



SERVICE MANUAL

MODEL : LGXBR342

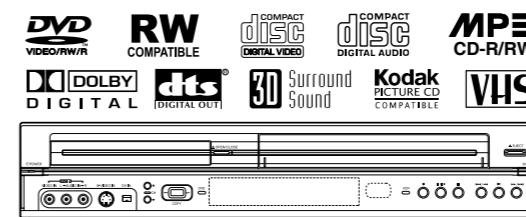


# VCR+DVD RECORDER SERVICE MANUAL

## MODEL : LGXBR342

### CAUTION

BEFORE SERVICING THE UNIT, READ THE "SAFETY PRECAUTIONS"  
IN THIS MANUAL.



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LG Electronics Inc.

# SECTION 1

## SUMMARY

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# PRODUCT SAFETY SERVICING GUIDELINES FOR VIDEO PRODUCTS

## IMPORTANT SAFETY NOTICE

This manual was prepared for use only by properly trained audio-video service technicians.

When servicing this product, under no circumstances should the original design be modified or altered without permission from Zenith Electronics Corporation. All components should be replaced only with types identical to those in the original circuit and their physical location, wiring and lead dress must conform to original layout upon completion of repairs.

Special components are also used to prevent x-radiation, shock and fire hazard. These components are indicated by the letter "x" included in their component designators and are required to maintain safe performance. No deviations are allowed without prior approval by Zenith Electronics Corporation.

Circuit diagrams may occasionally differ from the actual circuit used. This way, implementation of the latest safety and performance improvement changes into the set is not delayed until the new service literature is printed.

**CAUTION:** Do not attempt to modify this product in any way. Never perform customized installations without manufacturer's approval. Unauthorized modifications will not only void the warranty, but may lead to property damage or user injury.

Service work should be performed only after you are thoroughly familiar with these safety checks and servicing guidelines.

## GRAPHIC SYMBOLS



The exclamation point within an equilateral triangle is intended to alert the service personnel to important safety information in the service literature.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the service personnel to the presence of noninsulated "dangerous voltage" that may be of sufficient magnitude to constitute a risk of electric shock.



The pictorial representation of a fuse and its rating within an equilateral triangle is intended to convey to the service personnel the following fuse replacement caution notice:

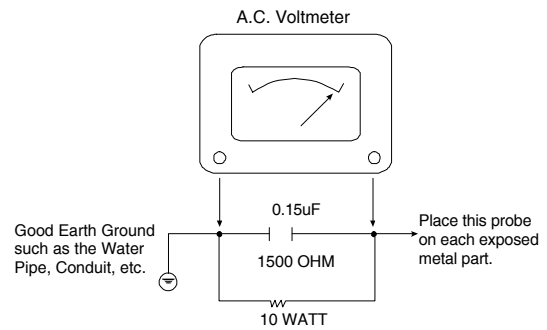
**CAUTION:** FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ALL FUSES WITH THE SAME TYPE AND RATING AS MARKED NEAR EACH FUSE.

## SERVICE INFORMATION

While servicing, use an isolation transformer for protection from AC line shock. After the original service problem has been corrected, make a check of the following:

### FIRE AND SHOCK HAZARD

1. Be sure that all components are positioned to avoid a possibility of adjacent component shorts. This is especially important on items transported to and from the repair shop.
2. Verify that all protective devices such as insulators, barriers, covers, shields, strain reliefs, power supply cords, and other hardware have been reinstalled per the original design. Be sure that the safety purpose of the polarized line plug has not been defeated.
3. Soldering must be inspected to discover possible cold solder joints, solder splashes, or sharp solder points. Be certain to remove all loose foreign particles.
4. Check for physical evidence of damage or deterioration to parts and components, for frayed leads or damaged insulation (including the AC cord), and replace if necessary.
5. No lead or component should touch a high current device or a resistor rated at 1 watt or more. Lead tension around protruding metal surfaces must be avoided.
6. After reassembly of the set, always perform an AC leakage test on all exposed metallic parts of the cabinet (the channel selector knobs, antenna terminals, handle and screws) to be sure that set is safe to operate without danger of electrical shock. **DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST.** Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner: Connect a 1500 ohm, 10 watt resistor, paralleled by a .15 mfd 150V AC type capacitor between a known good earth ground water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and .15 mfd capacitor. Reverse the AC plug by using a non-polarized adaptor and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.75 volts RMS. This corresponds to 0.5 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



## TIPS ON PROPER INSTALLATION

1. Never install any receiver in a closed-in recess, cubbyhole, or closely fitting shelf space over, or close to, a heat duct, or in the path of heated air flow.
2. Avoid conditions of high humidity such as: outdoor patio installations where dew is a factor, near steam radiators where steam leakage is a factor, etc.
3. Avoid placement where draperies may obstruct venting. The customer should also avoid the use of decorative scarves or other coverings that might obstruct ventilation.
4. Wall- and shelf-mounted installations using a commercial mounting kit must follow the factory-approved mounting instructions. A product mounted to a shelf or platform must retain its original feet (or the equivalent thickness in spacers) to provide adequate air flow across the bottom. Bolts or screws used for fasteners must not touch any parts or wiring. Perform leakage tests on customized installations.
5. Caution customers against mounting a product on a sloping shelf or in a tilted position, unless the receiver is properly secured.
6. A product on a roll-about cart should be stable in its mounting to the cart. Caution the customer on the hazards of trying to roll a cart with small casters across thresholds or deep pile carpets.
7. Caution customers against using extension cords. Explain that a forest of extensions, sprouting from a single outlet, can lead to disastrous consequences to home and family.

# SERVICING PRECAUTIONS

CAUTION: Before servicing the VCR + DVD RECORDER covered by this service data and its supplements and addends, read and follow the *SAFETY PRECAUTIONS*. NOTE: if unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions in this publications, always follow the safety precautions.

*Remember Safety First.*

## General Servicing Precautions

1. Always unplug the VCR + DVD RECORDER AC power cord from the AC power source before:
  - (1) Removing or reinstalling any component, circuit board, module, or any other assembly.
  - (2) Disconnecting or reconnecting any internal electrical plug or other electrical connection.
  - (3) Connecting a test substitute in parallel with an electrolytic capacitor.  
**Caution:** A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.
2. Do not spray chemicals on or near this VCR + DVD RECORDER or any of its assemblies.
3. Unless specified otherwise in this service data, clean electrical contacts by applying an appropriate contact cleaning solution to the contacts with a pipe cleaner, cotton-tipped swab, or comparable soft applicator. Unless specified otherwise in this service data, lubrication of contacts is not required.
4. Do not defeat any plug/socket B+ voltage interlocks with which instruments covered by this service manual might be equipped.
5. Do not apply AC power to this VCR + DVD RECORDER and / or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
6. Always connect the test instrument ground lead to an appropriate ground before connecting the test instrument positive lead. Always remove the test instrument ground lead last.

## Insulation Checking Procedure

Disconnect the attachment plug from the AC outlet and turn the power on. Connect an insulation resistance meter (500V) to the blades of the attachment plug. The insulation resistance between each blade of the attachment plug and accessible conductive parts (Note 1) should be more than 1M-ohm.

**Note 1:** Accessible Conductive Parts include Metal panels, Input terminals, Earphone jacks, etc.

## Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES 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 ES 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 ES 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 ES devices.
5. Do not use freon-propelled chemicals. These can generate an electrical charge sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil, or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES 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 ES devices. (Normally 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 ES device.)

# SPECIFICATIONS

## General

Power requirements	AC 120V, 50/60 Hz
Power consumption	35W
Dimensions (approx.)	430 X 83.5 X 360 mm
Mass (approx.)	6.8 kg
Operating temperature	5 °C ~ 40 °C
Standard Condition	-20 °C ~ -60 °C
Signal system	NTSC

## VDR PART

Read Disc Format	DVD Disc : DVD Video Specification Book. CD-DA Disc : RED Book.
Write Disc Format	DVD-R/DVD-R/W Disc : DVD-RW Recorder Specification Book
Video System	NTSC
Data Multiplexing	MPEG-2(ISO/IEC 13818-1)
Data Decoding Standards	MPEG-1, MPEG-2
Audio Compression	Read : AC-3 : ATSC Standard for ATV MPEG-1, MPEG-2 Write : MPEG-1, Layer-2

## VCR PART

Video Head System	Double azimuth 4head helical scanning
Tape Format	Tape width 12.7mm(0.5 inch)
Timer	24hours display type

## OUTOUT

VIDEO OUTPUTS	1.0 V (p-p), 75 $\Omega$ negative sync,RCA jack x 1
S-VIDEO OUTPUT	(Y)1.0 V (p-p), 75 $\Omega$ negative sync, Mini DIN 4-pin x 1 (C)0.3 V (p-p), 75 $\Omega$
COMPONENT VIDEO OUTPUT	(Y)1.0 V (p-p),75 $\Omega$ negative sync, RCA jack x 1 (Pb)/(Pr)0.7 V (p-p), 75 $\Omega$
Audio output (analog output)	(-)6dBm, less than 1k $\Omega$ RCA jack x 2
Audio output (digital output)	0.5 V (p-p), 75 $\Omega$ , RCA jack x 1
Audio output (optical output)	5 V (p-p), 75 $\Omega$ , Optical connector x 1

**SECTION 2**  
**CABINET & MAIN CHASSIS**

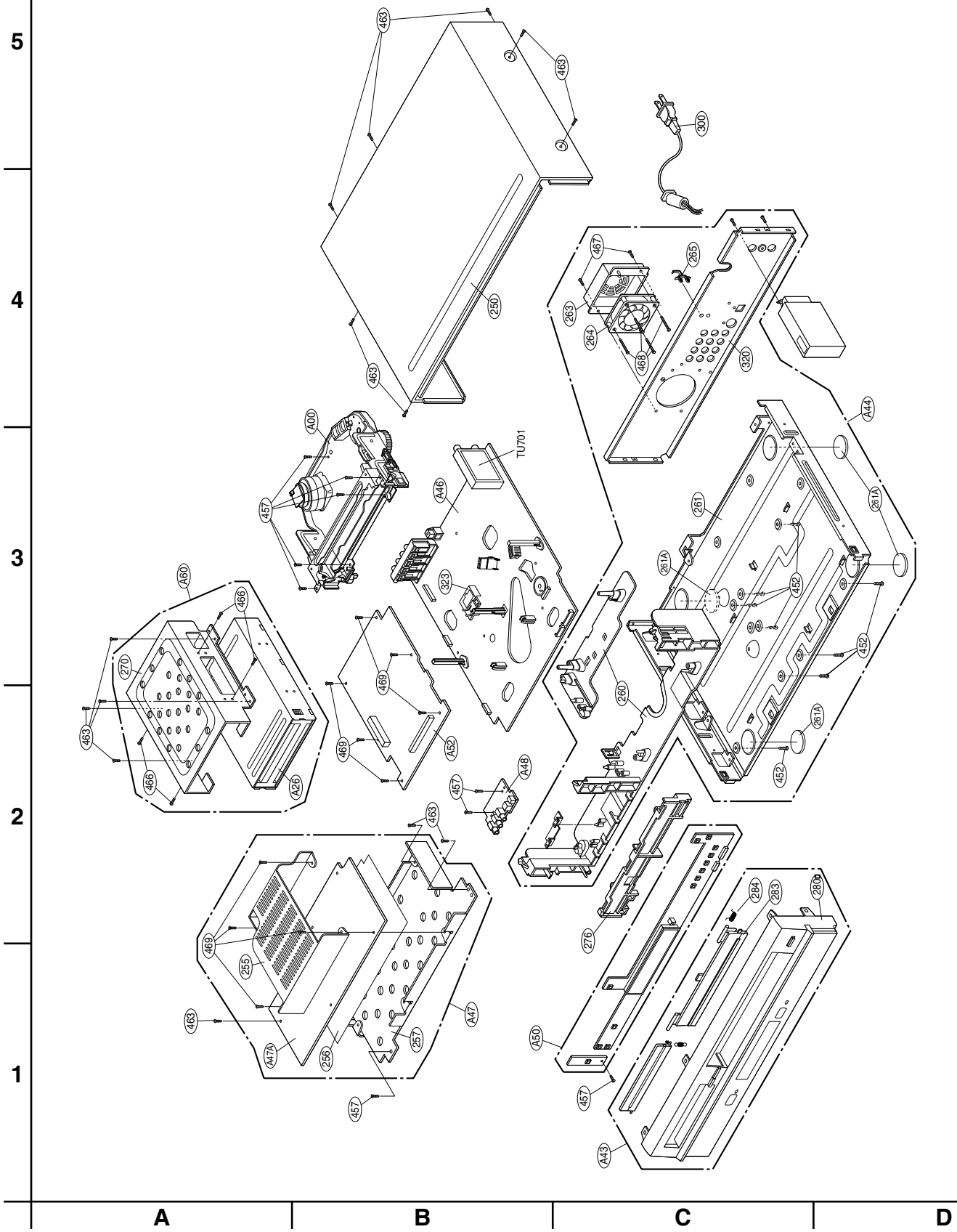
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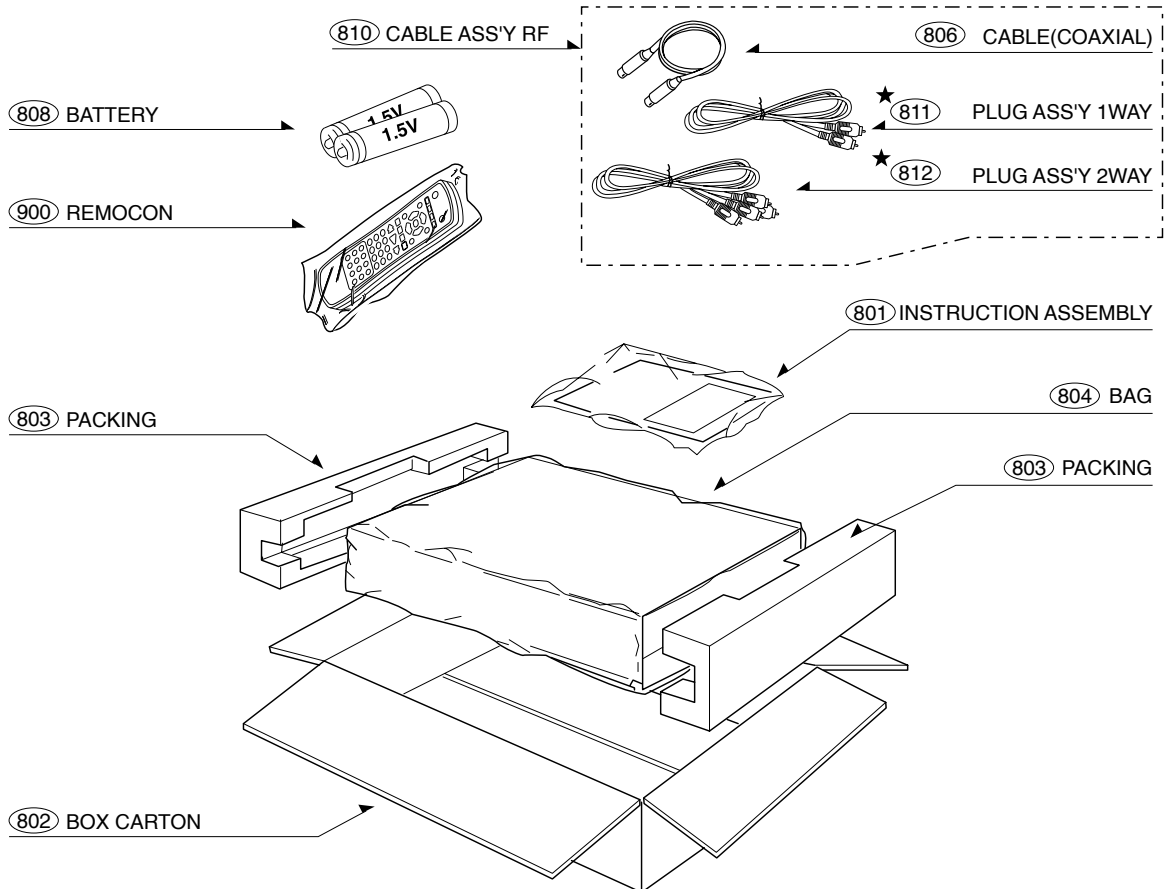
# EXPLODED VIEWS

## 1. Cabinet and Main Frame Section



## 2. Packing Accessory Section

★ OPTIONAL PARTS

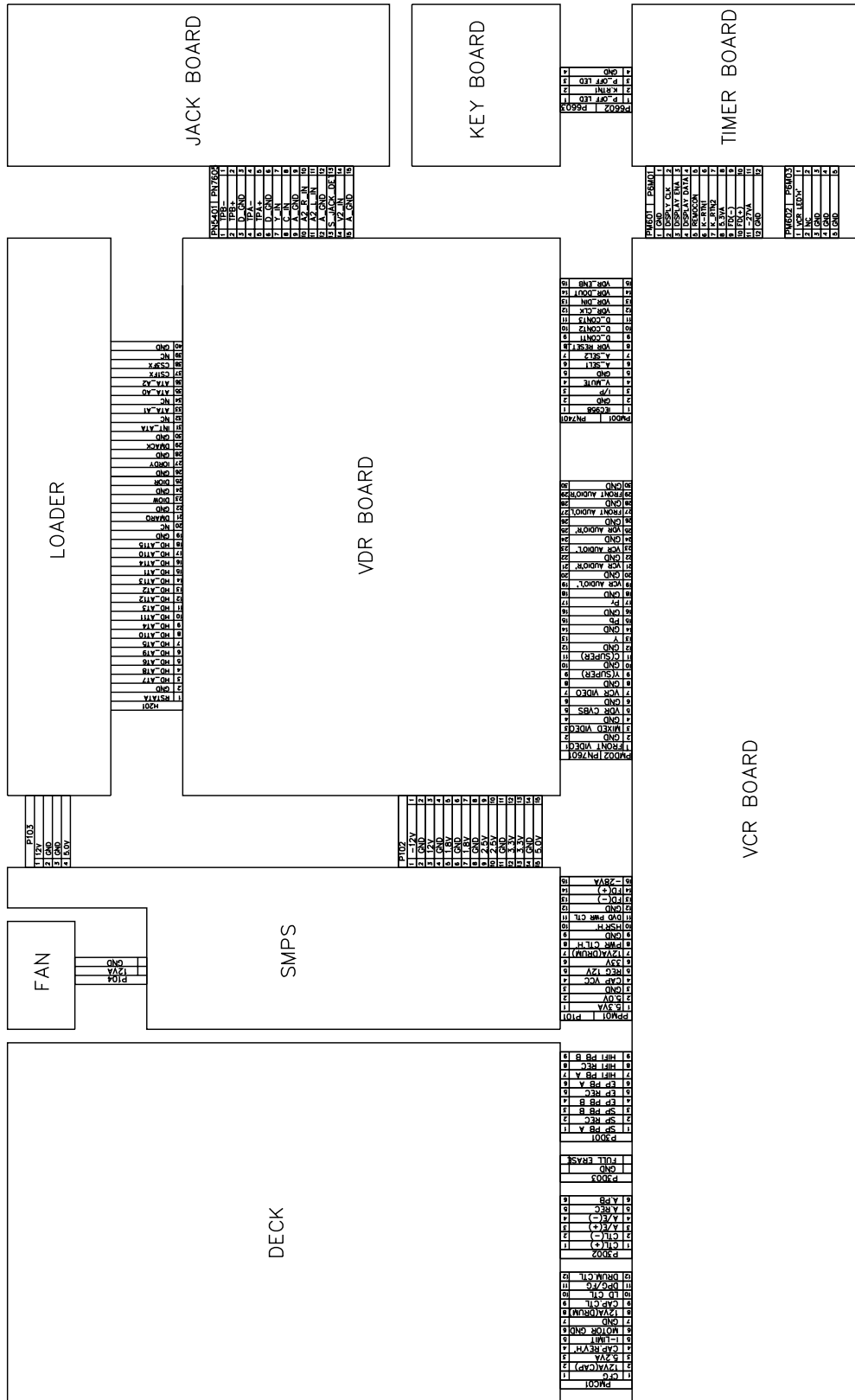




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# OVERALL WIRING DIAGRAM



# VCR PART

## ELECTRICAL ADJUSTMENT PROCEDURES

### 1. Servo Adjustment

#### 1) PG Adjustment

- Test Equipment
  - a) OSCILLOSCOPE
  - b) NTSC MODEL : NTSC SP TEST TAPE

- Adjustment And Specification

MODE	MEASUREMENT POINT	ADJUSTMENT POINT	SPECIFICATION
PLAY	V.Out H/SW(W5D1, W5D2)	R/C TRK JIG KEY	$6.5 \pm 0.5H$

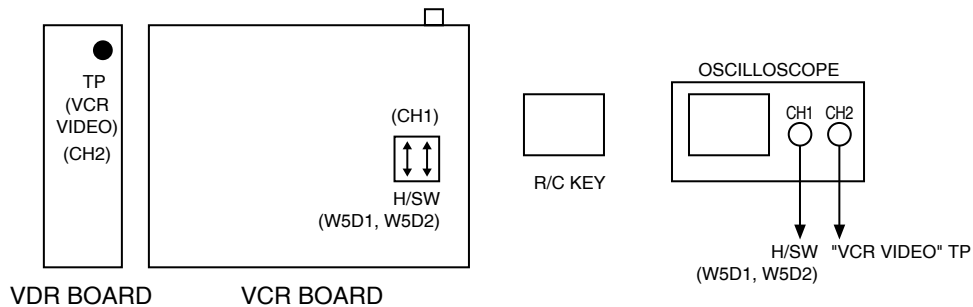
- **Adjustment Procedure**

- a) Insert the SP Test Tape and play.
- b) Connect the CH1 of the oscilloscope to the H/SW and CH2 to the "VCR VIDEO" TP for the VCR.
- c) Trigger the mixed Combo Video Signal of CH2 to the CH1 H/SW, and then check the distance (time difference), which is from the selected A(B) Head point of the H/SW(W5D1, W5D2) signal to the starting point of the vertical synchronized signal, to  $6.5H \pm 0.5H$  ( $412\mu s$ ,  $1H=63.5\mu s$ ).

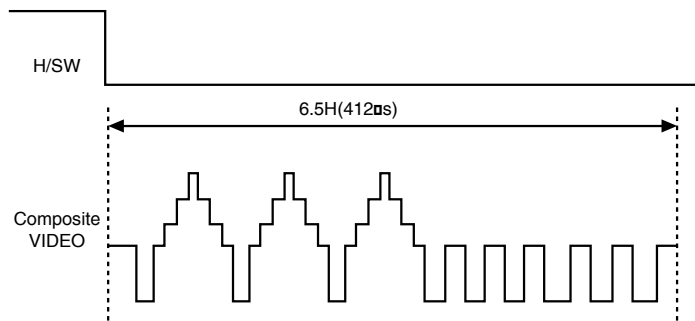
- **PG Adjustment Method**

- a-1) Playback the SP standard tape
- b-2) Press the "ENTER" key on the Remote controller and the "REC" key on the Front Panel at the same time, then it goes into Tracking initial mode. < Digitron[ - - ] >
- c-3) Repeat the above step(No.b-2), then it finishes the PG adjusting automatically. < Digitron[ PG ] >
- d-4) Stop the playback, then it goes out of PG adjusting mode after many the PG data.

- **CONNECTION**

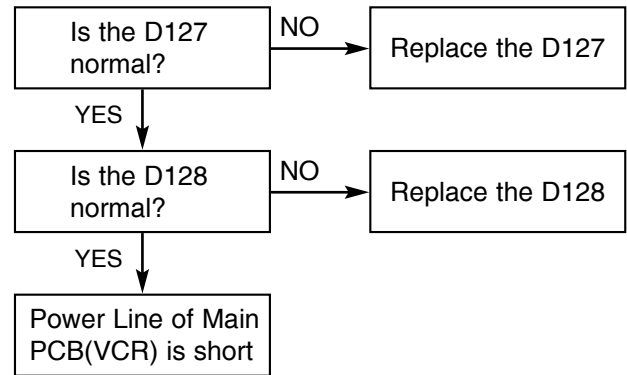
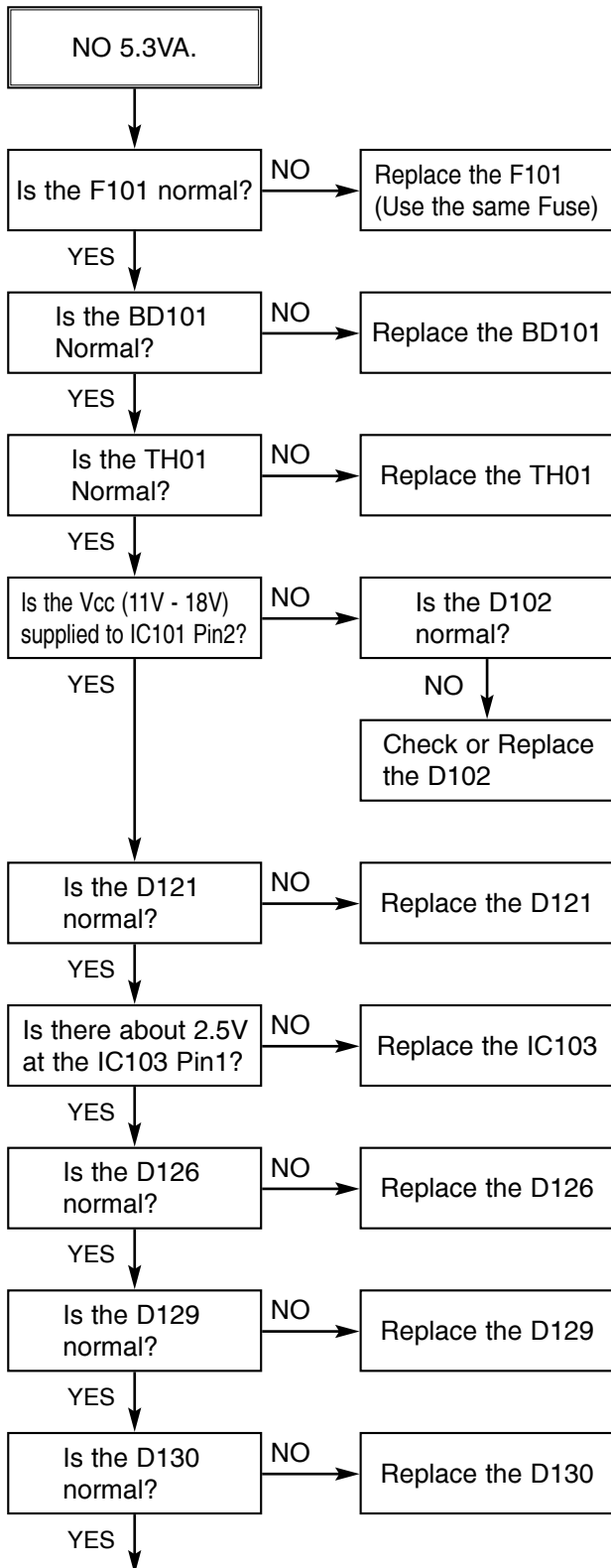


- **WAVEFORM**

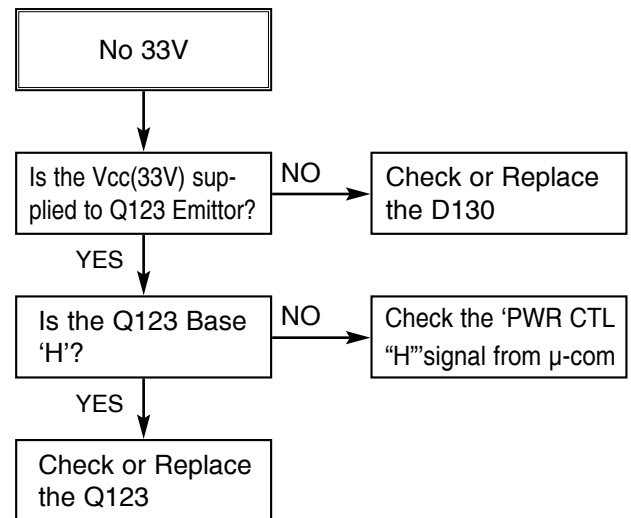
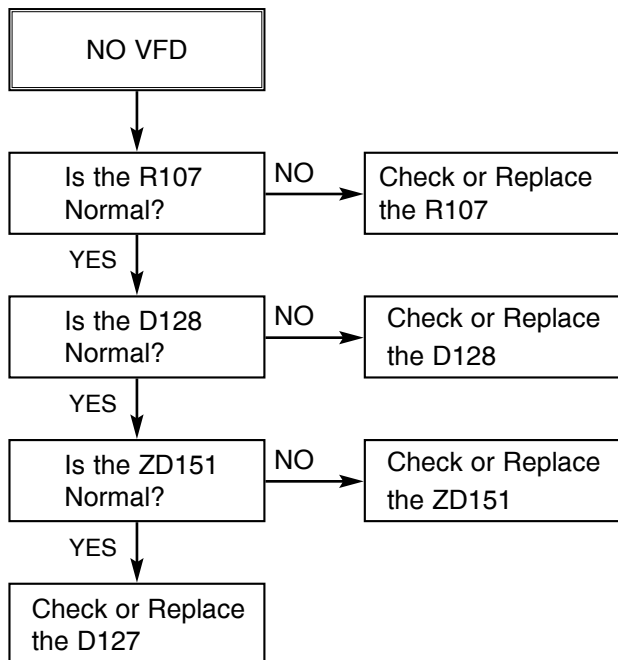
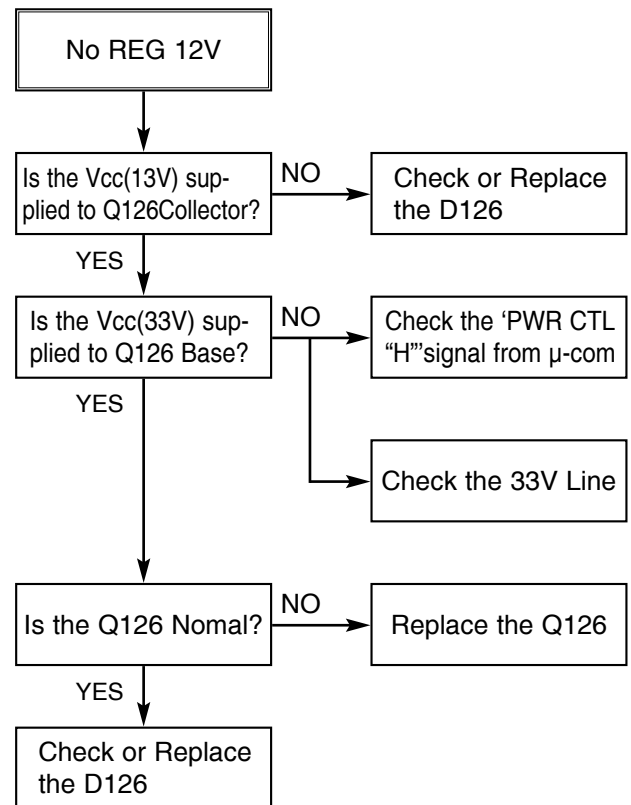
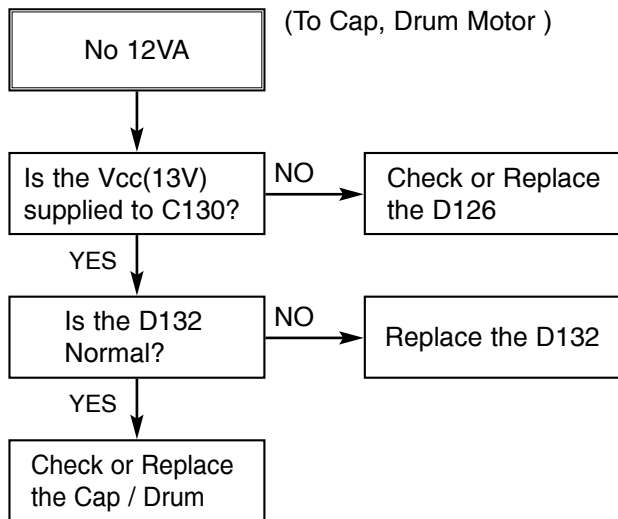


# VCR ELECTRICAL TROUBLESHOOTING GUIDE

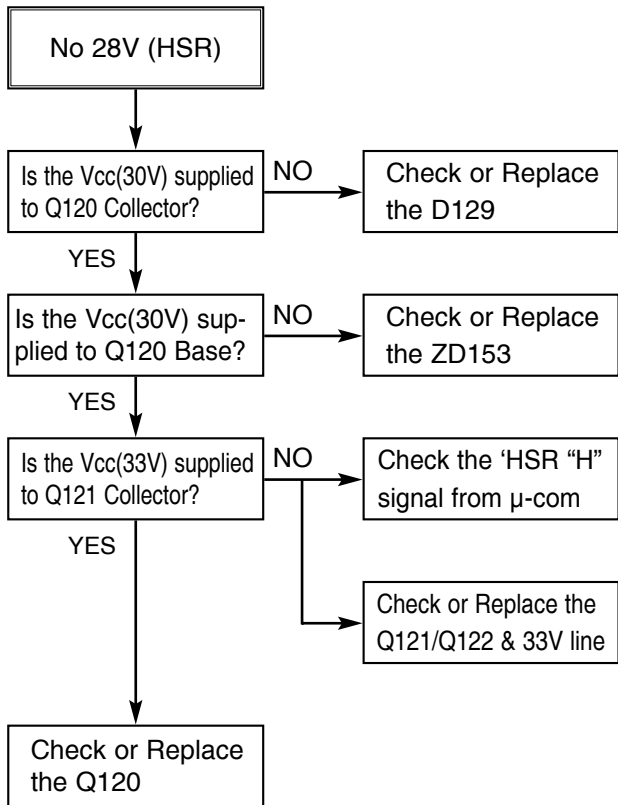
## 1. Power(SMPS) CIRCUIT



# VCR ELECTRICAL TROUBLESHOOTING GUIDE



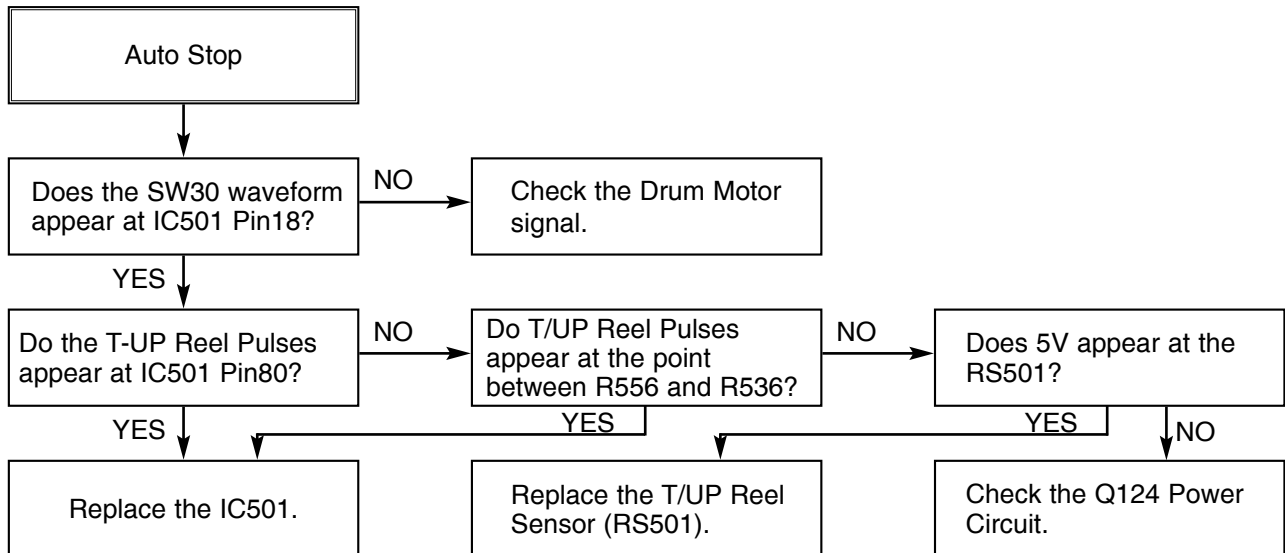
# VCR ELECTRICAL TROUBLESHOOTING GUIDE



# VCR ELECTRICAL TROUBLESHOOTING GUIDE

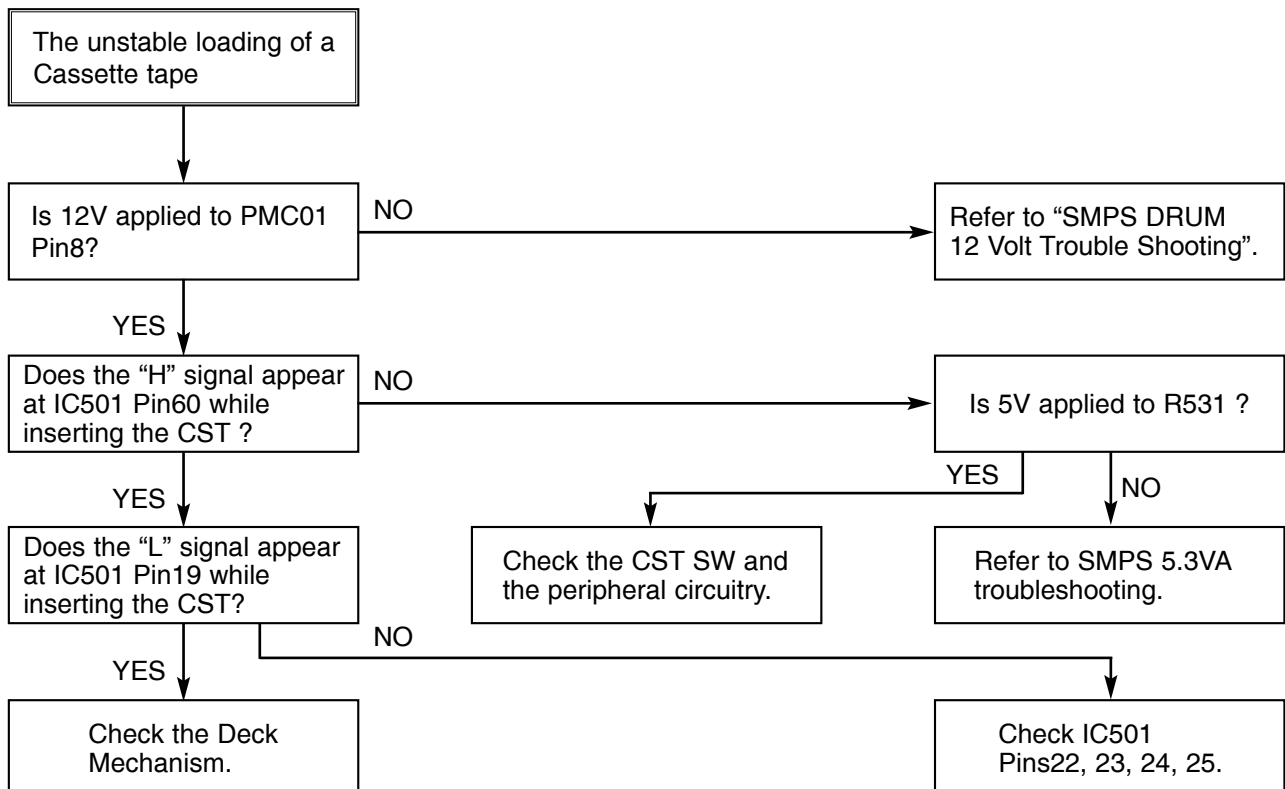
## 2. SYSTEM/KEY CIRCUIT

### (1) AUTO STOP



**Note :** Auto stop can occur because Grease or Oil has dried up

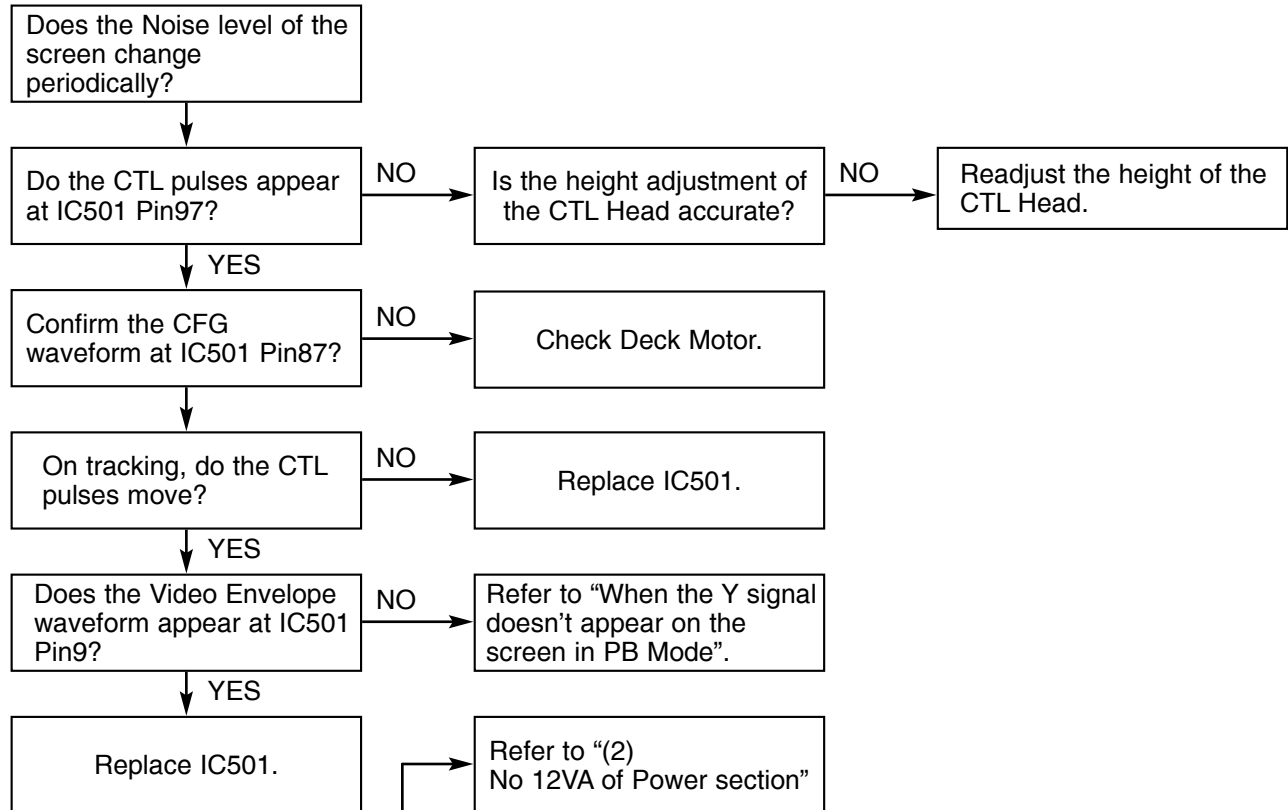
### (2) The unstable loading of a Cassette tape



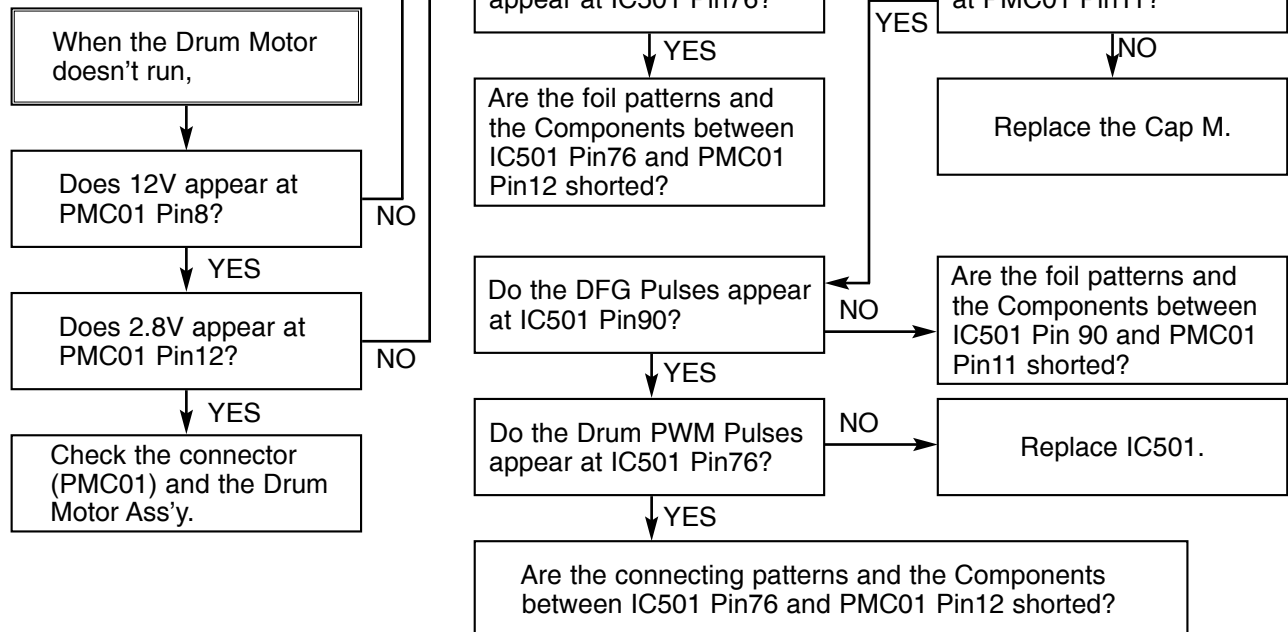
# VCR ELECTRICAL TROUBLESHOOTING GUIDE

## 3. SERVO CIRCUIT

### (1) Unstable Video in PB MODE



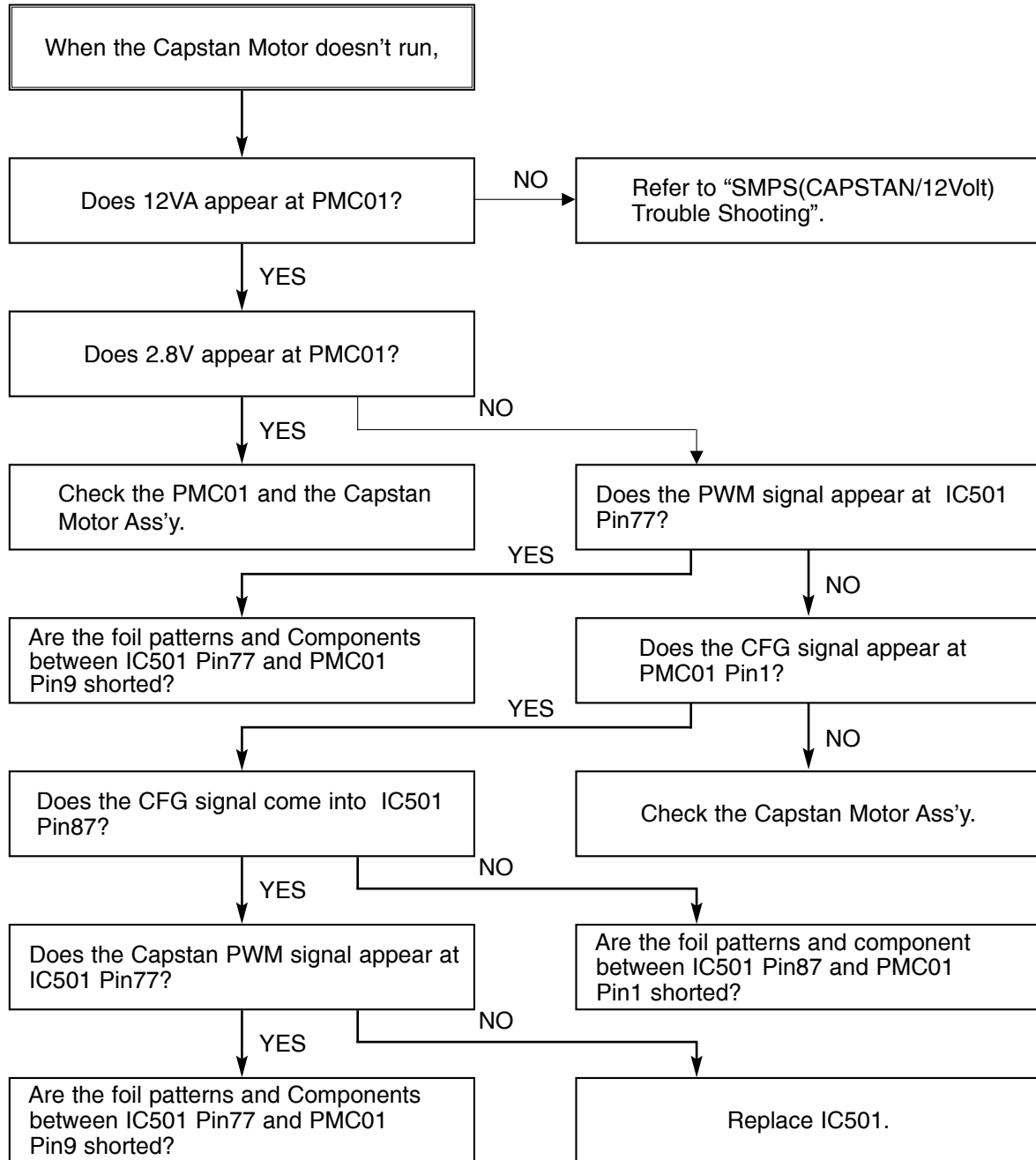
### (2) When the Drum Motor doesn't run.





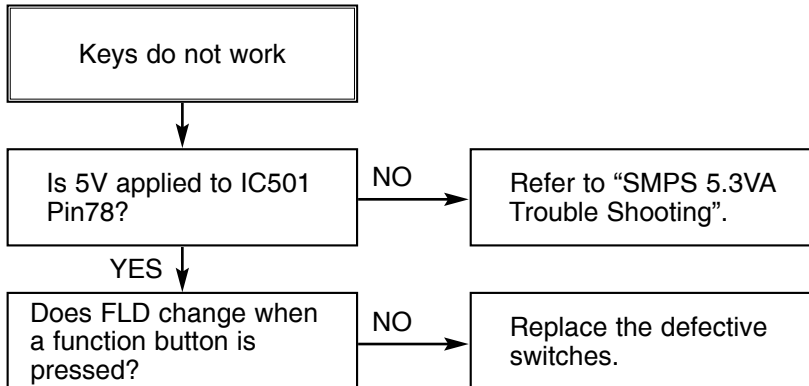
# VCR ELECTRICAL TROUBLESHOOTING GUIDE

(3) When the Capstan Motor doesn't run,



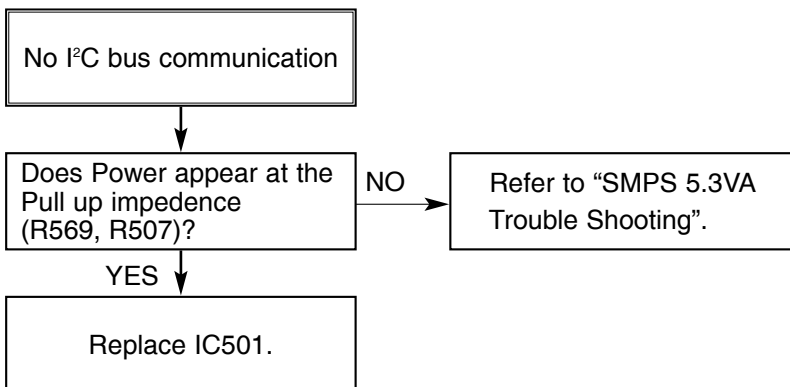
# VCR ELECTRICAL TROUBLESHOOTING GUIDE

## (4) Keys do not work



## 4. OSD CIRCUIT

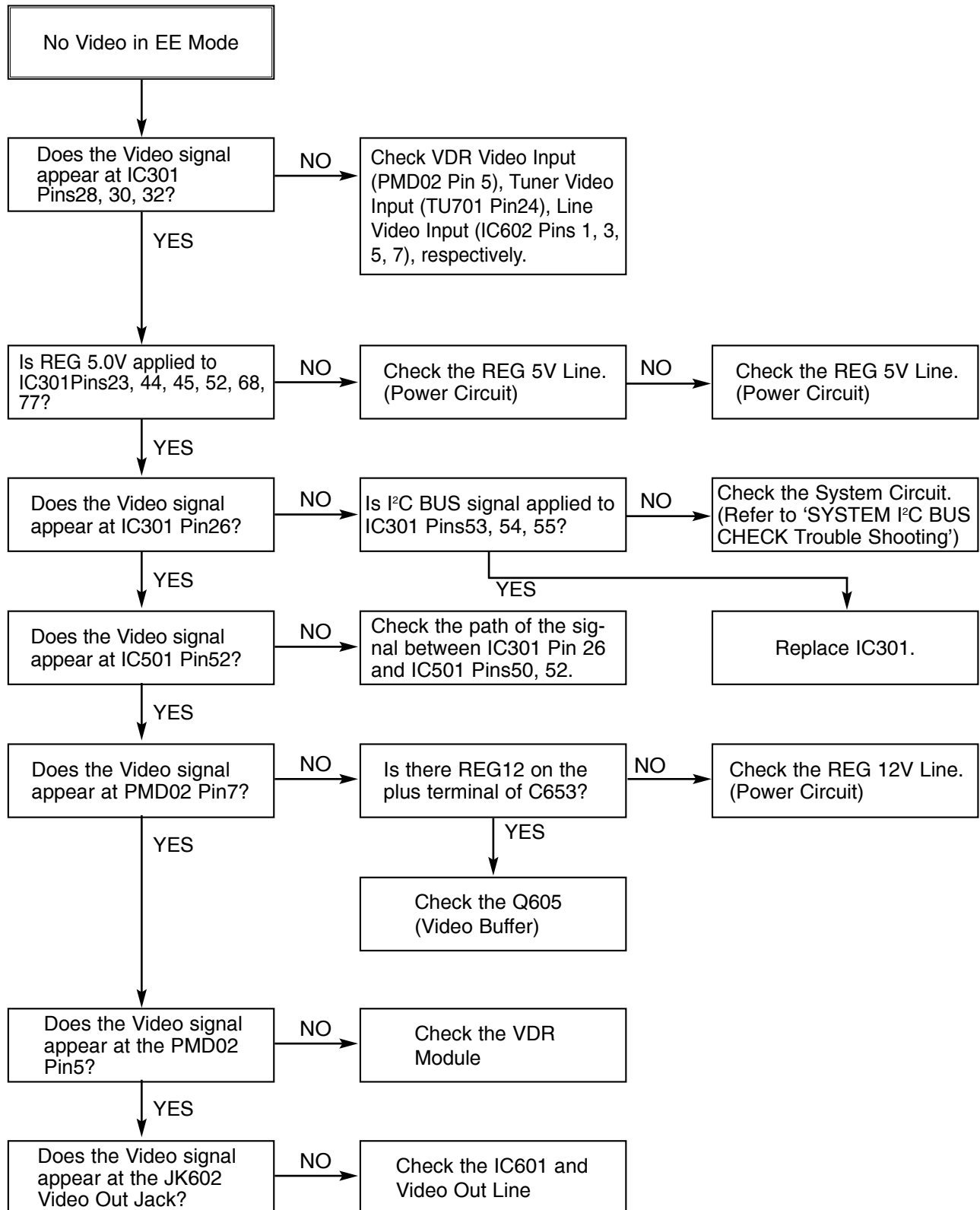
### (1) I<sup>2</sup>C BUS CHECK



# VCR ELECTRICAL TROUBLESHOOTING GUIDE

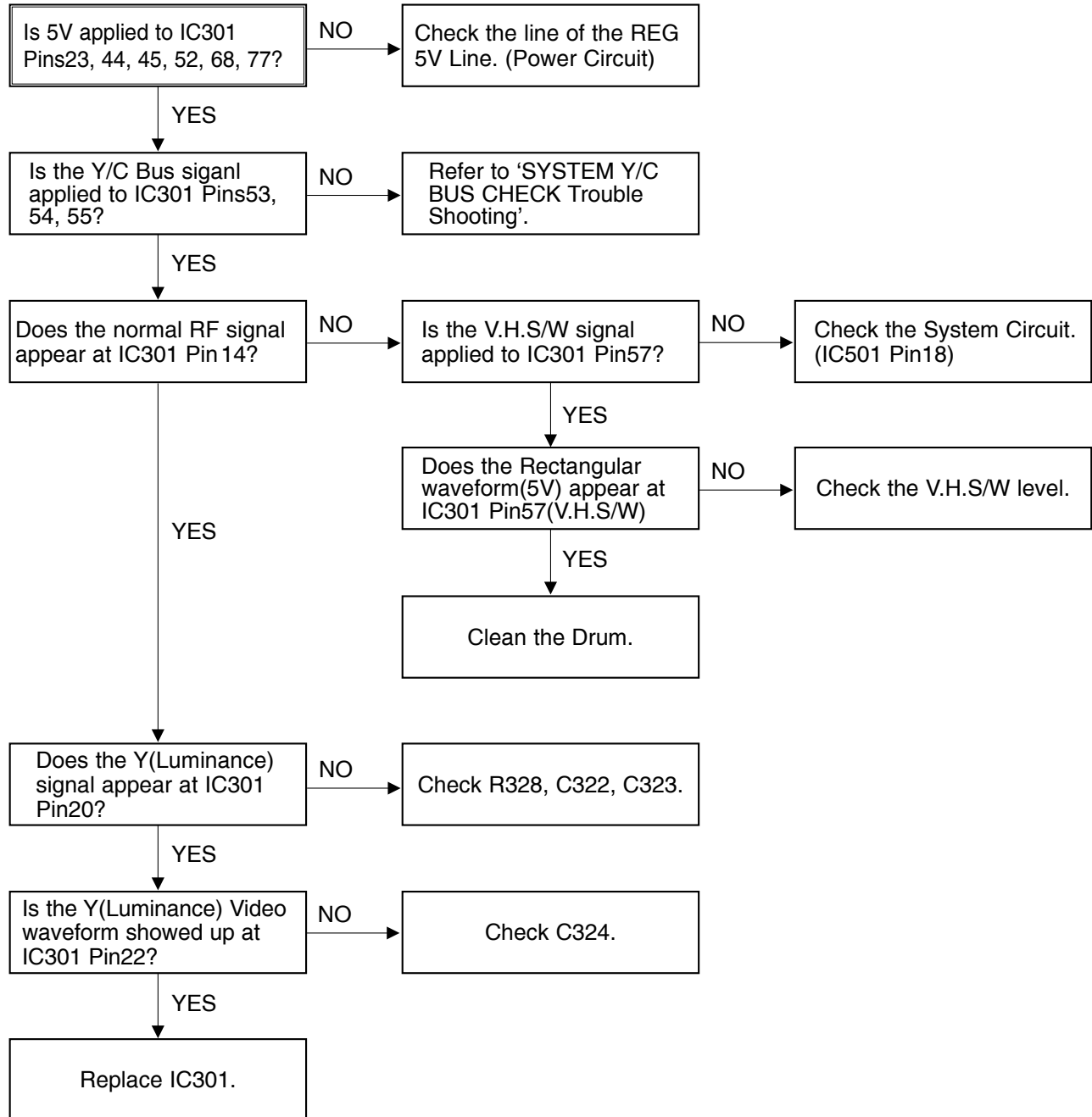
## 5. Y/C CIRCUIT

(1) No Video in EE Mode,



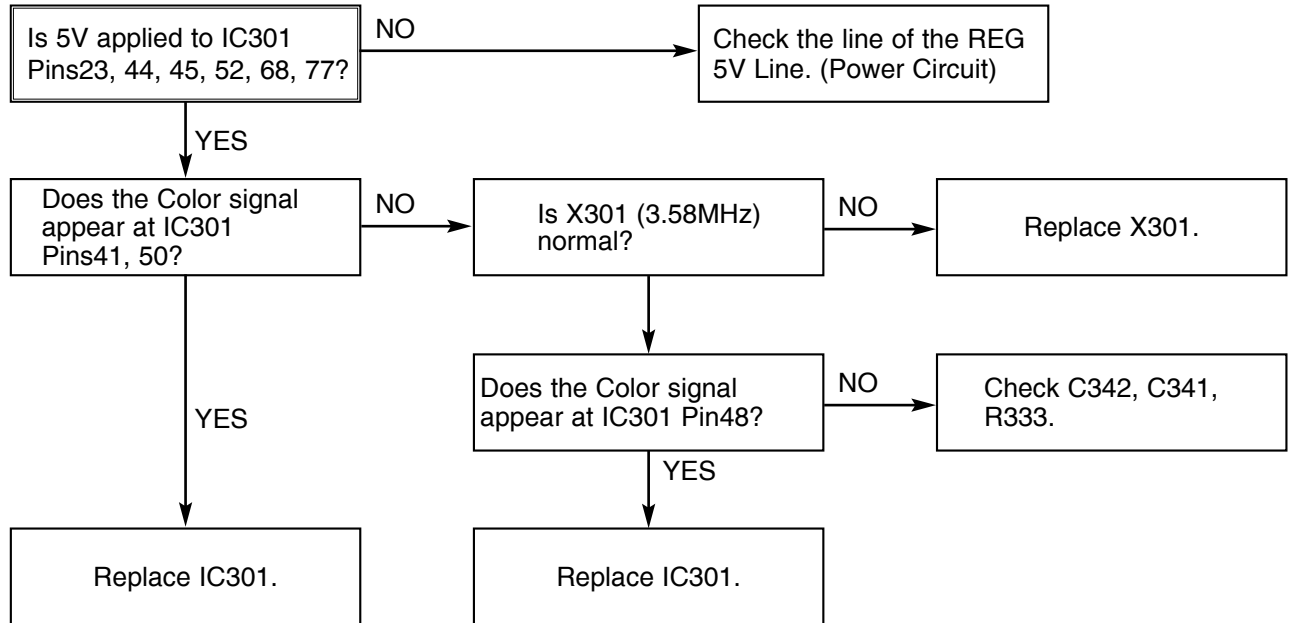
# VCR ELECTRICAL TROUBLESHOOTING GUIDE

(2) When the Y(Luminance) signal doesn't appear on the screen in PB Mode,



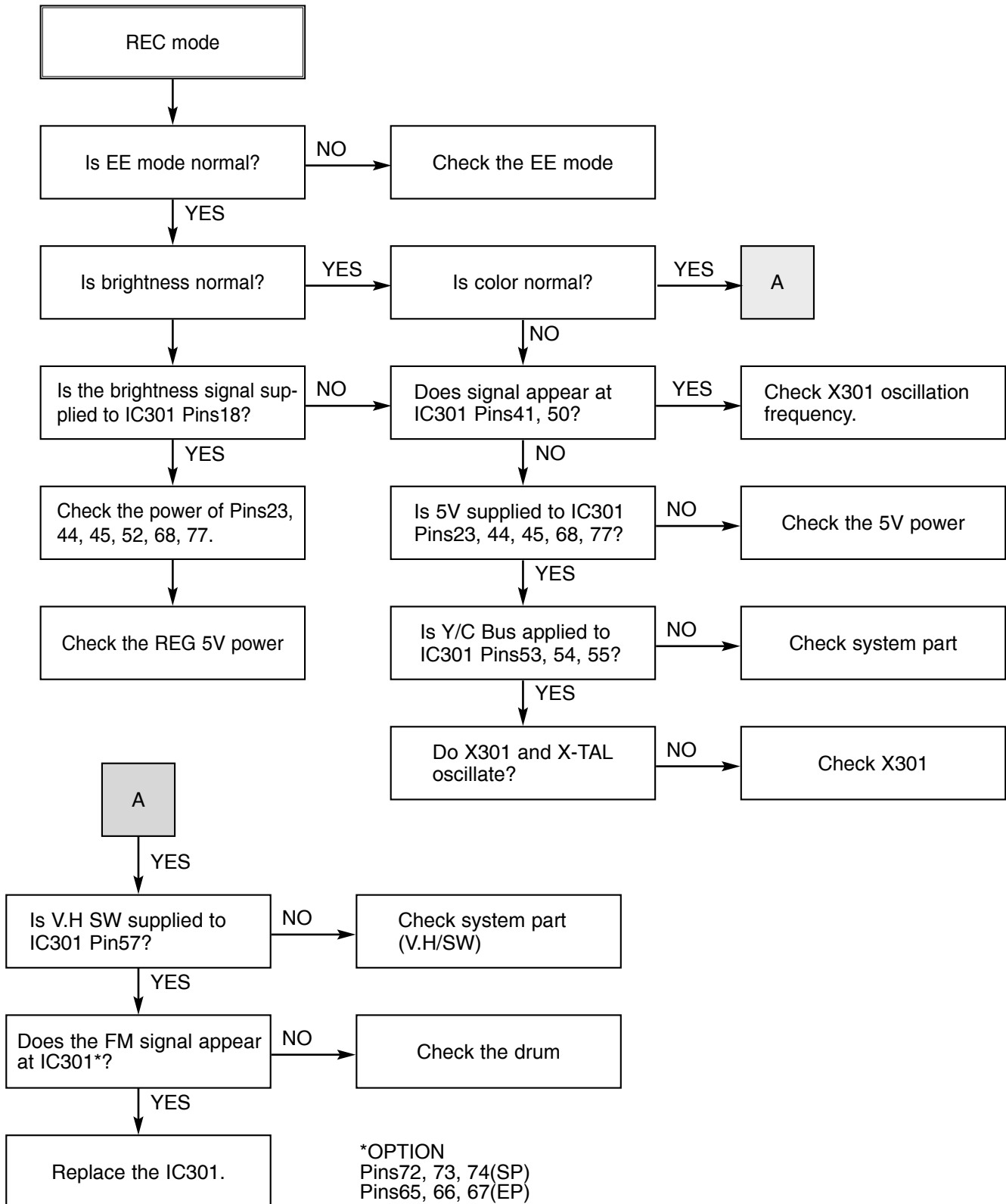
# VCR ELECTRICAL TROUBLESHOOTING GUIDE

(3) When the C(Color) signal doesn't appear on the screen in PB Mode,



# VCR ELECTRICAL TROUBLESHOOTING GUIDE

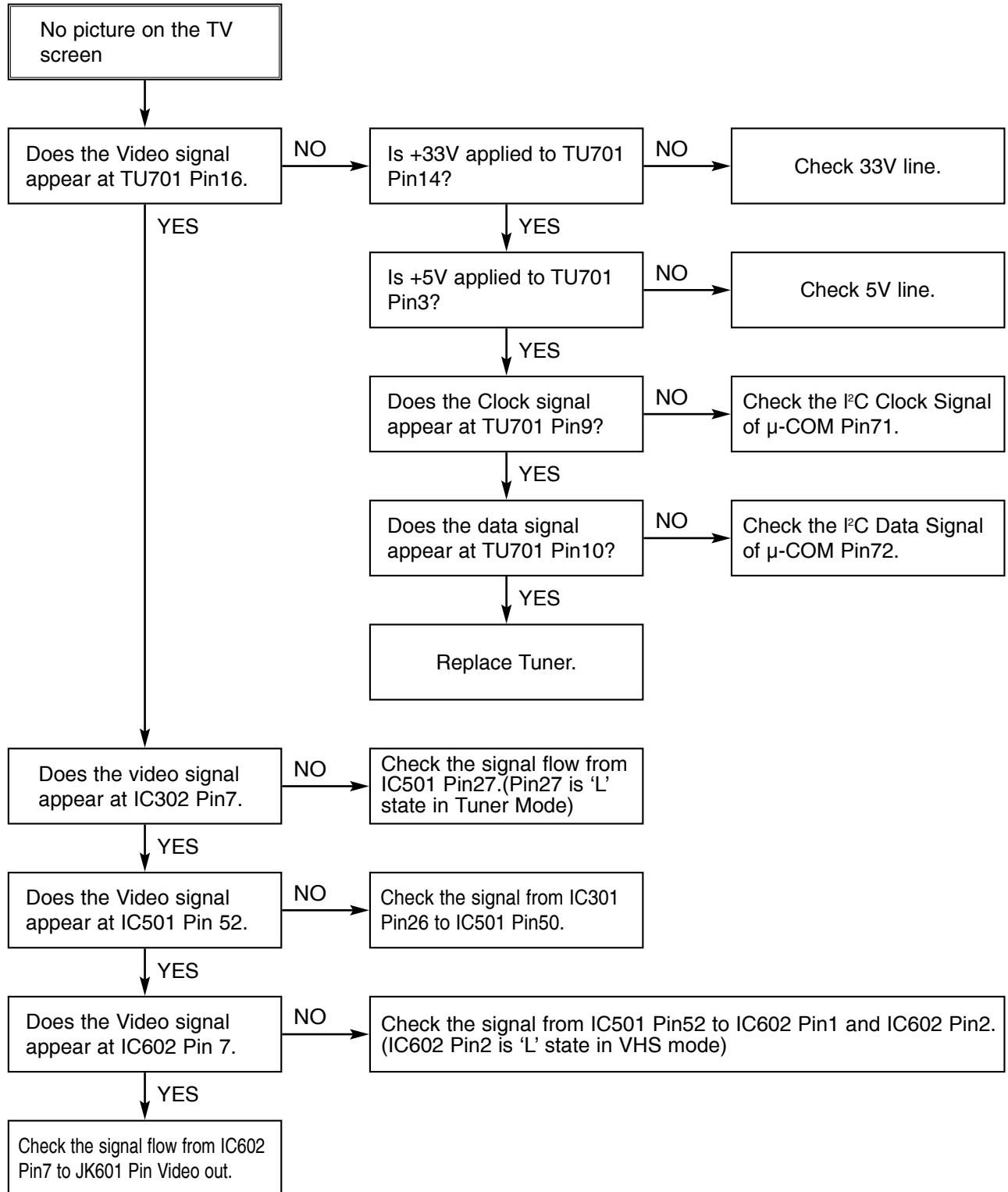
(4) When the Video signal doesn't appear on the screen in REC Mode,



