PHILCO SERVICE

TELEVISION

SERVICE BULLETIN 50T3

SERVICING PHILCO TELEVISION RECEIVERS

Subjects Covered

PREPRODUCTION AND PRODUCTION CHANGES IN MODELS 50-T1403, 50-T1404, AND 50-T1406, ALL CODE 125

Corrections to Service Manual (PR-1846)
Preproduction Changes
Production Changes

REPLACEMENT PARTS LIST AND SCHEMATIC FOR MODELS 50-T1403, 50-T1404, AND 50-T1406, ALL CODE 125, RUN 7

PRODUCTION CHANGES IN MODELS 50-T1404, CODE 123, AND 50-T1406, CODE 123; 50-T1404, 50-T1406, AND 50-T1432, ALL CODE 124

Corrections to Service Manual (PR-1844)
Production Changes

PRODUCTION CHANGES IN MODELS 50-T1600, 50-T1632, AND 50-T1633

Corrections to Service Manual (PR-1835)
Production Changes
TB-2 Booster Connections
Change in Control-Door Hinge for Model 50-T1600

TP0-899

MODEL 50-T1633

PREPRODUCTION CHANGES IN MODELS 50-T1600, 50-T1632, AND 50-T1633, ALL CODE 122

Corrections to Service Manual (PR-1854)
Preproduction Changes

SERVICE HINTS

Models 50-T1104, Code 122, and 50-T1105, Code 122—Built-in Aerial Lead Dress
All Models—Built-in Aerial Performance on Channel 6
All 10", 12", and 16" Models—CRT and Deflection-Yoke Extension Cables
Model 50-T1400 Series, Runs 1 and 2—Reduction of Vertical Jitter
Model 50-T1400 Series—Preventing Horizontal-Sync Tear at Minimum Contrast-Control Setting

Subjects Covered — Continued

PREPRODUCTION AND PRODUCTION CHANGES IN MODELS 50-T1403, 50-T1404, AND 50-T1406, ALL CODE 125

Corrections to Service Manual (PR-1846)

1. Delete step 5 of Horizontal-Sweep Adjustment.
2. The correct part number of the horizontal-blocking-oscillator transformer, T7, is 32-4470-3.
3. For corrections to Tuner Alignment Procedure, see Corrections to Service Manual (PR-1844).

PREPRODUCTION CHANGES

The following changes were made between the printing of PR-1846 and first production.

1. Resistor R118 was changed to 390,000 ohms, Part No. 66-4394240*.
2. Condenser C83 was changed to .001 μf., Part No. 45-3505-52.
3. The blocking condenser (C71) in the horizontal-output circuit was rewired as shown in figure 1.

PRODUCTION CHANGES

RUN NO.	DESCRIPTION OF CHANGE	REMOVED PART NO.	NEW OR ADDED PART NO.	REASON FOR CHANGE
2	R108 changed to 56,000 ohms. C73 changed to 390 $\mu\mu f$.	66-3824240 60-10685401	66-3564240 30-1220-35	To increase width and reduce interaction between width and linearity controls.
3	C67 increased in voltage rating.	60-00105407	30-1224	To reduce possibility of breakdown.
4	Video amplifier, sync take-off point, and sync separator changed as shown in figure 2.	Refer to following Parts List.	Refer to following Parts List.	To improve sync performance, and to improve picture quality with weak signal input.
4Z	A 33-$\mu\mu f$. condenser was added, across R32, and L19 was shorted out.		62-033009001	An inductive resistor was used for R32 (see note below.)
5 and 4X	R32 changed to 2000 ohms, non-inductive. The 33-$\mu\mu f$. condenser and the short across L19 were removed.	62-03330001		Circuit changed to use non-inductive resistor.
6	C74 changed to .0047 μf.	60-01825401	45-3505-90	To reduce parasitic oscillations in the 6BG6G.
7	A 680,000-ohm resistor was added, in series with R113.		66-4684340*	To increase width, and reduce squeeze on right side.

NOTE: When Part No. 33-1335-94 (220 ohms, non-inductive) is used as a replacement, the circuit should be wired as shown in figure 2.

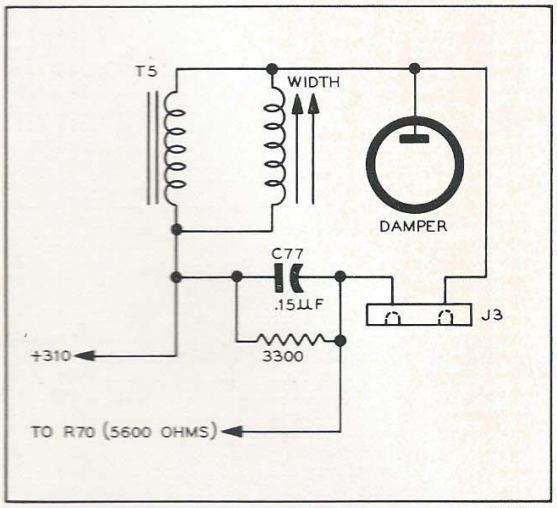


Figure 1. Change in Horizontal-Output Circuit, Models 50-T1403, 50-T1404, and 50-T1406, All Code 125

REPLACEMENT PARTS LIST

MODELS 50-T1403, 50-T1404, AND 50-T1406, ALL CODE 125, RUN 7

(Replacement parts for the tapered line tuner are grouped separately at the end of this list.)

NOTE: Part numbers identified by an asterisk (*) indicate general replacement items. These numbers may not be identical with those on factory assemblies; also, the electrical values of some replacement items may differ from the values indicated in the schematic diagram and replacement parts list. The values substituted in any case are so chosen that the operation of the receiver will be either unchanged or improved. When ordering replacements, use only the "Service Part No."

Reference Symbol	Description	Service Part No.
AD1	Built-in dipole (2 used)	56-7635
BB1	Beam bender, p.m.	76-3913-2
C1	Condenser, r-f by-pass, 2.2 $\mu\mu f$.	30-1221-4
C2	Condenser, fixed trimmer, 51 $\mu\mu f$.	30-1224-62

REPLACEMENT PARTS LIST (Cont.)

