

DVD PLAYER

DVD-S559MK2

SERVICE MANUAL

DVD-S559MK2

IMPORTANT NOTICE

This manual has been provided for the use of authorized YAMAHA Retailers and their service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically YAMAHA Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components, and failure of the product to perform as specified. For these reasons, we advise all YAMAHA product owners that any service required should be performed by an authorized YAMAHA Retailer or the appointed service representative.

IMPORTANT: The presentation or sale of this manual to any individual or firm does not constitute authorization, certification or recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of YAMAHA are continually striving to improve YAMAHA products. Modifications are, therefore, inevitable and specifications are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss).

IMPORTANT: Turn the unit OFF during disassembly and part replacement. Recheck all work before you apply power to the unit.

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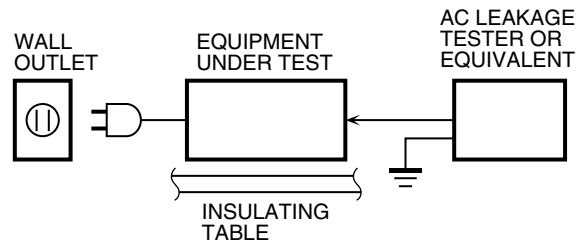


YAMAHA

YAMAHA CORPORATION
P.O.Box 1, Hamamatsu, Japan
06.06

■ TO SERVICE PERSONNEL

1. Critical Components Information
Components having special characteristics are marked \triangle and must be replaced with parts having specifications equal to those originally installed.
 2. Leakage Current Measurement (For 120V Models Only)
When service has been completed, it is imperative to verify that all exposed conductive surfaces are properly insulated from supply circuits.
- Meter impedance should be equivalent to 1500 ohms shunted by 0.15 μ F.



- Leakage current must not exceed 0.5mA.
- Be sure to test for leakage with the AC plug in both polarities.

WARNING: CHEMICAL CONTENT NOTICE!

The solder used in the production of this product contains LEAD. In addition, other electrical/electronic and/or plastic (where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and/or birth defects or other reproductive harm.

DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHATSOEVER!

Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

WARNING: Laser Safety

This product contains a laser beam component. This component may emit invisible, as well as visible radiation, which may cause eye damage. To protect your eyes and skin from laser radiation, the following precautions must be used during servicing of the unit.

- 1) When testing and/or repairing any component within the product, keep your eyes and skin more than 30 cm away from the laser pick-up unit at all times. Do not stare at the laser beam at any time.
- 2) Do not attempt to readjust, disassemble or repair the laser pick-up, unless noted elsewhere in this manual.
- 3) CAUTION : Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Laser Emitting conditions:

- 1) When the Top Cover is removed, and the STANDBY/ON SW is turned to the "ON" position, the laser component will emit a beam for several seconds to detect if a disc is present. During this time (5-10 sec.) the laser may radiate through the lens of the laser pick-up unit. Do not attempt any servicing during this period!
If no disc is detected, the laser will stop emitting the beam. When a disc is loaded, you will not be exposed to any laser emissions.
- 2) The laser power level can be adjusted with the VR on the pick-up PWB, however, this level has been set by the factory prior to shipping from the factory. Do not adjust this laser level control unless instruction is provided elsewhere in this manual. Adjustment of this control can increase the laser emission level from the device.

Laser Diode Properties

Type:	Semiconductor laser GaAlAs
Wave length:	650 nm (DVD) 780 nm (VCD/CD)
Output Power:	7 mW (DVD), 10 mW (VCD/CD)
Beam divergence:	60 degree

VARO! : AVATTAESSA JA SUOJALUKITUS
OHITETTAESSA OLET ALTTIINA
NÄKYMÄTTÖMÄLLE LASER-
SÄTEILYLLE. ÄLÄ KATSO
SÄTEESEEN.

WARNING! : OSYNLIG LASERSTRÅLNING NÄR
DENNA DEL ÄR ÖPPNAD OCH
SPÄRREN ÄR URKOPPLAD.
BETRAKTA EJ STRÅLEN.

WARNING**CAUTION**

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

L'emploi de commandes, de réglages ou un choix de procédures différents des spécifications de cette brochure peut entraîner une exposition à d'éventuelles radiations pouvant être dangereuses.

ACHTUNG

Die Verwendung von Bedienungselementen oder Einstellungen oder die Durchführung von Bedienungsvorgängen, die nicht in dieser Anleitung aufgeführt sind, kann zu einem Kontakt mit gefährlichen Laserstrahlen führen.

OBSERVERA

Användning av kontroller och justeringar eller genomförande av procedurer andra än de som specificeras i denna bok kan resultera i att du utsätter dig för farlig strålning.

ATTENZIONE

Uso di controlli o regolazioni o procedure non specificamente descritte può causare l'esposizione a radiazioni di livello pericoloso.

PRECAUCIÓN

El uso de los controles o los procedimientos de ajuste o utilización diferentes de los especificados en este manual pueden causar una exposición peligrosa a la radiación.

VOORZICHTIG

Gebruik van bedieningsorganen of instellingen, of uitvoeren van handelingen anders dan staan beschreven in deze handleiding kunnen leiden tot blootstelling aan gevaarlijke stralen.

ПРЕДУПРЕЖДЕНИЕ

Использование органов управления или настроек или выполнение процедур, отличных от описанных в данном руководстве, могут привести к опасному облучению.

OSTRZEŻENIE

Używanie regulatorów i nastawień w inny sposób lub wykonywanie procedur innych niż tutaj podane może być przyczyną niebezpiecznego promieniowania.

CAUTION

VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.

ADVARSEL

SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.

ADVARSEL

SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.

VARNING

SYNLIG OCH OSYNLIG LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPNAD. BETRakta EJ STRÅLEN.

VARO!

AVATTAESSA OLET ALTTIINA NÄKYVÄLLE JA NÄKYMÄTTÖMÄLLE LASER SÄ TEILYLLE. ÄLÄ KATSO SÄTEESEEN.

VORSICHT

SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.

DANGER

VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.

ATTENTION

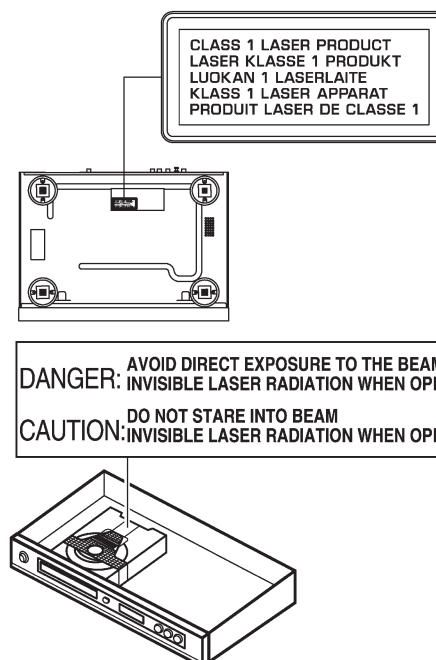
RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.

ПРЕДУПРЕЖДЕНИЕ

ПРИ ОТКРЫТИИ УСТРОЙСТВА ВЫ МОЖЕТЕ ПОДВЕРГНУТЬСЯ ВОЗДЕЙСТВИЮ ВИДИМОГО И НЕВИДИМОГО ЛАЗЕРНОГО ИЗЛУЧЕНИЯ. ИЗБЕГАЙТЕ ВОЗДЕЙСТВИЯ ЛУЧА.

OSTRZEŻENIE

WIDZIALNE I NIWIDZIALNE PROMIENIOWANIE LASEROWE PO OTWARCIU. UNIKAĆ NARAŻENIA NA WIĄZKĘ LASEROWĄ.



Warning for power supply

The primary side of the power supply carries live mains voltage when the player is connected to the mains even when the player is switched off !

This primary area is not shielded so it is possible to touch copper tracks and/or components when servicing the player. Service personnel have to take precautions to prevent touching this area or components in this area.

Note:

The screws on the DVD mechanism may never be touched, removed or re-adjusted.

Handle the DVD mechanism with care when the unit has to be exchanged!

The DVD mechanism is very sensitive for dropping or giving shocks.

■ PREVENTION OF ELECTROSTATIC DISCHARGE

The laser diode in the DVD mechanism may be damaged due to static electricity from clothes or the human body. Use caution to prevent electrostatic damage when servicing or handling the DVD-mechanism.

1. Grounding for electrostatic damage prevention

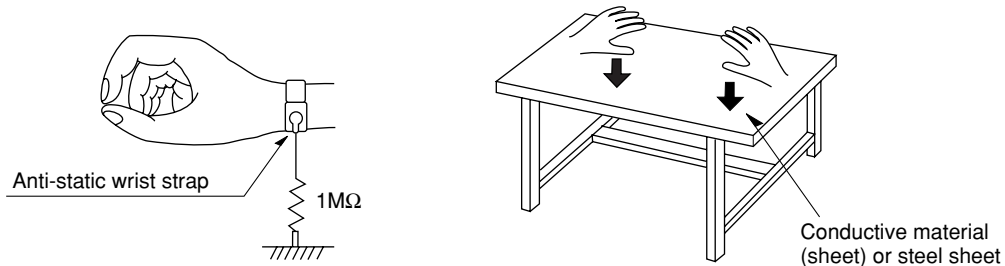
Some devices, such as the DVD player, use an optical pickup (laser diode) that will be damaged by static electricity in the working environment. Only attempt service after ensuring that all grounding procedures have been completed.

1. Worktable grounding

Put a grounded conductive material (sheet) or iron sheet on the area where the optical pickup is placed.

2. Human body grounding

Use an anti-static wrist strap to discharge the static electricity from your body.



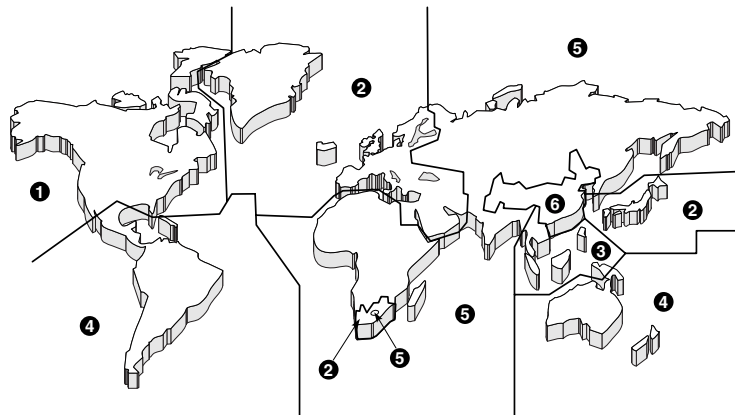
2. Handling Precautions for DVD mechanism

1. Handle the DVD mechanism gently, as it is an extremely high-precision assembly.
2. The flexible cable lines may break if an excessive force is applied to it. Use caution when handling the cable.
3. The semi-fixed resistor for laser power adjustment should not be adjusted. Do not turn the resistor.

■ LOCALE MANAGEMENT INFORMATION

Locale Management Information : This DVD player is designed and manufactured to respond to the Locale Management Information that is recorded on a DVD disc. If the Locale number described on the DVD disc does not correspond to the Locale number of this DVD player, this DVD player cannot play this disc.

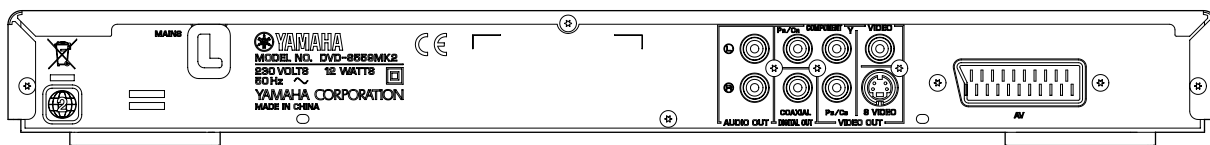
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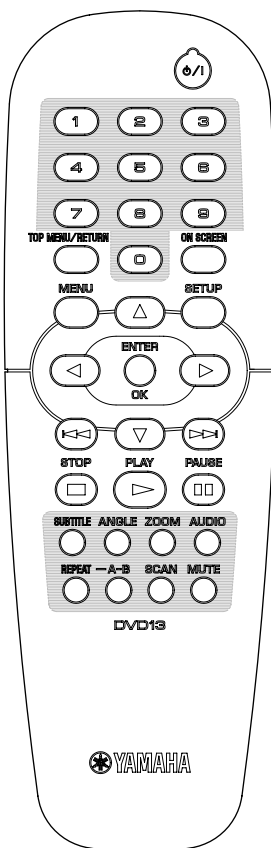
FRONT PANEL



REAR PANEL



REMOTE CONTROL PANEL



DVD-S559MK2

■ SPECIFICATIONS

PLAYBACK SYSTEM

DVD Video, VR (Video Recording) format (DVD-RW)
 Video CD & SVCD
 CD
 PICTURE CD
 CD-R, CD-RW
 DVD+R, DVD+RW, DVD+R DL
 DVD-R, DVD-RW, DVD-R DL

VIDEO PERFORMANCE

Video (CVBS) output 1 Vpp into 75 ohms
 S-Video output Y: 1 Vpp into 75 ohms
 C: 0.3 Vpp into 75 ohms
 RGB (SCART) output 0.7 Vpp into 75 ohms
 Component video output Y: 1 Vpp into 75 ohms
 Pb/Cb Pr/Cr: 0.7 Vpp into 75 ohms

AUDIO FORMAT

Digital Mpeg/Dolby Digital/DTS
 Compressed Digital
 PCM 16, 20, 24 bits
 fs, 44.1, 48, 96 kHz
 MP3 (ISO 9660) 96, 128, 256, 320 kbps
 fs, 32, 44.1, 48 kHz
 WMA 64 kbps to 192 kbps
 fs, 44.1, 48 kHz
 Analog sound Stereo

AUDIO PERFORMANCE

DA converter 24 bits
 Signal to noise (1 kHz) 105 dB
 Dynamic range (1 kHz) 97 dB
 DVD fs 96 kHz 2 Hz to 44 kHz
 fs 48 kHz 2 Hz to 22 kHz
 SVCD fs 48 kHz 2 Hz to 22 kHz
 fs 44.1 kHz 2 Hz to 20 kHz
 CD/VCD fs 44.1 kHz 2 Hz to 20 kHz
 Distortion and noise (1kHz) 0.0035 %

TV STANDARD (PAL/50 Hz) (NTSC/60 Hz)

Number of lines 625 525
 Playback Multistandard (PAL/NTSC)

CONNECTIONS

SCART Euroconnector
 Y output Cinch (green)
 Pb/Cb output Cinch (blue)
 Pr/Cr output Cinch (red)
 S-Video output Mini DIN, 4 pins
 Video output Cinch (yellow)
 Audio output (L+R) Cinch (red/white)
 Digital output 1 coaxial
 IEC60958 for CDDA/LPCM
 IEC61937 for MPEG 1/2, Dolby
 Digital and DTS

GENERAL

Dimensions (W x H x D) 435 x 51 x 318 mm
 (17-1/8" x 2" x 12-1/2")
 Weight Approx. 2.6 Kg (5 lbs. 12 oz)
 Finish Black color
 Titanium color
 Silver color
 Power supply AC 230 V, 50 Hz
 Power consumption Approx. 12 W
 Standby power consumption < 1 W

ACCESSORIES

Remote control x 1
 Battery x 2
 Audio pin cable (1.5 m) x 1
 Video pin cable (1.5 m) x 1

* *Specifications are subject to change without prior notice.*

G European model



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"DTS" and "DTS Digital Out" are trademarks of Digital Theater Systems, Inc.

