GRUNDIG

SCHALTBILD
CIRCUIT DIAGRAM
SCHEMA

TV

Schaltbild Circuit Diagram Schema Sach-Nr./Part No. 72010-918.20	Zusätzlich erforderliche Unterlagen: Additionally required Service Manuals: Documentazioni aggiuntive necessarie:	Service Manual Sicherheit Safety Sach-Nr./Part No. 72010-800.00

Ⓓ Btx ✱ 32700 #

GRUNDIG PASSION

CUC 1882
CUC 1893

M82 - 105 / 9 IDTV M 82 - 115 / 9 IDTV / PIP (9.21395-12)
M95 - 105 / 9 IDTV M 95 - 115 / 9 IDTV / PIP (9.21396-12)

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Sach-Nummer 72010-800.00, sowie zusätzlich eventuell abweichende, landesspezifische Vorschriften!

The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 72010-800.00, as well as the respective national deviations.

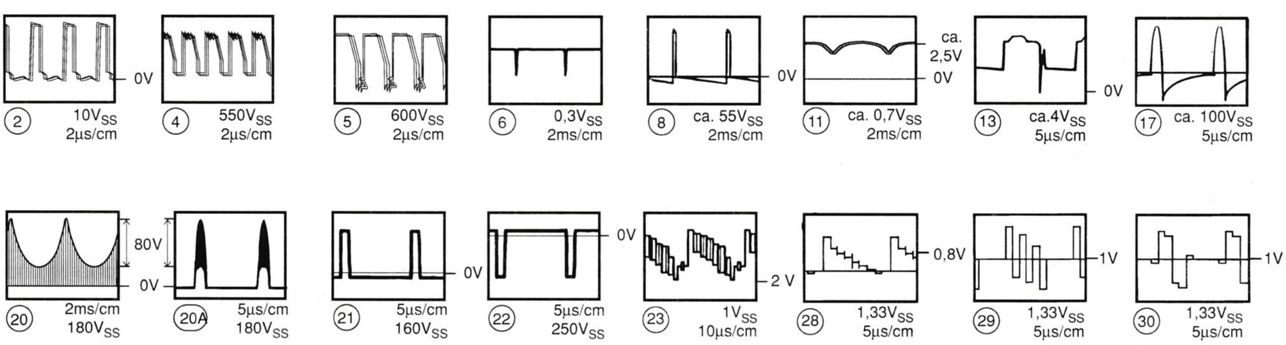
Valgono le prescrizioni e note di sicurezza secondo il Manuale di Servizio "Norme di sicurezza" numero d'ordine 72010-800.00, cosi pure le eventuali disposizioni specifiche vigenti nel singolo stato.

Weitere chassisbezogene Informationen entnehmen Sie bitte dem zugehörigen Service Manual.

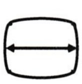
For more detailed information on the chassis, please see the appropriate Service Manual.

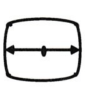
Ulteriori informazioni a seconda della chassis Le rilevi per favore dal relativo Manuale di Servizio.

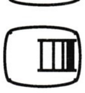
Oszillogramme - Chassis / Oscillogrammes Chassis / Oszillogrammi telaio

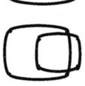


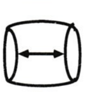
Schaltplansymbole / Circuit Diagram Symbols / Simboli sullo schema

 Zeilenbreite / Line width / Amplitude horizontale / Larghezza di riga / Amplitudo Horizontal

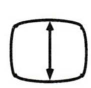
 Hor. Frequenz / Hor. Frequency / Fréqu. horiz. / Frequ. orizz. / Frequ. horiz.

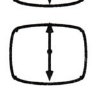
 Hor. Linearität / Hor. linearty / Linéar. Horizont / Linear. orizz. / Lineal. Horizontal

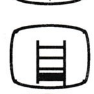
 Bildlage hor. / Hor. picture position / Cadrage horizont. / Posizione orizz. dìmmagine / Centrado horizontal

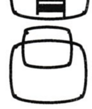
 Ost-West Amplitude / East-West amplitude / Amplitude Est - Ouest / Ampiezza Est-Ovest / Amplitud E-O

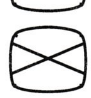
 Ost-West Symmetrie / East-West symm. / Symm. Est-Ouest / Simm. Est-Ovest / Simetria E-O

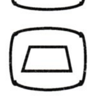
 Bildamplitude / Frame ampl. / Ampl. verticale / Ampiezza d'immagine / Ampl. vertical

 Vert. Frequenz / Vert. frequency / Fréqu. vert. / Frequ. vert. / Frequ. vert.

 Vert. Linearität / Vert. linearity / Linéarité vert. / Linear. vert. / Linealidad vert.

 Bildlage vert. / Vert. picture position / Cadrage vertical / Posiz. vert. d'immagine / Centrado vert.

 Focusregler / Focus control / Réglage de focalisation / Regolat. di focalizz. / Control de foco

 Trapez / Trapezium / Trapèze / Trapezio / Trapecio

Änderungen vorbehalten / Subject to alteration
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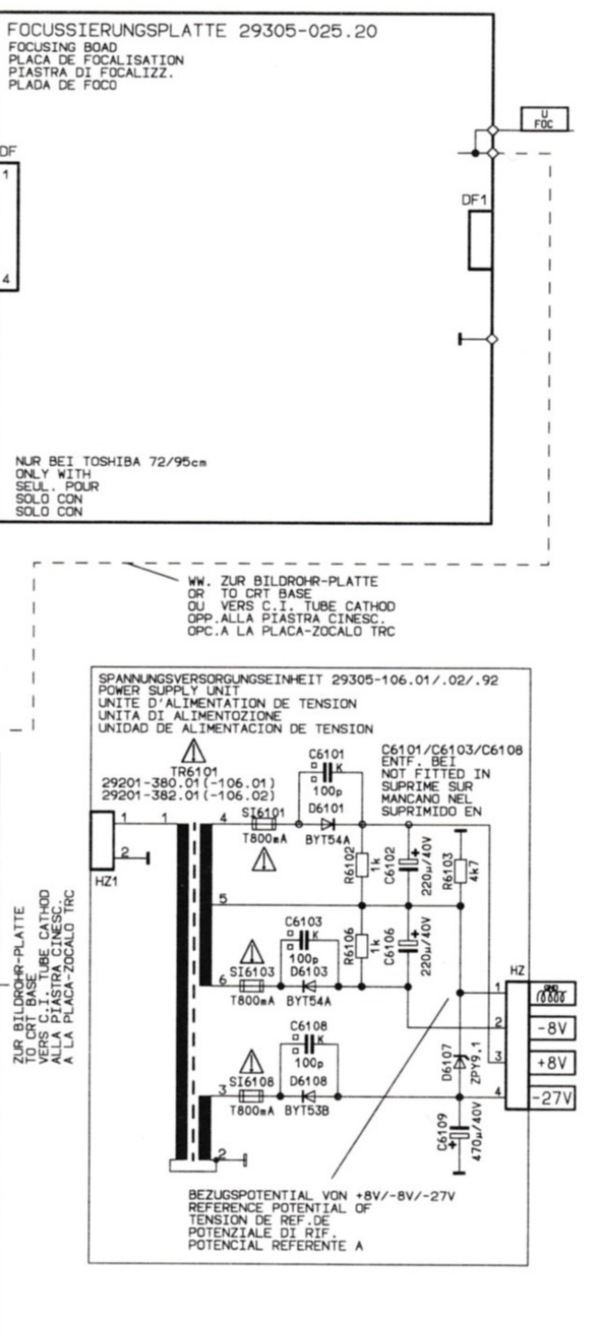
VK 22 0695

Schaltbild Sach-Nr. 72010-918.20
Circuit Diagram Part No. 72010-918.20

Gesamtschaltplan / General Circuit Diagram / Schema Completo

*	R408	R409	R501	R502	C511	C512	C521	C522	R523	L521	TR526	R535	R563	T572	C573	L573	R576	C631	R635	R662	C663	C659	R656	TR651	TR6111	K536
55cm PHI.	3n6	3n6	33Ω 2W	3Ω3/2W	3n7	13n	µ25	µ25	390Ω	-119.97	-025.18	150k	330k	2SD1432	µ47	-859.61	5Ω6	2n2	5k6	4Ω7	470p	3n3	18k	-415.97	—	BG20346423012G
63cm TOS.	1Ω6	1Ω6	4Ω7	1Ω/4W	9n5	27n	µ25	µ25	390Ω	-122.97	-025.07	110k	330k	2SC4542	µ68	-859.22	5Ω1	1n5	6k8	47Ω	220p	3n3	22k	-402.97(100W)/-403.97(50W)	-386.97	BG20346423209G
63cm PHI.	2Ω	1Ω8	22Ω 2W	1Ω/4W	9n	27n	µ3	µ3	220Ω	-122.97	-025.13	110k	330k	2SC4542	µ47	-859.22	4Ω7	1n5	6k8	47Ω	220p	3n3	22k	-402.97(100W)/-403.97(50W)	-385.97	BG20346423010G
63cm PHI. BL-SF	2Ω	1Ω8	4Ω7	1Ω/4W	9n5	20n	µ25	µ25	390Ω	-122.97	-025.12	110k	560k	2SC4542	µ68	-859.55	5Ω1	1n5	6k8	47Ω	220p	3n3	22k	-402.97(100W)/-403.97(50W)	-385.XX	BG20346423206G
70cm PHI.	1Ω8	1Ω8	4Ω7	1Ω5/2W	9n5	20n	µ41	µ41	220Ω	-122.97	-025.16	160k	330k	2SC4542	µ47	-859.55	4Ω7	1n5	6k8	47Ω	220p	3n3	18k	-412.99(50W)	-385.97	BG20346423010G
72cm TOS.	1Ω6	1Ω6	4Ω7	1Ω/4W	9n5	27n	µ25	µ25	390Ω	-122.97	-025.07	91k	330k	2SC4542	µ68	-859.22	3Ω9	1n5	6k8	47Ω	220p	3n3	22k	-402.97(100W)/-403.97(50W)	-386.97	BG20346423206G
72cm PHI.	2Ω	1Ω8	4Ω7	1Ω/4W	10n	20n	µ3	µ3	220Ω	-125.97	-025.12	91k	560k	2SC4542	µ68	-859.25	4Ω7	1n5	6k8	47Ω	220p	3n3	22k	-402.97(100W)/-403.97(50W)	-386.97	BG20346423206G
82cm TOS.	1Ω6	1Ω6	10Ω	1Ω/4W	9n	27n	µ3	µ3	680Ω	-119.97	-025.15	100k	330k	2SC4542	µ47	-859.22	1Ω5 1W	1n5	6k8	47Ω	220p	3n3	27k	-410.97(100W)	-387.97	BG20346423206G
95cm TOS.	1Ω8	1Ω8	4Ω7	1Ω/4W	9n	20n	µ3	µ3	390Ω	-117.97	-025.14	100k	560k	2SC4288A	µ68	-859.53	Ω47	1n5	6k8	47Ω	220p	3n3	30k	-410.97(100W)	-387.97	BG20346423206G



140395
21115-907.01

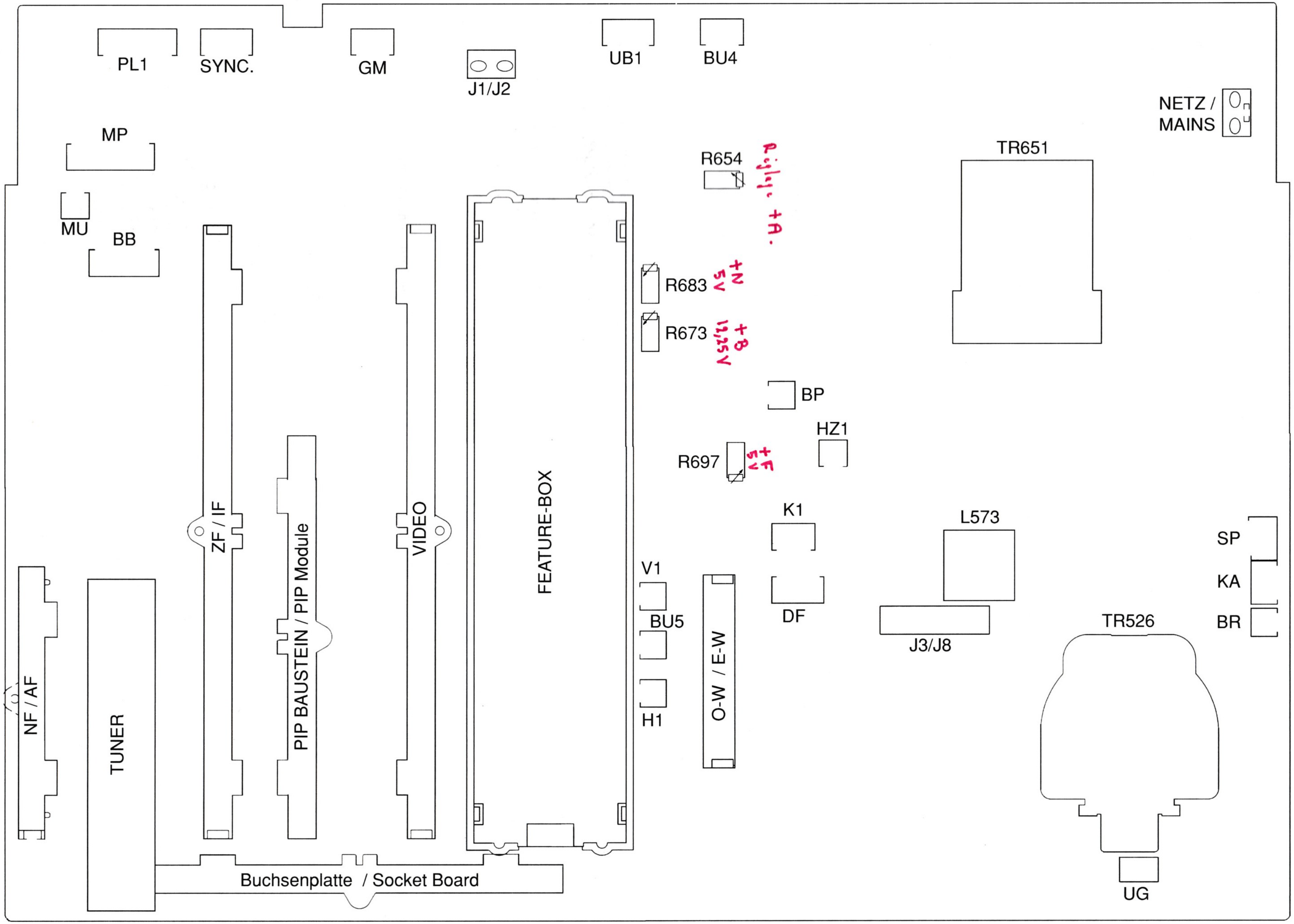
Achtung!

