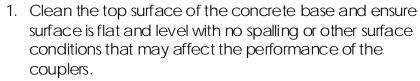
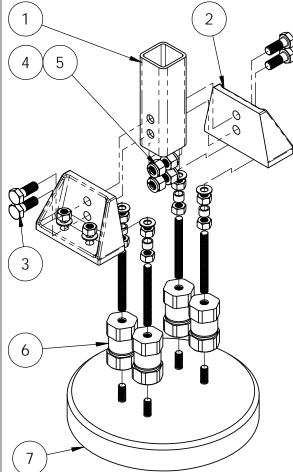
## SB503 ROADSIDE SIGNAGE BREAKAWAY BASE INSTALLATION INSTRUCTIONS - MALE ANCHORS

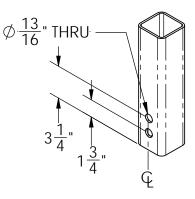
The following installation instructions are applicable to new installations or existing installations where appropriate anchors have been cast into the concrete base support.

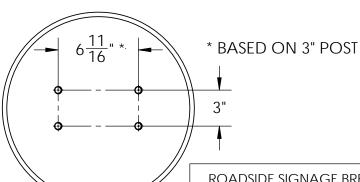


- 2. The preferred maximum height above level grade to the top of the concrete base is 1 5/8 inches or less. This provides the recommended clearance in the event of a collision with the structure.
- 3. Measure the height of the threaded anchor bolts above the concrete base (or reaction plate if used) and ensure this measurement is between 1 1/4 and 1 3/8 inches.
- 4. It is recommended that the threaded anchor bolt-coupler connection be coated with a rust-inhibiting grease. This will facilitate removal of the coupler when it is necessary. A suitable product for this application is ARCAN 1, a white, water resistant grease marketed by IMPERIAL OIL LTD.
- 5. Thread the coupler assembly on each anchor bolt (if the coupler assembly upper stud becomes loose as a result of handling, ensure that the stud is engaged at least 1 ¼" but not more than 1 3/8" in the coupler before locking with the locknut).

Note: The entire lower face of the coupler must be in contact with the concrete base. If protrusions, spalling or other surface conditions prevent proper contact, repair the surface or install a reaction plate.







ROADSIDE SIGNAGE BREAKAWAY BASE



SQ POST HOLE LOCATIONS

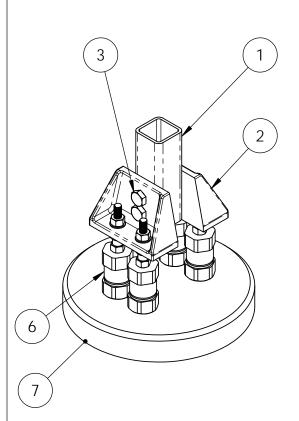
## SB503 ROADSIDE SIGNAGE BREAKAWAY BASE INSTALLATION INSTRUCTIONS - MALE ANCHORS

Continued from previous page)

6. Snug up each coupler against the concrete base (or reaction plate if used). Tighten each coupler alternately and incrementally, by means of a wrench or a pipe wrench on the bottom hex of the coupler with approximately 80 footpounds of torque.

Note: Tightening the coupler on the top hex may weaken the coupler at the machined groove.

- 7. Bring the leveling nuts (and hence, the lower washers) into a level plane as desired making certain that at least one plastic spacer remains in contact with its leveling nut and its lock nut.
- 8. Secure the angle brackets to the lower support column. Torque fasteners to 80 ft lbs.
- 9. Hoist the lower support column and angle bracket assembly onto upper coupler studs and secure with upper washers and retaining nuts. Provide external temporary support.
- 10. With the sign support in the required vertical orientation, and before the final tightening, ensure that all leveling and retaining nuts and lower and upper washers are made snug against the support angle brackets.
- 11. Tighten the top nuts to 80 ft lb torque while retaining the lower nut.
- 12. Once the support is secure, the external temporary support may be removed.



ITEM NO.	PART NO.	DESCRIPTION	TYPE 1 QTY.	TYPE 2 QTY.
1	-	SQ. POST	1	1
2	M33	SQ. POST BRACKET	2	2
3	M17	3/4" - 10 UNC GALV. HEX BOLT X 2" LG.	4	4
4	M65	3/4" GALV. LOCK WASHER	4	4
5	M16	3/4" - 10 UNC GALV. HEAVY HEX NUT	4	4
6	C10S ASSY	PLAIN COUPLER C10S ASSY	4	-
6	C10SG ASSY	GALV. COUPLER C10S ASSY	-	4
7		CONCRETE BASE WITH ANCHORS	1	1



SEPT 26/12