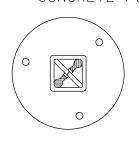
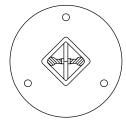
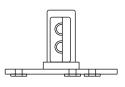
MULTI-DIRECTIONAL BREAKAWAY COUPING CONCRETE FOOTING INSTALLATION

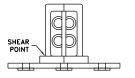




TOP SECTION VIEW

TOP ROTATED 45°





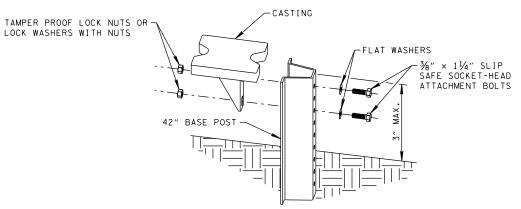
FRONT VIEW

(TO BE PAID UNDER ITEM NO. 713-11.04)

FRONT ROTATED 45°

P-POST

U-POST MULTI-DIRECTIONAL BREAKAWAY SLIP BASE



NOTE: BOLTS SHOULD BE TIGHTENED $\frac{1}{2}$ TO $\frac{3}{4}$ TURN AFTER SNUG.

STEP 1

DIRECTION OF TRAFFIC -TOP POST LOCK NUTS OR -FLAT WASHERS LOCK WASHERS WITH NUTS × 11/4" SLIP SAFE SOCKET-HEAD -LOCK NUT ATTACHMENT BOLTS -LOCK WASHER -U-BRACKET -FLAT WASHER ·II-BRACKET FLAT WASHER 28 GAGE GALVANIZED 1/2" × 21/8" SLIP SAFE KEEPER PLATE ATTACHMENT NOTE: TIGHTEN NUTS $\frac{1}{3}$ TO $\frac{1}{2}$ TURN AFTER SNUG.

STEP 3

(TO BE PAID UNDER ITEM NO. 713-11.22)

STEP 2

GENERAL NOTES

- (A) BREAKAWAY SIGN SUPPORTS SHALL BE USED ON ALL SIGN POSTS LOCATED WITHIN THE CLEAR ZONE OF A ROADWAY AND NOT PROTECTED BY AN APPROVED BARRIER SYSTEM.
- B SINGLE OR DOUBLE POSTS SIZED 3 LBS/FT OR SMALLER WITH A 7-FOOT CLEAR SPAN BETWEEN DOUBLE POSTS MAY BE DIRECT DRIVEN, AS THE POSTS ALONE ARE CONSIDERED BREAKAWAY PER FHWA. ALL TRIPLE U-POST INSTALLATIONS OF ANY SIZE POST, AND ALL 4 LBS/FT U-POST (MEMBER DESIGNATION U7 ON T-S-19) INSTALLATIONS OF ANY NUMBER OF POSTS, SHALL UTILIZE AN APPROVED BREAKAWAY SYSTEM. MULTI-DIRECTIONAL OR LAP-SPLICE SYSTEMS MAY BE USED, EXCEPT WHERE NOTED OTHERWISE, OR AS DIRECTED BY THE ENGINEER.
- (C) NO MORE THAN 2 SIGN POSTS OF ANY GAGE SHALL BE LOCATED WITHIN A 7-FOOT CIRCLE.

- SOLID TOP

- SOLID BOTTOM

ROTATED 45° VIEW

BOTTOM SECTION

P-POST

MULTI-DIRECTIONAL BREAKAWAY COUPING

GROUND INSTALLATION

TOP SECTION

FRONT VIEW

- (D) MULTI-DIRECTIONAL BREAKAWAY SLIP BASE SHALL BE USED AT LOCATIONS WHERE THE POSSIBILITY EXISTS OF THE SIGN BEING HIT FROM ANY DIRECTION. ALL U-POST SIGNS LOCATED IN ISLANDS, AT INTERSECTIONS, OR LOCATED ALONG THE OUTSIDE OF A HORIZONTAL CURVE SHALL BE EQUIPPED WITH A BREAKAWAY SYSTEM, REGARDLESS OF THE NUMBER OF POSTS OR SPACING.
- © ALL SIGN PANELS PLACED PARALLEL TO THE DIRECTION OF TRAFFIC FLOW (SUCH AS ONE-WAY SIGNS ON A DIVIDED HIGHWAY) SHALL BE MOUNTED ON A MULTI-DIRECTIONAL BREAKAWAY SYSTEM.
- © BREAKAWAY DEVICE IS OPTIONAL FOR POSTS WEIGHTING LESS THAN 3 LB/FT. BREAKAWAY DEVICE IS REQUIRED FOR HIGH SPEED (>45 MPH) FACILITIES.

SLIP BASE NOTES

- (6) BASE POST STUB HEIGHT SHALL BE 4 INCHES OR LESS ABOVE FINISHED GROUND SURFACE. WHEN DRIVING THE STUB POST, A DRIVE CAP OR OTHER ACCEPTABLE MEANS SHALL BE USED TO PROTECT THE TOP OF THE STUB POST FROM DAMAGE.
- (H) ALL FINISHED COMPONENTS OF THE SLIP BASE SYSTEM SHALL BE PERMANENTLY MARKED TO INDICATE THE MANUFACTURER. METHOD, DESIGN, AND LOCATION OF MARKING SHALL BE AS APPROVED BY THE ENGINEER.
- 1 THE STUB POST AND THE U-CHANNEL POST SHALL BE OF THE SAME SIZE (LB/FT) AND FROM THE SAME MANUFACTURER.
- ① INTERMIXING OF U-CHANNEL POSTS WITH PERFORATED SQUARE TUBE POSTS AT ANY SIGN INSTALLATION LOCATION WILL NOT BE
- (K) FOR BASE STUB AND U-POST MATERIAL PROPERTIES, SEE STANDARD DRAWING T-S-19. FOR DETAILS OF SIGN CONNECTION TO U-POST, SEE OTHER T-S-SERIES STANDARDS.
- U STEEL U-POSTS, BASE POSTS, SLIP BASES, AND HARDWARE SHALL BE SELECTED FROM THE OPL. ONLY SLIP BASE SYSTEMS ON OPL LIST 33 MAY BE USED.
- (M) TO BE PAID FOR UNDER ITEM NO. 713-11.22 U POST SLIP BASE PER EACH (INCLUDES COST OF SLIP BASE AND STUB)

COUPLING NOTES

- (N) CONFIRM IF SIGN SUPPORT STRUCTURAL DESIGN CALCULATIONS WOULD ALLOW TO HAVE A COUPLING SYSTEM.
- ① INSTALL MULTI-DIRECTIONAL BREAKAWAY COUPLING SYSTEMS AS DIRECTED BY MANUFACTURER.
- P ONLY COUPLING SYSTEMS ON QPL LIST 33 MAY BE USED.
- (a) TO BE PAID FOR UNDER ITEM NO. 713-11.04 SURFACE MOUNT BREAKAWAY BASE FOR SIGN POST PER EACH.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

> BREAKAWAY POST SIGN SUPPORTS

09-01-12 T-S-23C

NOT TO SCALE