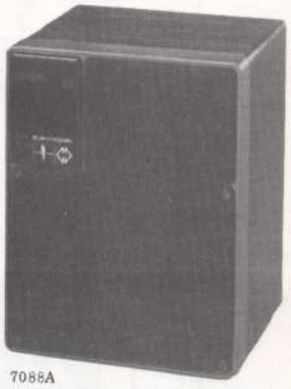
Hi-Fi MFB-BOX 22RH541/79

Service
Service
Service

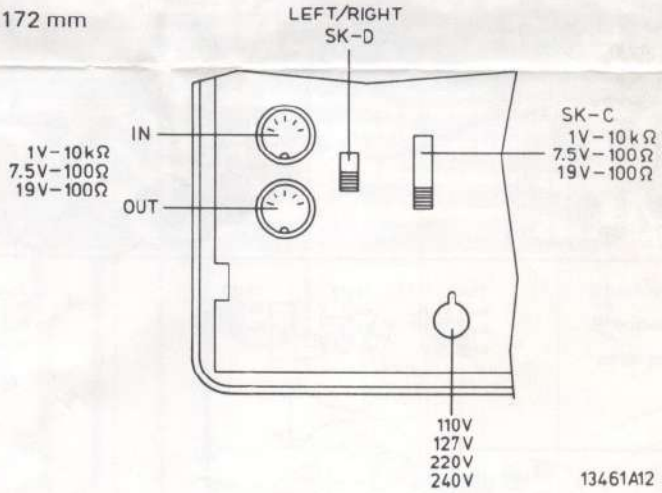


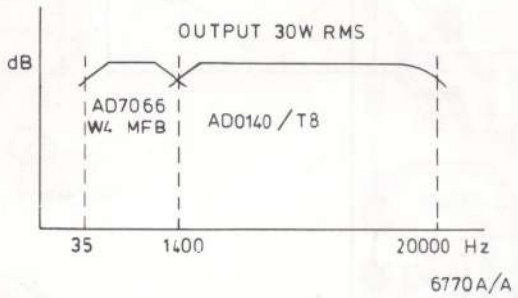
7088A

Service Manual

Contents
Contenu : 4 l.

Dimensions
Dimensions : 290x225x172 mm





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

Subject to modification
4822 725 12548
Printed in The Netherlands

PHILIPS

(GB)

Adjusting the DC current flowing through the output stage

Adjust, with R601, the voltage across R607 to 13,2 mV (40 mA).

Adjusting the acoustic feedback

1. Set SK-C to position 1V - 10 kΩ.
2. Apply a signal of 10 mV - 125 Hz to the input, using a low-ohmic generator (≤ 100 Ω).
3. Adjust, with R630, the voltage across S408 (points 3-4 of the plug) to 110-120 mV.

(F)

Réglage du courant continu dans l'étage final

Avec R601, régler la tension aux bornes de R607 sur 13,2 mV (40 mA)

Réglage de la rétroaction acoustique

1. Brancher SK-C en position 1 V - 10 kΩ.
2. A l'aide d'un générateur à basse impédance (≤ 100 Ω) appliquer un signal de 10 mV - 125 Hz sur l'entrée.
3. Avec R630, régler la tension aux bornes de S408 (points 3-4 de la douille) sur 110-120 mV.

(I)

Regolazione de la corrente continua nello stadio finale

Con R601, regolare la tensione ai capi di R607 su di 13,2 mV (40 mA).

Regolazione della reazione acustica

1. Collegare SK-C in posizione 1 V - 10 kΩ.
2. Tramite un generatore a bassa impedenza (≤ 100 Ω) applicare un segnale di 10 mV - 125 Hz sull ingresso.
3. Con R630, regolare la tensione ai capi di S408 (punti 3 e 4 della presa) su di 110-120 mV.

(S)

Justering av likströmmen genom slutsteget

Justera spänningen till 13,2 mV (40 mA) med R601 oever R607.

Justering av akustisk returmatning

1. SK-C i läge 1 V - 10 kΩ.
2. Anslut en 10 mV - 125 Hz signal till ingången; använd en lågohmig generator (≤ 100 Ω).
3. Justera spänningen till 110-120 mV med R630 över S408 (punkt 3-4 på uttaget).

(DK)

Justering av DC - strømmen gjennom utgangstrinnet

Juster spenningen over R607 til 13,2 mV (40 mA) med R601.

Justering av akustisk tilbakekopling

1. Sett SK-C i stilling 1 V - 10 kΩ.
2. Tilfør et signal på 10 mV - 125 Hz på inngangen, ved bruk av en lav-ohmig generator (≤ 100 Ω)
3. Juster spenningen over S408 (punktene 3-4 på pluggen) med R630.

(NL)

Instellen gelijkstroom eindtrap

M.b.v. R601 de spanning over R607 instellen op 13,2 mV (40 mA).

Instellen akoustische terugkoppeling

1. Zet SK-C in de stand 1 V - 10 kΩ.
2. M.b.v. een laag ohmige generator (≤ 100Ω) een signaal van 10 mV - 125 Hz op de ingangsbus toevoeren.
3. M.b.v. R630 de spanning over S408 (punten 3-4 van de plug) instellen op 110-120 mV.

(D)

Einstellen des Gleichstromes der Endstufe

Mit R601 die Spannung an R607 auf 13,2 mV (40 mA) einstellen.

Einstellen der akustischen Rückkopplung

1. SK-C in die Stellung 1 V - 10 kΩ schalten.
2. Mit einem niederohmigen Generator (≤ 100 kΩ) ein Signal von 10 mV - 125 Hz an die Eingangsbuchse führen.
3. Mit R603 die Spannung an S408 (Punkte 3-4 des Steckers) auf 110-120 mV einstellen.

(E)

Ajuste de la corriente de la etapa final

Ajústese mediante R601 la tensión en bornes de R607 a 13,2 mV (40 mA).

Ajuste del contracoplamiento acústico

1. Conmútese SK-C a la posición 1 V - 10 kΩ.
2. Apliquese, mediante un generador con resistencia óhmica baja (≤ 100 Ω), una señal de 10 mV - 125 Hz al enchufe de entrada.
3. Ajústese mediante R630 la tensión en bornes de S408 (puntos 3-4 del enchufe) a un valor de 110 a 120 mV.

(N)

Justering af jævnstrømmen, i udgangstrinet

Juster R601 således at spændingen over R607 er 13,2 mV (40 mA).

Justering af akustisk modkobling

1. Sæt SK-C i stilling 1 V - 10 kΩ.
2. Tilfør 125 Hz/10 mV til indgangen (benyt en lavohms-generator (≤ 100 Ω)
3. Juster R630 således at spændingen over S408 (pkt. 3-4 på pluget) er 110-120 mV.

