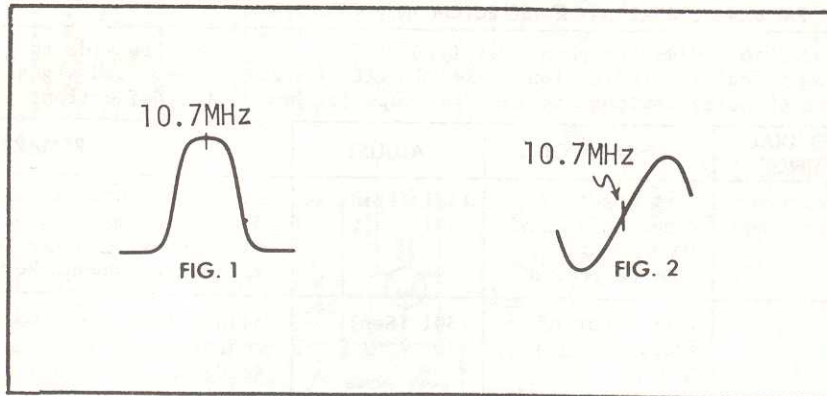


H. H. Scott 387B

NOTE: FOR REPLACEMENT PART NUMBERS, REFER TO SCHEMATICS



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.

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	T302, T301	Adjust for maximum. Repeat until no further improvement is noted.
600kHz	Tune to signal	"	T203	Adjust for maximum.
1640kHz	"	"	C232	Adjust for maximum.
1400kHz	"	"	C225	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 Jct L205 & R203 low side to ground.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
10.7MHz Unmodulated	Point of non- interference	DC probe of VTVM to Cathode D306, common to ground.	T301 (Pri), T201	Adjust for maximum.
"	"	DC probe of VTVM to Jct R312&R314 common to ground.	T301 (Sec)	Adjust for zero reading. A positive or-negative reading will be obtained on either side of correct setting.

ALIGNMENT INSTRUCTIONS (Continued)

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

High side of generator thru .001mfd to point Jct L205 & R203 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 Cathode D306, low side to ground.	T301 (Pri), T201	Disconnect stabilizing capacitor C323 Adjust for maximum gain and symmetry of response similar to Fig. 1 with markers as shown. Reconnect C323
"	"	Vert input of scope to Jct R312 & R318 low side to ground.	T301 (Sec)	Adjust T301 (Pri) to place marker center of S curve similar to Fig. 1 Readjust T301 (Sec) for maximum amplitude and straightness of line.

FM RF ALIGNMENT—SELECTOR IN FM POSITION

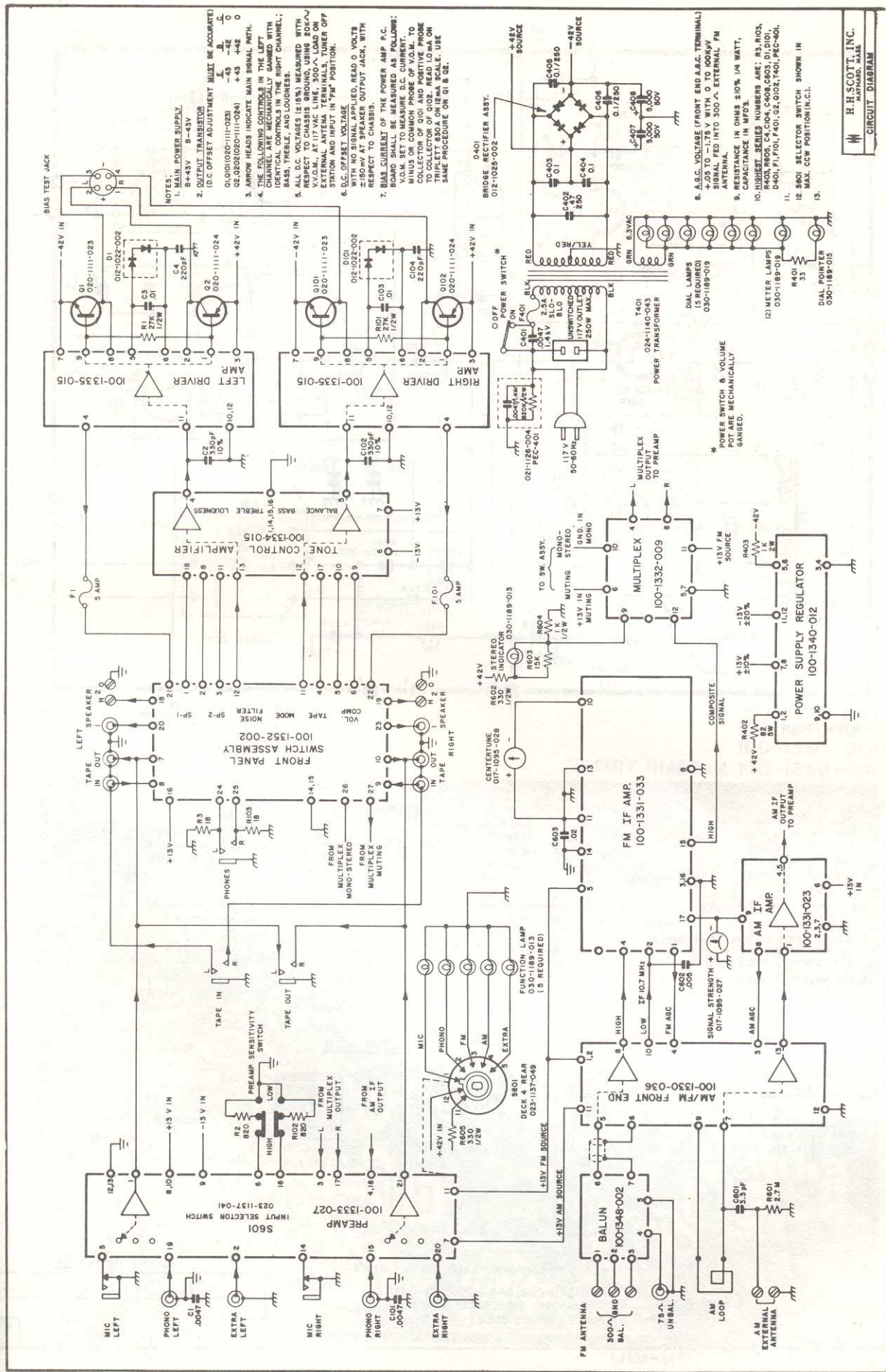
Connect generator across antenna terminals with 120-ohm carbon resistor in series with each lead. Adjustment of coils by bending should not be attempted unless the coil is deformed or replaced.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
88MHz Unmodulated	Low freq end	DC probe of VTVM to Cathode D306 common to ground.	L206,L205,L201	Adjust for maximum.
108MHz Unmodulated	Tune to signal	"	C217,C212,C203	Adjust for maximum. Repeat FM RF steps until no further improvement is noted.

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

High side of generator thru 47K to point Jct. R312 & R318 low side to ground.

GENERATOR FREQUENCY	INDICATOR	ADJUST	REMARKS
67kHz	Vert input of scope thru 47K to Base Q506, low side to ground.	L503	Adjust for MINIMUM.
19kHz	Vert input of scope thru 47K to Cathode D501 low side to ground.	L504,L505	Adjust for maximum.
19kHz	Vert input of scope thru 47K to Cathode D506 low side to ground.	T501	Adjust for maximum 38kHz response.
Modulated Left Channel	Vert input of scope to point R low side to ground.	R536	Adjust for MINIMUM. This step should require only slight adjustment.
Modulated Right Channel	Vert input of scope to point L low side to ground.	R532	Check for MINIMUM. If necessary, make compromise adjustment of R536

