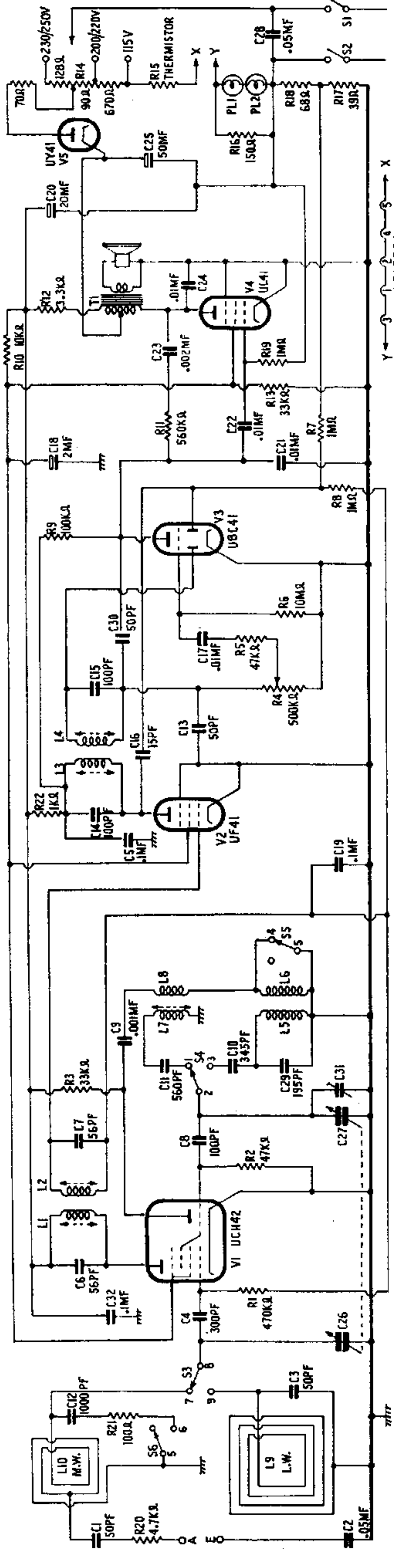


R 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847. 848. 849. 850. 851. 852. 853. 854. 855. 856. 857. 858. 859. 860. 861. 862. 863. 864. 865. 866. 867. 868. 869. 870. 871. 872. 873. 874. 875. 876. 877. 878. 879. 880. 881. 882. 883. 884. 885. 886. 887. 888. 889. 890. 891. 892. 893. 894. 895. 896. 897. 898. 899. 900. 901. 902. 903. 904. 905. 906. 907. 908. 909. 910. 911. 912. 913. 914. 915. 916. 917. 918. 919. 920. 921. 922. 923. 924. 925. 926. 927. 928. 929. 930. 931. 932. 933. 934. 935. 936. 937. 938. 939. 940. 941. 942. 943. 944. 945. 946. 947. 948. 949. 950. 951. 952. 953. 954. 955. 956. 957. 958. 959. 960. 961. 962. 963. 964. 965. 966. 967. 968. 969. 970. 971. 972. 973. 974. 975. 976. 977. 978. 979. 980. 981. 982. 983. 984. 985. 986. 987. 988. 989. 990. 991. 992. 993. 994. 995. 996. 997. 998. 999. 1000.



MODEL U122 is a five-valve, including rectifier, transportable superheterodyne receiver covering the Medium and Long Wavebands. It is contained in a thermo-plastics cabinet with built-in frame aerials, provision being made for the use of an external aerial in areas of low field strength.

MAINS SUPPLY: 200/250 volts D.C. or A.C., 25/100 cps.

Note.—An additional mains tapping screw can be provided to enable the receiver to operate from 115 volts mains. An additional screw is inserted in the 115v. tapping (covered by plastic tape) of the mains adjustment panel, leaving the existing screw in the 200/220v tapping.

CONSUMPTION: 153.5 m.a. with 240 volts A.C. input, 37 watts. 143.5 m.a. with 222.5 volts D.C. input, 32 watts.

