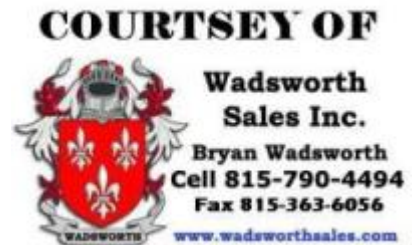




WHAT MAKE SINCLAIR ANTENNAS A BETTER BUILD AND DESIGN?

SINCLAIR SD 214 VHF

4 DIPOLE VHF - 8.5 dBd Gain - 1/4 Wave Offset - 138-174 MHz



**20' TALL --- 40" OFFSET WIDTH --- 65 LBS --- 2.4" MAST --- 130 MPH RATED --- 300 WATT
RATED**

INTERNAL COAX HARNESS - 8.5 dBd GAIN

COMPETITION BRAND A/Db



21' TALL --- OFFSET (NOT MUCH) --- 35 LBS --- 1.75" UPPER/2" LOWER --- 80 MPH RATED
500 WATT RATED (?) --- EXTERNAL COAX HARNESS --- 9 dBd GAIN (?)

(?) – DO WE REALLY BELIEVE THESE CLAIMS?

COMPETITION BRAND T



ANT150D6-9
(Harness not shown)
Support mast is
customer-supplied

20' TALL --- 40" OFFSET WIDTH --- 28 LBS (CUSTOMER TO SUPPLY 2" MAST) --- 150 MPH (?)

500 WATT RATED (?) --- EXTERNAL COAX HARNESS (NOT SHOWN) --- 9 dBd GAIN (?)

(?) - DO WE REALLY BELIEVE THESE CLAIMS?



SINCLAIR SD 318H

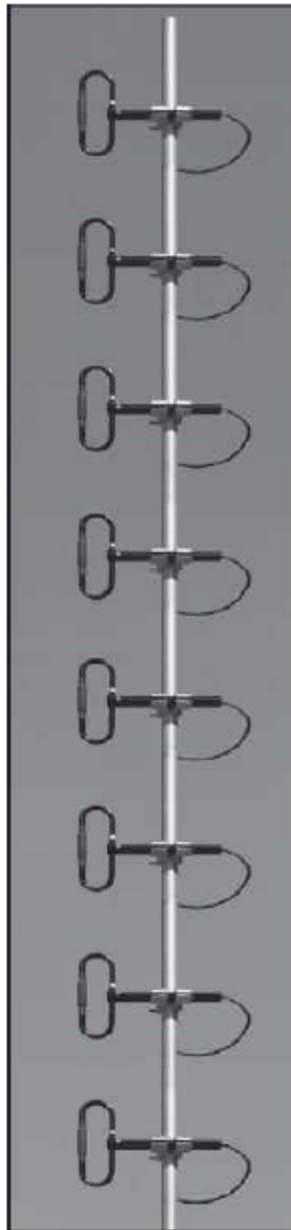
8 DIPOLE UHF - 10.2 dBd Gain - 1/4 Wave Offset - 406-512 MHz



17' TALL --- 12" OFFSET WIDTH --- 48 LBS --- 2.4" MAST --- 120 MPH RATED --- 150 WATT RATED

INTERNAL COAX HARNESS --- 10.2 dBd GAIN

COMPETITION BRAND T



ANT450D7-12
(Harness not shown)
Support mast is
customer-supplied

**12' TALL (?) --- 12" OFFSET WIDTH MAX --- 36 LBS (CUSTOMER TO SUPPLY MAST) --- 175 MPH
RATED (?)**

EXTERNAL COAX HARNESS (NOT SHOWN) --- 7-12 dBd GAIN (DEPENDENT ON PATTERN)(?)

(?) – DO WE REALLY BELIEVE THESE CLAIMS?

COMPETITION BRAND A/Db



COMPETITION BRAND A/Db

CONTINUED

BANDWIDTH

Four models, each with a bandwidth of approximately 20 MHz, cover the 406-420 and 450-512 MHz bands. Performance characteristics (gain and VSWR) are essentially constant across the bandwidth of the antenna. This feature permits the DB413 to provide optimum performance when used in either single- or multifrequency systems.