Reference Symbol	Description	Service Part No.
C3	Condenser, fixed trimmer, 51 $\mu\mu f$.	30-1224-62
C4	Condenser, a-g-c by-pass, 1500 $\mu\mu f$.	62-215001001
C5	Condenser, a-g-c by-pass, 1500 $\mu\mu f$.	62-215001001
C6	Condenser, screen by-pass, 1500 $\mu\mu f$.	62-215001001
C7	Condenser, B+ by-pass, 1500 $\mu\mu f$.	62-215001001
C8	Condenser, d-c blocking, 470 $\mu\mu f$.	62-147001001
C9	Condenser, a-g-c by-pass, 1500 $\mu\mu f$.	62-215001001
C10	Condenser, screen by-pass, 1500 $\mu\mu f$.	62-215001001
C11	Condenser, d-c blocking, 470 $\mu\mu f$.	62-147001001
C12	Condenser, a-g-c by-pass, 1500 $\mu\mu f$.	62-215001001
C13	Condenser, screen by-pass, 1500 $\mu\mu f$.	62-215001001
C14	Condenser, d-c blocking, 470 $\mu\mu f$.	62-147001001
C15	Condenser, fixed trimmer, 51 $\mu\mu f$.	30-1224-62
C16	Condenser, fixed trimmer, 51 $\mu\mu f$.	30-1224-62
C17	Condenser, cathode by-pass, 1500 $\mu\mu f$.	62-215001001
C18	Condenser, screen by-pass, 1500 $\mu\mu f$.	62-215001001
C19	Condenser, d-c blocking, 470 $\mu\mu f$.	62-147001001
C20	Condenser, r-f by-pass, 1500 $\mu\mu f$.	62-215001001
C21	Condenser, video by-pass, .047 μf.	45-3505-62*
C22	Condenser, r-f by-pass, 47 $\mu\mu f$.	62-051009001*
C23	Condenser, a-g-c filter, .47 μf.	45-3505-34*
C24	Condenser, r-f by-pass, 10 $\mu\mu f$.	62-010409001
C25	Condenser, d-c blocking, .047 μf.	45-3505-62*
C26	Condenser, d-c blocking, .22 μf.	45-3505-49*
C27	Condenser, cathode by-pass, .47 μf.	45-3505-34*
C28	Condenser, d-c blocking, .047 μf.	45-3505-62*
C29	Condenser, d-c blocking, .01 μf.	45-3505-58*
C30	Condenser, fixed trimmer, 56 $\mu\mu f$.	62-056409001
C31	Condenser, cathode by-pass, 470 $\mu\mu f$.	62-147001001
C32	Condenser, screen by-pass, 1500 $\mu\mu f$.	62-215001001
C33	Condenser, B+ by-pass, 1500 $\mu\mu f$.	62-215001001
C34	Condenser, d-c blocking, 56 $\mu\mu f$.	62-056409001
C35	Condenser, screen by-pass, 1500 $\mu\mu f$.	62-215001001
C36	Condenser, fixed trimmer, 18 $\mu\mu f$.	62-018300001
C37	Condenser, balancing, 2.2 $\mu\mu f$.	30-1221-4
C38	Condenser, r-f by-pass, 150 $\mu\mu f$.	60-10155407
C39	Condenser, r-f by-pass, 150 $\mu\mu f$.	60-10155407
C40	Condenser, FM detector filter, 2 μf., 50v.	30-2417-7
C41	Condenser, r-f by-pass, 1500 $\mu\mu f$.	62-215001001
C42	Condenser, d-c blocking, .01 μf.	45-3505-58*
C43	Condenser, d-c blocking, .0047 μf.	45-3505-56*
C44	Condenser, bias filter, .047 μf.	45-3505-62*
C45	Condenser, d-c blocking, .01 μf.	45-3505-58*
C46	Condenser, tone compensating, .0068 μf., 1000v	45-3505-91*
C47	Condenser, filter, 30 μf., 250v	30-2568-23
C48	Condenser, 2-section filter	30-2568-40
C48A	Condenser, input filter, 30 μf., 475v	Part of C48
C48B	Condenser, filter, 40 μf., 475v	Part of C48
C49	Condenser, 4-section filter	30-2570-41
C49A	Condenser, filter, 40 μf., 475v	Part of C49
C49B	Condenser, filter, 20 μf., 475v	Part of C49
C49C	Condenser, filter, 10 μf., 475v	Part of C49
C49D	Condenser, low-frequency compensation, 10 μf., 475v	Part of C49
C50	Condenser, d-c blocking, .047 μf.	45-3505-62*
C51	Condenser, d-c blocking, 220 $\mu\mu f$.	30-1224-20*
C52	Condenser, d-c blocking, .015 μf.	45-3505-42*
C54	Condenser, integrating, .0022 μf.	45-3505-54*
C55	Condenser, integrating, .0047 μf.	45-3505-56*
C56	Condenser, integrating, .0047 μf.	45-3505-56*
C57	Condenser, d-c blocking, .01 μf.	45-3505-58*
C58	Condenser, vertical shaping, .1 μf.	45-3505-47*
C59	Condenser, d-c blocking, .1 μf.	45-3505-47*
C60	Condenser, 4-section filter	30-2570-55
C60A	Condenser, cathode by-pass, 40 μf., 50v	Part of C60
C60B	Condenser, decoupling, 5 μf., 475v	Part of C60
C60C	Condenser, decoupling, 10 μf., 475v	Part of C60
C60D	Condenser, cathode by-pass, 80 μf., 475v	Part of C60
C61	Condenser, d-c blocking, .047 μf.	45-3505-62*
C63	Condenser, d-c blocking, 100 $\mu\mu f$.	60-10105407
C65	Condenser, 3-section trimmer	31-6477-12
C65A	Condenser, HORIZ. LOCK-IN	Part of C65
C65B	Not used	
C65C	Condenser, HORIZ. DRIVE	Part of C65
C66	Condenser, d-c blocking, .0022 μf.	45-3505-54*
C67	Condenser, sweep feedback, 10 $\mu\mu f$.	30-1224
C68	Condenser, cathode by-pass, .022 μf.	45-3505-43*
C69	Condenser, cathode filter, .22 μf.	45-3505-49*
C70	Condenser, plate by-pass, .047 μf.	45-3505-62*
C71	Condenser, d-c blocking, 150 $\mu\mu f$.	30-1220-1
C72	Condenser, sweep charging, 1200 $\mu\mu f$.	60-20125404
C73	Condenser, d-c blocking, 390 $\mu\mu f$.	60-10395417
C74	Condenser, screen by-pass, .0047 μf.	45-3505-56*
C75	Condenser, sweep shaping, .047 μf.	45-3505-62*
C76	Condenser, sweep shaping, .22 μf.	45-3505-49*
C77	Condenser, d-c blocking, .15 μf.	45-3505-31*
C78	Condenser, high-voltage filter, 500 $\mu\mu f$.	30-1229-2
C79	Condenser, filament by-pass, 1500 $\mu\mu f$.	62-215001001
C80A	Condenser, trimmer	Part of Z1
C80B	Condenser, trimmer	Part of Z1
C81	Condenser, AERIAL TUNING	31-6519
C82	Condenser, feedback delay, 150 $\mu\mu f$.	60-10155407
C83	Condenser, d-c blocking, .001 μf.	45-3505-52*
C84	Condenser, fixed trimmer, .01 μf.	45-3505-58*
C85	Condenser, compensating, 470 $\mu\mu f$.	62-147001001
F1	Fuse, B+ protective, ½ ampere, delayed action	45-2656-17
F2	Fuse, filament protective	Length of No. 26 wire
J1	Socket, FM TEST	27-6126
J2	Socket, ALIGN TEST	27-6126
J3	Socket, deflection	27-6174-4
J4	Socket, speaker test	27-6180
J5	Socket, a-c power	27-6240
J6	Socket, HORIZ. TEST	27-6126
L1	Coil, 28.1-mc. trap	32-4234-8
L2	Coil, 1st v-i-f grid tank	32-4233-4
L3	Coil, 1st v-i-f plate tank	32-4359
L4	Coil, 2nd v-i-f plate tank	32-4359
L5	Coil, 3rd v-i-f plate tank	32-4234-1
L6	Coil, 22.1-mc. trap	32-4234-7
L7	Coil, 4th v-i-f grid tank	32-4233-4
L8	Coil, 4th v-i-f tank	32-4234-1
L9	Coil, r-f choke, B+ decoupling	32-4112-15
L10	Coil, r-f choke, filament decoupling	32-4112-15
L11	Coil, r-f choke, filament decoupling	32-4112-15
L12	Coil, r-f choke, B+ decoupling	32-4112-15
L13	Coil, r-f choke, filament decoupling	32-4112-15
L14	Coil, r-f choke, filament decoupling	32-4112-15
L15	Coil, series peaking, 40 μh.	32-4143-16
L16	Coil shunt peaking, 250 μh.	32-4143-14
L17	Not used	
L18	Coil shunt peaking, 250 μh.	32-4143-14
L19	Coil series peaking, 180 μh.	32-4143-13
L20	Coil, shunt peaking, 180 μh.	32-4143-13
L21	Coil, 1st s-i-f autotransformer	32-4303-2
L22	Coil, 2nd s-i-f primary	Part of Z1
L23	Coil 2nd s-i-f secondary	Part of Z1
L24	Coil, r-f choke, filament decoupling	32-4112-15
L25	Coil, FM-detector primary	Part of Z2
L26	Coil, FM-detector secondary	Part of Z2
L27	Coil, FM-detector tertiary	Part of Z2
L28	Coil, filter choke	32-8438
L29	Coil, focus	Part of Z3
L30	Coil, horizontal-blocking-oscillator transformer	Part of T4
L31	Coil, WIDTH	32-4419-3
L32	Coil, HORIZ. LIN.	32-4211-1
L33	Coil, vertical deflection	Part of Z4
L34	Coil, horizontal deflection	Part of Z4
L35	Coil, stabilizing	Part of T7
LS1	Speaker, p.m., 4" x 6"	36-1633-2
PL1	Plug-and-cable assembly, deflection	41-3860-6
PL2	Plug, a-c interlock	Part of W1
R1	Resistor, isolating, 470 ohms	66-1478340*
R2	Resistor, terminating, 5600 ohms, ±5%	66-2568240*
R3	Resistor, loading, 10,000 ohms	66-3108340*