# VCR ELECTRICAL TROUBLESHOOTING GUIDE

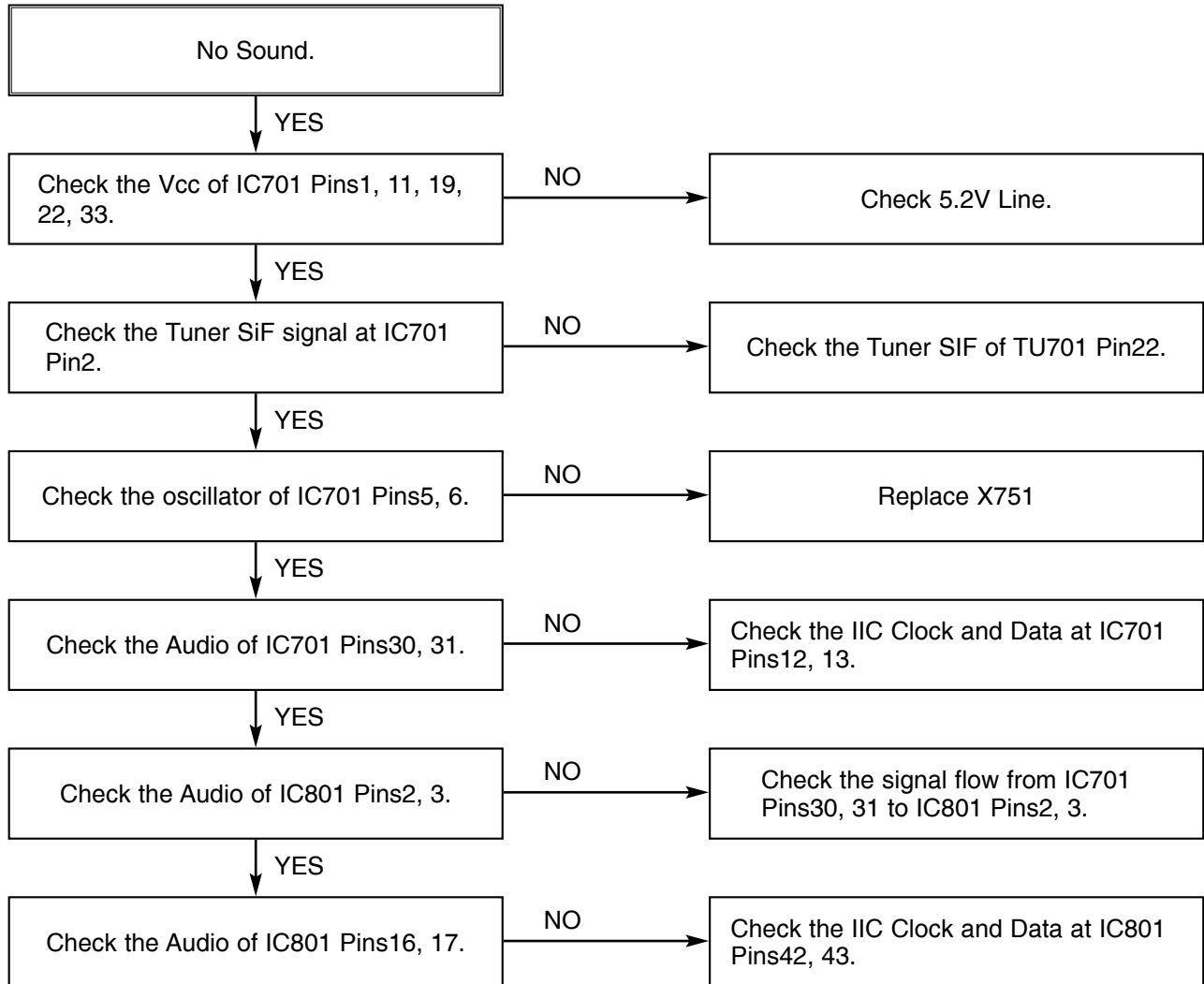
## 6. Tuner/IF CIRCUIT

(1) No Picture on the TV screen



# VCR ELECTRICAL TROUBLESHOOTING GUIDE

## (B) No Sound

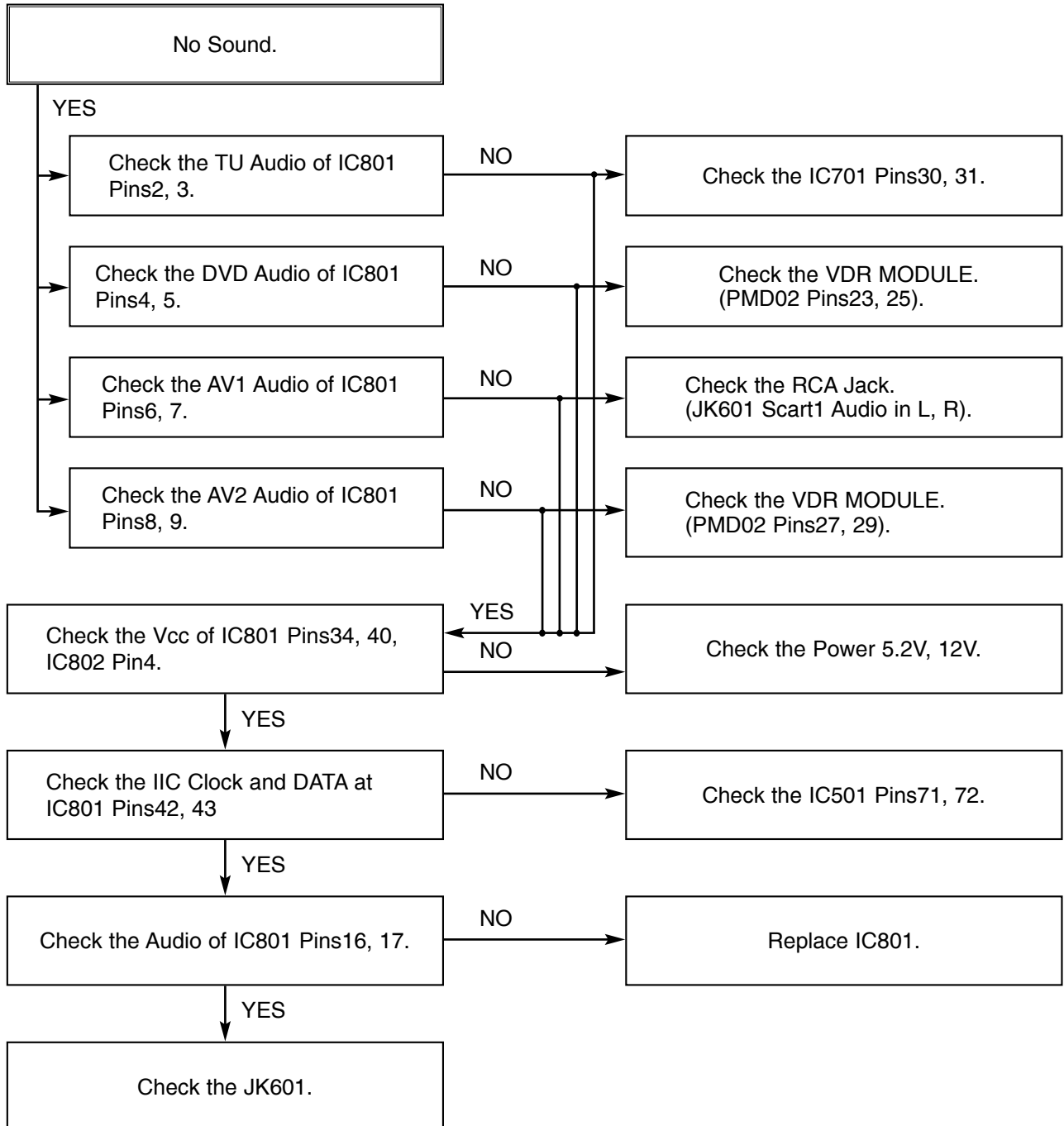




# VCR ELECTRICAL TROUBLESHOOTING GUIDE

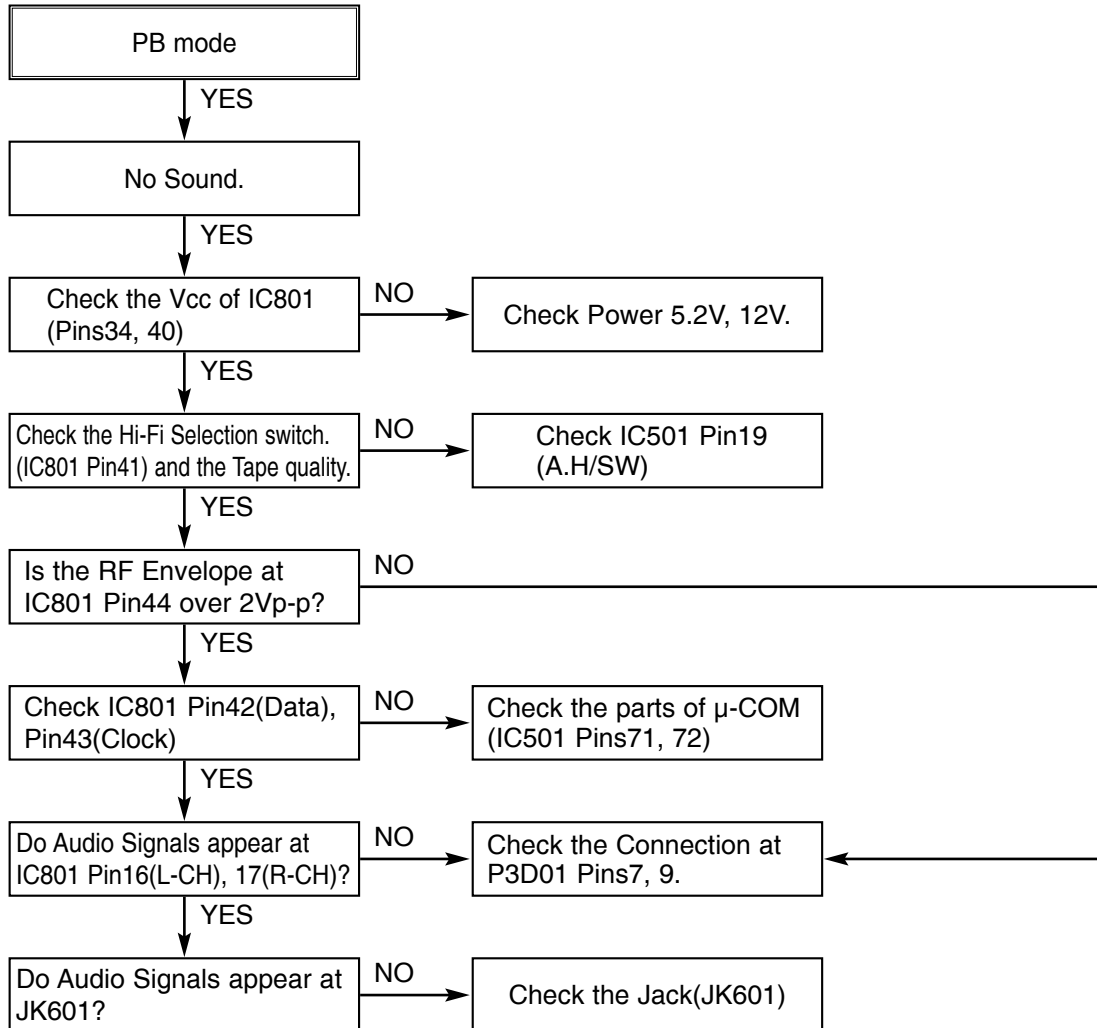
## 7. Hi-Fi CIRCUIT

### (1) No Sound(EE Mode)



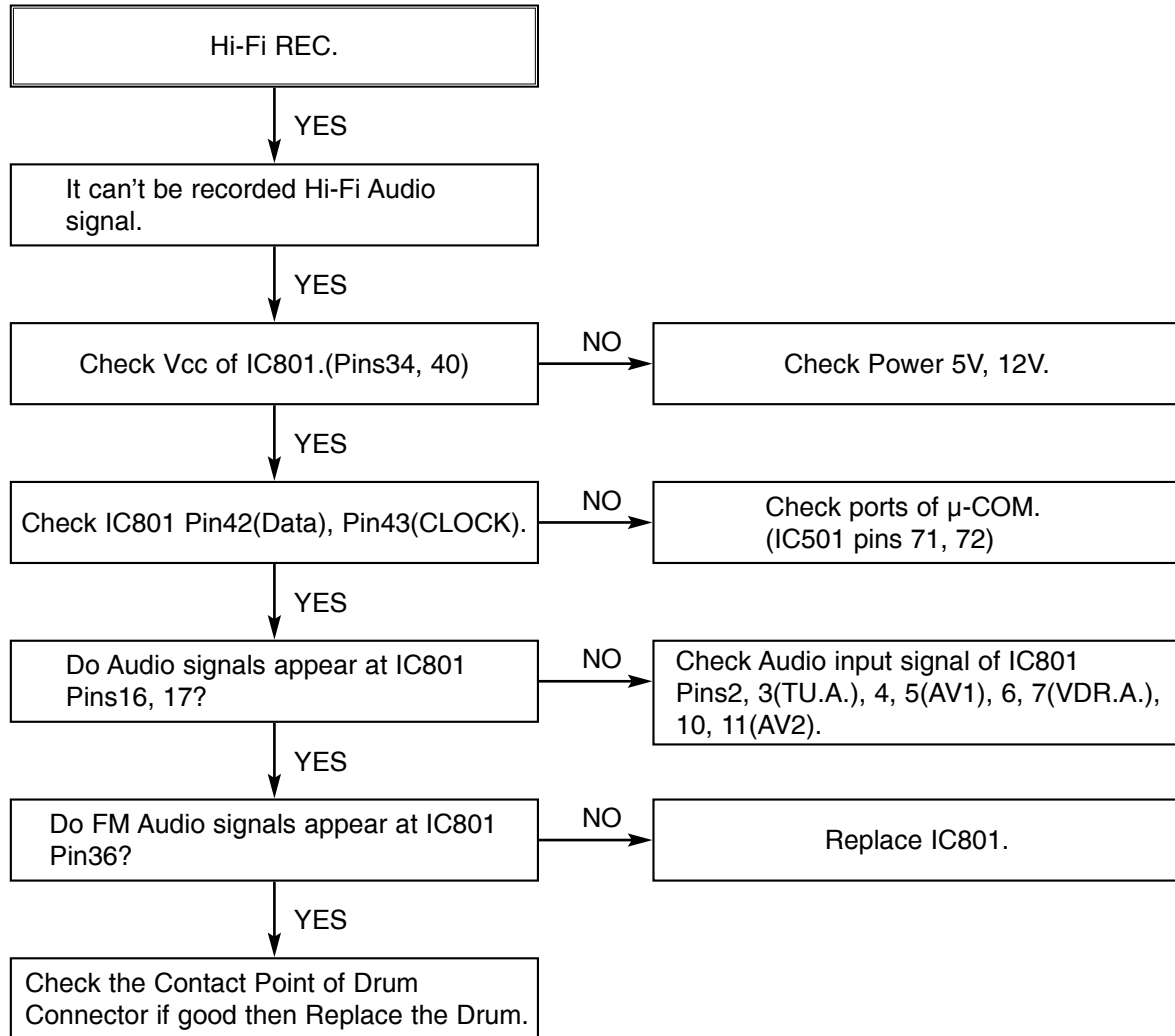
# VCR ELECTRICAL TROUBLESHOOTING GUIDE

## (2) Hi-Fi Playback



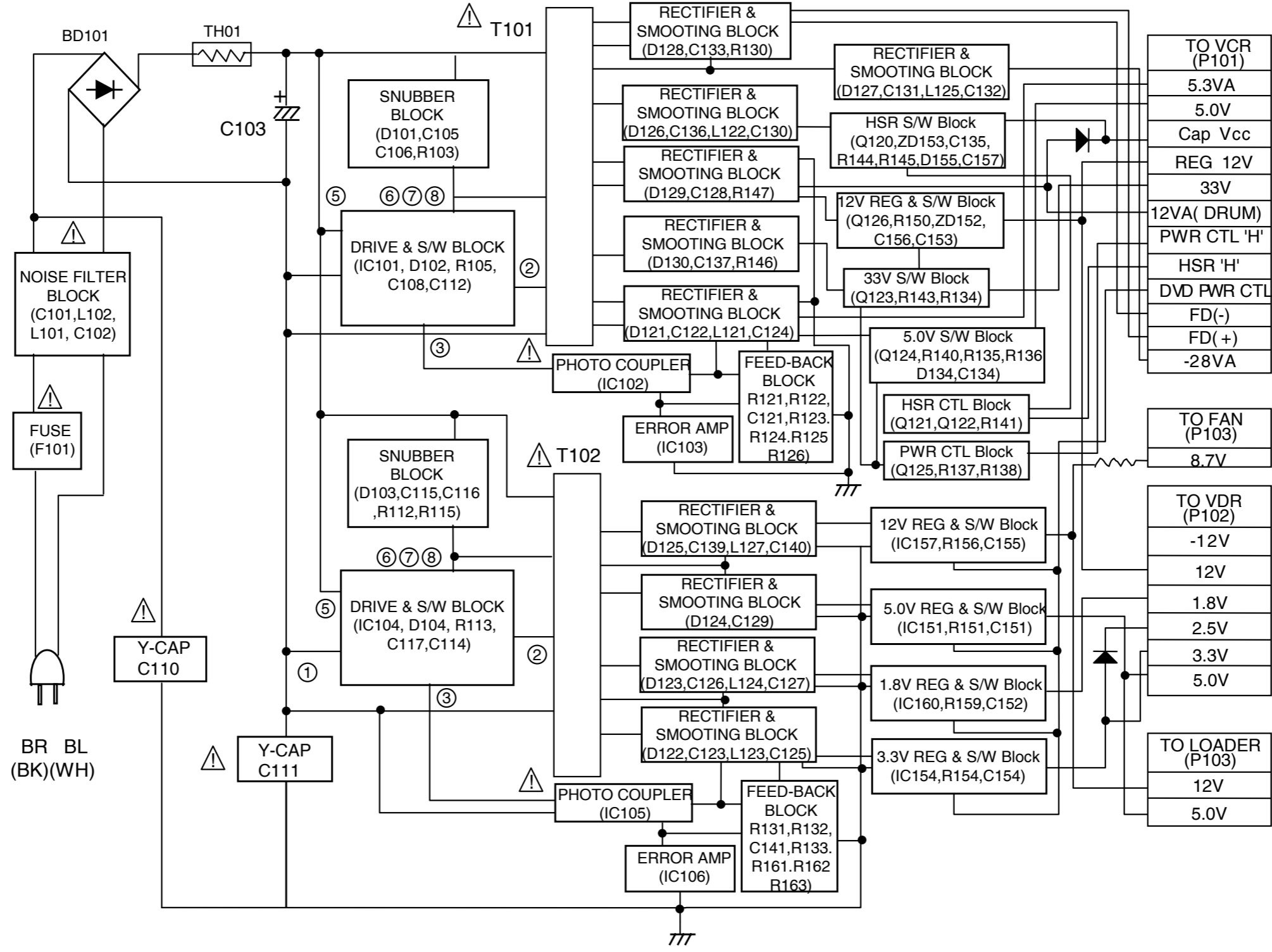
# VCR ELECTRICAL TROUBLESHOOTING GUIDE

(3)

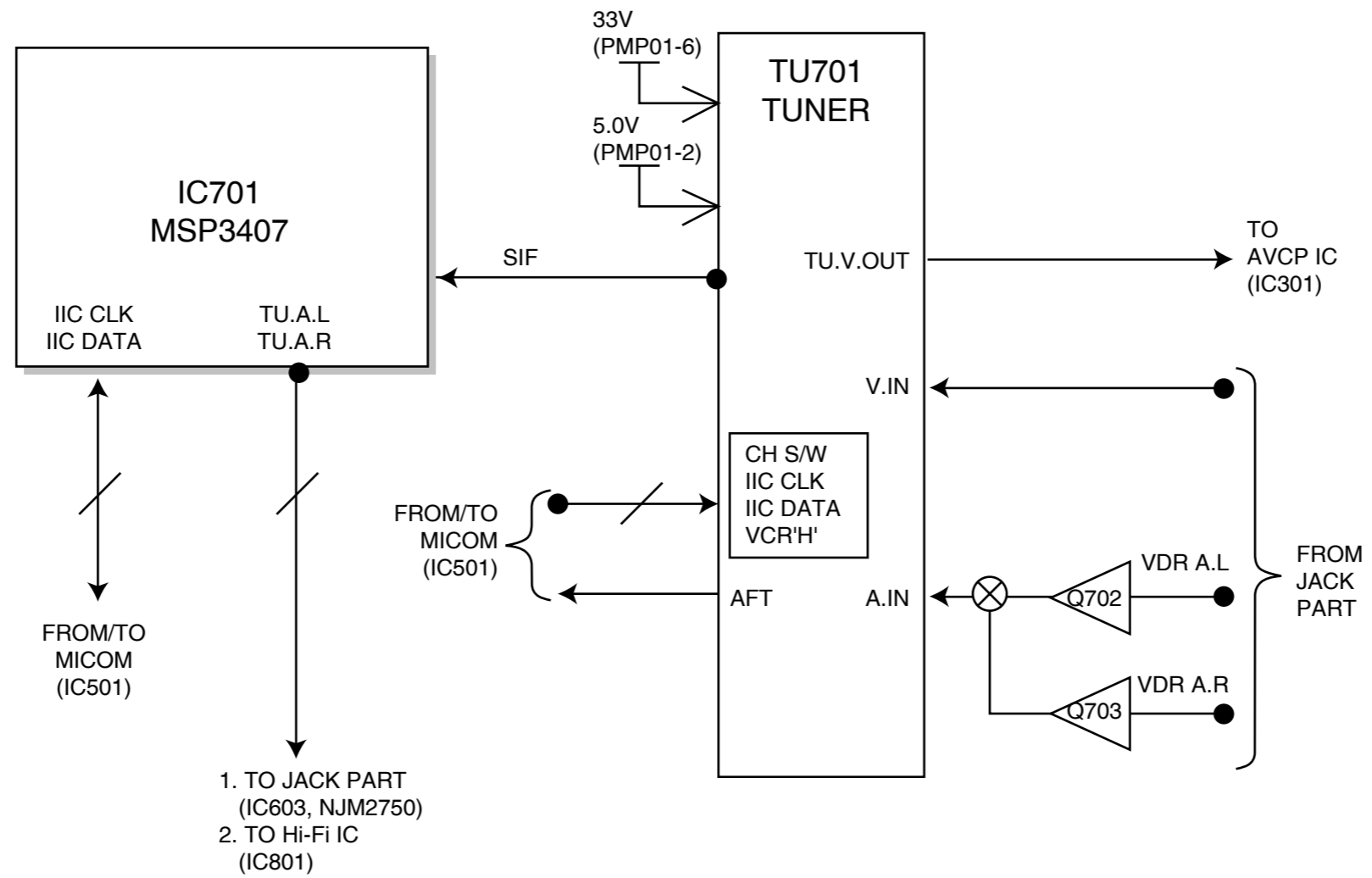


# BLOCK DIAGRAMS

## 1. POWER(SMPS) BLOCK DIAGRAM

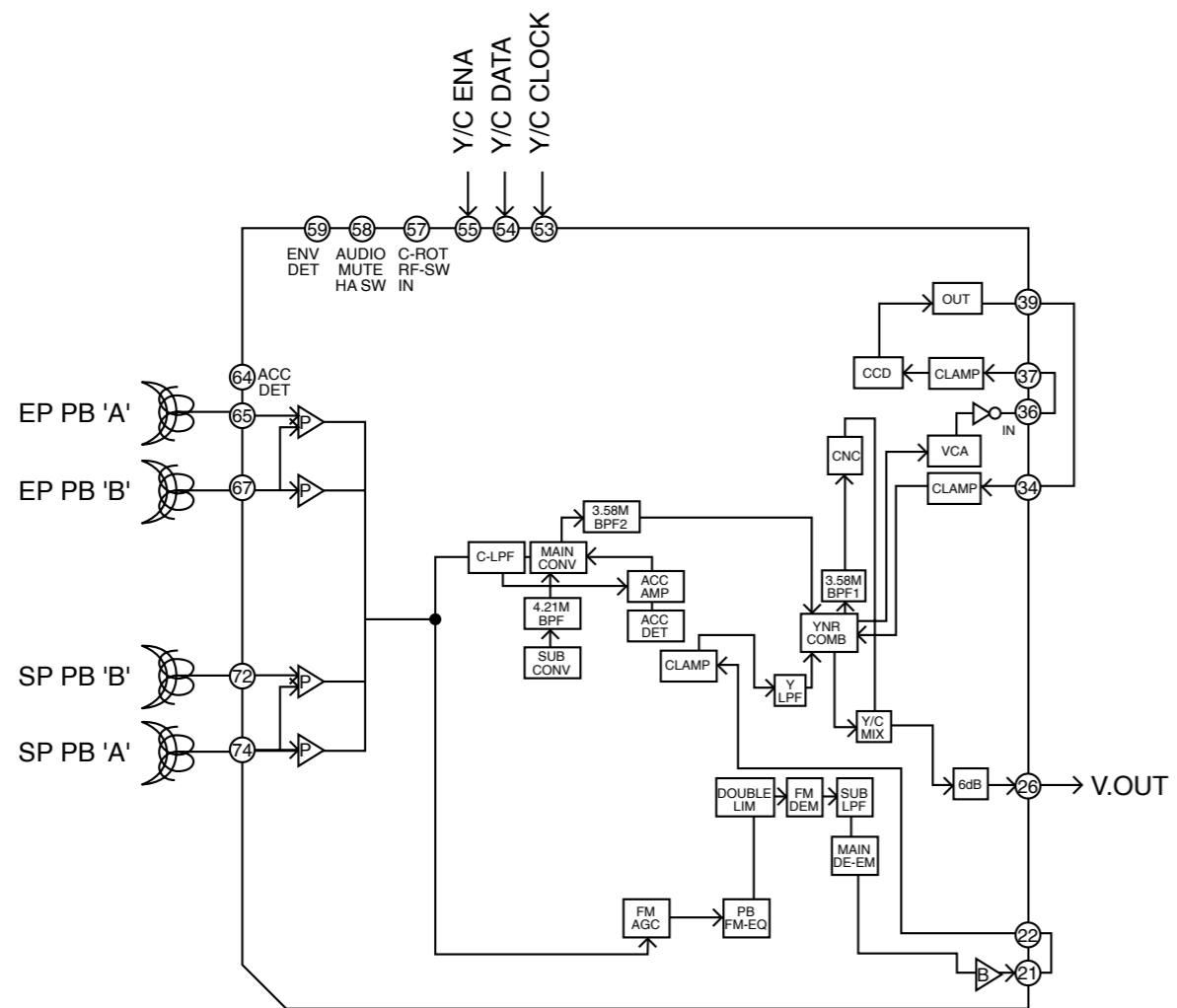


## 2. TUNER/MTZ BLOCK DIAGRAM

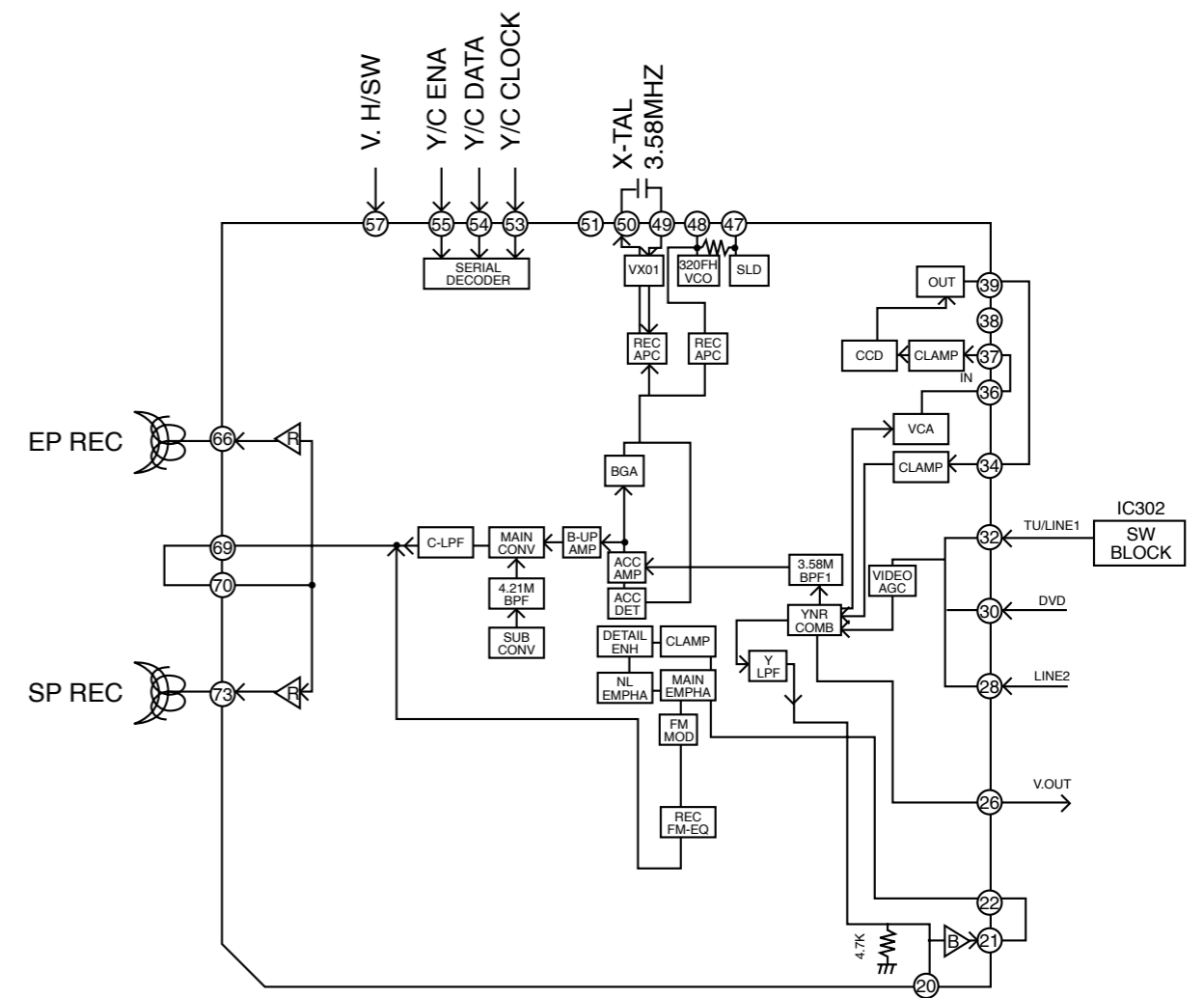


### 3. Y/C BLOCK DIAGRAM

(PB Mode)

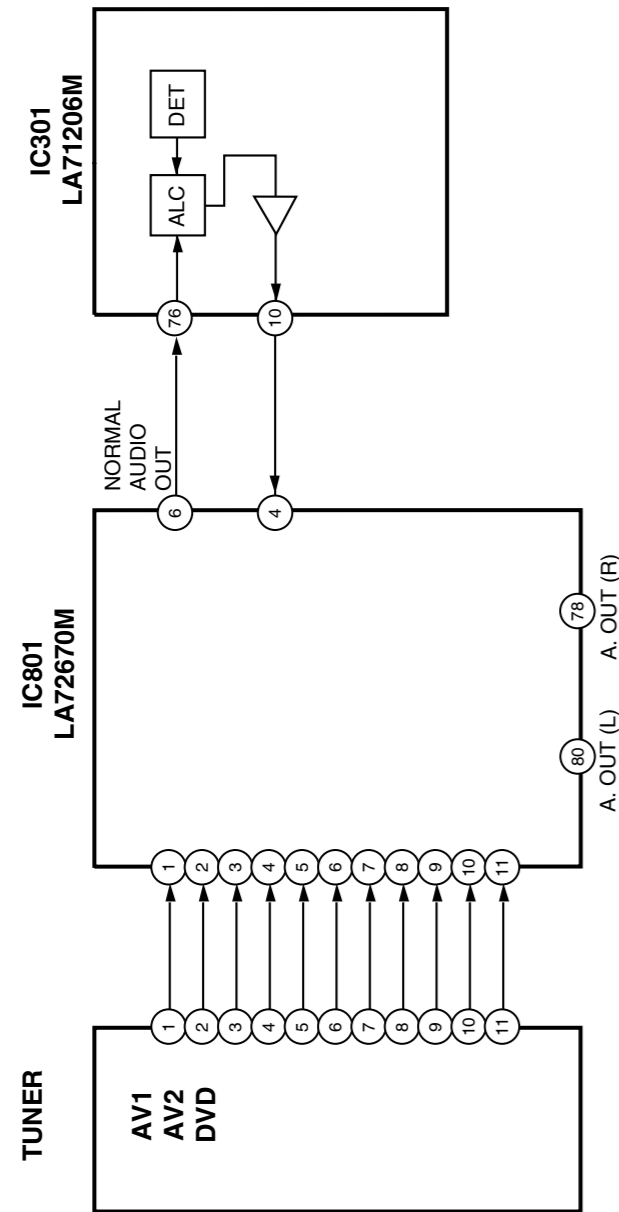


(REC Mode)

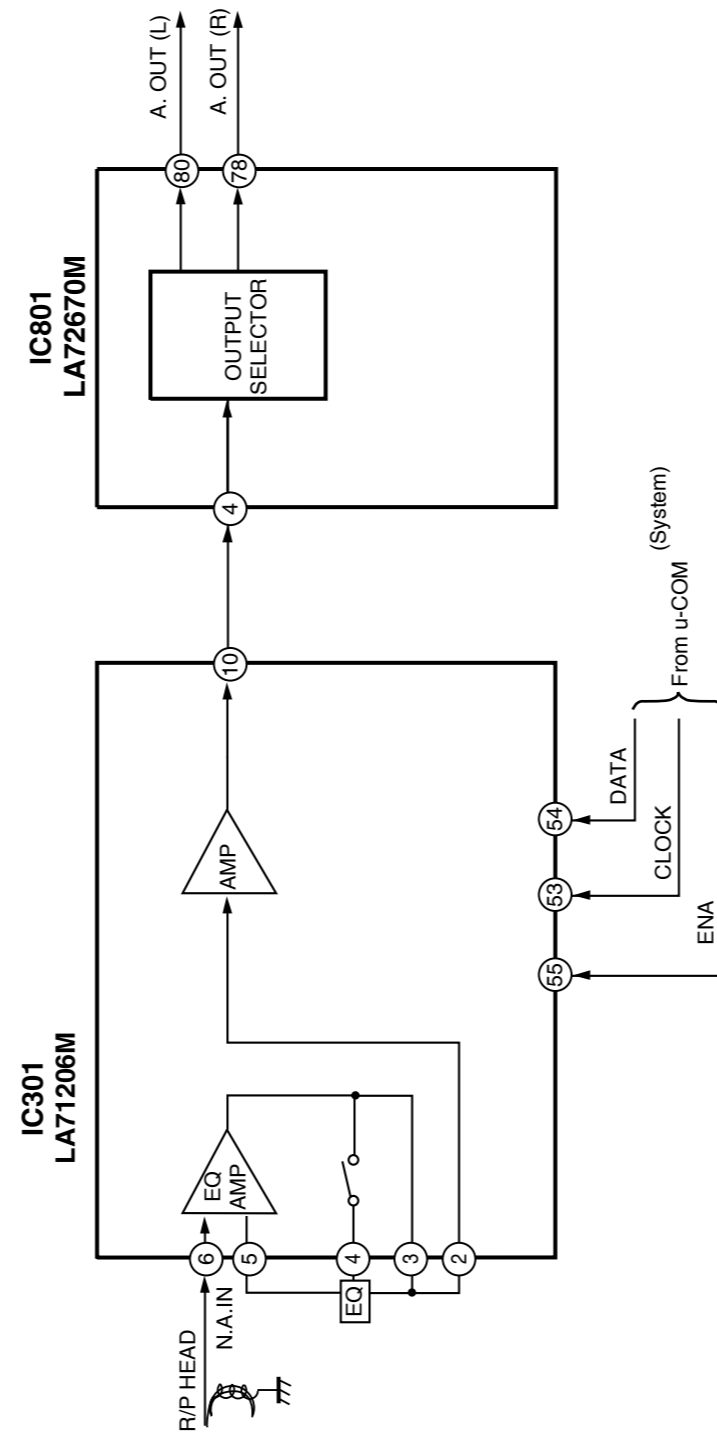


## 4. NORMAL AUDIO BLOCK DIAGRAM

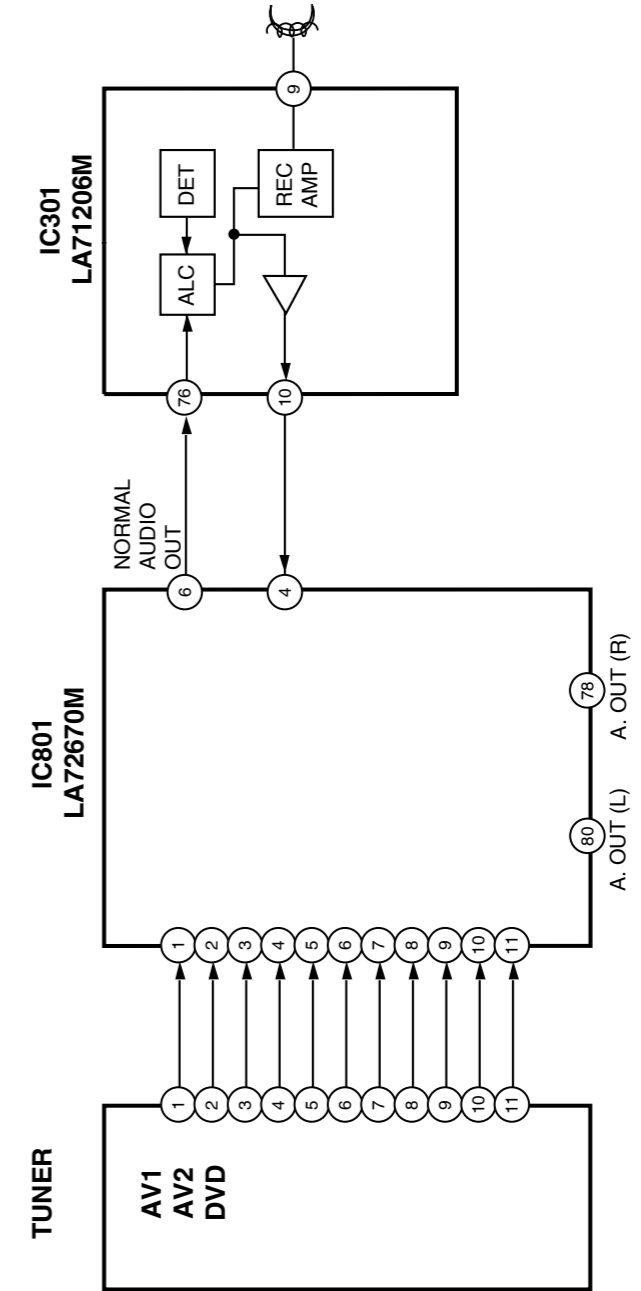
(EE Mode)



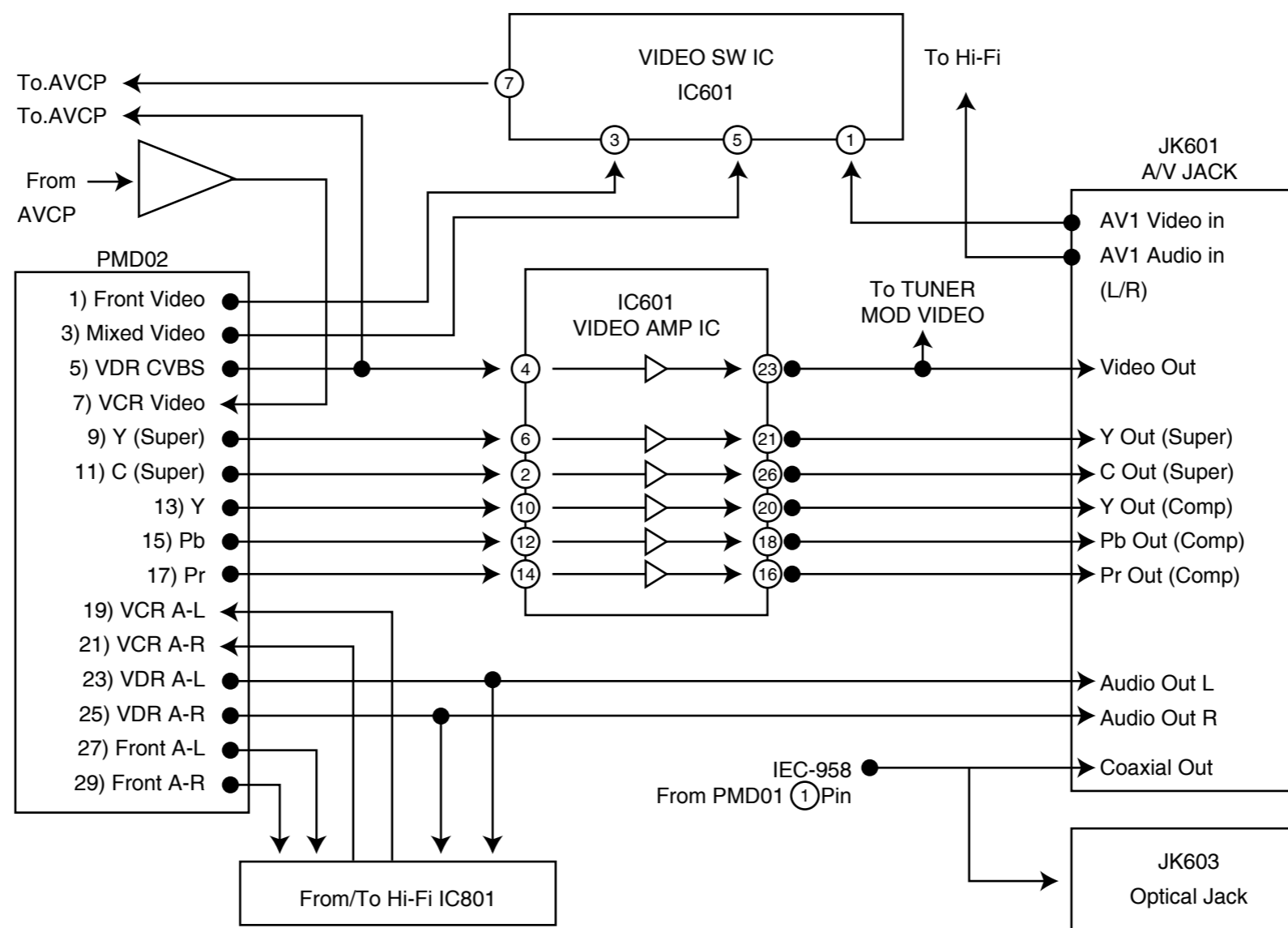
(PB Mode)



(REC Mode)

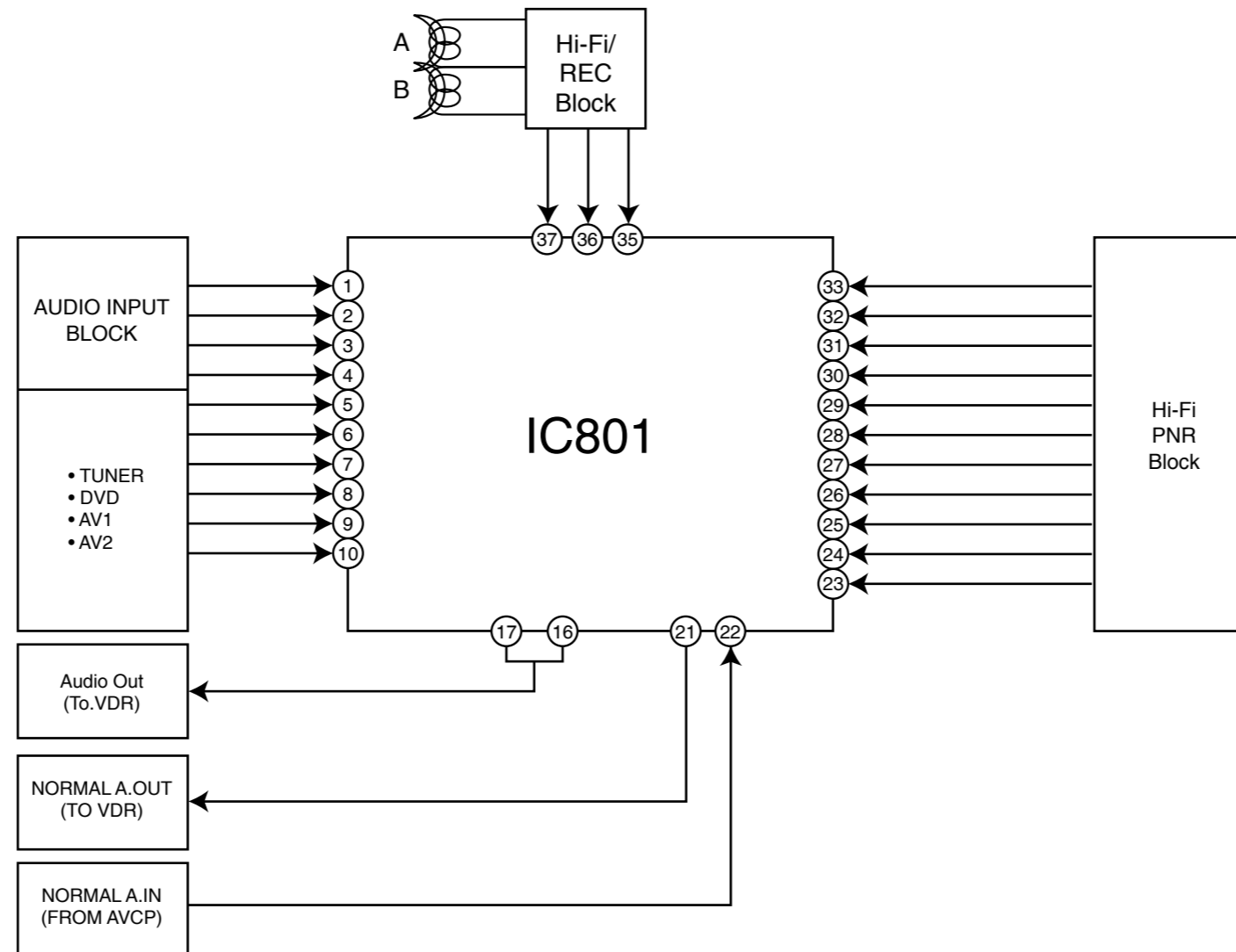


## 5. JACK BLOCK DIAGRAM

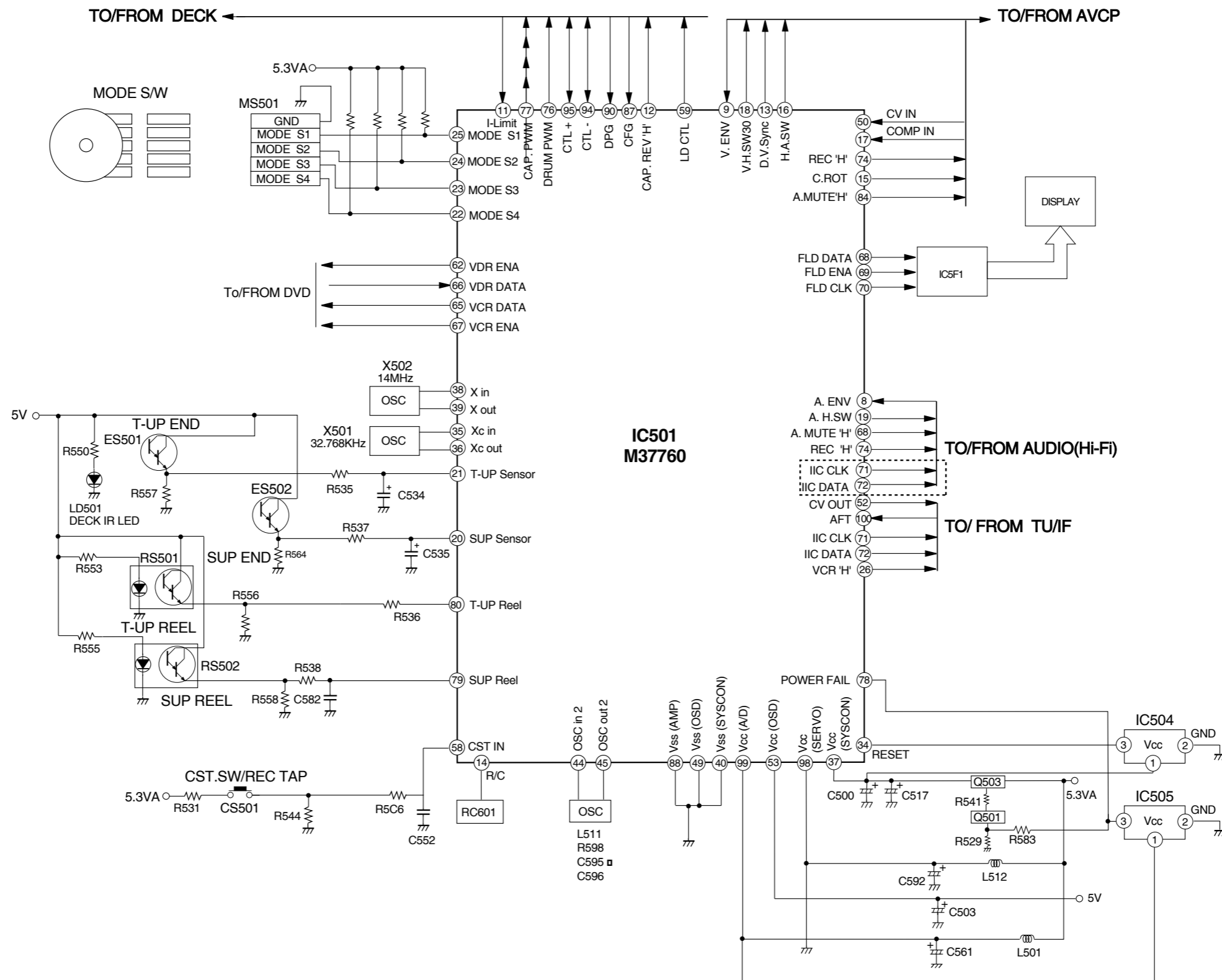




## 6. Hi-Fi BLOCK DIAGRAM



# 7. SYSTEM BLOCK DIAGRAM



# CIRCUIT DIAGRAMS

## 1. POWER(SMPS) CIRCUIT DIAGRAM

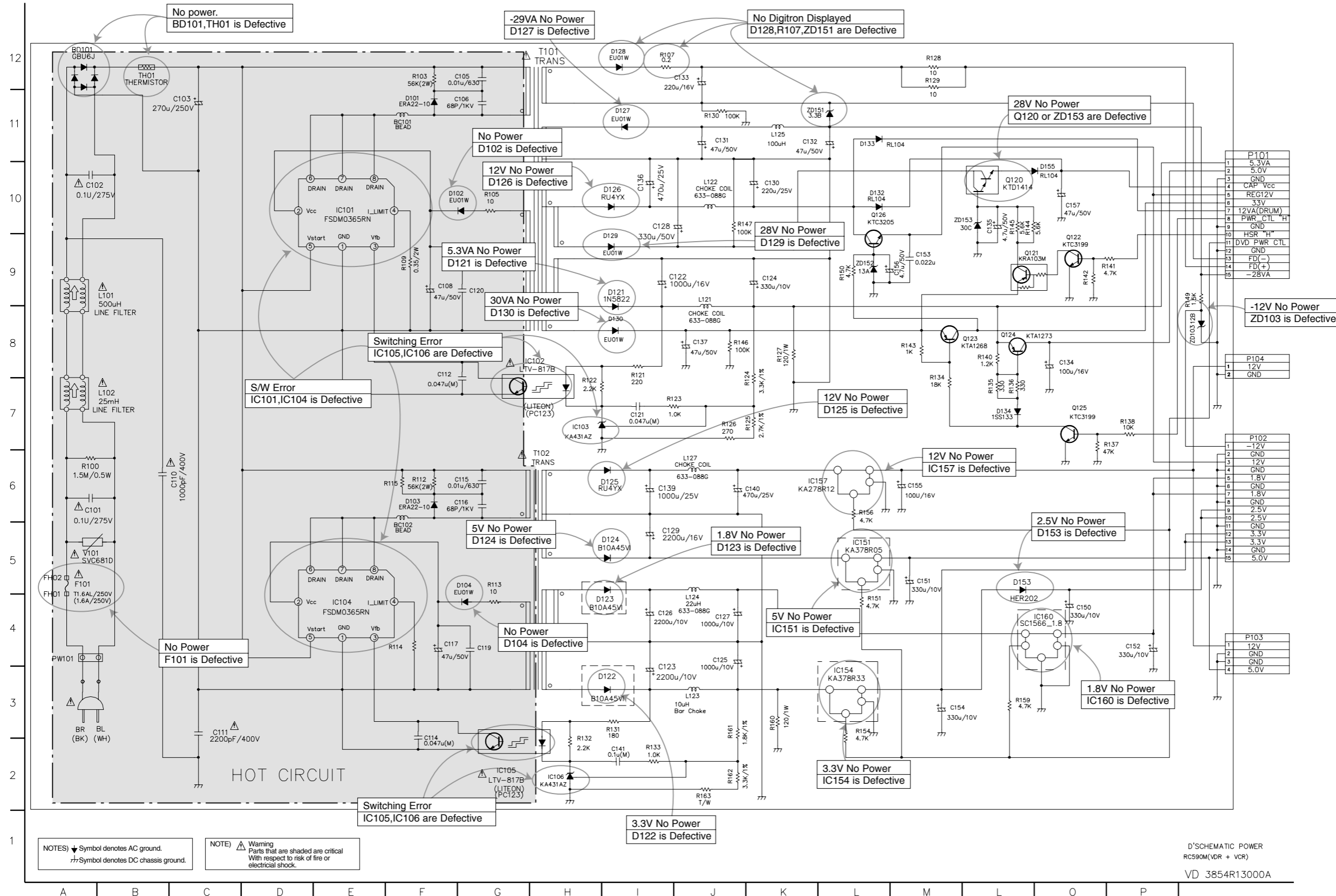
### IMPORTANT SAFETY NOTICE

WHEN SERVICING THIS CHASSIS, UNDER NO CIRCUMSTANCES SHOULD THE ORIGINAL DESIGN BE MODIFIED OR ALTERED WITHOUT PERMISSION FROM THE ZENITH ELECTRONICS CORPORATION. ALL COMPONENTS SHOULD BE REPLACED ONLY WITH TYPES IDENTICAL TO THOSE IN THE ORIGINAL CIRCUIT.

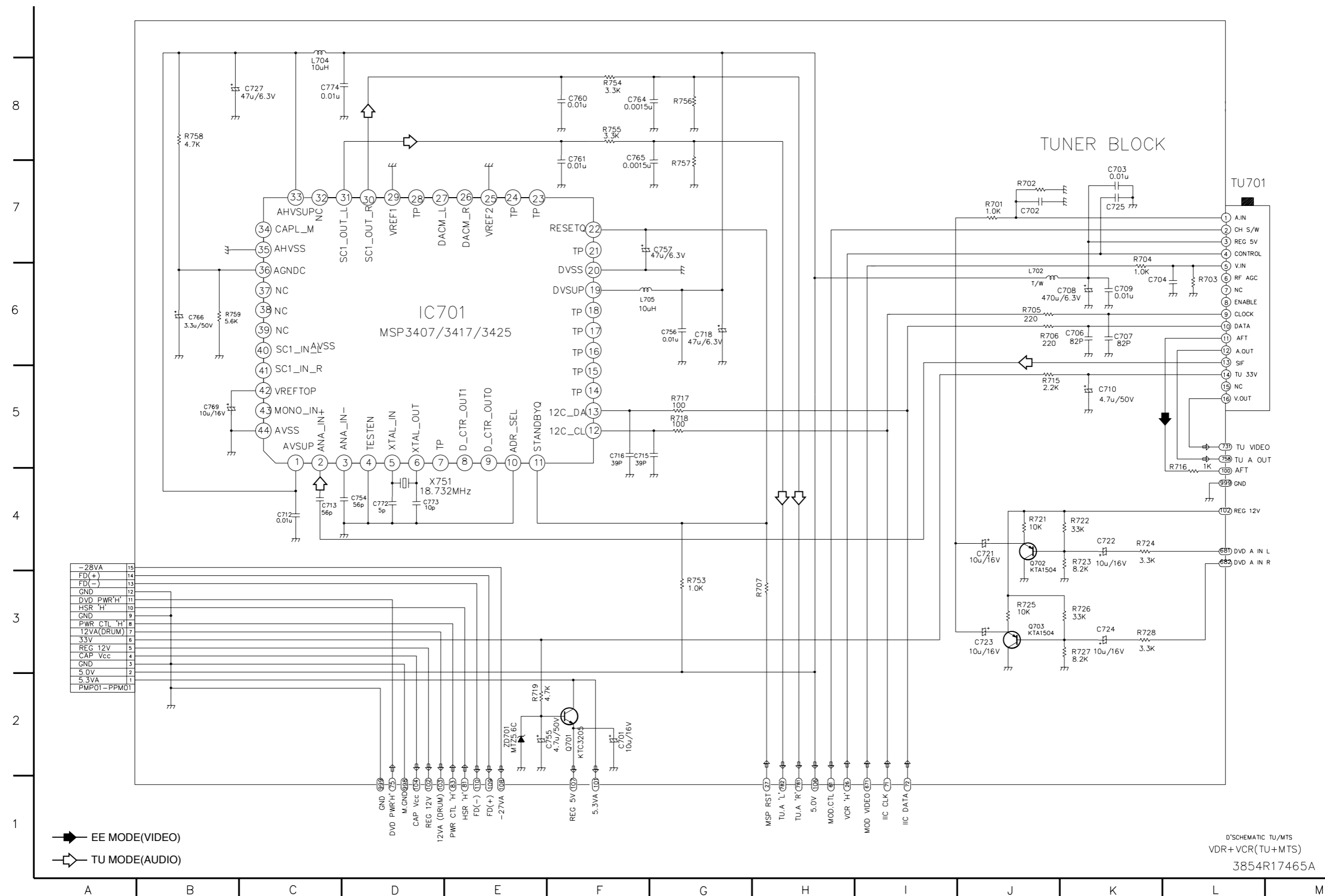
SPECIAL COMPONENTS ARE SHADED ON THE SCHEMATIC FOR EASY IDENTIFICATION. THIS CIRCUIT DIAGRAM MAY OCCASIONALLY DIFFER FROM THE ACTUAL CIRCUIT USED. THIS WAY, IMPLEMENTATION OF THE LATEST SAFETY AND PERFORMANCE IMPROVEMENT CHANGES INTO THE SET IS NOT DELAYED UNTIL THE NEW SERVICE LITERATURE IS PRINTED.

### 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.



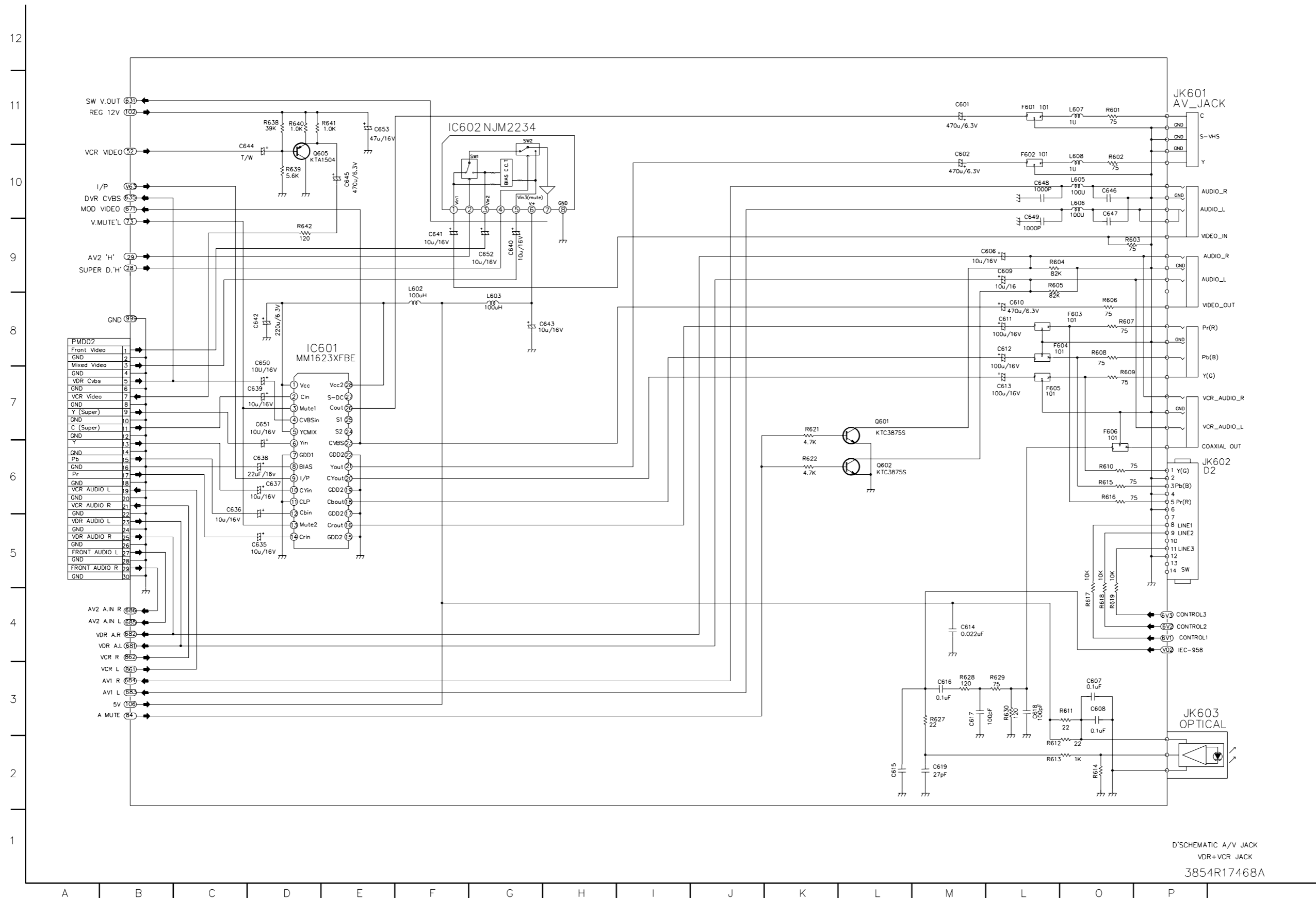
## 2. TU/IF CIRCUIT DIAGRAM



D'SCHEMATIC TU/MTS  
VDR+VCR(TU+MTS)  
3854R17465A

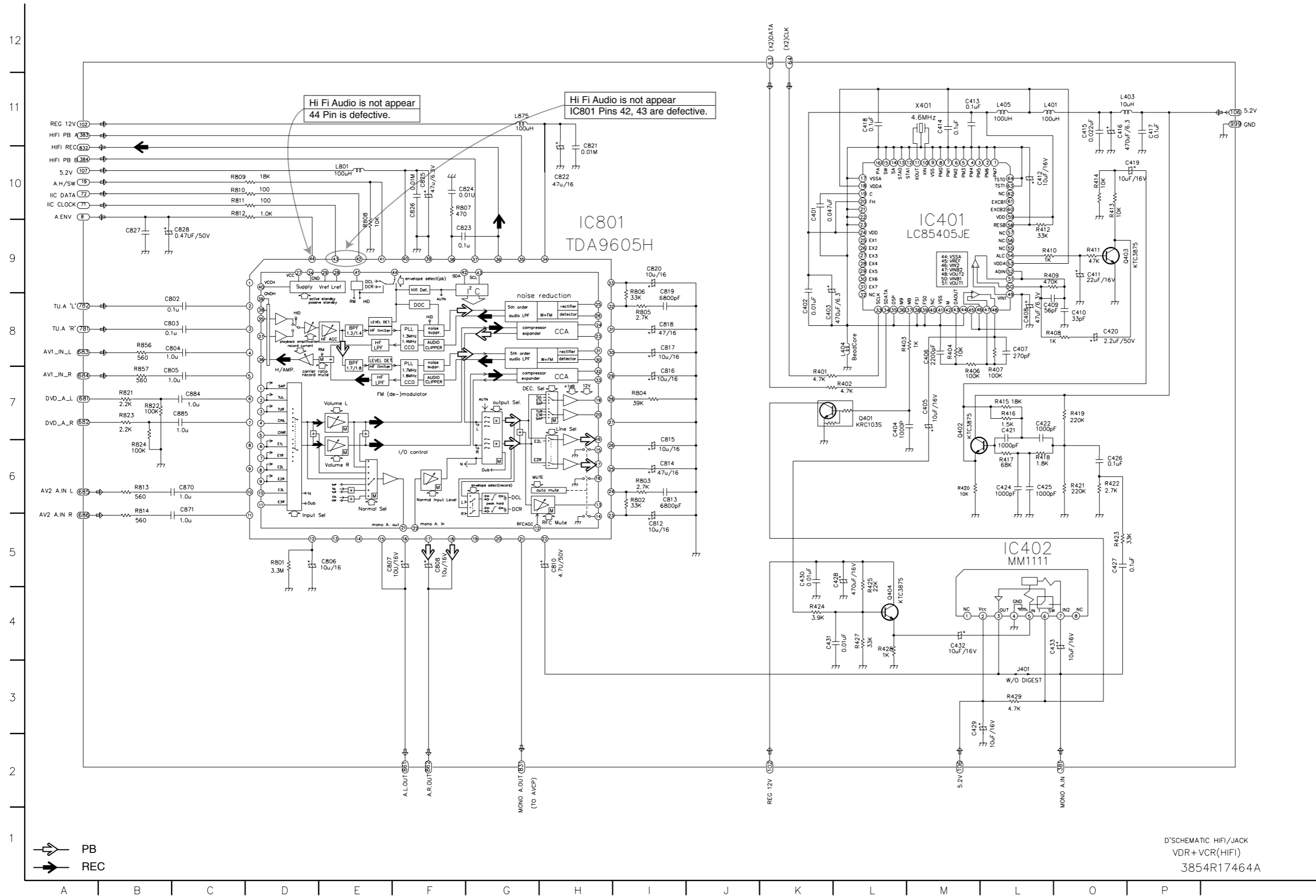


# 4. JACK CIRCUIT DIAGRAM



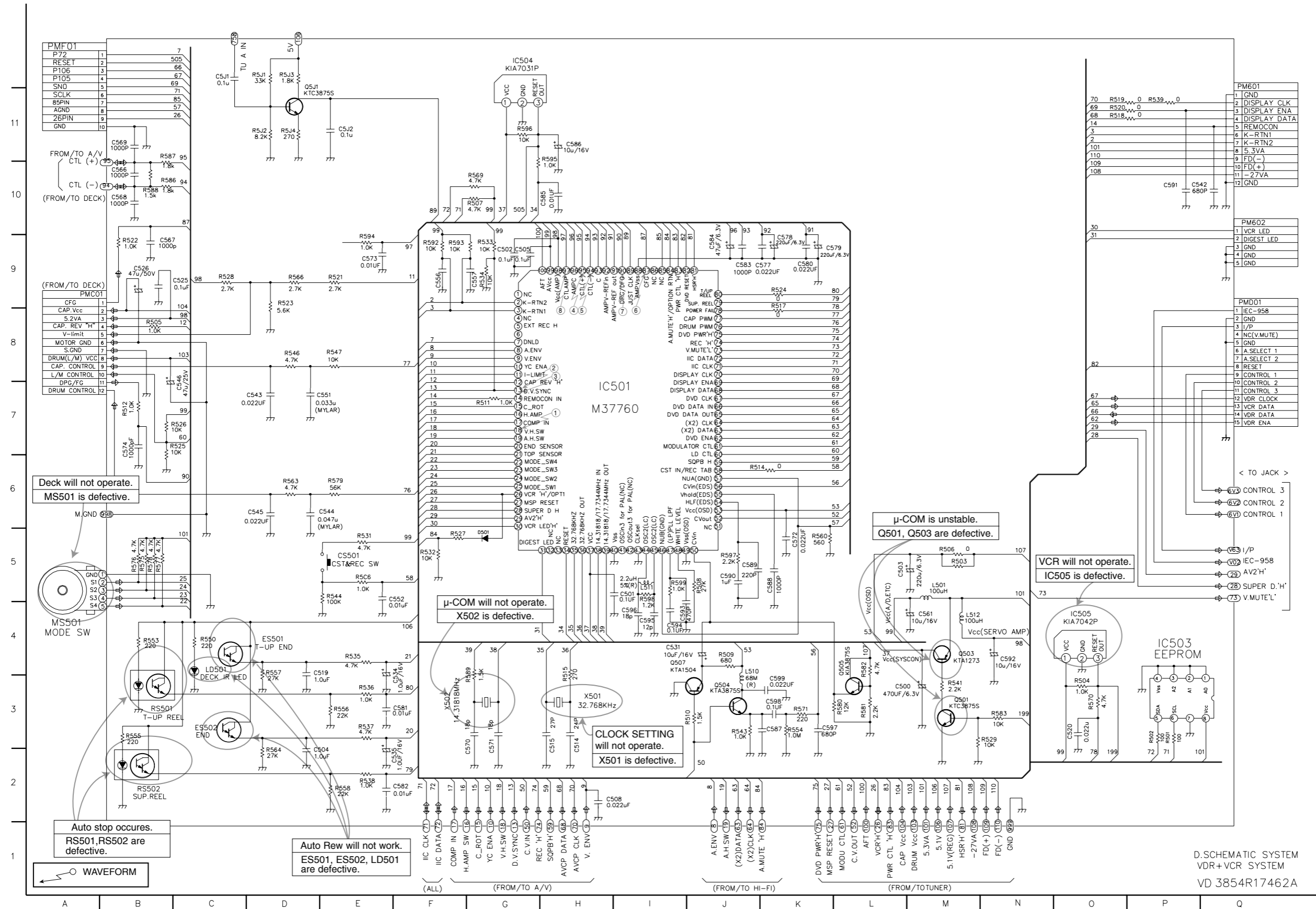
D'SCHEMATIC A/V JACK  
VDR+VCR JACK  
3854R17468A

