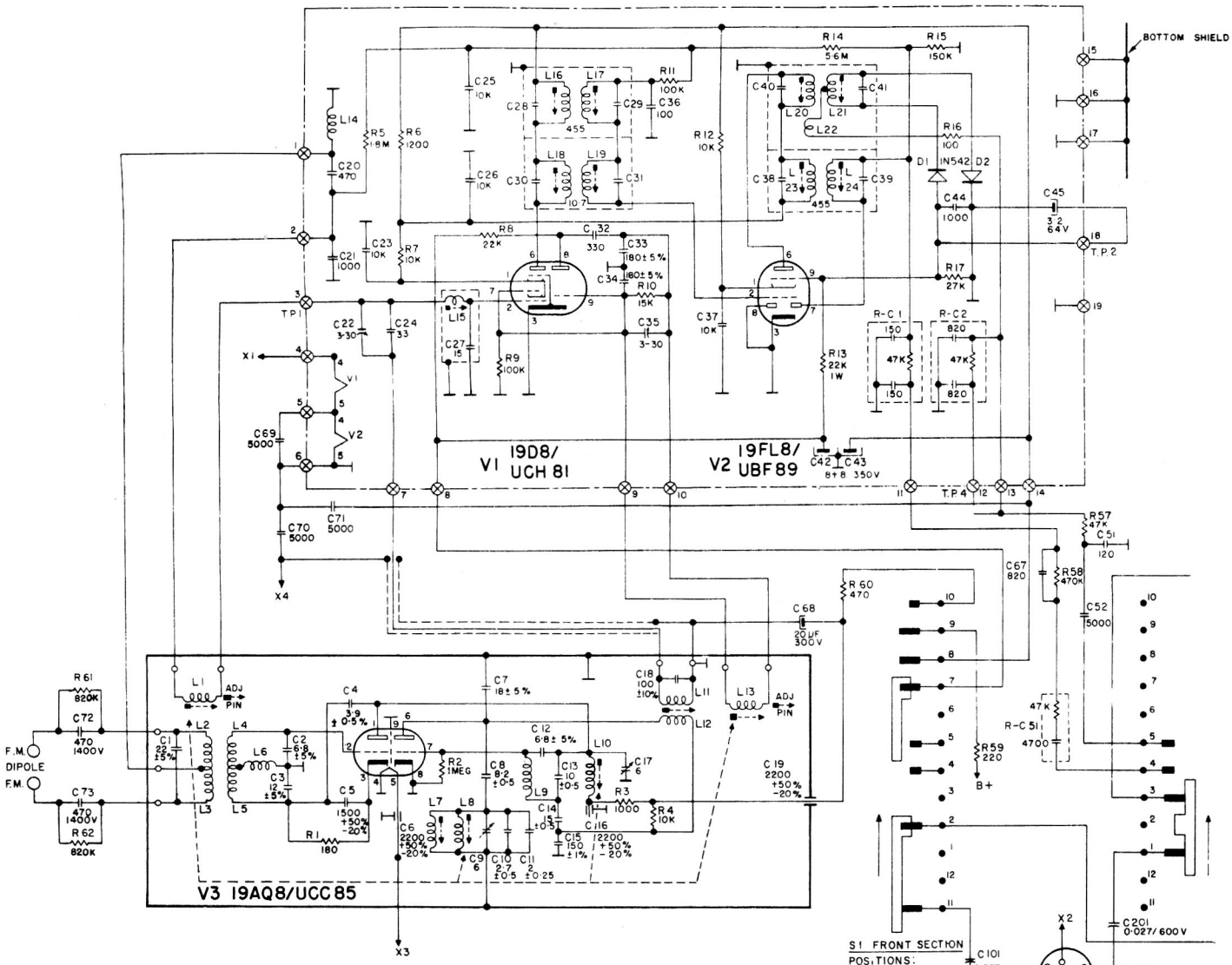
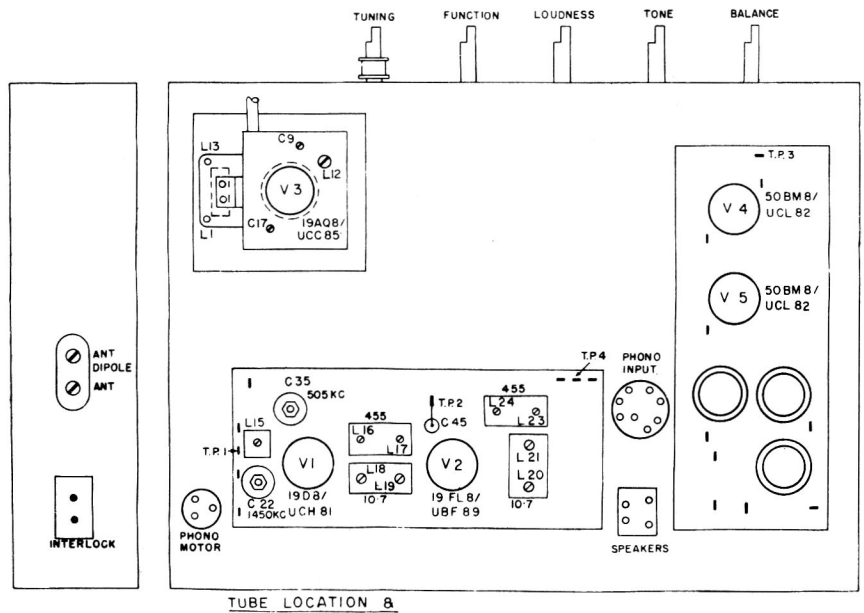
PHILIPS
RG2030A





