

Service Service Service



VRx87



VR686



VR286



VRx85



SBxxx

VR285/02/05/07/13/39/58

VR286/02

VR287/02/07/13/39

VR485/02/39/58

VR487/02/39/58

VR685/02/07/13/16/39/58

VR686/02/13/39

SB110/03

SB115/03

SB215/02

SB615/03/11

Service Manual

Evolution: AA

GB

For chapters 2 and 4 reference is made to the Service Manual of QUEEN volume **4822 726 15512**.

D

Für die Kapiteln 2 und 4 siehe Service Manual QUEEN volume **4822 726 15511**.

NL

Voor de hoofdstuk 2 en 4 wordt verwezen naar de Service Documentatie van de QUEEN volume **4822 726 15514**.

F

Pour ce qui est des chapitres 2 et 4 veuillez vous référer à la Documentation Service du QUEEN volume **4822 726 15513**.

I

Per i capitoli 2 e 4 veda il Manuale di Servizio di QUEEN volume **4822 726 15515**.

E

Para los capítulos 2 y 4 véase el manual de servicio de QUEEN volume **4822 726 15516**.

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

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

Le prescrizioni di sicurezza richiedono che l'apparecchio sia ricondotto alle condizioni originali e che siano usati ricambi originali.

Survey of versions:

/02/03	PAL B/G, VPS/PDC
/05	PAL I, UK
/07	PAL I, Ireland
/11	PAL B/G Belgium
/13	PAL B/G, Nordic
/16	PAL B/G, Spain
/38/39	SECAM L/L', PAL B/G, PAL I
/58/59	PAL/SECAM B/G, D/K

Survey of remote controls:

VR285/02/05/07/13/39/58, VR485/02/58	RT183/201	482: 219 10496
SB110/03, SB115/03		
SB215/02, SB615/03/11		
VR286/02, VR287/02/07/13	RT184/101	482: 219 10498
VR487/02/58		
VR685/02/07/13/16/58, VR686/02/13		
VR285/39, VR287/39, VR485/39	RT184/104	482: 219 10501
VR487/39, VR685/39, VR686/39		

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Gerätes darf nicht verändert werden. Für Reparaturen sind Originalersatzteile zu verwenden.

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.

Las instrucciones de seguridad exigen que después de la reparación el aparato se encuentre en el estado original y que las piezas de reemplazo sean idénticas a las originales.



PHILIPS

TABLE OF CONTENTS

	Page
CHAPTER 1	
TECHNICAL DATA AND FEATURES	
Front page	1-1
Table of contents	1-2
Survey of sets and features	1-3
Survey of sets, PCB's and μ P's	1-4
Technical specifications	1-5
Safety instructions	1-6/7
Description of the system for publication of changes	1-8
Front/rear view of the set and Remote control	1-9/13
List of abbreviations	1-14/16
 CHAPTER 2	
TOOLS FOR ERROR DIAGNOSIS	
This chapter should be used in conjunction with the Service Manual QUEEN volume VR171.	
Servicing of SMDs	
Dismantling of the set	
Circuit descriptions	
IN/OUT Block diagram	
Error diagnosis system	
Adjustment procedures	
 CHAPTER 3	
PRINTED BOARDS	
Wiring diagram	3-1
Block diagram video part	3-2
Block diagram audio part	3-3
Block diagram digital part	3-4
Block diagram power supply part	3-5
 Mother board QMB	
PCB drawing mother board QMB	3-6/7
Circuit diagram PS	3-8
Head amplifier- HV/HA circuit diagram	3-9
Deck electronics- DE circuit diagram	3-10
Display control- DC circuit diagram	3-11
Video/Chroma- VS circuit diagram	3-12
Audio linear- AL circuit diagram	3-12
In/Out- I/O circuit diagram	3-13
Secam- VS circuit diagram	3-14
Frontend- FV circuit diagram	3-15
Audio FM- AF circuit diagram	3-16
Circuit diagram OSD, FOME, VPS	3-17
 QNIC board	
Circuit diagram QNIC	3-18
PCB drawing QNIC	3-19
 Shuttle board	
PCB drawing/Circuit diagram QKP21	3-19
 Connector board	
PCB drawing/Circuit diagram ACP1	3-19
PCB drawing/Circuit diagram QBOC1, QBOB1, QBOG1	3-20

CHAPTER 4 TAPE DECK

This chapter should be used in conjunction with the Service Manual QUEEN volume VR171.

Deck parts replacement

Auxiliary tools for deck adjustment
Deck layout diagrams
Lift
Head disc
A/C Head
Threading motor
Capstan motor
Pressure roller
Roller unit right
Roller unit left

Adjustments

Tape path
„Roller unit left; roller unit right“
A/C Head
Horizontal distance
Brake band
Tape tension adjustment
Friction clutch control
Reverse brake control
Top view, Underside view

Exploded view

Mechanical drive parts list	4-1
Drive top view	4-2
Drive underside view	4-3
Exploded view of cabinet parts set	4-4

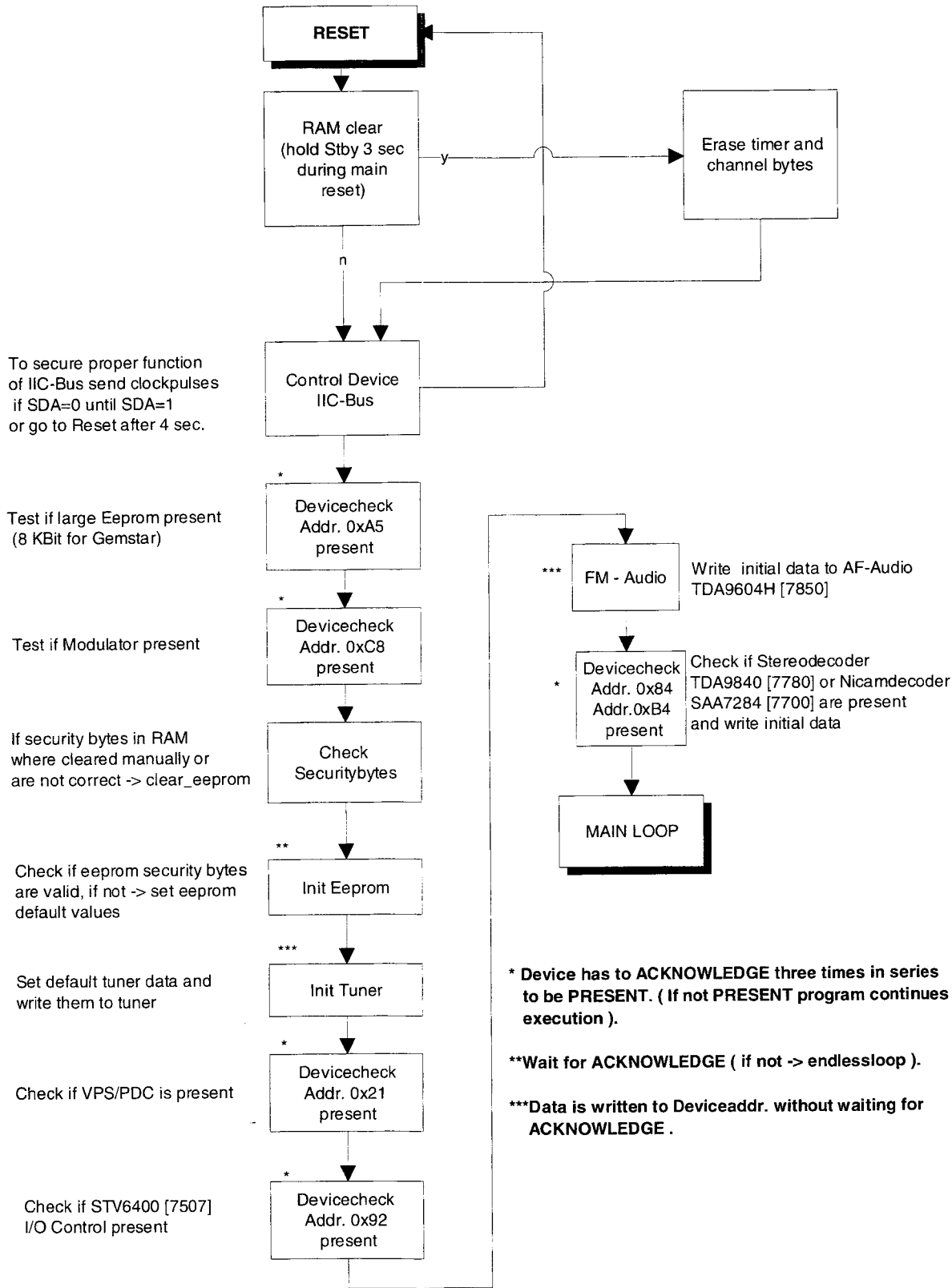
CHAPTER 5 PARTS LIST

Cabinet parts	5-1/2
Mother board QMB	5-3/11
QNIC board	5-12
Cables	5-13
Sub moduls	5-13

Features

[illegible]

Start - up software from the display control - µP



Survey of sets and PCB`s with software versions

Page 3 -		QMB - MOTHERBOARD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
		-QMB layout	-PS Power supply	-HA Head amplifier	-DE Deck electronics	-DC Display control	-VS Signal electronic	-AL Audio linear	-IO IN/OUT	-VS-SEC Signal electronic	-FV Frontend	-AF Audio FM	-OSD, FOME, VPS Part	Deck Control-µP Pos. 7400	Display Control-µP Pos. 7201																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

(GB)

TECHNICAL DATA

Mains voltage	Netzspannung
Mains frequency	Netzfrequenz
Power consumption:	Leistungsaufnahme:
without Low Power Standby	Standby
with Low Power Standby	Standby mit geringem Verbrauch
Ambient temperature	Raumtemperatur
Relative humidity	Relative Luftfeuchtigkeit
Dimensions	Abmessungen
Weight	Gewicht
Fast forward/rewind time (turbo) ...	Vor-/Rückspulzeit (turbo)
Position of use	Betriebslage
Video resolution	Video-Auflösung
Audio	Audio

(D)

TECHNISCHE DATEN

(F)

CARACTERISTIQUES

Tension secteur	220 - 240 V, +/- 10%
Fréquence	45 - 65 Hz
Puissance absorbée:	mono 12.5 W during operation
mode veille normal	HiFi 16 W during operation
mode veille faible consommation ..	mono 9.5 W
Température ambiante	HiFi 11 W
Humidité relative	< 6 W standby
Encombrement	+10°C to +35°C
Poids	20 - 80 %
Temps (re-)bobinage (turbo)	380 x 260 x 94 mm
Position d'emploi	3,7 kg
Puissance absorbée	typ. 100s (E180 cass.)
Audio SP: Linear Audio	horizontally, max. 15°
Audio LP: Linear Audio	≥240 lines
Stereo FM Audio	80Hz - 10kHz (≤8dB)
	80Hz - 5kHz (≤8dB)
	20Hz - 20kHz (≤3dB)

(NL)

TECHNISCHE GEGEVENS

(E)

DATOS TECNICOS

(I)

DATI TECNICI

Netspanning	Tensión de red	Tensione di alimentazione	220 - 240 V
Netfrequentie	Frecuencia de red	Frequenza di rete	45 - 65 Hz
Opgenomen vermogen:	Consumo de potencia:	Potenza assorbita:	mono 12.5 W during operation
zonder Low Power Standby	sin standby de bajo consumo	in attesa non a basso consumo	HiFi 16 W during operation
met Low Power Standby	con standby de bajo consumo	in attesa a basso consumo	mono 9.5 W during standby
Omgevingstemperatuur	Temperatura ambiente	Temperatura ambiente	HiFi 11 W during standby
Relatieve vochtigheid	Humedad relativa	Umidità relativa	< 6 W standby
Afmetingen	Dimensiones	Dimensioni	+10°C to +35°C
Gewicht	Peso	Peso	20 - 80 %
Vooruit/terugspoeltijd (turbo)	tiempo de (re-)bobinado (turbo)	Tempo di (ri-)avvolgimento (turbo)	380 x 260 x 94 mm
Gebruikspositie	Posición de uso	Posizione di funzionamento	3,7 kg
Opplossend vermogen	Resolución video	Risoluzione video	typ. 100s (E180 cass.)
Audio	Audio	Audio SP: Linear Audio	horizontally, max. 15°
		Audio LP: Linear Audio	≥240 lines
		Stereo FM Audio	80Hz - 10kHz (≤8dB)
			80Hz - 5kHz (≤8dB)
			20Hz - 20kHz (≤3dB)

Euroconnector (AV1) SCART plug 1

Connection to TV, monitor, projection TV ...

Pin 1 ARO (audio right out)	500 mV _{rms} +/- 3 dB	R _{out} 1 kOhm
Pin 2 ARI (audio right in)	0,2 V _{rms} to 2 V _{rms}	R _{in} 10 kOhm
Pin 3 ALO (audio left out)	500 mV _{rms} +/- 3 dB	R _{out} 1 kOhm
Pin 6 ALI (audio left in)	0,2 V _{rms} to 2 V _{rms}	R _{in} 10 kOhm
Pin 7 Blue (out) **)		
Pin 8 Switching output:	(with R _{load} = 10kOhm, C _{load} < 2nF)	
	low: 2 V	
	high: 9.5 V	
	rise time: 5 ms	

Pin 11 Green (out) **)

Pin 15 Red (out) **)

Pin 16 Blanking (out) **) loop through enabled during standby, view-mode

Pin 19 CVBS II (video out)	1 V _{pp} +/- 2dB	R _{out} 75 Ohm
Pin 20 CVBS I (video in)	1 V _{pp} +/- 3dB	R _{in} 75 Ohm

**) passive loop through from AV2

Euroconnector (AV2) SCART plug 2

Connection to decoder, SAT tuner, video disc, 2nd VCR

Pin 1 ARO (audio right out)	500 mV _{rms} +/- 3 dB	R _{out} 1 kOhm
Pin 2 ARI (audio right in)	0,2 V _{rms} to 2 V _{rms}	R _{in} 10 kOhm
Pin 3 ALO (audio left out)	500 mV _{rms} +/- 3 dB	R _{out} 1 kOhm
Pin 6 ALI (audio left in)	0,2 V _{rms} to 2 V _{rms}	R _{in} 10 kOhm
Pin 7 Blue (in) *)		
Pin 8 Switching input only	low: 2 V (low)	R _{in} 10 kOhm
	high: 4.5 V (high)	R _{in} 10 kOhm

Pin 11 Green (in) *)

Pin 15 Red (in) *)

Pin 16 Blanking (in) *) loop through enabled during standby, view-mode

Pin 19 CVBS II (video out)	1 V _{pp} +/- 2dB	R _{out} 75 Ohm
Pin 20 CVBS I (video in)	1 V _{pp} +/- 3dB	R _{in} 75 Ohm

*) passive loop through to Euroconnector AV1

Cinch Audio/Video input on front panel (OPTION)**Audio:**

AINFR (audio right in) red	0.2 V _{rms} to 2 V _{rms}	typ. 500 mV _{rms}
AINFL (audio left in) white	0.2 V _{rms} to 2 V _{rms}	typ. 500 mV _{rms}
Input impedance	47 kOhm	

Video:

VFR yellow	1 V _{pp} + 3 / -3 dB
Input impedance	75 Ohm

Cinch Audio Out Rear (OPTION)

AOUT1R (audio right out) red	500 mV _{rms} +/- 3 dB	R _{out} 1 kOhm
AOUT1L (audio left out) white	500 mV _{rms} +/- 3 dB	R _{out} 1 kOhm

This outputs are in parallel with the corresponding outputs on Euroconnector 1.

TUMOD**Modulator:**

Frequency range loop through	45 MHz - 160 MHz
Gain: ANT IN - TV OUT	2 dB + 3 / -2 dB
ANT IN - TUN OUT	2 dB + 3 / -2 dB
Switch for RF input attenuation	NO
Frequency range out (tuned by IIC bus) Ch 21 - C55	

Tuner:

Frequency range	43 MHz - 860 MHz
for UK	450 MHz - 860 MHz

Input voltage max.	< 100 dBμV
min.	> 60 dBμV

Safety instructions

- Safety regulations demand that the set be restored to its original condition and that components identical with the original types be used.

Safety components are marked by the symbol .

- All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair may reduce life drastically. When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools on the same potential.
- A set to be repaired should always be connected to the mains via a suitable isolating transformer.
- Never replace any modules or any other parts while the set is switched on.
- Use plastic instead of metal alignment tools. This in order to preclude short-circuit or to prevent a specific circuit from being rendered unstable.

Remarks

- The direct voltages and oscillograms ought to be measured relative to the set mass.
EXCEPTION
At the power supply, the DC voltages and the oscillograms at the primary side are measured to LIVE GND.
- The direct voltages and oscillograms mentioned in the diagrams ought to be measured with a colour bar signal and the picture carrier at 503.25 MHz (C25).
- The oscillograms and direct voltages have been measured in RECORD or PLAY mode.
- The semiconductors, which are mentioned in the circuit diagram and in the parts lists, are fully exchangeable per position with the semiconductors in the set, irrespective of the type designation of these semiconductors.

Sicherheitshinweise

- Die Sicherheitsvorschriften erfordern es, daß sich das Gerät nach der Reparatur in seinem originalen Zustand befindet und daß die zur Reparatur benutzten Ersatzteile mit den Originalersatzteilen identisch sind.

Sicherheits-Bauteile sind mit der Markierung  versehen

- Alle IC's und Halbleiter sind empfindlich gegen elektrostatische Entladungen (ESD). Unvorschriftsmässige Behandlung von Halbleitern im Reparaturfall kann zur Zerstörung dieser Bauteile oder zu einer drastischen Reduzierung der Lebensdauer führen. Sorgen Sie dafür, daß Sie sich im Reparaturfall über ein Armband mit Widerstand auf dem gleichen Potential, wie die Masse des Gerätes befinden. Alle Bauteile, Werkzeuge und Hilfsmittel sind auf das gleiche Potential zu legen.
- Ein zu reparierendes Gerät ist immer über einen Trenntransformator an die Netzspannung anzuschließen.
- Bei eingeschaltetem Gerät dürfen keine Module oder sonstige Einzelteile ausgetauscht werden.
- Zum Abgleich sind ausschließlich Kunststoffwerkzeuge zu benutzen (keine Metallwerkzeuge verwenden). Dadurch wird vermieden, daß ein Kurzschluß entstehen kann oder eine Schaltung instabil wird.

Anmerkungen

- Die Gleichspannung und Oszillogramme sind gegen Gerätemasse zu messen.
AUSNAHME
Beim Netzteil sind die Gleichspannungen und Oszillogramme auf der Primärseite gegen LIVE GND gemessen.
- Die Gleichspannungen und Oszillogramme angeführt in den Schaltbildern sollen unter folgenden Bedingungen gemessen werden: Farbbalkensignal, Bildträger auf 503.25 MHz (C25)
- Die Oszillogramme und Gleichspannungen sind in RECORD oder PLAY gemessen. Die in den Stücklisten aufgeführten Bauteile sind positionsweise voll auswechselbar gegen die Bauteile in dem Gerät, ungeachtet der etwaigen Typenbezeichnungen.

Avertissements

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

Les composants de sécurité sont marqués .

- Tout les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharger statiques (ESD). Leur longévité pourrait être considérablement écourté par le fait qu'aucune précaution n'est prise à leur manipulation. Lors de réparations s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité. Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.
- Toujours alimenter un appareil à réparer à travers un transfo d'isolement.
- Ne jamais remplacer les modules ni d'autres composants quand l'appareil est sous tension.
- Pour l'ajustage, utiliser des outils en plastique au lieu d'instruments métalliques. Ceci afin d'éviter les court-circuits et exclure l'instabilité dans certains circuits.

Observations

- La mesure des tensions continues et des oscillogrammes doit se faire par rapport à la terre de l'appareil.
EXCEPTION
Sur l'unité d'alimentation la tension continue et l'oscillogramme sont mesurés sur le côté primaire en Live GND.
- La mesure des tensions continues et des oscillogrammes figurant sur le schéma doit se faire dans un signal de barre couleur porteuse image sur 503.25 MHz (C25).
- Les oscillogrammes et tension sont mesurées en mode RECORD ou PLAY.
- Les semi-conducteurs indiqués dans le schéma de principe et à la liste des composants, sont interchangeable par repère sur ce chassis avec les semi-conducteurs de l'appareil quelle que soit la désignation de type donnée sur ces semi-conducteurs.

Veiligheidsinstructies

- Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, indientiek aan de oorspronkelijke, worden toegepast.
De veiligheidsonderdelen zijn aangeduid met het symbool



- Alle IC's en vele andere halfgeleiders zijn gevoelig voor elektrostatische ontladingen (ESD). Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor, dat U tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat. Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.
- Sluit een apparaat dat gerepareerd wordt altijd via een scheidingstransformator aan op de netspanning.
- Verwissel nooit modules of andere onderdelen terwijl het apparaat is ingeschakeld.
- Gebruik voor het afregelen plastic i.p.v. metalen gereedschap. Dit om mogelijke kortsluiting te voorkomen of een bepaalde schakeling instabiel te maken.

Opmerkingen

- De gelijksspanningen en oscillogrammen dienen gemeten te worden ten opzichte van de apparaat aarde.
- De gelijksspanningen en oscillogrammen vermeld in de schema's dienen gemeten te worden met een kleurbalkensignaal beeldtraag golf op 503.25 MHz (C25).
- De oscillogrammen en gelijksspanningen zijn in RECORD of PLAY mode gemeten.
- De halfgeleiders, die in het pricipeschema en in de stuklijsten, zijn vermeld, zijn per positie volledig uitwisselbaar met de halfgeleiders in het apparaat, ongeacht de typeaanduiding op deze halfgeleiders.

Avvertimenti

- Le prescrizioni di sicurezza richiedono che l'apparecchio sia ricondotto alle condizioni originali e che siano usati ricambi originali.

Componenti di sicurezza sono marcati con 

- Tutti gli IC e semiconduttori sono sensibili a scariche elettrostatiche (ESD). Non curanze durante la riparazione di semiconduttori possono danneggiarli o condurre ad una riduzione drastica della durata. Durante la riparazione assicurarsi di essere collegati allo stesso potenziale attraverso un bracciale di protezione contro scariche elettrostatiche. Inoltre tenere anche tutti i componenti e gli attrezzi a questo potenziale.
- Apparecchi da riparare bisogna collegarli sempre via un trasformatore isolante (separatore) alla tensione normale.
- Non scambiare moduli o altri componenti quando l'apparecchio è in funzione.
- Per l'accordo usare soltanto attrezzi di plastica (non usare attrezzi metallici). Così si evitano cortocircuiti e collegamenti instabili.

Osservazioni

- Misurare le tensioni continue e gli oscillogrammi riferendosi alla massa dell'apparecchio.
ECCEZIONE
Le tensioni continue e gli oscillogrammi dall'alimentatore sono misurati sulla parte primaria contro GND-Live.
- Le tensioni continue e gli oscillogrammi indicati negli schemi di collegamento devono essere misurati secondo le condizioni seguenti: segnale barre colore, portante dell'immagine su: 503.25 MHz (C25).
- Gli oscillogrammi e le tensioni continue sono misurati in RECORD o PLAYBACK.
- I componenti indicati nelle liste sono intercambiabili con quelli nell'apparecchio nonostante l'eventuale denominazione di modelli.

WARNING FOR LITHIUM BATTERIES!

Lithium batteries, if incorrectly used (excessive heat, wrong connection of terminals, short circuit) represent a danger of explosion!

Lithium batteries must be replaced only by original spare parts.

WARNHINWEIS ZU LITHIUM-BATTERIEN!

Bei falscher Handhabung (Überhitzung, Falschpolung oder Kurzschluss) der Lithium-Batterien besteht Explosionsgefahr! Lithium-Batterien dürfen nur gegen Originalersatzteile getauscht werden.

ATTENTION!

Pile au lithium.

Danger d'explosion si traitée incorrectement. Ne peut être remplacée que par un spécialiste (comme décrit dans les instructions de réparation).

OPGELET MET LITHIUM-BATTERIJEN!

Bij foutieve behandeling (oververhitting, foutieve poling of kortsluiting) van lithium-batterijen bestaat er explosiegevaar! Lithium-batterijen mogen slechts door originele onderdelen vervangen worden.

Avisos

- Las instrucciones de seguridad exigen que después de la reparación el aparato se encuentre en el estado original y que las piezas de repuesto, utilizadas para la reparación, sean idénticas a las originales.

Los componentes de seguridad están marcados con 

- Todos los IC y semiconductores son sensibles a descargas electrostáticas (ESD). Un tratamiento no conforme a las instrucciones de semiconductores en caso de reparación, podría llevar a la destrucción de estos componentes, o a una reducción drástica de la duración. Tenga cuidado de que, en caso de reparación, estar al mismo potencial que la masa del aparato, por una pulsera con resistencia. Ponga todos los componentes, herramientas y recursos al mismo potencial.
- Para reparar un aparato hay que conectarlo siempre a la alimentación a través de un transformador de aislamiento.
- Cuando un aparato está en marcha no pueden ser cambiados módulos u otras piezas de repuesto.
- Para los ajustes hay que utilizar exclusivamente herramientas de plástico (nunca herramientas metálicas). Así se evitan cortocircuitos y circuitos inestables.

Notas

- Hay que medir las tensiones continuas y los oscilogramas contra la masa del aparato.
UITZONDERING:
Bij het netgedeelte zijn de gelijkspanningen en oscilogrammen aan de primaire kant tegen Live GND gemeten.
- Las tensiones continuas y los oscilogramas mencionados en los esquemas tienen que ser medidos de manera siguiente: señal barra de color portadora de imagen en 503.25 MHz (C25)
- Los oscilogramas y las tensiones continuas son medidas en „RECORD“ y „PLAYBACK“
- Los componentes mencionados en las listas se bs puede cambiar por los componentes en el aparato, a pesar de eventuales designaciones de tipos.

ATTENZIONE CON LE PILE AL LITIO!

In caso di utilizzo errato (surriscaldamento, errata posizione dei poli o cortocircuito) delle pile al litio consiste pericolo di esplosione! Le pile al litio si possono sostituire solo con pezzi di ricambio originali.

AVISO!

Bateria de litio.

Por una inadecuada intervención puede explotar.

Solo debe ser cambiada por una persona con conocimientos técnicos (como en la guía de reparación se describe).

ADVARSEL!

Lithium batteri. Eksplosionsfare.

Udskiftning må kun foretages af en sagkyndig, og om beskrevet i servicemanualen.

VARNING!

Eksplosionsfara vid felaktigt batteribyte!

Använd samma batterityp eller ekvivalent typ som rekommenderas av apparattillverkaren.

VAROITUS!

Paristo voi räjähtää, jos se on virheellisesti asennettu!

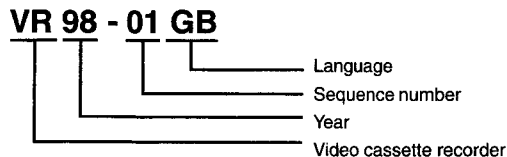
Vaihda paristo ainoastaan laitevalmistajan suosittelema an tyyppiin.

Modifications

Description of the system used for publishing modification data and supplements to the service manual.

All modification data and supplements to the Service Manual are published by means of Service Information bulletins.

Each Service information has a number, for example :



A Service Information bulletin consists of a front sheet, as the case may be followed by supplementary and/or replacement sheets.

Replacement sheets serve to replace existing sheets in the Service Manual. These sheets are identified by an additional letter after the page number, for example 5-1a. Page 5-1a then takes the place of page 5-1.

Supplementary sheets are inserted between the existing sheets in the Service Manual. These sheets can be identified by an additional figure following the page number, for example 5-1-1.

Sheet 5-1-1 should be inserted after page 5-1.

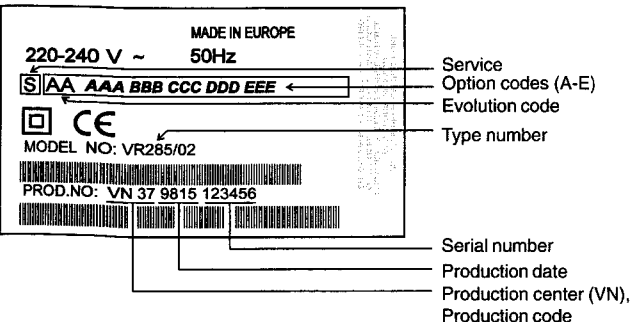
Description of the system by means of which modifications are indicated in the recorder.

All important parts of the recorder, such as tape deck, p.c. boards and modules, are provided with a sticker. These stickers specify a number of product data. The meaning of this data will now be explained for the most important sections.

The complete recorder

The type plate is located at the back of the recorder, below an example of such a type plate is given.

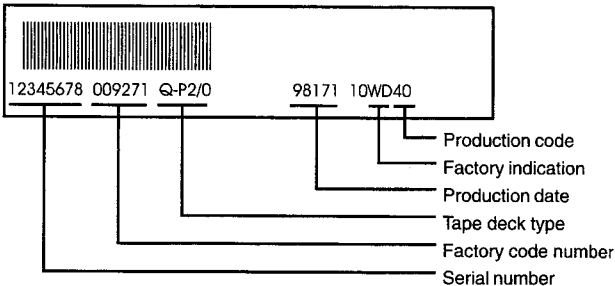
Type plate :



Note :

- In the case of an important modification to the recorder the production code on the type plate is increased by one.
E.g. 37 becomes 38.
- In the case of an important modification to the service documentation the evolution code on the type plate is increased by one.
E.g. AA becomes AB.

Tape deck



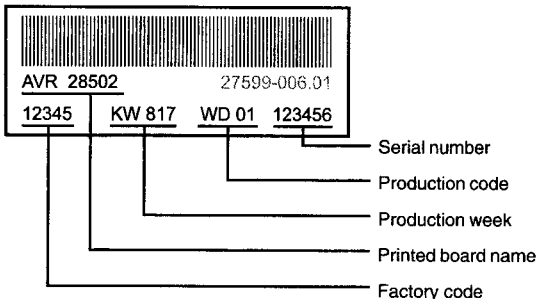
Note :

The production code and the serial number on the tape deck need not correspond to the production code and the serial number on the type plate.

Printed panels

The stickers are generally located on the track side of the module.

Example :



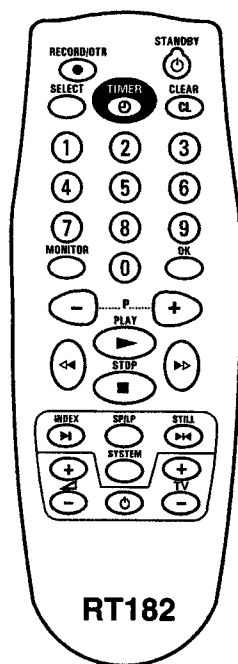
Remarks :

The production code number will not always be mentioned.

In case of an important modification, the last figure of the factory code number (point number) is increased by one. E.g. 6635.1 becomes 6635.2.

OPERATING INSTRUCTIONS IN BRIEF

The remote control



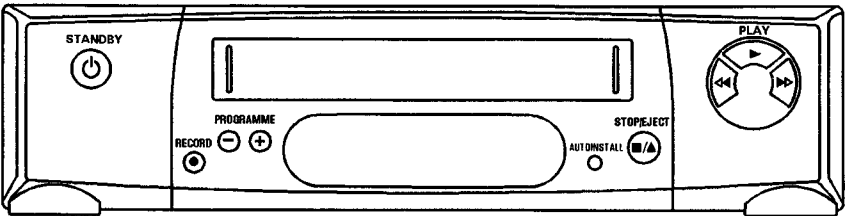
- RECORD/OTR** Record
- STANDBY** Standby
- SELECT** Function selector
- TIMER** 'VIDEOPlus' / 'TIMER' programming
- CLEAR (CL)** Reset, clear
- 0-9** Digit buttons 0-9
- MONITOR** TV monitor function
- OK** Confirm button
- P-** Down, number minus
- P+** Up, number plus
- PLAY** Playback
- ◀◀** Rewind/Reverse scanning
- ▶▶** Forward wind/ Forward scanning
- STOP** Pause/Stop, Tuner-mode
- INDEX** Index search
- SP/LP** SP/LP selection
- STILL** Still picture
- SYSTEM** Special function

Additional TV functions: Only function with televisions with the same remote control code.

- TV+** TV volume plus
- TV-** TV volume minus
- Switch off TV**
- TV+** Programme number +
- TV-** Programme number -

Front of the video recorder

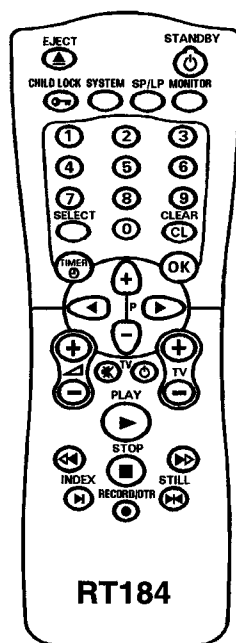
- STANDBY** Standby
- RECORD** Record
- PROGRAMME-** Down/Minus, number
- PROGRAMME+** Up/Plus, number
- AUTOINSTALL** Installation
- STOP/EJECT** Stop/Cassette eject
- ◀◀** Rewind/Reverse scanning
- PLAY** Playback
- ▶▶** Forward wind/ Forward scanning



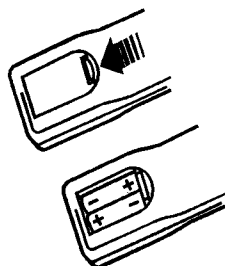
VR285, VR485, VR685

OPERATING INSTRUCTIONS IN BRIEF

The remote control



RT184



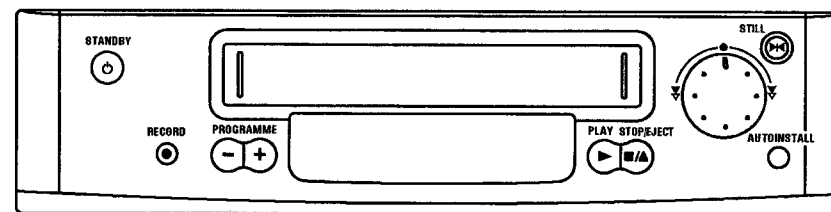
- EJECT** Eject
- STANDBY** Standby
- CHILD LOCK** Child lock
- SYSTEM** Special function
- SP/LP** SP/LP selection
- MONITOR** TV monitor function
- 0-9** Digit buttons 0-9
- SELECT** Function selector
- CLEAR (CL)** Reset, clear
- TIMER** 'VIDEOPlus' / 'TIMER' programming
- OK** Confirm button
- P+** Up/Plus, programme number
- Menu left** Menu left
- Menu right** Menu right
- P-** Down/Minus, programme number
- PLAY** Playback
- Rewind/Reverse scanning** Rewind/Reverse scanning
- STOP** Pause/Stop, Tuner-mode
- Forward wind/ Forward scanning** Forward wind/ Forward scanning
- INDEX** Index search
- RECORD/OTR** Record
- STILL** Still picture

Additional TV functions:

- TV volume plus**
- TV volume minus**
- TV sound off**
- Switch off TV**
- Programme number +**
- Programme number -**

Front of the video recorder

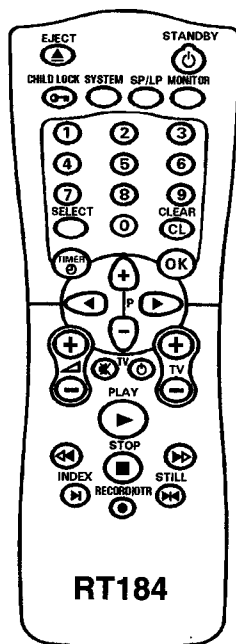
- STANDBY** Standby
- RECORD** Record
- PROGRAMME -** Down/Minus, number
- PROGRAMME +** Up/Plus, number
- PLAY** Playback
- STOP/EJECT** Stop/Cassette eject
- SHUTTLE ON / STILL** Still picture
- Rotary control for Rewind/Reverse scanning or Forward wind/ Forward scanning**
- INSTALLATION button**



VR287, VR487

OPERATING INSTRUCTIONS IN BRIEF

The remote control



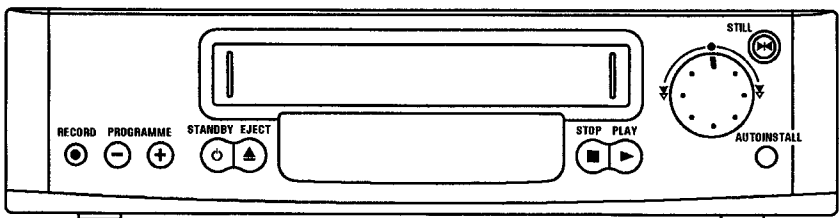
- EJECT** Eject
- STANDBY** Standby
- CHILD LOCK** Child lock
- SYSTEM** Special function
- SP/LP** SP/LP selection
- MONITOR** TV monitor function
- 0-9** Digit buttons 0-9
- SELECT** Function selector
- CLEAR (CL)** Reset, clear
- TIMER** 'VIDEOPlus' / 'TIMER' programming
- OK** Confirm button
- P+** Up/Plus, programme number
- Menu left**
- Menu right**
- P-** Down/Minus, programme number
- PLAY** Playback
- Rewind/Reverse scanning**
- STOP** Pause/Stop, Tuner-mode
- Forward wind/ Forward scanning**
- INDEX** Index search
- RECORD/OTR** Record
- STILL** Still picture

Additional TV functions:

- TV volume plus**
- TV volume minus**
- TV sound off**
- Switch off TV**
- Programme number +**
- Programme number -**

Front of the video recorder

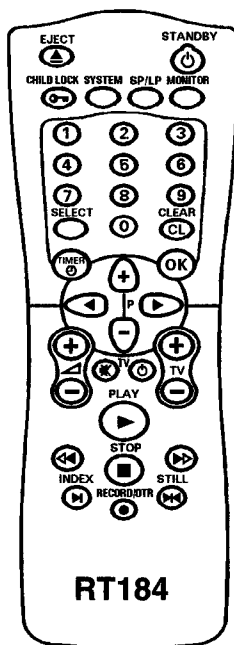
- RECORD** Record
- PROGRAMME -** Down/Minus, number
- PROGRAMME +** Up/Plus, number
- STANDBY** Standby
- EJECT** Cassette eject
- STOP** Pause/Stop
- PLAY** Playback
- STILL** Still picture
- Rotary control for Rewind/Reverse scanning or Forward wind/ Forward scanning**
- AUTOINSTALL** Installation button



VR686

OPERATING INSTRUCTIONS IN BRIEF

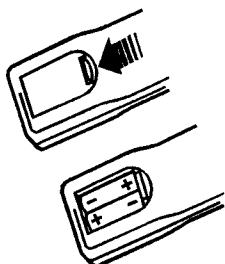
The remote control



- EJECT** Eject
- STANDBY** Standby
- CHILD LOCK** Child lock
- SYSTEM** Special function
- SP/LP** SP/LP selection
- MONITOR** TV monitor function
- 0-9** Digit buttons 0-9
- SELECT** Function selector
- CLEAR (CL)** Reset, clear
- TIMER** 'VIDEOPlus' / 'TIMER' programming
- OK** Confirm button
- P+** Up/Plus, programme number
- Menu left** Menu left
- Menu right** Menu right
- P-** Down/Minus, programme number
- PLAY** Playback
- Rewind/Reverse scanning** Rewind/Reverse scanning
- STOP** Pause/Stop, Tuner-mode
- Forward wind/ Forward scanning** Forward wind/ Forward scanning
- INDEX** Index search
- RECORD/OTR** Record
- STILL** Still picture

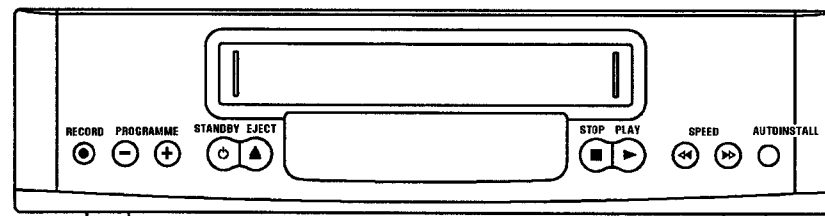
Additional TV functions:

- TV volume plus**
- TV volume minus**
- TV sound off**
- Switch off TV**
- Programme number +**
- Programme number -**



Front of the video recorder

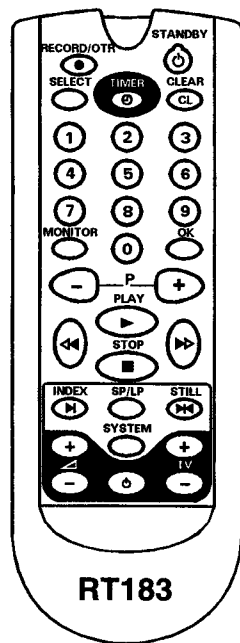
- STANDBY** Standby
- RECORD** Record
- PROGRAMME-** Down/Minus, number
- PROGRAMME+** Up/Plus, number
- PLAY** Playback
- STOP** Stop/Cassette eject
- SHUTTLE ON / STILL** Still picture
- Rotary control for Rewind/Reverse scanning or Forward wind/ Forward scanning**
- AUTOINSTALL** Installation button



VR286

OPERATING INSTRUCTIONS IN BRIEF

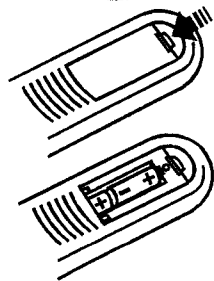
The remote control



- RECORD/OTR** Record
- STANDBY** Standby
- SELECT** Function selector
- TIMER** 'VIDEOPlus' / 'TIMER' programming
- CLEAR (CL)** Reset, clear
- 0-9** Digit buttons 0-9
- MONITOR** TV monitor function
- OK** Confirm button
- P-** Down, number minus
- P+** Up, number plus
- PLAY** Playback
- ◀◀** Rewind/Reverse scanning
- ▶▶** Forward wind/ Forward scanning
- STOP** Pause/Stop, Tuner-mode
- INDEX** Index search
- SP/LP** SP/LP selection
- STILL** Still picture
- SYSTEM** Special function

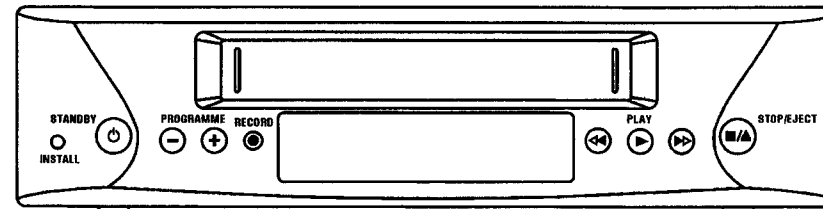
Additional TV functions: Only function with televisions with the same remote control code.

