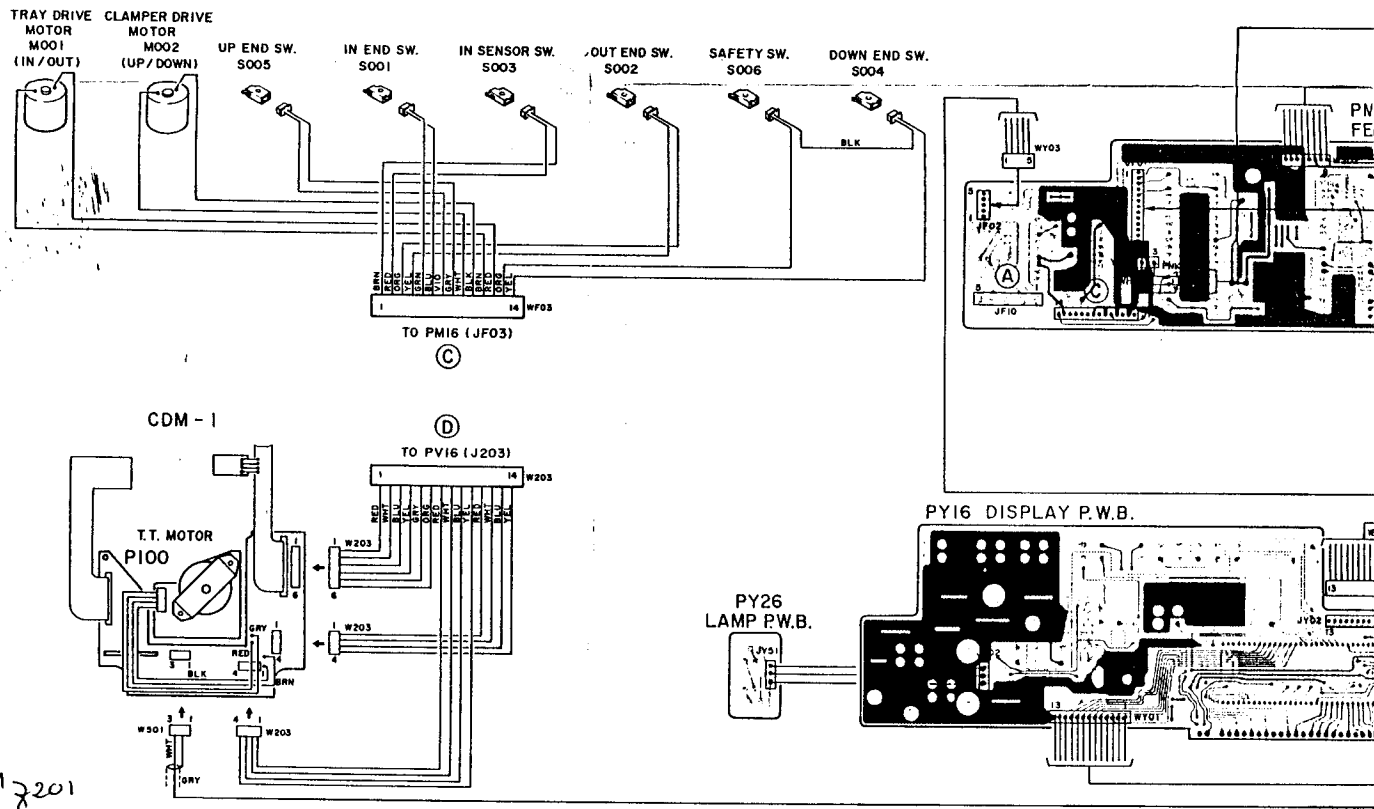
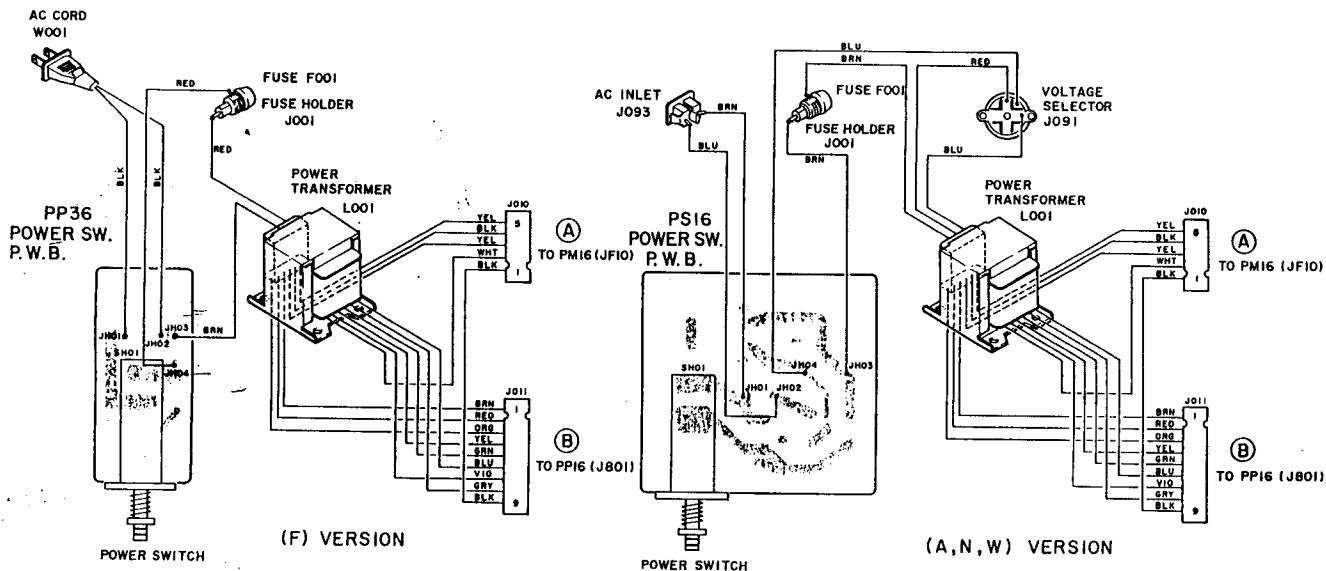