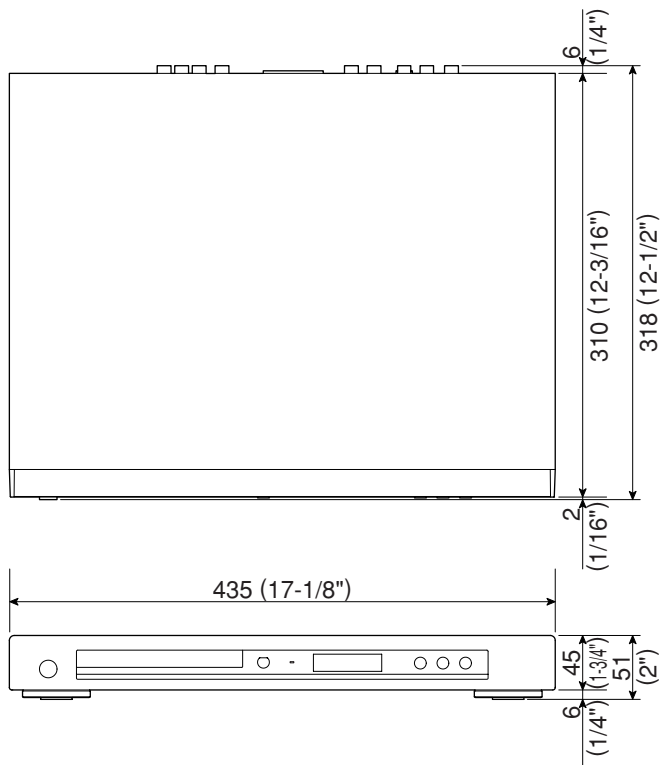


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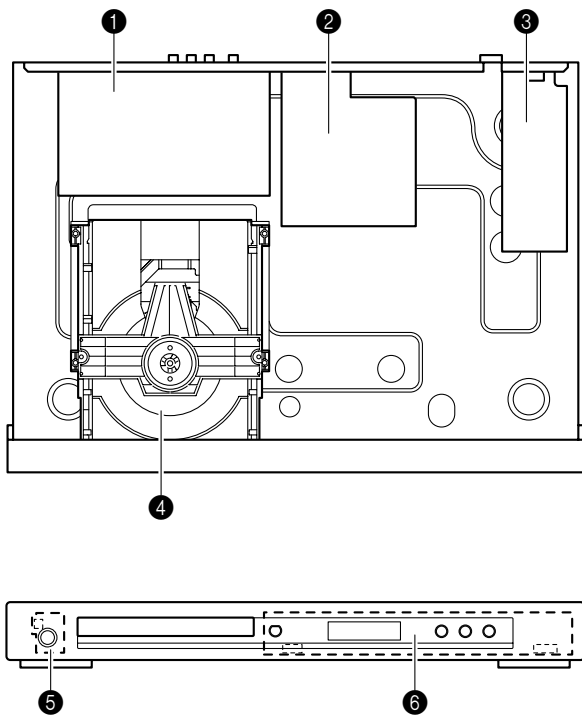
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• DIMENSIONS



Unit: mm (inch)

■ INTERNAL VIEW



- ① AV P.C.B.
- ② MONO P.C.B.
- ③ Power Supply Unit
- ④ DVD Mechanism

- ⑤ FRONT (2) P.C.B.
- ⑥ FRONT (1) P.C.B.

REPAIR NOTES

Repair Tips

None of the components of the following unit can be supplied separately.
Each unit must be replaced as a whole in case of a failure.

- DVD Mechanism
- MONO P.C.B.
- FRONT P.C.B.
- AV P.C.B.
- Power Supply Unit

TRADE MODE

This unit provides TRADE mode which prevents the tray from opening even when the "OPEN/CLOSE" key is pressed.

Activating TRADE mode

The power to the main unit should be turned on before activating the TRADE mode.

1. Press the "OPEN/CLOSE" key to open the tray. (Fig. 1)
2. Press the "2", "5" and "9" keys on the remote control in that order. (Fig. 2)
3. "TRA ON" is displayed and TRADE mode is activated. (Fig. 3)

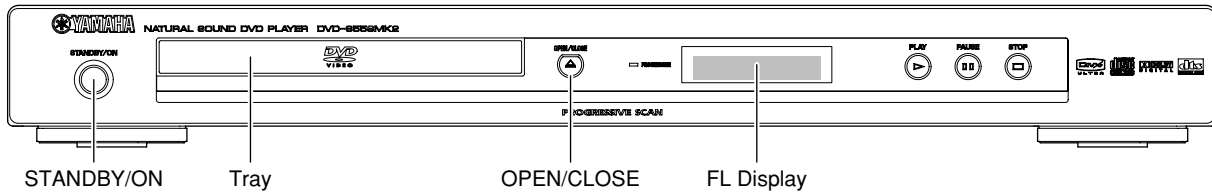


Fig. 1

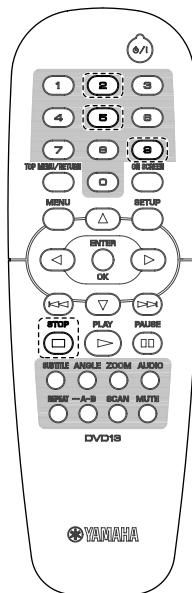
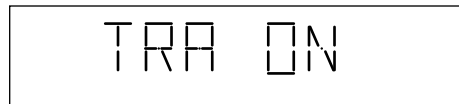


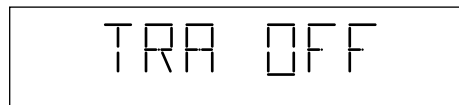
Fig. 2

TRADE mode display



Enter

Fig. 3



Cancel

Fig. 4

- * After activating TRADE mode, it is not possible to operate keys of the main unit as usual except the following key.
STANDBY/ON (Turn on the power only)
But operation with the remote control is available as usual.

Canceling TRADE mode

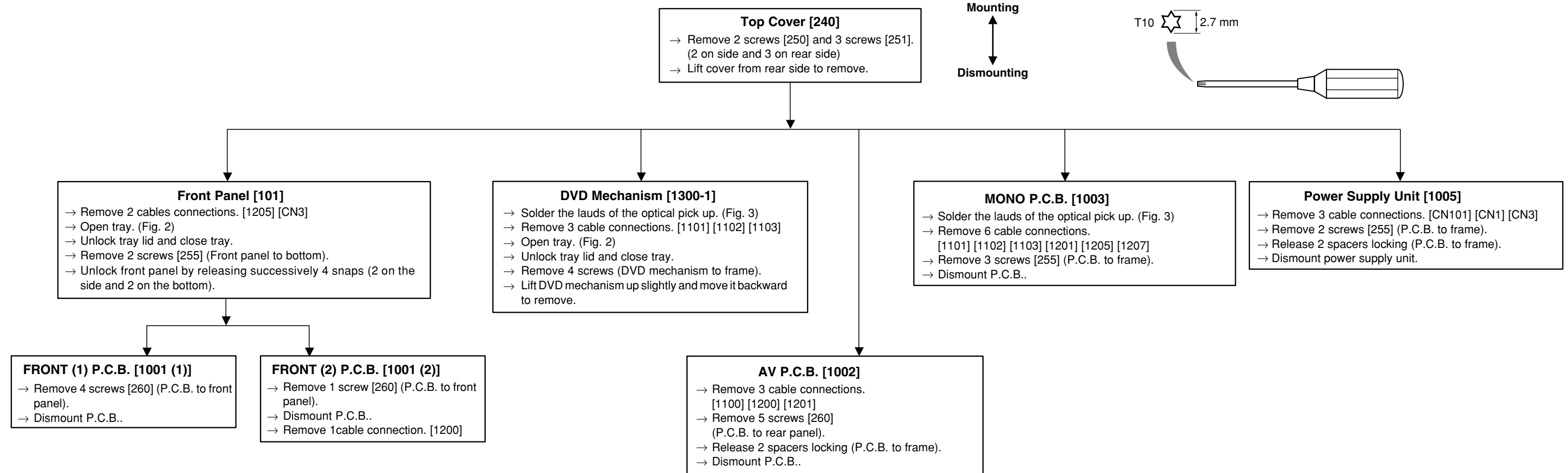
The power to the main unit should be turned on before canceling TRADE mode.

1. Press and hold the "STOP" key on the remote control. (Fig. 2)
The tray opens after about 2 second.
2. Press the "2", "5" and "9" keys on the remote control in that order. (Fig. 2)
3. "TRA OFF" is displayed and TRADE mode is cancelled. (Fig. 4)

DISASSEMBLY PROCEDURES

See REPLACEMENT PARTS LIST for item numbers.

When disassembling, use the special screw driver with tip shape in figure.



● Cable connections

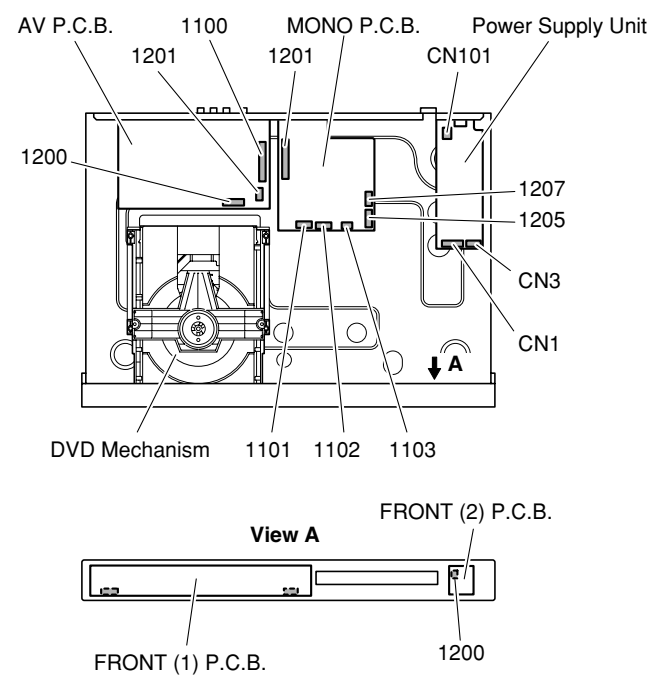


Fig. 1

● How to manually eject the tray

- Turn the player bottom up.
- Move the slider in the direction indicated with a screw driver until the tray is ejected.
- Gently pull the tray out.

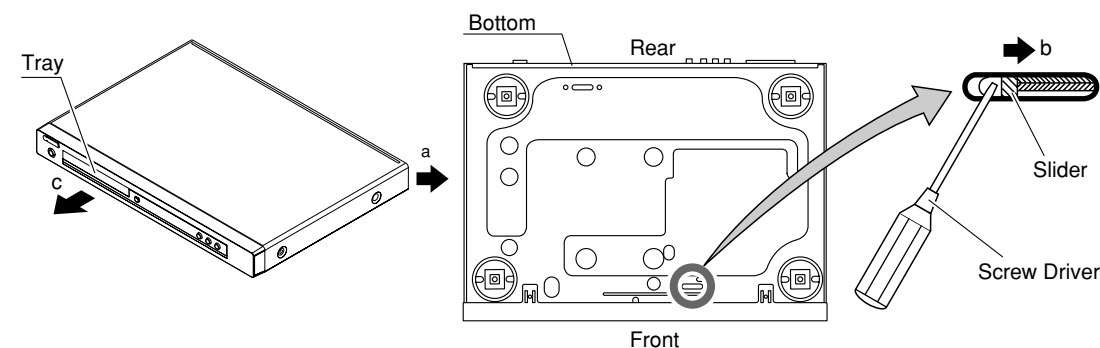


Fig. 2

● Preventive measure for laser diode from electrostatic breakdown

When replacing the MONO P.C.B. or DVD mechanism, solder between lands of the optical pick up P.C.B. to protect the laser diode against electrostatic breakdown.

Notes

- Use an anti-static soldering iron to short-circuit and unshort-circuit laser diode.
- After you have finished repairing, remove the solder from the short-circuit location.

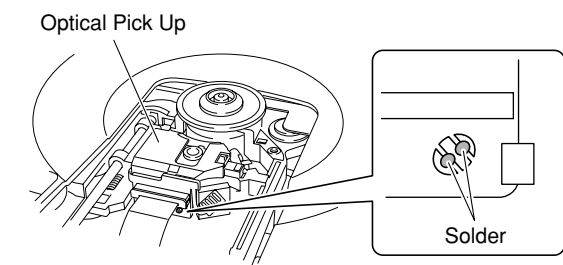


Fig. 3

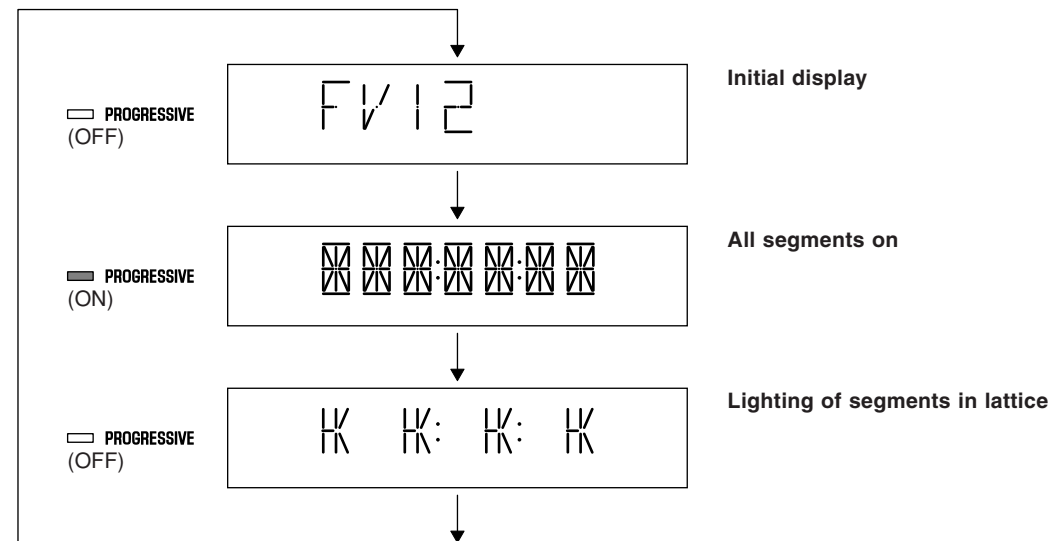
■ TEST MODE

• Starting Test Mode

- Connect the power cable to the AC power outlet.
- Press the "STANDBY/ON" key while simultaneously pressing "PAUSE" and "STOP" keys of the main unit.
At this time, keep pressing "PAUSE" and "STOP" keys for 8 seconds or longer.
- The "FV xx" (firmware version) is displayed.