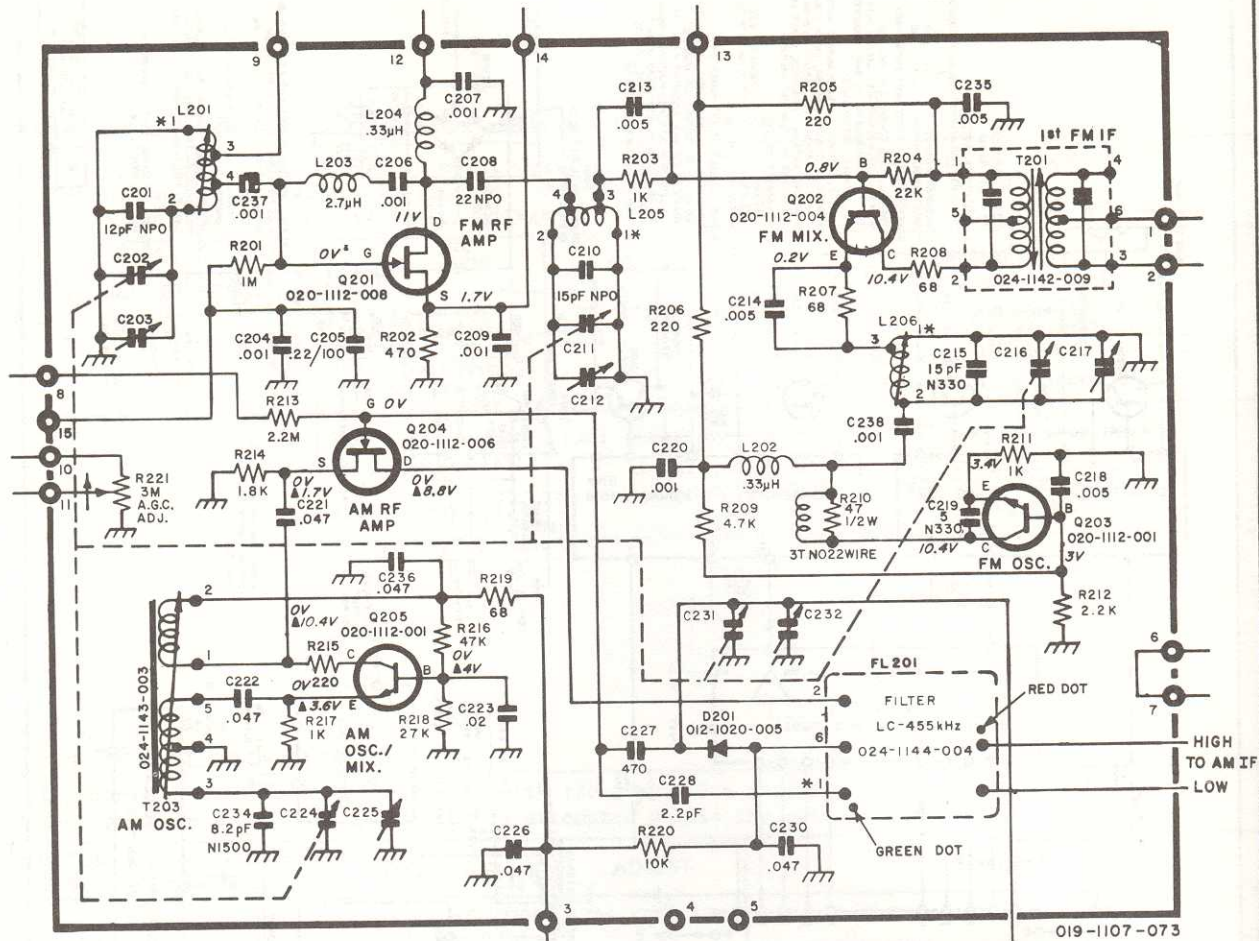


- NOTES:**
1. MAIN POWER SUPPLY: 9-43V
 2. D.C. TRANSISTOR (D.C. OFFSET ADJUSTMENT MUST BE ACCURATE): 01Q101020-1111-023 0 020-1111-024 0 020-1111-024 0 020-1111-024 0
 3. ARROW HEADS INDICATE MAIN SIGNAL PATH.
 4. THE FOLLOWING CONTROLS IN THE LEFT CHANNEL ARE IDENTICAL TO THE RIGHT CHANNEL: BASS, TREBLE, AND LOUDNESS.
 5. ALL D.C. VOLTAGES (±19%) MEASURED WITH RESPECT TO CHASSIS GROUND, USING 20KΩ EXTERNAL ANTENNA TERMINALS, TUNER OFF STATION AND INPUT IN FM POSITION.
 6. D.C. OFFSET VOLTAGE WITH NO SIGNAL APPLIED, READ 0 VOLTS WITH NO SIGNAL OUTPUT JACK, WITH RESPECT TO CHASSIS.
 7. BIAS CURRENT OF THE POWER AMP P.C. BOARD SHALL BE MEASURED AS FOLLOWS: V.O.M. SET TO MEASURE D.C. CURRENT. MINUS ON COMMON PROBE OF V.O.M. TO TRIPLETT 850A. ON ISMA SCALE. USE SAME PROCEDURE ON Q1 & Q2.

8. A.S.C. VOLTAGE (FRONT END A.S.C. TERMINAL): +0.5 TO -1.75 V WITH 0 TO 100μV ANTENNA.
9. RESISTANCE IN OHMS ±10% 1/4 WATT, 1/2 WATT, 1 WATT, 2 WATT, 5 WATT, 10 WATT.
10. HIGHEST SERIES NUMBERS ARE: R3, R03, R403, R005, C4, C04, C408, C003, D1, D101, D401, F1, F101, F401, Q2, Q102, T401, REC-401.
11. S601 SELECTOR SWITCH SHOWN IN MAX. CCW POSITION (N.C.I.).
12. S601 SELECTOR SWITCH SHOWN IN MAX. CCW POSITION (N.C.I.).
- 13.

H. H. SCOTT, INC.
 HAYWARD, CALIF.

CIRCUIT DIAGRAM



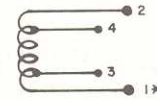
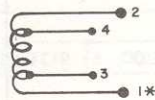
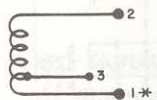
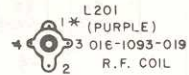
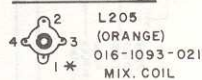
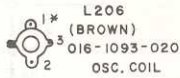
AM/FM FRONT END

FROM AM LOOPSTICK (HIGH)
HIGH TO AM IF
LOW

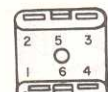
NOTES:

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. Δ INDICATES VOLTAGE MEASURED WITH INPUT SWITCH IN "AM" POSITION AND NO SIGNAL.
5. ALL VOLTAGES $\pm 15\%$.

BOTTOM VIEWS

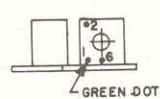


BOTTOM VIEW



BOTTOM VIEW

024-1144-004



HIGHEST SERIES NUMBERS

L206	C238
R221	T203
D201	Q205
	FL201

REFER TO COMPONENT LABEL 019-1107-073/B

100-1330-029, 033 & 034, 036 HAVE MECHANICAL DIFFERENCES. VARIOUS PULLEY DRUMS USED.

AM/FM FRONT END

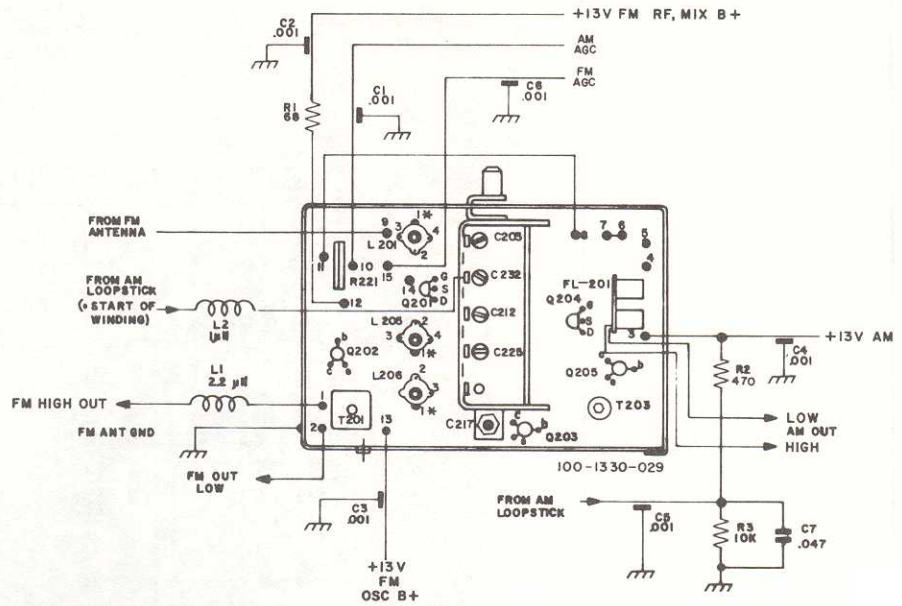
H.H. SCOTT, INC. MAYNARD, MASS.

SCALE: —	DWG SIZE: C	100-1330-036	REV: 3
SHEET 1 OF 2		100-1330-029	
		100-1330-033	
		100-1330-034	

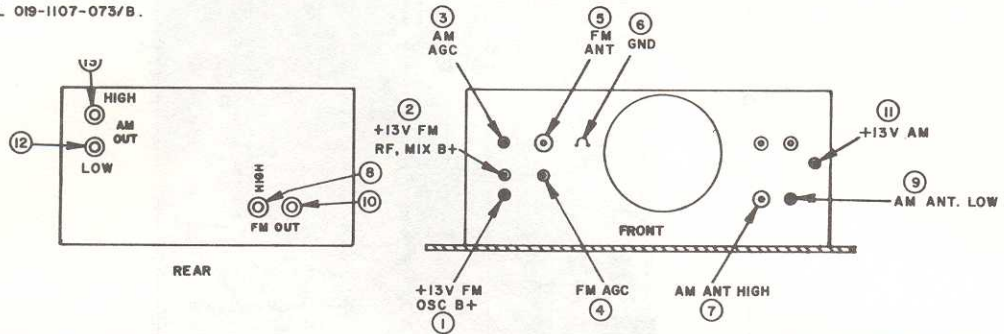
H. H. Scott 387B

NOTES:

- 1. UNLESS OTHERWISE SPECIFIED:
RESISTANCE IN OHMS $\pm 10\%$
RESISTORS 1/4 WATT.
CAPACITANCE IN MFD'S
- 2. ARROWS INDICATE MAIN SIGNAL PATH
- 3. TRIMMERS: C 203 — FM ANT. } HIGH ADJ.
C 232 — AM ANT. }
C 212 — FM MIX. }
C 225 — AM OSC. }
C 217 — FM OSC. }
- COILS: L 201 — FM RF. } LOW ADJ.
L 205 — FM MIX. }
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

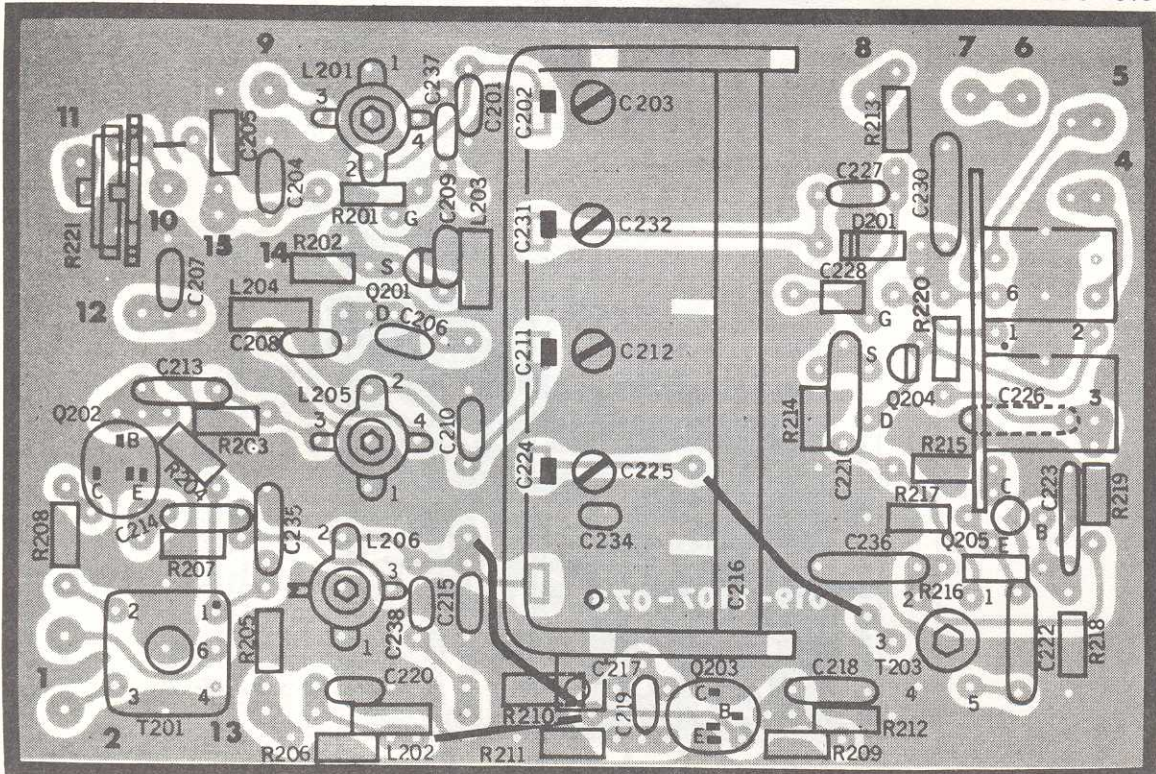


REFER TO COMPONENT LABEL 019-1107-073/B.



