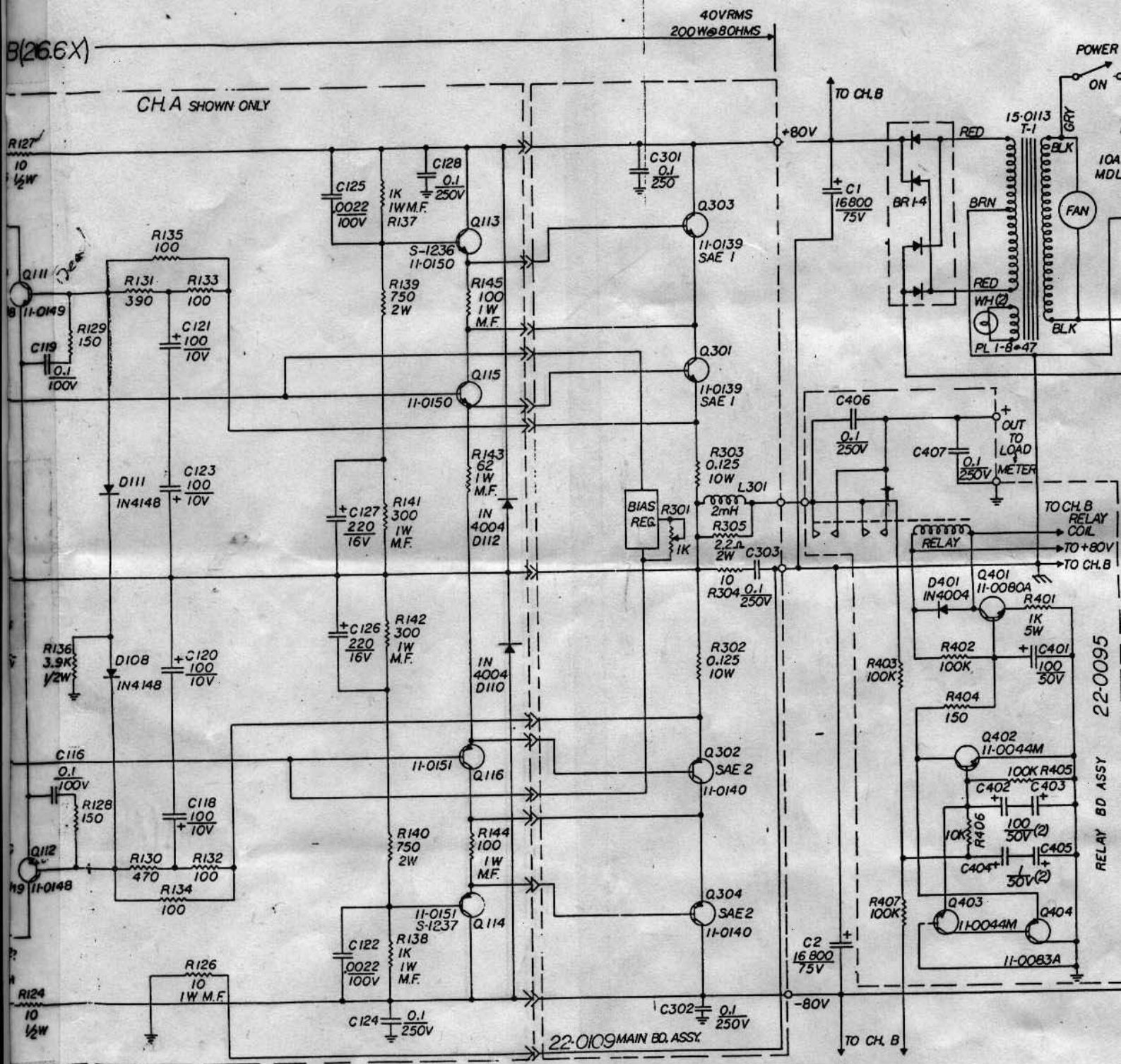


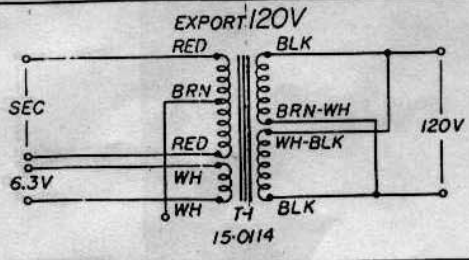
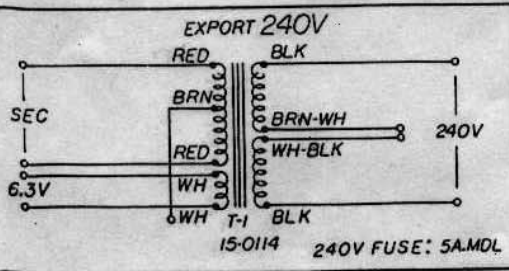
