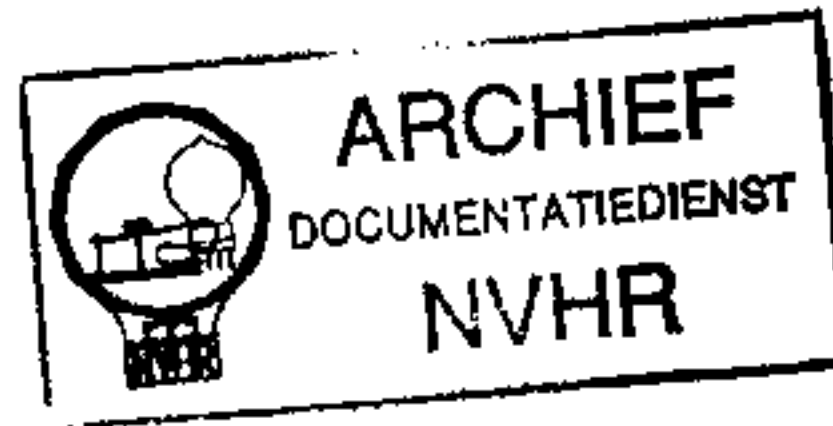
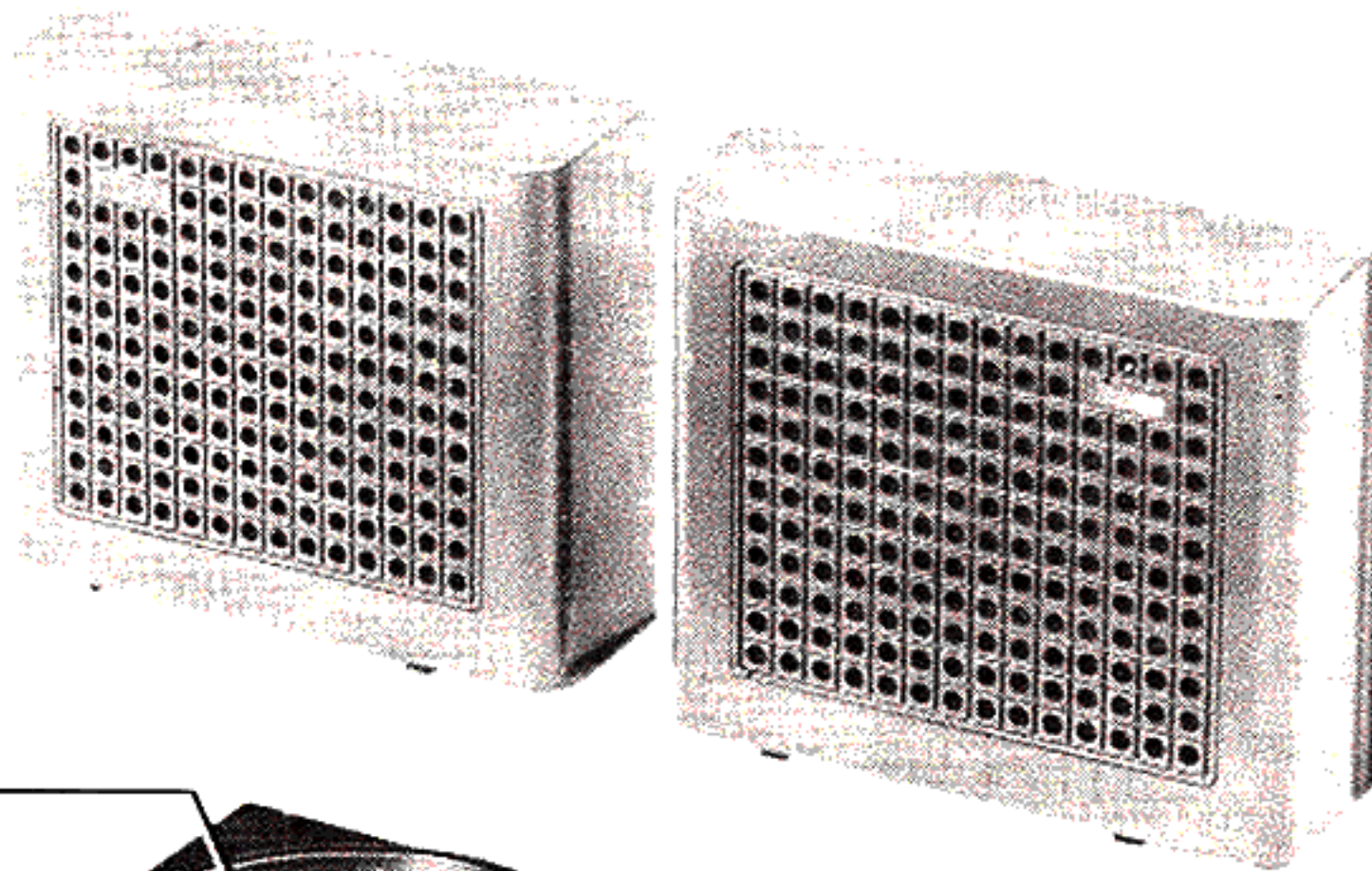


