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# SECTION 1. GENERAL

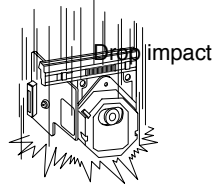
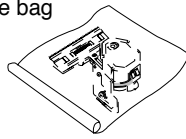
## SERVICING PRECAUTIONS

### [NOTES REGARDING HANDLING OF THE PICK-UP]

#### 1 Notes for transport and storage

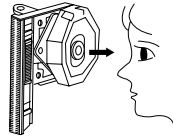
- 1) The pick-up should always be left in its conductive bag until immediately prior to use.
- 2) The pick-up should never be subjected to external pressure or impact.

Storage in conductive bag



#### 2 Repair notes

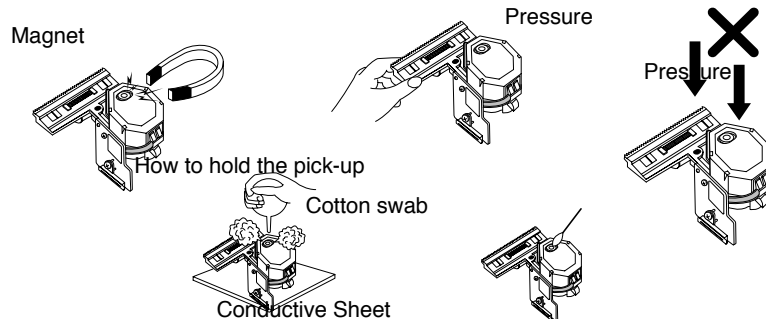
- 1) The pick-up incorporates a strong magnet, and so should never be brought close to magnetic materials.
- 2) The pick-up should always be handled correctly and carefully, taking care to avoid external pressure and impact. If it is subjected to strong pressure or impact, the result may be an operational malfunction and/or damage to the printed-circuit board.
- 3) Each and every pick-up is already individually adjusted to a high degree of precision, and for that reason the adjustment point and installation screws should absolutely never be touched.
- 4) Laser beams may damage the eyes!  
Absolutely never permit laser beams to enter the eyes!



NEVER look directly at the laser beam, and don't let contact fingers or other exposed skin.

Also NEVER switch ON the power to the laser output part (lens, etc.) of the pick-up if it is damaged.

- 5) Cleaning the lens surface  
If there is dust on the lens surface, the dust should be cleaned away by using an air bush (such as used for camera lens). The lens is held by a delicate spring. When cleaning the lens surface, therefore, a



cotton swab should be used, taking care not to distort this.

- 6) Never attempt to disassemble the pick-up.  
Spring by excess pressure. If the lens is extremely dirty, apply isopropyl alcohol to the cotton swab. (Do

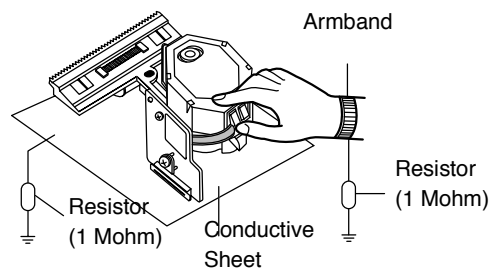
# [NOTES REGARDING COMPACT DISC PLAYER REPAIRS]

## ① Preparations

- 1) Compact disc players incorporate a great many ICs as well as the pick-up (laser diode). These components are sensitive to, and easily affected by, static electricity. If such static electricity is high voltage, components can be damaged, and for that reason components should be handled with care.
- 2) The pick-up is composed of many optical components and other high-precision components. Care must be taken, therefore, to avoid repair or storage where the temperature of humidity is high, where strong magnetism is present, or where there is excessive dust.

## ② Notes for repair

- 1) Before replacing a component part, first disconnect the power supply lead wire from the unit
- 2) All equipment, measuring instruments and tools must be grounded.
- 3) The workbench should be covered with a conductive sheet and grounded.  
When removing the laser pick-up from its conductive bag, do not place the pick-up on the bag. (This is because there is the possibility of damage by static electricity.)
- 4) To prevent AC leakage, the metal part of the soldering iron should be grounded.
- 5) Workers should be grounded by an armband (1MΩ)
- 6) Care should be taken not to permit the laser pick-up to come in contact with clothing, in order to prevent static electricity changes in the clothing to escape from the armband.
- 7) The laser beam from the pick-up should NEVER be directly facing the eyes or bare skin.



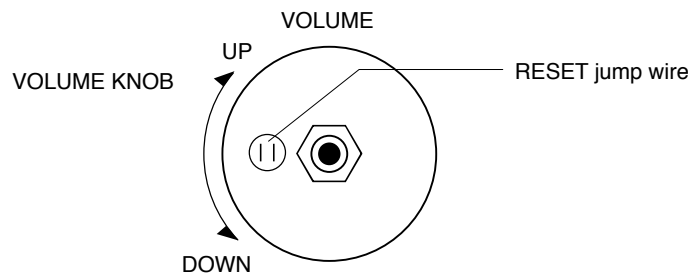
## CLEARING MALFUNCTION

You can reset your unit to initial status if malfunction occur(button malfunction, display, etc.).

Using a pointed good conductor(such as driver), simply short the RESET jump wire on the inside of the volume knob for more than 3 seconds.

If you reset your unit, you must reenter all its settings(stations, clock, timer)

- NOTE:** 1. To operate the RESET jump wire, pull the volume rotary knob and release it.  
2. If you wish to operate the RESET jump wire, it is necessary to unplug the power cord.



# ■ ESD PRECAUTIONS

## Electrostatically Sensitive Devices (ESD)



Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive Devices (ESD). Examples of typical ESD devices are integrated circuits and some field-effect transistors and semiconductor chip components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ESD devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ESD devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESD devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESD devices.
6. Do not remove a replacement ESD device from its protective package until immediately before you are ready to install it. (Most replacement ESD devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive materials).
7. Immediately before removing the protective material from the leads of a replacement ESD device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

**CAUTION : BE SURE NO POWER IS APPLIED TO THE CHASSIS OR CIRCUIT, AND OBSERVE ALL OTHER SAFETY PRECAUTIONS.**

8. Minimize bodily motions when handling unpackaged replacement ESD devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ESD device).

## [CAUTION. GRAPHIC SYMBOLS]

	THE LIGHTNING FLASH WITH APROWHEAD SYMBOL. WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.
	THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF IMPORTANT SAFETY INFORMATION IN SERVICE LITERATURE.

# SECTION 2. ELECTRICAL SECTION

## ■ ADJUSTMENTS

This set has been aligned at the factory and normally will not require further adjustment. As a result, it is not recommended that any attempt is made to modificate any circuit. If any parts are replaced or if anyone tampers with the adjustment, realignment may be necessary.

### IMPORTANT

1. Check Power-source voltage.
2. Set the function switch to band being aligned.
3. Turn volume control to minimum unless otherwise noted.
4. Connect low side of signal source and output indicator to chassis ground unless otherwise specified.
5. Keep the signal input as low as possible to avoid AGC and AC action.

### TAPE DECK ADJUSTMENT

#### 1. AZIMUTH ADJUSTMENT

Deck Mode	Test Tape	Test Tape	Adjustment	Adjust for
Palyback	MTT-114	Speaker Out	DECK Screw Azimuth Screw	Maximum

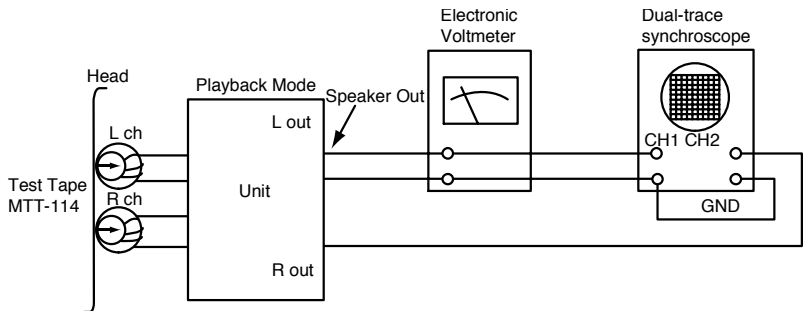


Figure 1. Azimuth Adjustment Connection Diagram

#### 2. MOTOR SPEED ADJUSTMENT

Deck Mode	Test Tape	Test Tape	Adjustment	Adjust for
Rec/Pause	MTT-5511	ERASE HEAD WIRE(PN201)	L201	60kHz±5kHz (Auto stop) 85kHz±5kHz(Auto Reverse)

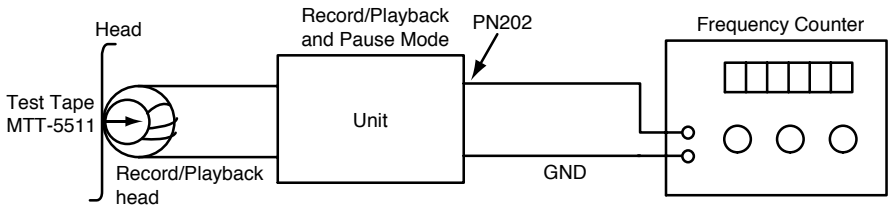


Figure 2. Motor Speed Adjustment Connection Diagram

### 3. TUNER ADJUSTMENT

(FM)

Item	Test Point	Adjustment	Adjust for
DC Voltage	Check Point TP1, TP2	L101	0V±50mV

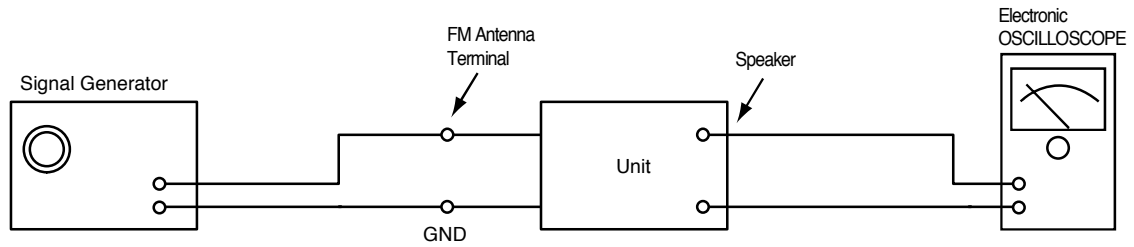
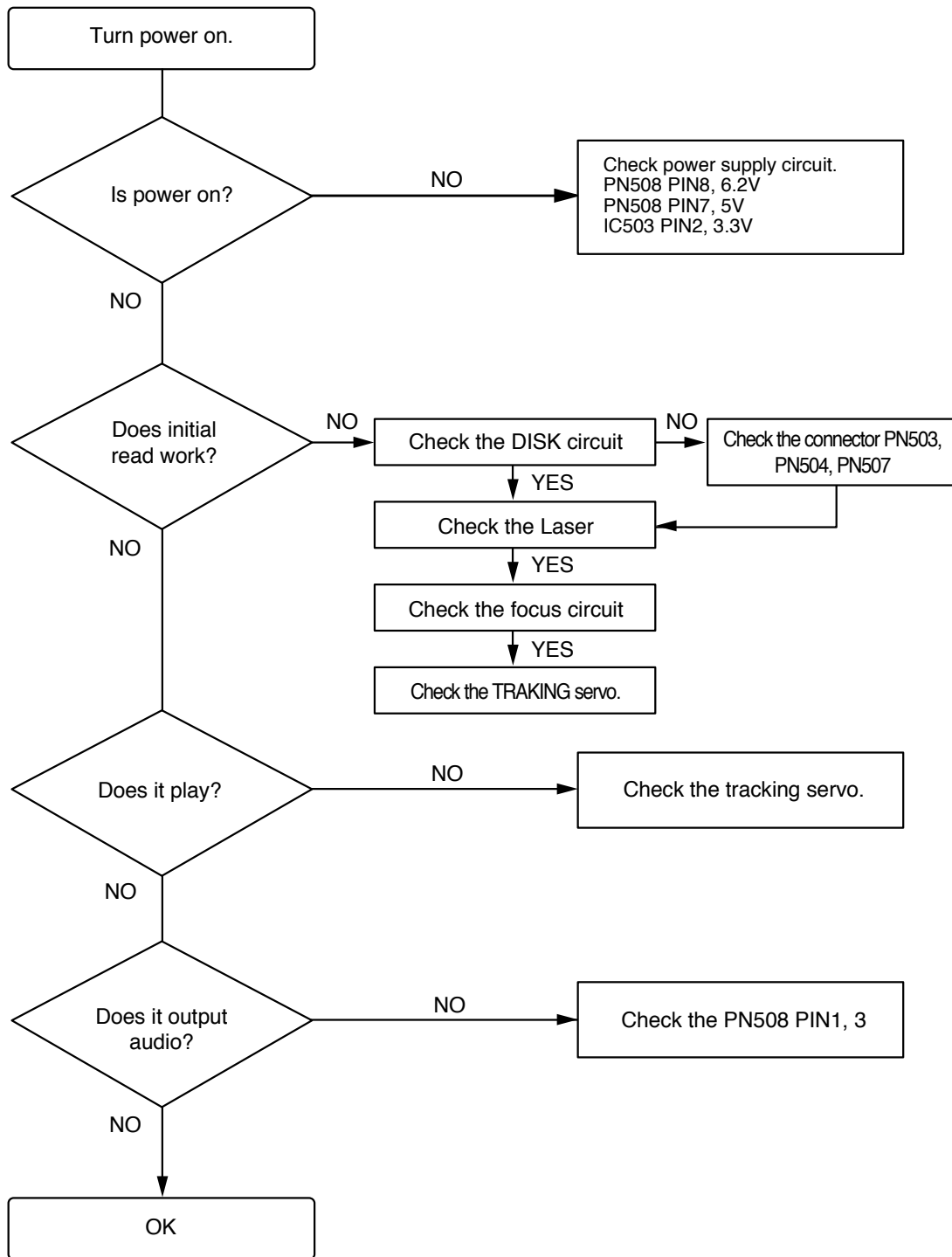


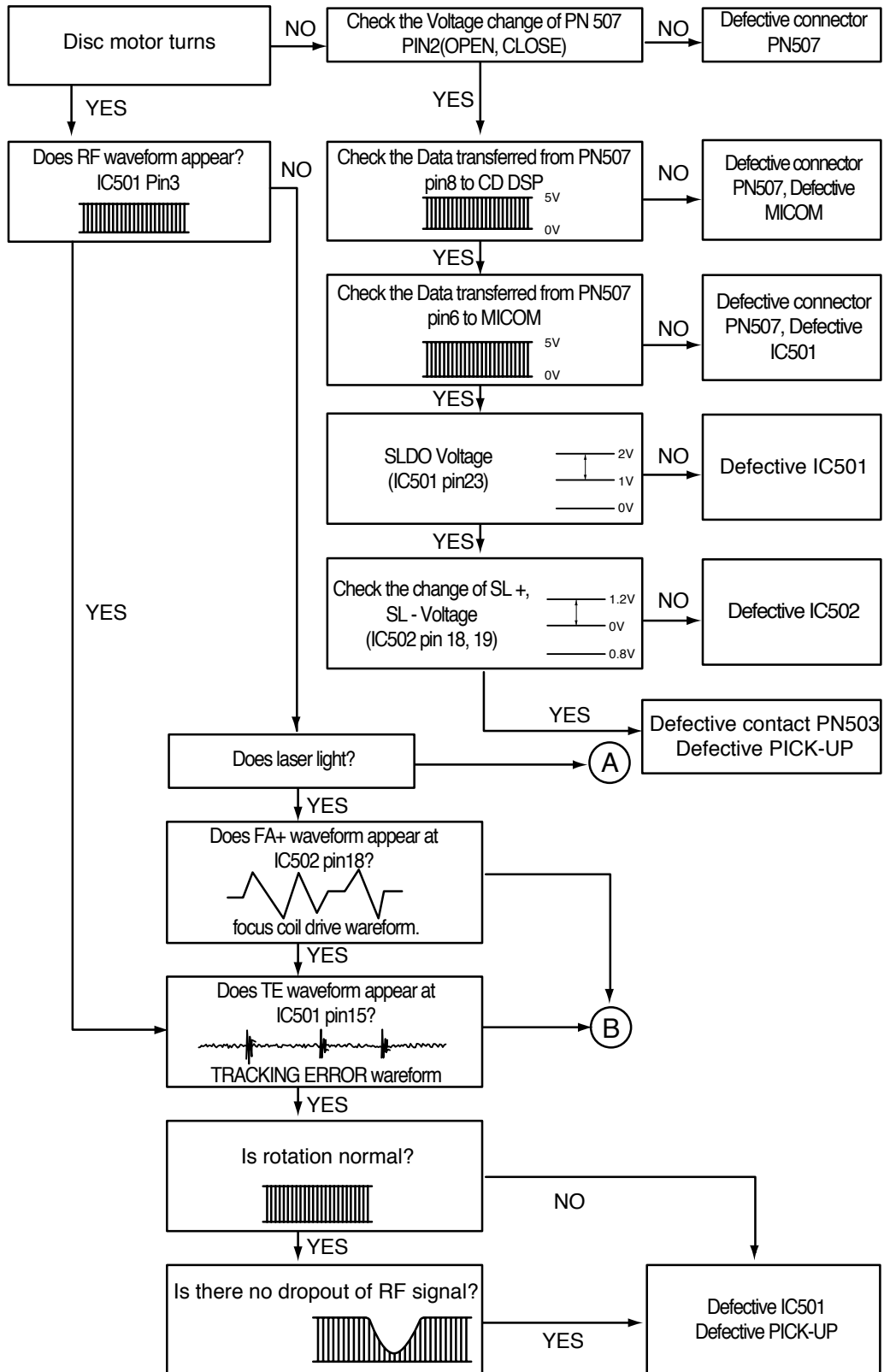
Figure 3. Tuner(S curve) Adjustment Connection Diagram

