

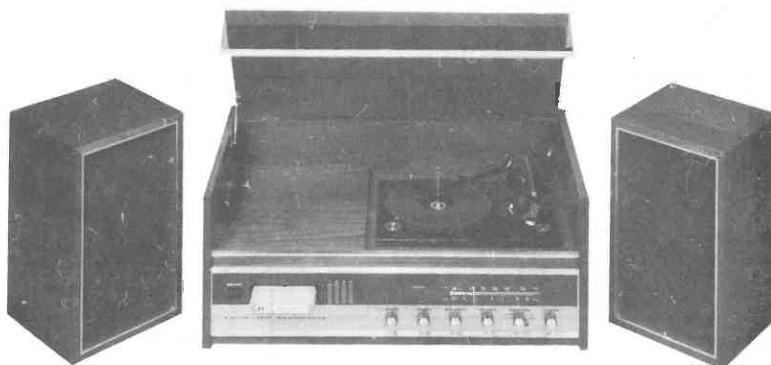


PHOTOFACT[®] with

CIRCUITRACE[®]

For Supplier Address See PHOTOFACT Index
FOR SERVICE INFORMATION ON COMPLETE RECORD CHANGER-
SEE SIMILAR CHANGER-PHOTOFACT SET 873, FOLDER 5.

Lear Jet Model H-459
8-Track Stereo



LEAR JET MODEL H-459

RECORD CHANGER SERVICING

Adjustments

TONE ARM SETDOWN

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

TONE ARM HEIGHT

Adjust B2 until the top of tone arm clears a 12-inch record on the center spindle shelf and returns over the rest post during the change cycle. Adjusting B2 clockwise decreases the lift-up height.

NEEDLE PRESSURE

Adjust B3 to obtain the correct needle pressure. Rotating B3 clockwise decreases the needle pressure.

DRIVE IDLER HEIGHT

Select 33 rpm, and adjust the screw in the idler support arm until the idler tracks in the center of the 33 rpm section of the motor shaft.

Cleaning

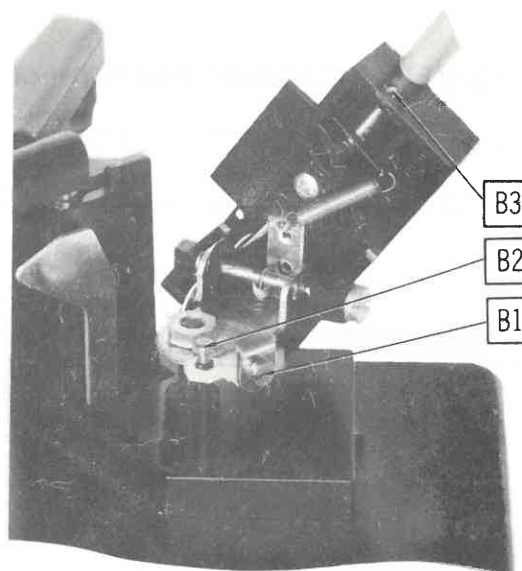
Using a soft cloth dampened with isopropyl alcohol, remove dirt and lubricant from the driving surfaces of the idler wheel, the motor shaft, and the inside rim of the turntable.

Lubricating

Use light, nonhardening grease on sliding cam surfaces and pivot points.

Use light machine oil on the tone-arm lift rod, idler wheel bearings, and motor bearings.

Do not lubricate turntable driving surface or the teeth on cycling gear and turntable hub.



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

© 1970 Howard W. Sams & Co., Inc. Printed in U. S. of America C1185

OPERATING INSTRUCTIONS

Move Function Selector to Tape and turn power on with Bass control.

Press program selector to play desired tracks, or allow unit to select tracks automatically.

Insert cartridge until it locks and turns unit on.

Remove cartridge to turn unit off.

Set operating controls as desired.

DISASSEMBLY

Remove cabinet back held by five Phillips screws.
Remove six push-on-type knobs, remove eleven

screws in bottom of cabinet, and slide unit out the rear of cabinet.

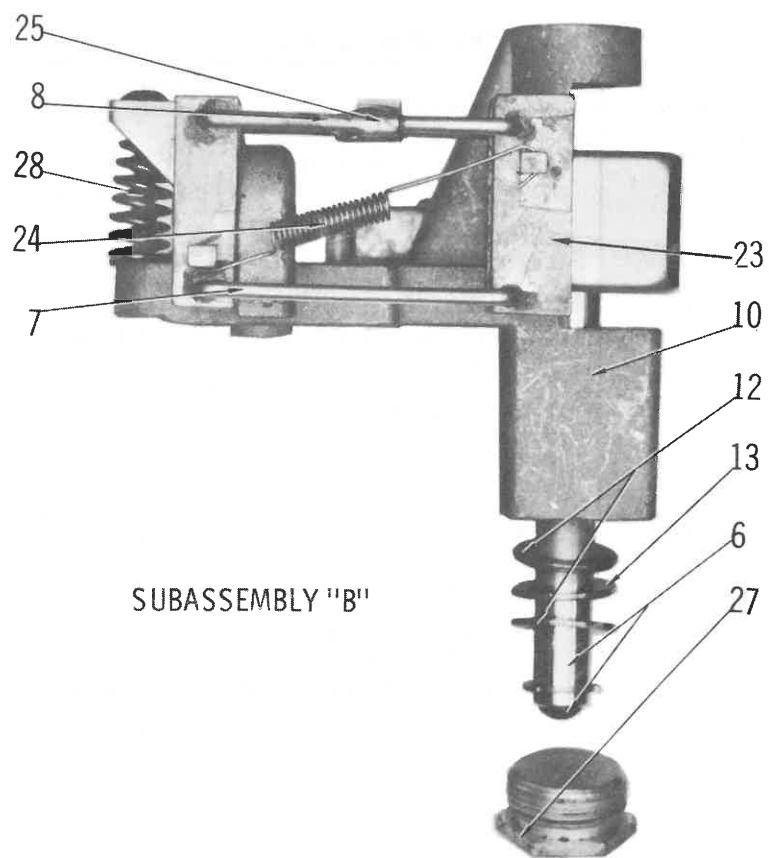
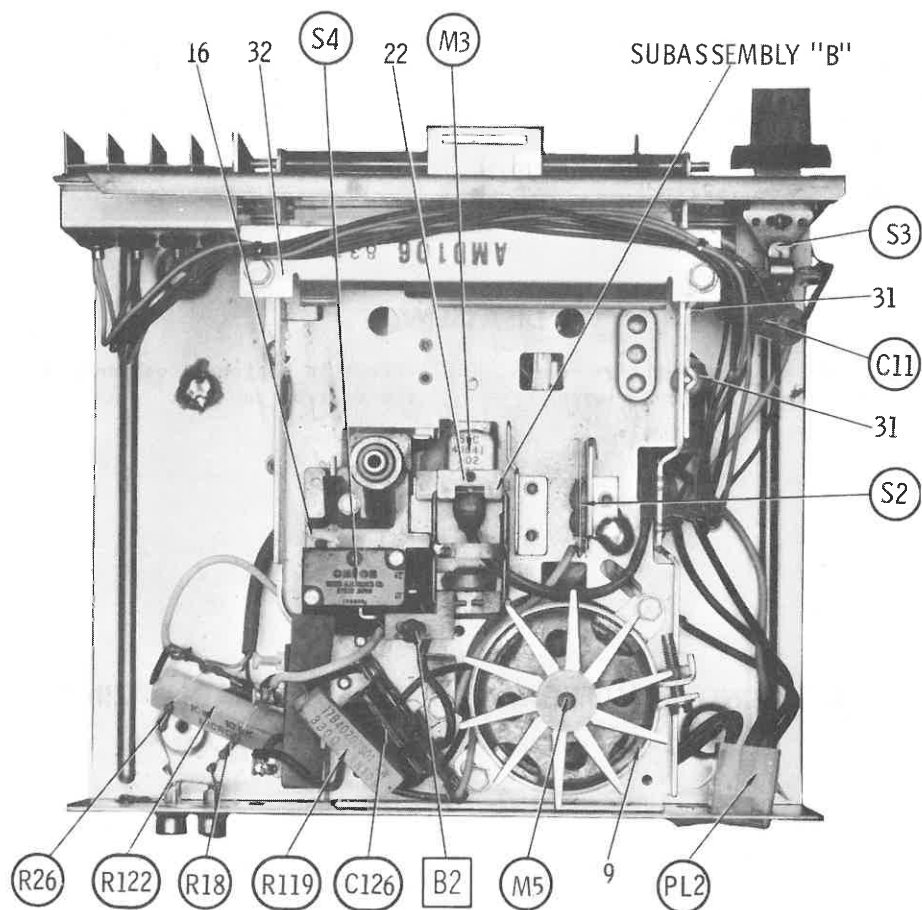
CLEANING LUBRICATING HEAD DEMAGNETIZING

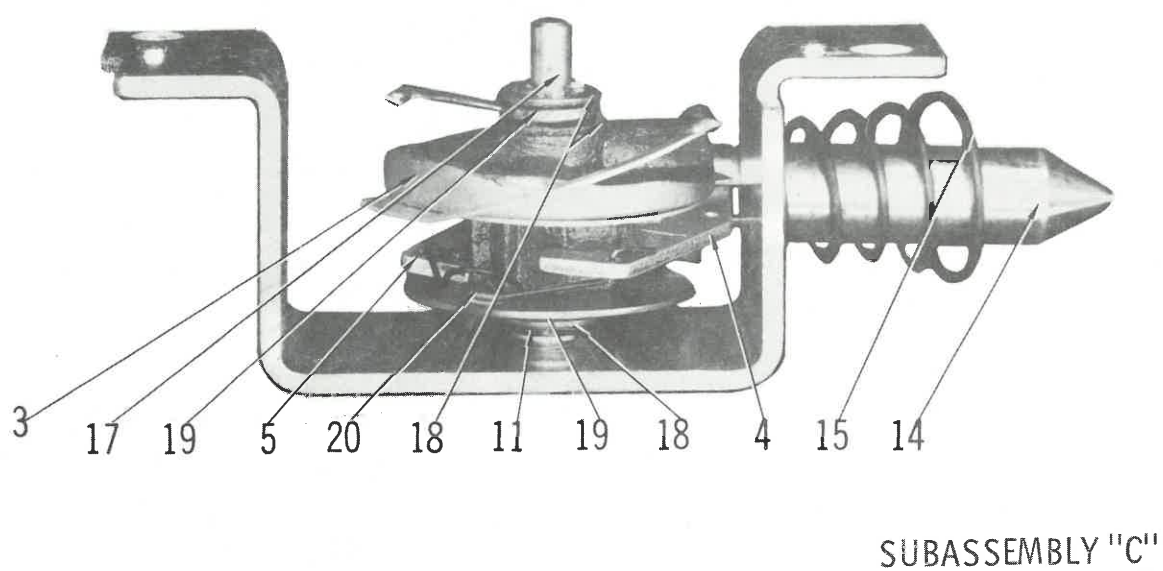
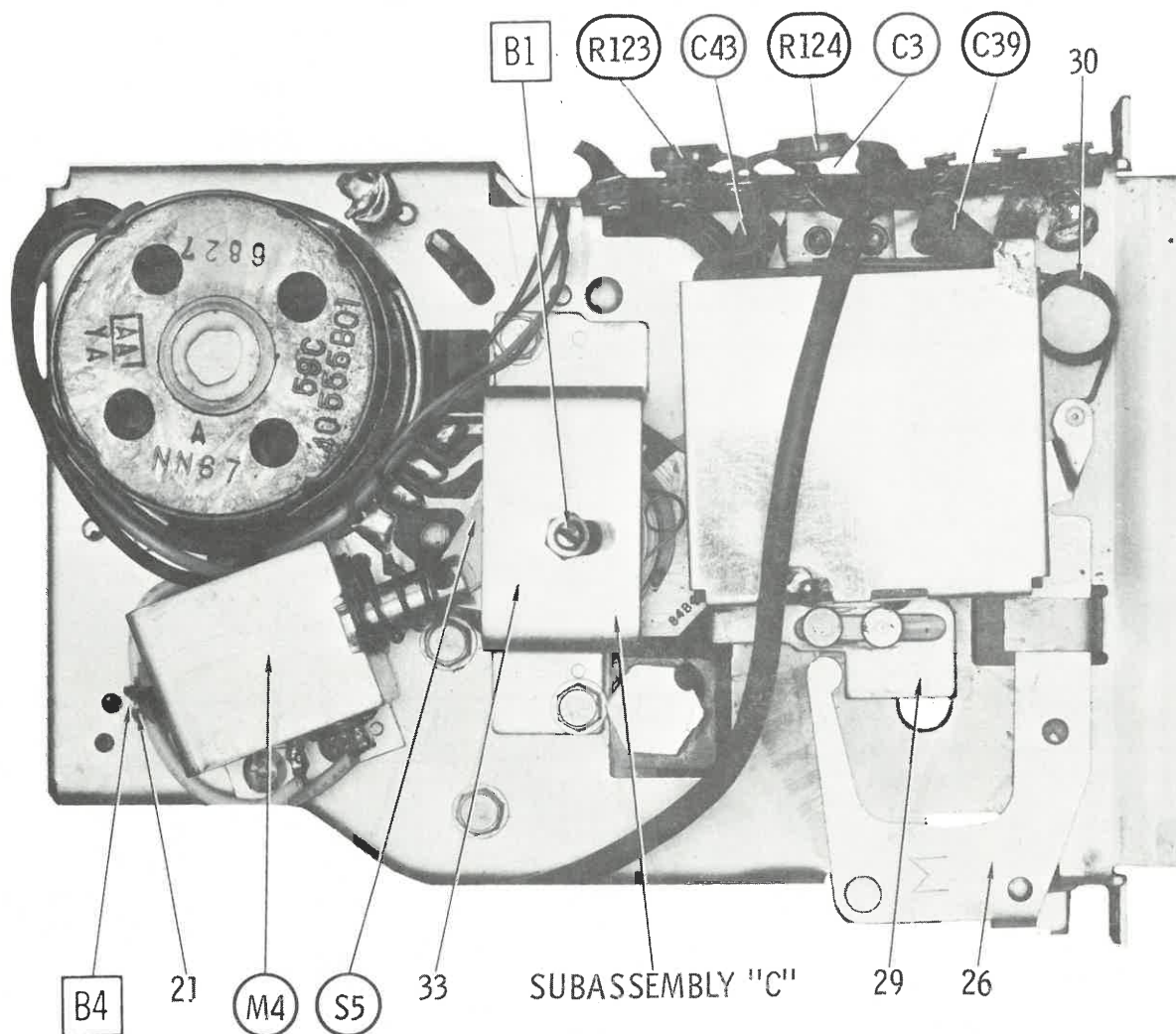
Refer to "General Servicing Information" on page 4.