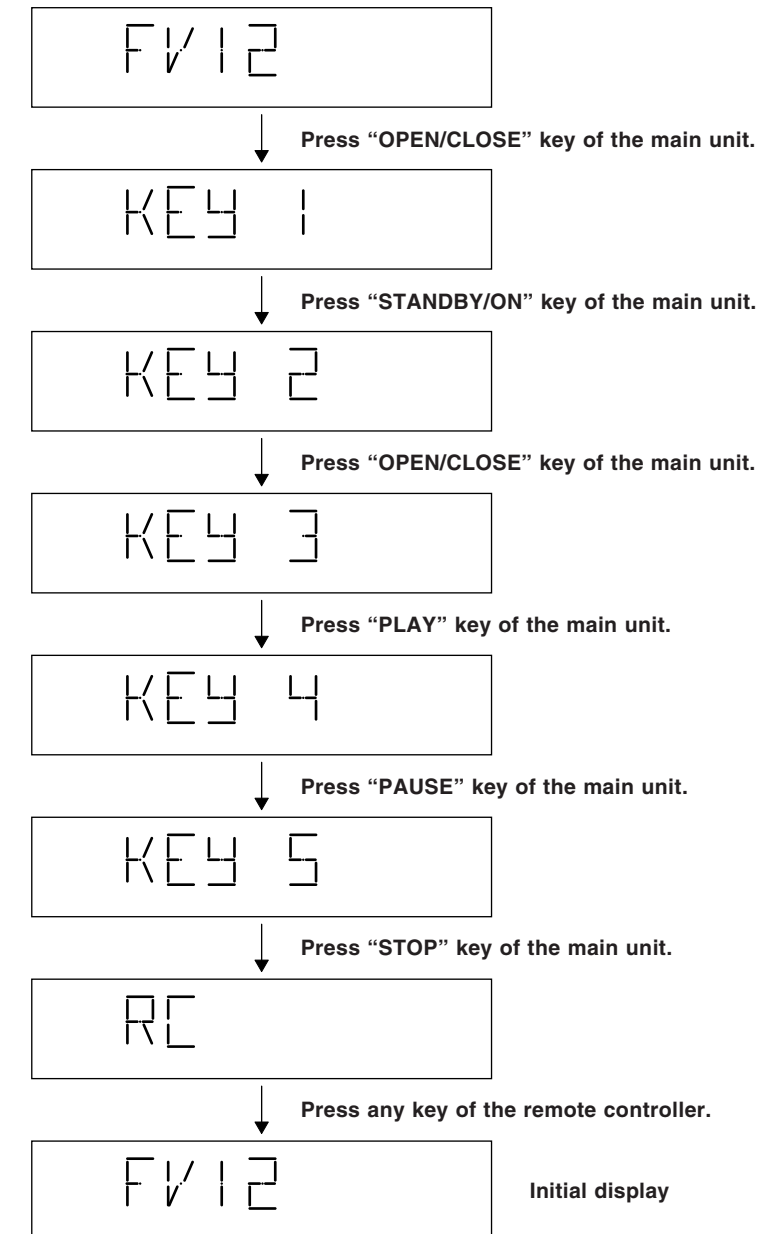
• Display Test

The display condition varies as shown below according to the "PLAY" key of the main unit.



• Panel Key Test

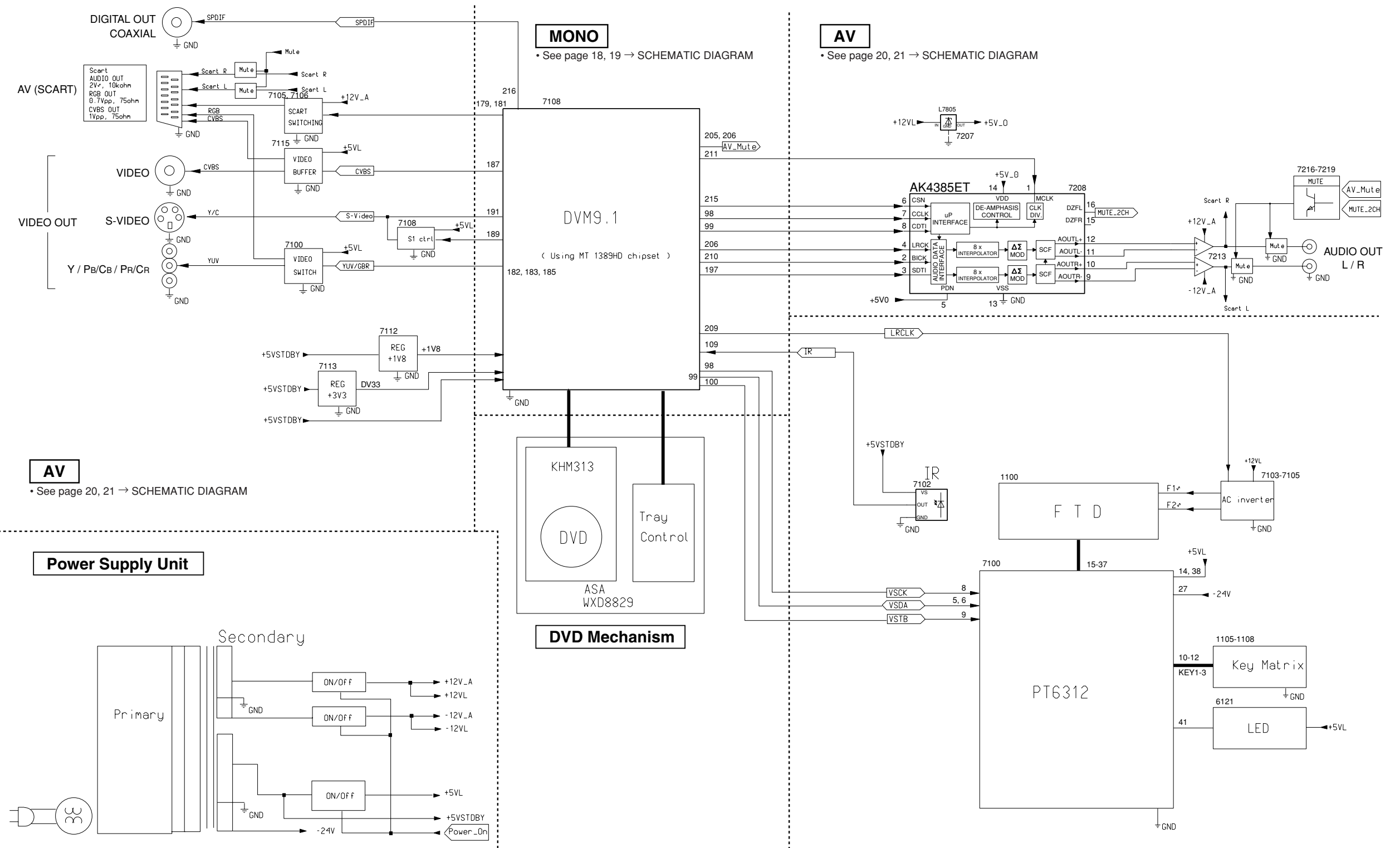
The display changes as shown below as the specified key is pressed.



• Canceling Test Mode

Disconnect the power cable from the AC power outlet.

BLOCK DIAGRAM



MONO
 • See page 18, 19 → SCHEMATIC DIAGRAM

AV
 • See page 20, 21 → SCHEMATIC DIAGRAM

AV
 • See page 20, 21 → SCHEMATIC DIAGRAM

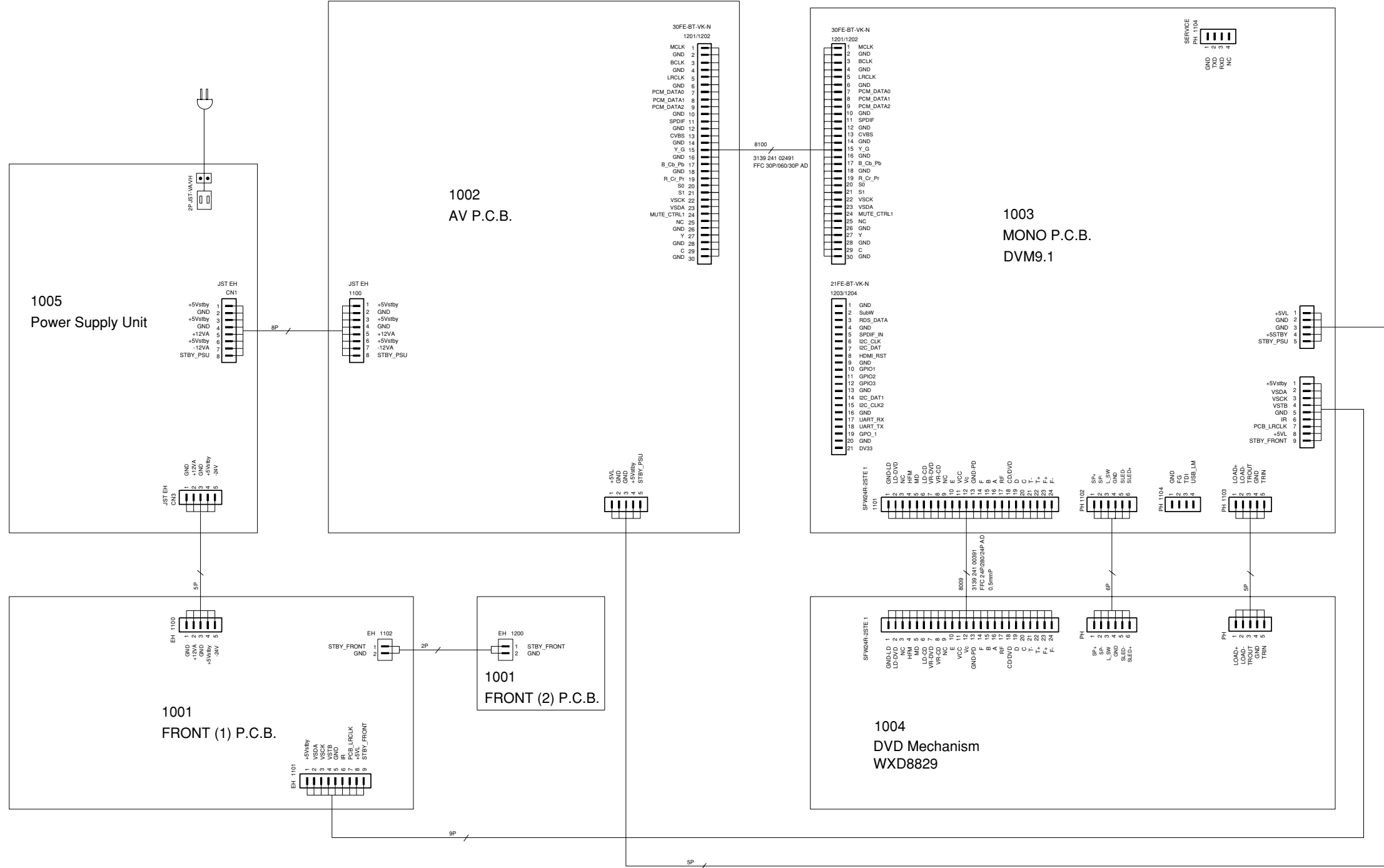
Power Supply Unit

DVD Mechanism

FRONT
 • See page 22 → SCHEMATIC DIAGRAM

1
2
3
4
5
6

WIRING DIAGRAM



■ PRINTED CIRCUIT BOARDS

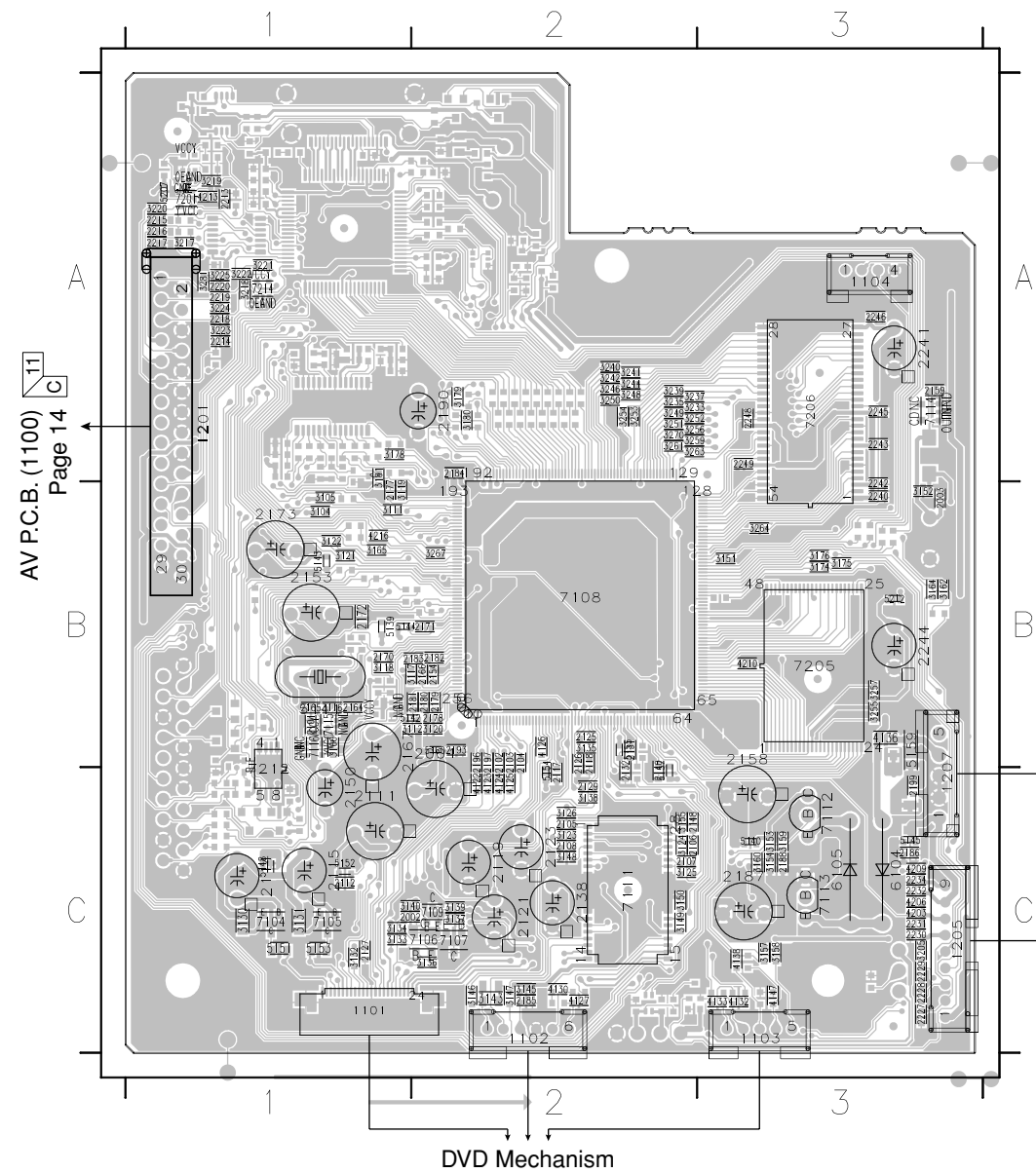
FOR INFORMATION ONLY (NO SERVICE PARTS WILL BE AVAILABLE)

The first digit of a component indicates the component type.