Service  
Service  
Service

Ned. Ver. v. Historie v/d Radio

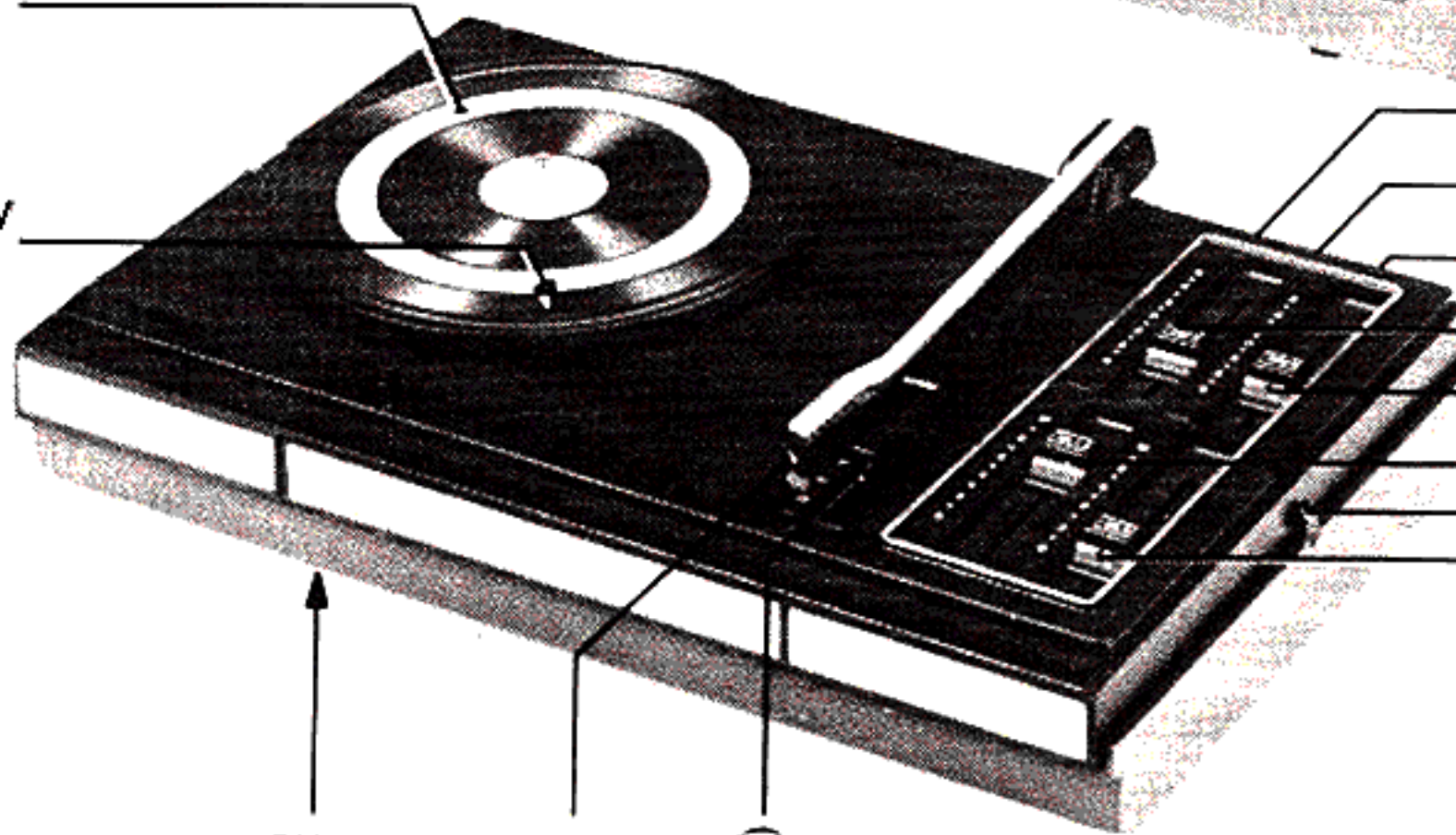


# Service Manual



RECORD PLAYER  
22GC023/90

110/127/220/240V  
50/60Hz SK-2



9V  $\equiv$  6x1.5V (R20)  
GP214 GP215 33-45-78

BU431 { 3.5-2 0.3mV/k $\Omega$  OUTPUT  
          3.5-2 320mV(200k $\Omega$ ) INPUT  
BU430a □ L 4 $\Omega$ /1.5W  
BU430b □ R 4 $\Omega$ /1.5W  
L R R504a  
L R R504b  
L R R505a  
LOCK  
L R R505b

