



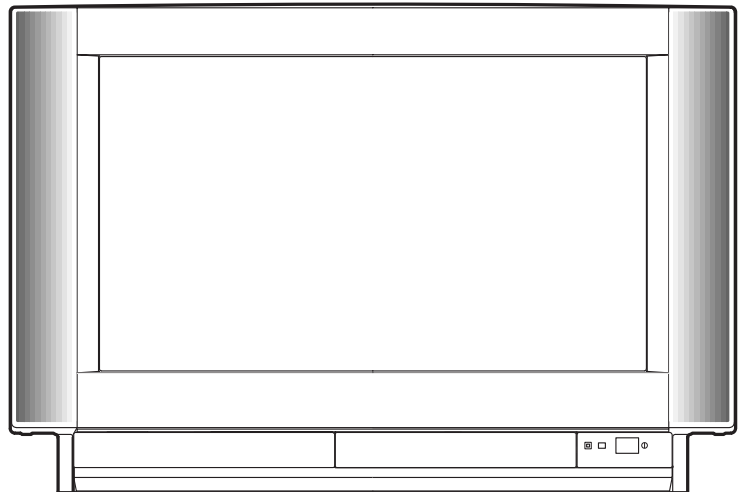
Colour Television Service Manual

CE28WN5-B

Model CE28WN5-B

Service Ref.No. CE28WN5-B-02

PRODUCT CODE: 111356800
SERVICE MANUAL SUPPLEMENT
Chassis No. EB6-A



SERVICE MANUAL SUPPLEMENT
THIS SUPPLEMENT SHOULD BE FILED WITH THE ORIGINAL SERVICE MANUAL FOR CE28WN5-B-00.

SERVICE MANUAL SUPPLEMENT
FOR ALL INFORMATION NOT CONTAINED IN THIS SUPPLEMENT PLEASE REFER TO THE ORIGINAL SERVICE MANUAL FOR CE28WN5-B-00. THIS SUPPLEMENT ONLY CONTAINS DIFFERENCES BETWEEN SERVICE REFERENCE NUMBERS.

Give complete "SERVICE REF. NO." for parts order or servicing, it is shown on the rating sheet on the cabinet back of the TV set.

Note
This TV receiver will not work properly in foreign countries where the television transmission system and power source differ from the design specifications. Refer to the specifications for the design specifications

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SAFETY PRECAUTION

- 1: An isolation transformer should be connected in the power line between the receiver and the AC line when a service is performed on the primary of the converter transformer of the set.
- 2: Comply with all caution and safety-related notes provided on the cabinet back, inside the cabinet, on the chassis or the picture tube.

- 3: When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as, control knobs, adjustment covers or shields, barriers, isolation resistor-capacitor networks etc. Before returning any television to the customer, the service technician must be sure that it is completely safe to operate without danger of electrical shock.

X-RADIATION PRECAUTION

The primary source of X-RADIATION in the television receiver is the picture tube. The picture tube is specially constructed to limit X-RADIATION emissions. For continued X-RADIATION protection, the replacement tube must be the same type as the original including suffix letter. Excessive high voltage may produce potentially hazardous X-RADIATION. To avoid such hazards, the high voltage must be maintained within specified limit. Refer to this service manual, high voltage adjustment for specific high voltage limit. If high voltage exceeds specified limits, take necessary corrective action. Carefully follow the instructions for +B1 volt power supply adjustment, and high voltage adjustment to maintain the high voltage within the specified limits.

PRODUCT SAFETY NOTICE

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by mark \triangle in the parts list and the schematic diagram designate components in which safety can be of special significance. It is particularly recommended that only parts designated on the parts list in this manual be used for component replacement designated by mark \triangle . No deviations from resistance wattage or voltage ratings may be made for replacement items designated by mark \triangle .

PRODUCT SPECIFICATIONS

Power source	AC 220~240V, 50Hz
Television system	System I
Colour system	PAL/NTSC4.43 (PAL/NTSC4.43/MTSC3.58 IN AV MODE)
Receiving channel	UHF: #21~69
Aerial input impedance	75ohm
AV terminal	
21 Pin SCART Terminal	AV1:CENELEC standard with RGB AV2:CENELEC standard with S-inputs AV3:RCA Terminal, Video and Audio (L/R)
Sound output(Music)	12 x 2
Dimensions(WxHxD mm)	779 x 524 x 511.5mm
Weight	32.5 Kg

