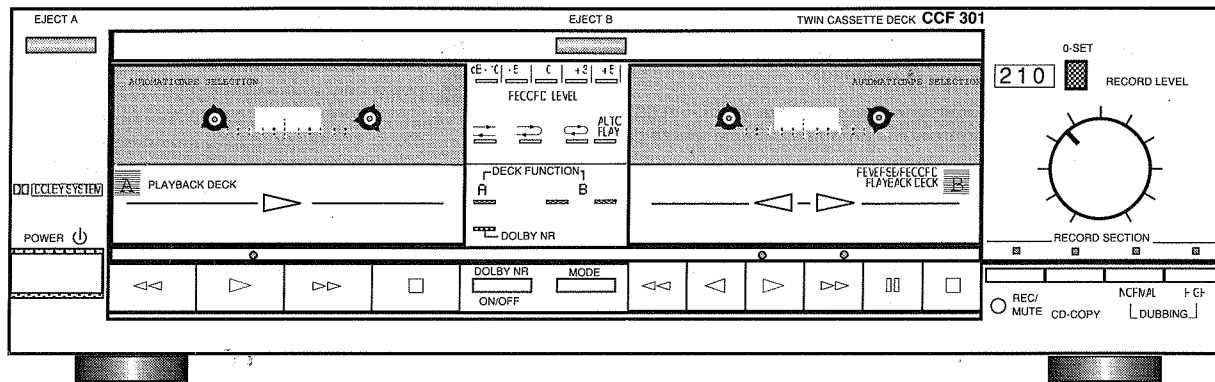


Service Manual

D Btx * 32700 #

96525 CCF 301

CCF 301 (9.52027-8151)



D

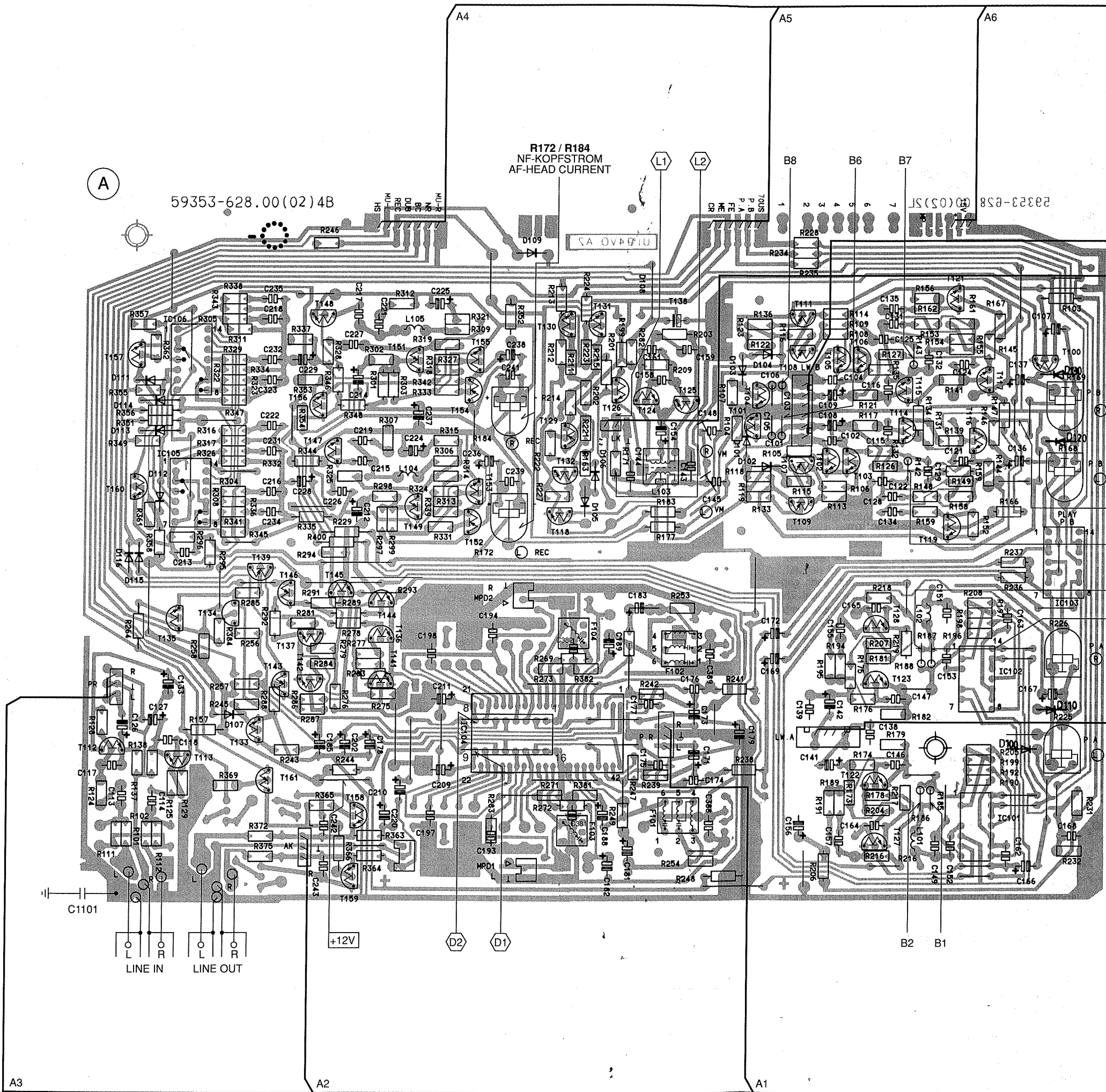
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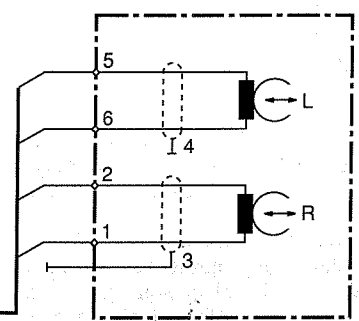
A

59353-628.00(02)4B

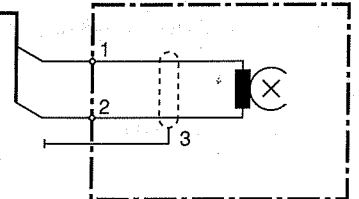
R172 / R184
NF-KOPFSTROM
AF-HEAD CURRENT

