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# CARVER

# Model CT-17 SERVICE MANUAL

CONTENTS	Page
SPECIFICATIONS	
BLOCK DIAGRAM	3
ALIGNMENT PROCEDURES	e
PCB COMPONENT SIDE VIEWS	g
VOLTAGE CONVERSION	16
EXPLODED VIEWS	17
PARTS LIST	19
SCHEMATIC DIAGRAMS	27

#### **SPECIFICATIONS**

PHONO:

RIAA+1.0 dB "extended" RIAA curve Overload:

150 mV at 1 kHz

Frequency Response:

20 Hz-20 kHz ±0.5 dB (High Cut Filter, Tone, Hologram OUT)

SENSITIVITY:

Phono: CD/Tape/AUX: 2.7 mV 180 mV

NOISE:

Phono: Line Level: 84 dB, IHF A-weighted, below 5 Vrms at 1 kHz

98 dB, IHF A-weighted, below 2 Vrms

**DISTORTION:** 

THD:

0.01% or less, below 3 Vrms

IM (CCIR or SMPTE):

0.05% or less

TIM:

unmeasurable

**RATED OUTPUT:** 

6V

**SONIC HOLOGRAM GENERATOR:** 

Image Resolution: S/N ratio at rated reference:

5 horizontal, 20 vertical

greater than 85 dB

**TONE CONTROLS:** 

Turnover:

100 Hz, 1 kHz, 10 kHz

Boost/Cut: Loudness: ±8 dB for bass and treble, ±6 dB for midrange

+3 dB at 100 Hz

**MUTE EFFECT:** 

FM Sensitivity for 50 dB quieting (mono):

**HEADPHONE:** 

Sensitivity at preout 1 V: Maximum output at preout 1 V: 125 mV

400 dB

-20 dB

**TUNER SECTION:** 

FM IHF Usable Sensitivity:

14.3 dBf

FM S/N:

18.3 dBf 78 dB

FM IF Rejection: FM Capture Ratio: 82 dB

3.0 dB

FM Harmonic Distortion:

0.10%

FM Alternate Channel Selectivity:

72 dB

AM Suppression:

62 dB

FM Stereo Separation:

46 dB

AM THD (2 mV) 30% Modulation: AM Selectivity at S/N 20 dB±10 kHz: 1.2% 38 dB

AM Image Rejection: AM IF Rejection:

46 dB 65 dB

**VIDEO SECTION:** 

Frequency Response:

Video Input and Output:

10 Hz-5 MHz ±1.5 dB

Input Impedance:

75 ohms 1.0 Vp-p

SIZE:

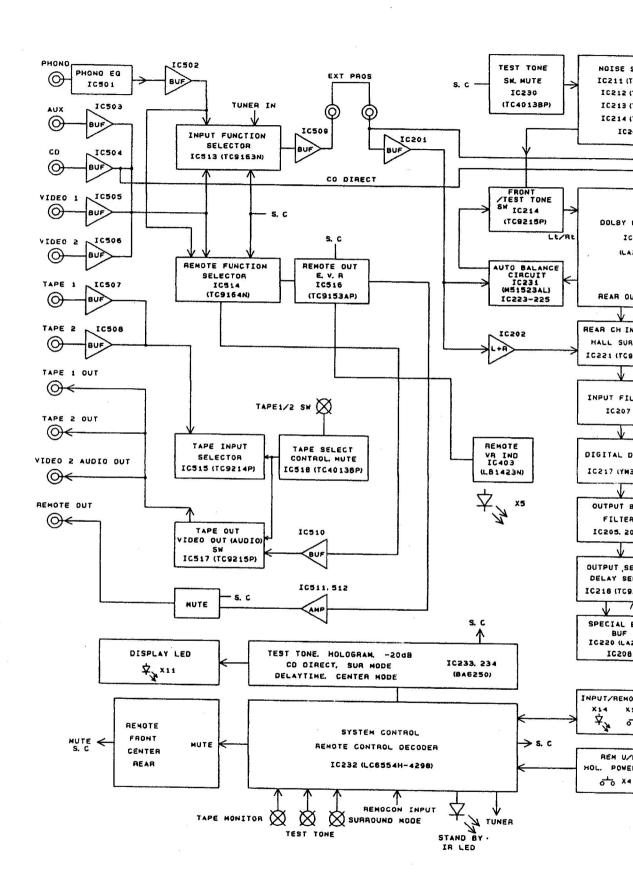
19"×3-1/2"×12.25"

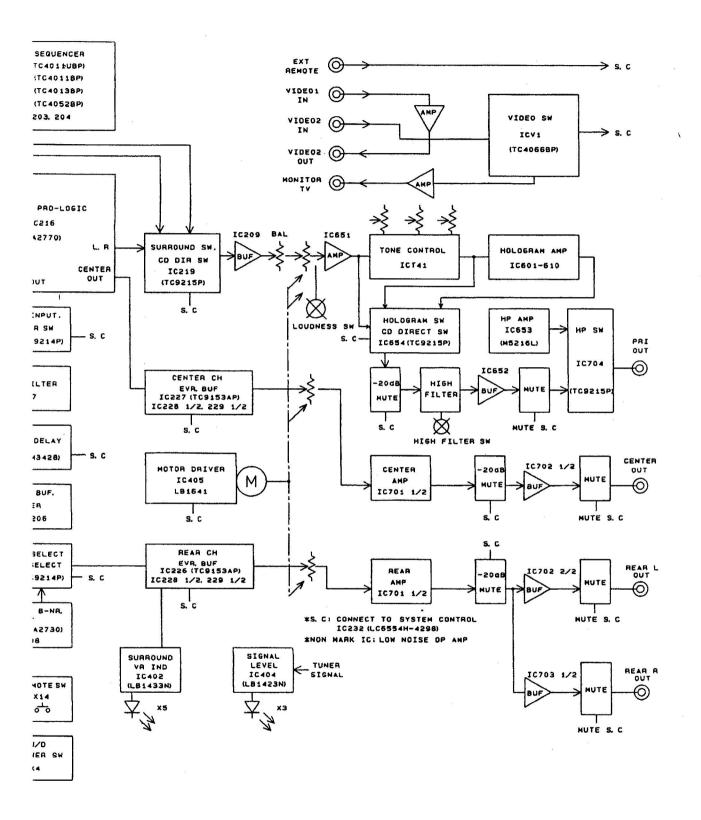
**WEIGHT:** 

12 lbs (5.4 kg)

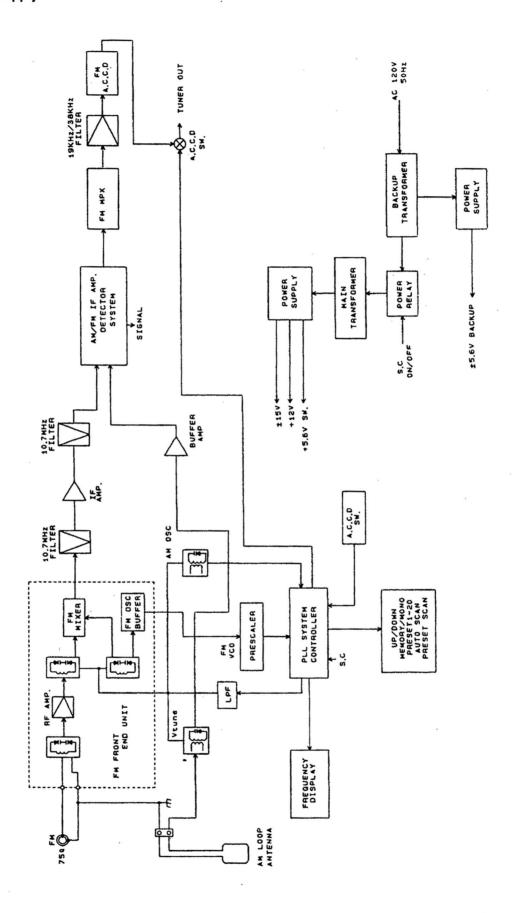
#### **BLOCK DIAGRAM**

#### Audio/Video/Surround





#### Tuner/Power Supply



#### **ALIGNMENT PROCEDURES**

#### Tuner (AM)

#### Condition

- 1. Tuning method: LOCKED indicator, ON
- 2. Modulation: 400 Hz, 30 %
- TAPE OUT load: A 100 kΩ resistor shunted by a 1000 pF capacitor
- 4. Input level: 74 dB/m (5 mV/m) unless otherwise noted
- Generator output: IRE loop antenna 24" (60cm) spacing or through IHF dummy (200 pF capacitor).
- 6. CH.STEP switch (SW459): US position (EX version only)
- 7. Preheat: More than 1 minute

#### **TUNING VOLTAGE**

- 1. Set the tuner frequency to 520 kHz.
- 2. No input.
- 3. Connect the DC digital volt meter to the test point TP1.
- The voltage of AM Low end changes for the color of D1 and D2. (See Fig.2)
- 5. Adjust T4 until the voltage is  $1.00\pm0.05$  V or  $0.95\pm0.05$  V, depending on the color of D1 and D2.
- 6. Change the tuner frequency to 1710 kHz.
- 7. Adjust TC1 until the voltage is nearly 8 V.

#### 1F

- 1. Set the tuner frequency to the point of non-interference.
- Connect the output of IF sweep generator to AM antenna terminal through IHF dummy and set the frequency to 450±0.5 kHz.
- 3. Connect the input of IF sweep generator to the test point TP3 through a 10  $\mu$ F cap.
- 4. Adjust T3 until the output waveform is flat and maximum.

#### TRACKING

- 1. Set the tuner frequency to 600 kHz.
- Connect the output of signal generator to AM antenna terminal through IHF dummy and set the frequency to 600 kHz.
- 3. Connect the ACVM to TAPE OUT jacks.
- 4. Adjust T1 until the ACVM is maximum.
- 5. Change the tuner frequency from 600 kHz to 1400 kHz.
- 6. Change the frequency from 600 kHz to 1400 kHz.
- 7. Adjust TC1 until the ACVM is maximum.

#### SCAN STOP LEVEL

- 1. Set the tuner frequency to 1000 kHz.
- 2. Connect the DC digital volt meter to the test point TP4.
- 3. Set the input level to 54 dB/m.
- Connect the output of signal generator to IRE loop antenna and set the frequency to 1000 kHz.
- Adjust SVR1 until the voltage changes 12 V from 0 V at the test point TP4.

#### Tuner (FM)

#### Condition

- Tuning method: Adjust desired signal frequency. Reception frequency, 98.00 MHz
- Generator: Mono.....Mod. 1 kHz, 75 kHz dev. Stereo...Mod. 1 kHz, 68.25 kHz +6.75 kHz dev.
- TAPE OUT load: A 100 kΩ resistor shunted by a 1000 pF capacitor
- 4. Input level: 65.2 dBf (500 μV) unless otherwise noted
- 5. De-Emphasis switch (SW51): 75  $\mu$ s position (EX version only)
- 6. AUTO SCAN switch: OFF position
- 7. Preheat: More than 1 minute

#### **TUNING VOLTAGE**

- 1. Set the tuner frequency to 87.50 MHz.
- 2. No input.
- 3. Connect the DC digital volt meter to the test point TP1.
- 4. Adjust OSC-L(Front-end) until the voltage is 1.6±0.3 V.
- 5. Change the tuner frequency from 87.50 MHz to 108.00 MHz.
- 6. Check that the voltage is between 8.0+2.1 V and 8.0-1.0 V.

#### IF

- 1. Set the input level to 12.2~14.2 dBf (1.12~1.41  $\mu$ V).
- Connect the output of signal generator to 75 ohm antenna terminal through a matching dummy and set the frequency to 98.00 MHz.
- 3. Connect the ACVM and the distortion meter to TAPE OUT jacks.
- 4. Connect the DC digital volt meter to the test point TP2.
- Adjust IFT (Front-end) until the ACVM is maximum or the distortion meter is minimum.
- 5. Change the input level from 12.2~14.2 dBf (1.12~1.41  $\mu$ V) to 65.2 dBf (500  $\mu$ V).
- 7. Adjust T2 (a) until the voltage is less than 1 mV.
- 8. Adjust T2 (b) until the distortion meter is less than 0.3%.

#### TRACKING

- 1. Set the input level to 12.2~14.2 dBf (1.12~1.41  $\mu$ V).
- Connect the output of signal generator to 75 ohm antenna terminal through a matching dummy and set the frequency to 98.00 MHz.
- 3. Connect the ACVM to TAPE OUT jacks.
- 4. Adjust ANT-L and RF1-L (Front-end) until the ACVM is maximum.

#### MUTING LEVEL

- Connect the output of signal generator to 75 ohm antenna terminal through a matching dummy and set the frequency to 98.00 MHz.
- 2. Connect the DC digital volt meter to the test point TP4.
- 3. Set the input level to 33.2 dBf (12.5 μV).
- Adjust SVR2 until the voltage changes 12 V from 0 V at the test point TP4.

#### SIGNAL LEVEL

- 1. Set the input level to 65.2 dBf (500  $\mu$ V).
- Connect the output of signal generator to 75 ohm antenna terminal through a matching dummy and set the frequency to 98.00 MHz.
- 3. Adjust SVR60 until the SIGNAL indicators fully light up.

#### SEPARATION

- Connect the output of signal generator to 75 ohm antenna terminal through a matching dummy and set the frequency to 98.00 MHz in separate R ch or L ch.
- 2. Connect the ACVM to TAPE OUT jacks.
- Adjust SVR51 until both channels have maximum but equal separation.

#### FM A.C.C.D SWITCHING LEVEL

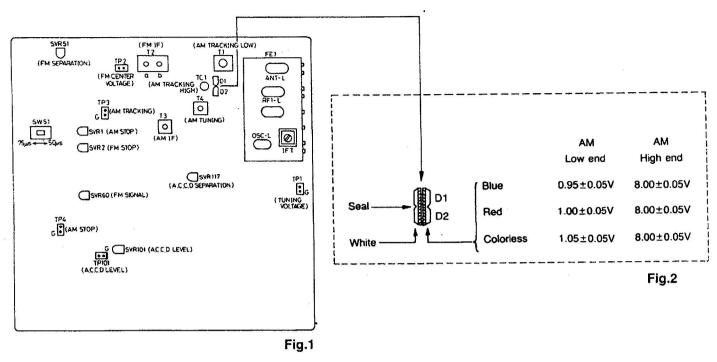
- 1. Set the input level to 55.2 dBf (158  $\mu$ V).
- 2. Connect the DC digital volt meter to the test point TP101.
- Adjust SVR101 the moment the voltage at TP101 change from +8 V to -8 V. Rotate SVR101 slowly. Perform this adjustment after MUTING LEVEL adjustment.

#### FM A.C.C.D SEPARATION

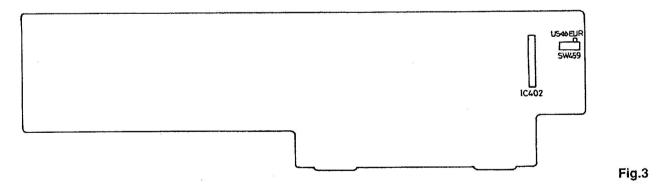
- 1. Set the input level to 37.5 dBf (75  $\mu$ V).
- 2. Set generator Mod. 6.3 kHz, 49.5 kHz +6.75 kHz dev.
- 3. L ch only driven.
- 4. Connect the ACVM to TAPE OUT jacks.
- 5. A.C.C.D switch on.
- 6. Adjust SVR117 to 8 dB separation.

