

ANTENNA ASSEMBLY

MODEL	101-C
FREQ. (MHZ.)	30 - 50

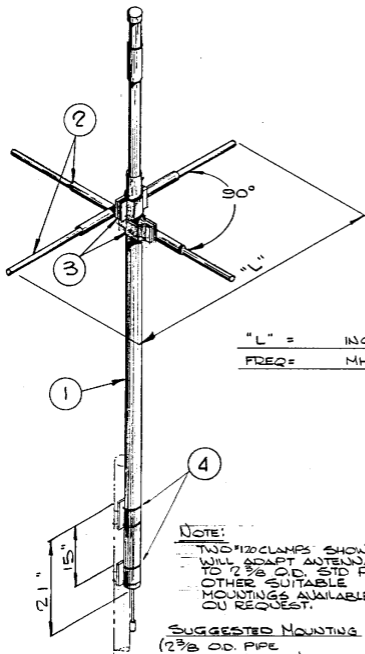
ASSEMBLY PROCEDURE

1. CHECK QTY. OF PARTS AGAINST PARTS LIST. NOTIFY CARRIER IMMEDIATELY IF SHORTAGE OR DAMAGE IS EVIDENT.
2. PLACE A # 1 CLAMP ON THE ANTENNA AND SLIDE A GROUND ROD THROUGH THE CLAMP UNTIL THE ROD IS CENTRED THEN SLIDE CLAMP UP UNTIL IT BUTTS AGAINST LOWER BASE BOLT AND TIGHTEN IN POSITION. FOLLOW THE SAME PROCEDURE FOR THE LOWER GROUND ROD.

NOTE:

THE TWO # 1 CLAMPS MUST BUTT AGAINST ONE ANOTHER AND GROUND RODS MUST BE AT 90° TO EACH OTHER.

3. $\frac{3}{8}$ BOLTS TIGHTEN TO 25 FT/LB
 $\frac{1}{2}$ BOLTS TIGHTEN TO 35 FT/LB



"L" = _____ INCHES

FREQ = _____ MHZ

NOTE:

- TWO #120 CLAMPS SHOWN WILL ADAPT ANTENNA TO 2 $\frac{3}{8}$ O.D. STD PIPE.
- OTHER SUITABLE MOUNTINGS AVAILABLE ON REQUEST.

SUGGESTED MOUNTING
 (2 $\frac{3}{8}$ O.D. PIPE NOT SUPPLIED)

PARTS LIST

ITEM	DESCRIPTION	QTY
1	ANTENNA ASSY	1
2	GROUND RODS	2
3	# 1 CLAMP	2
4	# 120 CLAMP	2

ISSUE	ECN	DATE	CHECKED	APP.
2	6315	21-11-56		137

NUMBER
025242

ANTENNA ASSEMBLY

MODEL	101-C
FREQ. (MHZ.)	50 - 88

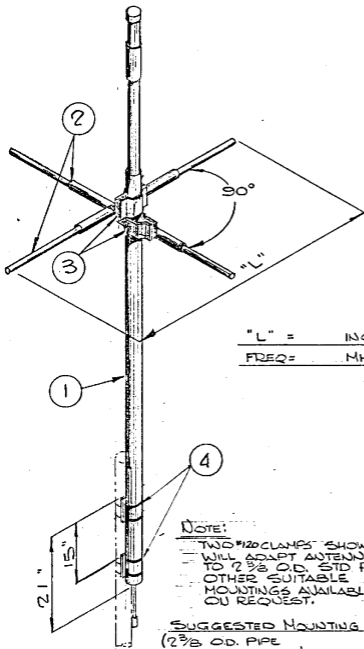
ASSEMBLY PROCEDURE

1. CHECK QTY OF PARTS AGAINST PARTS LIST. NOTIFY CARRIER IMMEDIATELY IF SHORTAGE OR DAMAGE IS EVIDENT.
2. PLACE A # 11 CLAMP ON THE ANTENNA AND SLIDE A GROUND ROD THROUGH THE CLAMP UNTIL THE ROD IS CENTRED THEN SLIDE CLAMP UP UNTIL IT BUTTS AGAINST LOWER BASE BOLT AND TIGHTEN IN POSITION. FOLLOW THE SAME PROCEDURE FOR THE LOWER GROUND ROD.

NOTE:

THE TWO # 11 CLAMPS MUST BUTT AGAINST ONE ANOTHER AND GROUND RODS MUST BE AT 90° TO EACH OTHER.