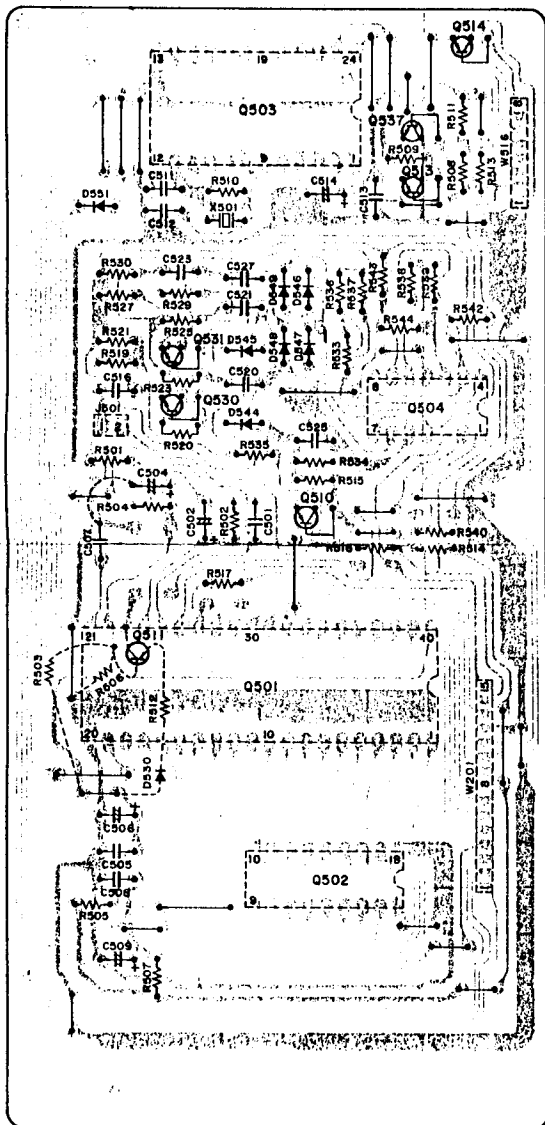
# WIRING DIAGRAMS (COMPONENT SIDE)



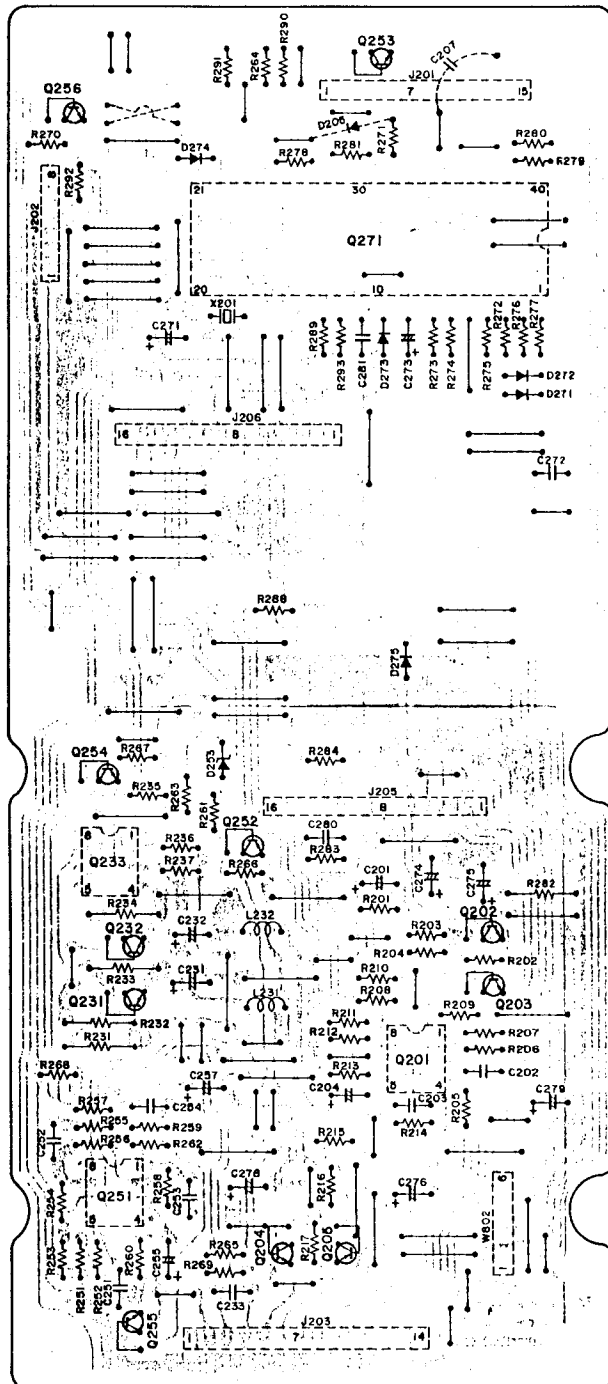
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PD16 DEMO / ERCO P.W.B.

