TC-21/14S3MC Service Manual

Service Support

Service and repair of this product is supported by Panasonic's LUCI interface.

This interface provides a link between the TV and a standard PC to allow a number of diagnostic and control functions to be performed.

For more details contact your local Panasonic company.

BACK
EXIT

Video / Audio

Control

BACK

E - PCB

Y - PCB

BACK

E - Schematic

Y - Schematic

BACK

ORDER NO. SM−97067

Service Manual

Colour Television

TC−21S3MC
TC−14S3MC

Z−7 Chassis

SPECIFICATIONS

(Information in brackets {} refer to TC−14S3MC)

Power Source :	220−240V AC, 50Hz	
Power Consumption :	50W	{33W}
Video / Audio Terminals :		
AV1 IN	Video (21 pin) Audio (21 pin) RGB (21 pin)	1V p−p 75Ω 500mV rms 10kΩ
AV1 OUT	Video (21 pin) Audio (21 pin)	1V p−p 75Ω 500mV rms 1kΩ
RCA IN	Video	1V p−p 75Ω
RCA IN	Audio	500mV rms, 10KΩ
High Voltage : (zero beam current)	27kV + 0.7kV / − 1kV {23kV +0.7kV / − 1kV}	
Picture Tube :	A51EFS83X191 51cm {A34EAC01X13 34cm}	
Audio Output : **Speaker**	6 W (Music Power) 8 Ω Impedance	
Headphones	8 Ω Impedance	
Accessories supplied :	**1 x BNC to 21 pin Euro connector cable**	
Dimensions :		
Height :	480 mm	{364mm}
Width :	520 mm	{389mm}
Depth :	485 mm	{384mm}
Net Weight :	21kg	{10kg}

Specifications are subject to change without notice.
Weight and dimensions shown are approximate.

CARACTÉRISTIQUES

(Les informations entre parenthèses {} concernent le TC−14S3MC)

Alimentation :	220−240V AC, 50Hz	
Consommation :	50W	{33W}
Les bornes vidéo/audio :		
Entrée AV1 (21 broches)	Video (21 pin) Audio (21 pin) RGB (21 pin)	1V p−p 75Ω 500mV rms 10kΩ
Sortie AV1 (21 broches)	Video (21 pin) Audio (21 pin)	1V p−p 75Ω 500mV rms 1kΩ
Entrée **RCA**	Video	1V p−p 75Ω
Entrée **RCA**	Audio	500mV rms, 10KΩ
Tension d'anode :	27kV + 0.7kV / − 1kV {23kV +0.7kV / − 1kV}	
Tube image :	A51EAL135X13 51cm {A34EAC01X13 34cm}	
Sortie Audio :	6 W (Music Power) 8 Ω Impédance	
Casque d'écoute	8 Ω Impédance	
Accessories fournis	Cordon adapteur : Péritel <−> BNC (Video) RCA (Audio)	
Dimensions :		
Hauteur :	480 mm	{364mm}
Largeur :	520 mm	{389mm}
Profondeur :	485 mm	{384mm}
Poids (NET) :	21kg	{10kg}

Les caractéristiques techniques sont susceptibles de modification sans Préavis.
Le poids et les dimensions indiqués sont approximatifs.

Panasonic

CONTENTS

SAFETY PRECAUTIONS

GENERAL GUIDE LINES

1. It is advisable to insert an isolation transformer in the AC supply before servicing a hot chassis.
2. When servicing, observe the original lead dress in the high voltage circuits. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
3. After servicing, see that all the protective devices such as insulation barriers, insulation papers, shields and isolation R–C combinations are correctly installed.
4. When the receiver is not being used for a long period of time, unplug the power cord from the AC outlet.
5. Potentials as high as 28kV {24kV} are present when this receiver is in operation. Operation of the receiver without the rear cover involves the danger of a shock hazard from the receiver power supply. Servicing should not be attempted by anyone who is not familiar with the precautions necessary when working on high voltage equipment. Always discharge the anode of the picture to the chassis before handling the tube.
6. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.

LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs of the plug.
2. Turn on the receiver's power switch.
3. Measure the resistance value with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the receiver, such as screw heads, aerials, connectors, control shafts etc. When the exposed metallic part has a return path to the chassis the reading should be between 4M ohm and 20M ohm. When the exposed metal does not have a return path to the chassis the reading must be infinite.

CONTENTS

PRECAUTIONS DE SECURITE

CONSEILS GENERAUX

1. Avant d'effectuer toute révision d'un châssis sous tension il est recommandé d'installer un transformateur d'isolation.
2. Il est important, lors des réparations, de conserver laposition initial de tours les fils et faisceaux, surtout dans le circuit de la haute tension. Remplacer toutes les pièces affectées par la chaleur dégagée lors d'un cort–circuit.
3. Aprés les réparations, s'assurer que toutes les pièces protectrices telles que barrières ou papiers isolants,blindages et réseaux d'isolation R–C soient convenablement placées.
4. Il est préférable de débrancher le fil d'alimentation si la télé –couleur ne doit pas être utilisée pendant un certain temps.
5. Une tension élevée, de l'odre de 28kV {24kV}, est présente en plusieurs endroits lorsque l,appareil est en circuit. Il y a danger de chocs électriques lorsque le contact est établi en absence du panneau arriére. Toute personne qui tente de réparer cet appareil doit d'abord être consciente des précautions à observer avant de travailler sur un circuit à haute tension. Toujours décharger l'anode du tube cathodique au châssis avant de manipuler.
6. Après tout réparation, on doit effectuer les tests de courant de fuite dans le but d,éviter tout choc.

VERIFICATION DES COURANTS DE FUITE SANS ALIMENTATION

1. Débrancher le fil d'alimentation et installer un fil STRAP entre les deux broches de la fiche.
2. Placer l'interrupteur comme pour établir le contact sur l'appareil.
3. Mesurer la résistance entre les branches de la fiche d'alimentation et les pièces métalliques visibles telles que têtes de vis, antennes, arbre des commandes, support des poignées, etc. Certaines de ces pièces sont en contact avec le châssis et la rèsistance measurée devrait se siture entre 4MΩ, et 20MΩ. La résistance des pièces qui ne sont pas en contact avec le châssis doit être infinie.

LEAKAGE CURRENT HOT CHECK

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 2kΩ 10W resistor in series with an exposed metallic part on the receiver and an earth such as a water pipe.
3. Use an AC voltmeter with high impedance to measure the potential across the resistor.
4. Check each exposed Metallic part and check the voltage at each point.
5. Reverse the AC plug at the outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 1.4 Vrms. In case a measurement is outside the limits specified, there is a possibility of a shock hazard, and the receiver should be repaired and rechecked before it is returned to the customer.

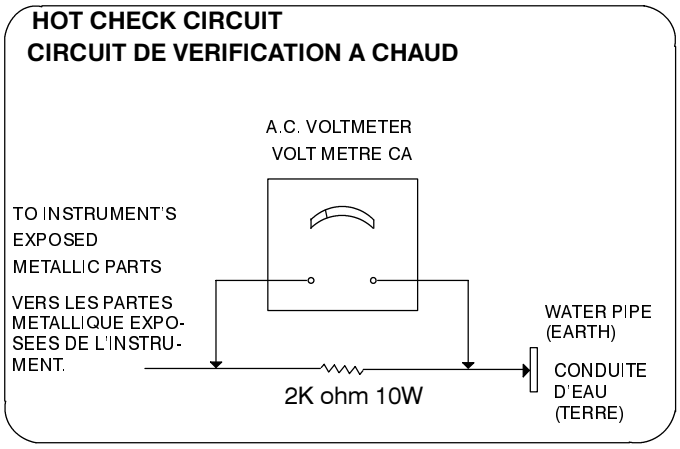


Fig.1

X–RADIATION WARNING

1. The potential sources of X–Radiation in TV sets are the high voltage section and the picture tube.
2. When using a picture tube test jig for service ensure that the jig is capable of handling 28kV {24kV} without causing X–Radiation.

NOTE : It is important to use an accurate periodically calibrated high voltage meter

1. Set the brightness to minimum.
2. Measure the high voltage. The meter should indicate 27kV + 0.7 / – 1kV {23kV + 0.7 / – 1kV} if the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.
3. To prevent any X–Radiation possibility, it is essential to use the specified tube.

VERIFICATION A CHAUD DU COURANT DE FUITE

1. Brancher le cordon secteur directement à une prise secteur. Ne pas utiliser de transformateur d'isolation pour cette vérification.
2. Raccorder une résistance de 2kΩ, 10W, en série avec une partie métallique exposée du récepteur et une terre comme une conduite d'eau.
3. Utiliser un voltmètre CA, de type à impédance élevée, pour mesurer le potentiel à travers la résistance.
4. Vérifier toutes les parties métalliques exposées et mesurer la tension à chaque point.
5. Retourner la fiche CA dans la prise secteur et répéter toutes les mesures ci–dessus.
6. Le potentiel à tous les points ne doit pas dépasser 1.4 volt RMS. AU cas où une mesure est supérieure à cette limite spécifiée, il y a un risque de décharge électrique et le récepteur doit être réparé et revérifié avant d'être rendu au cliente.

IRRADIATION AUX RAYONS X ATTENTION:

1. Les parties de la haute tension et du tube–cathodique d'une télé–couleur sont des sources possible d'emissions de rayons X.
2. Si un tube cathodique témoin est utilisé pour la réparation, s'assurer que son assemblage pourra supporter 28kV {24kV} sans émettre de radiations.

REMARQUE : Il est important que le multimètre à haute tension utilisé soit étalonné périodiquement.

1. Tourner entièrement vers la gauche la commande de lumière.
2. Mesurer la haute tension à l'aide du multimètre approprié. La valeur nominale est de 27kV + 0.7 / – 1kV {23kV + 0.7 / – 1kV}. Si la lecture est hors des tolérances, une réparation immédiate s'impose afin de prévenir toute panne prématurée.
3. Il est essentiel d'utiliser le tube cathodique d'origine pour prévenir toute émission de rayons X.

SERVICE HINTS

HOW TO REMOVE THE REAR COVER

1. Remove the 5 screws (A) as shown in **Fig.2**/**Fig.3.**

SUGGESTIONS DE DEPANNAGE

COMMENT RETIRER LE PENNEAU ARRIÈRE

1. Retirer les 5 vis (A) comme sur la **Fig.2.** / **Fig.3.**

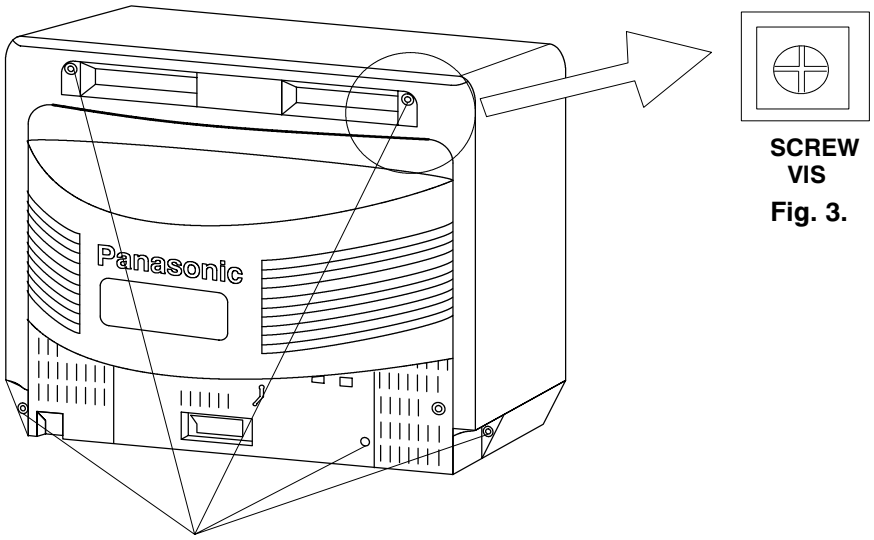


Fig. 3.

