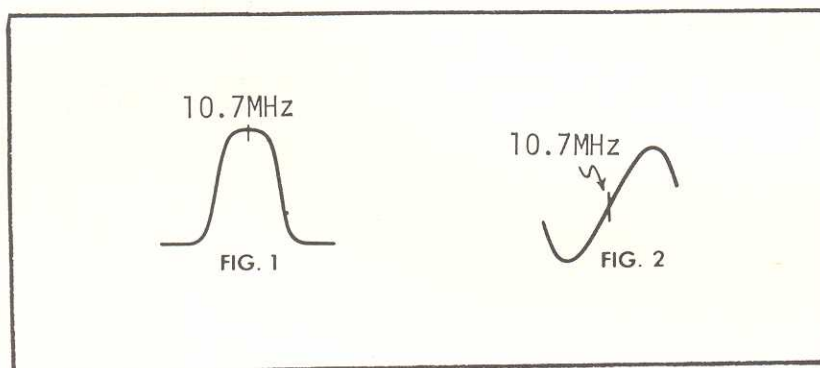


# H. H. Scott 357B

## 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, T304	Adjust for maximum. Repeat until no further improvement is noted.
600kHz	Tune to signal	"	T202	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 junction L205 and C213, 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 D305, common to ground.	T306 (Pri.) T305, T303, T301, T201	Adjust for maximum.
"	"	DC probe of VTVM to Jct R312&R319 common to ground.	T306 (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 junction L205 and C213, 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 D305, side to ground.	T306 (Pri), T305,T303, T301,T201	Disconnect stabilizing capacitor C320 Adjust for maximum gain and symmetry of response similar to Fig. 1 with markers as shown. Reconnect C 320.
"	"	Vert input of scope to junction R312 & C319, side to ground.	T306 (Sec)	Adjust T306(Sec) to place marker at center of S curve, similar to Fig. 2. Readjust T306(Pri) 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.

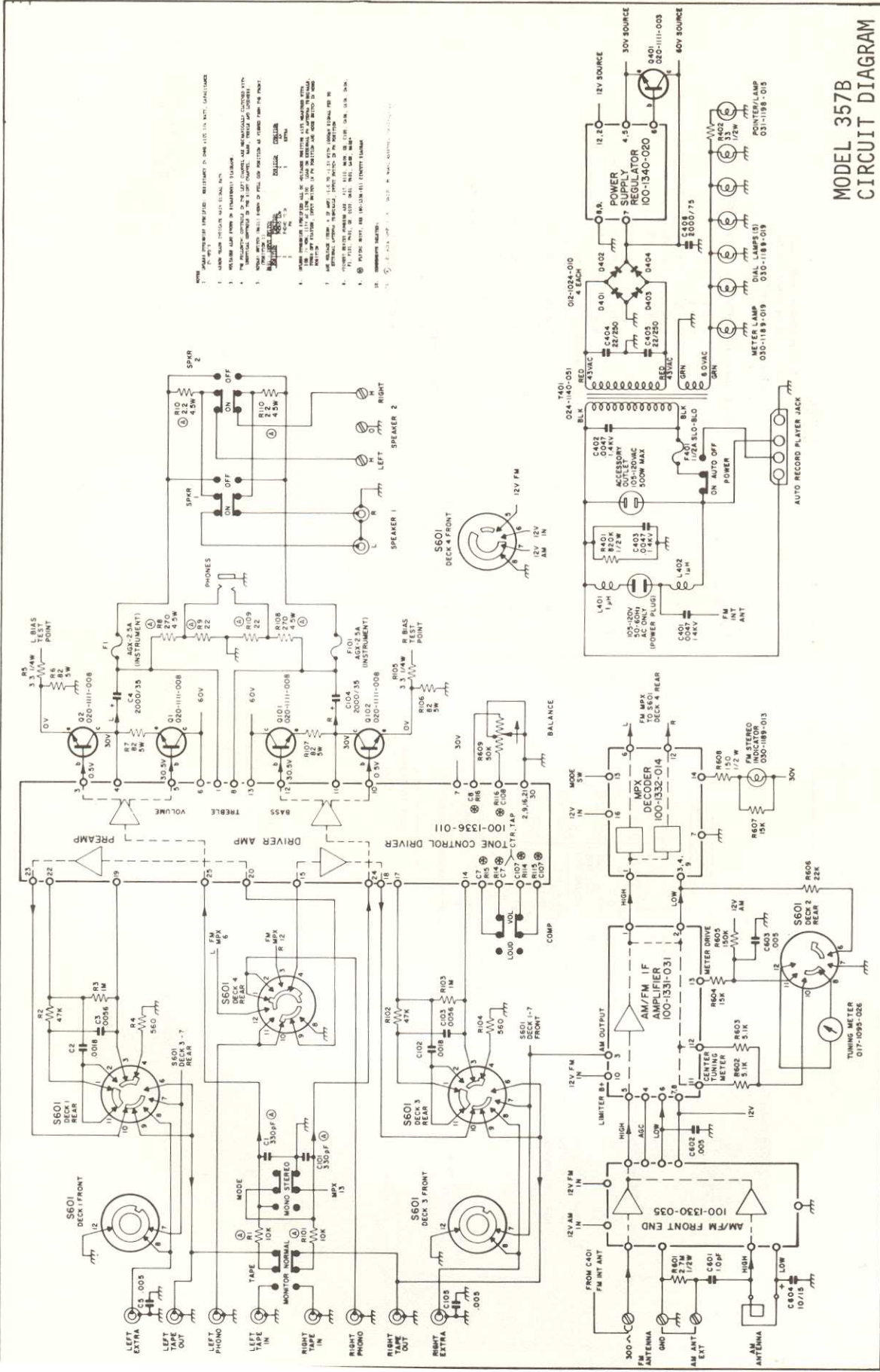
GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
88MHz Unmodulated	Low freq end	DC probe of VTVM to cathode D305, common to ground.	L206, L201	Adjust for maximum.
108 MC Unmodulated	Tune to signal	"	C217,C212, C203	Adjust for maximum. Repeat FM RF steps until no further improvement is noted.

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

High side of generator thru 47K to junction R312 and C319 low side to ground.

GENERATOR FREQUENCY	INDICATOR	ADJUST	REMARKS
67kHz	Vert input of scope thru 47K to Base Q505, low side to ground.	L502	Adjust for MINIMUM.
19kHz	Vert input of scope thru 47K to cathode D501 low side to ground.	L503	Adjust for maximum.
19kHz	Vert input of scope thru 47K to Jct.D504&D506 low side to ground.	T501	Adjust for maximum 38kHz response.
Modulated Left Channel	Vert input of scope to point PT12 low side to ground.	R518, R519	Adjust for MINIMUM. This step should require only slight adjustment.
Modulated Right Channel	Vert input of scope to point PT6 low side to ground.		Check for MINIMUM. If necessary, make compromise adjustment of R518,R519.

