

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 fastener is designed to provide the basic characteristics of the Invert-A-Bolt™ concept with the exception that the stud is contained by the mill fixture rather than by an outer housing. To make use of this IVB fastener, simply prep the fixture and insert the components as described below.

**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. Note: This product can be used in an AA02 type hole as well. If desirable, please see the AA02-015-021 instructions for more information. For Flush Mount:

- 1 Prepare the "holding" side in the following manner:**  
Counterbore .846" x .015"  
to a depth of 1.151"/1.157".

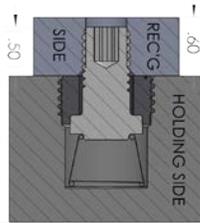
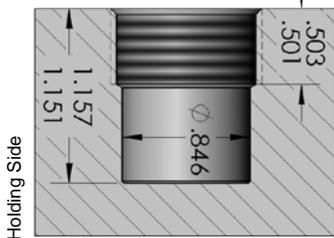
Counterbore .92"/.928" (minor diameter)  
to a depth of .501"/.503".

Tap (or thread) 1"-12 UNF-2B-LH  
to a depth of at least .375"

To install the IVB Fastener:  
Simply place the spring into the "holding" side hole, place the stud on top of the spring (threads facing out of the hole). Using P/N AA02-004-004 insertion tool, screw the 1" diameter cap into the on top of the 1"-12 threaded hole until it bottoms out in the hole. Note: you will have to "force" the stud down through the hole of the cap with the insertion tool in order to screw it down flush.

- 2 Prepare the "receiving" side for the stud threads:**  
Tap Drill through using 27/64" diameter drill. Tap (or thread) 1/2"-13 UNC 2B .60" deep. C'sink .60" dia. X 45 degrees.

For better resistance against vibration, use a Spiralock® tap. Once the "holding" side and the "receiving" side have been prepped, 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. The stud will proceed into the 1/2"-13 tapped hole. Tighten until the stud is fully engaged (approximately .50" inches into the "receiving" side). Use a feeler gauge to insure that the "receiving" side material is pulled down properly.

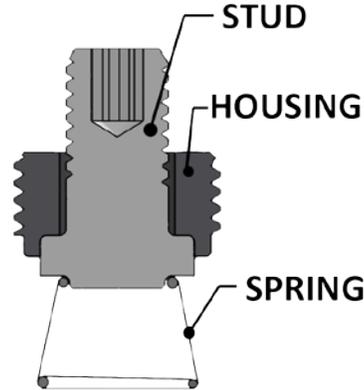


**REPLACEMENT PARTS & MAINTENANCE**

Periodically remove the cap of the IVB fastener, blow out the hole to clean out accumulated metal chips and debris.

Replace internal components (stud and spring) as required by ordering refurbishment kit AA06-015-021RFB.

Cross section of IVB fastener



Fastener P/N: AA06-015-021  
1/2"-13 dia. Stud x 1-12 dia left hand Housing  
1/4" hex



**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](http://www.invert-a-bolt.com). The IVB fastener should be used in only two positions – fully engaged and fully dis-engaged.

