



# 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 Point	Adjustment	Adjust for
Palyback	MTT-114	Speaker Out	DECK Screw Azimuth Screw	Maximum

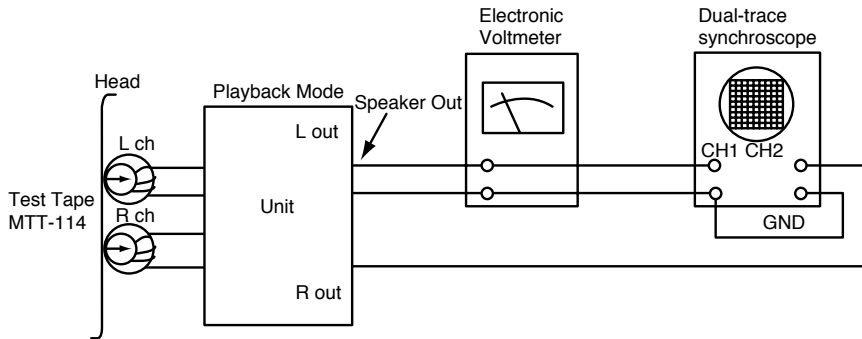
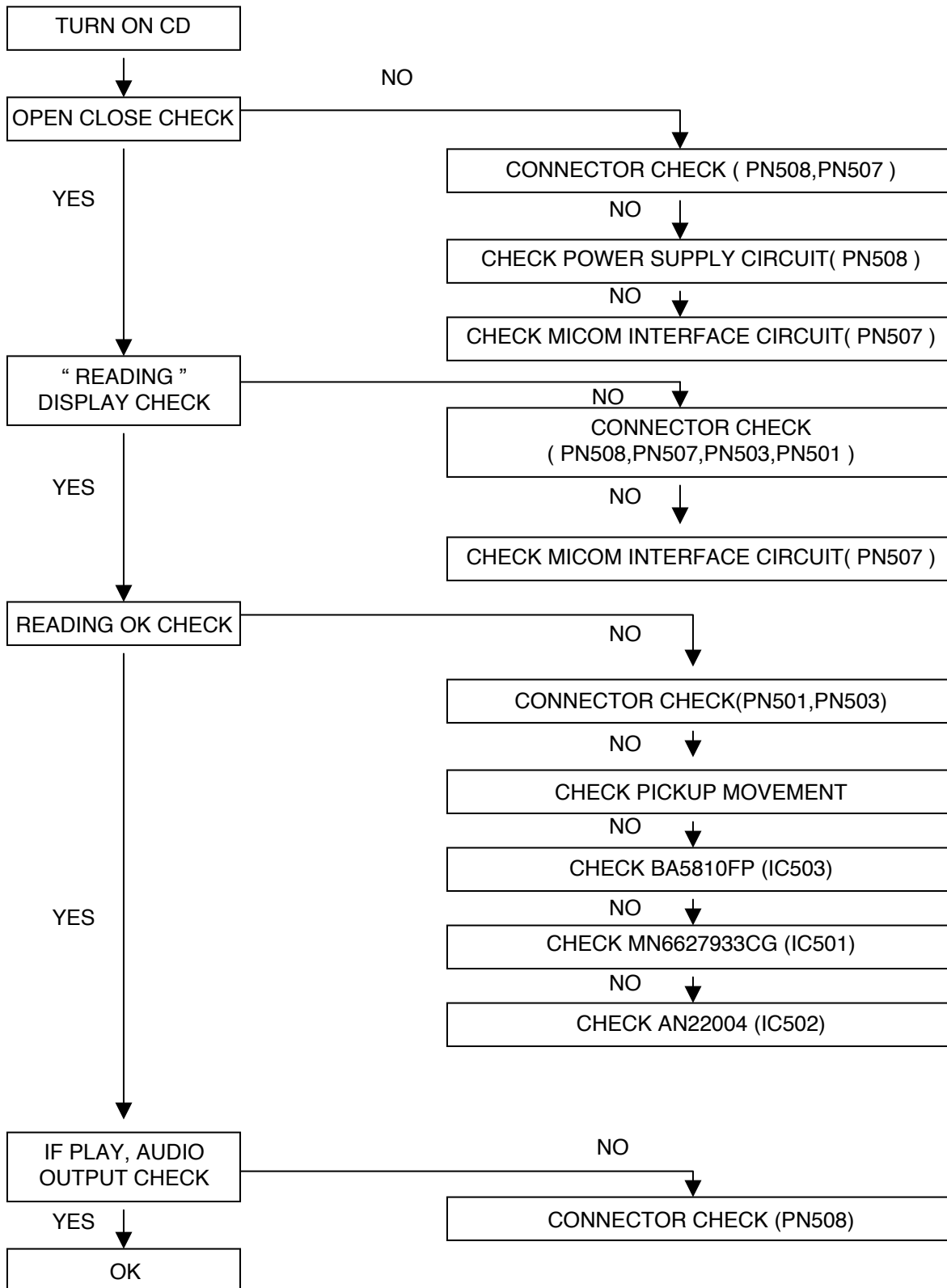


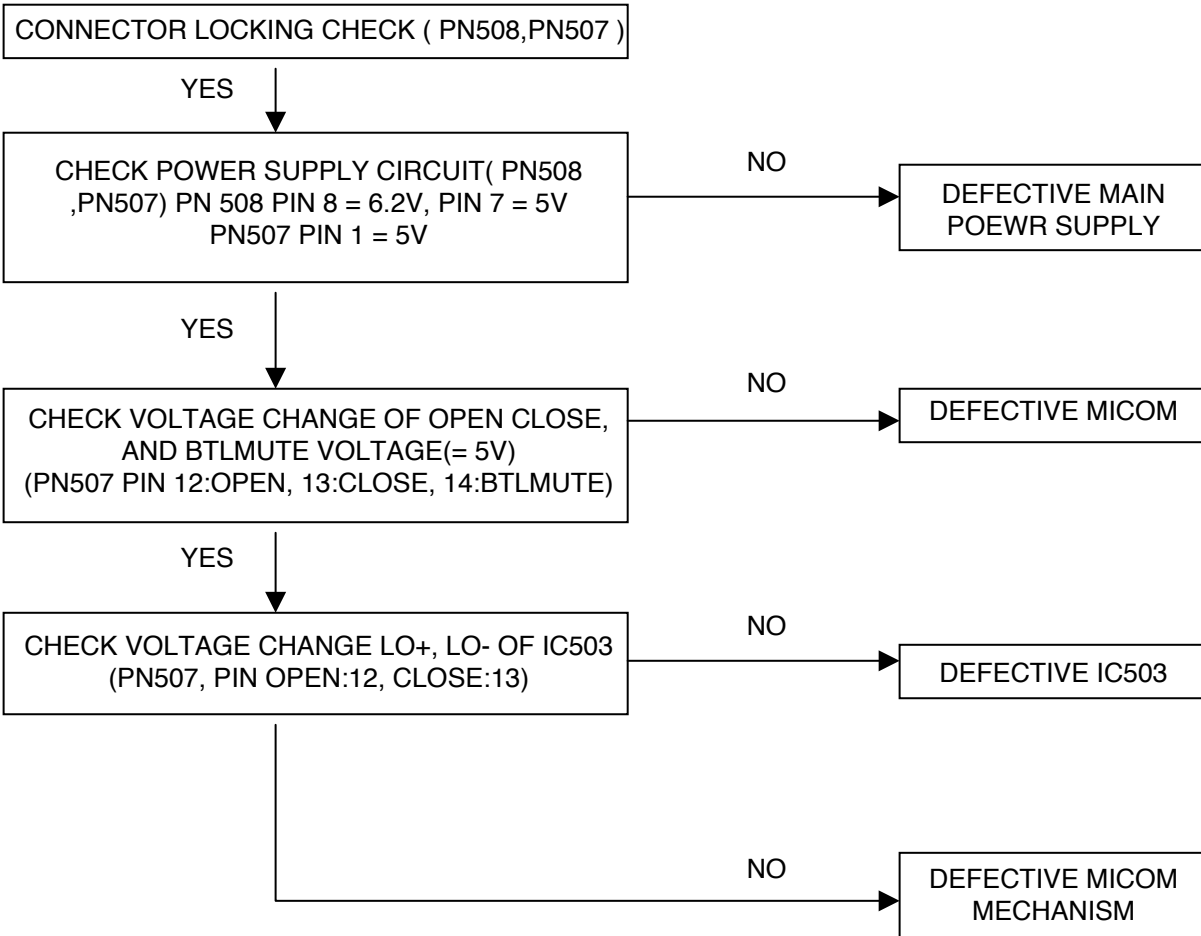
Figure 1. Azimuth Adjustment Connection Diagram