# H. H. Scott 357B



1. MAIN POWER SWITCH (S601) IS LOCATED IN THE MAIN POWER SUPPLY SECTION.
2. MAIN POWER SWITCH (S601) IS LOCATED IN THE MAIN POWER SUPPLY SECTION.
3. MAIN POWER SWITCH (S601) IS LOCATED IN THE MAIN POWER SUPPLY SECTION.
4. MAIN POWER SWITCH (S601) IS LOCATED IN THE MAIN POWER SUPPLY SECTION.
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11. MAIN POWER SWITCH (S601) IS LOCATED IN THE MAIN POWER SUPPLY SECTION.
12. MAIN POWER SWITCH (S601) IS LOCATED IN THE MAIN POWER SUPPLY SECTION.
13. MAIN POWER SWITCH (S601) IS LOCATED IN THE MAIN POWER SUPPLY SECTION.
14. MAIN POWER SWITCH (S601) IS LOCATED IN THE MAIN POWER SUPPLY SECTION.
15. MAIN POWER SWITCH (S601) IS LOCATED IN THE MAIN POWER SUPPLY SECTION.

MODEL 357B  
CIRCUIT DIAGRAM



**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: C203 — FM ANT.  
C232 — AM ANT.  
C212 — FM MIX. HIGH ADJ.  
C225 — AM OSC.  
C217 — FM OSC.

COILS: L201 — FM RF. LOW ADJ.  
L205 — FM MIX. LOW ADJ.  
L206 — FM OSC.

TRANSFORMERS T201 — FM I.F.  
T202 — AM I.F.  
T203 — AM OSC.

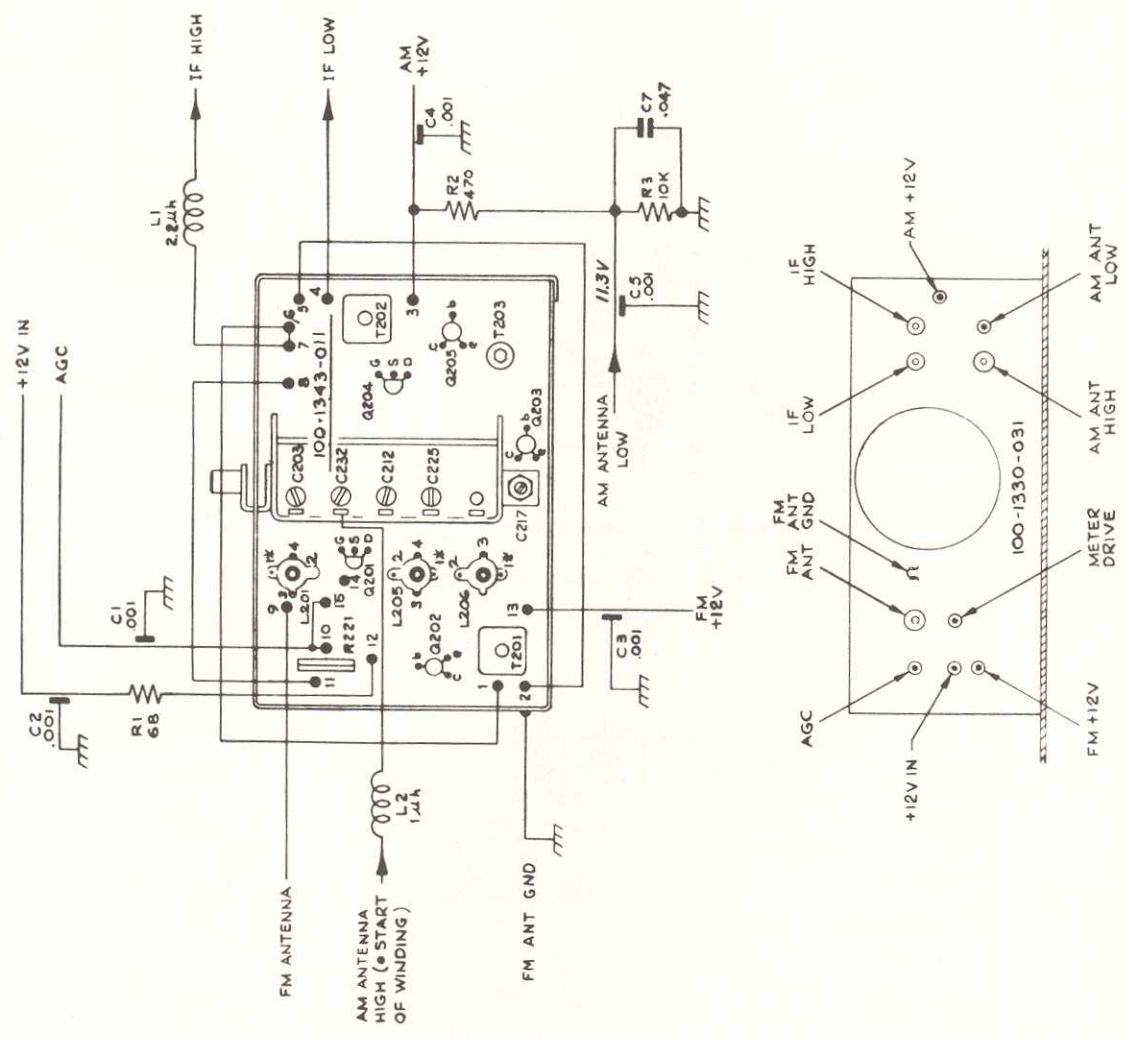
TRANSISTORS: G201 — FM, RF AMP.  
G202 — FM MIX.  
G203 — FM OSC.  
G204 — AM, RF AMP/MIX.  
G205 — AM OSC.

POTENTIOMETER: R221 — AGC ADJ.