# 5. HI-FI CIRCUIT DIAGRAM



D'SCHEMATIC HIFI/JACK  
 VDR+VCR(HIFI)  
 3854R17464A

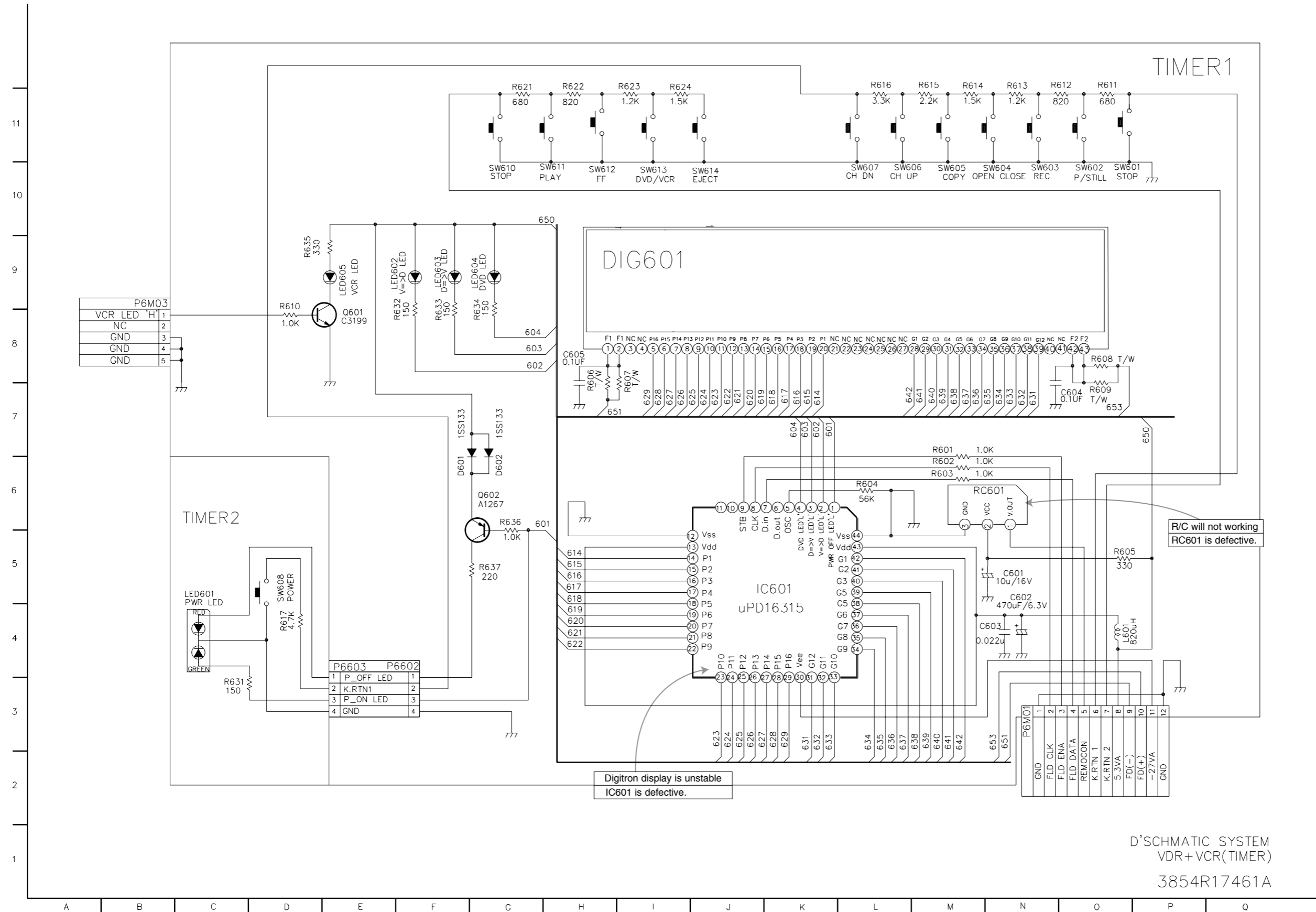
# 6. SYSTEM CIRCUIT DIAGRAM



D.SCHEMATIC SYSTEM  
VDR+VCR SYSTEM  
VD 3854R17462A



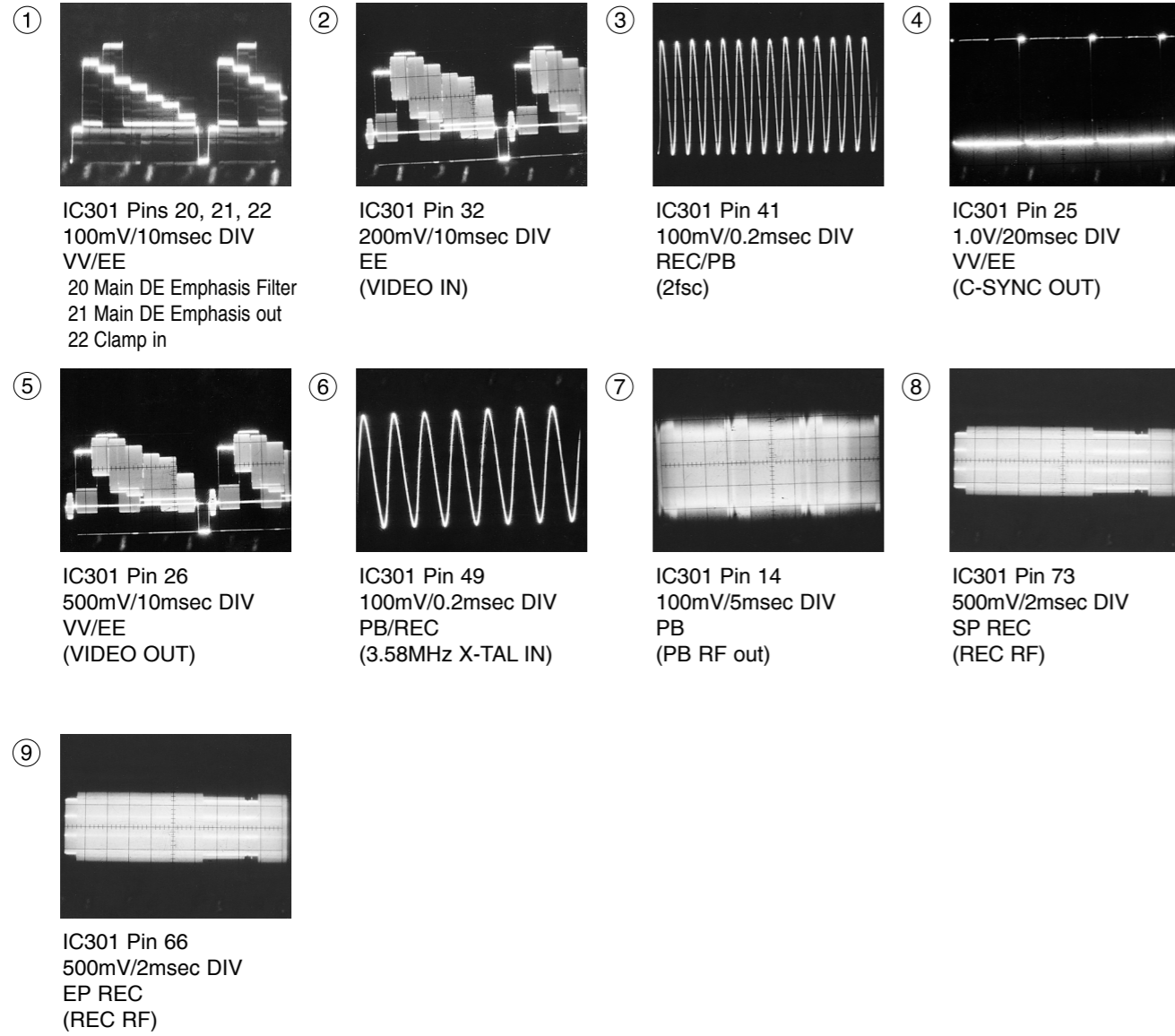
# 7. TIMER CIRCUIT DIAGRAM



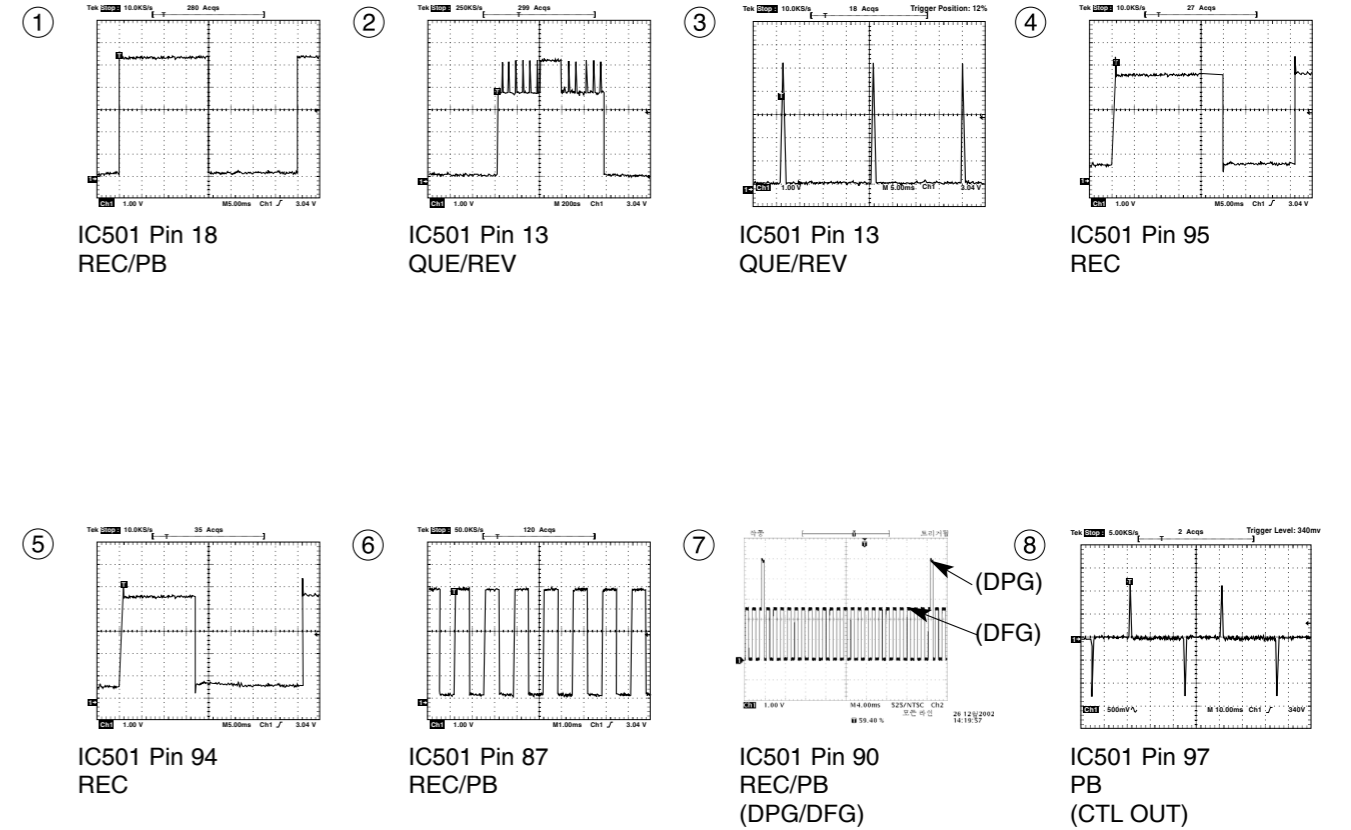
D'SCHMATIC SYSTEM  
VDR+VCR(TIMER)  
3854R17461A

• WAVEFORMS

\* IC301 Waveform



\* IC501 Waveform



**• CIRCUIT VOLTAGE CHART**

MODE PIN NO.	EE	PLAY
<b>IC 301</b>		
1	2.3	2.31
2	2.29	2.28
3	2.29	2.28
4	2.29	2.28
5	2.31	2.29
6	2.3	2.31
7	0	2.31
8	2.31	2.32
9	2.31	2.31
10	2.25	2.27
11	4.93	4.93
12	1.0	1.0
13	0.97	0.97
14	1.92	1.89
15	1.55	1.53
16	0	0
17	2.37	2.55
18	2.39	1.45
19	0	0
20	2.46	2.49
21	1.73	1.79
22	3.07	2.29
23	4.96	4.95
24	0	0
25	0.36	0.35
26	1.83	1.87
27	1.47	1.6
28	2.25	2.56
29	2.32	2.31
30	2.25	2.26
31	4.08	4.08
32	2.25	2.26
33	3.62	2.8
34	2.97	2.93
35	3.13	3.14
36	2.37	2.37
37	2.35	2.29
38	0	0
39	1.82	1.87
40	0	0
41	0.83	0.83
42	2.34	2.37
43	0	0
44	4.92	4.92
45	4.95	4.95
46	2.27	3.17
47	3.31	3.31
48	3.32	3.32
49	3.94	3.94
50	2.54	2.55
51	2.12	2.09
52	4.95	4.95
53	4.75	4.62
54	4.7	4.52

MODE PIN NO.	EE	PLAY
55	0.68	0.93
56	0	0
57	0	2.56
58	0	1.61
59	0	2.9
60	4.91	0.94
61	2.92	1.94
62	0	0
63	3.96	3.98
64	1.76	1.72
65	1.84	1.85
66	1.84	1.86
67	1.84	1.86
68	4.93	4.93
69	0.18	0
70	0.15	0
71	0	0
72	1.82	0.71
73	1.82	0.71
74	1.82	0.71
75	0	0
76	2.3	2.3
77	4.96	4.96
78	2.3	2.3
79	0	0
80	2.3	2.3
<b>IC 501</b>		
1	0.97	0
2	5.17	5.17
3	5.17	5.16
4	0	0
5	0.5	0.54
6	0	0
7	0.4	0.42
8	0.19	4.06
9	0.29	3.91
10	0.68	0.99
11	0	3.42
12	0	0
13	0	0
14	4.78	4.78
15	0	2.57
16	0	0
17	0.68	0.43
18	2.56	2.57
19	2.57	2.57
20	0	0
21	0.11	0.11
22	5.17	5.17
23	5.17	5.17
24	5.17	5.17
25	0	0
26	5.13	5.13
27	5.13	5.17
28	0	0

MODE PIN NO.	EE	PLAY
29	0	0
30	5.17	5.17
31	0	0
32	0	0
33	0	0
34	5.15	5.15
35	1.52	1.51
36	1.43	1.44
37	5.15	5.15
38	2.19	2.18
39	2.28	2.27
40	0	0
41	0.51	0.55
42	0.26	0.55
43	0.26	0
44	2.53	2.34
45	2.41	2.41
46	0	0
47	1.29	0
48	0	0
49	0	0
50	1.88	1.99
51	0.53	0.57
52	1.88	1.98
53	4.96	4.95
54	2.03	2.03
55	2.6	1.92
56	1.96	2.05
57	0	0
58	0	0
59	0	0
60	2.57	2.58
61	0	0
62	PULSE	PULSE
63	0	0
64	0	0
65	PULSE	PULSE
66	PULSE	PULSE
67	PULSE	PULSE
68	PULSE	PULSE
69	PULSE	PULSE
70	PULSE	PULSE
71	PULSE	PULSE
72	PULSE	PULSE
73	5.17	5.17
74	0	0
75	5.17	5.17
<b>IC 602</b>		
1	3.06	3.06
2	5.11	5.1
3	3.01	3
4	0	0
5	3.06	3.05
6	5.03	5.03
7	2.28	2.27
8	0	0
81	0	0
82	5.03	4.98
83	5.13	5.1

MODE PIN NO.	EE	PLAY
84	0	0
85	0	0
86	0	0
87	-	PULSE
88	0	0
89	0	0
90	PULSE	PULSE
91	2.53	2.54
92	2.54	2.53
93	0.21	0
94	2.5	2.59
95	2.5	2.59
96	2.52	2.52
97	2.52	2.52
98	5.08	5.08
99	5.17	5.17
100	2.64	2.64
<b>IC 601</b>		
1	4.83	4.84
2	2.34	2.3
3	5.06	5.0
4	1.66	1.57
5	4.84	4.84
6	1.65	1.57
7	0	0
8	2.36	2.36
9	3.24	3.23
10	1.63	1.55
11	0	0
12	2.32	2.32
13	5.05	5
14	2.33	2.33
15	0	0
16	2.35	2.35
17	0	0
18	2.36	2.36
19	0	0
20	2.22	2.06
21	2.23	2.06
22	0	0
23	2.26	2.08
24	0	0
25	0	0
26	2.35	2.35
27	0	0
28	4.84	4.83
<b>IC 602</b>		
1	3.06	3.06
2	5.11	5.1
3	3.01	3
4	0	0
5	3.06	3.05
6	5.03	5.03
7	2.28	2.27
8	0	0

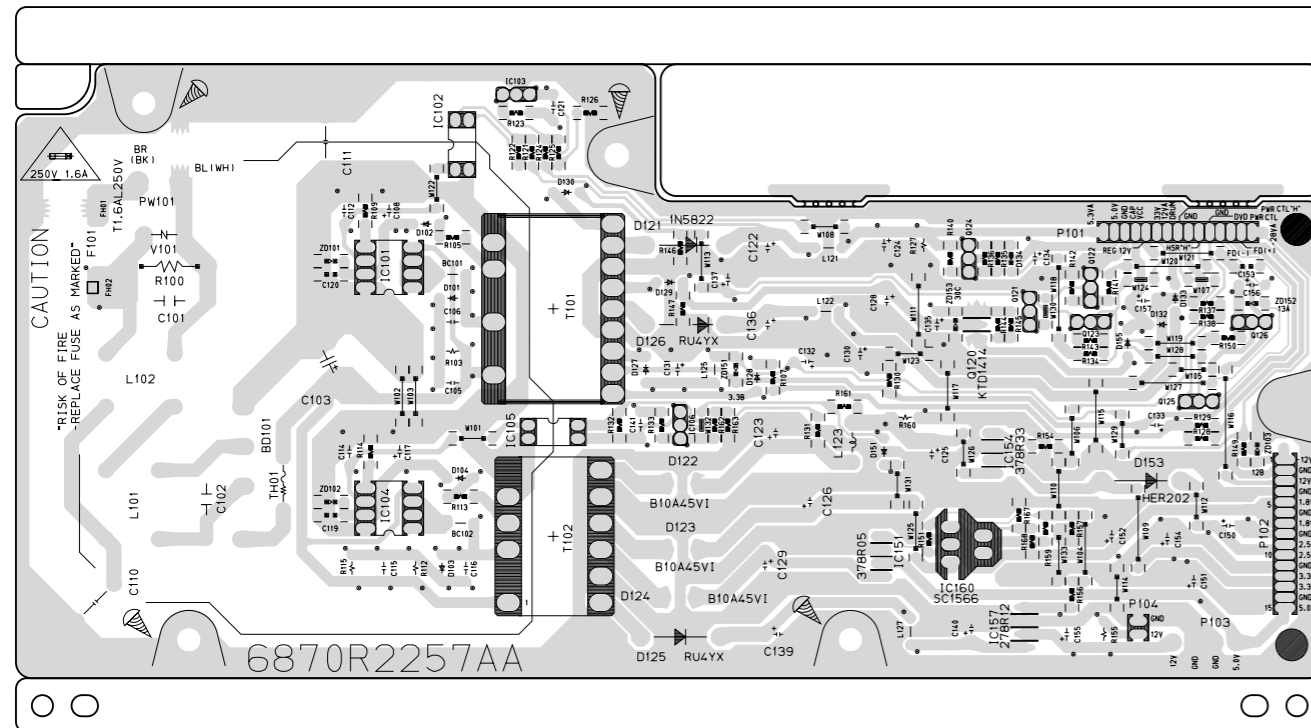
MODE PIN NO.	EE	PLAY
<b>IC 701</b>		
1	5.1	5.1
2	1.5	1.5
3	1.5	1.5
4	0	0
5	2.5	2.46
6	2.44	2.44
7	1.84	1.89
8	1.86	0
9	1.86	0
10	0	0
11	5.12	5.12
12	4.8	4.8
13	4.7	4.75
14	1.75	2.6
15	1.77	2.6
16	1.77	5
17	1.75	1.5
18	1.75	1.5
19	5	5
20	0	0
21	1.88	1.58
22	5.1	5.1
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	2.78	2.77
31	2.78	1.9
32	0	0
33	5.1	5.09
34	4.06	4.08
35	0	0
36	2.77	2.76
37	0	0
38	0	0
39	0	0
40	2.76	2.75
41	2.76	2.75
42	2.59	2.59
43	2.35	2.35
44	0	0
<b>IC 801</b>		
1	3.8	3.8
2	3.8	3.8
3	3.8	3.8
4	3.8	3.8
5	3.8	3.8
6	3.8	3.8
7	3.8	3.8
8	3.8	3.8
9	3.8	3.8

MODE PIN NO.	EE	PLAY
10	3.8	3.8
11	3.8	3.8
12	0	-
13	3.87	3.8
14	0	0
15	0	0
16	6	6.07
17	6	6.07
18	7	6.07
19	6	6.06
20	6	6.07
21	4.58	4.57
22	3.82	3.82
23	3.86	3.84
24	3.87	3.84
25	3.87	3.9
26	0.76	0
27	0	0
28	3.84	3.83
29	3.86	3.86
30	0.77	0.76
31	3.87	3.87
32	3.86	3.87
33	3.86	3.86
34	11.84	11.76
35	0.64	0.44
36	0.64	0.62
37	0.64	0.63
38	0	0
39	0	0
40	5	5.07
41	0	0.92
42	4.7	4.7
43	4.8	4.8
44	0	3.3

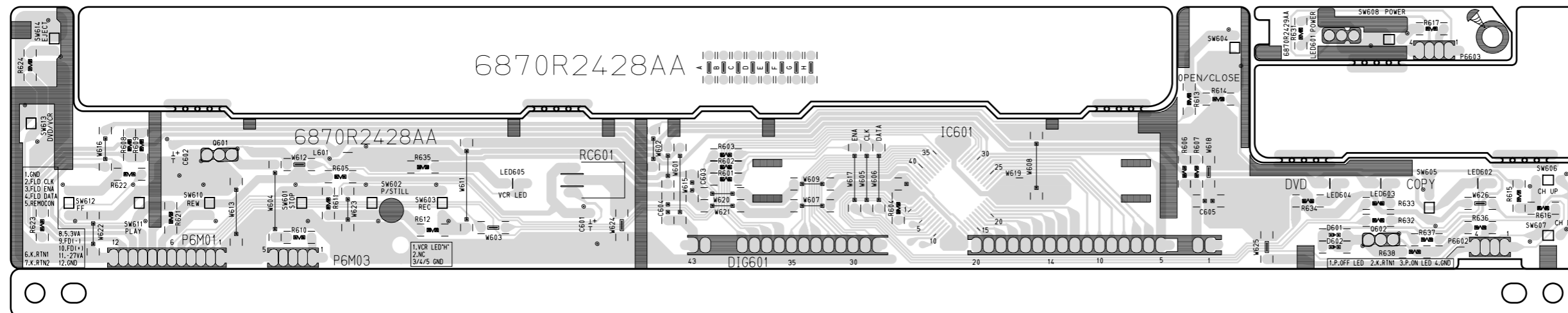
Location No.	EE			PLAY		
	E	C	B	E	C	B
Q301	4.97	4.91	4.26	4.96	4.91	4.26
Q302	0	0	0.78	0	0	1.74
Q303	0	0	0.73	0	0	0.72
Q304	0	0	0	0	0	0
Q305	4.94	0	4.92	4.93	0	4.92
Q306	2.45	0	1.82	2.5	0	1.86
Q307	2.51	0	1.84	2.62	0	2.05
Q308	4.87	4.93	5.19	4.91	4.92	5.19
Q309	0	4.91	0	0	4.97	0
Q501	0	0	0.68	0	0	0.68
Q503	4.48	5.15	5.17	4.48	5.15	5.17
Q504	2.18	4.95	2.82	2.27	4.95	2.94
Q505	1.03	4.96	1.58	2.24	4.96	1.58
Q507	0	0	2.8	3.23	0	2.6
Q601	0	0	0	0	0	0
Q602	0	0	0	0	0	0
Q605	2.7	0	2.1	2.6	0	1.95
Q701	5	5.17	5.7	4.99	5.17	5.7
Q702	3.0	0	2.4	3	0	2.4
Q703	3.0	0	2.4	3	0	2.4



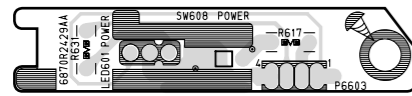
## 2. POWER P.C.BOARD



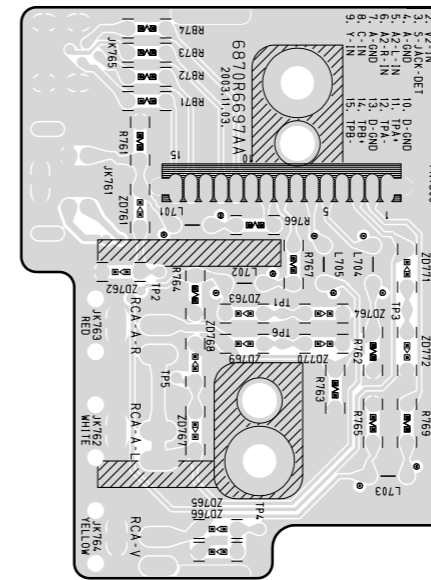
## 3. TIMER P.C.BOARD



#### 4. KEY P.C.BOARD



#### 5. JACK P.C.BOARD

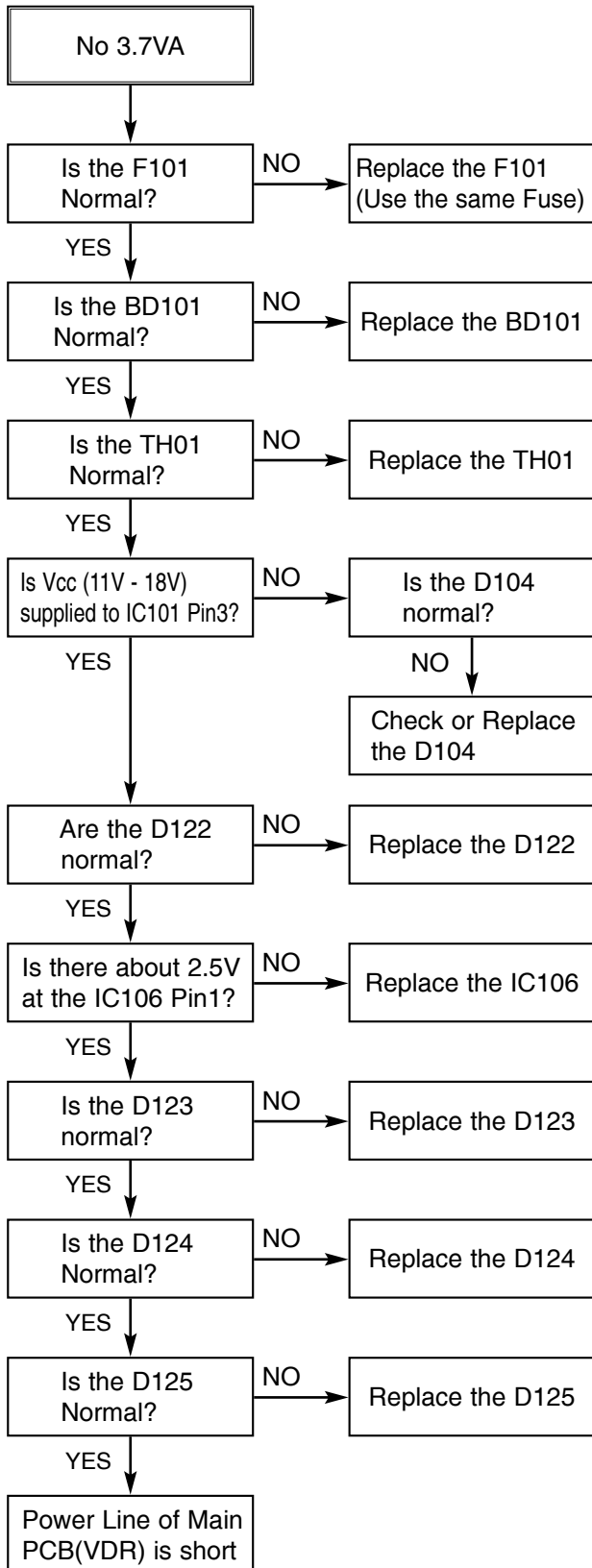




# VDR PART

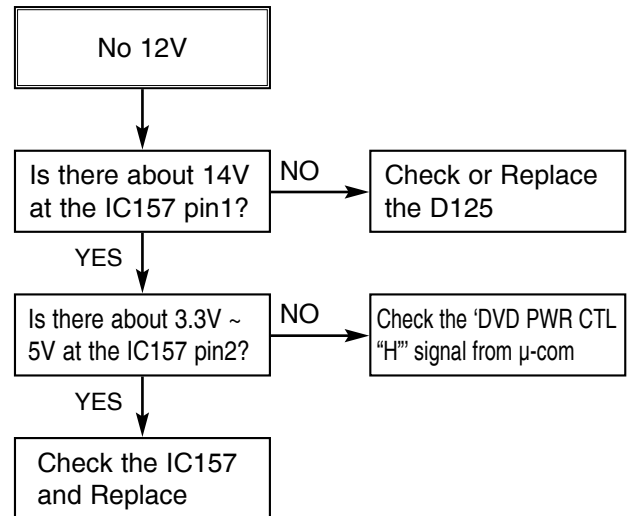
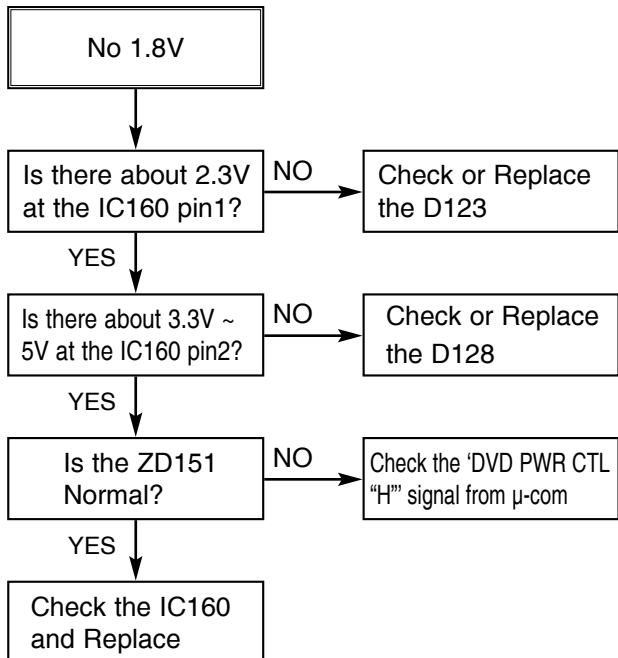
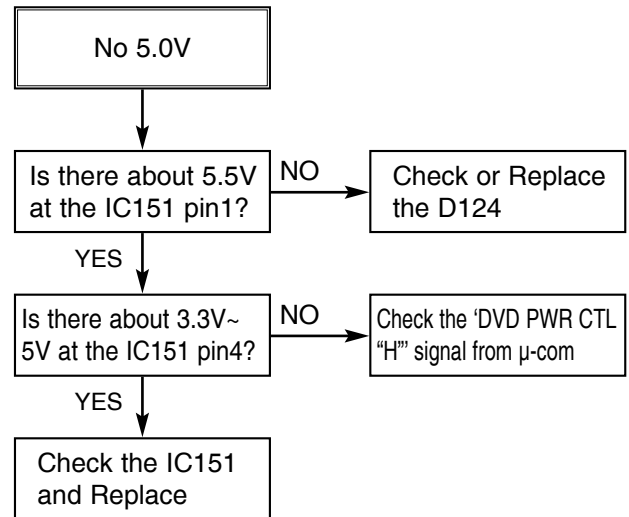
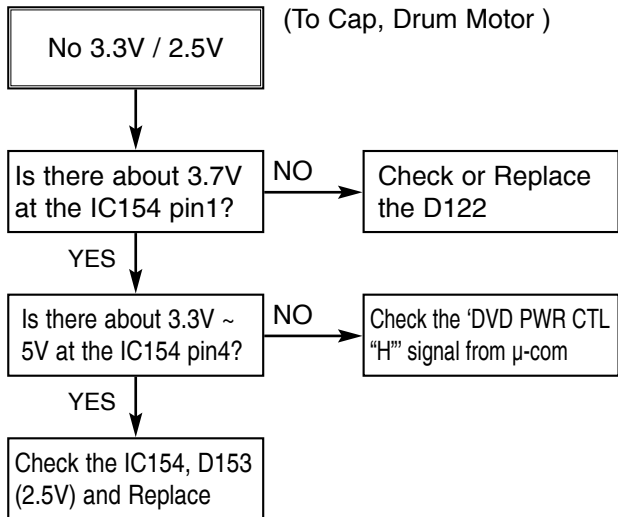
## VDR ELECTRICAL TROUBLESHOOTING GUIDE

### 1. Power(SMPS) CIRCUIT

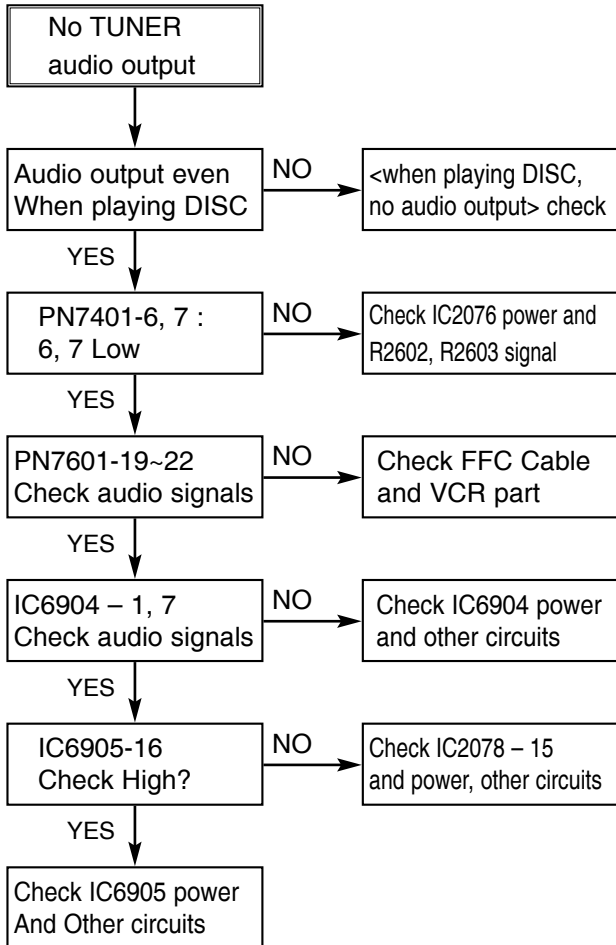
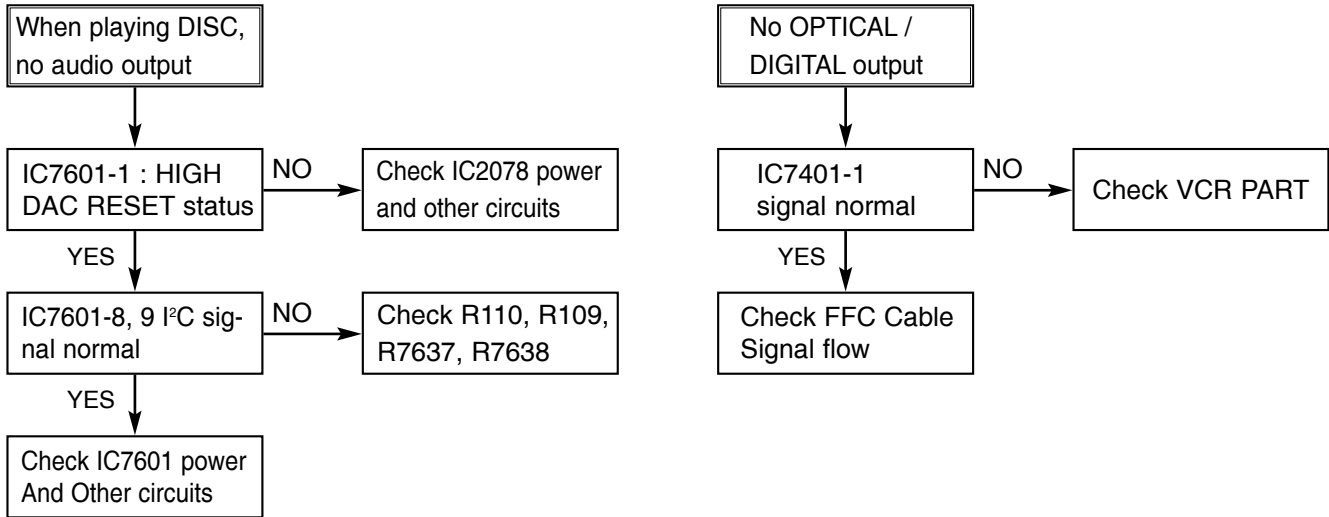




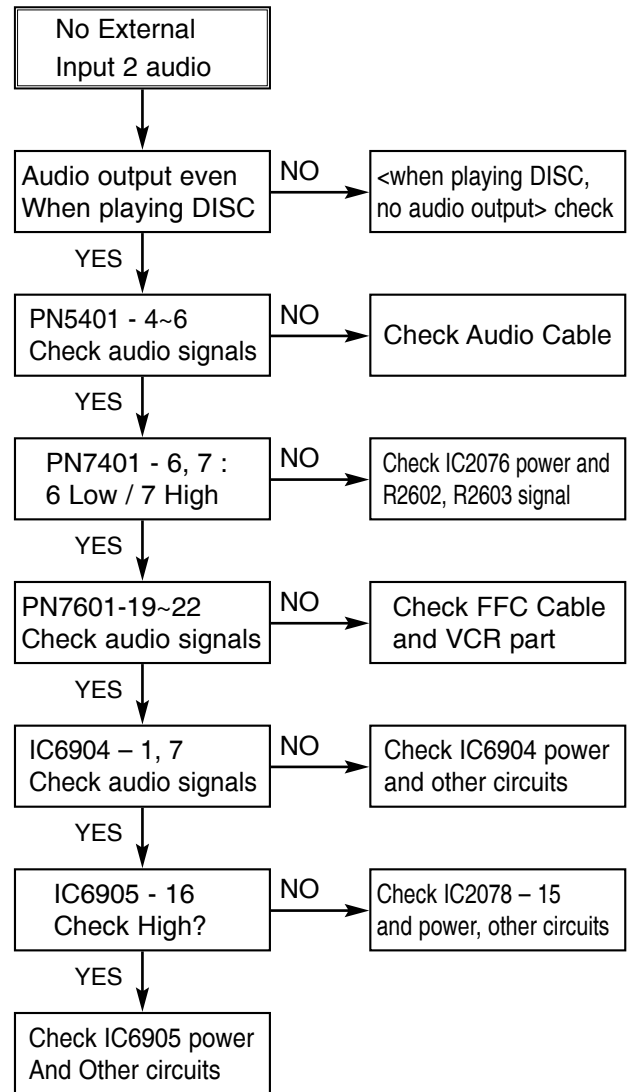
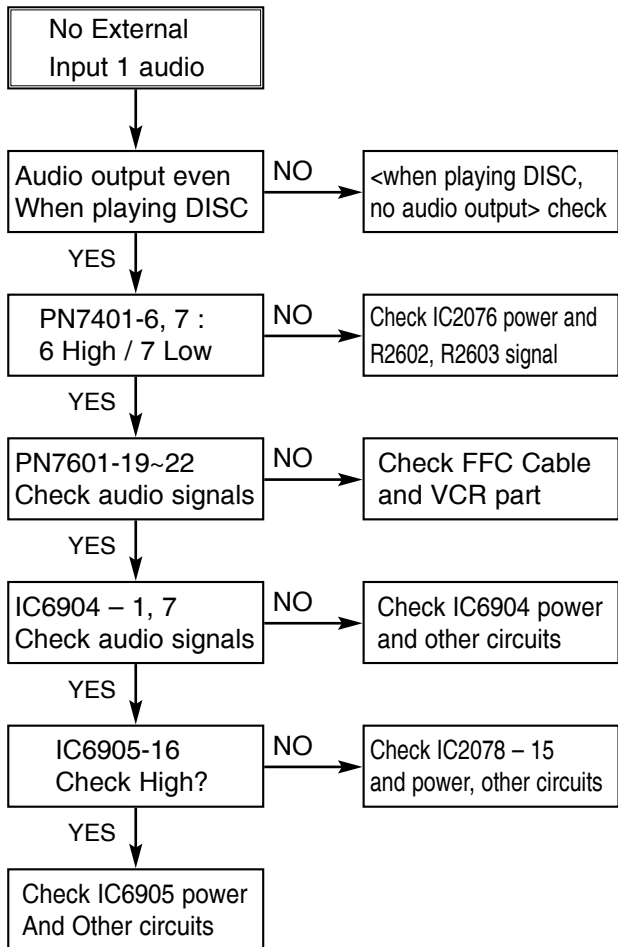
# VDR ELECTRICAL TROUBLESHOOTING GUIDE



# VDR ELECTRICAL TROUBLESHOOTING GUIDE

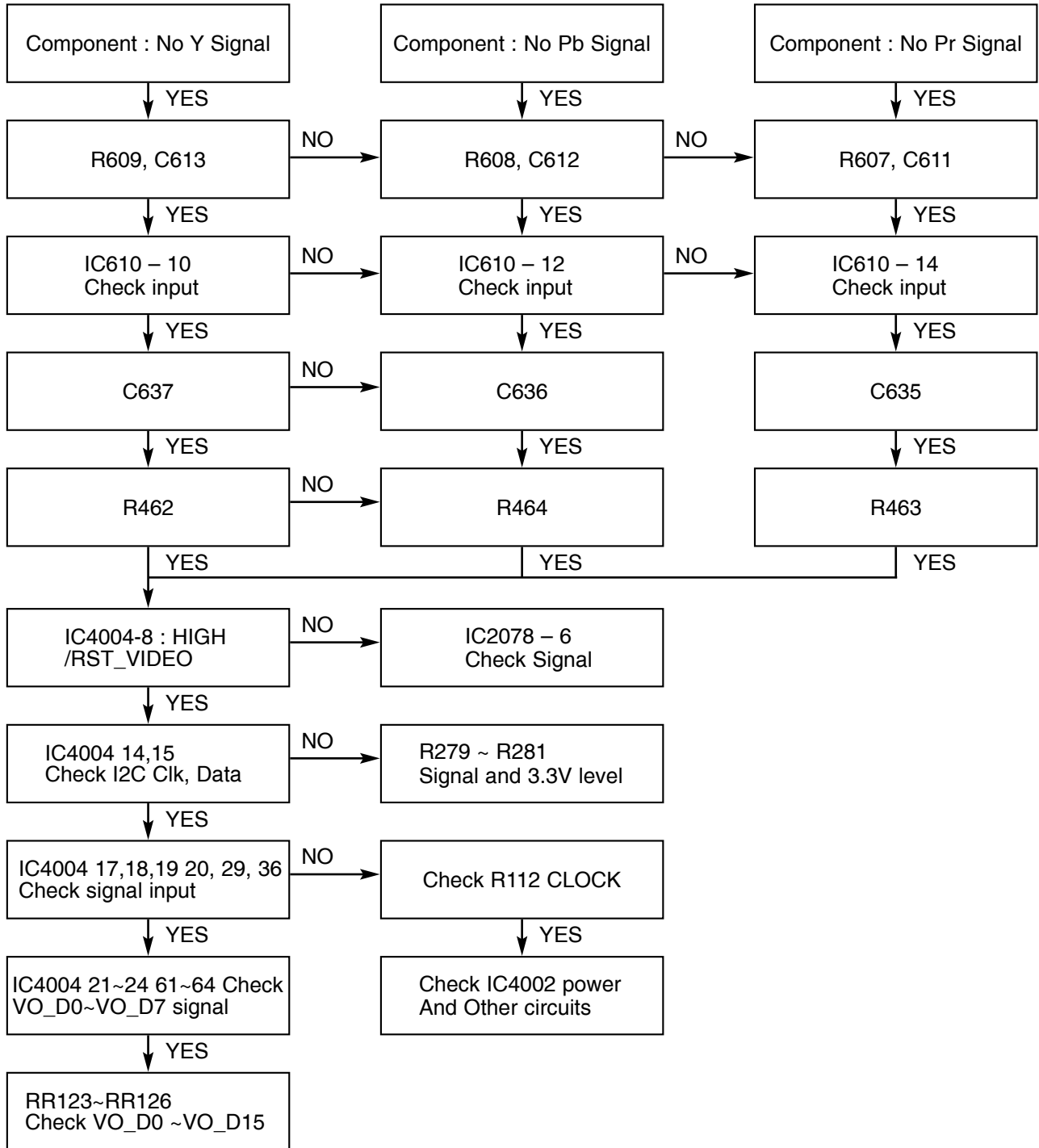


# VDR ELECTRICAL TROUBLESHOOTING GUIDE

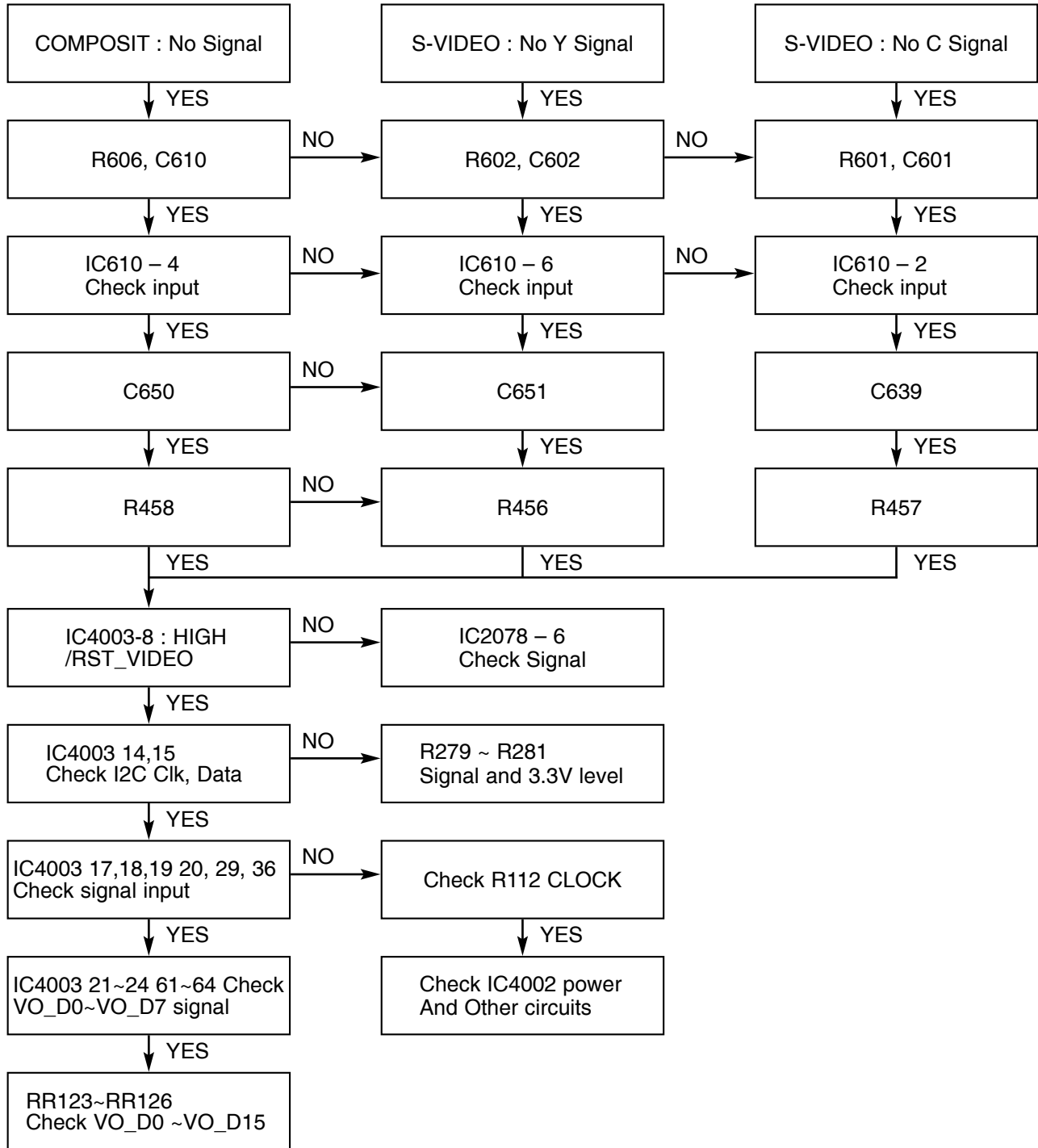


# VDR ELECTRICAL TROUBLESHOOTING GUIDE

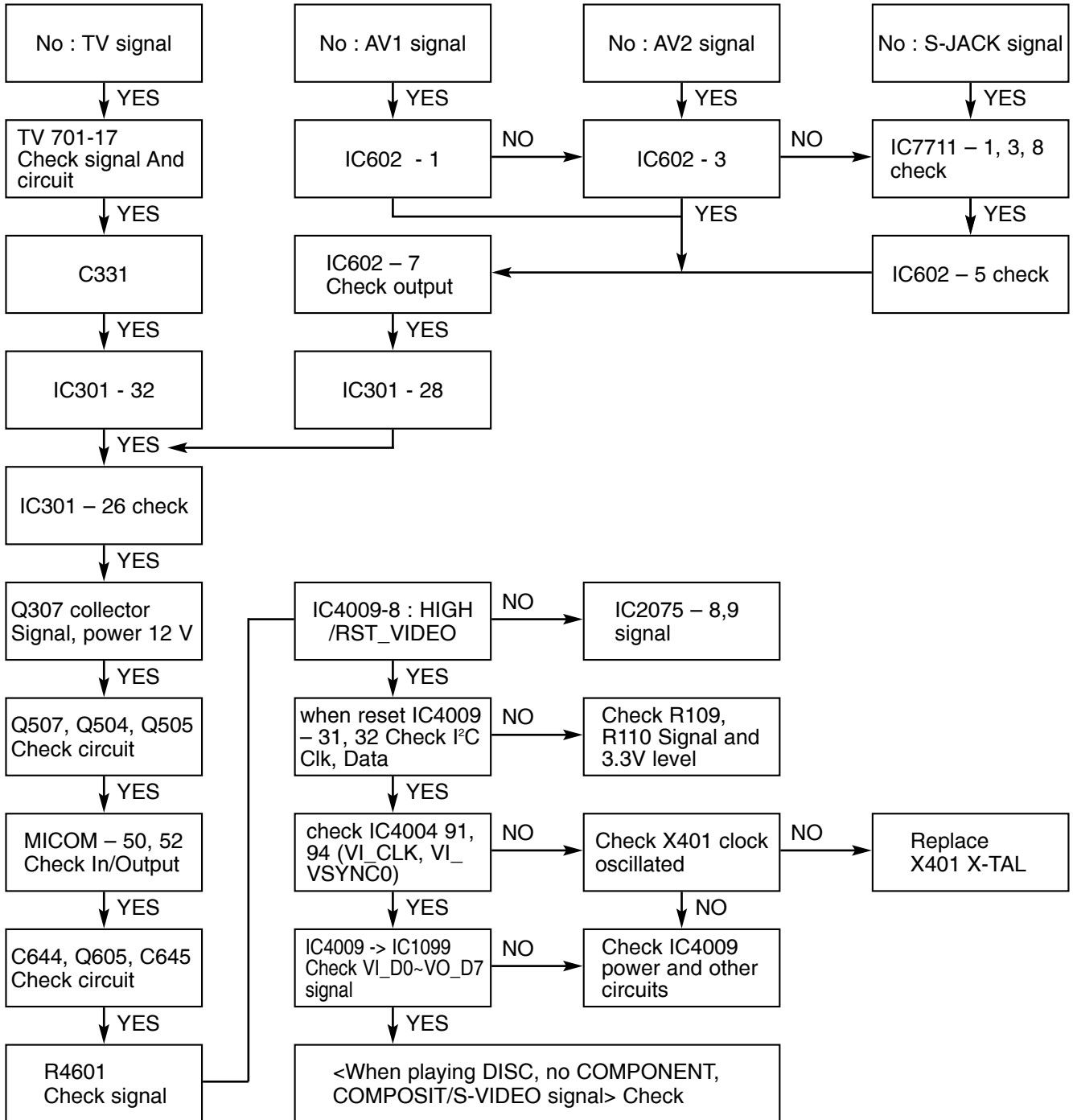
No Component video signal when playing DISC



No COMPOSIT / S-VIDEO signal when playing DISC

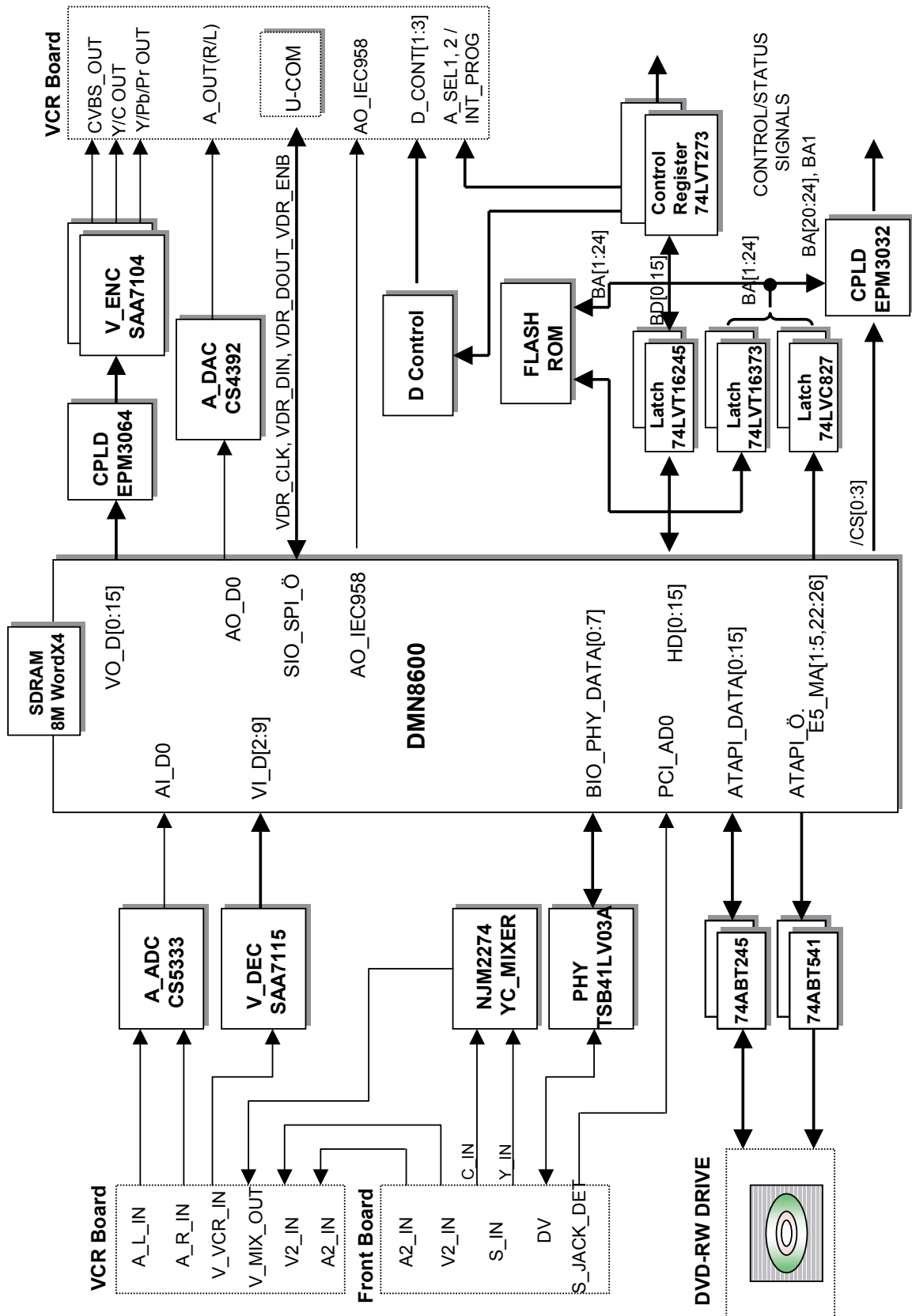


No TV, External Input video signal

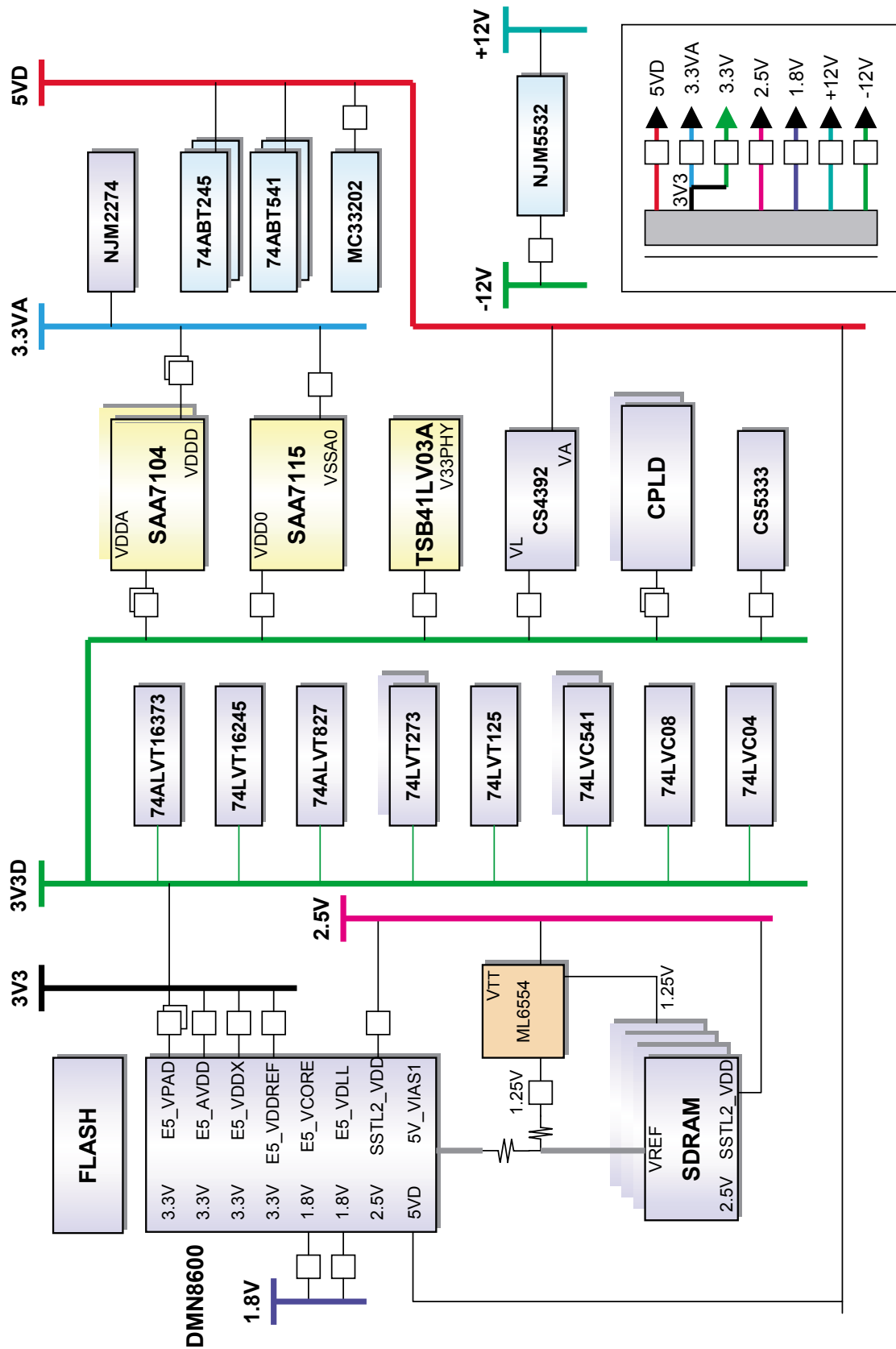


# BLOCK DIAGRAMS

## 1. VDR MAIN H/ W BLOCK DIAGRAM

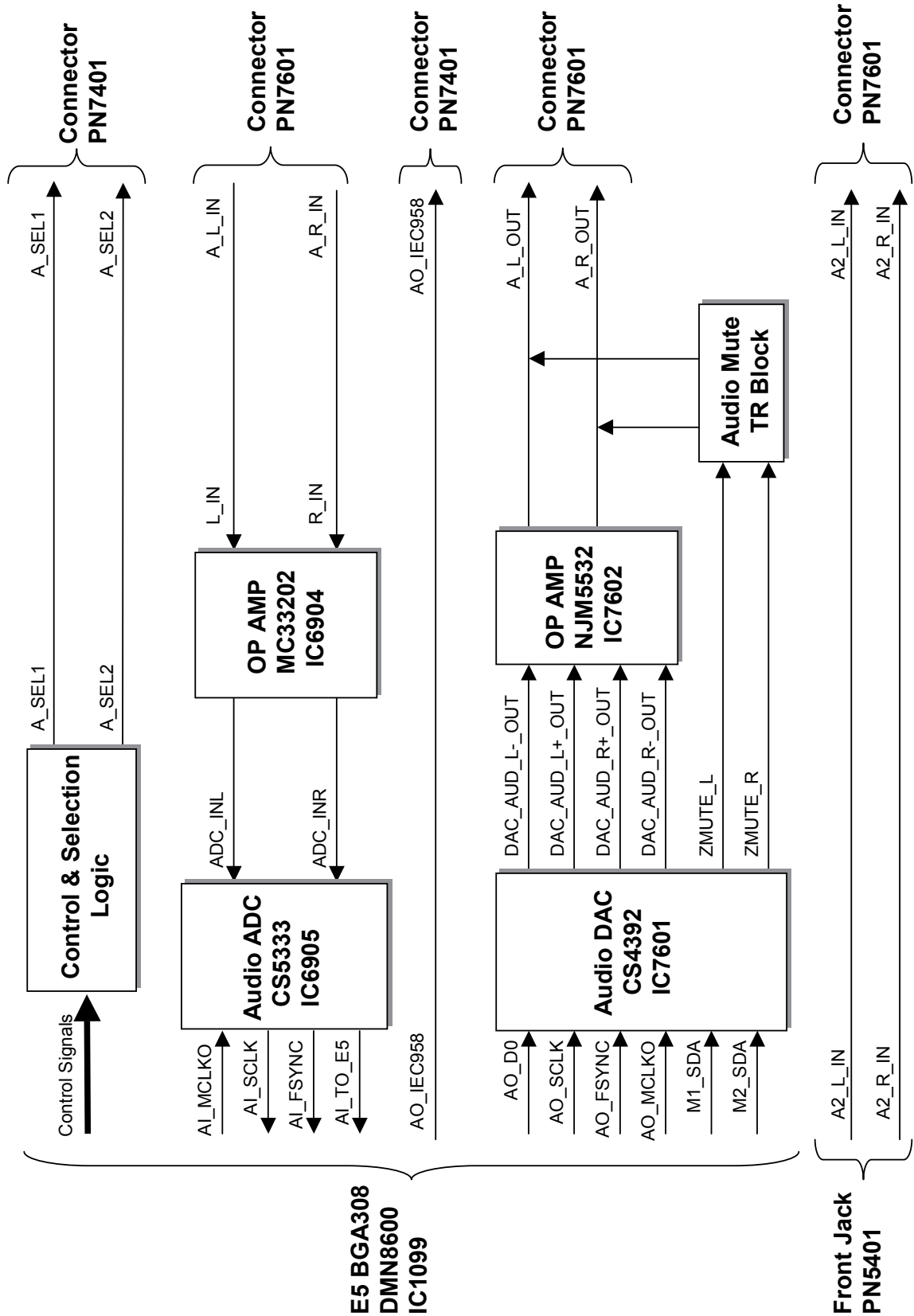


## 2. POWER BLOCK DIAGRAM

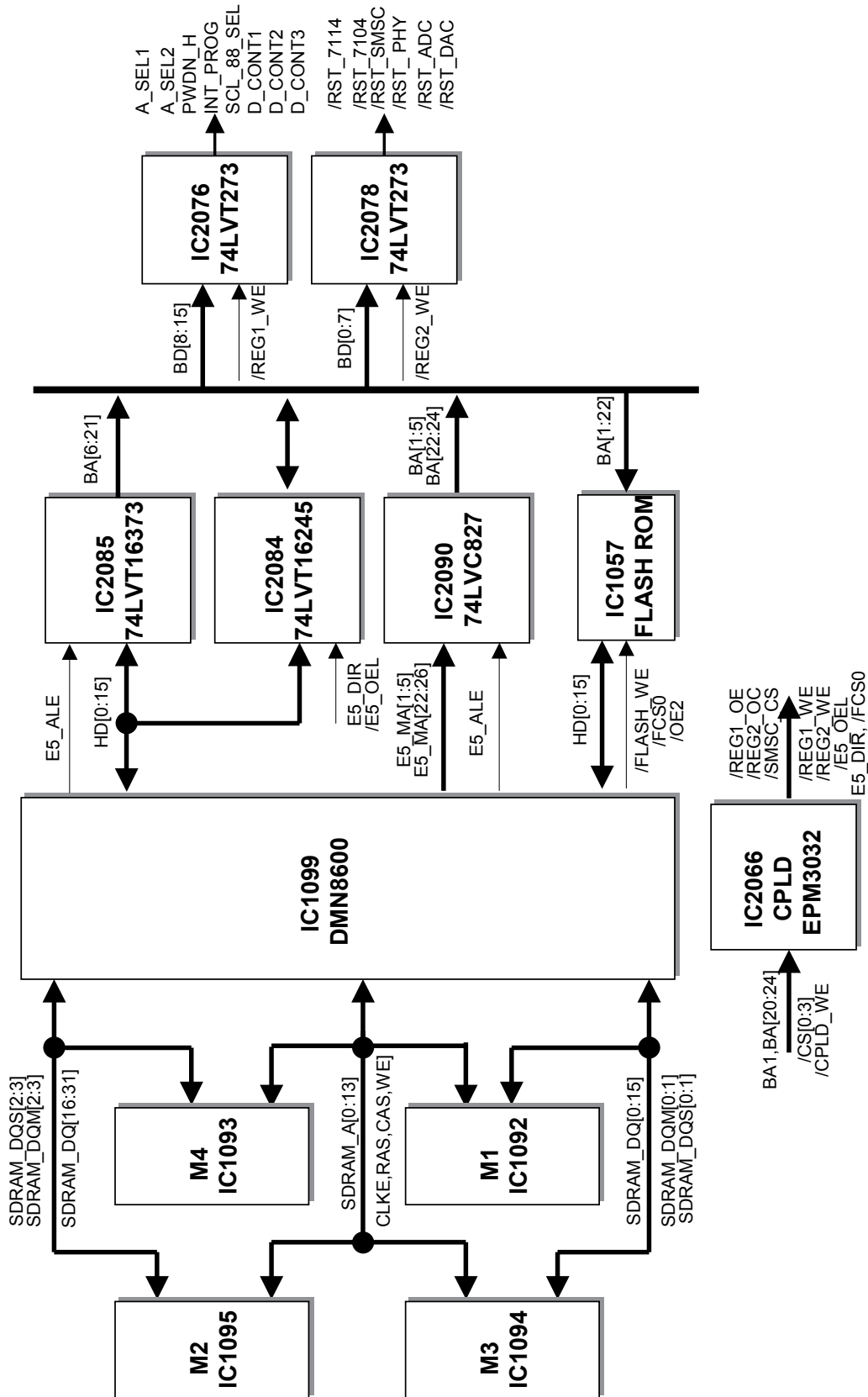




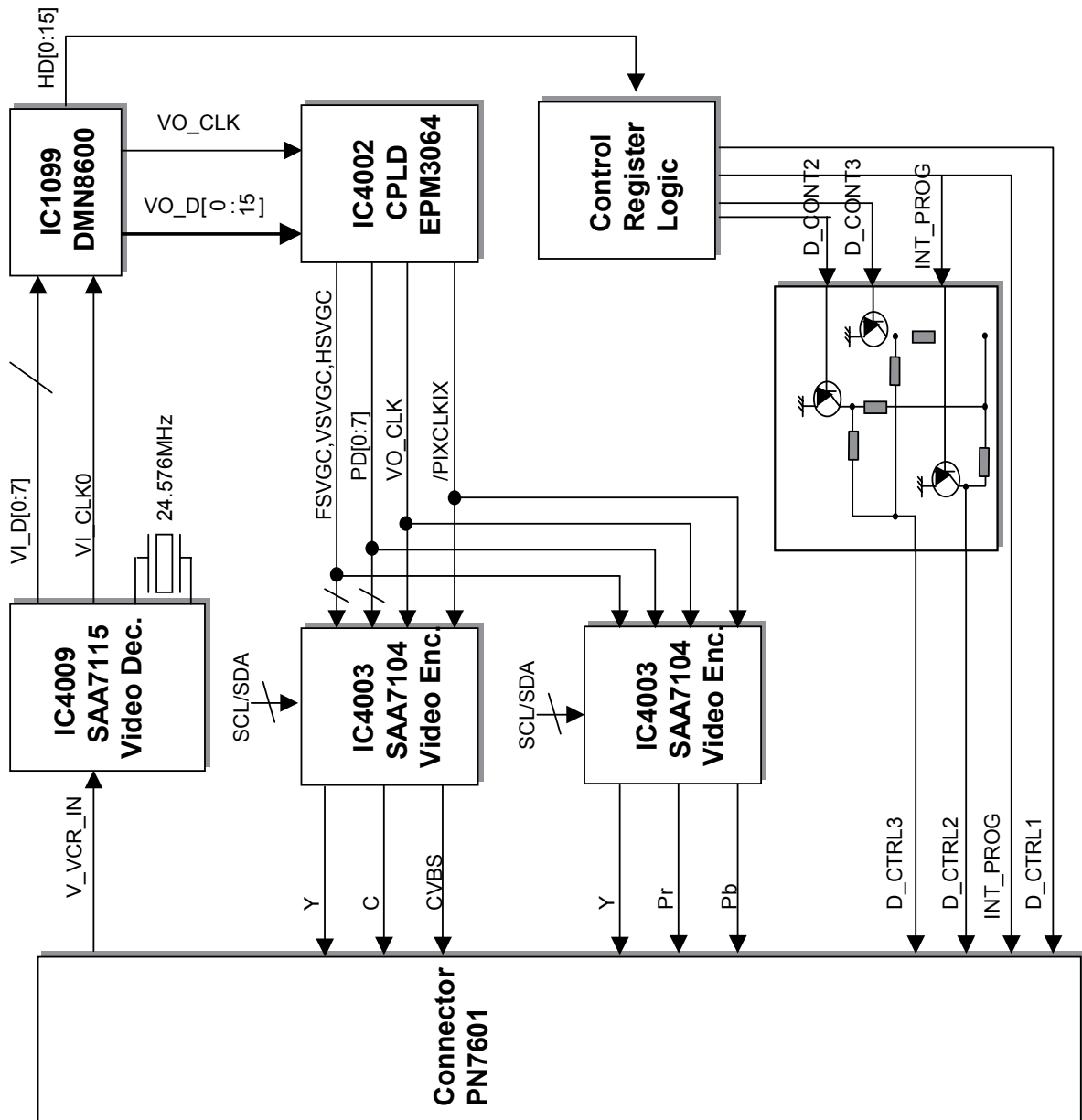
### 3. AUDIO IN/ OUT BLOCK DIAGRAM



# 4. CPU & Control Register BLOCK DIAGRAM

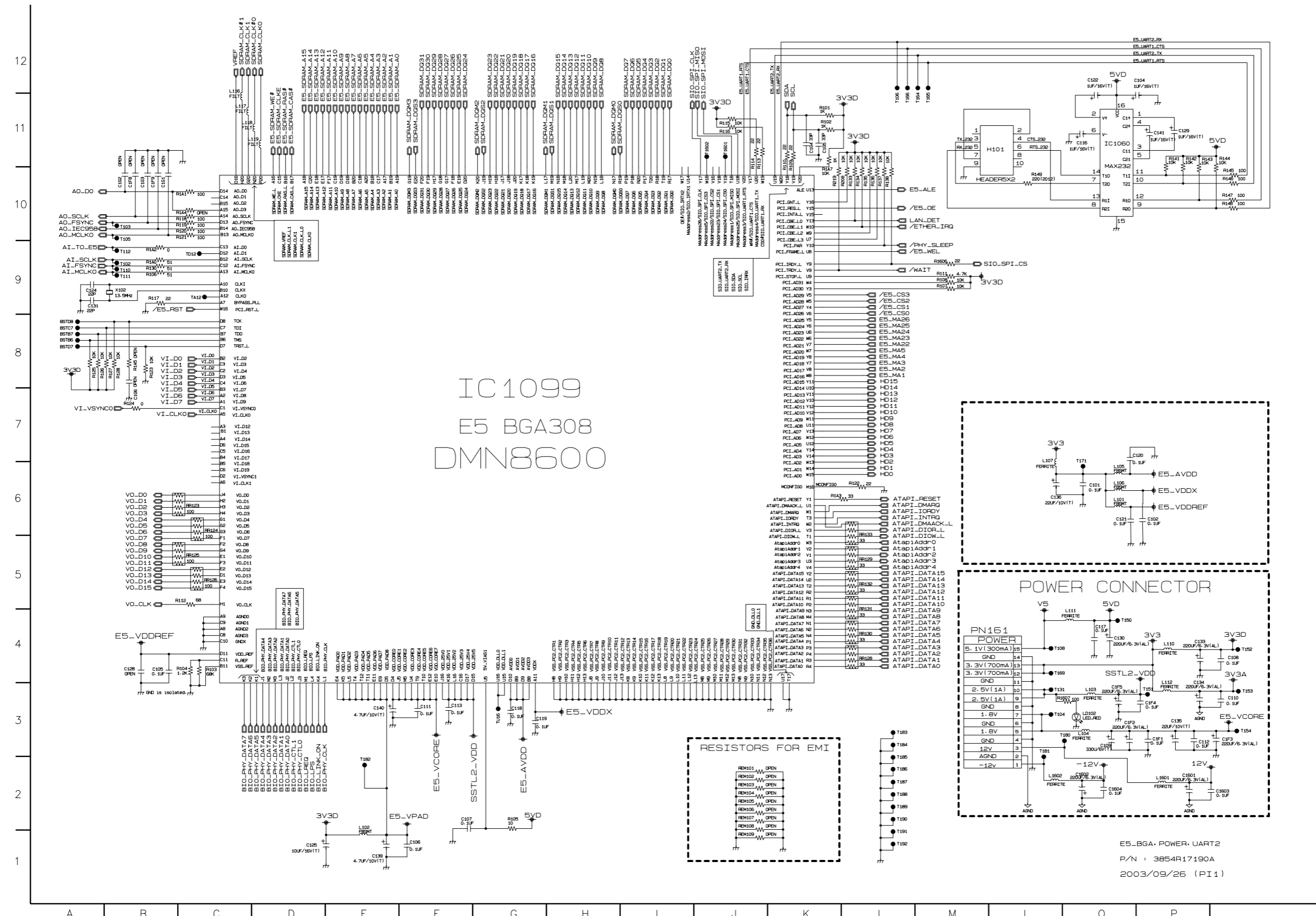


## 5. VIDEO IN/ OUT BLOCK DIAGRAM

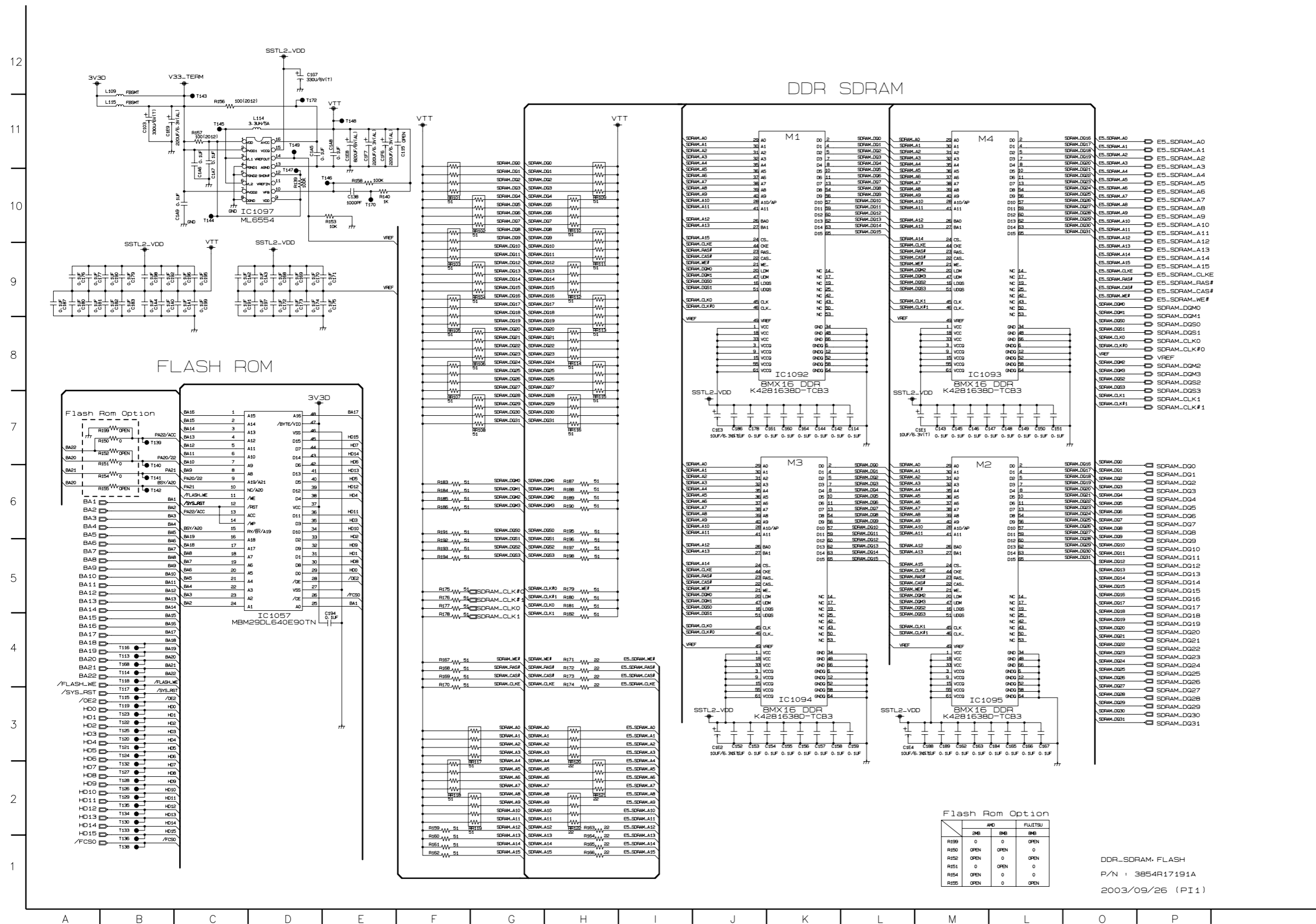


# CIRCUIT DIAGRAMS

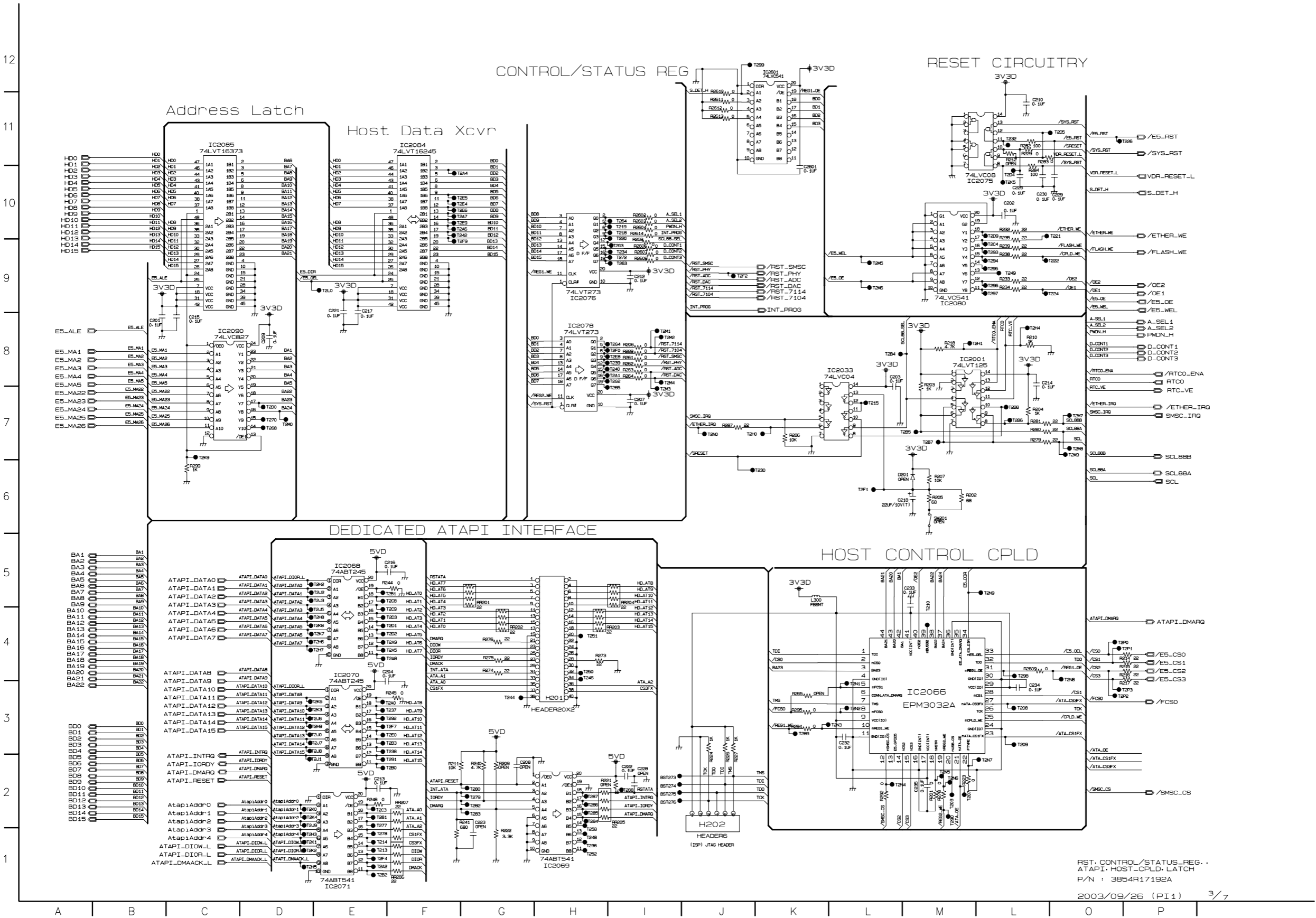
## 1. E5\_BGA, POWER, UART2 CIRCUIT DIAGRAM