# ■ TROUBLESHOOTING

## • CD PART



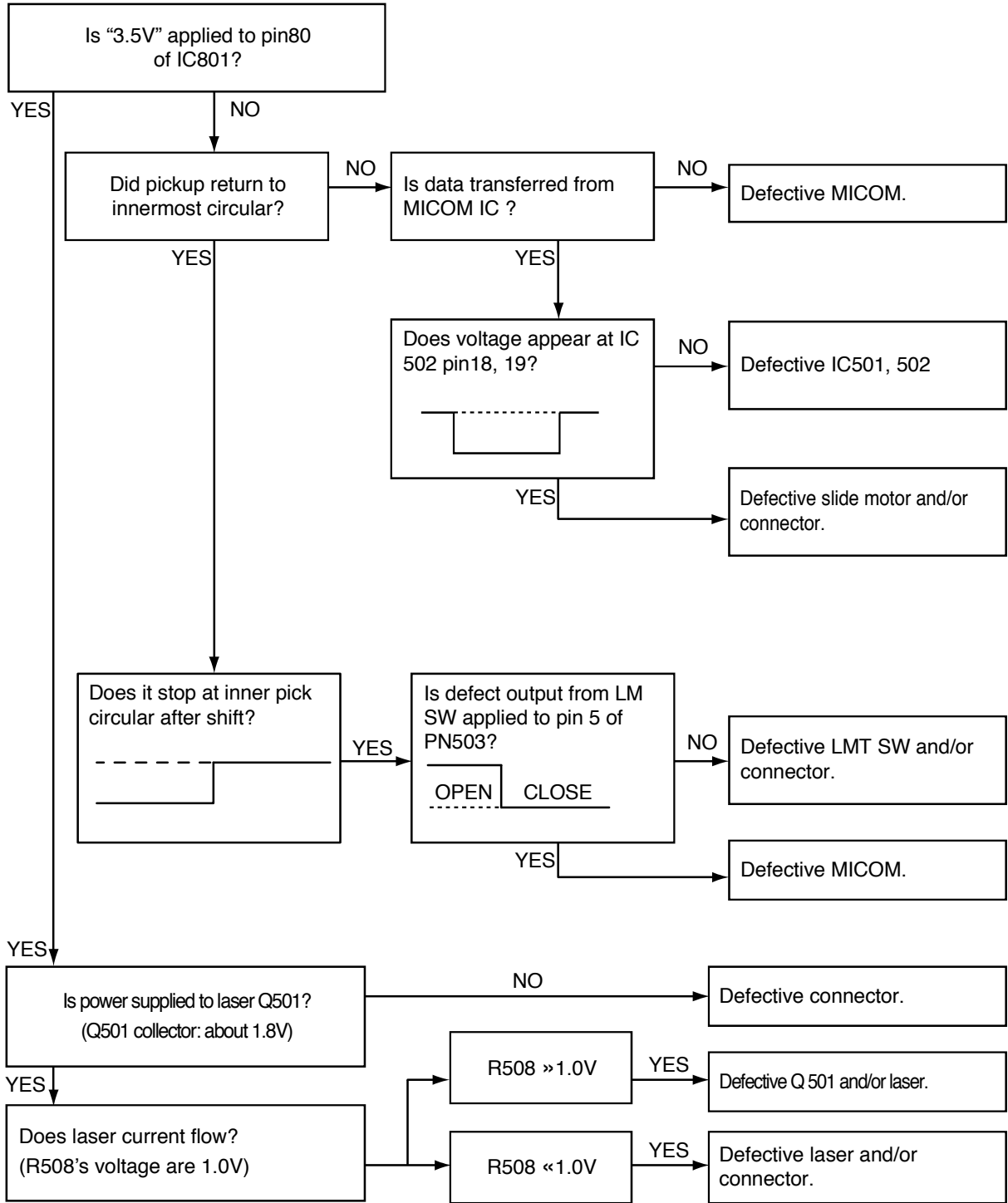
**FAILS TO INITIAL READ**

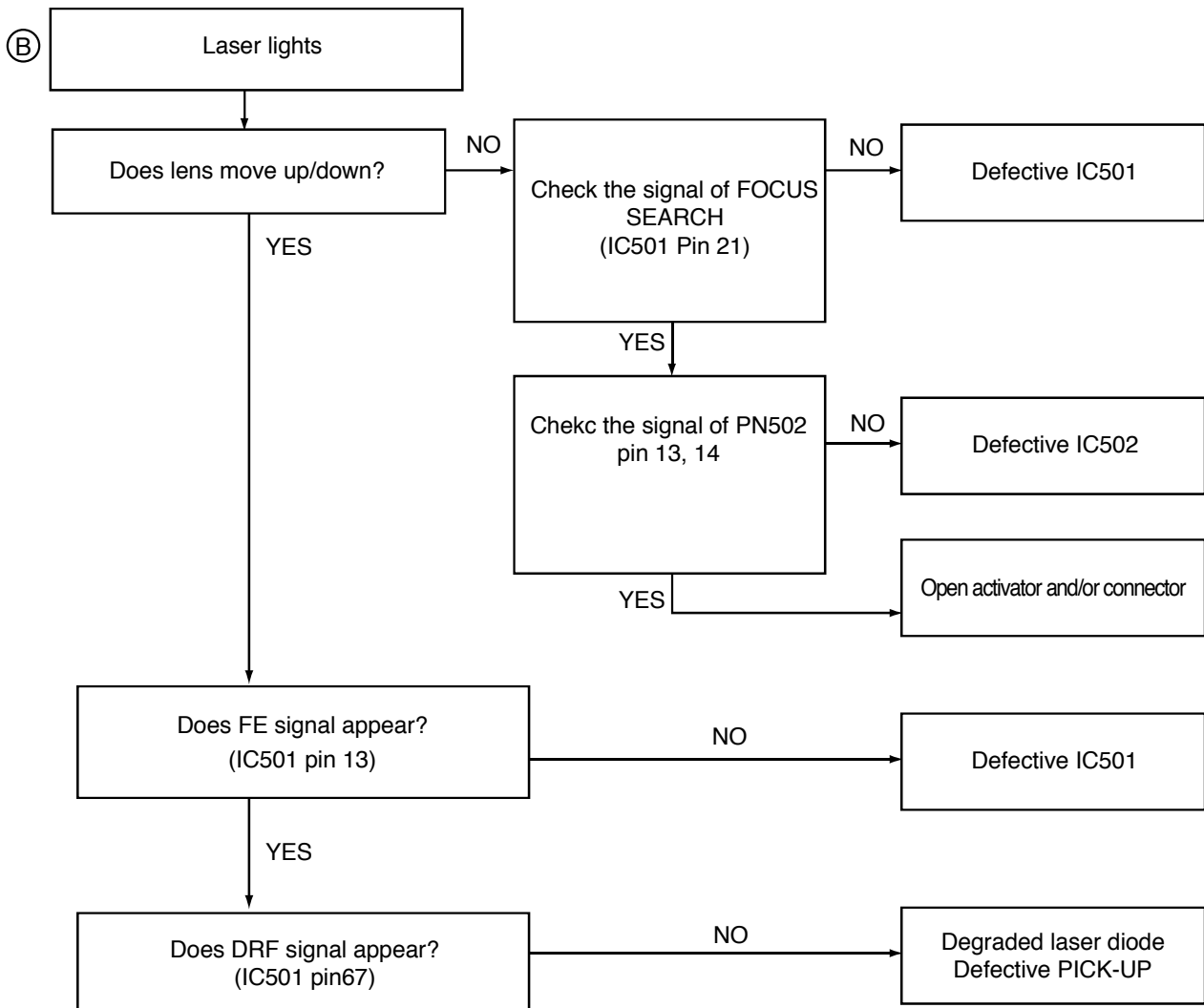




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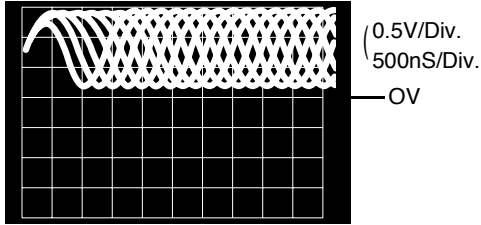
Laser does not light.



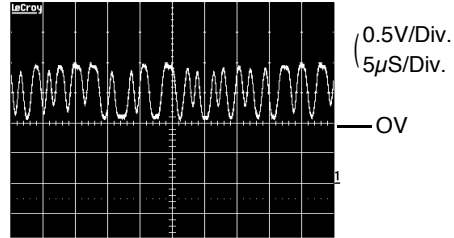


# ■ WAVEFORMS OF MAJOR CHECK POINT

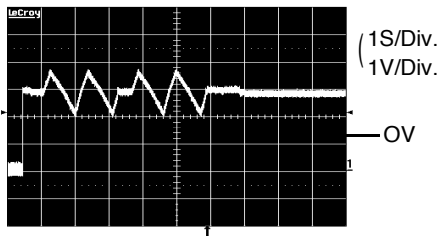
1. HF signal (RF signal ) waveform (IC501 pin4) during normal play



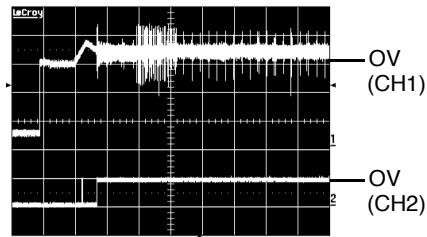
2. EFM signal (IC501 pin 3) waveform during Normal Play



3. Focus coil drive waveform(IC502 pin13)  
• When focus search failed or there is no disc on the tray



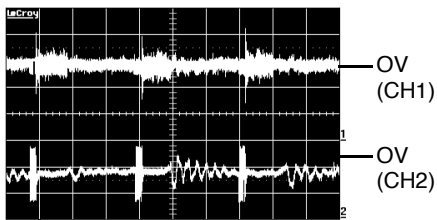
• Focus coil drive waveform(FDO: IC501 pin21) and DRF(IC501 pin67) when focus search is accomplished



( CH1 : FOCUS COIL DRIVE SIGNAL 2V/Div.  
CH2 : DRF

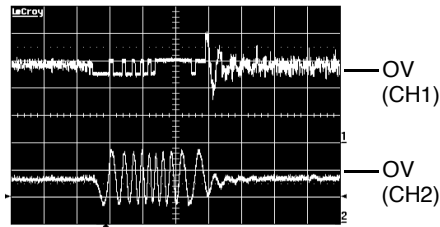
4. Tracking coil drive waveform and TE during track traverse

(1) When time division is 20mS/Div. 1V/Div.



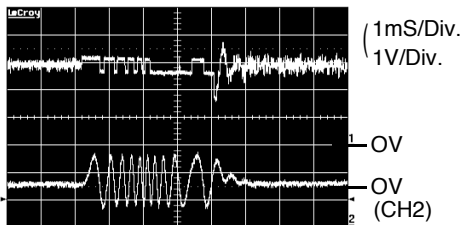
( CH1 : TRACKING COIL DRIVE (IC502 pin27)  
CH2 : TRACKING ERROR (TE: IC501 pin15)

(2) When time division 1mS/Div, 1V/Div  
(During forward track traverse)



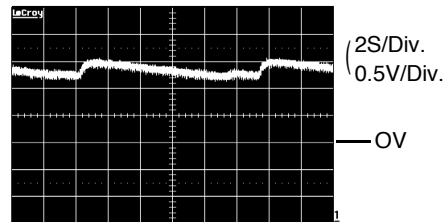
( CH1 : TRACKING COIL DRIVE (IC502 pin27) SIGNAL 2V/Div.  
CH2 : TRACKING ERROR (TE: IC501 pin15) 1V/Div.

(3) When time division is 0.5nS/div.  
(During backward Track Traverse)

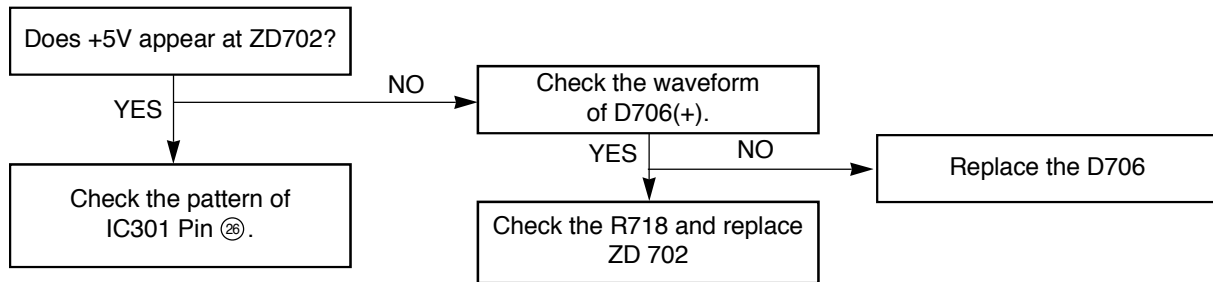


( CH1 : TRACKING COIL DRIVE SIGNAL 2V/Div. (IC502 pin27)  
CH2 : TRACKING ERROR(TE: IC501 pin15) 1V/Div.

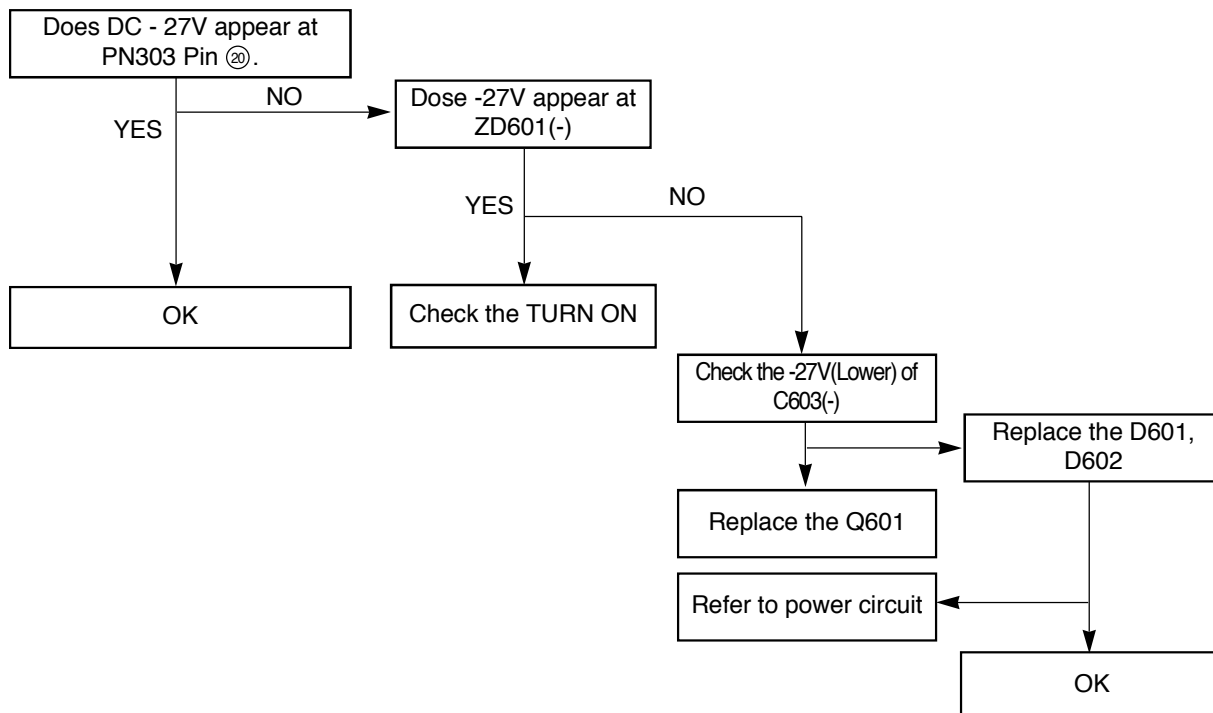
5. Feed motor drive waveform(IC 502 pin18)  
During normal play



