

THESE DRAWINGS AND INSTRUCTIONS ARE INTENDED TO BE A SUPPLEMENT TO THE INSTALLATION AND OPERATION MANUAL NOT A REPLACEMENT.


PLEASE READ THE SUPPLIED MANUAL COMPLETELY PRIOR TO INSTALLATION OF THIS UNIT.

**R. B. Allen Co. Inc.
P.O. BOX 770
131 Lafayette Road
North Hampton, NH 03862
1-800-258-7264**

**AES
Radio Transceiver
Installation
Cover Sheet**

SCALE: NTS

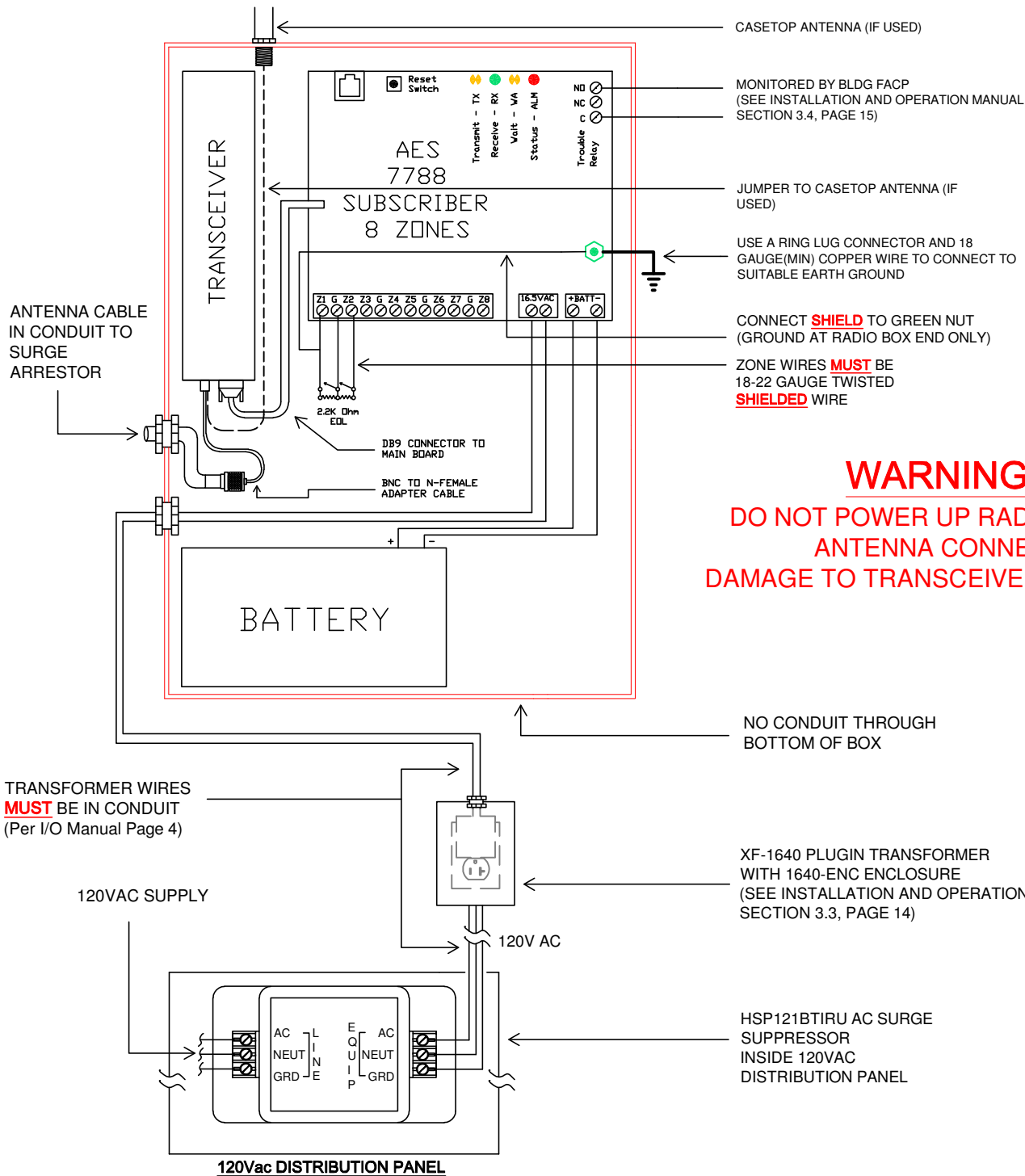
REV.	DESCRIPTION	DATE	DRWN	RVWD
1	AES Cover Sheet	3/13	Jeff P.	