R168 / R169
BEZUGSBAND-
PEGELEINST.
DOLBY PEGEL

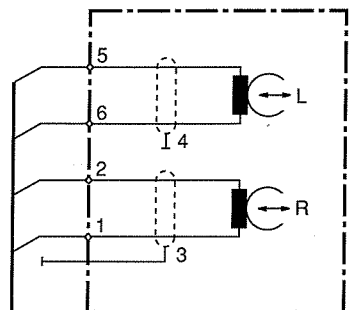
R225 / R226
DOLBY LEVEL



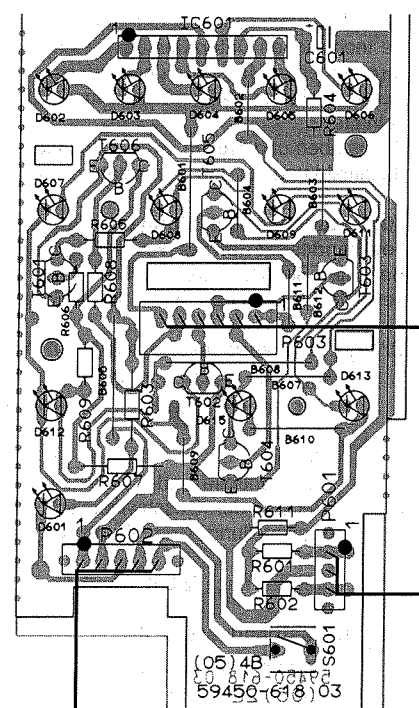
AW-KOPF
RP-HEAD
LW-B



LÖSCHKOPF
ERASE HEAD
LW-B

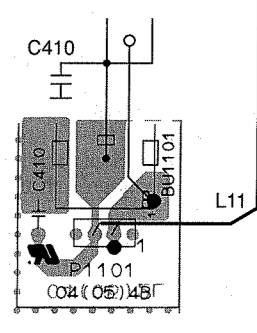
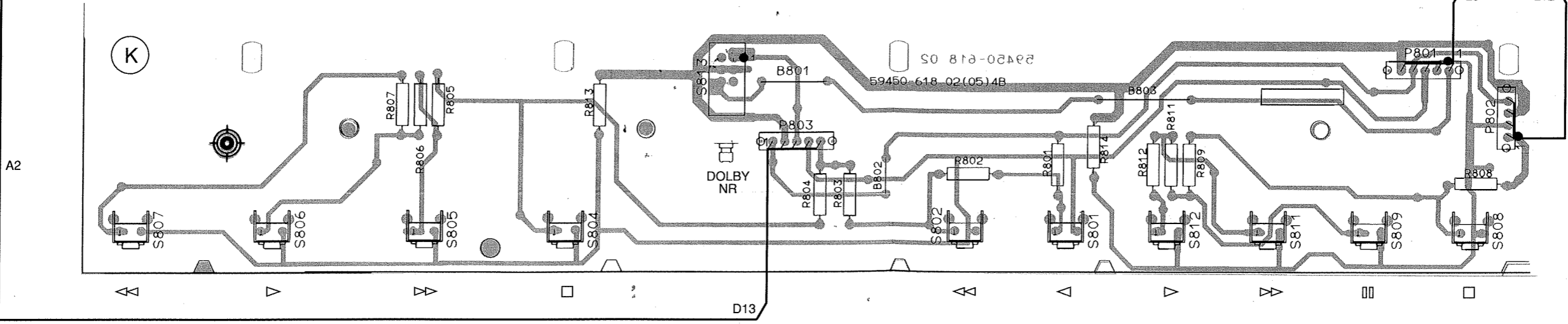
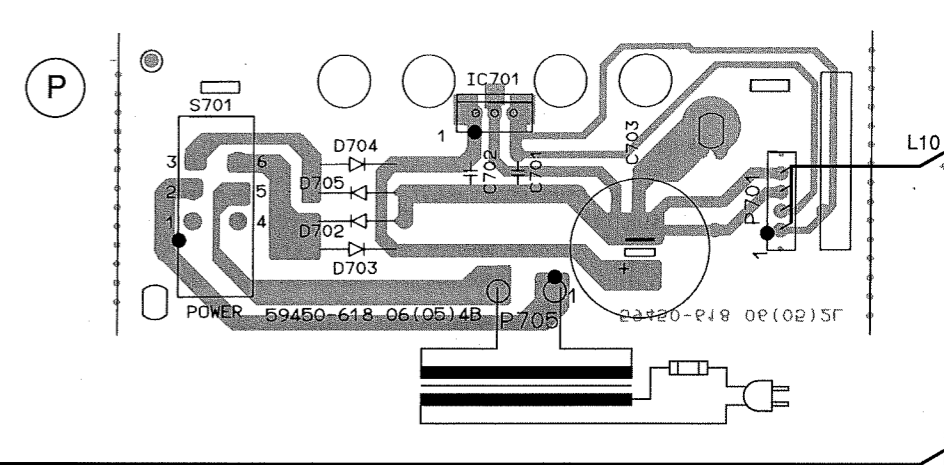
