

SKYBOLT

AEROSPACE FASTENERS

CLoc® | ZLoc® | ALoc® | Armorloc® | Skytanium® | Diamondhead®



Innovative Fastener Manufacturing Since 1982

Bonding Products



Industry Standard Bonding Process and Products for Panel Fasteners & Platenuts

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About Us

In 1993, Skybolt® developed high tech manufacturing processes to produce innovative ¼-turn fasteners. Developments in the aerospace and racing markets presented opportunities to design higher quality, higher strength lightweight fasteners. Skybolt® achieved three US Patents on adjustable designs that allow one fastener length to adjust to any panel thickness. We quickly introduced these designs into the FAA approval process for use on certified aircraft. We have gone on to add additional patent applications for adjustable CLoc® Fasteners.

We identified every weak point in every fastener design and capitalized on better designs. Skybolt® became the leading source for all variations of cowling fasteners common to commercial aircraft. To further develop our “kit” concept, and to create better controls on quality, we began manufacturing industry standard cowling fasteners in-house. Skybolt® could now enhance quality, strength, and luster finish. We were free to innovate and innovate we did. The new Skytanium® alloys, developed by Skybolt®, decreased weight by 40% to 50% while maintaining MIL-F-5591C and NASM5591 strength!

The Skytanium® ¼-Turn fastener and derivatives can eliminate serious weight from helicopters, UAVs, existing commercial airliners, and be the perfect answer to the Boeing 787 and Airbus 320-350 programs.



Welcome to the 2023 Skybolt® Catalog

Skybolt® has served the Aerospace and Automotive Racing industries since 1982 through distribution and manufacturing of high quality, traceable aerospace fasteners. We specialize in ¼-Turn Panel and Cowling fasteners, specifically in 303 stainless and our unique lightweight, high strength Skytanium® materials.



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AEROSPACE FASTENERS

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Skybolt® Quality Standards

AS9100D, ISO 9001:2015, FAR21.137 QMS (Quality Manual System and Quality Standards) certified and inspected by NSF-ISR and the Federal Aviation Administration, Manufacturing Inspection District Office (MIDO) and Airframe Certification Office (ACO); Registered IAQG OASIS.

AS9102 First Article and Form 8130 Release

FAA PMA PQ1554CE and Production Holder (PAH) certified and inspected by Federal Aviation Administration Manufacturing Inspection District Office (MIDO).

Supplemental Type Certificates approved and inspected by the Federal Aviation Administration, Manufacturing Inspection District Office (MIDO) and Airframe Certification Office (ACO).

Calibration Standards as per MIL-45662A/ANSI/NCSL Z540.3-2006/ISO 10012-1 & ISO/IEC Guide 25; and AS9100-7.6, 8.2.4 and FAR21.137(f).

Statistical Sampling as per ANSI/ASQC Z1.4-1993.

CLoc® components are manufactured to meet and exceed NASM5591 Table II Performance (unless noted) with in-house testing/independent testing.

CLoc®, ALoc®, ZLoc® components (unless noted) are approved under TSO-C148 requirements for installation or replacement on all TC certificated airframes.

Cage Code 435Z0

HTS (ECCN)
CCR Number
JCP Number
North American Industry Classification (NAICS)

Standard Industrial Classification (SIC)
Federal Supply Classification (FSC)
JCP US/Canada Joint Cert. Office DD Form 2345
Business Type (SBA)
MPIN Marketing Partner ID

DUNS Number 10-184-9024

EAR 99
See CCR Information
0026417
336413 Other Aircraft Parts
332721 Precision Turned Mfg
3999 Manufacturing Industries, NEC
1560 Airframe Structural Components
DD Form 2345 0026417
21 Small Business
SK9000NCB



Intellectual Property

Skybolt is an innovative company. We invest vast time and money in design, engineering, and creation of innovative fasteners for a wide spectrum of industries. Skybolt® is currently filing patent paperwork at an average rate of 1 every 60 days and could file more based on our unique engineering experience in the world of Panel Fasteners. Skybolt® keeps a constant revision approval system with our aerospace oversight department of the US Government to maintain current TSO approvals; a rate far higher than most ISO9000 or AS9100 requirements.

Reference	Patent Description	File Date	Patent Owner
5,688,093	Ejecting Fastener for 1/4-Turn Fastener	11-18-1997	Ned Bowers
5,716,180	Adjustable Locking Receptacle for 1/4-Turn Fastener	2-10-1998	Ned Bowers
5,795,122	Adjustable Locking Receptacle for 1/4-Turn Fastener	8-18-1998	Ned Bowers
7,997,843	Isolator Platemount - Cam Washer Adjustment	8-16-2011	Ned Bowers/Carlos Osorio
8,282,329	Isolator Platemount - Cam Washer Adjustment	10-9-2012	Ned Bowers/Carlos Osorio
8,490,358	Interlocking Flange Mounting System for 1/4-Turn Fastener	7-23-2013	Ned Bowers/Russ Ortner
8,757,952	Isolator Platemount - Cam Washer Adjustment	6-24-2014	Ned Bowers/Russ Ortner
10,539,172	Fastener Hold Out Mechanism	8/17/2017	Ned Bowers/Russ Ortner
13/630,324	Provisional - Armor Plate Quick Release Fastener	11-8-2012	Ned Bowers/Russ Ortner
61/714,363	Provisional - Armor Plate Quick Release Fastener	10-15-2012	Ned Bowers/Russ Ortner
61/813,795	Provisional - Folding Wing - Rivet Nut 1/4-Turn Fastener	4-19-2013	Ned Bowers/Russ Ortner
14/256,436	Provisional - Structural Fastener	4-18-2014	Ned Bowers/Russ Ortner
14/850,092	Provisional - Folding Wing - Rivet Nut 1/4-Turn Fastener	5/7/2015	Ned Bowers/Russ Ortner
62/436,644	Provisional - Fastener Nutsert	12/3/2016	Ned Bowers/Russ Ortner
62/471,406	Provisional - ZLocker®	2/15/2017	Ned Bowers/Russ Ortner
62/513,663	Provisional - Adjusting CLoc® Receptacle	5/3/2017	Ned Bowers/Russ Ortner
62/657,056	Provisional - Adjusting CLoc® Receptacle	4-13-2018	Ned Bowers/Russ Ortner
62/719,841	Provisional - Adjusting CLoc® Receptacle	8-20-2018	Ned Bowers/Russ Ortner
63/446,597	QuickChange Floating Platenuts	2-17-2023	Ned Bowers/Russ Ortner

