

# GLOBAL ASSEMBLY EXPERT

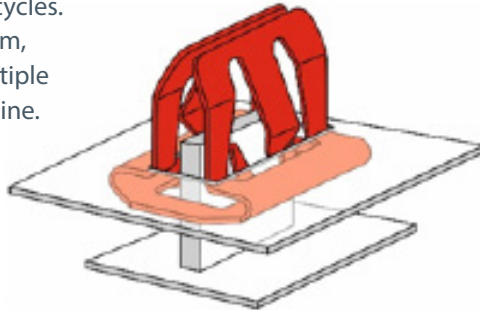
Provides Impressive Cost Savings for Major Appliance OEM



## THE CHALLENGE

A multinational home appliance manufacturer with more than 50 locations globally was looking to reduce assembly time and labor on one of their production lines.

The manufacturer's original design required the use of six screws to attach a control panel onto a washing machine. This created an ergonomic issue due to the repetitive screwdriving cycles. In order to alleviate this problem, the customer was rotating multiple employees on the production line.



Through early collaboration with the customer we were able to design a solution that maximized savings, minimized labor, and completed performance testing without jeopardizing launch timelines."

Robert TAYLOR

Product Line Manager  
ARaymond Tinnerman Industrial

## KEY SUCCESSES

Design and launch costs reduced

Total assembly costs reduced

Decreased labor costs

Savings carried to other models

Eliminated ergonomic issues



## THE SOLUTIONS

The manufacturer began investigating alternatives to their existing assembly process and contacted ARaymond's application engineering team for assistance. Both companies began working together to develop some new, innovative solutions.

The collaboration with the manufacturer began early in the new model design process, providing the opportunity to recommend standard products. This meant no new development work or tooling costs, and faster product development.

Two design options were suggested as potential solutions.

### 1 A standard design

### 2 A more robust High-Strength Trim Clip

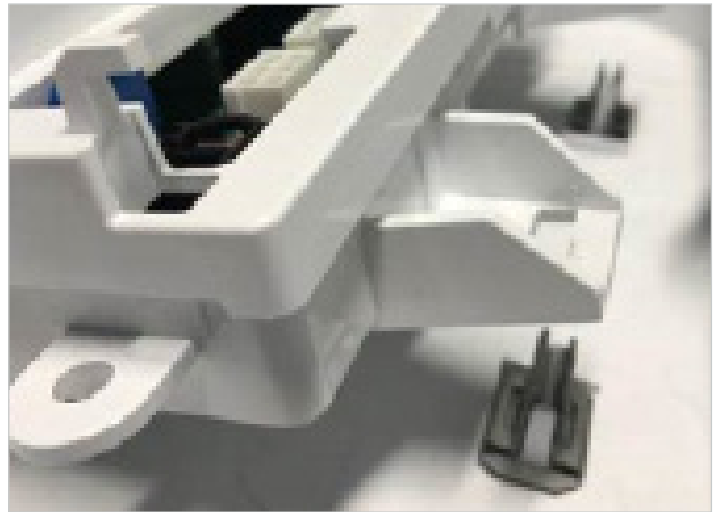
A 3D model of the clip was supplied to the customer for incorporation into their design. After showing promise, two performance tests were completed and 100 pieces of each part were provided for testing on their production line.

It was determined that the more robust design was required in order to withstand the rigorous demands of the application.

Since this part also installed easier, it was determined the High-Strength Trim Clip would be integrated into their application.



## THE RESULTS



Use of the High-Strength Trim Clip was so successful the part was migrated to other models. Switching to this part provided the following benefits:

- Assembly solution expertise early in the design process
- Reduction of design and launch costs
- Tooling cost avoided
- Total assembly cost reduced
- Increased Productivity
- Elimination of ergonomic issue

## ABOUT ARAYMOND

ARaymond, part of the global, ARaymond Network, has been an expert in plastic and metal assembly solutions FOR MORE THAN 150 YEARS.

**TINNERMAN** Speed Nut® Palnut®

Heavily focused on innovation and engineering, ARaymond combines its own technical expertise with the customer's market sector skills to enable the development of cost-effective assembly solutions.

This partnership strategy is at the forefront of the major innovations or improvements that target one key objective: simplify assembly to reduce the total cost of ownership.

[www.araymond-industrial.com](http://www.araymond-industrial.com)

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