820887

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used

Documentation Technique Service Dokumentation Documentazione di Servizio Huolto-Ohje Manual de Servicio Manual de Servicio

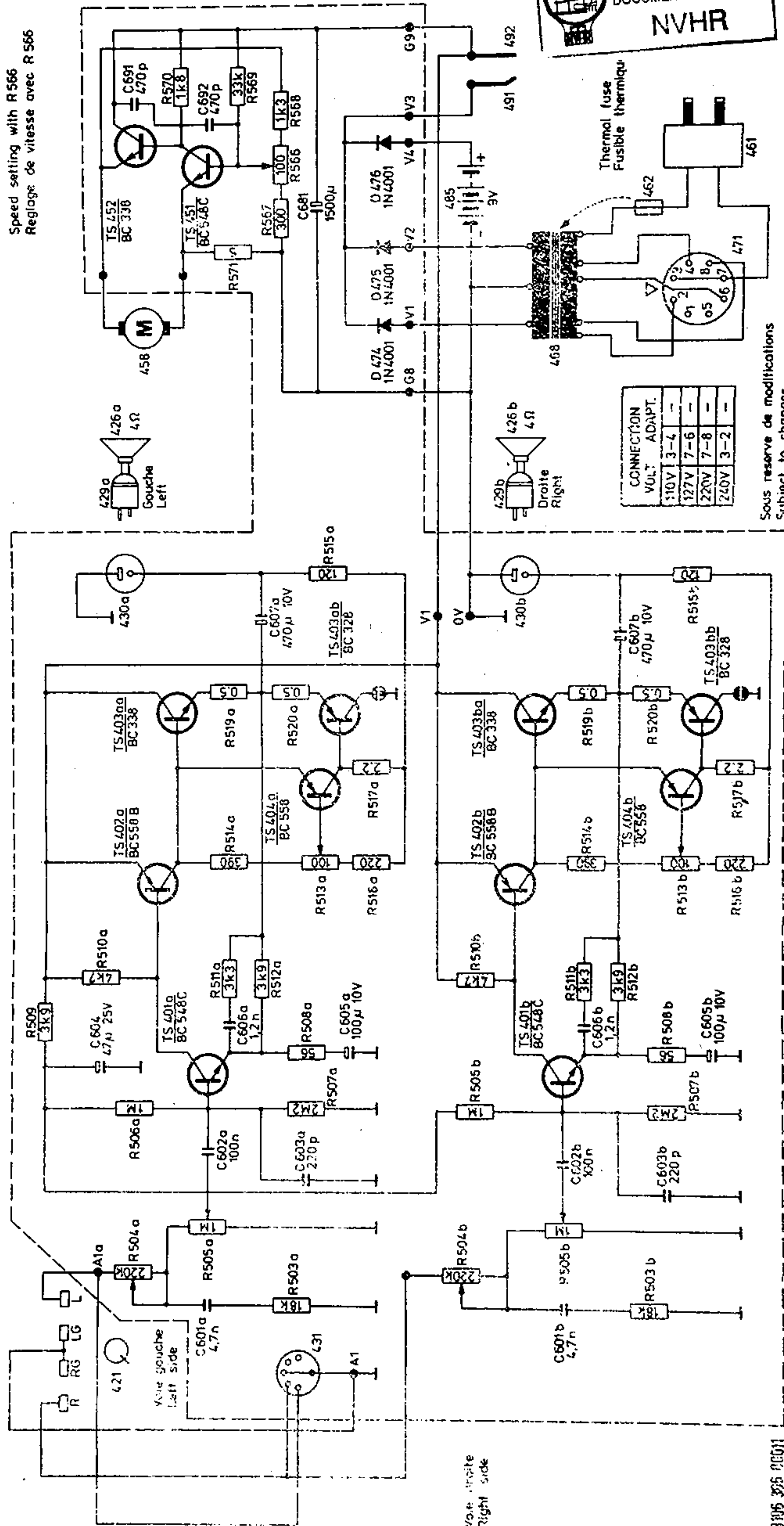


Subject to modification  
4822 276 11643  
Printed in The Netherlands

**PHILIPS**

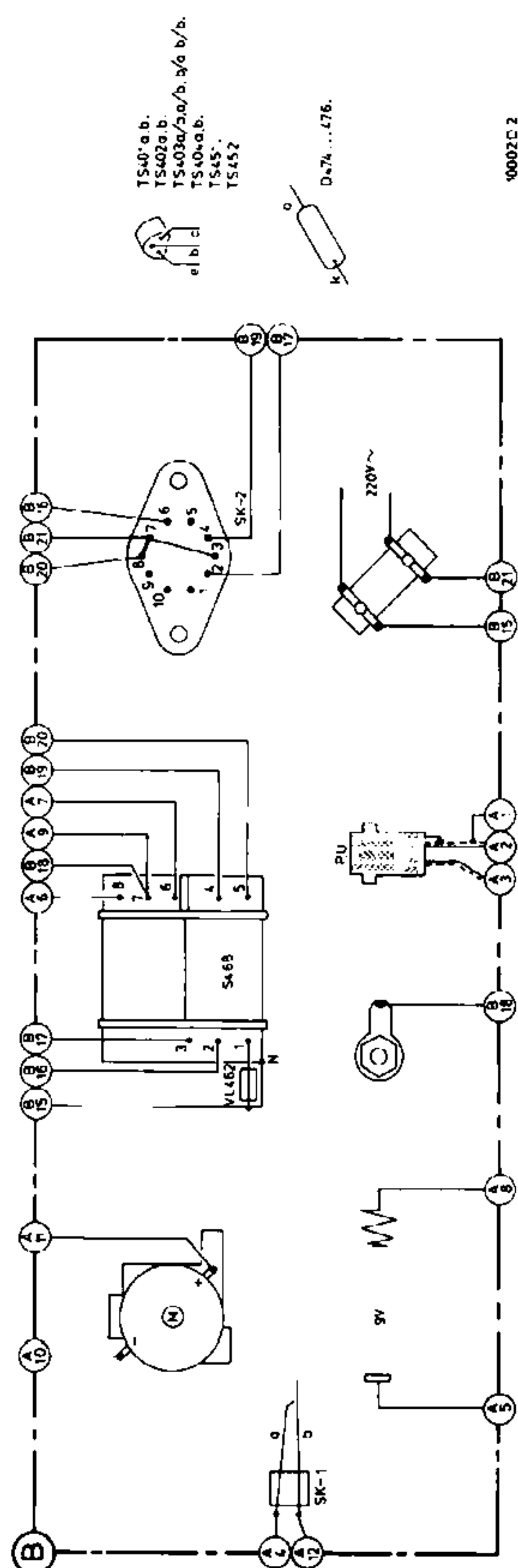
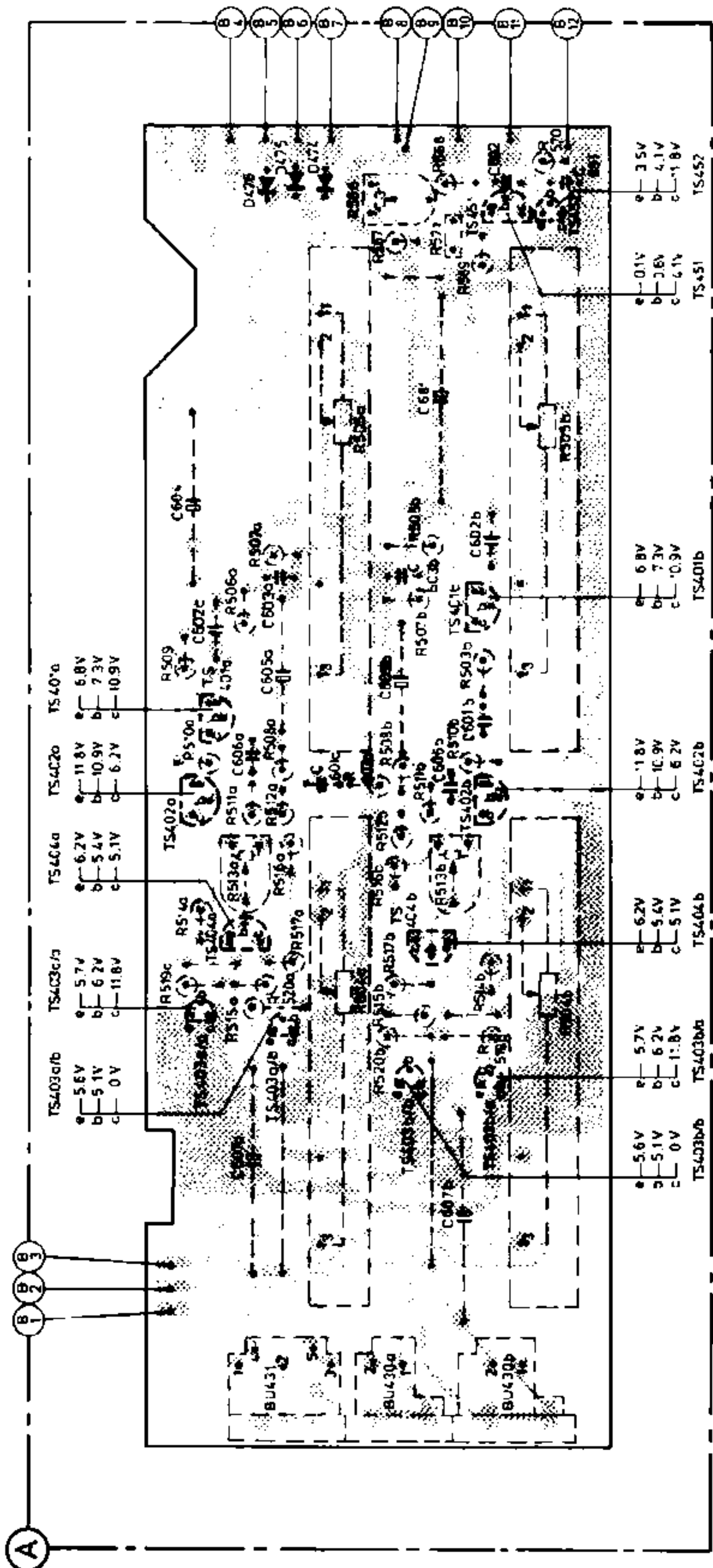
CS54845