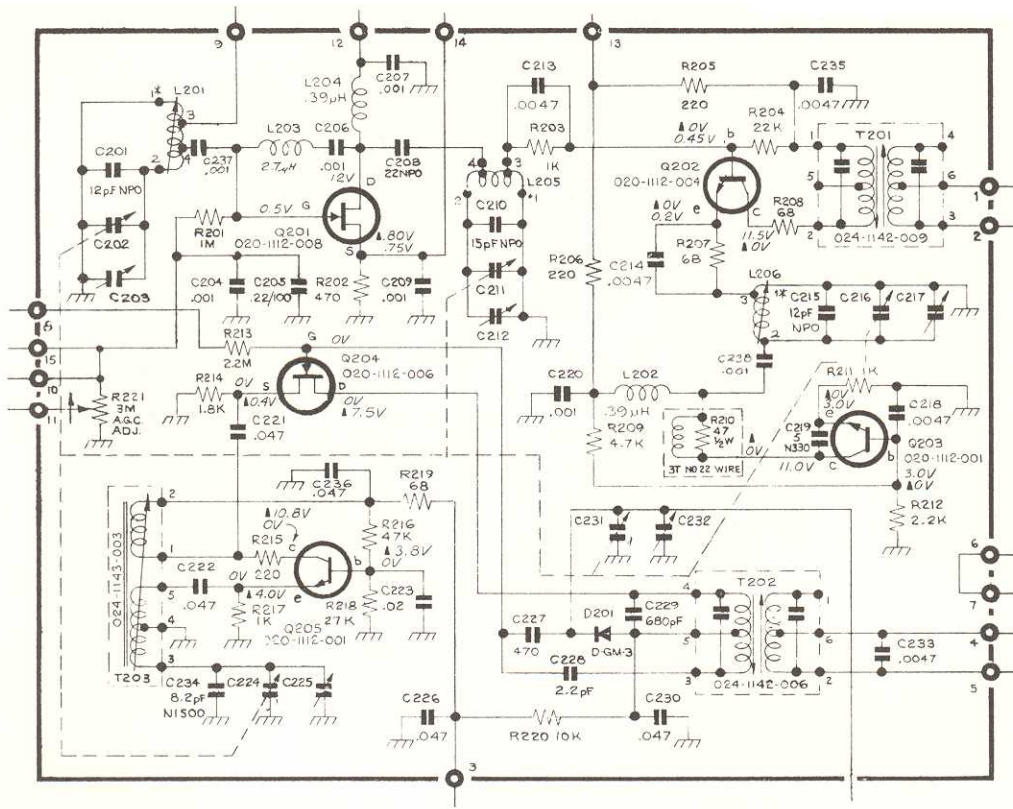
4. HIGHEST SERIES NUMBERS  
C7  
R4  
L2

5. COMPONENTS DELETED ARE; R4, C6.

NOTE:  
USE 100-1343-011 ASSEMBLY TO COMPLETE  
FRONT END ASSEMBLY. USE 010-1107-073/D  
COMPONENT LABEL.



# H. H. Scott 357B

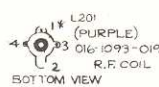


AM/FM FRONT END 100-1343-011

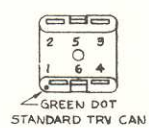
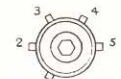
PC BD 019-1107-073

**NOTES:**

- 1 UNLESS OTHERWISE SPECIFIED: RESISTANCE IN OHMS  $\pm 10\%$ , RESISTORS  $1/4$  WATT, CAPACITANCE IN MFDS.
- 2 \* INDICATES START OF COIL WINDING.
- 3 C234 MOUNTED ON TUNING CAPACITOR AND LISTED ON PL-445.
- 4 ALL VOLTAGES  $\pm 15\%$   $\uparrow$  INDICATES VOLTAGES MEASURED WITH INPUT SWITCH IN 'AM' POSITION AND NO SIGNAL.