VALVES:
 V1—UCH42 Frequency changer.
 V2—UF41—L.F. amplifier.
 V3—UBC41—Demodulator, A.V.C., L.F. amplifier.
 V4—UL41—L.F. amplifier.
 V5—UY41—Halfwave Rectifier.

All valves are Mullard and have B8A bases.

PILOT LAMPS: 6 volts 60 m.a. M.E.S.

LOUDSPEAKER IMPEDANCE: 3 ohms at 400 c.p.s.
INTERMEDIATE FREQUENCY: 470 Kc/s.
DRIVE CORD: Length 37.5 ins. Diagram of drive cord fitting is given overleaf.
FREQUENCY COVERAGE: M.W. 1560 to 532 Kc/s. L.W. 311 to 142 Kc/s.

ALIGNMENT: Connect output meter across the loudspeaker tags. I.F.: Switch to M.W. Turn tuning control fully clockwise to close the gang. Inject 470 Kc/s. via 0.1 mfd. condenser to the control grid (pin 6), of V1 and adjust the 2nd I.F.T. upper and lower cores, then 1st I.F.T. upper and lower cores in that order for maximum output.

POINTER SETTING: Before re-calibration, the pointer must be adjusted to datum. With the gang fully closed, the pointer should coincide with the white mark above the "M" in 550M. Any error can be corrected by sliding the cursor, as necessary, along the drive cord.

M.W. CALIBRATION: Tune to and inject (via A. and E.) 1200 Kc/s. and adjust C31 for maximum output. Check that the Third Programme is received at 1546 Kc/s. Tune to and inject 850 Kc/s. and adjust L7 core for maximum output, choosing the peak where most core stem is exposed.

L.W. CALIBRATION should be satisfactory if M.W. adjustments are correct.