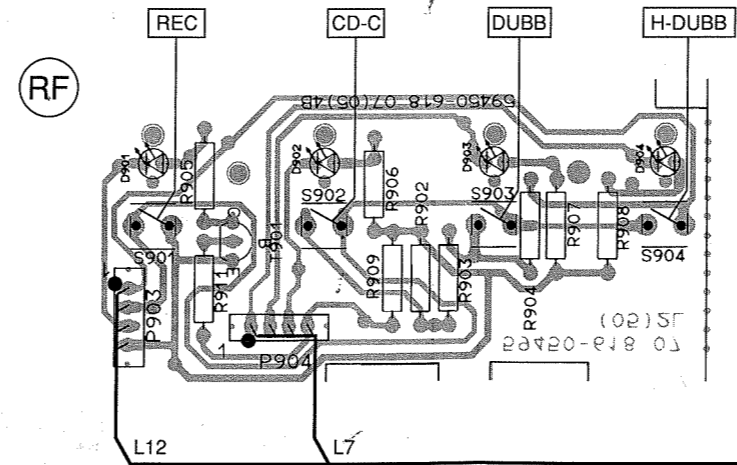
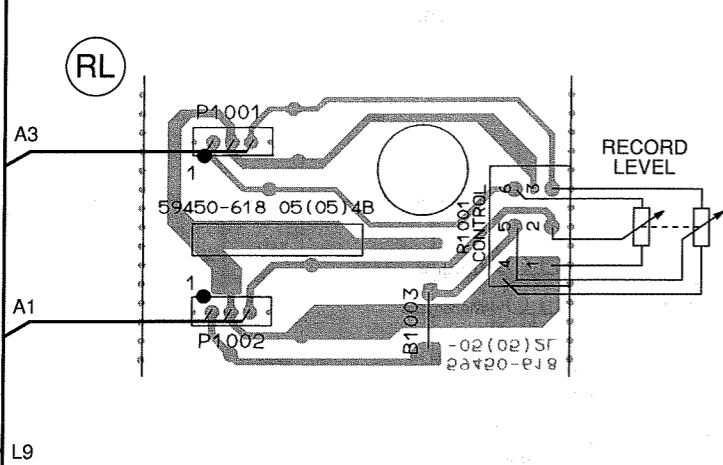
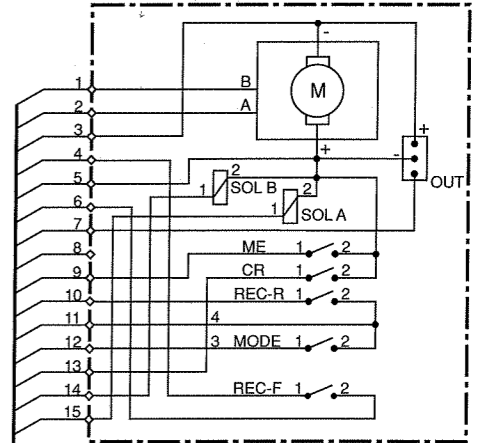
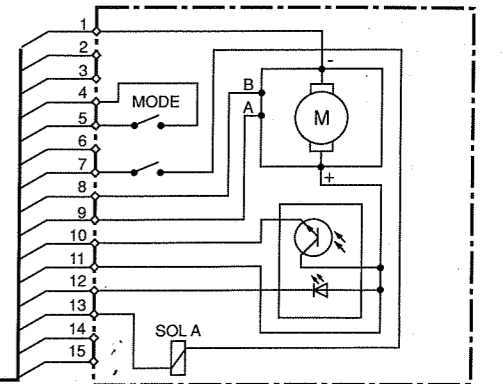
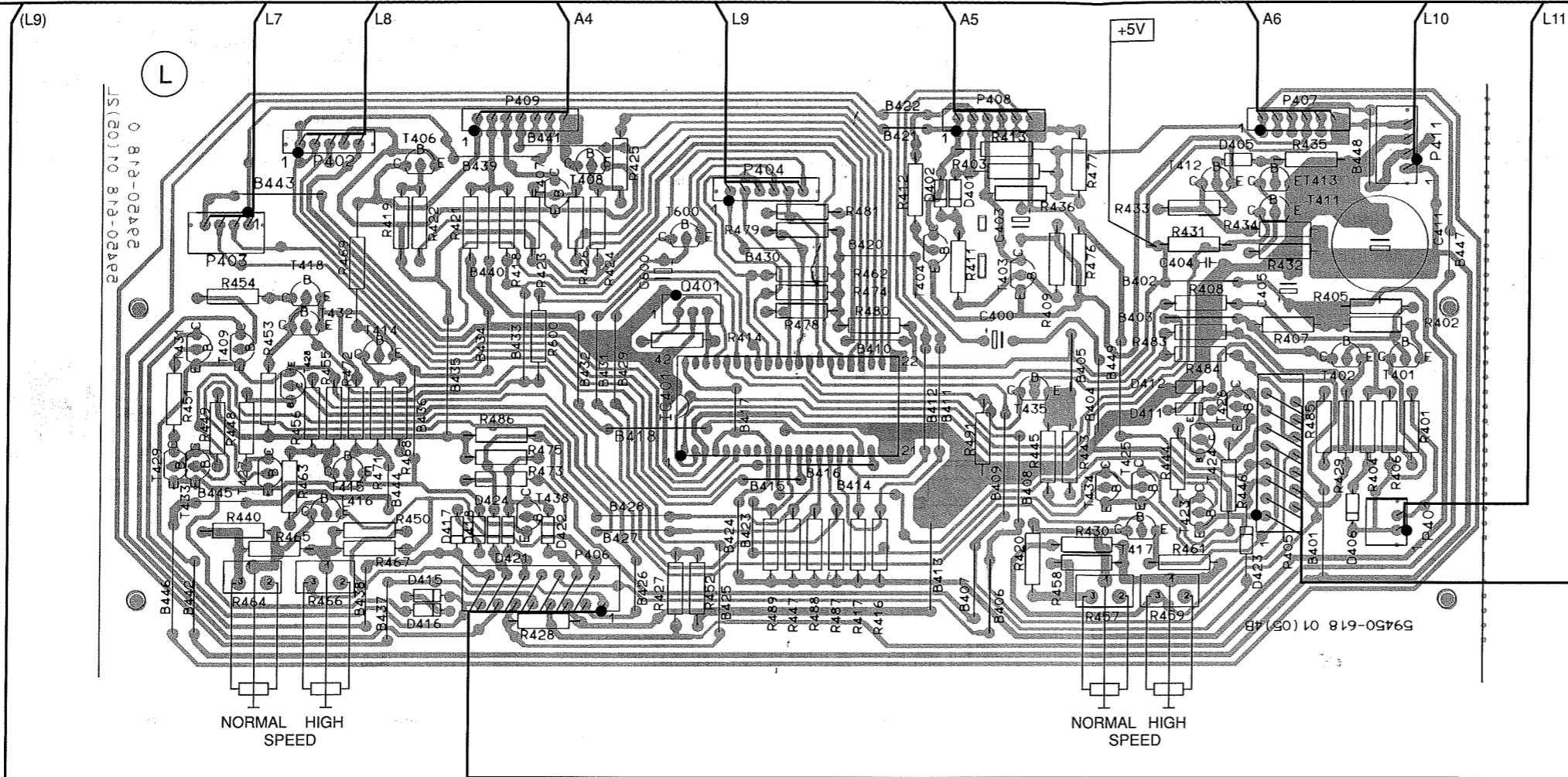


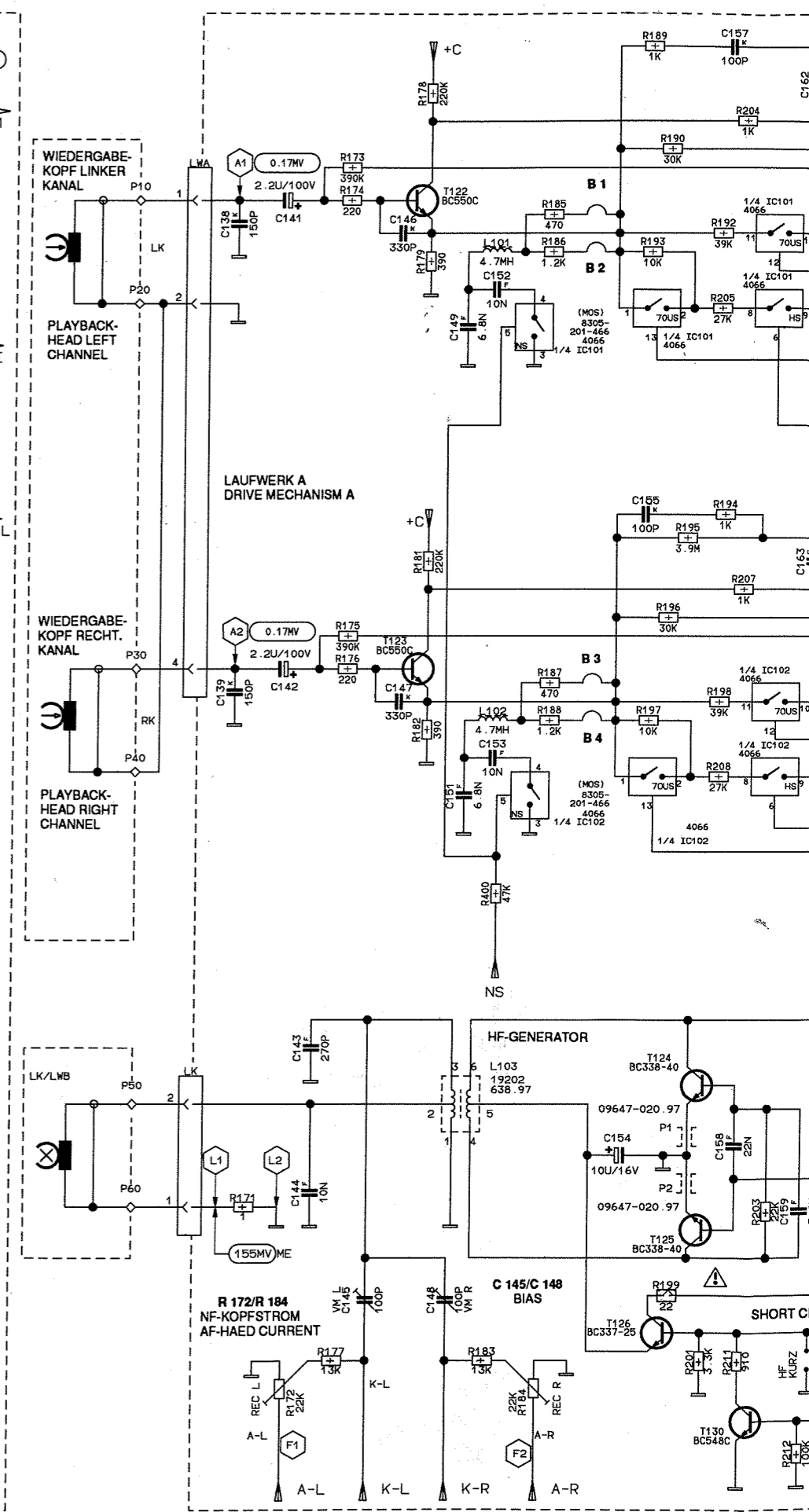
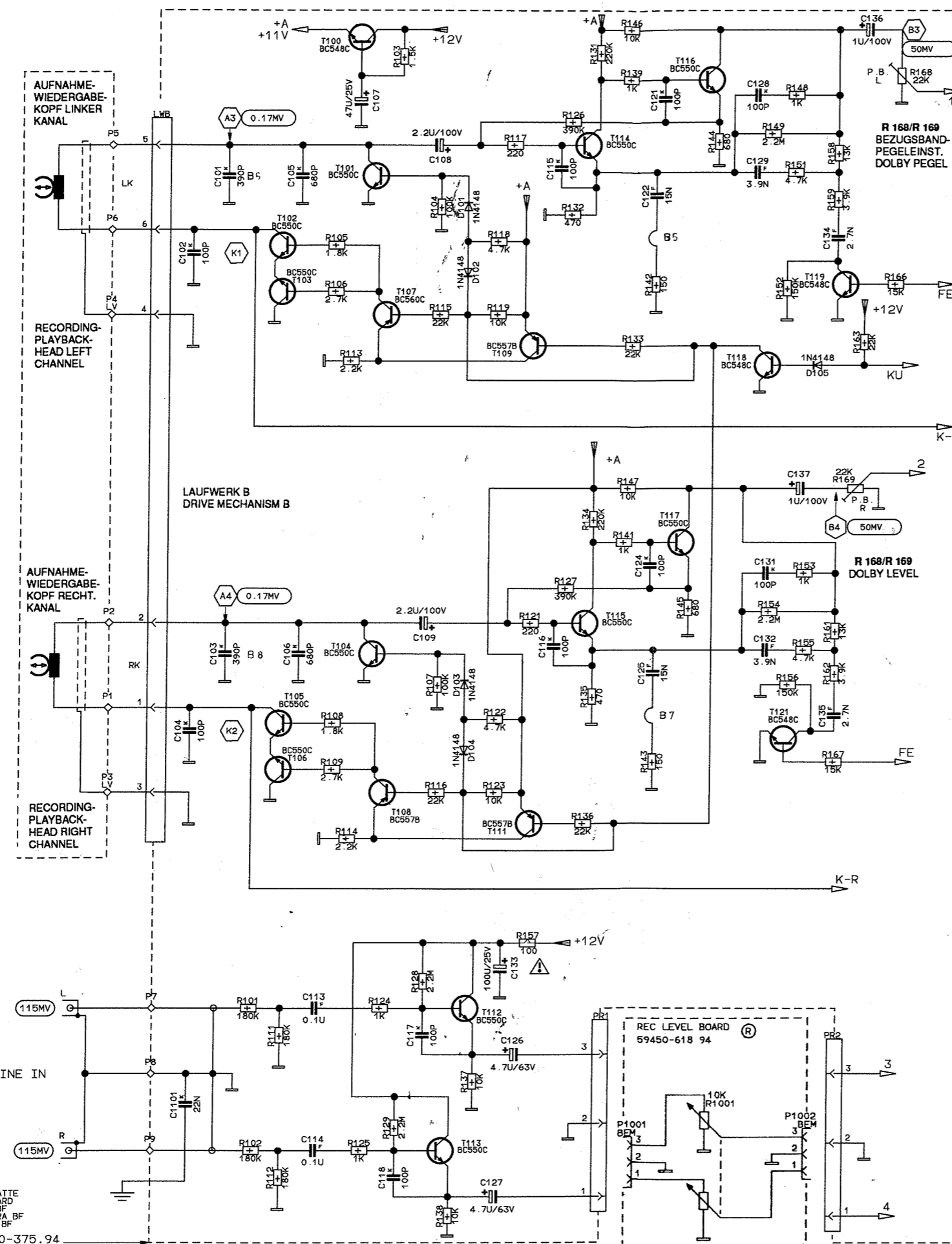
W-KOPF
P-HEAD
LW-A