Bei Messungen auf der Fokussierungsplatte nur ausreichend isolierte Meßleitungen und spannungsfeste Tastköpfe (z. B. 100:1) verwenden.

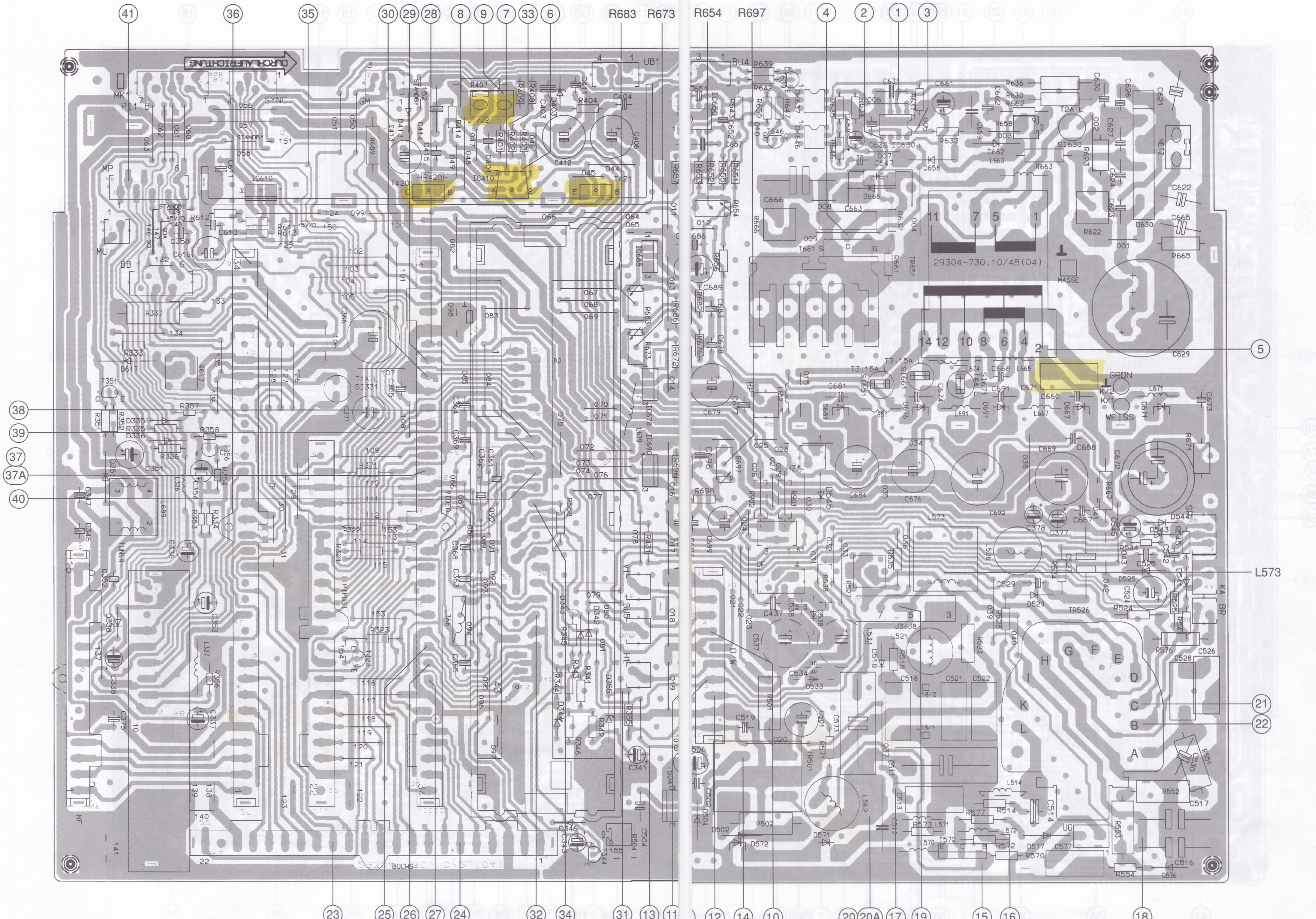
Attention!

For measurements on the focus control panel use only sufficiently insulated measuring cables and test probes with ad-equate electric strength (eg. 100:1).

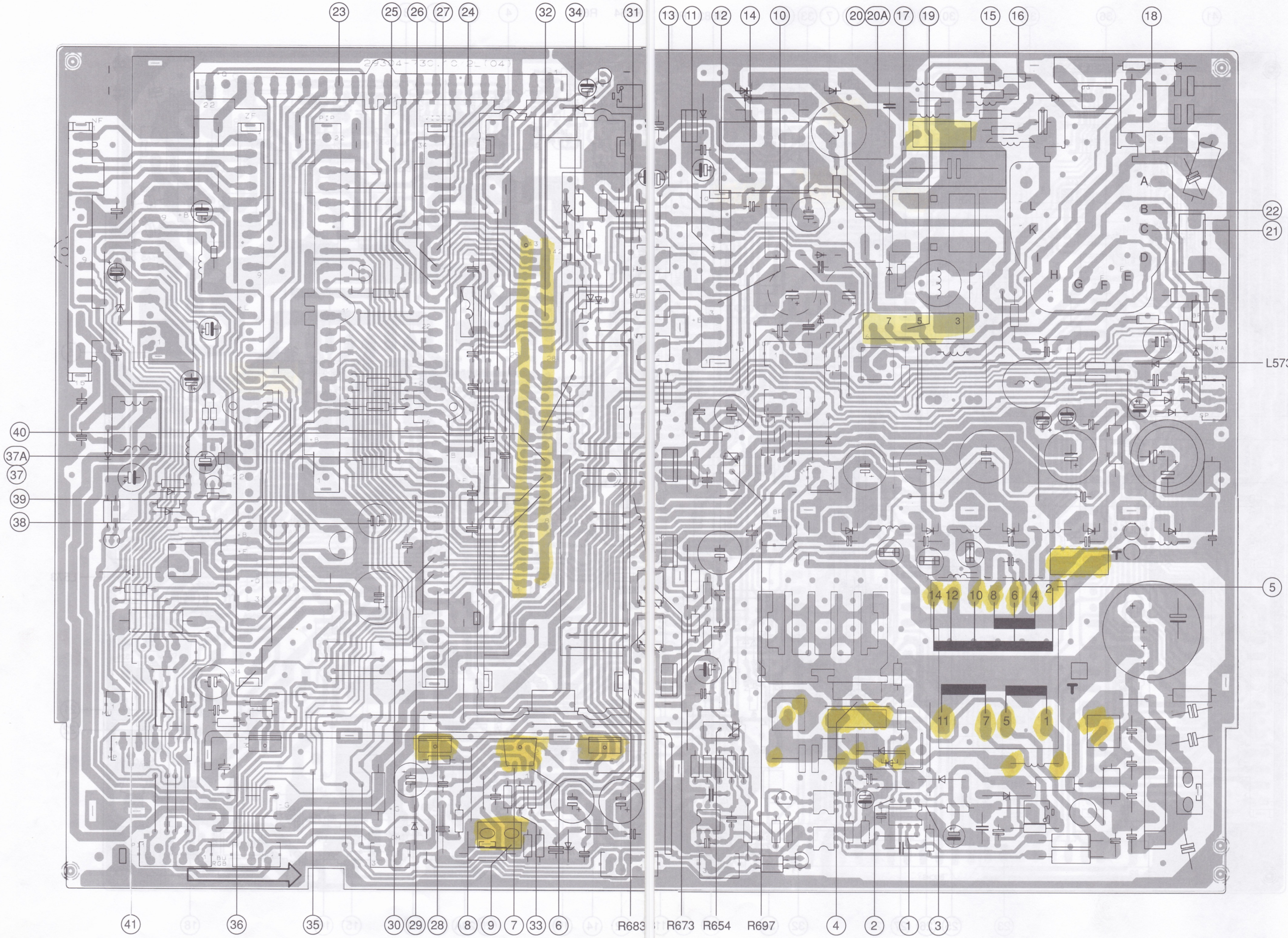
Abgleichlageplan / Alignment Layout



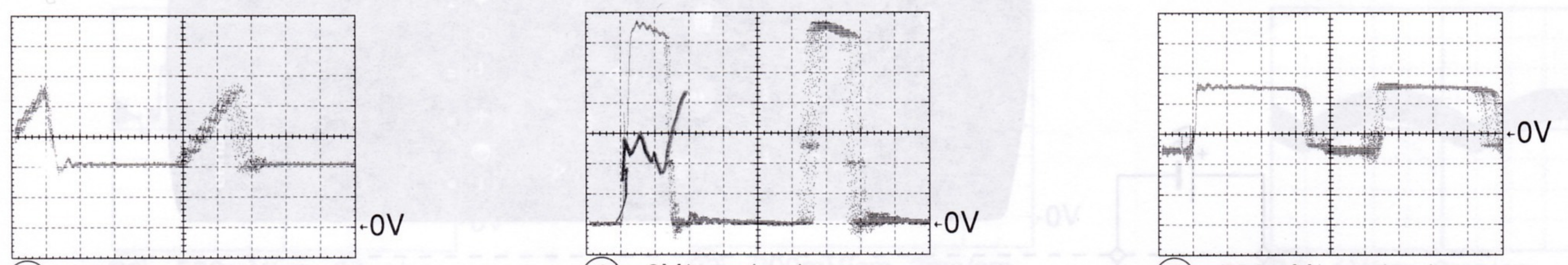
Chassisplatte / Chassis Board



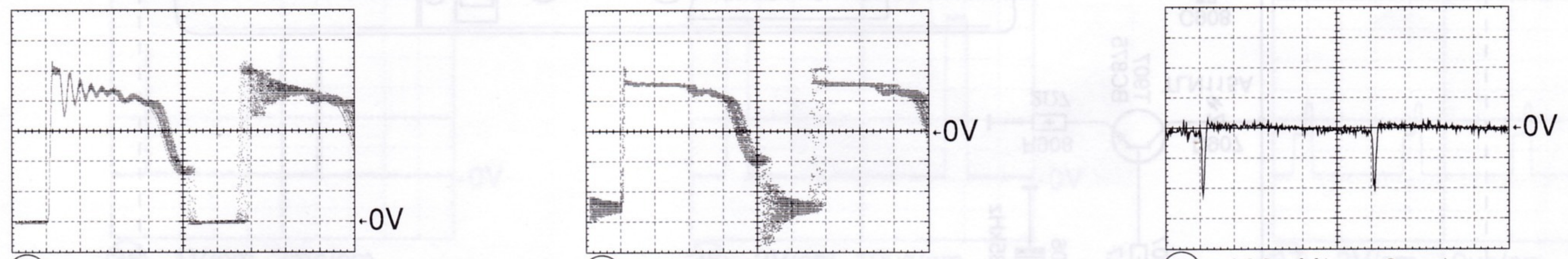
Chassisplatte / Chassis Board



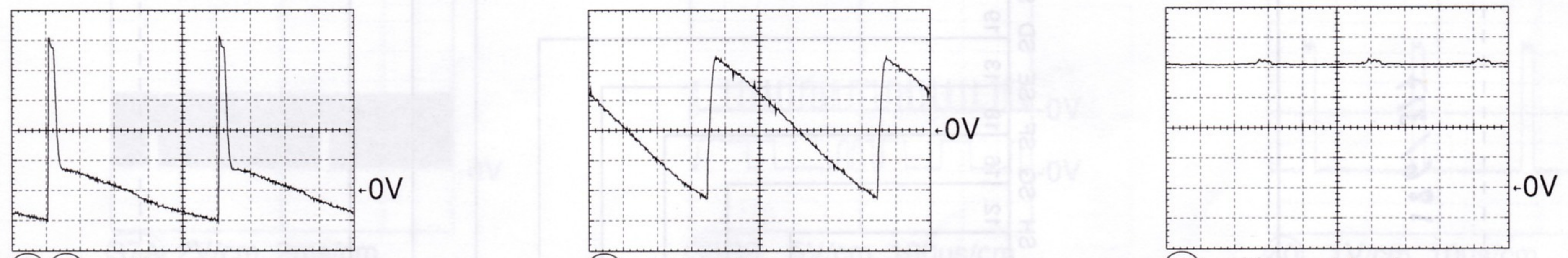
Chassisplatte / Chassis Board



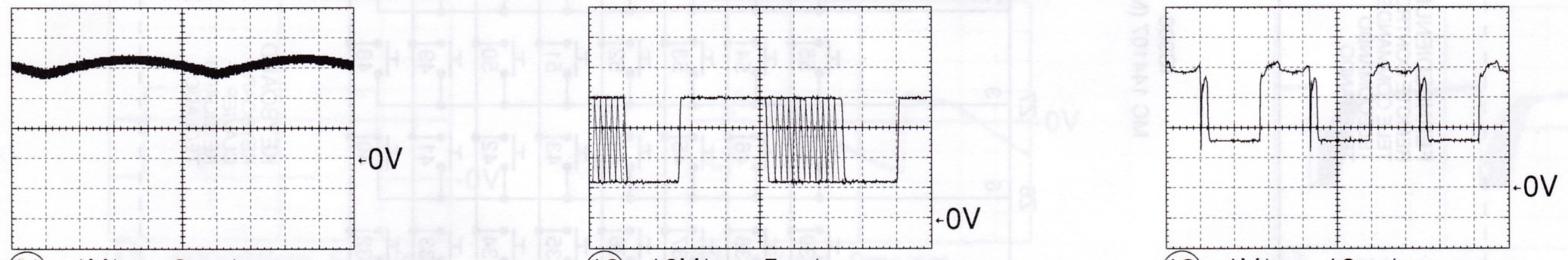
1 500mV/cm, 1µs/cm
2 2V/cm, 1µs/cm
3 500mV/cm, 1µs/cm