CONSTRUCTION

The mast and radiation elements are fabricated of high strength aluminum alloys. For ease of handling and to facilitate shipment, the mast is made in two sections. Assembling the sections is simple, requiring only ordinary hand tools. The unique center splice ensures proper alignment (see Figure 1). Superior protection against lightning damage is provided by the heavy-walled mast, which offers a positive low resistance discharge path to the tower and ground systems.

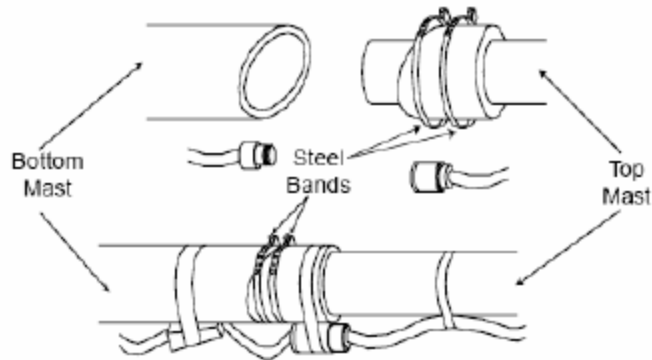
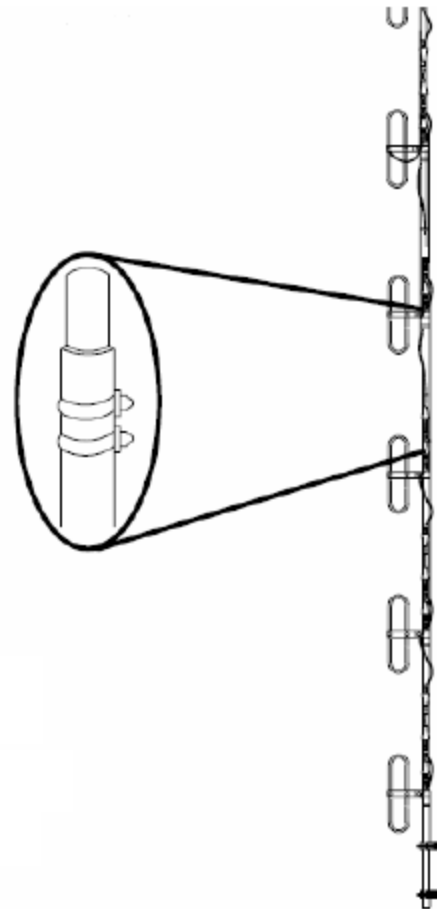


Figure 1. Center Splice Assembly.



COMPETITION ADb HAS TO HAVE 4 MODELS TO COVER THE UHF BAND

AND A SPLICE OF THE MAST IN THE MIDDLE

18' TALL --- OFFSET (NOT MUCH) --- 32 LBS --- 2" MAST --- 100 MPH RATED --- 250 WATT RATED

EXTERNAL COAX HARNESS --- 12 dBd GAIN (?)

SPECIAL NOTE: THE PROBLEM WITH AN EXPOSED COAX HARNESS IS THAT TWO TYPES OF FAILURES CAN HAPPEN WITH TIME.

THE FIRST IS THAT MOISTURE WORKS ITS WAY INTO THE HARNESS AND INTO THE CONNECTORS AND OVER TIME THE SUN-WIND-RAIN AND FREEZING TAKE ITS TOLL ON THE PROTECTIVE COVERINGS AND EVENTUALLY WORKS ITS WAY INTO THE CONNECTORS.

THE SECOND IS THAT THE SUN-WIND-RAIN AND FREEZING WILL CAUSE THE HARNESS TO LOOSEN UP AND START BANGING WITH THE WIND INTO THE MAST PIPE. THIS WILL INDUCE RF NOISE ON THE RECEIVER CAUSING A "CRACKLING SOUND" TO BE PRESENT WHEN EVER THE WIND IS BLOWING. MANY A REPLACEMENT ANTENNA HAS BEEN SOLD JUST TO SOLVE THESE "CRACKLING SOUNDS" TO REPEATER OWNERS WHO GOT VERY TIRED OF THEM.