

## **Honda Ultrasonic Test Evaluation**

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### **Poster Abstract**

Currently Honda must destroy an entire *Whitebody* to test the integrity of the spot welds. Therefore, an alternative non-destructive solution may contribute to cost savings.

Ultrasonic testing is one possible solution to the problem

Staveley's non-destructive testing equipment was used to evaluate a part and the results were compared to that of destructive testing. The effectiveness of the ultrasonic systems was evaluated.

The flaw detector that was used for ultrasonic of the spot welds was a Sonic 1200's, which is Staveley's most popular unit. The utilized transducer was a-10MHz Hard-tip Delay line (SPO-4470), which is best for spot welds with smooth surfaces.

We have ascertained that, as stated in other studies, there is a learning curve associated with ultrasonic testing. Based on previous studies, we believe the measurements can be improved and ultrasonic results can be very accurate. While not as accurate as hoped for, our initial data does show that with little practice, acceptable and unacceptable welds can be identified. For Honda, this procedure may require a great deal of time before it can replace destructive testing, but it is feasible.