1xxx : Connector 3xxx : Resistor 5xxx : Coil 7xxx : IC, Transistor, FET
 2xxx : Capacitor 4xxx : SMD jumper 6xxx : Diode 9xxx : Wire jumper

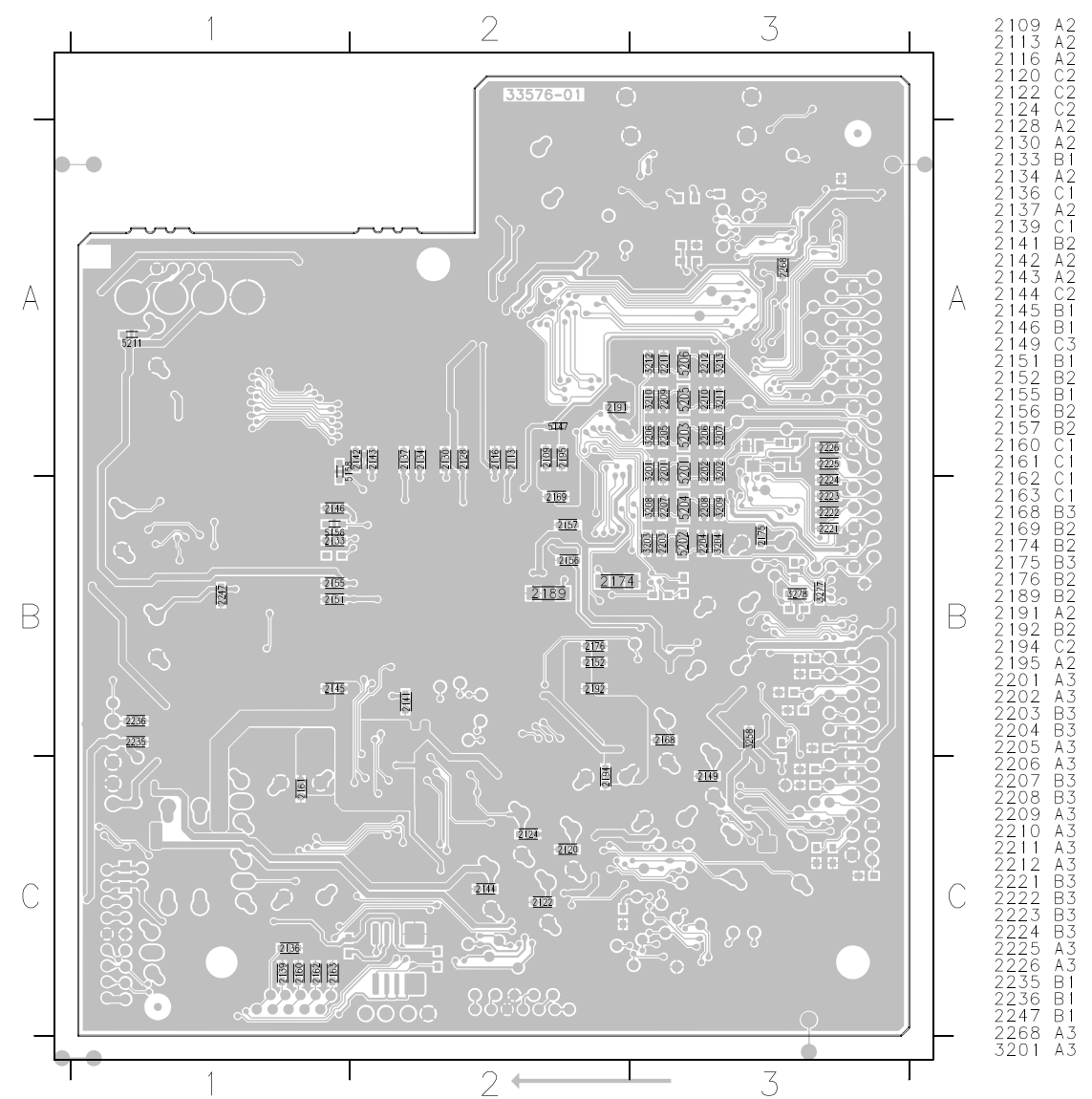
MONO P.C.B. Top View

MONO P.C.B. Bottom View



FRONT (1) P.C.B. (1102) Page 16 A

1101	C1	2193	B2	3153	C3	4123	C2
1102	C2	2196	B2	3154	C3	4124	C2
1103	C3	2197	B2	3155	C2	4125	C2
1104	A3	2199	C3	3157	C3	4126	B2
1201	A1	2213	A1	3158	C3	4127	C2
1205	C3	2214	A1	3159	C3	4130	C2
1207	C3	2215	A1	3160	C3	4132	C3
2001	B2	2216	A1	3162	B3	4133	C3
2002	C1	2217	A1	3164	B3	4136	B3
2003	B3	2218	A1	3165	B1	4138	C3
2101	B1	2219	A1	3166	B1	4147	C3
2102	B2	2220	A1	3174	B3	4203	C3
2103	B2	2227	C3	3175	B3	4206	C3
2104	B2	2228	C3	3176	B3	4209	C3
2105	C2	2229	C3	3178	A1	4210	B3
2106	C2	2230	C3	3179	A2	4213	A1
2107	C2	2231	C3	3180	A2	4216	B1
2108	C2	2232	C3	3181	A1	5139	B1
2111	C1	2234	C3	3205	C3	5140	C3
2112	C1	2240	B3	3217	A1	5141	B1
2114	C1	2241	A3	3218	A1	5142	B1
2115	C1	2242	B3	3219	A1	5143	B1
2117	C2	2243	A3	3220	A1	5144	A1
2118	B2	2244	B3	3221	A1	5145	C3
2119	C2	2245	A3	3222	A1	5148	C1
2121	C2	2246	A3	3223	A1	5151	C1
2125	C2	2248	A3	3224	A1	5152	C1
2126	B2	2249	A3	3225	A1	5153	C1
2127	C1	3104	B1	3233	A2	5154	C2
2129	C1	3105	B1	3235	A2	5155	B2
2131	B2	3112	B2	3237	A2	5157	C2
2132	C2	3116	B1	3239	A2	5159	B3
2138	C2	3117	B1	3240	A2	5160	B2
2140	C2	3119	B1	3241	A2	5207	A1
2148	C2	3120	B2	3242	A2	5212	B3
2150	C1	3121	B1	3244	A2	6104	C3
2153	B1	3122	B1	3246	A2	6105	C3
2154	B2	3123	C2	3248	A2	7104	C1
2158	B3	3124	C2	3249	A2	7105	C1
2159	A3	3125	C2	3250	A2	7106	C2
2164	B1	3126	C2	3251	A2	7107	C2
2165	B1	3130	C1	3252	A2	7108	B2
2166	B2	3131	C1	3253	A2	7109	C2
2167	B1	3132	C1	3254	A2	7111	C2
2170	B1	3133	C1	3255	B3	7112	C2
2171	B2	3134	C1	3256	A2	7113	C3
2172	B1	3135	B2	3257	B3	7114	A3
2175	B1	3136	B2	3259	A2	7115	B1
2177	B1	3137	C2	3261	A2	7116	B1
2178	B2	3138	C2	3263	A2	7201	A1
2179	B2	3139	C2	3264	B3	7205	B3
2180	B2	3140	C1	3267	B2	7206	A3
2181	B2	3143	C1	3268	A1	7212	C1
2182	B2	3145	C2	3269	A1	7214	A1
2183	B2	3146	C2	3270	A2		
2184	A2	3147	C2	3281	A1		
2185	C2	3148	C2	3324	A2		
2186	C3	3149	C2	3327	A2		
2187	C3	3150	C2	3328	A2		
2188	C3	3151	B3	3329	A2		
2190	A2	3152	B3	3330	A2		
				4122	C2		

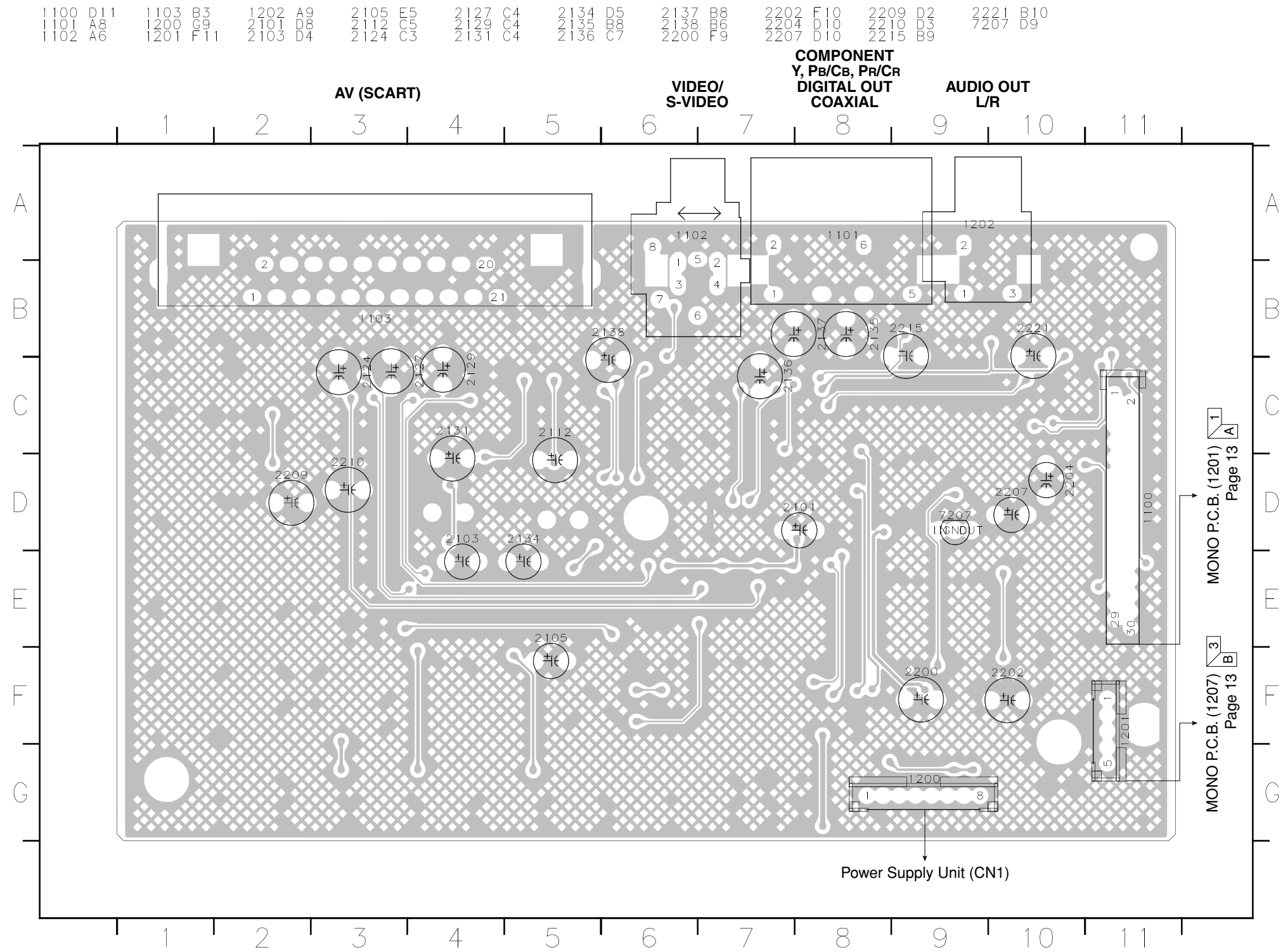


2109	A2	3202	A3
2113	A2	3203	B3
2116	A2	3204	B3
2120	C2	3206	A3
2122	C2	3207	A3
2124	C2	3208	B3
2128	A2	3209	B3
2130	A2	3210	A3
2133	B1	3211	A3
2134	A2	3212	A3
2136	C1	3213	A3
2137	A2	3258	B3
2139	C1	3277	B3
2141	B2	3278	B3
2142	A2	5147	A2
2143	A2	5156	B1
2144	C2	5158	A1
2145	B1	5201	A3
2146	B1	5202	B3
2149	C3	5203	A3
2151	B1	5204	B3
2152	B2	5205	A3
2155	B1	5206	A3
2156	B2	5211	A1
2157	B2		
2160	C1		
2161	C1		
2162	C1		
2163	C1		
2168	B3		
2169	B2		
2174	B2		
2175	B3		
2176	B2		
2189	B2		
2191	A2		
2192	B2		
2194	C2		
2195	A2		
2201	A3		
2202	A3		
2203	B3		
2204	B3		
2205	A3		
2206	A3		
2207	B3		
2208	B3		
2209	A3		
2210	A3		
2211	A3		
2212	A3		
2221	B3		
2222	B3		
2223	B3		
2224	B3		
2225	A3		
2226	A3		
2235	B1		
2236	B1		
2247	B1		
2268	A3		
3201	A3		

The first digit of a component indicates the component type.

