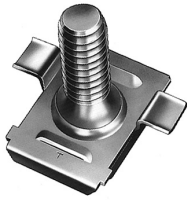


Tinnerman® Multiple Thread Engaging Nut and Bolt Retainers

The dimensions of the above parts are envelope dimensions only. For complete design information, please request a blueprint from your Tinnerman representative or the Tinnerman Engineering department.

Metric parts listed in italic>

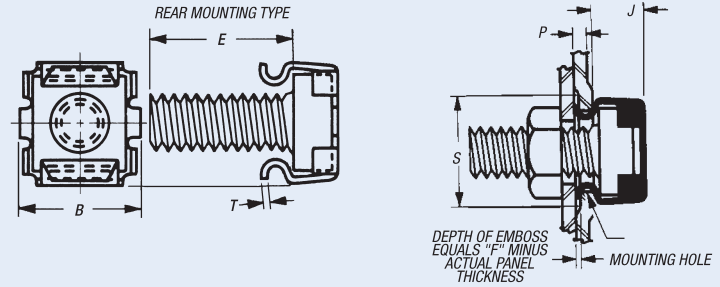
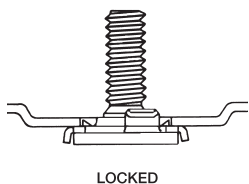
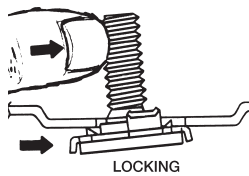
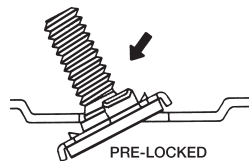


Bolt Retainers Rear Mounting Type

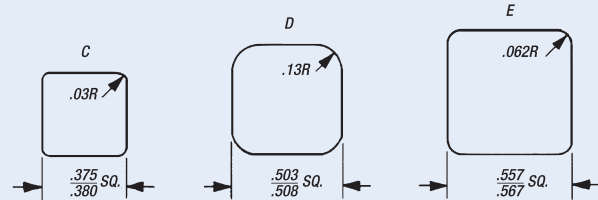
Tinnerman **Bolt Retainers** eliminate problems of blind location, bolt retention, threaded stud damage, paint-clogged threads, weld flash and difficult assembly or removability wherever threaded studs may be used. They can be attached after finishing and just before final assembly to eliminate thread damage due to stacking, weld flash, paint clogging, etc. One type is mounted from the front to ease assembly in blind or difficult locations. Both are self-retained and can be easily removed and replaced without damage to the mounting panel. Access to the underside of the panel is unnecessary because the bolt cannot turn as the nut is driven to its prescribed torque. A shallow emboss allows flush mounting of mating panels.

How to apply Bolt Retainers

Hold the threaded bolt between the thumb and forefinger. Tip the retainer into the mounting hole allowing the wing-like spring legs to rest on the panel. Apply a rearward pressure on the top panel side of the bolt until the embossed shear snaps into the panel hole locking the **Bolt Retainer** in position.



MOUNTING HOLE VARIATIONS



Screw Size	Panel Range	B Width	E	F	G Mounting Hole	J	S Emboss Square (Min.)	T Mat'l. Part Thick. Number
<i>M6X1</i>	.650-1.600	13.475	22.000	2.350	C	6.300	13.500	.510 C33987-M61
<i>M8X1.25</i>	.500-1.000	16.750	50.000	2.410	D	7.620	18.640	.640 D98655-M8125