TUBE LOCATION & ALIGNMENT POINTS

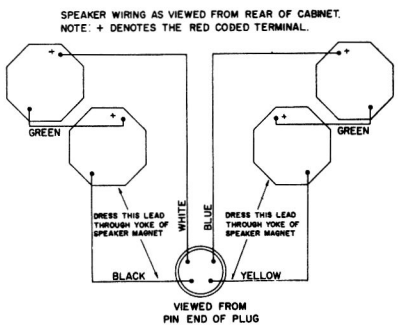
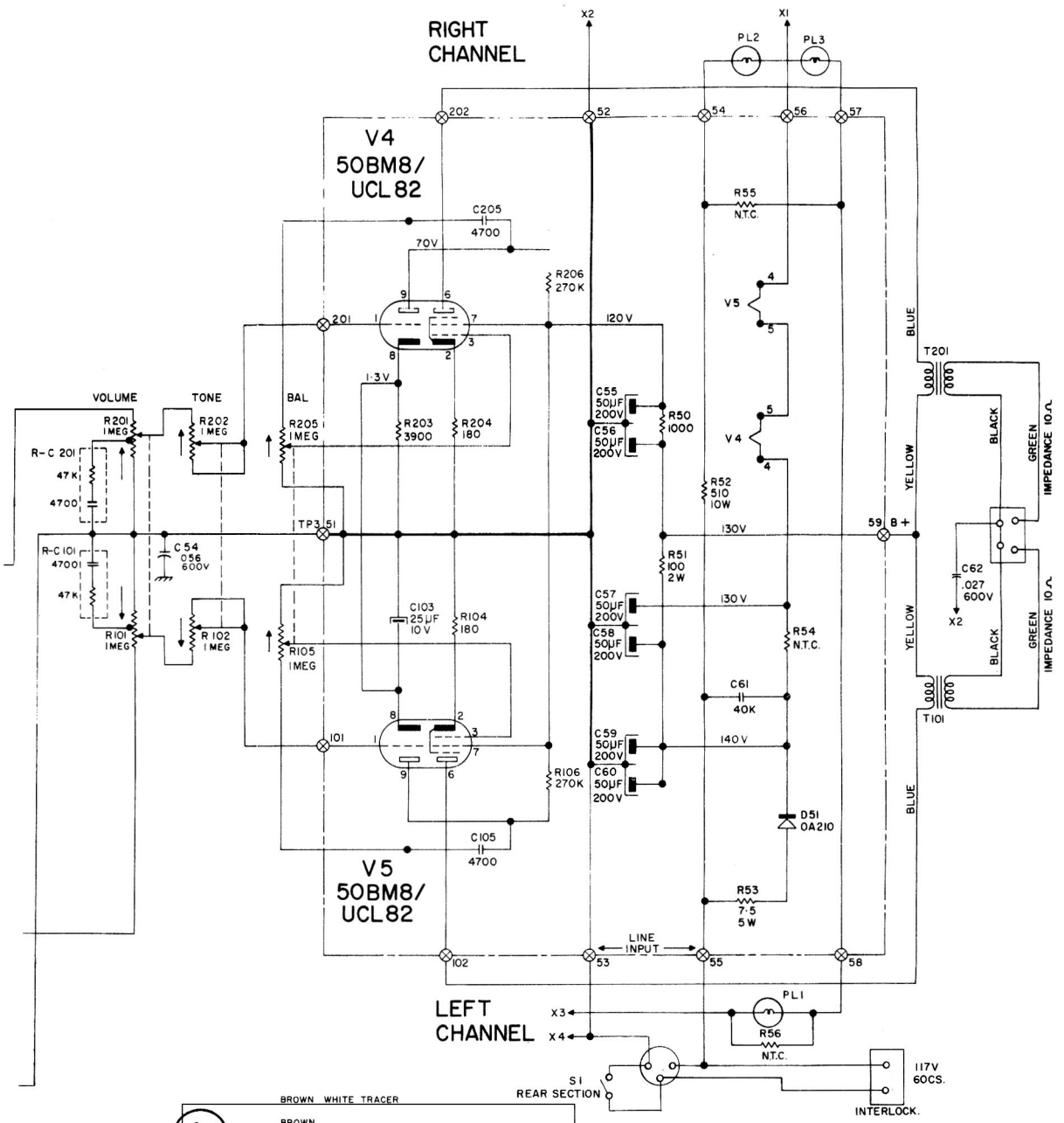