LEAR JET MODEL H-459

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 (M4) defective or not supplied with power. Cartridge defective.
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.





ADJUSTMENTS

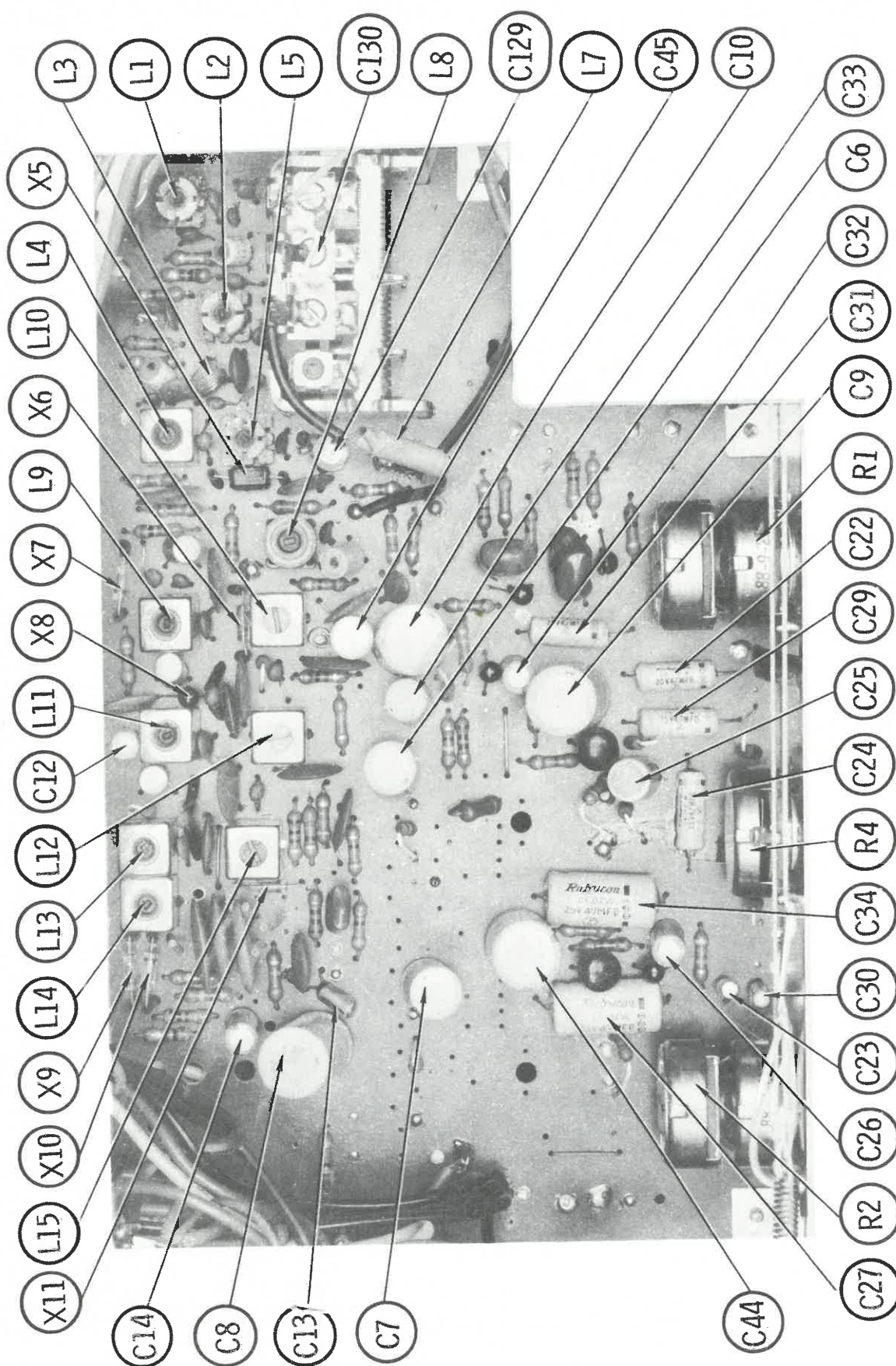
ADJUST	REMARKS
Head Height	Play a test cartridge, follow instructions with cartridge, and adjust B1 for proper response.
Head Azimuth	Connect an AC VTVM across right output. Play a test cartridge and adjust B2 for maximum.
Indexing Solenoid	Press program selector to continuously cycle indexing mechanism, turn Screw B4 clockwise until cycling stops, and then turn screw counter-clockwise 1/4 turn past restart of cycling.
Hum Reduction	Rotate motor for MINIMUM hum and position Shield (9) for MINIMUM hum.

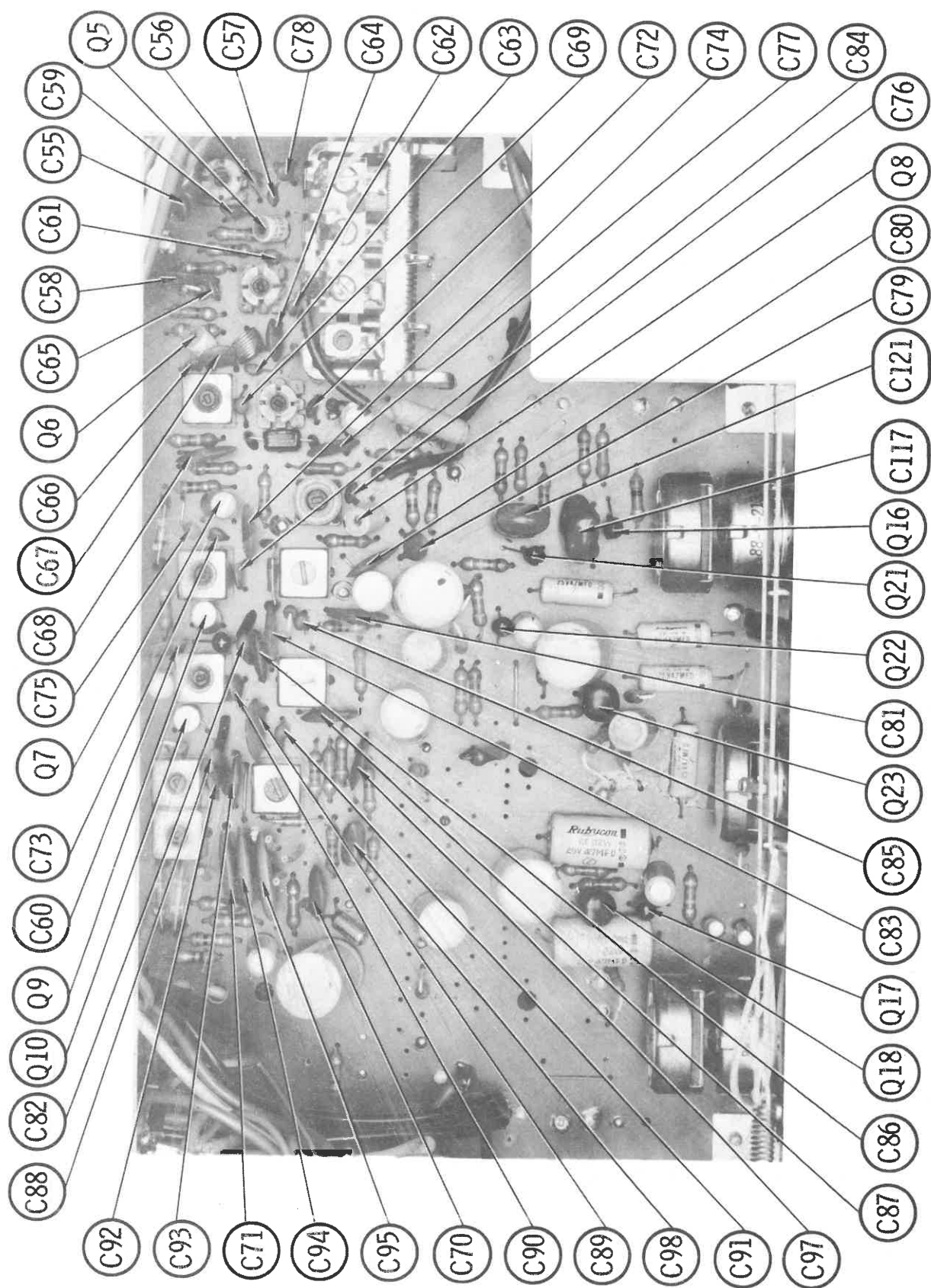
MECHANICAL PARTS LIST

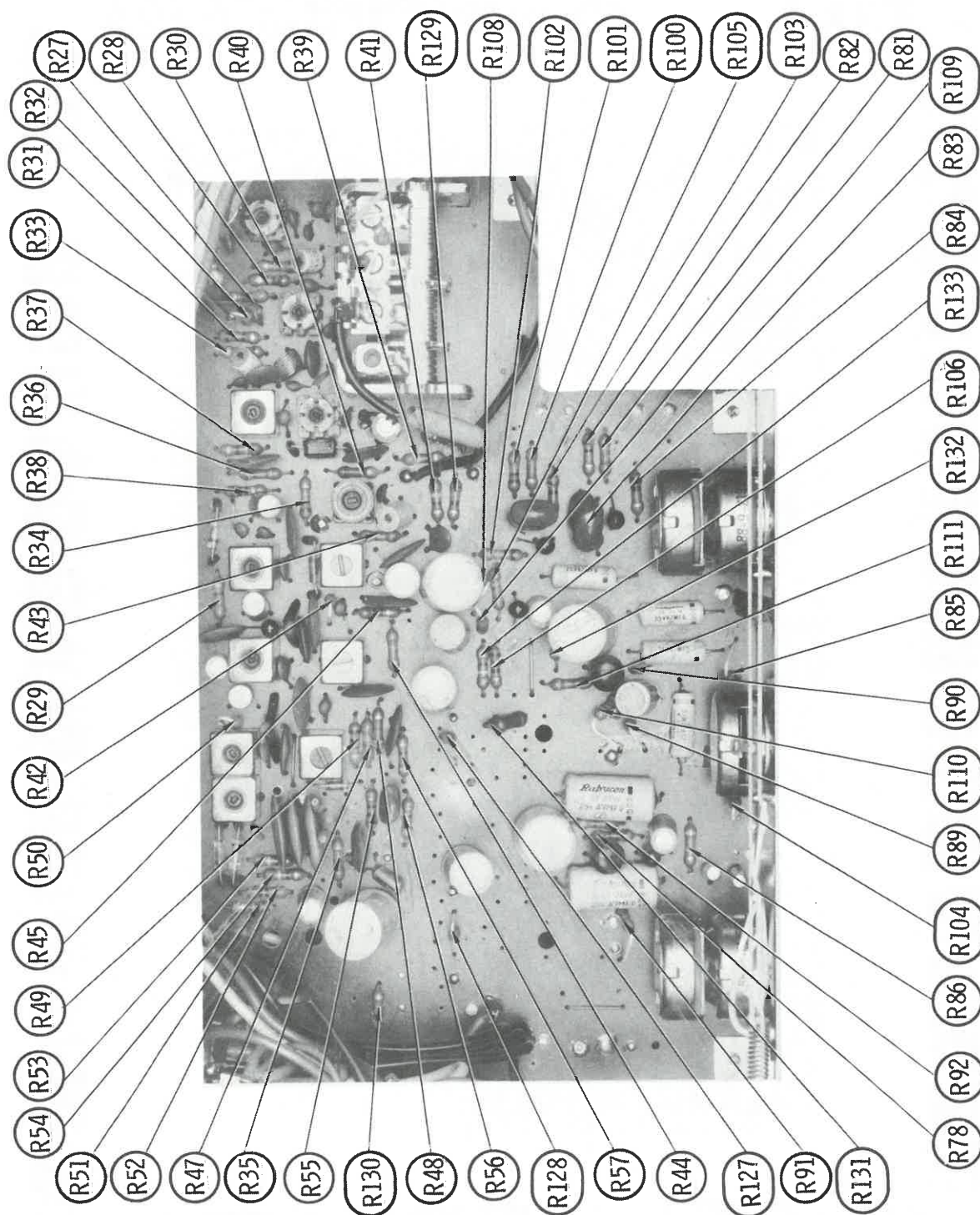
REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1*	1342-6302-10300	Drive Belt	17	(1)	Cam Shaft
2	1312-4116-10300	Flywheel	18	(1)	Thrust Washer (3 used)
3	(1)	Track Selector Cam	19	(1)	Thrust Bearing (2 used)
4	(1)	Push Pawl	20	(1)	Arm Actuating Spring
5	(1)	Pull Pawl	21	(6)	Solenoid Adjustment Screw
6	(3)	Capstan Shaft and Bearing	22	1342-4116-10600	Transfer Pin (Spindle Lifting)
7	(3)	Radius Arm	23	(3)	Head Retaining Block
8	(3)	Radius Arm (2 used)	24	1342-5101-17100	Head Mount Spring
9	(4)	Magnetic Shield	25	(3)	Spring Clip
10	1340-6044-00100 (2)	Capstan Housing Assembly	26	(7)	Ejector Lever
11	(1)	Spring Washer	27	(3)	Capstan Cap Nut
12	(3)	Thrust Washer (2 used)	28	(3)	Azimuth Adjust Spring
13	(3)	Thrust Bearing	29	(7)	Ejector Bracket
14	(1)	Solenoid Plunger	30	1342-5101-17000	Ejector Lever Spring
15	1342-5101-16900	Plunger Return Spring	31	(7)	Plastic Roller (2 used)
16	1342-4123-12200	Motor Actuating Arm	32	(7)	Cartridge Roller
			33	1340-6028-10400 (5)	Cam Drive Assembly