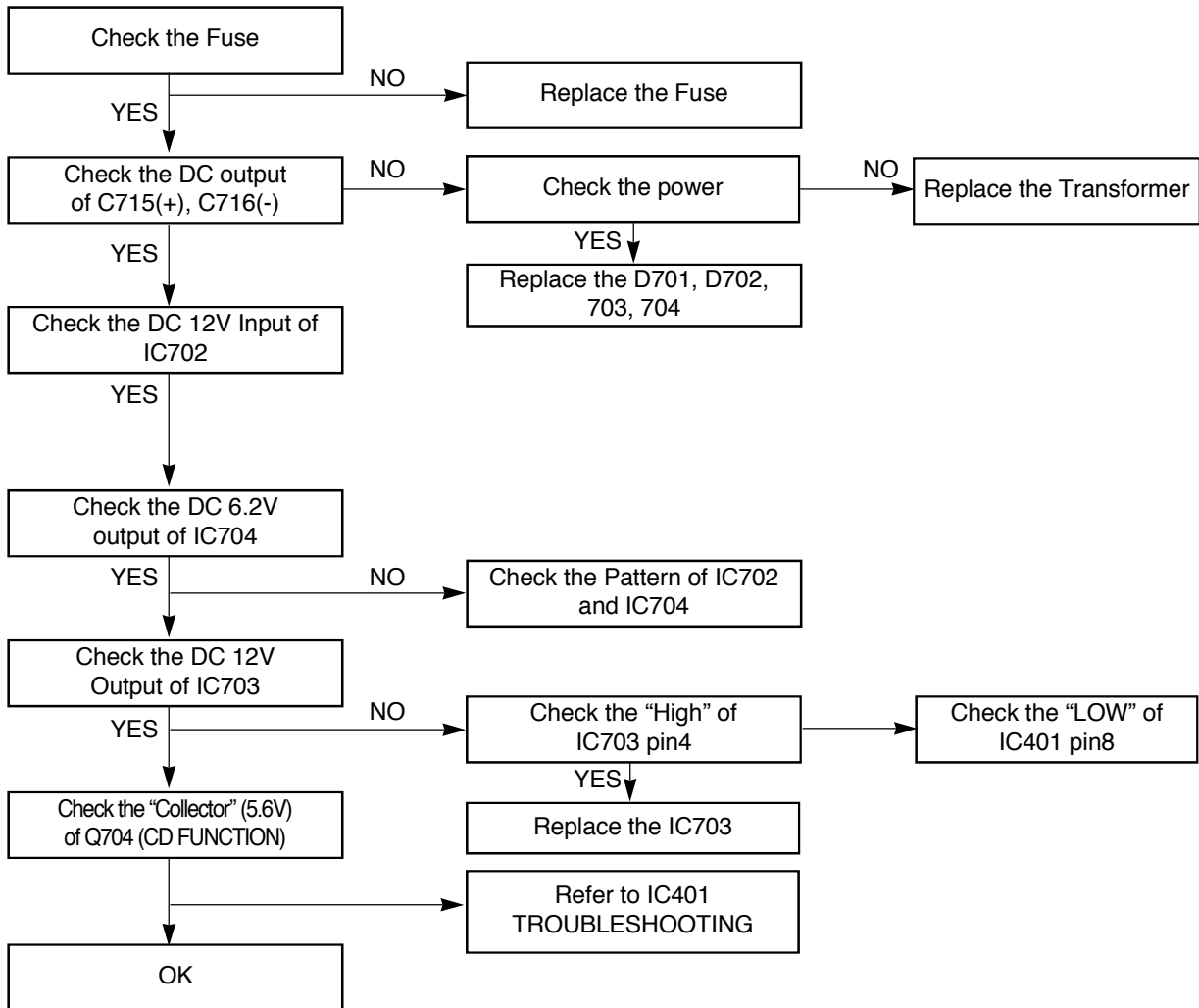
### P-SENS PART



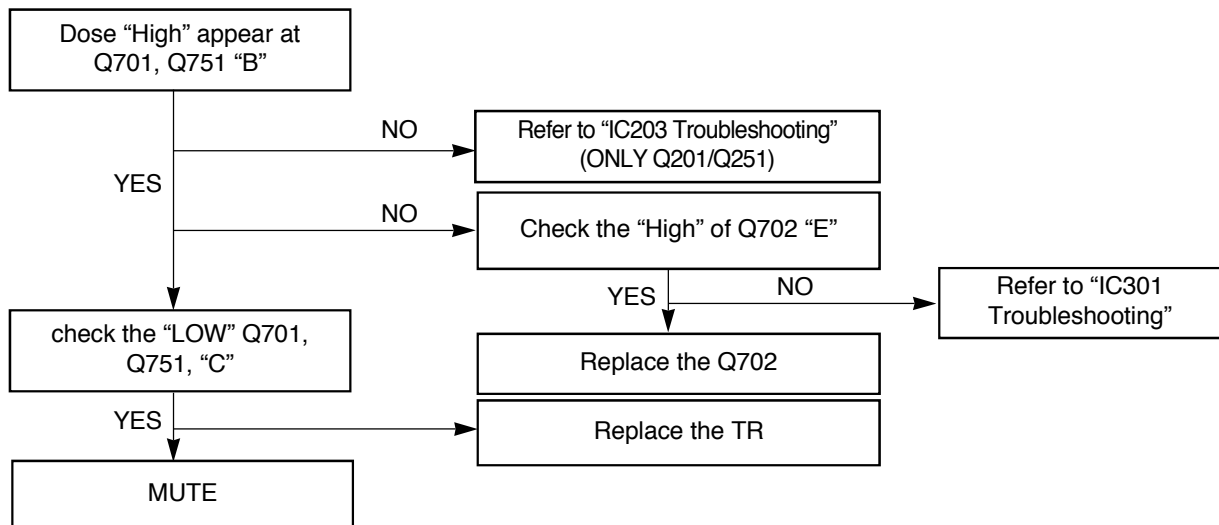
### VKK PART



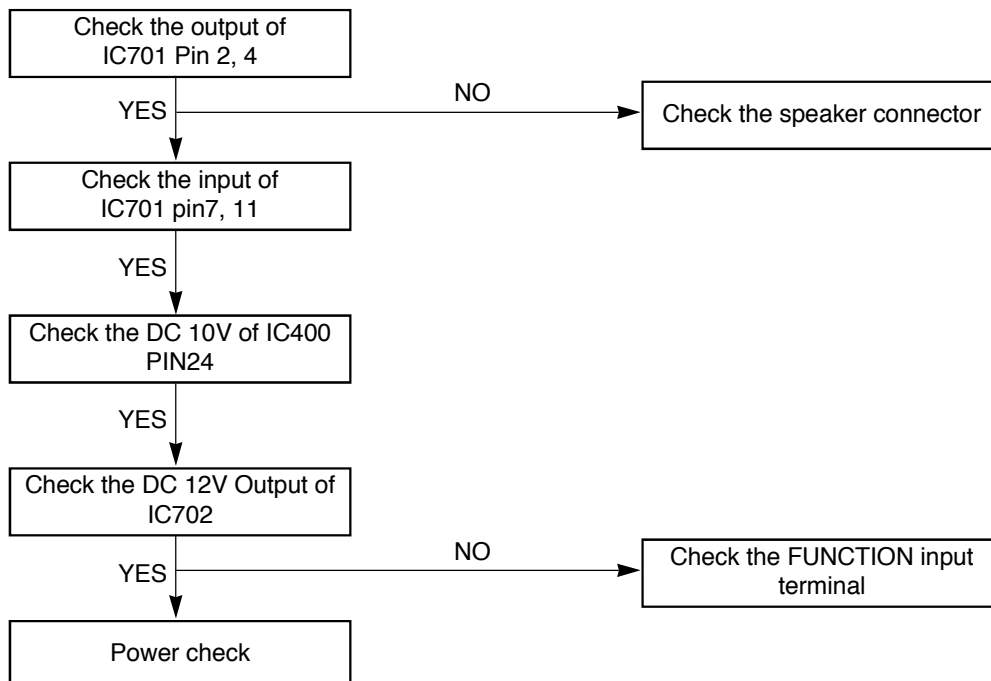
## POWER CIRCUIT



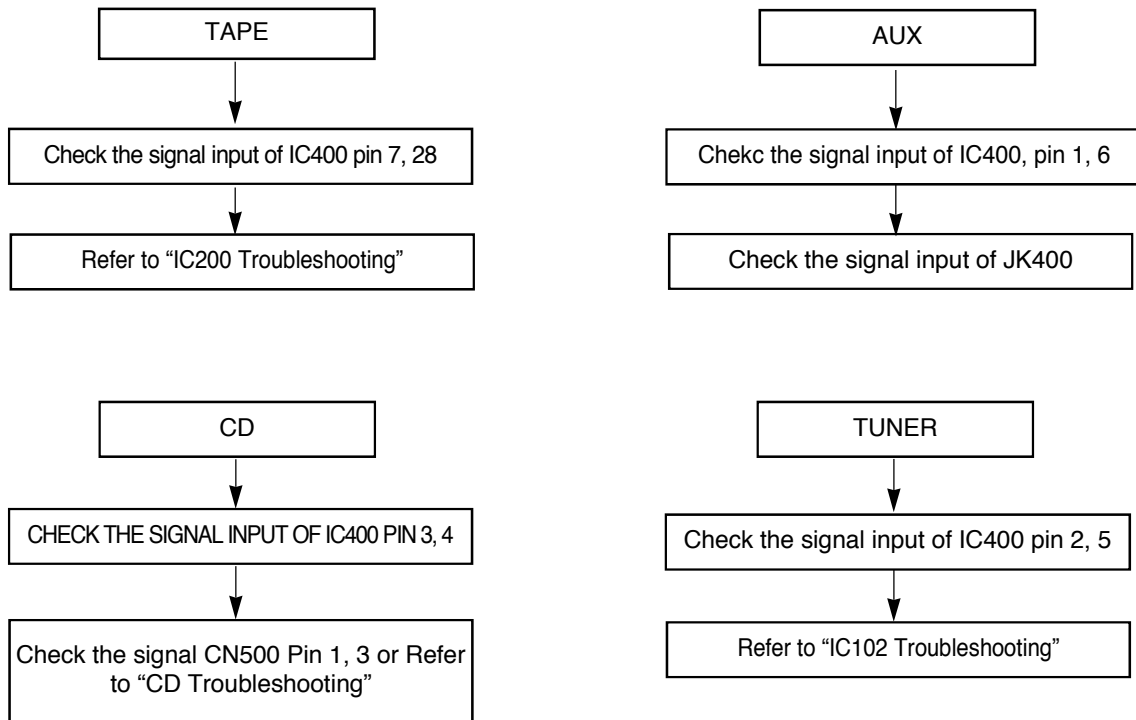
### MUTING CIRCUIT (MUTE)