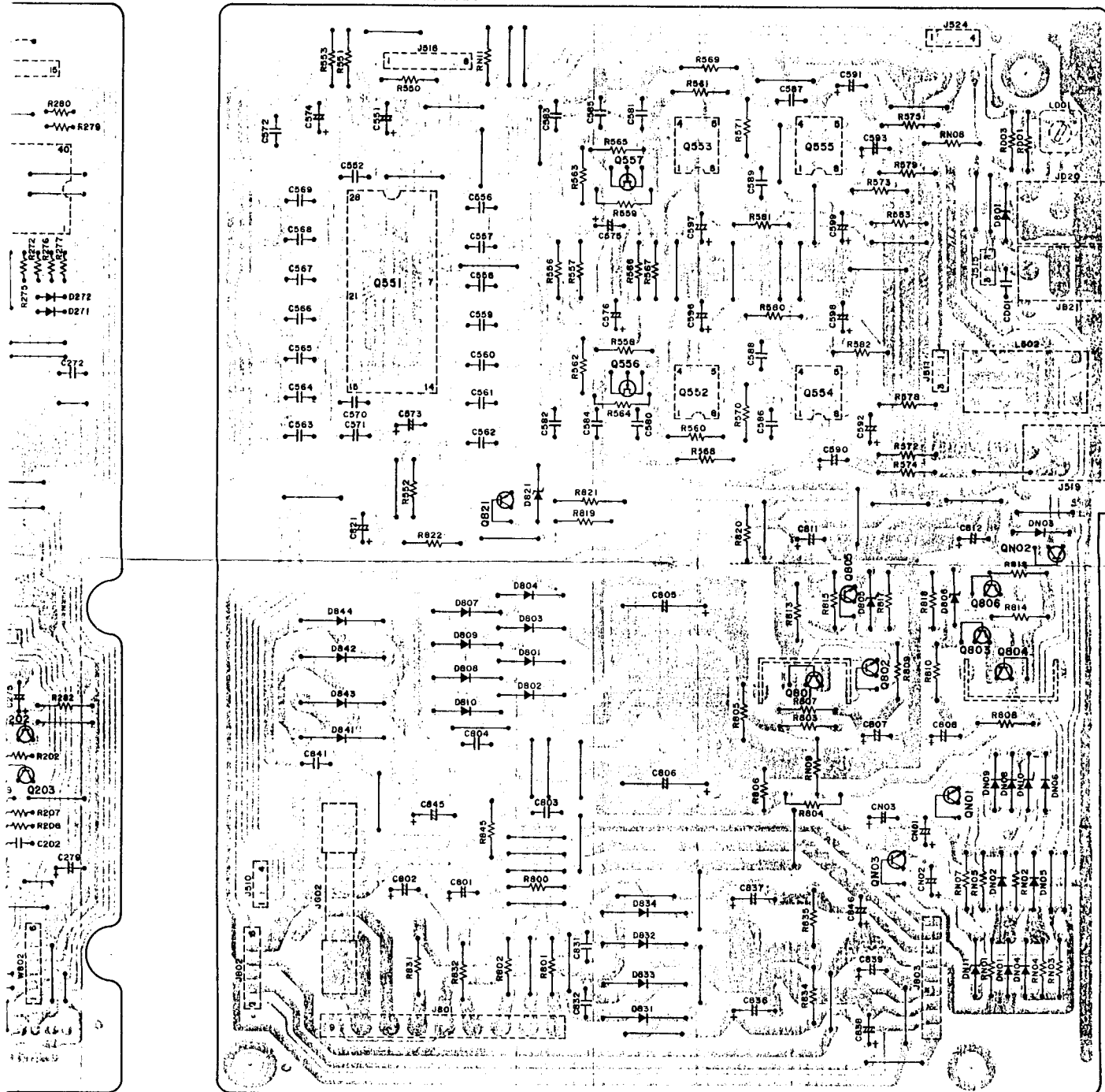


PV16 SERVO P.W.B.



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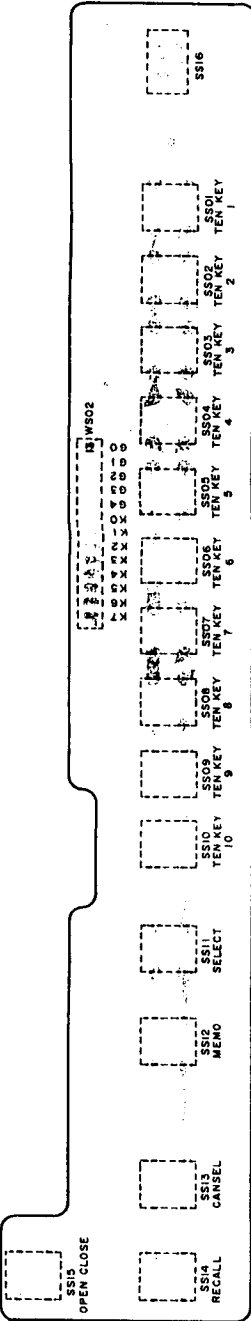
# PP16 DAC / POWER P.W.B.



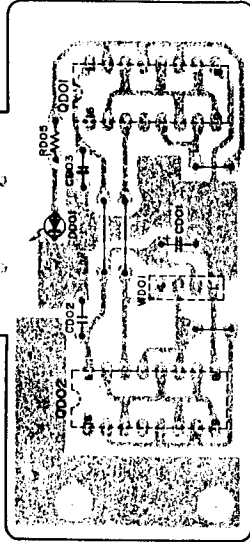
M7202

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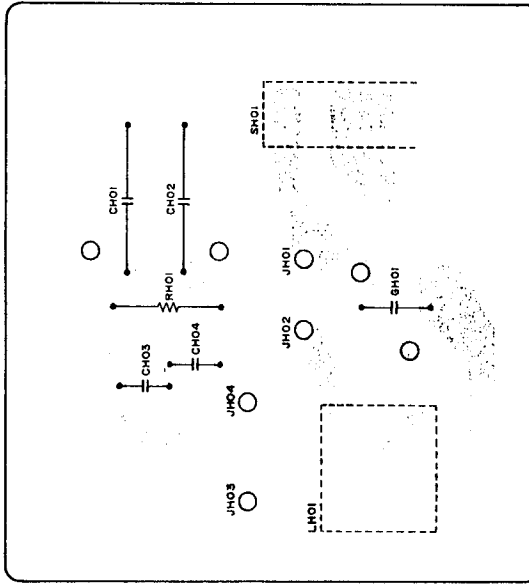
# PS26 TEN KEYS P.W.B.



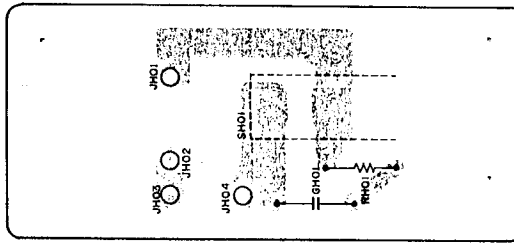
## PF16 OPTICAL OUT P.W.B.



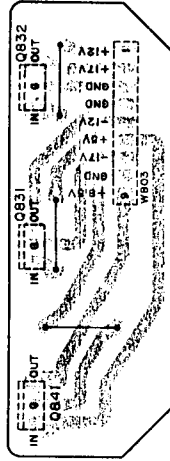
## PS16 POWER SW. P.W.B.



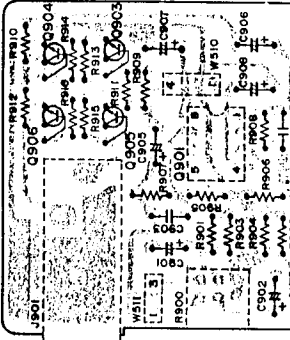
## PP36 (F ONLY) POWER SW. P.W.B.