## 2. DDR\_SDRAM, FLASH CIRCUIT DIAGRAM

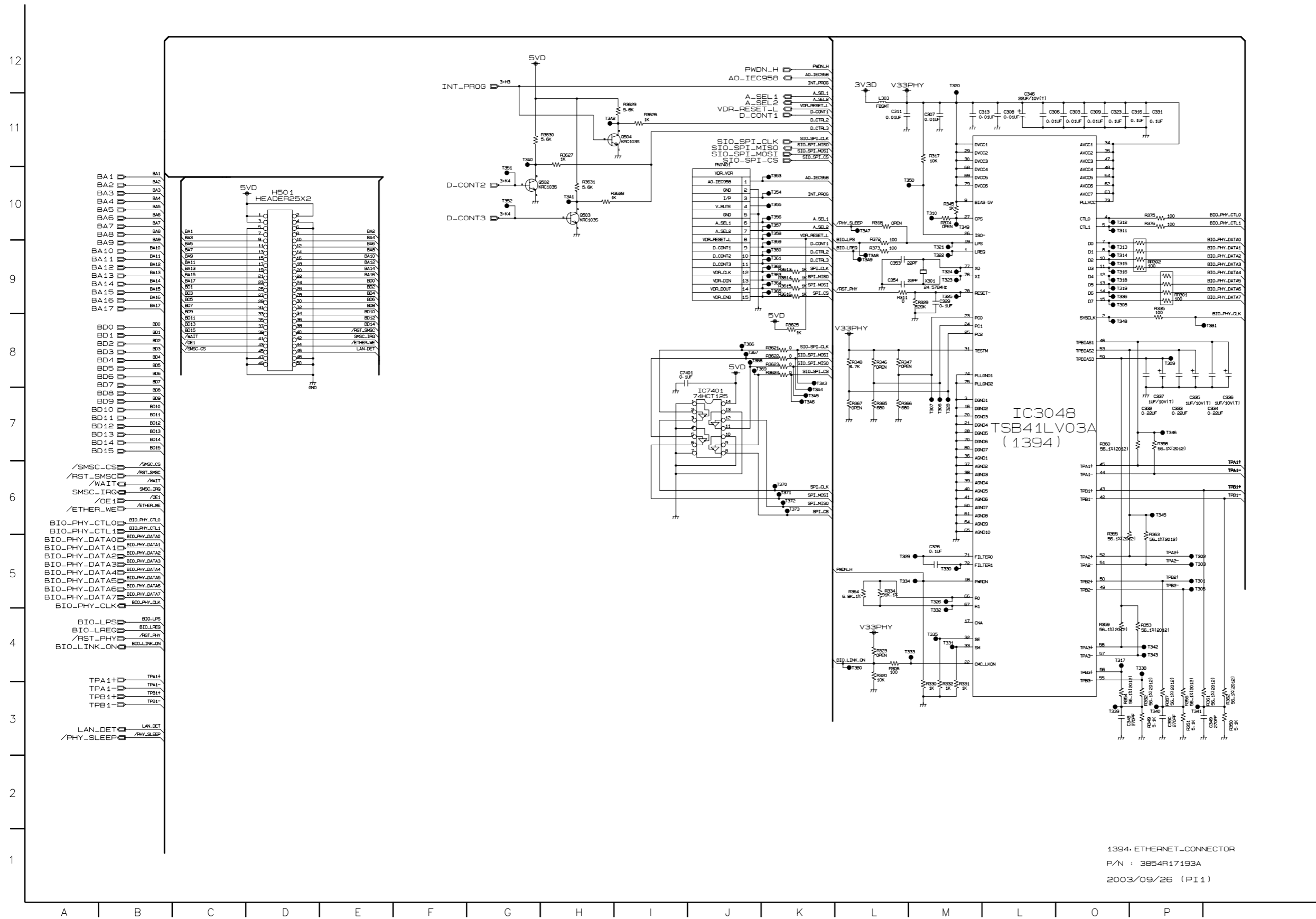


### 3. RST. CONTROL/STATUS\_REG/ATAPI, HOST\_CPLD/LATCH CIRCUIT DIAGRAM



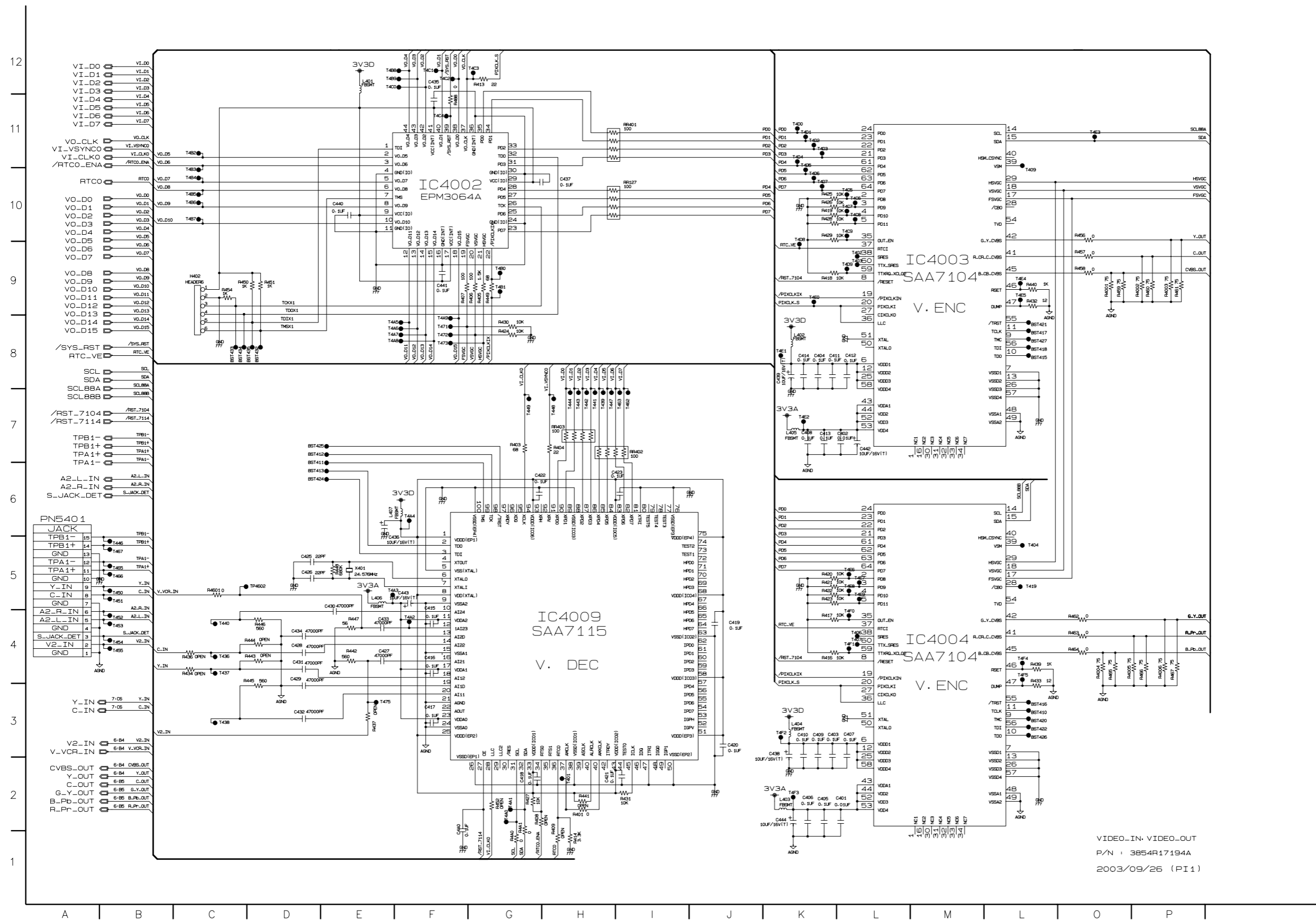
RST. CONTROL/STATUS\_REG .  
 ATAPI. HOST\_CPLD. LATCH  
 P/N : 3854R17192A  
 2003/09/26 (PI1) 3/7

# 4. 1394, ETHERNET\_CONNECTOR CIRCUIT DIAGRAM



1394. ETHERNET\_CONNECTOR  
P/N : 3854R17193A  
2003/09/26 (P11)

# 5. VIDEO\_IN/OUT CIRCUIT DIAGRAM

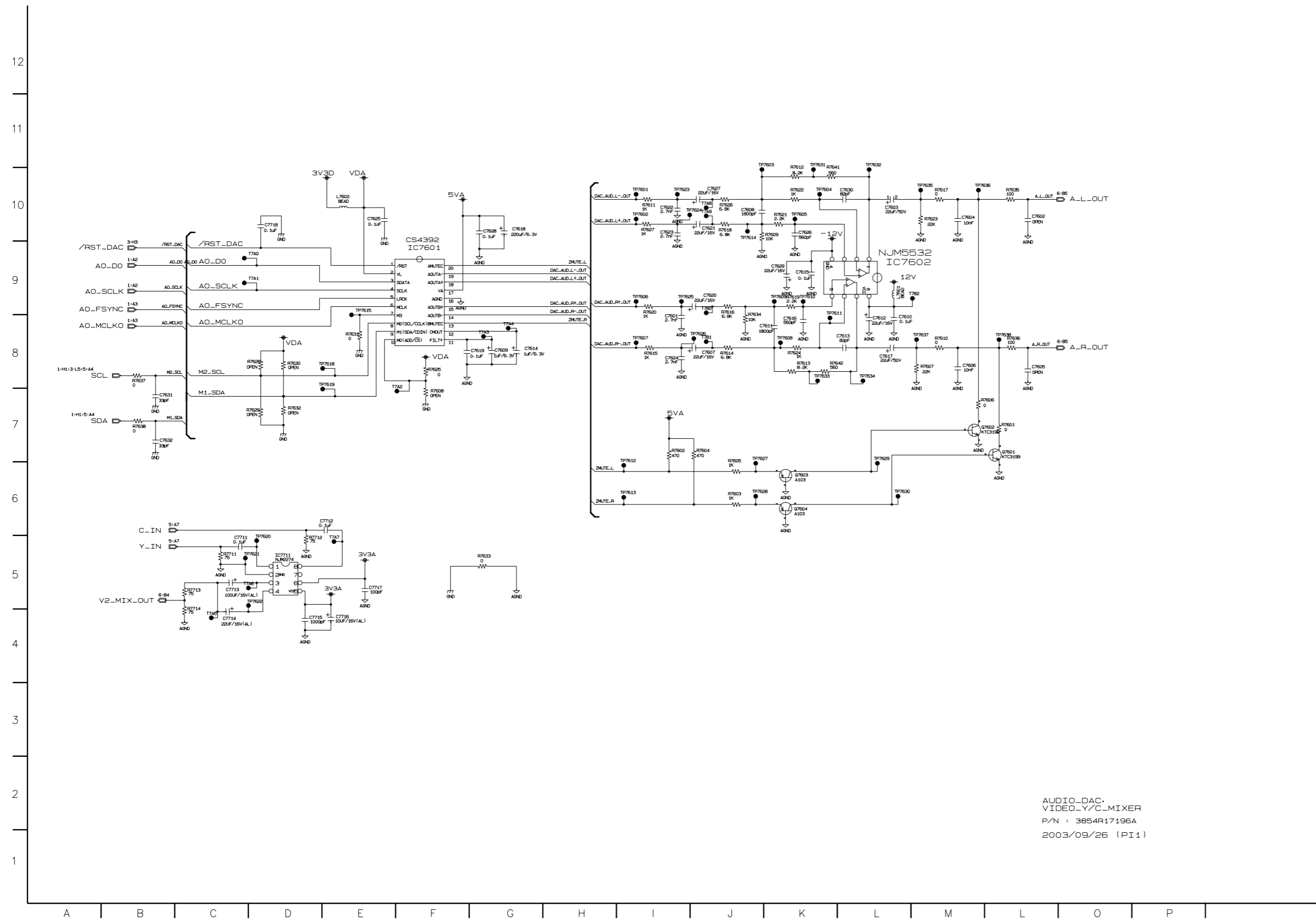


VIDEO-IN-VIDEO-OUT  
P/N : 3854R17194A  
2003/09/26 (PI1)



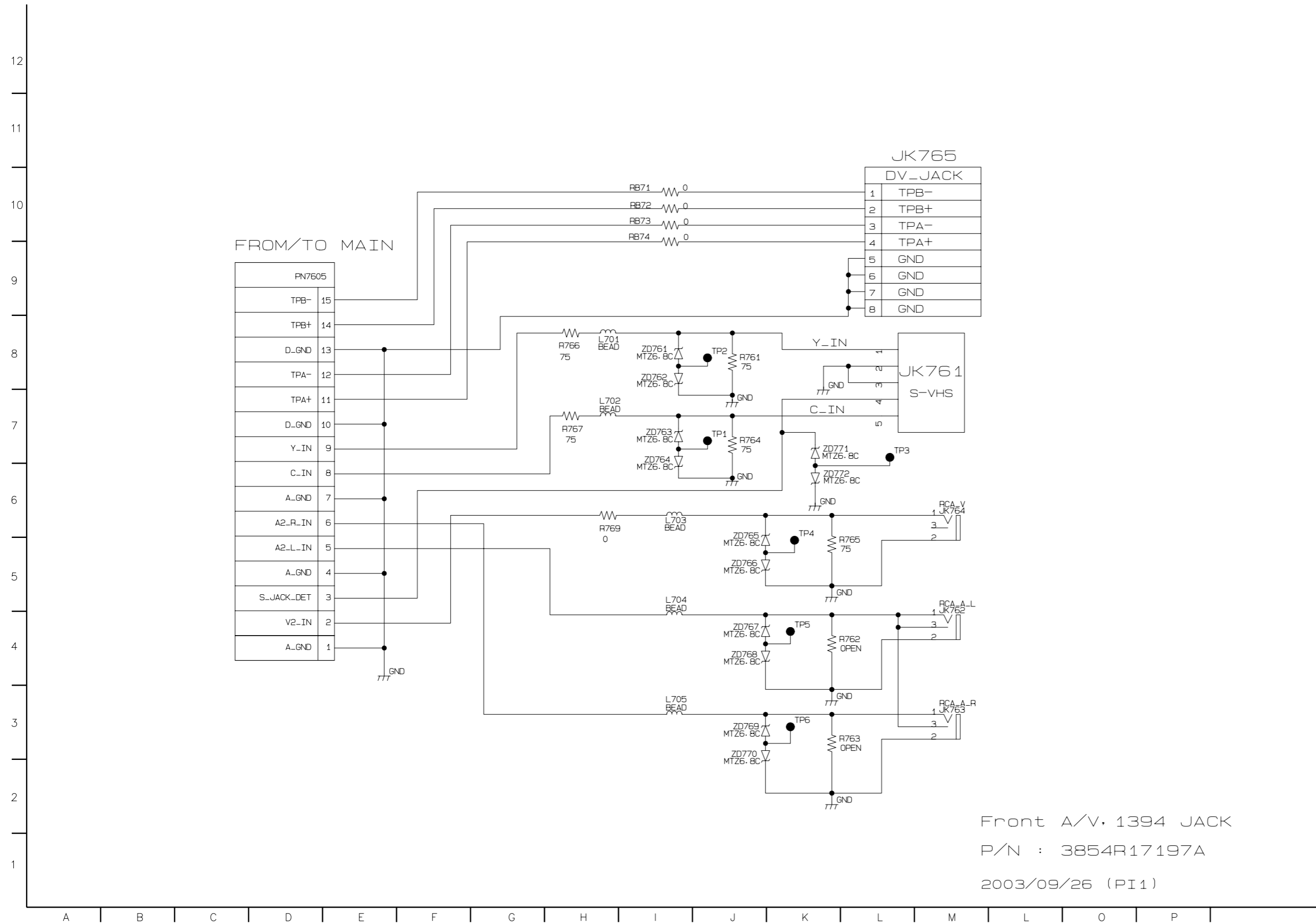


# 7. AUDIO DAC, VIDEO\_Y/MIXER CIRCUIT DIAGRAM



AUDIO\_DAC.  
VIDEO\_Y/C\_MIXER  
P/N : 3854R17196A  
2003/09/26 (PI1)

# 8. FRONT A/V, 1934 JACK CIRCUIT DIAGRAM

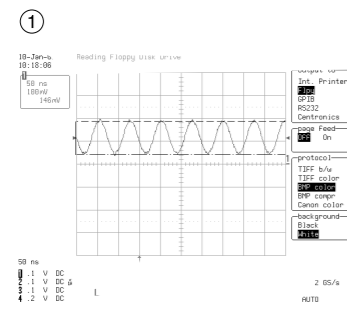


Front A/V, 1394 JACK

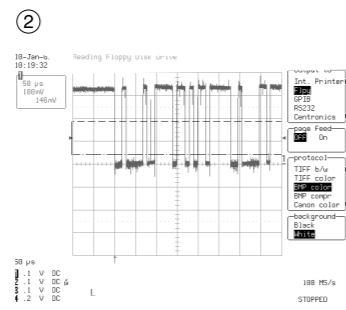
P/N : 3854R17197A

2003/09/26 (PI1)

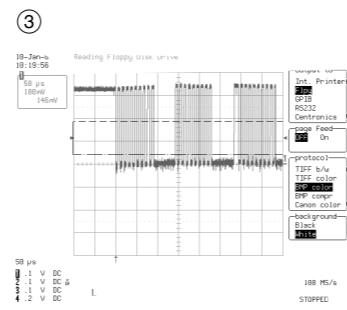
# • WAVEFORMS



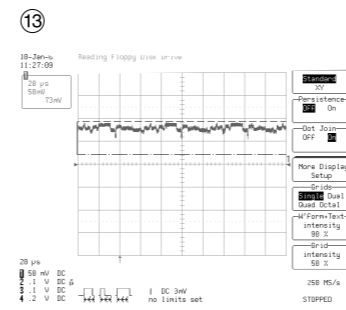
**X102  
13.5MHz**



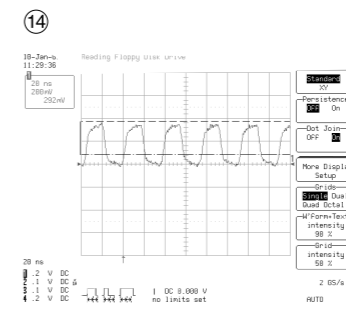
**IC4009  
PIN32  
SDA**



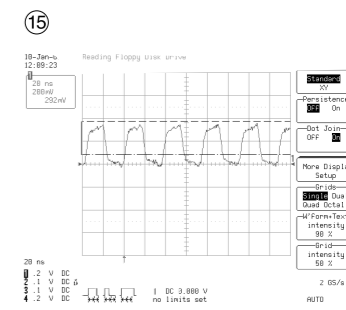
**IC4009  
PIN31  
SCL**



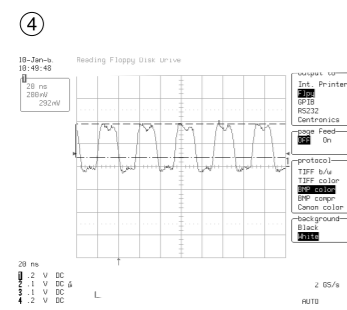
**PN7601  
PIN15  
B\_Pb\_OUT**



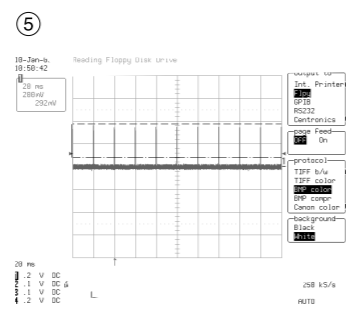
**IC4004  
PINS20, 36  
VO\_CLK**



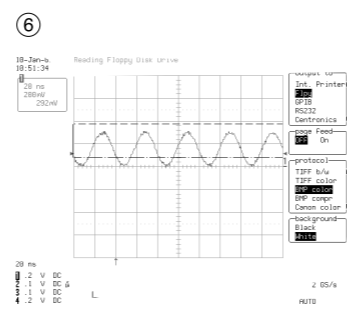
**IC4002  
PIN37  
VO\_CLK**



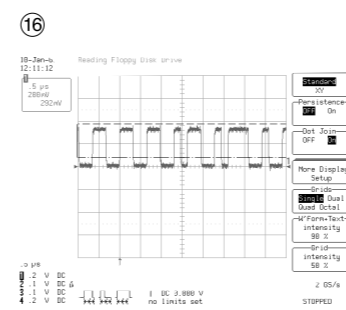
**IC4009  
PIN94  
VI\_CLK0**



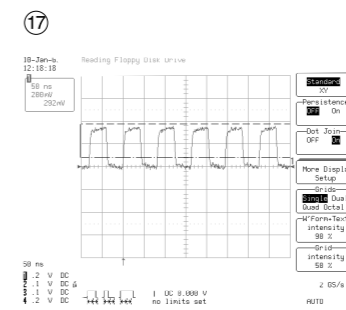
**IC4009  
PIN91  
VI\_SYNC0**



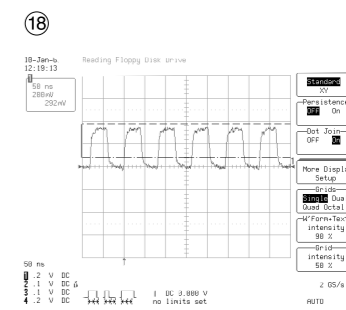
**IC4009  
PIN6  
24.576MHz**



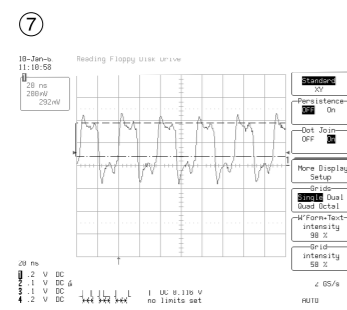
**PN7401  
PIN1  
AO\_IEC958**



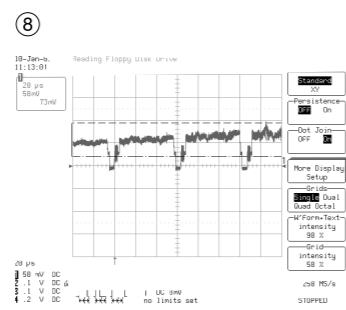
**PN6905  
PIN2  
ADC\_MCLK**



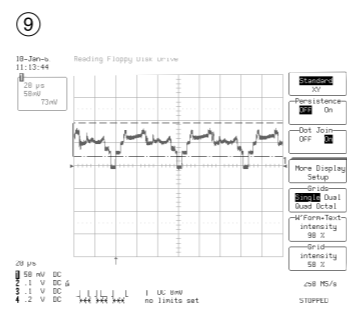
**PN7601  
PIN16  
DAC\_MCLK**



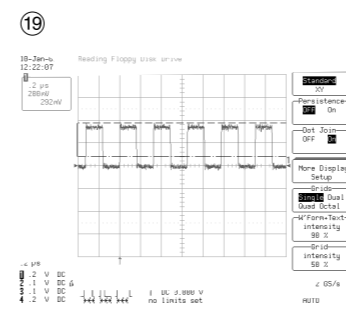
**IC4002  
PIN22  
/PIXCLKIX**



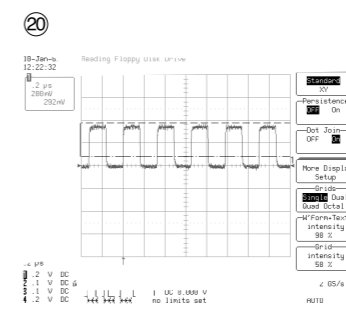
**PN7601  
PIN5  
CVBS\_OUT**



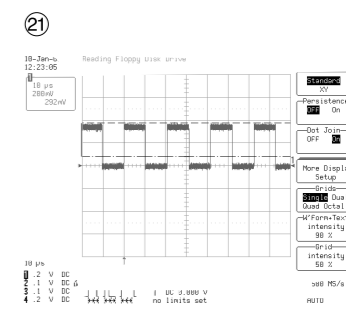
**PN7601  
PIN9  
Y\_OUT**



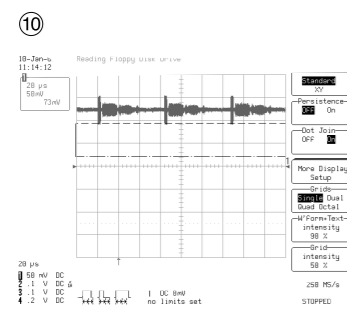
**PN6905  
PIN3  
AI\_SCLK**



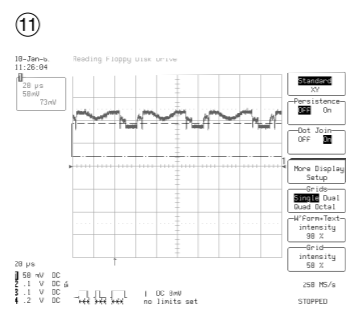
**PN7601  
PIN4  
AO\_SCLK**



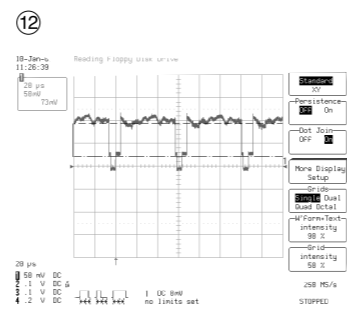
**PN6905  
PIN7  
AI\_FSYNC**



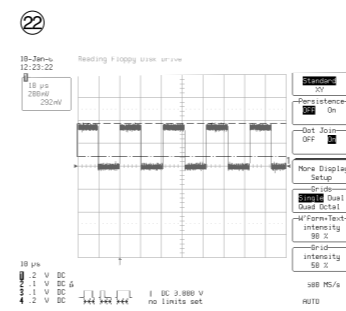
**PN7601  
PIN11  
C\_OUT**



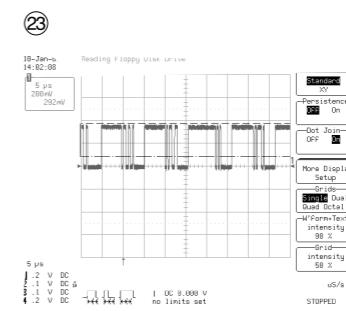
**PN7601  
PIN17  
R\_Pr\_OUT**



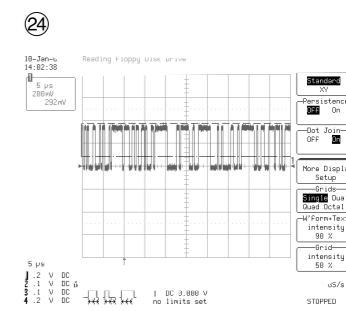
**PN7601  
PIN13  
G\_Y\_OUT**



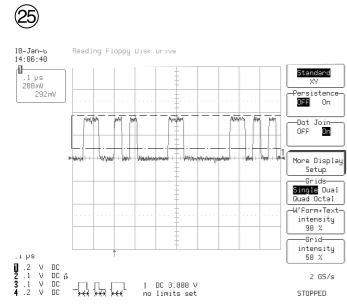
**PN7601  
PIN5  
AO\_FSYNC**



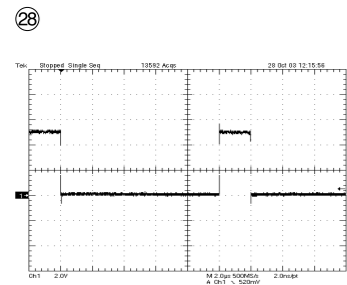
**PN6905  
PIN4  
AI\_T0\_E5**



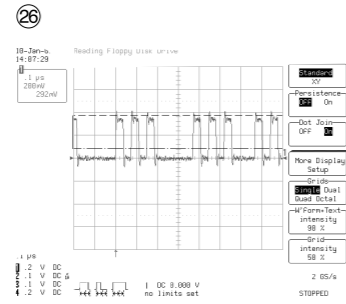
**PN7601  
PIN3  
AO\_D0**



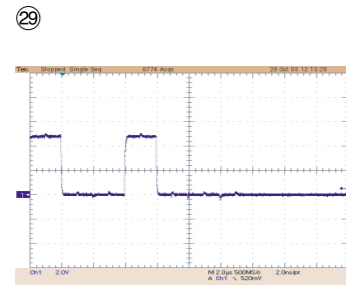
IC4002  
PIN38  
VO\_D0



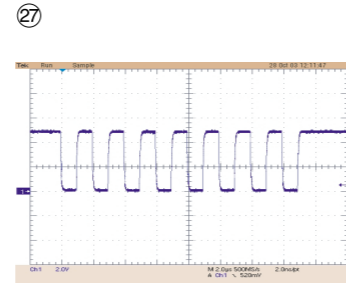
PN7401  
PIN 13  
VDR\_DIN



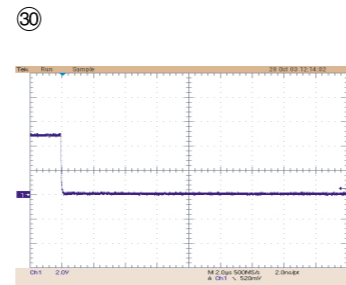
IC4009  
PIN90  
VI\_D0



PN7401  
PIN 14  
VDR\_DOUT



PN7401  
PIN 12  
VDR\_CLK



PN7401  
PIN 15  
VDR\_ENB

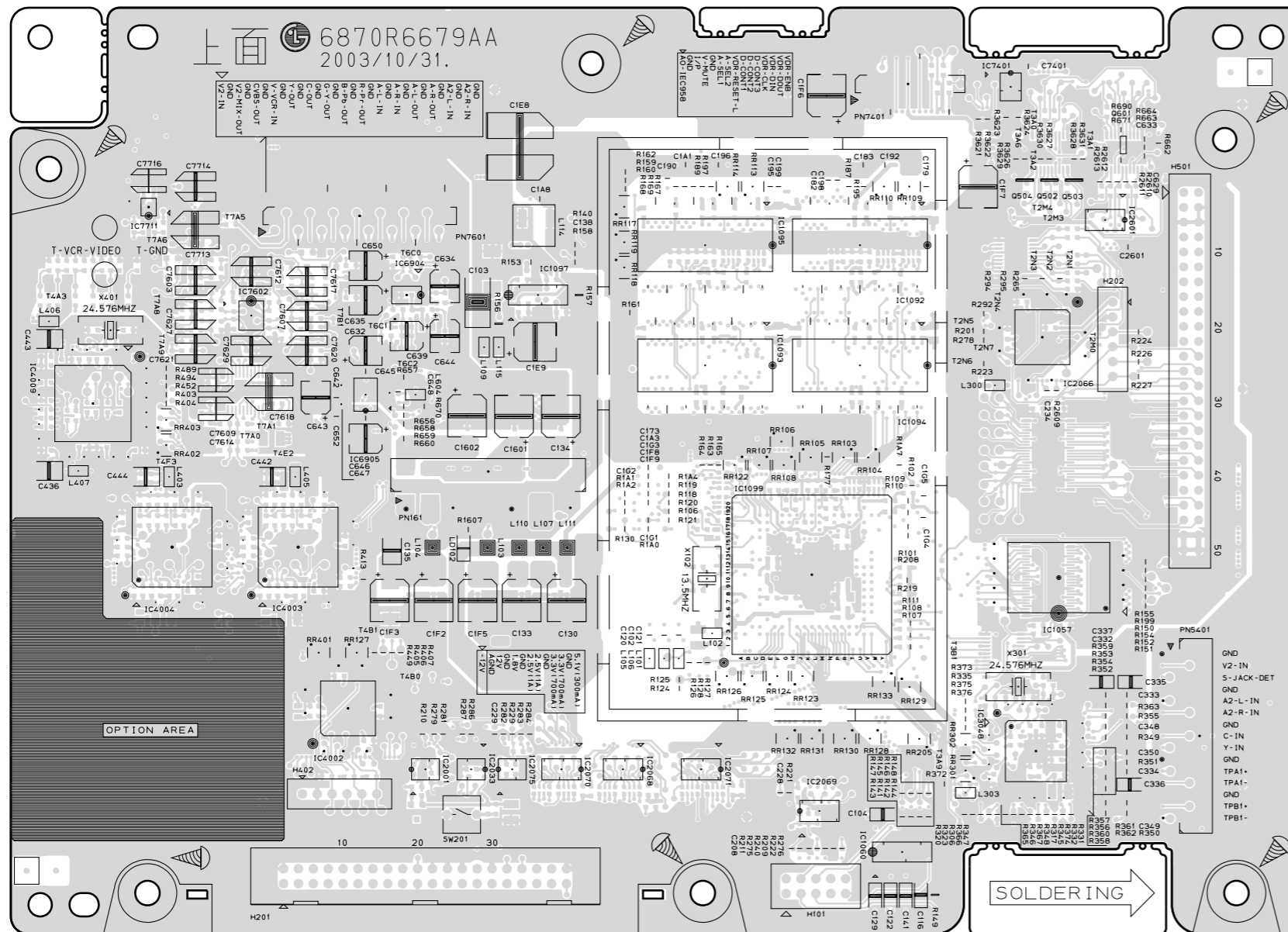
**• CIRCUIT VOLTAGE CHART**

MODE PIN NO.	EE	PB	REC	MODE PIN NO.	EE	PB	REC	MODE PIN NO.	EE	PB	REC	MODE PIN NO.	EE	PB	REC	MODE PIN NO.	EE	PB	REC	MODE PIN NO.	EE	PB	REC	MODE PIN NO.	EE	PB	REC	MODE PIN NO.	EE	PB	REC	MODE PIN NO.	EE	PB	REC
<b>IC 6905</b>				5	0	0	0	11	0.11	0.23	3.6	3	0.03	0.03	0.03	9	3.1*	3.1	3.0*	7	0	0	0	20	3.22	3.22	3.21	22	0	0	0				
1	0	3.21	3.21	6	0	0	0	12	0.02	0.22	0.4	4	0	0	0	10	0	0	0	8	3.21	3.21	3.21	<b>IC 1097</b>				23	0	0	0				
2	1.62	1.615	1.61	7	3.22	3.22	3.21	13	0.11	0.22	0.28	5	0.03	0.03	0.03	11	1.65	1.05	0.91	9	3.21	3.21	3.21	1	3.18	3.1	3.15	24	3.22	3.22	3.22				
3	1.61	1.61	1.61	8	0	0	0	14	0.11	0.22	0.17	6	0.03	0.03	0.03	12	0	0	0	10	0	0	0	2	3.21	3.2	3.21	<b>IC 2061</b>							
4	1.19	1.19	1.17	9	0	0	0	15	0.11	0.2	0.14	7	3.22	3.22	3.22	13	0.5	3.24	3.21	11	3.21	3.21	3.21	3	0.31	1.3	1.29	1	0.02	0	0				
5	3.21	3.21	3.21	10	0	0	0	16	0.11	0.1	0.1	8	0.03	0.03	0.03	14	3.21	3.24	3.21	12	3.21	3.21	3.21	4	0	0	0	2	3.23	3.23	3.21				
6	0	0	0	11	0	0	0	17	0.11	3.86	3.69	9	0.03	0.03	0.03	<b>IC 2069</b>				13	0	0	0	5	0	0	0	3	0.02	0	0				
7	1.59	1.58	1.59	12	0	0	0	18	0.11	3.86	0.44	10	0	0	0	1	0.01	0	0	14	3.21	3.21	3.21	6	1.31	1.3	1.3	4	0.02	0	0				
8	0	0	0.03	13	2.86	2.86	2.85	19	0.01	0	0	11	0	0.03	0.03	2	3.24	3.23	3.21	15	3.21	3.21	3.21	7	3.2	3.2	3.2	5	0.02	0	0				
9	0	0	0	14	2.86	2.86	2.85	20	4.97	4.95	4.94	12	0.03	0.03	0.03	3	0.02	0.02	0.02	16	3.21	3.21	3.21	8	0	0	0	6	0.02	0.17	0.75				
10	0	0	0	15	0	0	0	<b>IC 6905</b>				13	0.03	0.03	0.03	4	4.95	4.95	4.92	17	3.21	0.03	3.22	9	3.18	3.18	3.15	7	0.02	0.16	0.73				
11	3.19	3.19	3.18	16	0	0	0	1	3.23	3.21	3.21	14	0.03	0.03	0.03	5	0.02	0	0.26	18	3.21	3.22	3.22	10	1.31	1.3	1.29	8	0.13	0.16	0.73				
12	0	0	0	17	2.86	2.86	2.86	2	2.14	2.4	1.73*	15	0	0	0	6	0.02	0	0	19	0	0	0	11	1.29	1.28	1.27	9	0.13	0.16	0.74				
13	1.61	1.61	1.61	18	3.22	3.22	3.21	3	2.15	2.2	1.73*	16	0	0	0	7	0.02	0	0	20	3.21	2.22	3.22	12	3.14	3.12	3.13	10	0.02	0	0				
14	1.61	1.61	1.61	19	2.86	2.86	2.86	4	2.15	2.2	1.73*	17	0.03	0.03	0.03	8	0.07	0	0	<b>IC 2076</b>				13	0	0	0	11	0.15	0.22	0.76				
15	0	1.62	1.62	20	0	0	0	5	2.15	2.2	1.73*	18	3.19	3.19	3.19	9	0.02	0	0	1	3.22	3.22	3.21	14	1.31	1.3	1.29	12	0.18	0.21	0				
16	0	3.21	3.21	21	0	0	0	6	2.15	2.3	2.34	19	0.03	0.04	0.03	10	0.02	0	0	2	0.03	3.22	3.21	15	2.61	2.6	2.57	13	0.15	0.21	0				
<b>IC 7602</b>				22	0	0	0	7	2.15	2.3	1.7*	20	0.03	0.04	0.03	11	0.11	0.1	0.1	3	2.87	2.86	2.86	16	3.14	3.13	3.14	14	0.15	2	0.78				
1	0	0	0	23	0	0	0	8	2.15	2.3	2.3	21	0	0	0	12	0.11	0.1	0.1	4	2.87	0.02	2.86	<b>IC 2033</b>				15	0.02	0	0				
2	0	0	0	24	3.22	3.22	3.21	9	2.15	2.3	1.7	22	0.03	0.04	0.03	13	0.11	0.1	0.1	5	0.03	3.22	3.22	1	0.2	0.5	0.7	16	0.02	0	0				
3	0	0	0	25	3.22	3.22	3.21	10	0.01	0	0	23	0.03	0.04	0.03	14	0.11	0.1	0.1	6	0.03	0.02	0.03	2	3.21	3.22	3.21	17	0.02	0	0				
4	-11.93	-11.9	-11.92	26	0	0	0	11	3.85	0	0	24	0	0	0	15	0.11	0.1	0.1	7	0.03	0.02	0	3	0.24	0.5	0.73	18	2.88	2.88	2.89				
5	0	0	0	27	0	0	0	12	0.05	2.6*	3.7	25	0	0	0	16	4.13	4.14	4.15	8	0.03	2.87	2.86	4	3.22	3.22	3.21	19	3.23	3.23	3.21				
6	0	0	0	28	0	0	0	13	3.85	2.7*	0.1	26	0	0	0	17	0.11	0.1	0.11	9	0.04	0.01	3.21	5	0	0	0	20	3.24	3.23	3.21				
7	0	0	0	29	0	0	0	14	3.85	1.9*	0.1	27	0	0	0	18	4.95	4.92	4.9	10	0	0	0	6	3.22	3.2	3.21	IC1057							
8	12.19	12.19	12.18	30	2.86	3.86	2.85	15	3.85	*	0.1	28	0	0.02	0	19	0.02	0	0	11	3.22	3.22	3.22	7	0	0	0	1	0.05	0.03	0.04				
<b>IC 6904</b>				31	0	3.21	3.21	16	3.85	1.7*	0.1	29	0	0	0	20	4.96	4.95	4.94	12	3.22	3.22	3.22	8	0.02	0	0	<b>IC 6904</b>							
1	2.49	2.47	2.47	32	2.86	3.22	2.84	17	3.85	1.4*	0.1	30	2.86	2.86	2.85	<b>IC 2071</b>				13	2.86	2.86	2.86	9	3.22	3.22	3.21	3	0.05	0.03	0.04				
2	0	2.47	2.47	33	2.86	0	0	18	3.85	2.8	0.1	31	3.22	3.22	3.21	1	0.02	0	0	14	0	0	0	10	3.22	3.22	3.21	4	0.05	0.03	0.04				
3	2.49	2.47	2.47	34	0	0	0	19	0.01	2.8	0	32	2.86	2.87	2.85	2	0.02	0	0	15	0.04	0.04	0.04	11	0	0	0	5	0.05	0.03	0.04				
4	0.02	0	0	35	0	0	0	20	4.96	4.9	4.93	33	0	0	0	3	0.05	0	0	16	0.04	0.04	0.04	12	0	0	0	6	0.05	0.03	0.04				
5	2.49	2.47	2.47	36	2.86	2.88	2.86	<b>IC 7601</b>				34	0	0	0	4	0.02	0	0	17	0	0	0	13	3.22	3.22	3.21	7	0.05	0.03	0.04				
6	0.02	2.47	2.47	37	0	0	0	1	3.22	3.22	3.22	35	2.86	2.86	2.86	5	0.05	3.22	3.2	18	0	0	0	14	3.22	3.22	3.21	8	0.05	0.03	0.04				
7	0.02	2.47	2.47	38	0	0	0	2	3.22	3.22	3.22	36	2.86	2.86	2.86	6	3.23	3.22	3.2	19	0.04	0.04	0.04	<b>IC 2090</b>				9	0.05	0.03	0.04				
8	4.97	4.94	4.94	39	0	0	0	3	1.6	1.6	1.6	37	0	0	0	7	3.23	3.22	3.02	20	0.04	3.22	2.22	1	0	0	0	10	0.05	0.03	0.04				
<b>IC 6904</b>				40	0	0	0	4	1.6	1.6	1.61	38	0	0	0	8	3.23	3.15	3.2	<b>IC 2078</b>				2	0	0	0	<b>IC 6904</b>							
1	0	0	0	41	0	0	0	5	1.6	1.6	1.59	39	0	0	0	9	3.23	3.15	3.2	1	3.22	3.22	3.22	3	0	0	0	12	3.24	3.21	3.21				
2	0.02	0	0	42	3.22	3.22	3.21	6	1.6	1.6	1.61	40	0	0	0	10	0.05	0	0	2	3.22	3.22	3.22	4	0	0	0	13	0.02	0	0				
3	0	0	0	43	3.22	0	0	7	0	1.62	0	41	0	0	0	11	0.02	4.92	4.9	3	2.86	2.86	2.86	5	0	0	0	14	3.24	3.21	3.21				
4	0	0	0	44	0	0	0	8	3.12	3	3*	42	3.22	3.22	3.22	12	4.93	4.82	4.9	4	0	0	0	6	0	0	0	15	4.3	0.86	0.63				
5	0	0	0	45	0	0	0	9	3.12	3.16	3.14	43	0	0	0	13	4.93	4.92	4.9	5	3.22	3.22	3.22	7	0	0	0	16	0.05	0.03	0.04				
6	0	0	0	46	0	0	0	10	3.21	3.23	3.21	44	0	0	0	14	0.03	4.92	4.9	6	3.22	3.22	3.22	8	0	0	0	17	0.05	0.03	0.04				
7	0	0	0	47	2.88	2.88	2.85	11	4.87	4.84	4.87	45	0	0	0	15	4.93	4.92	4.9	7	0	0	0	9	0	0	0	18	0.05	0.03	0.04				
8	3.22	3.22	3.21	48	3.22	3.22	3.22	12	2.31	1.99	2.31	46	0	0	0	16	0.03	0.1	0.1	8	0	0	0	10	0	0	0	19	0.05	0.03	0.04				
9	5.08	5.08	5.07	<b>IC 2068</b>				13	0.37	0.37	0.38	47	2.86	2.9	2.85	17	0.03	0.1	0.1	9	0	0.04	0.03	11	0	0	0	20	0.05	0.03	0.04				
10	3.22	3.22	3.21	1	3.23	3.13	3.21	14	2.36	2.36	2.37	48	0	0	0	18	0.11	0.1	0.1	10	0	0	0	12	0	0	0	21	0.02	0	0				
11	3.22	3.22	3.21	2	0.19	2.46	2.37	15	0.1	2.37	2.37																								

MODE PIN NO.	EE	PB	REC	MODE PIN NO.	EE	PB	REC	MODE PIN NO.	EE	PB	REC	MODE PIN NO.	EE	PB	REC	MODE PIN NO.	EE	PB	REC	MODE PIN NO.	EE	PB	REC	MODE PIN NO.	EE	PB	REC	MODE PIN NO.	EE	PB	REC
31	0.02	0	0	37	1.53	1.53	1.52	47	0.7	0.78	0.7	37	0.2	0.2	0.2	27	2.9	3.18	3.18	82	0.16	0.1	0.8	27	3.18	3.18	3.14	37	0	0	0
32	3	2.91	3.05	38	1.22	1.22	1.22	48	0	0	0	38	0.2	0.2	0.2	28	1.61	1.61	1.61	83	3.18	3.18	3.16	28	3.18	3.18	3.14	38	0	0	0
33	0.02	0	0	39	3.17	3.17	3.17	49	0	0	0	39	0	0	0	29	1.6	1.6	1.6	84	0.17	0.1	1.2	29	3.18	3.18	3.14	39	0	0	0
34	0.02	0	0	40	1.18	1.17	1.17	50	3.14	3.14	3.14	40	3	3	3	30	3.18	3.18	3.18	85	0.16	0.2	1.5	30	0	0	0	40	0	0	0
35	0.02	0	0	41	3.16	3.16	3.16	51	0	0	0	41	0.42	0.42	0.41	31	3.18	3.1	3.18	86	0	0.11	1.2	31	3.18	3.18	3.14	41	0	0	0
36	3.02	2.91	3.05	42	1.2	1.01	1.03	52	3.15	3.15	3.15	42	0.47	0.4	0.38	32	3.18	3.1	3.18	87	0.2	0.1	1.28	32	0.06	0.06	0.06	42	0	0	0
37	3.24	3.21	3.21	43	0.99	1.04	1.13	53	3.15	3.15	3.15	43	3.15	3.15	3.15	33	3.18	3.18	3.178	88	0	0	0	33	3.18	3.18	3.14	43	0	0	0
38	0.02	0	0	44	1.4	1.38	1.6	54	0.07	0.07	0.05	44	3.15	3.15	3.15	34	3.18	3.18	3.178	89	2.12	0.1	1.3	34	3.18	3.18	3.14	44	3.15	3.15	3.15
39	3.08	2.91	3.05	<b>IC 4003</b>				55	2.3	2.3	2.3	45	0.39	0.4	0.4	35	0.06	0.1	0.2	90	0.17	0.13	0	35	0	0	0	45	3.15	3.15	3.15
40	0.02	0	0	1	0	0	0	56	2.3	2.3	2.3	46	1.23	1.23	1.23	36	0	0	0	91	0	0.1	0	36	0	0	0	46	3.15	3.15	3.15
41	0.02	0	0	2	0	0	0	57	0	0	0	47	0.5	0.5	0.5	37	0	0	0	92	0	0.08	0	37	0	0	0	47	3.15	3.15	3.15
42	0.02	0	0	3	0	0	0	58	3.16	3.15	3.15	48	0	0	0	38	0	0	0	93	3.18	3.18	3.16	38	0	0	0	48	3.15	3.15	3.15
43	0.02	0	0	4	0	0	0	59	0	0	0	49	0	0	0	39	3.18	3.18	3.18	94	2.11	0.13	1.6	39	0.06	0.06	0.06	49	0	0	0
44	0.02	0	0	5	0	0	0	60	0.08	0.04	0.05	50	3.12	3.12	3.12	40	0	0	0	95	0.16	0.1	2.38	40	3.18	3.16	3.14	50	0	0	0
45	0.02	0	0	6	3.16	3.15	3.15	61	1.55	1.49	1.58	51	0	0	0	41	0	0	0	96	0	0	0	41	3.18	3.18	3.14	51	3.15	3.15	2.82
46	0.02	0	0	7	0	0	0	62	1.18	0.84	1.04	52	3.13	3.13	3.13	42	0	2.26	2.26	97	2.27	2.27	2.29	42	0	0	0	52	3.15	3.15	2.89
47	3.24	2.91	3.21	8	3.18	3.17	3.17	63	1.31	0.7	1.2	53	3.13	3.13	3.13	43	3.18	3.18	3.18	98	2.27	2.27	2.29	43	0.04	0.04	0.04	53	3.15	3.15	2.39
48	0.05	0	0.04	9	2.3	2.28	2.29	64	1.22	1.09	1.2	54	0.2	0.2	0.2	44	0.07	3.17	0.2	99	2.27	2.27	2.29	44	0.04	0.04	0.04	54	3.15	3.15	3.15
<b>IC 4002</b>				10	0.2	0.2	0.2	<b>IC 4004</b>				55	2.28	2.28	2.28	45	0	3.18	3.18	100	0	0	0	<b>IC 3048</b>				55	0	0	0.02
1	3.17	3.17	3.17	11	0.2	0.2	0.2	1	0.02	0.02	0.02	56	2.28	2.28	2.28	46	0.05	0.2	0	<b>IC 7711</b>				1	0	0	0	56	0	0	0
2	1.17	0.7	0.8	12	3.17	3.15	3.15	2	0	0	0	57	0	0	0	47	0	0	0	1	1.31	1.31	1.31	2	1.5	1.5	1.5	57	3.13	3.13	2.94
3	1.46	0.75	0.78	13	0	0	0	3	0	0	0	58	3.13	3.13	3.13	48	0.08	0.1	0	2	0	0	0	3	0	0	0	58	3.12	3.12	2.94
4	0	0	0	14	3.17	3.1	3.16	4	0	0	0	59	0	0	0	49	0.06	0.14	0.02	3	0.28	0.28	0.28	4	0	0	0	59	3.12	3.12	3.12
5	1.26	1.03	1.67	15	3.11	3.0	3.1	5	0	0	0	60	0.21	0.21	0.21	50	0	0	0	4	0.36	0.36	0.36	5	0	0	0	60	0	0	0
6	1.17	1.17	1.18	16	0	0	0	6	3.15	3.15	3.13	61	1.5	1.2	1.9	51	3.18	3.18	3.16	5	3.17	3.17	3.17	6	3.16	3.16	3.16	61	0	0	0
7	3.16	3.16	3.16	17	3.12	3.12	3.11	7	0	0	0	62	1.2	0	1	52	0.05	0.16	0	6	3.17	3.17	3.17	7	0.03	0.03	0	62	3.16	3.16	3.16
8	1.18	1.2	1.17	18	3.12	3.12	3.11	8	3.16	3.16	3.14	63	1.12	0	1.6	53	0.08	0.2	0	7	0	0	0	8	0.02	0	0.02	63	3.16	3.16	3.16
9	3.17	3.16	3.16	19	1.49	1.49	1.49	9	2.34	2.23	2.29	64	1.2	0	1.73	54	0.09	0.18	0	8	1.4	1.4	1.4	9	3.16	3.16	3.16	64	0	0	0
10	1.32	1.3	1.13	20	1.53	1.53	1.53	10	0.5	0.4	0.5	<b>IC 4009</b>				55	0.07	0.2	0	<b>IC 2066</b>				10	0	0	0	65	0	0	0
11	0	0	0	21	1.14	0.87	1.05	11	0.54	0.45	0.4	1	3.16	3.16	3.16	56	0.05	0.2	0	1	3.18	3.16	3.14	11	0	0	0	66	0	0	0
12	1.09	1.13	1.12	22	1.2	1.08	1.05	12	3.15	3.15	3.15	2	0.2	0.2	0.2	57	0	0.13	0	2	3.18	3.18	3.14	12	0.03	0.03	0	67	1.26	1.26	1.26
13	1.17	1.17	1.18	23	1.18	1.2	1.14	13	0	0	0	3	2.28	2.28	2.28	58	3.18	3.18	3.18	3	0	0	0	13	0	0	0	68	3.16	3.16	3.17
14	1.3	1.21	1.02	24	1.24	1.21	1.21	14	3	2.94	3.1	4	0.1	0.4	0.2	59	0.05	0.14	0	4	0	0	0	14	0	0	0	69	3.16	3.16	3.16
15	1.28	1.21	0.87	25	3.16	3.16	3.16	15	3.1	2.97	3.1	5	0	0	0	60	0.07	0.2	0	5	3.18	3.18	3.14	15	0	0	0	70	0	0	0
16	0	0	0	26	0	0	0	16	0	0	0	6	1.55	1.55	1.55	61	0.09	0.16	0	6	0	0	0	16	0	0	0	71	0	0	0
17	3.16	3.16	3.16	27	0	0	0	17	3.11	3.1	3.1	7	1.65	1.47	1.47	62	0.07	0.17	0	7	3.18	3.18	3.14	17	3.16	3.16	3.15	72	1.1	1.1	1.1
18	1.84	1.97	2	28	2.41	2.41	2.41	18	3.11	3.1	3.1	8	3.19	3.19	3.19	63	0	0	0	8	3.18	3.18	3.14	18	0.03	0.03	0.03	73	3.12	3.12	3.12
19	3.15	3.15	3.15	29	3.16	3.16	3.15	19	1.49	1.48	1.48	9	0	0	0	64	0.05	0.17	0	9	3.18	3.18	3.14	19	3.16	3.16	3.16	74	0	0	0
20	3.15	3.15	3.15	30	0	0	0	20	1.52	1.52	1.52	10	0	0	0	65	0.05	0.2	0.4	10	3.18	3.18	3.14	20	0	0	0	75	0	0	0
21	3.16	3.16	3.16	31	0	0	0	21	1.19	0.97	1.19	11	3.19	3.19	3.19	66	0.07	0.18	0.3	11	0	0	0	21	0	0	0	76	1.4	1.4	1.4
22	1.47	1.47	1.47	32	0	0	0	22	1.2	1.16	1.17	12	0.16	0.1	1	67	0.1	0.15	0.17	12	3.18	3.18	3.14	22	0	0	0	77	1.37	1.37	1.4
23	1.76	1	1.3	33	0	0	0	23	1.2	1.13	1.17	13	0	0	0	68	3.18	3.18	3.18	13	0	0	0	23	0	0	0	78	3.16	3.16	3.16
24	0	0	0	34	0	0	0	24	1.24	1.18	1.2	14	0	0	0	69	0.05	0.05	0.3	14	3.18	3.18	3.14	24	0	0	0	79	3.16	3.16	3.16
25	1.19	0.84	1	35	0.5	0.5	0.5	25	3.15	3.15	3.15	15	0	0	0	70	0.06	0.08	0.35	15	3.18	3.18	3.14	25	3.16	3.16	3.14	80	0	0	0
26	0.05	0.05	0.05	36	1.53	1.53	1.53	26	0	0	0	16	0	0	0	71	0.1	0.03	0	16	0	0	0	26	3.16	3.16	3.16				
27	1.53	0.78	0.98	37	0.07	0.06	0.06	27	0	0	0	17	3.19	3.19	3.19	72	0.08	0.05	0.34	17	3.18	3.18	3.14	27	3.15	3.15	3.15				
28	1.82	1.45	1.57	38	0.08	0.05	0.05	28	2.4	2.4	2.4	18	0	0	0	73	2.27	2.27	2.27	18	0	0	3.14	28	0	0	0				
29	3.16	3.16	3.16	39	0	0	0	29	3.15	3.15	3.15	19	1	1	1	74	2.27	2.27	2.27	19	3.18	3.18	3.14	29	3.16	3.16	3.16				
30	0	0	0	40	3.04	3.04	3.04	30	0	0	0	20	1	1	1	75	3.18	3.18	3.16	20	3.18	3.18	3.14	30	3.16	3.16	3.16				
31	1.38	1.19	1.13	41	0.61	0.61	0.61	31	0	0	0	21	0	0	0	76	0	0	0	21	3.18</										

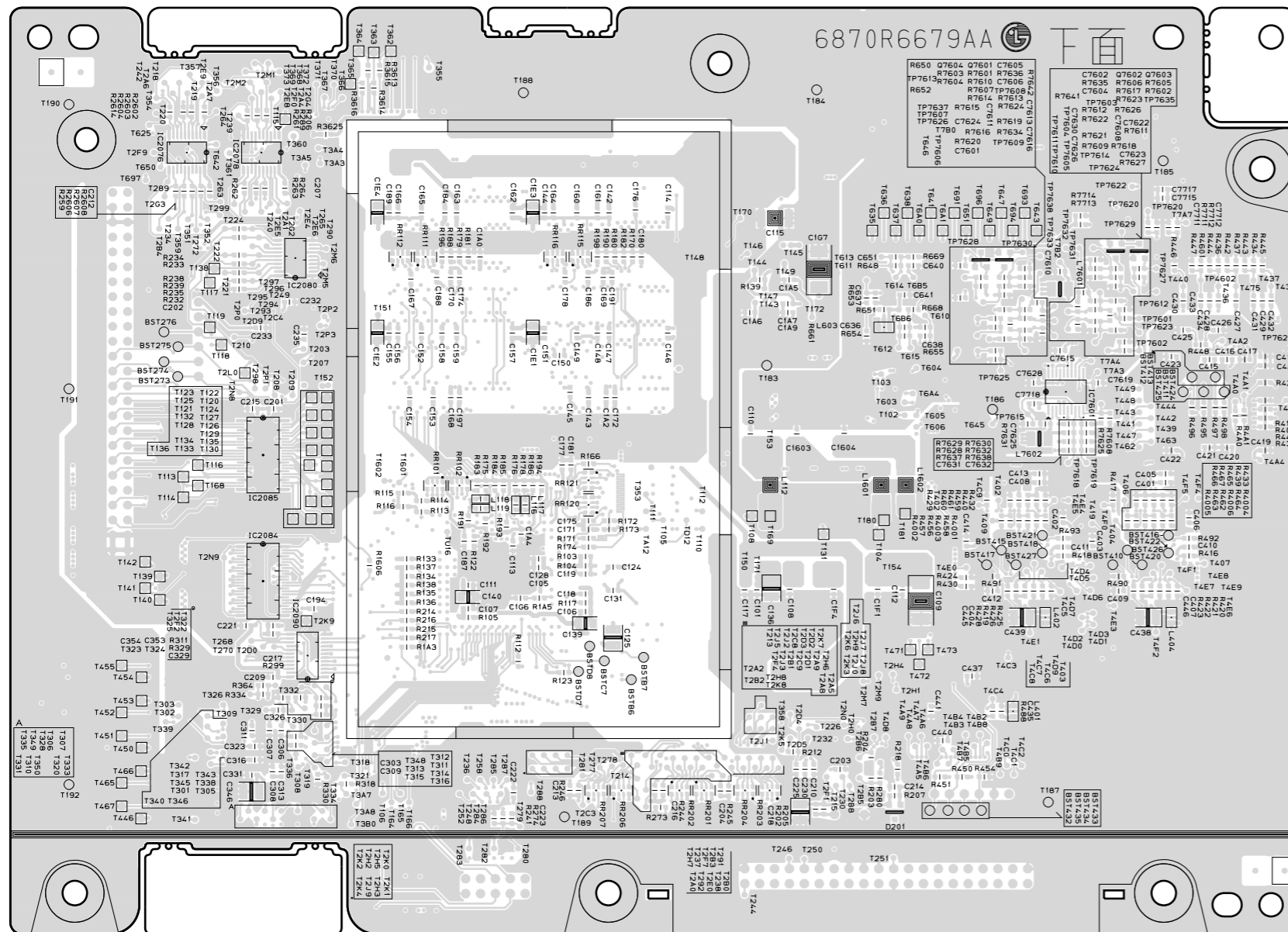
# PRINTED CIRCUIT DIAGRAMS

## 1. MAIN P.C.BOARD(TOP VIEW)

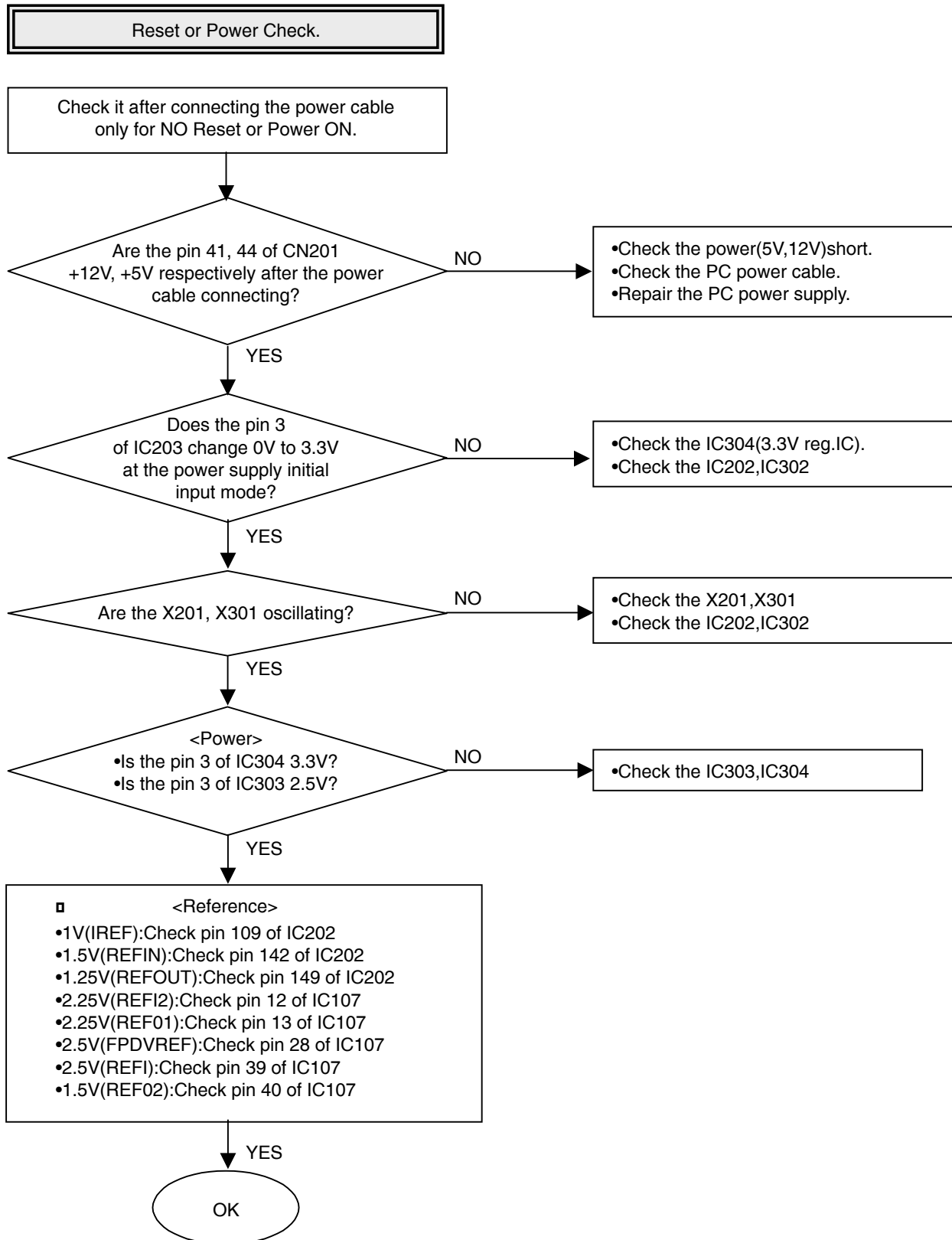


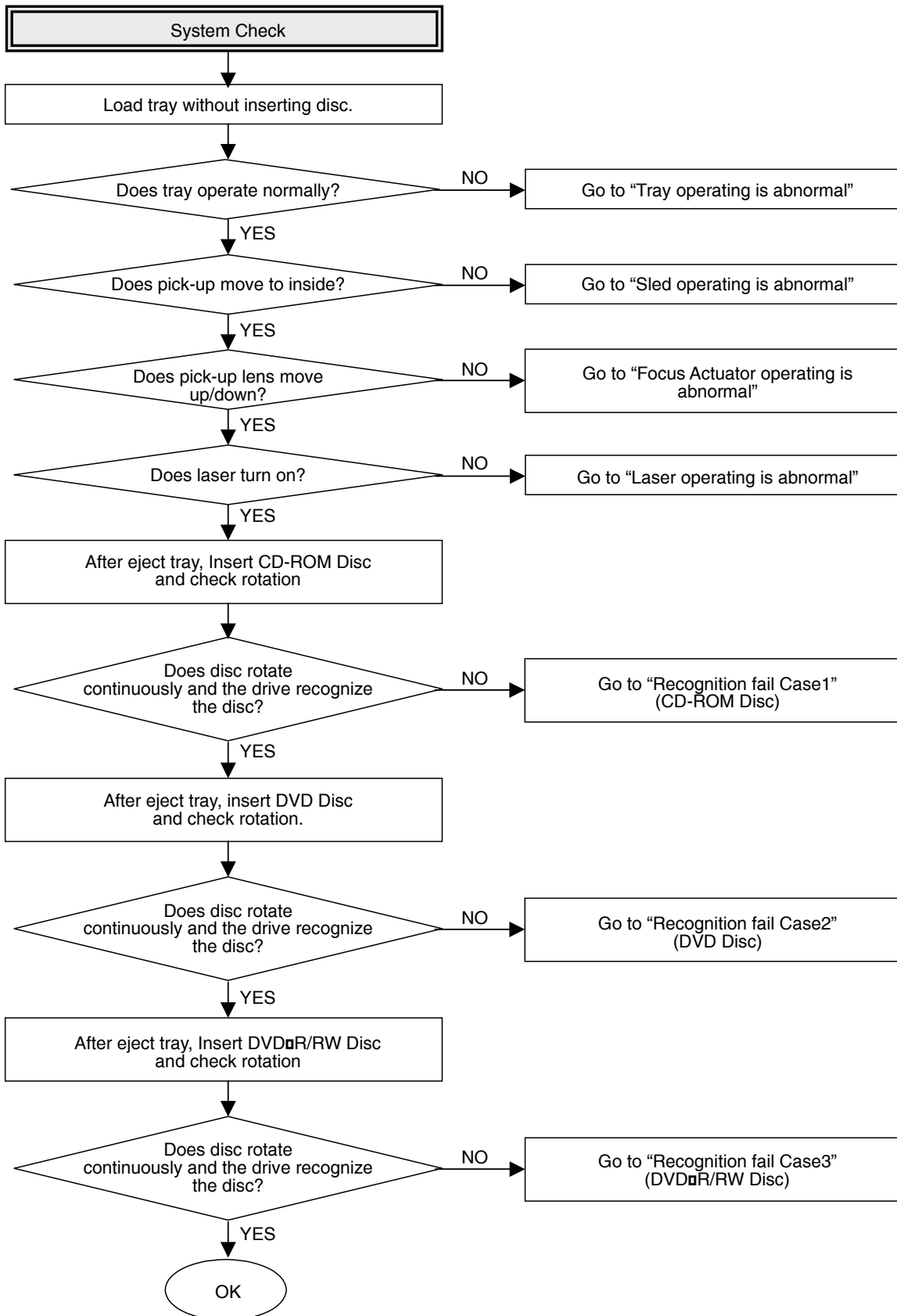


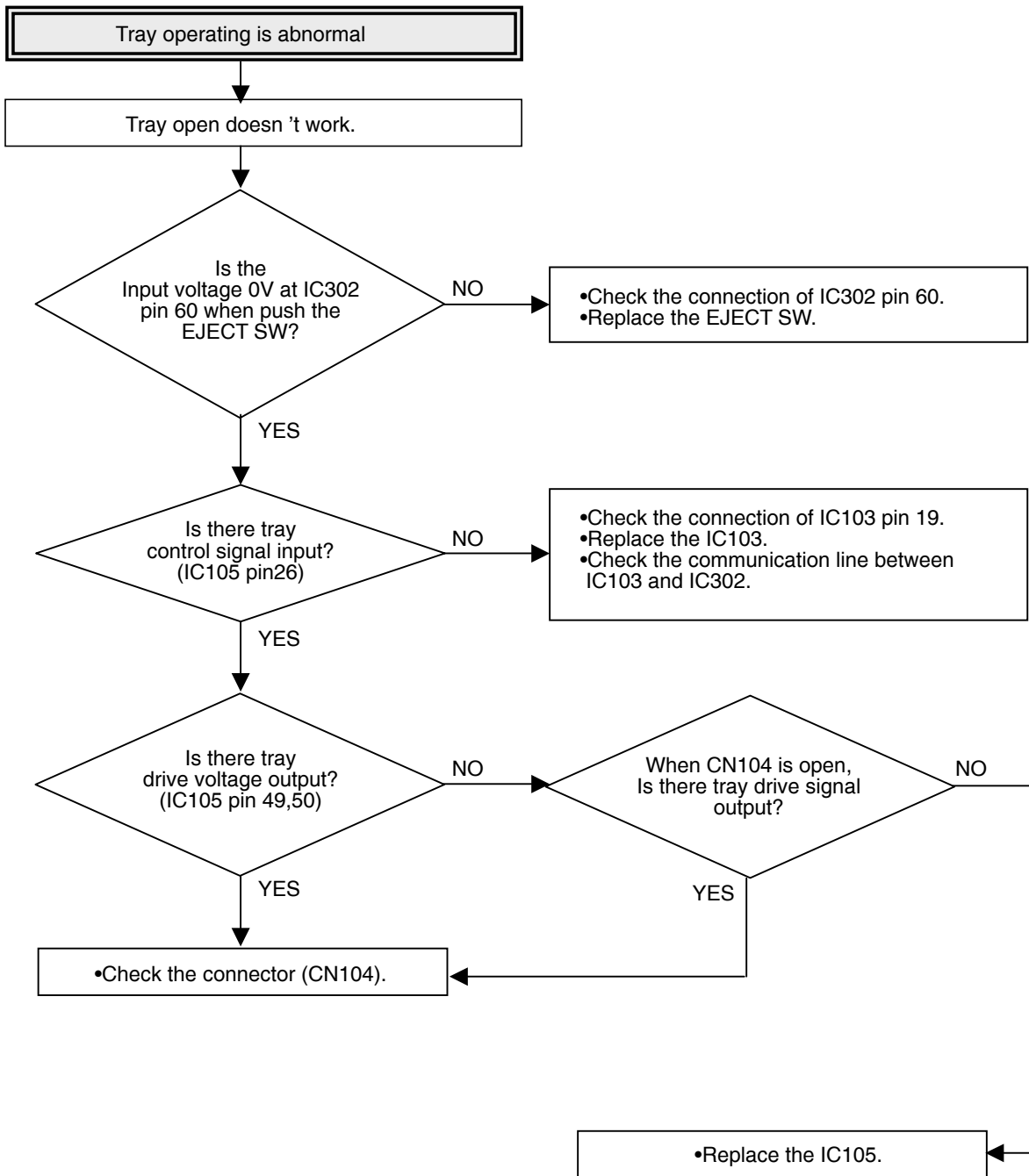
## 2. MAIN P.C.BOARD (BOTTOM VIEW)

