

MODEL	CHASSIS	TAPE UNIT
T29321	329-3M	TDA301A
T29400	"	TDA301A/TDK303
T29402	"	" "
T29405	"	TDA302/TDK303/TDK305
T29406M	329-3M	TDK305/TDA306/TDJ307
T29407M	"	" " "
T29408M	"	" " "
T29412	"	TDK305
T29440	"	"
T29442	"	"
T29450	"	TDA301A/TDK303
T29500FP	"	" "
T29501FPG	"	" "
T29601	"	TDA302/TDK303/TDK305
T29601M	"	TDK305/TDA306/TDJ307
T29602M	"	" " "
T29603	"	TDA302/TDK303/TDK305
T29609	"	" " "
T29630	"	TDK305



Model T29321

RECORD CHANGER SERVICING

RECORD CHANGER - BSR - MODEL #C-129

ADJUSTMENTS**TONE ARM SETDOWN**

Adjust screw B1 so the needle sets down in the center of the lead-in groove on a 12-inch record. Turning the screw clockwise moves the set-down point outward.

TONE ARM HEIGHT

Adjust B2 so the top of the tone arm clears a 12-inch record on the center spindle shelf during the change cycle. Turning B2 clockwise decreases the lift-up height.

CLEANING

Use a cloth dampened with isopropyl alcohol to clean the driving surfaces of the idler wheel, motor shaft and inside rim of the turntable.

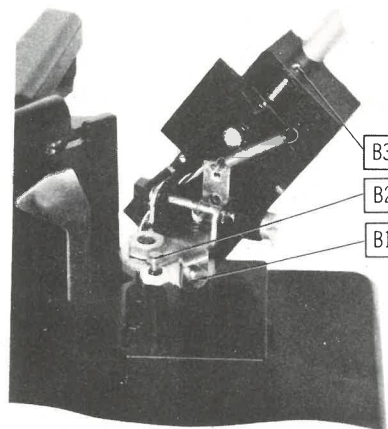
LUBRICATION

Apply light nonhardening grease to sliding cam surfaces and pivot points, light machine oil on the tone arm lift rod, idler wheel bearings, and motor bearings.

DO NOT lubricate turntable driving surface, the teeth on cycling gear or turntable hub.

NEEDLE PRESSURE

Nominal pressure 5 grams. Adjust B3 to obtain correct needle pressure. Turning B3 clockwise decreases needle pressure.

**HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206**

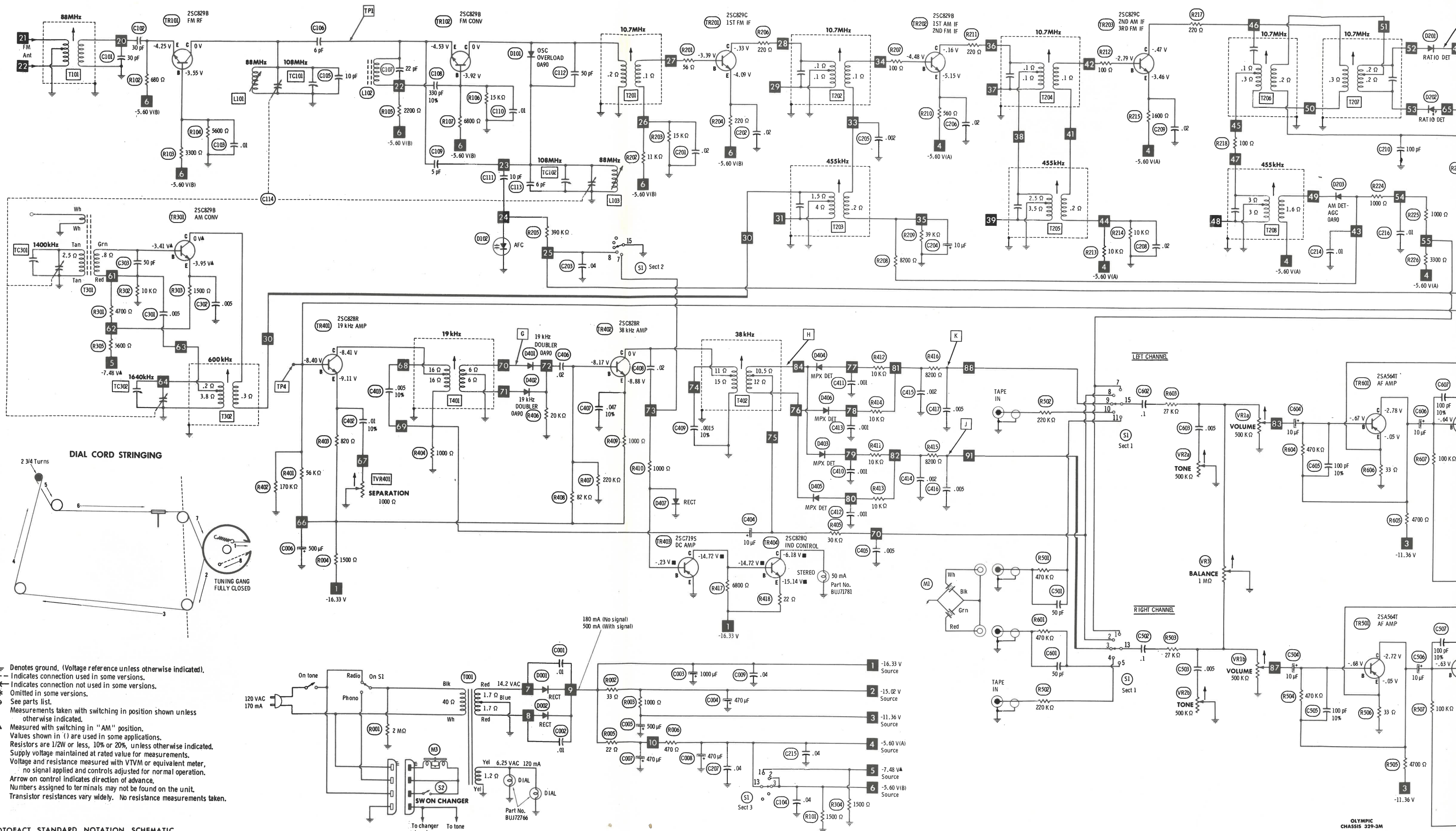
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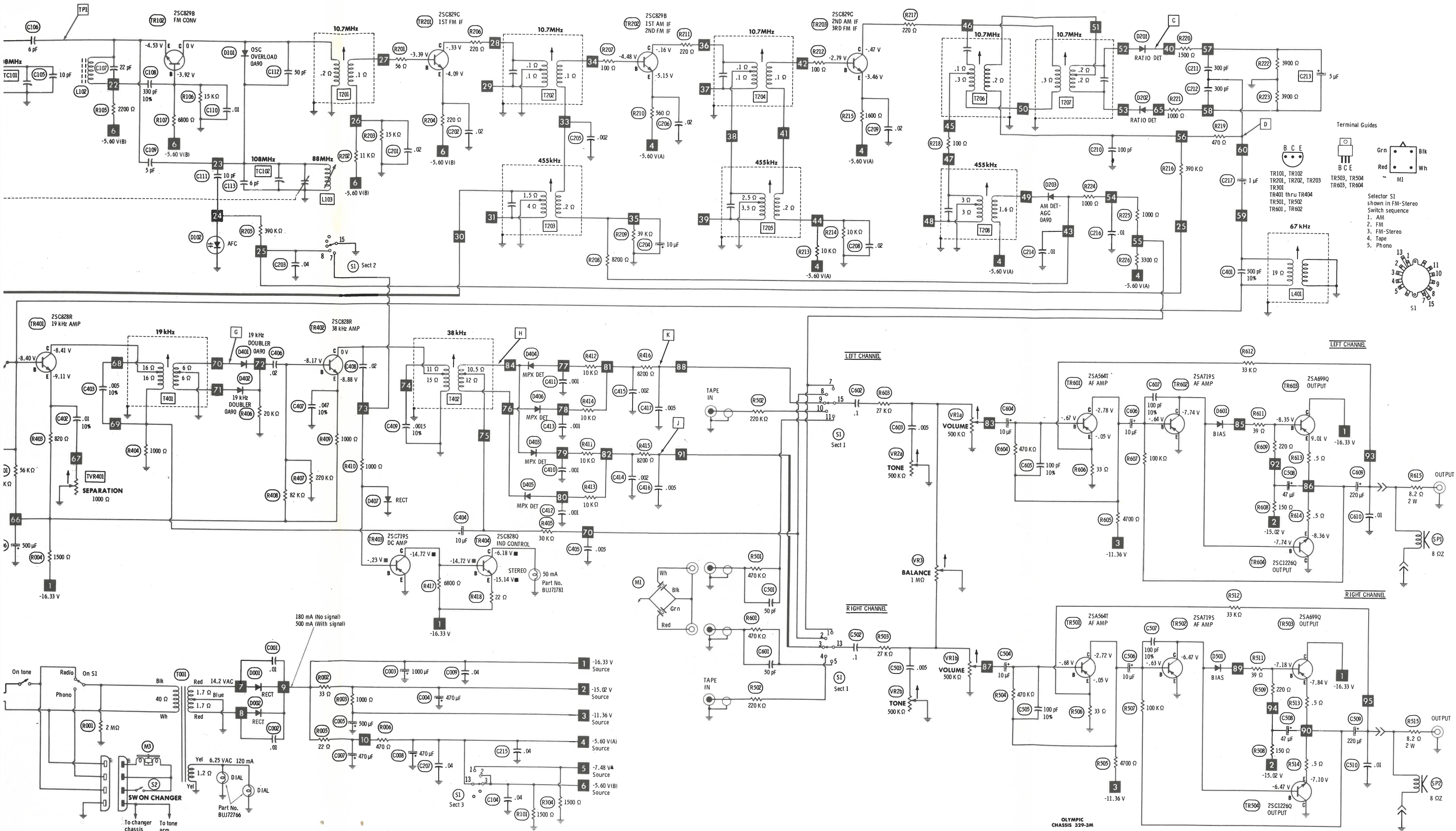
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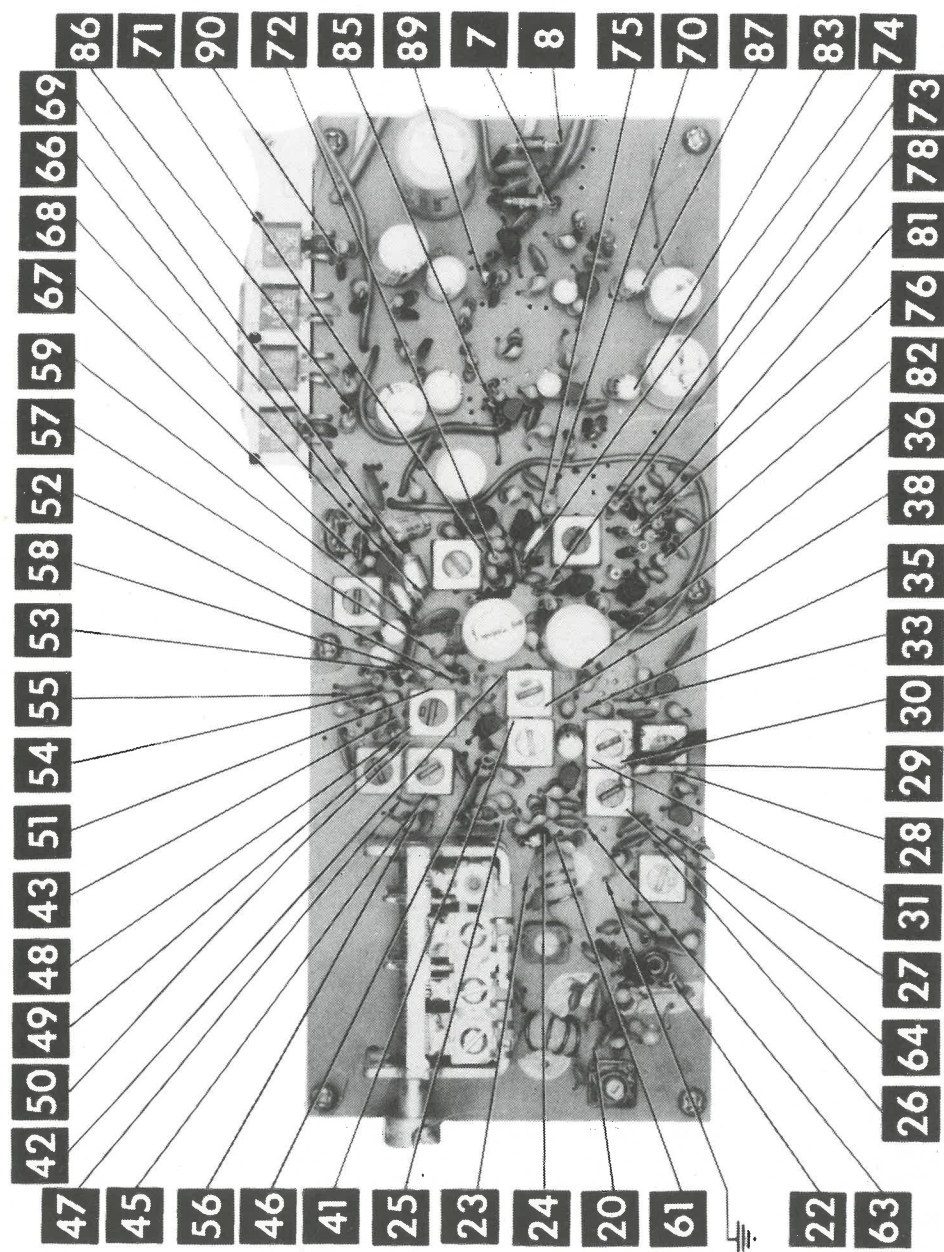
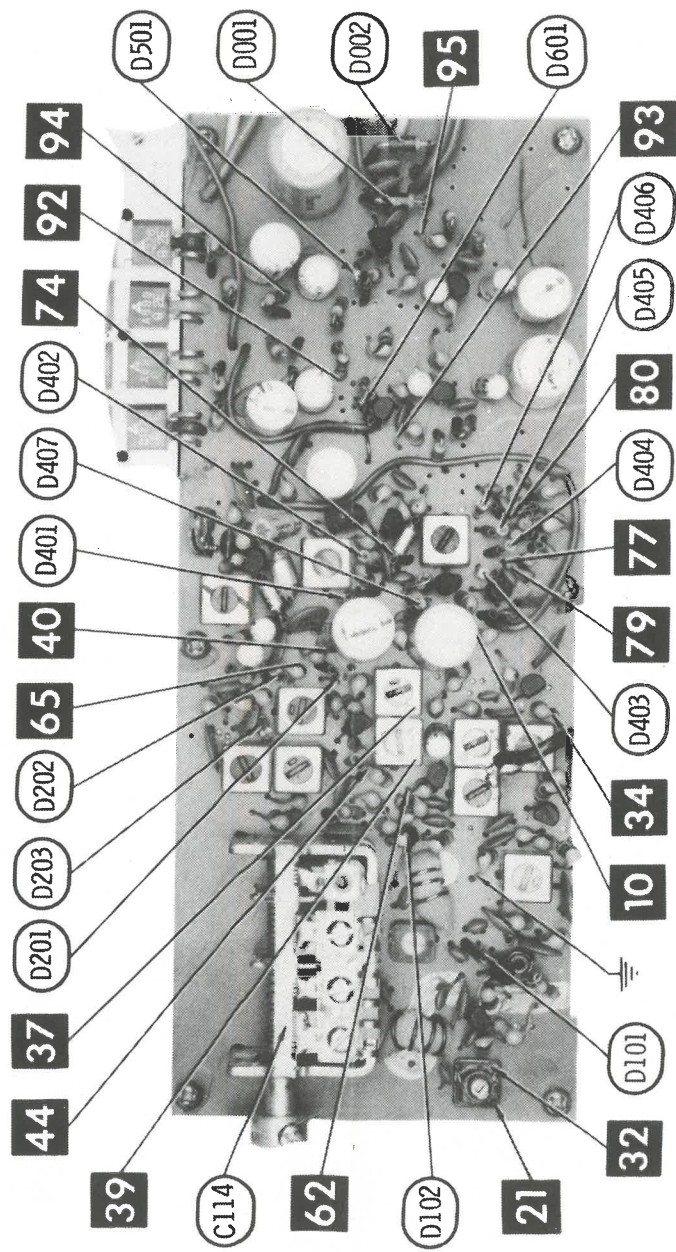
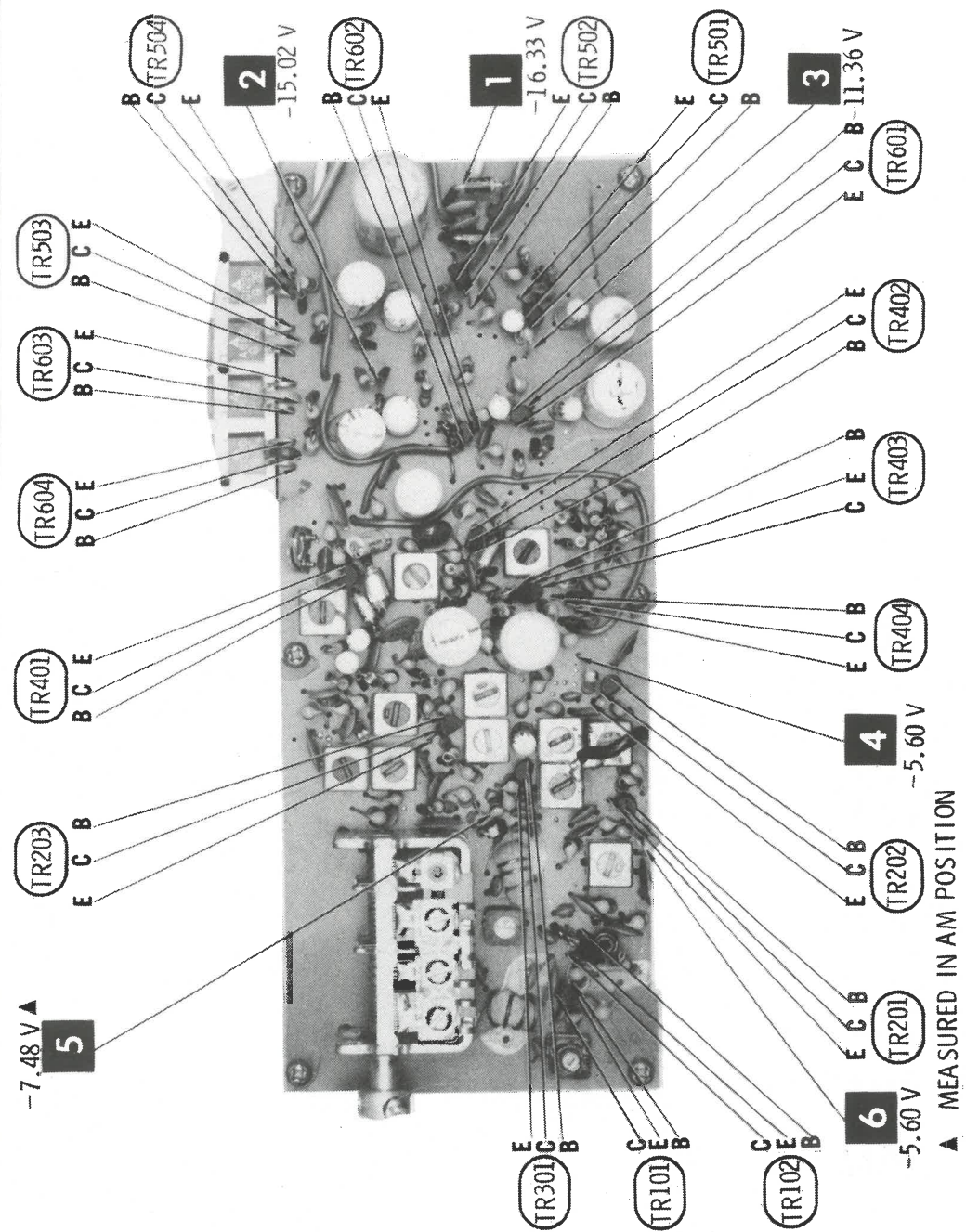
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SET 1406 FOLDER 4