## PP26 REG P.W.B.



## PR16 HEADPHONE JACK P.W.B.

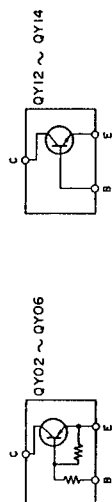
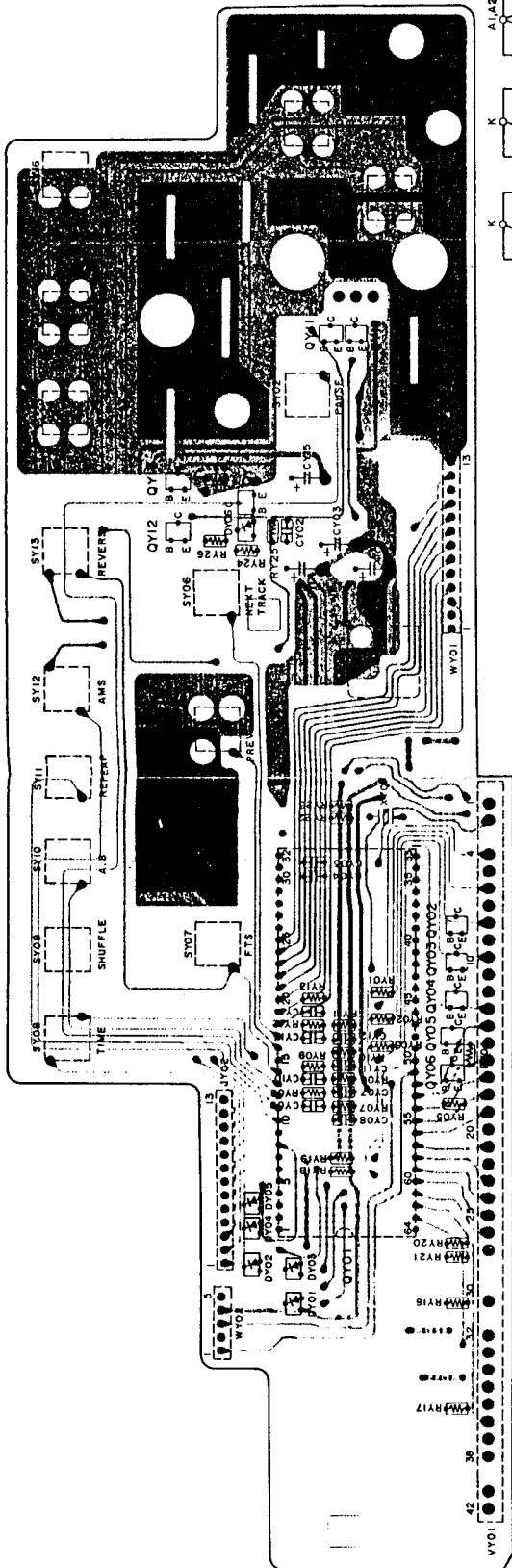


## PY16 DISPLAY P.W.B.

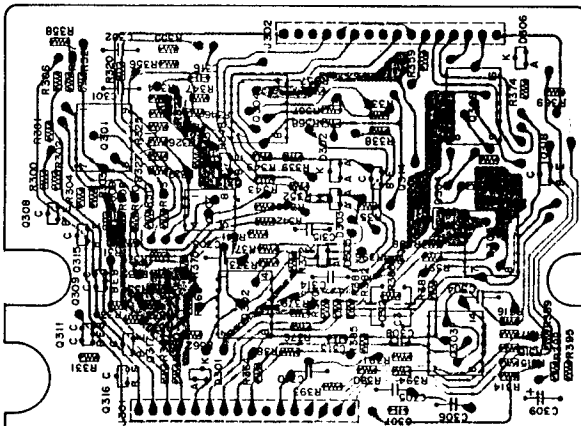
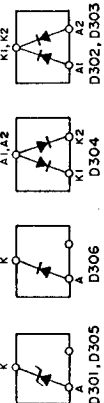
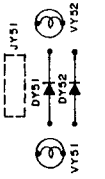


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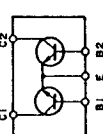
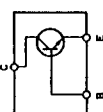
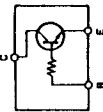
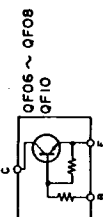
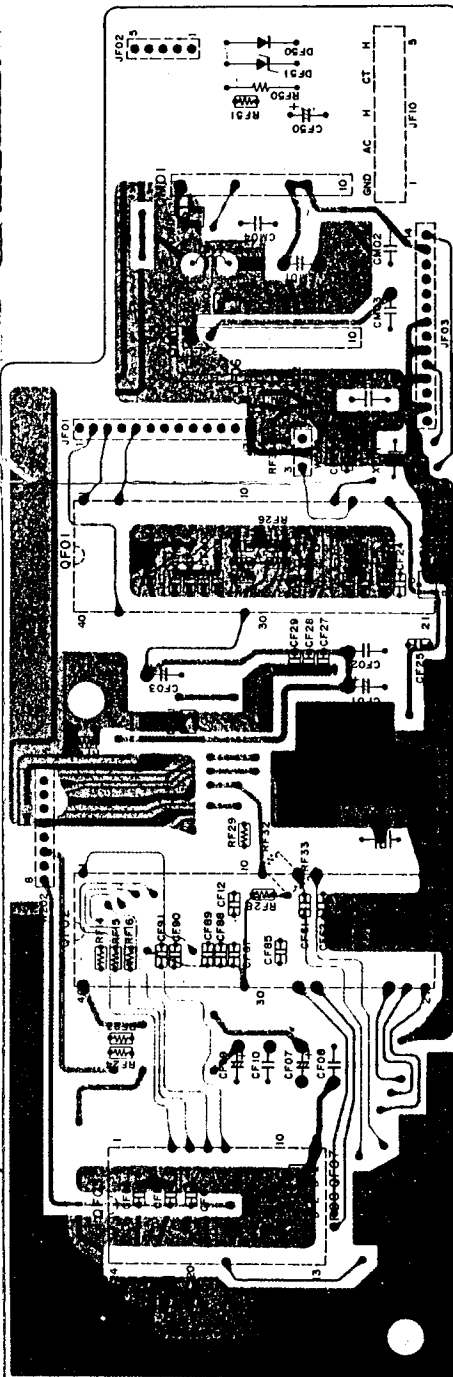
# PY16 DISPLAY P.W.B.