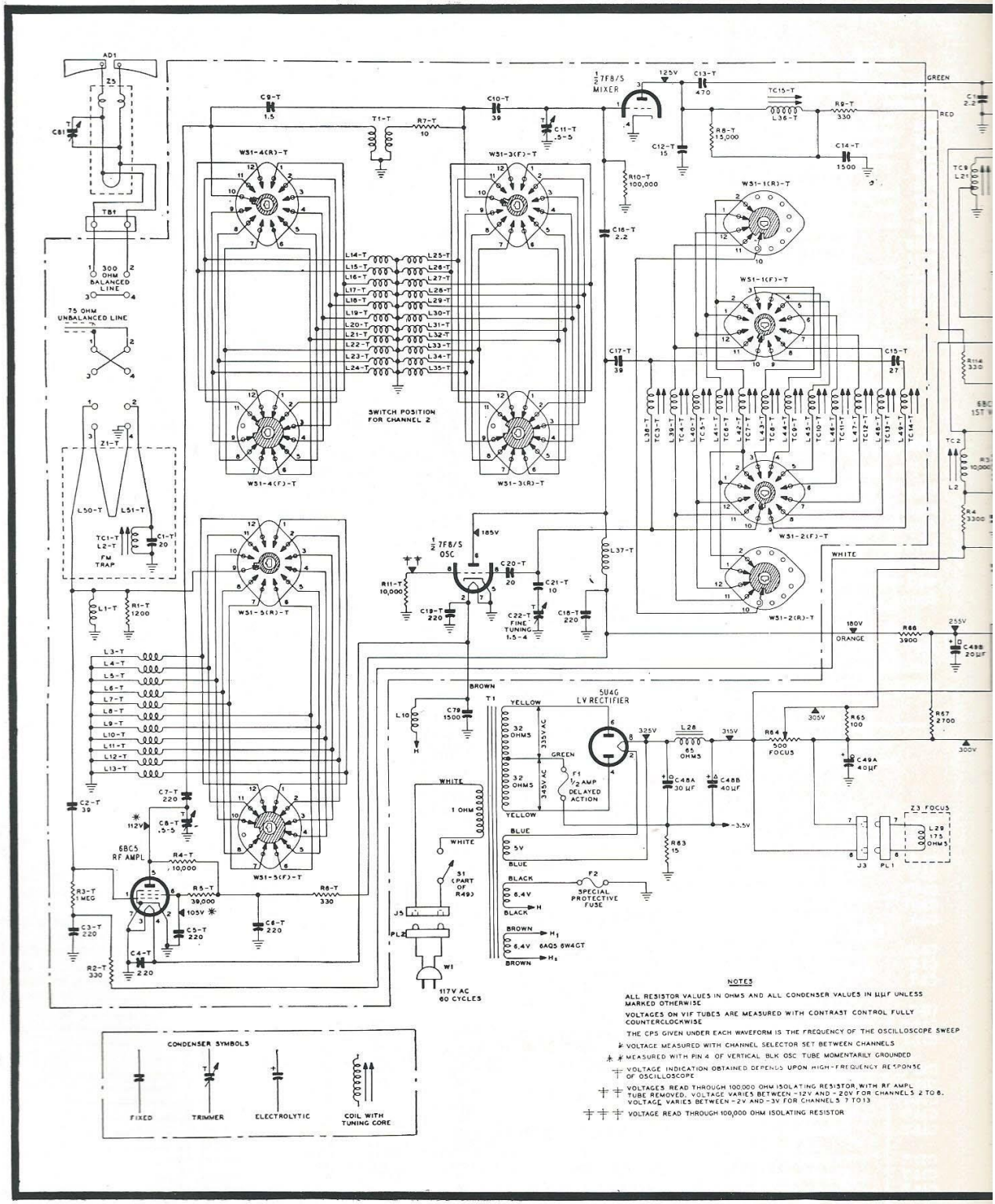
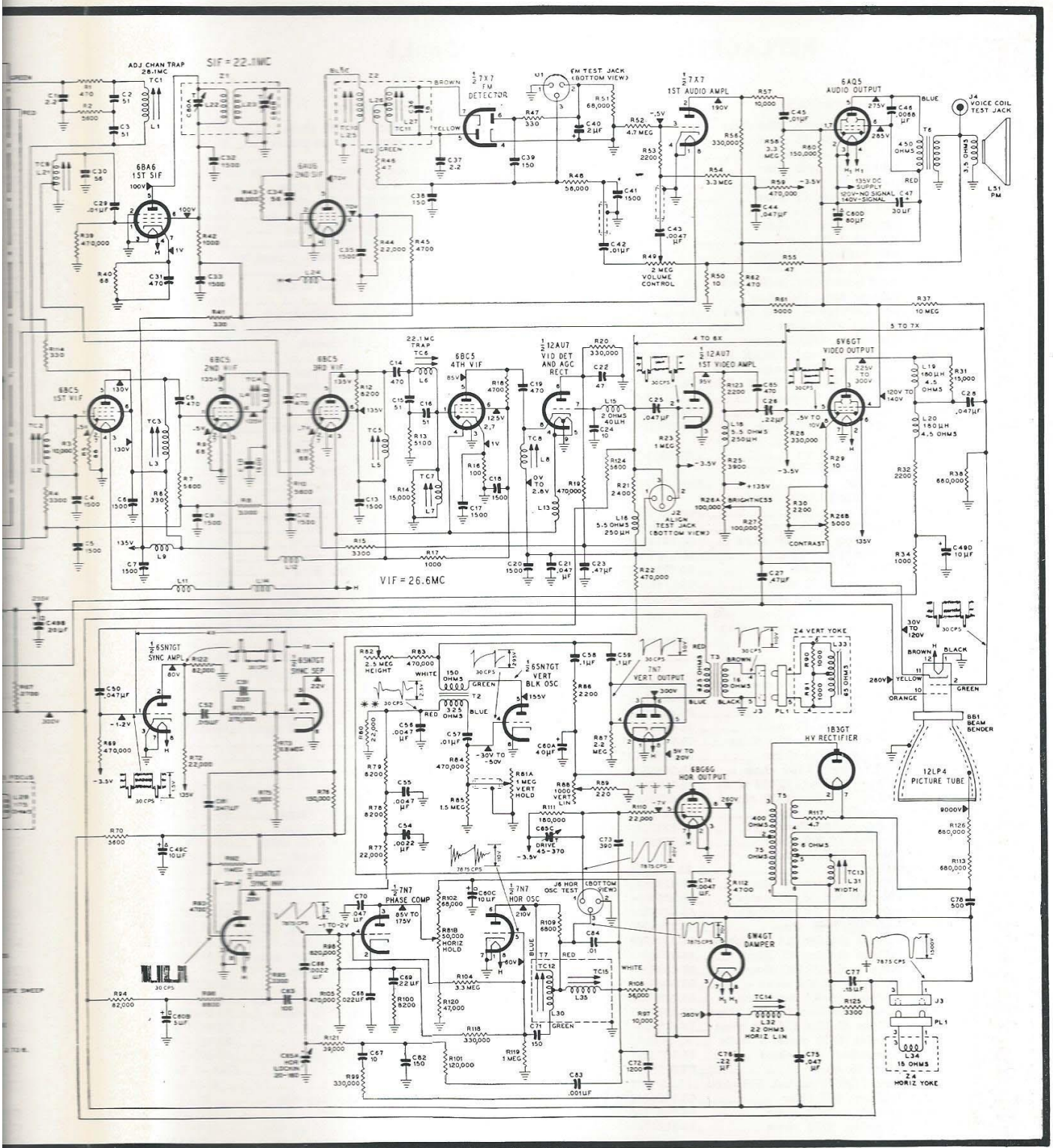


Figure 2. Schematic Diagram, Models 50-T140



50-T1403, 50-T1404, and 50-T1406, All Code 125 Run 7

TP0-369-1

REPLACEMENT PARTS LIST (Cont.)