# □ TROUBLESHOOTING

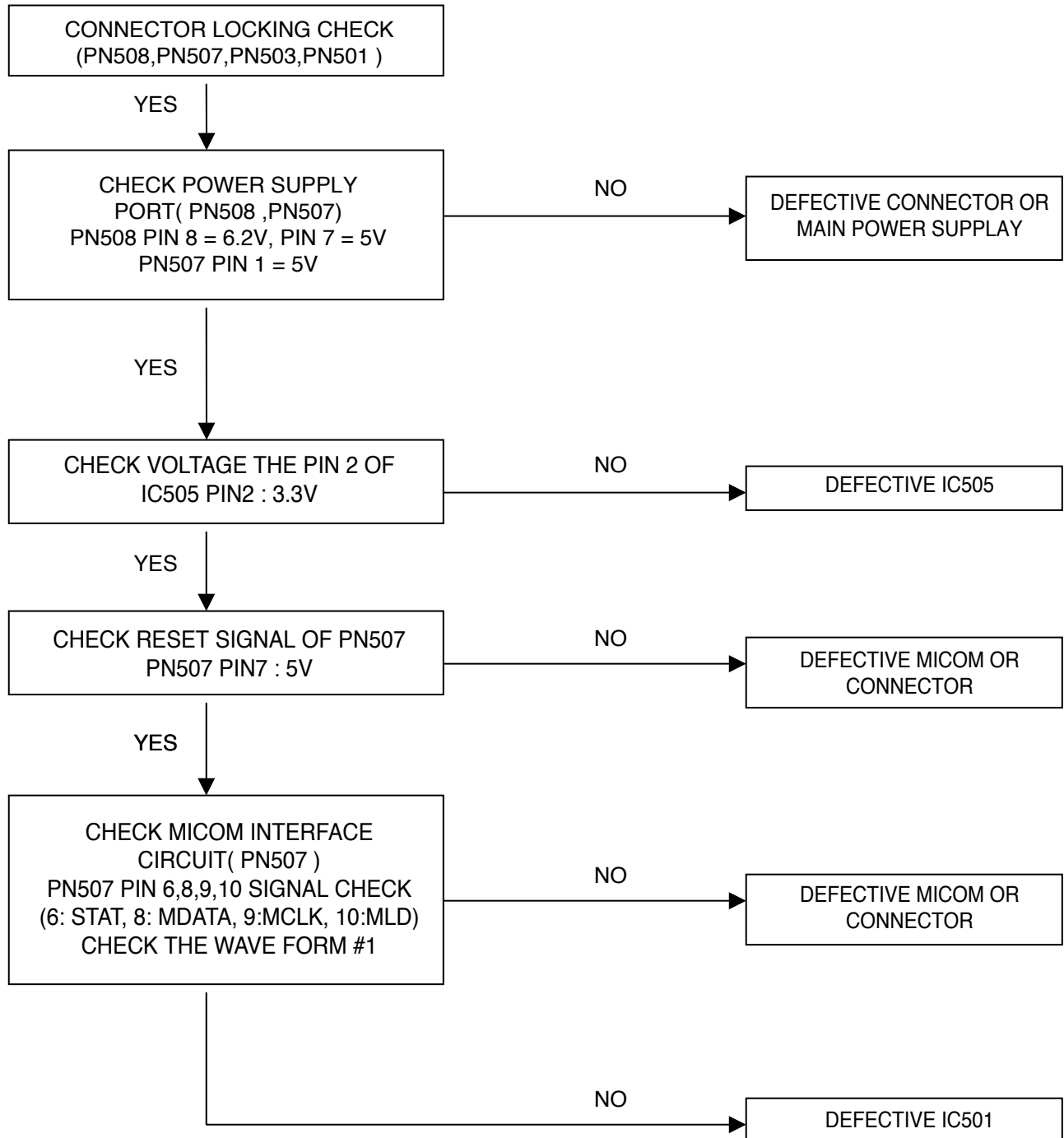
## • CD PART



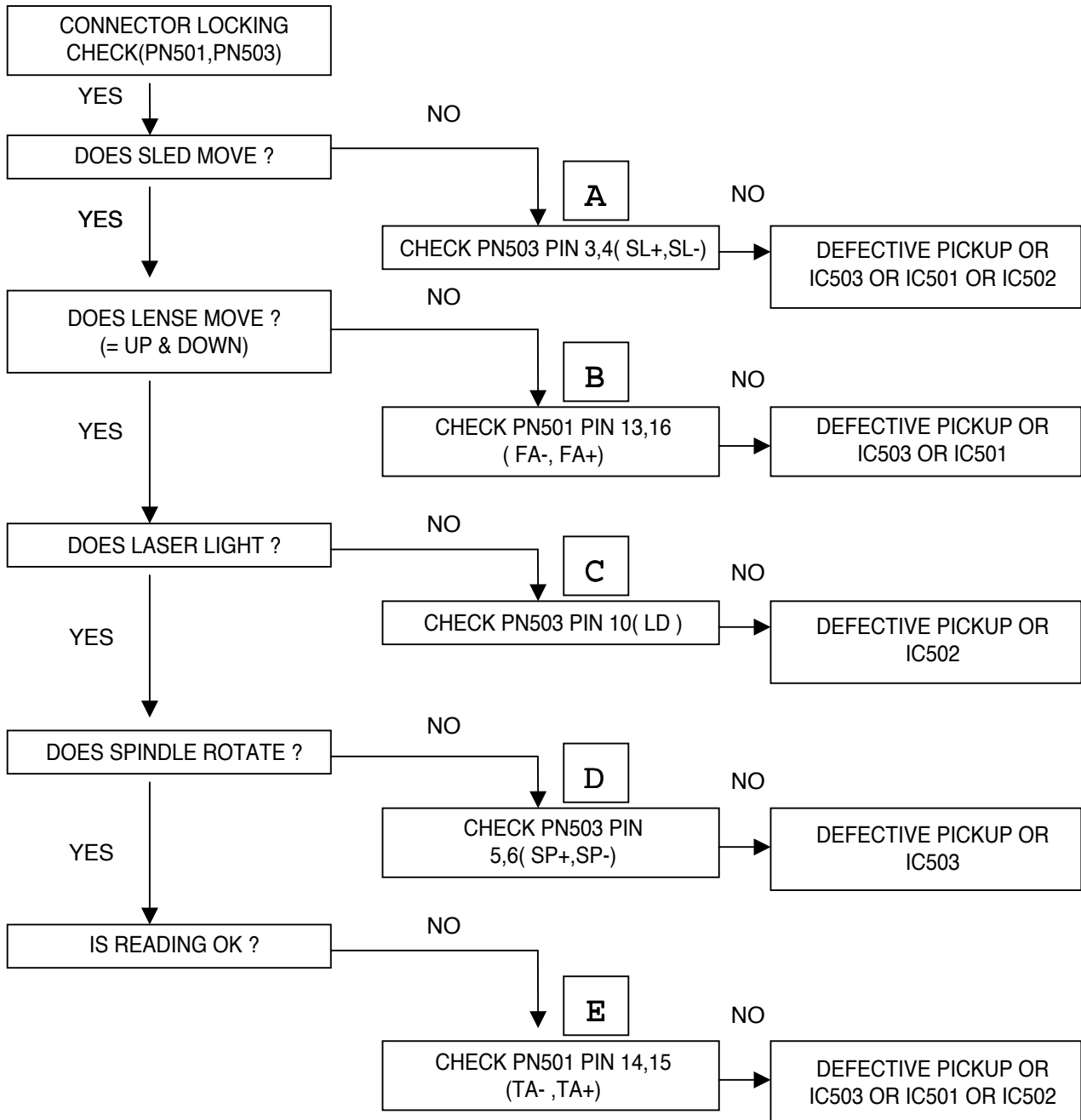
• OPEN CLOSE NG



• “ READING ” DISPLAY CHECK (= ONLY “CD “DISPLAY)