## PY26 LAMP P.W.B. PV26 SERVO MODULE P.W.B.



## PM16 FEATURE µCOM P.W.B.

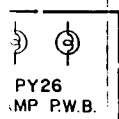


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M7203

M 7204<sup>A</sup>

35

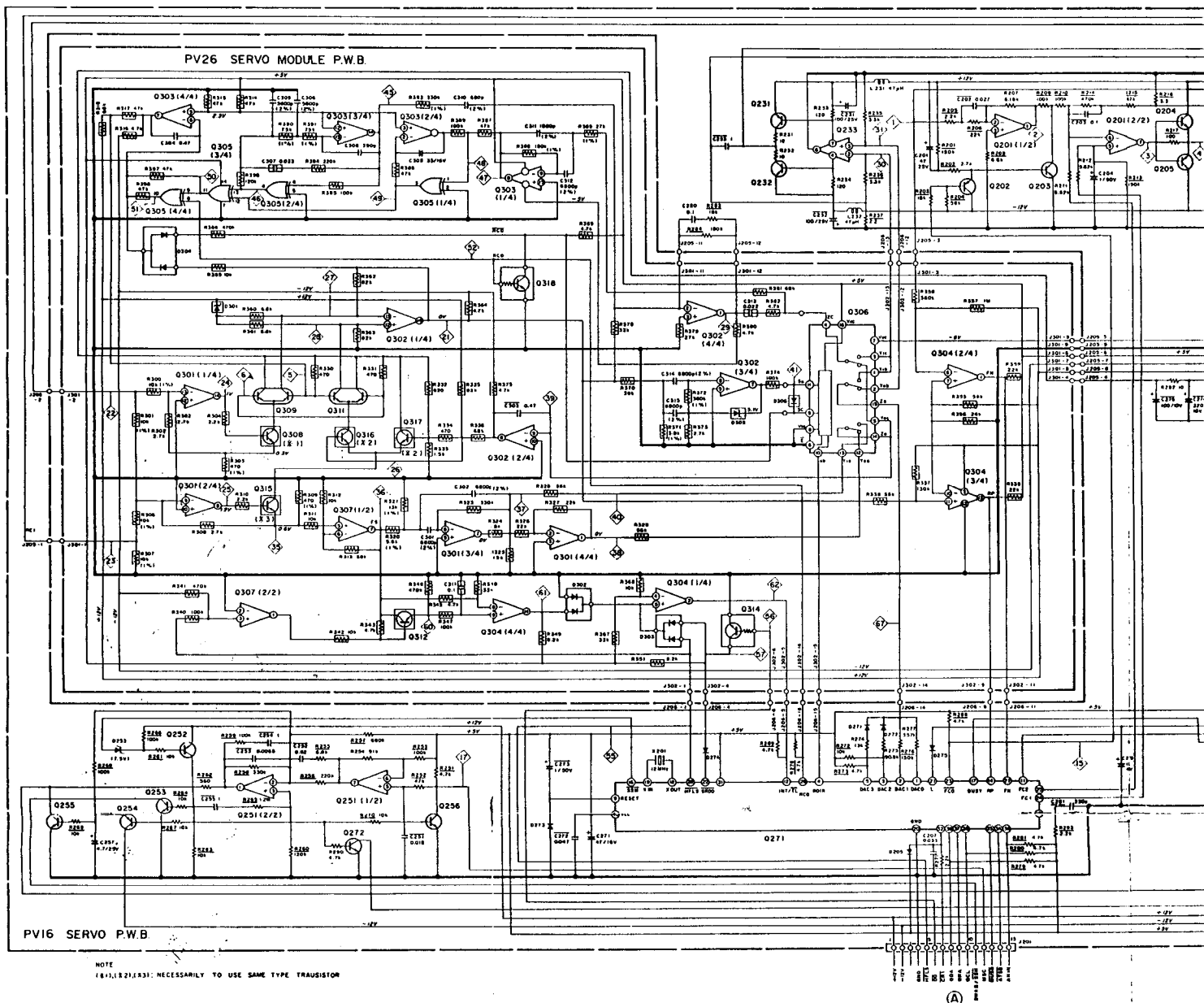


The block diagram illustrates the internal architecture of the TMS320C25 DSP. Key components and their interconnections include:

- Input/Output and Control:** Pins 15 (HF), 14 (FB), 16 (HFO), 12 (PD/OC), 13 (REF), 17 (VCCI), and 18 (CEFM) are connected to the **DATA SLICER**. Pin 25 (SR) connects to **DEMOD TIMING**. Pin 26 (CR) connects to **DEMOD TIMING** and **EFM DECODER**. Pin 27 (SWAB/SSM) connects to **SUBCODE PROCESSOR**. Pins 29 (ODA), 31 (OCL), and 30 (ORA) connect to the **Q CHANNEL PROCESSOR**. Pin 31 (MUTE) connects to the **Q CHANNEL PROCESSOR**. Pins 32 (DEEM), 33 (MC), 34 (SCAB), and 35 (SCAB) are also connected to the **Q CHANNEL PROCESSOR**.
- Frequency and Phase Processing:** The **PHASE & FREQUENCY DETECTOR** receives PD/OC and REF signals. Its output goes to the **DATA SLICER**. The **VCCI** block also feeds into the **DATA SLICER**.
- Control and Data Paths:** The **FFO CONTROL & RAM INTERFACE** block is a central hub. It receives an **X-TAL CLOCK** and provides **CONTROL**, **ADDRESS**, and **DATA & FLAG** buses to the **C1** and **C2** blocks, the **ADAPTIVE FLAG PROCESSOR**, and the **1 SAMPLE INTERPOLATOR & SAMPLE/HOLD & MUTE CIRCUIT**.
- Processing Blocks:**
  - DEMOD TIMING** feeds into the **EFM DECODER**.
  - EFM DECODER** feeds into the **SUBCODE PROCESSOR**.
  - SUBCODE PROCESSOR** feeds into the **Q CHANNEL PROCESSOR**.
  - Q CHANNEL PROCESSOR** feeds into the **1 SAMPLE INTERPOLATOR & SAMPLE/HOLD & MUTE CIRCUIT**.
  - C1 (INTERLEAVER CORRECTOR)** and **C2 (INTERLEAVER CORRECTOR DESEMBLER)** process data from the **DATA SLICER** and **ADAPTIVE FLAG PROCESSOR**.
  - ADAPTIVE FLAG PROCESSOR** receives data from the **DATA SLICER** and **C1**.
- Output and Oscillator:** The **1 SAMPLE INTERPOLATOR & SAMPLE/HOLD & MUTE CIRCUIT** outputs to pins 36 (WSAB), 37 (CLAB), 38 (DAAB), and 39 (EFAB). The **X-TAL OSCILLATOR** provides the **X-TAL CLOCK** to the system, with pins 40 (X-OUT) and 41 (X-IN) also shown.