1xxx : Connector 3xxx : Resistor 5xxx : Coil 7xxx : IC, Transistor, FET
 2xxx : Capacitor 4xxx : SMD jumper 6xxx : Diode 9xxx : Wire jumper

AV P.C.B. Top View

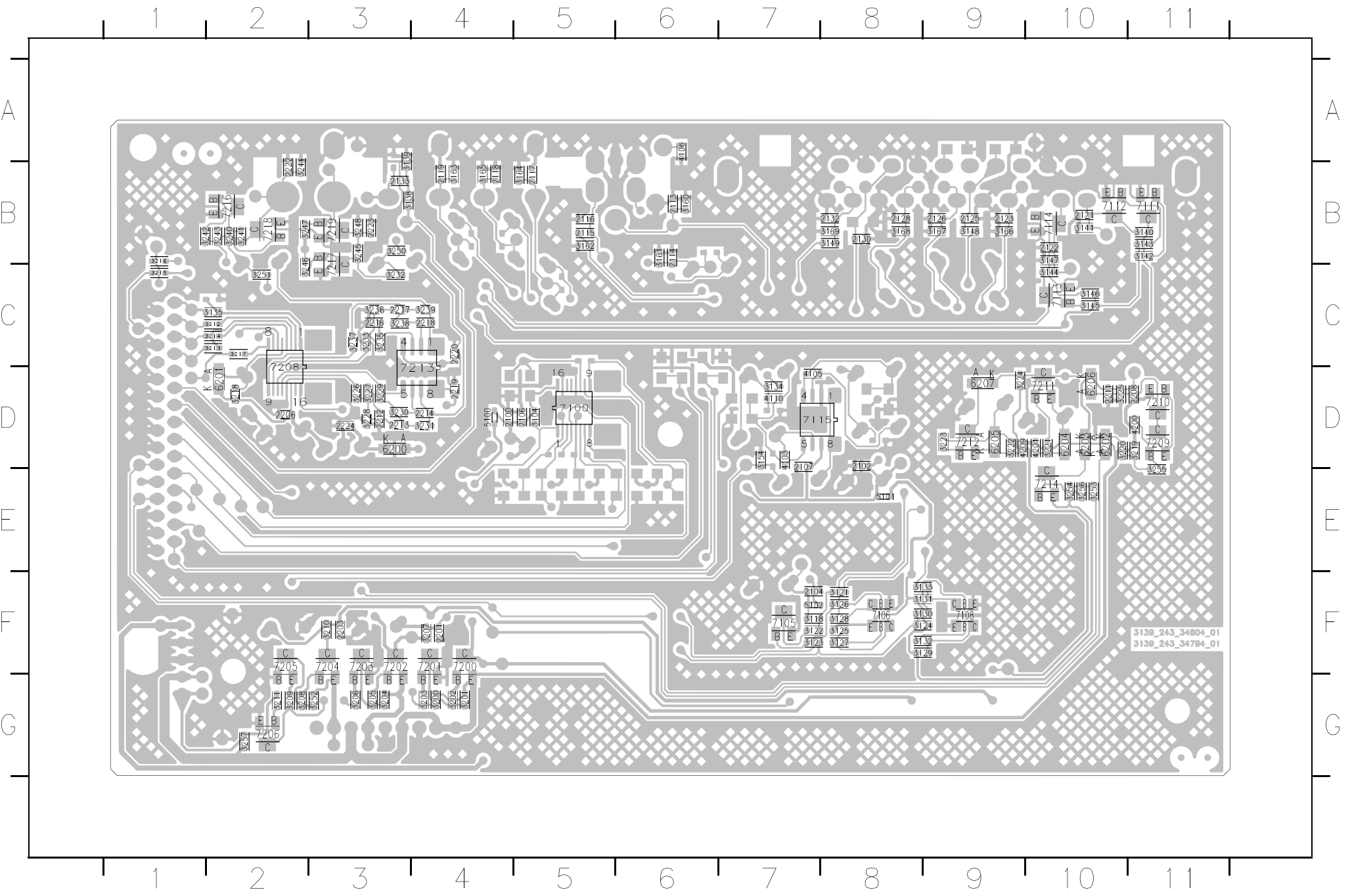


The first digit of a component indicates the component type.

1xxx : Connector 3xxx : Resistor 5xxx : Coil 7xxx : IC, Transistor, FET
 2xxx : Capacitor 4xxx : SMD jumper 6xxx : Diode 9xxx : Wire jumper

AV P.C.B. Bottom View

220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220
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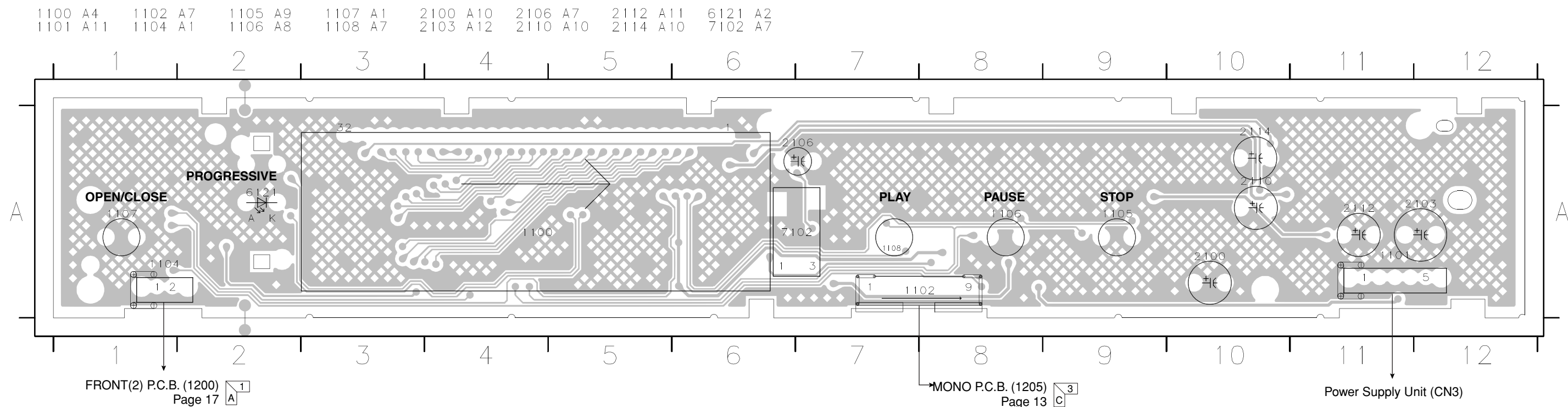


The first digit of a component indicates the component type.

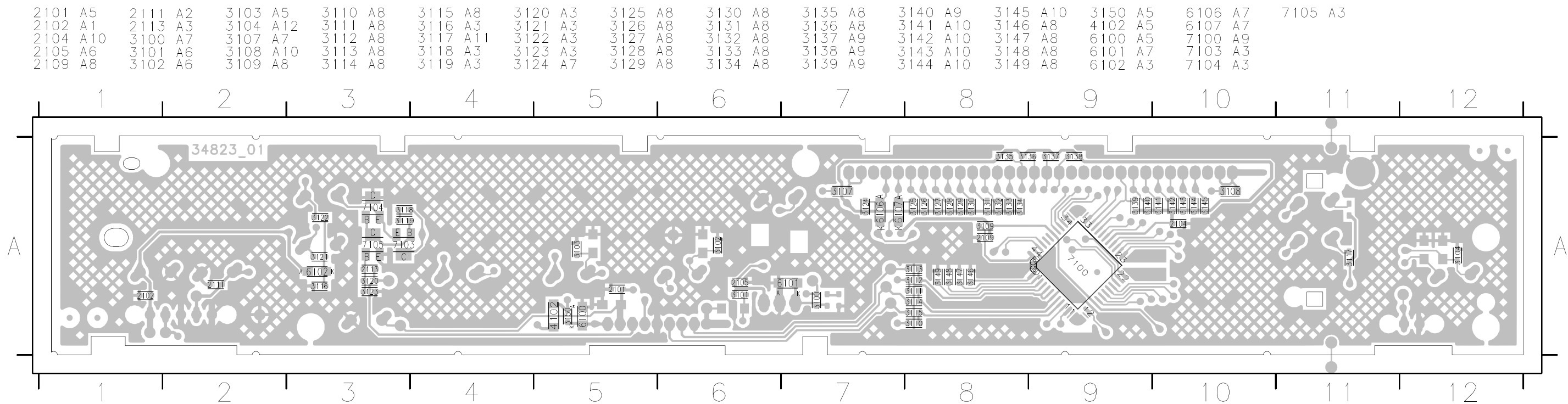
1xxx : Connector 3xxx : Resistor 5xxx : Coil 7xxx : IC, Transistor, FET

2xxx : Capacitor 4xxx : SMD jumper 6xxx : Diode 9xxx : Wire jumper

FRONT (1) P.C.B. Top View



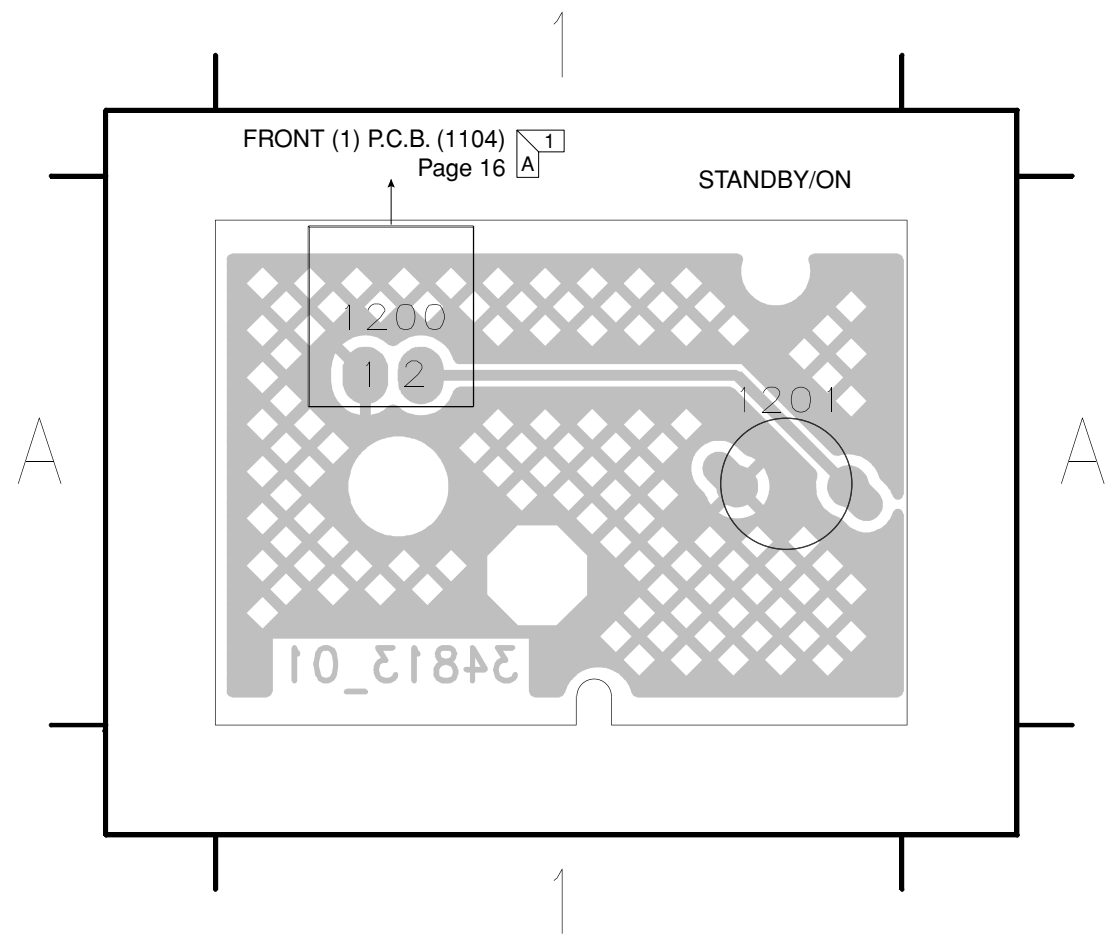
FRONT (1) P.C.B. Bottom View



The first digit of a component indicates the component type.

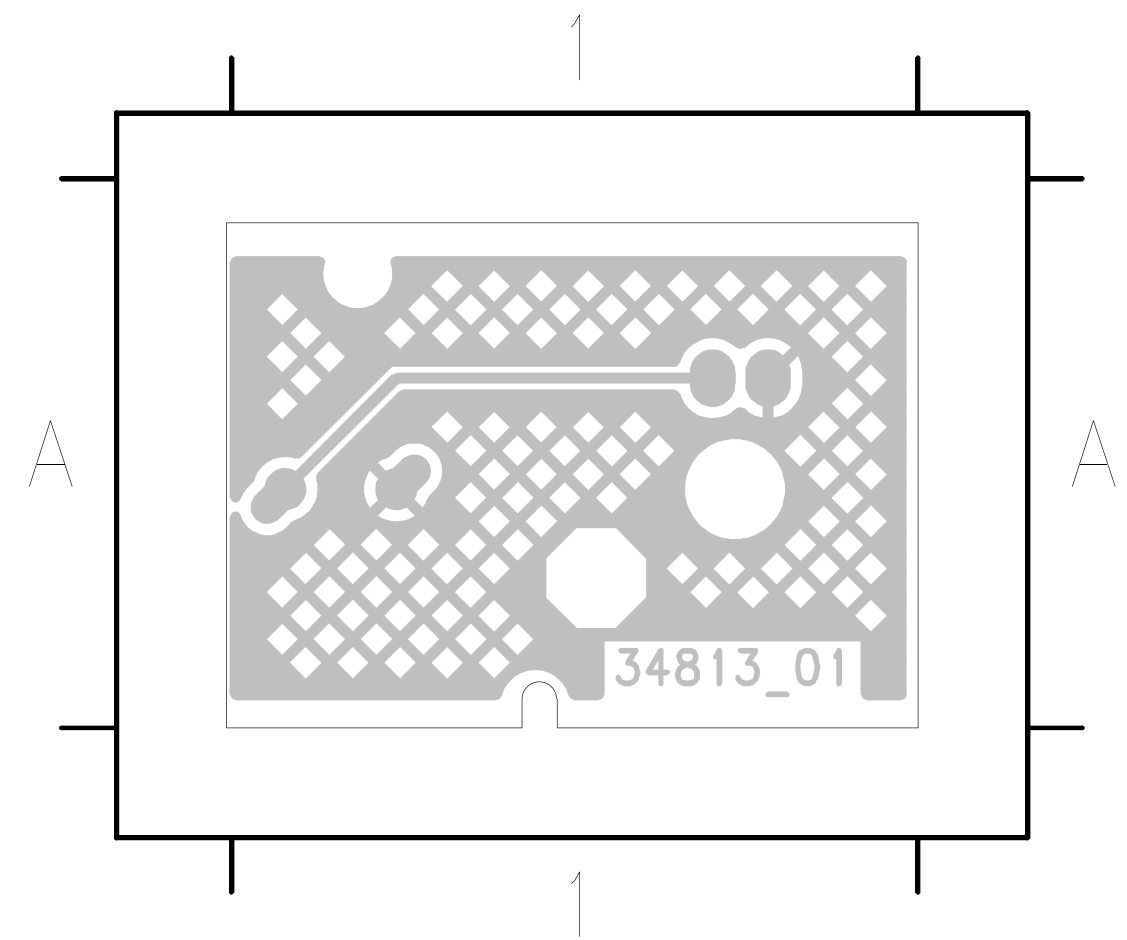
1xxx : Connector 3xxx : Resistor 5xxx : Coil 7xxx : IC, Transistor, FET
 2xxx : Capacitor 4xxx : SMD jumper 6xxx : Diode 9xxx : Wire jumper