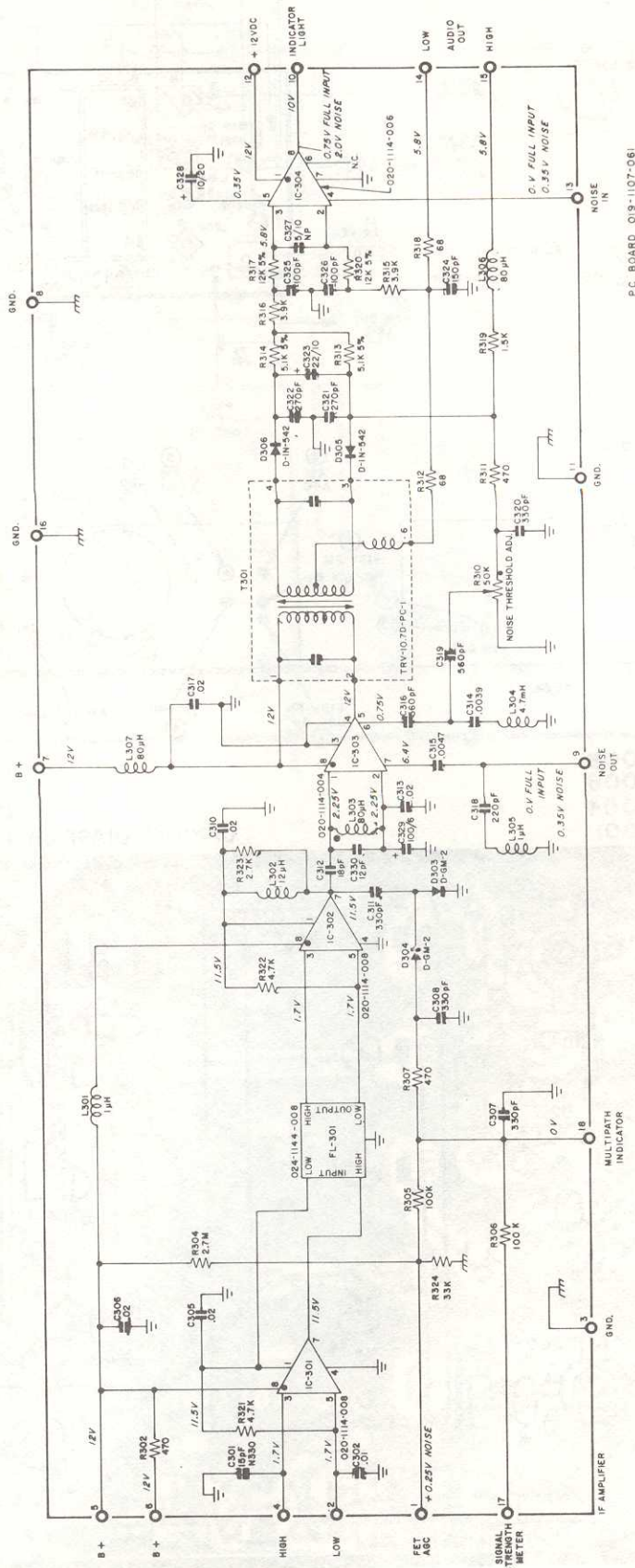
- Q201; 020-1112-008
- Q204; 020-1112-006
- Q202; 020-1112-004
- Q203, Q205; 020-1112-001

- 100-1330-034
- 100-1330-033
- 100-1330-029
- CIRCUIT DIAGRAM 100-1330-016



AM/FM FRONT END

019-1107-073/B REV. 5



PC BOARD 019-1107-061

- NOTES:
1. UNLESS OTHERWISE SPECIFIED: RESISTANCE IN OHMS $\pm 10\%$, $1/4$ WATT, AND CAPACITANCE IN PFD'S.
 2. UNLESS OTHERWISE SPECIFIED: T301, L307, C330, R324, D307, (R301, R303, R306, C304, C309 AND C309 DELETED).
 3. DOT ON POTENTIOMETER INDICATES EXTREME CW POSITION VIEWED FROM KNOB END.
 4. COMPONENTS DELETED: R303, R308, C303, C304, C305, R301, R305, D301, D302, D307.

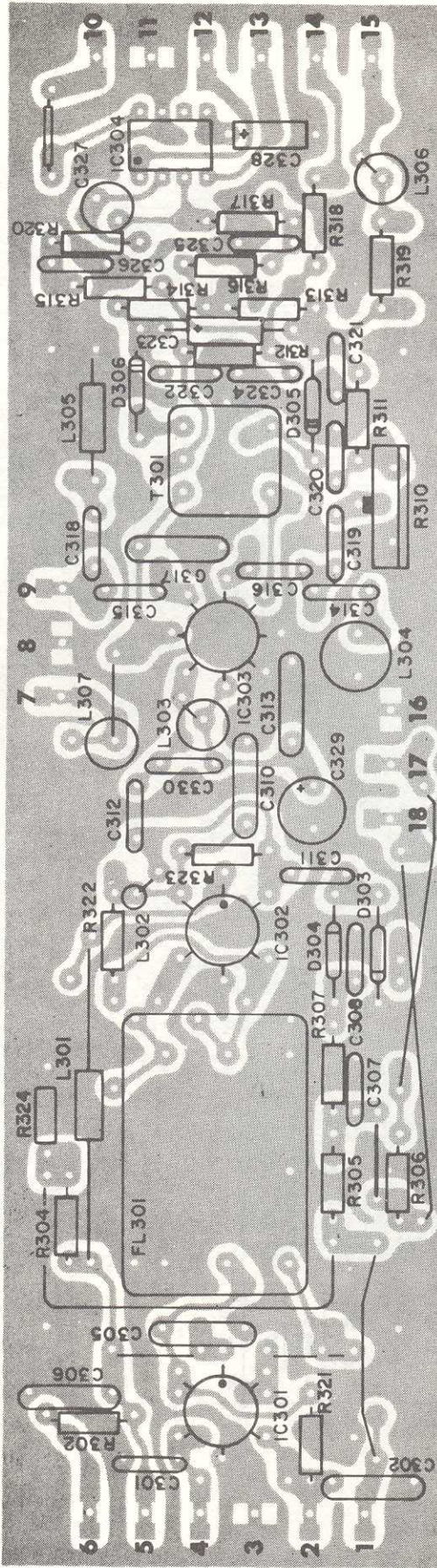
6 POLE SINGLE FILTER IF AMPLIFIER REFER TO COMPONENT LABEL 019-1107-061/C FOR USE WITH 019-1107-081 REV. 4 BOARD AND OVER