(SF)

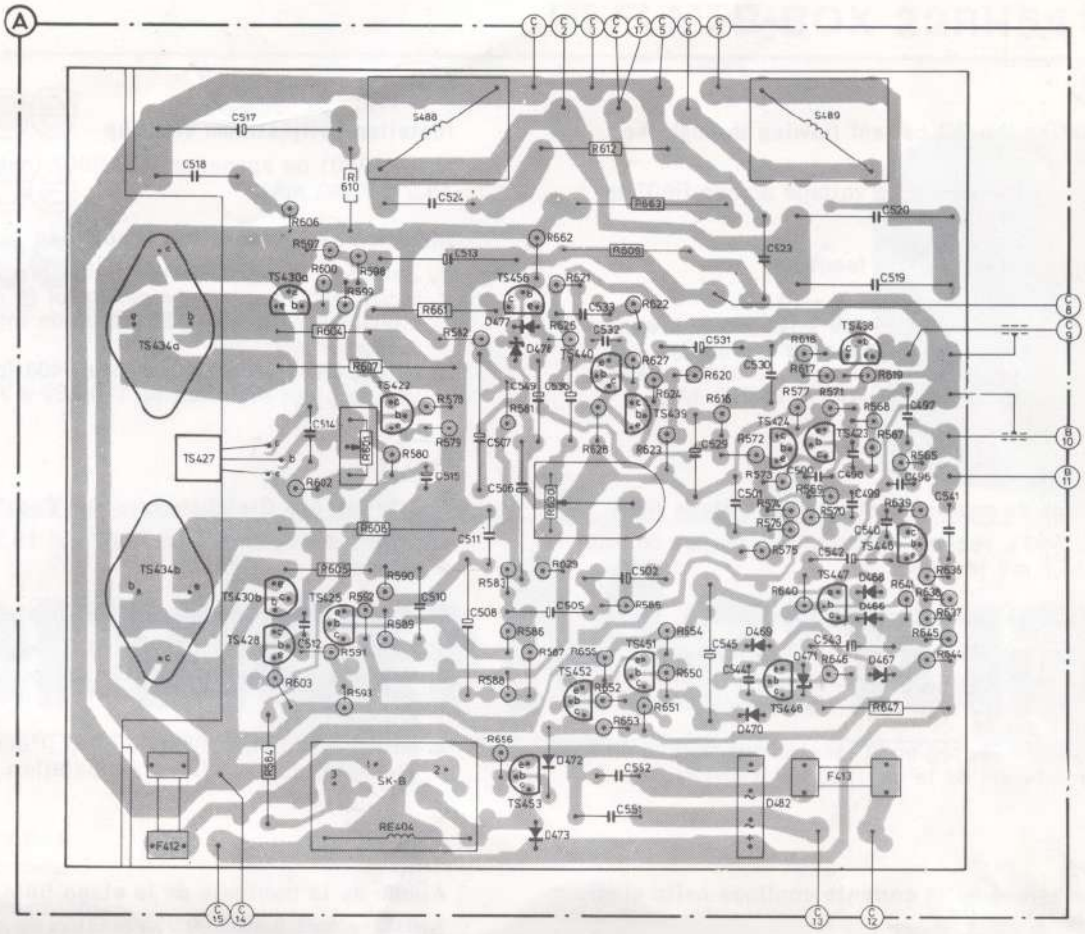
Pääteasteen tasavirran säätö

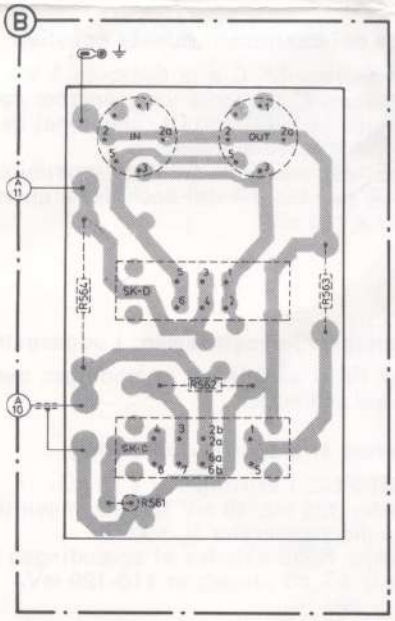
Säädä vastuksella R601 jännite R607 navoissa arvoon 13,2 mV (40 mA).

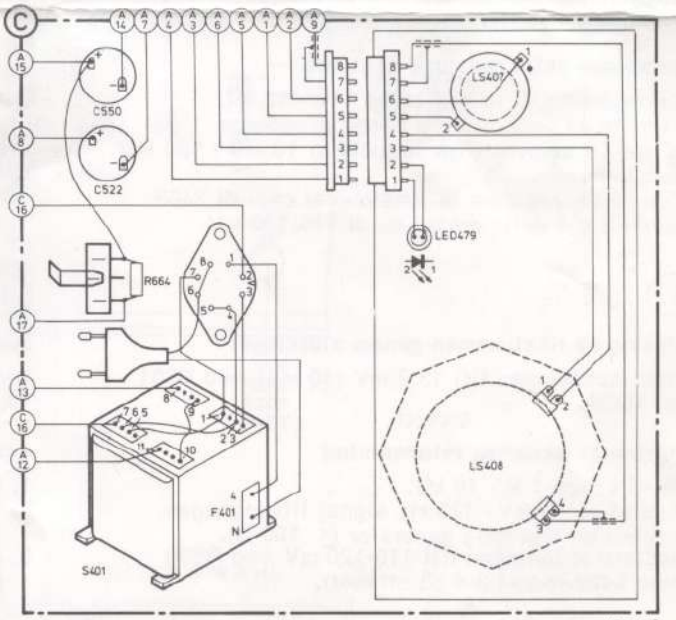
Akustisen vastakytkennän säätö

1. Aseta SK-C asentoon 1 V - 10 kΩ.
2. Syötä 10 mV signaali taajuudella 125 Hz tuloon käyttäen pieni-impedanssista generaattoria (≤ 100 Ω).
3. Säädä R630: lla jännite S408:n navoissa (pistikkeen nastat 3-4) arvoon 110-120 mV.