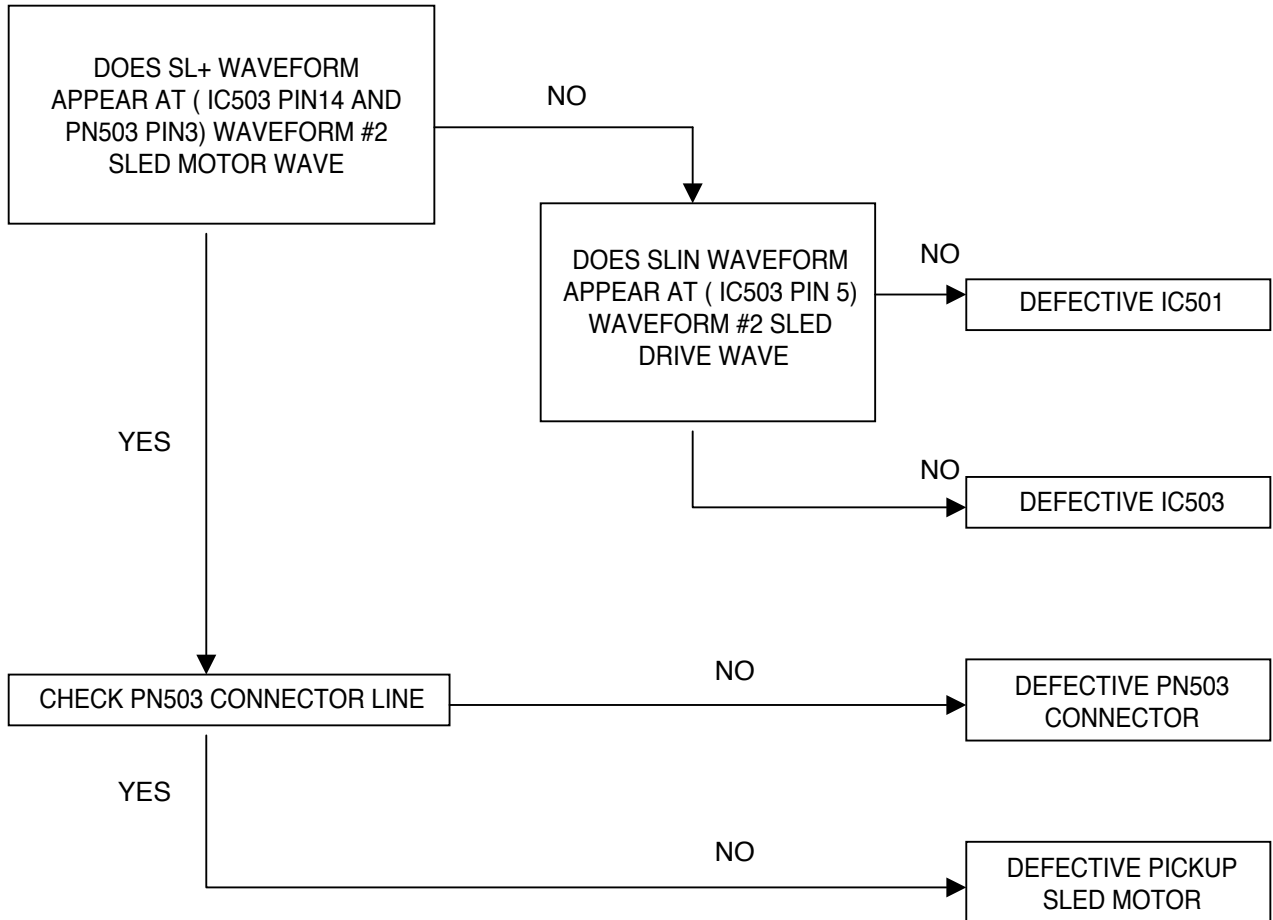


• **READING OK CHECK (= “NO DISC” DISPLAY)**

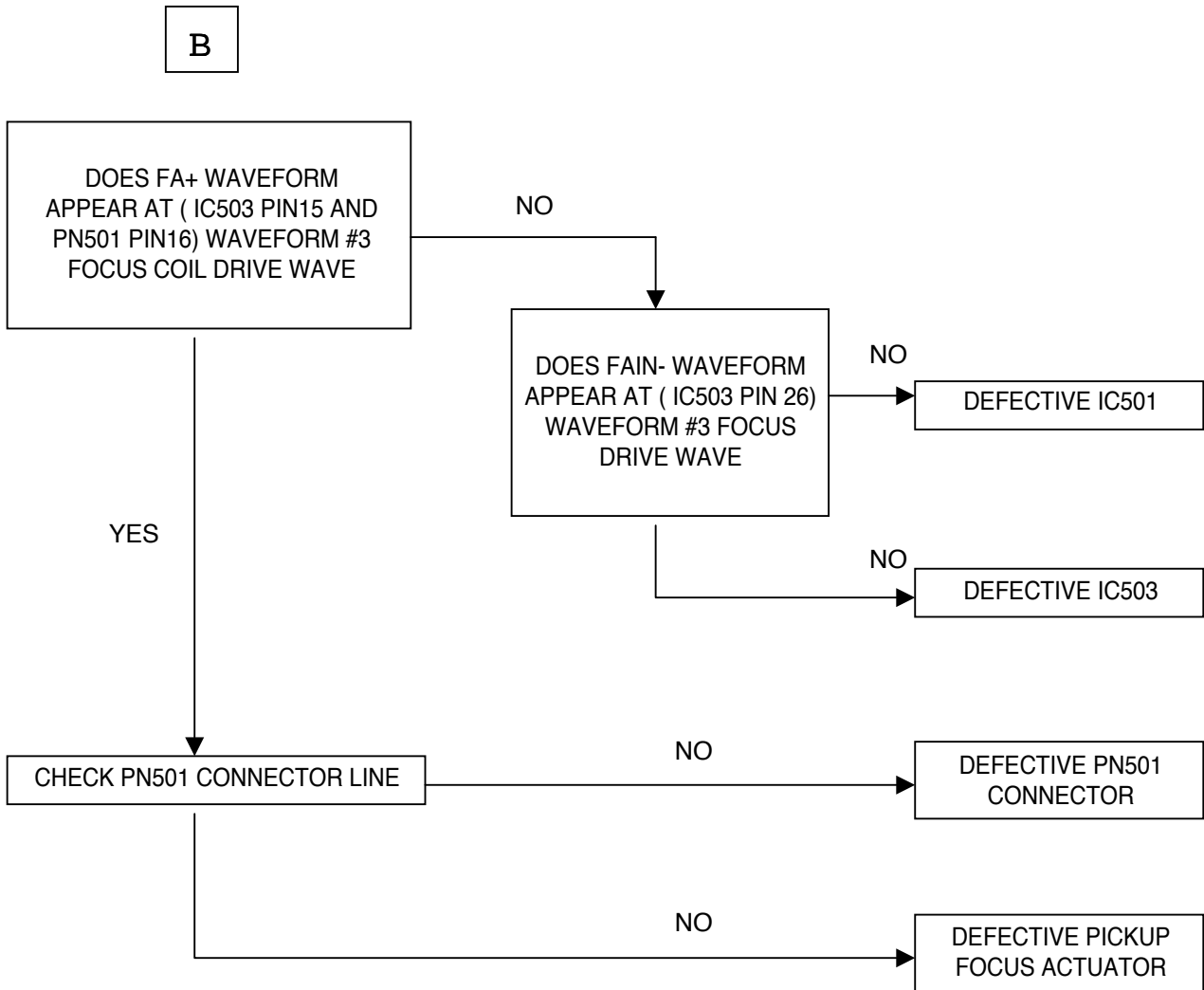


• **READING OK CHECK #A (= “NO DISC” DISPLAY)**

**A**

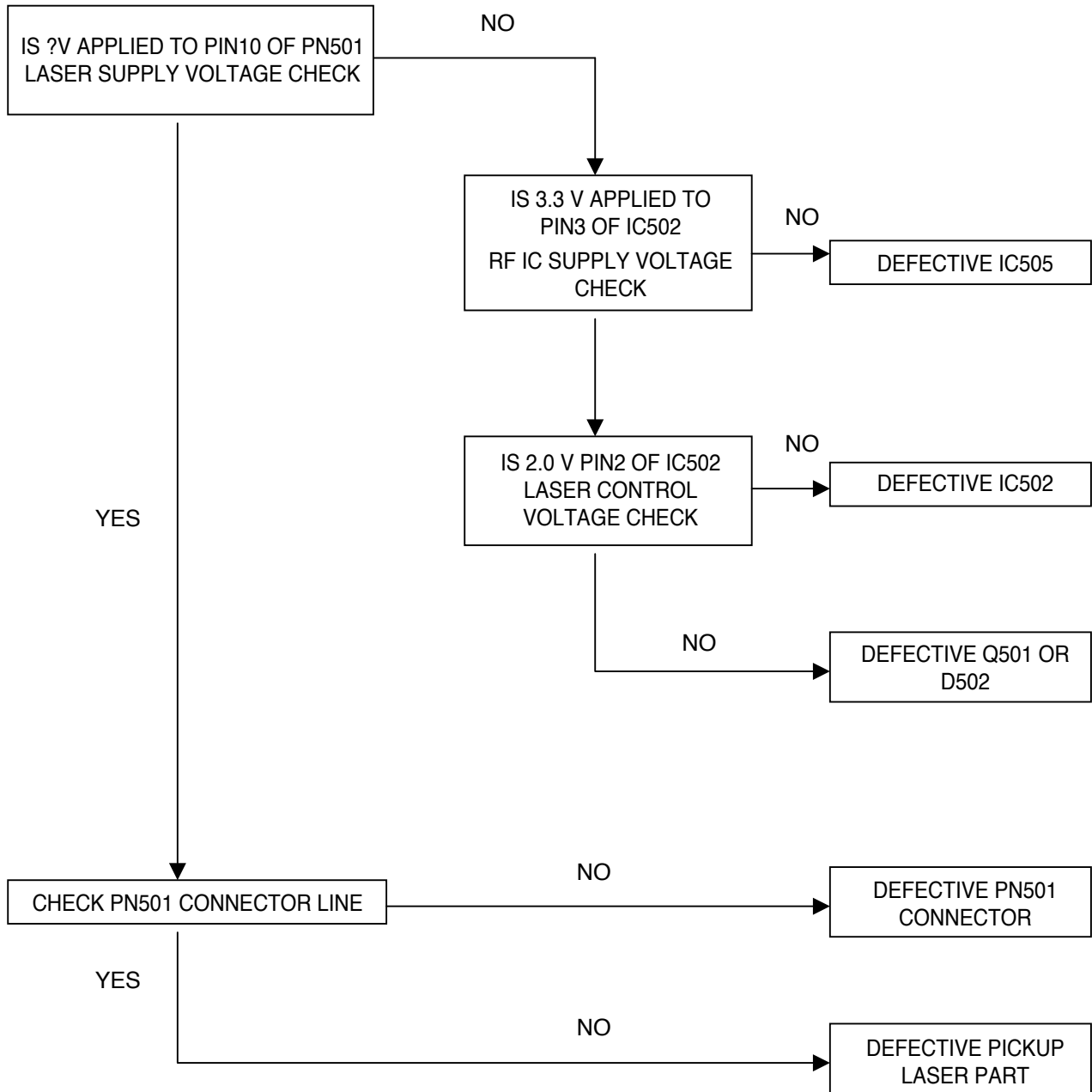


• **READING OK CHECK #B (= “NO DISC” DISPLAY)**



• **READING OK CHECK #C (= “NO DISC” DISPLAY)**

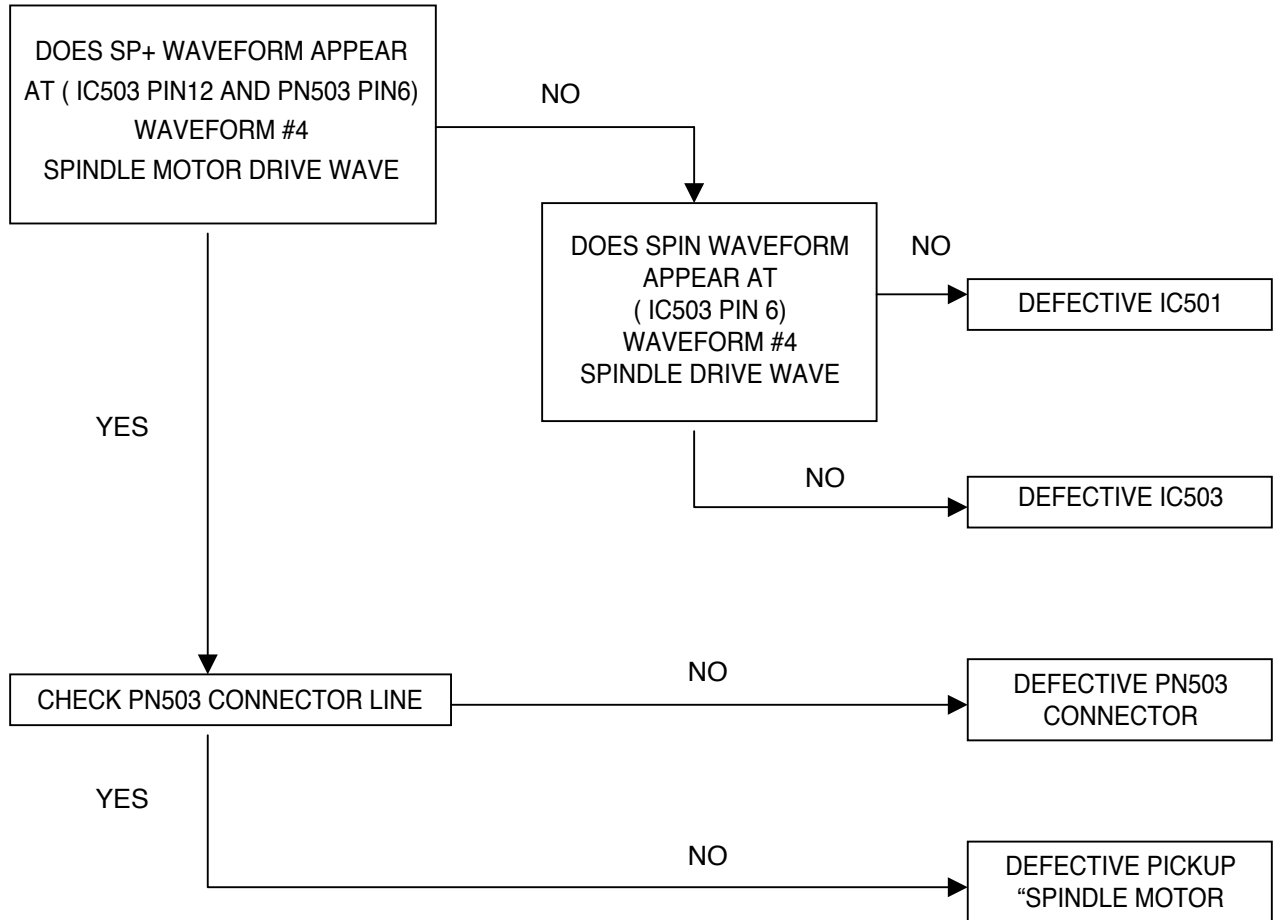
**C**





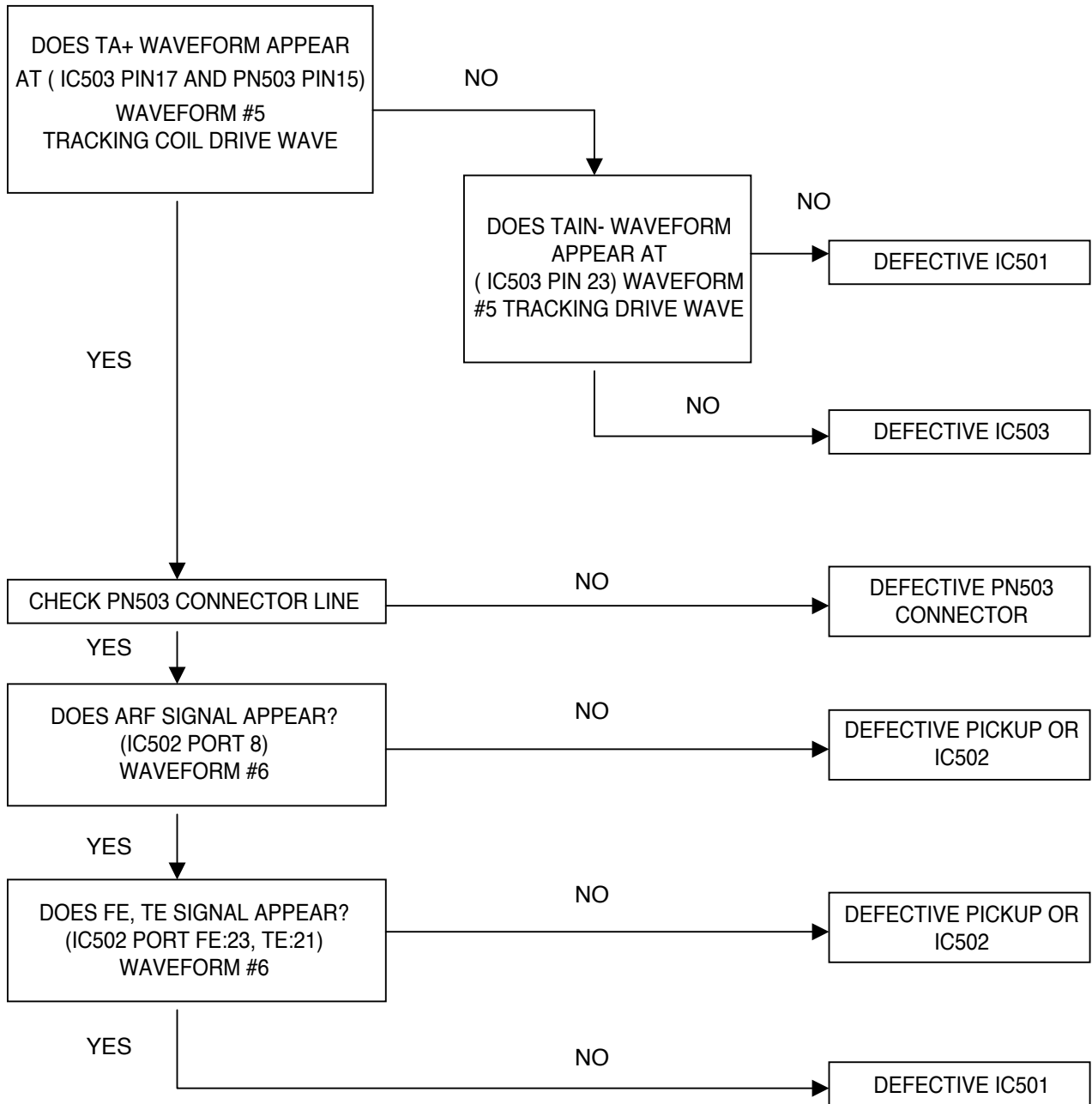
• **READING OK CHECK #D (= “NO DISC” DISPLAY)**

**D**



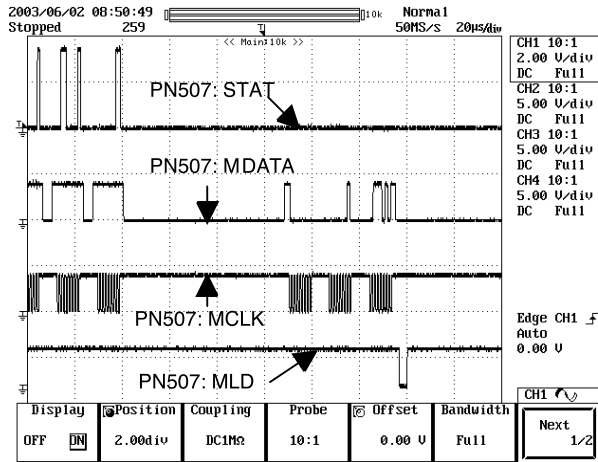
• **READING OK CHECK #E (= “NO DISC” DISPLAY)**