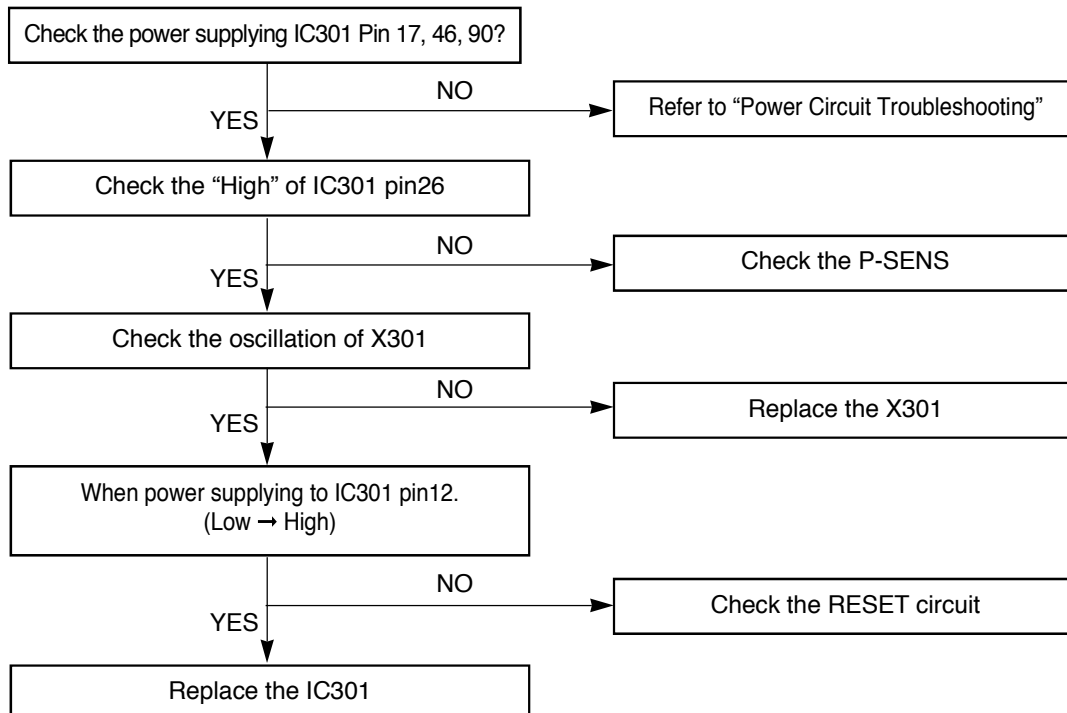
### AUDIO ABNORMAL



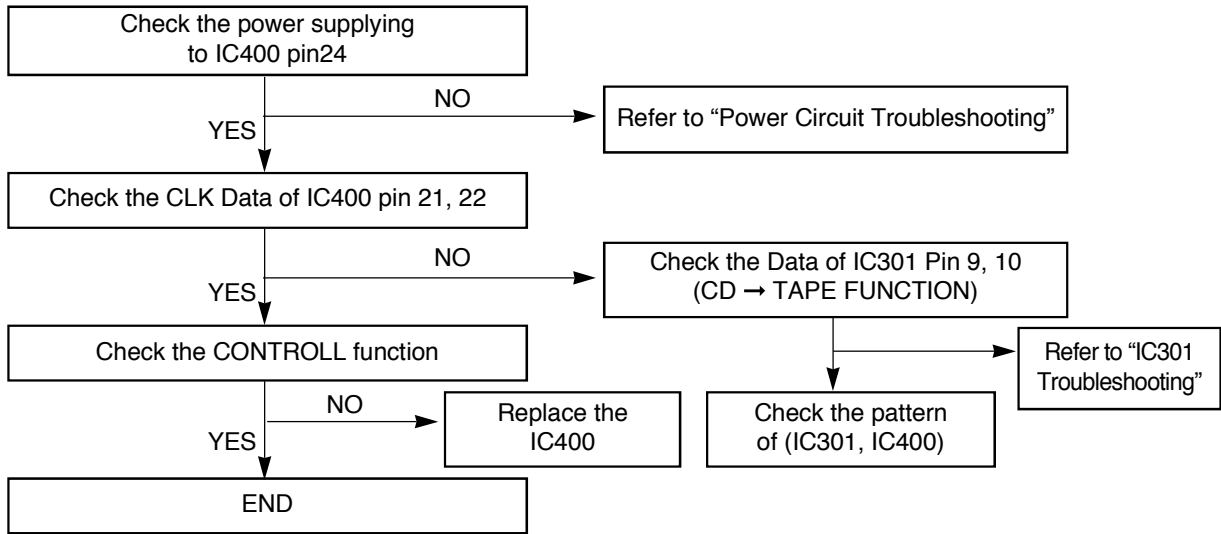
## FUNCTION MODE AUDIO ABNORMAL



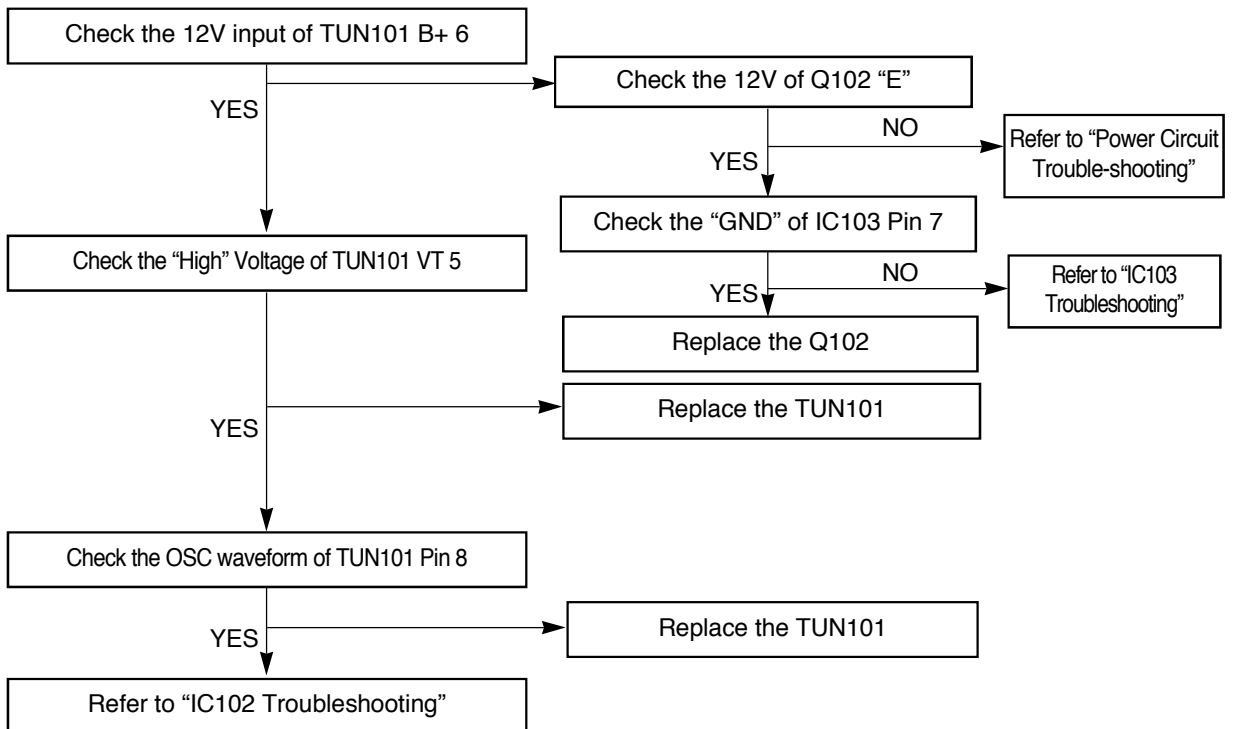
## IC301 TROUBLESHOOTING



## IC203 TROUBLESHOOTING

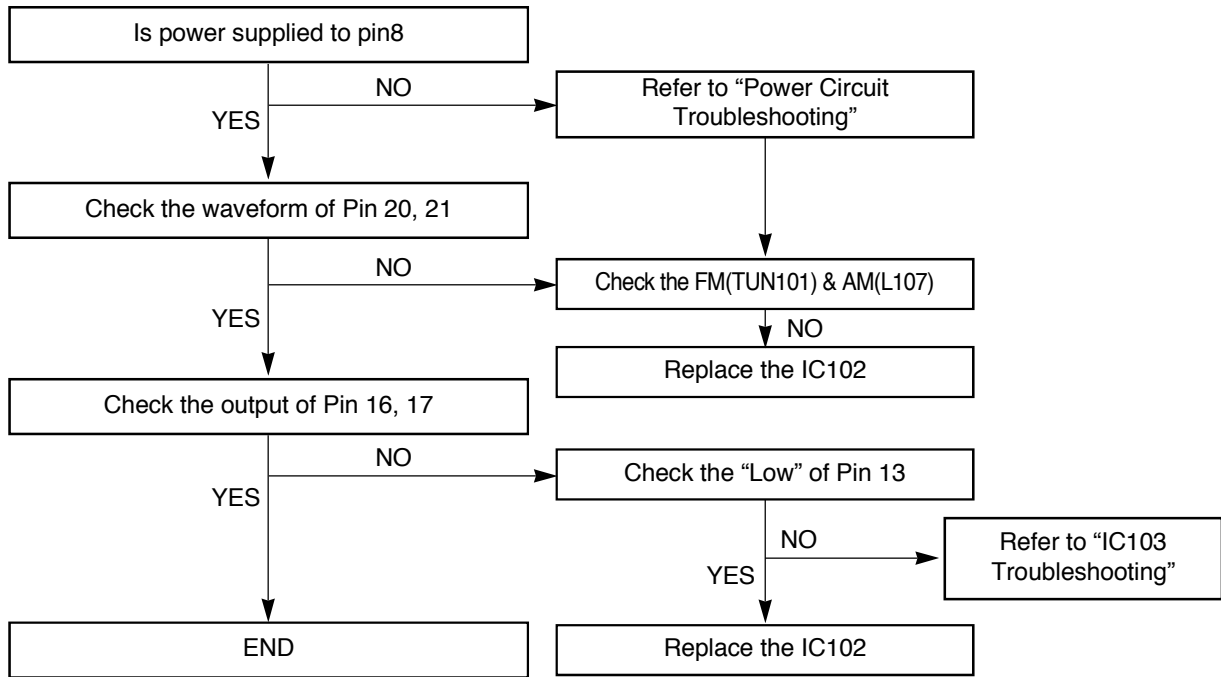


## FM (TUN101)

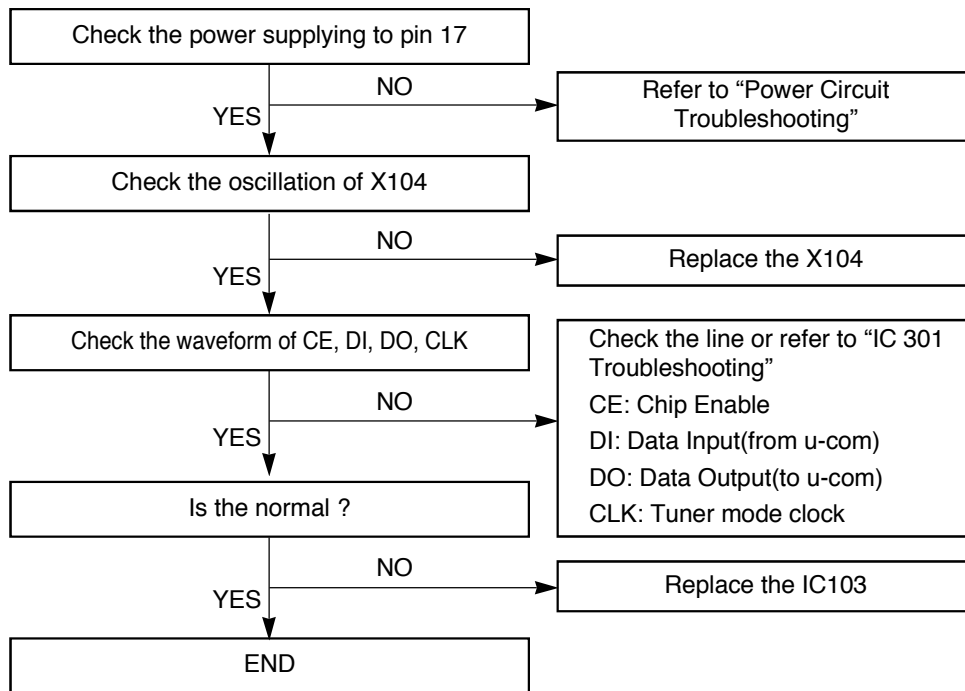




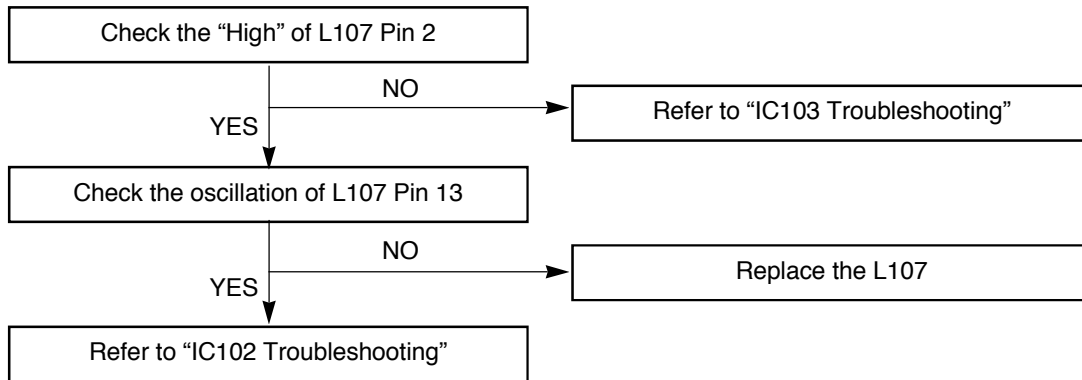
### IC102 TROUBLESHOOTING



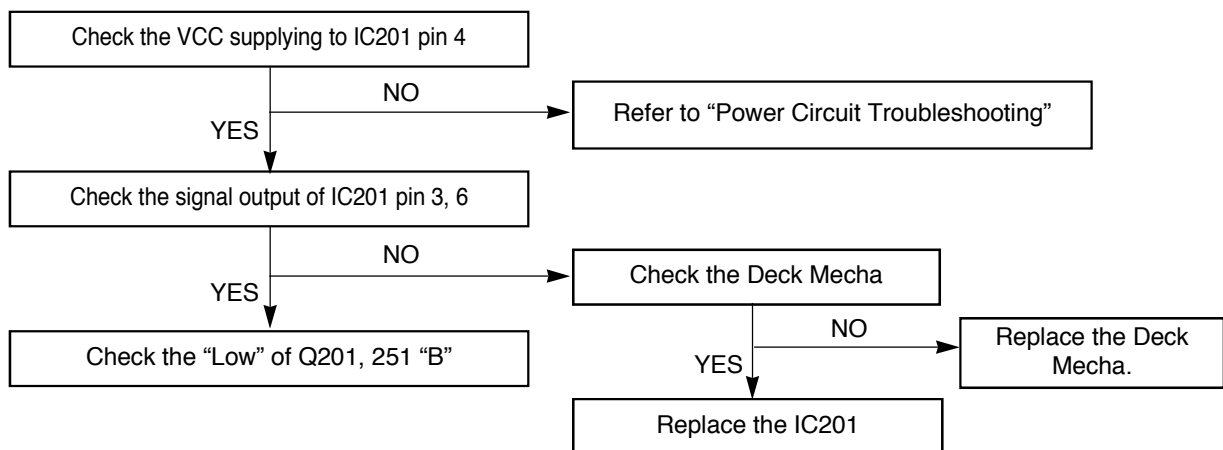
### IC103 TROUBLESHOOTING



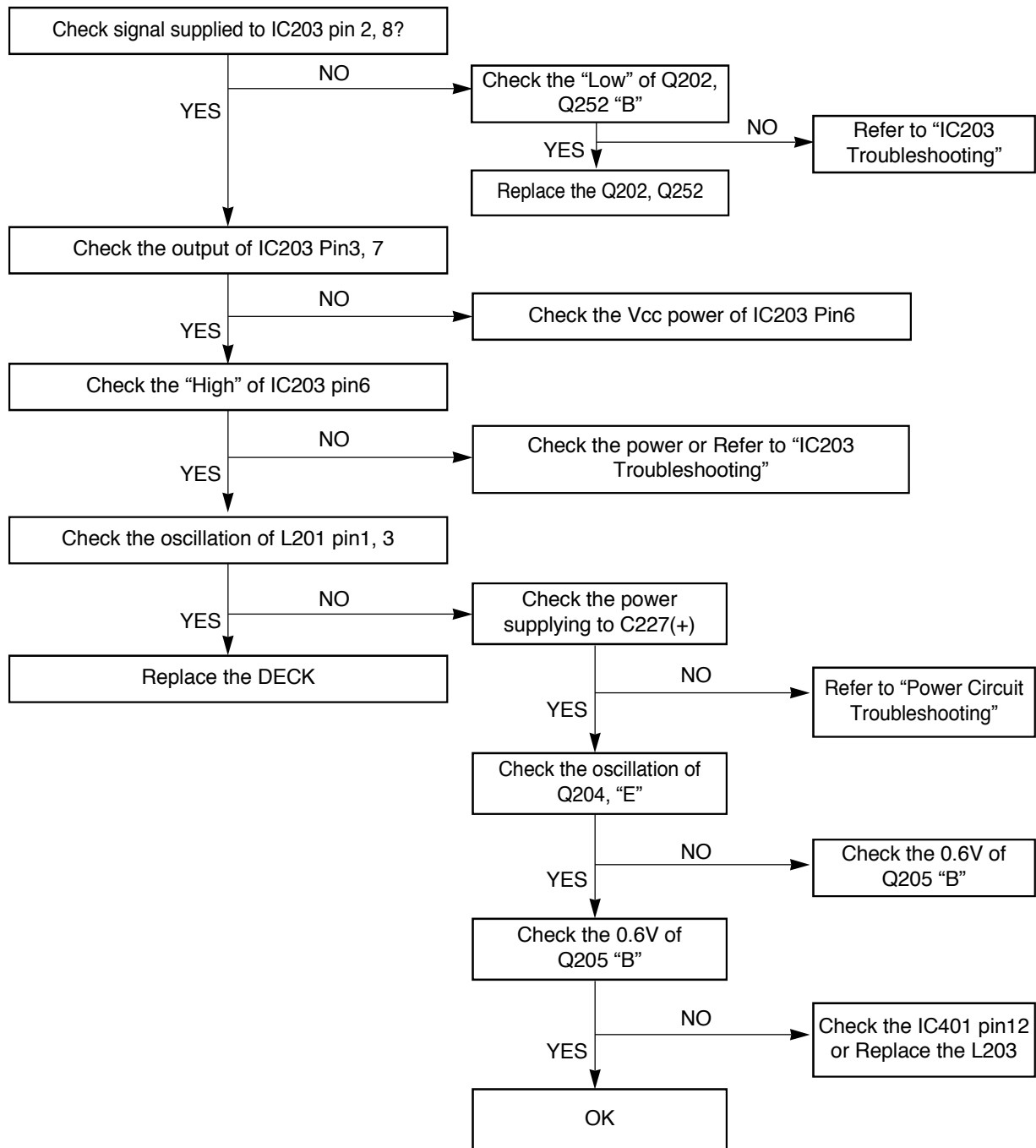
## AM-COIL TROUBLESHOOTING



## Play

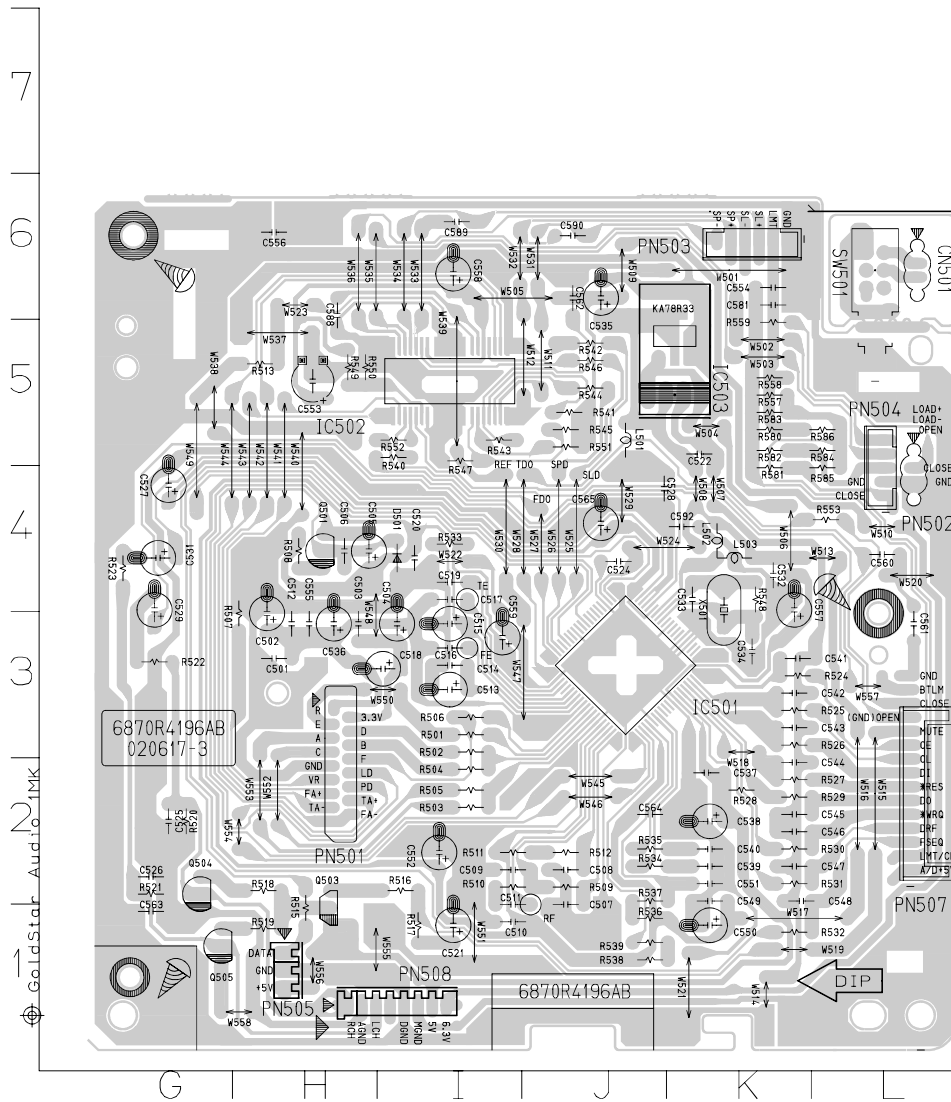


**REC (Q252, Q202 ON / R273, R223 High)**



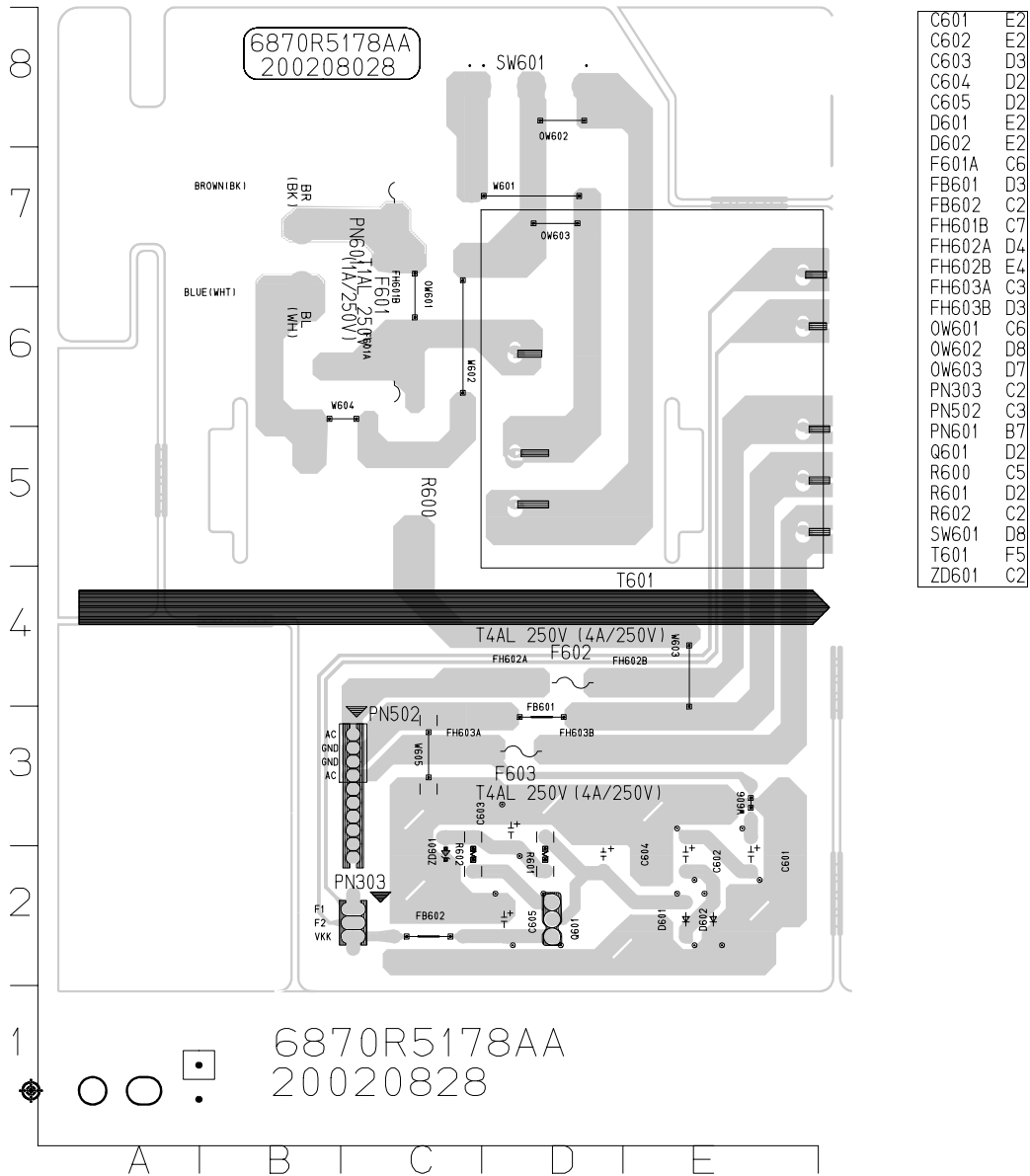


# • CD MAIN P.C. BOARD (COMPONENT SIDE)



C501	H3	PN502	L4
C502	H3	PN503	K6
C503	H3	PN504	L4
C504	I3	PN505	H1
C505	H4	PN507	L2
C506	H4	PN508	H1
C507	J1	Q501	H4
C508	J2	Q503	H1
C509	I2	Q504	G2
C510	I1	Q505	G1
C511	I1	R501	I3
C512	H3	R502	I3
C513	I3	R503	I2
C514	I3	R504	I2
C515	I3	R505	I2
C516	I3	R506	I3
C517	I4	R507	H3
C518	I3	R508	H4
C519	I4	R509	J2
C520	I4	R510	I2
C521	I1	R511	I2
C522	K5	R512	J2
C524	J4	R513	H5
C525	G2	R515	H1
C526	G2	R516	I2
C527	G4	R517	I1
C528	J4	R518	H2
C529	G4	R519	H1
C531	G4	R520	G2
C532	K4	R521	G2
C533	K4	R522	G3
C534	K3	R523	G4
C535	J6	R524	K3
C536	H3	R525	K3
C537	K2	R526	K3
C538	K2	R527	K2
C539	K2	R528	K2
C540	K2	R529	K2
C541	K3	R530	K2
C542	K3	R531	K2
C543	K3	R532	K1
C544	K2	R533	I4
C545	K2	R534	J2
C546	K2	R535	J2
C547	K2	R536	J1
C548	K2	R537	J2
C549	K2	R538	J1
C550	K1	R539	J1
C551	K2	R540	I5
C552	I2	R541	J5
C553	H5	R542	J5
C554	K6	R543	I5
C555	H3	R544	J5
C556	H6	R545	J5
C557	K4	R546	J5
C558	I6	R547	I5
C559	I3	R548	K4
C560	L4	R549	H5
C561	L3	R550	H5
C562	J6	R551	J5
C563	G1	R552	I5
C564	J2	R553	L4
C565	J4	R557	K5
C581	K6	R558	K5
C588	H6	R559	K5
C589	I6	R580	K5
C590	J6	R581	K4
C592	K4	R582	K5
D501	I4	R583	K5
IC503	K5	R584	L5
L501	J5	R585	L4
L502	K4	R586	L5
L503	K4	X501	K4
PN501	H3		

• POWER P.C. BOARD



# INTERNAL BLOCK DIAGRAM OF ICs

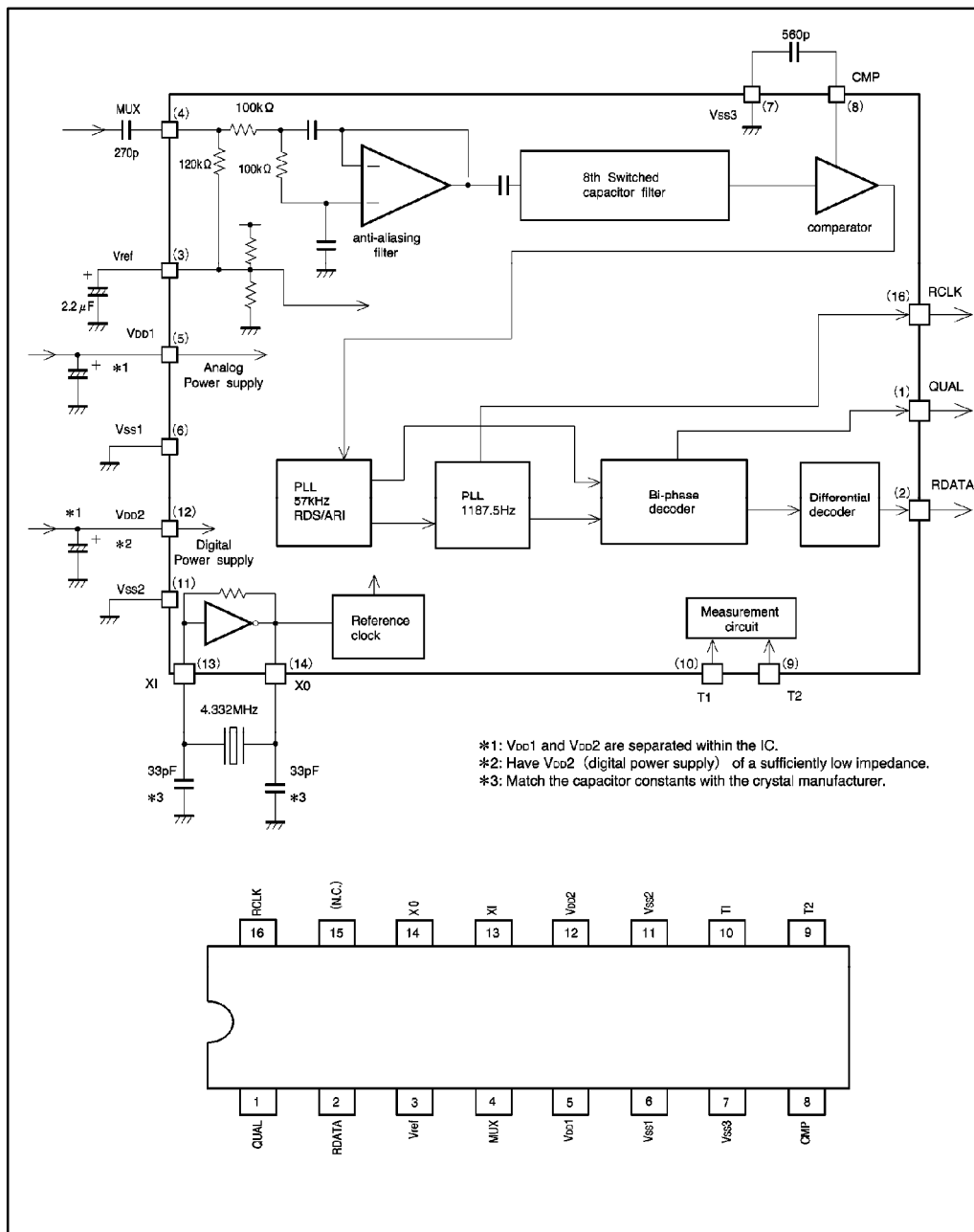
## BU1923F (IC 302)

Low Dropout Voltage Regulator

### FEATURES

RDS / RBDS compatible FM receivers for American and European markets, car stereos, high-fidelity stereo systems and components, and FM pagers.

