

Precision Placement of Small Conductive Washer

CUSTOMER

Automotive Electronics
Manufacturer

PART

Electrically Conductive Washer

MATERIAL

Chomerics S6305 electrically
conductive silicone rubber,
0.32" thick, with PSA on one
side

APPLICATION

Electrically conductive washer
acts as an EMI shielding gasket
where the two metal cast
halves attached on a standoff.

CHALLENGE

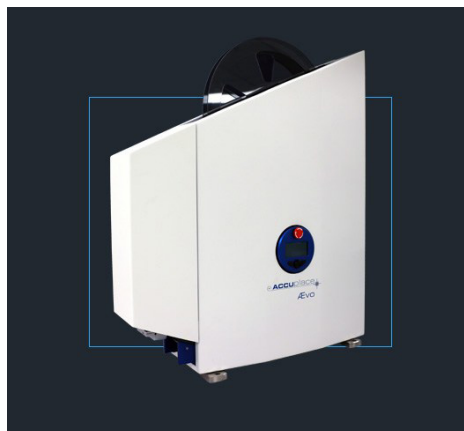
The customer needed a precisely cut washer that would act as a gasket on the standoff where two metal cast halves of an engine controller (EC) were attached. The gasket also needed to shield the EC from electromagnetic interference (EMI) with other "under-the-hood" electronics. The customer also required an efficient and cost-effective solution because the washer was a high-volume small part (4,000,000 annually). Rapid and accurate placement of the part was required to meet production efficiency and quality metrics.

SOLUTION

Marian offered to supply the customer with a part that could be placed accurately and automatically using the AccuPlace system. Though the die-cut part was extremely small (.256" x .157"), Marian was able to cut them precisely. In fact, Marian developed a specialized process to ensure that the small center slugs were removed uniformly.

CUSTOMER BENEFITS

- The conductive silicone material combined with the precise cut of the washer ensured EMI control.
- The reliable material dimensions of the washer assured good height and width accuracy on the standoff surface.
- Marian developed a process to remove the center slugs of the washer, ensuring a high level quality with every component.
- The AccuPlace system automatically placed parts at high volumes meeting the customer's productivity metrics.



(Left) Accuplace automated placement machine