

# Service Manual

## Color Television

**CHASSIS : CN-220F/NS**

**Model :**

CN-220F	DTQ-21U6SC	U.S.A,Canada,Mexico
	DTQ-21U6SS	
	DTQ-21U8SC	
	DTQ-21U8SS	
	DTQ-21U6SSP	Chile,Peru,Philippines
CN-220NS	DTQ-14D7SS	U.S.A,Canada,Mexico
	DTQ-20D7SS	
	DTQ-21D7SS	
	DTQ-14D7SSP	
	DTQ-20D7SSP	Chile,Peru,Philippines
	DTQ-21D7SSP	
	DTQ-20S1SSF	

### ■ Specification

Model Items	DTQ-21U6SC DTQ-21U6SS DTQ-21U8SC DTQ-21U8SS	DTQ-21U6SSP	DTQ-14D7SS DTQ-20D7SS DTQ-21D7SS	DTQ-14D7SSP DTQ-20D7SSP DTQ-21D7SSP	DTQ-20S1SSF
TV Standard	NTSC-M				
Power Input	120V, 60Hz	220V, 50/60Hz	120V, 50/60Hz	220V, 50/60Hz	80-275V, 50/60Hz
Power Consumption	92W	95W	DTQ-14D7SS : 67W DTQ-20D7SS : 76W DTQ-21D7SS : 88W	DTQ-14D7SSP : 69W DTQ-20D7SSP : 78W DTQ-21D7SSP : 90W	78W
Tuning System	Frequency Synthesizer(FS)Tuning System				
Tuning Ranges	TV VHF(L) : CH2 - CH6 UHF(H) : CH7-CH13 UHF : CH14-CH69 CATV VHF(L) : 5A, A-B, A-5-A-1 CH2 - CH6 VHF(H) : C-W+11 CH7 - CH13 UHF : W+12-W+84				
Sound Output	1.8W+1.8W	3W+3W	3W+3W	5W+5W	7W+7W
Speaker	8 ohm 5W×2EA		8 ohm 7.5W 2EA×		
Antenna Input Impedance	75 ohm Unbalanced				
Auxiliary Input Terminal	Font: Video, Audio(R,L) Rear: Video, Audio(R,L)				
Auxiliary Output Terminal	Rear: Video, Audio(R,L), Front: Earphone				
Intermediate Frequencies	Picture IF Carrier Frequency : 45.75MHz Sound IF Carrier Frequency : 41.25MHz Color Sub-Carrier Frequency : 3.579545MHz				
Remote Control	R-43A07				
Special Function	1) ICON MENU TYPE 2) STEREO / SAP 3) 3-LANGUAGE OSD 4) WITH • V-CHIP 5) CH • LABEL				

#### Caution

: In this Manual, some parts can be changed for improving. their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List)in Service Information Center(<http://svc.dwe.co.kr>)

**DAEWOO ELECTRONICS Corp.**

<http://svc.dwe.co.kr>

June. 2003

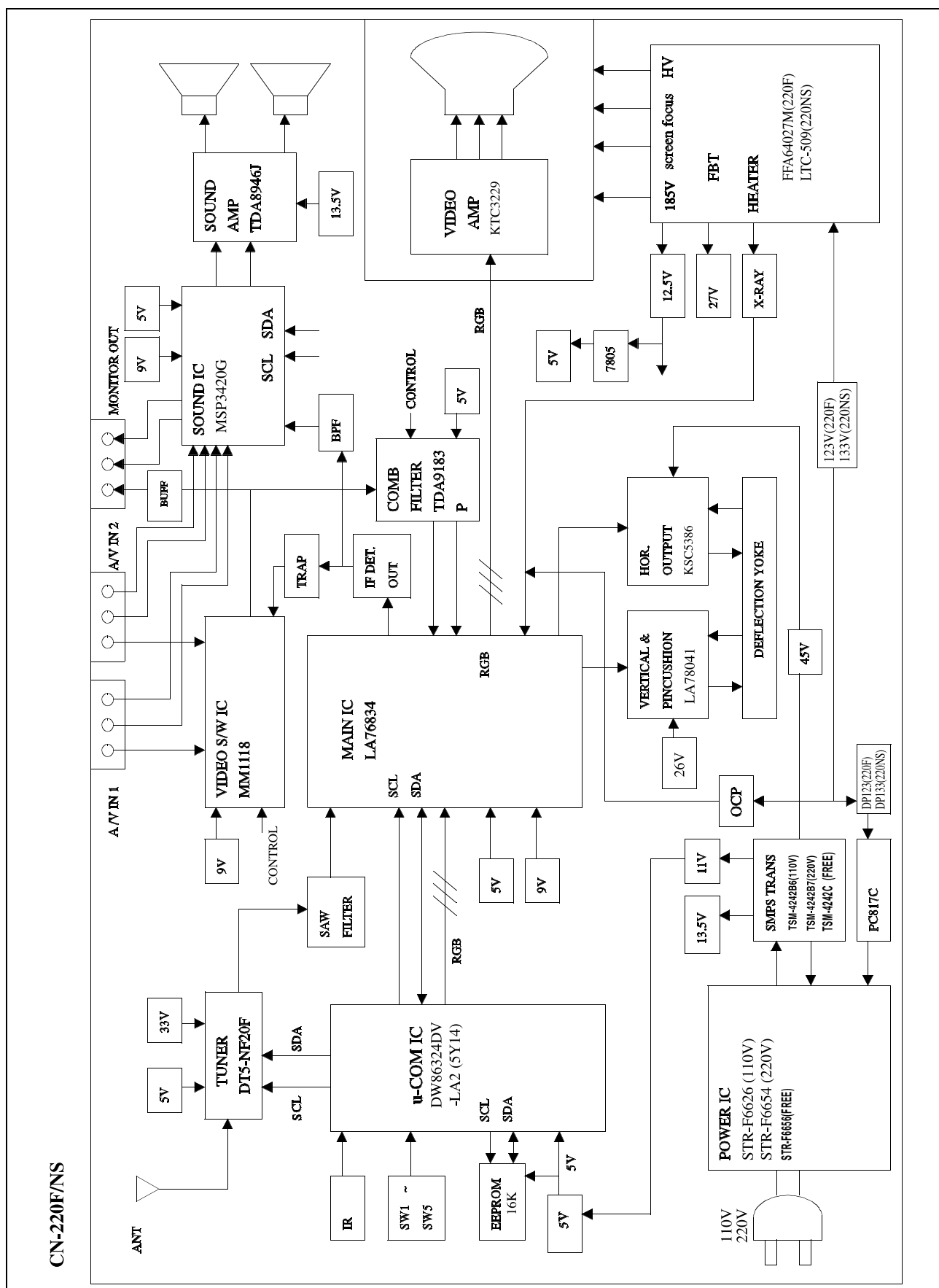
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# SPECIFICATIONS

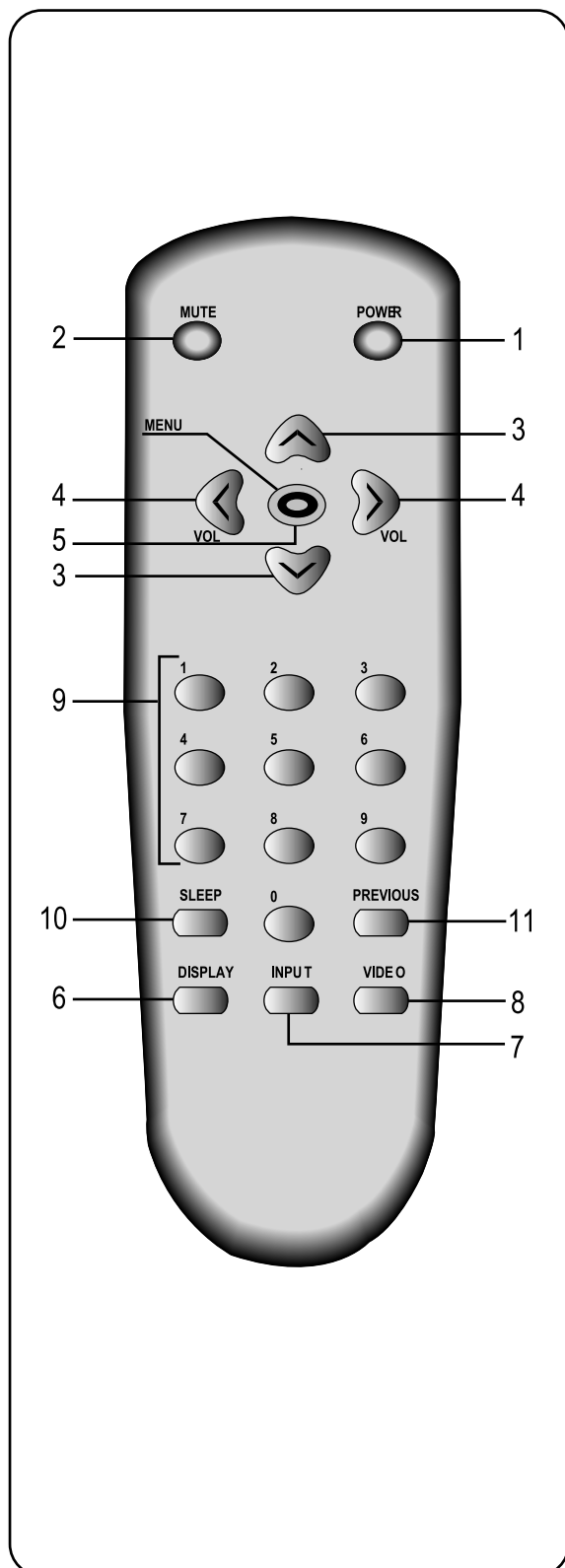
<div>MODEL</div> <div>ITEMS</div>	DTQ-21U6SC DTQ-21U6SS DTQ-21U8SC DTQ-21U8SS	DTQ-21U6SSP	DTQ-14D7SS DTQ-20D7SS DTQ-21D7SS	DTQ-14D7SSP DTQ-20D7SSP DTQ-21D7SSP	DTQ-20S1SSF
TV STANDARD	NTSC-M				
POWER INPUT	120V, 60Hz	220V, 50/60Hz	120V, 50/60Hz	220V, 50/60Hz	80-275V, 50/60Hz
POWER CONSUMPTION	92W	95W	DTQ-14D7SS : 67W DTQ-20D7SS : 76W DTQ-21D7SS : 88W	DTQ-14D7SSP : 69W DTQ-20D7SSP : 78W DTQ-21D7SSP : 90W	<b>78W</b>
TUNING SYSTEM	Frequency Synthesizer ( FS ) Tuning System				
TUNING RANGES	TV            VHF(L) : CH2 ~ CH6 UHF(H) : CH7 ~ CH13 UHF        : CH14 ~CH69 CATV        VHF(L) : 5A, A,B, A-5 -A-1 CH2 ~ CH6 VHF(H) : C-W +11 CH7 - CH13 UHF : W +12- W+84				
SOUND OUTPUT	1.8 W+ 1.8 W	3 W+3 W	3 W+3 W	5 W+5 W	7 W+7 W
SPEAKER	8 ohm 5W * 2EA		8 ohm 7.5W * 2EA		8 ohm 12W * 2EA
ANTENNA INPUT IMPEDANCE	75 ohm Unbalanced				
AUXILIARY INPUT TERMINAL	FRONT : VIDEO, AUDIO(R,L) REAR : VIDEO , AUDIO(R,L)				
AUXILIARY OUTPUT TERMINAL	REAR : VIDEO, AUDIO(R,L), Front: Earphone				
INTERMEDIATE FREQUENCIES	Picture IF Carrier Frequency : 45.75 MHz Sound IF Carrier Frequency : 41.25 MHz Color Sub-Carrier Frequency : 3.579545 MHz				
REMOTE CONTROL	R-43A07				
SPECIAL FUNCTIONS	1) ICON MENU TYPE				

# CIRCUIT BLOCK DIAGRAM



## ALIGNMENT INSTRUCTION

### Your Remote Control(R-43A07)



1. POWER  
use this button to turn your TV on or off.
2. MUTE  
Use to turn the TV's sound on and off.
3. ▼CH▲  
Use these buttons to change your TV's volume, to activate selections in the menu system.
4. ◀VOL▶  
Use these buttons to change your TV's volume, to activate selections in the menu system, or to change audio and video settings.
5. MENU  
Use this button to turn the TV's menu system on and off.
6. DISPLAY  
Use this button to display the channel number and status.
7. INPUT  
Use this button to select the TV's signal source.
8. VIDEO  
Use this button to display video adjustment.
9. 0-9  
Use these buttons to change channels.
10. SLEEP  
Use this button to program the TV to turn off after a certain time.
11. PREVIOUS  
Use this button to return to the previous channel you were watching.

## 1. SERVICE MODE ADJUSTMENTS

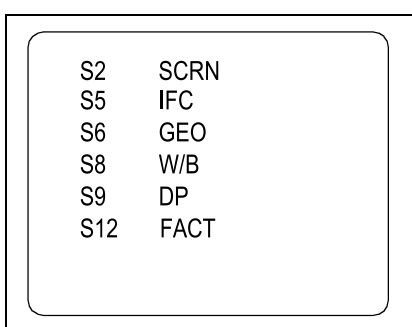
Follow the steps below whenever service adjustment is required. See Table- A and Table- B to determine if service adjustments are required.

### 1) How to enter the service mode using the user remote control.

- Turn the set on.
- Direct the remote control to the reception window of TV.
- Push buttons of remote control in sequence as follows.

**1 → MUTE → DISPLAY → MUTE**

- Then, the screen will appear as follows.



- Using the channel up or channel down button, select the item you wish to adjust.  
(The color of selected item turns into the red.)
- Press the volume up or down button to enter in the service mode you wish to adjust.

### 2) How to memorize the adjusted values in the service mode.

- Must press **DISPLAY** button the state which the screen is displaying each of service menus after all adjustments are completed each of all service menu.

**Table-A : Adjust the values of service mode when a part is replaced.**

PART REPLACED	ADJUSTMENT		NOTES
	NECESSARY	UNNECESSARY	
I701 (U-COM)		O	Data is stored in I702.
I101 (MAIN)		O	
I70 2 (EEPROM)	O		Initial setting values are written from I701. ADJUSTING ITEMS  S5 : RFAGCD S6 : H.PHASE/V.POSI/V.SIZE S8 : RD/GD/BD/RB/GB/BB S9 Subbrightness
CRT	O		Adjust items related to picture tube only.(White Balance adjustment)

## ALIGNMENT INSTRUCTIONS

MODE	ADJUSTMENT	MAX	DATA INITIAL	REMARKS
SVC2	Screen Adjustment			
SVC5	VIDEO LEVEL	7	7	
	RF AGC DELAY	63	10	Align RF AGC threshold
	FM LEVEL	31	20	
	AGC POINT		3.75	Select AGC reference voltage
SVC6	H.PHASE	31	15	Align sync flyback pulse, using internal cross pattern(s11)
	H.SIZE	63	32	Fixed
	P.CUSHION	63	32	Fixed
	V.POSI	63	30	Align Vertical DC Bias, using internal cross pattern(s11)
	V.SIZE	127	35	Align Vertical Amplitude, using internal cross pattern(s11)
	V.LIN	31	12	Align Vertical Linearity, using internal cross pattern(s11)
	V.S	31	14 (8)	( ) is 20 inch default value
	TILT	63	38	Fixed
	TOP.C	15	8	Fixed
	BOT.C	15	8	Fixed
	V.SIZE.C	7	7	Fixed
	ABL.POINT	7	0	
	BK.LEVEL	3	3	
	BK.START	3	1	
SVC7	BRI.STOP	1	0	
	Y.CORING	1	0	
	PRE.SHOOT	3	3	
	DC.REST	3	3	
	W.PEAK	1	1	
	FRESH	1	0	
	OSD.GAIN	3	0	
	OSD.GRAY	1	0	
	OSD.SW	1	0	
	HT.SW	1	1	
	HT.LEVEL	3	0	
	C.BPF	1	0	
	C.KILL	7	0	
	RB.ANGLE	15	0	
SVC7-2	G.ANGLE	1	0	
	C.EXT	1	1 (0)	( ) is 220NS default value
	FILTER	7	(1)	( ) is 220NS default value
	TRAP.TEST	7	0	
	CORING.GN	3	3	
	H.SIZE.CP	7	4	
	R.DRIVE	127	65	
	G.DRIVE	15	10	
	B.DRIVE	127	75	
SVC8	R.BIAS	255	127	
	G.BIAS	255	127	
	B.BIAS	255	127	
	SCR R-BIAS	255	0	
	SCR G-BIAS	255	127	
SVC-8	SCR B-BIAS	255	0	
	SCR R-DRIVE	127	64	
	SCR G-DRIVE	15	10	
	SCR B-DRIVE	127	64	
	SCR BRIGHT	127	80 (100)	( ) is 220NS default value
	SUB BRIGHTNESS	127	70	Align common RGB DC level
	CONTRAST	28	27	
SVC9	TINT	77	40 (32)	( ) is 220NS default value
	COLOR	27	15 (27)	( ) is 220NS default value
	SHARPNESS	13	13	
	FM/AM PRE	127	45 (55) [75]	( ) is SSPand [ ] is SSF default value.
	SCART PRE	127	45 (55) [70]	( ) is SSPand [ ] is SSF default value.
	MONI VOL	127	60 (36) [70]	( ) is SSPand [ ] is SSF default value.
	H.B.R	7	4	
SVC10	H.B.L	7	5	
	H.BLK.SW	1	1	
	AFG&G	1	1	
	H.FREQ	63	36	
	V.SEP	1	0	
	V.COUNT	1	0	
SVC11	Internal Black			Display Internal Black Pattern
	Internal 100% White			Display Internal 100% White
	Internal 60% White			Display Internal 60% White
	Internal Cross Pattern			Display Internal Cross Pattern
SVC12	Forwarding Mode			Factory Initialization

## 2. ASSEMBLY ADJUSTMENTS

### 1) SCREEN ADJUSTMENT (S2)

- Enter the service mode and select service adjustment S2.
- You can see the one horizontal line on the screen.
- Adjust the Screen Control Volume (located on FBT) so that the horizontal line onscreen may be disappeared.
- Press the volume up or down button to exit in the screen adjustment mode.

