

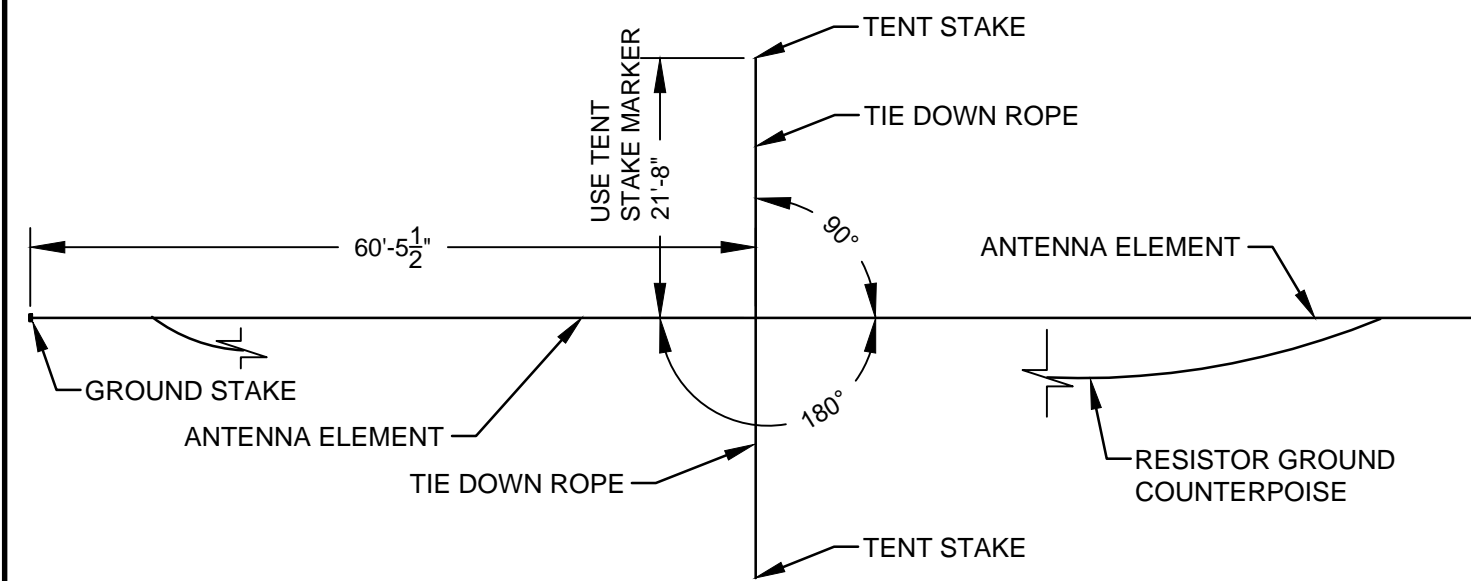
**ANTENNA SECTION**

MEASURED SWR:

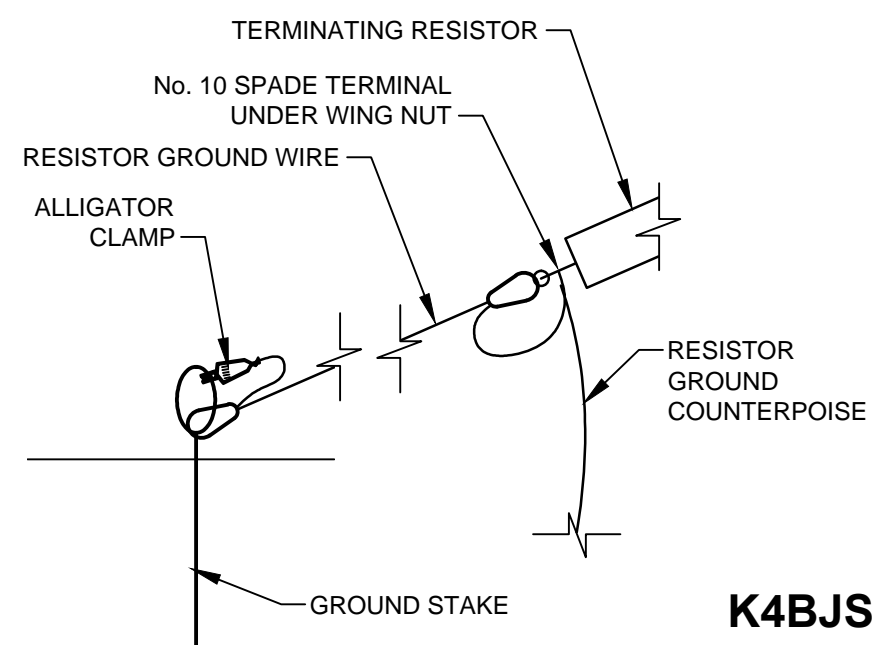
3.750	1.22
7.150	1.27
14.160	1.26
18.175	1.44
21.175	1.38

RETURN LOSS:

