

Figure 9 – Bottom (Component) View of Model 14T301

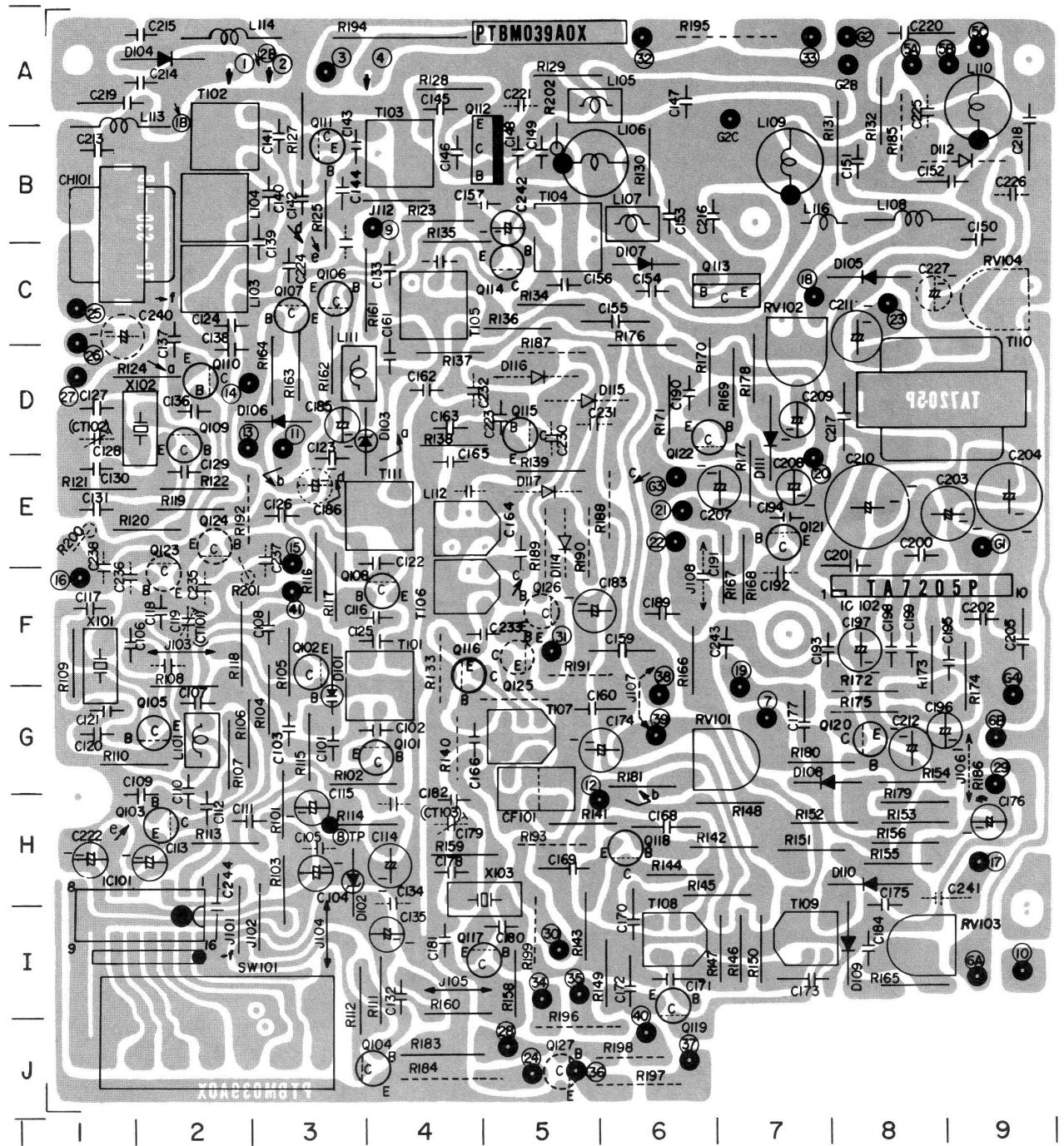


Figure 10 – Main Printed Circuit Board – 14T300 & 14T301

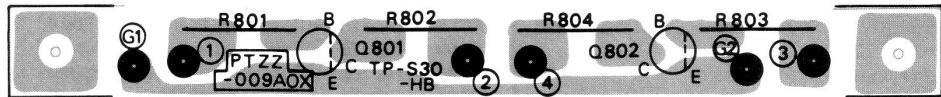


Figure 11 – Lamp Printed Circuit Board – 14T301

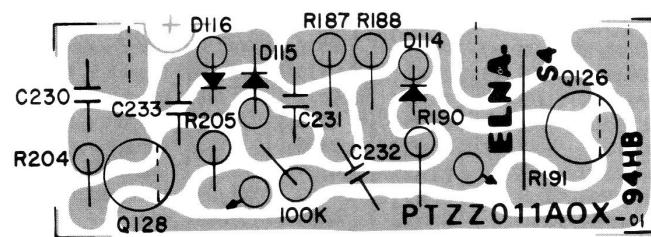


Figure 12 – Noise Blanker Printed Circuit Board – 14T301

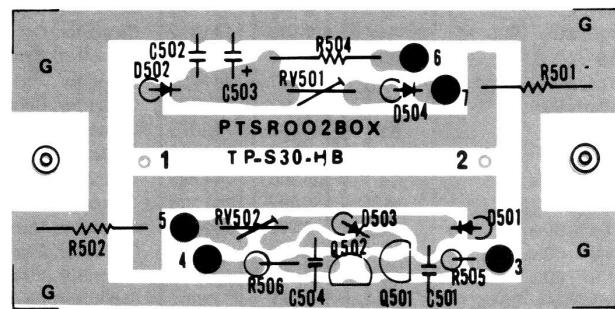


Figure 13 – SWR Printed Circuit Board – 14T301



SYMB. NO.	STOCK NO.	DESCRIPTION	LOCA- TION	SYMB. NO.	STOCK NO.	DESCRIPTION	LOCA- TION
C230	742016	Capacitor, Ceramic - 4 pf, 50 v (14T301 only)	D5	L116	741703	Coil, RF	B7
C231	742070	Capacitor, Ceramic - .01 uF, 50 v	D5	M	741846	Meter (14T300 only)	FP
C232	742017	Capacitor, Mylar - 3300 pf, 50 v (14T301 only)	D4	M	741831	Meter (14T301 only) - Incl. Lamp PL3)	FP
C233	741775	Capacitor, Ceramic - 220 pf, 50 v	F5				
C235	741810	Capacitor, Ceramic - 15 pf, 50 v (14T301 only)	F2	PL1	741818	Lamp, CH	FP
C236	741761	Capacitor, Ceramic - 29 pf, 50 v	-	PL2	741818	Lamp, Meter (14T300 only)	FP
C237	741786	Capacitor, Mylar - .0022 uF, 50 v	E3	PL3	741818	Lamp, TX (14T300 only)	FP
C238	741786	Capacitor, Mylar - .0022 uF, 50 v	F1	PL4	741833	Part of Meter M (14T301 only)	FP
C240	742085	Capacitor, Electrolytic - 33 uF, 16 v	C1	Q101	741726	Lamp, Mod	FP
C242	742076	Capacitor, Electrolytic - 1 uF, 50 v	B5	Q102	741726	Transistor, 2SC710D	G4
C243	741787	Capacitor, Ceramic - 100 pf, 50 v	F7	Q103	741727	Transistor, 2SC710D	F3
C245	741778	Capacitor, Ceramic - 27 pf, 50 v	-	Q104	741726	Transistor, 2SC829D	H2
C501	741840	Capacitor, Ceramic - .01 uF, 50 v (14T301 only)	*	Q105	741726	Transistor, 2SC710D	J4
C502	741840	Capacitor, Ceramic - .01 uF, 50 v (14T301 only)	*	Q106	741728	Transistor, 2SC710D	G2
C503	742089	Capacitor, Electrolytic - 1 uF, 50 v (14T301 only)	*	Q107	741729	Transistor, 2SC1318Q	C3