- TV+** TV volume plus
- TV-** TV volume minus
- ⏻** Switch off TV
- TV+** Programme number +
- TV-** Programme number -



Front of the video recorder

- INSTALL** Installation button
- ⏻** Standby
- PROGRAMME-** Down/Minus, number
- PROGRAMME+** Up/Plus, number
- RECORD** Record
- ◀◀** Rewind/Reverse scanning
- PLAY** Playback
- ▶▶** Forward wind/ Forward scanning
- /▲ STOP/EJECT** Stop/Cassette eject



SB110, SB115, SB615

List of abbreviations

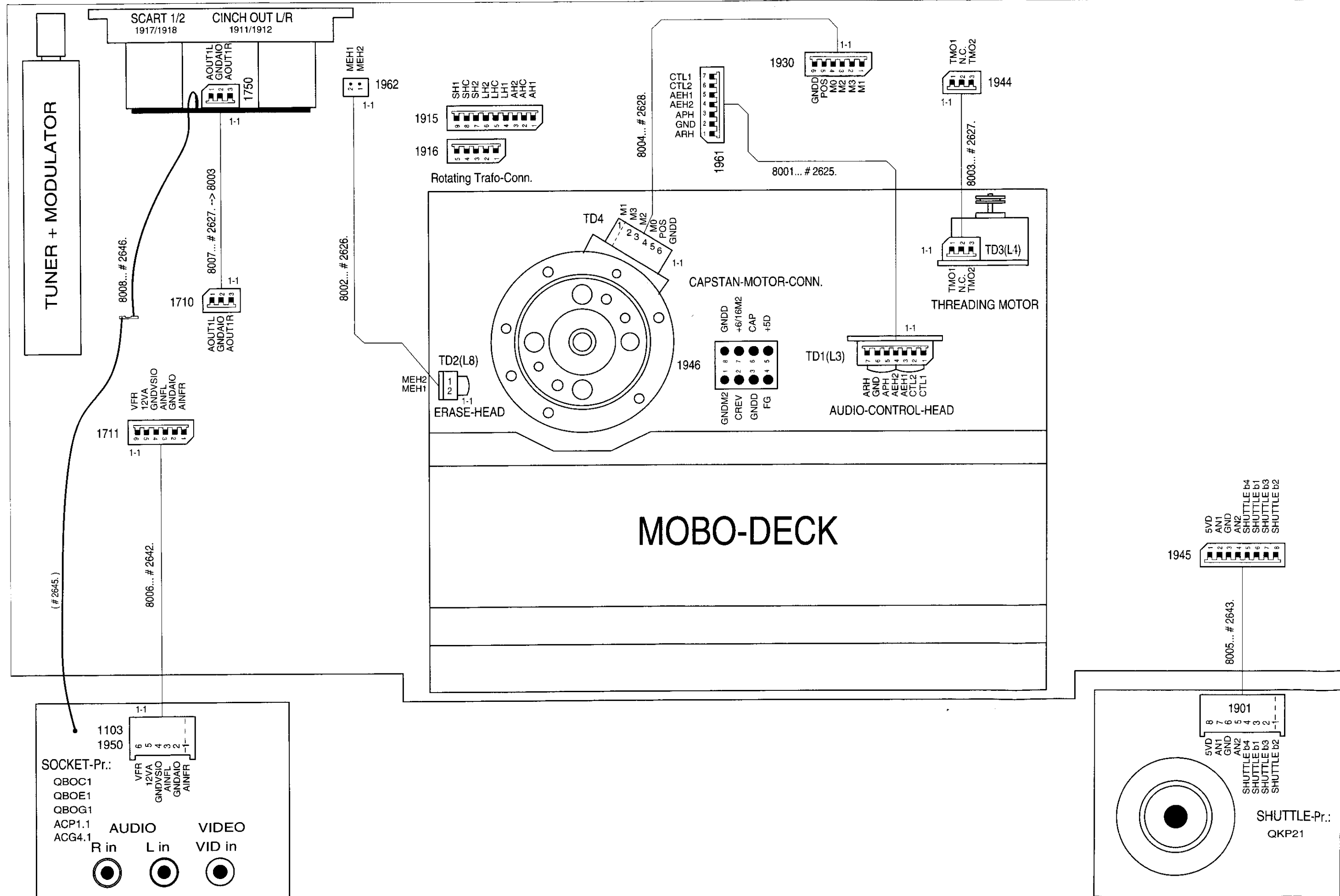
Signal	Description	Application															
+5AS	+5V analog after fuse 1700																QNIC
+5ASS	+5V digital, after coil 5706																QNIC
+5D	+5V digital			DE													QNIC
-28V	-28V display supply	PS			DC				IO								
-7V	-7V I/O-switches supply								IO								
12SW	+12V analog (< 6W switched)	PS							AL			FV					QNIC
12VA	+12V analog	PS							IO		FV	AF					
14VM1	+14V for threading- and headmotor	PS		DE													
2FSC	2x Colour subcarrier					VS										OS	
33V	+33V for tuner tuning voltage	PS									FV						
5VA	+5V analog	PS							IO		FV	AF	OS				
5VASW	+5V analog (< 6W switched)	PS	HA	DE		VS				SE	FV		OS			QNIC	
5VASW2	+5V analog after coil 5802												OS				
5VASWB	+5V analog after coil 5726										FV						
5VD	+5V digital	PS		DE	DC						FV						
5VD1	+5V digital, after coil 5200				DC												
5VD2	+5V digital, after coil 5400			DE													
8SC1	Scart 1 pin 8 output			DE					IO								
8SC2	Scart 2 pin 8 input			DE					IO								
9/14VM2	Capstan motor supply, switched	PS		DE													
AEH1/2	Audio erase head								AL								
AF1	Audio from frontend, left								AL	IO		FV	AF				
AF2	Audio from frontend, right											FV	AF				
AFC	Automatic frequency control				DC							FV					
AFE	Audio from frontend											FV				QNIC	
AGC	Automatic gain control			DE								FV					
AH1/2/C	Audio heads		HA														
AIN1	Audio input scart 1								AL	IO							
AIN1L	Audio input scart 1, left									IO			AF				
AIN1R	Audio input scart 1, right									IO			AF				
AIN2	Audio input scart 2								AL	IO							
AIN2L	Audio input scart 2, left									IO			AF				
AIN2R	Audio input scart 2, right									IO			AF				
AINFL	Audio left from Front connector									IO			AF				
AINFR	Audio right from front connector									IO			AF				
AMCO	Audio to the modulator											FV	AF				
AML P	Audio mono playback								AL	IO		FV	AF				
AML R	Audio mono record								AL	IO			AF				
AN1/2	Analog voltage from keyboard matrix				DC												
ANIL	NICAM Audio, left											FV				QNIC	
ANIR	NICAM Audio, right											FV				QNIC	
AOUT1L	Audio output from scart 1, left									IO			AF				
AOUT1R	Audio output from scart 1, right									IO			AF				
AOUT2L	Audio output from scart 2, left									IO			AF				
AOUT2R	Audio output from scart 2, right									IO			AF				
APH	Audio playback head								AL								
ARH	Audio record head								AL								
BLANKING	Blanking pulse RGB loopthrough									IO							
BLUE	Blue signal between scart 1/2									IO							
CAP	Capstan control voltage			DE													
CKDET	Colour system information			DE		VS											
CLKD1	Serial bus clock			DE	DC												
CREV	Capstan reverse			DE													
CROT	Colour rotation on/off			DE		VS											

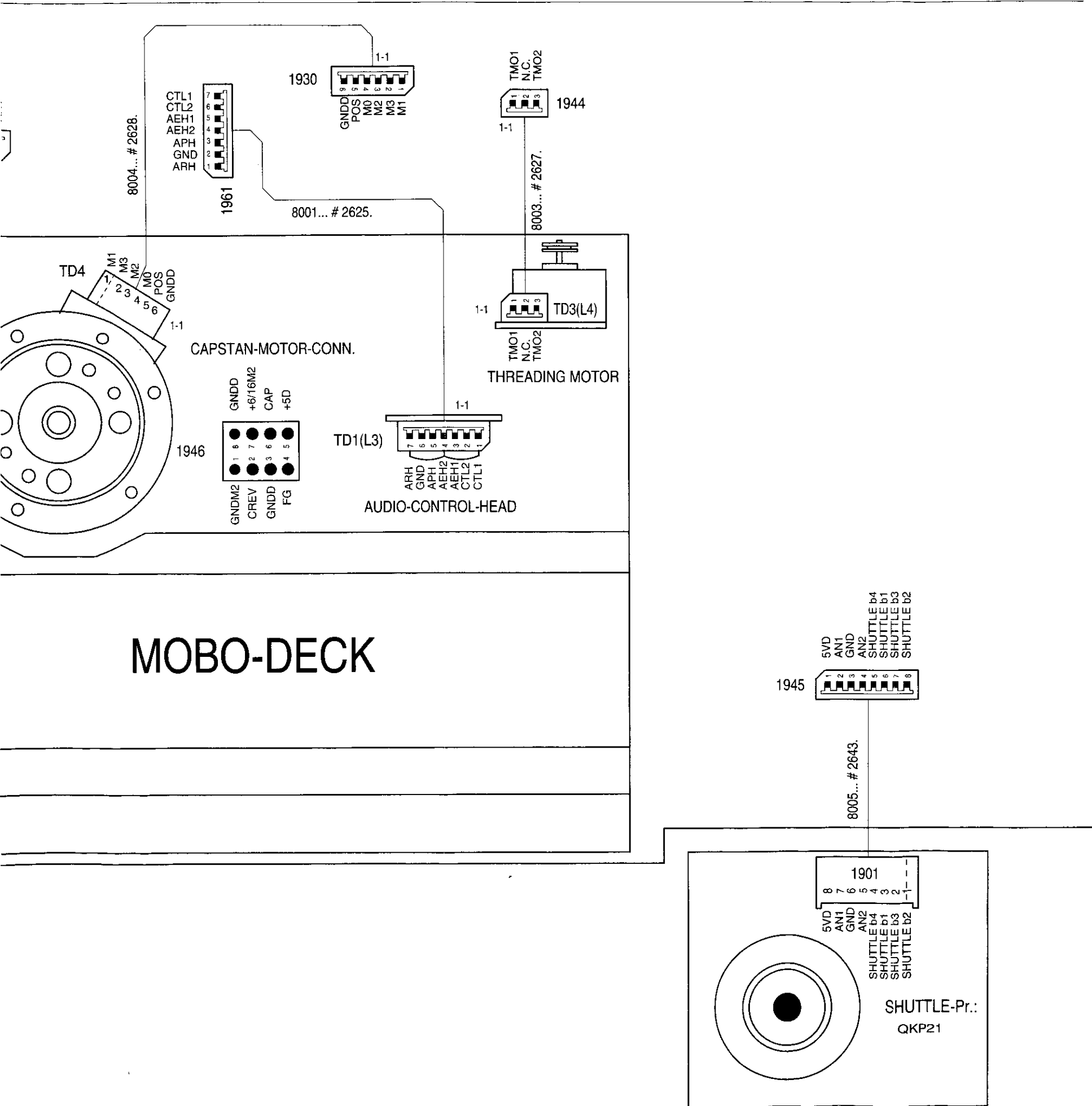
Signal	Description	Application															
CSCP	Colour phase switching for LP feature mode			DE		VS											
CSI	Colour system information			DE					SE								
CSP	Chrominance secam playback					VS			SE								
CSR	Chrominance secam record		HA						SE								
CSW	8V/14V switching for capstan motor	PS		DE													
CSYNC/1/2	Composite sync pulse		HA	DE		VS			SE						OS		
CTL1/2	Control track signal			DE			AL										
DATD1/2	Serial bus data			DE	DC												
DEC	Audio switching voltage								IO								
ENVC	Envelope comparator signal		HA	DE													
FFP	Feature frame pulse			DE		VS											
FG	Capstan tach pulse			DE													
FGD	Capstan tach pulse digital			DE													
FMAP	FM audio playback		HA												AF		
FMAR	FM audio record		HA												AF		
FMPV	FM video playback		HA			VS			SE								
FMRV	FM video record		HA			VS											
FOME	Follow Me (video signals equal)			DE											OS		
FTA	Threading tach			DE													
FTAD	Threading tach digital			DE													
GND A	Ground analog								IO		FV				QNIC		
GND A1/A2	Ground analog QNIC														QNIC		
GND AF	Ground analog AF														AF		
GND AIO	Ground analog IO								IO								
GND AL	Ground analog AL						AL										
GND D	Ground digital			DE					IO			AF			QNIC		
GND EO	Ground erase oscillator						AL										
GND M	Ground capstan motor			DE													
GND VS	Ground signal electronics														AF		
GND VSIO	Ground analog VS, IO								IO								
GREEN	Green signal between scart1/2								IO								
HEHI	Heater for displaytube high	PS			DC												
HELO	Heater for displaytube low	PS			DC												
HES T	Heater voltage control signal				DC												
HP2	Head pulse audio		HA	DE											AF		
I/R	Deck switch / Record protection			DE													
I LED	LED-tower supply			DE													
INIT	Deck switch			DE													
IPOR	Inverse power on reset			DE	DC												
IRAF	Inverse record FM-audio		HA	DE													
IREV	Dubbing oscillator on/off			DE		VS	AL										
ISTBY	Inverse stand by	PS			DC												
ISWS	Video-FM mute			DE		VS											
IWIND	Control pulse amplification low			DE													
LH1/2/C	Long play heads		HA														
MEH1/2	Main erase head						AL										
MON	Monitor loop through scart 1/2								IO								
MOT0-3	Head motor Control lines			DE													
MTA	Audio mute			DE			AL										
NC	Not connected			DE													
OCLK	OSD-bus clock				DC										OS		
OCS	OSD chip select				DC										OS		
ODAT	OSD-bus data				DC										OS		
OPF	Frame pulse			DE											OS		

Signal	Description	Application											
PBV	Playback		DE					SE					
PG/FG	Head wheel position/-speed		DE										
POS	Position pulse headwheel		DE										
PSS	PAL or secam-L			DC				FV					
RECP	Record protection		DE										
RED	Red signal between scart 1/2						IO						
REEL	Head wheel control		DE										
SB1	Secam band 1			DC				FV					
SCL	IIC bus clock						IO	FV	AF	OS	QNIC		
SCL2	Serial bus clock		DE	VS									
SDA	IIC bus data						IO	FV	AF	OS	QNIC		
SDA2	Serial bus data		DE	VS									
SFS	Sound filter switch			DC				FV					
SH1/2/C	Standard play heads		HA										
SSIF	Second sound interfrequency							FV			QNIC		
SWIN	Head switching pulse		HA	DE									
SYNC	Control track pulse		DE										
TAE	Tape end detection		DE										
TAS	Tape start detection		DE										
THIO	Threading motor in/out		DE										
TMO	Threading motor on/off		DE										
TMO1/2	Threading motor connection		DE										
TRIA/ALI	Tracking information audio / Audio level indication		DE						AF				
TRIV	Tracking information video		HA	DE									
VBS	Video input				VS		IO				OS		
VFR	Video from front connector						IO						
VFV	Video from frontend				VS		IO	FV		OS			
VIN1	Video input scart 1						IO						
VIN2	Video input scart 2						IO						
VISS	Control sync pulse inversion		DE										
VMOD	Video to the modulator						IO	FV					
VOUT	Video from OSD part						IO				OS		
VREC	Video record from I/O				VS			SE			OS		
VREF	Reference voltage							SE					
VS	Video from signal electronics				VS						OS		
W/R	Control track write/read		DE										
WTL	Wind tachometer left		DE										
WTLD	Wind tachometer left digital		DE										
WTR	Wind tachometer right		DE										
WTRD	Wind tachometer right digital		DE										

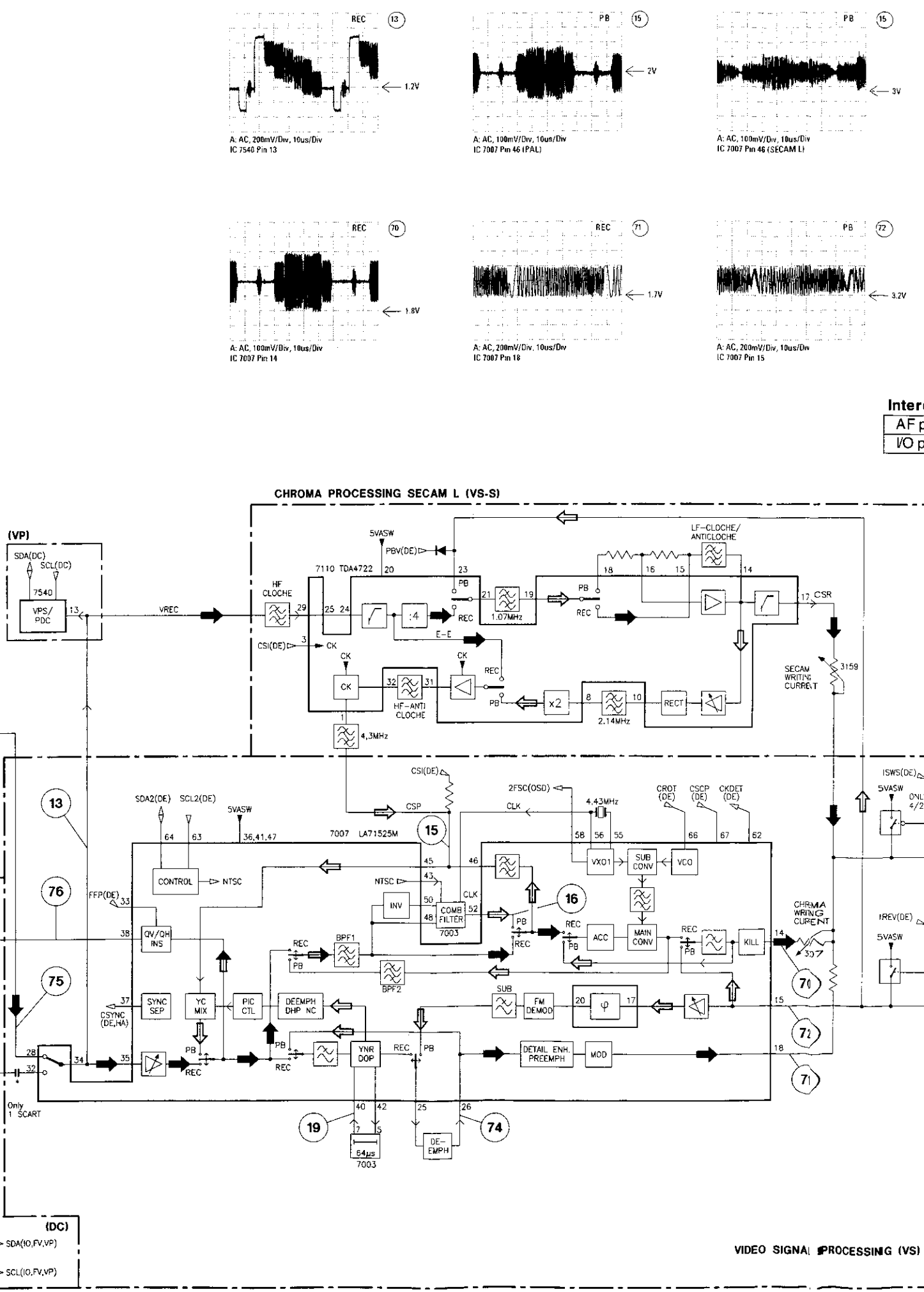
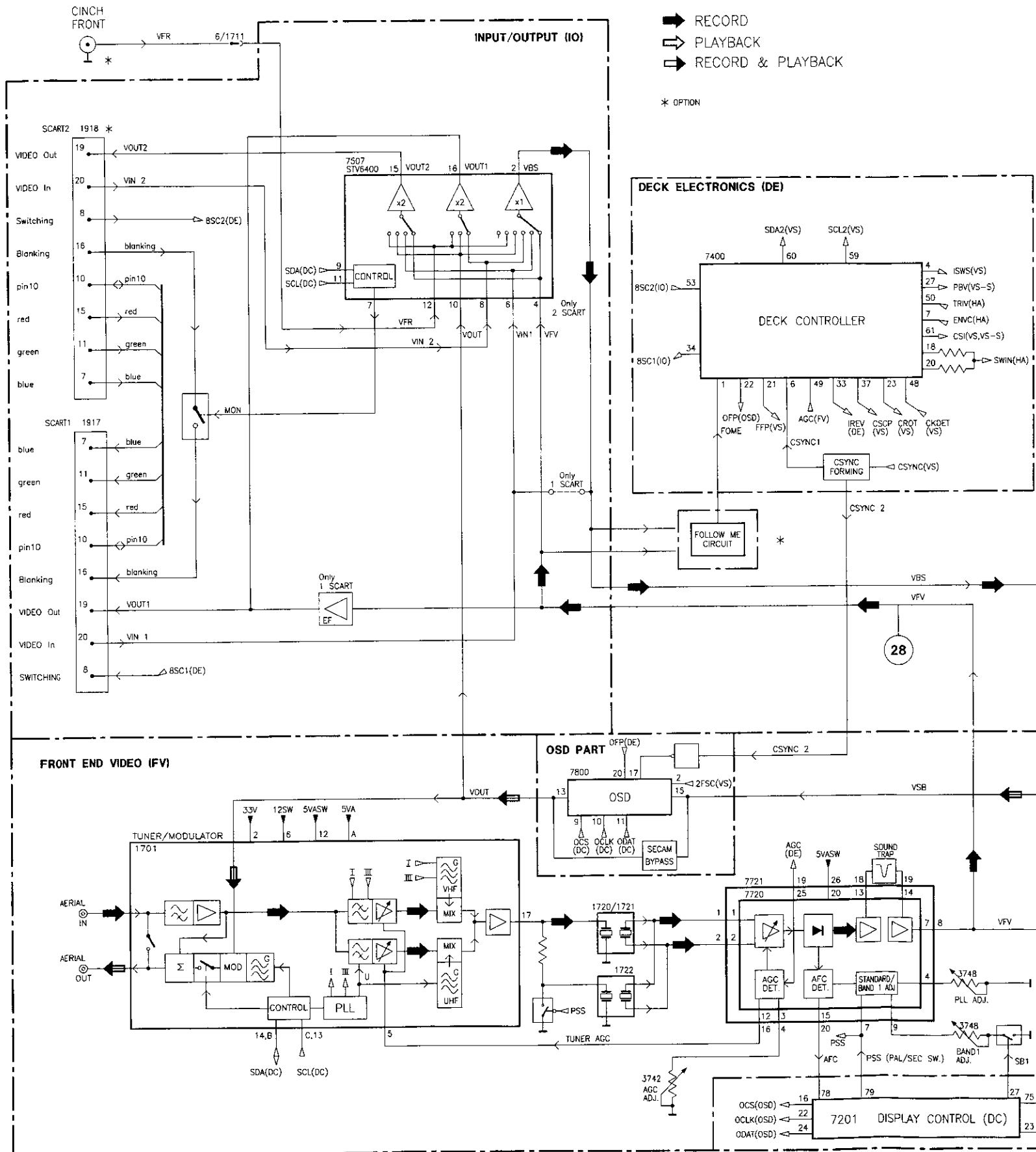
PS	Power Supply	page 3-8
HA	Head Amplifier	page 3-9
DE	Deck Electronics	page 3-10
DC	Display Control	page 3-11
VS	Video Signal Processing	page 3-12
AL	Audio Linear	page 3-12
IO	In/Out	page 3-13
SE	Secam Processing	page 3-14
FV	Frontend	page 3-15
AF	Audio Processing	page 3-16
OS	On Screen Display	page 3-17
QNIC	Nicam Board	page 3-18

Wiring Diagram

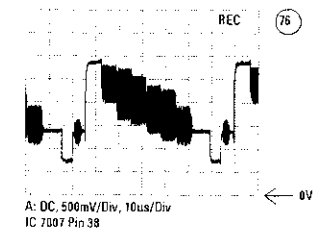
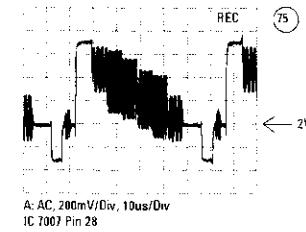
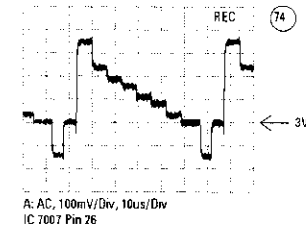
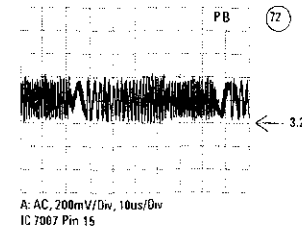
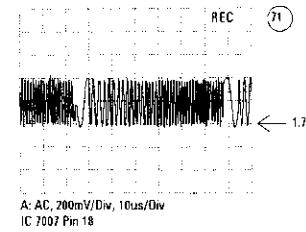
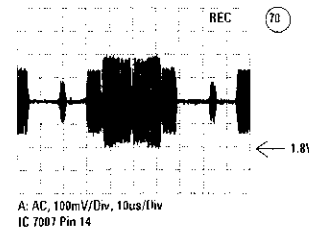
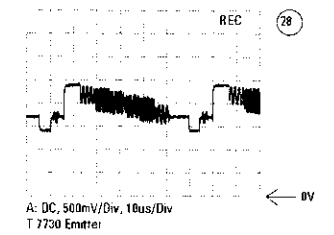
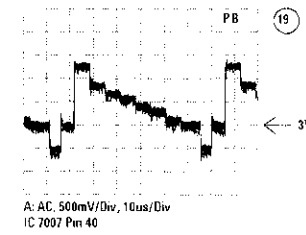
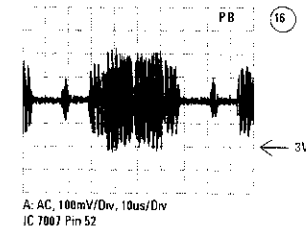
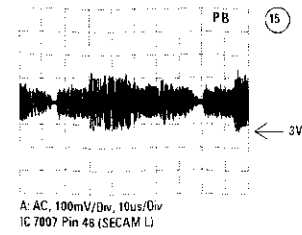
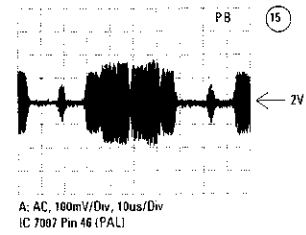
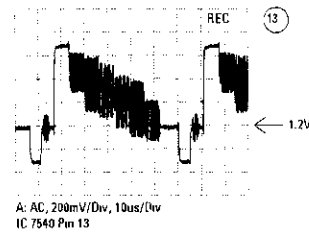




Block Diagram Video

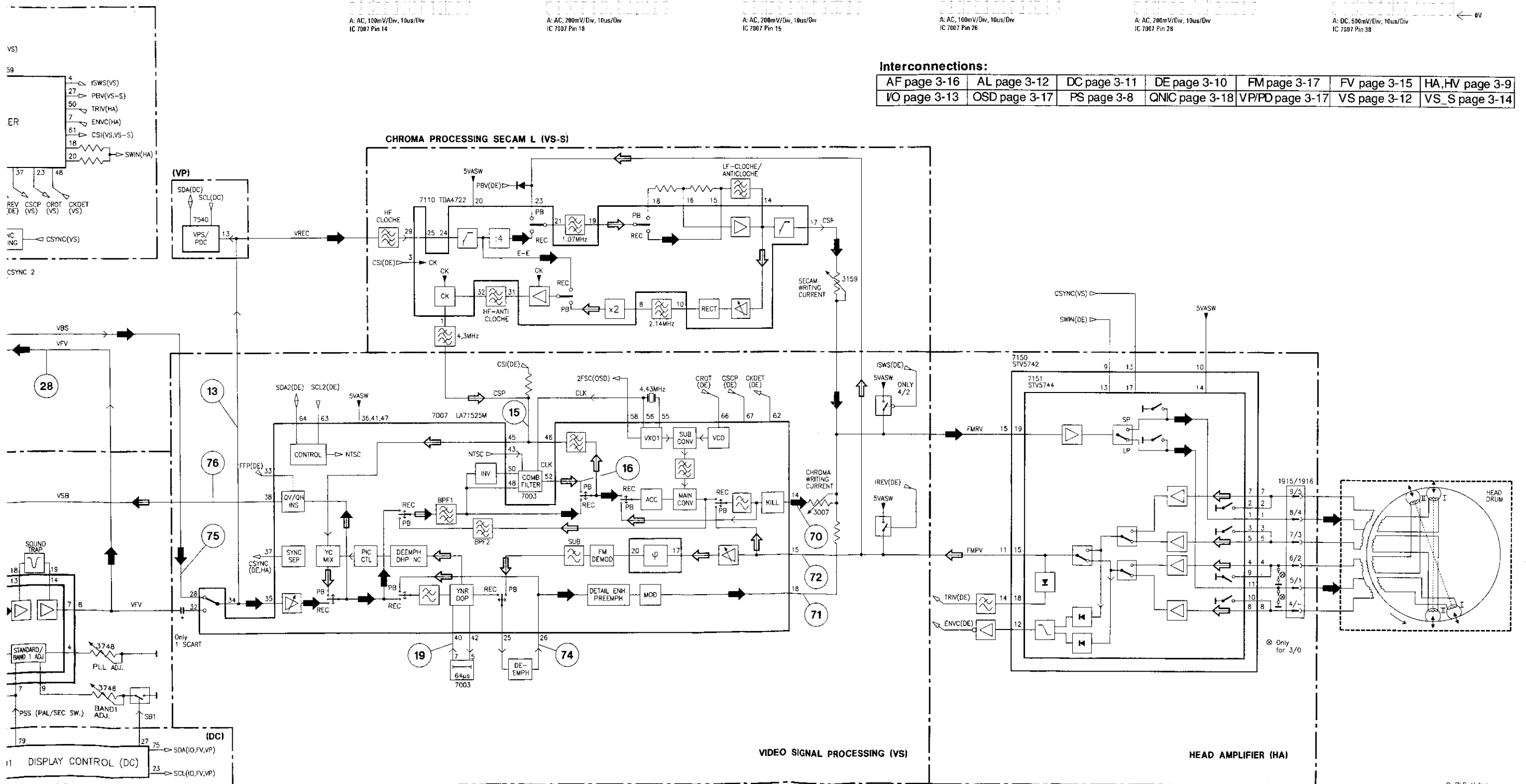


Interco
AF pe
VO pa

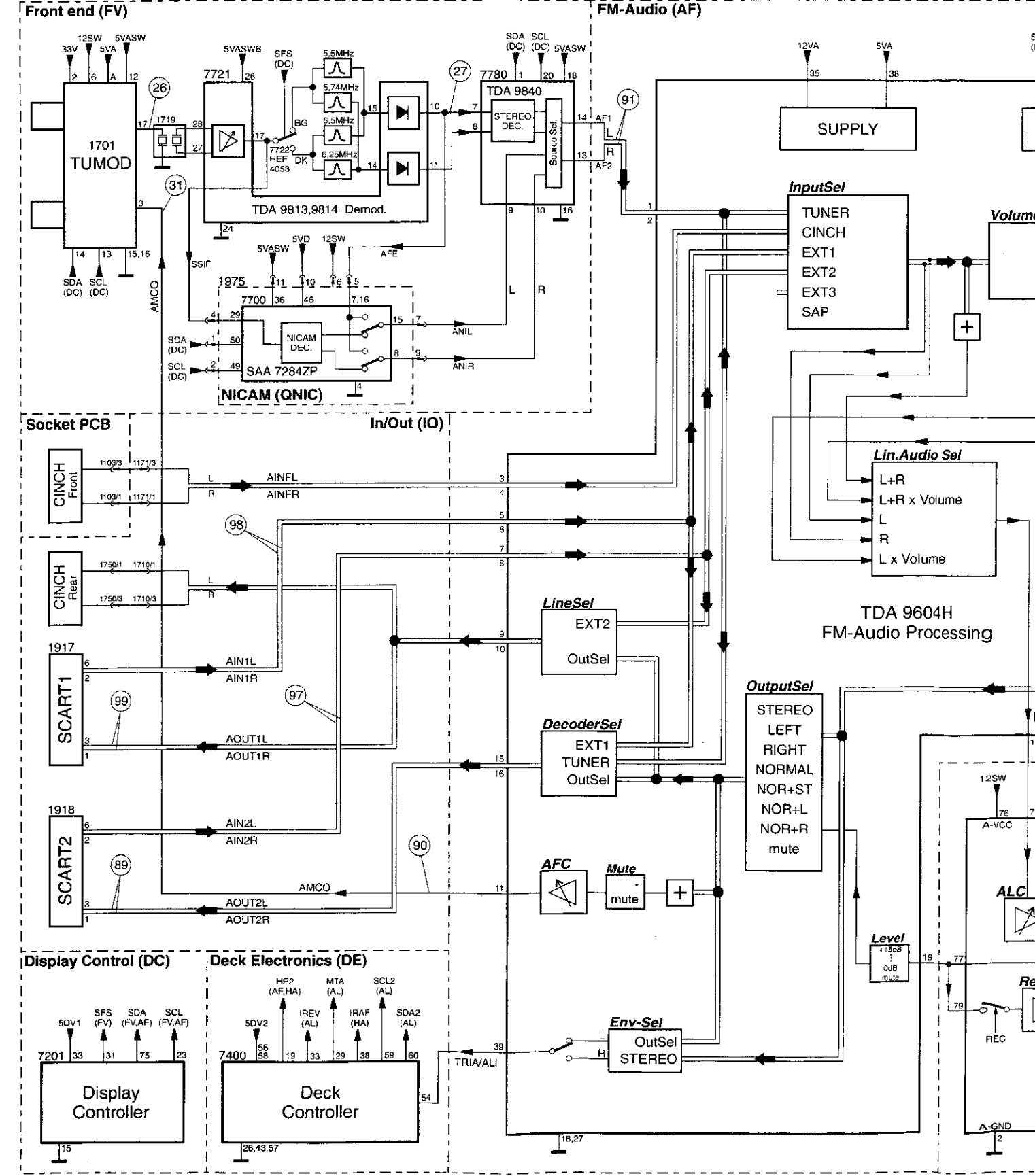
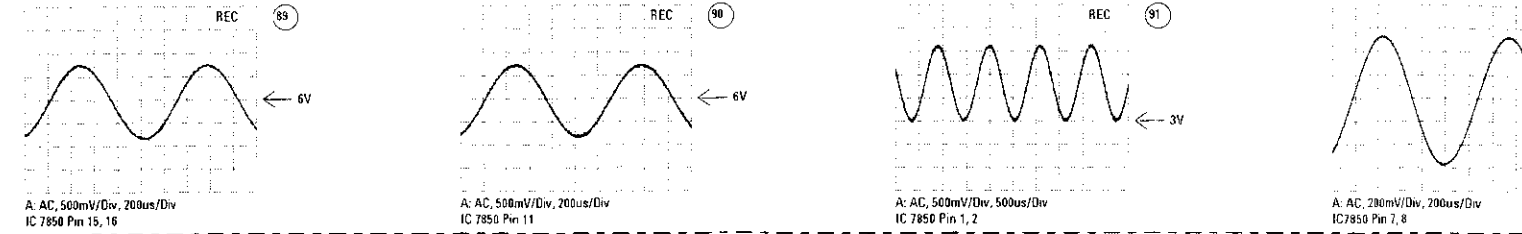


Interconnections:

AF page 3-16	AL page 3-12	DC page 3-11	DE page 3-10	FM page 3-17	FV page 3-15	HA, HV page 3-9
I/O page 3-13	OSD page 3-17	PS page 3-8	QNIC page 3-18	VP/PD page 3-17	VS page 3-12	VS_S page 3-14

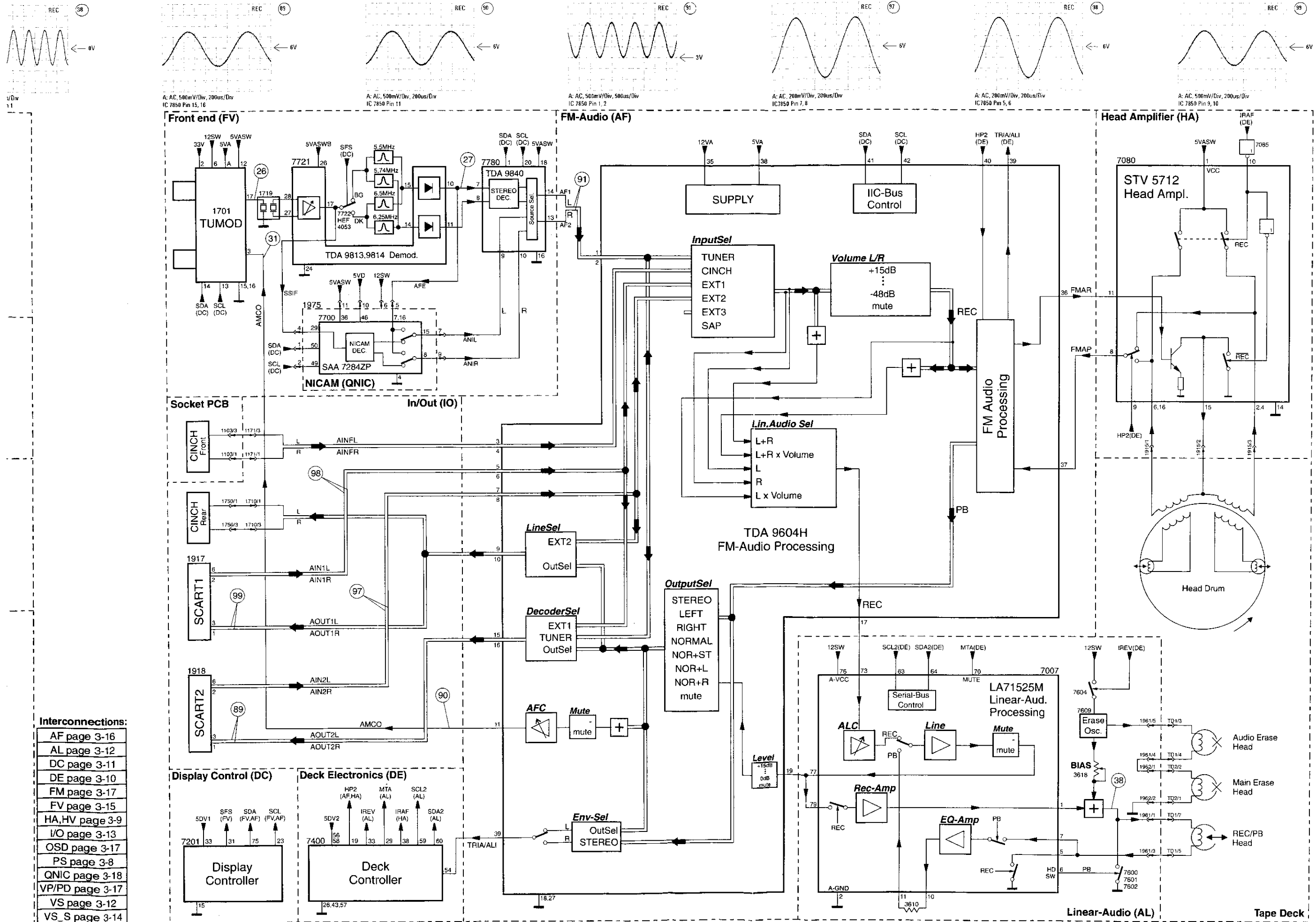


Block Diagram Audio Stereo



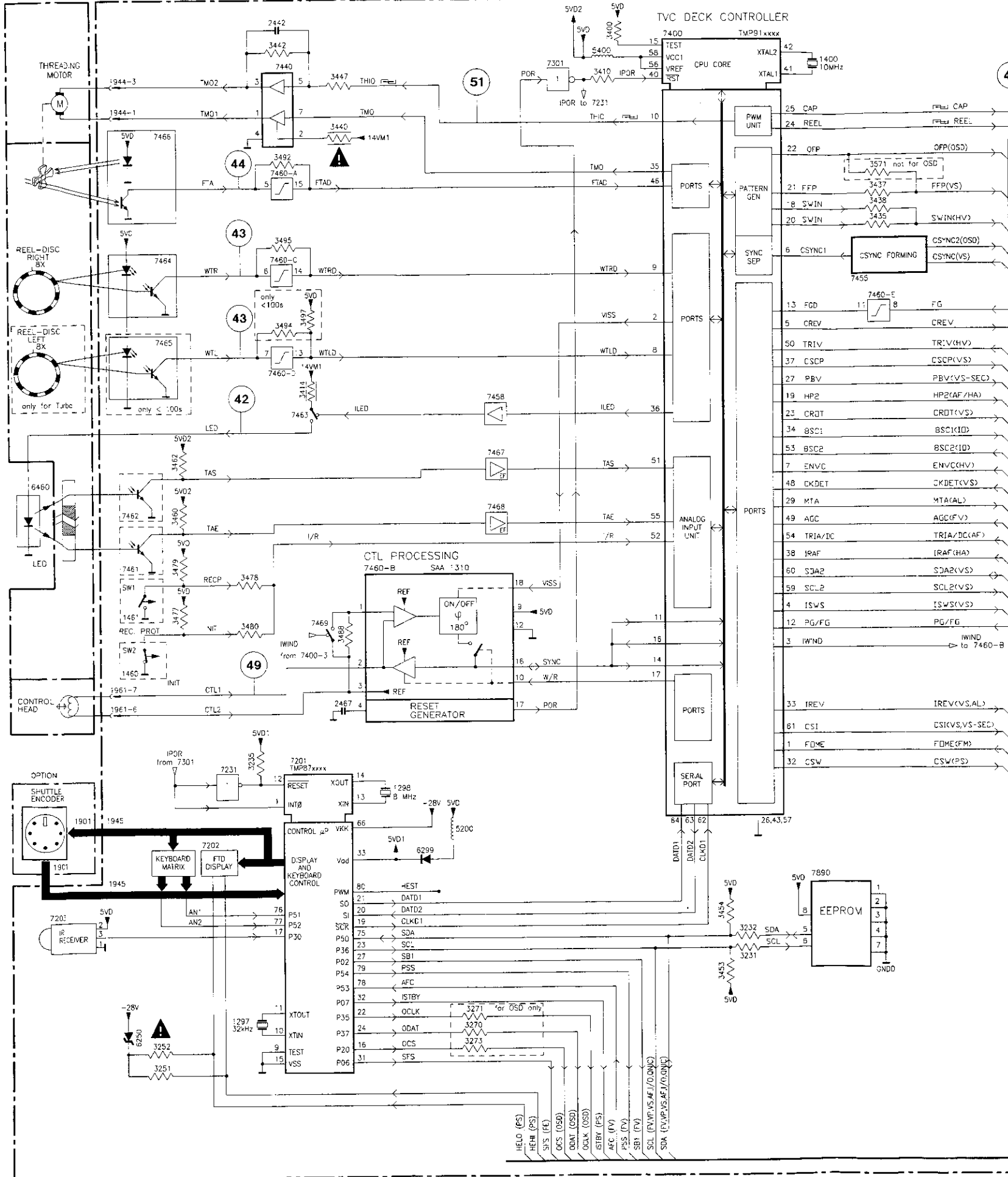
Interconnections
AF page 3-16
AL page 3-12
DC page 3-11
DE page 3-10
FM page 3-17
FV page 3-15
HA, HV page 3-9
I/O page 3-13
OSD page 3-17
PS page 3-8
QNIC page 3-18
VP/PD page 3-17
VS page 3-12
VS, S page 3-14