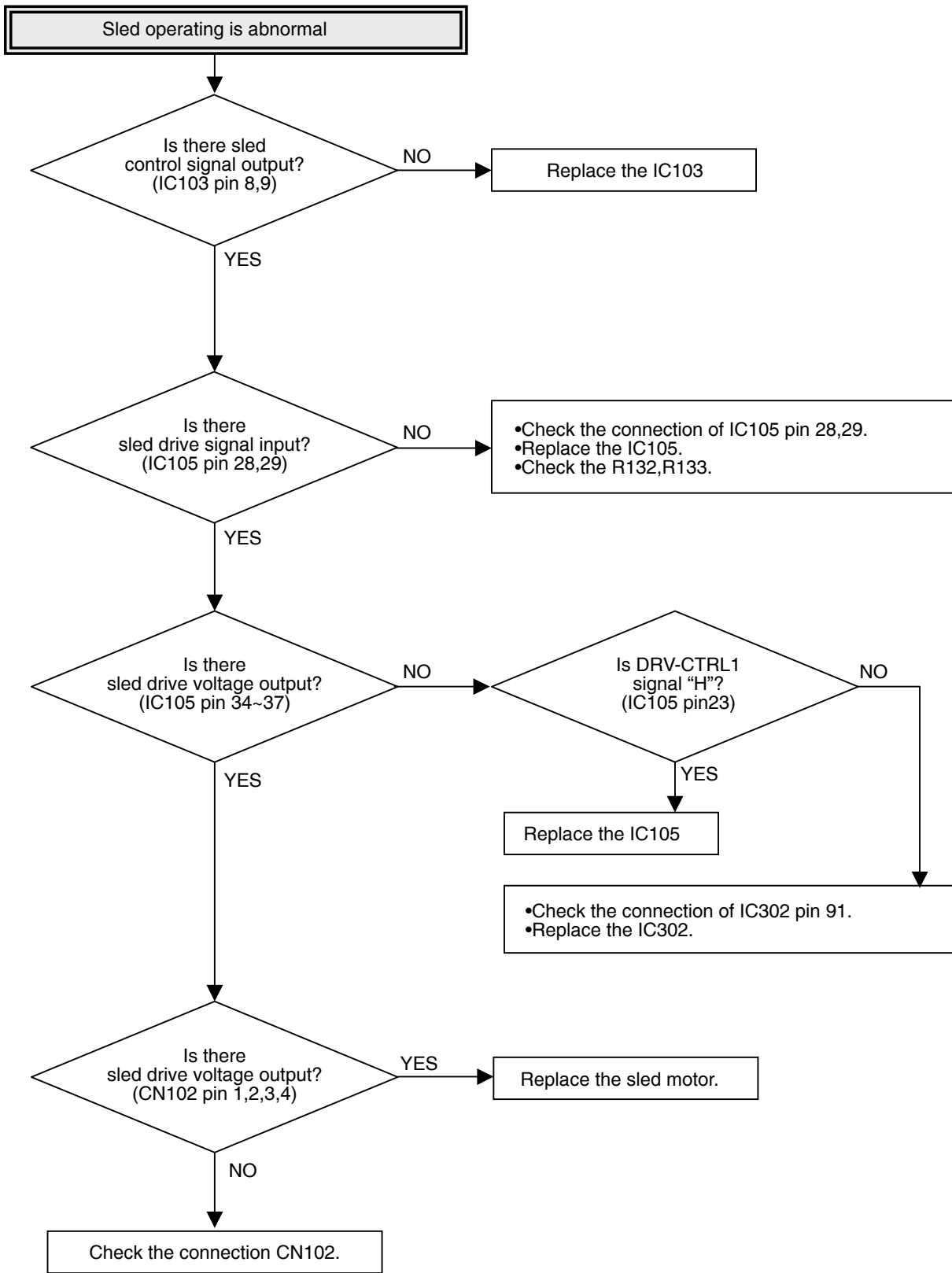


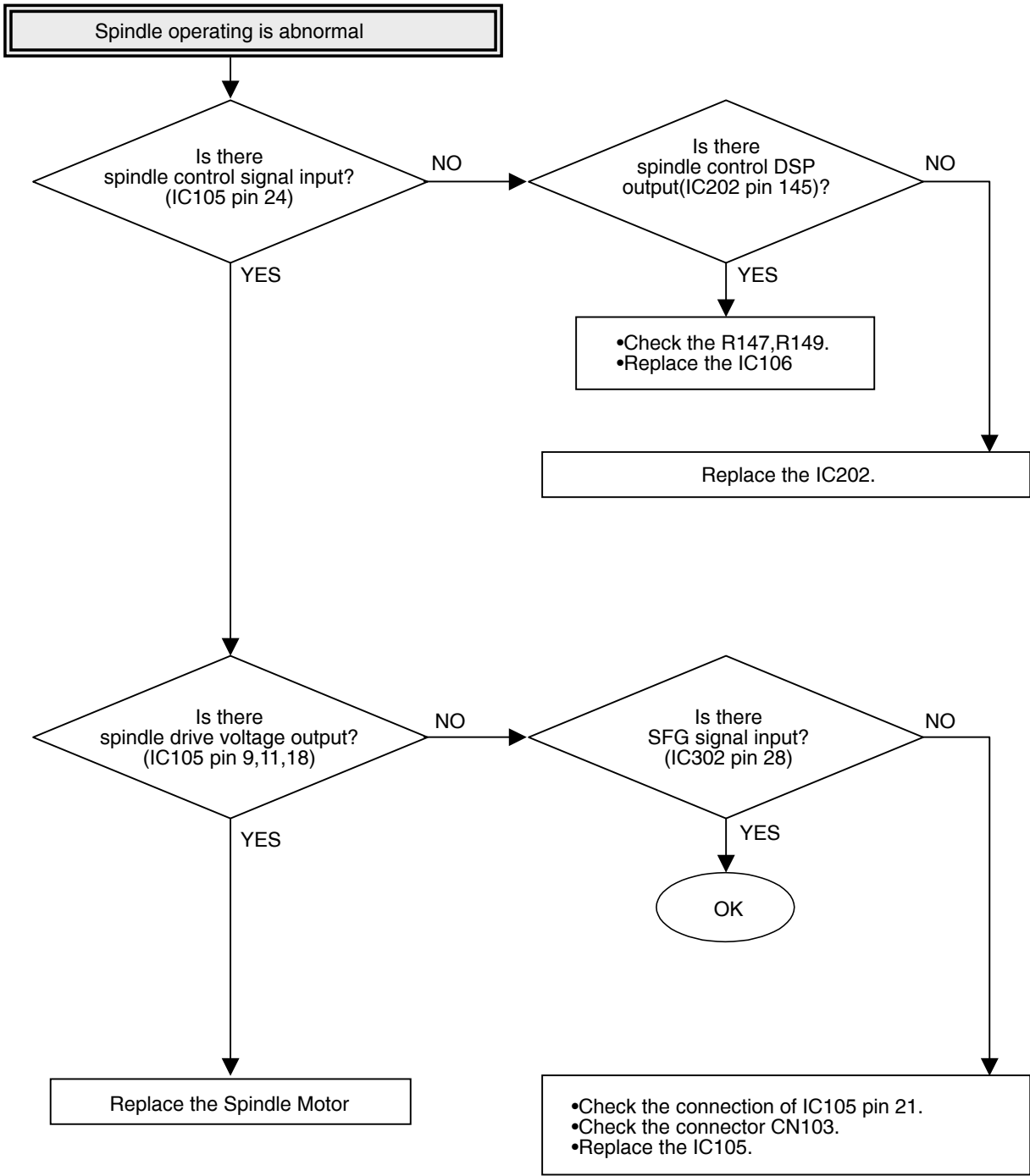
# RL-01A LOADER PART ELECTRICAL TROUBLESHOOTING GUIDE

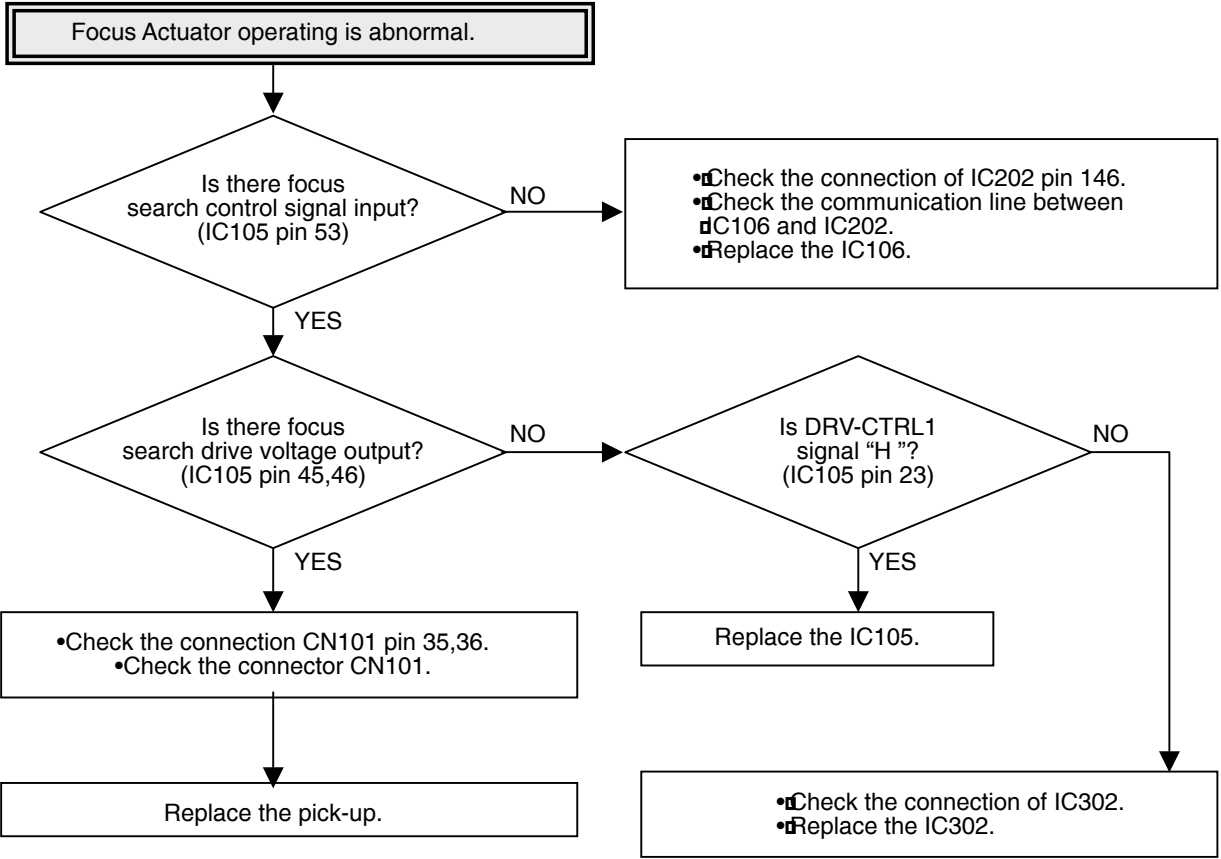
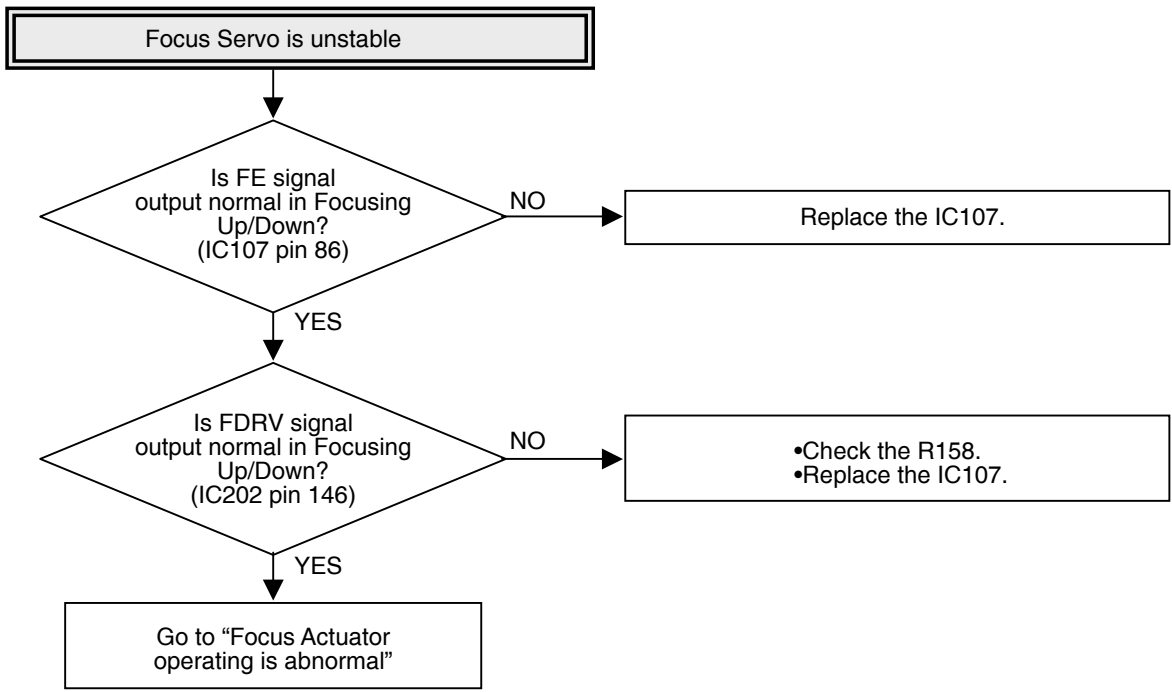


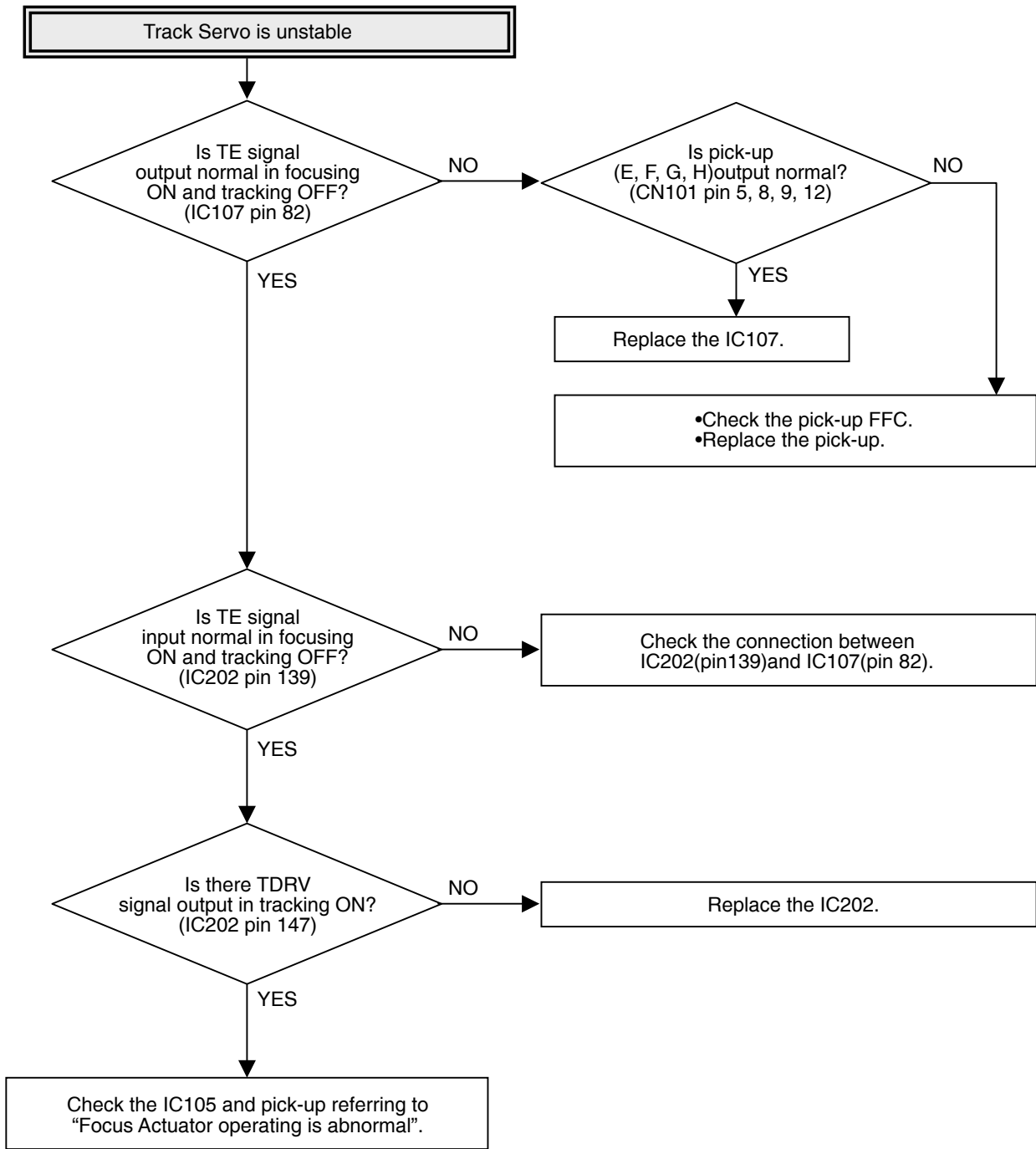




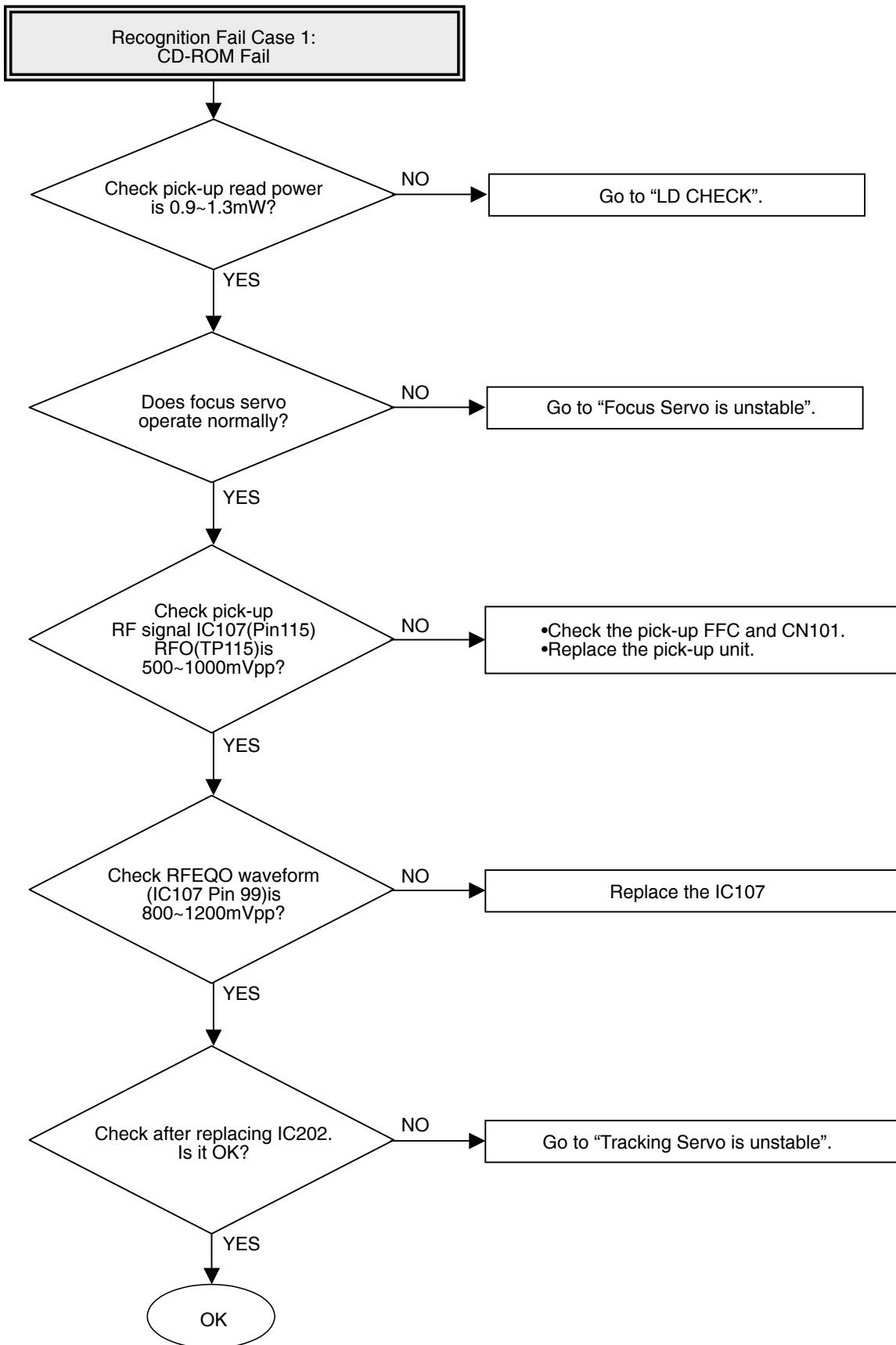


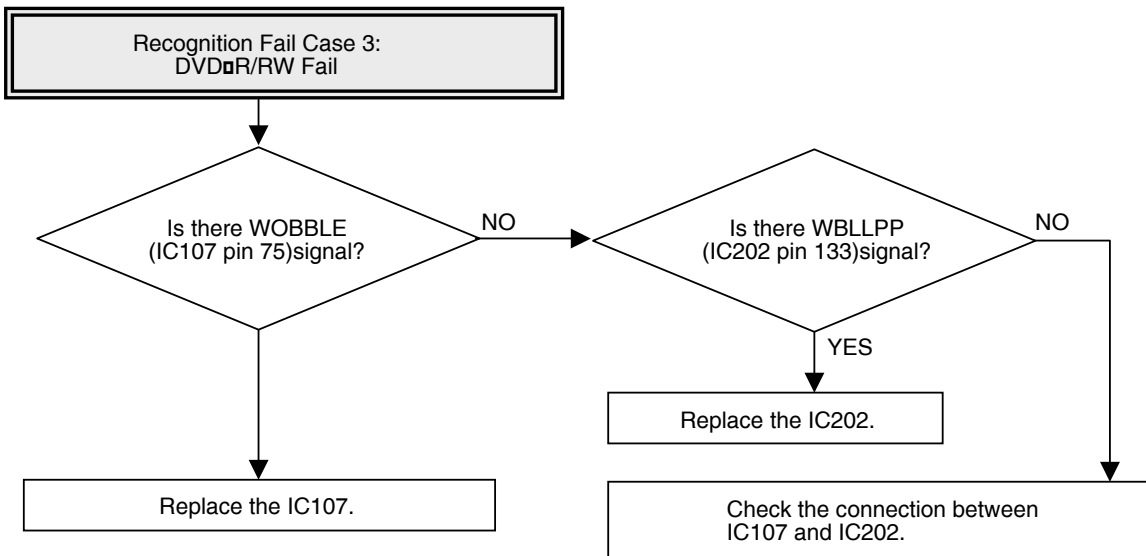
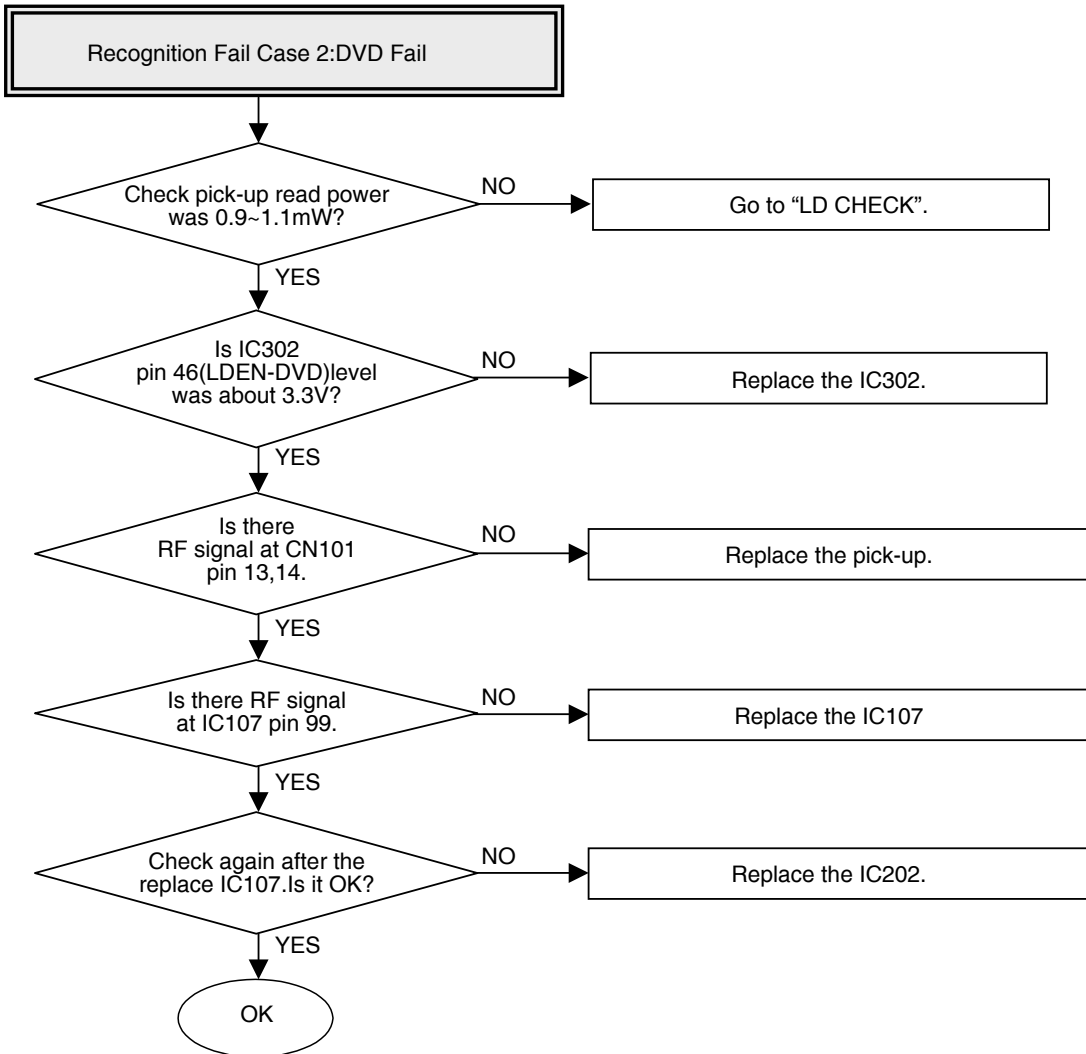


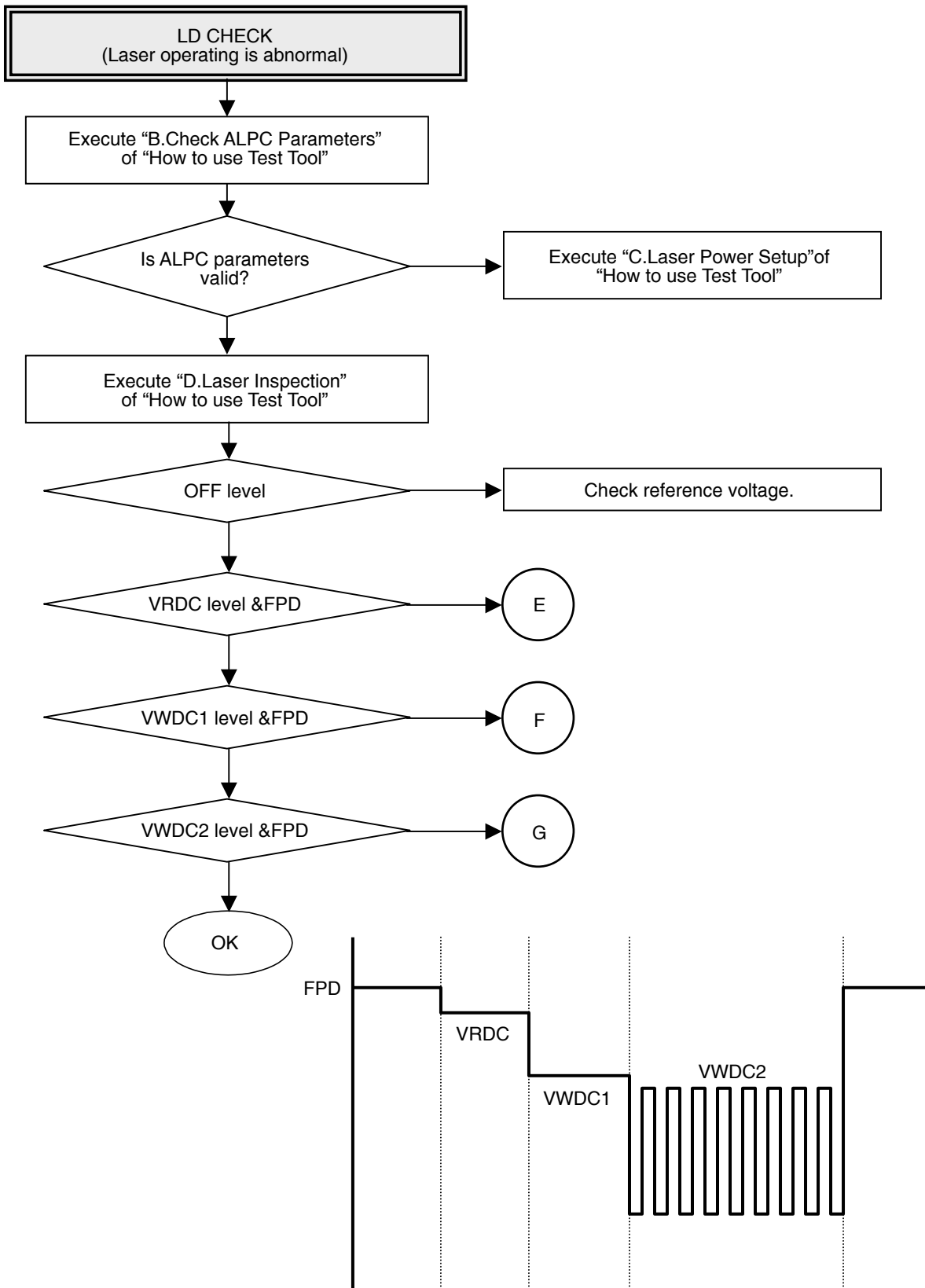


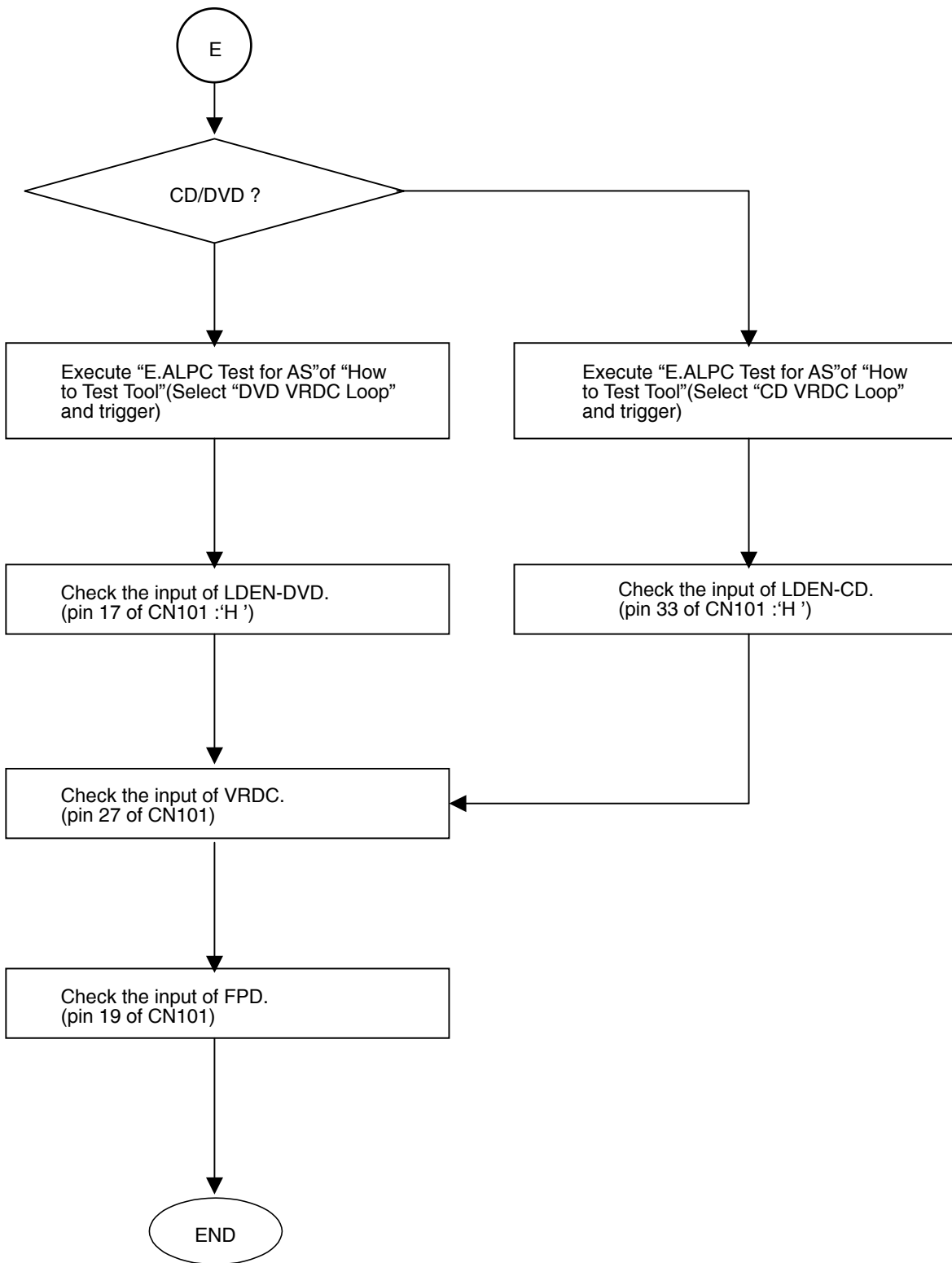


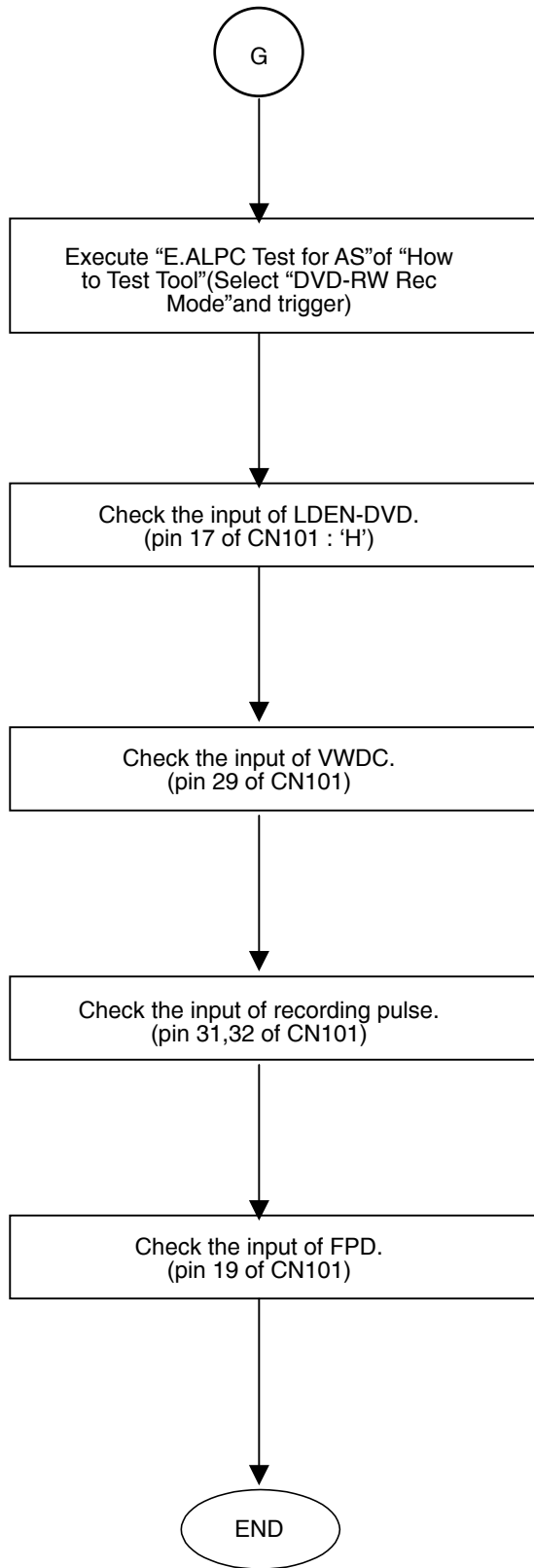
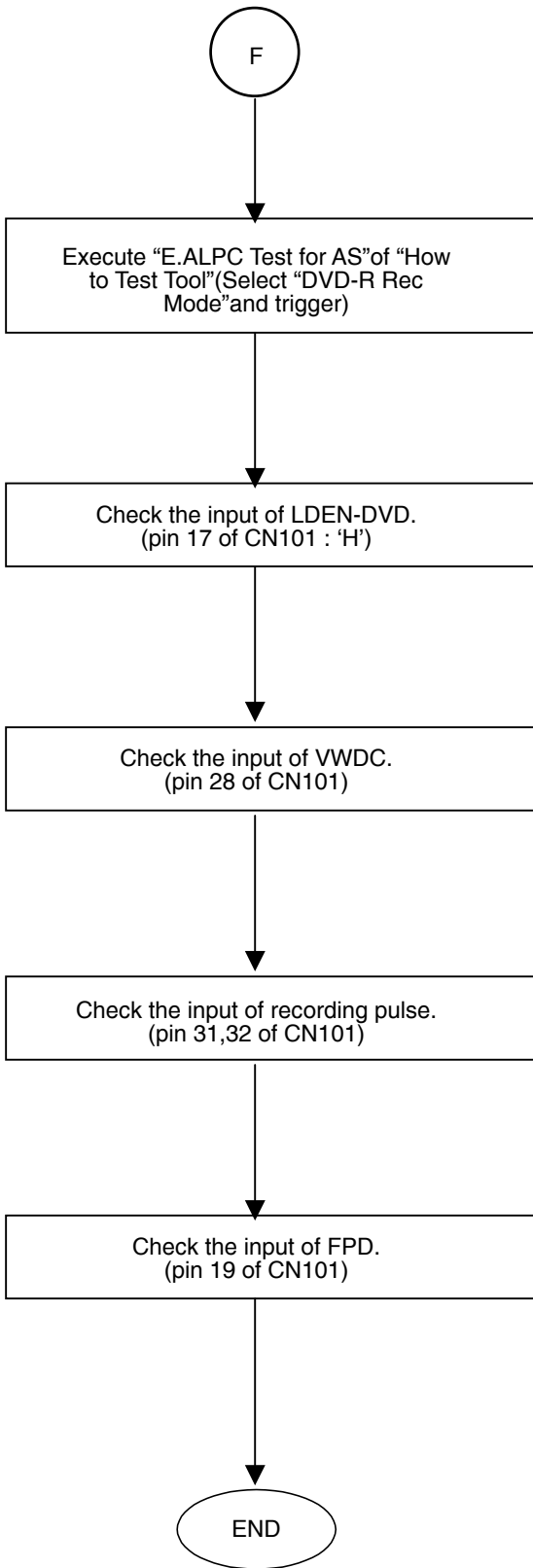




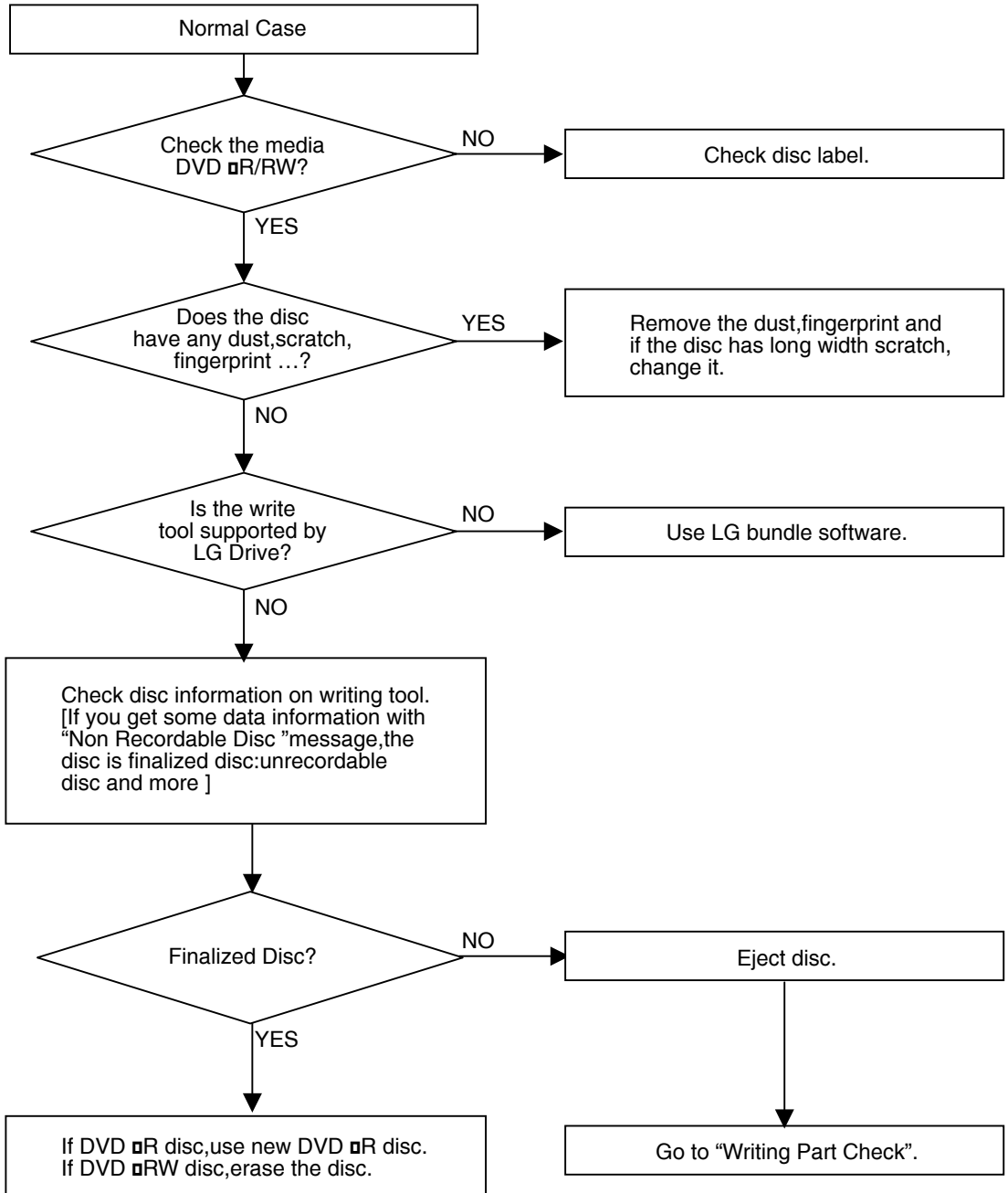


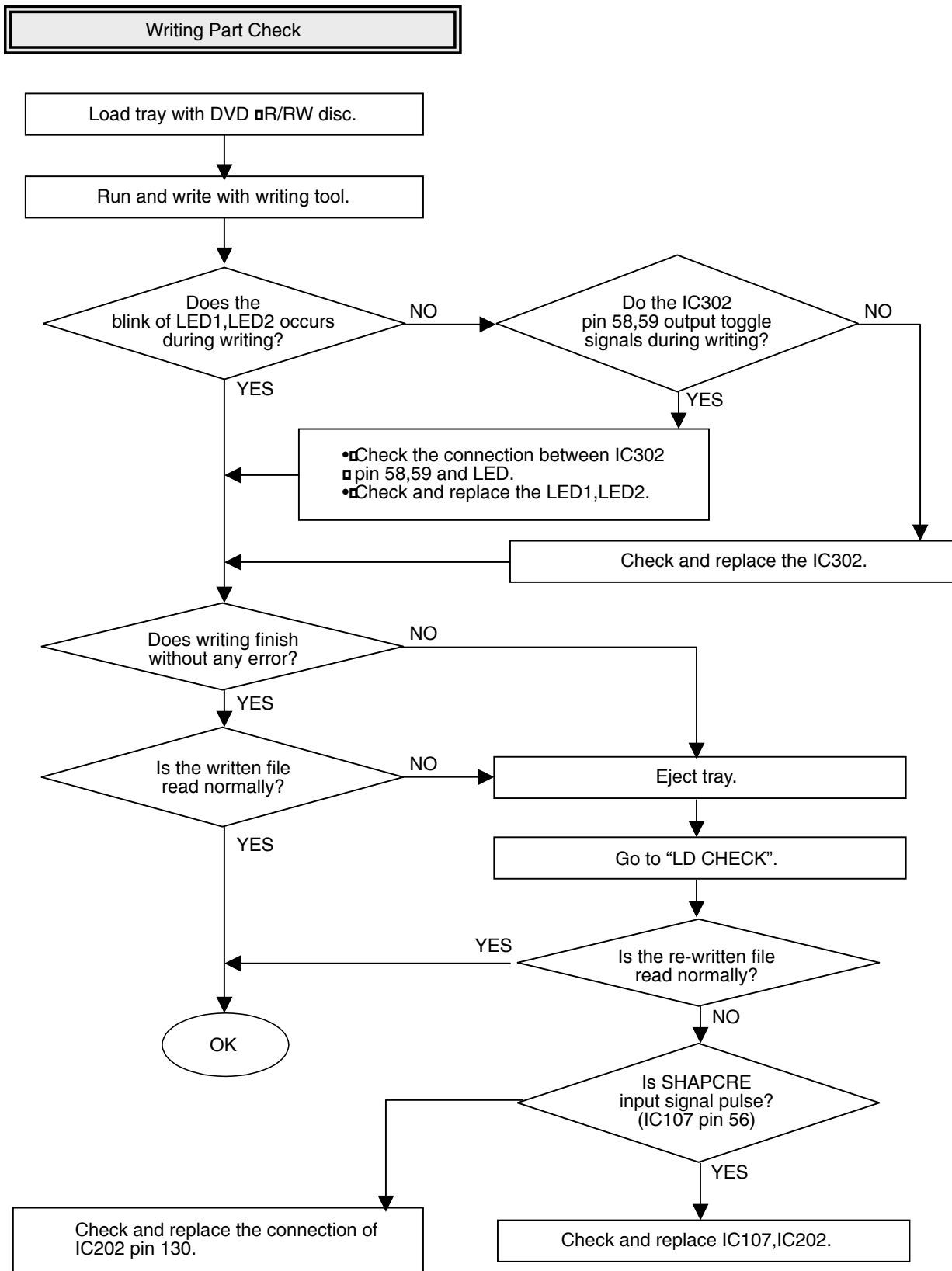






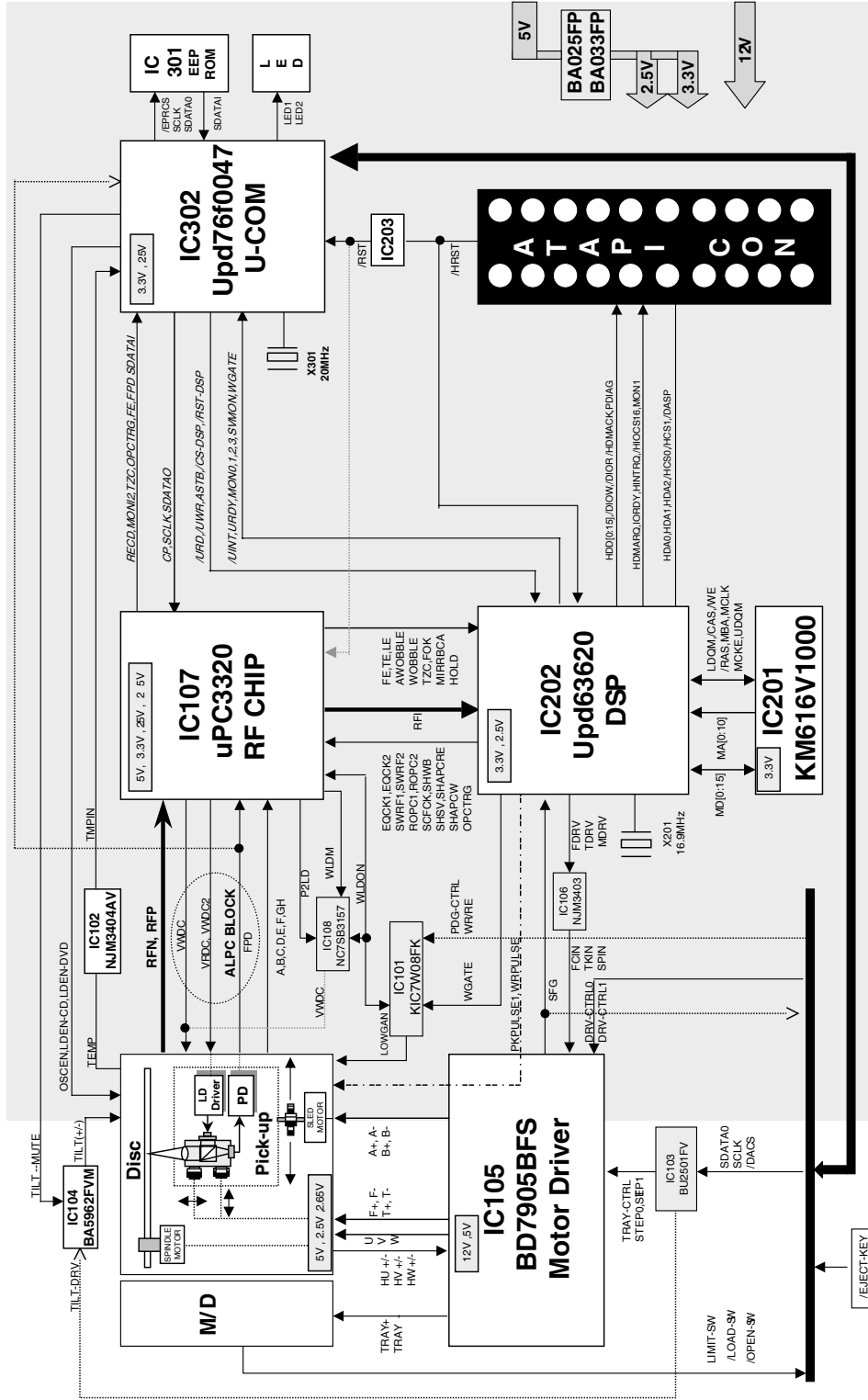
In case of writing fail.





# BLOCK DIAGRAMS & DESCRIPTION

## 1. Overall Block Diagram

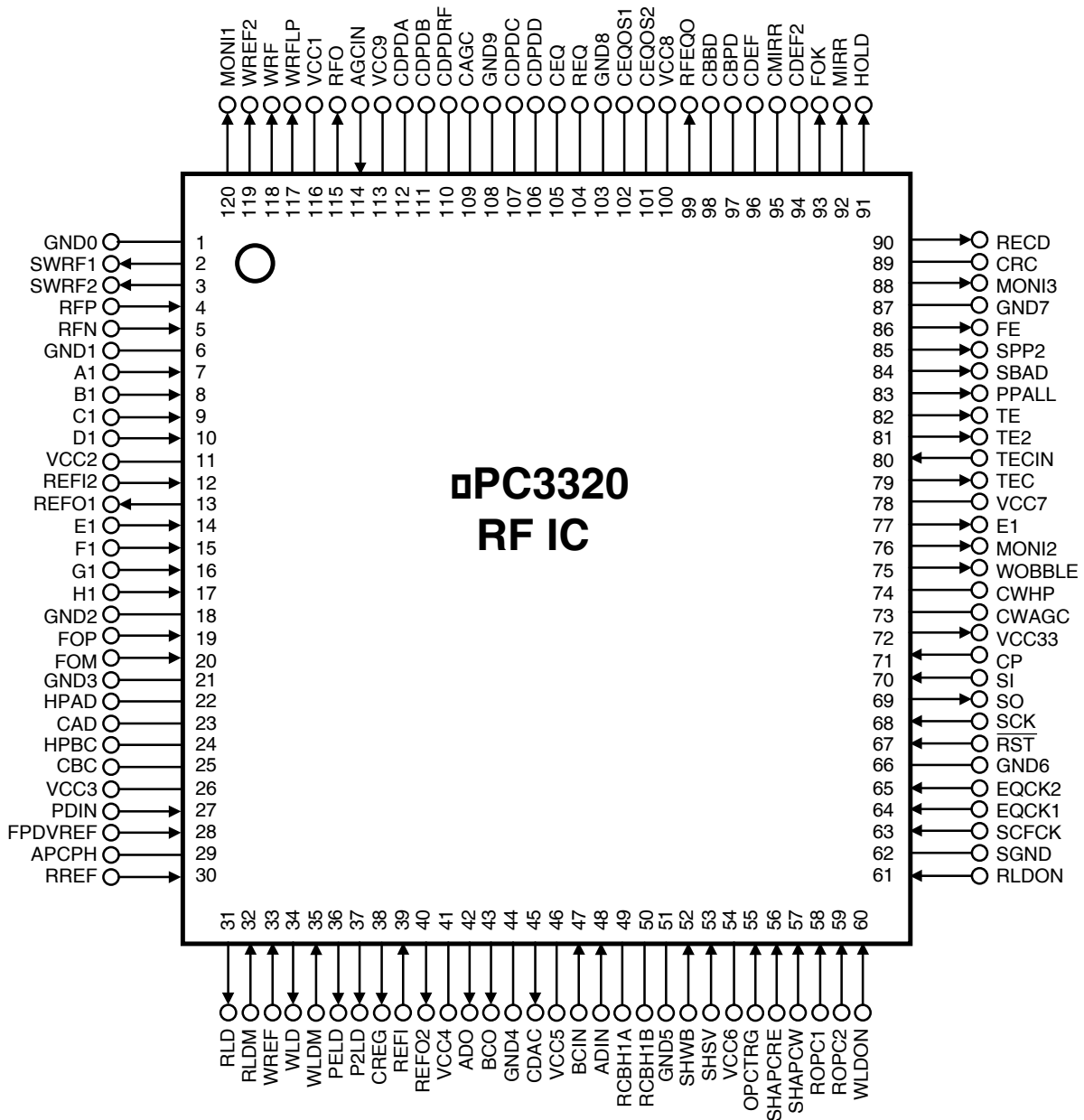




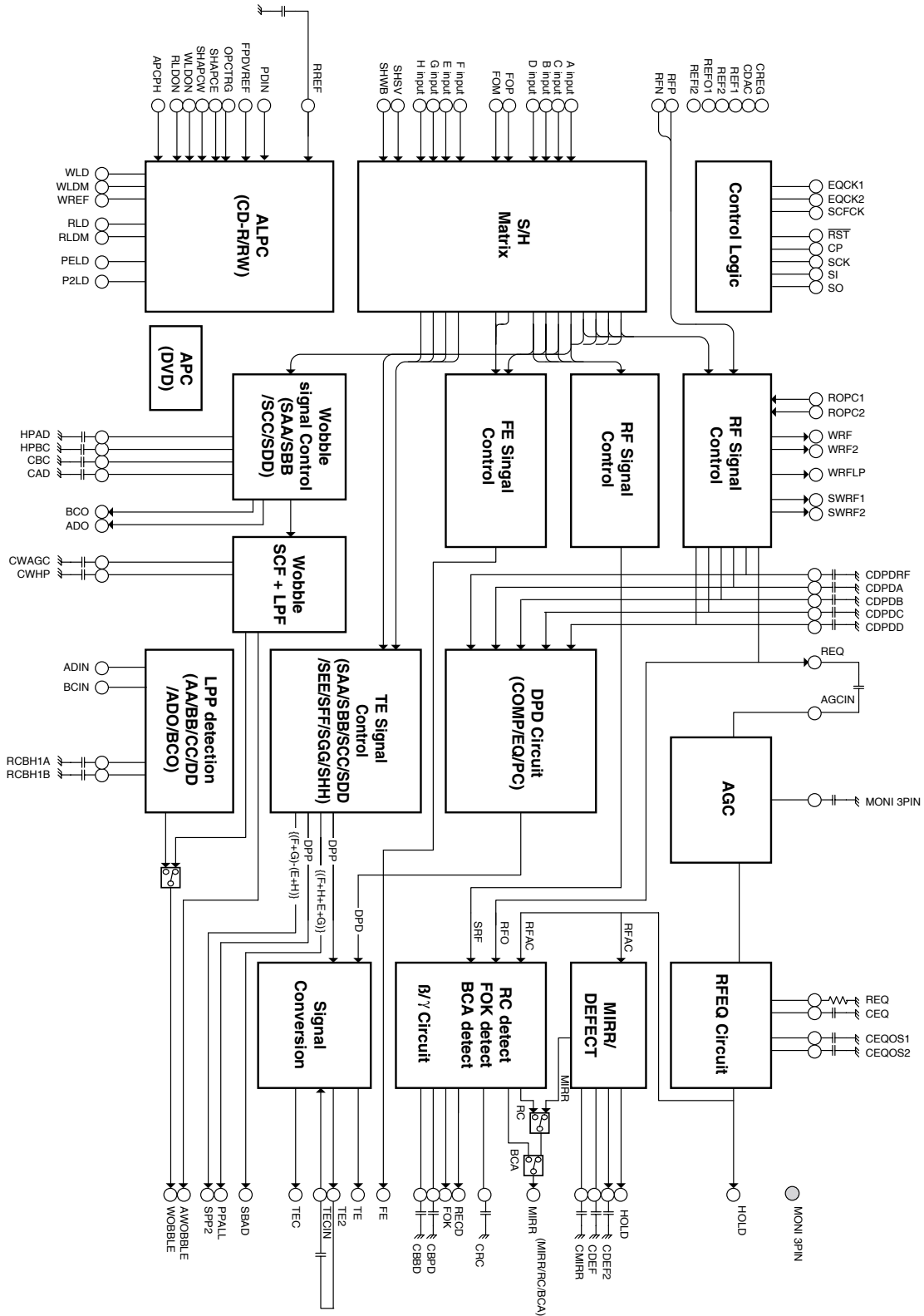
## 2. MAJOR IC INTERNAL BLOCK DIAGRAM AND PIN DESCRIPTION

### IC101 ( $\mu$ PC3320) : RF Signal Processor for CD/DVD

#### Pin Assignment



# Block Diagram



## Pin description

No.	Pin Name	Type	Description
1	GND0	-	Analog GND
2	SWRF1	OUTPUT	WRF signal sampling & hold [S/H] signal output.
3	SWRF1	OUTPUT	WRF signal sampling & hold [S/H] signal output.
4	RFP	INPUT	RF differential signal[+] input.
5	RFN	INPUT	RF differential signal[-] input.
6	GND1	-	Analog GND
7	A1	INPUT	Main beam signal [A1] input.
8	B1	INPUT	Main beam signal [B1] input.
9	C1	INPUT	Main beam signal [C1] input.
10	D1	INPUT	Main beam signal [D1] input.
11	VCC2	-	Analog power.
12	REFI2	INPUT	Reference voltage input pin for PDIC.
13	REFO1	OUTPUT	Pick-up internal reference voltage output[at REFI pin 2.5V: 2.25V output.]
14	E1	INPUT	Sub beam signal [E1] input.
15	F1	INPUT	Sub beam signal [F1] input.
16	G1	INPUT	Sub beam signal [G1] input.
17	H1	INPUT	Sub beam signal [H1] input.
18	GND2	-	Analog GND
19	FOP	INPUT	FO+ signal input for Focus.
20	FOM	INPUT	FO- signal input for Focus.
21	GND3	-	Analog GND
22	HPAD	-	Wobble circuit HPF band setting condenser connecting port.
23	CAD	-	Wobble circuit AGC response time setting condenser connecting port.
24	HPBC	-	Wobble circuit HPF band setting condenser connecting port.
25	CBC	-	Wobble circuit AGC response time setting condenser connecting port.
26	VCC3	-	Analog power.
27	PDIN	INPUT	Laser monitor current input.
28	FPDVREF	INPUT	Reference voltage input pin for front monitor.
29	APCPH	-	Peak-hold condenser connecting pin for ALPC .
30	RREF	-	Read ALPC Condenser connecting port.
31	RLD	OUTPUT	Read Laser drive control output.
32	RLDM	INPUT	Read Laser drive control Amp[-] input.
33	WREF	-	Write ALPC Condenser connecting port.
34	WLD	OUTPUT	Write Laser drive control output.
35	WLDM	INPUT	Write Laser drive control Amp[-] input.
36	PELD	OUTPUT	Pick power output port1.
37	P2LD	OUTPUT	Pick power output port 2.
38	CREG	OUTPUT	Regulator voltage[2.5V] output.
39	REF1	INPUT	DSP power voltage input[2.5V].
40	REFO2	OUOTPTU	DSP Reference voltage output [at REFI port 2.5V: 1.5V output].

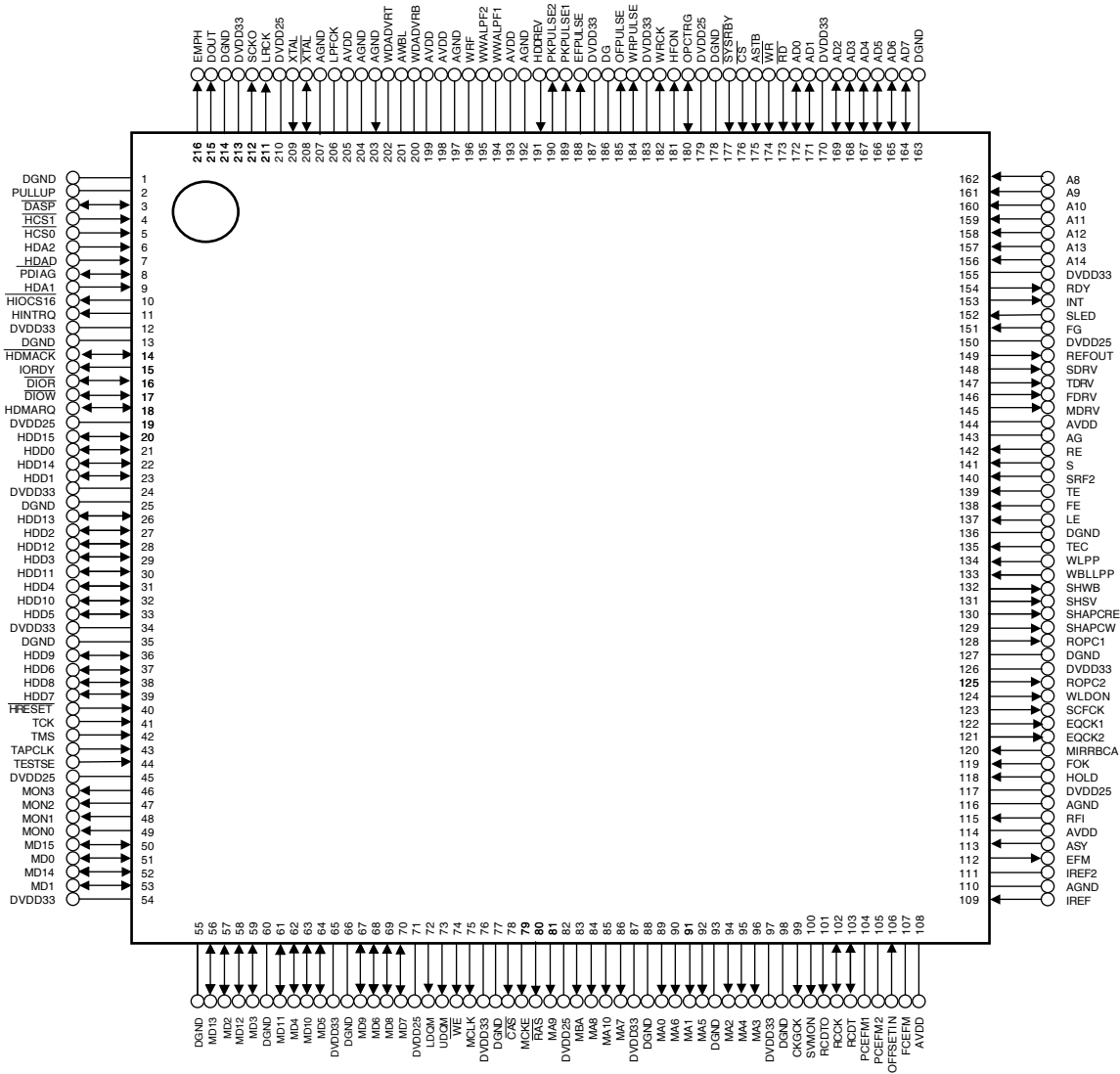
No.	Pin Name	Type	Description
41	VCC4	-	Analog power.
42	ADO	OUTPUT	Wobble circuit [A+D] signal output.
43	BCO	OUTPUT	Wobble circuit [B+C] signal output.
44	GND4	-	Analog GND
45	CDAC	OUTPUT	DAC reference voltage output.
46	VCC5	-	Digital power.
47	BCIN	INPUT	[B+C] signal input.
48	ADIN	INPUT	[A+D] signal input.
49	RCBH1A	-	RLPP circuit bottom hold condenser connecting port.
50	RCBH1B	-	RLPP circuit bottom hold condenser connecting port.
51	GND5	-	Analog GND
52	SHWB	INPUT	Sample hold pulse input for Wobble signal.
53	SHSV	INPUT	Sample hold pulse input for Servo signal.
54	VCC6	-	Digital power.
55	OPCTRG	INPUT	OPCTRG signal input.
56	SHAPCRE	INPUT	Sample hold pulse input for Read/Erace ALPC.
57	SHPCW	INPUT	Sample hold pulse input fot Write ALPC.
58	ROPC1	INPUT	Sample hold pulse input 1 for WRF signal.
59	ROPC2	INPUT	Sample hold pulse input 2 for WRF signal.
60	WLDON	INPUT	Write ALPC Center signal input.
61	RLDON	INPUT	Read ALPC Center signal input.
62	SGND	-	Sub straight GND.
63	SCFCK	INPUT	SCF clock input.
64	EQCK1	INPUT	Fixed clock input.
65	EQCK2	INPUT	Equalize automatic control clock input.
66	GND6	-	Analog GND
67	RST	INPTU	Register reset input.
68	SCK	INPUT	Register setting clock input.
69	SO	OUTPUT	Serial data output.
70	SI	INPUT	Serial data input.
71	CP	INPUT	Address
72	VCC33	OUTPUT	Power voltage [3.3V monitor].
73	CWAGC	-	Wobble circuit AGC response time setting condenser connecting port.
74	CWHP	-	Wobble circuit HPF band setting condenser connecting port.
75	WOBBLE	OUTPUT	Wobble signal output [Digital signal].
76	AWOBBLE	OUTPUT	Wobble signal output [Analog signal].
77	MONI2	OUTPUT	Internal signal monitor port.
78	VCC7	-	Digital power.
79	TEC	OUTUPT	Tracking zero cross signal output.
80	TECIN	INPUT	Tracking zero cross signal input.