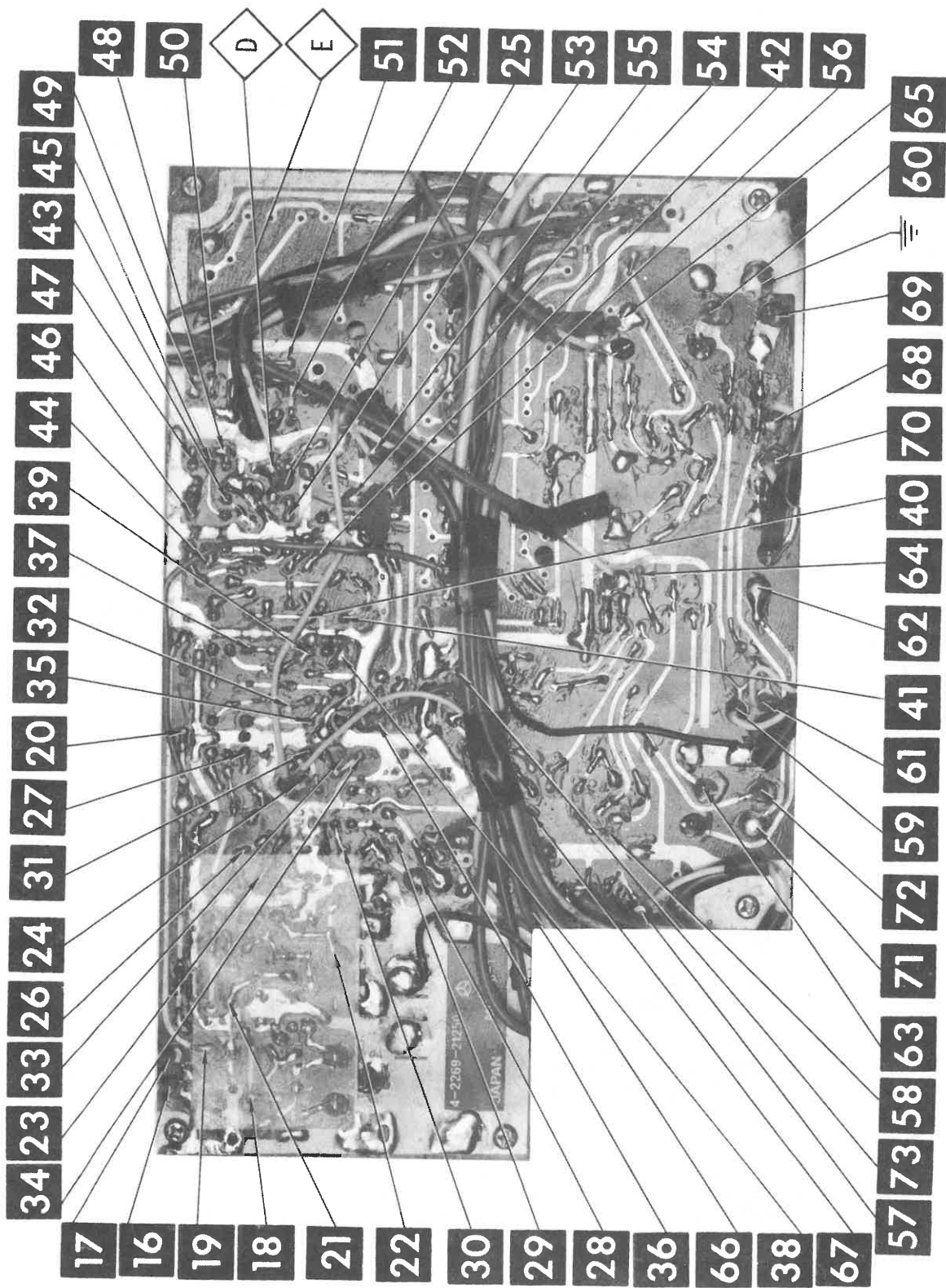
* Drive Belt-WALSCO Replacement Number 1424-06.

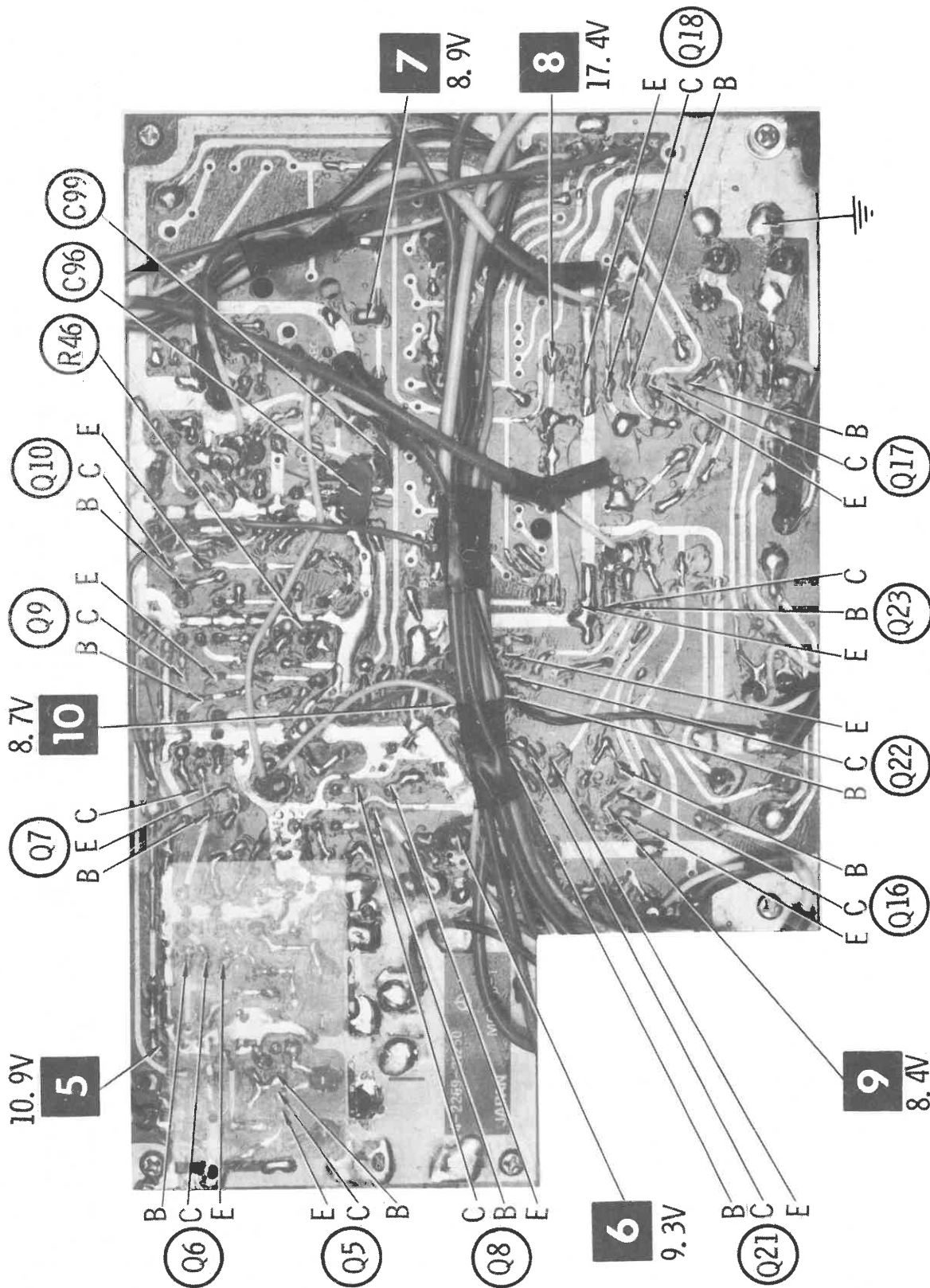
- (1) Part of Assembly (33).
- (2) Includes Ref. Nos. (6), (7), (8), (12), (13), (23), (25), (27), and (28).
- (3) Part of Assembly (10)
- (4) Part of Motor Assembly (M5).
- (5) Includes Ref. Nos. (3), (4), (5), (11), (14), (17), (18), (19), and (20).
- (6) Part of Solenoid Assembly (M4).
- (7) Part of Chassis Assembly, Part Number 1310-3001-10600.











A Howard W. Sams CIRCUITTRACE® Photo

LEAR JET MODEL H-459

ALIGNMENT INSTRUCTIONS

CAUTION: Use isolation transformer or observe polarity when connecting test equipment. Maintain line voltage at 117VAC. Allow a 15-minute warm-up period. Use only enough generator output to obtain a suitable indication.

Suggested Alignment Tools:

A1 thru A5, A12, A13, A17 thru A20	GENERAL CEMENT	WALSCO
A6 thru A11, A14 thru A16	#8868, 8987, 9089	#2531-X, 2541, 2587
	#9440	#2501

AM ALIGNMENT—SELECTOR IN AM POSITION

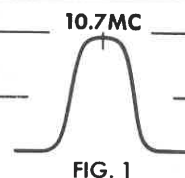
Connect generator across loop fashioned of several turns of wire. Set volume at maximum.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1. 455KC 400 cycle modulation	Tuning gang fully open.	Output Meter across voice coil.	A1, A2 A3	Adjust for maximum. Repeat until no further improvement can be made.
2. 1640KC	"	"	A4	Adjust for maximum.
3. 1400KC	Tune to signal	"	A5	"
4. 600KC	"	"	A6	Rock tuning gang and adjust for maximum. Repeat steps 2 thru 4 until no further improvement can be made.

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

High side of generator thru .001mfd to point $\diamond B$, low side to ground.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
5. 10.7MC Unmodulated	Point of non-interference	DC probe of VTVM to point $\diamond C$, common to ground.	A7, A8 A9, A10	Adjust for maximum.
6. "	"	DC probe of VTVM to point $\diamond D$, common to ground.	A11	Adjust for zero reading. A positive or negative reading will be obtained on either side of the correct setting.



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

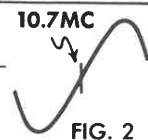
High side of generator thru .001mfd to point $\diamond B$, low side to ground. Use only enough marker signal for indication. Use 60 cycle frequency modulated signal with 450KC sweep. Use 60 cycle sawtooth voltage in scope for horizontal deflection.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
5. 10.7MC 450KC Sweep	Point of non-interference	Vert. amp of scope to point $\diamond C$, low side to ground.	A7, A8 A9, A10	Disconnect stabilizing capacitor C14. Adjust for maximum gain and symmetry of response similar to Fig. 1 with marker as shown. Reconnect C14.
6. "	"	Vert. amp of scope to point $\diamond D$, low side to ground.	A11	Adjust A11 (secondary) to place marker at center of "S" curve similar to Fig. 2. Readjust A7 (primary) 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.