Block Diagram Audio Stereo

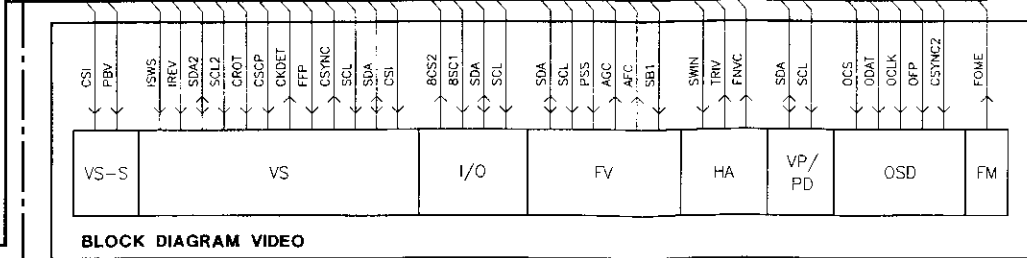
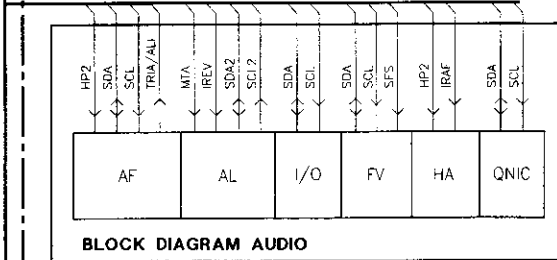
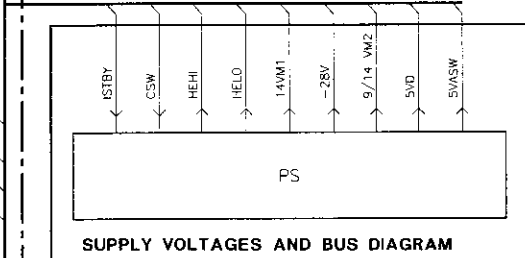
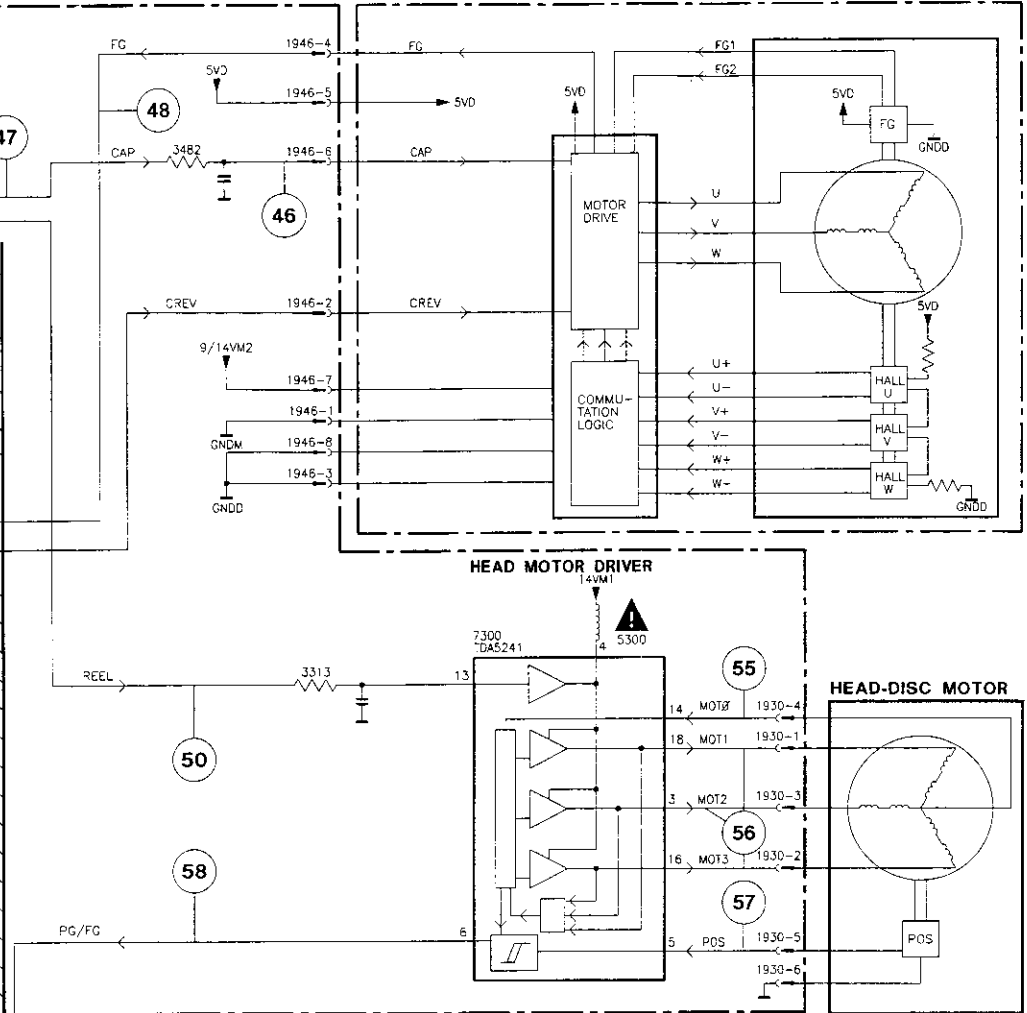


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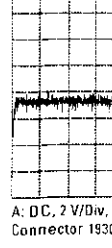
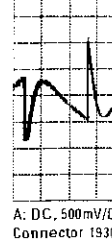
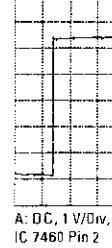
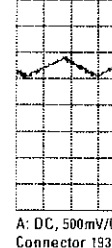
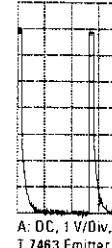
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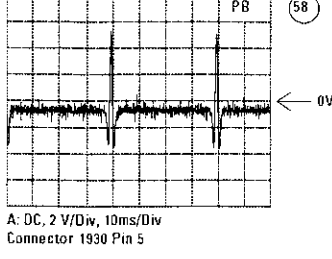
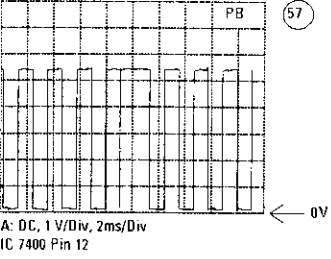
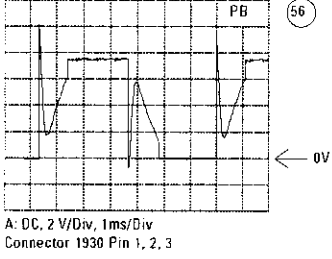
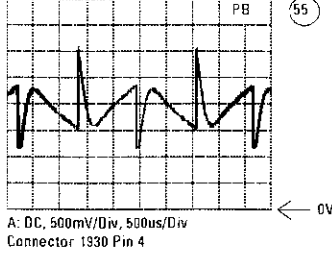
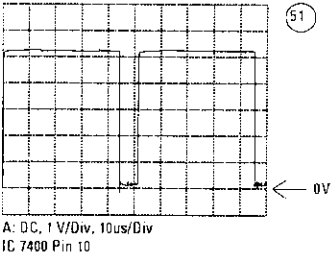
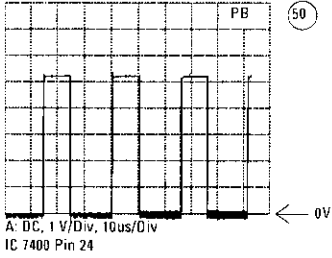
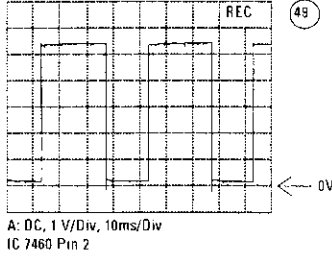
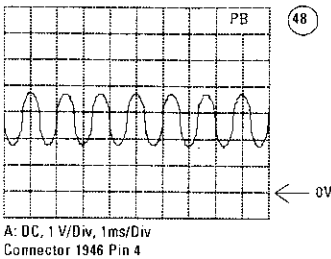
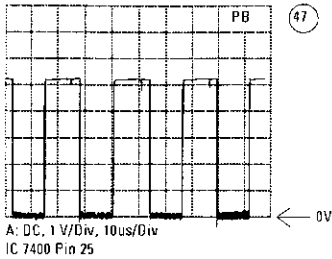
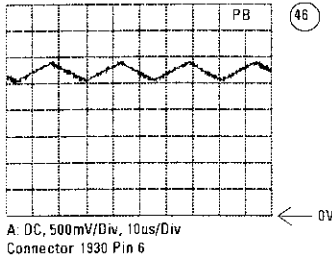
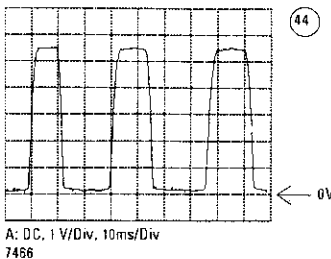
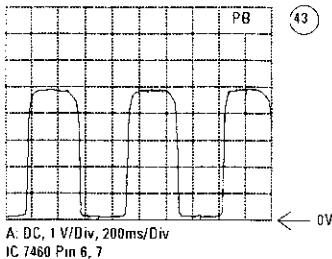
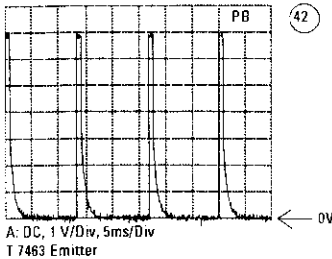
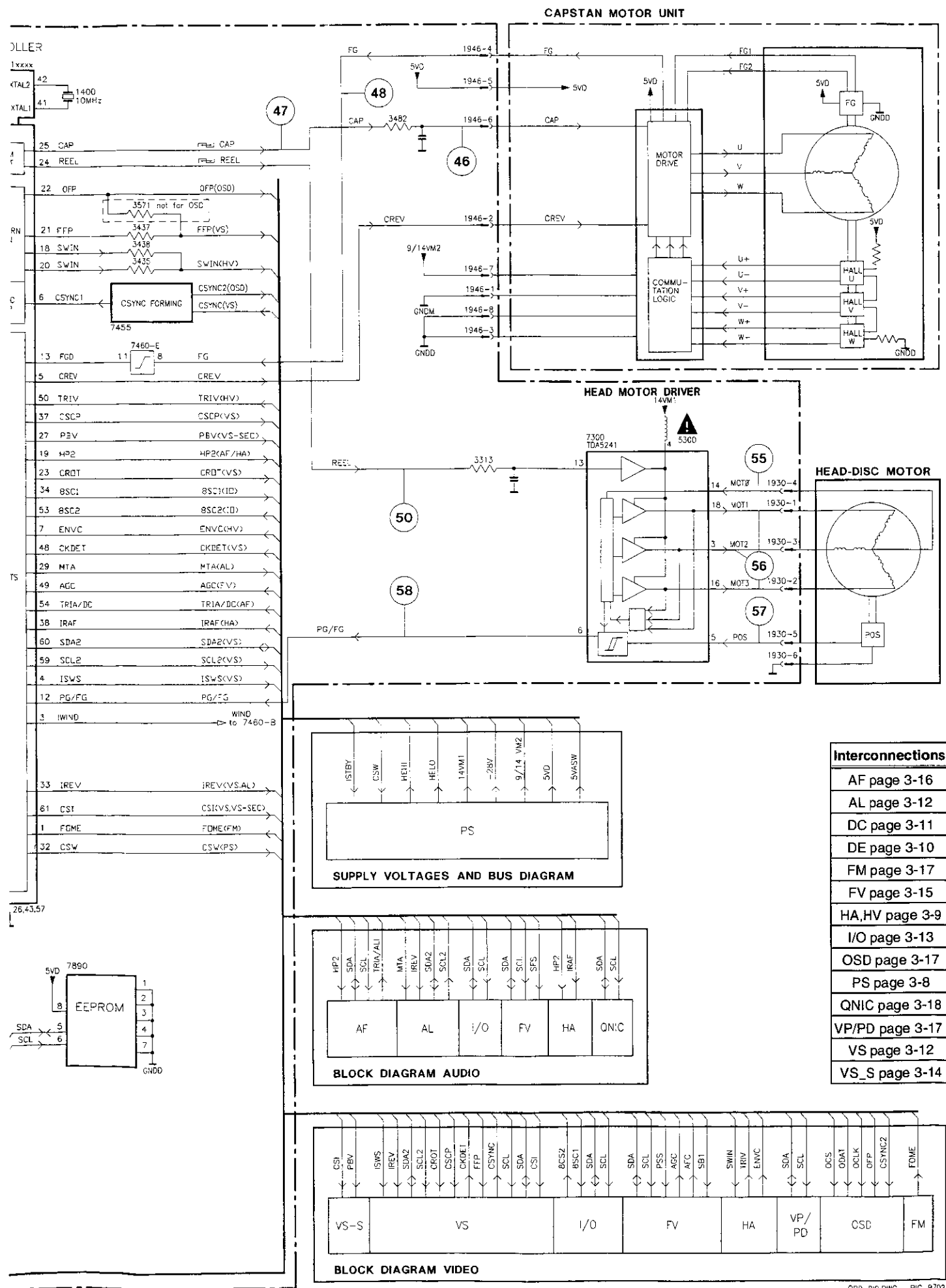


CAPSTAN MOTOR UNIT

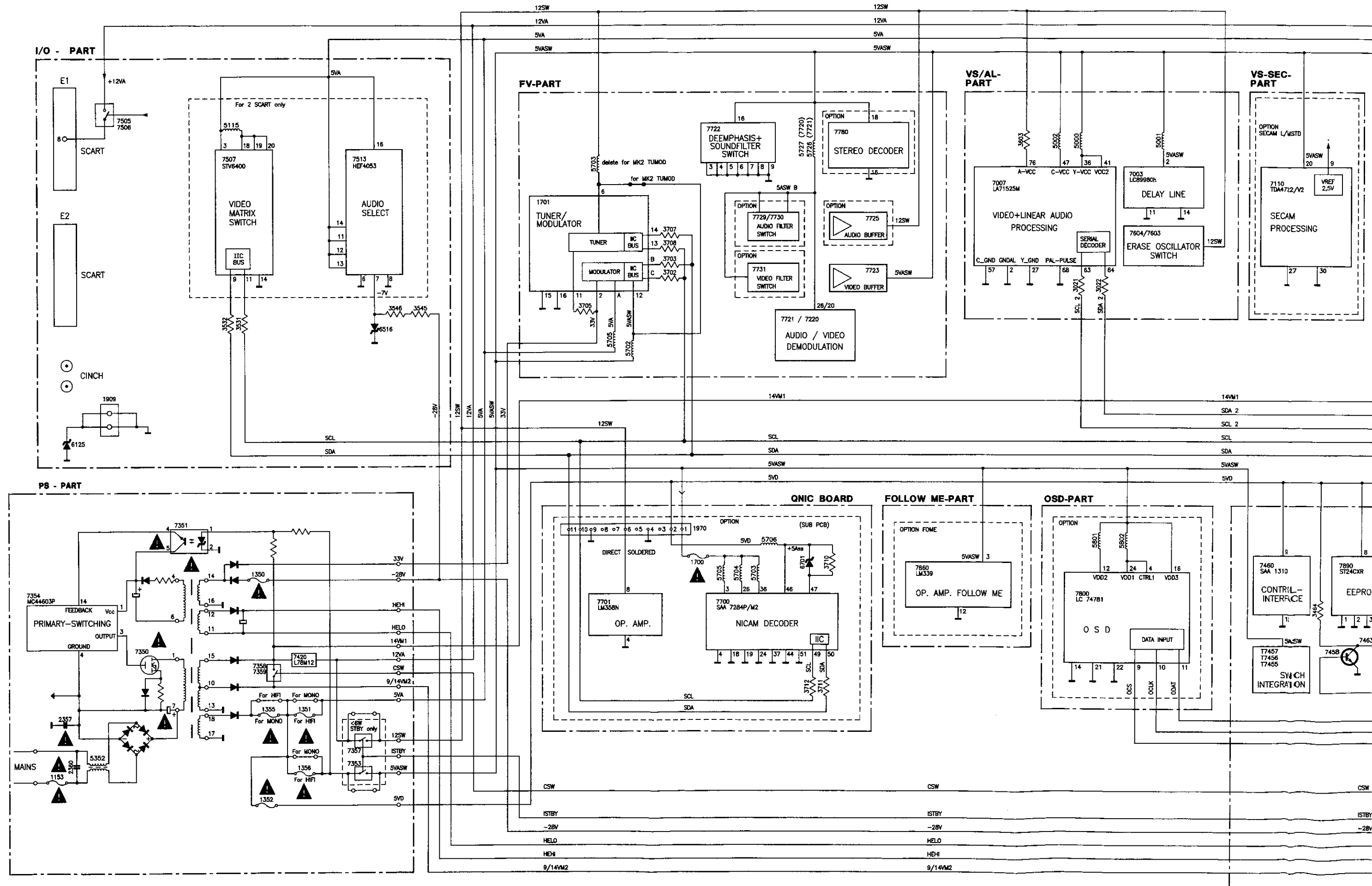


Interconnections	
AF	page 3-16
AL	page 3-12
DC	page 3-11
DE	page 3-10
FM	page 3-17
FV	page 3-15
HA, HV	page 3-9
I/O	page 3-13
OSD	page 3-17
PS	page 3-8
QNIC	page 3-18
VP/PD	page 3-17
VS	page 3-12
VS_S	page 3-14



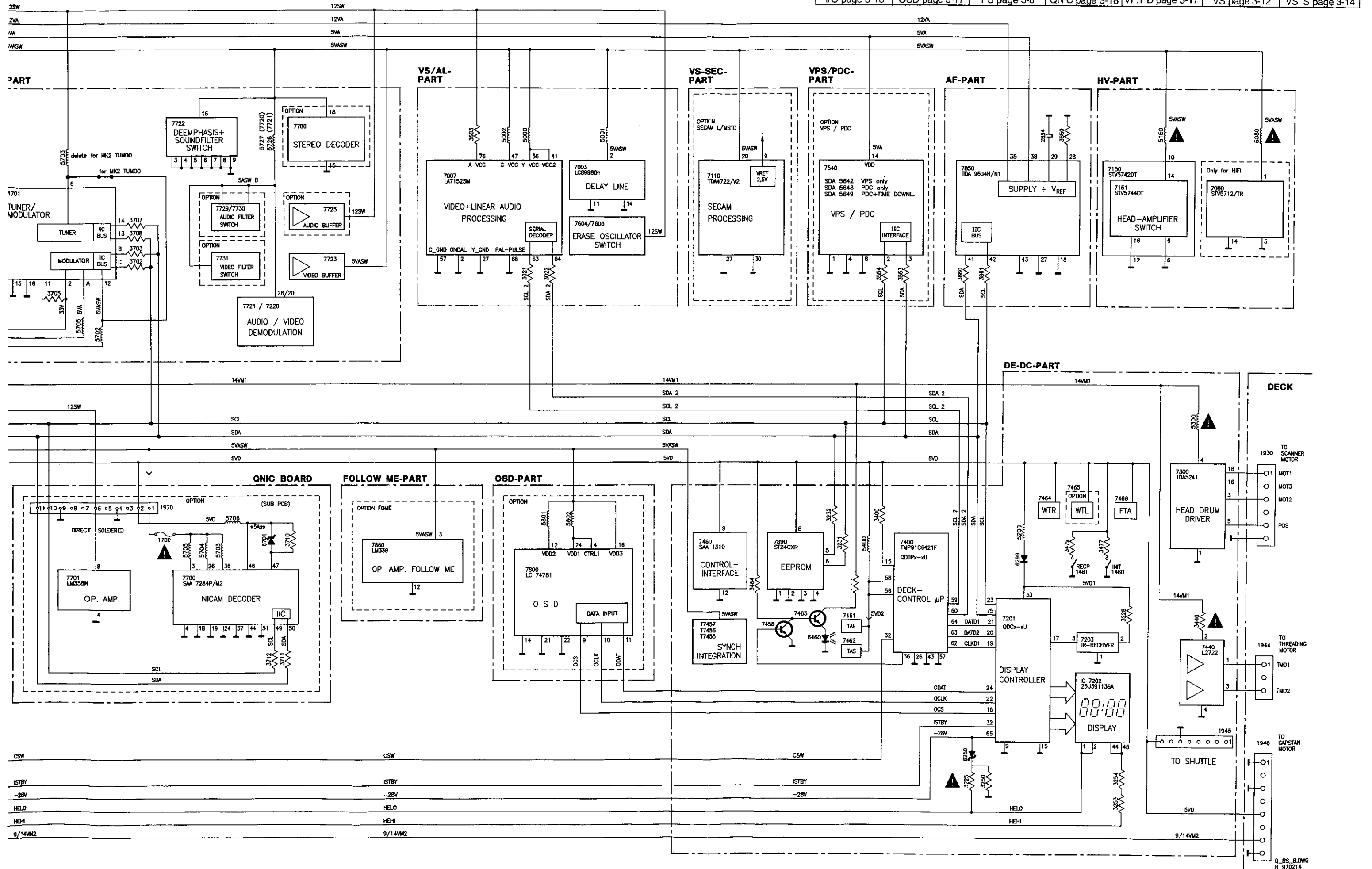


Supply Voltages and Bus Diagram



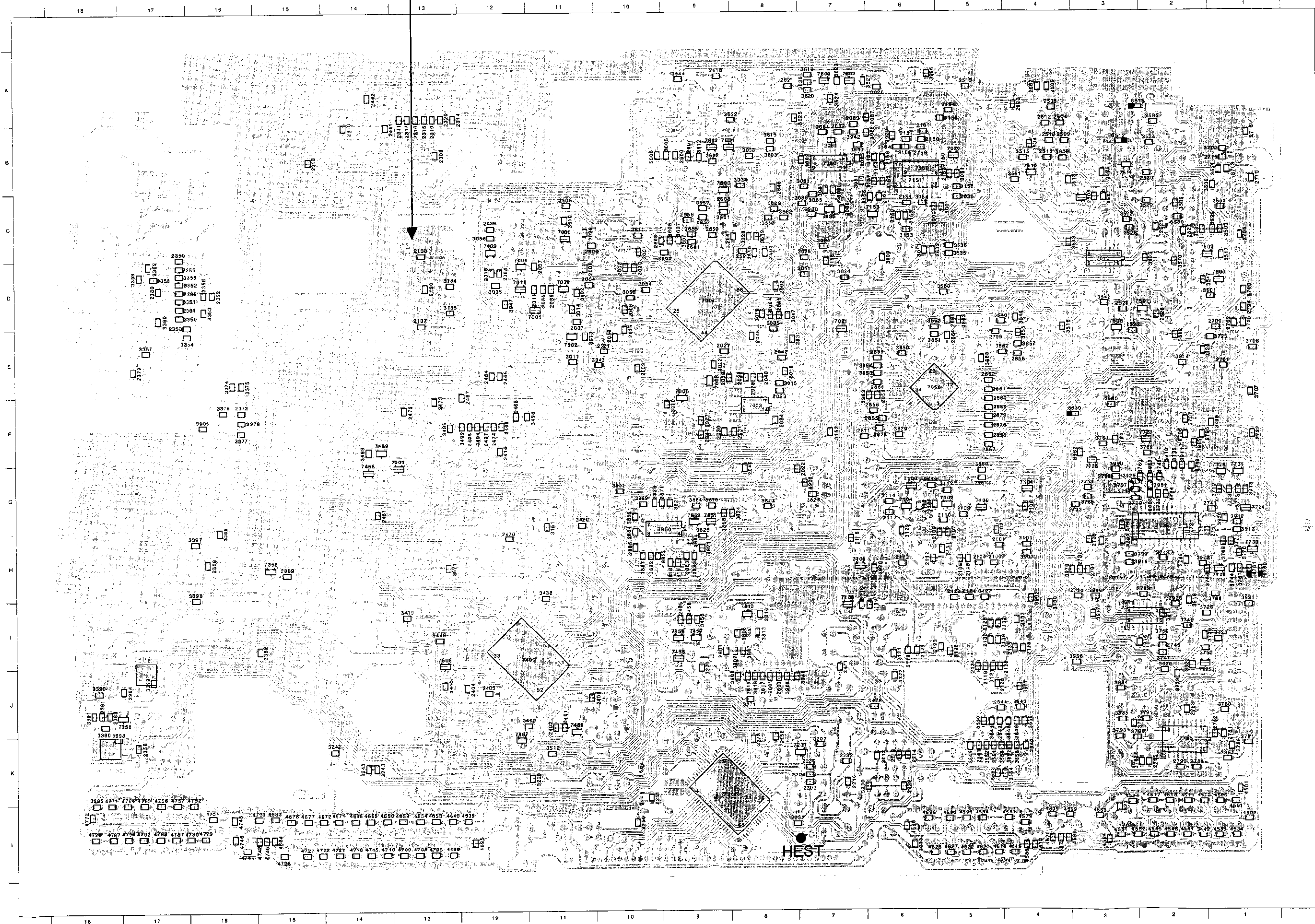
Interconnections:

AF page 3-16	AL page 3-12	DC page 3-11	DE page 3-10	FM page 3-17	FV page 3-15	HA, HV page 3-9
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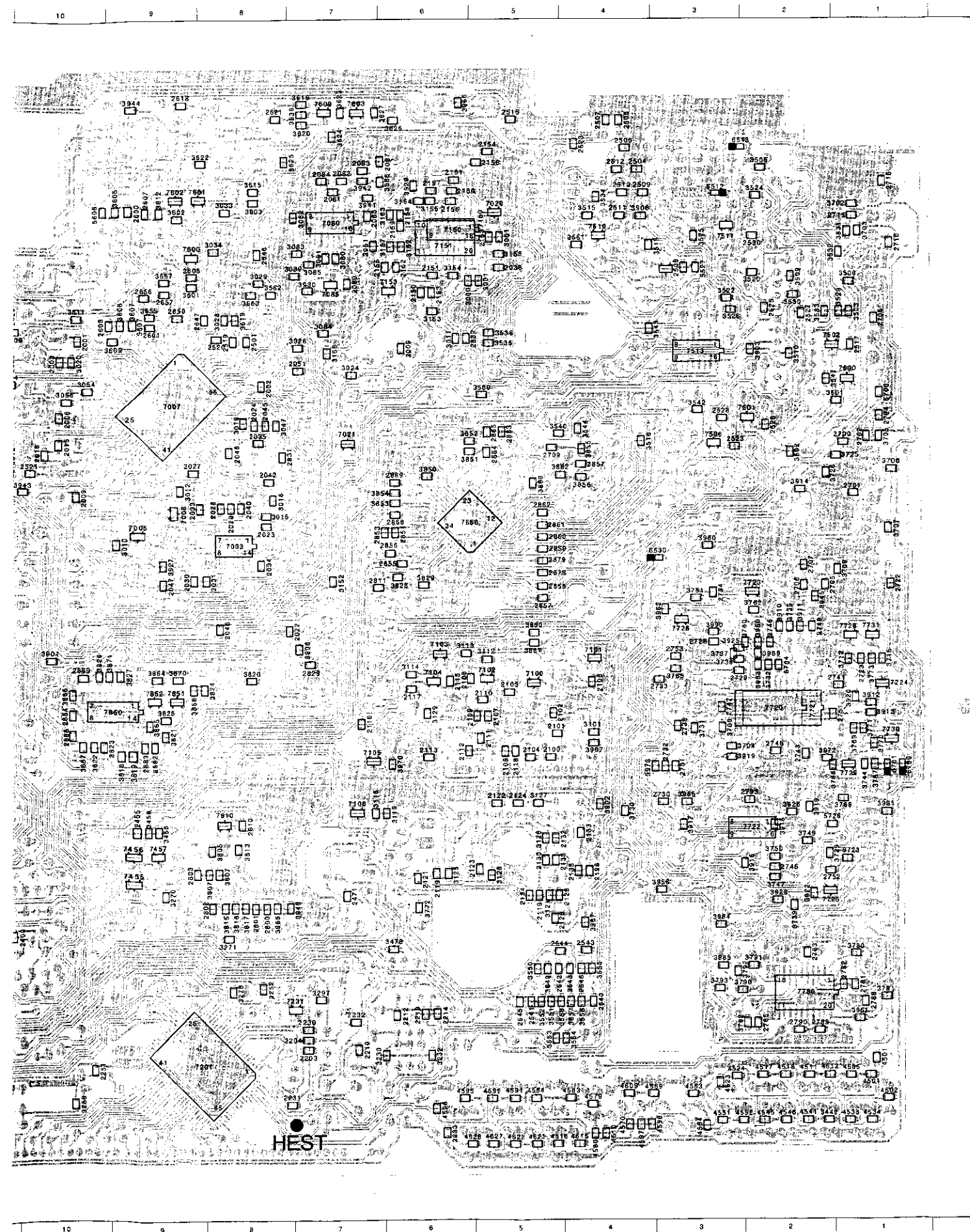


Mother Board AMB - solder side

Layout for cinch print rear



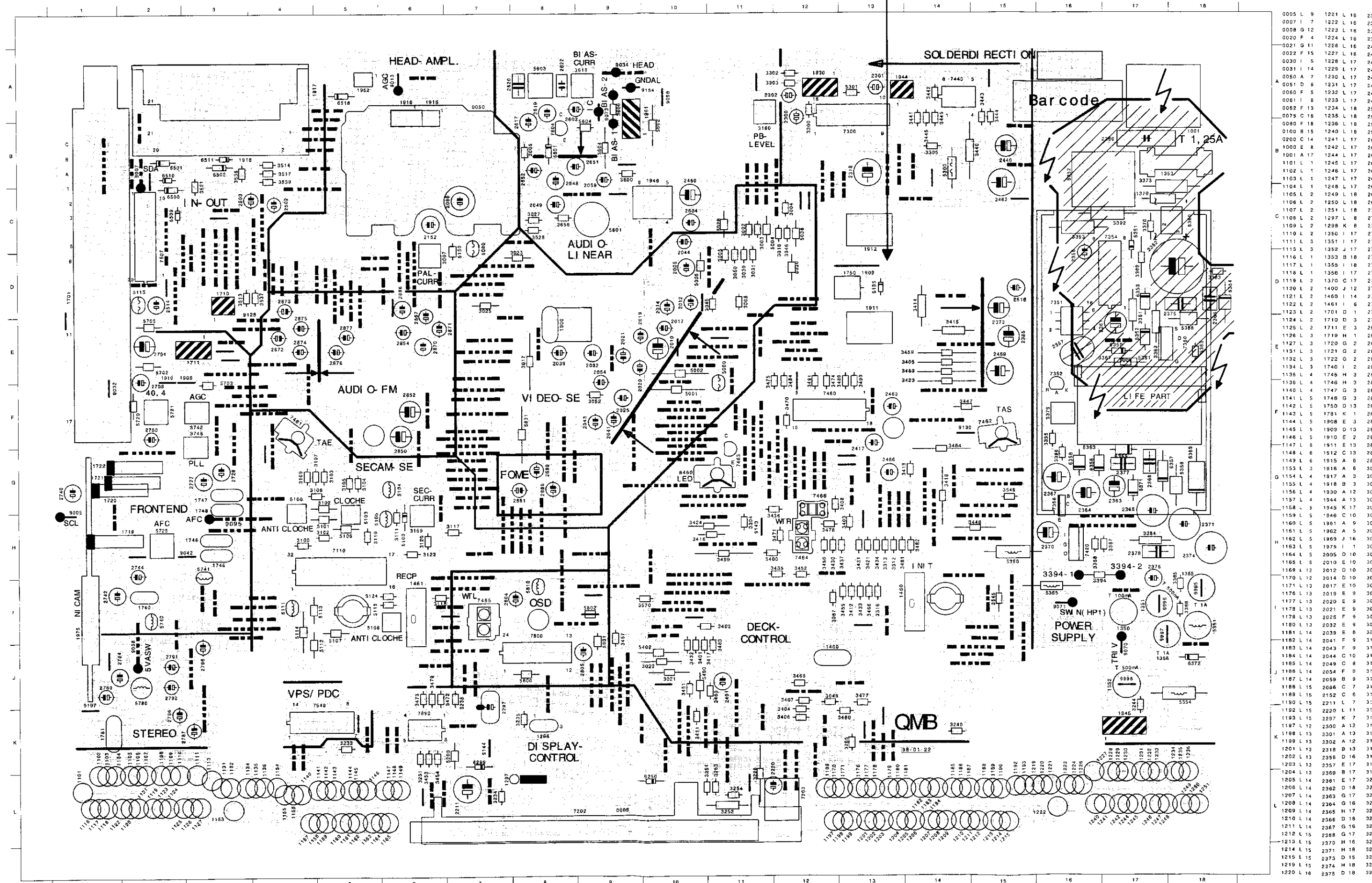
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2006 D 10	2352 D 16	2793 H 2	3355 D
2007 D 11	2353 D 17	2794 D 1	3356 D
2008 D 11	2354 J 17	2795 F 2	3357 E
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2011 E 11	2358 K 17	2801 J 8	3359 D
2013 D 11	2359 H 15	2802 J 8	3360 D
2015 E 10	2369 H 16	2803 I 9	3362 D
2016 E 10	2372 F 16	2810 I 8	3374 E
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2023 E 8	2381 D 17	2831 E 8	3377 F
2024 D 8	2383 J 18	2832 C 6	3378 F
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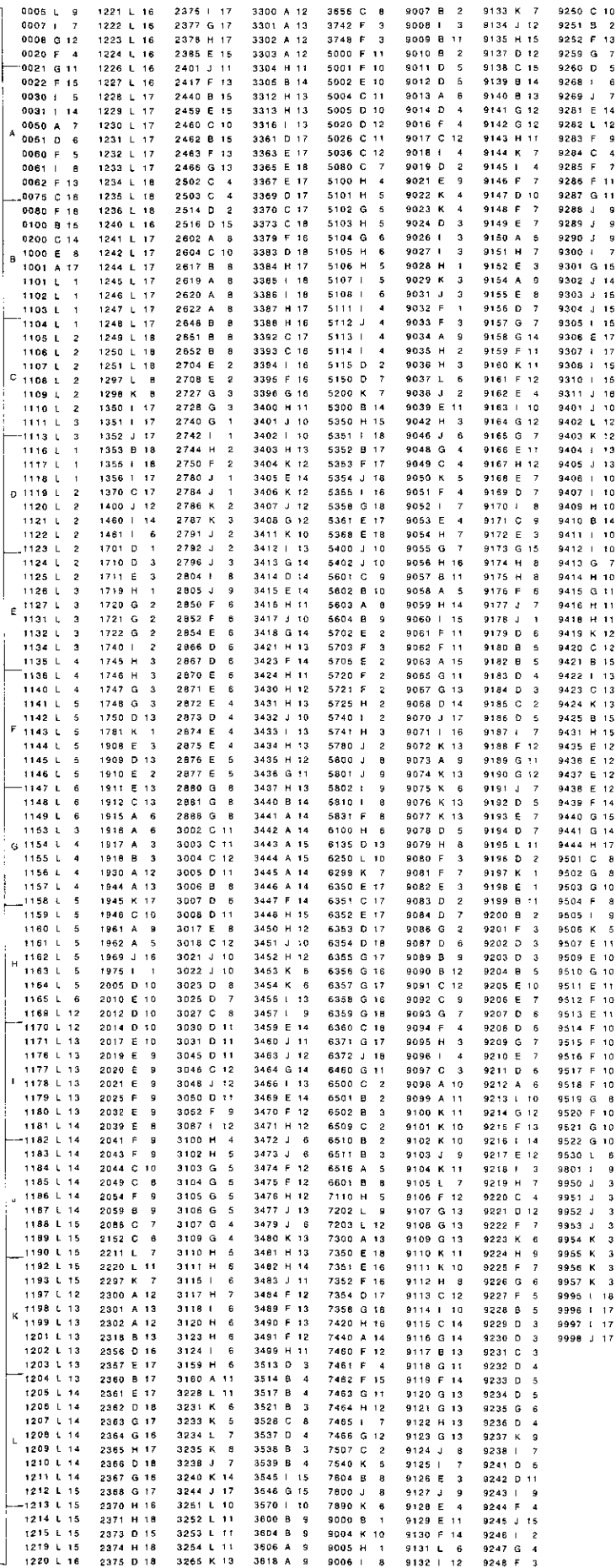
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2130 I 5	2621 A 8	3112 G 5	3544 D 4	3837 C 4	4665 L 14	7726 F 3
2132 I 5	2644 B 8	3113 G 6	3547 D 2	3838 G 9	4666 L 14	7728 G 1
2133 I 5	2647 C 6	3114 G 6	3548 J 4	3860 G 5	4671 L 14	7729 H 1
2134 J 5	2650 C 9	3116 I 7	3549 J 5	3861 G 5	4672 L 15	7730 H 1
2135 I 4	2656 C 9	3119 I 6	3550 J 5	3862 E 5	4677 L 15	7731 G 1
2137 D 13	2657 C 9	3121 J 5	3551 K 5	3863 E 5	4678 L 15	7780 K 2
2138 C 13	2700 E 1	3122 I 4	3552 K 5	3864 G 9	4683 L 15	7810 I 8
2150 C 6	2701 E 1	3125 I 6	3553 K 5	3865 H 9	4684 L 15	7850 E 6
2151 C 6	2702 D 1	3126 I 5	3554 K 4	3866 G 10	4695 L 12	7851 G 9
2153 B 5	2705 C 1	3127 I 5	3555 J 4	3867 H 10	4696 L 13	7852 G 9
2154 A 5	2706 F 2	3128 I 5	3556 K 4	3870 G 9	4703 L 13	7860 G 9
2155 C 6	2707 F 2	3129 H 6	3557 K 4	3871 G 10	4704 L 13	
2156 B 6	2709 E 5	3134 D 13	3558 K 5	3901 G 10	4709 L 13	
2157 B 6	2710 B 1	3135 D 13	3560 D 5	3902 I 4	4710 L 14	
2158 B 6	2715 B 1	3151 G 11	3561 B 4	3903 D 2	4715 L 14	
2159 B 6	2716 B 1	3152 F 7	3562 C 8	3905 F 16	4716 L 14	
2160 B 6	2722 F 1	3153 C 6	3563 C 8	3906 G 7	4721 L 14	
2161 B 6	2723 G 1	3154 C 6	3571 H 13	3907 H 4	4722 L 15	
2162 C 6	2726 G 3	3155 B 5	3601 C 5	3908 B 4	4727 L 15	
2163 C 6	2729 G 3	3156 A 5	3602 B 9	3910 G 2	4728 L 15	
2203 K 7	2730 I 3	3157 B 6	3603 B 8	3911 G 2	4739 L 15	
2204 K 7	2731 H 3	3158 D 7	3605 B 9	3912 G 1	4740 L 15	
2210 K 7	2732 H 3	3162 B 6	3607 C 9	3913 H 1	4741 L 16	
2212 K 6	2733 G 3	3163 B 6	3608 C 9	3914 E 2	4742 L 15	
2213 K 6	2734 F 3	3164 B 6	3609 C 9	3915 I 2	4745 L 16	
2214 K 6	2735 H 3	3165 B 6	3610 C 11	3916 I 2	4746 L 16	
2230 K 7	2741 G 1	3229 K 11	3611 C 10	3917 I 3	4751 L 16	
2231 L 8	2743 H 2	3230 K 6	3612 B 9	3918 H 3	4752 L 16	
2232 K 7	2745 I 2	3232 K 6	3615 B 8	3919 I 2	4757 L 17	
2233 L 6	2746 G 2	3241 K 14	3619 A 7	3922 J 2	4758 L 17	
2251 K 10	2747 G 3	3242 K 14	3620 A 7	3923 G 1	4763 L 17	
2252 K 8	2748 H 2	3243 K 14	3622 A 8	3925 G 3	4764 L 17	
2308 B 13	2749 G 2	3245 L 18	3623 A 7	3926 I 2	4771 L 18	
2310 B 14	2751 H 2	3250 L 10	3624 A 7	3927 F 9	4772 L 18	
2311 A 13	2752 I 2	3270 J 9	3625 A 8	3928 J 2	4779 L 16	
2313 B 15	2753 G 3	3271 J 8	3626 A 6	3929 B 6	4780 L 16	
2314 A 13	2761 K 1	3273 K 8	3627 A 7	3930 C 7	4787 L 17	
2315 A 13	2762 K 1	3297 K 7	3638 A 7	3931 I 1	4788 L 17	
2316 A 13	2783 J 2	3350 D 17	3655 C 9	3941 B 7	4793 L 17	

