XR-5880R/5890R

SERVICE MANUAL

AEP Model
UK Model

Photo: XR-5890R

Model Name Using Similar Mechanism	XR-C6100R
Tape Transport Mechanism Type	MG-25G-136

SPECIFICATIONS

Cassette player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.08 % (WRMS)
Frequency response	30 – 18,000 Hz
Signal-to-noise ratio	

Cassette type	
TYPE II, IV	61 dB
TYPE I	58 dB

Tuner section

FM

Tuning range	87.5 – 108.0 MHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz
Usable sensitivity	9 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 68 dB (mono)
Harmonic distortion at 1 kHz	
	0.7 % (stereo), 0.4 % (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

MW/LW

Tuning range	MW: 531 – 1,602 kHz LW: 153 – 281 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	MW: 30 µV LW: 50 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	35 W × 4 (at 4 ohms)

General

Outputs	Power aerial relay control lead Telephone ATT control lead (XR-5890R/4890 only)
Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Power requirements	12 V DC car battery (negative earth)
Dimensions	Approx. 188 × 58 × 181 mm (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 164 mm (w/h/d)
Mass	Approx. 1.2 kg
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1)
Optional accessories	Rotary commander RM-X4S

Design and specifications are subject to change without notice.

FM/MW/LW CASSETTE CAR STEREO

MICROFILM

SONY®

TABLE OF CONTENTS

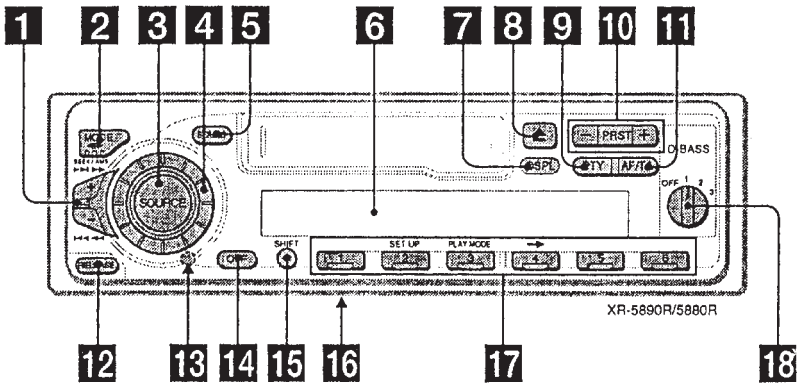
Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Location of controls



Refer to the pages listed for details.

1 SEEK/AMS (seek/Automatic Music Sensor/manual search) control 6, 8, 11, 14,

2 MODE (◄I►) button

During tape playback:
Playback direction change 6

During radio reception:
BAND select 7, 8

3 SOURCE (TAPE/TUNER) button 6, 7, 8, 12

4 Dial (volume/bass/treble/left-right/rear-front control) 5, 17

5 SOUND button 17

6 Display window

7 DSPL (display mode change) button 6, 9, 10

8 ⏏ (eject) button 6

9 PTY button*

RDS Programme 14

10 PRST button

During radio reception:
Preset stations select 8

11 AF/TA button* 10, 11, 12, 13

12 RELEASE (front panel release) button 4, 20

13 Reset button (located on the front side of the unit behind the front panel) 4

14 OFF button 4, 6

15 SHIFT button
PLAY MODE 7, 8, 11, 13
SET UP 5, 14, 17

16 POWER SELECT switch (located on the bottom of the unit)
See "POWER SELECT switch" in the Installation/Connections manual.

17 Number buttons 8, 11, 13

18 D-BASS control 18

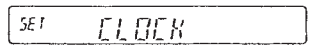
** XR-5890R/5880R only*

Setting the clock

The clock uses a 24-hour digital indication.

Example: To set the clock to 10:08

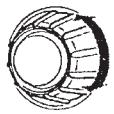
1 Press (SHIFT), then press ② (SET UP) repeatedly until "CLOCK" appears.



❶ Press ④ (→).

The hour indication flashes.

❷ Set the hour.



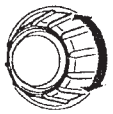
to go backward

to go forward

❸ Press ④ (→).

The minute indication flashes.

❹ Set the minute.



to go backward

to go forward

2 Press (SHIFT).

The clock starts.

3 Press (SHIFT).
After the clock setting is complete, the display returns to normal playback mode.

Note
If the POWER SELECT switch on the bottom of the unit is set to the ❽ position, turn the power on first, then set the clock.

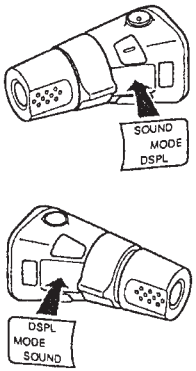
This section is extracted from instruction manual.

Other Functions

You can also control this unit with an optional rotary commander.

Labelling the rotary commander

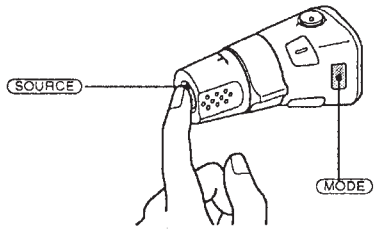
Depending on how you mount the rotary commander, attach the appropriate label as shown in the illustration below.



Using the rotary commander

The rotary commander works by pressing buttons and/or rotating controls.

By pressing buttons (the SOURCE and MODE buttons)



Each time you press (SOURCE), the source changes as follows:

TUNER ⟷ TAPE

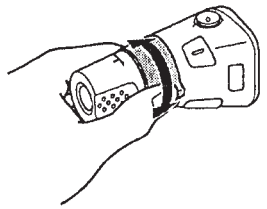
Pressing (MODE) changes the operation in the following ways;

- Tape : playback direction
- Tuner : FM1 → FM2 → FM3 → MW → LW

Tip

When the POWER SELECT switch is set to position B, you can turn on this unit by pressing (SOURCE) on the rotary commander.

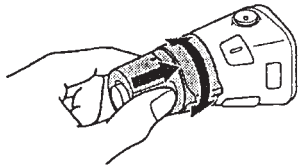
By rotating the control (the SEEK/AMS control)



Rotate the control and release it to:

- Locate the beginnings of tracks on the tape. Rotate and hold the control, and release it to fast-wind the tape. To start playback while fast-winding the tape, press (MODE).
- Tune in stations automatically. Rotate and hold the control to find a specific station.

By pushing in and rotating the control (the PRESET/DISC control)

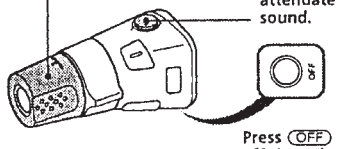


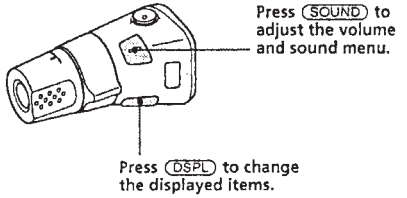
Push in and rotate the control to:

Receive the stations memorized on the number buttons.

Other operations

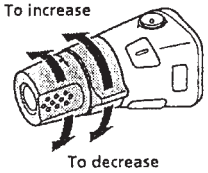
Rotate the VOL control to adjust the volume.



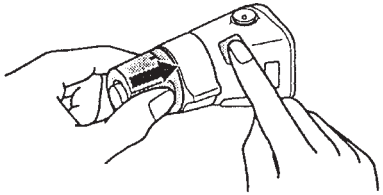


Changing the operative direction

The operative direction of controls is factory-set as shown below.



If you need to mount the rotary commander on the right hand side of the steering column, you can reverse the operative direction.



Press (SOUND) for two seconds while pushing the VOL control.

Tip

You can also change the operative direction of these controls with the unit (see "Changing the sound and display settings" on page 17).

Installation

Precautions

- Do not tamper with the four holes on the upper surface of the unit. They are used for tuner adjustments to be made only by service technicians.
- Choose the installation location carefully so that the unit will not interfere with driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperatures, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware for a safe and secure installation.

Mounting angle adjustment

Adjust the mounting angle to less than 20°.

How to detach and attach the front Panel

Before installing the unit, detach the front panel.

A To detach

Before detaching the front panel, be sure to press (OFF). Press (RELEASE), then slide the front panel a little to the left, and pull it off towards you.

B To attach

Attach part ⓔ of the front panel to part ⓑ of the unit as illustrated and push the left side into position until it clicks.

Instalacja

Środki ostrożności

- Proszę nie manipulować w czterech otworach nastawczych na górnej powierzchni sprzętu. Służą one regulacji tunera, przeprowadzanej wyłącznie przez techniczny personel punktów serwisowych.
- Miejsce na zamontowanie sprzętu należy wybrać po dokładnym namyśle, tak aby instalacja nie przeszkadzała kierowcy przy prowadzeniu pojazdu.
- Unikać montażu sprzętu w miejscach gdzie byłby narażony na działanie wysokich temperatur w wyniku silnego nasłonecznienia lub wydmuchu gorącego powietrza z otworów ogrzewczych w miejscach narażonych na kurz, brud lub nadmierne wstrząsy.
- Dla bezpiecznego i pewnego montażu, korzystać wyłącznie z załączonych przyrządów montażowych.

Regulacja montażowego kąta nachylenia

Kąt nachylenia powinien wynosić poniżej 20°.

Zdejmowanie i zakładanie przedniego panelu

Przed zamocowaniem sprzętu usunąć przedni panel.

A Zdejmowanie

Przed zdjęciem przedniego panelu, nacisnąć przycisk (OFF). Nacisnąć przycisk (RELEASE), panel lekko przesunąć w lewo i zdjąć, przyciągając do siebie.

B Zakładanie

Stronę panelu oznaczoną ⓔ proszę zamocować na sprzęcie w miejscu oznaczonym ⓑ, jak pokazano na ilustracji i lekko docisnąć lewą stronę panelu, do zaskoczenia.

Instalace

Bezpečnostní upozornění

- Nedotýkejte se čtyř otvorů na horní straně přístroje. Jsou určeny pro nastavování přijímače, prováděné výhradně v servisních střediskách.
- Místo pro instalaci vyberte tak, aby přístroj nerušil při běžných činnostech při řízení auta.
- Neinstalujte přístroj na místa, kde by byl vystaven vysokým teplotám, jako např. přímému slunečnímu záření nebo teplému vzduchu z topení, nebo kde by byl vystaven nadměrné prašnosti, vlhkosti nebo přílišným vibracím.
- Pro bezpečnou a jistou instalaci používejte výhradně nářadí, které je součástí příslušenství.

Úhel montáže

Úhel montáže by neměl přesahovat 20°.

Snímání a nasazování předního panelu

Než začnete s montáží přístroje, sejměte přední kryt.

A Sejmutí

Před sejmáním předního panelu dbejte na to, abyste napřed stiskli tlačítko (OFF) - vypnutí přístroje. Potom stiskněte tlačítko (RELEASE), posuňte přední panel lehce doleva a sejměte ho směrem k sobě.

B Nasazení

Nasaďte stranu ⓔ předního panelu na stranu ⓑ na přístroji podle ilustrace a zatlačte na levou stranu, dokud nezaklapne.

Εγκατάσταση

Προφυλάξεις

- Μην πειράζετε τις τέσσερις τρύπες στην επάνω επιφάνεια της συσκευής. Χρησιμοποιούνται για ρυθμίσεις του δέκτη, οι οποίες πρέπει να γίνονται μόνο από εξειδικευμένους τεχνικούς.
- Επιλέξτε προσεκτικά τη θέση εγκατάστασης έτσι ώστε η συσκευή να μην παρεμβάλλεται στις συνήθεις κινήσεις οδήγησης.
- Αποφύγετε την εγκατάσταση της συσκευής σε σημεία υποκείμενα σε υψηλές θερμοκρασίες, όπως στον ήλιο ή σε ζεστό αέρα από το καλοριφέρ, ή σε σημεία υποκείμενα σε σκόνη, βρωμιά ή υπερβολικές δονήσεις.
- Για ασφαλή και σίγουρη εγκατάσταση χρησιμοποιείτε μόνο τα παρεχόμενα υλικά τοποθέτησης.

Ρύθμιση γωνίας τοποθέτησης

Ρυθμίστε τη γωνία τοποθέτησης σε λιγότερο από 20°.

Πως να αφαιρέσετε και να τοποθετήσετε την πρόσοψη

Πριν την εγκατάσταση της συσκευής, αφαιρέστε την πρόσοψη.

A Αφαίρεση της πρόσοψης

Πριν αφαιρέσετε την πρόσοψη, βεβαιωθείτε πρώτα να πατήσετε (OFF). Πατήστε (RELEASE), μετά τραβήξτε την πρόσοψη λίγο προς τα αριστερά και έπειτα τραβήξτε την προς το μέρος σας.

B Τοποθέτηση της πρόσοψης

Τοποθετήστε το σημείο ⓔ της πρόσοψης στο σημείο ⓑ της συσκευής, όπως δείχνει η εικόνα, και σπρώξτε την αριστερή πλευρά στη θέση της, μέχρι να κουμπώσει.

Kurma

Tedbirler

- Ünitenin üst yüzündeki 4 deliğe dokunmayınız. Bunlar, radyo ayarında kullanılır ve yalnızca teknisyenler tarafından ayarlanabilir.
- Ünitenin kurma mekanını normal sürüş işlemlerine engel olmaması için dikkatle seçiniz.
- Üniteyi doğrudan güneş ışığı veya ısıtıcıdan çıkan sıcak hava gibi yüksek ısıya veya toz, kir veya aşırı vibrasyona maruz kalacak yerlerde monte etmeyiniz.
- Kurma işleminin emniyetli ve güvenli olabilmesi için yalnız ünite ile verilen montaj aletini kullanınız.

Montaj açı ayarı

Montaj açısını 20°'nin altına ayarlayınız.

Ön panel nasıl takılır, nasıl sökülür?

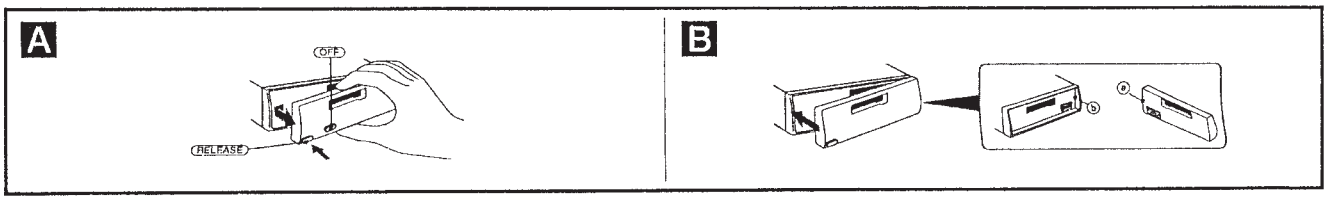
Üniteyi kurmadan önce ön paneli sökünüz.

A Sökmek için

Ön paneli takmadan önce, (OFF) tuşuna bastığınıza emin olunuz. (RELEASE) tuşuna basınız, ardından ön paneli biraz sola kaydırınız ve kendinize doğru çekerek çıkarınız.

B Takmak için

Ön panelin ⓔ parçasını ünitenin ⓑ parçasına gösterildiği üzere takınız ve sol tarafını yerine oturup klik sesi gelene kadar itiniz.



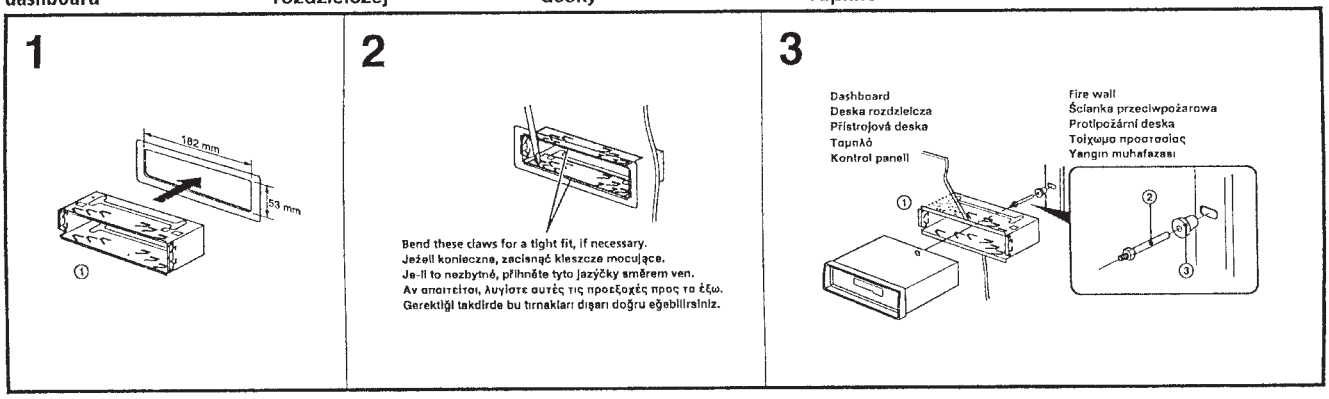
Installation in the dashboard

Instalacja na desce rozdzielczej

Instalace do přístrojové desky

Εγκατάσταση στο ταμπλό

Kontrol panelini kurma



Reset button

When the installation and connections are complete, be sure to press the reset button with a ballpoint pen, etc.

Przycisk zerowania

Po zakończeniu montażu i wykonaniu podłączeń, proszę pamiętać o naciśnięciu przycisku zerowania sprzętu, używając do tego celu np. długopisu lub podobnego przedmiotu.

Tlačítko na vynulování

Jakmile je dokončená instalace a zapojení, nezapomeňte stisknout tlačítko na vynulování kuličkovým perem apod.

Πλήκτρο Επαναρύθμισης (Reset)

Όταν ολοκληρωθούν η εγκατάσταση και οι συνδέσεις, θυμηθείτε να πιέσετε το πλήκτρο επαναρύθμισης με ένα στυλό.

Ayar düğmesi

Kurma ve bağlantılar bittiğinde, ayar düğmesine tükenmez bir kalem v.b. ile bastığınıza emin olunuz.

Connections

Cautions

- This unit is designed for negative earth 12 V DC operation only.
- Be careful not to pinch any wires between a screw and the body of the car or this unit or between any moving parts such as the seat railing, etc.
- Connect the power connecting cord Ⓚ to the unit and speakers before connecting it to the auxiliary power connector.
- **Run all earth wires to a common earth point.**
- Connect the yellow cord to a free car circuit rated higher than the unit's fuse rating. If you connect this unit in combination with other stereo components, the car circuit they are connected to must be rated higher than the sum of the individual components' fuse rating. If there are no car circuits rated as high as the unit's fuse rating, connect the unit directly to the battery. If no car circuits are available for connecting this unit, connect the unit to a car circuit rated higher than the unit's fuse rating in such a way that if the unit blows its fuse, no other circuits will be cut off.

Podłączenia

Ostrzeżenie

- Sprzęt przeznaczono wyłącznie do zasilania prądem o ujemnym uziemieniu i napięciu 12 V DC.
- Proszę uważać by nie przyskrzynić przewodów sprzętu między śrubką, pojazdem, korpusem sprzętu lub innymi ruchomymi elementami jak np. między siedzeniami, itp.
- Przewód zasilania Ⓚ należy przed podłączeniem do pomocniczego złącza zasilania, podłączyć w pierwszej kolejności do sprzętu i do głośników.
- **Wszystkie przewody uziemiające poprowadzić do wspólnego punktu uziemienia.**
- Żółty przewód podłączyć do wolnego obwodu pojazdu o wyższej, od podanej na bezpieczniku sprzętu, wartości znamionowej. Łącząc sprzęt w kombinacji z innymi komponentami wyposażenia stereofonicznego, należy upewnić się, że obwód samochodowy do którego urządzenia zostaną podłączone, posiada wyższą wartość znamionową niż wynosi suma wartości bezpieczników wszystkich komponentów razem wziętych. W braku obwodu o wyższej od bezpiecznika sprzętu wartości znamionowej, proszę podłączyć sprzęt bezpośrednio do akumulatora. **Jeżeli dla sprzętu brakuje odpowiedniego obwodu, proszę podłączyć sprzęt do dowolnego obwodu samochodowego o wyższej od podanej na bezpieczniku sprzętu wartości znamionowej w taki sposób, aby przepalenie bezpiecznika sprzętu nie spowodowało odcięcia pozostałych obwodów.**

Zapojení

Pozor

- Tento přístroj je konstruován výhradně pro stejnosměrný proud 12 V a negativní uzemnění.
- Dbejte na to, abyste nepřiskřípli žádné dráty mezi šroub a karoserii auta nebo tento přístroj nebo pod žádné pohyblivé části jako jsou kolejnice pod sedadly apod.
- Zapojte přívodní kabel Ⓚ do přístroje a reproduktorů, než ho zapojíte do pomocného konektoru na proud.
- **Všechny dráty pro uzemnění zapojte do společného bodu.**
- Zapojte žlutý kabel na volný okruh v autě s vyšší hodnotou proudu než jakou má pojistka tohoto přístroje. Jestliže zapojujete tento přístroj v kombinaci s jinými stereofonními přístroji, musí být okruh v autě, na který budou přístroje zapojené, vyšší hodnotu než součet hodnot pojistek ve všech zapojených přístrojích. Jestliže není v autě žádný obvod s takovou hodnotou, která by odpovídala hodnotám všech pojistek, zapojte je přímo na baterii. Jestliže není v autě žádný obvod s vyšší hodnotou než jakou má pojistka, zapojte tento přístroj přímo na autobaterii. Není-li v autě k dispozici žádný volný okruh pro zapojení autorádia, zapojte ho do okruhu s vyšší hodnotou proudu než jakou má pojistka tohoto přístroje tak, aby nedošlo k přerušení žádných jiných okruhů, jestliže praskne pojistka v tomto přístroji.