			*	Q108	741730	Transistor, 2SA719Q	F4
			*	Q109	741726	Transistor, 2SC1359B	D2
			*	Q110	741726	Transistor, 2SC710D	D2
			*	Q111	741731	Transistor, 2SC1687	B3
CF101	741812	Capacitor, Ceramic	G5	Q112	741688	Transistor, 2SC1760-3	B4
CH101	741691	Coil, Choke	B1	Q113	741732	Transistor, 2SC1306	C7
CT101	741721	Capacitor, Trimmer 20 pf	F2	Q114	741733	Transistor, 2SC1047B	C5
D101	741689	Diode - ITT-410	G3	Q115	741730	Transistor, 2SC1359B	D5
D102	741738	Diode - MZ205	H3	Q116	166906	Transistor, 2SC829C	F4
D103	741739	Diode - RD9.1E	D3	Q117	741726	Transistor, 2SC710D	I4
D104	741740	Diode - 1S1885	A2	Q118	166906	Transistor, 2SC829C	H6
D105	166593	Diode - V06C	C8	Q119	166906	Transistor, 2SC829C	I6
D106	741741	Diode - 1S1555	D3	Q120	741735	Transistor, 2SC372Y	G8
D107	741741	Diode - 1S1555	C6	Q121	741736	Transistor, 2SC828P.Q	E7
D108	741741	Diode - 1S1555	G8	Q122	741737	Transistor, 2SC828P	D6
D109	226344	Diode - 1N60	I8	Q123	741805	Transistor, 2SC839F (14T301 only)	F2
D110	226344	Diode - 1N60	H8	Q124	741805	Transistor, 2SC839F (14T301 only)	E2
D111	226344	Diode - 1N60	D7	Q125	741806	Transistor, 2SC900U (14T301 only)	F5
D114	741741	Diode - 1S1555	E5	Q126	741008	Transistor, 2SA733P.Q (14T301 only)	F5
D115	226344	Diode - 1N60	D5	Q128	166906	Transistor, 2SC829B,C	NB
D116	226344	Diode - 1N60	D5	Q801	741724	Transistor, 2SC945 (14T301 only)	LB
D501	226344	Diode - 1N60	*	Q802	741724	Transistor, 2SC945 (14T301 only)	LB
D502	226344	Diode - 1N60	*				
D503	226344	Diode - 1N60	*				
IC101	741686	Circuit, Integrated PLL02A	I1,2				
IC102	741687	Circuit, Integrated TA7205P	F8,9				
J1	741814	Jack, Antenna	RP				
J2	741815	Jack, Microphone	SP				
J3	741816	Jack, PA/Ext. CB	RP				
J4	741816	Jack, Ext. Spkr.	RP	R1	223769	All Resistors fixed carbon 1/4 watt unless otherwise noted	FP