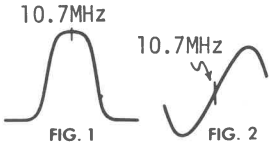




OLYMPIC
CHASSIS 329-3M

ALIGNMENT INSTRUCTIONS

CAUTION: Use isolation transformer or observe polarity when connecting test equipment. Maintain line voltage at 120VAC. Allow a 15-minute warm-up period. Use only enough generator output to obtain a suitable indication. Suggested Alignment Tools: GC ELECTRONICS T101 9440 L401, T201 Thru T208,T302,T401,T402. 8728



AM ALIGNMENT—SELECTOR IN AM POSITION

Connect generator across loop fashioned of several turns of wire. Set volume at maximum.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
455kHz 400-hertz Modulation	Tuning gang fully open	Output meter across voice coil	T208,T205, T203	Adjust for maximum. Repeat until no further improvement is noted.
600kHz	Tune to signal	"	T302	Adjust for maximum.
1640kHz	"	"	TC302	Adjust for maximum.
1400kHz	"	"	TC301	Adjust for maximum. Repeat AM alignment until no further improvement is noted.

FM IF ALIGNMENT USING AM SIGNAL GENERATOR—SELECTOR IN FM POSITION

High side of generator thru .001mfd to point TP1 low side to ground.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
10.7MHz Unmodulated	Point of non-interference	DC probe of VTVM to point C common to ground.	T206,T204, T202,T201	Adjust for maximum.
"	"	DC probe of VTVM to point D common to ground.	T207	Adjust for zero reading. A positive or negative reading will be obtained on either side of correct setting.

FM IF ALIGNMENT USING FM SIGNAL GENERATOR—SELECTOR IN FM POSITION

High side of generator thru .001mfd to point TP1 low side to ground. Use only enough marker signal for indication. Use 60-hertz frequency modulated signal with 450kHz sweep. Use 60-hertz sawtooth voltage in scope for horizontal deflection.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
10.7MHz 450kHz Sweep	Point of non-interference	Vert input of scope to point C low side to ground.	T206,T204, T202,T201	Disconnect stabilizing capacitor C 213 Adjust for maximum gain and symmetry of response similar to Fig. 1 with markers as shown. Reconnect C 213
"	"	Vert input of scope to point D low side to ground.	T207	Adjust T207 to place marker at center of S curve similar to Fig. 2. Readjust T206 for maximum amplitude and straightness of line.

FM RF ALIGNMENT—SELECTOR IN FM POSITION

Connect generator across antenna terminals with 120-ohm carbon resistor in series with each lead. Adjustment of coils by bending should not be attempted unless the coil is deformed or replaced.