Συνδέσεις

Προσοχή

- Αυτή η συσκευή είναι σχεδιασμένη μόνο για λειτουργία με 12 V DC και αρνητική γείωση.
- Προσέξτε να μην μαγκώσετε κανένα καλώδιο μεταξύ κάποιας βίδας και του αμαξώματος ή της συσκευής ή μεταξύ κάποιων κινούμενων τμημάτων, όπως οι ράγες του καθίσματος, κλπ.
- Πριν συνδέσετε τη συσκευή με τη βοηθητική υποδοχή τροφοδοσίας, συνδέστε το καλώδιο τροφοδοσίας Ⓚ με τη συσκευή και τα ηχεία.
- **Συνδέστε όλα τα καλώδια γείωσης σε ένα κοινό σημείο γείωσης.**
- Συνδέστε το κίτρινο καλώδιο με ένα ελεύθερο κύκλωμα του αυτοκινήτου, με ονομαστική ένταση ρεύματος μεγαλύτερη από αυτήν της ασφάλειας της συσκευής. Εάν συνδέσετε αυτή τη συσκευή μαζί με άλλες στερεοφωνικές συσκευές, το κύκλωμα του αυτοκινήτου στο οποίο είναι συνδεδεμένες, θα πρέπει να έχει μεγαλύτερη ονομαστική ένταση ρεύματος από το άθροισμα των ονομαστικών εντάσεων των επιμέρους συσκευών. Εάν δεν υπάρχει κύκλωμα στο αυτοκίνητο με ονομαστική ένταση τουλάχιστον ίση με αυτήν της ασφάλειας της συσκευής, συνδέστε τη συσκευή απευθείας με την μπαταρία. Εάν δεν υπάρχουν ελεύθερα κυκλώματα στο αυτοκίνητο για τη σύνδεση αυτής της συσκευής, συνδέστε τη σε ένα κύκλωμα με ονομαστική ένταση μεγαλύτερη από αυτήν της ασφάλειας της συσκευής, κατά τέτοιο τρόπο ώστε εάν η συσκευή κάψει την ασφάλειά της, να μην διακοπούν άλλα κυκλώματα.

Bağlantılar

Dikkat

- Ünite yalnız negatif toprak 12 V DC işlemi için dizayn edilmiştir.
- Herhangi bir kabloyu bir vida ile otomobilin iskeletine veya ünitenin veya koltuk rayları v.b. gibi herhangi harekelli bir parçanın arasına sıkıştırmamaya dikkat ediniz.
- Güç bağlantı kablosunu Ⓚ yardımcı güç konektörüne bağlamadan önce üniteye ve hoparlörlere bağlayınız.
- **Tüm toprak kablolarını ortak bir toprak noktaya çekiniz.**
- Sarı kabloyu ünitenin sigorta değerinden daha yüksek otomobilin boş bir devresine bağlayınız. Bu üniteyi başka stereo parçalarla birlikte bağlarsanız, bağlı oldukları otomobil devresinin tüm parçaların sigorta değerlerinin toplamından daha yüksek olması gereklidir. Ünitenin sigorta değeri kadar yüksek bir otomobil devresi yoksa üniteyi direkt aküye bağlayınız. Bu üniteyi bağlamak için uygun otomobil devresi yoksa, üniteyi ünitenin sigorta değerinden daha yüksek bir otomobil devresine öyle bağlayınız ki, ünitenin sigortası attığında diğer hiçbir devre kesilmesin.

If your car has no accessory position on the ignition key switch

— POWER SELECT Switch

The front panel illumination is factory set to be turned on even while the unit is not in use. However, this setting may cause some car battery to wear **if your car has no accessory position on the ignition key switch.** To avoid this battery wear, **set the POWER SELECT switch located on the bottom of the unit to the Ⓑ position, then press the reset button.** The illumination is reset to stay off while the unit is not in use.

Notes

- *The caution alarm for the front panel is not activated when the POWER SELECT switch is set to the Ⓑ position.*
- *Do not use excessive force when changing the POWER SELECT switch.*

Jeżeli stacyjka samochodu nie jest wyposażona w pozycję włączania dodatkowego sprzętu, proszę przełączyć selektor zasilania

— Przełącznik wyboru źródła zasilania POWER SELECT

Luminacja przedniego panelu jest fabrycznie zaprogramowana i działa również przy wyłączonym sprzęcie. **W pojazdach, których stacyjki nie wyposażono w pozycję zasilania dodatkowego osprzętu,** następuje w ten sposób niewielkie zużycie mocy akumulatora. Aby temu zapobiec, **należy przełącznik POWER SELECT (selektor mocy), umieszczony na dolnej powierzchni sprzętu, ustawić w pozycji oznaczonej Ⓑ nacisnąć przycisk zerowania.** Luminacja pozostaje wyłączona do momentu włączania sprzętu.

Uwagi

- *Przestawienie przełącznika POWER SELECT na pozycję Ⓑ, deaktywuje alarm ostrzegawczy.*
- *Zmieniając pozycję przełącznika POWER SELECT, nie wywierać zbytniego nacisku.*

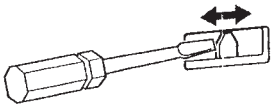
Jestliže je vaše auto vybaveno kl'íčkem pro zapalování se dvěma polohami

— Spínač POWER SELECT volba proudu

Osvětlení předního panelu je výrobcem nastaveno tak, aby svítilo, i když je přístroj vypnutý. Toto nastavení však může vést k vybití baterie, **jestliže vaše auto není vybaveno pohotovostní polohou klíčku pro zapalování.** Abyste zabránili vybití baterie, **nastavte spínač POWER SELECT na spodní straně přístroje do polohy Ⓑ, potom stiskněte tlačítko reset - na vynulování.** Nyní je osvětlení nastaveno tak, aby bylo zhasnuté, když je přístroj vypnutý.

Poznámky

- *Bezpečnostní alarm předního panelu je vypnutý, jestliže je spínač POWER SELECT přepnut do polohy Ⓑ.*
- *Při přepínání spínače POWER SELECT nevyvíjejte příliš nou sílu.*



Εάν το αυτοκίνητό σας δεν έχει βοηθητική θέση στο διακόπτη ανάφλεξης

— Διακόπτης POWER SELECT

Ο φωτισμός της πρόσοψης έχει ρυθμιστεί από το εργοστάσιο να ανάβει ακόμη και όταν η συσκευή δε χρησιμοποιείται. Ωστόσο, αυτή η ρύθμιση μπορεί να προκαλέσει εξάντληση της μπαταρίας, **εάν ο διακόπτης ανάφλεξης του αυτοκινήτου σας δεν έχει βοηθητική θέση.** Για να αποφύγετε την εξάντληση της μπαταρίας, **επιλέξτε τη θέση Ⓑ του διακόπτη POWER SELECT, που βρίσκεται στο κάτω μέρος της συσκευής, και πιέστε το πλήκτρο επαναρύθμισης (reset).** Έτσι, ο φωτισμός ρυθμίζεται ώστε να παραμένει σβηστός όταν η συσκευή δε χρησιμοποιείται.

Σημειώσεις

- *Ο συναγερμός προειδοποίησης της πρόσοψης δε λειτουργεί όταν ο διακόπτης POWER SELECT είναι στη θέση Ⓑ.*
- *Μη χρησιμοποιείτε πολλή δύναμη για να αλλάξετε τη θέση του διακόπτη POWER SELECT.*

Eğer otomobilinizin kontak anahtarı yuvasında özel bir pozisyon yoksa

— POWER SELECT tuşu

Ön panel ışıklandırması fabrika ayarıdır ve ünite kullanımda olmadığında da açık olmaya ayarlanmıştır. Ancak bu ayar, **eğer otomobilinizin kontak anahtarı düğmesinde özel bir pozisyon yoksa** otomobil akü sünün zayıflamasına yol açabilir. Akünün zayıflamasını önlemek için, **ünitenin üzerine yerleştirilmiş POWER SELECT düğmesini Ⓑ pozisyonuna ayarlayınız, ardından ayar düğmesine basınız.** Işıklandırma, ünite kullanımda olmadığında kapalı olmaya ayarlanmış olur.

Notlar

- *POWER SELECT tuşu Ⓑ pozisyonuna getirilmiş ise, ön panelin dikkat ikazı kapalı durumda olur.*
- *POWER SELECT düğmesini değiştirirken aşırı güç kullanmayınız.*

Notes of connection example

Notes on the control leads

- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the ATA (Automatic Tuner Activation), AF (Alternative Frequency) or the TA (Traffic Announcement) function.*
- *A power aerial without a relay box cannot be used with this unit.*

Warning

If you have a power aerial without a relay box, connecting this unit with the supplied power connecting cord Ⓚ may damage the aerial.

Memory hold connection

When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection

- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.*
- *Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers. Be sure to connect passive speakers to these terminals.*

Uwagi dotyczące przykładów podłączeń

Uwagi na temat przewodów sterujących

- Przewód sterujący automatyczną anteną (niebieski), dostarcza +12 V DC po włączeniu sprzętu lub funkcji ATA (Automatic Tuner Activation = automatyczne uaktywnienie tunera), funkcji AF (Alternative Frequency = alternatywne częstotliwości) lub funkcji TA (Traffic Announcement = migawki ruchu drogowego).
- *Antena automatyczna bez skrzynki przekaźnikowej nie nadaje się do użytku z tym sprzętem.*

Ostrzeżenie

Jeśli używana antena automatyczna nie jest wyposażona w skrzynkę przekaźnikową, przeprowadzenie podłączenia sprzętu dostarczonym przewodem Ⓚ może uszkodzić antenę.

Wspomaganie pamięci sprzętu

Podłączenie żółtego przewodu doprowadzania zasilania umożliwia, nawet przy wyłączonym zapłonie, stały dopływ mocy do obwodu wspomagania pamięci.

Uwagi dotyczące podłączania głośników

- Przed podłączeniem głośników, proszę pamiętać o wyłączeniu zasilania sprzętu.
- Proszę podłączyć głośniki o impedancji od 4 do 8 ohmów i dostatecznej wydajności mocy. W przeciwnym przypadku może nastąpić uszkodzenie głośników.
- Nie podłączać złączy systemu głośnikowego do karoserii lub też złączy prawego do złączy lewego głośnika.
- Głośników nie podłączać równolegle.
- Do gniazdek głośnikowych sprzętu, nie podłączać głośników aktywnych (wyposażonych we wzmacniacze). Może nastąpić uszkodzenie głośników aktywnych. Proszę upewnić się, że podłączane głośniki są typu pasywnego.

Poznámky k příkladu zapojení

Poznámky k přívodním kabelům

- Kabel pro ovládání elektrické antény (modrý) dodává stejnosměrný proud +12 V, jakmile zapnete rádio nebo jakmile zaktivujete jednu z funkcí ATA (Automatic Tuner Activation - automatická aktivace tuneru), AF (Alternative Frequency - alternativní frekvence) nebo TA (Traffic Announcement - dopravní hlášení).
- S tímto přístrojem nelze používat elektrickou anténu bez relé.

Upozornění

Jestliže máte anténu bez relé, může při jejím zapojení na tento přístroj za pomoci kabelu Ⓚ z příslušenství dojít k poškození antény.

Zapojení pro uchování paměti

Je-li zapojený žlutý kabel pro napájení přístroje, bude okruh paměti zásobován proudem i při vypnutém klíčku pro zapalování.

Poznámky k zapojení reproduktorů

- Než začnete se zapojováním reproduktorů, vypněte přístroj.
- *Používejte reproduktory s impedancí od 4 do 8 ohmů a s odpovídajícím výkonem. Jinak by mohlo dojít k jejich poškození.*
- *Nezapojujte vývody od reproduktorů na podvozek vozidla a nezapojujte vývod pravého reproduktoru společně s vývodem levého reproduktoru.*
- *Nepokoušejte se zapojit reproduktory paralelně.*
- *Do svorek tohoto přístroje nezapojujte žádné aktivní reproduktory (se zabudovaným zesilovačem). Mohlo by to vést k poškození aktivních reproduktorů. Proto se přesvědčte, abyste na tento přístroj zapojili pasivní reproduktory.*

Σημειώσεις παραδείγματος σύνδεσης

Σημειώσεις για τα καλώδια ελέγχου

- *Το καλώδιο ελέγχου της ηλεκτρικής κεραίας (μπλε) δίνει τάση +12 V DC όταν ενεργοποιείτε το δέκτη ή τις λειτουργίες ATA (Automatic Tuner Activation ή Αυτόματη Ενεργοποίηση Δέκτη), AF (Alternative Frequency ή Εναλλακτική Συχνότητα) ή TA (Traffic Announcement ή Ανακοινώσεις για την Κυκλοφορία).*
- *Ηλεκτρική κεραία χωρίς κουτί ρελέ δεν μπορεί να χρησιμοποιηθεί με αυτή τη συσκευή.*

Προειδοποίηση

Εάν έχετε ηλεκτρική κεραία χωρίς κουτί ρελέ, και τη συνδέσετε στη συσκευή με το παρεχόμενο καλώδιο τροφοδοσίας Ⓚ, μπορεί να έχει ως αποτέλεσμα την καταστροφή της κεραίας.

Σύνδεση συγκράτησης μνήμης

Όταν είναι συνδεδεμένο το κίτρινο καλώδιο τροφοδοσίας, στο κύκλωμα μνήμης παρέχεται συνέχεια τοχώς, ακόμη και όταν ο διακόπτης ανάφλεξης είναι γυρισμένος στη θέση off.

Σημειώσεις για τη σύνδεση των ηχείων

- *Πριν συνδέσετε τα ηχεία, σβήστε τη συσκευή.*
- *Χρησιμοποιείτε ηχεία με σύνθετη αντίσταση 4 έως 8 ohm, και επαρκούς ισχύος. Διαφορετικά, υπάρχει πιθανότητα να καταστραφούν τα ηχεία.*
- *Μη συνδέετε τις επαφές του συστήματος ηχείων με το αμάξωμα του αυτοκινήτου, όπως επίσης μη συνδέετε τις επαφές του δεξιού ηχείου με αυτές του αριστερού.*
- *Μην επιχειρήσετε να συνδέσετε παράλληλα τα ηχεία.*
- *Μη συνδέετε ενεργά ηχεία (με ενσωματωμένο ενισχυτή) στις εξόδους ηχείων της συσκευής. Κάτι τέτοιο μπορεί να καταστρέψει τα ενεργά ηχεία. Βεβαιωθείτε ότι στις εξόδους ηχείων έχετε συνδέσει παθητικά ηχεία.*

Bağlantı örneği notları

Kontrol kablo notları

- *Güç anteni kontrol kablosu (mavi) radyoyu açtığınızda veya ATA (Automatic Tuner Activation), AF (Alternative Frequency) veya TA (Traffic Announcement) fonksiyonlarını aktive ettiğinizde +12 V DC verir.*
- *Bu ünite ile yayın kutusu olmayan bir güç anteni kullanılamaz.*

Uyarı

Yayın kablosu olmayan bir güç anteniniz varsa, bu üniteyi beraberindeki güç bağlantı kablosuna Ⓚ bağlamak antene zarar verebilir.

Hafızada tutma bağlantısı

Sarı güç giriş kablosu bağlandığında, kontak düğmesi kapalı olsa dahi hafıza devresine her zaman güç verileceklir.

Hoparlör bağlantı notları

- *Hoparlörleri bağlamadan önce, üniteyi kapatınız.*
- *4 -8 ohm empedansa ve uygun güç kullanım kapasitesine sahip hoparlörler kullanınız. Aksi takdirde hoparlörler zarar görebilir.*
- *Hoparlör sisteminin terminallerini otomobil şasisine bağlamayınız ve sağ hoparlör terminallerini sol hoparlör terminallerine bağlamayınız.*
- *Hoparlörleri paralel bağlamaya çalışmayınız.*
- *Hiçbir aktif hoparlörü (dahili amplifikatörleri olan) ünitenin hoparlör terminallerine bağlamayınız. Bunu yapmak aktif hoparlörlere zarar verebilir. Bu terminallere pasif hoparlörler bağladığınıza emin olunuz.*

Connection example
Przykład wykonania podłączenia
Příklad zapojení
Παράδειγμα σύνδεσης
Bağlantı örneği

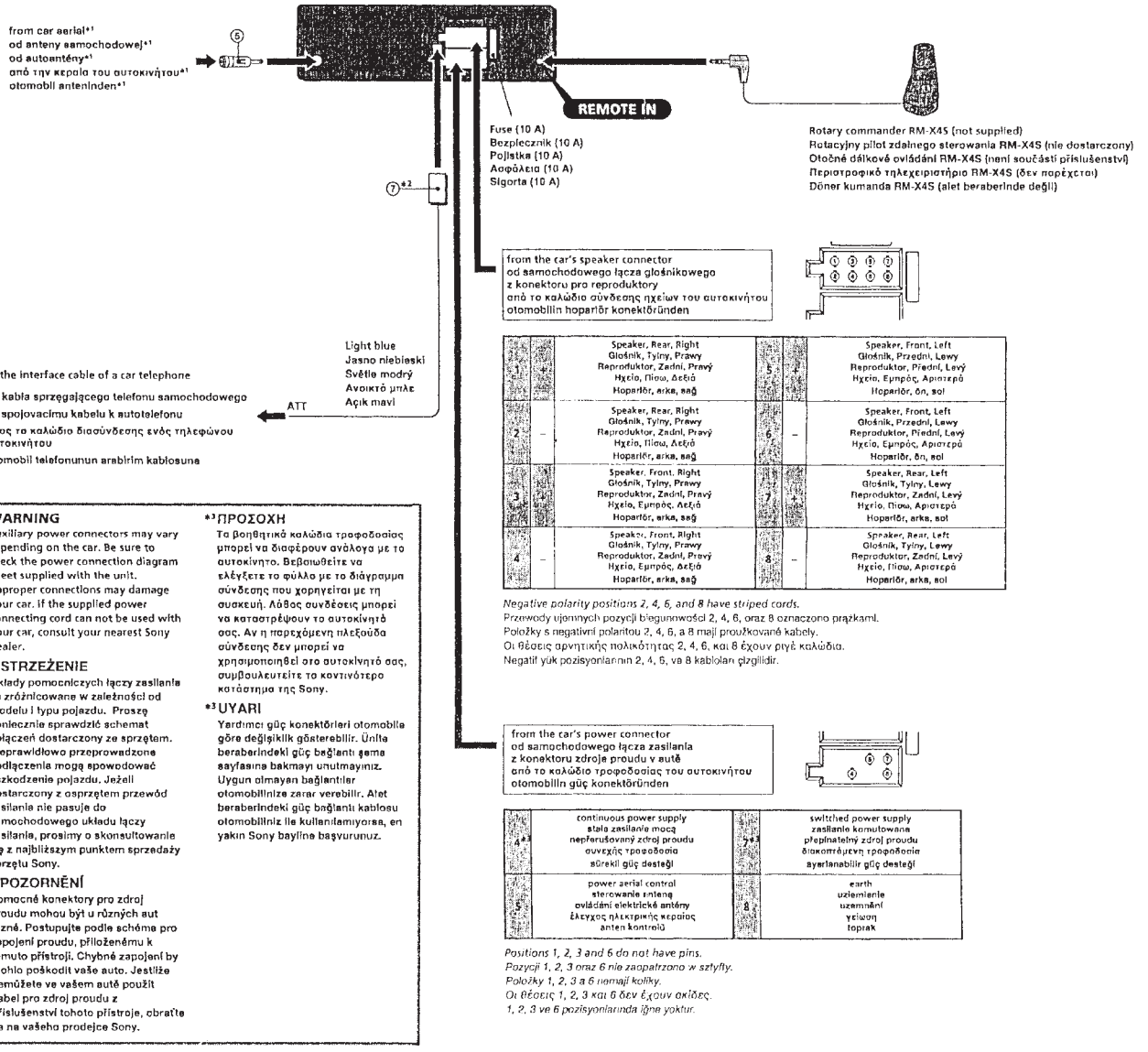
*¹ *Note for the aerial connecting*
If your car aerial is an ISO (International Organization for Standardization) type, use the supplied adapter ⑤ to connect it.
First connect the car aerial to the supplied adapter, then connect it to the aerial jack of the master unit.
*² *XR-5890R only*

*¹ *Uwaga dotycząca podłączania anteny*
Jeżeli antena jest według standardu ISO (International Organization for Standardization), do podłączenia proszę użyć dostarczonego adaptera ⑤.
Antenę samochodową podłączyć do dostarczonego adaptera, a następnie do gniazdka antenowego na głównym korpusie sprzętu.
*² *tylko dla XR-5890R*

*¹ *Poznámka k zapojení antény*
Jestliže máte autoanténu ISO (International Organization for Standardization - Mezinárodní organizace pro standardizaci), použijte k zapojení adaptér ⑤ z příslušenství.
Napřed zapojte autoanténu do adaptéru z příslušenství, potom ji zapojte do zdířky pro anténu na přístroji.
*² *pouze XR-5890R*

*¹ *Σημείωση για τη σύνδεση της κεραίας*
Εάν η κεραία του αυτοκινήτου σας είναι τύπου ISO (International Organization for Standardization), χρησιμοποιήστε τον παρεχόμενο αντάπτορα ⑤ για να τη συνδέσετε.
Συνδέστε πρώτα την κεραία του αυτοκινήτου στον παρεχόμενο προσαρμογέα, και μετά συνδέστε τον στον ακροδέκτη κεραίας της συσκευής.
*² *μόνο για το XR-5890R*

*¹ *Anten bağlantı notu*
Otomobil anteniniz bir ISO (International Organisation for Standardization) tipi ise bağlantı için ünite ile verilen adaptörü ⑤ kullanınız.
Önce otomobil antenini alet beraberindeki adaptöre bağlayınız, ardından ana ünitenin anten jakına bağlayınız.
*² *Yalnız XR-5890R için*



Negative polarity positions 2, 4, 6, and 8 have striped cords.
Przewody ujemnych pozycji biegunowości 2, 4, 6, oraz 8 oznaczono prążkami.
Položky s negativní polaritou 2, 4, 6, a 8 mají proužkované kabely.
Οι θέσεις αρνητικής πολικότητας 2, 4, 6, και 8 έχουν ριγέ καλώδια.
Negatif yük pozisyonlarının 2, 4, 6, ve 8 kabloları çizgilidir.

Positions 1, 2, 3 and 6 do not have pins.
Pozycji 1, 2, 3 oraz 6 nie zaopatrzono w sztyfty.
Položky 1, 2, 3 a 6 nemají kolíky.
Οι θέσεις 1, 2, 3 και 6 δεν έχουν ακίδες.
1, 2, 3 ve 6 pozisyonlarında iğne yoktur.

*³WARNING
Auxiliary power connectors may vary depending on the car. Be sure to check the power connection diagram sheet supplied with the unit. Improper connections may damage your car. If the supplied power connecting cord can not be used with your car, consult your nearest Sony dealer.

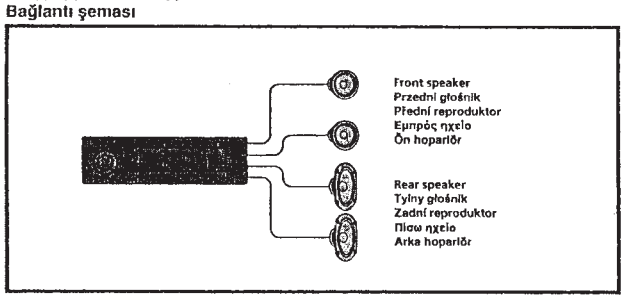
*³OSTRZEŻENIE
Układy pomocniczych łączy zasilania są zróżnicowane w zależności od modelu i typu pojazdu. Proszę koniecznie sprawdzić schemat połączeń dostarczony ze sprzętem. Nieprawidłowo przeprowadzone podłączenia mogą spowodować uszkodzenie pojazdu. Jeżeli dostarczony z osprzętem przewód zasilania nie pasuje do samochodowego układu łączy zasilania, prosimy o skonsultowanie się z najbliższym punktem sprzedaży sprzętu Sony.