Fig. 2.

LOCATION OF CONTROLS

EMPLACEMENT DES COMMANDES

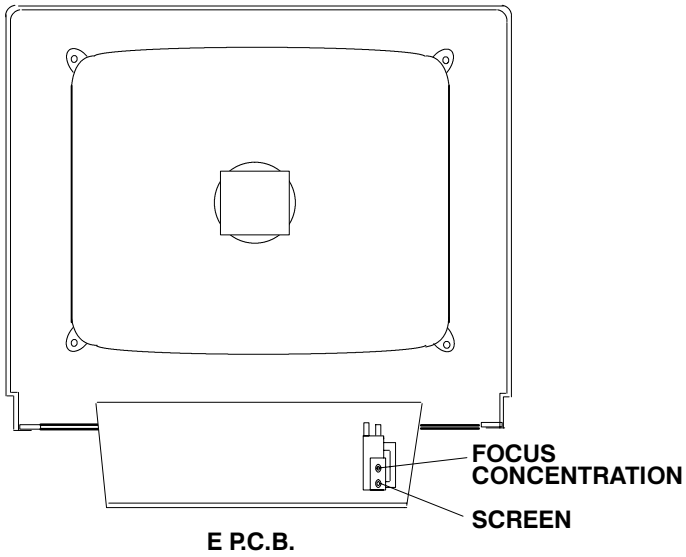


Fig. 4.

ADJUSTMENTS

ITEM/PREPARATION	ADJUSTMENT PROCEDURE
B VOLTAGE 1. Operate the TV set. 2. Set controls : Bright minimum Contrast minimum Volume minimum Beam Current Zero	1. Confirm the indicated test points for the specified voltage. TPE 1: 10V ± 1V TPE 2: 5V ± 0.3V TPE 3: 12.5V ± 1V TPE 4: 22V ± 2.5V TPE 5: 5V ± 0.3V TPE 6: 9V ± 0.3V TPE 9: 30V ± 2.5V TPE 10: 185V ± 10V {135V ± 10V} TPE 11: −13V ± 1V TPE 12: 12V ± 1.5V TPE 13: 125V ± 1.5V {104V ± 1.5V} TPE 14: 8V ± 1V TPE 18: 8V ± 1V TPE 19: 31V ± 1.5V

RÉGLAGES

Préparation	Réglages
+B 1. Appliquer une mire à carreaux N/B 2. Régler les contrôles suivants Lumière Minimum Contraste Minimum Volume Minimum Beam Current Zero	1. TPE 1: 10V ± 1V TPE 2: 5V ± 0.3V TPE 3: 12V ± 1V TPE 4: 22V ± 2.5V TPE 5: 5V ± 0.3V TPE 6: 9V ± 0.3V TPE 9: 30V ± 2.5V TPE 10: 185V ± 10V {135V ± 10V} TPE 11: −13V ± 1V TPE 12: 12V ± 1.5V TPE 13: 125V ± 1.5V {104V ± 1.5V} TPE 14: 8V ± 1V TPE 18: 8V ± 1V TPE 19: 31V ± 1.5V

ALIGNMENT SETTINGS

1. To access Service Mode connect Service Pack (Part No. MSK2681) and using a Z7 remote control.
2. Press the Off Timer button on the remote control and at the same time press the V (down) button on the customer controls at the front of the TV, this will place the TV into Service Mode.
3. Press the Λ / V buttons to step up / down through the functions.
4. Press the + / − buttons to alter the function values.
5. Press the TV/AV button on the remote control after each adjustment has been made to store the required values.
6. To exit Service Mode press the Normalisation button.

NOTE :
The figures used below are nominal and used for representative purposes only

Alignment Function		Settings / Special Features
1. Vertical amplitude	V−Amp 27	Optimum setting
2. Vertical position	V−Pos 03	Optimum setting
3. Horizontal centre	H−Ctr 07	Optimum setting
4. Red cutoff	R−Cut 186	Optimum setting
5. Green cutoff	G−Cut 220	Optimum setting
6. Blue cutoff	B−Cut 213	Optimum setting
7. Red drive	R−Drv 46	Optimum setting
8. Blue drive	B−Drv 36	Optimum setting
9. AGC	AGC 33	No adjustment
10. Sub contrast	S−Con 33	Optimum setting
11. Sub colour	S−Col 39	Optimum setting
12. Sub bright	S−Bri 40	Optimum setting

RÉGLAGES

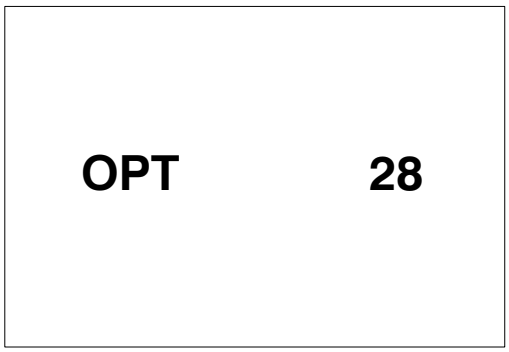
1. Pour accéder au mode Service connecter le Service Pack (référence MSK2681) et utiliser une télécommande Z7.
2. Appuyer la touche minuterie (Off Timer) de la télécommande et simultanément presser la touche V (−) sur le clavier de commande à l'avant du téléviseur en mode Service.
3. Appuyer sur la touche Λ (+) ou V (−) pour sélectionner la fonction déstrée.
4. Appuyer sur la touche + ou − pour modifier les valeurs des réglages.
5. Presser la touche TV/AV dela télécommande après chaque réglage pour mémoriser les valeurs désirées.
6. Pour sortir de la position SERVICE MODE arrèter le TV.

(Les figures ci−dessous sont fictives et utilisées uniquement à des fins représentatives)

Fonctions		Réglages/Points particuliers
1. Amplitude verticale	V−Amp 27	Optimiser les réglages
2. Vertical position	V−Pos 03	Optimiser les réglages
3. Centrage horizontal	H−Ctr 07	Optimiser les réglages
4. Red cutoff	R−Cut 186	Optimiser les réglages
5. Green cutoff	G−Cut 220	Optimiser les réglages
6. Blue cutoff	B−Cut 213	Optimiser les réglages
7. Red drive	R−Drv 46	Optimiser les réglages
8. Blue drive	B−Drv 36	Optimiser les réglages
9. AGC	AGC 33	Ne pas régler
10. Sub contrast	S−Con 33	Optimiser les réglages
11. Sub colour	S−Col 39	Optimiser les réglages
12. Sub bright	S−Bri 40	Optimiser les réglages

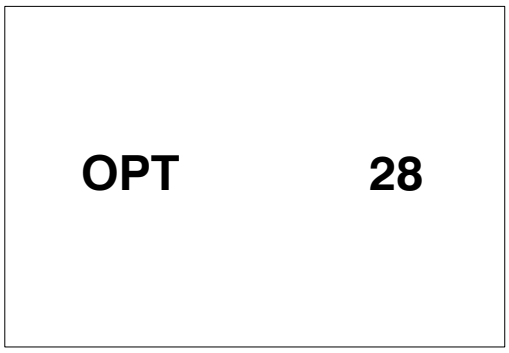
SELF CHECK

Self check is used to automatically check the Bus Lines Hexadecimal code of the TV set.
Self check can be accessed by connecting Service Pack (Part No. MSK2681) and using a Z7 remote control.
To acces the Self Check mode press the Status button on the Remote Control, followed by the V (down) button on the customer controls at the front of the TV, and the screen will show:–
When exiting Self Check the customer settings will return to factory settings.



AUTO TEST

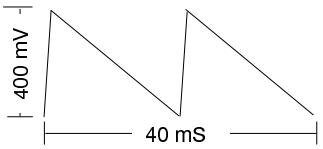
L'auto test est utilisé pour véifier le BUS et les codes Hexadécimaux du TV.
Le mode Self Check peut être atteint en utilisant la Service Pack (référence MSK2681) et une télécommande Z7.
Pour passer en mode test ,il faut appuyé simultanément sur : VOLUME MOINS sur le tiroir en face avant et: OFF TIMER sur la télécommande Infra–rouge:–
Après un Auto Test (Self Check) le téléviseur retourne en position réglages usine.