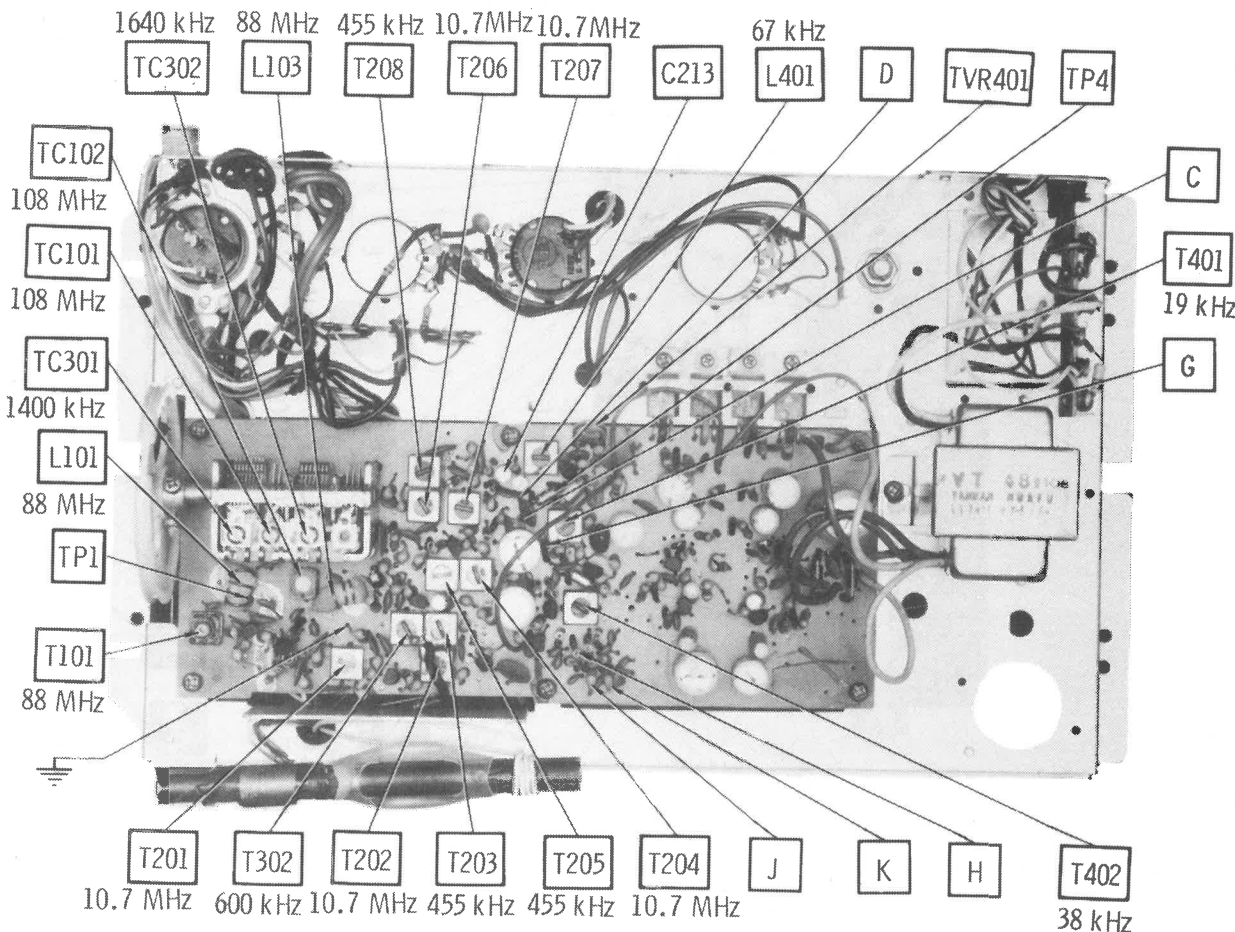
GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
88MHz Unmodulated	Low freq end	DC probe of VTVM to point C common to ground.	L103,L101, T101	Adjust for maximum.
108MC Unmodulated	Tune to signal	"	TC102,TC101	Adjust for maximum. Repeat FM RF steps until no further improvement is noted.

ALIGNMENT INSTRUCTIONS (Continued)

FM STEREO MULTIPLEX ALIGNMENT USING FM STEREO SIGNAL GENERATOR (± .0001% ACCURACY)

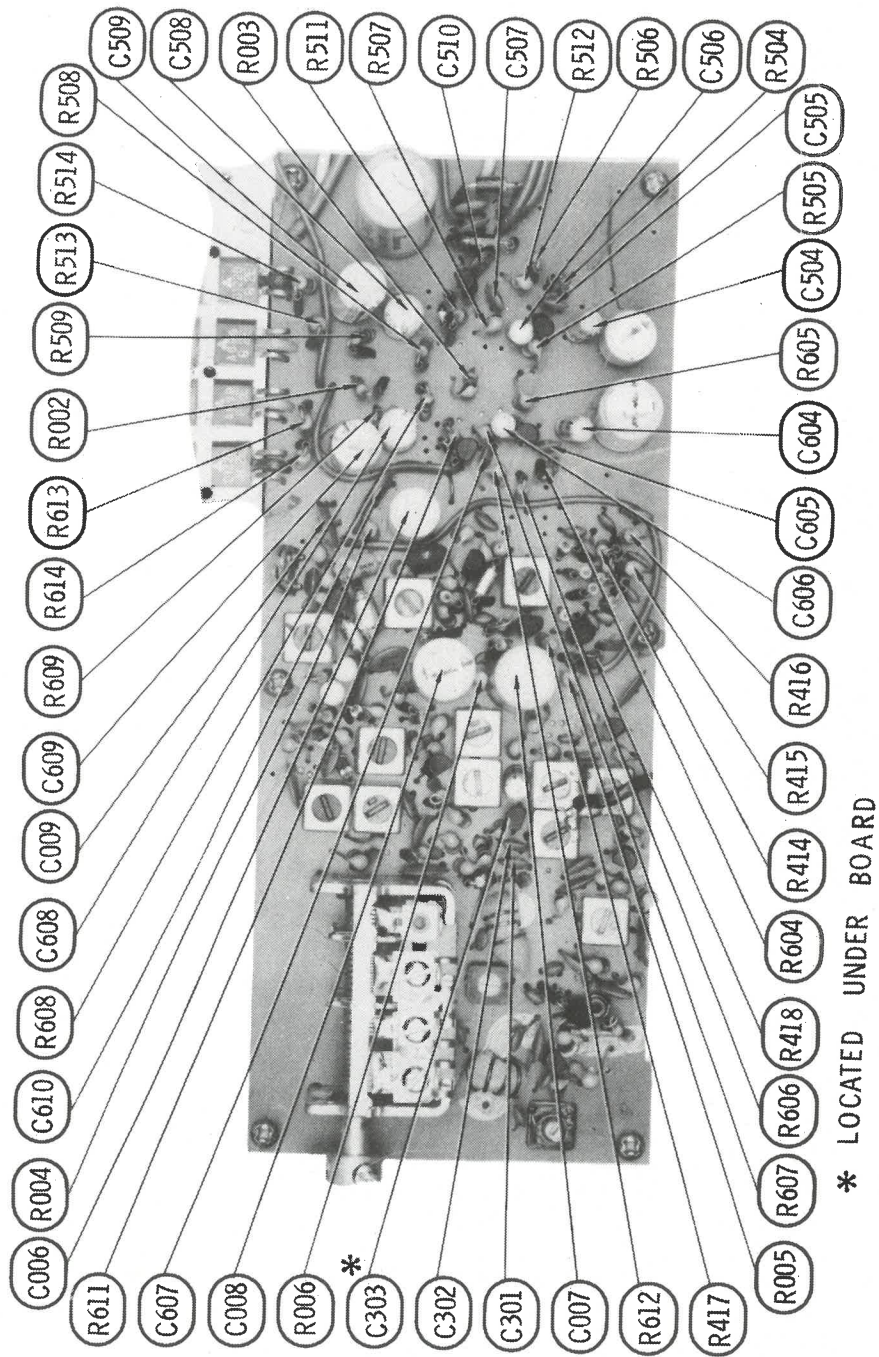
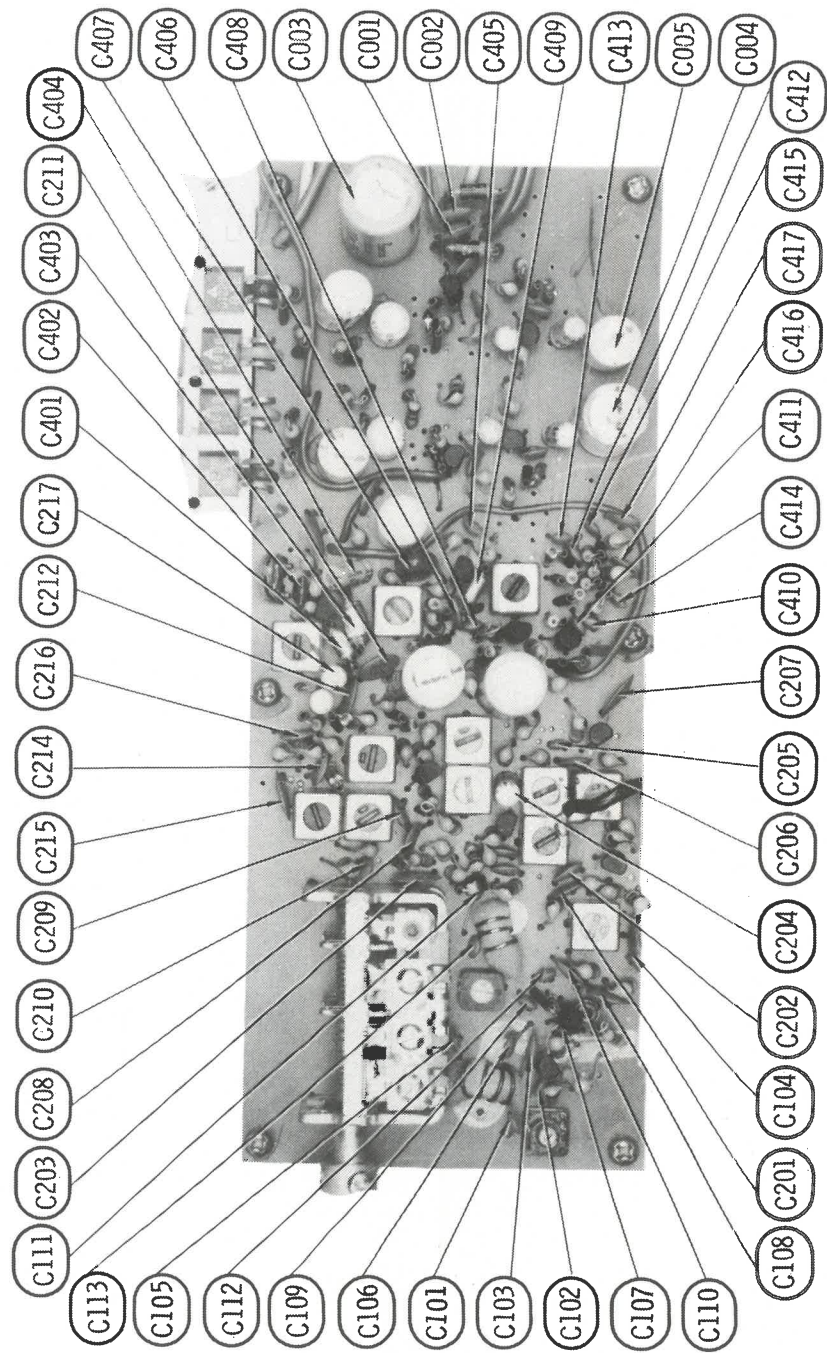
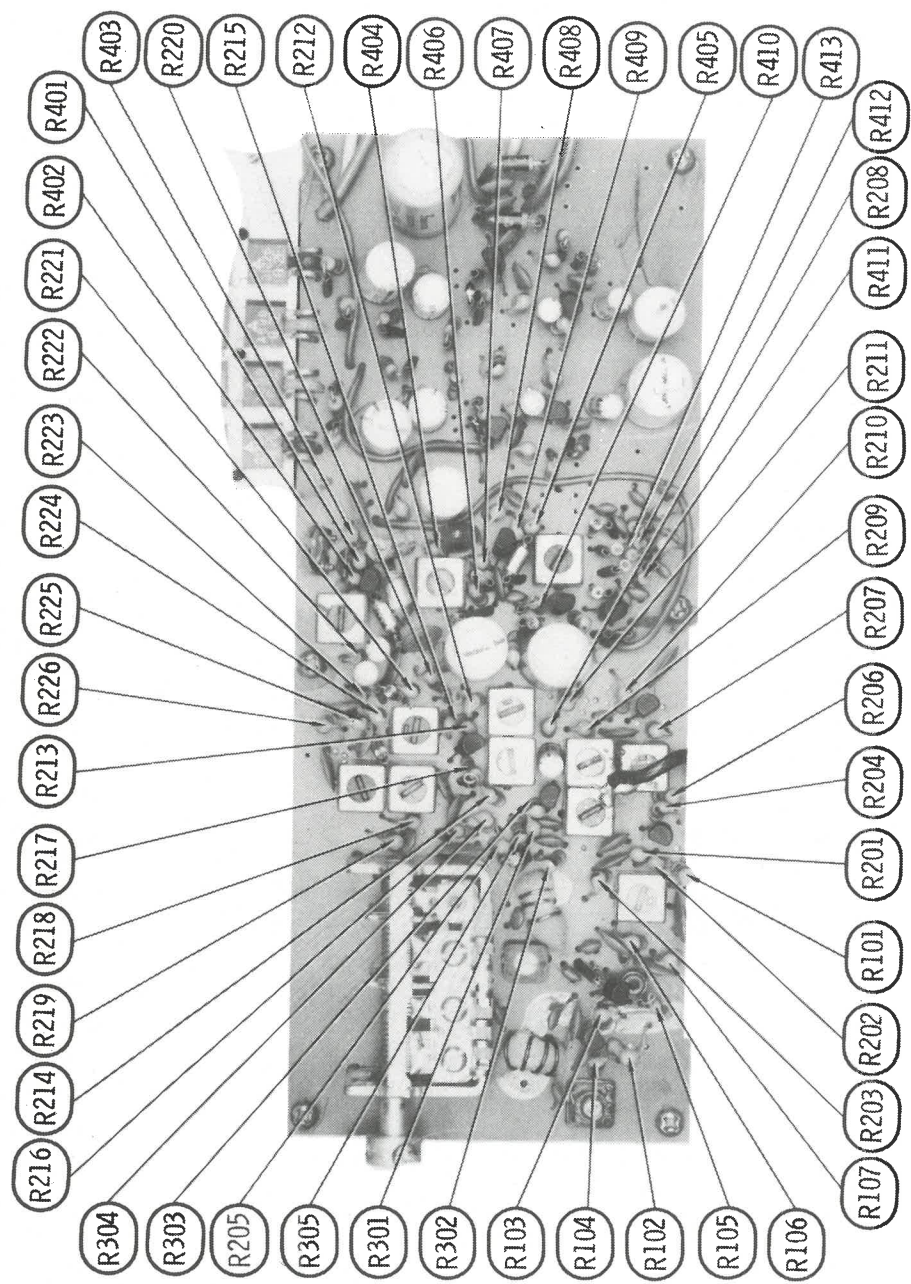
High side of generator thru 47K to point D low side to ground.