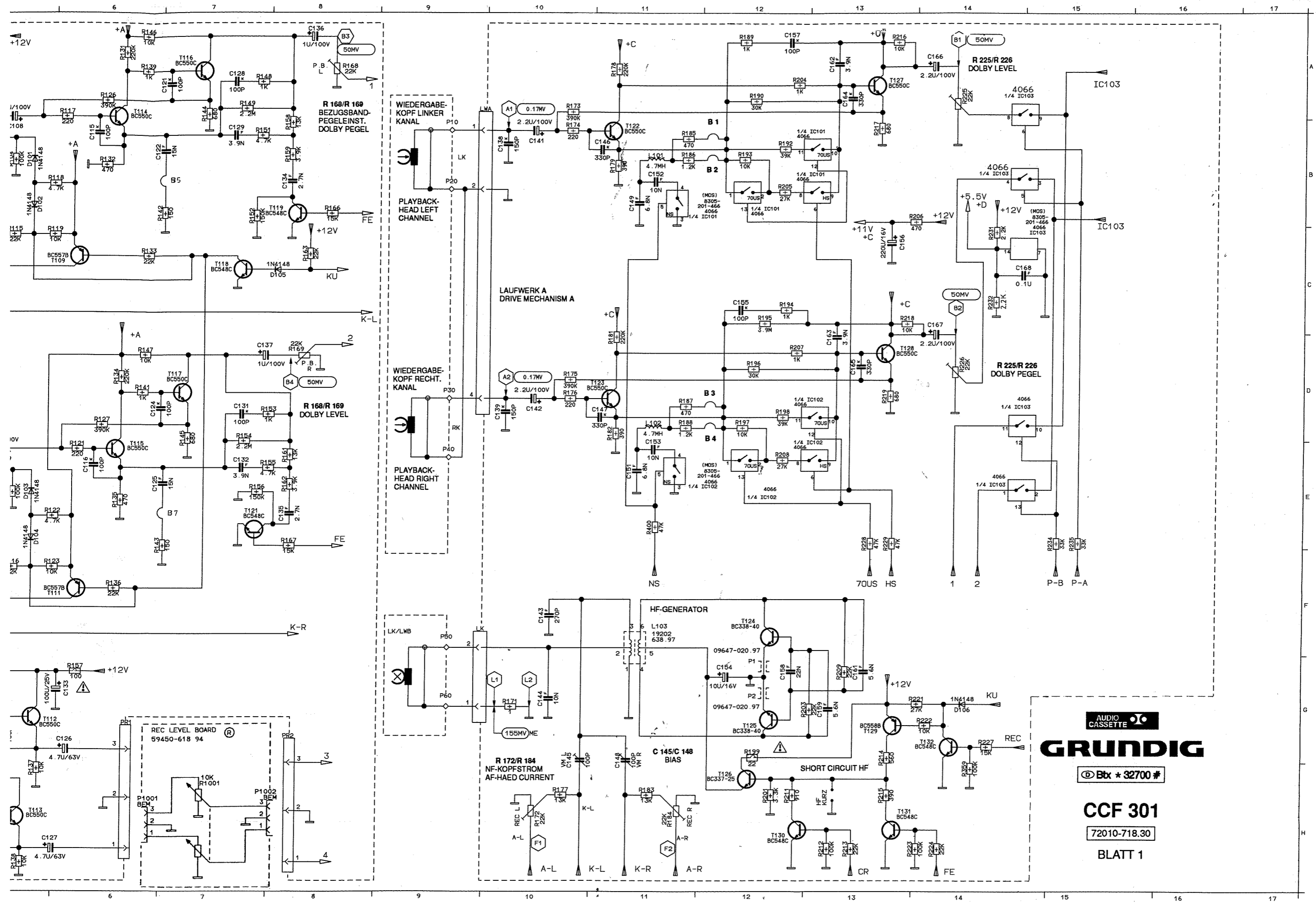


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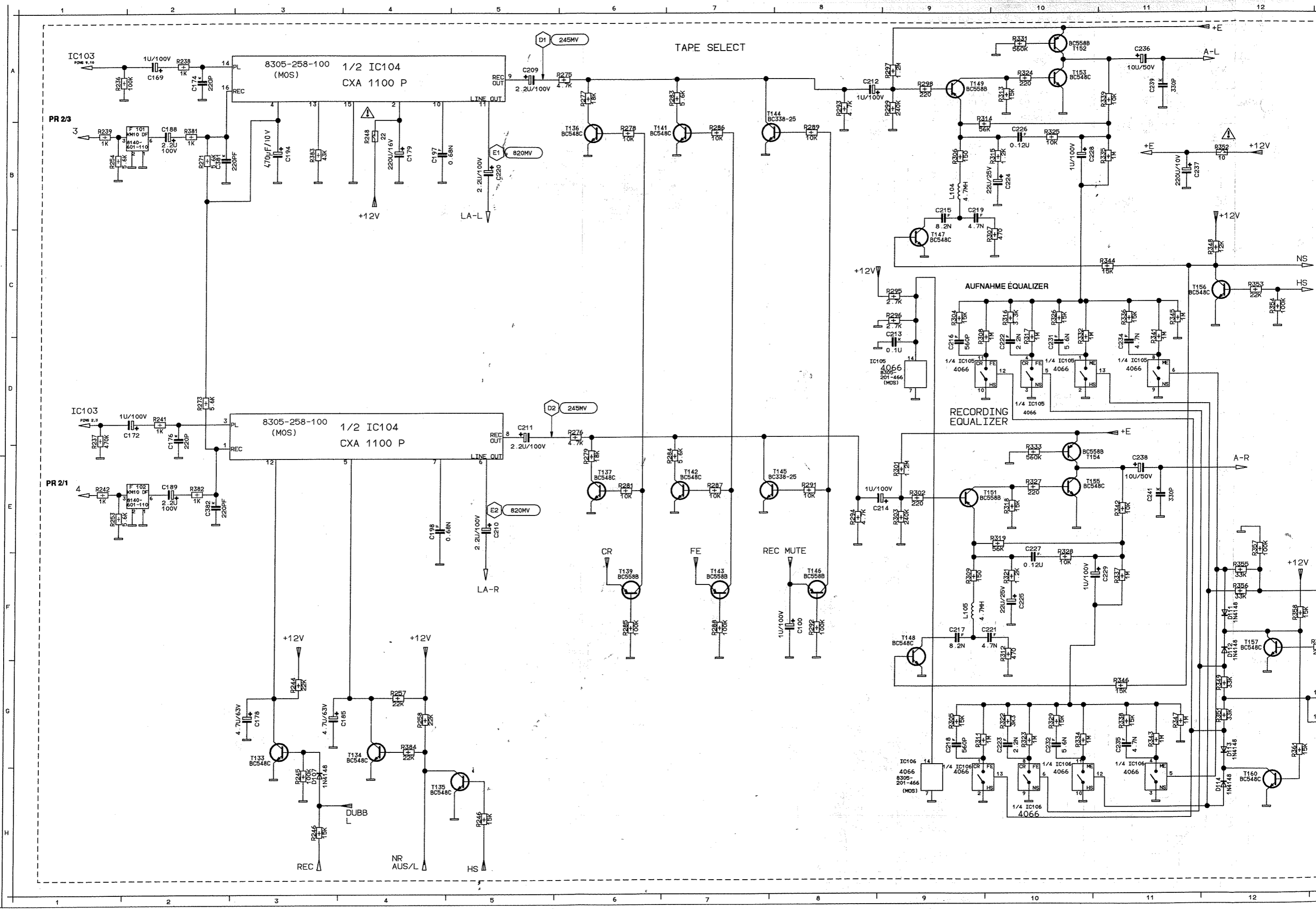
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59450-618) 03

