

Service Manual

Colour Television EURO 2 Chassis

TX-25XD1F TX-28XD1F

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Service Manual

Colour Television TX-28XD1F TX-25XD1F EURO-2 Chassis

Specifications

(Information in brackets {} refers to TX-25XD1F)

Power Source :	220 - 240 V AC, 50Hz
Power Consumption :	105W {100W}
Aerial Impedance :	75Ω unbalanced, Coaxial Type
Receiving System :	PAL B/G, I PAL - 60 SECAM L/L', B/G, D/K
Receiving Channels :	VHF E2 - E12
VHF H1 - H2 (ITALY)	VHF A - H (ITALY)
VHF R1 - R2	VHF R3 - R5
VHF R6 - R12	UHF E21 - E69
CATV (S01 - S05)	CATV S1 - S10 (M1 - M10)
CATV S11 - S20 (U1 - U10)	CATV S21 - S41 (HYPERBAND)
Intermediate Frequency :	
Video	38.9MHz, 34MHz
Sound	32.9MHz, 33.4MHz, 33.16MHz, 32.4MHz
Colour	33.05MHz, 34.05MHz, 40.4MHz
Video / Audio Terminals :	
AV1 IN	Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 10kΩ RGB (21 pin)
AV1 OUT	Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 1kΩ
AV2 IN	Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 10 kΩ S-Video IN Y : 1V p-p 75Ω (21 pin) C : 0.3V p-p 75Ω
AV2 OUT	Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 1kΩ Selectable output (21 pin)
AV3 IN	S-Video IN Y : 1V p-p 75Ω (4-pin) C : 0.3V p-p 75Ω Audio (RCA x 2) 500mV rms 10kΩ Video (RCA x 1) 1V p-p 75Ω
High Voltage :	29kV ± 0.7kV at zero beam current
Picture Tube :	A68ESF002X11 72 cm {A59EEH048201 63 cm} 110° deflection
Audio Output :	
Internal Speaker	2 x 20 W (Music Power) 4-8 Ω Impedance

Headphones 1 x 8 Ω Impedance

Accessories supplied : Remote Control
R6 (UM3) Battery

Dimensions : Height : 562mm {512mm}
Width : 771mm {708mm}
Depth : 482mm {455mm}

Net Weight 34kg {28.5kg}

Specifications are subject to change without notice.

Weight and dimensions shown are approximate.

NOTE : This Service Manual should be used in conjunction with the EURO 2 technical guide.

Caractéristiques

(Les informations entre parenthèses {} concernent le TX-25XD1F)

Alimentation :	220 - 240 V AC, 50Hz
Consommation :	105W {100W}
Impédance d'antenne :	75Ω asymétrique sur prise coaxiale
Système de réception :	PAL B/G, I PAL - 60 SECAM L/L', B/G, D/K
Canaux de réception :	VHF E2 - E2
VHF H1 - H2 (ITALY)	VHF A - H (ITALY)
VHF R1 - R2	VHF R3 - R5
VHF R6 - R12	UHF E21 - E69
CATV (S01 - S05)	CATV S1 - S10 (M1 - M10)
CATV S11 - S20 (U1 - U10)	CATV S21 - S41 (HYPERBAND)
Fréquence Intermédiaire :	
Vidéo	38.9MHz, 34MHz
Sound	32.9MHz, 33.4MHz, 33.16MHz, 32.4MHz
Colour	33.05MHz, 34.05MHz, 40.4MHz
Les bornes vidéo/audio :	
Entrée AV1 (21 broches)	Vidéo 1V p-p 75Ω Audio 500mV rms 10kΩ RVB
Sortie AV1 (21 broches)	Vidéo 1V p-p 75Ω Audio 500mV rms 1kΩ
Entrée AV2 (21 broches)	Vidéo 1V p-p 75Ω Audio 500mV rms 10 kΩ S-Vidéo IN Y : 1V p-p 75Ω (21 broches) C : 0.3V p-p 75Ω
Sortie AV2 (21 broches)	Vidéo 1V p-p 75Ω Audio 500mV rms 1kΩ Sortie Commutable (21 broches)
Entrée AV3 (21 broches)	S-Vidéo IN Y : 1V p-p 75Ω (4-broches) C : 0.3V p-p 75Ω Audio (RCA x 2) 500mV rms 10kΩ Vidéo (RCA x 1) 1V p-p 75Ω
Tension d'anode :	29kV ± 0.7kV
Tube image :	A68ESF002X11 70 cm {A59EEH048201 63 cm} 110° mesure diagonale.

Sortie Audio :	
Hautes parleurs intérieurs	2 x 20W (Music Power) 4-8 Ω Impédance
Casque d'écoute	1 x 8 Ω Impédance
Accessories fournis :	Télécommande R6 (UM3) Piles x 2
Dimensions :	Hauteur : 562mm {512mm} Largeur : 771mm {708mm} Profondeur : 482mm {455mm}
Poids (NET) :	34kg {28.5kg}

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

NOTE : Ce Service Manual doit être conjointement avec le Technical Guide EURO-2.

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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 29.7kV 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.

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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 la position initiale de tous les fils et faisceaux, surtout dans le circuit de la haute tension. Remplacer toutes les pièces affectées par la chaleur dégagée lors d'un court-circuit.
3. Après 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'ordre de 29.7kV, 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 arrière. 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 toute 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 résistance mesurée devrait se situer 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 2k Ω 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.

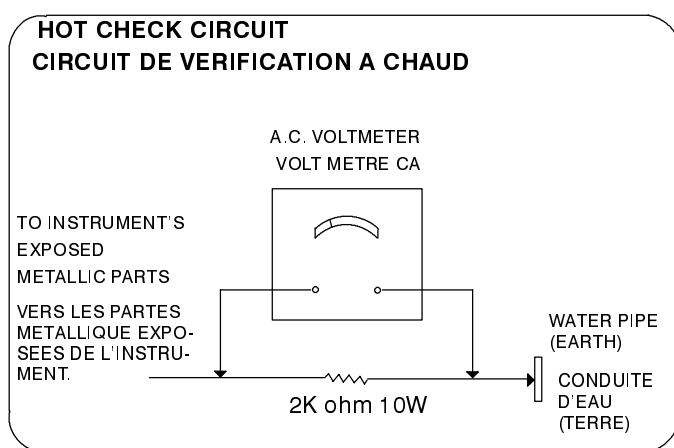


Fig.1

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 29.7kV 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 29kV $\pm$ 0.7kV 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 2k Ω , 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 client.

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'émissions de rayons X.
2. Si un tube cathodique témoin est utilisé pour la réparation, s'assurer que son assemblage pourra supporter 29.7kV 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 29kV $\pm$ 0.7kV. 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.

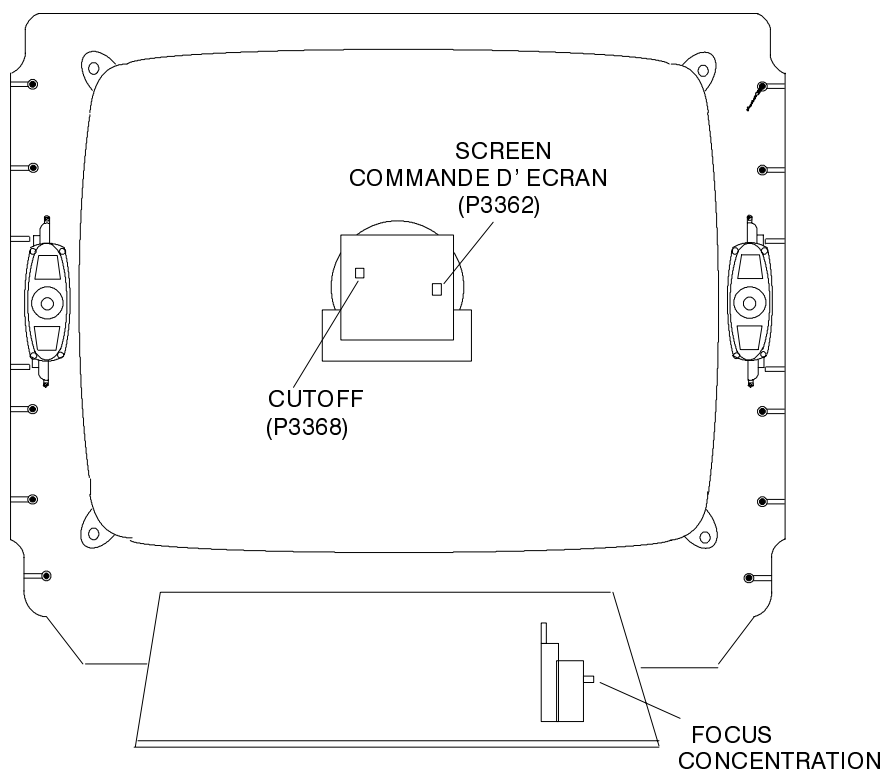


Fig.2

SERVICE HINTS

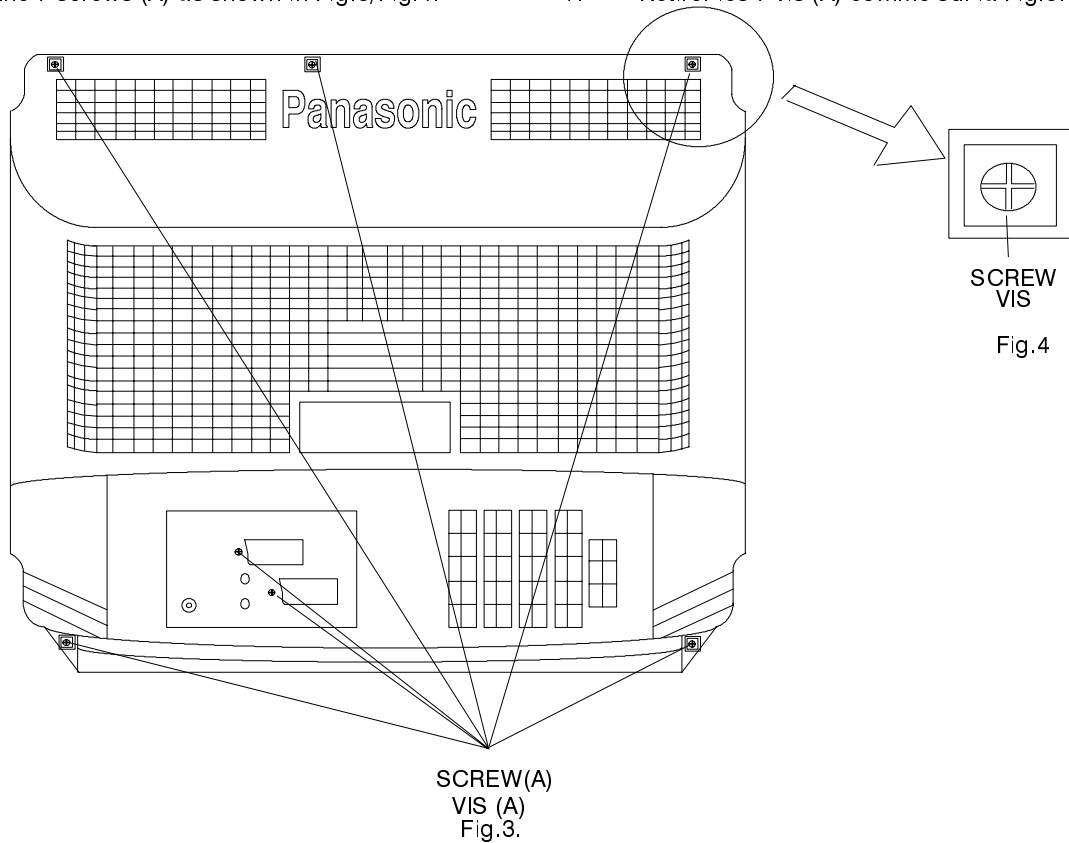
HOW TO REMOVE THE REAR COVER

1. Remove the 7 screws (A) as shown in Fig.3/Fig.4.

SUGGESTIONS DE DEPANNAGE

COMMENT RETIRER LE PENNEAU ARRIERE

1. Retirer les 7 vis (A) comme sur la Fig.3. / Fig.4.



HOW TO MOVE THE CHASSIS INTO THE SERVICE POSITION

1. Hold and lift the rear of the E- PCB chassis and M - PCB as shown in fig.5. and gently pull the chassis toward you. Release the M - PCB as explained on page 6
2. Turn the chassis through 90°, anti-clockwise, as shown in fig.6.
3. Clip the chassis onto the support bracket as shown in fig.6 and fig.7.
4. After servicing ensure all wiring is returned to its original position before returning the receiver to the customer

COMMENT PLACER LE CHASSIS EN POSITION DE SERVICE

1. Tenir et soulever l'arrière de la PCB - E et M tel qu'indiquer sur la Fig.5 puis tirer doucement vers soi le châssis. Pour retirer la PCB - M voir les explications données page 6.
2. Défaire les différentes fixations retenant les câbles, tourner la PCB-E de 90° (Fig-6).
3. Enchâsser la PCB sur les supports prévus à cet effet (Fig-7).
4. Après intervention s'assurer que les fils de liaisons soient bien à leur place.

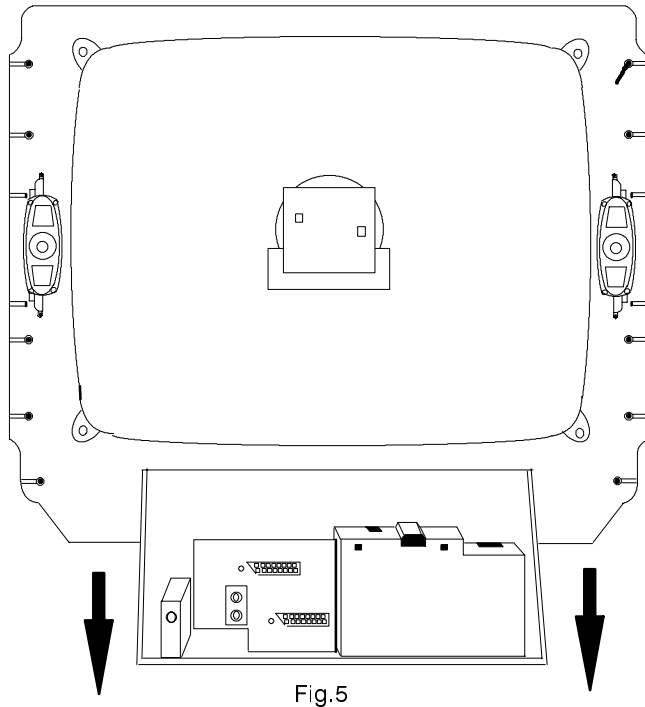


Fig.5

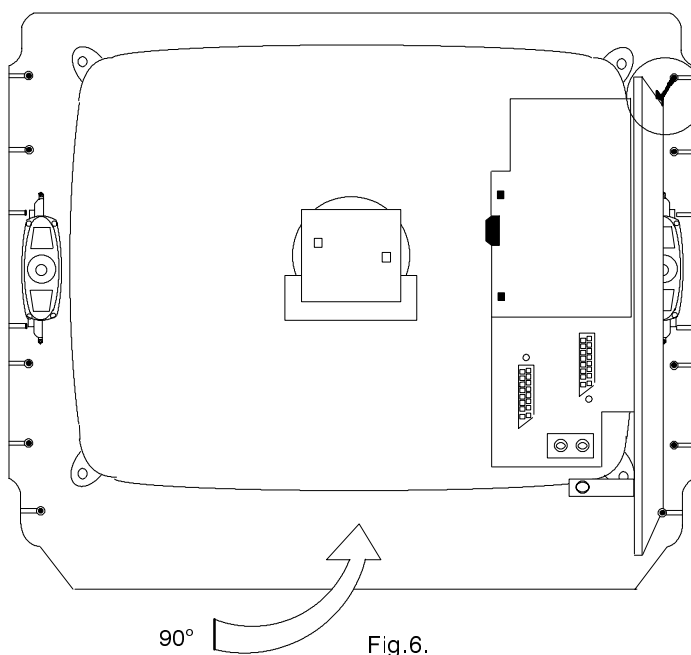


Fig.6.

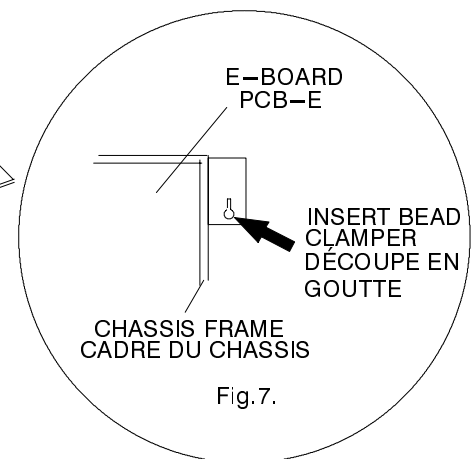


Fig.7.

HOW TO REMOVE THE CONTROL PANEL (M BOARD)

1. Remove the E-board from the cabinet with the M-board attached.
2. Unclip by lifting the front of the M-board vertically.
3. After servicing ensure all wiring is returned to its original position before returning the receiver to the customer.

COMMENT RETIRER LE PANNEAU DE CONTROLE (PCB-M)

1. Retirer l'ensemble PCB-E et PCB-M.
2. Dégrafer la PCB-M en la levant verticalement.
3. Après intervention s'assurer que les fils de liaisons soient bien à leur place.