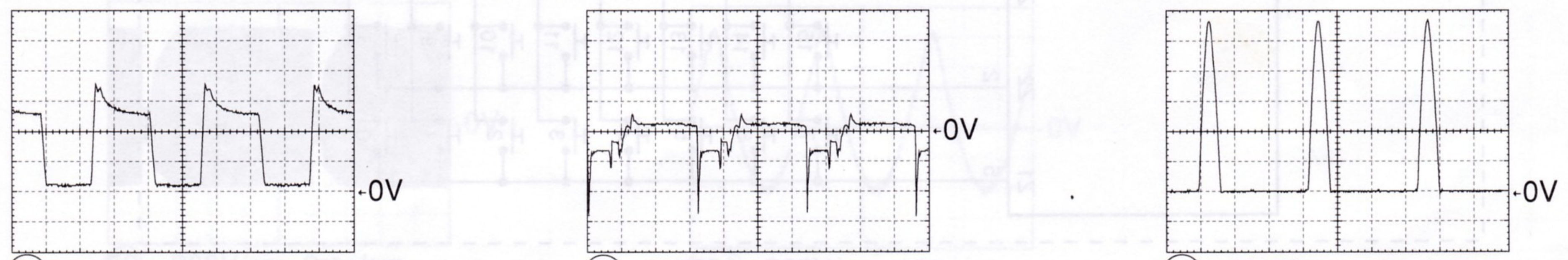
4 100V/cm, 1µs/cm
5 100V/cm, 1µs/cm
6 100mV/cm, 2ms/cm



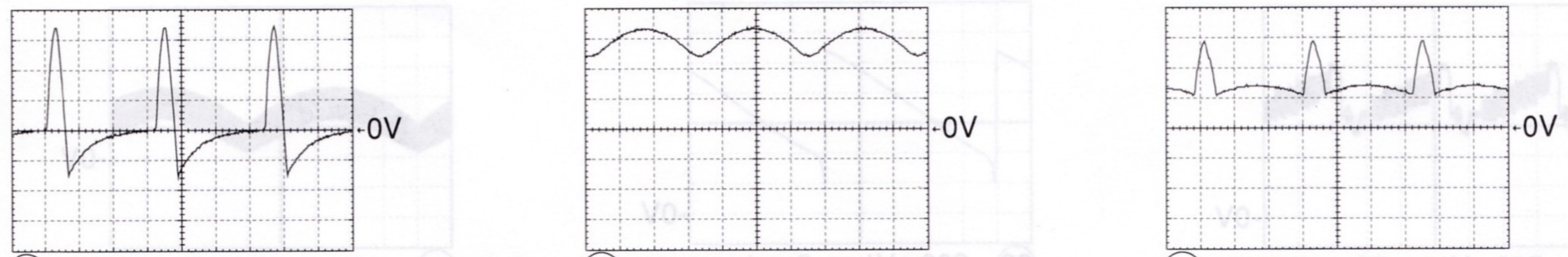
7 8 10V/cm, 2ms/cm
9 500mV/cm, 2ms/cm
10 1V/cm, 10µs/cm



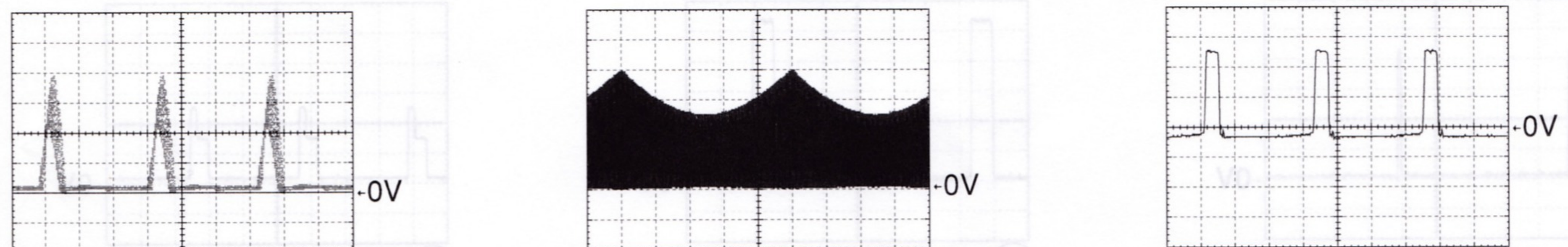
11 1V/cm, 2ms/cm
12 10V/cm, 5µs/cm
13 1V/cm, 10µs/cm



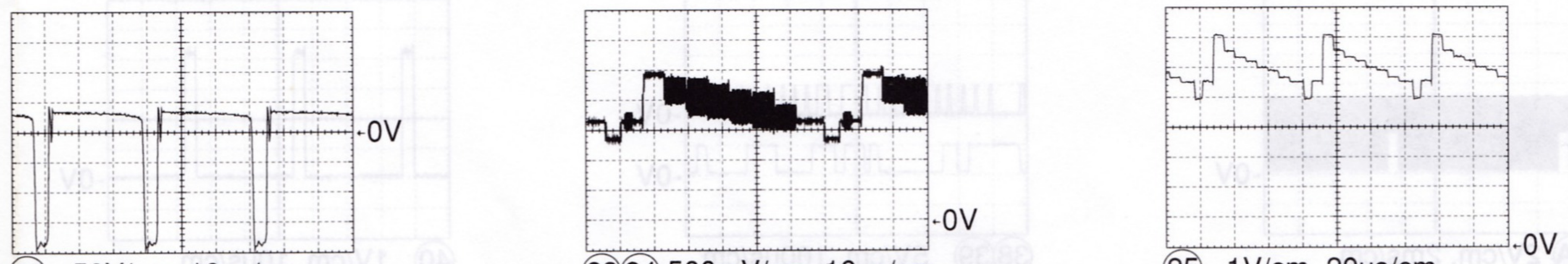
14 10V/cm, 10µs/cm
15 5V/cm, 10µs/cm
16 200V/cm, 10µs/cm



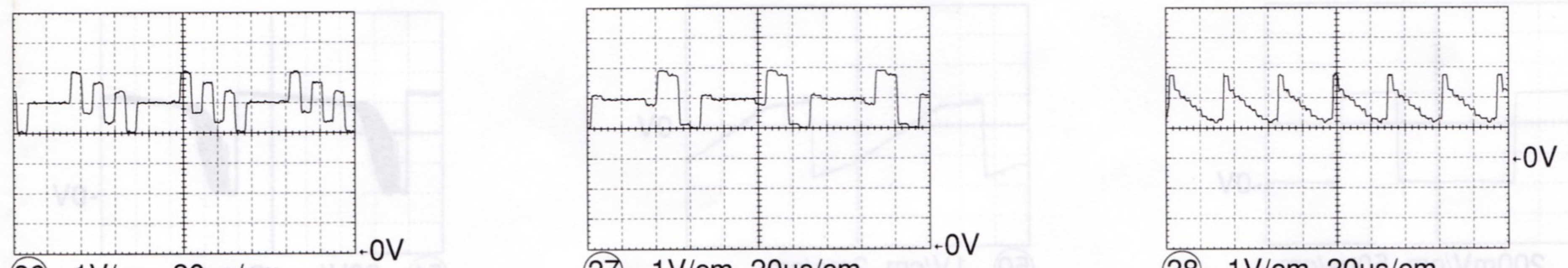
17 20V/cm, 10µs/cm
18 50V/cm, 10µs/cm
19 100V/cm, 10µs/cm



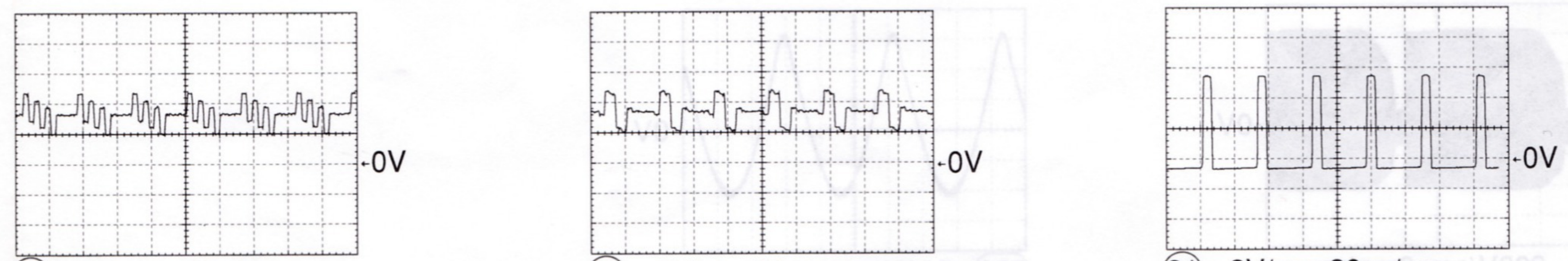
20 50V/cm, 10µs/cm
20A 50V/cm, 2ms/cm
21 50V/cm, 10µs/cm



22 50V/cm, 10µs/cm
23 24 500mV/cm, 10µs/cm
25 1V/cm, 20µs/cm

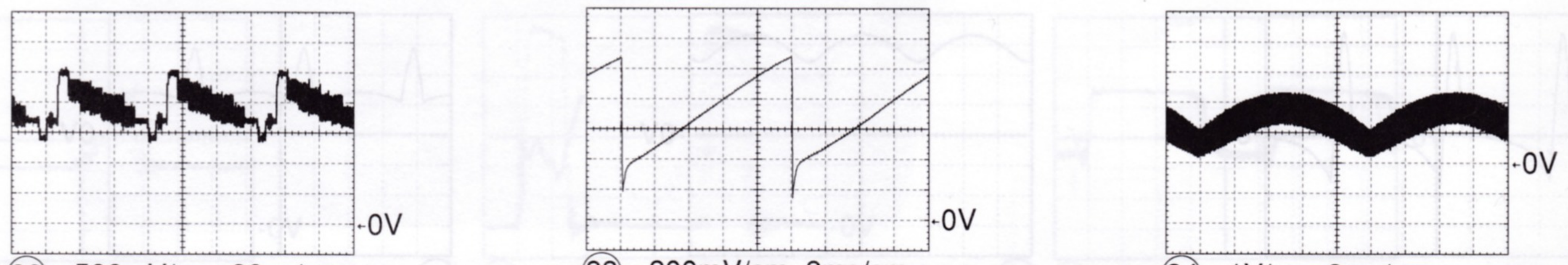


26 1V/cm, 20µs/cm
27 1V/cm, 20µs/cm
28 1V/cm, 20µs/cm

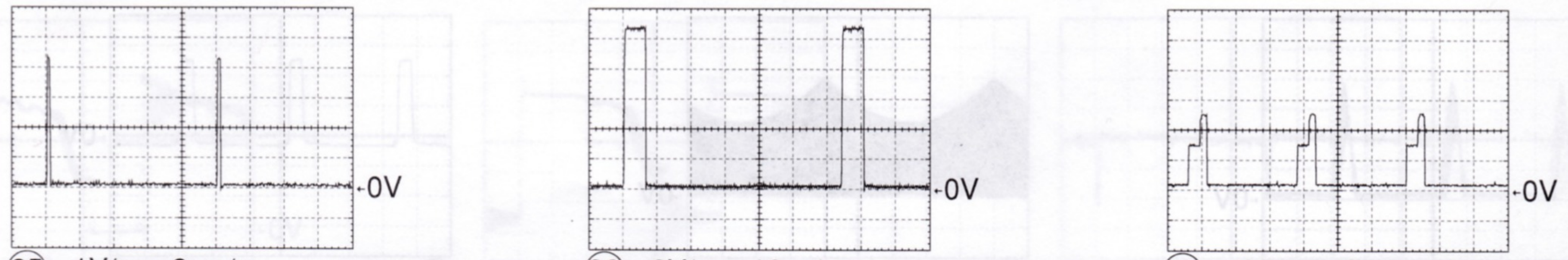


29 1V/cm, 20µs/cm
30 1V/cm, 20µs/cm
31 2V/cm, 20µs/cm

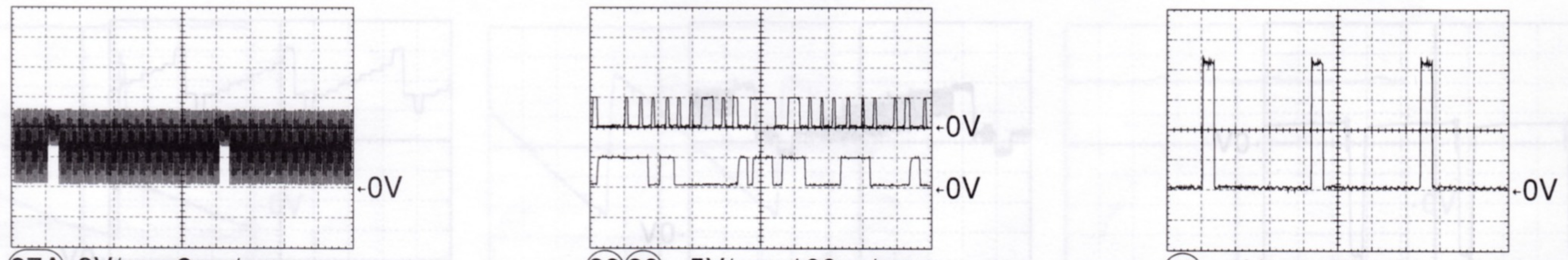
Chassisplatte / Chassis Board



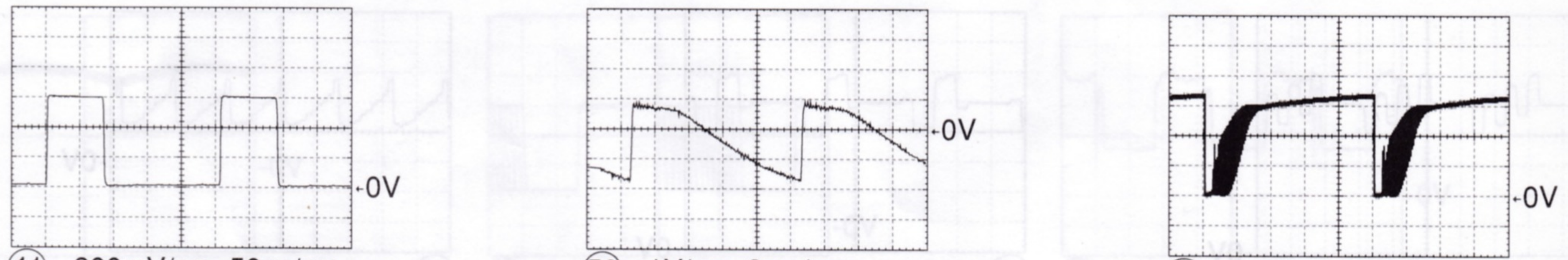
32 500mV/cm, 20µs/cm
33 200mV/cm, 2ms/cm
34 1V/cm, 2ms/cm



