



# COST SAVINGS SUCCESS STORY

## Report #3-09



**Top:** Original design utilized a metal bracket with a tapped hole and a machine screw.

**Bottom:** New design eliminated the cost and quality issues associated with the metal bracket and fastened into the plastic housing.

## Laser Level Manufacturer Part Redesign

### ■ Problem or Opportunity:

The manufacturer was experiencing **quality** and **cost issues** with the original design. Occasionally, threads in the bracket **were not properly tapped** causing installation and rework issues. The cost of the metal bracket, tapping operation and rework **significantly altered** the **competitive** position of this product.

### ■ Previous Design:

The original design called for a machine screw to be driven into a tapped hole in a metal bracket.

### ■ New Design:

The Field Team redesigned the fastener to address the **quality** and **assembly issues**, lower the **overall cost**, and provide quality fastening systems. Field performed tests to determine the loads generated by the original design, developed and tested the new design, and submitted a detailed engineering report to document their recommendations. The new design **eliminated the metal bracket** utilizing a boss molded into the plastic housing and a thread form designed for this type of plastic.

### ■ Cost Savings Summary:

EAU 12,000		
	Unit Cost	Annual Savings
Bracket Cost	0.94	\$11,280
Secondary Operations	\$1.12	\$13,440
Scrap and Rework	\$1.89	\$22,680
<b>Total Savings</b>	<b>\$3.95</b>	<b>\$47,400</b>