

## SPECIFICATIONS

	FOUR POLES		PF8-457DA
	VHF	UHF	
FREQUENCY RANGE	150-174 MHz	450-470 MHz	450-470 MHz
HEIGHT	24ft.(7.3m)	8.5ft.(2.59m)	8.5ft.(2.59m)
WEIGHT	7lbs.(3.2kg)	5lbs.(2.27kg)	7.1lbs.(3.22kg.)
BANDWIDTH	10 MHz	20 MHz	20 MHz
WINDSURFACE AREA	2.56ft <sup>2</sup> (0.23m <sup>2</sup> )	1ft <sup>2</sup> (0.093m <sup>2</sup> )	1.4ft <sup>2</sup> (0.13m <sup>2</sup> )
GAIN(OMNI)	6dB	6dB	6.8dB
(OFFSET)	9dB	9dB	---
(ELLIPTICAL)	---	---	7.8dB
IMPEDANCE	50ohms	50ohms	50ohms
VSWR	1.5:1	1.5:1	1.5:1
POWER HANDLING	500watts(cont.)	250watts(cont.)	250watts(cont.)
WIND SURVIVAL	100mph(160km/h)	100mph(160km/h)	100mph(160km/h)
LIGHTNING PROTECTION	dc Ground	dc Ground	dc Ground
TERMINATION	SO-239	SO-239	SO-239

## LIMITED WARRANTY

CUSHCRAFT CORPORATION, P.O. BOX 4680, MANCHESTER, NEW HAMPSHIRE 03108, WARRANTS TO THE ORIGINAL CONSUMER PURCHASER FOR ONE YEAR FROM DATE OF PURCHASE THAT EACH CUSHCRAFT ANTENNA IS FREE OF DEFECTS IN MATERIAL OR WORKMANSHIP. IF, IN THE JUDGEMENT OF CUSHCRAFT, ANY SUCH ANTENNA IS DEFECTIVE, THEN CUSHCRAFT CORPORATION WILL, AT ITS OPTION, REPAIR OR REPLACE THE ANTENNA AT ITS EXPENSE WITHIN THIRTY DAYS OF THE DATE THE ANTENNA IS RETURNED (AT PURCHASER'S EXPENSE) TO CUSHCRAFT OR ONE OF ITS AUTHORIZED REPRESENTATIVES. THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESSED WARRANTIES. ANY IMPLIED WARRANTY IS LIMITED IN DURATION TO ONE YEAR. CUSHCRAFT CORPORATION SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES WHICH MAY RESULT FROM A DEFECT. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR EXCLUSIONS OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. SO THE ABOVE LIMITATION AND EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. THIS WARRANTY DOES NOT EXTEND TO ANY PRODUCTS WHICH HAVE BEEN SUBJECT TO MISUSE, NEGLIGENCE, ACCIDENT OR IMPROPER INSTALLATION. ANY REPAIRS OR ALTERATIONS OUTSIDE OF THE CUSHCRAFT FACTORY WILL NULLIFY THIS WARRANTY.



P.O. BOX 4680, MANCHESTER, N.H. 03108

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

## FOUR POLE MASTS

(Figure 3)

### PFM-8 ASSEMBLY

Lay out the tubing in the proper order shown in Diagram 3. Slide section MB8 6" (15.24cm) into the slotted end of section MA. Place the 2 1/4" (5.72cm) worm clamp (#414) over the slots approximately 1/4" (0.64cm) from the end and tighten securely.

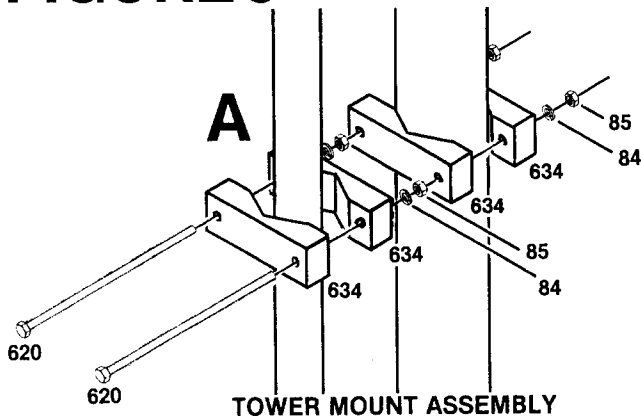
### PFM-22 ASSEMBLY

Lay out the tubing in the proper order from MA to MD. Begin assembly by sliding section MB into section MA's slotted end 8" (20.32cm) and secure with a 2 1/4" (5.72cm) worm clamp (#414), as described in the PFM-8 assembly. Next slide section MC's non-slotted end into section MB and secure with worm clamp (#414). Slide the final section MD into MC 8" (20.32cm) and secure with the 1 3/4" (4.45cm) worm clamp (#413).