**E**

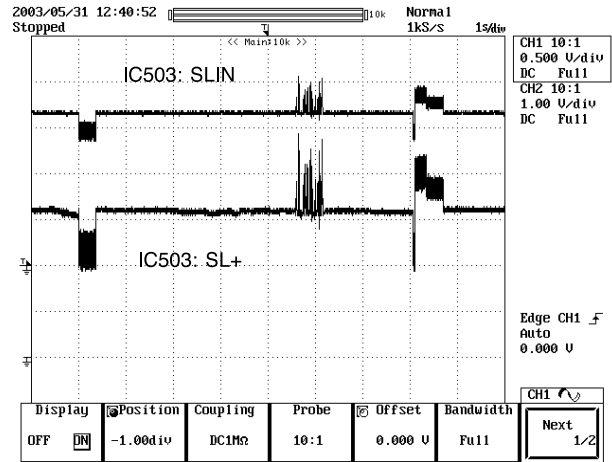


# □ WAVEFORMS OF MAKOR CHECK POINT

#1 . MICOM INTERFACE WAVEFORM  
(PN507 pin6, 8, 9, 1 0) during normal play

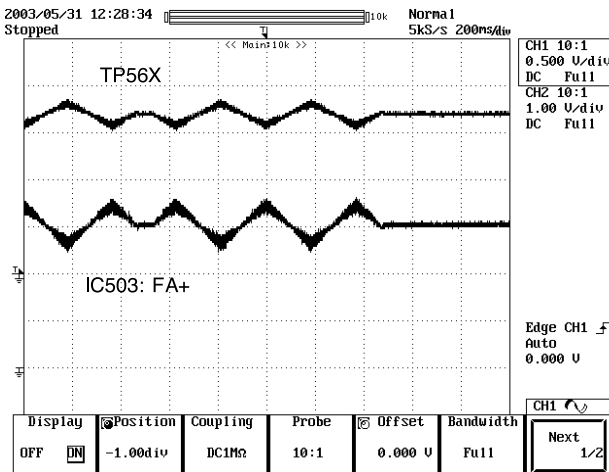


#2. SLED DRIVE AND MOTOR WAVEFORM  
(IC503 pin5, 1 4) when focus search

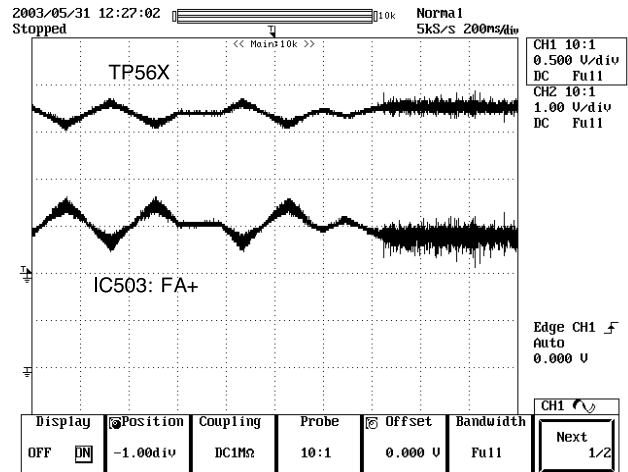


#3. FOCUS DRIVE AND MOTOR WAVEFORM  
(TP56 1 , IC503 pin 1 5)

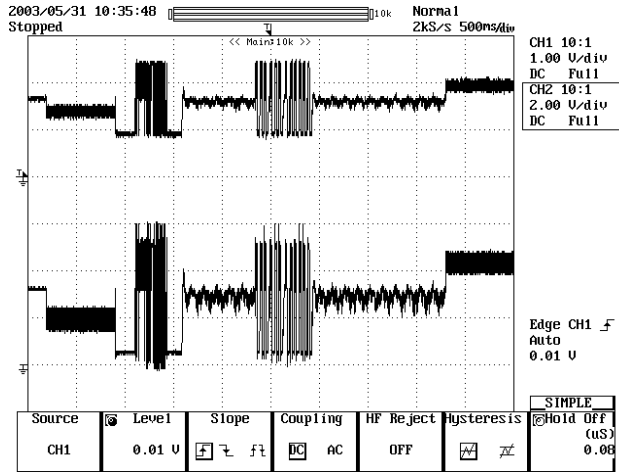
- When focus search failed or there is no disc on tray



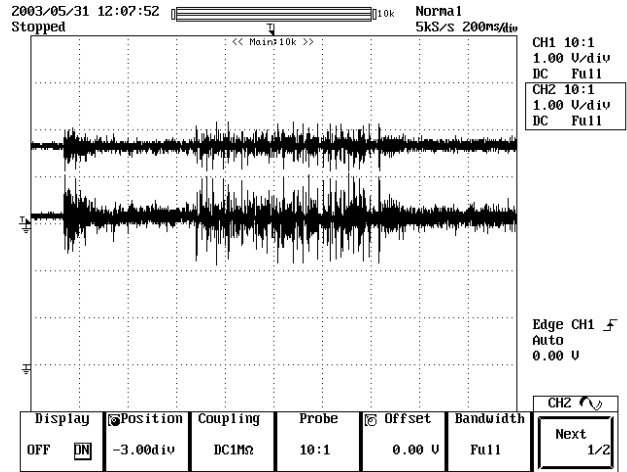
- There is disc on tray and focus search success



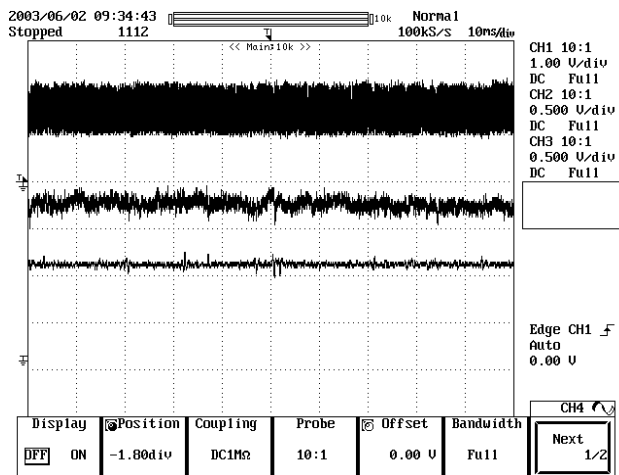
#4. SPINDLE DRIVE AND MOTOR WAVEFORM (IC503 pin6, 1 2) when TOC reading



#5. TRACK DRIVE AND MOTOR WAVEFORM (TP560, IC503 pin23) during normal play

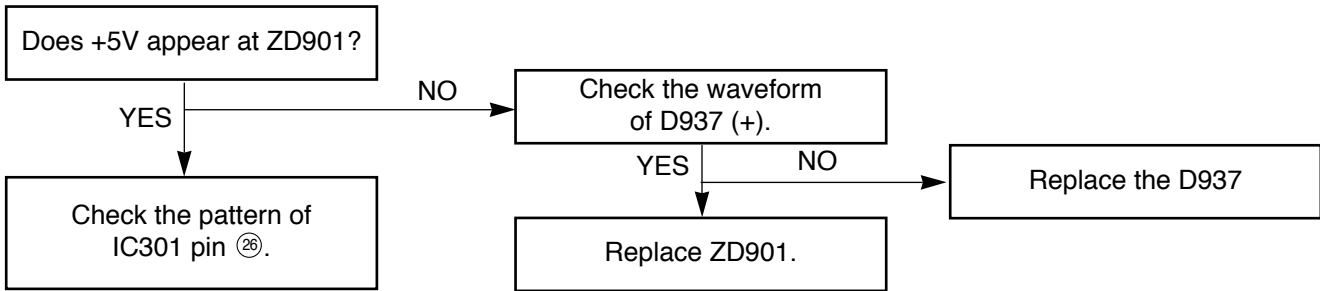


#6. RF, TRACKING AND FOCUS ERROR WAVEFORM (IC502 pin8, 2 1 , 23) during normal play