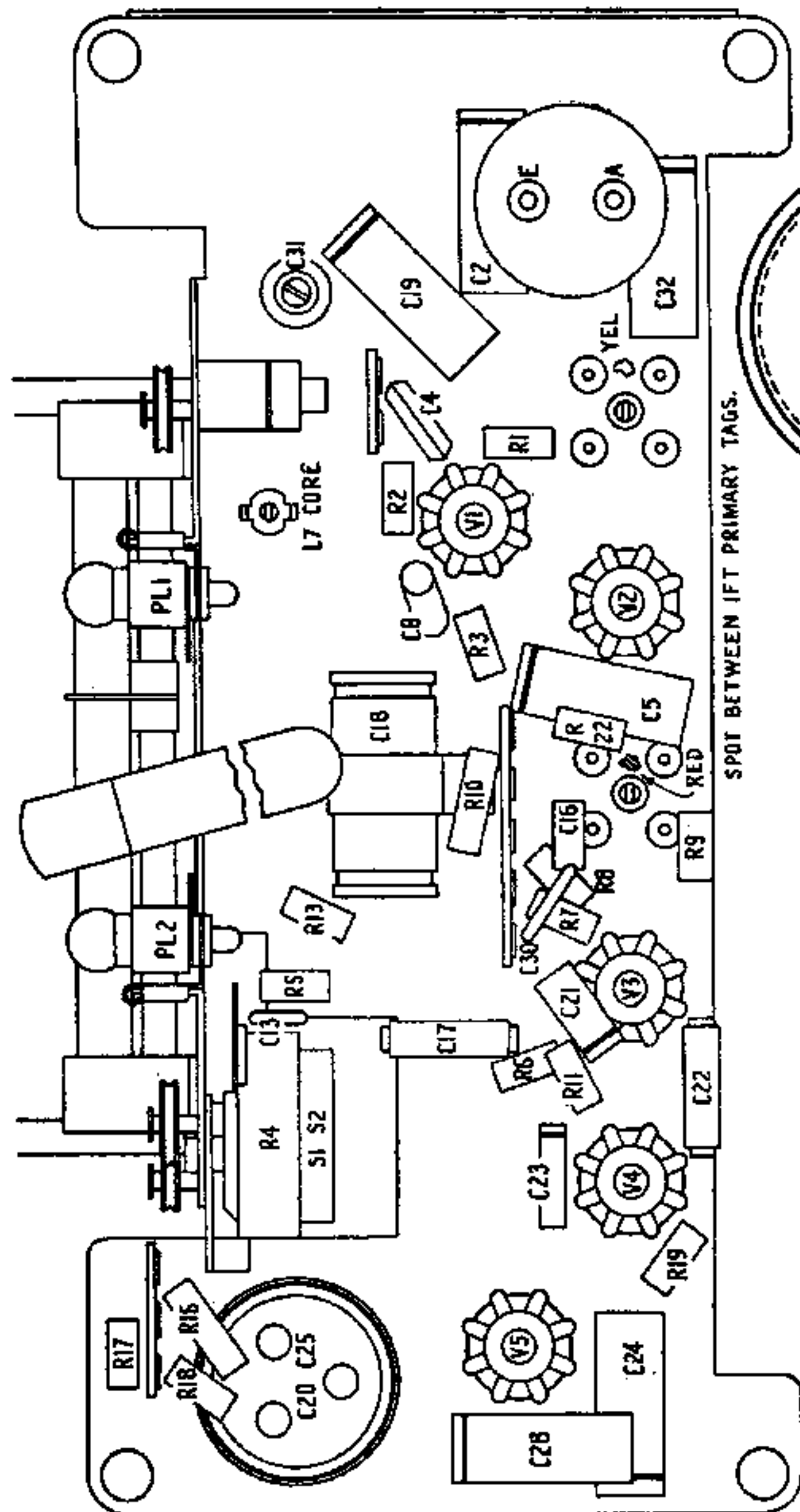
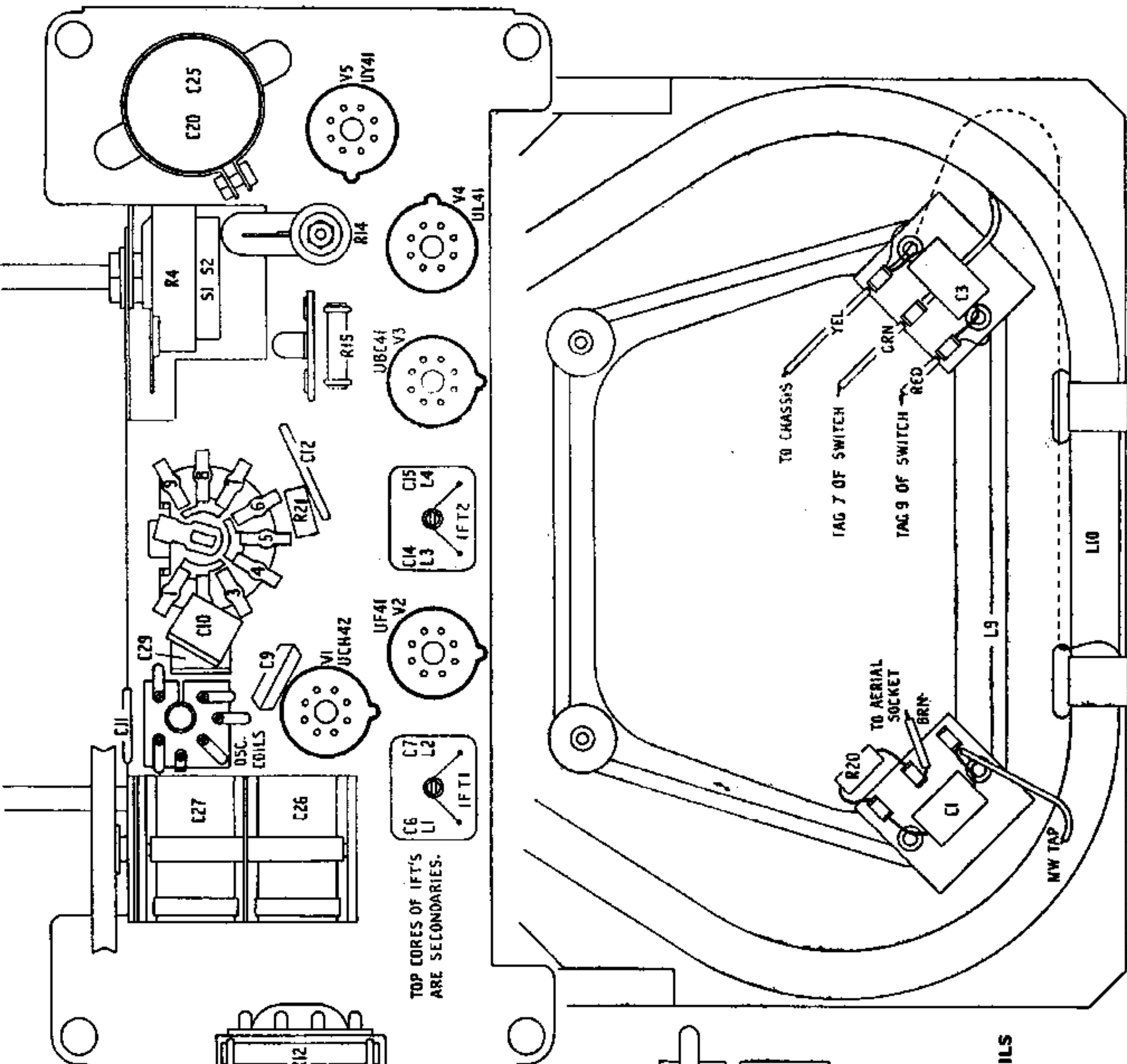
CHASSIS REMOVAL: Lay receiver flat, knobs uppermost, then remove the four rubber feet and slide base cover along the mains cord. Remove the four corner hexagonal pillars and the chassis is then free to be withdrawn from the cabinet.