3.750	20.00dB
7.150	18.53dB
14.160	18.88dB
18.175	14.94dB
21.175	16.03dB

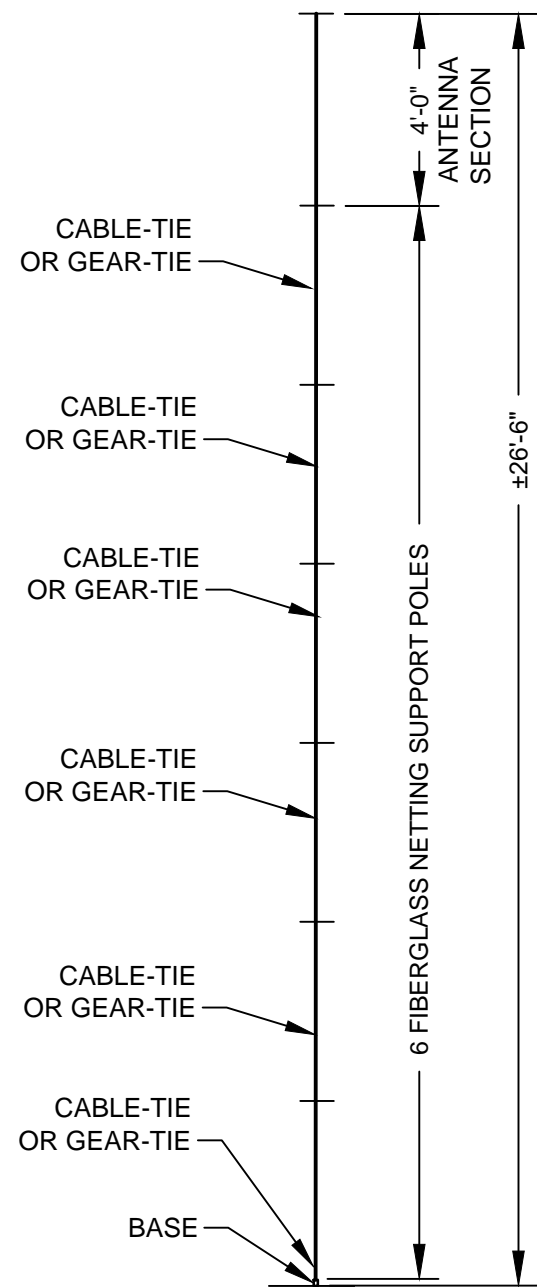


**PLAN VIEW**

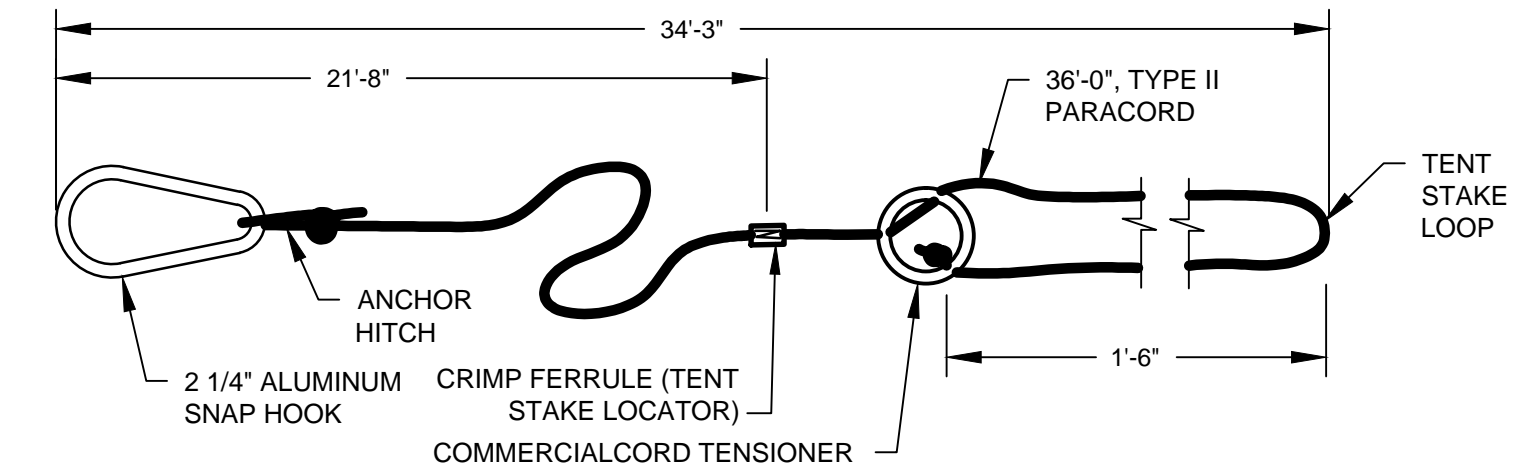


**RESISTOR GROUND WIRE DETAIL**

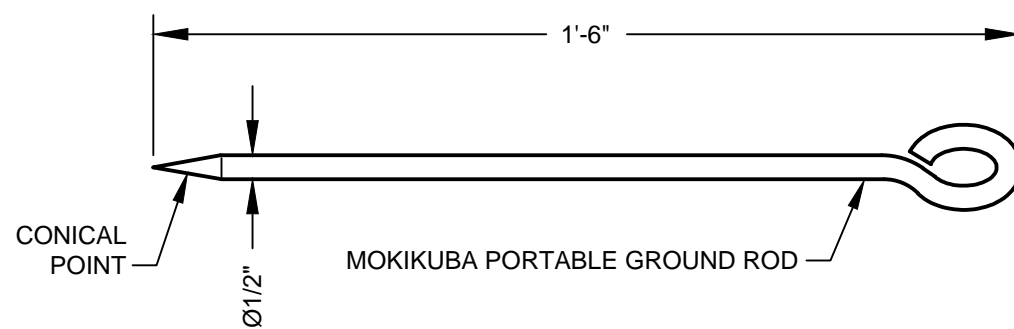
**K4BJS PORTABLE NVIS ANTENNA  
TERMINATED "V"**