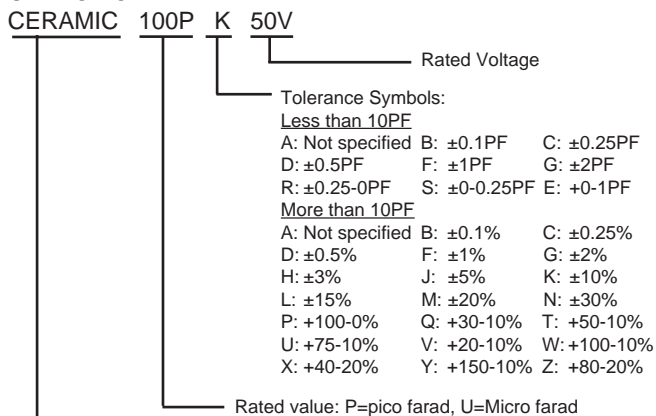
CHASSIS ELECTRICAL PARTS LIST

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by a Δ mark in this parts list and the circuit diagram show components whose value have special significance to product safety. It is particularly recommended that only parts specified on the following parts list be used for components replacement pointed out by the mark Δ .

Note: Parts order must contain Service Ref. No., Part No., and descriptions.

Read description in the Capacitor and Resistor as follows:

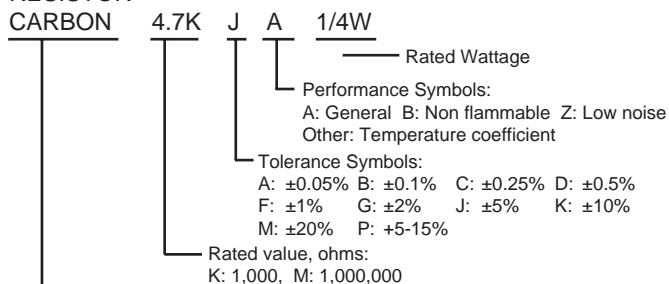
CAPACITOR



Material:

- CERAMICCeramic
- MT-PAPERMetallized Paper
- POLYESTERPolyester
- MT-POLYESTMetallized Polyester
- POLYPROPolypropylene
- MT-POLYPROMetallized Polypropylene
- COMPO FILMComposite film
- MT-COMPOMetallized Composite
- STYRENEStyrene
- TA-SOLIDTantalum Solid
- AL-SOLIDAluminium Solid
- ELECTElectrolytic
- NP-ELECTNon-polarised Electrolytic
- OS-SOLIDAluminium Solid with Organic Semiconductive Electrolytic
- DL-ELECTDouble Layered Electrolytic

RESISTOR



Material:

- CARBONCarbon
- MT-FILMMetal Film
- OXIDE-MTOxide Metal Film
- SOLIDComposition
- MT-GLAZEMetal Glaze
- WIRE WOUNDWire Wound
- CERAMIC RES.....Ceramic
- FUSIBLE RESFusible

Ref. No. Part No. Description

Service Ref. No. CE28WN5-B-02

Chassis construction

013C3HAL	ELECTRICAL PARTS
1AA0B10H051K0	ASSY,PWB,MAIN C3HALA
1AA0B10H047D0	ASSY,PWB,HARMONICS EB6WAB
1AA0B10H04300	ASSY,PWB,FRONT C2YH 0805
1AA0B10E59200	ASSY,PWB,NICAM-SW C2HA
1AA0B10H05300	ASSY,PWB,RGB BIAS C3HAL
1AA0B10H043P0	ASSY,PWB,CRT C3HAL TRANS

1AA0B10H051K0 ASSY,PWB,MAIN C3HALA (DIFFERENCES)

CAPACITOR

C1042	403 207 0317	SMD 1MF GRM40Y5V105Z16PT
C1043	403 207 0317	SMD 1MF GRM40Y5V105Z16PT
C1044	403 207 0317	SMD 1MF GRM40Y5V105Z16PT
C1050	403 157 3611	CERAMIC 100P J 50V
C130	403 157 3116	CERAMIC 56P J 50V
C830		DELETED

DIODE

D1001	407 221 7116	ZENER D. UDZS- TE- 1712B
D1002	407 221 7116	ZENER D. UDZS- TE- 1712B
D1003	407 221 7116	ZENER D. UDZS- TE- 1712B
D1007	407 221 7116	ZENER D. UDZS- TE- 1712B
D1008	407 221 7116	ZENER D. UDZS- TE- 1712B
D1010	407 221 7116	ZENER D. UDZS- TE- 1712B
D1011	407 149 0817	DIODE 1SS355- TE- 17
D1012	407 149 0817	DIODE 1SS355- TE- 17
D1013	407 149 0817	DIODE 1SS355- TE- 17
D831	407 149 0817	DIODE 1SS355- TE- 17

