## WHAT'S IN YOUR BOX?

#### **HERE IS WHAT'S IN OURS**

#### **Research and Development**

Echlin® has 13 fully equipped design and development centers around the world, including locations in New York, South Carolina, Poland, and Germany.

#### **Precision Manufacturing**

We are an expert manufacturer with 19 plants around the world, including multiple plants in the US, Mexico, Canada, Poland, and Germany. Echlin®-manufactured ETBs are made in North America, and our plants are IATF 16949, ISO 9001 and ISO 14001 certified.

#### **Testing and Performance Analysis**

Every Tech Expert® ETB is calibrated and end-of-line tested for voltage output before it is placed in the Tech Expert® box. That means they can be installed with confidence.

#### **On-Vehicle Validation**

New Tech Expert® Electronic Throttle Bodies are tested on real vehicles for performance and durability at our Vehicle Testing Center in Texas.

#### **Sales Support**

The industry's best and most recognized training programs, comprehensive marketing, word-class category management and a sales force that is second to one, are why Echlin<sup>®</sup> is more than just a part in a box.

















# ELECTRONIC THROTTLE BODIES



# WHEN CHOOSING A REPLACEMENT ELECTRONIC THROTTLE BODY, YOU HAVE THREE CHOICES

#### **A Value-Line Part:**

Often remanufactured and uses older electronics

Doesn't include the required gasket

Limited resources for engineering and quality testing



# 2

#### **An OE Service Part:**

The same design as the part that just failed

May not include the gasket needed for a complete repair



### A High-Quality Replacement from Tech Expert®:

100% new, not remanufactured

All popular Tech Expert® by NAPA® Echlin® ETBs include the required gaskets

Design improvements for durability (applicable on specific ETBs with high OE failure rates)



#### **DESIGN IMPROVEMENTS**

The electronic throttle bodies on the Chrysler / Pentastar 2.0L and 2.4L are known for their high failure rates.

#### **OE PROBLEM**

The gear teeth prematurely wear because of poor geometry and a soft material

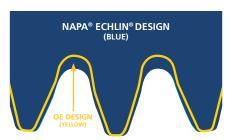




#### NAPA® ECHLIN® SOLUTIONS

- 1. Increased the face width on the gear by 17% to reduce stress on the gear teeth
- 2. Improved the geometry of the gear teeth to make the gear teeth stronger (thicker teeth, with a slightly shorter overall length)
- 3. Upgraded the material to Nylon 66, a higher strength, heat-resistant material

# OE DESIGN NAPA® ECHLIN® DESIGN



#### The result is an ETB that outlasts the original