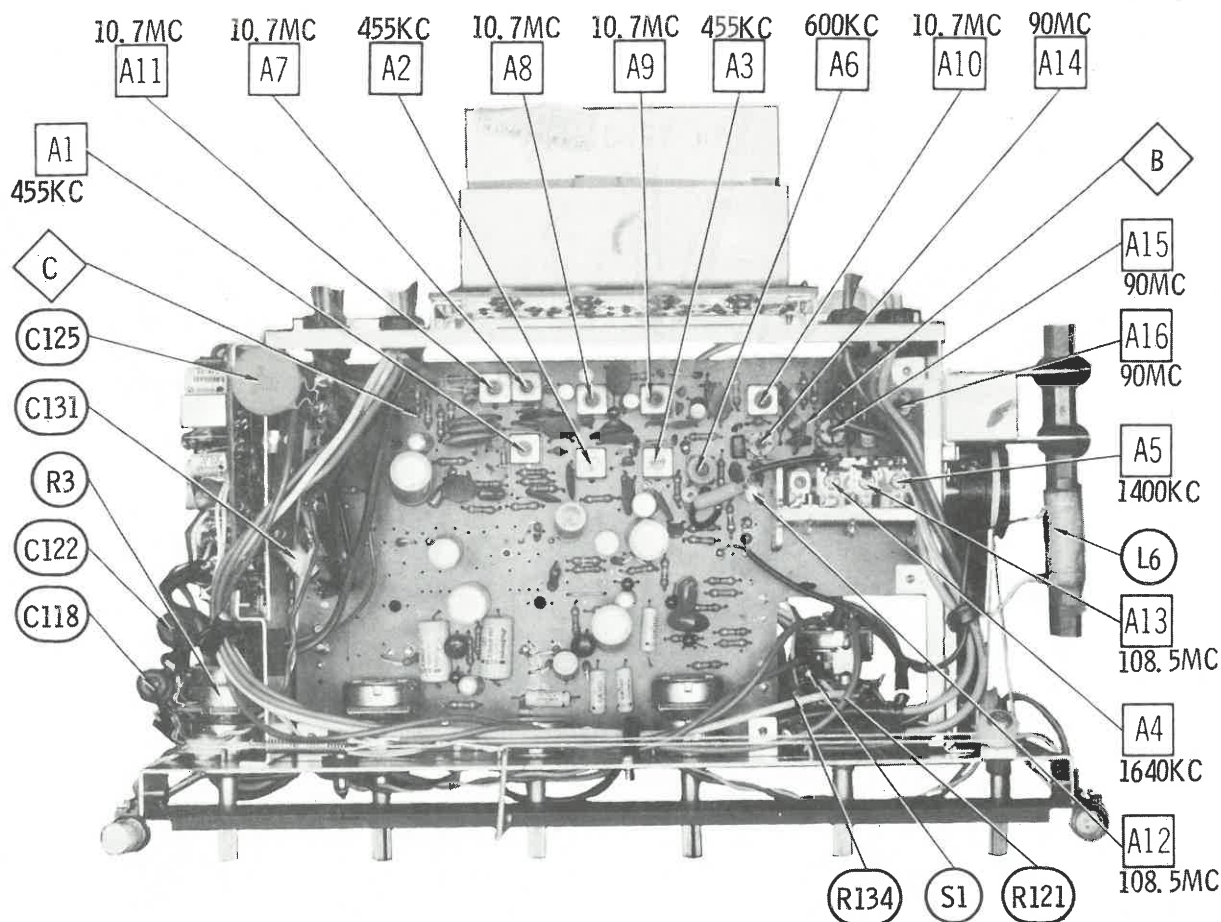
GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
7. 108.5MC	High freq. end	DC probe of VTVM to point $\diamond C$, common to ground.	A12 A13	Adjust for maximum.
8. 90MC Unmodulated	Tune to signal.	"	A14 A15 A16	Rock tuning and adjust for maximum. Repeat steps 7 and 8 until no further improvement can be made.



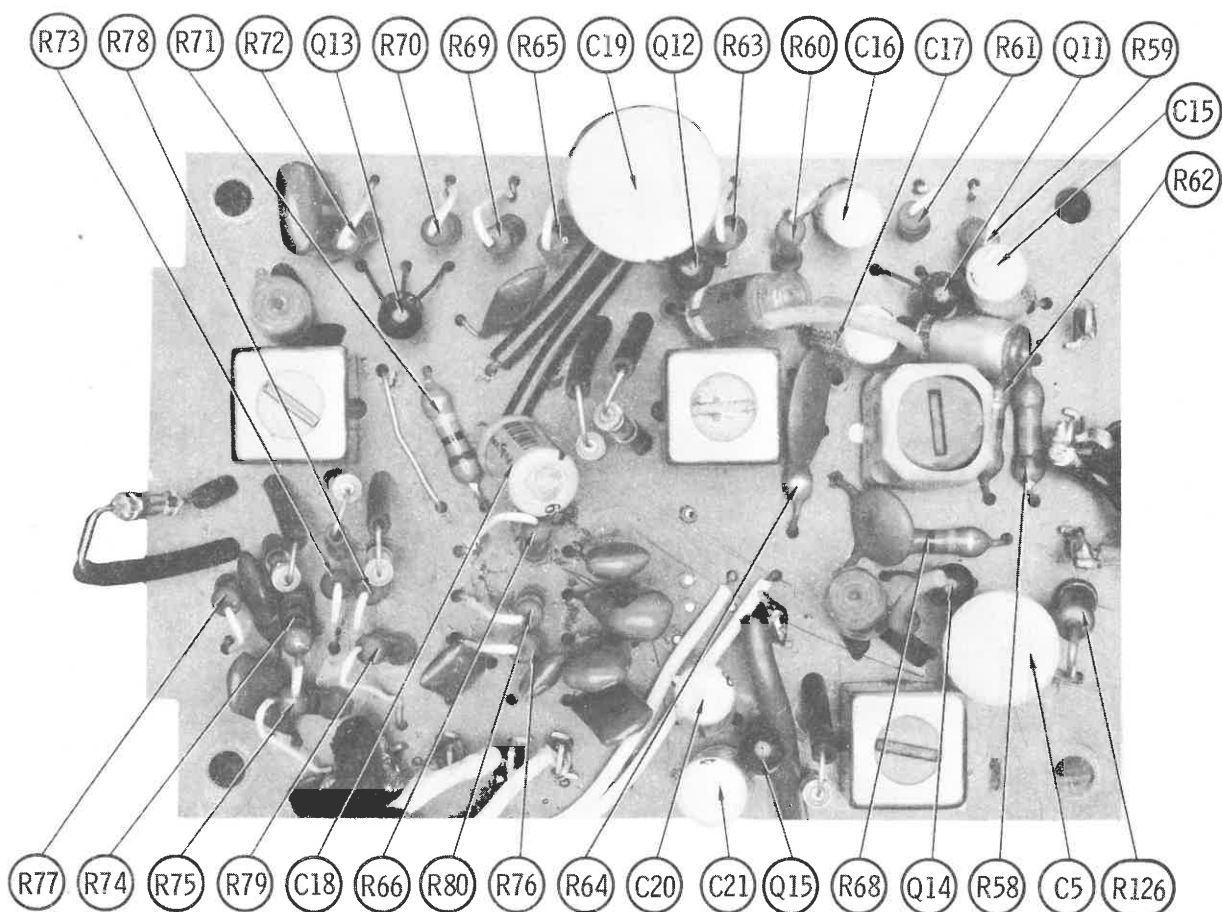
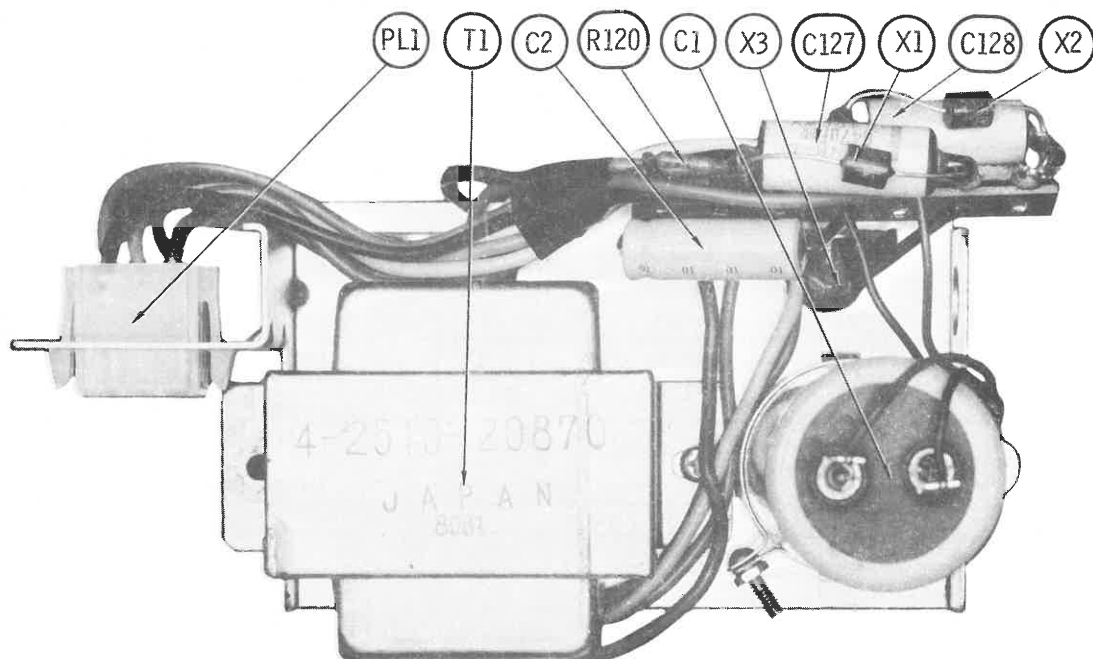
ALIGNMENT INSTRUCTIONS (Continued)

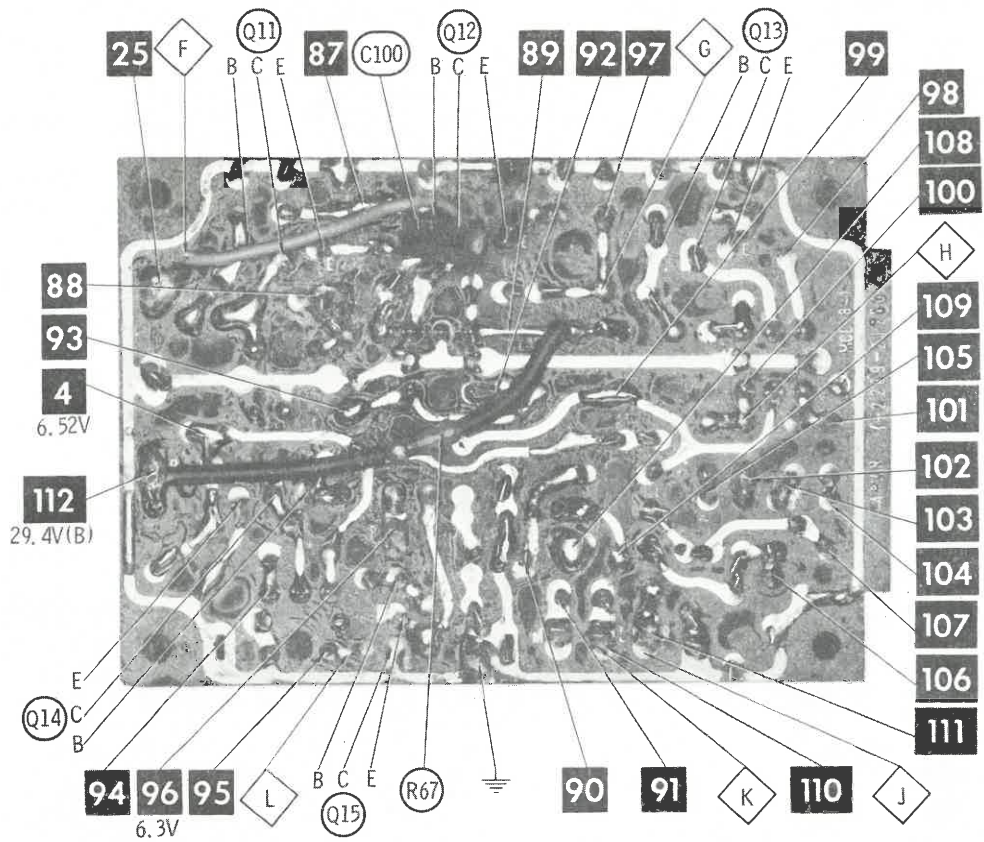
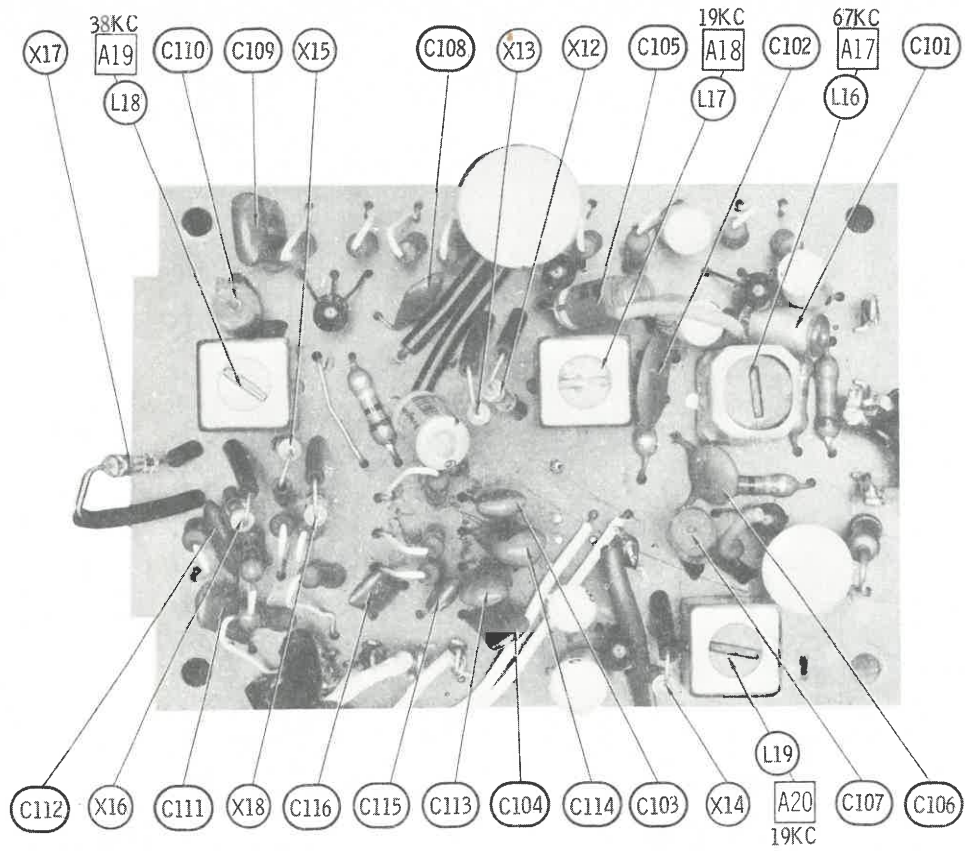
FM STEREO MULTIPLEX ALIGNMENT USING FM STEREO SIGNAL GENERATOR ($\pm .0001\%$ ACCURACY)