INTERGRATED CIRCUITS

IC201	409 504 3300	IC TB1251CN VER 6.3
IC802	AAJQ0213H-	C2HAL VP/P 017C

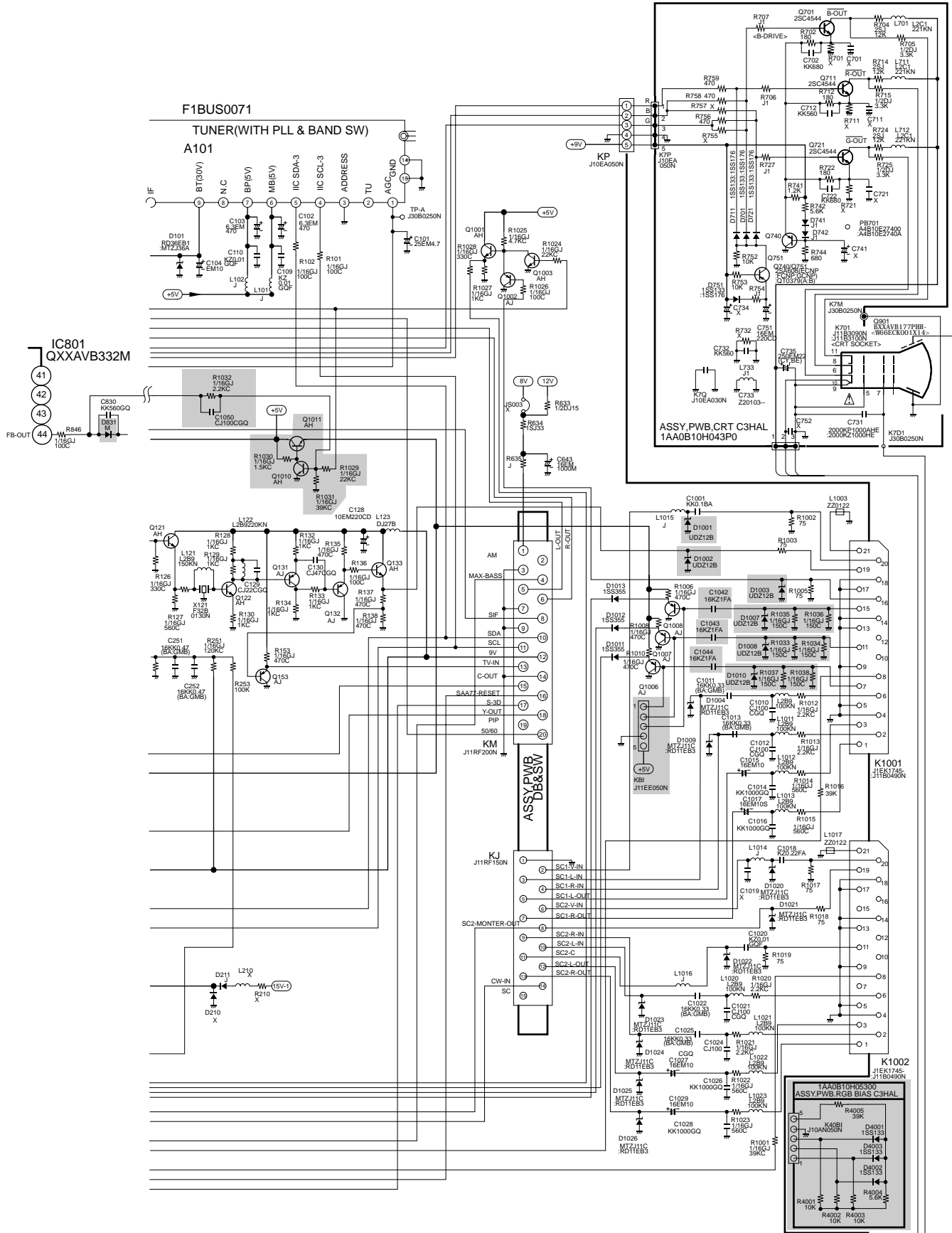
COIL

L122	645 003 8426	PEAKING COIL 27UH TAPED
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RESISTOR

R1007		DELETED
R1009		DELETED
R1011		DELETED
R1031	401 105 4710	MT- GLAZE 39K JA 1/16W
R1032	401 105 2914	MT- GLAZE 22K JA 1/16W
R1033	401 105 1412	MT- GLAZE 150 JA 1/16W
R1034	401 105 1412	MT- GLAZE 150 JA 1/16W
R1035	401 105 1412	MT- GLAZE 150 JA 1/16W
R1036	401 105 1412	MT- GLAZE 150 JA 1/16W
R1037	401 105 1412	MT- GLAZE 150 JA 1/16W
R1038	401 105 1412	MT- GLAZE 150 JA 1/16W
R847		DELETED
R848		DELETED
R849		DELETED

