

PRESIDENT HARRY



MANUEL DE MAINTENANCE

CARACTERISTIQUES COMMERCIALES

1) GENERALES :

- Bande de fréquences : 26,965 MHz à 27,405 MHz
- Nombre de canaux : 40
- Ecart entre canaux : 10 KHz
- Classe d'émission : F3E (FM)
- Tension d'alimentation : 13,2 V (10,8 V à 15,6 V)
- Marge de température : - 10° C à + 55° C
- Impédance d'antenne : 50 Ohms

2) EMETTEUR :

- Ecart de fréquence : moins que +/- 600 Hz
- Puissance démission : 4 W crête
- Microphone : pastille electred
- Puissance émise dans le canal adjacent : inférieure à 20 microwatts

3) RECEPTEUR :

- Première F.I. : 10,695 MHz
- Deuxième F.I. : 4 55 KHz
- Impédance du haut-parleur incorporé : 16 Ohms
- Puissance de sortie B.F. : 2 W
- Sensibilité : meilleure que 12 dB/microvolt (f, e, m)

ALIGNEMENT DU SYNTHETISEUR

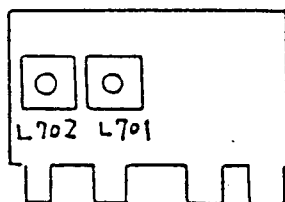
1) Equipement nécessaire

- a) Alimentation continu 13,8 volts.
- b) Voltmètre continu.

2) Procédure d'alignement

ORDRE	MODE	REGLAGE	OPERATION
1	TX : CANAL : 40 PAS DE MODULATION	L 702	Relier le voltmètre continu au VCO Ajuster L 702 pour obtenir 4,5 V +/- 0,1 V
2	RX : CANAL : 40 PAS DE MODULATION	L 701	IDEM

3) Emplacement des points d'alignement.



ALIGNEMENT DE L'EMETTEUR

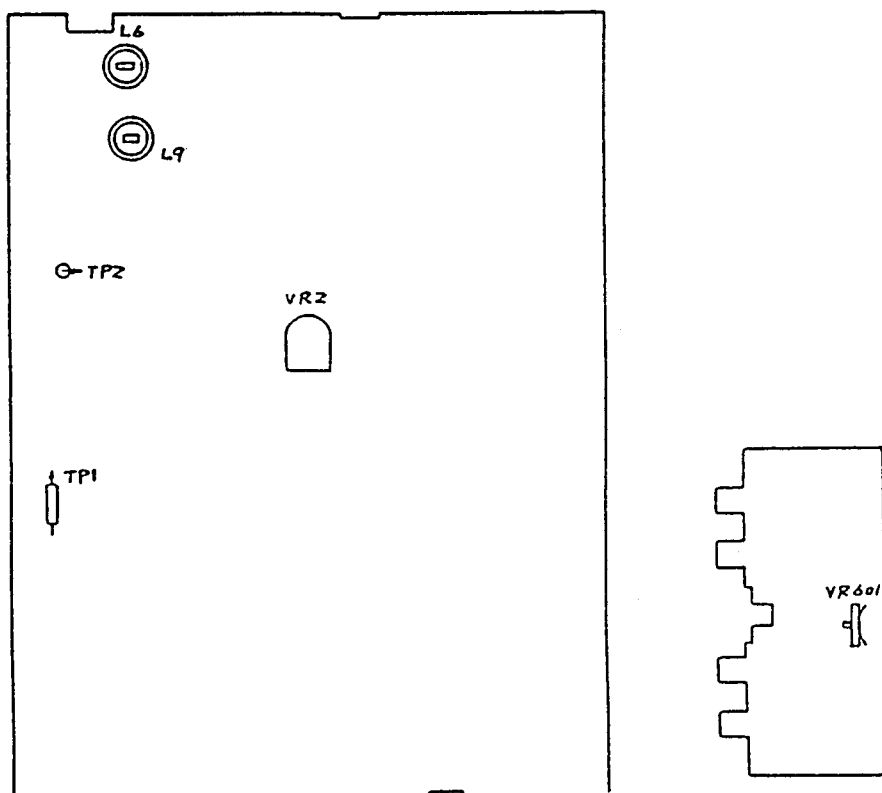
1) Equipement nécessaire

- a) Alimentation continu
- b) Oscillateur 1 KHZ
- c) Excursiomètre FM
- d) Charge fictive 50 OHMS
- e) Wattmètre HF

2) Procédure d'alignement

ORDRE	MODE	REGLAGE	OPERATION
1	CANAL : 19 Mod - 500 MV	L 6 L 9	Relier le wattmètre au jack antenne. obtenir le max de puissance
2	SANS MODUL CANAL : 19	L 6	Ajuster L 6 pour obtenir 4 W sur le wattmètre
3	IDEM 2	VR 2	Ajuster VR 2 pour que la 4ème led commence à s'éclairer.
4	MOD- 30 MV CANAL : 1	VR 601	Ajuster VR 601 pour obtenir +/- 1.5 KHZ sur l'excursiomètre FM.

3) Emplacement des points d'alignement.



ALIGNEMENT DU RECEPTEUR

1) Equipement nécessaire

- a) Alimentation 13,8 V continu
- b) Générateur (27 MHZ , 1 KHZ, 30%)
- c) Voltmètre alternatif (décibelmètre)

2) Procédure d'alignement

ORDRE	MODE	REGLAGE	OPERATION
1	CANAL : 19 VOLUME MAX	L 1,2,3, et L 11	Relier le générateur au jack antenne et le voltmètre alternatif aux bornes du haut-parleur Ajuster les noyaux pour le maximum de lecture.
2	IDEM	VR 4	Atténuer le générateur de moins 3 db, ajuster la puissance de sortie à 5 MW. Si la puissance obtenue est inférieure, régler VR 2 vers le min. Si la puissance obtenue est supérieure, régler VR 2 vers le max.
3	CANAL 19 SANS MODULATION	VR 3	Régler le générateur à 1000 microvolts. Ajuster VR 3 pour que la 4ème led commence à s'éclairer.
4	CANAL : 19 VO/MAX	VR 1	Ajuster VR 1 pour que le bruit de souffle commence à être atténué.
5	CANAL : 19	L 601	Régler le générateur à 100 microvolts. Ajuster L 601 pour obtenir 4,5 +/- 0,2 V.

ALIGNEMENT PLATINE FM

1) Equipement nécessaire

- a) Alimentation continu
- b) Oscilloscope
- c) Générateur 450 KHz FM
- d) Voltmètre continu
- e) Voltmètre alternatif

2) Procédure d'alignement

ORDRE	MODE	REGLAGE	OPERATION
1	RX : GENERATEUR FM 3 MV - 1 KHZ 1,5 KHZ DE DEVIATION	L 601	Relier le voltmètre continu entre TP 601 et la masse. Ajuster L 601 pour obtenir 4,5 V +/- 0,1 V. Vérifier que la variation est de 150 à 350 MV.
2	TX : OSCILLATEUR 10MV 1 KHZ	VR 601 AU MILIEU	Ajuster VR 601 pour obtenir 4 - 9 mV sur le voltmètre alternatif.

3) Emplacement des points d'alignement.

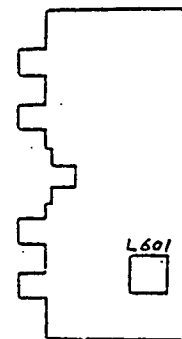
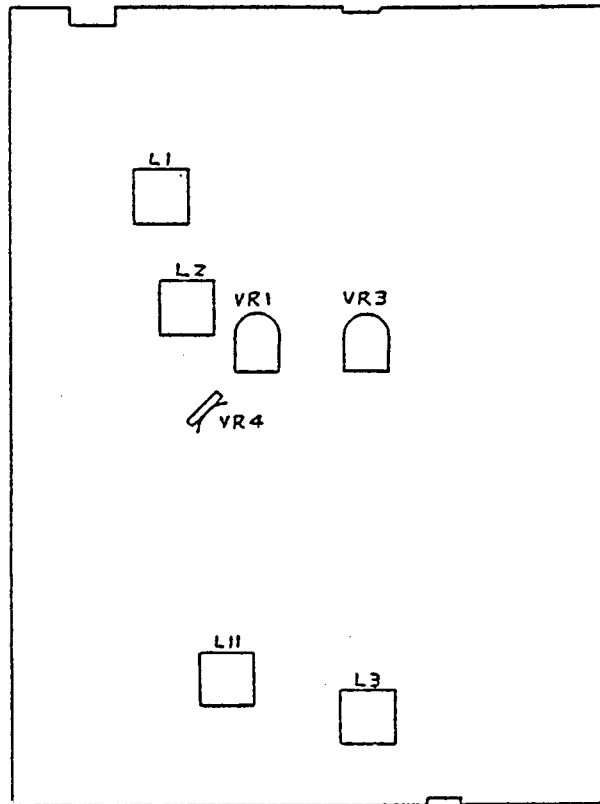


TABLEAU DE FREQUENCE

TABLEAU DE FREQUENCE V.C.O. ET DU FACTEUR DE DIVISION N.