Mother Board AMB - component side

Layout for cinch print rear



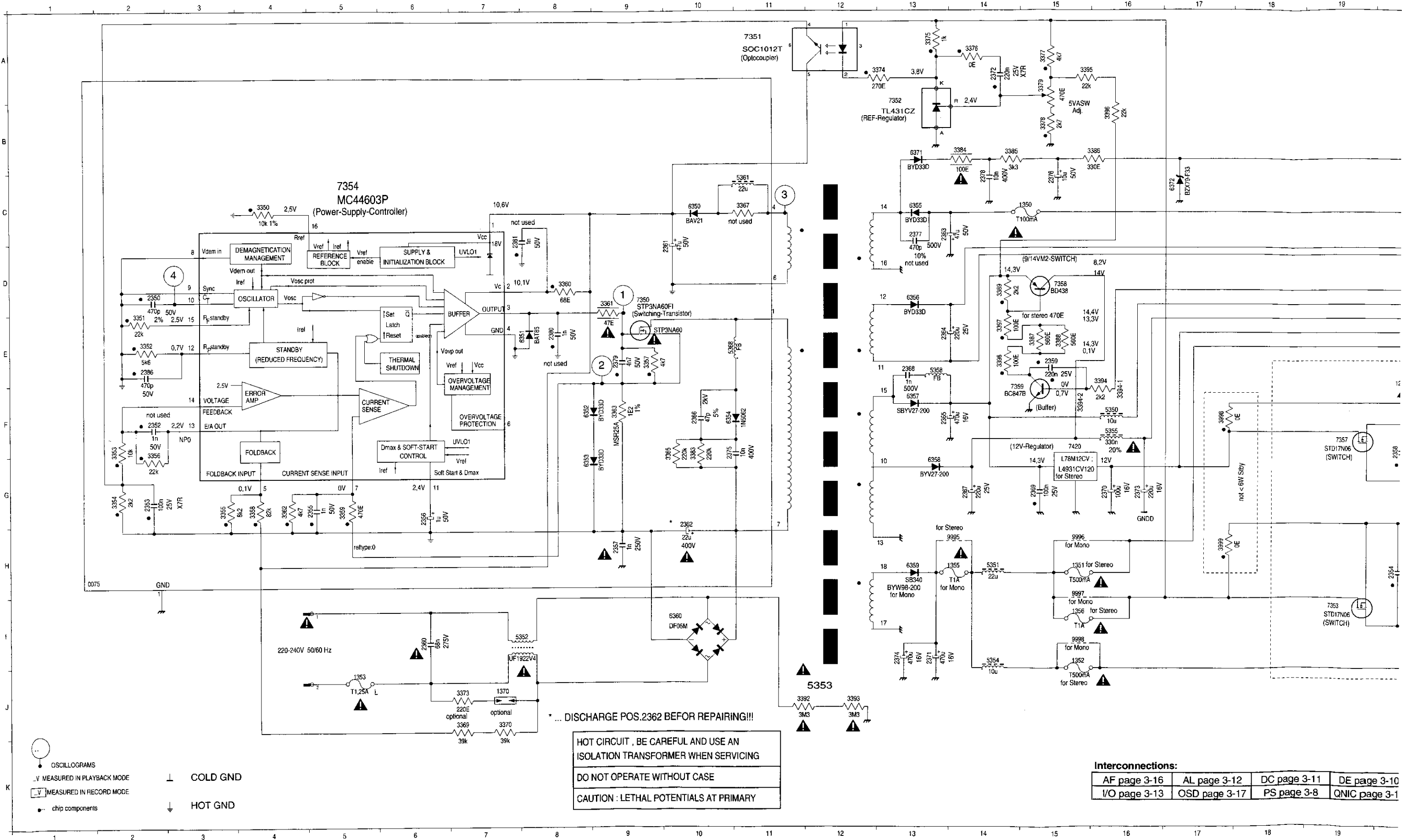
0005	L	9	1221	L	16	237
0007	I	7	1222	L	16	237
0008	G	12	1223	L	16	237
0020	F	4	1224	L	16	237
0021	G	11	1225	L	16	237
0022	F	15	1227	L	16	237
0030	I	5	1228	L	17	240
0031	I	14	1229	L	17	240
0050	A	7	1230	L	17	240
0051	D	6	1231	L	17	240
0050	F	5	1232	L	17	240
0061	I	8	1233	L	17	240
0062	F	13	1234	L	18	240
0075	C	18	1235	L	18	240
0080	F	18	1236	L	18	240
0100	B	15	1240	L	16	25
0200	C	14	1241	L	17	260
1000	E	8	1242	L	17	260
1001	A	17	1244	L	17	260
1101	L	1	1245	L	17	260
1102	L	1	1246	L	17	260
1103	L	1	1247	L	17	260
1104	L	1	1248	L	17	260
1105	L	2	1249	L	18	260
1106	L	2	1250	L	18	260
1107	L	2	1251	L	18	260
1108	L	2	1297	L	8	270
1109	L	2	1298	K	8	270
1110	L	2	1350	L	17	270
1111	L	3	1351	L	17	270
1113	L	3	1352	J	17	270
1116	L	1	1353	B	18	270
1117	L	1	1355	L	18	270
1118	L	1	1356	L	17	270
1119	L	2	1370	C	17	270
1120	L	2	1400	J	12	270
1121	L	2	1460	L	14	270
1122	L	2	1461	G	6	270
1123	L	2	1701	D	1	270
1124	L	2	1710	D	3	270
1125	L	2	1711	E	3	260
1126	L	3	1719	H	1	280
1127	L	3	1720	G	2	280
1131	L	3	1721	G	2	280
1132	L	3	1722	G	2	280
1134	L	3	1740	I	2	280
1135	L	4	1745	H	3	280
1136	L	4	1746	H	3	280
1140	L	4	1747	G	3	280
1141	L	5	1748	G	3	280
1142	L	5	1750	D	13	280
1143	L	5	1781	K	1	280
1144	L	5	1908	E	3	280
1145	L	5	1909	D	13	280
1146	L	5	1910	E	2	280
1147	L	6	1911	E	13	280
1148	L	6	1912	C	13	280
1149	L	6	1915	A	6	280
1153	L	3	1918	A	6	300
1154	L	4	1917	A	3	300
1155	L	4	1918	B	3	300
1156	L	4	1930	A	12	300
1157	L	4	1944	A	13	300
1158	L	5	1945	K	17	300
1159	L	5	1946	C	10	300
1160	L	5	1951	A	9	300
1161	L	5	1962	A	5	300
1162	L	5	1969	J	16	300
1163	L	5	1975	I	1	300
1164	L	5	2005	D	10	300
1165	L	6	2010	E	10	300
1166	L	6	2012	D	10	300
1170	L	12	2014	D	10	300
1171	L	13	2017	E	10	300
1176	L	13	2019	E	9	300
1177	L	13	2020	E	9	300
1178	L	13	2021	E	9	300
1179	L	13	2025	F	9	300
1180	L	13	2032	E	9	300
1181	L	14	2035	E	8	300
1182	L	14	2041	F	9	310
1183	L	14	2043	F	9	310
1184	L	14	2044	C	10	310
1185	L	14	2049	C	8	310
1186	L	14	2054	F	9	310
1187	L	14	2059	B	9	310
1188	L	15	2068	C	7	310
1189	L	15	2152	C	6	310
1190	L	15	2211	L	7	310
1192	L	15	2220	L	11	310
1193	L	15	2297	K	7	310
1197	L	12	2300	A	12	310
1198	L	13	2301	A	12	310
1199	L	13	2302	A	12	310
1201	L	13	2318	B	13	310
1202	L	13	2356	D	16	310
1203	L	13	2357	E	17	310
1204	L	13	2360	B	17	310
1205	L	14	2361	E	17	320
1206	L	14	2362	D	18	320
1207	L	14	2363	G	17	320
1208	L	14	2364	G	18	320
1209	L	14	2365	H	17	320
1210	L	14	2366	D	18	320
1211	L	14	2367	G	18	320
1212	L	15	2368	G	17	320
1213	L	15	2370	H	16	320
1214	L	15	2371	H	15	320
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1219	L	15	2374	H	18	320
1220	L	16	2375	D	18	320

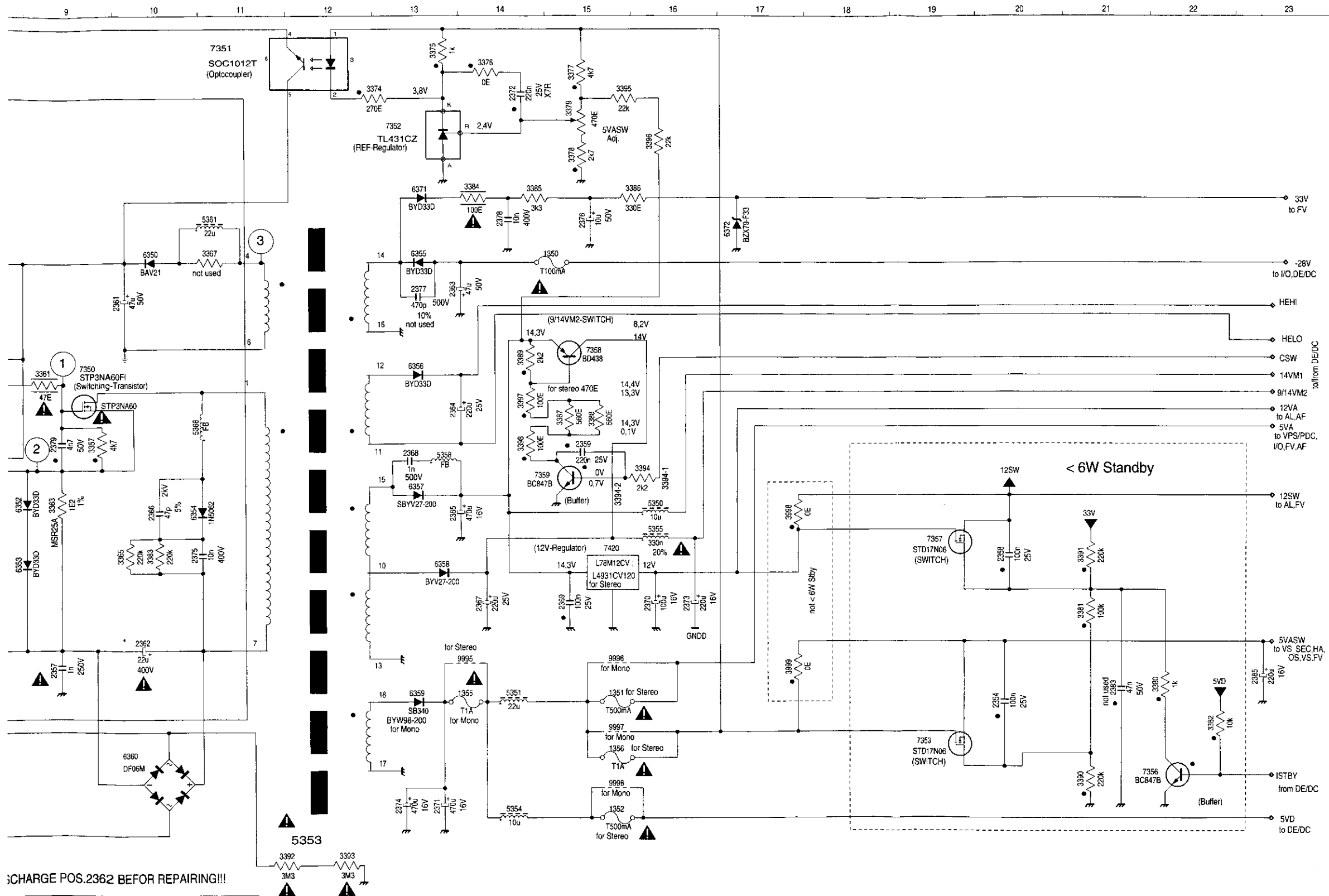


The image contains four diagrams illustrating different types of structural supports:

- Top Left:** A horizontal beam is shown with a fixed support at its left end. The support is represented by a vertical wall and a horizontal line with a double arrow pointing to the right, indicating that the beam is fixed against rotation and translation.
- Top Right:** A horizontal beam is shown with a roller support at its left end. The support is represented by a vertical wall and a single arrow pointing to the right, indicating that the beam is free to rotate and translate horizontally.
- Bottom Left:** A horizontal beam is shown with a pin support at its left end. The support is represented by a vertical wall and a single arrow pointing to the right, indicating that the beam is free to rotate and translate horizontally.
- Bottom Right:** A horizontal beam is shown with a fixed support at its left end. The support is represented by a vertical wall and a double arrow pointing to the right, indicating that the beam is fixed against rotation and translation.

Power Supply (PS)





CHARGE POS.2362 BEFORE REPAIRING!!!

HOT CIRCUIT, BE CAREFUL AND USE AN ISOLATION TRANSFORMER WHEN SERVICING

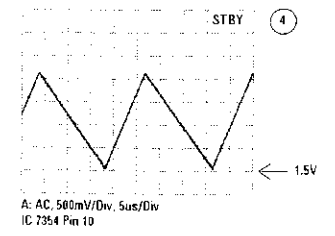
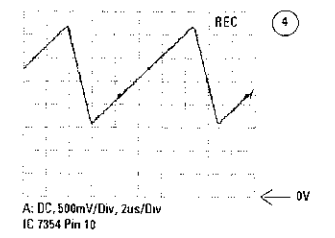
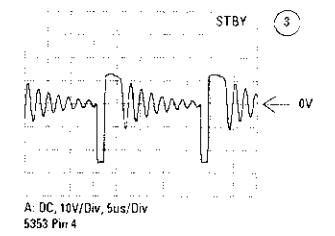
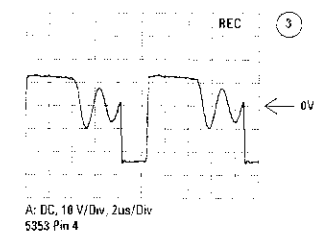
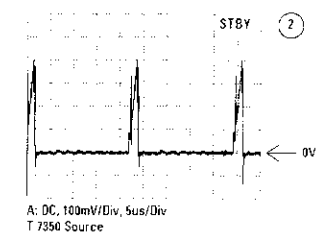
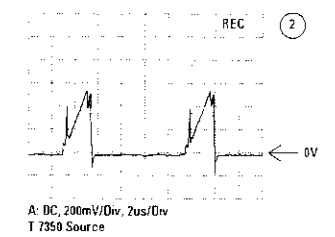
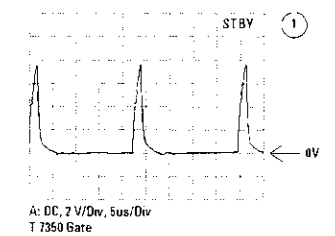
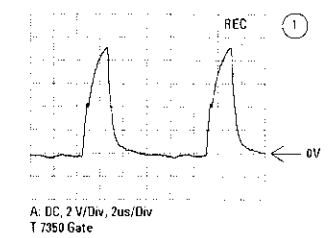
DO NOT OPERATE WITHOUT CASE

CAUTION: LETHAL POTENTIALS AT PRIMARY

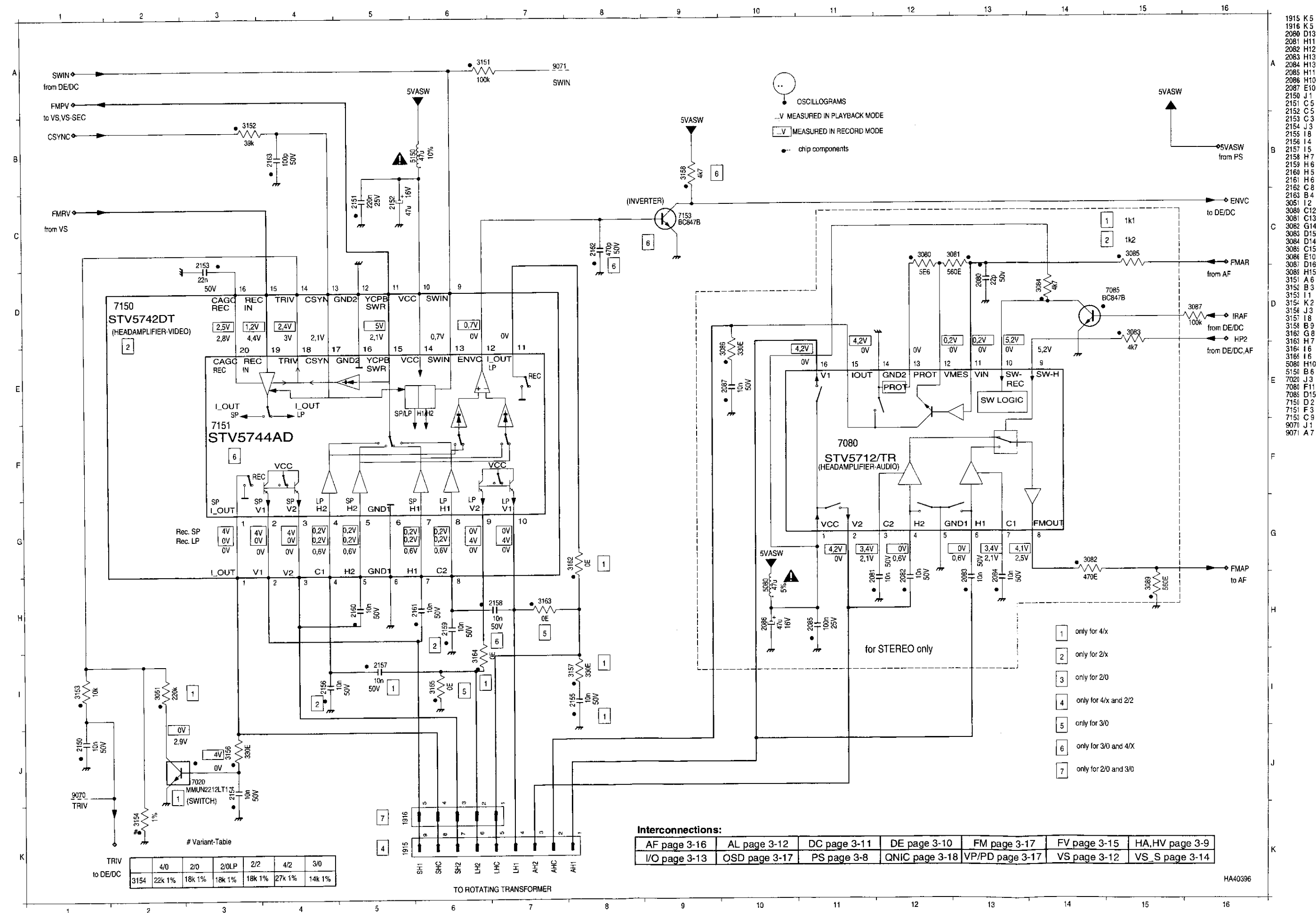
Interconnections:

AF page 3-16	AL page 3-12	DC page 3-11	DE page 3-10	FM page 3-17	FV page 3-15	HA,HV page 3-9
I/O page 3-13	OSD page 3-17	PS page 3-8	QNIC page 3-18	VP/PD page 3-17	VS page 3-12	VS_S page 3-14

- 0075 H 1
- 1350 C15
- 1351 H15
- 1352 I15
- 1353 J5
- 1355 H14
- 1356 I15
- 1370 J7
- 2350 D2
- 2352 F2
- 2353 G2
- 2354 H20
- 2355 G5
- 2356 G6
- 2357 H9
- 2358 F20
- 2359 E15
- 2360 I6
- 2361 D10
- 2362 H10
- 2363 C13
- 2364 E13
- 2365 F13
- 2366 F10
- 2367 G14
- 2368 E13
- 2369 G15
- 2370 G16
- 2371 I13
- 2372 A14
- 2373 G16
- 2374 I13
- 2375 F10
- 2376 C15
- 2377 C13
- 2378 C14
- 2379 E9
- 2380 E8
- 2381 C7
- 2382 H21
- 2383 H23
- 2384 E2
- 2385 C4
- 2386 E2
- 2387 F2
- 2388 G2
- 2389 G3
- 2390 F2
- 2391 G3
- 2392 G4
- 2393 G5
- 2394 D8
- 2395 D9
- 2396 G4
- 2397 F9
- 2398 F10
- 2399 C11
- 2400 J7
- 2401 J7
- 2402 A13
- 2403 A13
- 2404 A15
- 2405 B15
- 2406 H22
- 2407 G21
- 2408 H22
- 2409 F10
- 2410 B14
- 2411 B14
- 2412 B16
- 2413 E15
- 2414 E15
- 2415 D14
- 2416 I21
- 2417 F21
- 2418 J11
- 2419 J12
- 2420 E15
- 2421 A15
- 2422 B16
- 2423 E14
- 2424 E14
- 2425 F17
- 2426 H17
- 2427 F16
- 2428 H14
- 2429 I8
- 2430 J12
- 2431 I14
- 2432 F16
- 2433 E13
- 2434 C11
- 2435 E10
- 2436 C10
- 2437 E8
- 2438 F8
- 2439 G8
- 2440 F10
- 2441 C13
- 2442 D13
- 2443 F13
- 2444 G13
- 2445 H13
- 2446 I10
- 2447 B13
- 2448 C17
- 2449 D9
- 2450 A11
- 2451 B13
- 2452 I9
- 2453 C5



Head Amplifier (HA)



1915 K5
1916 K5
2080 D13
2081 H11
2082 H12
2083 H13
2084 H13
2085 H11
2086 H10
2087 E10
2150 J1
2151 C5
2152 C5
2153 C3
2154 J3
2155 I8
2156 I4
2157 I5
2158 H7
2159 H6
2160 H5
2161 H6
2162 C8
2163 B4
3051 I2
3088 C12
3081 C13
3082 G14
3083 D15
3084 D14
3085 C15
3086 E10
3087 D18
3088 H15
3151 A6
3152 B3
3153 I1
3154 J3
3155 I8
3156 B9
3162 G8
3163 H7
3164 I6
3165 I6
5088 H10
5150 B6
7020 J3
7080 F11
7085 D15
7150 D2
7151 F3
7152 C9
9070 J1
9071 A7

42 PB
A: DC, 1 V/Div, 5ms/Div
T 7463 Emitter
← 0V

43 PB
A: DC, 1 V/Div, 200ms/Div
IC 7460 Pin 6, 7
← 0V

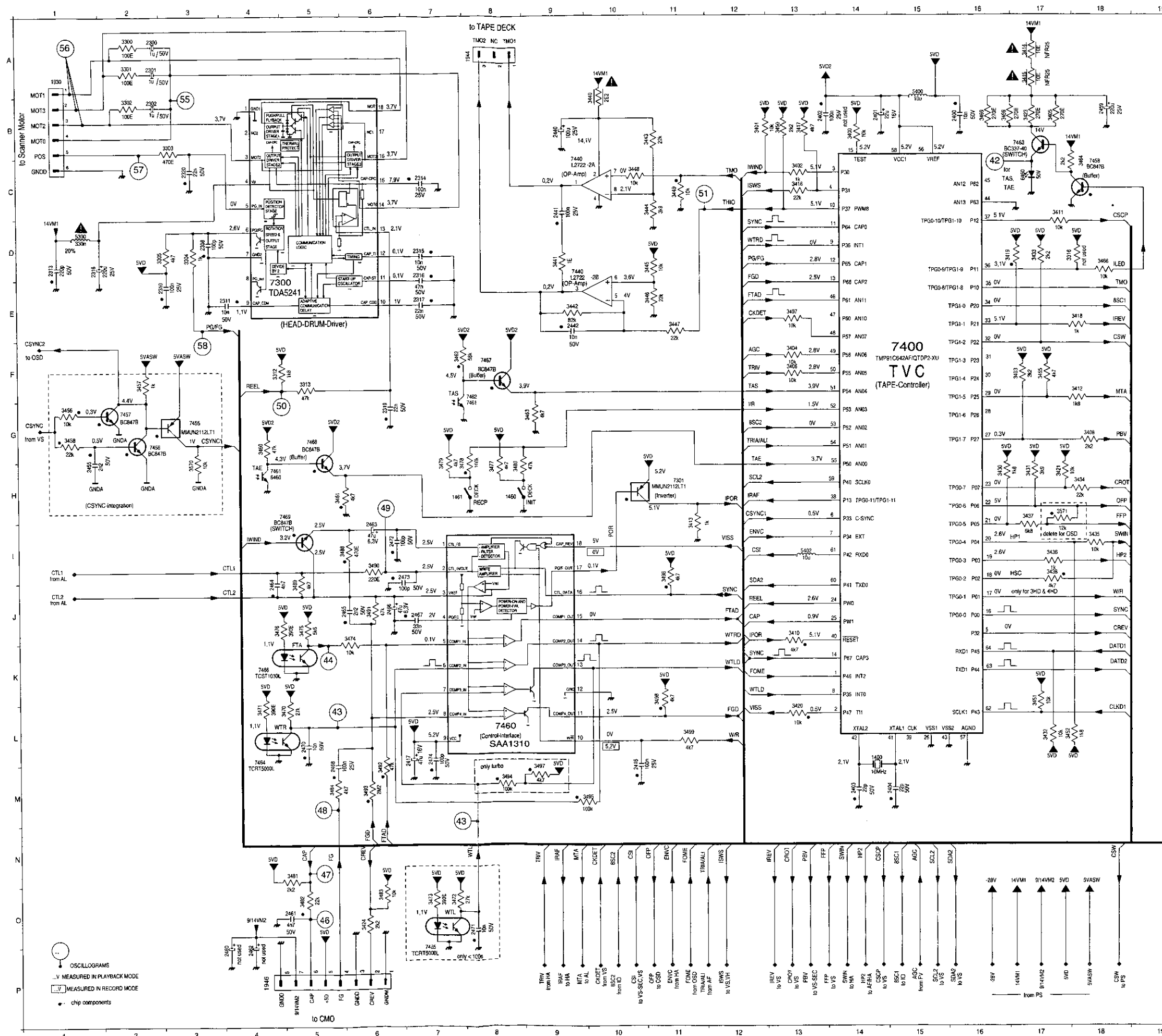
44
A: DC, 1 V/Div, 10ms/Div
7485
← 0V

46 PB
A: DC, 500mV/Div, 10us/Div
Connector 1330 Pin 6
← 0V

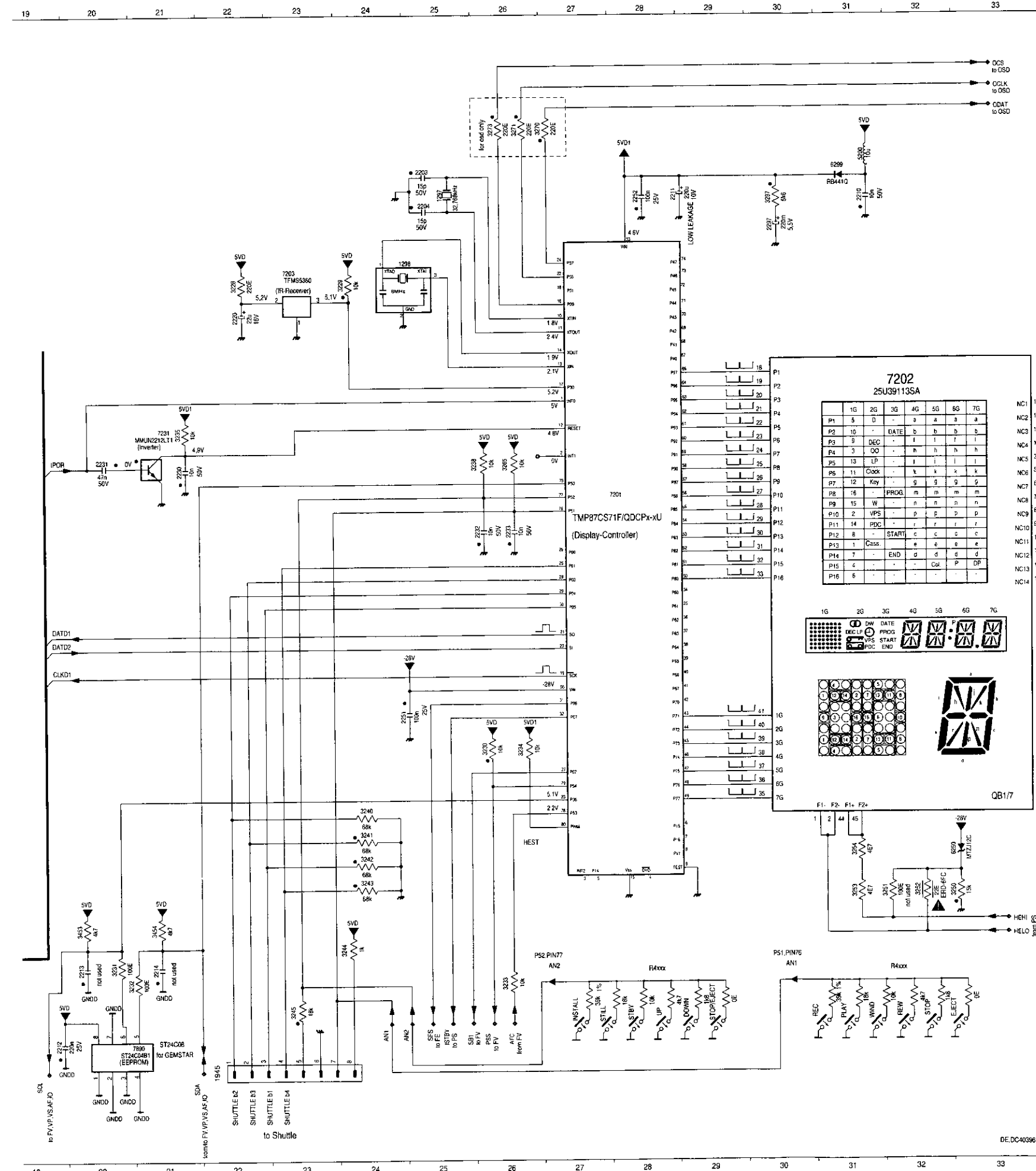
47 PB
A: DC, 1 V/Div, 10us/Div
IC 7400 Pin 25
← 0V

48 PB
A: DC, 1 V/Div, 1ms/Div
Connector 1946 Pin 4
← 0V

49 REC
A: DC, 1 V/Div, 10ms/Div
IC 7460 Pin 2
← 0V

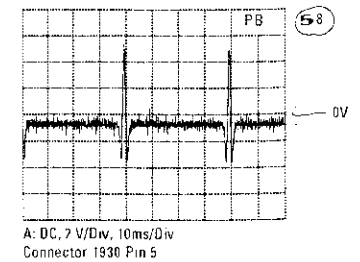
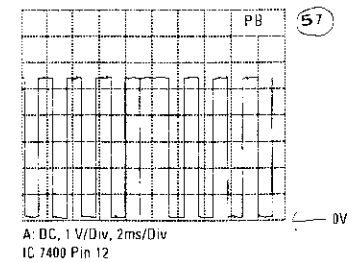
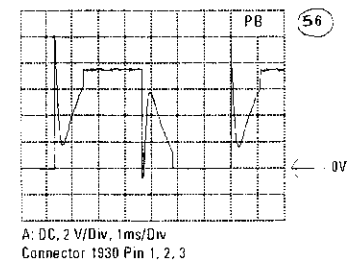
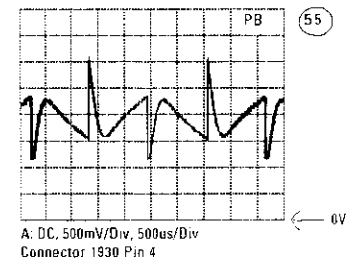
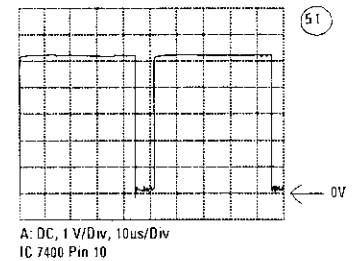
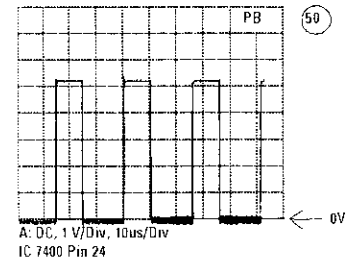


Display Control (DC)



Interconnections:

AF	page 3-16
AL	page 3-12
DC	page 3-11
DE	page 3-10
FM	page 3-17
FV	page 3-15
HA,HV	page 3-9
I/O	page 3-13
OSD	page 3-17
PS	page 3-8
QNIC	page 3-18
VP/PD	page 3-17
VS	page 3-12
VS_S	page 3-14

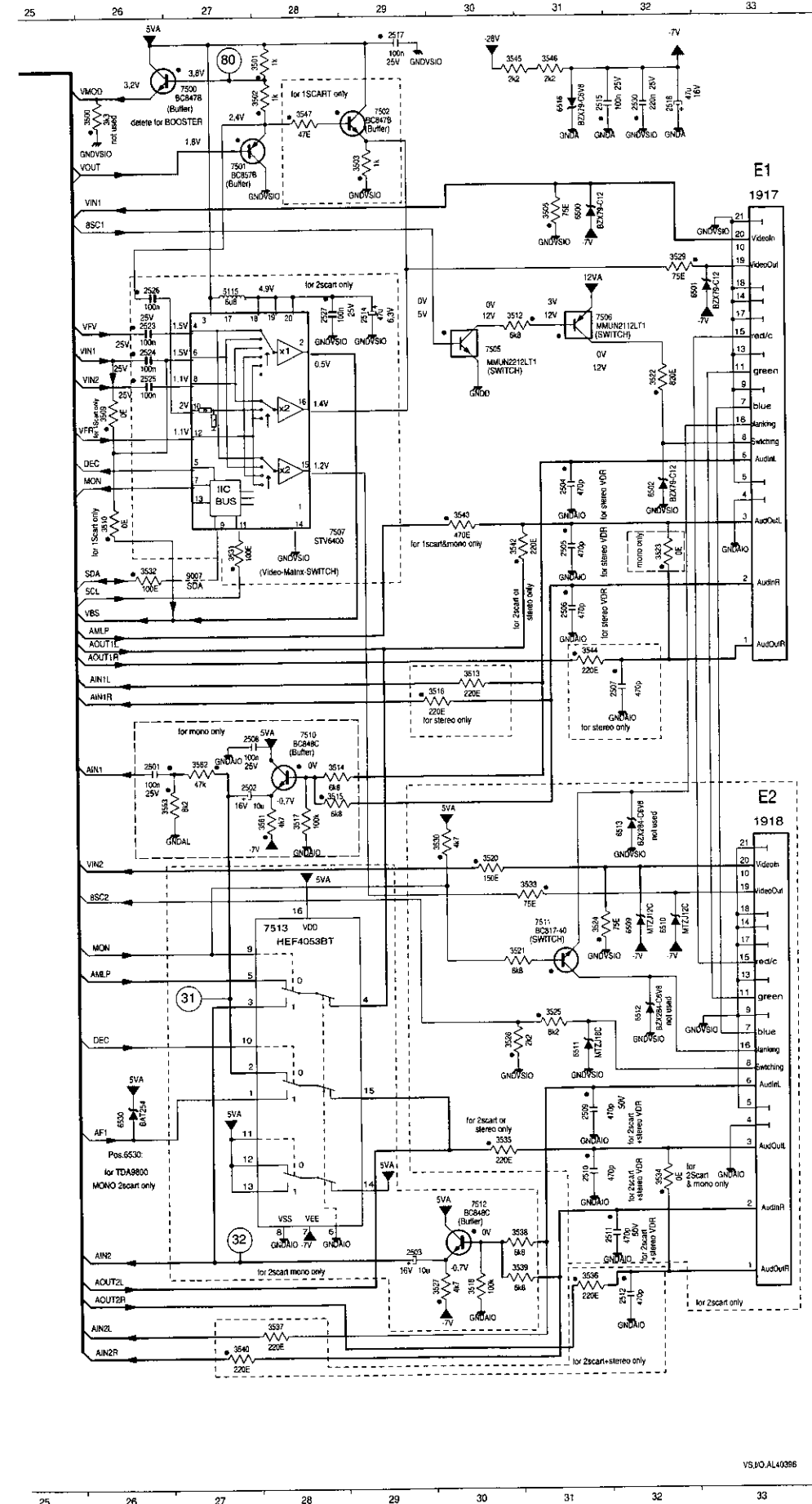


Keyfunction	4xxx	Voltage pin77
AN2		P52
STOP/EJECT	0E	0V
DOWN	1k8	0.808V
UP	4k7	1.695V
STBY	10k	2.65V
STILL	18k	3.41V
INSTALL	39k	4.22V

Keyfunction	4xxx	Voltage pin76
AN1		P51
EJECT	0E	0V
STOP	1k8	0.808V
REWIND	4k7	1.695V
WIND	10k	2.65V
PLAY	18k	3.41V
RECORD	39k	4.22V