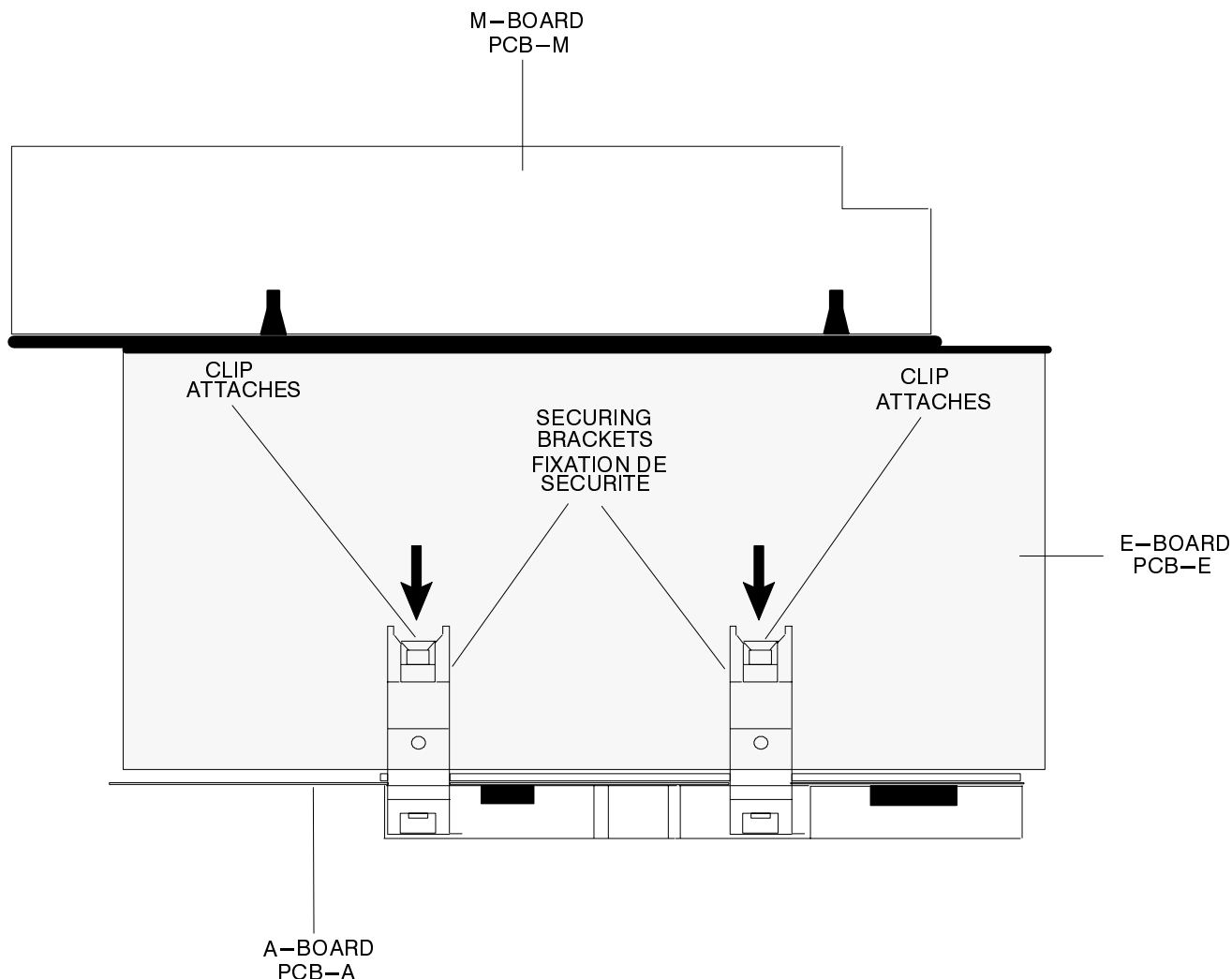


Fig.8

HOW TO REMOVE THE A - BOARD

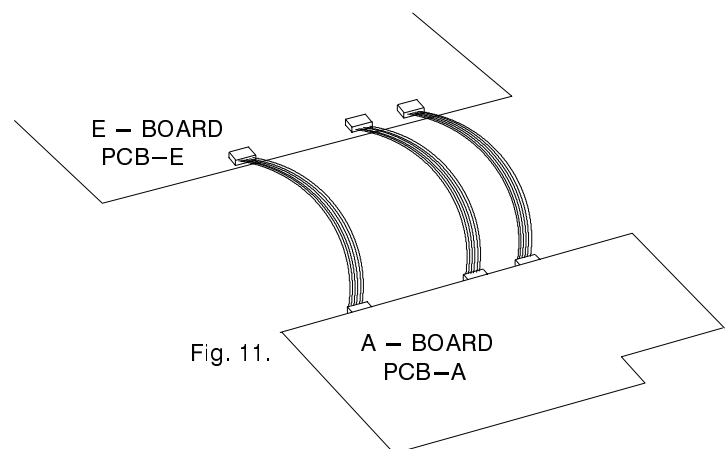
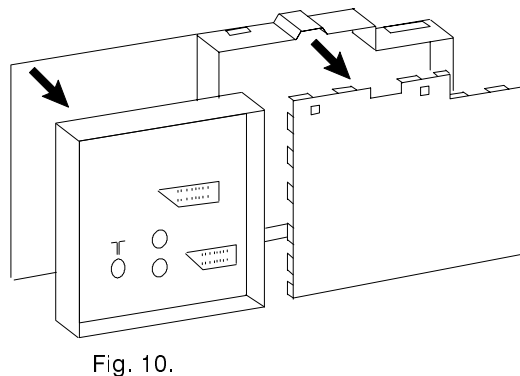
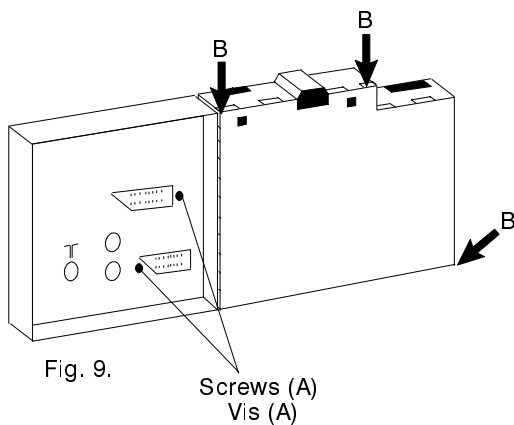
1. Disconnect the 4 leads from the A - board.
2. Release the A board securing brackets by pushing the clips in the direction shown in Fig.8, and remove the A - board by gently lifting vertically.
3. After servicing ensure all wiring is returned to its original position before returning the receiver to the customer.

COMMENT RETIRER LA PCB-A

1. Déconnecter les 4 câbles de liaison de la PCB-A.
2. Retirer les fixations de sécurité des PCB-A en poussant les attaches dans la direction indiquée Fig.8, retirer la PCB-A en la tirant doucement verticalement.
3. Après intervention s'assurer que les fils de liaisons soient bien à leur place.

SERVICE POSITION FOR THE A-BOARD

1. Remove the A-board from the main chassis (E-board) as shown in Fig.8.
2. Remove the two screws (A) (Fig.9) from the plastic AV cover and unclip the AV cover from the A-board (Fig. 10).
3. Carefully unclip the three metal clips marked B in Fig.9.
4. Unclip the front metal cover (fig.10) and remove from the A-board.
5. Fit the 4 extension leads to the A-board making sure that the A-board does not touch the E-board (fig.11).
6. After servicing ensure all wiring is returned to its original position before returning the receiver to the customer.
Note : The extension lead wire kit is supplied as a service kit. (Part number TZS4EP001).

**POSITION DE SERVICE DE LA PCB-A.**

1. Retirer la PCB-A du châssis principal ([PCB-E) tel qu'indiqué Fig.8.
2. Retirer les deux vis (a) (Fig.9) du cache plastique AV. Dégrafer le cache de la PCB-A (Fig.10).
3. Retirer les 3 attaches métalliques repérées (B) sur la Fig.9.
4. Retirer le capot métallique (Fig.10) de la PCB-A.
5. Mettre en place les câbles d'extension (S'addurer que la PCB-A ne touche pas la PCB-E) (Fig.11).
6. Après intervention s'assurer que les fils de liaisons soient bien à leur place.
Remarque : Le Kit d'extension est disponible sous la référence TZS4EP001.

ADJUSTMENT PROCEDURE

Adjustment	Signal	Conditions	Adjustments	Settings/Special features
Operating voltage	Test pattern	230 V – beam current 0	Adjust P633	Measure Cathode D651 so a Voltmeter shows $+147V \pm 0.5$
Focus	Test pattern		Focus at line transformer	Optimum setting
RF AGC	Standard colour bar signal	Place an oscilloscope on tuner AGC	Adjust P4701 clockwise	Slowly turn P4701 anti-clockwise, set P4701 where the RF AGC voltage drops by 0.2V from maximum.

The remote control is used for entering and storing adjustments, with the exception of cut-off adjustments which must always be done prior to service adjustment. Perform adjustments in accordance with screen display. The display on the screen also specifies the CCU variants as well as the approx. setting values. The adjustment sequence for the service mode is indicated below.

1. Set the Bass to maximum position, set the Treble to minimum position, press the F button followed by the volume down button on the customer controls at the front of the TV and at the same time press the Reveal button on the remote control, this will place the TV into the Service Mode.
2. Press the RED / GREEN buttons to step up / down through the functions.
3. Press the YELLOW / BLUE buttons to alter the function values.
4. Press the STORE button after each adjustment has been made to store the required values.
5. To exit the Service Mode press the Normalisation button..

NOTE: This TV also has the option of using a Memory Pack which enables you to copy the preset TV channels into the Memory Pack and then download them onto this or any other EURO-2S TV set.

TV to Memory Pack process

1. Plug the memory pack into the lower of the two 21 pin terminals at the back of the TV and switch the TV on. If the TV has only one 21 pin connector then this will be able to accept the memory pack.
2. Go into the Service Mode as explained above. The screen will show: –

Program
External>>TV

3. Press the blue button on the remote control. The screen will show: –

Program
TV>>External

4. Press the STORE button on the TV. The screen will show: –

Storing

5. All the tuning information stored inside the TV will now be transferred to the Memory Pack. This process will take 2–3 minutes to complete and when finished the screen will show: –

OK!

Memory Pack to TV Process

1. Plug the memory pack into the lower of the two 21 pin terminals at the back of the TV and switch the TV on. If the TV has only one 21 pin connector then this will be able to accept the memory pack.
2. Go into the Service Mode as explained above. The screen will show: –

Program
External>>TV

3. Press the STORE button on the TV. The screen will show: –

Loading

4. All the tuning information stored inside the Memory Pack will now be transferred to the TV. This process will take 2–3 minutes to complete and when finished the screen will show: –

OK!

5. The tuning information from the Memory Pack has now been copied into the TV
6. To exit from the Service Mode press the Normalisation button.
7. The process has now been completed and the Memory Pack can now be removed.

Errors

If an error occurs while using the Memory Pack the TV will detect this and the screen will show: –

Program
Error!

If this happens then press the Normalisation button and repeat the process that was being used. If the errors continue to occur then check the connectors between the TV and the memory pack and check the 9V battery inside the memory pack.

RÉGLAGES

Fonctions	Signal source	Conditions	Réglages	Mesures
Tension d'alimentation	Mire test	230 V AC Courant de faisceau = 0	P633	Mesurer sur la cathode de D651 147V $\pm$ 0,5V
Focus	Mire test		Potentiomètre de Focus sur le transfoligne.	Optimiser le réglage
RF AGC	Mire de barres couleur 60 dB $\pm$ 2dB (75 ohms ouvert)	Oscilloscope sur la broche AGC du tuner	P4701 sens des aiguilles d'une montre.	Tourner lentement P4701 dans le sens inverse des aiguilles d'une montre. Régler P4701 jusqu'au moment où la tension d' AGC passe du maximum à 0,2 volts.

La télécommande sert à entrer et stocker les données des réglages. Sauf pour le cut-off qui doit être réalisé en priorité.

Les réglages s'affichent sur l'écran, ainsi que les spécificités nominales du CCU.

- Régler par la télécommande le niveau de **grave** au **maximum**, **aigu** au **minimum**. Simultanément appuyer sur: **Volume-** du tiroir en face avant et le bouton **Reveal** de la télécommande.
- Appuyer sur la touche **ROUGE** ou **VERTE** pour sélectionner la fonction désirée.
- Appuyer sur la touche **JAUNE** ou **BLEUE** pour modifier les valeurs des réglages.
- Mettre en mémoire après chaque réglage, en appuyant sur la touche **STORE**.
- Pour sortir de la position SERVICE MODE arrêter le TV

REMARQUE : Le Memory Pack permet de copier la configuration du TV, (Chaines, Niveaux analogiques) et de la transférer, via le Memory Pack, vers un autre TV EURO-2.

Processus de transfert "téléviseur vers bloc-mémoire"

- La partie arrière du téléviseur comporte deux connecteurs à 21 broches : brancher le bloc-mémoire dans le connecteur inférieur (AV2), puis mettre le téléviseur en marche ("ON"). Si le téléviseur ne comporte qu'un seul connecteur à 21 broches, celui-ci pourra alors servir à reccorder le bloc-mémoire.

- Passer en Mode Service (voir ci-dessus). L'écran affichera:

Program
External >> TV

- Appuyer sur la touche BLEUE de la télécommande. L'écran du téléviseur présente le message suivant:

Program
TV >> External

- Appuyer sur la touche de mémorisation (STORE) du téléviseur et l'écran présentera le message suivant :

Storing

- Toutes les informations de syntonisation enregistrées par le téléviseur seront maintenant transférées vers le bloc-mémoire. Cette opération ne prend que 2 à 3 minutes. Lorsqu'elle est terminée, l'écran du téléviseur présentera message suivant :

OK!

Processus de transfert "bloc-mémoire vers téléviseur"

- La partie arrière du téléviseur comporte deux connecteurs à 21 broches : brancher le bloc-mémoire dans le connecteur inférieur (AV2), puis mettre le téléviseur en marche ("ON"). Si le téléviseur ne comporte qu'un seul connecteur à 21 broches, celui-ci pourra alors servir à reccorder le bloc mémoire.

- Passer en Mode Service (voir ci-dessus). L'écran affichera:

Program
External >> TV

- Appuyer sur la touche de mémorisation (STORE) du téléviseur et l'écran présentera le message suivant:

Loading

- Toutes les informations de syntonisation enregistrées par le téléviseur seront maintenant transférées vers le bloc-mémoire. Cette opération ne prend que 2 à 3 minutes. Lorsqu'elle est terminée, l'écran du téléviseur présentera message suivant:

OK!

- Les informations de syntonisation du téléviseur du bloc-mémoire ont maintenant été copiées dans le téléviseur.
- Pour sortir du mode d'exploitation SERVICE, mettre le téléviseur hors circuit ("OFF").
- Une fois l'opération terminée, enlever le bloc-mémoire.

Erreurs

Le téléviseur détectera toutes les erreurs susceptibles de se produire éventuellement pendant l'utilisation du bloc-mémoire. L'écran présentera alors le message suivant:

Program
Error!

Dans ce cas, mettre le téléviseur hors circuit ("OFF") puis répéter l'opération qui était en cours. En cas d'erreurs répétées, vérifier les connexions entre le téléviseur et le bloc-mémoire, puis contrôler l'état de la pile 9V à l'intérieur du bloc-mémoire.

ALIGNMENT SETTINGS (The figures used below are nominal and used for representative purposes only)

Alignment Function	TX-28XD1F	TX-25XD1F	Settings / Special features												
1. Vertical amplitude	<table><tr><td colspan="3">V-AMP</td></tr><tr><td colspan="3">051</td></tr></table>	V-AMP			051			<table><tr><td colspan="3">V-AMP</td></tr><tr><td colspan="3">063</td></tr></table>	V-AMP			063			Optimum setting
V-AMP															
051															
V-AMP															
063															
2. Vertical symmetry	<table><tr><td colspan="3">V-SYM</td></tr><tr><td colspan="3">013</td></tr></table>	V-SYM			013			<table><tr><td colspan="3">V-SYM</td></tr><tr><td colspan="3">002</td></tr></table>	V-SYM			002			
V-SYM															
013															
V-SYM															
002															
3. Vertical linearity	<table><tr><td colspan="3">V-LIN</td></tr><tr><td colspan="3">012</td></tr></table>	V-LIN			012			<table><tr><td colspan="3">V-LIN</td></tr><tr><td colspan="3">-020</td></tr></table>	V-LIN			-020			
V-LIN															
012															
V-LIN															
-020															
4. Vert. DC.	<table><tr><td colspan="3">Vert. D.C..</td></tr><tr><td colspan="3">000</td></tr></table>	Vert. D.C..			000			<table><tr><td colspan="3">Vert. D.C.</td></tr><tr><td colspan="3">000</td></tr></table>	Vert. D.C.			000			Not to be adjusted.
Vert. D.C..															
000															
Vert. D.C.															
000															
5. V-Pos.	<table><tr><td colspan="3">V. Pos.</td></tr><tr><td colspan="3">003</td></tr></table>	V. Pos.			003			<table><tr><td colspan="3">V. Pos</td></tr><tr><td colspan="3">005</td></tr></table>	V. Pos			005			Optimum setting
V. Pos.															
003															
V. Pos															
005															
6. Horizontal amplitude	<table><tr><td colspan="3">H-AMP</td></tr><tr><td colspan="3">-033</td></tr></table>	H-AMP			-033			<table><tr><td colspan="3">H-AMP</td></tr><tr><td colspan="3">-044</td></tr></table>	H-AMP			-044			Optimum setting
H-AMP															
-033															
H-AMP															
-044															
7. Horizontal position	<table><tr><td colspan="3">H-POS</td></tr><tr><td colspan="3">049</td></tr></table>	H-POS			049			<table><tr><td colspan="3">H-POS</td></tr><tr><td colspan="3">542</td></tr></table>	H-POS			542			
H-POS															
049															
H-POS															
542															
8. Text Position	<table><tr><td colspan="3">TEXT POSITION</td></tr><tr><td colspan="3">045</td></tr></table>	TEXT POSITION			045			<table><tr><td colspan="3">TEXT POSITION</td></tr><tr><td colspan="3">049</td></tr></table>	TEXT POSITION			049			Optimum setting
TEXT POSITION															
045															
TEXT POSITION															
049															
9. EW-amplitude	<table><tr><td colspan="3">E-W-AMP 1</td></tr><tr><td colspan="3">-058</td></tr></table>	E-W-AMP 1			-058			<table><tr><td colspan="3">E-W-AMP 1</td></tr><tr><td colspan="3">-059</td></tr></table>	E-W-AMP 1			-059			Optimum setting
E-W-AMP 1															
-058															
E-W-AMP 1															
-059															
10. EW-amplitude	<table><tr><td colspan="3">E-W-AMP 2</td></tr><tr><td colspan="3">023</td></tr></table>	E-W-AMP 2			023			<table><tr><td colspan="3">E-W-AMP 2</td></tr><tr><td colspan="3">044</td></tr></table>	E-W-AMP 2			044			Optimum setting
E-W-AMP 2															
023															
E-W-AMP 2															
044															
11. Trapezium-comp	<table><tr><td colspan="3">TRAPEZ-1</td></tr><tr><td colspan="3">-014</td></tr></table>	TRAPEZ-1			-014			<table><tr><td colspan="3">TRAPEZ-1</td></tr><tr><td colspan="3">000</td></tr></table>	TRAPEZ-1			000			Optimum setting
TRAPEZ-1															
-014															
TRAPEZ-1															
000															
12. Trapezium-comp	<table><tr><td colspan="3">TRAPEZ-2</td></tr><tr><td colspan="3">012</td></tr></table>	TRAPEZ-2			012			<table><tr><td colspan="3">TRAPEZ-2</td></tr><tr><td colspan="3">-009</td></tr></table>	TRAPEZ-2			-009			Optimum setting
TRAPEZ-2															
012															
TRAPEZ-2															
-009															
13. Colour VCO	<table><tr><td colspan="3">Colour VCO</td></tr><tr><td colspan="3">015</td></tr></table>	Colour VCO			015			<table><tr><td colspan="3">Colour VCO</td></tr><tr><td colspan="3">006</td></tr></table>	Colour VCO			006			Press either Blue or Yellow buttons to effect automatic adjustment
Colour VCO															
015															
Colour VCO															
006															
14. Cut-off DC	<table><tr><td colspan="3">Cut-off DC</td></tr><tr><td colspan="3">050</td></tr></table>	Cut-off DC			050			<table><tr><td colspan="3">Cut-off DC</td></tr><tr><td colspan="3">050</td></tr></table>	Cut-off DC			050			Not to be adjusted.
Cut-off DC															
050															
Cut-off DC															
050															
15. Ug2 Test	<table><tr><td colspan="3">Ug 2 Test</td></tr><tr><td>107</td><td>021</td><td>023</td></tr></table>	Ug 2 Test			107	021	023	<table><tr><td colspan="3">Ug 2 Test</td></tr><tr><td>094</td><td>044</td><td>020</td></tr></table>	Ug 2 Test			094	044	020	To adjust the screen settings. Turn P3362 until a colour reaches 25 ± 5 , place an oscilloscope probe on the cathode with the highest output and adjust P3368 so the oscilloscope trace reads 170V 0-peak, then turn P3362 up so the highest numbered box on the TV screen reads 050 ± 010 .
Ug 2 Test															
107	021	023													
Ug 2 Test															
094	044	020													
16. Cutoff	<table><tr><td colspan="3">Cutoff</td></tr><tr><td>045</td><td>055</td><td>050</td></tr></table>	Cutoff			045	055	050	<table><tr><td colspan="3">Cutoff</td></tr><tr><td>057</td><td>064</td><td>056</td></tr></table>	Cutoff			057	064	056	Press the GREEN button to step through the settings. Adjust for optimum.
Cutoff															
045	055	050													
Cutoff															
057	064	056													
17. White	<table><tr><td colspan="3">White</td></tr><tr><td>224</td><td>255</td><td>237</td></tr></table>	White			224	255	237	<table><tr><td colspan="3">White</td></tr><tr><td>200</td><td>255</td><td>246</td></tr></table>	White			200	255	246	Press the GREEN button to step through the settings. Adjust for optimum.
White															
224	255	237													
White															
200	255	246													

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

Fonctions	TX-28XD1F	TX-25XD1F	Réglages / Points particuliers
1. Amplitude verticale	V-AMP 051	V-AMP 063	Optimiser les réglages
2. Symétric verticale	V-SYM 013	V-SYM 002	
3. Linéarité verticale	V-LIN 012	V-LIN -020	
4. Vert. DC.	Vert. D.C.. 000	Vert. D.C.. 000	Ne pas régler
5. V-Pos.	V. Pos. 003	V. Pos 005	Optimiser les réglages
6. Amplitude horizontal	H-AMP -033	H-AMP -044	Optimiser les réglages
7. Centrage horizontal	H-POS 049	H-POS 542	
8. Text Position	TEXT POSITION 045	TEXT POSITION 049	Optimiser les réglages
9. Amplitude E.O.	E-W-AMP 1 -058	E-W-AMP 1 -059	Optimiser les réglages
10. Amplitude E.O.	E-W-AMP 2 023	E-W-AMP 2 044	Optimiser les réglages
11. Correction trapèze	TRAPEZ-1 -014	TRAPEZ-1 000	Optimiser les réglages
12. Correction trapèze	TRAPEZ-2 012	TRAPEZ-2 -009	Optimiser les réglages
13. Réglage oscillateur sous porteuse	Colour VCO 015	Colour VCO 006	Régler la fréquence
14. Cut-off DC	Cut-off DC 050	Cut-off DC 050	Ne pas régler
15. Bildschirm	Ug 2 Test 107 021 023	Ug 2 Test 094 044 020	Réglage d'écran. Ajuster P3362 au minimum, mettre la sonde d'oscilloscope sur la cathode et régler P3368 pour obtenir 170V; puis régler P3362 pour que le chiffre le plus élevé, soit lu sur l'afficheur 050±010
16. Cutoff	Cutoff 045 055 050	Cutoff 057 064 056	Appuyer sur la touche VERTE pour accéder aux réglages. Régler pour optimiser.
17. White	White 224 255 237	White 200 255 246	Appuyer sur la touche VERTE pour accéder aux réglages. Régler pour optimiser.