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Radio Transceiver
Installation
Cover Sheet**

SUBSCRIBER UNIT INSTALLATION



WARNING
 DO NOT POWER UP RADIO WITHOUT
 ANTENNA CONNECTED
 DAMAGE TO TRANSCEIVER WILL OCCUR

NO CONDUIT THROUGH
 BOTTOM OF BOX

XF-1640 PLUG-IN TRANSFORMER
 WITH 1640-ENC ENCLOSURE
 (SEE INSTALLATION AND OPERATION MANUAL
 SECTION 3.3, PAGE 14)

HSP121BTIRU AC SURGE
 SUPPRESSOR
 INSIDE 120VAC
 DISTRIBUTION PANEL

AES
Radio Transceiver
SUBSCRIBER
UNIT

SCALE: NTS

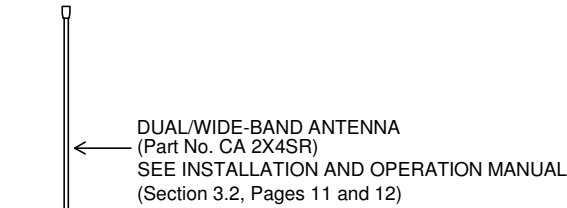
REV.	DESCRIPTION	DATE	DRWN	RVWD
1	AES Subscriber Unit	3/13	Jeff P.	

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SUBSCRIBER UNIT

ANTENNA INSTALLATION



EXTERIOR ANTENNA
(DUAL/WIDE-BAND)
SEE DETAIL "A"

ASSEMBLY MUST BE GROUNDED
IN ACCORDANCE WITH
NEC ARTICLE 810

TRANSMISSION WIRE **MUST** BE
PROTECTED IN CONDUIT FROM
ANTENNA TO RADIO BOX
CONTINUOUSLY IN
ACCORDANCE WITH
NFPA72 - 27.5.5.4 AND
I/O MANUAL PAGE 4

STANDOFF BRACKET
(4" - Use Part No. 8304)
OPTIONAL IF NEEDED
(12" - Use Part No. 8312)
(18" - Use Part No. 8318)

10" ALUMINUM
MOUNTING PIPE
(Part No. 10 MTG PIPE)

ATTACH TO STRUCTURE
AND CONDUIT PIPING

TO SURGE ARRESTOR
ENCLOSURE

SWEEP PIPE

DRILL 1/8" WEEP HOLE

SURGE ARRESTOR
ENCLOSURE
(See Surge Arrestor Drawing)

SURGE ARRESTOR MUST BE
LOCATED IN ACCORDANCE
WITH NEC ARTICLE 810.19 (B)

NOTE: 12" x 12" NEMA RATED ENCLOSURE IS
RECOMMENDED FOR EXTERIOR
INSTALLATIONS OF COAX SURGE ARRESTOR
(SUPPLIED BY INSTALLER)

EXTERIOR INTERIOR

AES
Radio Transceiver
Dual/Wideband
Antenna Installation

SCALE: NTS

REV.	DESCRIPTION	DATE	DRWN	RVWD
1	AES Dual/Wide-Band Antenna Installation	3/13	Jeff P.	