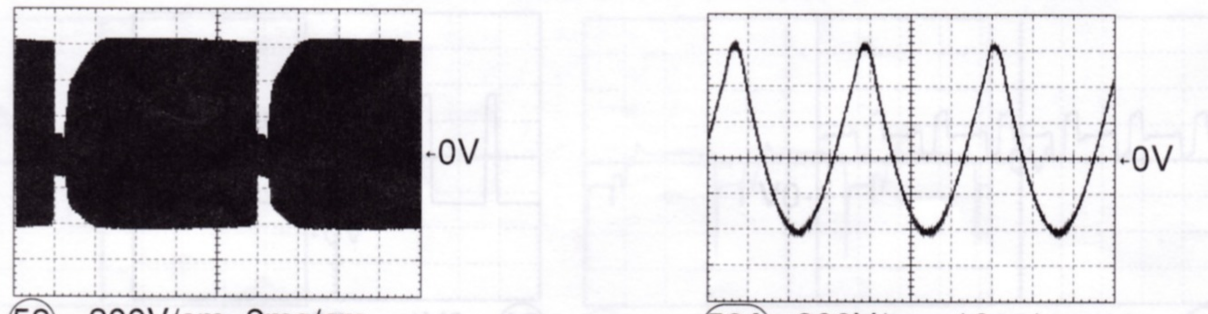
35 1V/cm, 2ms/cm
36 2V/cm, 10µs/cm
37 2V/cm, 10µs/cm



37A 2V/cm, 2ms/cm
38 39 5V/cm, 100µs/cm
40 1V/cm, 10µs/cm



41 200mV/cm, 50µs/cm
50 1V/cm, 2ms/cm
51 20V/cm, 2ms/cm



52 200V/cm, 2ms/cm
52A 200V/cm, 10µs/cm

Video-Baustein / Video Module / Modulo Video

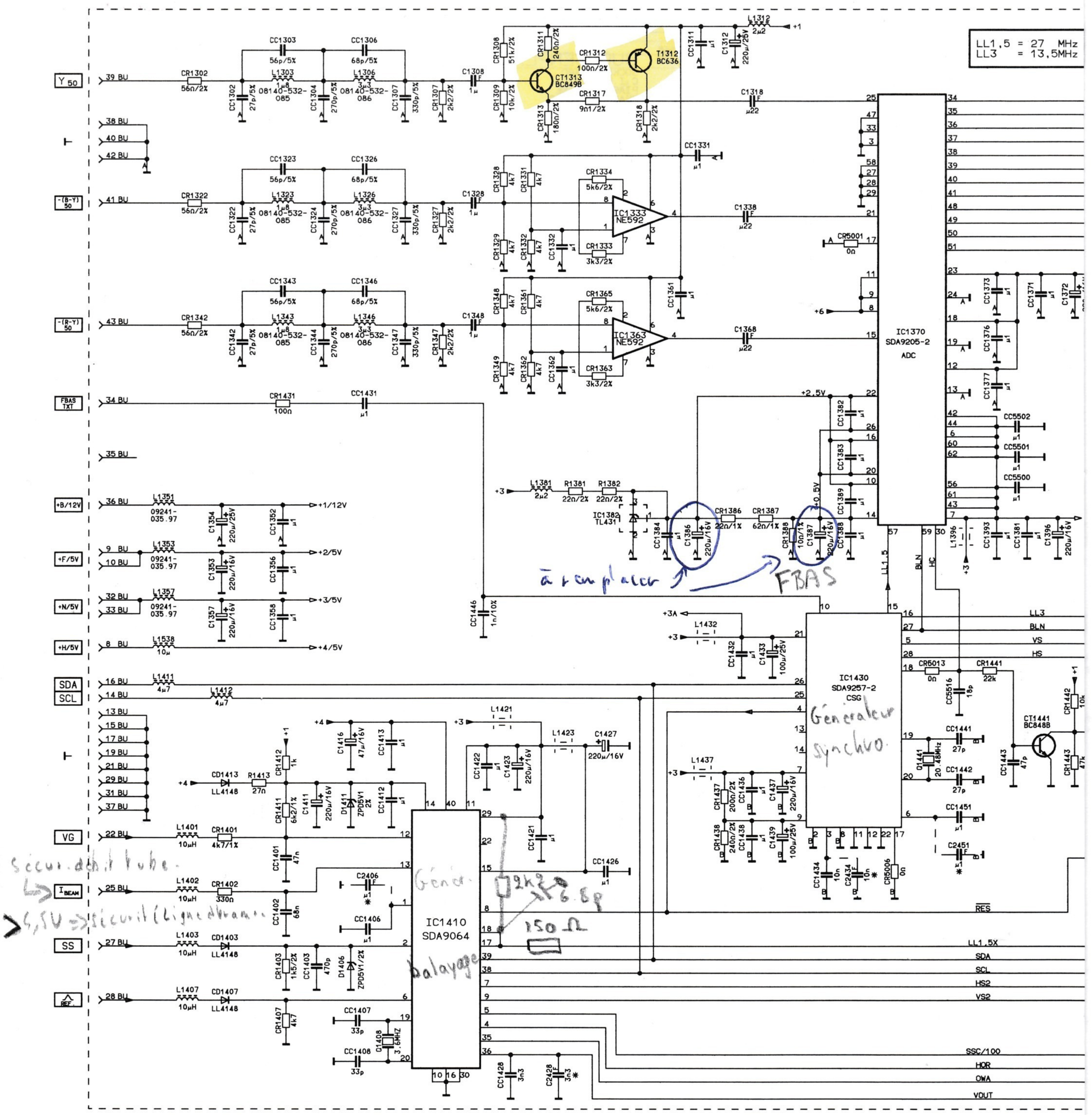
Video-Baustein / Video Module / Modulo Video

**	CR5022	CC5024	CC5023	CR5268	IC5001	IC5122	C5211 C5212 C5213	C5228	CR5208
-165.63	100k	22n	4n7	47Ω	TDA9160A	TDA4686	µ1	—	330Ω
-165.66	75k	100n	3n3	0Ω	TDA9160AN3B/N3C	TDA4686	µ1	—	330Ω
-165.69	75k	100n	3n3	0Ω	TDA9160AN3B/N3C	TDA4780	—	1µ/100V	0Ω

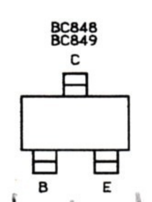
Anzeigeeinheit / Display Unit / Indicatore d'unita

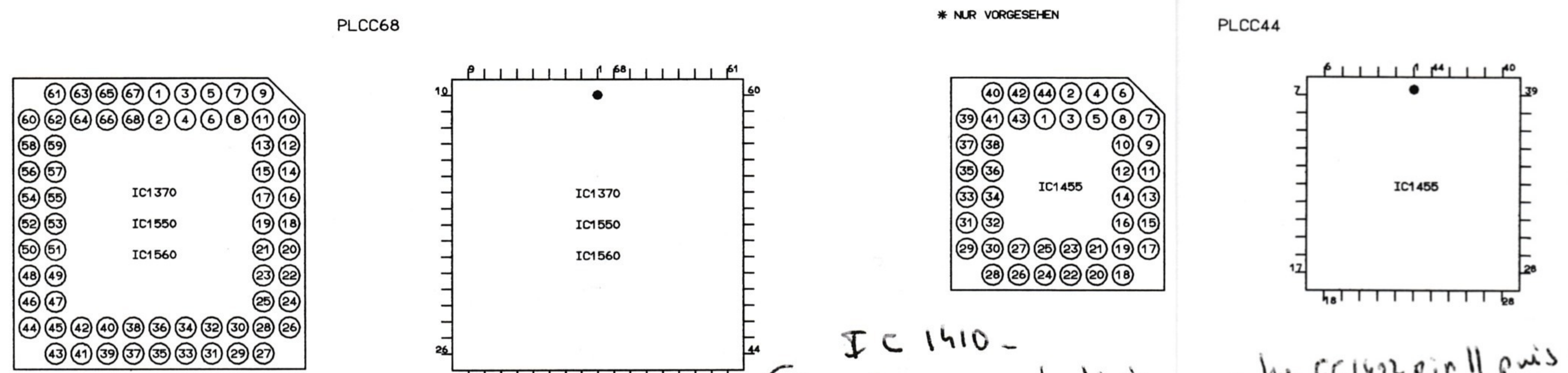
Feature-Box

Servicearbeiten nach Bausteinwechsel: siehe Abgleich Seite 3-1 (1.5)
Servicing work after replacing the module: see alignment page 3-4 (1.5)



Connecteur BU 1 à ressouder





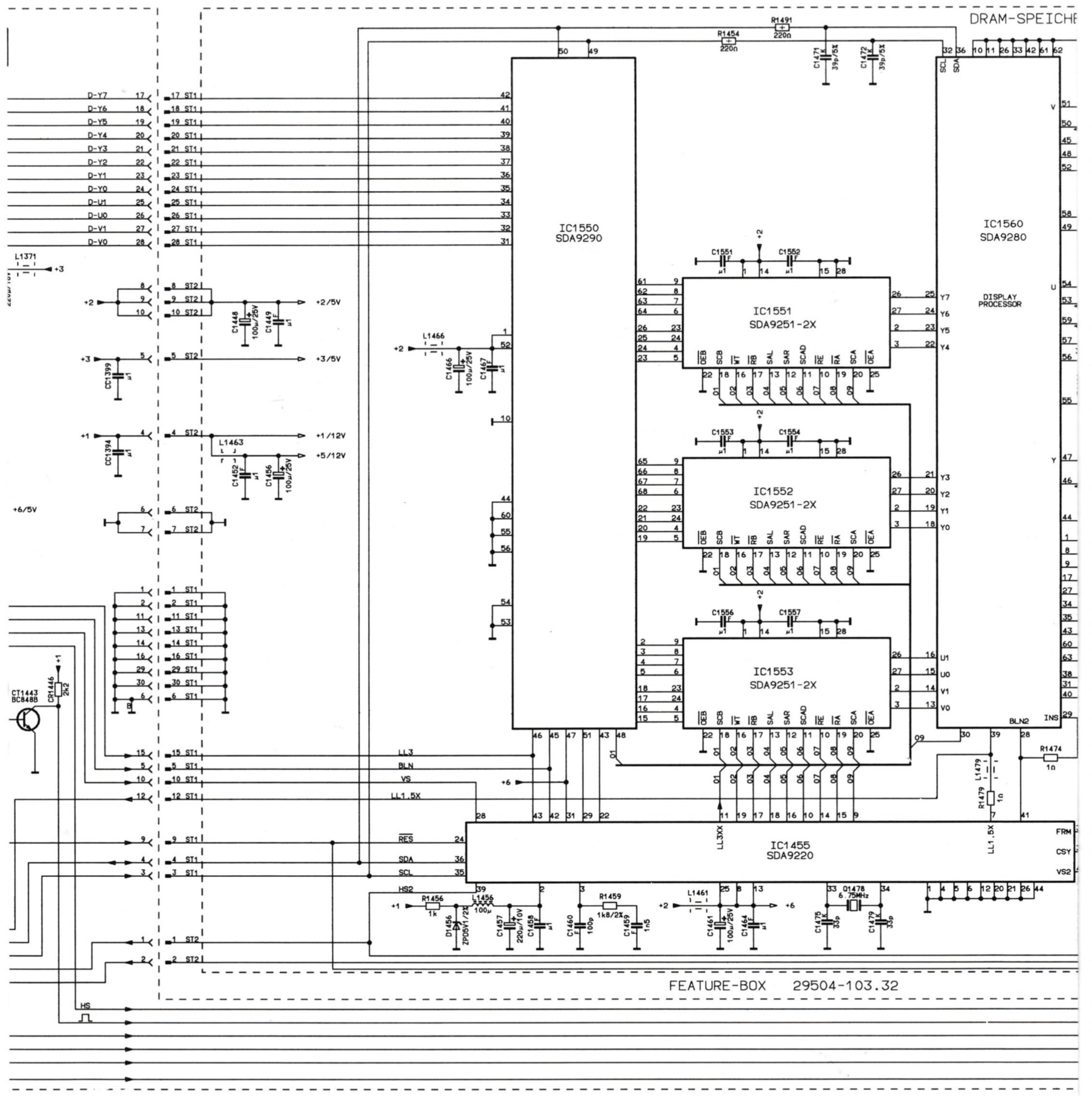
IC VON UNTEN
IC BOTTOM VIEW
IC VVUES DE DESSOUS
IC VEDUTO DA SOTTO
IC VISTO POR DEBAJO

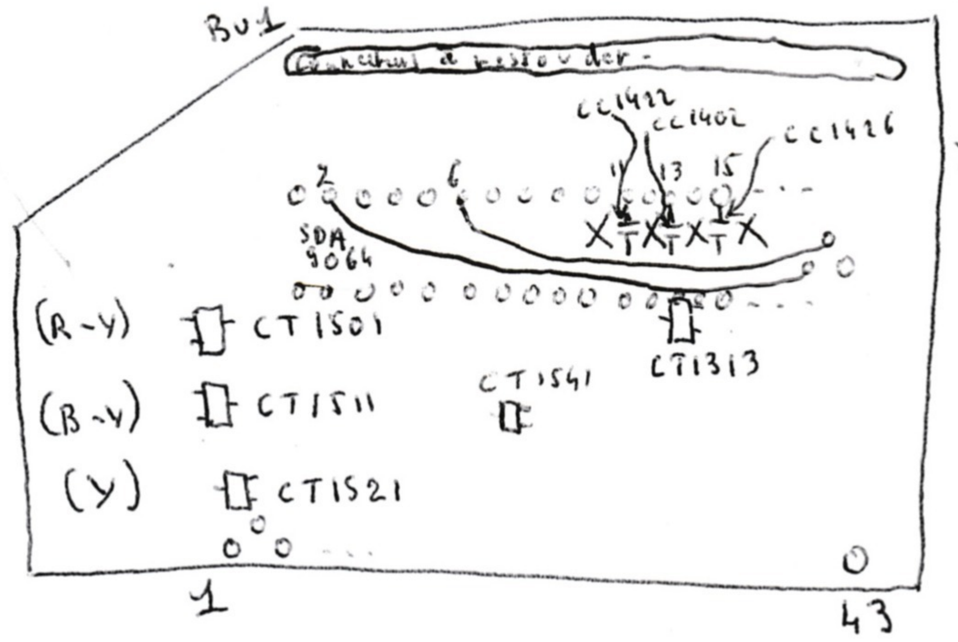
IC VON OBEN
IC TOP VIEW
IC VUES DE DESSOUS
IC VEDUTO DA SOPRA
IC VISTO DESDE ARRIBA