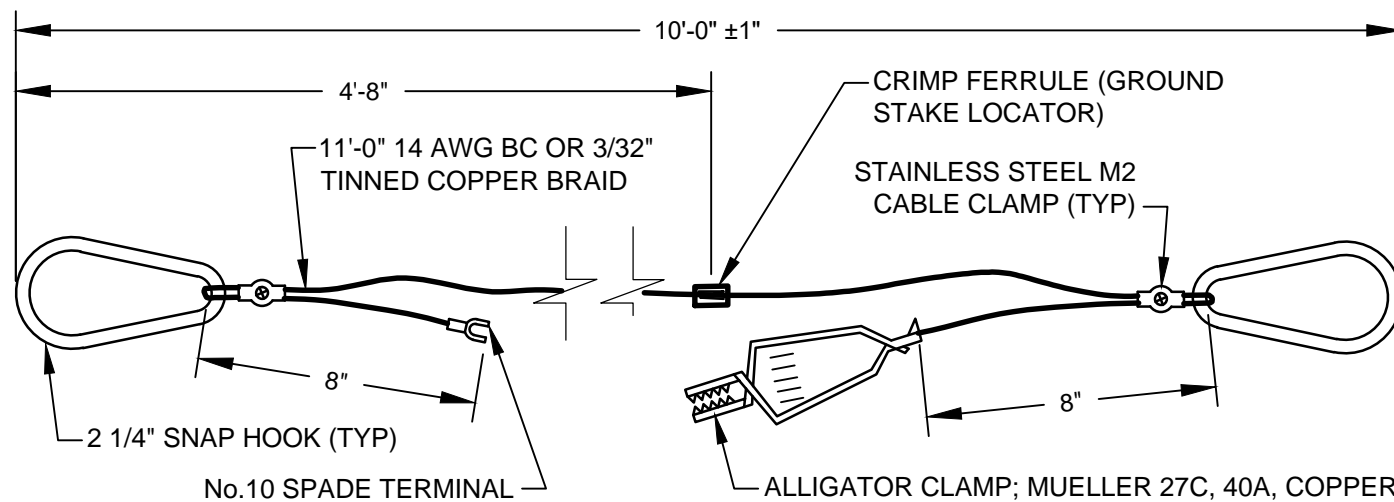
1 REQUIRED  
**MAST ASSEMBLY**



2 REQUIRED  
**GUY ROPE ASSEMBLY**



2 REQUIRED  
**GROUND STAKE**

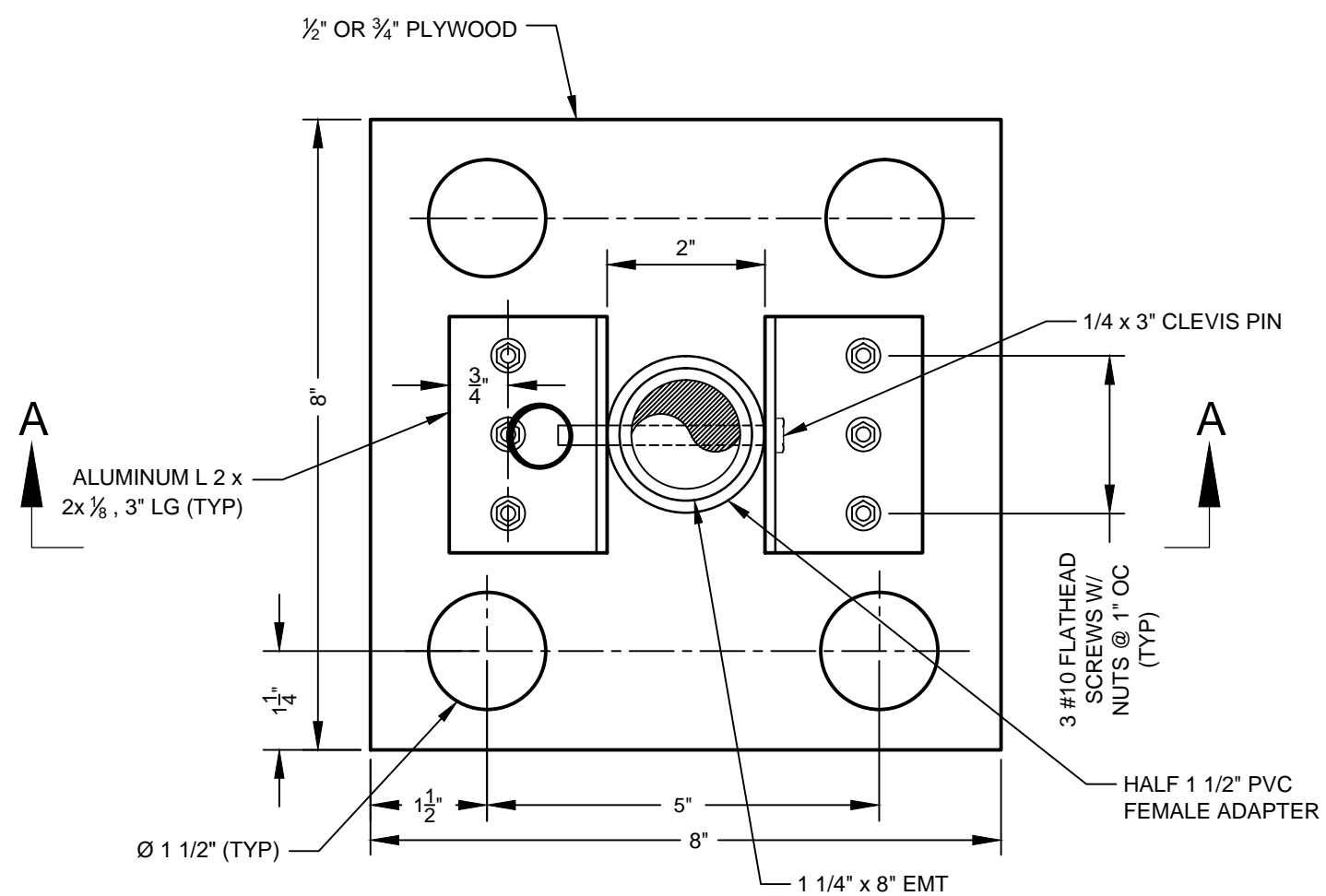


2 REQUIRED  
**RESISTOR GROUND WIRE**

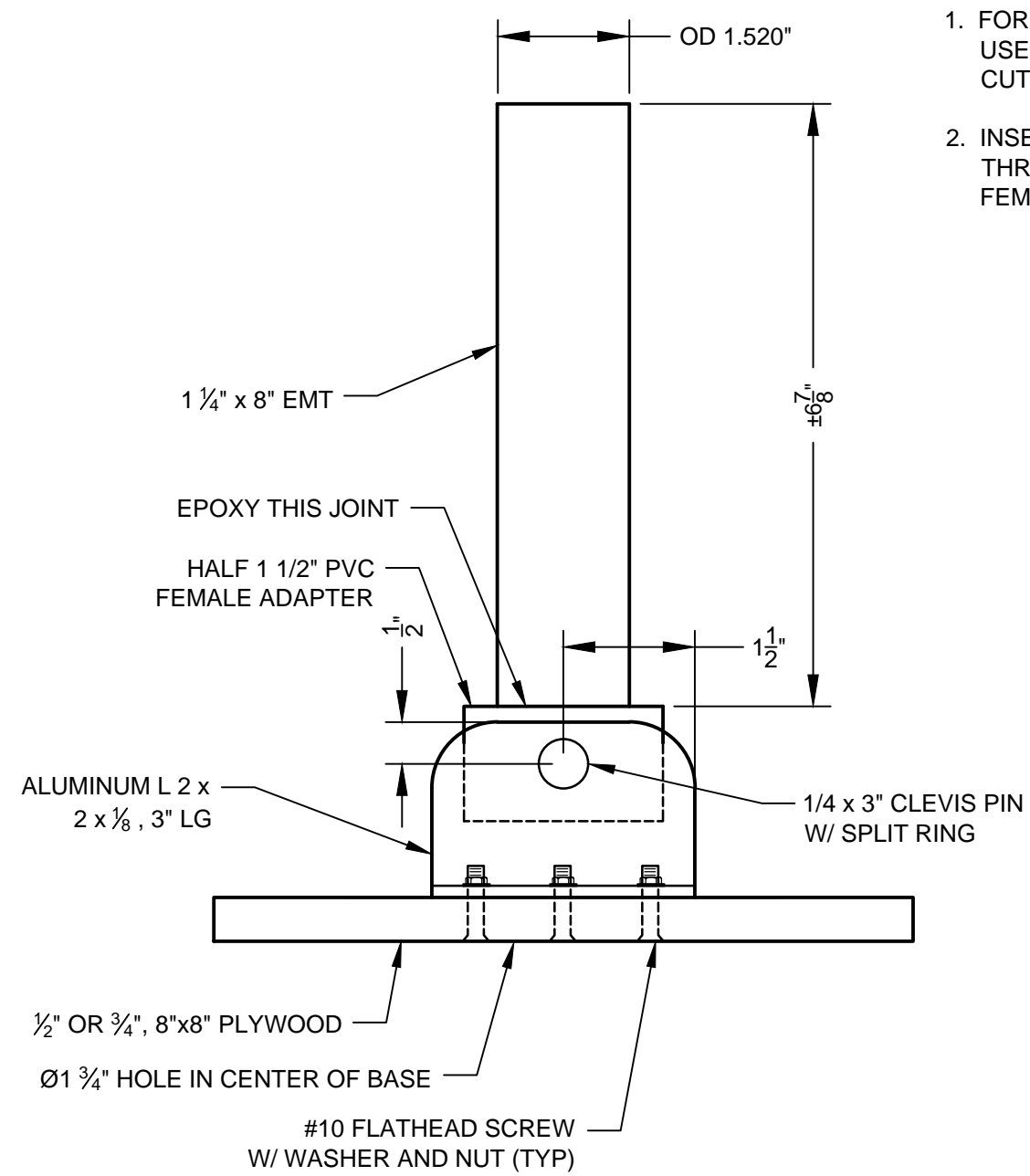
**NOTES:**

1. USE CRIMP FERRULE TO LOCATE LOCATION OF TENT STAKES FOR MAST SETUP.
2. GROUND STAKE IS MOKIKUBA, PORTABLE GROUND STAKE, X0039JK4LZ OR EQUAL.

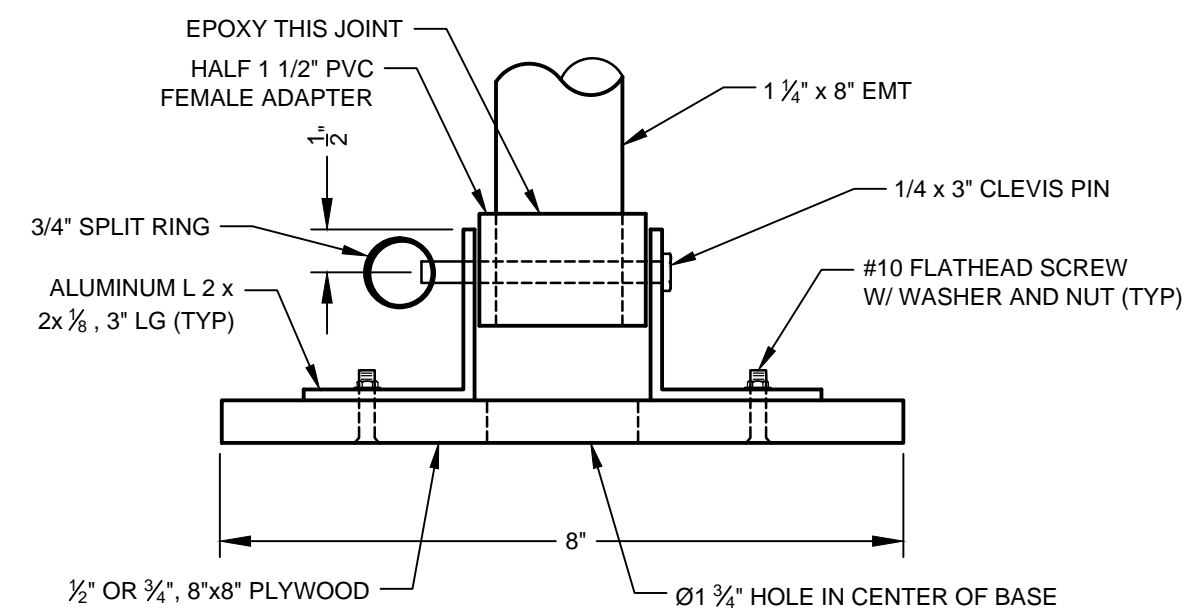
**K4BJS PORTABLE NVIS ANTENNA  
TERMINATED "V"**