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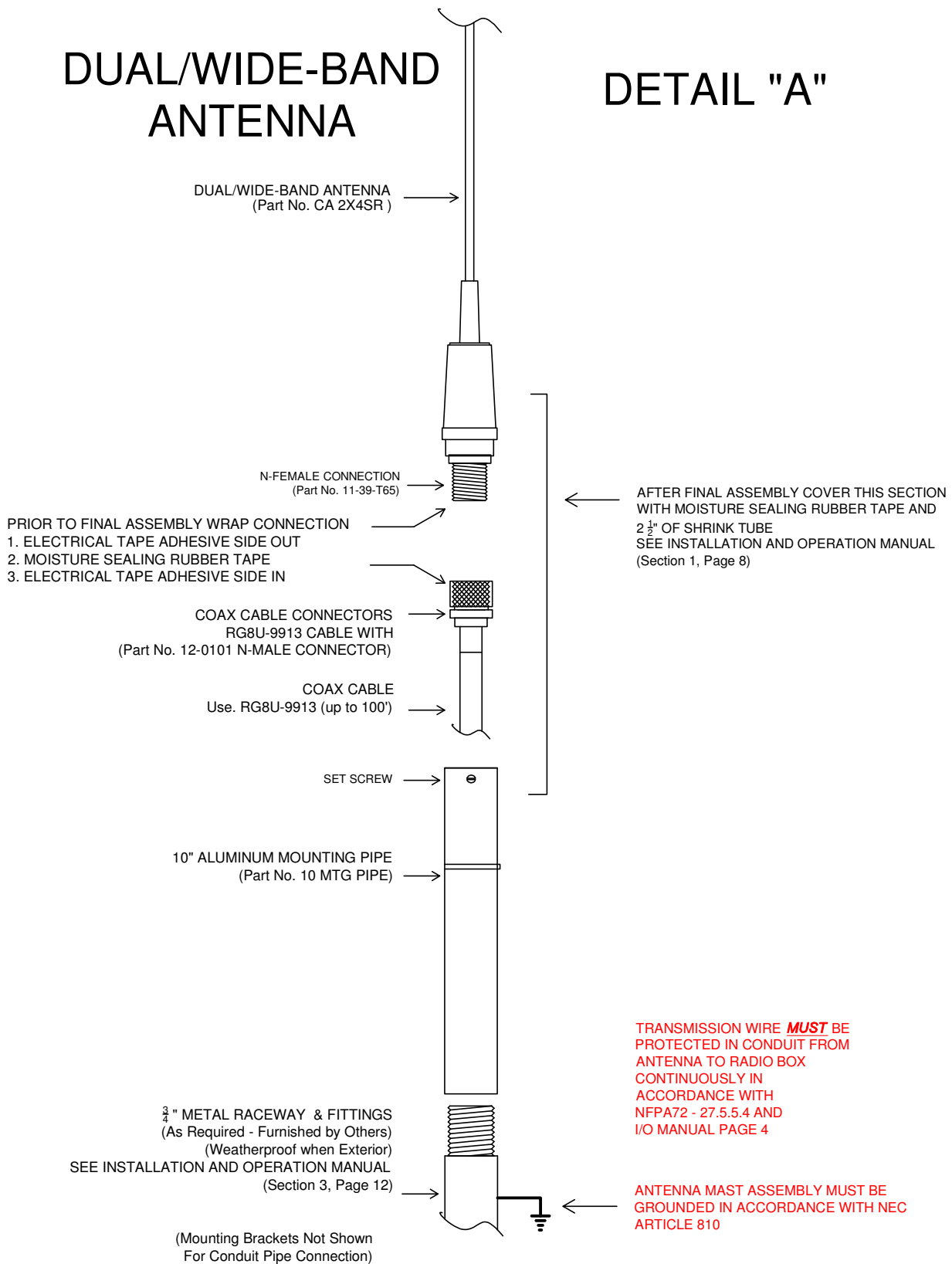
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Dual/Wide-Band
Antenna Installation

DUAL/WIDE-BAND ANTENNA

DETAIL "A"



← AFTER FINAL ASSEMBLY COVER THIS SECTION WITH MOISTURE SEALING RUBBER TAPE AND 2 1/2" OF SHRINK TUBE SEE INSTALLATION AND OPERATION MANUAL (Section 1, Page 8)

TRANSMISSION WIRE **MUST BE** PROTECTED IN CONDUIT FROM ANTENNA TO RADIO BOX CONTINUOUSLY IN ACCORDANCE WITH NFPA72 - 27.5.5.4 AND I/O MANUAL PAGE 4