Echange standard :
Changer CT1313, CT1501, CT1511,
CT1521, CT1541
Changer C1386 et C1387 220µ 16V en passant
par le module opposé qu'il faut dessouder.
Recabler la liaison pin 2 et 6 IC SDA9064. ⟹
Ressouder le connecteur BU 1

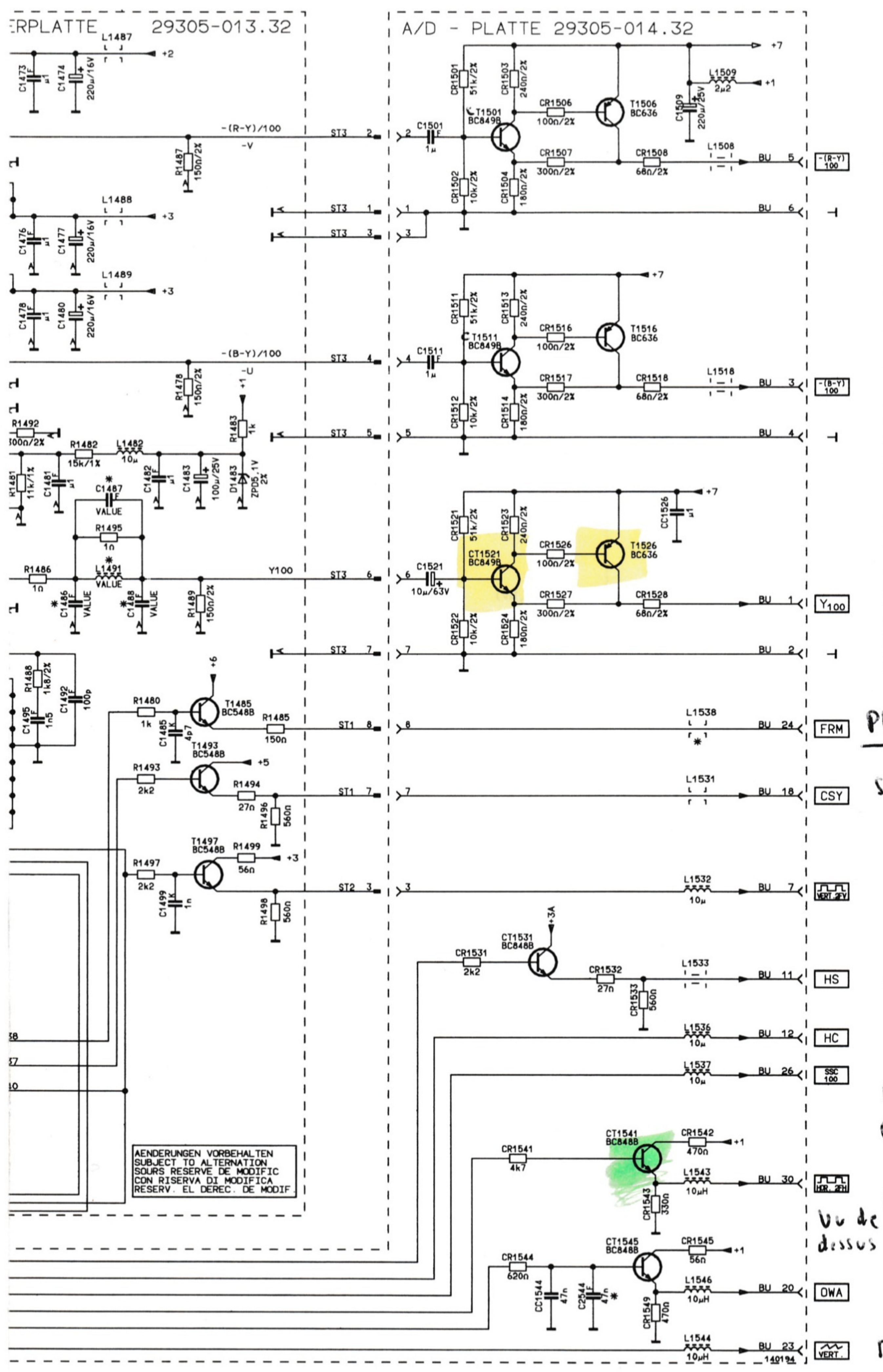
IC 1410 –
Pin 2 – couper la liaison entre CC1422 pin 11 puis CC1402
puis CC1426 – recabler Pin 2 avec un fil juste après
CC1426.
Pin 6 – idem. recabler juste après CC1426.
Dessouder la plaque de l'autre côté pour changer C1386
et C1387
220µ 16V.

Il est possible de remplacer un 29504103350 par un 295041033200
(il n'y a plus le connect 16/9) mais pas l'inverse.





X = pistes coupées.



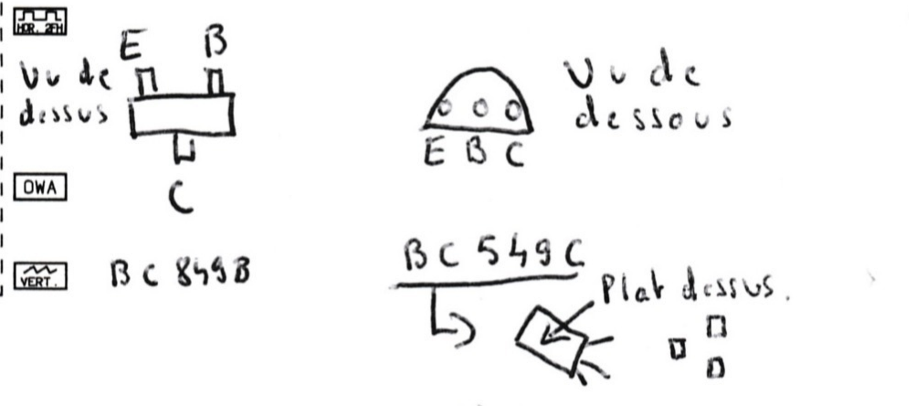
	BU-	ST1	ST2	ST3
01	Y/100 →	MASSE	HS2	MASSE ANALOG
02	MASSE	MASSE	VS2	-(R-Y)/100
03	-(B-Y)/100 →	SCL	VERT. 2FV	MASSE ANALOG
04	MASSE	SDA	+1/12V	-(B-Y)/100
05	-(R-Y)/100 →	BLN	+3/5V	MASSE ANALOG
06	MASSE	MASSE	MASSE	Y/100
07	VERT.2FV →	CSY	MASSE	MASSE ANALOG
08	→ +H (+4/5V)	FRM	+2/5V	
09	→ +F (+2/5V)	RES	+2/5V	
10	→ +F (+2/5V)	VS	+2/5V	
11	HS →	MASSE		
12	HC →	LL1,5X		
13	MASSE	MASSE		
14	→ SCL	MASSE		
15	MASSE	LL3		
16	→ SDA →	MASSE		
17	MASSE	D-Y7		
18	CSY →	D-Y6		
19	MASSE	D-Y5		
20	OWA →	D-Y4		
21	MASSE	D-Y3		
22	→ VG	D-Y2		
23	VERT. →	D-Y1		
24	FRM →	D-Y0		
25	→ IBEAM	D-U1		
26	SSC/100 →	D-U0		
27	→ SS	D-V1		
28	→ REF	D-V0		
29	MASSE	MASSE		
30	HOR.2FH →	MASSE		
31	MASSE			
32	→ +N (+3/5V)			
33	→ +N (+3/5V)			
34	→ BAS			
35	FREI			
36	→ +B(+1/12V)			
37	MASSE			
38	MASSE ANALOG			
39	→ Y50			
40	MASSE ANALOG			
41	→ -(B-Y)/50			
42	MASSE ANALOG			
43	→ -(R-Y)/50			

Plus de luminence.

Se méfier de CT1521 BC849B
de T1526 BC636
et T1312
de CT1313 BC849B

BC 849B = BC 849C
Ref : 830100684900

BC849C = BC549C
Ref : 4822 130 44 246



BC 636 = BC 640.

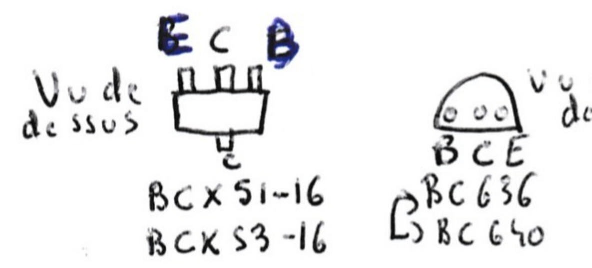
Refaire systématiquement toutes les soudures sur tous les connecteurs.

BC 636 classique = BCX 51-16 CMS (marquage AD)

BC 640 = BCX 53-16 (marquage AL)

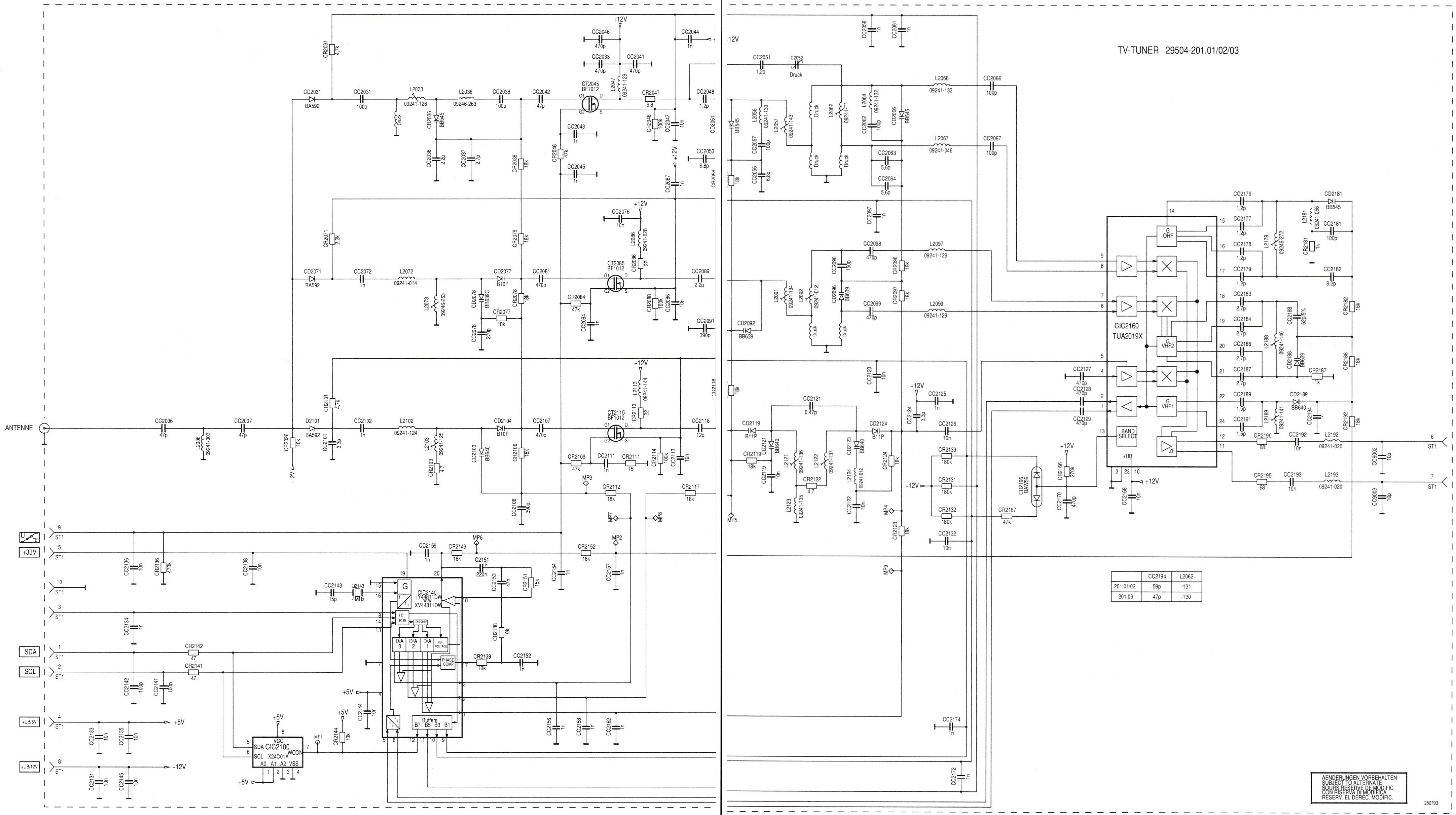
Sécurité
⟹ toujours arrêt de modulation du tube. (pas SSC 100)

