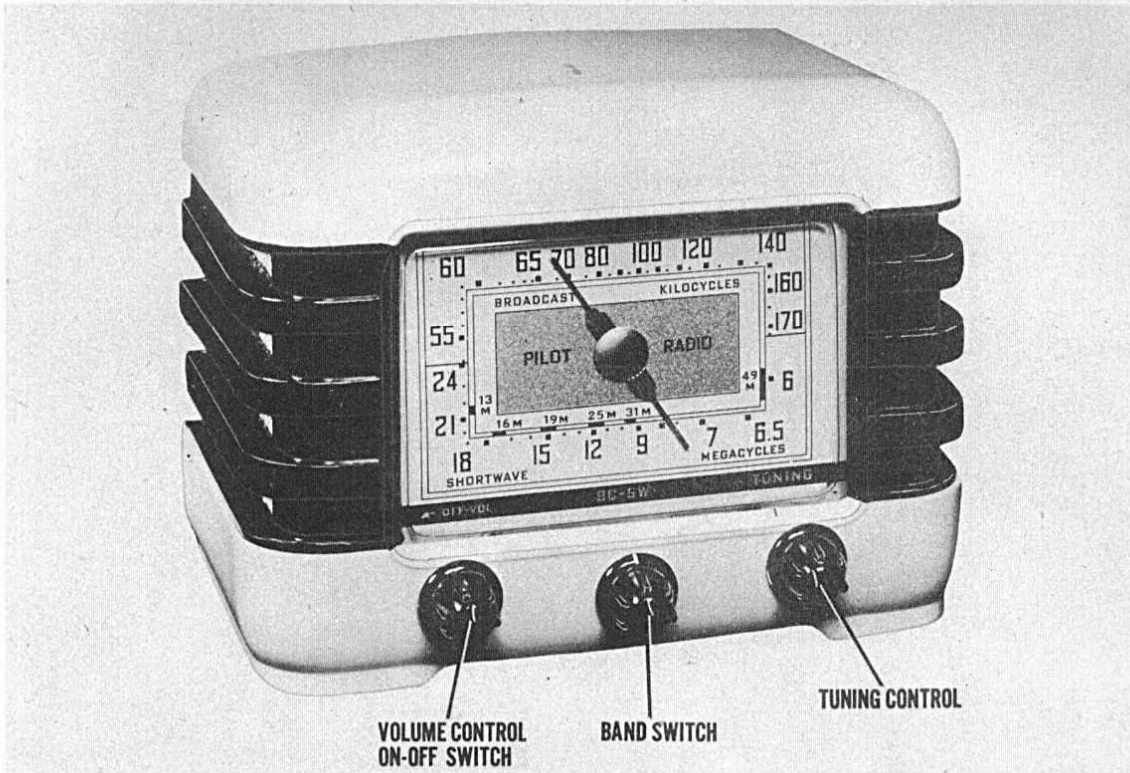


PILOT  
MODEL T-500 SERIES



PILOT  
MODEL T-500 SERIES

PILOT MODEL T-500U

<b>TRADE NAME</b>	Pilot, Model T-500 Series						
<b>MANUFACTURER</b>	Pilot Radio Corp., 37-06 36th St. Long Island City N.Y.						
<b>TYPE SET</b>	AC-DC Operated Two Band Superheterodyne Receiver						
<b>TUBES (FIVE)</b>	Types 12SA7GT Converter, 12SK7GT IF Amp, 12SQ7GT Det.-AVC-AF 50L6GT Power Output, 35Z5GT Rectifier						
<b>POWER SUPPLY</b>	105-120 Volts AC-DC		<b>RATING</b> .270 Amp. @ 117 Volts AC				
<b>TUNING RANGE—BROADCAST</b>	535-1720KC		<b>SHORT WAVE</b> 5.6-24.0MC				
<b>ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT</b>							
To set pointer turn variable fully closed and set pointer at the last reference mark at the low freq. end of the dial. Use isolation trans. if available. If not, connect capacitor in series with the low side of the signal generator and B-. Set volume control at maximum volume and output of signal generator no higher than is necessary to obtain output reading. Use insulated alignment screwdriver for adjusting.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
.1 MFD.	High side to stator of front section of variable. Low side to B-.	455KC	BC	Low freq. end	Across voice coil	A1, A2 A3, A4.	Adjust for maximum output. If isolation trans. is not used reduce dummy ant to .001 MFD. to reduce hum modulation.
400Ω	High side to ext. ant. lead. Low side to B-.	18.0MC	SW	18.0MC	"	A5	Adjust for maximum output
400Ω	"	18.0MC	"	Tune for maximum output.	"	A6	Rock variable and adjust for maximum output.
200MFD.	"	1500KC	BC	1500KC	"	A7	Adjust for maximum output
200MFD.	"	600KC	"	Tune for maximum output.	"	A8	Rock variable and adjust for maximum output. Re-check A7 at 1500KC.

