

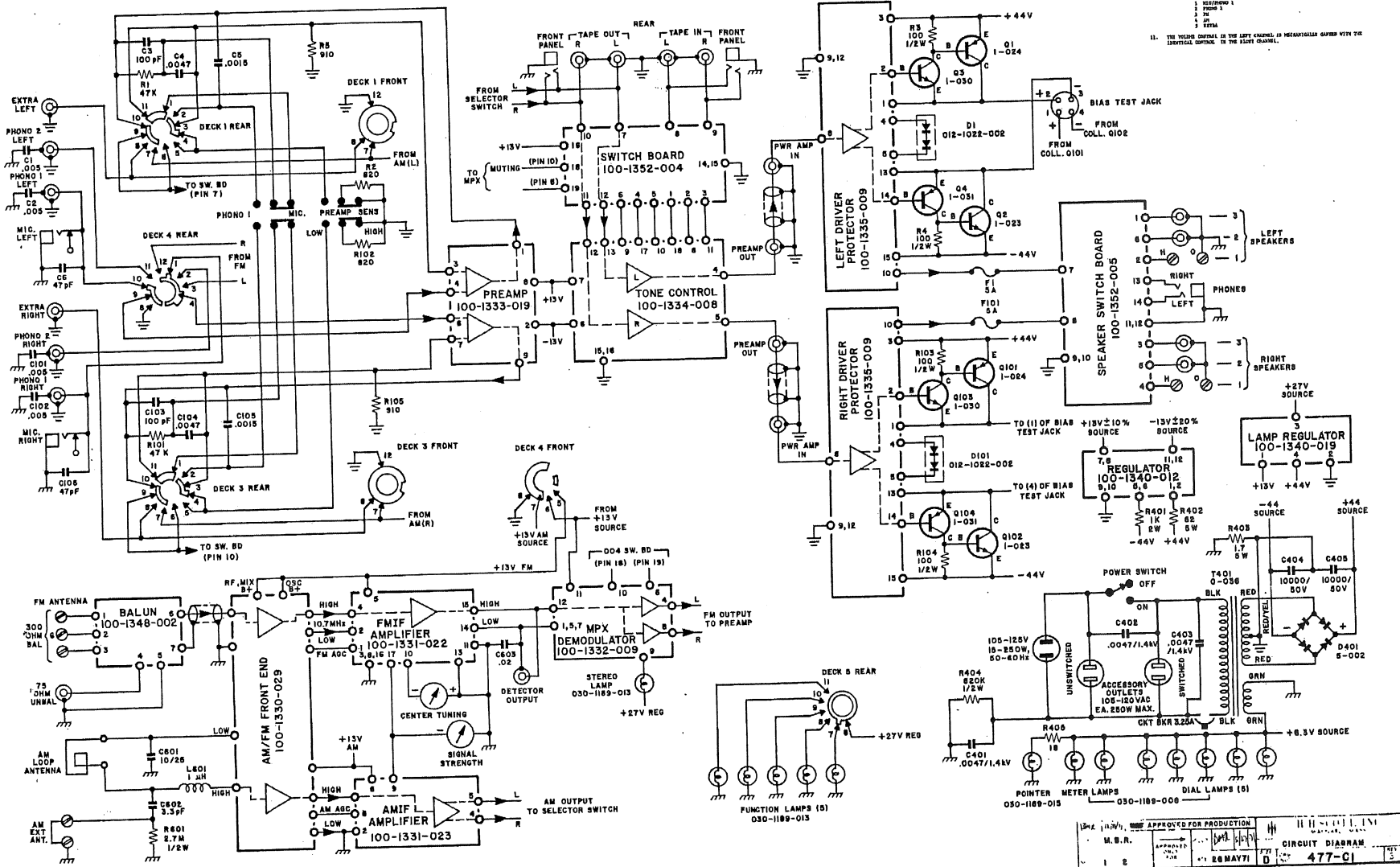
SERVICE INFORMATION

for

477

W SCOTT®
where innovation is a tradition

H. H. Scott, Inc., 111 Powdermill Road, Maynard, Mass. 01754



- NOTES:
1. ANNO MARKS INDICATE TYPICAL PARTS.
 2. VOLTAGE READ SHOWN ON SYMBOLIC DIAGRAM.
 3. SPECIAL SYMBOLS SPECIFIED ARE D.C. WELDING POINTS AND WELDED WITH REFERENCE TO CARRIER FREQUENCY. WELDING POINTS ARE TO BE MADE IN THE MOUNTING AREA. THESE ARE NOT TO BE MADE IN THE MOUNTING AREA.
 4. P.C. BOARD SPECIFICATIONS: BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS. BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS. BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS. BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS.
 5. P.C. BOARD SPECIFICATIONS: BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS. BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS. BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS. BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS.
 6. P.C. BOARD SPECIFICATIONS: BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS. BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS. BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS. BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS.
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 8. P.C. BOARD SPECIFICATIONS: BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS. BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS. BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS. BOARD IS TO BE MADE OF AT LEAST 1.5mm THICKNESS.
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 11. THE WELDING POINTS IN THE LEFT CHANNEL ARE IDENTICAL TO THE WELDING POINTS IN THE RIGHT CHANNEL.

APPROVED FOR PRODUCTION

M.B.R.

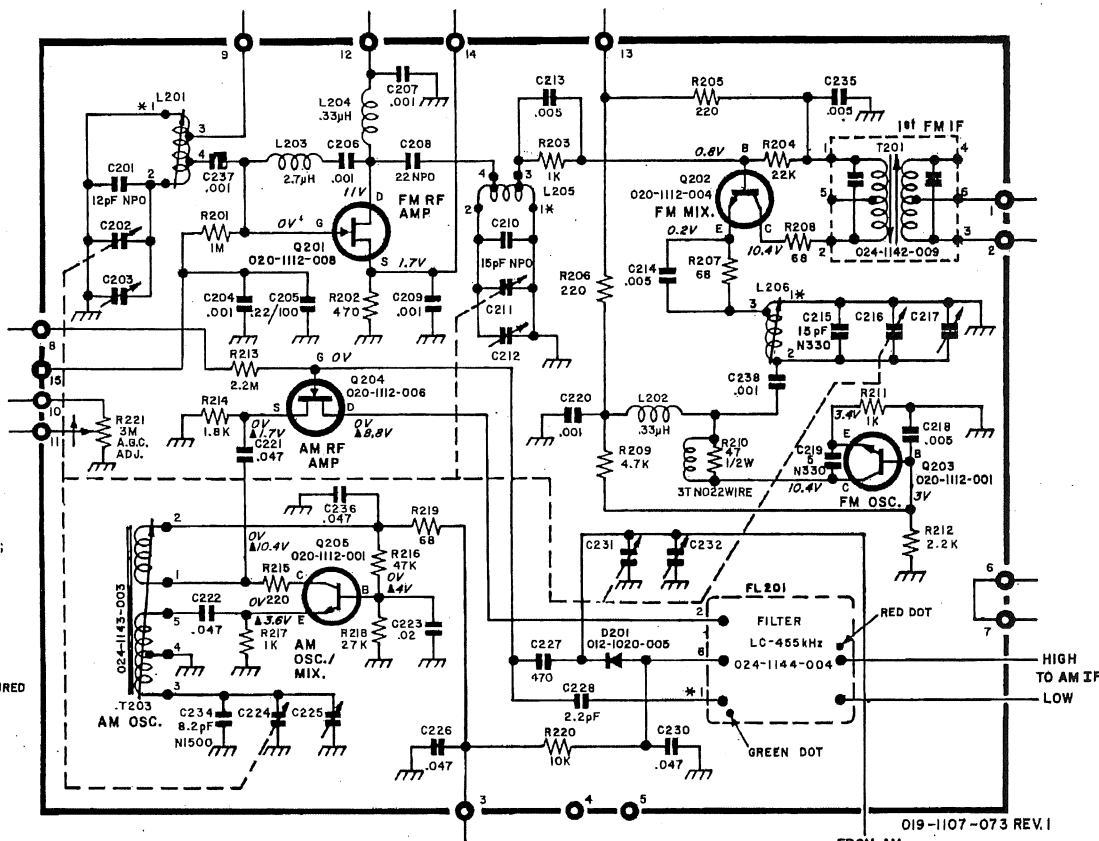
DATE: 28 MAY 71

CIRCUIT DIAGRAM

477-C1

REVISIONS		
SYN	DESCRIPTION	DATE

100-1330-029 REV 3

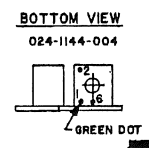
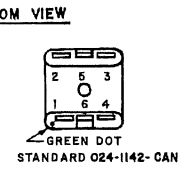
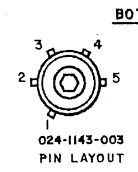
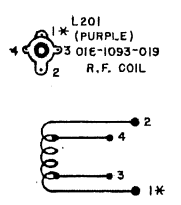
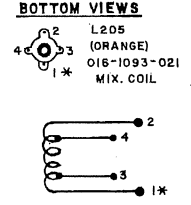
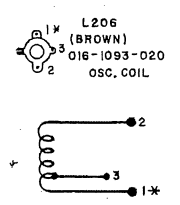


HIGHEST SERIES NUMBERS	
L206	C238
R221	T203
D201	Q205
	FL201

- NOTES:**
1. UNLESS OTHERWISE SPECIFIED; RESISTANCE IN OHMS $\pm 10\%$. RESISTORS 1/4 WATT. CAPACITANCE IN MFD'S.
 2. * INDICATES START OF COIL WINDING.
 3. COMPONENTS DELETED: C229, C233.
 4. & INDICATES VOLTAGE MEASURED WITH INPUT SWITCH IN "AM" POSITION AND NO SIGNAL.
 5. ALL VOLTAGES $\pm 15\%$.

AM/FM FRONT END

019-1107-073 REV.1
FROM AM LOOPSTICK (HIGH)



REFER TO COMPONENT LABEL 019-1107-073/B
100-1330-029, 033 & 034 HAVE MECHANICAL DIFFERENCES. VARIOUS PULLEY DRUMS USED.