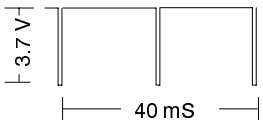
WAVEFORM PATTERN TABLE

TABLEAU DE MIRES DE FORMA D'ONDES

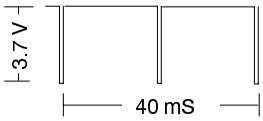
Vert Out IC IN
IC451 pin 4
5 mS 20 mV



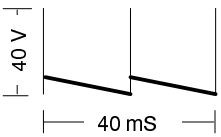
SDA
IC601 pin 14
5 mS 5 mV



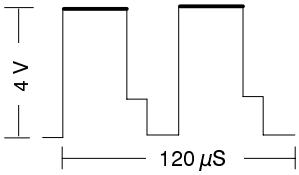
SCL
IC1201 pin 3
5 mS 1 V



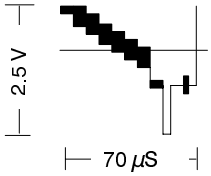
Vert Drive
IC451 pin 2
5 mS 1 V



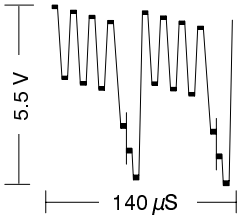
H. Out
IC601 pin 13
20 µS 1 V



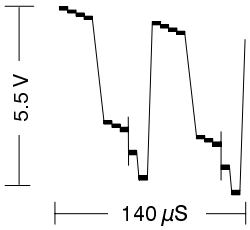
IF VO
IC601 pin 52
20 µS 50 mV



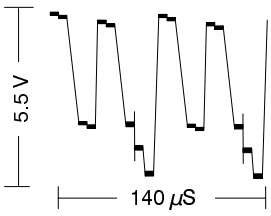
B Out
TPE15
20 µS 0.1 V



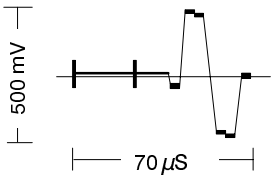
G Out
TPE16
20 µS 0.1 V



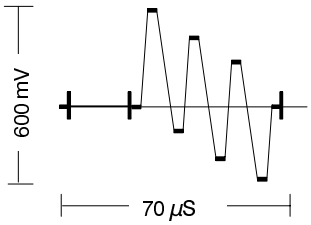
R Out
TPE17
20 µS 0.1 V



'RY' Out
IC601 pin 43
20 µS 20 mV

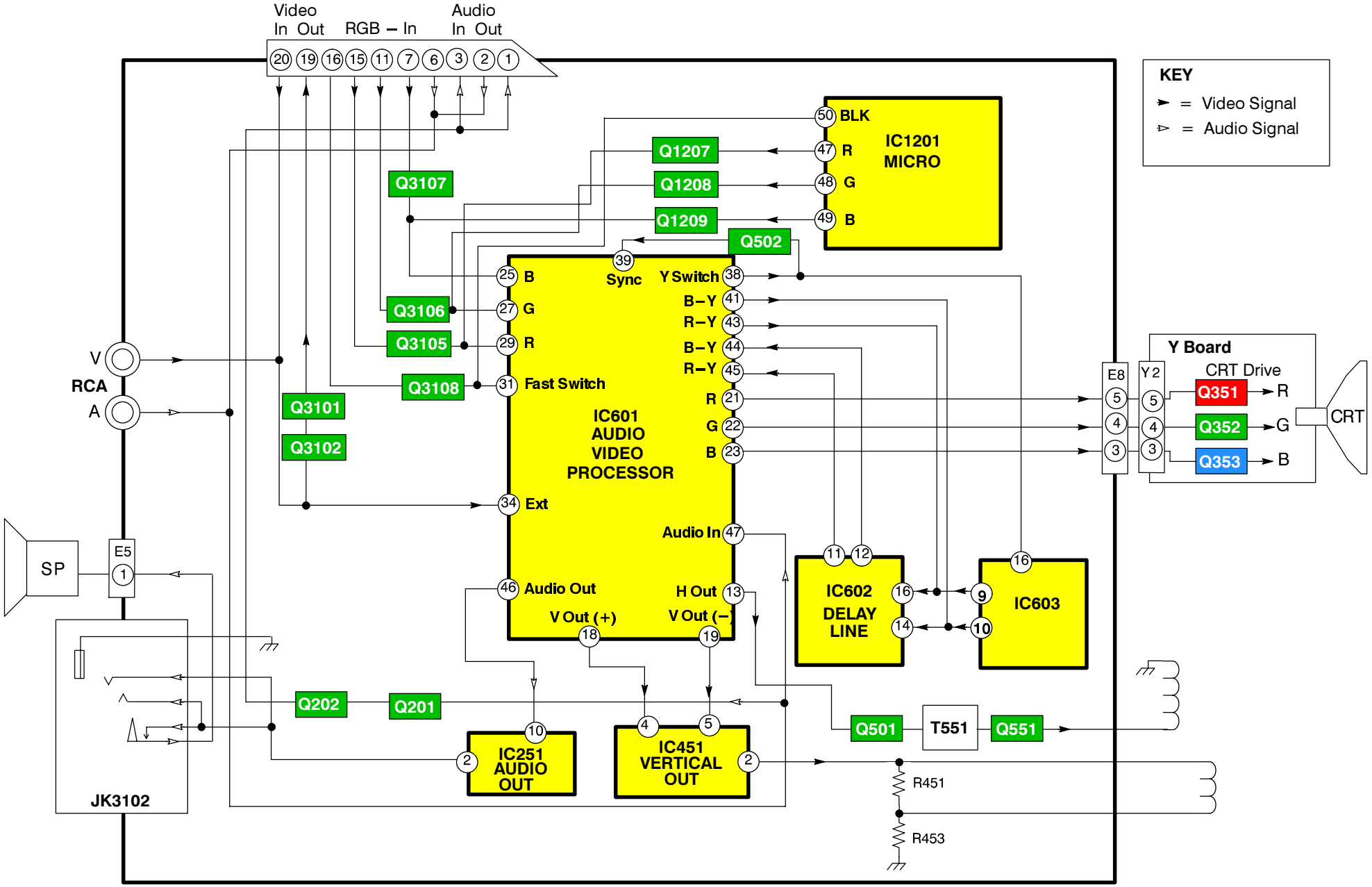


'BY' Out
IC601 pin 41
20 µS 20 mV



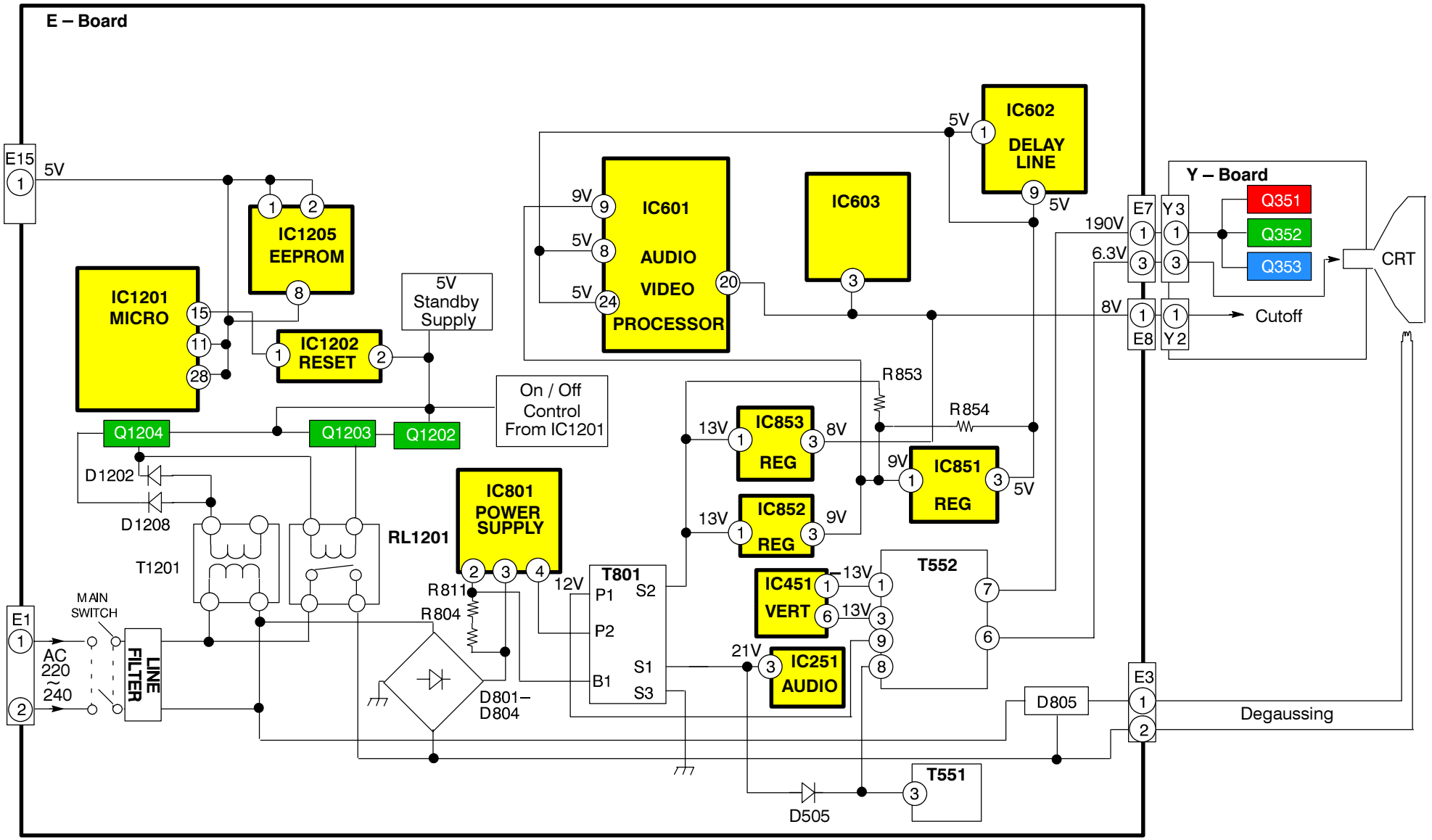
VIDEO / AUDIO SIGNAL BLOCK DIAGRAM

SINOPTIQUE VIDEO / AUDIO



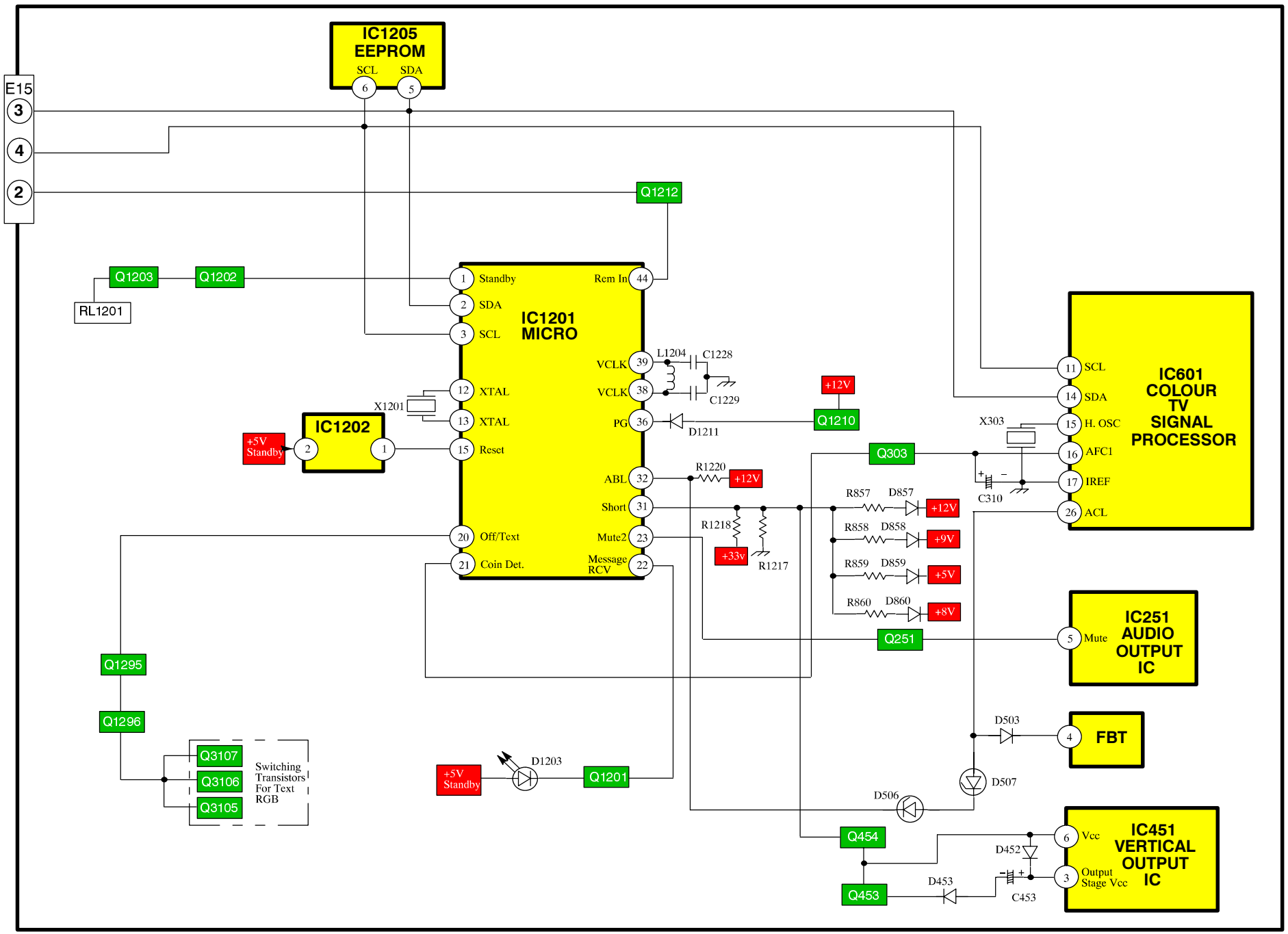
POWER SUPPLY BLOCK DIAGRAM

SYNOPTIQUE DE L'ALIMENTATION



CONTROL BLOCK DIAGRAM

SYNOPTIQUE DU SIGNAL DE CONTROLE



PARTS LOCATION

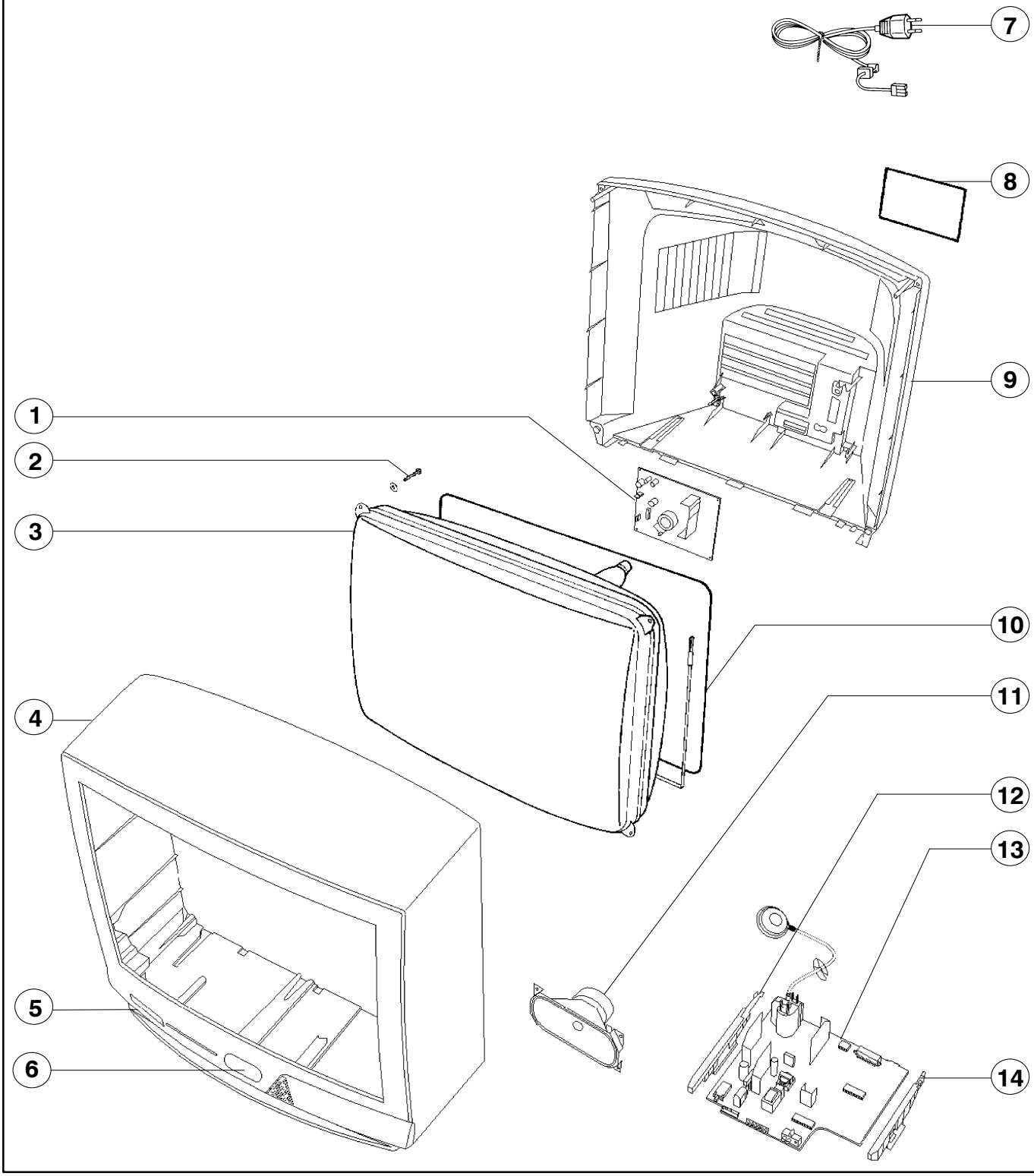
NOTE :

The numbers on the exploded view below refer to the miscellaneous section of the Replacement Parts List.

EMPLACEMENT DÈS PIECES

REMARQUE :

Les numéros sur les pièces mécaniques indiquent les NO. de réf. da la liste des pieces de rechange.



REPLACEMENT PARTS LIST

Important Safety Notice
Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

LISTE DES PIÈCES DE RECHANGE

Remarque importante pour la sécrité
Les éléments portant la indication ⚠ possèent des caractéristiques de sécurité spécials Lors du remplacement de l'une quelconque des ces pièces, n'utiliser que celles spécifiées par la fabricant.

COMMON PARTS FOR MODELS TC−21S3MC AND TC−14S3MC

MISCELLANEOUS COMPONENTS

Ref No.	Part No.	Description	
1)	**********	REFER TO DIFFERENCE LIST	
2)	**********	REFER TO DIFFERENCE LIST	
3)	**********	REFER TO DIFFERENCE LIST	
4)	**********	REFER TO DIFFERENCE LIST	
5)	**********	REFER TO DIFFERENCE LIST	
6)	TKP8E1147	SMOKE PANEL	
7)	TSX8E0020	POWER CORD	⚠
8)	**********	REFER TO DIFFERENCE LIST	
9)	**********	REFER TO DIFFERENCE LIST	
10)	**********	REFER TO DIFFERENCE LIST	
11)	**********	REFER TO DIFFERENCE LIST	
12)	**********	REFER TO DIFFERENCE LIST	
13)	**********	REFER TO DIFFERENCE LIST	
14)	**********	REFER TO DIFFERENCE LIST	
	TBM8E1415	BLIND SHEET	
	TJS8E006	SCART CONNECTOR	
	TQB8E2438	INST BOOK	⚠
	31221212478	FIX CLIP	
	31221212478	FIX CLIP	
	31221212478	FIX CLIP	
	TBX8E037	3 KEY BUTTON PAD	
	TMW8E015−2	LED HOLDER	

INTEGRATED CIRCUITS

IC251	LA4265	AUDIO OUTPUT
IC451	LA7840	VERTICAL OUTPUT
IC601	M52778SP−A	AUDIO / VIDEO PROCESSOR
IC602	U3666M−MDP	DELAY LINE
IC603	TDA8395PN2	SECAM DECODER
IC801	STR58041A	POWER SUPPLY
IC851	L78M05MRB	5V REGULATOR
IC852	L78M09MRB	9V REGULATOR
IC853	AN78M08LB	8V REGULATOR
IC1201	SDA5222V50	MICRO PROCESSOR
IC1202	MN1280R	RESET

CAPACITORS

C114	ECA1HM010GB	ELECT	50V	1pF
C206	ECEA1CN470	ELECT	16V	47μF
C207	ECEA1CN100	ELECT	16V	10μF
C208	ECA1CM100GB	ELECT	16V	10pF
C217	ECEA1CN101	ELECT	16V	100μF
C251	ECA1EM471GB	ELECT	25V	470pF
C252	ECA1HM010GB	ELECT	50V	1pF