FRONT (2) P.C.B. Top View



1200 A1
 1201 A1

FRONT (2) P.C.B. Bottom View



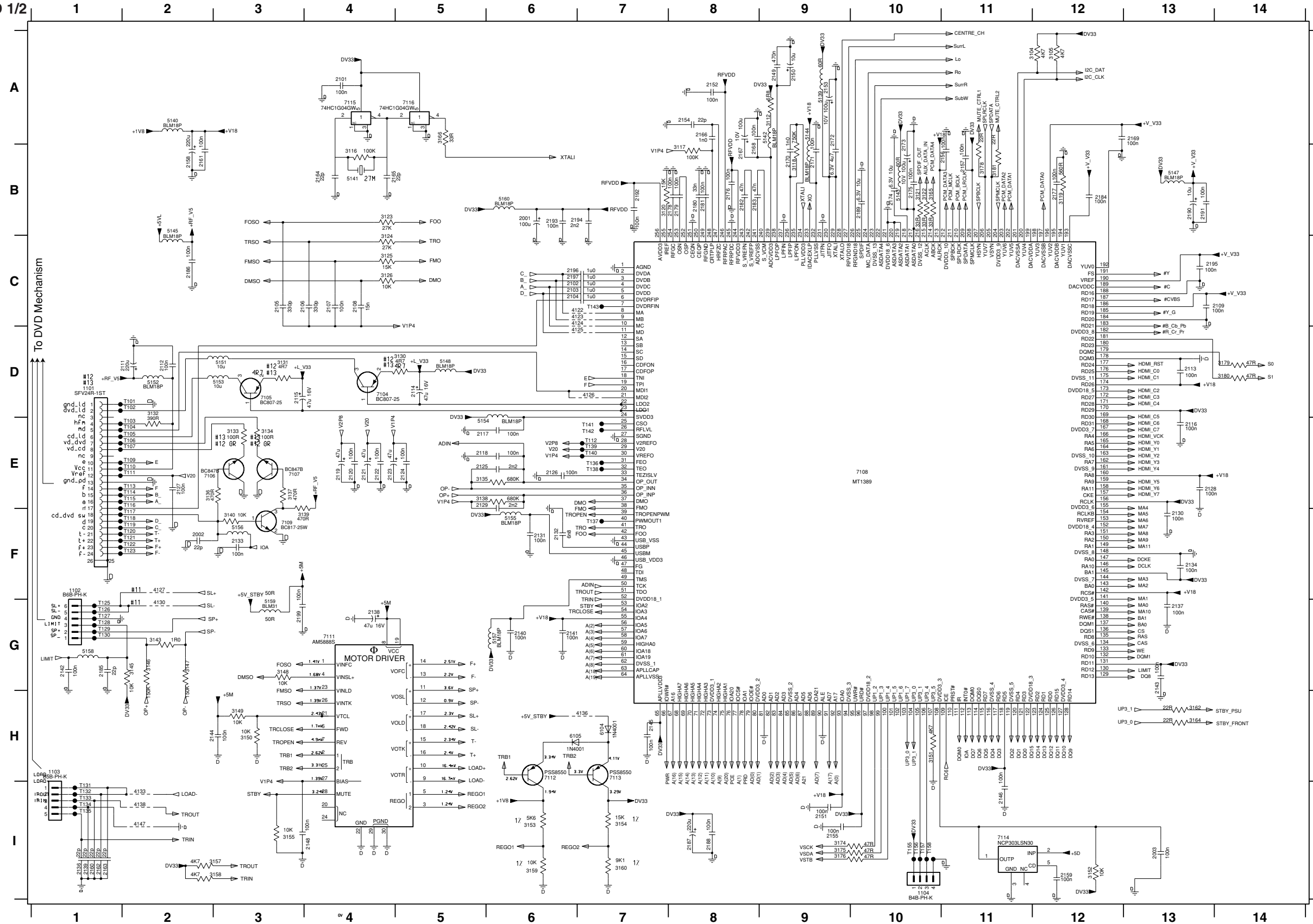
SCHEMATIC DIAGRAMS

FOR INFORMATION ONLY (NO SERVICE PARTS WILL BE AVAILABLE)

The first digit of a component indicates the component type.

- 1xxx : Connector
- 3xxx : Resistor
- 5xxx : Coil
- 7xxx : IC, Transistor, FET
- 2xxx : Capacitor
- 4xxx : SMD jumper
- 6xxx : Diode
- 9xxx : Wire jumper

MONO 1/2



1101 D1	3125 C4	T133 I1
1102 F1	3129 D14	T134 I1
1105 H1	3130 D5	T135 I1
1104 H10	3131 D3	T136 E7
2001 B6	3132 D2	T137 F7
2002 F2	3133 E3	T138 E7
2003 I13	3134 E3	T139 E7
2101 A4	3135 E5	T140 E7
2102 C6	3136 E2	T141 E7
2103 C6	3137 E8	T142 E7
2104 C6	3138 E5	T143 C7
2105 C3	3139 F3	T155 H10
2106 C4	3140 F3	T156 H10
2107 C4	3143 G2	T157 H10
2108 C4	3145 G2	T158 H10
2109 C14	3146 G2	
2111 D2	3147 G2	
2112 D2	3148 G2	
2113 D13	3149 H3	
2114 D5	3150 H3	
2115 D3	3151 H10	
2116 E13	3152 I12	
2117 E5	3153 I6	
2118 E5	3157 I7	
2119 E4	3155 I3	
2120 E4	3157 I3	
2121 E4	3158 I3	
2122 E4	3159 I6	
2123 E4	3160 I7	
2124 E5	3162 H13	
2125 E5	3164 H13	
2126 E5	3165 H13	
2127 E2	3166 A5	
2128 E13	3174 I9	
2129 E5	3175 I9	
2130 F13	3176 I9	
2131 F6	3178 B11	
2132 F6	3179 D14	
2133 F3	3180 D14	
2134 F13	3183 F7	
2136 I1	4122 C7	
2137 G13	4123 C7	
2138 G4	4124 C7	
2139 I1	4125 D7	
2140 G6	4126 D7	
2141 G6	4127 D7	
2142 G1	4130 G2	
2143 G13	4132 I2	
2144 H3	4136 H7	
2145 H7	4138 I2	
2146 I11	4147 I2	
2148 I4	5138 A9	
2149 A9	5140 A2	
2150 A9	5141 B4	
2151 I9	5142 A9	
2152 A8	5143 B10	
2153 A9	5144 A9	
2154 A8	5145 B2	
2155 I9	5147 B13	
2156 B10	5148 D5	
2157 B11	5151 D3	
2158 B2	5152 D2	
2159 I12	5153 D3	
2160 I1	5154 E5	
2161 B2	5155 F6	
2162 I1	5156 F3	
2163 I11	5157 G1	
2164 B4	5158 G1	
2165 B5	5159 G3	
2166 A8	5160 B6	
2167 B8	6104 H7	
2168 B8	6105 H6	
2170 A4	7104 D4	
2169 A13	7105 D3	
2170 B9	7106 D3	
2171 B9	7106 E2	
2172 A9	7107 E3	
2173 B10	7108 E10	
2174 B10	7109 F3	
2175 B10	7111 G4	
2176 B8	7112 H6	
2177 B12	7113 H7	
2178 B8	7114 I11	
2179 B8	7115 A4	
2180 B8	7116 A5	
2181 B8	T101 D2	
2182 B8	T102 D2	
2183 B8	T103 E2	
2184 B12	T104 E2	
2185 G1	T105 E2	
2186 C2	T106 E2	
2187 I8	T107 E2	
2188 I8	T109 E2	
2189 B10	T110 E2	
2190 B13	T111 E2	
2191 B3	T112 E7	
2192 B7	T113 E2	
2193 B6	T114 E2	
2194 B6	T115 E2	
2195 C13	T116 E2	
2196 C6	T117 F2	
2198 C3	T118 F2	
3104 A12	T120 F2	
3105 A12	T121 F2	
3112 A9	T122 F2	
3116 B4	T123 F2	
3117 B8	T125 G1	
3118 B9	T126 G1	
3119 B12	T127 G1	
3120 B7	T128 G1	
3121 B10	T129 G1	
3122 B10	T130 G1	
3123 B4	T131 I1	
3124 C4	T132 I1	

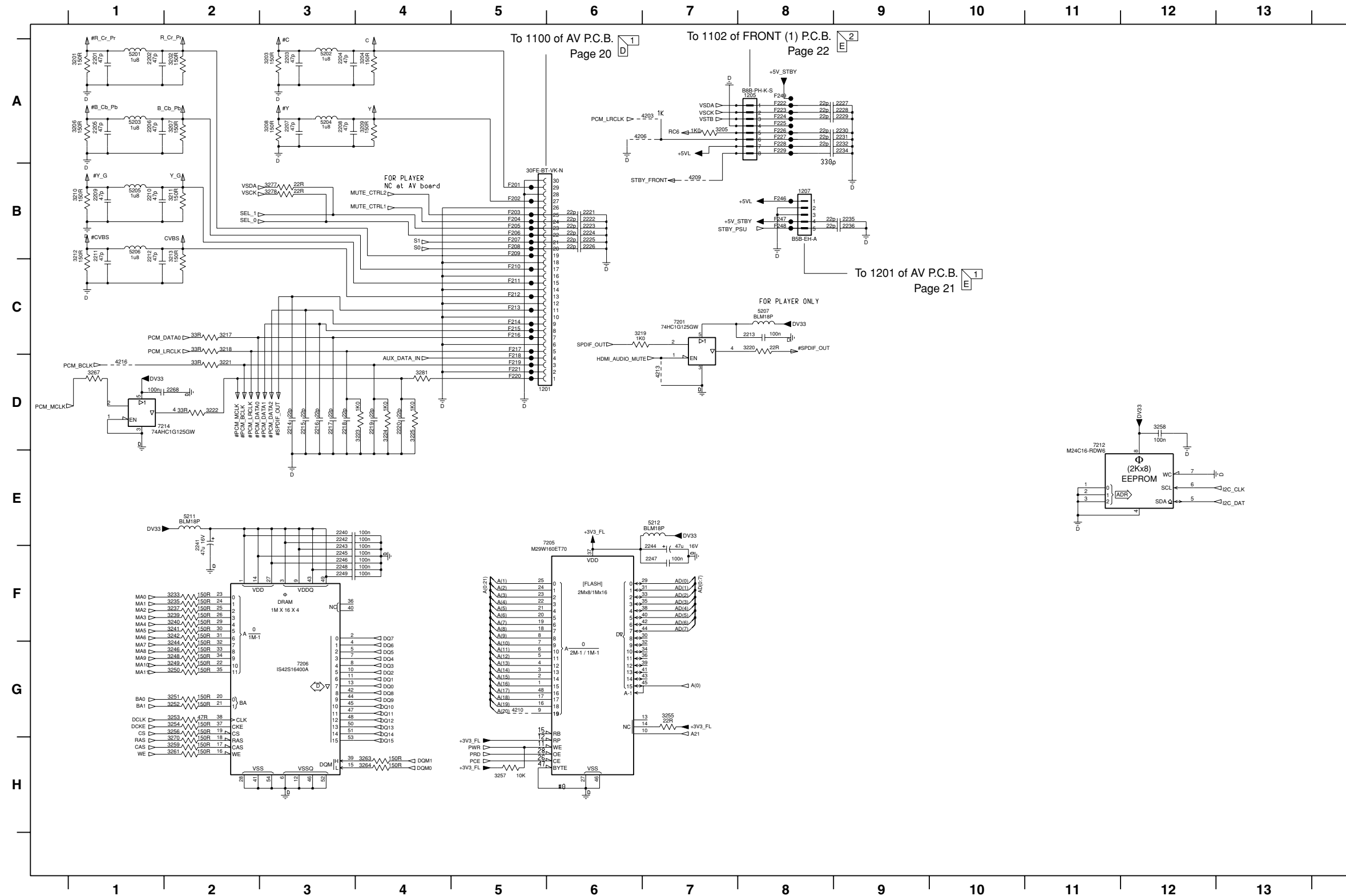
* Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
 * Schematic diagram is subject to change without notice.

The first digit of a component indicates the component type.