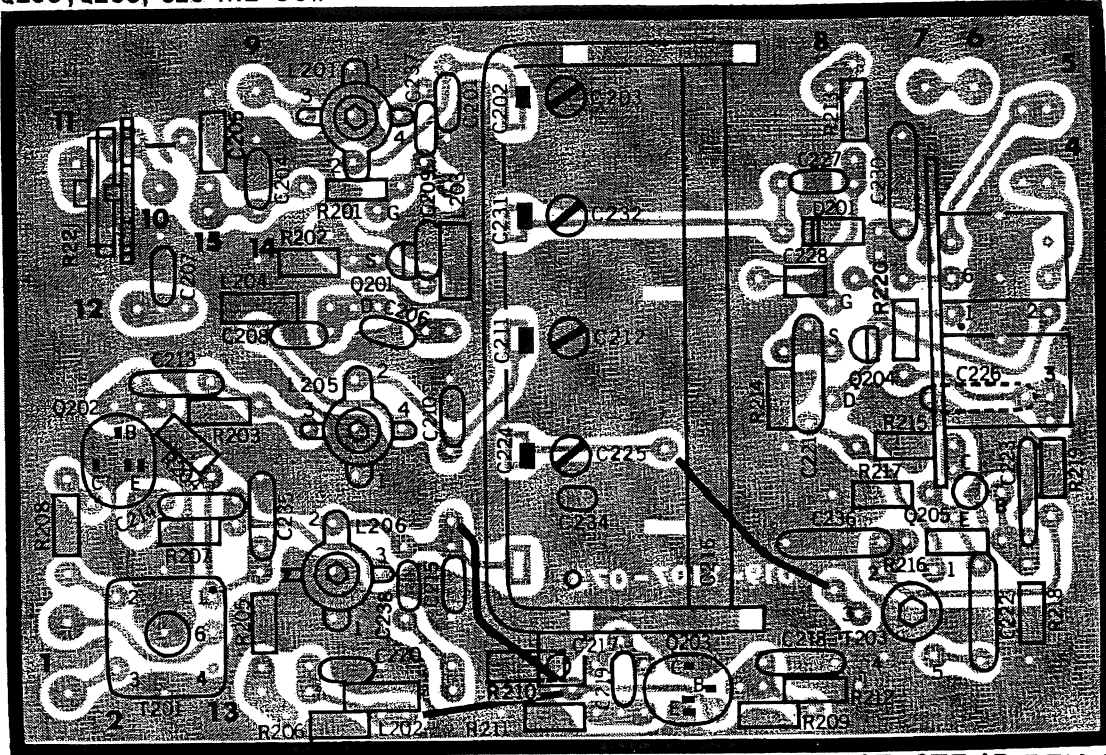
APPROVED FOR PRODUCTION

DATE 5-11-71	H.H. SCOTT, INC. MAYNARD, MASS.
DRAF. <i>fm</i>	
CH.	AM/FM FRONT END
ENG. <i>CHR. 12/9/71</i>	SCALE: —
PROD.	SHEET 1 OF 2
	DWG. SET 100-1330-029
	100-1330-033
	100-1330-034
	REV 3

Q201; 020-1112-008
 Q204; 020-1112-006
 Q202; 020-1112-004
 Q203, Q205; 020-1112-001.

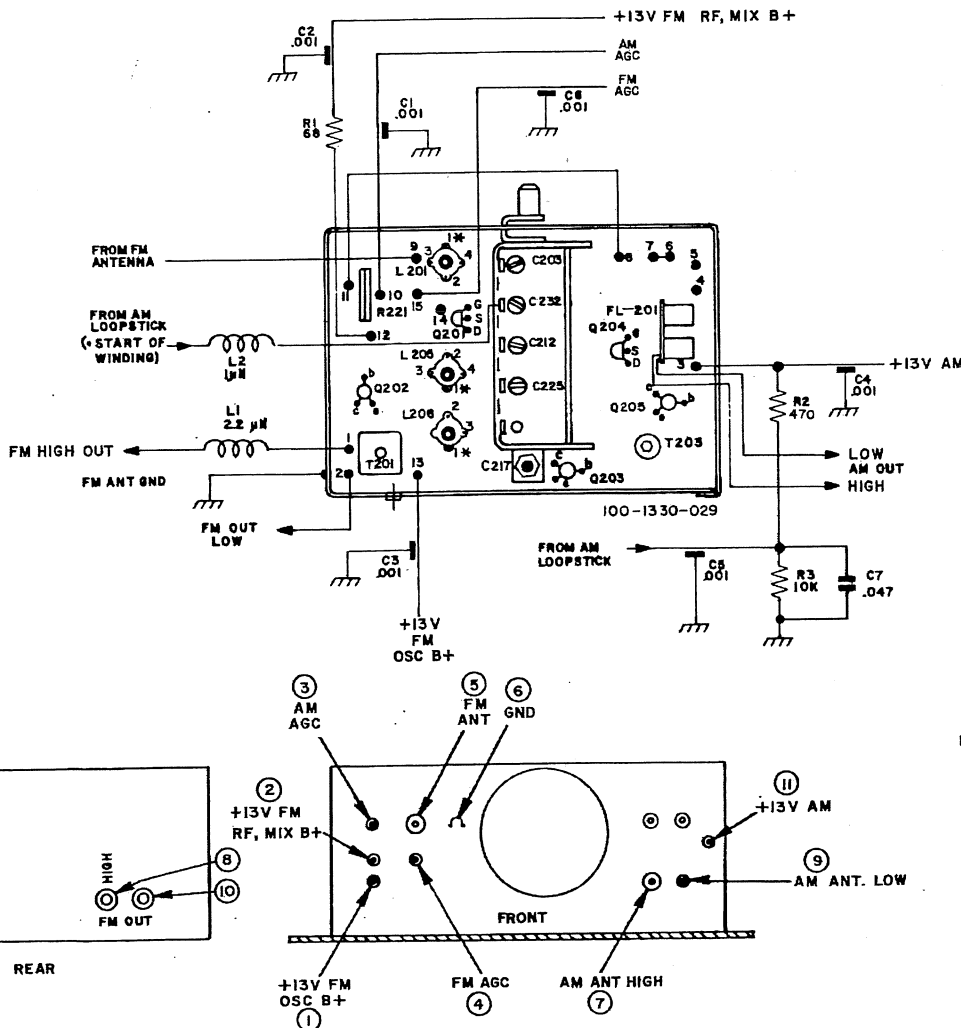
100-1330-034
 100-1330-033
 100-1330-029

CIRCUIT DIAGRAM 100-1330-016



AM/FM FRONT END

019-1107-073/B REV. 5



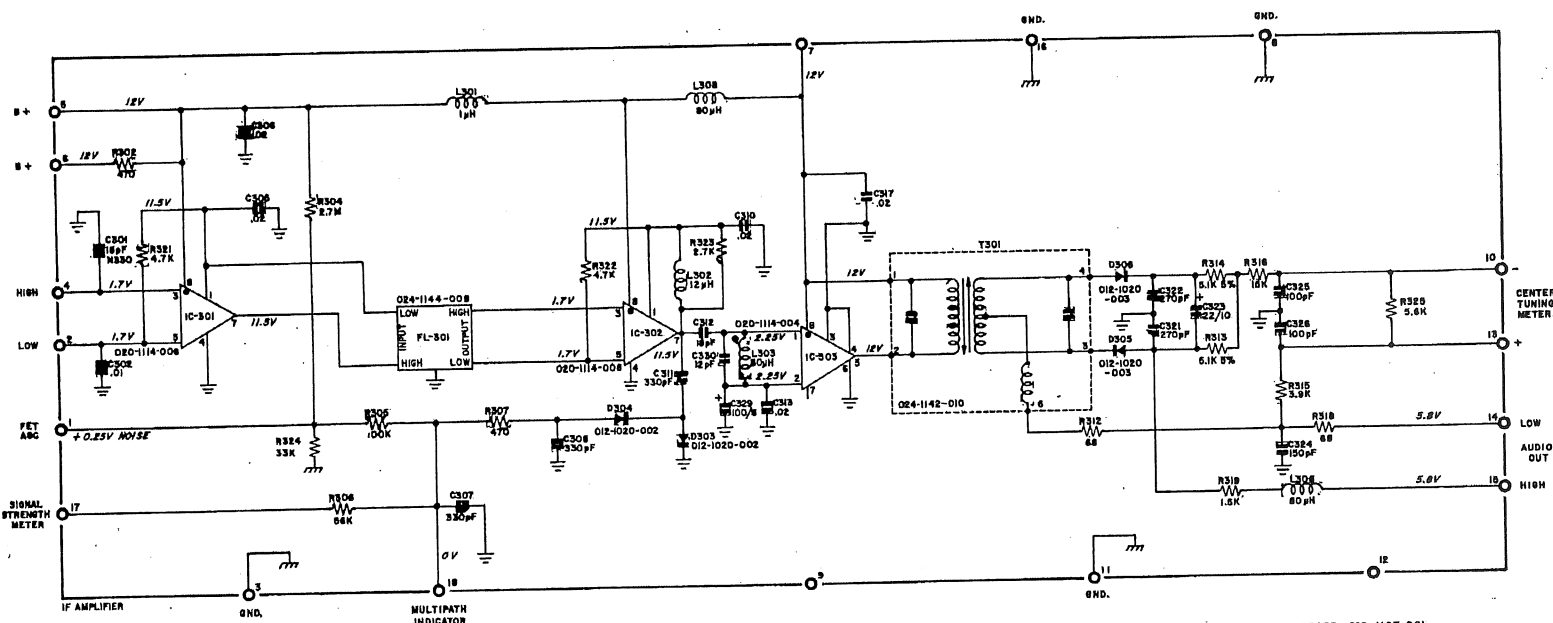
NOTES:

1. UNLESS OTHERWISE SPECIFIED:
 RESISTANCE IN OHMS 10%
 RESISTORS 1/4 WATT.
 CAPACITANCE IN MFD'S
2. ARROWS INDICATE MAIN SIGNAL PATH
3. TRIMMERS: C 203 — FM ANT. }
 C 232 — AM ANT. } HIGH ADJ.
 C 212 — FM MIX. }
 C 225 — AM OSC. }
 C 217 — FM OSC. }
- COILS: L 201 — FM RF. }
 L 205 — FM MIX. } LOW ADJ.
 L 206 — FM OSC. }
- TRANSFORMERS:
 T 201 — FM I.F.
 T 203 — AM
- FILTERS: FL 201 — AM
- TRANSISTORS:
 Q 201 — FM, RF AMP
 Q 202 — FM MIX.
 Q 203 — FM OSC.
 Q 204 — AM, RF AMP/MIX.
 Q 205 — AM OSC.
- POTENTIOMETER:
 R 221 — AGC ADJ
- * INDICATES BOTTOM OF WIND
 HIGHEST SERIES NUMBERS
 C 7
 R 3
 L 2

REFER TO COMPONENT LABEL 019-1107-073/B

CIRCUIT OF 020-1114-008 TO BE PRINTED IN THIS AREA WHEN IF CIRCUIT APPEARS IN THE SERVICE MANUAL SEE 020-1114-008.

