

HINGE ASSEMBLY

1. BUTT UPPER AND LOWER POSTS TOGETHER ON FLAT SURFACE.
2. PLACE HINGE PLATES (13) ON OUTER FLANGES AND SNUGLY SECURE WITH $\frac{3}{4}$ "- UNC BOLTS (14) (15) AND (16). DO NOT TIGHTEN.
3. MAKE SURE UPPER AND LOWER POSTS ARE IN ALIGNMENT. THEN TIGHTEN ALL NUTS (16) TO PROOF LOAD - ONE HALF OF A TURN BEYOND SNUG.

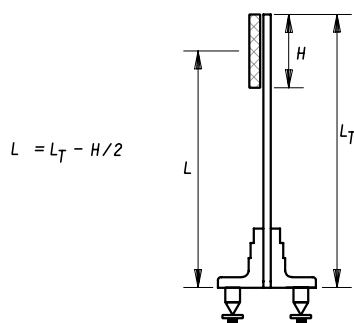
GENERAL NOTES

1. INSTALLATION MUST MEET AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS".
2. ALL HARDWARE SHALL BE HOT DIP GALVANIZED PER A 153.
3. FASTENERS, EXCEPT FOR SPECIAL BOLT AND COUPLING, SHALL BE INSTALLED WITH LOCKWASHERS OR LOCKNUTS AND DO NOT HAVE SPECIFIC TORQUE REQUIREMENTS. FASTENERS SHOULD BE MADE AS TIGHT AS POSSIBLE WITH CONVENTIONAL WRENCHES.
4. SQUARE AND LEVEL INDIVIDUAL COMPONENTS TO MINIMIZE NEED FOR SHIMMING.
5. NO MORE THAN TWO SHIMS SHALL BE USED UNDERNEATH ANY ONE COUPLING. NO MORE THAN THREE SHIMS SHALL BE USED UNDERNEATH ANY TWO COUPLINGS.
6. STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED PER A 123 FABRICATION.
7. ALL BRACKETS SHALL BE PERMANENTLY LABELED WITH THE APPROPRIATE BRACKET TYPE AND BRACKET SELECTION NUMBER.
8. SELECT CORRECT BRACKET NUMBER FROM BRACKET SELECTION TABLE USING THE PROPER 'L' VALUE AS SHOWN IN THE FIGURE BELOW.

BRACKET NUMBER	E (IN.)
1	0.100
2	0.150
3	0.200

I-BEAM BRACKET SELECTION TABLE

POST WIDTH (IN.)	BRACKET 1		BRACKET 2		BRACKET 3	
	MIN. L (FT.)	MAX. L (FT.)	MIN. L (FT.)	MAX. L (FT.)	MIN. L (FT.)	MAX. L (FT.)
6	12	29	9	12	0	9
8	14	29	10	14	0	10
10	16	29	11	16	0	11
12	18	29	13	18	0	13
14	19	29	14	19	0	14
16	21	29	15	21	0	15
18	23	29	16	23	0	16
21	25	29	18	25	0	18



SQUARE TUBE BRACKET SELECTION TABLE

BEAM SIZE (IN.)	BRACKET 1	BRACKET 2	BRACKET 3
5 x 5 x $\frac{1}{4}$	$L \geq 11$	$8 < L < 11$	$L \leq 8$
6 x 6 x $\frac{1}{4}$	$L \geq 12$	$9 < L < 12$	$L \leq 9$
7 x 7 x $\frac{1}{4}$	$L \geq 13$	$9.5 < L < 13$	$L \leq 9.5$
8 x 8 x $\frac{5}{16}$	$L \geq 14$	$10 < L < 14$	$L \leq 10$

SPECIFICATION
821

CATEGORY CODE ITEMS

APPROVED

DIRECTOR - OFFICE OF TRAFFIC AND SAFETY



APPROVAL • SHA
REVISIONS

APPROVAL 5-17-07

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Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES

BREAKAWAY BASE SUPPORT SYSTEM 'B'
FOR HIGHWAY SIGNS

STANDARD NO.

MD 821.03-06