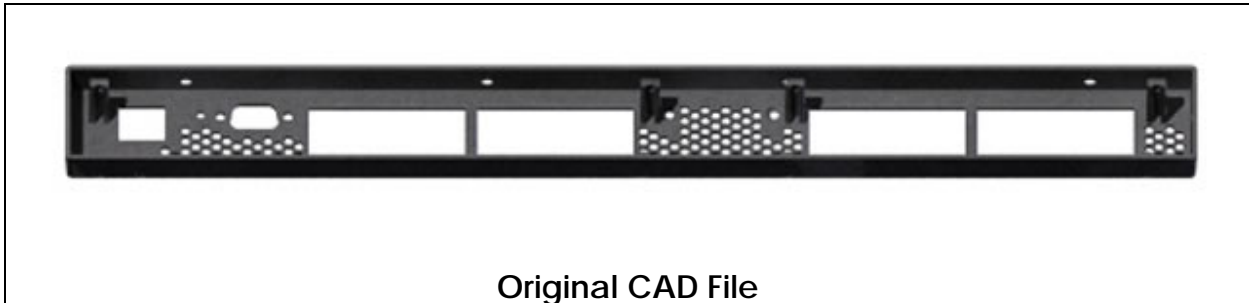




**Case Study:** **Prototype of Die Cast Faceplate**

**The Challenge:** Our Customer required 40 pieces of an aluminum housing that was designed for die casting. The faceplate contained a pattern of hexagon shaped holes with virtual sharp corners. Several of the internal features could not be easily machined.



**Original CAD File**

**The Solution:** K&C used a combination of Technology, Teamwork, and Craftsmanship to deliver parts on time that exceeded the quality requirements.

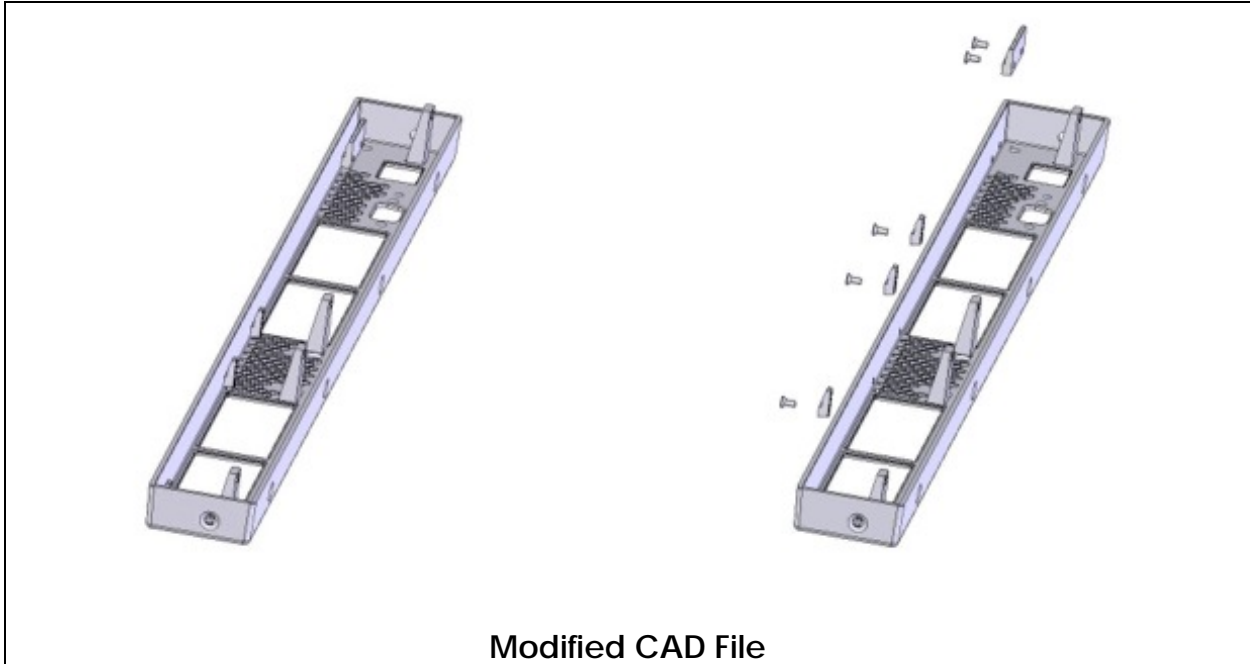
First the part was reviewed and solutions brainstormed. It was decided that the hex holes should be produced using either a broaching tool or EDM. Contact with our supplier quickly eliminated EDM in favor of broaching.

Next, after discussions with the customer, the part was modified in CAD to make certain features machining friendly. In addition, there were some internal tabs that we were allowed to machine as separate pieces and screw in place. This allowed us to divide the machining among multiple machines for faster delivery.

Programming and setup occurred during the day by the project leader. Once the operation was proven, the night shift produced multiple components. The parts were assembled and shot blast to give them a die cast appearance. Time from order to delivery was two weeks.



K&C MACHINING, INC.



**Tools Used:**

- SolidWorks
- Gibbs Cam
- HAAS VFOE -2-
- Integrex 100sy