DIAGRAM SPEAKER WIRING CONNECTIONS


RIGHT CHANNEL
V4 50BM8/ UCL82
V5 50BM8/ UCL82
LEFT CHANNEL
VOLUME
TONE
BAL
R201 1MEG
R202 1MEG
R205 1MEG
R203 3900
R204 180
R-C 201
47K
4700
R-C 101
4700
47K
C54 056 600V
R101 1MEG
R102 1MEG
R105 1MEG
C205 4700
70V
R206 270K
120V
1·3V
C55 50µF 200V
C56 50µF 200V
R50 1000
R55 N.T.C.
V5
V4
R52 510 10W
130V
R51 100 2W
C57 50µF 200V
C58 50µF 200V
130V
R54 N.T.C.
C61 40K
C59 50µF 200V
C60 50µF 200V
140V
R106 270K
D51 OA210
C103 25µF 10V
R104 180
C105 4700
R53 7·5 5W
LINE INPUT
TP3
PL2
PL3
PL1
R56 N.T.C.
S1 REAR SECTION
117V 60CS.
INTERLOCK.
T201
T101
BLUE
YELLOW
BLACK
GREEN
IMPEDANCE 10Ω
C62 .027 600V
X1
X2
X3
X4
202
52
54
56
57
201
101
102
53
55
58
59 B+
BROWN WHITE TRACER
BROWN
BLUE
COLOURLESS
YELLOW
SHIELD
COLOURED
RED
WHITE
GOLD
FRONT VIEW OF PICKUP ARM
BROWN
BLACK
WHITE
4700
WHITE
4700
GREY
M
CHANGER BASE

FM ALIGNMENT-IF (Sweep Generator Method)

The AUDIO OUTPUTS MUST BE LOADED and the AM section of the receiver correctly aligned before attempting FM alignment. For optimum results, a sweep frequency generator and an oscilloscope should be used. When these test instruments are not available, the dc alignment should be carried out. Set FUNCTION switch to FM.

1. Connect the 10.7 Mc/s. output of a sweep frequency generator between the tube shield of V3 and B- (tuner frame); insulate the base of the tube shield from the tuner.
2. Disconnect the negative lead (body) of C45 from test point TP2.
3. Connect the oscilloscope input to test point TP2 via a 47 K. isolation resistor. Connect oscilloscope ground to test point TP3.
4. Adjust L12, L15, L18, L19 and L20 to obtain a bandpass pattern on the oscilloscope of approx. 1.0 volt amplitude. Adjust sweep generator as required.
5. Re-connect C45 to test point TP2. Connect oscilloscope input to test point TP4 via the 47 K. isolation resistor.
6. Adjust L21 to obtain a symmetrical and linear detection characteristic (S curve) on the oscilloscope with an approximate peak to peak amplitude of 0.15 volt. Reduce generator output as required. The important consideration, when adjusting L21, is the linearity and symmetry of the S curve; also look for symmetrical noise rejection at both sides of the 10.7 Mcs. marker.

NOTE: The 10.7 Mc/s. marker does not necessarily have to coincide with the zero reference line.

FM ALIGNMENT-IF (Alternative Method)

1. Connect the output of an unmodulated 10.7 Mc/s. generator between the tube shield of V3 and B- (tuner frame); insulate the base of the tube shield from the tuner.
2. Connect a DC VTVM between test point TP2 and test point TP3 (VTVM ground to test point TP3; do not disconnect C45).
3. Adjust L12, L15, L18, L19, L20 and finally L21 in the sequence given, for maximum negative indication on the VTVM. Adjust the generator output to provide a VTVM reading of -3.0 volts.

NOTE: The adjustment to L21 will have a minor effect on the VTVM reading but it will be clearly recognizable if made with care.

FM ALIGNMENT-RF

1. Connect the 96 Mc/s. unmodulated output of a signal generator, having a balanced 300 ohm output, to the antenna terminals. (If the generator available does not have a balanced output, an unbalanced output may be used and should be connected between either of the antenna terminals and the tuner frame).
2. Connect a DC. VTVM to test point TP2; connect VTVM ground to test point TP3. Rotate tuning control until the receiver dial pointer indicates 96 Mc/s. Adjust C9 and then C17 for a peak negative reading on the VTVM. Do not exceed 3 volts; adjust generator output as required.

FM TUNER REPLACEMENT

After FM tuner replacement, L12 and L15 should be adjusted as described in FM Alignment (IF.) (Step 4 Sweep Alignment) or (Step 3 FM Alignment - IF. (Alternative Method).