SINGLE FILTER IF, PERFECTUME, SEPARATE AGC
H. H. SCOTT, INC.
 HARRARD, MASS.
 IF AMPLIFIER CIRCUIT DIAGRAM

H. H. Scott 387B

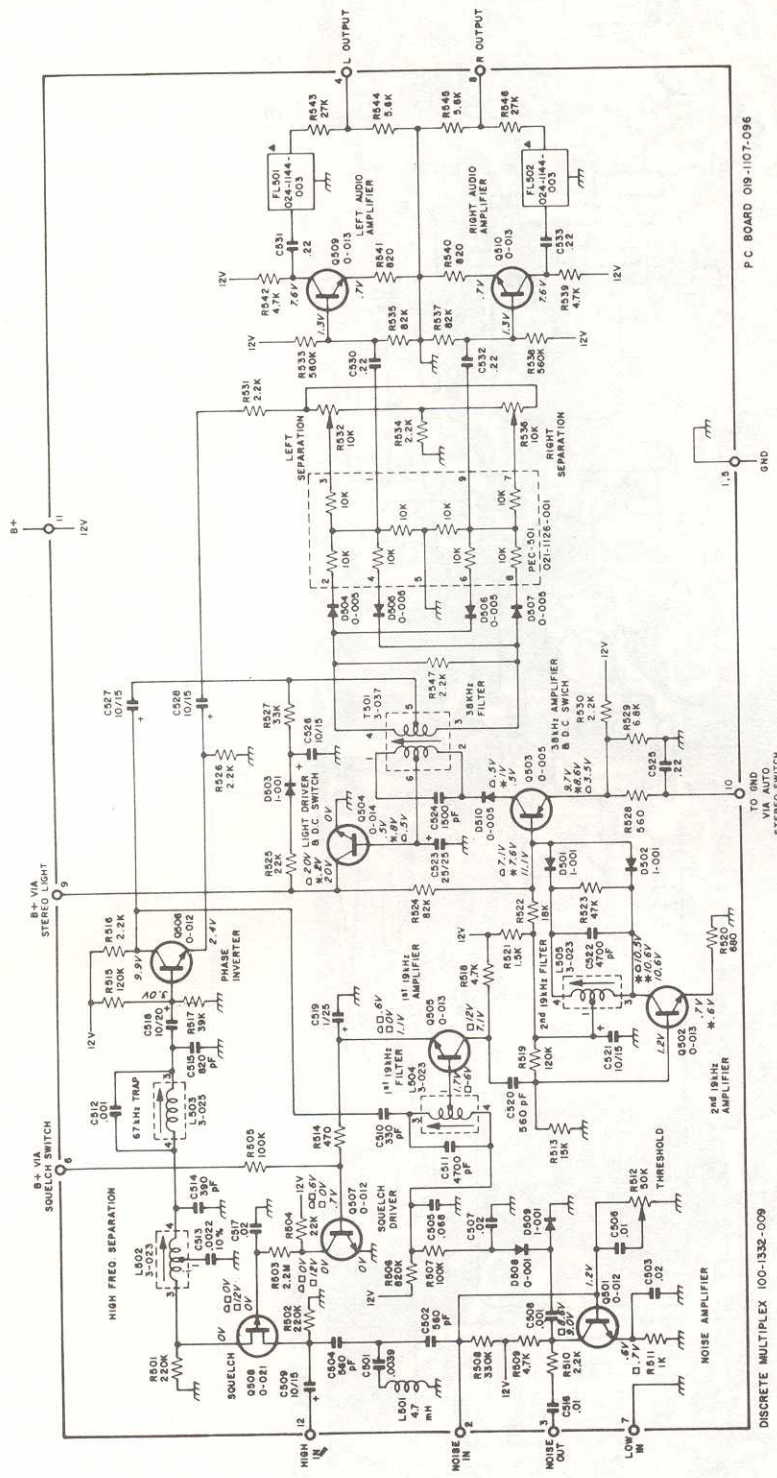
- IC-301 μ A703 020-1114-008
- IC-302 μ A703 020-1114-008
- IC-303 μ A719 020-1114-004
- IC-304 (SC5117) 020-1114-006
- FL-301 024-1144-008 (ALTERNATE 024-1144-001)

CIRCUIT DIAGRAM 100-1331-033



H.H.S SINGLE FILTER IF AMP.

019-1107-061/C REV.0



PC BOARD 018-1107-096

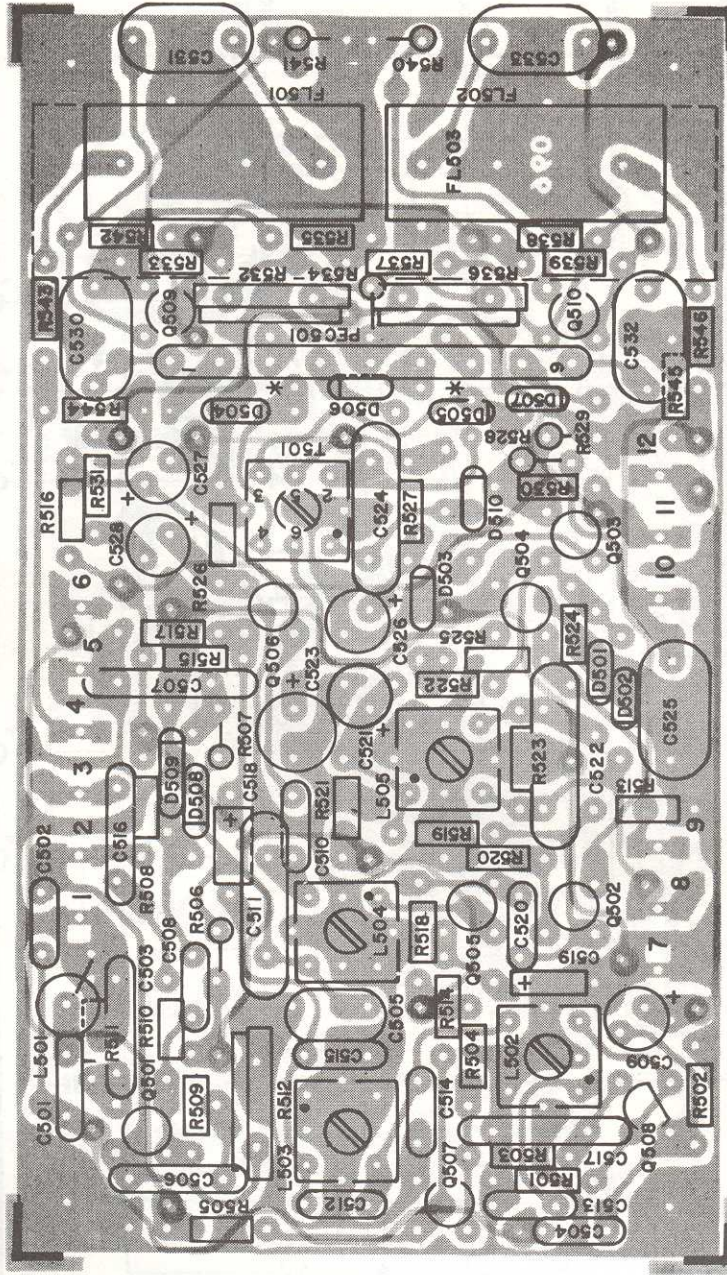
DISCRETE MULTIPLEX 100-1332-009

- NOTES:
1. UNLESS OTHERWISE SPECIFIED, RESISTANCE IN OHMS $\pm 10\%$, $1/4$ WATT, CAPACITANCE IN MFD'S.
 2. ALL D.C. VOLTAGES ($\pm 15\%$) 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.
 3. STEREO SIGNAL FED TO DEMODULATOR.
 4. OFF-STATION NOISE FED TO DEMODULATOR.
 5. SQUELCH AND AUTO-STEREO SWITCHES OPEN.
 6. 0.024-1144-007 FILTER (FL503) MAY BE SUBSTITUTED FOR THE TWO 024-1144-003 FILTERS (FL-501, FL-502).
 7. 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: 'LBT' ARE 08-1093-...; 'D' IS 012-1021-...; 'Q' IS 020-110-...; 'HIGHEST SERIES NUMBERS ARE: R647, C534, D510, Q510, L506, T501, FL502, PEC-501.
 8. COMPONENT NUMBERS ARE SHOWN BY THE LAST FOUR NUMBERS OF THEIR TEN DIGIT PART NUMBER.
 9. COMPONENT NUMBERS ARE SHOWN BY THE LAST FOUR NUMBERS OF THEIR TEN DIGIT PART NUMBER.
 10. RES'TY TO BE SOLDERED TO BOTTOM SIDE OF BOARD BETWEEN PIN 3 AND PIN 4 OF T501 AS INDICATED.

H. H. Scott 387B

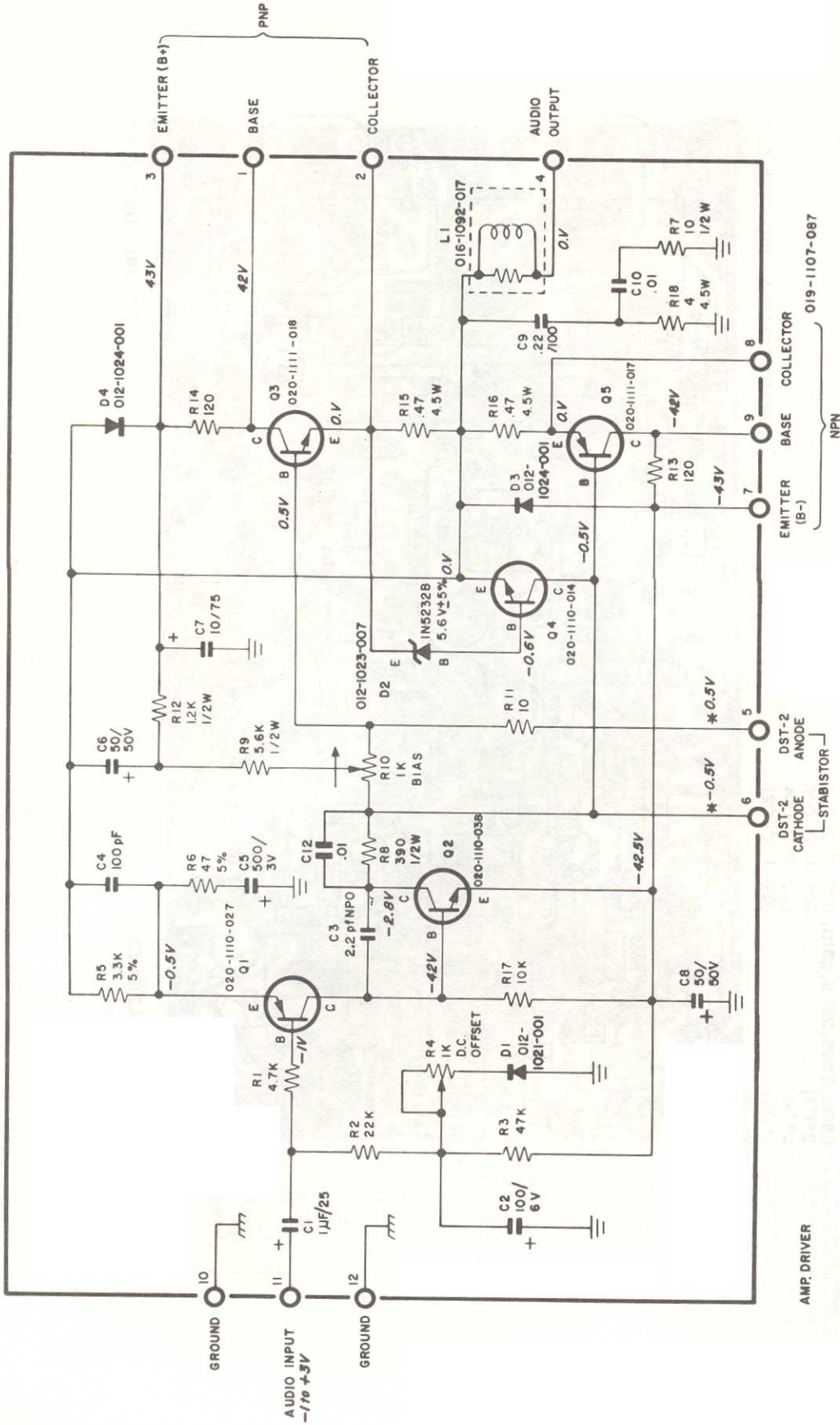
CIRCUIT DIAGRAM 100-1332-009

- 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



DISCRETE MULTIPLEX

019-1107-096 REV. 2



AMP DRIVER

NOTE:
REFER TO COMPONENT
LABEL 019-1107-087/A.