CIRCUIT OF 020-1114-004 TO BE PRINTED IN THIS AREA WHEN IF CIRCUIT APPEARS IN THE SERVICE MANUAL SEE 020-1114-004.



PC BOARD 018-1107-061

- NOTES:
1. UNLESS OTHERWISE SPECIFIED; RESISTANCE IN OHMS $\pm 10\%$ 1/4 WATT, AND CAPACITANCE IN MFD'S.
 2. HIGHEST SERIES IC304, FL301, T301, L308, C330, R325, D307.
 3. DOT ON POTENTIOMETER INDICATES EXTREME CW POSITION VIEWED FROM KNOB END.
 4. COMPONENTS DELETED: R301, R303, R308, R309, R310, R311, R317, R320, C303, C304, C309, C314, C315, C316, C318, C319, C320, C327, C328, D301, D302, D307, L304, L308

CIRCUIT OF 6-POLE FILTER TO BE PRINTED IN THIS AREA WHEN IF CIRCUIT APPEARS IN THE SERVICE MANUAL SEE 024-1144-008.

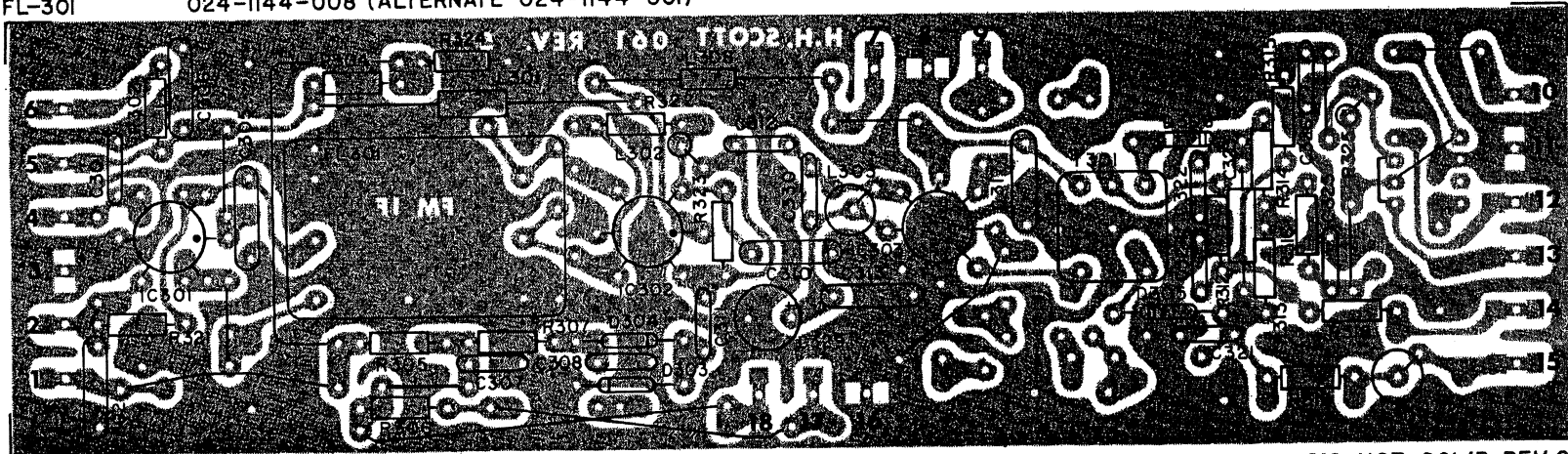
6 POLE SINGLE FILTER IF AMPLIFIER
 REFER TO COMPONENT LABEL 018-1107-061/B
 FOR USE WITH 018-1107-061 REV.4 BOARD AND OVER.

H.H. SCOTT, INC. MAYNARD, MASS.	
REV. 5	DATE 10-1-68
BY: [Signature]	CHKD: [Signature]
100-1331-022	11/0
PAGE 1 OF 1	

IC-301 μ A703 020-1114-008
IC-302 μ A703 020-1114-008
IC-303 μ A719 020-1114-004

FL-301 024-1144-008 (ALTERNATE 024-1144-001)

CIRCUIT DIAGRAM 100-1331-022



H.H.S. SINGLE FILTER IF AMP.

019-1107-061/B REV.0

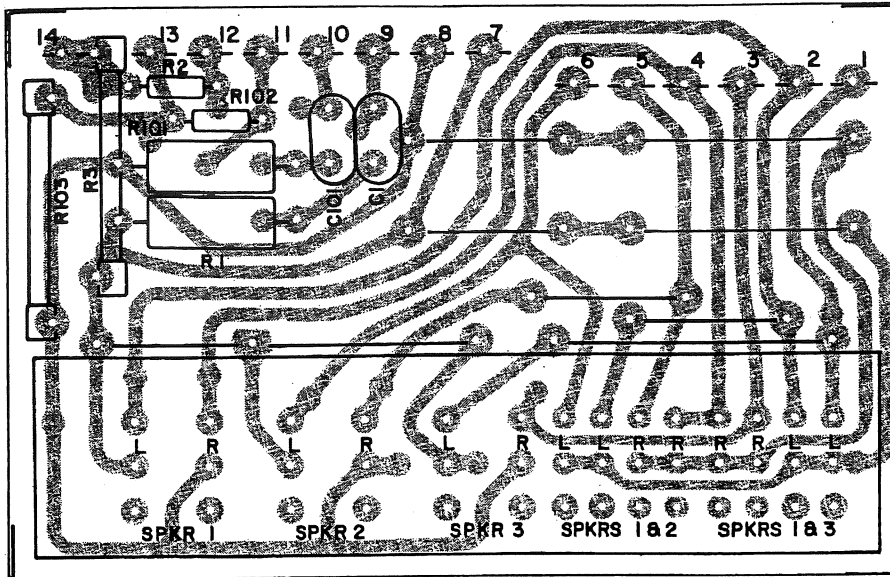
477 Main PARTS LIST

PART NUMBER	DESCRIPTION	PART NUMBER	DESCRIPTION
011-1004-024	Capacitor, Electrolytic, Can 10,000/50v	031-1197-027	Dial Cord
012-1022-002	Diode, Stabistor	031-1198-019	Pointer
013-1031-017	Fuse	100-1330-029	Assy., Front End
013-1032-004	Circuit Breaker 5A	100-1331-022	Assy, IF Strip, FM
015-1061-005	Jack, Phone, Stereo	100-1331-023	Assy, IF Strip, AM
015-1061-008	Jack, Phone, Minature	100-1332-009	Assy, MPX
017-1095-019	Meter, Single Strength	100-1333-019	Assy, Pre Amp
017-1095-020	Meter, Center Tune	100-1334-008	Assy, Tone Control
018-1105-089	Dial	100-1335-009	Assy, Driver Board
020-1111-023	Transistor, Power NPN	100-1340-012	Assy, Regulator Board
020-1111-024	Transistor, Power PNP	100-1340-019	Assy, Refulator, Lamp Supply
020-1111-030	Transistor, Power NPN	100-1348-002	Assy, Balum
020-1111-031	Transistor, Power PNP	100-1352-004	Assy, Switch
023-1135-016	Switch, Slide, Power	100-1352-005	Assy, Switch, spkr.
023-1137-052	Switch, Rotary	018-1100-088	Knob, Tuning
024-1140-036	Transformer, Power	018-1100-089	Knob, Single
026-1150-026	Audio Cable Set	018-1100-090	Knob, Rear
030-1189-008	Lamp, Dial	018-1100-091	Knob, Front
030-1189-013	Lamp, 28v	013-1031-017	Fuse, Slo Blo, 5A
030-1192-004	Holder, Fuse Push Type	035-1275-002	FM Antenna
		026-1152-004	Line Cord

NOTE- THIS PARTS LIST CONTAINS ONLY THOSE NON-STANDARD ITEMS WHICH MUST BE ORDERED FROM THE FACTORY.

