

# The PHOTOFACT Servicer

SET 462

★ Published for all users of Howard W. Sams' Photofact Folders

★ NOV., 1959

This Servicer provides you with essential data on other models or special equipment not covered in standard PHOTOFACT folders. The schematics and supplementary data included here will be of valuable help to you in servicing this equipment.

TRADE NAME AND MODEL

## TELEVISION RECEIVERS

RCA VICTOR

Chassis KCS127A, B, F, L, LX, M, MX.....462-1

SILVERTONE

Chassis 456.51580 thru 585, 600 thru 605,  
620 thru 627, 528.51580 thru 585, 600  
thru 605, 621 thru 627, 528.59350.....462-2

## PRODUCTION CHANGE BULLETIN

ADMIRAL Television Rec.

Chassis 18A6CB, TB, 18B6CB, TB, TC,  
18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....462-3

FERROGRAPH Tape Recorder

3A/N.....462-3

GENERAL ELECTRIC Television Rec.

M4 Line.....462-3

## OTHER EQUIPMENT

ALLSTATE

6225, 6256 (Ch. 528.55040, 528.55041).....462-4

CHANNEL MASTER

6501, 6502.....462-5

CROWN

TR-830.....462-6

DYNAMIC

ST-3000PA.....462-7

## CONTENTS PHOTOFACT SET 462

TRADE NAME AND MODEL	SET AND FOLDER NO.	TRADE NAME AND MODEL	SET AND FOLDER NO.
TELEVISION RECEIVERS		GRANCO	
RCA VICTOR		601.....	462-8
SILVERTONE		HARMAN-KARDON	
Chassis KCS127A, B, F, L, LX, M, MX.....	462-1	HK20.....	462-9
Chassis 456.51580 thru 585, 600 thru 605, 620 thru 627, 528.51580 thru 585, 600 thru 605, 621 thru 627, 528.59350.....	462-2	KNIGHT	
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	KN-120 (92SU423).....	462-10
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	MOTOROLA	
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	5T12B, M, P, W, 5T13P, S, 5T14GW, W (Ch. HS-653, HS-654).....	462-11
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	7X23E, 7X24, S, W (Ch. HS-688).....	462-12
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	OLYMPIC	
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	655.....	462-13
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	PILOT	
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	SP-216, A.....	462-14
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	PONTIAC	
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	988977.....	462-15
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	SILVERTONE	
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	9011, 9012, 9013 (Ch. 132.44500).....	462-16
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	SYLVANIA	
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	4312 Series (Ch. 1-639-1).....	462-17
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	WEBCOR	
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	1912, 1915 (Ch. 14X279, 14X281).....	462-18
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	ZENITH	
Chassis 18A6CB, TB, 18B6CB, TB, TC, 18D6T, 18UA6CB, TB, 18UB6CB, TB, TC.....	462-3	SF114E, R, W, SF117E, R, W, SF2505E, R, W, SRS4E, R, W, SRS7 (Ch. 5B27, 5B29).....	462-19

IN THIS ISSUE OF  
THE SERVICER:

CBS Models  
TR260, TR261,  
TR262

Dukane Models  
14A290B, B1, C,  
14A390

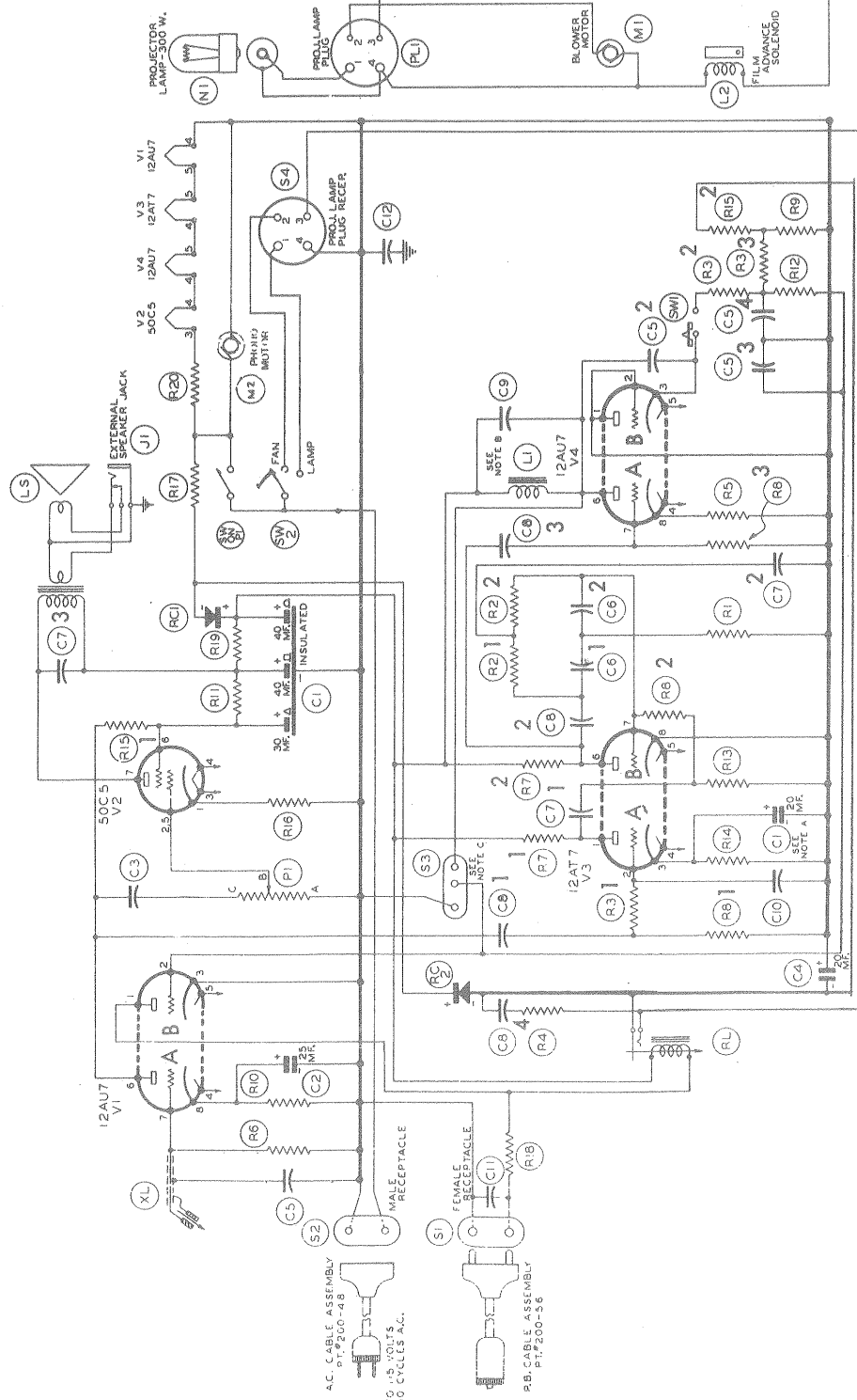
1. ALL VOLTAGES MEASURED BETWEEN TERMINALS AND FLOTTING GROUND.
2. LINE VOLTAGE IS 115 VOLT 60 CYCLE.
3. DC VOLTAGES MEASURED WITH RCA VOLT OHMIST V.T. VOLTMETER.
4. AC VOLTAGES MEASURED WITH A VOLT OHMIST V.T. VOLTMETER.
5. VOLTAGES MAY VARY WITH DIFFERENT TUBES, BUT SHOULD BE GENERALLY 20% ACCURATE.
6. VOLUME CONTROL WITH SWITCH IN AUTOMATIC POSITION.
7. AC 30 CYCLE INPUT-AND A.C. RECORDING-606'S IS BEING PLAYED.