High side of generator thru 47K to point $\diamond E$, low side to ground.			
GENERATOR FREQUENCY	INDICATOR	ADJUST	REMARKS
9. 67KC	Vert. amp of scope thru 47K to point $\diamond F$, low side to ground.	A17	Adjust for MINIMUM
10. 19KC	Vert. amp of scope thru 47K to point $\diamond G$, low side to ground.	A18	Adjust for maximum.
11. "	Vert. amp of scope thru 47K to point $\diamond H$, low side to ground.	A19	Adjust for maximum 38KC response.
12. "	Vert. amp of scope thru 47K to point $\diamond L$, low side to ground.	A20	Adjust for maximum.
13. Modulated Left Channel	Vert. amp of scope to point $\diamond J$, low side to ground.	A18 A19	Adjust for MINIMUM. This step should require only slight adjustment.
14. Modulated Right Channel	Vert. amp of scope to point $\diamond K$, low side to ground		Check for MINIMUM. If necessary make compromise adjustment of A18, A19

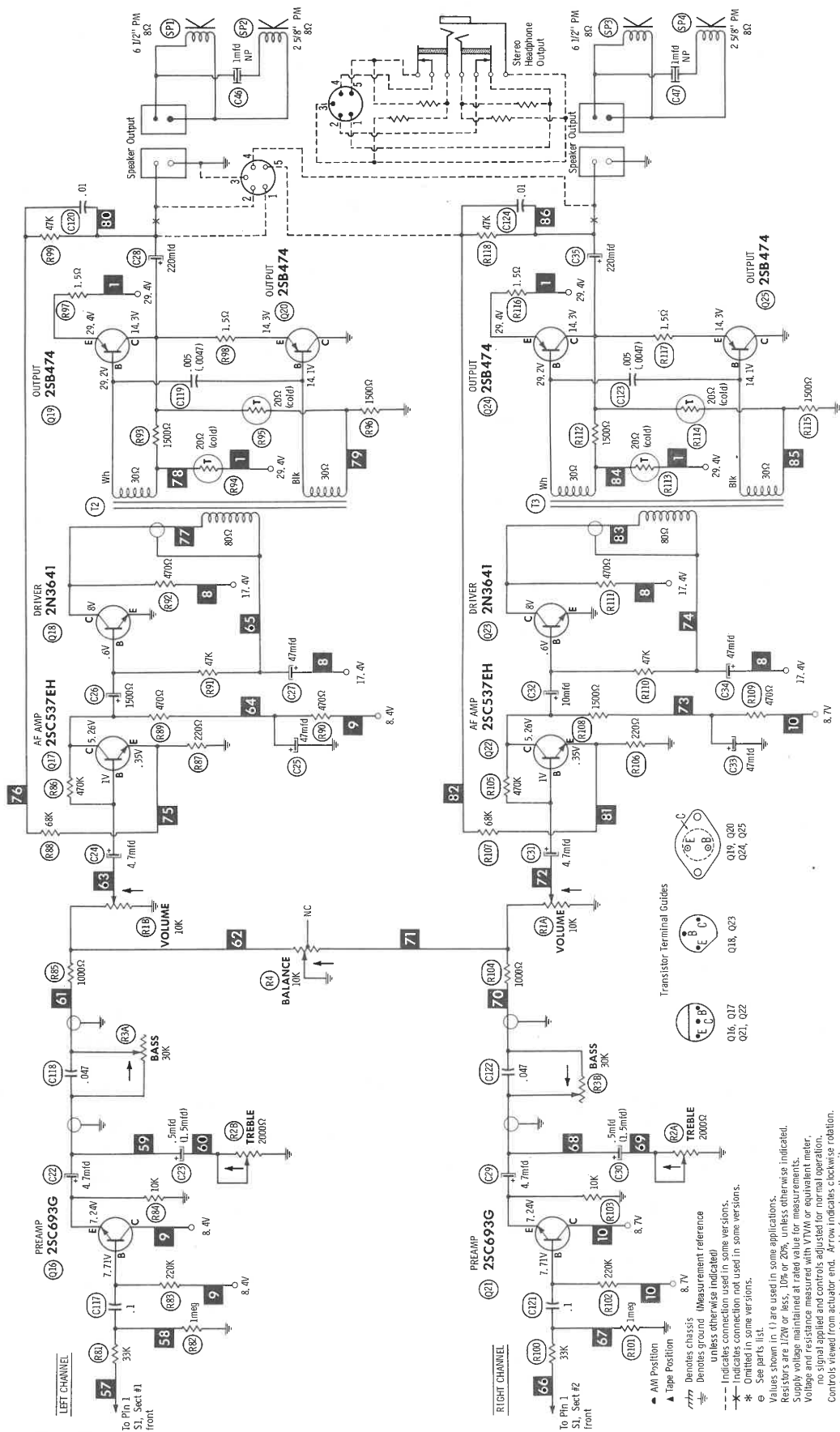


LEAR JET MODEL H-459





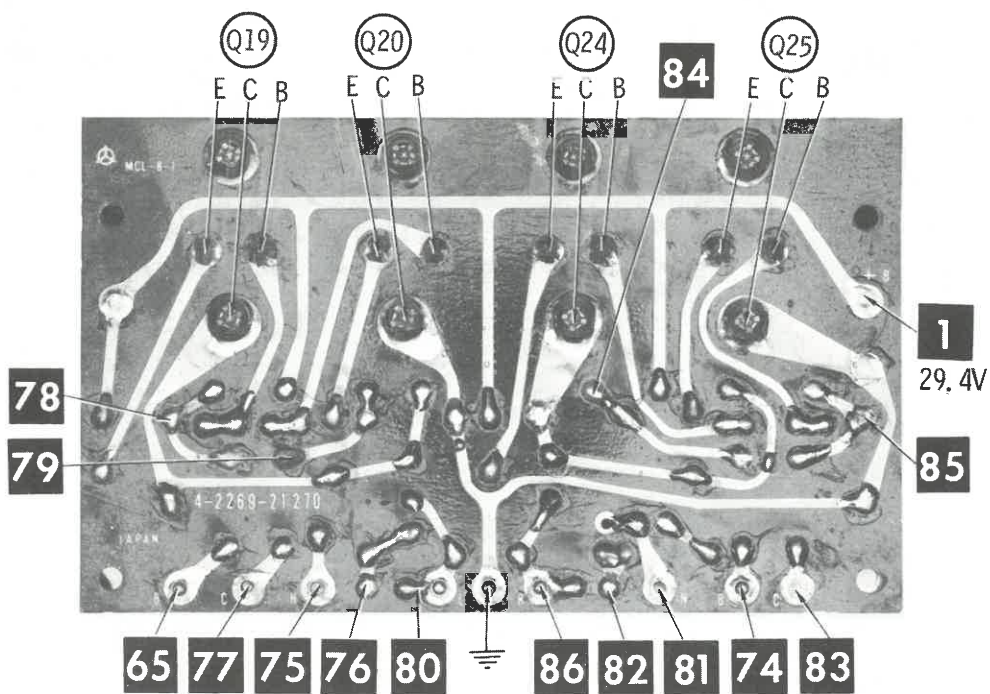
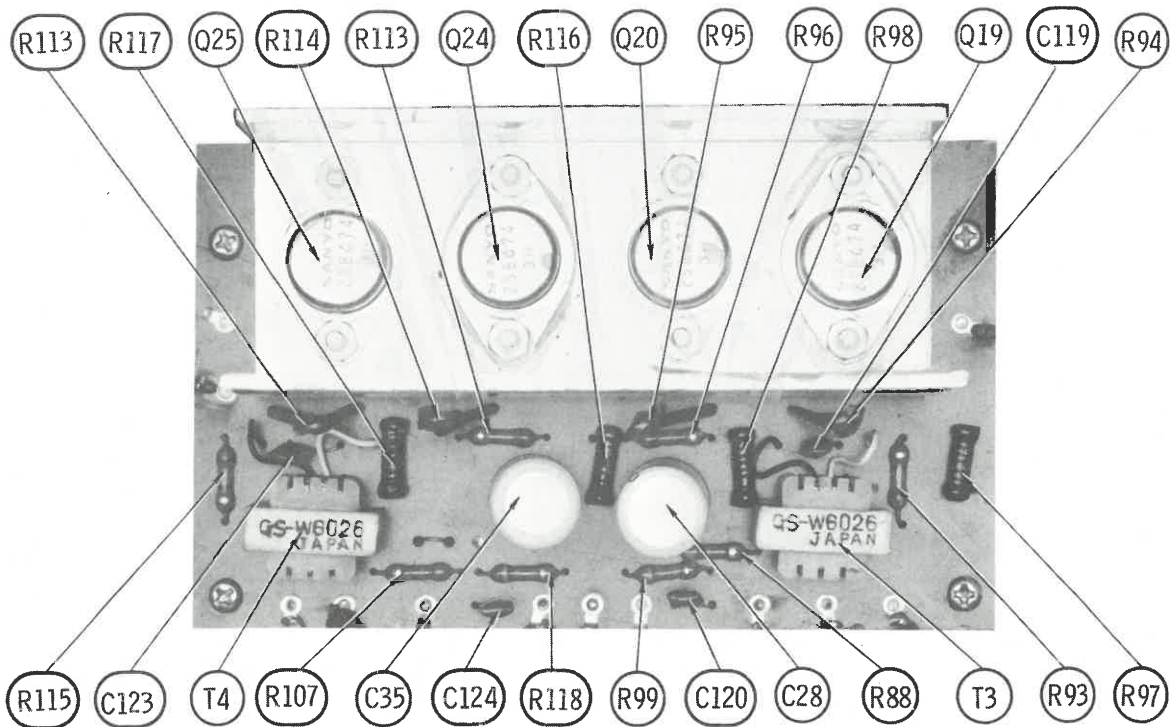
NOTE: DEMAGNETIZE HEADS AFTER SERVICING



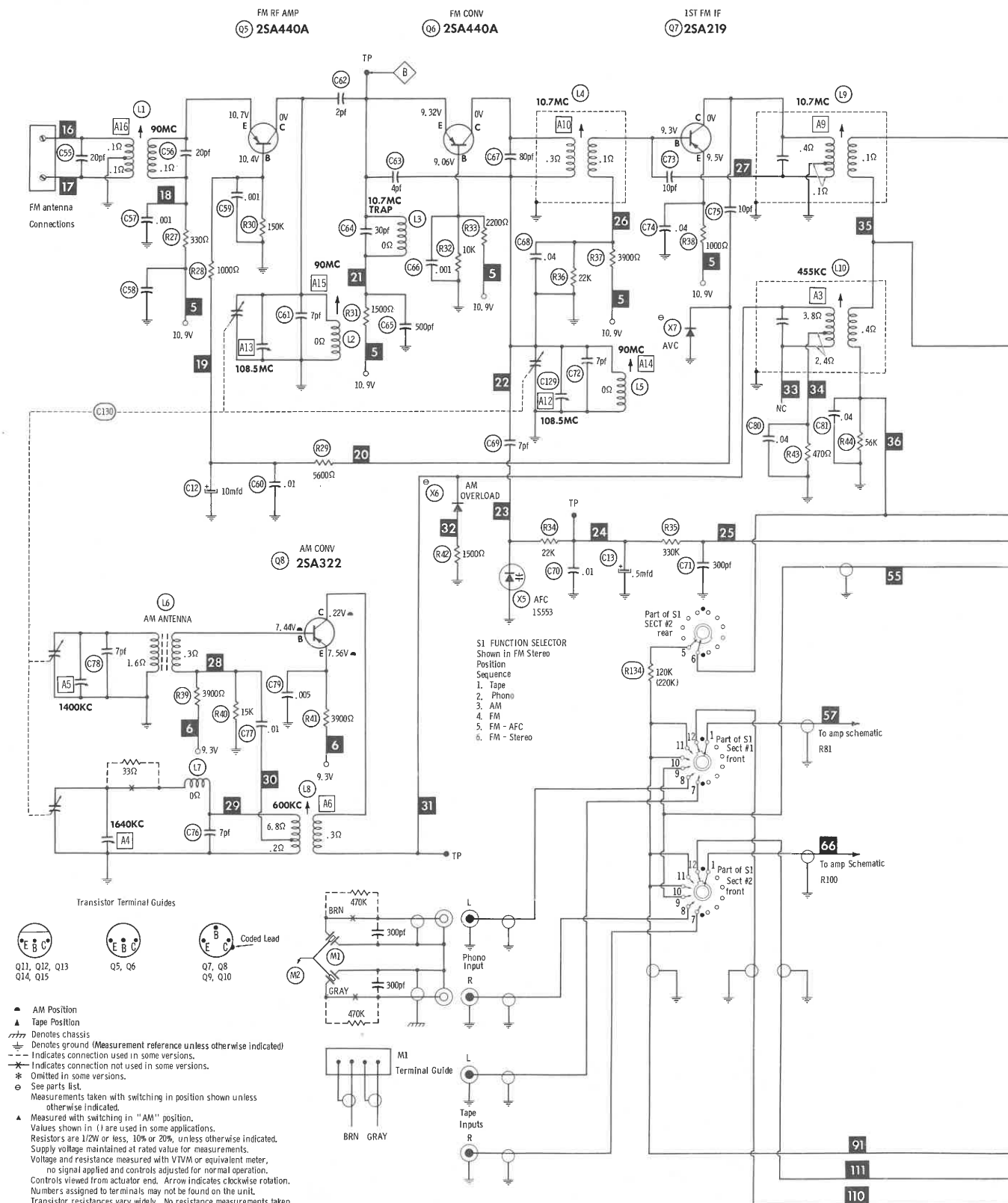
A PHOTOFACT STANDARD NOTATION SCHEMATIC
with **CIRCUITACE**