NOTES:
1. UNLESS OTHERWISE SPECIFIED: ALL RESISTANCE IN OHMS $\pm 10\%$, CAPACITANCE IN MFDS, RESISTORS 1/4 WATT, AND VOLTS ARE DC. $\pm 15\%$ MEASURED WITH 20 K Ω /VOLT V.O.M.

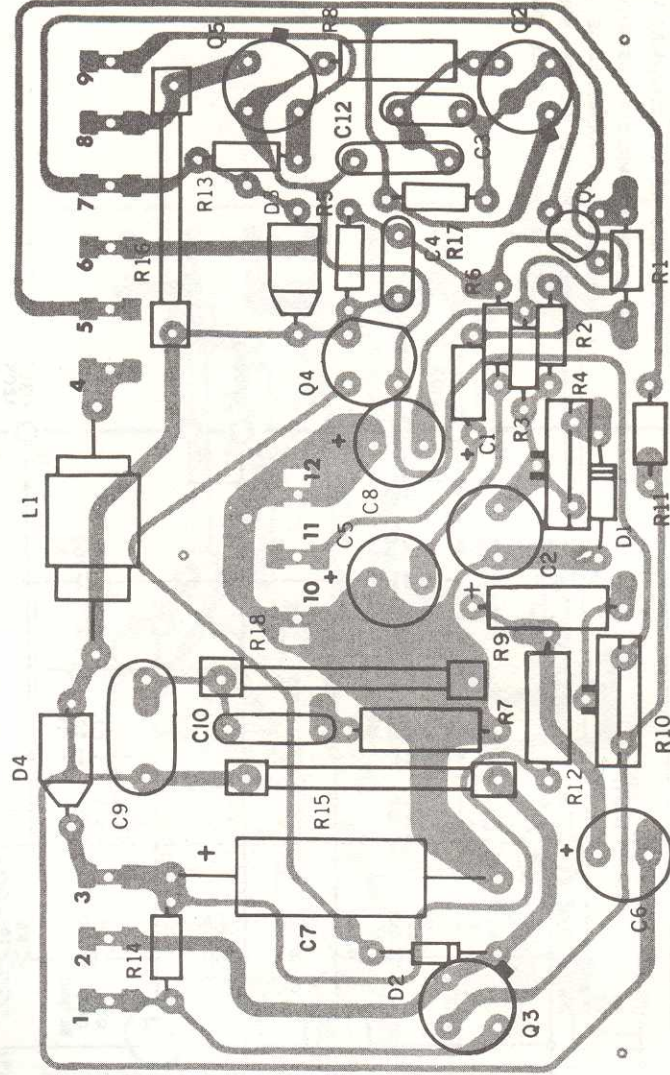
2. HIGHEST SERIES NUMBERS: R18, C12, D4, Q5, L1
3. * AFFECTED BY D.C. OFFSET ADJUSTMENT.
4. COMPONENTS DELETED: C11

H.H. SCOTT, INC.
MAYNARD, MASS.
AMP DRIVER (387B)

H. H. Scott 387B

- Q1; 020-1110-027
- Q2; 020-1110-036
- Q3; 020-1111-018
- Q4; 020-1110-014
- Q5; 020-1111-017

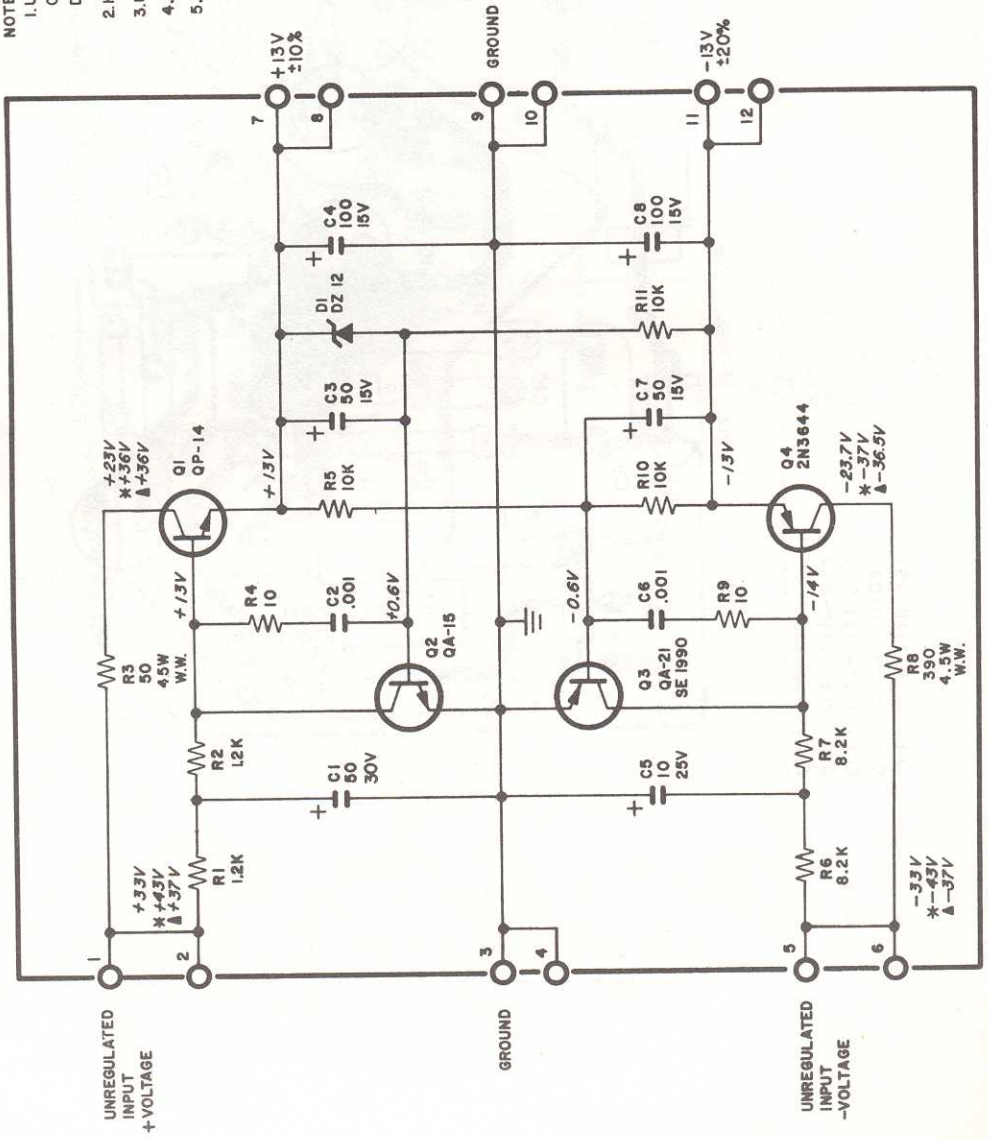
CIRCUIT 100-1335-015
100-1335-014



019-1107-087/A Rev 0

NOTE:
THIS COMPONENT LABEL ARTWORK CAN NOT BE USED
FOR THE PURPOSE OF SILK SCREENING A PC BOARD.

- NOTES:
1. 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.
 2. HIGHEST SERIES NUMBERS: R11, C8, D1, Q4
 3. UNREGULATED INPUT VOLTAGE RANGE $\pm (25V \text{ TO } 44V)$
 4. * INDICATES THE ONLY VOLTAGES WHICH CHANGE WITH 43V INPUT, (387).
 5. Δ INDICATES THE ONLY VOLTAGES WHICH CHANGE WITH 37V INPUT, (499).