#### CAUTION

IN THE SCREEN ADJUSTMENT MODE, DONT PRESS OTHER BUTTONS EXCEPT VOLUME UP OR DOWN BUTTON.

### 2) FOCUS ADJUSTMENT

- Turn in a local station and adjust the Focus Control knob (located on FBT) for best picture details at high light condition.

### 3) RF AGC DELAY ADJUSTMENT (S5)

- Receive a good local channel.
- Enter the service mode and select service adjustment S5.
- You can see the OSD as shown in below.

IF	CONTROL	
AUTO	RFAGC	START
VIDEO LEVEL		7
RF AGC DELAY		10
FM LEVEL		20
AGC POINT		3.75
A/D VALUE	:	DFH

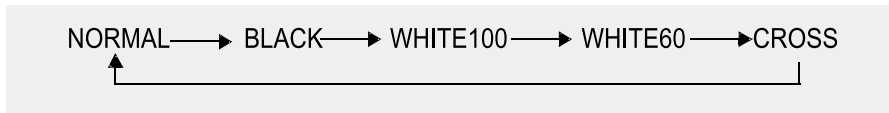
- Select RFAGCD item, press the volume up or down button until noise or beat in picture disappears.
- Press the DISPLAY button to memorize the data.



## ALIGNMENT INSTRUCTIONS

### 4) GEOMETRIC ADJUSTMENTS (S6)

- Enter the service mode and select service adjustment S11.
- Whenever you select the “S11” using the volume up or down button, the screen is changing like this.



- Using the volume up or down button, select internal cross pattern.
- Select service adjustment S6
- You can see the OSD as shown in below.

H. PHASE	15
H.SIZE	32
P. CUSHION	32
V. POSI	30
V. SIZE	35
V. LIN	12
V. S	14
TILT	38
TOP. C	8
BOT. C	8
V. SIZE. C	7

#### 4-1. Horizontal Position Adjustment

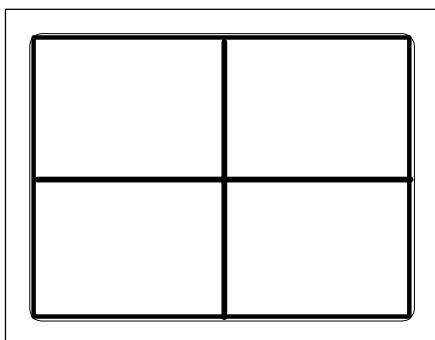
- Select H-CENTER item, adjust H-CENTER data value to obtain proper horizontal centering of the internal cross pattern at the left and right of the screen.

#### 4-2. Vertical Position Adjustment

- Select V-CENTER item, adjust V-CENTER data value to center the raster properly on the screen.

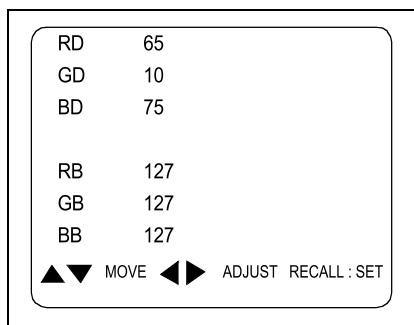
#### 4-3. Vertical Size Adjustment

- Select “V.SIZE” item, adjust “V.SIZE” data value to proper vertical size as follows.



**5) WHITE BALANCE ADJUSTMENT(S8)**

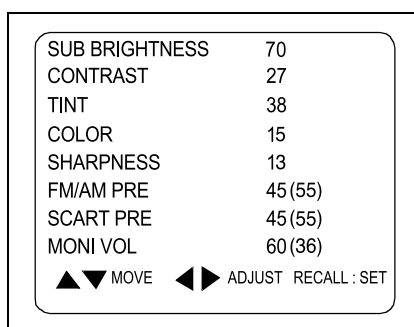
- Receive a good local channel.
- Enter the service mode and select service adjustment S8.
- You can see the OSD as shown in below.



- Using volume up or volume down, adjust service adjustment data of RD/GD/BD and RB/GB/BB until a good gray scale with normal whites is obtained.
- Press the DISPLAY button to memorize the data.

**6) DIGITAL PRESET(D.P) ADJUSTMENTS(S9)****SUBBRIGHTNESS ADJUSTMENT**

- Receive a good local channel.
- Enter the service mode and select service adjustment S9.
- You can see the OSD as shown in below.



- Select Subbrightness item, adjust Subbrightness data value to obtain normal brightness level.
- Press the DISPLAY button to memorize the data.

**CONTRAST**

- Fixed value = 27

**TINT**

- Fixed value = 40 (32) ; ( ) is CN-220NS default value

**COLOR**

- Fixed value = 15 (27) ; ( ) is CN-220NS default value

**7) FACTORY OUTGOING MODE (S12 : FACT)**

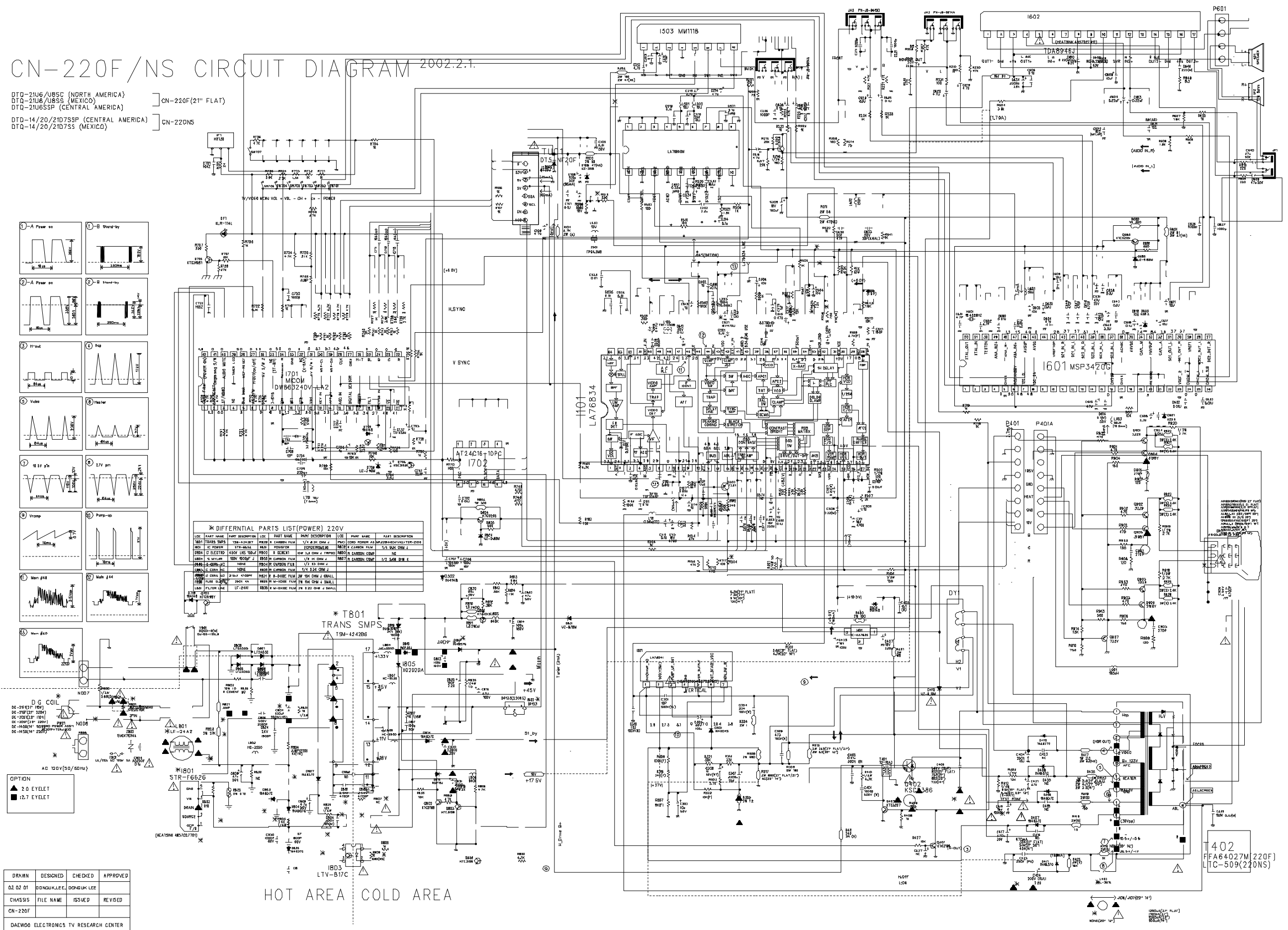
- If you select the S12, then the set becomes factory outgoing status.
- You can see the OSD "outgoing OK"

## SCHEMATIC DIAGRAM

CN-220F/NS CIRCUIT DIAGRAM 2002.2.1.

DTQ-21U6/U85C {NORTH AMERICA}  
DTQ-21U6/U85S {MEXICO}  
DTQ-21U6SSP {CENTRAL AMERICA} ] CN-220F (21" FLAT)

DTQ-14/20/21D7SSP {CENTRAL AMERICA}  
DTQ-14/20/21D7SS {MEXICO} ] CN-220NS



# ELECTRICAL PARTS LIST

**Caution** In this Manual, some parts can be changed for improving, their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Prats Price List) in Service information Center (<http://svc.dwe.co.kr>)

**CAUTION** “△” is a safety part, so it must be used the same part.  
“®” is a recommendable part for essential stock.

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
ZZ100	48B434A07	TRANSMITTER REMOCON	R-43A07 (AA)	®	40	2291050301	FLUX SOLVENT	IM-1000	
ZZ110	PTACPWJ885	ACCESSORY AS	DTQ-21U6SC		C405	CCYB2H103K	C CERA	500V B 0.01MF K	®
10	4850A02510	ANT ROD	S3BW216B (L=600 MM)		C409	CMYH3C822J	C MYLAR	1.6KV BUP 8200PF J	®
30	4850Q00810	BATTERY	R6P/LN		C423	CMYE2D334J	C MYLAR	200V PU 0.33MF J	®
40	4850A00250	TRANS ANT MATCHING	IMT-06		C803	CL1UC3104M	C LINE ACROSS	WORLD AC250V 0.1UF M R.47	△ ®
10000	48586054K1	MANUAL INSTRUCTION	DTM-2082CW		C804	CEYN2D331P	C ELECTRO	200V LHS 330MF	△ ®
M821	4858213800	BAG INSTRUCTION	L.D.P.E T0.05X250X400		C824	CBYB3D152K	C CERA SEMI	2KV BL(N) 1500PF K	®
ZZ120	PTBCSHJ885	COVER BACK AS	DTQ-21U6SC		D810	DRGP30J -	DIODE	RGP30J	®
M211	4852158703	COVER BACK	FR HIPS GY	△ ®	DF01	DKLR114L	LED	KLR114L	®
M781	4857817610	CLOTH BLACK	FELT 300X20X0.7		F801	5F1GB5021L	FUSE GLASS TUBE	CSA/UL 125V 5A	△ ®
ZZ130	PTPKCPJ885	PACKING AS	DTQ-21U6SC		I101	1LA76834	IC MAIN	LA76834	®
10	6520010100	STAPLE PIN	AUTO W65		I301	PTA2SW7912	HEAT SINK ASS'Y	1LA78041 + 7174300811	
M801	4858059100	BOX	DW-3		1	1LA78041	IC VERTICAL	LA78041	®
M811	4858196300	PAD	EPS 21U6		0000A	4857027912	HEAT SINK	AL EX	
M821	4858219100	BAG P.E	P.E FOAM T0.5X1300X1150		0000B	7174300811	SCREW TAPPTITE	TT2 RND 3X8 MFZN	
ZZ131	58G0000154	COIL DEGAUSSING	DC-21F1	△ ®	I401	1KA7805 -	IC REGULATOR	KA7805	®
ZZ132	48519A7110	CRT GROUND NET	2101F-1015-1P	®	I502	1TDA9183P-	IC COMBFILTER	TDA9183P	®
ZZ140	PTCACAJ885	CABINET AS	DTQ-21U6SC		I503	1MM1118 -	IC A/V SWITCH	MM1118	®
40	2TF01612CL	TAPE FILAMENT	0.15X12mmX55mm		I601	1MSP3420B8	IC SOUND PROCESSOR	MSP3420G-P0-B8	®
CRT1	4859634760	CRT	A51QDJ279X32 P38	△ ®	I602	PTB2SW7912	HEAT SINK ASS'Y	1TDA8946J- + 7174301011	
M201A	4856013300	SCREW CRT FIXING	30X80 BK		1	1TDA8946J-	IC AUDIO	TDA8946J	®
M201B	4856219502	WASHER RUBBER	CR T2.0 BLACK		0000A	4857027912	HEAT SINK	AL EX	
M201C	4856013302	SCREW CRT FIXING	30X190 BK		0000B	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN	
M211A	7172401412	SCREW TAPPTITE	TT2 TRS 4X14 MFZN BK		I701	1DW8632LA2	IC MICOM	DW863240V-LA2	®
M541	4855415800	SPEC PLATE	150ART P/E FILM (C/TV)		I702	1AT24C16PC	IC	AT24C16-10PC	®
M681	4856812001	TIE CABLE	NYLON66 DA100		I801	PTK2SW7701	HEAT SINK ASS'Y	1STRF6626- + 7174301011	
SP01A	7178301011	SCREW TAPPTITE	TT2 WAS 3X10 MFZN		1	1STRF6626-	IC POWER	STR-F6626	®
SP02A	7178301011	SCREW TAPPTITE	TT2 WAS 3X10 MFZN		0000A	4857027701	HEAT SINK	AL EX	
ZZ200	PTFMSJJ885	MASK FRONT AS	DTQ-21U6SC		0000B	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN	
M191	4851945003	BUTTON CTRL	4948703+5543401	△ ®	I802	1 DP 123	IC ERROR AMP	DP123	®
M191A	7178301011	SCREW TAPPTITE	TT2 WAS 3X10 MFZN		I803	1LTV817C	IC PHOTO COUPLER	LTV-817C	△ ®
M201	4852076903	MASK FRONT	FR HIPS GY	△ ®	I805	TX0202DA	THYRISTOR	X0202DA1BA2	®
M481	4854859303	BUTTON POWER	FR ABS GY 21U6	△ ®	IF01	1TS0P1238W	IC PREAMP	TS0P1238W11	®
M481A	4856716000	SPRING	SWPA PIE0.5		JA01	4859109250	JACK PIN BOARD	PH-JB-9614A	®
M561	4855617500	MARK BRAND	CU AU+ABS BK		JA02	4859109250	JACK PIN BOARD	PH-JB-9614A	®
M591	4855933401	DECO EYE	ABS BLUE	△ ®	JA03	4859108450	JACK PIN BOARD	YSC03P-4120-14A	®
M591B	7178301011	SCREW TAPPTITE	TT2 WAS 3X10 MFZN		JP01	4859102130	JACK EARPHONE	YSC-1537	®
ZZ202	PTSPWJ885	SPEAKER AS	DTQ-21U6SC		L105	58N0000042	COIL VCO	TRF-V008	®
P601A	4850704S31	CONNECTOR	YH025-04+35098+ULW=800	®	L403	58H0000055	COIL H-LINEARITY	TRL-361A	®
SP01	4858314910	SPEAKER	SP-33129A03	®	L801	5PLF24A2	FILTER LINE	LF-24A2	△ ®
SP02	4858314910	SPEAKER	SP-33129A03	®	M351	4853530901	HOLDER LED	P.P	
ZZ290	PTMPMSJ885	PCB MAIN MANUAL AS	DTQ-21U6SC		M683	4856812001	TIE CABLE	NYLON66 DA100	
10	2193102005	SOLDER BAR	SN:PB=63:47 S63S-1320		P401A	4850708N08	CONNECTOR	BIC-08T-25T+C-20T+ULW=400	®
30	2291050616	FLUX SOLDER	JS-64T3		PWC1	4859907810	CORD POWER AS	ME301P+TER=2100	△ ®