Marquage
BC 849B = 2B
BC X51-16 = AD
BC X53-16 = AL



BCX 53-16 (AL) Ref : 532213061816

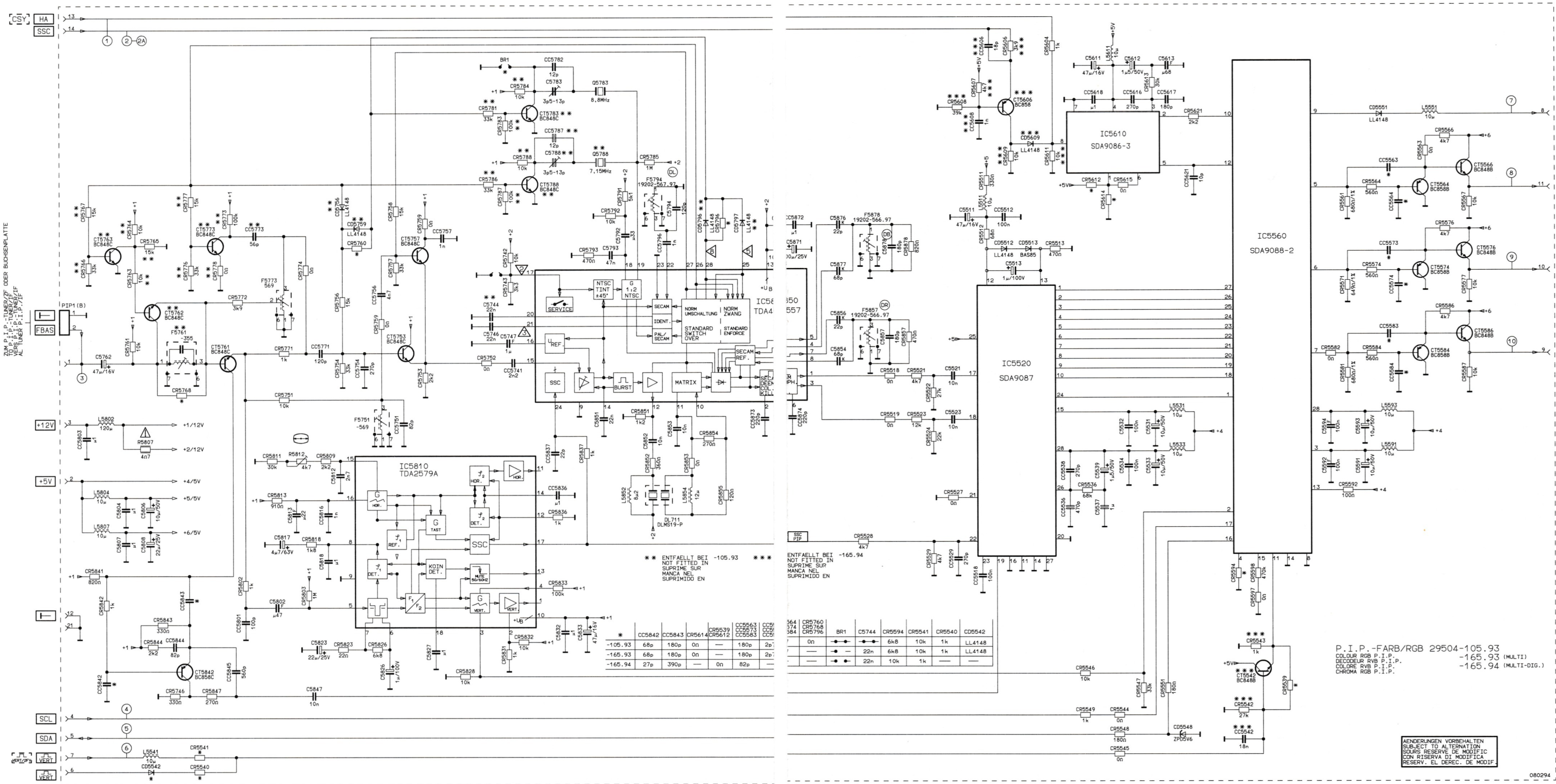
Tuner



	CC2194	L2062
201.01/02	59p	-131
201.03	47p	-130

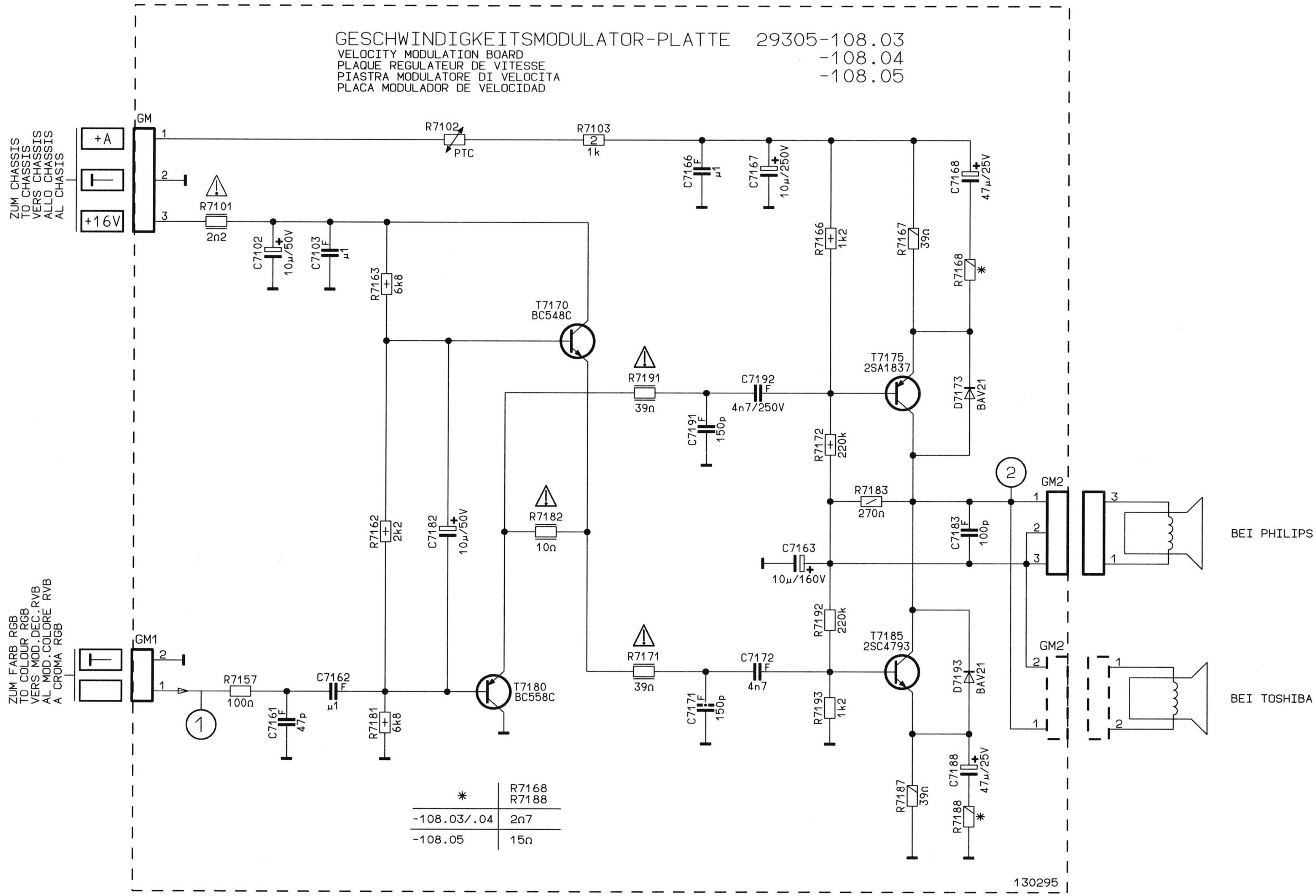
ZF-Verstärker / IF Amplifier / Amplificatore FI

P.I.P.-Farb-RGB / Colour RGB P.I.P. / Colore RVB P.I.P.



Buchsenplatte / Socket Board / Piastra Prese

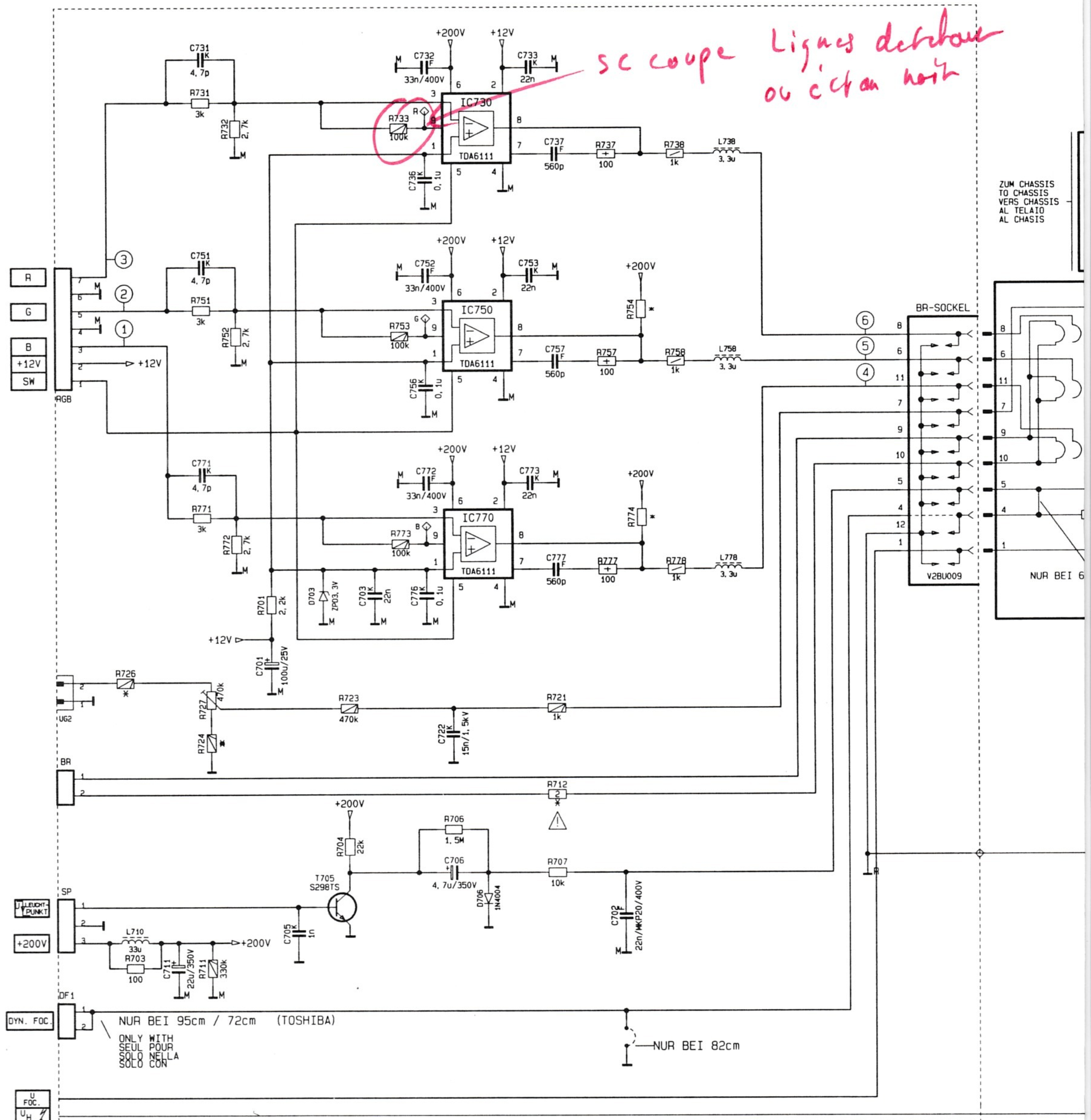
Geschwindigkeitsmodulator-Platte
Velocity Modulation Board
Piastra Modulatore di Velocita



Bildrohrplatte / CRT Panel

Servicearbeiten nach Bausteinwechsel: siehe Abgleich Seite 3-2
Servicing work after replacing the module: see alignment page 3-5

se coupe Lignes de retour ou écran noir



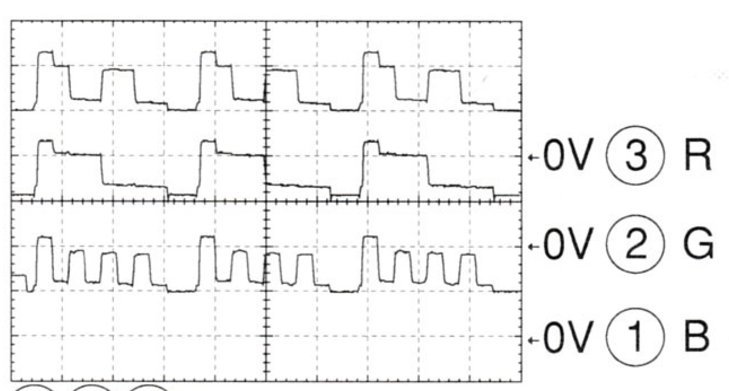
BILDROHRPLATTE
CRT PANEL
C.I. TUBE CATHOD.
PIASTRA CINESC.
PLACA-ZOCALO TRC

29305 - 022.31 (72cm/TOSHIBA)
29305 - 022.34 (82cm)
29305 - 022.35 (95cm)
29305 - 022.37 (70/72cm/PHILIPS)
29305 - 022.38 (63cm/TOSHIBA)
29305 - 022.39 (63cm/PHILIPS)
29305 - 022.89 (55cm/DIGI 5)

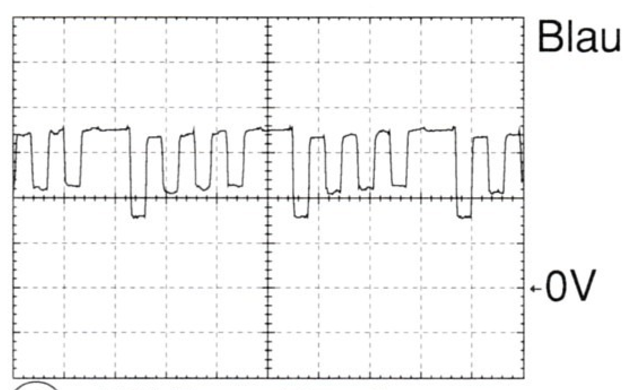
AENDERUNGEN VORBEHALTEN
SUBJECT TO ALTERNATE
SOURS RESERVE DE MODIFIC
CON RISERVA DI MODIFICA
RESERV. EL DEREC. MODIFIC.