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# PARTS LIST AND DESCRIPTIONS TUBES

# CHASSIS—TOP VIEW

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	INSTALLATION NOTES
		PILOT PART No.	STANDARD REPLACEMENT		
1	Converter	12SA7GT	12SA7GT	8AD	
2	IF Amp.	12SK7GT	12SK7GT	8N	
3	Det.-AVC-AF	12SQ7GT	12SQ7GT	8Q	
4	Power Output	50L6GT	50L6GT	7AC	
5	Rectifier	35Z5GT	35Z5GT	6AD	

## CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING CAP.	VOLT	REPLACEMENT DATA				IDENTIFICATION CODES AND INSTALLATION NOTES		
			PILOT PART No.	SOLAR PART No.	SPRAGUE PART No.	AEROVOX PART No.		CORNELL-DUBILER PART No.	MALLOY PART No.
6A	30	150	24-81	DY-303	EL-324	AF64D4A	UP4CJ2	FP313	Filter
B	20	150							
C	20	25							
7	.05	600	22-31	S-6-05	TC-15	684-05	DT8S5	TP415	Cath. Bypass
8	.01	400	22-17	S-4-01	TC-11	484-01	DT4S1	TP421	Line Filter
9	.01	400	22-17	S-4-01	TC-11	484-01	DT4S1	TP421	Output Plate Bypass
10	.01	400	22-17	S-4-01	TC-11	484-01	DT4S1	TP421	Audio Coupling
11	.05	200	22-16	S-4-05	TC-15	484-05	DT4S5	TP426	AVC Filter
12	.2	400	22-100	S-4-2	TC-2	484-2	DT4P2	TP429	Line Isolation
13	.1	400	22-17	S-4-1	TC-1	484-1	DT4P1	TP426	RF Bypass Pwr. Supp.
14	.1	400	20-14	MO.5-31	TP-31	1488-001	5M6T1	TP421	Fixed Padcer SW
15	100	500	20-90	MO.5-43	MS-43		5M6Q3	MC235	Tone Compensation
16	35	500	20-50	MO.5-45	IPN-55		5M6T5	MC245	IF Bypass Vol. Cont.
17	100	500	20-50	MO.5-35	IPN-35		5M6T1	MC255	sec. grid capacitor
18	100	500	20-14	MO.5-31	IPN-31		5M6Q1	MC215	Ant. Coupling
19	10	500	20-2	MO.5-41	IPN-41				Fixed Trimmer *
20	E20	500							

\*Not used in all models.

## CONTROLS

ITEM No.	RATING RESISTANCE	WATTS	REPLACEMENT DATA			INSTALLATION NOTES
			PILOT PART No.	MALLOY PART No.	CLAROSTAT PART No.	
21A	500K $\Omega$	1	36-24	MR48	D13-133	M-60-Z
B	Smart		Not Req.		A	Not Req.
C	Switch			M25	41	SM-A