MISC	421	-	401a	-	402a - 404a	-	403aa	-	403ab-430b	-	429a	-	426a	-	458-474	-	475 - 485-452-462	-	491
MISC			401b	-	402b - 404b	-	403ba	-	403bb-430a	-	429b	-	426b	-	458	-	471 - 451-476-461	-	492
C	601a	-	602a-603a	-	604-606a-605a	-	606b-605b	-	607a	-		-		-		-	681	-	691
R	503a-505a-504a	-	506a - 507a	-	508a-509-511a-512a-510a-513a-516a-514a-517a-519a-520a	-	515b	-	515b	-		-		-		-	571	-	566 - 570
R	503b-505b-504b	-	507b-506b-508b-511b-512b-510b-513b-516b-514b-517b-519b-520b	-		-		-	515a	-		-		-		-	567	-	568-569





MISC	SK-1	BU437.430a,b M	TS4C10a,b	TS403b,c,b/vL462 S468	S404a,b	PJ TS402ab	TS401a,b	SK-2	TS457.452 C.474	476	MISC
C		607b.o	601a,606a,b	601b,605a,b,602a,603a,b,602b,601	515a,520a,504a,519a,517c,514a,516a,513a,510,512a,503a,500a,508a,509,506c,507a	505a	505b	581	691.652		C
R			520b,519b,515b,504b,514b,517b,516a,513b,512b,511b,508b,513a,503b,507b			505c	505d		569.567.571	566	R
R										571	R