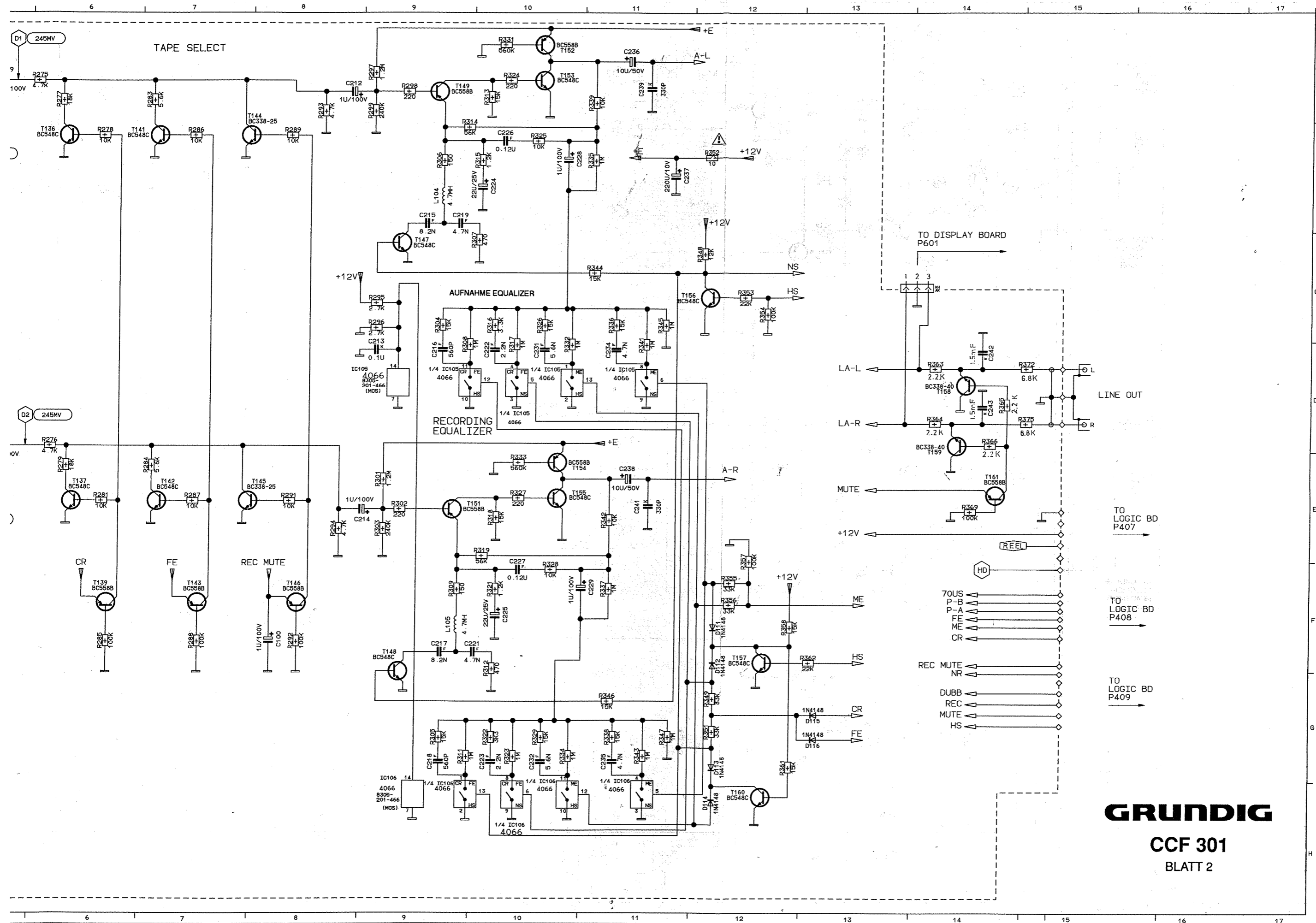




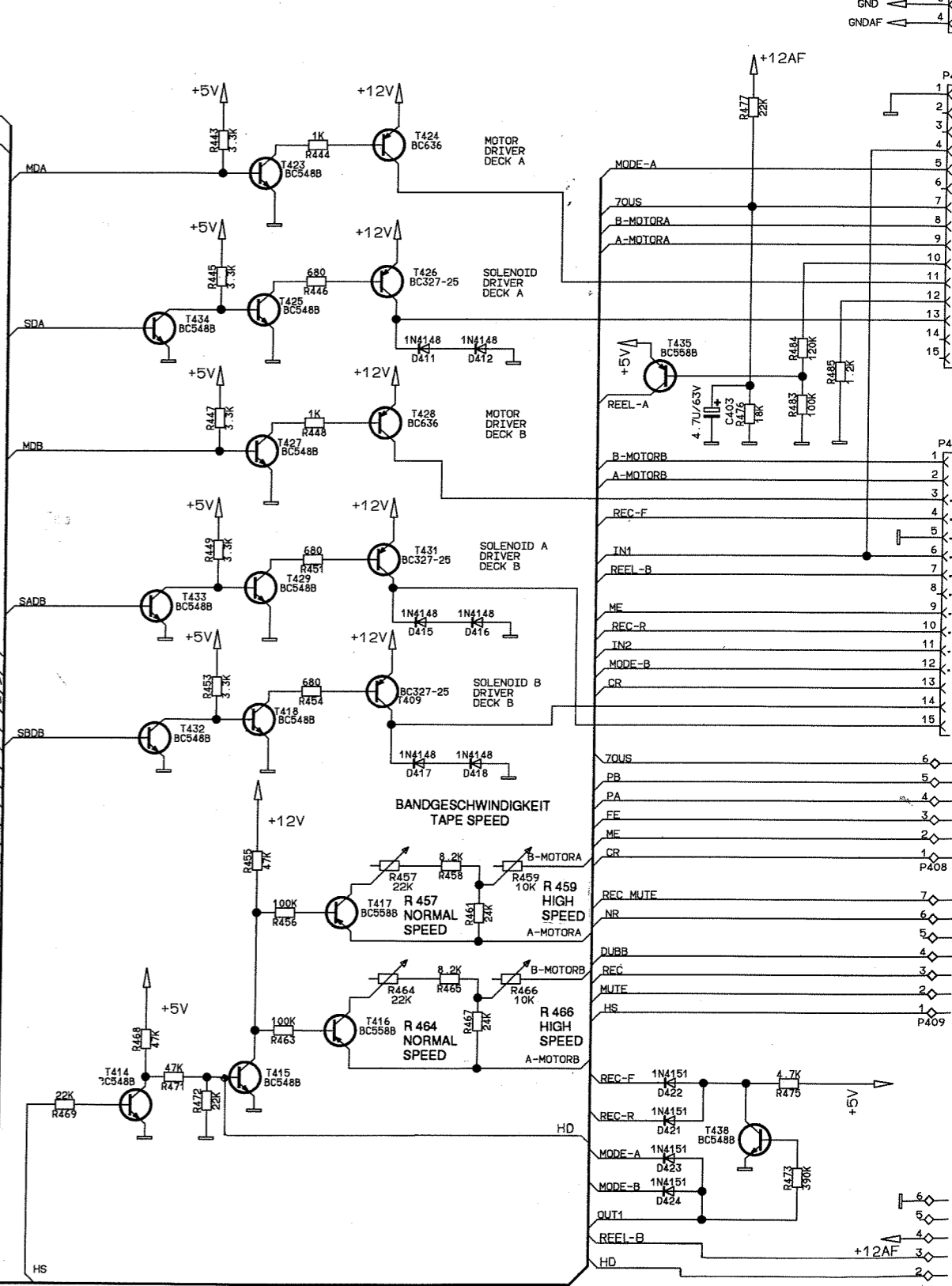
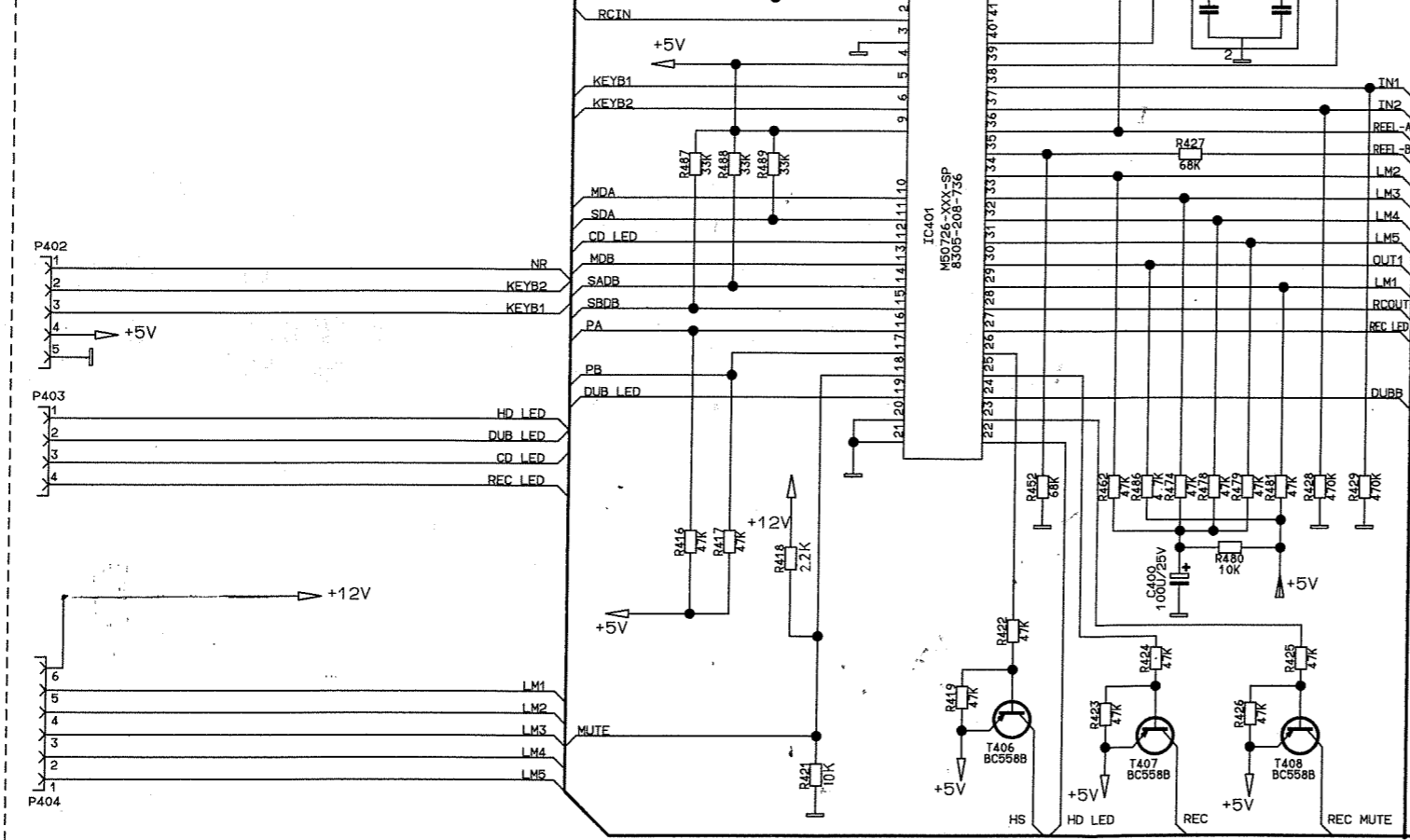
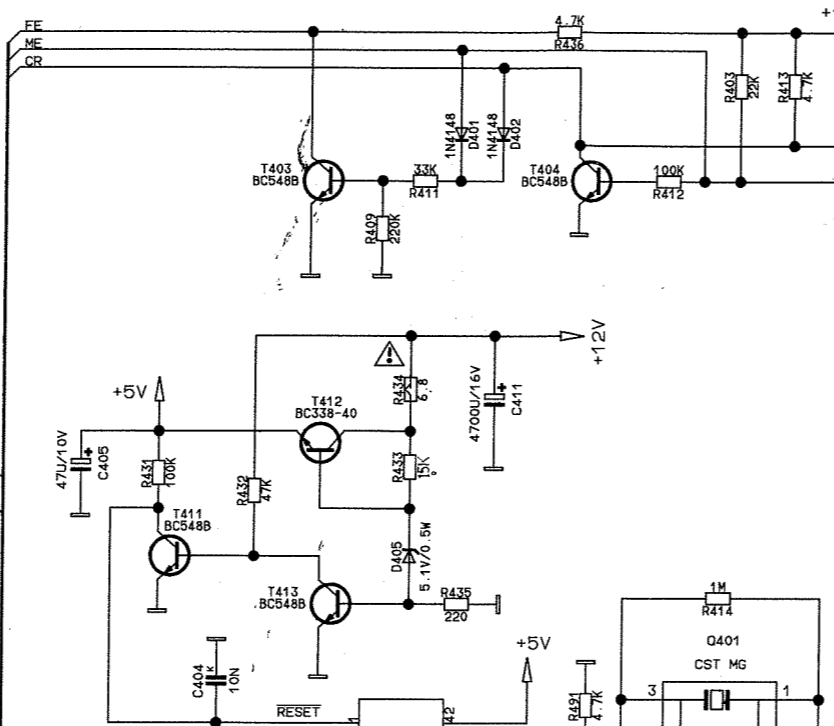
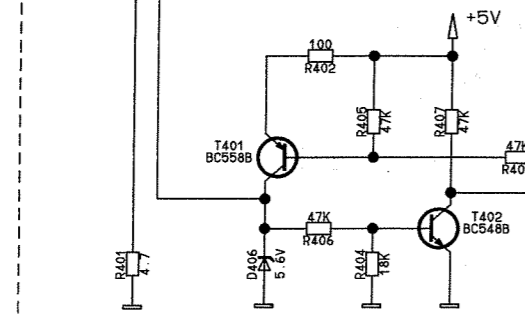
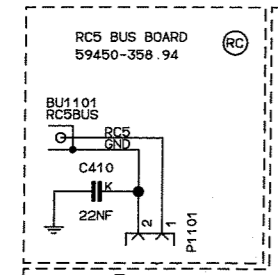