### VOLTAGE DATA

TUBE TYPE	1	2	3	4	5	6	7	8	9
V1 12AU7	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25
V2 12AU7	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25
V3 12AU7	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25
V4 12AU7	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25

TUBE TYPE	1	2	3	4	5	6	7	8	9
V1 12AU7	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25
V2 12AU7	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25
V3 12AU7	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25
V4 12AU7	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25	139-25

VOLTAGE RATIO  
30/50 CYCLE TO  
BE 6.11 OR BETTER.

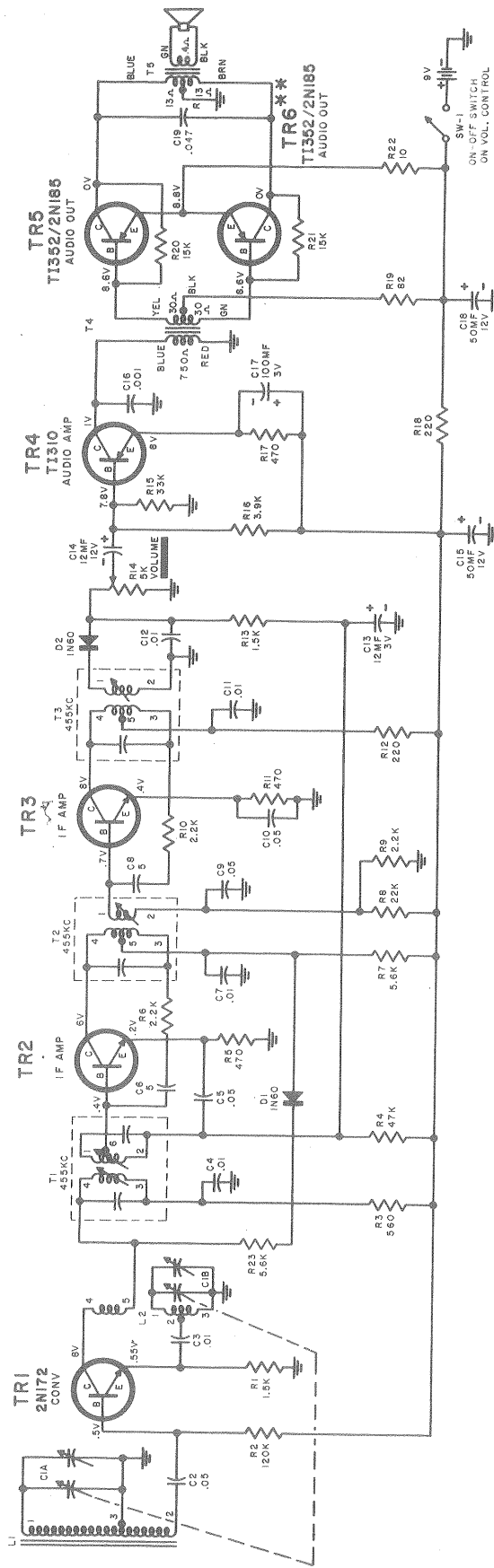


LEGEND	DESCRIPTION	QTY	PART NO.
C1	CAPACITOR-ELECTROLYTIC		
C2	CAPACITOR		
C3	CAPACITOR		
C4	CAPACITOR		
C5	CAPACITOR		
C6	CAPACITOR		
C7	CAPACITOR		
C8	CAPACITOR		
C9	CAPACITOR		
C10	CAPACITOR		
C11	CAPACITOR		
C12	CAPACITOR		
V1	ELECTRON TUBE		
V2	ELECTRON TUBE		
V3	ELECTRON TUBE		
V4	ELECTRON TUBE		
V5	ELECTRON TUBE		
V6	ELECTRON TUBE		
V7	ELECTRON TUBE		
V8	ELECTRON TUBE		
V9	ELECTRON TUBE		
V10	ELECTRON TUBE		
V11	ELECTRON TUBE		
V12	ELECTRON TUBE		
V13	ELECTRON TUBE		
V14	ELECTRON TUBE		
V15	ELECTRON TUBE		
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V98	ELECTRON TUBE		
V99	ELECTRON TUBE		
V100	ELECTRON TUBE		