TS401 a, b.  
 TS402 a, b.  
 TS403 a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z, aa, ab, ac, ad, ae, af, ag, ah, ai, aj, ak, al, am, an, ao, ap, aq, ar, as, at, au, av, aw, ax, ay, az, ba, bb, bc, bd, be, bf, bg, bh, bi, bj, bk, bl, bm, bn, bo, bp, bq, br, bs, bt, bu, bv, bw, bx, by, bz, ca, cb, cc, cd, ce, cf, cg, ch, ci, cj, ck, cl, cm, cn, co, cp, cq, cr, cs, ct, cu, cv, cw, cx, cy, cz, da, db, dc, dd, de, df, dg, dh, di, dj, dk, dl, dm, dn, do, dp, dq, dr, ds, dt, du, dv, dw, dx, dy, dz, ea, eb, ec, ed, ee, ef, eg, eh, ei, ej, ek, el, em, en, eo, ep, eq, er, es, et, eu, ev, ew, ex, ey, ez, fa, fb, fc, fd, fe, ff, fg, fh, fi, fj, fk, fl, fm, fn, fo, fp, fq, fr, fs, ft, fu, fv, fw, fx, fy, fz, ga, gb, gc, gd, ge, gf, gg, gh, gi, gj, gk, gl, gm, gn, go, gp, gq, gr, gs, gt, gu, gv, gw, gx, gy, gz, ha, hb, hc, hd, he, hf, hg, hh, hi, hj, hk, hl, hm, hn, ho, hp, hq, hr, hs, ht, hu, hv, hw, hx, hy, hz, ia, ib, ic, id, ie, if, ig, ih, ii, ij, ik, il, im, in, io, ip, iq, ir, is, it, iu, iv, iw, ix, iy, iz, ja, jb, jc, jd, je, jf, jg, jh, ji, jj, jk, jl, jm, jn, jo, jp, jq, jr, js, jt, ju, jv, jw, jx, jy, jz, ka, kb, kc, kd, ke, kf, kg, kh, ki, kj, kl, km, kn, ko, kp, kq, kr, ks, kt, ku, kv, kw, kx, ky, kz, la, lb, lc, ld, le, lf, lg, lh, li, lj, lk, ll, lm, ln, lo, lp, lq, lr, ls, lt, lu, lv, lw, lx, ly, lz, ma, mb, mc, md, me, mf, mg, mh, mi, mj, mk, ml, mm, mn, mo, mp, mq, mr, ms, mt, mu, mv, mw, mx, my, mz, na, nb, nc, nd, ne, nf, ng, nh, ni, nj, nk, nl, nm, nn, no, np, nq, nr, ns, nt, nu, nv, nw, nx, ny, nz, oa, ob, oc, od, oe, of, og, oh, oi, oj, ok, ol, om, on, oo, op, oq, or, os, ot, ou, ov, ow, ox, oy, oz, pa, pb, pc, pd, pe, pf, pg, ph, pi, pj, pk, pl, pm, pn, po, pp, pq, pr, ps, pt, pu, pv, pw, px, py, pz, qa, qb, qc, qd, qe, qf, qg, qh, qi, qj, qk, ql, qm, qn, qo, qp, qq, qr, qs, qt, qu, qv, qw, qx, qy, qz, ra, rb, rc, rd, re, rf, rg, rh, ri, rj, rk, rl, rm, rn, ro, rp, rq, rr, rs, rt, ru, rv, rw, rx, ry, rz, sa, sb, sc, sd, se, sf, sg, sh, si, sj, sk, sl, sm, sn, so, sp, sq, sr, ss, st, su, sv, sw, sx, sy, sz, ta, tb, tc, td, te, tf, tg, th, ti, tj, tk, tl, tm, tn, to, tp, tq, tr, ts, tt, tu, tv, tw, tx, ty, tz, ua, ub, uc, ud, ue, uf, ug, uh, ui, uj, uk, ul, um, un, uo, up, uq, ur, us, ut, uu, uv, uw, ux, uy, uz, va, vb, vc, vd, ve, vf, vg, vh, vi, vj, vk, vl, vm, vn, vo, vp, vq, vr, vs, vt, vu, vv, vw, vx, vy, vz, wa, wb, wc, wd, we, wf, wg, wh, wi, wj, wk, wl, wm, wn, wo, wp, wq, wr, ws, wt, wu, wv, ww, wx, wy, wz, xa, xb, xc, xd, xe, xf, xg, xh, xi, xj, xk, xl, xm, xn, xo, xp, xq, xr, xs, xt, xu, xv, xw, xx, xy, xz, ya, yb, yc, yd, ye, yf, yg, yh, yi, yj, yk, yl, ym, yn, yo, yp, yq, yr, ys, yt, yu, yv, yw, yx, yy, yz, za, zb, zc, zd, ze, zf, zg, zh, zi, zj, zk, zl, zm, zn, zo, zp, zq, zr, zs, zt, zu, zv, zw, zx, zy, zz.