Note.—In early models, a soft plastic compound was used to prevent possible vibration of the grille against the escutcheon, and in a few cases the compound has prevented the free movement of the released chassis.

In such cases, carefully run a thin bladed knife between the grille and escutcheon to open the bond.

To remove the escutcheon, pull off the two knobs and the plastic washers beneath them. Unscrew the two screws now exposed. With the chassis and escutcheon removed, care must be taken to prevent undue pressure on the wavechange lever which will, snap if grossly mishandled.

DANGER FROM SHOCK: As is usual with AC/DC receivers, the chassis is connected to the mains, and care must be taken when handling a "live" chassis. Ensure that chassis is connected to the earthed side of A.C. mains.



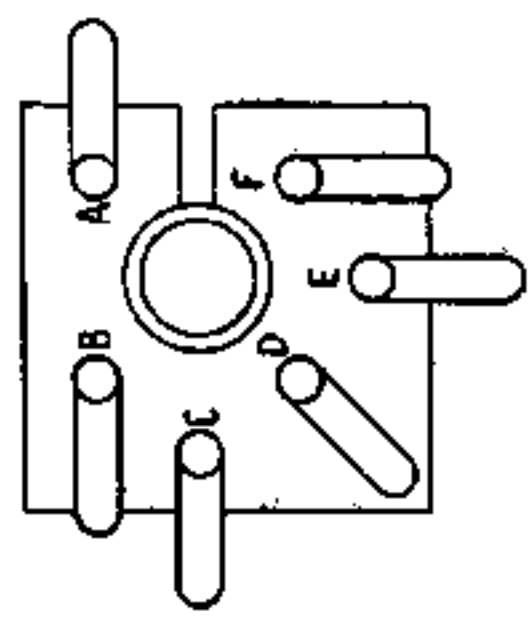
VOLTAGE AND CURRENT DATA

VALVE	ANODE Volts	SCREEN Volts	M.A.	CATHODE Volts	M.A.
UCH42	158	76	2.0	6.7	6.7
UF41	73	76	1.25	5.75	5.75
UBC41	155	76	0.7	0.7	0.7
UL41	213	76	2.35	27.85	27.85
UY41	215AC			218	43.75

BIAS VOLTS : R7—1.72 volts. R17,R18—4.63 volts.