← ANTENNA MAST ASSEMBLY MUST BE GROUNDED IN ACCORDANCE WITH NEC ARTICLE 810

3/4" METAL RACEWAY & FITTINGS (As Required - Furnished by Others) (Weatherproof when Exterior) SEE INSTALLATION AND OPERATION MANUAL (Section 3, Page 12)

(Mounting Brackets Not Shown For Conduit Pipe Connection)

AES
 Radio Transceiver
 Dual/Wide-Band
 Antenna Installation
 DETAIL "A"

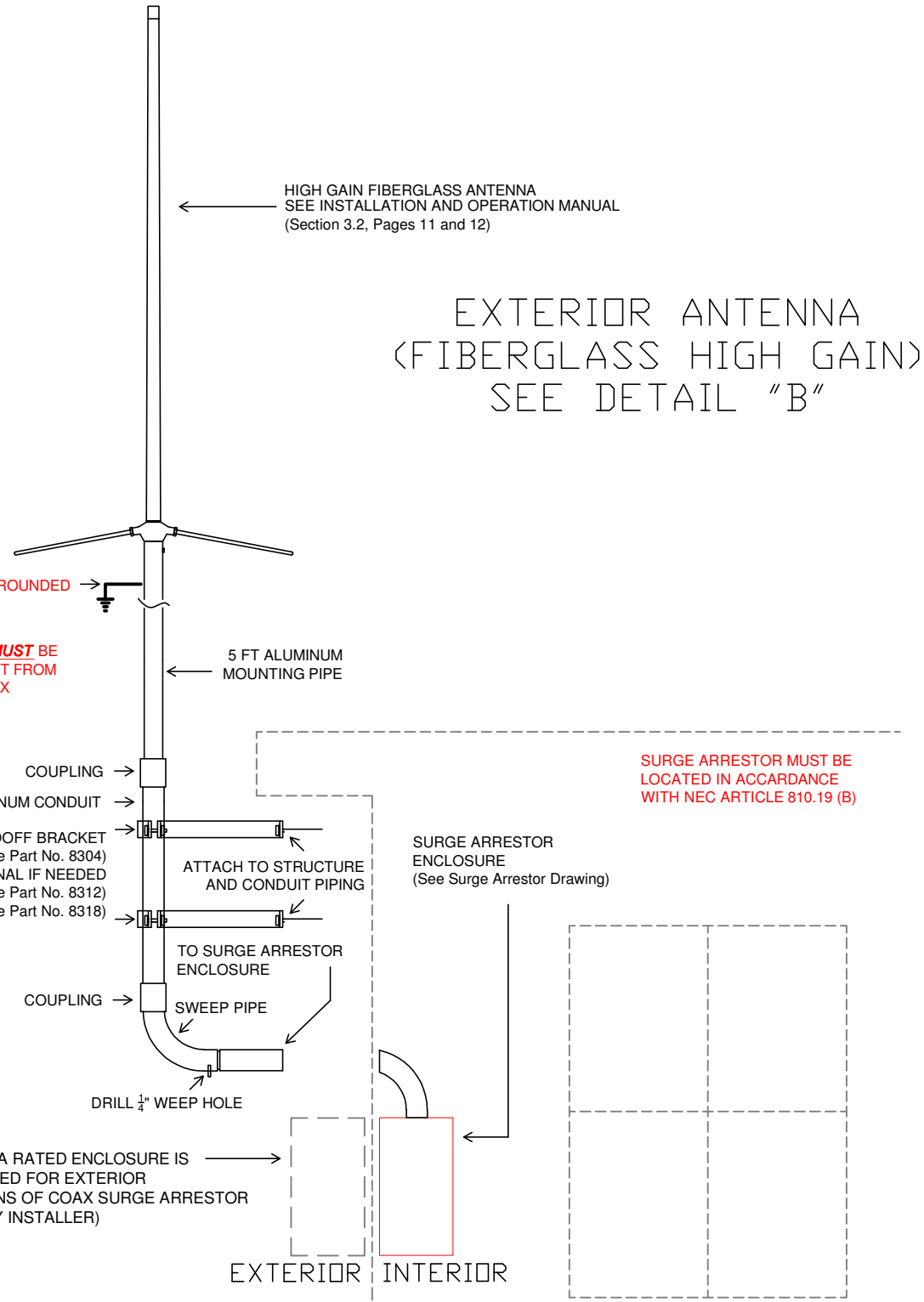
SCALE: NTS

REV.	DESCRIPTION	DATE	DRWN	RVWD
1	AES Dual/Wide-Band Antenna Installation Detail A	3/13	Jeff P.	