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
MISCELLANEOUS			R705	401 009 6622	CARBON 3.3K JA 1/2W
J119	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	R706	CUTTING WIRE	
J121	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	R707	CUTTING WIRE	
KBI	645 005 8448	SOCKET 5P	R708	DELETED	
1AA0B10H05300 ASSY,PWB,RGB BIAS C3HAL			R709	DELETED	
DIODE			R711	DELETED	
D4001	407 012 4416	DIODE 1SS133-T-77	R712	401 025 3827	CARBON 180 JA 1/6W
D4002	407 012 4416	DIODE 1SS133-T-77	R713	DELETED	
D4003	407 012 4416	DIODE 1SS133-T-77	△ R714	401 065 4604	OXIDE-MT 12K JA 2W
RESISTOR			R715	401 009 6622	CARBON 3.3K JA 1/2W
R4001	401 024 7430	CARBON 10K JA 1/6W	R718	DELETED	
R4002	401 024 7430	CARBON 10K JA 1/6W	R721	DELETED	
R4003	401 024 7430	CARBON 10K JA 1/6W	R722	401 025 3827	CARBON 180 JA 1/6W
R4004	401 027 2620	CARBON 5K6 JA 1/6W	△ R724	401 065 4604	OXIDE-MT 12K JA 2W
R4005	401 026 7428	CARBON 39K JA 1/6W 26MM	R725	401 009 6622	CARBON 3.3K JA 1/2W
MISCELLANEOUS			R727	401 025 1328	CARBON 150 JA 1/6W
K40BI	645 006 1905	HSG PLUG 5P S5B-XH-A JST	R741	401 024 9325	CARBON 1K2 JA 1/6W 26MM
1AA0B10H04300 ASSY,PWB,FRONT C2YH 0805 (DIFFERENCES)			R742	401 027 2620	CARBON 5K6 JA 1/6W
INTEGRATED CIRCUIT			R744	401 027 5225	CARBON 680 JA 1/6W
IC1304	409 203 2921	IC SN74LS123ML1	R752	401 024 7430	CARBON 10K JA 1/6W
1AA0B10H043P0 ASSY,PWB,CRT C3HAL TRANS (DIFFERENCES)			R753	401 024 7430	CARBON 10K JA 1/6W
CAPACITOR			R756	401 026 3925	CARBON 330 JA 1/6W 26MM
CR727TM	403 073 6413	CERAMIC 470P K 50V	R758	401 026 9620	CARBON 470 JA 1/6W 26MM
C702	403 074 8911	CERAMIC 680P K 50V	R759	401 026 9620	CARBON 470 JA 1/6W 26MM
C711	DELETED		MISCELLANEOUS		
C712	403 074 5712	CERAMIC 560P K 50V	K7D1	645 008 4058	TERMINAL PLUG
C718	DELETED		K7D2	DELETED	
C721	DELETED		K7M	645 008 4058	TERMINAL PLUG
C722	403 074 8911	CERAMIC 680P K 50V	K7M1	DELETED	
C731	403 077 2728	CERAMIC 1000P P 2K	K7M2	DELETED	
C732	403 074 5712	CERAMIC 560P K 50V			
C735	403 055 8401	ELECT 22U M 250V			
C751	403 200 6722	ELECT 220U M 16V			
DIODE					
D702	DELETED				
D703	DELETED				
D711	407 012 4416	DIODE 1SS133-T-77			
D751	407 012 4416	DIODE 1SS133-T-77			
INTEGRATED CIRCUIT					
IC701	DELETED				
IC701-1	DELETED				
COIL					
L701	645 007 9856	PEAKING COIL 220UH K			
L711	645 007 9856	PEAKING COIL 220UH K			
L712	645 007 9856	PEAKING COIL 220UH K			
L721	DELETED				
TRANSISTOR					
Q701	406 009 9509	TR 2SC4544			
Q711	406 009 9509	TR 2SC4544			
Q721	406 009 9509	TR 2SC4544			
Q740	406 007 1901	TR JC556A			
Q751	406 007 1901	TR JC556A			
RESISTOR					
R701	DELETED				
R702	401 025 3827	CARBON 180 JA 1/6W			
R703	DELETED				
△ R704	401 065 4604	OXIDE-MT 12K JA 2W			



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