## ELECTRICAL PARTS LIST

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
Q402	PTD2SW7601	HEAT SINK ASS'Y	TKSC5386 + 7174300811		E003	4856310300	EYE LET	BSR T0.2 (R1.6)	
1	TKSC5386	TR	KSC5386	®	E004	4856310300	EYE LET	BSR T0.2 (R1.6)	
0000A	4857027601	HEAT SINK	AL EX		E005	4856310300	EYE LET	BSR T0.2 (R1.6)	
0000B	7174300811	SCREW TAPPTITE	TT2 RND 3X8 MFZN		E006	4856310300	EYE LET	BSR T0.2 (R1.6)	
Q901	TKTC3229	TR	KTC3229	®	E007	4856310300	EYE LET	BSR T0.2 (R1.6)	
Q902	TKTC3229	TR	KTC3229	®	E008	4856310300	EYE LET	BSR T0.2 (R1.6)	
Q903	TKTC3229	TR	KTC3229	®	E009	4856310600	EYE LET	BSR T0.2 (R2.3)	
R801	DD3R0M140	POSISTOR	ECPBD3R0M140	®	E010	4856310600	EYE LET	BSR T0.2 (R2.3)	
R802	RX10T109KS	R CEMENT	10W 1 OHM K TRIPOD SMALL	®	E012	4856310300	EYE LET	BSR T0.2 (R1.6)	
SCT01	4859303830	SOCKET CRT	ISHG94S	△ ®	E013	4856310600	EYE LET	BSR T0.2 (R2.3)	
SF101	5PTS5241P	FILTER SAW	TSF5241P	®	E014	4856310600	EYE LET	BSR T0.2 (R2.3)	
SW701	5S50101035	SW TACT	KPT-1112 1C-1P	®	E015	4856310300	EYE LET	BSR T0.2 (R1.6)	
T401	50D10A3 -	TRANS DRIVE	TD-10A3	®	E016	4856310600	EYE LET	BSR T0.2 (R2.3)	
T402	50H0000223	FBT	FFA64717M	△ ®	E017	4856310600	EYE LET	BSR T0.2 (R2.3)	
T402A	7178301212	SCREW TAPPTITE	TT2 WAS 3X12 MFZN BK		E018	4856310300	EYE LET	BSR T0.2 (R1.6)	
T801	50M4242B6-	TRANS SMPS	TSM-4242B6	△ ®	E019	4856310300	EYE LET	BSR T0.2 (R1.6)	
TU01	4859719130	TUNER VARACTOR	DT5-NF20F	®	E020	4856310300	EYE LET	BSR T0.2 (R1.6)	
X601	5XE18R432E	CRYSTAL QUARTZ	HC-49/U 18.43200MHZ 30PPM	®	E021	4856310300	EYE LET	BSR T0.2 (R1.6)	
X701	5XYR03276C	CRYSTAL QUARTZ	C-001R 32.768000KHZ 20PPM	®	E022	4856310300	EYE LET	BSR T0.2 (R1.6)	
Y801	5SC0101338	SW RELAY	DQ5D1-O(M)/GJ-SS-105LM	△ ®	E023	4856310300	EYE LET	BSR T0.2 (R1.6)	
Z501	5PYXT4R5MB	FILTER CERA	XT 4.5MB	®	E024	4856310600	EYE LET	BSR T0.2 (R2.3)	
Z802	DSVC471D14	VARISTOR	SVC471D14A	△ ®	E025	4856310600	EYE LET	BSR T0.2 (R2.3)	
ZZ200	PTMPJ0J885	PCB MAIN (RHU) AS	DTQ-21U6SC		E026	4856310300	EYE LET	BSR T0.2 (R1.6)	
C113	CEXF1C471V	C ELECTRO	16V RSS 470MF (10X12.5)TP	△ ®	E027	4856310300	EYE LET	BSR T0.2 (R1.6)	
C307	CEXF1E222V	C ELECTRO	25V RSS 2200MF (16X25) TP	△ ®	E028	4856310300	EYE LET	BSR T0.2 (R1.6)	
C311	CEXF1C471V	C ELECTRO	16V RSS 470MF (10X12.5)TP	△ ®	E029	4856310300	EYE LET	BSR T0.2 (R1.6)	
C404	CEXF2E100V	C ELECTRO	250V RSS 10MF (10X20) TP	△ ®	E030	4856310300	EYE LET	BSR T0.2 (R1.6)	
C417	CEXF1V471V	C ELECTRO	35V RSS 470MF (10X20) TP	△ ®	E031	4856310300	EYE LET	BSR T0.2 (R1.6)	
C419	CEXF1C102V	C ELECTRO	16V RSS 1000MF (10X20) TP	△ ®	E032	4856310300	EYE LET	BSR T0.2 (R1.6)	
C424	CEXA2D229E	C ELECTRO	200V RUL 2.2MF (10X16) TP	△ ®	E033	4856310300	EYE LET	BSR T0.2 (R1.6)	
C507	CMXM2A224J	C MYLAR	100V 0.22MF J		E034	4856310300	EYE LET	BSR T0.2 (R1.6)	
C508	CMXM2A224J	C MYLAR	100V 0.22MF J		E035	4856310600	EYE LET	BSR T0.2 (R2.3)	
C521	CEXF1C471V	C ELECTRO	16V RSS 470MF (10X12.5)TP	△ ®	E036	4856310600	EYE LET	BSR T0.2 (R2.3)	
C634	CEXF1E222V	C ELECTRO	25V RSS 2200MF (16X25) TP	△ ®	E037	4856310600	EYE LET	BSR T0.2 (R2.3)	
C810	CBXB3D102K	C CERA SEMI	2KV BL(N) 1000PF K (T)		E038	4856310600	EYE LET	BSR T0.2 (R2.3)	
C813	CEXF2C101V	C ELECTRO	160V RSS 100MF (16X25) TP	△ ®	E039	4856310600	EYE LET	BSR T0.2 (R2.3)	
C814	CEXF2C101V	C ELECTRO	160V RSS 100MF (16X25) TP	△ ®	E040	4856310600	EYE LET	BSR T0.2 (R2.3)	
C816	CEXF2A470V	C ELECTRO	100V RSS 47MF (10X16) TP	△ ®	E041	4856310600	EYE LET	BSR T0.2 (R2.3)	
C820	CEXF1E222V	C ELECTRO	25V RSS 2200MF (16X25) TP	△ ®	E042	4856310600	EYE LET	BSR T0.2 (R2.3)	
C831	CEXF1E222V	C ELECTRO	25V RSS 2200MF (16X25) TP	△ ®	E043	4856310300	EYE LET	BSR T0.2 (R1.6)	
C880	CH1BEE472M	C CERA AC	U/C/V 2.5KV 4700PF TP	△ ®	E044	4856310600	EYE LET	BSR T0.2 (R2.3)	
C881	CH1BEE472M	C CERA AC	U/C/V 2.5KV 4700PF TP	△ ®	E045	4856310600	EYE LET	BSR T0.2 (R2.3)	
C906	CH1BEE472M	C CERA AC	U/C/V 2.5KV 4700PF TP	®	E046	4856310300	EYE LET	BSR T0.2 (R1.6)	
ZZ200	PTMPJB885	PCB MAIN M-10 AS	DTQ-21U6SC		E047	4856310300	EYE LET	BSR T0.2 (R1.6)	
10	2TM18006BE	TAPE MASKING	6.2X500		E048	4856310300	EYE LET	BSR T0.2 (R1.6)	
E001	4856310300	EYE LET	BSR T0.2 (R1.6)		E049	4856310300	EYE LET	BSR T0.2 (R1.6)	
E002	4856310300	EYE LET	BSR T0.2 (R1.6)		E050	4856310300	EYE LET	BSR T0.2 (R1.6)	

## ELECTRICAL PARTS LIST

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
E051	4856310300	EYE LET	BSR T0.2 (R1.6)		R925	RS02Z243JS	R M-OXIDE FILM	2W 24K OHM J SMALL	
E052	4856310300	EYE LET	BSR T0.2 (R1.6)		R926	RS02Z243JS	R M-OXIDE FILM	2W 24K OHM J SMALL	
E053	4856310300	EYE LET	BSR T0.2 (R1.6)		ZZ200	PTMPJRJ885	PCB MAIN RADIAL AS	DTQ-21U6SC	
E054	4856310300	EYE LET	BSR T0.2 (R1.6)		C106	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
E055	4856310300	EYE LET	BSR T0.2 (R1.6)		C107	CEXF1H228V	C ELECTRO	50V RSS 0.22MF (5X11) TP	
E060	4856310600	EYE LET	BSR T0.2 (R2.3)		C108	CEXF1H101V	C ELECTRO	50V RSS 100MF (8X11.5) TP	
E061	4856310600	EYE LET	BSR T0.2 (R2.3)		C109	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
E062	4856310300	EYE LET	BSR T0.2 (R1.6)		C114	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
E063	4856310300	EYE LET	BSR T0.2 (R1.6)		C116	CMXM2A333J	C MYLAR	100V 0.033MF J (TP)	
E064	4856310600	EYE LET	BSR T0.2 (R2.3)		C117	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)	
N001	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)		C201	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP	
N002	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)		C202	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP	
N003	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)		C205	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
N004	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)		C210	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP	
N007	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)		C213	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
N008	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)		C214	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
P601	485923172S	CONN WAFER	YW025-04 (STICK)		C215	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
R102	RS02Z680JS	R M-OXIDE FILM	2W 68 OHM J SMALL		C216	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
R104	RS02Z472JS	R M-OXIDE FILM	2W 4.7K OHM J SMALL		C217	CEXF1E221V	C ELECTRO	25V RSS 220MF (8X11.5) TP	
R204	RS02Z181JS	R M-OXIDE FILM	2W 180 OHM J SMALL		C301	CXSL2H100D	C CERA	500V SL 10PF D (TAPPING)	
R304	RS02Z109JS	R M-OXIDE FILM	2W 1 OHM J SMALL		C303	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
R305	RS02Z129JS	R M-OXIDE FILM	2W 1.2 OHM J SMALL		C304	CMXM2A224J	C MYLAR	100V 0.22MF J	
R308	RS02Z681JS	R M-OXIDE FILM	2W 680 OHM J SMALL		C305	CEXF1H101V	C ELECTRO	50V RSS 100MF (8X11.5) TP	
R309	RS02Z181JS	R M-OXIDE FILM	2W 180 OHM J SMALL		C306	CEXD1H109Q	C ELECTRO	50V RT 1MF (6.3X11) TP	
R315	RS02Z241JS	R M-OXIDE FILM	2W 240 OHM J SMALL		C308	CMXM2A153J	C MYLAR	100V 0.015MF J (TP)	
R317	RS02Z681JS	R M-OXIDE FILM	2W 680 OHM J SMALL		C309	CMXM2A473J	C MYLAR	100V 0.047MF J (TP)	
R401	RS02Z120JS	R M-OXIDE FILM	2W 12 OHM J SMALL		C310	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)	
R411	RS02Z241JS	R M-OXIDE FILM	2W 240 OHM J SMALL		C401	CCXB2H102K	C CERA	500V B 1000PF K (TAPPING)	
R415	RS02Z302JS	R M-OXIDE FILM	2W 3K OHM J SMALL		C402	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)	
R417	RS01Z229J-	R M-OXIDE FILM	1W 2.2 OHM J (TAPPING)		C421	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP	
R418	RS02Z109JS	R M-OXIDE FILM	2W 1 OHM J SMALL		C429	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)	
R419	RS02Z109JS	R M-OXIDE FILM	2W 1 OHM J SMALL		C433	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
R420	RS01Z249J-	R M-OXIDE FILM	1W 2.4 OHM J (TAPPING)		C437	CEXF1C221V	C ELECTRO	16V RSS 220MF (8X11.5) TP	
R425	RS02Z163JS	R M-OXIDE FILM	2W 16K OHM J SMALL		C501	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP	
R450	RS02Z101JS	R M-OXIDE FILM	2W 100 OHM J SMALL		C502	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
R511	RS02Z560JS	R M-OXIDE FILM	2W 56 OHM J SMALL		C503	CEXF1C221V	C ELECTRO	16V RSS 220MF (8X11.5) TP	
R601	RS02Z910JS	R M-OXIDE FILM	2W 91 OHM J SMALL		C504	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
R680	RS01Z331J-	R M-OXIDE FILM	1W 330 OHM J (TAPPING)		C505	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
R810	RS02Z109JS	R M-OXIDE FILM	2W 1 OHM J SMALL		C506	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
R811	RS02Z109JS	R M-OXIDE FILM	2W 1 OHM J SMALL		C509	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
R823	RS02Z273JS	R M-OXIDE FILM	2W 27K OHM J SMALL		C510	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
R824	RS01Z331J-	R M-OXIDE FILM	1W 330 OHM J (TAPPING)		C511	CMXM2A153J	C MYLAR	100V 0.015MF J (TP)	
R825	RF02Z128J-	R FUSIBLE	2W 0.12 OHM J (TAPPING)	®	C512	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP	
R921	RS02Z243JS	R M-OXIDE FILM	2W 24K OHM J SMALL		C513	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
R922	RS02Z243JS	R M-OXIDE FILM	2W 24K OHM J SMALL		C515	CEXF1H478V	C ELECTRO	50V RSS 0.47MF (5X11) TP	
R923	RS02Z243JS	R M-OXIDE FILM	2W 24K OHM J SMALL		C517	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)	
R924	RS02Z243JS	R M-OXIDE FILM	2W 24K OHM J SMALL		C518	CEXF1H478V	C ELECTRO	50V RSS 0.47MF (5X11) TP	

# ELECTRICAL PARTS LIST

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
C570	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP		Q203	TKSA733CY-	TR	KSA733CY (TP)	
C603	CEXF1H228V	C ELECTRO	50V RSS 0.22MF (5X11) TP		Q205	TKTC3198Y-	TR	KTC3198Y	
C605	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		Q403	TKTC3207	TR	KTC3207 (TP)	
C606	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)		Q407	TKTC3198Y-	TR	KTC3198Y	
C607	CMXL1J224J	C MYLAR	63V MEU 0.22MF J (TP)		Q680	TKTC3205Y-	TR	KTC3205Y (TP)	®
C608	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP		Q703	TKTC3198Y-	TR	KTC3198Y	
C609	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		Q704	TKSA733CY-	TR	KSA733CY (TP)	
C610	CMXL1J224J	C MYLAR	63V MEU 0.22MF J (TP)		Q705	TKTC3198Y-	TR	KTC3198Y	
C611	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		Q706	TKTC3198Y-	TR	KTC3198Y	
C613	CEXF1H228V	C ELECTRO	50V RSS 0.22MF (5X11) TP		Q801	TKSA1013Y-	TR	KSA1013Y (TP)	
C614	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)		Q802	TKTC3198Y-	TR	KTC3198Y	
C615	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP		Q803	TKTC3198Y-	TR	KTC3198Y	
C616	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		Q806	TKTC3198Y-	TR	KTC3198Y	
C617	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		Q824	TKTC3205Y-	TR	KTC3205Y (TP)	®
C619	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP		Q904	TKTC3198Y-	TR	KTC3198Y	
C620	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP		Q905	TKTC3198Y-	TR	KTC3198Y	
C621	CMXM2A152J	C MYLAR	100V 1500PF J (TP)		Q906	TKTC3198Y-	TR	KTC3198Y	
C622	CMXM2A152J	C MYLAR	100V 1500PF J (TP)		Q907	TKSA733CY-	TR	KSA733CY (TP)	
C625	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP		SW702	5S50101090	SW TACT	THVH472GCA	
C629	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP		SW703	5S50101090	SW TACT	THVH472GCA	
C631	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP		SW704	5S50101090	SW TACT	THVH472GCA	
C636	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP		SW705	5S50101090	SW TACT	THVH472GCA	
C637	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP		SW706	5S50101090	SW TACT	THVH472GCA	
C639	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP		SW707	5S50101090	SW TACT	THVH472GCA	
C640	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP		X501	5XEX3R579C	CRYSTAL QUARTZ	HC-49U 3.579545M (TP)	®
C642	CEXF1H339V	C ELECTRO	50V RSS 3.3MF (5X11) TP		ZZ200	PTMPJAJ885	PCB MAIN AXIAL AS	DTQ-21U6SC	
C649	CMXM2A223J	C MYLAR	100V 0.022MF J TP		10	2TM14006LB	TAPE MASKING	3M #232 6.0X2000M	
C669	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		20	2TM10006LB	TAPE MASKING	3M #232-MAP-C 6.2X2000M	
C703	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP		A001	4859815691	PCB MAIN	330X246	△ ®
C704	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP		C103	CCZF1H103Z	C CERA	50V F 0.01MF Z	
C705	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP		C111	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
C706	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP		C112	CCZF1H103Z	C CERA	50V F 0.01MF Z	
C707	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)		C115	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
C709	CEXF1C221V	C ELECTRO	16V RSS 220MF (8X11.5) TP		C151	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
C805	CCXB2H222K	C CERA	500V B 2200PF K (TAPPING)		C154	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
C806	CCXB2H222K	C CERA	500V B 2200PF K (TAPPING)		C203	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
C808	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP		C206	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
C829	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP		C207	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
C832	CEXF1H220V	C ELECTRO	50V RSS 22MF (5X11) TP		C211	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
C833	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP		C221	CCZF1H103Z	C CERA	50V F 0.01MF Z	
C834	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)		C500	CBZR1C392M	C CERA	16V Y5R 3900PF M (AXIAL)	
C835	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP		C514	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
F801A	4857415001	CLIP FUSE	PFC5000-0702		C516	CZCH1H160J	C CERA	50V CH 16PF J (AXIAL)	
F801B	4857415001	CLIP FUSE	PFC5000-0702		C519	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
L805	58CX430599	COIL CHOKE	AZ-9004Y 940K TP		C522	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
L806	58CX430599	COIL CHOKE	AZ-9004Y 940K TP		C523	CCZF1H103Z	C CERA	50V F 0.01MF Z	
L901	5CPX181J	COIL PEAKING	180UH J (RADIAL)		C524	CCZF1H103Z	C CERA	50V F 0.01MF Z	