C253	ECEA1EGE470	ELECT	25V	47μF
C254	ECUV1H272JCX	S.M.CAP	50V	2.7nF
C255	ECQB1H104J	FILM	50V	100nF
C256	ECQM1H224J	FILM	50V	220nF
C257	ECQM1H474J	FILM	50V	470nF
C258	ECEA1EGE101	ELECT	25V	100μF
C260	ECA1EM102GB	ELECT	25V	1nF
C261	ECUV1H471JCX	S.M.CAP	50V	470pF
C262	ECA1HM101GB	ELECT	50V	100pF
C301	ECA1HM101GB	ELECT	50V	100pF
C302	ECUV1H104ZFX	S.M.CAP	50V	100nF
C303	ECA1CM471GB	ELECT	16V	470pF
C304	ECUV1H104ZFX	S.M.CAP	50V	100nF
C305	ECA1HM101GB	ELECT	50V	100pF
C307	ECA1HM101GB	ELECT	50V	100pF
C308	ECUV1H104ZFW	S.M.CAP	50V	100nF
C309	ECUV1H223KBX	S.M.CAP	50V	22nF
C310	ECA1HM010GB	ELECT	50V	1pF
C311	ECUV1H104ZFX	S.M.CAP	50V	100nF
C312	ECUV1H104ZFX	S.M.CAP	50V	100nF
C313	ECUV1H104ZFX	S.M.CAP	50V	100nF
C314	ECEA1HNR47UB	ELECT	50V	0.47μF
C315	ECEA1HN2R2UB	ELECT	50V	2.2μF
C319	ECUV1H104ZFX	S.M.CAP	50V	100nF
C355	ECKC3D152J	CERAMIC	2KV	1.5nF ⚠
C357	ECKC2H152J	CERAMIC	500V	1.5nF ⚠
C362	ECUV1H102ZFX	S.M.CAP	50V	1nF
C368	ECEA2EU010	ELECT	250V	1μF
C370	ECA1CM220GB	ELECT	16V	22μF
C371	ECA1CM221GB	ELECT	16V	220pF
C401	ECUV1H223KBX	S.M.CAP	50V	22nF
C402	ECUV1H472KBX	S.M.CAP	50V	4.7nF
C403	ECA1HM010GB	ELECT	50V	1pF
C404	ECUV1H103ZFX	S.M.CAP	50V	10nF
C452	ECQM1H274J	FILM	50V	270nF
C457	ECQM1H394J	FILM	50V	390nF
C461	ECUV1H100CCX	S.M.CAP	50V	10pF
C501	ECA1HM010GB	ELECT	50V	1pF
C502	ECUV1H223KBX	S.M.CAP	50V	22nF
C503	ECUV1H391JCX	S.M.CAP	50V	390pF
C504	ECEA1HN010UB	ELECT	50V	1μF
C505	ECUV1H331JCX	S.M.CAP	50V	330pF
C506	ECQM1273KZW	FILM	100V	27nF
C507	ECEA1HGE100	ELECT	50V	10μF
C541	ECEA1EN4R7UB	ELECT	25V	4.7μF
C550	ECA1VM471GB	ELECT	35V	470pF
C559	ECKC2H471J	CERAMIC	500V	470pF ⚠
C560	ECKC2H471J	CERAMIC	500V	470pF ⚠
C561	ECEA2EU100	ELECT	250V	10μF
C562	ECKC2H471J	CERAMIC	500V	470pF ⚠
C563	ECA1VM471GB	ELECT	35V	470pF
C564	ECA1CM471GB	ELECT	16V	470pF
C565	ECA1VM471GB	ELECT	35V	470pF
C566	ECKC2H471J	CERAMIC	500V	470pF ⚠
C601	ECUV1H473KBX	S.M.CAP	50V	47nF
C602	ECUV1H153KBX	S.M.CAP	50V	15nF
C603	ECA1HM010GB	ELECT	50V	1pF
C605	ERJ6GEY0R00	S.M.CARB	0.1W	5% 0Ω
C606	ECUV1H104ZFX	S.M.CAP	50V	100nF
C607	ECUV1H104ZFX	S.M.CAP	50V	100nF
C608	ECUV1H470JCX	S.M.CAP	50V	47pF
C609	ECUV1H470JCX	S.M.CAP	50V	47pF
C610	ECA1HM101GB	ELECT	50V	100pF
C611	ECUV1H104ZFX	S.M.CAP	50V	100nF
C612	ECUV1H103KBX	S.M.CAP	50V	10nF
C613	ECUV1H103KBX	S.M.CAP	50V	10nF
C614	ECUV1H104ZFX	S.M.CAP	50V	100nF
C615	B32529−C224	CAPACITOR		0.22μF
C616	222236576104	FILM	760V	100nF
C617	ECUV1H104ZFX	S.M.CAP	50V	100nF
C618	ECA1HM101GB	ELECT	50V	100pF
C619	ECUV1H103KBX	S.M.CAP	50V	10nF
C620	ECUV1H103KBX	S.M.CAP	50V	10nF
C623	ECUV1H104ZFW	S.M.CAP	50V	100nF
C624	ECUV1H560JCX	S.M.CAP	50V	56pF
C625	ECUV1H560JCX	S.M.CAP	50V	56pF
C626	ECUV1H560JCX	S.M.CAP	50V	56pF
C627	ECUV1H560JCX	S.M.CAP	50V	56pF
C628	ECUV1H390JCX	S.M.CAP	50V	39pF
C630	ECUY1H103JCW	S.M.CAP	50V	10nF
C802	ECQU2A823MNB	FILM	200V	82nF
C803	ECKC2H472J	CERAMIC	500V	4.7nF ⚠
C804	ECKC2H472J	CERAMIC	500V	4.7nF ⚠
C805	ECKC2H472J	CERAMIC	500V	4.7nF ⚠
C806	ECKC2H472J	CERAMIC	500V	4.7nF ⚠
C807	ECOS2GA101BB	ELECT	400V	100μF
C808	ECQB1H333J	FILM	50V	33nF
C809	ECKC3D471JB	CERAMIC	2KV	470pF ⚠
C810	ECA1VM101GB	ELECT	35V	100pF
C812	ECA2CHG221E	ELECT	160V	220pF
C813	ECQU2A823MNB	FILM	200V	82nF
C817	ECA1VM101GB	ELECT	35V	100pF
C818	ECKWNA471MBC	CERAMIC	250V	470pF
C820	ECKWNA332MEC	CERAMIC	250V	3.3nF