R	R	R	C	MISC
			517	S488 S489
		612		
			518	
610				
	663			
			524 520	
606				
	622		513 523	
597	609			
600				
598	621		519	TS430a TS456
599				
	622 661		533	D477
604	626	618	532	TS418
	582		531	TS434a
				D478
607	627	617	530	TS440
	581	619		TS422
	624	620 577	549	
	578	571	536	TS439
		616	497	TS424
		568	514	TS423
		567	507	
	579	572	529	
601	628	565	516	
580	623		498	TS427
		573	566	
		569	500	
	630	574	496	
		639	499	
		570	501	
608		576	540	
			541	TS446
	583	575	511	TS447
605	629	636	542	TS434b
590		640	502	D468
		641	510	TS430b
592		638	505	TS425
	585	637	508	D466
589	654	645	512	D469
	586		543	TS428
591	587	644	543	TS451
	655	646	544	D471
603	650			D467
	588			TS452
593	652	647		TS448
	651			D470
	653			
	656			
				D472
				F413
584			552	SK-B
				D482
			551	TS453
				RE404
				D473
				F412
			550	LS407
			522	
564				
563		664		SK-D
562				
				SK-C
				LS408
561				F401
				S401



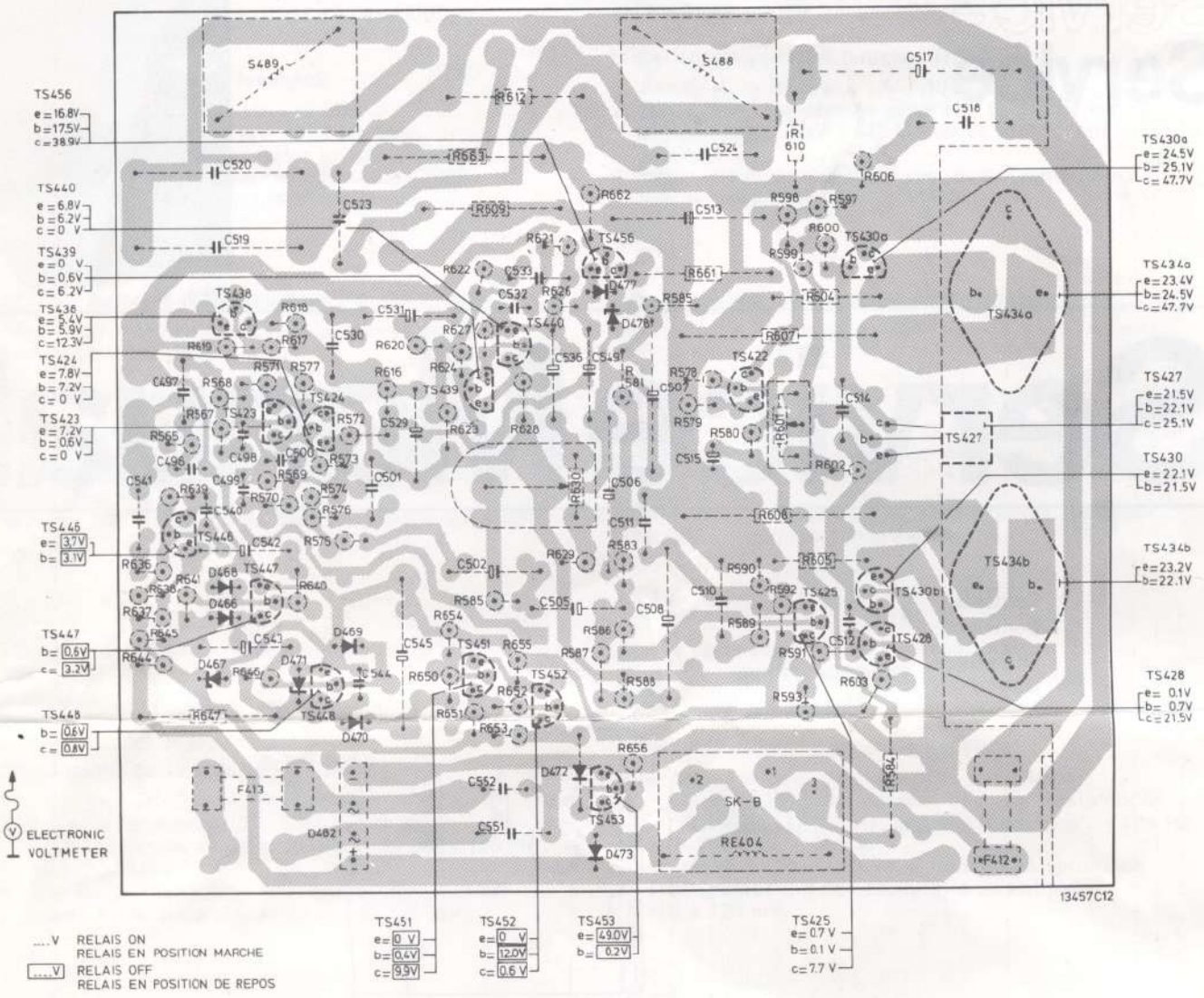




13456D12

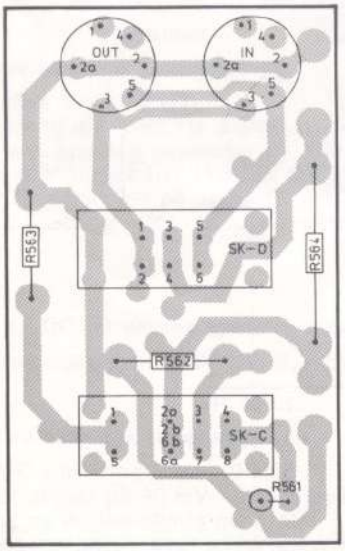
CS 59 732

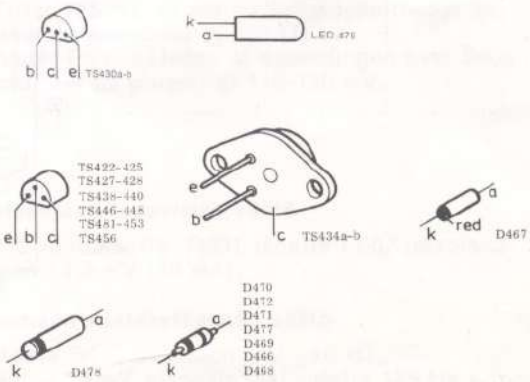
MISC.	TS438.423. S489. TS424. TS439. TS440. TS456. D477. 478. S488 TS422. TS430a. TS427. TS434a.
MISC.	TS446. D466...471. F413. TS447.448. D482 TS451. TS452. D472. 473. TS453. SK-B. RE404 TS425. TS430b. TS428. F412 TS434b.
C	497. 520. 519. 498. 530. 523. 529. 531. 532. 533. 536. 549. 506. 507. 513. 524. 514. C517. C518.
C	541. 496. 542. 540. 499. 500. 570. 543. 544. 501. 545. 502. 552. 551. 505. 511. 508. 515. 510. 512.
R	565. 567. 619. 568. 571. 617. 618. 577. 572. 616. 620. 622. 624. 627. 663. 609. 612. 628. 621. 626. 662. 581. 585. 578. 579. 661. 580. 610. 607. 597 ··· 601. 604. 606
R	636...639. 644. 645. 641. 647. 647. 569. 640. 573...576. 585. 650...655. 629. 630. 586...588. 583. 656. 608. 589...593. 605. 602. 603. 584.