## ELECTRICAL PARTS LIST

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
C525	CCZF1H103Z	C CERA	50V F 0.01MF Z		C903	CCZB1H271K	C CERA	50V B 270PF K	
C528	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)		D101	DUZ5R1B -	DIODE ZENER	UZ-5.1B	®
C530	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z		D102	D U Z 3 3 B	DIODE ZENER	UZ-33B	®
C531	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		D301	D1N4004S	DIODE	1N4004S	
C532	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		D406	DRGP15J -	DIODE	RGP15J	®
C533	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		D407	D1N4937G	DIODE	1N4937G (TAPPING)	
C540	CCZF1H103Z	C CERA	50V F 0.01MF Z		D408	D1N4937G	DIODE	1N4937G (TAPPING)	
C541	CCZB1H181K	C CERA	50V B 180PF K (AXIAL)		D410	D1N4937G	DIODE	1N4937G (TAPPING)	
C601	CZCH1H479K	C CERA	50V CH 4.7PF K (AXIAL)		D411	D1N4937G	DIODE	1N4937G (TAPPING)	
C602	CZCH1H479K	C CERA	50V CH 4.7PF K (AXIAL)		D415	DUZ9R1BM	DIODE ZENER	UZ-9.1BM	
C604	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z		D502	D1N4148 -	DIODE	1N4148 (TAPPING)	
C618	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z		D504	D1N4148 -	DIODE	1N4148 (TAPPING)	
C623	CZSL1H200J	C CERA	50V SL 20PF J (AXIAL)		D601	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
C624	CCZF1H103Z	C CERA	50V F 0.01MF Z		D605	DUZ9R1BM	DIODE ZENER	UZ-9.1BM	
C626	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)		D680	DUZ5R6BM	DIODE ZENER	UZ-5.6BM	
C627	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)		D705	D1N4148 -	DIODE	1N4148 (TAPPING)	
C628	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z		D706	DUZ3R9B -	DIODE ZENER	UZ-3.9B	
C630	CZSL1H470J	C CERA	50V SL 47PF J (AXIAL)		D719	D1N4148 -	DIODE	1N4148 (TAPPING)	
C632	CCZF1H103Z	C CERA	50V F 0.01MF Z		D801	DLT2A05G	DIODE	LT2A05G (TP)	®
C633	CCZF1H103Z	C CERA	50V F 0.01MF Z		D802	DLT2A05G	DIODE	LT2A05G (TP)	®
C635	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z		D803	D1N4937G	DIODE	1N4937G (TAPPING)	®
C643	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z		D804	D1N4937G	DIODE	1N4937G (TAPPING)	®
C645	CCZB1H471K	C CERA	50V B 470PF K (AXIAL)		D805	D1N4937G	DIODE	1N4937G (TAPPING)	®
C646	CCZB1H471K	C CERA	50V B 470PF K (AXIAL)		D806	DLT2A05G	DIODE	LT2A05G (TP)	®
C647	CCZB1H471K	C CERA	50V B 470PF K (AXIAL)		D807	D1N4937G	DIODE	1N4937G (TAPPING)	®
C648	CCZB1H471K	C CERA	50V B 470PF K (AXIAL)		D808	DLT2A05G	DIODE	LT2A05G (TP)	®
C690	CCZF1H103Z	C CERA	50V F 0.01MF Z		D812	D1N4937G	DIODE	1N4937G (TAPPING)	®
C691	CCZF1H103Z	C CERA	50V F 0.01MF Z		D814	D1N4937G	DIODE	1N4937G (TAPPING)	®
C701	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z		D815	DRGP15J -	DIODE	RGP15J	®
C702	CCZF1H103Z	C CERA	50V F 0.01MF Z		D819	D1N4937G	DIODE	1N4937G (TAPPING)	®
C708	CZCH1H120J	C CERA	50V CH 12PF J (AXIAL)		D821	DUZ9R1BM	DIODE ZENER	UZ-9.1BM	®
C711	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z		D824	DUZ5R6BM	DIODE ZENER	UZ-5.6BM	®
C712	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z		J001	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C713	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z		J002	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C720	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)		J003	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C722	CCZF1H103Z	C CERA	50V F 0.01MF Z		J004	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C723	CCZF1H103Z	C CERA	50V F 0.01MF Z		J005	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C741	CCZB1H221K	C CERA	50V B 220PF K (AXIAL)		J006	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C752	CZCH1H180J	C CERA	50V CH 18PF J (AXIAL)		J007	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C754	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z		J008	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C757	CCZB1H333K	C CERA	50V B 0.033MF K AXL		J009	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C777	CCZF1H103Z	C CERA	50V F 0.01MF Z		J010	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C807	CCZB1H821K	C CERA	50V B 820PF K AXIAL		J011	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C817	CCZB1H101K	C CERA	50V B 100PF K (AXIAL)		J012	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C830	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)		J013	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C901	CCZB1H271K	C CERA	50V B 270PF K		J014	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
C902	CCZB1H101K	C CERA	50V B 100PF K (AXIAL)		J015	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	



**ELECTRICAL PARTS LIST**

[illegible]

## ELECTRICAL PARTS LIST

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
R103	RD-AZ153J-	R CARBON FILM	1/6 15K OHM J		R500	RD-AZ514J-	R CARBON FILM	1/6 510K OHM J	
R106	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R501	RD-4Z111J-	R CARBON FILM	1/4 110 OHM J	
R107	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R502	RD-AZ151J-	R CARBON FILM	1/6 150 OHM J	
R154	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J		R503	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
R156	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J		R504	RD-AZ622J-	R CARBON FILM	1/6 6.2K OHM J	
R163	RD-AZ153J-	R CARBON FILM	1/6 15K OHM J		R505	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R164	RD-AZ104J-	R CARBON FILM	1/6 100K OHM J		R506	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R165	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		R507	RD-AZ123J-	R CARBON FILM	1/6 12K OHM J	
R201	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J		R508	RD-AZ203J-	R CARBON FILM	1/6 20K OHM J	
R202	RD-AZ154J-	R CARBON FILM	1/6 150K OHM J		R509	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R205	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J		R510	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
R206	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J		R512	RD-AZ241J-	R CARBON FILM	1/6 240 OHM J	
R207	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J		R513	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J	
R208	RD-AZ680J-	R CARBON FILM	1/6 68 OHM J		R519	RD-AZ123J-	R CARBON FILM	1/6 12K OHM J	
R209	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J		R521	RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J	
R210	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J		R522	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R211	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J		R523	RD-AZ622J-	R CARBON FILM	1/6 6.2K OHM J	
R214	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J		R525	RD-AZ122J-	R CARBON FILM	1/6 1.2K OHM J	
R215	RD-AZ203J-	R CARBON FILM	1/6 20K OHM J		R526	RD-AZ751J-	R CARBON FILM	1/6 750 OHM J	
R216	RD-2Z151J-	R CARBON FILM	1/2 150 OHM J		R531	RD-AZ623J-	R CARBON FILM	1/6 62K OHM J	
R217	RD-AZ203J-	R CARBON FILM	1/6 20K OHM J		R532	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J	
R221	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J		R533	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J	
R222	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R534	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J	
R223	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J		R554	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R224	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R557	RD-AZ302J-	R CARBON FILM	1/6 3K OHM J	
R225	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J		R559	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J	
R230	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J		R562	RD-AZ914J-	R CARBON FILM	1/6 910K OHM J	
R231	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J		R567	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
R232	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J		R568	RN-AZ4701F	R METAL FILM	1/6 4.7K OHM F	
R234	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R570	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
R235	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R604	RD-AZ392J-	R CARBON FILM	1/6 3.9K OHM J	
R301	RD-AZ362J-	R CARBON FILM	1/6 3.6K OHM J		R605	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R302	RD-AZ272J-	R CARBON FILM	1/6 2.7K OHM J		R606	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R306	RN-AZ1003F	R METAL FILM	1/6 100K OHM F		R607	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J	
R307	RN-AZ1102F	R METAL FILM	1/6 11.0K OHM F		R608	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J	
R314	RD-AZ333J-	R CARBON FILM	1/6 33K OHM J		R609	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J	
R316	RN-AZ2402F	R METAL FILM	1/6 24.0K OHM F		R610	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J	
R321	RD-AZ303J-	R CARBON FILM	1/6 30K OHM J		R611	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
R322	RN-AZ1002F	R METAL FILM	1/6 10K OHM F		R641	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R408	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R649	RD-AZ829J-	R CARBON FILM	1/6 8.2 OHM J	
R409	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J		R681	RD-AZ561J-	R CARBON FILM	1/6 560 OHM J	
R410	RD-4Z472J-	R CARBON FILM	1/4 4.7K OHM J		R701	RD-AZ240J-	R CARBON FILM	1/6 24 OHM J	
R413	RD-4Z912J-	R CARBON FILM	1/4 9.1K OHM J		R702	RD-AZ514J-	R CARBON FILM	1/6 510K OHM J	
R424	RD-4Z123J-	R CARBON FILM	1/4 12K OHM J		R703	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R427	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		R704	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R443	RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J		R705	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	
R451	RD-2Z151J-	R CARBON FILM	1/2 150 OHM J		R706	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	

# ELECTRICAL PARTS LIST

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
R707	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J		R790	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R708	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		R791	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R709	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		R792	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R710	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		R793	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R711	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J		R797	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J	
R712	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J		R799	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
R713	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R800	RC-2Z565KP	R CARBON COMP	1/2 5.6M OHM K	△ ®
R714	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		R803	RD-AZ911J-	R CARBON FILM	1/6 910 OHM J	
R715	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R804	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R716	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		R805	RD-4Z242J-	R CARBON FILM	1/4 2.4K OHM J	
R717	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R806	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R718	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R808	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R719	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R809	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R722	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J		R812	RD-AZ363J-	R CARBON FILM	1/6 36K OHM J	
R723	RD-AZ121J-	R CARBON FILM	1/6 120 OHM J		R813	RD-AZ563J-	R CARBON FILM	1/6 56K OHM J	
R724	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R814	RD-AZ153J-	R CARBON FILM	1/6 15K OHM J	
R725	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R815	RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J	
R726	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J		R817	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R727	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R819	RD-AZ622J-	R CARBON FILM	1/6 6.2K OHM J	
R728	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R820	RD-AZ561J-	R CARBON FILM	1/6 560 OHM J	
R731	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R821	RD-2Z105J-	R CARBON FILM	1/2 1M OHM J	
R732	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R826	RD-2Z121J-	R CARBON FILM	1/2 120 OHM J	
R733	RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J		R829	RD-AZ123J-	R CARBON FILM	1/6 12K OHM J	
R734	RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J		R830	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R735	RD-AZ392J-	R CARBON FILM	1/6 3.9K OHM J		R831	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
R736	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		R833	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
R737	RD-AZ392J-	R CARBON FILM	1/6 3.9K OHM J		R835	RD-4Z109J-	R CARBON FILM	1/4 1 OHM J	
R738	RD-AZ362J-	R CARBON FILM	1/6 3.6K OHM J		R888	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R739	RD-AZ272J-	R CARBON FILM	1/6 2.7K OHM J		R901	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	
R740	RD-AZ202J-	R CARBON FILM	1/6 2K OHM J		R902	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	
R741	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R903	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	
R742	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R904	RD-AZ151J-	R CARBON FILM	1/6 150 OHM J	
R743	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R905	RD-AZ151J-	R CARBON FILM	1/6 150 OHM J	
R748	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J		R906	RD-AZ151J-	R CARBON FILM	1/6 150 OHM J	
R751	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		R907	RD-AZ121J-	R CARBON FILM	1/6 120 OHM J	
R753	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R908	RD-AZ121J-	R CARBON FILM	1/6 120 OHM J	
R754	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		R909	RD-AZ121J-	R CARBON FILM	1/6 120 OHM J	
R755	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J		R910	RD-AZ751J-	R CARBON FILM	1/6 750 OHM J	
R761	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		R913	RD-AZ561J-	R CARBON FILM	1/6 560 OHM J	
R769	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J		R914	RD-AZ133J-	R CARBON FILM	1/6 13K OHM J	
R770	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J		R918	RD-2Z272J-	R CARBON FILM	1/2 2.7K OHM J	
R776	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		R919	RD-2Z272J-	R CARBON FILM	1/2 2.7K OHM J	
R777	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		R920	RD-2Z272J-	R CARBON FILM	1/2 2.7K OHM J	
R778	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		R931	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	
R779	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J		R932	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	
R780	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J		R933	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	
R783	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J						

# EACH MODEL PARTS LIST

## CABINET DIFFERENCE PARTS LIST

LOC	PART NAME	21U6SC		21U6SS/SSP	
		PART CODE	PART DESCRIPTION	PART CODE	PART DESCRIPTION
M211	COVER BACK	4852158703	FR HIPS GY	4852158702	HIPS GY
M191	BUTTON CTRL	4851945003	4948703+5543401	4851945002	4948702+5543401
M201	MASK FRONT	4852076903	FR HIPS GY	4852076902	HIPS GY
M481	BUTTON POWER	4854859303	FR ABS GY 21U6	4854859302	ABS GY
M591	DECO EYE	4855933401	ABS BLUE	4855933401	ABS BLUE

LOC	PART NAME	21U8SC		21D7	
		PART CODE	PART DESCRIPTION	PART CODE	PART DESCRIPTION
M211	COVER BACK	4852159712	FR HIPS GY(CORE A1,B1)	4852160311	HIPS GY
M201	MASK FRONT	4852077902	FR HIPS GY	4852078611	HIPS GY
M481	BUTTON POWER	4854860802	FR ABS GY	4854860701	ABS GY
M491	BUTTON CH	4854950302	FR ABS GY	4854950201	ABS GY
M551	DECO SENSOR	4855544801	PC SM0G	4855544701	PC SMOG
M591	DECO EYE	4855936301	ABS BLUE	4855936101	ABS BLUE

LOC	PART NAME	20D7		14D7	
		PART CODE	PART DESCRIPTION	PART CODE	PART DESCRIPTION
M211	COVER BACK	4852160013	HIPS GY 20D7	4852159931	HIPS GY CORE(B) 14D7
M191	BUTTON CTRL	4851944900	4949901+5544600	4851944810	4949811+5544500
M201	MASK FRONT	4852078311	HIPS GY	4852078211	HIPS GY
M481	BUTTON POWER	4854860411	ABS GY	4854860311	ABS GY
M591	DECO EYE	4855934601	ABS BLUE	4855934601	ABS BLUE

## ■ CN-220F/NS DIFFERENCE PARTS LIST

LOC	PART NAME	CN-220F		CN-220NS	
		PART CODE	PART DESCRIPTION	PART CODE	PART DESCRIPTION
C201	C ELECTRO	CEXF1H108V	50V RSS 0.1MF (5X11) TP	NONE	
C502	C ELECTRO	CEXF1H109V	50V RSS 1MF (5X11) TP	NONE	
C510	C ELECTRO	CEXF1H100V	50V RSS 10MF (5X11) TP	NONE	
C514	C CERA SEMI	CBZF1H104Z	50V F 0.1MF Z	NONE	
C519	C CERA SEMI	CBZF1H104Z	50V F 0.1MF Z	NONE	
C531	WIRE COPPER	85801065GY	AWG22 1/0.65 TIN COATING	NONE	
C532	WIRE COPPER	85801065GY	AWG22 1/0.65 TIN COATING	NONE	
C533	WIRE COPPER	85801065GY	AWG22 1/0.65 TIN COATING	NONE	
C599	C CERA SEMI	CBZF1H104Z	50V F 0.1MF Z	NONE	
I502	IC COMBFILTER	1TDA9183P-	TDA9183P	NONE	
I802	IC ERROR AMP	1DP123----	DP123	1DP133----	DP133
L501	COIL PEAKING	5CPZ100K02	10UH K (AXIAL 3.5MM)	NONE	
L502	COIL PEAKING	5CPZ100K02	10UH K (AXIAL 3.5MM)	NONE	
R102	R M-OXIDE FILM	RS02Z680JS	2W 68 OHM J SMALL	RS02Z470JS	2W 47 OHM J SMALL
R204	R M-OXIDE FILM	RS02Z181JS	2W 180 OHM J SMALL	RS02Z470JS	2W 47 OHM J SMALL
R417	R M-OXIDE FILM	RS01Z229J-	1W 2.2 OHM J (TAPPING)	RS02Z620JS	2W 62 OHM J SMALL
R503	R CARBON FILM	RD-AZ101J-	1/6 100 OHM J	NONE	
R505	R CARBON FILM	RD-AZ102J-	1/6 1K OHM J	NONE	
R510	R CARBON FILM	RD-AZ101J-	1/6 100 OHM J	NONE	
R511	R M-OXIDE FILM	RS02Z560JS	2W 56 OHM J SMALL	RS02Z470JS	2W 47 OHM J SMALL
R522	R CARBON FILM	RD-AZ102J-	1/6 1K OHM J	NONE	
R601	R M-OXIDE FILM	RS02Z910JS	2W 91 OHM J SMALL	RS02Z470JS	2W 47 OHM J SMALL
R808	R CARBON FILM	RD-AZ102J-	1/6 1K OHM J	RD-AZ681J-	1/6 680 OHM J
T402	FBT	50H0000223	FFA64027M	50H0000210	LTC-509