Ref No.	Part No.	Description			
C821	ECKC3A101J	CERAMIC	1.0KV	100pF	
C853	ECEA1EGE102	ELECT	25V	1000μF	
C854	ECA1HHG471E	ELECT	50V	470pF	
C855	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C856	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C857	ECA1HM101GB	ELECT	50V	100pF	
C858	ECA1AM222B	ELECT	10V	2.2nF	
C859	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C860	ECA1HM101GB	ELECT	50V	100pF	
C861	ECA1CM102B	ELECT	16V	1nF	
C1201	ECA1EM102GB	ELECT	25V	1nF	
C1202	ECA1EM101GB	ELECT	25V	1μF	
C1203	ECA1EM471GB	ELECT	25V	470pF	
C1205	ECUV1H471KBX	S.M.CAP	50V	470pF	
C1206	ECUV1H471KBX	S.M.CAP	50V	470pF	
C1207	ECUV1H471KBX	S.M.CAP	50V	470pF	
C1210	ECUV1H473KBX	S.M.CAP	50V	47nF	
C1218	ECA1HM010GB	ELECT	50V	1pF	
C1219	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1220	ECA0JM101G	ELECT	6.3V	100pF	
C1226	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1227	ECA1HM101GB	ELECT	50V	100pF	
C1229	ECUV1H470GCG	S.M.CAP	50V	47pF	
C1230	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
C1232	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1234	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1241	ECA1HM101GB	ELECT	50V	100pF	
C1244	ECA1CM100GB	ELECT	16V	10pF	
C1245	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
C1249	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1257	ECUV1H561JCX	S.M.CAP	50V	560pF	
C1258	ECA1CM100GB	ELECT	16V	10pF	
C1259	ECUV1H150JCX	S.M.CAP	50V	15pF	
C1260	ECUV1H560JCX	S.M.CAP	50V	56pF	
C1261	ECA1HM101GB	ELECT	50V	100pF	
C1262	ECUV1H390JCX	S.M.CAP	50V	39pF	
C1263	ECUV1H390JCX	S.M.CAP	50V	39pF	
C1264	ECUV1H390JCX	S.M.CAP	50V	39pF	
C1265	ECUV1H560JCX	S.M.CAP	50V	56pF	
C1268	ECA1HM101GB	ELECT	50V	100pF	
C3101	ECUV1H101JCX	S.M.CAP	50V	100pF	
C3102	ECUV1H561KBX	S.M.CAP	50V	560pF	
C3105	ECUV1H101JCX	S.M.CAP	50V	100pF	
C3106	ECA1HM101GB	ELECT	50V	100pF	
C3108	ECEA1CN101	ELECT	16V	100μF	
C3109	ECUV1H561JCX	S.M.CAP	50V	560pF	
C3110	222236516684	FILM	160V	100nF	
C3113	ECUV1H103KBX	S.M.CAP	50V	10nF	
C3115	ECEA1CN100	ELECT	16V	10μF	
C3117	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C3118	ECEA1CN100	ELECT	16V	10μF	
C3119	ECEA1CN100	ELECT	16V	10μF	
C3120	ECA1CM471GB	ELECT	16V	470pF	
C3121	ECA1HM4R7GB	ELECT	50V	4.7μF	

DIODES

D304	1SS355TE−17	DIODE
D306	MTZJT−774.7A	DIODE
D307	MTZJT−774.7A	DIODE
D351	MA165TA5	DIODE 1SS133T−77
D352	MA165TA5	DIODE 1SS133T−77
D353	MA165TA5	DIODE 1SS133T−77
D354	MA165TA5	DIODE 1SS133T−77
D452	ERA15−02V3	DIODE
D453	MA165TA5	DIODE 1SS133T−77
D454	MA165TA5	DIODE 1SS133T−77
D455	MA165TA5	DIODE 1SS133T−77
D503	MA165TA5	DIODE 1SS133T−77
D504	MA165TA5	DIODE 1SS133T−77
D505	1SR124−4AT82	DIODE
D506	MTZJ33B	DIODE
D541	MA165TA5	DIODE 1SS133T−77
D542	MA165TA5	DIODE 1SS133T−77
D551	TVSRH2F−LFB3	DIODE
D552	TVSRU2AMLFA5	DIODE
D553	1SR124−4AT82	DIODE
D554	1SR124−4AT82	DIODE
D555	ERA22−02V3	DIODE
D556	MA165TA5	DIODE 1SS133T−77
D557	1SR124−4AT82	DIODE
D801	EMO2BMV0	DIODE
D802	EMO2BMV0	DIODE
D803	EMO2BMV0	DIODE

Ref No.	Part No.	Description
D804	EMO2BMV0	DIODE
D808	1SR124−4AT82	DIODE
D809	1SR124−4AT82	DIODE
D810	RU3LFA1	DIODE
D811	1SR124−4AT82	DIODE
D812	R2KNLFA1	DIODE
D814	MA165TA5	DIODE 1SS133T−77
D815	1SR124−4AT82	DIODE
D816	1SR124−4AT82	DIODE
D851	TVSRU3AMLFA5	DIODE
D852	TVSRU2AMV1	DIODE
D857	MA165TA5	DIODE 1SS133T−77
D858	MA165TA5	DIODE 1SS133T−77
D859	MA165TA5	DIODE 1SS133T−77
D860	MA165TA5	DIODE 1SS133T−77
D861	MA165TA5	DIODE 1SS133T−77
D1202	MA170	DIODE
D1203	SLR56UR3FLF	LED
D1205	MA170	DIODE
D1207	MTZJT−778.2A	DIODE
D1208	MA170	DIODE
D1209	MTZJT−775.1C	DIODE
D1211	MA165TA5	DIODE 1SS133T−77
D1212	MA165TA5	DIODE 1SS133T−77
D1213	MA165TA5	DIODE 1SS133T−77
D1214	MA170	DIODE
D1217	MA165TA5	DIODE 1SS133T−77
D1218	MA165TA5	DIODE 1SS133T−77
D1219	MA165TA5	DIODE 1SS133T−77
D1220	MA165TA5	DIODE 1SS133T−77
D1221	MA165TA5	DIODE 1SS133T−77
D1222	MA165TA5	DIODE 1SS133T−77
D1224	MA165TA5	DIODE 1SS133T−77
D1301	MTZJT−775.1A	DIODE
D1311	MA165TA5	DIODE 1SS133T−77
D3101	MA165TA5	DIODE 1SS133T−77

FUSES

F801	2153.15H	FUSE	⚠
F8011	EYF52BC	FUSE HOLDER	
F8012	EYF52BC	FUSE HOLDER	

TERMINALS AND LINKS

JC1	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JC11	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JC12	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JC14	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JC20	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JC21	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JC22	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JC23	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JC24	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JC25	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JC26	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JC27	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JC28	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JC3	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
JC30	ERJ8GEYJ101	S.M.CAR	.125W	5%	100Ω
JC31	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JC35	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JC7	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JC8	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JEEK	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JEFK	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JEJK	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JEPK	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JEXK	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JEZK	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JK3102	TJB16663	A.V.TERMINAL			
J208	EXCELSA39V	COIL			
J321	EXCELSA35V	COIL			

COILS

L451	EXCELSA35T	COIL
L801	ELF18D281A	COIL
L803	EXCELSA35T	COIL
L804	EXCELDR35V	COIL
L851	EXCELSA35T	COIL

Ref No.	Part No.	Description
L852	EXCELSA35T	COIL
L1201	EXCELSA35T	COIL
L1203	TLTACT100K	COIL
L1204	ELJNA6R8GF	COIL
L1207	TLTACT100K	COIL
L1208	TLTACT100K	COIL
L1209	EXCELSA35T	COIL

TRANSISTORS

Q102	BC847B	TRANSISTOR OR 2SD601ATX
Q201	BC847B	TRANSISTOR OR 2SD601ATX
Q202	BC847B	TRANSISTOR OR 2SD601ATX
Q251	BC847B	TRANSISTOR OR 2SD601ATX
Q252	BC857B	TRANSISTOR OR 2SB709ATX
Q253	BC847B	TRANSISTOR OR 2SD601ATX
Q303	BC847B	TRANSISTOR OR 2SD601ATX
Q354	BC857B	TRANSISTOR OR 2SB709ATX
Q453	BC847B	TRANSISTOR OR 2SD601ATX
Q454	BC847B	TRANSISTOR OR 2SD601ATX
Q501	2SD2398−M2	TRANSISTOR
Q502	BC857B	TRANSISTOR OR 2SB709ATX
Q503	BC847B	TRANSISTOR OR 2SD601ATX
Q504	BC847B	TRANSISTOR OR 2SD601ATX
Q551	BU2506DFRB	TRANSISTOR
Q801	BC847B	TRANSISTOR OR 2SD601ATX
Q802	2SD965−R	TRANSISTOR
Q1202	BC847B	TRANSISTOR OR 2SD601ATX
Q1203	BC847B	TRANSISTOR OR 2SD601ATX
Q1204	2SC1317−TA	TRANSISTOR
Q1205	BC847B	TRANSISTOR OR 2SD601ATX
Q1207	BC847B	TRANSISTOR OR 2SD601ATX
Q1208	BC847B	TRANSISTOR OR 2SD601ATX
Q1209	BC847B	TRANSISTOR OR 2SD601ATX
Q1210	BC857B	TRANSISTOR OR 2SB709ATX
Q1211	BC857B	TRANSISTOR OR 2SB709ATX
Q1212	BC847B	TRANSISTOR OR 2SD601ATX
Q1213	BC847B	TRANSISTOR OR 2SD601ATX
Q1295	BC857B	TRANSISTOR OR 2SB709ATX
Q1296	BC847B	TRANSISTOR OR 2SD601ATX
Q3101	2SC1318−S	TRANSISTOR
Q3102	BC847B	TRANSISTOR OR 2SD601ATX
Q3105	BC857B	TRANSISTOR OR 2SB709ATX
Q3106	BC857B	TRANSISTOR OR 2SB709ATX
Q3107	BC857B	TRANSISTOR OR 2SB709ATX
Q3108	BC857B	TRANSISTOR OR 2SB709ATX

RESISTOR

RL1201	TSE1885−1	RELAY			
R107	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R114	ERJ6GEYJ123	S.M.CARB	0.1W	5%	12KΩ
R203	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2Ω
R205	ERJ6GEYJ112	SM.CARB	0.125W	5%	1K1Ω
R206	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R221	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω
R224	ERJ6GEYJ114	S.M.CARB	0.1W	5%	110KΩ
R225	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39KΩ
R251	ERJ6GEYJ3R3	S.M.CARB	0.1W	5%	3R3Ω
R252	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω
R254	ERJ6GEYJ121	S.M.CARB	0.1W	5%	120Ω
R255	ERJ6GEYJ181	S.M.CARB	0.1W	5%	180Ω
R256	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R257	ERQ1CJP120	METAL	1W	5%	12Ω ⚠
R259	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330Ω
R260	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω
R261	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω
R262	ERJ6GEYF104V	SM.CARB	0.125W	1%	100KΩ
R263	ERJ6GEYF622V	SM.CARB	0.125W	1%	6K2Ω
R264	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R301	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R302	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R303	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R304	ERJ6ENF2201	SM.CARB	0.125W	5%	200Ω
R317	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R318	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R319	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R320	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R372	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R373	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390Ω
R374	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R401	ERJ6ENF9100	SM.CARB	0.125W	5%	10Ω
R402	ERJ6ENF8201	SM.CARB	0.125W	5%	200Ω