Reference Symbol	Description	Service Part No.
R4	Resistor, a-g-c decoupling, 3300 ohms	66-2338340*
R5	Resistor, cathode bias, 68 ohms	66-0688340*
R6	Resistor, B+ decoupling, 330 ohms	66-1338340*
R7	Resistor, grid return, 5600 ohms	66-2568340*
R8	Resistor, a-g-c decoupling, 3300 ohms	66-2338340*
R9	Resistor, cathode bias, 68 ohms	66-0688340*
R10	Resistor, grid return, 5600 ohms	66-2568340*
R11	Resistor, cathode bias, 68 ohms	66-0688340*
R12	Resistor, loading, 8200 ohms	66-2828340*
R13	Resistor, terminating, 5100 ohms, ±5%	66-2518240
R14	Resistor, loading, 15,000 ohms	66-3158340*
R15	Resistor, a-g-c decoupling, 3300 ohms	66-2338340*
R16	Resistor, cathode bias, 100 ohms	66-1108340*
R17	Resistor, B+ decoupling, 1000 ohms	66-2108340*
R18	Resistor, loading, 4700 ohms	66-2478340*
R19	Resistor, a-g-c filter, 470,000 ohms	66-4478340*
R20	Resistor, a-g-c diode load, 330,000 ohms	66-4338340*
R21	Resistor, diode load, 2400 ohms, ±5%	66-2248240*
R22	Resistor, voltage divider, 470,000 ohms	66-4478340*
R23	Resistor, grid return, 1 megohm	66-5108340*
R24	Resistor, loading, 2200 ohms	66-2228340*
R25	Resistor, plate load, 3900 ohms	66-2394340*
R26	Potentiometer assembly, dual, 100,000 ohms and 5000 ohms	33-5563-22
R26A	Potentiometer, BRIGHTNESS control, 100,000 ohms	Part of R26
R26B	Potentiometer, CONTRAST control, 5000 ohms	Part of R26
R27	Resistor, limiting, 100,000 ohms	66-4108340*
R28	Resistor, grid return, 330,000 ohms	66-4338340*
R29	Resistor, limiting, 10 ohms	66-0103340*
R30	Resistor, shunt, 2200 ohms	66-2228340*
R31	Resistor, loading, 15,000 ohms	66-3158340*
R32	Resistor, plate load, 2200 ohms	33-1335-97
R33	Not used	
R34	Resistor, low-frequency compensating, 1000 ohms	66-2108340*
R35	Not used	
R36	Not used	
R37	Resistor, voltage divider, 10 megohms	66-6108340*
R38	Resistor, grid return, 680,000 ohms	66-4688340*
R39	Resistor, grid return, 470,000 ohms	66-4478340*
R40	Resistor, cathode bias, 68 ohms	66-0688340*
R41	Resistor, B+ decoupling, 330 ohms	66-1338340*
R42	Resistor, dropping, 1000 ohms	66-2108340*
R43	Resistor, grid return, 68,000 ohms	66-3688340*
R44	Resistor, voltage divider, 22,000 ohms	66-3228340*
R45	Resistor, voltage divider, 4700 ohms	66-2478340*
R46	Resistor, decoupling, 47 ohms	66-0478340
R47	Resistor, isolating, 330 ohms	66-1338340*
R48	Resistor, r-f filter, 56,000 ohms	66-3568340*
R49	Potentiometer, VOLUME control, 2 megohms	33-5566-16
R50	Resistor, voltage divider, 10 ohms	66-0108340*
R51	Resistor, FM detector, 68,000 ohms	66-3688340*
R52	Resistor, grid return, 4.7 megohms	66-5478340*
R53	Resistor, isolating, 2200 ohms	66-2228340*
R54	Resistor, voltage divider, 3.3 megohms	66-5334240*
R55	Resistor, voltage divider, 47 ohms	66-0478340*
R56	Resistor, plate load, 330,000 ohms	66-4338340*
R57	Resistor, isolating, 10,000 ohms	66-3108340*
R58	Resistor, grid return, 3.3 megohms	66-5334240*
R59	Resistor, bias decoupling, 470,000 ohms	66-4478340*
R60	Resistor, voltage divider, 150,000 ohms	66-4158340*
R61	Resistor, bleeder, 5000 ohms, 8 watts	33-3435-20
R62	Resistor, decoupling, 470 ohms	66-1475340*
R63	Resistor, bias, 15 ohms	66-0155340*
R64	Potentiometer, FOCUS control, 500 ohms	33-5546-28
R65	Resistor, limiting, 100 ohms	66-1104340*
R66	Resistor, dropping, 3900 ohms	66-2395340*
R67	Resistor, dropping, 2700 ohms	66-2295340*
R68	Not used	
R69	Resistor, grid return, 470,000 ohms	66-4478340*
R70	Resistor, decoupling, 5600 ohms	66-2568340
R71	Resistor, compensating, 270,000 ohms	66-4278340*
R72	Resistor, plate load, 22,000 ohms	66-3228340*
R73	Resistor, grid return, 6.8 megohms	66-5688340*
R74	Not used	
R75	Resistor, voltage divider, 15,000 ohms	66-3158340*
R76	Resistor, plate load, 150,000 ohms	66-4158340*
R77	Resistor, integrating, 22,000 ohms	66-3228340*
R78	Resistor, integrating, 8200 ohms	66-2828340*
R79	Resistor, integrating, 8200 ohms	66-2828340*
R80	Resistor, terminating, 22,000 ohms	66-3228340*
R81	Potentiometer assembly, dual, 1 megohm and 50,000 ohms	33-5563-23
R81A	Potentiometer, VERT. HOLD control, 1 megohm	Part of R81
R81B	Potentiometer, HORIZ. HOLD control, 50,000 ohms	Part of R81
R82	Potentiometer, HEIGHT control, 2.5 megohms	33-5565-10
R83	Resistor, limiting, 470,000 ohms	66-4478340*
R84	Resistor, limiting, 470,000 ohms	66-4478340*
R85	Resistor, shunt, 1.5 megohms	66-5158340*
R86	Resistor, shaping, 2200 ohms	66-2228340*
R87	Resistor, grid return, 2.2 megohms	66-5228340*
R88	Potentiometer, VERT. LIN. control, 1000 ohms	33-5546-31
R89	Resistor, limiting, 220 ohms	66-1228340*
R90	Resistor, damping, 1000 ohms	66-2108340*
R91	Resistor, damping, 1000 ohms	66-2108340*
R92	Resistor, grid return, 1 megohm	66-5108340*
R93	Resistor, video filter, 4700 ohms	66-2478340*
R94	Resistor, dropping, 82,000 ohms	66-3828340*
R95	Resistor, plate load, 3300 ohms	66-2338340*
R96	Resistor, plate load, 6800 ohms	66-2688340*
R97	Resistor, decoupling, 10,000 ohms	66-3104340*
R98	Resistor, grid return, 560,000 ohms	66-4568340*
R99	Resistor, sweep feedback, 330,000 ohms, ±5%	66-4338240*
R100	Resistor, cathode filter, 8200 ohms	66-2828340*
R101	Resistor, sweep feedback, 120,000 ohms	66-4128340*
R102	Resistor, voltage divider, 68,000 ohms, ±5%	66-3684240*
R103	Not used	
R104	Resistor, grid return, 3.3 megohms	66-5334240*
R105	Resistor, cathode return, 470,000 ohms	66-4478340*
R106	Not used	
R107	Not used	
R108	Resistor, sweep charging, 56,000 ohms, ±5%	66-3564240*
R109	Resistor, loading, 6800 ohms	66-2688340*
R110	Resistor, suppressor, 22,000 ohms	66-3228340*
R111	Resistor, grid return, 180,000 ohms	66-4188340*
R112	Resistor, screen dropping, 4700 ohms	66-2475340*
R113	Resistor, limiting, 680,000 ohms	66-4688340*
R114	Resistor, B+ decoupling, 330 ohms	66-1338340*
R115	Not used	
R116	Not used	
R117	Resistor, filament dropping, 4.7 ohms	66-9478340*
R118	Resistor, coupling, 330,000 ohms, ±5%	66-4334240*
R119	Resistor, grid return, 1 megohm, ±5%	66-5104240*
R120	Resistor, voltage divider, 47,000 ohms	66-3474340*
R121	Resistor, sweep feedback delay, 39,000 ohms	66-3398340*
R122	Resistor, voltage divider, 82,000 ohms	66-3828340*
R123	Resistor, compensating, 2200 ohms	66-2228340*
R124	Resistor, isolating, 5600 ohms	66-2568340*
R125	Resistor, shunting, 3300 ohms	66-2334340*
R126	Resistor, limiting, 680,000 ohms	66-4684340*
S1	Switch, OFF-ON	Part of R49
T1	Transformer, power	32-8423-2*
T2	Transformer, vertical blocking osc.	32-8442
T3	Transformer, vertical output	32-8422-1
T4	Transformer, horizontal blocking osc.	32-4470-1
T5	Transformer, horizontal output	32-8437
T6	Transformer, audio output	32-8242
TB1	Terminal board, aerial	38-8689
TC1	Tuning core	Part of L1

REPLACEMENT PARTS LIST (Cont.)

Reference Symbol	Description	Service Part No.
TC2	Tuning core	Part of L2
TC3	Tuning core	Part of L3
TC4	Tuning core	Part of L4
TC5	Tuning core	Part of L5
TC6	Tuning core	Part of L6
TC7	Tuning core	Part of L7
TC8	Tuning core	Part of L8
TC9	Tuning core	Part of L21
TC10	Tuning core	Part of L25
TC11	Tuning core	Part of L27
TC12	Tuning core	Part of T7
TC13	Tuning core, WIDTH	Part of L31
TC14	Tuning core, HORIZ. LIN.	Part of L32
TC15	Tuning core	Part of T7
W1	Line cord	41-3865
Z1	Transformer, 2nd s-i-f	32-4236
Z2	Transformer, FM detector	32-4317-2
Z3	Focus-coil assembly	76-2622-3
Z4	Deflection-coil assembly	32-9622
Z5	Loop assembly, aerial tuning	76-5413-2

MISCELLANEOUS

Description	Service Part No.
Grommet, 7N7 shock mtg.	27-4099-3
Socket, 7N7 shock mtg.	27-6207

TAPERED LINE TUNER PART NO. 76-5433-1

IMPORTANT —

For most of the common troubles, the above tuners may be repaired in the field. Tuners of this type, under warranty, may be returned for repair through Philco distributors at no cost except for missing parts and out-of-warranty tubes. Damaged or mutilated tuners are considered out-of-warranty. A small handling charge will be made for tuners returned under warranty, but found to be operating normally.