### EQIALENT CIRCUIT



## Pin descriptions

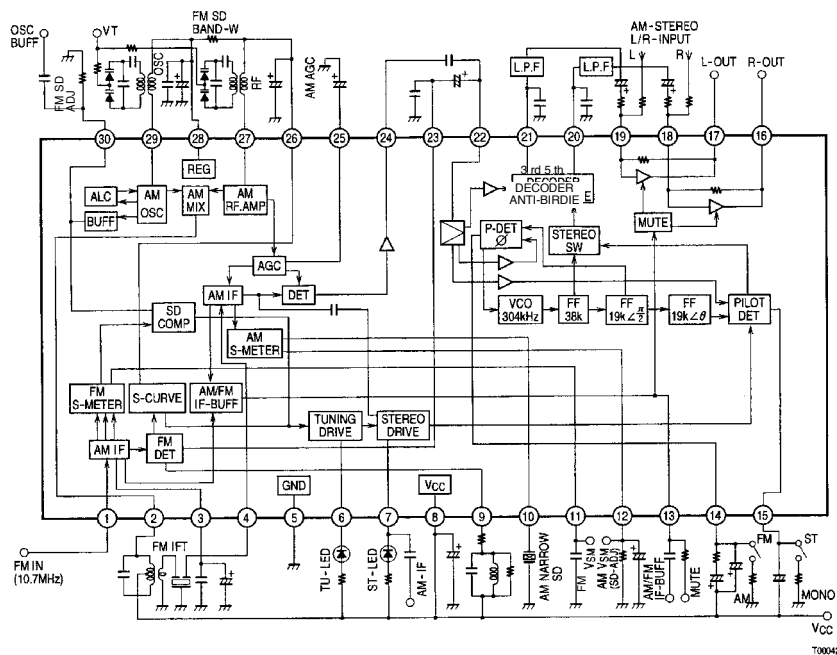
Pin No.	Symbol	Pin name	Function	Input/output type
1	QUAL	Demodulator quality	Good data: High, bad data: Low	Type C
2	RDATA	Demodulator data	Refer to output data timing	—
3	Vref	Reference voltage	1/2 V <sub>DD1</sub> (refer to input/output circuits)	Type E
4	MUX	Input	Composite signal input (refer to input/output circuits)	Type D
5	V <sub>DD1</sub>	Analog power supply	4.5V to 5.5V	—
6	V <sub>SS1</sub>			
7	CMP	Comparator input	C-junction (refer to input/output circuits )	Type D
8	V <sub>SS3</sub>	GND	—	—
9	T2	Test input	Open or connected to ground	Type B
10	T1			
11	V <sub>DD2</sub>	Digital power supply	4.5V to 5.5V	—
12	V <sub>SS2</sub>			
13	XI	Crystal oscillator	Connects to 4.332MHz oscillator (refer to input/output circuits)	Type A
14	XO			
15	(N.C.)	—	—	—
16	RCLK	Demodulator clock	1187.5Hz clock (refer to the timing diagram)	Type C

## ■ LA1837 (IC 102)

### Single-Chip Home stereo IC with Electronic Tuning Support

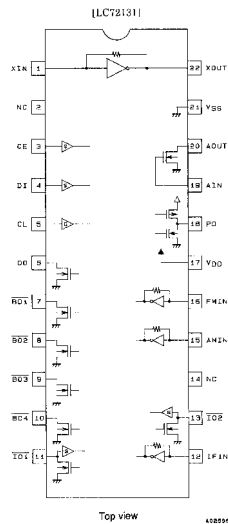
The LA1837 is a single-chip AM/FM IF and MPX IC that supports electronic tuning and was developed for use in home stereo systems. It is optimal for use in automatic station selection systems that use the SD and IF counting techniques.

### Block Diagram

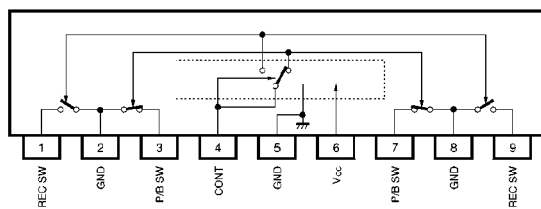




■ **LC72131 (IC 103)**  
**AM/FM PLL Frequency Synthesizer**



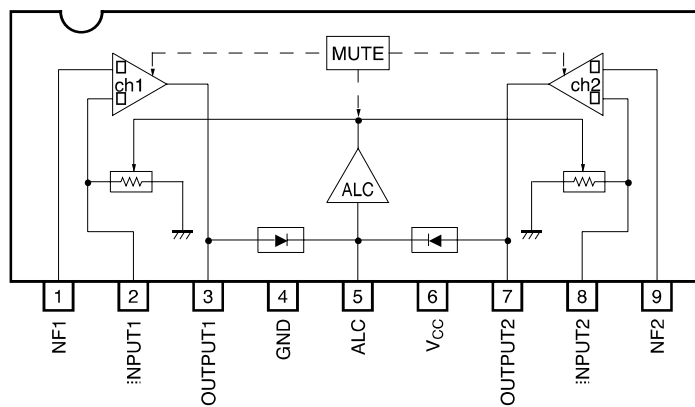
■ **BA3126N (IC 201)**  
**2-channel head switch for radio cassette recorders**



■ **BA3308 (IC203)**  
**Dual preamplifier with ALC**

**APPLICATIONS**

Stereo radio cassette recorders, cassette decks and home stereo systems and music centers



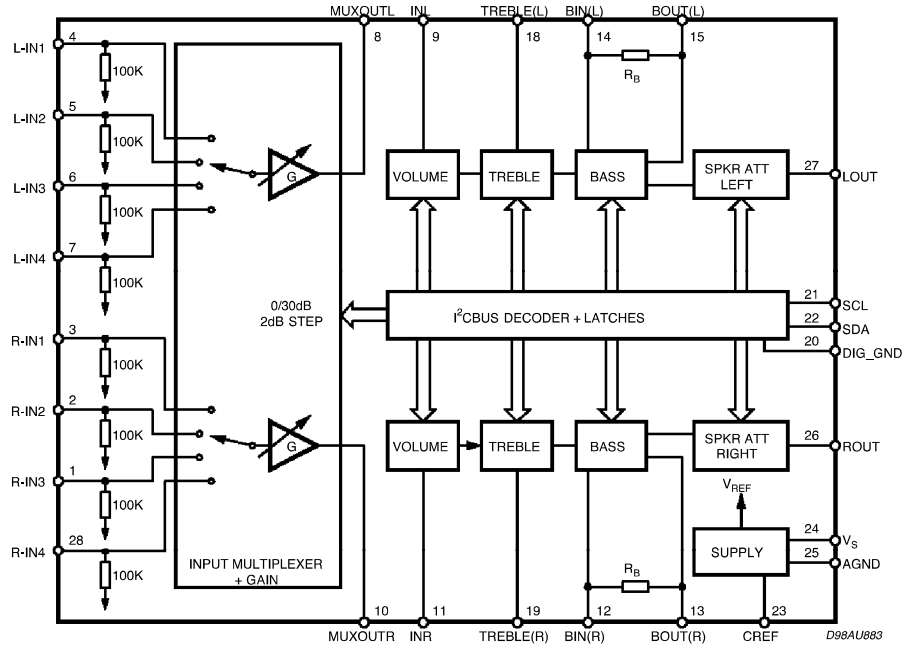
# ■ TDA7440D (IC 701)

## TONE CONTROL DIGITALLY CONTROLLED AUDIO PROCESSOR

### DESCRIPTION

The TDA7440D is a volume tone (bass and treble) balance (Left/Right) processor for quality audio applications in Hi-Fi systems.

### BLOCK DIAGRAM

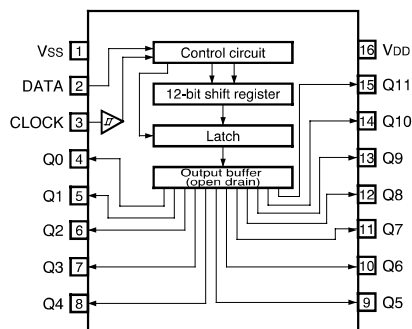


## ■ BU2090F (IC401)

### 12-bit, serial IN, parallel OUT driver

#### APPLICATIONS

Radio cassette players, telephones, compact audio systems, car stereos, and others



#### • Pin descriptions

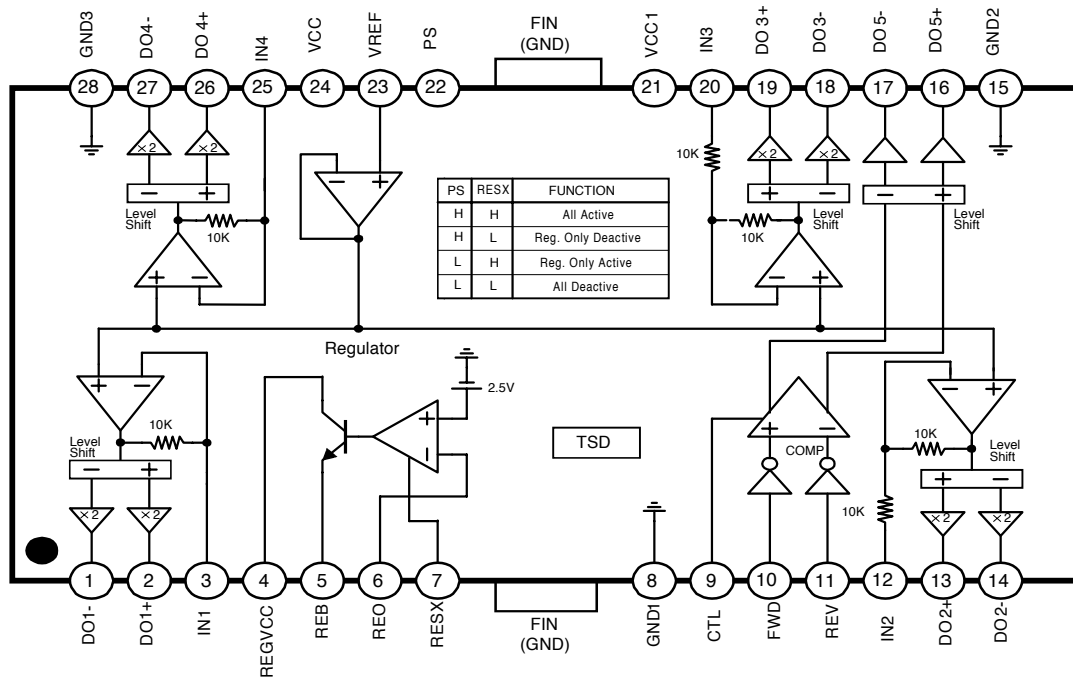
Pin No.			Pin name	Function
BU2090 / F / FS	BU2092 / F	BU2092 / FV		
1	1	1	V <sub>SS</sub>	GND
2	2	2	DATA	Serial data input
3	3	3	CLOCK	Data shift clock input
—	4	4	LCK	Data latch clock input
4	5	5	Q0	Parallel data output
5	6	6	Q1	Parallel data output
6	7	7	Q2	Parallel data output
7	8	8	Q3	Parallel data output
8	9	9	Q4	Parallel data output
9	10	10	Q5	Parallel data output
10	11	11	Q6	Parallel data output
—	—	12	N.C.	Not connected
—	—	13	N.C.	Not connected
11	12	14	Q7	Parallel data output
12	13	15	Q8	Parallel data output
13	14	16	Q9	Parallel data output
14	15	17	Q10	Parallel data output
15	16	18	Q11	Parallel data output
—	17	19	$\overline{\text{OE}}$	Output Enable
16	18	20	V <sub>DD</sub>	Power supply

# ■ FAN8039BD3 (IC 802)

## 5-CH MOTOR DRIVER

### DESCRIPTION

The FAN8039BD3 is a monolithic integrated circuit suitable for a 5-CH motor driver which drives the tracking actuator, focus actuator, sled motor, tray motor, spindle motor of the DVDP/CAR-CD systems.



### Pin Definitions

NO	Symbol	Description	NO	Symbol	Description
1	DO1-	CH1 Drive Output (-)	15	GND2	Power Ground1 (CH 2,3,5)
2	DO1+	CH1 Drive Output (+)	16	DO5+	CH5 Drive Output (+)
3	IN1	CH1 Drive Input	17	DO5-	CH5 Drive Output(-)
4	REGVCC	Regulator Supply Voltage	18	DO3-	CH3 Drive Output(-)
5	REB	Regulator Output	19	DO3+	CH3 Drive Output (+)
6	REO	Regulator Feedback Input	20	IN3	CH3 Drive Input
7	RESX	Regulator Reset	21	VCC1	Supply Voltage1(CH2,CH3,CH5)
8	GND1	Signal Ground	22	PS	Power Save
9	CTL	CH5 Motor Speed Control	23	VREF	Bias Voltage
10	FWD	CH5 Forward Input	24	VCC	Supply Voltage(CH1,CH4)
11	REV	CH5 Reverse Input	25	IN4	CH4 Drive Input
12	IN2	CH2 Drive Input	26	DO4+	CH4 Drive Output (+)
13	DO2+	CH2 Drive Output (+)	27	DO4-	CH4 Drive Output (-)
14	DO2-	CH2 Drive Output (-)	28	GND3	Power Ground2 (CH 1,4)

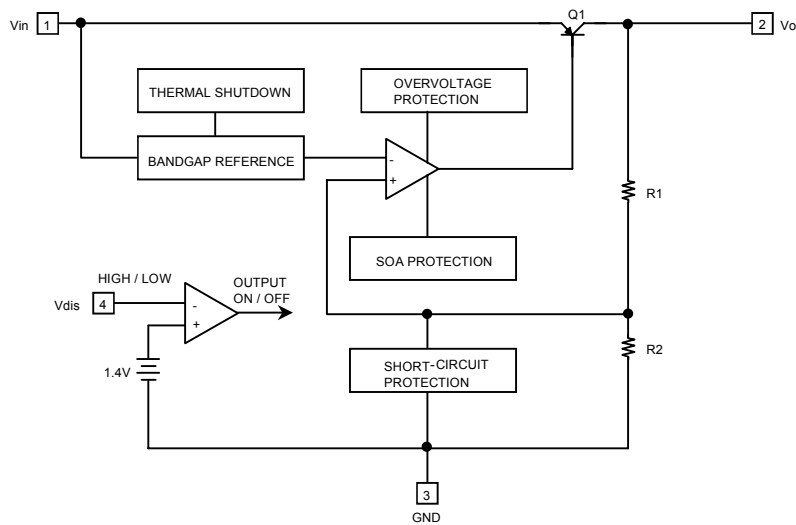
# KA78R33 (IC 803)

## Low Dropout Voltage Regulator

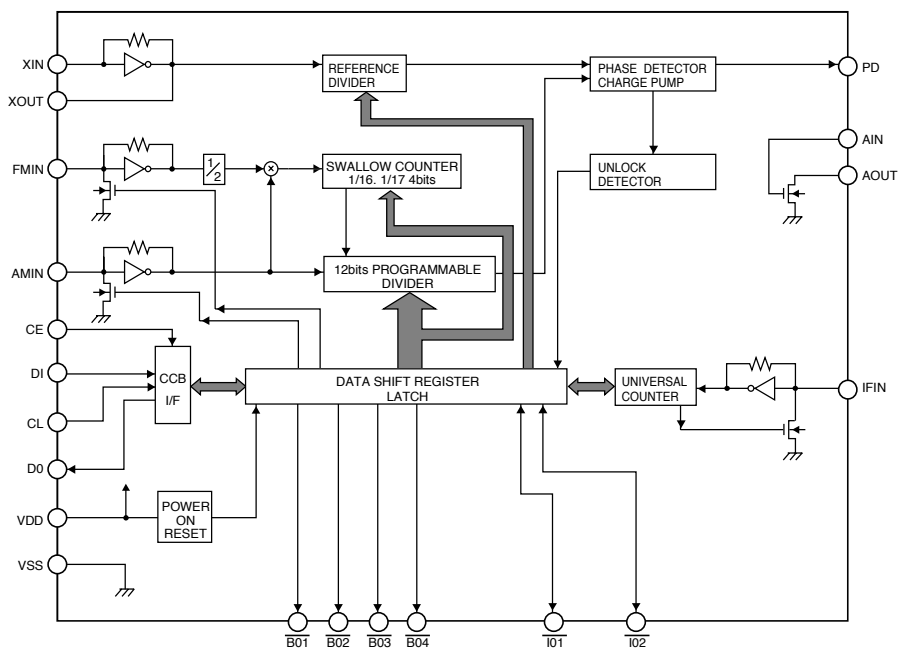
### DESCRIPTION

The KA78R33 is a low-dropout voltage regulator suitable for various electronic equipments. It provides constant voltage power source with TO-220 4 lead full mold package. Dropout voltage of KA78R33 is below 0.5V in full rated current(1A). This regulator has various function such as peak current protection, thermal shut down, overvoltage protection and output disable function.