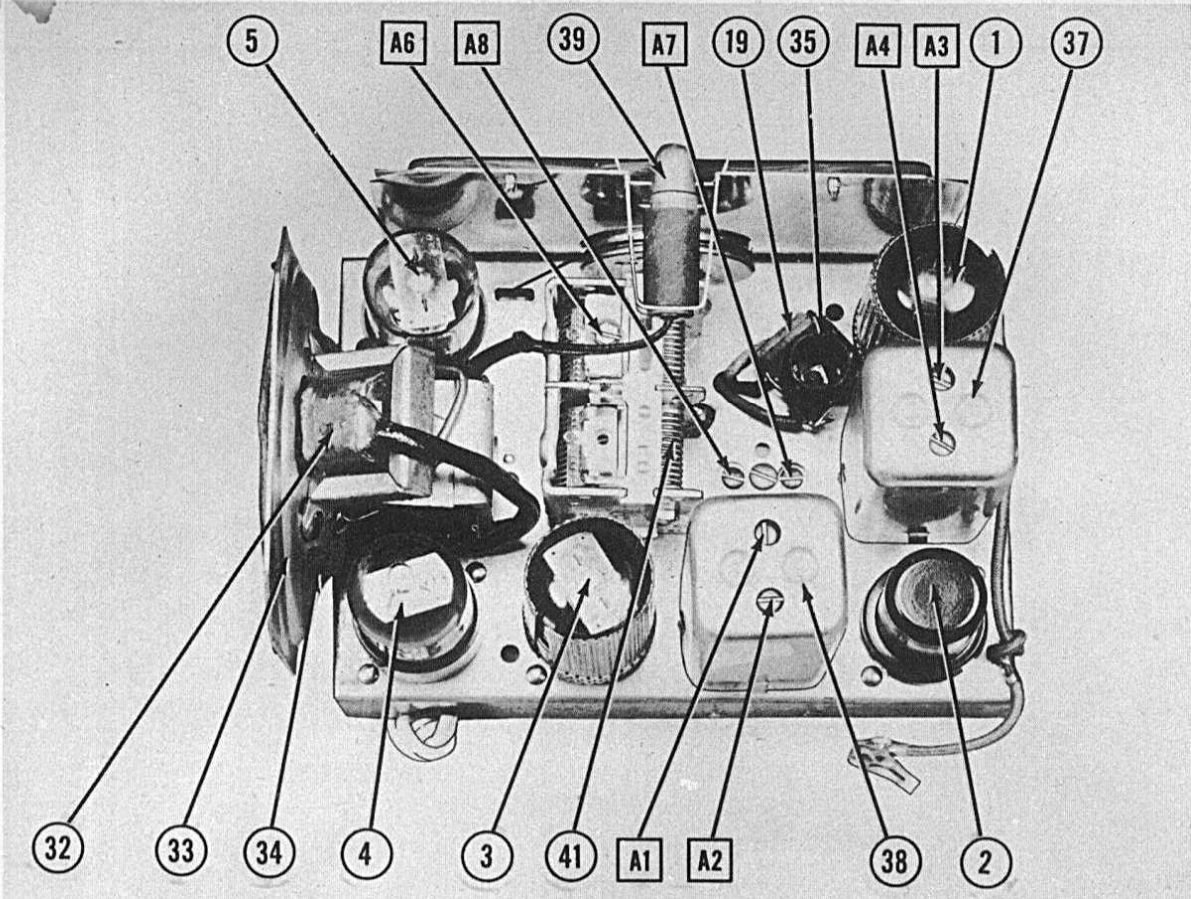
## RESISTORS

ITEM No.	RATING RESISTANCE	WATTS	REPLACEMENT DATA			IDENTIFICATION CODES
			PILOT PART No.	MALLOY PART No.	IRC PART No.	
22	20K		30-8	EM-4-22	IR-22	Red-Blk.-Blk. Parasitic Suppressor
23	25K		30-266	BTS-22K	IR-266	Red-Red-Or. Oscillator Grid
24	220K $\Omega$		30-271	BTS-220K	IR-271	Red-Red-Yl. Line Isolation
25	2.2 Meg.		30-278	BTS-2.2 Meg.	IR-278	Red-Red-Yl. Line Isolation
26	2.2 Meg.		30-278	BTS-2.2 Meg.	IR-278	Red-Red-Yl. Line Isolation
27	3.9 Meg.		30-295	BTS-3.9 Meg.	IR-295	Red-Red-Yl. Line Isolation
28	330K $\Omega$		30-294	BTS-330K	IR-294	Or.-White-Grm. AF Grid
29	470K $\Omega$		30-294	BTS-470K	IR-294	Or.-Yl.-Yl. Output Grid
30	120K		30-304	EM-1-120	IR-304	Br.-Red-Br. Cathode
31	150K		30-365	EM-3-150	IR-365	Br.-Grn.-Br. Pilot Light Shunt

## TRANSFORMER (OUTPUT)

ITEM No.	RATING		REPLACEMENT DATA		INSTALLATION NOTES
	IMPEDANCE PRI.	DC RES. SEC.	PILOT PART No.	STANCOR THORDARN PART No.	
32	1700 $\Omega$	2.9 $\Omega$	185 $\Omega$	A-3576+	T22845+