GRUNDIG
 © Btx * 32700 #
CCF 301
 72010-718.30
 BLATT 1





GRUNDIG
CCF 301
 BLATT 2



LOGIKPLATTE
LOGIC BOARD
C.I. LOGIQUE
PIASTRA LOGICA
PLACA LOGICA
59450-355.94

TO KEYBOARD
P801

TO RECORD FUNCTIONS BOARD
P904

TO DISPLAY BOARD
P603

+12V
+12AF
GND
GNDAF

+12AF

MODE-A
70US
B-MOTORA
A-MOTORA

REEL-A
B-MOTORB
A-MOTORB

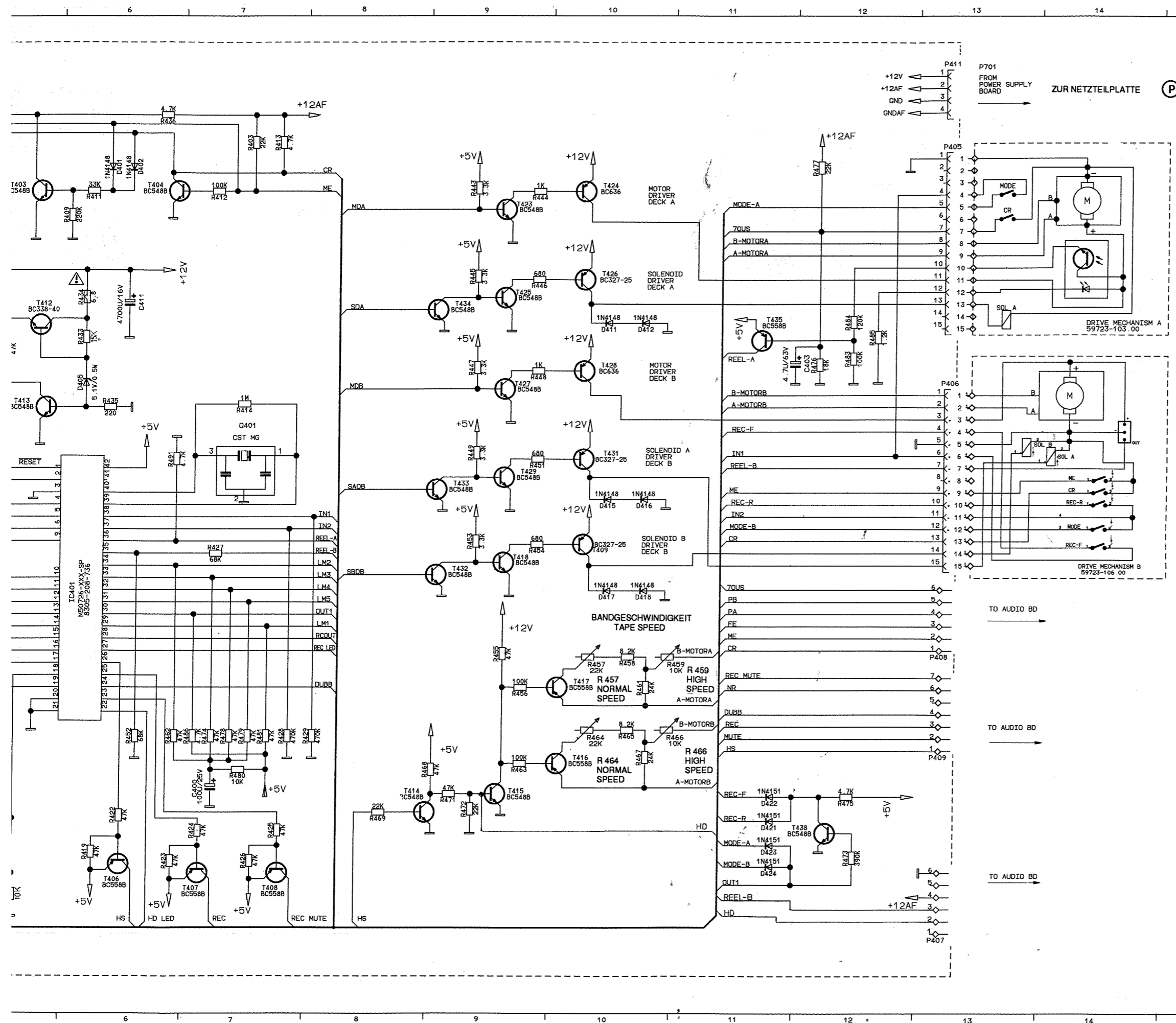
REC-F
IN1
REEL-B
ME
REC-R
IN2
MODE-B
CR

70US
PB
PA
FF
ME
CR

REC MUTE
NR
DUBB
REC
MUTE
HS

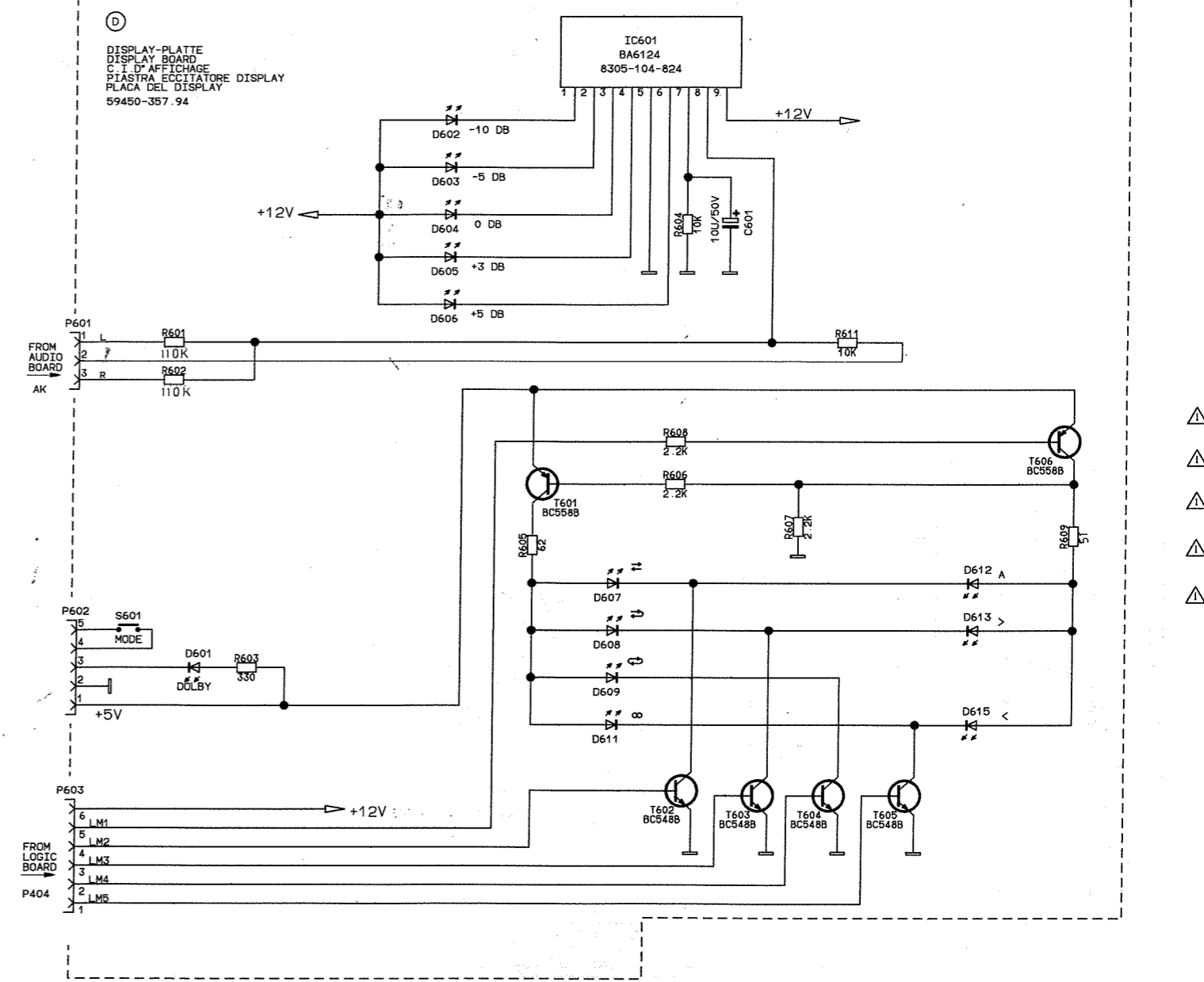
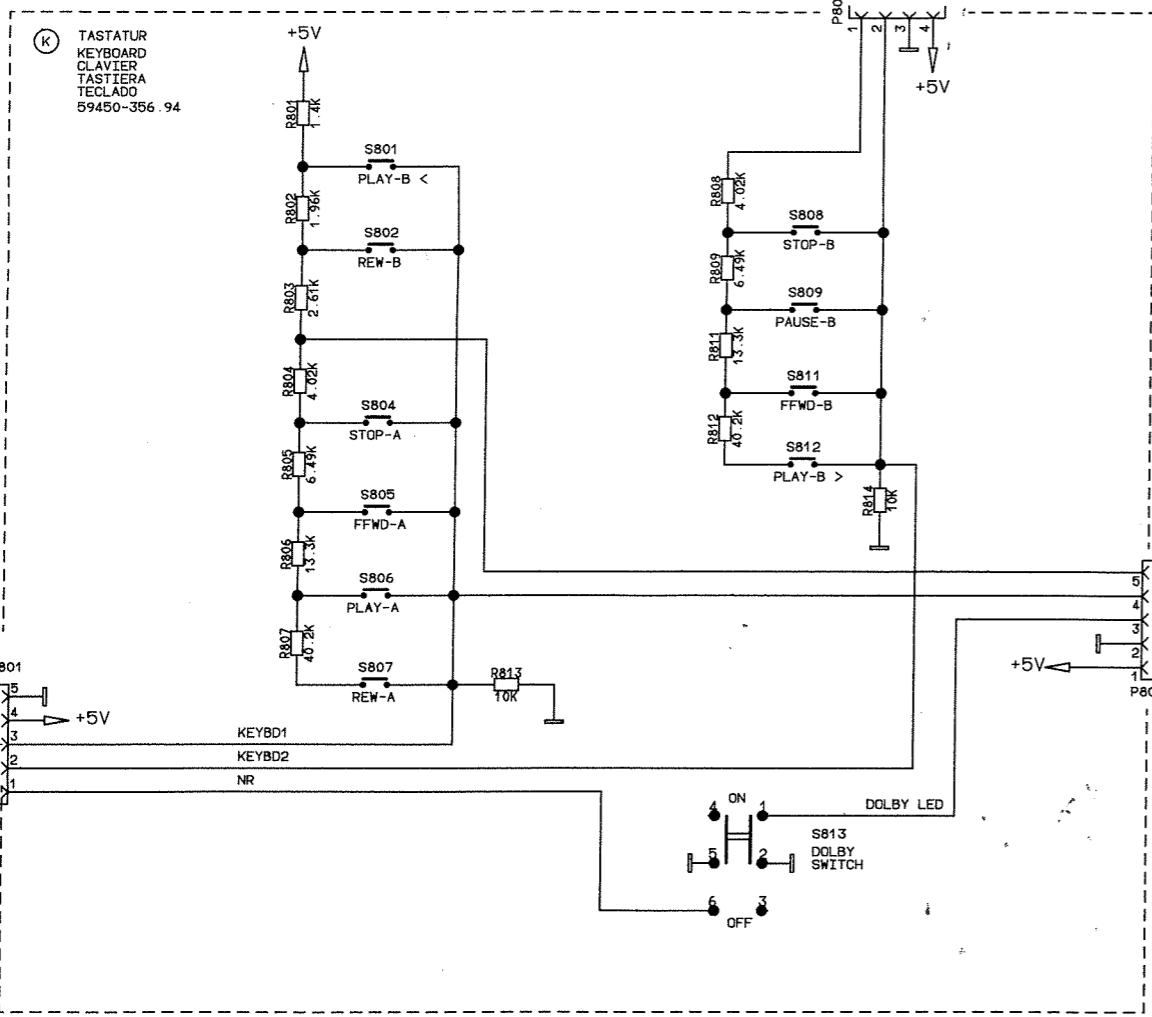
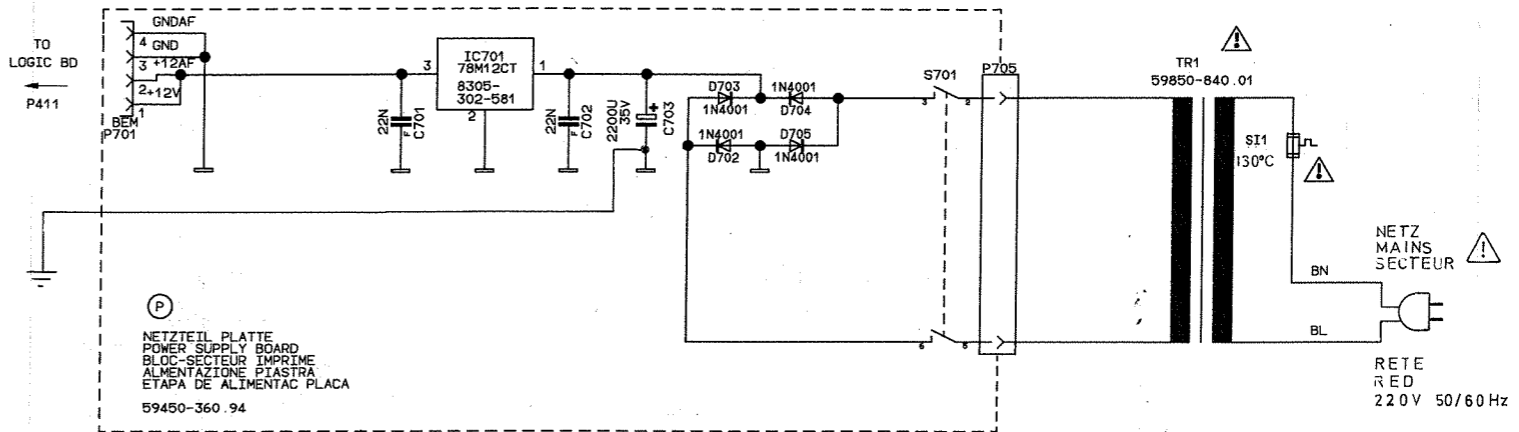
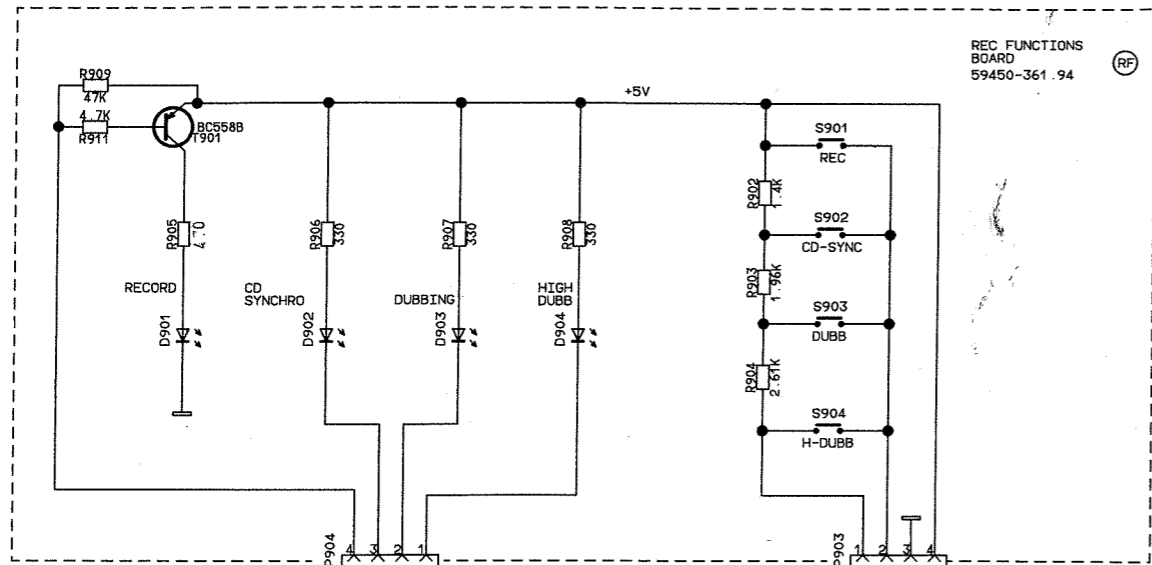
REC-F
REC-R
MODE-A
MODE-B
OUT1
REEL-B
HD

P401
P402
P403
P404
P407
P408
P409



- (D)** Achtung: Bei Eingriffen ins Gerät sind die Sicherheitsvorschriften nach VDE 701 (reparaturbezogen) bzw. VDE 0860 / IEC 65 (gerätebezogen) zu beachten!
- (A)** Bauteile nach IEC- bzw. VDE-Richtlinien! Im Ersatzfall nur Teile mit gleicher Spezifikation verwenden!
- MOS** - Vorschriften beim Umgang mit MOS - Bauteilen beachten!
- (GB)** Attention: Please observe the applicable safety requirements according to VDE 701 (concerning repairs) and VDE 0860 / IEC 65 (concerning type of product)!
- (A)** Components to IEC or VDE guidelines! Only use components with the same specifications for replacement!
- Observe MOS components handling instructions when servicing!
- (F)** Attention: Priere d'observer les prescriptions de securite VDE 701 (concernant les reparations) et VDE 0860 / IEC 65 (concernant le type de produit)!
- (A)** Composants répondant aux normes VDE ou IEC. Les remplacer uniquement par des composants ayant les memes spécifications.
- Lors de la manipulation des circuits MOS, respecter les prescriptions MOS!
- (I)** Attenzione: Osservare le corrispondenti prescrizioni di sicurezza VDE 701 (concernente servizio) e VDE 0860 / IEC 65 (concernente il tipo di prodotto)!
- (A)** Componenti secondo le norme VDE risp. te IEC! In caso di sostituzione impiegare solo componenti con le stesse caratteristiche.
- Osservare le relative prescrizioni durante i lavori con componenti MOS!
- (E)** Atención: Recomendamos las normas de seguridad VDE u otras normas equivalentes, por ejemplo: VDE 701 para reparaciones, VDE 0860 / IEC 65 para aparatos!
- (A)** Componentes que cumplen las normas VDE/IEC. En caso de sustitución, emplear componentes con idénticas especificaciones!
- Durante la reparacion observar las normas sobre componentes MOS!

GRUNDIG
CCF 301
BLATT 3

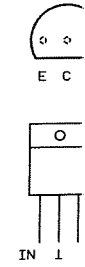


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SUB.
SOU
CON
RES.