If it is not desired to repair out-of-warranty tuners, they may be returned for repair through your Philco distributor, at a reasonable cost. There will be an extra charge for missing parts or damaged tuners.

For detailed service information, refer to PR-1858, Service Manual for Philco 12-Channel Turret Tuner and 12-Channel Wafer-Switch Tuners, Part Nos. 76-5411-Series, 76-4402- Series, and 76-5433- Series.

Parts identified by † in the following list may be replaced in the field without disturbing the tuned circuits.

CAUTION: The lead dress and lead lengths of some of these components are critical. When replacing components, duplicate the original wiring as closely as possible.

REPLACEMENT PARTS LIST

Reference Symbol	Description	Service Part No.
C1-T†	Condenser, fixed trimmer, 20 $\mu\mu f$.	62-020309011
C2-T	Condenser, d-c blocking, 39 $\mu\mu f$.	Not replaceable
C3-T†	Condenser, a-g-c by-pass, 220 $\mu\mu f$.	30-1225-11
C4-T†	Condenser, filament by-pass, 220 $\mu\mu f$.	30-1225-11
C5-T	Condenser, screen by-pass, 220 $\mu\mu f$.	Not replaceable
C6-T†	Condenser, B+ by-pass, 220 $\mu\mu f$.	30-1225-11
C7-T	Condenser, d-c blocking, 220 $\mu\mu f$.	Not replaceable
C8-T	Condenser, trimmer, r-f plate, .5-5 $\mu\mu f$.	Not replaceable
C9-T	Condenser, coupling, 1.5 $\mu\mu f$.	Not replaceable
C10-T	Condenser, d-c blocking, 39 $\mu\mu f$.	Not replaceable
C11-T	Condenser, trimmer, mixer grid, .5-5 $\mu\mu f$.	Not replaceable
C12-T†	Condenser, r-f by-pass, 15 $\mu\mu f$.	62-015409011
C13-T	Condenser, d-c blocking, 470 $\mu\mu f$.	Not replaceable
C14-T†	Condenser, r-f by-pass, 1500 $\mu\mu f$.	30-1225-19
C15-T	Condenser, fixed padder, 27 $\mu\mu f$.	Not replaceable
C16-T	Condenser, oscillator injection, 2.2 $\mu\mu f$.	Not replaceable
C17-T	Condenser, fixed padder, 39 $\mu\mu f$.	Not replaceable
C18-T	Condenser, r-f by-pass, 220 $\mu\mu f$.	30-1225-11
C19-T	Condenser, filament by-pass, 220 $\mu\mu f$.	Not replaceable
C20-T†	Condenser, d-c blocking, 20 $\mu\mu f$.	30-1224-67
C21-T	Condenser, fixed padder, 10 $\mu\mu f$.	Not replaceable
C22-T**	Condenser, FINE TUNING, 1.5-4 $\mu\mu f$.	31-6517-1
L1-T	Coil, r-f grid tank	Not replaceable
L2-T†	Coil, FM trap	32-4438-1
L3-T thru L13-T	Coils, r-f tank	Not replaceable
L14-T thru L24-T	Coils, r-f plate tank	Not replaceable
L25-T thru L35-T	Coils, mixer grid tank	Not replaceable
L36-T†	Coil, 1st v-i-f tank	32-4359-8
L37-T†	Coil, r-f plate feed	32-4112-2
L38-T†	Coil, oscillator, Channel 2	32-4357-2
L39-T†	Coil, oscillator, Channel 3	32-4357-3
L40-T†	Coil, oscillator, Channel 4	32-4357-4
L41-T†	Coil, oscillator, Channel 5	32-4357-5
L42-T†	Coil, oscillator, Channel 6	32-4357-6
L43-T†	Coil, oscillator, Channel 7	32-4357-7
L44-T†	Coil, oscillator, Channel 8	32-4357-8
L45-T†	Coil, oscillator, Channel 9	32-4357-8
L46-T†	Coil, oscillator, Channel 10	32-4357-10
L47-T†	Coil, oscillator, Channel 11	32-4357-11
L48-T†	Coil, oscillator, Channel 12	32-4357-12
L49-T†	Coil, oscillator, Channel 13	32-4537-11
L50-T†	Coil, tapered line	32-4432
L51-T†	Coil, tapered line	32-4432
R1-T†	Resistor, input loading, 1200 ohms	66-2128340*

REPLACEMENT PARTS LIST (Cont.)

Reference Symbol	Description	Service Part No.
R2-T†	Resistor, a-g-c decoupling, 330 ohms	66-1338340*
R3-T†	Resistor, grid return, 1 megohm	66-5108340*
R4-T†	Resistor, plate feed, 10,000 ohms	66-3108340*
R5-T†	Resistor, screen dropping, 39,000 ohms	66-3398340*
R6-T†	Resistor, B+ decoupling, 330 ohms	66-1338340*
R7-T	Resistor, suppressor, 10 ohms	Not replaceable
R8-T†	Resistor, loading, 15,000 ohms	66-3158340*
R9-T†	Resistor, B+ decoupling, 330 ohms	66-1338340*
R10-T†	Resistor, grid return, 100,000 ohms	66-4108340*
R11-T†	Resistor, grid return, 10,000 ohms	66-3108340*
T1-T	Transformer, r-f	Not replaceable
C1-T	Tuning core FM trap	Part of L2-T
TC2-T thru TC14-T	Tuning cores, oscillator	Part of Coils
TC15-T	Tuning core, mixer plate	Not replaceable
WS1-T	Wafer switch	Not replaceable
Z1	Tapered line transformer assembly	Not replaceable

****C22-T is made accessible by first moving L38-T (Channel 2) and L39-T (Channel 3) oscillator coils. This may be done by compressing the coil mounting clips, then carefully pushing the coil back into the Tuner, out of the way.**

PRODUCTION CHANGES IN MODELS 50-T1404, CODE 123, AND 50-T1406, CODE 123; 50-T1404, 50-T1406, AND 50-T1432, ALL CODE 124

Corrections to Service Manual (PR-1844)

1. Figure 5, page 6, caption should read, "Top View of Chassis (without Tuner), etc."

2. Figure 6, page 7, caption should read, "Top View of Chassis, Showing Locations of Adjustments."

3. The Bandpass and R-F Response Adjustment Procedure for Tapered Line Tuner (Code 123), page 12, is superseded by the following procedure (refer to PR-1858 for complete tuner information):

1. Connect the outputs of the AM and FM signal generators through the aerial-matching network (figure 1) to terminals 1 and 2 of Z1-T. Terminals 3 and 4 of Z1-T should be connected together, for a 300-ohm input.

2. Connect a 3300-ohm resistor in series with the 150-volt (red) B+ lead to R9-T. Connect the vertical input of the oscilloscope to the junction of the 3300-ohm resistor and R9-T.

3. Turn the CHANNEL SELECTOR to Channel 10, and remove the 1st v-i-f tube. Connect a 470-ohm resistor from the v-i-f output (green) lead to ground.

4. Set the FM signal generator to 195 mc., with sufficient sweep to give the complete response curve.

5. Set the AM signal generator (unmodulated) to produce marker pips at the video and sound carriers for Channel 10.

6. Adjust C8-T and C11-T for maximum symmetrical response within Channel 10. If there is one weak station in the local area, the adjustment of C8-T and C11-T may be made on that channel, to improve its performance, provided that the response on other channels is not sacrificed too much.

4. The Bandpass and R-F Response Adjustment Procedure for 12-Position Turret Tuner (Code 124), page 13, step 2, should read, "Short the v-i-f output lead of the tuner to ground through a 470-ohm resistor."

5. The connection of C15-T and L17-T, R10-T should be interchanged in figure 13, page 13.

6. In figure 14, pages 16 and 17, terminal 4 of the tapered line input terminals should be grounded.

7. In figure 14, pages 16 and 17, the connections to pins 1 and 3 of the 6T8 (Code 124) should be reversed.

8. In figure 14, pages 16 and 17, the value of R94 should be 82,000 ohms.

9. In figure 14, pages 16 and 17, and in the Replacement Parts List, the values of R3-T and R2-T should be interchanged.

10. In figure 14, the peak-to-peak voltage on the grid of the 6BG6G tube should be 35v.

11. The correct part number of C24 is 62-01049001.

12. The correct part number of R26 is 33-5563-22.

PRODUCTION CHANGES IN MODELS 50-T1404, CODE 123, AND 50-T1406, CODE 123

RUN NO.	DESCRIPTION OF CHANGE	REMOVED PART NO.	NEW OR ADDED PART NO.	REASON FOR CHANGE
2	R85 changed to 1.5 megohms.	66-5108340	66-5158340	To center range of VERT. HOLD control.
3	R68 removed. Pin 6 of video output tube was connected directly to the 135-volt source.	66-2565340		To simplify wiring.
4	L17 and R24 removed. Plate of 1st video amplifier was connected directly to L18.	32-4143-14 66-3158340		To improve video response.

