



Customer

Automotive Manufacturer

Part

Decomp

Manufacturing Issues

Costs and production times were rising for the shaft component of this part.

Assembly costs were rising to unacceptable levels and operations were inconsistent.

Customer's Goal

Reduce the costs of the shaft piece and simplify the manufacturing process.

Minimize the assembly costs utilizing a more efficient method that meets quality and design standards.

Manufacturing Process

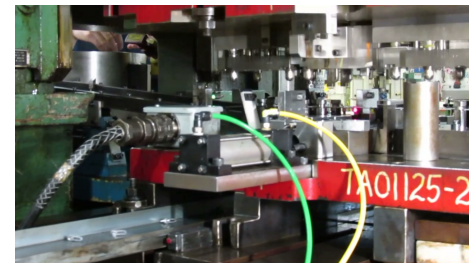
The shaft component was currently being produced as a sintered metal piece to attain the correct form. This was a time consuming and costly process.

Ultra recommended manufacturing the shaft as a cold-headed piece going forward. This process would produce the shaft more quickly and at a significantly lower cost. The strength of the shaft would also be increased and eliminate fracturing issues during assembly.

We next addressed the assembly issues and our focus turned to the metal stamping process. Ultra determined it was most cost-effective to design and build a new progressive stamping die to consistently assemble this part and meet their production demands.

FIRST, the lever component is metal stamped in our Minster 100-ton press.

SECOND, the shaft and lever components are assembled. The bowl feeders, shown below, orient and feed the shaft components into the progressive die for assembly with the lever components.



Customer Outcome

Experienced a **90% decrease in the cost** of the shaft piece.

Lead times were **improved** with assembly operations now taking place in the stamping press.

The stamping press produces 4,800 of these parts per hour.