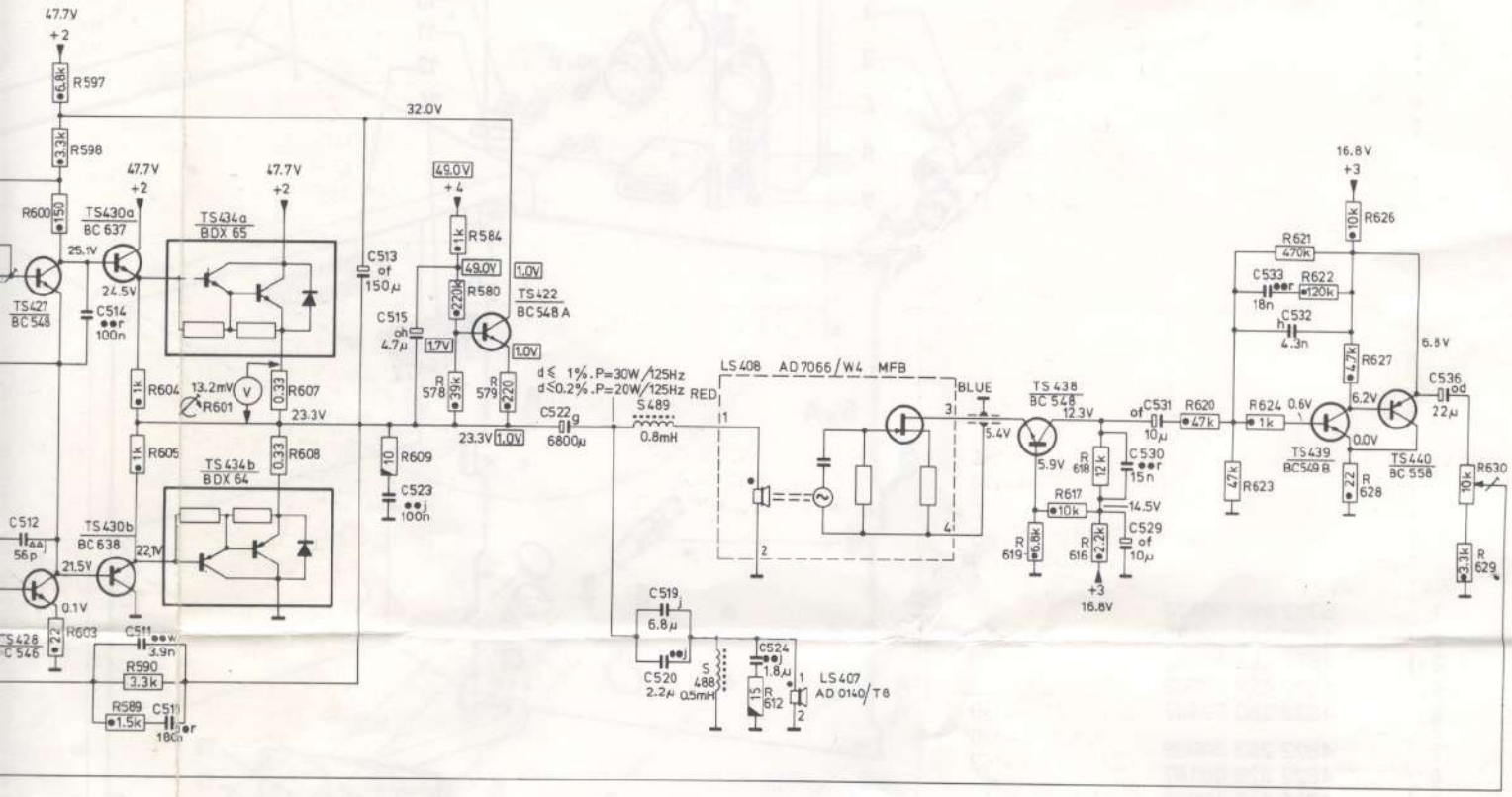
....V RELAIS ON
RELAIS EN POSITION MARCHE

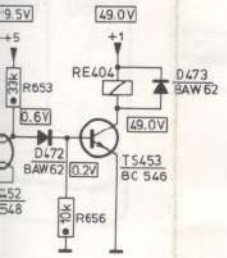
[....V] RELAIS OFF
RELAIS EN POSITION DE REPOS

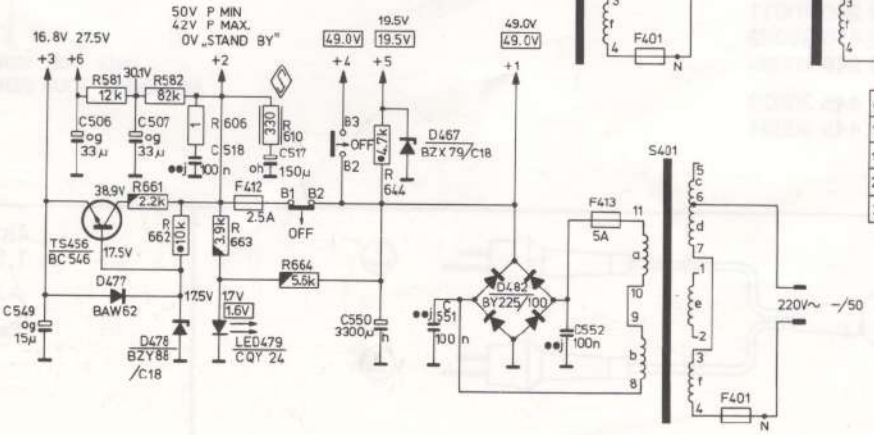




	TS 428,427		TS430a, 430b		TS434a, 434b						TS422			S489	S488	LS407	LS408				TS 438						TS439		TS440	MISC
2	D472	TS 453	RE 404	D473							TS 456	D477	D478	D479	F412			D477	D482		F413	S401	F401							MISC
	512	514	511	510				513	515	523		522		519	520		524						530	529	531	533	532		536	C
									549	506	507	518				517	550	551		552										C
597÷602		603÷605	589	590		607	608	609	578	584	580	579					612					619	616÷618		620	621÷674		626÷628	630	629	R
653		656										581	661	582	662	606	663	610	664		644										R