No.	Pin Name	Type	Description
81	TE2	OUTPUT	Tracking error signal output.
82	TE	OUTPUT	Tracking error signal output for Servo.
83	PPALL	OUTPUT	Main side push-pull signal output.
84	SBAD	OUTPUT	Sub beam signal output [ (E+F+G+H) signal].
85	SPP2		Sub beam signal output [ (F+G)-(E+H) signal].
86	FE	OUTPUT	Focus error signal.
87	GND7	-	Analog GND
88	MONI3	OUTPUT	Internal signal monitor port.
89	CRC	-	Radial contrast circuit condenser connecting port.
90	RECD	OUTPUT	No recording area detection.
91	HOLD	OUTPUT	Detection signal output.
92	MIRR	OUTPUT	Mirror detection/RCA signal output.
93	FOK	OUTPUT	Focus OK signal.
94	CDEF2	-	Detect circuit condenser connecting port 2.
95	CMIRR	-	Mirror circuit condenser connecting port.
96	CDEF	-	Detect circuit condenser connecting port .
97	CBPD	-	$\beta$ , $\gamma$ adetection[peak]condenser connecting port.
98	CBBD	-	$\beta$ , $\gamma$ adetection[buttom]condenser connecting port.
99	RFEQO	OUTPUT	Equalizer output.
100	VCC8	-	Analog power.
101	CEQOS2	-	RF Equalizer circuit condenser connecting port 2.
102	CEQOS1	-	RF Equalizer circuit condenser connecting port 1.
103	GND8	-	Analog GND
104	REQ	-	RF Equalizer circuit volatage setting resistance connecting port.
105	CEQ	-	Equalizer fc automatic control curcuit condenser connecting port.
106	CDPDD	-	DPD [D signal] HPF band setting condenser connecting port.
107	CDPDC	-	DPD [C signal] HPF band setting condenser connecting port.
108	GND9	-	Analog GND
109	CDPDC	-	RFAGC circuit condenser connecting port.
110	CDPDRF	-	DPD [RF signal] HPF band setting condenser connecting port.
111	CDPDRF	-	DPD [B signal] HPF band setting condenser connecting port.
112	CDPDA	-	DPD [A signal] HPF band setting condenser connecting port.
113	VCC9	-	Analog power.
114	AGCIN	INPTU	AGC input
115	RFO	OUTPUT	Read RF signal output.
116	VCC1	-	Analog power.
117	WRFLP	OUTPUT	Write RF LPF output.
118	WRF	OUTPUT	Write RF signal output.
119	WFR2	OUTPUT	Write RF2 signal output.
120	MONI1	OUTPUT	Internal signal monitor port.

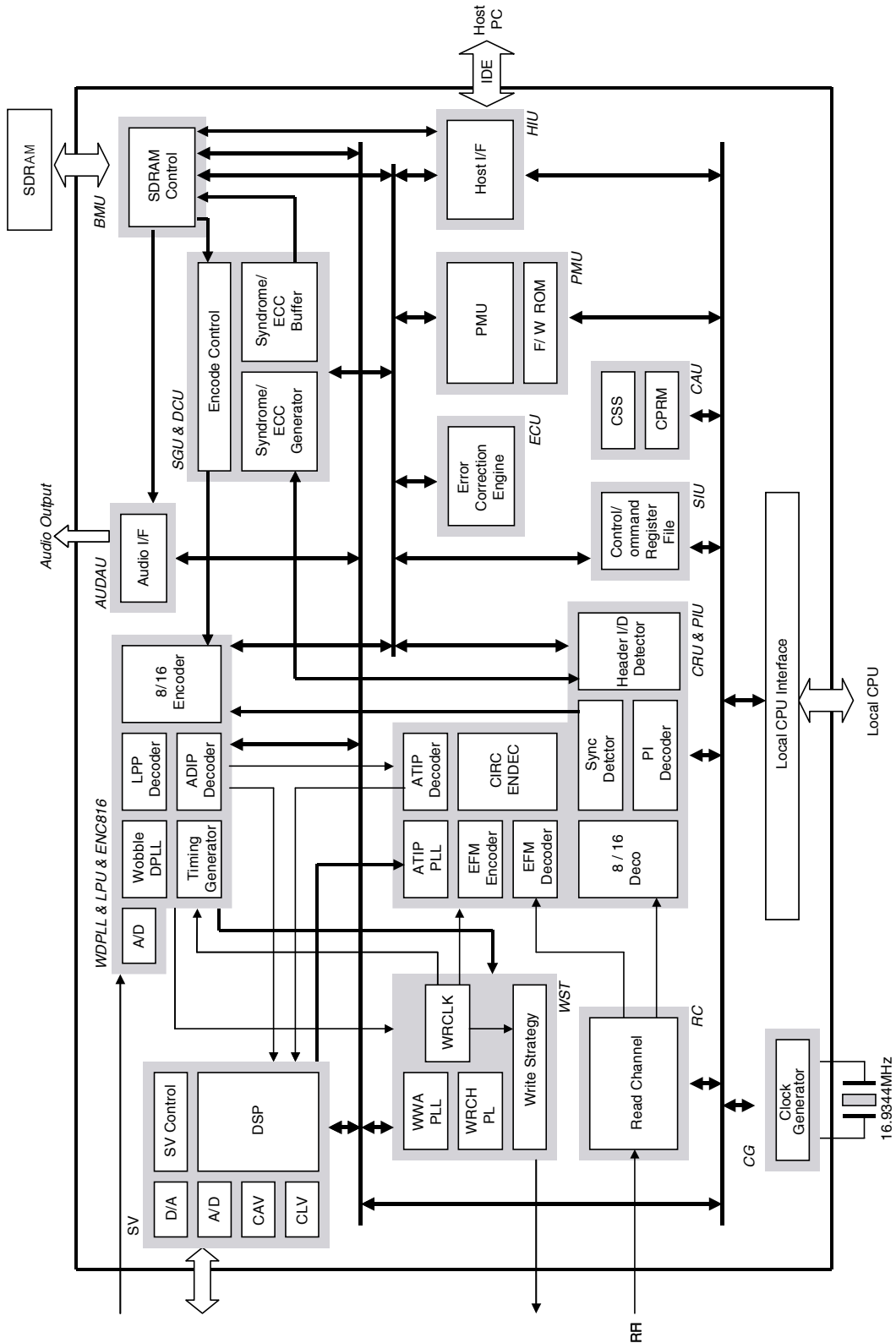
# 3. MAJOR IC INTERNAL BLOCK DIAGRAM AND PIN DESCRIPTION

## IC201(μPD63620) : Encoder, Decoder & DSP Signal Processor

### Pin Assignment



# Block Diagram



## Pin description

Pin No.	Pin Name		Type		Description
1	DGND	-	-	-	Digital GND
2	PULLUP	-	-	-	Pull-up resistance connecting port.[5V or 3.3V]
3	$\overline{\text{DASO}}$	5V_tolerant	I/O	Pull-up	Drive active slave presesnt signal.[open/drain]
4	$\overline{\text{HCS1}}$	5V_tolerant	I	-	Host interface chip, pull-up selection input.
5	$\overline{\text{HCS0}}$	5V_tolerant	I	-	Host interface chip, pull-up selection input.
6	HDA2	5V_tolerant	I	-	Host interface chip, address signal input.
7	HDAO	5V_tolerant	I	-	Host interface chip, address signal input.
8	$\overline{\text{PDIAG}}$	5V_tolerant	I/O	Pull-up	Diagnostic signal [open/drain]
9	HDA1	5V_tolerant	I	-	Host interface chip, address signal input.
10	$\overline{\text{HIOCS16}}$	5V_tolerant	I	Pull-up	16 bit I/O signal [open/drain]. When Ultra DMA burst, this is 3 state port.
11	HINTRQ	5V_tolerant	O	Pull-up	Host interrupt signal output.
12	DVDD33	-	-	-	Digital power[3.3V]
13	DGND	-	-	-	Digital GND
14	$\overline{\text{HDMACK}}$	5V_tolerant	I/O	-	DMA acknowledge signal.
15	IORDY	5V_tolerant	I	Pull-up	I/O Channel ready[open/drain]. When Ultra DMA burst, this is DDMARDY: DSTROBE signal.
16	$\overline{\text{DIOR}}$	5V_tolerant	I/O	-	Host interface read input signal. When Ultra DMA burst, this is HDMARDY: HSTROBE signal.
17	$\overline{\text{DIOW}}$	5V_tolerant	I/O	-	Host interface write input signal. When Ultra DMA burst, this is STOP signal.
18	HDMARQ	5V_tolerant	O	Pull-up	DMA request signal output.
19	DVDD25	-	-	-	Digital power[2.5V]
20	HDD15 ----- HDD8	5V_tolerant	I/O	Pull-up	Host interface data bus.[within slave resistance]
21	HDD0 ----- HDD6	5V_tolerant	O	Pull-up	Host interface data bus.[within slave resistance]
22	HDD14 ----- HDD9	5V_tolerant	I/O	Pull-up	Host interface data bus.[within slave resistance]
23	HDD1	5V_tolerant	I/O	Pull-up	Host interface data bus.[within slave resistance]
24	DVDD33	-	-	-	Digital power[3.3V]
25	DGND	-	-	-	Digital GND
26	HDD13 ----- HDD10	5V_tolerant	I/O	Pull-up	Host interface data bus.[within slave resistance]
27	HDD2 ----- HDD4	5V_tolerant	I/O	Pull-up	Host interface data bus.[within slave resistance]



Pin No.	Pin Name		Type		Description
28	DGND ----- HDD4	5V_tolerant	I/O	Pull-up	Host interface data bus.[within slave resistance
29	HDD3 ----- HDD3	5V_tolerant	I/O	Pull-up	Host interface data bus.[within slave resistance]
30	HDD11 ----- HDD12	5V_tolerant	I/O	Pull-up	Host interface data bus.[within slave resistance]
31	HDD4 ----- HDD2	5V_tolerant	I/O	Pull-up	Host interface data bus.[within slave resistance
32	HDD7 ----- HDD13	5V_tolerant	I/O	Pull-up	Host interface data bus.[within slave resistance]
33	HDD7 ----- HDD1	5V_tolerant	I/O	Pull-up	Host interface data bus.[within slave resistance].
34	DVDD33	-	-	-	Digital power[3.3V]
35	DGND	-	-	-	Digital GND
36	HDD9 ----- HDD14	5V_tolerant	I/O	Pull-up	Host interface data bus.[within slave resistance].
37	HDD6 ----- HDD0	5V_tolerant	I/O	Pull-up	Host interface data bus.[within slave resistance].
38	HDD8 ----- HDD15	5V_tolerant	I/O	Pull-up	Host interface data bus.[within slave resistance].
39	HDD7	5V_tolerant	I/O	Pull-up	Host interface data bus.
40	HRESET	5V_tolerant	I/O	-	Host reset input.
41	TCK	3V	I	-	Test port. It must be connected to DGND.
42	TMS	3V	I	-	Test port. It must be connected to DGND.
43	TAPCLK	3V	I	-	Test port. It must be connected to DGND.
44	TESTSE	3V	I	-	Test port. It must be connected to DGND.
45	DVDD25	-	-	-	Digital power[2.5V]
46	MON3	3V	O	L	Monitor: test signal.
47	MON2	3V	O	L	Monitor: test signal.
48	MON1	3V	I/O	L	Monitor: test signal.
49	MON0	3V	I/O	L	Monitor: test signal.
50	MD15	3V	I/O	Pull-up	Buffer memory , Interface data bus.
51	MD0	3V	I/O	Pull-up	Buffer memory , Interface data bus.
52	MD14	3V	I/O	Pull-up	Buffer memory , Interface data bus.
53	MD1	3V	I/O	Pull-up	Buffer memory , Interface data bus.
54	DVDD33	-	-	-	Digital power.[3.3V](Buffer. Memory. Block)

Pin No.	Pin Name		Type		Description
55	DGND	-	-	-	Digital GND.(Buffer. Memory. Block)
56	MD13	3V	I/O	Pull-up	Buffer memory , Interface data bus.
57	MD2	3V	I/O	Pull-up	Buffer memory , Interface data bus.
58	MD12	3V	I/O	Pull-up	Buffer memory , Interface data bus.
59	MD3	3V	I/O	Pull-up	Buffer memory , Interface data bus.
60	DGND	-	-	-	Digital GND.
61	MD11	3V	I/O	Pull-up	Buffer memory , Interface data bus.
62	MD4	3V	I/O	Pull-up	Buffer memory , Interface data bus.
63	MD10	3V	I/O	Pull-up	Buffer memory , Interface data bus.
64	MD5	3V	I/O	Pull-up	Buffer memory , Interface data bus.
65	DVD33	-	-	-	Digital power.[3.3V](Buffer. Memory. Block)
66	DGND	-	-	-	Digital GND.(Buffer. Memory. Block)
67	MD9	3V	I/O	Pull-up	Buffer memory , Interface data bus.
68	MD6	3V	I/O	Pull-up	Buffer memory , Interface data bus.
69	MD8	3V	I/O	Pull-up	Buffer memory , Interface data bus.
70	MD7	3V	I/O	Pull-up	Buffer memory , Interface data bus.
71	DVDD25	-	-	-	Digital power.[2.5V]
72	LDQM	3V	O	H	Low byte, data input/output mask control signal.
73	UDQM	3V	O	H	High byte, data input/output mask control signal.
74	WE	3V	O	H	Buffer memory , Interface write enable signal.
75	MCLK	3V	O	Pull-up	SDRAM clock output.
76	DVDD33	-	-	-	Digital power.[3.3V](Buffer. Memory. Block)
77	DGND	-	-	-	Digital GND.(Buffer. Memory. Block)
78	$\overline{\text{CAS}}$	3V	O	H	Buffer memory , Interface column address strobe control signal.
79	MCKE	3V	O	H	SDRAM clock enable control signal.
80	$\overline{\text{RAS}}$	3V	O	H	Buffer memory , Interface row address strobe control signal.
81	MA9	3V	O	L	Buffer memory , Interface address bus.
82	DVDD25	-	-	-	Digital power.[2.5V]
83	MBA	3V	O	L	Buffer memory , Interface bank address signal.
84	MA8	3V	O	L	Buffer memory , Interface data bus.
85	MA10	3V	O	L	Buffer memory , Interface data bus.
86	MA7	3V	O	L	Buffer memory , Interface data bus.
87	DVDD33	-	-	-	Digital power.[3.3V](Buffer. Memory. Block)

Pin No.	Pin Name		Type		Description
88	DGND	-	-	-	Buffer memory , Interface data bus.
89	MA0	3V	O	H	Buffer memory , Interface data bus.
90	MA6	3V	O	L	Buffer memory , Interface data bus.
91	MA1	3V	O	L	Buffer memory , Interface data bus.
92	MA5	3V	O	L	Buffer memory , Interface data bus.
93	DGND	-	-	-	Digital GND
94	MA2	3V	O	L	Buffer memory , Interface data bus
95	MA4	3V	O	L	Buffer memory , Interface data bus.
96	MA3	3V	O	L	Buffer memory , Interface data bus.
97	DVDD3	-	-	-	Digital power.[3.3V](Buffer. Memory. Block)
98	DGND	-	-	-	Digital GND (Buffer. Memory. Block)
99	CKGCK	3V	O		Clock, Generator output.
100	SVMON	3V	O	L	Servo, block monitor signal output.
101	RCDTO	3V	O	L	Read channel data output.
102	RCCK	3V	I/O	Hi-Z	Read channel clock output.
103	RCDT	3V	I/O	Hi-Z	Read channel data output.
104	PCEF1	Analog	-	-	Read channel phase discriminator condenser connecting port.
105	PCEF2	Analog	-	-	Read channel phase discriminator condenser connecting port.
106	OFFSETIN	Analog	-	-	Read channel phase discriminator charge pump control port.
107	FCEFM	Analog	-	-	Read channel frequency discriminator condenser connecting port.
108	AVDD	-	-	-	Analog power[2.5V]
109	IREF	Analog	o	-	Read channel analog reference voltage input.
110	AGND	-	-	-	Analog GND[EFM PLL]
111	IREF2	Analog	O	-	Non connecting port.
112	EFM	Analog	O	Pull-up	EFM comparator output.
113	ASY	Analog	O	-	EFM comparator asymmetry control voltage input.
114	AVDD	-	-	-	Analog power[2.5V]
115	RFI	Analog	O		EFM comparator RF signal input.
116	AGND	-	-	-	Analog GND[EFM]
117	DVDD25	-	-	-	Digital power.[2.5V]
118	HOLD	3v	O	-	HOLD control signal input.
119	FOK	3v	O	-	FOK signal input.
120	MIRRBCA	3V	O	-	Mirror signal or BCA signal input.

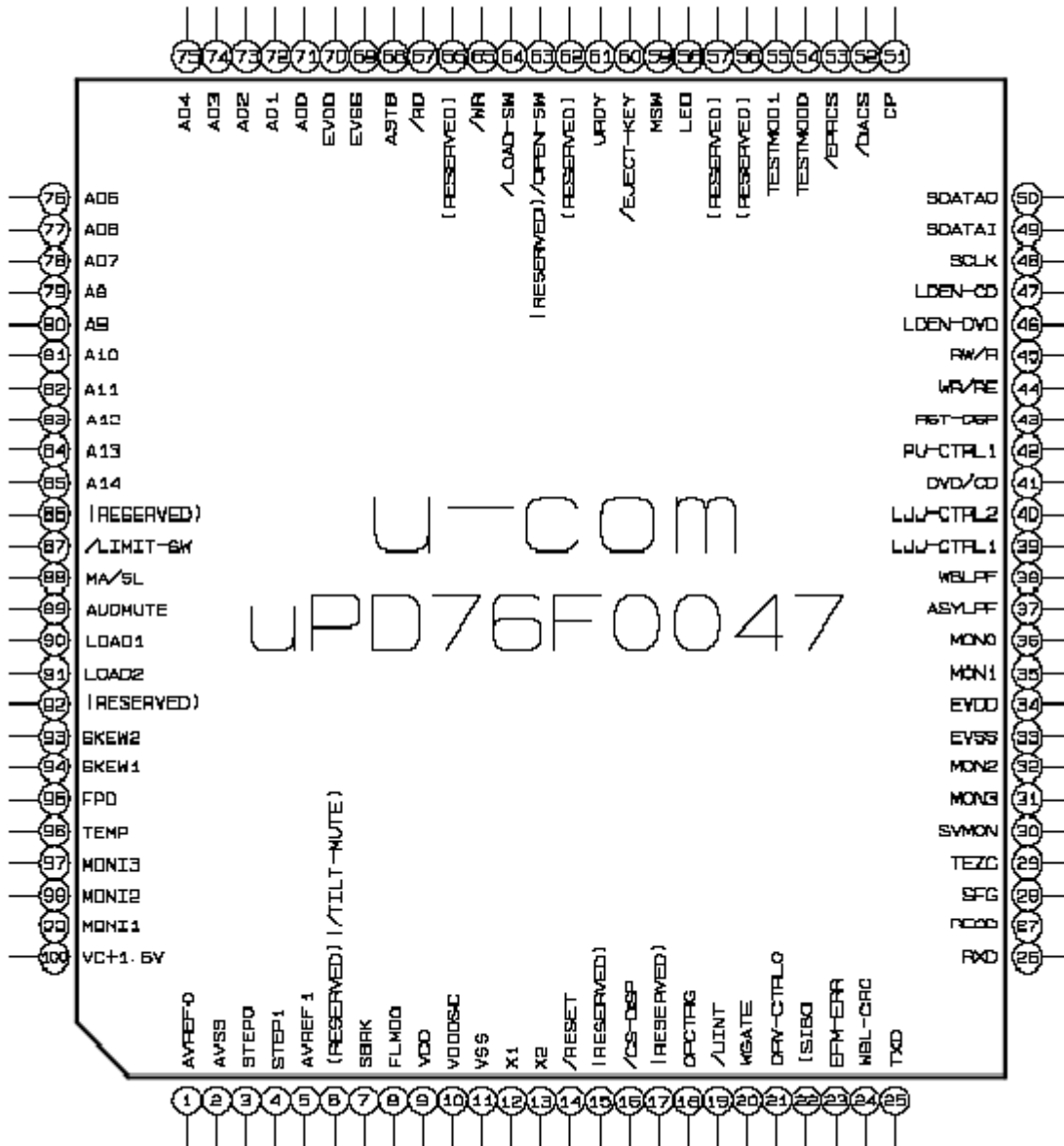
Pin No.	Pin Name		Type		Description
121	MIRRBCA	3V	O	Pull-up	RF AMP PC3320 RF equalizer automatic follow-up clock output.
122	EQCK1	3V	O	Pull-up	RF AMP PC3320 RF equalizer fixed clock output.
123	SCFCK	3V	O	P	RF AMP PC3320 RF equalizer automatic follow-up clock output.
124	WLDON	3V	O	L	Laser, Driver write laser control signal.
125	ROPC2	3V	O	L	Running OPC,sample hold signal.
126	DVDD33	-	-	-	Digital power.[3.3V]
127	DGND	-	-	-	Digital GND
128	ROPC1	3V	O	L	Running OPC,sample hold signal.
129	ROPC1	3V	O	L	APC write, sample hold signal.
130	SHAPCRE	3V	O	H	APC read/erase, sample hold signal.
131	SHSV	3V	O	H	Servo, sample hold signal.
132	SHWB	3V	O	H	Wobble, sample hold signal.
133	WBLPP	3V	I	-	CD: 2 direct Wobble signal input, DVD: RLPP signal input.
134	TEC	3V	I	-	Test port. It must be connected to DGND.
135	TEC	3V	I	-	Tracking, zero, cross signal input.
136	DGND	-	-	-	Digital GND
137	LE	Analog	I	-	Lens error signal input [A/D convertor].
138	FE	Analog	I	-	Focus error signal input [A/D convertor].
139	TE	Analog	I	-	Tracking error signal input [A/D convertor].
140	SWRF2	Analog	I	-	WRF sample hold signal input [A/D convertor].
141	SWRF1	Analog	i	-	WRF sample hold signal input [A/D convertor].
142	REFIN	Analog	I	-	Reference voltage input [A/D convertor].
143	AGND	-	-	-	Analog GND[Servo A/D, D/A block]
144	AVDD	-	-	-	Analog power 2.5V[Servo A/D, D/A block].
145	MDRV	Analog	O		Spindle drive output [D/A convertor output].
146	FDRV	Analog	O		Focus drive output [D/A convertor output].
147	TDRV	Analog	O		Trackng drive output [D/A convertor output].
148	SDRV	Analog	O		Sled drive output [D/A convertor output].
149	REFOUT	Analog	O	1/2AVDD	Reference voltage output.
150	DVDD25	-	-	-	Digital power[2.5V]
151	FG	5V_tolerant	I	-	FG signal input
152	SLED	5V_tolerant	O	-	Sled position sensor input.
153	INT	5V_tolerant	O	L	Interrupted request signal output to Local CPU

Pin No.	Pin Name		Type		Description
154	RDY	5V_tolerant	I	-	Access control signal output from Local CPU to SDRAM.
155	DVDD33	-	-	-	Digital power[3.3V]
156	A14	5V_tolerant	I	-	Local CPU Address bus.
157	A13	5V_tolerant	I	-	Local CPU Address bus.
158	A12	5V_tolerant	I	-	Local CPU Address bus.
159	A11	5V_tolerant	I	-	Local CPU Address bus.
160	A10	5V_tolerant	I	-	Local CPU Address bus.
161	A9	5V_tolerant	I	-	Local CPU Address bus.
162	A8	5V_tolerant	I	-	Local CPU Address bus.
163	DGND	-	-	-	Digital GND
164	AD7	5V_tolerant	I/O	-	Local CPU Address/data mux bus.
165	AD6	5V_tolerant	I/O	-	Local CPU Address/data mux bus.
166	AD5	5V_tolerant	I/O	-	Local CPU Address/data mux bus.
167	AD4	5V_tolerant	I/O	-	Local CPU Address/data mux bus.
168	AD3	5V_tolerant	I/O	-	Local CPU Address/data mux bus.
169	AD2	5V_tolerant	I/O	-	Local CPU Address/data mux bus.
170	DVDD33	-	-	-	Digital power[3.3V]
171	AD1	5V_tolerant	I/O	-	Local CPU Address/data mux bus.
172	AD0	5V_tolerant	I/O	-	Local CPU Address/data mux bus.
173	RD	5V_tolerant	I	-	Read strobe signal input.
174	WR	5V_tolerant	I	-	Write strobe signal input.
175	ASTB	5V_tolerant	I	-	Address strobe input.
176	$\overline{\text{CS}}$	5V_tolerant	I	-	Chip selector input from Local CPU.
177	$\overline{\text{SYSRST}}$	5V_tolerant	I	-	Reset input.
178	DGND	-	-	-	Digital GND.
179	DVDD25	-	-	-	Digital power[2.5V]
180	OPCTRG	3V	I/O	-	Wobble FM demodulation data output. DVD mode: OPCTRG signal output.
181	HFON	3V	O	H	Laser, Driver high-frequency control signal.
182	WRCK	-	-	L	Write Clock.
183	DVDD33	-	-	-	Digital power[3.3V]
184	WRPULSE	3V	O	L	Write pulse [write laser/driver control signal]
185	OPPULSE	3V	O	H	Write pulse [write laser/driver control signal]
186	DGND	-	-	-	Digital GND.

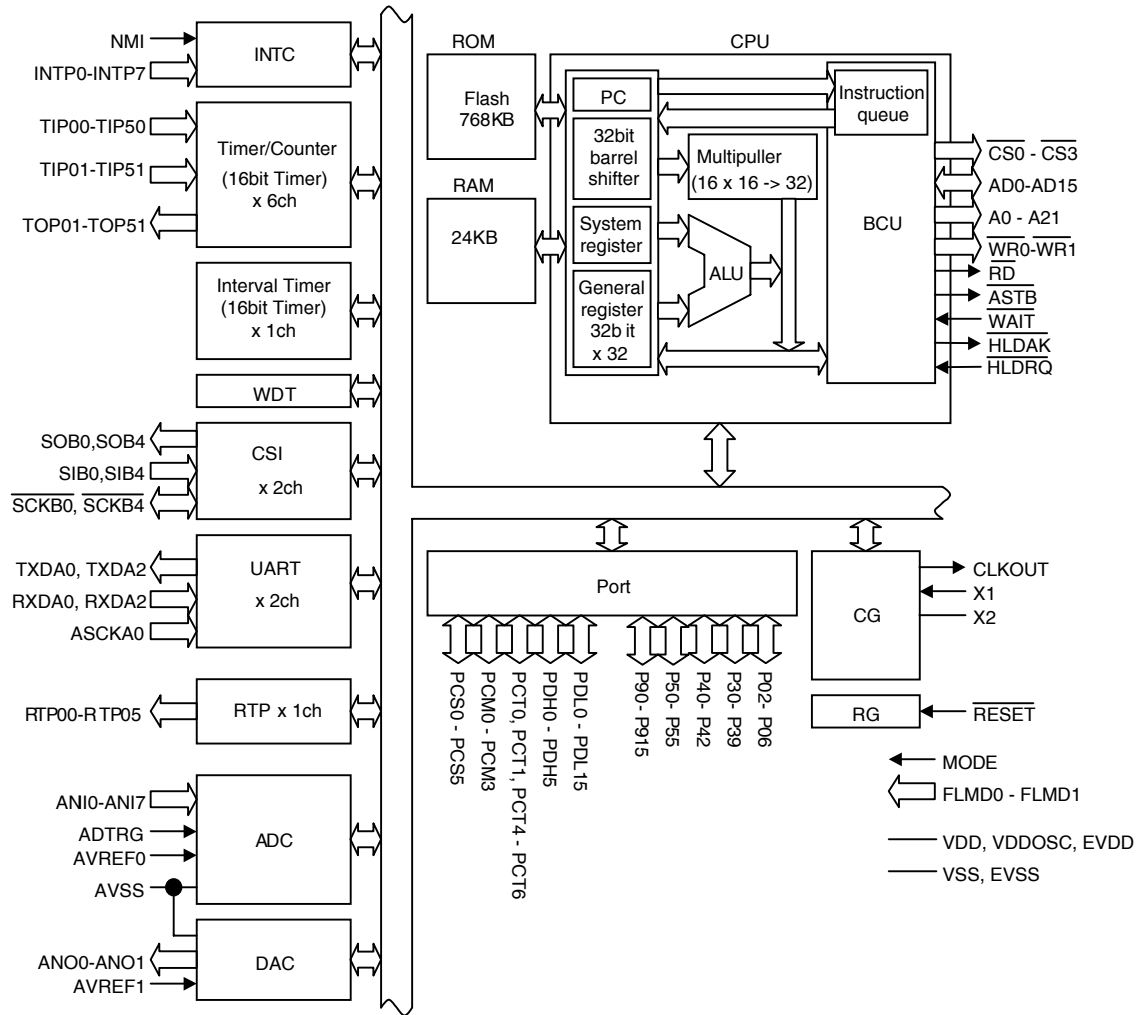
Pin No.	Pin Name		Type		Description
187	DVDD33	-	-	-	Digital power[3.3V]
188	EFPULSE	3V	O	L	OFF pluse output[write laser/driver control signal].
189	PKPULSE1	3V	O	L	Peak pluse output[write laser/driver control signal].
190	PKPULSE2	3V	O	L	Peak pluse output[write laser/driver control signal].
191	HDDREV	3V	I	-	Host interface data bus selector.[H: general, L: reverse]
192	AGND	-	-	-	Analog GND[WWAPLL]
193	AVDD	-	-	-	Analog power 2.5V [WWAPLL]
194	WWALPF1	Analog	-	-	WWAPLL condenser connecting port.
195	WWALPF2	Analog	-	-	WWAPLL condenser connecting port.
196	WRLPF	Analog	-	-	WST DLL condenser connecting port.
197	AGND	-	-	-	Analog GND[WST DLL block]
198	AVDD	-	-	-	Analog power 2.5V [WST DLL block]
199	AVDD	-	-	-	Analog power 2.5V [WDPLL A/D block]
200	WDADVRT	Analog	-	-	WDPLL block A/D convertor condenser connecting port.
201	AWBL	Analog	I	-	Analog wobble signal input port.
202	WDADVRB	Analog	-	-	WDPLL block A/D convertor condenser connecting port.
203	AGND	-	-	-	Analog GND[WDPLL A/D block]
204	AGND	-	-	-	Analog GND[PLL block]
205	AVDD	-	-	-	Analog power 2.5V [PLL block]
206	LPFCK	Analog	-	-	Test port. It must be connected to AGND.
207	AGND	-	-	-	Analog GND[Crystal block]
208	$\overline{\text{XTAL}}$	-	I/O	-	Crystal oscillator connecting port.
209	XTAL	-	I	-	Crystal oscillator connecting port.
210	DVDD25	-	-	-	Digital power[2.5V]
211	LRCK	3V	O	Pull-up	DOUt serial audio data.
212	SCKO	3V	O	Pull-up	Serial audio data synchronizing clock output port.
213	DVDD33	-	-	-	Digital power[3.3V]
214	DGND	-	-	-	Digital GND
215	DOUt	3V	O	Pull-up	Serial audio data output port.
216	EMPH	3V	O	Pull-up	Emphasis distinguish signal.

# 4. IC302(uPD76f0047):MICOM

## Pin Assignment



# Block Diagram





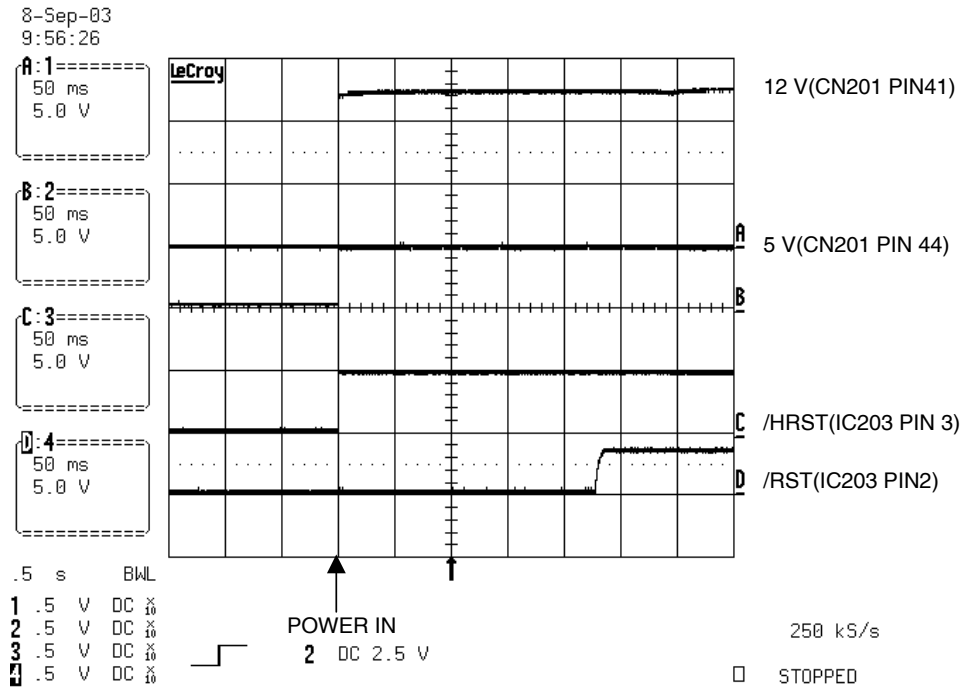
## Pin description

Pin No.	Pin Name	Type	Des cription
1	AVREF0	I	A/D CONVERTER REFERENCE VOLTAGE INPUT
2	AVSS	-	A/D,D/A CONVERTER POTENTIAL
3	STEP0	O	STEPPTING MOTOR CONTROL SIGNAL
4	STEP1	O	STEPPTING MOTOR CONTROL SIGNAL
5	AVREF1	I	D/A CONVERTER REFERENCE VOLTAGE INPUT
6	TILT-MUTE	O	TILT DRIVE MUTE SIGNAL
7	SBRK	O	EXTERNAL MEMORY ADDRESS BUS
8	FLMD0	I	FLASH PROFLAMING MODE
9	VDD	-	I NTERNAL CONSTANT POWER
10	VDDOSC	-	CONSTANT POWER
11	VSS	-	INTERNAL GROUND POTENTIAL
12	X1	I	MAIN CLOCK
13	X2	-	MAIN CLOCK
14	/RESET	I	SYSTEM RESET
15	(RESERVED)	-	-
16	/CS-DSP	O	CHIP SELECTOR OUPUT
17	(RESERVED)	-	-
18	OPCTRГ	I/O	WOBBLE FM DE M ODUL ATI ON DATA
19	/UINT	I	INTERRUPTED REQUEST SIGNAL INPUT
20	WGATE	I	DRIVER WRITER LASER CONTROL SIGNAL
21	DRV-CTRL0	-	-
22	SIB0	I	SERIAL CLOCK
23	EFM-ERR	-	-
24	WBL-CRC	-	-
25	TXD	O	SERIAL CLOCK
26	RXD	I	SERIAL CLOCK
27	RECD	I	NO RECODR DING AREA DETECTION
28	SFG	I	FG SIGNAL INPUT
29	TEZC	I	TRACK ZERO CROSS SIGNAL INPUT
30	SVMON	I	SERVO BLOCK MONITOR SIGNAL
31	MON3	I	M ONI TOR TEST SINGNAL
32	MON2	I	M ONI TOR TEST SINGNAL
33	EVSS	-	EXTERNAL CONSTANT POWER
34	EVDD	-	EXTERNAL CONSTANT POWER
35	MON1	I	MONITOR TEST SINGNAL
36	MON0	I	MONITOR TEST SINGNAL
37	ASYLPF	-	-
38	WBLPF	-	-
39	LJJ-CTRL1	-	-
40	LJJ-CTRL2	-	-
41	DV D/CD	-	-
42	PU-CTRL1	O	PD IC GAIN CONTROL SIGNAL
43	RST-DSP	O	RESET OUT
44	WR/RE	O	PD IC GAIN COTTROL SI NAL(WRITE/READ)
45	RW/R	-	-
46	LDEN-DVD	O	PICK-UP LD ENABLE SIGNAL (DV D)
47	LDEN-CD	O	PIC K-UP LD ENABLE SIGNAL (C D)
48	SCLK	O	REGISTER SETTING CLOCK
49	SDATAI	I	REGISTER SETTING DATA INPUT
50	SDATAO	O	REGISTER SETTING DATA OUTPUT

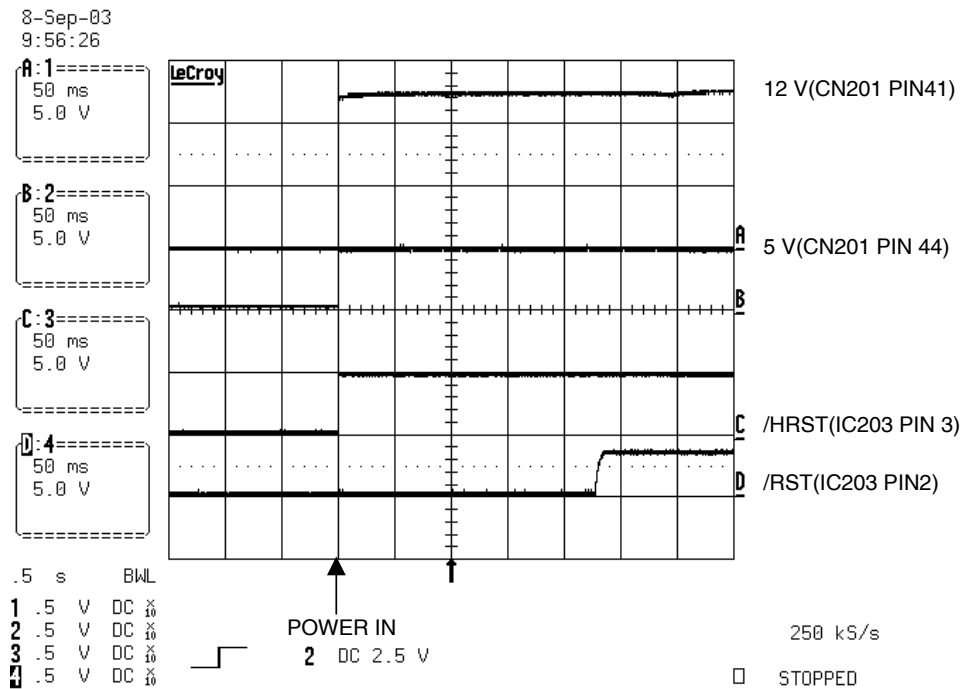
Pin No.	Pin Name	Type	Des cription
51	CP	O	REGISTER ADDRESS OUPUT
52	/DACS	O	CHIP SELECTOR
53	/BPRCS	O	EEPROM COMM UNICATON LINE
54	TEST MOD0	-	-
55	TEST MOD1	-	-
56	(RESERVED)	-	-
57	(RESERVED)	-	-
58	LED	O	LED ENABLE LINE
59	MSW	O	LED ENABLE LINE
60	/EJECT-KEY	O	TRAY OPE N LINE
61	URDY	O	ACCESS CONTROL SIGNAL INPUT FRON CPU TO SDRAM
62	(RESERVED)	-	-
63	/OPEN-SW	I	OPEN S/W INPUT
64	/LOAD-SW	I	LOAD S/W INPUT
65	/WR	O	WRITE STROBE SIGNAL OUTPUT
66	(RESERVED)	-	-
67	/RD	O	READ STROBE SIGNAL OUPUT
68	ASTB	O	ADDRESS STROBE OUPUT
69	EVSS	-	EX TERNAL CONSTANT POWER
70	EVDD	-	EX TERNAL CONSTANT POWER
71	AD0	I/O	PORT DL 16BIT INPUT/OUTPUT
72	AD1	I/O	PORT DL 16BIT INPUT/OUTPUT
73	AD2	I/O	PORT DL 16BIT INPUT/OUTPUT
74	AD3	I/O	PORT DL 16BIT INPUT/OUTPUT
75	AD4	I/O	PORT DL 16BIT INPUT/OUTPUT
76	AD5	I/O	PORT DL 16BIT INPUT/OUTPUT
77	AD6	I/O	PORT DL 16BIT INPUT/OUTPUT
78	AD7	I/O	PORT DL 16BIT INPUT/OUTPUT
79	A8	I/O	PORT DL 16BIT INPUT/OUTPUT
80	A9	I/O	PORT DL 16BIT INPUT/OUTPUT
81	A10	I/O	PORT DL 16BIT INPUT/OUTPUT
82	A11	I/O	PORT DL 16BIT INPUT/OUTPUT
83	A12	I/O	PORT DL 16BIT INPUT/OUTPUT
84	A13	I/O	PORT DL 16BIT INPUT/OUTPUT
85	A14	I/O	PORT DL 16BIT INPUT/OUTPUT
86	(RESERVED)	I/O	PORT DL 16BIT INPUT/OUTPUT
87	/LIMIT-SW	I	TRAY LIMIT S/W INPUT
88	MA/SL	I	MASTER/SLAVE MODE SELECTOR
89	AUDMUTE	-	-
90	LOAD1	O	STANDBY/BRAKE CONTROL SIGNAL
91	LOAD2	O	STANDBY/BRAKE CONTROL SIGNAL
92	(RESERVED)	-	-
93	SKEW2	-	-
94	SKEW1	-	-
95	FPD	I	TEMPERATURE MONITOR CURRENT INPUT
96	TEMP	I	MONITOR TEST SINGNAL
97	MONI3	I	FOCUS ERROR INPUT
98	MONI2	I	LASER MONITOR CURRENT INPUT
99	MONI1	I	PDIC REFERNEC VOLTAGE
100	VC+1.5V	I	VCC 1.5V INPUT

# WAVEFORMS

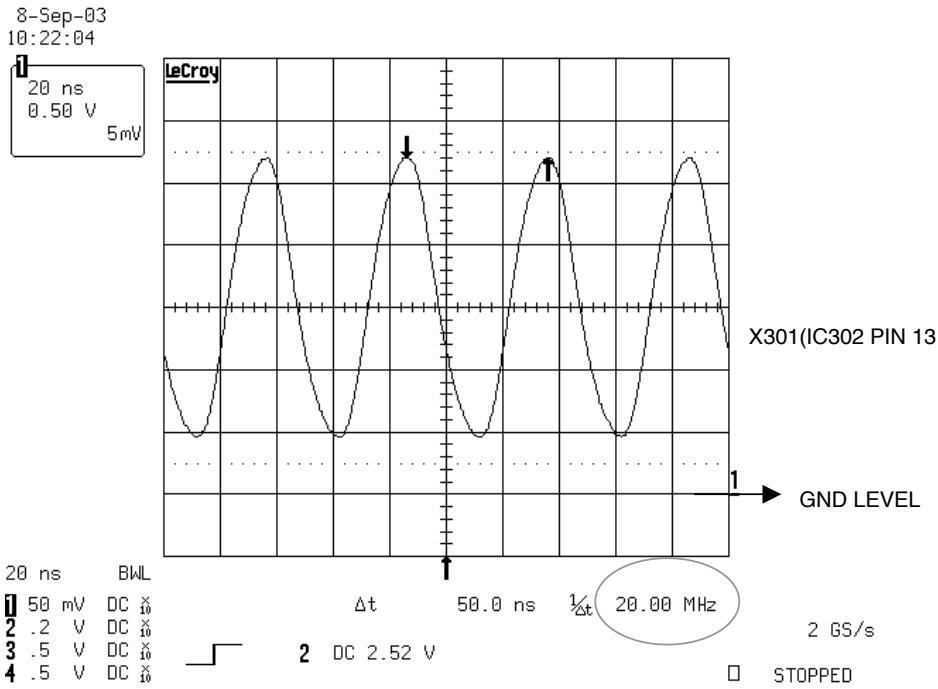
## 1. POWER & RESET Signal



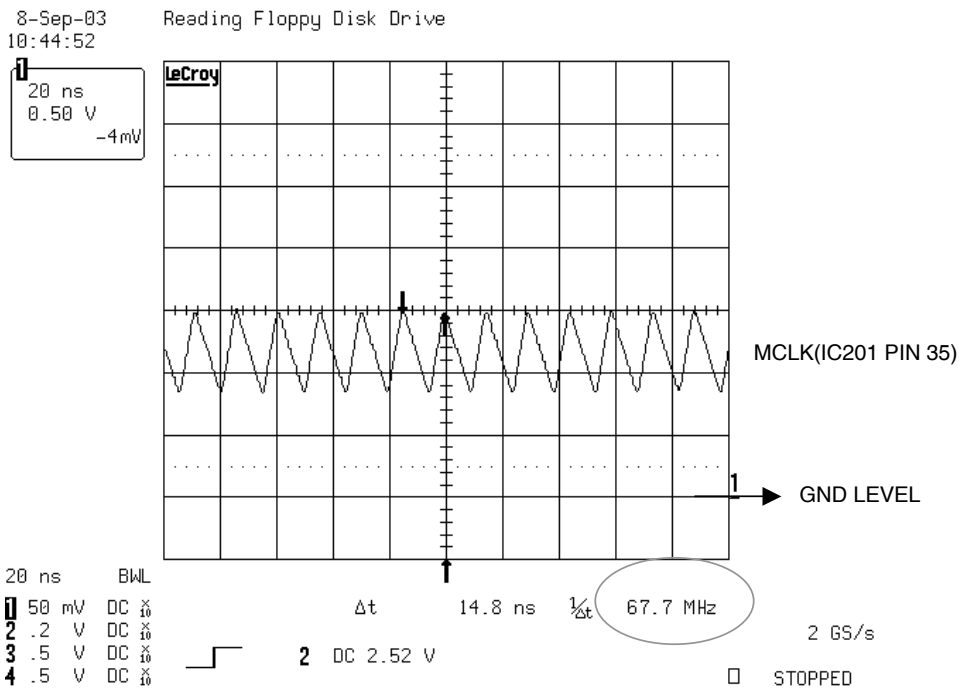
## 2. Main Clock1 for IC202 (16.9MHz)



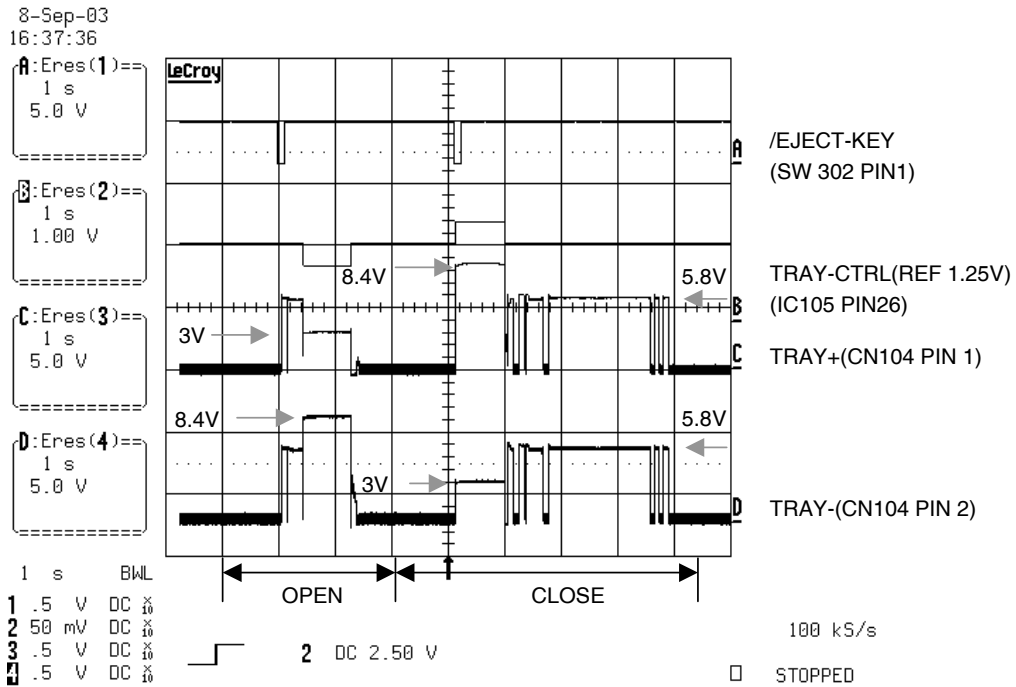
### 3. Main Clock2 for IC302 (20MHz)



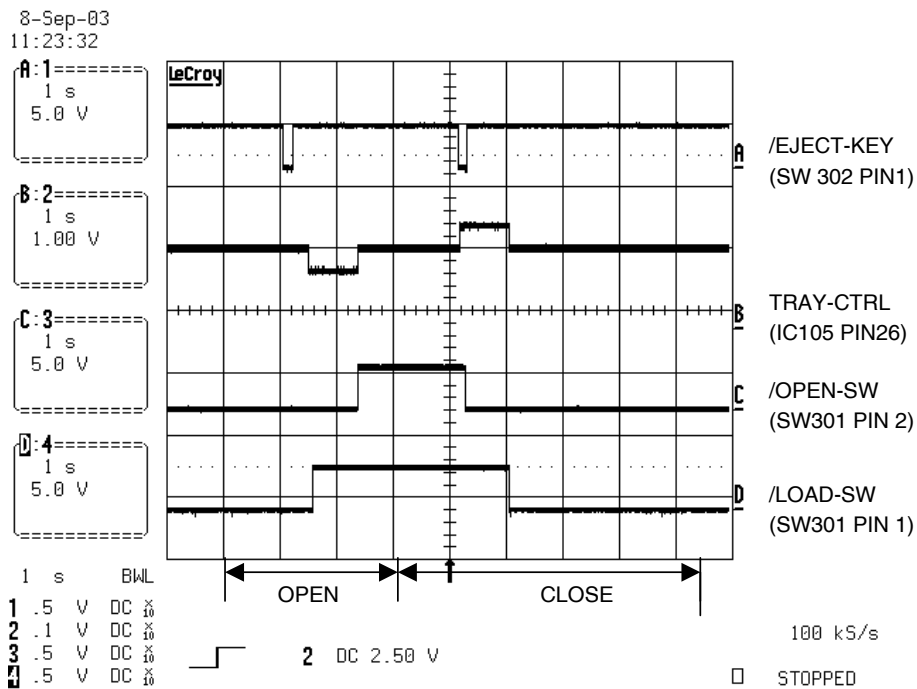
### 4. SDRAM Clock



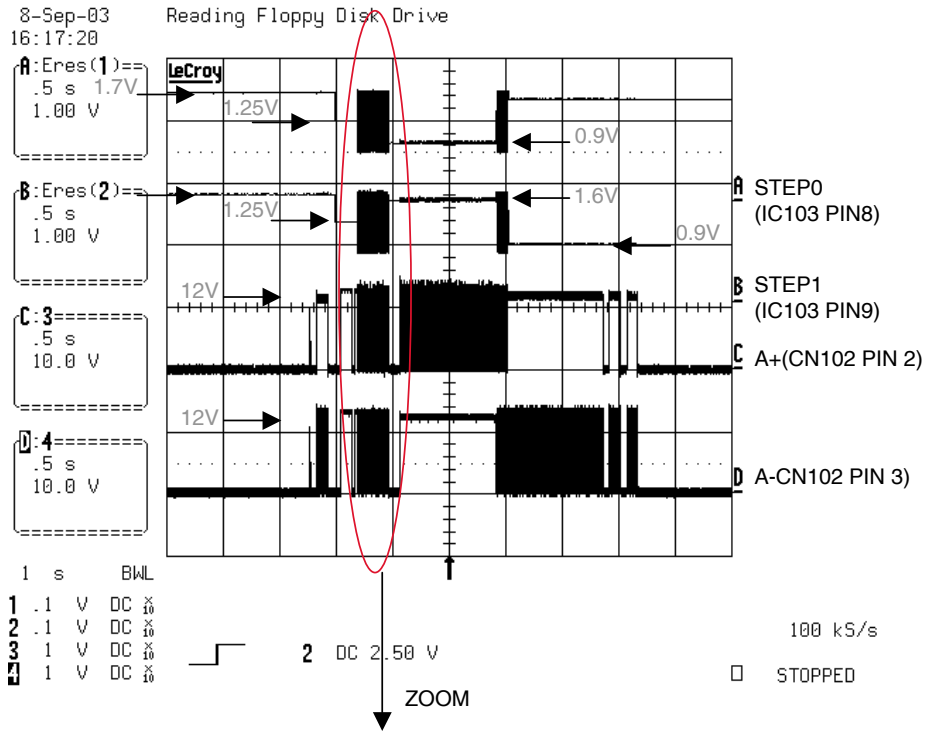
## 5. TRAY OPEN/CLOSE SIGNAL 1



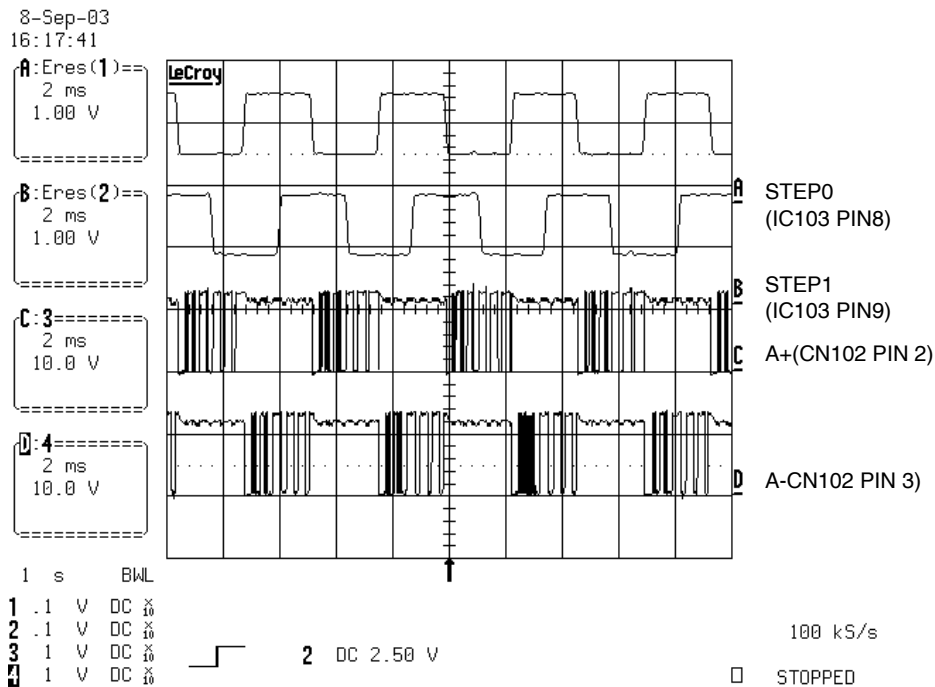
## 6. TRAY OPEN/CLOSE SIGNAL 2



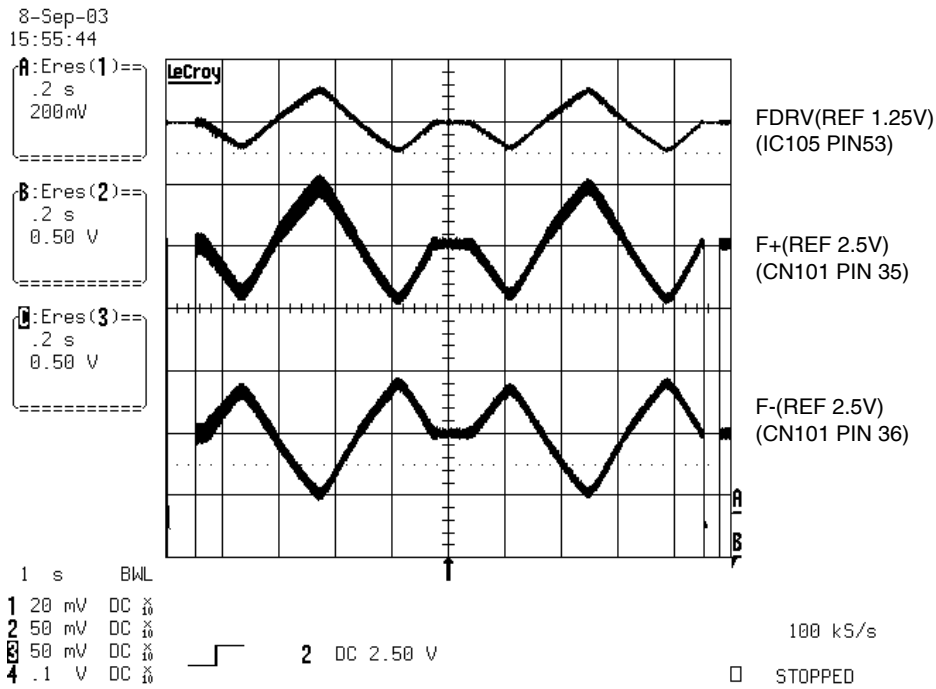
## 7. SLED MOVE SIGNAL 1



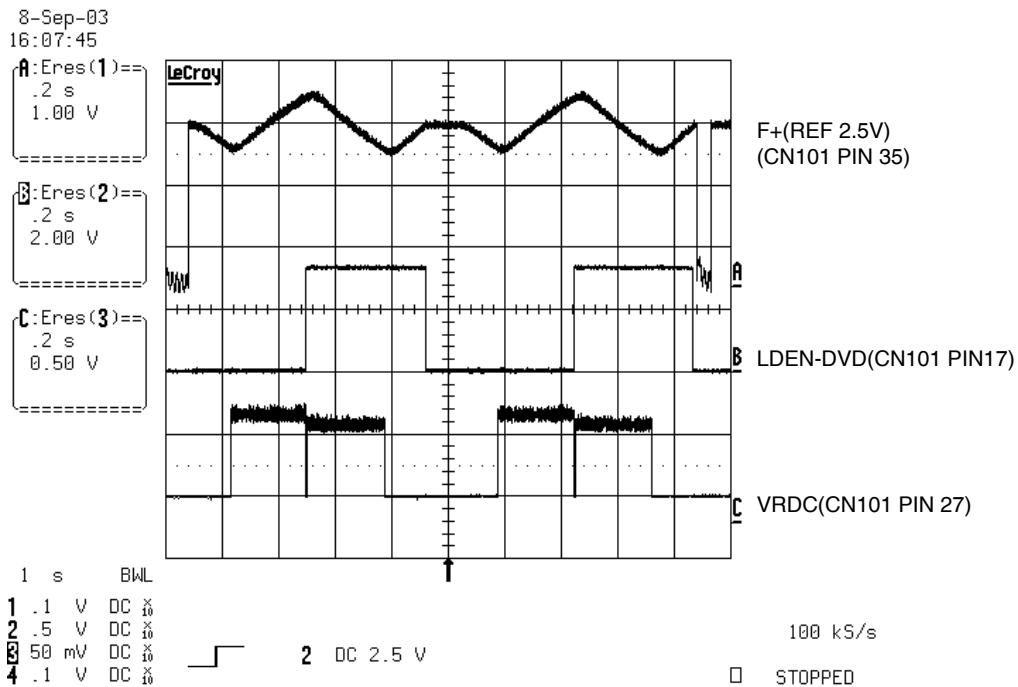
## 8. SLED MOVE SIGNAL 2



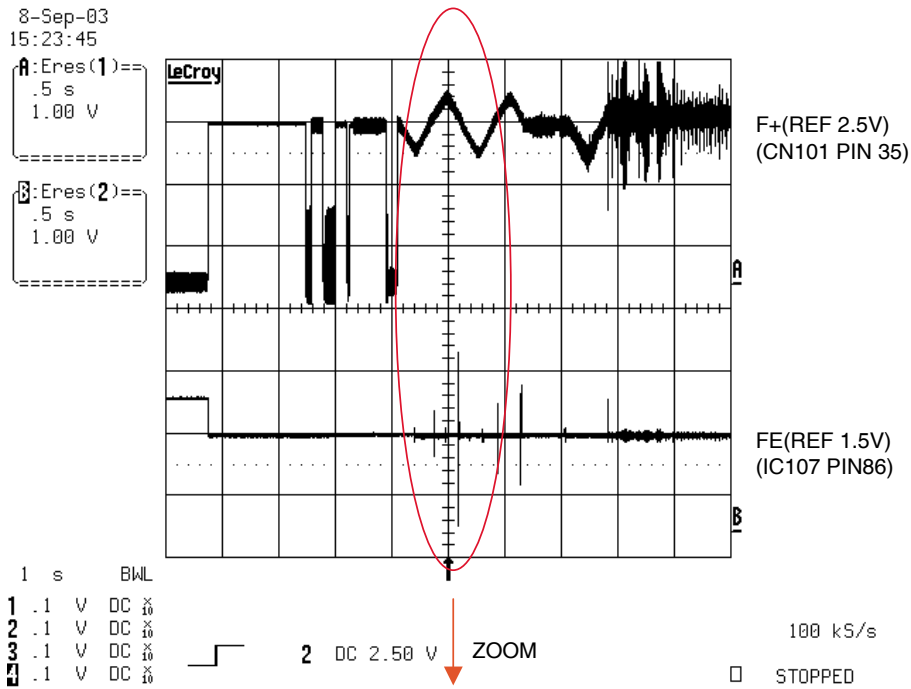
## 9. FOCUS SEARCH SIGNAL



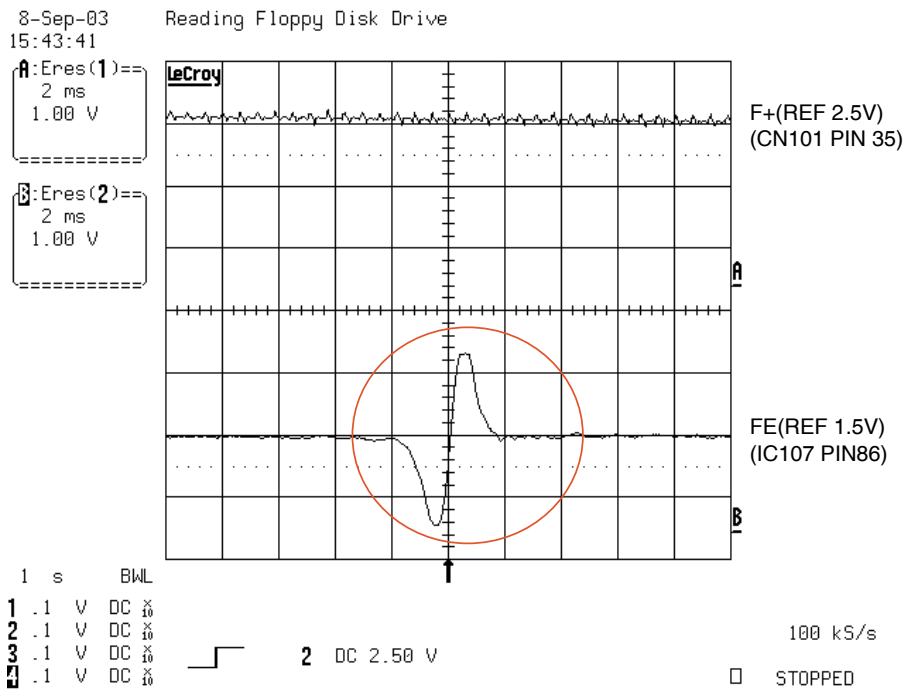
## 10. LASER TURN ON SIGNAL



## 11. DISC TYPE JUDGEMENT WAVEFORM (CD SERIES)

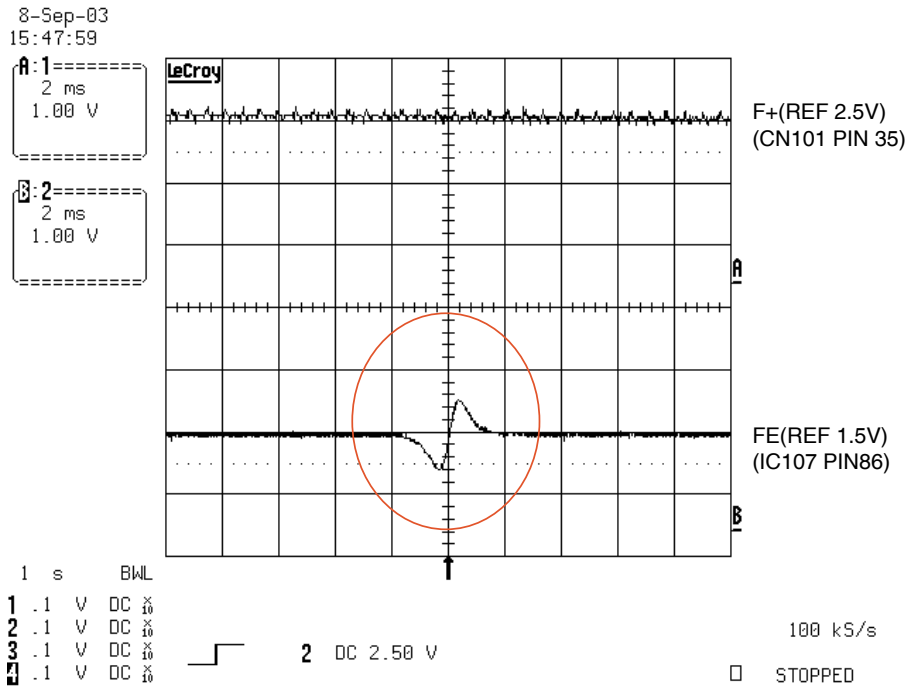


## 12. DISC TYPE JUDGEMENT WAVEFORM (CD&CD-R)

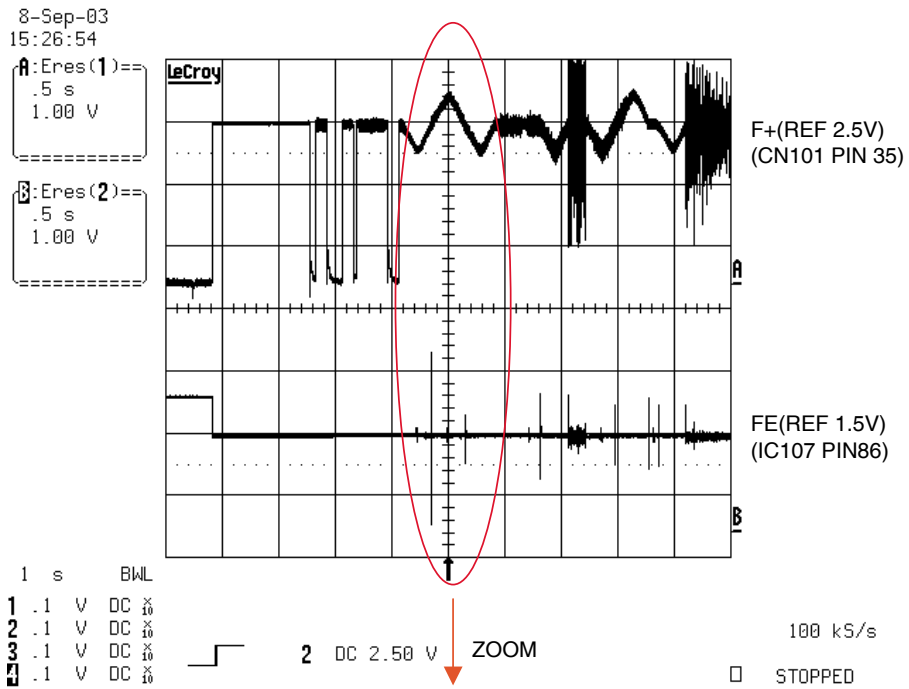




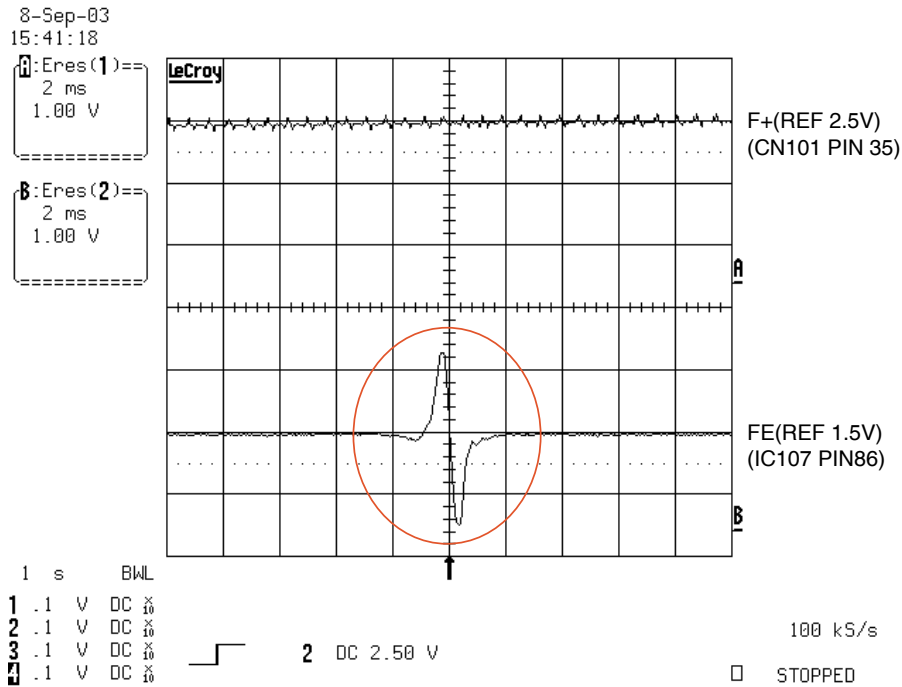
### 13. DISC TYPE JUDGEMENT WAVEFORM (CD-RW)



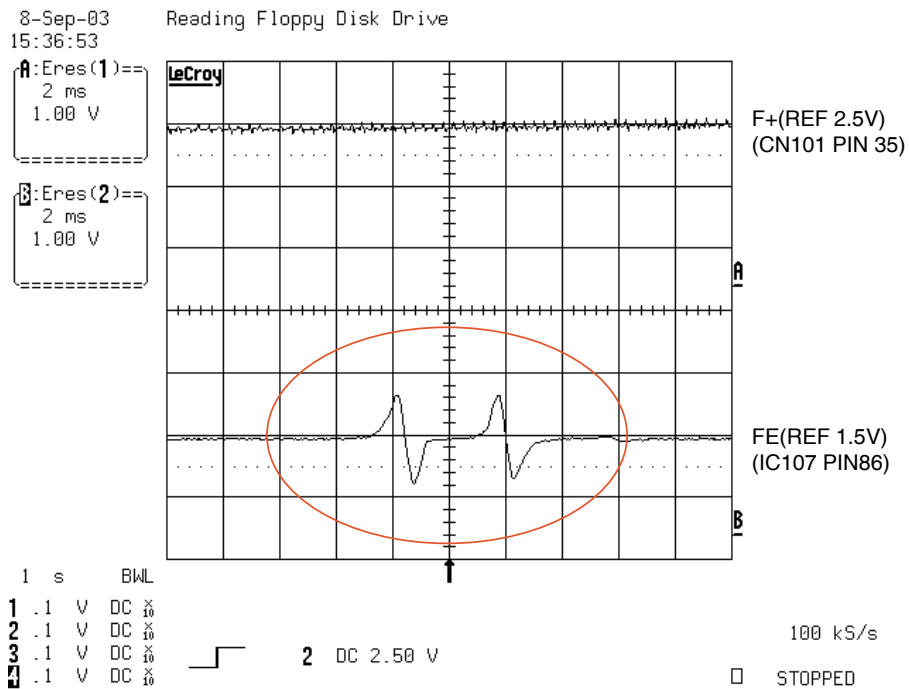
### 14. DISC TYPE JUDGEMENT WAVEFORM (DVD SERIES)



