

MAT 9 – BRN 9

EJECTOR FIT

The MAT 9 / BRN 9 Rely on the ejector built into your 9MM AR style Lower Receiver.

For optimal performance the ejector will need to be adjusted to fit the bolt on your new upper. In some circumstances some material may need to be removed from the ejector for proper fit.

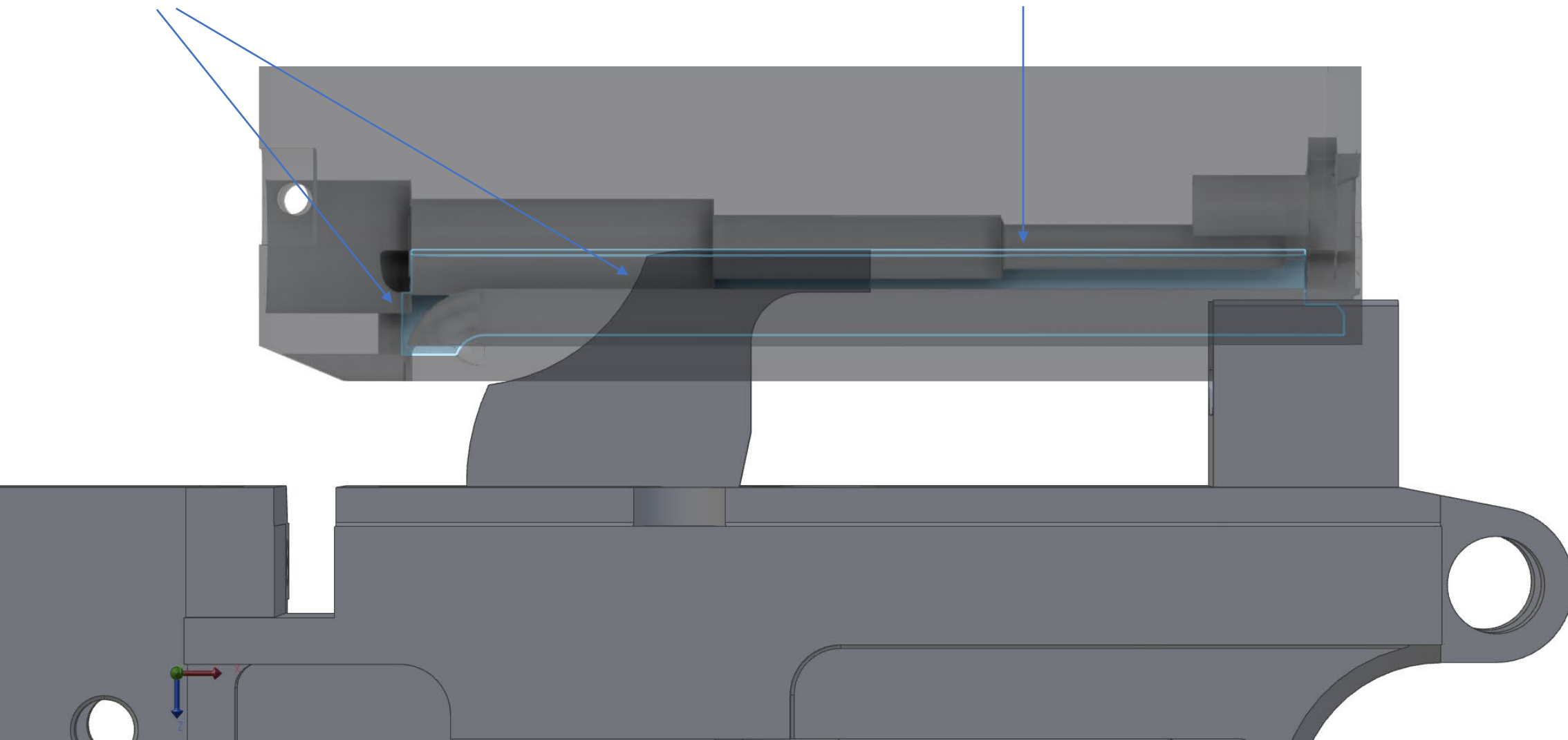
The procedure to adjust and fit your ejector is as follows:

- Loosen the set screw(s) on the bolt catch side of your lower, and install the upper with bolt, but recoil assembly removed
- Manually move the bolt forward and observe where (image 3) the ejector is protruding from the bolt face
- Move the ejector tip upwards until it is barely contacting the bolt, but not creating resistance, and re-tighten the set screws

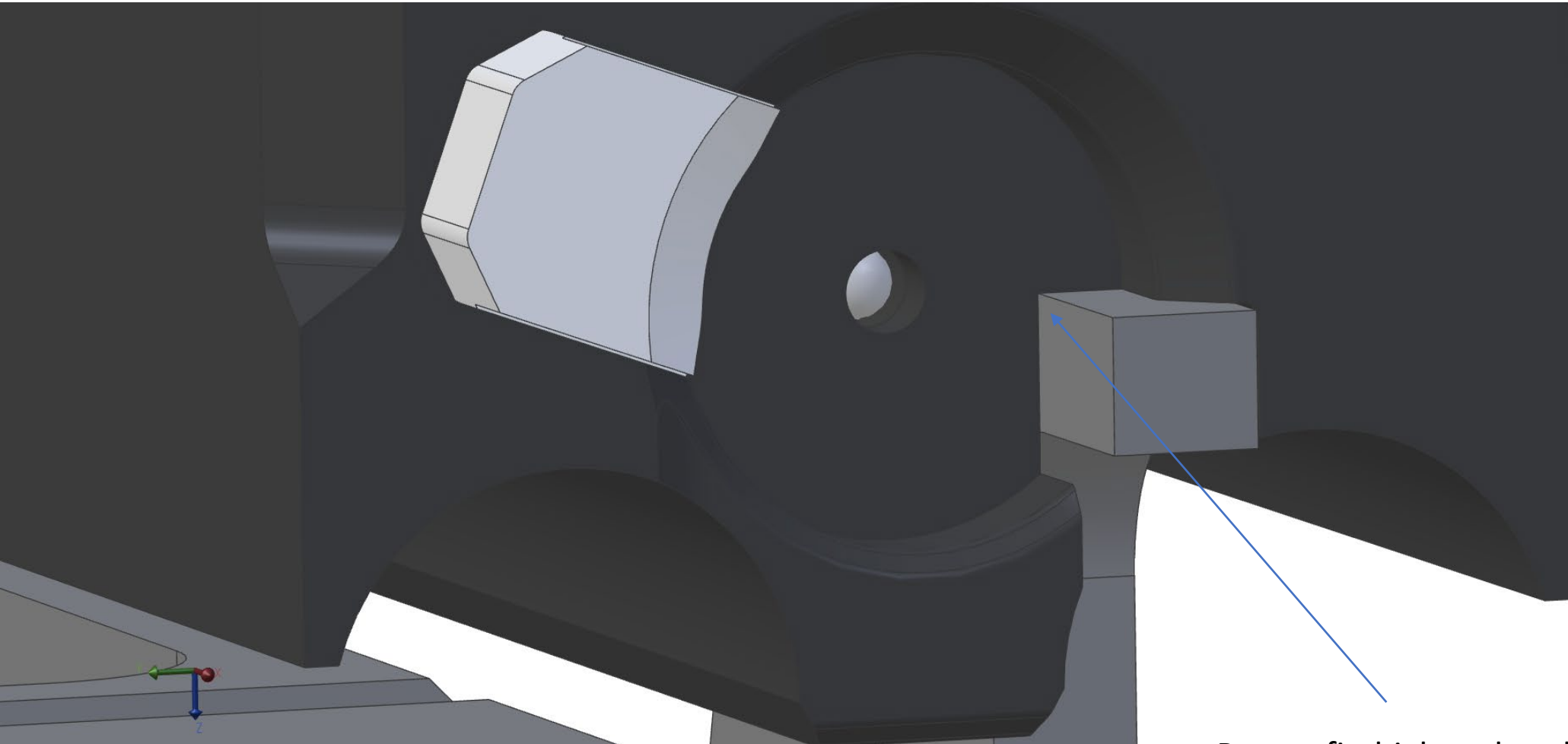
If the Upper won't close on the lower:

- Repeat step one above
- Observe through the ejection port where the ejector is stopping the bolt – if it is the top, try adjusting down, if it is the rear, some material will need to be removed from the top-rear of the ejector
- This can be achieved with a file, sandpaper, or grinder with the ejector removed from the lower
- Go slow, a small amount at a time, only a minimal amount of material should be removed. Once the upper clears, repeat the steps to adjust the fit

Light blue areas show where the ejector should ride, and how it should clear



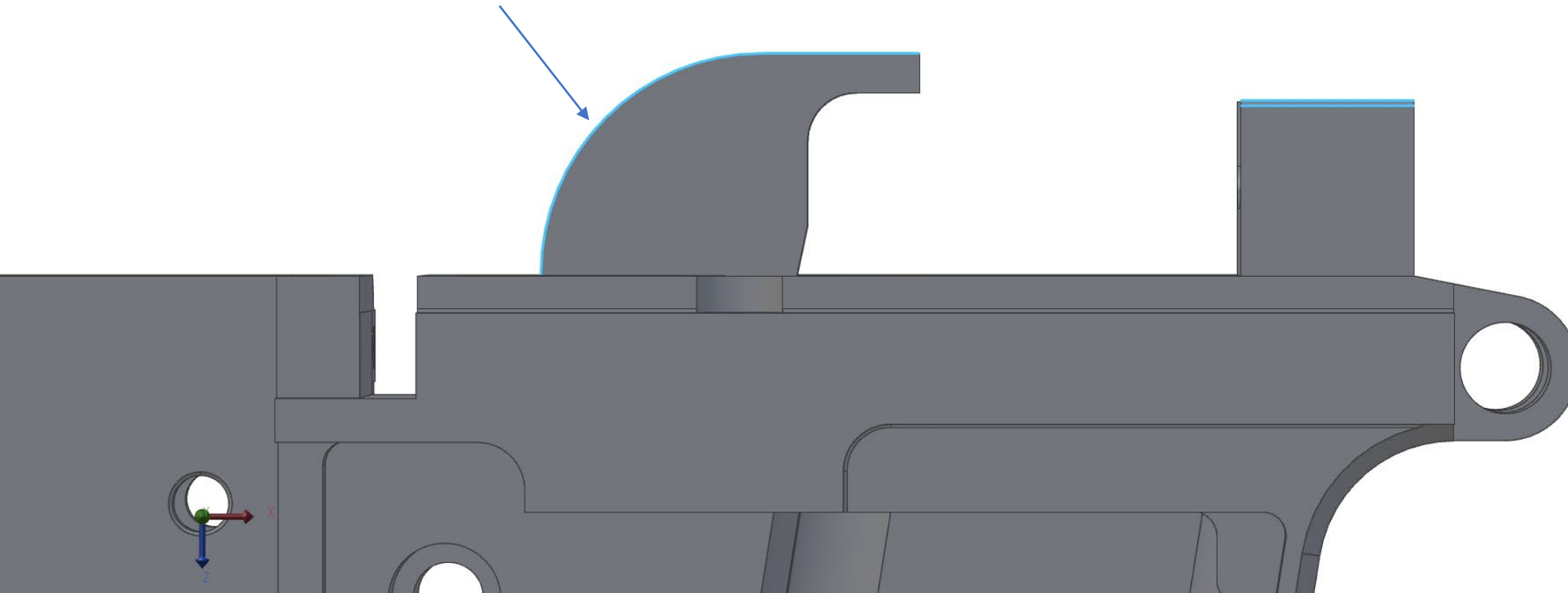
This image shows proper fit of your ejector in the bolt face



Proper fit, high and to the center in the channel

These areas are where an ejector (and feed ramp tower) may need to be modified for a proper fit

