5.75 dB Gain
Fiber Glass Omnidirectional CB Base Station Antenna

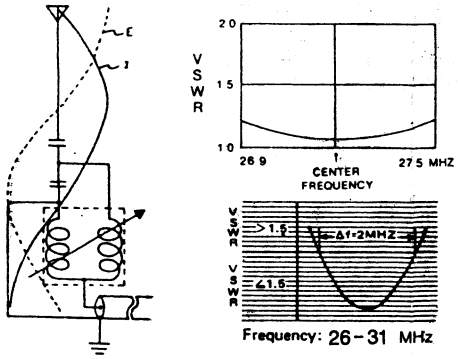
Model CBS-18 (0189)

Features

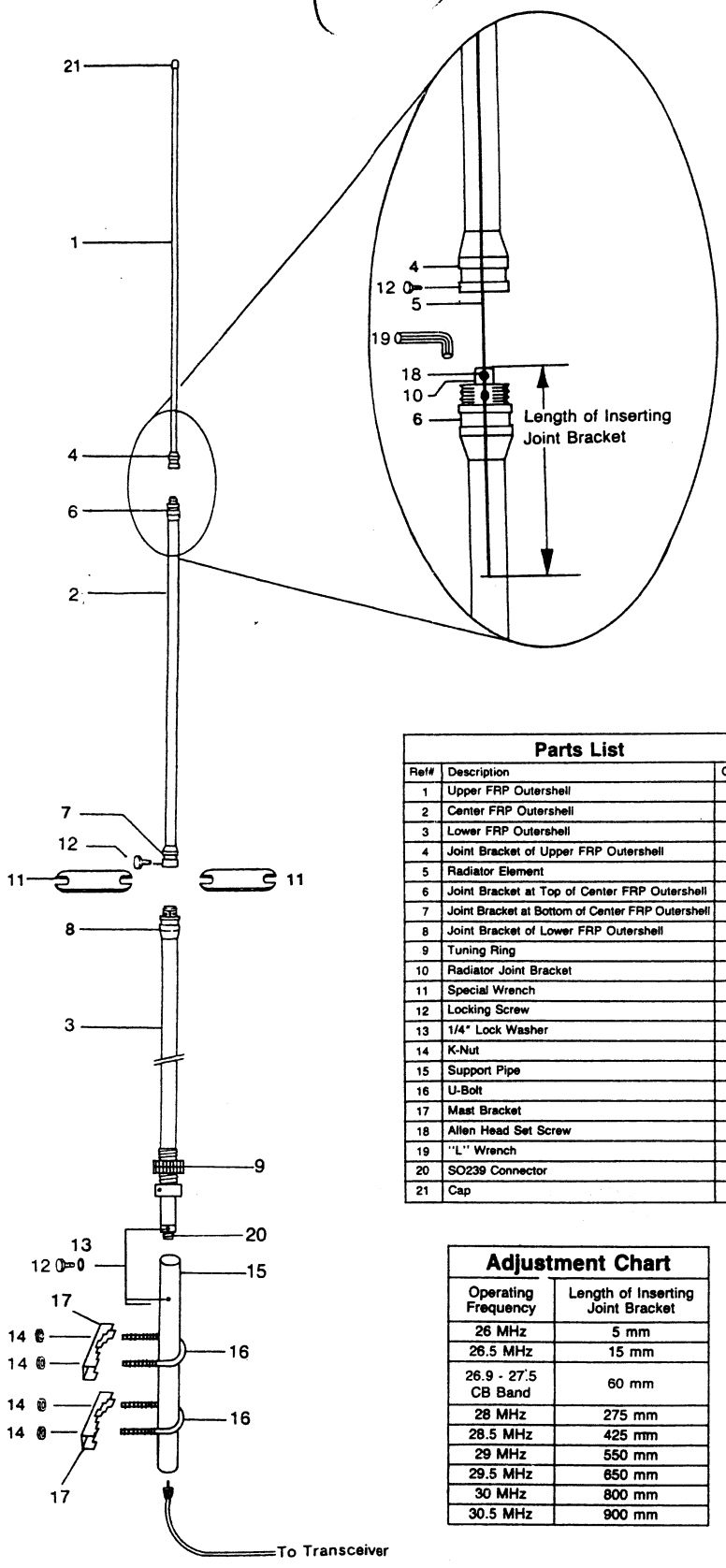
- Fiberglass antenna offers:
  - — Protection from weather, a must in salt water areas.
  - — Durable construction withstand 900 MPH (40m/sec) winds.
  - — Reduction in precipitation static, lower background noise.
  - — Insulated conductor, less interference from rain, sleet and snow.
- Protects UP to 14500 Volts
- 18-ft tall – Comes in three sections
- Mast diameter accepted 30-62m/m(1 $\frac{3}{16}$" -2 $\frac{7}{16}$")
- No ground radials needed
- Adjusting the length of whip for covering 26-31 MHz without cutting
- External trimmer for easy tuning at any frequency range