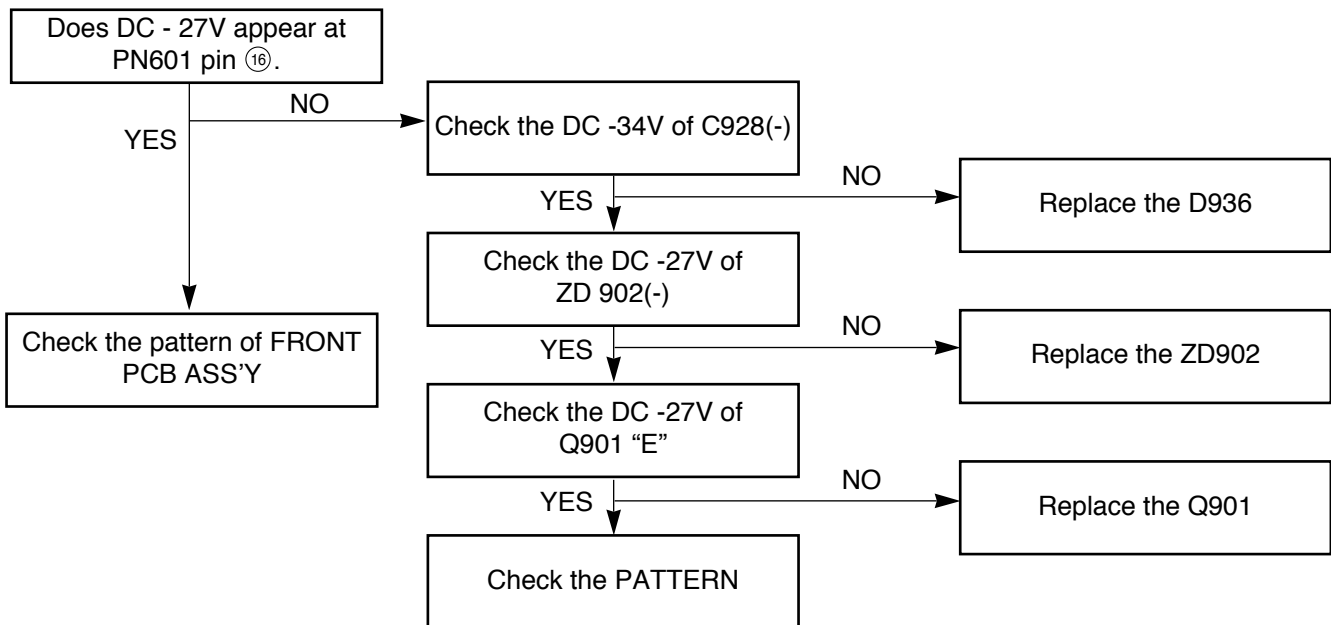


# □ AUDIO PART

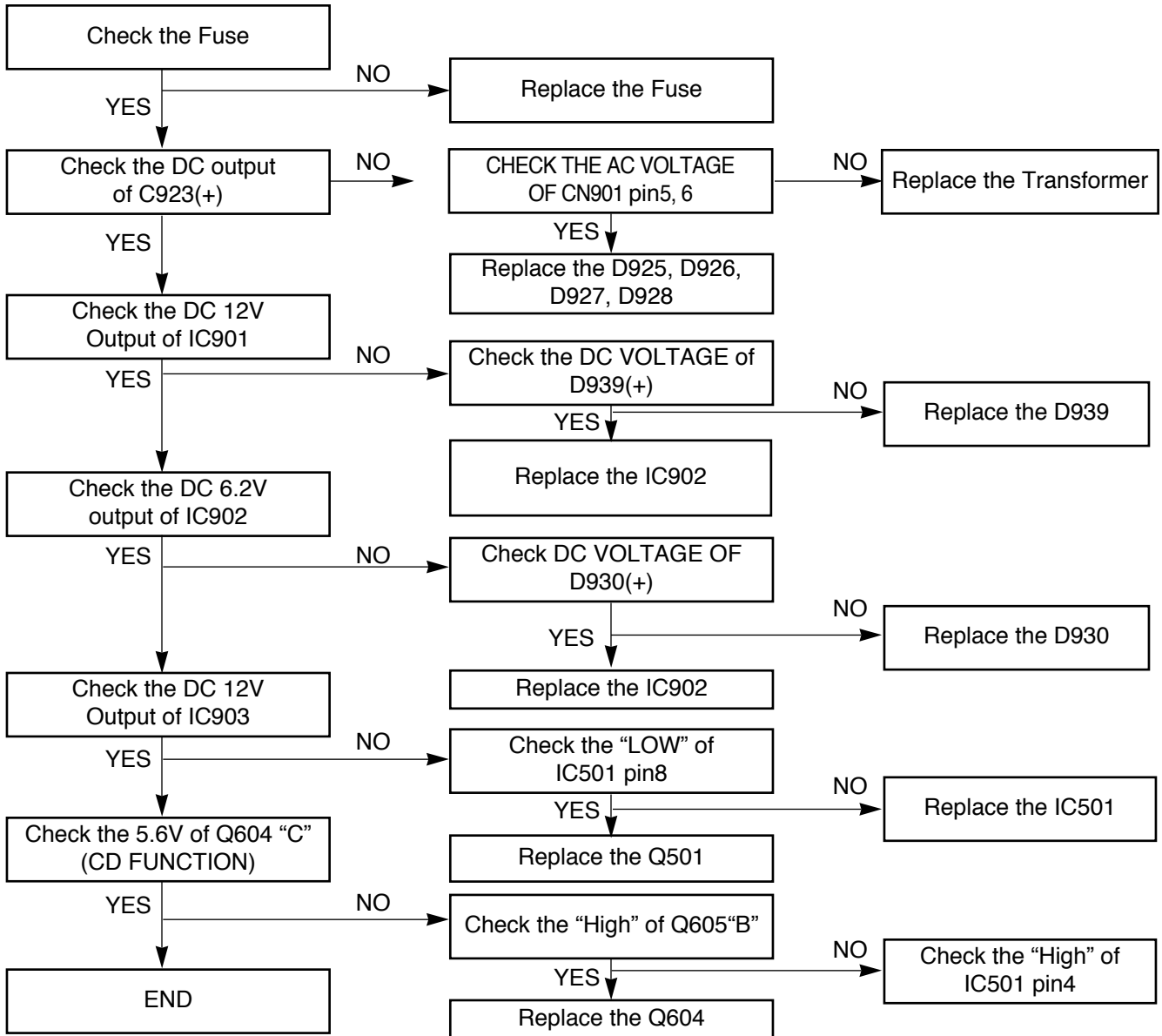
## P-SENS PART



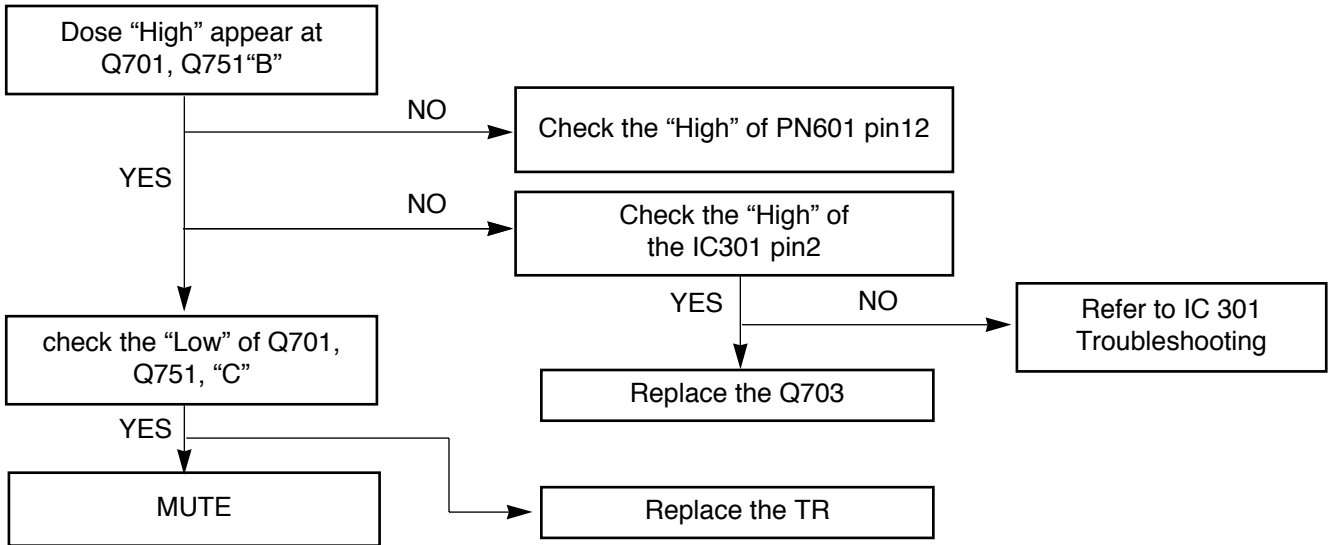
## VKK PART



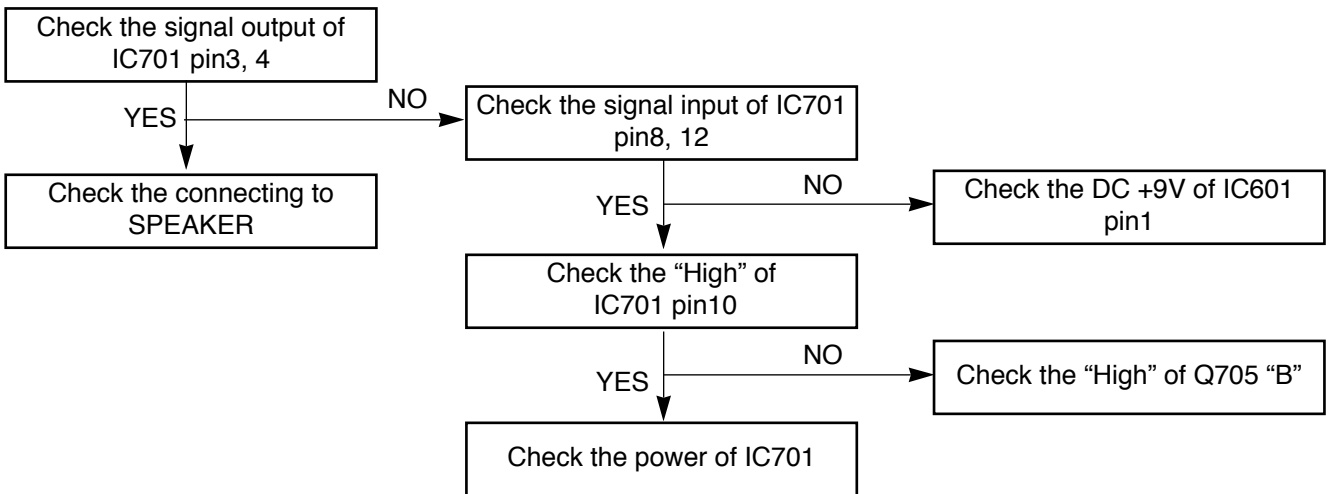
# POWER CIRCUIT



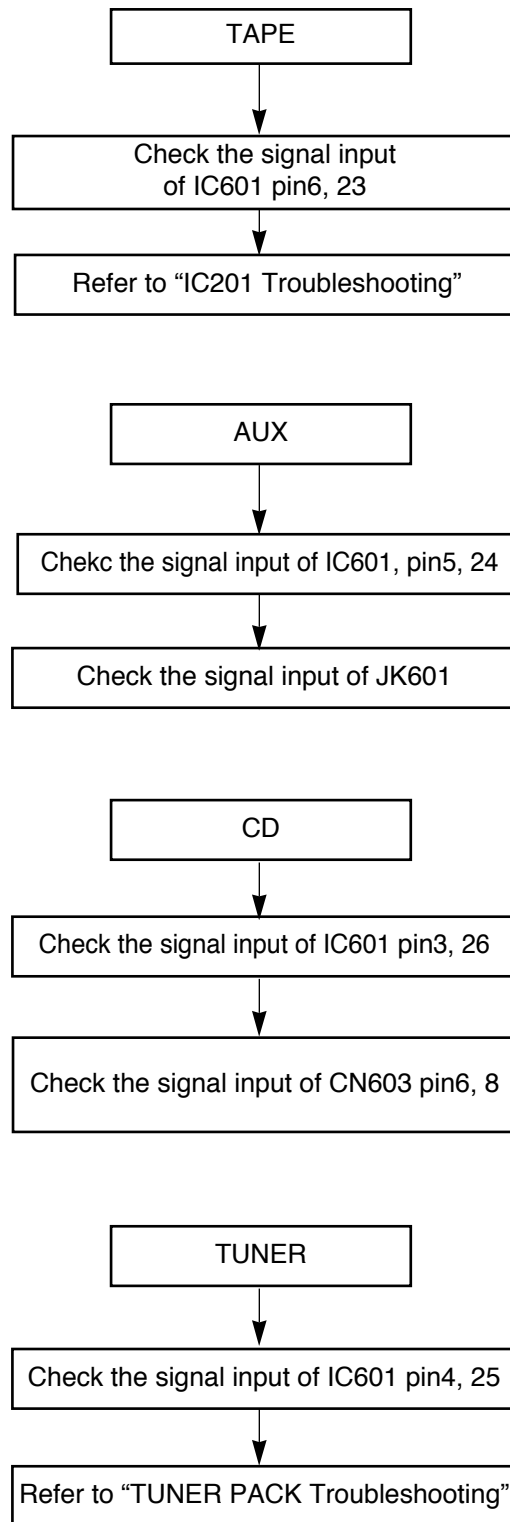
## MUTING CIRCUIT (MUTE)



