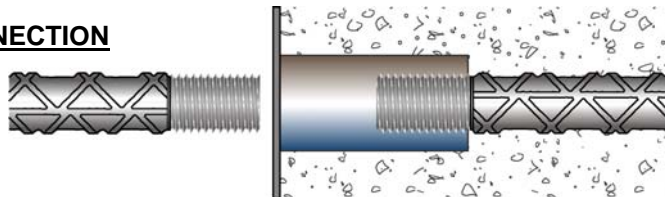


## INSTALLATION INSTRUCTIONS FOR FIELD ASSEMBLY OF BPI® BARSPLICER COUPLERS ON GRADE 60 THREADED REBARS [U.S. METRIC GRADE 420]

Internal coupler threads are protected by plastic plugs and external rebar threads are protected by plastic caps, both of which should be kept in place until the time of assembly. If missing, **obtain the correct plugs/caps** from the manufacturer or supplier. If you see minor external **thread damage**, try using a thread file to correct the problem. For other thread damage, it may be necessary to use a thread die tool. **DO NOT TRY TO ASSEMBLE DAMAGED THREADS.** You may cause premature binding. **DO NOT USE THIS COUPLER IN CONJUNCTION WITH A REBAR WHICH IS LARGER OR SMALLER THAN THE INTENDED BAR SIZE. DO NOT USE WITH ANYTHING OTHER THAN UNIFIED NATIONAL COURSE (UNC) THREADS. STORE COUPLERS IN A CLEAN, DRY PLACE UNTIL READY TO INSTALL.** When the bar cannot be turned, use a BPI® Barsplicer Position coupler or an alternate splice system such as Zap Screwlok®.

- 1 If the Barsplicer coupler is placed first, make sure the internal coupler thread is protected from the concrete before pouring concrete around or near the coupler. Make sure the coupler flange is properly secured to the form. Make sure that the bar is properly supported and tied off. If the threaded rebar is placed first, make sure the rebar thread is protected from the concrete before pouring concrete around or near the thread. **DO NOT PLACE REINFORCING BAR OR COUPLER IF THE THREADS ARE DAMAGED AND CANNOT BE REPAIRED.**
- 2 When joining the threaded rebar and Barsplicer coupler, remove the protective caps and plugs and then line up both sides as straight as possible as shown in the pre-assembled condition below.

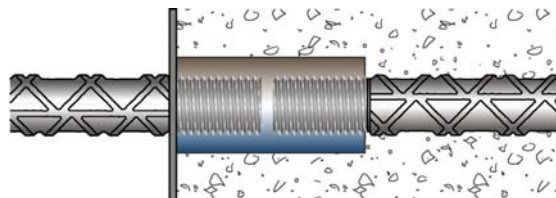
### PRE-ASSEMBLED CONNECTION



Just before assembly, check both internal and external threads for cleanliness. Clean off any foreign matter. **DO NOT USE CORROSIVE ACIDS.** Any thread damage must be corrected as noted above before installation.

- 3 After the initial thread location, rotate the free rebar clockwise making sure that the threaded ends remain aligned. NOTE: If the threaded end of the rebar is bent, **DO NOT ALIGN THE REBARS. ALIGN THE THREADS SO THAT THE THREADS SCREW TOGETHER.** Continue to rotate the free rebar by hand. If you feel the threads starting to prematurely bind, **DO NOT FORCE THEM. Shake the free end of the rebar while turning.** Allow the free end of the rebar to rotate in its own natural circle. **ASSEMBLE UNTIL THREADS ARE FULLY ENGAGED.**

### ASSEMBLED CONNECTION



If the threaded rebar end does not properly engage into the Barsplicer coupler during assembly, stop immediately. Disassemble the connection to determine the problem. Possible causes of mis-assembly may be either mis-matched thread sizes, or bars are rubbing against each other, or threads are contaminated with (ex.) concrete, dirt, or threads have been damaged. Reassemble only after the problem has been identified and corrected.

- 4 To be assured that the threads have been fully engaged, use a pipe wrench or chain wrench to snug and tighten the assembly. Long lengths of rebar, especially large diameter bars are heavy. To overcome bar weight or bars rubbing against each other, it may be necessary to use an extension bar. As a guide, and as necessary, use the following wrench lengths: Coupler sizes #3 - #6 = 8"-12" length, sizes #7 - #8 = 12"-18" length, and sizes #9 - #11 = 18"-24" length. **DO NOT WIRE TIE BARS UNTIL AFTER FULL ASSEMBLY.** In all cases, consider your own **personal safety.** Make sure you are securely positioned and that you will not slip or fall during installation. Use only good quality wrenches that will not round-out.
- 5 Inspect the splice for proper thread engagement. For Barsplicer threads, some variation in the number of exposed threads is natural due to thread tolerance build-up and thread run-out. In general, it is usual to see 0 to 1 threads after full assembly. Fully assembled threads can be double-checked by the application of a pipe wrench, which overcomes the weight of the bar as described above. **IT IS NOT NECESSARY TO USE A TORQUE WRENCH OR APPLY A HIGH TORQUE VALUE.**
- 6 In the case of epoxy coated couplers and rebar, touch-up any damaged areas with an epoxy repair kit. Seal off the rebar at the point of entry of the rebar into the coupler using epoxy repair material.