



## TIER-1 AUTO PARTS SUPPLIER'S SERVO MOTOR CABLE DOESN'T CUT IT

**Total Savings in Material & Labor = \$11,747 & Increased Production by 138 Hours**

**TPC PRODUCT: SUPER-TREX® REDUCED DIAMETER CONTROL CABLE W/ ARAMID OVER-BRAID**

*Source: TPC Cost Value Analysis Report #1361*

**CUSTOMER PROBLEM:**

A Tier-1 automotive supplier of underbody structural parts was experiencing problems with the power cable for its servo motors and needed to replace it every 1.5 months. The cable would be cut by parts, fail, and sometimes blow out the servo motors to the tune of \$3,000+ each. The cost to replace the cable was \$546 in product and labor expenses each and every time.

**TPC SOLUTION:**

The TPC representative recommended Super-Trex® Reduced Diameter Control Cable customized and strengthened with aramid. Already designed with a high strand count and construction that provides long life in dynamic flexing applications, the thermoplastic elastomer (TPE) jacket was enhanced with an aramid fiber vest to yield exceptional strength and cut-through resistance. The customized cable solution would also provide excellent protection against oil and most industrial chemicals.

**CUSTOMER'S RESULT:**

TPC's Super-Trex® Reduced Diameter Control Cable with aramid over-braid was installed in all 6 servo motor units. After 1 year in use, the cables were holding up well against cutting hazards. After 3 years in use, again without failure, it was determined the customer was able to avoid 144 hours in downtime and the total cost in products and labor for TPC's solution was just \$1,357 – compared to the \$13,104 the customer would've spent replacing cable every 6 weeks across 6 units over the course of 36 months. Ultimately, TPC was able to save the customer \$11,747 in expenses and delivered a 138-hour increase in production time. Since then, in response to customer needs, TPC has introduced Trex-Onics® Servo Motor Cable, color-coded orange and specifically designed to protect motors from damage by reducing noise issues while also extending conductor life in dynamic applications.