GENERATOR FREQUENCY	INDICATOR	ADJUST	REMARKS
67kHz	Vert input of scope thru 47K to point TP4 low side to ground.	L401	Adjust for MINIMUM.
19kHz	Vert input of scope thru 47K to point G low side to ground.	T401	Adjust for maximum.
19kHz	Vert input of scope thru 47K to point H low side to ground.	T402	Adjust for maximum 38kHz response.
Modulated Left Channel	Vert input of scope to point J low side to ground.	TVR401	Adjust for MINIMUM. This step should require only slight adjustment.
Modulated Right Channel	Vert input of scope to point K low side to ground.		Check for MINIMUM. If necessary, make compromise adjustment of TVR401



OLYMPIC CHASSIS 329-3M

FOLDER 4



* LOCATED UNDER BOARD

OLYMPIC
CHASSIS 329-3M

FOLDER 4

PARTS LIST AND DESCRIPTION
(When ordering parts, state Model, Part Number, and Description.)

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in 12 Colors
8524 (Stranded) Available in 12 Colors
Low-loss Shielded Lead (interconnecting) Use BELDEN No. 8401 or 8421

SEMICONDUCTORS

ITEM No.	TYPE / MFR. No./PART No.	REPLACEMENT DATA						
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	MOTOROLA PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.
D001	MSR-500/RFJ72787	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPRO052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D002	MSR-500/RFJ72787	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPRO052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D101	0A90/D1J71776	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 110 (6)
D102	SC-15/D1J71777(8)	GE-90 (8)	D201 (8)					
D201	20A90/D1J71778	1N34AS (7)	1N34A (7)	PTC207 (7)	HEP134 (7)	SK3087 (7)		ECG 110 (6)
D202	20A90/D1J71778	1N34AS (7)	1N34A (7)	PTC207 (7)	HEP134 (7)	SK3087 (7)		ECG 110 (6)
D203	0A90/D1J71776	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 110 (6)
D401	0A90/D1J71776	1N34AS (7)	1N34A (7)	PTC207 (7)	HEP134 (7)	SK3087 (7)		ECG 110 (6)
D402	0A90/D1J71776	1N34AS (7)	1N34A (7)	PTC207 (7)	HEP134 (7)	SK3087 (7)		ECG 110 (6)
D403	20A90/D1J71778	1N34AS (7)	1N34A (7)	PTC207 (7)	HEP134 (7)	SK3087 (7)		ECG 110 (6)
D405	20A90/D1J71778	1N34AS (7)	1N34A (7)	PTC207 (7)	HEP134 (7)	SK3087 (7)		ECG 110 (6)
D406	20A90/D1J71778	1N34AS (7)	1N34A (7)	PTC207 (7)	HEP134 (7)	SK3087 (7)		ECG 110 (6)
D407	0A90/D1J71776	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D501	K8162/D1J71779							
D601	K8162/D1J71779							
TR101	2SC829B/TNJ70478	GE-20	TR-24	PTC132	HEP50	SK3018	RT108	ECG 107
TR102	2SC829B/TNJ70478	GE-20	TR-24	PTC132	HEP50	SK3018	RT108	ECG 107
TR201	2SC829C/TNJ70478-1	GE-20	TR-24	PTC132	HEP50	SK3018	RT108	ECG 107
TR202	2SC829C/TNJ70478-1	GE-20	TR-24	PTC132	HEP50	SK3018	RT108	ECG 107
TR203	2SC829C/TNJ70478-1	GE-20	TR-24	PTC132	HEP50	SK3018	RT108	ECG 107
TR301	2SC829B/TNJ70478(1)	GE-20	TR-24	PTC132	HEP50	SK3018	RT108	ECG 107
TR401	2SC828R/TNJ70480	GE-20	TR-24	PTC132	HEP728	SK3122	RT102	ECG 123A
TR402	2SC828R/TNJ70480	GE-20	TR-24	PTC132	HEP728	SK3122	RT102	ECG 123A
TR403	2SA7195/TNJ71773	GE-21	TR-30	PTC103	HEP716	SK3114	RT115	ECG 159
TR404	2SA7195/TNJ72773(1)	GE-21	TR-30	PTC103	HEP716	SK3114	RT115	ECG 159
TR405	2SC8280/TNJ72783(1)	GE-20	TR-24	PTC132	HEP728	SK3122	RT102	ECG 123A
TR501	2SA5647/TNJ71774	GE-21	TR-30	PTC103	HEP716	SK3114	RT115	ECG 159
TR502	2SA7195/TNJ71773	GE-21	TR-30	PTC103	HEP716	SK3114	RT115	ECG 159
TR503	2SA699(1)	GE-29 (9)	TR-56 (9)	PTC111 (9)	HEP246 (9)			ECG 187 (9)
TR504	2SC12260	GE-28 (9)	TR-55 (9)	PTC110 (9)	HEP245 (9)			ECG 186 (9)
TR601	2SA5647/TNJ71774	GE-21	TR-30	PTC103	HEP716	SK3114	RT115	ECG 159
TR602	2SA7195/TNJ71773	GE-21	TR-30	PTC103	HEP716	SK3114	RT115	ECG 159
TR603	2SA699(1)	GE-29 (9)	TR-56 (9)	PTC111 (9)	HEP246 (9)			ECG 187 (9)
TR604	2SC12260	GE-28 (9)	TR-55 (9)	PTC110 (9)	HEP245 (9)			ECG 186 (9)

- (1) Used in some versions.
(6) Matched Pair.
(7) Two required - select matched pair.
(8) Varactor.
(9) Complementary pair.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA						
		MFR. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C003	1000 25 V		RME-P-6-1000	EP30-1000	WBR1000-25	MTA1000G25	EV-1360	
C004	470 16 V	C0J70867	RME-L-E-500	EP15-500	PC500-16	MTV500DN15	EV-1250	
C005	500 10 V	C0J70867(1)	RME-K-D-500	EP15-500	PC500-16	MTV500DN15	EV-1150	
C006	500 10 V		RME-L-E-500	EP15-500	PC500-16	MTV500DN15	EV-1250	
C007	470 16 V	C0J70867(1)	RME-L-E-500	EP15-500	PC500-16	MTV500DN15	EV-1250	
C008	470 16 V	C0J70867	RME-L-E-500	EP15-500	PC500-16	MTV500DN15	EV-1250	
C204	10 10 V	C0J70685	RME-A-D-010	EP15-10	PC10-25	VTT10A25	EV-1222	
C213	5 10 V	C0J61249	RME-A-D-005	EP15-5	PC50-10	VTT4R7A50	EV-1319	
C217	1 10 V	C0J71304	RME-A-E-001	EP15-1	PC1-50	MTV1CB50	EV-1315	
C404	10 10 V	C0J70685	RME-A-D-010	EP15-10	PC10-25	VTT10A25	EV-1222	
C504	10 10 V	C0J70685	RME-A-D-010	EP15-10	PC10-25	VTT10A25	EV-1222	
C506	10 10 V	C0J70685	RME-A-D-010	EP15-10	PC10-25	VTT10A25	EV-1222	
C508	47 10 V		RME-D-D-050	EP15-50	PC50-10	MTV50CB15	EV-1226	
C509	50 10 V	C0J61252(1)	RME-D-D-050	EP15-50	PC50-10	MTV50CB15	EV-1226	
C509	220 16 V	C0J70677	ME-6-E-200	EP15-250	PC200-16	MTV200DE15	EV-1240	
C604	10 10 V	C0J70685	RME-A-D-010	EP15-10	PC10-25	VTT10A25	EV-1222	
C606	10 10 V	C0J70685	RME-A-D-010	EP15-10	PC10-25	VTT10A25	EV-1222	
C608	47 10 V		RME-A-D-050	EP15-50	PC50-10	MTV50CB15	EV-1226	
C609	50 10 V	C0J61252(1)	RME-A-D-050	EP15-50	PC50-10	MTV50CB15	EV-1226	
C609	220 16 V	C0J70677	ME-6-E-200	EP15-250	PC200-16	MTV200DE15	EV-1240	

(1) Used in some versions.

