

This antenna must be end mounted with the M/B Mounting Bracket included.

22" Boom Length: 48" Element Spacing: 1" 11" 24" 47" Guarantee Model No hassle refund If you are not completely satisfied 220-5Solid with any ARROW ANTENNA Product it can be returned for a FULL refund less shipping and handling within 90 DAYS of purchase date. We don't invent antennas. SIMPLY THE BEST We simply build them better.

Part #	Price	Model 220-5S Parts List
220801	\$18.00	Boom (with connector) 1" Sq. X 48" X .062 wall
220S04	\$ 6.00	Reflector Element 1/4" Round X 27 3/8"
220S05	\$ 6.00	Driven Element 1/4" Round X 26"
220S06	\$ 6.00	1st Director Element 1/4" Round X 23 <sup>1</sup> / <sub>4</sub> "
220S07	\$ 6.00	2nd Director Element 1/4" Round X 22 <sup>3</sup> / <sub>4</sub> "
220S08	\$ 6.00	3rd Director Element 1/4" Round X 22 <sup>1</sup> / <sub>4</sub> "
146S06	\$.50	#4 - 40 X 3/4" Element Screws (Stainless)
220S07	\$ 6.00	Gamma Match Assembly (3.5" Plastic, 3.5" Aluminum & 3 3/8" Copper on Connector)
220S08	\$12.00	Shorting Bar Assembly (3 piece)
220S09	\$.25	Plastic End Caps for Boom (1"Sq. X .062)
M/B	\$15.00	Mounting Bracket
		(Please add \$8.00 S & H per order. Thank you.)

A gamply Instructions

### Assembly Instructions

#### Important:

# Remove the connector from the boom (4 screws). Turn the connector 90 degrees and reinstall with the copper rod sticking out through the rubber grommet in the boom.

Thread each of the  $\frac{1}{4}$ " round elements with a #4-40 x  $\frac{3}{4}$ " stainless steel screw into the center of each element. This is to make sure all the elements are threaded properly and that the screws start easy.

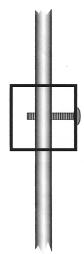
Lay out the elements according to size. The dimensions and position of each element are shown on the front page of these instructions. Attach the elements to the boom as shown.

**Caution:** Do NOT over tighten the screw or it will bend the element. Turn the screw just until it is snug then <sup>1</sup>/<sub>4</sub> turn more.

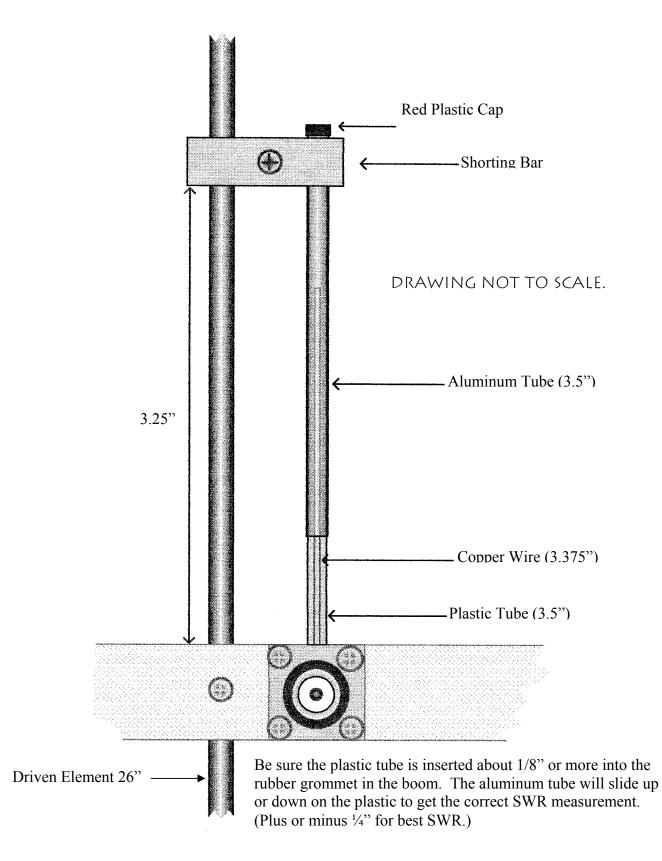
Then slide the plastic tube for the gamma match over the copper rod. The plastic tube should go through the rubber grommet at least 1/8". Then slide the aluminum tube over the plastic tube. Loosen the screw of the shorting bar and slide it over the driven element and the gamma match. (See Gamma Match Adjustment Sheet)

