



Figure 2. Comparison of trigger shapes.

EFFECTS OF MODIFICATION

The table below contains data related to the effects of modifying the current Model 700 trigger. The first row of the table allows the weight of the triggers to be compared. The location of the composite center of mass is calculated relative to the pivot hole of the trigger. The calculation of the composite center of mass took into account the mass of the connector. For these calculations, the mass of the trigger was taken as 7.4 g/cc. The radial distance to the composite center was calculated from the x and y components of the center of mass location.

	<i>Current Model 700 Trigger</i>	<i>Third Rib Added</i>	<i>Ribs Extended</i>	<i>Back Area Filled In</i>
Weight (ounces)	0.309	0.314	0.312	0.334
Location of composite center of mass (x,y in inches from pivot)	-0.1029, 0.05736	-0.1064, 0.05260	-0.1050, 0.05343	-0.1200, 0.03434
Radial distance to composite center of mass	0.1178	0.1187	0.1178	0.1248
Peak Von Mises stress, 20 pound load.	114,000 psi	52,300 psi	66,500 psi	30,700 psi