CAPACITORS

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA				
			ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C001	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C002	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C009	.04		CCD-300	DD-403		GP140	
C101	30		CCD-300				10TCC-Q30
C102	30		CCD-300				10TCC-Q30
C103	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C104	.04		CCD-103	DD-403		GP140	
C105	10		CCD-100	DTZ-10	NP010	CN0410	10TCC-Q10
C106	6						10TCC-V56
C107	22		CCD-200	DTZ-20	NP020	CN0420	10TCC-Q20
C108	330		CCD-331	DD-331	NP050	GP333	10TS-T33
C109	5						10TCC-V50
C110	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C111	10		CCD-100	DTZ-10	NP010	CN0410	10TCC-Q10
C112	50		CCD-510	DTZ-50	NP050	CN0450	10TCC-Q50
C113	6						10TCC-V56
C114	Tuning Gang	CVJ71782					
C201	.02		CCD-203	DD-203		GP120	10TS-S20
C202	.02		CCD-203	DD-203		GP120	10TS-S20
C203	.04			DD-403		GP140	
C205	.002		CCD-202	DD-202	GP2000	GP220	10TS-D20
C206	.02		CCD-203	DD-203		GP120	10TS-S20
C207	.04			DD-403		GP140	
C208	.02		CCD-203	DD-203		GP120	10TS-S20
C209	.02		CCD-203	DD-203		GP120	10TS-S20
C210	100		CCD-101	DD-101	GP100	GP310	10TS-T10
C211	300		CCD-301	DD-301	GP300	GP330	10TS-T30
C212	300		CCD-301	DD-301	GP300	GP330	10TS-T30
C214	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C215	.04			DD-403		GP140	
C216	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C301	.005		CCD-502	DD-502	GP5000	JF250	10TS-D50
C302	.005		CCD-502	DD-502	GP5000	JF250	10TS-D50
C303	50		CCD-510	DTZ-50	NP050	CN0450	10TCC-Q50
C401	.500	10%	DM-19-501J	CPR-510J	CD15FD511J03	SX351	424MES10QJ501
C402	.01	50 V	TDP-1-103	CPR-10000J	DPMS651	EWFA1110	225P10391WD3
C403	.005	10%	DM-30-502J	CPR-5000J		SX250	10TS-D50
C405	.005		CCD-502	DD-502	GP5000	JF250	10TS-S20
C406	.02		CCD-203	DD-203	DPMS6547	GP120	10TS-S20
C407	.047	50 V	TDP-2-473			EWFA1A147	225P47391WD3
C408	.02		CCD-203	DD-203	DPMS6547	GP120	10TS-S20
C409	.0015	10%	DM-20-152J	CPR-1500J	CD19FD152J03	SX215	424ME1501J501
C410	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C411	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C412	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C413	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C414	.002		CCD-202	DD-202	GP2000	GP220	10TS-D20
C415	.002		CCD-202	DD-202	GP2000	GP220	10TS-D20
C416	.005		CCD-502	DD-502	GP5000	JF250	10TS-D50
C417	.005		CCD-502	DD-502	GP5000	JF250	10TS-D50
C501	50		CCD-510	DTZ-50	NP050	CN0450	10TCC-Q50
C502	.1		CK-104			TA010	TG-P10
C503	.005	10%	CCD-502	DD-502	GP5000	JF250	10TS-D50
C505	100	10%	CCD-101	DD-101	GP100	GP310	10TS-T10
C507	100	10%	CCD-101	DD-101	GP100	GP310	10TS-T10
C510	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C601	50		CCD-510	DTZ-50	NP050	CN0450	10TCC-Q50
C602	.1		CK-104			TA010	TG-P10
C603	.005		CCD-502	DD-502	GP5000	JF250	10TS-D50
C605	100	10%	CCD-101	DD-101	GP100	GP310	10TS-T10
C607	100	10%	CCD-101	DD-101	GP100	GP310	10TS-T10
C610	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
TC101	Trimmer	(1)					
TC102	Trimmer	COJ71783					
TC301	Trimmer	(1)					
TC302	Trimmer	(1)					

(1) Part of Tuning Gang C114.

CONTROLS (All wattages 1/2 watt, or less, unless listed)

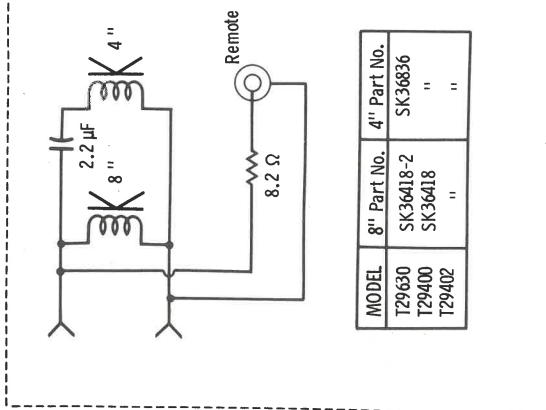
ITEM No.	FUNCTION	RESISTANCE	REPLACEMENT DATA				
			MFR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
TR401	Separation	1000	PTJ71251	TSV-500 (2) or T-500 (2)	C-501 (2)	X201R5018 (2)	MTC52L1 (2)
VR1a	Volume, Left	500 K	PTJ72788	F2-500K (1), R2-500K, SSK112,CPL2	NP-500K-Z(1), NR-500K-Z, UP-C-400,PC-2	BU1(1),CF25, CR20,SS1,SS7A,DC1	P55A,3014(1), RU55A,CS3500
VR2a	Tone, Left	500 K	PTJ72789	F1-500K(1), R1-500K, SSK112,CPL2, KR1	NP-500K-S(1), NR-500K-S, UP-C-400,DC-2, NWE-12	BU1(1),CF16,CR11, SS1,SS7A,DC	P55L,3014(1),RU55L,CS3500,US41
VR3	Balance	1 meg	PTJ72790	F1-1meg (1), SSK112	A47-1meg-S(1), KSS-3 or [NP-1meg-S(1), UP-C-400]	BU1(1),CF17,SS1, DC1	RU16L,SL36,SL3250 or [UA16L(1), SK3500, or U45(1)]

(1) Enlarge mounting hole.

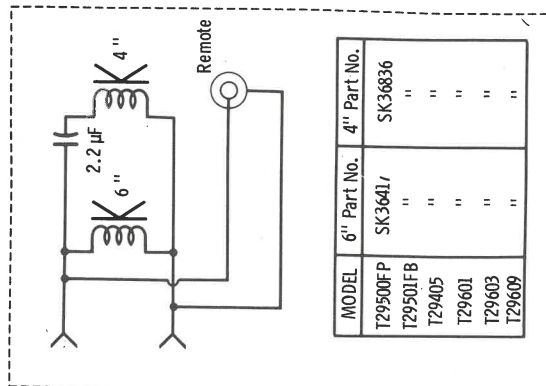
RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFR. PART No.			WORKMAN PART No.	MFR. PART No.
R513	.5 1/2 W Carbon			R613	.5 1/2 W Carbon		
R614	.5 1/2 W Carbon			R614	.5 1/2 W Carbon		
R515	8.2 2 W WW			R615	8.2 2 W WW		

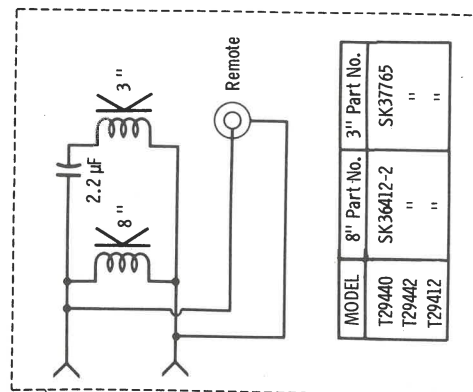
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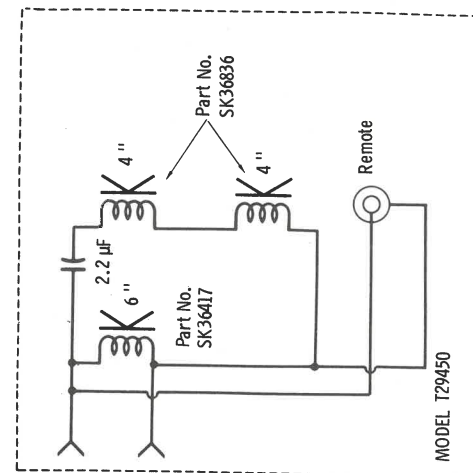
MODEL	8" Part No.	4" Part No.
T29630	SK36418-2	SK36836
T29400	SK36418	"
T29402	"	"



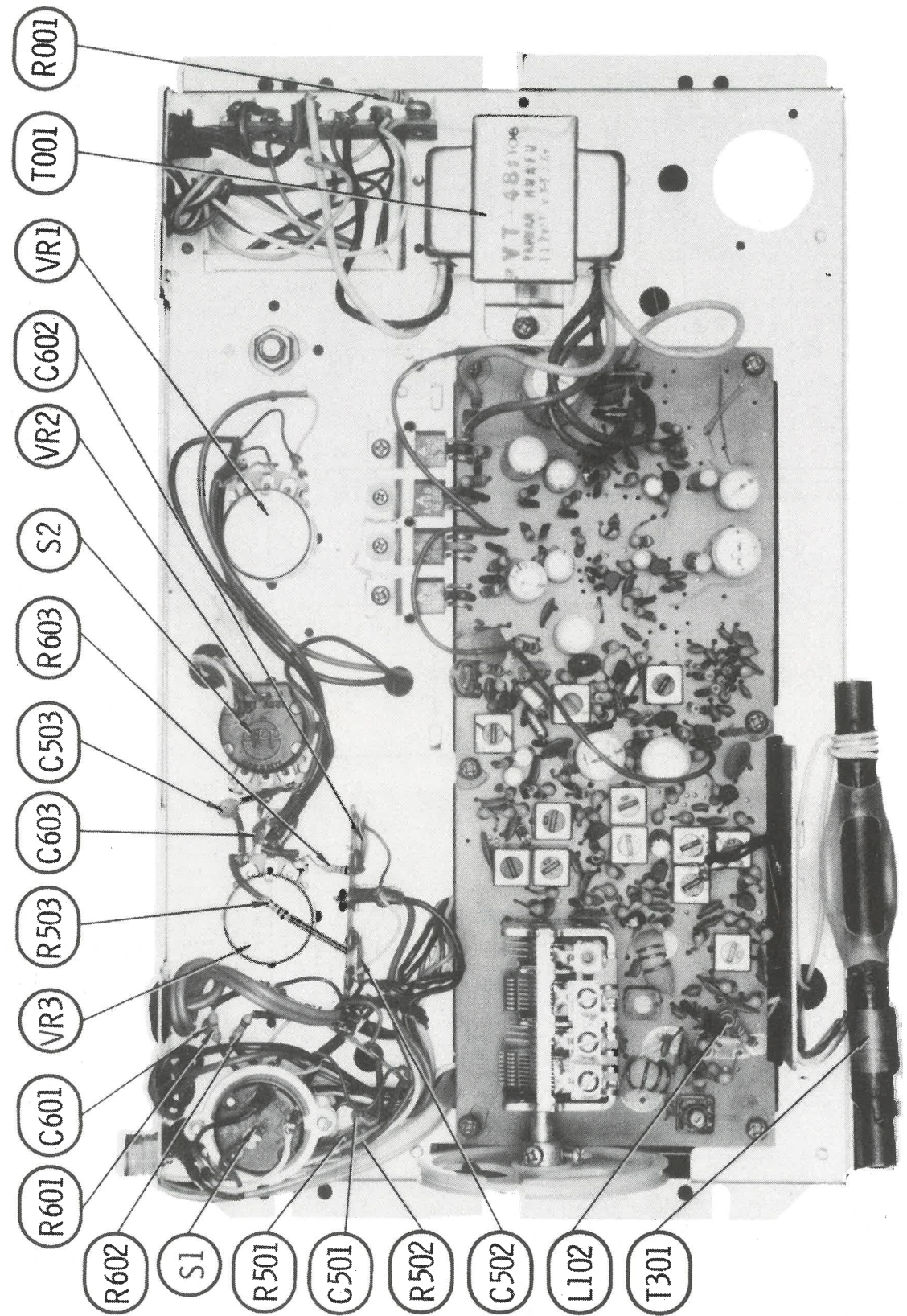
MODEL	6" Part No.	4" Part No.
T29500FP	SK36417	SK36836
T29501FB	"	"
T29405	"	"
T29601	"	"
T29603	"	"
T29609	"	"