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Radio Transceiver
Dual/Wide-Band
Antenna Installation
DETAIL "A"

ANTENNA INSTALLATION



AES
Radio Transceiver
High Gain Fiberglass
Antenna Installation

SCALE: NTS

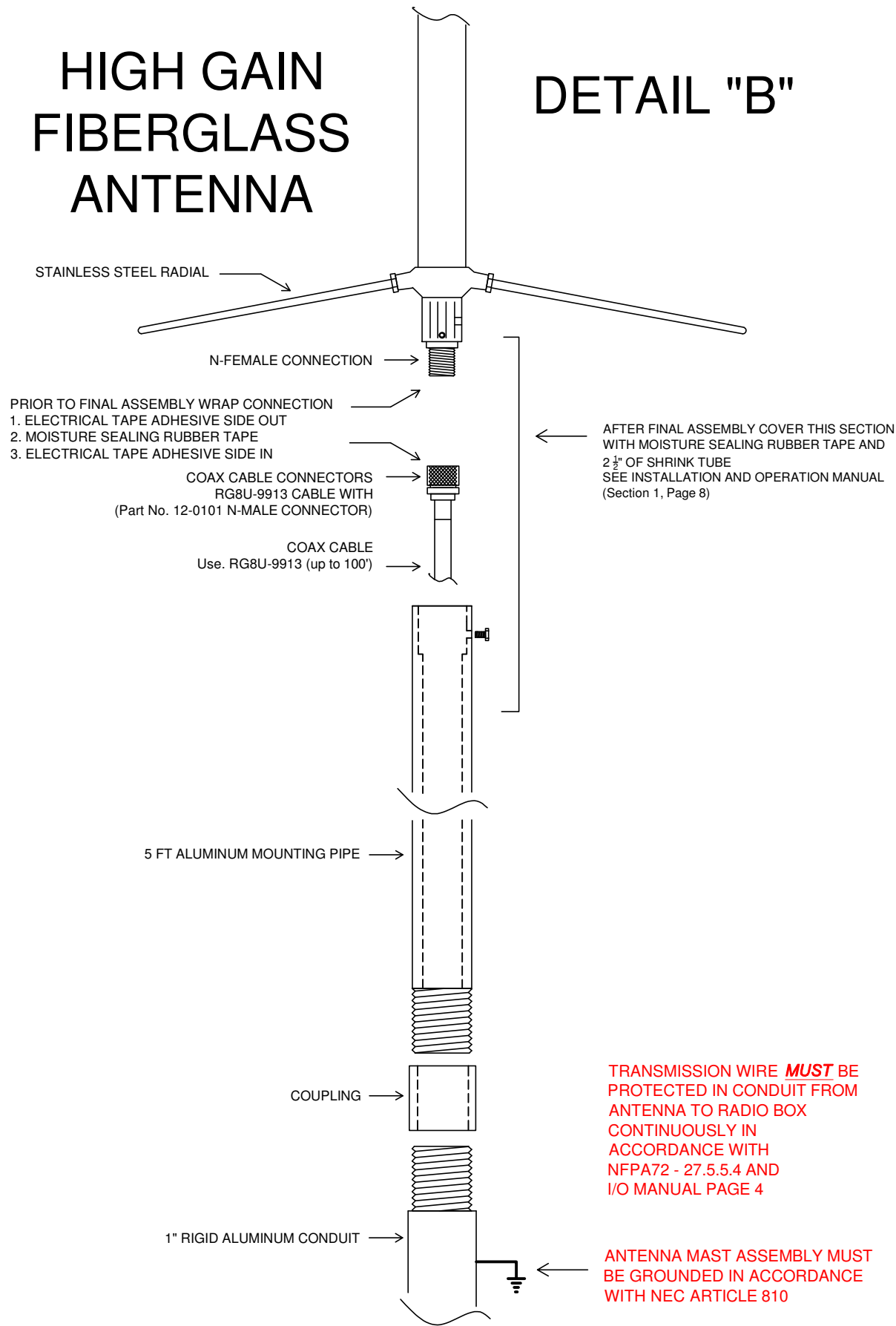
REV.	DESCRIPTION	DATE	DRWN	RVWD
1	AES High Gain Fiberglass Antenna Installation	3/13	Jeff P.	