CANAL	FREQUENCE ANTENNE (MHZ)	EMISSION (R/T=H) (N)	FREQUENCE V.C.O. (MHZ)	RECEPTION (R/T=L) (N)	FREQUENCE V.C.O. (MHZ)
1	26.965	2596	26.965	1627	16.273
2	26.975	2697	26.975	1628	16.283
3	26.985	2698	26.985	1629	16.293
4	27.005	2700	27.005	1631	16.313
5	27.015	2701	27.015	1632	16.323
6	27.025	2702	27.025	1633	16.333
7	27.035	2703	27.035	1634	16.343
8	27.055	2705	27.055	1636	16.363
9	27.065	2706	27.065	1637	16.373
10	27.075	2707	27.075	1638	16.383
11	27.085	2708	27.085	1639	16.393
12	27.105	2710	27.105	1641	16.413
13	27.115	2711	27.115	1642	16.423
14	27.125	2712	27.125	1643	16.433
15	27.135	2713	27.135	1644	16.443
16	27.155	2715	27.155	1646	16.463
17	27.165	2716	27.165	1647	16.473
18	27.175	2717	27.175	1648	16.483
19	27.185	2718	27.185	1649	16.493
20	27.205	2720	27.205	1651	16.513
21	27.215	2721	27.215	1652	16.523
22	27.225	2722	27.225	1653	16.533
23	27.255	2725	27.255	1656	16.563
24	27.233	2723	27.235	1654	16.543
25	27.245	2724	27.245	1655	16.553
26	27.265	2726	27.265	1657	16.573
27	27.275	2727	27.275	1658	16.583
28	27.285	2728	27.285	1659	16.593
29	27.295	2729	29.295	1660	16.603
30	27.305	2730	27.305	1661	16.613
31	27.315	2731	27.315	1662	16.623
32	27.325	2732	27.325	1663	16.633
33	27.335	2733	27.335	1664	16.643
34	27.345	2734	27.345	1666	16.663
36	27.365	2736	27.365	1667	16.673
37	27.375	2737	27.375	1668	16.683
38	27.385	2738	27.385	1669	16.693
39	27.395	2739	27.395	1670	16.703
40	27.405	2740	27.405	1671	16.713

TABLEAU DE TENSION DES CIRCUITS INTEGRES

IC NO.	NOM CI	IC PIN NO.	R X (V)		TX (V)
1	LA 1185	1	0.8	RF GAIN MIN 1.2	0.8
		2	1.5	1.5	1.5
		3	8	8	8
		4	1.5	1.5	1.5
		5	0	0	0
		6	2.5	2.5	2.5
		7	2.2	2.2	2.2
		8	8	8	8
		9	8	8	8
2	TDA 1220 B	1	2.8		2.8
		2	1.4		1.4
		3	8		8
		4	1.4		1.4
		5	1.4		1.4
		6	2.4		2.4
		7	8		8
		8	0.8		0.8
		9	1.8		1.8
		10	2.9		2.9
		11	0		0
		12	0		0
		13	0		0
		14	2.4		2.4
		15	2.4		2.4
		16	0		0
3	MS223 L	1	0.2	SQ MAX 0.2	0.2
		2	1.2	1.2	1.2
		3	1.2	1.2	1.2
		4	0	0	0
		5	2	1.2	2
		6	1.6	1.6	1.6
		7	6.5	0	7
		8	8	8	8

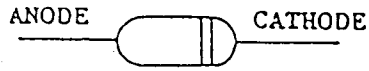
IC NO.	NOM CI	IC PIN NO.	RX (V)		TX (V)
4	TDA 1905	1	7	SQ MAX 7	7
		2	13.6	13.6	13.6
		3	13.6	13.6	13.6
		4	3	0	2.2
		5	0	0	0
		6	2.5	2.5	2.5
		7	2.5	2.5	2.5
		8	2.4	2.4	2.4
		9	0	0	0
		10	0	0	0
		11	0	0	0
		12	0	0	0
		13	0	0	0
		14	0	0	0
		15	0	0	0
		16	0	0	0
5	SM5124 A	1		2.6	2.6
		2		3	.3
		3		6	6
		4		6	6
		5		3	3
		6		3	3
		7		3	3.6
		8		0.2	5.8
		9		2.9	2.9
		10		0.6	0.6
		11		0.6	0.6
		12		0.6	0.6
		13		6	6
		14		6.4	6.4
		15		0	0
		16		6.4	6.4
		17		6.4	6.4
		18		0	0
6	L7808 CV	1		13.6	13.6
		2		0	0
		3		8	8
7	LB 1423	1		9.4	9.4
		2		9.4	9.4
		3		9.4	9.4
		4		9.4	9.4
		5		0	0
		6		0.2	0.2
		7		0.2	0.2
		8		0.2	0.2
		9		8	8

TABLEAU DE TENSION DES CIRCUITS INTEGRES

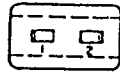
IC NO.	NOM IC	IC PINNO.	R X (V)	T X (V)
601	NTM4558D	1	0	4.3
		2	0	4.3
		3	0	4.3
		4	0	0
		5	0	4.0
		6	0	4.0
		7	0	4.0
		8	0	7.7
602	μPC1028HA	1	1.3	1.3
		2	1.3	1.3
		3	7.4	7.4
		4	0	0
		5	3.4	3.4
		6	3.4	3.4
		7	4.6	4.6

IDENTIFICATION DES SEMI-CONDUCTEURS

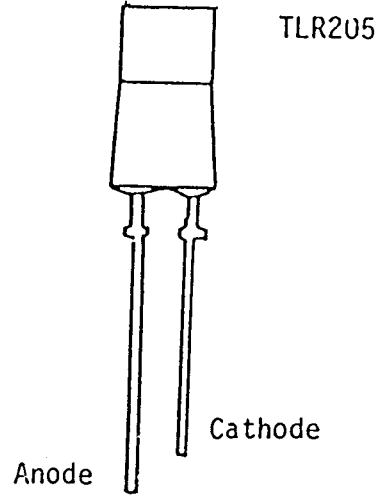
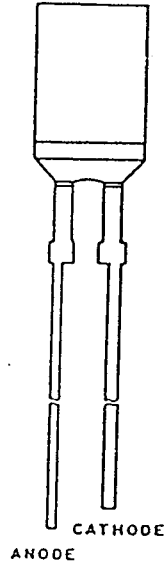
DIODE



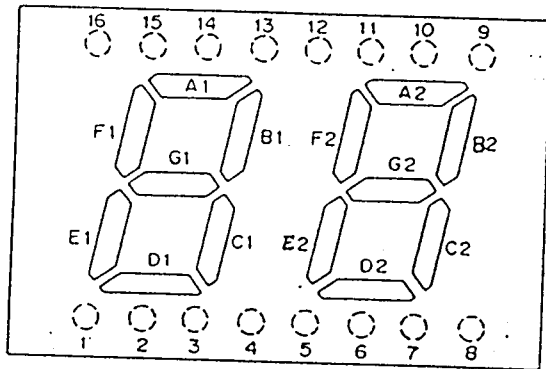
- 1N60AM
- 1N4003
- 1S1555
- HZ-6C1
- 1SV73-EB



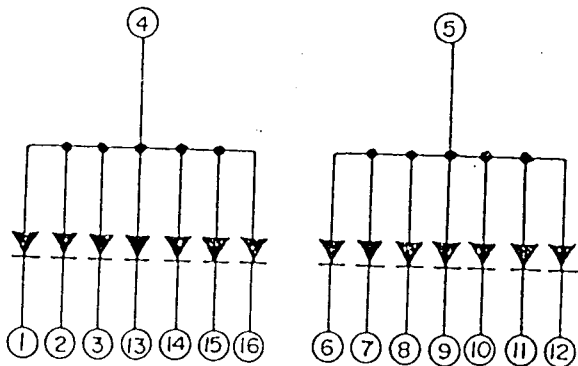
GL-9PR2



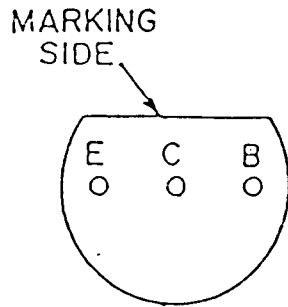
LDR204AL



Pin No.	Function
1	Cathode C1
2	Cathode E1
3	Cathode D1
4	Anode Common Digit 1
5	Anode Common Digit 2
6	Cathode D2
7	Cathode E2
8	Cathode C2
9	Cathode G2
10	Cathode A2
11	Cathode F2
12	Cathode B2
13	Cathode B1
14	Cathode F1
15	Cathode A1
16	Cathode G1