*	R712	R726	R724	R754	R774
-022.34	●–●	220k	390k	5, 6M	6, 8M
-022.35	●–●	220k	390k	5, 6M	6, 8M
-022.31	●–●	120k	470k	5, 6M	6, 8M
-022.37	4, 7/2W	●–●	1M	-	10M
-022.38	5, 6/2W	120k	470k	5, 6M	6, 8M
-022.39	5, 1/2W	●–●	1M	-	10M
-022.89	5, 6/2W	●–●	1M	-	10M

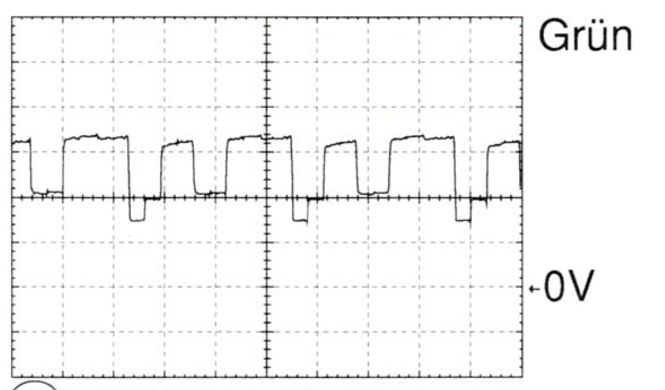
050994



①②③ 2V/cm, 10µs/cm

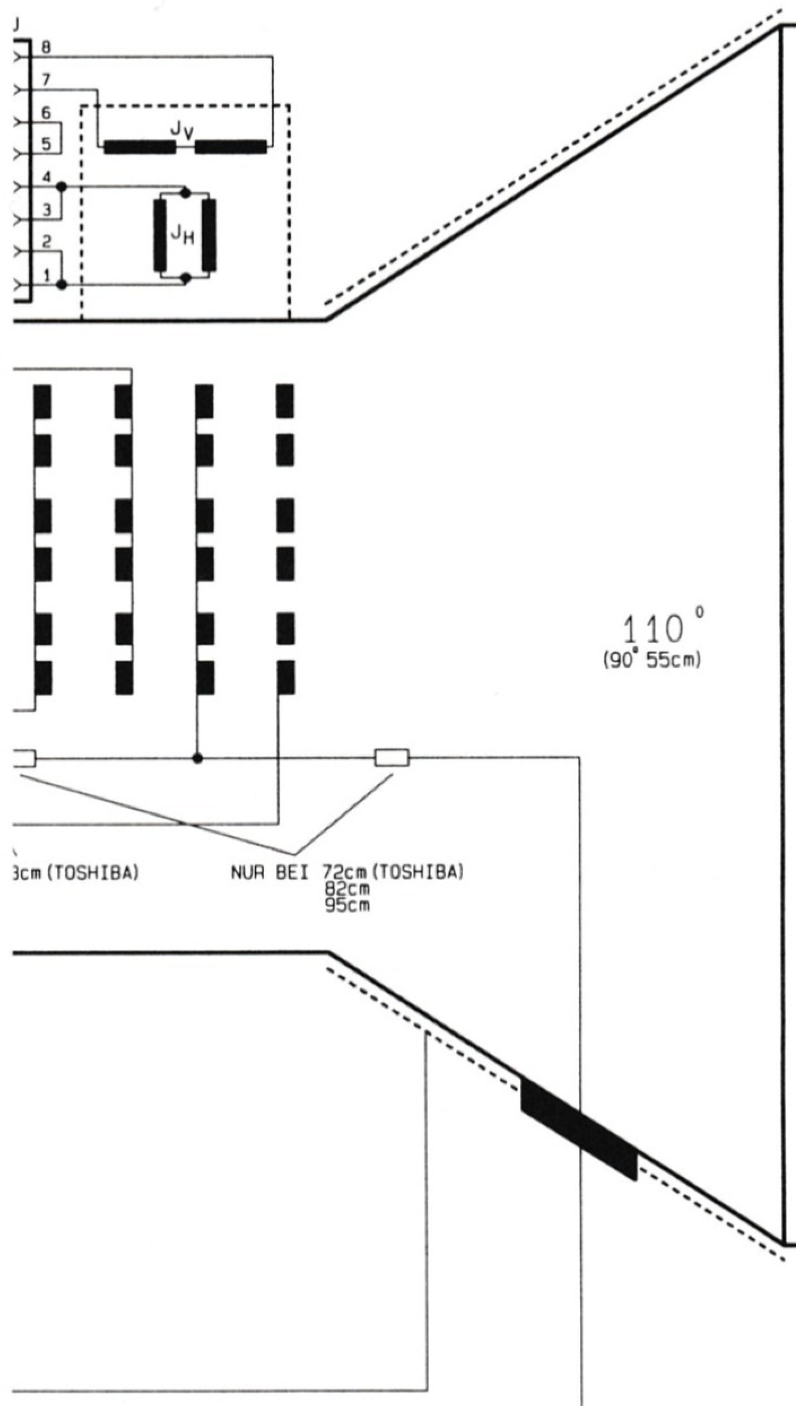


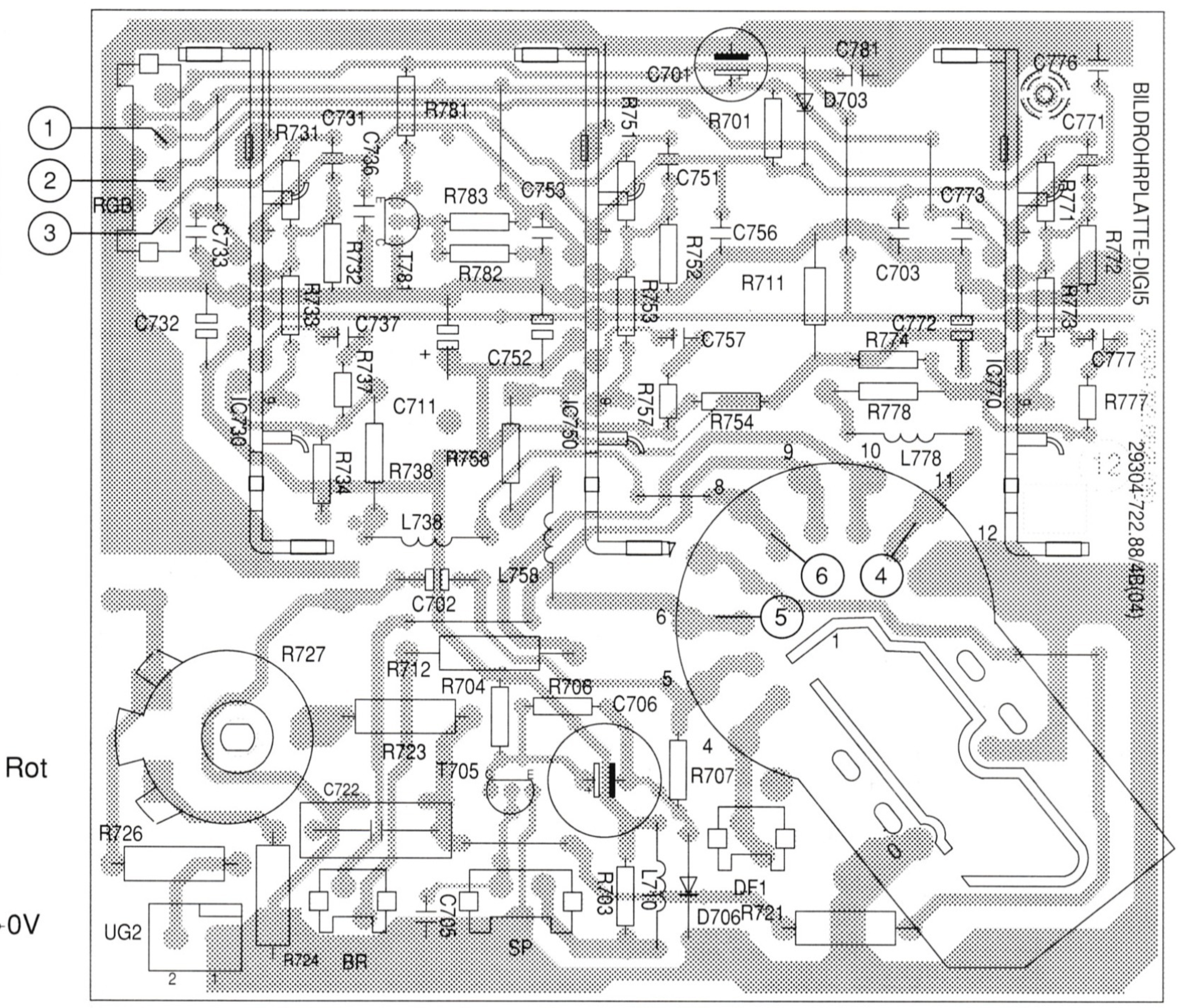
④ 50V/cm, 10µs/cm

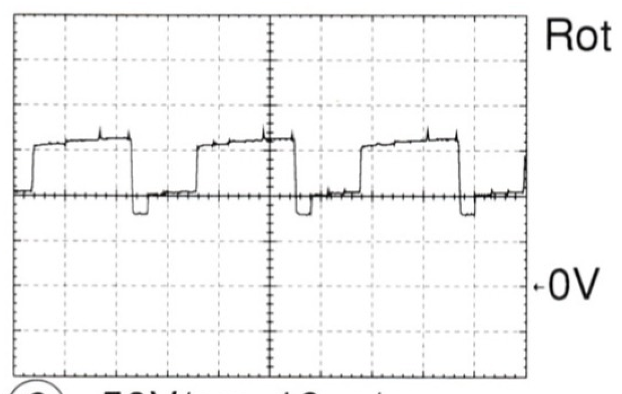


⑤ 50V/cm, 10µs/cm

IC HS. Remettre le refroidisseur des 3 IC à la masse CI tube avec un clip ref: 2930316401 (décharge statique).

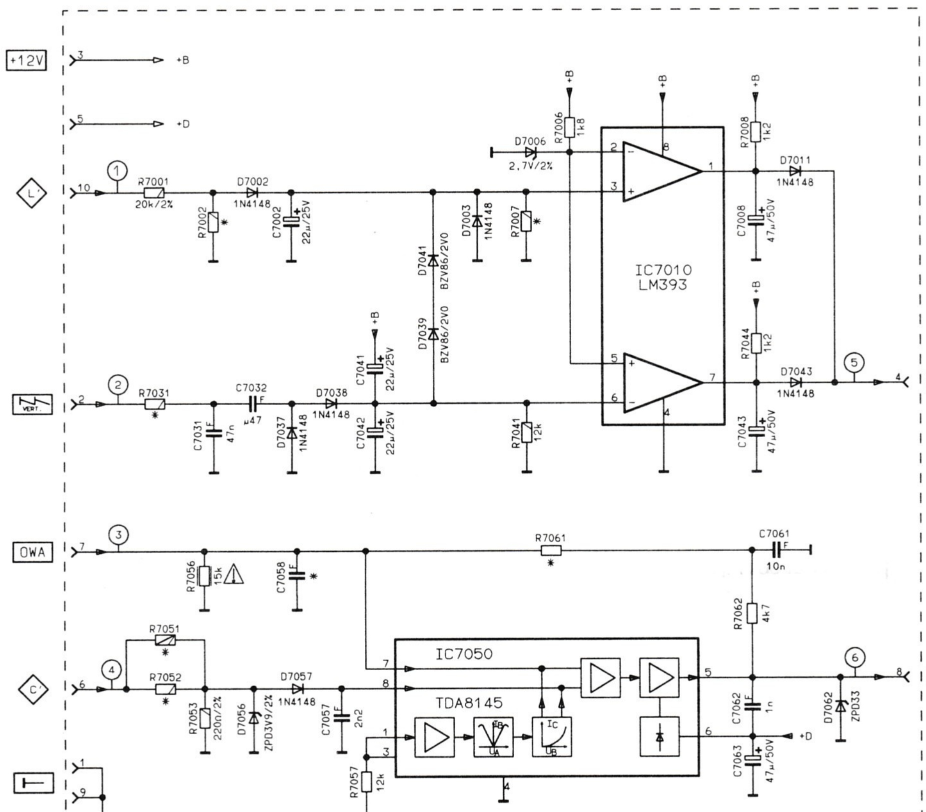






⑥ 50V/cm, 10µs/cm

Ost / West-Baustein / East / West Module

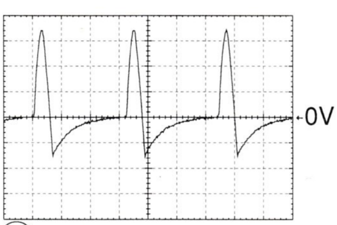


Sécurité ligne + trame > à 4.5V

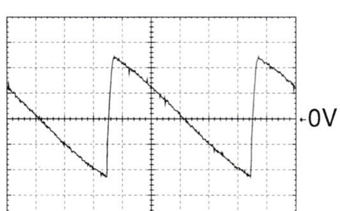
*	R7002	R7007	R7052	R7051	R7061	C7058	R7031
-107.62	3k/2%	13k/2%	33k/2%	3k9/2%	39k	22n	3k6
-107.63	3k3/2%	13k7/1%	33k/2%	3k9/2%	39k	22n	2k7
-107.64	3k3/2%	13k/2%	33k/2%	3k9/2%	39k	22n	5k6
-107.65	3k9/2%	12k/2%	—	4k7/2%	220k	22n	3k
-107.66	3k/2%	12k/2%	33k/2%	3k9/2%	39k	22n	5k1
-107.67	3k3/2%	11k/1%	33k/2%	3k9/2%	82k	µ1	3k3
-107.68	3k9/2%	12k/2%	33k/2%	3k9/2%	82k	22n	3k6

OST/WEST-BAUST. 29504 -107.62 TOSHIBA 70cm/82cm/16:9(DIGI 5)
EAST/WEST MODULE -107.63 PHILIPS 55cm/63cm(BLS)
EAST/OUEST MOD. -107.64 TOSHIBA 63cm/72cm
MODULO EST/OVEST -107.65 PHILIPS 63cm(SF)/72cm
MODULO ESTE/OESTE -107.66 TOSHIBA 82cm
-107.67 TOSHIBA 95cm
-107.68 PHILIPS 70cm