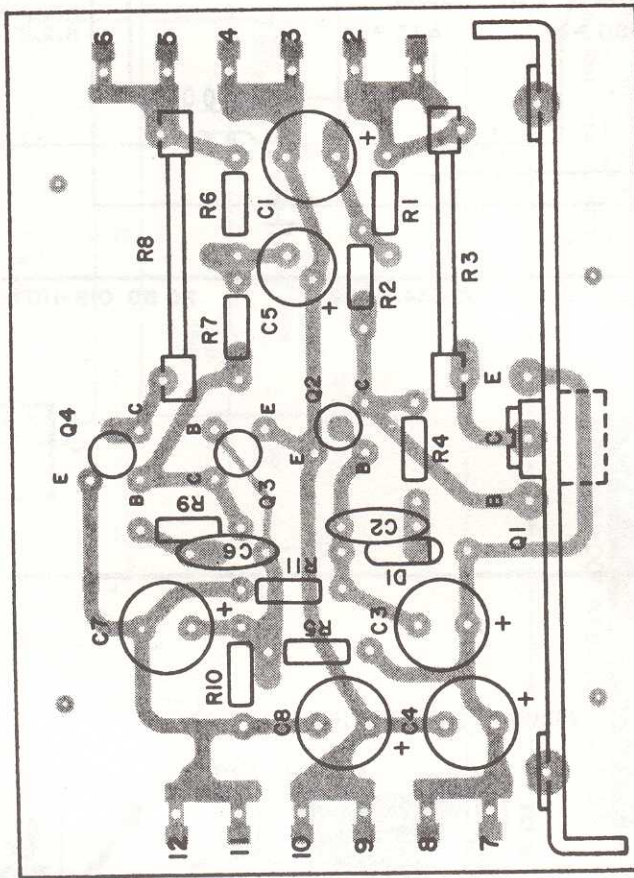
019-1107-057 REV.0

REGULATED POWER SUPPLY

H. H. Scott 387B

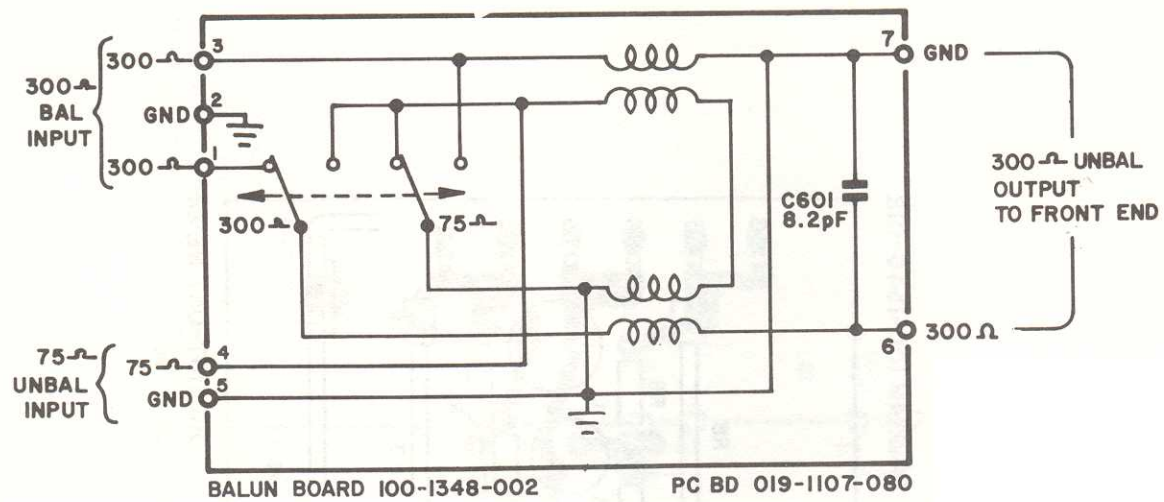
- Q4 020-1110-004
- Q3 020-1110-005
- Q2 020-1110-013
- Q1 020-1111-005

CIRCUIT DIAGRAM 100-1340-012



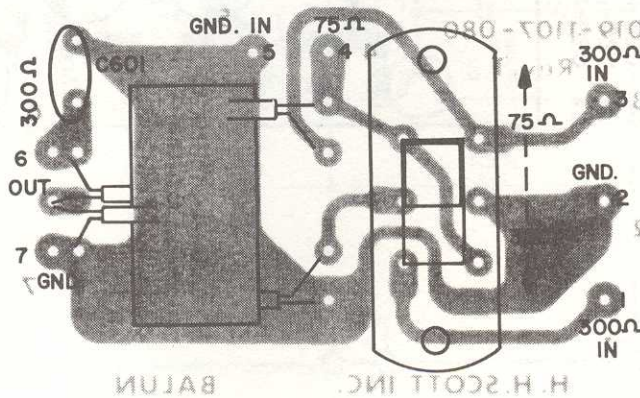
019-1107-057 REV.2

H.H.S. POWER SUPPLY

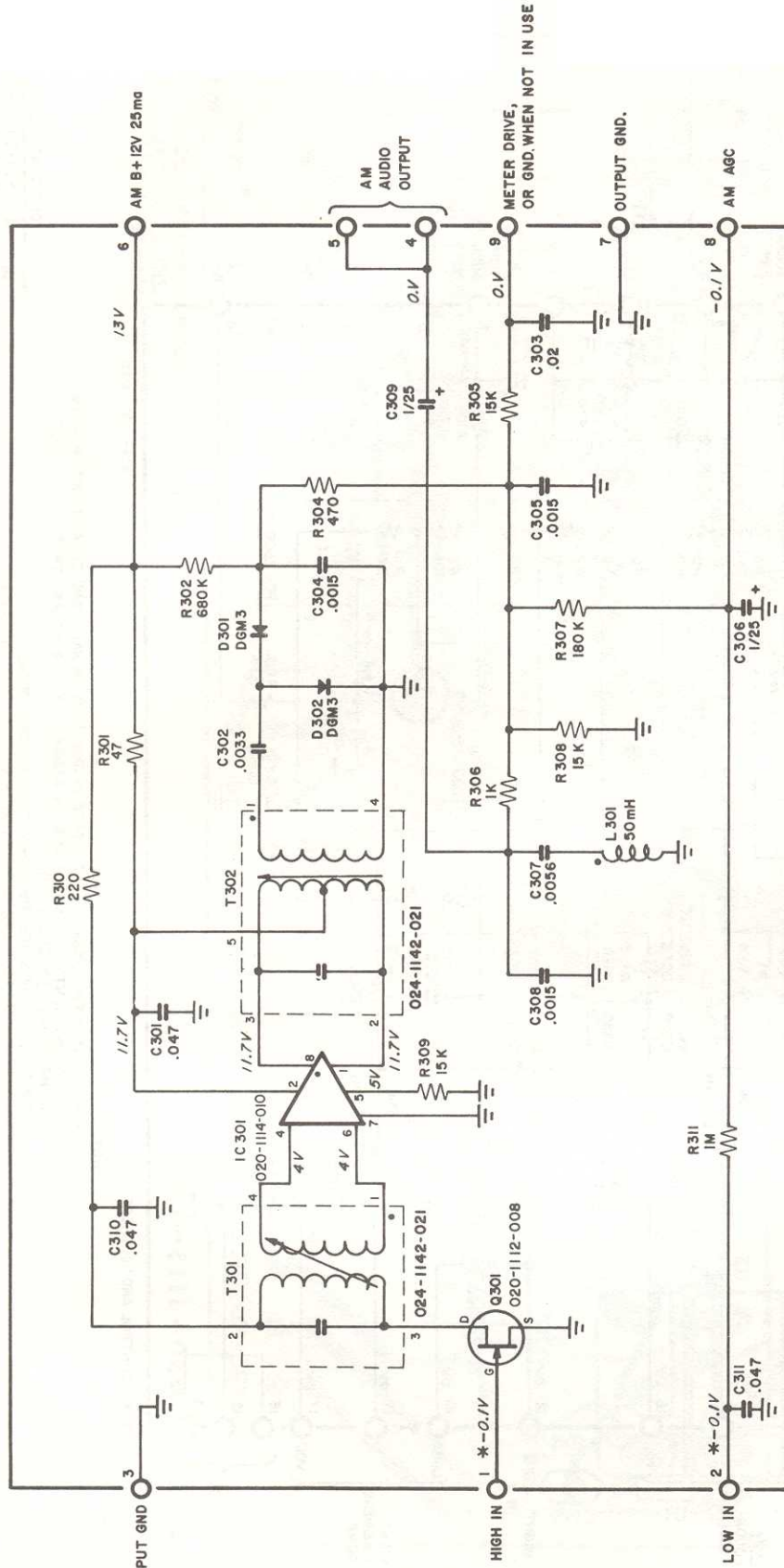



H.H. SCOTT, INC.
 MAYNARD, MASS.
BALUN BOARD

CIRCUIT DIAGRAM 100-1348-002



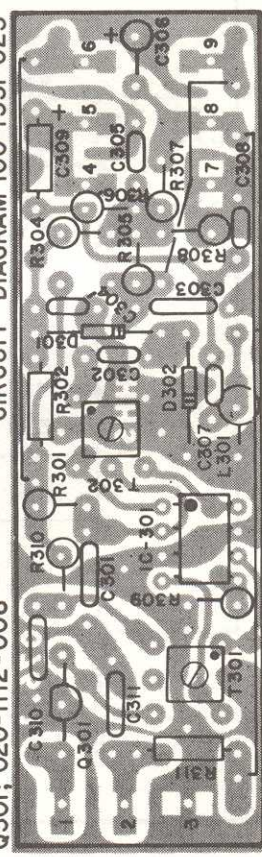
REFER TO COMPONENT LABEL 019-1107-076/A



019-1107-076

- 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, IC301, 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