MODEL	8" Part No.	3" Part No.
T29440	SK36412-2	SK37765
T29442	"	"
T29412	"	"



MODEL T29450



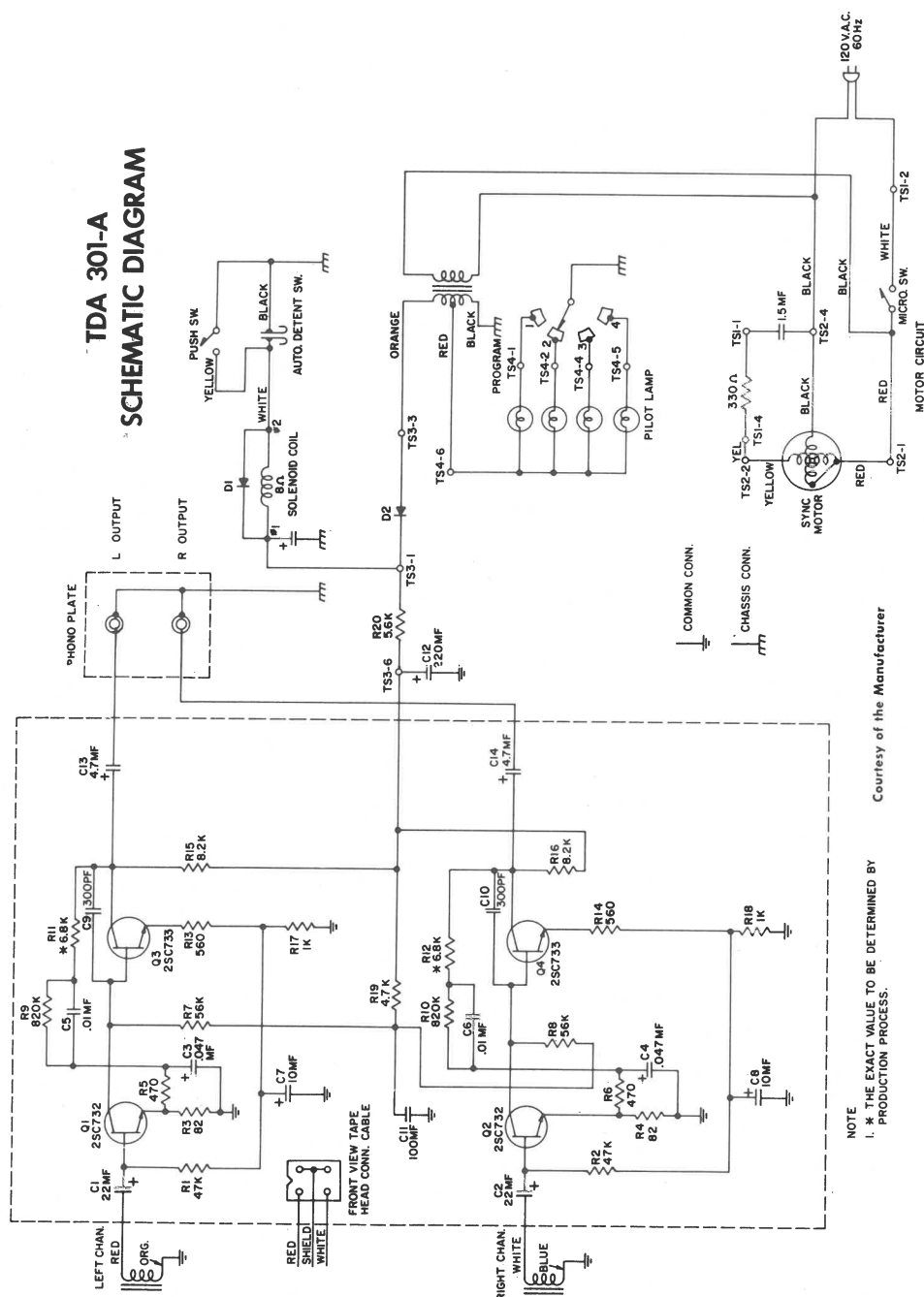
CHASSIS - TOP VIEW

PHOTOFACT® Folder



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OLYMPIC
TAPE PLAYER TDA301A, TDA302TDA 301-A
SCHEMATIC DIAGRAM

NOTE
1. * THE EXACT VALUE TO BE DETERMINED BY
PRODUCTION PROCESS.

Courtesy of the Manufacturer

OLYMPIC
TAPE PLAYER TDA301A, TDA302

SET 1406 FOLDER 4-A

HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

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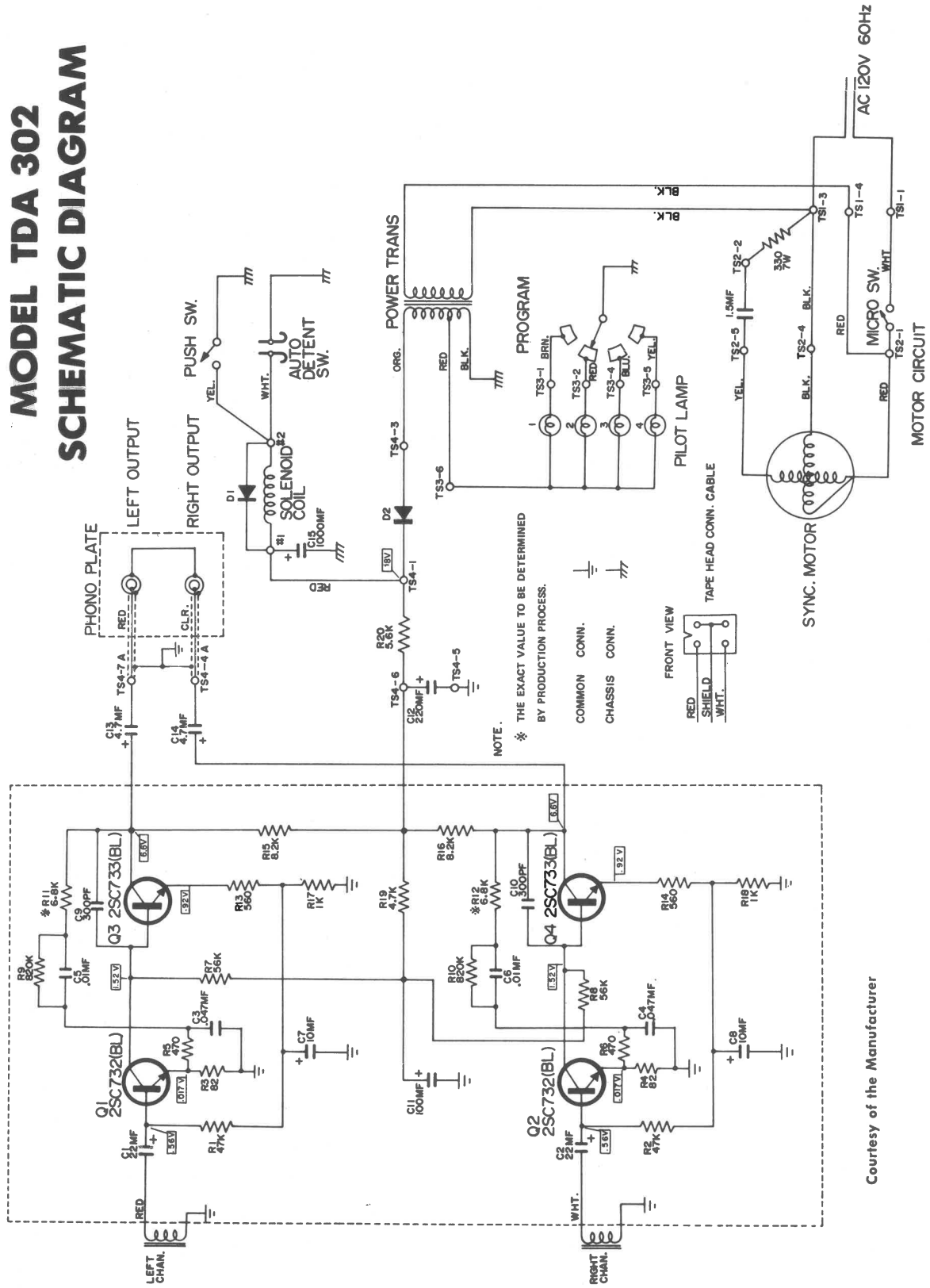
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DATE 6-74