## AUDIO ABNORMAL

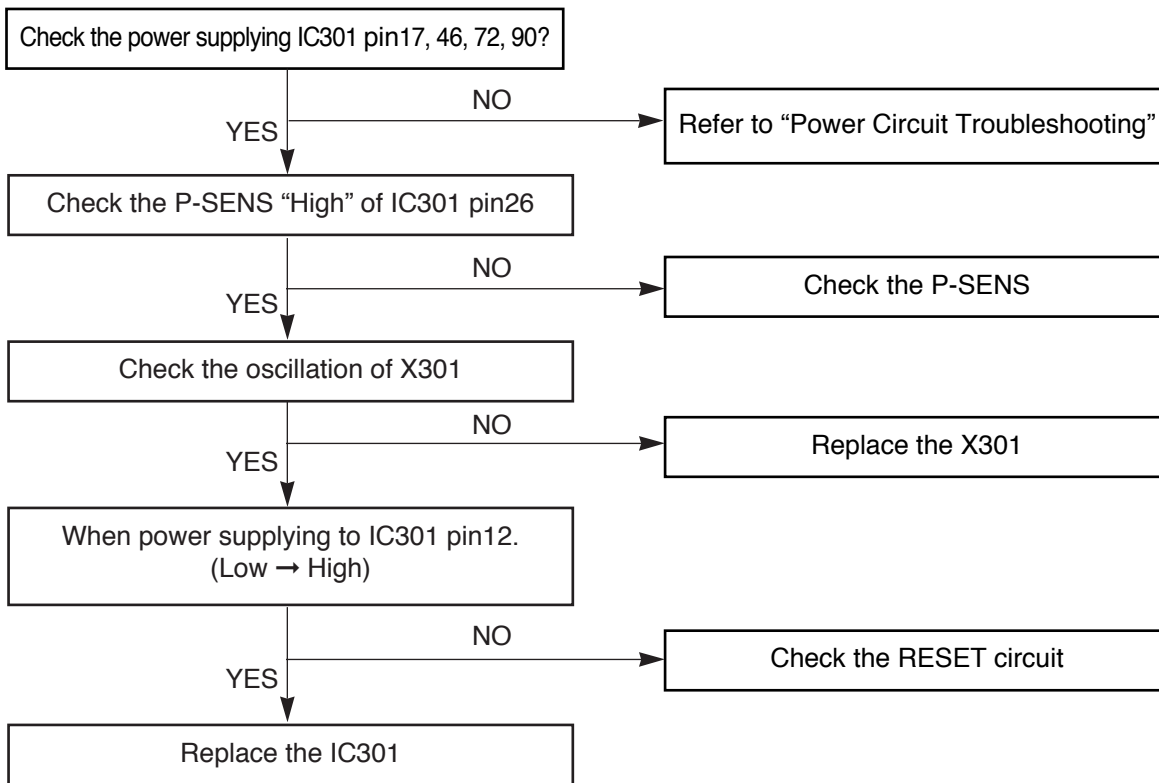


## FUNCTION MODE AUDIO ABNORMAL

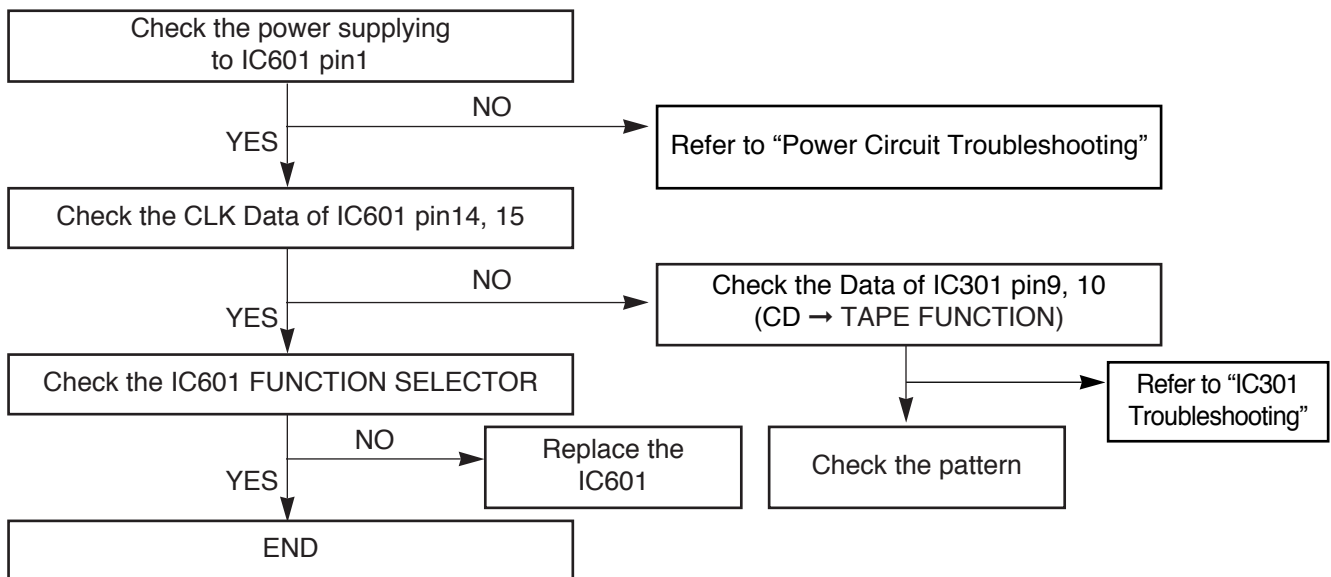




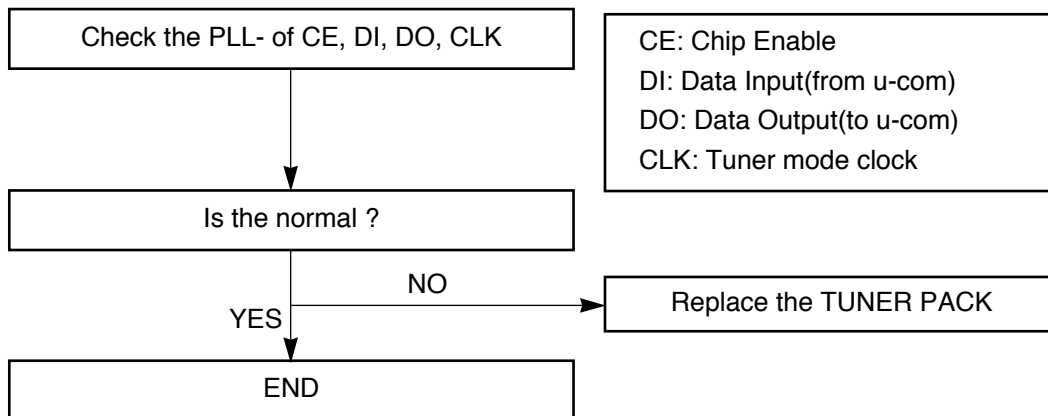
## IC301 TROUBLESHOOTING



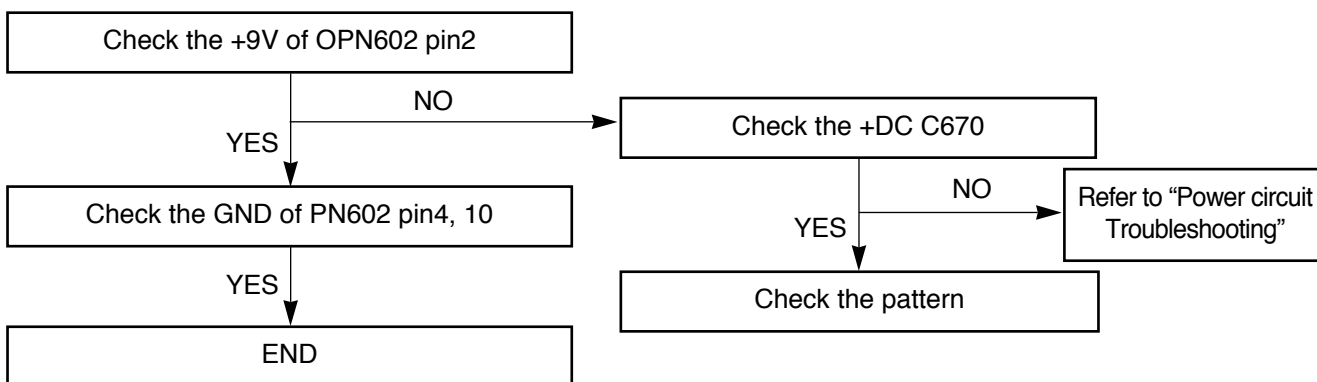
## IC601 TROUBLESHOOTING



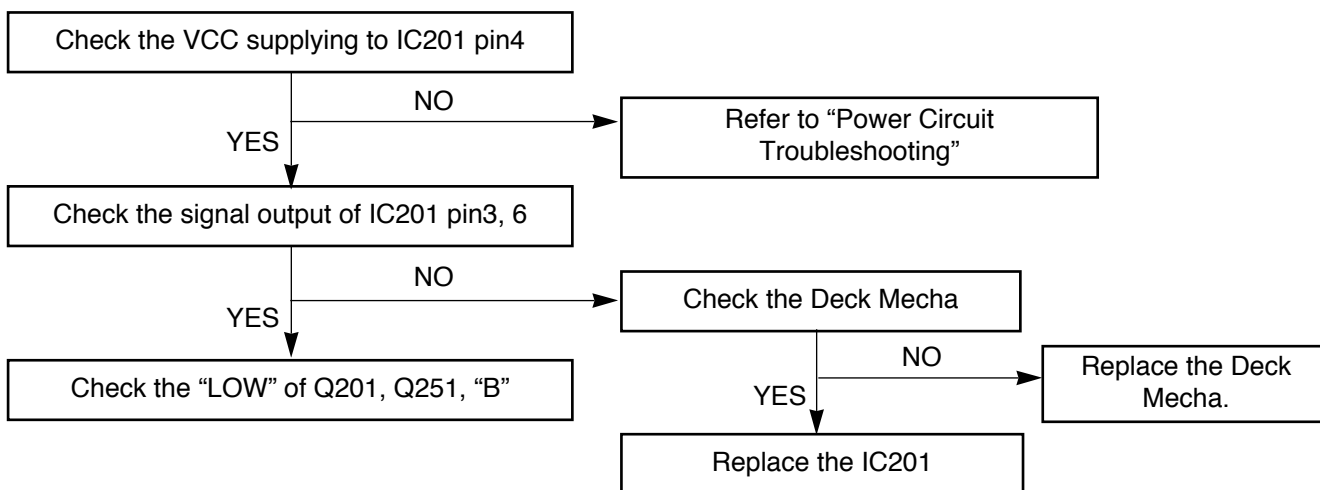
## TUNER PACK TROUBLESHOOTING



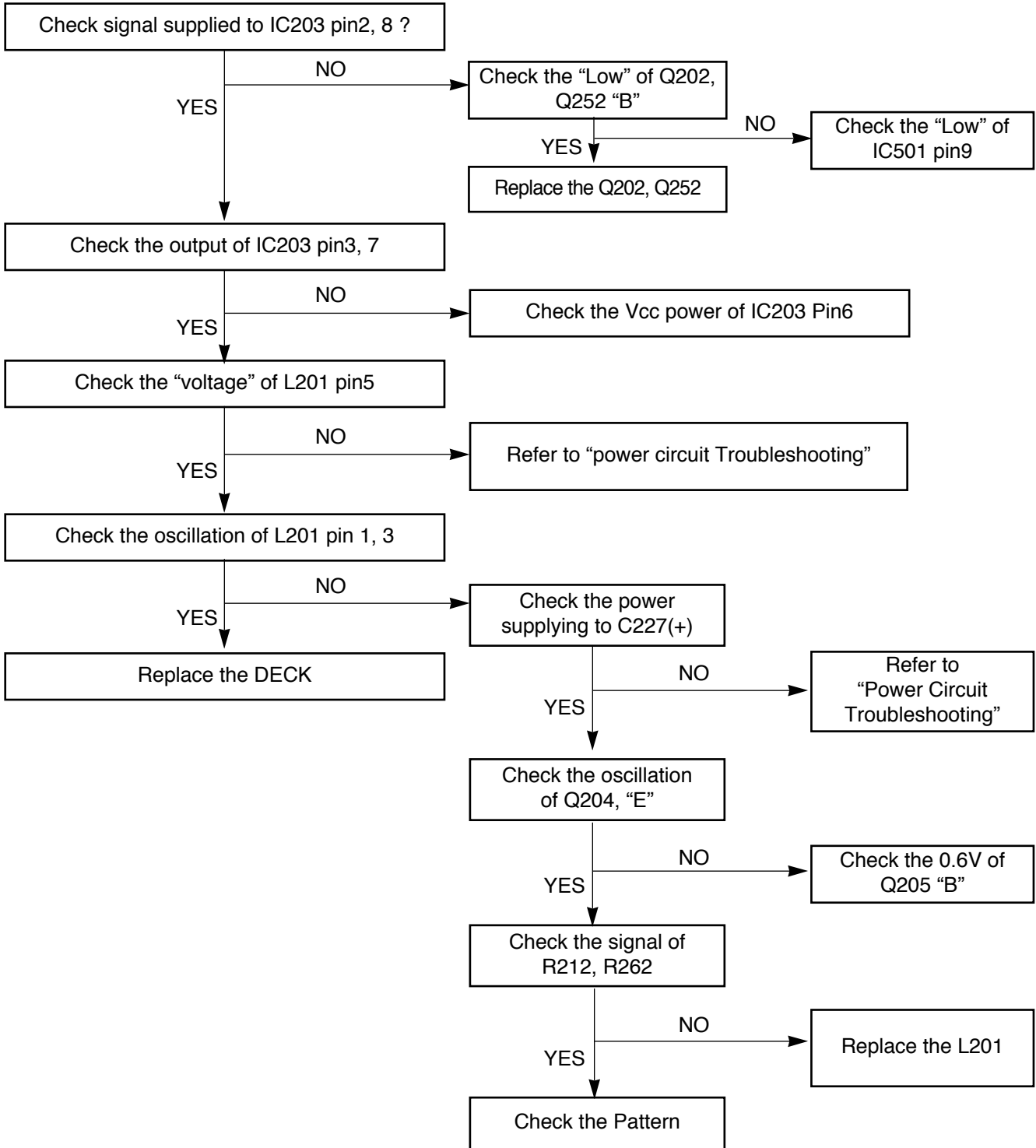
## TUNER PACK POWER TROUBLESHOOTING



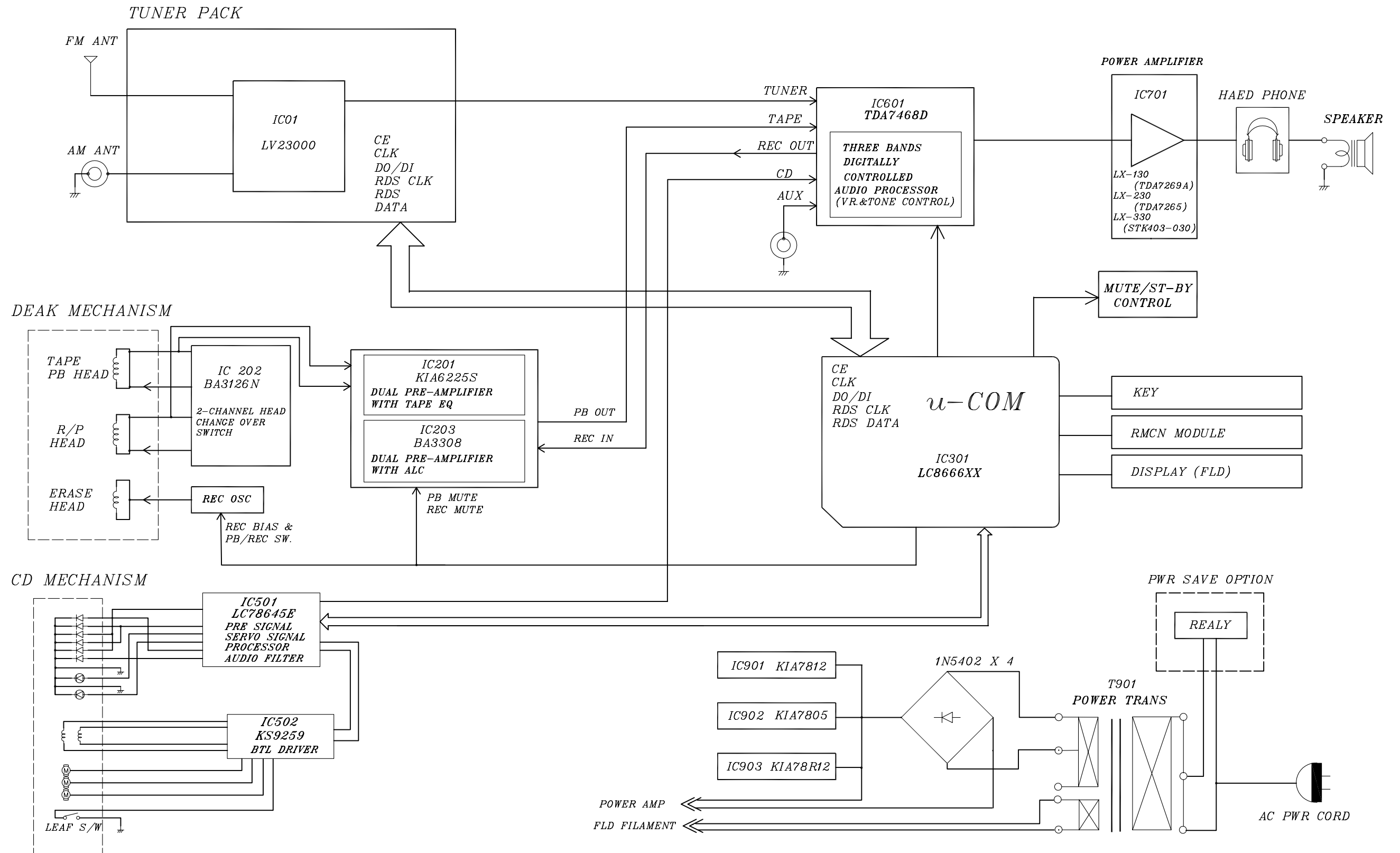
## PLAY



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




# BLOCK DIAGRAM



# SCHEMATIC DIAGRAMS

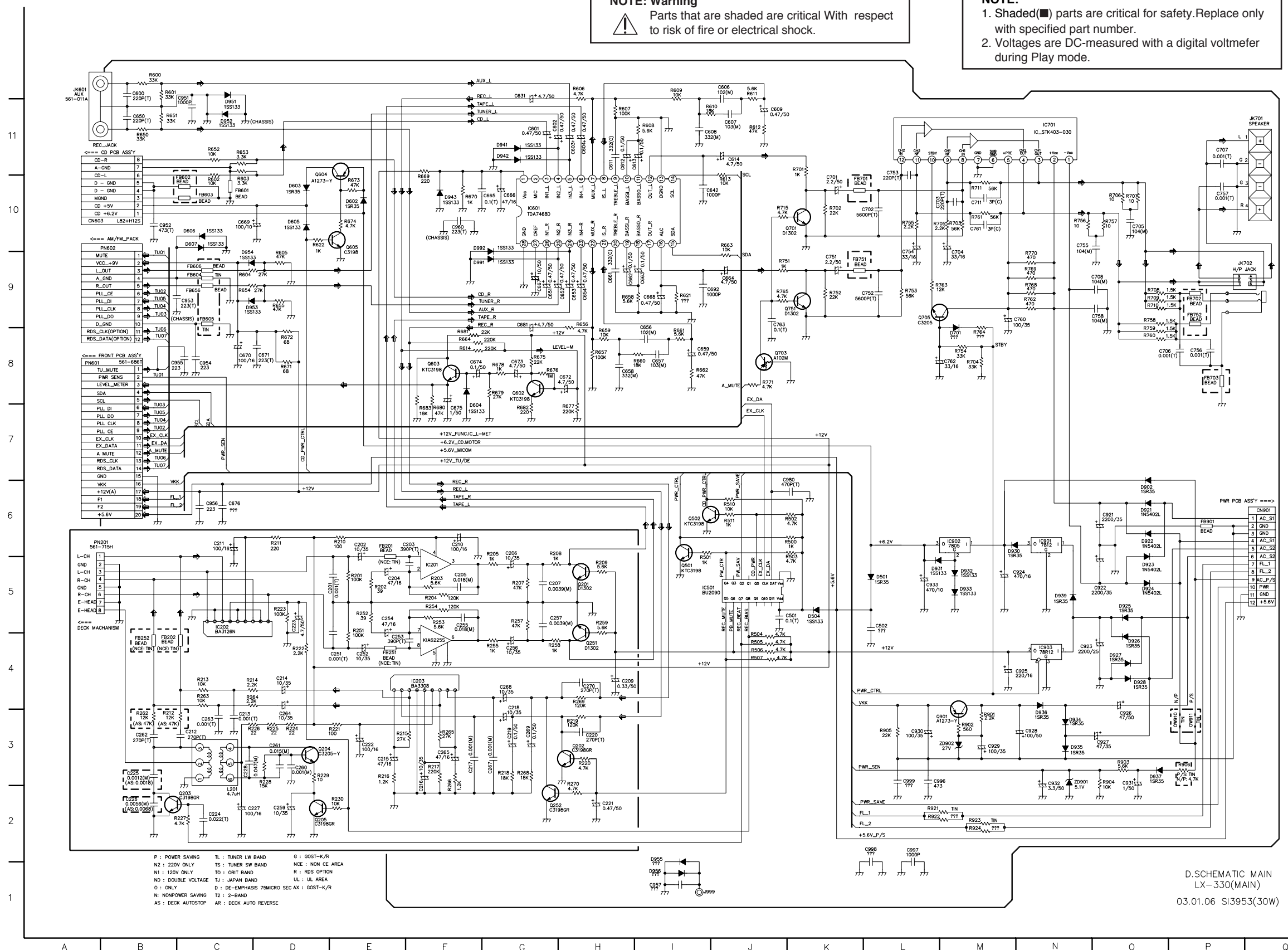
## MAIN SCHEMATIC DIAGRAM

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

**NOTE:**  
 1. Shaded(■) parts are critical for safety. Replace only with specified part number.  
 2. Voltages are DC-measured with a digital voltmeter during Play mode.


### LOCATION GUIDE

C201	E5	C925	N4	Q751	J9	R711	M10
C202	E6	C926	O3	Q901	L3	R715	J10
C203	E6	C927	O3	R201	E5	R751	J9
C204	E5	C928	N3	R202	E5	R752	K9
C205	F5	C929	M3	R203	F5	R753	L9
C206	G6	C930	L3	R204	F5	R754	M8
C207	G5	C931	O3	R205	G6	R755	L10
C209	H4	C932	N3	R207	G5	R756	N10
C210	F6	C933	L5	R208	G6	R757	O10
C211	G6	C951	C11	R209	H5	R758	O9
C212	C3	C952	B10	R210	E6	R759	O8
C213	C3	C953	C9	R211	E6	R760	O8
C214	D4	C954	C8	R212	B3	R761	M10
C215	E3	C955	B8	R213	C4	R762	N9
C216	F2	C956	C6	R214	C4	R763	L9
C217	F3	C957	I1	R215	E3	R764	M8
C218	G4	C960	F10	R216	E3	R765	J9
C219	G3	C980	J6	R217	F3	R768	N9
C220	H3	C996	L3	R218	G3	R769	N9
C221	H2	C997	L2	R219	H3	R770	N9
C222	E3	C998	L2	R220	H3	R771	J8
C223	D5	C999	L3	R221	E3	R901	M3
C224	C2	CN603	A10	R222	D4	R902	M3
C225	B3	CN901	G6	R223	D5	R903	O3
C226	B2	D501	L5	R224	D3	R904	O3
C227	C2	D504	K5	R225	D3	R905	L3
C228	C3	D602	E10	R226	C3	R906	P3
C251	E4	D603	D10	R227	B2	R921	L2
C252	E4	D604	F7	R228	D3	R922	L2
C253	E4	D605	D10	R229	D3	R923	M2
C254	E5	D606	C10	R230	E2	R924	M2
C255	E4	D607	C10	R251	F5	R925	J8
C256	G4	D701	M8	R252	E5	U01	B8
C257	G5	D902	O6	R253	F5	U02	B9
C259	D2	D921	O6	R254	F5	U02	B7
C260	D3	D922	O6	R255	G4	U03	B9
C261	C3	D923	O5	R257	G5	U03	B7
C262	B3	D924	O5	R258	G4	U04	B9