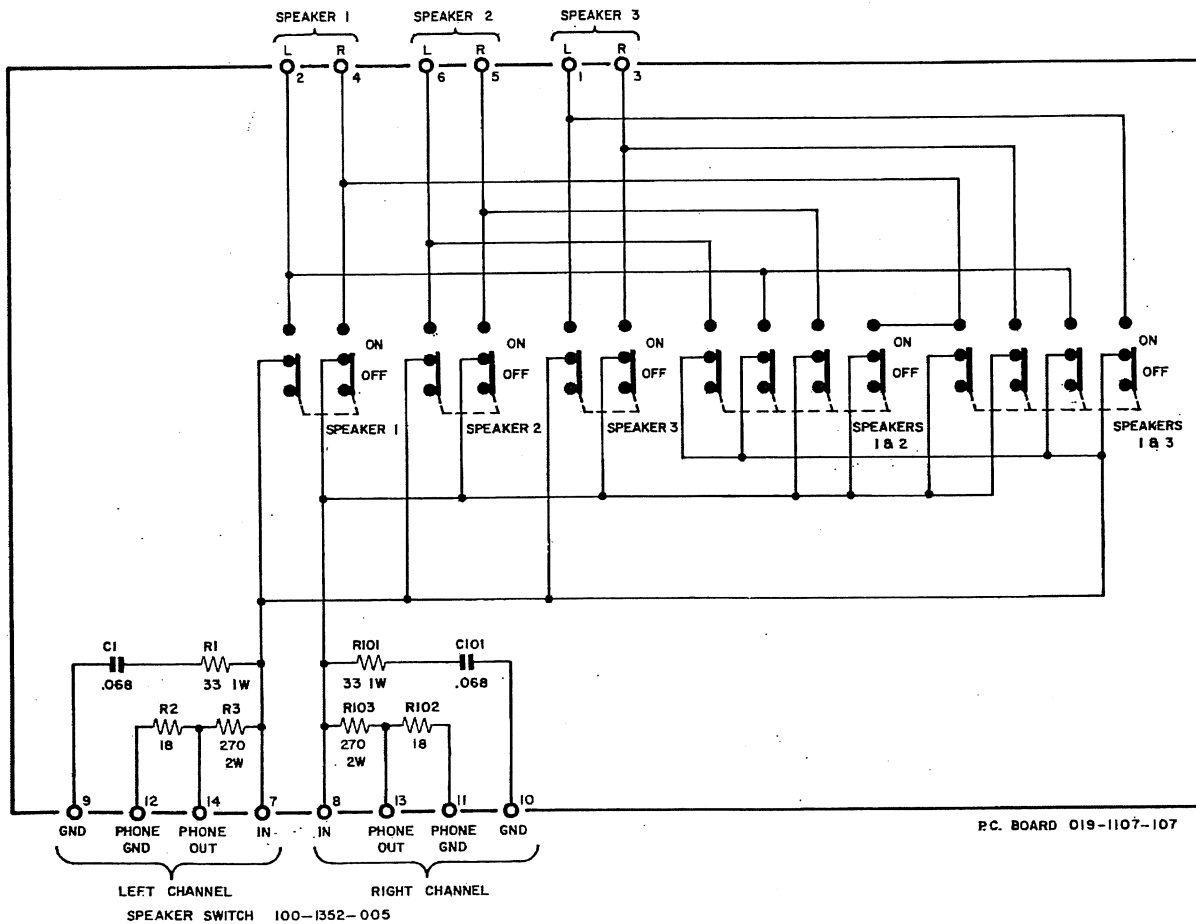
H. H. SCOTT, INC.
PARTS DEPARTMENT
111 POWDERMILL ROAD
MAYNARD, MA 01754

CIRCUIT DIAGRAM 100-1352-005



H.H.S. SPEAKER SWITCH BOARD

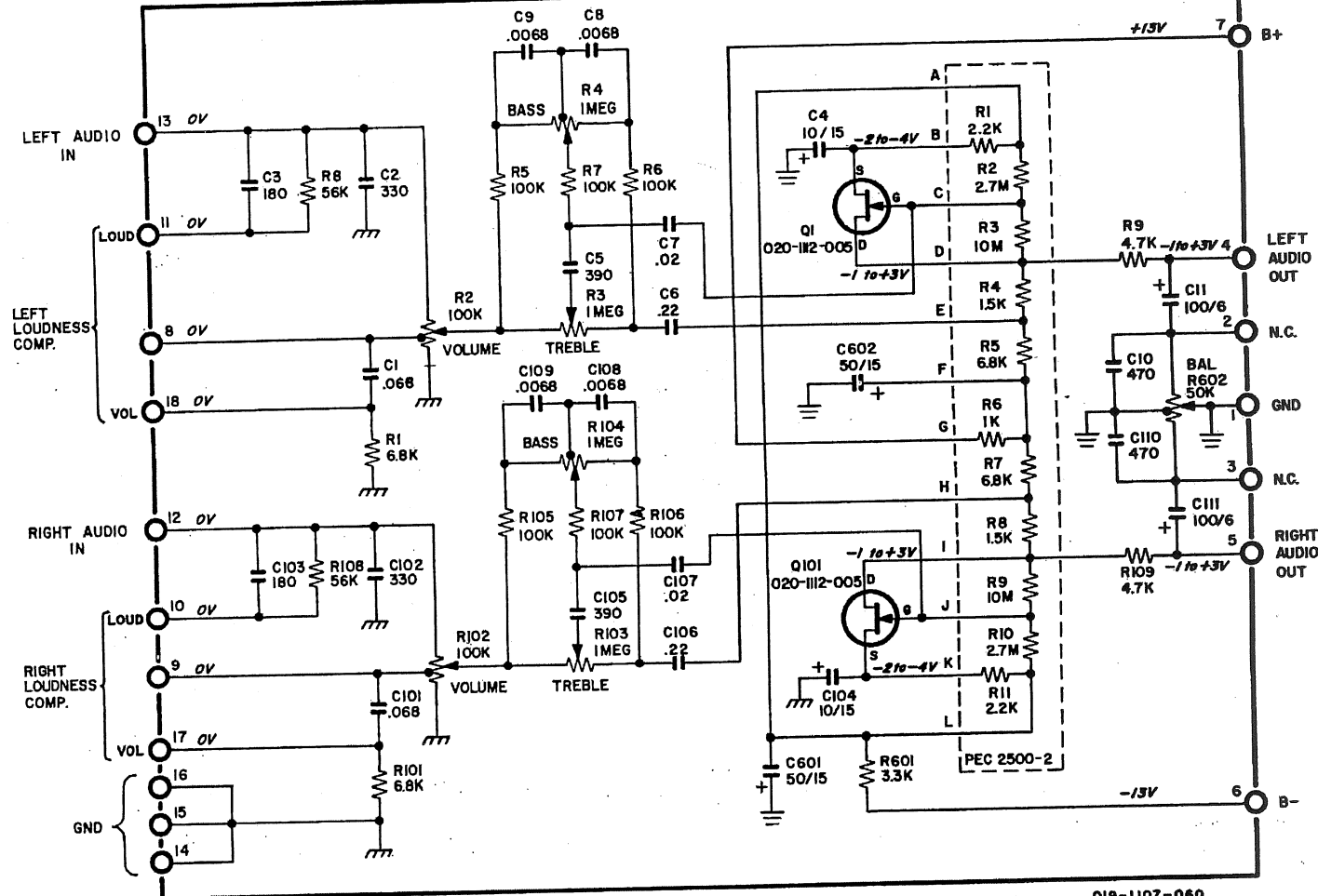
019-1107-109A REV 0



P.C. BOARD 019-1107-107

LEFT CHANNEL
RIGHT CHANNEL
SPEAKER SWITCH 100-1352-005

REVISIONS			
SYM	DESCRIPTION	DATE	APP.
1	ECO 3668	8-17-71	242
2	ECO	8-26-72	



TONE CONTROL AND LOUDNESS

019-1107-060

- NOTES:
1. UNLESS OTHERWISE SPECIFIED: RESISTANCE IN OHMS $\pm 10\%$ 1/4 WATT, AND CAPACITANCE IN MFD'S.
 2. THE VOLUME CONTROL IS MECHANICALLY GANGED. THE BASS AND TREBLE CONTROLS ARE MECHANICALLY CLUTCHED.
 3. HIGHEST SERIES NO'S ARE: R9, R109, R602, C11, C111, C602, Q1, Q101.
 4. WHEN TONE CONTROLS ARE IN FLAT POSITION, THE OVERALL VOLTAGE GAIN OF THIS CIRCUIT IS APPROXIMATELY UNITY. (0db)
 5. 100-1334-007 USES LOUDNESS POT. 021-1125-063 & "B" TYPE CONN. 030-1181-023
 100-1334-008 USES LOUDNESS POT. 021-1125-038 & "A" TYPE CONN. 030-1181-020
 100-1334-015 USES LOUDNESS POT. 021-1125-095 & "B" TYPE CONN. 030-1181-023

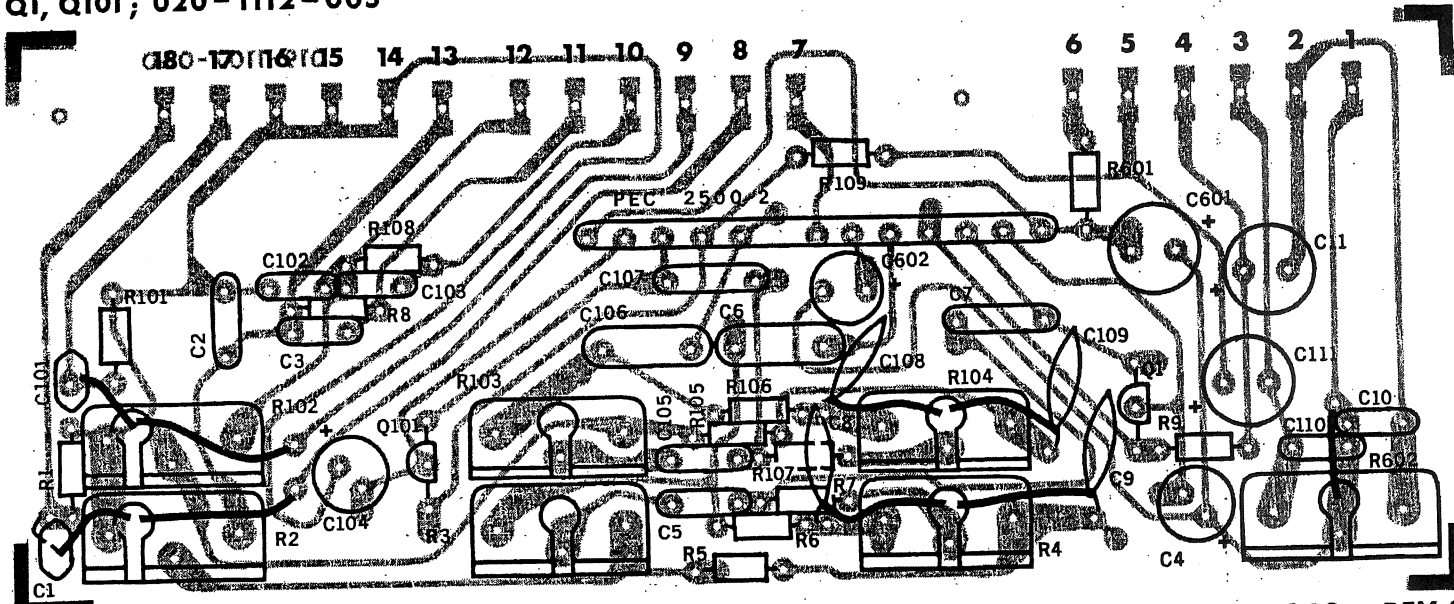
TONE CONTROL

H.H. SCOTT, INC.
MAYNARD, MASS.