Shorting Bar

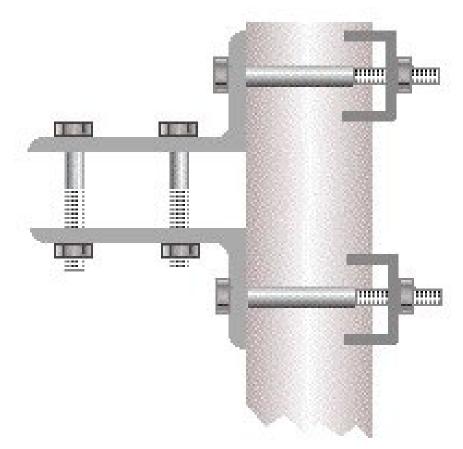




## 220-5S Gamma Match Setting







Mounting Bracket for Antennas with 1" Square Booms.

For Masts up to  $1 \frac{1}{2}$ ".

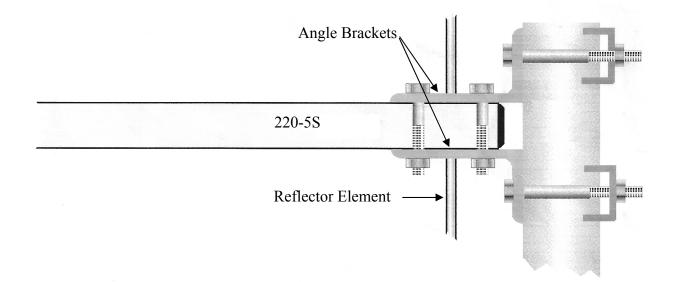
#### Guarantee No hassle refund

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## Model M/B

Mounting Bracket

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CHECKLIST FOR OUR SHIPPING DEPARTMENT Circle Antenna being built:

- 220-5S N 220-5S SO-239
- \_\_\_N connector \_\_\_\_SO-239 Connector
- \_\_\_\_Connector replacement sign.
- \_\_\_\_1" x 48" Boom
- \_\_\_\_5 Element holes
- <u>5</u> Set screw holes
- \_\_\_Black end caps.
- \_\_\_\_Black gromets in boom adjacent to connector hole.
- 6 @ #4 40 X 3/4" Element Screws (Stainless)
- \_\_\_\_Gamma Match Assembly (3.5" Plastic, 3.5" Aluminum & 3
  - 3/8" Copper on Connector)
- \_\_\_\_Shorting Bar Assembly (3 piece)

Reflector Element 1/4" Round X 27 3/8"

- Driven Element 1/4" Round X 26"
- \_\_\_\_1st Director Element 1/4" Round X 23 <sup>1</sup>/<sub>4</sub>"
- 2nd Director Element 1/4" Round X 22 <sup>3</sup>/<sub>4</sub>"
- \_\_\_\_3rd Director Element 1/4" Round X 22 <sup>1</sup>/<sub>4</sub>"
- <u>2 Mounting Brackets</u>
- \_\_\_2 Saddles
- \_\_\_\_4 bolts, nuts & lock washers  $\frac{1}{4}$ -20 x 2.75"
- \_\_\_\_4 bolts, nuts & lock washers  $\frac{1}{4}$ -20 x 1.75"