*³UPOZORNĚNÍ
Pomocné konektory pro zdroj proudu mohou být u různých aut různé. Postupujte podle schéma pro zapojení proudu, přiloženému k tomuto přístroji. Chybné zapojení by mohlo poškodit vaše auto. Jestliže nemůžete ve vašem autě použít kabel pro zdroj proudu z příslušenství tohoto přístroje, obraťte se na vašeho prodejce Sony.

*³ΠΡΟΣΟΧΗ
Τα βοηθητικά καλώδια τροφοδοσίας μπορεί να διαφέρουν ανάλογα με το αυτοκίνητο. Βεβαιωθείτε να ελέγξετε το φύλλο με το διάγραμμα σύνδεσης που χορηγείται με τη συσκευή. Λάθος συνδέσεις μπορεί να καταστρέψουν το αυτοκίνητό σας. Αν η παρεχόμενη πλεξούδα σύνδεσης δεν μπορεί να χρησιμοποιηθεί στο αυτοκίνητό σας, συμβουλευτείτε το κοντινότερο κατάστημα της Sony.

*³UYARI
Yardımcı güç konektörleri otomobile göre değişiklik gösterebilir. Ünite beraberindeki güç bağlantı şema sayfasına bakmayı unutmayınız. Uygun olmayan bağlantılar otomobilinize zarar verebilir. Alet beraberindeki güç bağlantı kablosu otomobiliniz ile kullanılamıyorsa, en yakın Sony bayiine başvurunuz.

Connection Diagram
Schemat Podłączeń
Schéma zapojení
Διάγραμμα Σύνδεσης
Bağlantı şeması



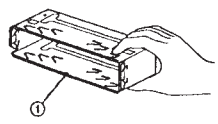
Caution
Cautionary notice for handling the bracket ①.
Handle the bracket carefully to avoid injuring your fingers.

Ostrzeżenie
Uwaga ostrzegawcza dotycząca wspornika ①.
Aby uniknąć obrażeń ciała, proszę przy montażu wspornika, podjąć odpowiednie środki ostrożności.

Pozor
Bezpečnostní upozornění pro zacházení s konzolí ①.
S konzolí zacházejte opatrně, abyste si přitom neporanili prsty.

Προσοχή
Προειδοποίηση για το χειρισμό του πλαισίου ①.
Χειρίζεστε το πλαίσιο προσεκτικά προς αποφυγή τραυματισμού των δαχτύλων σας.

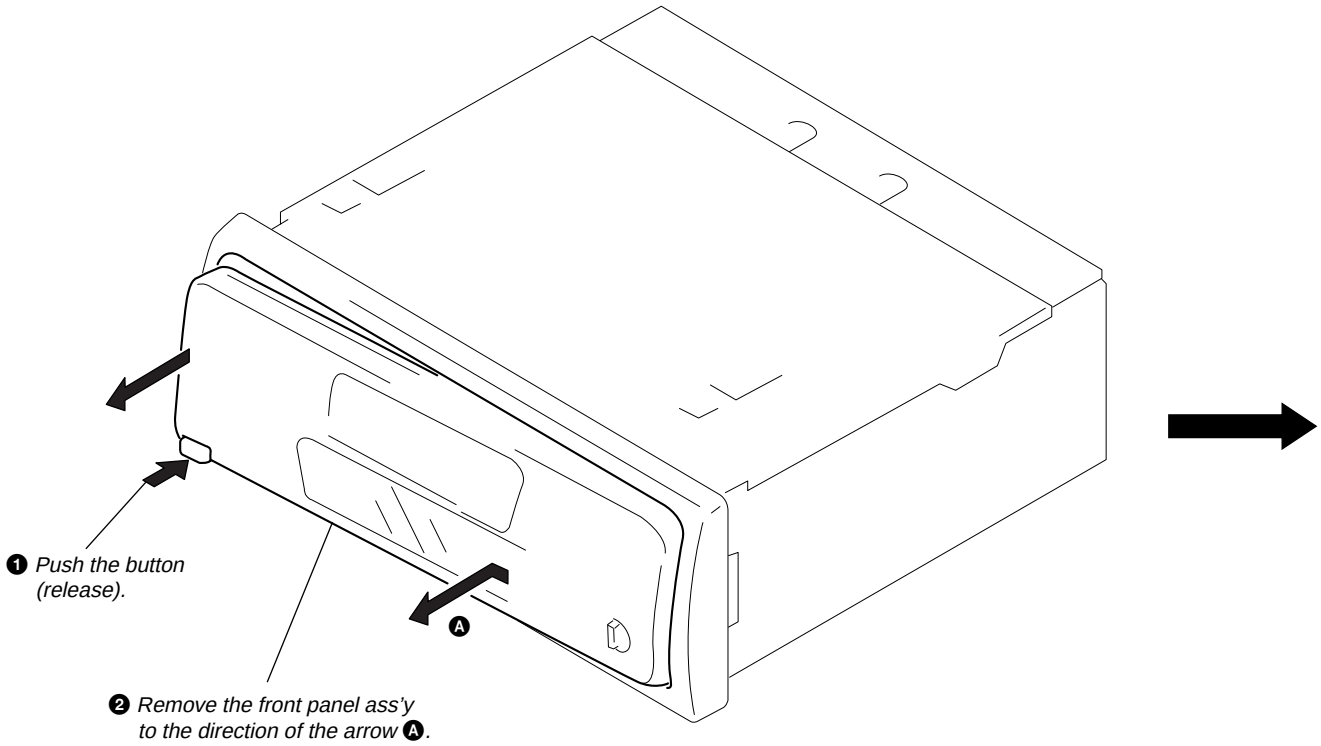
Dikkat
Destekle ① ilgili dikkat ikazı.
Parmaklarınızın yaralanmaması için desteğe dokunurken dikkat



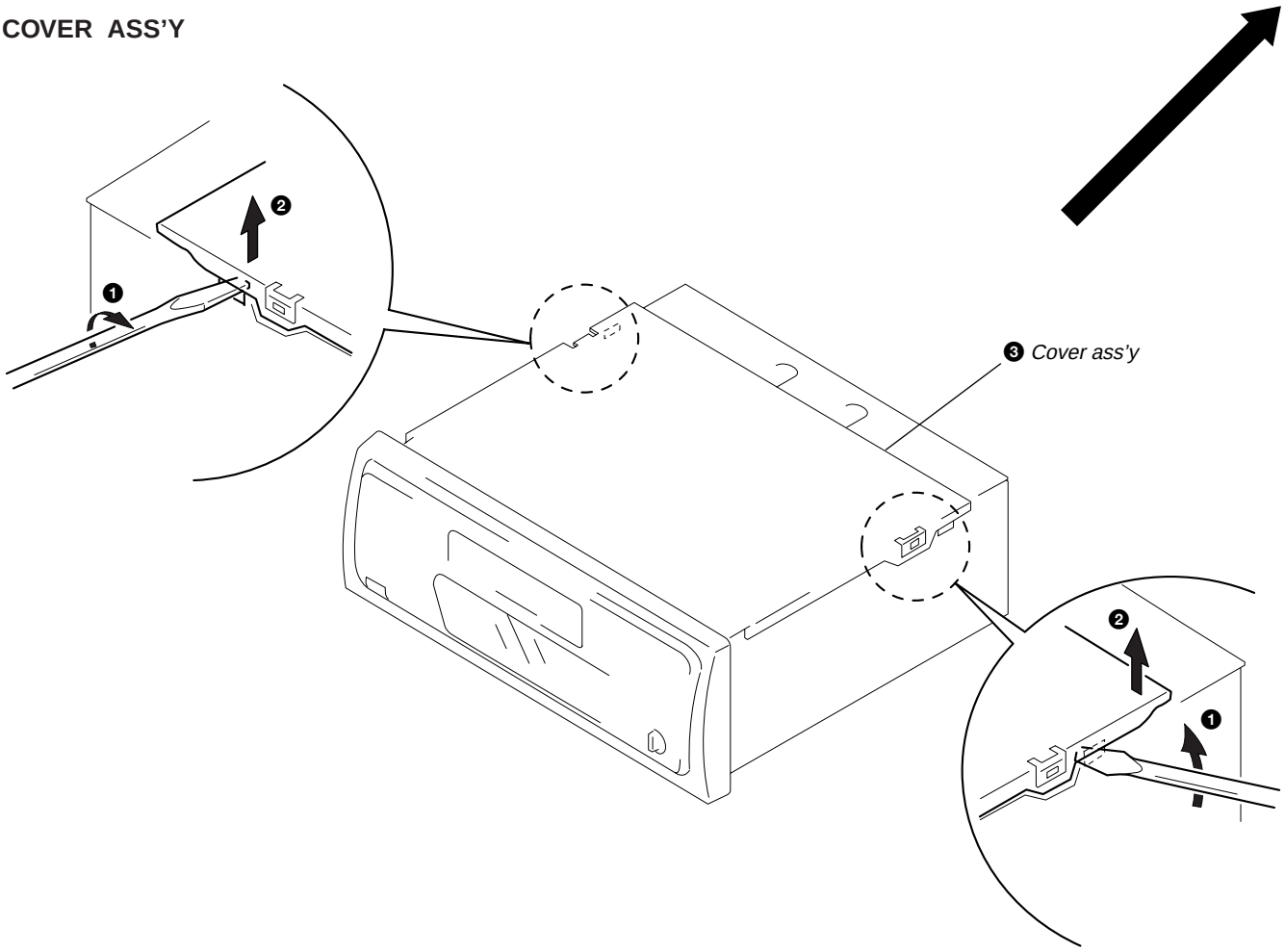
SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

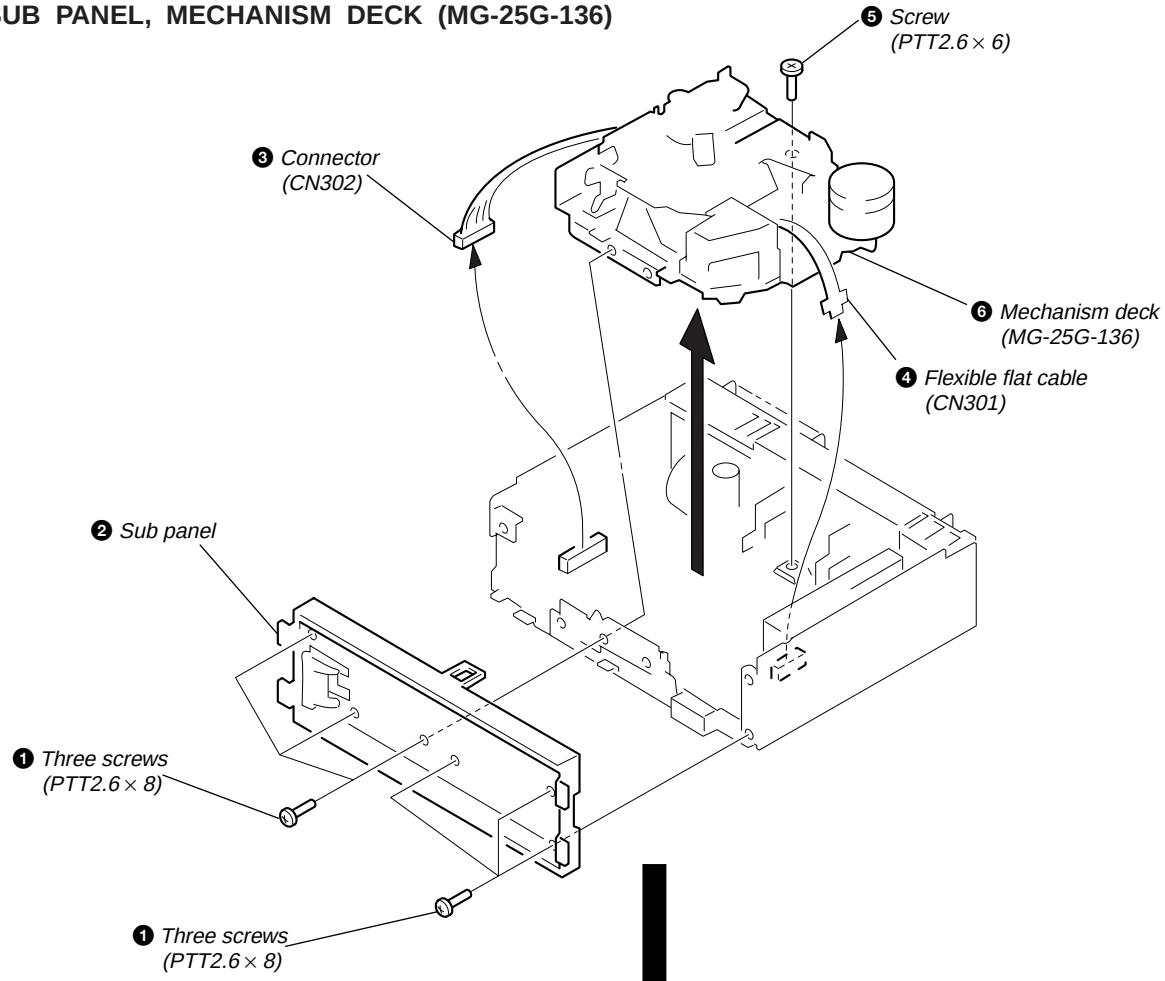
FRONT PANEL ASS'Y



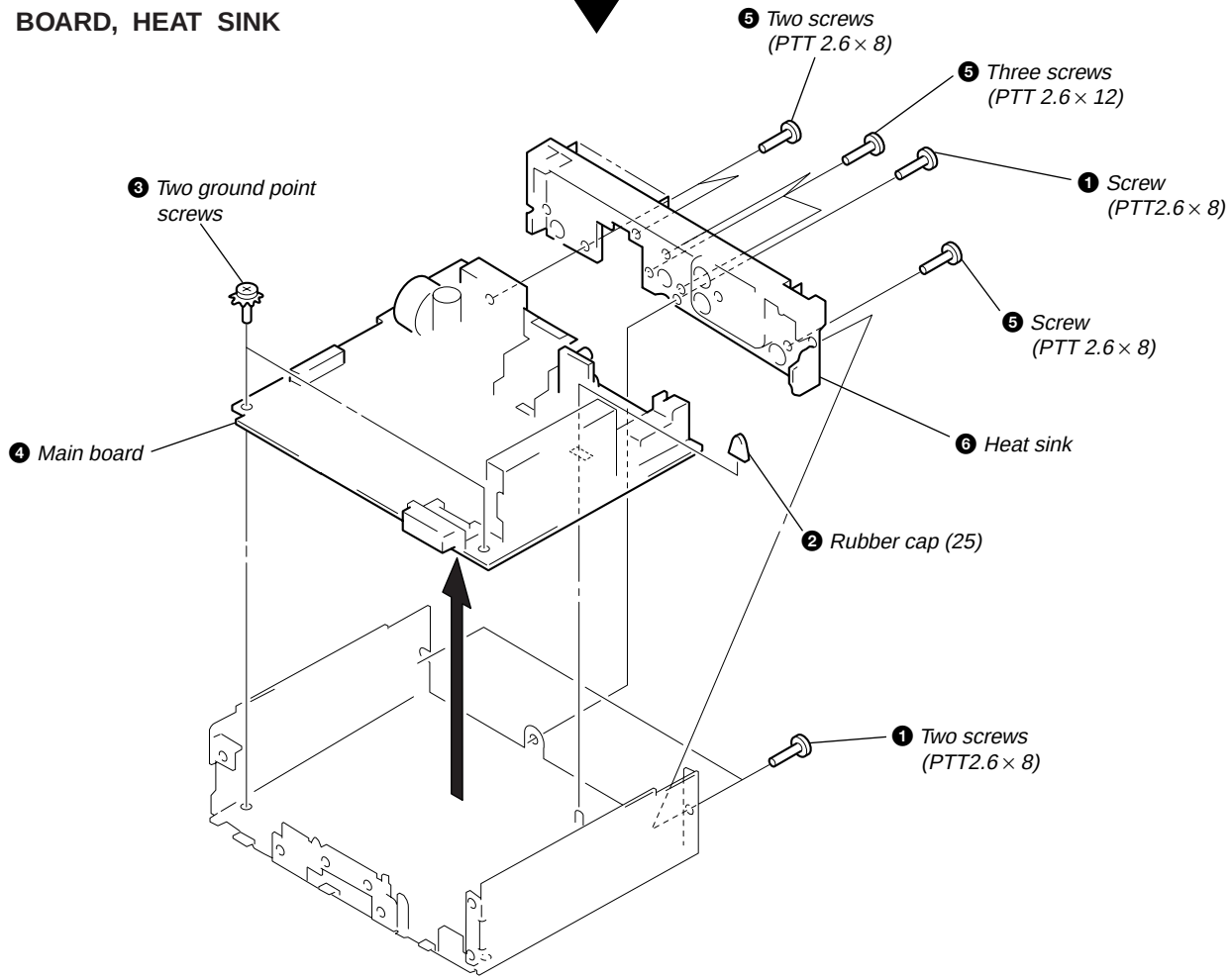
COVER ASS'Y



SUB PANEL, MECHANISM DECK (MG-25G-136)



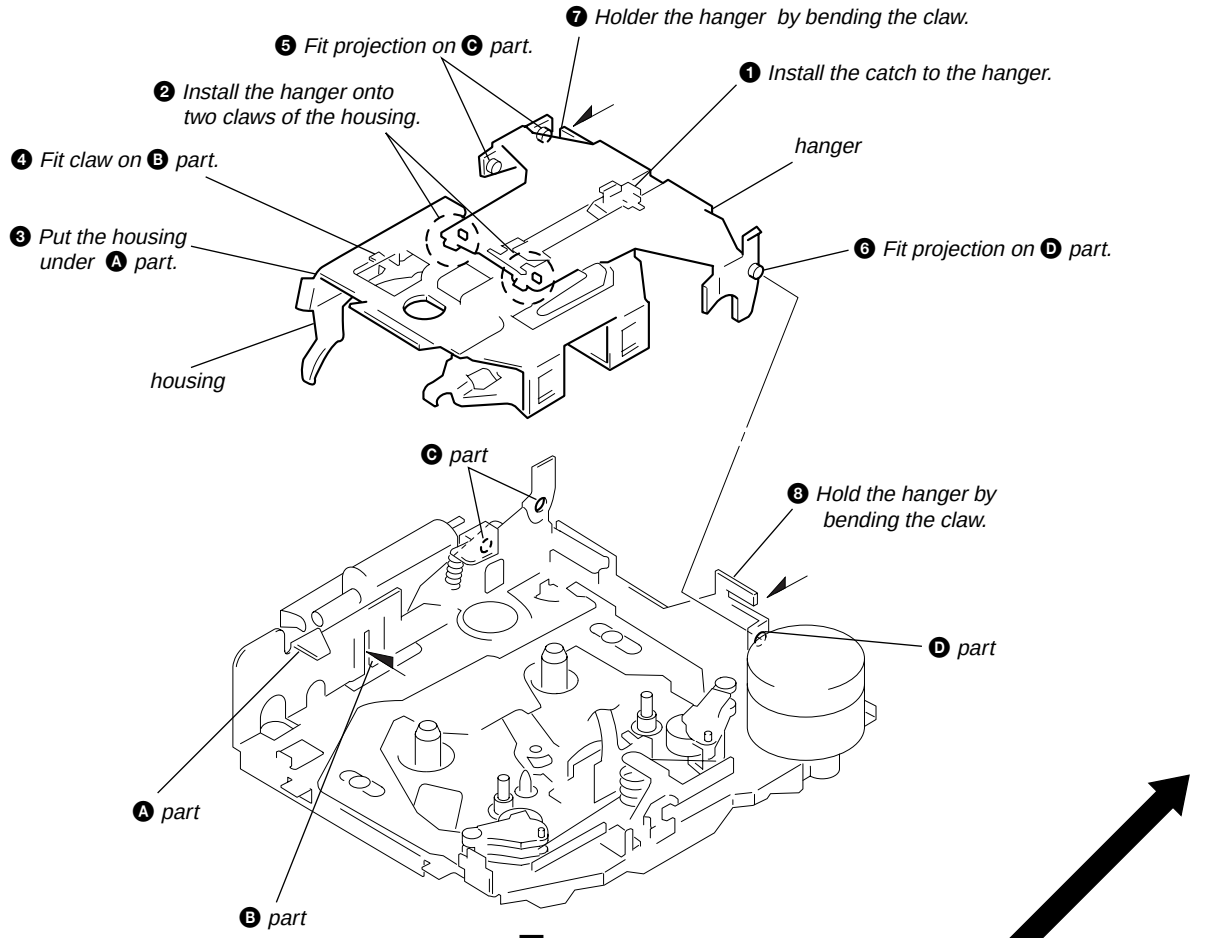
MAIN BOARD, HEAT SINK



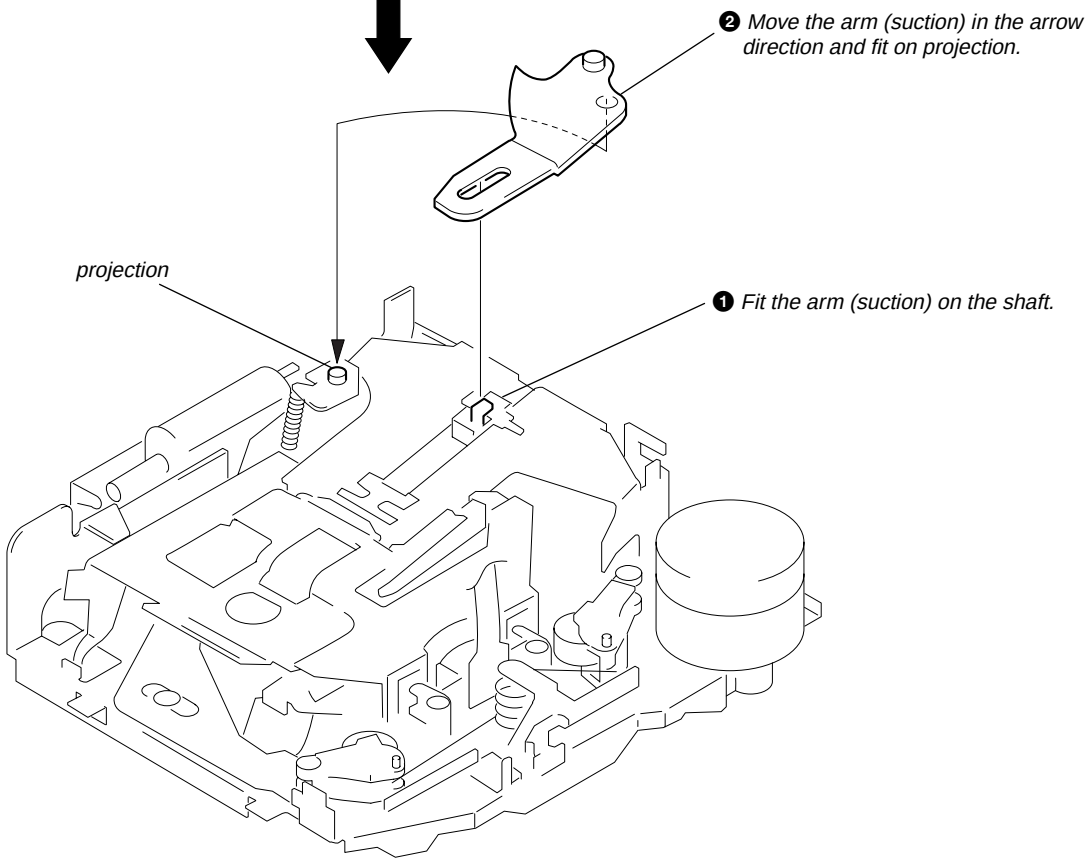
SECTION 3
ASSEMBLY OF MECHANISM DECK

Note: Follow the assembly procedure in the numerical order given.