1xxx : Connector 3xxx : Resistor 5xxx : Coil 7xxx : IC, Transistor, FET

2xxx : Capacitor 4xxx : SMD jumper 6xxx : Diode 9xxx : Wire jumper

MONO 2/2

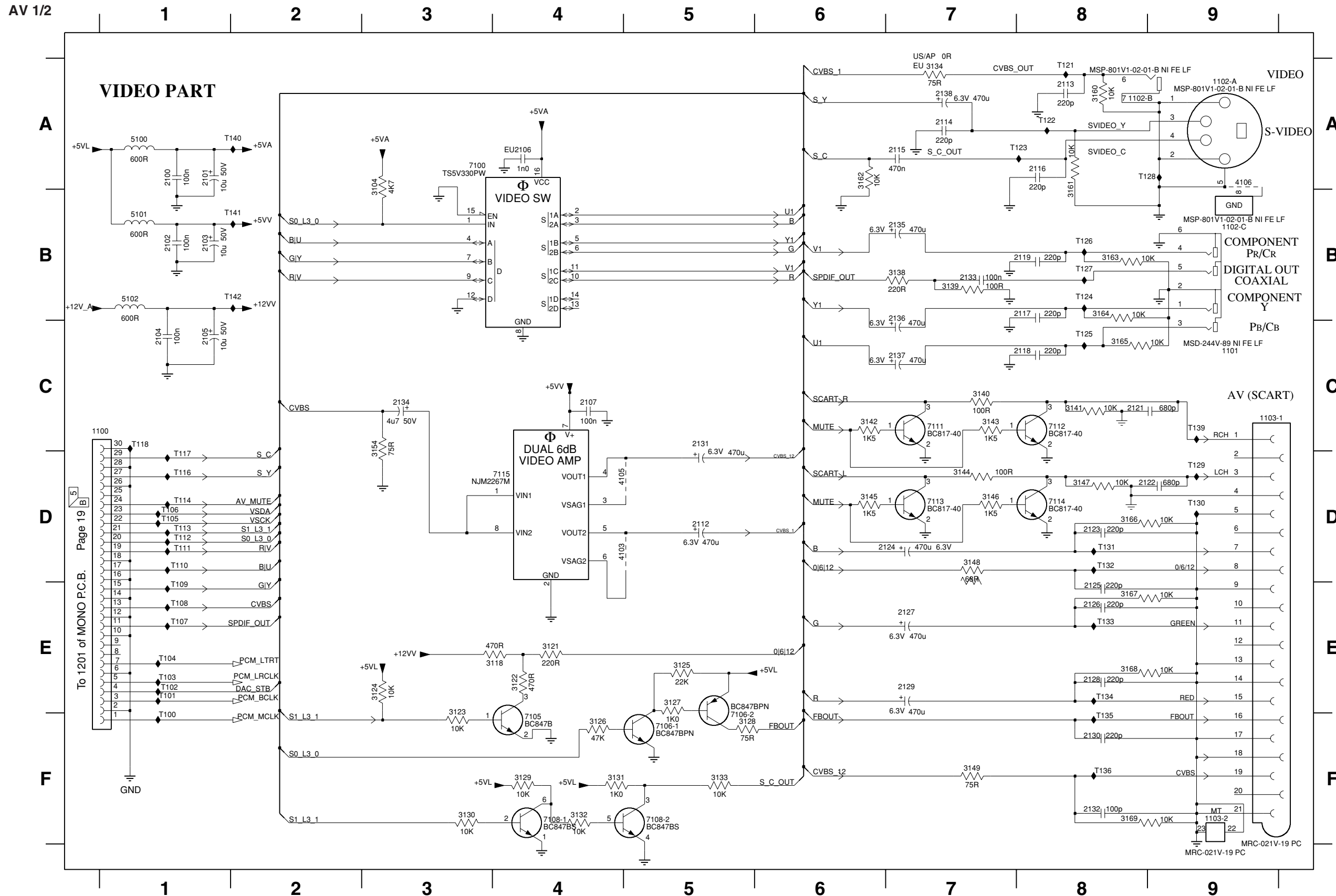


- 1201 D5
- 1205 A8
- 1206 A8
- 1207 B6
- 2201 A1
- 2202 A1
- 2203 A3
- 2204 A3
- 2205 A1
- 2206 A1
- 2207 A3
- 2208 A3
- 2209 B1
- 2210 B1
- 2211 B1
- 2212 B1
- 2213 C8
- 2214 D3
- 2215 D3
- 2216 D3
- 2217 D3
- 2218 D3
- 2219 D4
- 2220 D4
- 2221 B6
- 2222 B6
- 2223 B6
- 2224 B6
- 2225 B6
- 2226 B6
- 2227 A9
- 2228 A9
- 2229 A9
- 2230 A9
- 2231 A9
- 2232 A9
- 2233 A9
- 2234 A9
- 2235 B9
- 2236 B9
- 2240 E2
- 2241 E2
- 2242 E3
- 2243 F3
- 2244 F7
- 2245 F3
- 2246 F3
- 2247 F7
- 2248 F3
- 2249 F3
- 2268 D2
- 3201 A1
- 3202 A2
- 3203 A3
- 3204 A4
- 3205 A7
- 3206 A1
- 3207 A2
- 3208 A3
- 3209 A4
- 3210 B1
- 3211 B2
- 3212 B1
- 3213 B2
- 3217 C2
- 3218 C2
- 3219 C6
- 3220 C6
- 3221 D2
- 3222 D2
- 3223 D4
- 3224 D4
- 3225 D4
- 3233 F2
- 3235 F2
- 3237 F2
- 3239 F2
- 3240 F2
- 3241 F2
- 3242 F2
- 3244 G2
- 3246 G2
- 3248 G2
- 3249 G2
- 3250 G2
- 3251 G2
- 3252 G2
- 3253 G2
- 3254 G2
- 3255 G7
- 3256 G2
- 3257 H5
- 3258 D12
- 3259 H2
- 3261 H2
- 3263 H4
- 3264 H4
- 3267 D1
- 3270 H2
- 3277 B3
- 3278 B3
- 3281 D4
- 4203 A7
- 4206 A6
- 4209 B7
- 4210 G5
- 4213 D7
- 4216 A1
- 5203 A1
- 5204 A3
- 5205 B1
- 5206 B1
- 5207 C8
- 5211 E2
- 5212 E7
- 7201 C7
- 7205 E5
- 7206 G3
- 7212 D11
- 7214 D2
- F201 B5
- F202 B5
- F203 B5
- F204 B5
- F205 B5
- F206 B5
- F207 B5
- F208 B5
- F209 B5
- F210 C5
- F211 C5
- F212 C5
- F213 C5
- F214 C5
- F215 C5
- F216 C5
- F217 C5
- F218 D5
- F219 D5
- F220 D5
- F221 D5
- F222 A8
- F223 A8
- F224 A8
- F225 A8
- F226 A8
- F227 A8
- F228 A8
- F229 A8
- F246 B8
- F247 B8
- F248 B8

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 ★ Schematic diagram is subject to change without notice.

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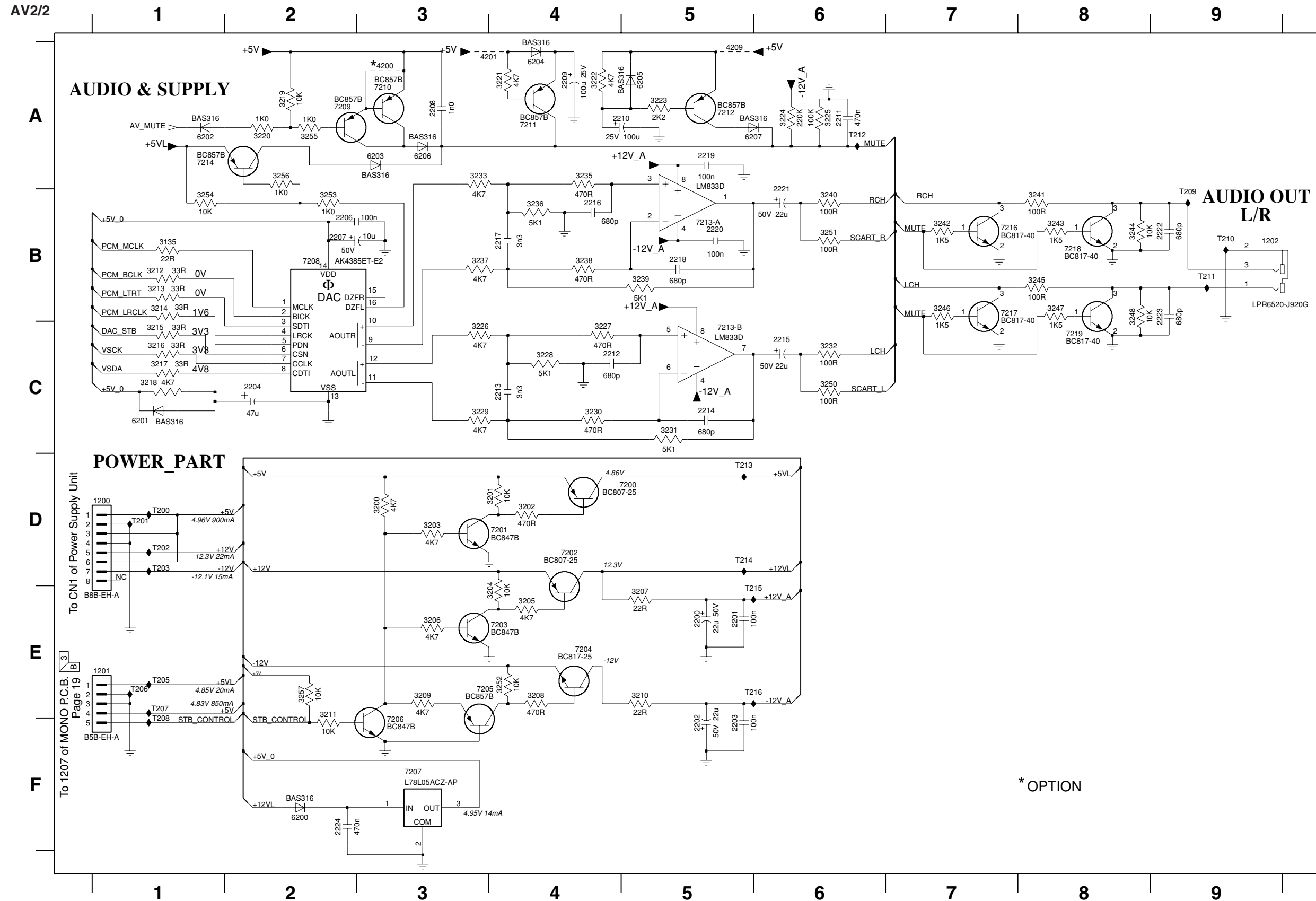


- 1100 C1
- 1101 C9
- 1102-A A9
- 1102-B A8
- 1102-C B9
- 1103-1 C9
- 1103-2 F9
- 2100 A1
- 2101 A1
- 2102 B1
- 2103 B1
- 2104 C1
- 2105 C1
- 2106 A4
- 2107 C4
- 2112 D5
- 2113 A8
- 2114 A7
- 2115 A7
- 2116 A8
- 2117 B8
- 2118 C8
- 2119 B8
- 2121 C8
- 2122 D8
- 2123 D8
- 2124 D7
- 2125 E8
- 2126 E8
- 2127 E7
- 2128 E8
- 2129 E7
- 2130 F8
- 2131 C5
- 2132 F8
- 2133 B7
- 2134 C3
- 2135 B7
- 2136 C7
- 2137 C7
- 2138 A7
- 3104 A3
- 3105 A4
- 3106 A8
- 3107 A8
- 3108 A8
- 3109 A8
- 3110 A8
- 3111 A8
- 3112 A8
- 3113 A8
- 3114 A8
- 3115 A8
- 3116 A8
- 3117 A8
- 3118 A8
- 3119 A8
- 3120 A8
- 3121 A8
- 3122 A8
- 3123 F3
- 3124 E3
- 3125 E5
- 3126 F4
- 3127 E5
- 3128 F5
- 3129 F4
- 3130 F3
- 3131 F4
- 3132 F4
- 3133 F5
- 3134 A7
- 3138 B7
- 3139 B7
- 3140 C7
- 3141 C8
- 3142 C6
- 3143 C7
- 3144 D7
- 3145 D6
- 3146 D7
- 3147 D8
- 3148 D7
- 3149 F7
- 3154 C3
- 3160 A8
- 3161 A8
- 3162 A6
- 3163 B8
- 3164 B8
- 3165 C8
- 3166 D8
- 3167 E8
- 3168 E8
- 3169 F8
- 4103 D5
- 4105 D5
- 4106 A9
- 5100 A1
- 5101 B1
- 5102 B1
- 7100 A3
- 7105 F4
- 7106-1 F5
- 7106-2 E5
- 7108-1 F4
- 7108-2 F5
- 7111 C7
- 7112 C8
- 7113 D7
- 7114 D8
- 7115 D4
- 7100 F1
- T101 E1
- T102 E1
- T103 E1
- T104 E1
- T105 D1
- T106 D1
- T107 E1
- T108 E1
- T109 E1
- T110 D1
- T111 D1
- T112 D1
- T113 D1
- T114 D1
- T116 D1
- T117 D1
- T118 C1
- T121 A8
- T122 A8
- T125 C8
- T126 B8
- T127 B8
- T128 A8
- T129 D9
- T130 D9
- T131 D8
- T132 D8
- T133 E8
- T134 E8
- T135 F8
- T136 F8
- T139 C9
- T140 A2
- T141 B2
- T142 B2

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 * Schematic diagram is subject to change without notice.

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1xxx : Connector 3xxx : Resistor 5xxx : Coil 7xxx : IC, Transistor, FET
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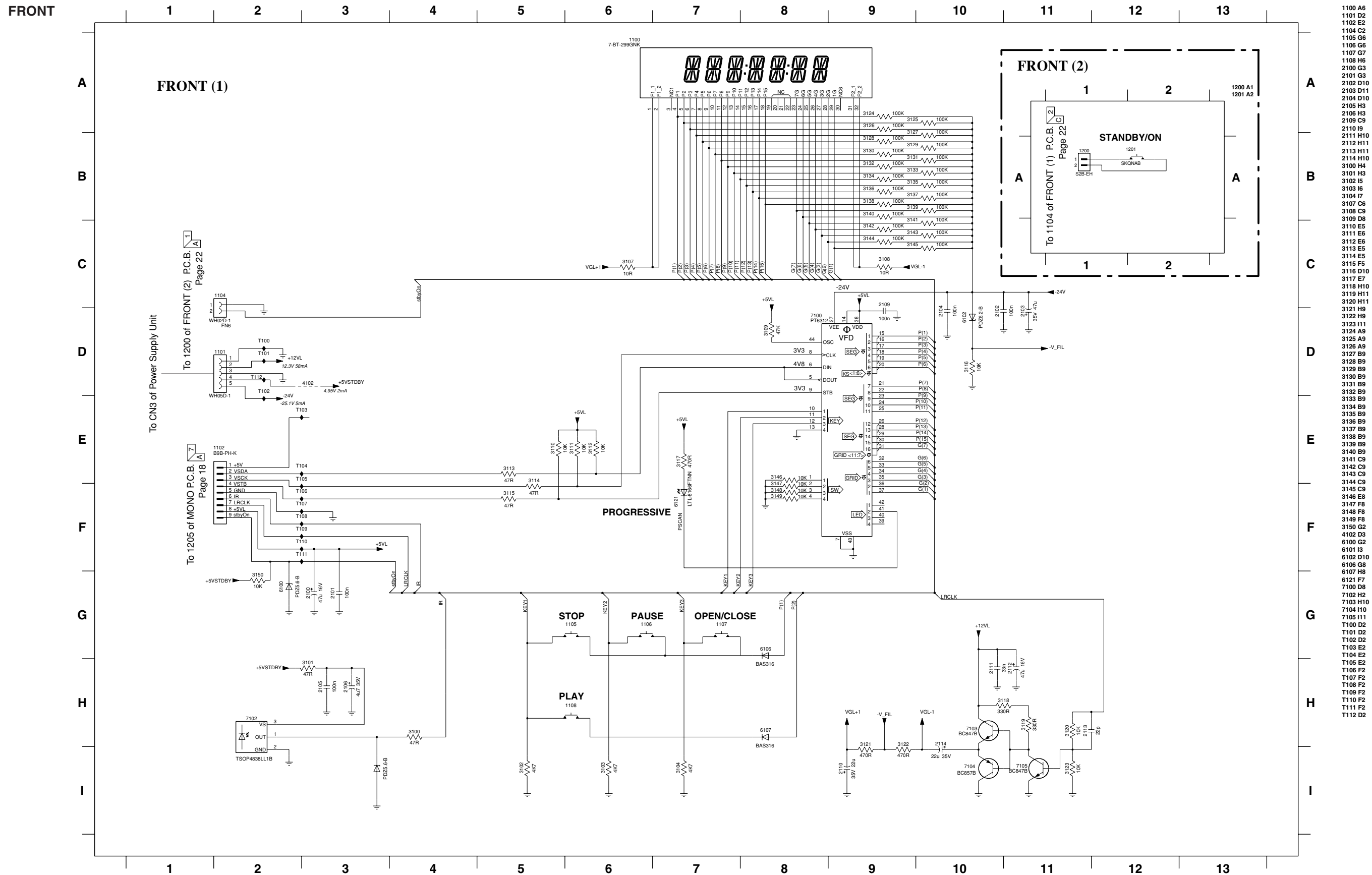
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1202 B9	3251 B6
2200 E5	3252 E4
2201 E5	3253 B2
2202 F5	3254 B1
2203 F5	3255 A2
2204 C2	3256 A2
2206 B2	3257 E2
2207 B2	4200 A3
2208 A3	4201 A3
2209 A4	4209 A5
2210 A4	6200 F2
2211 A6	6211 C1
2212 C4	6202 A1
2213 C4	6203 A3
2214 C5	6204 A4
2215 C6	6205 A5
2216 B4	6206 A3
2217 B4	6207 A5
2218 B5	7200 D5
2219 A5	7201 D4
2220 B5	7202 D4
2221 B6	7203 E4
2222 B9	7204 E4
2223 B9	7205 E4
2224 F2	7206 F3
3135 B1	7207 F3
3200 D3	7208 B2
3201 D4	7209 A2
3202 D4	7210 A3
3203 D3	7211 A4
3204 E4	7212 A5
3205 E4	7213-A B5
3206 E3	7213-B C5
3207 E5	7214 A1
3208 E4	7216 B7
3209 E3	7217 B7
3210 E5	7218 B8
3211 E2	7219 B8
3212 B1	T200 D1
3213 B1	T201 D1
3214 B1	T202 D1
3215 C1	T203 D1
3216 C1	T205 E1
3217 C1	T206 E1
3218 C1	T207 E1
3219 A2	T208 E1
3220 A2	T209 B9
3221 A4	T210 B9
3222 A4	T211 B9
3223 A5	T212 A6
3224 A6	T213 D5
3225 A6	T214 D5
3226 C3	T215 E5
3227 C4	T216 E5
3228 C4	
3229 C3	
3230 C4	
3231 C5	
3232 C6	
3233 A3	
3235 A4	
3236 B4	
3237 B3	
3238 B4	
3239 B5	
3240 B6	
3241 B8	
3242 B7	
3243 B8	
3244 B8	
3245 B8	
3246 B7	
3247 B8	