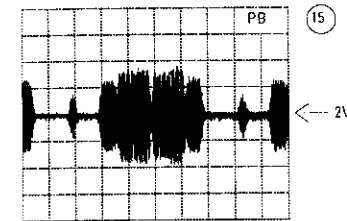
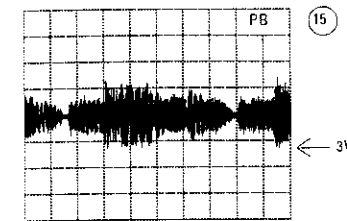
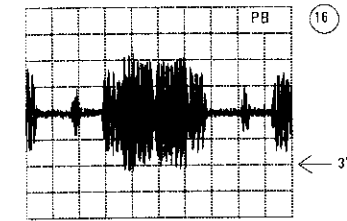
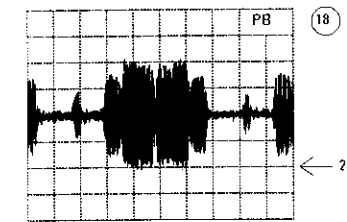
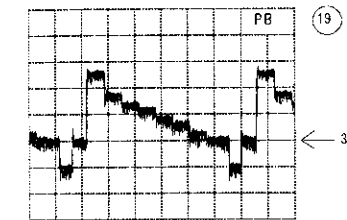
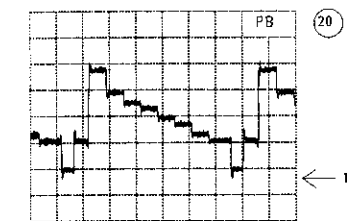
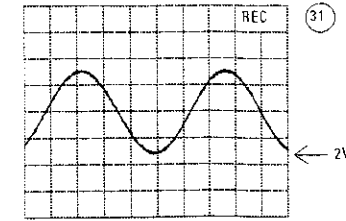
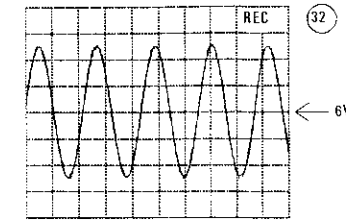
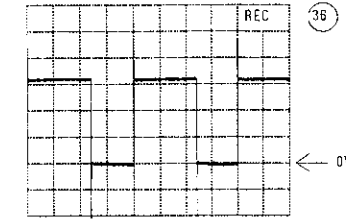
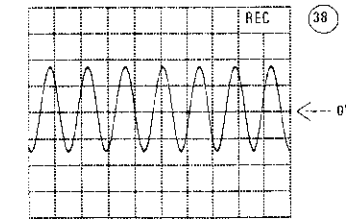
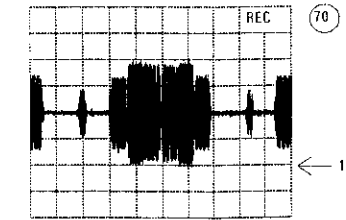
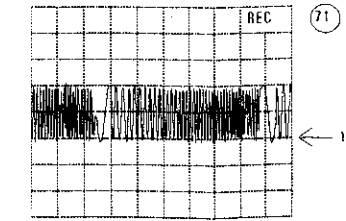
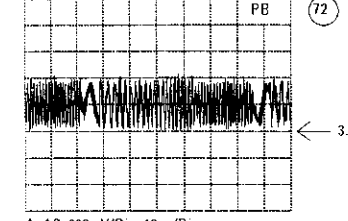
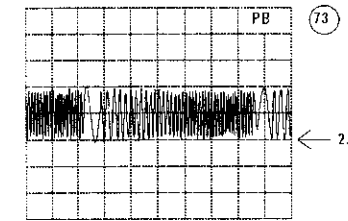
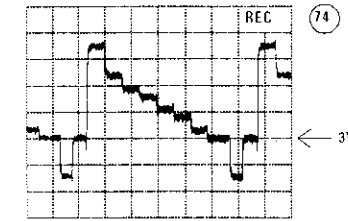
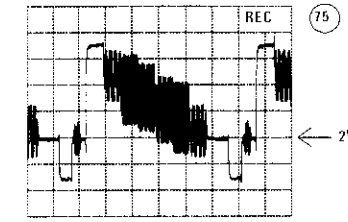
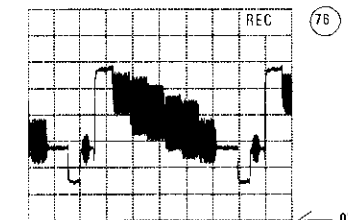
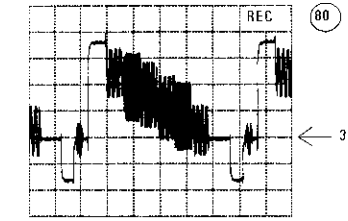
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In/Out (I/O)

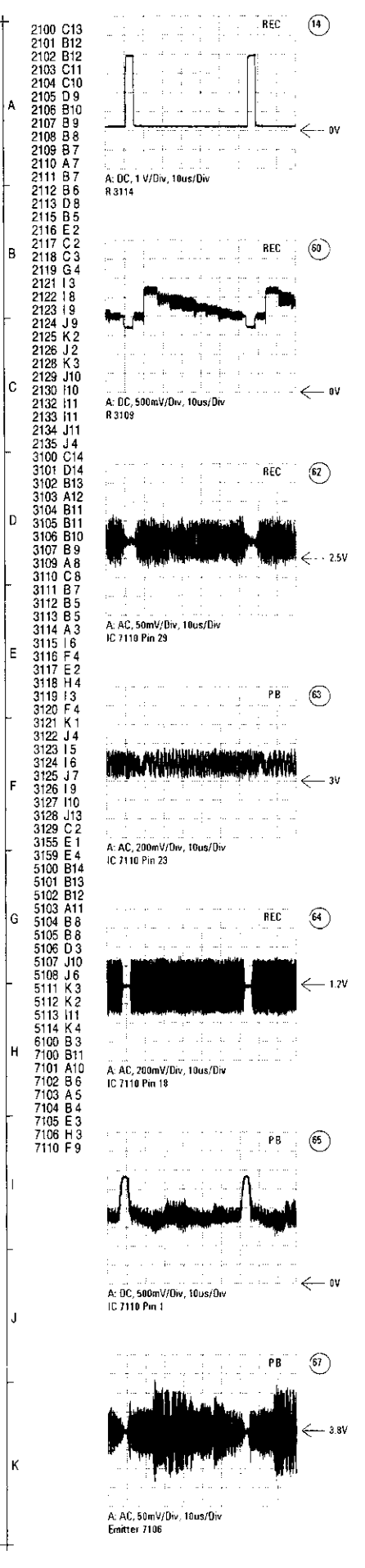
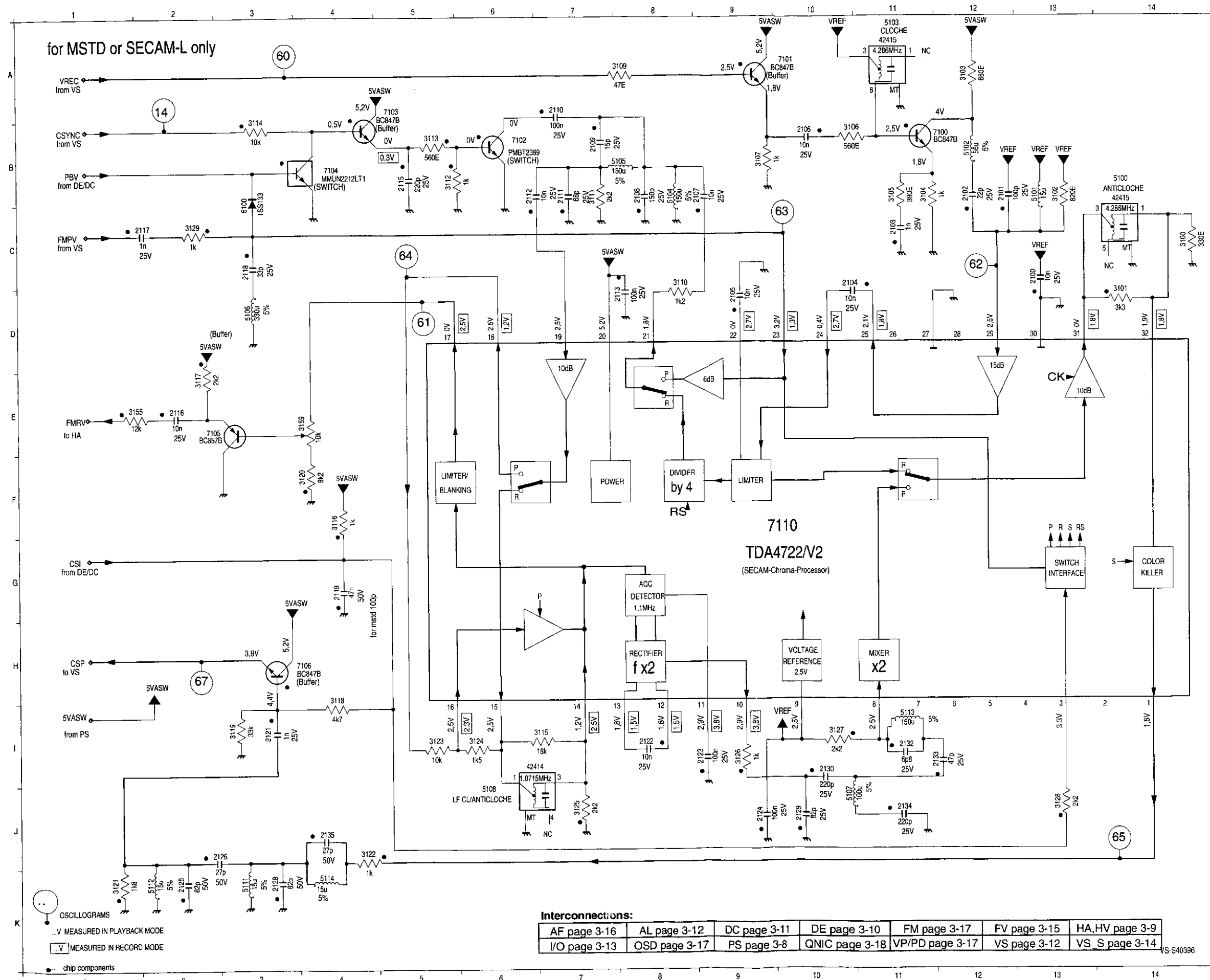


Interconnections:

AF	page 3-16
AL	page 3-12
DC	page 3-11
DE	page 3-10
FM	page 3-17
FV	page 3-15
HA,HV	page 3-9
I/O	page 3-13
OSD	page 3-17
PS	page 3-8
QNIC	page 3-18
VP/PD	page 3-17
VS	page 3-12
VS_S	page 3-14

A: AC, 100mV/Div, 10us/Div
IC 7007 Pin 46 (PAL)A: AC, 100mV/Div, 10us/Div
IC 7007 Pin 46 (SECAM L)A: AC, 100mV/Div, 10us/Div
IC 7007 Pin 52A: AC, 100mV/Div, 10us/Div
IC 7007 Pin 48/50A: AC, 500mV/Div, 10us/Div
IC 7007 Pin 40A: AC, 100mV/Div, 10us/Div
IC 7007 Pin 42A: AC, 500mV/Div, 200us/Div
Modulator Pin 3A: AC, 200mV/Div, 500us/Div
C 2503A: DC, 1 V/Div, 10ms/Div
Connector 1961 Pin 7A: DC, 1 V/Div, 10us/Div
Connector 1951 Pin 1A: AC, 100mV/Div, 10us/Div
IC 7007 Pin 14A: AC, 200mV/Div, 10us/Div
IC 7007 Pin 18A: AC, 200mV/Div, 10us/Div
IC 7007 Pin 15A: AC, 200mV/Div, 10us/Div
IC 7007 Pin 20A: AC, 100mV/Div, 10us/Div
IC 7007 Pin 26A: AC, 200mV/Div, 10us/Div
IC 7007 Pin 28A: DC, 500mV/Div, 10us/Div
IC 7007 Pin 38A: AC, 100mV/Div, 10us/Div
T 7500 Emitter

Video Signal Processing Secam (VS_S)

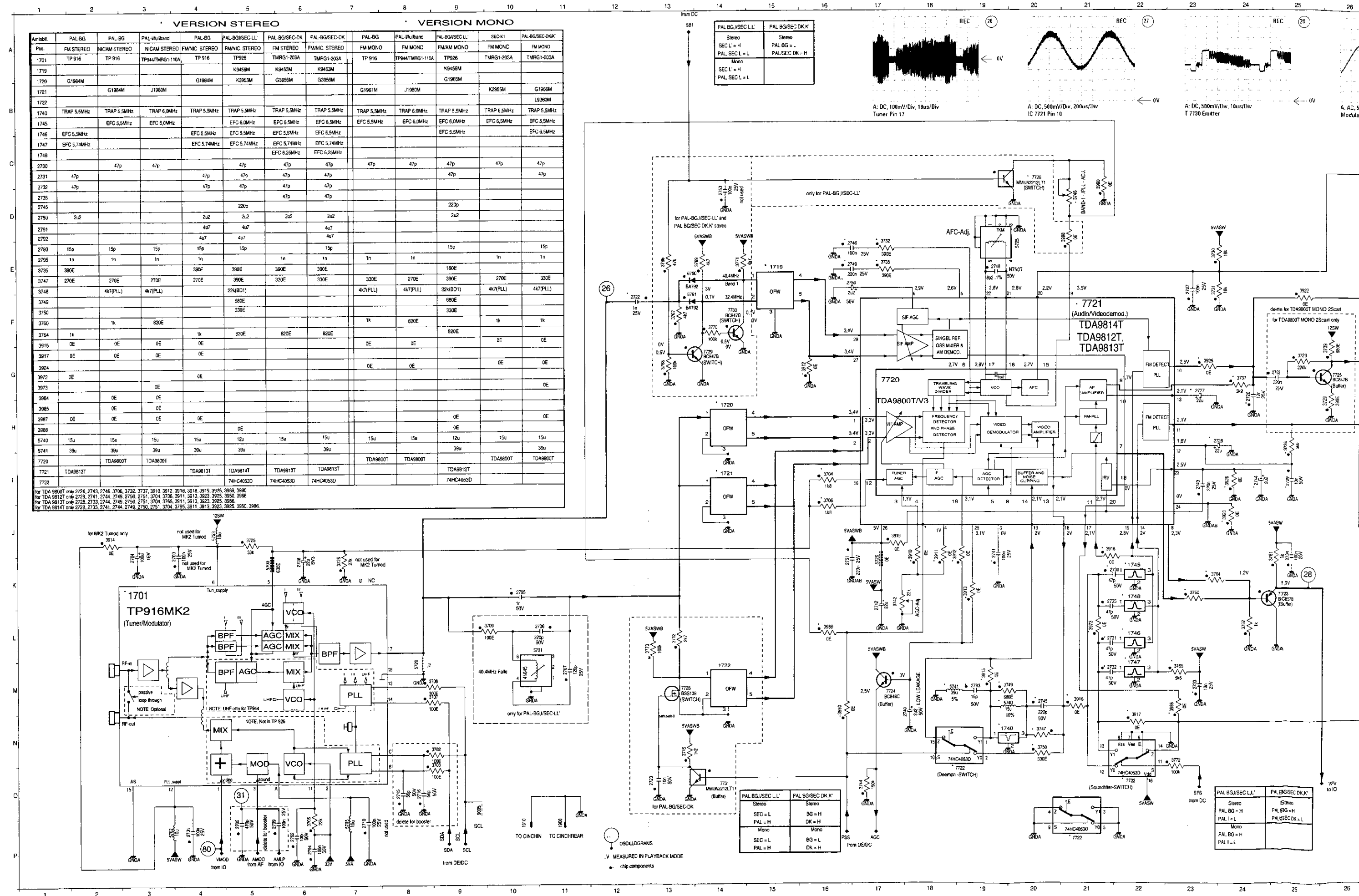


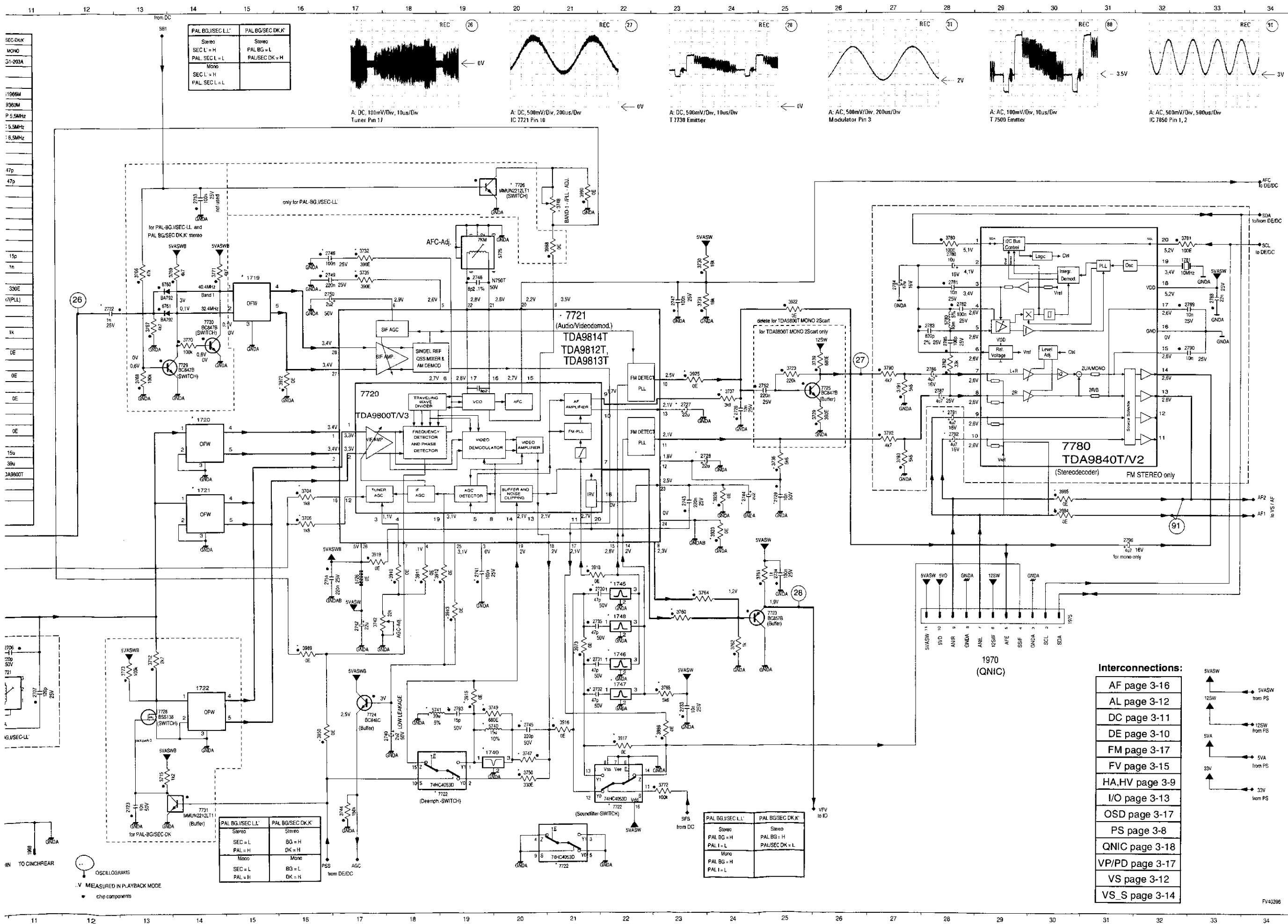
Interconnections:

AF page 3-16	AL page 3-12	DC page 3-11	DE page 3-10	FM page 3-17	FV page 3-15	HA, HV page 3-9
I/O page 3-13	OSD page 3-17	PS page 3-8	QNIC page 3-18	VP/PD page 3-17	VS page 3-12	VS_S page 3-14

VS S40396

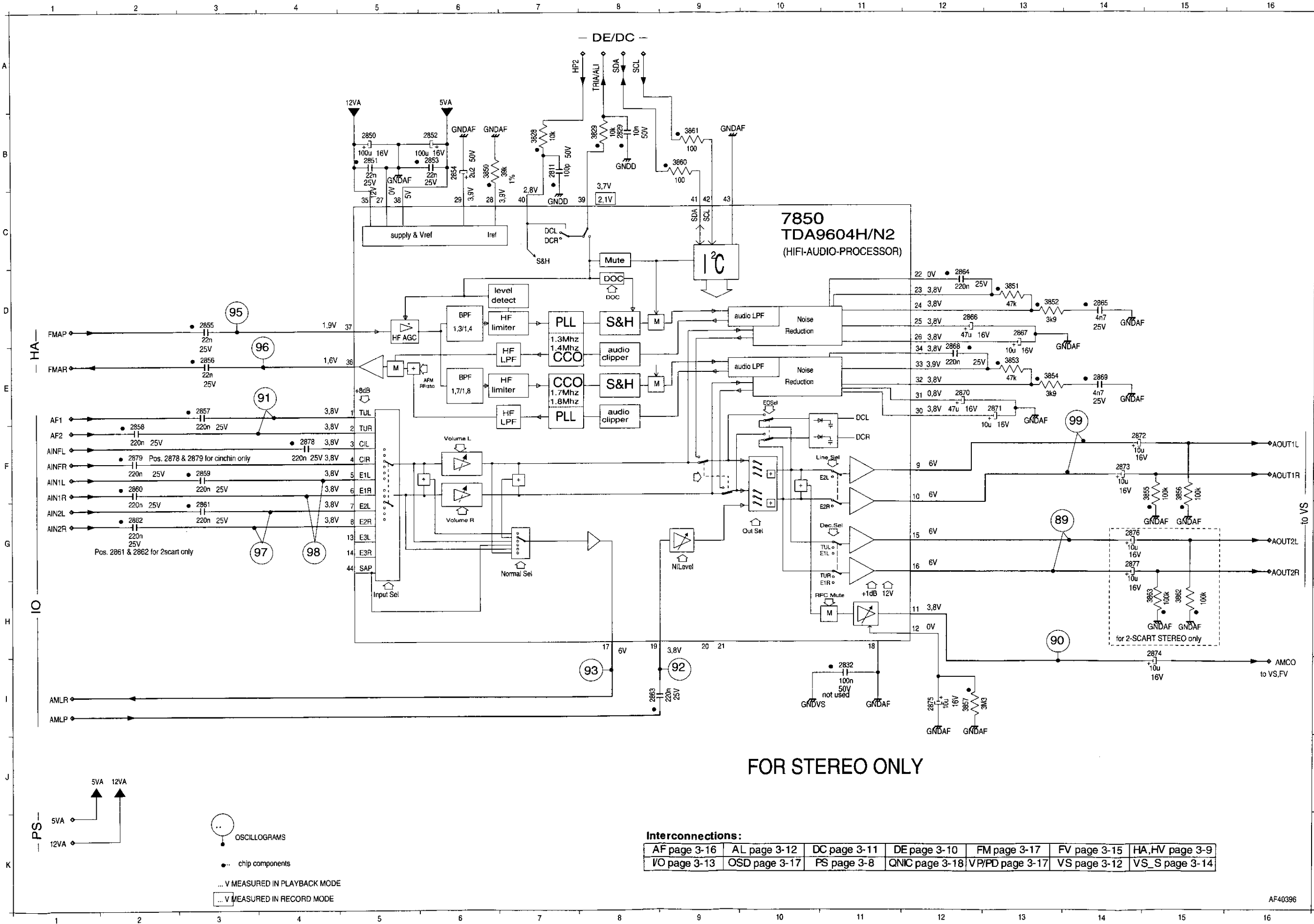
Frontend (FV)



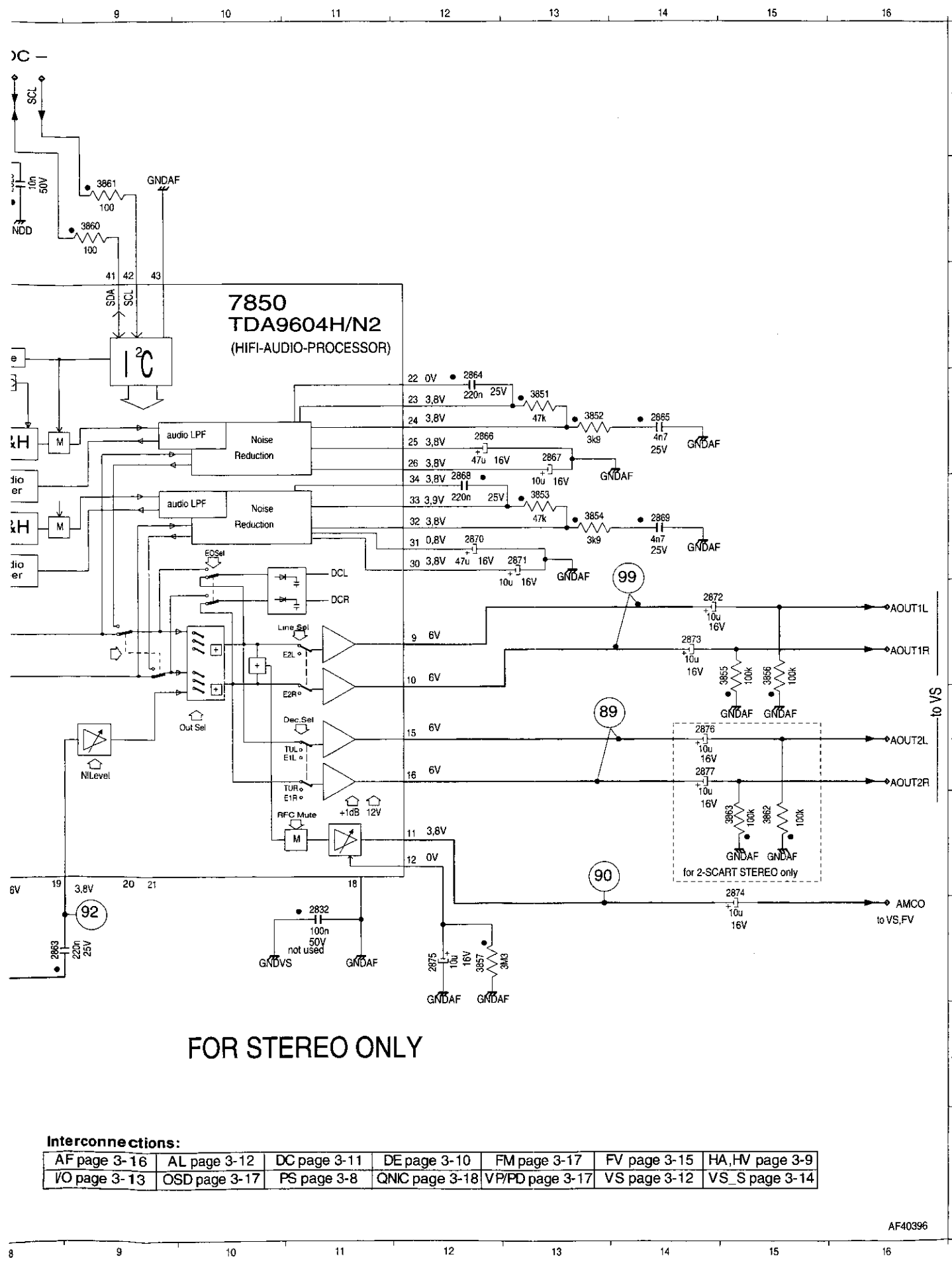


1701	K 3	5700	K 5
1719	E 15	5702	P 3
1720	H 14	5703	J 4
1721	I 14	5705	P 7
1722	M 14	5720	M 8
1740	N 19	5721	L 10
1745	K 22	5725	E 20
1746	L 22	5726	K 17
1747	M 22	5740	M 20
1748	K 22	5741	M 18
1781	E 32	5780	F 28
1908	P 11	6780	E 13
1910	P 10	6781	F 13
1975	K 30	7720	G 17
2700	J 4	7721	F 21
2701	P 4	7722	Q 22
2702	P 6	7722	O 19
2704	J 3	7722	P 21
2705	P 5	7723	K 25
2706	L 11	7724	M 17
2707	M 11	7725	G 26
2708	K 6	7726	C 20
2709	P 5	7728	M 13
2710	P 7	7729	G 14
2715	O 8	7730	F 14
2716	O 8	7731	O 14
2722	F 12	7780	H 30
2723	O 13	9005	O 9
2728	H 24		
2727	G 23		
2728	H 23		
2729	I 25		
2730	K 22		
2731	L 21		
2732	M 21		
2733	M 23		
2734	K 25		
2735	K 21		
2740	M 16		
2741	J 19		
2742	K 17		
2743	I 23		
2744	I 24		
2745	M 20		
2746	E 17		
2747	E 23		
2748	E 19		
2749	E 17		
2750	E 16		
2751	K 16		
2752	G 25		
2753	D 14		
2780	E 28		
2781	E 28		
2782	F 28		
2783	F 28		
2784	E 27		
2785	F 28		
2786	G 28		
2787	G 28		
2788	E 33		
2789	F 33		
2790	F 33		
2791	H 28		
2792	H 28		
2793	M 19		
2794	P 6		
2795	K 10		
2796	J 31		
3702	N 9		
3703	O 9		
3704	I 16		
3705	P 6		
3706	J 16		
3707	M 9		
3708	M 9		
3709	L 10		
3712	L 13		
3715	N 13		
3723	G 25		
3725	J 5		
3726	K 7		
3729	H 26		
3730	E 23		
3731	E 23		
3732	E 17		
3735	E 17		
3736	H 25		
3737	G 24		
3739	G 26		
3742	K 17		
3744	O 17		
3747	N 20		
3748	D 21		
3749	M 20		
3750	N 20		
3750	K 23		
3751	K 25		
3752	L 24		
3764	K 23		
3765	M 23		
3766	E 13		
3767	F 13		
3768	G 13		
3769	E 14		
3770	F 14		
3771	E 14		
3772	N 23		
3773	L 13		
3780	D 28		
3781	D 32		
3782	G 28		
3790	G 27		
3791	G 27		
3792	H 27		
3793	H 27		
3910	K 18		
3911	K 18		
3912	K 18		
3913	K 19		
3914	J 2		
3915	M 19		
3916	M 21		
3917	N 22		
3918	J 21		
3919	J 17		
3922	F 25		
3923	J 24		
3925	G 23		
3926	I 24		
3950	M 16		
3972	G 16		
3973	L 21		
3984	I 30		
3985	I 30		
3986	M 23		
3988	D 21		
3989	L 16		
3990	C 21		

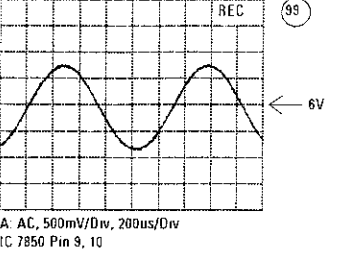
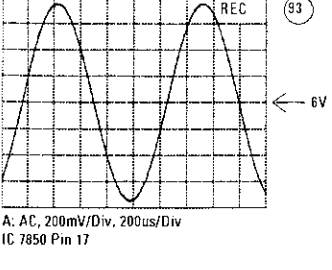
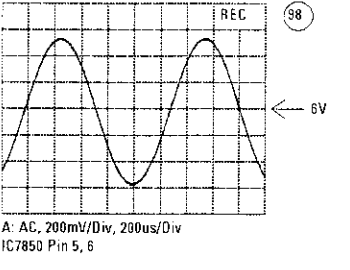
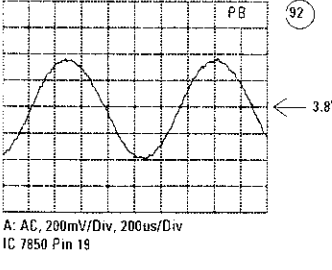
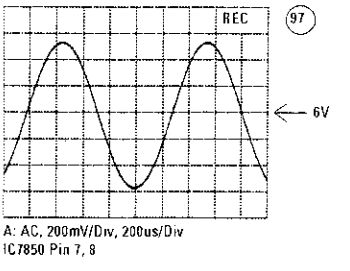
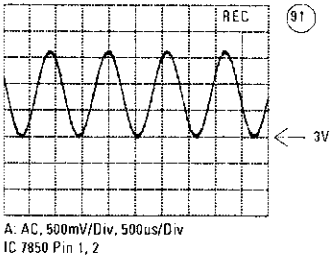
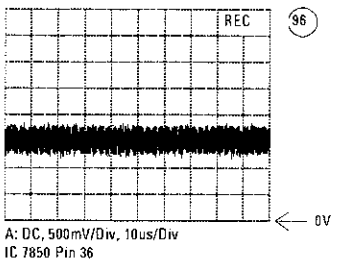
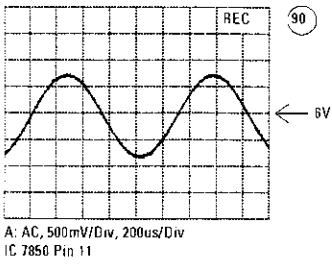
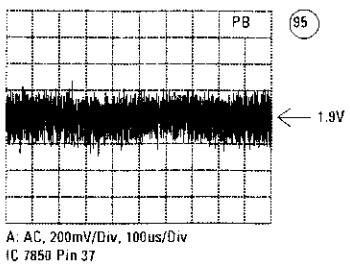
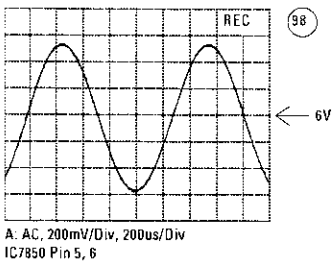
Audio FM Processing (AF)



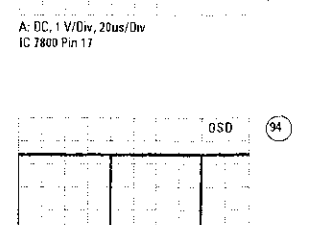
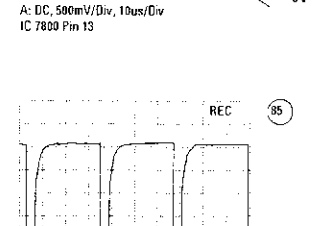
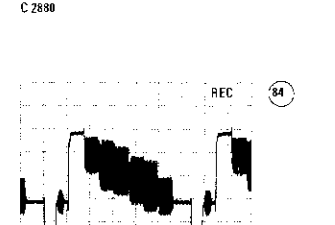
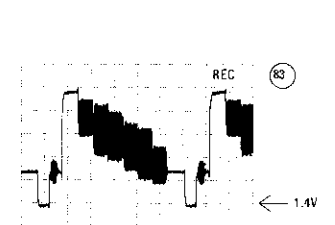
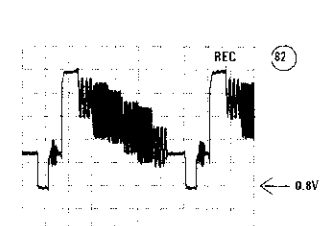
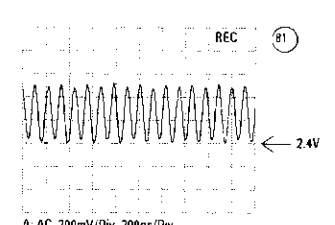
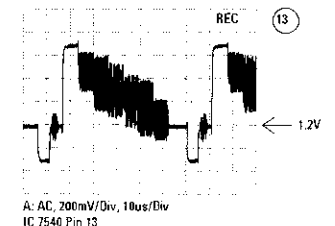
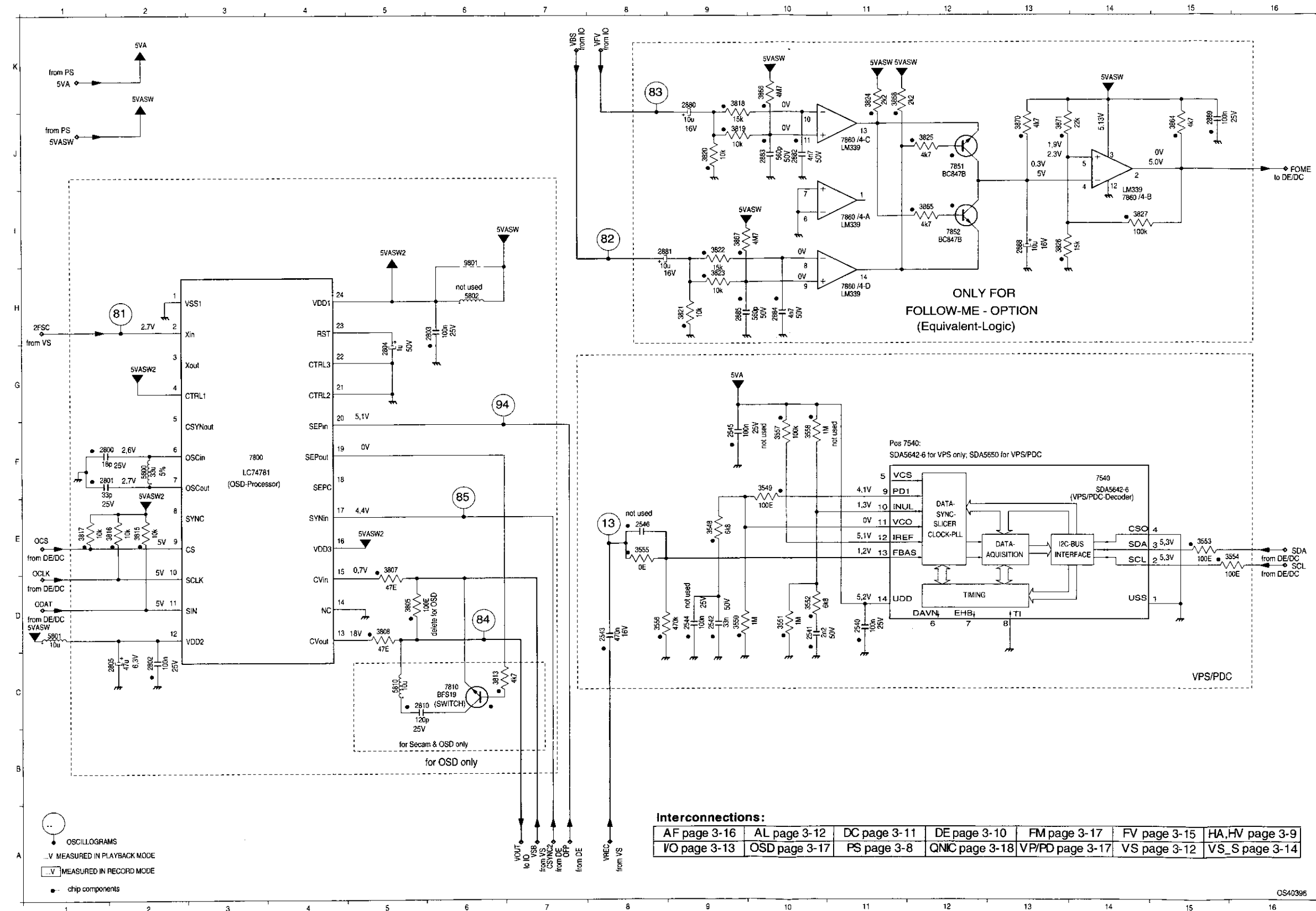
2811 B 7
2829 B 8
2832 I 11
2850 B 5
2851 B 5
2852 B 6
2853 B 6
2854 B 6
2855 D 3
2856 E 3
2857 E 3
2858 F 2
2859 F 3
2860 F 2
2861 G 3
2862 G 2
2863 I 8
2864 D 12
2865 D 14
2866 D 12
2867 D 13
2868 E 12
2869 E 14
2870 E 12
2871 E 13
2872 F 14
2873 F 14
2874 I 15
2875 I 12
2876 G 14
2877 G 14
2878 F 4
2879 F 2
2880 B 7
2882 B 8
2883 B 6
2884 D 13
2885 E 13
2886 E 13
2887 F 15
2888 F 12
2889 B 9
2890 B 9
2891 B 9
2892 H 15
2893 H 15
7850 C 10



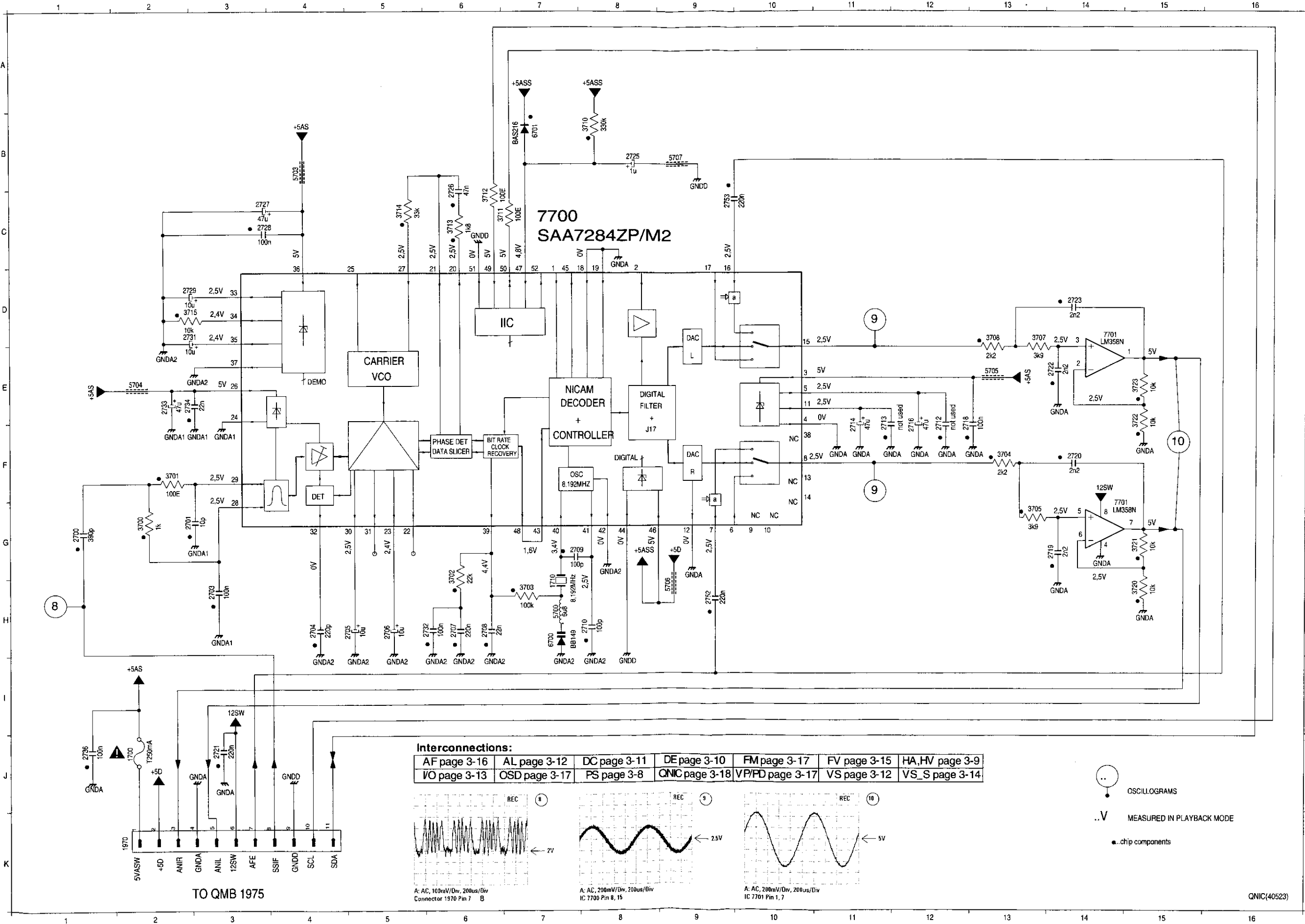
- 2811 B 7
- 2829 B 8
- 2832 I11
- 2850 B 5
- 2851 B 5
- 2852 B 6
- 2853 B 6
- 2854 B 6
- 2855 D 3
- 2856 E 3
- 2857 E 3
- 2858 F 2
- 2859 F 3
- 2860 F 2
- 2861 G 3
- 2862 G 2
- 2863 I 8
- 2864 D12
- 2865 D14
- 2866 D12
- 2867 D13
- 2868 E12
- 2869 E14
- 2870 E12
- 2871 E13
- 2872 F14
- 2873 F14
- 2874 I15
- 2875 I12
- 2876 G14
- 2877 G14
- 2878 F 4
- 2879 F 2
- 3828 B 7
- 3829 B 8
- 3850 B 6
- 3851 D13
- 3852 D13
- 3853 E13
- 3854 E13
- 3855 F15
- 3856 F15
- 3857 I12
- 3860 B 9
- 3861 B 9
- 3862 H15
- 3863 H15
- 7850 C10