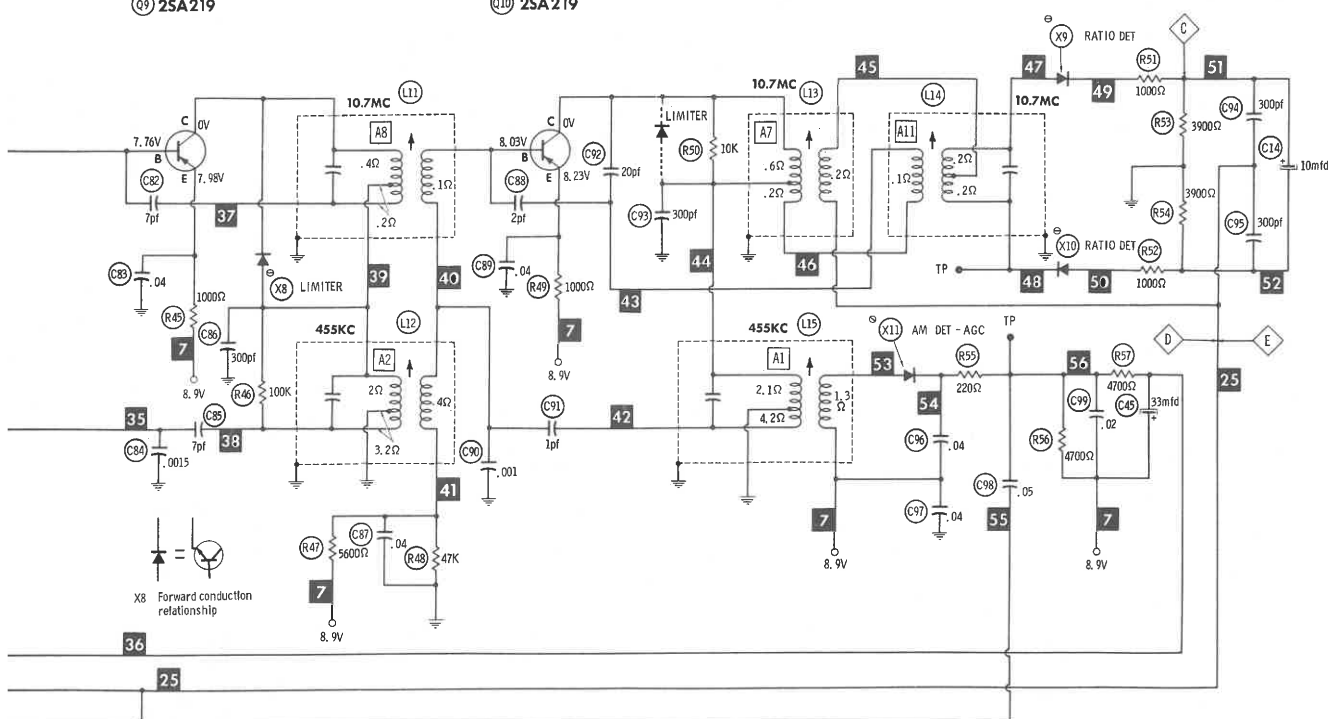
© Howard W. Sams & Co., Inc. 1970

LEAR JET MODEL H-459

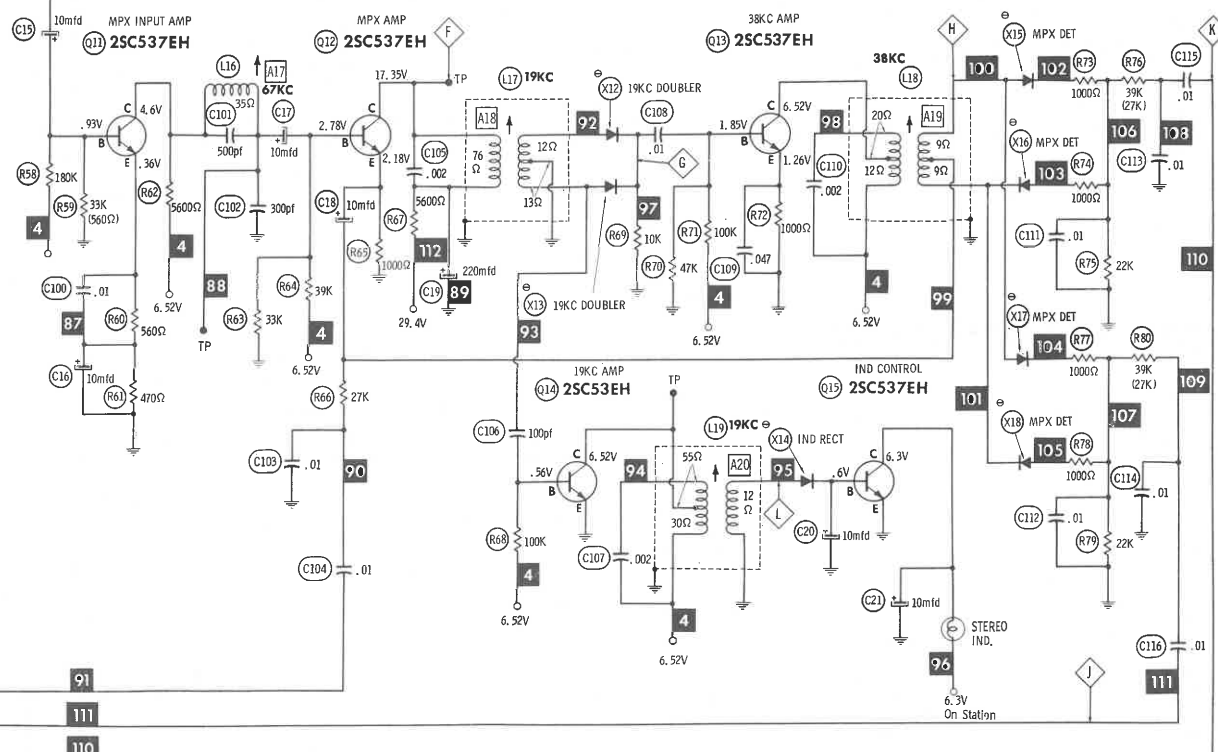


NOTE: DEMAGNETIZE HEADS AFTER SERVICING





LEAR JET MODEL H-459



LEAR JET MODEL H-459

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
Power Cord	Use BELDEN No.	17106 (Plastic) or 17126 (Rubber) - 6 Ft. 17109 (Plastic) or 17129 (Rubber) - 9 Ft.
Low-loss Shielded Lead (Interconnecting)	Use BELDEN No.	8401 or 8421
Phono Pick-up Arm Cable	Use BELDEN No.	8430 (Two Conductor-Unshielded) 8429 (Two Conductor-Shielded) 8419 (Three Conductor-Shielded)

TRANSISTORS

ITEM No.	TYPE No.	FUNCTION	REPLACEMENT DATA					
			MFGR. PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MOTOROLA PART No.	RCA PART No.	SYLVANIA PART No.
Q1	2SC732	Preamp		GE-20	TR-21	HEP730	SK3020	ECG 123A
Q2	2SC733	AF Amp		GE-20	TR-21	HEP729	SK3020	ECG 123A
Q3	2SC732	Preamp		GE-20	TR-21	HEP730	SK3020	ECG 123A
Q4	2SC733	AF Amp		GE-20	TR-21	HEP729	SK3020	ECG 123A
Q5	2SA440A	FM RF Amp		GE-9	TR-17	HEP3	SK3006	ECG 126
Q6	2SA440A	FM Converter		GE-9	TR-17	HEP3	SK3006	ECG 126
Q7	2SA219	1st FM IF		GE-9	TR-17	HEP637	SK3006	ECG 126
Q8	2SA322	AM Converter		GE-1	TR-11	HEP639	SK3008	ECG 126
Q9	2SA219	1st AM IF-2nd FM IF		GE-9	TR-17	HEP637	SK3006	ECG 126
Q10	2SA219	2nd AM IF-3rd FM IF		GE-9	TR-17	HEP637	SK3006	ECG 126
Q11	2SC537EH	MPX Input Amp		GE-20	TR-21	HEP54	SK3020	ECG 123A
Q12	2SC537EH	MPX Amp		GE-20	TR-21	HEP54	SK3020	ECG 123A
Q13	2SC537EH	38KC Amp		GE-20	TR-21	HEP54	SK3020	ECG 123A
Q14	2SC537EH	19KC Amp		GE-20	TR-21	HEP54	SK3020	ECG 123A
Q15	2SC537EH	Indicator Control		GE-20	TR-21	HEP54	SK3020	ECG 123A
Q16	2SC693G	Preamp		GE-20	TR-21	HEP54	SK3020	ECG 123A
Q17	2SC537EH	AF Amp		GE-20	TR-21	HEP54	SK3020	ECG 123A
Q18	2N3641	Driver		GE-17	TR-21	HEP736	SK3018	ECG 123A
Q19	2SB474	Output				HEP643		ECG 131MP
Q20	2SB474	Output				HEP643		
Q21	2SC693G	Preamp		GE-20	TR-21	HEP54	SK3020	ECG 123A
Q22	2SC537EH	AF Amp		GE-20	TR-21	HEP54	SK3020	ECG 123A
Q23	2N3641	Driver		GE-17	TR-21	HEP736	SK3018	ECG 123A
Q24	2SB474	Output				HEP643		ECG 131MP
Q25	2SB474	Output				HEP643		

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MFGR. PART OR TYPE No.	REPLACEMENT RECTIFIERS & DIODES			REPLACEMENT RECTIFIERS	NOTES
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	SYLVANIA PART No.	RCA PART No.	
X1	DS16C	GE-504A	8D4 or 5A4-D	ECG 116 or ECG 117	SK3030 or SK3031	
X2	DS16C	GE-504A	8D4 or 5A4-D	ECG 116 or ECG 117	SK3030 or SK3031	
X3	10D1	GE-504A	8D4 or 5A4-D	ECG 116 or ECG 117	SK3030 or SK3031	
X4	DS16C	GE-504A	8D4 or 5A4-D	ECG 116 or ECG 117	SK3030 or SK3031	
X5	1S553					
X6	1S188	1N34AS	1N34A	ECG 109		
X7	1S188	1N34AS	1N34A	ECG 109		
X8	DS410					
X9	1S188	1N34AS	1N34A	ECG 109		
X10	1S188	1N34AS	1N34A	ECG 109		
X11	1S188	1N34AS	1N34A	ECG 109		
X12	1S188	1N34AS	1N34A	ECG 109		
X13	1S188	1N34AS	1N34A	ECG 109		
X14	1S188	1N34AS	1N34A	ECG 109		
X15	1S188	1N34AS	1N34A	ECG 109		
X16	1S188	1N34AS	1N34A	ECG 109		
X17	1S188	1N34AS	1N34A	ECG 109		
X18	1S188	1N34AS	1N34A	ECG 109		