#### **ALIGNMENT POINTS**

#### TIM-812A Tuner P.C.Board



#### FL-828B Display & DTS P.C.Board



#### **Amplifier**

#### Condition

Surround mode: DOLBY PROLOGIC

#### VCA

- Apply a 1 kHz 200 mV signal equally to the left and right of AUX input terminal, CT-17.
- 2. Shorting jumper across pin 1 and pin 2 of the test point TP201 .
- 3. Connect the ACVM to the PREOUT left and right jacks.
- 4. Set the VOLUME control to the suitable position.
- 5. Adjust SVR204 until the output is minimum at L and R.

#### DC OFFSET

- Apply a 1 kHz 200 mV signal equally to the left and right of AUX input terminal, CT-17.
- 2. Shorting jumper across pin 1 and pin 2 of the test point TP201.
- Connect the DC digital volt meter between shorting jumper (tentative GND) and pin 3 of the test point TP201.
- 4. Adjust SVR203 for minimum DC offset.

#### **DOLBY LEVEL**

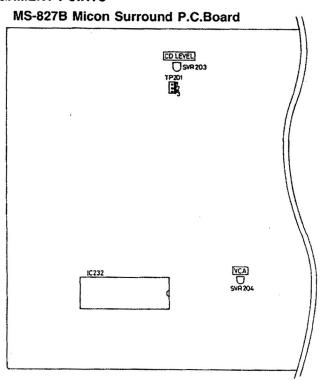
"Use Pro-Logic Test Input Circuit in Fig.6."

- Apply a 1 kHz 350 mV to the Pro-Logic Test Input Circuit and set the surround position (position 4).
- Connect the output of Pro-Logic Test Input Circuit to the AUX input terminal, CT-17.
- 3. Connect the ACVM to the test point TP202 (R294).
- 4. Adjust SVR202 to 71 mV ±1 dB.

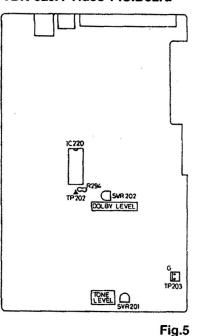
#### **CALIBRATE TONE LEVEL**

- 1. CALIBRATE TONE switch: ON position.
- 2. Connect the ACVM to the test point TP203.
- 3. Adjsut SVR201 to 77.5 mV ±2 dB.

#### **ALIGNMENT POINTS**



#### VDN-829A Video P.C.Board



#### **Dolby Pro-Logic Test Input Circuit**

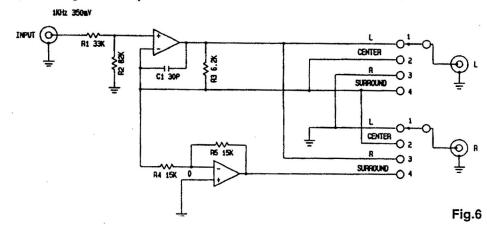
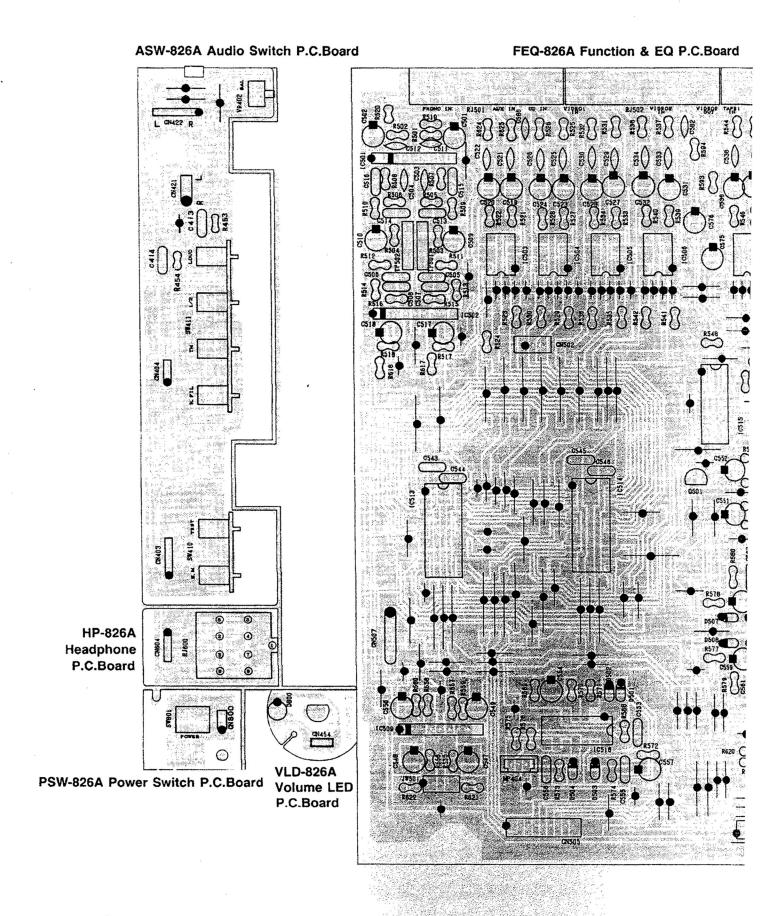
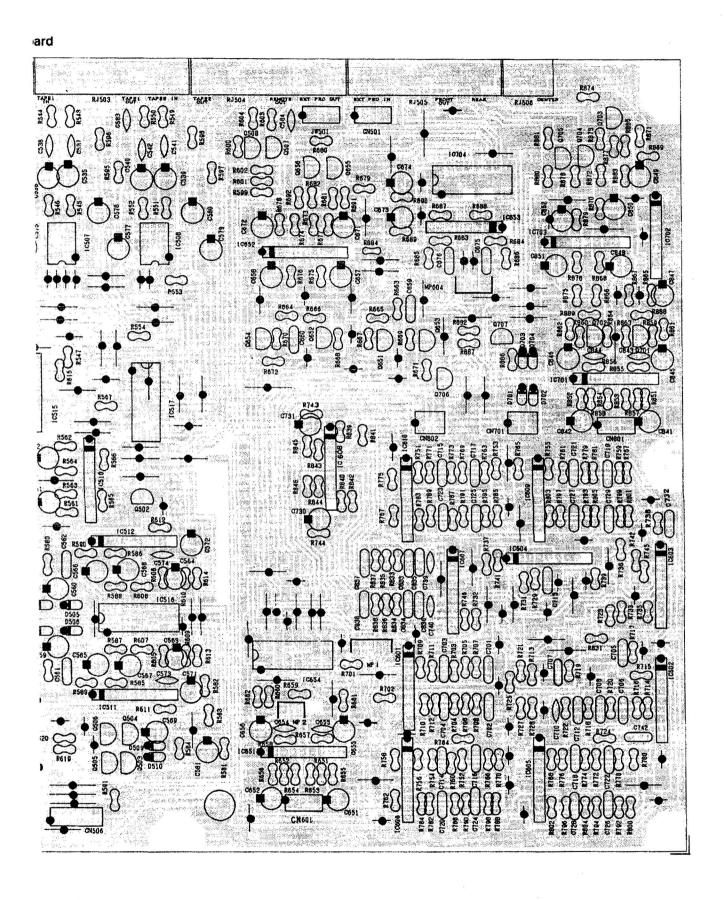


Fig.4

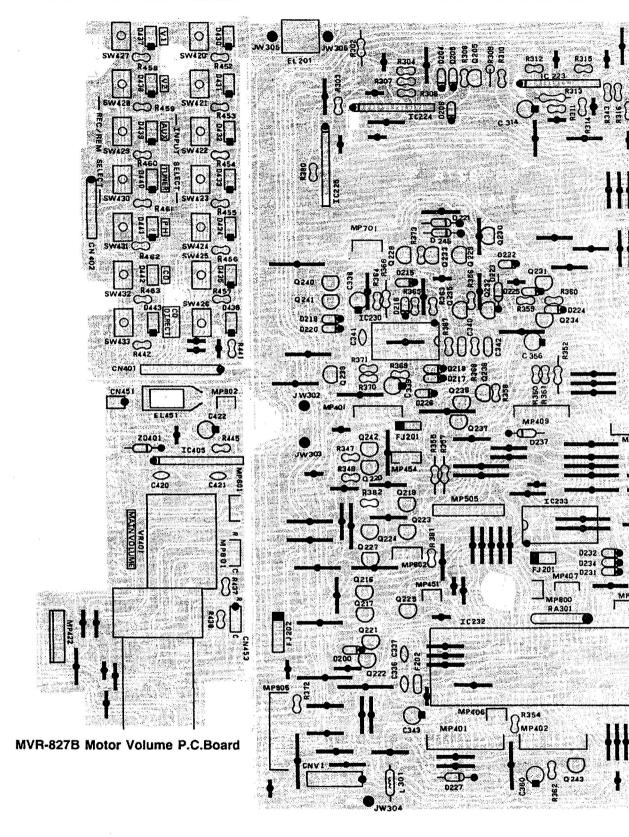
#### **PCB COMPONENT SIDE VIEWS**

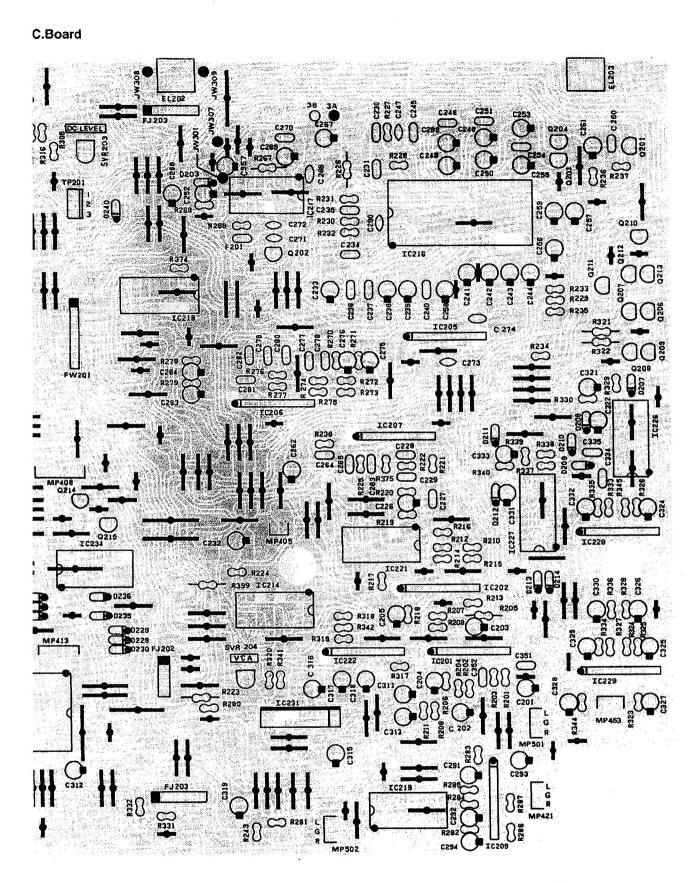




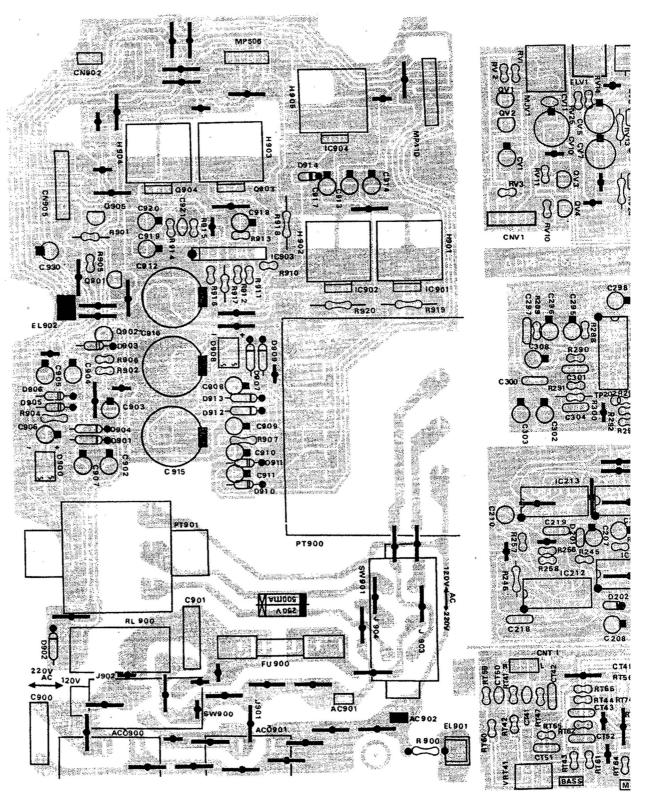
#### FSW-827B Front Switch P.C.Board

#### MS-827B Micon Surround P.C.B

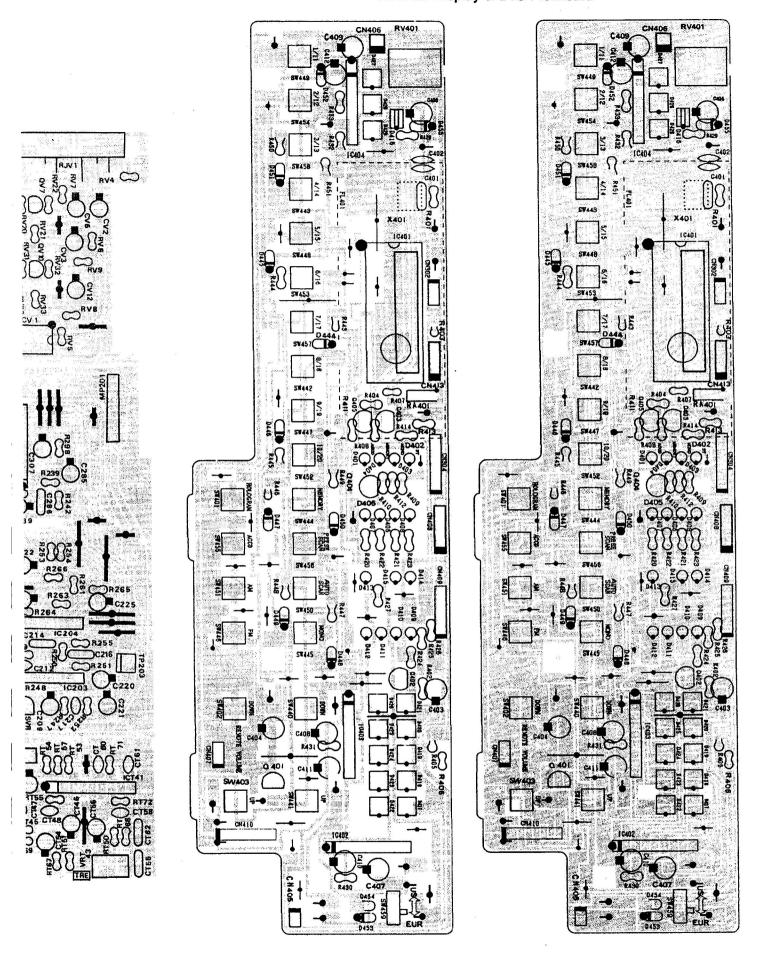




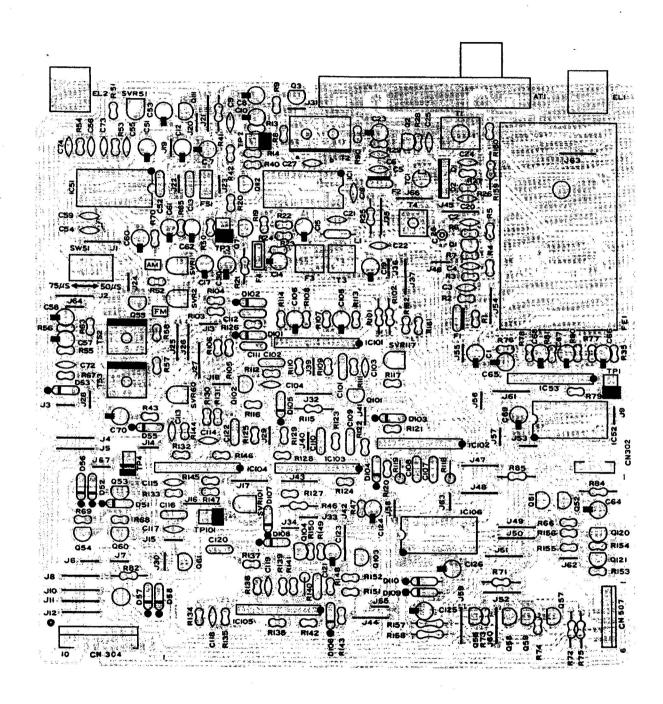
#### VDN-829A Video P.C.Board



PS-829A Power Supply I



#### TIM-812A Tuner P.C.Board



#### **VOLTAGE CONVERSION (EX Version only)**

#### 220 V/50 Hz Version

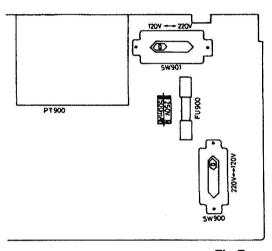
#### **Bill of Materials**

Q'ty	Part No.	Description
1	315-15005-00	FUSE 250 V 315 mA
1	530-10128-00	FUSE LABEL 250 V 315 mA
1	530-10088-00	LABEL 220 V AC 50 HZ
1	530-10130-00	LABEL VOLTAGE CONVERSION
1	530-10013-00	LABEL MILITARY CONVERSION

#### **Direction for Change**

- Locate Power Supply P.C.Board on the left of front panel side. (See Fig.7 and Fig.8.).
  - A. Set slide switches SW900 and SW901 to 220 V.
  - B. Change fuse FU900 from 250 V 500 mA to 315-15005-00 (250 V 315 mA).
  - C. Put the label 530-10128-00 (250 V 315 mA) on printed in 250 V/500 mA.