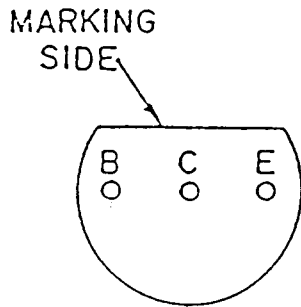


TRANSISTOR



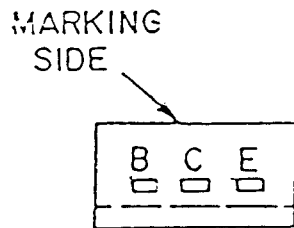
Bottom View

2SA733A-PB
2SC941TM-0
2SC945A-Q
2SC1675-L



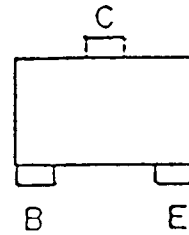
Bottom View

2SC2086-0



Bottom View

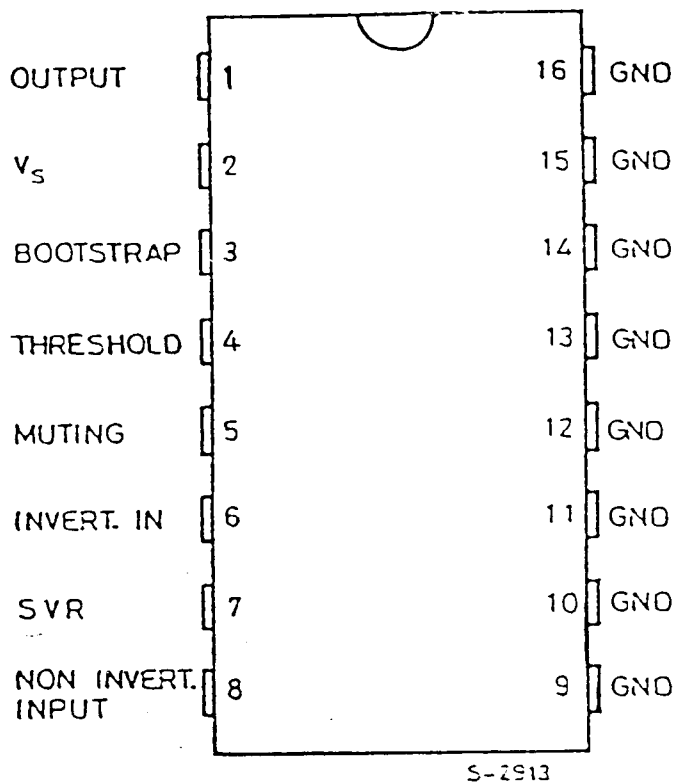
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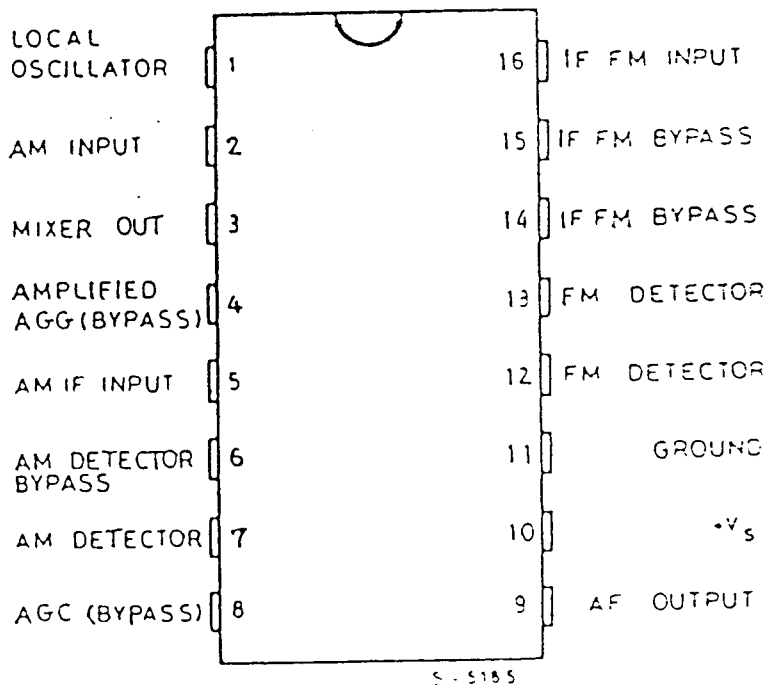
2SC2814-F5

Top View

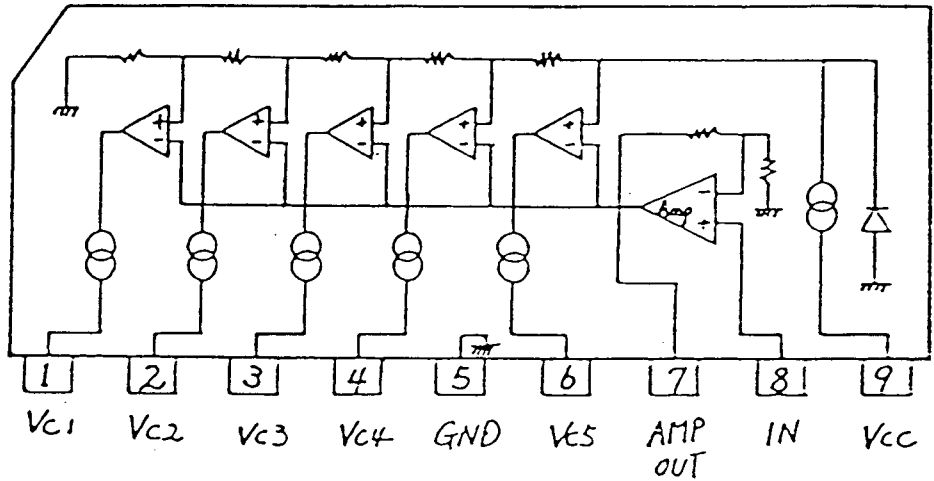
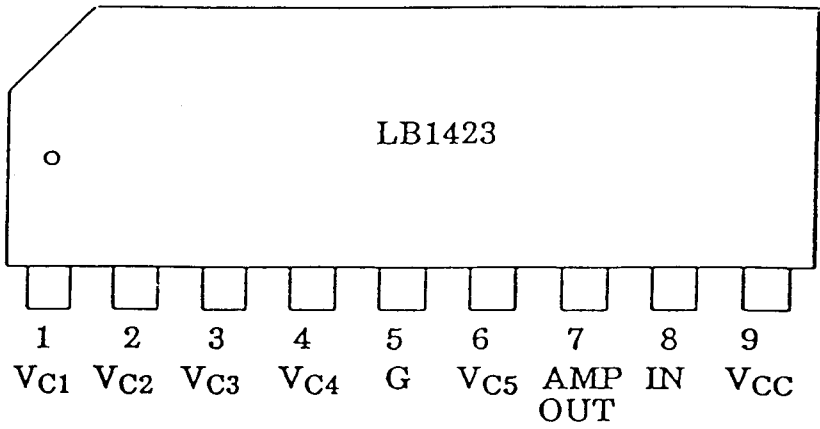
TDA1905
(AUDIO AMPLIFIER)



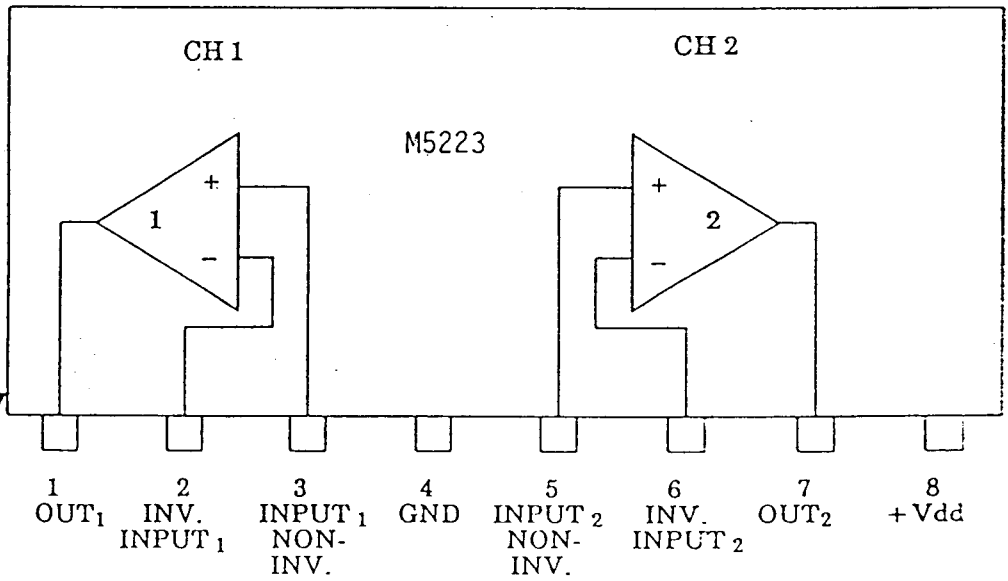
TDA1220B
(* 2nd Mix.
* 2nd IF Amp.
* DET
* AGC)