On Screen Display (OS), Follow Me (FM), Video Programming System / Programm Delivery Control (VP/PD)



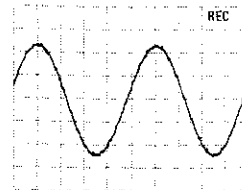
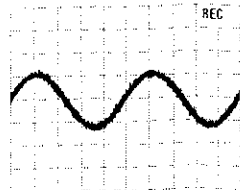
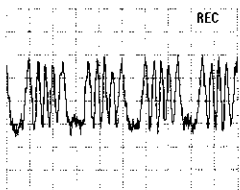
Nicam Board (QNIC)



- 1700 J2
- 1710 K7
- 1720 G1
- 1730 G2
- 1740 H3
- 1750 H4
- 1760 H5
- 1770 H6
- 1780 G7
- 1790 H8
- 1800 F12
- 1810 F11
- 1820 F12
- 1830 F12
- 1840 F14
- 1850 I3
- 1860 E14
- 1870 D14
- 1880 B8
- 1890 C6
- 1900 C3
- 1910 C3
- 1920 D2
- 1930 D2
- 1940 H6
- 1950 E2
- 1960 E2
- 1970 J1
- 1980 H9
- 1990 G9
- 2000 G2
- 2010 F2
- 2020 G6
- 2030 H7
- 2040 F13
- 2050 G13
- 2060 D13
- 2070 D13
- 2080 B8
- 2090 C7
- 2100 C6
- 2110 C6
- 2120 C5
- 2130 D3
- 2140 H15
- 2150 G15
- 2160 E15
- 2170 E15
- 2180 H7
- 2190 B4
- 2200 E2
- 2210 E13
- 2220 H9
- 2230 B9
- 2240 H7
- 2250 B7
- 2260 C7
- 2270 D14
- 2280 G14

Interconnections:

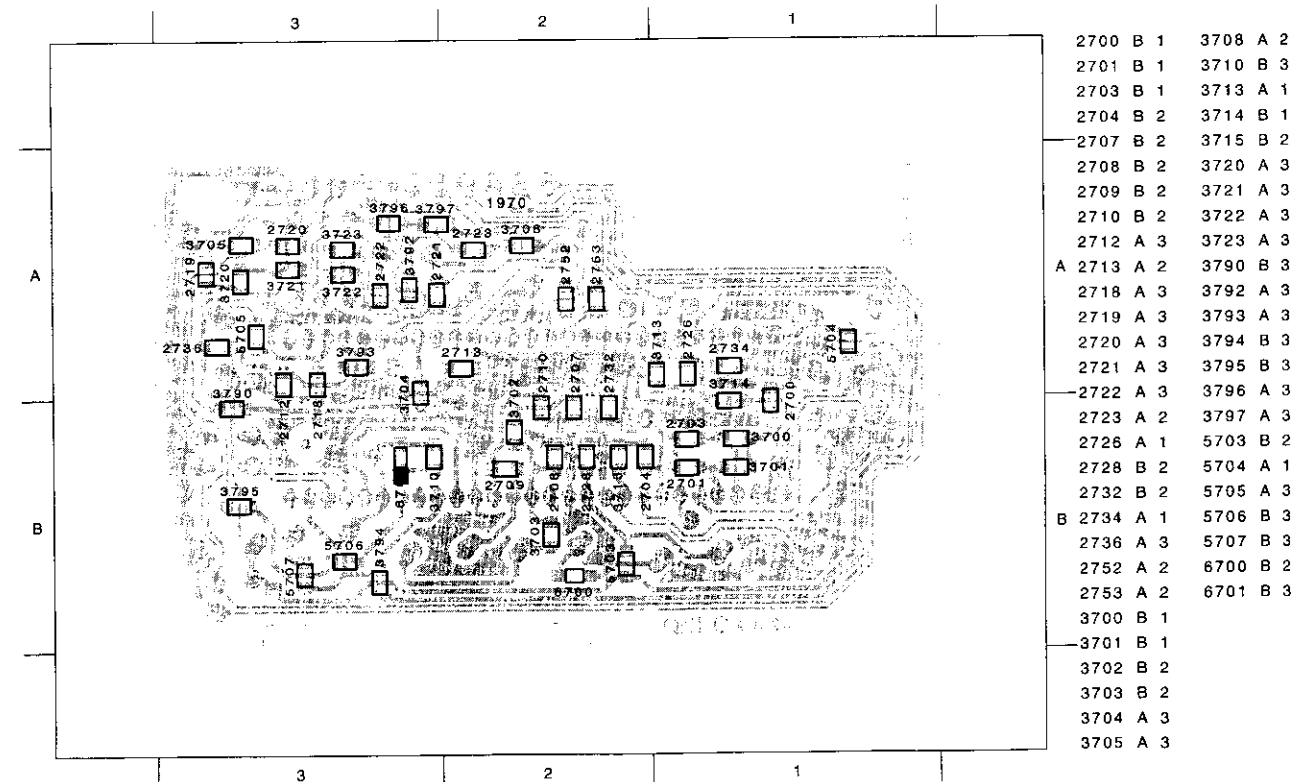
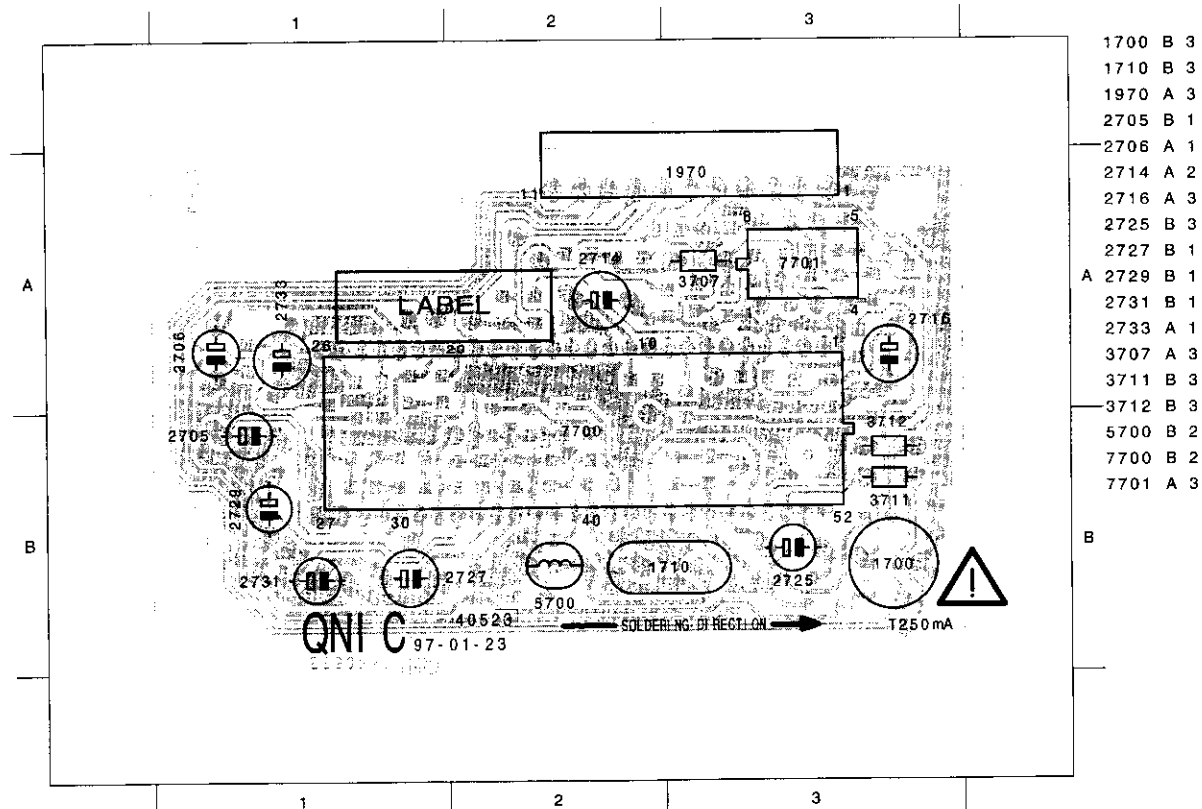
AF page 3-16	AL page 3-12	DC page 3-11	DE page 3-10	FM page 3-17	FV page 3-15	HA,HV page 3-9
I/O page 3-13	OSD page 3-17	PS page 3-8	QNIC page 3-18	VP/PD page 3-17	VS page 3-12	VS_S page 3-14



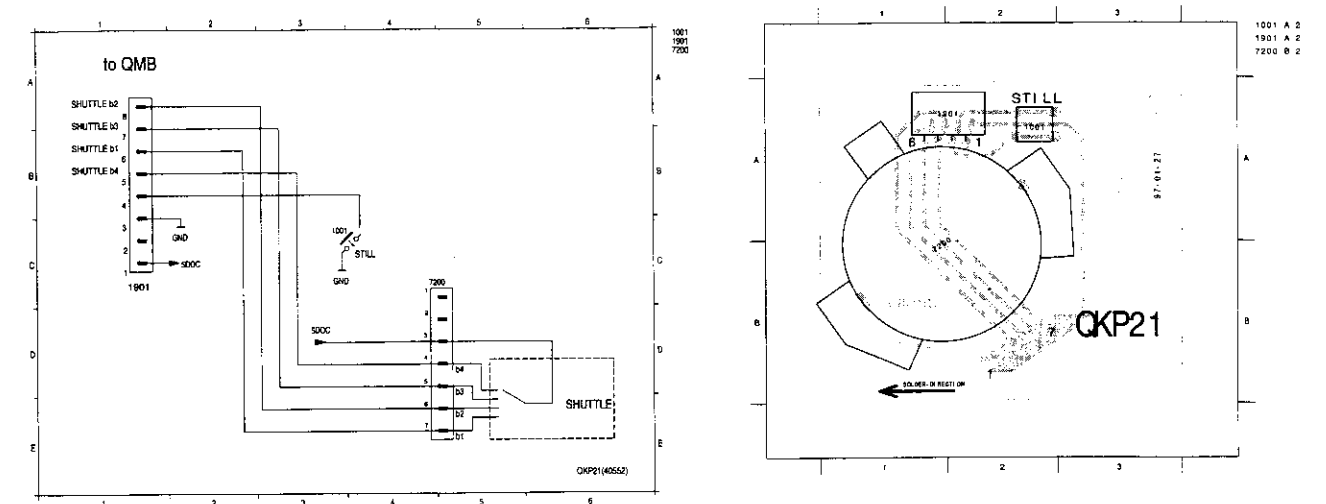
OSCILLOGRAMS
MEASURED IN PLAYBACK MODE
chip components

QNIC(40523)

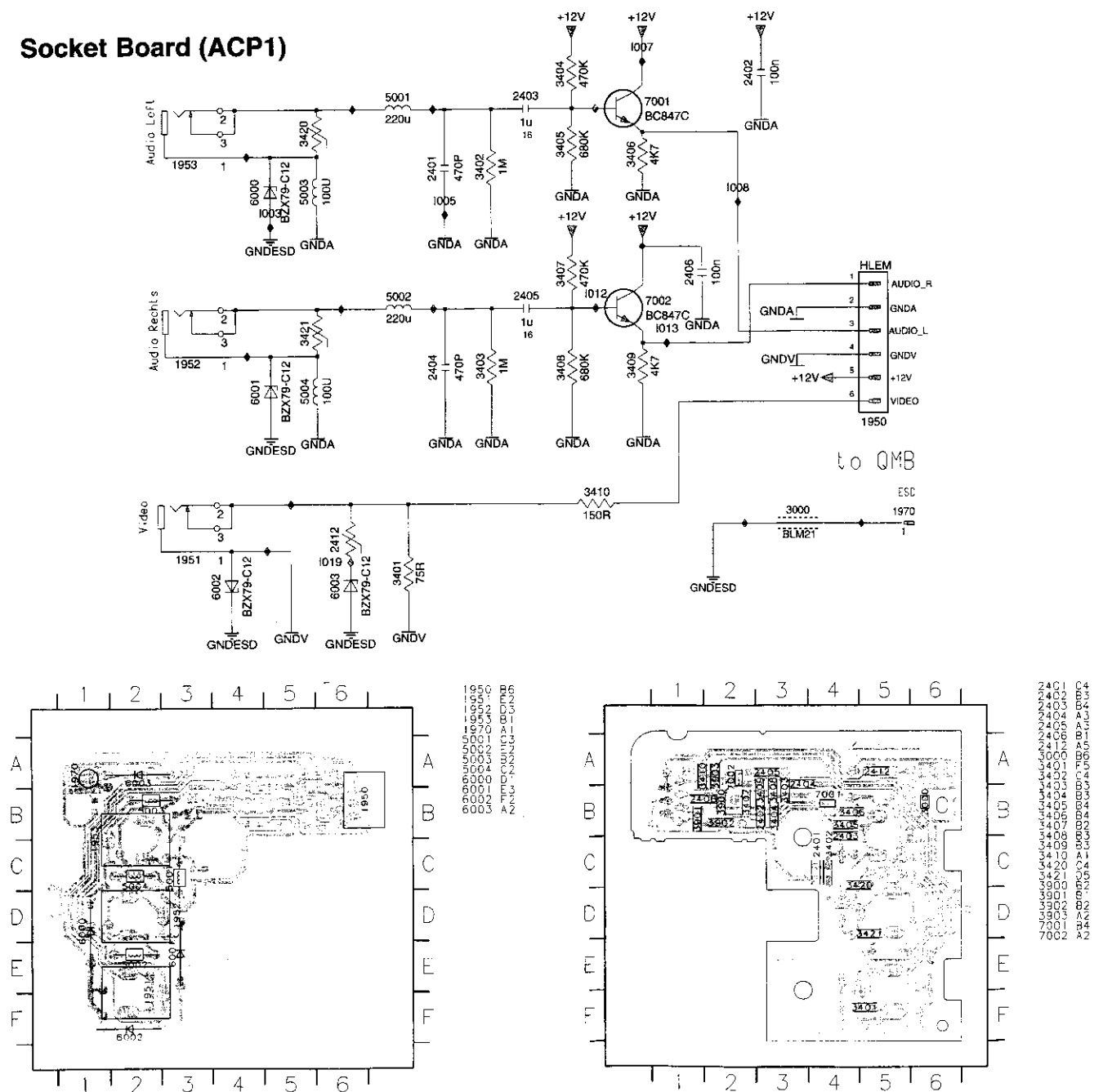
Nicam Board (QNIC)



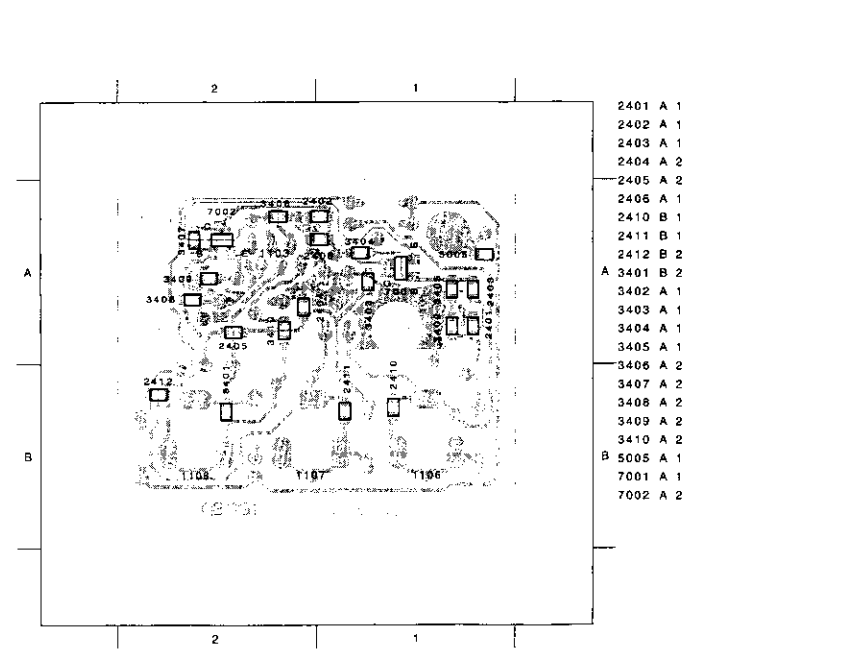
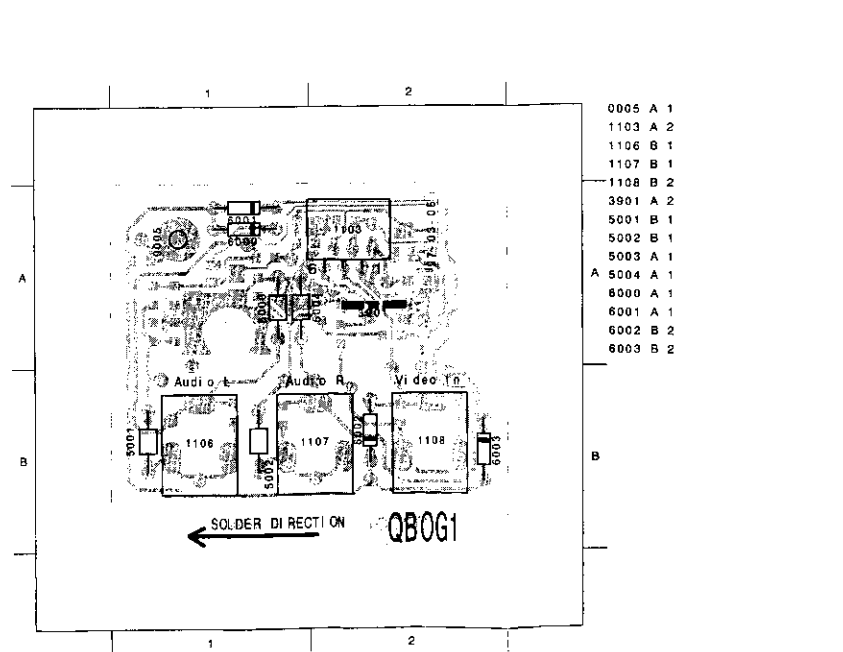
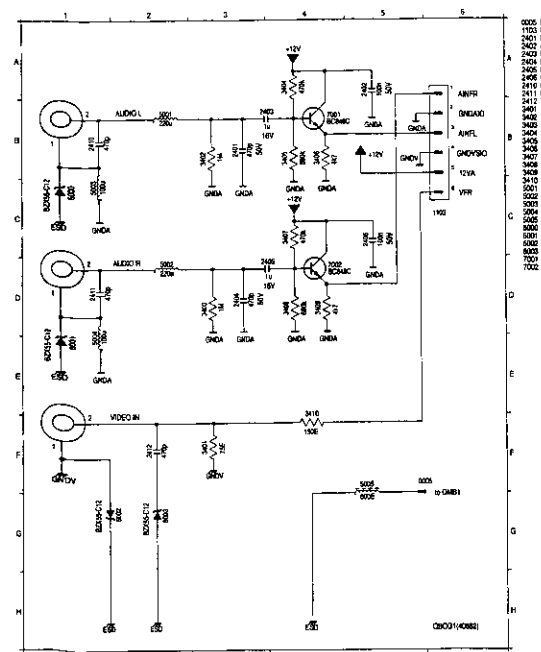
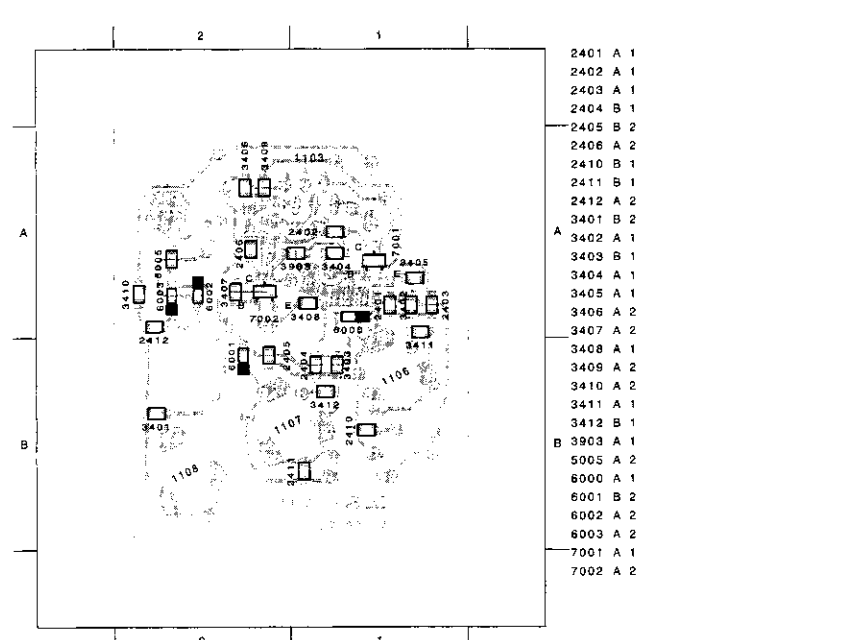
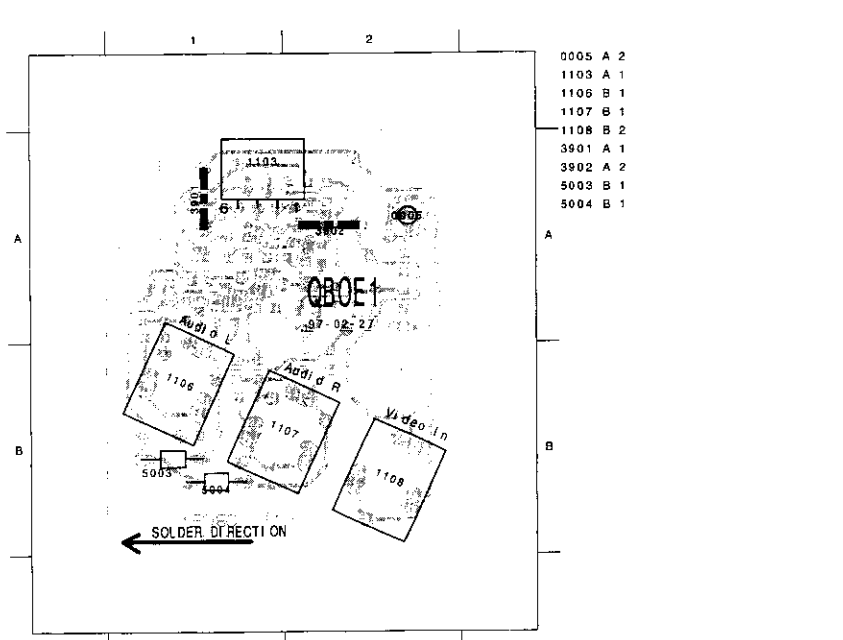
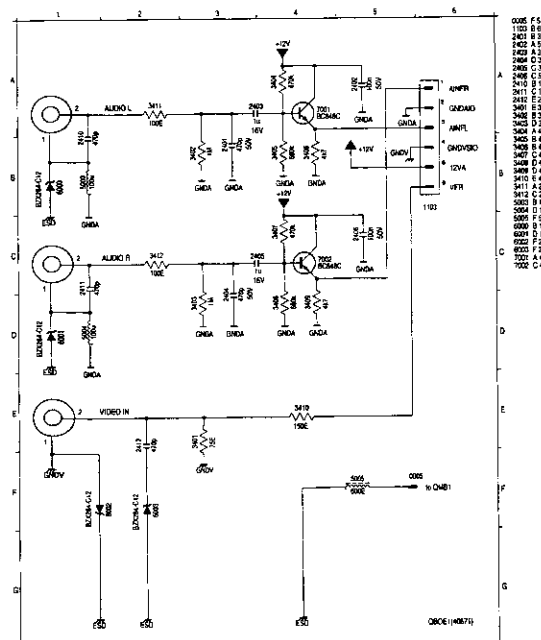
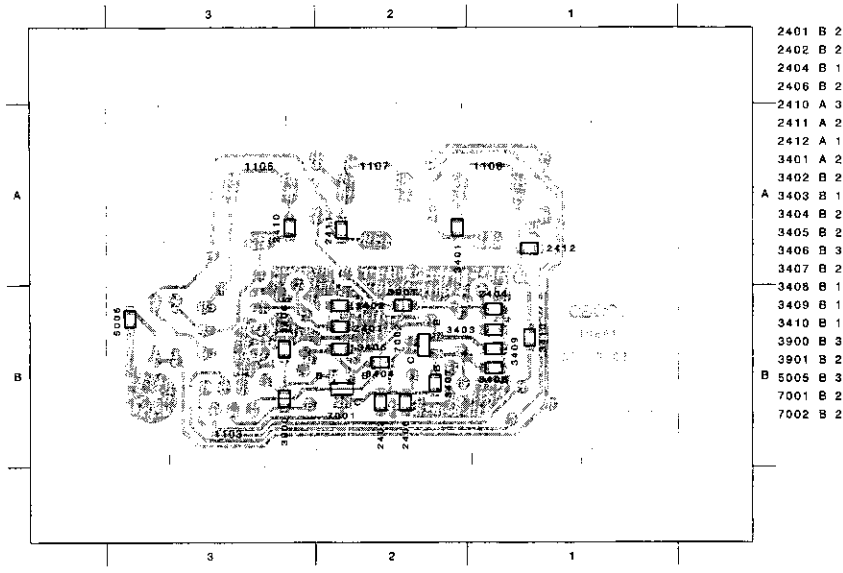
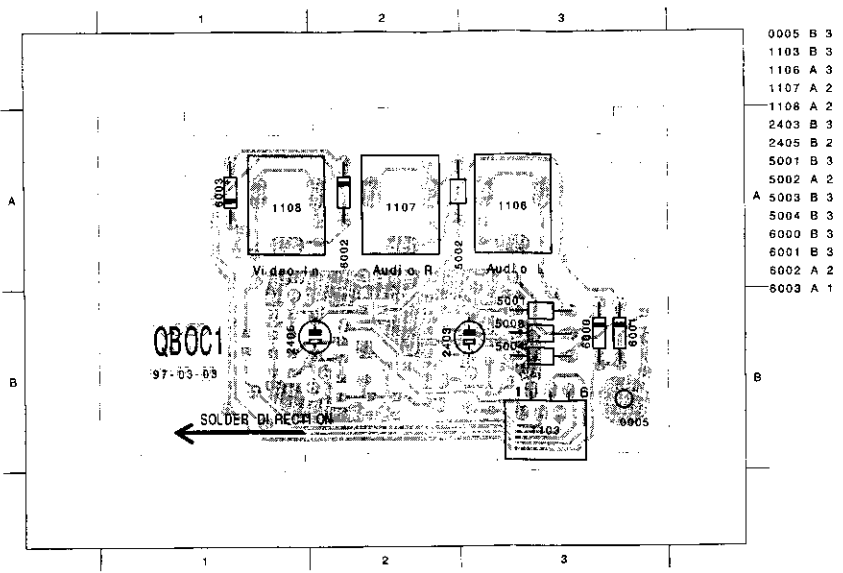
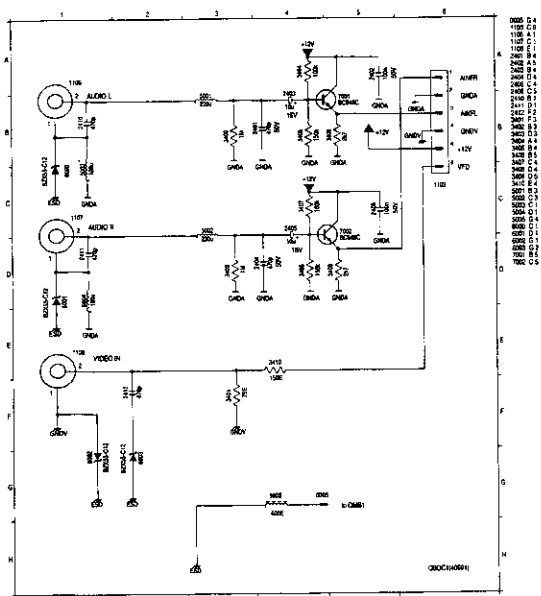
Shuttle Board (QKP21)



Socket Board (ACP1)



Socket Boards (QBOC1,QBOE1,QBOG1)



4. DRIVE ASSEMBLY

4.1 MECHANICAL PARTS LIST

Pos.	Description	K I T S								Code number 4822
		B	I	L	P	Q	R	S	T	
1	Rec. protection lever (with spring)									402 10202
2	Chassis mounting spring (2x)									492 71022
5	Main brake left				P					
6	Main brake spring (2x)				P					
9	Damping roller *)									528 70782
10	Main brake right			P						
11	Tension arm spring									492 33317
12	Tension crank									403 70551
13	Slip ring						R			
14	Tension band				P					
15	Tension arm									403 70547
16	Erase head									249 10522
17	Swivelling gear						R			
18	Brake gear (2x)						R			
19	Swivelling plate						R			
20	Reel table (S)						R			
20a	Reel table (T)						R			
21	Headamplifier holder							T		
22	Bracket							T		
23	Roller unit left									528 70771
24	Loading arm left	B								
25	Loading arm right	B								
26	Roller unit right									528 70772
27	Loading gear	B								
30	Reverse clip					Q				
31	Reverse lever					Q				
32	Intermediate lever					Q				
33	Head disc 2/0									691 10583
33	Head disc 2/0-LP									691 10585
33	Head disc 4/0									691 10674
33	Head disc 4/0 Secam									691 21012
33	Head disc 4/2									691 10548
33	Head disc 4/2 Secam									691 10551
34	Scanner motor 2/0 (with screws)									361 10963
34	Scanner motor 4/0 (with screws)									361 10819
34	Scanner motor 4/2 (with screws)									361 10901
35	Cleaning roller									528 70773
36	A/C Head (with clip and screws)									249 10468
37	Pressure roller (with spring)									528 70774
38	Threading motor									361 10809
39	Threading belt									358 20421
40	Motor holder							T		
41	Pressure roller guide							S		
42	Reverse brake				P					
44	Slider gear	B						S		
45	Cam wheel							S		
46	Cam shaft							S		
47	Pulley shaft									528 81462
48	Worm shaft							S		
49	Chassis mounting clip								T	
50	WD-holder								T	

Pos.	Description	K I T S								Code number 4822
		B	I	L	P	Q	R	S	T	
101	Cassette loader trigger			L						
102	Clip			L						
103	Cassette loader gear1			L						
104	Cassette loader spring			L						
105	Cassette loader gear2			L						
106	Spindle									535 93277
111	Cam wheel reverse	B								
112	Tension lever								T	
113	Cam wheel tension	B								
114	Clutch lever (with spring)									403 70549
115	Clutch									528 20736
116	Changing gear	I								
117	Double gear	I								
118	Light prism								T	
119	Init flap and holder								T	
120	Cam wheel lever								T	
121	S-VHS lever								T	
122	Prism rihgt								T	
123	Prism left								T	
125	Main slider								T	
126	Driving belt									358 31166
127	Capstan motor (with screws)									361 10805
129	Reverse kicker with transmission gears *)									522 20451
128	Gear pulley	I								
150	Lift									443 64112
KIT	B									310 31955
KIT	I									310 31963
KIT	L									310 32116
KIT	P									310 32191
KIT	Q									310 10658
KIT	R									310 10659
KIT	S									310 10661
KIT	T									310 10662

*) optional

Um einen hohen Reparaturstandard zu gewährleisten sind mit Ausnahme von Kit T immer alle im Kit enthaltenen Teile zu tauschen.

In order to guarantee a high repair standard all spare parts included in a kit have to be replaced with the exception of kit T.

Per una riparazione garantita occorre sostituire tutti i pezzi contenuti nei kit, fatta eccezione per il kit T.

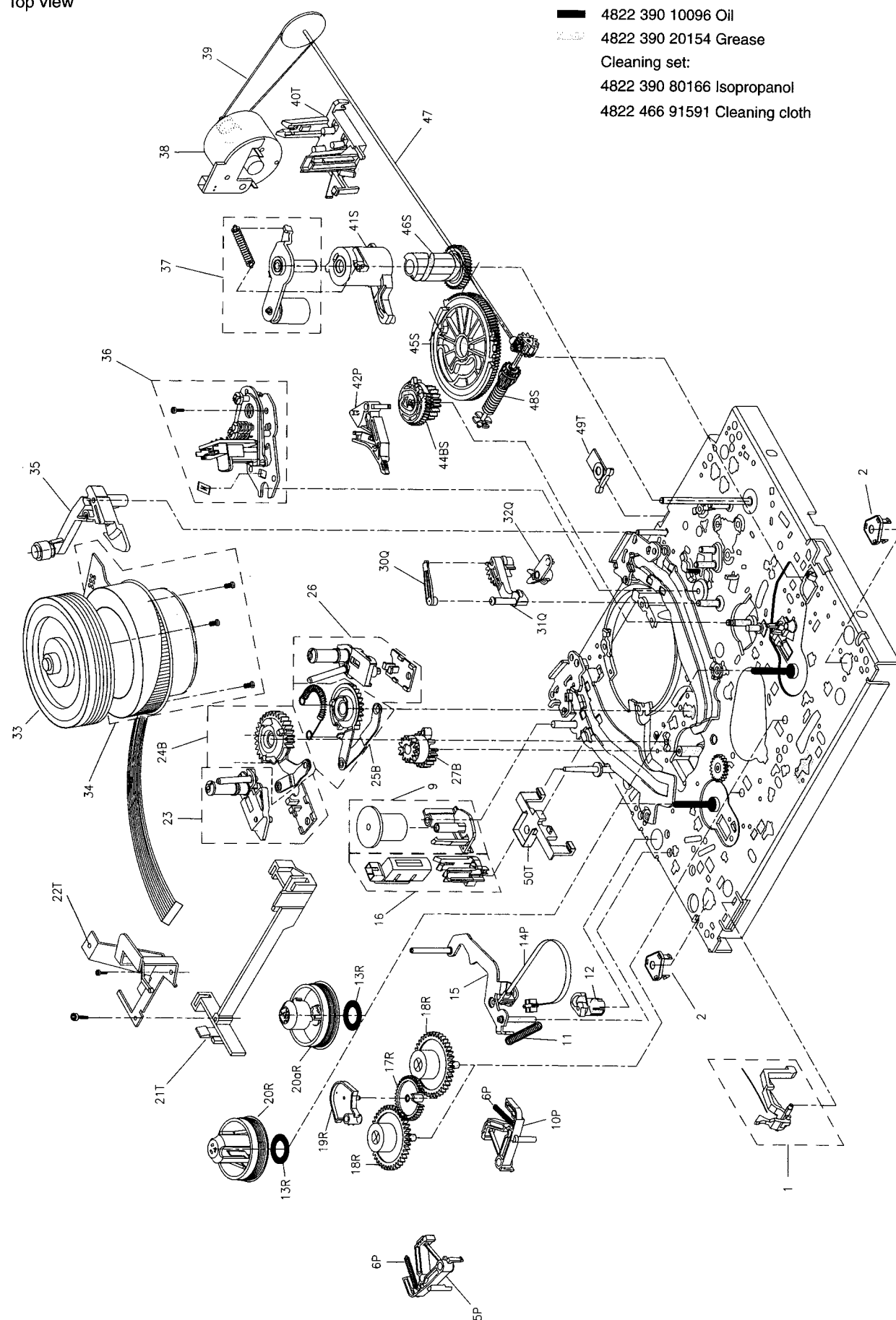
Para obtener un estándar de reparaciones elevado, es necesario cambiar todas las partes contenidas en el kit, la única excepción es para el kit T.

A fin d'obtenir un standard de réparations élevé, toutes les pièces de rechange incluses dans un kit sont à remplacer, exception faite du kit T.

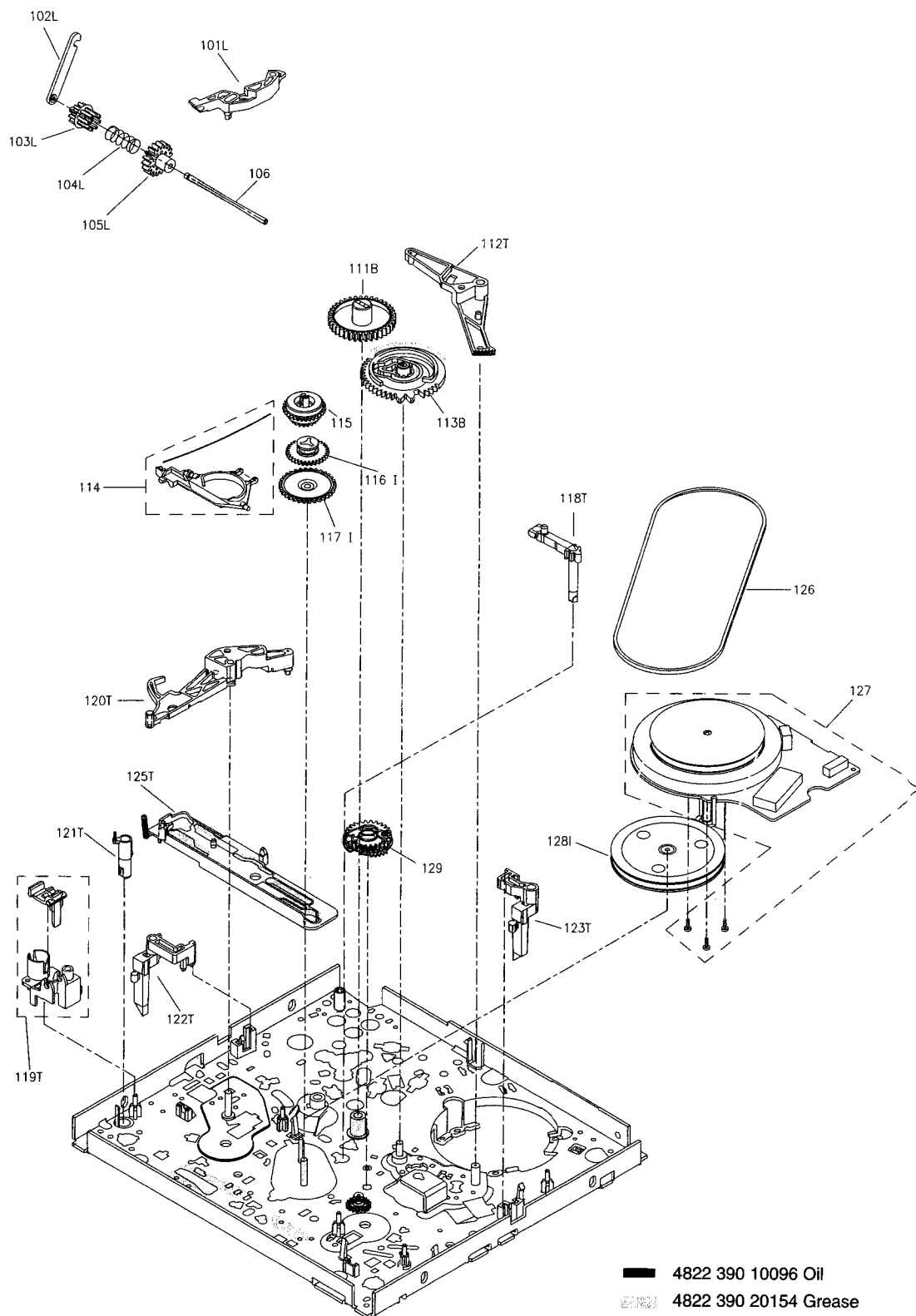
Om een hoge reparatiekwaliteit te waarborgen moeten, met uitzondering van kit T, altijd alle zich in een kit bevindende onderdelen worden vervangen.