PRODUCTION CHANGES IN MODELS 50-T1404, 50-T1406, 50-T1432, ALL CODE 124

RUN NO.	DESCRIPTION OF CHANGE	REMOVED PART NO.	NEW OR ADDED PART NO.	REASON FOR CHANGE
2	R85 changed to 1.5 megohms.	66-5108340	66-5158340	To center range of VERT. HOLD control.
3	R68 removed. Pin 6 of video output tube was connected directly to the 135-volt source.	66-2565340		To simplify wiring.
4	L17 and R24 removed. Plate of 1st video amplifier was connected directly to L18.	32-4143-14 66-3158340		To improve video response.
4	A 3.3-$\mu\mu f$. condenser was added, from pin 1 of FM detector, 6T8, to ground.		30-1224-30	To improve FM detector AM rejection.

PRODUCTION CHANGES IN MODELS 50-T1600, 50-T1632, AND 50-T1633

Corrections to Service Manual (PR-1835)

1. On page 3, under HORIZONTAL SWEEP ADJUSTMENTS, step 3 should read, "Connect an oscilloscope to pin 3 of J1, etc." Step 5 should read, "Connect the oscilloscope to pin 1 of J1."

2. The Replacement Parts List should be corrected according to the following list.

Reference Symbol	Published Part No.	Corrected Part No.
C1	45-9570	31-6519
C33	62-10009001	62-110009001

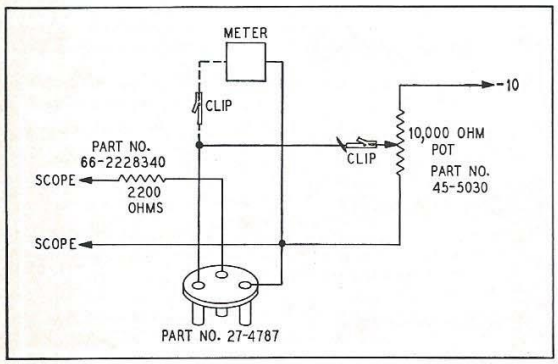


Figure 3. Correct Wiring for ALIGN TEST Jack Adapter, for Models 50-T1600, 50-T1632, and 50-T1633

MISCELLANEOUS

Description	Published Part No.	Corrected Part No.
Knob, FINE TUNING	54-4771	76-5794
Knob, VOLUME	54-5794	76-5795
Screw, picture-tube mtg.	2W5492FA9	1W25492FA9
Cable, chassis connecting (power)	41-3975	41-3975-1
Ring, picture-tube frame assembly	57-7869FA3	56-7869FA3

3. The ALIGN TEST jack adapter shown on page 6, figure 5, should be wired as shown in figure 3.

4. The FM TEST jack adapter shown on page 6, figure 6, should be wired as shown in figure 4.

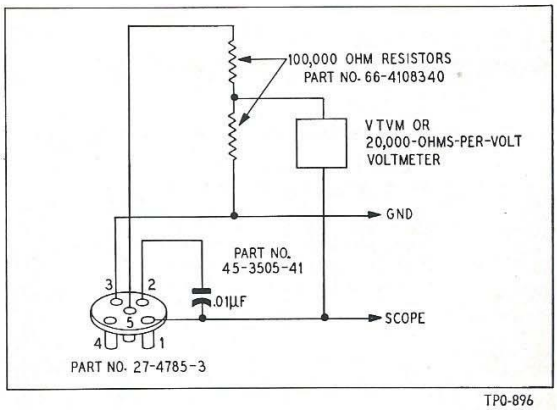


Figure 4. Correct Wiring for FM TEST Jack Adapter, for Models 50-T1600, 50-T1632, and 50-T1633

PRODUCTION CHANGES

The following production changes were made since the printing of Service Bulletin 50T1 (PR-1853).

The high-voltage supply, the r-f, i-f chassis, and the deflection chassis carry separate run numbers.

RUN NO.	DESCRIPTION OF CHANGE	REMOVED PART NO.	NEW OR ADDED PART NO.	REASON FOR CHANGE
5 (R-f, i-f)	The 100-$\mu\mu f$. condenser from pin 5 of Z3 was replaced by a trimmer (located between the FM-detector transformer, Z7, and the 6AQ5). See ALIGNMENT NOTE below. 1st s-i-f grid circuit was rewired as in first production.	62-168001001 62-110009001 66-2188340	31-6473-18 trimmer 66-4478340 66-5478340	To improve stability and AM rejection.
5 (Deflection)	C84 changed to silver mica type.	60-10275407	60-10275337	To reduce drift.
6 (Deflection)	C67 increased in ripple-current rating.		30-2568-37*	To reduce heating.
7 (Deflection)	R70 removed. R74 changed to 2700 ohms. R73 changed to 5600 ohms.	66-3228340* 66-2478340* 66-3108340*	66-2278340* 66-2568340*	To simplify wiring.
8 (Deflection)	Fuse holder relocated outside the h-v cage.			To reduce ambient temperature of fuse.
9 (Deflection)	C87 changed to 820 $\mu\mu f$.	60-20125404	60-10825401	To reduce interaction between width and linearity adjustments.
10 (Deflection)	A 250-μf., 50v condenser was added, across focus coil.		30-2417-15	To improve overall focus.
During Run 1 (H-v ass'y.)	Horizontal output transformer changed to 32-8428-1. Wiring of secondary winding changed as shown in figure 5.	32-8428	32-8428-2*	To decrease current in width coil.
2 (H-v ass'y.)	Physical wiring change.			To simplify wiring.
3 (H-v ass'y.)	Fuse relocated outside h-v cage.			To reduce ambient temperature of fuse.

NOTE: All Run 1, 2, 3, and 4 chassis that have Run 5 changes incorporated have a "Y" stamped after the run number. In these chassis, the trimmer referred to above is located underneath the chassis, from pin 5 of Z3 to ground.

ALIGNMENT NOTE: When making the alignment, use a station signal, turn the FINE TUNING control clockwise to obtain a slightly smeary picture, and adjust this trimmer for best sound—minimum AM (noise) output.

TB-2 BOOSTER CONNECTIONS

The booster B+ connection is wired to pin 6 of the audio output tube (6V6GT), and therefore, TB-2 Booster Adapter Cable, Part No. 41-3963, should be used with this series.

CHANGE IN CONTROL DOOR HINGE FOR MODEL 50-T1600

Later production 50-T1600 used a larger hinge, Part No. 56-8442, on the control door. The depth of one leaf of this hinge is approximately ¾".

It is recommended that this new hinge be used for all replacements. Due to the larger size, it is necessary to butt this hinge tightly against the ledge. See figure 6.

PREPRODUCTION CHANGES IN MODELS 50-T1600, 50-T1632, AND 50-T1633, ALL CODE 122

Corrections to Service Manual (PR-1854)

1. The Replacement Parts List should be corrected according to the following list.

Reference Symbol	Published Part No.	New or Corrected Part No.
L35	32-4467-3	32-4143-17
T3	32-4470	32-4470-1
T5	32-8428	32-8428-2
MISCELLANEOUS		
Description	Published Part No.	New or Corrected Part No.
Socket, 1X2 tube (first)	27-6254-1	27-6254-3
Socket, 1X2 tube (second)	27-6254	27-6254-2

2. On page 2, Step 11, the Signal-Generator Connection should be, "Connect output of AM generator to pin 3 of J3".

PREPRODUCTION CHANGES

The following changes were made between the printing of PR-1854 and first production:

1. Alignment test points G3, G4, and G5 were removed.
2. C107 was changed to 150 $\mu\mu f$., Part No. 30-1220-1.
3. A 15,000-ohm resistor, Part No. 66-3158340, was added, between R129 and the wire from pin 6 of the 12AU7 and R139.
4. R131 was replaced by a wire.
5. R138 was changed to 180,000 ohms, Part No. 66-4188340.
6. R121 was changed to 1,000 ohms, Part No. 66-2108340.
7. The positions of L21 and L23 were reversed in the circuit.
8. The connections to pins 9 and 4,5 of the 12AU7 video detector and a-g-c rectifier tube were reversed.
9. The connections to pin 9 and 4,5 of the 12AU7 1st video amplifier tube were reversed.
10. The connections to pins 4 and 5 of the 6T8 FM detector and 1st audio tube were reversed.
11. The connections to pins 2 and 7 of the 6V6GT audio-output tube were reversed.
12. The filament pins of the 6BF5 tube are 3 and 4, instead of 1 and 4.
13. R73 was changed to 5600 ohms, Part No. 66-2568340.
14. C87 was changed to 820 $\mu\mu f$., Part No. 60-10825401.
15. The width coil was rewired as shown in figure 5.