**BASE TOP VIEW**



**BASE FRONT VIEW**

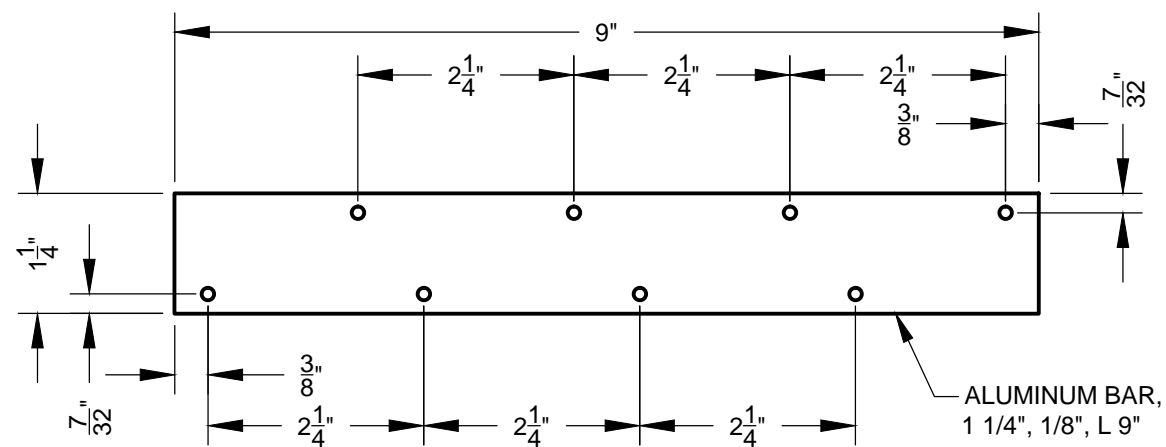


**SECTION A-A**

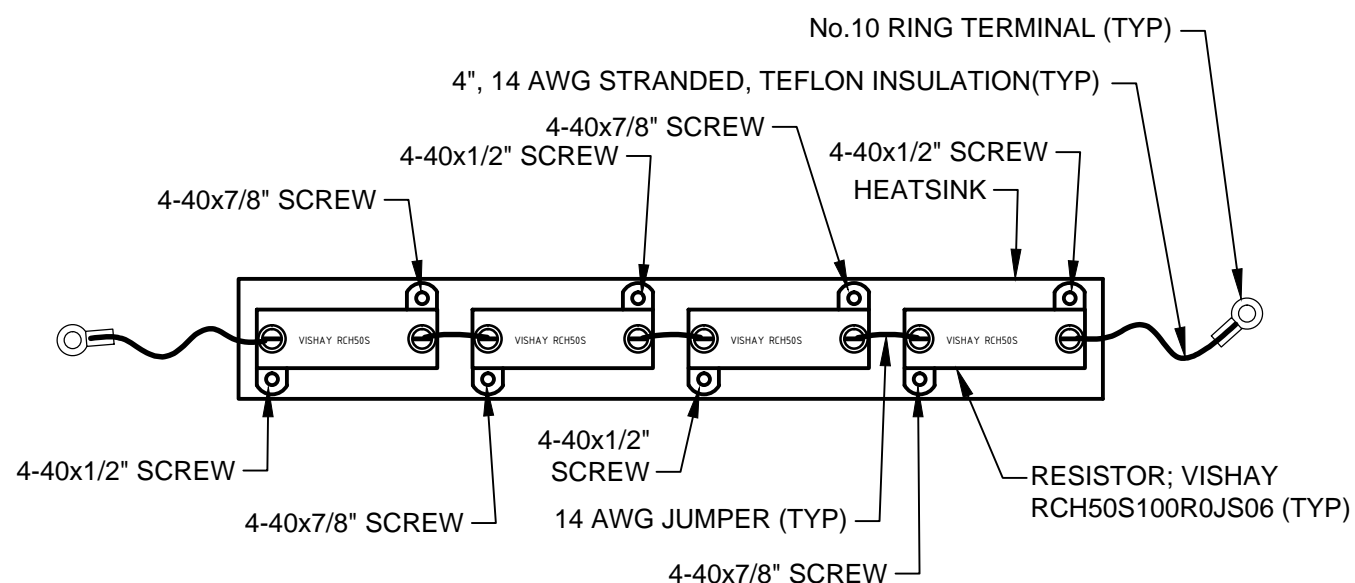
NOTE:

1. FOR THE 1 1/2" PVC FEMALE ADAPTER USE THE FEMALE THREAD PORTION, CUT OFF THE SLIP JOINT.
2. INSERT THE 1 1/4" EMT COMPLETELY THROUGH THE CUT DOWN 1 1/2" FEMALE ADAPTER.

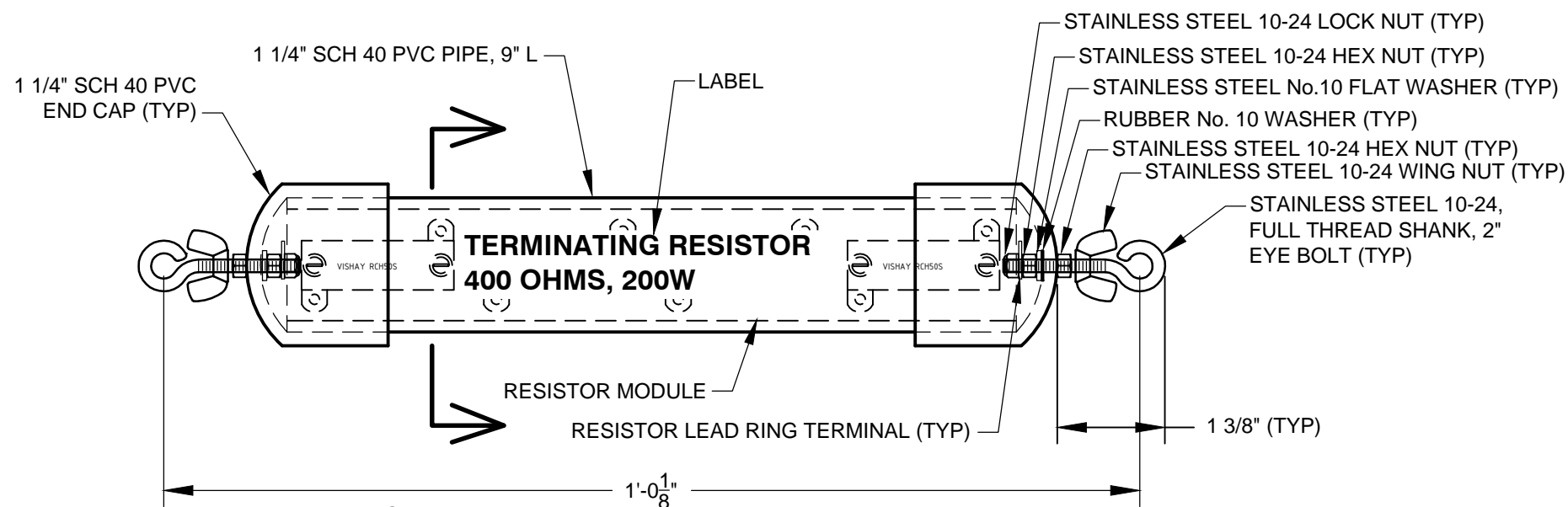
**K4BJS PORTABLE NVIS ANTENNA  
TERMINATED "V"**