SELF CHECK

Self check is used to automatically check the Bus Lines and Hexadecimal code of the TV set.

To get into the Self Check mode press the F button followed by the volume down button on the customer controls at the front of the TV at the same time pressing the Status button, on the Remote Control, and the screen will show:—

1 — ok	Tuner	11 — — —	Dolby IC for C/R
2 — ok	VIF	12 — ok	P S MODE
3 — ok	EEPROM	13 — ok	P TA0
4 — ok	Sound AV switch 1	14 — ok	P TA1
5 — ok	Video AV switch 1	15 — ok	P TA2
6 — ok	VDP	16 — ok	P TA3
7 — ok	TPU	17 — ok	P SDA
8 — ok	MSP	18 — ok	P SCL1
9 — — —	Dolby Sub	19 — ok	P SCL3
10 — — —	Dolby IC for L/R	20 — ok	P SCL4

If the CCU ports have been checked and found to be incorrect then "—" will appear in place of "OK".

21 — ok	P SBLED
22 — ok	P OFF
23 — ok	P DEFL
24 — ok	P RAM

Hex codes

6A
20
81
94
84

AUTO TEST

L'auto test est utilisé pour vérifier le BUS et les codes Hexadécimaux du TV.

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:—

1 — ok	Tuner	11 — — —	Dolby IC for C/R
2 — ok	VIF	12 — ok	P S MODE
3 — ok	EEPROM	13 — ok	P TA0
4 — ok	Sound AV switch 1	14 — ok	P TA1
5 — ok	Video AV switch 1	15 — ok	P TA2
6 — ok	VDP	16 — ok	P TA3
7 — ok	TPU	17 — ok	P SDA
8 — ok	MSP	18 — ok	P SCL1
9 — — —	Dolby Sub	19 — ok	P SCL3
10 — — —	Dolby IC for L/R	20 — ok	P SCL4

Si lors du test une fonction du ccu est incorrecte l'afficheur indiquera "—" au lieu de "OK".

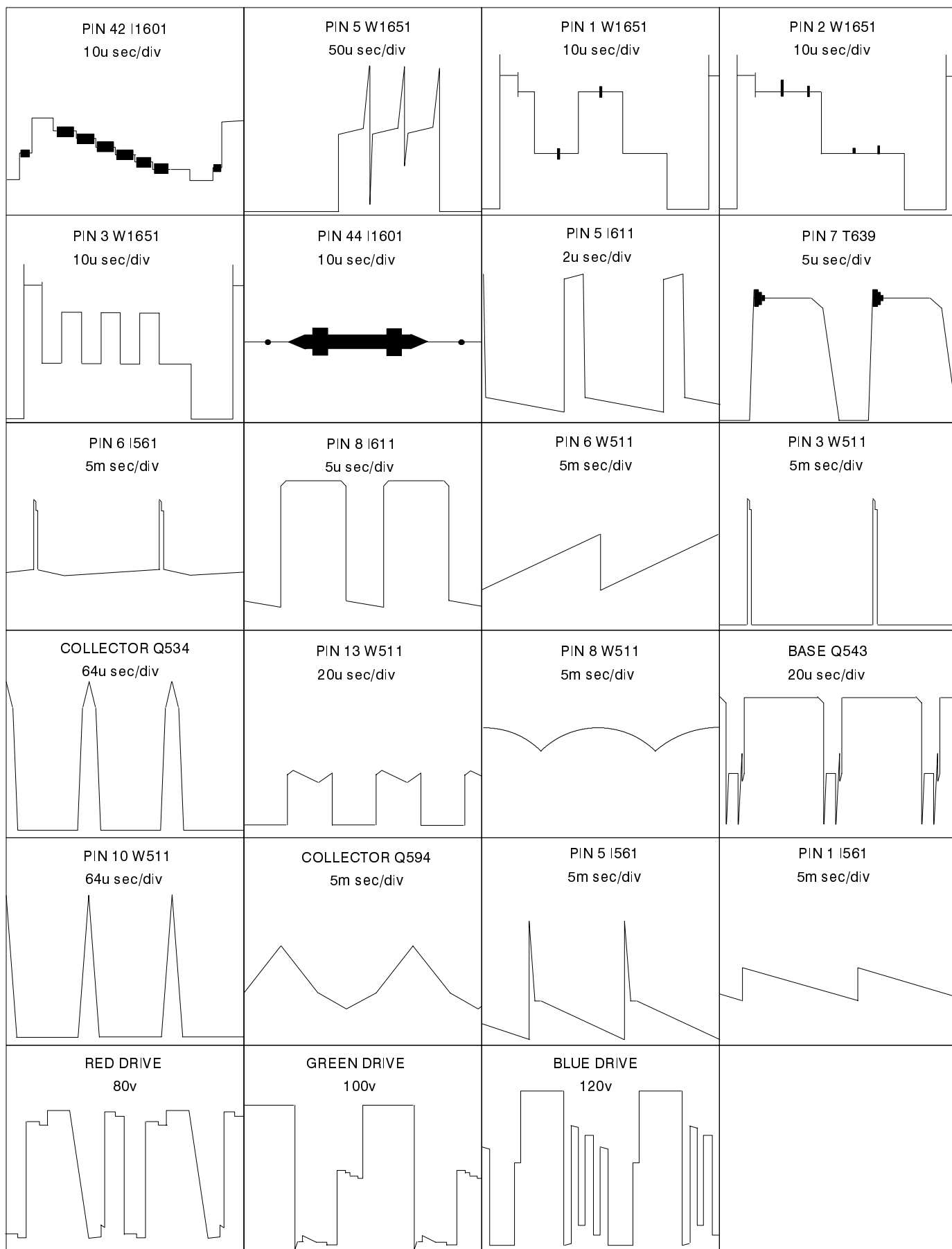
21 — ok	P SBLED
22 — ok	P OFF
23 — ok	P DEFL
24 — ok	P RAM

Hex codes

6A
20
81
94
84

WAVEFORM PATTERN TABLE

TABLEAU DE MIRES DE FORMA D'ONDES



SCHEMATIC DIAGRAM FOR MODELS TX-28/25XD1F (Euro-2 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

- RESISTOR**
All resistors are carbon 1/4W resistor, unless marked as follows:
Unit of resistance is OHM (Ω) (K=1,000, M=1,000,000).
- CAPACITORS**
All capacitors are ceramic 50V, unless marked as follows:
Unit of capacitance is μ F, unless otherwise stated.
- COIL**
Unit of inductance is μ H, unless otherwise stated.
- Components marked 'L' on the schematic diagram shows leadless parts.
- TEST POINT**
 : Test Point position
- EARTH SYMBOL**
 : Chassis Earth (Cold)  : Line Earth (Hot)
- 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
-  : Indicates the Video signal path
 : Indicates the Audio signal path
 : Indicates the Vertical/Horizontal signal path
- This schematic diagram is the latest at the time of printing and is subject to change without notice.

Remarks

- 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

- Do not touch the hot part, or the hot and cold parts at the same time, as you are liable to a shock hazard.
- Do not short-circuit the hot and cold circuits as electrical components may be damaged.
- 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.
- Make sure to disconnect the power plug before removing the chassis.

SCHEMA TECHNIQUE POUR MODELE TX-28/25XD1F (Euro-2 Chassis)

REMARQUE IMPORTANTE POUR LA SÉCURITÉ

Les éléments portant la marque  possèdent des caractéristiques de sécurité spéciales. Lors du remplacement de l'une quelconque de ces pièces n'utiliser que celles spécifiées par la fabricant.

Nota :

- RESISTOR**
Toutes les résistances sont des résistances 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).
- CONDENSATEUR**
Tous les condensateurs sont des condensateurs céramique 50V, sauf indication contraire par les indications suivantes :
L'unité de capacité est le μ F, sauf indication contraire.
- BOBINE**
L'unité d'inductance est le μ H, sauf indication contraire
- Les composants entourés de pointillés, sur le schéma, représentent des éléments non câblés.
- POINT D'ESSAI**
 Position du point d'essai
- SYMBOL DE TERRE**
 :Terre du châssis (froid)  :Terre de ligne (chaud)
- MESURE DE TENSION**
La tension est mesurée avec un voltmètre c.c.
Les conditions de mesure sont les suivantes:
Source d'alimentation CA 220V-240V, 50Hz
Signal de réception Signal barre couleur (RF)
Toutes les commandes utilisateur, Position maximum
-  : Vidéo
 : Audio
 : Vertical / Horizontal
- Ce schéma est à jour moment de l'impression et modifiable sans préavis.

Remarque

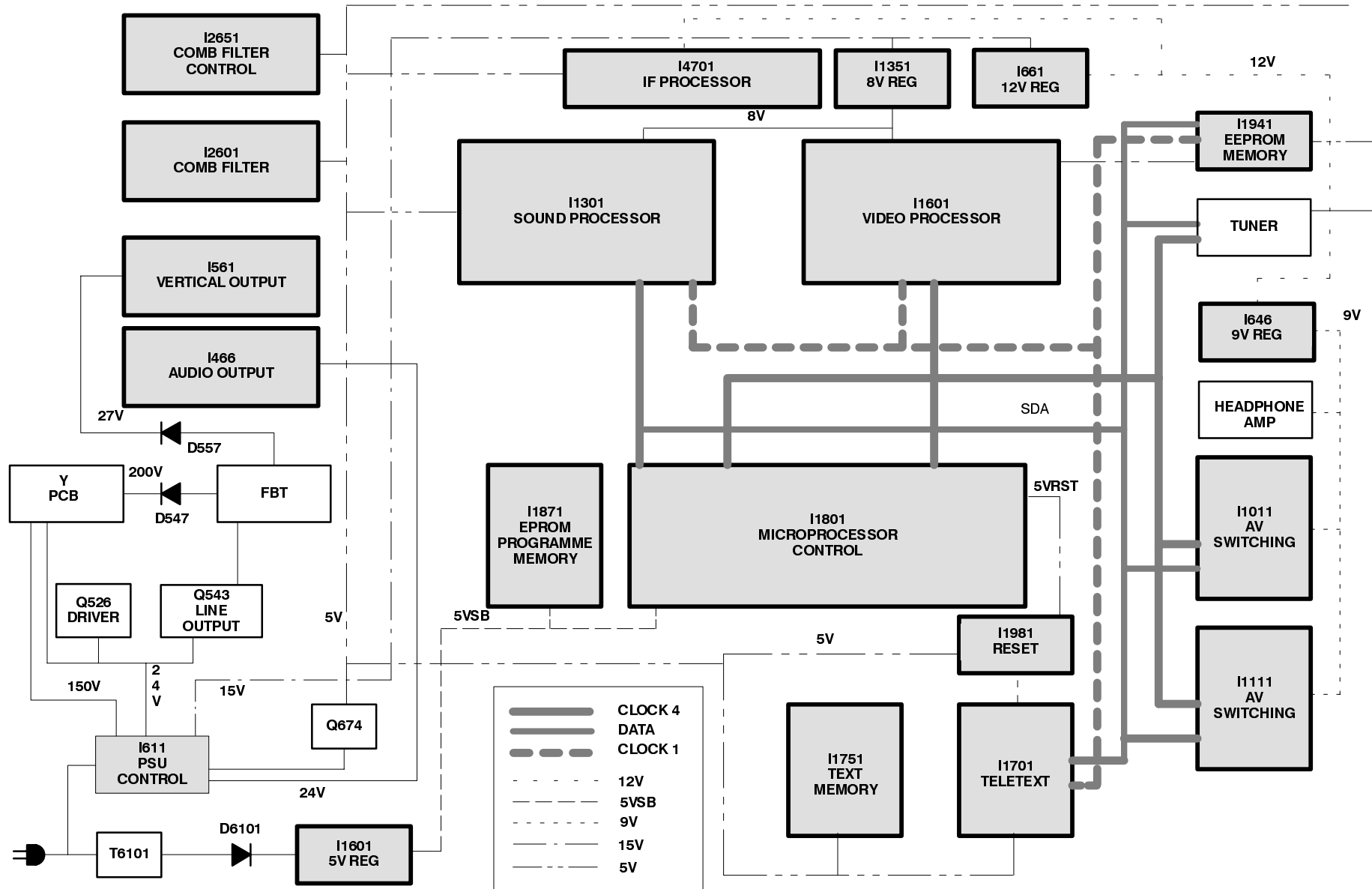
- Le circuit d'alimentation contient une zone de qui utilise une alimentation séparée pour isoler la connexion à la terre. Le circuit est défini par les indications chaud (HOT) et froid (COLD) dans le diagramme schématique. Prendre les précautions suivantes.
Tous les circuits, sauf le circuit d'alimentation,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

Précautions

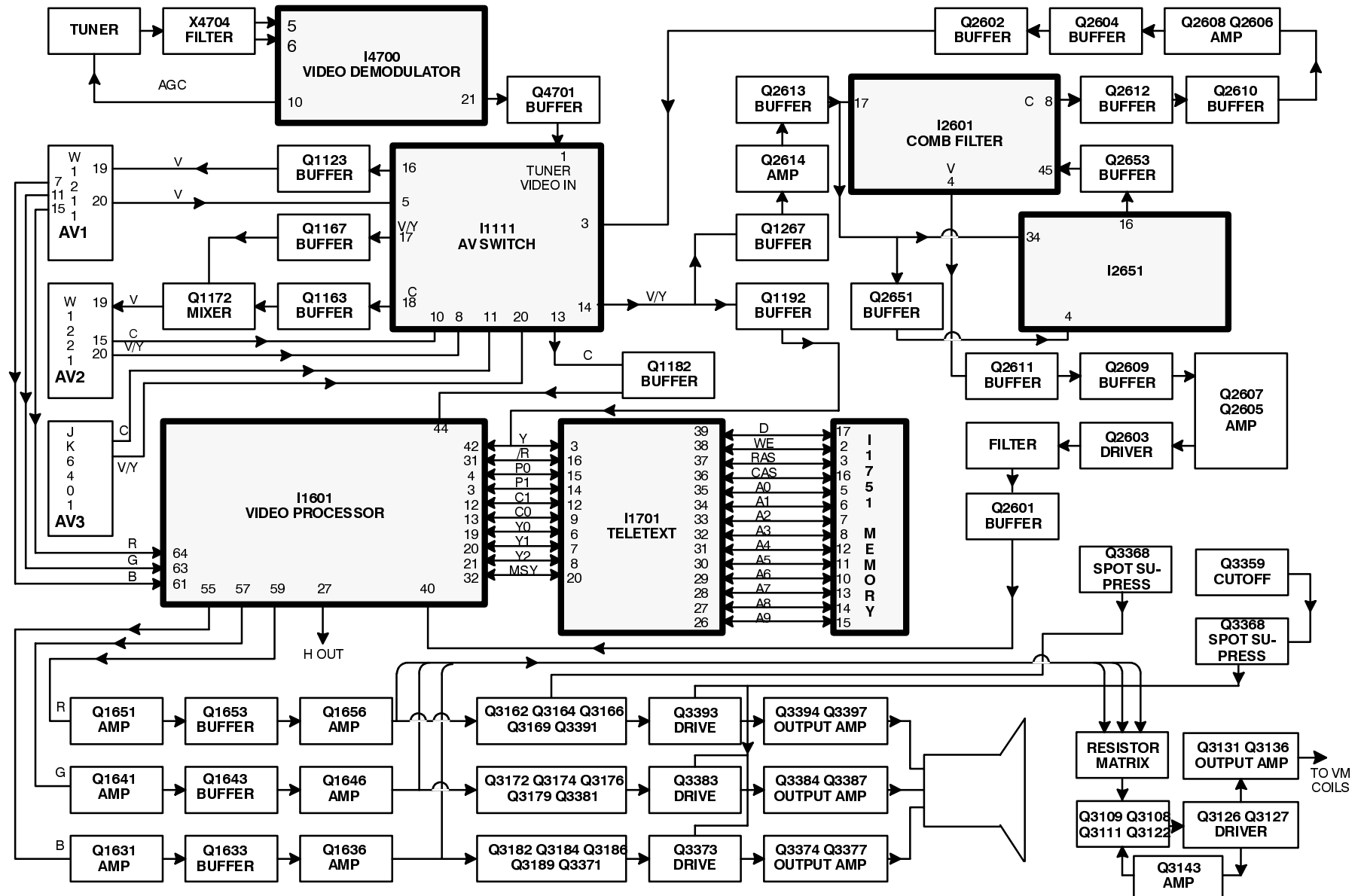
- Ne pas toucher la partie chaude ou en même temps les parties chaud et froide. Cela présente un risque de décharge électrique.
- Ne pas court-circuiter les circuits chaud et froid car un fusible peut sauter et des pièces se casser.
- Ne pas raccorder un instrument, comme un oscilloscope, simultanément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