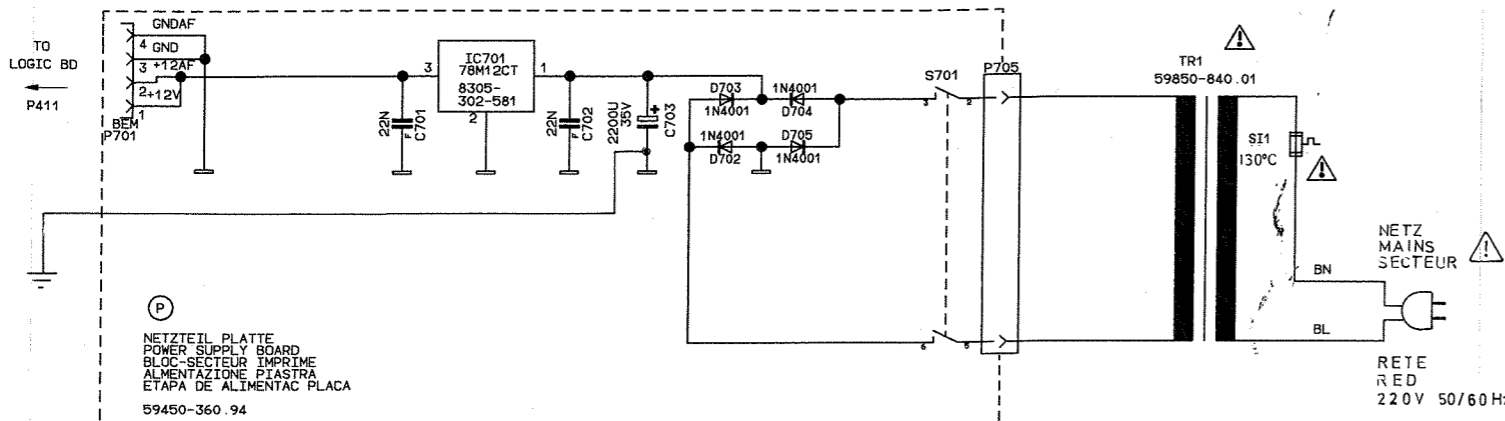
ACHTUNG!
VORSICHT!
MOS-BAU!
ATTENZIONE!
OBSERVE!
INSTRUC!
ATTENTION!
LORS DE!
CIRCUITS
PRESCRIT!
ATTENZIONE!
OBSERVARE!
DURANTE!
ATTENZIONE!
RESPECTAR!
COMPONEN

- WIDERSTAN
RESISTANC
- ⊕ KΩ
 - ⊖ MΩ
 - ⊕ KΩ
 - ⊖ MΩ
 - ⊕ KΩ
 - ⊖ MΩ
 - ⊕ KΩ
 - ⊖ MΩ
 - ⊕ KΩ
 - ⊖ MΩ

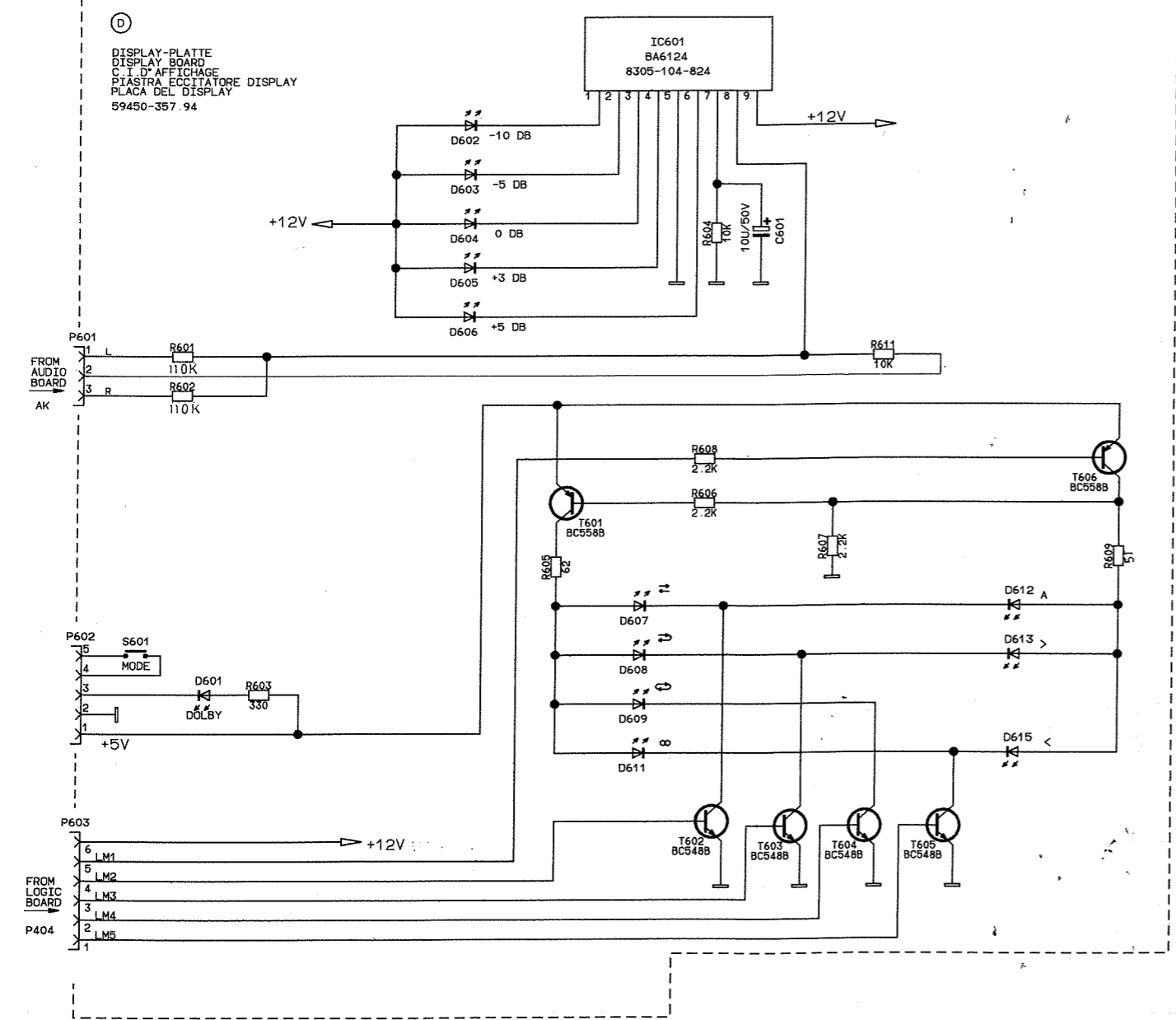
- ⚠ FUER DIE GE
DEN RICHTLI
BAUTEILE MI
- ⚠ ABSOLUTELY
MEET THE SA
AND MUST BE
- ⚠ ABSOLUMENT
ET CONFORME
N'UTILISER
- ⚠ NECESSARI PI
ALLE NORMI
IMPIEGARE O
- ⚠ ABSOLUTAMEN
CON LAS NORI
SUSTITUCION



VON
TOP
VUE
VISI
VISI



NETZTEIL PLATTE
POWER SUPPLY BOARD
BLOC-SECTEUR IMPRIME
ALIMENTAZIONE PIASTRA
ETAPA DE ALIMENTAC PLACA
59450-360.94



DISPLAY-PLATTE
DISPLAY BOARD
C.I. D'AFFICHAGE
PIASTRA ECCEITATORE DISPLAY
PLACA DEL DISPLAY
59450-357.94

AENDERUNGEN VORBEHALTEN
SUBJECT TO ALTERATION
SOUS RESERVE DE MODIFIC.
CON RISERVA DI MODIFICA
RES. EL DERECHO DE MODIFIC.

ACHTUNG!
VORSCHRIFTEN BEIM UMGANG MIT
MOS-BAUTEILEN BEACHTEN!
ATTENTION!
OBSERVE MOS COMPONENTS HANDLING
INSTRUCTIONS WHEN SERVICING!
ATTENTION!
LORS DE LA MANIPULATION DES
CIRCUITS MOS, RESPECTER LES
PRESCRIPTIONS MOS!
ATTENZIONE!
OSSERVARE LE RELATIVE PRESCRIZIONI
DURANTE I LAVORI CON COMPONENTI MOS!
ATENCIÓN!
RESPECTAR EL TRATAMIENTO DE
COMPONENTS MOS

- WIDERSTAND/RESISTOR
RESISTANCE/RESISTENZA/RESISTENCIA
- KSW 0204 DIN
 - MSW 0204 DIN
 - KSW 0207 DIN
 - MSW 0207 DIN
 - KSW 0309 DIN
 - KSW 0411 DIN
 - KSW 0617 DIN
 - MSW 0309 DIN
 - NTC
 - MSW 0414 DIN
 - DRAHT
WIRE
BOBINÉE
A FILO
BOBINADA
 - METALLOXYDSCHICHT
METAL OXIDE
A OXIDE METALLIQUE
AD OSSIDO METALLICO
DE CAPA DE OXIDO METALICO
 - RAUSCHARM
LOW NOISE
A SOUFFLE REDUIT
A BASSO RUMORE
DE BAJO RUIDO
 - SCHWER ENTFLAMMBAR
LOW FLAMMABILITY
PEU INFLAMMABLE
A BASSA INFLAMMABILITA
DIFICILMENTE INFLAMMABLE
 - SICHERUNGSWIDERSTAND
SAFETY RESISTOR
FUSIBLE
DI SICUREZZA
RESISTENCIA FUSIBLE

BK - SCHWARZ BLACK NOIR NERO	YE - GELB YELLOW JAUNE GIALLO	VT - VIOLETT VIOLET VIOLET VIOLETTO	GD - GOLD GOLD OR ORO
BN - BRAUN BROWN BRUN MARRONE	GN - GRÜN GREEN VERT VERDE	GY - GRAU GREY GRIS GRIGIO	SR - SILBER SILVER ARGENT ARGENTO
RD - ROT RED ROUGE ROSSO	TQ - TÜRKIS TURQUOISE TURQUOISE TURCHESE	WH - WEIß WHITE BLANC BIANCO	
OG - ORANGE ORANGE ORANGE ARANCIONE	BU - BLAU BLUE BLEU BLU	PK - ROSA PINK ROSE ROSA	

- KONDENSATOR/CAPACITOR
CONDENSATEUR/CONDENSATORE/CONDENSADOR
- ELKO
ELECTROLYTIC
ELECTROLYTIQUE
ELETTROLITICO
ELECTROLITICO
 - TANTAL ELKO
TANTALUM ELECTROLYTIC
ELECTROLYTIQUE AU TANTALE
ELETTROLITICO AL TANTALO
ELECTROLITICO DE TANTALO

- FOLIE
FOIL
A FEUILLE
A FOGLIA
DELAMINA
- KERAMIK
CERAMIC
CERAMIQUE
A CERAMICA
CERAMICO
- GLIMMER
MICA
AU MICA
A MICA
DE MICA
- VIELSCHICHT
MULTILAYER
A COUCHES MULTIPLES
A PIU' STRATI
MULTICAP
- POLYPROPYLEN
DE POLIPROPILENO
(KS-KP)

- ⚠ FUER DIE GERAETESICHERHEIT ABSOLUT NOTWENDIG UND ENTSPRECHEND DEN RICHTLINIEN DES VDE BZW. IEC, IM ERSATZFALL DUERFEN NUR BAUTEILE MIT GLEICHER SPEZIFIKATION VERWENDET WERDEN.
- ⚠ ABSOLUTELY NECESSARY FOR THE SAFETY OF THE SET, THESE COMPONENTS MEET THE SAFETY REQUIREMENTS ACCORDING TO VDE OR IEC, RESP. AND MUST BE REPLACED BY PARTS OF SAME SPECIFICATION ONLY.
- ⚠ ABSOLUMENT NECESSAIRE POUR LA SECURITE DE L'APPAREIL ET CONFORME AUX REGULATIONS VDE ET IEC, EN CAS DE REMPLACEMENT, N'UTILISER QUE DES COMPOSANTS AVEC LES MEMES SPECIFICATIONS.
- ⚠ NECESSARI PER LA SICUREZZA DELL' APPARECCHIO E SONO CONFORMI ALLE NORME DI SICUREZZA VDE E IEC, IN CASA DI SOSTITUZIONE IMPIEGARE QUINDI SOLTANTO PEZZI IN RICAMBIO ORIGINALI.
- ⚠ ABSOLUTAMENTE NECESARIO PARA LA SEGURIDAD DEL APARATO Y DE ACUERDO CON LAS NORMAS DE SEGURIDAD VDE O IEC, EN CASO DE SUSTITUCION SUSTITUCION SOLO DEBEN EMPLEARSE COMPONENTES CON LA MISMA ESPECIFICACION.

