

Your Elijah Tooling, Inc. Invert-A-Bolt™ (IVB) fastener has been manufactured to provide low cost, high value performance combined with ease of use. This IVB fastener is a patent pending product, ideal for connecting two materials or objects together especially when an unobtrusive connection is desired. AA02-500-101 has incorporated a number of new features that improve its function as well as reducing or eliminating maintenance. Look for these new capabilities: a top seal to prevent debris from entering the cavity; quarter-turn capability which speeds the seating of the stud as well as making engagement faster; more insertion tool holes to increase the application of torque when installing; and a proprietary finish on the stud to improve its wear capability. In short this product is the best quick-change fastener on the market – the gold standard!

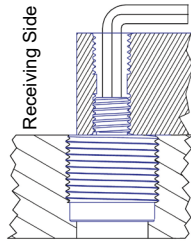
OPERATING INSTRUCTIONS

Usage of your IVB fastener requires simple preparation of the "holding" side for the housing threads and preparation of the "receiving" side for the stud threads. For Flush Mount:

- Prepare the "holding" side in the following manner:**
 Drill a 3/4" diameter (thru) hole
 C'Bore .92/.928" x .015"R
 to a depth of 1.152"
 C'bore & Tap (or Thread)
 1"-12UNF-2B-LH
 to a depth of .950"

- Prepare the "receiving" side for the stud threads:**
 Tap Drill 27/64" diameter thru. C'sink .60" dia. x 45 degrees. Tap 1/2"-13 .45" deep.

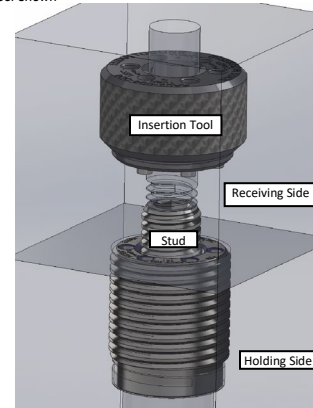
For better resistance against vibration on the receiving side, use a Spiralock® tap. Once the "holding" side and the "receiving" side have been prepped, simply screw your IVB fastener into the 1"-12 threaded hole with P/N AA02-004-004 insertion tool. Torque to 45-50 ft. lbs. Recommended: PRO-1 in-line pneumatic torque limiting wrench such as that shown at <https://elijahtooling.com/products/pro-1-torque-limiting-pneumatic-impact-wrench-with-adapter>. Place the "receiving" side 1/2"-13 tapped hole directly above the IVB fastener. Reach through the 1/2"-13 hole with your hex head wrench until contacting the hex head broach in the IVB stud. Start turning counter-clockwise and the stud will advance immediately. Tighten until the stud is fully engaged (approximately .40 inches into the "receiving" side) at 35 ft.lbs. Use a feeler gauge to insure that the "receiving" side material is pulled down properly. **NOT RECOMMENDED TO USE PNEUMATIC TOOLS TO PULL THE STUD UP INTO THE MATERIAL OR TO RETURN IT TO THE DIS-ENGAGED POSITION.**



RETURNING THE STUD TO THE FLUSH POSITION

Due to the quarter-turn technology, returning the stud to the flush position will be performed differently from the other type Invert-A-Bolt™ Fasteners. Screw the stud down until you feel it "clear" the receiving material. Then push straight down and turn one quarter turn. That motion will permit the stud to engage the keeper.

IVB fastener shown as installed with insertion tool shown



Fastener P/N: AA02-500-101
 1/2"-13 dia. Stud x 1.00"-12 dia LH Housing
 1/4" hex, 1/4 Turn Design



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LIMITED WARRANTY

We warrant that within 90 days from the date of shipment, if the product manufactured by us and sold by us (or an authorized distributor) is in the possession of the original buyer, we will replace or repair, at our option, free of charge, any part or parts which upon examination are found to be defective in workmanship or material, and not due to normal wear, provided that, upon our request, the product or parts thereof are returned to our location, with accompanying documentation that the product has been installed, used and maintained in accordance with instructions and has not been subject to abuse. We shall not be liable or responsible for any expense or liability for repairs, additions, or modifications made upon the product without our written consent.

This warranty is in lieu of all other express or implied warranties (including without limitation any warranty of merchantability or fitness for a particular purpose.) In no event shall we be liable for any indirect, special, or consequential damages (including, but not limited to, lost profits or other damages from loss of production) caused by defective material, or by unsatisfactory performance of the product, or by any other breach of contract by us.

The Elijah Tooling, Inc. Warranty shall apply in all cases to all products manufactured by us and sold by us. Elijah Tooling, Inc. reserves the right to modify or change the design of products shown in this specification/instruction sheet, without notice. Such modifications or changes may include, but are not limited to, changes in finish, materials, specifications, etc., from descriptions and illustrations of products listed herein.

Proviso: The IVB fastener is not certified to any specification. If loading is a concern, you should perform your own load analysis prior to usage in an application. Shear and Tensile Load information for some Invert-A-Bolt™ products is available on our website at www.invert-a-bolt.com. The IVB fastener should be used in only two positions – fully engaged and fully dis-engaged.