#### PS-829A Power Supply P.C.Board



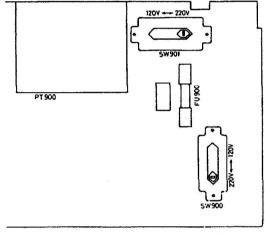
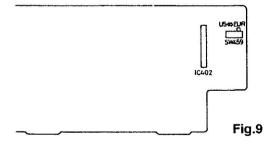


Fig.7

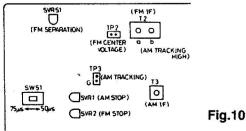
Fig.8

#### FL-828B Display & DTS P.C.Board

- Locate CH.STEP SW459 on Display & DTS P.C.Board and set it to "EUR" for 220 V Europe frequency stepping. (See Fig.9)
- 3. Locate de-emphasis switch SW51 on Tuner P.C.Board and set it to "50  $\mu$ s" for 220 V Europe de-emphasis. (See Fig.10)
- Apply label 530-10088-00 (220 V AC 50 Hz) in place of existing label 120 V AC 60 Hz.
- Using spray adhesive, mount label 530-10130-00 (VOLTAGE CONVERSION) to inside top cover.
- Apply label 530-10013-00 (MILITARY CONVERSION) to bottom of unit.

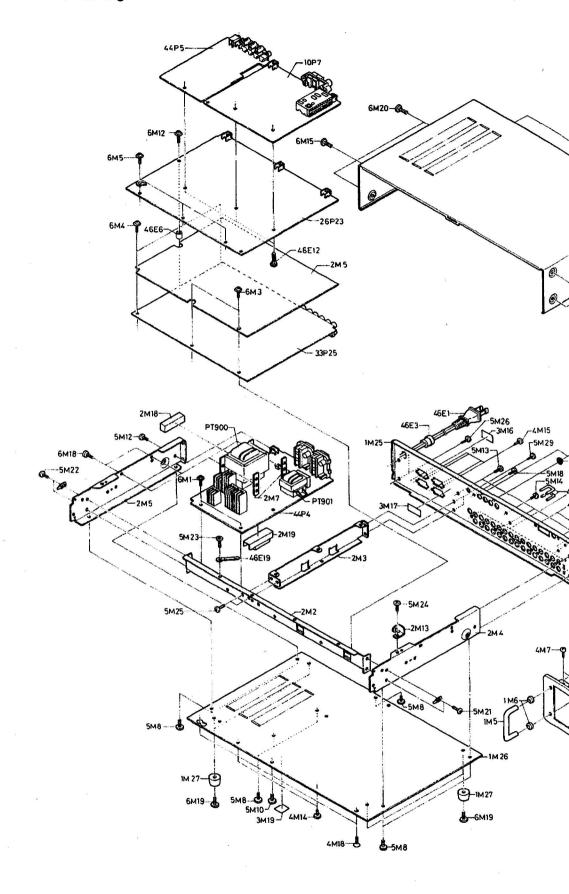


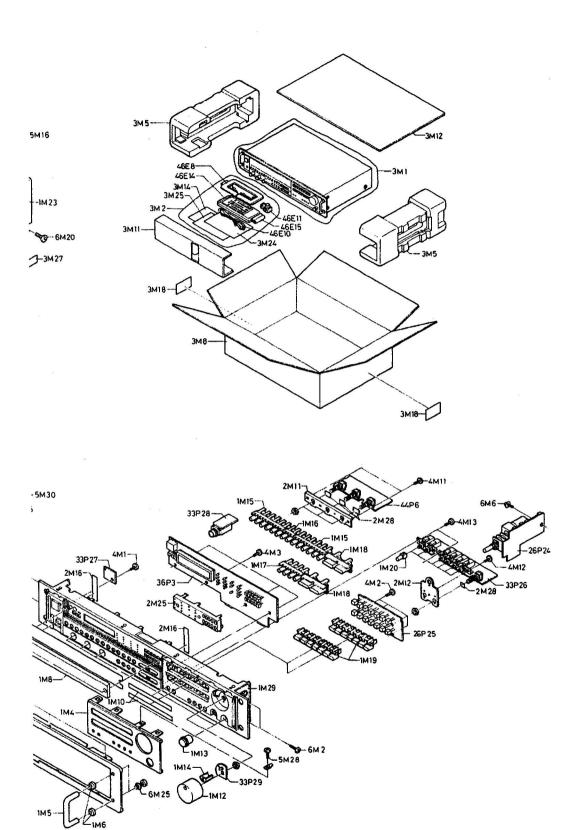




#### **EXPLODED VIEWS**

#### Main Unit and Packing





#### **PARTS LIST**

TUNER P.C. B	DARG			
REF. NO.	2'TY	CARVER	PART NO.	DESCRIPTION
F.C. BOARD				
19E 7	1	TIM-812	. <b>A</b>	PRINTED CIRCUIT BOARD
SEMICONDUCT				
0001,002 0051-043	, 15	KV12352 155176	-21	3100E 3100E
055~058 101~1^3	•			
0109.116	2	ZD50-09	13	VO.F .WS/1 .ZDD10 RBH31
3001	1			
2002	i	52C5998		TRANSISTOR TRANSISTOR
2003 2007	1	23C1815		TRANSISTOR TRANSISTOR
3651	1	#N-2204	•	TRANSISTOR
1052	3	25C1815		TRANSISTOR TRANSISTOR
3056	1	25A966-	·0 * Y	TRANSISTOR
7057 9056	i	25C1815		TRANSISTOR TRANSISTOR
1653	1 2	23C1615		TRANSISTOR
9101-103	3	2501815	-64	TRANSISTOR TRANSISTOR
3104	1	25A1013		TRANSISTOR TRANSISTOR
3112	1	25K246-	Y . GR	TRANSISTOR
3120,121	2	2502876	3-A+B	THANSISTOR
10001 10051	1	L41265		10
ICu52	1	TC7172A		IC IC
10053	1 5	NJN2904 NJN4565		IC IC
10106	í	TC9215F		ic
CAPACITORS				
C661	1	45-16T		ELECTROLYTIC CAPACITOR
C007	. 5 1	1101-2K	1 2 2 3 Z	CERAMIC CAPACITOR ELECTROLYTIC CAPACITOR
C008	1	HE4CSJS	4810H	ELECTRULYTIC CAPACITOR
COLC	1	NS-SUT	(1#2h	CERAMIC CAPACITOR ELECTROLYTIC CAPACITOR
C012 C013	1	HY-50VL		ELECTROLYTIC CAPACITOR MYLAR CAPACITOR
C014,015	5	NS-16T	110011	ELECTROLYTIC CAPACITOR
C017 CC1e	1	HEPOSJY		ELECTROLYTIC CAPACITOR CERAMIC CAPACITOR
C019	1	45-16TH	4100H	ELECTROLYTIC CAPACITOR
2021.022	2	HEPOSJY	F 223Z	CERAMIC CAPACITUR CERAMIC CAPACITUR
C025	1	NS-25TI		ELECTROLYTIC CAPACITOR
C£ 25	1	HE4GSJS	SLIIUK	CERAMIC CAPACITOR
C025	1	ST-SCVS		STYROL CAPACITOR CERAMIC CAPACITOR
C930	1	NS-SGT	HCRIN	ELECTROLYTIC CAPACITOR
C052	1	45-16T	U473J	ELECTROLYTIC CAPACITOR MYLAR CAPACITOR
C053 C054	1	HE90SJ	W160M YF2237	ELECTROLYTIC CAPACITOR CIRANIC CAPACITOR
C053+656		MY-5GVI	ULOZJ	MYLAR CAPACITUR
C057+C53	2	N3-16TI		ELECTROLYTIC CAPACITOR CERAMIC CAPACITOR
C060	1	NS-25T1	H4R7M	ELECTROLITIC CAPACITOR
C062+064		NS-50T1	MIRCH	ELECTROLYTIC CAPACITOR ELECTROLYTIC CAPACITOR
C060	1	NS-16T1		ELECTROLYTIC CAPACITOR
C067	1	LL-SOT	#847H	LUM LEAK. ELECTROLYTIC CAP.
C065	1	NS-16T		ELECTROLYTIC CAPACITOR ELECTROLYTIC CAPACITOR
C070	1	NS-25T	H4R7M	ELECTROLYTIC CAPACITOR
C101,102	1 2	ME4CSJ:		CERAMIC CAPACITOR MYLAR CAPACITUR
C103,104 C105,106	2	HE505J	SLIDIK	CERAMIC CAPACITOR
2107	1	MY-50VE	U1:3J	ELECTROLYTIC CAPACITOR MYLAR CAPACITOR
C105 C199-112	1 4	77-50V	J223J J104J	MYLAR CAPACITUR
2113 C114	1	HEYSSUS	563613	CERAMIC CAPACITOR CERAMIC CAPACITOR
C115	1	HE405J	SL47GK	CERAMIC CAPACITOR CERAMIC CAPACITOR
C116 C117	1	MY-50VC	J162J	MYLAR CAPACITUR CERAMIC CAPACITUR
C115	1	HE405JS	SLOBOK	CERAMIC CAPACITUR
C119 C120	1	HEARS JS		CERAMIC CAPACITOR MYLAR CAPACITOR
C121+122	2	MY-50VE	J104J	MYLAR CAPACITOR
C123 C124	1	NS-50T		ELECTROLYTIC CAPACITOR ELECTROLYTIC CAPACITOR
C125,126	2	NS-10TS		ELECTRULYTIC CAPACITOR
TC001	1	C1251C1	135	TRINMER CAPACITOR
RESISTORS				±.
8001	1	KAL6ST:		CARBON RESISTOR
9002 9003	1	KAL6ST		CARRON RESISTOR
₹074 <b>₹005</b>	1	KAL6ST	1331	CARBON RESISTOR
2006	1	KALEST:	331.	CARBON RESISTOR CARBON RESISTUR
3007 3009	1	KA16ST		CARGON RESISTUR
9009	1	KA16ST	101J	CARBON RESISTOR CARBON RESISTOR CARBON RESISTOR
7013 7014	1	KALGST: KALGST:	331J	CARBON RESISTOR
9019 8026	1	KALEST	82GJ	CARBON RESISTOR
9021	1	KALBST:		CARBON RESISTUR CARBON RESISTOR
7022 R023	1	KA16ST	1523	CARDON RESISTOR
3624	i	KA165T		CARBON RESISTOR CARBON RESISTOR

per Ma		T	
REF. NO.	O. TY	CARVER PART	
3025 3025.027	2	K4165T221J KA165T104J	CARBON RESISTOR CARBON RESISTUR
2028 2027	1	KA165T102J K4165T683J	CAREON RESISTOR
9035 9046	1	KA16ST332J KA16ST103J	CARBON RESISTOR CARBON RESISTOR
4041 4042	1	KA165T475J KA165T105J	CARBON RESISTOR
R043 R046	1	KA165T473J K416ST123J	CARBON RESISTOR
₹047 ₹050	1	KA165T223J KA165T123J	CARBON RESISTOR CARBON RESISTOR
3051 9052	i	KA16ST223J KA16ST473J	CARSON RESISTOR CARSON RESISTOR
R053+054 R053+056	2	KA165T753J	CARBON RESISTOR
₹057+05€	2	K4165T332J K4165T203J	CARBON RESISTOR
₹065 ₹065	1	KA165T692J KA165T562J	CARBON RESISTOR
₹056 ₹367	1	KA16ST102J KA16ST473J	CAREON RESISTOR
P068+069	2	X41657103J KA1657194J	CARBON RESISTOR
R071	1	K4163T151J K4163T103J	CARBON RESISTOR CARBON RESISTOR
7073 9074,675	1 2	K4165T104J KA16ST193J	CARBON RESISTOR CARBON RESISTUR
₹976 9077	ì	KA165T221J KA165T331J	CARBON RESISTOR CARBON RESISTOR
2078 2079	1	KA15ST124J	CAREON RESISTUR
9090 9091	1	K416ST473J K416ST822J	CARBON RESISTOR
≥082	1	KA165T183J KA165T103J	CARBON RESISTOR
₹08 <b>↓</b> ₹085	1	K4165T223J	CARBON RESISTOR
9093 9191,192	5 I	LSEETZ0144 LE12T20144	CARBON RESISTOR
2103+174 8105+196	2	KA16ST6#3J KA16ST193J	CAREON RESISTOR
3107,10B	5	K41657633J KA1657622J	CARBON RESISTOR CARBON RESISTOR
3111,112 4113,114	5 5	LAIGST 332J	CARBON RESISTOR
R115+116	2	K4165T104J	CARBON RESISTOR CAREON RESISTOR
=117 9113,119	2	KA165T333J KA25551C6J	CARBON RESISTOR CARBON RESISTOR
4120 4121	1	K4165T113J K4165T194J	CARBON RESISTOR CARBON RESISTOR
4122 4123	1	k4165T153J KA165T154J	CARBON RESISTUR CARBON RESISTUR
9124 9125+125	1 2	KA165T333J KA165T105J	CARBON RESISTOR
9127.128 9127	2	KA165T472J KA165T103J	CARGON RESISTUR
R130	1	K4165T512J	CARBON RESISTOR
9131 9132	1	K4165T513J K4165T433J	CARBON RESISTOR CARBON RESISTOR
7135 7154	1	K41657152J K41657512J	CARBON RESISTOR CARBON RESISTUR
9135 7135	1	K41657513J K41657273J	CARHON RESISTOR CARBON RESISTOR
2137 2138	1	K4165T152J	CARBON RESISTOR
9139 9140	1	KA165T132J KA165T103J	CARBON RESISTOR
9141	i	K42555475J K41657164J	CAREON RESISTOR
3142 3143	1	KA165T225J KA165T621J	CARBON RESISTOR
2144 2145	1	K4165T514J K416ST224J	CARBON RESISTOR CARBON RESISTOR
7146 7147	1	KA1557222J KA1557472J	CARBON RESISTOR
2148 9149	1	KA165T514J KA165T394J	CARBON RESISTOR
7150 2151	i	K4165T334J K4165T303J	CARBON RESISTOR CARBON RESISTOR
₹152	1	KA16ST102J	CARBON RESISTOR
2155+154 2155+15e	2	KA165T333J KA165T103J	CARBON RESISTOR
?157+155 ?159	2	KAZSST181J KA16ST912J	CARBON RESISTOR CARBON RESISTOR CARBON RESISTOR
3161+162	1	K4165T63ZJ K4165T10ZJ	CARBON RESISTOR CARBON RESISTOR
\$V3001+072	2	SVR-0513830	SEMI-VARIABLE RESISTOR
5V9051 5V3060	1	SVR-0613810	SEMI-VARIABLE RESISTOR
5V9151 5V9117	i	SVR-0613810	SEMI-VARIABLE RESISTOR
CIILS	-		
L001	1	LALOBIGZK	INDUCTOR
T001	1	126044	ME ANT COIL
T002 T003	1	141037	FM DET COIL NW IFT
T052,053	2	135023	MW OSC COIL FILTER BLOCK
MISCELLANE OUT			
F001+072	5	SFE10.7421K	-A CERAMIC FILTER
5094 F051	i	2FU450C4N CS6455F11	CERAMIC FILTER CERAMIC FILTER CERAMIC FILTER
47001	1	YK031-6319	ANT. TERMINAL
CHRUS	1	P125C-048	MICRO PLUG
C4304 C4507	i	P125C-08#	MICRO PLUG
C1507	_ 1	171825-6	HICKO PLUG

