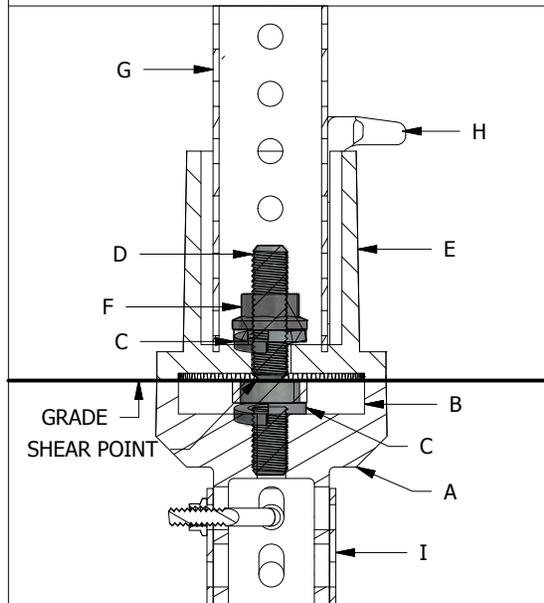
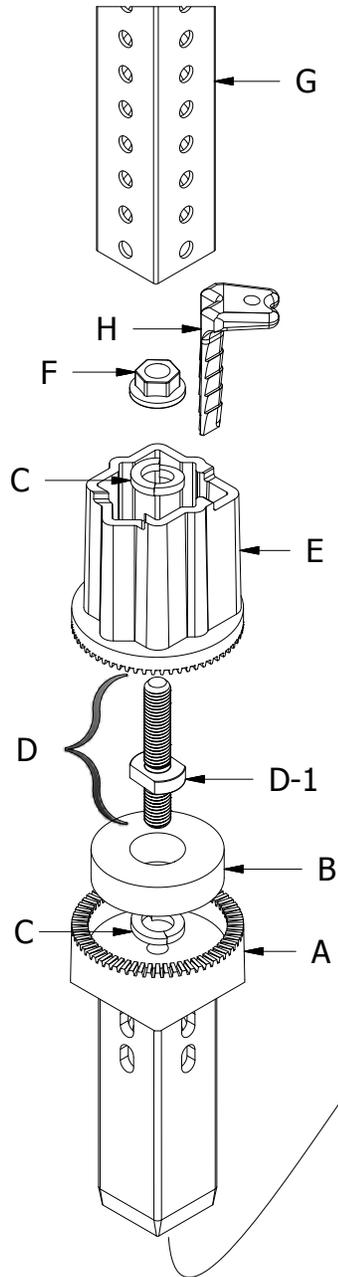


**INSTALLED CROSS SECTION VIEW**



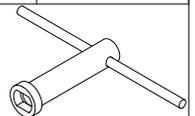
**PARTS LIST**

- A BOTTOM HALF COUPLER
- B RUBBER BUSHING
- C LOCK WASHER
- D 5/8"-11 x 4" SHEAR BOLT
- D-1 SHOULDER
- E TOP HALF COUPLER
- F 5/8"-11 SERRATED FLANGE NUT
- G SIGN SUPPORT
- H SIGN SUPPORT LOCKING WEDGE
- I 2-1/4" x 12ga. ANCHOR EXTENSION (optional) (includes corner bolt & nut)



**INSTALLATION PROCEDURE**

**TOOLS NEEDED:** **XKBW-SOCKET** Kleen Break Socket or **XKBW-1516** KLEEN BREAK WRENCH, and **HAMMER**



When installing into fresh concrete, it is helpful to preassemble Kleen Break coupler (steps 1-3). This prevents concrete from interfering with the meshing of serrated teeth. When pouring the footing. It helps to drive optional anchor extension (I) plumb into soil in bottom of hole a couple of inches prior to pouring, to prevent movement of assembly.

**NOTE:** If installing bottom half coupler (A) into existing concrete, a  $\phi 4"$  hole needs to be cored. Anchor extension (I) is optional if additional length beyond the 8" bottom half coupler stem (A) is desired. In the event an existing 2-1/4" PSST anchor is to be used, bottom half of coupler (A) may rest on top of existing concrete to meet FHWA/NCHRP 350 requirements. When a tripping hazard is a concern, bottom half (A) should be installed flush with grade.

- STEP 1** Thread short end of shear bolt (D), with lock washer (C) under shoulder (D-1), into threaded hole in bottom half coupler (A). Tighten with (XKBW-SOCKET) Kleen Break Socket or a Kleen Break Wrench (XKBW-1516) until split ring lock washer (C) is fully compressed.  
**NOTE:** Be sure that the shear point of shear bolt (D) is now above shoulder (D-1).
- STEP 2** Slide rubber bushing (B) over shear bolt (D) until seated firmly into round cavity in bottom half coupler (A).
- STEP 3** Slide top half of coupler (E) over shear bolt (D) until it rests on the rubber bushing (B). Using lock washer (C), thread 5/8" flange nut (F) onto top of shear bolt (D) with a Kleen Break Socket or a 15/16" deep well socket. Rotate top receiving half of coupler (E) to proper orientation of sign before tightening flange nut (F), not to exceed 110 ft.-lbs. Be sure coupler teeth are fully meshed. Total Kleen Break coupler assembly should be completely tight before proceeding to the next step.
- STEP 4** Insert sign support (G) into top half of coupler (E). Locking wedge (H) should be positioned at a corner of the sign support (G). With a hammer, drive the sign support locking wedge (H) between sign support (G) and top half coupler (E) at pre-determined location until seated in corresponding depression of top half coupler (E).  
**NOTE:** It is not necessary to drive the locking wedge (H) until it has bottomed out in the post receiving coupler (E). Due to the tolerance when hot dip galvanizing (thickness, runs, or drips) the locking wedge (H) can be fully engaged at different depths.  
**NOTE:** The sign support locking wedge (H) will keep the sign support (G) secure without need of additional fasteners or hardware.  
**NOTE:** Locking Wedge (H) can be removed by using a Light Duty Wedge Puller.

**REINSTALLATION AFTER IMPACT**

Remove sign support locking wedge (H) from top half coupler (E) with hammer. Remove both ends of broken shear bolt (D) from both coupler halves (A) & (E). Reassemble following steps 1 through 4 from the installation procedure.