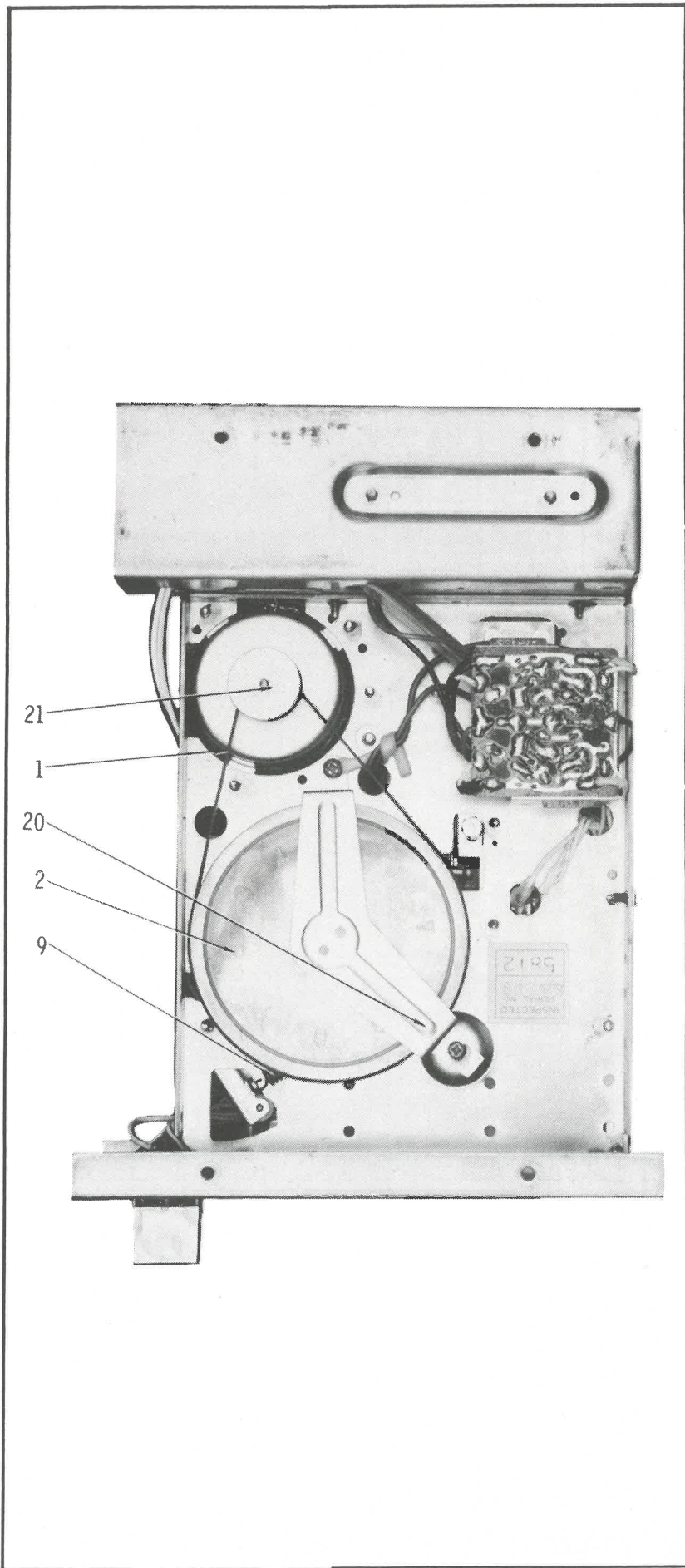
SET 1406 FOLDER 4-A



MODEL TDA 302 SCHEMATIC DIAGRAM



Courtesy of the Manufacturer



OLYMPIC TAPE
PLAYER TDK303, TDK305

MECHANICAL PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1*	BLJ70747-1*	Flywheel Drive Belt*	12	PPJ72007	Tape Guide
2	WHJ71748	Flywheel	13	RCJ71737	Track Change Cam
3	CMJ71736	Track Changing Ratchet Cam	14	PPJ71587	Cam Stopper
4	PPJ71597	Puch Pawl	15		Cam Spring
5	PPJ71598	Pull Pawl	16	SPJ71588	Azimuth Spring
6		Head Mounting Arm (Assembly)	17	CLJ71743	Solenoid Plunger
7	WHJ71577	Pressure Roller	18	SPJ71692	Plunger Spring
8		Pressure Roller Arm	19		Head Height Bracket
9	SPJ71579	Pressure Roller Spring	20		Flywheel Bracket
10		Flywheel Housing	21	PUJ72511	Motor Pulley
11	BKJ7158Q	Track Change Cam Assembly	22	SHJ72426	Tape Roller

*Flywheel Drive Belt -- E-V/GAME Replacement Number 1424-18
WALSCO Replacement Number 1424-18

CLEANING

Clean all tape contact surfaces with a soft, lint-free material and head cleaner or methyl alcohol. Use alcohol to remove oil and grease from all driving surfaces.

CAUTION: Avoid getting head cleaner on any plastic surface.

LUBRICATING

Bearings are oil-less type and do not need lubrication. Lubricate bushings lightly with #20 machine oil. Use a light film of nonhardening grease on cam surfaces.

HEAD DEMAGNETIZING

Demagnetize head when unit is serviced. Avoid using magnetic materials near head.

ADJUSTMENTS

ADJUST	REMARKS
Head Height	Play a test cartridge, follow instructions with cartridge, and adjust B1 for proper response.
Head Azimuth	Connect an AC VTVM across right output. Play a test cartridge and adjust B2 for maximum.
Play Level	Apply 1000 Hz .025 V rms; through 100 K resistor across left (right) channel section of R/P head. Adjust VR1 (VR2) for .63 V rms across left (right) Output.

TROUBLE CHART

SYMPTOM	REMARKS
Capstan does not rotate.	Belt (1) dirty, worn, or broken. Assembly (10) binding. Motor defective or not supplied with power.
Track-shift mechanism inoperative.	Switch S2 dirty. Cam (3) binding or worn. Pawls (4) and (5) worn. Arms (7) and (8) binding. Solenoid K1 defective or not supplied with power. Cartridge defective. Pawl (5) worn.
Wow or Flutter.	Belt (1) dirty or worn. Capstan dirty or binding. Cartridge defective. Motor defective.
Sound weak or distorted.	Head dirty, misaligned, or defective. Cartridge defective. Amplifiers defective.
Tape is pulled from cartridge.	Cartridge defective. Capstan dirty or scored.

SET 1406 FOLDER 4-B

PHOTOFACT® Folder

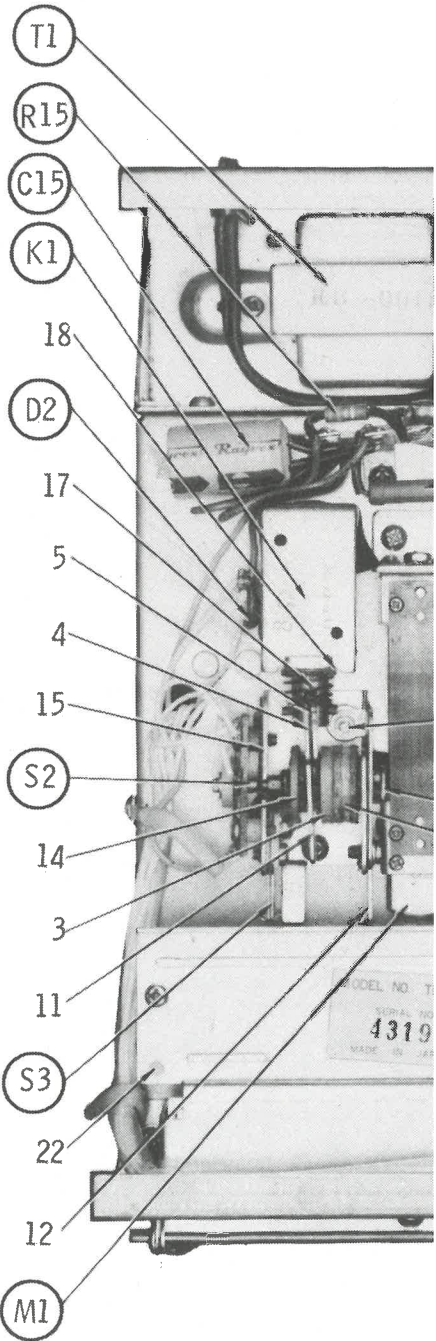
with CIRCUIT



IMPORTANT

This PHOTOFACT Folder
chassis covered in Ph

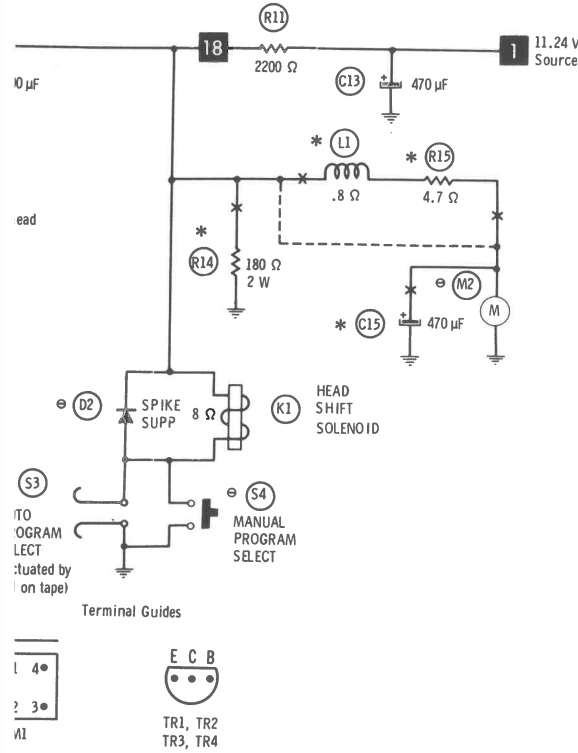
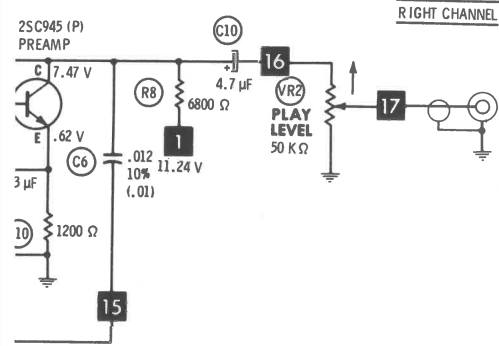
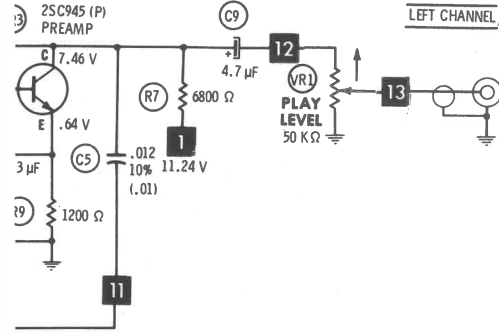
OLYMPIC TAPE
PLAYER TDK303, TDK305



HOWARD W. SAMS & CO

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LEFT CHANNEL

Blue

870 Ω

3

10

4.7 μF

500 pF

120 K Ω

1.22 V

0 V

47 Ω (39 Ω)

11.24 V

47 K Ω

200 pF

1.22 V

7.46 V

0.64 V

3.3 μF

1200 Ω

5600 Ω (8200 Ω)

11

10% 11.24 V (.01)

6800 Ω

4.7 μF

12

VR1

PLAY LEVEL

50 K Ω

13

RIGHT CHANNEL

Red

870 Ω

4

14

4.7 μF

500 pF

120 K Ω

1.22 V

0 V

47 Ω (39 Ω)

11.24 V

47 K Ω

200 pF

1.22 V

7.47 V

0.62 V

3.3 μF

1200 Ω

5600 Ω (8200 Ω)

15

10% 11.24 V (.01)