3. $\frac{3}{8}$ BOLTS TIGHTEN TO 25 FT/LB
 $\frac{1}{2}$ BOLTS TIGHTEN TO 35 FT/LB



"L" = _____ INCHES
FREQ = _____ MHZ

NOTE:

TWO #120 CLAMPS SHOWN WILL ADAPT ANTENNA TO $2\frac{3}{8}$ O.D. STD PIPE. OTHER SUITABLE MOUNTINGS AVAILABLE ON REQUEST.

SUGGESTED MOUNTING
($2\frac{3}{8}$ O.D. PIPE NOT SUPPLIED)

PARTS LIST

ITEM	DESCRIPTION	QTY
1	ANTENNA ASSY	1
2	GROUND RODS	2
3	# 11 CLAMP	2
4	# 120 CLAMP	2

ISSUE	E.C.N.	DATE	CHECKED	APP.
2	6193	12-05-36	E.G.	
3	6315	20-11-36		REC

NUMBER
025243

= FREE SPACE WAVELENGTH (INCHES)
 LG = WAVELENGTH IN CABLE (0.659) (INCHES)
 FAC = CONSTANT FACTOR = 0.02519*LG**0.25
 OR GRAPH = 0.1115 TO 0.0869

FREQ. (MHZ)	GND. ROD A-4467 .272*LG	GND. ROD A-4468 .614*LG	LOWER	UPPER	FEED- CABLE A-4460 .6566*LG	S.C. STUB A-4459 .25*LG
			RADIATOR A-4463 .112*LG +3.1875	RADIATOR A-4464 FAC*LG +0.5		
30.00	107.059	241.670	47.271	44.662	170.310	64.846
30.25	106.174	239.673	46.906	44.206	168.903	64.310
30.50	105.304	237.709	46.548	43.759	167.519	63.783
30.75	104.448	235.776	46.195	43.320	166.157	63.264
31.00	103.606	233.875	45.849	42.888	164.817	62.754
31.25	102.777	232.004	45.507	42.465	163.498	62.252
31.50	101.961	230.162	45.171	42.049	162.200	61.758
31.75	101.158	228.350	44.841	41.640	160.923	61.271
32.00	100.368	226.566	44.515	41.239	159.666	60.793
32.25	99.590	224.810	44.195	40.845	158.428	60.321
32.50	98.824	223.080	43.880	40.457	157.210	59.857
32.75	98.069	221.377	43.569	40.076	156.010	59.401
33.00	97.327	219.700	43.263	39.702	154.828	58.951
33.25	96.595	218.048	42.962	39.334	153.664	58.507
33.50	95.874	216.421	42.665	38.972	152.517	58.071
33.75	95.164	214.818	42.373	38.616	151.387	57.641
34.00	94.464	213.239	42.084	38.266	150.274	57.217
34.25	93.774	211.682	41.801	37.922	149.177	56.799
34.50	93.095	210.148	41.521	37.583	148.096	56.387
34.75	92.425	208.636	41.245	37.250	147.031	55.982
35.00	91.765	207.146	40.973	36.922	145.980	55.582
35.25	91.114	205.677	40.705	36.599	144.945	55.188
35.50	90.473	204.229	40.441	36.282	143.924	54.799
35.75	89.840	202.800	40.180	35.969	142.918	54.416
36.00	89.216	201.392	39.923	35.662	141.925	54.038
36.25	88.601	200.003	39.670	35.359	140.947	53.665
36.50	87.994	198.633	39.420	35.061	139.981	53.298
36.75	87.395	197.282	39.174	34.767	139.029	52.935
37.00	86.805	195.949	38.931	34.478	138.090	52.578
37.25	86.222	194.634	38.691	34.193	137.163	52.225
37.50	85.647	193.336	38.454	33.913	136.248	51.876
37.75	85.080	192.056	38.221	33.636	135.346	51.533
38.00	84.520	190.792	37.990	33.364	134.456	51.194
38.25	83.968	189.545	37.763	33.096	133.577	50.859
38.50	83.423	188.315	37.538	32.831	132.709	50.529
38.75	82.885	187.100	37.316	32.571	131.853	50.203
39.00	82.353	185.900	37.098	32.314	131.008	49.881
39.25	81.829	184.716	36.882	32.061	130.174	49.564
39.50	81.311	183.547	36.668	31.811	129.350	49.250
39.75	80.799	182.393	36.458	31.565	128.536	48.940
40.00	80.294	181.253	36.250	31.323	127.733	48.634