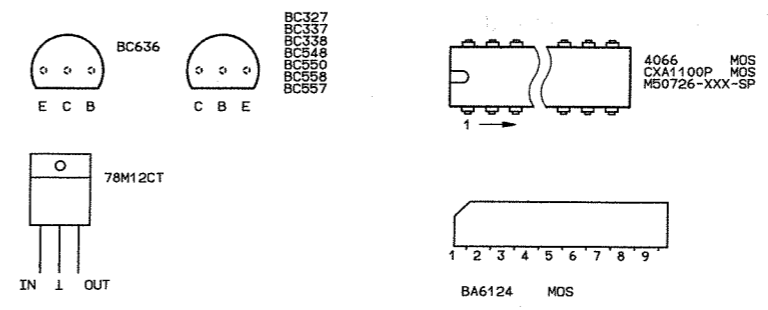
SPANNUNGEN MIT VOLTMETER (RI=10M Ω), FALLS NICHT ANDERS ANGEGEBEN, GEGEN MASSE GEMESSEN.
MESSWERTE GELTEN BEI 220V NETZSPANNUNG.

IF NOT OTHERWISE INDICATED ALL VOLTAGES ARE MEASURED AGAINST CHASSIS WITH A VOLTMETER (RI=10M Ω). THE VALUES ARE VALID FOR 220V AC MAINS VOLTAGES.

SAUF INDICATION CONTRAIRE, LES TENSIONS SONT MESUREES PAR RAPPORT AU CHASSIS AVEC UN VOLTMETRE (RI=10M Ω). LES VALEURS SONT VALABLES POUR UNE TENSION SECTEUR DE 220V CA.

TENSIONI MISURATE CON VOLTMETRO (RI=10M Ω), SALVE ALTRE INDICAZIONI, RIFERITE A MASSA. I VALORI DI MISURA VALGONO CON TENSIONE DI RETE DI 220V.

LAS TENSIONES, SIEMPRE QUE NO SE INDIQUE OTRA COSA, SE MIDEN CON RESPECTO A MASA CON VOLTMETRO (RI=10M Ω). LOS VALORES DE MEDIDA SON VALIDOS CON 220V DE TENSION DE RED.



VON OBEN GESEHEN
TOP VIEW
VUE DE HAUT
VISTA DA SOPRA
VISTO DESDE ARRIBA

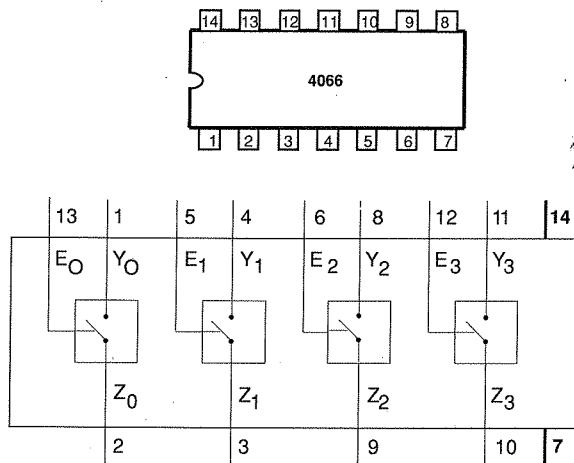
GRUNDIG
CCF 301
BLATT 4

IC-BLOCK DIAGRAMME - CCF 301 - IC-BLOCK DIAGRAMS

4066 (MOS)

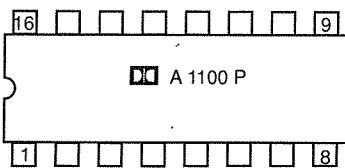
IC-101, IC-102, IC-103 und IC-105

(vier unabhängige Analogschalter)
(four independent bilateral analogue switches)

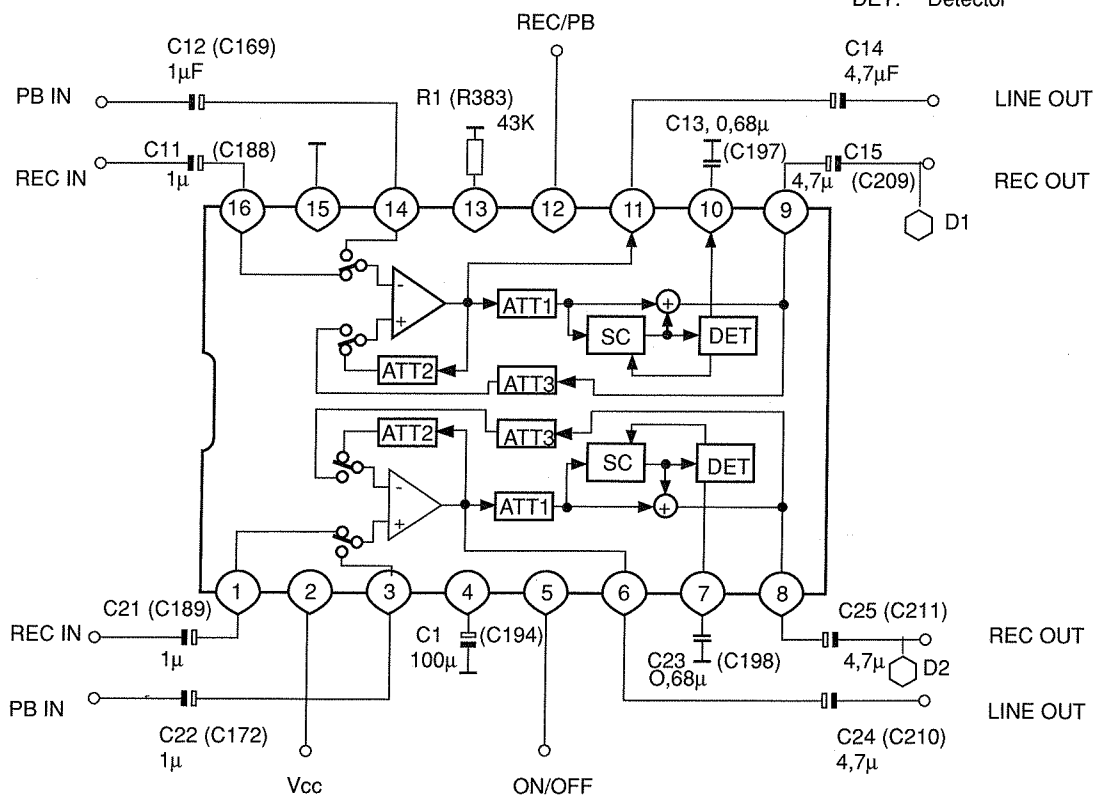


CXA 1100 P (MOS)

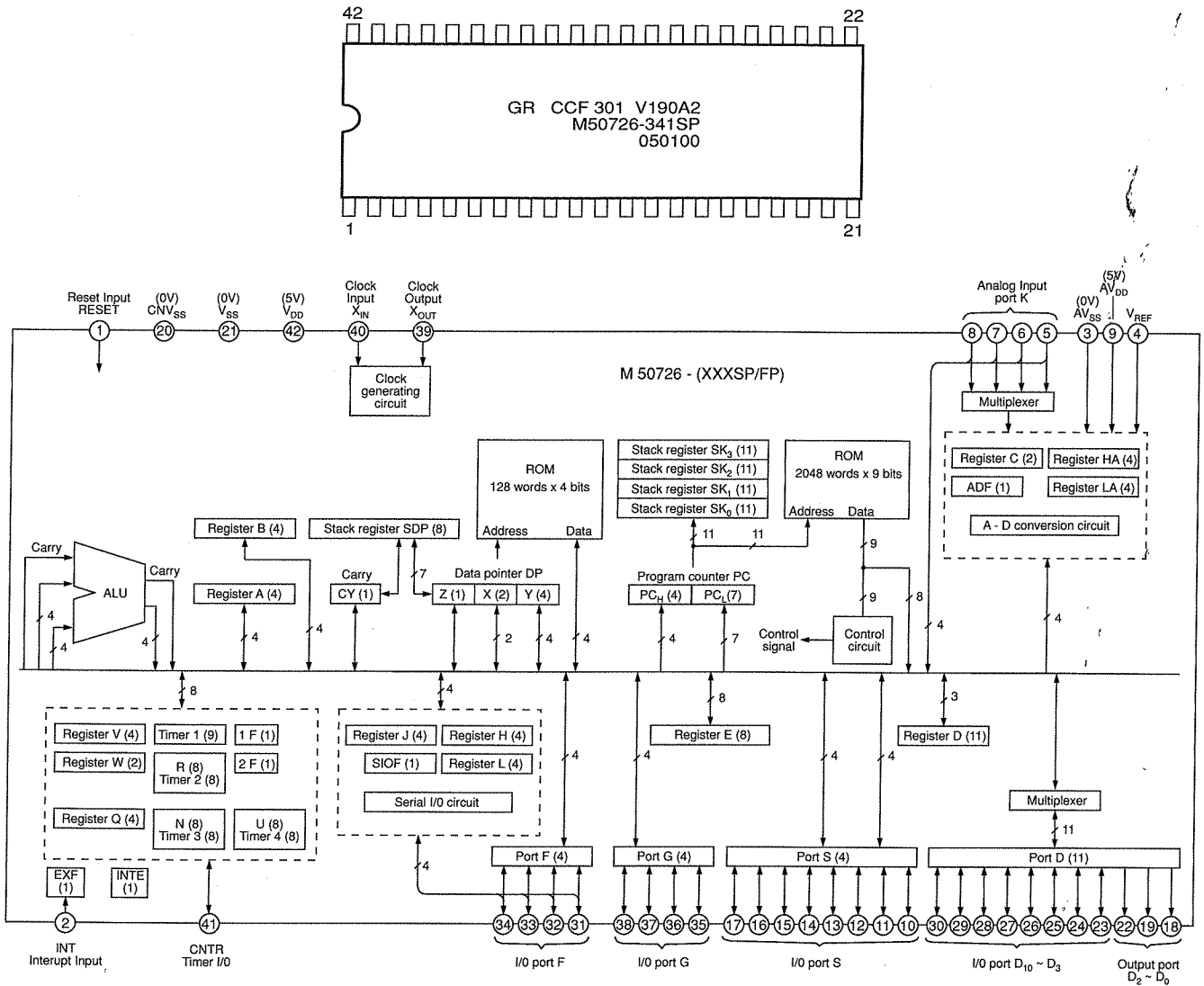
DOLBY-IC-104



ATT: Attenuator
SC: Side Chain
DET: Detector



M 50726-XXX-SP
(M50726-341-SP)
IC-401, SINGLE-CHIP 4-BIT MICROCOMPUTER (MOS)



BA 6124
IC-601
(Display-Treiber)
(Driver for display)