LB1423
(LED METER DRIVE)



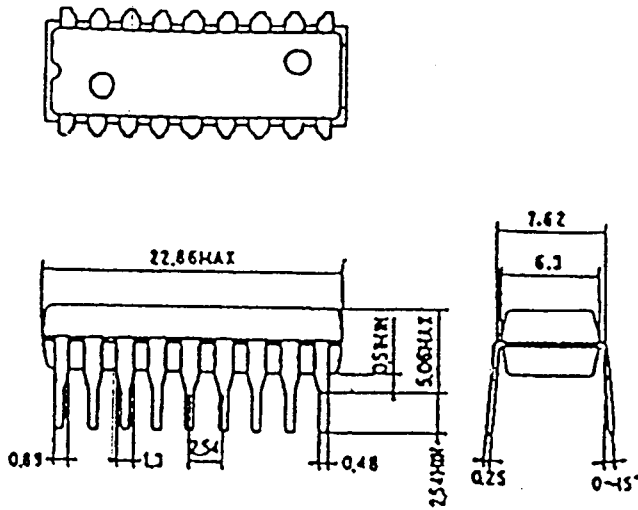
M5223L
(SQUELCH AND
AGC AMP.)



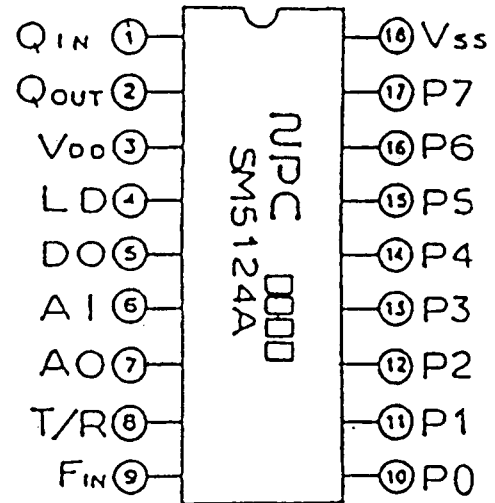
Marking Side →

BROCHAGE DES SEMI-CONDUCTEURS

■ PACKAGE DIMENSIONS

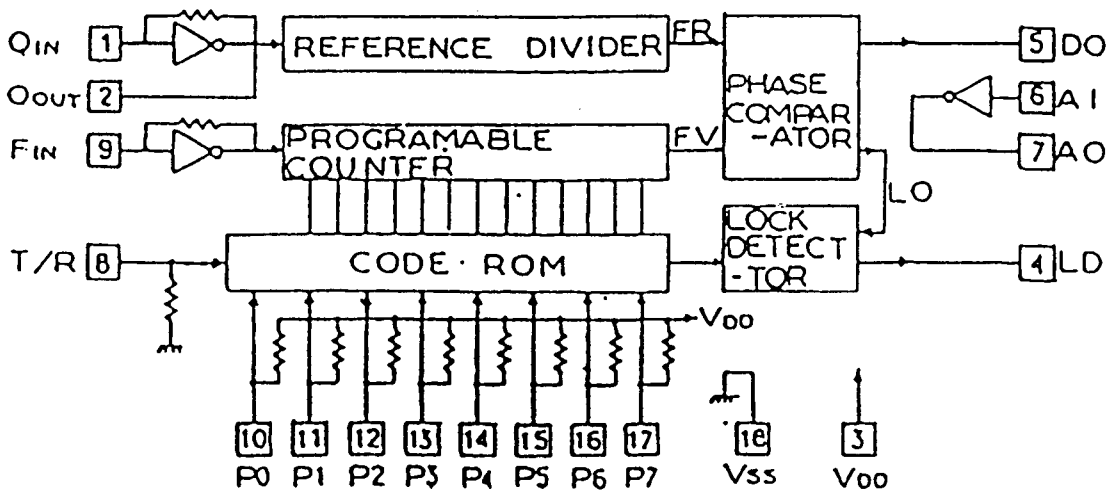


■ PIN CONFIGURATION

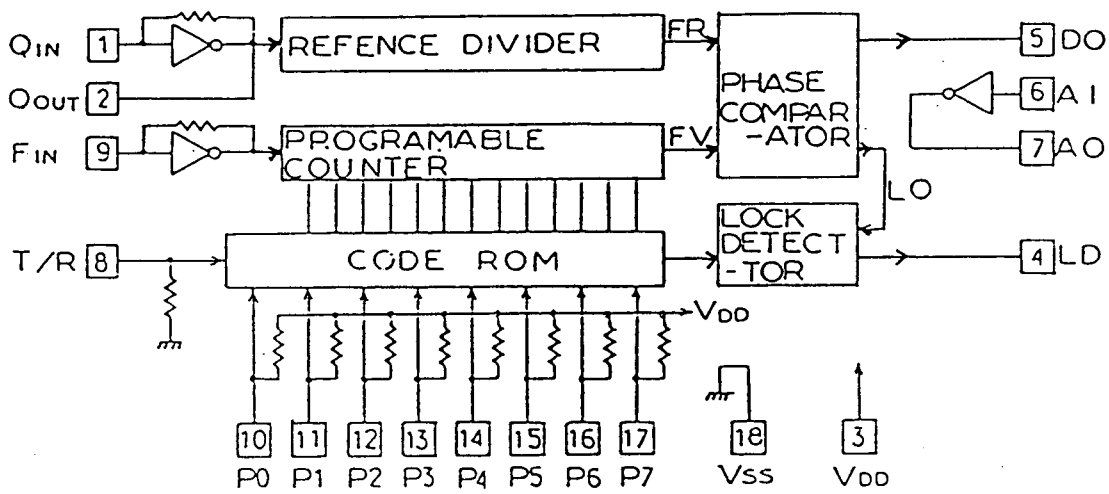
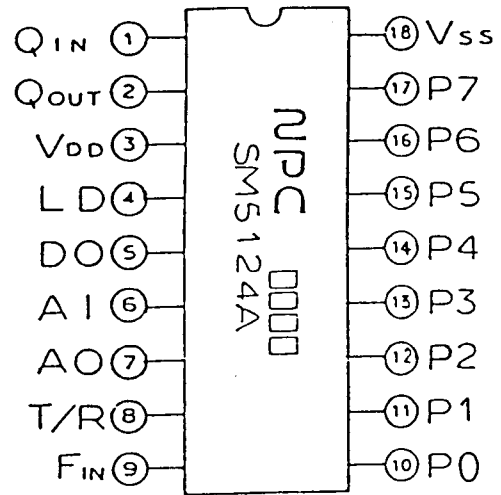