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DWG NAME: **AES**
**Radio Transceiver
High Gain Fiberglass
Antenna Installation**

HIGH GAIN FIBERGLASS ANTENNA

DETAIL "B"



AES
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 High Gain Fiberglass
 Antenna Installation
 DETAIL "B"

SCALE: NTS			
1	AES High Gain Fiberglass Antenna Installation Detail B	3/13	Jeff P.
REV.	DESCRIPTION	DATE	DRWN RVWD


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DWG NAME:
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 High Gain Fiberglass
 Antenna Installation
 DETAIL "B"

N - CONNECTOR INSTALLATION

**NOTE: FOR BEST RESULTS USE PALADIN COAX STRIPPERS
MODEL PA1256 FOR RG-8
MODEL PA1255 FOR RG-58**

To install the N connector(s), use the following procedures:

Step 1: Strip cable jacket, braid, and dielectric to dimensions shown. All cuts are to be sharp and square.

Important: Do not nick braid, dielectric, and center conductor. Tinning of center conductor is not necessary if contact is to be crimped. For solder method, tin center conductor avoiding excessive heat.

Step 2: Slide outer ferrule onto cable as shown. Flare slightly end of cable braid as shown to facilitate insertion of inner ferrule. **Important:** Do not comb out braid. Place contact on cable center conductor so it butts against cable dielectric. Center conductor should be visible through inspection hole in contact. Crimp or solder contact in place as follows:

Solder Method: Soft solder contact to cable center conductor. Do not get any solder on outside surface of contact. Avoid excessive heat to prevent swelling of dielectric.

Crimp Method: Use Die Set Cavity Specified below.

Step 1: Use die set with .100 cavity for center pin.

Step 2: Use die set with .415 cavity for outer ferrule.

Use die set with .256, .215 and .068 cavities (not shown) for RG-58 Cable and Connectors.

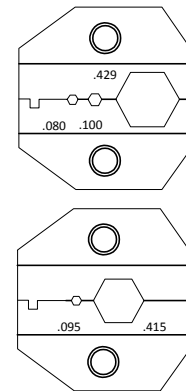
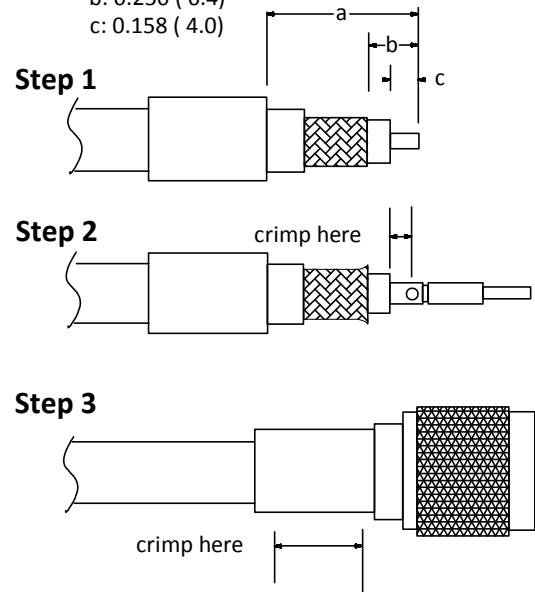
Step 3: Install cable assembly into body assembly so inner ferrule portion slides under braid, Push cable assembly forward until contact snaps into place in insulator. Slide outer ferrule over braid and up against connector body. Crimp outer ferrule using Die Set Cavity specified above.