IC301; 020-1114-010
Q301; 020-1112-008



CIRCUIT DIAGRAM 100-1331-023

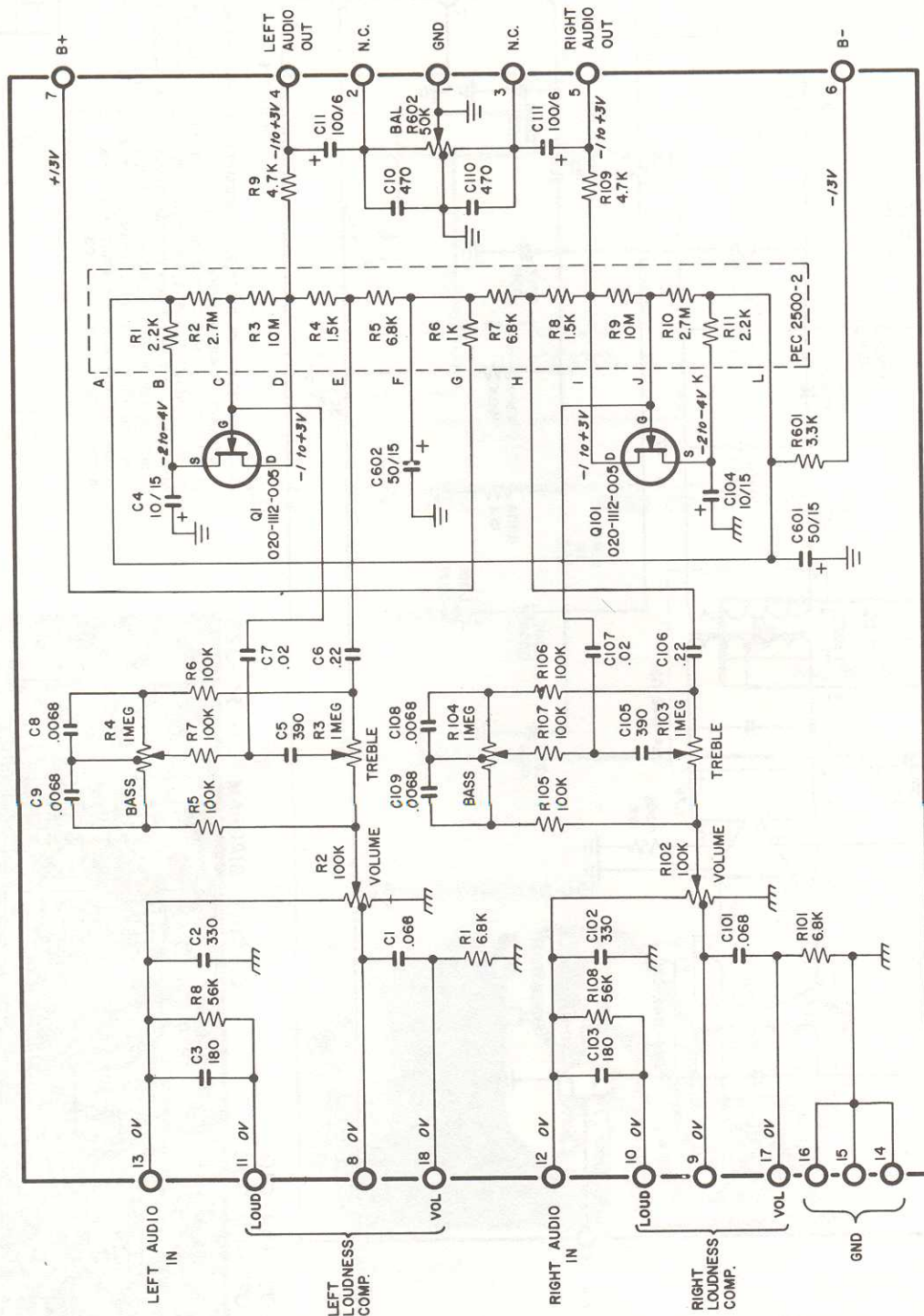
H.H.S. AM IF

019-1107-076/A REV.0



H.H. SCOTT INC.
MAYNARD, MASS.

AM IF STRIP



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, R10, R602, C11, C10, 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. 021-1125-065 & "B" TYPE CONN. 030-1181-053
 6. 100-1334-016 USES LOUDNESS POT. 021-1125-095 & "B" TYPE CONN. 030-1181-053

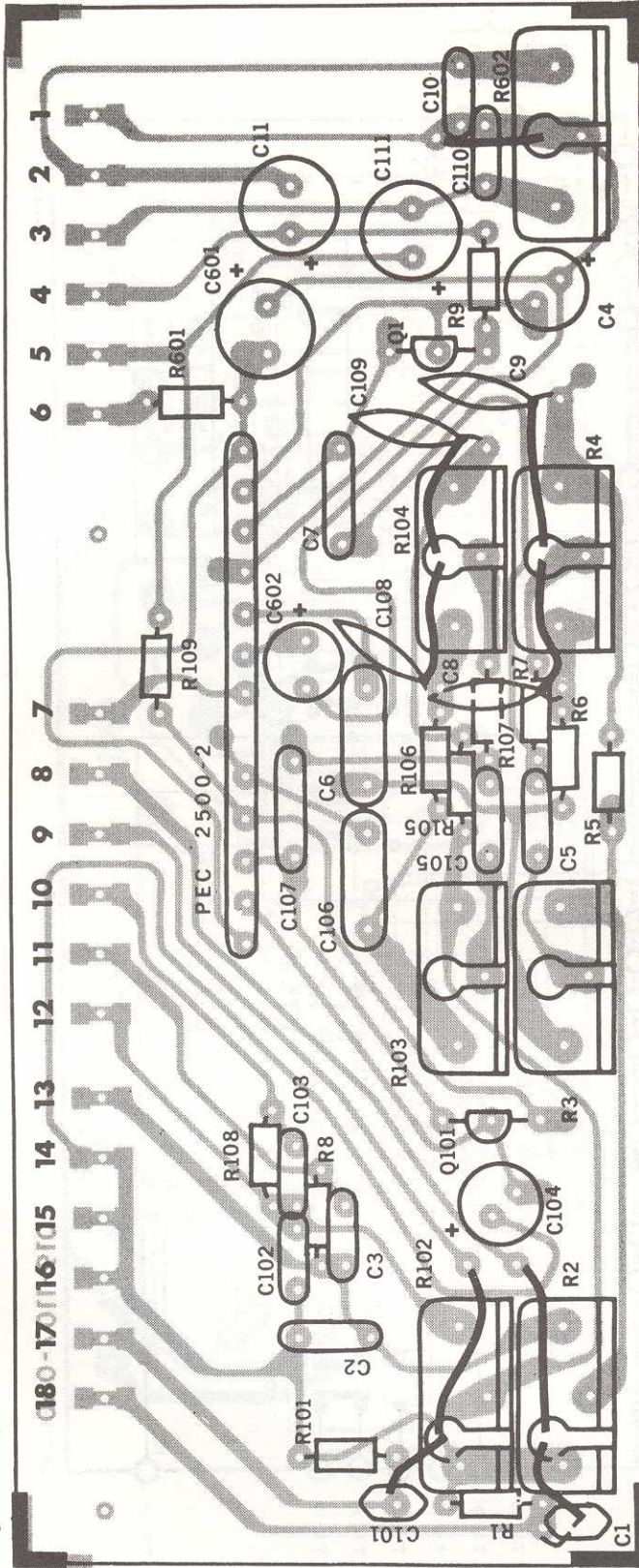
TONE CONTROL AND LOUDNESS

TONE CONTROL
H.H. SCOTT, INC.
MAYNARD, MASS.