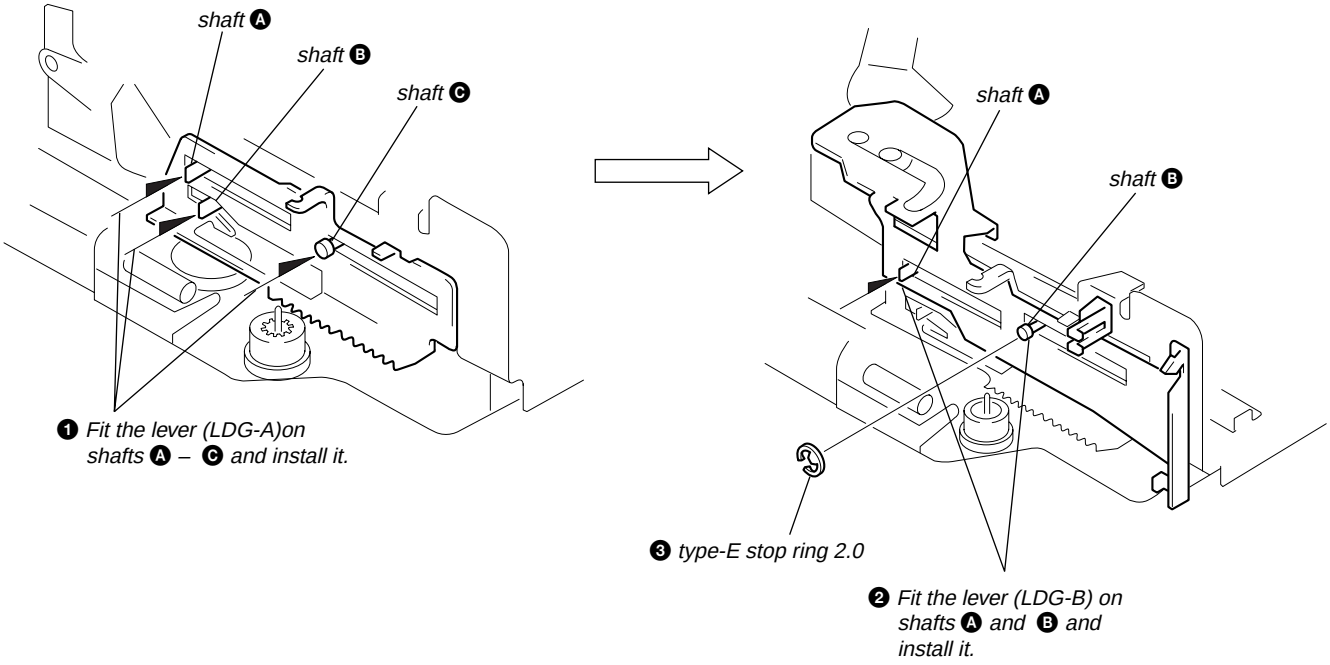
HOUSING



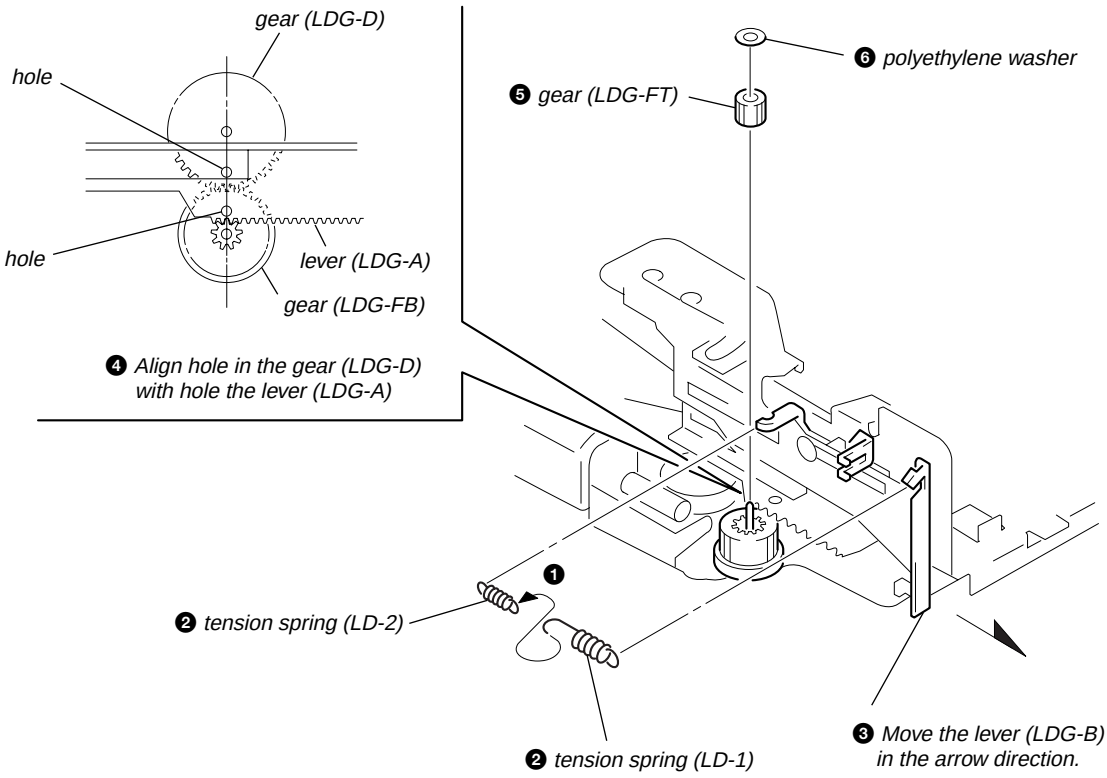
ARM (SUCTION)



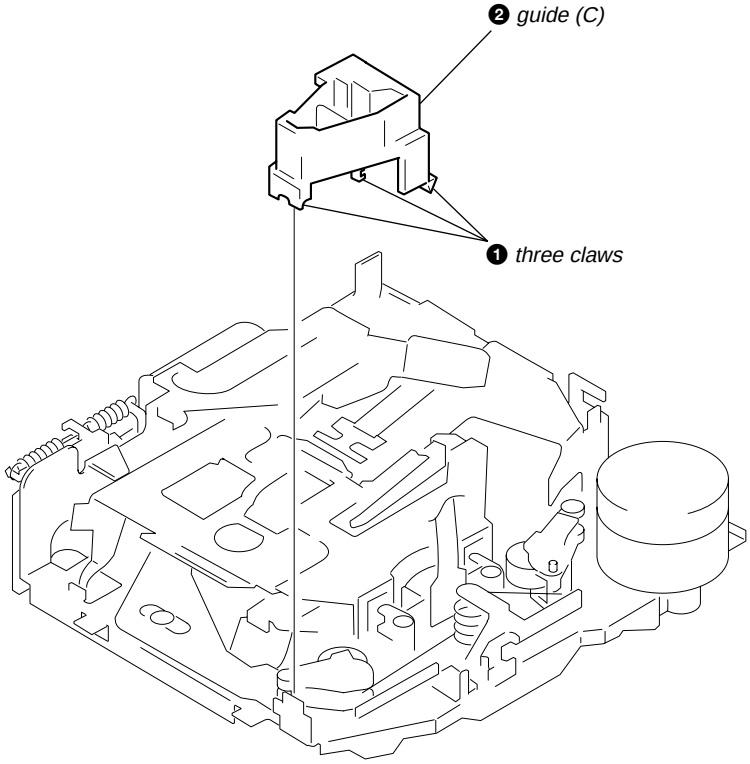
LEVER (LDG-A) / (LDG-B)



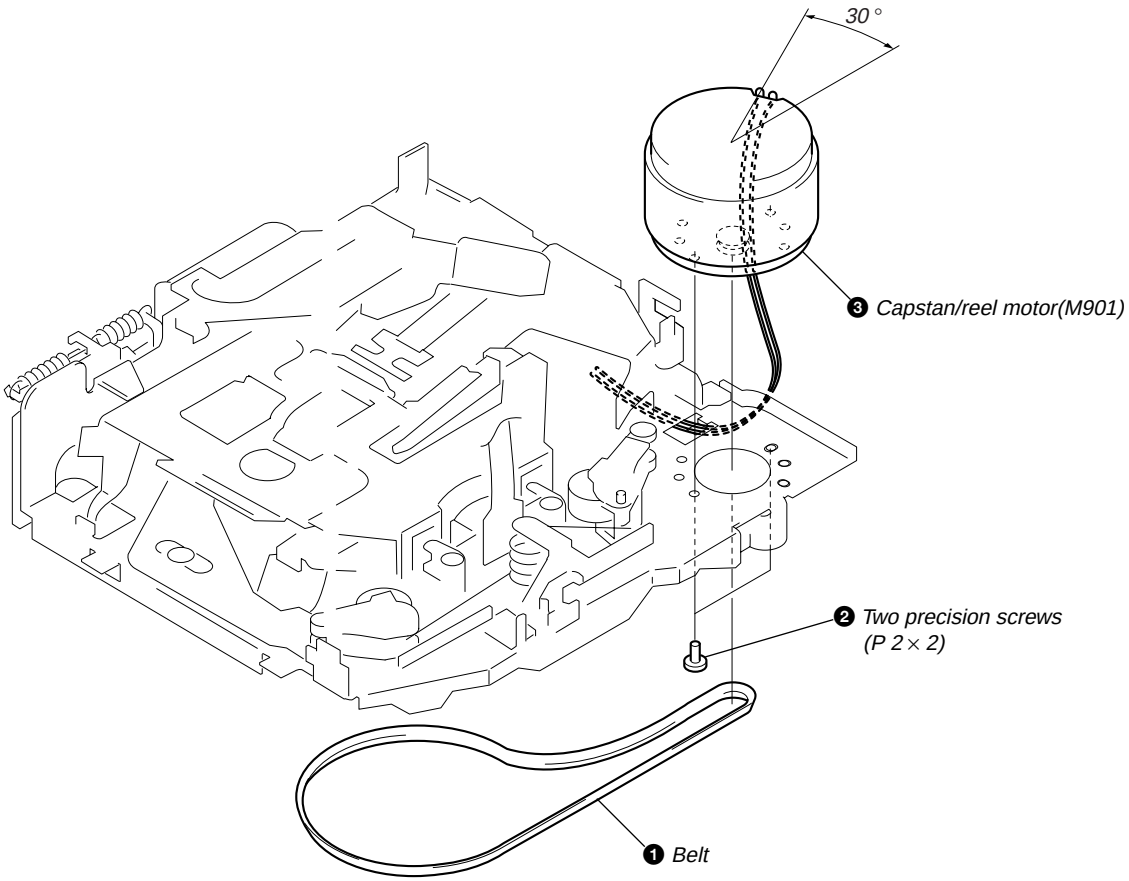
GEAR (LDG-FT)



GUIDE (C)



MOUNTING POSITION OF CAPSTAN/REEL MOTOR (M901)



SECTION 4
MECHANICAL ADJUSTMENTS

1. Clean the following parts with a denatured-alcohol-moistened swab:
   playback head pinch roller
   rubber belt capstan
   idlers
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the power supply voltage unless otherwise noted.

• Torque Measurement

Mode	Torque Meter	Meter Reading
Forward	CQ-102C	30 - 65 g•cm (0.42 - 0.90 oz•inch)
Forward Back Tension	CQ-102C	0.5 - 4.5 g•cm (0.01 - 0.06 oz•inch)
Reverse	CQ-102RC	30 - 65 g•cm (0.42 - 0.90 oz•inch)
Reverse Back Tension	CA-102RC	0.5 - 4.5 g•cm (0.01 - 0.06 oz•inch)
FF, REW	CQ-201B	60 - 200 g•cm (0.83 - 2.78 oz•inch)

• Tape Tension Measurement

Mode	Tension Meter	Meter Reading
Forward	CQ-403A	more than 90 g (more than 3.18 oz)
Reverse	CQ-403R	more than 90 g (more than 3.18 oz)

SECTION 5
ELECTRICAL ADJUSTMENTS

TEST MODE

This set have the test mode function. In the test mode, FM Auto Scan/Stop Level and AM (MW) Auto Scan/Stop Level adjustments can be performed easier than it in ordinary procedure.

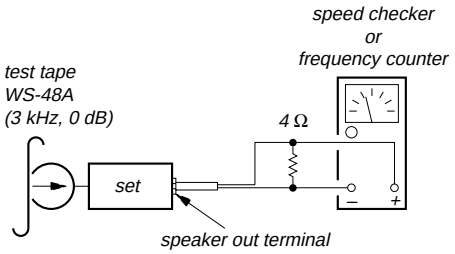
<Set the Test Mode>
1. Set the "power select" switch (S501) is "A" position.
2. Turn ON the regulated power supply. (All LEDs on the set lights up, and the clock is displayed.)
   Note: Press the [OFF] button, if the clock is not displayed.
3. Push the preset [4] button.
4. Push the preset [5] button.
5. Press the preset [1] button for more than two seconds.
6. Then the display indicates all lights, the test mode is set.

<Release the Test mode>
1. Push the [OFF] button.
2. Return the "power select" switch (S801) to initially set position.

See the adjustment location from on page 16 for the adjustment.

TAPE DECK SECTION **0 dB=0.775 V**

Tape Speed Adjustment
Setting:



Procedure:
1. Put the set into the FWD PB mode.
2. Adjust adjustment resistor for inside capstan motor so that the reading on the speed checker or frequency counter becomes in specification.

Specification: Constant speed

Speed checker	Frequency counter
–1.5 to +2.5%	2,955 to 3,075 Hz

Adjustment Location: See page 16.

TUNER SECTION | 0 dB=1 µV

Cautions during repair
When the tuner unit is defective, replace it by a new one because its internal block is difficult to repair.

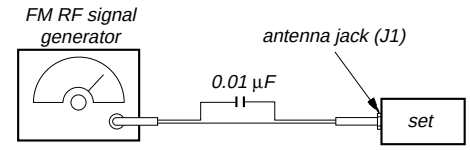
Note:
Adjust the tuner section in the sequence shown below.

1. FM Auto Scan/Stop Level Adjustment
2. FM Stereo Separation Adjustment
3. FM Signal Meter Adjustment
4. AM (MW) Auto Scan/Stop Level Adjustment

FM Auto Scan/Stop Level Adjustment

Setting:

SOURCE button: FM

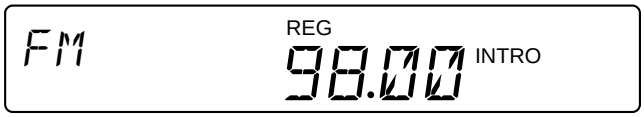


Carrier frequency : 98.0 MHz
Output level : 22 dB (12.6 µV)
Mode : mono
Modulation : 1 kHz, 22.5 kHz deviation (30%)

Procedure:

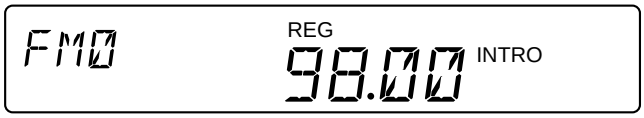
1. Set to the test mode. (See page 13).
2. Push the SOURCE button and set to FM.

Display



3. Adjust with the volume RV2 on TU1 so that the “FM” indication turns to “FM0” indication on the display window.
   But, in case of already indicated “FM0”, turn the RV2 so that put out light “0” indication and adjustment.

Display

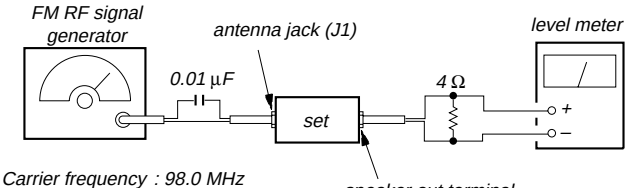


Adjustment Location: See page 16.

FM Stereo Separation Adjustment

Setting:

SOURCE button: FM



Carrier frequency : 98.0 MHz
Output level : 70 dB (3.2 mV)
Mode : stereo
Modulation : main: 1 kHz, 20 kHz deviation (26.7%)
sub: 1 kHz, 20 kHz deviation (26.7%)
19 kHz pilot: 7.5 kHz deviation (10%)

Procedure:

FM Stereo signal generator output channel	Level meter connection	Level meter reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV4 on TU1 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV4 on TU1 for minimum reading.

L-CH Stereo separation: Ⓐ-Ⓑ
R-CH Stereo separation: Ⓒ-Ⓓ
The separations of both channels should be equal.

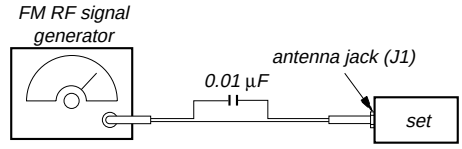
Specification: Separation more than 30 dB

Adjustment Location: See page 16.

FM Signal Meter Adjustment

Setting:

SOURCE button: FM

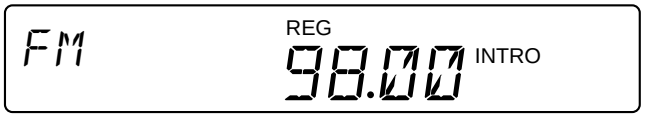


Carrier frequency : 98.00 MHz
Output level : 35 dB (56.2 µV)
Mode : mono
Modulation : no modulation

Procedure:

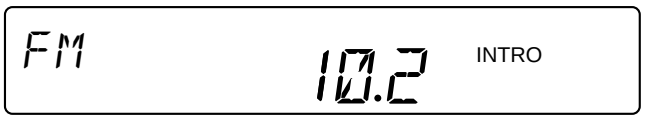
1. Set to the test mode. (See page 13.)
2. Push the SOURCE button and set to FM.

Display



3. Push the 6 button.
4. Adjust RV1 so that the display indication is “10.2”.

Display



Specification: Display indication: 10.0 to 10.4

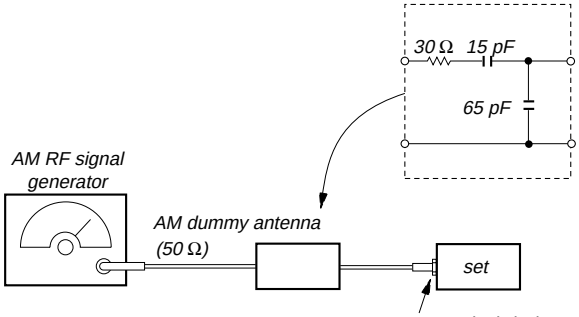
Adjustment Location: See page 16.

AM (MW) Auto Scan/Stop Level Adjustment

Make this adjustment after “FM Auto Scan/Stop Level Adjustment”.

Setting:

SOURCE button: MW



Carrier frequency : 999 kHz
30% amplitude modulation by 1 kHz signal
Output level : 33 dB (44.7 µV)

Procedure:

1. Set to the test mode. (See page 13.)
2. Push the SOURCE button and set to FM.
3. Push the MODE button and set to MW.

Display

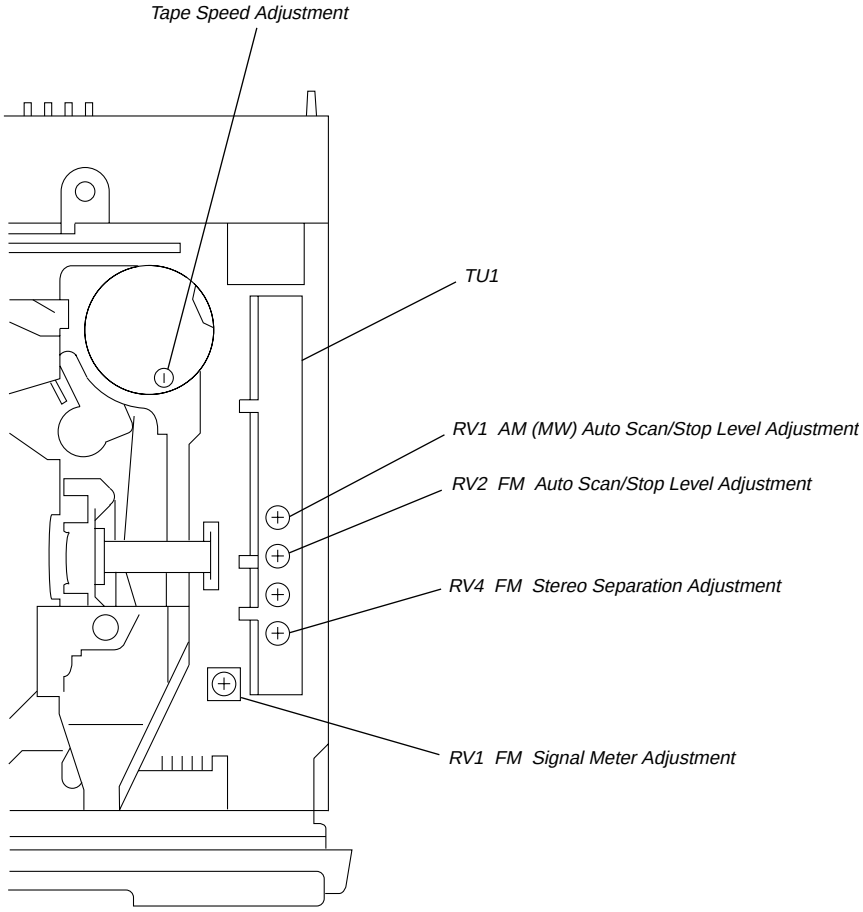
4. Adjust with the volume RV1 on TU1 so that the “MW” indication turns to “MW0” indication on the display window. But, in case of already indicated “MW0”, turn the RV1 so that put out light “0” indication and adjustment.