Strip Dimensions, inches (mm):

a: 0.539 (13.7)

b: 0.250 (6.4)

c: 0.158 (4.0)



AES
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N-Connector
Installation

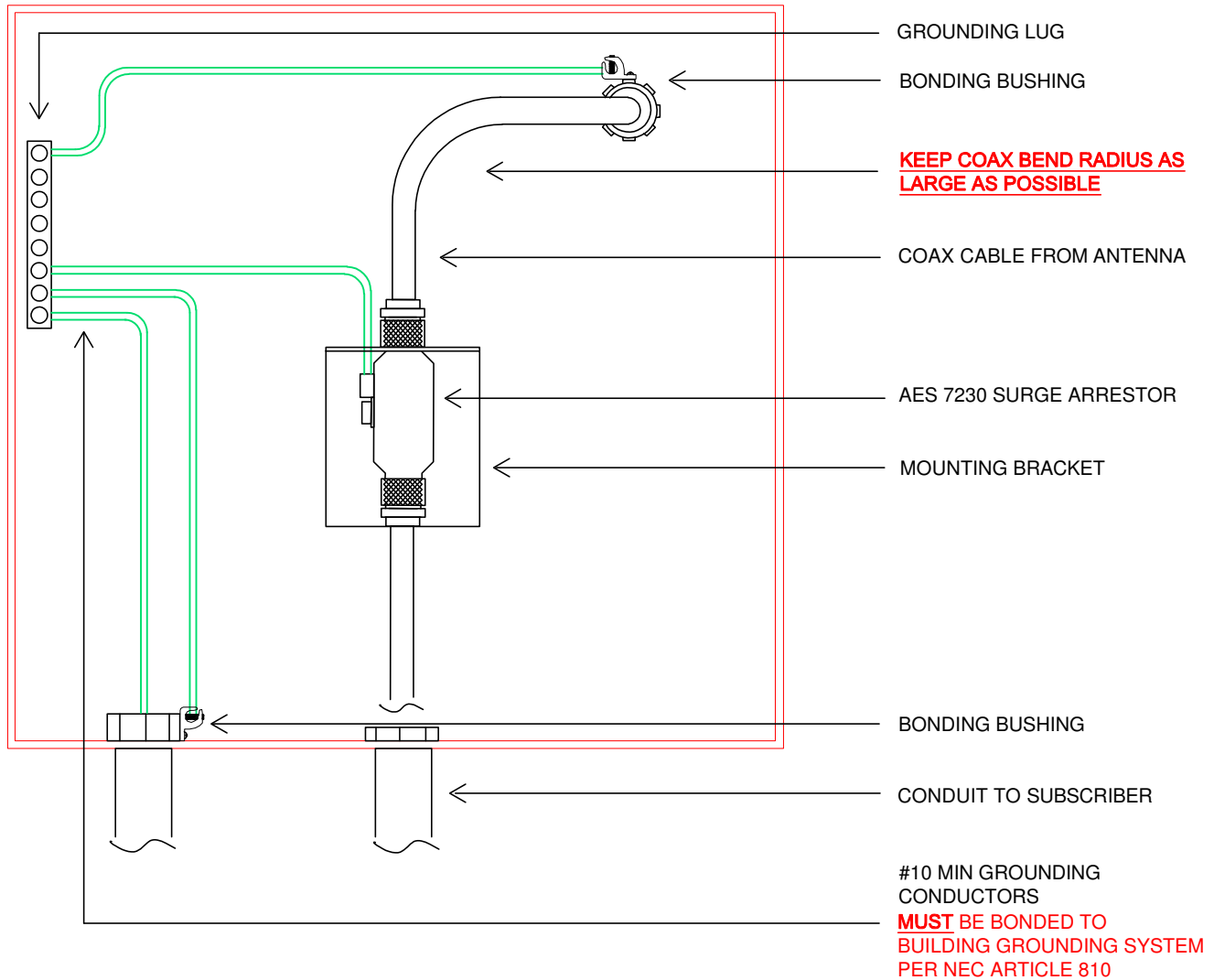
SCALE: NTS			
REV.	DESCRIPTION	DATE	DRWN RVWD
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N-Connector
Installation

SURGE ARRESTOR ENCLOSURE INSTALLATION



AES
Radio Transceiver
Surge Arrestor
Installation

SCALE: NTS

REV.	DESCRIPTION	DATE	DRWN	RVWD
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Installation**