



**FTC**

**FOR AEROSPACE**™

**Fastener  
Technology Corp.**

# Introduction

Fastener Technology Corp. specializes in meeting the precision fastener needs of the aerospace, military and commercial industries. The company was founded by Mr. Bulent Gulistan whose own background in fastener design and production spans over thirty years.

FTC engineers have produced some twenty-seven patents for original fastener designs. We specialize in designing and creating the best possible fastener to solve our customers' problems. We look at all peripheral aspects that may enhance

a design and benefit the customer.

Most important, we meet our deadlines while maintaining extremely high quality standards. We boast one of the best records in the industry for making our delivery dates on time and have earned a reputation for setting competitive pricing.

Personal attention is given to every design and manufacturing aspect of our operation. At FTC we will create original designs or work to your specifications. All fasteners can be produced in high volume quantities.



**1. BG BOLT**  
FTC's patented BG BOLT® is the first positive retention captive screw that can be installed without special tools. Designed to fit standard holes, it even allows for slightly large or imperfect drilling. Installed with simple thumb pressure, it stays in place until you want it removed. Available with or without spring.



**2. CAPTIVE SCREW WITH RIGID RETAINER RING**  
Our patented MAGIC GROOVE® captive screws have an altered groove design which allows the rigid retainer ring to slip easily onto the bolt without bending, breaking or distorting. Push out loads are up to six times that of similar fasteners. They offer foolproof installation at a reduced cost.



**3. ALIGNMENT PINS**  
Designed to provide perfect alignment while protecting against damage due to shear loads, shock, and chassis warpage. Mating receptacle is available for all sizes.

## 4. FULL OR PARTIAL RETRACT, SPRING LOADED, SWAGE TYPE

Full retract feature assures that screw is completely disengaged from mating thread prior to removal of top panel from sub-structure, and prevents damage to screw threads by jacking action. In both styles spring loading assures that the screw is retained in retract position when it is not engaged with mating thread, thus visually detectable that the screw is not engaged. Partial retract type is used when limited in space.



## 5. FULL RETRACT, SPRING LOADED TYPE AND NUT RETAINER

These captive screws are designed for use in applications where moderate to high loading stresses will be encountered. This method of captivation allows for easy removal of the screw assembly from the panel without the use of special tools. Retainers are available in 100% flush heads or protruding head styles. Both head styles are slotted for easy installation and removal.



## 6. ENCLOSED SPRING, FULL OR PARTIAL RETRACT, SPRING LOADED, SWAGE TYPE

This captive screw series features a knurled knob that encloses and grips the screw head, and a retractable housing that fully encloses the spring. Application of these screws is similar to style 4, except that the enclosed construction and overall appearance makes them particularly suitable for front panel applications. The knurled knob provides for easy finger-tip engagement of the stud with the mating thread in the bottom panel.



## 7. LOW PROFILE, PLAIN, PARTIAL RETRACT, SWAGE TYPE

Low profile captive screws are primarily intended for use on thin panels where minimal protrusion of the screw assembly above the panel is required. They are particularly suitable for use on panels that are not thick enough to accommodate a countersink, for flush head assembly.

# General Information

This catalog is intended to serve as a design guide only, and as such contains only general information regarding the various fasteners depicted herein. FTC will furnish appropriate engineering drawings or data sheets for each fastener style, showing complete details of design and construction including physical dimensions, materials, finishes (or processes), and performance characteristics. The fastening devices shown in

this catalog are typical of the types produced by FTC, and can be manufactured with a wide variety of head styles and recesses, thread sizes, single or multiple lead threads, and conforming to either U.S. standard or metric dimensions. All materials, processes, and finishes used in the construction of the fasteners are of military grade or equal, with certifications available upon written request.



## 8. LOW PROFILE SPRING LOADED, PARTIAL RETRACT SWAGE TYPE

Application of these screws is similar to style 7, except the spring loading assures that the screw is in retract position when not engaged with mating thread. Thus it is visually detectable that the screw is not engaged.



## 9. FLUSH HEAD, COUNTERSUNK, PLAIN PARTIAL RETRACT, SWAGE TYPE

Flush head captive screws are intended for top panel applications which require a smooth outside surface having no projections when the panel is installed in place. They are typically used for applications such as access panels in aircraft and electronic enclosures, and are designed with sufficient axial play so as to prevent undesired jacking action when the stud is unscrewed from the mating thread.



## 10. SNAP-IN TYPE, SPRING LOADED OR PLAIN, FULL OR PARTIAL RETRACT

Snap-in type captive screws are intended for applications where environmental stress factors such as shock and vibration are minimal. They require no installation tools, and are designed to be pushed into standard drilled or punched holes using only thumb pressure.

## 11. FLARE NUTS, FIXED, LOCKING OR NON-LOCKING, SINGLE OR MULTI LEAD THREAD

This captive nut series is designed for use in enclosures where it is impractical to use non-captive hardware. The serrated sleeve and swage type captivation provide high resistance to torque-out and push out even when installed on thin panels.



## 12. JACKING SCREW ASSEMBLY, SWAGE TYPE

The jacking screw is a dual purpose captive fastener designed for both panel retention and removal. It is ideally suited for use on sub-panels or printed wiring boards that are subject to installation and removal from enclosures where access to the panel or board is highly restricted. The sleeve that captivates the fastener to the panel is partially swaged over the screw head, which produces the jacking action when the fastener is unscrewed.



## 13. BUSHINGS AND INSERTS, THREADED OR SWAGE TYPE

These fasteners are designed to provide a bearing surface for hardened screws to prevent hole distortion under higher loads. Because they can be manufactured from a variety of materials and finishes, they may be used for special applications where fasteners and panels are made from incompatible materials.



## 14. OTHER FASTENER PRODUCTS:

Custom screws, bolts, and nuts.  
Cabinet door latches, 1/4 turn, spring loaded  
Captive spring loaded plunger pins  
Captive standoffs/spacers, threaded and plain, swage type.  
Press in captive screws  
Wood screw inserts

