19.0 FIELD ASSEMBLY OF TAPER GRIP-TWIST POSITION COUPLERS

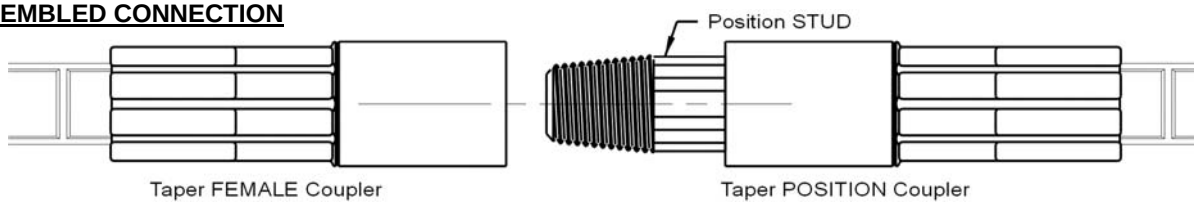
FABRICATOR IS RESPONSIBLE FOR PROVIDING THESE INSTRUCTIONS TO THE PLACER AND/OR CONTRACTOR.

Female threads are protected by color-coded plastic plugs and Male threads are protected by color-coded 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. 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 cleaner tool. DO NOT TRY TO ASSEMBLE DAMAGED THREADS. You may cause premature binding. Care must be taken to install the proper size rebar and coupler in the correct location, especially with transition splices. Note: All couplers are marked with rebar size and material code. DO NOT USE THIS COUPLER IN CONJUNCTION WITH A REBAR WHICH IS LARGER OR SMALLER THAN THE INTENDED BAR SIZE. CONTACT BPI FOR TRANSITION SPLICES. STORE COUPLERS IN A CLEAN, DRY PLACE UNTIL READY TO INSTALL.*

1 If the Taper Female coupler is placed first, make sure the female thread is protected from the concrete before pouring concrete around or near the Female coupler. If the Taper Position coupler is placed first, make sure the STUD threads and knurl are entirely shielded from the concrete before pouring concrete around or near the coupler. DO NOT PLACE REINFORCING BAR IF SWAGING IS NOT CORRECT.

2 When joining the Taper Position and Female coupler, remove the protective plugs and caps and then line up both sides as straight as possible as shown in the pre-assembled condition below.

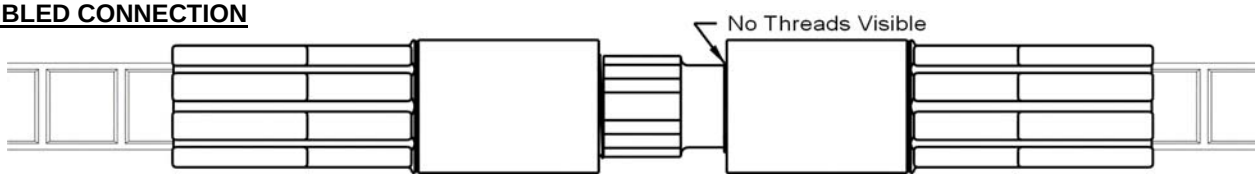
PRE-ASSEMBLED CONNECTION



Just before assembly, check both male and female 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 Move the free bar towards the fixed bar so as to locate the male thread inside the female. Rotate the position STUD clockwise making sure that the two coupler halves remain aligned. NOTE: If the coupler(s) have been swaged onto a crooked bar end, **DO NOT ALIGN THE REBARS. ALIGN THE COUPLERS SO THAT THE THREADS SCREW TOGETHER**. Continue to rotate the position STUD by hand. If you feel the threads starting to prematurely bind, DO NOT FORCE THEM. **Rock or shake the free end of the rebar while turning the STUD**. **ASSEMBLE UNTIL THE STUD TAPER THREADS ARE FULLY ENGAGED INTO THE FEMALE COUPLER**. Usually, this takes 4 to 5 turns. After assembly, there should be no threads visible on the position coupler side.

ASSEMBLED CONNECTION



If the threads of the position STUD do not properly engage during assembly, stop immediately. Disassemble the connection to determine the problem. Possible causes of mis-assembly may be either mis-matched thread sizes (be especially careful if splice is a transition), or threads are contaminated with (ex.) concrete, dirt, or threads have been damaged. Re-assemble only after the problem has been identified and corrected. Before re-assembly, make sure the position STUD is fully wound into the Taper Position coupler as shown in the pre-assembled connection above.

4 To be assured the taper threads have been fully engaged, use a pipe wrench or chain wrench to snug and tighten the position STUD into the taper Female. Long lengths of rebar, especially large diameter bars are heavy. To overcome bar weight, it may be necessary to use an extension bar. As a guide, and as necessary, use the following wrench lengths: Position coupler sizes #5-#6 = 8-12" length, sizes #7-#8 = 12-18" length, sizes #9-#11 = 18-24" length, and sizes #14-#18 = 24-36" 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 swaged length and thread engagement. For the position STUD, some variation in the number of exposed taper 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 taper 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**.

Please direct all assembly questions to BarSplice Products, Inc. (937) 275-8700.