J5	741819	Jack, DC (Power)	RP	R2	223769	Resistor - 100k ohms	FP
L101	741692	Coil, RF, 22UH	G2	R101	108861	Resistor - 100k ohms	H3
L103	741693	Coil, RF, 27 MHz	C2	R102	223769	Resistor - 100k ohms	G3
L104	741694	Coil, RF, 27 MHz	B2	R103	219459	Resistor - 1.5k ohms	H3
L105	741695	Coil, RF, 2.2 uH	A5	R104	219459	Resistor - 1.5k ohms	G3
L106	741696	Coil, RF	B5	R105	227755	Resistor - 220k ohms	F3
L107	741697	Coil, RF, 68 uH	B5	R106	219459	Resistor - 1.5k ohms	G2
L108	741698	Coil, RF	B8	R107	223769	Resistor - 100k ohms	G2
L109	741699	Coil, RF	B7	R108	219459	Resistor - 1.5k ohms	-
L110	741700	Coil, RF	A9	R109	223769	Resistor - 100k ohms	-
L111	741697	Coil, RF 68 uH	D3	R110	108866	Resistor - 2.2k ohms	G1
L112	741701	Coil, RF	E4	R111	108865	Resistor - 1k ohms	I4
L113	741702	Coil, RF	A1	R112	223769	Resistor - 100k ohms	I3
L114	741702	Coil, RF	A2				

Continued on Page 22

\*On SWR P.C. BOARD  
(FP) Front Panel

(LB) Lamp Board  
(NB) Noise Blanker Board

(RP) Rear Panel  
(SP) Side Panel

CHANNEL NO.	CHANNEL FREQUENCY MHZ	"N" CODE	V.C.O. FREQUENCY MHZ	IC101 PIN NO.				
				11	12	13	14	15
1	26.965	224	36.66	0	0	0	0	0
2	26.975	225	37.67	0	0	0	0	1
3	26.985	226	37.68	0	0	0	1	0
4	27.005	228	37.70	0	0	1	0	0
5	27.015	229	37.71	0	0	1	0	1
6	27.025	230	37.72	0	0	1	1	0
7	27.035	231	37.73	0	0	1	1	1
8	27.055	233	37.75	0	1	0	0	1
9	27.065	234	37.76	0	1	0	1	0
10	27.075	235	37.77	0	1	0	1	1
11	27.085	236	37.78	0	1	1	0	0
12	27.105	238	37.80	0	1	1	1	0
13	27.115	239	37.81	0	1	1	1	1
14	27.125	240	37.82	1	0	0	0	0
15	27.132	241	37.83	1	0	0	0	1
16	27.155	243	37.85	1	0	0	1	1
17	27.165	244	37.86	1	0	1	0	0
18	27.175	245	37.87	1	0	1	0	1
19	27.185	246	37.88	1	0	1	1	0
20	27.205	248	37.90	1	1	0	0	0
21	27.215	249	37.91	1	1	0	0	1
22	27.225	250	37.92	1	1	0	1	1
23	27.255	253	37.95	1	1	1	0	1