2 REQUIRED  
**HEAT SINK - TOP VIEW**



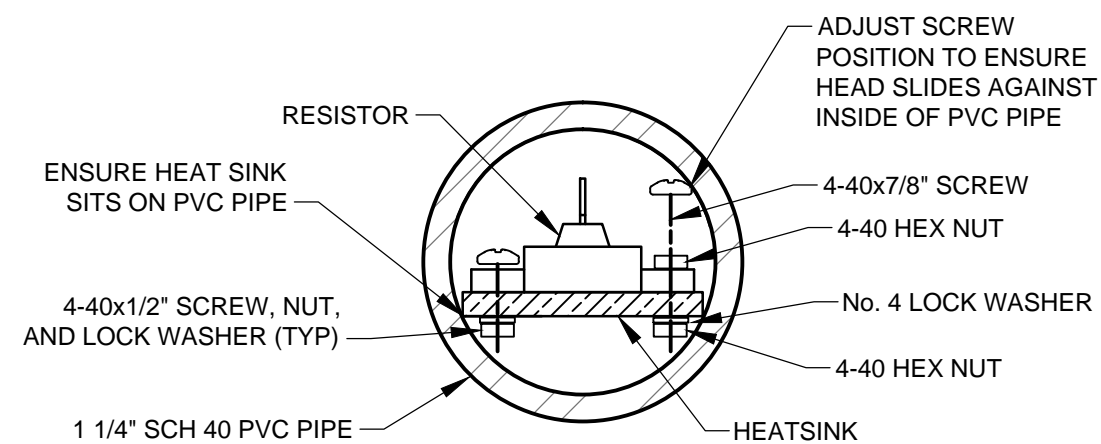
2 REQUIRED  
**RESISTOR MODULE - TOP VIEW**



2 REQUIRED  
**TERMINATING RESISTOR ASSEMBLY**

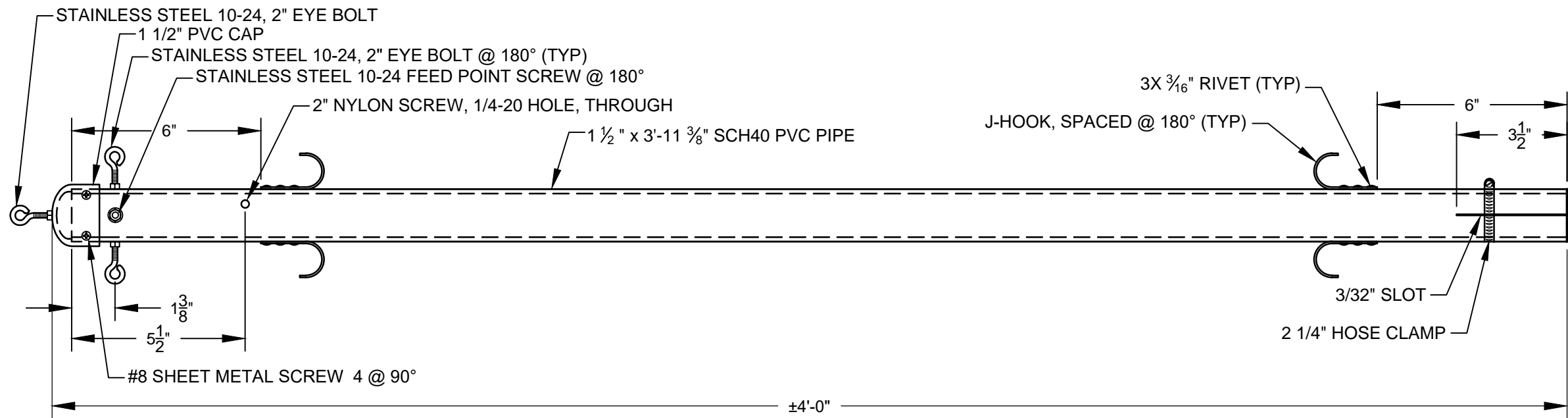
**NOTES:**

1. CLEAN HEAT SINK SURFACE AND BOTTOM OF RESISTORS BEFORE APPLYING HEATSINK COMPOUND.
2. APPLY SILICONE HEATSINK COMPOUND TO BOTTOM OF RESISTOR.

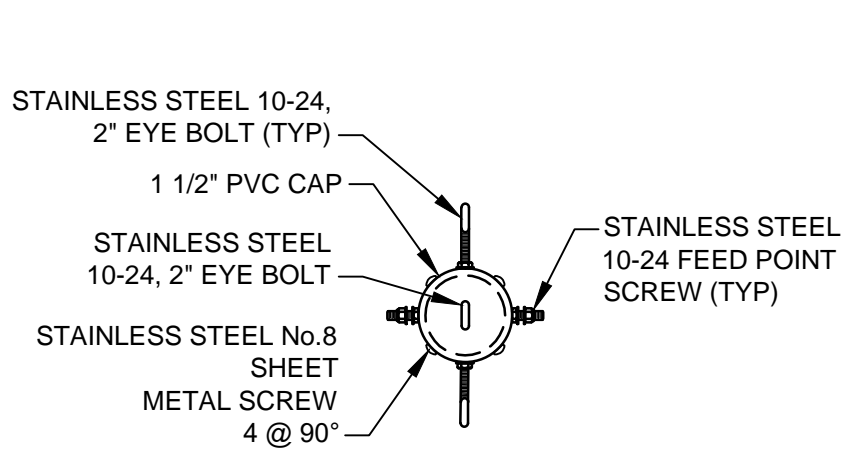


**RESISTOR MODULE - SECTION**

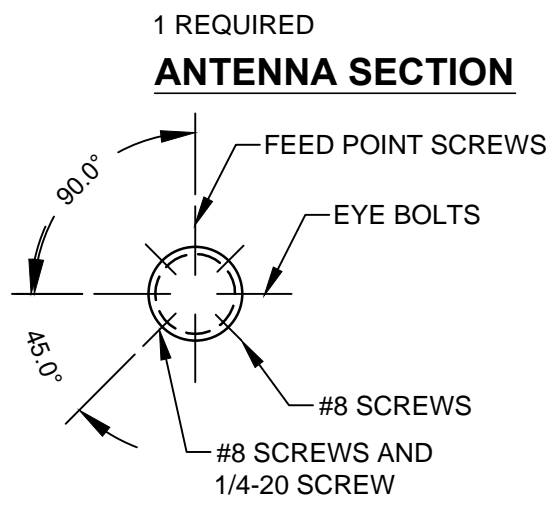
**K4BJS PORTABLE NVIS ANTENNA  
TERMINATED "V"**



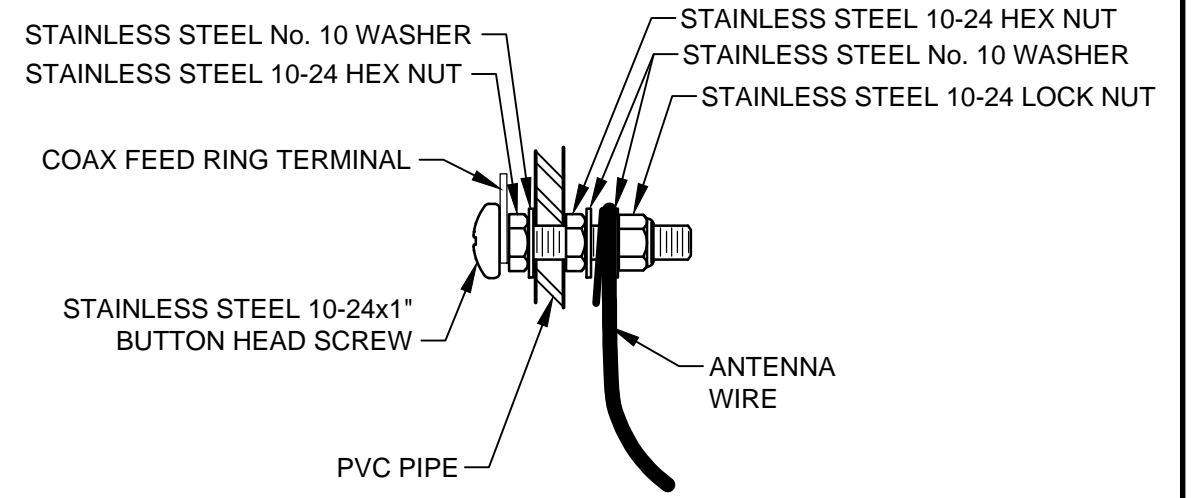
- NOTES:
1. PVC CAP NEEDS TO BE A LOOSE FIT ON PIPE, SAND PAPER INSIDE TO REMOVE SOME MATERIAL.
  2. ADD FIBERGLASS CLOTH AROUND BALUN TO ENSURE A FIRM FIT AND PREVENT MOVEMENT INSIDE PVC PIPE.
  3. THREAD BOTH SIDES OF THE 1/4-20 HOLE.
  4. CONNECT THE LOOP END OF ANTENNA ELEMENT TO THE FEED POINT SCREWS AND WRAP ANTENNA ON J-HOOKS.