Display

Adjustment Location: See page 16.

Adjustment Location:

– SET UPPER VIEW –



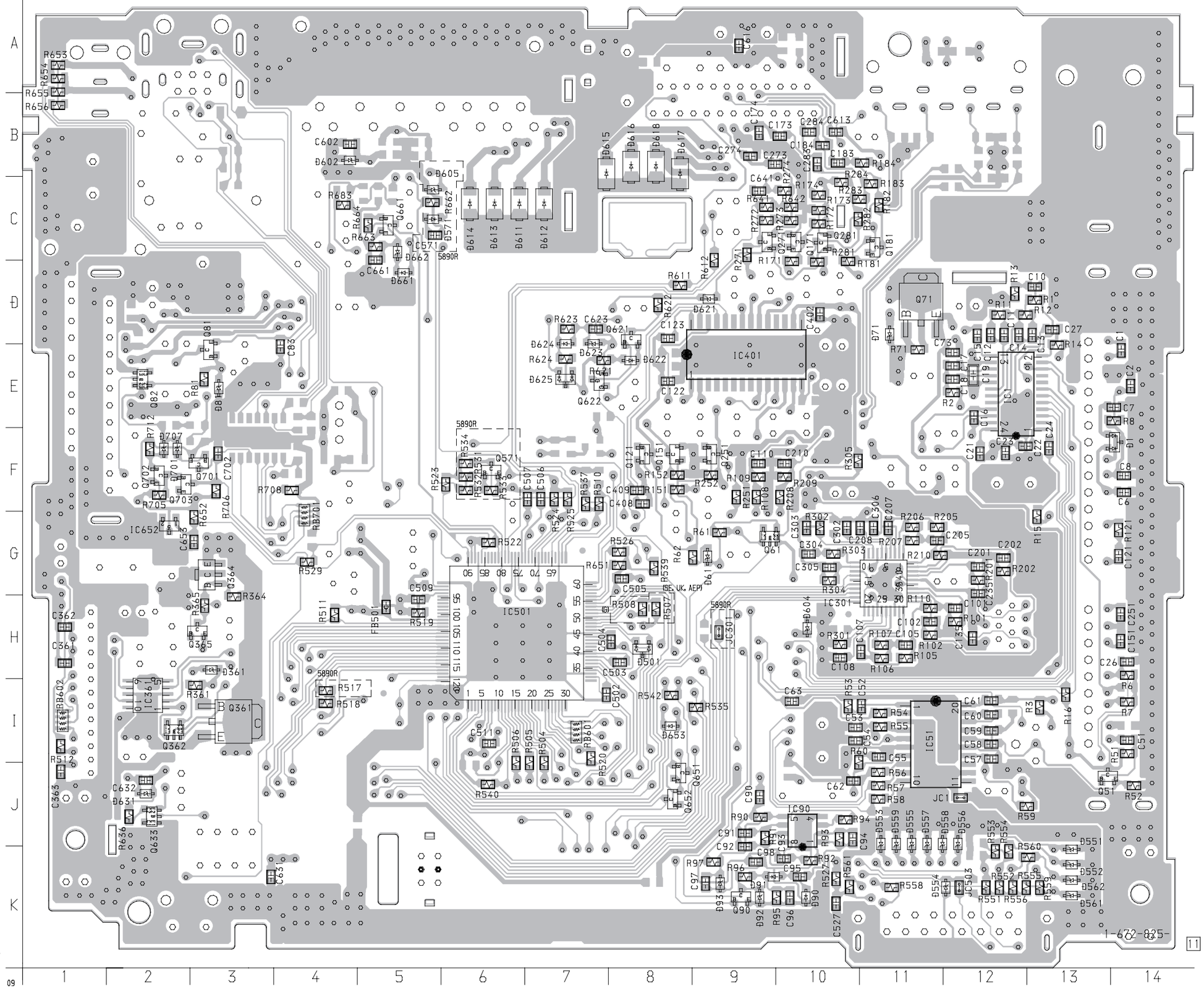
SECTION 6
DIAGRAMS

6-1. PRINTED WIRING BOARD — MAIN SECTION — (SIDE A)

• **Semiconductor Location**

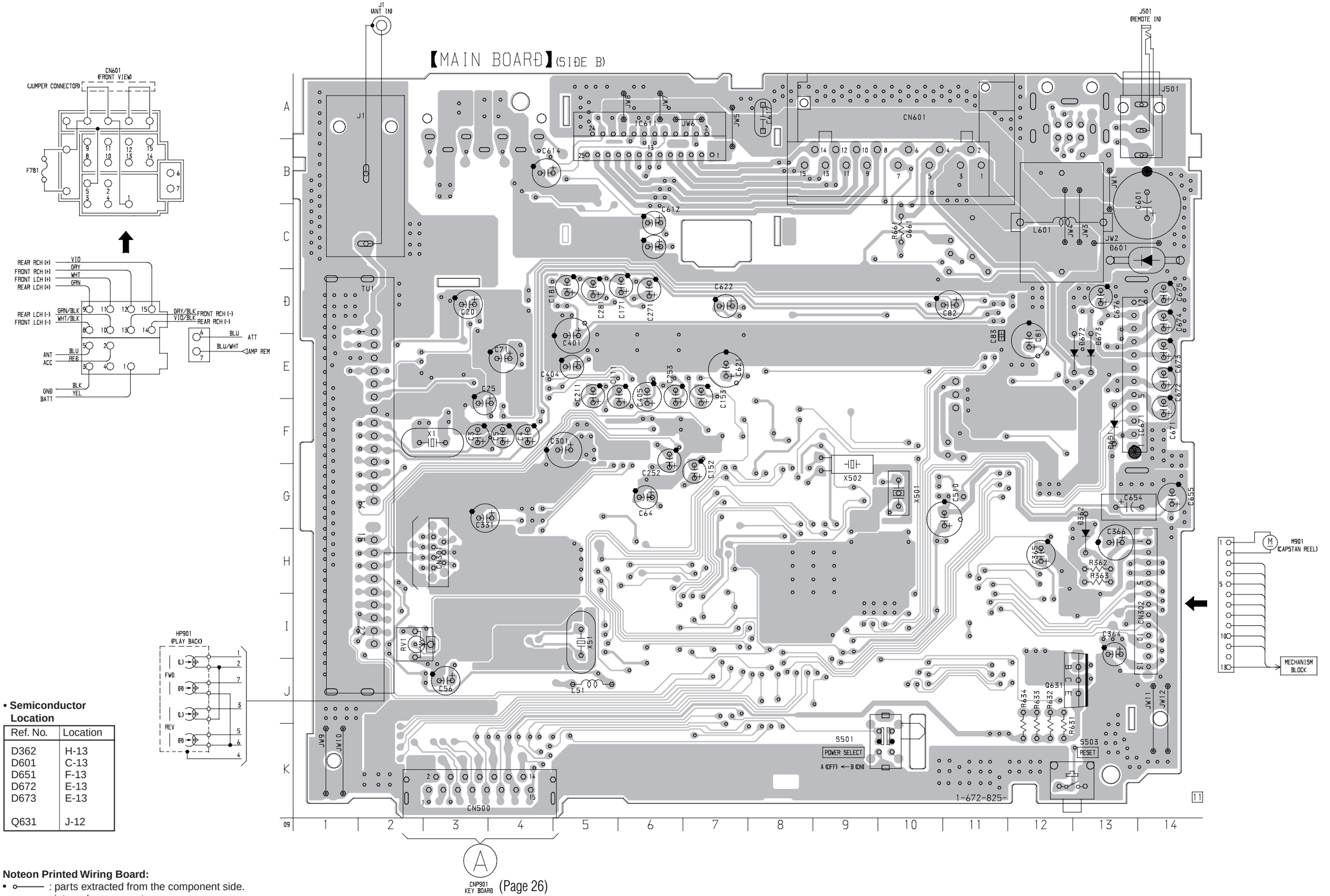
Ref. No.	Location	Ref. No.	Location
D1	F-14	D701	F-2
D61	G-9	D707	F-2
D71	D-11		
D81	E-3	IC1	E-12
D90	K-10	IC51	I-11
D91	K-9	IC90	J-10
D92	K-9	IC301	G-11
D93	K-9	IC361	I-2
D361	H-3	IC401	E-9
D501	H-8	IC501	H-6
D551	K-13	IC611	A-9
D552	K-13	IC652	G-2
D553	J-11	IC671	E-2
D554	K-12		
D555	J-11	Q51	J-13
D556	J-12	Q61	G-9
D557	J-11	Q71	D-11
D558	J-11	Q81	E-3
D559	J-11	Q82	E-2
D561	K-13	Q90	K-9
D562	K-13	Q121	F-8
D571	C-5	Q151	F-8
D602	B-4	Q171	C-10
D604	H-10	Q181	C-11
D605	C-5	Q251	F-9
D611	C-6	Q271	C-9
D612	C-7	Q281	C-10
D613	C-6	Q361	I-3
D614	C-6	Q362	I-2
D615	B-7	Q364	G-3
D616	B-8	Q365	H-3
D617	B-8	Q571	F-6
D618	B-8	Q621	D-8
D621	D-9	Q622	E-7
D622	E-8	Q633	J-2
D623	E-7	Q651	J-8
D624	E-7	Q652	J-8
D625	E-7	Q661	C-5
D631	J-2	Q701	F-3
D653	I-8	Q702	F-2
D661	D-5	Q703	F-2
D662	C-5		

【MAIN BOARD】(SIDE A)



Noteon Printed Wiring Board:
- ○—— : parts extracted from the component side.
- △ : internal component.
- Abbreviation
  G : German model.

— MAIN SECTION — (SIDE B)



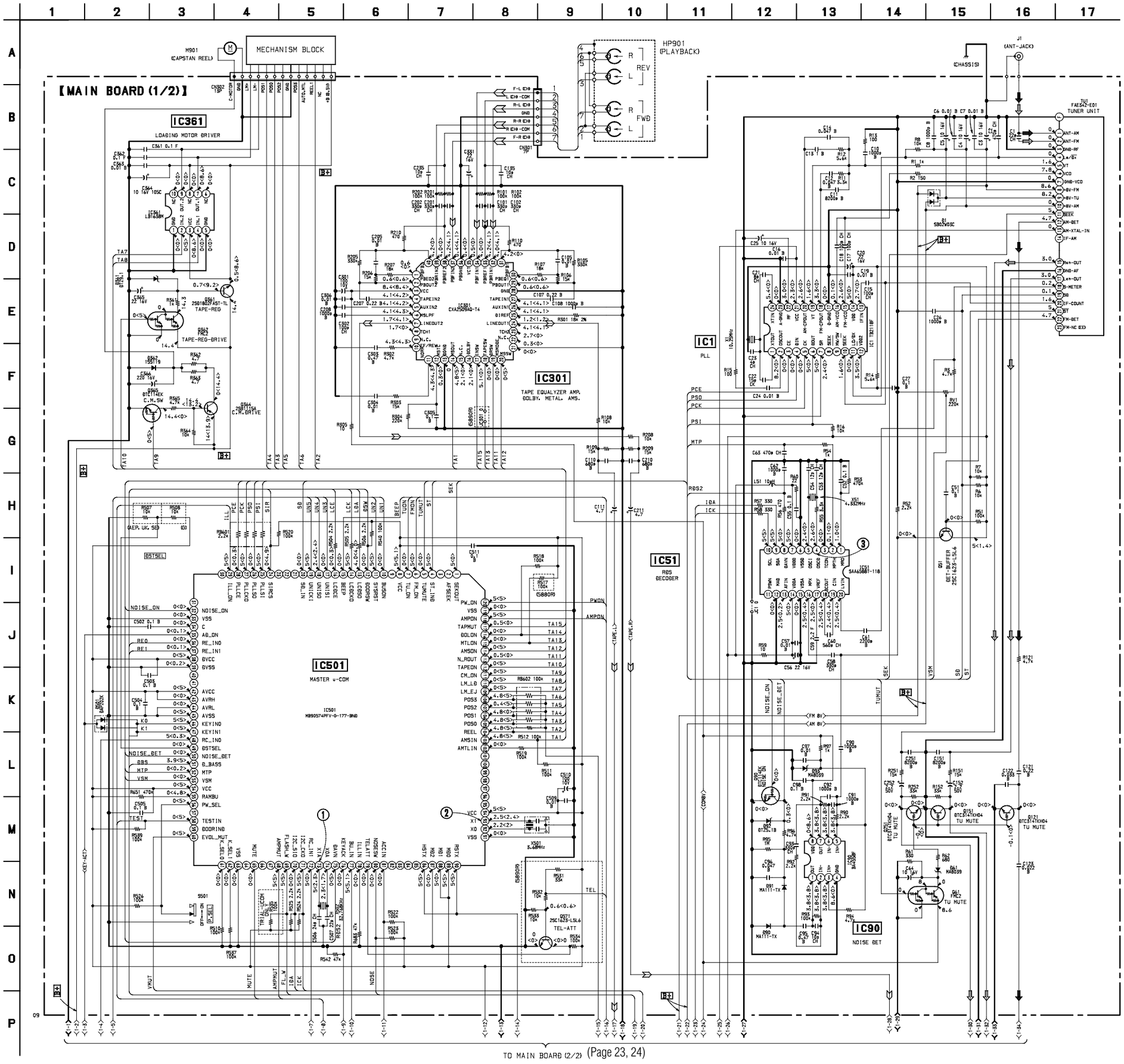
• **Semiconductor Location**

Ref. No.	Location
D362	H-13
D601	C-13
D651	F-13
D672	E-13
D673	E-13
Q631	J-12

Noteon Printed Wiring Board:

- ⟜——: parts extracted from the component side.
- △ : internal component.
- Abbreviation
  G : German model.

6-2. SCHEMATIC DIAGRAM — MAIN (1/2) SECTION — • Refer to page 29 for IC Block Diagrams.



- **Waveforms**

① 5.4Vp-p
32.8KHz
IC501 (73)

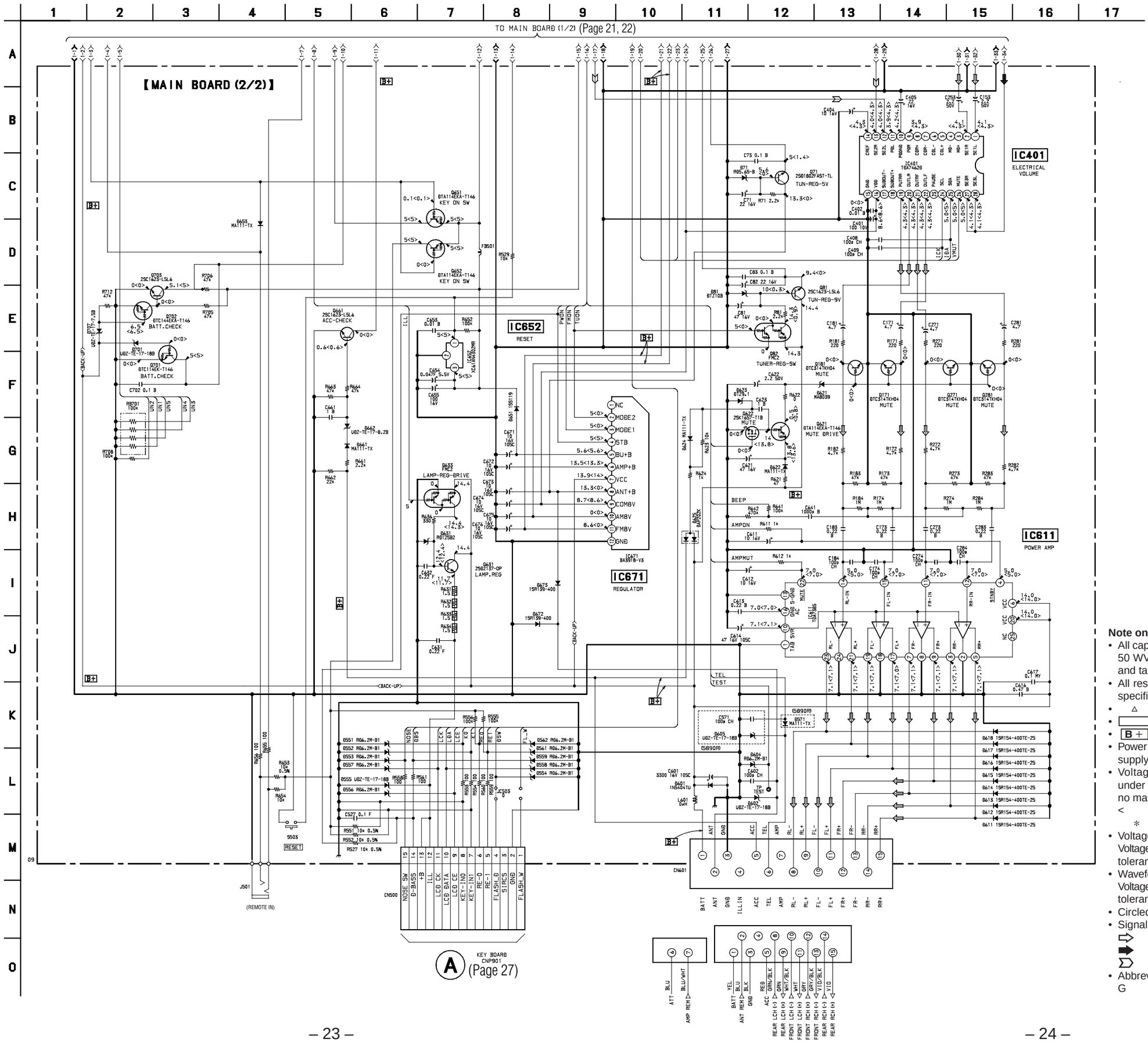
② 5.6Vp-p
3.68MHz
IC501 (93)

③ 5.4Vp-p
4.332MHz
IC51 (4)

Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- B+ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : FM
  < > : TAPE PLAYBACK
  ∗ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : AM (MW)
  ⇨ : TAPE PLAYBACK
- Abbreviation
  G : German model.

6-3. SCHEMATIC DIAGRAM — MAIN (2/2) SECTION — • Refer to page 29 for IC Block Diagrams.



Note on Schematic Diagram:

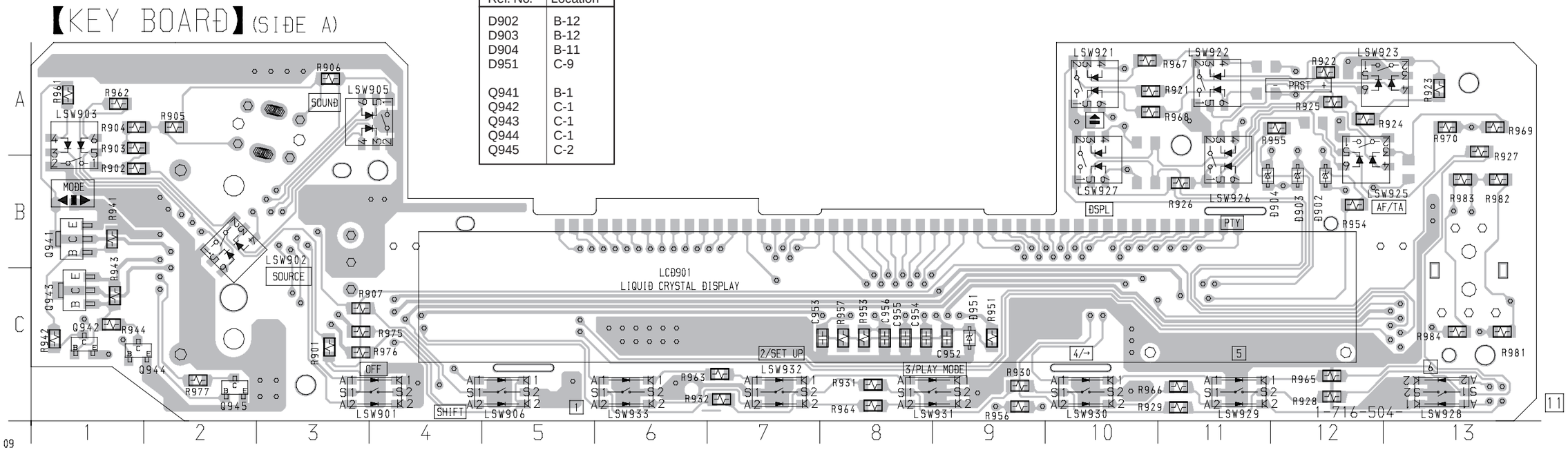
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- B+ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : FM
  < > : TAPE PLAYBACK
  ∗ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : AM (MW)
  ⇨ : TAPE PLAYBACK
- Abbreviation
  G : German model.