TOP VIEW

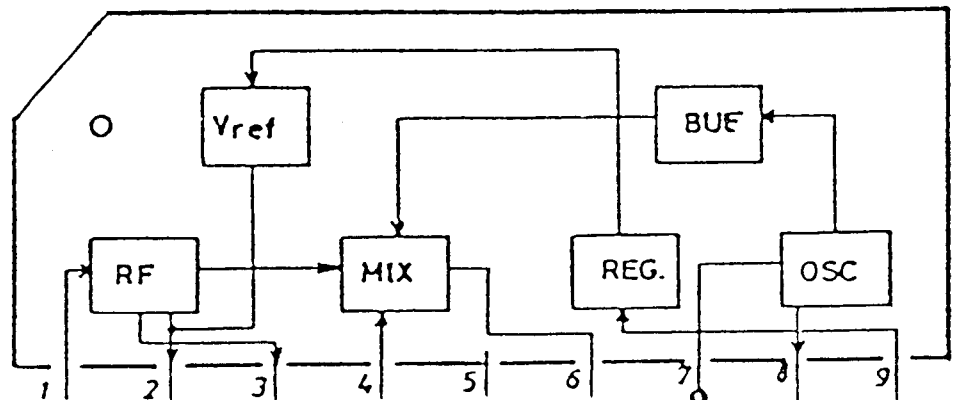
■ BLOC DIAGRAMME



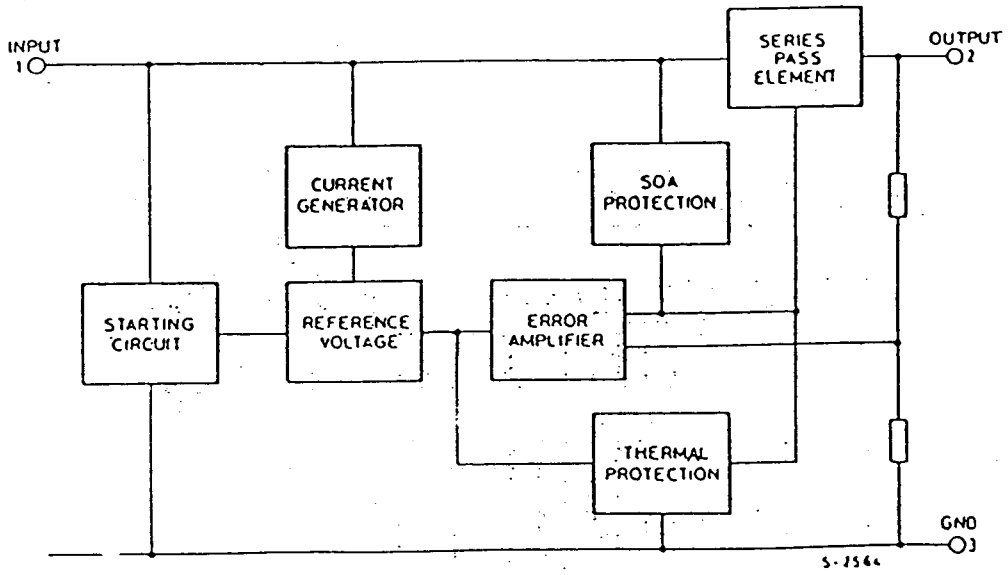
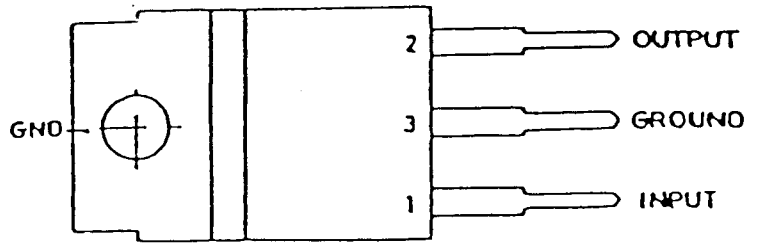
SM5124A
 (PLL Frequency Synthesizer)



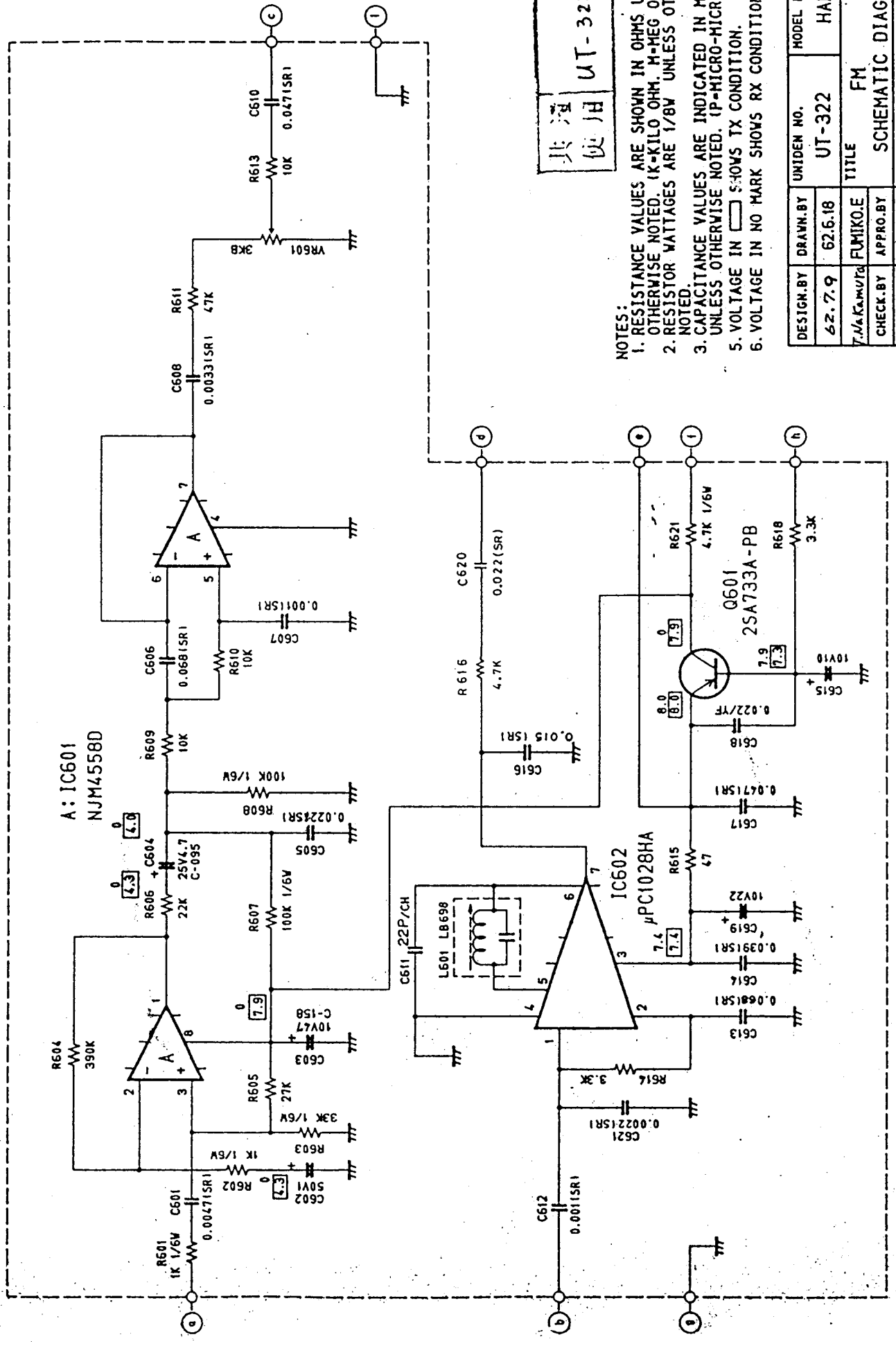
LA-1185
 (* BF Amp.
 * 1'st Mix.)



L7808CV
(REGULATOR)



8501 PA-261

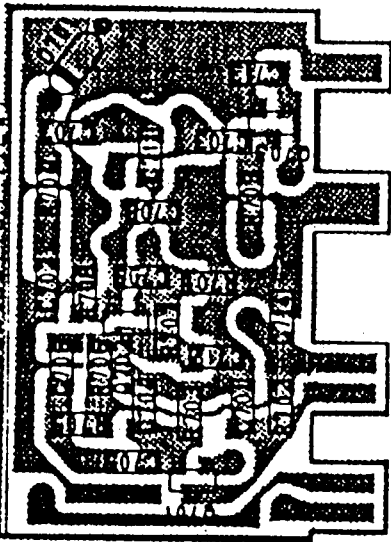


共通
使用
UT-322B

- NOTES:
1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. (K-KILO OHM, M-MEG OHM)
 2. RESISTOR WATTAGES ARE 1/8W UNLESS OTHERWISE NOTED.
 3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. (P-MICRO-MICRO FARAD)
 5. VOLTAGE IN \square SHOWS TX CONDITION.
 6. VOLTAGE IN NO MARK SHOWS RX CONDITION.

DESIGN.BY	62.7.9	UNIDEN NO.	UT-322	MODEL NO.	HARRY
CHECKED BY	T.M.KAMUWA	TITLE	FM	SCHEMATIC DIAGRAM 3/2	
APPROVED BY	82.7.9	DRAWING NO.	E14-2678 1/2		
NAME	M. MATSU	REV. MARK			

B701 PA-243AB (BOTTOM VIEW)



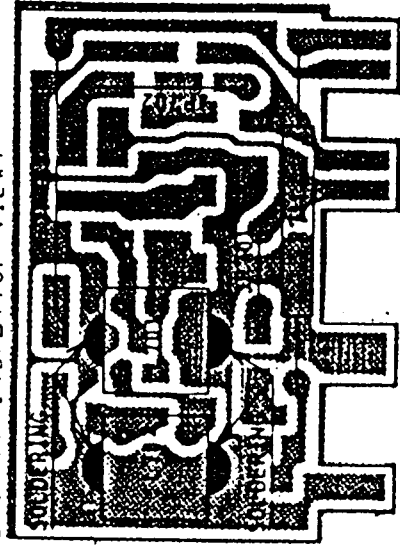
C701	39P/SL	
C702	0.01/Y	
C703	0.01/Y	
C704	0.01/Y	
C705	39P/SL	
C706	15P/CH	
C707	47P/UJ	
C708	100P/UJ	
C709	330P/UJ	
C711	39P/UJ	
C712	68P/SL	
C713	0.01/Y	
C714	0.01/Y	

Q701	25C2814F5	
Q702	25C2814F5	
Q703	25C2814F5	

R701	33K	
R702	100	
R703	390	
R704	10K	
R705	39K	
R706	100	
R707	15K	
R708	330	
R709	56K	

Q701	15V73EB	

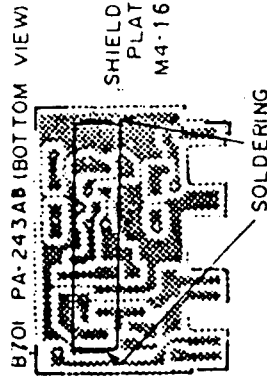
B701 PA-243AB (TOP VIEW)