### INTERNAL BLOCK DIAGRAM



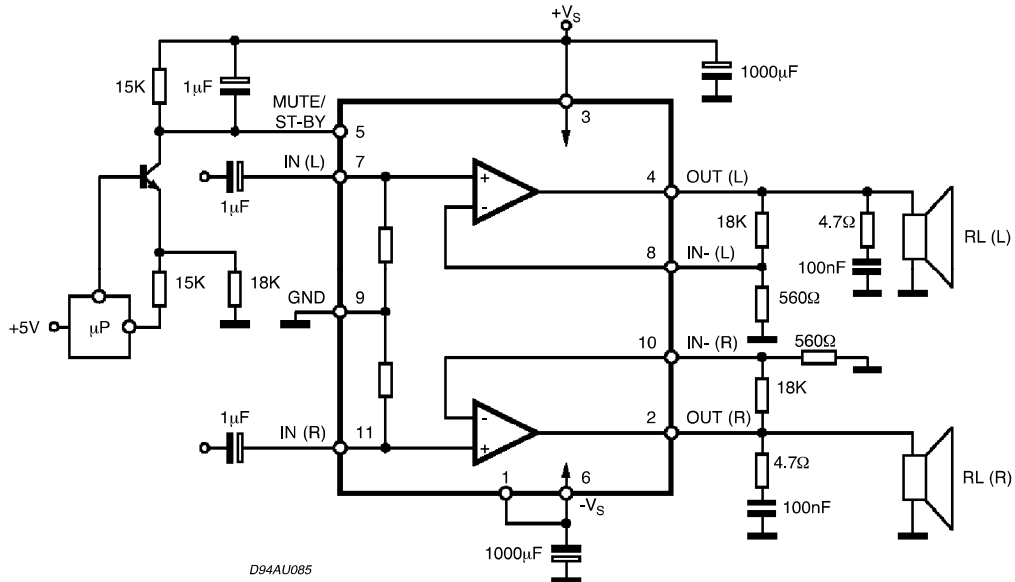
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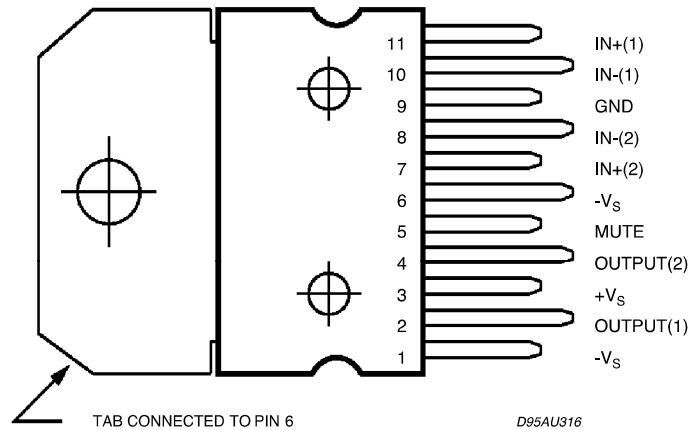
## ■ TDA7265 (IC701) 25+25W STEREO AMPLIFIER WITH MUTE & ST-BY

### • DESCRIPTION

The TDA7265 is class AB dual Audio power amplifier assembled in the Multiwatt package, specially designed for high quality sound application as Hi-Fi music centers and stereo TV sets.



### • PIN CONNECTION (TOP View)

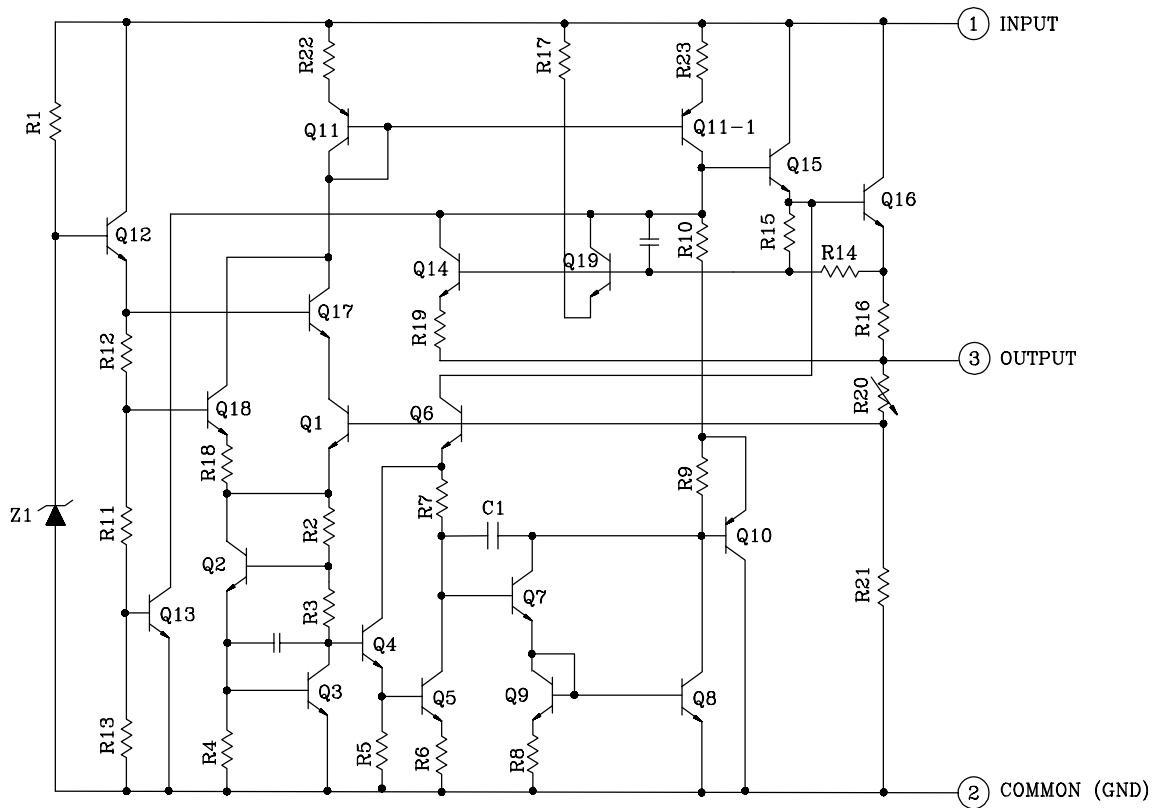


# ■ KIA7805, 7812API (IC 703, IC 782, IC 783) LOW DROPOUT VOLTAGE REGULATOR

## FEATURES

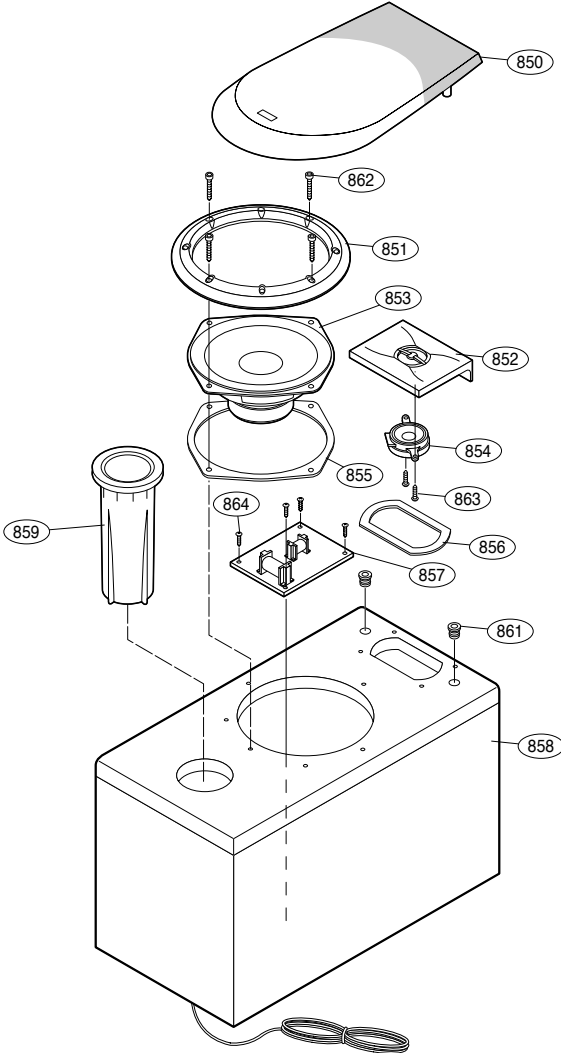
- Suitable for C-MOS, TTL, the Other Digital IC's Power Supply.
- Internal Thermal Overload Protection.
- Internal Short Circuit Current Limiting.
- Output Current in Excess of 1A
- Satisfies IEC-65 Specification. (International Electronical Commission.)

## EQUIVALENT CIRCUIT



# SECTION 4. SPEAKER SECTION

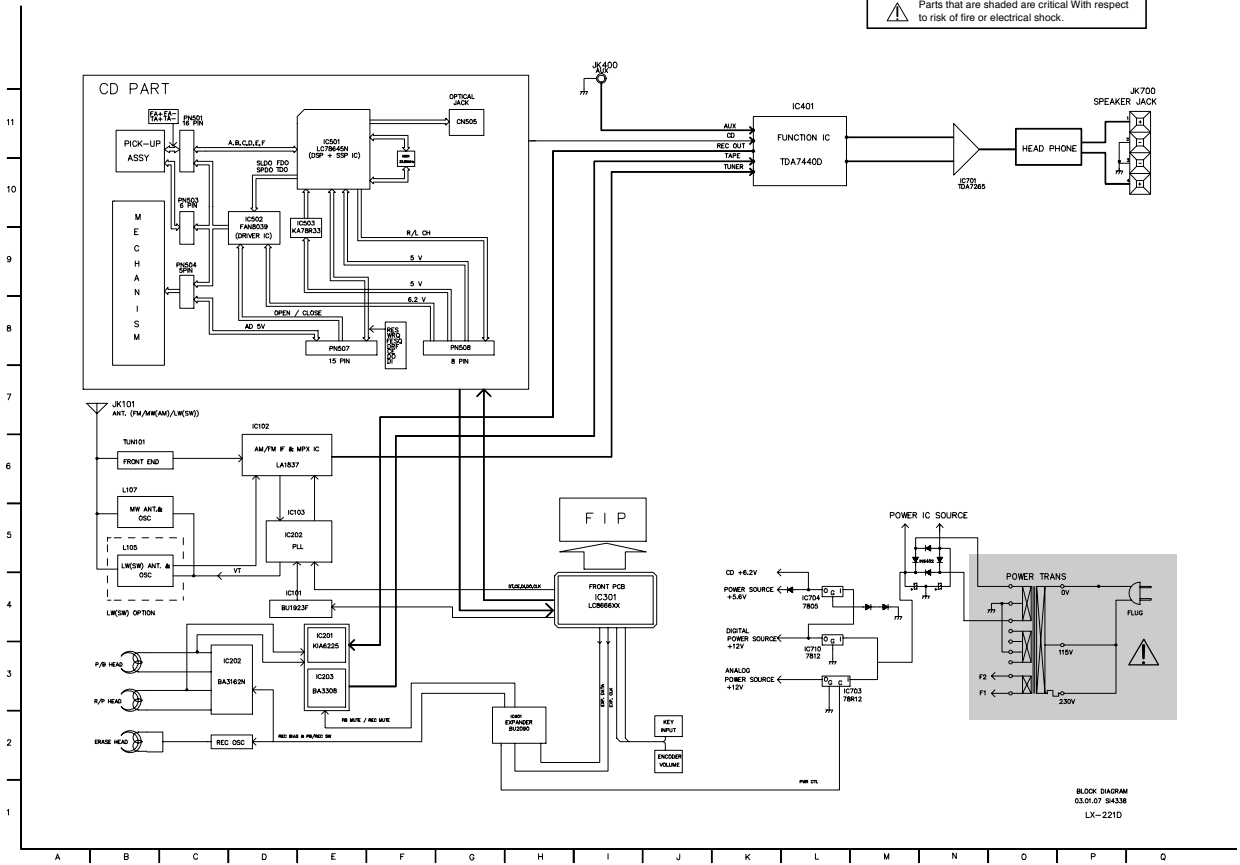
MODEL: LXS-220





# ■ BLOCK DIAGRAM

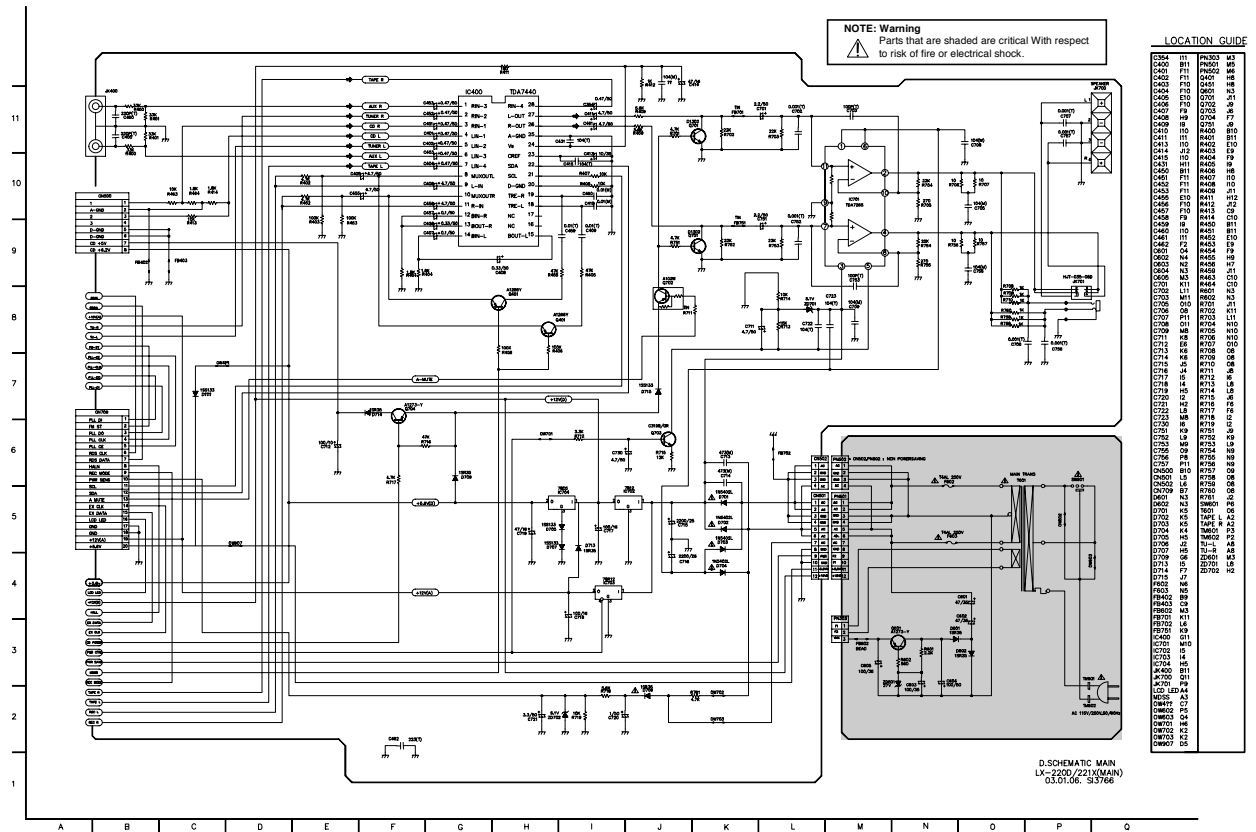
**NOTE: Warning**  
 ⚠ Parts that are shaded are critical With respect to risk of fire or electrical shock.



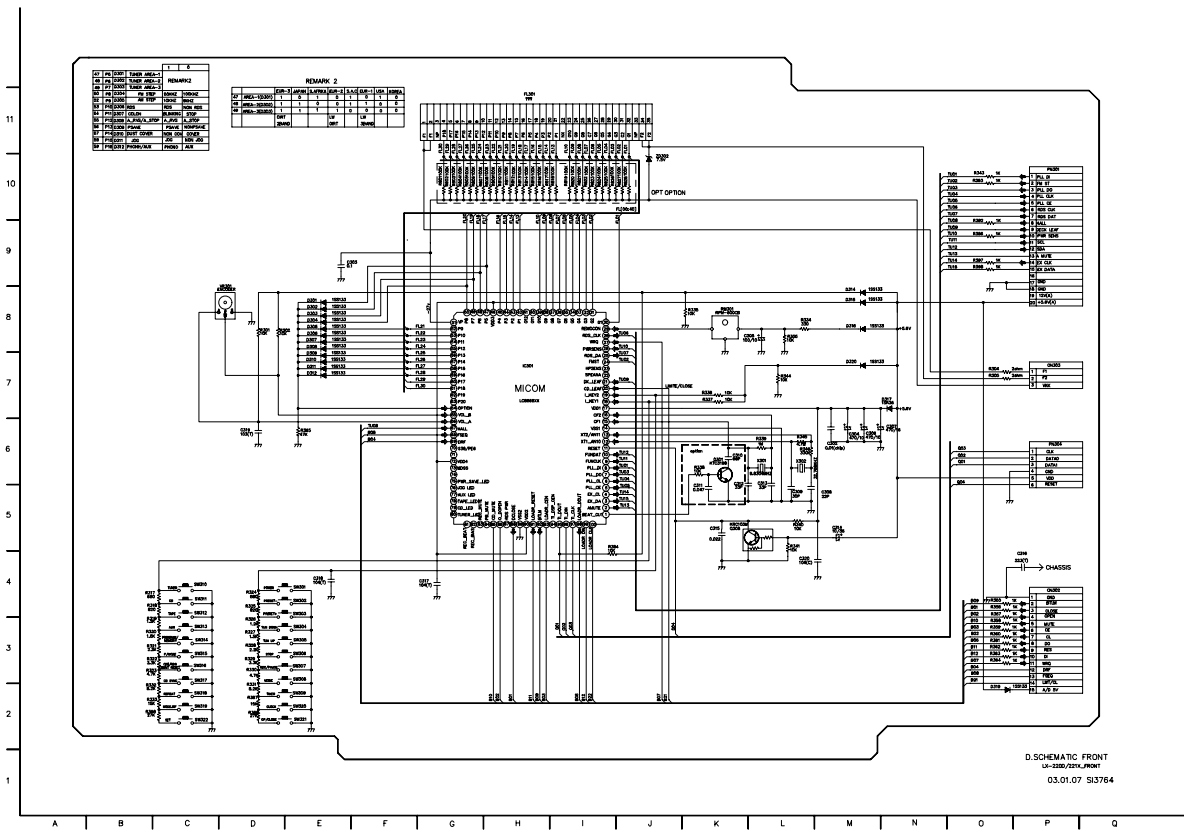
BLOCK DIAGRAM  
 03.01.07 S4338  
 LX-221D