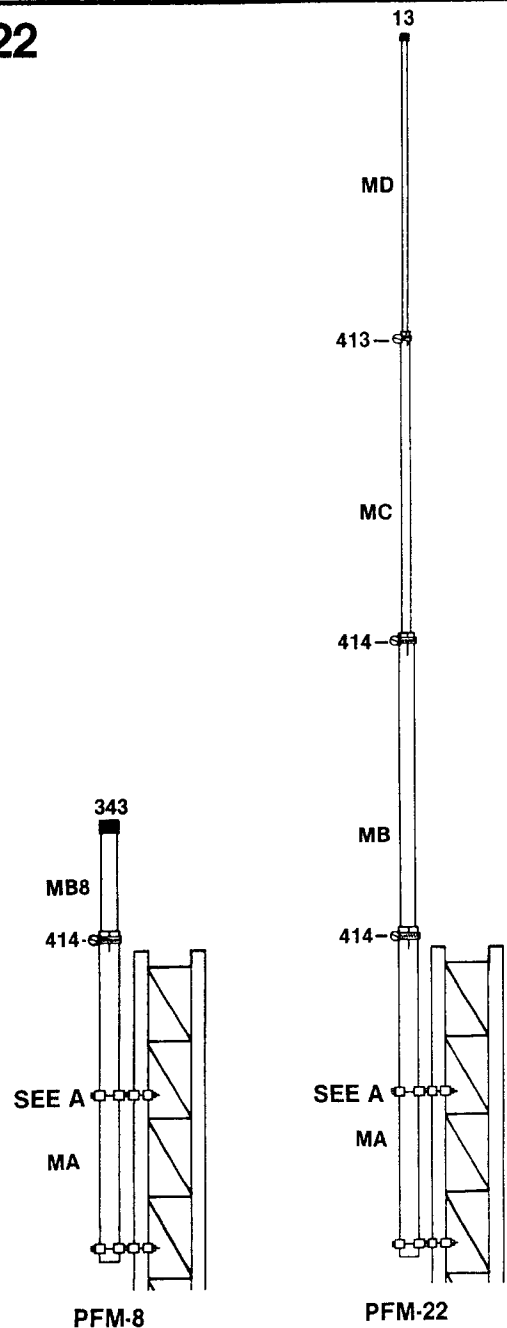
Once your support mast is assembled, place two steel bolts (#620) through the back of a V-block (#634). Place this around the tower leg and push another V-block (#634) toward the tower leg and secure with the 1/4" (0.64cm) hardware provided. Back another V-block (#634) onto the bolts (#620) and place the assembled support mast against the V-block. Put another V-block (#634) on the bolts and secure with the 1/4" (0.64cm) hardware provided. Assemble another support mast clamp at least 18" (45.72cm) away from the first support mast clamp.

## FIGURE 3

## PFM-8 & PFM-22

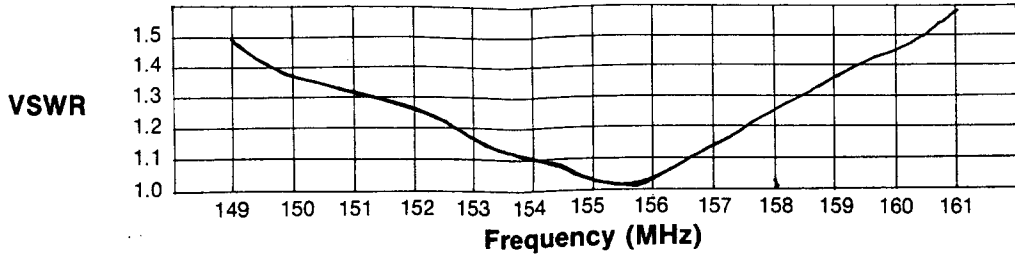


P/N	KEY	DISPLAY	DESCRIPTION	SIZE	QUANTITY	
					PFM-8	PFM-22
	MA		Aluminum Tubing	1 7/8" x 72" (4.7x182.9cm)	1	1
	MB		Aluminum Tubing	1 5/8" x 72" (4.1x182.9cm)	0	1
	MC		Aluminum Tubing	1 3/8" x 72" (3.5x182.9cm)	0	1
	MD		Aluminum Tubing	1 1/4" x 72" (3.2x182.9cm)	0	1
	MB8		Aluminum Tubing	1 3/4" x 30" (4.4x76.2cm)	1	0
030414	414		Worm Clamp	2 1/4" (5.7cm)	1	2
030413	413		Worm Clamp	1 3/4" (4.4cm)	0	1
050343	343		Plastic Cap	1 3/4" (4.4cm)	1	0
050013	13		Plastic Cap	1 1/4" (3.2cm)	0	1
171634	634		V-Block		8	8
010084	84		Split Lock Washer	1/4" (0.64cm)	8	8
010085	85		Hex Nut	1/4" (0.64cm)	8	8
021620	620		Steel Bolt	1/4" x 6" (0.64x15.2cm)	4	4