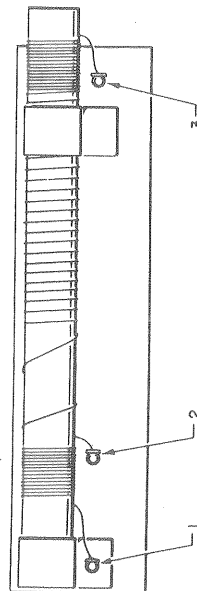
- NOTES:
1. C1 CAPACITOR, 20 MF, 25V, IS ONE SECTION OF CAPACITOR PT190-2915.
  2. L1 REACTOR - AUDIO, TO BE TUNED TO 50 CYCLES.
  3. S1 RECEPTACLE - 3 PHONO, IS NOT IDENTICAL TO S1 IN A TEST PLUG, ALDEN PT-4803-P.

DUKANE MODELS 14A290B, B1, C, 14A390

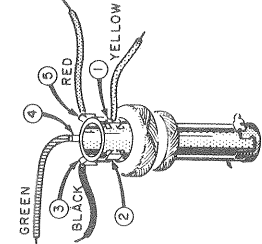
Schematic Diagram Courtesy of Dukane Corporation



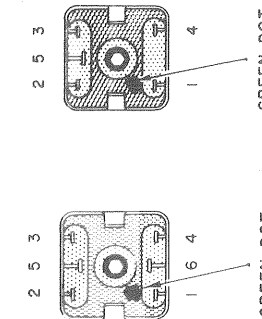
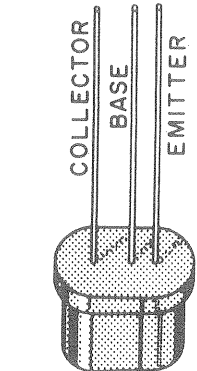
CBS MODELS TR260, TR261, TR262



L1—Antenna Coil



L2—Oscillator Coil



TR1—I.F. Trans. TR2—I.F. Trans. TR3—I.F. Trans.

TR4—I.F. Trans. TR5—I.F. Trans. TR6—I.F. Trans.

### NOTES

1. Voltages taken with VTVM from transistor socket terminals to chassis. Tuning capacitor set to minimum.
2. Capacitor values of less than one are microfarads and values greater than one are micro-microfarads, unless otherwise indicated.
3. Resistors are all 1/2W, 10%. K=X1,000.
4. Resistance reading taken with transistors removed from socket, and components disconnected from circuit.
5. Battery current  
Zero signal — 5 ma.  
Maximum signal — 40 ma.

### RESISTANCE READINGS

Terminal	TR 1	TR 2	TR 3	TR 4	TR 5	TR 6
Base	120K	7K	6K	4K	110	110
Emitter	*1.5K	*500	*500	700	10	10
Collector	780	4K	450	*750	*13	*13

Resistances in ohms. K=X1,000. Transistors removed from sockets.  
\*Measured from transistor socket terminals to chassis. All other readings to C18 & R19.

### Alignment

Set volume control at maximum. Use just enough signal generator output to provide satisfactory indication.

Connect the output of the generator to a coil consisting of five turns of wire, five inches in diameter, and radiate signal to receiver loop. Bring the coil just close enough to the receiver's loop to obtain satisfactory indication on output meter.

Step 1 (IF alignment) must be performed with chassis removed from cabinet to gain access to IF slugs. Steps 2, 3 and 4 (RF alignment) are performed with chassis in cabinet. The chassis must be in normal operating position with respect to the brass dial escutcheon to retain correct tracking.