REF. NO.	G'TY	CARVER PART NE	DESCRIPTION
EL 001,002	2	M1698	GND LUG
FEG01	1	FE497-A16	FH FRUNTEND
TPG01~004+	5	1 MSA-1066-02A	MINE TERMINAL PLATE
I^E 4	1	55-165-05	JUMP WIRE
10E10	34	E 955	JUMP WIRE
17E11	33	E1CO	JUNP WIRE

PUNCTION	17611	33 9	100	JUNP WIRE
P.C. BOARD  35225  SHI CONDUCTORS  0501-510 10 64Acl 010UE  3501-500 4 64-1207 FRANSISTOR  3505-500 2 47-2207 TRANSISTOR  3505-500 2 47-2207 TRANSISTOR  3505-500 2 47-2207 TRANSISTOR  351-600  701-725  170-727 2 R4-2207 TRANSISTOR  351-600  701-725  170-727 2 R4-2207 TRANSISTOR  351-600  701-725  170-727 2 R4-2207 TRANSISTOR  351-600  170-725  170-727 2 R4-2207 TRANSISTOR  150-1500  170-725  170-727 2 R4-2207 TRANSISTOR  150-1500  170-720 1 R4-5550B 1C  170-720 1 R4-5550B 1C  170-721 1 TC-7210P 1C  1	FUNCTION & EC	P.C.	BOARD	
SPECE   1   FEW-804   PAINTED CIRCUIT SUARD	REF. NO.	YTE	CARVER PART HO	DESCRIPTION
0591-510   0 4 MP1   01 JUE				
1501-50-4	0501-510	10		
1997/500#   13   25C7978-A+B   TAANSISTOR	9501~50+	4	A4-1207	TRANSISTOR
1C501-5C2   UPC4570WA   C   C   C   C   C   C   C   C   C	651-656. 701-705	13	25C7978-4-8	
C399-512	10501.502	5	UPC457G4A	10
15514	10509~512	4	NJM456556	
1	10514			
1	1C515 1C516			10
	10517	1	TC9215P	§C .
10032   1 M9210L   1 CO2159   1	10001-010,			
1	10652		NJ#456553 #52160	
CAPACITORS  C591-592  C595-5936  A MY-509U182J  C511-512  C511-512	10554	1	TC9215P	ic j
C591-592   Z   HENGSLYSICIK   CERANIC CAPACITOR   C595-596   A   MY-507UA733   MYLAR CAPACITOR   MYL				
C505-550	C501.572			
C511-512   NH-SOVU162J   CERNIC CAPACITOR   C515-516   NH-SOVU162J   WYLAR CAPACITOR   C517-516   NH-SOVU162J   WYLAR CAPACITOR   C517-526   CH-SOVU162J   CW LEAK, ELECTBOLYTIC CAPACITOR   C519-526   CH-SOVU162J   CW LEAK, ELECTBOLYTIC CAPACITOR   C523-526   CH-SOVU162J   CERNIC CAPACITOR   CERNIC CAPACITOR   C527-522   CH-SOVU162J   CERNIC CAPACITOR   CERNIC CAPACITOR   C527-522   CH-SOVU162J   CERNIC CAPACITOR   CERNIC CAPA	C505~598	4	KY-50VU473J	HYLAR CAPACITOR
C513-514   2 NY-50VU162J   YVLAR CAPACITOR   C517-516   2 NY-50VU562J   WYLAR CAPACITOR   C517-516   2 NY-50VU562J   WYLAR CAPACITOR   C517-526   2 NS-25TWAR7H   CERANIC CAPACITOR   C521-522   2 NS-25TWAR7H   CERANIC CAPACITOR   C527-528   2 NS-25TWAR7H   CERANIC CAPACITOR   C531-532   2 NS-25TWAR7H   CERANIC CAPACITOR   C531-535   2 NS-25TWAR7H   CERANIC CAPACITOR   C531-536   2 NS-25TWAR7H   CERANIC CAPACITOR   C537-5340   2 NS-25TWAR7H   CERANIC CAPACITOR   C547-552   NS-25TWAR7H   CERANIC CAPACITOR   C547-552   NS-25TWAR7H   CERANIC CAPACITOR   C547-552   NS-25TWAR7H   CERANIC CAPACITOR   C559-556   NS-25TWAR7H   CERANIC CAPACITOR   C559-556   NS-25TWAR7H   CERANIC CAPACITOR   C559-556   NS-25TWAR7H   CERANIC CAPACITOR   C559-556   NS-25TWAR7H   CERANIC CAPACITOR   C573-556   NS-25TWAR7H   CECANIC CAPACITOR   C573-576   C773-776   C773-7776   C773-7776   C773-7776   C773-7776   C773-7776				
C317-516   C   L-16Th220   C   C319-520   C   C319-520   C   C   C321-522   C   C321-527   C   C   C   C   C   C   C   C   C	C513,514	5	NY-50VU182J	YYLAR CAPACITOR
C321-522   AF-6SJ79471K   CERAMIC CAPACITOR	C517,51e	5	LL-16Th220H	LOW LEAK. ELECTROLYTIC CAP.
C525-524   2	C519.526 C521.522			
C524-532	2523,524	2	NS-25TN4F7H	ELECTRULYTIC CAPACITOR
C531-532		2	NS-25TW4R7#	ELECTROLYTIC CAPACITOR
C535-536				
C537-938	C533+534	2	HE405JY8471K	CERAMIC CAPACITUR
C5941-5942	C537,538	2	71746YL2743H	CERAMIC CAPACITOR
C545-546				
C553	C543~546	4	8Y-50VU104J	MYLAR CAPACITOR
C555,556   NS-50ThIGN   ELECTROLYTIC CAPACITOR	1553	1	HY-50VU164J	NYLAR CAPACITOR
C559-560				
C561-562   MY-SCVUICAJ   MYLAR CAPACITOR   C567-568   MS-25TWARTM   ELECTROLYTIC CAPACITOR   C567-568   MS-25TWARTM   ELECTROLYTIC CAPACITOR   C571-572   MS-25TWARTM   ELECTROLYTIC CAPACITOR   C571-572   MS-25TWARTM   ELECTROLYTIC CAPACITOR   C573-574   MS-25TWARTM   ELECTROLYTIC CAPACITOR   C575-581   MS-25TWARTM   ELECTROLYTIC CAPACITOR   C581   MS-25TWARTM   ELECTROLYTIC CAPACITOR   C582   MS-25TWARTM   ELECTROLYTIC CAPACITOR   C583-534   ME40SJY947IK   CERAMIC CAPACITOR   C651-552   MS-25TWARTM   ELECTROLYTIC CAPACITOR   C651-552   MS-25TWARTM   ELECTROLYTIC CAPACITOR   C657-656   MS-25TWARTM   ELECTROLYTIC CAPACITOR   C657-656   MS-25TWARTM   ELECTROLYTIC CAPACITOR   C657-656   MS-25TWARTM   ELECTROLYTIC CAPACITOR   C675-676   MY-5CVU332J   MYLAR CAPACITOR   C675-676   MY-5CVU332J   MYLAR CAPACITOR   C675-676   MY-5CVU332J   MYLAR CAPACITOR   C675-676   MY-5CVU322J   MYLAR CAPACITOR   C775-776   MY-5CVU322J   MYLAR CAPACITOR   C775-776   MY-5CVU322J   MYLAR CAPACITOR   MYLAR CAPAC	C557	7	HS-SCTHIKIN	ELECTROLYTIC CAPACITOR
C357-558	C561,552	2	MY-SGVUIGEJ	MYLAR CAPACITOR
C571-572	C563~556 C567.568			
C573-574   C4905J73101X   C578-581   6 NS-25TW001   ELECTROLYTIC CAPACITOR   C581   1 NS-25TW07H   ELECTROLYTIC CAPACITOR   C582   1 HE005J79471X   CERAMIC CAPACITOR   C583-534   HE005J79471X   CERAMIC CAPACITOR   C653-652   NS-25TW47H   ELECTROLYTIC CAPACITOR   C651-652   NS-25TW47H   ELECTROLYTIC CAPACITOR   C653-656   HE405J79471X   CERAMIC CAPACITOR   C653-656   NS-25TW47H   ELECTROLYTIC CAPACITOR   C675-656   NS-25TW47H   ELECTROLYTIC CAPACITOR   C673-667   C752-57W47H   ELECTROLYTIC CAPACITOR   C673-674   C752-57W47H   ELECTROLYTIC CAPACITOR   C673-674   C752-57W47H   ELECTROLYTIC CAPACITOR   C773-772   C773-772   C773-772   C773-772   C773-772   C773-772   C773-773		1	NS-SOTWLFOM	ELECTROLYTIC CAPACITOR
1	C573,574	2	HE40SJY3101X	CERAMIC CAPACITOR
C582	2521			ELECTROLYTIC CAPACITOR ELECTROLYTIC CAPACITOR
Temporal Capacitor   Tempora	C582 C583.534	1	HE40SJY3471K	
C553-654	1 5586		HEADSJY8471K	CERAMIC CAPACITOR
Ce55-056   NS-25THAZOM	C\$53+654	2	HESCSUSLICIK	CERAMIC CAPACITOR
C657+606   Z   MY-5CVU332J   MYLAR CAPACITUR   C671+672   Z   AS-25T+MATTH   ELECTROLYTIC CAPACITUR   C673+674   Z   MS-25T+MATTH   ELECTROLYTIC CAPACITUR   C775+976   Z   PY-5CVU322J   MYLAR CAPACITUR   MYLA			NS-25TH220M NS-25TH4R7M	ELECTROLYTIC CAPACITOR
Coffs	2059,000	2	KSEEUVJG-YK	MYLAR CAPACITUR
C075+076	C673+674	2	NS-25TW470H	ELECTROLYTIC CAPACITOR
C705,704 C705 C705 C705 C705 C705 C705 C705 C705				MYLAR CAPACITOR
C700 1 NY-50VU527J HYLAR CAPACITOR C777 1 NY-50VU527J HYLAR CAPACITOR C779 1 NY-50VU527J HYLAR CAPACITOR C710 1 HE-0SJY9681K C7110 1 HE-0SJY9681K C7110 1 HY-50VU127J HYLAR CAPACITOR C7110 1 HY-50VU127J HYLAR CAPACITOR C7110 1 HY-50VU107J HYLAR CAPACITOR C7110 731 2 LL-25TH9R7H LUM LEAK, ELECTROLYTIC CAPACITOR C730 1 HE-0SJY9221K C730 740 2 HE-0SJY9221K C730 753-636 4 HY-50VU107J HYLAR CAPACITOR C731 1 ECVIHIZAJ HEALIZED FILM CAPACITOR C731 1 ECVIHIZAJ HYLAR CAPACITOR C837-836 2 KY-5UVU107J HYLAR CAPACITOR C847-846 2 KY-25TW4R7H ELECTROLYTIC CAPACITOR C847-846 2 KY-25TW207H ELECTROLYTIC CAPACITOR	C703+704	5	PY-50VU473J	MYLAR CAPACITOR
C779 1 NY-50VUIZZJ MYLAR CAPACITUR C7112 1 NY-50VUIZZJ MYLAR CAPACITUR C712 1 NY-50VUIZZJ MYLAR CAPACITUR C714-729 16 NY-50VUIZZJ MYLAR CAPACITUR C730, 731 2 LL-25TWARTH LUM LEAK. ELECTROLYTIC CAP. C732 1 NY-50VUIGZJ MYLAR CAPACITUR C732 1 NY-50VUIGZJ MYLAR CAPACITUR C732 1 ECCYMIYZZJ CERANIC CAPACITUR C742 1 ECCYMIYZZJ MYLAR CAPACITUR C753-656 4 NY-50VUIZZJ MYLAR CAPACITUR C841-852 2 NY-50VUIZZJ MYLAR CAPACITUR C841-852 2 NS-25TWARTH ELECTROLYTIC CAPACITUR C845-846 2 NS-25TWARTH ELECTROLYTIC CAPACITUR C845-866 2 NS-25TWARTH ELECTROLYTIC CAPACITUR C945-866 2 NS-25TWARTH ELECTROLYTIC CAPACITUR	E 706	1	HY-50VU272J	HYLAR CAPACITOR
C710 1 HE-05349681K CERAHIC CAPACITOR C712 1 HY-504U122J WYLAR CAPACITOR WYLAR CAPACITOR C714-729 16 HY-504U162J HYLAR CAPACITOR C730-731 2 LL-25T%487H LUM LEAK. ELECTROLYTIC CAP. C730-731 2 LM-5594683J WYLAR CAPACITOR C732 1 NY-5594683J WYLAR CAPACITOR C732 1 HY-5594683J WYLAR CAPACITOR C742 1 ECGV1H124J2 HETALLIZED FILM CAPACITOR C837-6856 2 HY-504U162J HYLAR CAPACITOR C843-684 2 H5-25TW4R7H ELECTROLYTIC CAPACITOR C643-684 2 H5-25TW4R7H ELECTROLYTIC CAPACITOR C643-684 2 H5-25TW4R7H ELECTROLYTIC CAPACITOR	27C7		L2650A75-14	MYLAR CAPACITOR MYLAR CAPACITUR
C714-729 16 MY-50VU1C2J MYLAR CAPACITOR C730-731 2 LL-25Th9R7H LUM LEAK. ELECTROLYTIC CAP. C732 1 MY-50VU663J YLAR CAPACITOR C739-740 1 ECVILINIZAL CHRALLIZED FILM CAPACITOR C742 1 ECVILINIZAL HETALLIZED FILM CAPACITOR C753-656 4 MY-50VU102J MYLAR CAPACITOR C847-658 2 MY-50VU102J MYLAR CAPACITOR C847-658 2 MS-25TW4R7M ELECTROLYTIC CAPACITOR C845-646 2 MS-25TW2DM ELECTROLYTIC CAPACITOR C945-646 2 MS-25TW2DM ELECTROLYTIC CAPACITOR	C715	1	ME-OSJY9081K	CERAMIC CAPACITOR
C730,731 2 LL-25TH9R7H LUM LEAK. ELECTROLYTIC CAP. C732 1 HY-50VU653J YLAR CAPACITOR C739,740 2 HEADSJY9221K CERAMIC CAPACITOR C742 1 ECZVIHIZAJZ HETALLIZED FILA CAPACITOR C933-636 4 HY-50VU8ZZJ HYLAR CAPACITOR C841,682 2 HS-25TW4R7H ELECTROLYTIC CAPACITOR C843-844 2 HE50SJSLIOIK CERAMIC CAPACITOR C945-846 2 NS-25TW22DH ELECTROLYTIC CAPACITOR		1	MY-50VU562J	MYLAR CAPACITOR
C732 1 MY-50VU663J WYLAR CAPACITOR C739-740 2 HENOSJY922IK CERMIC CAPACITOR C742 1 ECZVIMI24JZ HETALLIZED FIL4 CAPACITOR 1933-636 4 MY-50VU182J MYLAR CAPACITOR C843-645 2 MY-50VU222J MYLAR CAPACITOR C843-644 2 HE50SJSLIOIK CERMIC CAPACITOR C945-846 2 N5-25TW4R7M ELECTROLYTIC CAPACITOR C945-846 2 N5-25TW220M ELECTROLYTIC CAPACITOR				
C702 1 ECZVINIZAJZ HETALLIZZO FILA CAPACITOR 2953-636 4 MY-50VULUZJ MYLAR CAPACITOR 2837-886 2 MY-50VUZZZJ MYLAR CAPACITOR 2541-692 2 MS-25TWAR7M ELECTROLYTIC CAPACITOR 2945-846 2 MS-25TW22DM ELECTROLYTIC CAPACITOR 2945-846 2 MS-25TW22DM ELECTROLYTIC CAPACITOR	C732	1	LEGGUVEE-YM	MYLAR CAPACITOR
1837,836 2 MY-50VU222J MYLAR CAPACITOR 1541,642 2 MS-25TW4R7M ELECTROLYTIC CAPACITOR 1543,844 2 HE50SJSLIOIK CERANIC CAPACITOR 1593,846 2 MS-25TW220M ELECTROLYTIC CAPACITOR	C742	1	ECSVIH124JZ	METALLIZED FILM CAPACITOR
C541,642 2 HS-25TWARTH ELECTROLYTIC CAPACITOR C643+644 2 HE50SJSLIDIK CERANIC CAPACITOR C945>646 2 NS-25TW22DM ELECTROLYTIC CAPACITOR				
C945+846 2 NS-25TH229N ELECTROLYTIC CAPACITOR	C541,642	2	HS-25TW4R7H	ELECTROLYTIC CAPACITOR
Cd47-852 6 MS-251W4R7M ELECTROLYTIC CAPACITOR	C945+846	5	NS-25T6220H	ELECTROLYTIC CAPACITOR
	C847-852	6	M5-25TW4R7M	ELECTROLYTIC CAPACITOR