6800 Ω

4.7 μF

16

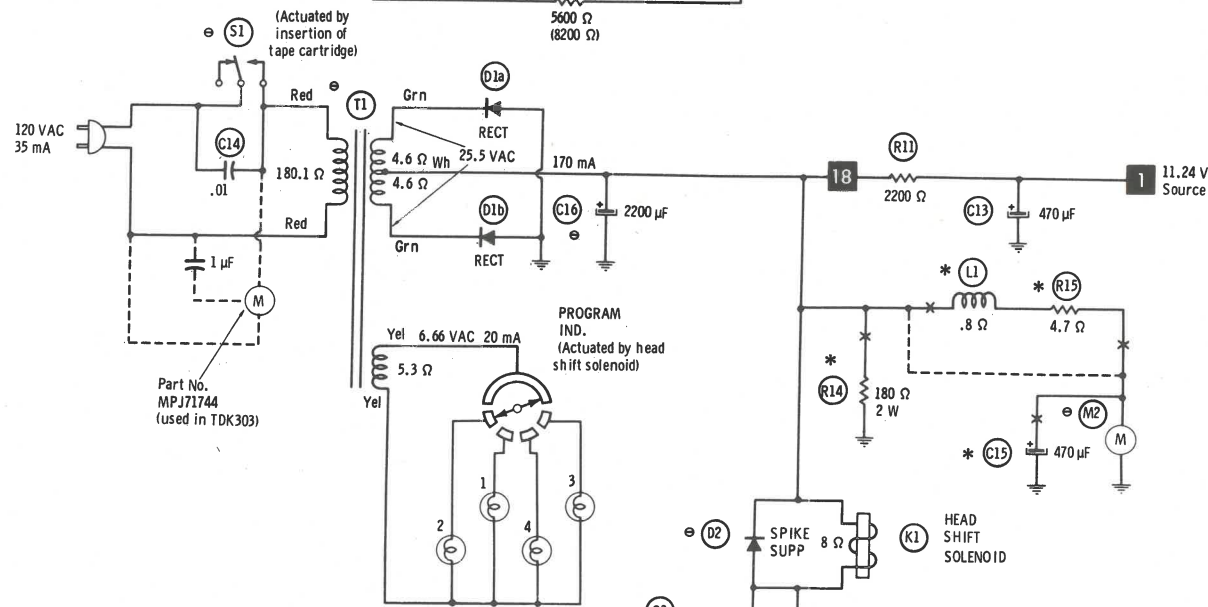
VR2

PLAY LEVEL

50 K Ω

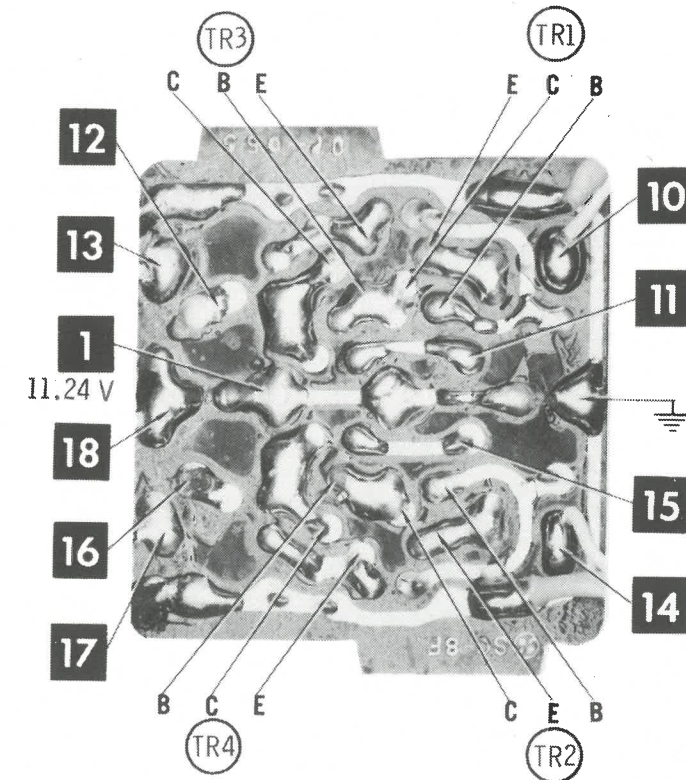
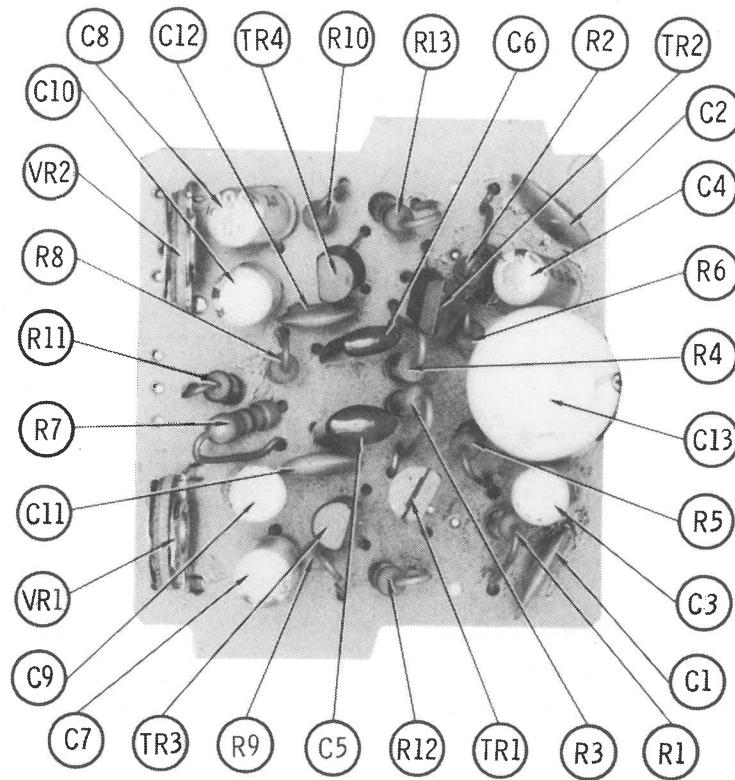
17

(Actuated by insertion of S1)



A PHOTOFAC T STANDARD NOTATION SCHEMATIC

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PARTS LIST AND DESCRIPTION
(When ordering parts, state Model, Part Number, and Description.)

WIRING DATA

PARTS LIST AND DESCRIPTION	
(When ordering parts, state Model, Part Number, and Description.)	
WIRING DATA	
General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid 22AWG) 8524 (Stranded 22AWG) 8570 (Stranded 26AWG)
	Available in 12 Colors

ITEM No.	TYPE / MFG. No. / PART No.	REPLACEMENT DATA							
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	MOTOROLA PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.	
D1	100C-1R/RJ70643	GE-504A (2)	804 (2) or 544D (2)	PTC201 (2) or PTC202 (2)	HEPR0052 (2)	SK3030 (2) or SK3031 (2)	RT214 (2) or RT215 (2)	ECG 116 (2) or ECG 117 (2)	
D2	100-05/01J72515	GE-504A	804 or 544D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117	
TR1	1001 (1)	GE-504A	804 or 544D	PTC201 or PTC139	HEP725	SK3031 or SK3124	RT214 or RT102	ECG 116 or ECG 199	
TR2	25C900(U,F,L)	GE-62	TR-24	PTC139	HEP725	SK3124	RT102	ECG 199	
	TR17127 (BL)	GE-62	TR-24	PTC139	HEP725	SK3124	RT102	ECG 199	
	25C600 (U,F,L)	GE-62	TR-24	PTC139	HEP725	SK3124	RT102	ECG 199	
	TR17127 (BL)	GE-62	TR-24	PTC139	HEP725	SK3124	RT102	ECG 199	
TR3	25C732 (BL) (1)	GE-62	TR-24	PTC139	HEP725	SK3124	RT102	ECG 199	
	25C945 (F)/TR170480	GE-20	TR-21	PTC136	HEP728	SK3124	RT102	ECG 199	
TR4	25C7339 (BL) (1)	GE-20	TR-21	PTC136	HEP728	SK3124	RT102	ECG 199	
	25C945 (F)/TR170480	GE-20	TR-21	PTC136	HEP728	SK3124	RT102	ECG 199	
	25C733 (BL) (1)	GE-20	TR-21	PTC136	HEP728	SK3124	RT102	ECG 199	

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFR. PART No.			WORKMAN PART No.	MFR. PART No.
R14	180 2 W Film		(1)	R15	4.7 1/2 W Carbon		(1)

ITEM No.	USE	REPLACEMENT DATA			REMARKS
		PART No.	MEISSNER PART No.	MILLER PART No.	
L1	Peaking (380 uH)	CLJ72393 (1)			

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	PRI.	SEC. 1	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	120 VAC -035 AAC	25.5 VAC @ .17 μ OC	TRJ72513 RB-0015 (1) TRJ72822 (2)				(1) Number on unit. (2) Used in Model TRJ 306A, etc. v.

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PHOTOFACT® Folder

with CIRCUITRACE™

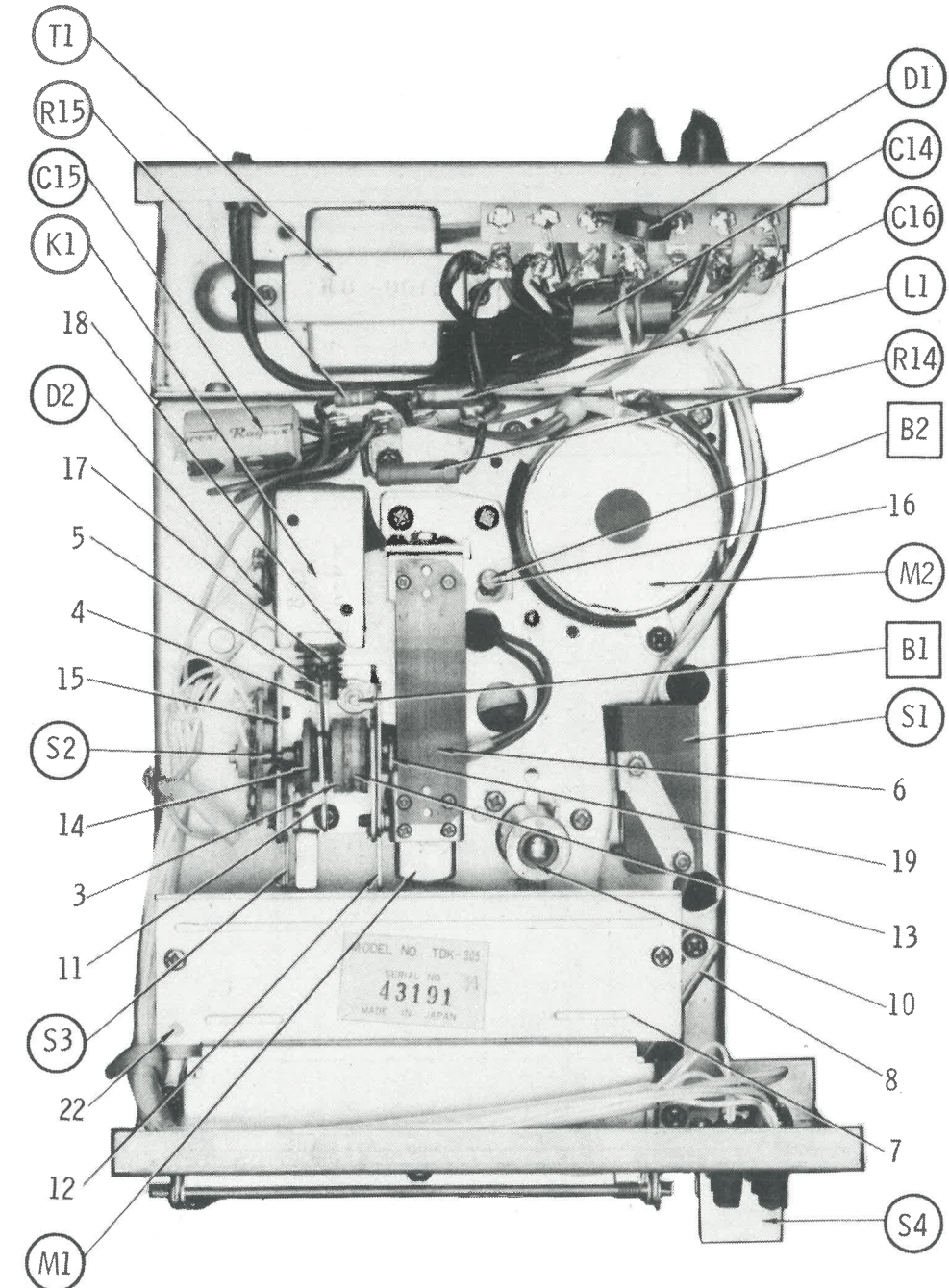
OLYMPIC TAPE
PLAYER TDK303, TDK305

IMPORTANT FILING NOTICE

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SET 1406 FOLDER 4-B

OLYMPIC TAPE
PLAYER TDK303, TDK305



OLYMPIC TAPE
PLAYER TDK303, TDK305

SET 1406 FOLDER 4-B

HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

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SET 1406 FOLDER 4-B