C263	C3	D925	O5	R259	H5	U04	B7
C264	D3	D926	O4	R262	B3	U05	B9
C265	F3	D927	O4	R263	C4	U05	B7
C267	G3	D928	O4	R264	C4	U06	B8
C268	G4	D929	M6	R265	F3	U06	B7
C269	G3	D931	L5	R266	F2	U07	B8
C270	H4	D932	M5	R268	G3	U07	B7
C501	J5	D933	M5	R269	H4	VKK	K4
C502	L5	D934	N3	R270	H3	VKK	B6
C600	B2	D935	N3	R500	J6	ZD901	N3
C601	G11	D936	O3	R501	N3	ZD902	M3
C602	G11	D937	O3	R502	J6		
C603	H11	D939	N5	R503	J5		
C604	H11	D941	G11	R504	J4		
C606	J12	D942	G11	R505	J4		
C607	J11	D943	F10	R506	J4		
C608	H11	D951	C11	R507	J4		
C609	J11	D952	C11	R510	J6		
C611	H11	D953	C9	R511	J6		
C612	H11	D954	C9	R600	B12		
C613	I11	D955	I2	R601	B11		
C614	J11	D956	I1	R602	C10		
C631	G12	D991	F9	R603	C10		
C642	I10	D992	F10	R604	C9		
C650	B11	FB201	E6	R605	D9		
C651	G9	FB202	B4	R606	H12		
C652	H9	FB251	E4	R607	H11		
C653	H9	FB252	B4	R608	H11		
C654	H9	FB601	C10	R609	I12		
C656	H8	FB602	B10	R610	I11		
C657	H8	FB603	C10	R611	J12		
C658	H8	FB604	C9	R612	J11		
C659	H9	FB605	C9	R613	J10		
C661	H9	FB606	C9	R614	F8		
C662	H9	FB656	C9	R621	I9		
C663	J9	FB701	K10	R622	D10		
C664	J9	FB702	P9	R650	B11		
C665	G10	FB751	G9	R651	H11		
C666	G10	FB752	P9	R652	C11		
C667	G9	FB752	P9	R653	C11		
C668	H9	FB901	P6	R654	C9		
C669	C10	IC201	F5	R655	D9		
C670	C8	IC202	C5	R656	H9		
C671	H8	IC203	F4	R657	H8		
C672	D8	IC501	I5	R658	H8		
C673	G8	IC601	G10	R659	H8		
C674	F8	IC701	N11	R660	H8		
C675	F7	IC901	N6	R661	I8		
C676	C6	IC902	M6	R662	I8		
C681	G9	IC903	N4	R663	J10		
C692	I9	J999	I1	R664	F8		
C701	K10	JK601	A12	R669	F10		
C702	K10	JK701	Q11	R670	F10		
C703	L10	JK702	P9	R671	D8		
C704	M9	J201	C2	R672	D8		
C705	O10	OW910	P3	R673	E10		
C706	O8	OW911	P3	R674	E10		
C707	P11	PN201	A6	R675	G8		
C708	N9	PN601	A6	R676	G8		
C711	M10	PN602	B10	R677	H7		
C751	K9	Q201	H5	R678	G8		
C752	K9	Q202	H3	R679	G8		
C753	L11	Q203	C2	R680	F7		
C754	L9	Q204	C3	R681	F8		
C755	N10	Q205	D2	R682	C7		
C756	P8	Q251	H4	R683	F7		
C757	P10	Q252	G2	R701	K11		
C758	O9	Q501	I5	R702	K10		
C760	M9	Q502	I6	R703	M10		
C761	O10	Q602	G8	R704	M8		
C762	M8	Q603	F8	R705	L10		
C763	J9	Q604	D10	R706	O10		
C921	O6	Q605	E10	R707	O10		
C922	O5	Q701	J10	R708	O9		
C923	N4	Q703	J8	R709	O9		
C924	M5	Q705	L9	R710	O9		