JP701	5	
JP702	10	
JP703	17 5	

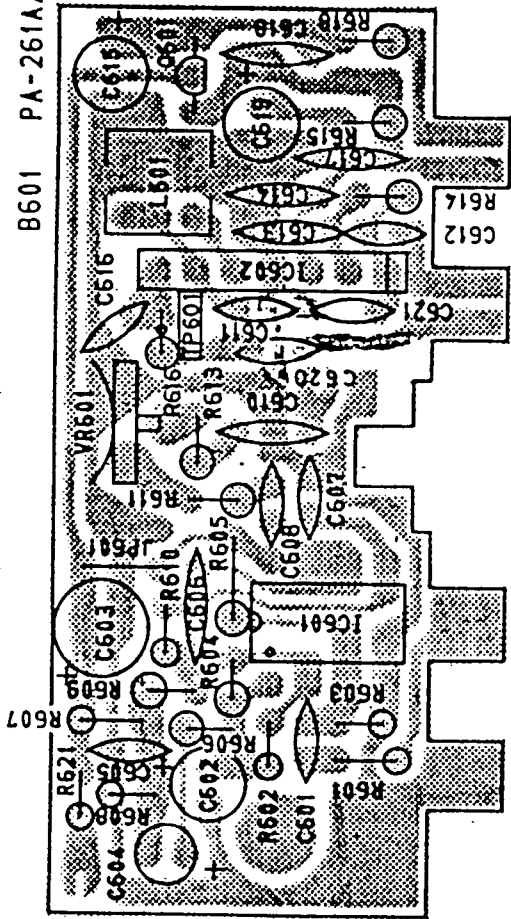
L701	L8537	
L702	L8537	

R711	1K	



- NOTES:
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 2. RESISTOR WATTAGES ARE 1/8W UNLESS OTHERWISE NOTED.
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B601 PA-261AA



C601	0.0047(SR)
C602	50V1
C603	10V47 C-158
C604	25V4.7 C-095
C605	0.022(SR)
C606	0.068(SR)
C607	0.001(SR)
C608	0.0033(SR)
C610	0.047(SR)
C611	22P/CH
C612	0.001(SR)
C613	0.068(SR)
C614	0.039(SR)
C615	10V10
C616	0.015(SR)
C617	0.047(SR)
C618	0.022/YF
C619	10V22
C620	0.022(SR)

C621	0.0022(SR)
IC601	NJM4558D
IC602	PCI028HA
Q601	2SA733A-PB

R601	1K	1/6W
R602	1K	1/6W
R603	33K	1/6W
R604	390K	
R605	27K	
R606	22K	
R607	100K	1/6W
R608	100K	1/6W
R609	10K	
R610	10K	
R611	47K	
R613	10K	
R614	3.3K	
R615	47	
R616	4.7K	
R618	3.3K	
R621	4.7K	1/6W

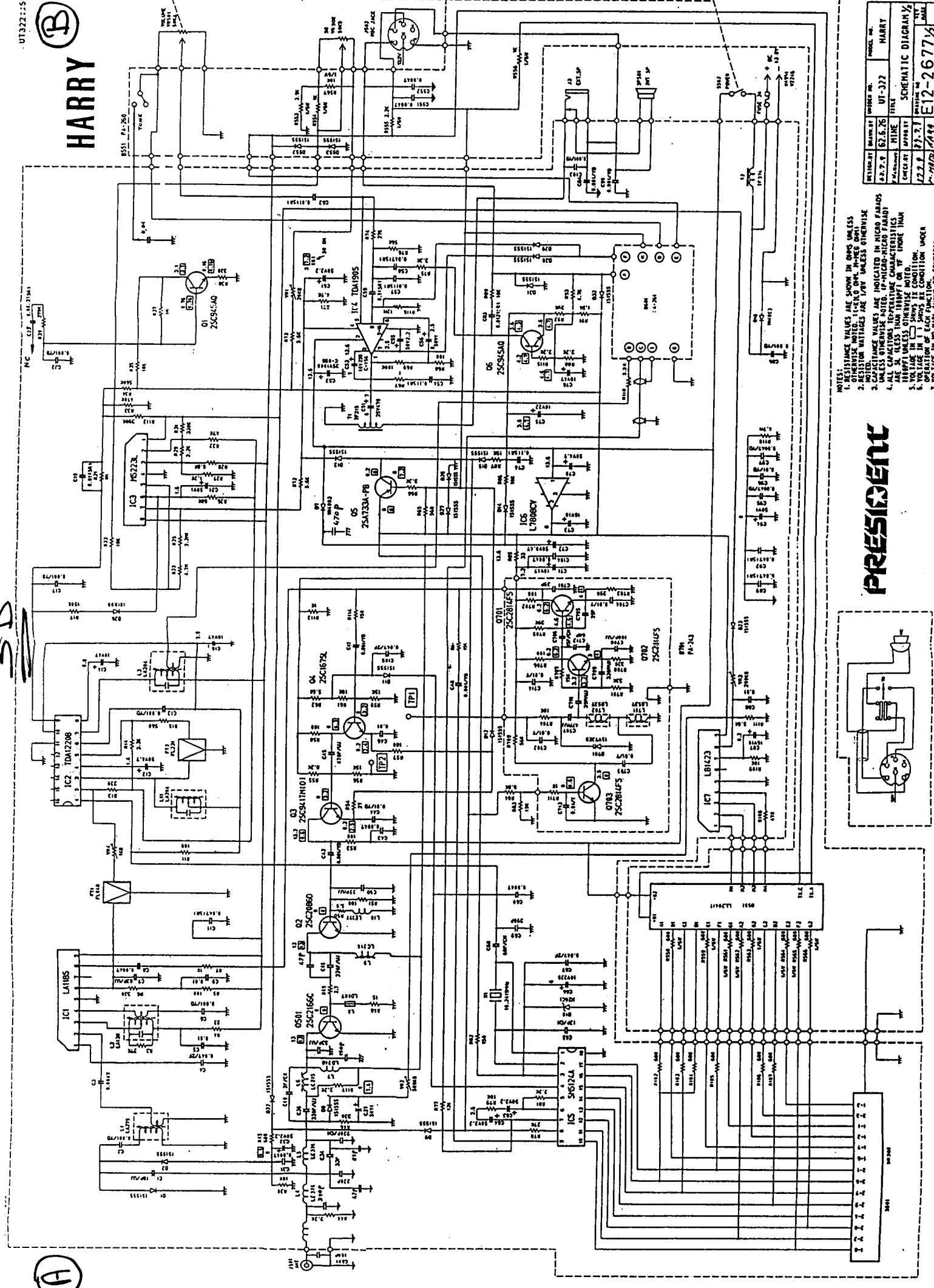
JP601	5
L601	LB698
VR601	3KB RT-535

UT-322B

- NOTES:
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 2. RESISTOR VOLTAGES ARE 1/8W UNLESS OTHERWISE NOTED.
 3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. (P-MICRO-MICRO FARAD)
 4. ALL CAPACITORS TEMPERATURE CHARACTERISTICS ARE ZF UNLESS OTHERWISE NOTED.
 5. ALL CAPACITORS TEMPERATURE CHARACTERISTICS ARE SL (LESS THAN 1000PF) OR ZF (MORE THAN 1000PF) UNLESS OTHERWISE NOTED.



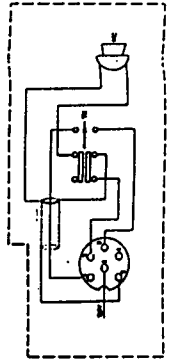
HARRY



- NOTE: RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. 1% TOLERANCE VALUES ARE SHOWN UNLESS OTHERWISE NOTED. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. IC-MICRO-HEAT-SINK CHARACTERISTICS ARE AS LESS THAN INDICATED ON THE PART NUMBER UNLESS OTHERWISE NOTED. VOLTAGE IN 1% SHOWS R1 CONDITION UNDER OPERATION OF EACH FUNCTION. VOLTAGE IN NO LOAD SHOWS R1 CONDITION.

