

SKYBOLT

AEROSPACE FASTENERS

New from Skybolt - CLoc[®] Adjustable Receptacle for blind applications.

Now the adjustment feature is located on the front side of the inner support panel, not the backside as previous lockers.

In 1993, Skybolt reformed the ¼-Turn Fastener design by introducing the unique adjusting receptacle. The key to adjusting is a fine threaded locking insert that allows one stud length to grip a broad range of panel thicknesses. Typically, a Camloc fastener has a grip range of .030 or +/- .015 inches. This limits how and what industries would consider this type of quick acting fastener.

However, the Skybolt designed SK213, SK215, and SK245 Series receptacles created a grip range of about .300 or +/- .150 inches.

The challenge from the beginning was how to lock the insert. Our original design and patent used a spring pin to secure the insert. Of course, re-adjusting proved to be challenging. We then patented an external locking band that has served us well for over 20 years. However, the outer band does not support a blind installation or an encapsulated installation.



Skybolt then came up with the pin-ball internal locker that had many advantages except the length of the insert was longer than desired, and the ball was not retained if the insert was removed. Moreover, we had issues with unwanted unlocking which proved difficult to control from lot to lot.

The latest Skybolt Adjusting mechanism uses a rotating cam pin. It answers almost all of our desires in an adjusting fastener, is simple with a positive lock, and contains less mass and moving parts.

As we gain experience with this new patent pending design, we plan to modify all Skybolt adjusting receptacles to this design; we call our Dash 7 (-7) Series. This new generation will allow us to phase out two of our old designs and focus on just one design for all applications, blind, non-blind, encapsulated, and our SK2003-50ADJ Cessna Platemarks.



The only tool necessary is a small flat blade screwdriver similar to common eyeglass screwdrivers.

To adjust, simply locate the slotted locking pin adjacent to either of the two locking indices.

The slot should be in the position shown to lock or unlock properly. (the slot points to the center of the receptacle insert). Turn the pin 180 degrees in either direction. The pin has a camming action as it moves from lock to unlock to lock. When unlocked, the insert is free to turn for adjustment.

Unlike previous internal locking designs, this pin retains itself even when the insert is completely removed.

Note: The insert should not be adjusted such that more than three threads are showing at the top or bottom.

Because of our NASM5591 endurance testing, Skybolt recommends a small drop of oil on all fastener cross pins. This will significantly increase the endurance (cycles) of the fastener.