SIZE C	DWG. NO.	100-1334-007 100-1334-008 100-1334-015	REV 2
ENG. <i>BYR</i>		SHEET 1 of 1	DATE 5-5-70

Q1, Q101; 020-1112-005

100-1334-008
100-1334-007
100-1334-004
CIRCUIT DIAGRAM

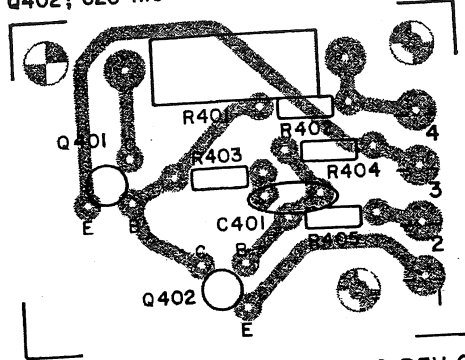


TONE CONTROL & LOUDNESS

019-1107-060 REV.2

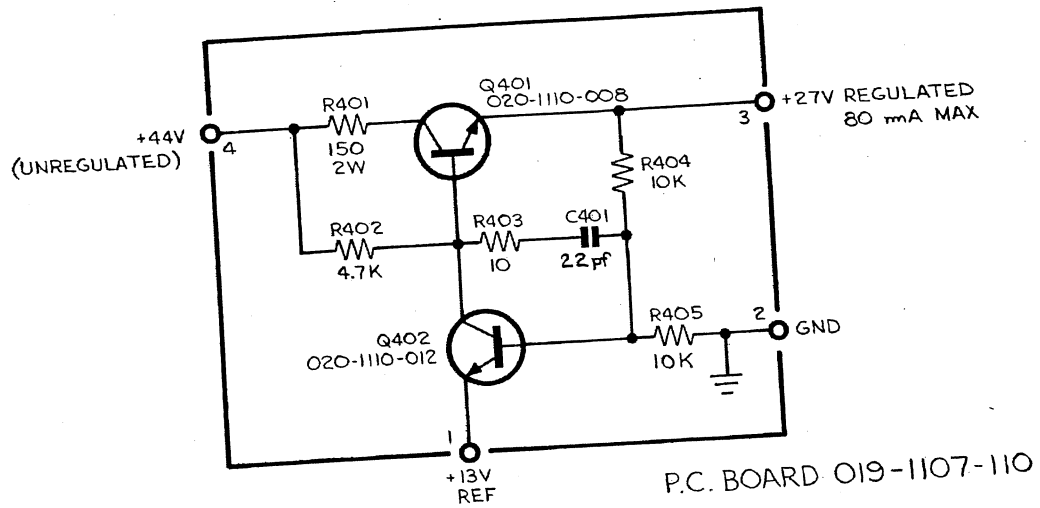
Q401; 020-1110-008
 Q402; 020-1110-012

CIRCUIT DIAGRAM
 100-1340-019



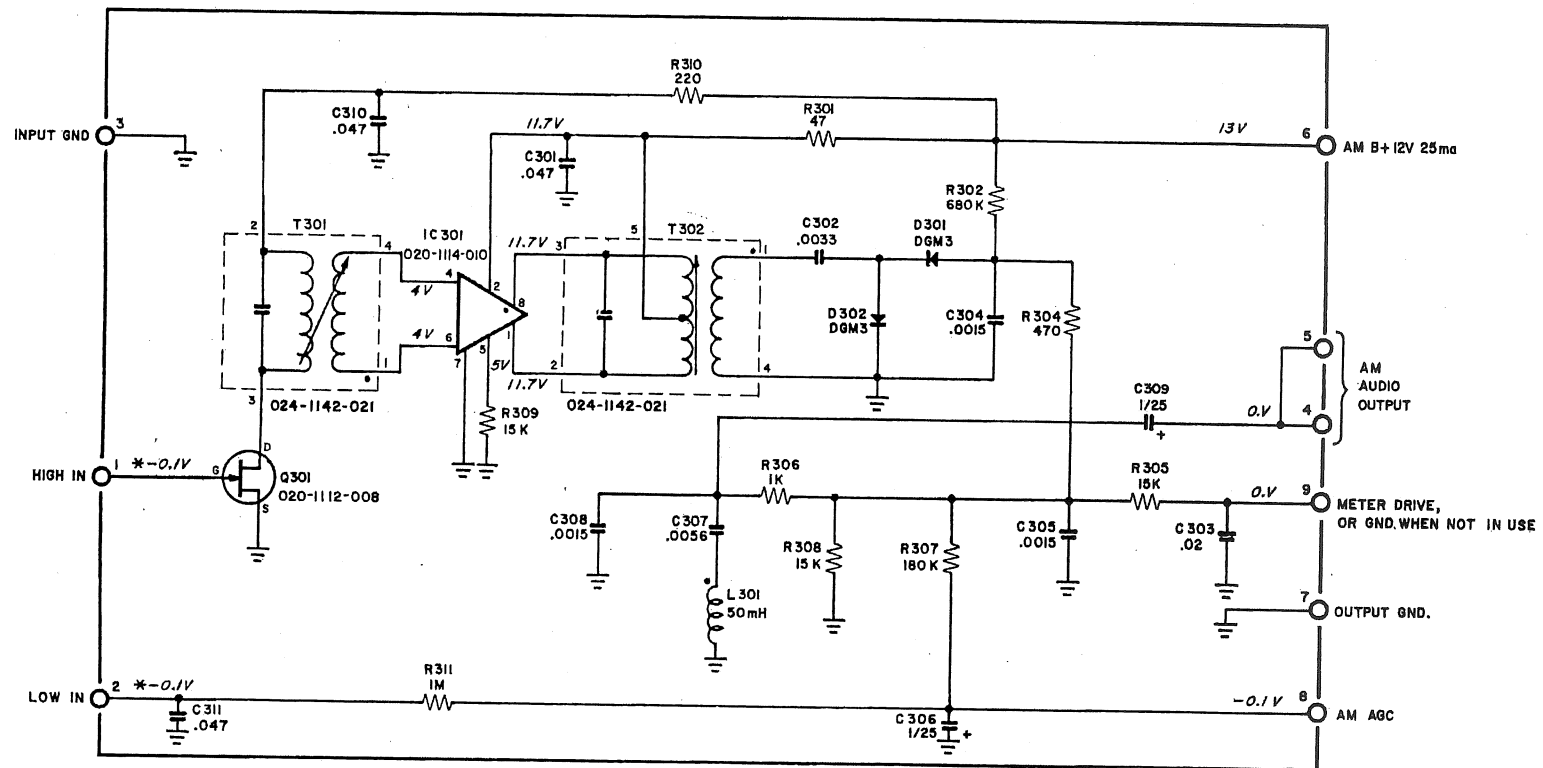
H.H.S
 REGULATOR, LAMP SUPPLY

019-1107-110 REV. 0



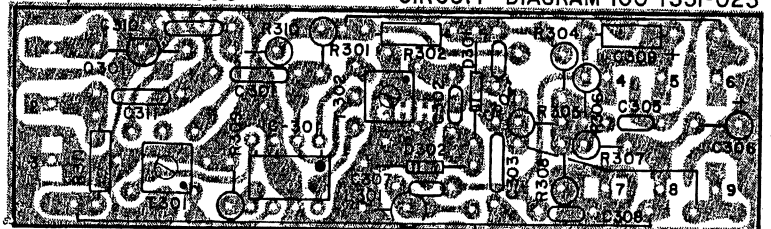
P.C. BOARD 019-1107-110

REVISIONS			
SYA	DESCRIPTION	DATE	APP.
1	ECO 3922	1-27-72	LAL



019-1107-076

IC301; 020-1114-010
 Q301; 020-1112-008
 CIRCUIT DIAGRAM 100-1331-023



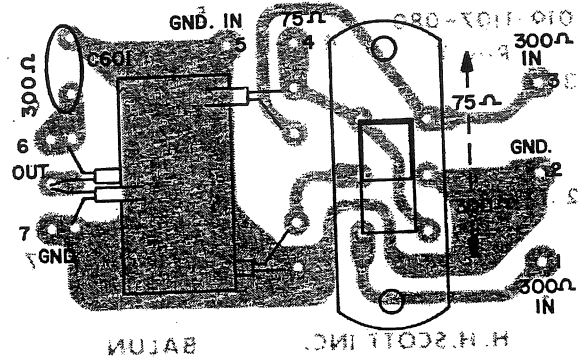
H.S. AM IF
 019-1107-076/A REV. 0

- NOTES:
1. UNLESS OTHERWISE SPECIFIED; RESISTANCE IN OHMS $\pm 10\%$ 1/4 WATT, AND CAPACITANCE IN MFD'S
 2. IC 301 IS 020-1114-010, T301 AND T302 ARE 016-1093-024, Q301 IS 020-1112-008
 3. HIGHEST SERIES NUMBERS, C311, R311, L301, IC 301, T302, Q301, D302.
 4. GREEN DOT ON TOP OF TRANSFORMER OR COIL CAN INDICATES PIN NO. 1.
 5. DOT ON TOP OR TIP ON SIDE OF IC INDICATES PIN NO. 8.
 6. * HIGH-INPUT IMPEDANCE METER ONLY (10 M Ω OR HIGHER).
 7. DOT ON CHOKE INDICATES START OF WINDING.
 8. COMPONENTS DELETED; R303

REFER TO COMPONENT LABEL 019-1107-076/A

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES		BANK 9/1/71		APPROVED FOR PRODUCTION		H.H. SCOTT, INC. MAYNARD, MASS.	
TOLERANCES ON FRACTIONS: $\frac{1}{32}$ DECIMALS: .005 ANGLES: $\frac{1}{2}^\circ$		DRAFT: <i>Fin</i>	APPROVED ONLY FOR	PILOT	<i>LML 9/1/71</i>	AM IF STRIP	
		CH.	FOR	SAMPLE	<i>AM 4/1/71</i>	SIZE	REV
		ENG.		QUOTE	<i>AM 4/1/71</i>	DWG. NO.	1
		MATERIAL:				100-1331-023	
		FINISH:				SCALE:	
						SHEET 1 OF 1	DATE 5-6-71