ANTENNA MODEL 101-C DIMENSIONS

FREQ. (MHZ)	GND. ROD		LOWER RADIATOR	UPPER RADIATOR	FEED- CABLE	S.C. STUB
	A-4467 .272*LO	A-4468 .614*LO	A-4463 .112*LO +3.1875	A-4464 FAC*LO +0.5	A-4460 .6566*LG	A-4459 .25*LG
40.25	79.796	180.127	36.045	31.084	126.939	48.332
40.50	79.303	179.015	35.842	30.848	126.156	48.034
40.75	78.817	177.917	35.641	30.615	125.382	47.739
41.00	78.336	176.832	35.443	30.386	124.617	47.448
41.25	77.861	175.760	35.248	30.160	123.862	47.160
41.50	77.392	174.701	35.055	29.937	123.116	46.876
41.75	76.929	173.655	34.864	29.716	122.379	46.596
42.00	76.471	172.622	34.675	29.499	121.650	46.318
42.25	76.018	171.600	34.489	29.285	120.931	46.044
42.50	75.571	170.591	34.305	29.073	120.219	45.773
42.75	75.129	169.593	34.123	28.865	119.516	45.506
43.00	74.692	168.607	33.943	28.659	118.821	45.241
43.25	74.261	167.633	33.765	28.455	118.134	44.980
43.50	73.834	166.669	33.590	28.255	117.456	44.721
43.75	73.412	165.717	33.416	28.057	116.784	44.466
44.00	72.995	164.775	33.244	27.861	116.121	44.213
44.25	72.583	163.844	33.074	27.668	115.465	43.963
44.50	72.175	162.924	32.907	27.477	114.816	43.716
44.75	71.772	162.014	32.740	27.289	114.175	43.472
45.00	71.373	161.114	32.576	27.103	113.540	43.230
45.25	70.978	160.223	32.414	26.920	112.913	42.992
45.50	70.588	159.343	32.253	26.738	112.293	42.755
45.75	70.203	158.472	32.095	26.559	111.679	42.522
46.00	69.821	157.611	31.937	26.382	111.072	42.291
46.25	69.444	156.759	31.782	26.207	110.472	42.062
46.50	69.070	155.916	31.628	26.035	109.878	41.836
46.75	68.701	155.083	31.476	25.864	109.290	41.612
47.00	68.336	154.258	31.326	25.696	108.709	41.391
47.25	67.974	153.442	31.177	25.529	108.134	41.172
47.50	67.616	152.634	31.030	25.365	107.565	40.955
47.75	67.262	151.835	30.884	25.202	107.001	40.741
48.00	66.912	151.044	30.739	25.041	106.444	40.528
48.25	66.565	150.261	30.597	24.882	105.893	40.319
48.50	66.222	149.487	30.455	24.725	105.347	40.111
48.75	65.883	148.720	30.316	24.570	104.806	39.905
49.00	65.546	147.961	30.177	24.417	104.272	39.701
49.25	65.214	147.210	30.040	24.265	103.742	39.500
49.50	64.884	146.467	29.905	24.115	103.218	39.300
49.75	64.558	145.731	29.770	23.967	102.700	39.103
50.00	64.236	145.002	29.637	23.820	102.186	38.907