## EACH MODEL PARTS LIST

### ■ POWER DIFFERENCE PARTS LIST

LOC	PART NAME	SC/SS(120V)		SSP(220V)	
		PART CODE	PART DESCRIPTION	PART CODE	PART DESCRIPTION
I801	IC POWER	1STRF6626-	STR-F6626	1STRF6654-	STR-F6654
C804	C ELECTRO	CEYN2D331P	200V LHS 330MF	CEYN2W151P	450V LHS 150MF (25X40)
C834	C MYLAR	CMXM2A104J	100V 0.1MF J (TP)	CMXM2A102J	100V 1000PF J (TP)
F801	FUSE GLASS TUBE	5F1GB5021L	CSA/UL 125V 5A	5F3GB4022L	V/S TL 4A 250V MF51
L801	FILTER LINE	5PLF24A2--	LF-24A2	5PLF24A1--	LF-24A1
PWC1	CORD POWER AS	4859907810	ME301P+TER=2100	4859908410	MP229+H03V/VH2-F+TER=2100
R800	R CARBON COMP	RC-2Z565KP	1/2 5.6M OHM K	NONE	
R807	R CARBON COMP	NONE		RC-2Z565KP	1/2 5.6M OHM K
R801	POSISTOR	DDB3R0M140	ECPBD3R0M140	DDB7R0M290	ECPBD7R0M290
R802	R CEMENT	RX10T109KS	10W 1 OHM K TRIPOD SMALL	RX10T339J-	10W 3.3 OHM J TRIPOD
R803	R CARBON FILM	RD-AZ911J-	1/6 910 OHM J	RD-AZ102J-	1/6 1K OHM J
R804	WIRE COPPER	85801065GY	AWG22 1/0.65 TIN COATING	RD-2Z330J-	1/2 33 OHM J
R805	R CARBON FILM	RD-4Z242J-	1/4 2.4K OHM J	RD-4Z332J-	1/4 3.3K OHM J
R823	R M-OXIDE FILM	RS02Z273JS	2W 27K OHM J SMALL	RS02Z153JS	2W 15K OHM J SMALL
R825	R FUSIBLE	RF02Z128J-	2W 0.12 OHM J (TAPPING)	RF02Z228J-	2W 0.22 OHM J (TAPPING)
R829	R CARBON FILM	RD-AZ123J-	1/6 12K OHM J	RD-AZ622J-	1/6 6.2K OHM J
R831	WIRE COPPER	85801065GY	AWG22 1/0.65 TIN COATING	RS02Z153JS	2W 15K OHM J SMALL
R832	R CARBON FILM	NONE		RD-4Z912J-	1/4 9.1K OHM J
T801	TRANS SMPS	50M4242B6-	TSM-4242B6	50M4242B7-	TSM-4242B7
ZZ131	COIL DEGAUSSING	58G0000078	DC-1400(14 INCH)	58G0000084	DC-1450(14 INCH)
		58G0000141	DC-20S1(20 INCH)	58G0000146	DC-20SF(20 INCH)
		58G0000154	DC-21F1(21 INCH)	58G0000141	DC-21SF(21 INCH)

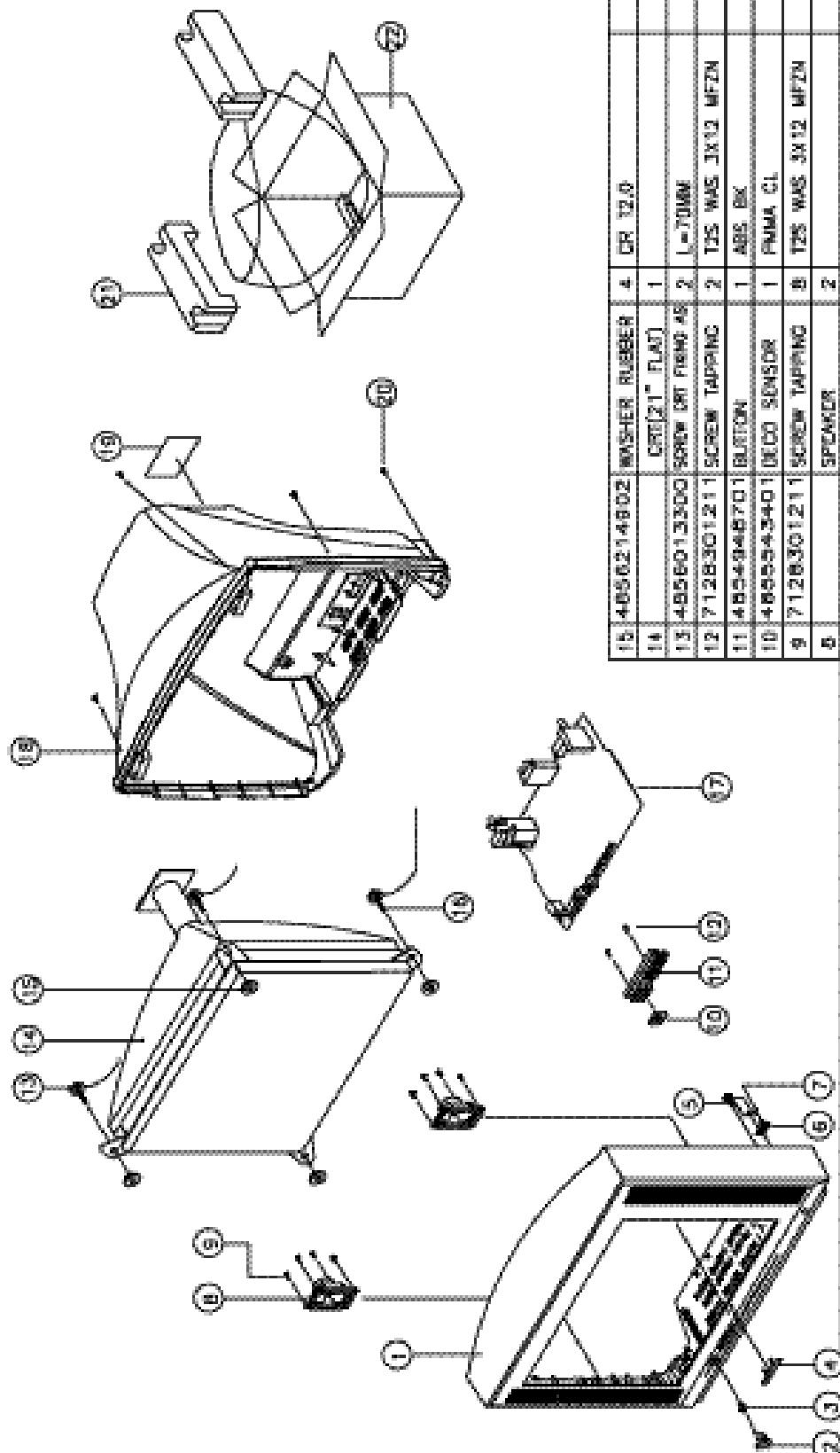
### ■ INCH DIFFERENCE PARTS LIST

LOC	PART NAME	21U6		21D7	
		PART CODE	PART DESCRIPTION	PART CODE	PART DESCRIPTION
R810	R M-OXIDE FILM	RS02Z109JS	2W 1 OHM J SMALL	RS02Z109JS	2W 1 OHM J SMALL
R504	R CARBON FILM	RD-AZ622J-	1/6 6.2K OHM J	RD-AZ752J-	1/6 7.5K OHM J
R301	R CARBON FILM	RD-AZ362J-	1/6 3.6K OHM J	RD-AZ362J-	1/6 3.6K OHM J
R315	R M-OXIDE FILM	RS02Z241JS	2W 240 OHM J SMALL	RS02Z681JS	2W 240 OHM J SMALL
R317	R M-OXIDE FILM	RS02Z681JS	2W 680 OHM J SMALL	RS02Z681JS	2W 680 OHM J SMALL
C409	C MYLAR	CMYH3C822J	1.6KV BUP 8200PF J	CMYH3C752J	1.6KV BUP 7500PF J
C423	C MYLAR	CMYE2D334J	200V PU 0.33MF J	CMYE2D514J	200V PU 0.51MF J
L403	COIL H-LINEARITY	58H0000055	TRL-361A	58H0000055	TRL-361A
R415	R M-OXIDE FILM	RS02Z302JS	2W 3K OHM J SMALL	RS02Z302JS	2W 3K OHM J SMALL
J096	WIRE COPPER	NONE		NONE	
J097	WIRE COPPER	NONE		NONE	
R413	R CARBON FILM	RD-4Z822J-	1/4 8.2K OHM J	RD-4Z912J-	1/4 9.1K OHM J
R420	R M-OXIDE FILM	RS02Z249JS	2W 2.4 OHM J SMALL	RS02Z479JS	2W 4.7 OHM J SMALL

LOC	PART NAME	20D7		14D7	
		PART CODE	PART DESCRIPTION	PART CODE	PART DESCRIPTION
R810	R M-OXIDE FILM	RS02Z209JS	2W 2 OHM J SMALL	RS02Z209JS	2W 2 OHM J SMALL
R504	R CARBON FILM	RD-AZ912J-	1/6 9.1K OHM J	RD-AZ123J-	1/6 12K OHM J
R301	R CARBON FILM	RD-AZ472J-	1/6 4.7K OHM J	RD-AZ472J-	1/6 4.7K OHM J
R315	R M-OXIDE FILM	RS02Z620JS	2W 62 OHM J SMALL	RS02Z620JS	2W 62 OHM J SMALL
R317	R M-OXIDE FILM	NONE		NONE	
C409	C MYLAR	CMYH3C662H	1.6KV BUP 6600PF H	CMYH3C722J	1.6KV BUP 7200PF J
C423	C MYLAR	CMYE2D514J	200V PU 0.51MF J	CMYE2D434J	200V PU 0.43MF J
L403	COIL H-LINEARITY	NONE		NONE	
R415	R M-OXIDE FILM	NONE		NONE	
J096	WIRE COPPER	85801065GY	AWG22 1/0.65 TIN COATING	85801065GY	AWG22 1/0.65 TIN COATING
J097	WIRE COPPER	85801065GY	AWG22 1/0.65 TIN COATING	85801065GY	AWG22 1/0.65 TIN COATING
R413	R CARBON FILM	RD-4Z912J-	1/4 9.1K OHM J	RD-4Z912J-	1/4 9.1K OHM J
R420	R M-OXIDE FILM	RS02Z479JS	2W 4.7 OHM J SMALL	RS02Z339JS	2W 3.3 OHM J SMALL

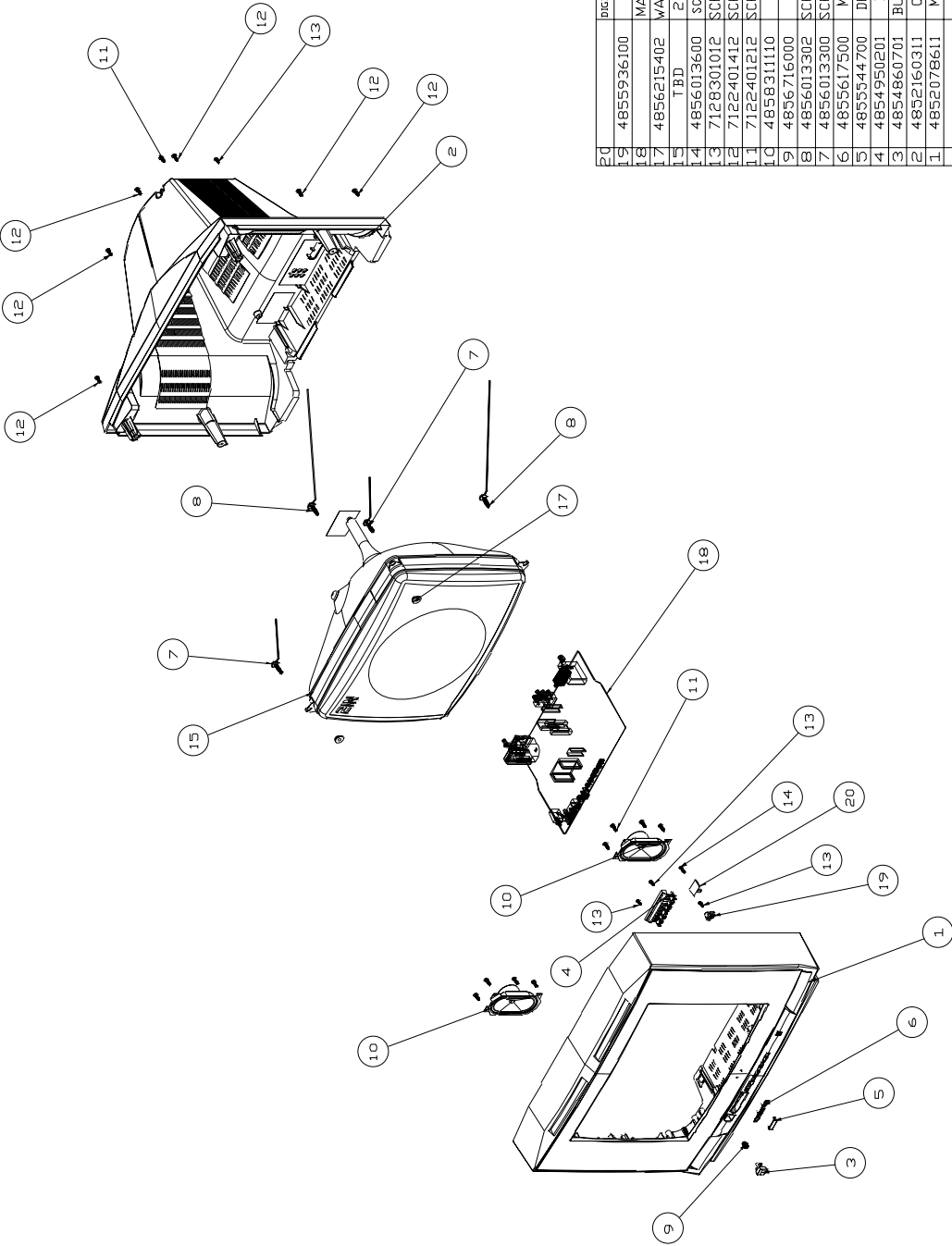
# EXPLODED VIEW

DTQ-21U6



No	PART CODE	PART NAME	QTY	MATERIAL	REMARKS
23	4856059100	BOX CARTON	1	DN-3	
22	4856059100	PAD	4	EPS 21U6	
21	4856196300	SCREW TAPPING	7	T25 TRS 4X14 MF2N BK	
20	7122401412	SPEC PLATE	1	150 ARE P/E FLU(C/TM)	
19	48550415800	COVER BACK	1	HIPS BK	
18	4852158701	MAIN PCB	1	CM-9888	
17	4856013303	SCREW CRT FRING AB	2	Li-240MM	
16	4856013303	SCREW CRT FRING AB	2	Li-240MM	
15	4856214802	WASHER RUBBER	4	CR 12.0	
14		CRT(21" FLAT)	1		
13	4856013300	SCREW CRT FRING AB	2	Li-70MM	
12	7128301211	SCREW TAPPING	2	T25 WAS 3X12 MF2N	
11	4854948701	BUTTON	1	ABS BK	
10	4855543401	DECO SENSOR	1	PMMA CL	
9	7128301211	SCREW TAPPING	8	T25 WAS 3X12 MF2N	
8		SPEAKER	2		
7	7128301211	SCREW TAPPING	1	T25 WAS 3X12 MF2N	
6	4855933401	DECO EYE	1	PMMA BLUE	
5					
4	4855817500	MARK BRAND	1	A1050P-K24 TO.4	
3	4856716000	SPRING	1	SMFA PIE TO.5	
2	4854859301	BUTTON POWER	1	ABS BK	
1	4852076901	MASK FRONT	1	HIPS BK	