Remove material along this blue edge if the ejector has been adjusted and lower will not close



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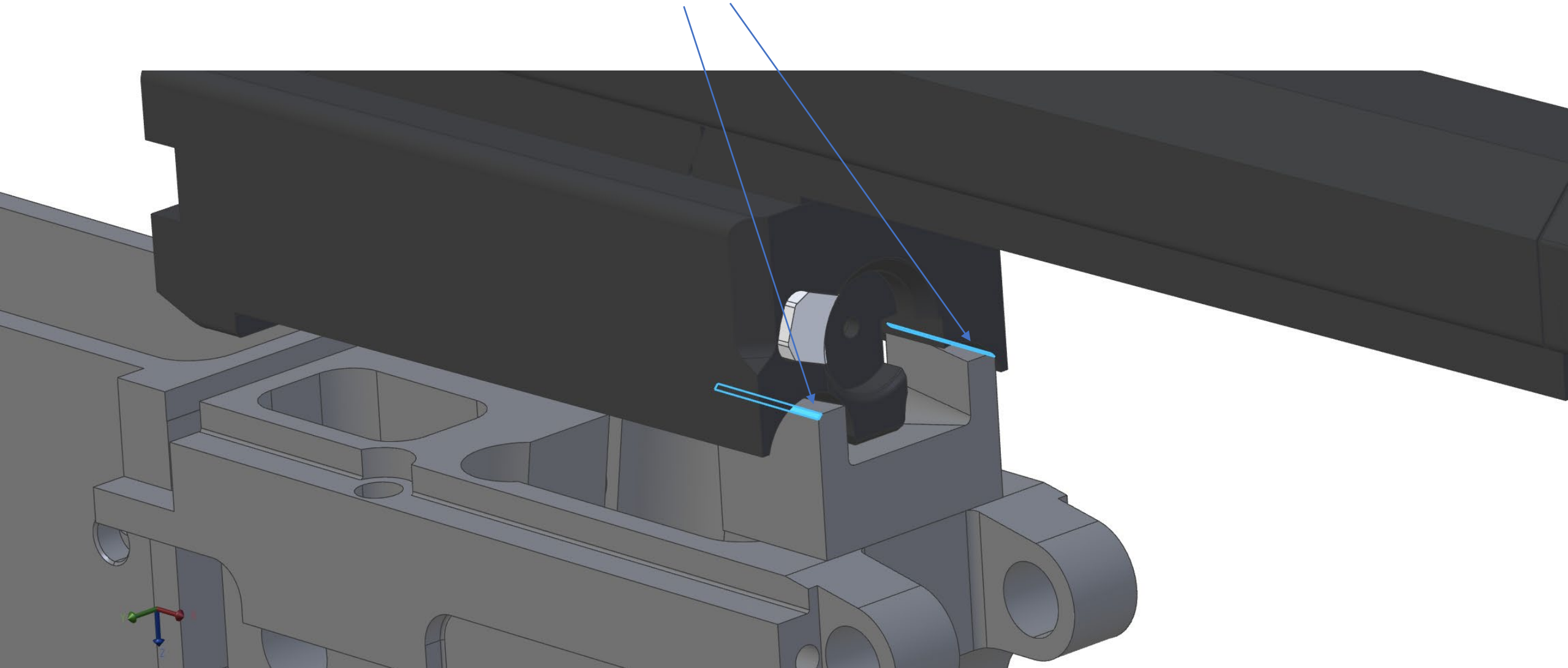
FEED TOWER FIT

The MAT 9 / BRN 9 Bolt has been designed to be as compatible as possible, but may interfere with some feed ramp towers (certain Colt and CZ style lowers).