Fig. 2

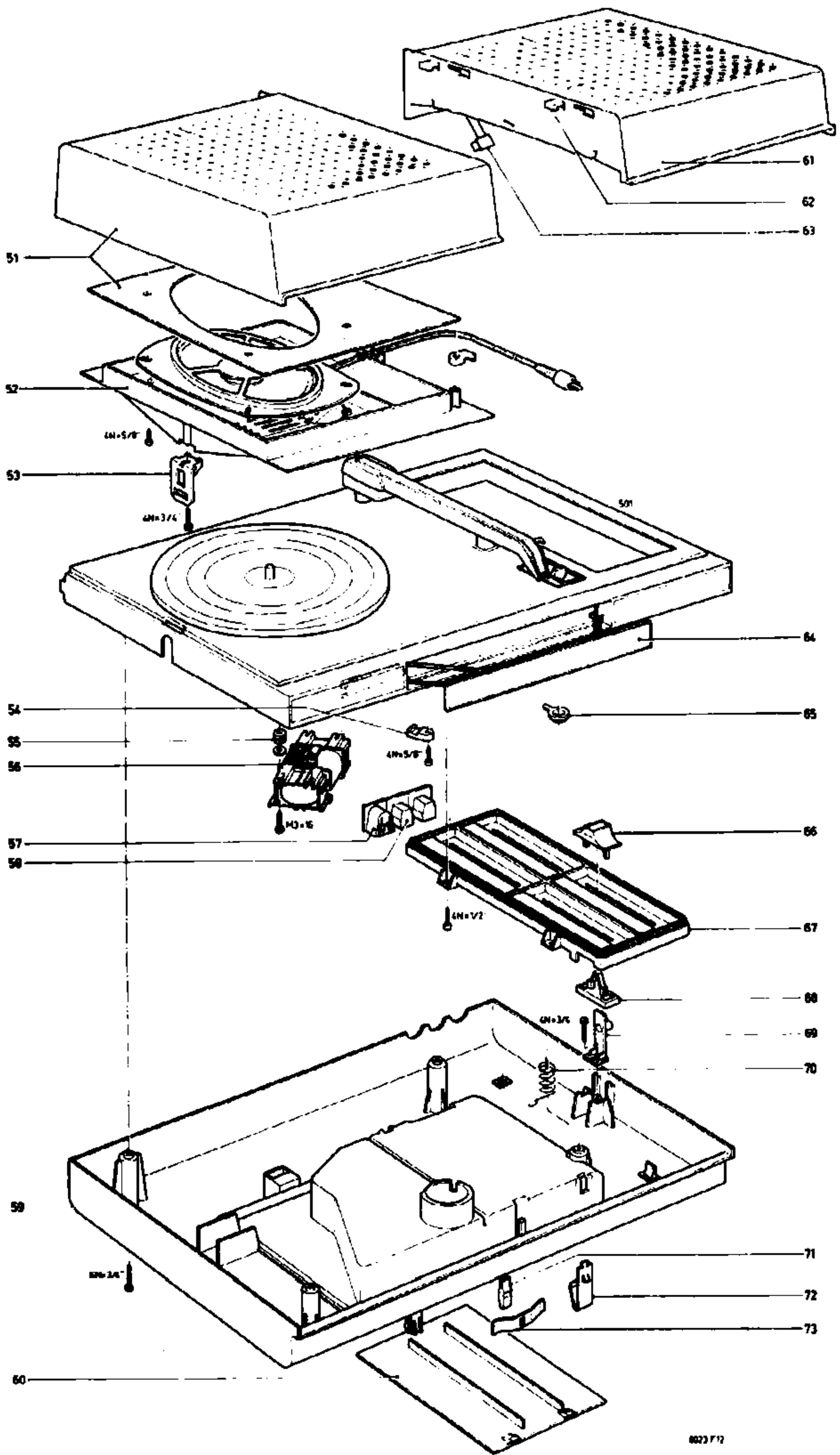


Fig. 3

51 /B	4822 444 40088	59 /B	4822 444 50256	66	4822 411 20219
/L	4822 444 40085	/L	4822 444 50254	67	4822 454 30239
52 /B	4822 444 20196	60 /B	4822 444 60339	68	4822 402 60518
/L	4822 444 20194	/L	4822 444 60335	69	4822 402 60517
53	4822 402 60409	61 /B	4822 444 40089	70	4822 492 31089
54	4822 401 10452	61 /L	4822 444 40086	71	4822 462 40016
55	4822 325 60177	62	4822 401 10452	72	4822 492 61688
56	4822 325 80115	63	4822 417 60091	73	4822 492 61902
57	4822 267 40209	64	4822 498 60333		
58	4822 267 30198	65	4822 290 30098		

