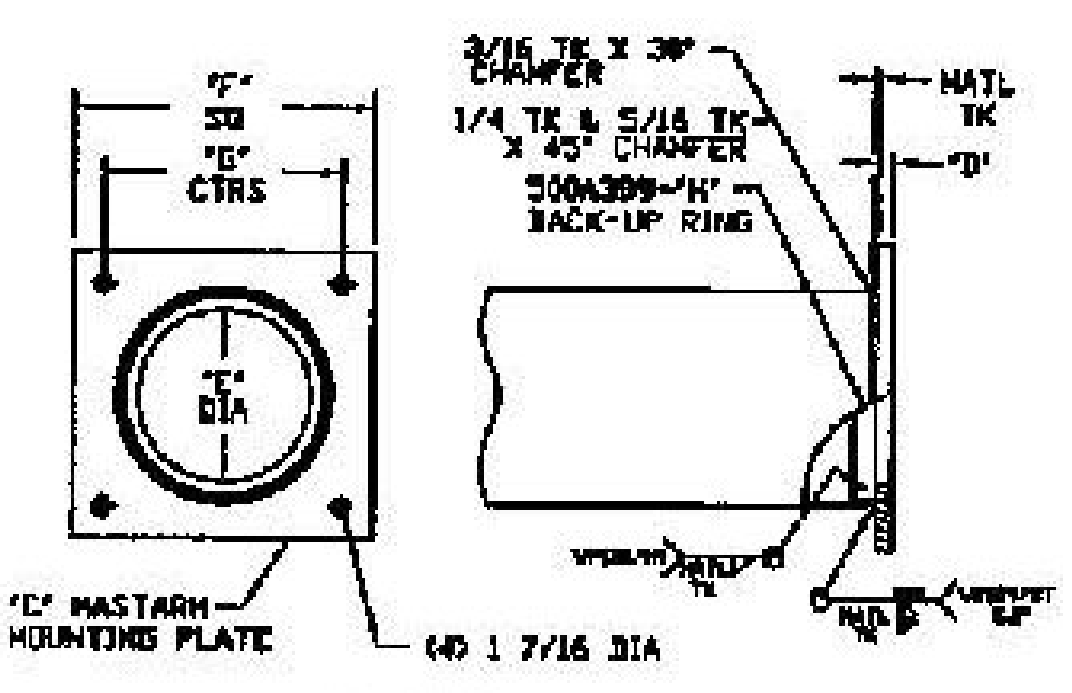


-DETAIL ② OPTIONAL MASTARM SIGNAL WIRE ENTRANCE HUB(S)-



-DETAIL ① MASTARM BASE-

- NOTE:
- MATERIAL- HIGH STRENGTH LOW ALLOY STEEL 55,000 PSI MIN YIELD PER ASTM A572 OR A101. MOUNTING PLATE MATERIAL PER ASTM A36.
  - FINISH- HOT DIP GALVANIZED PER ASTM A123 WITH TOP COAT PAINTED MILLERBERND FLAT BLACK MILLERBERND #PT-1-17-PTU-093-FR
  - MASTARM TO BE ROUND TUBE FABRICATED WITH ONE SUBMERGED ARC LONGITUDINAL SEAM WELD WITH 100% PENETRATION 6" FROM BASE PLATE & 60% FOR REMAINDER. GAS METAL ARC WELDING PROCESS TO BE USED FOR THE REMAINDER OF WELDED FABRICATION.
  - WELD TESTING- 100% PENETRATION WELDS ULTRASONIC TESTED (UT) USING THE CYCLICALLY LOADED ACCEPTANCE/REJECTION CRITERIA TABLE 6.3 OF AWS D11 SPECIFICATION. A RANDOM 30% OF REMAINING FILLET WELDS & PARTIAL PENETRATION LONGITUDINAL SEAM WELDS MAGNETIC PARTICLE TESTED (MT)
  - HEX HEAD BOLTS & NUTS (UNLESS SPECIFIED) ASTM A325 GALV A193
  - TO ADD OPTIONAL WIRE ENTRANCE HUB(S) ADD TO END OF PART NUMBER SLASH W AND NUMBER OF FEET FROM END OF MASTARM EX: 780B94-P35C0/W1-23
  - THE MASTARM & FOLLOWING ITEMS WILL BE SHIPPED UNASSEMBLED:
    - (4) 1 1/4"-7NC X "K" LG HVY HEX BOLT (A325 GV)
    - (4) 1 1/4"-7NC HVY HEX NUT (A563 GV)
    - (4) 1 1/4" LOCKWASHER (GV)
    - (1) 1/4" RD DELTECH PLASTIC CAP