~	CONNECTED		
110V	1–2	3–4	5–6
127V	1–2	3–4	7–8
220V	2–3	5–6	
240V	2–3	7–8	

13455E12

CS 59 728

MISC	TS423 TS424 TS425 TS428,427 TS430a,430
MISC	TS446 D468 D466 TS447 D469 TS448 D471 D470 TS451 TS452 D472 TS453 RE404
C	496 497 498 499 500 501 502 505 508 512 514 511
C	541 542 543 544 545
R	561÷564 565 567 568 569÷571 572 577 574÷576 585 583 587 588 593 592 597÷602 603÷605 589
R	636 638 639 637 640 641 645 646 647 650 654 651 655 653 656

ELECTRONIC VOLTMETER
VOLTMÈTRE ELECTRONIQUE

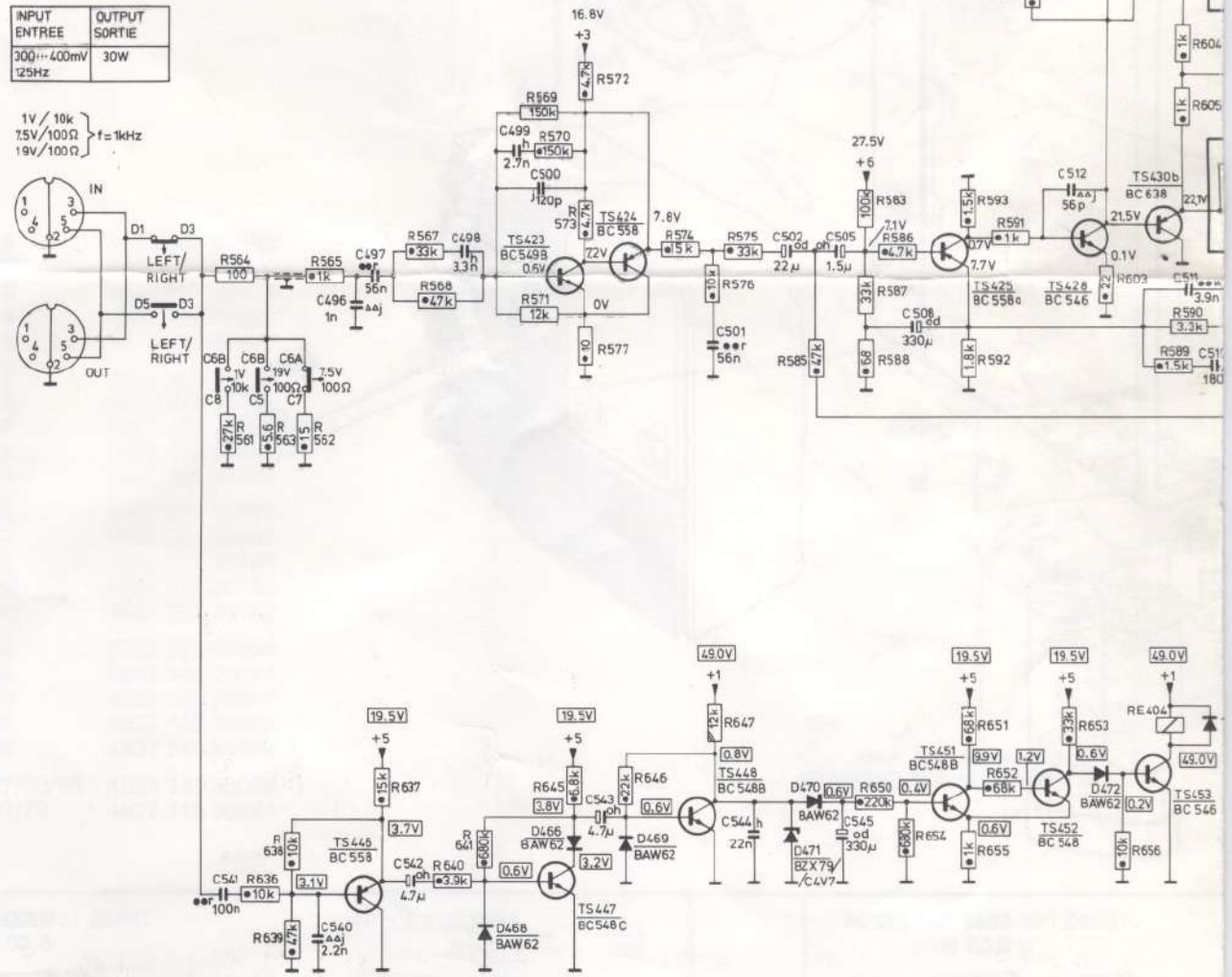
--- V RELAIS ON
RELAIS EN POSITION MARCHE
RELAIS OFF
RELAIS EN POSITION DE REPOS

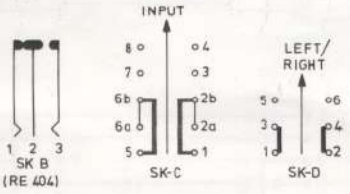
CARBON RESISTOR E24 SERIE 0.125W 5%
RÉSISTANSE À CARBON
" E24 SERIE 0.25W < 1MΩ 5% > 1MΩ 10%
" E12 SERIE 0.5W < 1.5MΩ 5% > 1.5MΩ 10%
" E12 SERIE 1W < 2.2MΩ 5% > 2.2MΩ 10%
SAFETY CARBON RESISTOR
RESISTANSE DE SECURITE AU CARBON
PLATE CERAMIC CAPACITOR
CONDENSATEUR PLAQUETTE AU CERAMIC
FLAT FOIL POLYESTER CAPACITOR
CONDENSATEUR PLAQUETTE AU POLYESTER
MINIATURE ELECTROLYTIC CAPACITOR
CONDENSATEUR MINIATURE ELECTROLYTIQUE