6-4. PRINTED WIRING BOARD

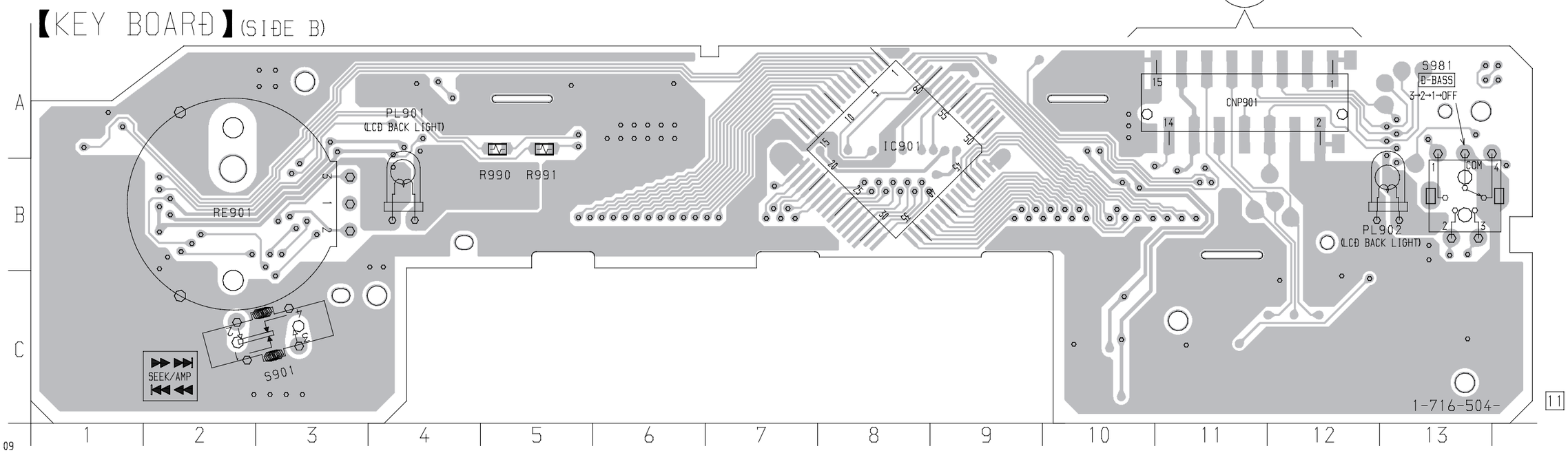
— PANEL SECTION — (SIDE A)

• **Semiconductor Location**

Ref. No.	Location
D902	B-12
D903	B-12
D904	B-11
D951	C-9
Q941	B-1
Q942	C-1
Q943	C-1
Q944	C-1
Q945	C-2



— PANEL SECTION — (SIDE B)

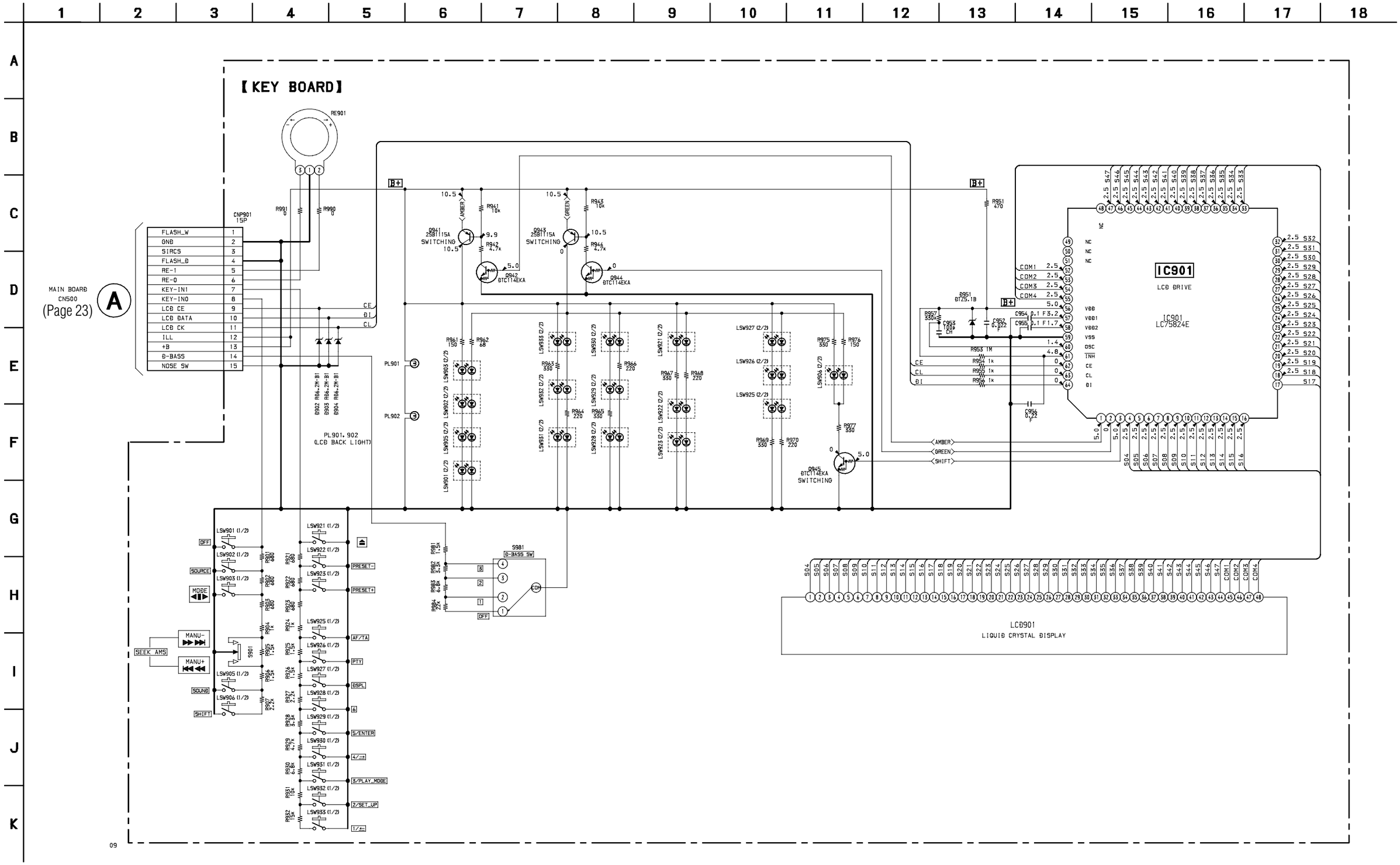


Note:

- ○——— : parts extracted from the component side.
- △ : internal component.
- ▒▒▒ : Pattern from the side which enables seeing.
- Abbreviation
  G : German model.

• **Semiconductor Location**

Ref. No.	Location
IC901	A-8

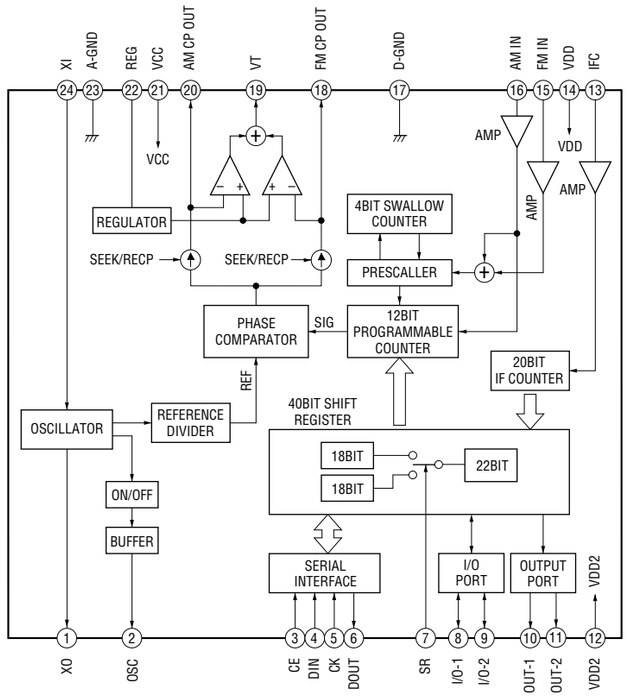


Note on Schematic Diagram:

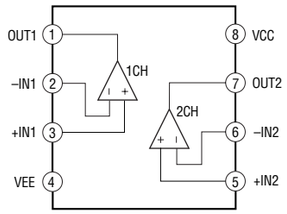
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- B+ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : FM
  < > : TAPE PLAYBACK
  ✻ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : AM (MW)
  Σ : TAPE PLAYBACK
- Abbreviation
  G : German model.

• IC Block Diagrams – MAIN Board –

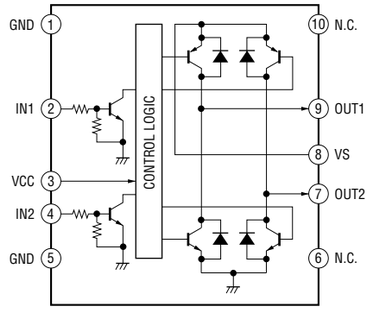
IC1 TB2118F (EL)



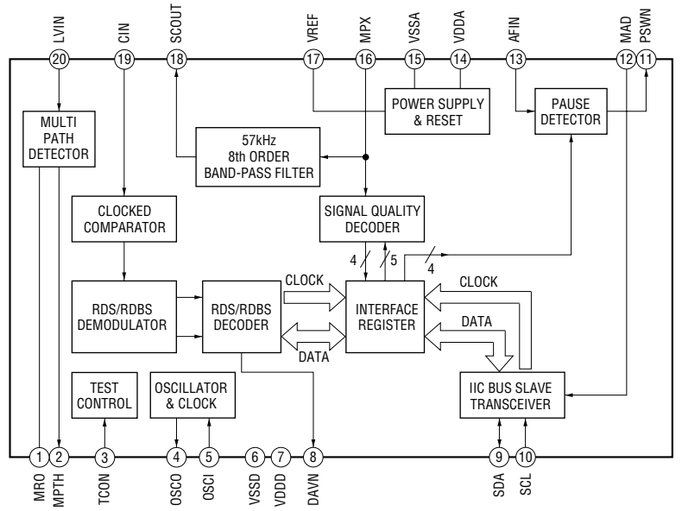
IC90 BA4558F



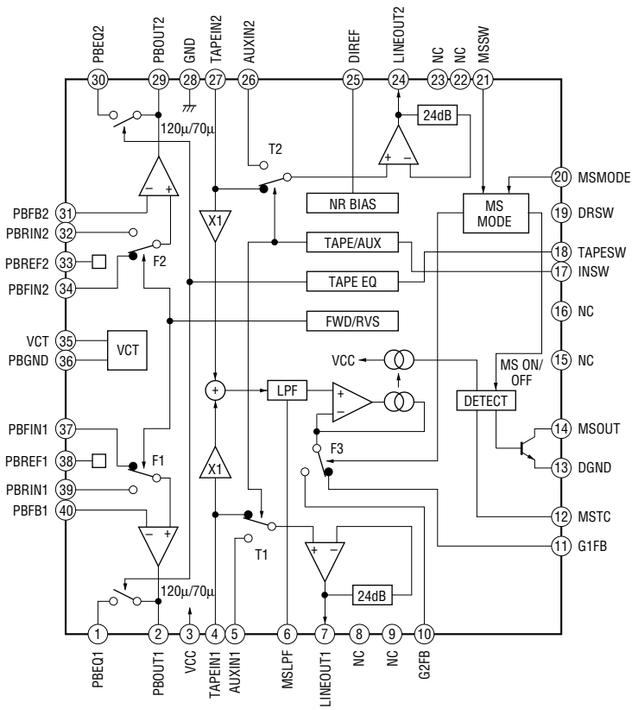
IC361 LB1638M



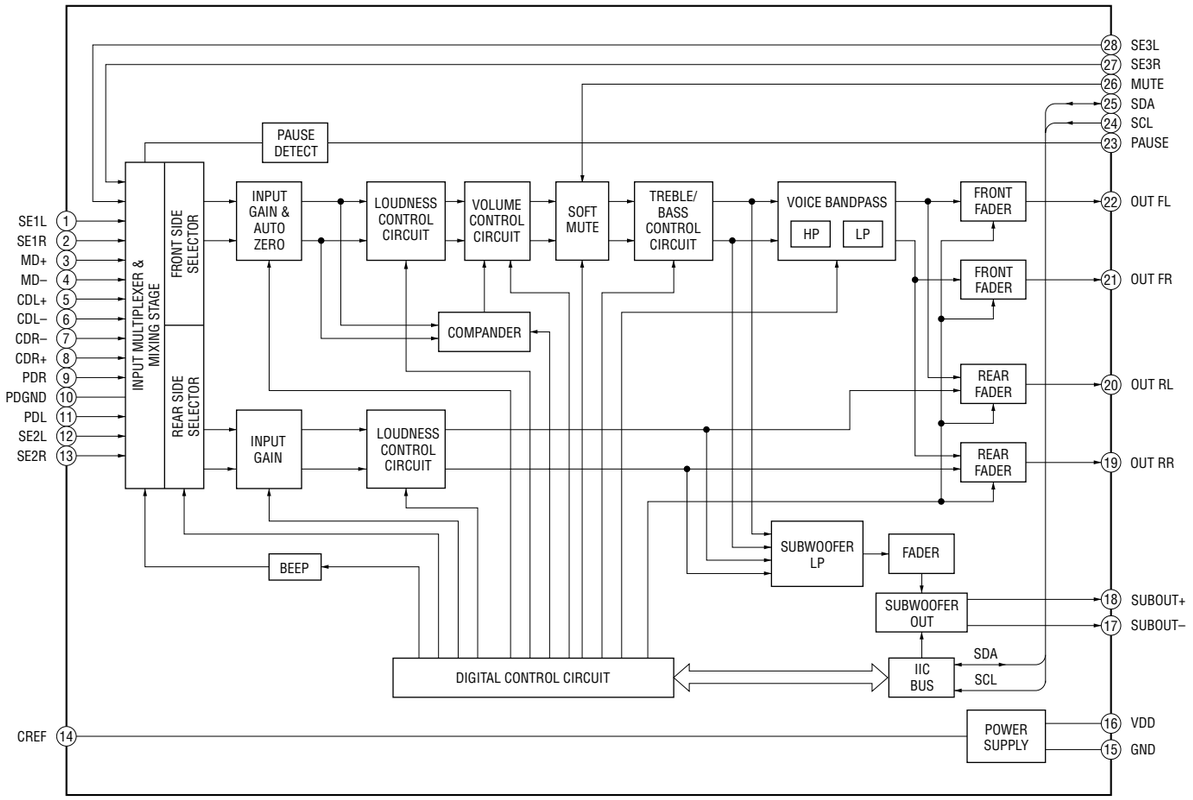
IC51 SAA6588T-118



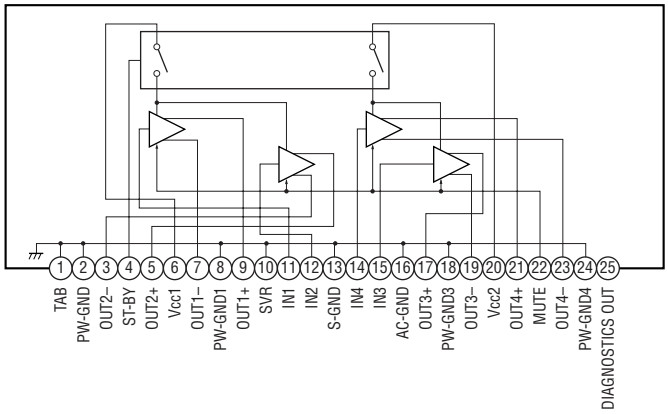
IC301 CXA2509AQ-T4



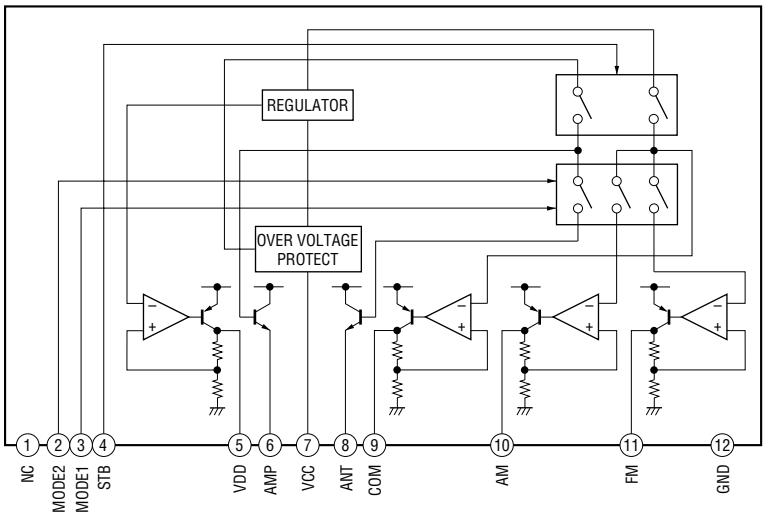
IC401 TDA7462D



IC611 TDA7385



IC671 BA3918-V3



6-6. IC PIN FUNCTION DESCRIPTION

• IC501 MASTER U-COM (MB90574PFV-G-177-BND)

Pin No.	Pin Name	I/O	Function
1	SEKOUT	O	Seek out
2	AFSEEK	O	AF seek
3	–	–	Not used
4	ST IND	I/O	Stereo display input and control MONO output
5	TUMUTE	O	Tuner mute output
6	FM ON	O	FM_ON output
7	TU ON	O	TUNER_ON output
8	VCC	–	Power supply terminal +5V
9	–	–	Not used
10	BUSON	O	Bus ON control output
11	SYSRST	O	SYSTEM RESET output
12	DOORSW	I	Door OPEN/CLOSE detection input
13	LCDSO	O	LCD serial data output
14	LCDCKO	O	LCD serial clock output
15	BEEP	O	BEEP output
16	LCDCE	O	LCD chip enable output
17	UNISI	I	BUS serial data input
18	UNISO	O	BUS serial data output
19	UNICKI	I	BUS serial clock input
20	SD IN	I	Signal detection input
21 to 23	–	–	Not used
24	SIRCS	I	Remote commander (infrared) input
25	PLLSI	I	PLL data input
26	PLLSO	O	PLL data output
27	PLLCKO	O	PLL clock output
28	PLLCE	O	PLL chip enable output
29	ILL ON	O	Illumination power control output
30 to 31	–	–	Not used
32	NOISE ON	O	NOISE DET discharge control output
33	VSS	–	Ground
34	C	–	Capacity connection terminal for power supply stabilization
35	AD ON	O	AD conversion power supply control output
36	RE IN0	I	Rotary encoder input 0
37	RE IN1	I	Rotary encoder input 1
38	DVcc	–	Power supply input for D/A
39	DVss	–	Ground for D/A
40, 41	–	–	Not used
42	AVcc	–	Power supply input for analog
43	AVRH	–	A/D converter VRef + input
44	AVRL	–	A/D converter VRef – input
45	AVss	–	Ground for analog
46	KEYIN0	I	KEY input 0
47	KEYIN1	I	KEY input 1
48	RC INO	I	Rotary commander input
49	DSTSEL	I	Destination setting
50	NOISE DET	I	NOISE DET, Noise level input for SEEK
51	D BASS	I	D_BASS KEY input
52	MTP	I	Tuner multipath input
53	VSM	I	S_meter voltage detection input

Pin No.	Pin Name	I/O	Function
54	Vcc	–	Power supply terminal +5V
55	RAMBU	I	RAM reset detection input (Non RDS)
56	PW SEL	I	Power select initial setting input
57	–	–	Not used
58	TESTIN	I	Test mode detection input
59	DOORIND	O	Not used
60	–	–	Not used
61	COLOR SW	I	Color switching, L:2 color, H:Single color
62	COLER SEL	I	Color selection, L:AMBER, H:GREEN
63	VSS	–	Ground
64	–	–	Not used
65	MUTE	O	System mute output terminal
66	COSTOM FILE	I	Custom file, L:Non, H:Yes
67	CD-TEXT	I	CD text, L:Non, H:Yes
68	AMPMUT	O	Power amplifier mute control output terminal
69	FLASH W	I	Flash memory writing mode detection input
70	I2C SIO	I/O	Electronic Vol & RDS serial data input/output
71	I2O CKO	O	Electronic Vol & RDS serial clock output
72	RC IN1	I	Rotary commander input
73	X1A	–	Low speed oscillator connection terminal (32.768 KHz)
74	X0A	–	Low speed oscillator connection terminal (32.768 KHz)
75	DAVN	I	RDS signal quality detection input
76	KEYACK	I	Keyack knowledge input
77	BU IN	I	Backup detection input terminal
78	ILLIN	I	ILLIN signal detection input terminal (VAG only)
79	TELATT	I	Telephone ATT detection input
80	NOSESW	I	Front panel detachment/attachment detection input terminal
81	ACCIN	I	ACC detection input terminal
82 to 85	–	–	Not used
86	HSTX	–	Hardware standby input terminal
87	MD2	–	To Vss
88	MD1	–	To Vcc
89	MD0	–	To Vcc
90	RSTX	I	Microprocessor reset input terminal
91	Vss	–	Ground
92	X0	–	High speed oscillator connection terminal (MHz)
93	X1	–	High speed oscillator connection terminal (MHz)
94	Vcc	–	To Vcc
95 to 99	–	–	Not used
100	9K/10K	I	9K/10K step switching detection terminal
101	–	–	Not used
102	AMTLIN	I	Auto metal detection terminal
103	AMSIN	I	Song presence/absence detection input during AMS
104	REEL	I	Reel rotation detection input
105	POS0	I	Position signal detection input 0
106	POS1	I	Position signal detection input 1
107	POS2	I	Position signal detection input 2
108	POS3	I	Position signal detection input 3
109	LM EJ	O	Loading motor control output (EJECT)
110	LM LD	O	Loading motor control output (LOAD)
111	CM ON	O	Tape capstan motor control output