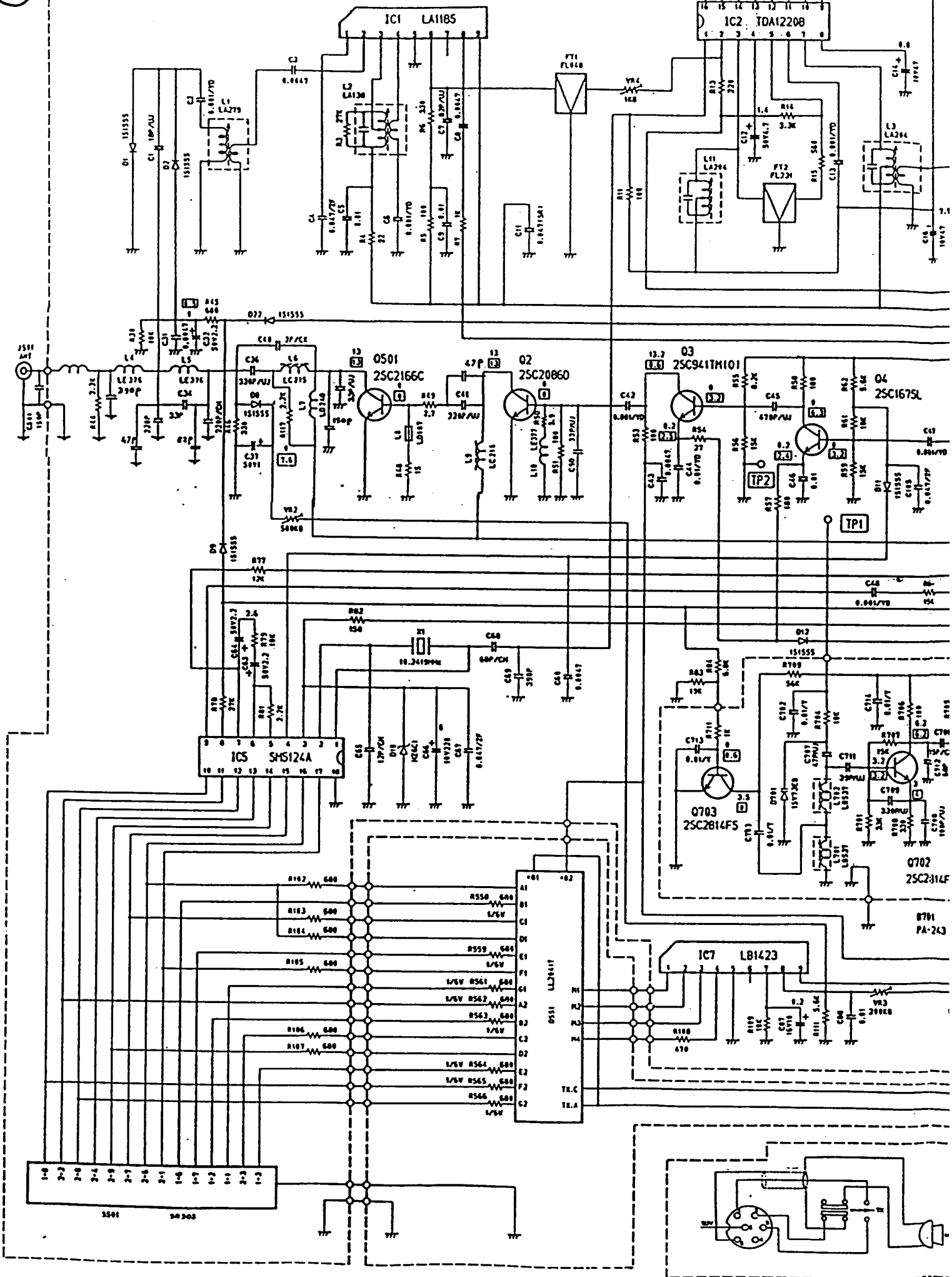
REVISION	DATE	BY	APPROVED	DATE	BY
02.7.9	02.6.76	UT-372	HARRY		
SCHEMATIC DIAGRAM			E12-2677A		

PRESIDENT



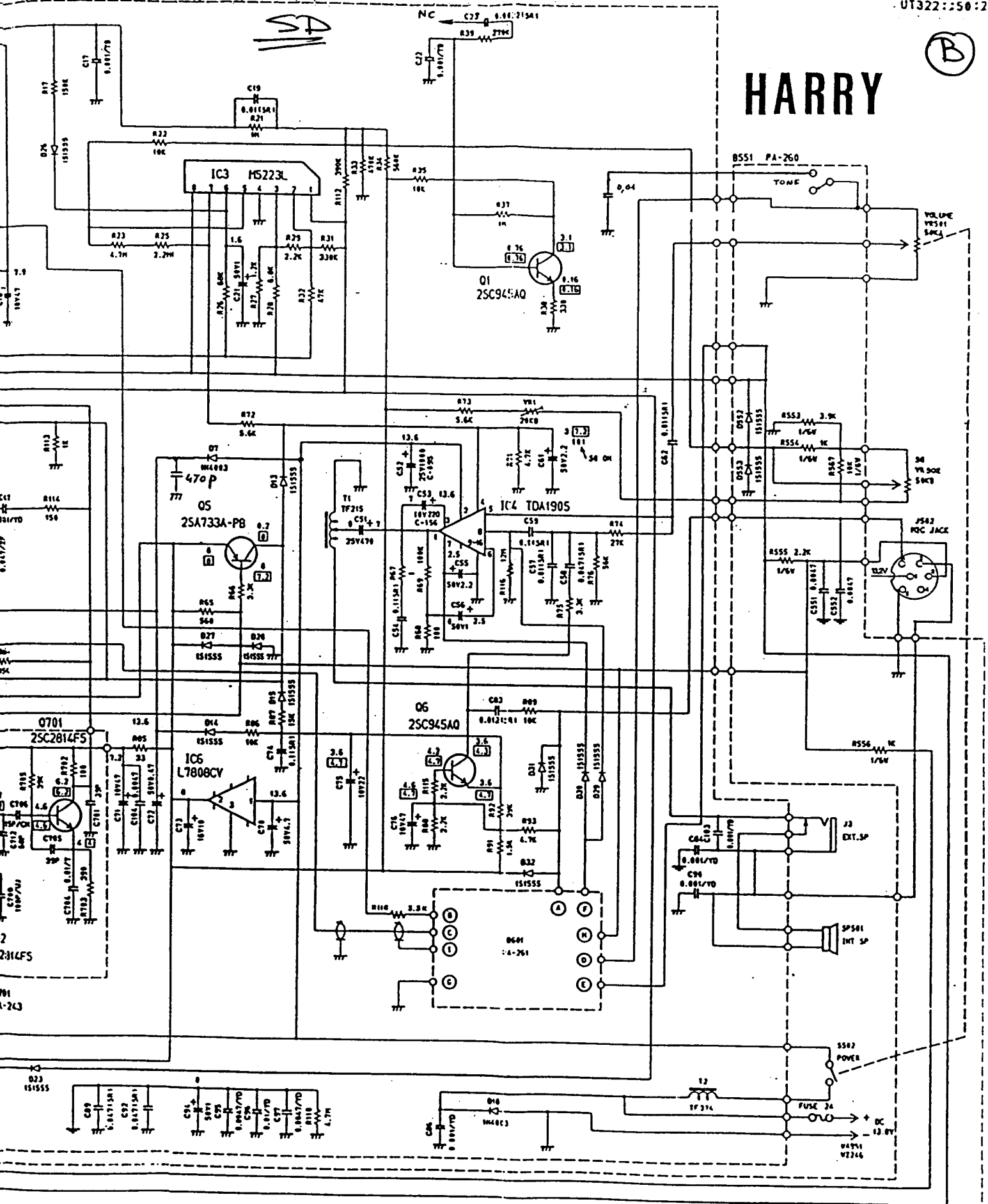
(A)

13D



(B)

HARRY



NOTES:

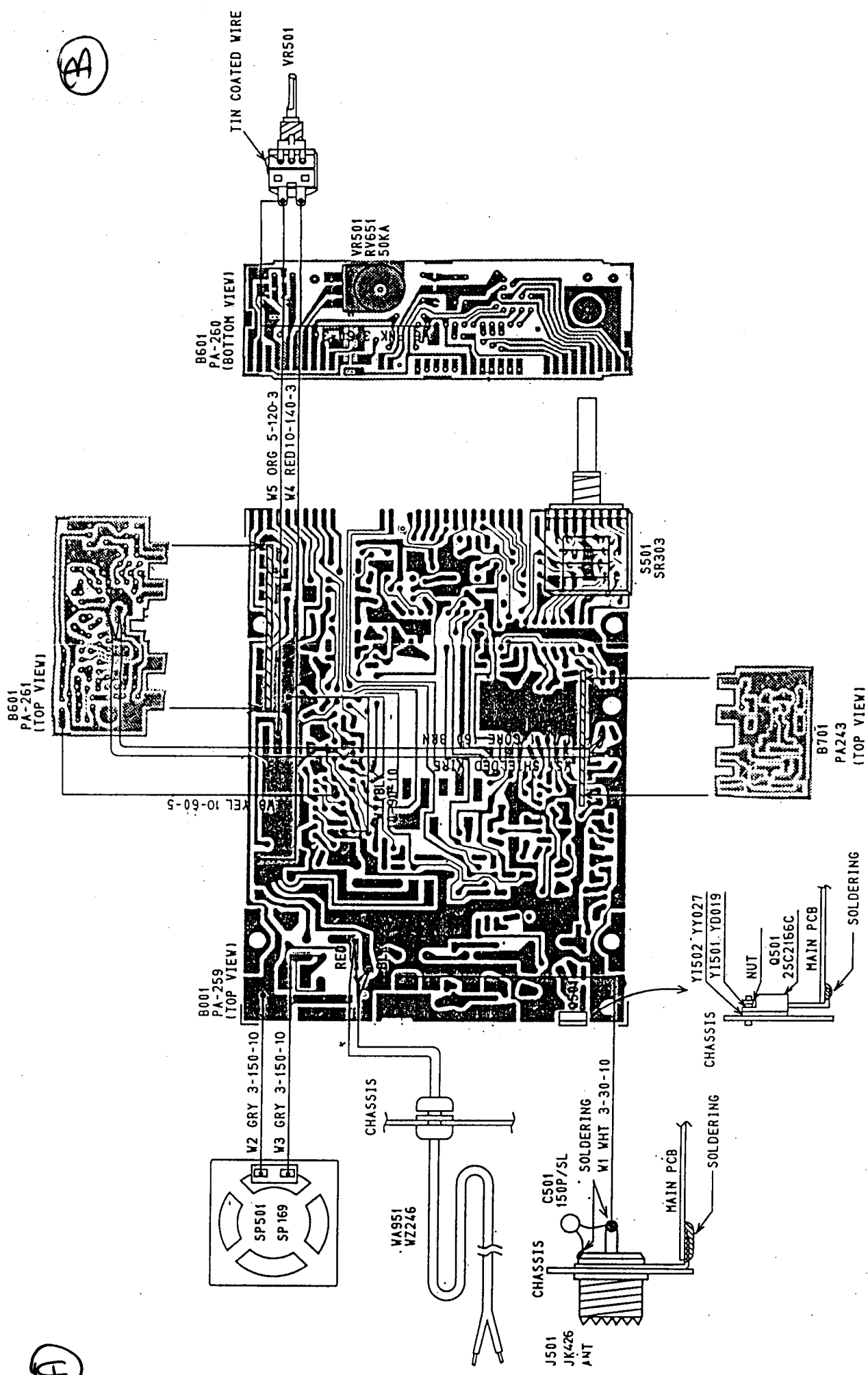
1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. 1K=KILO OHM, M=MEG OHM
2. RESISTOR WATTAGES ARE 1/8W UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. 1P=MICRO-MICRO FARAD
4. ALL CAPACITORS TEMPERATURE CHARACTERISTICS ARE SL (LESS THAN 1000PFI) OR TF (MORE THAN 1000PFI) UNLESS OTHERWISE NOTED.
5. VOLTAGE IN [] SHOWS TX CONDITION.
6. VOLTAGE IN | | SHOWS RX CONDITION UNDER OPERATION OF EACH FUNCTION.
7. VOLTAGE IN NO MARK SHOWS RX CONDITION.

PRESIDENT

DESIGN BY	DRAWN BY	UNIDEN NO.	MODEL NO.
42.7.9	62.6.26	UT-322	HARRY
Y. MAKAMURA	MINE	TITLE	
CHECK BY	APPROV BY	SCHEMATIC DIAGRAM 1/2	
177.9	87.7.7	DRAWING NO.	REV.
M. HAYASHI	TA99	E12-2677 1/2	PLATE

UNIDEN CORP

(B)

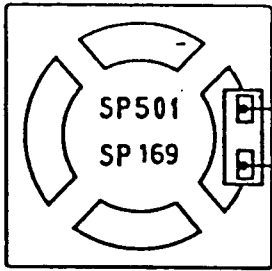


(A)

(A)

B601
PA-261
(TOP VIEW)

B001
PA-259
(TOP VIEW)

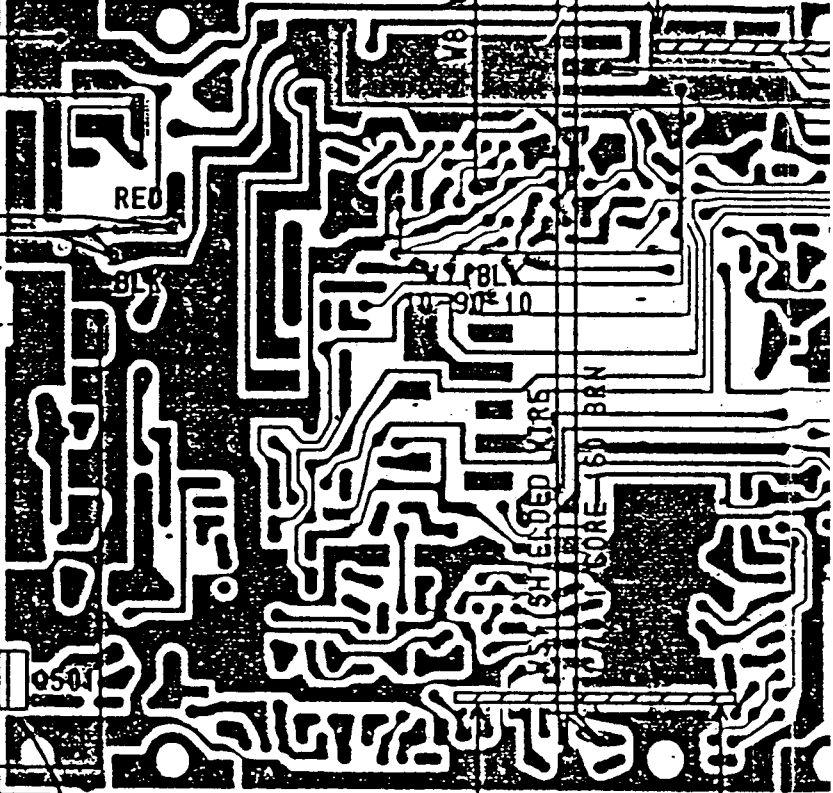


W2 GRY 3-150-10

W3 GRY 3-150-10

WA951
WZ246

CHASSIS



J501
JK426
ANT

CHASSIS

C501
150P/SL

SOLDERING
W1 WHT 3-30-10

MAIN PCB

SOLDERING

CHASSIS

Y1502 YY027

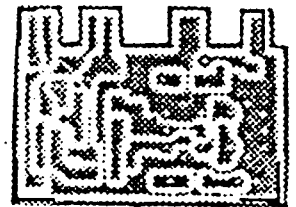
Y1501 YD019

NUT

Q501
25C2166C

MAIN PCB

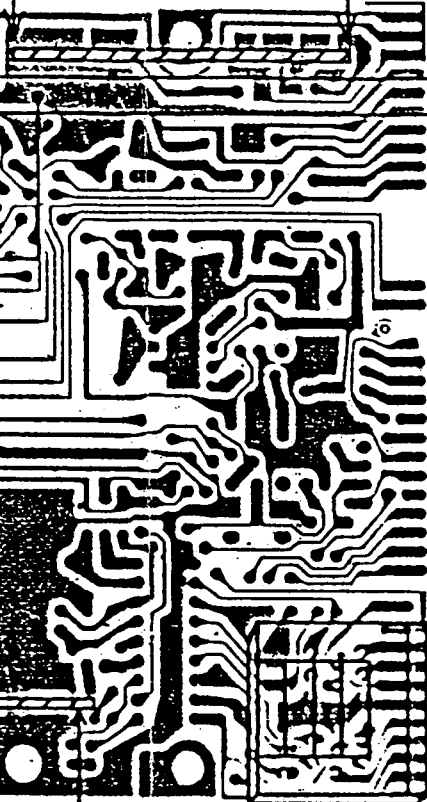
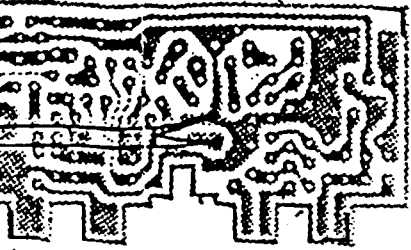
SOLDERING



B701
PA243
(TOP VIEW)

(B)

601
-261
TOP VIEW

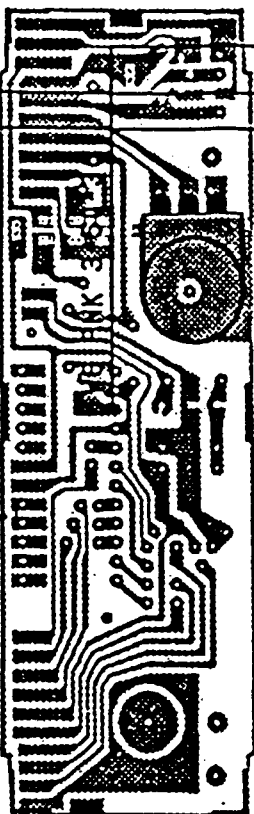


S501
SR303



VIEW

B601
PA-260
(BOTTOM VIEW)



W5 ORG 5-120-3
W4 RED 10-140-3

VR501
RV651
50KA

TIN COATED WIRE

VR501