1 = H Level (4.5V - 5.5V Circuit Tester DC V/20K )

0 = L Level (0.05V - 0.4V Circuit Tester DC V/20K )

Figure 14 – Channel Frequency Chart

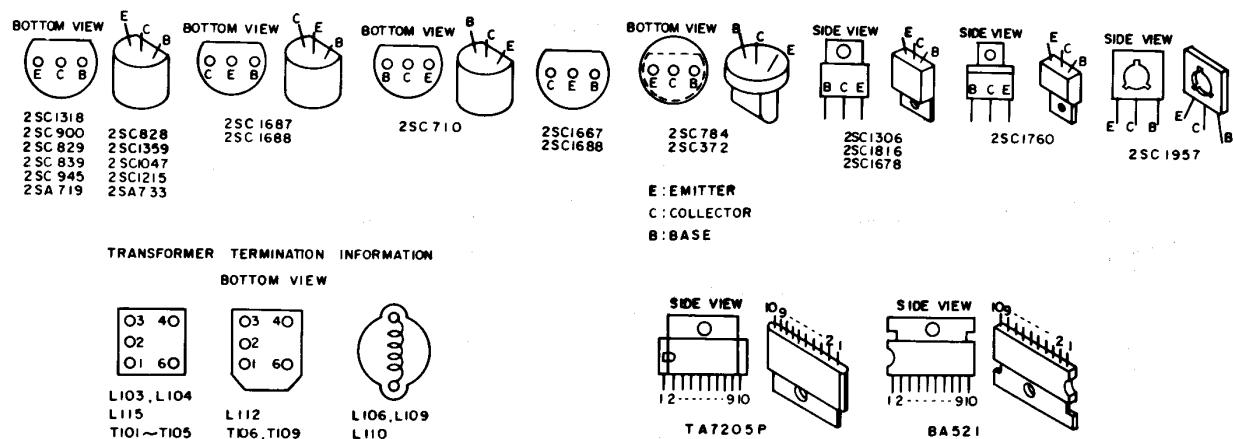


Figure 15 – Semiconductor Terminal Connections

SYMB. NO.	STOCK NO.	DESCRIPTION	LOCA- TION	SYMB. NO.	STOCK NO.	DESCRIPTION	LOCA- TION
R113	107972	Resistor - 3.3k ohms	H2	R179	426112	Resistor - 22k ohms	H8
R114	108864	Resistor - 470 ohms	H3	R180	219460	Resistor - 1.8k ohms	G8
R115	426112	Resistor - 22k ohms	G3	R181	108870	Resistor - 18k ohms	G6
R116	108864	Resistor - 470 ohms	E3	R183	133646	Resistor, Metal Oxide - 270 ohms, 1/2 w	J4
R117	426219	Resistor - 33k ohms	F3	R184	742015	Resistor, Metal Oxide - 150 ohms, 1 w (14T301 only)	J4
R118	427333	Resistor, Metal Oxide - 100 ohms 1/2 w	F2				
R119	219459	Resistor, Metal Oxide - 1.5k ohms	E2	R186	218499	Resistor - 10k ohms	G9
R120	223769	Resistor - 100k ohms	E2	R187	227741	Resistor - 560k ohms (14T301 only)	BB
R121	108865	Resistor - 1k ohms	E1	R188	243304	Resistor - 820k ohms (14T301 only)	E6
R122	108865	Resistor - 1k ohms	E2	R189	223769	Resistor - 100k ohms	E5
R123	430297	Resistor - 82k ohms	B4	R190	426213	Resistor - 4.7k ohms	E5
R124	108863	Resistor - 270 ohms	D2	R191	426112	Resistor - 22k ohms	F5
R125	218499	Resistor - 10k ohms	B3	R192	218499	Resistor - 10k ohms	E2
R127	426216	Resistor - 68 ohms	B3	R193	218499	Resistor - 10k ohms	H4
R128	108861	Resistor - 100 ohms	A4	R194	832015	Resistor, Metal Oxide - 15 ohms, 2 w	A3
R129	218758	Resistor - 220 ohms	A5	R199	107972	Resistor - 3.3k ohms	I5
R130	108860	Resistor - 47 ohms	B6	R202	249438	Resistor, Metal Oxide - 560 ohms, 1/4 w	A5
R131	426743	Resistor, Metal Oxide - 10 ohms, 1/2 w	B7	R204	223769	Resistor - 100k ohms	BB
R132	108871	Resistor - 47k ohms	H8	R205	108865	Resistor - 1k ohms	BB
R133	108863	Resistor - 270 ohms	F4	R501	228878	Resistor - 56 ohms	*
R134	426215	Resistor - 680 ohms	C5	R502	228878	Resistor - 56 ohms	*
R135	219459	Resistor - 1.5k ohms	C4	R504	108864	Resistor - 470 ohms	*
R136	108861	Resistor - 100 ohms	C5	R801	218499	Resistor - 10k ohms	LB
R137	108870	Resistor - 18k ohms	D4	R802	133646	Resistor, Metal Oxide - 270 ohms, 1/2 w	LB
R138	108865	Resistor - 1k ohms	D4				
R139	108864	Resistor - 470 ohms	E5	R803	108869	Resistor - 15k ohms (14T301 only)	LB
R140	232389	Resistor - 470k ohms	G4	R804	741725	Resistor, Metal Oxide - 330 ohms, 1/2 w (14T301 only)	LB