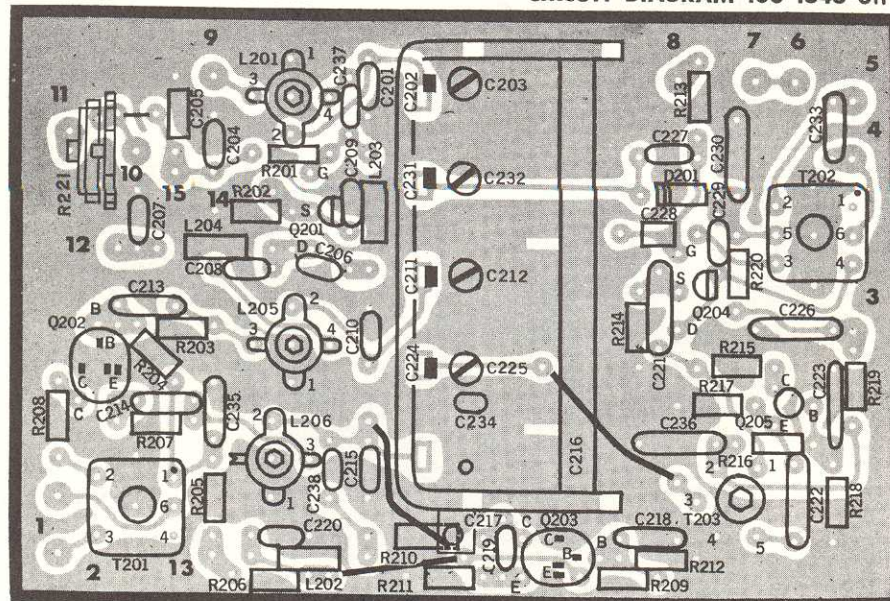


**BOTTOM VIEW**



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

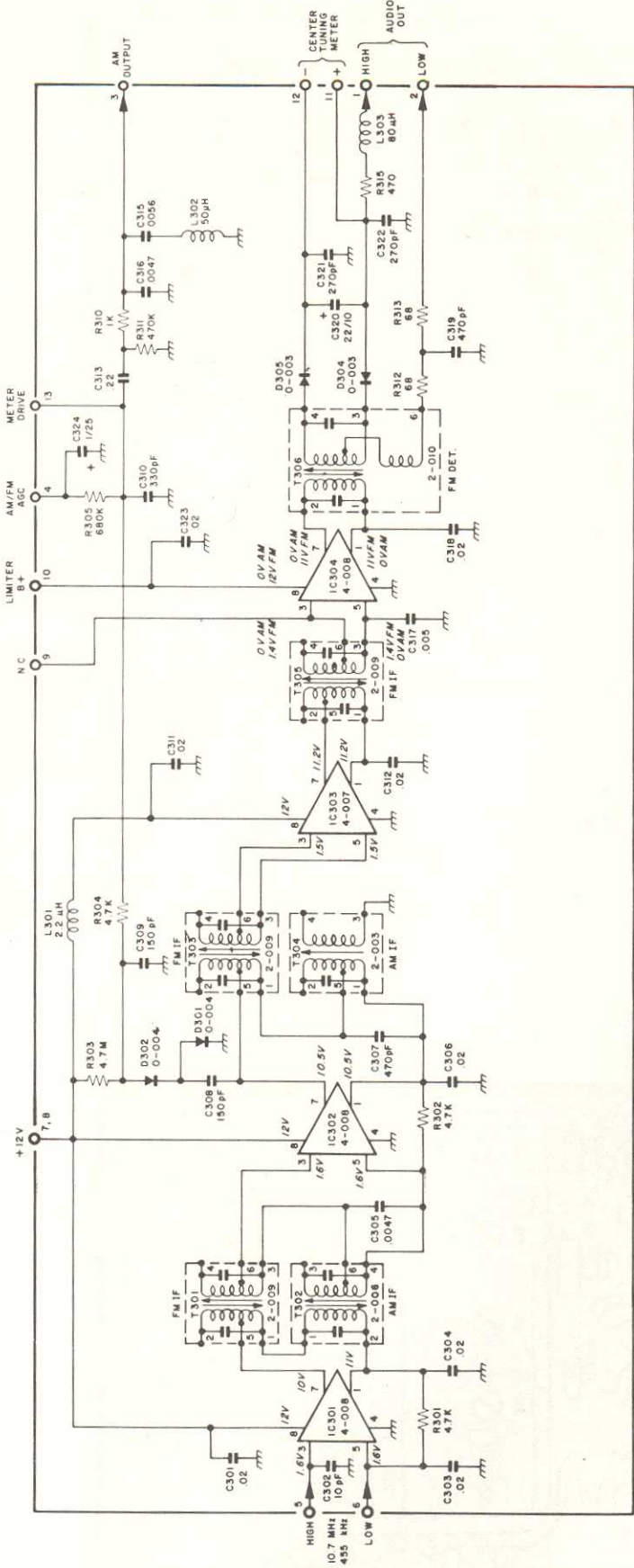
**CIRCUIT DIAGRAM 100-1343-011**



AM/FM FRONT END

019-1107-073/D

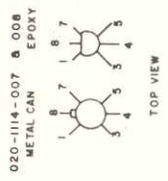




AM - FM IF AMPLIFIER 100-1331-031

P.C. BOARD 019-1107-028

- NOTES:
- UNLESS OTHERWISE SPECIFIED: RESISTANCE IN OHMS ± 10% 1/4 WATT, AND CAPACITANCE IN μFD'S
  - HIGHEST SERIES NUMBERS ARE: C324, R315, D305, IC304, Q301, L303 & T306
  - COMPONENTS DELETED ARE: R306, R307, R308, R305, R314, C314 & D303
  - ARROW HEADS INDICATES MAIN SIGNAL FLOW
  - ALL TRANSISTORS, DIODES, INTEGRATED CIRCUITS & TRANSFORMERS ARE THROUGH-HOLE TYPE UNLESS OTHERWISE SPECIFIED
  - SI PREFIXES RESPECTIVELY ARE 020-114-007, 020-114-008, 020-114-009, 020-114-010, 020-114-011, 020-114-012, 020-114-013, 020-114-014, 020-114-015, 020-114-016, 020-114-017, 020-114-018, 020-114-019, 020-114-020, 020-114-021, 020-114-022, 020-114-023, 020-114-024, 020-114-025, 020-114-026, 020-114-027, 020-114-028, 020-114-029, 020-114-030, 020-114-031, 020-114-032, 020-114-033, 020-114-034, 020-114-035, 020-114-036, 020-114-037, 020-114-038, 020-114-039, 020-114-040, 020-114-041, 020-114-042, 020-114-043, 020-114-044, 020-114-045, 020-114-046, 020-114-047, 020-114-048, 020-114-049, 020-114-050, 020-114-051, 020-114-052, 020-114-053, 020-114-054, 020-114-055, 020-114-056, 020-114-057, 020-114-058, 020-114-059, 020-114-060, 020-114-061, 020-114-062, 020-114-063, 020-114-064, 020-114-065, 020-114-066, 020-114-067, 020-114-068, 020-114-069, 020-114-070, 020-114-071, 020-114-072, 020-114-073, 020-114-074, 020-114-075, 020-114-076, 020-114-077, 020-114-078, 020-114-079, 020-114-080, 020-114-081, 020-114-082, 020-114-083, 020-114-084, 020-114-085, 020-114-086, 020-114-087, 020-114-088, 020-114-089, 020-114-090, 020-114-091, 020-114-092, 020-114-093, 020-114-094, 020-114-095, 020-114-096, 020-114-097, 020-114-098, 020-114-099, 020-114-100, 020-114-101, 020-114-102, 020-114-103, 020-114-104, 020-114-105, 020-114-106, 020-114-107, 020-114-108, 020-114-109, 020-114-110, 020-114-111, 020-114-112, 020-114-113, 020-114-114, 020-114-115, 020-114-116, 020-114-117, 020-114-118, 020-114-119, 020-114-120, 020-114-121, 020-114-122, 020-114-123, 020-114-124, 020-114-125, 020-114-126, 020-114-127, 020-114-128, 020-114-129, 020-114-130, 020-114-131, 020-114-132, 020-114-133, 020-114-134, 020-114-135, 020-114-136, 020-114-137, 020-114-138, 020-114-139, 020-114-140, 020-114-141, 020-114-142, 020-114-143, 020-114-144, 020-114-145, 020-114-146, 020-114-147, 020-114-148, 020-114-149, 020-114-150, 020-114-151, 020-114-152, 020-114-153, 020-114-154, 020-114-155, 020-114-156, 020-114-157, 020-114-158, 020-114-159, 020-114-160, 020-114-161, 020-114-162, 020-114-163, 020-114-164, 020-114-165, 020-114-166, 020-114-167, 020-114-168, 020-114-169, 020-114-170, 020-114-171, 020-114-172, 020-114-173, 020-114-174, 020-114-175, 020-114-176, 020-114-177, 020-114-178, 020-114-179, 020-114-180, 020-114-181, 020-114-182, 020-114-183, 020-114-184, 020-114-185, 020-114-186, 020-114-187, 020-114-188, 020-114-189, 020-114-190, 020-114-191, 020-114-192, 020-114-193, 020-114-194, 020-114-195, 020-114-196, 020-114-197, 020-114-198, 020-114-199, 020-114-200