Ref No.	Part No.	Description			
R403	ERJ6ENF6801	SM.CARB	0.125W	5%	800Ω
R451	ERDS1TJ331	CARBON	0.5W	5%	330Ω
R452	ERJ6GEYJ1R0	SM.CARB	0.125W	5%	1R0Ω
R454	ERJ6GEYF153V	SM.CARB	0.125W	1%	15KΩ
R456	ERO25CKF5601	METAL	0.25W	1%	5K6Ω ⚠
R457	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R458	ERD25TJ683	CARBON	0.25W	5%	68KΩ
R459	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω
R460	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R461	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R462	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R501	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390Ω
R502	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω
R503	ERG3SJS101	METAL	3W	5%	10Ω
R504	ERG2ANJ471	METAL	2W	5%	470Ω
R505	ERJ6GEYJ433	SM.CARB	0.125W	5%	43KΩ
R510	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560Ω
R511	ERJ6GEYJ334	S.M.CARB	0.1W	5%	330KΩ
R512	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω
R513	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R514	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω
R515	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R516	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R518	ERJ6ENF1302	SM.CARB	0.125W	5%	3KΩ
R520	ERJ6GEYJ334	S.M.CARB	0.1W	5%	330KΩ
R521	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R541	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω
R601	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω
R602	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R603	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R604	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R605	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R606	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R611	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R612	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R613	ERJ6GEYJ395	SM.CARB	0.125W	5%	3M9Ω
R614	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ
R801	ERF5ZK2R7	WOUND	5W	20%	2R7Ω ⚠
R804	ERDS1TJ224	CARBON	0.5W	5%	220KΩ
R805	ERW2PKR33	WIRE	2W	10%	R33Ω
R806	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R807	ERG2ANJ101	METAL	2W	5%	100Ω ⚠
R808	ERG12SJ561P	METAL	12W	5%	560Ω ⚠
R809	ERG2ANJP560H	METAL	2W	5%	56Ω ⚠
R810	ERQ12HJ100	METAL	0.5W	5%	10Ω ⚠
R811	ERDS1TJ224	CARBON	0.5W	5%	220KΩ
R813	ERJ6GEYJ202	SM.CARB	0.125W	5%	2KΩ
R814	ERD75TAJ825	CARBON	0.75W	5%	8M2Ω ⚠
R819	ERDS1TJ104	CARBON	0.5W	5%	100KΩ
R853	ERG2ANJ680	METAL	2W	5%	68Ω
R857	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R858	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R859	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R860	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R861	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1201	ERQ1CJP2R2	FUSIBLE	1W	5%	2R2Ω ⚠
R1202	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω
R1203	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω
R1204	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω
R1205	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω
R1206	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω
R1208	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1211	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1215	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1216	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1219	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω
R1220	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1221	ERJ6GEYJ271	S.M.CARB	0.1W	5%	270Ω
R1222	ERJ6GEYJ330	S.M.CARB	0.1W	5%	33Ω
R1227	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1228	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1229	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1230	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1232	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω
R1233	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω
R1235	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω
R1236	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ
R1237	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R1238	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1239	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1240	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1242	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1243	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1244	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1246	ERD25TJ272	CARBON	0.25W	5%	2K7Ω

Ref No.	Part No.	Description			
R1247	ERD25TJ221	CARBON	0.25W	5%	220Ω
R1248	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ
R1249	ERDS1TJ121	CARBON	0.5W	5%	120Ω
R1250	ERDS1TJ560	CARBON	0.5W	5%	56Ω
R1253	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39KΩ
R1255	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1258	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1259	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1261	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2Ω
R1263	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2Ω
R1265	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2Ω
R1266	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1268	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1269	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1270	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1271	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1272	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1273	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33KΩ
R1274	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R1275	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1276	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1282	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1283	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1284	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1285	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R1286	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R1287	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R1288	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R1289	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω
R1291	ERJ6GEYJ432	S.M.CARB	0.1W	5%	4K3Ω
R1293	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1294	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1295	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1296	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1298	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1303	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1309	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω
R1311	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3101	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω
R3102	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω
R3105	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3106	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3107	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3108	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3109	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω
R3110	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R3111	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3112	ERJ6GEYJ123	S.M.CARB	0.1W	5%	12KΩ
R3113	ERJ6GEYJ912	SM.CARB	0.125W	5%	9K1Ω

Ref No.	Part No.	Description			
R3114	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3115	ERDS1TJ750	CARBON	0.5W	5%	75Ω
R3116	ERJ6GEYJ183	S.M.CARB	0.1W	5%	18KΩ
R3117	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2Ω
R3118	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R3119	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R3120	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3121	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω
R3122	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω
R3123	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω
R3124	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω
R3125	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R3126	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ
R3131	ERJ6GEYJ242	S.M.CARB	0.1W	5%	2K4Ω
R3132	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3133	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ
R3134	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R3136	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3137	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ
R3138	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R3140	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3141	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ
R3142	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R3143	ERJ6GEYJ181	S.M.CARB	0.1W	5%	180Ω

SWITCHES

S801	ESB91232A	SWITCH	⚠
S1202	EVQ23405R	SWITCH	
S1203	EVQ23405R	SWITCH	
S1204	EVQ23405R	SWITCH	

TRANSFORMERS

T551	ETH19Z169AZ	TRANSFORMER
T1201	ETP35KAN617U	TRANSFORMER

FILTERS

X303	TAFCSB503F6	FILTER
X601	LN−P−01S	CRYSTAL
X1201	CSA18.00MXZ	CRYSTAL

DIFFERENCES FOR MODEL TC − 21S3MC

MISCELLANEOUS COMPONENTS

Ref No.	Part No.	Description	
1)	TNP8EY011AF	Y P.C.B.	⚠
2)	THT1009R	CRT FIXING SCREW	
3)	A51EFS83X191	CRT	⚠
4)	TKY8E029−1	CABINET	⚠
5)	TBX8E038	POWER BUTTON	
8)	TBM8E1793	MODEL LABEL	
9)	TKU8E00233	BACK COVER	⚠
10)	TLK8E05133	DEGAUSS COIL	⚠
11)	EASG12D546A2	SPEAKER	
12)	TMZ8E001	CHASSIS RAIL (RIGHT)	
13)	TNP8EE007BD	E P.C.B.	⚠
14)	TMZ8E002	CHASSIS RAIL (LEFT)	
	TBM8E1726	PANASONIC BADGE	
	TPC8E4667	OUTER CARTON	
	TPD8E576	TOP CUSHION	
	TPD8E577	BOTTOM CUSHION	

CAPACITORS

C351	ECUV1H221JCX	S.M.CAP	50V	220pF	
C352	ECUV1H271JCX	S.M.CAP	50V	270pF	
C353	ECUV1H221JCX	S.M.CAP	50V	220pF	
C369	ECA1HMR47GB	ELECT	50V	0.47μF	
C453	ECEA1HGE101	ELECT	50V	100μF	
C454	ECEA1HGE2R2	ELECT	50V	2R2μF	
C508	ECUV1H102JCX	S.M.CAP	50V	1nF	
C551	ECWH12H103J	FILM	1250V	10nF	⚠
C552	ECQM4333JC	FILM	400V	33nF	
C554	ECKC3D681J	CERAMIC	2KV	680pF	⚠
C557	ECWF2H394JZ	CERAMIC	500V	390nF	⚠
C558	ECEA2CU4R7	ELECT	160V	4.7μF	
C567	ECEA1VGE471	ELECT	35V	470μF	
C811	ECEA1JGE100	ELECT	63V	10μF	
C1228	ECUV1H470GCG	S.M.CAP	50V	47pF	

DIODES

D805	232266296706	THERMISTOR

INTEGRATED CIRCUITS

IC1205	XL24C02P−CAD	EAROM

COILS

L551	ELH5L429	COIL

Ref No.	Part No.	Description	

TRANSISTORS

Q351	2SC4714RL2	TRANSISTOR
Q352	2SC4714RL2	TRANSISTOR
Q353	2SC4714RL2	TRANSISTOR
Q507	BC847B	TRANSISTOR OR 2SD601ATX

RESISTOR

R305	ERJ6GEYJ271	S.M.CARB	0.1W	5%	270Ω	
R306	ERJ6GEYJ271	S.M.CARB	0.1W	5%	270Ω	
R307	ERJ6GEYJ271	S.M.CARB	0.1W	5%	270Ω	
R351	ERG2ANJ103	METAL	2W	5%	10KΩ	
R352	ERG2ANJ103	METAL	2W	5%	10KΩ	
R353	ERG2ANJ103	METAL	2W	5%	10KΩ	
R366	ERJ6GEYJ361	SM.CARB	0.125W	5%	360Ω	
R367	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390Ω	
R368	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390Ω	
R369	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R370	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R371	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R375	ERDS1TJ272	CARBON	0.5W	5%	2K7Ω	
R378	ERD25TJ274	CARBON	0.25W	5%	270KΩ	
R379	ERJ6GEYJ183	S.M.CARB	0.1W	5%	18KΩ	
R380	ERJ6GEYJ684	S.M.CARB	0.1W	5%	680KΩ	
R386	ERDS1TJ272	CARBON	0.5W	5%	2K7Ω	
R387	ERDS1TJ272	CARBON	0.5W	5%	2K7Ω	
R453	ERDS1TJ1R0	CARBON	0.5W	5%	1Ω	
R506	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R508	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R519	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ	
R522	ERJ6GEYJ684	S.M.CARB	0.1W	5%	680KΩ	
R523	ERJ6GEYJ154	S.M.CARB	0.1W	5%	150KΩ	
R524	ERJ6GEYJ184	S.M.CARB	0.1W	5%	180KΩ	
R525	ERJ6GEYJ184	S.M.CARB	0.1W	5%	180KΩ	
R542	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R543	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R553	ERQ1CJP102	METAL	1W	5%	1KΩ	⚠
R555	FL84252R0J	RESISTOR	42W	5%	2Ω	
R557	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R560	ERDS1TJ224	CARBON	0.5W	5%	220KΩ	
R1217	ERJ6ENF7501	S.M.CARB	0.1W	1%	7K5Ω	
R1218	ERO50PKF5603	METAL	50W	1%	560KΩ	⚠
R1252	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	

SWITCHES

S351	TJSC00300	CRT SOCKET

TRANSFORMERS

T552	ZTFK33005A	F.B.T.	⚠
T801	ETS29AK227AC	TRANSFORMER	⚠

DIFFERENCES FOR MODEL TC − 14S3MC

MISCELLANEOUS COMPONENTS

Ref No.	Part No.	Description	
1)	TNP8EY011AB	Y P.C.B.	⚠
2)	THE492−4	CRT FIXING SCREW	
3)	A34EAC01X13	C.R.T.	⚠
4)	TKY8E036−A	CABINET	⚠
5)	TBX8E018	POWER BUTTON	
8)	TBM8E1792	MODEL LABEL	
9)	TKU8E00251	REAR COVER	⚠
10)	TLK8E05134	DEGAUSS COIL	
11)	EASG9D541B2	SPEAKER	
13)	TNP8EE007BE	E P.C.B.	⚠
	TBM8E1727	PANASONIC BADGE	
	TPC8E4666	OUTER CARTON	
	TPD8E578	TOP CUSHION	
	TPD8E579	BOTTOM CUSHION	

CAPACITORS

C351	ECUV1H151JCX	S.M.CAP	50V	150pF	
C352	ECUV1H151JCX	S.M.CAP	50V	150pF	
C353	ECUV1H181JCX	S.M.CAP	50V	180pF	
C453	ECEA1HU101	ELECT	50V	100μF	
C454	ECA1HM2R2GB	ELECT	50V	2.2μF	
C551	ECWH12H822J	CERAMIC	1250V	8.2nF	⚠
C552	ECQE6104K	FILM	600V	100nF	⚠
C554	ECKC3D331J	CERAMIC	2KV	330pF	⚠
C556	ECEA2CGR47	ELECT	160V	0.47μF	
C557	ECWF2H474J	FILM	500V	470nF	⚠
C558	ECEA2CG010	ELECT	160V	1μF	
C567	ECA1VM471GB	ELECT	35V	470pF	
C811	ECA1JM100GB	ELECT	63V	10pF	
C1228	ECUV1H560GCG	S.M.CAP	50V	56pF	