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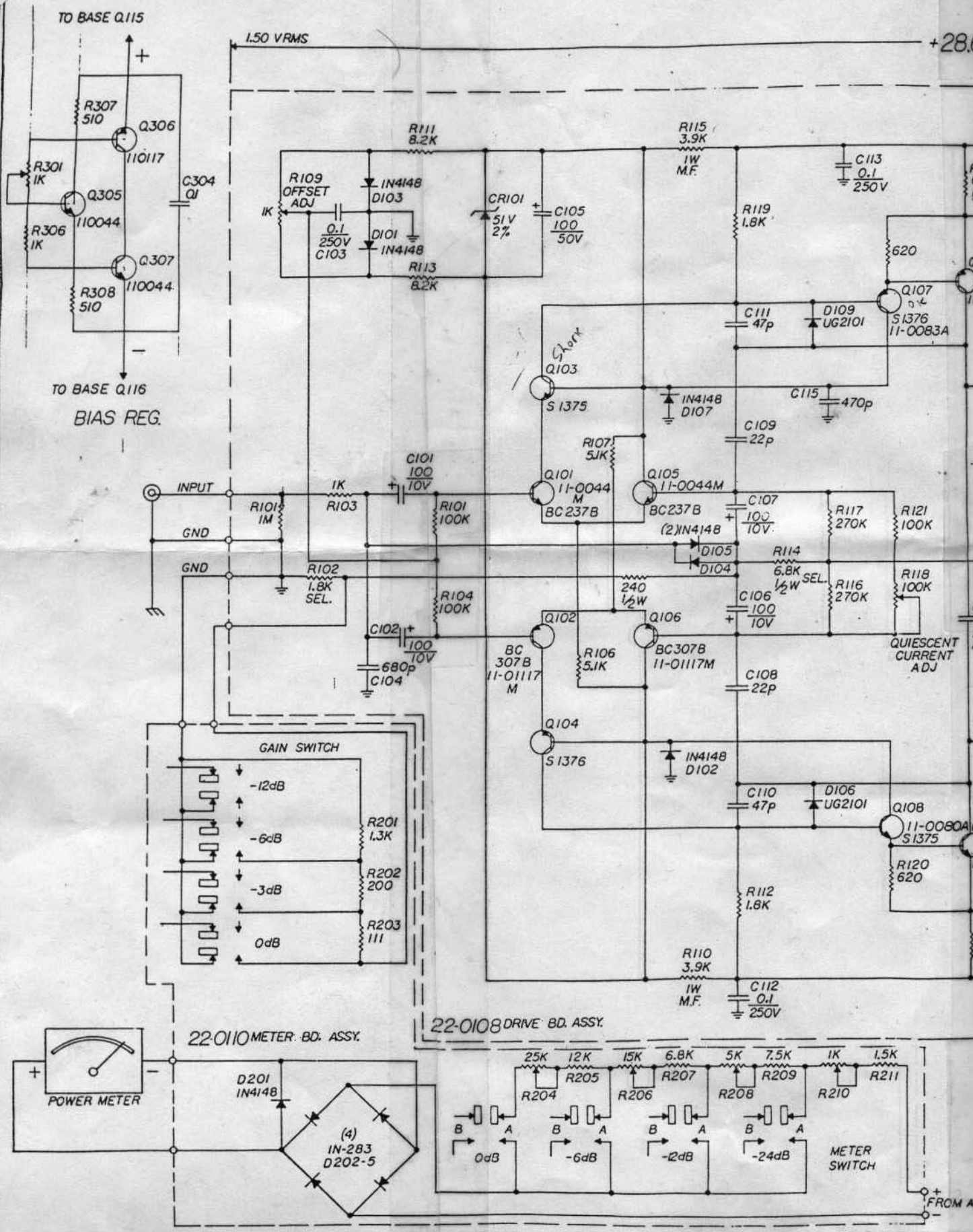
CHA SHOWN ONLY