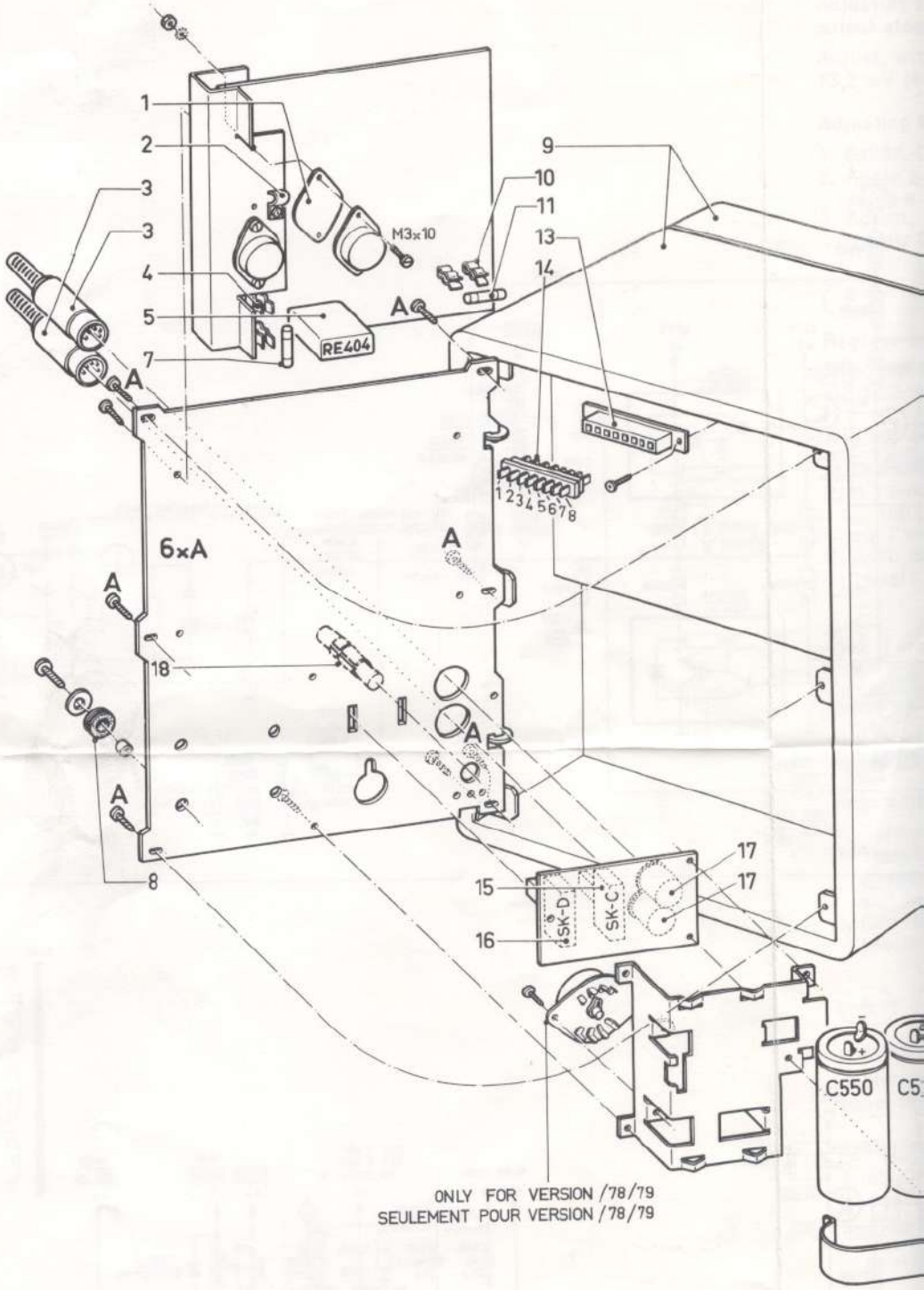
r 250V
j 100V
h 63V
g 40V
f 25V
d 10V

INPUT ENTREE	OUTPUT SORTIE
300÷400mV 125Hz	30W

1V/10k
7.5V/100Ω
19V/100Ω
f=1kHz

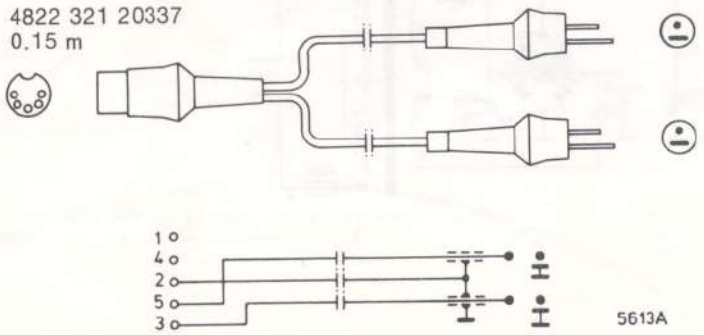




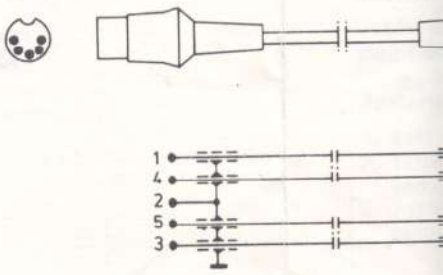


1	5322 466 90433
2	4822 255 40127
3	4822 264 40023
4	4822 492 60063
5	4822 280 60437
7	4822 253 30029
8	4822 325 60197
9	4822 445 10048
10	4822 492 60063
11	4822 253 30026
13	4822 267 50221
14	4822 264 50081
15	4822 277 20187
16	4822 277 20185
17	4822 267 40182
18	5322 325 64054
22	4822 445 30031
23	4822 240 70011
25	4822 445 30029
26	4822 240 50099
27/50/65	4822 445 30028
27/78	4822 445 30034

4822 321 20337
0.15 m



4822 321 20207
1.50 m



22

23

27

25

BLUE

RED

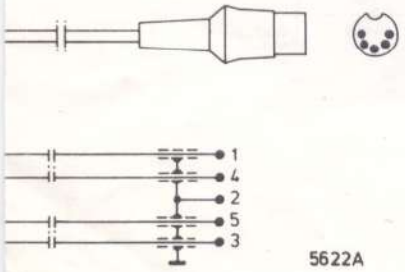
26

C550

C522

13458E12

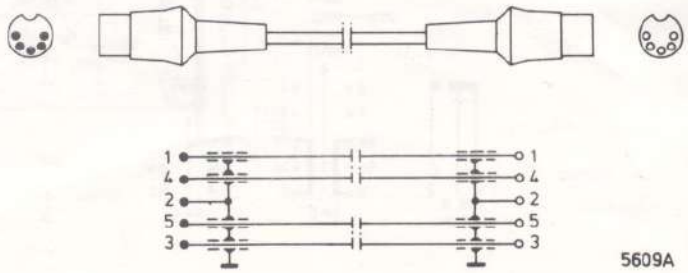
4822 321 20295
2.50 m



5622A

4822 321 20294
2.50 m

4822 321 20336
5.00 m



5609A

-TS-		
TS422	BC548A	4822 130 40948
TS423	BC549B	4822 130 40936
TS424	BC558	4822 130 40941
TS425	BC558A	4822 130 40962
TS427	BC548	4822 130 40938
TS428	BC546	4822 130 41001
TS430a-b	BC637-BC638	4822 130 41056
TS434a-b	BDX65-BDX64	4822 130 41057
TS438	BC548	4822 130 40938
TS439	BC549B	4822 130 40936
TS440	BC558	4822 130 40941
TS446	BC558	4822 130 40941
TS447	BC548C	5322 130 44196
TS448	BC548B	4822 130 40937
TS451	BC548B	4822 130 40937
TS452	BC548	4822 130 40938
TS453	BC546	4822 130 41001
TS456	BC546	4822 130 41001