REF. NO.	9.14	CARVER PART	NO. DESCRIPTION
	·		L
RESISTORS			
R501+502 R503+504	5 5	KA165T473J KA165T751J	CARBON RESISTOR CARBON RESISTOR
9505+575		KALOSTBARJ	CARBON RESISTOR
9507,508		LAI6STS14J	CARBON RESISTOR
9509,510		K4165T391J K4165T513J	CAREON RESISTOR CARBON RESISTUR
9513-514	2	KAL65T104J	CARBON RESISTOR
3515,516		KA16ST334J	CAREON RESISTOR
3517,516 9519,520	2	K415ST223J KA16ST22GJ	CARBON RESISTOR CARBON RESISTOR
7521~524		K4165T104J	CARBON RESISTOR
9525+520		KALOSTSOLJ	CAREON RESISTOR
R527~53↓ R531,532	2	K41557104J K41657561J	CARBON RESISTOR CARBON RESISTOR
9533-536		K41657104J	CARBON RESISTOR
2537,538	2	KAI6ST561J	CARBON RESISTUR
2539~542 2543,544	4	KA165T194J	CARHON RESISTOR
2545~548	2 .	KA165T361J KA165T104J	CARBON RESISTOR CARBON RESISTOR
2549,555	2	K4165T561J	CARBON RESISTUR
3551-556	6	KA165T124J	CARBON RESISTOR
₹557+55¢ ₹559~562	2	KA165T471J KA165T224J	CARBON RESISTOR CARBON RESISTOR
9563,554	S	KAL6ST471J	CARBON RESISTOR
2555~568	4	LADSTEDAJ	CARYON RESISTOR
17569	1	K4165T474J	CARBON RESISTOR
3576 3571	1	KA16ST473J KA16ST134J	CARUON RESISTOR CARUON RESISTOR
2572	i	K41657273J	CARSON RESISTOR
₹573-576	4	KA165T104J	CARHON RESISTOR
3577~589 3581	4	KAL6STICSJ	CARBON RESISTUR CARBON RESISTOR
9532	1	K4165T1C4J K4165T331J	CARBON RESISTOR
2583	1	KAI6STZ71J	CARBON RESISTOR
7584	1	K416STZ73J	CARBON RESISTOR
95851586 95871586	2	KA165T471J K4165T473J	CARGON RESISTOR CARGON RESISTOR
9529,590	5	K4165T224J	CARBON RESISTOR
4571	1	K4155T105J	CARBON RESISTOR
2593-69C 3601:632	5	KA165T172J KA165T103J	CAREDY RESISTOR CAREDU RESISTOR
P603,604	2	KA16ST102J	CARBON RESISTOR
90051605	2	K4165T471J	CAREON RESISTOR
3607+678 3609+613	2	K4165T473J	CARBON RESISTOR
0011.012	2	KA16ST122J KA16ST193J	CARBON RESISTOR CARBON RESISTOR
9613.614	?	K+1657153J	CARBON RESISTOR
3615	1	K41657174J	CARBON RESISTOR
3517,616 3619.620	5	K4165T271J K4165T103J	CARBON RESISTOR CARBON RESISTOR
£621.625	2	KA1657271J	CARBON RESISTOR
3624+625	2	KALOSTES1J	CAREON RESISTUR
2651.652 2653.654	. 5	K4165T471J K4165T224J	CARBON RESISTUR
₹655,656	2	KA165T152J	CAREON RESISTOR CAREON RESISTOR
₹657,052	2	K4145T123J	CARBON RESISTOR
9654+56¢	2	K4165T153J	CAREGA RESISTOR
4663,664	5	K4165T561J K416ST472J	CARRON RESISTOR CARBON RESISTOR
7465+656	2	KALGSTEROJ	CARBON RESISTOR
3667,668	2	KA15ST103J	CARGON RESISTOR
2669+679 2671+672	5	K41657104J	CAREON RESISTOR
3673,674	2	K4165T103J KA165T473J	CAREON RESISTOR CARBON RESISTOR
7675+67o	5	KA165T471J	CARBON RESISTOR
2677.678	5	KAL6ST1S3J	CARPON RESISTOR
₹679+69û ≥631+632	5	KA16ST192J KA16ST193J	CARRON RESISTOR CARBON RESISTOR
9693,634	2	K4165T224J	CARSON RESISTOR
2685,696	2	K4165T151J	CARBON RESISTOR
7627,686 7639,690	2	KA165T104J	CARBON RESISTER
2691:605	2	KA165T224J	CAREDN RESISTOR CAREDN RESISTOR
4701,792	Ž	K416ST203J	CARBON RESISTUR
2703,724	2	K4165T362J	CARBON RESISTOR
9705+776 8707+705	5	K4165T332J	CARBON RESISTER CARBON RESISTOR
2799.710	5	LEOSTZ01A*	CARBON RESISTUR
4711±712 9713	2	K416ST822J	CARBON RESISTUR
4713 4714	i	K41651392J	CARBON RESISTOR Carbon resistor
₹715	1	LSFETZC1AA	CARADA RESISTOR
7716 2717	1	KA165T912J	CARGON RESISTER
2717 2716	1	KALOSTIGJJ KALOSTIGJJ	CARHON RESISTOR CARBON RESISTOR
P719	1	KALOST 36ZJ	CARSON RESISTOR
4720	1	KA163T203J	CARBON RESISTOR
4721 4722	1	LSPETZ61PX LEOSTZ61PX	CARBON RESISTOR Carbon resistor
2723	i	KA165T392J	CARBON RESISTOR
9.724	1	K41657112J	CARBON RESISTOR
₹725,727; 725	. 3	KA165T392J	CARBON RESISTOR
4727	1	K4165T302J	CARADA RESISTER
7731	1	K4165T392J	CARHON RESISTOR
4732 9733	1	K4165T273J K4165T392J	CARBON RESISTOR Carbon resistor
₹735	i	KA1657302J	CARBON RESISTOR
9 736	1	KA16ST193J	CAREON RESISTOR
₹737 ₹733	1	K4155T682J K4155T392J	CARBON RESISTUR Carbon resistor
2739	1	KA165T162J	CAREON RESISTOR
9741	1	X41657273J	CARBON RESISTOR
9742	1	K416ST392J	CAREON RESISTUR
2743+744 2745	2	KA16ST473J KA16ST162J	CAREON RESISTOR Careon Resistur
7746	î	KA165T682J	CAREON RESISTOR
2751	L	KA16STZ03J	CARBON RESISTUR
9752 9753	1	K4165T361J KA165T512J	CARBON RESISTOR
3754	i	KA16ST752J	CAREON RESISTOR CAREON RESISTOR
4755,756	2	KA165T203J	CARBON RESISTOR
			man and a second and

REF. NO.	Q.T.	1	_ L
9757 7758+759	1	K4155T512J K416ST752J	CARBON RESISTOR
7760	í	KA165T122J	CARBON RESISTOR CARBON RESISTOR
2761	1	K4165T752J	CARPON RESISTOR
9762 9763	1	KA165T103J KA165T752J	CARSON RESISTOR
2764.755	2	K4165T193J	CARBON RESISTOR CARBON RESISTOR
2755	1	K416ST752J	CAREON RESISTOR
2767 2764	1	K416ST103J K416ST203J	CAREON RESISTOR
9769	i	*A165T361J	CARBON RESISTOR CARBON RESISTOR
9.770	1	KA1657512J	CARDON RESISTUR
7771 9772	1	KA16ST75ZJ	CARODN RESISTOR
2773,774	Ş	K416ST361J K416ST122J	CARBON RESISTOR CARBON RESISTOR
7775+776+	3	KA165T752J	CAREDIA RESISTOR
773 9779	1	KAL6ST127J	512:01 see
9786	i	KA16ST512J	CARSON RESISTOR CARSON RESISTOR
2781	1	KA165T361J	CARBON RESISTOR
4782	1	K4165T752J	CAROON RESISTOR
₹785	î	KA165T203J	CARBON RESISTOR
3790+787	2	K4155T122J	CARBON RESISTOR
7799	1	K4165T512J	CARBOM RESISTOR
9799 9796,791	1 2	K416ST752J K416ST301J	CARBON RESISTUR
2115	i	K41657752J	CARRON RESISTOR CARBON RESISTOR
4793	1	K41657172J	CAREON RESISTOR
2794 2795~799	1 5	K4165T361J	CAREON MESISTER
P836 + 691	2	K4155T752J K4165T512J	CARBON RESISTOR CAREON RESISTOR
2672+673	2	LECST201A*	CARBON RESISTOR
9 50 4 9 50 5	1	K4165T122J	CARUDN RESISTUR
3331	1	K414211057	CARBON RESISTOR CARBON RESISTUR
2833-636	4	K4165T303J	CAREON RESISTOR
9837,833 9339,846	2	K4165T133J	CARBON RESISTOR
2841.842	2	x4155T153J K4165T102J	CARBON RESISTOR CARBON RESISTOR
₹643,644	2	K41557511J	CARBON RESISTUR
7845+646 7851,452	2	K#1657561J	CARBON RESISTOR
2653.854	ş	K416ST471J KA16ST22~J	CARBON RESISTOR
2855,656	5	KA15STZZZJ	CARDU RESISTOR
9857,658 9859,860	5	KA1457202J	CARBON RESISTOR
\$861+862	2	K4165T155J K4165T561J	CAREON RESISTOR
₹ 65 € + 864	Ş	K41557103J	CARBON RESISTUR CARBON RESISTOR
+ 255,366	3	KA165T471J	CAREON RESISTOR
₹867+866 ₹86 <b>9</b> +870	2	KA165[104] KA165[153]	CARBON RESISTOR
2371-674	4	KA165T102J	CARBON RESISTOR
4875	1	KA165T471J	CARBON RESISTOR
4676 4277+876	7	LECTTS 644	CARGON RESISTUR
2579	i	K41657153J	CARBON RESISTOR CARBON RESISTOR
2880.881	2	KA16STIG2J	CARBON RESISTUR
9332~585 8836	1	K4165T105J K4165T101J	CARBON RESISTOR
2 g 2 7	i	K4165T105J	CARBON RESISTOR
2984888	5	KAL6ST686J	CARBON RESISTOR
FISCELLANE QU	s		
C1501	1	4263-809	MICRO SOCKET ASS'Y
C4572	1	NZG3-812	MICRO SUCKET ASS'Y
C7505 C7506	1	MZG 9-516 MZG 6-815	MICRO SUCKET ASS'Y
C4507	i	r206-915	MICRO SUCKET ASS'Y MICRO SUCKET ASS'Y
CN791	1	F263-911A	MICHO SOCKET ASS'Y
CN801 CN802	1	MZC3-929	MICRO SOCKET ASS'Y
10 To 1		M143-810A	MICRO SOCKET ASS'Y
J4501	1	# 103-903	MICRO SOCKET ASSTY
HO 001	1	173961-3	MICHO OLIVE
H2002+474	5	173961-3	MICHO PLUG
P0691	ī	4Z03-814	MICRO SUCKET ASS'Y
ND 6/1 4	1	175981-4	MICHO SUCKET ASS'Y
RJ501-505	5	YKC21-3051	RCA JACK OP
3123E	ì	YKC21-3949	RCA JACK IP
19501,502	2		
	2		MINI TERMINAL PLATE
37624	85	E 053	JUMP WIRE
30E76 31E27	100	E275	JUNP WIRE
30525	10	E1C0 E125	JUMP WIRE
37E29	17	£159	JUMP AIRE
30E30	9	£175	

REF. NG.	O.LA	CARVER PART NO.	DESCRIPTION
.C. 2047D			· · · · · · · · · · · · · · · · · · ·
33526	1	A 5W-826A	PRINTED CIRCUIT BOARD
CAPACITORS			
C413+414	2	K401UV02-YK	NYLAR CAPACITOR
ESISTUPS			
2453+454	2	K4165T133J	CARSON RESISTOR
V4402	1	V8609-154MN1K4	ROTARY PUTENTI JHETER
SHITCHES			
54416	1	54-1201289	PUSH SHITCH
54411	1	SW-1401269	PUSH SHITCH

REF. NG.	6.1A	CARVER PART	NO. DESCRIPTION
"ISCELLANED	US		
C4493	1	MZ05-818A	MICHU SUCKET ASS'Y
CY404	1	HZC3-617	MICRO SUCKET ASS'Y
CA4SI	1	MZG3-313	MICRO SOCKET ASS'Y
CAASS	1	M245-831	HICRO SOCKET ASS'Y
32.625	3	£109	JUAP WIKE

REF. NO.	SITY	CARVER PART NO	DESCRIPTION
F. C. BOARD			
33525	1	HP-326A	PRINTED CIRCUIT BOARD
APACITORS			
C951	1	HE125JYF473Z	CERAMIC CAPACITOR
I SCELLANE DUS	i		
CVOOL	1	4Z04-321A	MICHO SOCKET ASS'Y
HJOOLH	1	Y4821-5068	MECK JACK
45829	2	U9-#136025	UL TYPE TUBE
46E33	1	24E-05	LUS