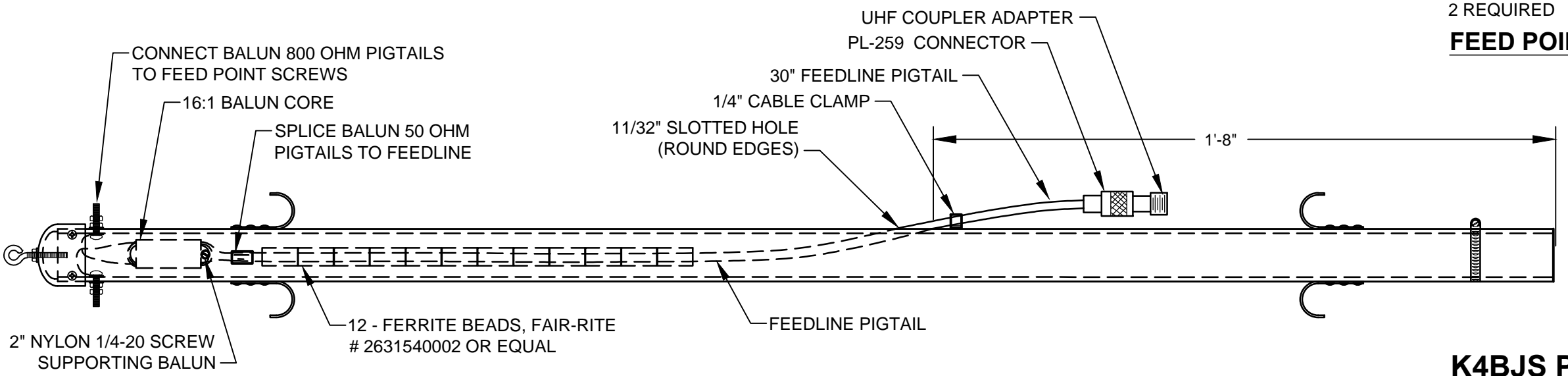
**ANTENNA SECTION  
TOP VIEW**



**DRILL GUIDE DETAIL**



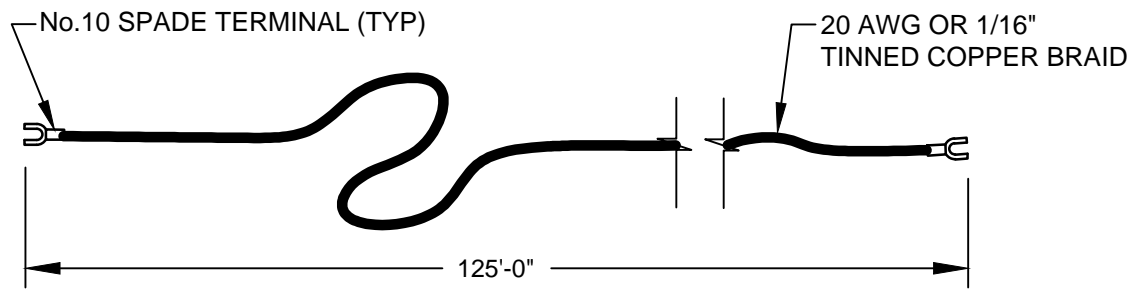
**FEED POINT DETAIL**



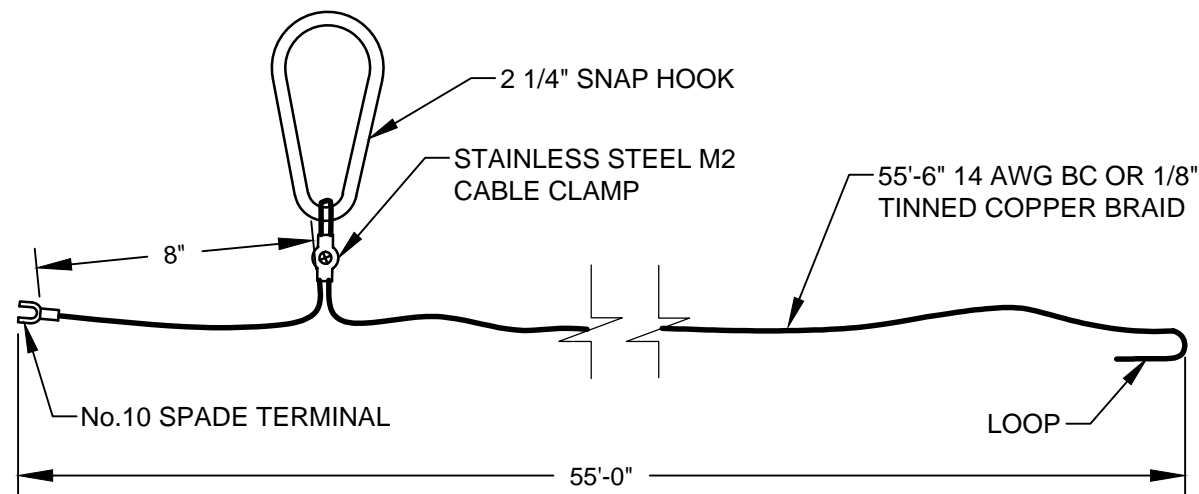
**FEED LINE DETAIL**

NOTE: ASSEMBLE FEEDLINE AND TOP INSULATOR WITHOUT PL-259 CONNECTOR, THEN INSERT IT INSIDE PVC PIPE AND INSTALL PL-259 CONNECTOR  
 NOTE: ANTENNA ELEMENTS NOT SHOWN ON J-HOOKS FOR CLARITY

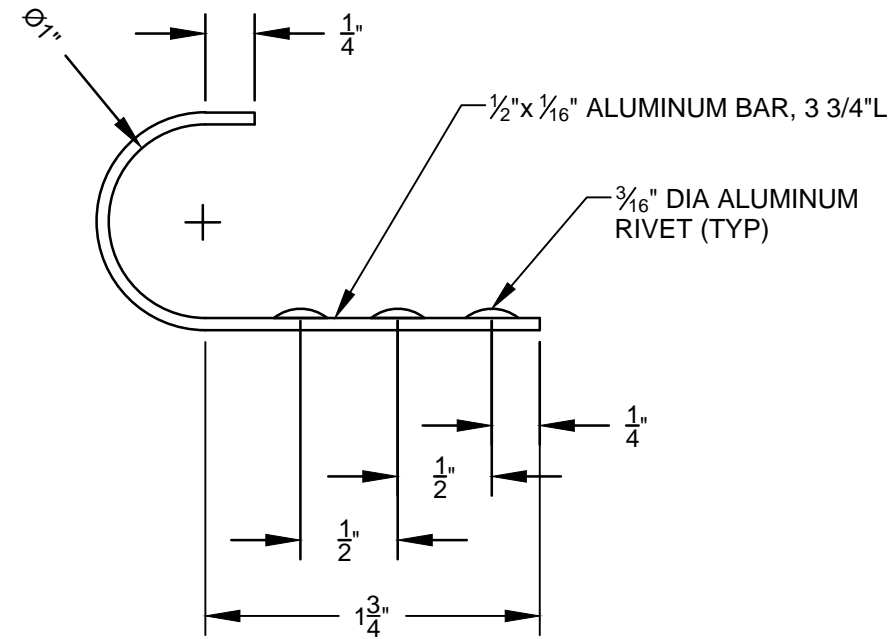
**K4BJS PORTABLE NVIS ANTENNA  
TERMINATED "V"**