4.2 Exploded view

Top view

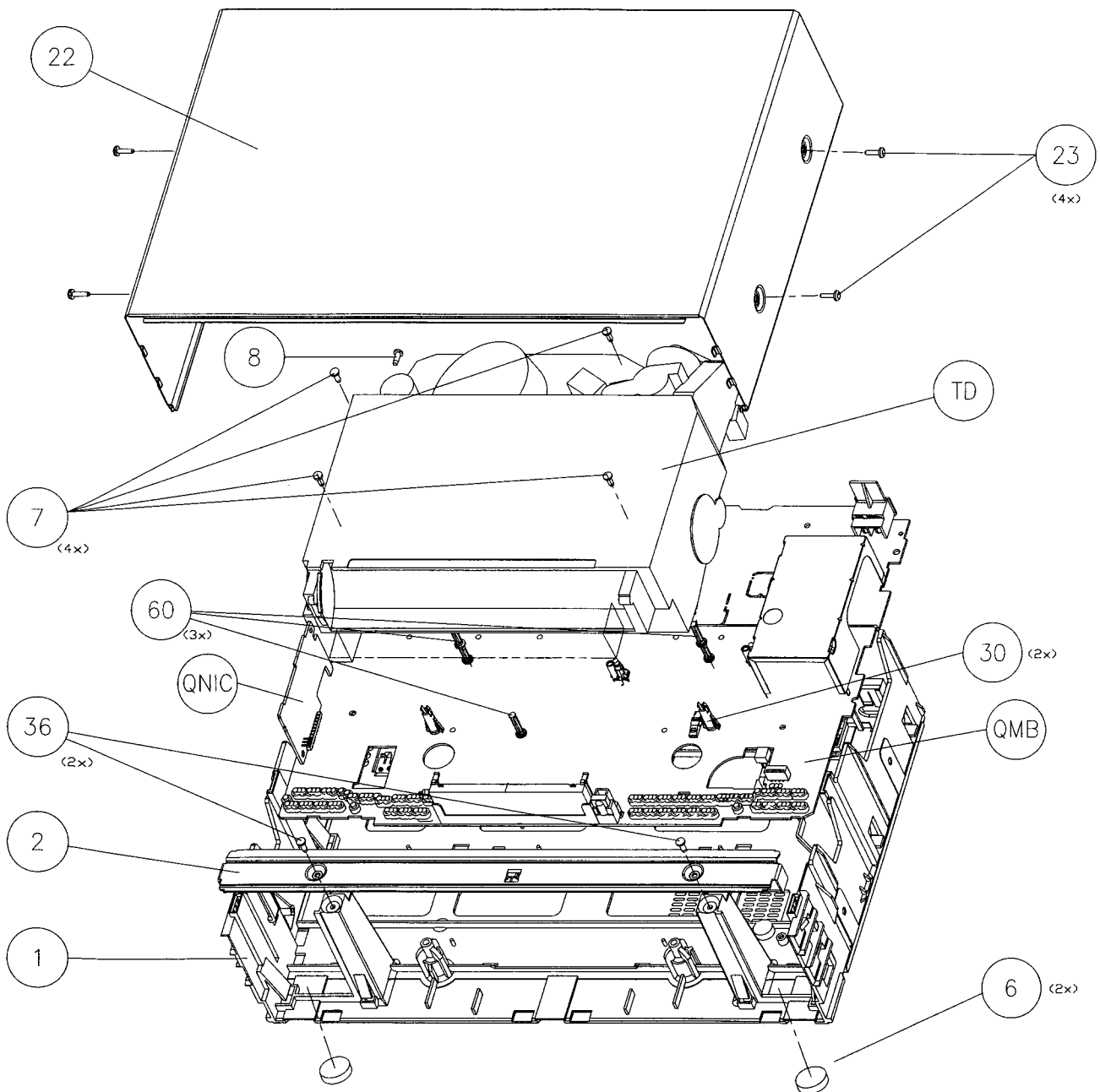


Underside view



- 4822 390 10096 Oil
- 4822 390 20154 Grease
- Cleaning set:
- 4822 390 80166 Isopropanol
- 4822 466 91591 Cleaning cloth

Exploded view set



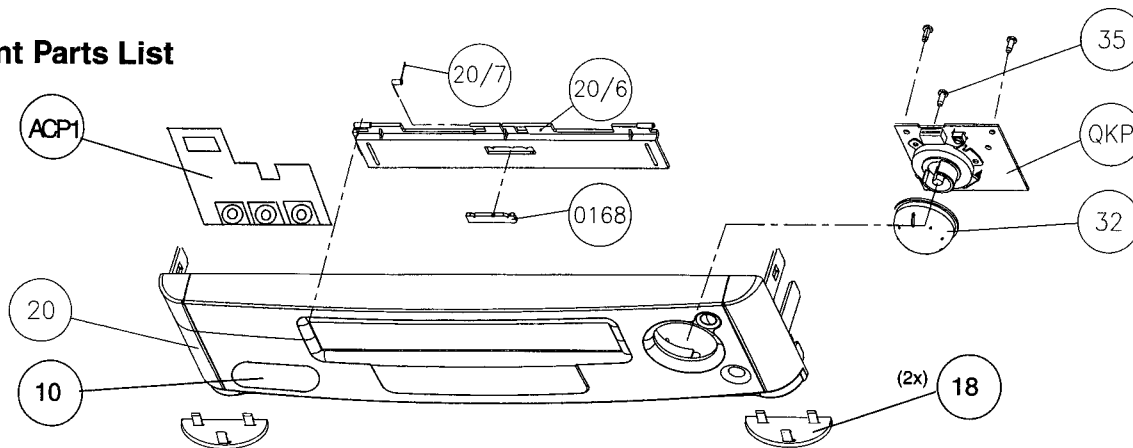
Set Parts List

Pos	Service code	Description
1	4822 464 10287	FRAME ASSY 1SCART SB110, SB115
	4822 464 10286	FRAME ASSY 2SCART VR28X, VR48X, SB215
	4822 464 10285	FRAME ASSY CINCH VR68X, SB615
2	4822 402 10709	BRACKET
6	4822 462 41806	FOOT FRAME
7	4822 502 13884	SCREW 3,5X16
8	4822 502 14431	SCREENING SCREW
22	4822 442 01371	COVER LACQUERED VRXXX
	4822 442 00887	COVER LACQUERED SBXXX
23	4822 502 14109	SCREW 3,5X10
30	4822 256 10198	DISTANCEHOLDER DECK
36	4822 502 11833	SCREW P2,9X12
60	4822 256 10359	DISTANCE HOLDER MOBO

Directions for use

Direction for use	Service code
VR285/02 DE,ES,FR,NL,IT,PT	4822 736 16116
VR285/02 GR	4822 736 16117
VR285/05 EN	4822 736 16115
VR285/07 EN	4822 736 16196
VR285/13 DA,FI,NO,SV	4822 736 16188
VR285/39 FR	4822 736 16153
VR285/58 EN,HU,PL,RU,SK,TS	4822 736 16145
VR286/02 DA,DE,ES,FI,FR,NL,NO,PT,SV	4822 736 16113
VR287/02 DE,FR,NL,IT,PT,ES	4822 736 16111
VR287/07 EN	4822 736 16109
VR287/13 DA,FI,NO,SV	4822 736 16187
VR287/39 FR	4822 736 16159
VR485/02 DA,DE,ES,FI,FR,GR,IT,NL,NO,P,SV	4822 736 16108
VR485/39 FR	4822 736 16107
VR485/58 EN,HU,PL,RU,SK,TS	4822 736 16106
VR487/02 DE,ES,FR, IT,PT	4822 736 16105
VR487/39 F	4822 736 16158
VR487/58 EN,HU,PL,RU,SK,TS	4822 736 16104
VR685/02 DE,FR,GR,IT,NL	4822 736 16156
VR685/07 EN	4822 736 16194
VR685/13 DA,FI,NO,SV	4822 736 16193
VR685/16 ES,FR,NL,PT	4822 736 16192
VR685/39 FR	4822 736 16191
VR685/58 EN,HU,PL,RU,SK,TS	4822 736 16189
VR686/02 DE,FR,NL,IT	4822 736 16103
VR686/13 DA,FI,NO,SV	4822 736 16157
VR686/39 FR	4822 736 16155
SB110/03 NL	4822 736 16121
SB115/03 NL	4822 736 16119
SB215/02 DA,DE,FI,NO,SV	4822 736 16195
SB615/03 NL	4822 736 16118
SB615/11 FR, NL	4822 736 16154

Front Parts List



Pos	Service code	Description
10	4822 442 01385	COVER CINCH FRONT
18	4822 462 11073	FOOT PANEL
20	4822 426 10641	CONTROL PANEL SB110/03
	4822 426 10639	CONTROL PANEL SB115/03
	4822 426 10662	CONTROL PANEL SB215/02
	4822 426 10638	CONTROL PANEL SB615/03
	4822 426 10647	CONTROL PANEL SB615/11
	4822 426 10367	CONTROL PANEL VR285/02, VR285/13
	4822 426 10635	CONTROL PANEL VR285/05, VR285/07
	4822 426 10646	CONTROL PANEL VR285/39
	4822 426 10634	CONTROL PANEL VR285/58
	4822 426 10633	CONTROL PANEL VR286/02
	4822 426 10632	CONTROL PANEL VR287/02, VR287/13
	4822 426 10631	CONTROL PANEL VR287/07
	4822 426 10653	CONTROL PANEL VR287/39
	4822 426 10629	CONTROL PANEL VR485/02
	4822 426 10628	CONTROL PANEL VR485/39
	4822 426 10627	CONTROL PANEL VR485/58
	4822 426 10626	CONTROL PANEL VR487/02, VR487/58
	4822 426 10652	CONTROL PANEL VR487/39
	4822 426 10649	CONTROL PANEL VR685/02
	4822 426 10661	CONTROL PANEL VR685/07
	4822 426 10659	CONTROL PANEL VR685/13, VR685/16, VR685/58
	4822 426 10658	CONTROL PANEL VR685/39
	4822 426 10625	CONTROL PANEL VR686/02
	4822 426 10651	CONTROL PANEL VR686/13
	4823 426 10648	CONTROL PANEL VR686/39
20/6	4822 443 10957	LIFT FLAP SB110/03
	4823 443 10956	LIFT FLAP SB115/03
	4824 443 10987	LIFT FLAP SB215/02
	4825 443 10955	LIFT FLAP SB615/03
	4826 443 10967	LIFT FLAP SB615/11
	4827 443 10954	LIFT FLAP VR285/02, VR285/05, VR285/07, VR285/13
	4828 443 10966	LIFT FLAP VR285/39
	4829 443 10954	LIFT FLAP VR285/58
	4830 443 10952	LIFT FLAP VR286/02
	4831 443 10951	LIFT FLAP VR287/02, VR287/07, VR287/13
	4832 443 10972	LIFT FLAP VR287/39
	4833 443 10949	LIFT FLAP VR485/02
	4834 443 10969	LIFT FLAP VR485/39
	4835 443 10949	LIFT FLAP VR485/58
	4836 443 10948	LIFT FLAP VR487/02
	4837 443 10971	LIFT FLAP VR487/39
	4838 443 10948	LIFT FLAP VR487/58
	4839 443 10968	LIFT FLAP VR685/02, VR685/07, VR685/13, VR685/16, VR685/58
	4840 443 10986	LIFT FLAP VR685/39
	4841 443 10947	LIFT FLAP VR686/02, VR686/13
	4842 443 10985	LIFT FLAP VR686/39
20/7	4822 492 70896	LEG SPRING
32	4822 410 11107	SHUTTLE KNOB VR686
	4822 410 11807	SHUTTLE KNOB VR287, VR487
35	4822 502 11839	SCREW 2,9X8
168	4822 459 11235	WORDMARK PHILIPS VRX86, VRX87
	4822 459 10886	WORDMARK PHILIPS VRX85
	4822 454 13207	WORDMARK PHILIPS SB215

Motherboard PAL, SECAM, MONO, STEREO

CONNECTORS

1001▲	4822 267 10577	MAINS PLUG
1002	4822 267 10498	CONN. 3p
1710	4822 265 30989	CONN. 3p
1711	4822 267 41062	CONN. 6p
1750	4822 267 10458	CONN. 3p
1908	4822 267 10584	CONN. 1p
1909	4822 267 10583	CONN. 1p
1911	4822 265 10938	CINCH 2p white
1912	4822 265 10939	CINCH 2p red
1915	4822 267 10364	CONN. 9p
1916	4822 267 41199	CONN. 5p
1917	4822 264 10345	SCART CONN. ORANGE
1918	4822 264 10346	SCART CONN. BLUE
1930	4822 267 41062	CONN. 6p
1944	4822 265 30989	CONN. 3p
1945	4822 267 51261	CONN. 8p
1946	4822 267 10366	CONN. 8p
1961	4822 267 31512	CONN. 7p
1962	5322 268 90415	CONN. 2p

MISCELLANEOUS

0005	4822 256 10355	DISPLAY HOLDER
0007	4822 256 10195	HOLDER
0008	4822 256 10196	HOLDER
0020	4822 256 10197	HOLDER
0021	4822 256 10197	HOLDER
0022	4822 256 10197	HOLDER
1000	4822 242 81067	Crystal 4.433 619 MHz
1101	4822 276 13732	SWITCH TACT PUSH
1103	4822 276 13732	SWITCH TACT PUSH
1105	4822 276 13732	SWITCH TACT PUSH
1107	4822 276 13732	SWITCH TACT PUSH
1109	4822 276 13732	SWITCH TACT PUSH
1110	4822 276 13732	SWITCH TACT PUSH
1111	4822 276 13732	SWITCH TACT PUSH
1113	4822 276 13732	SWITCH TACT PUSH
1132	4822 276 13732	SWITCH TACT PUSH
1134	4822 276 13732	SWITCH TACT PUSH
1136	4822 276 13732	SWITCH TACT PUSH
1140	4822 276 13732	SWITCH TACT PUSH
1142	4822 276 13732	SWITCH TACT PUSH
1143	4822 276 13732	SWITCH TACT PUSH
1144	4822 276 13732	SWITCH TACT PUSH
1145	4822 276 13732	SWITCH TACT PUSH
1147	4822 276 13732	SWITCH TACT PUSH
1148	4822 276 13732	SWITCH TACT PUSH
1149	4822 276 13732	SWITCH TACT PUSH
1154	4822 276 13732	SWITCH TACT PUSH
1155	4822 276 13732	SWITCH TACT PUSH
1178	4822 276 13732	SWITCH TACT PUSH
1180	4822 276 13732	SWITCH TACT PUSH
1181	4822 276 13732	SWITCH TACT PUSH
1183	4822 276 13732	SWITCH TACT PUSH
1185	4822 276 13732	SWITCH TACT PUSH
1186	4822 276 13732	SWITCH TACT PUSH
1187	4822 276 13732	SWITCH TACT PUSH
1190	4822 276 13732	SWITCH TACT PUSH
1192	4822 276 13732	SWITCH TACT PUSH
1193	4822 276 13732	SWITCH TACT PUSH
1220	4822 276 13732	SWITCH TACT PUSH
1224	4822 276 13732	SWITCH TACT PUSH
1226	4822 276 13732	SWITCH TACT PUSH
1227	4822 276 13732	SWITCH TACT PUSH
1228	4822 276 13732	SWITCH TACT PUSH
1229	4822 276 13732	SWITCH TACT PUSH
1230	4822 276 13732	SWITCH TACT PUSH
1231	4822 276 13732	SWITCH TACT PUSH
1232	4822 276 13732	SWITCH TACT PUSH
1233	4822 276 13732	SWITCH TACT PUSH
1234	4822 276 13732	SWITCH TACT PUSH
1235	4822 276 13732	SWITCH TACT PUSH

1236	4822 276 13732	SWITCH TACT PUSH
1242	4822 276 13732	SWITCH TACT PUSH
1297	5322 242 73682	Crystal 32,768 KHZ
1298	4822 242 82114	Crystal 8,00 MHZ
1350▲	4822 071 51001	Fuse 100 mA
1351▲	4822 071 55001	Fuse 500 mA
1352▲	4822 071 55001	Fuse 500 mA
1353▲	4822 070 31252	Fuse 1.25 A
1355▲	4822 071 51002	Fuse 1.0 A
1356▲	4822 071 51002	Fuse 1.0 A
1400	4822 242 82059	Crystal 10 MHZ
1460	4822 277 11521	Switch
1461	4822 277 11521	Switch
1701	4822 210 10786	TP916MK2 PAL BG (TMRG1-108A compatible)
1701	4822 210 10787	TMRG1-110A PAL I (IRL) (TP944MK2, TMRB1102A comp.)
1701	4822 210 10784	TMRG1-203A PAL GK
1701	4822 210 10785	TP926MK2 Booster SECAM (TMRG2-104A compatible)
1719	4822 242 10688	OFWK9456M SEC-LL'
1719	4822 242 10306	OFWK9463M SEC-DK
1720	4822 242 81964	G1984 FM stereo PAL-G
1720	4822 242 81737	G1965 mono SEC
1720	4822 242 10307	OFWG3956M SEC-DK
1720	4822 242 81436	OFWK3953M stereo SEC
1721	4822 242 81388	OFWG1961M mono PAL-G
1721	4822 242 81261	OFWG1966M mono SEC-DK
1721	4822 242 10575	OFWJ1980M PAL-I
1722	4822 242 10318	OFWL9360M mono SEC-DK
1740	4822 242 72586	TPS 5,5MB-TF20 PAL-G
1740	4822 242 81572	TPS 6,0MB-TF21 PAL-I
1745	4822 242 70279	SFE 6,0MB SEC-L, PAL-I
1745	4822 242 10428	EFCT5R5YS5A PAL-G
1745	4822 242 10429	EFCT6R5YS5A SEC-DK
1746	4822 242 10428	EFCT5R5YS5A
1746	4822 242 10429	EFCT6R5YS5A SEC-DK
1747	4822 242 10563	EFCT5R74YS5A stereo FM
1748	4822 242 10754	EFCT6R25YS5A stereo DK
1781	4822 242 82059	Crystal 10 MHZ

CAPACITORS

2001	4822 126 10002	100nF20%Y5V	5V
2002	4822 122 33177	10nF 20% X7R	10V
2003	4822 126 10002	100nF20%Y5V	5V
2004	4822 122 33177	10nF 20% X7R	10V
2005	4822 124 23055	22µF20%	6V
2006	4822 126 13222	390pF 2% np0	3V
2007	5322 122 32966	39pF 5%np0	10V
2008	5322 122 32658	22pF 5%	10V
2009	4822 126 10002	100nF20%Y5V	5V
2010	4822 124 80987	220µF20%	3V
2011	4822 122 33177	10nF 20% X7R	10V
2012	4822 124 11569	4,7µF 20%	5V
2013	4822 126 10002	100nF20%Y5V	5V
2014	4822 124 80975	0,47µF20%	10V
2015	4822 126 10002	100nF20%Y5V	5V
2016	4822 126 10002	100nF20%Y5V	5V
2017	4822 124 22826	10µF	5V
2018	5322 122 32658	22pF 5%	10V
2019	4822 124 22826	10µF	5V
2020	4822 124 22826	10µF	5V
2021	4822 124 22826	10µF	5V
2022	4822 126 10002	100nF20%Y5V	5V
2023	4822 122 33177	10nF 20% X7R	10V
2024	4822 126 10002	100nF20%Y5V	5V
2025	4822 124 11568	47µF 20%	5V
2026	4822 122 33575	220pF 5%	10V
2027	4822 122 33177	10nF 20% X7R	10V
2028	4822 122 33177	10nF 20% X7R	10V
2029	4822 122 33177	10nF 20% X7R	10V
2030	4822 122 33177	10nF 20% X7R	10V
2031	4822 126 10002	100nF20%Y5V	5V

Motherboard PAL, SECAM, MONO, STEREO

2032	4822 124 11568	47µF 20%	16V	2158	4822 122 33177	10nF 20% X7R	50V
2033	4822 126 10002	100nF20%Y5V	25V	2159	4822 122 33177	10nF 20% X7R	50V
2034	4822 122 33177	10nF 20% X7R	50V	2160	4822 122 33177	10nF 20% X7R	50V
2035	4822 122 33177	10nF 20% X7R	50V	2161	4822 122 33177	10nF 20% X7R	50V
2036	4822 122 33515	82pF 5%	63V	2162	5322 122 32268	470pF 10%	50V
2037	4822 126 14124	220pF 2%		2163	5322 122 32531	100pF 5%	50V
2038	5322 122 32658	22pF 5%	50V	2203	5322 122 32481	15pF 5%	50V
2038	5322 122 32139	12pF 2%	50V for 2 heads	2204	5322 122 32481	15pF 5%	50V
2039	4822 124 23053	1µF20%	63V	2210	4822 122 33177	10nF 20% X7R	50V
2040	5322 122 32654	22nF10%X7R	63V	2211	4822 124 81112	220µF20%	10V
2041	4822 124 23053	1µF20%	63V	2212	4822 126 13061	220nF20% Y5V	25V
2042	4822 122 33797	47nF20%Y5V	50V	2220	4822 124 23055	22µF20%	16V
2043	4822 124 41969	1µF20%	50V	2230	4822 122 33177	10nF 20% X7R	50V
2044	4822 124 23053	1µF20%	63V	2231	4822 122 33797	47nF20%Y5V	50V
2045	4822 126 13196	100nF10%X7R	50V	2232	4822 122 33177	10nF 20% X7R	50V
2046	5322 122 34123	1nF10%X7R	50V	2233	4822 122 33177	10nF 20% X7R	50V
2048	5322 122 31873	2,7pF0,5%	100V	2251	4822 126 10002	100nF20%Y5V	25V
2047	4822 122 33177	10nF 20% X7R	50V	2252	4822 126 10002	100nF20%Y5V	25V
2049	4822 124 11568	47µF 20%	16V	2297	4822 124 11968	220mF +80-20%	5,5V
2054	4822 124 41969	1µF20%	50V	2300	4822 124 80407	1µF20%	50V
2055	4822 122 33177	10nF 20% X7R	50V	2301	4822 124 80407	1µF20%	50V
2059	4822 124 23053	1µF20%	63V	2302	4822 124 80407	1µF20%	50V
2064	5322 122 31946	27pF 5%	63V	2308	5322 122 32531	100pF 5%	50V
2066	4822 122 33177	10nF 20% X7R	50V	2310	4822 126 10002	100nF20%Y5V	25V
2080	5322 122 32658	22pF 5%	50V	2311	4822 122 33177	10nF 20% X7R	50V
2081	4822 122 33177	10nF 20% X7R	50V	2313	4822 122 33575	220pF 5%	50V
2082	4822 122 33177	10nF 20% X7R	50V	2314	4822 126 10002	100nF20%Y5V	25V
2083	4822 122 33177	10nF 20% X7R	50V	2315	4822 122 33177	10nF 20% X7R	50V
2084	4822 122 33177	10nF 20% X7R	50V	2316	4822 122 33797	47nF20%Y5V	50V
2085	4822 126 10002	100nF20%Y5V	25V	2317	5322 122 32654	22nF10%X7R	63V
2086	4822 124 11568	47µF 20%	16V	2318	4822 124 22263	220µF20%	25V
2087	4822 122 33177	10nF 20% X7R	50V	2319	5322 122 32654	22nF10%X7R	63V
2100	4822 122 33177	10nF 20% X7R	50V	2320	5322 122 32654	22nF10%X7R	63V
2101	5322 122 32531	100pF 5%	50V	2350	4822 126 14125	470pF 2%	
2102	5322 122 32658	22pF 5%	50V	2353	4822 126 13196	100nF10% X7R	25V
2103	5322 122 34123	1nF10%X7R	50V	2354	4822 126 10002	100nF20%Y5V	25V
2104	4822 122 33177	10nF 20% X7R	50V	2355	5322 122 34123	1nF10%X7R	50V
2105	4822 122 33177	10nF 20% X7R	50V	2356	4822 124 23053	1µF20%	63V
2106	4822 122 33177	10nF 20% X7R	50V	2357▲	4822 126 13841	1nF 20%	250V
2107	4822 122 33177	10nF 20% X7R	50V	2358	4822 126 10002	100nF20%Y5V	25V
2108	5322 122 33538	150pF 2%	63V	2359	4822 126 13061	220nF20% Y5V	25V
2109	5322 122 32481	15pF 5%	50V	2360▲	4822 121 10667	68nF 20%	275V
2110	4822 126 10002	100nF20%Y5V	25V	2361	4822 124 22864	47µF	50V
2111	4822 126 13694	68pF 1%	63V	2362▲	4822 124 11969	22µF 20%	400V
2112	4822 122 33177	10nF 20% X7R	50V	2363	4822 124 22864	47µF	50V
2113	4822 126 10002	100nF20%Y5V	25V	2364	4822 124 11899	220µF 20%	25V
2115	4822 122 33575	220pF 5%	50V	2365	4822 124 11971	470µF 20%	16V
2116	4822 122 33177	10nF 20% X7R	50V	2366	4822 126 14126	47pF 5%	2KV
2117	5322 122 34123	1nF10%X7R	50V	2367	4822 124 11899	220µF 20%	25V
2118	5322 122 32659	33pF 5%	50V	2368	4822 122 31175	1nF 10%	500V
2119	5322 122 32531	100pF 5%	50V for mstd /39	2369	4822 126 10002	100nF20%Y5V	25V
2119	4822 122 33797	47nF 20%	50V	2370	4822 124 23052	100µF20%	16V
2121	5322 122 34123	1nF10%X7R	50V	2371	4822 124 11971	470µF 20%	16V
2122	4822 122 33177	10nF 20% X7R	50V	2372	4822 126 13061	220nF20% Y5V	25V
2123	4822 126 10002	100nF20%Y5V	25V	2373	4822 124 11486	220µF 20%	16V
2124	4822 126 10002	100nF20%Y5V	25V	2374	4822 124 11971	470µF 20%	16V
2125	4822 122 33515	82pF 5%	63V	2375	4822 121 42004	10nF 10%	400V
2126	5322 122 31946	27pF 5%	63V	2376	4822 124 22833	10µF	50V
2128	4822 122 33515	82pF 5%	63V	2378	4822 121 42004	10nF 10%	400V
2129	4822 122 33515	82pF 5%	63V	2379	5322 126 10223	4,7nF10%X7R	63V
2130	4822 122 33575	220pF 5%	50V	2385	4822 124 11486	220µF 20%	16V
2132	5322 122 32269	6,8pF 5%	50V	2386	5322 122 32268	470pF 10%	50V
2133	5322 122 32452	47pF 5%	63V	2400	4822 122 33177	10nF 20% X7R	50V
2134	4822 122 33575	220pF 5%	50V	2401	4822 124 23055	22µF20%	16V
2135	5322 122 31946	27pF 5%	63V	2403	5322 122 32658	22pF 5%	50V
2137	4822 116 10056	VDR 0805 1MA/ 8VMAX		2404	5322 122 32658	22pF 5%	50V
2138	4822 116 10056	VDR 0805 1MA/ 8VMAX		2416	4822 126 10002	100nF20%Y5V	25V
2150	4822 122 33177	10nF 20% X7R	50V	2417	4822 124 81295	47µF20%	6,3V
2151	4822 126 13061	220nF20% Y5V	25V	2440	4822 124 81029	100µF20%	25V
2152	4822 124 11568	47µF 20%	16V	2441	4822 126 10002	100nF20%Y5V	25V
2153	5322 122 32654	22nF 10% X7R	63V	2442	4822 122 33177	10nF 20% X7R	50V
2154	4822 122 33177	10nF 20% X7R	50V	2455	4822 122 33175	2,2nF 20% X7R	50V
2155	4822 122 33177	10nF 20% X7R	50V	2459	4822 124 22263	220µF20%	25V
2156	4822 122 33177	10nF 20% X7R	50V	2461	5322 126 10223	4,7nF10%X7R	63V
2157	4822 122 33177	10nF 20% X7R	50V	2463	4822 124 23027	47µF	6,3V

Motherboard PAL, SECAM, MONO, STEREO

2464	5322 126 10223	4,7nF10%X7R	63V		2707	5322 122 33861	120pF10%	50V
2465	4822 122 33175	2,2nF 20% X7R	50V		2708	4822 124 23055	22µF20%	16V
2466	4822 124 23027	47µF	6.3V		2709	4822 126 10002	100nF20%Y5V	25V
2467	4822 122 33342	33nF10%X7R	63V		2715	5322 122 32661	56pF 5%	50V
2468	4822 126 10002	100nF20%Y5V	25V		2716	5322 122 32661	56pF 5%	50V
2470	4822 122 33177	10nF 20% X7R	50V		2722	5322 122 34123	1nF10%X7R	50V
2471	4822 122 33177	10nF 20% X7R	50V		2723	4822 122 33177	10nF 20% X7R	50V
2472	5322 122 32531	100pF 5%	50V		2726	4822 126 12104	12nF 5%X7R	63V
2473	5322 122 32531	100pF 5%	50V		2727	4822 124 23055	22µF20%	16V
2474	5322 122 32531	100pF 5%	50V		2728	4822 124 23055	22µF20%	16V
2501	4822 126 10002	100nF20%Y5V	25V		2729	4822 122 33177	10nF 20% X7R	50V
2502	4822 122 22826	10µF	16V		2730	5322 122 32452	47pF 5%	63V
2503	4822 124 22826	10µF	16V		2731	5322 122 32452	47pF 5%	63V
2504	4822 116 10056	VDR 0805 1MA/ 8VMAX	for stereo		2732	5322 122 32452	47pF 5%	63V
2504	5322 122 32268	470pF 10%	50V	for mono	2733	4822 122 33177	10nF 20% X7R	50V
2505	5322 122 32268	470pF 10%	50V	for mono	2734	4822 126 10002	100nF20%Y5V	25V
2505	4822 116 10056	VDR 0805 1MA/ 8VMAX	for stereo		2735	5322 122 32452	47pF 5%	63V
2506	4822 116 10056	VDR 0805 1MA/ 8VMAX	for stereo		2740	4822 124 41576	2,2µF 20%	50V
2506	5322 122 32268	470pF 10%	50V	for mono	2741	4822 126 10002	100nF20%Y5V	25V
2507	4822 116 10056	VDR 0805 1MA/ 8VMAX			2742	4822 124 23055	22µF20%	16V
2508	4822 126 10002	100nF20%Y5V	25V		2743	4822 126 13061	220nF20% Y5V	25V
2509	5322 122 32268	470pF 10%	50V	for mono	2744	4822 124 40786	2,2µF20%	63V
2509	4822 116 10056	VDR 0805 1MA/ 8VMAX	for stereo		2745	4822 122 33575	220pF 5%	50V
2510	5322 122 32268	470pF 10%	50V	for mono	2746	4822 126 10002	100nF20%Y5V	25V
2510	4822 116 10056	VDR 0805 1MA/ 8VMAX	for stereo		2747	4822 126 10002	100nF20%Y5V	25V
2511	4822 116 10056	VDR 0805 1MA/ 8VMAX	for stereo		2748	4822 126 12945	8,2pF 2%	
2511	5322 122 32268	470pF 10%	50V	for mono	2749	4822 126 13061	220nF20% Y5V	25V
2512	4822 116 10056	VDR 0805 1MA/ 8VMAX			2750	4822 124 40786	2,2µF20%	63V
2514	4822 124 23027	47µF	6.3V		2752	4822 126 13061	220nF20% Y5V	25V
2515	4822 126 10002	100nF20%Y5V	25V		2780	4822 124 22826	10µF	16V
2516	4822 124 11568	47µF 20%	16V		2781	4822 122 33177	10nF 20% X7R	50V
2517	4822 126 10002	100nF20%Y5V	25V		2782	4822 126 10002	100nF20%Y5V	25V
2519	4822 126 10002	100nF20%Y5V	25V		2783	5322 126 10184	680p 5%	50V
2520	4822 126 10002	100nF20%Y5V	25V		2784	4822 124 11568	47µF 20%	16V
2521	4822 126 10002	100nF20%Y5V	25V		2785	5322 122 32531	100pF 5%	50V
2523	4822 126 10002	100nF20%Y5V	25V		2786	4822 124 11569	4,7µF 20%	25V
2524	4822 126 10002	100nF20%Y5V	25V		2787	4822 124 11569	4,7µF 20%	25V
2525	4822 126 10002	100nF20%Y5V	25V		2788	5322 122 32654	22nF10% X7R	63V
2526	4822 126 10002	100nF20%Y5V	25V		2789	4822 122 33177	10nF 20% X7R	50V
2527	4822 126 10002	100nF20%Y5V	25V		2790	4822 122 33177	10nF 20% X7R	50V
2530	4822 126 13061	220nF20% Y5V	25V		2791	4822 124 11569	4,7µF 20%	25V
2540	4822 126 10002	100nF20%Y5V	25V		2792	4822 124 11569	4,7µF 20%	25V
2541	4822 122 33175	2,2nF 20% X7R	50V		2793	5322 122 32481	15pF 5%	50V
2542	4822 122 33342	33nF10%X7R	63V		2794	4822 126 10002	100nF20%Y5V	25V
2543	4822 126 13482	470nF80/20%	16V		2795	5322 122 34123	1nF10%X7R	50V
2545	4822 126 10002	100nF20%Y5V	25V		2796	4822 124 11569	4,7µF 20%	25V
2600	5322 126 10184	680p 5%	50V		2800	4822 126 13689	18pF 1%	63V
2601	4822 122 33175	2,2nF 20% X7R	50V		2801	5322 122 32659	33pF 5%	50V
2602	4822 124 22826	10µF	16V		2802	4822 126 14118	100nF -20+80%	50V
2603	4822 122 33177	10nF 20% X7R	50V		2802	4822 126 10002	100nF20%Y5V	25V
2604	4822 124 22739	100µF	50V	for mono	2803	4822 126 10002	100nF20%Y5V	25V
2604	4822 124 22826	10µF	16V	for stereo	2804	4822 124 23053	1µF20%	63V
2605	5322 122 34123	1nF10%X7R	50V		2805	4822 124 23027	47µF	6.3V
2606	4822 126 10002	100nF20%Y5V	25V		2810	5322 122 33861	120pF10%	50V
2608	4822 122 33177	10nF 20% X7R	50V		2811	5322 122 32531	100pF 5%	50V
2617	4822 124 11568	47µF 20%	16V		2829	4822 122 33177	10nF 20% X7R	50V
2618	5322 122 31863	330pF 5%	50V		2831	5322 122 32481	15pF 5%	50V
2619	4822 124 11568	47µF 20%	16V		2850	4822 124 23052	100µF20%	16V
2620	4822 121 51655	47nF	50V		2851	5322 122 32654	22nF10% X7R	63V
2621	5322 122 34123	1nF10%X7R	50V		2852	4822 124 23052	100µF20%	16V
2622	4822 121 43873	27nF 5%	50V		2853	5322 122 32654	22nF10% X7R	63V
2646	4822 126 13482	470nF80/20%	16V		2854	4822 124 40786	2,2µF20%	63V
2647	4822 126 10002	100nF20%Y5V	25V		2855	5322 122 32654	22nF10% X7R	63V
2648	4822 124 23055	22µF20%	16V		2856	5322 122 32654	22nF10% X7R	63V
2650	4822 126 10002	100nF20%Y5V	25V		2857	4822 126 13061	220nF20% Y5V	25V
2651	4822 124 11568	47µF 20%	16V		2858	4822 126 13061	220nF20% Y5V	25V
2652	4822 124 22826	10µF	16V		2859	4822 126 13061	220nF20% Y5V	25V
2656	4822 126 14127	39nF 10%	50V		2860	4822 126 13061	220nF20% Y5V	25V
2657	4822 122 33128	15nF10%X7R	63V		2861	4822 126 13061	220nF20% Y5V	25V
2700	4822 126 10002	100nF20%Y5V	25V		2862	4822 126 13061	220nF20% Y5V	25V
2701	4822 126 10002	100nF20%Y5V	25V		2863	4822 126 13061	220nF20% Y5V	25V
2702	4822 126 10002	100nF20%Y5V	25V		2864	4822 126 13061	220nF20% Y5V	25V
2704	4822 124 23052	100µF20%	16V		2865	5322 126 10223	4,7nF10%X7R	63V
2705	5322 122 32268	470pF 10%	50V		2866	4822 124 11568	47µF 20%	16V
2706	4822 122 33575	220pF 5%	50V		2867	4822 124 22826	10µF	16V

Motherboard PAL, SECAM, MONO, STEREO

2868	4822 126 13061	220nF20% Y5V	25V
2869	5322 126 10223	4,7nF10%X7R	63V
2870	4822 124 11568	47µF 20%	16V
2871	4822 124 22826	10µF	16V
2872	4822 124 22826	10µF	16V
2873	4822 124 22826	10µF	16V
2874	4822 124 22826	10µF	16V
2875	4822 124 22826	10µF	16V
2876	4822 124 22826	10µF	16V
2877	4822 124 22826	10µF	16V
2880	4822 124 22826	10µF	16V
2881	4822 124 22826	10µF	16V
2882	5322 126 10223	4,7nF10%X7R	63V
2883	5322 116 80853	560pF 5%	63V
2884	5322 126 10223	4,7nF10%X7R	63V
2885	5322 116 80853	560pF 5%	63V
2888	4822 124 22826	10µF	16V
2889	4822 126 10002	100nF20%Y5V	25V

RESISTORS

3000	4822 051 10102	1K00	2%	0,25W	
3001	4822 051 10102	1K00	2%	0,25W	
3002	4822 116 52228	680E	5%	0,5W	
3003	4822 116 52228	680E	5%	0,5W	
3004	4822 116 52228	680E	5%	0,5W	
3005	4822 116 52303	8K2	5%	0,5W	
3006	4822 116 52238	12K	5%	0,5W	
3007	4822 100 12157	10K	30%	POT	
3008	4822 116 83883	470E	5%	0,5W	
3010	4822 051 10102	1K00	2%	0,25W	
3011	4822 117 11449	2K2	1%	0,1W	
3012	4822 117 11449	2K2	1%	0,1W	
3013	4822 117 11721	1K3	2%	0,1W	
3014	4822 116 83903	4K7	2%	0,1W	
3015	4822 051 10102	1K00	2%	0,25W	
3016	4822 051 20822	8K20	5%	0,1W	
3017	4822 116 52249	1K8	5%	0,5W	
3018	4822 116 83883	470E	5%	0,5W	
3019	4822 051 20562	5K60	5%	0,1W	
3020	4822 051 20224	220K0	5%	0,1W	
3021	4822 050 11002	1K00	1%	0,4W	
3022	4822 050 11002	1K00	1%	0,4W	
3024	4822 051 20822	8K20	1%	0,1W	
3024	4822 051 20682	6K80	5%	0,1W	for 2/x
3027	4822 116 52264	27K	5%	0,5W	
3028	4822 051 20562	5K60	5%	0,1W	for 1 scart
3028	4822 051 20332	3K30	5%	0,1W	for 2 scart
3029	4822 051 20225	2M20	5%	0,1W	
3030	4822 116 52256	2K2	5%	0,5W	
3031	4822 116 52256	2K2	5%	0,5W	
3032	4822 117 11449	2K2	1%	0,1W	
3033	4822 117 10965	18K	5%	0,5W	
3034	4822 051 20153	15K00	5%	0,1W	
3035	4822 117 11449	2K2	1%	0,1W	
3036	4822 051 20471	470R0	5%	0,1W	
3045	4822 116 83876	270E	5%	0,5W	
3046	4822 050 11002	1K00	1%	0,4W	
3048	4822 116 83884	47K	5%	0,5W	
3050	4822 116 83872	220R	5%	0,5W	for mstd
3050	4822 116 52175	100E	5%	0,5W	
3051	4822 051 20224	220K0	5%	0,1W	
3052	4822 116 52175	100E	5%	0,5W	
3054	4822 117 11449	2K2	1%	0,1W	
3055	4822 117 10361	680R	1%	0,1W	
3080	4822 051 20568	5R60	5%	0,1W	
3081	4822 051 20561	560R0	5%	0,1W	
3082	4822 051 20471	470R0	5%	0,1W	
3083	4822 051 20472	4K70	5%	0,1W	
3084	4822 051 20472	4K70	5%	0,1W	
3085	4822 051 20112	1K10	5%	0,1W	
3086	4822 051 20331	330R0	5%	0,1W	
3087	4822 116 52234	100K	5%	0,5W	
3089	4822 051 20561	560R0	5%	0,1W	

