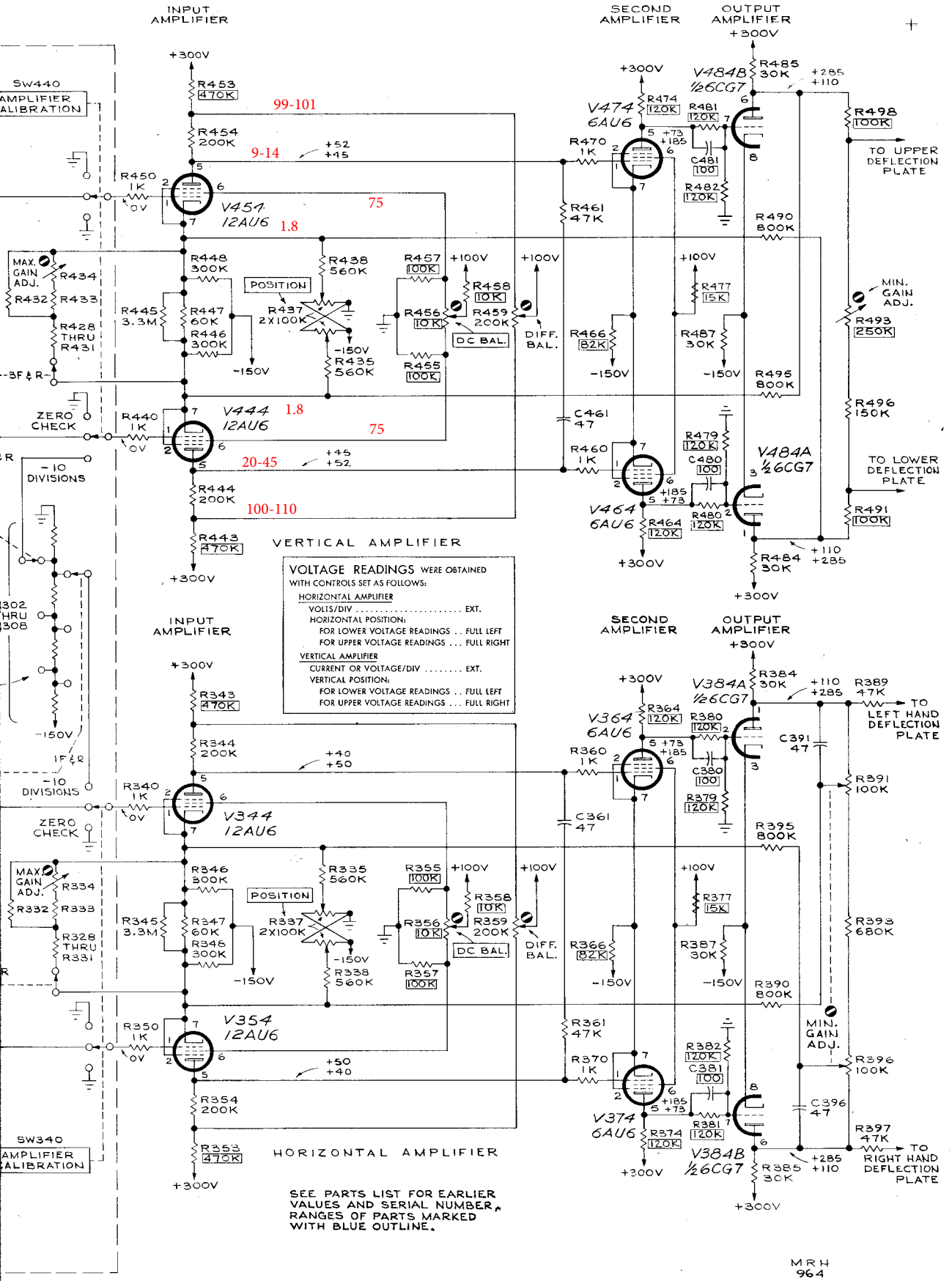
INPUT AMPLIFIER
SECOND AMPLIFIER
OUTPUT AMPLIFIER
+300V
SW440
AMPLIFIER CALIBRATION
R453 470K
R454 200K
R450 1K
0V
V454 12AU6
R448 300K
R438 560K
R457 100K
+100V
R458 10K
R456 10K
R459 200K
DC BAL.
DIFF. BAL.
R455 100K
R435 560K
-150V
POSITION
R437 2X100K
R447 60K
R446 300K
R445 3.3M
R434
R432
R433
MAX. GAIN ADJ.
R428 THRU R431
ZERO CHECK
R440 1K
V444 12AU6
R444 200K
R443 470K
-10 DIVISIONS
99-101
9-14
+52 +45
75
1.8
20-45
+45 +52
100-110
VERTICAL AMPLIFIER
VOLTAGE READINGS WERE OBTAINED WITH CONTROLS SET AS FOLLOWS:
HORIZONTAL AMPLIFIER
VOLTS/DIV ..... EXT.
HORIZONTAL POSITION:
FOR LOWER VOLTAGE READINGS .. FULL LEFT
FOR UPPER VOLTAGE READINGS ... FULL RIGHT
VERTICAL AMPLIFIER
CURRENT OR VOLTAGE/DIV ..... EXT.
VERTICAL POSITION:
FOR LOWER VOLTAGE READINGS .. FULL LEFT
FOR UPPER VOLTAGE READINGS ... FULL RIGHT
V474 6AU6
R474 120K
R470 1K
R461 47K
R481 120K
C481 100
R482 120K
+73 +185
V484B ½6CG7
R485 30K
+285 +110
R498 100K
TO UPPER DEFLECTION PLATE
R490 800K
R477 15K
R466 82K
R487 30K
R495 800K
MIN. GAIN ADJ.
R493 250K
R496 150K
C461 47
R460 1K
R464 120K
R479 120K
C480 100
R480 120K
V464 6AU6
V484A ½6CG7
R484 30K
R491 100K
TO LOWER DEFLECTION PLATE
+110 +285
+185 +73
R343 470K
R344 200K
R340 1K
V344 12AU6
R346 300K
R335 560K
R355 100K
R358 10K
R356 10K
R359 200K
R338 560K
R357 100K
R345 3.3M
R347 60K
R346 300K
R337 2X100K
R332
R333
R334
R328 THRU R331
R350 1K
V354 12AU6
R354 200K
R353 470K
SW340
AMPLIFIER CALIBRATION
HORIZONTAL AMPLIFIER
+40 +50
+50 +40
V364 6AU6
R364 120K
R360 1K
R361 47K
R370 1K
R380 120K
C380 100
R379 120K
R382 120K
C381 100
R381 120K
R374 120K
V374 6AU6
V384A ½6CG7
V384B ½6CG7
R384 30K
R385 30K
R389 47K
TO LEFT HAND DEFLECTION PLATE
C391 47
R391 100K
R395 800K
R393 680K
R390 800K
R366 82K
R387 30K
R377 15K
C361 47
C396 47
R396 100K
R397 47K
TO RIGHT HAND DEFLECTION PLATE
SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS MARKED WITH BLUE OUTLINE.
MRH 964
HORIZONTAL & VERTICAL AMPLIFIERS