DASH NO	QTY	POST SIZE	"B" SHAFT SIZE	SHAFT BLANK SIZE	"C" BASE PLATE THICKNESS	"B" BASE TK	"E" BASE DIA CUTOUT	"F" BASE SQ	"G" HOLE CTRS	"H" BACK-UP RING 500A399-	"J" DELTECH PLASTIC CAP	"K" BOLT LG	"L" RISE
P15C7	3	E0	3/16 X 7.0 X 4.90 X 15'-0"	21 3/8 + 14 13/16 = 36 3/16	291	1 1/4	4 1/2	14"	11"	500A399-1R	5"	4 1/2	3.0"
P15C7		E0	3/16 X 7.0 X 4.34 X 19'-0"	21 3/8 + 13 1/16 = 34 7/16	35	1 1/4	4 1/2	16 1/2	12 1/2	500A399-1R	4 1/4	4 1/2	2.0"
P20C7		E0	3/16 X 7.0 X 4.20 X 20'-0"	21 3/8 + 12 5/8 = 34"	291	1 1/4	4 1/2	14"	11"	500A399-1R	4 1/4	4 1/2	2.0"
P20C8		E1	3/16 X 8.0 X 5.20 X 20'-0"	24 9/16 + 15 3/4 = 40 3/16	302	1 1/4	5 1/2	15"	12"	500A399-13	5 1/4	4 1/2	2.0"
P20C9	2	E2	3/16 X 9.0 X 6.20 X 20'-0"	27 11/16 + 18 3/4 = 46 9/16	188	1 1/4	6 1/2	16"	13"	500A399-51	6 1/4	4 1/2	3.0"
P25C7		E0	3/16 X 7.0 X 3.5 X 25'-0"	21 3/8 + 11 7/16 = 32 13/16	291	1 1/4	4 1/2	14"	11"	500A399-1R	5 1/2	4 1/2	2.0"
P25C8		E1	3/16 X 8.0 X 4.5 X 25'-0"	24 9/16 + 13 9/16 = 38 1/8	271	1 1/4	5 1/2	15"	12"	500A399-13	4 1/2	4 1/2	3.0"
P25C9	1	E2	3/16 X 9.0 X 5.5 X 25'-0"	27 11/16 + 16 11/16 = 44 3/8	188	1 1/4	6 1/2	16"	13"	500A399-51	5 1/2	4 1/2	3.0"
P30C8		E1	3/16 X 8.0 X 3.8 X 30'-0"	24 9/16 + 11 3/8 = 35 15/16	271	1 1/4	5 1/2	15"	12"	500A399-13	3 3/4	4 1/2	3.0"
P30C9		E2	3/16 X 9.0 X 4.8 X 30'-0"	27 11/16 + 14 1/2 = 42 3/16	188	1 1/4	6 1/2	16"	13"	500A399-51	4 3/4	4 1/2	3.0"
P30C1	1	E4	3/16 X 11.0 X 6.8 X 30'-0"	33 15/16 + 23 3/4 = 57 3/4	159	1 1/2	8 1/2	18"	15"	500A399-110	6 3/4	5"	3.0"
P32C9		E2	3/16 X 9.0 X 4.52 X 32'-0"	27 11/16 + 13 5/8 = 41 5/16	6	1 1/4	7 1/2	16 1/2	13 1/2	500A399-51	4 1/2	4 1/2	2.5"
P35C0		B3	3/16 X 10.0 X 5.1 X 25'-0"	28 13/16 + 15 7/16 = 44 1/4	21	1 1/2	8"	17 1/2	14 1/2	500A399-23	5"	5"	3.0"
P45D1		B3	1/4 X 11.0 X 4.56 X 46'-0"	33 3/4 + 13 9/16 = 47 5/16	22	1 3/4	9"	18 1/2	15 1/2	500A399-21	4 1/2	5"	3.0"



2	15'	ADVISE	780B94-P15C7/ADVISE (ADVISE 2, 3, or 4 CPLG)
1	15'	ADVISE	780B94-P15C7/ADVISE (ADVISE 1, or 2 CPLG)
2	20'	ADVISE	780B94-P20C9/ADVISE (ADVISE 2, or 3 CPLG)
1	25'	ADVISE	780B94-P25C9/ADVISE (ADVISE 2, or 3 CPLG)
1	30'	ADVISE	780B94-P30C1/ADVISE (ADVISE 2, or 3 CPLG)
QTY	"A" LENGTH	"B" OPTIONAL WIRE ENTRANCE HUB LOCATIONS	780B94-DASH NUMBER 780B94-P35C0/W1-23

PO#3250-2139 / VT DOT: STP.0284(17) RICHMOND / W6 ROUTE 2, VT ROUTE 117  
 US ROUTE 2,  
 OFF-RAMP (RAMP D)  
 MILLERBERND #51660  
 REV 9-23-13 CHANGED GRADE 50 TO 55  
 DWN: PAUL F.  
 DATE: 3-27-06  
 CHK: WILL G.  
 SCALE: NTS  
 RCB3,E2,E0>HA-VT ROUND SIGNAL MASTARM WITH 1 1/4 WIRE ENTRANCE HUB(S) FOR SIGNAL HEAD(S)  
 Millerbernd MANUFACTURING CO. WINSTON, NH 780B94

**APPROVED**  
 By Derek Lyman at 8:55 am, Feb 11, 2014