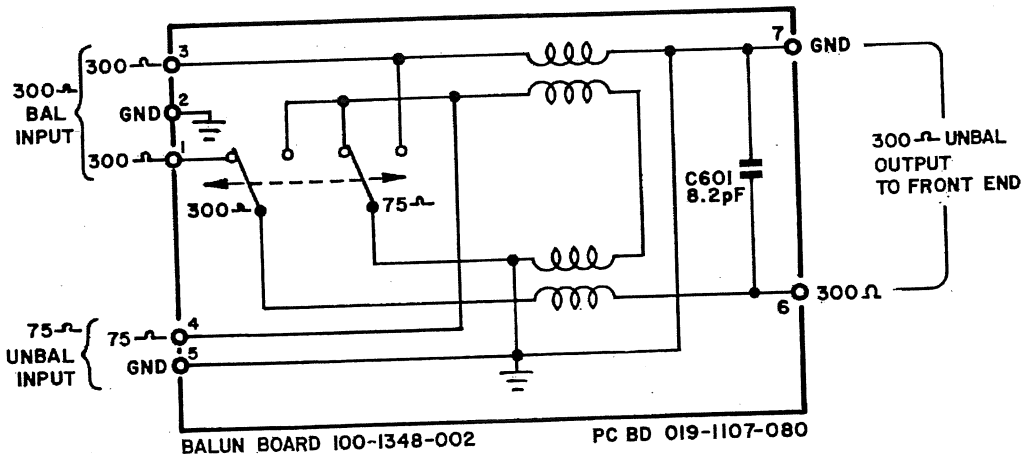
CIRCUIT DIAGRAM 100-1348-002



BALUN

019-1107-080 Rev. 1

REVISIONS			
SYM	DESCRIPTION	DATE	APPR.
1	ECO 3530	11-25-70	LMC



BALUN BOARD 100-1348-002

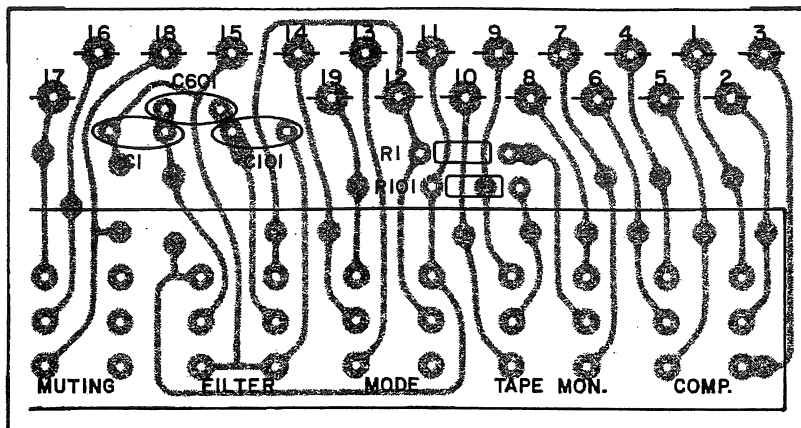
PC BD 019-1107-080

H.H. SCOTT, INC.
MAYNARD, MASS.

BALUN BOARD

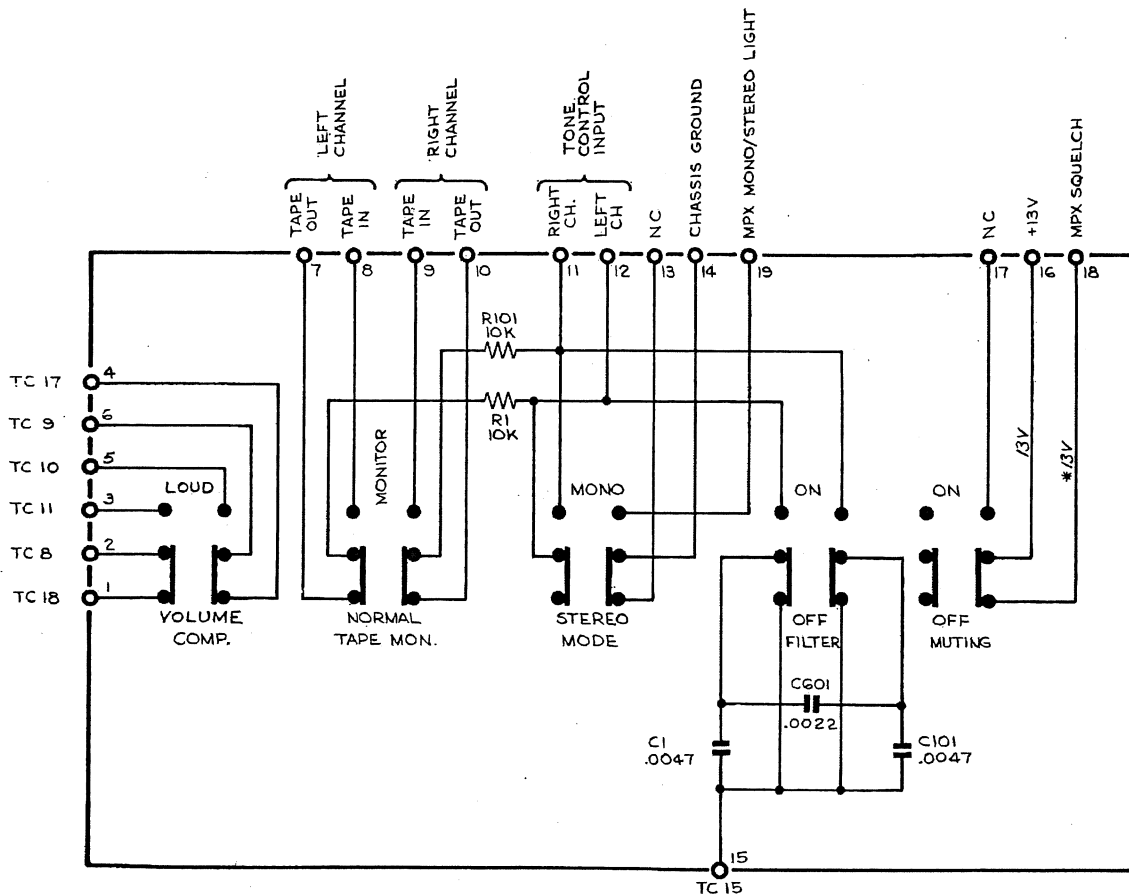
SIZE A	DWG. NO. 100-1348-002	REV. 1
ENG. DR	SHEET 1 OF 1	DATE 5/8/69