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA						
		PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	4000 30V	4-2239-203600	PR2-027 (1)		AA0155A			TVL-1247
C2	220 16V		CRE-481A	EA15-250	WBR250-50	MT1-23	MTA250F15	TE-1164
C3	100 16V		CRE-473A	EA15-100	AL100-16	MT1-19	MTA100E15	TE-1162
C4	80 16V		CRE-470A	EA15-100	AL100-16	MT1-19	MTA80E15	TE-1161
C5	100 16V		BCD15100	EP15-100	PC100-16	MT1-19	MTV100CF15	TE-1162
C6	100 16V		BCD15100	EP15-100	PC100-16	MT1-19	MTV100CF15	TE-1162
C7	100 16V		BCD15100	EP15-100	PC100-16	MT1-19	MTV100CF15	TE-1162
C8	330 16V		BCD15300	EA15-250	PC500-16	QT1-30A	MTV400DJ15	TE-1166
C9	220 16V		BCD20200	EA15-250	PC200-16	MT1-23	MTV200CK15	TE-1164
C10	220 16V		BCD20200	EA15-250	PC200-16	MT1-23	MTV200CK15	TE-1164
C11	.2mfd 250V							
C12	10 10V		BCD25010	EP15-10	PC10-50	MT1-5	MTV10CB50	TE-1128
C13	.5mfd 10V				TYR13BF474K		TAS474K010POA	196D474X0035DB
C14	10 10V		BCD25010	EP15-10	PC10-50	MT1-5	MTV10CB50	TE-1128
C15	10 10V		BCD25010	EP15-10	PC10-50	MT1-5	MTV10CB50	TE-1128
C16	10 10V		BCD25010	EP15-10	PC10-50	MT1-5	MTV10CB50	TE-1128
C17	10 10V		BCD25010	EP15-10	PC10-50	MT1-5	MTV10CB50	TE-1128
C18	10 10V		BCD25010	EP15-10	PC10-50	MT1-5	MTV10CB50	TE-1128
C19	220 16V		BCD20200	EA15-250	PC200-16	MT1-23	MTV200CK15	TE-1164
C20	10 10V		BCD25010	EP15-10	PC10-50	MT1-5	MTV10CB50	TE-1128
C21	10 16V		BCD25010	EP15-10	PC10-50	MT1-5	MTV10CB50	TE-1155
C22	4.7 25V		CRE604A	EA30-5	AL10-25	MT1-3	MTA5D50	TE-1202
C23	.5mfd 10V				TYR13BF474K		TAS474K010POA	196D474X0035DB
C24	4.7 25V		BCD25005	EP30-5	NLW5-50	MT1-3	MTV5CB50	TE-1202
C25	47 10V		BCD15050	EP15-50	PC50-16	MT1-16	MTV50CB15	TE-1133
C26	10 10V		BCD25010	EP15-10	PC10-50	MT1-5	MTV10CB50	TE-1128
C27	47 25V		CRE617A	EA50-25	NLW50-25	MT1-16.5	MTA50E25	TE-1209
C28	220 16V		BCD20200	EA15-250	PC200-16	MT1-23	MTV200CK15	TE-1164
C29	4.7 25V		CRE604A	EA5-30	NLW5-50	MT1-3	MTA5D50	TE-1202
C30	.5mfd 10V				TYR13BF474K		TAS474K010POA	196D474X0035DB
C31	4.7 25V		CRE604A	EA5-30	NLW5-50	MT1-3	MTA5D50	TE-1202
C32	10 10V		BCD25010	EP15-10	PC10-50	MT1-5	MTV10CB50	TE-1128
C33	47 10V		BCD15050	EP15-50	PC50-16	MT1-16	MTV50CB15	TE-1133
C34	47 25V		CRE617A	EA50-25	NLW50-25	MT1-16.5	MTA50E25	TE-1209
C35	220 16V		BCD20200	EA15-250	PC200-16	MT1-23	MTV200CK15	TE-1164
C36	20 16V		BCD15020	EP15-25	PC20-50	MT1-8.5	MTV20CD50	TE-1157
C37	.5mfd 10V				TYR13BF474K		TAS474K010POA	196D474X0035DB
C38	16 16V		CRE609A	EA15-15	NLW20-50	MT1-10	MTA15D35	TE-1156
C39	32 10V		CRE413A	EA15-50	AL50-16	MT1-13.5	MTA30E35	TE-1132.1
C40	20 16V		CRE461A	EA15-25	AL20-16	MT1-8.5	MTA20E50	TE-1157
C41	.5mfd 10V				TYR13BF474K		TAS474K010POA	196D474X0035DB
C42	16 16V		CRE609A	EA15-15	NLW20-50	MT1-10	MTA15D35	TE-1156
C43	32 10V		CRE413A	EA15-50	AL50-16	MT1-13.5	MTA30E35	TE-1132.1
C44	200 20V		BCD20200	EA15-250	PC200-16	MT1-23.5	MTV200CK15	TE-1213
C45	33 10V		BCD12035	EP15-25	PC30-35	MT1-13.5	MTV30CB25	TE-1158
C46	1mfd NP15V		PRSNP7525		BRNP1-50		TCN501	TVAN-1202
C47	1mfd NP15V		PRSNP7525		BRNP1-50		TCN501	TVAN-1202

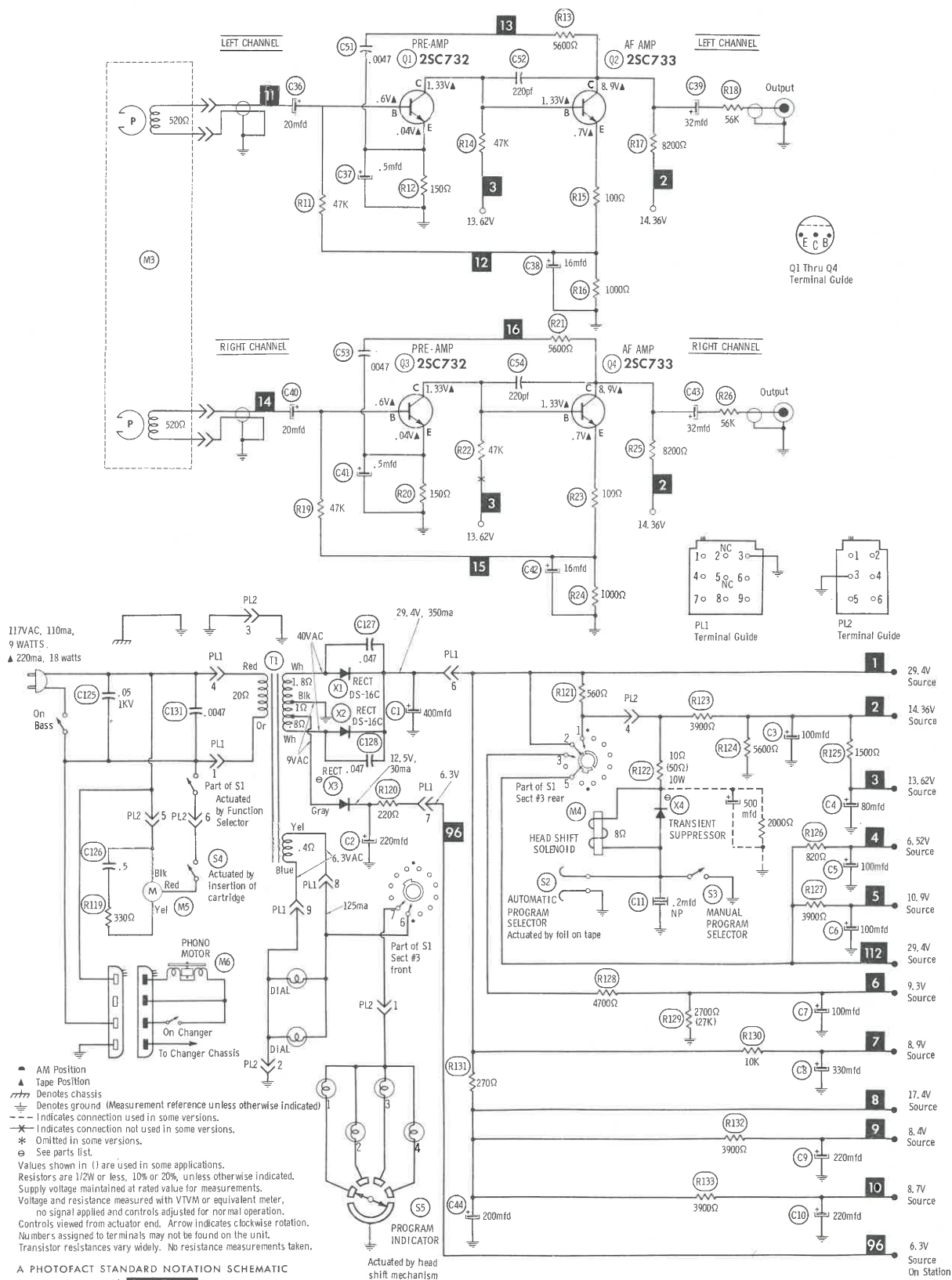
LEAR JET MODEL H-459

CAPACITORS

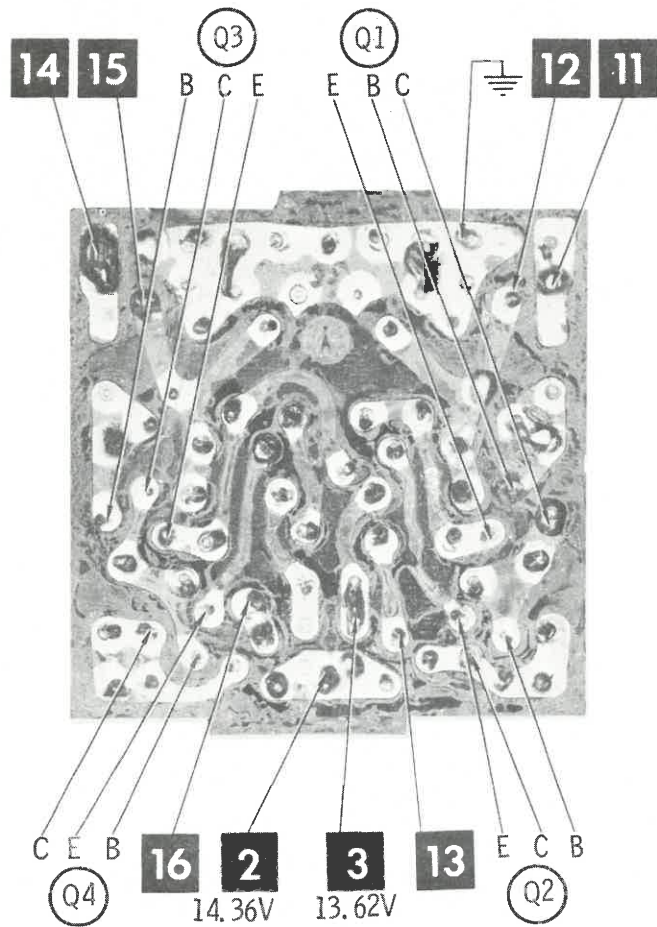
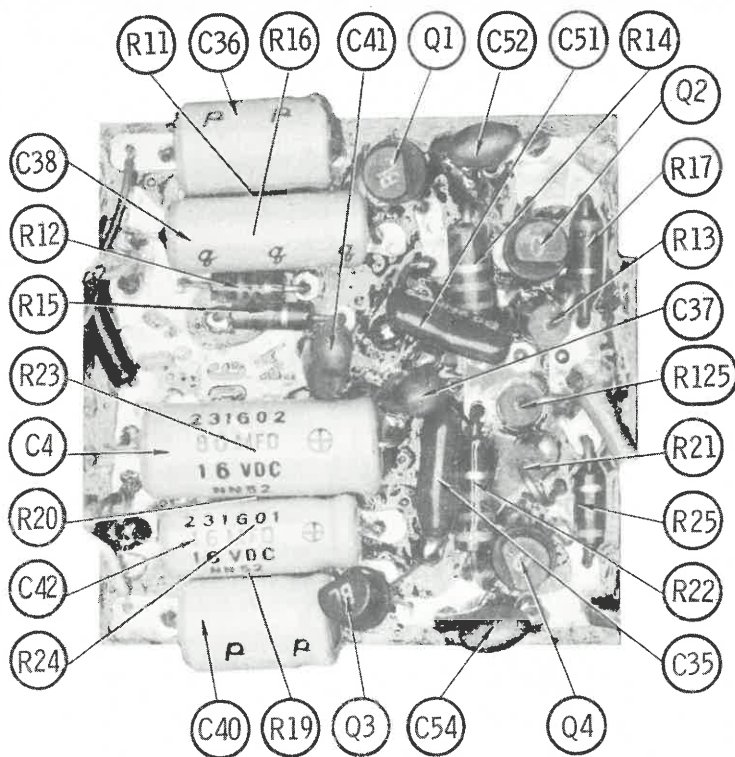
ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C51	.0047 10% 50V	(1)	LPDX5R472K	DD-472G	JBT601YP472K	CCD-472	JF247	10TS-D47
C52	220 50V		GPD X5F221K	DD-221	GP220	CCD-221	GP322	10TS-T22
C53	.0047 10% 50V		GPDX5R472K	DD-472G	JBT601YP472K	CCD-472	JF247	10TS-D47
C54	220 50V		GPD X5F221K	DD-221	GP220	CCD-221	GP322	10TS-T22
C55	20 50V			DD-200		CCD-200	GP420	10TS-Q20
C56	20 50V			DD-200		CCD-200	GP420	10TS-Q20
C57	.001 50V		GPD X5F102K	DM-102	GP1000	CCD-102	SM210	2SS-D10
C58	.01 50V		GPD X5F102K	DM-102	GP1000	CCD-102	SM210	2SS-D10
C59	.001 50V		GPD X5F102K	DM-102	GP1000	CCD-102	SM210	2SS-D10
C60	.01 50V		TTP-01	CK-103	MGP01	CCD-103	TA110	TG-S10
C61	7 50V		GPDCOH6R8K	DD-6R8	CZ601CH6R8K	CCTO-6R8	GP568	10TS-V68
C62	2 50V		GPDCOJ2R2K					
C63	4 50V		GPDCOH4R7K					
C64	30 10% 50V			DD30-4R7		3CCD-4R7		30GA-V47
C65	500 20% 50V			DD300		CCD-300	GP430	10TS-Q30
C66	.001 50V		GPD X5F102K	DM-102	HVY602ZU501P			30GA-T50
C67	80 50V		GPDX5F910K	DD820	GP1000	CCD-102	SM210	2SS-D10
C68	.04 50V		TTP-05	CK-503	MBX601YP820K	CC820	GP482	10TS-Q82
C69	7 50V		GPDCOH6R8K	DD-6R8	MGP05	CCD-503	TA150	TGL-S50
					CZ601CH6R8K	CCTO-6R8	GP568	10TS-V68