If you have a 9MM AR style lower with a feed tower and cannot pin your upper on, follow the steps below:

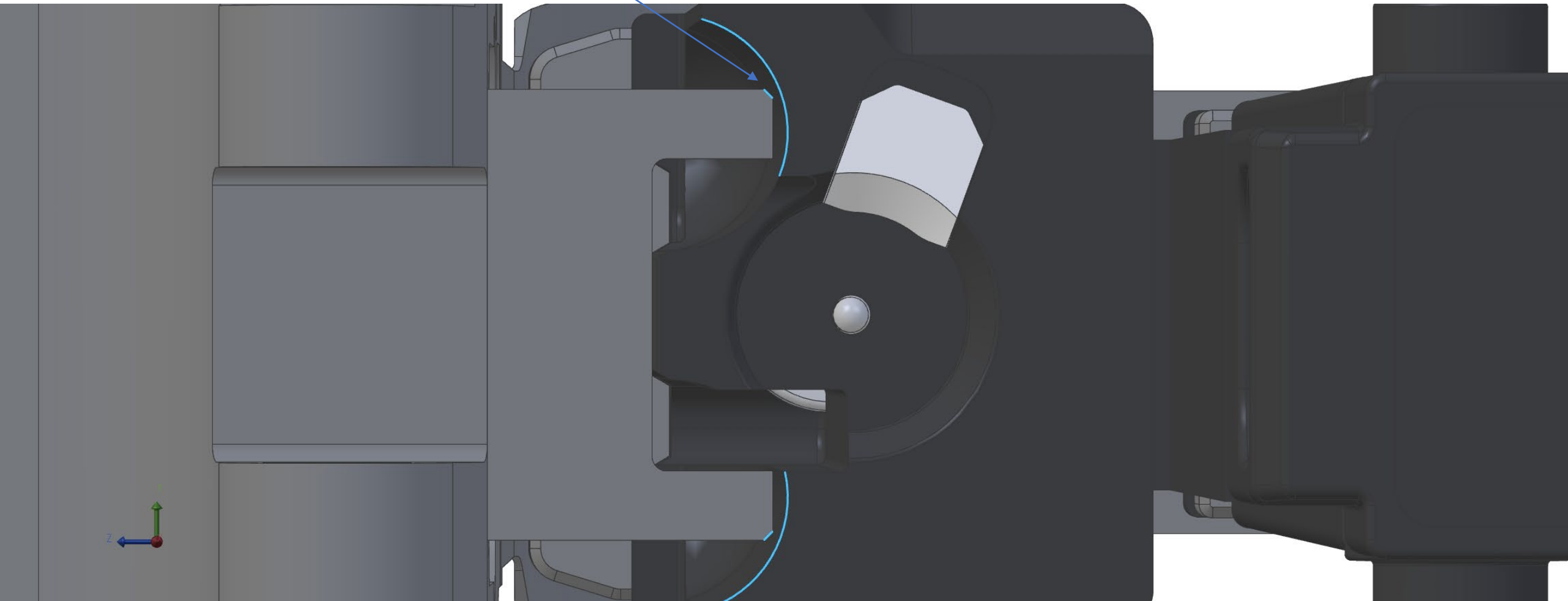
- Follow the ejector fit steps listed previously
  - Remove recoil assembly, slide bolt to the rear
  - Pin upper to lower, slide bolt forward until the “half moon” cutouts on the bolt face contact the feed ramp tower
  - Through the ejection port, observe the interference. This will typically be on the outer corner of the feed ramp tower
  - Remove the upper, and remove the feed ramp tower (typically set screw(s) near the front takedown pin)
  - Using a file, sandpaper, etc, remove small amounts of material from the corners of the feedramp tower that were contacting the bolt.
  - A chamfer or radius is best, do small amounts at a time until the bolt clears
  - Cut only minimally if needed into the actual center area where the rounds feed – we have never found this to be necessary
  - Repeat the first steps to check fit. When fit is achieved, cold blue or similar the bright areas you created, re-assemble and enjoy.
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- \*\* Feed ramps are typically available as replacements from your lower vendor if there is an issue
  - \*\* These steps should not affect function with your “normal” 9MM AR upper
  - \*\* Do NOT modify the bolt

The blue faces are where material may need to be removed, in a chamfer or radius, from the feed ramp tower





The blue areas show proper clearance needed on a feed ramp tower.



Cutaway view of proper feed ramp tower clearance