100-1334-008
100-1334-007
100-1334-004

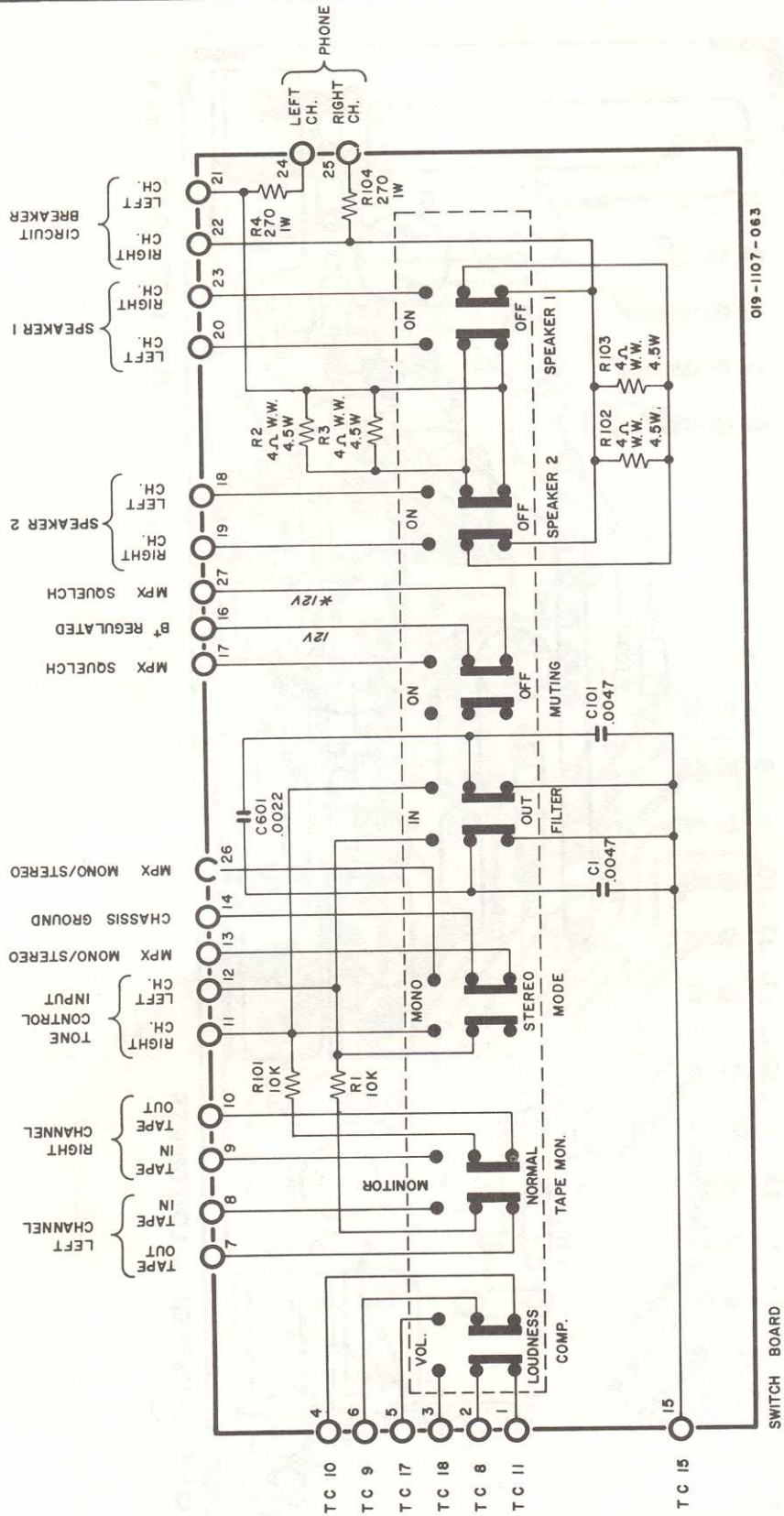
CIRCUIT DIAGRAM

Q1, Q101; 020-1112-005



TONE CONTROL & LOUDNESS

019-1107-060 REV.2

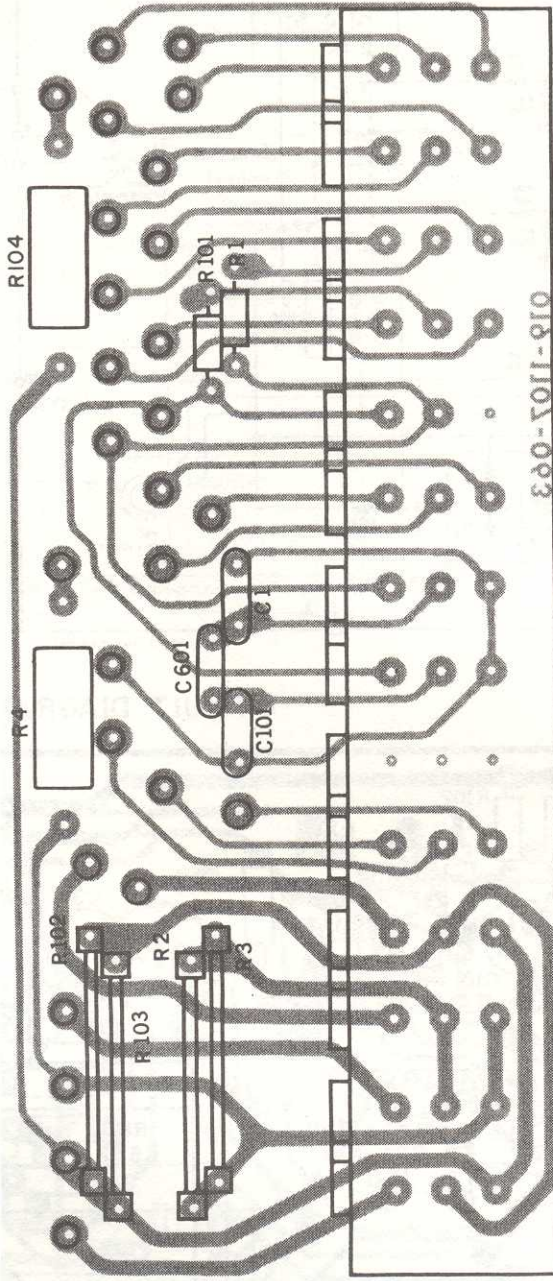


- NOTES:
- UNLESS OTHERWISE SPECIFIED: RESISTANCE VALUES ARE IN OHMS, RESISTORS 1/4 WATT, ±10%, CAPACITANCE IN MFD'S.
 - T C = TONE CONTROL ASSY PIN NO'S
 - HIGHEST SERIES NO'S. — C1, C101, C601, R4, R104
 - REFER TO COMPONENT LABEL 019-1107-063 REV.0
 - * WHEN MUTING OFF.
 - ALL OTHER VOLTAGES ARE 0. VOLTS.

H. H. SCOTT, INC.
 WATNAD, MASS.
 SWITCH BOARD

H. H. Scott 387B

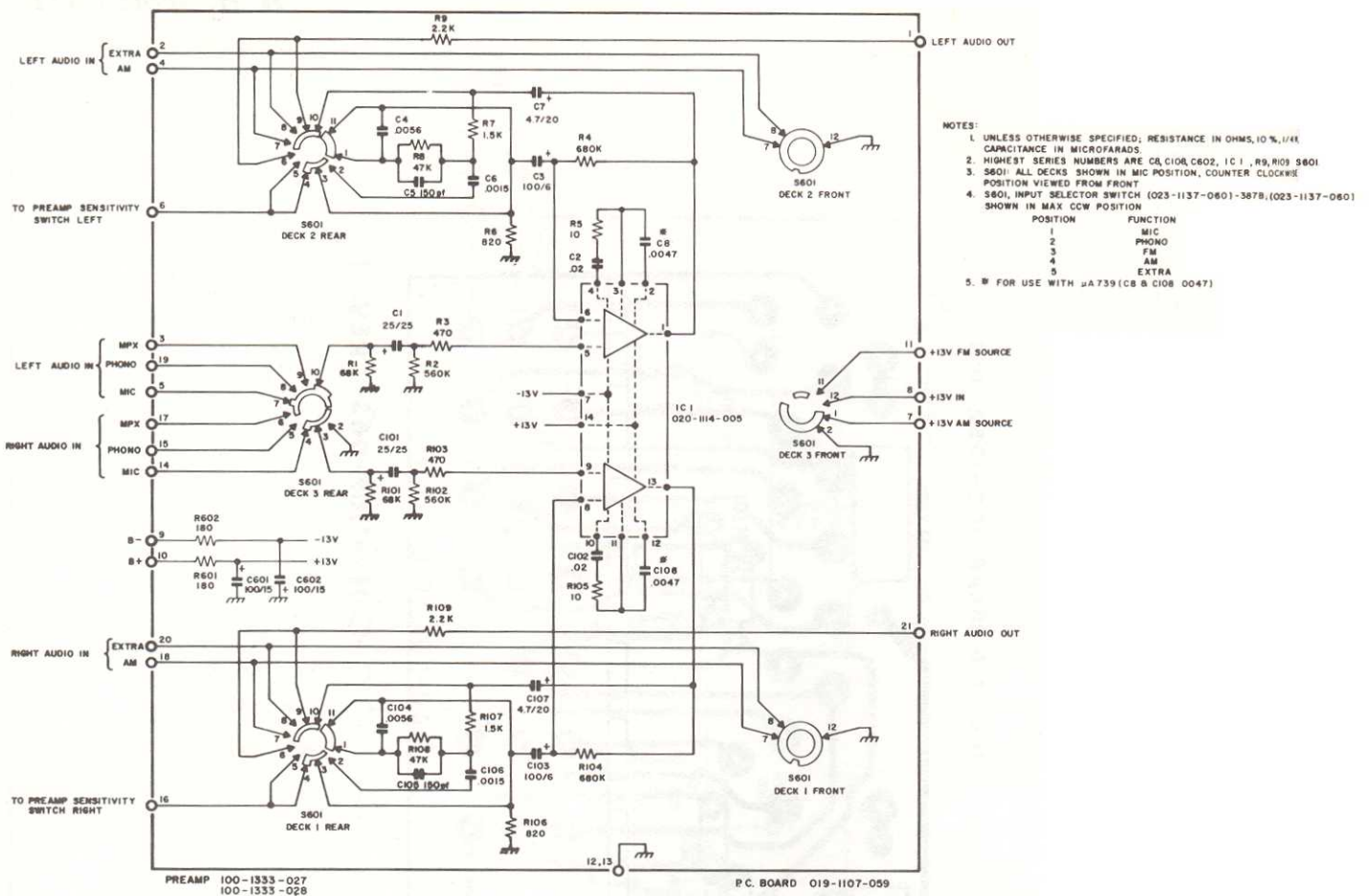
CIRCUIT DIAGRAM 100-1352-002



019-1107-063

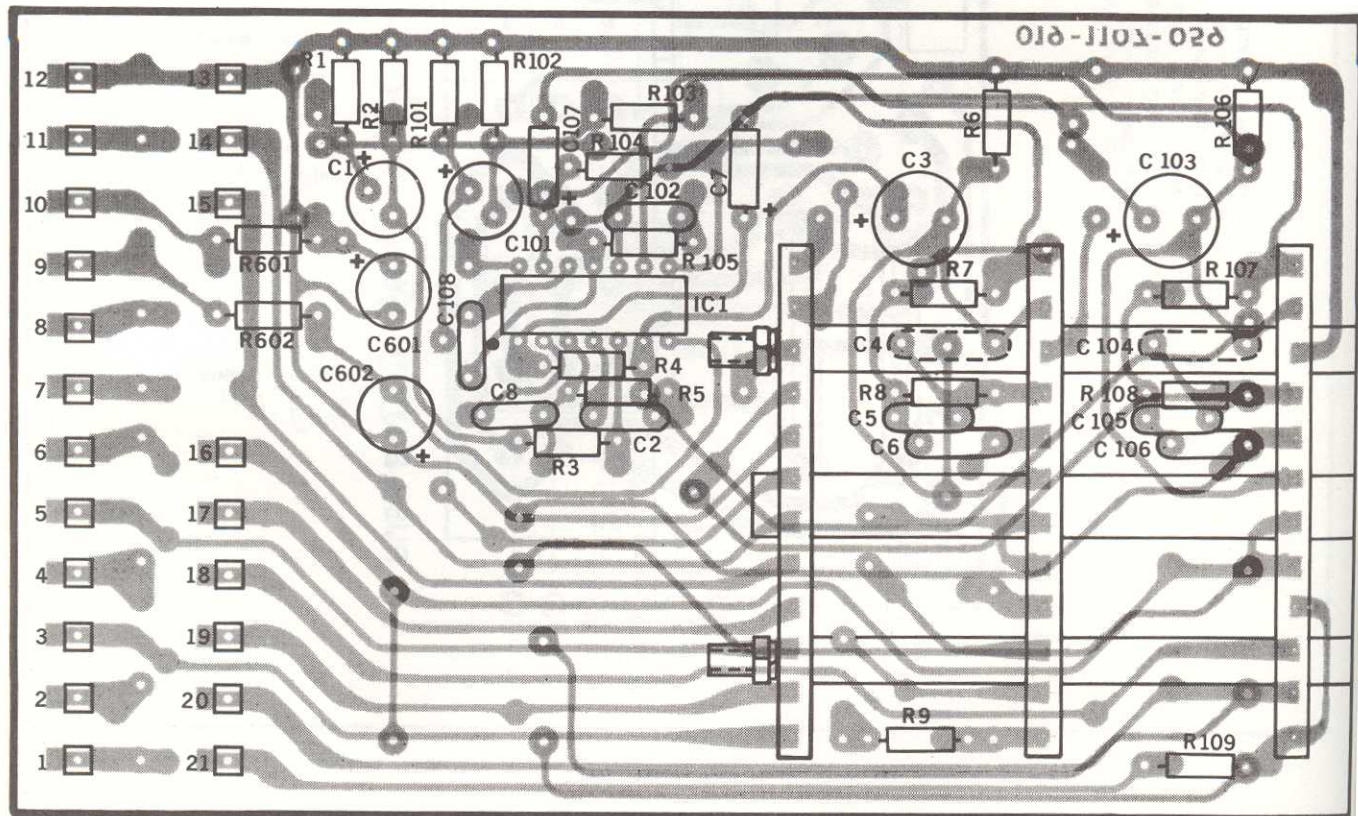
019-1107-063 REV. 1

PUSH BUTTON SW.



IC-1, SC5116P

CIRCUIT DIAGRAM 100-1333-014 REV I



PRE-AMP

019-1107-059 Rev. 4