R141	108865	Resistor - 1k ohms	H4				
R142	426213	Resistor - 4.7k ohms	H7				
R143	108864	Resistor - 470 ohms	I5	RV101	741707	Potentiometer - 10k ohms	G7
R144	108871	Resistor - 47k ohms	H6	RV102	741708	Potentiometer - 2k ohms	C7
R145	218758	Resistor - 220 ohms	H6	RV103	741709	Potentiometer - 20k ohms	I8
R146	219458	Resistor - 330 ohms	I7	RV501	741722	Potentiometer - 5k ohms (14T301 only)	*
R148	219467	Resistor - 27 ohms	H7				
R149	218758	Resistor - 220 ohms	I6	RV502	741723	Potentiometer - 2k ohms (14T301 only)	*
R150	108860	Resistor - 47 ohms	I7				
R151	426112	Resistor - 22k ohms	H7				
R152	232687	Resistor - 270k ohms	H7	S1	—	Part of VR1	—
R153	108871	Resistor - 47k ohms	H8	S2	741817	Switch, Slide - "CB/PA" (14T300 only)	FP
R154	427566	Resistor - 68k ohms	G9				
R155	426219	Resistor - 33k ohms	H8	S2	741834	Switch, Slide - "DELTA TUNE" (14T301 only)	FP
R156	108871	Resistor - 47k ohms	H8				
R158	223769	Resistor - 100k ohms	I5	S3	741817	Switch, Slide - "ANL/OFF" (14T300 only)	FP
R159	219459	Resistor - 1.5k ohms	—	S3	741817	Switch, Slide - "ANL/OFF" (14T301 only)	FP
R160	219459	Resistor - 1.5k ohms	I4				
R161	239443	Resistor, Metal Oxide - 22 ohms, 1/2 w	—	S4	741817	Switch, Slide - "CB/PA"	FP
R162	108865	Resistor, Metal Oxide - 1k ohms	D3	S5	741817	Switch, Slide - "NB/OFF"	FP
R163	108865	Resistor, Metal Oxide - 1k ohms	D3	S6	741834	Switch, Slide - "RF/CAL/SWR"	FP
R164	218499	Resistor, Metal Oxide - 10k ohms	D3	S7	741817	Switch, Slide - "LO/DX"	FP
R165	426234	Resistor, Metal Oxide - 820 ohms	I8				
R166	219464	Resistor, Metal Oxide - 5.6k ohms	F7	SP	741845	Speaker (14T300 only)	—
R167	219467	Resistor, Metal Oxide - 27 ohms	F7	SP	741830	Speaker (14T301 only)	—
R168	107972	Resistor, Metal Oxide - 3.3k ohms	F7	SW101	741710	Switch, Rotary - "CHAN"	I2,3
R169	227755	Resistor - 220k ohms	D7				
R170	426112	Resistor - 22k ohms	D6	T101	741711	Coil, RF	G4
R171	227744	Resistor - 150 ohms	D6	T102	741712	Coil, RF	B2
R172	108866	Resistor - 2.2k ohms	G8	T103	741713	Coil, RF	B4
R173	426234	Resistor - 820 ohms	F9	T104	741714	Coil, RF	C5
R174	108860	Resistor - 47 ohms	F9	T105	741715	Coil, RF	C4
R175	218499	Resistor - 10k ohms	G8	T106	741701	Coil, RF	F4
R176	227959	Resistor - 82 ohms	C6				
R177	108863	Resistor - 270 ohms	E7	T107	741717	Transformer, IF - 455k Hz	G5
R178	426215	Resistor - 680 ohms	D7				