(CONTINUED ON PAGE 66)

NOTE: DEMAGNETIZE HEADS AFTER SERVICING



LEAR JET MODEL H-459



PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

CAPACITORS (cont)

ITEM No.	RATING		REMARKS	REPLACEMENT DATA					
				AEROVOX PART No.	CENTRALAB PART No.	CORNELL- DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C70	.01	50V		TTP-01	CK-103	MGP01	CCD-103	TA110	TG-S10
C71	300	10% 50V		GPDX5F301K	DD-301		CCD-301	GP330	10TS-T30
C72	7	50V		GPDCOH6R8K	DD-6R8	CZ601CH6R8K	CCTO-6R8	GP568	10TS-V68
C73	10	50V		GPDCOH100K	DD-100	CZ6010G100K	CCD-100	GP410	10TS-Q10
C74	.04	50V		TTP-05	CK-503	MGP05	CCD-503	TA150	TGL-S50
C75	10	50V		GPDCOH100K	DD-100	CZ6010G100K	CCD-100	GP410	10TS-Q10
C76	7	50V		GPDCOH6R8K	DD-6R8	CZ601CH6R8K	CCTO-6R8	GP568	10TS-V68
C77	.01	50V		TTP-01	CK-103	MGP01	CCD-103	TA110	TG-S10
C78	7	50V		GPDCOH6R8K	DD-6R8	CZ601CH6R8K	CCTO-6R8	GP568	10TS-V68
C79	.005	50V		TTP-005	CK-502	MGP005	CCD-502	TA250	TG-D50
C80	.04	50V		TTP-05	CK-503	MGP05	CCD-503	TA150	TGL-S50
C81	.04	50V		TTP-05	CK-503	MGP05	CCD-503	TA150	TGL-S50
C82	7	50V		GPDCOH6R8K	DD-6R8	CZ601CH6R8K	CCTO-6R8	GP568	10TS-V68
C83	.04	50V		TTP-05	CK-503	MGP05	CCD-503	TA150	TGL-S50
C84	.0015	50V		GPD X5F152K	DD-152		CCD-152	GP215	10TS-D15
C85	7	50V		GPDCOH6R8K	DD6R8	CZ601CH6R8K	CCTO-6R8	GP568	10TS-V68
C86	300	50V		GPDX5F301K	DD-301		CCD-301	GP330	10TS-T30
C87	.04	50V		TTP-05	CK-503	MGP05	CCD-503	TA150	TGL-S50
C88	2	50V		GPDCOJ2R2K					
C89	.04	50V		TTP-05	CK-503	MGP05	CCD-503	TA150	TGL-S50
C90	.0015	50V		GPD X5F152K	DD-152		CCD-152	GP215	10TS-D15
C91	1pf	50V		NPO-DI 1.0	TCZ-1			CN0510	10TCC-V10
C92	20	50V			DD220	CY601CG220K	CCD-220	GP422	10TS-Q22
C93	300	10% 50V		GPDX5F301K	DD301		CCD301	GP330	10TS-T30
C94	300	10% 50V		GPDX5F301K	DD301		CCD301	GP330	10TS-T30
C95	300	10% 50V		GPDX5F301K	DD301		CCD301	GP330	10TS-T30
C96	.04	50V		TTP-05	CK-503	MGP05	CCD-503	TA150	TGL-S50
C97	.04	50V		TTP-05	CK-503	MGP05	CCD-503	TA150	TGL-S50
C98	.05	50V		TTP-05	CK-503	MGP05	CCD-503	TA150	TGL-S50
C99	.02	50V		TTP-02	CK-203	MGP02	CCD-203	TA120	TG-S20
C100	.01	50V		V1612S1	CPR-10000J	DPMS6S1	1DP-1-103	PVC211	225P10391WD3
C101	500	50V					DM-16501J		MS-35
C102	300	50V		GPDX5F301K	DD-301		CCD301	GP330	10TS-T30
C103	.01	50V		V1612S1	CPR-10000J	DPMS6S1	1DP-1-103	PVC211	225P10391WD3
C104	.01	50V		V1612S1	CPR-10000J	DPMS6S1	1DP-1-103	PVC211	225P10391WD3
C105	200	50V			CPR-200J	CD15F201J500	DM-15-201J	SX320	424ME2000J501
C106	100	50V		GPD X5F101K	DD-101	GP100	CCD-101	GP310	10TS-T10
C107	.002	50V			CPR-2000J	CD19F202J500	DM-19-202J	SX220	424ME2001J501
C108	.01	50V		ADM30-103	CPR-10000J	CD30F103J500	DM-30-103J	SX110	MS-11
C109	.047	50V		V1612S47		DPMS6S47	1DP-2-473	PVC1147	225P47391WD3
C110	.002	50V			CPR-2000J	CD19F202J500	DM-19-202J	SX220	424ME2001J501
C111	.01	50V		V1612S1	CPR-10000J	DPMS6S1	1DP-1-103	PVC211	225P10391WD3
C112	.01	50V		V1612S1	CPR-10000J	DPMS6S1	1DP-1-103	PVC211	225P10391WD3
C113	.01	50V		V1612S1	CPR-10000J	DPMS6S1	1DP-1-103	PVC211	225P10391WD3
C114	.01	50V		V1612S1	CPR-10000J	DPMS6S1	1DP-1-103	PVC211	225P10391WD3
C115	.01	50V		V1612S1	CPR-10000J	DPMS6S1	1DP-1-103	PVC211	225P10391WD3
C116	.01	50V		V1612S1	CPR-10000J	DPMS6S1	1DP-1-103	PVC211	225P10391WD3
C117	.1	50V		DBE2P1		DPMS2P1	1DP-2-104	PVC101	225P10491WD3
C118	.047	250V		DBE6S47		DPMS6S47	4DP-3-473	PVC4147	4PS-S47
C119	.005	50V		DBE6D5	CPR-5000J	DPMS6D5	1DP-1-502	PVC625	6PS-D50
C120	.01	50V		V1612S1	CPR-10000J	DPMS6S1	1DP-1-103	PVC211	225P10391WD3
C121	.1	50V		DBE2P1		DPMS2P1	1DP-2-104	PVC101	225P10491WD3
C122	.047	250V		DBE6S47		DPMS6S47	4DP-3-473	PVC4147	4PS-S47
C123	.005	50V		DBE6D5	CPR-5000J	DPMS6D5	1DP-1-502	PVC625	6PS-D50
C124	.01	50V		V1612S1	CPR-10000J	DPMS6S1	1DP-1-103	PVC211	225P10391WD3
C125	.05	1KV		GPDX5V503P	DD-503			GP-150	
C126	1.5MFD 5%	250V		NPO-DI 1.5	DTZ-1R5	NP01P5		CN0515	10TCC-V15
C127	.047	450V		V1612S47		DPMS6S47	1DP-2-473	PVC1147	225P47391WD3
C128	.047	450V		V1612S47		DPMS6S47	1DP-2-473	PVC1147	225P47391WD3
C129	Trimmer		4-2249-20310#						
C130	Tuning Gang		4-2249-20340#						
C131	.0047	450V		V1612D47		PM2047			

Lear Jet Part Number

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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

ITEM No.	FUNCTION	RESISTANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLOY PART No.
R1A	Volume, Right	10K	4-2229-21330 (88-9-21330)	F2-10K, (1)R2-10K, SSK106, CPL-2		B13-116, B13-116, SK1 (1)QCM or (BU1 (1)CF61, CR52, SST, SS7A, DC1)*	P14A, 3014 (1), RU14A, CS3500
B	Volume, Left	10K	(4-2229-213300)			B13-111, B13-111, SK1 (1)QCM or (BU1 (1)CF83, CR56, SST, SS7A, DC1)*	
R2A	Treble, Right	2000	4-2229-21350 (88-9-21350)			B17-120, B17-120 SK1 (1)QCM, 76-1	P54R, 3014 (1), RU54R, CS3500
B	Treble, Left	2000	(4-2229-213500)				
R3A	Bass, Right	30K	88-9-21310 (4-2229-213100)	F3-25K (1)R3-25K, SSK106, CPL-2, KR-1			
B	Bass/Switch, Left	30K	(4-2229-21660)				
R4	Balance	10K Tap @ 5000	4-2229-21340 (88-9-21340) (4-2229-213400)				RU14T53, SL36, SL3250

* "SNAPTROL"

(1) Enlarge mounting hole.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	MFGR. PART No.
R94	20 (Cold)			SDT-02L
R95	Thermistor			SDT-02L
R113	20 (Cold)			SDT-02L
	Thermistor			
	20 (Cold)			SDT-02L
	Thermistor			

ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	MFGR. PART No.
R114	20 (Cold)			SDT-02L
R119	Thermistor			
R122	330, 7Watt	PW10-350	7G-330	
	Wirewound	PW10-10	10W-SQ-10	
	10, 10Watt			
	Wirewound			

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
L1	FM Antenna Coil	4-2579-20700			
L2	FM RF Coil	4-2599-20200			
L3	10.7MC Trap	4-2599-20030			
L4	FM Input IF	4-2569-20560	16-9030 (1)	2070 (1)	
L5	FM Oscillator	4-2589-20510			
L6	AM Loopstick	4-2579-20690		7787	
L7	RF Choke	4-2539-20030			
L8	AM Oscillator	4-2589-20520			
L9	FM Interstage IF	4-2569-20570	16-9031	2071	
L10	AM Input IF	4-2569-20540	16-9026	8517	
L11	FM Output IF	4-2569-20570	16-9032	2072	
L12	AM Interstage	4-2569-20550	16-9027	2067	
L13	Ratio Detector Pri.	4-2569-20580			
L14	Ratio Detector Sec.	4-2569-20591			
L15	AM Output IF	4-2569-20250	16-9028	2068	
L16	67KC Trap	4-2659-20140			
L17	19KC Doubler	4-2659-20150			
L18	38KC Output	4-2659-20170			
L19	19KC Coil	4-2659-20160			

(1) Remove C67

TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	MFGR. PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	117VAC @ .225A	40VAC CT @ .35ADC Tapped @ 9VAC @.03ADC	4-2519-20870					
	SEC. 2	SEC. 3						
	6.3VAC @ .25AAC							

LEAR JET MODEL H-459

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	2.3	1	1	4-2549-20260					
T3	2.3	1	1	4-2549-20260					

SPEAKER

ITEM No.	TYPE				REPLACEMENT DATA		NOTES
					MFGR. PART No.	QUAM PART No.	
SP1	6 1/2"	PM	8 ohms	4-1519-210100	6A15MT		
SP2	2 5/8"	PM	8 ohms	4-1519-207200	22A06Z8		
SP3	6 1/2"	PM	8 ohms	4-1519-210100	6A15MT		
SP4	2 5/8"	PM	8 ohms	4-1519-207200	22A06Z8		

PHONO CARTRIDGE & NEEDLES

REPLACEMENT DATA								NOTES
ITEM No.	MFGR. PART No.		ASTATIC PART No.		ELECTRO-VOICE PART No.			
	CARTRIDGE	NEEDLE	CARTRIDGE	NEEDLE	CARTRIDGE	NEEDLE		
	M1 M2	CZ200	ST3	133	N50 N160	274	2421 2421	

TAPE HEADS

ITEM No.	MEASURED			PART No.	NORTRONICS PART No.	DESCRIPTION
	INDUCTANCE	BIAS/ERASE VOLTS (RMS)	BIAS FREQ.			
M3	400mh			4-2429-20010	5800 (1)	8-Track Stereo Play

(1) Use original mounting.

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
M4	Solenoid	1310-4008-00100	Head Shift
M5	Motor	1310-4009-00100	Tape Transport
S1	Switch		Function Selector
S2	Switch		Automatic Program Selector (Tape Player)
S3	Switch		Manual Program Selector (Tape Player)
S4	Switch	4-2319-21500	Motor On/Off (Tape Player)
S5	Switch	4-2319-21510	Program Indicator (Tape Player)
	Printed Circuit Board	1310-4001-129000	RF/IF Assembly, Complete
	Printed Circuit Board	4-2269-212500	RF/IF Assembly, Board only
	Printed Circuit Board	1310-4001-131000	AF Amplifier Assembly, Complete
	Printed Circuit Board	4-2269-212700	AF Amplifier, Board Only
	Printed Circuit Board	1310-4001-130000	MPX Assembly, Complete
	Printed Circuit Board	4-2269-212600	MPX Assembly, Board Only
	Printed Circuit Board	1310-4001-14800	Tape Player Preamp Assembly, Complete

CABINETS & CABINET PARTS (When ordering specify model, chassis & color)

ITEM	PART No.	ITEM	PART No.
Knob, Balance, Bass, Treble, and Volume	1310-1001-14303	Knob, Function Selector	1310-1001-14202
Knob, Tuning	1310-1001-14302		