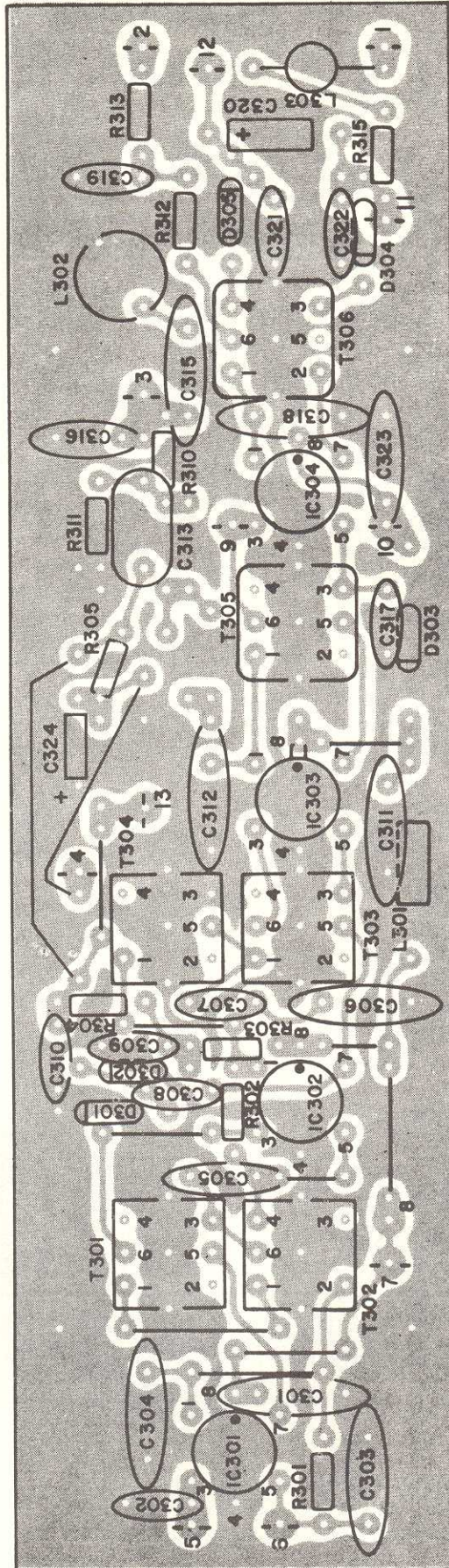
020-114-007  
METAL CAN  
EPOXY

TOP VIEW

# H. H. Scott 357B

100-1331-032  
 100-1331-031

IC301, IC302, IC304 020-1114-008  
 IC303 020-1114-007

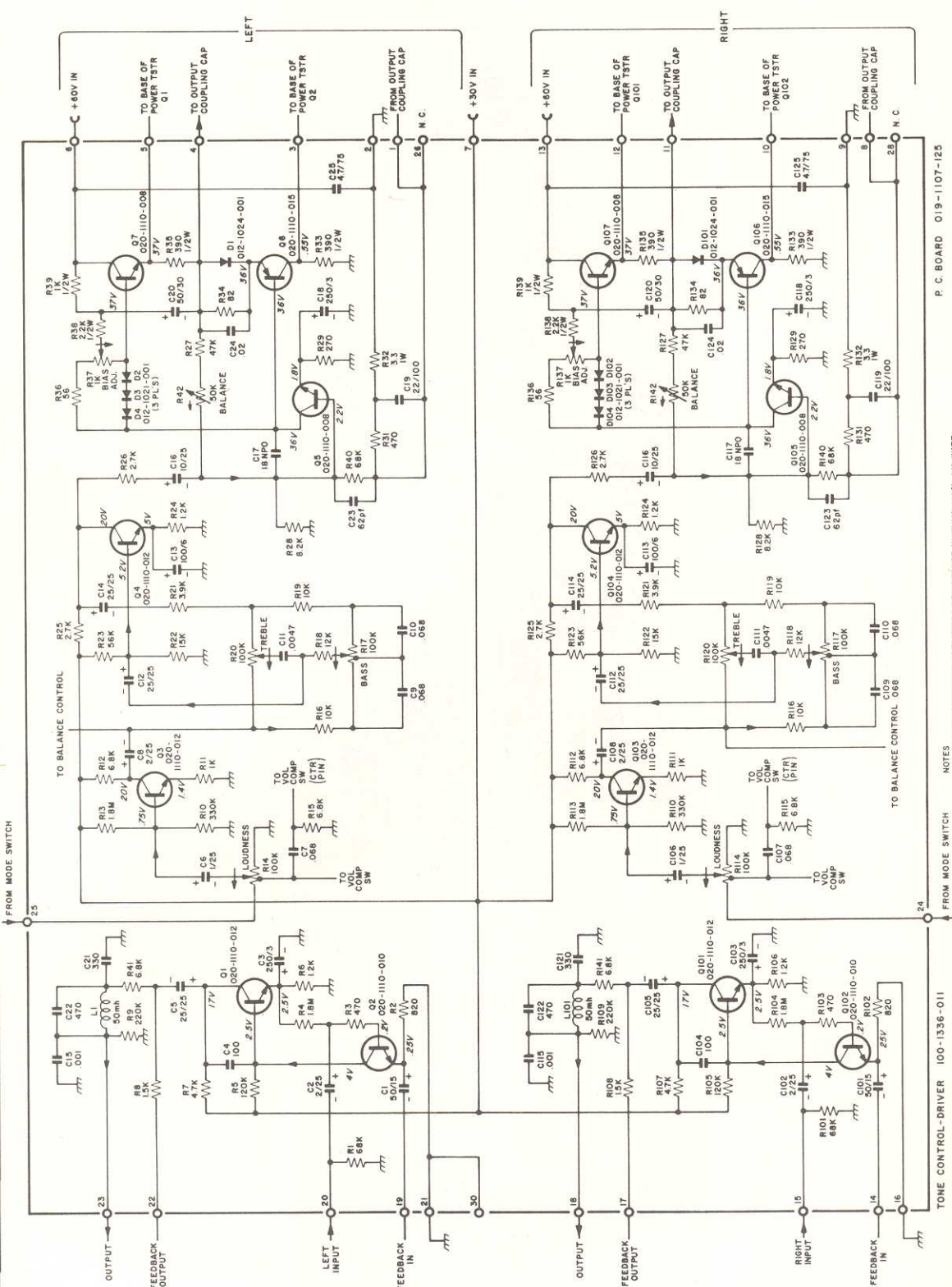


019-1107-028/D REV 0

H. H. S. AM-FM IF AMPLIFIER



# TONE CONTROL - DRIVER



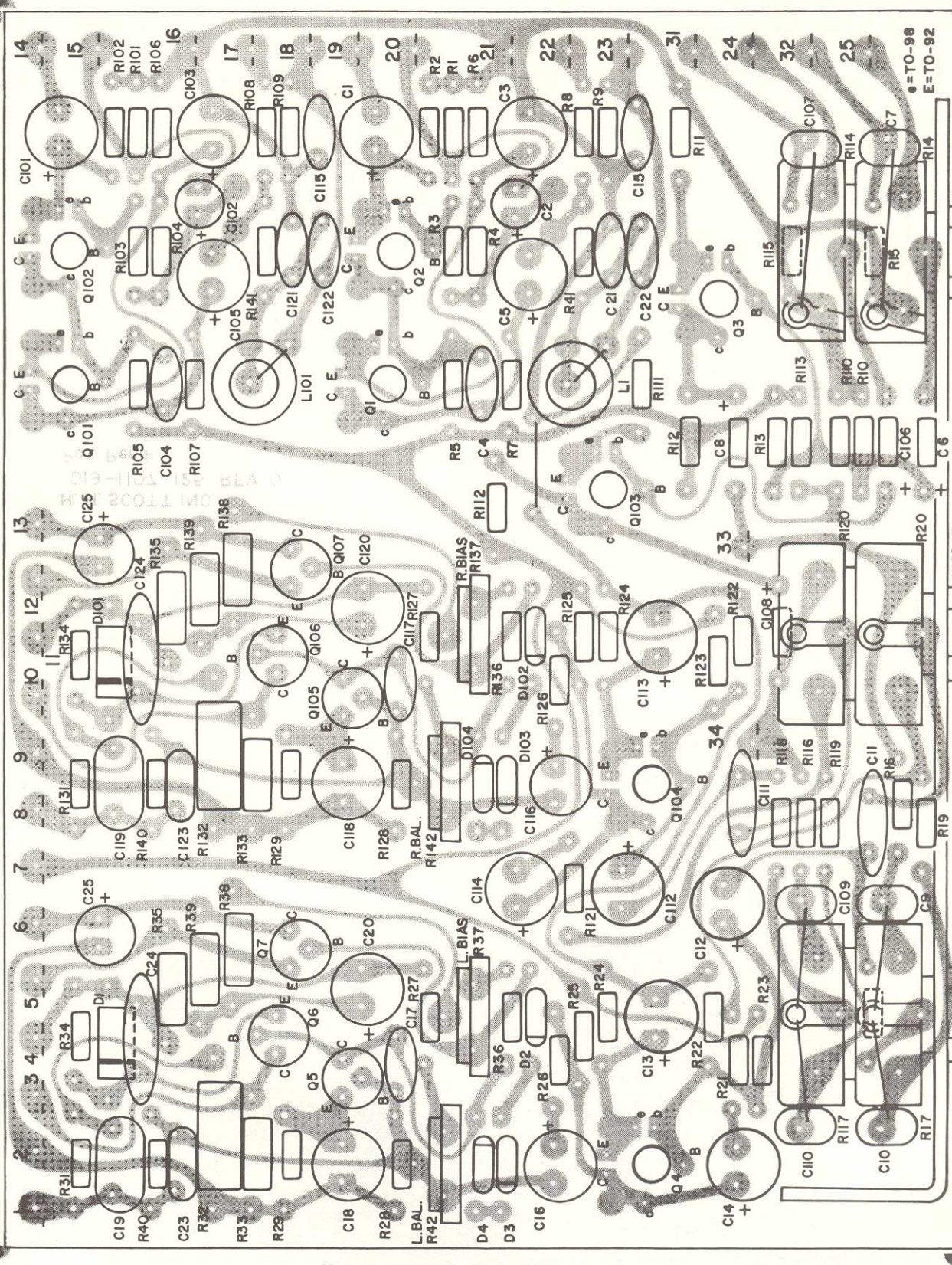
P. C. BOARD 019-1107-125

- NOTES:
1. UNLESS OTHERWISE SPECIFIED, RESISTANCE IN OHMS ±10%, 1/4 WATT.
