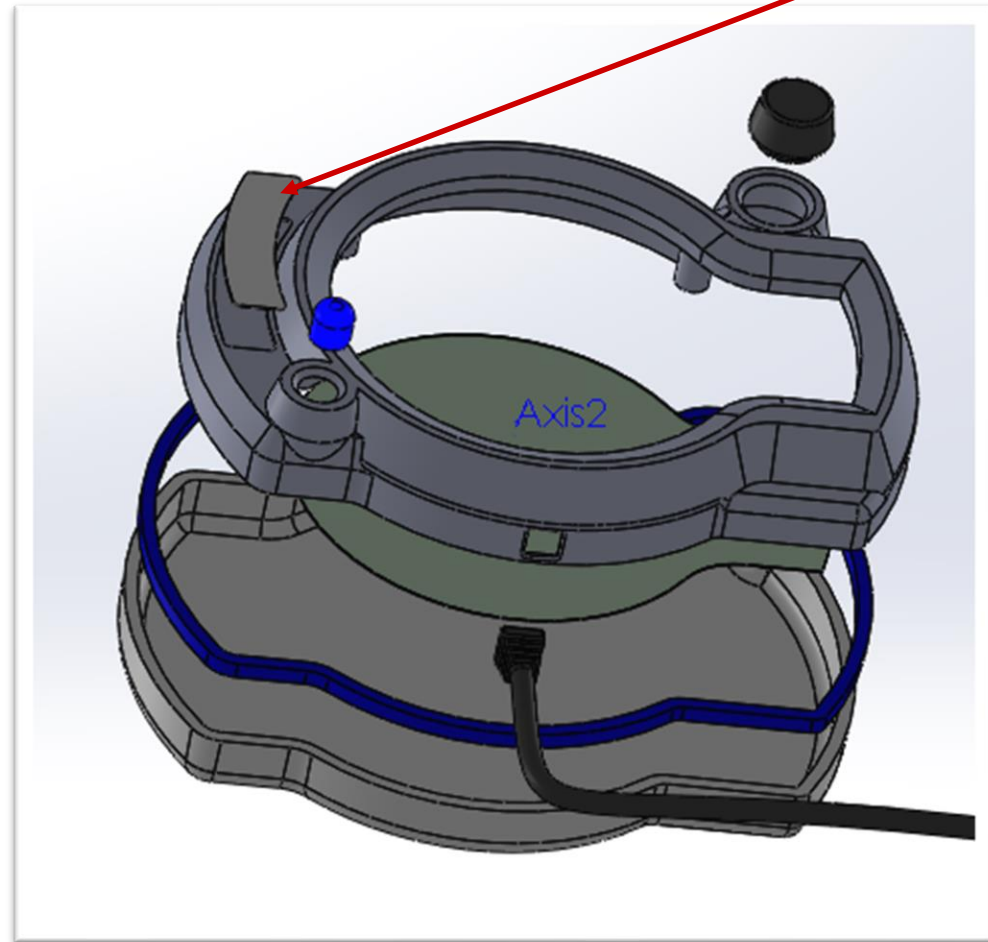
- Cam action required, any concerns regarding parting lines?



## Other items for note

- MMI would be glad to quote applying the logo sticker as part of our second operations program.
- If you are interested, can you send us the artwork?

Possible second ops addition?



# Thank you

- When can we schedule a meeting with your engineering team?