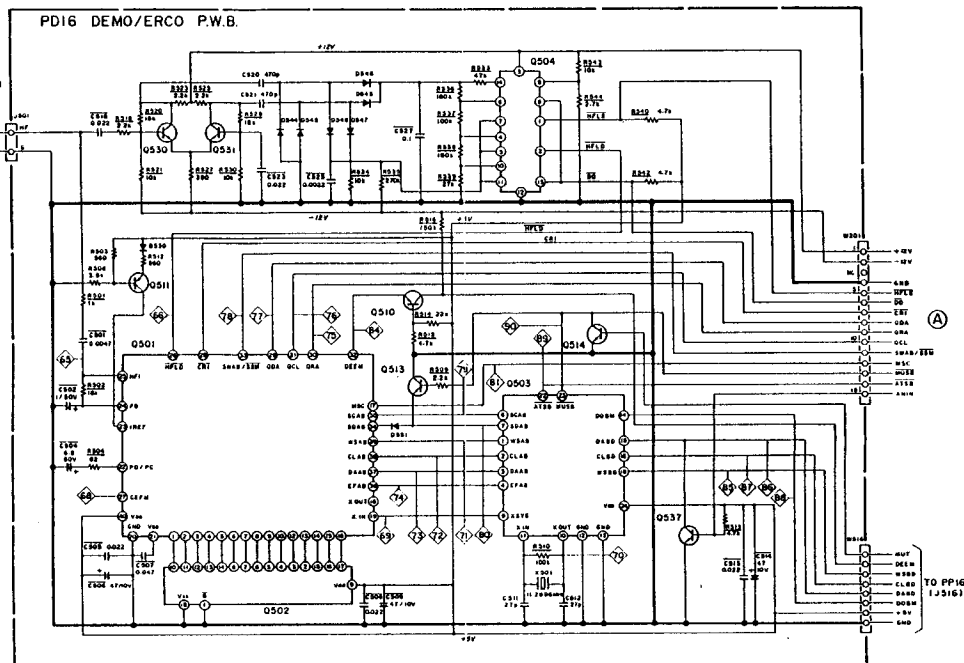
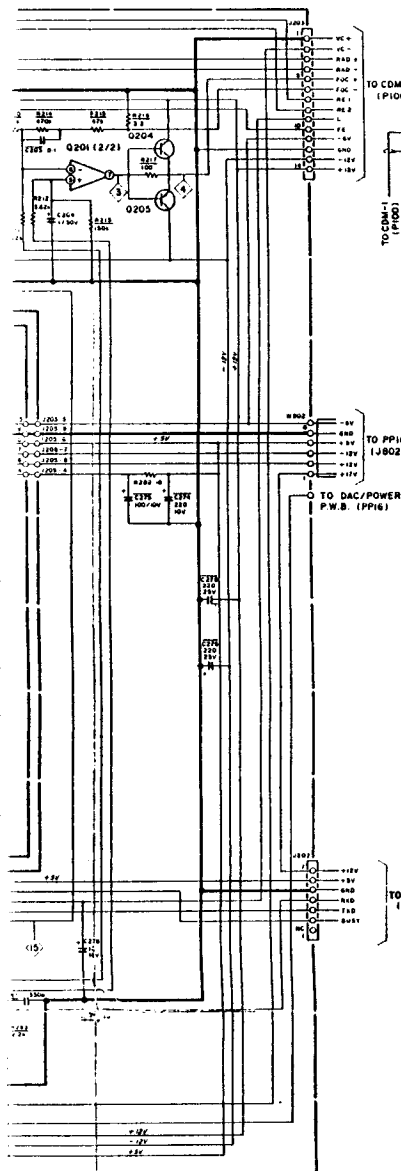
The diagram illustrates the internal architecture of the SAAT220. It features two main signal paths for WSAB, CLAB, DAAB, and EFAB inputs. These inputs pass through an input stage and are then processed by two identical channels, each containing an 8-sample interpolator, a 12-dB attenuator, and a soft mute circuit. The outputs of these channels are fed into a channel multi-plexer circuit, which also receives signals from a digital output encoder and two 4x upsampling digital filters. The multi-plexer's output is then sent to an output stage to produce DA8B, CL8B, and WS8B signals. Additionally, an X-TAL oscillator is shown, which is connected to X-IN and X-OUT pins and provides a clock signal to the 10 CROUT pin.



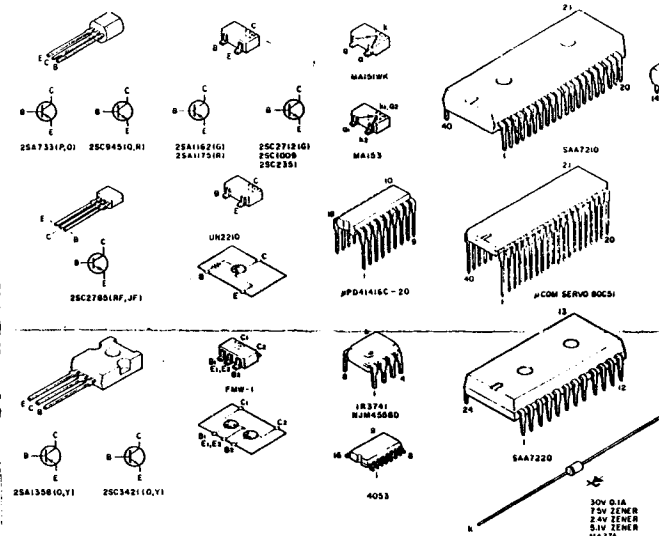


**NOTE ON SAFETY :**  
 Symbol  $\Delta$  Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol  $\Delta$ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

Components and wiring are subject to



Q514, Q256, Q537 Q203, Q253, Q255 HT3094S2A0 25C945 (Q, R)	Q233 HC1001320 1R3741	Q316, Q317 HX310091A0 25C1009
Q254, Q202 Q510, Q513, Q252 HT107332A0 25A733 (P, Q)	Q271 HC10017260 μCOM SERVO BOC51	Q511 HT111752A0 25A1175
Q501 HC10008490 5A7210	Q301 ~ Q304 HC10002090 NJM2902M	D205 D344 ~ D549 D271 ~ D275, D551 HD20002000 30V 0.1A
Q502 HC10158060 μPD41416C - 20	Q305 HC403000Z0 4030	D253 HD30751000 7.5V ZENER
Q503 HC10010490 5A7220	Q306 HC405300Z0 4053	D301 H230003090 2.4V ZENER
Q504 HC10010320 1R2339	Q308 HX32351010 25C2351	D302, D303, D306 H220001020 MA151WK
Q530, Q531, Q272 HT327852A0 25C2785	Q309, Q311 HC10059210 FMW1	D304 H220005020 MA153
Q201, Q251, Q307 HC10003090 NJM45580	Q312 HX111621A0 25A1162 (G)	D305 H230002050 5.1V ZENER
Q204, Q232 HT334212A0 25C3421 (Q, Y)	Q313, Q314, Q318 BA20005020 UN2210	D330 HV00010020 MA27A
Q205, Q231 HT113582A0 25A135810, Y1	Q315 HX327121A0 25C2712 (G)	