  2. CAPACITANCE IN MFD'S. ALL VOLTAGES DC ±15%, MEASURED WITH 20K $\Omega$  VOM NO SIGNAL & 117 VAC LINE.
  3. 20K $\Omega$  VOM NO SIGNAL & 117 VAC LINE.
  4. ARROW HEADS INDICATE MAIN SIGNAL PATH.
  5. HIGHEST SERIES NUMBERS: C25-C125, R42, R142, D4, D104, Q7, Q107.

TONE CONTROL-DRIVER 100-1336-011



CIRCUIT DIAGRAM 100-1336-011



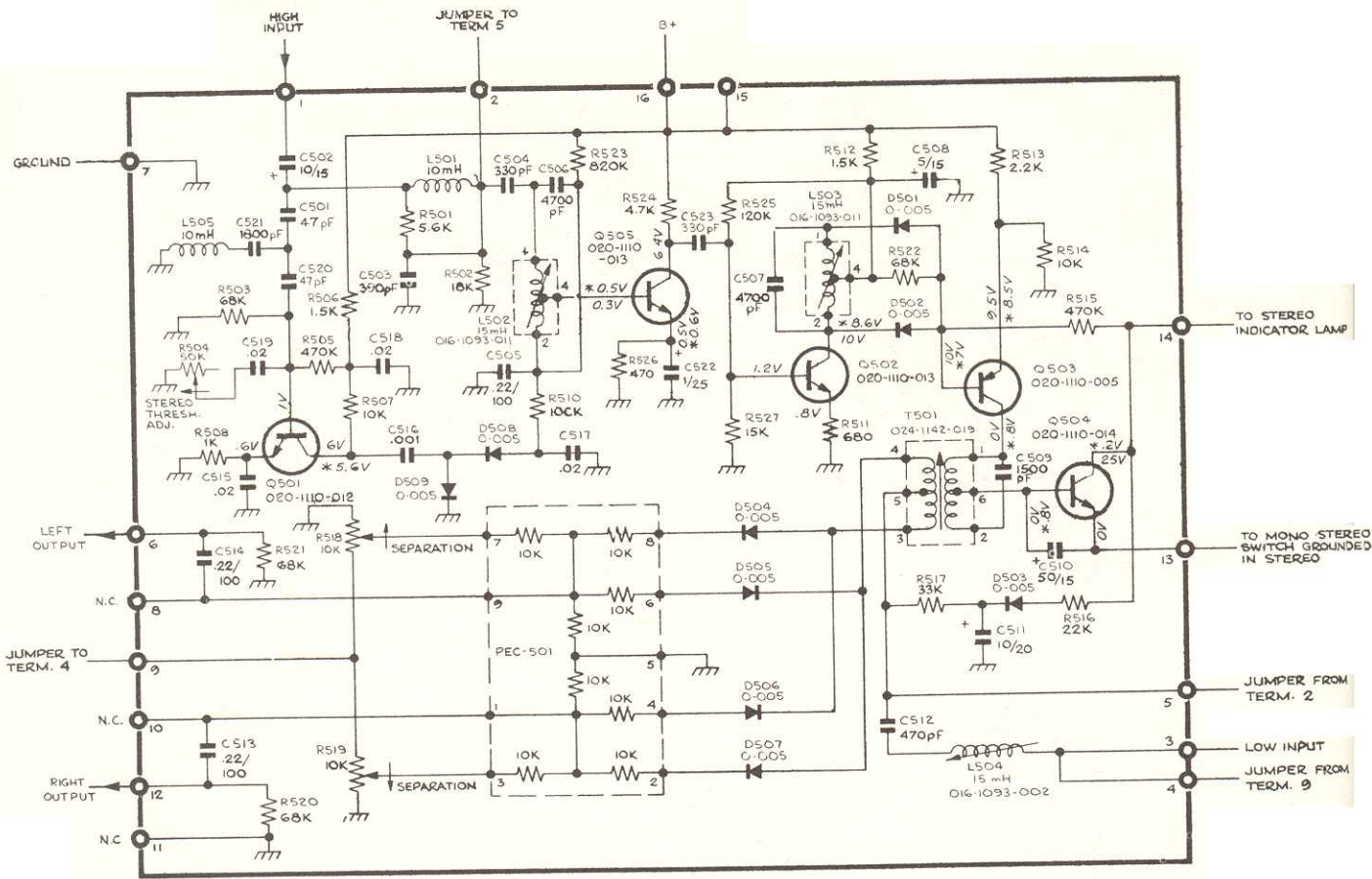
P.C. BOARD 019-1107-125 REV.