-D-		
D466	BAW62	5322 130 30613
D467	BZX79/C18	5322 130 44286
D468	BAW62	5322 130 30613
D469	BAW62	5322 130 30613
D470	BAW62	5322 130 30613
D471	BZX79/C4V7	5322 130 34174
D472	BAW62	5322 130 30613
D473	BAW62	5322 130 30613
D477	BAW62	5322 130 30613
D478	BZY88/C18	5322 130 30304
D482	BY225 - 100	4822 130 30917

-C-		
C498	3,3 nF micro poco	5322 121 54059
C499	2.7 nF micro poco	5322 121 54065
C519	6.8 µF plate cap.	4822 121 40463
C522	6800 µF elco, 40 V	4822 124 70315
C532	4.3 nF micro poco	5322 121 54062
C544	22 nF plate cap.	4822 122 30103
C550	3300 µF elco 63 V	5322 124 70199

-R-		
R564	100 Ω - 5 W wire wound	4822 112 21081
R569	250 kΩ - MR25	5322 116 54713
R571	12 kΩ - MR25	5322 116 50572
R581	12 kΩ - MR25	5322 116 50572
R582	82 kΩ - MR25	5322 116 54689
R583	100 kΩ - MR25	5322 116 54696
R587	33 kΩ - MR25	5322 116 50482
R590	3,3 kΩ - MR25	5322 116 54005
R592	1.8 kΩ - MR25	5322 116 54568
R601	1 kΩ potentiometer	4822 101 10005
R606	1 Ω - CR37	4822 110 53027
R607	0.33 Ω - 2.6 W wire wound	5322 113 60019
R608	0.33 Ω - 2.6 W wire wound	5322 113 60019
R610	330 Ω - safety CR25	4822 111 30458
R618	12 kΩ - MR25	5322 116 50572
R621	470 kΩ - MR30	5322 116 54336
R623	47 kΩ - MR25	5322 116 54671
R630	10 kΩ potentiometer	4822 101 10021

-Miscellaneous-		
S401	Mains transformer	4822 146 20506
F401	Fuse	4822 252 20007
RE404	Relais	4822 280 60437
S407	Speaker AD0140/T8	4822 240 70011
S408	Speaker AD7066/W4MFB	4822 240 50099
F412	Fuse 2.5 A	4822 253 30026
F413	Fuse 5 A	4822 253 30029
LED479	CQY24 LED	4822 130 30922
S488	Coil 0.5 mH	4822 157 50775
S489	Coil 0.8 mH	4822 157 50816

(GB)

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

(NL)

Veiligheidsbepalingen vereisen, dat het apparaat bij reparatie in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

(F)

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

(D)

Die Sicherheitsvorschriften erfordern, dass das Gerät sich nach der Reparatur in seinem originalen Zustand befindet und dass die benutzten Einzelteile den aufgeführten Teilen identisch sind.

(I)

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati.

(E)

Las normas de seguridad requieren que el aparato reparado cumpla las condiciones originales y que los recambios empleados sean idénticos a los especificados.

(S)

Säkerhetsbestämmelserna kräver att varje reparation skall utföras korrekt med hänsyn till ursprunglig placering av komponenter, ledningar etc. och med användning af föreskrivna reservdelar.

(DK)

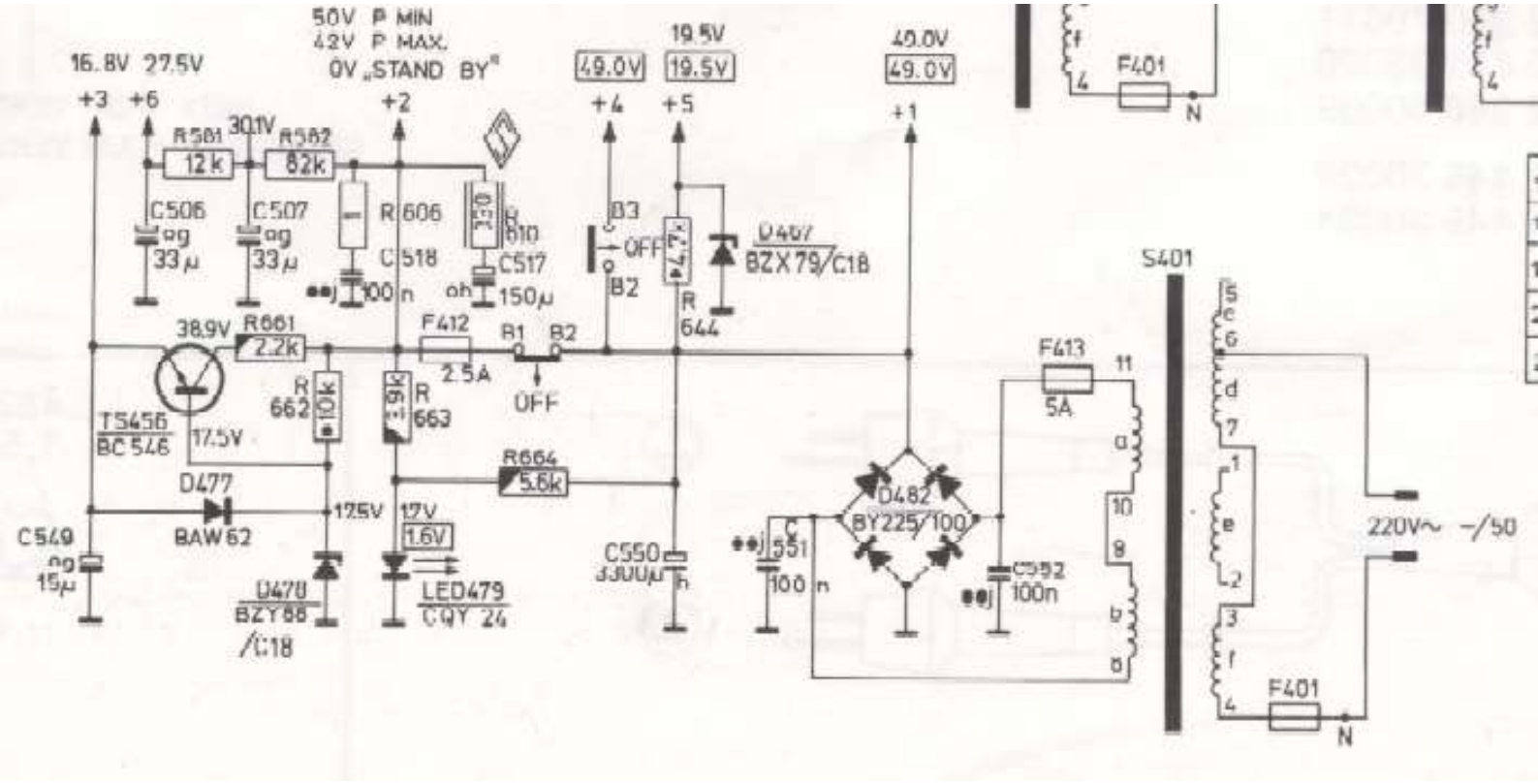
Myndighedernes sikkerheds- og radiostøjbestemmelser kraever, at enhver reparation skal udføres korrekt m.h.t. overholdelse af originalplacering og montering af komponenter, ledningsbundter, etc., og ved anvendelse af de foreskrevne reservedele.