+ Drill one new mounting hole

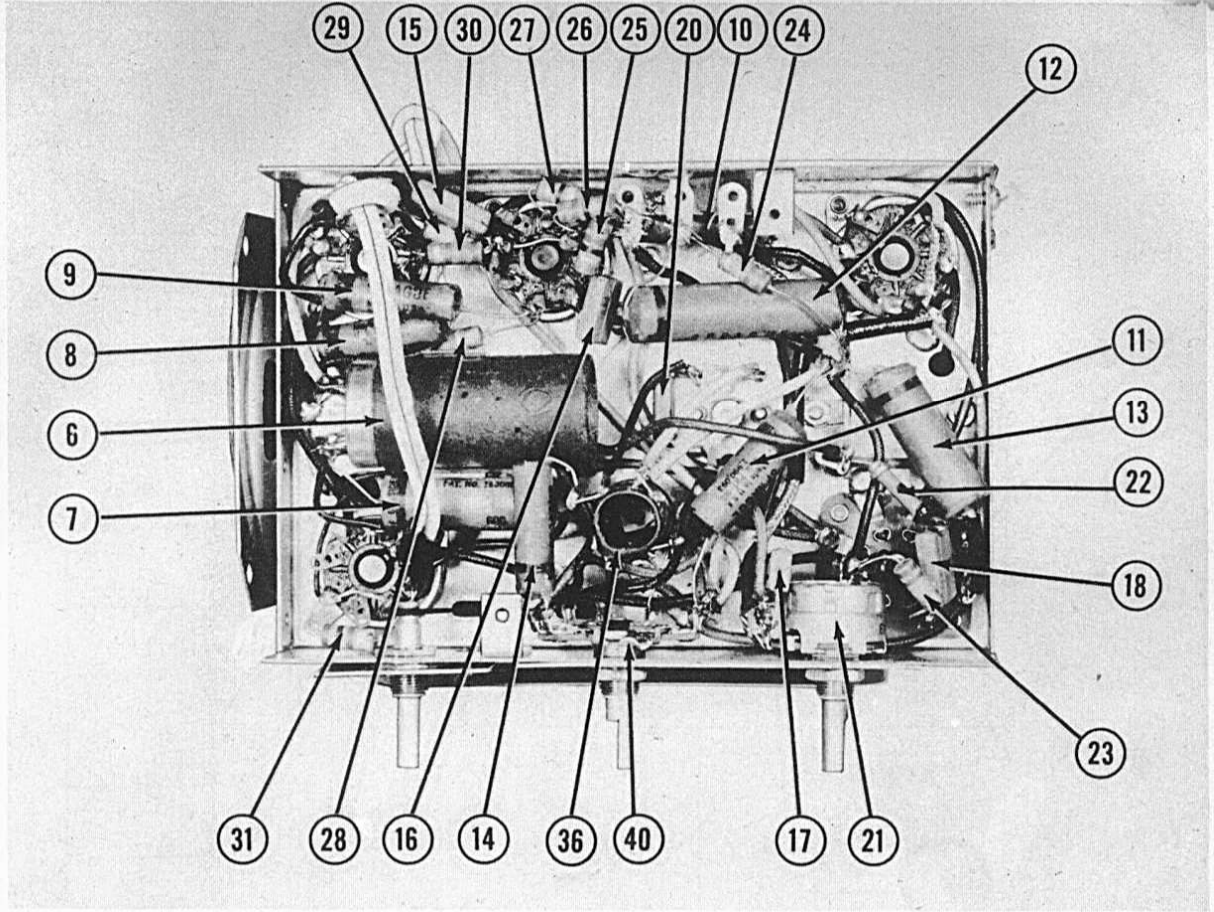




# PARTS LIST AND DESCRIPTIONS (Continued)

ITEM No.	RATINGS	REPLACEMENT DATA		INSTALLATION NOTES
		PILOT PART No.	JENSEN PART No.	
33	FIELD RES. VC IMP. 1500 2.5Ω	40-19	ST-537 MOG. H4-S	
34	CONE DIA. VC DIA. 4"	NOT READILY REPLACEABLE—USE COMPLETE SPEAKER UNIT.		

# CHASSIS—BOTTOM VIEW



## R F COILS

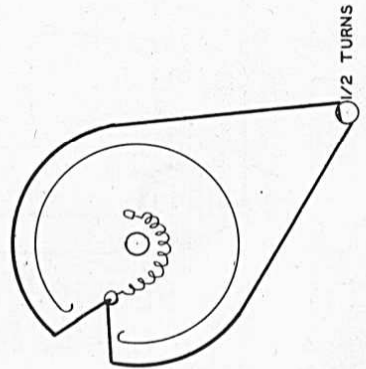
ITEM No.	USE	DC RES.		REPLACEMENT DATA		INSTALLATION NOTES
		PRI.	SEC.	PILOT PART No.	MEISSNER PART No.	
35A	EC Ant. Coil	4Ω		70-51		35A & 35B wound on same form.
35B	SM Ant. Coil	.2Ω		72-44		36A & 36B wound on same form.
36A	EC Osc. Coil	2.1Ω		273-91	16-6658	
36B	SM Osc. Coil	.1Ω		273-93	16-6660	
37	Input If	8Ω				
38	Output If	8.5Ω				

## DIAL LIGHT

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA		INSTALLATION NOTES
					PILOT PART No.	MEISSNER PART No.	
39	Bayonet	6-8	0.15	Brown	66-6		Type 47

## MISCELLANEOUS

ITEM No.	PART NAME	PILOT PART No.	NOTES
40	Bandswitch	100-49	
41	2-Gang Var. Cap	26-28	(14-548 MUF, 14-548 MTF)
A7	Dual Trimmer	27-18	{EC Osc. Adjustment
A8			{EC Osc. Padder



DIAL CORD DRIVE