DIODES

D805	232266296319	THERMISTOR

INTEGRATED CIRCUITS

IC1205	XL24C02P−CAA	EAROM

TERMINALS AND LINKS

JYAK	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω

COILS

L552	ELC08D055	COIL

TRANSISTORS

Q351	2SC1473−RN	TRANSISTOR
Q352	2SC1473−RN	TRANSISTOR
Q353	2SC1473−RN	TRANSISTOR

RESISTOR

R305	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R306	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R307	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R351	ERG1SJ123	METAL	1W	5%	12KΩ	
R352	ERG1SJ123	METAL	1W	5%	12KΩ	
R353	ERG1SJ123	METAL	1W	5%	12KΩ	
R366	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560Ω	
R367	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω	
R368	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω	
R369	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω	
R370	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω	
R371	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω	
R375	ERDS1TJ182	CARBON	0.5W	5%	1K8Ω	
R386	ERDS1TJ182	CARBON	0.5W	5%	1K8Ω	
R387	ERDS1TJ182	CARBON	0.5W	5%	1K8Ω	
R453	ERDS1TJ1R5	CARBON	0.5W	5%	1R5Ω	
R506	ERJ6GEYJ753	S.M.CARB	0.1W	5%	75KΩ	
R508	ERJ6GEYJ753	S.M.CARB	0.1W	5%	75KΩ	
R519	ERJ6GEYJ754	S.M.CARB	0.1W	5%	750KΩ	
R522	ERJ6GEYJ394	S.M.CARB	0.1W	5%	390KΩ	
R542	ERJ6GEYJ242	S.M.CARB	0.1W	5%	2K4Ω	
R543	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω	
R551	ERDS1TJ1R5	CARBON	0.5W	5%	1R5Ω	
R552	ERDS1TJ1R5	CARBON	0.5W	5%	1R5Ω	
R554	ERQ14AJW151	FUSIBLE	14W	5%	150Ω	⚠
R555	ERQ12HKR22	FUSIBLE	0.5W	5%	R22Ω	⚠
R557	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R560	ERDS1TJ304	CARBON	0.5W	5%	300KΩ	
R1217	ERJ6ENF1202	S.M.CARB	0.1W	1%	1K2Ω	
R1218	ERO50PKF6203	METAL	50W	1%	620KΩ	⚠
R1252	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	

SWITCHES

S351	0330660069	CRT	SOCKET

TRANSFORMERS

T552	ZTFK33004A	F.B.T.	⚠
T801	ETS29AK237AC	TRANSFORMER	⚠

SCHEMATIC DIAGRAM FOR MODELS

TC−21S3MC/TC−14S3MC

(Z−7 Chassis)

IMPORTANT SAFETY NOTICE

Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

Notes

1. RESISTOR
   All resistors are carbon ¼W resistor, unless marked as follows:
   Unit of resistance is OHM (Ω) (K=1,000, M=1,000,000).

2. CAPACITORS
   All capacitors are ceramic 50V, unless marked as follows:
   Unit of capacitance is μF, unless otherwise stated.

3. COIL
   Unit of inductance is μH, unless otherwise stated.

4. Components marked 'L' on the schematic diagram shows leadless parts.

5. TEST POINT
   : Test Point position

6. EARTH SYMBOL
   : Chassis Earth (Cold) :Line Earth (Hot)

7. VOLTAGE MEASUREMENT
   Voltage is measured by a DC voltmeter.
   Measurement conditions are as follows:

Power source	AC 220V−240V, 50Hz
Receiving Signal	Colour Bar signal (RF)
All customer controls	Maximum position

8. : Indicates the Video signal path
   : Indicates the Audio signal path
   : Indicates the Vertical/Horizontal signal path

9. This schematic diagram is the latest at the time of printing and is subject to change without notice.

Remarks

1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection. The circuit is defined by HOT and COLD indications in the schematic diagram. All circuits, except the Power Circuit, are COLD. Take the following precautions:

Precautions

a. Do not touch the hot part, or the hot and cold parts at the same time, as you are liable to a shock hazard.
b. Do not short−circuit the hot and cold circuits as electrical components may be damaged.
c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously, as this may cause fuse failure. Connect the earth of the instruments to the earth connection of the circuit being measured.
d. Make sure to disconnect the power plug before removing the chassis.

SCHEMA TECHNIQUE POUR MODELE

TC−21S3MC/TC−14S3MC

(Z−7 Chassis)

REMARQUE IMPORTANTE POUR LA SÉCURITÉ

Les élément portant la marque ⚠ possèdent des caractéristiques de sécurite spécialses. Lors du remplacement de l'une quelconque de ces pièces n' utiliser que celles spécifiées par la fabricant.

Nota :

1. RESISTOR
   Toutes les résistance sont des résistance au carbone 1/4W, sauf indication contraire par les indications suivantes
   L'unité de résistance est l' OHM (Ω) (K=1,000, M=1,000,000).

2. CONDENSATEUR
   Toutes les condensateurs sont des condensateurs céramique 50V, sauf indication contraire par les indications suivantes :
   L'unité de capacitié est le μF, sauf indication contraire.

3. BOBINE
   L'unité d'inductance est le μH, sauf indication contraire

4. Les composants entourés de pointillés, sur le schéma, représentent des éléments non câblés.

5. POINT D'ESSAI
   Position du point d'essai

6. SYMBOL DE TERRE
   :Terre du châssis (froid) :Terre de ligne (chaud)

7. MESURE DE TENSION
   La tension est mesurée avec un voltmètre c.c.
   Les conditions de mesure sont les suivantes:

Source d'alignmentation	CA 220V−240V, 50Hz
Signal de réception	Signal barre couleur (RF)
Toutes les commandes utilisateur	Position maximum

8. : Vidéo
   : Audio
   : Vertical / Horizontal

9. Ce schéma est à jour moment de l'impression et modifiable sans préavis.

Remarque

1. Le circuit d'alimentation contient une zone de qui utilise une alimentation séparée pour isoler la connexion à la terre. Le circuit est défini par les indications chaud (HOT) et froid (COLD) dans le diagramme schématique. Prendre les précautions suivantes. Tous les circuits, sauf le circuit d'alimentation, sont froids.

Précautions

a. Ne pas toucher la partie chaude ou en même temps les parties chaud et froide. Cela présente un risque de décharge électrique.
b. Ne pas court−circuit les circuits chaud et froid car un fusible peut sauter et des pièces se casser.
c. Ne pas raccorder un instrument, comme un oscilloscope, simultanément aux circuits chaud et froid car un fusible peut sauter. Raccorder la terre des instruments à la connexion de terre du circuit mesuré.
d. Toujours débrancher la fiche d'alimentation avant de déposer le châssis.