POWER SUPPLY AND CONTROL BLOCK DIAGRAM

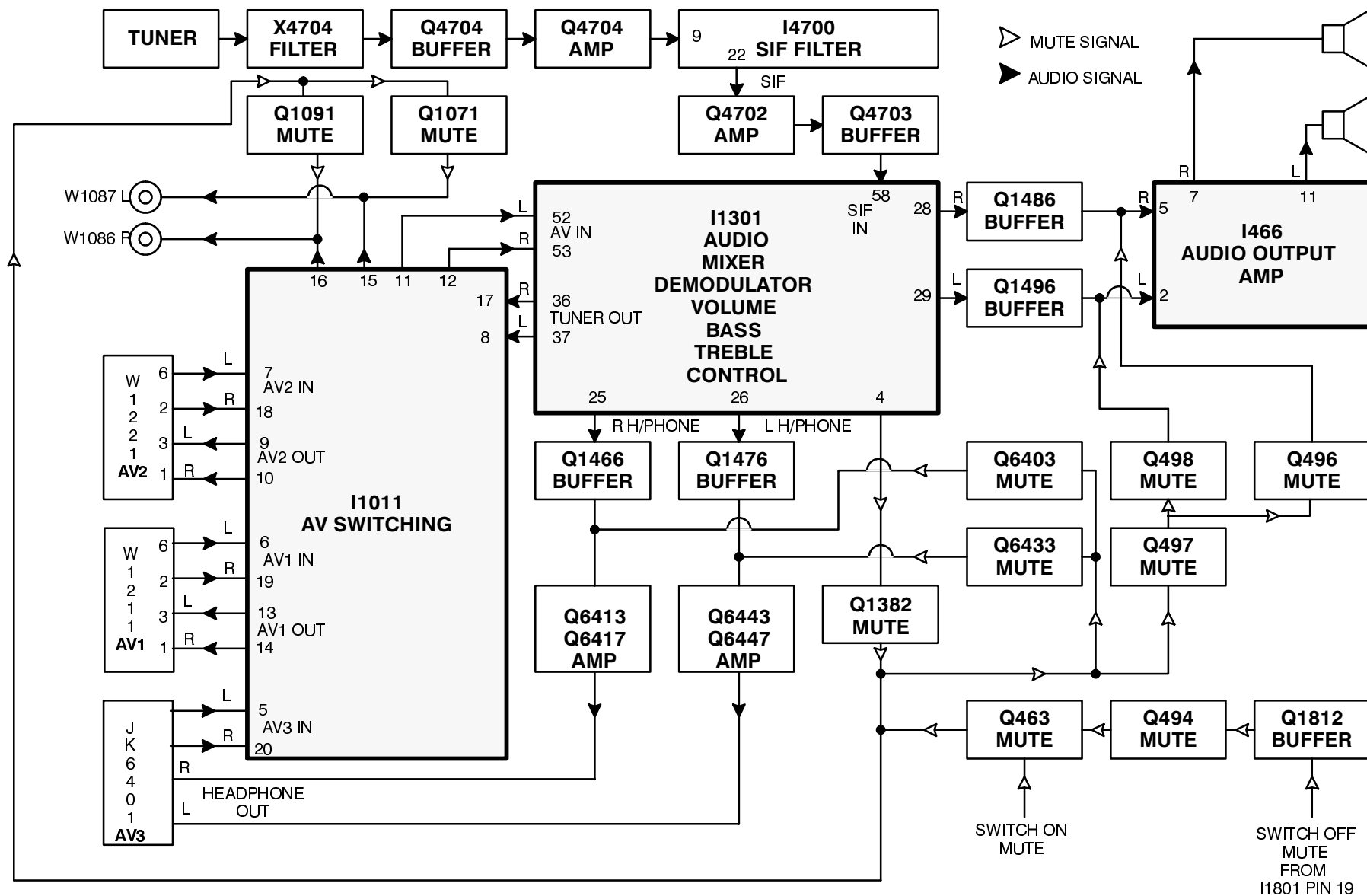
ALIMENTATION ET SYNOPTIQUE DE COMMANDE



VIDEO BLOCK DIAGRAM



SYNOPTIQUE AUDIO



PARTS LOCATION

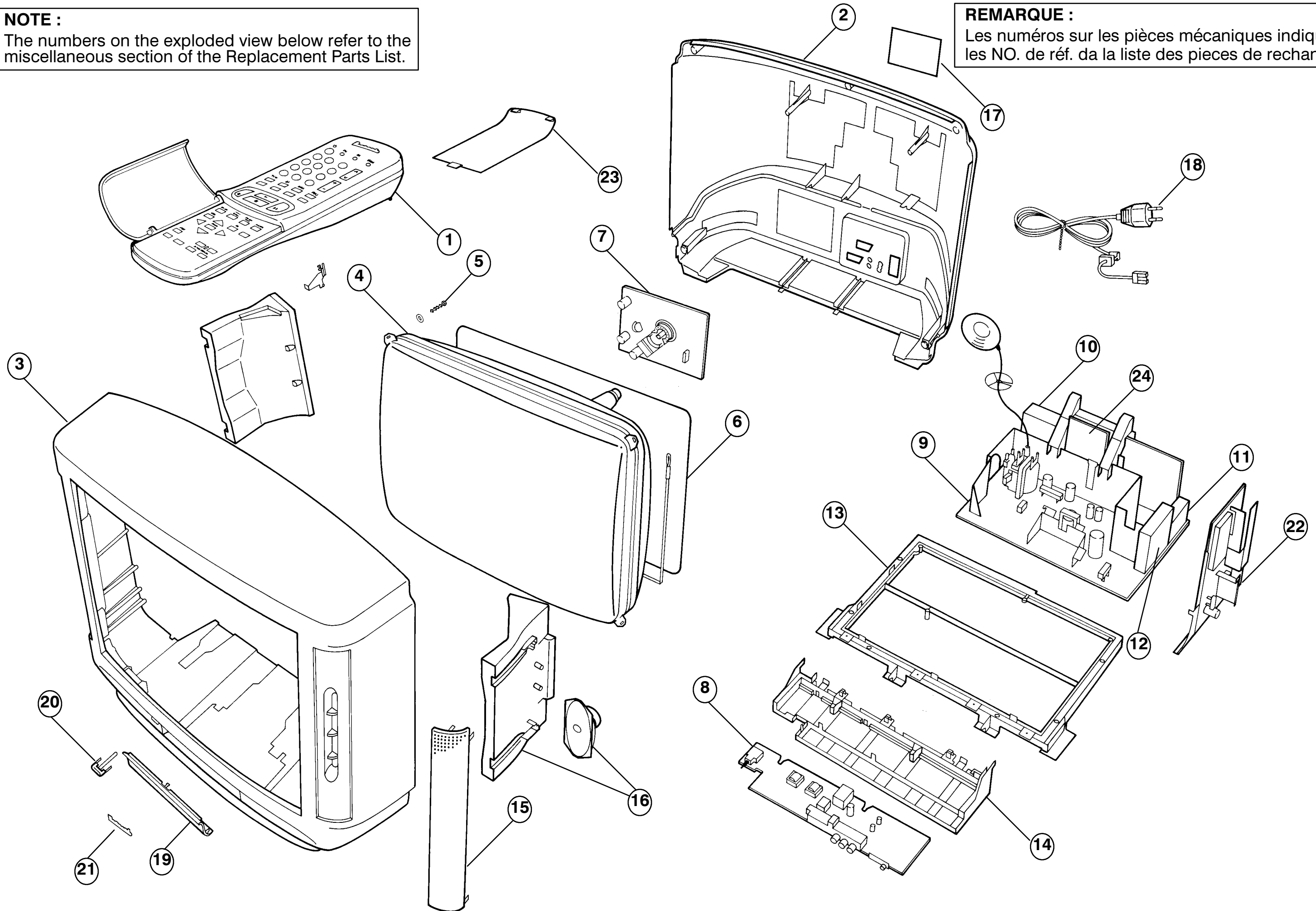
NOTE :

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

EMPLACEMENT DES PIÈCES

REMARQUE :

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



REPLACEMENT PARTS LIST

Important Safety Notice

Components identified by Δ 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 sécurité

Les éléments portant la indication Δ possèdent des caractéristiques de sécurité spécial Lors du remplacement de l'une quelconque des ces pièces, n'utiliser que celles spécifiées par la fabricant.

PARTS COMMON TO TX – 28XD1F AND TX – 25XD1F

Ref No.	Part No.	Description	
MISCELLANEOUS COMPONENTS			
1)	EUR51920	REMOTE CONTROL	
2)	*****	SEE DIFFERENCE LIST	
3)	*****	SEE DIFFERENCE LIST	
4)	*****	SEE DIFFERENCE LIST	
5)	VP17005-32	SCREW	
6)	*****	SEE DIFFERENCE LIST	
7)	TNP117037AL	Y P.C.B.	Δ
8)	TNP8EM011	M P.C.B.	Δ
9)	TNP197087AM	E P.C.B.	Δ
10)	*****	SEE DIFFERENCE LIST	
11)	ENV578F5G3	TUNER	Δ
12)	TNP117058AA	B P.C.B.	Δ
13)	TMX8E005	CHASSIS FRAME	
14)	EAG1216A2	SPEAKER	
15)	*****	SEE DIFFERENCE LIST	
16)	TSX8E0011	MAINS LEAD	Δ
17)	*****	SEE DIFFERENCE LIST	
18)	TBM153022	PANASONIC BADGE	
19)	TKP8E1122	LID	
20)	TBX8E025	POWER BUTTON	
21)	UR51EC780	BATTERY COVER (REMOTE)	
	TBM8E1410	PRESET PANEL	
	TBM8E1486	INDICATION SHEET	
	TEK6935	LID SWITCH	
	TJB8E012	AV TERMINAL	
	TKK8E023	BRACKET	
	TKP8E1120	LED PANEL	
	TMW8E018	LED HOLDER	
	TNA10805	VIF PACK	
	TPD8E562	CUSHION	
	TQB8E0922A	GERMAN INSTRUCTION BOOK	Δ
	TQB8E0922B	DUTCH INSTRUCTION BOOK	Δ
	TQB8E0922C	ITALIAN INSTRUCTION BOOK	Δ
	TQB8E0922D	FRENCH INSTRUCTION BOOK	Δ
	UM-3DEP-2P	BATTERY	
	VP17101HIP	FIXING BUSH	
LINKS			
BC1	ERJ6GEY0R00	WIRE LINK	
BC2	ERJ6GEY0R00	WIRE LINK	
BC4	ERJ6GEY0R00	WIRE LINK	
BC5	ERJ6GEY0R00	WIRE LINK	
B1	ERJ6GEY0R00	WIRE LINK	
B2	ERJ6GEY0R00	WIRE LINK	
B3	ERJ6GEY0R00	WIRE LINK	
B4	ERJ6GEY0R00	WIRE LINK	
B5	ERJ6GEY0R00	WIRE LINK	
B6	ERJ6GEY0R00	WIRE LINK	
B7	ERJ6GEY0R00	WIRE LINK	

Ref No.	Part No.	Description	
CAPACITORS			
C201	ECEA1CU101	ELECT 16V 100 μ F	
C202	ECQB1H103J	FILM 50V 10nF	
C203	ECEA1CU221	ELECT 16V 220 μ F	
C204	ECQB1H104J	FILM 50V 100nF	
C205	ECBT1H102KB3	CERAMIC 50V 1nF	
C206	222236516334	FILM 160V 330nF	
C212	ECA1HMR22GB	ELECT 50V 0.22 μ F	
C226	ECQB1H104J	FILM 50V 100nF	
C228	ECKC1H102J	CERAMIC 50V 1000pF	
C461	ECKC1H821J	CERAMIC 50V 820pF	
C462	ECEA1EU101	ELECT 25V 100 μ F	
C463	ECA1EM471GB	ELECT 25V 470pF	
C464	ECQM1H104J	FILM 50V 100nF	
C465	ECEA1CU470	ELECT 16V 47 μ F	
C466	ECEA1HU222	ELECT 50V 2200 μ F	
C467	ECQB1H103J	FILM 50V 10nF	
C470	222236516184	FILM 160V 180nF	
C471	ECEA1HU010	ELECT 50V 1 μ F	
C472	ECEA1CU101	ELECT 16V 100 μ F	
C473	ECEA1EGE222	ELECT 25V 2200 μ F	
C476	ECEA1HU4R7	ELECT 50V 4.7 μ F	
C477	ECEA1HU4R7	ELECT 50V 4.7 μ F	
C479	222236576104	FILM 760V 100nF	
C480	222236516184	FILM 160V 180nF	
C481	ECEA1HU010	ELECT 50V 1 μ F	
C482	ECEA1CU101	ELECT 16V 100 μ F	
C483	ECEA1EGE222	ELECT 25V 2200 μ F	
C486	ECEA1HU4R7	ELECT 50V 4.7 μ F	
C487	ECEA1HU4R7	ELECT 50V 4.7 μ F	
C489	222236576104	FILM 760V 100nF	
C492	ECA1VM4R7GB	ELECT 35V 4.7 μ F	
C495	ECEA1EU101	ELECT 25V 100 μ F	
C496	ECEA1CU100	ELECT 16V 10 μ F	
C521	ECEA1HU101	ELECT 50V 100 μ F	
C524	222236516105	FILM 160V 1 μ F	
C525	ECKC1H271J	CERAMIC 50V 270pF	
C527	ECQM2683JZ	FILM 250V 68nF	
C531	ECQM2564KZ	FILM 250V 560nF	
C534	ECWH15H332J	FILM 1500V 3300 μ F	
C536	ECWH12H103J	FILM 1250V 10nF	Δ
C537	ECQF4393JZH	FILM 400V 0.039 μ F	Δ
C538	ECWF2H394JZ	CERAMIC 500V 390nF	Δ
C541	ECWF2H105J	FILM 500V 1000nF	Δ
C543	ECEA2VU2R2	ELECT 350V 2.2 μ F	
C544	ECKC3D152J	CERAMIC 2KV 1.5nF	Δ
C547	ECKC2H101J	CERAMIC 500V 100pF	Δ
C548	ECEA2EU220	ELECT 250V 22 μ F	
C549	ECEA2AU2R2	ELECT 100V 2.2 μ F	
C557	ECKC2H101J	CERAMIC 500V 100pF	Δ
C558	ECA1VM102GB	ELECT 35V 1nF	
C561	ECEA1VU222	ELECT 35V 2200 μ F	
C562	222236576104	FILM 760V 100nF	
C563	ECA1VM471GB	ELECT 35V 470pF	
C564	ECQB1H473K	FILM 50V 47nF	
C565	ECKC2H151J	CERAMIC 500V 150pF	Δ
C567	ECQB1H333J	FILM 50V 33nF	
C568	222236516224	FILM 160V 220nF	

Ref No.	Part No.	Description		
C574	ECEA1VU332	ELECT	35V 3300µF	
C577	222236516105	FILM	160V 1µF	
C578	222236576104	FILM	760V 100nF	
C579	ECKC1H472J	CERAMIC	50V 4.7nF	
C591	ECEA1HGE4R7	ELECT	50V 4.7µF	
C592	ECA1CM330GB	ELECT	16V 33pF	
C594	ECKC1H103JB	CERAMIC	50V 10nF	
C595	ECQB1H102J	FILM	50V 1nF	
C618	ECOS2G6181NGELECT	400V	180µF	△
C619	ECQE6104K	FILM	600V 100nF	△
C620	ECKC2H561J	CERAMIC	500V 560pF	△
C622	ECEA1HFS470	ELECT	50V 47µF	
C623	222236516224	FILM	160V 220nF	
C626	ECKC3D471JB	CERAMIC	2KV 470pF	△
C628	ECKC1H221J	CERAMIC	50V 220pF	
C629	ECQB1H153K	FILM	50V 15nF	
C631	ECQB1H472J	FILM	50V 4.7nF	
C632	ECQB1H103J	FILM	50V 10nF	
C634	ECEA1HGE010	ELECT	50V 1µF	
C635	ECKC3D331J	CERAMIC	2KV 330pF	△
C636	ECKC2H472J	CERAMIC	500V 4.7nF	△
C637	ECQB1H222J	FILM	50V 2200pF	
C638	ECQF6333JZH	FILM	600V 0.033µF	
C639	ECKCWS222MEJ	CERAMIC	400V 2200pF	
C647	222236516334	FILM	160V 330nF	
C650	ECKC3A102J	CERAMIC	1KV 1nF	△
C651	ECOS2EA221AB	ELECT	400V 220µF	
C656	ECKC2H681J	CERAMIC	500V 680pF	△
C657	ECA1HM471GB	ELECT	50V 470pF	
C661	ECKC2H821J	CERAMIC	500V 820pF	△
C662	ECEA1VU222	ELECT	35V 2200µF	
C666	222236516224	FILM	160V 220nF	
C667	ECEA1CU471	ELECT	16V 470µF	
C671	ECKC2H681J	CERAMIC	500V 680pF	△
C672	ECEA1VU222	ELECT	35V 2200µF	
C677	ECEA1CU471	ELECT	16V 470µF	
C681	ECEA1EGE101	ELECT	25V 100µF	
C682	ECKC2H331J	CERAMIC	500V 330pF	△
C687	ECEA1HGE102	ELECT	50V 1000µF	
C1001	ECEA1CU470	ELECT	16V 47µF	
C1002	ECUV1H104ZFX	S.M.CAP	50V 100nF	
C1011	ECEA1CU470	ELECT	16V 47µF	
C1012	ECUV1H473ZFX	S.M.CAP	50V 47nF	
C1013	ECEA1CU470	ELECT	16V 47µF	
C1019	ECEA1CU470	ELECT	16V 47µF	
C1020	ECEA1CU470	ELECT	16V 47µF	
C1021	ECEA1HUR47	ELECT	50V 0.47µF	
C1022	ECEA1HUR47	ELECT	50V 0.47µF	
C1023	ECUV1H221JCX	S.M.CAP	50V 220pF	
C1024	ECUV1H221JCX	S.M.CAP	50V 220pF	
C1031	ECEA1HNR47	ELECT	50V 0.47µF	
C1032	ECEA1HUR47	ELECT	50V 0.47µF	
C1033	ECUV1H221JCX	S.M.CAP	50V 220pF	
C1034	ECUV1H221JCX	S.M.CAP	50V 220pF	
C1036	ECEA1CU470	ELECT	16V 47µF	
C1038	ECEA1CU470	ELECT	16V 47µF	
C1041	ECUV1H103KBX	S.M.CAP	50V 10nF	
C1042	ECUV1H103KBX	S.M.CAP	50V 10nF	
C1043	ECEA1HUR47	ELECT	50V 0.47µF	
C1044	ECEA1HUR47	ELECT	50V 0.47µF	
C1051	ECEA1HNR33	ELECT	50V 0.33µF	
C1052	ECEA1HNR33	ELECT	50V 0.33µF	
C1071	ECEA1CN470	ELECT	16V 47µF	
C1091	ECEA1CU470	ELECT	16V 47µF	
C1101	ECEA1CU470	ELECT	16V 47µF	
C1111	ECEA1HU470	ELECT	50V 47µF	
C1112	ECUV1H473ZFX	S.M.CAP	50V 47nF	
C1116	ECUV1H473ZFX	S.M.CAP	50V 47nF	
C1121	ECEA1CU470	ELECT	16V 47µF	
C1124	ECUV1H473ZFX	S.M.CAP	50V 47nF	

Ref No.	Part No.	Description		
C1126	ECEA1CU470	ELECT	16V 47µF	
C1151	ECUV1H102KBX	S.M.CAP	50V 1nF	
C1158	ECEA1CU470	ELECT	16V 47µF	
C1161	ECUV1H102KBX	S.M.CAP	50V 1nF	
C1178	ECUV1H473ZFX	S.M.CAP	50V 47nF	
C1179	ECEA1CU470	ELECT	16V 47µF	
C1183	ECUV1H104ZFX	S.M.CAP	50V 100nF	
C1193	ECUV1H104ZFX	S.M.CAP	50V 100nF	
C1226	ECUV1H560JCX	S.M.CAP	50V 56pF	
C1231	ECUV1H104ZFX	S.M.CAP	50V 100nF	
C1241	ECUV1H472KBX	S.M.CAP	50V 4.7nF	
C1242	ECUV1H472KBX	S.M.CAP	50V 4.7nF	
C1263	ECUV1H102KBX	S.M.CAP	50V 1nF	
C1271	ECUV1H102KBX	S.M.CAP	50V 1nF	
C1273	ECEA1CU470	ELECT	16V 47µF	
C1282	ECEA1HUR47	ELECT	50V 0.47µF	
C1284	ECEA1HUR47	ELECT	50V 0.47µF	
C1301	ECEA1CU100	ELECT	16V 10µF	
C1302	ECUV1H104ZFX	S.M.CAP	50V 100nF	
C1303	ECEA1CU100	ELECT	16V 10µF	
C1304	ECUV1H104ZFX	S.M.CAP	50V 100nF	
C1306	ECEA1CU101	ELECT	16V 100µF	
C1307	ECUV1H104ZFX	S.M.CAP	50V 100nF	
C1309	ECEA1CU100	ELECT	16V 10µF	
C1310	ECEA1CU100	ELECT	16V 10µF	
C1311	ECUV1H104ZFX	S.M.CAP	50V 100nF	
C1312	ECEA50Y3R3	ELECT	50V 3.3µF	
C1313	ECUV1H471JCX	S.M.CAP	50V 470pF	
C1314	ECUV1H471JCX	S.M.CAP	50V 470pF	
C1315	ECEA1CU100	ELECT	16V 10µF	
C1316	ECUV1H104ZFX	S.M.CAP	50V 100nF	
C1321	ECUV1H030CCX	S.M.CAP	50V 30pF	
C1322	ECUV1H030CCX	S.M.CAP	50V 30pF	
C1326	ECQM1H334J	FILM	50V 330nF	
C1327	ECUV1H221JCX	S.M.CAP	50V 220pF	
C1331	ECUV1H391JCX	S.M.CAP	50V 390pF	
C1332	ECUV1H391JCX	S.M.CAP	50V 390pF	
C1346	ECUV1H221JCX	S.M.CAP	50V 220pF	
C1347	ECUV1H221JCX	S.M.CAP	50V 220pF	
C1351	ECEA1CU470	ELECT	16V 47µF	
C1352	ECUV1H104ZFX	S.M.CAP	50V 100nF	
C1353	ECUV1H104ZFX	S.M.CAP	50V 100nF	
C1371	ERJ6GEY0R00	WIRE LINK		
C1377	ECUV1H104ZFX	S.M.CAP	50V 100nF	
C1382	ECUV1H104ZFX	S.M.CAP	50V 100nF	
C1409	ECUV1H470JCX	S.M.CAP	50V 47pF	
C1411	ECUV1H070DCX	S.M.CAP	50V 7pF	
C1412	ECUV1H100DCX	S.M.CAP	50V 10pF	
C1413	ECUV1H220JCX	S.M.CAP	50V 22pF	
C1416	ECUV1H070DCX	S.M.CAP	50V 7pF	
C1417	ECUV1H560JCX	S.M.CAP	50V 56pF	
C1444	ECUV1H102KBX	S.M.CAP	50V 1nF	
C1454	ECUV1H102KBX	S.M.CAP	50V 1nF	
C1463	ECUV1H102KBX	S.M.CAP	50V 1nF	
C1465	ECUV1H560JCX	S.M.CAP	50V 56pF	
C1467	ECUV1H102KBX	S.M.CAP	50V 1nF	
C1468	ECUV1H102KBX	S.M.CAP	50V 1nF	
C1473	ECUV1H102KBX	S.M.CAP	50V 1nF	
C1475	ECUV1H560JCX	S.M.CAP	50V 56pF	
C1483	ECUV1H102KBX	S.M.CAP	50V 1nF	
C1487	ECUV1H103KBX	S.M.CAP	50V 10nF	
C1493	ECUV1H102KBX	S.M.CAP	50V 1nF	
C1497	ECUV1H103KBX	S.M.CAP	50V 10nF	
C1601	ECEA1CU470	ELECT	16V 47µF	
C1602	ECUV1H103KBX	S.M.CAP	50V 10nF	
C1606	ECEA0JU102	ELECT	6.3V 1000µF	
C1607	ECUV1H103KBX	S.M.CAP	50V 10nF	
C1611	ECEA1CU470	ELECT	16V 47µF	
C1612	ECUV1H103KBX	S.M.CAP	50V 10nF	
C1613	ECEA1CU100	ELECT	16V 10µF	