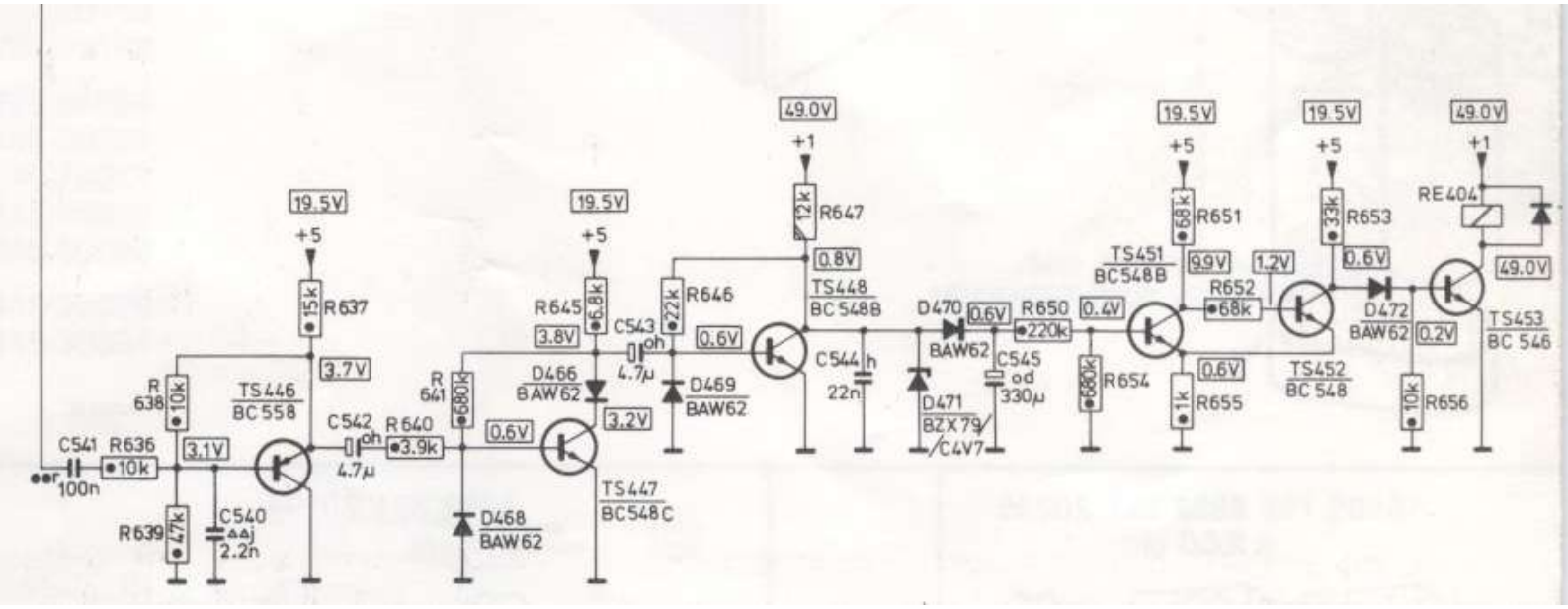
(N)

Sikkerhetsbestemmelser kreves at apparatet blir gjennopprettet til orignial utførelse og at deler som er identiske med de som er spesifisert, blir benyttet.

(SF)

Korjatessa laitetta on turvallisuussyistä ehdottomasti eneteltävä oikein ja käytettävä tehtaan määräämiä alkuperäisvaraosia.


50V P MIN
42V P MAX.
0V „STAND BY"
16.8V 27.5V
+3 +6
R581 12k
30.1V
R582 82k
+2
C506 ag 33µ
C507 ag 33µ
R606
C518 100n
330 R 610
C517 ah 150µ
+4
49.0V
B3
OFF
B2
+5
19.5V
19.5V
4,7k
R 644
D407 BZX79/C18
+1
40.0V
49.0V
38.9V
R661 2.2k
F412 2.5A
B1 B2
OFF
T5456 BC546
17.5V
R 662 10k
39k R 663
R664 5.6k
D477 BAW62
17.5V
17V
1.6V
C549 ag 15µ
D478 BZY88 /C18
LED479 CQY 24
C550 3300µ h
C551 100n
D482 BY225/100
F413 5A
C552 100n
S401
F401
N
220V~ -/50


19.5V
+5
15k
R637
3.7V
R
638
10k
TS446
BC558
C541
R636
10k
100n
3.1V
R639
47k
C540
2.2n
C542
4.7µ
R640
3.9k
R
641
680k
D468
BAW62
0.6V
19.5V
+5
R645
6.8k
3.8V
D466
BAW62
3.2V
TS447
BC548C
C543
4.7µ
R646
22k
0.6V
D469
BAW62
49.0V
+1
R647
12k
0.8V
TS448
BC548B
C544
22n
D470
BAW62
0.6V
D471
BZX79/
/C4V7
R650
220k
C545
330µ
0.4V
680k
R654
19.5V
+5
68k
R651
9.9V
TS451
BC548B
1k
R655
0.6V
R652
68k
1.2V
19.5V
+5
33k
R653
0.6V
TS452
BC548
D472
BAW62
0.2V
10k
R656
49.0V
+1
RE404
49.0V
TS453
BC546