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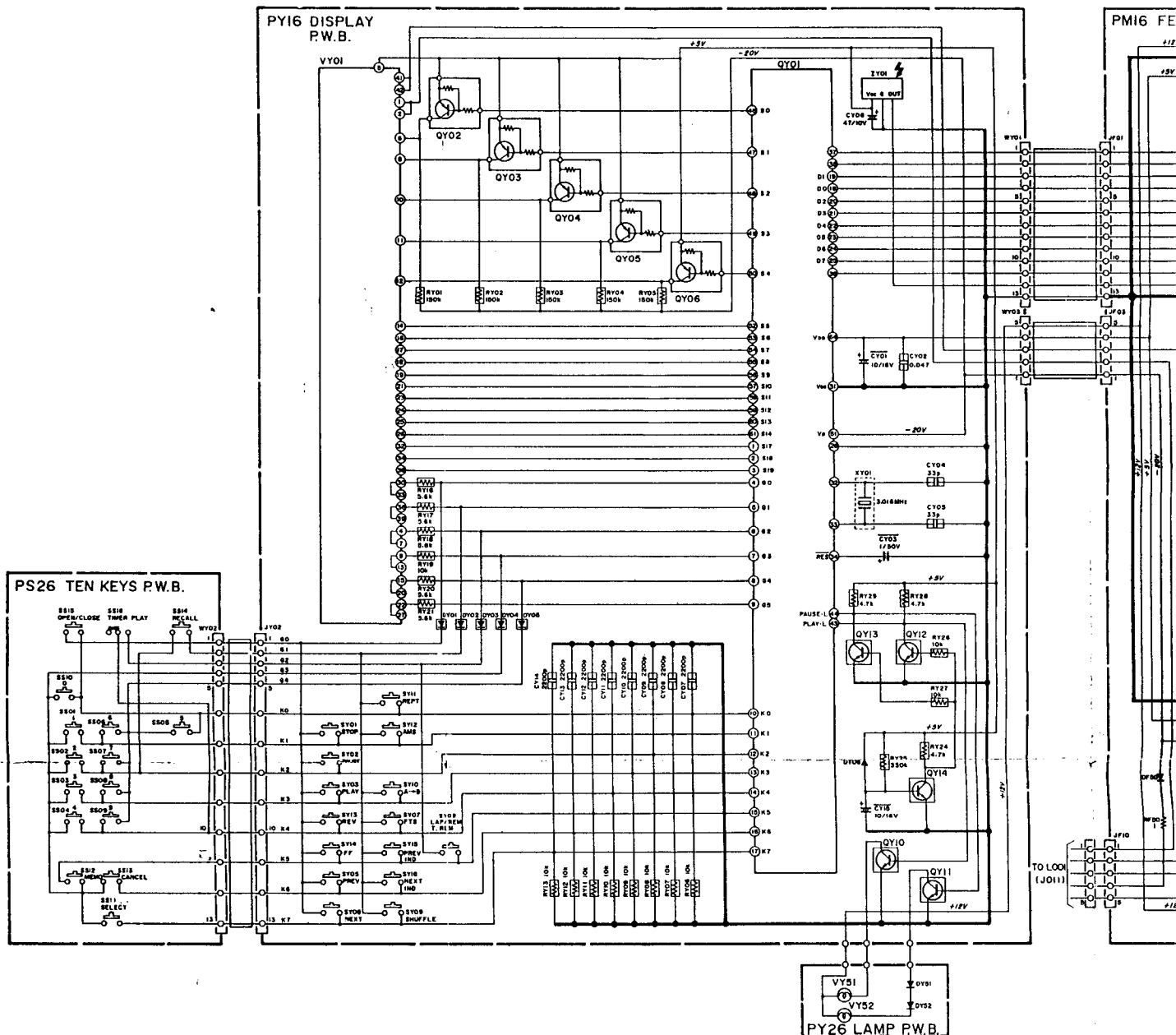
#### Kind of Common Parts

<b>R***</b>	<b>RESISTOR</b>
(1) GD05 ... 140,	Carbon film fixed resistor, ±5% 1/4W
(2) GD05 ... 160,	Carbon film fixed resistor, ±5% 1/6W
<b>C***</b>	<b>CERAMIC CAP.</b>
(1) DD1 ... 370,	Ceramic condenser, disc type (titan condenser)
	Temp. coeff. P350 ~ N1000 50V
<b>C***</b>	<b>CERAMIC CAP.</b>
(1) DK16 ... 370,	High dielectric constant ceramic condenser, disc type (titan variable)
	Temp. chara. 2B4 50V

<b>E***</b>	<b>ELECTROLYTIC CAP. (E) / FILM CAP. (F)</b>
(1) EA ... 10,	Electrolytic condenser, one-way lead type, tolerance ±20%
(2) DF15 ... 350,	Plastic film condenser, one-way type, Mylar, ±5% 50V

\* In case of ordering the common parts, please establish the correct parts number of 10 figures by the procedure "ASSIGNMENT OF COMMON PARTS CODES"

and wiring are subject to change for modification without notice.

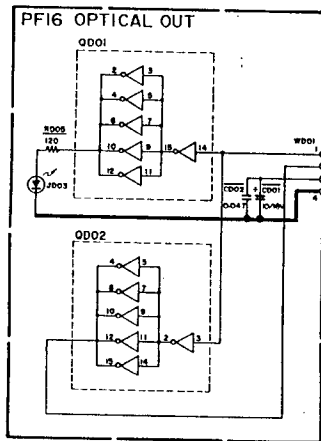
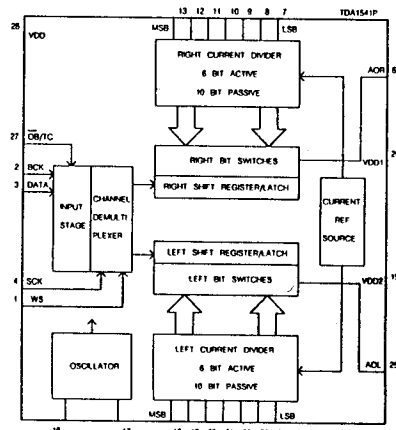