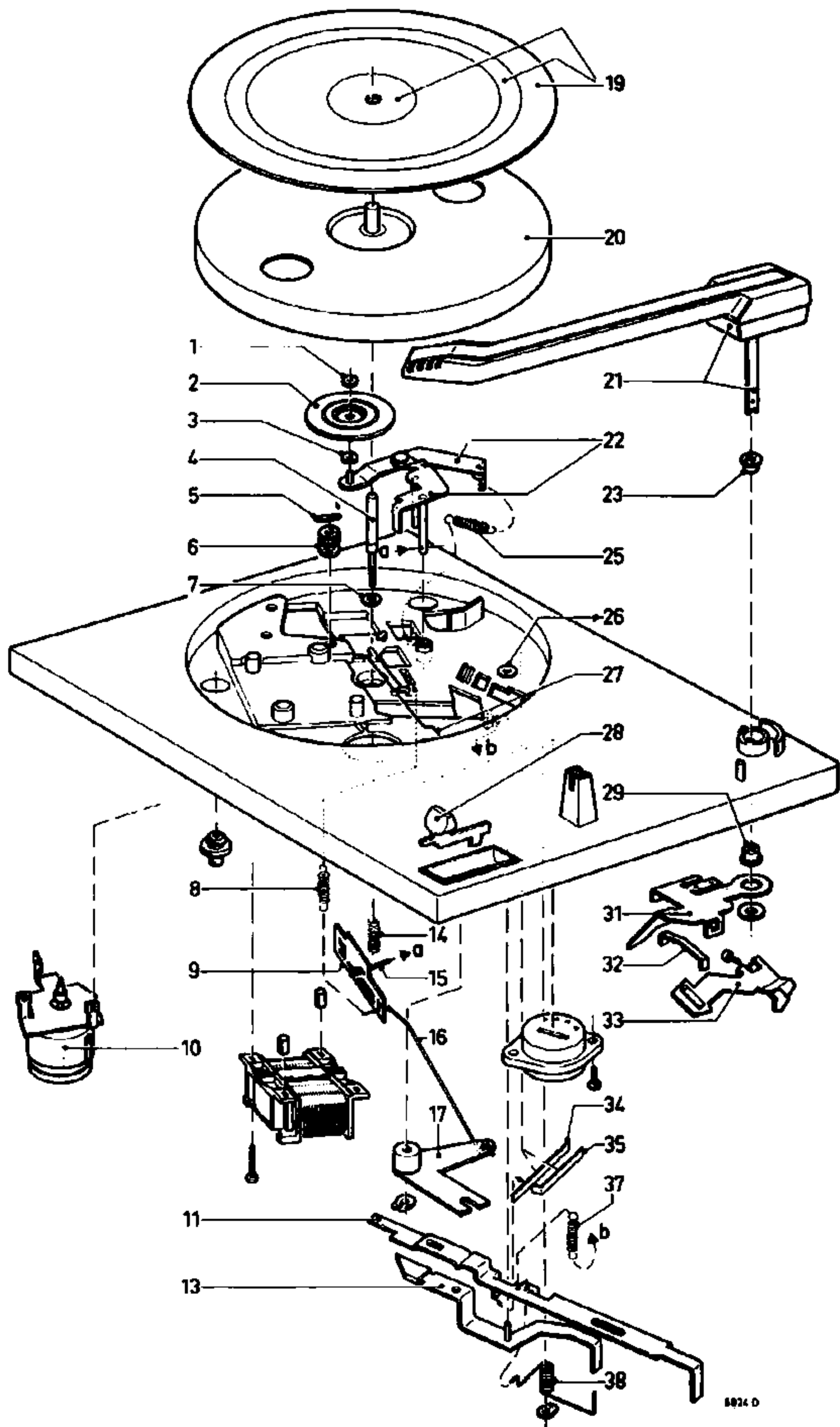


Fig. 4

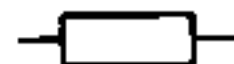
1	4822 532 50827	10	4822 361 70264	20	4822 528 10249	29	4822 532 50834
2	4822 528 70235	11	4822 402 30048	21	4822 251 70147	31	4822 402 60498
3	4822 532 50296	13	4822 402 60448	22	4822 402 40028	32	4822 492 61623
4	4822 535 90757	14	4822 492 50916	23	4822 532 50834	33	4822 402 30051
5	4822 460 20078	15	4822 535 90951	25	4822 492 30867	34	4822 290 80226
6	4822 325 80123	16	4822 535 90973	26	4822 532 50827	35	4822 290 80225
7	4822 532 10561	17	4822 402 60497	27	4822 492 40408	37	4822 492 30869
8	4822 492 30868	19	4822 466 50084	28	4822 411 60397	38	4822 492 40612
9	4822 402 60296						

**-TS-**

TS 401a,b	BC548C	5322 130 44196
TS 402a,b	BC558B	5322 130 44197
TS 403a/a,b/a	BC338	5322 130 44121
TS 403a/b,b/b	BC328	5322 130 44104
TS 404a,b	BC558	4822 130 40941
TS 451	BC548B	4822 130 40937
TS 452	BC338	5322 130 44121

**-D-**

D 474 - 476	1N4001	5322 130 30197
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**-R-**

R 504a,b	Potm. 220 k $\Omega$ lin	4822 105 10246
R505 a,b	Potm. 1 M $\Omega$ log	4822 105 10239
R 513a,b	Potm. 100. $\Omega$	4822 100 10075
R 566	Potm. 100. $\Omega$	4822 101 20254
F 567	300 $\Omega$	4822 110 60093
R 568	1.3 k $\Omega$	4822 110 60111
R 571	5 $\Omega$ Coil resistor	4822 157 50568

**-Miscellaneous-**

<b>-M-</b>		4822 361 70264
S 426a,b	AD2461/RX speaker	4822 240 10009
S 468	Mains transformer	4822 145 30167
SK1a		4822 290 80225
SK1b		4822 290 80226
LS-flex		4822 264 30041
VL 462	Fuse (thermal)	4822 252 20007