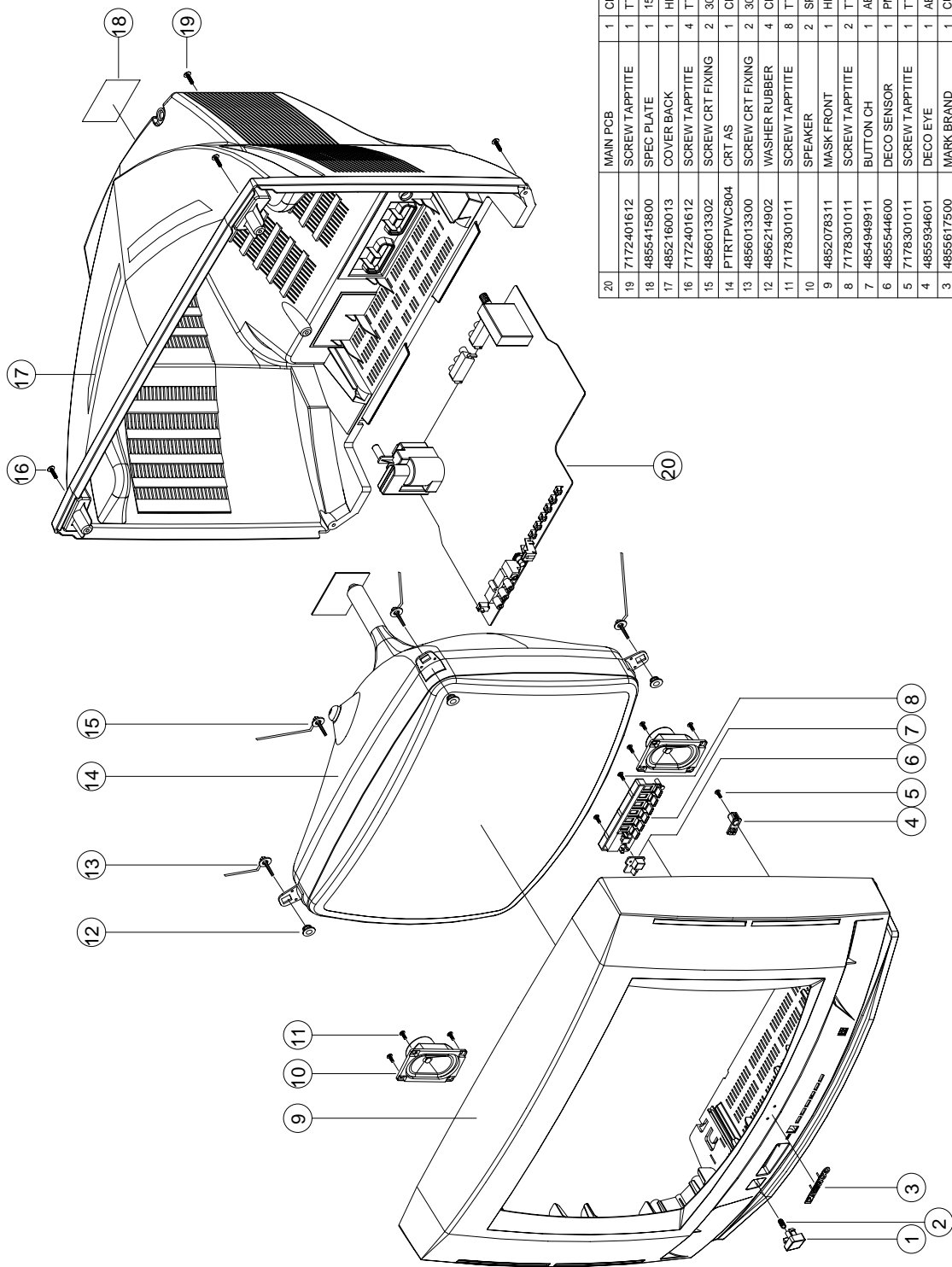
DTQ-21D7



NO	PART CODE	PART NAME	QTY	MATERIAL	REMARKS
19	4855936100	DIGITAL EYE CHASSIS	1		
18	4855936100	DECO EYE	1	PC SMIG	
17	4856215402	MAIN CHASSIS	1	CP-90SS	
16	4856215402	WASHER RUBBER	2	CR T2.0	
15	4856215402	T8D	1		
14	4856013600	21CRT DRJON	1	SWRM+SECC	
13	7128301012	SCREW SPRK FIX	1	T12 WAS 3X10 MFZN BK	
12	7122401412	SCREW TAPPING	4	T12 TRS 4X14 MFZN BK	
11	7122401212	SCREW TAPPING	6	T12 TRS 4X12 MFZN CK	
10	4858311110	SPEAKER	2	12V 8 OHM SP-58126F	
9	4856716000	SPRING	1	SWPA PIE 0.5	
8	4856013302	SCREW CRT FIX	2	30X190 BK	
7	4856013300	SCREW CRT FIX	2	30X80 BK	
6	4855617500	MARK BRAND	1	CU AU+ABS BK	
5	4855544700	DECO SENSOR	1	PC SMIG	
4	4854950201	BUTTON CH	1	ABS GY	
3	4854860701	BUTTON POWER	1	ABS GY	
2	4852160311	COVER BACK	1	HIPS GY	
1	4852078611	MASK FRONT	1	HIPS GY	
NO	PART CODE	PART NAME	QTY	MATERIAL	REMARKS
UNITS	mm	Designed by	Checked by	Inspected by	PART NAME
SCALE	0.1:1	W.KANGK.S HANY	H.CHO.S DPARK		DEVELOPMENT DWG
		Doewoo Electronics Co., Ltd.	MODEL	DTQ-21D7ME	N48500BJK
		Mechanical Design Team, TV Research Center	REFERENCE		

EXPLODED VIEW

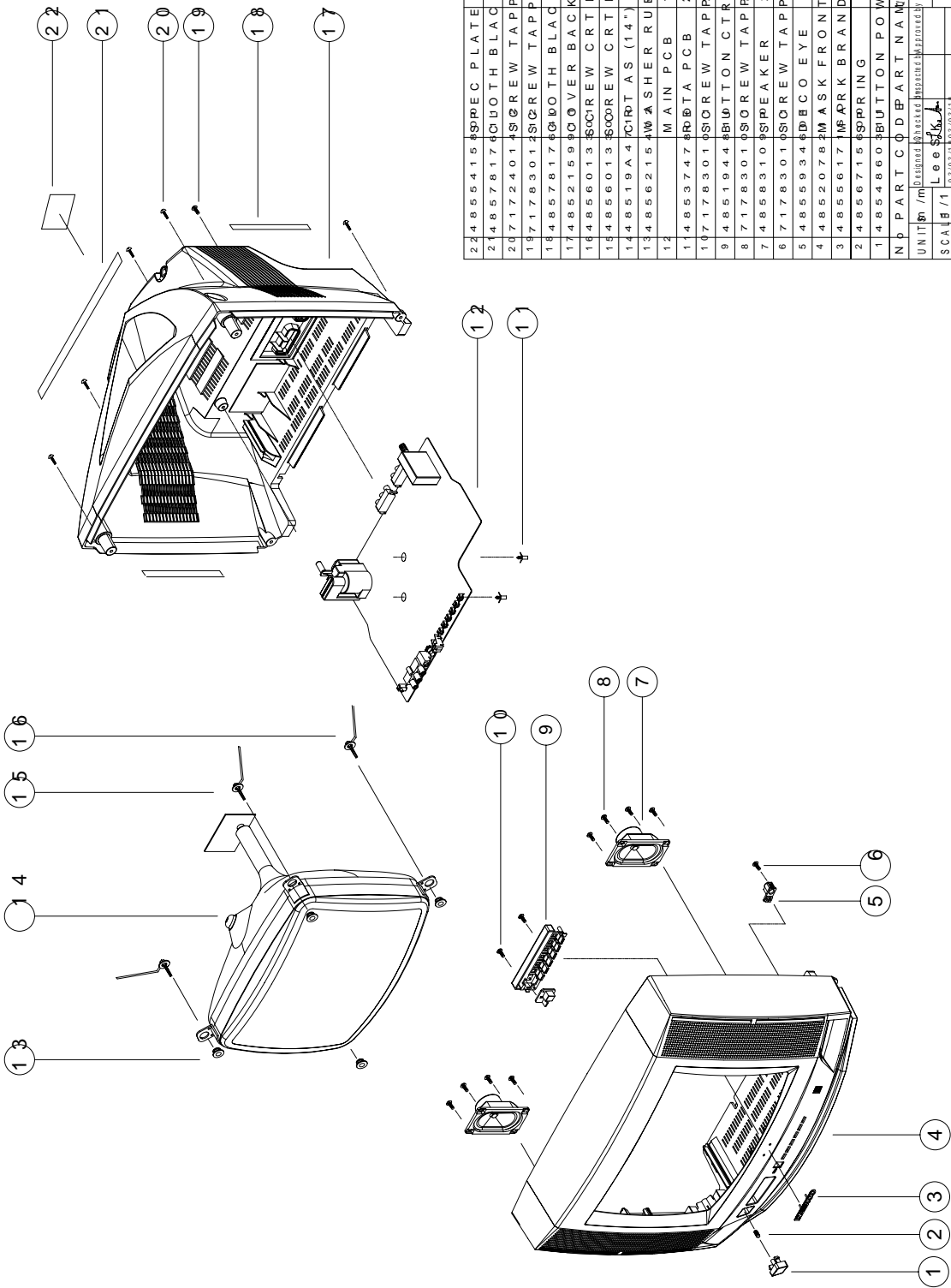
DTQ-20D7



No	PART CODE	PART NAME	Qty	MATERIAL	REMARKS
20		MAIN PCB	1	CN-220NS	
19	7172401612	SCREW TAPPTITE	1	TT2 TRS 4X16 MFZN BK	20+17
18	4855415800	SPEC PLATE	1	150ART PIE FILM	
17	4852160013	COVER BACK	1	HPS GY	core 'b'
16	7172401612	SCREW TAPPTITE	4	TT2 TRS 4X16 MFZN BK	17+9
15	4856013302	SCREW CRT FIXING	2	30X190 BK	14+9
14	PTRTPWC804	CRT AS	1	CRT 20"	
13	4856013300	SCREW CRT FIXING	2	30X80 BK	14+9
12	4856214902	WASHER RUBBER	4	CR TO.2	
11	7178301011	SCREW TAPPTITE	8	TT2 WAS 3X10 MFZN	10+9
10		SPEAKER	2	SP-5090F03	
9	4852078311	MASK FRONT	1	HPS GY	
8	7178301011	SCREW TAPPTITE	2	TT2 WAS 3X10 MFZN	7+9
7	4854949911	BUTTON CH	1	ABS GY	
6	485544600	DECO SENSOR	1	PMMA MILKY	
5	7178301011	SCREW TAPPTITE	1	TT2 WAS 3X10 MFZN	4+9
4	4855934601	DECO EYE	1	ABS BLUE	
3	4855617500	MARK BRAND	1	CU AU+ABS BK	
2	4856716000	SPRING	1	SWPA 0.4	
1	4854860411	BUTTON POWER	1	ABS GY	
No	PART CODE	PART NAME	Qty	MATERIAL	REMARKS
UNITS	Design/ly	Checked/ly	Approved/ly	PART NAME	
SCALE	N.S	B.W SEO		DEVELOPMENT DWG	
DAEWOO Electronics CO.,LTD. No.1000 Daewoo 1st Fl. Yeosu City		MODEL	DTQ-20D7SS	D	485009JD
		REFERENCE	CN-220NS	N	



DTQ-14D7

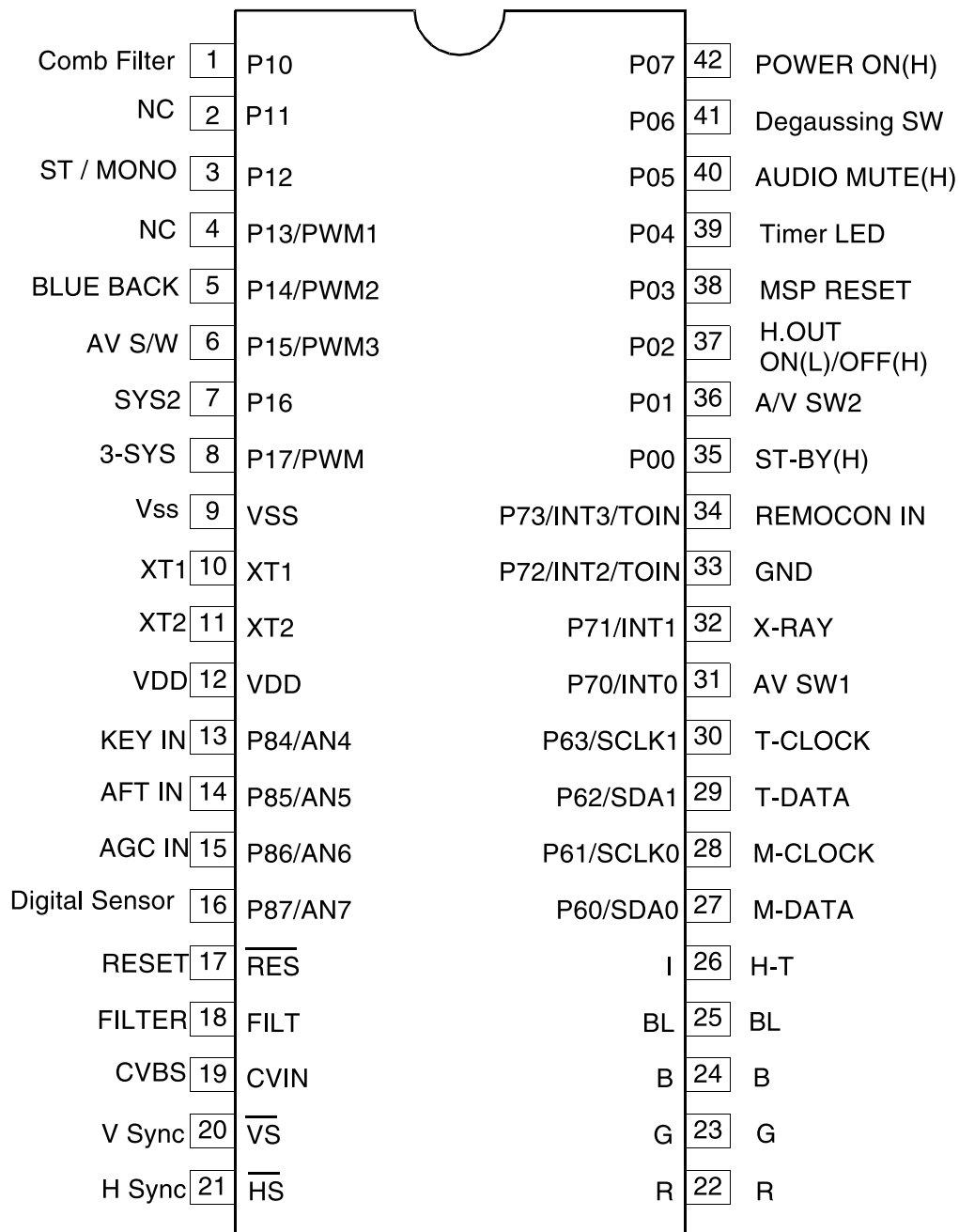


24	855415	SPREC PLATE	1	150ART P/E FILM
21	857817	QUOTH BLACK	FELT 200X20X0.7	
20	7172401	SCREW TAPIT	TR S 4X14 M FZN B	
19	1783012	SCREW TAPIT	TR S 3X12 M FZN B	
18	857817	QUOTH BLACK	FELT 100X20X0.7	
17	852159	COVER BACK	HIPS GY	
16	86013	SCREW CRT	8MMG40 YL	
15	86013	SCREW CRT	8MMG0 BK	
14	8519A4	CRT AS (14")	1 1401S-1015-1P	
13	856215	WASHER RUB	5 CRT 2.0	
12		MAIN PCB	1 CN-220NS	
11	853747	REAR PCB	2 NYLON 66	
10	718301	SCREW TAPIT	TR S 4X14 M FZN B	4+9
9	8519A4	CR T L	4949811+55445	POH S EN
8	718301	SCREW TAPIT	TR S 3X10 M FZN	
7	858310	SPEAKER	2 SP-5090F03	
6	718301	SCREW TAPIT	TR S 3X10 M FZN	
5	855934	BE CO EYE	1 ABS BLUE	
4	852078	MASK FRONT	HIPS GY	
3	855617	MARK BRAND	SILVER DIA-CUTTING	
2	856715	SPRING	1 SW PA PIE 0.4	
1	854860	BUTTON POW	HIPS GY	
UNIT / m / Design / Drawing / Approval By				
PART CODE PART NAME MATERIAL REMARK				
UNIT / m / Design / Drawing / Approval By				
SCALE / 1				
PART NAME DEVELOPMENT				
Daewoo Electronics Co., Ltd. Model: DTQ-14D7S 485009				
Team 4, TV Research Center - 220NS				

# IC DESCRIPTION

U-COM(I701)