Ref No.	Part No.	Description
C1614	ECUV1H473ZFX S.M.CAP	50V 47nF
C1615	ECUV1H103KBX S.M.CAP	50V 10nF
C1616	ECUV1H101JCX S.M.CAP	50V 100pF
C1617	ECUV1H470JCX S.M.CAP	50V 47pF
C1618	ECUV1H470JCX S.M.CAP	50V 47pF
C1619	ECUV1H103KBX S.M.CAP	50V 10nF
C1620	ECUV1H102KBX S.M.CAP	50V 1nF
C1621	ECUV1H103KBX S.M.CAP	50V 10nF
C1622	ECEA0JU102 ELECT	6.3V 1000μF
C1625	ERJ6GEYJ151 S.M.CARB	0.1W 5% 150Ω
C1626	ECUV1H104ZFX S.M.CAP	50V 100nF
C1627	ECEA1HNR22 ELECT	50V 0.22μF
C1628	ECEA0JU102 ELECT	6.3V 1000μF
C1641	ECUV1H104ZFX S.M.CAP	50V 100nF
C1651	ECUV1H104ZFX S.M.CAP	50V 100nF
C1652	ECUV1H104ZFX S.M.CAP	50V 100nF
C1653	ECUV1H104ZFX S.M.CAP	50V 100nF
C1655	ECEA1CU470 ELECT	16V 47μF
C1661	ECUV1H102KBX S.M.CAP	50V 1nF
C1662	ECUV1H683ZFX S.M.CAP	50V 68nF
C1663	ECUV1H102KBX S.M.CAP	50V 1nF
C1666	ECUV1H102KBX S.M.CAP	50V 1nF
C1667	ECUV1H683ZFX S.M.CAP	50V 68nF
C1668	ECUV1H104ZFX S.M.CAP	50V 100nF
C1672	ECEA0JU101 ELECT	6.3V 100μF
C1673	ECUV1H104ZFX S.M.CAP	50V 100nF
C1681	ECUV1H102KBX S.M.CAP	50V 1nF
C1682	ECUV1H102KBX S.M.CAP	50V 1nF
C1685	ECUV1H102KBX S.M.CAP	50V 1nF
C1686	ECUV1H271JCX S.M.CAP	50V 270pF
C1687	ECUV1H121JCX S.M.CAP	50V 120pF
C1688	ECUV1H471JCX S.M.CAP	50V 470pF
C1691	ECUV1H104ZFX S.M.CAP	50V 100nF
C1692	ECUV1H104ZFX S.M.CAP	50V 100nF
C1693	ECUV1H104ZFX S.M.CAP	50V 100nF
C1696	ECUV1H102KBX S.M.CAP	50V 1nF
C1697	ECUV1H100DCX S.M.CAP	50V 10pF
C1698	ECUV1H102KBX S.M.CAP	50V 1nF
C1699	ECUV1H100DCX S.M.CAP	50V 10pF
C1701	ECEA1CU470 ELECT	16V 47μF
C1702	ECUV1H103KBX S.M.CAP	50V 10nF
C1704	ECEA1CU470 ELECT	16V 47μF
C1706	ECUV1H104ZFX S.M.CAP	50V 100nF
C1714	ECUV1H103KBX S.M.CAP	50V 10nF
C1717	ECUV1H102KBX S.M.CAP	50V 1nF
C1721	ECUV1H473ZFX S.M.CAP	50V 47nF
C1722	ECUV1H102KBX S.M.CAP	50V 1nF
C1752	ECUV1H103KBX S.M.CAP	50V 10nF
C1753	ECEA1CU100 ELECT	16V 10μF
C1801	ECUV1H103KBX S.M.CAP	50V 10nF
C1802	ECA0JM471GB ELECT	6.3V 470pF
C1804	ECUV1H103KBX S.M.CAP	50V 10nF
C1811	ECUV1H332KBX S.M.CAP	50V 3.3nF
C1816	ERJ6GEYJ153 S.M.CARB	0.1W 5% 15KΩ
C1826	ERJ6GEYJ153 S.M.CARB	0.1W 5% 15KΩ
C1836	ECUV1H104ZFX S.M.CAP	50V 100nF
C1838	ECUV1H101JCX S.M.CAP	50V 100pF
C1843	ECUV1H472KBX S.M.CAP	50V 4.7nF
C1845	ECUV1H560JCX S.M.CAP	50V 56pF
C1849	ECKC1H102J CERAMIC	50V 1000pF
C1851	ECUV1H470JCX S.M.CAP	50V 47pF
C1852	ECUV1H390JCX S.M.CAP	50V 39pF
C1853	ECUV1H390JCX S.M.CAP	50V 39pF
C1857	ECUV1H560JCX S.M.CAP	50V 56pF
C1859	ECUV1H560JCX S.M.CAP	50V 56pF
C1871	ECUV1H103KBX S.M.CAP	50V 10nF
C1879	ECUV1H560JCX S.M.CAP	50V 56pF
C1888	ECUV1H103KBX S.M.CAP	50V 10nF
C1891	ECUV1H102KBX S.M.CAP	50V 1nF
C1893	ECUV1H102KBX S.M.CAP	50V 1nF
C1894	ECUV1H102KBX S.M.CAP	50V 1nF

Ref No.	Part No.	Description
C1922	ECUV1H103KBX S.M.CAP	50V 10nF
C1925	ECUV1H103KBX S.M.CAP	50V 10nF
C1931	ECUV1H103KBX S.M.CAP	50V 10nF
C1941	ECUV1H103KBX S.M.CAP	50V 10nF
C1942	ECEA1CU470 ELECT	16V 47μF
C1961	ECUV1H332KBX S.M.CAP	50V 3.3nF
C1962	ECUV1H332KBX S.M.CAP	50V 3.3nF
C1963	ECUV1H332KBX S.M.CAP	50V 3.3nF
C1964	ECUV1H332KBX S.M.CAP	50V 3.3nF
C1971	ECUV1H104ZFX S.M.CAP	50V 100nF
C1972	ECEA1CU470 ELECT	16V 47μF
C1973	ECUV1H104ZFX S.M.CAP	50V 100nF
C1974	ECUV1H104ZFX S.M.CAP	50V 100nF
C1976	ECUV1H104ZFX S.M.CAP	50V 100nF
C1977	ECA0JM471GB ELECT	6.3V 470pF
C1981	ECUV1H104ZFX S.M.CAP	50V 100nF
C1982	ECUV1H101JCX S.M.CAP	50V 100pF
C3101	ECUV1H030CCX S.M.CAP	50V 30pF
C3102	ECUV1H103ZFX S.M.CAP	50V 10nF
C3103	ECEA1HU100 ELECT	50V 10μF
C3122	ECUV1H102KBX S.M.CAP	50V 1nF
C3124	ECUV1H471JCX S.M.CAP	50V 470pF
C3131	ECKC2H471J CERAMIC	500V 470pF ▲
C3134	ECEA1CU101 ELECT	16V 100μF
C3136	ECKC2H471J CERAMIC	500V 470pF ▲
C3139	ECEA1CU101 ELECT	16V 100μF
C3141	ECEA1CU471 ELECT	16V 470μF
C3143	ECEA1CU100 ELECT	16V 10μF
C3144	ECEA1CU470 ELECT	16V 47μF
C3146	ECEA2EU220 ELECT	250V 22μF
C3152	ECEA2EU220 ELECT	250V 22μF
C3153	ECA1VM101GB ELECT	35V 100pF
C3167	ECUV1H220JCX S.M.CAP	50V 22pF
C3168	ECUV1H103ZFX S.M.CAP	50V 10nF
C3169	ECEA1CU100 ELECT	16V 10μF
C3177	ECUV1H150JCX S.M.CAP	50V 15pF
C3178	ECUV1H103ZFX S.M.CAP	50V 10nF
C3179	ECEA1CU100 ELECT	16V 10μF
C3187	ECUV1H101JCX S.M.CAP	50V 100pF
C3188	ECUV1H103ZFX S.M.CAP	50V 10nF
C3189	ECEA1CU100 ELECT	16V 10μF
C3356	ECA1CM220GB ELECT	16V 22μF
C3357	ECUV1H104ZFX S.M.CAP	50V 100nF
C3362	TACA1103P2KV I.C.	
C3363	TACA1103P2KV I.C.	
C3364	ECKC1H102J CERAMIC	50V 1000pF
C3366	ECEA2EU220 ELECT	250V 22μF
C3367	ECQM2104KZ FILM	250V 100nF
C3369	ECEA1HU010 ELECT	50V 1μF
C3373	ECUV1H104ZFX S.M.CAP	50V 100nF
C3377	ECUV1H681JCX S.M.CAP	50V 680pF
C3381	ECUV1H020CCX S.M.CAP	50V 2pF
C3383	ECUV1H104ZFX S.M.CAP	50V 100nF
C3387	ECUV1H681JCX S.M.CAP	50V 680pF
C3391	ECUV1H070CCX S.M.CAP	50V 7pF
C3392	ECA1CM222GB ELECT	16V 2200μF
C3393	ECUV1H104ZFX S.M.CAP	50V 100nF
C3397	ECUV1H681JCX S.M.CAP	50V 680pF
C4702	ECUV1H151JCX S.M.CAP	50V 150pF
C4703	ECUV1H151JCX S.M.CAP	50V 150pF
C4704	ECUV1H151JCX S.M.CAP	50V 150pF
C4705	ECUV1H104ZFX S.M.CAP	50V 100nF
C4707	ECUV1H151JCX S.M.CAP	50V 150pF
C4708	ECUV1H100DCX S.M.CAP	50V 10pF
C4709	ECUV1H100DCX S.M.CAP	50V 10pF
C4711	ECUV1H153ZFX S.M.CAP	50V 15nF
C4712	ECUV1H471JCX S.M.CAP	50V 470pF
C4713	ECUV1C105ZFX S.M.CAP	16V 1000nF
C4714	ECEA1HKA2R2 ELECT	50V 2.2μF
C4715	ECEA1CKA100 ELECT	16V 10μF

Ref No.	Part No.	Description
C4718	ECUV1H104ZFX S.M.CAP	50V 100nF
C4719	ECEA1CKA100 ELECT	16V 10 μ F
C4720	ECUV1H104ZFX S.M.CAP	50V 100nF
C4721	ECEA1CKA100 ELECT	16V 10 μ F
C4723	ECUV1H104ZFX S.M.CAP	50V 100nF
C4724	ECEA1CKA470 ELECT	16V 47 μ F
C4725	ECUV1H104ZFX S.M.CAP	50V 100nF
C4726	ECUV1H104ZFX S.M.CAP	50V 100nF
C4727	ECUV1H104ZFX S.M.CAP	50V 100nF
C4730	ECUV1H104ZFX S.M.CAP	50V 100nF
C4731	ECUV1H070DTX S.M.CAP	50V 70pF
C4732	ECEA1HKA2R2 ELECT	50V 2.2 μ F
C4733	ECEA1HKA2R2 ELECT	50V 2.2 μ F
C4734	ECUV1H104ZFX S.M.CAP	50V 100nF
C4735	ECEA1CKA100 ELECT	16V 10 μ F
C4736	ECUV1H104ZFX S.M.CAP	50V 100nF
C4737	ECUV1H104ZFX S.M.CAP	50V 100nF
C4738	ECUV1H104ZFX S.M.CAP	50V 100nF
C4739	ECUV1H104ZFX S.M.CAP	50V 100nF
C4740	ECUV1H104ZFX S.M.CAP	50V 100nF
C4741	ECUV1H104ZFX S.M.CAP	50V 100nF
C4742	ECUV1H102KBX S.M.CAP	50V 1nF
C4743	ECUV1H104ZFX S.M.CAP	50V 100nF
C4744	ECUV1H102KBX S.M.CAP	50V 1nF
C4747	ECUV1H102KBX S.M.CAP	50V 1nF
C4748	ECUV1H393KBX S.M.CAP	50V 39nF
C4760	ECUV1H104ZFX S.M.CAP	50V 100nF
C4761	ECUV1H030CCX S.M.CAP	50V 30pF
C6101	ECEA1HU471 ELECT	50V 470 μ F
C6102	ECQM1H334J FILM	50V 330nF
C6103	ECQM1H104J FILM	50V 100nF
C6104	ECEA1HU101 ELECT	50V 100 μ F
C6106	ECEA1HU101 ELECT	50V 100 μ F
C6301	ECEA1CU470 ELECT	16V 47 μ F
C6303	ECUV1H103ZFX S.M.CAP	50V 10nF
C6401	ECEA1CU101 ELECT	16V 100 μ F
C6402	ECEA1CU101 ELECT	16V 100 μ F
C6403	ECUV1H103ZFX S.M.CAP	50V 10nF
C6406	ECEA1HU4R7 ELECT	50V 4.7 μ F
C6407	ECUV1H102KBX S.M.CAP	50V 1nF
C6408	ECEA1HU4R7 ELECT	50V 4.7 μ F
C6409	ECUV1H561JCX S.M.CAP	50V 560pF
C6410	ECUV1H561JCX S.M.CAP	50V 560pF
C6417	ECEA1CU471 ELECT	16V 470 μ F
C6418	ECUV1H103ZFX S.M.CAP	50V 10nF
C6436	ECEA1HU4R7 ELECT	50V 4.7 μ F
C6437	ECUV1H102KBX S.M.CAP	50V 1nF
C6438	ECEA1HU4R7 ELECT	50V 4.7 μ F
C6447	ECEA1CU471 ELECT	16V 470 μ F
C6448	ECUV1H103ZFX S.M.CAP	50V 10nF
C6491	ECUV1H271JCX S.M.CAP	50V 270pF
C6591	ECUV1H271JCX S.M.CAP	50V 270pF
C6812	ECQU2A154MN FILM	250V 150nF
C6815	ECQU2A224MN FILM	250V 220nF

DIODES

D206	MA4300	DIODE
D465	MA165TA5	DIODE
D466	MA165TA5	DIODE
D467	MA165TA5	DIODE
D468	MA165TA5	DIODE
D471	MA700TA5	DIODE
D481	MA700TA5	DIODE
D491	MA167TA5	DIODE
D521	MA170	DIODE
D526	MA165TA5	DIODE
D527	EU02	DIODE
D536	ERB0615	DIODE TYPD0753VAG
D537	TVSRU2AM	DIODE

Ref No.	Part No.	Description
D544	TVSES1FV1	DIODE
D547	AU02V0	DIODE
D548	MA165TA5	DIODE
D549	MA167TA5	DIODE
D557	EU02	DIODE
D561	ERA15-02V3	DIODE
D562	MA165TA5	DIODE
D563	MA165TA5	DIODE
D566	MA2082ALFS	DIODE
D567	MA4062	DIODE
D568	MA2100LFS	DIODE
D569	MA2082ALFS	DIODE
D590	MA4360	DIODE
D613	RBV4-08	DIODE
D622	MA167TA5	DIODE
D624	BYT56K15/10	DIODE
D630	MA165TA5	DIODE
D636	MA167TA5	DIODE
D651	RG4CLFL1	DIODE
D656	EU02	DIODE
D661	ERD32-02L7	DIODE
D671	ERD32-02L7	DIODE
D674	MA4120	DIODE
D678	MA4027	DIODE
D681	EU02	DIODE
D686	RU4AMLF-M1	DIODE
D1019	PMLL5242B	DIODE
D1020	PMLL5242B	DIODE
D1023	PMLL5242B	DIODE
D1024	PMLL5242B	DIODE
D1033	PMLL5242B	DIODE
D1034	PMLL5242B	DIODE
D1036	PMLL5242B	DIODE
D1038	PMLL5242B	DIODE
D1070	PMLL5242B	DIODE
D1080	PMLL4148L	DIODE
D1081	PMLL4148L	DIODE
D1082	PMLL4148L	DIODE
D1090	PMLL5242B	DIODE
D1121	PMLL5242B	DIODE
D1123	PMLL5242B	DIODE
D1156	PMLL5242B	DIODE
D1158	PMLL5242B	DIODE
D1172	PMLL5242B	DIODE
D1221	PMLL5232B	DIODE
D1222	PMLL5232B	DIODE
D1270	PMLL5242B	DIODE
D1273	PMLL5242B	DIODE
D1282	PMLL5242B	DIODE
D1284	PMLL5242B	DIODE
D1381	PMLL5239B	DIODE
D1382	PMLL4148L	DIODE
D1601	RLS72TE-11	DIODE
D1614	RLS72TE-11	DIODE
D1617	PMLL4148L	DIODE
D1623	PMLL4148L	DIODE
D1624	PMLL4148L	DIODE
D1672	PMLL4148L	DIODE
D1681	PMLL4148L	DIODE
D1682	PMLL4148L	DIODE
D1717	RLS72TE-11	DIODE
D1941	PMLL5232B	DIODE
D3126	PMLL4148L	DIODE
D3127	PMLL4148L	DIODE
D3133	PMLL4148L	DIODE
D3138	PMLL4148L	DIODE
D3368	PMLL4148L	DIODE
D3372	MA165TA5	DIODE
D3373	PMLL4148L	DIODE
D3374	PMLL4148L	DIODE
D3377	PMLL4148L	DIODE

Ref No.	Part No.	Description
D3382	MA165TA5	DIODE
D3383	PMLL4148L	DIODE
D3384	PMLL4148L	DIODE
D3387	PMLL4148L	DIODE
D3391	MA165TA5	DIODE
D3392	MA165TA5	DIODE
D3393	PMLL4148L	DIODE
D3394	PMLL4148L	DIODE
D3397	PMLL4148L	DIODE
D4701	BA582	DIODE
D4702	BA582	DIODE
D4720	MA3020TX	DIODE
D4721	MA3020TX	DIODE
D6101	TVSS1WBS10	DIODE
D6103	PMLL4148L	DIODE
D6106	PMLL4148L	DIODE
D6301	LN81RPHL	DIODE
D6381	PMLL4148L	DIODE
D6382	PMLL4148L	DIODE
D6391	PMLL4148L	DIODE
D6392	PMLL4148L	DIODE
D6491	PMLL4148L	DIODE
D6492	PMLL4148L	DIODE
D6591	PMLL4148L	DIODE
D6592	PMLL4148L	DIODE

FUSES

F547	TR5-T2000	FUSE	△
F656	TR5-T1250	FUSE	△
F661	TR5-T2000	FUSE	△
F671	TR5-T2000	FUSE	△
F6811	2153.15H	FUSE	△
F68111	EYF52BC	FUSE HOLDER	
F68112	EYF52BC	FUSE HOLDER	

SOCKETS

H1871	832AG11D-ESL	I.C. SOCKET
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INTEGRATED CIRCUITS

I466	LA4282	AUDIO OUTPUT
I561	TDA8175-3	VERTICAL OUTPUT
I611	TDA4605-3	SWITCHABLE POWER SUPPLY
I646	L78M09MRB	9V REGULATOR
I661	LM317T	12V REGULATOR
I676	TL431ACLPM	COIL
I1011	TEA6420	AUDIO SWITCH
I1111	TEA6415C	VIDEO SWITCH
I1301	MSP3410-15	AUDIO PROCESSOR
I1351	AN78L08TA	8V REGULATOR
I1601	VDP3108-25	VIDEO PROCESSOR
I1701	TPU3040-20	TEXT PROCESSOR
I1751	81C1000A-70P	DRAM
I1801	CCU3000I-05	CENTRAL CONTROL UNIT
I1802	MN1280R	RESET
I1871	27C010-07A2F	EPROM
I1981	MN1280R	RESET
I4701	TDA9814T	VIF
I4702	TSA5514AT/C2	A.F.C. CONTROL
I6101	AN78L05TA	5V REGULATOR
I6301	RPM-637CBRS1	LED RECEIVER