REF. NO.	3.11	CARVER PART	HO. DESCRIPTION
P.C. BOARD			· · · · · · · · · · · · · · · · · · ·
33627	1	P5W-0264	PRINTED CIRCUIT BUARD
SWITCHES			
54601	1	SDA-12445	TACT SALTCH
FISCELLANE OU	s		
CHBRO	1	NZ62-524	"ICRO SUCKET ASS'Y

PEF. 40.	Q*TY	CARVER PART NO	DESCRIPTION
			-1 -22-3-1-0"
CFACE.O.	-		
33E29	1	VLD-8264	PRINTED CIRCUIT SOAND
SEMI CONDUCTOR	S		
0800	1	SPR-54 HVEF	LED
ISCELLANE DUS			
CY454	•	M263-920	MICRO SUCKET ASS'Y

### POWER SUPPLY P.C. BOARD Q'TY CARVER PART NO. REF. 40. DESCRIPTION F+C-80ARD 1 P5-929A PRINTED CIRCUIT BOARD 55%1 COMDUCTORS 5906 D901 + 902 5903 0 904 5905 5906 5907 5908 5909 5910 5911 5912 + 913 010DE 010DE 2EMER 010DE,1/2%,5,7V 010DE 2EMER 010DE,1/2%,6,2V 010DE 010DE 010DE 010DE 010DE 2EMER 010DE,1/2%,4V 2EMER 010DE,1/2%,4V 010DE 010DE 134842 1N4002 2050-057 1N4002 2050-062 1N4002 1N4002 1N4002 2050-040 2050-215 7 2050-05 1 2050-06 1 144002 1 14642 1 144002 1 2050-04 1 2050-21 2 14402 1 155176 4901 1902 1903 1994 1905 25C1815-Y+GR 25A1015-Y+GR 25B1274-R+S 25D1913-R+S 25D400-E+F TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR 1C901,902 1C903 NJM78M12A M523GL NJM76MG5A CAPACITORS. C900-961 C902-973 C906 C907 C908 C907 C908 C901 C911 C912 C913-914 C915-916 C917 C918 C917-922 C928 YE103 h5-16TW470H h5-16TW221H h5-10TW470H h5-10TW470H h5-50TW272H h5-55TW470H h5-55TW100H h5-16TW100H h5-16TW100H h5-16TW100H h5-35TW222H-KF h5-35TW222H-KF h5-55TW10H h5-16TW10H h5-16TW10H h5-16TW10H h5-16TW10H h5-16TW10H METALLIZEU FILT CAPACITOR ELECTROLYTIC CAPACITOR

CERAMIC CAPACITOR ELECTROLYTIC CAPACITOR

REF. NO.	Q. TA	CARVER PART N	DESCRIPTION
PESISTORS			
9900	1	KASOXT335J	CAREON RESISTOR
3901	1	KAIOSTIDZJ	CARBON RESISTOR
9902	1	KA165T103J	CARSON RESISTOR
3904	ī	KA165T391J	CAREON RESISTOR
1905	i	K4165T102J	CAREDN RESISTOR
3916	ĩ	KA16ST223J	CARBON RESISTOR
2907	i	KA165T192J	CARSON RESISTOR
9916	î	KA10ST151J	CARSON RESISTOR
₹911	i	KA1657561J	
3912	i	MF165T332F	CARBON RESISTOR
9913	i	KF165T243F	METAL FILM RESISTOR
2914,915	2		HETAL FILM RESISTUR
2314,412		KA165T153J	CARBON RESISTOR
2917	1	K41657561J	CARSON HESISTER
9913		K41657151J	CARBON RESISTOR
	1	SA-1-TOBCJ-LP	
7919,920	2	SA-1W1131J-LP	METAL DAIDE RESISTOR
KISCELLANEOU	S		
H901	1	05H-1623-HP	HEAT SINK
4665-634	3	05H-1543-HP	HEAT SINK
1905	1	05H-1625-MP	MEAT SINK
4C901+90Z	2	57254795	GNO LUG
CAADS	1	×202-325	MICRO SOCKET ASS'Y
C4905	1	HZ09-926	HICRO SUCKET ASS'Y
EL 401	1	M1095	GND LUG
EL 903	1	59554795	SNO LUG
FU900	1	FU-625G14-SM	FUSE
H2410	1	173981-9	MICHO PLUE
K>500	i	173981-6	MICRO PLUG
RL 900	1	DM1T-SS-112LM	RELAY
43529	13	€950	JUMP #[HE
43529	34	£100	JUNP WIRE
44513	2	C4741-6013	FUSE HOLDER
100900.901	2	H7037	AC OUTLET

VIDEO P.C. 80#FD

REF. NC.	YT'E	CARVER PART NO.	DESCRIPTION	
P+C+BOARD	_			_
44E 5	1	4528-NGA	PRINTED CIRCUIT BOARD	
SEMI CONDUCTOR	5			
202 4 202	2	155176	91906	
10273,274,			10	
208	3	NJ4459552	10	
10211	1	TC4011U3P	10	
10515	1	TC40118P	10	
1C213 1C215	1	TC40139P TC40528P	IC IC	
10550	ì	LA2739	ic	
34601	1	RN-1207	TRANSISTOR	
SA005	1	25C1315-Y+6R	TRANSISTOR	
27003+004	5	RY-1207	TRANSISTOR	
34002-010	6	25C1815-Y,GR	TRANSISTOR	
[CAOUI	1	TC49668P	IC	
CAPACITORS				
C 20 6	1	NP-SOTHIRON	ELECTROLYTIC CAPACITOR	
C207	1	NS-16TH10CH NS-50TW3R3H	ELECTROLYTIC CAPACITOR	
C50.8	i	KS-16TW100M	ELECTROLYTIC CAPACITOR ELECTROLYTIC CAPACITOR	
215	1	Nº-50TE2R2M	ELECTROLYTIC CAPACITOR	
C211	1	45-16TW103H	ELECTRULYTIC CAPACITOR	
C212 C213,214,	1	ME40SJSL47CK MY-50VU103J	CERAMIC CAPACITOR MYLAR CAPACITOR	
21.6	-	50001055	TICHE CAPACITOR	
2217	1	HE40SJSL470K	CERANIC CAPACITOR	
C518+51A	2	MY-50VU1G4J	MYLAR CAPACITOR	
C220+221 C222~275+	5	NS-SGTW1RDM NS-16TW1JOM	ELECTROLYTIC CAPACITOR SLECTROLYTIC CAPACITOR	
265	-		TECCHOCITIC CAPACITOR	
C285	1	KY-50VU182J	MYLAR CAPACITOR	
C289	1	NS-16TW1COM	ELECTROLYTIC CAPACITOR	
7275	i	LL-SCTWRIOM	LOW LEAK. ELECTROLYTIC CAP.	
C297	1	MY-50VU333J	MYLAR CAPACITOR	
C298	1	NS-16THICIM	ELECTROLYTIC CAPACITOR	
C300 C301	1	HY-53VU273J	MYLAR CAPACITOR	
2302	1	HS-16TH220M	MYLAR CAPACITUR ELECTROLYTIC CAPACITOR	
C305	ī	NS-10TH101M	ELECTROLYTIC CAPACITOR	
C304	1	LSSBUVOE-YM	MYLAR CAPACITUR	
C305-307	3	NS-16TW1COM	ELECTROLYTIC CAPACITOR	
C303+319	2	NS-SOTULRON	ELECTROLYTIC CAPACITOR	
CV001~004 CV005	*	HS-16TW141H	ELECTROLYTIC CAPACITOR	
CV005	1	NS-10TW331P HE40SJSL470K	ELECTRULYTIC CAPACITOR CERAMIC CAPACITOR	
CVOTS	-	NS-16TW101M	ELECTROLYTIC CAPACITIA	
EV007	1	NS-10TW331H	ELECTROLYTIC CAPACITIE	
CACOS	1	H5-16Th101H	SLECTEDLYTIC CAPACITOR	
CV079 CV010	1	HE4DSJSL47GK NS-16TW102H-KF	CERAMIC CAPACITUR ELECTROLYTIC CAPACITUR:	
CVOIL	î	HE99SJYF223Z	CERAMIC CAPACITOR	

REF. NO.	D'TY	CARVER PART	NO. DESCRIPTION
PESISTORS			
3241 3242	1	KA165T132J KA165T134J	CARBON RESISTOR
2244	i	K4165T105J	CARBON RESISTOR CARBON RESISTOR
7245	1	K416ST132J	CARSON RESISTOR
9246 ⇒247	1	KA16ST104J KA16ST473J	CARBON RESISTOR CARBON RESISTOR
2243	ĩ	KA165T221J	CARBON RESISTOR
3249,250 3251	2	K4165T473J	CARBON RESISTOR
3252	1	KA16ST153J K416ST622J	CARLON RESISTOR CAREON RESISTOR
3253-255	3	KA165T104J	CARSON RESISTOR
7250 7257,258	1	KA165T191J	CARGON RESISTOR CARGON RESISTOR
2259~262	4	KA165T174J	CAREON RESISTUR
7263 7264~26c	1 3	KA16ST101J KA16ST104J	CARBON RESISTOR CARBON RESISTOR
2283	í	KA1657274J	CARDON RESISTOR
2239	1	K4165T622J	CAROON RESISTOR
3537 3536	1	X4165T473J X4165T332J	CARBON RESISTOR CARBON RESISTOR
305	1	KA16ST123J	CARBON RESISTOR
2293 2294	1	KA165T191J KA165T153J	CARBON RESISTOR
9275	1	K4165T103J	CARSON RESISTOR CARGON RESISTOR
3296	1	K416ST273J	CARRON RESISTOR
1297 1293+299	7	K4165T471J K4165T473J	CARBON RESISTOR
P390	ī	K4165T274J	CAREDN RESISTOR
87001	1	K416ST473J	CARED! WESTERAD
84005	i	K41657104J	CARBON RESISTOR CARBON RESISTOR
2003	1	KA165T1CGJ	CARBON RESISTOR
RY004 RY005+606	1	K416ST750J K416ST104J	CARBON RESISTOR CARBON RESISTUR
24017	ī	K4165T750J	CARBON RESISTOR
24009,039	2	K416ST134J K416ST472J	CARBON RESISTOR
RV311	i	K4165T104J	CARBON RESISTOR CARBON RESISTOR
84015	1	KA16ST1C3J	CARBON RESISTOR
RV013 RV614	1	K425ST391J K416ST680J	CAREON RESISTOR CARBON RESISTOR
RVC13	1	K41657223J	CAREON RESISTOR
RVC15 RV017	1	KA15ST102J	CARBON RESISTOR
RVOIS	1	KA165T471J KA165T472J	CARBON RESISTOR CARBON RESISTOR
RV619.020	Ž	KA165T471J	CARBON RESISTOR
BV021	1	KA16ST472J	CAREON RESISTOR
84055	1	KA165T223J KA165T103J	CAREON RESISTOR
84054	1	KA2557371J	CARBON RESISTOR
RV025	1	KA165T69GJ KA165T472J	CARFON RESISTOR CARBON RESISTOR
RY027	1	K415ST223J	CARBON RESISTOR
RV02d RV029~631	1	KA16ST102J KA16ST471J	CARBON RESISTOR CARBON RESISTOR
RV332	1	K4165T223J	CARSON RESISTOR
SV033	1	KA16ST472J	CAREON RESISTOR
SV2201+202	2	SVR-0613650	3 SEMI-VARIABLE RESISTOR
MISCELLANEOU	5		
CN300	1	52007-0910	CONNECTOR
T= 203	1	171825-2	MICRO PLUG
43514	6	5050	JUMP WIRE
43 £ 15 43 £ 17	1	E275 E102	JUMF WIRE JUMP WIKE
C#1901	1	171825-5	AICES PERS
£FA90!	1	M1693	SNO LUG
474601	1	YK221-5130	"IC JACK
TOCATE	1	16225-BAA4	RC4 JACK 49

REF. NO.	S.LA	CARVER PART NO.	DESCRIPTION
P.C. BOAPD			
44E 6	1	T3N-6294	PRINTED CIRCUIT BUARD
SENTCONDUCTO	RS		
ICT041	1	NJH455558	IC
CAPACITORS			
CTOAL	1	ECGV14334JZ	METALLIZED FILA CAPACITOR
CT042+C43	2	MY-50VU123J	YYLAR CAPACITOR
CTO44	1	MY-50VU323J	MYLAR CAPACITOR
CT045,045	2	NS-25TW4R7K	ELECTROLYTIC CAPACITOR
CTO47	1	HS-25TH220H	ELECTROLYTIC CAPACITOR
CTS45	1	HE40SJY2101K	CERAMIC CAPACITOR
CT049,050	2	ECGV14334JZ	METALLIZED FILM CAPACITOR
CT051+652	2	MY-5cVU125J	MYLAR CAPACITOR
CT033	1	MY-50VU323J	MYLAR CAPACITOR
CT054	1	NS-25TN4R7M	ELECTROLYTIC CAPACITOR
CT955	1	LSOSUVOS-YM	MYLAR CAPACITOR
CTG56	1	K5-25TW4R7M	ELECTROLYTIC CAPACITOR
CTG57	ı	#S-25TW220#	ELECTROLYTIC CAPACITOR
CTOSE	1	HEADSJY9101K	CERAMIC CAPACITOR
CT 059	1	£C2V14334JZ	METALLIZED FILM CAPACITOR
CT060,061	2	HE705JYF1937	CERAMIC CAPACITOR
C1065	1	LZ35UV05-YY	MYLAR CAPACITOR

REF. NO.	0.LA	CARVER PART NO	. DESCRIPTION
RESISTORS			
RT941	1	KA165T562J	CARBON RESISTOR
RTOAZ	1	K416ST182J	CARADN RESISTOR
RT043	1	K416ST152J	CARBON RESISTOR
RYG44	1	KA16STS62J	CARBON RESISTOR
RT045	1	K4165T682J	CAREON RESISTOR
RTG45	1	* 4155T222J	CARBON RESISTOR
RT047	1		CARBON RESISTUR
RT048~051	4		CARBON RESISTUR
RT052	1	K416ST682J	CARSON RESISTOR
RT053	1	K4165T474J	CARBON RESISTOR
RT354	1		CARBON RESISTOR
RT 055	1	ka1657274J	CARBON RESISTOR
RT056	1	<b>* * 1 6 S T 5 6 2 J</b>	CARBON RESISTOR
RT057,658	2		CARBON RESISTOR
RT 059	1	LS86TE8SEA	CARBON RESISTOR
RTUGG	1	KA15ST132J	CARBON RESISTOR
RT 361	ı	KA16ST152J	CARBON RESISTOR
RTOSZ	1	K4165T562J	CARBON RESISTOR
RT063+C54	2	K416ST152J	CARGON RESISTOR
RTC55	1	KALGSTSGZJ	CARRON RESISTOR
RT 356	1	LSE0720144	CARBON RESISTOR
RT067+068	2		CARHON RESISTOR
RT069	1		CARBON RESISTOR
21070	1		POTEIZEM NOBEAN
RT071	1	K4165T474J	CARBON RESISTOR
RT072	1		CARBON RESISTOR
RT 073	1	K4165T561J	CARBON RESISTOR
RT 0.74	1	K416ST562J	CARBON RESISTOR
VRTQ41~043	3	V3T07-293821K4	ROTARY POTENTIONETER
ISCELLANE DUS			
45E20	12	2050	JUMP WIRE
45E21	13	E100	JUMP WIRE
45E23	4	E125	JUNP WIRE
45E24	2	E150	JUNP WIRE
CHTODI	1.	HZ05-827	MICRO SOCKET ASS'Y
CHTOOZ	1	MZ03-528	MICRO SOCKET ASS'Y