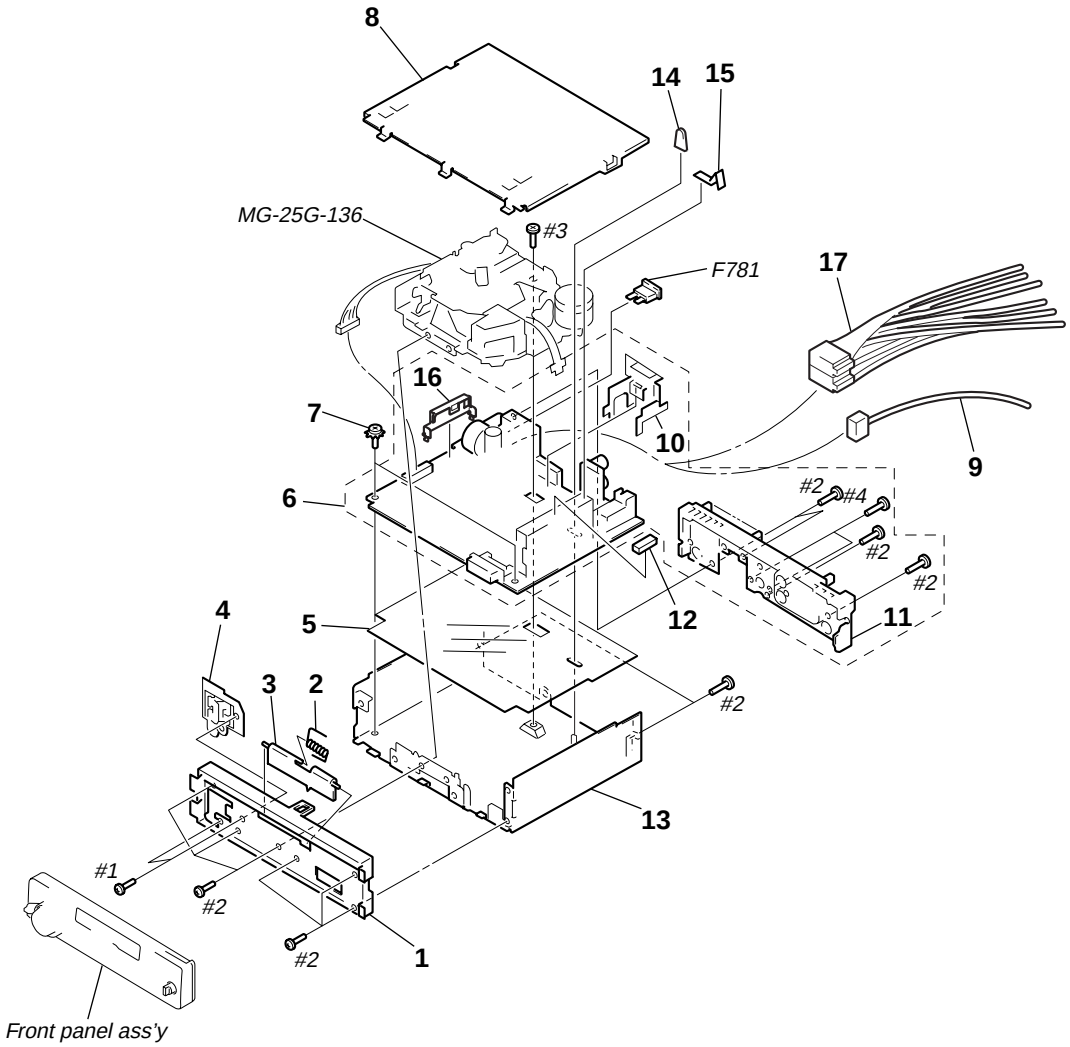
Pin No.	Pin Name	I/O	Function
112	TAPEON	O	TAPE power supply control output
113	N ROUT	O	FOR/REV control output
114	AMSON	O	AMS control output
115	MTLON	I/O	Metal control input/output
116	DOLON	I/O	DOLBY control input/output
117	TAPMUT	O	Audio signal selection control output terminal
118	AMPON	O	Power IC standby control output
119	Vss	–	Ground
120	PW ON	O	System power supply control output

SECTION 7
EXPLODED VIEWS

NOTE:
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Color Indication of Appearance Parts Example:
  KNOB, BALANCE (WHITE) . . . . (RED)
  ↑ ↑
  Parts color Cabinets color
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  G : German model
  SE : South European model

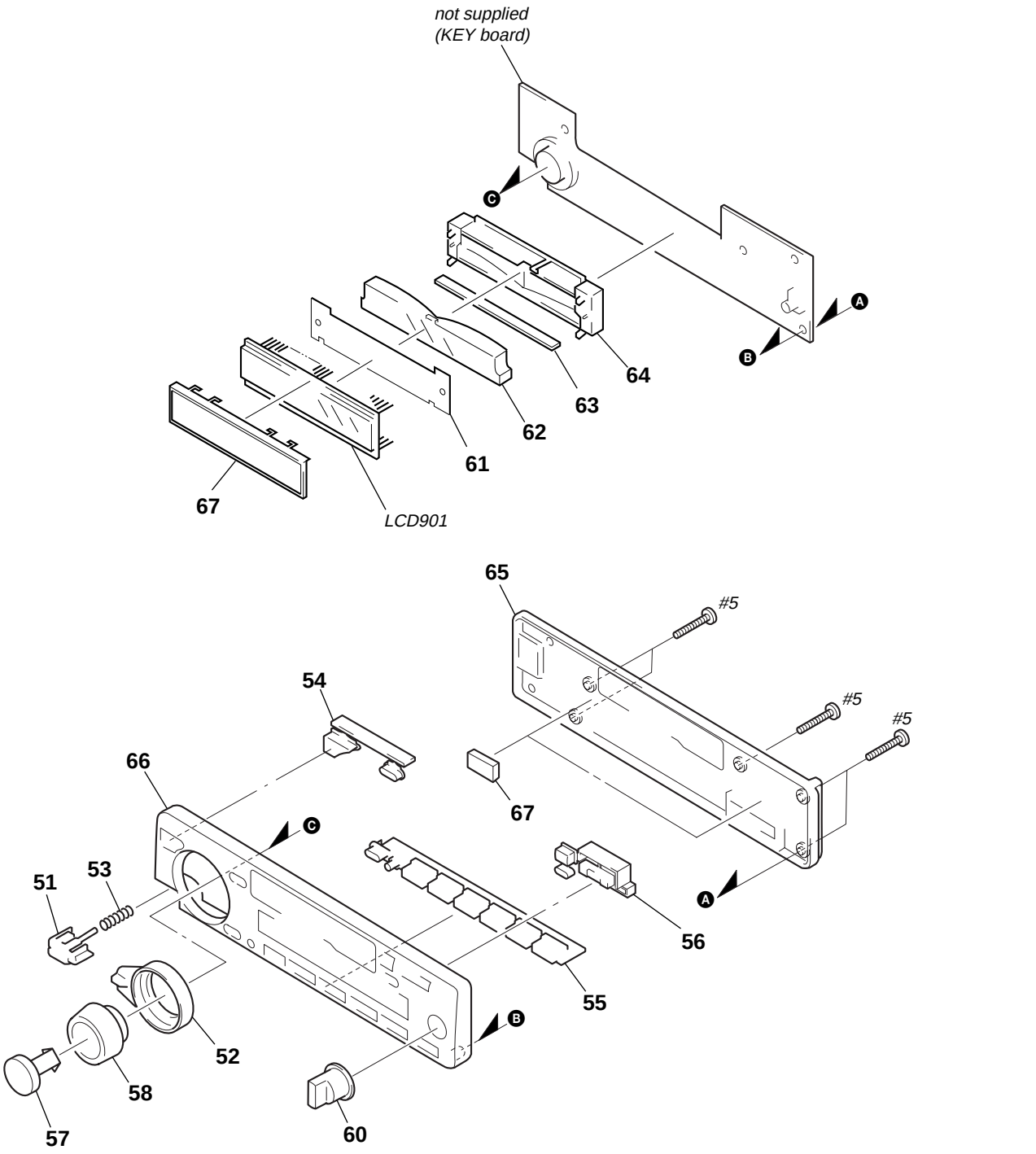
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

(1) CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	3-030-828-01	PANEL, SUB	
2	3-935-003-01	SPRING, TORSION	
3	3-027-437-04	DOOR, CASSETTE	
4	X-3367-636-1	LOCK ASSY	
* 5	3-033-846-01	INSULATED PLATE	
* 6	A-3317-341-A	MAIN BOARD, COMPLETE (XR-5890R: SE,UK,AEP)	
* 6	A-3317-342-A	MAIN BOARD, COMPLETE (XR-5890R: G)	
* 6	A-3317-355-A	MAIN BOARD, COMPLETE (XR-5880R: SE,UK,AEP)	
* 6	A-3317-356-A	MAIN BOARD, COMPLETE (XR-5880R: G)	
7	3-915-923-01	SCREW, GROUND POINT	
* 8	X-3373-269-1	COVER ASSY (ISO)	
9	1-777-989-31	CORD (WITH CONNECTOR)(ATT)(XR-5890R)	
* 10	3-018-147-01	BRACKET (IC)	
* 11	3-031-056-01	HEAT SINK	
12	3-935-014-01	CUSHION (U)	
* 13	3-009-813-41	CHASSIS	
14	3-012-859-01	CAP (25), RUBBER	
15	3-937-650-01	PLATE (C), GROUND	
16	3-031-828-01	BRACKET (REG.IC)	
17	1-782-381-11	CORD (WITH CONNECTOR)(ISO-P&S)	
F781	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE)(10A)	

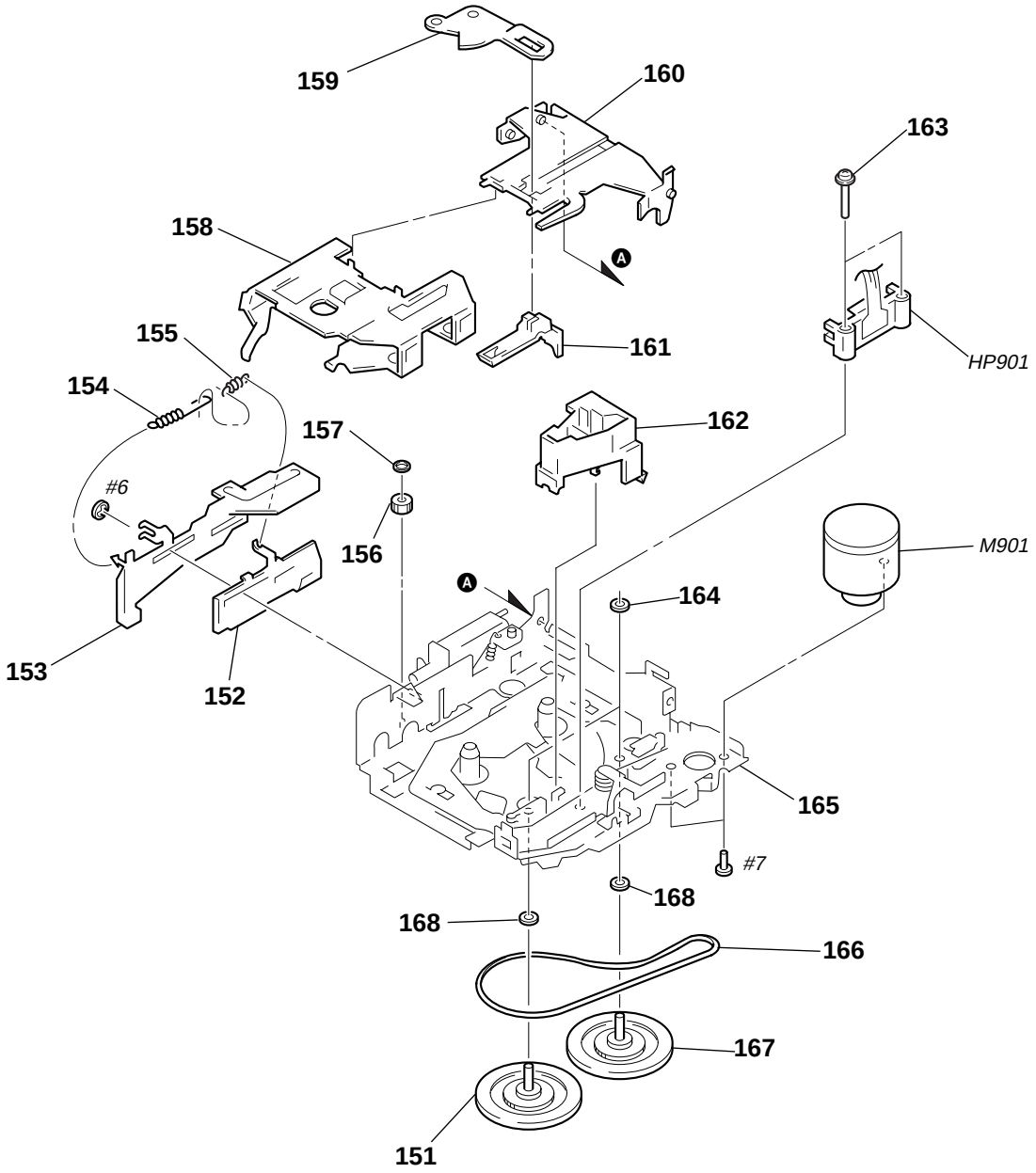
(2) FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	3-030-838-01	BUTTON (RELEASE)(XR-5890R)	
51	3-030-838-11	BUTTON (RELEASE)(XR-5880R)	
52	3-030-832-01	LEVER (S/A)(XR-5890R)	
52	3-030-832-11	LEVER (S/A)(XR-5880R)	
53	3-932-475-01	SPRING (RELEASE)	
54	3-030-834-01	BUTTON (M/S)	
55	3-030-835-01	BUTTON (1-6)	
56	3-031-027-01	BUTTON (P/P/A)	
57	3-030-831-01	BUTTON (SOURCE)	
58	3-030-830-01	KNOB (VOL)	

Ref. No.	Part No.	Description	Remark
60	3-030-837-01	BUTTON (D-BASS)(XR-5890R)	
60	3-030-837-11	BUTTON (D-BASS)(XR-5880R)	
* 61	3-030-839-01	SHEET (REFLECTOR)	
* 62	3-030-824-01	PLATE, LIGHT GUIDE	
63	1-694-508-11	CONDUCTIVE BOARD, CONNECTION	
* 64	3-030-825-01	HOLDER (LCD)	
65	3-030-827-01	PANEL, FRONT BACK	
66	X-3376-781-1	FRONT PANEL ASSY (XR-5890R)	
66	X-3376-782-1	FRONT PANEL ASSY (XR-5880R)	
* 67	3-030-497-01	PLATE (B), GROUND	
LCD901	1-803-497-11	DISPLAY PANEL, LIQUID CRYSTAL	

(3) MECHANISM DECK SECTION (MG-25G-136)



Ref. No.	Part No.	Description	Remark
151	A-3291-667-A	CLUTCH (FR) ASSY	
* 152	3-019-130-01	LEVER (LDG-A)	
153	3-019-131-01	LEVER (LDG-B)	
154	3-020-539-01	SPRING (LD-1), TENSION	
155	3-020-540-01	SPRING (LD-2), TENSION	
156	3-020-542-01	GEAR (LOADING FT)	
157	3-341-753-11	WASHER, POLYETHYLENE	
158	3-020-533-01	HOUSING	
* 159	3-020-532-01	ARM (SUCTION)	
160	3-020-534-01	HANGER	

Ref. No.	Part No.	Description	Remark
161	3-933-346-01	CATCHER	
162	3-933-344-01	GUIDE (C)	
163	3-014-798-01	SCREW (HEAD), SPECIAL	
164	3-364-151-01	WASHER	
165	X-3377-036-1	CHASSIS (S) ASSY (G)	
166	3-017-302-01	BELT (25)	
167	3-936-853-01	FLYWHEEL (F)	
168	3-701-437-21	WASHER	
HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	

SECTION 8
ELECTRICAL PARTS LIST

KEY

Note:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: µ , for example:
  uA...: µ A..., uPA...: µ PA..., uPB...: µ PB..., uPC...: µ PC..., uPD...: µ PD...
- CAPACITORS
  uF : µ F
- COILS
  uH : µ H
- Abbreviation
  G : German model
  SE : South European model

Ref. No.	Part No.	Description			Remark
		KEY MOUNTED BOARD, COMPLETE			
		**********			
	1-694-508-11	CONDUCTIVE BOARD, CONNECTION			
*	3-030-824-01	PLATE, LIGHT GUIDE			
*	3-030-825-01	HOLDER (LCD)			
*	3-030-839-01	SHEET (REFLECTOR)			
*	3-030-840-01	PLATE (B), GROUND			
		< CAPACITOR >			
C952	1-163-033-00	CERAMIC CHIP	0.022uF		50V
C953	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C954	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C955	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C956	1-164-222-11	CERAMIC CHIP	0.22uF		25V
		< CONNECTOR >			
CNP901	1-785-773-11	PIN, CONNECTOR 15P			
		< DIODE >			
D902	8-719-105-99	DIODE RD6.2M-B1			
D903	8-719-105-99	DIODE RD6.2M-B1			
D904	8-719-105-99	DIODE RD6.2M-B1			
D951	8-719-976-99	DIODE DTZ5.1B			
		< IC >			
IC901	8-759-366-34	IC LC75824E			
		< LIQUID CRYSTAL DISPLAY >			
LCD901	1-803-497-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< SWITCH >			
LSW901	1-771-610-11	SWITCH, TACTILE (WITH LED)(OFF)			
LSW902	1-762-620-21	SWITCH, KEY BOARD (WITH LED)(SOURCH)			
LSW903	1-762-620-21	SWITCH, KEY BOARD (WITH LED)(MODE ◄II►)			
LSW905	1-762-620-21	SWITCH, KEY BOARD (WITH LED)((SOUND)			
LSW906	1-771-610-11	SWITCH, TACTILE (WITH LED)(SHIFT)			
LSW921	1-762-620-21	SWITCH, KEY BOARD (WITH LED)(⏏)			
LSW922	1-762-620-21	SWITCH, KEY BOARD (WITH LED)(PROST –)			
LSW923	1-762-620-21	SWITCH, KEY BOARD (WITH LED)(PROST +)			
LSW925	1-762-620-21	SWITCH, KEY BOARD (WITH LED)(AF/TA)			
LSW926	1-762-620-21	SWITCH, KEY BOARD (WITH LED)(PTY)			
LSW927	1-762-620-21	SWITCH, KEY BOARD (WITH LED)(DSPL)			
LSW928	1-771-610-11	SWITCH, TACTILE (WITH LED)(6)			
LSW929	1-771-610-11	SWITCH, TACTILE (WITH LED)(5/ENTER)			
LSW930	1-771-610-11	SWITCH, TACTILE (WITH LED)(4/→)			
LSW931	1-771-610-11	SWITCH, TACTILE (WITH LED)(3/PLAY MODE)			
LSW932	1-771-610-11	SWITCH, TACTILE (WITH LED)(2/SET UP)			
LSW933	1-771-610-11	SWITCH, TACTILE (WITH LED)(1/←)			
		< PILOT LAMP >			
PL901	1-517-633-21	LAMP, PILOT			
PL902	1-517-633-21	LAMP, PILOT			
		< TRANSISTOR >			
Q941	8-729-106-60	TRANSISTOR 2SB1115A			
Q942	8-729-900-53	TRANSISTOR DTC114EK			
Q943	8-729-106-60	TRANSISTOR 2SB1115A			
Q944	8-729-900-53	TRANSISTOR DTC114EK			
Q945	8-729-900-53	TRANSISTOR DTC114EK			
		< RESISTOR >			
R901	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R902	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R903	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R904	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R905	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R906	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R907	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R921	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R922	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R923	1-216-647-11	METAL CHIP	680	0.5%	1/10W
R924	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R925	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R926	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R927	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R928	1-216-663-11	METAL CHIP	3.3K	0.5%	1/10W
R929	1-216-667-11	METAL CHIP	4.7K	0.5%	1/10W
R930	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R931	1-208-806-11	RES,CHIP	10K	2%	1/10W
R932	1-208-810-11	RES,CHIP	15K	2%	1/10W
R941	1-216-073-00	METAL CHIP	10K	5%	1/10W
R942	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R943	1-216-073-00	METAL CHIP	10K	5%	1/10W
R944	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R951	1-216-041-00	METAL CHIP	470	5%	1/10W
R953	1-216-121-00	RES,CHIP	1M	5%	1/10W
R954	1-216-049-11	RES,CHIP	1K	5%	1/10W
R955	1-216-049-11	RES,CHIP	1K	5%	1/10W
R956	1-216-049-11	RES,CHIP	1K	5%	1/10W
R957	1-216-109-00	METAL CHIP	330K	5%	1/10W
R961	1-216-029-00	METAL CHIP	150	5%	1/10W
R962	1-216-021-00	METAL CHIP	68	5%	1/10W

Ref. No.	Part No.	Description			Remark
R963	1-216-037-00	METAL CHIP	330	5%	1/10W
R964	1-216-033-00	METAL CHIP	220	5%	1/10W
R965	1-216-037-00	METAL CHIP	330	5%	1/10W
R966	1-216-033-00	METAL CHIP	220	5%	1/10W
R967	1-216-037-00	METAL CHIP	330	5%	1/10W
R968	1-216-033-00	METAL CHIP	220	5%	1/10W
R969	1-216-037-00	METAL CHIP	330	5%	1/10W
R970	1-216-033-00	METAL CHIP	220	5%	1/10W
R975	1-216-037-00	METAL CHIP	330	5%	1/10W
R976	1-216-029-00	METAL CHIP	150	5%	1/10W
R977	1-216-037-00	METAL CHIP	330	5%	1/10W
R981	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R982	1-216-663-11	METAL CHIP	3.3K	0.5%	1/10W
R983	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R984	1-216-081-00	METAL CHIP	22K	5%	1/10W
R990	1-216-295-00	SHORT	0		
R991	1-216-295-00	SHORT	0		
		< ROTARY ENCODER >			
RE901	1-475-014-11	ENCODER, ROTARY			
		< SWITCH >			
S901	1-771-290-11	SWITCH, SLIDE (SEEK/AMS/MANU +–)			
S981	1-762-937-11	SWITCH, ROTARY (D-BASS SW)			
**********					
*	A-3317-341-A	MAIN MOUNTED BOARD, COMPLETE			
		**********			
		(XR-5890R: SE,UK,AEP)			
*	A-3317-342-A	MAIN MOUNTED BOARD, COMPLETE			
		**********			
		(XR-5890R: G)			
*	A-3317-355-A	MAIN MOUNTED BOARD, COMPLETE			
		**********			
		(XR-5880R: SE,UK,AEP)			
*	A-3317-356-A	MAIN MOUNTED BOARD, COMPLETE			
		**********			
		(XR-5880R: G)			
*	3-019-147-01	BRACKET (IC) (M)			
*	3-031-056-01	HEAT SINK			
*	3-031-828-01	BRACKET (REG.IC)			
	7-685-793-09	SCREW +PTT 2.6X8 (S)			
	7-685-795-09	SCREW +PTT 2.6X12 (S)			
		< CAPACITOR >			
C1	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C2	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3	1-124-233-11	ELECT	10uF	20%	16V
C4	1-124-233-11	ELECT	10uF	20%	16V
C5	1-124-233-11	ELECT	10uF	20%	16V
C6	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C7	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C8	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C10	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C11	1-163-020-00	CERAMIC CHIP	0.0082uF	10%	50V
C12	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V

Ref. No.	Part No.	Description			Remark
C13	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C14	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C15	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C16	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C17	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C18	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C19	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C20	1-124-234-00	ELECT	22uF	20%	16V
C21	1-163-091-00	CERAMIC CHIP	8PF		50V
C22	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C23	1-163-087-00	CERAMIC CHIP	4PF		50V
C24	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C25	1-124-233-11	ELECT	10uF	20%	16V
C26	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C27	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C51	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C52	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C53	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C54	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C55	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C56	1-124-234-00	ELECT	22uF	20%	16V
C57	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C58	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C59	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C60	1-163-135-00	CERAMIC CHIP	560PF	5%	50V
C61	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C62	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C63	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C64	1-124-233-11	ELECT	10uF	20%	16V
C71	1-124-234-00	ELECT	22uF	20%	16V
C73	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C81	1-124-589-11	ELECT	47uF	20%	16V
C82	1-124-234-00	ELECT	22uF	20%	16V
C83	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C90	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C91	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C92	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C93	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C94	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C95	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C96	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C97	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C98	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C101	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C102	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C105	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C107	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C108	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C110	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C111	1-126-163-11	ELECT	4.7uF	20%	50V
C121	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C122	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C123	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C135	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C151	1-163-020-00	CERAMIC CHIP	0.0082uF	10%	50V
C152	1-124-257-00	ELECT	2.2uF	20%	50V
C153	1-124-257-00	ELECT	2.2uF	20%	50V
C171	1-126-163-11	ELECT	4.7uF	20%	50V