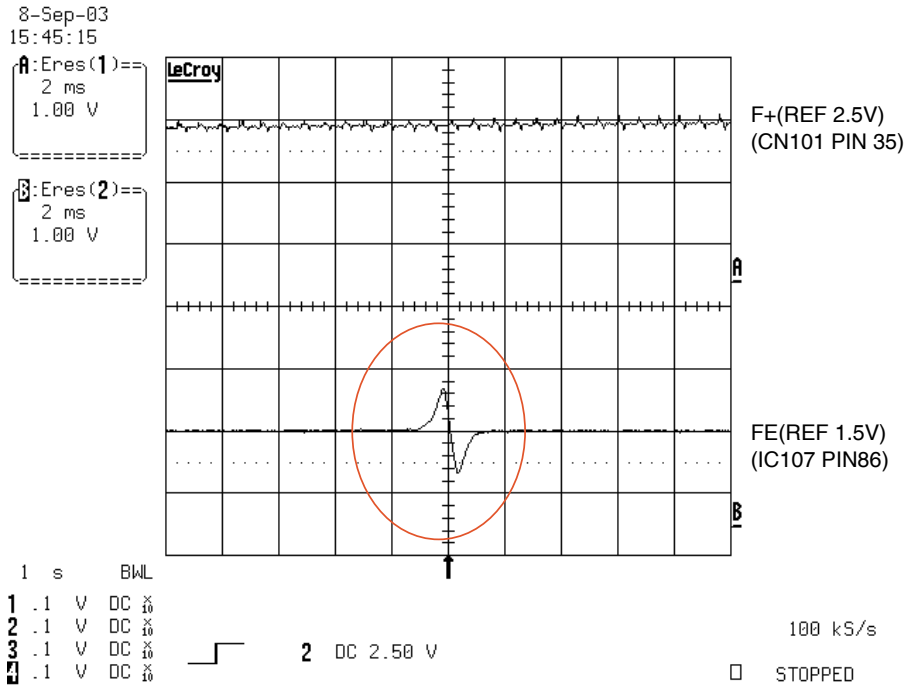
### 15. DISC TYPE JUDGEMENT WAVEFORM (DVD\_SINGLE&R)



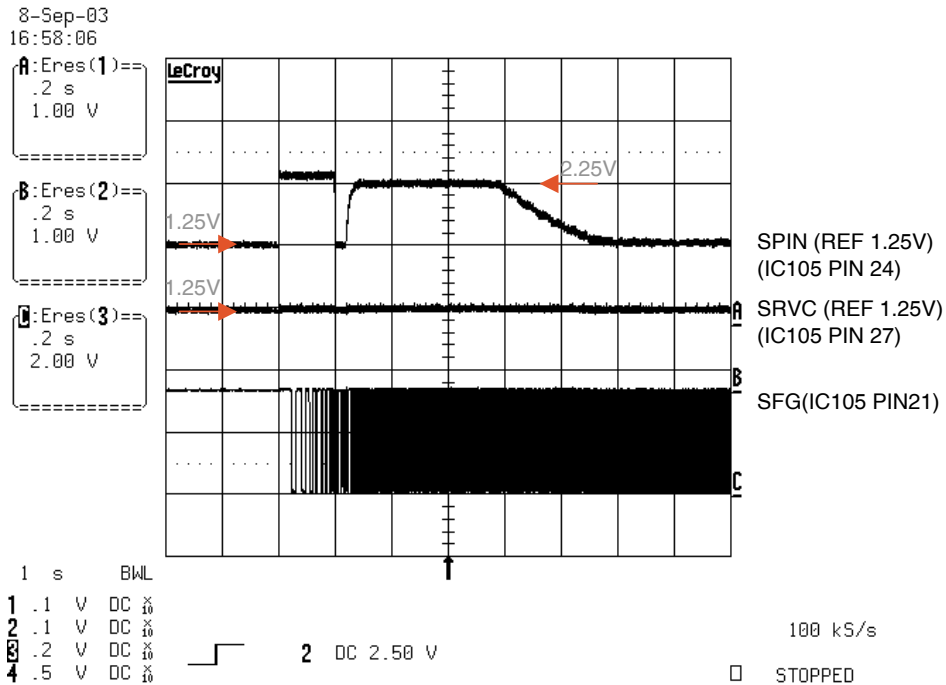
### 16. DISC TYPE JUDGEMENT WAVEFORM (DVD\_DUAL)



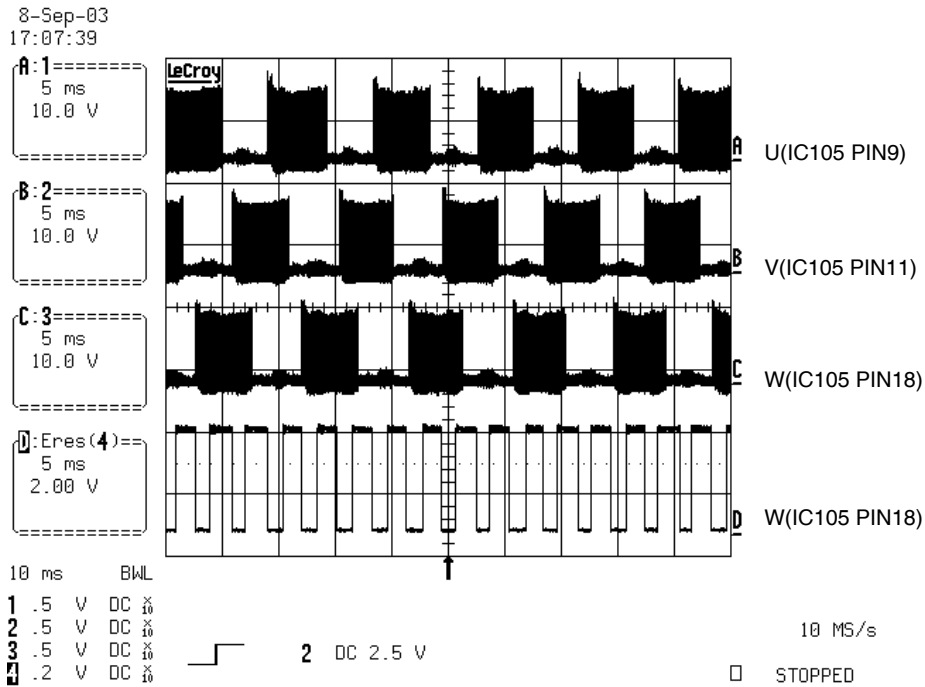
### 17. DISC TYPE JUDGEMENT WAVEFORM (DVDRW)



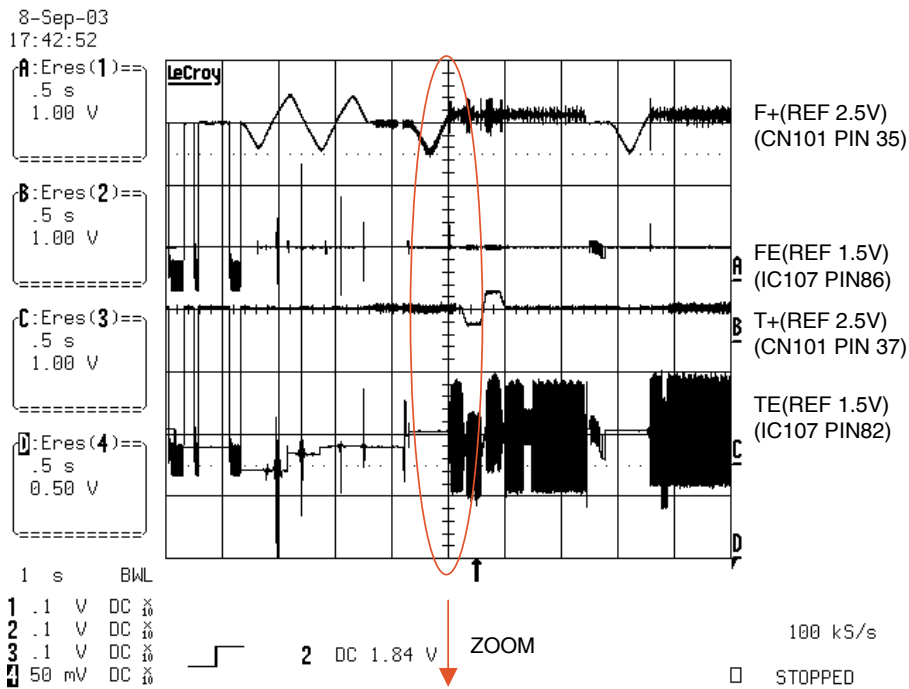
### 18. SPINDLE WAVEFORM1



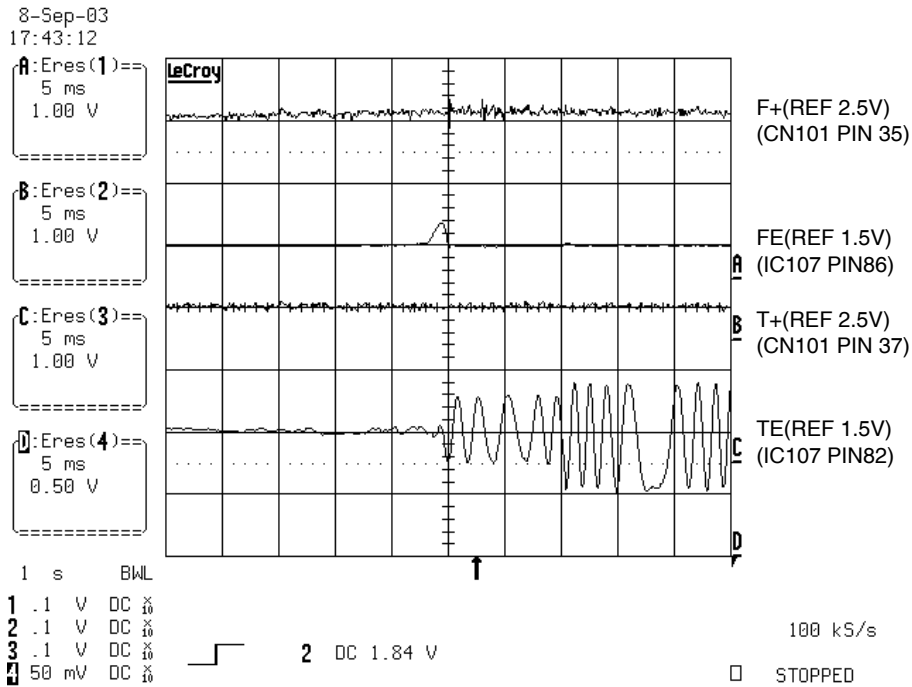
## 19. SPINDLE WAVEFORM2



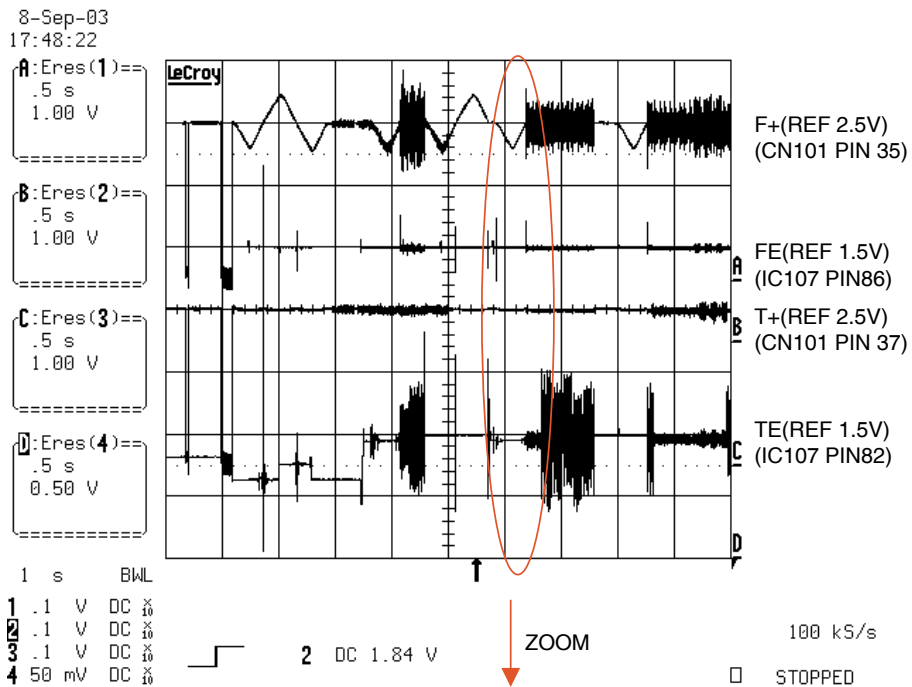
## 20. FOCUS ON SIGNAL(CD)



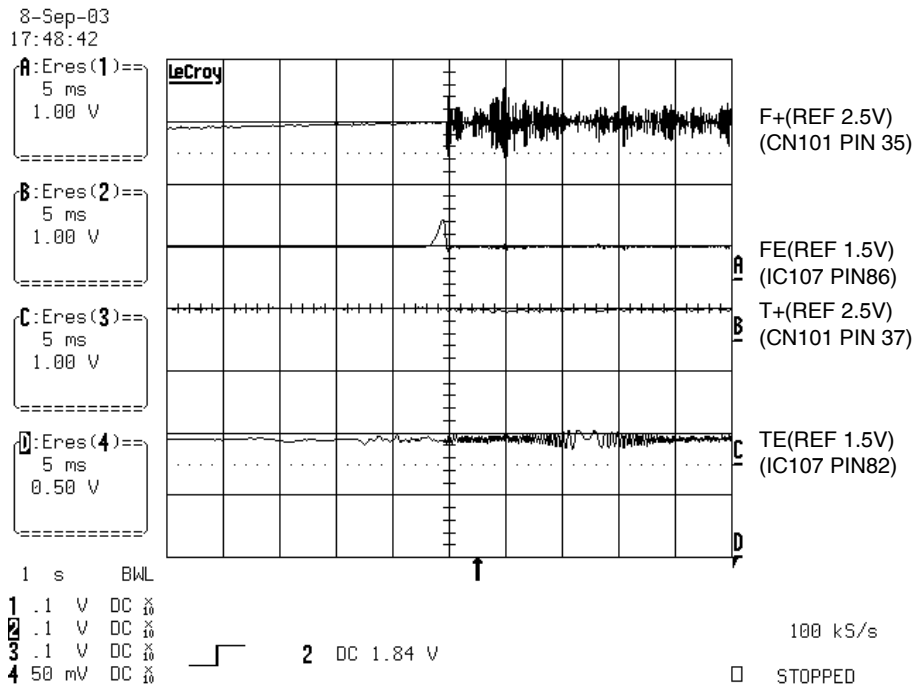
## 21. FOCUS ON SIGNAL(CD)



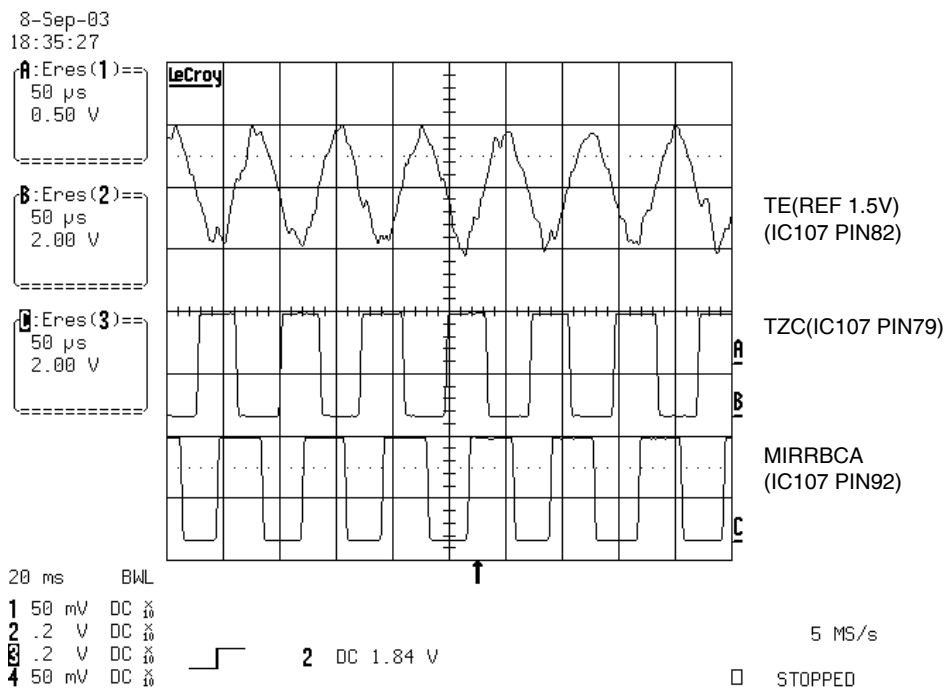
## 22. FOCUS ON SIGNAL(DVD)



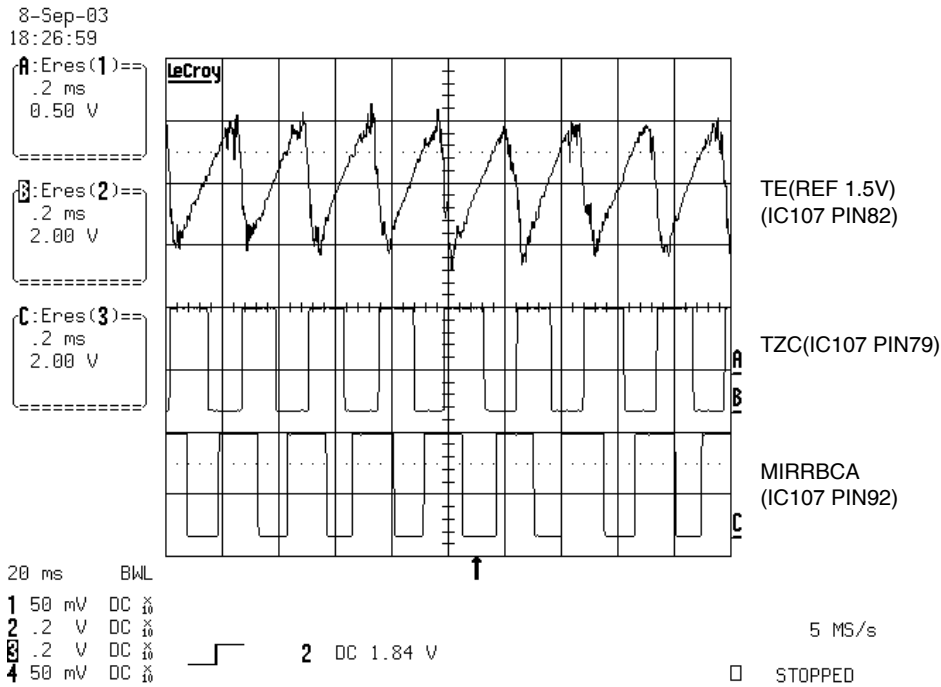
### 23. FOCUS ON SIGNAL (DVD)



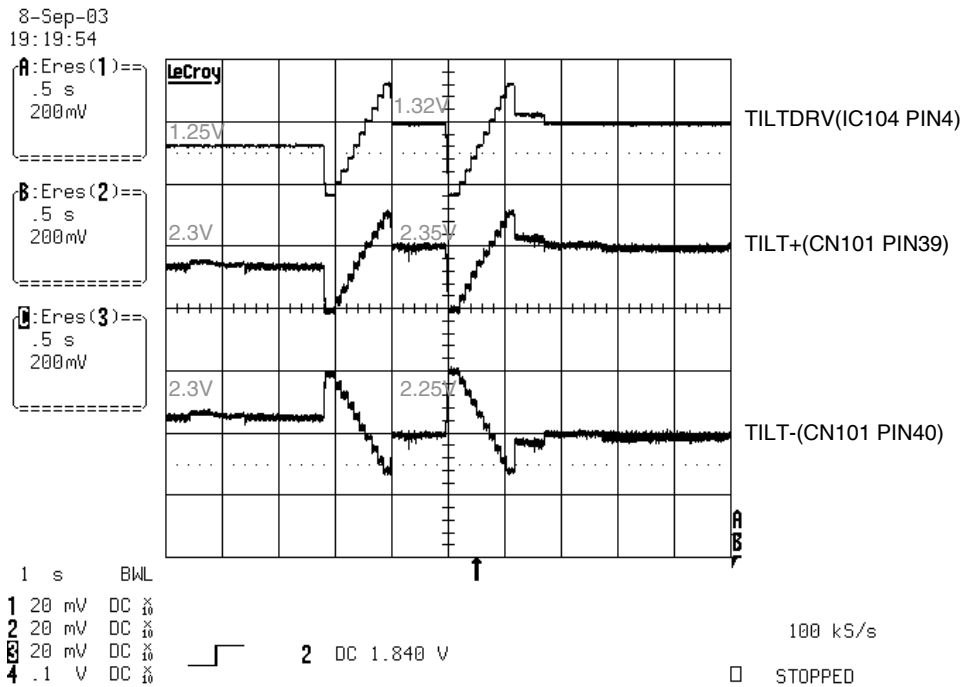
### 24. TRACK OFF SIGNAL(CD)



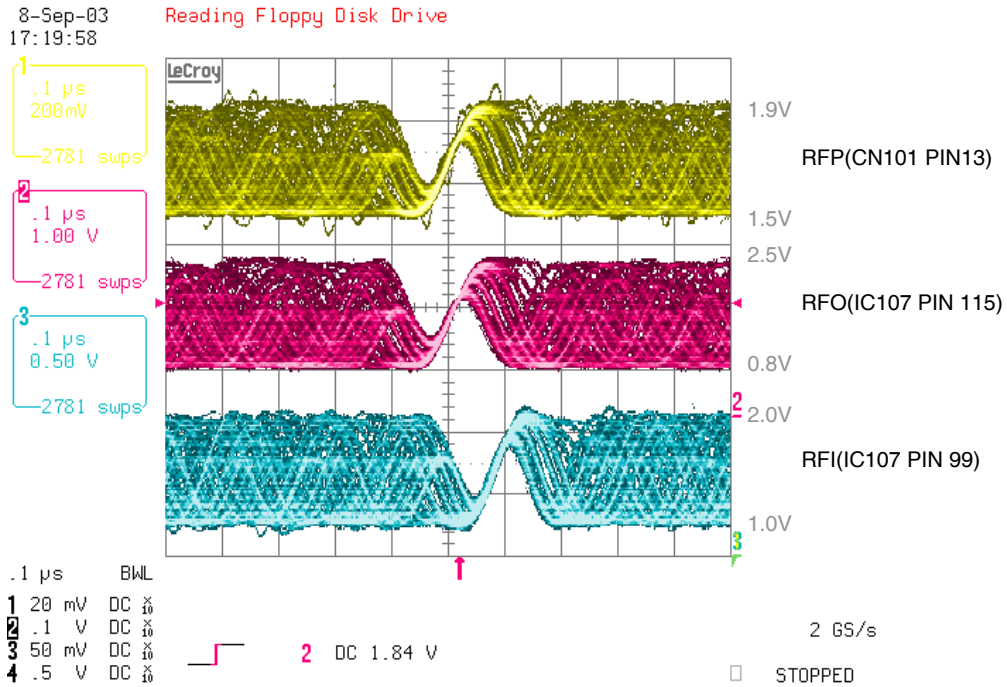
## 25. TRACK OFF SIGNAL(DVD)



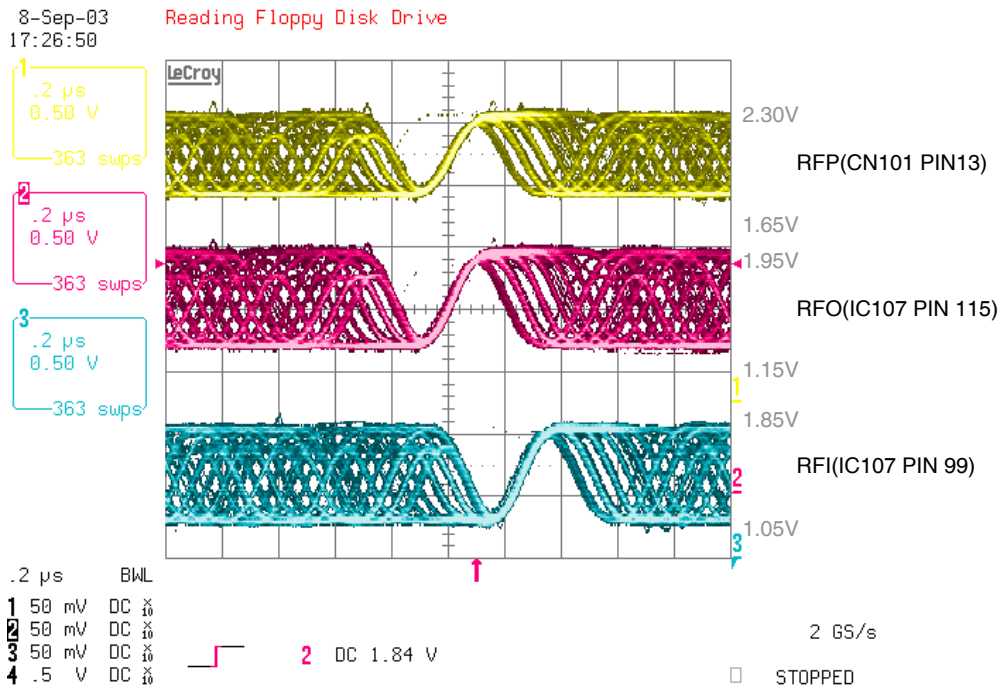
## 26. Tilt Driver signal(Disc reading)



## 27. RF WAVEFORM(DVD)

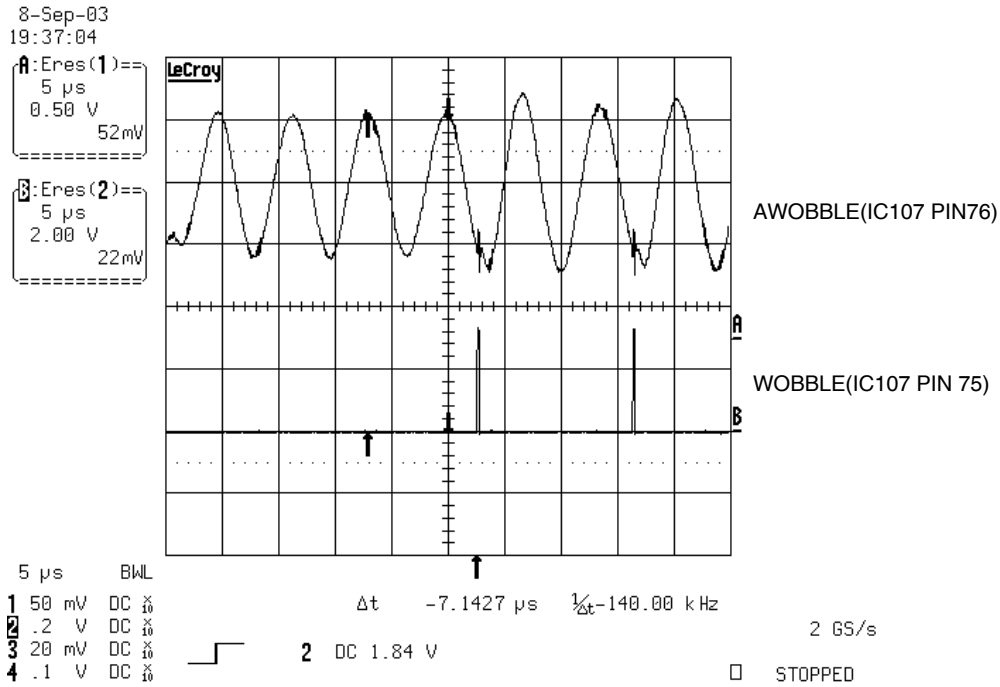


## 28. RF WAVEFORM(CD)

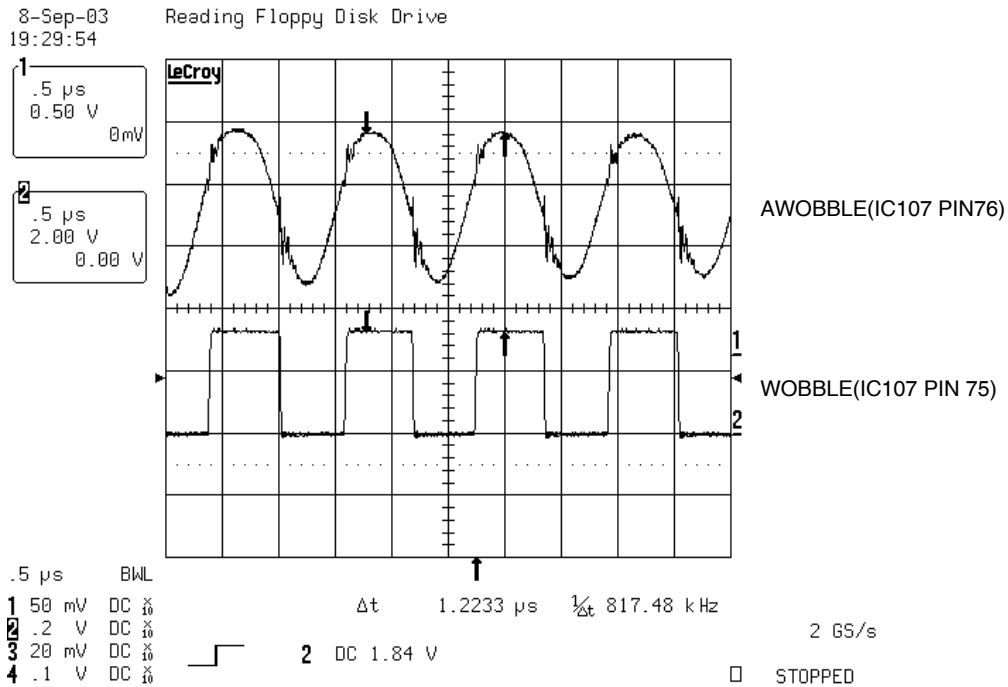




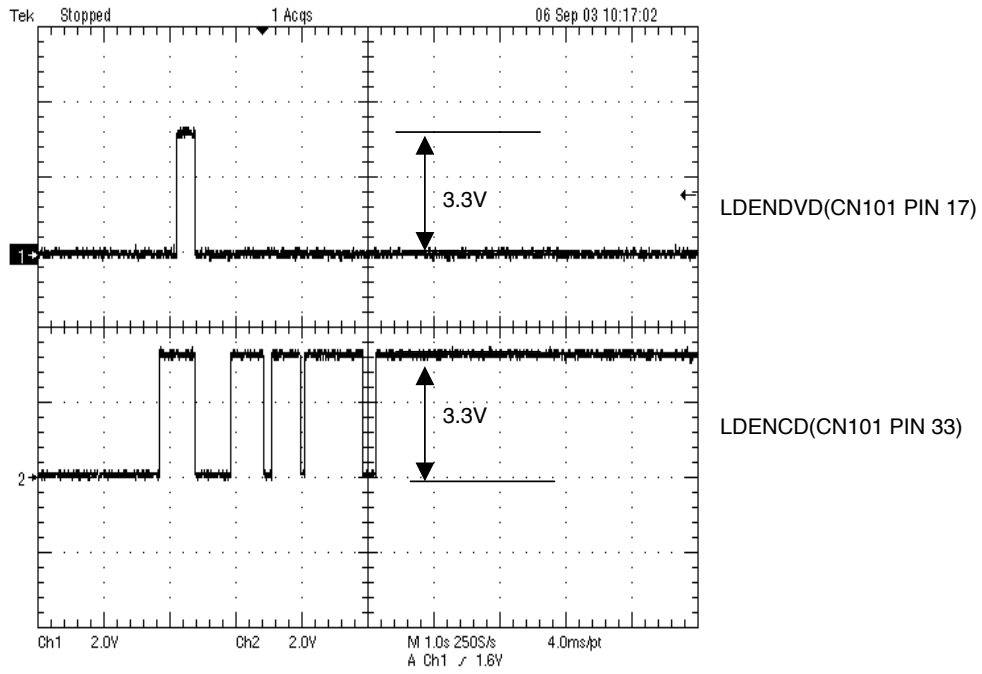
## 29. WOBBLE(DVD-R/RW)\_READING



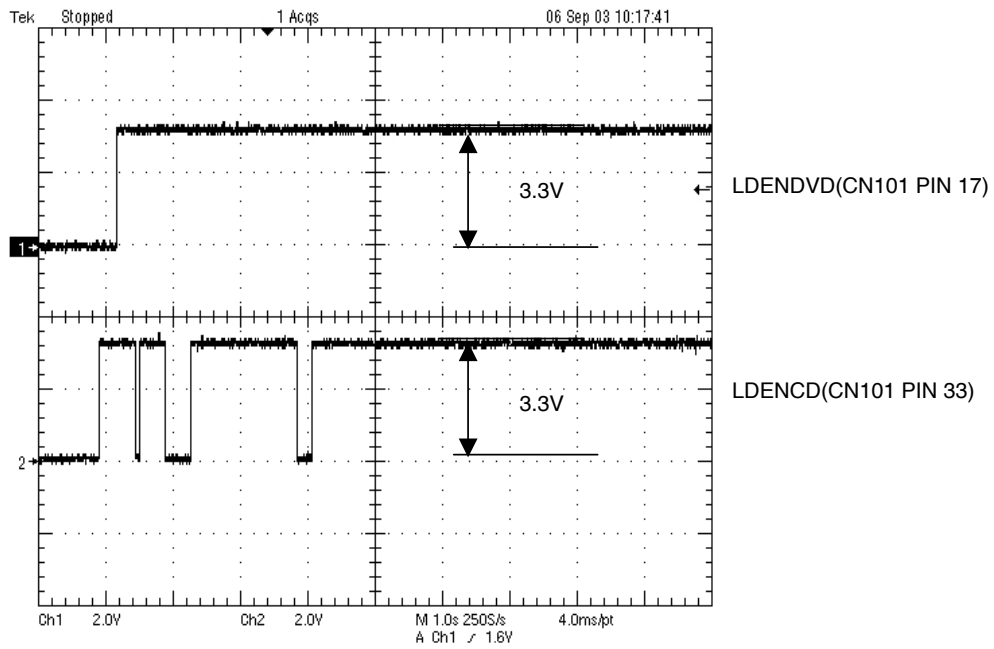
## 30. WOBBLE(DVD+R/RW)\_READING&WRITING =>X1 SPEED



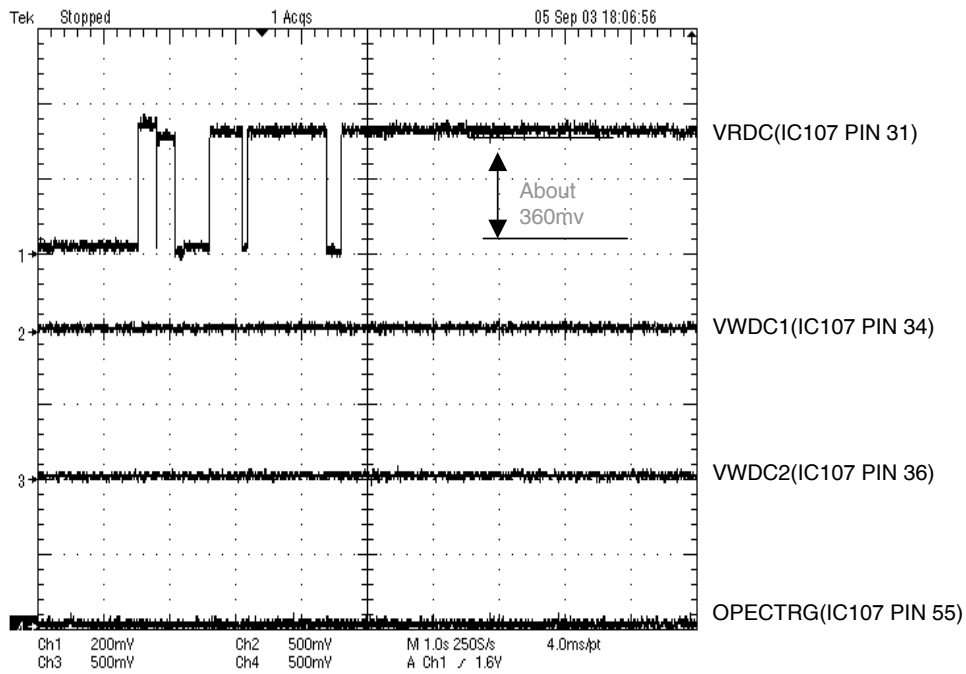
### 31. LD Enable(DVD)



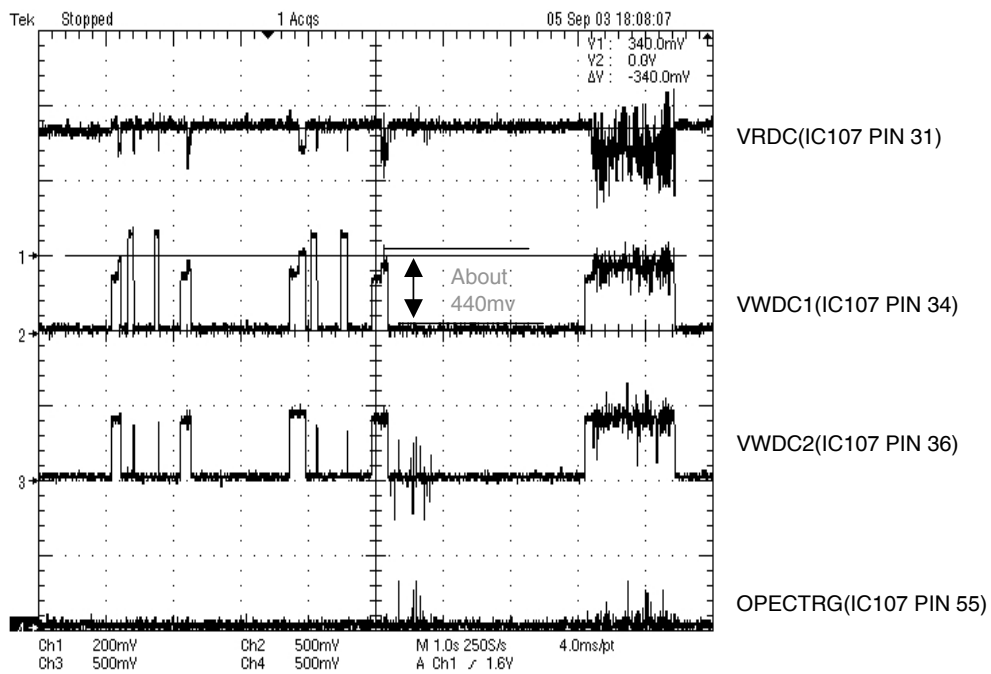
### 32. LD Enable(CD)



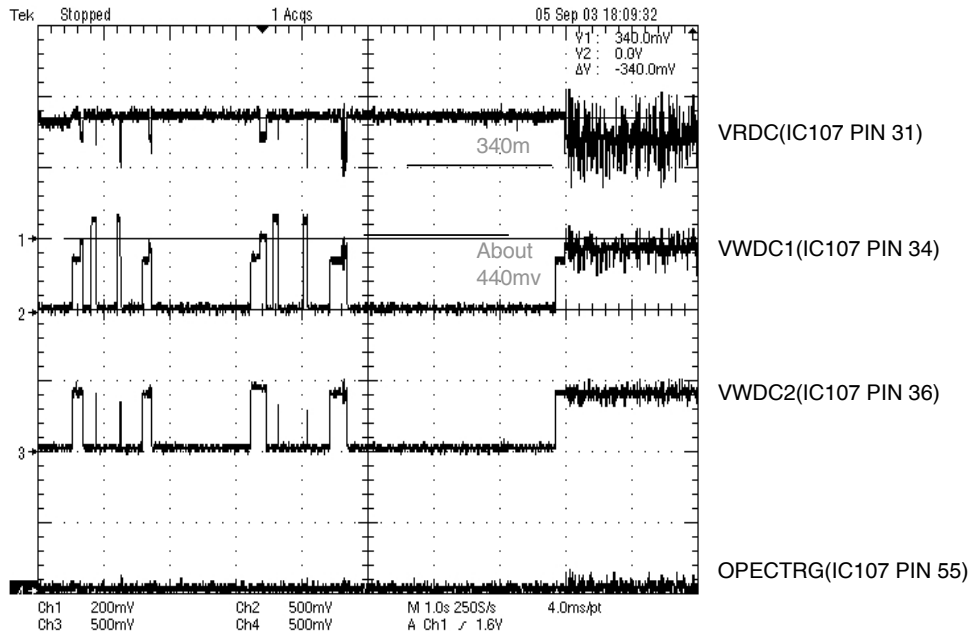
### 33. Laser Power(reading)\_DVD+RW



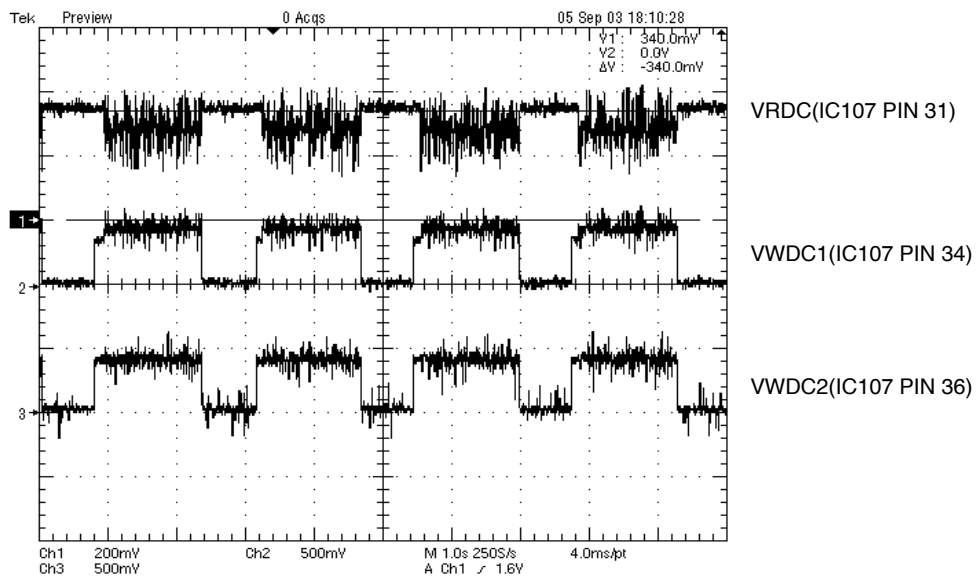
### 34. Laser Power(Erase)\_DVD+RW



### 35. Laser Power(Writing)\_initial state



### 36. Laser Power(Writing)\_Processing

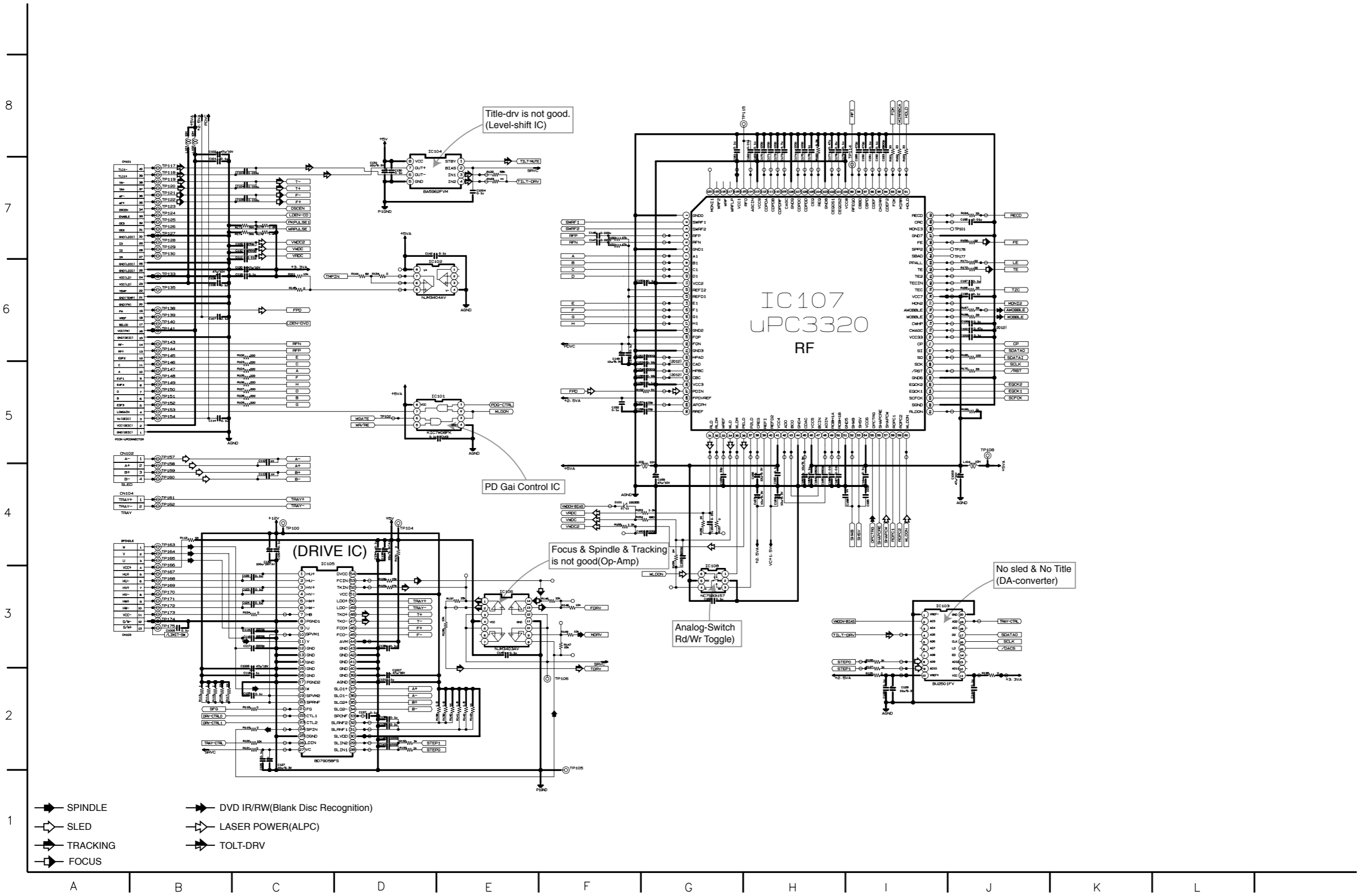


# MEMO

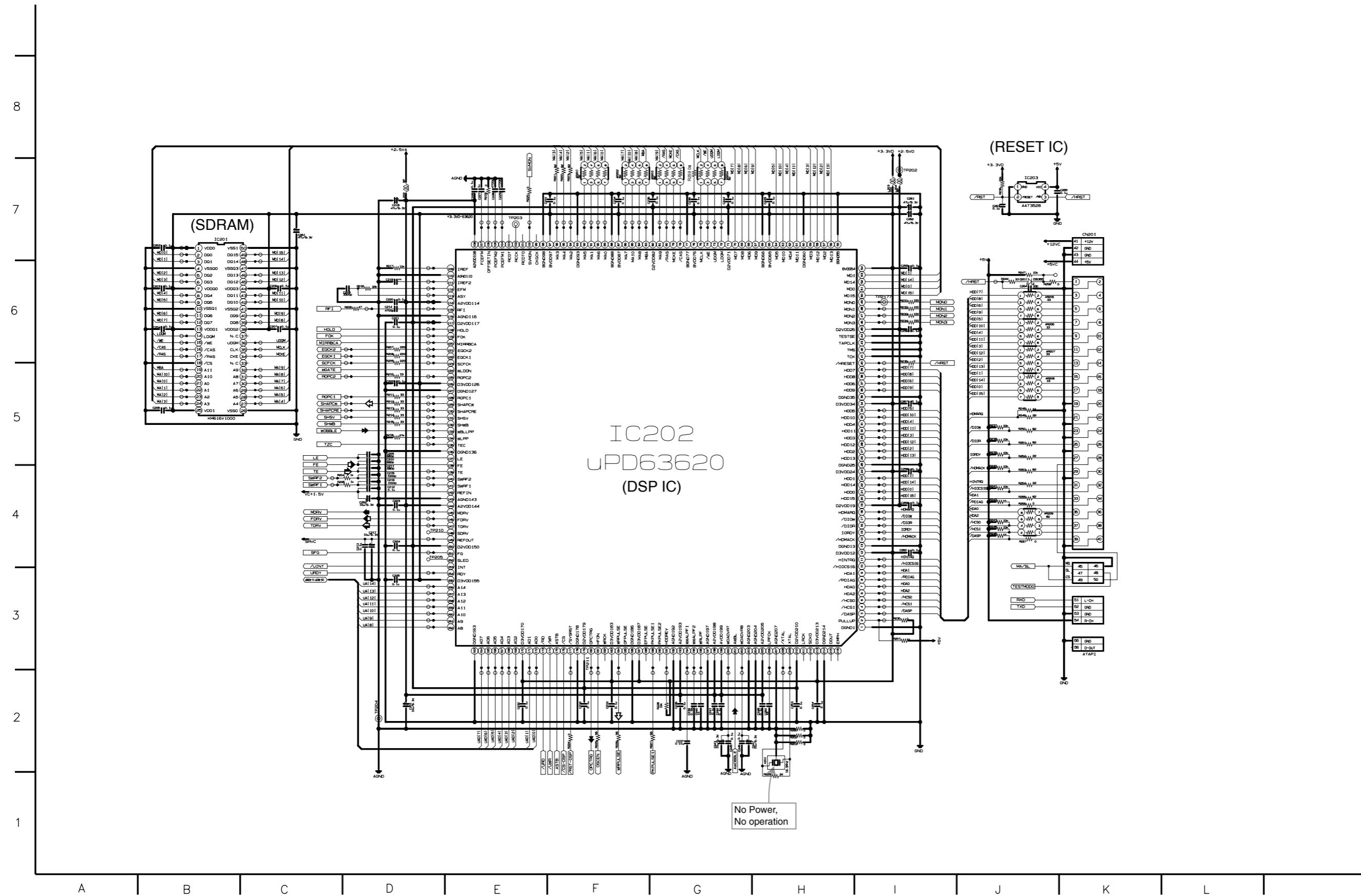
A series of horizontal dotted lines for writing.

# CIRCUIT DIAGRAMS

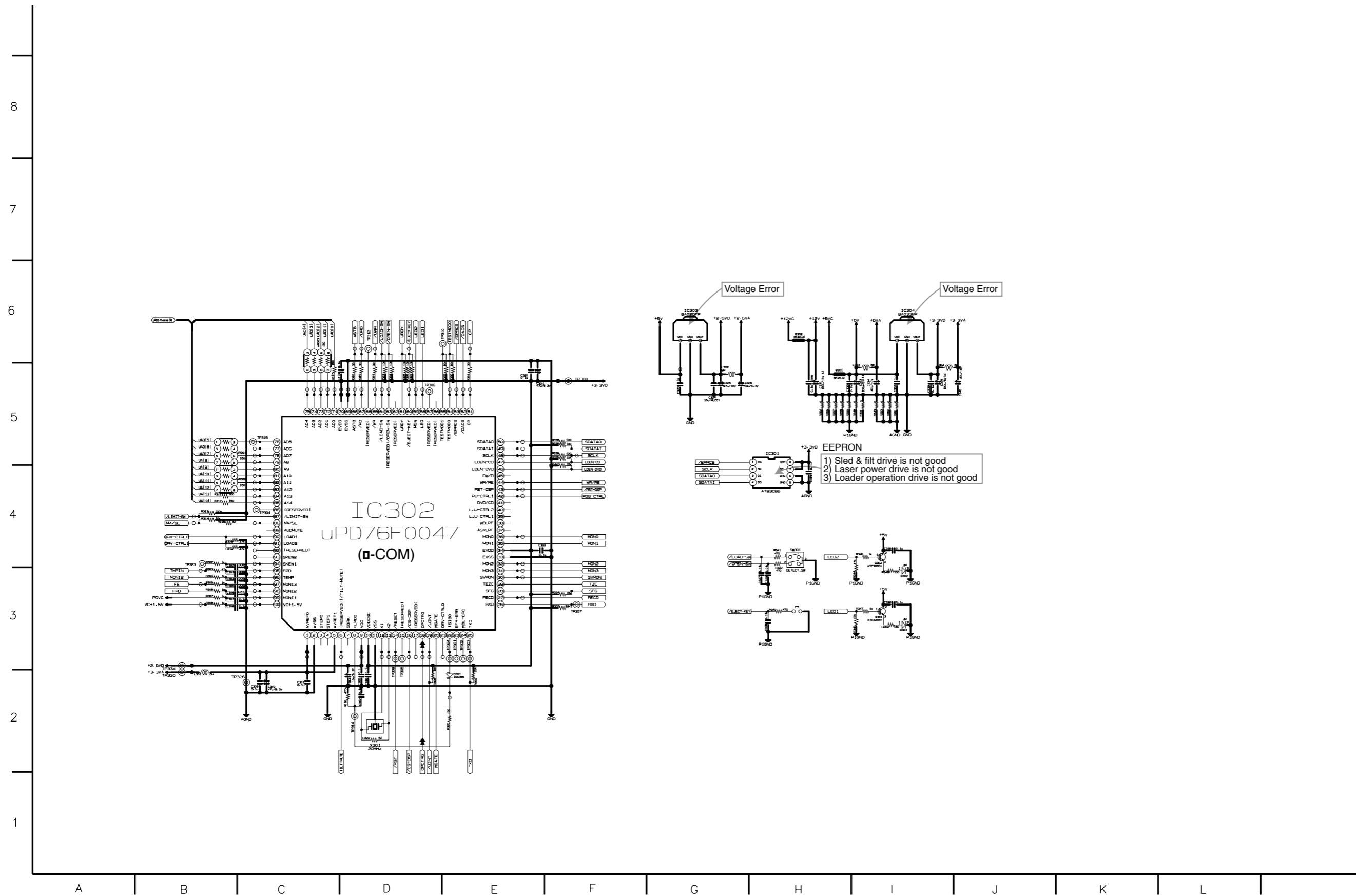
## 1. RF CIRCUIT DIAGRAM



## 2. DSP CIRCUIT DIAGRAM



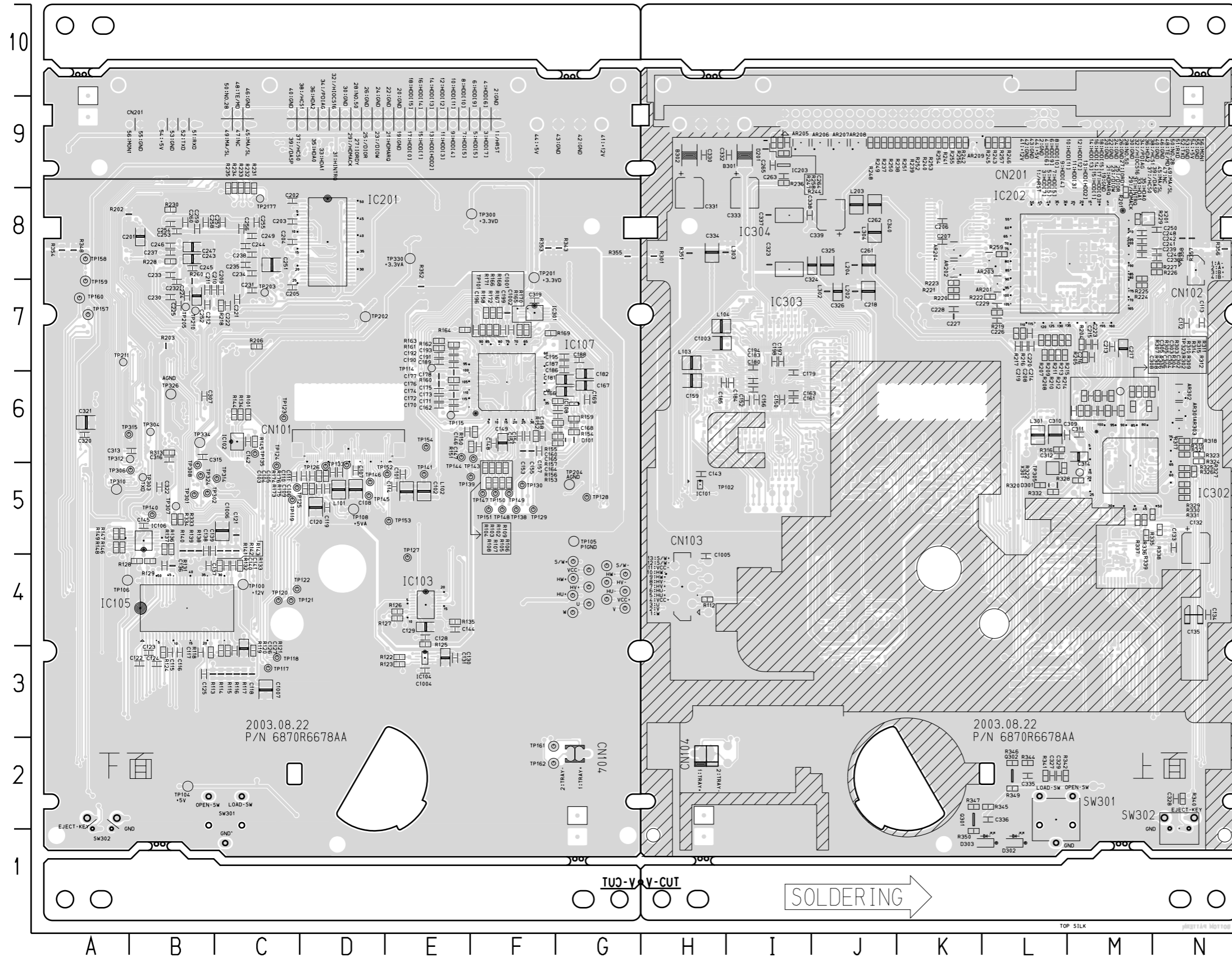
### 3. $\mu$ -COM CIRCUIT DIAGRAM





# PRINTED CIRCUIT DIAGRAMS

## 1. MAIN P.C.BOARD



### LOCATION GUIDE

C1001	F7	IC174	E6	IC102	C6	R159	G6	TP123	E6	TP153	E5	TP2178	C8
C1002	F7	IC175	F6	IC103	E4	R160	F6	TP129	F6	TP154	E5	TP2179	C8
C1004	E3	IC176	E6	IC104	E3	R161	E7	TP114	E7	TP157	A7	TP2180	C8
C1006	C5	IC177	E6	IC105	B4	R162	E7	TP1141	F6	TP158	A8	TP2186	C8
C1007	C3	IC178	E6	IC106	B5	R163	E6	TP115	E6	TP159	A7	TP2215	C9
C101	E5	IC181	G6	IC107	F6	R164	E7	TP1152	G3	TP160	F7	TP2216	C9
C102	E5	IC182	G6	IC108	G6	R165	F7	TP1156	E4	TP161	F2	TP2217	C9
C103	C5	IC186	G7	IC201	D8	R166	F7	TP1157	E4	TP162	F2	TP2218	C9
C104	D5	IC187	F7	IC301	F7	R167	F7	TP1159	E4	TP163	G4	TP2219	C9
C105	D5	IC188	G7	L101	D5	R168	F7	TP1167	E4	TP164	G4	TP2220	C9
C106	D5	IC189	E7	L102	E5	R169	F7	TP117	C3	TP165	G4	TP2221	C9
C107	D5	IC190	E7	R101	C6	R170	F7	TP1178	B3	TP166	G4	TP2222	C9
C108	D5	IC191	E7	R102	C6	R171	F7	TP118	C3	TP167	G4	TP2223	C9
C109	D5	IC192	E7	R103	F5	R172	F7	TP1189	B4	TP168	G4	TP2252	A8
C110	D5	IC193	E7	R104	F5	R173	D5	TP119	C5	TP169	G4	TP2254	A8
C111	D5	IC195	G7	R105	F5	R174	D5	TP1190	C4	TP170	G4	TP2257	A8
C114	E5	IC196	F7	R106	F5	R175	D5	TP1192	C4	TP171	G4	TP2259	A8
C115	B3	IC199	F7	R107	F5	R176	D5	TP1194	C4	TP172	G4	TP2263	A8
C116	B3	IC201	B8	R108	F5	R202	A8	TP1195	C4	TP173	G4	TP2265	A8
C118	C3	IC203	C8	R113	B3	R206	C7	TP1198	B4	TP175	G4	TP2300	F8
C119	D5	IC204	C8	R114	C3	R218	C7	TP120	C4	TP204	C8	TP3000	C6
C120	D5	IC205	C7	R115	C3	R228	B8	TP1206	B4	TP207	C8	TP3005	B6
C121	C3	IC209	C7	R116	C3	R21	C7	TP121	B4	TP208	C7	TP301	B5
C122	B3	IC210	B7	R117	C3	R231	C8	TP1217	B4	TP21	F8	TP302	B5
C123	B3	IC211	B7	R118	B3	R232	C8	TP1218	B4	TP210	C8	TP303	B5
C124	C2	IC212	C2	R119	C2	R233	C8	TP1219	B4	TP211	C8	TP304	B6
C125	B3	IC221	C7	R120	C3	R234	C8	TP122	C4	TP215	C8	TP306	B5
C126	C3	IC222	C7	R121	C3	R235	C8	TP1221	C4	TP219	C8	TP307	B5
C127	C3	IC224	B7	R122	E3	R260	B7	TP1222	C4	TP22	C7	TP308	B5
C128	C3	IC228	B7	R123	E3	R278	B7	TP123	B4	TP223	C7	TP309	B5
C129	E4	IC230	B7	R124	B3	R333	B5	TP1230	B4	TP203	C7	TP312	B6
C130	E3	IC231	E4	R125	E4	R334	B5	TP1233	G8	TP204	G5	TP314	C5
C131	E3	IC232	E4	R126	E4	R335	B5	TP1234	G8	TP205	G5	TP315	A5
C136	B4	IC233	B8	R127	E4	R348	A8	TP1235	G8	TP206	G5	TP316	B5
C137	B4	IC234	B8	R128	A4	R352	E7	TP1236	C6	TP2063	C7	TP326	B6
C138	B5	IC235	B8	R129	B4	R353	F8	TP124	C5	TP2066	C7	TP330	E8
C139	B5	IC236	B8	R130	B4	R354	F8	TP1243	C5	TP207	C7	TP334	B6
C140	C4	IC238	B8	R132	C4	R355	G8	TP1248	E3	TP2075	B7	TP336	A5
C141	C4	IC243	B8	R133	C4	TP100	C4	TP125	C5	TP2076	B7	TP339	B5
C142	C6	IC244	C8	R134	C6	TP1005	G6	TP1250	A4	TP208	A4	TP350	A2
C143	C6	IC245	C8	R135	C6	TP106	E4	TP1251	A4	TP209	E4	TP368	B6
C145	B5	IC246	B8	R136	B5	TP1007	E4	TP1255	A5	TP2095	B6	TP377	B6
C146	E6	IC247	B8	R137	B5	TP101	F7	TP1256	A5	TP2097	B7	TP378	B6
C147	E6	IC248	B8	R138	B5	TP1017	D4	TP1257	E4	TP210	A6	TP379	B6
C148	F6	IC251	C8	R139	B5	TP1012	D4	TP127	E4	TP2101	A6	TP381	B6
C149	F6	IC252	B7	R140	B5	TP1017	E4	TP128	G5	TP2102	A6	TP382	B6
C151	F6	IC253	B8	R141	C5	TP1019	E6	TP129	F5	TP2105	E6	TP383	C4
C152	F6	IC254	B8	R142	C5	TP1023	E6	TP130	F5	TP2106	E6	TP384	B6
C154	F6	IC255	C8	R143	C5	TP1027	E7	TP133	D5	TP2108	F7	TP397	B6
C155	F6	IC256	C8	R144	C5	TP1028	F7	TP135	C6	TP2109	F7	TP414	C5
C157	F6	IC257	C8	R145	C6	TP1029	F7	TP138	F5	TP213	A7	TP415	B5
C158	F6	IC258	B8	R146	A5	TP1037	F7	TP139	F5	TP212	A7	TP417	B5
C160	G6	IC259	B8	R147	A5	TP104	B2	TP140	B5	TP2122	C7	TP426	C5
C162	E6	IC260	B8	R148	A5	TP1047	F7	TP141	E5	TP2131	C7	TP443	B5
C163	E6	IC261	B8	R149	A5	TP1053	F7	TP142	F5	TP2134	C7	TP444	B5
C165	G6	IC313	B8	R150	F6	TP1059	E7	TP144	E6	TP2135	C7	TP442	B9
C166	G6	IC315	B6	R151	F6	TP106	A4	TP145	D5	TP2137	C8	TP443	C9
C167	G6	IC316	B6	R152	F6	TP1074	F6	TP146	D5	TP2145	C8	TP444	C9
C168	G6	IC319	B6	R153	F6	TP1075	F6	TP147	F6	TP2146	C8	TP447	E5
C169	G6	IC320	A6	R154	G6	TP1076	F6	TP148	F5	TP2147	C8	TP450	E4
C170	E6	IC321	A6	R155	G6	TP1077	G6	TP149	F5	TP2148	C8		
C171	E6	IC322	A6	R156	G6	TP1078	G6	TP150	F5	TP2152	C8		
C172	E6	IC323	A6	R157	G6	TP1088	F7	TP151	F5	TP2154	C8		
C173	E6	IC324	A6	R158	F7	TP1116	F5	TP152	E5	TP2177	C8		
AR201	L7	R306	M6	R223	K7	R344	L2	TP1220	N5	TP2196	J9		
AR202	K8	R308	M6	R224	M7	R345	L2	TP123	M6	TP2197	J9		
AR203	L8	R309	M6	R225	M7	R346	L2	TP177	J7	TP2198	J9		
AR204	K8	R310	L6	R226	N8	R347	K2	TP200	J8	TP2199	J9		
AR205	K9	R311	L6	R227	N8	R348	L2	TP206	K8	TP220	J9		
AR206	J9	R312	L6	R229	M8	R350	K1	TP202	L8	TP2203	J9		
AR207	J9	R314	M6	R236	I9	R351	H8	TP203	K8	TP2204	J9		
AR208	J9	R323	I8	R237	J9	R356	N8	TP205	K8	TP2205	J9		
AR209	K9	R324	I8	R238	J9	R357	N8	TP206	I8	TP2206	J9		
AR301	N6	R325	J8	R239	K9	R358	N8	TP2011	K8	TP2208	J9		
AR302	N6	R326	J7	R240	K9	R359	L2	TP2013	K8	TP2209	J9		
AR303	M6	R327	L2	R241	K9	R362	N1	TP2016	K8	TP2210	K9		
B301	I9	R328	N2	R242	K9	R364	H7	TP202	K8	TP221	K9		
B302	H9	R329	L2	R243	L9	TP1008	J6	TP2021	L7	TP2212	K9		
IC1003	H7	R330	H9	R244	I9	TP1009	J6	TP2022	K7	TP2223	L9		
IC1005	H4	R331	H9	R245	K9	TP1010	J6	TP2023	K7	TP2224	M8		
IC112	N7	R332	I9	R246	L9	TP1013	J6	TP2026	K8	TP224	M8		
IC113	N7	R333	I8	R247	I9	TP1014	I6	TP2027	K8	TP2247	M8		
IC132	N5	R334	H8	R248	J9	TP1015	J6	TP2029	K8	TP2258	M8		
IC133	N5	R335	L2	R249	J9	TP1016	J6	TP2030	K8	TP226	M8		
IC134	N4	R336	L2	R250	J9	TP1018	I6	TP2032	K8	TP2272	M8		
IC135	N4	R337	I8	R251	K9	TP102	H5	TP2033	K8	TP3002	M6		
IC136	H5	R338	H5	R252	K9	TP1021	H5	TP2035	K8	TP305	M6		
IC150	I6	R339	J8	R253	K9	TP1026	I7	TP2038	K8	TP309	N6		
IC152	I6	R340	J8	R254	K9	TP103	I6	TP2039	K8	TP311	N6		
IC156	I6	IC102	N8	R255	K9	TP1033	I7	TP2040	K8	TP313	N6		
IC159	I6	IC103	H4	R256	K9	TP1036	I7	TP2043	K8	TP319	J8		
IC161	I6	IC104	H2	R257	L9	TP1038	I7	TP2044	K8	TP320	H8		
IC163	I6	IC105	M9	R258	I9	TP1039	I6	TP2045	K8	TP322	N6		
IC179	I6	D201	I9	R259	L8	TP1040	I7	TP2046	K8	TP323	M6		
IC180	I6	D301	L5	R301	H8	TP1041	I6	TP2047	K7	TP327	N6		
IC183	I6	D302	L1	R302	M6	TP1042	I7	TP2048	K7	TP328	N6		
IC184	I6	D303	L1	R303	M6	TP1043	I6	TP2055	J7	TP329	N6		
IC185	H6	IC101	H5	R304	M6	TP1044	I7	TP2058	K7	TP331	N5		
IC194	I7	IC202	M8	R305	M6	TP1045	I6	TP2059	J7	TP332	N5		
IC197	I7	IC203	I9	R306	M6	TP1046	I7	TP2060	J7	TP333	N5		
IC198	I7	IC302	M8	R307	M6	TP1049	H5	TP2061	J7	TP337	M5		
IC206	K8	IC303	I8	R308	M5	TP1050	I7	TP2074	J7	TP338	M5		
IC207	K8	IC304	I8	R309	M6	TP1052	I6	TP2080	J6	TP344	N6		
IC208	L7	L103	H7	R310	M6	TP1058	I7	TP2082	M7	TP345	N6		
IC213	H7	L104	H7	R311	M6	TP1066	J7	TP2086	M6	TP346	N6		
IC214	L7	L202	J7	R312	M6	TP1070	J7	TP2088	M7	TP351	N5		
IC215	M7	L203	J8	R314	M6	TP1078	H6	TP2092	M7	TP361	N6		
IC216	M7	L204	J8	R315	M6	TP1080	H6	TP2098	M6	TP363	N6		
IC217	M7	L301	J7	R316	M6	TP1081	H6	TP2099	M6	TP365	N6		
IC218	J7	L302	J7	R317	M6	TP1085	H6	TP2110	I7	TP370	M6		
IC219	L7	L303	H8	R318	N6	TP1086	I6	TP2111	H7	TP371	M6		
IC220	L7	L304	J8	R319	N6	TP1091	H6	TP2112	H7	TP372	M6		
IC223	K7	R320	K7	R320	N6	TP1092	H6	TP2113	H7	TP373	N6</		

# SECTION 4 MECHANISM OF VCR PART

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### MECHANISM TROUBLESHOOTING GUIDE

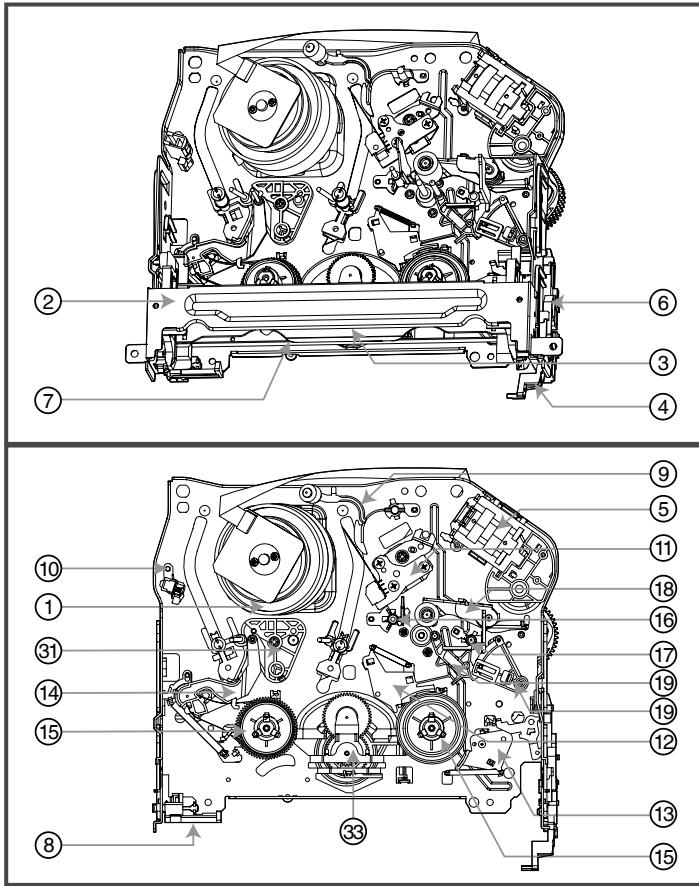
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### EXPLODED VIEWS

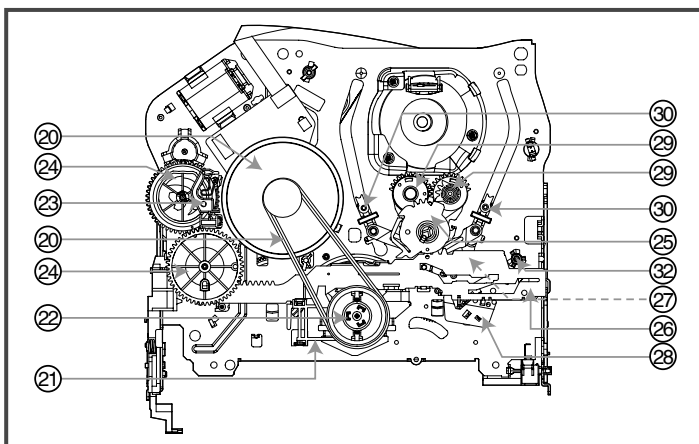
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# DECK MECHANISM PARTS LOCATIONS

## • Top View



## • Bottom View



**NOTE: When reassembly perform the procedure in the reverse order.**

- 1) When reassembling, confirm Mechanism and Mode Switch Alignment Position (Refer to Page 4-14)
- 2) When disassembling, the Parts in the "Starting No." colum should be removed first.