E - BOARD TC-21S3MC

E BOARD
TNP8EE007

IC1205
XL24C02P-B

IC1201
SDA5222V50

IC1202
MN1280-R

IC851
AN78M05LB1

IC853
AN78M08LB

IC852
AN78M09LB1

IC601
M52778SP-A

IC602
U3666M-MDP

IC603
TDA8395PN2

IC251
LA4265

IC451
LA7840

IC801
STR58041A

JK3102
TJB16663

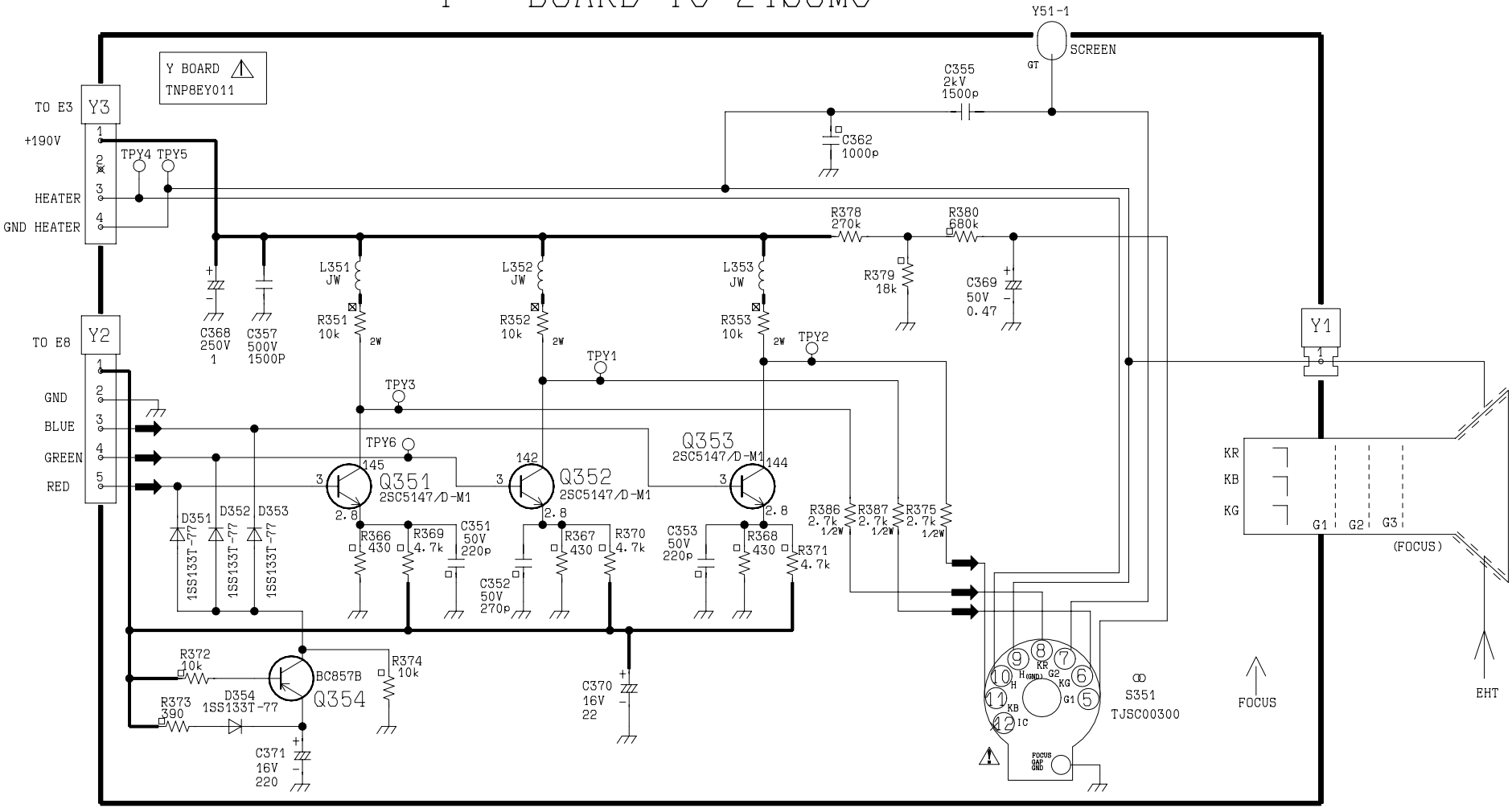
JK3101

E - BOARD TC-14S3MC

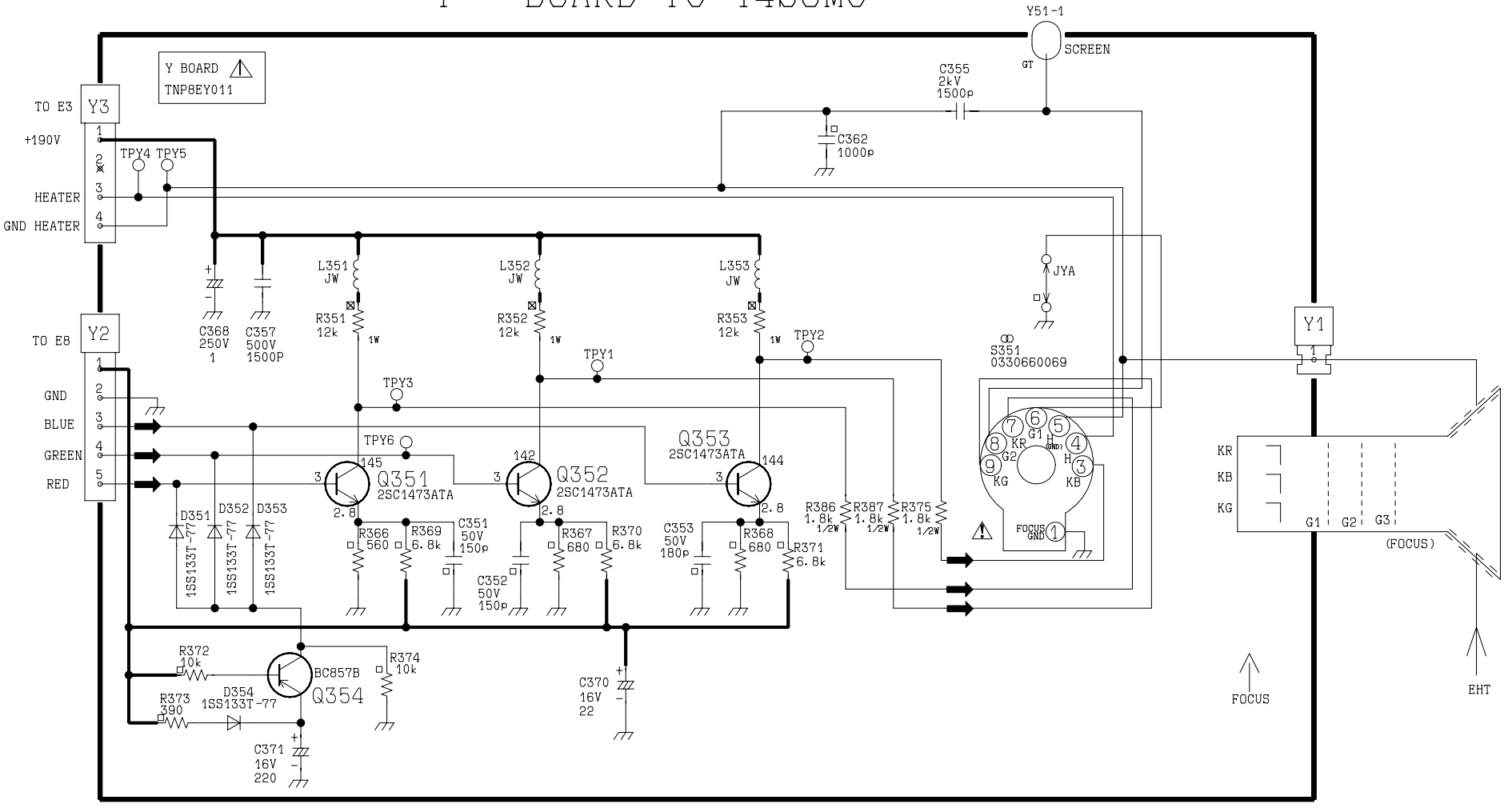
E BOARD
TNP8EE007

IC1205
IC1201
SDA5222V50
IC1202
MN1280-R
IC851
AN78M05LB1
IC853
AN78M08LB
IC852
AN78M09LB1
IC601
M52778SP-A
IC602
U3666M-MDP
IC603
TDA8395PN2
IC251
LA4265
IC801
STR58041A
IC451
LA7840
Q1212
Q1205
Q1211
Q1213
Q1208
Q1207
Q1209
Q1204
Q1203
Q1202
Q1210
Q202
Q201
Q502
Q3108
Q3105
Q3107
Q3106
Q504
Q503
Q1295
Q1296
Q802
Q801
Q252
Q253
Q501
Q551
Q454
Q453
Q3102
Q3110
Q3111
Q3109
Q1301
Q3101
JK3102
TJB16663
JK3101
E15
E16
E17
E9
E10
E5
E8
E7
E4
E1
E3
TO E-60
AC 230V
50Hz

Y - BOARD TC-21S3MC



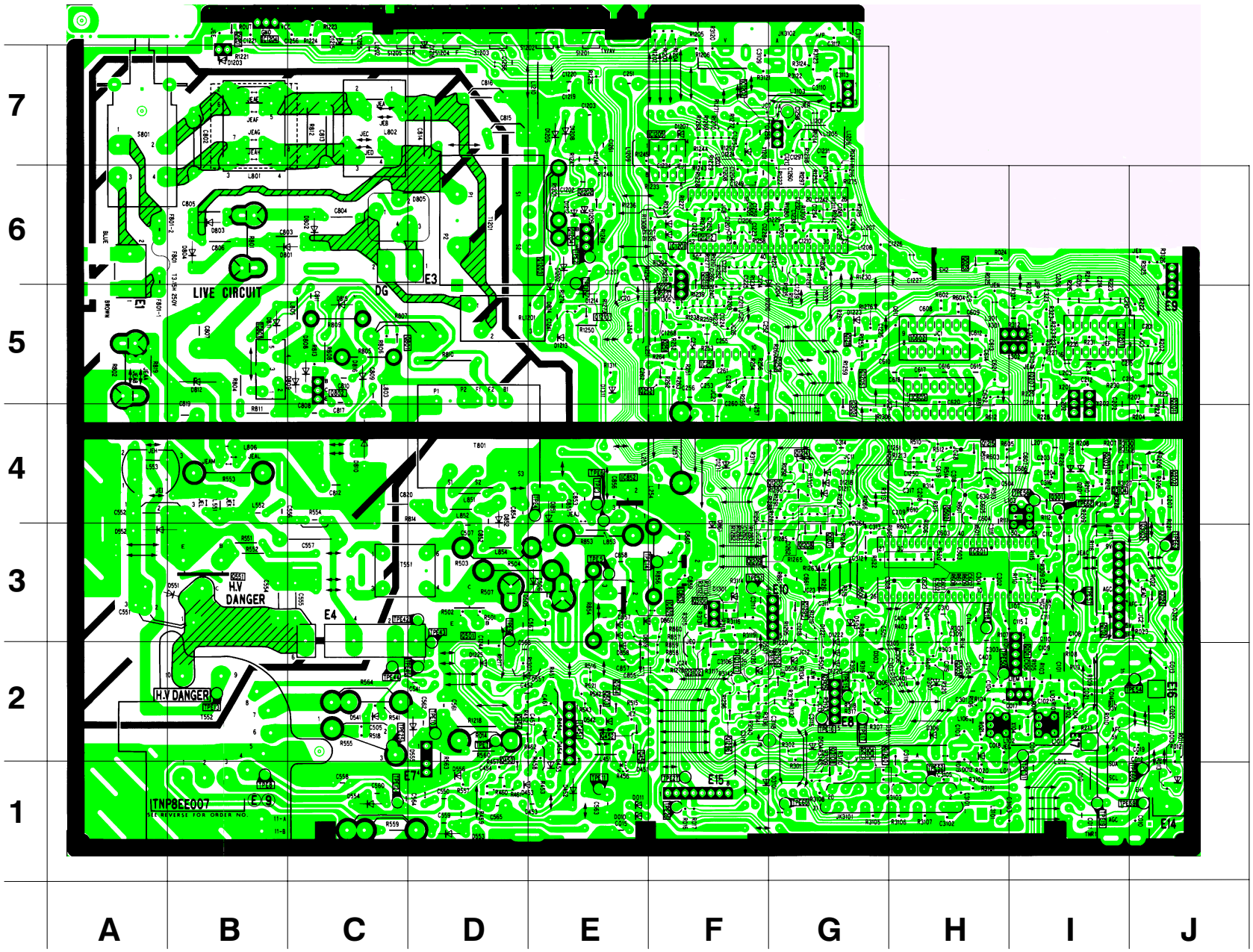
Y - BOARD TC-14S3MC



E −BOARD TNP8EE007 CARTE − E

DIODES				TRANS				TEST POINT	
D010	E1	D814	E5	Q022	J3	Q1216	F6	TPE1	E6
D011	E1	D815	C5	Q023	H6	Q1217	F5	TPE2	E6
D012	H2	D816	C5	Q101	I2	Q1240	G2	TPE3	E4
D013	J1	D851	E4	Q102	I3	Q1295	G3	TPE4	E4
D201	J4	D852	D4	Q201	J4	Q1296	F2	TPE5	E3
D202	J4	D857	E3	Q202	J4	Q3101	F3	TPE6	E4
D301	G2	D858	E2	Q203	I4	Q3102	F2	TPE7	D2
D302	G2	D859	E3	Q207	I5	Q3103	J3	TPE8	B1
D303	G2	D860	E3	Q251	F5	Q3105	G2	TPE9	D3
D306	H2	D861	F3	Q252	F5	Q3106	G2	TPE10	D2
D307	H2	D1201	E6	Q252	G5	Q3107	F2	TPE11	E1
D452	E1	D1203	B7	Q301	I4	Q3108	G2	TPE12	C1
D453	D1	D1205	E7	Q302	G4			TPE13	B2
D454	E2	D1207	F7	Q303	H2	I.C.		TPE14	F3
D455	E1	D1208	E7	Q451	E2	IC201	I5	TPE16	G2
D503	G3	D1209	E6	Q452	E2	IC251	F5	TPE17	G2
D504	G2	D1210	G6	Q453	D1	IC451	E2	TPE18	H3
D505	E3	D1211	F4	Q454	D2	IC601	H3	TPE19	I1
D506	G2	D1212	E6	Q501	D3	IC602	H5	TPE25	C2
D507	F2	D1213	E5	Q502	H4	IC603	H5	TPE26	F1
D541	C2	D1214	E5	Q503	E2	IC801	B5	TPE27	F1
D542	F2	D1215	C8	Q504	E2	IC851	E3	TPE31	I2
D551	B3	D1216	D7	Q551	B3	IC852	E4	TPE42	D3
D552	A3	D1217	G4	Q801	C5	IC853	F3	TPE43	D3
D553	D1	D1218	G4	Q802	C5	IC1201	F6	TPE44	C2
D554	C1	D1219	G4	Q1201	B8	IC1202	G7	TPE46	D2
D555	D2	D1220	G2	Q1202	F6	IC1204	B8	TPE50	H2
D556	D1	D1221	G2	Q1203	F6	IC1205	F7	TPE51	F3
D557	F2	D1223	G5	Q1204	F6			TPE52	H1
D801	B6	D1224	F7	Q1205	G5			TPE54	J2
D802	C6	D1225	D2	Q1207	G3			TPE56	I4
D803	B6	D1226	F6	Q1208	G3			TPE57	I3
D804	B6	D1227	F6	Q1209	G3			TPE59	J1
D805	D6	D1301	F3	Q1210	E5			TPE60	J1
D808	C5	D1311	E5	Q1211	G5			TPE62	I4
D809	C5	D3101	F1	Q1212	F6			TPE63	J3
D810	C4			Q1213	G4			TPE65	G1
D811	B5			Q1214	G4				
D812	B5			Q1215	H4				

E-BOARD TNP8EE007 CARTE-E



CONDUCTOR VIEWS VUE DU CIRCUIT IMPRIMÉ

Y – BOARD TNP8EY011 CARTE – Y

TEST POINT		DIODE		TRANS	
TPY1	B2	D351	B3	Q351	B2
TPY2	E1	D352	A3	Q352	A4
TPY3	B2	D353	A3	Q353	F1
TPY4	D3	D354	A3		
TPY5	E4				
TPY6	A4