Step	Signal Generator Freq.	Connect To	Receiver Tuning	Output Meter Connection	Adjust
1	455 KC MOD.	See preliminary instructions above.	Minimum Capacity	Across voice coil	T3, T2 & T1 for maximum indication
2	1620 KC MOD.	As Above	As Above	As Above	C1B, Oscillator trimmer, for maximum indication
3	1400 KC MOD.	As Above	For maximum indication	As Above	C1A, Antenna trimmer for maximum indication
4	540 KC MOD.	As Above	Maximum Capacity	As Above	L2 for maximum indication (See note below)

Note: Repeat steps 2 and 3 after completing step 4.

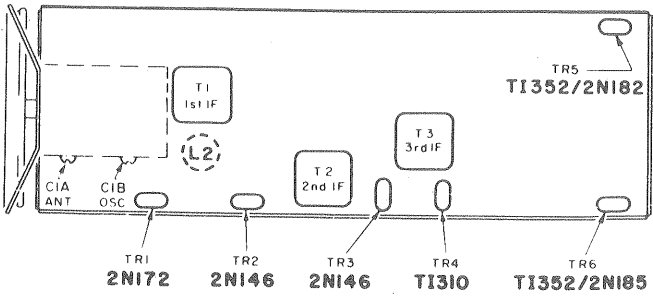


Figure 1 Transistor and trimmer locations

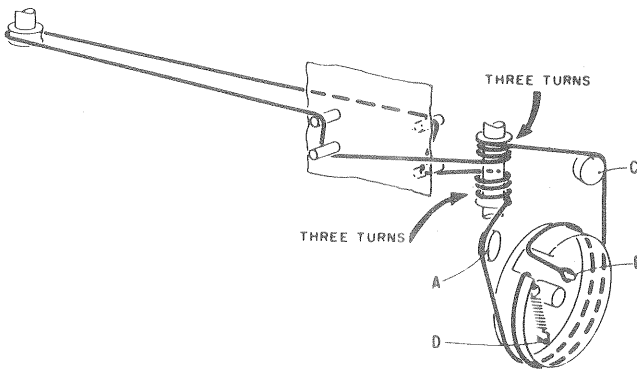


Figure 2 Dial Stringing

### Cabinet

70 002 811	Cabinet, Masonite, Ebony (TR260)	D1, D2	63 000 181	1N60, Crystal Diode
70 002 812	Cabinet, Wood, Blonde (TR261)	L1	79 000 391	Rod Antenna
70 002 813	Cabinet, Wood, Fruitwood (TR262)	L2	15 000 811	Oscillator Coil
76 004 146	Knob, On-Off-Volume, Ebony (TR260)	T1	12 001 321	I.F. Transformer
76 004 144	Knob, On-Off-Volume, Blonde (TR261)	T2, T3	12 001 331	I.F. Transformer
76 004 148	Knob, On-Off-Volume, Brown (TR262)	T4	10 000 801	Interstage Audio Transformer
76 004 147	Knob, Tuning, Ebony (TR260)	T5	10 000 791	Output Transformer
76 004 145	Knob, Tuning, Blonde (TR261)	TR1	63 000 141	2N172 Transistor
76 004 149	Knob, Tuning, Brown (TR262)	TR2	63 000 201	2N146 Transistor (Green dot)
73 001 132	Grille Cloth (TR260)	TR2	63 000 151	2N146 Transistor (Yellow dot)
73 001 133	Grille Cloth (TR261)	TR3	63 000 151	2N146 Transistor (Yellow dot)
73 001 134	Grille Cloth (TR262)	TR3	63 000 211	2N146 Transistor (Red dot)
73 001 251	Speaker, 6 x 9	TR4	63 000 161	TI310 Transistor
46 006 781	Decorative Bezel	TR5	63 000 171	TI352/2N185 Transistor
48 000 441	Handle	TR6	63 000 171	TI352/2N185 Transistor
48 000 431	Handle Retainer		44 001 421	Battery Cable Assembly
47 001 871	Spring (handle detent)		53 000 701	I.F. Trans-Mounting Clip
88 000 361	Dial Scale		46 006 741	Dial Plate
42 000 061	Battery, Eveready #276		46 006 761	Dial Pointer
			76 002 661	Dial Spring
			76 004 344	Dial Cord