Electrical Specification

- Gain .....DC Grounded 5.75 dB
- VSWR .....less than 1.15:1 for CB band
  ..... less than 1.5:1 for 2 MHz band width
- Frequency ..... 26-31 MHz
- Polarization ..... Vertical
- Impedance ..... 50 ohm
- Power Capacity ..... 2000 watts
- Configuration .....Half wave over a quarter wave variable mutual transductance tuned
- Connector ..... SO 239



(0189)



Parts List		
Ref#	Description	Q'TY
1	Upper FRP Outershell	1
2	Center FRP Outershell	1
3	Lower FRP Outershell	1
4	Joint Bracket of Upper FRP Outershell	1
5	Radiator Element	1
6	Joint Bracket at Top of Center FRP Outershell	1
7	Joint Bracket at Bottom of Center FRP Outershell	1
8	Joint Bracket of Lower FRP Outershell	1
9	Tuning Ring	2
10	Radiator Joint Bracket	1
11	Special Wrench	2
12	Locking Screw	3
13	1/4" Lock Washer	1
14	K-Nut	4
15	Support Pipe	1
16	U-Bolt	2
17	Mast Bracket	2
18	Allen Head Set Screw	1
19	"L" Wrench	1
20	SO239 Connector	1
21	Cap	1

Adjustment Chart	
Operating Frequency	Length of Inserting Joint Bracket
26 MHz	5 mm
26.5 MHz	15 mm
26.9 - 27.5 CB Band	60 mm
28 MHz	275 mm
28.5 MHz	425 mm
29 MHz	550 mm
29.5 MHz	650 mm
30 MHz	800 mm
30.5 MHz	900 mm

7673-3000-5065

Assembly & Basic Tuning Procedure (Before Roof-Mounting)

1. Lay the 3-antenna sections flat on a large work area.
2. Loosen the set screw (18) using the supplied "L"-wrench (19), and slide the radiator element (5) into the radiator joint bracket (10) to correct length of each frequency showing the adjustment chart, then tighten the set screw (18).
3. Screw upper FRP outershell (1) tightly onto the joint bracket (6), using supplied special wrench (11). Then, thread locking screw (12) installed into joint bracket (4) and tighten securely with wrench.
4. Screw center FRP outershell (2) tightly onto the joint bracket (8) with supplied special wrench (11). Then, thread locking screw (12) installed into joint bracket (7) and tighten securely with wrench.
5. Secure support pipe (15) to mounting pole (not included) in desired location using brackets (17), u-bolts (16) and k-nuts (14). Tighten securely with wrench.
6. Install PL-259 connector (not included) onto coaxial cable from radio and run it up through support pipe (15) and screw PL-259 tightly onto SO-239 connector at base of antenna. Lower assembled antenna into support pipe (15) with open threaded hole turned so that it will align with hole in support pipe for locking screw. Thread locking screw (12) with lock washer (13) installed into hole and tighten securely with wrench.

Fine-Tuning Procedure (After Roof-Mounting)

A. Check SWR at low and high of frequency band(for example CH.1 & CH.40 of the CB-Band).

B. If the SWR is better at low (CH.1-CB) than at high (CH.40-CB) raise the twin-ring about ¼ to ½ turns.

C. If the SWR is better at high (CH.40-CB) lower the twin-ring about ¼ to ½ turns. Repeat the step B & C until the SWR is the nearly the same in the low and the high of the frequency band and the best performance will be obtained. Then tighten the twin-ring against each other.