H.H. SCOTT INC. TONE CONTROL DRIVER

Q3, Q103,  
Q1, Q101,  
Q4, Q104 --- 020-1110-012

Q2, Q102 --- 020-1110-010  
Q6, Q106 --- 020-1110-009  
Q7, Q107 --- 020-1110-008  
Q5, Q105 --- 020-1110-014





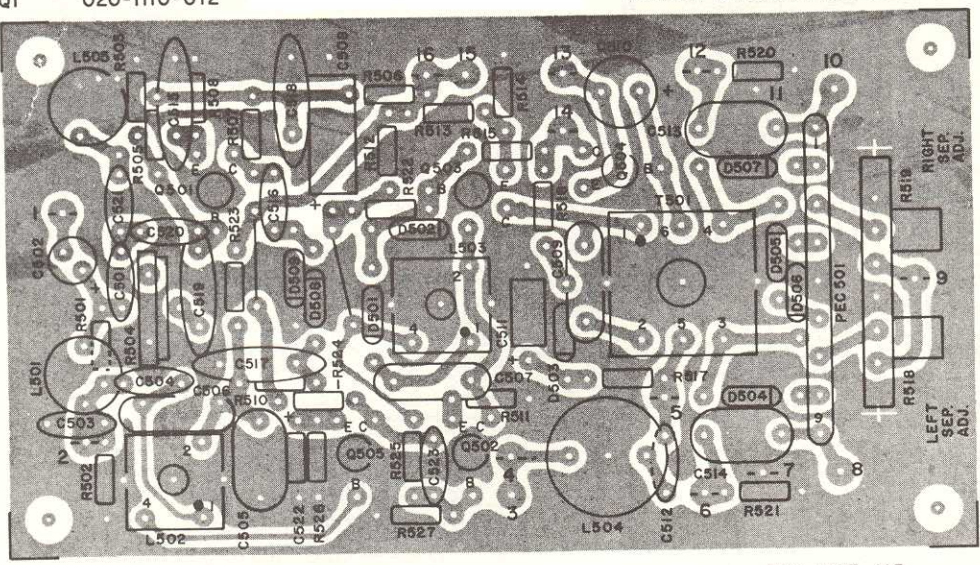
MULTIPLEX DECODER 100-1332-014

PC BD 019-1107-115

- NOTES:
1. UNLESS OTHERWISE SPECIFIED: RESISTANCE IN OHMS  $\pm 10\%$ , CAPACITANCE IN MFD'S, RESISTORS 1/4 WATT.
  2. ARROWS ON POTENTIOMETERS INDICATE CW ROTATION.
  3. ALL VOLTAGES  $\pm 15\%$   
\* MODE SWITCH IN STEREO POSITION.
  4. HIGHEST SERIES NUMBERS ARE: R527, T501, C523, L505, D509 & PEC 501
  5. DELETED COMPONENTS ARE: R3
  6. DIODES ARE LISTED BY THE LAST FOUR DIGITS OF A TEN DIGIT P/N PREFIX IS 012-102-....