REF. NO. Q	'TY	CARVER PART NO.	DESCRIPTION
7.C. 99ARU 36E 3	1	FL-8236	PRINTED CIRCUIT BOARD
SEMI CONDUCTORS			
5401 5402	1		LED LED
2403~415	13	SLR-37VR3F	LEO
7416	10		LED
7427-427	3		LED LEO
94444527 455	13		01306
3401~435	3	25C3330-5+T	TRANSISTOR
10401	1		16
15402,493 15404	;		IC IC
	-	C31463H	
CAPACITORS C401,402	2	WEERS 1511-72 :	*******************************
C4019492	1		CERAMIC CAPACITOR SLECTROLYTIC CAPACITOR
5404	1	NS6R3TW471M	ELECTROLYTIC CAPACITOR
C4C6 C407~469	1 3	MCOIWT61-24	ELECTRULYTIC CAPACITOR
-41 - 411	2	NS-16Th1COM	SLECTROLYTIC CAPACITOR SLECTROLYTIC CAPACITOR SLECTROLYTIC CAPACITOR
5412	1	45-25TW4R7M	SLECTROLYTIC CAPACITOR
RESISTORS			
4431 4402	1		CARBON RESISTOR CARBON RESISTOR
7405	1	K416STE22J	CAREON RESISTOR
9404 9405	1	<b>*4165T123J</b>	CARBON RESISTUR
1405	1	K4165T103J K4165T475J	CARBON RESISTOR CARBON RESISTOR
2407	1	K4165T393J	CARBON RESISTOR
340 \$ 440 9	1	KA16ST631J KA16ST391J	CARBON RESISTOR CARBON RESISTOR
2416,411	2	K4165T681J	CARBON RESISTOR
P412 R413	1	KA165T373J KA165T822J	CARBON RESISTOR CARBON RESISTOR
7414	1	KA16ST393J	CARBON RESISTOR
7426-427	3	KA165T681J	CARBON RESISTOR
2429 2430,431	1	K4165T102J K4165T103J	CARBON RESISTOR CARBON RESISTOR
9432,433	2	KAL6ST473J	CARGON RESISTOR
* 445-451	9	KA16ST192J	CARBON RESISTOR
24401	1	RA-SP-(5473J	BLOCK RESISTOR
SHITCHES			
\$4401~403+ *40~458	55	57A-12445	TACT SWITCH
MISCELLANEOUS MACE	1	HC18/U7.2004HZ	QUARTZ SSCILLATUR UNIT
C4302	1	4204-303	HICRO SUCKET ASS'Y
C4304 C4403	1	MZ08-301	MICRO SUCKET ASS'Y HICRO SUCKET ASS'Y
C4406	i	H202-807 H202-806	HICRO SOCKET ASS'Y
CN497	1	MZ03-905	HICKO SOCKET ASS'Y
C4408	1	XZ06-800 MZC7-799	MICRO SOCKET ASS'Y MICRO SOCKET ASS'Y
CHAIG	1	M208-8C4	MICRO SOCKET ASS'Y
CV413	1	MZC5-802	MICRO SOCKET ASS'Y

CARVE	Ra	udio.cor	m
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REF. NO.	8.1A	CARVER PART NO.	DESCRIPTION
FL491	1	FG710F1	DISPLAY
RV401	1	52×1483-11	REMOTE SIGNAL RECEIVING UNIT
35E1a	45	E050	JUMP WIRE
35219 35220	1 3	E075 E109	JUNP WIRE
35621	4	2150	JUMP WIRE
1035 SUR RC314	10 P.	C. BOARD	
REF. NO.	0.11	CARVER PART NO.	DESCRIPTION
25E23	1	#5-927c	PRINTED CIRCUIT BGARD
EN I CONDUCTOR	RS		
232,234~	37	155176	0100E
237+240+ 245			
3201-294	4	RN-1207	TRANSISTIR
3205 1205+237	5	25K363-4L R4-2207	TRANSISTOR TRANSISTOR
\$208.299	5	4N-1207	TRANSISTOR
1210,211 4212,213	2	RN-2297 RN-1207	TRANSISTOR TRANSISTOR
1214~217	4	HN-2207	TRANSISTOR
1219~221 4222	3	24-1237 44-2207	TRANSISTOR TRANSISTOR
7223	i 1	RN-1207	TRANSISTOR TRANSISTOR
3224 3225	1	R4-2207 R4-1207	TRANSISTOR
3227 3228~230 3231~236	1	KN-1211 KN-2207	TRANSISTER TRANSISTER
7231~236 3237	6	RN-1207 KN-2207	TRANSISTUR TRANSISTUR TRANSISTUR
723#	1	RN-1207	TRANSISTOR
9239,246 9241	2 1	HN-2207 HN-1207	TRANSISTOR TRANSISTOR
3242 1243	i	RN-1211	TRANSISTOR
10201.202.	5	25A1u1>-Y,GR NJM455558	TRANSISTOR
205-207.	Ŭ	K3E433338	TC .
10214 10216	1	TC9215F	ic
10216	1	L42770 524844	10
1C214 1C214 1C214	ĩ	TC9214P TC9215P	ic
IC221	1	TC92146	IC IC
10222	ı l	NJM456556 NJM97285	IC IC
10224,225	2	826654MLK	tc
10226.227	5	TC9153AP NJ#45658B	IC IC
10230	1	TC49138P	IC
IC232	1	H51523AL LC6554H-4298	IC IC
10233+254	2	3A6250	10
CAPACITORS C201~205	5	57-25Tw4R7H	ELECTROLYTIC CAPACITOR
C226 C277	1	57-16TH100H MY-50VU183J	ELECTROLYTIC CAPACITOR
2225	1	MY-50VU483J	MYLAR CAPACITOR MYLAR CAPACITOR
C229 C230 + 231	1 2	MY-50VU392J MY-50VU104J	MYLAR CAPACITOR
2232.233	2	57-16TH160H	ELECTROLYTIC CAPACITOR
7234,235 C236,237	2	KY-50VU104J ECGV1+154J2	MYLAR CAPACITUR METALLIZED FIL4 CAPACITOR
C239 + 2* 4	2	SL-35TW4R7M-AT	SLECTABLYTIC CAPACITOR
C 240 C 241	1	MY-SOVUSAZJ SL-St TWRZZM-RT	MYLAR CAPACITUR ELECTROLYTIC CAPACITOR
C242	1	SI - 45 TWAD 7 M-DT	ELECTROLYTIC CAPACITOR

REF. NO.	0.1A	CARVER PART NO.	<del></del>
C311 C312	1		ELECTROLYTIC CAPACITOR ELECTROLYTIC CAPACITOR
C313 C31*	1	ST-16TH10CM SL-16TH100M	ELECTROLYTIC CAPACITOR LOW LEAK. ELECTROLYTIC CAP
C315	1	57-16TW100H	ELECTROLYTIC CAPACITOR
C316 C317	1	57-16TW220M 57-16TW100M	ELECTROLYTIC CAPACITOR ELECTROLYTIC CAPACITOR
C316+319 C321	5	57-16Tw220h 57-25Tw4R7M	ELECTROLYTIC CAPACITOR ELECTROLYTIC CAPACITOR ELECTROLYTIC CAPACITOR
C 322	1	57-50T#1R0M	ELECTROLYTIC CAPACITOR
C324+325 C326	2	S7-25T%4R7M S7-16T%220#	ELECTROLYTIC CAPACITOR ELECTROLYTIC CAPACITOR
C327~329 C333	3	57-25TW4R7M 57-10TW220M	ELECTROLYTIC CAPACITOR
C331	1	57-SOTWIRGE	SLECTROLYTIC CAPACITOR SLECTROLYTIC CAPACITOR
C332,333 C334,335	5 5	57-25TW4R7H HE705JYF103Z	ELECTROLYTIC CAPACITOR CERAMIC CAPACITOR
C336+337 C333	2	HE50SJC430UJ	CERAMIC CAPACITOR
C337	1	57-16TW10CM 57-56TW1RDM	ELECTROLYTIC CAPACITOR ELECTROLYTIC CAPACITOR
C340~342 C343	3	XY-50VU104J S7-50TW1R0H	MYLAR CAPACITOR ELECTROLYTIC CAPACITOR
C351+352	ž	HE70SJYF103Z	CERANIC CAPACITOR
C356 C357	1	57-16TW1GOH 576R3TW101H-LC	ELECTROLYTIC CAPACITOR ELECTROLYTIC CAPACITOR
C360	1	S7-16TW100M	ELECTROLYTIC CAPACITOR
RESISTORS	-		
3201,202	2	K4165T471J K4165T224J	CARBON RESISTOR CARBON RESISTOR
3205,270 3207,20E	5	K4165T134J K*165T472J	CARBON RESISTOR
R209	1	KA1457203J	CARBON RESISTOR
9210 1211	1	KA165T103J K4165T203J	CARSON RESISTOR
4212	1	K4165T472J	CARLON RESISTOR
R215+214 R215	1	K#1657103J #A1657104J	CARBON RESISTOR CARBON RESISTOR
₹215,217 ₹21£	5	K4165T193J K4165T153J	CARDON RESISTOR
3519	1	K4165T104J	CAREDN RESISTOR
₹220~222 ₹22 <b>3</b> ,224	3	K4165T8Z1J K4165T104J	CAREON RESISTOR CAREON RESISTOR
4275 3236	1	KA165T821J KA165T155J	CARRON RESISTER CARRON RESISTOR
3237	1	K4105T473J	CARSON RESISTOR
7273 7224	1	K41657752J K41657103J	CAREON RESISTOR
R23J R231	1	K415ST752J KA15ST153J	CARBON RESISTOR CARBON RESISTOR
9232	1	K4165T473J	CARBON RESISTOR
*233~235 *236+237	3	K4165T103J K4165T474J	CARSON RESISTOR Carbon resistor
4238	1	KA16ST8Z1J	CARPON RESISTOR
₹243 ₹267	1	KA1657174J KA1657473J	CAREON RESISTOR CAREON RESISTOR
£055 9055	1	K416ST472J K416ST105J	CARBON PESISTOR CARBON FESISTOR
2276 - 271 2272 - 273	5 5	KA15ST104J	CARBOK RESISTUR
2274~277	4	KA16ST112J KA16ST821J	CARBON RESISTOR
2278-291 2292,293	2	KA1657134J KA1657224J	CARBON RESISTOR CARBON RESISTOR
7294,285	2	KA165T471J K4165T104J	CARBON RESISTOR CARBON RESISTOR
2302	1	K4165T473J	CARBON RESISTOR
2303 4304	1	LSSST20144 LSSST20144	CARBON RESISTOR CARBON RESISTOR
9305+30 a	2	K4165T104J K4165T103J	CARLON RESISTOR
₹305	1	KALGSTICAJ	CARBON RESISTOR
2303 2316	1	K42555106J K41657474J	CARBON RESISTOR CARBON RESISTOR
₹311	1	KA16ST103J	CARPON RESISTOR
₹312 ₹313~315	3	K4165T183J K4165T183J	CARBON RESISTOR
9315 9317	1	K4165TZ03J K4165TZ23J	CAREON RESISTOR CAREON RESISTOR
3313 3314	1	KA16ST333J	CAREDO RESISTOR
R320	. 1	K415ST223J K416ST333J	CARLON RESISTOR
9321,322	2	KA165T193J K4165T224J	CARBON RESISTOR
4324	1	FA16ST471J	CARLON RESISTOR
4325 4326	1	KA165T473J KA165T224J	CARBON RESISTOR CARBON RESISTOR
9327 9323	1	K4165T471J K4165T473J	CARBON RESISTOR CARBON RESISTOR
7327	1	KA16ST273J	CAREON RESISTOR
9334 9331,332	1	KA16ST1C4J KA16ST1?3J	CARBON RESISTOR CARBON RESISTOR
5333	i	KA165T471J KA16ST473J	CAREON RESISTOR
3334 3335	1	K4165T224J	CARBON RESISTOR
7336 7337	1	KA165T473J KA165T331J	CARBON RESISTOR CARBON RESISTOR
7373 9537	1	K4165T271J	CARBON RESISTOR
- 340-342	1	K4165T273J K4165T104J	CARBON RESISTOR CARBON RESISTOR
4343 7344	1	KA165T2C3J KA165T224J	CARBON RESISTUR CARBON RESISTOR
345	1	KA1657471J	CARDON FESISTOR
7347 7342	1	K4165T681J K4165T172J	CARBON RESISTOR CARBON RESISTOR
		KA1657561J	CAROON RESISTOR
R350~352	1		
4354 4355~357		KA16ST472J KA16ST332J	CARBON RESISTOR
A 354	3		CARBON RESISTOR CARBON RESISTOR CARBON RESISTOR CARBON RESISTOR

REF. NO.	G.LA	CARVER PART NO.	DESCRIPTION
806~266F	4	K41657104J	CAREON RESISTOR
7369	1	k4145T223J	CARRON RESISTOR
<b>376 • 371</b>	2	KA165T104J	CARBON RESISTOR
₹372	1	KA165T472J	CAREDI RESISTOR
₹374	1	K4165T104J	CARBON RESISTOR
375	1	K4165T821J	CARBON RESISTOR
7390	1	K4165T194J	CARBON RESISTOR
2351.332.	3	KA165T1C3J	CARSON RESISTOR
300			
R4301	1	RA-SP-09104J	BLOCK RESISTOR
SV2223	1	SVR-66736163	SEMI-WARIABLE RESISTOR
573 2°4	1	SVE-06T361C4	SEMI-VARIABLE RESISTOR
CILS			
L301	1	LALO3471K	INDUCTOR
ISCELLANEOUS			
F 20 1	1	CSA3.5646	CERAMIC DSILLATOR UNIT
F 20 2	1	CSA4.1946	CERANIC OSILLATOR UNIT
143	ı	C-F-508592FKZ	3-LEAD FLAT CABLE
1 w 8	ī		5-LEAD FLAT CABLE
1×13	i	24J267221-J-J	7-LEAD FLAT CABLE
1917	î	2HJ26781C-J-Z	9-LEAD FLAT CABLE
1 #1 9	1		SOLDER PLATED WIRE
1 1 1 7	i		SOLDER PLATED WIRE
EL 201-503	3	r1698	SNO LUG
M2431	1	1-175961-0	TICRO PLUG
AP 40 Z	1	173961-9	MICRO PLUS
HP 493	1	173981-5	MICAD PLUG
X2405+496	5	173981-2	MICRO PLUS
45 40 A	1	173961-3	MICRO PLUG
40404	1	173781-6	MICRO PLUG
47 47 P	1	173981-7	HICRO PLUG
MP 413	1	173981-5	MICRO PLUG
Pa 421	1	173981-3	MICRO PLUG
F2451	1	173961-2	MICHO PLUG
KP 453	1	173961-3	MICAD PLUS
MD 454	ī	P125C-03K	HICRO PLJG
MP 501 , 50 2	ž	173981-3	TICRO PLJ6
#2575	ĩ	173961-7	MICRO PLJG
M2701	i	173981-3	MICRO PLUG
#3 80 C	i	173981-2	MICRO PLUG
HP 80 2	i	173981-3	HICRO PLUG
HP 305	î	173981-7	MICRO PLUG
T 201	1	171625-3	MICRO PLJS
200	2 <del>5</del>		SERVICE CONTROL OF THE PROPERTY.
26F26	65	E050	JAIK 9KUL
26527		E 375	JUMP WIRE
25 2 2 8	148	Elco	JUMP WIRE
	17	£125	JUMP WIRE
25E23 26E30	20	E150	JUMP WIRE

