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INSTALLATION INSTRUCTIONS FOR FIELD ASSEMBLY OF BPI® BARSPLICER COUPLERS WITH BPI® THREADED REINFORCEMENT BAR

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

Internal coupler threads are protected by plastic plugs and rebar threads are protected by plastic caps, both of which should be kept in place until time of assembly. If missing, obtain the correct caps/plugs from the manufacturer. If thread damage is discovered, it must be corrected before assembly to avoid premature binding. Minor thread damage can be fixed using a thread file, or a thread cleaning tool. For other thread damage, it may be necessary to use a thread die tool. DO NOT TRY TO ASSEMBLE DAMAGED THREADS. All Barsplicer couplers are marked with the intended rebar size. DO NOT USE WITH REBAR THAT IS LARGER OR SMALLER THAN THE INTENDED BAR SIZE, OR WITH REBAR THREADS OTHER THAN UNIFIED NATIONAL COURSE (UNC). STORE BARSPLICER COUPLERS AND BPI® THREADED BAR IN A CLEAN, DRY PLACE UNTIL READY TO INSTALL.

When the bar cannot be turned, use a Barsplicer Position coupler or an alternate splice system such as Zap Screwlok®.

CAUTION: When installing to formwork, make sure thread plugs are installed in all couplers prior to attaching to form or pouring concrete around or over the placed setting bars. DO NOT POUR CONCRETE IF THREADS ARE NOT PROTECTED.

If installing Barsplicer setting bars with flanged couplers to formwork, use suitable screws or nails through the two holes in the flange.
When reinforcing bar is horizontal, make sure to use both holes with the flange orientated vertically. See FIGURE 1 connection.
Continue with splice bar assembly once concrete is poured and form is removed. If couplers do not have flanges, continue to step 2.

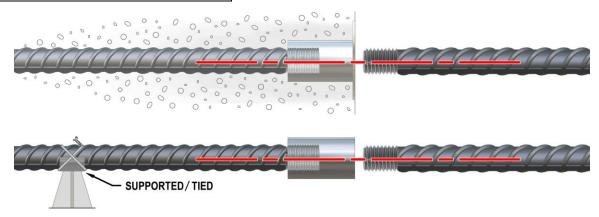
FIGURE 1: FLANGE CONNECTION (IF PRESENT)



NOTE: Flanges are NOT structural components. After attachment, rebar extending from the coupler MUST be properly supported and tied to prevent bar movement which could result in the flanges disconnecting from the coupler, or the coupler pulling away from the form. **DO NOT STAND ON UNSUPPORTED OR IMPROPERLY SUPPORTED BARS AND/OR COUPLERS.**

- 2) Remove the protective cap from threaded rebar and protective plug from the coupler and check both external (rebar) and internal (coupler) threads for cleanliness. Clean off any debris and/or foreign matter. DO NOT USE CORROSIVE ACIDS. Any thread damage must be corrected as noted above prior to installation.
- 3) Locate the BPI threaded rebar (splice bar) and coupler (setting bar), and line them up as straight as possible. See FIGURE 2 for preassembled connection. DO NOT ALIGN THE REBAR. Align the THREADS of the bar and Barsplicer coupler so that they will screw together without binding.

FIGURE 2: PRE-ASSEMBLED CONNECTION



NOTE: If the threaded rebar and coupler threads do not properly engage during assembly, stop immediately. Disassemble the connection to determine the problem. Possible causes of mis-assembly may be mis-matched thread sizes, contaminated threads (i.e. concrete, dirt, etc.) or damaged threads. Re-assemble only after the problem has been identified and corrected.

Please direct all assembly questions to BarSplice Products, Inc.

4) After the initial thread location, rotate the free rebar clockwise making sure the threaded bar and coupler remain aligned. If you feel the threads starting to prematurely bind, DO NOT FORCE THEM. Shake the free end of the rebar while turning, allowing the free end of the rebar to rotate in its own natural circle with the coupler threads aligned. Continue to rotate until FULLY ENGAGED and SNUG. See FIGURE 3 for assembled connection. For easy threading of splice bars, consider using the BPI® BARBARIAN BAR SPINNER. (https://www.barsplice.com/barbarian.html)

FIGURE 3: ASSEMBLED CONNECTION



NOTE: If a setting bar was supplied with a coupler already attached, no additional installation is required on that bar. If both sides of the coupler require rebar to be installed into it, tighten the first side as described before tightening the second side as described. When installing epoxy coated or galvanized couplers and rebar, apply wrench to the rebar, not the coated coupler.

- 5) A chain wrench or pipe wrench can be used to snug and tighten the threaded bar and couplers as needed. No more than one half additional turn should be required once threaded bar is snug within the coupler. Always consider your own **personal safety**. Make sure you are securely positioned and that you will not slip or fall during installation.
 - NOTE: Long lengths of rebar, especially large diameter bars, are heavy. To overcome rebar weight, it may be necessary to use an extension bar. As necessary, use the following wrench lengths as a guide: Bar sizes #4 #6 (16-19 mm / 10M, 15M & 20M) = 8 12" (20-30 cm) length; Sizes #7 #8 (22-25 mm / 25M) = 12 18" (30-45 cm) length; and Sizes #9 #11 (29-36 mm / 30M & 35M) = 18 24" (45-60 cm) length. DO NOT WIRE TIE BARS UNTIL AFTER FULL ASSEMBLY.
- 6) After assembly, inspect for proper thread engagement. For BPI® Barsplicer threads, some variation in the number of exposed threads is natural due to the thread tolerance and run-out. In general, it is typical to see 0 to 1 complete thread(s) on each side of the coupler after full assembly, per FIGURE 3. If needed, fully assembled threads can be double-checked using a chain or pipe wrench as described above, to ensure they are snug. IT IS NOT NECESSARY TO USE A TORQUE WRENCH OR APPLY A HIGH TORQUE VALUE.
- 7) When installing epoxy coated rebar into epoxy couplers, touch-up any exposed or damaged areas, and seal off the rebar threads at the points of entry into the coupler, using epoxy repair kit. When installing galvanized rebar into galvanized couplers, touch-up any exposed or damaged areas, and seal off the rebar threads at the points of entry into the coupler, using a zinc-rich cold galvanizing paint.