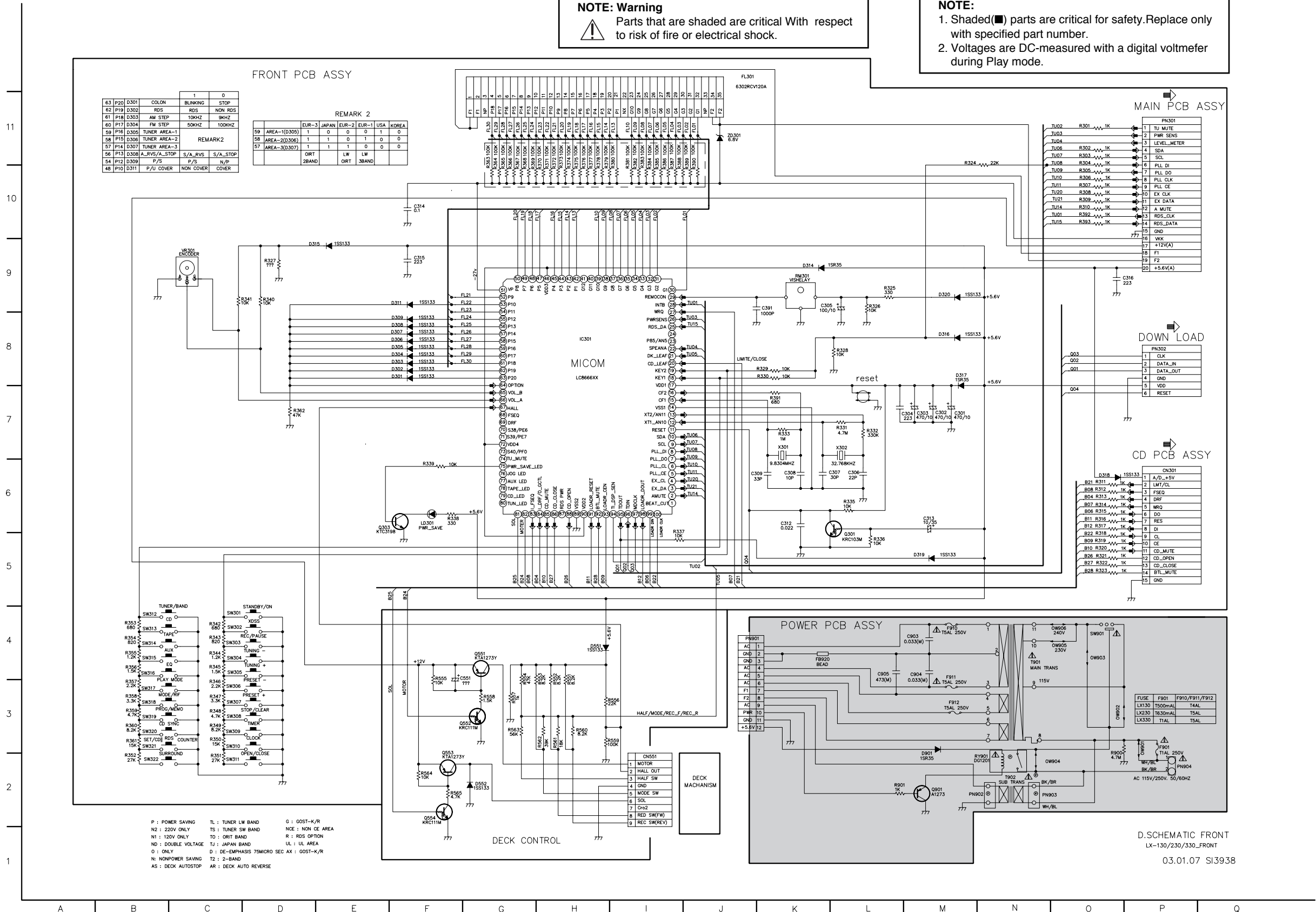


D.SCHEMATIC MAIN  
 LX-330(MAIN)  
 03.01.06 SI3953(30W)

# FRONT/POWER SCHEMATIC DIAGRAM

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

**NOTE:**  
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 2. Voltages are DC-measured with a digital voltmeter during Play mode.

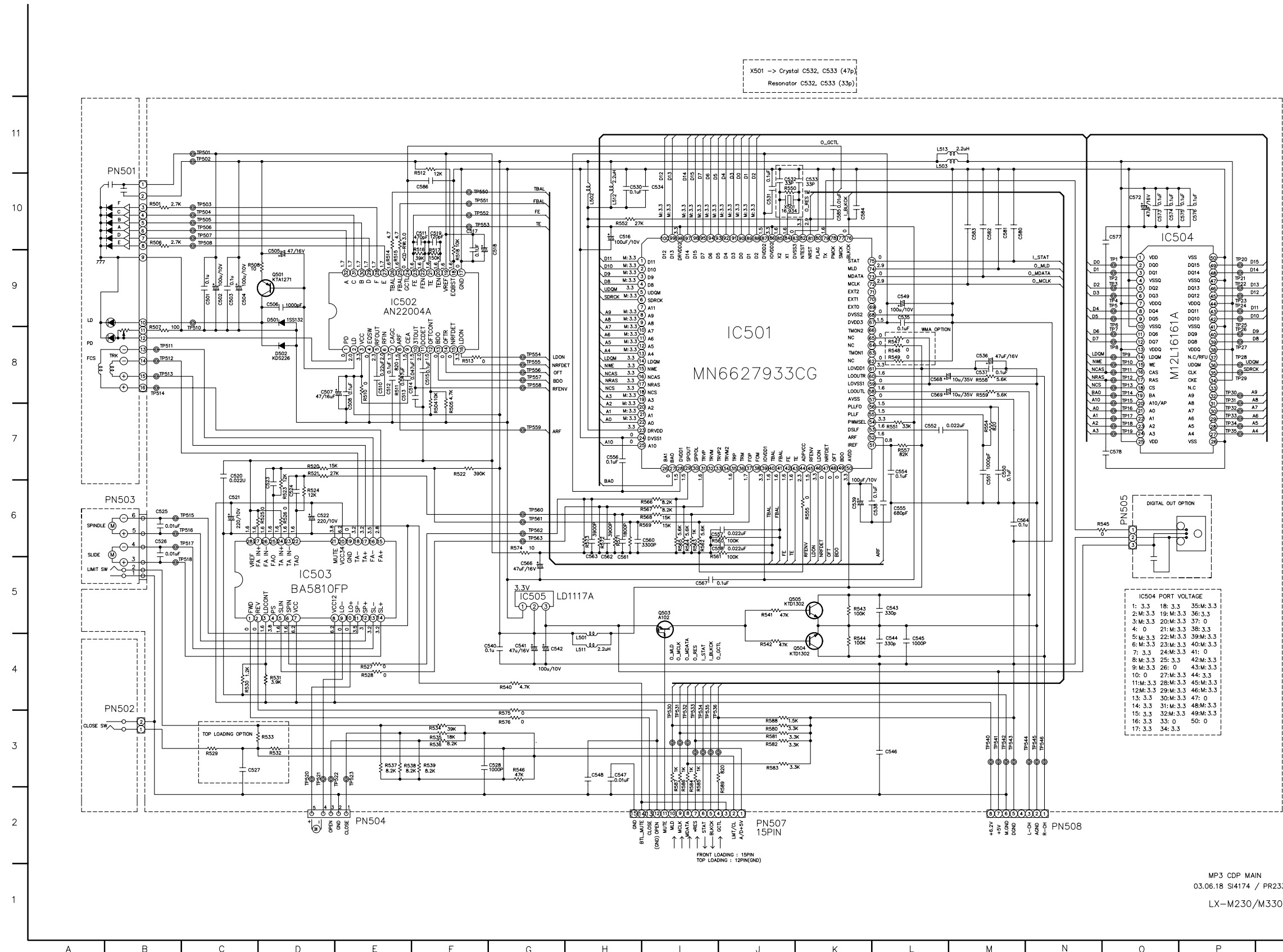


D. SCHEMATIC FRONT  
 LX-130/230/330\_FRONT  
 03.01.07 SI3938

# • CDP SCHEMATIC DIAGRAM

## LOCATION GUIDE

C501	C9	R510	E8
C502	C9	R511	F8
C503	C9	R512	F10
C504	D9	R513	F8
C505	D9	R514	E9
C506	D9	R515	F9
C507	E8	R516	F9
C508	E7	R517	F9
C510	E8	R518	F9
C511	F10	R520	D7
C512	E8	R521	D7
C513	F8	R522	F7
C514	F8	R523	D6
C515	F8	R524	D6
C516	H10	R525	D6
C517	F10	R526	D6
C518	G9	R527	E4
C519	F10	R528	E4
C520	C7	R529	C3
C521	C6	R530	D4
C522	D6	R531	D4
C523	D6	R532	D3
C524	D6	R533	D3
C525	B6	R534	F3
C526	B6	R535	F3
C527	C3	R536	D3
C528	G3	R537	E3
C530	H10	R538	F3
C531	J10	R539	F3
C532	K10	R540	G4
C533	K10	R541	J5
C534	H10	R542	J4
C535	L9	R543	K5
C536	M8	R544	K4
C537	M8	R545	O6
C538	L6	R546	G3
C539	K6	R547	L8
C540	G4	R548	L8
C541	G4	R549	L8
C542	H4	R550	K10
C543	L5	R551	L7
C544	L4	R552	H10
C545	L4	R553	M7
C546	L3	R554	K6
C547	H3	R555	L7
C548	H3	R556	M8
C549	L9	R559	M8
C550	M7	R560	J6
C551	M6	R561	J5
C552	L7	R562	J6
C554	L7	R563	I6
C555	L6	R564	I6
C556	H7	R565	I6
C557	J6	R566	I6
C558	J6	R567	I6
C560	I6	R568	I6
C561	H5	R569	I6
C562	H5	R571	H6
C563	H5	R572	H6
C564	N6	R573	H6
C566	G5	R574	O6
C567	I5	R575	O6
C568	L8	R576	G3
C569	L8	R580	J3
C572	O10	R581	J3
C573	O10	R582	J3
C574	P10	R583	J3
C575	P10	R584	I2
C576	P10	R585	I2
C577	O10	R586	I2
C578	O7	R587	I2
C580	N10	R588	J3
C581	M10	R589	J2
C582	M10	R590	J2
C583	M10	R591	J2
C584	L10	R592	J2
C585	K10	R593	J2
C586	F10	R594	J2
D501	D9	R595	J2
D502	D8	R596	J2
IC501	J8	R597	J2
IC502	E9	R598	J2
IC503	D5	R599	J2
IC504	O10	R600	J2
IC505	G5	R601	J2
L501	H4	R602	J2
L502	H10	R603	J2
L503	M11	R604	J2
L511	H4	R605	J2
L512	H10	R606	J2
L513	M11	R607	J2
PN501	B10	R608	J2
PN502	B3	R609	J2
PN503	B6	R610	J2
PN504	E2	R611	J2
PN505	O6	R612	J2
PN507	J2	R613	J2
PN508	N2	R614	J2
Q501	D9	R615	J2
Q503	I5	R616	J2
Q504	K4	R617	J2
Q505	K5	R618	J2
R501	B10	R619	J2
R504	F7	R620	J2
R505	F7	R621	J2
R506	B10	R622	J2
R507	B8	R623	J2
R508	D9	R624	J2



IC504 PORT VOLTAGE

1:	3.3	18:	3.3	35:M:	3.3	
2:	M:	3.3	19:	M:	3.3	
3:	M:	3.3	20:	M:	3.3	
4:	0	21:	M:	3.3	38:	3.3
5:	M:	3.3	22:	M:	3.3	
6:	M:	3.3	23:	M:	3.3	
7:	3.3	24:	M:	3.3	41:	0
8:	M:	3.3	25:	M:	3.3	
9:	M:	3.3	26:	0	43:M:	3.3
10:	0	27:	M:	3.3	44:	3.3
11:	M:	3.3	28:	M:	3.3	
12:	M:	3.3	29:	M:	3.3	
13:	3.3	30:	M:	3.3	47:	0
14:	3.3	31:	M:	3.3	48:M:	3.3
15:	3.3	32:	M:	3.3	49:M:	3.3
16:	3.3	33:	0	50:	0	
17:	3.3	34:	3.3			

MP3 CDP MAIN  
03.06.18 SI4174 / PR2330AA  
LX-M230/M330

# WIRING DIAGRAM