# ■ SCHEMATIC DIAGRAMS

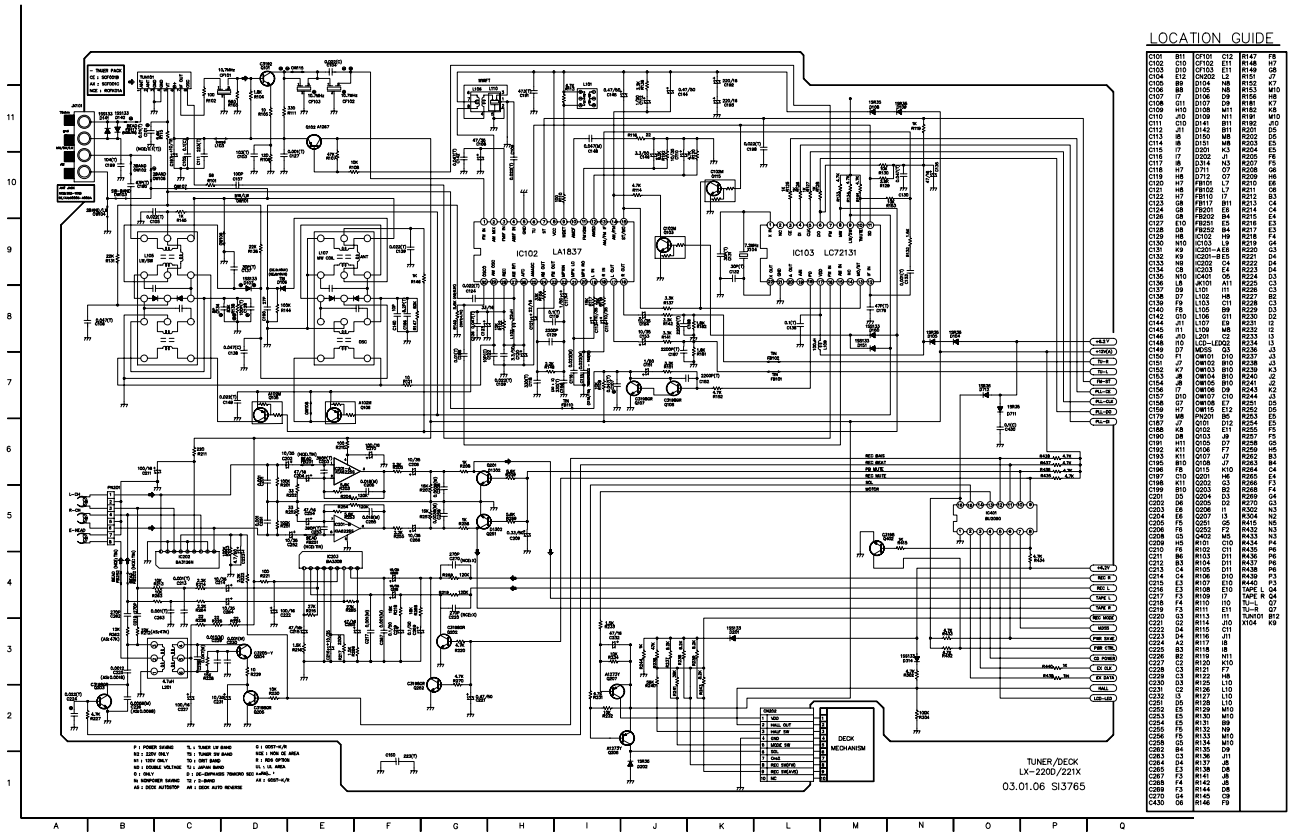
## • MAIN SCHEMATIC DIAGRAMS



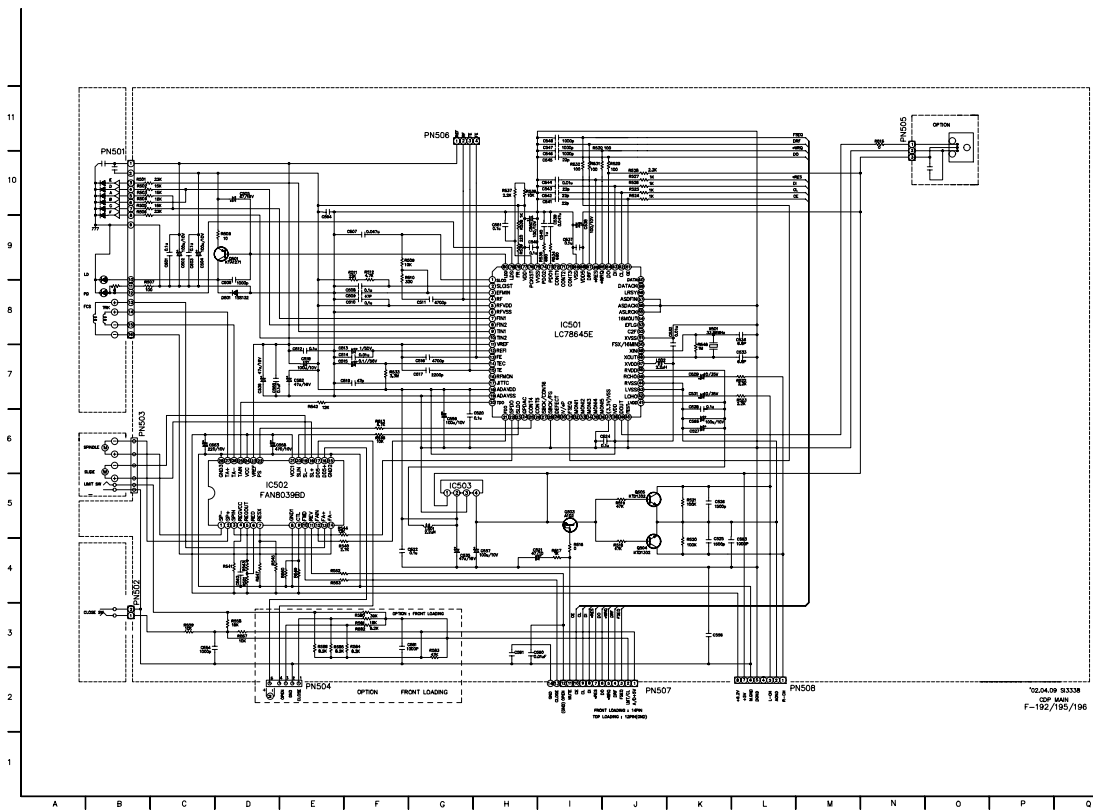
• FRONT SCHEMATIC DIAGRAMS



• TUNER & DECK SHEMATIC DIAGRAMS



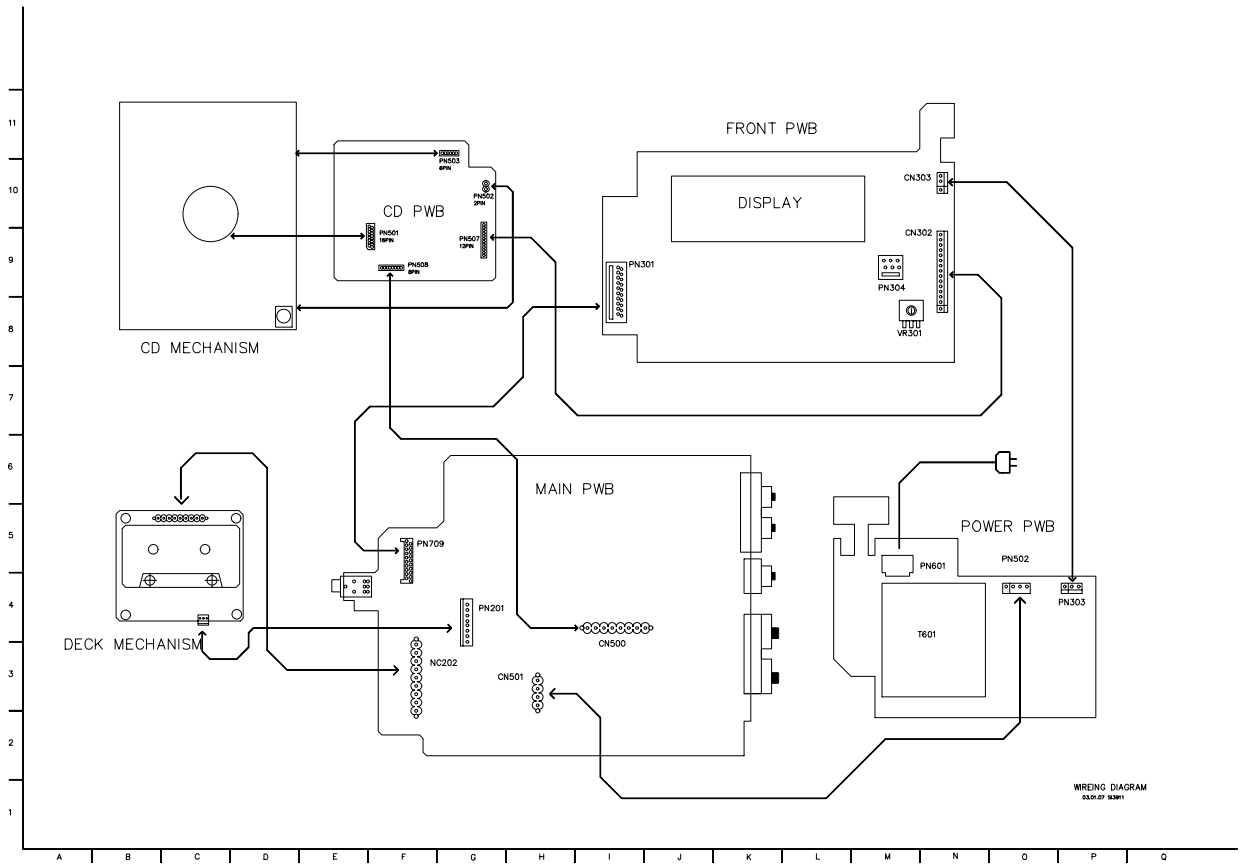
• CDP SHEMATIC DIAGRAMS



LOCATION GUIDE

4E2	IC	R801	4E2	IC	R801
4E3	IC	R802	4E3	IC	R802
4E4	IC	R803	4E4	IC	R803
4E5	IC	R804	4E5	IC	R804
4E6	IC	R805	4E6	IC	R805
4E7	IC	R806	4E7	IC	R806
4E8	IC	R807	4E8	IC	R807
4E9	IC	R808	4E9	IC	R808
4E10	IC	R809	4E10	IC	R809
4E11	IC	R810	4E11	IC	R810
4E12	IC	R811	4E12	IC	R811
4E13	IC	R812	4E13	IC	R812
4E14	IC	R813	4E14	IC	R813
4E15	IC	R814	4E15	IC	R814
4E16	IC	R815	4E16	IC	R815
4E17	IC	R816	4E17	IC	R816
4E18	IC	R817	4E18	IC	R817
4E19	IC	R818	4E19	IC	R818
4E20	IC	R819	4E20	IC	R819
4E21	IC	R820	4E21	IC	R820
4E22	IC	R821	4E22	IC	R821
4E23	IC	R822	4E23	IC	R822
4E24	IC	R823	4E24	IC	R823
4E25	IC	R824	4E25	IC	R824
4E26	IC	R825	4E26	IC	R825
4E27	IC	R826	4E27	IC	R826
4E28	IC	R827	4E28	IC	R827
4E29	IC	R828	4E29	IC	R828
4E30	IC	R829	4E30	IC	R829
4E31	IC	R830	4E31	IC	R830
4E32	IC	R831	4E32	IC	R831
4E33	IC	R832	4E33	IC	R832
4E34	IC	R833	4E34	IC	R833
4E35	IC	R834	4E35	IC	R834
4E36	IC	R835	4E36	IC	R835
4E37	IC	R836	4E37	IC	R836
4E38	IC	R837	4E38	IC	R837
4E39	IC	R838	4E39	IC	R838
4E40	IC	R839	4E40	IC	R839
4E41	IC	R840	4E41	IC	R840
4E42	IC	R841	4E42	IC	R841
4E43	IC	R842	4E43	IC	R842
4E44	IC	R843	4E44	IC	R843
4E45	IC	R844	4E45	IC	R844
4E46	IC	R845	4E46	IC	R845
4E47	IC	R846	4E47	IC	R846
4E48	IC	R847	4E48	IC	R847
4E49	IC	R848	4E49	IC	R848
4E50	IC	R849	4E50	IC	R849
4E51	IC	R850	4E51	IC	R850
4E52	IC	R851	4E52	IC	R851
4E53	IC	R852	4E53	IC	R852
4E54	IC	R853	4E54	IC	R853
4E55	IC	R854	4E55	IC	R854
4E56	IC	R855	4E56	IC	R855
4E57	IC	R856	4E57	IC	R856
4E58	IC	R857	4E58	IC	R857
4E59	IC	R858	4E59	IC	R858
4E60	IC	R859	4E60	IC	R859
4E61	IC	R860	4E61	IC	R860
4E62	IC	R861	4E62	IC	R861
4E63	IC	R862	4E63	IC	R862
4E64	IC	R863	4E64	IC	R863
4E65	IC	R864	4E65	IC	R864
4E66	IC	R865	4E66	IC	R865
4E67	IC	R866	4E67	IC	R866
4E68	IC	R867	4E68	IC	R867
4E69	IC	R868	4E69	IC	R868
4E70	IC	R869	4E70	IC	R869
4E71	IC	R870	4E71	IC	R870
4E72	IC	R871	4E72	IC	R871
4E73	IC	R872	4E73	IC	R872
4E74	IC	R873	4E74	IC	R873
4E75	IC	R874	4E75	IC	R874
4E76	IC	R875	4E76	IC	R875
4E77	IC	R876	4E77	IC	R876
4E78	IC	R877	4E78	IC	R877
4E79	IC	R878	4E79	IC	R878
4E80	IC	R879	4E80	IC	R879
4E81	IC	R880	4E81	IC	R880
4E82	IC	R881	4E82	IC	R881
4E83	IC	R882	4E83	IC	R882
4E84	IC	R883	4E84	IC	R883
4E85	IC	R884	4E85	IC	R884
4E86	IC	R885	4E86	IC	R885
4E87	IC	R886	4E87	IC	R886
4E88	IC	R887	4E88	IC	R887
4E89	IC	R888	4E89	IC	R888
4E90	IC	R889	4E90	IC	R889
4E91	IC	R890	4E91	IC	R890
4E92	IC	R891	4E92	IC	R891
4E93	IC	R892	4E93	IC	R892
4E94	IC	R893	4E94	IC	R893
4E95	IC	R894	4E95	IC	R894
4E96	IC	R895	4E96	IC	R895
4E97	IC	R896	4E97	IC	R896
4E98	IC	R897	4E98	IC	R897
4E99	IC	R898	4E99	IC	R898
4E100	IC	R899	4E100	IC	R899

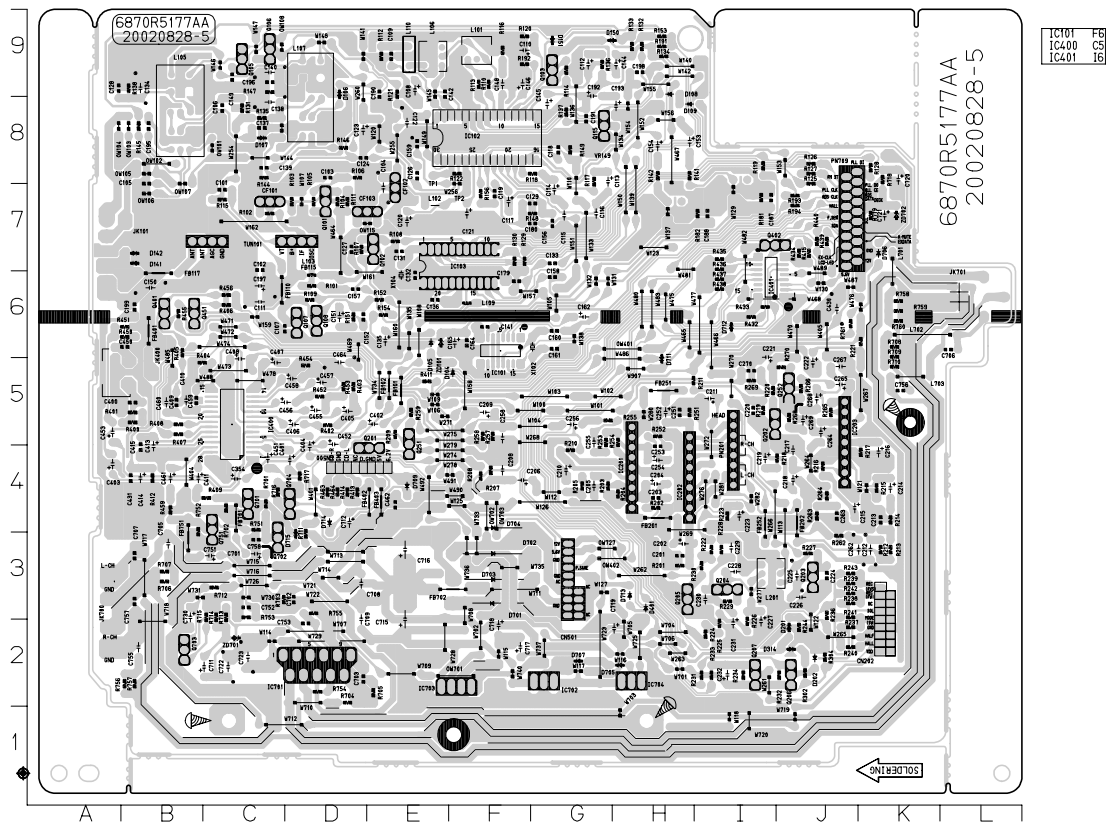
## ■ WIRING DIAGRAM



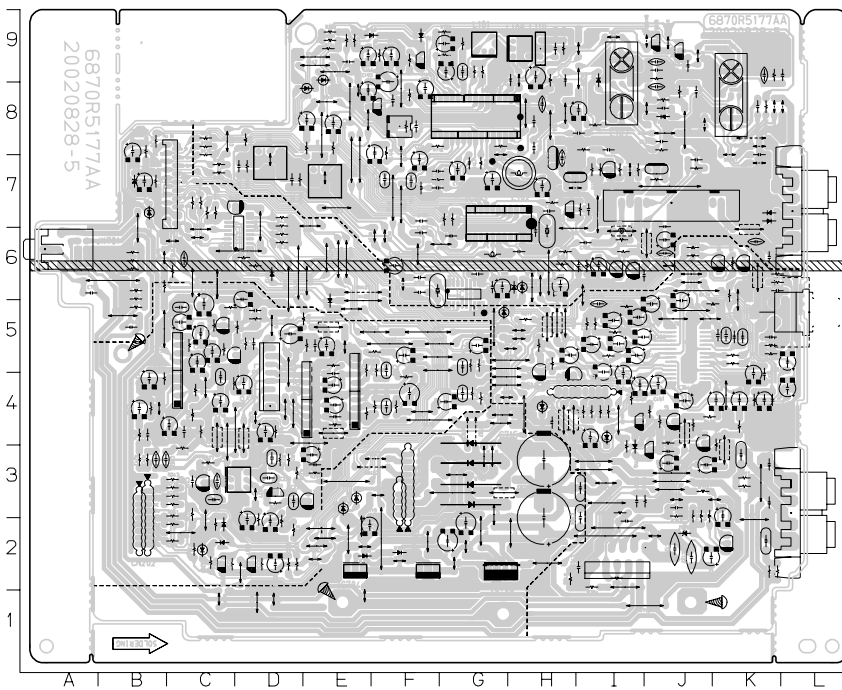
WIRING DIAGRAM  
33.01.01.001

■ PRINTED CIRCUIT DIAGRAMS

• MAIN & TUNER P.C. BOARD (SOLDER SIDE)