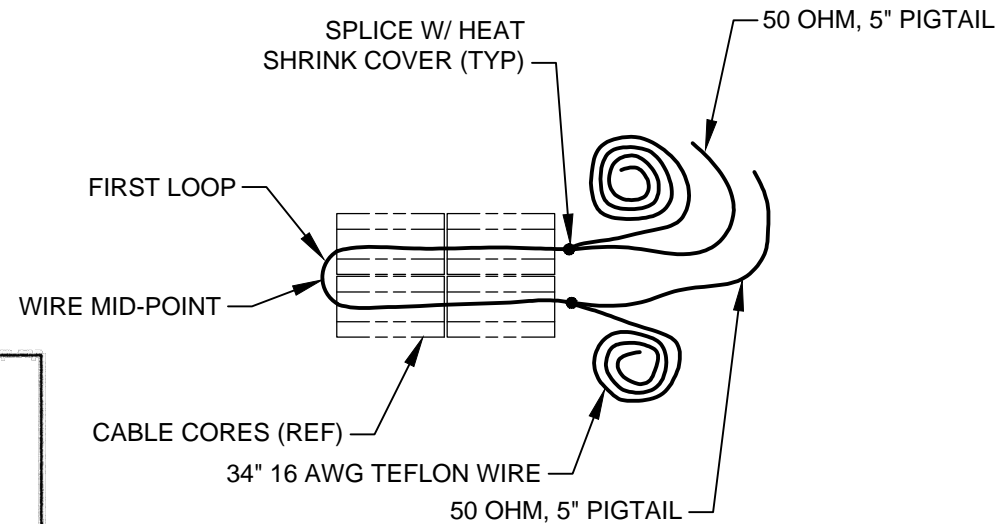
**RESISTOR GROUND COUNTERPOISE**



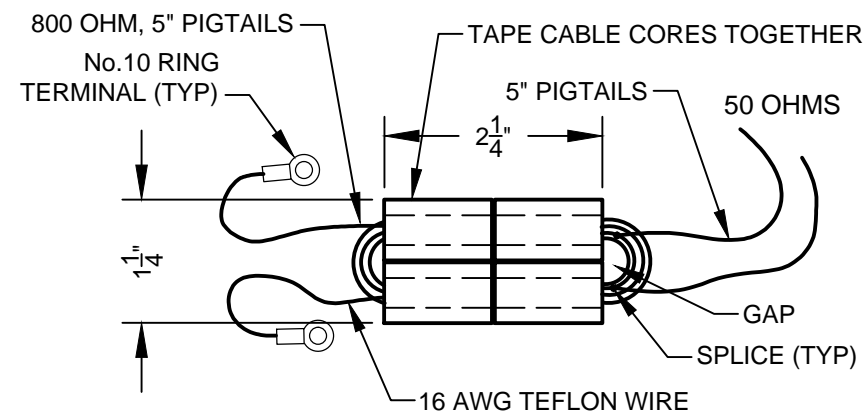
2 REQUIRED  
**ANTENNA ELEMENT**



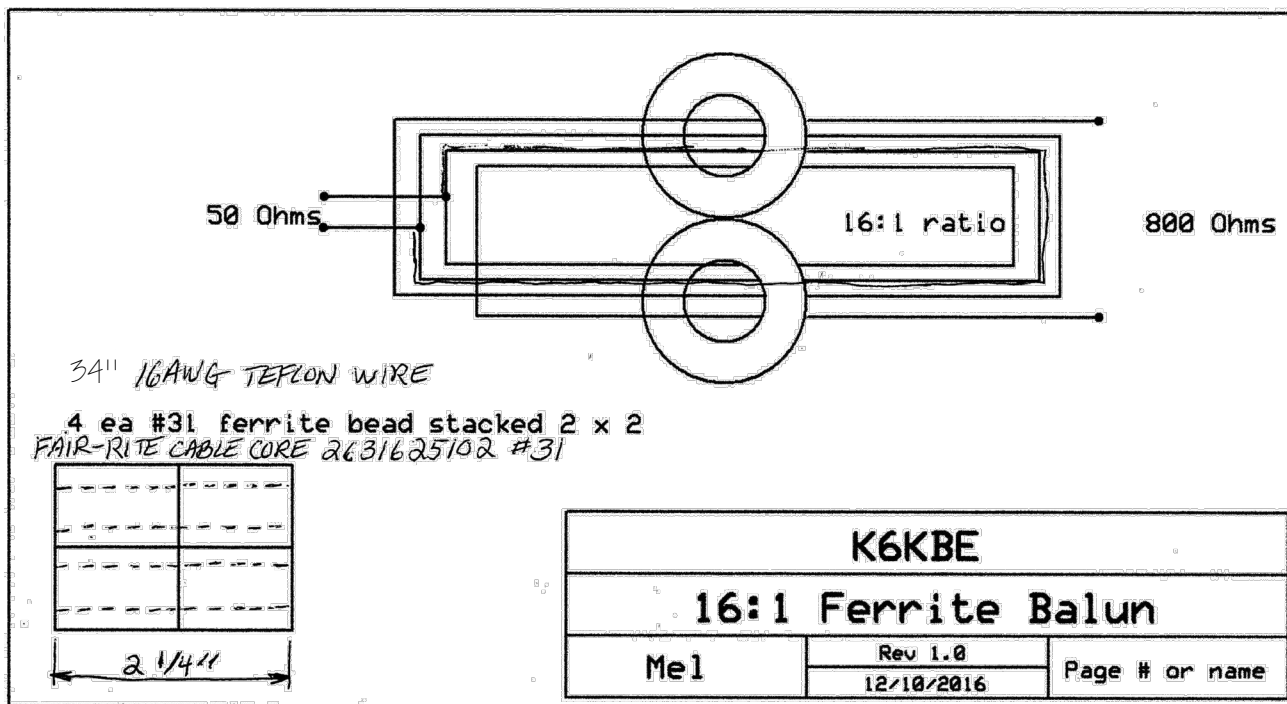
4 REQUIRED  
**J-HOOK**



**16:1 BALUN PIGTAIL SPLICE DETAIL**



**16:1 BALUN CORE DETAIL**

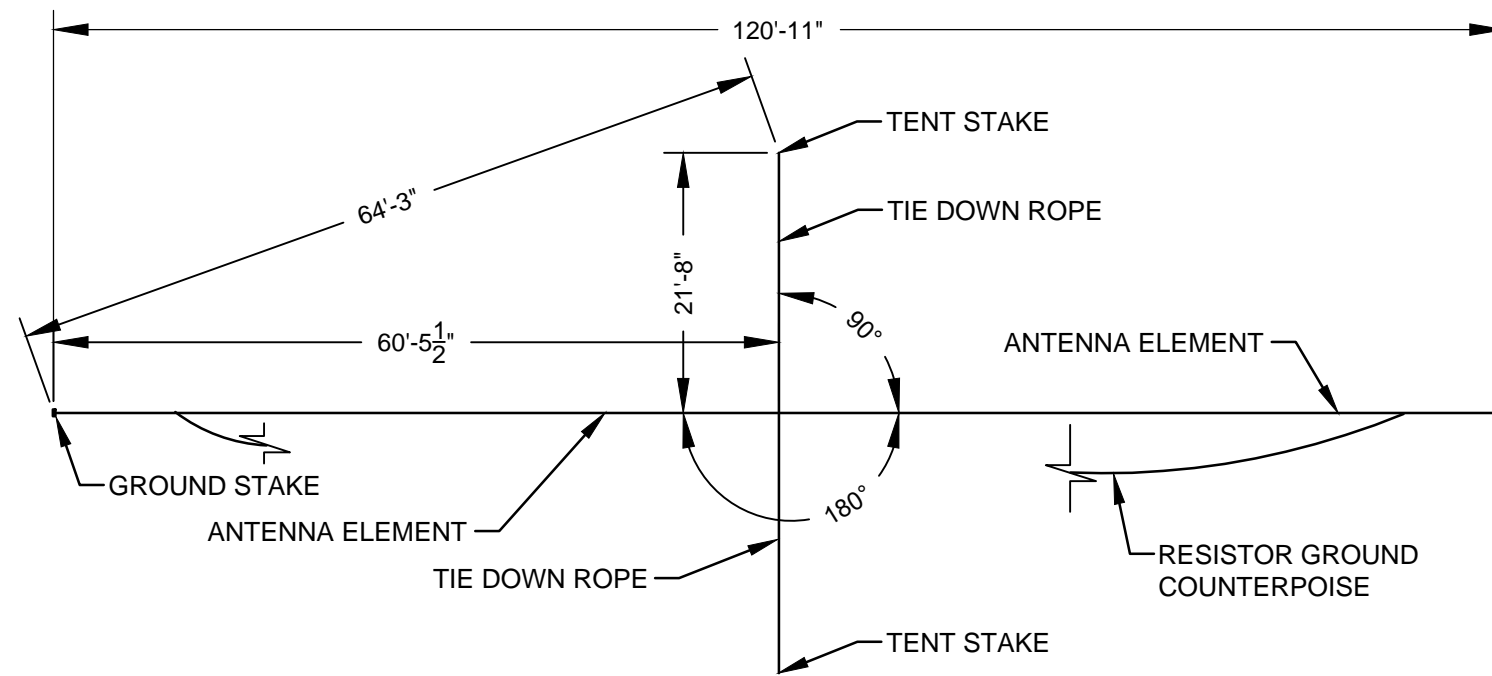


**16:1 BALUN WINDING DETAIL**

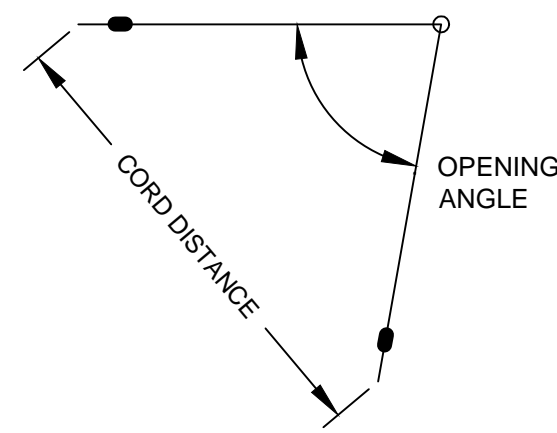
NOTES:

- 1 USE 3/4" PVC PIPE TO FORM J-HOOK.
2. GROUND COUNTERPOISE IS NOT RESONANT.

**K4BJS PORTABLE NVIS ANTENNA  
TERMINATED "V"**



**INVERTED 'V' LAYOUT DETAIL**



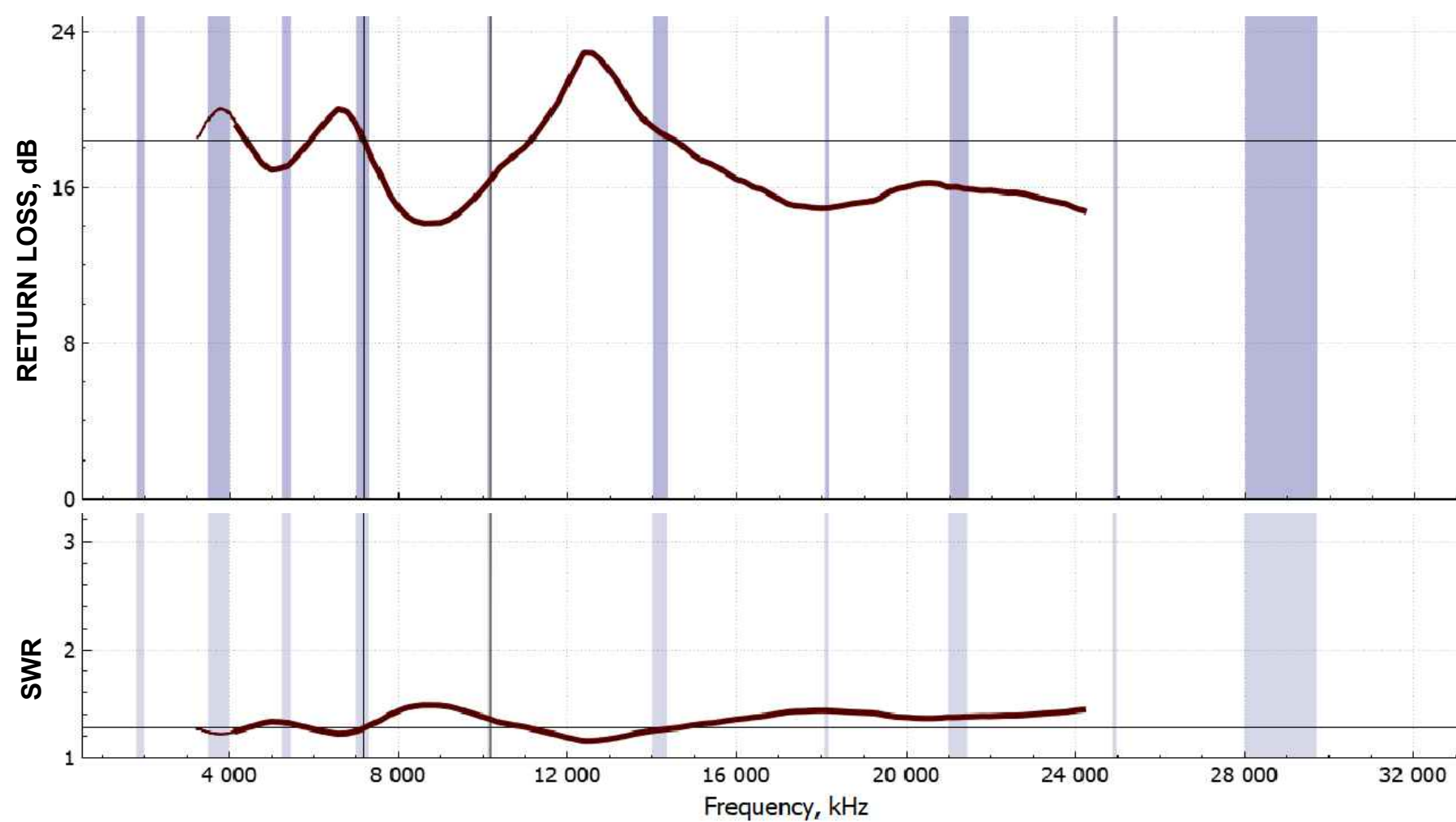
**OPENING ANGLE DETAIL**

**DANGER**  
WATCH FOR OVERHEAD WIRES. NEVER ERECT ANTENNA DIRECTLY UNDER POWERLINES

- TOOLS:
1. HAMMER
  2. SURVEYOR FLAGGING
  3. RF EXPOSURE SIGNS

RF EXPOSURE  
MINIMUM COMPLIANCE, UNCONTROLLED ENVIRONMENT

75M.....7"
60M.....9"
40M.....1'-0"
30M.....1'-5"
20M.....2'-0"



NOTE: RESISTOR GROUND COUNTERPOISE INSTALLED DURING MEASUREMENTS

SLOPING 'V' OPENING ANGLE TABLE			
BAND (m)	FREQUENCY (MHz)	OPENING ANGLE (deg)	CORD DISTANCE
6	52	50	51'-1"
10	29	70	69'-4"
12	25	75	73'-7"
15	21	80	77'-8"
17	18	85	81'-8"
20	14	90	85'-5"
30	10	100	92'-7"
40	7	110	99'-0"
60	5	120	104'-8"
80	4	130	109'-6"
160	2	150	116'-9"
ALL	-----	180	120'-11"

**K4BJS PORTABLE NVIS ANTENNA  
TERMINATED "V"**