Mark	Trademark Description	File Date	Owner
Skybolt®	Skybolt® Aeromotive Corp	Continuous	Ned Bowers
Skytanium®	Skybolt® Lightweight Material	Continuous	Ned Bowers
CLoc®	CamLoc® compatible 1/4-Turn Fasteners	Continuous	Ned Bowers
ALoc®	AirLoc® compatible 1/4-Turn Fasteners	Continuous	Ned Bowers
ZLoc®	Dzus® compatible 1/4-Turn Fasteners	Continuous	Ned Bowers
Diamondhead®	CLoc® 300 Series Phillips Head Hardened Fasteners	Continuous	Ned Bowers
Armorloc®	Armor Plating Quick Release Fasteners	Continuous	Ned Bowers
QuickChange™	Quick Change Insert - Floating Platenut	Continuous	Ned Bowers
Toolless™	Toolless Insert Installation-Removal - Floating Platenut	Continuous	Ned Bowers

Copyright	Copyright Description	File Date	Patent Owner
Installation Instructions®	All Skybolt® Installation Instructions for 1/4-Turn Fasteners	Continuous	Ned Bowers

Quality Control	AC21-43/CFR14 Part 21.137 Certified	Rev B	1/10/2017
	Current FAR21.137 Certification by FAA		7/16/2018
	AS9100D with ISO 9001:2015 Certified by NSF-ISR	Rev C	12/14/2017
	AS9100D with ISO 9001:2015 Certified by NSF-ISR	Rev D	12/20/2020

Intellectual Property Cont'd

STC	Aircraft	Type Cert.	Last Revision
SA3284SO	C150, A150 Series	TC 3A19	5/8/2010
	Cessna 150 - Converts Screws to CLoc® 2000 Fasteners		
	Cessna 150 - Converts Southco® to CLoc® 4000 Fasteners		
SA3285SO	C172, R172 Series	3A12, 3A17	5/8/2010
	Cessna 172 - Converts Screws to CLoc® 2000 Fasteners		
	Cessna 172 - Converts Southco® to CLoc® 4000 Fasteners		
SA02386AT	C175, 175A, 175B, 175C Series	3A17	6/22/2006
	Cessna 175 - Converts Screws to CLoc® 2000 Fasteners		
SA3286SO	C177, 177RG Series	A13CE, A20CE	5/8/2010
	Cessna 177 - Converts Southco® to CLoc® 4000 Fasteners		
SA02387AT	C180, 180A, 180B, 180C Series	5A6	5/22/2006
	Cessna 180 - Converts Screws to CLoc® 2000 Fasteners		
SA3287SO	C182,A, B, C, Q, R, T182, 182P	3A13	5/8/2010
	Cessna 182 - Converts Screws to CLoc® 2000 Fasteners		
	Cessna 182 - Converts Southco® to CLoc® 4000 Fasteners		
SA02660AT	Beech Bonanza 35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33, E33A, E33C, F33, F33A, F33C, G33, H35, J35, K35, M35, N35, P35, S35, V35, V35A, V35B, 36, A36TC, B36TC, G36, 35, A35, B35, C35, D35, E35, F35, G35, 35R	3A15, A777	9/15/2010
	Bonanza - Converts Dzus® and AirLoc® to CLoc® 2000 and 4000 Series Fasteners		

FAA-PMA	Approval	Revision Dates
PQ1554CE	Cessna Conversion STC	6/25/2010
PQ1422CE	Beech Conversion STC	7/6/2010

TSO-C148	Approval	Revision	Revision Dates
TSO-C148	Panel Fastener Manufacturing Approval	Q	8-23-2016
TSO-C148	Panel Fastener Manufacturing Approval	R	2-15-2017
TSO-C148	Panel Fastener Manufacturing Approval	S	7-26-2017
TSO-C148	Panel Fastener Manufacturing Approval	T	11-1-2018
TSO-C148	Panel Fastener Manufacturing Approval	U	6-21-2021

Awards - Recognitions

William C Schwartz Industry Innovation Award - 2012 - Metro Orlando Economic Development Commission
Top 100 Manufacturers in Florida - 2015 - Orlando Business Journal
GROWFL - Grant Participant -2015
GROWFL - Grant Participant -2017 - Top 50
Nominated 2018 FloridaMakes/Florida Sterling Manufacturing Business Excellence (SMBE) Award
MACF - 2019 - Manufacturer of the Year