Ref No.	Part No.	Description
TERMINALS AND LINKS		
JC1001	ERJ8GEY0R00	WIRE LINK
JC1002	ERJ8GEY0R00	WIRE LINK
JC1003	ERJ8GEY0R00	WIRE LINK
JC1004	ERJ8GEY0R00	WIRE LINK
JC1005	ERJ6GEY0R00	WIRE LINK
JC1006	ERJ6GEY0R00	WIRE LINK
JC1007	ERJ8GEY0R00	WIRE LINK
JC1008	ERJ8GEY0R00	WIRE LINK
JC1009	ERJ8GEY0R00	WIRE LINK
JC1010	ERJ8GEY0R00	WIRE LINK
JC1011	ERJ8GEY0R00	WIRE LINK
JC1012	ERJ6GEY0R00	WIRE LINK
JC1013	ERJ6GEY0R00	WIRE LINK
JC1014	ERJ8GEY0R00	WIRE LINK
JC1015	ERJ6GEY0R00	WIRE LINK
JC1016	ERJ8GEY0R00	WIRE LINK
JC1017	ERJ8GEY0R00	WIRE LINK
JC1018	ERJ8GEY0R00	WIRE LINK
JC1019	ERJ6GEY0R00	WIRE LINK
JC1020	ERJ8GEY0R00	WIRE LINK
JC1021	ERJ8GEY0R00	WIRE LINK
JC1022	ERJ8GEY0R00	WIRE LINK
JC1023	ERJ8GEY0R00	WIRE LINK
JC1024	ERJ6GEY0R00	WIRE LINK
JC1025	ERJ8GEY0R00	WIRE LINK
JC1026	ERJ8GEY0R00	WIRE LINK
JC1027	ERJ6GEY0R00	WIRE LINK
JC1029	ERJ8GEY0R00	WIRE LINK
JC1030	ERJ6GEY0R00	WIRE LINK
JC1031	ERJ6GEY0R00	WIRE LINK
JC1032	ERJ6GEY0R00	WIRE LINK
JC1033	ERJ8GEY0R00	WIRE LINK
JC1034	ERJ8GEY0R00	WIRE LINK
JC1035	ERJ6GEY0R00	WIRE LINK
JC1036	ERJ8GEY0R00	WIRE LINK
JC1037	ERJ8GEY0R00	WIRE LINK
JC1040	ERJ8GEY0R00	WIRE LINK
JC1041	ERJ8GEY0R00	WIRE LINK
JC1042	ERJ8GEY0R00	WIRE LINK
JC1043	ERJ8GEY0R00	WIRE LINK
JC1044	ERJ8GEY0R00	WIRE LINK
JC1045	ERJ6GEY0R00	WIRE LINK
JC1047	ERJ8GEY0R00	WIRE LINK
JC1048	ERJ6GEY0R00	WIRE LINK
JC1049	ERJ8GEY0R00	WIRE LINK
JC1050	ERJ8GEY0R00	WIRE LINK
JC1051	ERJ6GEY0R00	WIRE LINK
JC1052	ERJ8GEY0R00	WIRE LINK
JC1053	ERJ8GEY0R00	WIRE LINK
JC1054	ERJ8GEY0R00	WIRE LINK
JC1055	ERJ6GEY0R00	WIRE LINK
JC1056	ERJ6GEY0R00	WIRE LINK
JC1057	ERJ6GEY0R00	WIRE LINK
JC1058	ERJ8GEY0R00	WIRE LINK
JC1059	ERJ8GEY0R00	WIRE LINK
JC1060	ERJ6GEY0R00	WIRE LINK
JC1061	ERJ8GEY0R00	WIRE LINK
JC1062	ERJ8GEY0R00	WIRE LINK
JC1064	ERJ6GEY0R00	WIRE LINK
JC1065	ERJ8GEY0R00	WIRE LINK
JC1066	ERJ6GEY0R00	WIRE LINK
JC1067	ERJ6GEY0R00	WIRE LINK
JC1068	ERJ6GEY0R00	WIRE LINK
JC1069	ERJ8GEY0R00	WIRE LINK
JC1070	ERJ6GEY0R00	WIRE LINK
JC1071	ERJ6GEY0R00	WIRE LINK
JC1072	ERJ6GEY0R00	WIRE LINK
JC1073	ERJ8GEY0R00	WIRE LINK
JC1074	ERJ6GEY0R00	WIRE LINK

Ref No.	Part No.	Description
JC1075	ERJ6GEY0R00	WIRE LINK
JC1076	ERJ6GEY0R00	WIRE LINK
JC1077	ERJ8GEY0R00	WIRE LINK
JC1078	ERJ6GEY0R00	WIRE LINK
JC1079	ERJ8GEY0R00	WIRE LINK
JC1080	ERJ8GEY0R00	WIRE LINK
JC1081	ERJ8GEY0R00	WIRE LINK
JC1082	ERJ8GEY0R00	WIRE LINK
JC1083	ERJ8GEY0R00	WIRE LINK
JC1084	ERJ6GEY0R00	WIRE LINK
JC1085	ERJ6GEY0R00	WIRE LINK
JC1086	ERJ6GEY0R00	WIRE LINK
JC1087	ERJ6GEY0R00	WIRE LINK
JC1088	ERJ6GEY0R00	WIRE LINK
JC1089	ERJ8GEY0R00	WIRE LINK
JC1090	ERJ6GEY0R00	WIRE LINK
JC1091	ERJ6GEY0R00	WIRE LINK
JC1093	ERJ8GEY0R00	WIRE LINK
JC1094	ERJ8GEY0R00	WIRE LINK
JC1095	ERJ8GEY0R00	WIRE LINK
JC1096	ERJ6GEY0R00	WIRE LINK
JC1097	ERJ6GEY0R00	WIRE LINK
JC1098	ERJ8GEY0R00	WIRE LINK
JC1099	ERJ8GEY0R00	WIRE LINK
JC1100	ERJ8GEY0R00	WIRE LINK
JC1101	ERJ8GEY0R00	WIRE LINK
JC1102	ERJ8GEY0R00	WIRE LINK
JC1103	ERJ6GEY0R00	WIRE LINK
JC1104	ERJ8GEY0R00	WIRE LINK
JC1105	ERJ8GEY0R00	WIRE LINK
JC1106	ERJ8GEY0R00	WIRE LINK
JC1107	ERJ8GEY0R00	WIRE LINK
JC1108	ERJ8GEY0R00	WIRE LINK
JC1109	ERJ6GEY0R00	WIRE LINK
JC1111	ERJ6GEY0R00	WIRE LINK
JC1112	ERJ6GEY0R00	WIRE LINK
JC1113	ERJ6GEY0R00	WIRE LINK
JC1114	ERJ8GEY0R00	WIRE LINK
JC1115	ERJ6GEY0R00	WIRE LINK
JC1116	ERJ6GEY0R00	WIRE LINK
JC1117	ERJ6GEY0R00	WIRE LINK
JC1118	ERJ6GEY0R00	WIRE LINK
JC1119	ERJ6GEY0R00	WIRE LINK
JC1121	ERJ8GEY0R00	WIRE LINK
JC1122	ERJ8GEY0R00	WIRE LINK
JC1123	ERJ6GEY0R00	WIRE LINK
J12	EXCELSA39V	COIL
J23	EXCELSA39V	COIL

COILS

L202	ELER220KA	COIL
L204	ELER220KA	COIL
L230	EXCELSA24T	COIL
L538	297-23293	COIL
L541	ELH5L421	COIL
L542	ELC08D055	COIL
L594	297-017696	COIL
L624	EXCELSA35T	COIL
L626	EXCELD35C	COIL
L650	EXCELD35C	COIL
L661	EXCELD35V	COIL
L671	EXCELD35V	COIL
L686	EXCELSA35T	COIL
L1037	TSC925-4	CHOKE
L1301	EXCELD35V	COIL
L1303	EXCELD35V	COIL
L1351	ELEV4R7KA	COIL
L1413	ELEV6R8KA	COIL
L1601	ELEV4R7KA	COIL

Ref No.	Part No.	Description
L1606	EXCELD35V	COIL
L1611	ELEV4R7KA	COIL
L1619	EXCELD35V	COIL
L1622	ELEV4R7KA	COIL
L1634	EXCEMT101BT	COIL
L1644	EXCEMT101BT	COIL
L1652	ELEV4R7KA	COIL
L1654	EXCEMT101BT	COIL
L1687	ELEMV1R5MA	COIL
L1691	EXCEMT101BT	COIL
L1692	EXCEMT101BT	COIL
L1693	EXCEMT101BT	COIL
L1694	EXCEMT101BT	COIL
L1701	ELEV4R7KA	COIL
L1714	EXCELD35V	COIL
L1751	EXCELD35V	COIL
L1801	ELEV4R7KA	COIL
L1837	EXCELD35V	COIL
L1845	ELEV3R3KA	COIL
L1857	ELEV3R3KA	COIL
L1859	ELEV3R3KA	COIL
L1871	EXCELD35V	COIL
L1878	ELEV3R3KA	COIL
L1888	ELEV4R7KA	COIL
L1931	ELEV4R7KA	COIL
L1941	EXCELD35V	COIL
L1972	EXCELD35V	COIL
L1974	EXCELD35V	COIL
L1977	EXCELD35V	COIL
L3161	SDL-4101	COIL
L3171	SDL-4101	COIL
L3181	SDL-4101	COIL
L4702	ELESN102KA	COIL
L4703	ELESNR22MA	COIL
L4706	ELESN6R8KA	COIL
L4707	EQV7EN203B	COIL
L4708	ELESN181KA	COIL
L4709	ELESNR22MA	COIL
L6403	ELEBT6R8KA	COIL
L6404	ELEBT6R8KA	COIL
L6417	ELEBT6R8KA	COIL
L6447	ELEBT6R8KA	COIL
L6811	ELF18D415F	FILTER
L6812	ELF18D415F	FILTER

CONTROLS

P633	EVMEASA00B52	CONTROL 500Ω
P3362	RH092GDJ6J	VARIABLE RESISTOR
P3368	EVN65UA00B24	CONTROL 20KΩ
P4701	EVND4AA00B24	CONTROL 20KΩ
P4702	EVND4AA00B24	CONTROL 20KΩ

TRANSISTORS

Q463	BC557B	TRANSISTOR
Q465	BC547B	TRANSISTOR
Q494	BC547B	TRANSISTOR
Q496	BC547B	TRANSISTOR
Q497	BC557B	TRANSISTOR
Q498	BC547B	TRANSISTOR
Q526	2SD836-AL	TRANSISTOR
Q534	BU2508AXRL	TRANSISTOR
Q591	BC557B	TRANSISTOR
Q592	BC557B	TRANSISTOR
Q593	BC547B	TRANSISTOR
Q594	2SD1265A	TRANSISTOR
Q624	2SK1118LB	TRANSISTOR
Q651	TFD312SOF632	DIODE

Ref No.	Part No.	Description
Q667	BC547B	TRANSISTOR
Q674	BUZ71AF1	TRANSISTOR
Q681	BC557B	TRANSISTOR
Q682	2SA1535LB	TRANSISTOR
Q1071	BC817-25	TRANSISTOR
Q1091	BC817-25	TRANSISTOR
Q1123	BC847B	TRANSISTOR
Q1163	BC847B	TRANSISTOR
Q1167	BC857B	TRANSISTOR
Q1172	BC847B	TRANSISTOR
Q1182	BC847B	TRANSISTOR
Q1192	BC847B	TRANSISTOR
Q1221	BC847B	TRANSISTOR
Q1222	BC847B	TRANSISTOR
Q1382	BC857B	TRANSISTOR
Q1466	BC860B	TRANSISTOR
Q1476	BC860B	TRANSISTOR
Q1486	BC860B	TRANSISTOR
Q1496	BC860B	TRANSISTOR
Q1612	BC847B	TRANSISTOR
Q1631	BC847B	TRANSISTOR
Q1633	BC847B	TRANSISTOR
Q1636	BC857B	TRANSISTOR
Q1641	BC847B	TRANSISTOR
Q1643	BC847B	TRANSISTOR
Q1646	BC857B	TRANSISTOR
Q1651	BC847B	TRANSISTOR
Q1653	BC847B	TRANSISTOR
Q1656	BC857B	TRANSISTOR
Q1663	BC847B	TRANSISTOR
Q1664	BC847B	TRANSISTOR
Q1667	BC847B	TRANSISTOR
Q1673	BC847B	TRANSISTOR
Q1812	BC847B	TRANSISTOR
Q1816	BC847B	TRANSISTOR
Q1822	BC847B	TRANSISTOR
Q1824	BC847B	TRANSISTOR
Q1827	BC857B	TRANSISTOR
Q1831	BC847B	TRANSISTOR
Q3108	BC847B	TRANSISTOR
Q3109	BC847B	TRANSISTOR
Q3111	BC857B	TRANSISTOR
Q3122	BC847B	TRANSISTOR
Q3126	BC847B	TRANSISTOR
Q3127	BC857B	TRANSISTOR
Q3131	2SB940APLB	TRANSISTOR
Q3136	2SD1264APLB	TRANSISTOR
Q3143	BC847B	TRANSISTOR
Q3162	BC857B	TRANSISTOR
Q3164	BC847B	TRANSISTOR
Q3166	BC857B	TRANSISTOR
Q3169	BC857B	TRANSISTOR
Q3172	BC857B	TRANSISTOR
Q3174	BC847B	TRANSISTOR
Q3176	BC857B	TRANSISTOR
Q3179	BC857B	TRANSISTOR
Q3182	BC857B	TRANSISTOR
Q3184	BC847B	TRANSISTOR
Q3186	BC857B	TRANSISTOR
Q3189	BC857B	TRANSISTOR
Q3359	BC847B	TRANSISTOR
Q3368	2SB710A-XR	TRANSISTOR
Q3371	BC857B	TRANSISTOR
Q3373	2SC4714RL2	TRANSISTOR
Q3374	2SC3063RL	TRANSISTOR
Q3377	2SA1698RL	TRANSISTOR
Q3381	BC857B	TRANSISTOR
Q3383	2SC4714RL2	TRANSISTOR
Q3384	2SC3063RL	TRANSISTOR
Q3387	2SA1698RL	TRANSISTOR
Q3391	BC857B	TRANSISTOR

Ref No.	Part No.	Description
Q3392	2SA1309ATA	TRANSISTOR
Q3393	2SC4714RL2	TRANSISTOR
Q3394	2SC3063RL	TRANSISTOR
Q3397	2SA1698RL	TRANSISTOR
Q4701	BC847B	TRANSISTOR
Q4702	BC847B	TRANSISTOR
Q4703	BF799E6327	CHIP TRANSISTOR
Q4704	BC847B	TRANSISTOR
Q4705	BC847B	TRANSISTOR
Q4706	BC847B	TRANSISTOR
Q6111	BC847B	TRANSISTOR
Q6114	BC847B	TRANSISTOR
Q6403	BC847B	TRANSISTOR
Q6413	BC847B	TRANSISTOR
Q6417	BC857B	TRANSISTOR
Q6433	BC847B	TRANSISTOR
Q6443	BC847B	TRANSISTOR
Q6447	BC857B	TRANSISTOR

RESISTOR

RL6101	TSE10818	RELAY		
R201	ERD25TJ223	CARBON	0.25W	5% 22KΩ
R206	ERG2ANJ223	METAL	2W	5% 22KΩ
R259	ERD25TJ473	CARBON	0.25W	5% 47KΩ
R462	ERD25TJ101	CARBON	0.25W	5% 100Ω
R463	ERD25TJ103	CARBON	0.25W	5% 10KΩ
R466	ERD25TJ153	CARBON	0.25W	5% 15KΩ
R470	ERD25TJ560	CARBON	0.25W	5% 56Ω
R471	ERD25TJ102	CARBON	0.25W	5% 1KΩ
R472	ERD25TJ333	CARBON	0.25W	5% 33KΩ
R473	ERD25TJ270	CARBON	0.25W	5% 27Ω
R477	ERD25TJ684	CARBON	0.25W	5% 680KΩ
R478	ERD25TJ332	CARBON	0.25W	5% 3K3Ω
R479	ERDS1TJ2R2	CARBON	0.5W	5% 2.2Ω
R480	ERD25TJ560	CARBON	0.25W	5% 56Ω
R481	ERD25TJ102	CARBON	0.25W	5% 1KΩ
R482	ERD25TJ333	CARBON	0.25W	5% 33KΩ
R483	ERD25TJ270	CARBON	0.25W	5% 27Ω
R484	ERD25TJ273	CARBON	0.25W	5% 27KΩ
R485	ERD25TJ561	CARBON	0.25W	5% 560Ω
R486	ERD25TJ333	CARBON	0.25W	5% 33KΩ
R487	ERD25TJ684	CARBON	0.25W	5% 680KΩ
R488	ERD25TJ332	CARBON	0.25W	5% 3K3Ω
R489	ERDS1TJ2R2	CARBON	0.5W	5% 2.2Ω
R490	ERD25TJ563	CARBON	0.25W	5% 56KΩ
R491	ERQ14AJ100	METAL	0.25W	5% 10Ω ▲
R492	ERD25TJ102	CARBON	0.25W	5% 1KΩ
R493	ERD25TJ473	CARBON	0.25W	5% 47KΩ
R494	ERD25TJ684	CARBON	0.25W	5% 680KΩ
R496	ERD25TJ103	CARBON	0.25W	5% 10KΩ
R497	ERD25TJ103	CARBON	0.25W	5% 10KΩ
R498	ERD25TJ103	CARBON	0.25W	5% 10KΩ
R499	ERD25TJ473	CARBON	0.25W	5% 47KΩ
R521	ERQ14AJ3R3	METAL	0.25W	5% 3R3Ω ▲
R526	ERD25TJ560	CARBON	0.25W	5% 56Ω
R527	ERDS1TJ152	CARBON	0.5W	5% 1K5Ω
R528	ERDS1TJ152	CARBON	0.5W	5% 1K5Ω
R531	ERF10ZK4R7	WOUND	10W	5% 4R7Ω ▲
R532	ERW2PKR56	WIRE	2W	10% R56Ω ▲
R533	ERDS1TJ220	CARBON	0.5W	5% 22Ω
R541	ERG1ANJ152	METAL	1W	5% 1K5Ω
R542	ERQ12AJ101	FUSABLE	0.5W	5% 100Ω ▲
R543	ERD25TJ103	CARBON	0.25W	5% 10KΩ
R546	ERDS1TJ184	CARBON	0.5W	5% 180K
R548	ERD25TJ223	CARBON	0.25W	5% 22KΩ
R549	ERDS1TJ224	CARBON	0.5W	5% 220KΩ
R557	ERQ12HKR22	FUSIBLE	0.5W	5% 0R22Ω ▲
R559	ERDS1TJ100	CARBON	0.5W	5% 10Ω
R561	ERQ12HJ1R5	FUSIBLE	0.5W	5% 1R5Ω ▲

Ref No.	Part No.	Description			
R563	ERD25TJ104	CARBON	0.25W	5% 100KΩ	
R564	ERD25TJ223	CARBON	0.25W	5% 22KΩ	
R566	ERD25TJ472	CARBON	0.25W	5% 4K7Ω	
R567	ERD25TJ472	CARBON	0.25W	5% 4K7Ω	
R568	ERD25TJ1R5	CARBON	0.25W	5% 1R5Ω	
R569	ERDS1TJ821	CARBON	0.5W	5% 820Ω	
R570	ERG2SJ102	METAL	2W	5% 1K0Ω	
R572	ERO25CKF1801	METAL	0.25W	1% 1K8Ω	△
R573	ERO25CKF1801	METAL	0.25W	1% 1K8Ω	△
R574	ERW12PKR68	WIREWOUND	0.5W	10% R68Ω	△
R576	ERD25TJ223	CARBON	0.25W	5% 22KΩ	
R577	ERD25TJ223	CARBON	0.25W	5% 22KΩ	
R578	ERD25TJ680	CARBON	0.25W	5% 68Ω	
R579	ERD25TJ103	CARBON	0.25W	5% 10KΩ	
R580	ERG1SJ561	METAL	1W	5% 560Ω	
R581	ERG2FJ221	METAL	2W	5% 220Ω	△
R583	ERD25TJ472	CARBON	0.25W	5% 4K7Ω	
R591	ERD25TJ102	CARBON	0.25W	5% 1KΩ	
R592	ERD25TJ103	CARBON	0.25W	5% 10KΩ	
R593	ERD25TJ103	CARBON	0.25W	5% 10KΩ	
R594	ERD25TJ104	CARBON	0.25W	5% 100KΩ	
R595	ERD25TJ472	CARBON	0.25W	5% 4K7Ω	
R596	ERD25TJ563	CARBON	0.25W	5% 56KΩ	
R598	ERD25TJ102	CARBON	0.25W	5% 1KΩ	
R613	ERF10ZK5R6	WIRE	10W	5% 5R6Ω	△
R614	ERDS1TJ394	CARBON	0.5W	5% 390KΩ	
R616	ERC12GK154D	SOLID	0.5W	10% 150KΩ	
R619	232266296706	THERMISTOR			
R621	ERG2FJ183	METAL	0.5W	5% 18KΩ	△
R622	ERDS1TJ394	CARBON	0.5W	5% 390KΩ	
R623	ERD25TJ472	CARBON	0.25W	5% 4K7Ω	
R624	ERD25TJ121	CARBON	0.25W	5% 120Ω	
R625	ERC12GK154D	SOLID	0.5W	10% 150KΩ	
R626	ERG2FJ183	METAL	0.5W	5% 18KΩ	△
R627	ERD25TJ103	CARBON	0.25W	5% 10KΩ	
R628	ERG3FJ393	METAL	0.25W	5% 39KΩ	△
R629	ERG1ANJ470	METAL	1W	5% 47Ω	
R630	ERD25TJ270	CARBON	0.25W	5% 27Ω	
R631	ERD25TJ101	CARBON	0.25W	5% 100Ω	
R632	ERO25CKF1400	METAL	0.25W	1% 140Ω	△
R633	ERO25CKF3921	METAL	0.25W	1% 3R92KΩ	△
R634	ERDS1TJ1R5	CARBON	0.5W	5% 1R5Ω	
R636	ERD25TJ473	CARBON	0.25W	5% 47KΩ	
R639	ERD75TAJ825	CARBON	0.75W	5% 8M2Ω	△
R651	ERDS1TJ474	CARBON	0.5W	5% 470KΩ	
R666	ERO25CKF3301	METAL	0.25W	1% 3K3Ω	△
R667	ERO25CKF3900	METAL	0.25W	1% 3R9KΩ	△
R668	ERD25TJ103	CARBON	0.25W	5% 10KΩ	
R674	ERD25TJ223	CARBON	0.25W	5% 22KΩ	
R675	ERD25TJ155	CARBON	0.25W	5% 1M5Ω	
R676	ERO25CKF1002	METAL	0.25W	1% 10KΩ	△
R677	ERO25CKF1002	METAL	0.25W	1% 10KΩ	△
R678	ERD25TJ121	CARBON	0.25W	5% 120Ω	
R680	ERQ12HJ1R5	FUSIBLE	0.5W	5% 1R5Ω	△
R681	ERDS1TJ4R7	CARBON	0.5W	5% 4R7Ω	
R682	ERD25TJ222	CARBON	0.25W	5% 2K2Ω	
R683	ERG3FJ101	METAL	3W	5% 100Ω	△
R684	ERD25TJ682	CARBON	0.25W	5% 6K8Ω	
R686	NKS2	FUSABLE	0.25W	5% 0.1Ω	
R688	NKS2	FUSABLE	0.25W	5% 0.1Ω	
R1001	ERQ14AJ3R3	METAL	0.25W	5% 3R3Ω	△
R1011	ERQ14AJ100	METAL	0.25W	5% 10Ω	△
R1019	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1020	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1021	ERJ6GEYJ153	S.M.CARB	0.1W	5% 15KΩ	
R1022	ERJ6GEYJ153	S.M.CARB	0.1W	5% 15KΩ	
R1023	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1024	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1031	ERJ6GEYJ153	S.M.CARB	0.1W	5% 15KΩ	
R1032	ERJ6GEYJ153	S.M.CARB	0.1W	5% 15KΩ	