22-0109 MAIN BD. ASSY

RELAY BD ASSY 22-0095



SAE			
SAE ELECTRONIC AND ELECTRO MECHANICAL			
30 E. MAIN ST. LOS ANGELES, CALIF.			
DATE	SCALE	C.D.	DRAWN BY
2/13/65	NONE		50011



2400/MARK 24 POWER AMPLIFIER COMPONENT PART LIST

PRE-DRIVE CARD

1.Q101	11-0044M	BC237 B,C NPN	REPLACED BY 11-0175 DIFFERENTIAL PAIR C 1583
2.Q102	11-0117M	BC307 B,C PNP	REPLACED BY 11-0174 DIFFERENTIAL PAIR A 798
3.Q103	11-0080A	S-1375	NPN
4.Q104	11-0083A	S-1376	PNP
5.Q105	11-0044M	BC237 B,C NPN	REPLACED BY 11-0175 DIFFERENTIAL PAIR C 1583
6.Q106	11-0117M	BC307 B,C PNP	REPLACED BY 11-0174 DIFFERENTIAL PAIR A 798
7.Q107	11-0083A	S-1376	PNP — ECG189, NTE189
8.Q108	11-0080A	S-1375	NPN — ECG188, NTE188
9.Q109	11-0148	2SA839, SA913	PNP — NTE398
10.Q110	11-0149	2SC1669, SC1913	NPN
11.Q111	11-0149	2SC1669, SC1913	NPN — NTE375
12.Q112	11-0148	2SA839, SA913	PNP
13.Q113	11-0150	S-1236, 2SB595	PNP ECG-55
14.Q114	11-0151	S-1237, 2SD525	NPN ECG-54
15.Q115	11-0150	S-1236, 2SB595	PNP ECG-55
16.Q116	11-0151	S-1237, 2SD525	NPN ECG-54

BIAS CIRCUIT

1.Q305	11-0044	BC237 B,C NPN
2.Q306	11-0117	BC307 B,C PNP
3.Q307	11-0044	BC237 B,C NPN

OUTPUT MODULE

1.Q301	11-0068	2SD424	NPN
2.Q302	11-0074	2SB554	PNP
3.Q303	11-0068	2SD424	NPN
4.Q304	11-0074	2SB554	PNP

PRE-DRIVE CARD ADJUSTMENTS

1. THE TOP ADJUSTMENT OF THE CARD IS FOR THE D.C. OFFSET WHICH CAN BE MEASURED AT THE SPEAKER OUTPUT TERMINALS. THIS ADJUSTMENT SHOULD BE MADE AS CLOSE TO (0) AS POSSIBLE, WITH (50) MILIVOLTS BEING THE HIGHEST ALLOWABLE LEVEL.
2. THE SECOND ADJUSTMENT IS FOR THE QUIESCENT CURRENT LEVEL. THIS ADJUSTMENT IS MADE BY MEASURING THE VOLTAGE ACROSS THE FUSEABLE (62) OHM RESISTORS (R122/R22, R125/R25). THE LEVEL SHOULD BE SET FOR (1.6) VOLTS FOR CONSUMER USE, AND (1.7) VOLTS FOR THE PROFESSIONAL USER. THE TWO SIDES SHOULD BE MEASURED COMPARING THEM WITH EACH OTHER, THE DIFFERENCE BETWEEN THEM SHOULD BE (+/- 10/25) MILIVOLTS.

HARMONIC DISTORTION ADJUSTMENT

THIS ADJUSTMENT SHOULD BE MADE WITH THE USE OF A DISTORTION ANALYZER SET TO A (20) KHZ SIGNAL AT (1) WATT INTO A (8) OHM LOAD. THE UNIT SHOULD BE IN A WARM CONDITION FOR THE MOST ACCURATE ADJUSTMENT. SET THE DISTORTION LEVEL FOR (.05) FOR THE CONSUMER, AND (.08) FOR THE PROFESSIONAL USER.

AFTER ALL THE SETTINGS HAVE BEEN DONE. RUN UNIT FOR ABOUT (30) MINUTES AND CHECK THE LEVELS OF EACH SETTING FOR STABILITY.