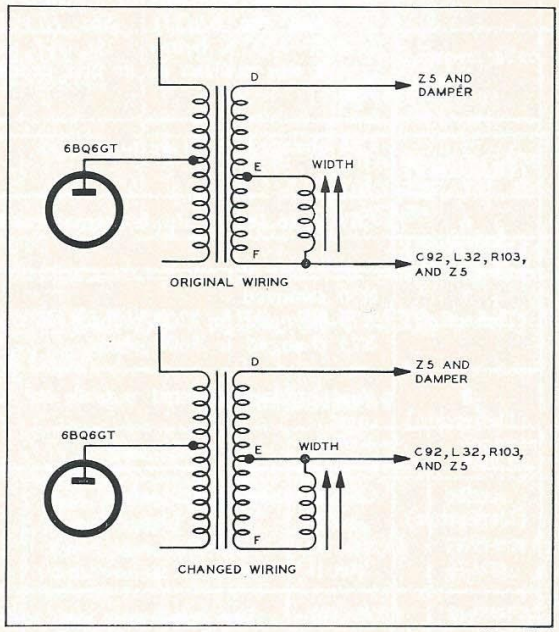


Figure 5. Wiring Changes in Horizontal-Output-Transformer Secondary, Models 50-T1600, 50-T1632, and 50-T1633

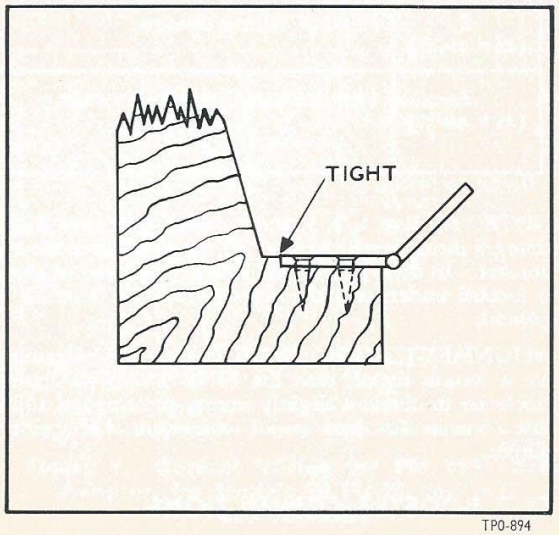


Figure 6. Substituting Hinge, Model 50-T1600

SERVICE HINTS

MODELS 50-T1104, CODE 122, AND 50-T1105, CODE 122 — BUILT-IN AERIAL LEAD DRESS

In some cases, improper performance of the built-in aerial may be traced to the way the lead from the built-in aerial to the aerial-input terminals is dressed. This lead should be kept away from the end of the dipole element nearest the power transformer, and dressed so that it is entirely in the clear.

ALL MODELS—BUILT-IN AERIAL PERFORMANCE ON CHANNEL 6

To make the built-in aerial matching system tune more sharply on Channel 6, one of the dipole elements was shortened. This change does not affect the reception of the built-in aerial on the other television channels. This change voids previous information stating that the built-in aerial tunes on all channels except 6.

ALL 10", 12", AND 16" MODELS — CRT AND DEFLECTION-YOKE EXTENSION CABLES

To greatly facilitate service bench work, CRT and deflection-yoke extension cables may be prefabricated from the following Accessory parts:

1. Deflection plug and cable assembly, Part No. 41-3860-6
   Octal Socket and Cable, Part No. 41-3777
2. CRT cable and socket assembly, Part No. 41-3772
   CRT plug, Part No. 54-4571-1

This cable is approximately 28" long.

MODEL 50-T1400 SERIES, RUNS 1 AND 2 — REDUCTION OF VERTICAL JITTER

Vertical jitter in the picture due to line voltage fluctuations in the above models may be greatly reduced or eliminated, in the special cases where necessary, by adding an extra filter network to the B supply feeding the vertical oscillator and discharge tube. This network consists of a 10,000-ohm resistor and a 10-μf. condenser. The circuit is shown in figure 7.

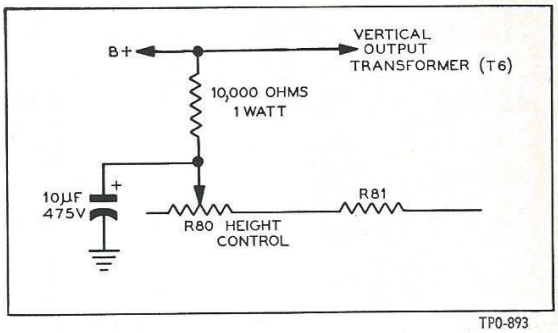


Figure 7. Addition of Filter Network, Model 50-T1400 Series, Runs 1 and 2

MODEL 50-T1400 SERIES PREVENTING HORIZONTAL-SYNC TEAR AT MINIMUM CONTRAST CONTROL SETTING

Horizontal tear at the top of the picture may be caused by a horizontal damper lead radiating energy into the sync separator circuit.

The effect of this radiation may be reduced by redressing these leads (refer to figure 7, page 5, of Service Bulletin 49T3, PR-1822) as follows:

Redress the blue lead on B3-3 to the mounting jack of the high-voltage condenser, under C46, and under T6 to the condenser mounting jack. This wire connects C51 to C79, and radiates some horizontal output signal to the lead connected from B3-2 to B8-3, which is in the sync separator grid circuit. Also redress this wire (from B3-2 to B8-3) on the 6SN7GT side of B8, under R76 to B8-3.

ALL MODELS — ALIGNMENT PRACTICES

As a general rule, the practice of removing the horizontal-oscillator tube during alignment of the r-f and i-f circuits, in order to disable the high-voltage, is detrimental, for the following reasons: the change in B+ voltage may be enough to change the response curve. This would be especially detrimental in fringe areas. Second, in some receivers, removing the drive from the horizontal-output tube causes an abnormally high level of plate current to be drawn by this tube. This may eventually damage the output tube, and in some cases, may overload and damage the low-voltage rectifier tube.

3. Adjusting the width coil also changes the amplitude of the plate pulse, and thus affects the oscillations.

The adjustments of linearity, drive, and width are all interrelated; therefore, compromising them to reduce Barkhausen effect should not be allowed to deteriorate the picture width, linearity, or brilliance to any marked degree.

MODEL 48-2500 — GROUNDING KEYSTONING MAGNETS

Before adjusting the keystone magnets, it is advisable to ground the metallic magnet band clamp, to eliminate the static high-voltage charge on the magnets. Where a plastic magnet band clamp is encountered, it is necessary to ground the individual magnets themselves momentarily.

CORRECTIONS AND ADDITIONS TO SERVICE MANUALS AND BULLETINS

Model 50-T1400 Series, 50-T1404 and 50-T1105 (PR-1793, PR-1822) — Correction of Part Number

The correct part number of C74, the 500-$\mu\mu f$., 25-volt filter condenser across the 15-ohm resistor in the negative return of the low-voltage power supply, is 30-2570-40.

Model 7050 Tube Tester — Correction to 6W4GT Setting (Service Bulletin 50T2, PR-1853)

The setting given for the 6W4GT on page 11 should be as follows:

Tube	Filament	Short	Load	Quality
6W4GT	6	cAE	3	AC

Model 50-T1403 (PR-1829) — Additional Replacement Part

A securing clip for the oscillator adjustment cover escutcheon plate is now available for replacement purposes. The part number is 1W57058FA22. It is referred to as a speed clip.

Model 50-T1481 (PR-1787) New Part

A new fiberboard baffle-and-cloth assembly is available for the above model. Its part number is 40-7860-1, and it may be used as a direct replacement for the old type baffle and cloth.

Part No. 76-5433 — Series Tuner — Additional Replacement Part (Supplementary Information to PR-1858)

The FINE TUNING condenser for the above tuners is available for replacement purposes. The part number is 31-6517-1. This condenser is made accessible by first moving L38-T (Channel 2) and L39-T (Channel 3) oscillator coils. This may be done by compressing the coil mounting clips, then carefully pushing the coil back into the tuner, out of the way.

GENERAL

SUBSTITUTING PART NO. 76-5433-1 TUNERS FOR PART NO. 76-4402-6 AND PART NO. 76-5433 TUNERS

Tuner Part No. 76-5433-1 is built only to be shock-mounted; therefore, when using it to replace other tuners, mounting brackets are required. These brackets, including installation instructions, may be ordered by Part No. 45-9591.

MODEL 7050 TUBE TESTER — REVISED 1B3GT SETTING

The following setting for the 1B3GT tube supersedes those previously issued.