CIRCUIT DIAGRAM 100-1352-



H.H.S. SWITCH BOARD

O19-1107-108 REV. A

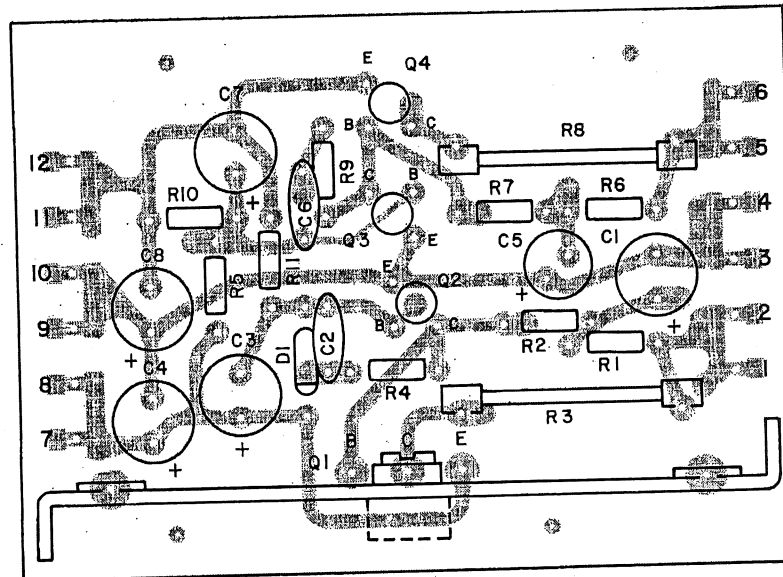


SWITCH BOARD 100-1352-004

P.C. BOARD 019-1107-116

Q4 020-1110-004
Q3 020-1110-005
Q2 020-1110-013
Q1 020-1111-005

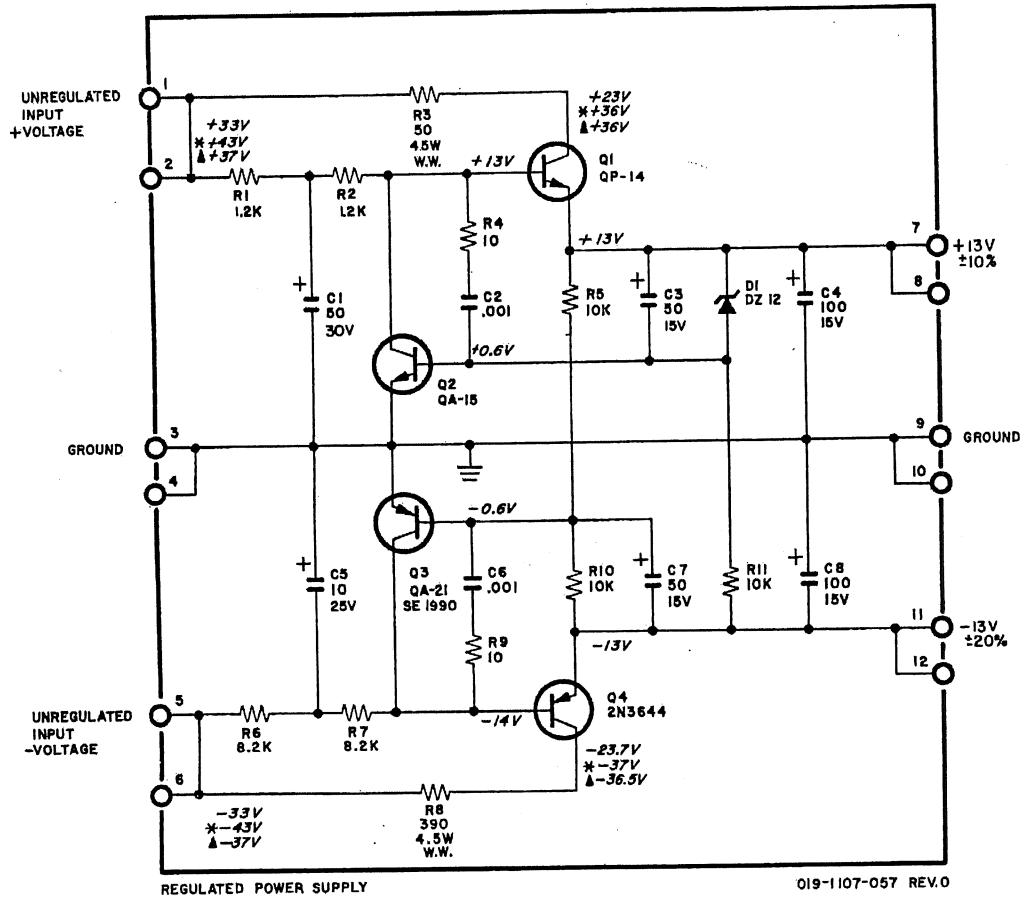
CIRCUIT DIAGRAM 100-1340-012



H.H.S. POWER SUPPLY

019-1107-057 REV.2

REVISIONS			
SYM	DESCRIPTION	DATE	APP.
1	ECO 3040	10-11-69	277
2	ECO 3366	11-5-70	276
3	ECO 3699	6-14-71	275



REGULATED POWER SUPPLY

019-1107-057 REV.0

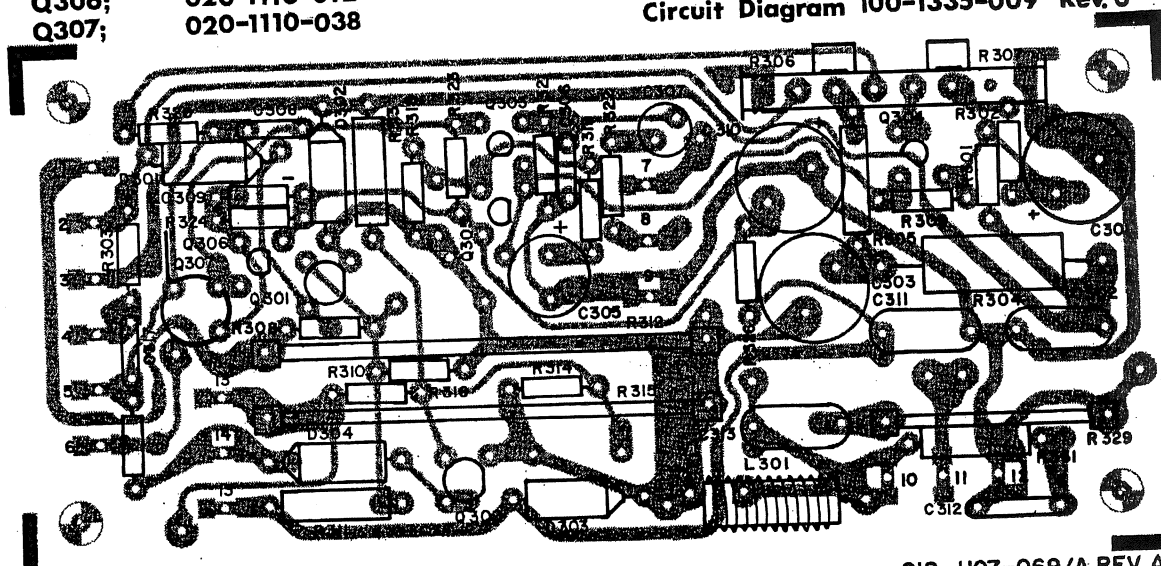
NOTES:

- UNLESS OTHERWISE SPECIFIED: ALL RESISTANCE IN OHMS $\pm 10\%$, CAPACITANCE IN MFD'S, RESISTORS 1/4 WATT, AND VOLTS ARE D.C. $\pm 15\%$ MEASURED WITH 20K Ω /VOLT V.O.M.
- HIGHEST SERIES NUMBERS: R11, C8, D1, Q4
- UNREGULATED INPUT VOLTAGE RANGE $\pm(25V$ TO $44V)$
- * INDICATES THE ONLY VOLTAGES WHICH CHANGE WITH 43V INPUT, (387).
- Δ INDICATES THE ONLY VOLTAGES WHICH CHANGE WITH 37V INPUT, (499).

H.H. SCOTT, INC. MAYNARD, MASS.			
REGULATED POWER SUPPLY			
SIZE	DWG. NO.	REV.	
C	100-1340-012	3	
REV.:	SHEET 1 OF 1	DATE:	10-29-68

Q301; 020-1110-014
Q302; 020-1110-004
Q303,Q305; 020-1110-027
Q304; 020-1110-028
Q306; 020-1110-012
Q307; 020-1110-038

Circuit Diagram 100-1335-009 Rev. 0



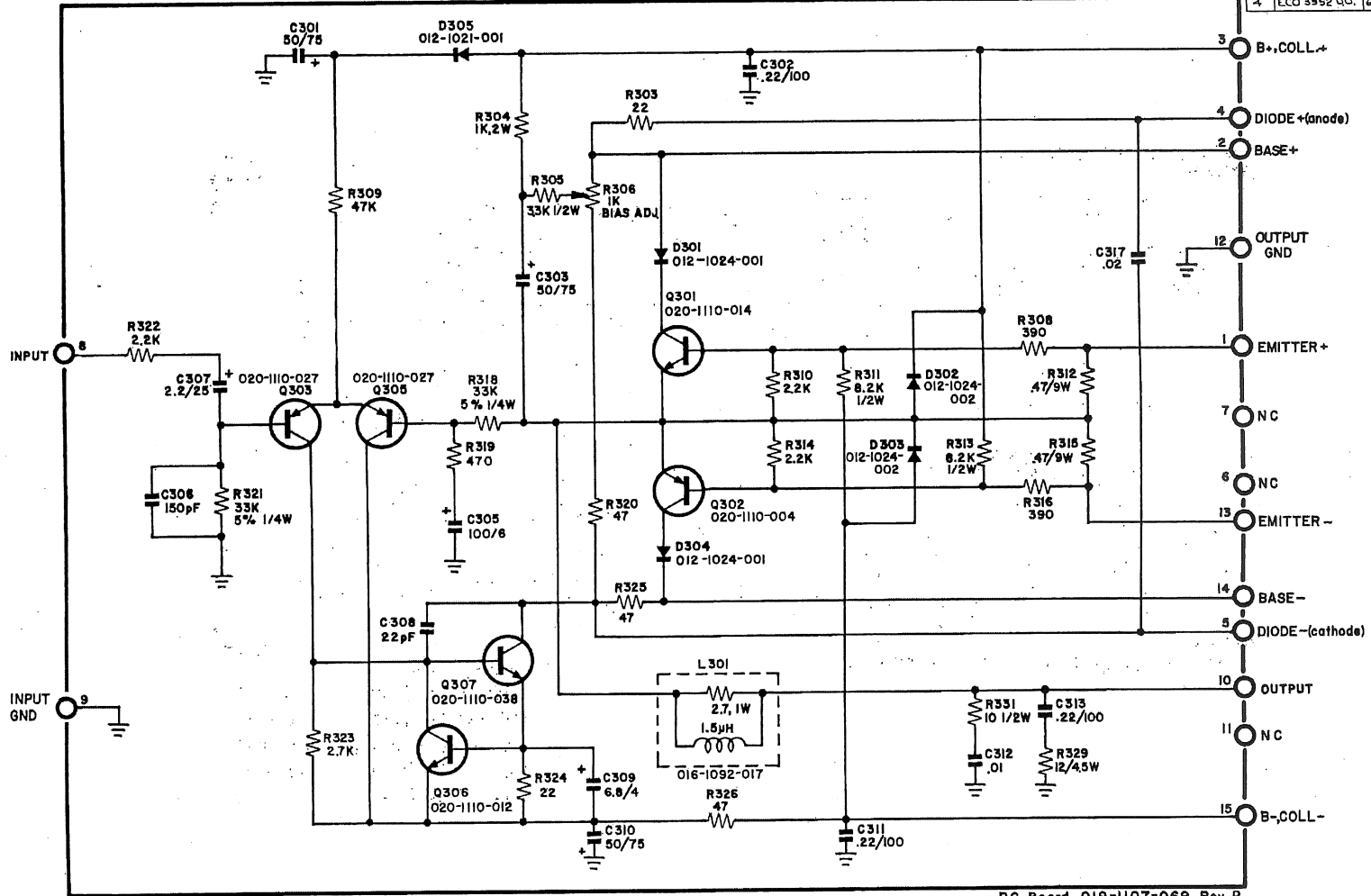
H.H.S. DRIVER

019-1107-069/A REV. A

1 2 3 4 5 6 7 8 9 10

H
G
F
E
D
C
B
A

REVISIONS			
BY	DESCRIPTION	DATE	APP.
A	ECO 3736	7-14-71	JHR
B	ECO 3784	8-30-71	JHR
1	ECO 3851	12-17-71	JHR
2	ECO 3875	12-20-71	JHR
3	ECO 3890	1-19-72	JHR
4	ECO 3952	6-12-72	JHR



DRIVER 100-1335-009

P.C. Board 019-1107-069 Rev. B

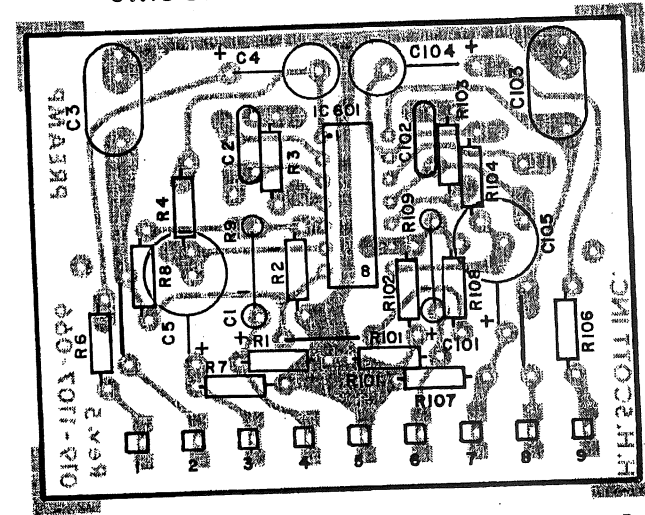
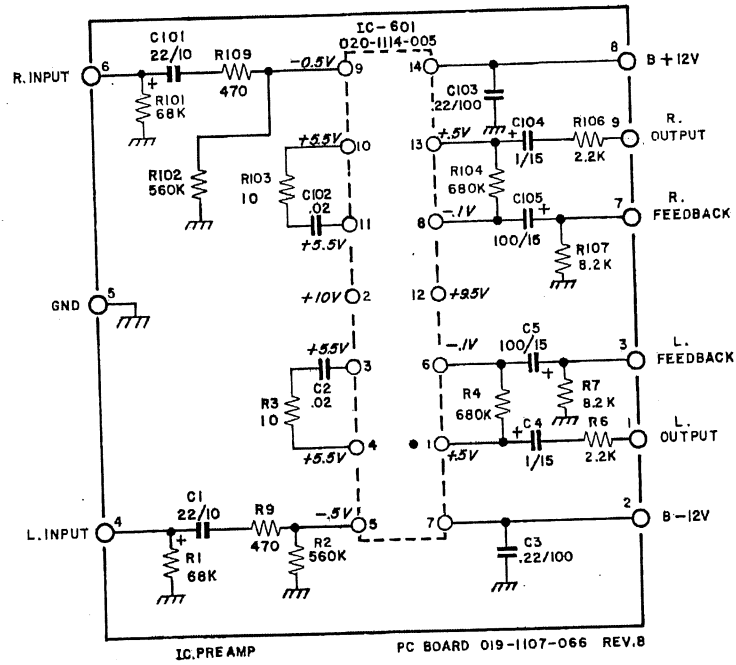
REFER TO COMPONENT LABEL 019-1107-069/A

- NOTES:
- UNLESS OTHERWISE SPECIFIED RESISTANCE IN OHMS 10% 1/4WATT, AND CAPACITANCE IN MFD'S
 - HIGH SERIES NUMBER Q307, L301, R332, C317, D305
 - COMPONENT NUMBERS DELETED: R317, R327, R328, R332, C304, C314, C315, C316, R330, R302, R307, Q304.