REF. NO.	9.1A	CARVER PART NO.	DESCRIPTION
.C. EDARD			
Z6E24	1	HVK-8273	PRINTED CIRCUIT BOARD
ENI CONDUCTO	RS		
10425	1	L31641	10
ZDANI	1	2950-062	ZEHER 0100E-1/2W-6.2V
APACITORS			
C426	1	HC10SJZF473Z	CERAMIC CAPACITOR
C421	1	HE7GSJYF103Z	CERAMIC CAPACITOR
5422	1		ELECTROLYTIC CAPACITOR
ESISTORS			
3437,438	2	KA165T133J	CARDON RESISTOR
3462	1	K4165T100J	CAREON RESISTOR
104FV	1	V3V16-10454MF5	ROTARY POTENTIONETER
*I SCELLANE DU			
CY451	1	M2G2-919	MICRO SOCKET ASS'Y
C4453	1	MZ63-930	MICRO SUCKET ASS'Y
EL451	1	57651692	SKD LUS
Nº 422	1		MICRO PLJ6
Nº 601 - 801	2	173981-3	MICRO PLUG
K > 30 S	1	173981-2	MICAD PLUG
25E 1	2	EOSC	JUMP WIRE
25E 2		E075	JUMP RIRE
25E 3	1	E100	JUNP WIRE
CHV001	1	MZ05-833	MICRO SOCKET ASS'Y

#### FRONT SHITCH P.C. COARD

REF. NO.	SITY	CARVER PART	NO. DESCRIPTION
F.C. BOARD			
25525	1	F5W-8273	PRINTED CIRCUIT BUARD
SEMICONDUCTO	RS.		
0430-435	٥	SL3-55DUSF	LED
3436	1	SLO-55VR5F	LED
2437~442	6	SLB-SSDUSF	LED
7443	1	SL6-55VR5F	LEÓ
RESISTORS			
2441	1	KA16STS51J	CARSON RESISTOR
9442	1	KA16ST6BLJ	CARGON RESISTOR
1452-463	12	KA16ST331J	CARBON RESISTOR
SHITCHES			
58426-433	14	SHPS1-ACE	TACT SWITCH
PISCELLANEOU	s		w
C4401	1	MZ10-323A	MICRO SOCKET ASS'Y
C:1402	1	H208-922	AICRO SUCKET ASS'Y
26E18	3	E050	JUMP MIRE

#### OTHER PARTS

REF. NO.	STY	CARVER PART NO.	DESCRIPTION
ISCELLAMEOU	5		
1 MS 1	1	C-0-6180222760	SOLDER PLATED WIRE
46217	2	CNT31-0074	SHORT PIN
46E19	1	VJR-3	SNAKE LUS
46E25.E26	12	5K-1	CORD CLAMP
46E27	3	NO.5167	CORD CLAMP

EXPLODED VIE	ws		
REF. NO.	9'14	CARVER PART NI	D. DESCRIPTION
COILS			
PT 903	1	#40E2-16H	POWER TRANSFORMER
h1467	1	NPT-2314	POWER TRANSFORMER
46E 8	1	171003	LUOP ANT ANT. HOLDER
45E 9	1	L4-75	ANT. HOLDER
MI SCELL ANE DU			
16.1	1	N215G5-1 N45714-1	FRONT PANEL SUB PANEL(L)
18.5	1	N31115-1	SUB PANEL(R)
1 M 5	2	6K4005A-BK1 N44092-BK1	HANDLE SPACER
1 1 6	1	N31117	FRONT GLASS
1# 9 1#10	1 2	N31113-1 N45710-1	DISPLAY GLASS
1412	1	N31117-T-BK1	FUNCTION GLASS
1#13 1#14	1	K44260-T-8K1 N45522	KN06 33 KN08 12
1115	2	N4566E	LED CHIP TACT BUTTON
1416 1817	1	145663-2	TACT BUTTON TACT BUTTON
1 11 9	1	N45663-4 N45686	TACTSUTION TACT BUTTON
9 th f	5	N31115	TACT BUTTON TACT BUTTON.7
1 1 1 2 1	6	N45646A N42797-6K1	PUSH BUTTON DECURATION SCREW
1 125	1	V51812	CABINET
1 425	1	W21919A-18	REAR PANEL
1 H27	i,	NO.7134	90179% 80AR0 FOOT
1 #29	1	110505-1	FRONT BASE
2 H 2	1	N21803 N31125	CENTER HETAL . 1
24 4	1	N31124	CENTER METAL.2 SIDE METAL.R
24 5 28 7	1 2	N31123	SIDE HETAL.L
2#11	i	N42727A N45711	FITTINGS (P.T.) VR. METAL-1
ZM12	1	445713	VR HETAL.2
2413 2413	1	N45712 N31133	PC3 METAL, 2 INSULATION SHEET
2416	2	N45813	SHEET, SHIELD
5419 5419	1	N45H11 H457896	RT CUSHION
2M20	1	1145797	SPACER
2M21 2M24	1	N45774 BP5-304	CUSTON
2 M 2 5	1	M21803	LED SPACER LED HOLDER
2425	4	N408496	SHAFT TAPE
37 1	1	N41313-1	POLYETHYLENE BAG POLYETHYLENE BAG (ACCESSORIES)
3H 2 3H 3	1	N40487 N21373A-1	POLYETHYLENE BAG (ACCESSORIES) PACKING PAD
30 3	1	N21944-2A	INER CARTON
3411 3412	1	H31063	PACKING PAD(FRONT) PACKING PAD(TOP)
3×14	1	04-966A	INSTRUCTION MANUAL
3M16,M17	2	N45335 N42235	LABEL SERIAL NO.
3119	1	1144043	SHEET, SERIAL NUMBER LABEL, SAIPOS(LIGHTNING FLASH)
3M22 3M24	1	N41939	CHOCLE PUSE
3425	1	N31136 K31137	WARRANTY R LIMITED WARRANTY
3/127	ĩ	N45775	LABEL, PRO-LOGIC
3427	1	N45487	LABEL, UL
44 1~# 3	?	T3P+25X06-Y	TAP SCREN By PAN HEAD, Y
4M11-M19	27	T95+37X06-Y T36+37X06-6	TAP SCREW B. FLAT HEAD, Y TAP SCREW B. BIND HEAD, B
L			The or other senor o

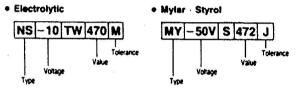
REF. NO.	C'TY	CARVER PART NO	• DESCRIPTION
5H 5-H10+ H12-H10+ M16	23	T55+30X08-8	TAP SCREW S. BIND HEAD. 3
5H21~H30	17	TSP+30x06-8	TAP SCREW 5'PAN HEAU+8
58 1-8 7	14	TSC+30x0a-Y	TAP SCREW S. WASHER FACED.
SHIZ	1	TSC+39X16-Y	TAP SCREW STRASHER FACEDTY
5715	S	T33+40X1U-8	TAP SCREW STRING HEADTB
SMIG-MZG	10	T58+43A10-E	TAP SCREW S. BIND HEAD. 3
6M25	4	55P52+40X10-6	SCREW-SP ASSY, PAN HEAD, 3
5828	1	ZTWX30-Y	TOOTHED LOCK WACHER
37217	1	PET41-0105	SHAP PLATE
45E L	1	ACC-02274-4EE1	LINE COND
465 3	1	SR-411-4	CORD STOPPER
45E 5	1	YKD41-0064	GROUND TERMINAL
45E 6	1	T4-367	ONE TOUCH COLLAR
45E10	1	TANT-JOA	FM ANTENNA (CORD)
45E11	1	YAE21-0061D	MATCHING AGAPTOR
46512	3	KGL5-1631	LOCKING SUPPORT
45 = 14	1	RC-CT17	REMOTE CONTROL TRANSMITTER
40E15	ī	UN-3-2	BATTERY
46E2G+E21	2	R-024-12	CABLE ASS'Y

REF. NO.	9.11	CARVER PART	NO.	DESCRIPTION
10P 7	1			TUNER P.C. BOARD
25P23	1			MICON SURROUND P.C. BOARD
25P24	1			MUTOR VOLUME P.C. BOARD
25925	1			FRONT SHITCH P.C. BDARD
33925	1			FUNCTION & EG P.C. BGARD
33P26	1			AUDIO SWITCH P.C. BOARD
33P27	1			OFADS. 2.4 HOTING FAUNC
33P23	ĩ			HEADPHONE P. C. SOARD
33929	1			VOLUME LED P.C. BOARD
35P 3	1		19	DISPLAY & DTS P.C. BOARD
44P 4	1			POWER SUPPLY P.C.BOARD
44P 5	1			VIDEO P.C. BOARS
44P 6	1			TONE CONTROL P.C. BOARD

#### **DIFFERENT PARTS LIST**

Ref.No.	Description	CT-17(UL)	CT-17(EX)
TUNER P.C.BO	DARD		
C055,056	NYLAR CAPACITOR	MY-50VU102J	-
C055,056	CERAMIC CAPACITOR		HE11SJSL681J
C073,074	CERAMIC CAPACITOR	-	HE80SJSL331J
SW051	SLIDE SWITCH	-	SW-5220157
POWER SUPPL'	Y P.C.BOARD		
S¥900,901	SWITCH	-	SW-5220218
DISPLAY & D'	TS P.C.BOARD		
D453,454	DIODE	-	GMA01
SW459	SLIDE SWITCH	_	SW-5121298

#### **Capacitors Description**

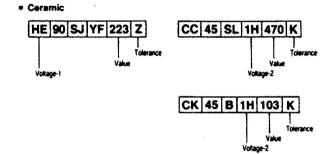


• Electrolytic

Type		Vol	age	V	alue	Tolerance		
LL: NP: NS:	Low Leak Non-Pole Standard	-50:	50V		0.47µF 4.7µF 47µF 470µF 4700µF	M:	± 10% ± 20%	

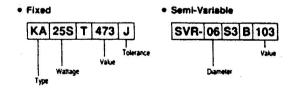
• Mylar - Styrol

Type		Voltage		1	/alue	Tolerance		
MY:	Mylar	-25V:	25V	4R7:	4.7pF	G:	±2%	
ST:	Styrol	125V:	125V	470:	47pF	J:	±5%	
		-63T:	63V	471:	470pF	K:	±10%	
				472:	4700pF	M:	±20%	
				473:	0.047µF			
		1		474:	0.47µF			
				(1000pF	$=0.001 \mu F$			



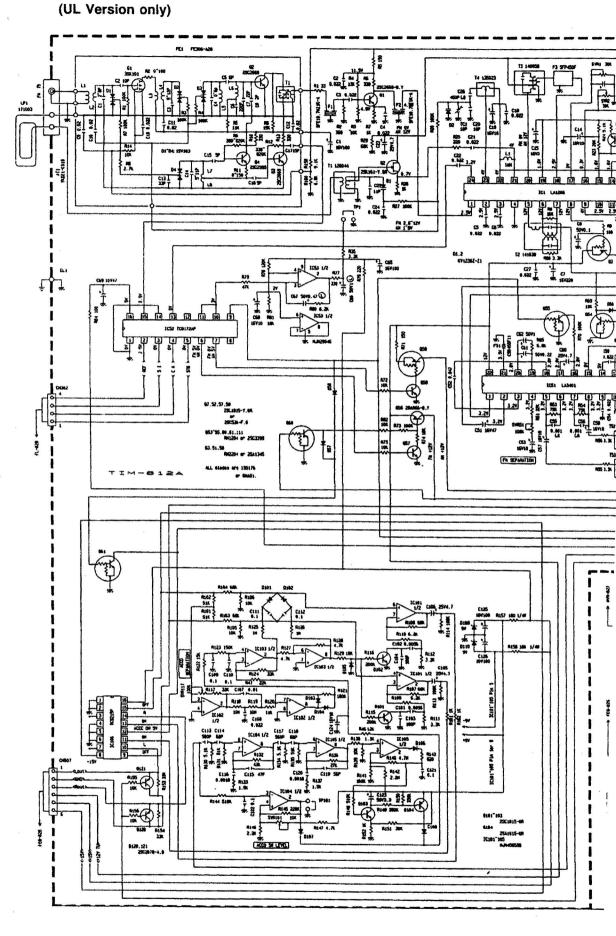
Voltage-1		Voltage-2		١ ١	/alue	Tolerance		
HC:	25V	1E:	25V	4R7:	4.7pF	C:	±0.25pF	
HE:	50V	1H:	50V	470:	47pF	D:	±0.5pF	
H:	100V	2H:	500V	471:	470pF	F:	±1pF	
HK:	250V			472:	4700pF	J:	±5%	
HM:	500V	1		473:	0.047µF	K:	±10%	
				474:	0.47µF	M:	±20%	
		l		(1000pF	≠0.001μF)	Z:	+80~-20%	

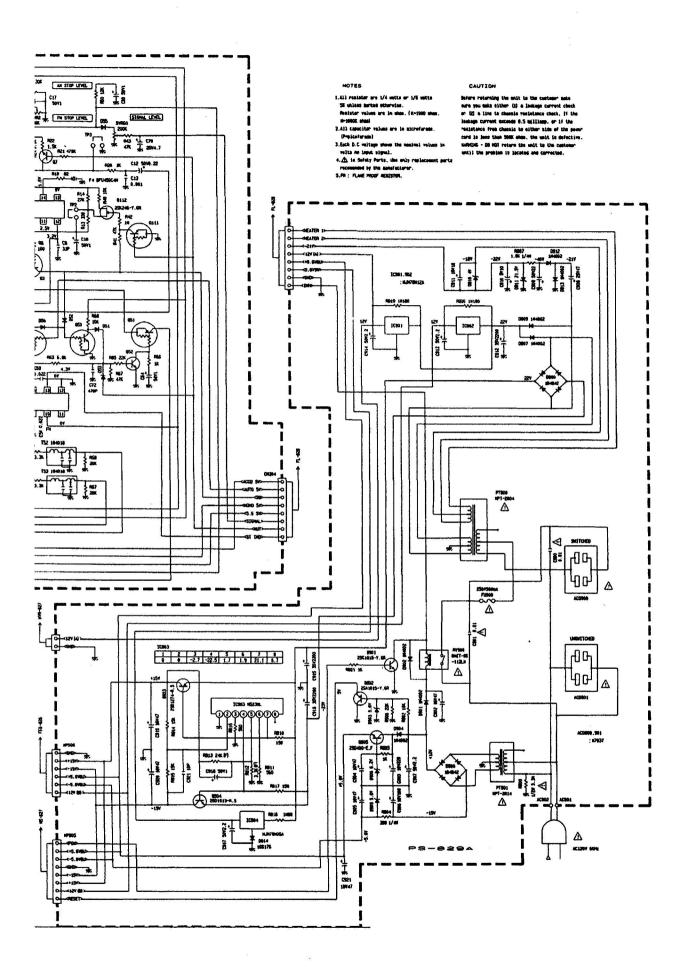
#### **Resistors Description**



Type		Wattage		Value		To	ierance	Diameter	
CE:	Cement Case	-2W:	2W	R47:	0.47Ω	M:	±20%	08:	84
FR:	Flame Proof	10W:	10W	4R7:	4.7Ω	K:	±10%	10:	100
KA:	Carbon	16S:	1/6W	470:	47Ω	J:	±5%	06:	6¢
MF:	Motal Film	20S:	1/5W	471:	470Ω	G:	±2%		
RF:	Fusible	25S:	1/4W	472:	4.7kΩ	F:	±1%		
SA:	Metal Oxide	505:	1/2W	473:	47kΩ	D:	±0.5%	ŀ	
		50X:	1/2W	474:	470kΩ			}	
		S3W:	3W	475:	4.7MΩ	1			

## SCHEMATIC DIAGRAMS





### (EX Version only)