Ref No.	Part No.	Description			
R1033	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1034	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1036	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1038	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1041	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1042	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1071	ERJ6GEYJ473	S.M.CARB	0.1W	5% 47KΩ	
R1072	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1073	ERJ6GEYJ152	S.M.CARB	0.1W	5% 1K5Ω	
R1074	ERJ6GEYJ471	S.M.CARB	0.1W	5% 470Ω	
R1091	ERJ6GEYJ473	S.M.CARB	0.1W	5% 47KΩ	
R1092	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1093	ERJ6GEYJ152	S.M.CARB	0.1W	5% 1K5Ω	
R1094	ERJ6GEYJ471	S.M.CARB	0.1W	5% 470Ω	
R1095	ERJ6GEYJ474	S.M.CARB	0.1W	5% 470KΩ	
R1116	ERJ6GEYJ104	S.M.CARB	0.1W	5% 100KΩ	
R1117	ERJ6GEYJ104	S.M.CARB	0.1W	5% 100KΩ	
R1120	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1121	ERJ6GEYJ750	S.M.CARB	0.1W	5% 75Ω	
R1122	ERJ6GEYJ750	S.M.CARB	0.1W	5% 75Ω	
R1123	ERJ6GEYJ102	S.M.CARB	0.1W	5% 1KΩ	
R1124	ERJ6GEYJ151	S.M.CARB	0.1W	5% 150Ω	
R1125	ERJ6GEYJ151	S.M.CARB	0.1W	5% 150Ω	
R1126	ERQ14AJ100	METAL	0.25W	5% 10Ω	△
R1127	ERJ6GEYOR00	WIRE LINK			
R1131	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1132	ERJ6GEYJ103	S.M.CARB	0.1W	5% 10KΩ	
R1133	ERJ6GEYJ103	S.M.CARB	0.1W	5% 10KΩ	
R1151	ERJ6GEYJ750	S.M.CARB	0.1W	5% 75Ω	
R1152	ERJ6GEYJ104	S.M.CARB	0.1W	5% 100KΩ	
R1153	ERJ6GEYJ104	S.M.CARB	0.1W	5% 100KΩ	
R1156	ERJ6GEYJ470	S.M.CARB	0.1W	5% 47Ω	
R1158	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1159	ERJ6GEYJ750	S.M.CARB	0.1W	5% 75Ω	
R1161	ERJ6GEYJ682	S.M.CARB	0.1W	5% 6K8Ω	
R1162	ERJ6GEYJ333	S.M.CARB	0.1W	5% 33KΩ	
R1163	ERJ6GEYJ471	S.M.CARB	0.1W	5% 470Ω	
R1166	ERJ6GEYJ103	S.M.CARB	0.1W	5% 10KΩ	
R1167	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1168	ERJ6GEYJ680	S.M.CARB	0.1W	5% 68Ω	
R1169	ERJ6GEYJ471	S.M.CARB	0.1W	5% 470Ω	
R1171	ERJ6GEYJ750	S.M.CARB	0.1W	5% 75Ω	
R1172	ERJ6GEYJ102	S.M.CARB	0.1W	5% 1KΩ	
R1173	ERJ6GEYJ151	S.M.CARB	0.1W	5% 150Ω	
R1174	ERJ6GEYJ151	S.M.CARB	0.1W	5% 150Ω	
R1177	ERJ6GEYJ561	S.M.CARB	0.1W	5% 560Ω	
R1178	ERQ14AJ100	METAL	0.25W	5% 10Ω	△
R1181	ERJ6GEYJ103	S.M.CARB	0.1W	5% 10KΩ	
R1182	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1183	ERJ6GEYJ680	S.M.CARB	0.1W	5% 68Ω	
R1184	ERJ6GEYJ103	S.M.CARB	0.1W	5% 10KΩ	
R1185	ERJ6GEYJ151	S.M.CARB	0.1W	5% 150Ω	
R1191	ERJ6GEYJ103	S.M.CARB	0.1W	5% 10KΩ	
R1192	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1193	ERJ6GEYJ680	S.M.CARB	0.1W	5% 68Ω	
R1194	ERJ6GEYJ103	S.M.CARB	0.1W	5% 10KΩ	
R1195	ERJ6GEYJ750	S.M.CARB	0.1W	5% 75Ω	
R1221	ERJ6GEYJ473	S.M.CARB	0.1W	5% 47KΩ	
R1222	ERJ6GEYJ473	S.M.CARB	0.1W	5% 47KΩ	
R1225	ERJ6GEYJ101	S.M.CARB	0.1W	5% 100Ω	
R1237	ERJ6GEYJ103	S.M.CARB	0.1W	5% 10KΩ	
R1241	ERJ6GEYJ102	S.M.CARB	0.1W	5% 1KΩ	
R1242	ERJ6GEYJ102	S.M.CARB	0.1W	5% 1KΩ	
R1251	ERJ6GEYJ750	S.M.CARB	0.1W	5% 75Ω	
R1270	ERJ6GEYJ470	S.M.CARB	0.1W	5% 47Ω	
R1271	ERJ6GEYJ750	S.M.CARB	0.1W	5% 75Ω	
R1272	ERJ6GEYJ750	S.M.CARB	0.1W	5% 75Ω	
R1273	ERJ6GEYJ470	S.M.CARB	0.1W	5% 47Ω	
R1276	ERJ6GEYJ104	S.M.CARB	0.1W	5% 100KΩ	
R1277	ERJ6GEYJ104	S.M.CARB	0.1W	5% 100KΩ	
R1281	ERJ6GEYJ153	S.M.CARB	0.1W	5% 15KΩ	

Ref No.	Part No.	Description
R1282	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1283	ERJ6GEYJ153	S.M.CARB 0.1W 5% 15KΩ
R1284	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1349	ERJ6GEYJ473	S.M.CARB 0.1W 5% 47KΩ
R1381	ERJ6GEYJ223	S.M.CARB 0.1W 5% 22KΩ
R1382	ERJ6GEYJ473	S.M.CARB 0.1W 5% 47KΩ
R1386	ERJ6GEY0R00	WIRE LINK
R1412	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R1464	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1465	ERJ6GEYJ183	S.M.CARB 0.1W 5% 18KΩ
R1466	ERJ6GEYJ222	S.M.CARB 0.1W 5% 2K2Ω
R1467	ERJ6GEY0R00	WIRE LINK
R1474	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1476	ERJ6GEYJ222	S.M.CARB 0.1W 5% 2K2Ω
R1477	ERJ6GEY0R00	WIRE LINK
R1484	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1486	ERJ6GEYJ222	S.M.CARB 0.1W 5% 2K2Ω
R1487	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R1494	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1496	ERJ6GEYJ222	S.M.CARB 0.1W 5% 2K2Ω
R1497	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R1608	ERJ6GEY0R00	WIRE LINK
R1612	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1613	ERJ6GEYJ560	S.M.CARB 0.1W 5% 56Ω
R1614	ERJ6GEYJ331	S.M.CARB 0.1W 5% 330Ω
R1615	ERJ6GEYJ221	S.M.CARB 0.1W 5% 220Ω
R1616	ERJ6GEYJ151	S.M.CARB 0.1W 5% 150Ω
R1617	ERJ6GEYJ333	S.M.CARB 0.1W 5% 33KΩ
R1618	ERJ6GEYJ151	S.M.CARB 0.1W 5% 150Ω
R1619	ERJ6GEYJ151	S.M.CARB 0.1W 5% 150Ω
R1621	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R1622	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1623	ERJ6GEYJ123	S.M.CARB 0.1W 5% 12KΩ
R1624	ERJ6GEYJ333	S.M.CARB 0.1W 5% 33KΩ
R1626	ECUV1H151JCX	S.M.CAP 50V 150pF
R1627	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω
R1630	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1631	ERJ6GEYJ470	S.M.CARB 0.1W 5% 47Ω
R1632	ERJ6GEYJ391	S.M.CARB 0.1W 5% 390Ω
R1633	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1634	ERJ6GEYJ332	S.M.CARB 0.1W 5% 3K3Ω
R1636	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω
R1637	ERJ8GEYJ471	S.M.CAR 0.125W 5% 470Ω
R1641	ERJ6GEYJ821	S.M.CARB 0.1W 5% 820Ω
R1642	ERJ6GEYJ391	S.M.CARB 0.1W 5% 390Ω
R1643	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1644	ERJ6GEYJ332	S.M.CARB 0.1W 5% 3K3Ω
R1646	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω
R1647	ERJ8GEYJ471	S.M.CAR 0.125W 5% 470Ω
R1652	ERJ6GEYJ391	S.M.CARB 0.1W 5% 390Ω
R1653	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1654	ERJ6GEYJ332	S.M.CARB 0.1W 5% 3K3Ω
R1656	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω
R1657	ERJ8GEYJ471	S.M.CAR 0.125W 5% 470Ω
R1661	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1664	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1666	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1667	ERJ6GEYJ104	S.M.CARB 0.1W 5% 100KΩ
R1669	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1670	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1671	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1672	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1673	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1674	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1681	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1682	ERJ6GEYJ473	S.M.CARB 0.1W 5% 47KΩ
R1683	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R1691	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω
R1692	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω
R1693	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω
R1694	ERJ6GEYJ750	S.M.CARB 0.1W 5% 75Ω

Ref No.	Part No.	Description
R1696	ERJ8GEYJ103	S.M.CAR 0.125W 5% 10KΩ
R1698	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1717	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R1718	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1719	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1753	ERJ6GEY0R00	WIRE LINK
R1807	ERJ6GEYJ222	S.M.CARB 0.1W 5% 2K2Ω
R1808	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1809	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1811	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1812	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1815	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1816	ERJ6GEYJ473	S.M.CARB 0.1W 5% 47KΩ
R1819	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1821	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R1822	ERJ6GEYJ392	S.M.CARB 0.1W 5% 3K9Ω
R1823	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1824	ERJ6GEYJ473	S.M.CARB 0.1W 5% 47KΩ
R1825	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1826	ERJ6GEYJ563	S.M.CARB 0.1W 5% 56KΩ
R1827	ERJ6GEYJ393	S.M.CARB 0.1W 5% 39KΩ
R1828	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1829	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R1831	ERJ6GEYJ392	S.M.CARB 0.1W 5% 3K9Ω
R1832	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1837	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1838	ERJ6GEYJ331	S.M.CARB 0.1W 5% 330Ω
R1840	ERJ6GEY0R00	WIRE LINK
R1842	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1843	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1844	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1845	ERJ6GEYJ470	S.M.CARB 0.1W 5% 47Ω
R1847	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1849	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1850	ERJ6GEY0R00	WIRE LINK
R1851	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1856	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1857	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1858	ERJ8GEYJ103	S.M.CAR 0.125W 5% 10KΩ
R1859	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1863	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1872	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1873	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1878	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1879	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1882	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1884	ERJ6GEYJ222	S.M.CARB 0.1W 5% 2K2Ω
R1885	ERJ8GEY0R00	WIRE LINK
R1886	ERJ6GEYJ222	S.M.CARB 0.1W 5% 2K2Ω
R1888	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1889	ERJ8GEY0R00	WIRE LINK
R1893	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1897	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1920	ERJ8GEYJ223	S.M.CAR 0.125 5% 22KΩ
R1921	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R1922	ERJ6GEYJ471	S.M.CARB 0.1W 5% 470Ω
R1925	ERJ6GEYJ331	S.M.CARB 0.1W 5% 330Ω
R1933	ERJ6GEY0R00	WIRE LINK
R1941	ERJ6GEY0R00	WIRE LINK
R1953	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1957	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1958	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1959	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1961	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1962	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1963	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1964	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R1983	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R1993	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R3101	ERJ6GEYJ562	S.M.CARB 0.1W 5% 5K6Ω
R3102	ERJ6GEYJ562	S.M.CARB 0.1W 5% 5K6Ω

Ref No.	Part No.	Description				
R3103	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R3104	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3106	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56KΩ	
R3107	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R3108	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3109	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3111	ERDS1FYJ222	CARBON	0.5W	5%	2K2Ω	△
R3112	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R3113	ERD25TJ681	CARBON	0.25W	5%	680Ω	
R3121	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R3122	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R3123	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3124	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω	
R3126	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2Ω	
R3127	ERQ14AJ100	METAL	0.25W	5%	10Ω	△
R3128	ERQ14AJ820	METAL	0.25W	5%	82Ω	△
R3129	ERQ14AJ820	METAL	0.25W	5%	82Ω	△
R3130	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3131	ERD25TJ563	CARBON	0.25W	5%	56KΩ	
R3132	ERD25TJ122	CARBON	0.25W	5%	1K2Ω	
R3133	ERD25TJ2R7	CARBON	0.25W	5%	2R7Ω	
R3134	ERDS1FVJ390	CARBON	0.5W	5%	39Ω	△
R3135	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3136	ERD25TJ563	CARBON	0.25W	5%	56KΩ	
R3137	ERD25TJ122	CARBON	0.25W	5%	1K2Ω	
R3138	ERD25TJ2R7	CARBON	0.25W	5%	2R7Ω	
R3139	ERDS1FVJ390	CARBON	0.5W	5%	39Ω	△
R3141	ERDS1FYJ101	CARBON	0.5W	5%	100Ω	△
R3142	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R3143	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R3144	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω	
R3146	ERDS1FYJ181	CARBON	0.5W	5%	180Ω	△
R3152	ERQ12HJ102	METAL	0.5W	5%	1KΩ	△
R3153	ERQ14AJ3R9	FUSIBLE	0.25W	5%	3R9Ω	△
R3160	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3161	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3162	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3163	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3164	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3166	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3167	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3168	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3169	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2Ω	
R3170	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3171	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3172	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3173	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3174	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3176	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3177	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3178	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3179	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2Ω	
R3180	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3181	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3182	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3183	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3184	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3186	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3187	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3188	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3189	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2Ω	
R3307	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3308	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3309	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3354	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ	
R3358	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3359	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R3361	ERQ12HKR68	FUSIBLE	0.5W	10%	R68Ω	△
R3362	ERC12GK105D	SOLID	0.5W	10%	1MΩ	
R3364	ERC12GK821D	SOLID	0.5W	10%	820Ω	

Ref No.	Part No.	Description				
R3365	ERD25TJ220	CARBON	0.25W	5%	22Ω	
R3366	ERQ12AJ101	FUSABLE	0.5W	5%	100Ω	△
R3367	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3368	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3369	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω	
R3370	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3371	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7Ω	
R3372	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3373	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R3374	ERDS1TJ913	CARBON	0.5W	5%	91KΩ	
R3375	ERG2ANJ183	METAL	2W	5%	18KΩ	
R3376	ERD25TJ561	CARBON	0.25W	5%	560Ω	
R3378	ERC12GK821D	SOLID	0.5W	10%	820Ω	
R3379	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R3380	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3381	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7Ω	
R3382	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3383	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R3384	ERDS1TJ913	CARBON	0.5W	5%	91KΩ	
R3385	ERG2ANJ183	METAL	2W	5%	18KΩ	
R3386	ERD25TJ561	CARBON	0.25W	5%	560Ω	
R3387	ERJ6GEYOR00	WIRE LINK				
R3388	ERC12GK821D	SOLID	0.5W	10%	820Ω	
R3389	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R3390	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3391	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7Ω	
R3392	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3393	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R3394	ERDS1TJ913	CARBON	0.5W	5%	91KΩ	
R3395	ERG2ANJ183	METAL	2W	5%	18KΩ	
R3396	ERD25TJ561	CARBON	0.25W	5%	560Ω	
R3397	ERJ6GEYOR00	WIRE LINK				
R3398	ERC12GK821D	SOLID	0.5W	10%	820Ω	
R3399	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R4702	ERJ6GEYOR00	WIRE LINK				
R4703	ERJ6GEYOR00	WIRE LINK				
R4704	ERJ6GEYJ123	S.M.CARB	0.1W	5%	12KΩ	
R4705	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2Ω	
R4706	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R4707	ERJ6GEYJ330	S.M.CARB	0.1W	5%	33Ω	
R4708	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R4709	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2Ω	
R4710	ERJ6GEYJ154	S.M.CARB	0.1W	5%	150KΩ	
R4711	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2Ω	
R4712	ERJ6GEYJ154	S.M.CARB	0.1W	5%	150KΩ	
R4713	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2Ω	
R4725	ERJ6GEYJ512	S.M.CARB	0.1W	5%	5K1Ω	
R4726	ERJ6GEYJ181	S.M.CARB	0.1W	5%	180Ω	
R4727	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ	
R4729	ERJ6GEYJ121	S.M.CARB	0.1W	5%	120Ω	
R4730	ERJ6GEYJ151	S.M.CARB	0.1W	5%	150Ω	
R4733	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ	
R4734	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R4735	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R4737	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330Ω	
R4738	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R4739	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68Ω	
R4740	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560Ω	
R4741	ERJ6GEYJ151	S.M.CARB	0.1W	5%	150Ω	
R4742	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56KΩ	
R4743	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ	
R4744	ERJ6GEYOR00	WIRE LINK				
R4746	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R4747	ERJ6GEYOR00	WIRE LINK				
R4749	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R4750	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R4753	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330Ω	
R4754	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330Ω	
R4755	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R4756	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ	