225v. A.C. INPUT. SET TUNED TO 550 METRES NO SIGNAL INPUT. 2000 OHMS/VOLT METER.

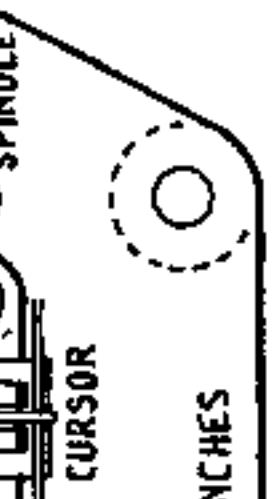
SPOT BETWEEN IFT PRIMARY TAGS.



L5 TAGS A & B
L6 " F & B
L7 " C & E
L8 " D & F
OSC. COIL DETAILS

DRIVE CORD DETAILS

CORD LENGTH 37.5 INCHES



RESISTANCE OF WINDINGS

COIL	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	TLPRI	TLSEC.
OHMS	30	30	15	15	6.5	3	2.5	1.5	11.5	2	170+200	less than 1.

SERVICE DEPT., E. K. COLE Ltd.,
Somerton Works, Arterial Road,
Southend-on-Sea
'Phone: Southend 2296
Head Office: Ekco Works, Southend sea

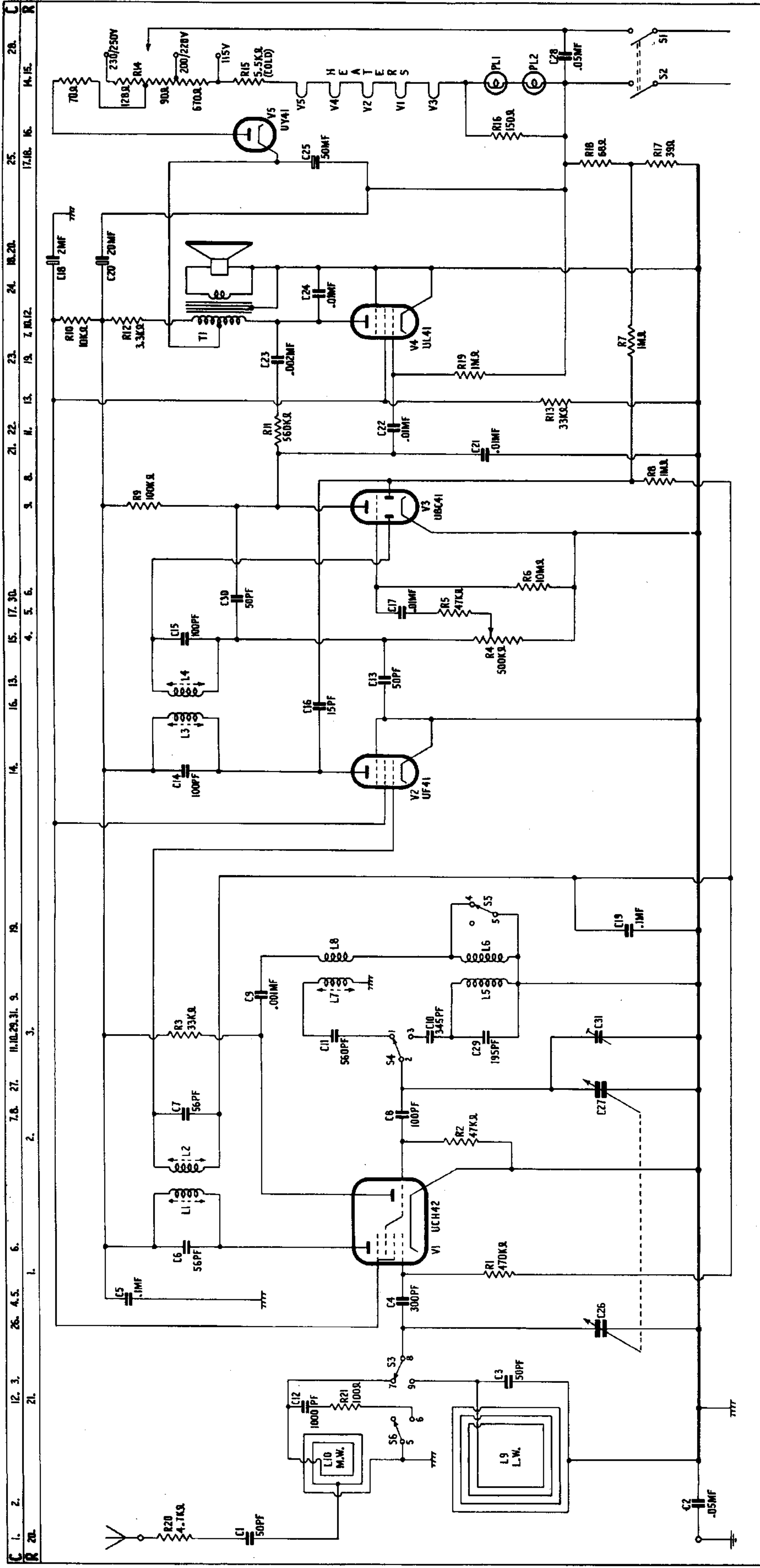
SCOTTISH SERVICE DEPOT:
26, India Street,
Glasgow, C.2.
'Phone: Central 2012