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Ref. No.	Part No.	Description			Remark
C173	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C174	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C181	1-126-163-11	ELECT	4.7uF	20%	50V
C183	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C184	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C201	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C202	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C205	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C207	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C208	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C210	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C211	1-126-163-11	ELECT	4.7uF	20%	50V
C235	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C251	1-163-020-00	CERAMIC CHIP	0.0082uF	10%	50V
C252	1-124-257-00	ELECT	2.2uF	20%	50V
C253	1-124-257-00	ELECT	2.2uF	20%	50V
C271	1-126-163-11	ELECT	4.7uF	20%	50V
C273	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C274	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C281	1-126-163-11	ELECT	4.7uF	20%	50V
C283	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C284	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C301	1-124-584-00	ELECT	100uF	20%	10V
C302	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C303	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C304	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C305	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C306	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C331	1-124-234-00	ELECT	22uF	20%	16V
C361	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C362	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C363	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C364	1-126-157-11	ELECT	10uF	20%	16V
C365	1-124-234-00	ELECT	22uF	20%	16V
C366	1-126-934-11	ELECT	220uF	20%	16V
C401	1-124-584-00	ELECT	100uF	20%	10V
C402	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C404	1-124-233-11	ELECT	10uF	20%	16V
C405	1-124-234-00	ELECT	22uF	20%	16V
C408	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C409	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C502	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C503	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C504	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C505	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C506	1-163-102-00	CERAMIC CHIP	24PF	5%	50V
C507	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C509	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C510	1-124-584-00	ELECT	100uF	20%	10V
C511	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C527	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C571	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C601	1-107-885-31	ELECT	3300uF	20%	16V
C602	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C611	1-124-233-11	ELECT	10uF	20%	16V
C612	1-124-233-11	ELECT	10uF	20%	16V
C613	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C614	1-107-909-11	ELECT	47uF	20%	16V
C616	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C617	1-136-165-00	FILM	0.1uF	5%	50V
C621	1-124-589-11	ELECT	47uF	20%	16V
C622	1-124-257-00	ELECT	2.2uF	20%	50V
C623	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C631	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C632	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C641	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C653	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C654	1-125-701-11	DOUBLE LAYER	0.047F	0	5.5V
C655	1-126-933-11	ELECT	100uF	20%	16V
C661	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C671	1-126-157-11	ELECT	10uF	20%	16V
C672	1-126-157-11	ELECT	10uF	20%	16V
C673	1-126-157-11	ELECT	10uF	20%	16V
C674	1-126-157-11	ELECT	10uF	20%	16V
C675	1-126-157-11	ELECT	10uF	20%	16V
C676	1-126-157-11	ELECT	10uF	20%	16V
C702	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
		< CONNECTOR >			
CN301	1-766-260-11	CONNECTOR, FFC/FPC (ZIF) 7P			
* CN302	1-506-995-11	PIN, CONNECTOR (PC BOARD) 13P			
CN500	1-785-772-11	PLUG, CONNECTOR 15P			
CN601	1-785-761-11	PIN, CONNECTOR (ISO)			
		< DIODE >			
D1	8-719-991-65	DIODE SB02W03C			
D61	8-719-422-12	DIODE MA8039			
D71	8-719-158-15	DIODE RD5.6S-B			
D81	8-719-977-28	DIODE DTZ10B			
D90	8-719-404-50	DIODE MA111-TX			
D91	8-719-404-50	DIODE MA111-TX			
D92	8-719-976-99	DIODE DTZ5.1B			
D93	8-719-422-12	DIODE MA8039			
D361	8-719-977-22	DIODE DTZ9.1			
D362	8-719-911-19	DIODE 1SS119			
D501	8-719-914-44	DIODE DAP202K			
D551	8-719-105-99	DIODE RD6.2M-B1			
D552	8-719-105-99	DIODE RD6.2M-B1			
D553	8-719-105-99	DIODE RD6.2M-B1			
D554	8-719-105-99	DIODE RD6.2M-B1			
D555	8-719-056-93	DIODE UDZ-TE-17-18B			
D556	8-719-105-99	DIODE RD6.2M-B1			
D557	8-719-105-99	DIODE RD6.2M-B1			
D558	8-719-105-99	DIODE RD6.2M-B1			
D559	8-719-105-99	DIODE RD6.2M-B1			
D561	8-719-105-99	DIODE RD6.2M-B1			
D562	8-719-105-99	DIODE RD6.2M-B1			
D571	8-719-404-50	DIODE MA111-TX			
D601	8-719-049-38	DIODE 1N5404TU			
D602	8-719-056-93	DIODE UDZ-TE-17-18B			
D604	8-719-105-99	DIODE RD6.2M-B1			
D605	8-719-056-93	DIODE UDZ-TE-17-18B			
D611	8-719-053-18	DIODE 1SR154-400TE-25			
D612	8-719-053-18	DIODE 1SR154-400TE-25			
D613	8-719-053-18	DIODE 1SR154-400TE-25			

Ref. No.	Part No.	Description	Remark
D614	8-719-053-18	DIODE 1SR154-400TE-25	
D615	8-719-053-18	DIODE 1SR154-400TE-25	
D616	8-719-053-18	DIODE 1SR154-400TE-25	
D617	8-719-053-18	DIODE 1SR154-400TE-25	
D618	8-719-053-18	DIODE 1SR154-400TE-25	
D621	8-719-422-12	DIODE MA8039	
D622	8-719-404-50	DIODE MA111-TX	
D623	8-719-977-22	DIODE DTZ9.1	
D624	8-719-404-50	DIODE MA111-TX	
D625	8-719-914-44	DIODE DAP202K	
D631	8-719-158-49	DIODE RD12SB2	
D651	8-719-911-19	DIODE 1SS119	
D653	8-719-404-50	DIODE MA111-TX	
D661	8-719-404-50	DIODE MA111-TX	
D662	8-719-056-85	DIODE UDZ-TE-17-8.2B	
D672	8-719-970-02	DIODE 1SR139-400	
D673	8-719-970-02	DIODE 1SR139-400	
D701	8-719-056-93	DIODE UDZ-TE-17-18B	
D707	8-719-056-84	DIODE UDZ-TE-17-7.5B	
		< FERRITE BEAD >	
FB501	1-414-233-22	INDUCTOR CHIP 0UH	
		< IC >	
IC1	8-759-573-79	IC TB2118F(EL)	
IC51	8-759-492-59	IC SAA6588T-118	
IC90	8-759-909-71	IC BA4558F	
IC301	8-752-079-78	IC CXA2509AQ-T4	
IC361	8-759-823-87	IC LB1638M	
IC401	8-759-572-10	IC TDA7462D	
IC501	8-759-579-15	IC MB90574PFV-G-177-BND	
IC611	8-759-572-08	IC TDA7385	
IC652	8-759-574-61	IC XC61AN4302MR	
IC671	8-759-347-50	IC BA3918-V3	
		< JACK >	
J1	1-764-808-21	JACK (ANT)	
J501	1-566-822-41	JACK	
		< JUMPER RESISTOR >	
JC1	1-216-295-00	SHORT 0	
JC301	1-216-295-00	SHORT 0	
JC503	1-216-295-00	SHORT 0	
		< COIL >	
L51	1-410-509-11	INDUCTOR 10uH	
L601	1-411-669-21	INDUCTOR 0uH	
		< TRANSISTOR >	
Q51	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q61	8-729-921-25	TRANSISTOR FMC2	
Q71	8-729-015-11	TRANSISTOR 2SD1802FAST-TL	
Q81	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q82	8-729-921-25	TRANSISTOR FMC2	
Q90	8-729-900-53	TRANSISTOR DTC114EK	
Q121	8-729-920-21	TRANSISTOR DTC314TKH04	
Q151	8-729-920-21	TRANSISTOR DTC314TKH04	
Q171	8-729-920-21	TRANSISTOR DTC314TKH04	
Q181	8-729-920-21	TRANSISTOR DTC314TKH04	
Q251	8-729-920-21	TRANSISTOR DTC314TKH04	
Q271	8-729-920-21	TRANSISTOR DTC314TKH04	
Q281	8-729-920-21	TRANSISTOR DTC314TKH04	
Q361	8-729-015-11	TRANSISTOR 2SD1802FAST-TL	
Q362	8-729-921-25	TRANSISTOR FMC2	
Q364	8-729-106-60	TRANSISTOR 2SB1115A	
Q365	8-729-900-53	TRANSISTOR DTC114EK	
Q571	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q621	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q622	8-729-021-94	TRANSISTOR 2SK1657-T1B	
Q631	8-729-423-99	TRANSISTOR 2SD2137-OP	
Q633	8-729-921-25	TRANSISTOR FMC2	
Q651	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q652	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q661	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q701	8-729-900-53	TRANSISTOR DTC114EK	
Q702	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q703	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		< RESISTOR >	
R1	1-216-049-11	RES,CHIP 1K 5% 1/10W	
R2	1-216-029-00	METAL CHIP 150 5% 1/10W	
R3	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R6	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R7	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R8	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R11	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R12	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R13	1-216-025-00	RES,CHIP 100 5% 1/10W	
R14	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R15	1-216-025-00	RES,CHIP 100 5% 1/10W	
R16	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R51	1-216-097-91	RES,CHIP 100K 5% 1/10W	
R52	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R53	1-216-113-00	METAL CHIP 470K 5% 1/10W	
R54	1-216-049-11	RES,CHIP 1K 5% 1/10W	
R55	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R56	1-216-041-00	METAL CHIP 470 5% 1/10W	
R57	1-216-037-00	METAL CHIP 330 5% 1/10W	
R58	1-216-037-00	METAL CHIP 330 5% 1/10W	
R59	1-216-001-00	METAL CHIP 10 5% 1/10W	
R60	1-216-009-00	RES,CHIP 22 5% 1/10W	
R61	1-216-037-00	METAL CHIP 330 5% 1/10W	
R62	1-216-045-00	METAL CHIP 680 5% 1/10W	
R71	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R81	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R90	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R91	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R92	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R93	1-216-097-00	RES,CHIP 100K 5% 1/10W	
R94	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R95	1-216-121-00	RES,CHIP 1M 5% 1/10W	
R96	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R97	1-216-049-11	RES,CHIP 1K 5% 1/10W	
R101	1-216-097-00	RES,CHIP 100K 5% 1/10W	
R102	1-216-097-00	RES,CHIP 100K 5% 1/10W	

MAIN

Ref. No.	Part No.	Description			Remark
R105	1-216-109-00	METAL CHIP	330K	5%	1/10W
R106	1-216-077-00	METAL CHIP	15K	5%	1/10W
R107	1-216-079-00	METAL CHIP	18K	5%	1/10W
R108	1-216-073-00	METAL CHIP	10K	5%	1/10W
R109	1-216-077-00	METAL CHIP	15K	5%	1/10W
R110	1-216-041-00	METAL CHIP	470	5%	1/10W
R121	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R151	1-216-077-00	METAL CHIP	15K	5%	1/10W
R152	1-216-085-00	METAL CHIP	33K	5%	1/10W
R171	1-216-033-00	METAL CHIP	220	5%	1/10W
R172	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R173	1-216-089-00	RES,CHIP	47K	5%	1/10W
R174	1-216-121-00	RES,CHIP	1M	5%	1/10W
R181	1-216-033-00	METAL CHIP	220	5%	1/10W
R182	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R183	1-216-089-00	RES,CHIP	47K	5%	1/10W
R184	1-216-121-00	RES,CHIP	1M	5%	1/10W
R201	1-216-097-00	RES,CHIP	100K	5%	1/10W
R202	1-216-097-00	RES,CHIP	100K	5%	1/10W
R205	1-216-109-00	METAL CHIP	330K	5%	1/10W
R206	1-216-077-00	METAL CHIP	15K	5%	1/10W
R207	1-216-079-00	METAL CHIP	18K	5%	1/10W
R208	1-216-073-00	METAL CHIP	10K	5%	1/10W
R209	1-216-077-00	METAL CHIP	15K	5%	1/10W
R210	1-216-041-00	METAL CHIP	470	5%	1/10W
R251	1-216-077-00	METAL CHIP	15K	5%	1/10W
R252	1-216-085-00	METAL CHIP	33K	5%	1/10W
R271	1-216-033-00	METAL CHIP	220	5%	1/10W
R272	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R273	1-216-089-00	RES,CHIP	47K	5%	1/10W
R274	1-216-121-00	RES,CHIP	1M	5%	1/10W
R281	1-216-033-00	METAL CHIP	220	5%	1/10W
R282	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R283	1-216-089-00	RES,CHIP	47K	5%	1/10W
R284	1-216-121-00	RES,CHIP	1M	5%	1/10W
R301	1-208-812-11	RES,CHIP	18K	2%	1/10W
R302	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R303	1-216-077-00	METAL CHIP	15K	5%	1/10W
R304	1-216-105-00	RES,CHIP	220K	5%	1/10W
R305	1-216-001-00	METAL CHIP	10	5%	1/10W
R361	1-216-049-11	RES,CHIP	1K	5%	1/10W
R362	1-249-389-11	CARBON	4.7	5%	1/4W F
R363	1-249-389-11	CARBON	4.7	5%	1/4W F
R364	1-216-073-00	METAL CHIP	10K	5%	1/10W
R365	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R504	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R505	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R506	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R507	1-216-073-00	METAL CHIP	10K	5%	1/10W
R508	1-216-073-00	METAL CHIP	10K	5%	1/10W (XR5890R: G/XR5880R: G)
R510	1-216-097-00	RES,CHIP	100K	5%	1/10W
R511	1-216-097-00	RES,CHIP	100K	5%	1/10W
R512	1-216-097-00	RES,CHIP	100K	5%	1/10W
R517	1-216-097-00	RES,CHIP	100K	5%	1/10W (XR5880R)
R518	1-216-097-00	RES,CHIP	100K	5%	1/10W
R519	1-216-097-00	RES,CHIP	100K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R520	1-216-097-00	RES,CHIP	100K	5%	1/10W
R522	1-216-097-00	RES,CHIP	100K	5%	1/10W
R523	1-216-097-00	RES,CHIP	100K	5%	1/10W
R524	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R525	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R526	1-216-097-00	RES,CHIP	100K	5%	1/10W
R527	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R529	1-216-073-00	METAL CHIP	10K	5%	1/10W
R531	1-216-085-00	METAL CHIP	33K	5%	1/10W
R532	1-216-073-00	METAL CHIP	10K	5%	1/10W
R533	1-216-073-00	METAL CHIP	10K	5%	1/10W
R534	1-216-097-00	RES,CHIP	100K	5%	1/10W
R535	1-216-097-00	RES,CHIP	100K	5%	1/10W
R537	1-216-097-00	RES,CHIP	100K	5%	1/10W
R539	1-216-097-00	RES,CHIP	100K	5%	1/10W
R540	1-216-097-00	RES,CHIP	100K	5%	1/10W
R542	1-216-089-00	RES,CHIP	47K	5%	1/10W
R551	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R552	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R553	1-216-025-00	RES,CHIP	100	5%	1/10W
R554	1-216-025-00	RES,CHIP	100	5%	1/10W
R555	1-216-097-00	RES,CHIP	100K	5%	1/10W
R556	1-216-097-00	RES,CHIP	100K	5%	1/10W
R558	1-216-025-00	RES,CHIP	100	5%	1/10W
R559	1-216-025-00	RES,CHIP	100	5%	1/10W
R560	1-216-025-00	RES,CHIP	100	5%	1/10W
R561	1-216-025-00	RES,CHIP	100	5%	1/10W
R611	1-216-049-00	RES,CHIP	1K	5%	1/10W
R612	1-216-049-11	RES,CHIP	1K	5%	1/10W
R621	1-216-017-00	RES,CHIP	47	5%	1/10W
R622	1-216-295-00	SHORT	0		
R623	1-216-073-00	METAL CHIP	10K	5%	1/10W
R624	1-216-049-11	RES,CHIP	1K	5%	1/10W
R631	1-249-383-11	CARBON	1.5	5%	1/6W F
R632	1-249-383-11	CARBON	1.5	5%	1/6W F
R633	1-249-383-11	CARBON	1.5	5%	1/6W F
R634	1-249-383-11	CARBON	1.5	5%	1/6W F
R636	1-216-037-00	METAL CHIP	330	5%	1/10W
R641	1-216-097-00	RES,CHIP	100K	5%	1/10W
R642	1-216-113-00	METAL CHIP	470K	5%	1/10W
R651	1-216-113-00	METAL CHIP	470K	5%	1/10W
R652	1-216-097-00	RES,CHIP	100K	5%	1/10W
R653	1-208-806-11	RES,CHIP	10K	0.50%	1/10W
R654	1-216-073-00	METAL CHIP	10K	5%	1/10W
R655	1-216-025-00	RES,CHIP	100	5%	1/10W
R656	1-216-025-00	RES,CHIP	100	5%	1/10W
R661	1-249-421-11	CARBON	2.2K	5%	1/4W F
R662	1-216-081-00	METAL CHIP	22K	5%	1/10W
R663	1-216-089-00	RES,CHIP	47K	5%	1/10W
R664	1-216-089-00	RES,CHIP	47K	5%	1/10W
R683	1-216-089-00	RES,CHIP	47K	5%	1/10W
R705	1-216-089-00	RES,CHIP	47K	5%	1/10W
R706	1-216-089-00	RES,CHIP	47K	5%	1/10W
R708	1-216-097-00	RES,CHIP	100K	5%	1/10W
R712	1-216-089-00	RES,CHIP	47K	5%	1/10W

Ref. No.	Part No.	Description	Remark
		< COMPOSITION CIRCUIT BLOCK >	
RB601	1-233-413-11	RES, CHIP NETWORK 2.2K (3216)	
RB602	1-233-810-21	RES, NETWORK 100K (3216)	
RB701	1-233-810-21	RES, NETWORK 100K (3216)	
		< VARIABLE RESISTOR >	
RV1	1-223-836-11	RES, ADJ, CARBON 220.0K	
		< SWITCH >	
S501	1-571-478-11	SWITCH, SLIDE (P.SEL/ON,OFF)	
S503	1-692-431-21	SWITCH, TACTILE (RESET SW)	
		< TUNER >	
TU1	1-693-440-21	TUNER UNIT	
		< VIBRATOR >	
X1	1-781-246-11	VIBRATOR, CRYSTAL (10.25 MHz)	
X51	1-579-242-41	VIBRATOR, CRYSTAL (4.332 MHz)	
X501	1-767-833-21	VIBRATOR, CERAMIC (3.68 MHz)	
X502	1-567-098-41	VIBRATOR, CRYSTAL (32.768 KHz)	

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		MISCELLANEOUS	
		**********	
9	1-777-989-31	CORD (WITH CONNECTOR)(ATT)	
17	1-782-381-11	CORD (WITH CONNECTOR)(ISO-P&S)	
63	1-694-508-11	CONDUCTIVE BOARD, CONNECTION	
506	1-465-459-21	ADAPTER, ANTENNA	
507	1-777-989-31	CORD (WITH CONNECTOR)(XR-5890R)	
508	1-782-381-11	CORD (WITH CONNECTOR)(ISO-P&S)	
F781	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE)(10A)	
HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)	
LCD901	1-803-497-11	DISPLAY PANEL, LIQUID CRYSTAL	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	

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ACCESSORIES & PACKING MATERIALS
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3-865-670-11 MANUAL, INSTRUCTION (ENGLISH,SPANISH,SWEDISH,PORTUGUESE)(UK)
3-865-670-21 MANUAL, INSTRUCTION (FRENCH,GERMAN,DUTCH,ITALIAN)(AEP)
3-865-670-31 MANUAL, INSTRUCTION (GERMAN,RUSSIAN)(G)
3-865-670-41 MANUAL, INSTRUCTION (ENGLISH,GREEK,CZECH,POLISH,TURKISM)(SE)
3-865-671-11 MANUAL, INSTRUCTION (ENGLISH,SPANISH,SWEDISH,PORTUGUESE)(UK)

3-865-671-21 MANUAL, INSTRUCTION (FRENCH,DUTCH,ITALIAN,RUSSIAN,GERMAN)(AEP,G)
3-865-671-31 MANUAL, INSTRUCTION (ENGLISH,CZECH,POLISH,TURKISH,GREEK)(SE)
X-3373-412-1 CASE (PANEL) ASSY

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Ref. No.	Part No.	Description	Remark
		**********	
		HARDWARE LIST	
		**********	
#1	7-621-772-10	SCREW +B 2X4	
#2	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#3	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#4	7-685-795-09	SCREW +PTT 2.6X12 (S)	
#5	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	
#6	7-624-104-04	STOP RING 2.0, TYPE -E	
#7	7-627-553-17	PRECISION SCREW +P 2X2 TYPE 3	

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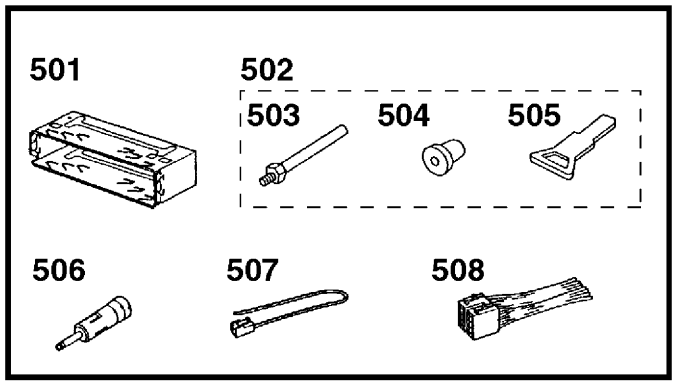
		PARTSFORINS TALLATION AND CONNECTIONS	
		**********	
501	3-916-161-31	FRAME ASSY	
502	X-3370-077-1	SCREW ASSY (AE.KEY), FITTING	
503	3-386-828-01	SCREW, FITTING	
504	3-349-410-01	BUSHING	
505	3-388-078-01	KEY	
506	1-465-459-21	ADAPTER, ANTENNA	
507	1-777-989-31	CORD (WITH CONNECTOR)(ATT)(XR-5890R)	
508	1-782-381-11	CORD (WITH CONNECTOR)(ISO-P&S)	



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