



MANUFACTURING CASE STUDY

THE CHALLENGE.

The customer was in the process of designing a new ventilator motor that required two grommets that needed to be air tight and made out of FDA silicone material. The obstacle that we had to overcome was five very small thru holes oriented at a difficult angle to seal and provide a pathway for the wiring to the motor.



THE SOLUTION.

We worked with a custom molder to provide a unique tool with miniature pins at a 45 degree angle to mold the passage ways. After validating the parts we ran into another hurdle with excess flash that had to be removed. Any flash on the internal air passageway of the motor was not acceptable. There was a chance that the flash could break loose and eventually be ingested by the patient.

THE RESULTS.

We worked with several cryogenic deflashers and eventually found a superior process to complete our parts. These ventilators have been in production during the COVID-19 pandemic to save lives. The ventilators are working very well with no failures to date.