Filament	Short Test	Quality	Load
1	kmop	KMOPT	8

MODEL 7050 TUBE TESTER — REVISED 6AG5 SETTING

Filament	Short Test	Quality	Load
6	bnr$\overline{\text{AG}}$EF	ABGNT	2

TELEVISION SERVICE PUBLICATIONS

As an aid in selecting the proper service information for a particular television model, all '50 Philco television and television-radio-phonograph models built to date, and their corresponding service publications, are listed below. The PR number in *ITALICS* is the basic manual for that particular model.

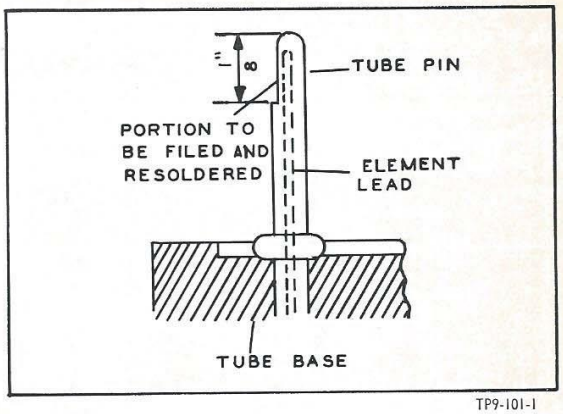


Figure 8. Pin of Picture Tube Filed for Resoldering, All Models

MODEL	CODE	RUN NO.	DESCRIPTION	SERVICE PUBLICATION
50-T702	121	1	7″ Table Model	*PR-1672*
50-T702	121	2	7″ Table Model	PR-1765—*1672*
50-T1104	121	1	10″ Table Model	PR-1792—*1771*
50-T1105	121	1	10″ Table Model	*PR-1771*
50-T1106	121	1	10″ Table Model	*PR-1771*
50-T1104	122	1	10″ Table Model	PR-1792—*1771*
50-T1104	123	1	10″ Table Model	*PR-1793*
50-T1104	123	2 to 4	10″ Table Model	PR-1822—*1793*
50-T1400	121	1	12″ Table Model	*PR-1793*
50-T1402	121	1	12″ Table Model	*PR-1793*
50-T1400	121	2 to 5	12″ Table Model	PR-1822—*1793*
50-T1402	121	2 to 5	12″ Table Model	PR-1822—*1793*
50-T1401	121	2 to 5	12″ Table Model	PR-1822—*1793*
50-T1430	121	2 to 5	12″ Console Model	PR-1822—*1793*
50-T1400	121	6 and 7	12″ Table Model	PR-1823—1822—*1793*
50-T1401	121	6 and 7	12″ Table Model	PR-1823—1822—*1793*
50-T1402	121	6 and 7	12″ Table Model	PR-1823—1822—*1793*
50-T1430	121	6 and 7	12″ Console Model	PR-1823—1822—*1793*
50-T1400	121	8 to 10	12″ Table Model	PR-1825—1823—1822—*1793*
50-T1401	121	8 to 10	12″ Table Model	PR-1825—1823—1822—*1793*
50-T1402	121	8 to 10	12″ Table Model	PR-1825—1823—1822—*1793*
50-T1430	121	8 to 10	12″ Console Model	PR-1825—1823—1822—*1793*
50-T1403	121	11 to 13	12″ Table Model	PR-1829—1825—1823—1822—*1793*
50-T1404	121	11 to 13	12″ Table Model	PR-1829—1825—1823—1822—*1793*
50-T1406	121	11 to 13	12″ Table Model	PR-1829—1825—1823—1822—*1793*
50-T1400	121	14 to 22	12″ Table Model	PR-1853—1829—1825—1823—1822—*1793*
50-T1401	121	14 to 22	12″ Table Model	PR-1853—1829—1825—1823—1822—*1793*
50-T1402	121	14 to 22	12″ Table Model	PR-1853—1829—1825—1823—1822—*1793*
50-T1403	121	14 to 22	12″ Table Model	PR-1853—1829—1825—1823—1822—*1793*
50-T1404	121	14 to 22	12″ Table Model	PR-1853—1829—1825—1823—1822—*1793*
50-T1406	121	14 to 22	12″ Table Model	PR-1853—1829—1825—1823—1822—*1793*
50-T1430	121	14 to 22	12″ Console Model	PR-1853—1829—1825—1823—1822—*1793*
50-T1402	122	1	12″ Table Model	PR-1829—1825—1823—1822—*1793*
50-T1406	122	1	12″ Table Model	PR-1829—1825—1823—1822—*1793*
50-T1432	122	1	12″ Console Model	PR-1829—1825—1823—1822—*1793*
50-T1402	122	2 to 6	12″ Table Model	PR-1853—1829—1825—1823—1822—*1793*
50-T1406	122	2 to 6	12″ Table Model	PR-1853—1829—1825—1823—1822—*1793*
50-T1432	122	2 to 6	12″ Console Model	PR-1853—1829—1825—1823—1822—*1793*
50-T1404	123	1	12″ Table Model	*PR-1844*
50-T1406	123	1	12″ Table Model	*PR-1844*
50-T1404	123	2 to 4	12″ Table Model	PR-1897—*1844*
50-T1406	123	2 to 4	12″ Table Model	PR-1897—*1844*

TELEVISION SERVICE PUBLICATIONS (Cont.)

MODEL	CODE	RUN NO.	DESCRIPTION	SERVICE PUBLICATION
50-T1404	124	1	12" Table Model	*PR-1844*
50-T1406	124	1	12" Table Model	*PR-1844*
50-T1432	124	1	12" Console Model	*PR-1844*
50-T1404	124	2 to 4	12" Table Model	PR-1897—*1844*
50-T1406	124	2 to 4	12" Table Model	PR-1897—*1844*
50-T1432	124	2 to 4	12" Console Model	PR-1897—*1844*
50-T1403	125	1	12" Table Model	PR-1846—*1844*
50-T1404	125	1	12" Table Model	PR-1846—*1844*
50-T1406	125	1	12" Table Model	PR-1846—*1844*
50-T1403	125	2 to 7	12" Table Model	PR-1897—1846—*1844*
50-T1404	125	2 to 7	12" Table Model	PR-1897—1846—*1844*
50-T1406	125	2 to 7	12" Console Model	PR-1897—1846—*1844*
50-T1443	122	1	12" Consolette	*PR-1774*
50-T1443	122	1Z	12" Consolette	PR-1822—*1774*
50-T1443	123	1	12" Consolette	PR-1800—*1774*
50-T1443	123	2 to 4	12" Consolette	PR-1822—1800—*1774*
50-T1443	123	5 to 6	12" Consolette	PR-1823—1822—1800—*1774*
50-T1443	123	6Z and 7	12" Consolette	PR-1829—1823—1822—1800—*1774*
50-T1477 through 50-T1482	121	1	12" Radio-Phono-TV	*PR-1787*
50-T1477 through 50-T1482	121	2 to 4	12" Radio-Phono-TV	PR-1829—*1787*
50-T1476	121		12" Radio-Phono-TV	PR-1853—1829—*1787*
50-T1484	121		12" Radio-Phono-TV	PR-1853—1829—*1787*
50-T1483	121	1	12" Radio-Phono-TV	*PR-1802*
50-T1483	121	1Z to 3	12" Radio-Phono-TV	PR-1829—*1802*
50-T1630	121	1	16" Console	*PR-1791*
50-T1630	121	2 and 3	16" Console	PR-1822—*1791*
50-T1630	121	1Z and 2	16" Console	PR-1823—1822—*1791*
50-T1630	121	3	16" Console	PR-1825—1823—1822—*1791*
50-T1630	121	3X and 4	16" Console	PR-1829—1823—1822—*1791*
50-T1630	122	1	16" Console	PR-1825—*1791*
50-T1600	121	1	16" Table Model	*PR-1835*
50-T1632	121	1	16" Console Model	*PR-1835*
50-T1633	121	1	16" Console Model	*PR-1835*
50-T1600	121	2 to 4	16" Table Model	PR-1853—*1835*
50-T1632	121	2 to 4	16" Console Model	PR-1853—*1835*
50-T1633	121	2 to 4	16" Console Model	PR-1853—*1835*
50-T1600	121	5 to 10	16" Table Model	PR-1897—1853—*1835*
50-T1632	121	5 to 10	16" Console Model	PR-1897—1853—*1835*
50-T1633	121	5 to 10	16" Console Model	PR-1897—1853—*1835*
50-T1600	122		16" Table Model	PR-1854—*1835*
50-T1632	122		16" Console Model	PR-1854—*1835*
50-T1633	122		16" Console Model	PR-1854—*1835*
76-5411—Series Tuner			Philco 12-Position Turret Tuner	PR-1803
76-4402—Series 76-5433—Series 76-5411—Series Tuners			Philco 12-Channel Turret Tuner and 12-Channel Wafer-Switch Tuner	PR-1803—*1858*