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES		APPROVED FOR PRODUCTION		H.H. SCOTT, INC. MAYNARD, MASS.	
DRAFT: JA	CH. BFI	APPROVED ONLY FOR	PILOT	DRIVER-PROTECTOR	
ENG.	ENG.	FOR	SAMPLE	SIZE C	DWG. NO. 100-1335-009
PROD.	PROD.	QUOTE	QUOTE	SCALE: —	REV. 4
MATERIAL:	FINISH:			SHEET 1 of 1	DATE 12-10-69

REVISIONS			
SYM	DESCRIPTION	DATE	APP
1	ECO 3177	1-7-70	SG
2	ECO 3688 R	8-8-71	SG
3	ECO 3789 R	8-17-71	SG

CIRCUIT DIAGRAM 100-1333-019



PRE AMP

019-1107-066/A REV. 1

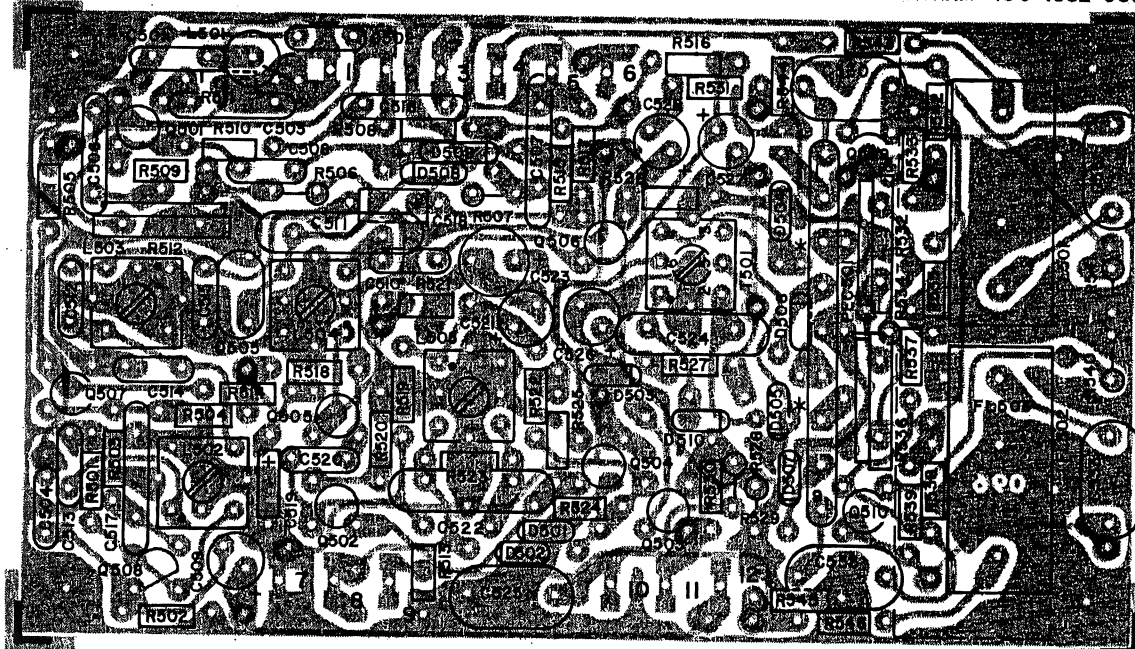
NOTES:

1. UNLESS OTHERWISE SPECIFIED, ALL RESISTANCE IN OHMS, $\pm 10\%$, 1/4 WATT, CAPACITANCE IN MICROFARADS.
2. HIGHEST SERIES NUMBERS ARE: R9, R10, C5, C105, IC-601.
3. CIRCLE MARK ON TOP OR INDENTATION ON LEG OF IC INDICATES PIN NC.1.
4. VOLTAGES SHOWN DO NOT APPLY TO 2506-07.
5. R5, R105, R8 AND R108 ARE DELETED.
6. REFER TO COMPONENT LABEL 019-1107-066/A
7. UNLESS OTHERWISE SPECIFIED ALL VOLTAGES ARE DC $\pm 15\%$ MEASURED WITH 20K \sim 1V V.O.M.

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES		SG <i>Elitio</i> APPROVED FOR PRODUCTION		H.H. SCOTT, INC. MAYNARD, MASS.	
DRAFT	J.A.	APPROVED ONLY FOR	PILOT		
CH.	B.F.E.		SAMPLE		
ENG.			QUOTE		
PROD.					
MATERIAL					
FINISH					
TOLERANCES ON FRACTIONS ON DECIMALS ON ANGLES ON			SIZE C	DWG NO 100 1333 019	REV 3
			SCALE	SHEET 1 OF 1	DATE 12/17/69

Q501, Q506, Q507; 020-1110-012
 Q502, Q505, Q509, Q510; 020-1110-013
 Q503; 020-1110-005
 Q504; 020-1110-014
 Q508; 020-1110-021

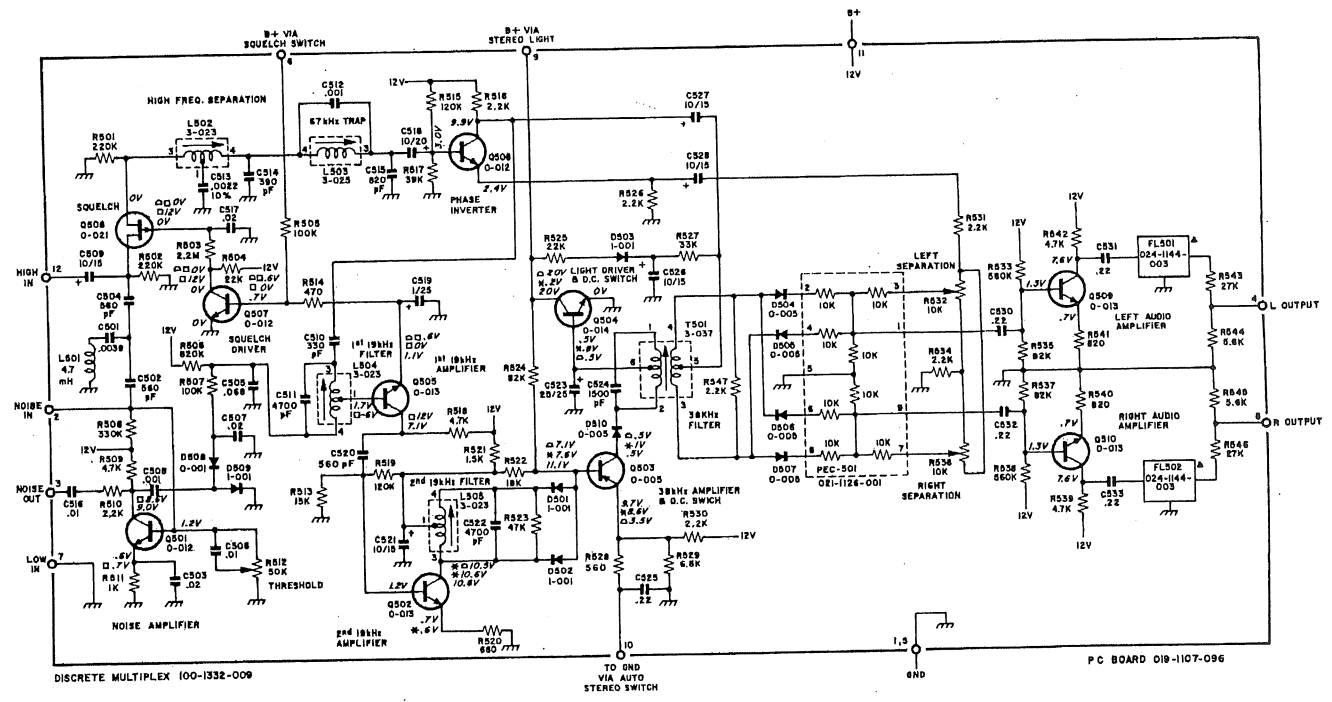
CIRCUIT DIAGRAM 100-1332-009



DISCRETE MULTIPLEX

019-1107-096 REV. 2

REV.	DESCRIPTION	DATE	APPR.
1	ECO 3888 INC 7-28-70		
2	ECO 3778 INC 8-31-71		
3	ECO 3848 INC 11-30-71		



- NOTES:
- UNLESS OTHERWISE SPECIFIED, RESISTANCE IN OHMS $\pm 10\%$ 1/4 WATT, CAPACITANCE IN MFD'S.
 - ALL D.C. VOLTAGES ($\pm 1\%$) MEASURED WITH RESPECT TO CHASSIS GROUND, USING V.T.V.M. AT 117VAC LINE, AND FM MONO SIGNAL FED INTO THE DEMODULATOR. SQUELCH AND AUTO-STEREO SWITCHES OPEN.
 - * FM STEREO SIGNAL FED TO DEMODULATOR.
 - OFF-STATION NOISE FED TO DEMODULATOR.
 - SQUELCH AND AUTO-STEREO SWITCHES OPEN.
 - A 024-1144-007 FILTER (FL503) MAY BE SUBSTITUTED FOR THE TWO 024-1144-003 FILTERS (FL-501, FL-502).
 - ALL L, T, D, AND Q NUMBERS ARE SHOWN BY THE LAST FOUR NUMBERS OF THEIR TEN DIGIT PART NUMBER. PREFIX FOR EACH AS FOLLOWS: L&T ARE 016-1093-..., D IS 012-1021-..., Q IS 020-1110-....
 - HIGHEST SERIES NUMBERS ARE: R547, C534, D510, 0510, L506, T501, FL502, PEC-501
 - COMPONENT NUMBERS DELETED: C529, C534
 - R547 TO BE SOLDERED TO BOTTOM SIDE OF BOARD BETWEEN PIN 3 AND PIN 4 OF T501 AS INDICATED.

CIRCUIT OF 024-1144-003 TO BE PRINTED IN THIS AREA WHEN MULTIPLEX CIRCUIT APPEARS IN THE SERVICE MANUAL SEE 024-1144-003

DESIGNED BY	DATE APPROVED FOR PRODUCTION	H. H. SCOTT, INC. MAYNARD, MASS.
DRAWN BY T.F.M.	APPROVED BY	DISCRETE MULTIPLEX CIRCUIT
CHECKED BY	DATE 8-28-70	REV. D
SHEET 1 OF 1		100-1332-009