FREQ. (MHZ)	GND. ROD A-4461 .614*LO	LOWER	UPPER	FEED- CABLE A-4460 .6566*LG	S.C. STUB A-4459 .25*LG
		RADIATOR A-4463 .112*LO +3.1875	RADIATOR A-4464 FAC*LO +0.5		
50.25	144.281	29.506	23.675	101.678	38.714
50.50	143.567	29.376	23.532	101.175	38.522
50.75	142.859	29.247	23.390	100.676	38.332
51.00	142.159	29.119	23.250	100.183	38.144
51.25	141.466	28.992	23.112	99.694	37.958
51.50	140.779	28.867	22.974	99.210	37.774
51.75	140.099	28.743	22.839	98.731	37.592
52.00	139.425	28.620	22.705	98.256	37.411
52.25	138.758	28.498	22.572	97.786	37.232
52.50	138.097	28.378	22.441	97.320	37.055
52.75	137.443	28.259	22.311	96.859	36.879
53.00	136.795	28.140	22.182	96.402	36.705
53.25	136.152	28.023	22.055	95.950	36.533
53.50	135.516	27.907	21.929	95.501	36.362
53.75	134.886	27.792	21.805	95.057	36.193
54.00	134.261	27.678	21.681	94.617	36.025
54.25	133.643	27.565	21.560	94.181	35.859
54.50	133.030	27.453	21.439	93.749	35.695
54.75	132.422	27.343	21.319	93.321	35.532
55.00	131.820	27.233	21.201	92.897	35.370
55.25	131.224	27.124	21.084	92.476	35.210
55.50	130.633	27.016	20.968	92.060	35.052
55.75	130.047	26.909	20.854	91.647	34.894
56.00	129.466	26.803	20.740	91.238	34.739
56.25	128.891	26.699	20.628	90.832	34.584
56.50	128.321	26.595	20.516	90.430	34.431
56.75	127.755	26.491	20.406	90.032	34.280
57.00	127.195	26.389	20.297	89.637	34.129
57.25	126.640	26.288	20.189	89.246	33.980
57.50	126.089	26.187	20.082	88.858	33.832
57.75	125.543	26.088	19.976	88.473	33.686
58.00	125.002	25.989	19.872	88.092	33.541
58.25	124.465	25.891	19.768	87.714	33.397
58.50	123.934	25.794	19.665	87.339	33.254
58.75	123.406	25.698	19.563	86.967	33.113
59.00	122.883	25.603	19.462	86.599	32.972
59.25	122.365	25.508	19.362	86.233	32.833
59.50	121.851	25.414	19.263	85.871	32.695
59.75	121.341	25.321	19.165	85.512	32.558
60.00	120.835	25.229	19.068	85.155	32.423
60.25	120.334	25.138	18.972	84.802	32.288
60.50	119.837	25.047	18.876	84.451	32.155
60.75	119.343	24.957	18.782	84.104	32.023
61.00	118.854	24.868	18.688	83.759	31.891
61.25	118.369	24.779	18.595	83.417	31.761
61.50	117.888	24.691	18.503	83.078	31.632
61.75	117.411	24.604	18.412	82.742	31.504
62.00	116.937	24.518	18.322	82.408	31.377
62.25	116.468	24.432	18.233	82.077	31.251
62.50	116.002	24.347	18.144	81.749	31.125
62.75	115.540	24.263	18.056	81.423	31.002
63.00	115.081	24.179	17.969	81.100	30.879

FREQ. (MHZ)	GND. ROD A-4461 .614*LO	LOWER	UPPER	FEED- CABLE A-4460 .6566*LG	S.C. STUB A-4459 .25*LG
		RADIATOR A-4463 .112*LO +3.1875	RADIATOR A-4464 FAC*LO +0.5		
63.25	114.626	24.097	17.883	80.780	30.757
63.50	114.175	24.014	17.797	80.462	30.636
63.75	113.727	23.933	17.713	80.146	30.516
64.00	113.283	23.851	17.629	79.833	30.396
64.25	112.842	23.771	17.545	79.522	30.278
64.50	112.405	23.691	17.463	79.214	30.161
64.75	111.971	23.612	17.381	78.908	30.044
65.00	111.540	23.534	17.300	78.605	29.929
65.25	111.113	23.456	17.219	78.304	29.814
65.50	110.689	23.378	17.140	78.005	29.700
65.75	110.268	23.302	17.061	77.708	29.587
66.00	109.850	23.225	16.982	77.414	29.475
66.25	109.436	23.150	16.905	77.122	29.364
66.50	109.024	23.075	16.828	76.832	29.254
66.75	108.616	23.000	16.751	76.544	29.144
67.00	108.211	22.926	16.675	76.258	29.035
67.25	107.808	22.853	16.600	75.975	28.927
67.50	107.409	22.780	16.526	75.694	28.820
67.75	107.013	22.708	16.452	75.414	28.714
68.00	106.619	22.636	16.379	75.137	28.608
68.25	106.229	22.565	16.306	74.862	28.504
68.50	105.841	22.494	16.234	74.589	28.400
68.75	105.456	22.424	16.162	74.317	28.296
69.00	105.074	22.354	16.091	74.048	28.194
69.25	104.695	22.285	16.021	73.781	28.092
69.50	104.318	22.216	15.951	73.515	27.991
69.75	103.944	22.148	15.882	73.252	27.891
70.00	103.573	22.080	15.814	72.990	27.791
70.25	103.204	22.013	15.745	72.730	27.692
70.50	102.838	21.946	15.678	72.473	27.594
70.75	102.475	21.880	15.611	72.216	27.496
71.00	102.114	21.814	15.544	71.962	27.400
71.25	101.756	21.749	15.478	71.710	27.303
71.50	101.400	21.684	15.413	71.459	27.208
71.75	101.047	21.619	15.348	71.210	27.113
72.00	100.696	21.555	15.284	70.963	27.019
72.25	100.348	21.492	15.220	70.717	26.926
72.50	100.002	21.429	15.156	70.473	26.833
72.75	99.658	21.366	15.093	70.231	26.740
73.00	99.317	21.304	15.031	69.991	26.649
73.25	98.978	21.242	14.969	69.752	26.558
73.50	98.641	21.181	14.908	69.514	26.468
73.75	98.307	21.120	14.847	69.279	26.378
74.00	97.974	21.059	14.786	69.045	26.289
74.25	97.645	20.999	14.726	68.812	26.200
74.50	97.317	20.939	14.666	68.581	26.112
74.75	96.991	20.880	14.607	68.352	26.025
75.00	96.668	20.821	14.548	68.124	25.938
75.25	96.347	20.762	14.490	67.898	25.852
75.50	96.028	20.704	14.432	67.673	25.766
75.75	95.711	20.646	14.375	67.450	25.681
76.00	95.396	20.589	14.318	67.228	25.597