## DW863240V-LA1



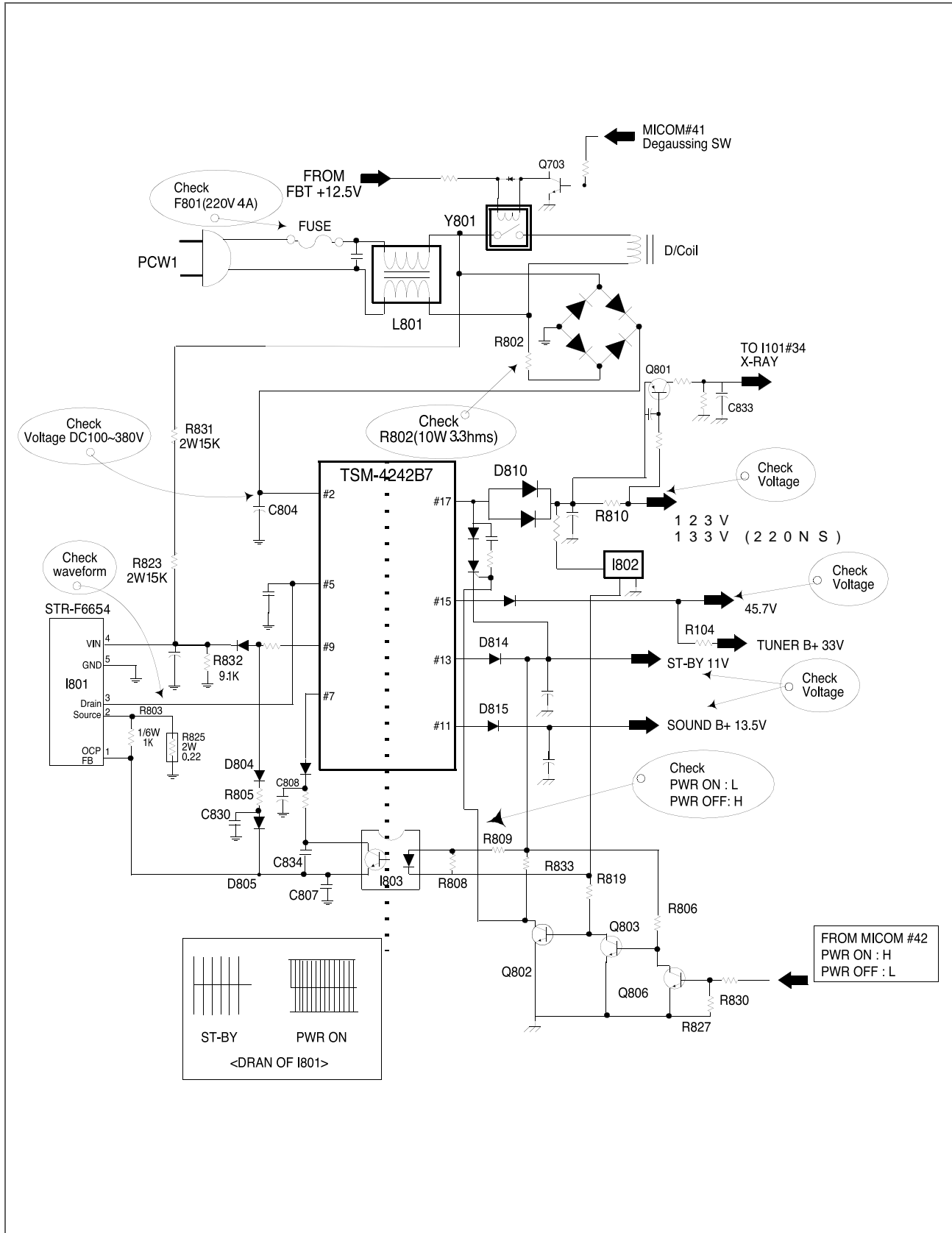
- X'TAL : 32.768 KHz

NO	PIN	PIN NAME	DESCRIPTION ( LEVEL )
1	1	Comb Filter	+5V
2	2	NC	NC
3	3	ST/MONO	+5V
4	4	NC	I503#6
5	5	BLUE BACK	+5V
6	6	AV S/W	+5V
7	7	SYS2	NC
8	8	3-SYS	GND
9	9	Vss	GND
10	10	XT1	32.768KHz
11	11	XT2	32.768KHz
12	12	Vdd	+5V
13	13	KEY IN	SW702~6
14	14	AFT IN	I101#10
15	15	AGC IN	TU01,I101#4
16	16	DIGITAL SENSOR	IF02
17	17	RESET	RESET ACTIVE "L"
18	18	FILTER	FILTER
19	19	CVBS	I501#12
20	20	VS	I101#30
21	21	HS	I101#31
22	22	R	I101#14
23	23	G	I101#15
24	24	B	I101#16
25	25	BL	I101#17
26	26	H-T	NC
27	27	MSP-DATA	IS601#8
28	28	MSP-CLOCK	IS601#7
29	29	T-DATA	TU01,I101#11
30	30	T-CLOCK	TU01,I101#12
31	31	AV S/W1	I503 #6
32	32	X-RAY	GND
33	33	GND	GND
34	34	REMOCON IN	IF01
35	35	STAND-BY	NC
36	36	AV S/W2	I503 #8
37	37	H-OUT	Q407 BASE ( TO 2SD2578)
38	38	MSP-RESET	IS601#20 ACTIVE "L"
39	39	TIMER LED	STD-BY: "H", TV ON: "L"
40	40	AUDIO MUTE	I602#10
41	41	Degaussing sw	Q703 BASE (TO RELAY) Degaussing : "H"
42	42	PWR ON	Q806 BASE(TO STR-F6656) TV ON : "H"

# TROUBLESHOOTING GUIDE

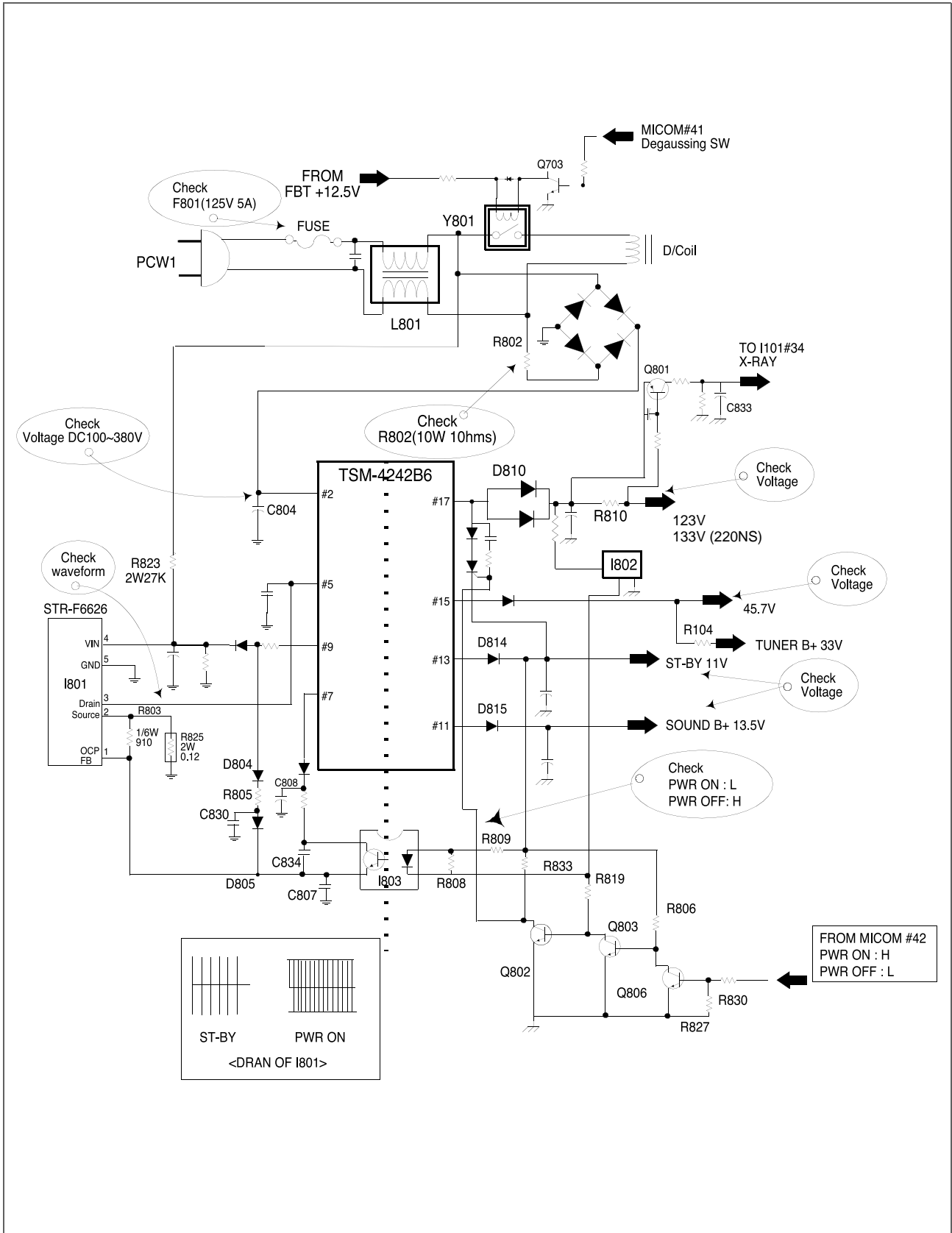
## 1. NO POWER

### (1) NO POWER ( 2 2 0 V )



# TROUBLESHOOTING GUIDE

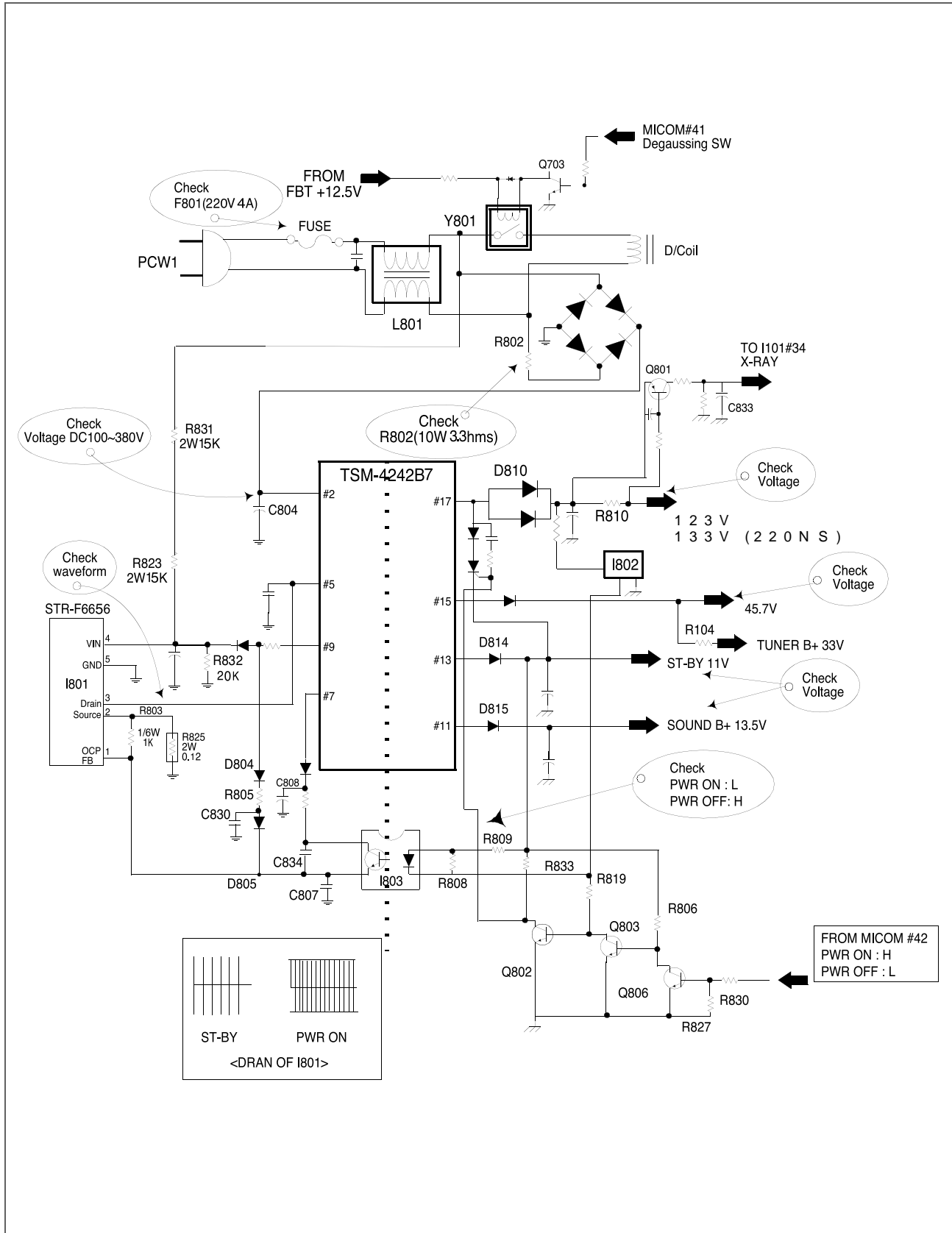
## 1. NO POWER (2) NO POWER (110V)