Continued on Page 23

SYMB. NO.	STOCK NO.	DESCRIPTION	LOCA- TION	SYMB. NO.	STOCK NO.	DESCRIPTION	LOCA- TION
T108	741718	Transformer, IF - 455k Hz	I6	22	741822	Knob Assembly, Channel	
T109	741719	Transformer, IF - 455k Hz	I7	23	741823	Knob, VR	
T110	741690	Transformer, Audio Output	D8	26	741845	Speaker (SP)	
T111	741720	Transformer, IF	E4	27	742013	Bracket, Speaker mtg.	
X101	741704	Crystal - 11.8066 MHz	F1		742009	Bracket, mobile mtg.	
X102	741705	Crystal - 10.695 MHz	D2		741827	Cord Assembly, DC	
X103	741706	Crystal - 10.240 MHz	H3		741825	Holder, microphone	
VR1	741842	Control, "Volume" - 50k ohms (Incl. S1) (14T300 only)	FP		741826	Microphone	
VR1	741828	Control, "Volume" - 50k ohms (Incl. S1) (14T301 only)	FP		741745	Sheet, mylar (for IC102)	
VR2	741843	Control, "Squelch" - 10k ohms (14T300 only)	FP		741813	Spacer, crystal	
VR2	741829	Control, "Squelch" - 10k ohms (14T301 only)	FP	2	741824	MECHANICAL PARTS - 14T301 (Refer to exploded view Figure 7 Page 11)	
VR3	741844	Control, "RF Gain" - 10k ohms (14T300 only)	FP	3	741818	Holder, lamp	
VR3	741829	Control, "CAL/SWR" - 10k ohms (14T301 only)	FP	4	741833	Lamp (PL1)	
		MECHANICAL PARTS - 14T300 (Refer to exploded view Figure 6 Page 10)		5	741832	Lamp (PL4)	
				6	741834	Lamp (PL2)	
				7	741817	Switch, slide (S2, S6)	
				8	741828	Switch, slide (S3, S4, S5, S7)	
				9	741829	Control (VR1 - Volume, Incl. S1)	
				10	741829	Control (VR2 - Squelch)	
				11	741831	Control (VR3 - S, CAL, SWR/PRF)	
				12	742014	Meter (M - Incl. lamp PL3)	
				16	741815	Bracket, meter mtg.	
2	741824	Holder, lamp		17	741816	Jack, microphone (J2)	
3	741818	Lamp (PL1, 2, 3)		20	741819	Jack, PA/EXT. CB, EXT SP. (J3,J4)	
4	741819	Switch, Slide (S2, S3)		21	741814	Jack, DC	
5	741844	Control (VR3 - RF Gain)		25	741838	Jack, Antenna (J1)	
6	741842	Control (VR1 - Volume)		26	742011	Escutcheon Assembly	
7	741843	Control (VR2 - Squelch)		27	742010	Plate, Buffer, CH	
8	741846	Meter		28	741822	Plate, Channel Indicating	
9	742012	Bracket, meter mtg.		29	741823	Knob Assembly, Channel	
10	741851	Holder, meter lamp		32	741831	Knob, VR	
12	741815	Jack, Microphone - 4 Prong (J2)		33	742013	Speaker (SP)	
13	741816	Jack, PA + Ext. Spkr - 3 Prong (J3, J4)			742018	Bracket, speaker mtg.	
16	741819	Jack, DC			741827	Bracket, mobile mtg.	
17	741814	Jack, Antenna (J1)			741825	Cord Assembly, DC	
19	741849	Escutcheon Assembly			741826	Holder, microphone	
20	742011	Plate, Buffer, CH			741745	Microphone	
21	742010	Plate, Channel Indicating			741813	Sheet, mylar (for IC102)	
						Spacer, crystal	

(FP) Front Panel