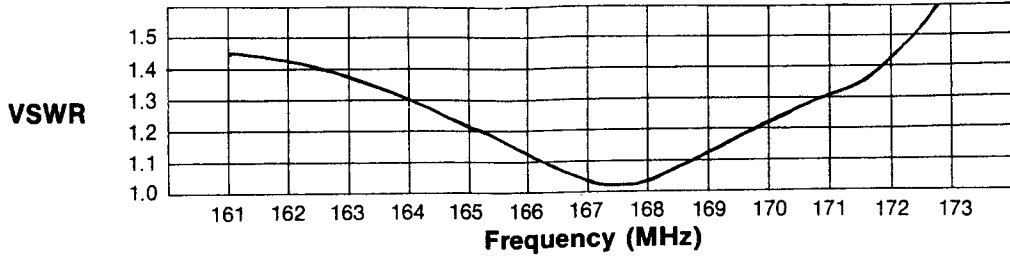


# VSWR

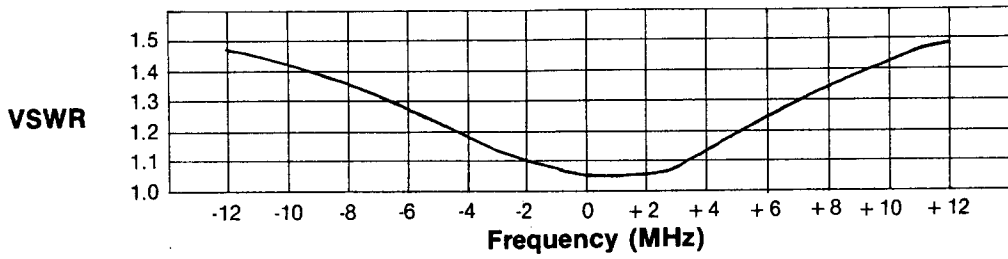
PF-156D



PF-167D

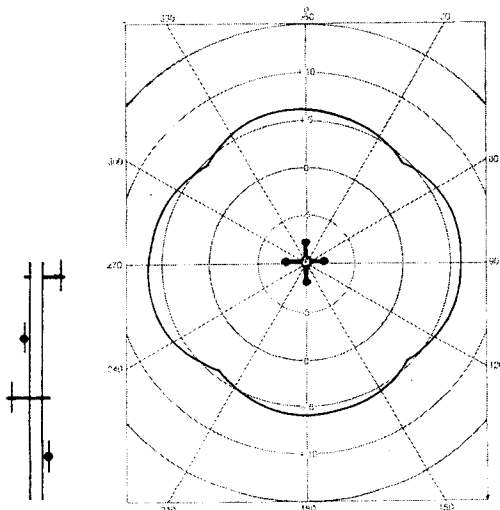


PF-457D

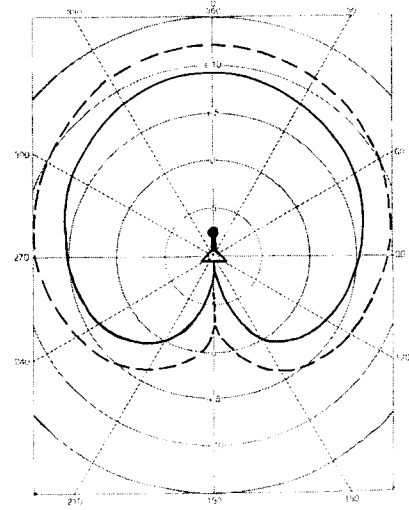


# FOUR POLE PATTERNS

A



B1

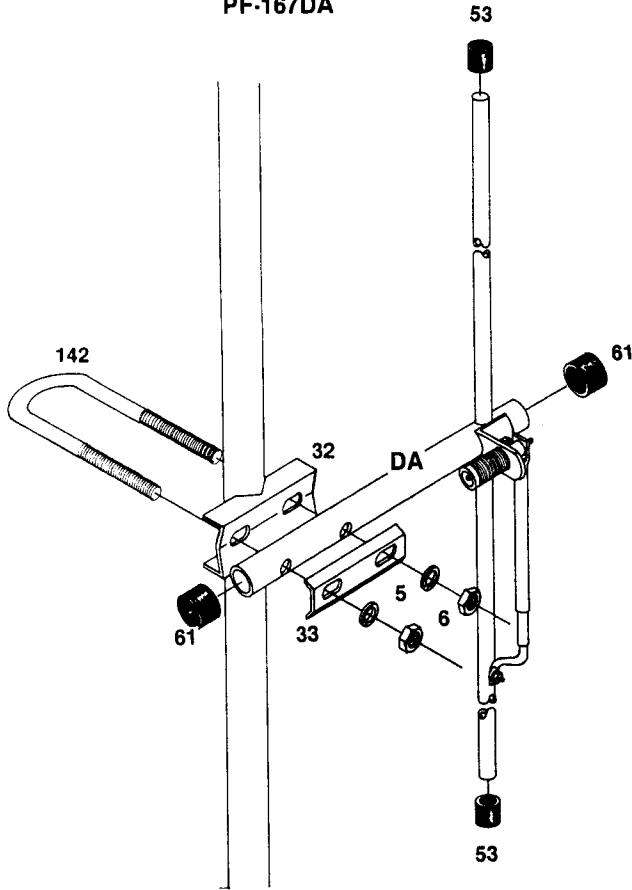


— 4 DIPOLE OMNI

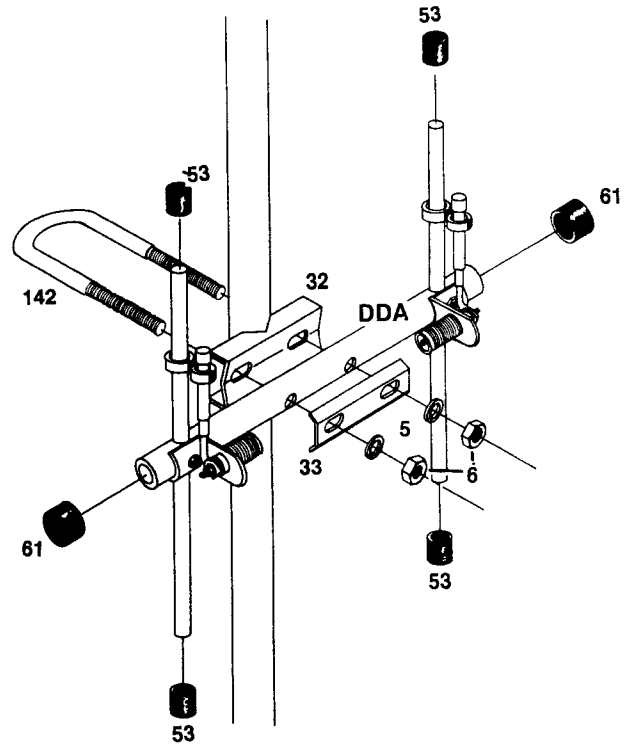
— 4 DIPOLES MOUNTED ON 12" TOWER OFFSET 9dBd  
 - - - 8 DIPOLES MOUNTED ON 12" TOWER OFFSET 12dBd

# FIGURE 1

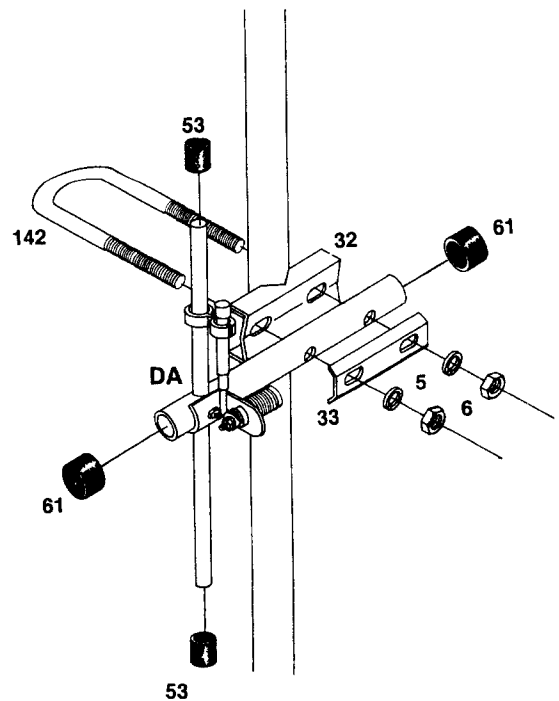
PF-156DA  
&  
PF-167DA


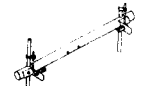










PF8-457DA



PF-457DA



P/N	KEY	DISPLAY	DESCRIPTION	SIZE	QUANTITY	
					FOUR-POLES	PF-8-457DA
	DA		Dipole Assembly		4	0
	DDA		Dual Dipole Assembly		0	4
020005	5		Lock Washer	5/16''(0.8cm)	8	8
020006	6		Hex Nut	5/16''(0.8cm)	8	8
020142	142		U-Bolt	2 3/8''(5.1cm)	4	4
190032	32		U-Bolt Bracket	3 1/2''(8.9cm)	4	4
190033	33		U-Bolt Bracket Plate	3 1/2''(8.9cm)	4	4
050053	53		Plastic Cap	1/2''(1.3cm)	8	16
050061	61		Plastic Cap	7/8''(2.2cm)	8	8
290326	326		Danger Label		1	1