# TROUBLESHOOTING GUIDE

## 1. NO POWER

### (3) NO POWER ( F R E E V )

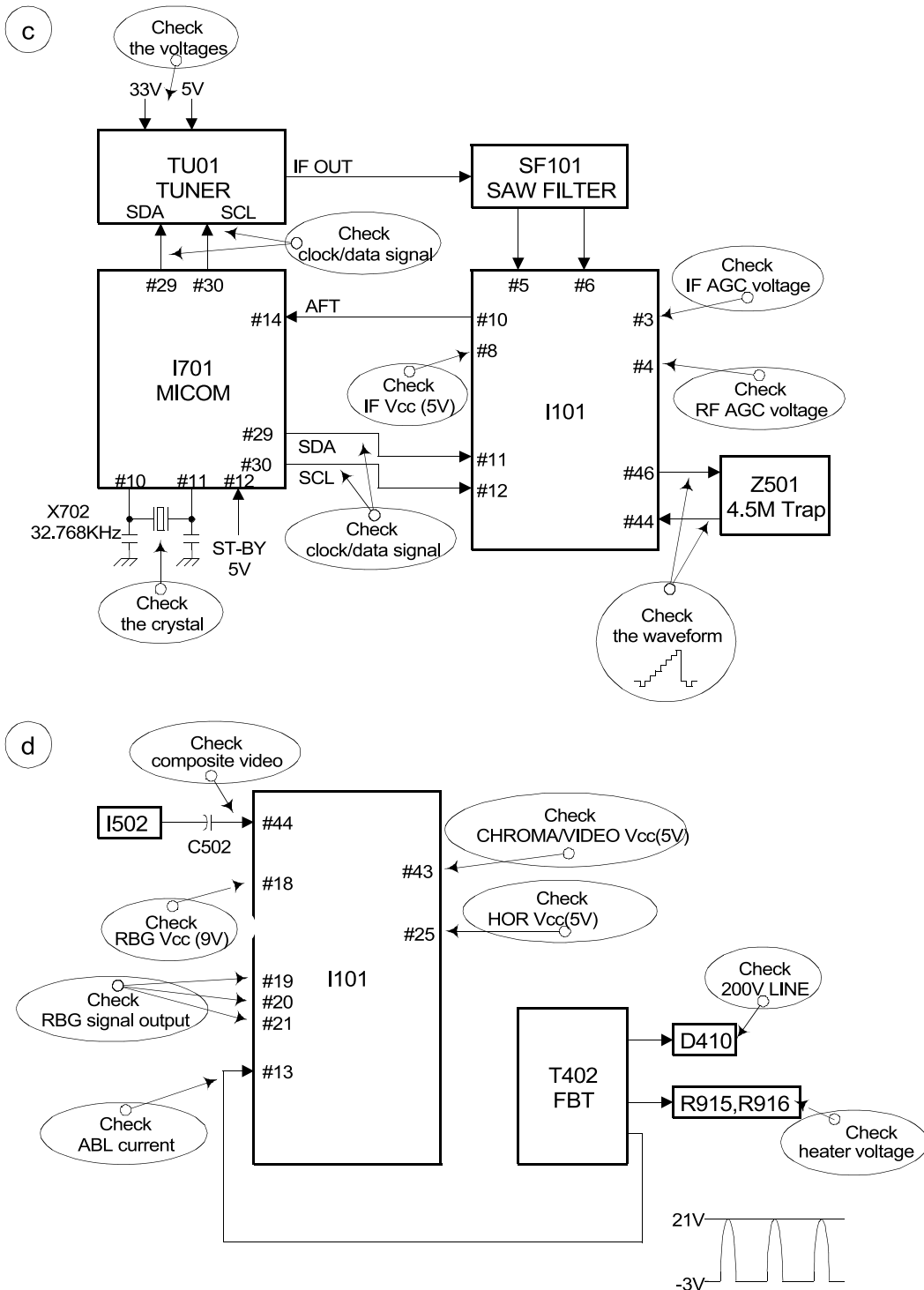


## 2. NO PICTURE

Check the waveform of I101 #46

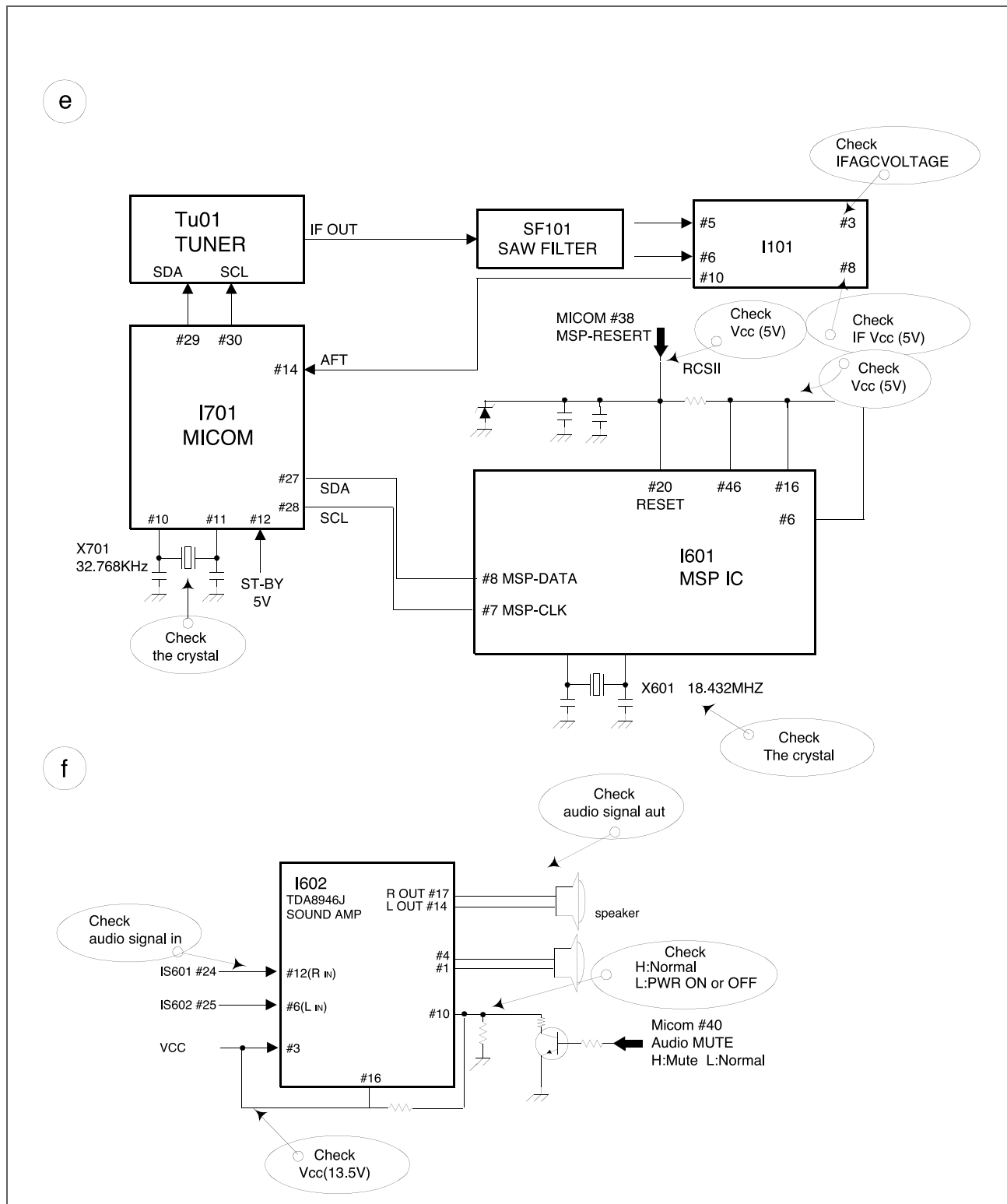
NG : GO to the figure ㉓

OK : Go the figure ㉔



## 3. NO SOUND

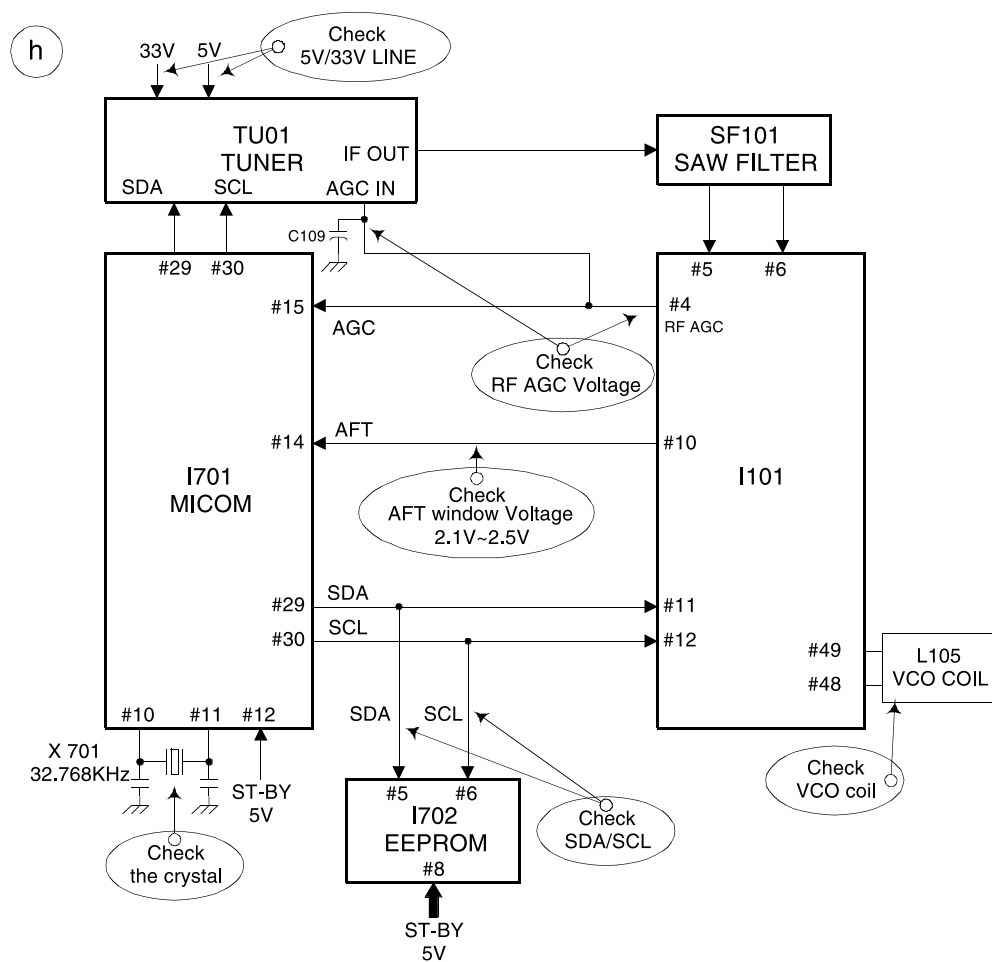
Check audio output signal of I101 #1	NG : Go to the figure ㉔
	OK : Go to the figure ㉕



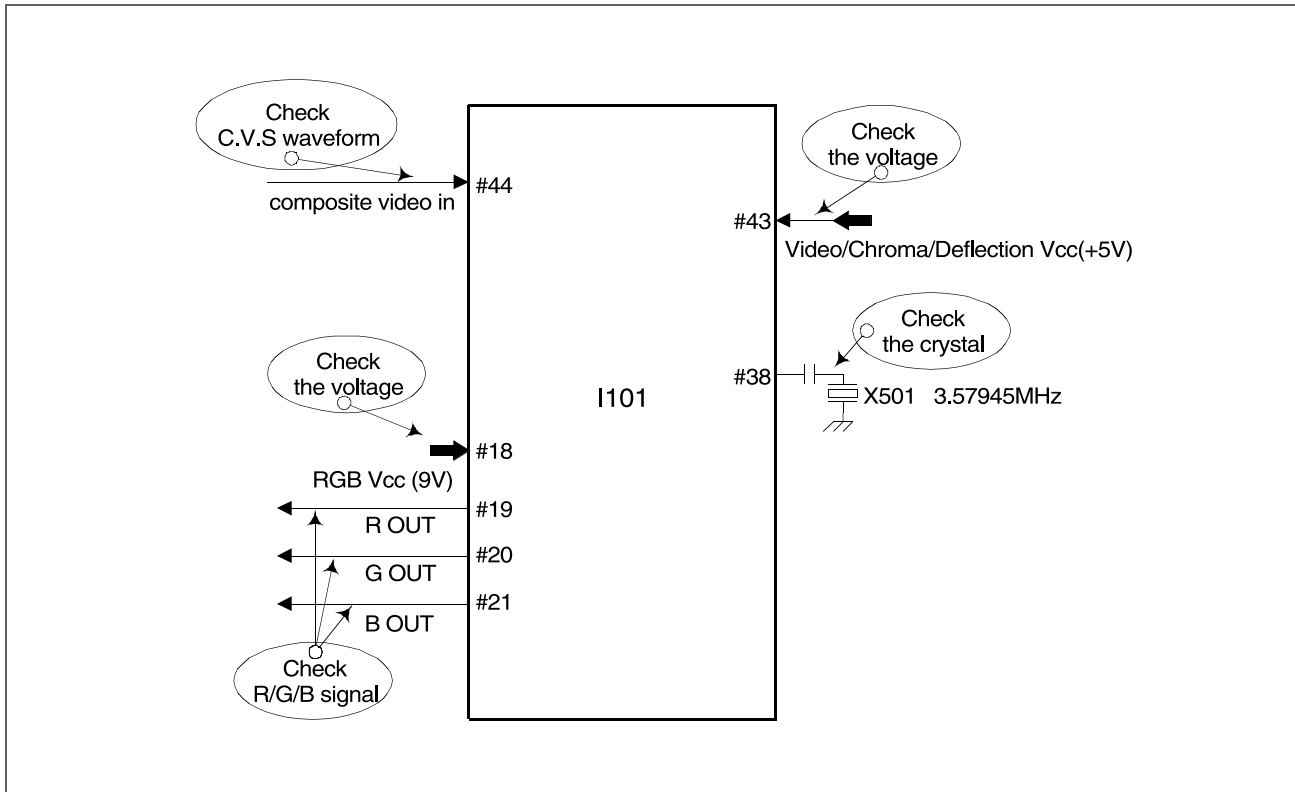


## 4. CH DON'T STOP

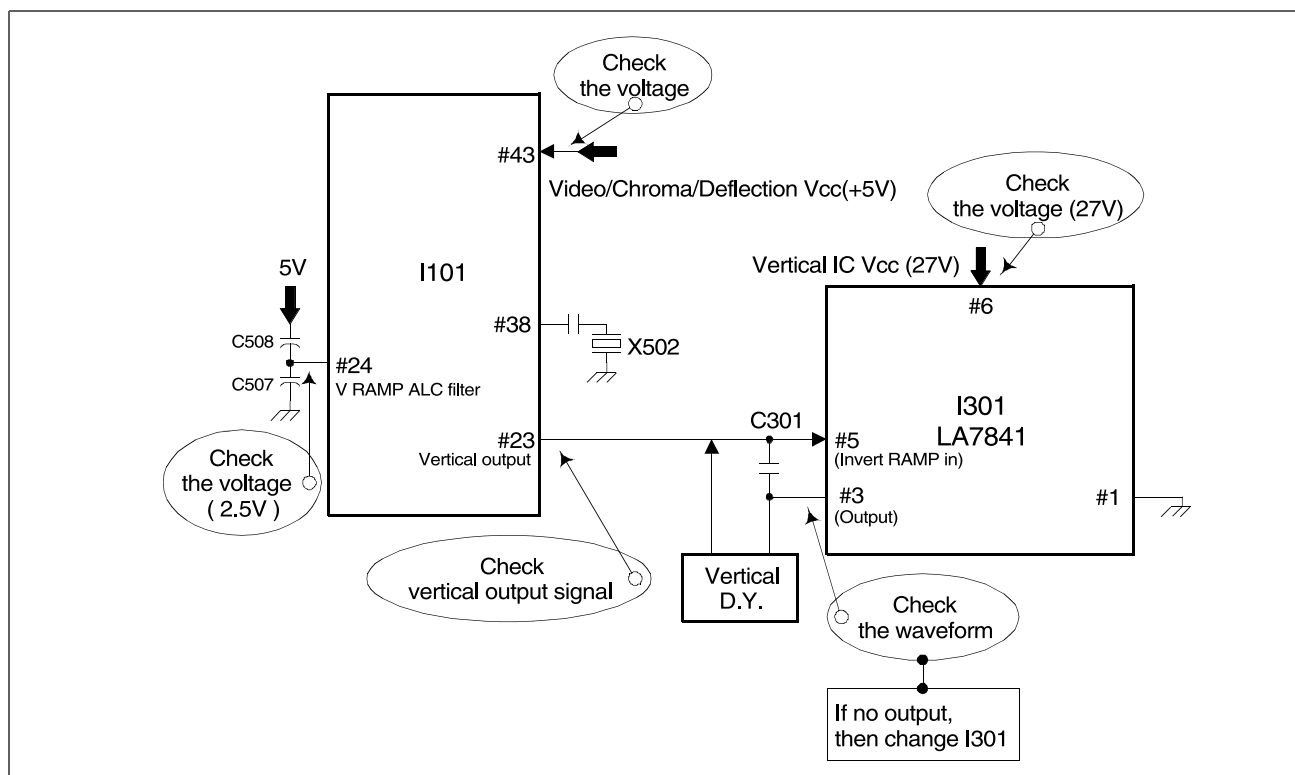
Check the input signal conditions	NG : Loss of signal or weak signal
	OK : Go to the figure ㉑



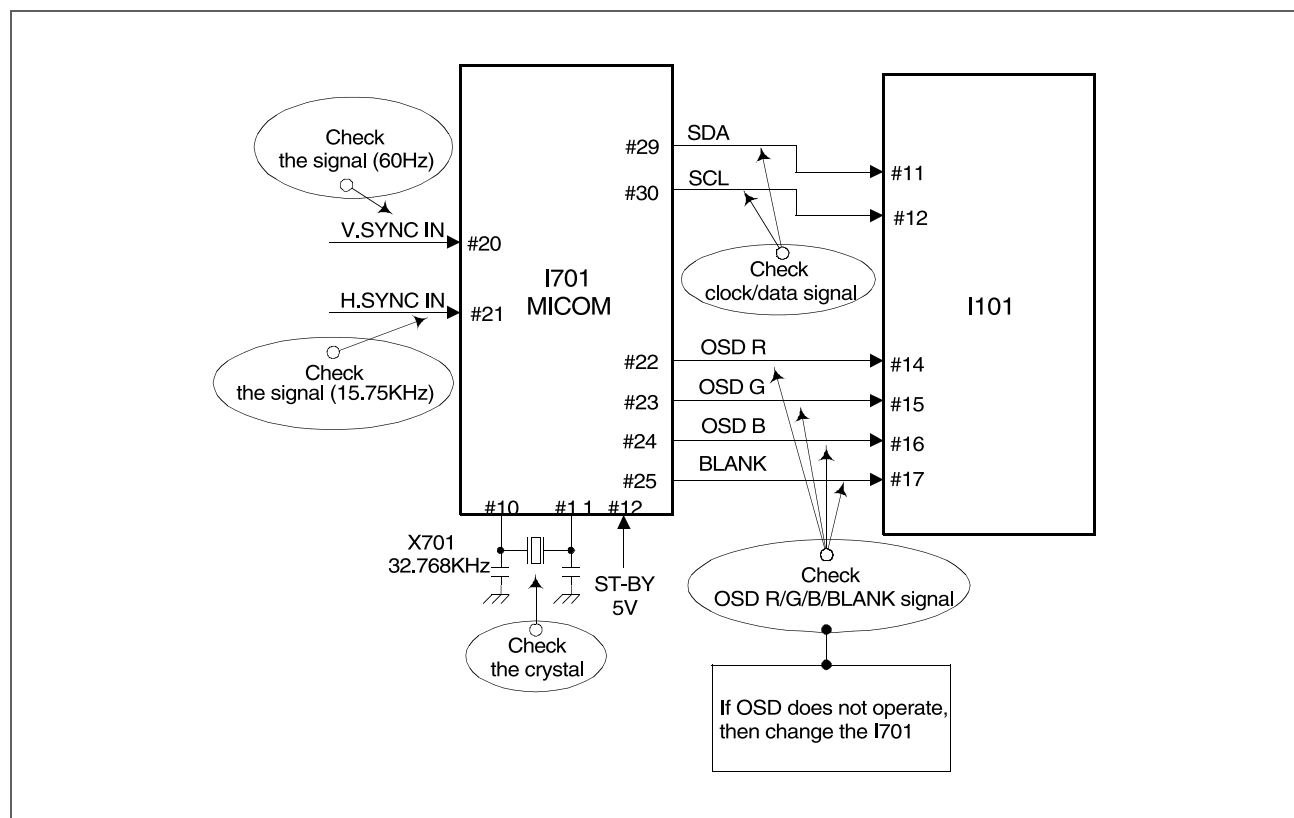
## 5. NO COLOR



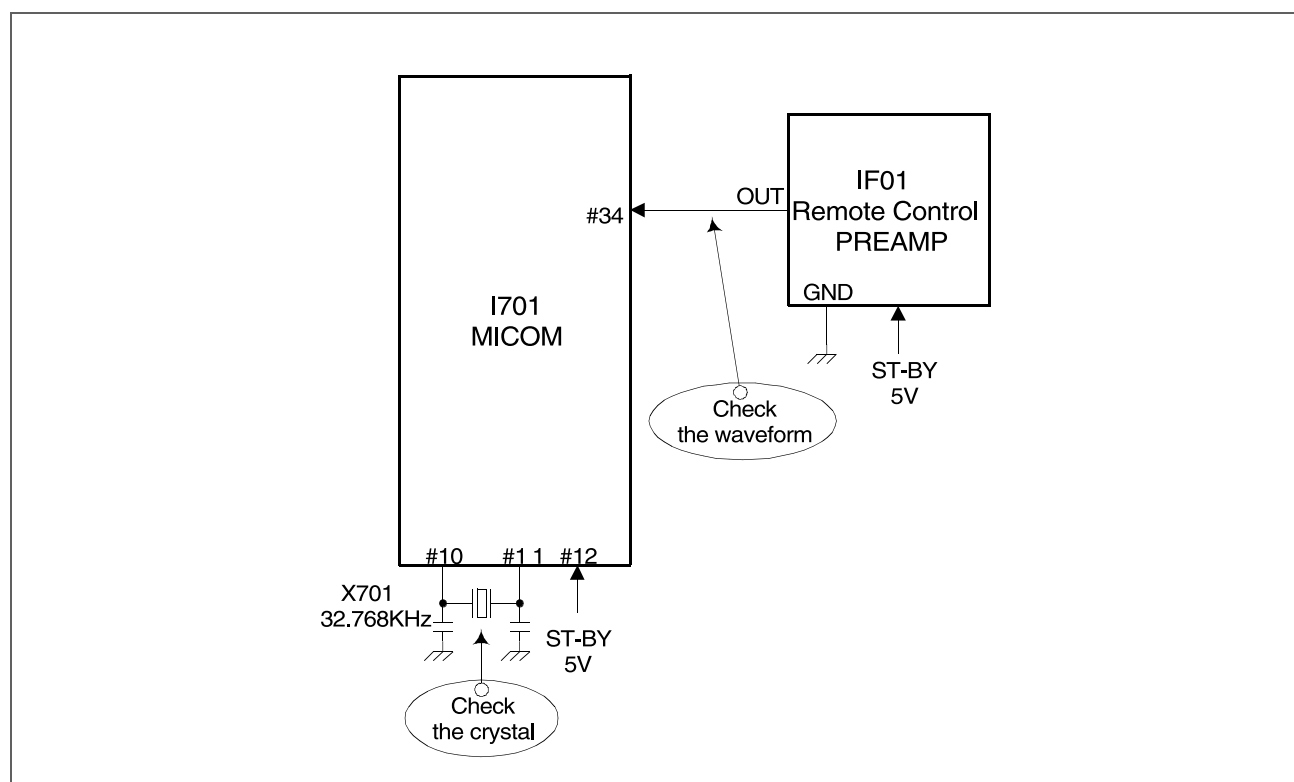
## 6. NO VERTICAL DEFLECTION



## 7. NO OSD (ON SCREEN DISPLAY)



## 8. NO REMOCON RECEIPT



**DAEWOO**

DAEWOO ELECTRONICS Corp.

686, AHYEON0DONG MAPO-GU

SEOUL, KOREA

C.P.O. BOX 8003 SEOUL, KOREA