NORTHERN SERVICE DEPOT:
55, Whitworth Street,
Manchester, 1
'Phone: Central 6711/2

MIDLAND SERVICE DEPOT:
11, Brook Street,
Birmingham, 3
'Phone: Central 2505/6

EKCO ADVANCE SERVICE INFORMATION

MODEL U122



EKCO ADVANCE SERVICE INFORMATION

MODEL U122

MODEL U122 is a five valve, including rectifier, superheterodyne receiver covering the medium and long wavebands, with built-in frame aeriels and provision for external aerial and earth. The receiver is housed in a thermo-plastic cabinet and is transportable.

MAINS SUPPLY. 200/220V, 230/250V D.C. or A.C. 25-100 cps.

An additional mains tapping screw can be provided to enable the receiver to operate from 115 volt mains. The additional screw is inserted in the 115V tapping of the mains adjustment panel, leaving the existing screw in the 200/220 volt tapping.

CONSUMPTION. 153.5 ma with 240v A.C. input, 37 watts

143.5 ma with 222.5v D.C. input, 32 watts.

VALVES. As overleaf. All are MULLARD and have B8A bases.

PILOT LAMPS. 6 volts 60 ma MBS.

THERMISTOR R15. This protects the pilots from the initial surge and is nominally 5500 ohms when cold, but drops to approx.

170 ohms when carrying the 100 ma heater current.

FREQUENCY COVERAGE. M.W. 1560 - 532 Kc/s.

L.W. 311 - 142 Kc/s.

INTERMEDIATE FREQUENCY. 470 Kc/s.

DRIVE CORD LENGTH. 37.5 inches.

ALIGNMENT.

I.F. Switch to MW. Turn tuning control fully clockwise.

Inject 470 Kc/s via a 0.1 mfd condenser to the control grid of V1 and adjust 2nd IFT upper and lower cores then 1st IFT upper and lower cores in that order for maximum output.

M.W. Tune to and inject 1200 Kc/s and align gang trimmer for maximum output. Check that the Third Programme is received at 1546 Kc/s.

Tune to and inject 850 Kc/s and adjust L7 core for max. output.

Tune to the peak where most core stem is exposed.

LW calibration should be satisfactory if MW adjustments are correct.