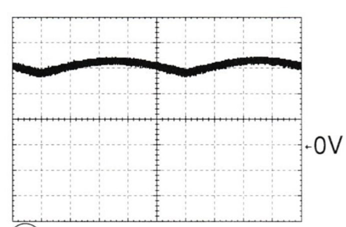
021294



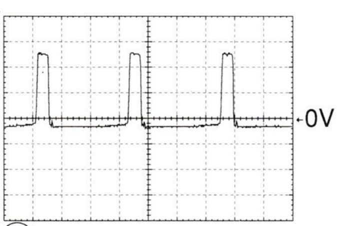
1 20V/cm, 10µs/cm



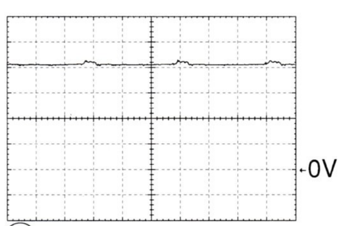
2 500mV/cm, 2ms/cm



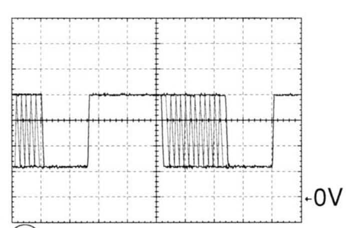
3 1V/cm, 2ms/cm



4 50V/cm, 10µs/cm

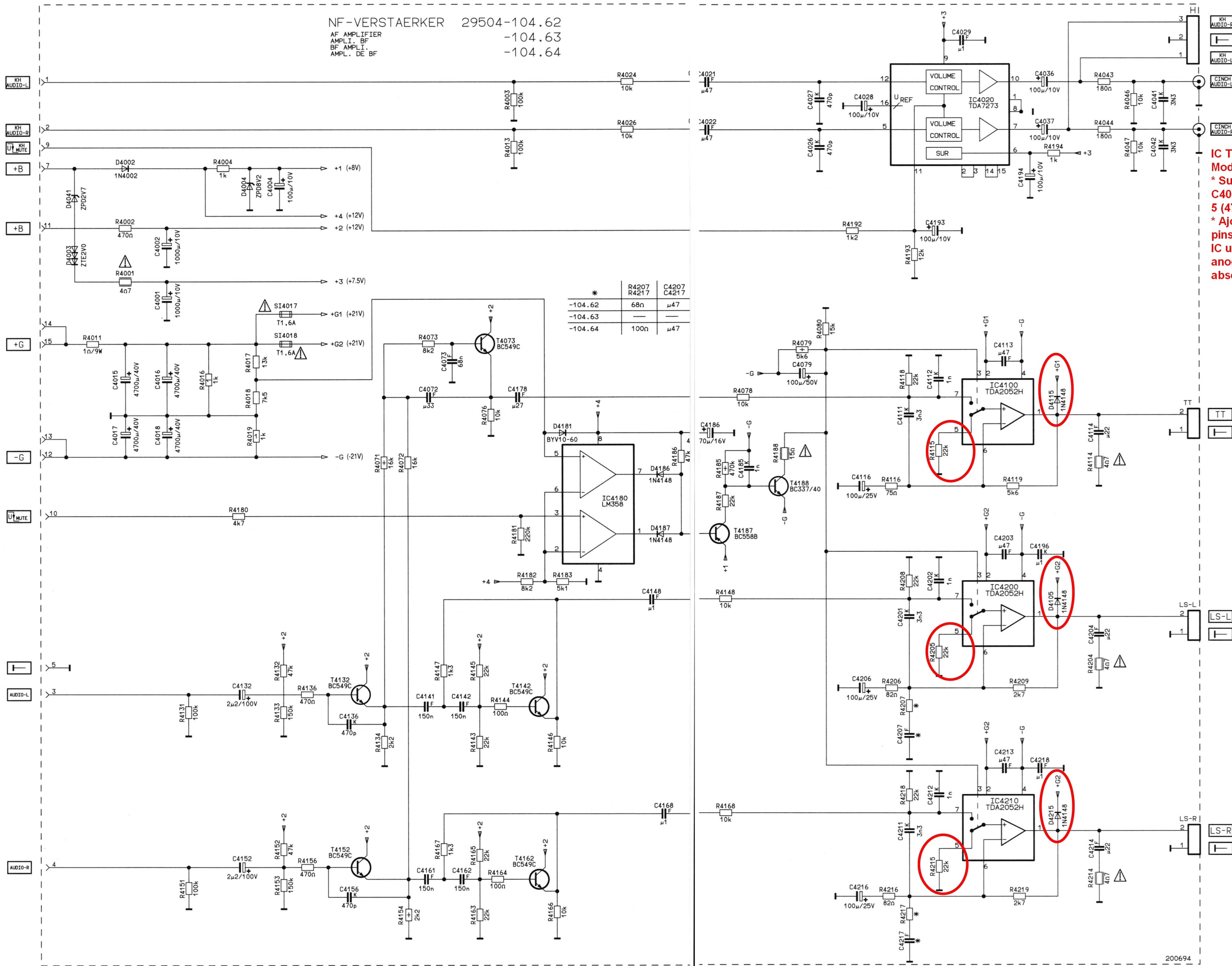


5 1V/cm, 10µs/cm



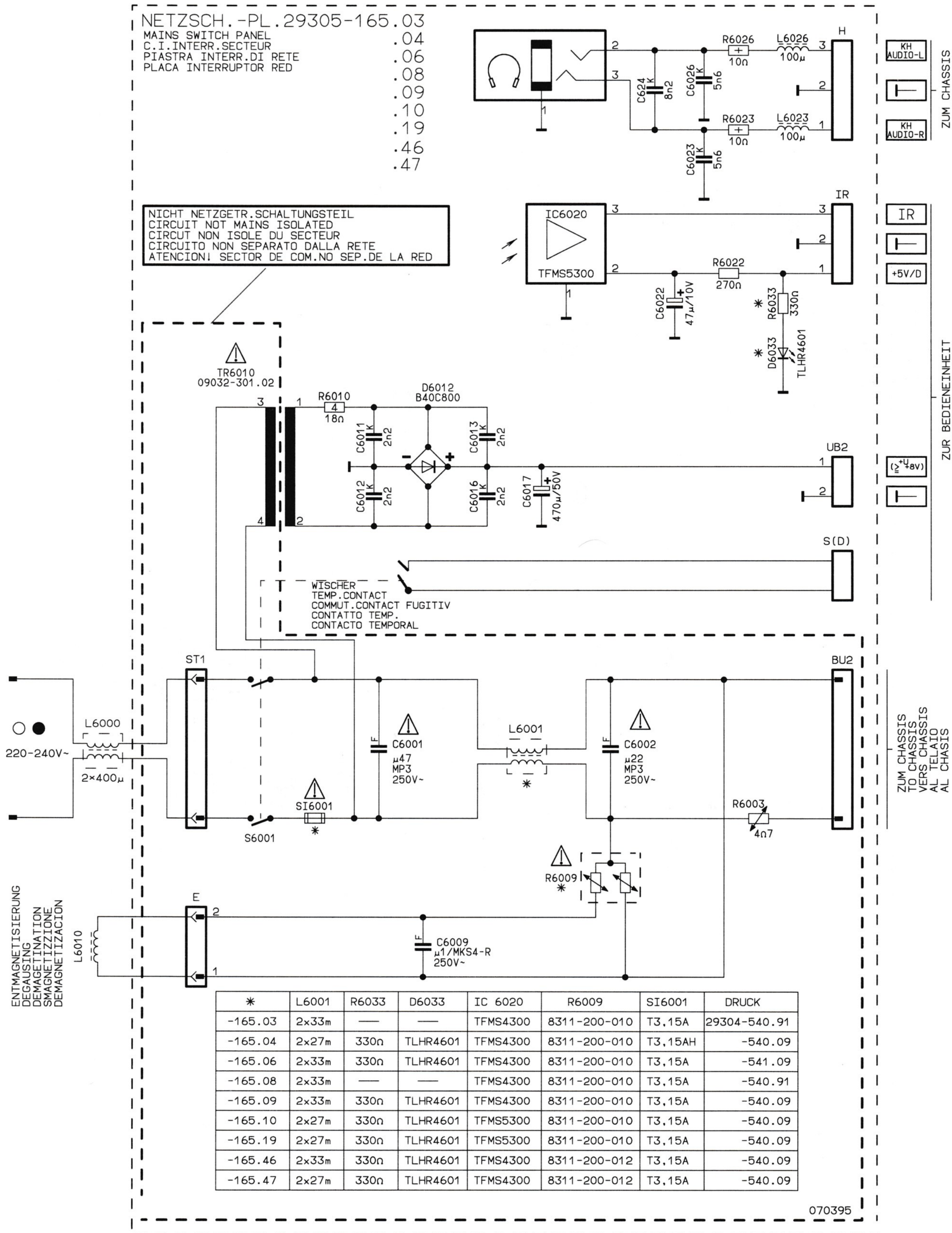
6 10V/cm, 5µs/cm

NF-Verstärker / AF Amplifier / Amplificatore BF

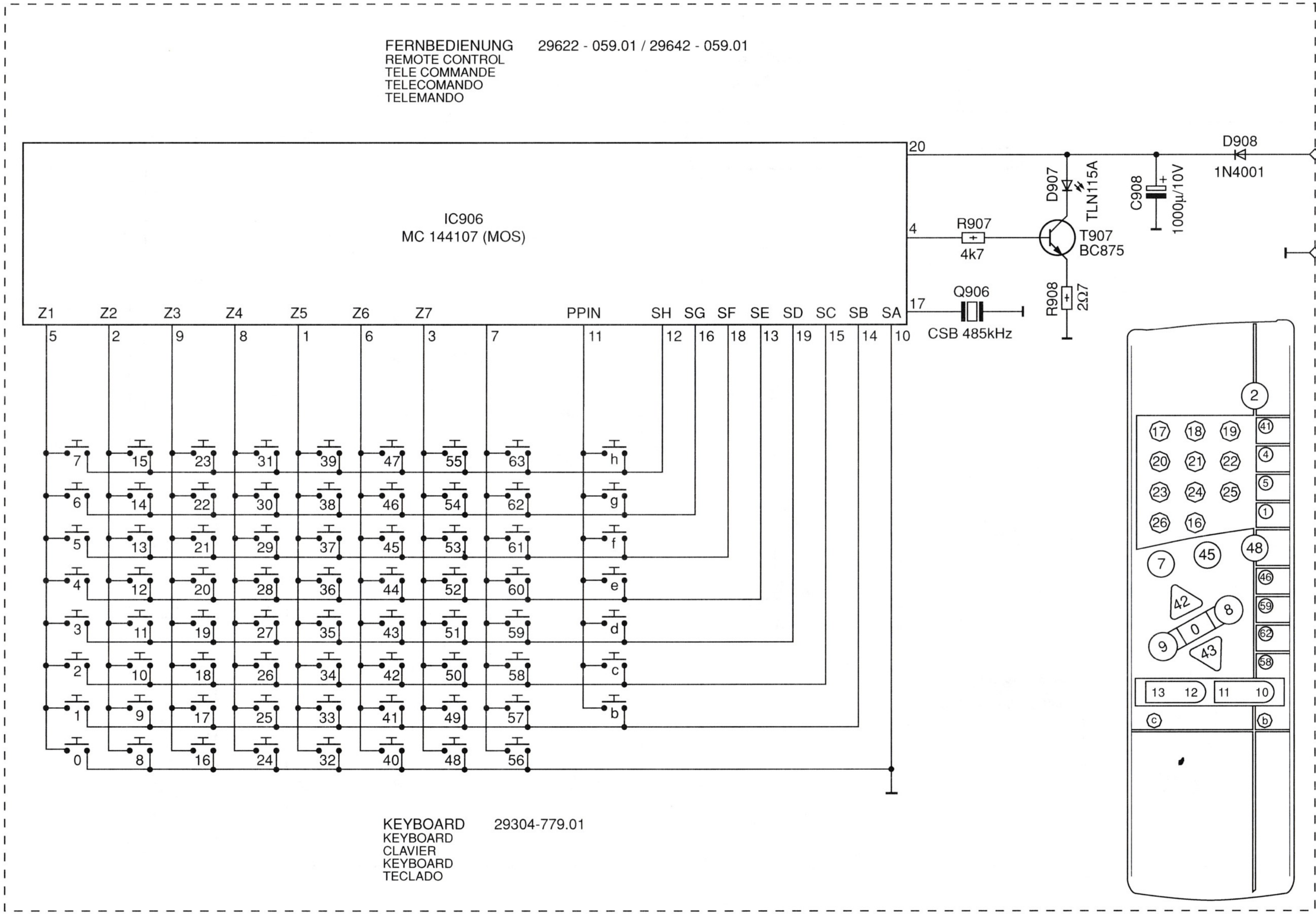


IC TDA 2052H HS
Modifier tous les IC:
* Supprimer C4115, C4025, C4215 sur pin 5 (470nF) si présents.
* Ajouter entre les pins 1 et 2 de chaque IC une diode 1N4148 anode coté pin 1 si absentes

Netzschalterplatte / Mains Switch Panel / Piastra Interr. di Rete



✱	L6001	R6033	D6033	IC 6020	R6009	SI6001	DRUCK
-165.03	2x33m	——	——	TFMS4300	8311-200-010	T3,15A	29304-540.91
-165.04	2x27m	330Ω	TLHR4601	TFMS4300	8311-200-010	T3,15AH	-540.09
-165.06	2x33m	330Ω	TLHR4601	TFMS4300	8311-200-010	T3,15A	-541.09
-165.08	2x33m	——	——	TFMS4300	8311-200-010	T3,15A	-540.91
-165.09	2x33m	330Ω	TLHR4601	TFMS4300	8311-200-010	T3,15A	-540.09
-165.10	2x27m	330Ω	TLHR4601	TFMS5300	8311-200-010	T3,15A	-540.09
-165.19	2x27m	330Ω	TLHR4601	TFMS5300	8311-200-010	T3,15A	-540.09
-165.46	2x33m	330Ω	TLHR4601	TFMS4300	8311-200-012	T3,15A	-540.09
-165.47	2x27m	330Ω	TLHR4601	TFMS4300	8311-200-012	T3,15A	-540.09


FERNBEDIENUNG 29622 - 059.01 / 29642 - 059.01
REMOTE CONTROL
TELE COMMANDE
TELECOMANDO
TELEMANDO
IC906
MC 144107 (MOS)
D908
1N4001
D907
TLN115A
C908
1000µ/10V
9V
R907
4k7
T907
BC875
R908
2Ω7
Q906
CSB 485kHz
Z1 Z2 Z3 Z4 Z5 Z6 Z7 PPIN SH SG SF SE SD SC SB SA
KEYBOARD 29304-779.01
KEYBOARD
CLAVIER
KEYBOARD
TECLADO


AUX
OK
P+
P-
PIP
16:9
IDTV
VIDEO
SAT
GRUNDIG