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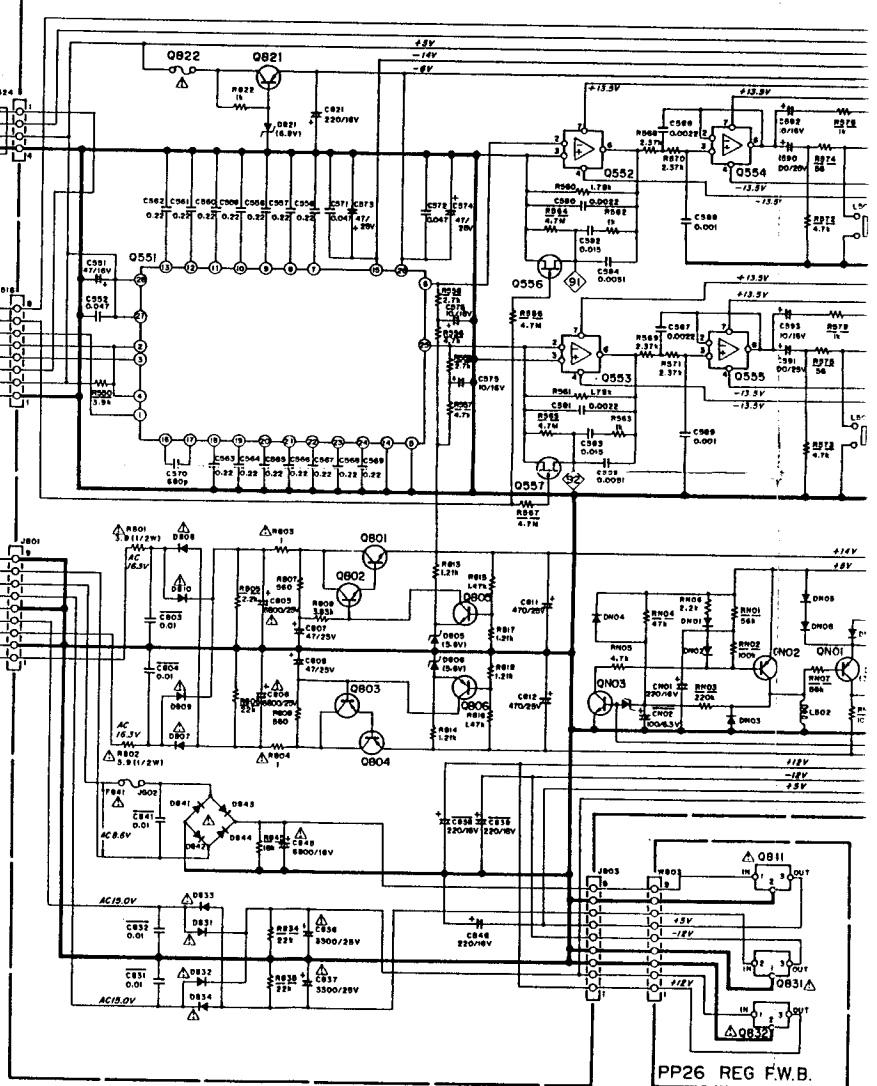
MOD1  
 MOD  
 SAFET  
 S008  
 S003  
 S001  
 S002  
 S003



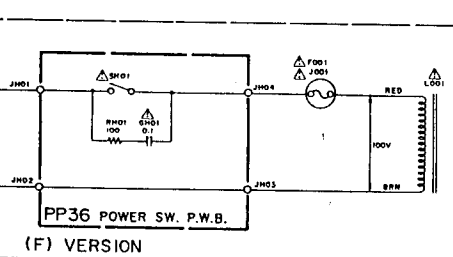
# D.A.C (Q551)



## PP16 DAC/POWER P.W.B.

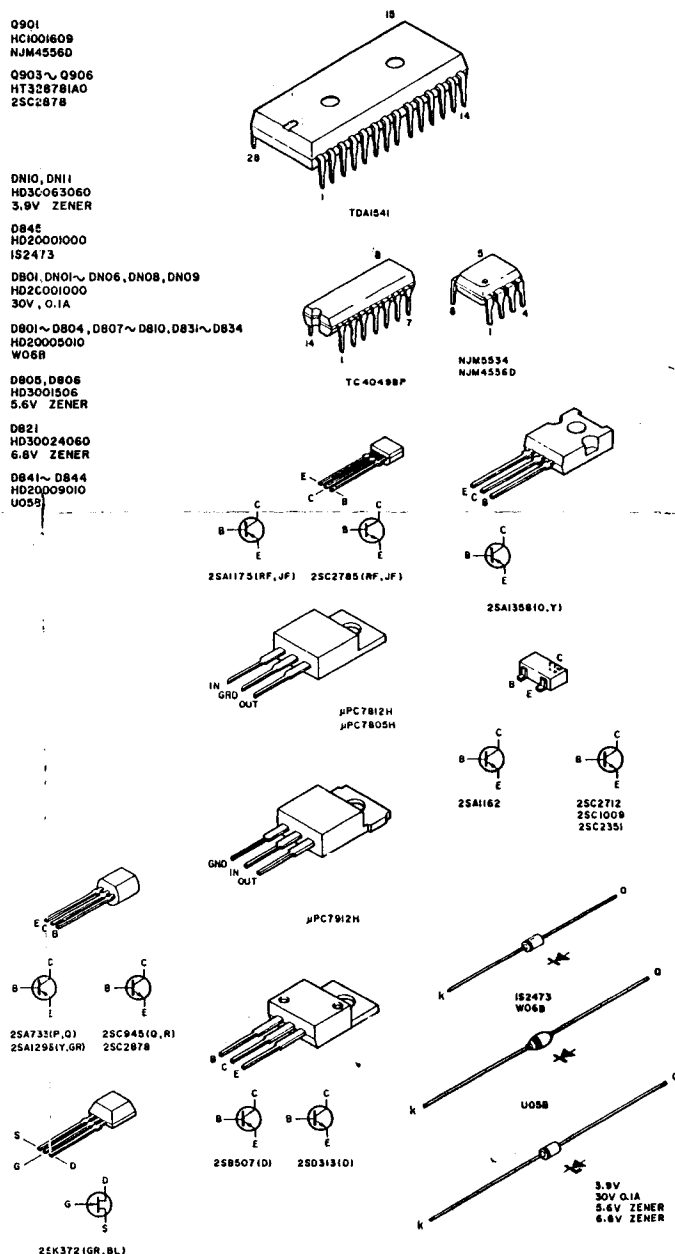


## (A,N,W) VERSION



## (F) VERSION

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