3100	4822 116 52219	330E	5%	0,5W	
3101	4822 051 20332	3K30	5%	0,1W	
3102	4822 116 52231	820E	5%	0,5W	
3103	4822 116 52228	680E	5%	0,5W	
3104	4822 050 11002	1K00	1%	0,4W	
3105	4822 116 52222	390E	5%	0,5W	
3106	4822 116 52226	560E	5%	0,5W	
3107	4822 050 11002	1K00	1%	0,4W	
3109	4822 116 52195	47E	5%	0,5W	
3110	4822 116 52207	1K2	5%	0,5W	
3111	4822 116 52256	2K2	5%	0,5W	
3112	4822 051 10102	1K00	2%	0,25W	
3113	4822 051 20561	560R0	5%	0,1W	
3114	4822 117 10833	10K	1%	0,1W	
3115	4822 116 52251	18K	5%	0,5W	
3116	4822 051 10102	1K00	2%	0,25W	
3117	4822 116 52256	2K2	5%	0,5W	
3118	4822 116 52283	4K7	5%	0,5W	
3119	4822 116 52271	33K	5%	0,5W	
3120	4822 116 52303	8K20	5%	0,5W	
3121	4822 051 20182	1K80	5%	0,1W	
3122	4822 051 10102	1K00	2%	0,25W	
3123	4822 116 83864	10K	5%	0,5W	
3124	4822 116 52243	1K5	5%	0,5W	
3125	4822 117 11449	2K2	1%	0,1W	
3126	4822 051 10102	1K00	2%	0,25W	
3127	4822 117 11449	2K2	1%	0,1W	
3128	4822 117 11449	2K2	1%	0,1W	
3129	4822 051 10102	1K00	2%	0,25W	
3134	4822 117 11503	220R	1%	0,1W	
3135	4822 117 11503	220R	1%	0,1W	
3151	4822 051 20104	100K00	5%	0,1W	
3152	4822 051 20393	39K00	5%	0,1W	
3153	4822 117 10833	10K	1%	0,1W	
3154	4822 117 12605	27K	1%	0,1W	for 4/2
3154	4822 117 10354	22K	1%	0,1W	for 4/0
3154	4822 117 12141	14K	1%	0,1W	for 3/0
3154	4822 117 12342	18K	1%	0,1W	for 2/x
3155	4822 117 11383	12K	1%	0,1W	for 2/x
3155	4822 051 20153	15K00	5%	0,1W	for 4/x
3156	4822 051 20331	330R00	5%	0,1W	
3157	4822 051 20331	330R00	5%	0,1W	
3158	4822 051 20472	4K70	5%	0,1W	
3159	4822 100 12157	10K	30%	POT	
3160	4822 100 12157	10K	30%	POT	
3162	4822 051 20008	0R00 JUMP (0805)			
3163	4822 051 20008	0R00 JUMP (0805)			
3164	4822 051 20008	0R00 JUMP (0805)			
3165	4822 051 20008	0R00 JUMP (0805)			
3228	4822 116 83872	220E	5%	0,5W	
3229	4822 117 10833	10K	1%	0,1W	
3230	4822 117 10833	10K	1%	0,1W	
3231	4822 116 52175	100E	5%	0,5W	
3232	4822 051 20101	100E	5%	0,5W	
3233	4822 116 83864	10K	5%	0,5W	
3234	4822 116 83864	10K	5%	0,5W	
3235	4822 116 83864	10K	5%	0,5W	
3238	4822 116 83864	10K	5%	0,5W	
3240	4822 116 52297	68K	5%	0,5W	
3241	4822 051 20683	68K00	5%	0,1W	
3242	4822 051 20683	68K00	5%	0,1W	
3243	4822 051 20683	68K00	5%	0,1W	
3244	4822 050 11002	1K00	1%	0,4W	
3245	4822 051 20183	18K00	5%	0,1W	
3250	4822 051 20153	15K00	5%	0,1W	
3252▲	4822 117 11593	22E	5%		
3253	4822 050 24708	4R70	1%	0,6W	
3254	4822 050 24708	4R70	1%	0,6W	
3265	4822 116 83864	10K	5%	0,5W	
3270	4822 117 11503	220R	1%	0,1W	
3271	4822 117 11503	220R	1%	0,1W	
3273	4822 117 11503	220R	1%	0,1W	
3297	4822 051 20562	5K60	5%	0,1W	
3300	4822 116 52175	100E	5%	0,5W	
3301	4822 116 52175	100E	5%	0,5W	

Motherboard PAL, SECAM, MONO, STEREO

3302	4822 116 52175	100E	5%	0,5W	
3303	4822 116 83883	470E	5%	0,5W	
3304	4822 050 11002	1K00	1%	0,4W	
3305	4822 116 52283	4K7	5%	0,5W	
3312	4822 116 52249	1K8	5%	0,5W	
3313	4822 116 83884	47K	5%	0,5W	
3350	4822 117 10833	10K	1%	0,1W	
3351	4822 051 20223	22K00	5%	0,1W	
3352	4822 051 20562	5K60	5%	0,1W	
3353	4822 117 10833	10K	1%	0,1W	
3354	4822 117 11449	2K2	1%	0,1W	
3355	4822 051 20822	8K20	5%	0,1W	
3356	4822 051 20223	22K00	5%	0,1W	
3357	4822 051 20472	4K70	5%	0,1W	
3358	4822 117 11149	82K	1%	0,1W	
3359	4822 051 20471	470R00	5%	0,1W	
3360	4822 051 20689	68R00	5%	0,1W	
3361▲	4822 052 10479	47R00	5%	0,33W	
3362	4822 051 20472	4K70	5%	0,1W	
3363	4822 050 21208	1R20	1%	0,6W	
3365	4822 116 83874	220K	5%	0,5W	
3369	4822 116 83882	39K	5%	0,5W	
3370	4822 116 83882	39K	5%	0,5W	
3374	4822 051 20271	270R00	5%	0,1W	
3375	4822 051 10102	1K00	2%	0,25W	
3376	4822 051 20008	0R00 JUMP (0805)			
3377	4822 051 20472	4K70	5%	0,1W	
3378	4822 051 20272	2K70	5%	0,1W	
3379	4822 101 11383	470E	30%	POT	
3380	4822 051 10102	1K00	2%	0,25W	
3381	4822 051 20104	100K00	5%	0,1W	
3382	4822 117 10833	10K	1%	0,1W	
3383	4822 116 83874	220K	5%	0,5W	
3384▲	4822 052 10101	100R00	5%	0,33W	
3385	4822 116 52269	3K30	1%	0,4W	
3386	4822 116 52219	330R00	1%	0,4W	
3387	4822 116 52226	560R00	5%	0,5W	
3387	4822 116 83883	470R00	5%	0,5W	for stereo
3388	4822 116 52226	560R00	5%	0,5W	
3388	4822 116 83883	470R00	5%	0,5W	for stereo
3389	4822 117 11449	2K2	1%	0,1W	
3390	4822 051 20224	220K00	5%	0,1W	
3391	4822 051 20224	220K00	5%	0,1W	
3392▲	4822 053 21335	3M30	5%	0,5W	
3393▲	4822 053 21335	3M30	5%	0,5W	
3394	4822 116 52256	2K2	5%	0,5W	
3395	4822 116 52257	22K	5%	0,5W	
3396	4822 116 52257	22K	5%	0,5W	
3397	4822 051 20101	100E	5%	0,5W	
3398	4822 051 20101	100E	5%	0,5W	
3400	4822 116 83864	10K	5%	0,5W	
3401	4822 116 83864	10K	5%	0,5W	
3402	4822 050 11002	1K00	1%	0,4W	
3403	4822 116 52256	2K2	5%	0,5W	
3404	4822 116 83864	10K	5%	0,5W	
3405	4822 116 83876	270E	5%	0,5W	
3406	4822 116 83864	10K	5%	0,5W	
3407	4822 116 83864	10K	5%	0,5W	
3408	4822 116 52256	2K2	5%	0,5W	
3410	4822 051 20472	4K70	5%	0,1W	
3411	4822 116 83864	10K	5%	0,5W	
3412	4822 116 52249	1K8	5%	0,5W	
3413	4822 050 11002	1K00	1%	0,4W	
3414▲	4822 052 10109	10R00	5%	0,33W	
3415▲	4822 052 10109	10R00	5%	0,33W	
3416	4822 116 52257	22K	5%	0,5W	
3417	4822 116 52283	4K7	5%	0,5W	
3418	4822 050 11002	1K00	1%	0,4W	
3419	4822 051 20472	4K70	5%	0,1W	
3420	4822 117 10833	10K	1%	0,1W	
3421	4822 116 83864	10K	5%	0,5W	
3423	4822 116 83876	270R	5%	0,5W	
3424	4822 116 52256	2K2	5%	0,5W	
3430	4822 116 52249	1K8	5%	0,5W	
3431	4822 116 52276	3K9	5%	0,5W	
3432	4822 116 83864	10K	5%	0,5W	
3433	4822 116 52256	2K2	5%	0,5W	
3434	4822 116 52257	22K	5%	0,5W	
3435	4822 116 83864	10K	5%	0,5W	
3436	4822 050 11002	1K00	1%	0,4W	
3437	4822 116 83961	6K8	5%	0,5W	
3438	4822 051 20472	4K70	5%	0,1W	
3440▲	4822 052 10228	2R20	5%	0,33W	
3441	4822 116 80176	1E	5%	0,5W	
3442	4822 116 52304	82K	5%	0,5W	
3443	4822 116 52257	22K	5%	0,5W	
3444	4822 116 52276	3K9	5%	0,5W	
3445	4822 116 83864	10K	5%	0,5W	
3446	4822 116 52257	22K	5%	0,5W	
3447	4822 116 52257	22K	5%	0,5W	
3448	4822 116 83864	10K	5%	0,5W	
3449	4822 117 10833	10K	1%	0,1W	
3450	4822 116 52256	2K2	5%	0,5W	
3451	4822 116 83864	10K	5%	0,5W	
3452	4822 116 52249	1K8	5%	0,5W	
3453	4822 116 52283	4K7	5%	0,5W	
3454	4822 116 52283	4K7	5%	0,5W	
3455	4822 116 52283	4K7	5%	0,5W	
3456	4822 117 10833	10K	1%	0,1W	
3457	4822 050 11002	1K00	1%	0,4W	
3458	4822 051 20223	22K00	5%	0,1W	
3459	4822 116 83876	270E	5%	0,5W	
3460	4822 116 83884	47K	5%	0,5W	
3461	4822 051 20472	4K70	5%	0,1W	
3462	4822 051 20563	56K00	5%	0,1W	
3463	4822 116 52283	4K7	5%	0,5W	
3464	4822 116 52256	2K2	5%	0,5W	
3466	4822 116 83864	10K	5%	0,5W	
3469	4822 116 83876	270E	5%	0,5W	
3470	4822 116 52264	27K	5%	0,5W	
3471	4822 116 52222	390E	5%	0,5W	
3472	4822 116 52264	27K	5%	0,5W	
3473	4822 116 52222	390E	5%	0,5W	
3474	4822 116 83864	10K	5%	0,5W	
3475	4822 116 52289	5K6	5%	0,5W	
3476	4822 116 52222	390E	5%	0,5W	
3477	4822 116 52283	4K7	5%	0,5W	
3478	4822 051 20104	100K00	5%	0,1W	
3479	4822 116 52283	4K7	5%	0,5W	
3480	4822 116 83884	47K	5%	0,5W	
3481	4822 116 52256	2K2	5%	0,5W	
3482	4822 116 52257	22K	5%	0,5W	
3483	4822 116 83864	10K	5%	0,5W	
3484	4822 116 52283	4K7	5%	0,5W	
3488	4822 051 20471	470R00	5%	0,1W	
3489	4822 116 52283	4K7	5%	0,5W	
3490	4822 116 83872	220R	5%	0,5W	
3491	4822 116 83884	47K	5%	0,5W	
3492	4822 051 20473	47K00	5%	0,1W	
3493	4822 051 20225	2M20	5%	0,1W	
3494	4822 051 20104	100K00	5%	0,1W	
3495	4822 051 20104	100K00	5%	0,1W	
3496	4822 051 20472	4K70	5%	0,1W	
3497	4822 051 20472	4K70	5%	0,1W	
3498	4822 051 20472	4K70	5%	0,1W	
3499	4822 116 52283	4K7	5%	0,5W	
3501	4822 051 10102	1K00	2%	0,25W	
3502	4822 051 10102	1K00	2%	0,25W	
3503	4822 051 10102	1K00	2%	0,25W	
3505	4822 051 20759	75R00	5%	0,1W	
3509	4822 051 20008	0R00 JUMP (0805)			
3510	4822 051 20008	0R00 JUMP (0805)			
3512	4822 051 20682	6K80	5%	0,1W	
3513	4822 116 83872	220E	5%	0,5W	
3514	4822 116 83961	6K80	5%		
3515	4822 051 20682	6K80	5%	0,1W	
3516	4822 117 11503	220R	1%	0,1W	
3517	4822 116 52234	100K	5%	0,5W	
3518	4822 116 52234	100K	5%	0,5W	
3519	4822 051 20822	8K20	5%	0,1W	

▲... Safety component, use only this type

PCS 93764

Motherboard PAL, SECAM, MONO, STEREO

3520	4822 117 10353	150R	1%	0,1W	
3521	4822 116 83961	6K8	5%		
3522	4822 051 20821	820R00	5%	0,1W	
3523	4822 051 20008	0R00 JUMP (0805)			
3524	4822 051 20759	75R00	5%	0,1W	
3525	4822 051 20822	8K20	5%	0,1W	
3526	4822 117 11449	2K20	1%	0,1W	
3527	4822 051 20472	4K70	5%	0,1W	
3528	4822 116 83884	47K	5%	0,5W	
3529	4822 051 20759	75R00	5%	0,1W	
3530	4822 051 20472	4K70	5%	0,1W	
3531	4822 051 20101	100R00	5%	0,1W	
3532	4822 051 20101	100R00	5%	0,1W	
3533	4822 051 20759	75R00	5%	0,1W	
3534	4822 051 20008	0R00 JUMP (0805)			
3535	4822 117 11503	220E	1%	0,1W	
3536	4822 117 11503	220E	1%	0,1W	
3537	4822 116 83872	220E	5%	0,5W	
3538	4822 116 83961	6K8	5%		
3539	4822 116 83961	6K8	5%		
3540	4822 117 11503	220E	1%	0,1W	
3542	4822 117 11503	220E	1%	0,1W	
3543	4822 051 20471	470R00	5%	0,1W	
3544	4822 117 11503	220R	1%	0,1W	
3545	4822 116 52256	2K2	5%	0,5W	
3546	4822 116 52256	2K2	5%	0,5W	
3547	4822 051 20479	47R00	5%	0,1W	
3548	4822 051 20682	6K80	5%	0,1W	
3549	4822 051 20101	100R00	5%	0,1W	
3550	4822 051 20105	1M00	5%	0,1W	
3551	4822 051 20105	1M00	5%	0,1W	
3552	4822 051 20682	6K80	5%	0,1W	
3553	4822 051 20101	100R00	5%	0,1W	
3554	4822 051 20101	100R00	5%	0,1W	
3555	4822 051 20008	0R00 JUMP (0805)			
3556	4822 051 20474	470K00	5%	0,1W	
3557	4822 051 20104	100K00	5%	0,1W	
3560	4822 051 20008	0R00 JUMP (0805)			
3561	4822 051 20472	4K70	5%	0,1W	
3562	4822 051 20473	47K00	5%	0,1W	
3563	4822 051 20822	8K20	5%	0,1W	
3570	4822 116 83864	10K	5%	0,5W	
3571	4822 117 11383	12K	1%	0,1W	
3600	4822 116 52257	22K	5%	0,5W	
3601	4822 117 10833	10K	1%	0,1W	
3602	4822 051 20472	4K70	5%	0,1W	
3603	4822 051 20101	100R00	5%	0,1W	
3604	4822 116 52257	22K	5%	0,5W	
3605	4822 117 11449	2K2	1%	0,1W	
3606	4822 116 52195	47E	5%	0,5W	
3607	4822 051 20394	390K00	5%	0,1W	
3608	4822 117 11383	12K	1%	0,1W	
3609	4822 051 20822	8K20	5%	0,1W	
3610	4822 117 11449	2K2	1%	0,1W	
3611	4822 051 20101	100R00	5%	0,1W	for mono
3611	4822 051 20681	680R00	5%	0,1W	for stereo
3612	4822 117 11449	2K2	1%	0,1W	
3615	4822 051 20101	100R00	5%	0,1W	
3618	4822 100 12159	100K	30%	POT	
3619	4822 051 20158	1R50	5%	0,1W	
3620	4822 051 20473	47K00	5%	0,1W	
3622	4822 051 20335	3M30	5%	0,1W	
3623	4822 117 10833	10K	1%	0,1W	
3624	4822 051 20332	3K30	5%	0,1W	
3625	4822 051 20339	33R00	5%	0,1W	
3626	4822 051 20224	220K00	5%	0,1W	
3627	4822 051 20563	56K00	5%	0,1W	
3638	4822 051 20109	10R00	5%	0,1W	
3655	4822 051 20681	680R00	5%	0,1W	
3656	4822 116 83961	6K8	5%		
3657	4822 051 20391	390R00	5%	0,1W	
3702	4822 051 20101	100R00	5%	0,1W	
3703	4822 051 20101	100R00	5%	0,1W	
3704	4822 051 20182	1k80	5%	0,1W	
3705	4822 051 20223	22K00	5%	0,1W	
3706	4822 051 20182	1k80	5%	0,1W	
3707	4822 051 20101	100R00	5%	0,1W	
3708	4822 051 20101	100R00	5%	0,1W	
3709	4822 051 20101	100R00	5%	0,1W	
3712	4822 051 20272	2K70	5%	0,1W	
3715	4822 051 20122	1K20	5%	0,1W	
3723	4822 051 20224	220K00	5%	0,1W	
3725	4822 051 20333	33K00	5%	0,1W	
3726	4822 051 20273	27K00	5%	0,1W	
3729	4822 051 20391	390R00	5%	0,1W	
3730	4822 051 20183	18K00	5%	0,1W	
3731	4822 051 20183	18K00	5%	0,1W	
3732	4822 051 20391	390R00	5%	0,1W	
3735	4822 117 11448	180R	1%	0,1W	for mono SEC
3735	4822 051 20391	390R00	5%	0,1W	
3736	4822 051 20562	5K60	5%	0,1W	
3737	4822 051 20392	3K90	5%	0,1W	
3739	4822 051 20681	680R00	5%	0,1W	
3742	4822 100 12158	22K	30%	POT	
3744	4822 051 20154	150K00	5%	0,1W	
3747	4822 051 20391	390R00	5%	0,1W	for SECAM
3747	4822 051 20331	330R00	5%	0,1W	for SEC DK
3747	4822 051 20271	270E	5%	0,1W	for PAL
3748	4822 100 12156	4K7	30%	POT	for PLL adj.
3748	4822 100 12158	22K	30%	POT	for Bd. 1 adj.
3749	4822 051 20681	680R00	5%	0,1W	
3750	4822 051 20331	330R00	5%	0,1W	
3760	4822 051 10102	1K00	2%	0,25W	
3760	4822 051 20821	820R00	5%	0,1W	for PAL I
3761	4822 051 10102	1K00	2%	0,25W	
3762	4822 051 10102	1K00	2%	0,25W	
3764	4822 051 10102	1K00	2%	0,25W	for PAL
3764	4822 051 20821	820R00	5%	0,1W	for SECAM
3765	4822 051 20562	5K60	5%	0,1W	
3766	4822 051 20473	47K00	5%	0,1W	
3767	4822 051 20472	4K70	5%	0,1W	
3768	4822 051 20104	100K00	5%	0,1W	
3769	4822 051 20472	4K70	5%	0,1W	
3770	4822 051 20104	100K00	5%	0,1W	
3771	4822 051 20472	4K70	5%	0,1W	
3772	4822 051 20104	100K00	5%	0,1W	
3773	4822 051 20104	100K00	5%	0,1W	
3780	4822 051 20101	100R00	5%	0,1W	
3781	4822 051 20101	100R00	5%	0,1W	
3782	4822 051 20333	33K00	5%	0,1W	
3790	4822 051 20472	4K70	5%	0,1W	
3791	4822 051 20562	5K60	5%	0,1W	
3792	4822 051 20472	4K70	5%	0,1W	
3793	4822 051 20562	5K60	5%	0,1W	
3805	4822 051 20101	100R00	5%	0,1W	
3807	4822 051 20479	47R00	5%	0,1W	
3808	4822 051 20479	47R00	5%	0,1W	
3813	4822 051 20472	4K70	5%	0,1W	
3815	4822 117 10833	10K	1%	0,1W	
3816	4822 117 10833	10K	1%	0,1W	
3817	4822 117 10833	10K	1%	0,1W	
3818	4822 051 20153	15K00	5%	0,1W	
3819	4822 117 10833	10K	1%	0,1W	
3820	4822 117 10833	10K	1%	0,1W	
3821	4822 117 10833	10K	1%	0,1W	
3822	4822 051 20153	15K00	5%	0,1W	
3823	4822 117 10833	10K	1%	0,1W	
3824	4822 117 11449	2K2	1%	0,1W	
3825	4822 051 20472	4K70	5%	0,1W	
3826	4822 051 20153	15K00	5%	0,1W	
3827	4822 051 20104	100K00	5%	0,1W	
3828	4822 117 10833	10K	1%	0,1W	
3829	4822 117 10833	10K	1%	0,1W	
3850	4822 117 12708	39K	1%	0,1W	
3851	4822 051 20473	47K00	5%	0,1W	
3852	4822 051 20392	3K90	5%	0,1W	
3853	4822 051 20473	47K00	5%	0,1W	
3854	4822 051 20392	3K90	5%	0,1W	
3855	4822 051 20104	100K00	5%	0,1W	
3856	4822 051 20104	100K00	5%	0,1W	

Motherboard PAL, SECAM, MONO, STEREO

3857	4822 051 20335	3M30	5%	0,1W	
3858	4822 117 11449	2K2	1%	0,1W	
3860	4822 051 20101	100R00	5%	0,1W	
3861	4822 051 20101	100R00	5%	0,1W	
3862	4822 051 20104	100K00	5%	0,1W	
3863	4822 051 20104	100K00	5%	0,1W	
3864	4822 051 20472	4K70	5%	0,1W	
3865	4822 051 20472	4K70	5%	0,1W	
3866	4822 051 20475	4M70	5%	0,1W	
3867	4822 051 20475	4M70	5%	0,1W	
3870	4822 051 20472	4K70	5%	0,1W	
3871	4822 051 20223	22K00	5%	0,1W	
3901	4822 051 20008	0R00 JUMP (0805)			
3902	4822 051 20008	0R00 JUMP (0805)			
3903	4822 051 20008	0R00 JUMP (0805)			
3905	4822 051 20008	0R00 JUMP (0805)			
3906	4822 051 20008	0R00 JUMP (0805)			
3907	4822 051 20008	0R00 JUMP (0805)			
3908	4822 051 20008	0R00 JUMP (0805)			
3910	4822 051 20008	0R00 JUMP (0805)			
3911	4822 051 20008	0R00 JUMP (0805)			
3912	4822 051 20008	0R00 JUMP (0805)			
3913	4822 051 20008	0R00 JUMP (0805)			
3915	4822 051 20008	0R00 JUMP (0805)			
3916	4822 051 20008	0R00 JUMP (0805)			
3917	4822 051 20008	0R00 JUMP (0805)			
3918	4822 051 20008	0R00 JUMP (0805)			
3919	4822 051 20008	0R00 JUMP (0805)			
3922	4822 051 20008	0R00 JUMP (0805)			
3923	4822 051 20008	0R00 JUMP (0805)			
3925	4822 051 20008	0R00 JUMP (0805)			
3926	4822 051 20008	0R00 JUMP (0805)			
3927	4822 051 20008	0R00 JUMP (0805)			
3928	4822 051 20008	0R00 JUMP (0805)			
3929	4822 051 20008	0R00 JUMP (0805)			
3930	4822 051 20008	0R00 JUMP (0805)			
3931	4822 051 20008	0R00 JUMP (0805)			
3941	4822 051 20008	0R00 JUMP (0805)			
3942	4822 051 20008	0R00 JUMP (0805)			
3943	4822 051 20008	0R00 JUMP (0805)			
3944	4822 051 20008	0R00 JUMP (0805)			
3945	4822 051 20008	0R00 JUMP (0805)			
3946	4822 051 20008	0R00 JUMP (0805)			
3947	4822 051 20008	0R00 JUMP (0805)			
3950	4822 051 20008	0R00 JUMP (0805)			
3951	4822 051 20008	0R00 JUMP (0805)			
3956	4822 051 20008	0R00 JUMP (0805)			
3960	4822 051 20008	0R00 JUMP (0805)			
3961	4822 051 20008	0R00 JUMP (0805)			
3962	4822 051 20008	0R00 JUMP (0805)			
3965	4822 051 20008	0R00 JUMP (0805)			
3966	4822 051 20008	0R00 JUMP (0805)			
3967	4822 051 20008	0R00 JUMP (0805)			
3970	4822 051 20008	0R00 JUMP (0805)			
3972	4822 051 20008	0R00 JUMP (0805)			
3973	4822 051 20008	0R00 JUMP (0805)			
3984	4822 051 20008	0R00 JUMP (0805)			
3985	4822 051 20008	0R00 JUMP (0805)			
3986	4822 051 20008	0R00 JUMP (0805)			
3988	4822 051 20008	0R00 JUMP (0805)			
3989	4822 051 20008	0R00 JUMP (0805)			
3990	4822 051 20008	0R00 JUMP (0805)			
3998	4822 051 20008	0R00 JUMP (0805)			
3999	4822 051 20008	0R00 JUMP (0805)			
4501	4822 117 12708	39K00	5%	0,1W for INST	
4505	4822 117 10833	10K	1%	0,1W for STBY	
4511	4822 117 10833	10K	1%	0,1W for STBY	
4512	4822 117 12708	39K00	5%	0,1W for REC	
4517	4822 051 20182	1K80	5%	0,1W for DOWN	
4517	4822 117 10833	10K	1%	0,1W for STBY	
4518	4822 117 12708	39K00	5%	0,1W for REC	
4523	4822 117 10833	10K	1%	0,1W for STBY	
4523	4822 051 20008	0R00 JUMP (0805)		for ST/EJ	
4563	4822 117 10833	10K	1%	0,1W for STBY	
4569	4822 051 20472	4K70	5%	0,1W for UP	
4570	4822 117 12708	39K00	5%	0,1W for REC	
4579	4822 051 20182	1K80	5%	0,1W for DOWN	
4579	4822 117 12708	39K00	5%	0,1W for INST	
4580	4822 117 12708	39K00	5%	0,1W for REC	
4583	4822 117 10833	10K00	1%	0,1W for STBY	
4583	4822 051 20472	4K70	5%	0,1W for UP	
4583	4822 051 20182	1K80	5%	0,1W for DOWN	
4591	4822 117 12708	39K00	5%	0,1W for INST	
4591	4822 051 20182	1K80	5%	0,1W for DOWN	
4595	4822 117 12708	39K00	5%	0,1W for INST	
4595	4822 051 20472	4K70	5%	0,1W for UP	
4596	4822 051 20008	0R00 JUMP (0805)		for EJECT	
4596	4822 117 12708	39K00	5%	0,1W for REC	
4609	4822 051 20182	1K80	5%	0,1W for DOWN	
4653	4822 051 20182	1K80	5%	0,1W for DOWN	
4659	4822 051 20182	1K80	5%	0,1W for STOP	
4559	4822 117 12708	39K00	5%	0,1W for INST	
4660	4822 051 20472	4K70	5%	0,1W for REW	
4660	4822 051 20182	1K80	5%	0,1W for STOP	
4660	4822 051 20183	18K00	5%	0,1W for PLAY	
4665	4822 051 20472	4K70	5%	0,1W for UP	
4671	4822 051 20008	0R00 JUMP (0805)		for ST/EJ	
4671	4822 051 20182	1K80	5%	0,1W for DOWN	
4671	4822 051 20472	4K70	5%	0,1W for UP	
4672	4822 051 20183	18K00	5%	0,1W for PLAY	
4678	4822 117 10833	10K	1%	0,1W for WIND	
4683	4822 051 20008	0R00 JUMP (0805)		for ST/EJ	
4683	4822 051 20472	4K70	5%	0,1W for UP	
4684	4822 117 12708	39K00	5%	0,1W for REC	
4740	4822 051 20472	4K70	5%	0,1W for REW	
4745	4822 051 20008	0R00 JUMP (0805)		for ST/EJ	
4746	4822 051 20472	4K70	5%	0,1W for REW	
4752	4822 051 20472	4K70	5%	0,1W for REW	
4757	4822 051 20008	0R00 JUMP (0805)		for ST/EJ	
4758	4822 051 20183	18K00	5%	0,1W for PLAY	
4763	4822 117 12708	39K00	5%	0,1W for INST	
4764	4822 051 20183	18K00	5%	0,1W for PLAY	
4764	4822 117 10833	10K	1%	0,1W for WIND	
4764	4822 117 12708	39K00	5%	0,1W for REC	
4772	4822 117 10833	10K	1%	0,1W for WIND	
4772	4822 051 20472	4K70	5%	0,1W for REW	

COILS

5000	4822 157 11234	10µH	5%	
5001	4822 152 20677	10µH		
5002	4822 152 20677	10µH		
5004	4822 157 11142	47µH	5%	
5005	4822 157 11145	150µH	5%	
5020	4822 157 10972	15µH	5%	
5026	4822 157 11228	LAN02TB101J		
5036	4822 157 11149	56µH	5%	
5080▲	4822 157 11226	47µH	5%	
5100	4822 157 63661	FIL LC VAR 4M286		5VS
5101	4822 157 10972	15µH	5%	
5102	4822 157 11149	56µH	5%	
5103	4822 157 63661	FIL LC VAR 4M286		5VS
5104	4822 157 11227	150µH	5%	
5105	4822 157 11227	150µH	5%	
5106	4822 157 11151	330µH	5%	
5107	4822 157 11228	LAN02TB101J		
5108	4822 157 63659	FIL LC VAR 1G072		5V2
5111	4822 157 11229	15µH	5%	
5112	4822 157 10972	15µH	5%	
5113	4822 157 11145	150µH	5%	
5114	4822 157 10972	15µH	5%	
5115	4822 157 63717	6,8µH		
5130	4822 157 71206	BLM21A10PT		
5150▲	4822 157 53906	47µH		
5200	4822 152 20677	10µH		
5300▲	4822 157 53005	0.33µH	20%	
5350	4822 157 51462	10µH		
5351	4822 157 71461	22µH	10%	
5352▲	4822 157 10454	Line filter		

Motherboard PAL, SECAM, MONO, STEREO

5353▲	4822 146 10786	SRW32ES-E01(TRAFO)
5353/80	4822 466 11688	ISOL. PLATE (TRAFO 5353)
5354	4822 157 51462	10µH
5355▲	4822 157 53005	0,33µH
5358	4822 157 60147	2,2µH
5361	4822 157 52286	22µH
5368	4822 157 60147	2,2µH
5400	4822 152 20677	10µH
5402	4822 152 20677	10µH
5601	4822 157 11249	10.000UH5%
5602	4822 157 11151	330µH 5%
5603	4822 157 53531	Coil
5604	4822 157 11251	3,3µH 10%
5605	4822 157 71206	BLM21A10PT
5700	4822 157 71206	BLM21A10PT
5702	4822 152 20677	10µH
5703	4822 152 20677	10µH
5705	4822 152 20677	10µH
5720	4822 157 11231	LAN02TB1R0J
5721	4822 157 70877	H292ONS-6785NK
5725	4822 157 70877	H292ONS-6785NK
5726	4822 051 20008	OR00 JUMP (0805)
5740	4822 157 11232	12µH 5% for SECAM LL'
5740	4822 157 11229	15µH 5% for PAL
5741	4822 157 11223	39µH 5%
5780	4822 157 70038	10mH 5%
5800	4822 157 11233	LAN02TB330J
5801	4822 152 20677	10µH
5810	4822 157 11234	10µH 5%
5831	4822 157 11235	LANO2TB220J

DIODES

6100	4822 130 32778	1SS133
6135	4822 130 34197	BZX79-B12 (MTZJ12C)
6250	4822 130 34197	BZX79-B12
6299	4822 130 10869	RB441
6350	4822 130 30842	BAV21
6351	4822 130 31983	BAT85
6352	4822 130 42488	BYD33D
6353	4822 130 42488	BYD33D
6354	4822 130 80858	1N5062
6355	4822 130 42488	BYD33D
6356	4822 130 42488	BYD33D
6357	4822 130 10871	DIODE RECT SBYV2
6358	5322 130 31938	BYV27-200
6359	4822 130 32715	SB340 for stereo
6359	4822 130 83909	BYW98-200RL for mono
6360	4822 130 83147	DF06M
6371	4822 130 42488	BYD33D
6372	4822 130 34142	BZX79-B33
6460	4822 130 10231	SET: 2x Sens + 1x Led
6500	4822 130 34197	BZX79-B12
6501	4822 130 34197	BZX79-B12
6502	4822 130 34197	BZX79-B12
6509	4822 130 34197	BZX79-B12
6510	4822 130 34197	BZX79-B12
6511	4822 130 10884	MTZJ18C
6516	4822 130 34278	BZX79-B6V8
6530	4822 130 10654	BAT254
6601	4822 130 30861	BZX79-B7V5
6760	4822 130 10414	BA792
6761	4822 130 10414	BA792

TRANSISTORS & IC's

7000	4822 130 42353	BSF19-F2
7001	4822 130 10872	MMUN2112LT1
7002	4822 130 60511	BC847B
7003	4822 209 15526	LC89980M
7004	4822 130 42353	BSF19-F2
7005	5322 130 60508	BC857B
7006	4822 130 60511	BC847B
7007	4822 209 15527	LA71525M
7008	5322 130 60508	BC857B
7009	4822 130 10872	MMUN2112LT1
7011	4822 130 60511	BC847B
7020	4822 130 63732	MMUN2212
7021	5322 130 60508	BC857B
7080	4822 209 90421	STV5712
7085	4822 130 60511	BC847B
7100	4822 130 60511	BC847B
7101	4822 130 60511	BC847B
7102	4822 209 73852	PMBT2369
7103	4822 130 60511	BC847B
7104	4822 130 63732	MMUN2212
7105	5322 130 60508	BC857B
7106	4822 130 60511	BC847B
7110	4822 209 90189	TDA4722/V2
7150	4822 209 13121	STV5742
7151	4822 209 15548	STV5744AD
7153	4822 130 60511	BC847B
7201	4822 209 15516	TMP87CS71F QDCE1-xP
7201	4822 209 15517	TMP87CS71F QDCE2-xU
7201	4822 209 15518	TMP87CS71F QDCE3-xU
7201	4822 209 15521	TMP87CS71F QDCH1-xP
7201	4822 209 15519	TMP87CS71F QDCH2-xU
7201	4822 209 15528	TMP87CS71F QDCH3-xU
7201	4822 209 15549	TMP87CS71F QDCH4-xU
7201	4822 209 15573	TMP87CS71F QDCH5-xU
7202	4822 135 00115	25U39113SA (Display)
7203	4822 212 30842	TSOP1736 (IR-receiver)
7231	4822 130 63732	MMUN2212
7300	4822 209 13126	TDA5241
7301	4822 130 10872	MMUN2112LT1
7350▲	4822 130 63794	STP3NA60
7350/2	4822 255 10387	COOLING BLOCK (HEAT SINK)
7350/3	4822 502 14482	SCREW M3x6
7351▲	4822 209 32126	SOC1012T (OPTO)
7352	4822 209 81397	TL431CLpST
7353	4822 130 10214	STD17N06
7354	4822 209 90025	MC44603P
7356	4822 130 60511	BC847B
7357	4822 130 10214	STD17N06
7358	4822 130 40995	BD438
7359	4822 130 60511	BC847B
7400	4822 209 15529	TMP91C642AF QTDP2-xU
7420	4822 209 90313	L4812CV for stereo
7420	4822 209 81726	MC7812CT for mono
7440	4822 209 30146	L2722
7455	4822 130 10872	MMUN2112LT1
7456	4822 130 60511	BC847B
7457	4822 130 60511	BC847B
7458	4822 130 60511	BC847B
7460	4822 209 30836	SAA1310/N2
7461	4822 130 10231	SET: 2x Sens + 1x Led
7462	4822 130 10231	SET: 2x Sens + 1x Led
7463	4822 130 41344	BC337-40
7464	4822 130 10233	TCRT5000L
7465	4822 130 10233	TCRT5000L
7466	4822 130 10234	TCST1030L
7467	4822 130 60511	BC847B
7468	4822 130 60511	BC847B
7469	4822 130 60511	BC847B
7500	4822 130 60511	BC847B
7501	5322 130 60508	BC857B
7502	4822 130 60511	BC847B
7505	4822 130 63732	MMUN2212
7506	4822 130 10872	MMUN2112LT1

Motherboard PAL, SECAM, MONO, STEREO

7507	4822 209 90016	STV6400
7510	5322 130 42136	BC848C
7511	4822 130 42615	BC817-40
7512	5322 130 42136	BC848C
7513	5322 209 14481	HEF4053BT
7513	5322 209 14481	HEF4053BT
7540	4822 209 15504	SDA5650 for VPS/PDC
7540	4822 209 32728	SDA5642.6 for VPS only
7600	4822 130 60373	BC856B
7601	5322 130 60159	BC846B
7602	5322 130 60159	BC846B
7603	4822 130 60511	BC847B
7604	4822 130 41715	BC328-40
7609	4822 130 42615	BC817-40
7720	4822 209 90288	TDA9800T/V3
7721	4822 209 90018	TDA9812T for SECAM mono
7721	4822 209 90431	TDA9813T/V2 for PAL FM stereo
7721	4822 209 90452	TDA9814T/V3 for SECAM stereo
7722	5322 209 14481	HEF4053BT
7723	5322 130 60508	BC857B
7724	5322 130 42136	BC848C
7725	4822 130 60511	BC847B
7726	4822 130 63732	MMUN2212
7728	4822 130 10802	BSS138
7729	4822 130 60511	BC847B
7730	4822 130 60511	BC847B
7731	4822 130 63732	MMUN2212
7780	4822 209 32501	TDA9840T/V2
7800	4822 209 15524	LC74781-9663
7810	4822 130 42353	BSF19-F2
7850	4822 209 15525	TDA9604H/N1
7851	4822 130 60511	BC847B
7852	4822 130 60511	BC847B
7860	4822 209 60177	LM339D
7890	4822 209 33113	ST24C08CB6 for GEMSTAR
7890	4822 209 30953	ST24C04CB6

QNIC

MISCELLANEOUS

1700▲	4822 071 52501	Fuse	250mA
1710	4822 242 10433	Crystal	8,192 MHz
1970	4822 265 10943	CONN	11P

CAPACITORS

2700	4822 122 33172	390pF	5%	50V
2701	5322 122 32448	10pF	5%	50V
2703	4822 126 10002	100nF	20%	25V
2704	4822 122 33575	220pF	5%	50V
2705	4822 124 22826	10µF		16V
2706	4822 124 22826	10µF		16V
2707	4822 126 13061	220nF	20%	25V
2708	5322 122 32654	22nF	10%	63V
2709	5322 122 32531	100pF	5%	50V
2710	5322 122 32531	100pF	5%	50V
2714	4822 124 23027	47µF		6.3V
2716	4822 124 23027	47µF		6.3V
2718	4822 126 10002	100nF	20%	25V
2719	4822 122 33175	2,2nF	20%	50V
2720	4822 122 33175	2,2nF	20%	50V
2721	4822 126 13061	220nF	20%	25V
2722	4822 122 33175	2,2nF	20%	50V
2723	4822 122 33175	2,2nF	20%	50V
2725	4822 124 23053	1µF	20%	63V
2726	4822 122 33797	47nF	20%	50V
2727	4822 124 23027	47µF		6.3V
2728	4822 126 10002	100nF	20%	25V
2729	4822 124 22826	10µF		16V
2731	4822 124 22826	10µF		16V
2732	4822 126 10002	100nF	20%	25V
2733	4822 124 23027	47µF		6.3V
2734	5322 122 32654	22nF	10%	63V
2736	4822 126 10002	100nF	20%	25V
2752	4822 126 13061	220nF	20%	25V
2753	4822 126 13061	220nF	20%	25V

RESISTORS

3700	4822 051 10102	1K00	2%	0,25W
3701	4822 051 20101	100R00	5%	0,1W
3702	4822 051 20223	22K00	5%	0,1W
3703	4822 051 20104	100K00	5%	0,1W
3704	4822 117 11449	2K2	1%	0,1W
3705	4822 051 20392	3K90	5%	0,1W
3707	4822 116 52276	3K9	5%	0,5W
3708	4822 117 11449	2K2	1%	0,1W
3710	4822 051 20334	330K00	5%	0,1W
3711	4822 116 52175	100E	5%	0,5W
3712	4822 116 52175	100E	5%	0,5W
3713	4822 051 20182	1K80	5%	0,1W
3714	4822 051 20333	33K00	5%	0,1W
3715	4822 117 10833	10K	1%	0,1W
3720	4822 117 10833	10K	1%	0,1W
3721	4822 117 10833	10K	1%	0,1W
3722	4822 117 10833	10K	1%	0,1W
3723	4822 117 10833	10K	1%	0,1W
3790	4822 051 20008	0R00	JUMP (0805)	
3792	4822 051 20008	0R00	JUMP (0805)	
3793	4822 051 20008	0R00	JUMP (0805)	
3794	4822 051 20008	0R00	JUMP (0805)	
3795	4822 051 20008	0R00	JUMP (0805)	
3796	4822 051 20008	0R00	JUMP (0805)	
3797	4822 051 20008	0R00	JUMP (0805)	

COILS

5700	4822 157 63717	6,8µH
5703	4822 157 71206	BLM21A10
5704	4822 157 71206	BLM21A10
5705	4822 157 71206	BLM21A10
5706	4822 157 71206	BLM21A10
5707	4822 157 71206	BLM21A10

DIODES

6700	4822 130 10652	BB149
6701	4822 130 83757	BAS216

TRANSISTORS & IC's

7700	4822 209 14809	SAA7284Z
7701	5322 209 61487	LM358N

CABLES & SUB MODULS

CABLES

8001	4822 320 11889	FFC TD1-1961
8002	4822 323 10374	CABLE TREE TD2-1962
8003	4822 320 11891	FFC TD3-1944
8004	4822 320 11892	FFC TD4-1930
8005	4822 320 11888	FFC 1901-1945
8006	4822 320 12343	FFC 1103-1711
8007	4822 320 11891	FFC 1710-1750
8008	4822 323 10373	ESD-GND CONN.
	▲ 4822 321 10886	MAINS CORD (+FUSE) for UK
	▲ 4822 321 10249	MAINS CORD
	4822 320 50377	ANTENNA cable
	4822 321 63002	SCART cable

SUB MODULS

4822 214 12238	CINCH print rear
4822 214 12248	QKP21 Shuttle print
4822 214 12744	ACP1 CINCH print front