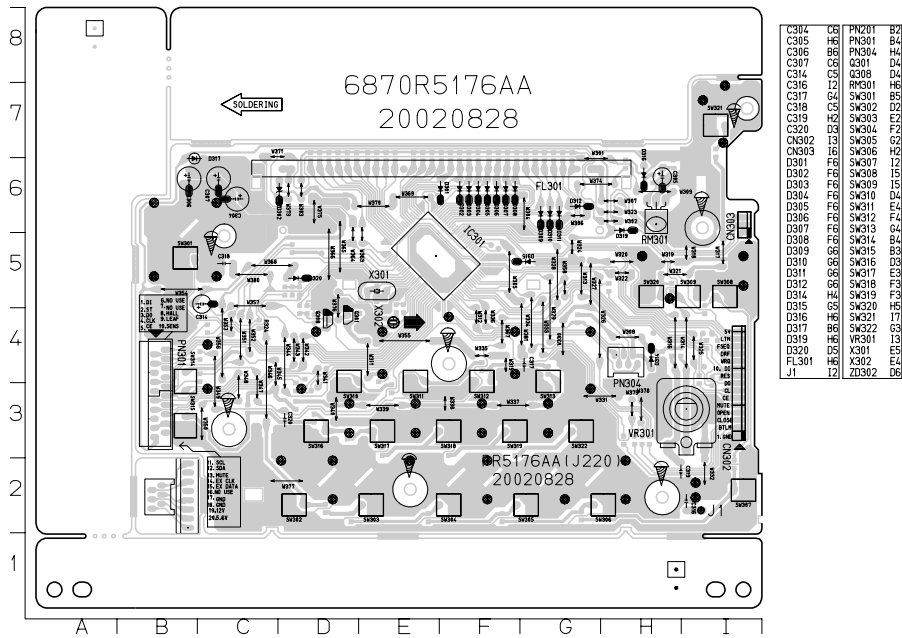
• MAIN & TUNER P.C. BOARD (COMPONENT SIDE)



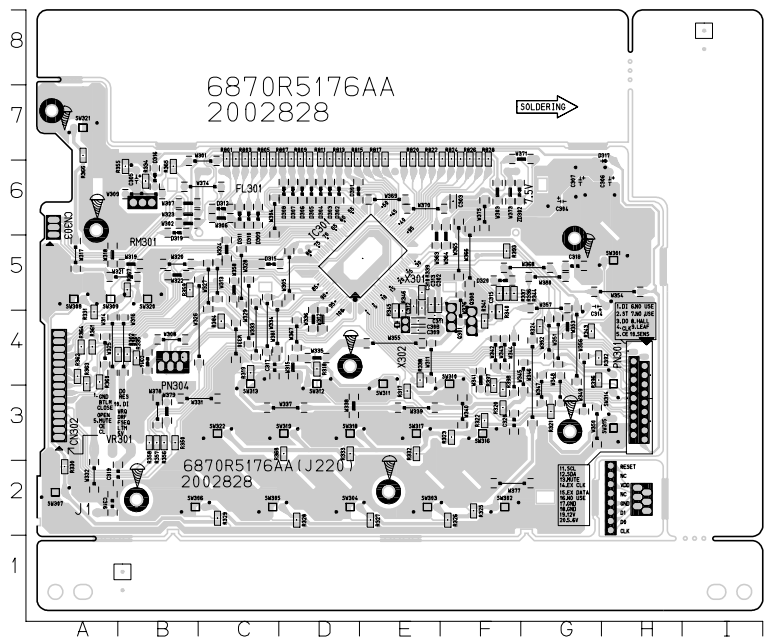
C181	J7	C180	F7	C201	IG	CNS00	I4	L105	K8	R110	G9	R216	C4	R415	C7
C182	J7	C187	D7	C402	H5	CNS01	F3	L106	H9	R111	I7	R217	B4	R422	D6
C183	18	C188	D7	C403	L4	D104	G5	L107	10	R112	H9	R218	C4	R433	C7
C184	H7	C190	H8	C404	1A	D105	H6	L109	G6	R113	G9	R219	D5	R434	C7
C185	K7	C191	F8	C405	1S	D106	19	L110	H8	R114	F8	R220	D5	R435	D7
C186	J8	C192	F8	C406	1S	D107	J8	L201	D3	R115	J7	R221	B8	R436	D7
C187	J6	C193	E8	C407	J5	D108	E9	L301	B6	R116	G9	R222	D5	R437	D6
C188	H9	C195	K8	C408	J9	D109	E9	L702	B6	R117	F8	R223	D4	R438	D6
C189	H9	C196	J9	C409	K5	D141	K7	L703	B5	R118	F8	R224	D2	R439	C7
C190	G8	C197	J6	C410	K5	D142	K7	OW101	16	R119	D8	R225	D2	R440	C7
C191	J6	C198	E8	C411	K4	D150	F9	OW102	K8	R120	G9	R226	D2	R450	K6
C192	F9	C199	K6	C413	K4	D151	F9	OW103	K8	R121	H9	R227	D3	R451	K6
C193	F8	C201	E8	C414	K4	D201	J8	OW104	J8	R122	G8	R228	D3	R452	15
C194	F7	C202	E8	C415	K4	D202	C2	OW105	K8	R125	C7	R229	D3	R453	15
C195	F7	C203	E4	C430	G6	D314	C2	OW106	K7	R126	G8	R230	D3	R454	15
C196	F7	C241	E4	C431	K4	D401	E3	OW107	K7	R127	G8	R231	D2	R455	K6
C197	G7	C205	F4	C450	K6	D701	G3	OW108	J9	R128	B8	R232	C2	R456	J6
C198	F8	C206	G4	C451	J4	D702	G3	OW109	H7	R129	C7	R233	D2	R459	K4
C199	G7	C208	G4	C452	1S	D703	G3	OW401	E6	R130	G7	R234	D2	R463	14
C200	H7	C209	E5	C453	1S	D704	G4	OW402	F3	R131	J6	R236	C3	R464	14
C201	G7	C210	F4	C455	1S	D705	E2	OW701	G2	R132	E8	R237	C2	R701	J4
C202	H8	C211	D5	C456	1S	D706	B7	OW702	G4	R133	E9	R238	C3	R702	J4
C203	18	C212	B4	C457	1S	D707	F2	OW703	G4	R134	E9	R239	C3	R703	J4
C204	18	C213	B4	C458	1S	D709	H4	OW907	E5	R135	J8	R240	C2	R704	J4
C205	H8	C214	B4	C459	K3	D711	E9	PN201	D4	R136	F9	R241	C3	R705	H3
C206	17	C215	C4	C460	K3	D712	J6	PN705	C7	R137	F8	R242	C3	R706	K3
C207	L9	C216	B4	C461	K4	D713	E3	Q101	I7	R138	K9	R243	C3	R707	K3
C208	F7	C217	C4	C462	H4	D714	14	Q102	H7	R141	E8	R244	C2	R708	B6
C209	H7	C218	C4	C464	1S	D715	13	Q103	F9	R142	E8	R251	E5	R709	B6
C210	H5	C219	D4	C701	J3	F8101	H5	Q105	J9	R144	J8	R252	E5	R710	B5
C211	K3	C220	D5	C702	1S	F8102	H5	Q106	J9	R145	H8	R253	F3	R711	13
C212	K3	C221	D6	C703	12	F8103	J6	Q107	16	R146	H8	R254	E3	R712	J3
C213	H5	C222	D3	C705	K3	F8105	J6	Q108	16	R147	J9	R255	F3	R713	J3
C214	H5	C223	B4	C706	A6	F8107	K6	Q115	F8	R149	F7	R257	G5	R714	13
C215	J8	C224	C3	C707	K3	F8201	E4	Q201	H4	R149	F8	R258	G5	R715	J3
C216	J8	C225	C3	C708	13	F8202	C4	Q202	D5	R151	16	R259	H5	R716	J4
C217	J8	C226	C3	C709	12	F8203	E5	Q203	H5	R152	H6	R262	C3	R717	14
C218	J9	C227	D2	C711	J2	F8252	D4	Q204	D3	R153	E9	R263	C4	R718	B8
C219	G6	C228	D3	C712	11	F8401	K6	Q205	E3	R154	H6	R264	C4	R719	B7
C220	H9	C229	D3	C715	H2	F8402	H4	Q206	C2	R156	G7	R265	C3	R751	J4
C221	L4	C230	D3	C716	H3	F8403	H4	Q207	D2	R161	D7	R266	C3	R752	J4
C222	F8	C231	D2	C717	G2	F8701	J4	Q251	H5	R162	D7	R268	C3	R753	J3
C223	G9	C232	D2	C718	G2	F8702	G3	Q252	C5	R191	E9	R269	D5	R754	12
C224	G9	C233	D2	C719	E7	F8751	K3	Q401	H6	R192	G9	R270	C5	R755	13
C225	J9	C234	E5	C720	B8	IC103	H7	Q402	D7	R193	C7	R202	C2	R756	K2
C226	K6	C235	E4	C721	B7	IC201	E4	Q451	K6	R194	C7	R204	C2	R757	K2
C227	16	C236	E4	C722	J2	IC202	E4	Q701	J4	R201	E3	R400	K5	R758	B6
C228	16	C237	F5	C723	J2	IC203	C4	Q702	J3	R202	E4	R401	K5	R759	B6
C229	E8	C238	F5	C730	K3	IC701	J2	Q703	K2	R203	F4	R402	15	R760	B6
C230	E8	C239	F5	C731	J3	IC702	F2	Q704	14	R204	E4	R403	15	R761	C9
C231	F7	C242	B3	C752	J3	IC703	G2	Q751	J4	R205	F4	R404	K5	TP1	H8
C232	16	C243	C4	C753	I2	IC704	E2	Q101	16	R207	G4	R405	K5	TP2	G7
C233	F5	C244	C3	C755	K2	J2	B3	R102	J7	R208	G4	R406	J6	TUN01	J7
C234	H8	C245	C3	C756	B5	JK101	L1	R103	17	R209	H5	R407	K5	VR19	F8
C235	F5	C246	C3	C757	K3	JK400	L5	R104	17	R210	F4	R408	K5	X102	F8
C236	F5	C247	C3	C758	J3	JK700	L3	R105	17	R211	E5	R409	J4	X104	F8
C237	F5	C248	C3	C759	J7	JK701	A6	R106	18	R212	B3	R411	H5	ZD101	H8
C238	G5	C249	D5	CF102	H7	L101	G9	R107	17	R213	B3	R412	K4	ZD701	J2
C239	G5	C254	J4	CF103	H7	L102	H7	R108	H7	R214	B4	R413	14	ZD702	B7
C240	G5	C290	K5	CN202	B3	L103	16	R109	15	R215	B4	R414	14		



• FRONT P.C. BOARD (SOLDER SIDE)



• FRONT P.C. BOARD (COMPONENT SIDE)

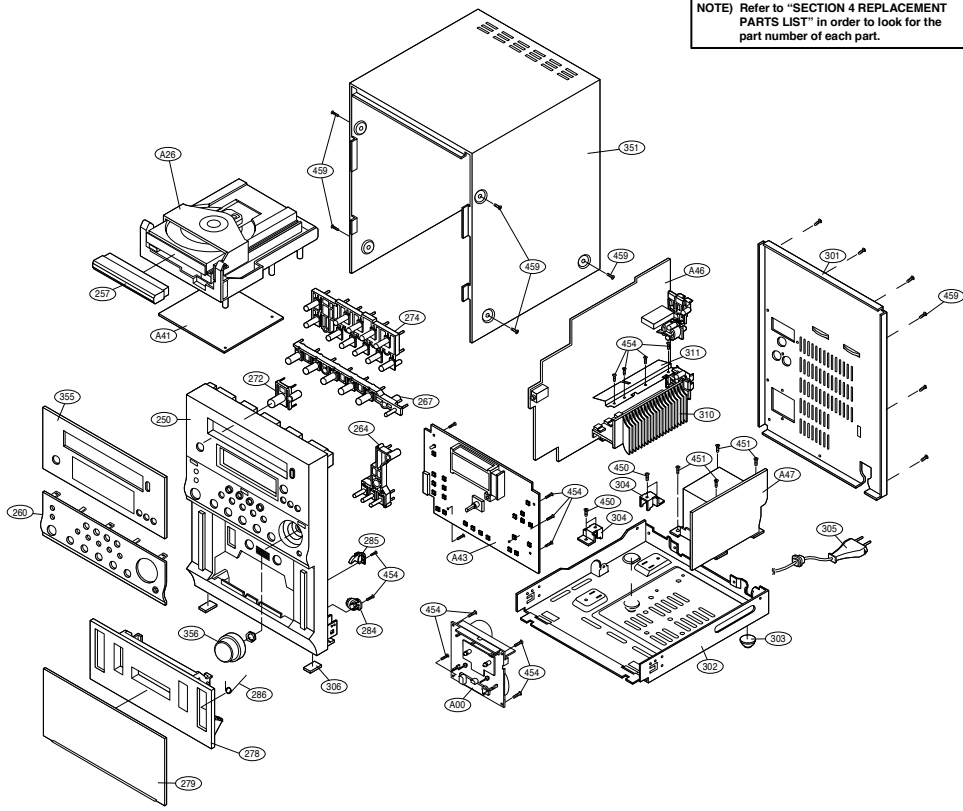


C302	E5	R358	B3
C303	F6	R359	B5
C308	E4	R360	A4
C309	E4	R361	A4
C310	E5	R362	A4
C311	E4	R363	A4
C312	E5	R364	A4
C313	E5	R365	B6
C315	F4	R366	A7
IC301	E5	R367	B5
R301	B4	R368	D3
R302	B4	R384	C4
R317	E3	R392	G4
R318	D4	R393	F5
R319	C4	R396	G4
R320	F3	R397	F3
R321	G3	R398	F3
R322	F3	R80	C7
R323	F3	R802	C7
R324	G4	R803	C7
R325	F2	R804	C7
R326	F2	R805	C7
R327	E2	R806	C7
R328	D2	R807	D7
R329	C2	R808	D7
R330	A2	R809	D7
R331	A4	R810	D7
R332	E3	R811	D7
R333	D3	R812	D7
R334	B6	R813	D7
R335	B4	R814	D7
R336	F5	R815	D7
R337	F5	R816	E7
R338	E4	R819	E7
R339	E5	R818	E7
R340	F4	R819	E7
R341	F4	R820	E7
R343	G4	R821	E7
R344	F5	R822	E7
R345	E4	R823	F7
R346	E4	R824	F7
R350	B3	R825	F7
R355	B6	R826	F7
R356	B3	R827	F7
R357	B3	R828	F7

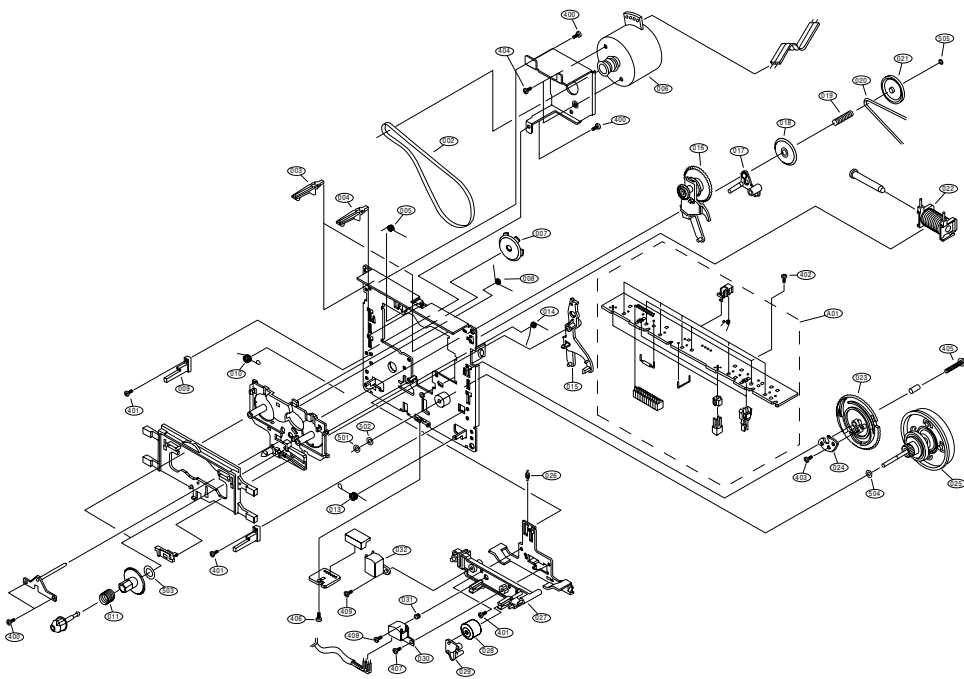
# SECTION 3. EXPLODED VIEWS

## CABINET AND MAIN FRAME SECTION

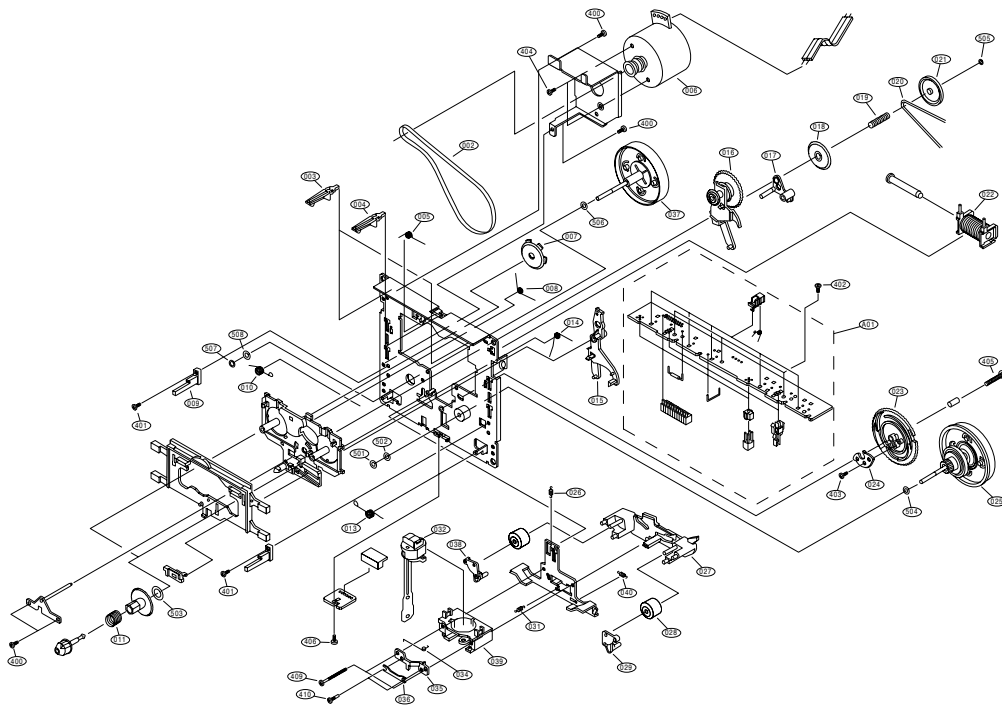
NOTE) Refer to "SECTION 4 REPLACEMENT PARTS LIST" in order to look for the part number of each part.



• TAPE DECK MECHANISM: AUTO STOP DECK(OPTIONAL)



• TAPE DECK MECHANISM: AUTO REVERSE DECK



• CD MECHANISM