- Q4 020-1110-014
- Q3 020-1110-005
- Q2,Q5 020-1110-013
- Q1 020-1110-012

CIRCUIT DIAGRAM 100-1332-014

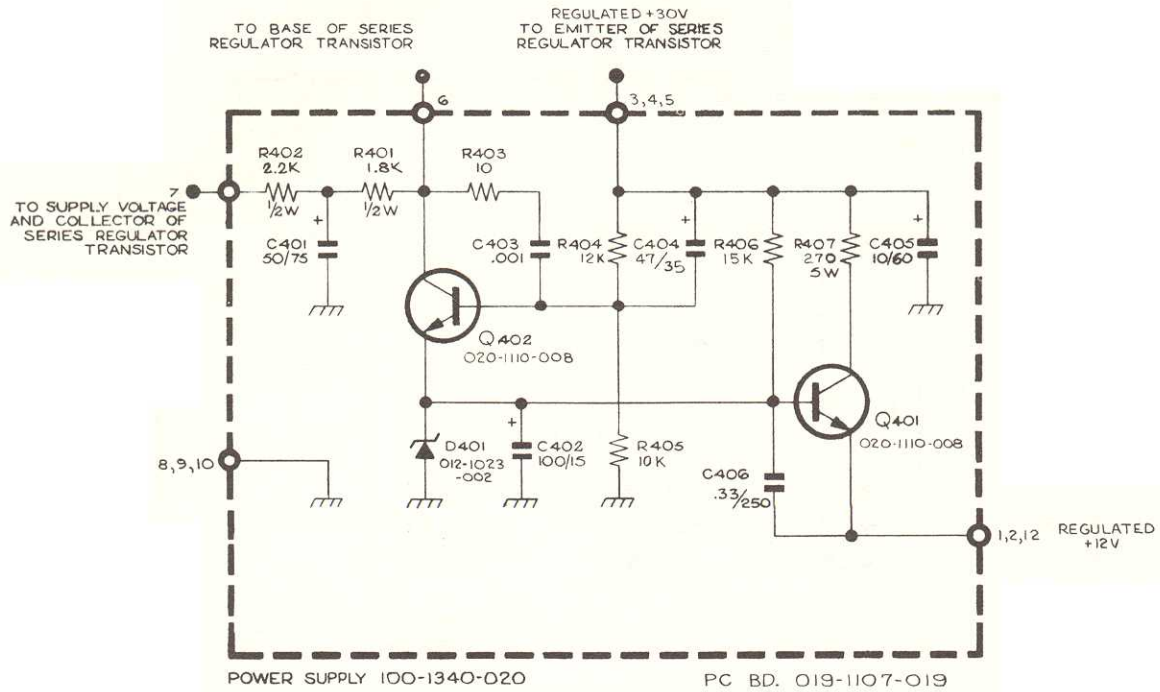


H.H.S MULTIPLEX DECODER

019-1107-115



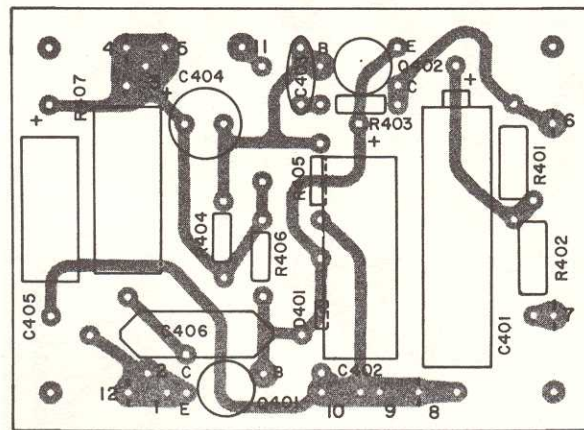
# H. H. Scott 357B



NOTES:  
 UNLESS OTHERWISE SPECIFIED  
 1. RESISTANCE IN OHMS  $\pm 10\%$   
 CAPACITANCE IN MFD'S  
 RESISTORS  $\frac{1}{4}$  WATT

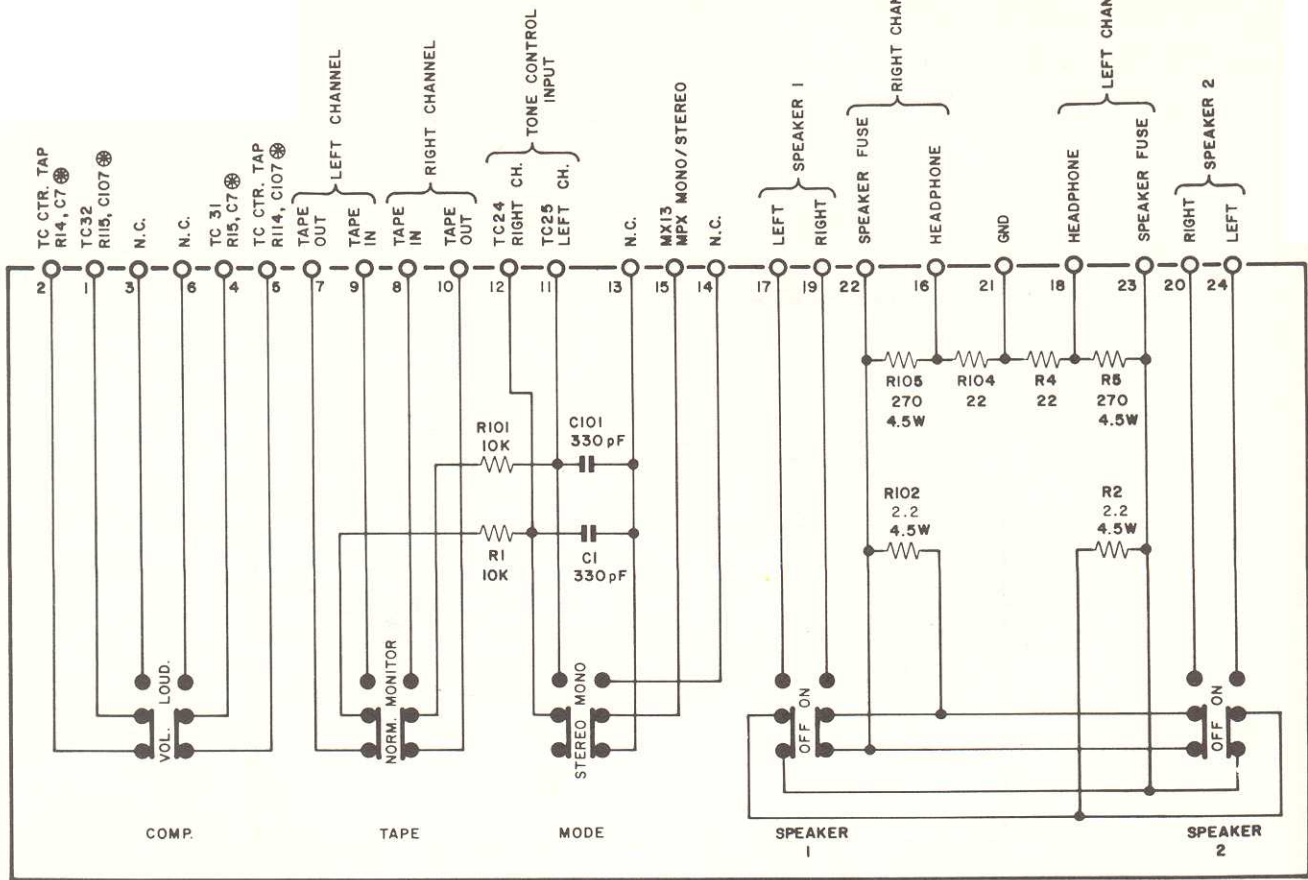
Q401 & Q402  
 020-1110-008

CIRCUIT DIAGRAM 100-1340-020



H.H.S POWER SUPPLY

019-1107-019



SWITCH BOARD 100-1352-013

P.C. BOARD 019-1107-152

NOTES:

1. UNLESS OTHERWISE SPECIFIED: RESISTANCE IN OHMS  $\pm 10\%$  1/4 WATT, CAPACITANCE IN MICROFARADS.
2. TC = TONE CONTROL ASSY PIN NO'S
3. HIGHEST SERIES NO'S ARE R5, R105, C1, C101
4. AC POWER SWITCH IS MECHANICALLY CONNECTED TO OTHER SWITCHES ON BOARD
5. PUSH BUTTON SWITCHES SHOWN IN "OUT" POSITION.
6. ASSEMBLY MAY HAVE TWO/CH.  $4\Omega$  RESISTORS SUBSTITUTED FOR THE ONE/CH.  $2.2\Omega$  RESISTORS.

CIRCUIT DIAGRAM 100-1352-013