Ref No.	Part No.	Description
R4757	ERJ6GEY0R00	WIRE LINK
R4758	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R4759	ERJ6GEY0R00	WIRE LINK
R4760	ERJ6GEY0R00	WIRE LINK
R4770	ERJ6GEYJ181	S.M.CARB 0.1W 5% 180Ω
R4771	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R4781	ERJ6GEYJ393	S.M.CARB 0.1W 5% 39KΩ
R6102	ERD25TJ151	CARBON 0.25W 5% 150Ω
R6111	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R6112	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10KΩ
R6113	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R6114	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R6301	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R6302	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100Ω
R6305	ERJ6GEY0R00	WIRE LINK
R6401	ERD25TJ220	CARBON 0.25W 5% 22Ω
R6402	ERD25TJ220	CARBON 0.25W 5% 22Ω
R6403	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R6404	ERJ6GEY0R00	WIRE LINK
R6405	ERJ6GEY0R00	WIRE LINK
R6406	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R6407	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R6408	ERJ6GEY0R00	WIRE LINK
R6411	ERJ6GEYJ473	S.M.CARB 0.1W 5% 47KΩ
R6412	ERJ6GEYJ273	S.M.CARB 0.1W 5% 27KΩ
R6413	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R6416	ERD25TJ101	CARBON 0.25W 5% 100Ω
R6417	ERD25TJ101	CARBON 0.25W 5% 100Ω
R6418	ERJ6GEYJ100	S.M.CARB 0.1W 5% 10Ω
R6433	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R6436	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R6437	ERJ6GEYJ472	S.M.CARB 0.1W 5% 4K7Ω
R6438	ERJ6GEY0R00	WIRE LINK
R6441	ERJ6GEYJ473	S.M.CARB 0.1W 5% 47KΩ
R6442	ERJ6GEYJ273	S.M.CARB 0.1W 5% 27KΩ
R6443	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1KΩ
R6446	ERD25TJ101	CARBON 0.25W 5% 100Ω
R6447	ERD25TJ101	CARBON 0.25W 5% 100Ω
R6448	ERJ6GEYJ100	S.M.CARB 0.1W 5% 10Ω
R6811	ERC12ZGK335D	SOLID 0.5W 10% 3M3Ω

Ref No.	Part No.	Description
SWITCHES		
S6304	EVQQBH12G	SWITCH
S6305	EVQQBH12G	SWITCH
S6306	EVQQBH12G	SWITCH
S6307	EVQQBH12G	SWITCH
S6308	EVQQBH12G	SWITCH
S6811	ESB91232A	SWITCH ▲
TRANSFORMERS		
T528	5270103200	TRANSFORMER
T531	ZTFH65007A	F.B.T. ▲
T639	ETS39AH117AA	TRANSFORMER ▲
T6101	BV030—7395.0	TRANSFORMER
CONNECTORS		
W1951	MKS165810808	CONNECTOR
FILTERS		
X1321	TSS4004—B	CRYSTAL
X1608	TSS2169—B	CRYSTAL
X1854	TSS4007—B	CRYSTAL
X4702	EFCV4045A4	CHIP FILTER
X4704	K3953—M100	SAW FILTER
X4705	K9453M	SAW FILTER
X4706	EFCS5M7MW3	CERAMIC FILTER
X4707	EFCS6R0MW5	FILTER
X4709	EFCA6504BF	FILTER
X4710	EFCV4045A4	CHIP FILTER

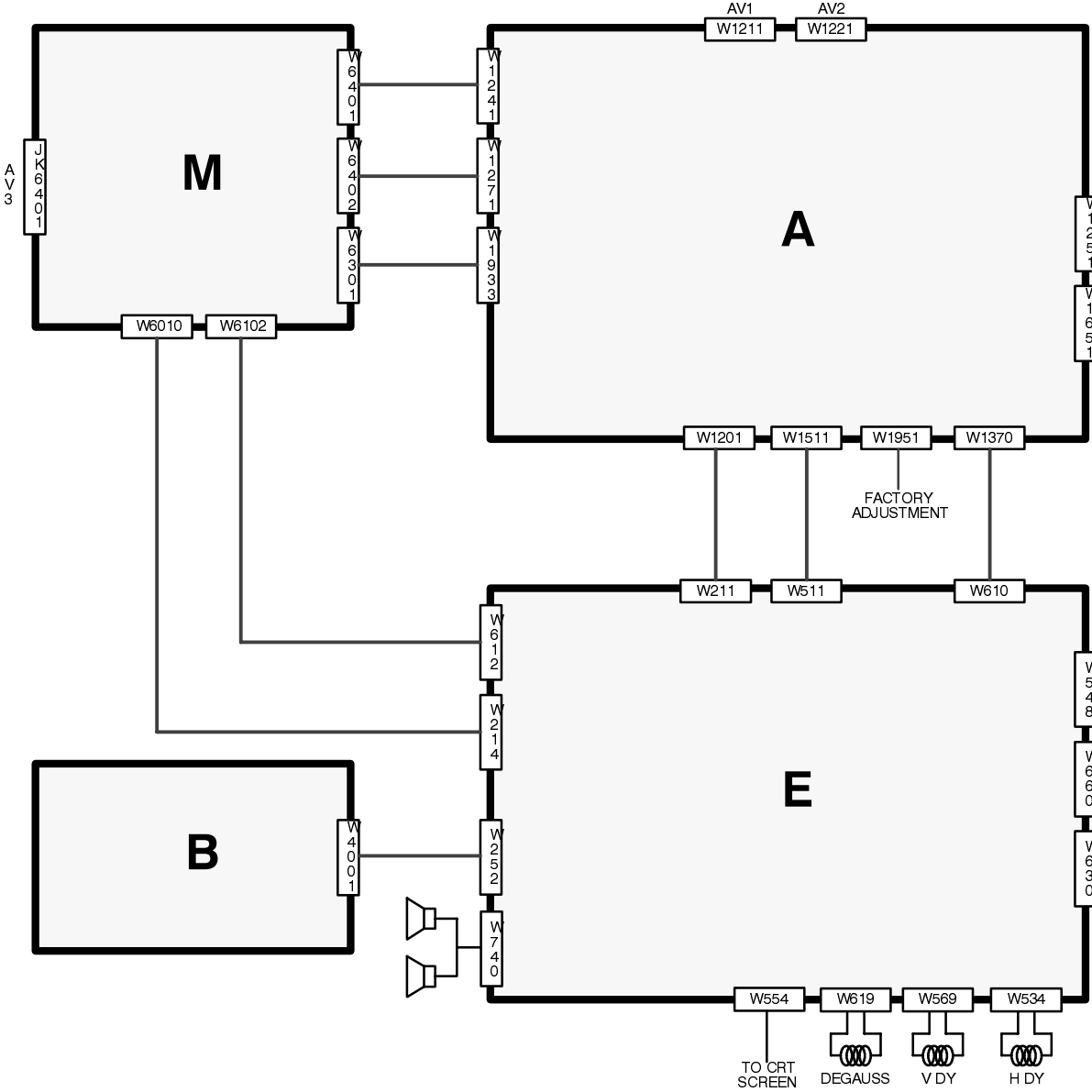
PARTS FOR TX – 28XD1F ONLY

Ref No.	Part No.	Description
MISCELLANEOUS COMPONENTS		
	A66EAK252X21	C.R.T. ▲
	TBM8E1463	REAR COVER LABEL
	TKP8E1124	SPEAKER NET
	TKU8E00170	REAR COVER ▲
	TKY8E038	CABINET ▲
	TLK8E05116	DEGAUSS COIL ▲
	TNP117034AS	A P.C.B. ▲
	TPC8E4464	OUTER CARTON
INTEGRATED CIRCUITS		
I1941	X24C16P—E1F	EAROM
RESISTOR		
R1887	ERJ6GEY0R00	WIRE LINK

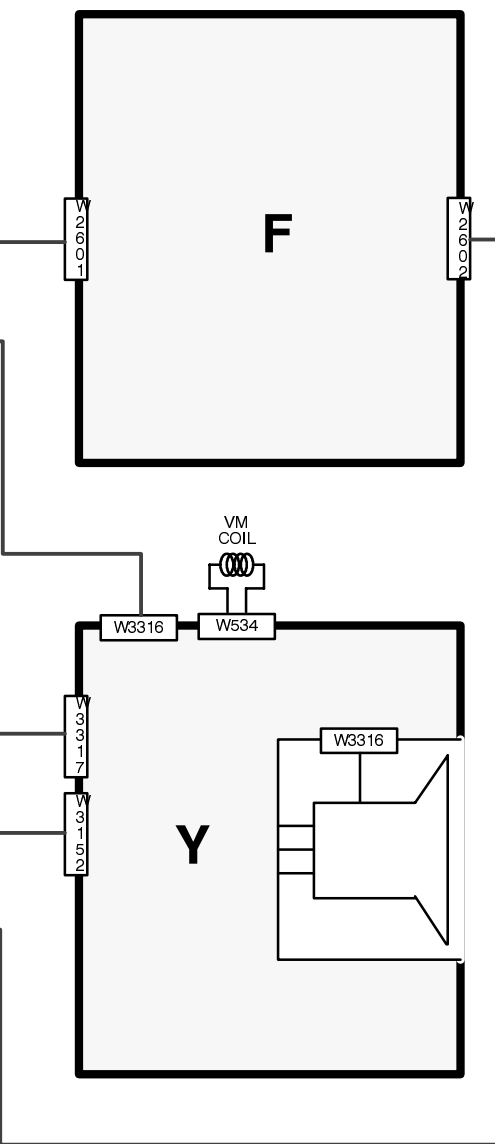
PARTS FOR TX – 25XD1F ONLY

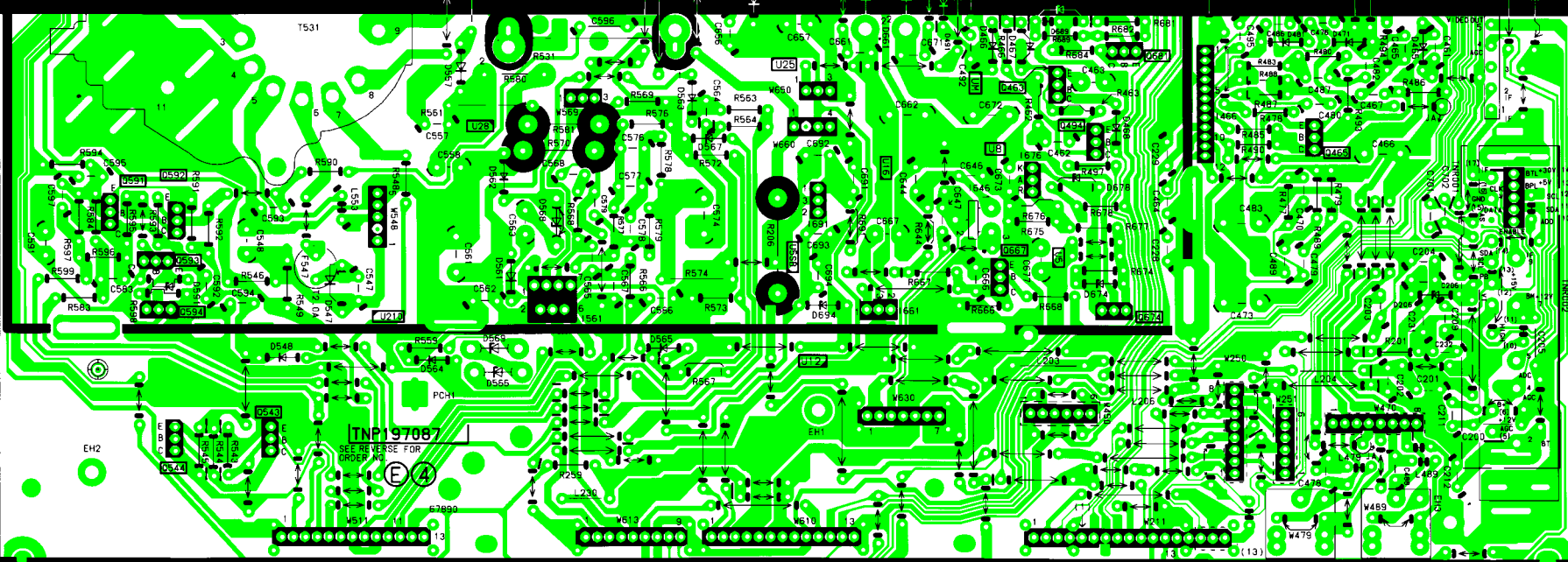
Ref No.	Part No.	Description
MISCELLANEOUS COMPONENTS		
	A59EAK252X21	C.R.T. ▲
	TBM8E1496	REAR COVER LABEL
	TKP8E1121	SPEAKER NET
	TKU8E00160	REAR COVER ▲
	TKY8E037	CABINET ▲
	TLK8E05115	DEGAUSS COIL ▲
	TNP117034AW	A P.C.B. ▲
	TPC8E4461	OUTER CARTON
INTEGRATED CIRCUITS		
I1941	X24C16P—D1F	EAROM
RESISTOR		
R1887	ERJ8GEY0R00	WIRE LINK

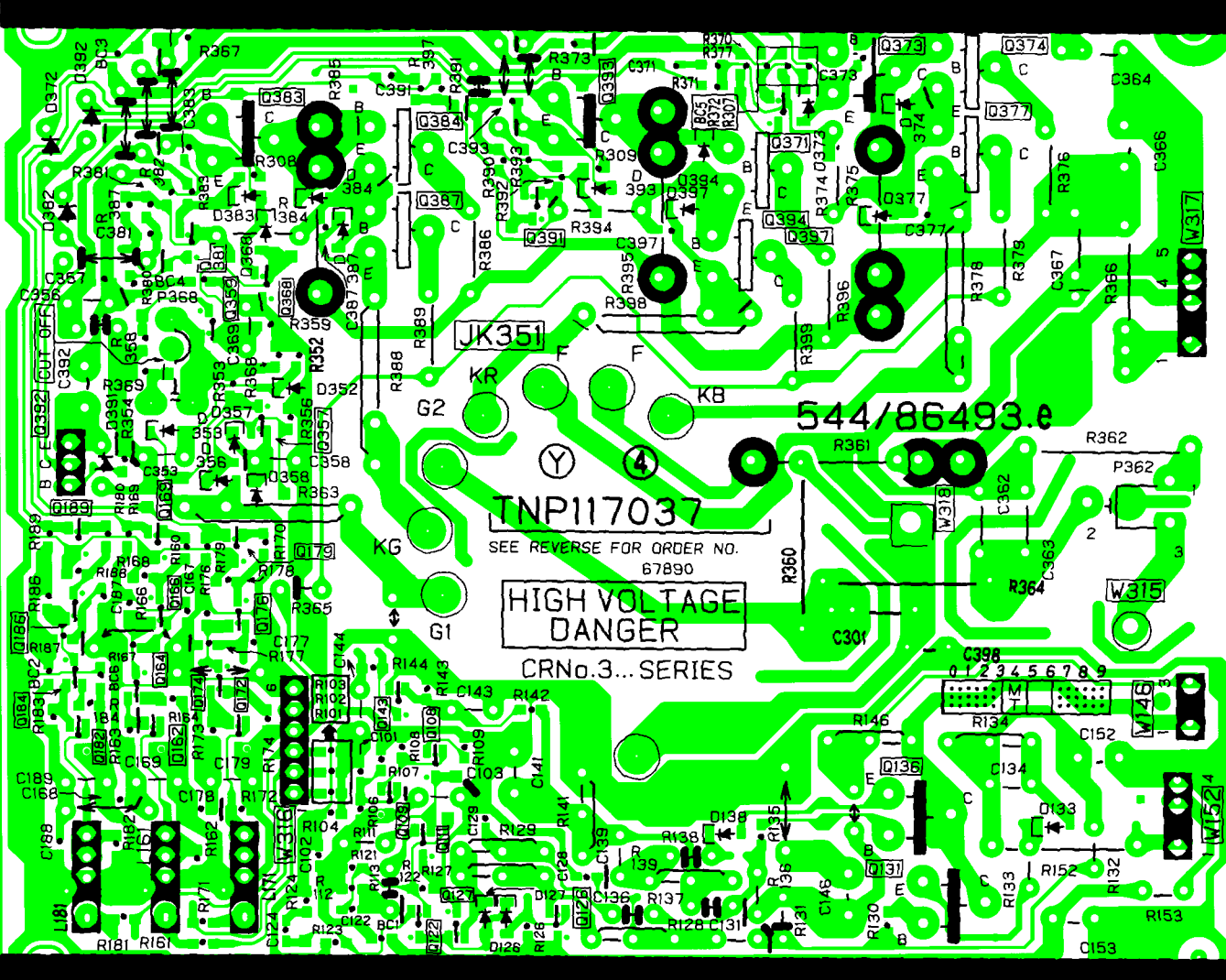
WIRING BLOCK DIAGRAM



SYNOPTIQUE WIRING







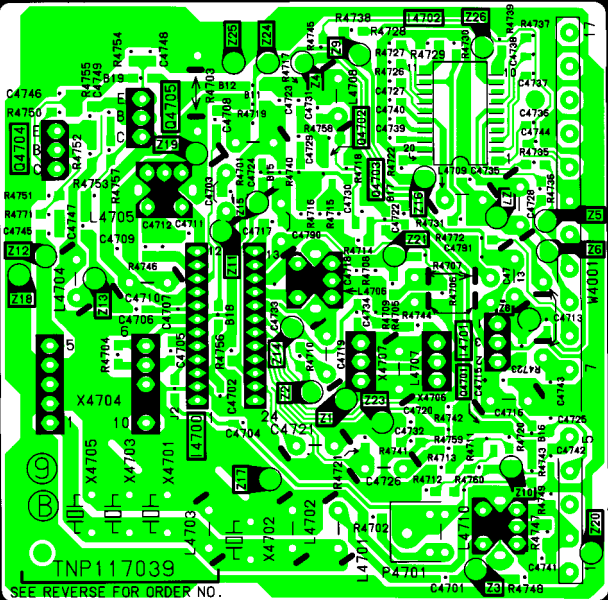
TNP117037

SEE REVERSE FOR ORDER NO.
67890

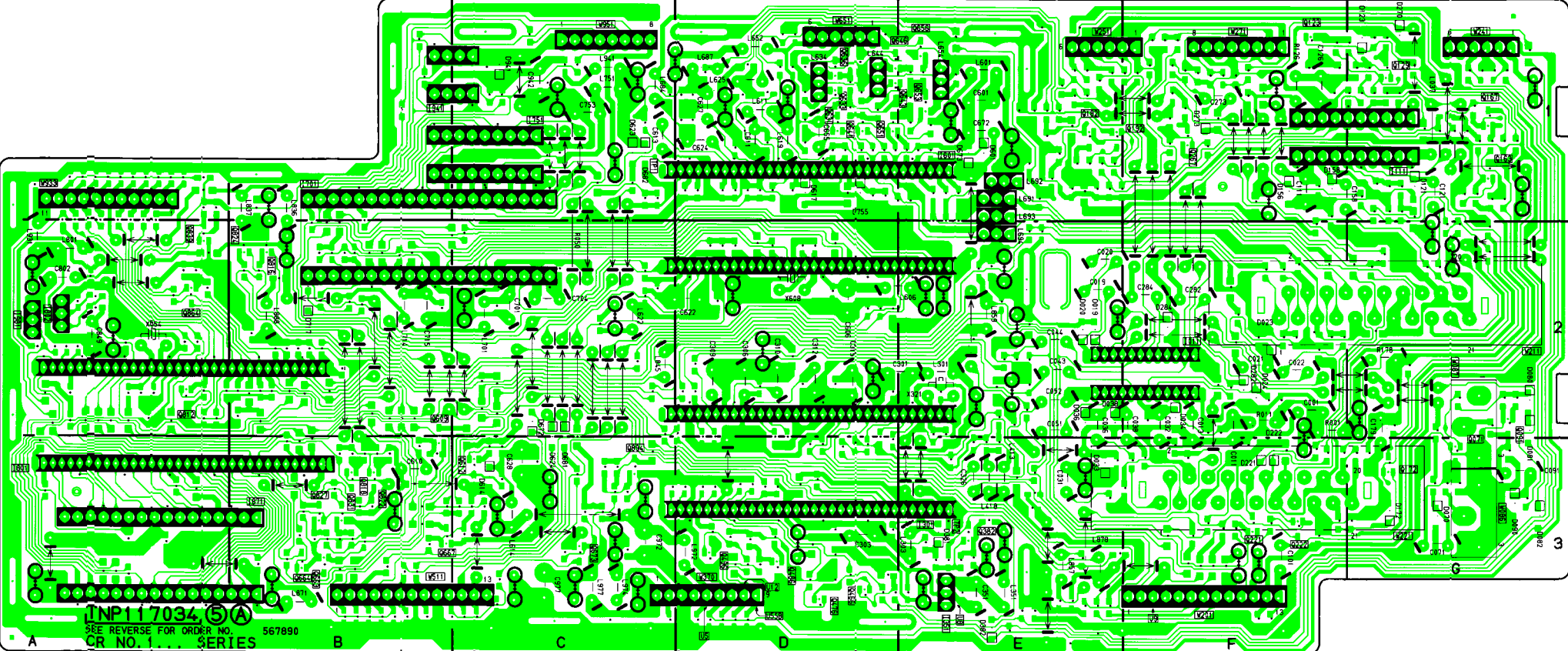
HIGH VOLTAGE
DANGER

CRNo.3... SERIES

544/86493.0



TNP117039
SEE REVERSE FOR ORDER NO.



INP117034 (S) A

SEE REVERSE FOR ORDER NO. 567890
CR NO. 1... SERIES

A

B

C

D

E

F

2

3