FREE SPACE WAVELENGTH (INCHES)
 = WAVELENGTH IN CABLE (Ø.659) (INCHES)
 AC= CONSTANT FACTOR = 0.02519*LO**0.25
 OR GRAPH = 0.1115 TO 0.0869

FREQ. (MHZ)	GND. ROD A-4461 .614*LO	LOWER RADIATOR A-4463 .112*LO +3.1875	UPPER RADIATOR A-4464 FAC*LO +0.5	FEED- CABLE A-4460 .6566*LG	S.C. STUB A-4459 .25*LG
76.00	95.396	20.589	14.318	67.228	25.597
76.50	94.773	20.475	14.205	66.788	25.430
77.00	94.157	20.363	14.094	66.355	25.265
77.50	93.550	20.252	13.984	65.927	25.102
78.00	92.950	20.143	13.876	65.504	24.941
78.50	92.358	20.035	13.770	65.087	24.782
79.00	91.774	19.928	13.665	64.675	24.625
79.50	91.196	19.823	13.561	64.263	24.470
80.00	90.626	19.719	13.459	63.866	24.317
80.50	90.064	19.616	13.359	63.470	24.166
81.00	89.508	19.515	13.260	63.078	24.017
81.50	88.958	19.414	13.162	62.691	23.870
82.00	88.416	19.315	13.066	62.309	23.724
82.50	87.880	19.218	12.970	61.931	23.580
83.00	87.351	19.121	12.877	61.558	23.438
83.50	86.828	19.026	12.784	61.189	23.298
84.00	86.311	18.931	12.693	60.825	23.159
84.50	85.800	18.838	12.603	60.465	23.022
85.00	85.295	18.746	12.514	60.110	22.887
85.50	84.797	18.655	12.426	59.758	22.753
86.00	84.304	18.565	12.339	59.411	22.621
86.50	83.816	18.476	12.254	59.067	22.490
87.00	83.335	18.389	12.169	58.728	22.361
87.50	82.858	18.302	12.086	58.392	22.233
88.00	82.388	18.216	12.004	58.060	22.106
88.50	81.922	18.131	11.923	57.732	21.982
89.00	81.462	18.047	11.843	57.408	21.858
89.50	81.007	17.964	11.763	57.087	21.736
90.00	80.557	17.882	11.685	56.770	21.615
90.50	80.112	17.801	11.608	56.457	21.496
91.00	79.672	17.720	11.532	56.146	21.378
91.50	79.236	17.641	11.457	55.840	21.261
92.00	78.806	17.562	11.382	55.536	21.145
92.50	78.380	17.485	11.309	55.236	21.031
93.00	77.958	17.408	11.236	54.939	20.918
93.50	77.541	17.332	11.164	54.645	20.806
94.00	77.129	17.257	11.093	54.354	20.695
94.50	76.721	17.182	11.023	54.067	20.586
95.00	76.317	17.109	10.954	53.782	20.478
95.50	75.917	17.036	10.886	53.501	20.370
95.00	75.522	16.963	10.818	53.222	20.264
96.50	75.131	16.892	10.752	52.946	20.159
97.00	74.743	16.821	10.686	52.673	20.055
97.50	74.360	16.752	10.620	52.403	19.952
98.00	73.981	16.682	10.556	52.136	19.851