* OPTION

★ Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
 ★ Schematic diagram is subject to change without notice.

The first digit of a component indicates the component type.

1xxx : Connector 3xxx : Resistor 5xxx : Coil 7xxx : IC, Transistor, FET
 2xxx : Capacitor 4xxx : SMD jumper 6xxx : Diode 9xxx : Wire jumper



- 1100 A6
- 1101 D2
- 1102 E2
- 1103 G2
- 1104 C2
- 1105 G6
- 1106 G6
- 1107 G7
- 1108 H6
- 2100 G3
- 2101 G3
- 2102 D10
- 2103 D11
- 2104 D10
- 2105 H3
- 2106 H3
- 2109 C9
- 2110 I9
- 2111 H10
- 2112 H11
- 2113 H11
- 2114 H10
- 3100 H4
- 3101 H3
- 3102 I5
- 3103 I6
- 3104 I7
- 3107 C6
- 3108 C9
- 3109 D8
- 3110 E5
- 3111 E5
- 3112 E6
- 3113 E5
- 3114 E5
- 3115 F5
- 3116 D10
- 3117 E7
- 3118 H10
- 3119 H11
- 3120 H11
- 3121 H9
- 3122 H9
- 3123 I11
- 3124 A9
- 3125 A9
- 3126 A9
- 3127 B9
- 3128 B9
- 3129 B9
- 3130 B9
- 3131 B9
- 3132 B9
- 3133 B9
- 3134 B9
- 3135 B9
- 3136 B9
- 3137 B9
- 3138 B9
- 3139 B9
- 3140 B9
- 3141 C9
- 3142 C9
- 3143 C9
- 3144 C9
- 3145 C9
- 3146 E8
- 3147 F8
- 3148 F8
- 3149 F8
- 3150 G2
- 4102 D3
- 6100 G2
- 6101 I3
- 6102 D10
- 6106 G8
- 6107 H8
- 6121 F7
- 7100 D8
- 7102 H2
- 7103 H10
- 7104 I10
- 7105 I11
- T100 D2
- T102 D2
- T103 E2
- T104 E2
- T105 E2
- T106 F2
- T107 F2
- T108 F2
- T109 F2
- T110 F2
- T111 F2
- T112 D2

★ Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
 ★ Schematic diagram is subject to change without notice.

MEMO

A large, empty rectangular box with a double-line border, intended for writing a memo. The box is positioned on the left side of the page.

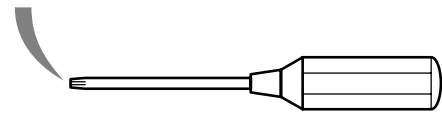
MEMO

A large, empty rectangular box with a double-line border, intended for writing a memo. The box is positioned on the right side of the page.

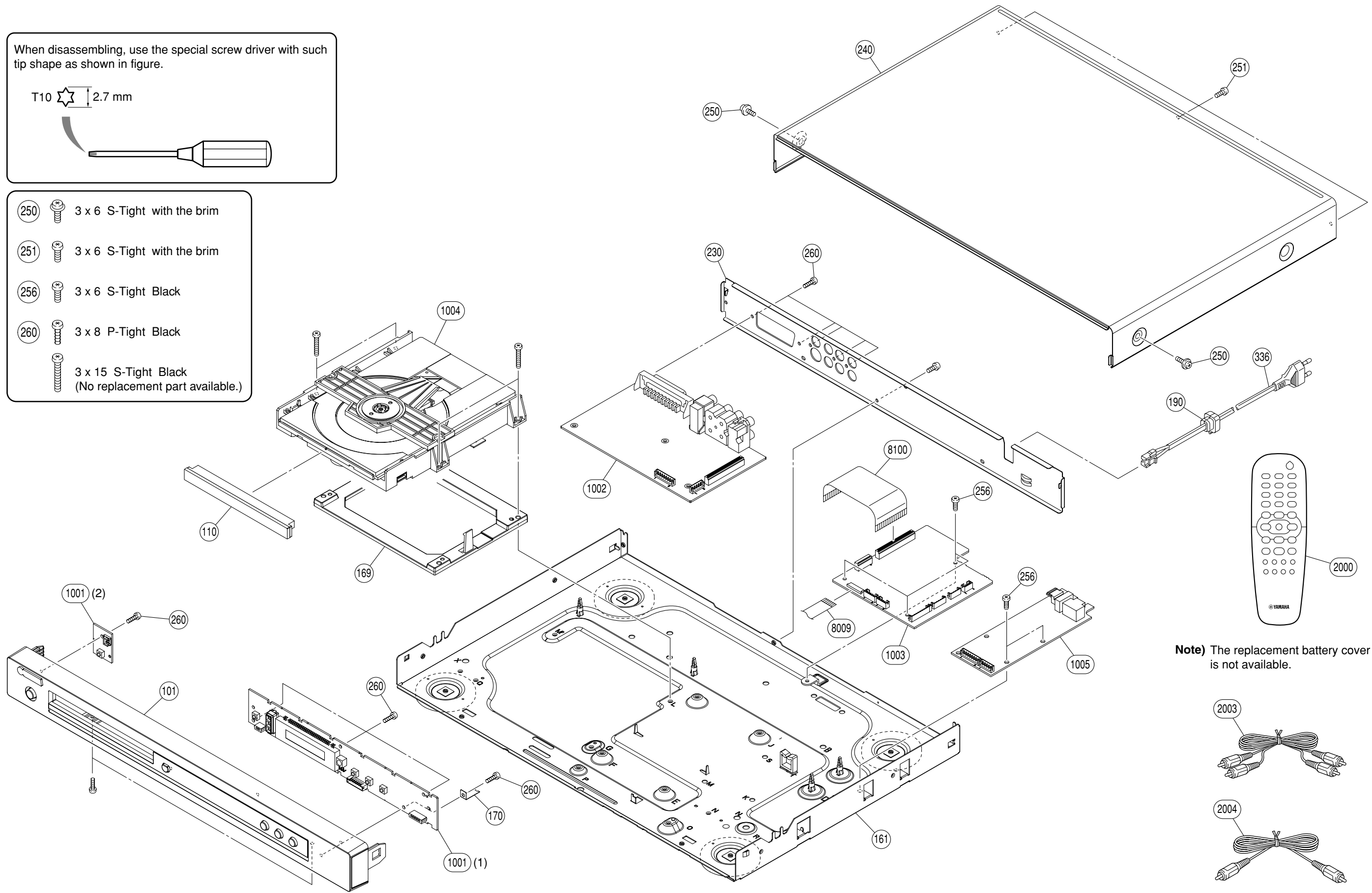
REPLACEMENT PARTS LIST

When disassembling, use the special screw driver with such tip shape as shown in figure.

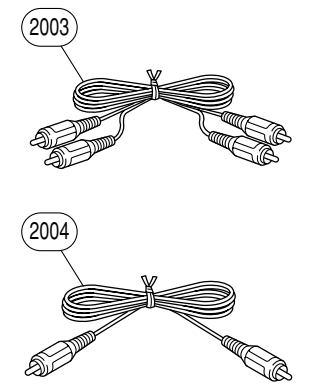
T10 2.7 mm



- 250 3 x 6 S-Tight with the brim
- 251 3 x 6 S-Tight with the brim
- 256 3 x 6 S-Tight Black
- 260 3 x 8 P-Tight Black
- 3 x 15 S-Tight Black (No replacement part available.)



Note) The replacement battery cover is not available.



■ **WARNING**

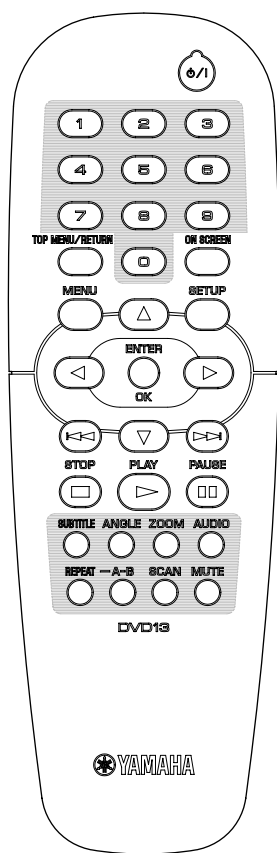
- Components having special characteristics are marked △ and must be replaced with parts having specifications equal to those originally installed.

Ref. No.	Part No.	Description	Remarks	Markets
*	101	AAX77830 FRONT ASS'Y	BL	3141 079 37061
*	101	AAX77850 FRONT ASS'Y	TI	3141 079 37081
*	101	AAX77840 FRONT ASS'Y	SI	3141 079 37071
*	110	AAX77810 TRAY COVER ASS'Y		3141 079 37091
*	161	AAX77820 FRAME ASS'Y		3141 079 37101
*	169	AAX77860 BRACKET		3139 244 10241
*	170	AAX69600 EMC SPRING		3139 241 00042
	190	AAX53540 BUSH	450H259010	3139 114 26671
*	230	AAX77870 REAR PANEL		3139 241 24751
	240	AAX58270 TOP COVER	BL	3139 247 59051
	240	AAX58290 TOP COVER	TI, SI	3139 241 22191
	250	AAX55450 PW HEAD TORX S-TIGHT SCREW	BL 3x6-8 MFZN2BL	3139 110 40611
	250	AAX53440 PW HEAD TORX S-TIGHT SCREW	TI, SI 3x6-8 MFN133	3104 120 40081
	251	AAX23640 PAN HEAD TORX S-TIGHT SCREW	BL 3x6 MFZN2BL	2511 077 00039
	251	AAX23650 PAN HEAD TORX S-TIGHT SCREW	TI, SI 3x6 MFN133	2511 077 01039
	256	AAX23640 PAN HEAD TORX S-TIGHT SCREW	3x6 MFZN2BL	2511 077 00039
	260	AAX53520 PAN HEAD TORX P-TIGHT SCREW	3x8 MFZN2BL	2511 076 50012
△	336	AAX53630 POWER CABLE	1.8m	2422 070 98231
*	1001	AAX77790 P.C.B. ASS'Y	FRONT	3139 248 89511
*	1002	AAX77770 P.C.B. ASS'Y	AV	3139 248 89481
*	1003	AAX77780 P.C.B. ASS'Y	MONO DVM9.1	3139 248 89461
*	1004	AAX77760 DVD MECHANISM	WXD8829	3139 248 00311
* △	1005	AAX77890 POWER SUPPLY UNIT	SRV1797EK	3139 247 12432
	8009	AAX53460 FLEXIBLE FLAT CABLE	24P 280mm P=0.5mm	3139 241 00391
*	8100	AAX77800 FLEXIBLE FLAT CABLE	30P 60mm P=1mm	3139 241 02491
		ACCESSORY		
*	2000	AAX77880 REMOTE CONTROL	DVD13	3139 238 13331
	2003	AAX21980 AUDIO PIN CABLE	RD/WH 1.5m 1pc	3103 308 92611
	2004	AAX22970 VIDEO PIN CABLE	YE 1.5m 1pc	3104 108 45432
		BATTERY	UM-3 2pcs	

*: New Parts

■ REMOTE CONTROL

• PANEL



• KEY CODE

Key label	Code
STANDBY/ON	7C-80
1	7C-94
2	7C-95
3	7C-96
4	7C-97
5	7C-98
6	7C-99
7	7C-9A
8	7C-9B
9	7C-9C
0	7C-93
TOP MENU/RETURN	7C-B1
ON SCREEN	7C-A6
MENU	7C-B2
SETUP	7C-AC
◀ (left)	7C-B5
▶ (right)	7C-B6
▲ (up)	7C-B4
▼ (down)	7C-B3
◀◀ (SKIP/SEARCH-)	7C-B9
▶▶ (SKIP/SEARCH+)	7C-BA
ENTER/OK	7C-B8
STOP	7C-85
PLAY	7C-82
PAUSE	7C-83
SUBTITLE	7C-AA
ANGLE	7C-AE
ZOOM	7C-D7
AUDIO	7C-AD
REPEAT MODE	7C-A3
REPEAT A-B	7C-A4
SCAN	7C-E2
MUTE	7C-E4