Starting No.	Procedure	Part	Fixing Type	Figure	
	1	Drum Assembly	3 Screw	A-1	T
	2	Top Plate Assembly	2 Hook	A-2	T
2	3	CST Holder Assembly	Chassis Hole	A-2	T
2	4	Door Opener	Chassis Hole	A-2	T
	5	L/D Motor Bracket Assembly	3 Hook	A-2	T
2,3,4	6	F/L Gear Rack	1 Hook, Chassis Hole	A-2	T
2,3,4,6	7	F/L Arm Assembly	Chassis Hole	A-2	T
	8	S/W Lever Assembly	1 Hook	A-2	T
	9	Cleaner Arm Assembly	Chassis Embossing	A-3	T
	10	F/E Head	Chassis Embossing	A-3	T
	11	A/C Head Base Assembly	1 Screw	A-3	T
2,3	12	T Brake Assembly	1 Hook	A-4	T
2,3	13	RS Brake Assembly	1 Hook	A-4	T
2,3	14	Tension Arm Assembly	2 Hook	A-4	T
2,3,12,13,14	15	S Reel / T Reel		A-4	T
	16	P4 Base Assembly	Chassis Embossing	A-5	T
	17	Lid Opener	Chassis Embossing	A-5	T
17	18	Pinch Arm Assembly	Shaft	A-5	T
17	19	T/up / Arm T/up Lever	1 Hook	A-5	T
17,18	20	Capstan Belt /Capstan Motor	3 Screw	A-6	B
	21	F/R Lever	Locking Tab	A-6	B
20, 21	22	D35 Clutch Assembly	Washer	A-6	B
	23	Capstan Brake Assembly	Locking Tab	A-6	B
	24	Drive Gear / Cam Gear	Washer/Hook	A-7	B
	25	Sector Gear	1 Hook	A-7	B
20,21,23,24,25	26	Slider Plate	Shaft Guide	A-7	B
20,21,23,24,25,26	27	Tension Lever	1 Hook	A-7	B
2,3,14,20,21,25,23,24,26	28	Spring Lever	Locking Tab	A-7	B
25	29	P2 Gear Assembly/P3 Gear Assembly	Boss	A-8	B
2,3,14,25,29	30	P2 Base Assembly/P3 Base Assembly	Chassis Slot	A-8	B
2,3,14,25,29	31	Loading Base	1 Screw	A-9	T
2,3,14	32	Tension Base	Chassis Embossing	A-9	B
2,3,20,21,22	33	Idler Arm Jog Assembly	Locking Tab	A-9	T

R: Top, B:Bottom

# DECK MECHANISM DISASSEMBLY

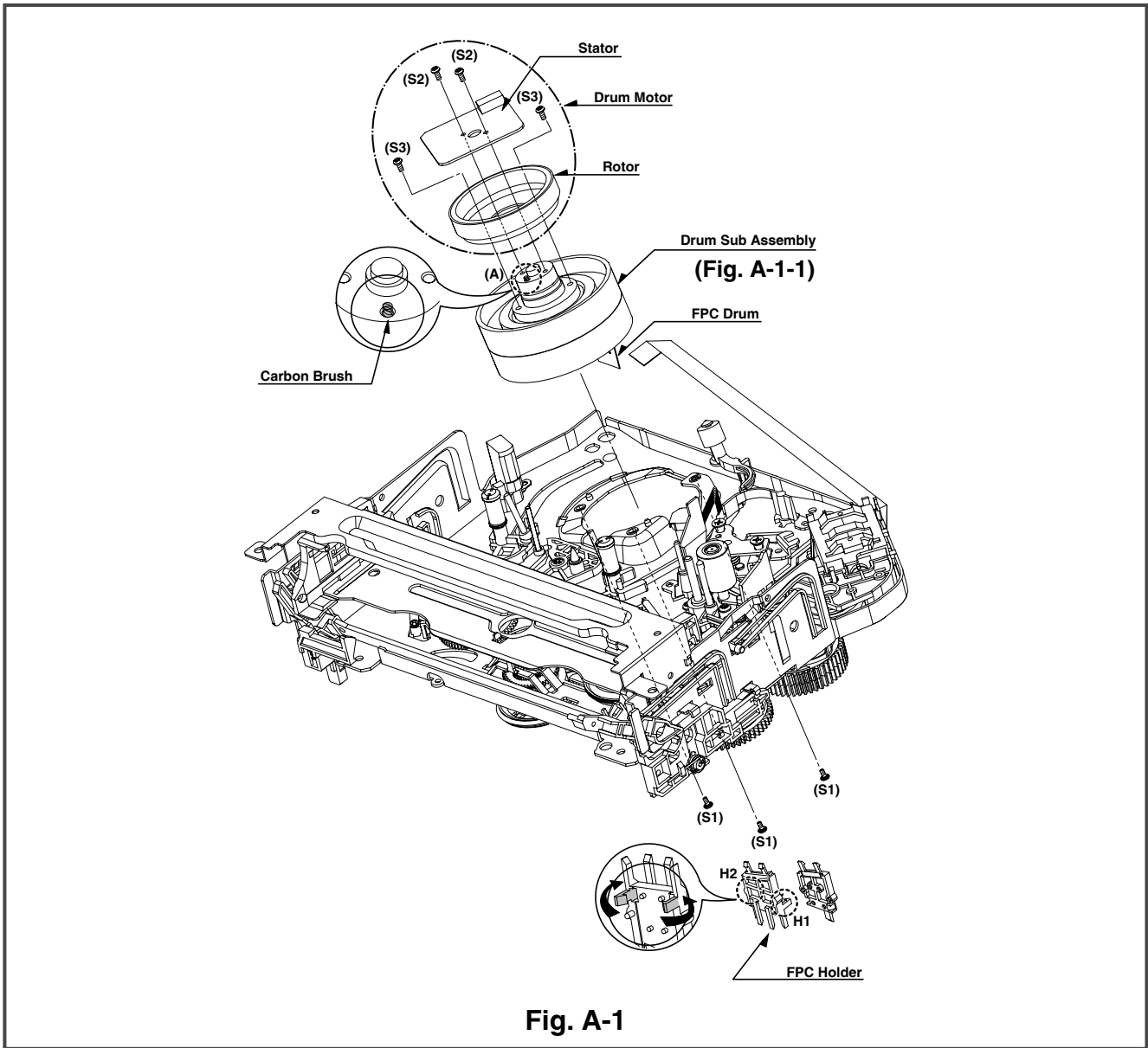


Fig. A-1

## 1. Drum Assembly (Fig. A-1-1)

- 1) Unplug the FPC Drum Connector.
- 2) Remove three Screws (S1) on the bottom side and separate the Drum assembly.
- 3) Unhook (H1), (H2) and separate the FPC Holder and FPC Cap. (See Fig. B-1)

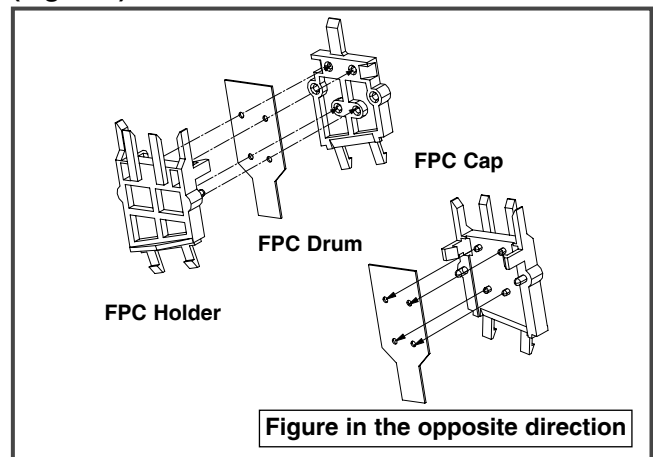
### 1-1. Drum Motor

- 1) Remove two Screws (S2) and disassemble the Stator of the Drum Motor.
- 2) Remove two Screws (S3) and separate the Rotor of the Drum Motor from the Drum Sub assembly.

#### NOTE

When reassembling, check to ascertain that the Carbon Brush is in position.

(Fig. B-1)



# DECK MECHANISM DISASSEMBLY

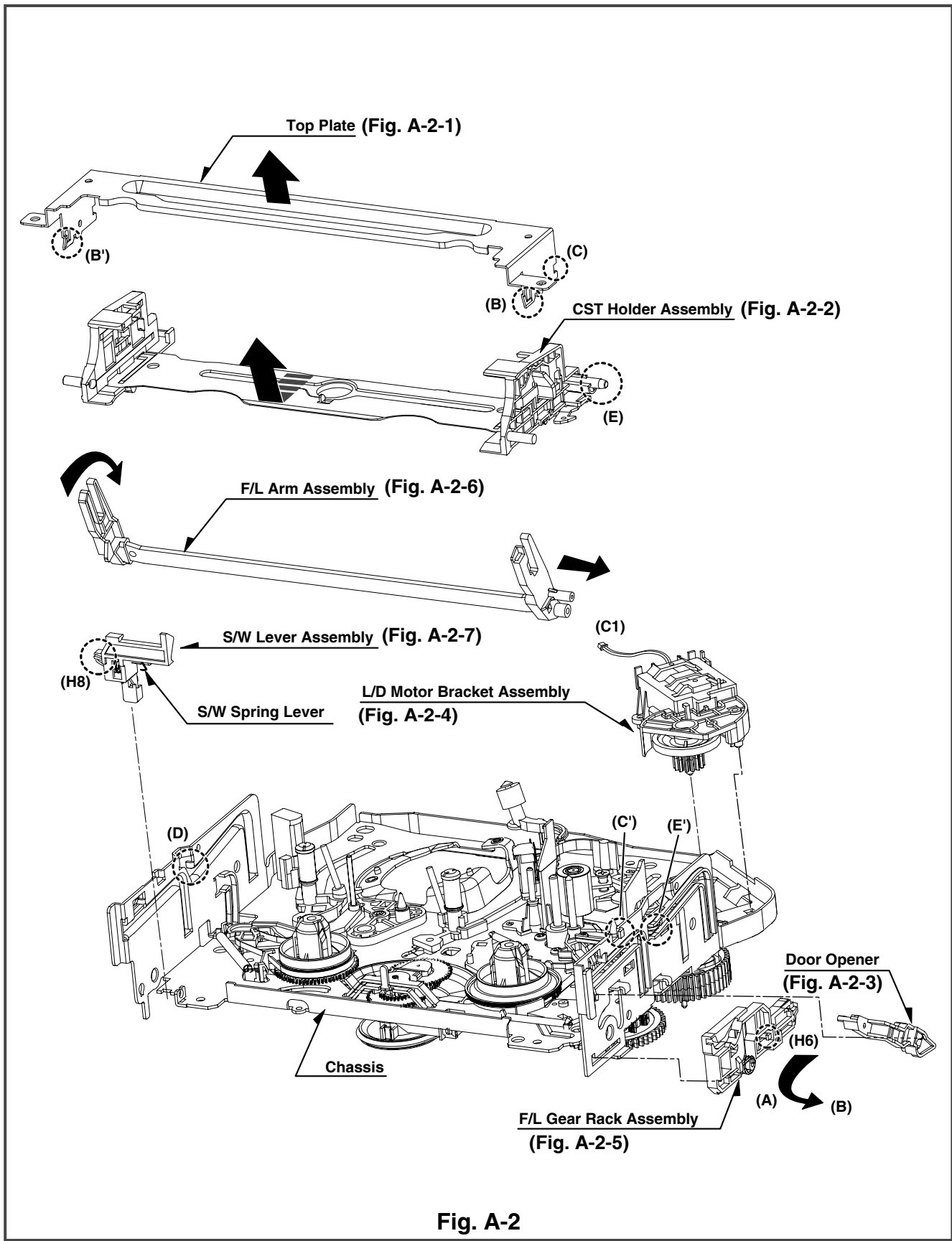


Fig. A-2

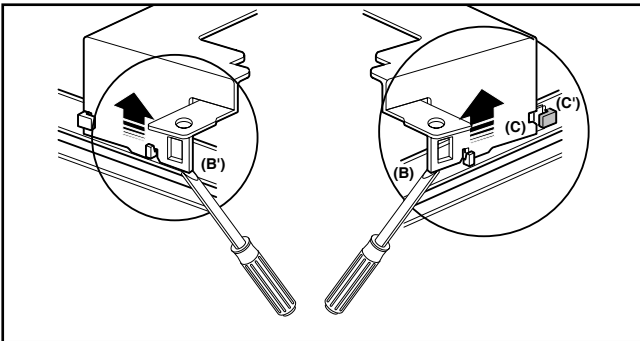
# DECK MECHANISM DISASSEMBLY

## 2. Top Plate Assembly (Fig. A-2-1)

- 1) Pull the (B) portion of the Top Plate back in direction of arrow and separate the right side of it.
- 2) Pull the (B') portion of the Top Plate back in direction of arrow and separate the left side of it.  
(Tools: (-) Flat type screwdriver or any tool with a sharp or flat point.)

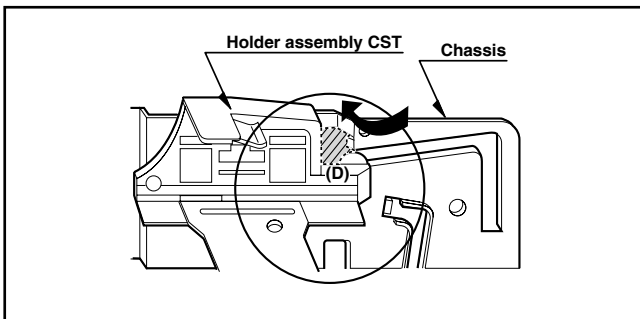
### NOTE

- 1) When reassembling, push the Top Plate on after aligning the two position (C), (C') as Fig.



## 3. CST Holder Assembly (Fig.A-2-2)

- 1) Move the CST Holder Assembly in direction of arrow and separate the left side of it first through the (D) position of the Chassis.



- 2) Disassemble the right side of the CST Holder Assembly from each guided hole of the Chassis.

### NOTE

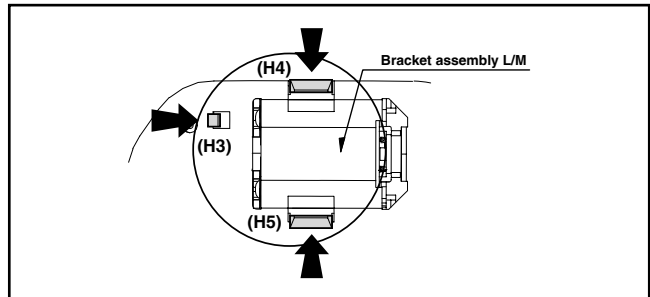
When reassembling, insert the (E) part of the CST Holder assembly in the (E') hole of the Chassis first and assemble the left side of it.

## 4. Door Opener (Fig.A-2-3)

## 5. L/D Motor Bracket Assembly (Fig. A-2-4)

- 1) Unplug the Connector (C1).

- 2) Unhook three Hooks (H3, H4, H5) on the bottom side of the Chassis, lift up the L/M Bracket Assembly and disassemble the L/D Motor Bracket Assembly.

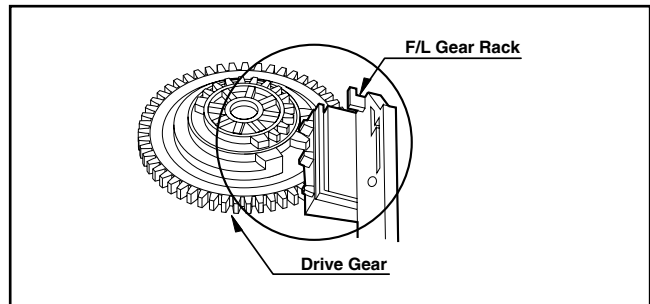


## 6. F/L Gear Rack (Fig. A-2-5)

- 1) Move the F/L Gear Assembly Rack in the direction of arrow (A) and unhook the Hook (H6) pulling back in front.
- 2) Separate the F/L Rear Rack in direction of arrow (B).

### NOTE

When reassembling, align the Gear part of the Gear F/L Assembly Rack with the Drive Gear as below Fig.

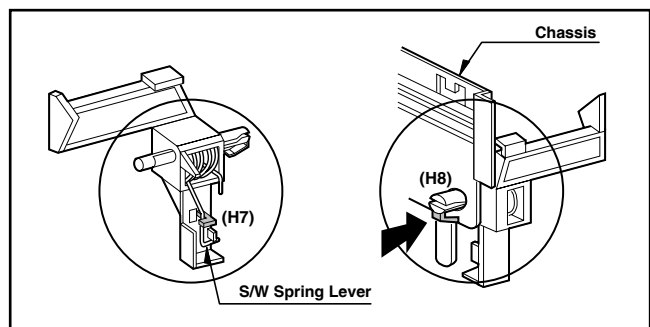


## 7. F/L Arm Assembly (Fig. A-2-6)

- 1) Move the F/L Arm Assembly in direction of arrow and separate the left side of it first.
- 2) Disassemble the F/L Arm Assembly from each guided Holes in of the Chassis.

## 8. S/W Lever Assembly (Fig. A-2-7)

- 1) Hook the S/W Spring Lever on the Hook (H7) first as shown below.
- 2) Unhook the Hook (H8) in the left side of the Chassis and move the S/W Lever Assembly.



# DECK MECHANISM DISASSEMBLY

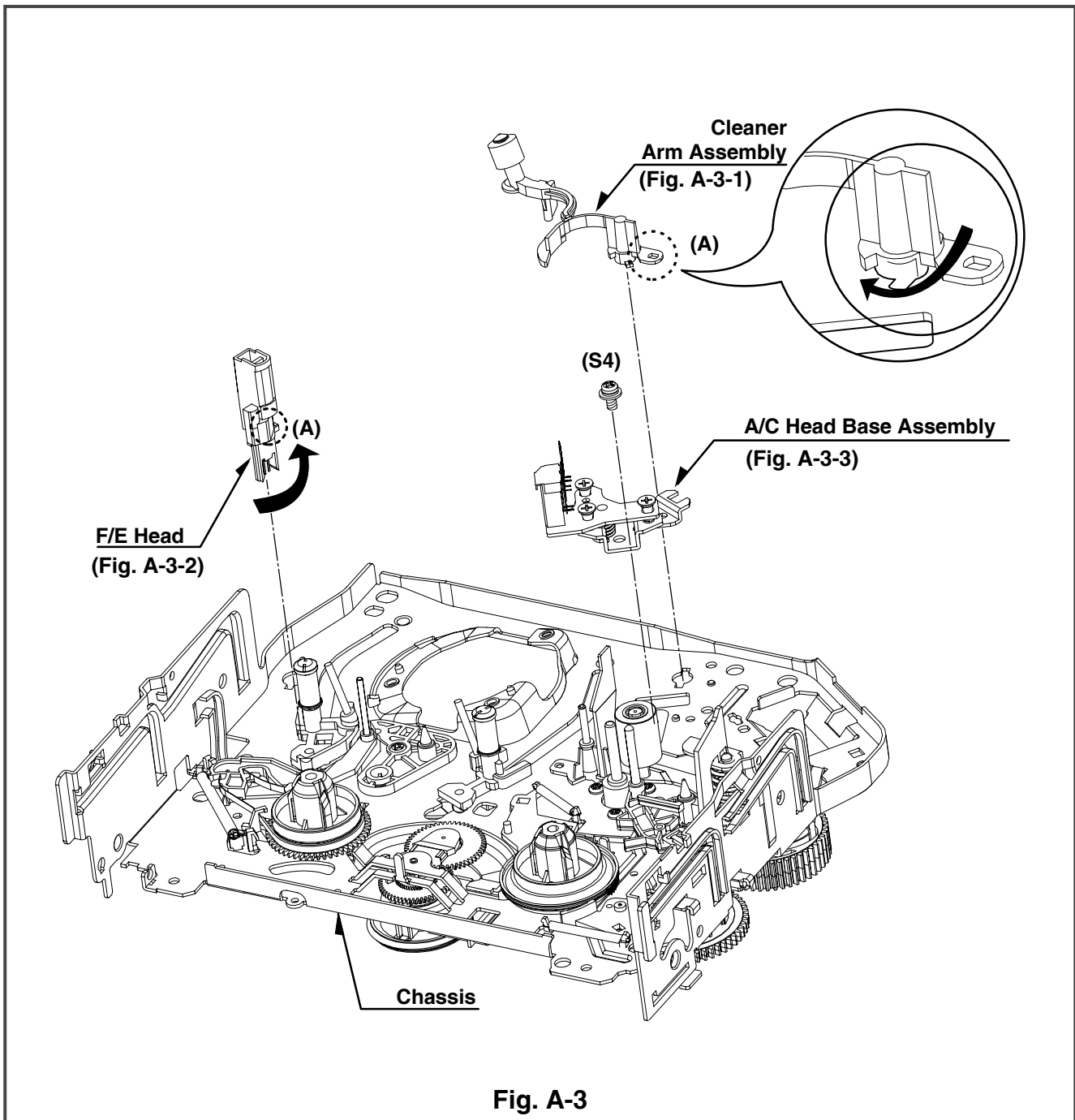


Fig. A-3

## 9. Cleaner Arm Assembly (Fig. A-3-1)

- 1) Carefully pry tab "A" (see Fig.A-3-1) to clear the embossed tab on the chassis. Turn the Cleaner Arm Assembly clockwise and lift it from the chassis.

## 10. F/E Head (Fig. A-3-2)

- 1) Carefully pry tab "A" (see Fig.A-3-2) to clear the embossed tab on the chassis. Turn the Cleaner Arm Assembly counter-clockwise and lift it from the chassis.

## 11. A/C Head Base Assembly (Fig. A-3-3)

- 1) Remove the Screw (S4) and lift the A/C Head Base Assembly up.

# DECK MECHANISM DISASSEMBLY

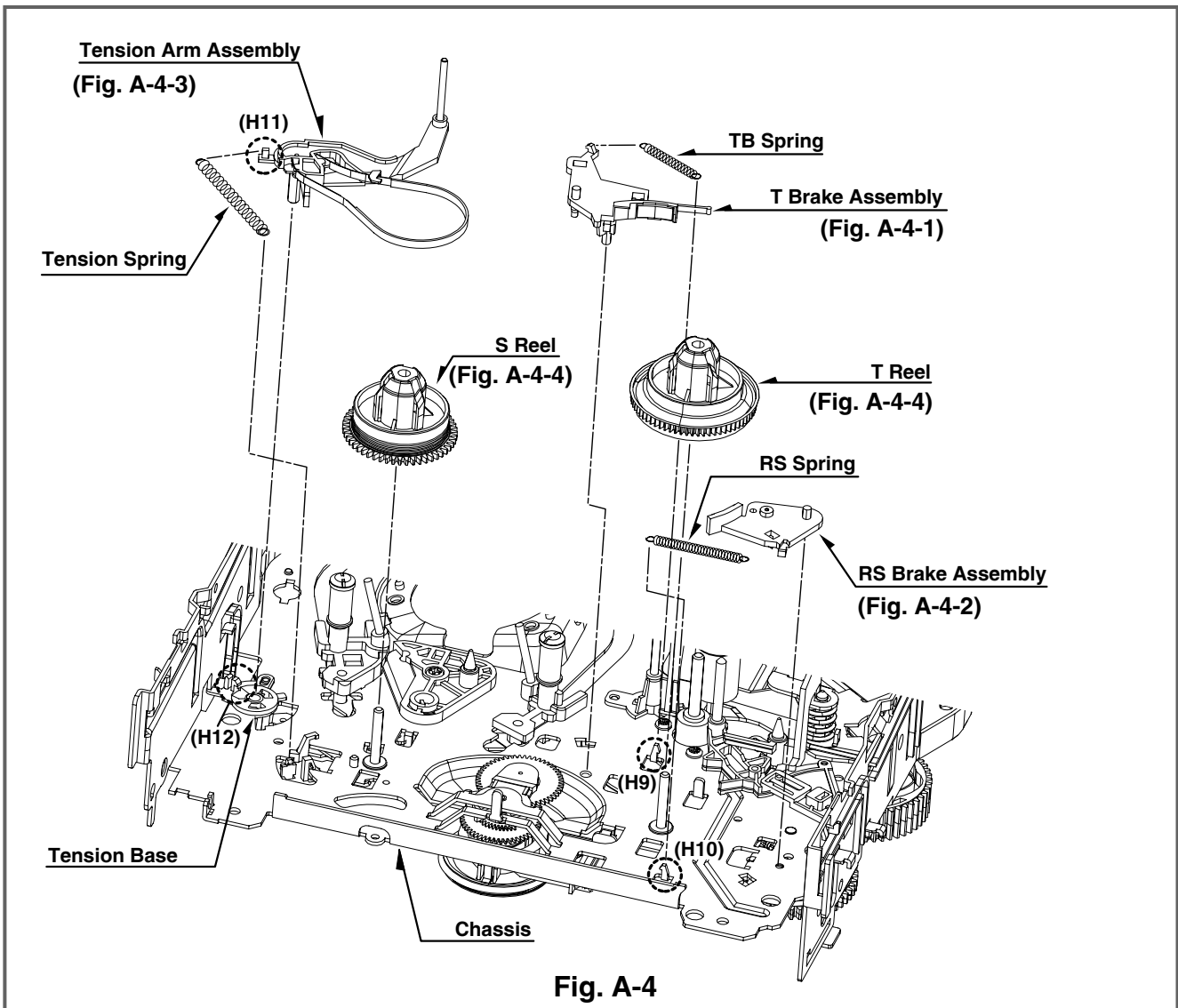


Fig. A-4

## 12. T Brake Assembly (Fig. A-4-1)

- 1) Unhook the TB Spring from the Hook (H9) of the Chassis.
- 2) Lift the T Brake Assembly up.

## 13. RS Brake Assembly (Fig. A-4-2)

- 1) Unhook the RS Spring from the Hook (H10) of the Chassis.
- 2) Lift the T Brake Assembly up.




## 14. Tension Arm Assembly (Fig. A-4-3)

- 1) Unhook the Tension Spring from the Hook (H11) of the Tension Arm Assembly.
- 2) Unhook the Hook (H12) of the Tension Base and lift the Tension Arm Assembly up.

## NOTE

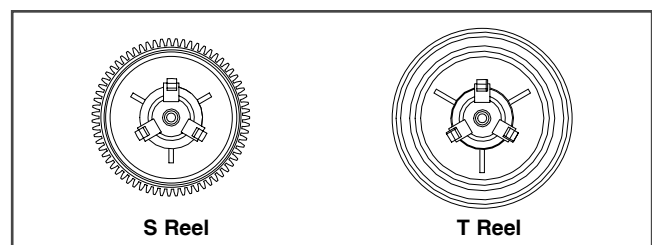
Difference for Springs

(Difference for Springs)

	TB Spring
	RS Spring Color (Black)
	Tension Spring

## 15. S Reel / T Reel (Fig. A-4-4)

- 1) Difference for S Reel / T Reel





# DECK MECHANISM DISASSEMBLY

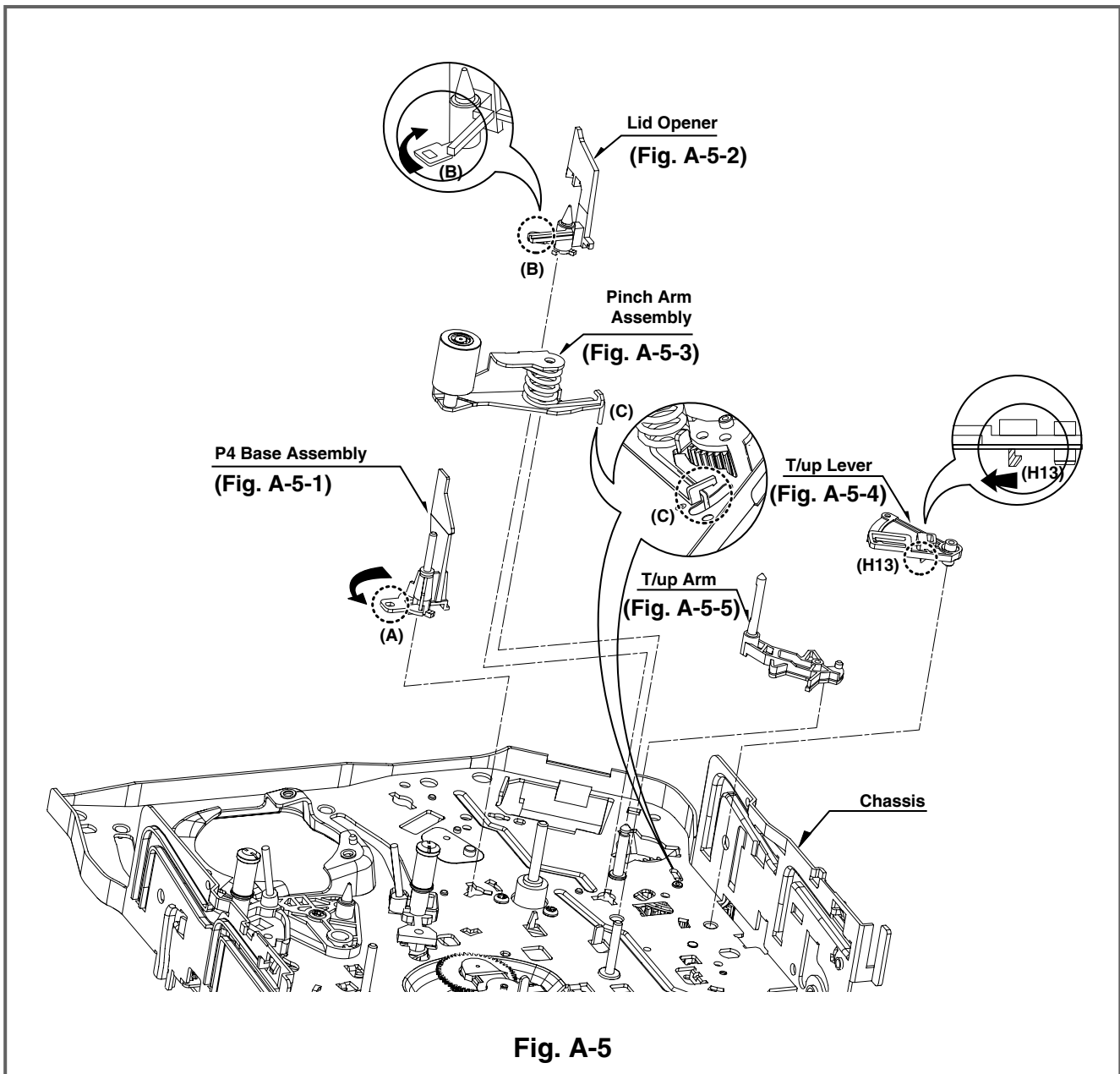


Fig. A-5

## 16. P4 Base Assembly (Fig. A-5-1)

- 1) Carefully pry the (A) portion of the P4 Base Assembly from the Embossing of the Chassis.
- 2) Turn the P4 Base Assembly counterclockwise and lift it up.

## 17. Lid Opener (Fig. A-5-2)

- 1) Carefully pry the (B) portion of the Lid Opener from the Embossing of the Chassis.
- 2) Turn the Lid Opener to clockwise direction and lift it up.

## 18. Pinch Arm Assembly (Fig. A-5-3)

- 1) Lift the Pinch Arm Assembly up.

## 19. T/up (Fig. A-5-4)/ Arm T/up Lever (Fig. A-5-5)

- 1) Unhook the Hook (H13) of the bottom Chassis and lift the T/up Lever up.
- 2) Lift the T/up Arm up.

### NOTE

When reassembling, confirm the (C) portion of the Pinch Arm Assembly is inserted in the Chassis Hole correctly.

Place the Mechanism face down, or up side down.

# DECK MECHANISM DISASSEMBLY

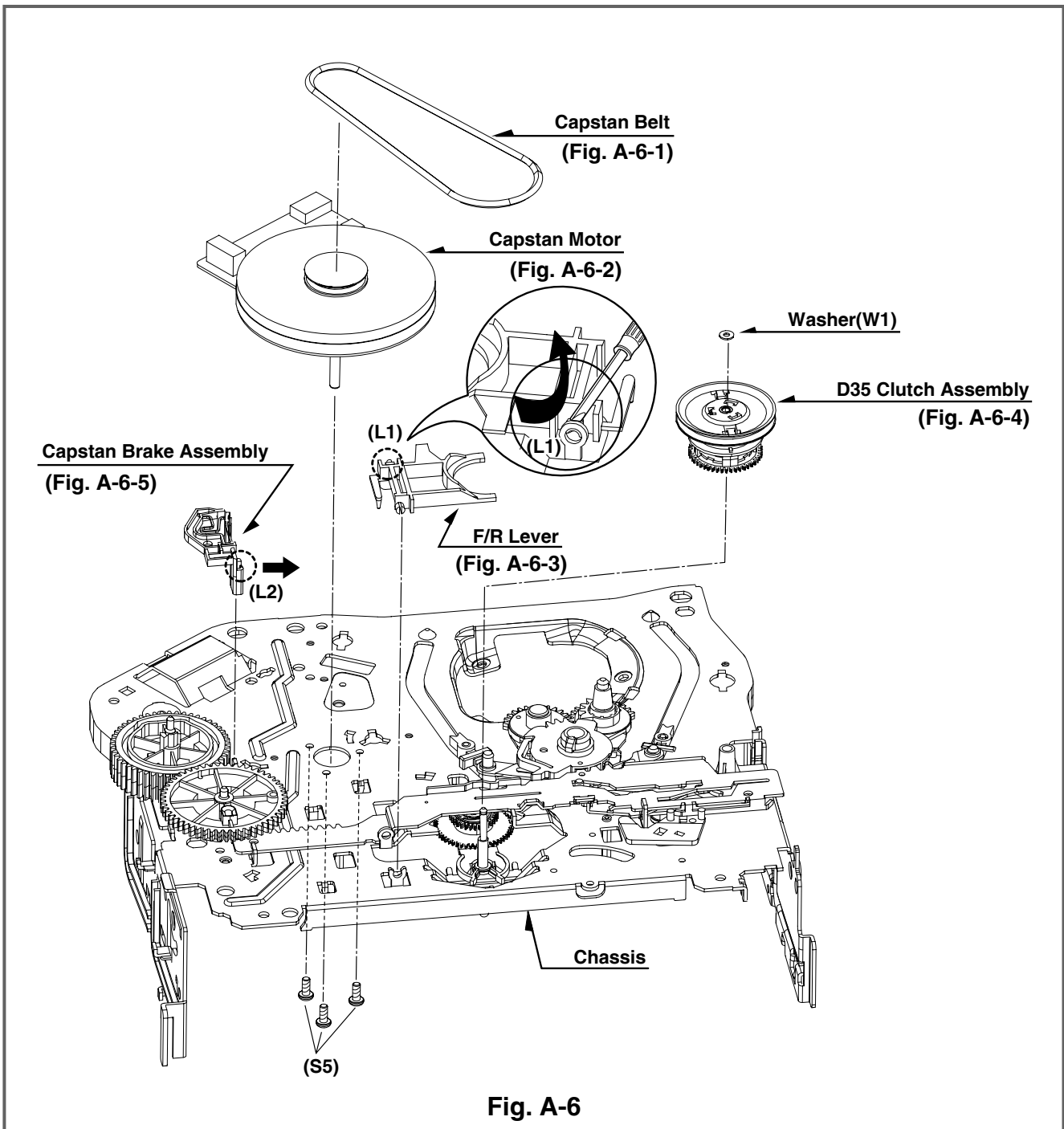


Fig. A-6

## 20. Capstan Belt (Fig. A-6-1)/ Capstan Motor (Fig. A-6-2)

- 1) Remove the Capstan Belt..
- 2) Remove the three Screws (S5) from the bottom of the Chassis and lift the Capstan Motor up.

## 21. F/R Lever (Fig. A-6-3)

- 1) Unlock the Locking Tab (L1) as Fig. A-6-3 and lift the F/R Lever up.

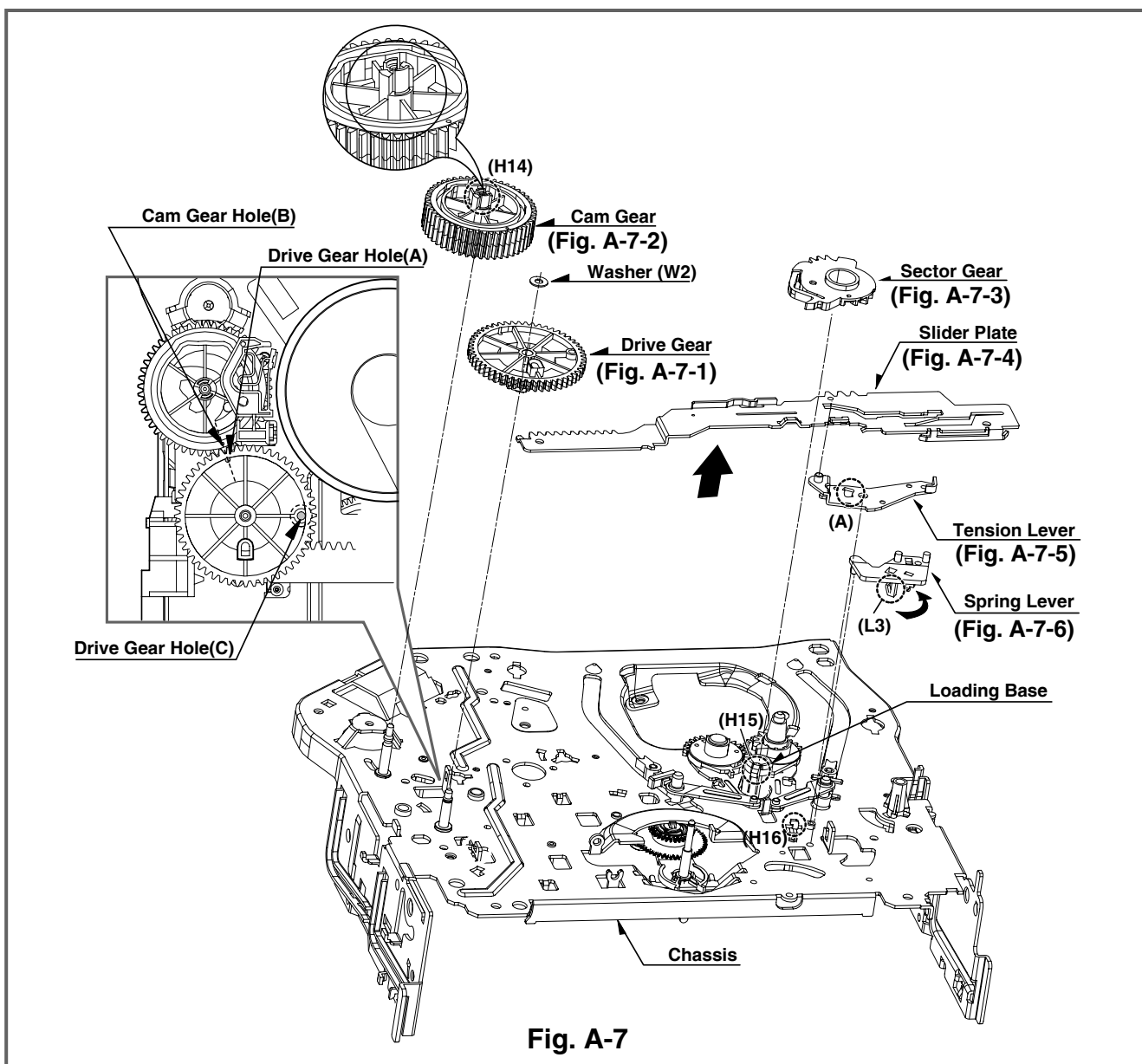
## 22. D35 Clutch assembly (Fig. A-6-4)

- 1) Remove the Washer (W1) and lift the D35 Clutch Assembly up.

## 23. Capstan Brake Assembly (Fig. A-6-5)

- 1) Pull the Locking Tab (L2) back in the direction of the arrow and lift it up.

# DECK MECHANISM DISASSEMBLY



**Fig. A-7**

## 24. Drive Gear (Fig. A-7-1)/ Cam Gear (Fig. A-7-2)

- 1) Remove the Washer (W2) and lift the Drive Gear up.
- 2) Unhook the Hook (H14) of the Cam Gear and lift the Cam Gear up.

### NOTE

When reassembling, align the Drive Gear Hole (A) and the Cam Gear Hole (B) in a straight line after the Drive Gear Hole (C) is aligned with the Chassis Hole.

## 25. Sector Gear (Fig. A-7-3)

- 1) Unhook the Hook (H15) of the Loading Base on bottom Chassis and lift the Sector Gear up.

## 26. Slider Plate (Fig. A-7-4)

- 1) Lift the Slider Plate up.

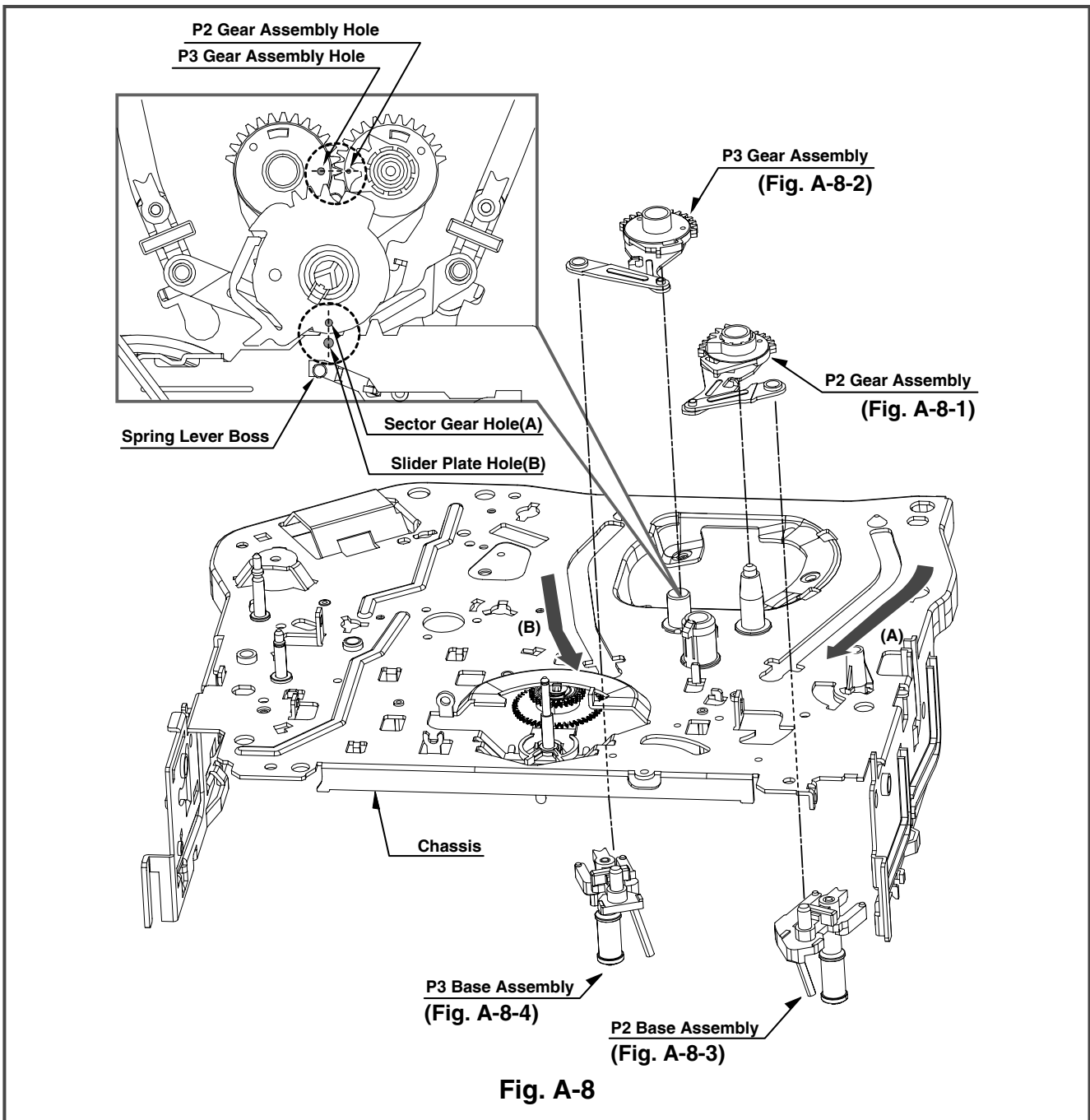
## 27. Tension Lever (Fig. A-7-5)

- 1) Unhook the (A) portion of the Tension Lever from the Hook (H16) of the Chassis.
- 2) Turn the Tension Lever counterclockwise and lift it up.

## 28. Spring Lever (Fig. A-7-6)

- 1) Unlock the Locking Tab (L3) from the bottom of the Chassis and lift the Spring Lever up.

# DECK MECHANISM DISASSEMBLY



**Fig. A-8**

## 29. P2 Gear Assembly (Fig. A-8-1)/ P3 Gear Assembly (Fig. A-8-2)/

- 1) Lift the P2 Gear Assembly up.
- 2) Lift the P3 Gear Assembly up.

### NOTE

When reassembling, align the two Holes of the P2 and P3 Gear Assembly in a straight line after confirming the Sector Gear Hole (A) and the Slider Plate Hole (B) are aligned as in the above Fig.

## 30. P2 Base Assembly (Fig. A-8-3)/ P3 Base Assembly (Fig. A-8-4)

- 1) Move the P2 Base Assembly in the direction of the arrow (A) along the slot of the Chassis and disassemble it from the bottom side.
- 2) Move the P3 Base Assembly in the direction of the arrow (B) along the slot of the Chassis and disassemble it from the bottom side.

**Place the Mechanism face up, or return to it's original position.**

# DECK MECHANISM DISASSEMBLY

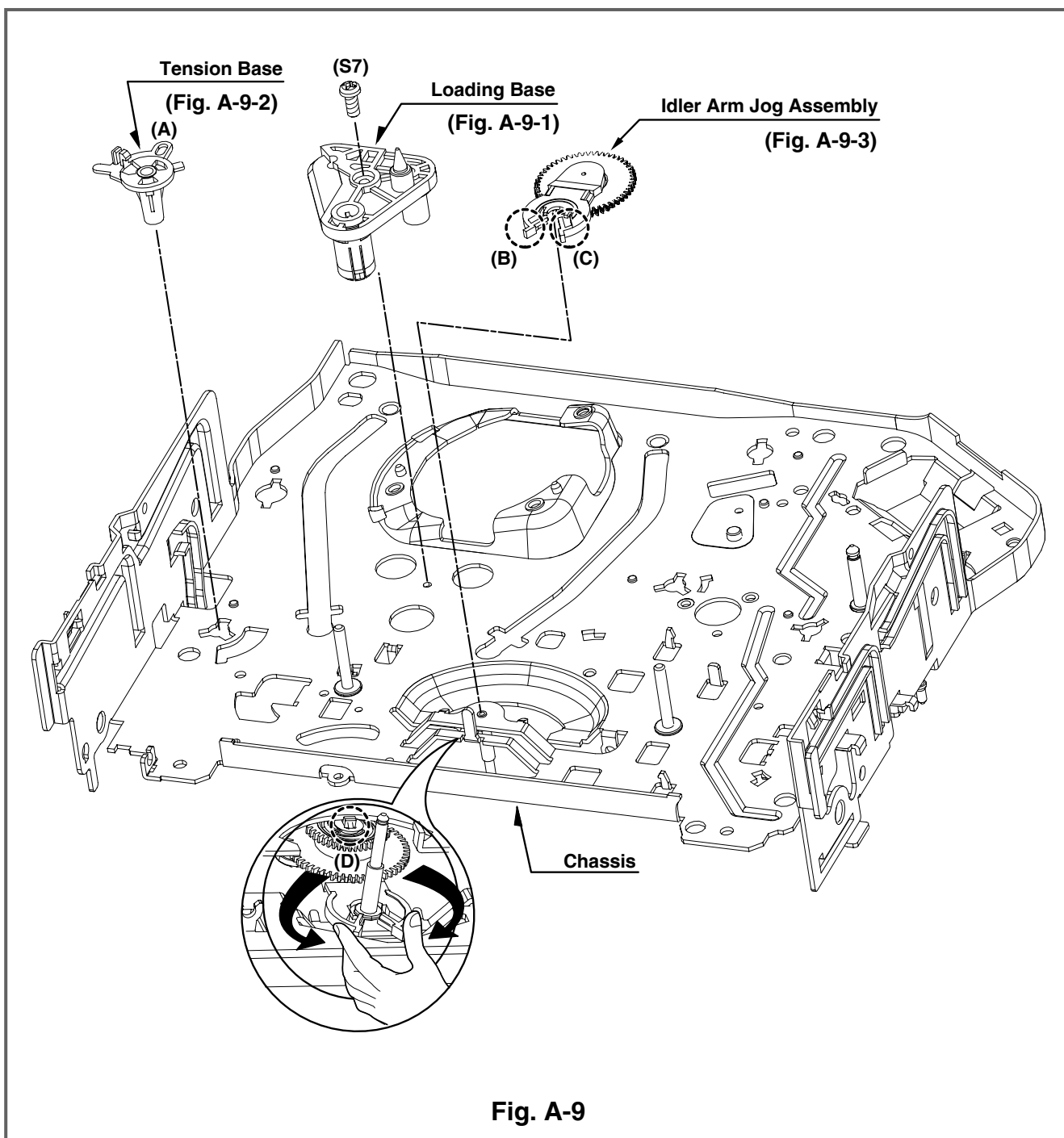


Fig. A-9

## 31. Loading Base (Fig. A-9-1)

- 1) Remove the Screw (S7).
- 2) Lift the Loading Base up.

## 32. Tension Base (Fig. A-9-2)

- 1) Remove the (A) portion of the Tension Base from the Embossing of the Chassis.
- 2) Turn the Tension Base counterclockwise and lift it up.

## 33. Idler Arm Jog Assembly (Fig. A-9-3)

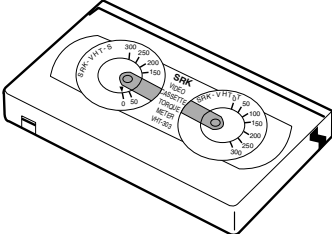
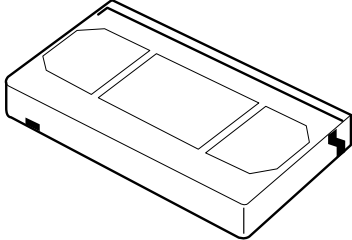
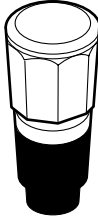
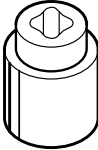
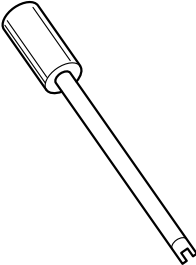
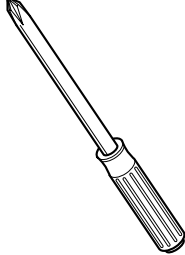
- 1) Pinch (B) and (C), as shown in Fig. A-9-3.
- 2) Lift the Idler Arm Assembly up.

### NOTE

When disassembling, be careful not to catch part (D) on the Chassis (see inset).

# DECK MECHANISM DISASSEMBLY

## • Tools and Fixfures for Service

<p>1. Cassette Torque meter SRK-VHT-303 (Not SVC part) Part No: D00-D006</p>  A rectangular cassette torque meter with two circular gauges on top. The gauges have scales from 0 to 300 and are labeled 'SRK VHT-303 TORQUE METER FOR VHS-VL'.	<p>2. Alignment tape Part No NTSC: DTN-001 PAL:DTN-0002</p>  A rectangular alignment tape with a central slot and two side tabs.	<p>3. Torque gauge 600g.Cm ATG Part No:D00-D002</p>  A cylindrical torque gauge with a hexagonal top and a black base.
<p>4. Torque gauge adaptor Part No:D09-R001</p>  A cylindrical torque gauge adaptor with a central hole and a small protrusion on top.	<p>5. Post height adjusting driver Part No:DTL-0005</p>  A long, thin metal driver with a cylindrical handle and a small hook at the end.	<p>6. + Type driver (ø 5)</p>  A standard Phillips (+) type screwdriver with a textured handle.

# DECK MECHANISM ADJUSTMENT

## 1. Mechanism Alignment position Check

**Purpose:** To determine if the Mechanism is in the correct position, when a Tape is ejected.

Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Check Point
• Blank tape	• Eject Mode (with Cassette ejected)	• Mechanism and Mode Switch Position

1) Turn the Power S/W on and eject the Cassette by pressing the Eject Button.  
 2) Remove the Top Cover and Top Plate Assembly, visually check if the Cam Gear Hole is aligned with the Chassis Hole as below Fig. C-2.  
 3) If not, rotate the Shaft of the Loading Motor Clockwise or Counterclockwise until the Alignment is as shown below in Fig. C-2.  
 4) Remove the Screw which attaches the Deck Mechanism and Main Frame, confirm the Cam Gear is aligned with the Drive Gear as shown below in Fig. C-1 (A).  
 5) Confirm if the Mode S/W on the Main P.C. Board is aligned as shown below in Fig. C-1 (B).  
 6) Remount the Deck Mechanism on the Main P.C. Board and check each operation.

### CHECK DIAGRAM

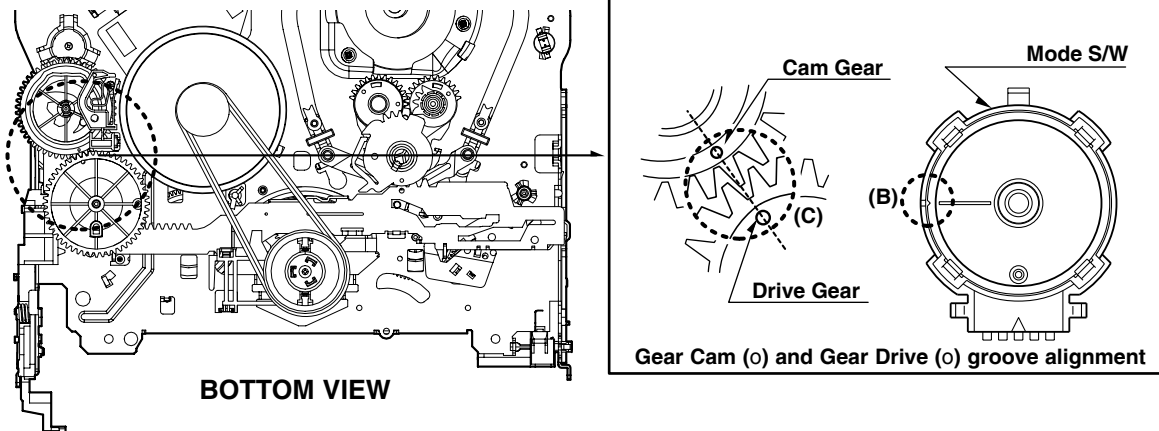


Fig. C-1

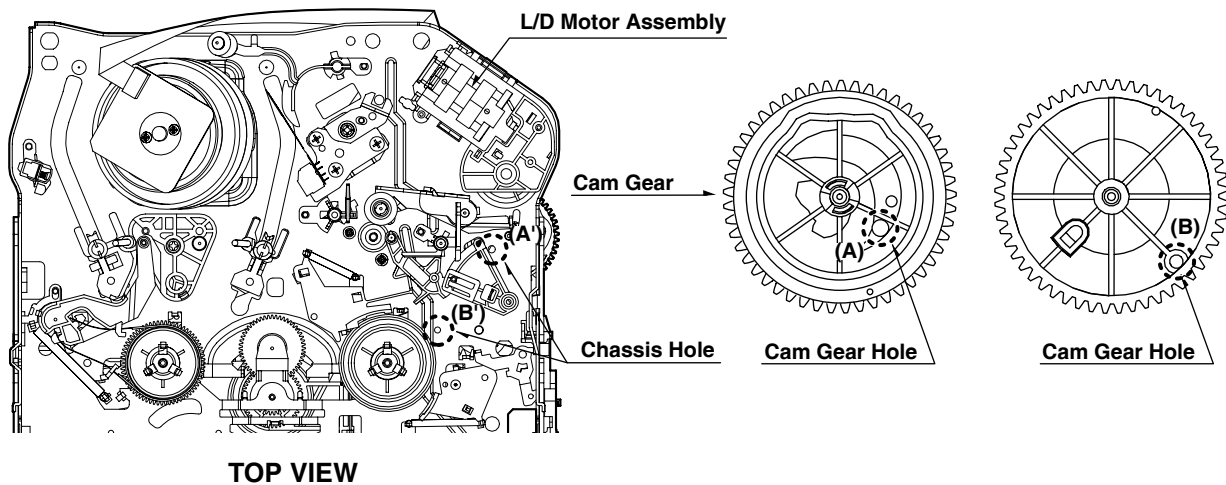


Fig. C-2

# DECK MECHANISM ADJUSTMENT

## 2. Preparation for Adjustment (To set the Deck Mechanism to the Loading state without inserting a Cassette Tape).

- 1) Unplug the Power Cord from the AC Outlet.
- 2) Disassemble the Top Cover and Top Plate Assembly.
- 3) Plug the Power Cord into the AC Outlet.
- 4) Turn the Power S/W. Push the Stop Lever of the CST Holder Assembly to the back for Loading without the

Tape.

Cover the Holes of the End Sensors at the both sides of the (L) Side Bracket and Door Bracket Assembly to prevent sensing light.

Then The Deck Mechanism drives to the Stop Mode.

In this case, The Deck Mechanism can accept inputs of each mode, however the Rewind and Review Operation can not be performed for more than a few seconds because the Take-up Reel Table is in the Stop Mode and can not detect the Reel Pulses.

## 3. Checking Torque

**Purpose: To insure smooth Transport of the Tape during each Mode of Operation.**  
**If the Tape Transport is abnormal, then check the Torque as indicated by the chart below.**

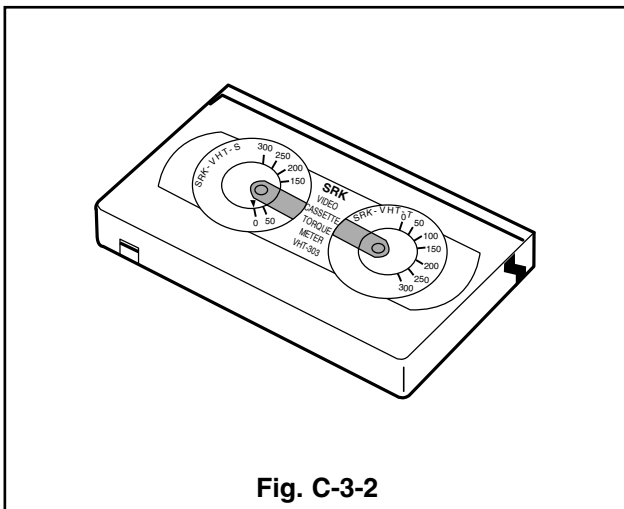
Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Checking Method
<ul style="list-style-type: none"> <li>• Torque Gauge (600g/cm ATG)</li> <li>• Torque Gauge Adaptor</li> <li>• Cassette Torque Meter SRK-VHT-303</li> </ul>	<ul style="list-style-type: none"> <li>• Play (FF) or Review (REW) Mode</li> </ul>	<ul style="list-style-type: none"> <li>• Perform each Deck Mechanism Mode without inserting a Cassette Tape (Refer to above No.2 Preparation for Adjustment).</li> <li>• Read the Measurement of the Take-up or Supply Reels on the Cassette Torque Meter (Fig. C-3-2).</li> <li>• Attach the Torque Gauge Adaptor to the Torque Gauge and then read the Value of it (Fig. C-3-1).</li> </ul>

Item	Mode	Test Equipment	Measurement Reel	Measurement Values
Fast Forward Torque	Fast Forward	Cassette Torque Gauge	Take-Up Reel	More than 400g/cm
Rewind Torque	Rewind	Cassette Torque Gauge	Supply Reel	More than 400g/cm
Play Take-Up Torque	Play	Cassette Torque Meter	Take-Up Reel	40~100g/cm
Review Torque	Review	Cassette Torque Meter	Supply Reel	120~210g/cm

### NOTE:

The Values are measured by using a Torque Gauge and Torque Gauge Adaptor with the Torque Gauge affixed.

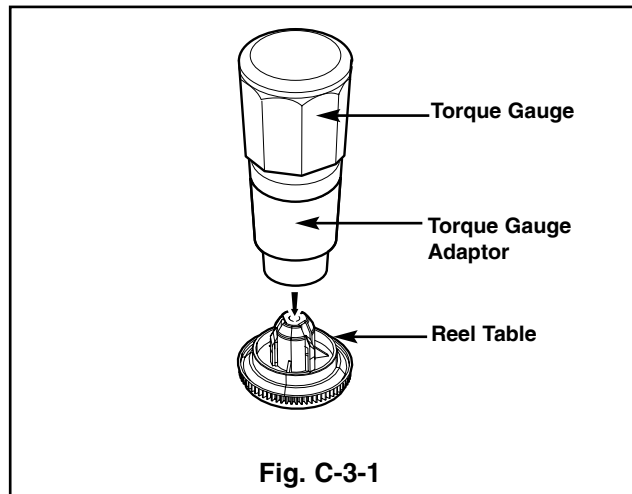
- Cassette Torque Meter (SRK-VHT-303)



### NOTE:

The Torque reading to measure occurs when the Tape abruptly changes direction from Fast Forward of Rewind Mode, when quick bracking is applied to both Reels.

- Torque Gauge (600g.cm ATG)



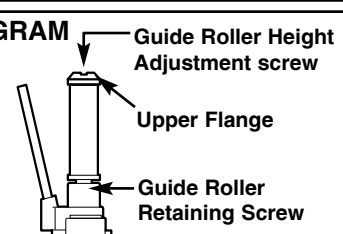


# DECK MECHANISM ADJUSTMENT

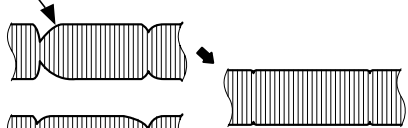
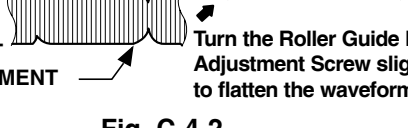
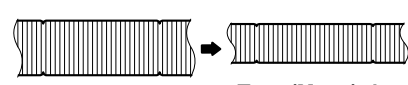
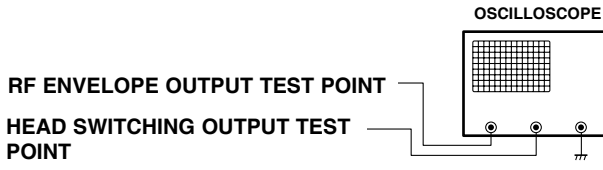
## 4. Guide Roller Height Adjustment

**Purpose: To regulate the Height of the Tape so that the Bottom of the Tape runs along the Tape Guide Line on the Lower Drum.**

### 4-1. Preliminary Adjustment

Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Adjustment Point
<ul style="list-style-type: none"> <li>• Post Height Adjusting Driver</li> </ul>	<ul style="list-style-type: none"> <li>• Play or Review Mode</li> </ul>	<ul style="list-style-type: none"> <li>• Guide Roller Height Adjustment screws on the Supply and Take-Up Guide Rollers.</li> </ul>
<b>Adjustment Procedure</b> <ol style="list-style-type: none"> <li>1) Confirm that the Tape runs along the Tape Guide Line of the Lower Drum.</li> <li>2) If the Tape runs at the Bottom of the Guide Line, turn the Guide Roller Height Adjustment Screw Clockwise.</li> <li>3) If it runs at the Top, turn Counterclockwise.</li> <li>4) Adjust the Height of the Guide Roller to be guided to the Guide Line of the Lower Drum from the Starting and Ending Point of the Drum.</li> </ol>		<b>ADJUSTMENT DIAGRAM</b>  <p><b>Fig. C-4-1</b></p>

### 4-2. Precise Adjustment

Test Equipment/Fixture	Test Equipment Connection Points	Test Conditions VCR (VCP) State	Adjustment Point
<ul style="list-style-type: none"> <li>• Oscilloscope</li> <li>• Alignment Tape</li> <li>• Post Height Adjusting Driver</li> </ul>	<ul style="list-style-type: none"> <li>• CH-1:PB RF Envelope</li> <li>• CH-2:NTSC: SW 30Hz PAL: SW 25Hz</li> <li>• Head Switching Output Point</li> <li>• RF Envelope Output Point</li> </ul>	<ul style="list-style-type: none"> <li>• Play an Alignment Tape</li> </ul>	<ul style="list-style-type: none"> <li>• Guide Roller Height Adjustment Screws</li> </ul>
<b>Adjustment Procedure</b> <ol style="list-style-type: none"> <li>1) Play an Alignment Tape after connecting the Probe of the Oscilloscope to the RF Envelope Output Test Point and Head Switching Output Test Point.</li> <li>2) Tracking Control (in PB Mode): Center Position (When this Adjustment is performed after the Drum Assembly has been replaced, set the Tracking Control so that the RF Output is Maximum).</li> <li>3) Height Adjustment Screw: Flatten the RF Waveform. (Fig. C-4-2)</li> <li>4) Turn (Move) the Tracking Control (in PB Mode) Clockwise and Counterclockwise. (Fig. C-4-3)</li> <li>5) Check that any Drop of RF Output is uniform at the Start and End of the Waveform.</li> </ol> <p><b>NOTE</b></p> <p>If the adjustment is excessive or insufficient the tape will jam or fold.</p>		<b>Waveform Diagrams</b> <p><b>P2 POST ADJUSTMENT</b></p>  <p><b>P3 POST ADJUSTMENT</b></p>  <p><b>Fig. C-4-2</b></p> <p>Turn the Roller Guide Height Adjustment Screw slightly to flatten the waveform.</p> <p><b>Tracking control at center</b></p>  <p><b>Fig. C-4-3</b></p> <p>Turn (Move) the tracking control to both directions</p> <p><b>Connection Diagram</b></p> 	

# DECK MECHANISM ADJUSTMENT

## 5. Audio/Control (A/C) Head Adjustment

**Purpose: To insure that the Tape's Audio and Control Tracks pass accurately over the head in exact alignment in both the Record and Playback Modes.**

### 5-1. Preliminary Adjustment (Height and Tilt Adjustment)

Perform the Preliminary Adjustment, when there is no Audio Output Signal with the Alignment Tape.

Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Adjustment Point
<ul style="list-style-type: none"> <li>• Blank Tape</li> <li>• Screw Driver (+) Type 5mm</li> </ul>	<ul style="list-style-type: none"> <li>• Play the blank tape</li> </ul>	<ul style="list-style-type: none"> <li>• Tilt Adjustment Screw (C)</li> <li>• Height Adjustment Screw (B)</li> <li>• Azimuth Adjustment Screw (A)</li> </ul>

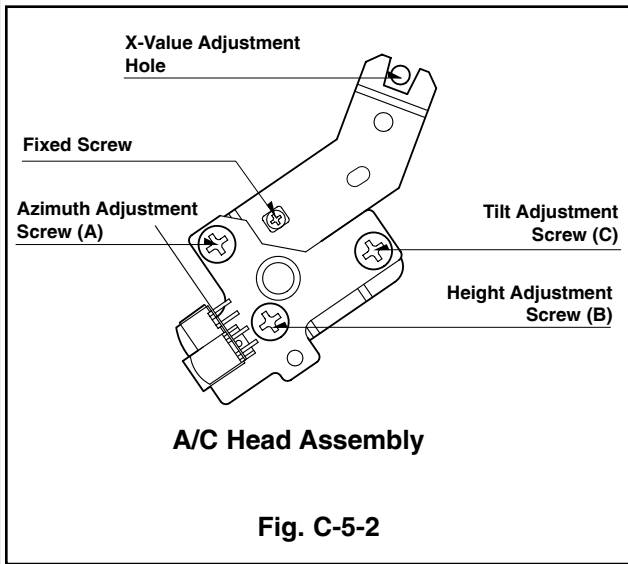
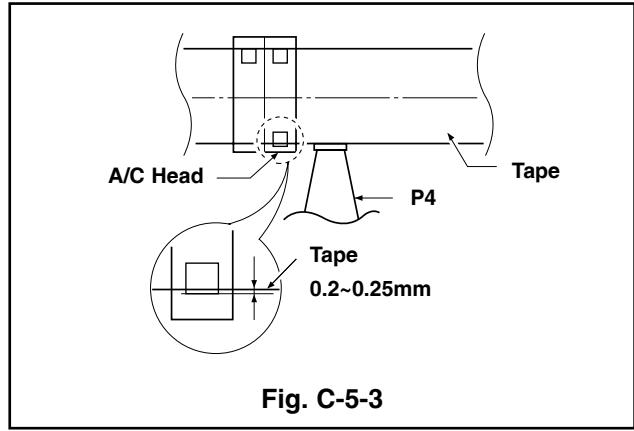
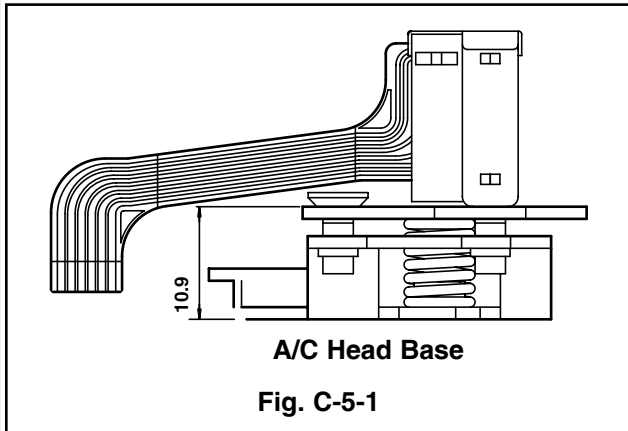
#### Adjustment Procedure/Diagrams

- 1) Adjust the A/C Head Base Assembly as shown Fig. C-5-1 by using the Height Adjustment Screw (B).
- 2) Play a Blank Tape and observe if the Tape passes accurately over the A/C Head without the Tape Curling or Folding.
- 3) If Folding or Curling occurs adjust the Tilt Adjustment Screw (C) while the Tape is running to resemble Fig. C-5-3.

- 4) Reconfirm the Tape Path after playback of approximately 4~5 seconds.

#### NOTE

Ideal A/C head height occurs when the tape runs between 0.2~0.25mm above the bottom edge of the A/C head core.



# DECK MECHANISM ADJUSTMENT

## 5-2. Confirm that the Tape passes smoothly between the Take-up Guide and Pinch Roller (using a Mirror or the naked eye).

- 1) After completing Step 5-1. (Preliminary Adjustment), check that the Tape passes around the Take-up Guide and Pinch Roller without Folding or Curling at the Top or Bottom.
  - (1) If Folding or Curling is observed at the Bottom of the Take-up Guide then slowly turn the Tilt Adjustment Screw (C) in the Clockwise direction.

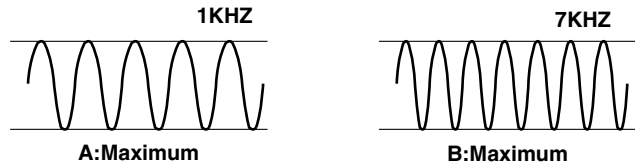
(2) If Folding or Curling is observed at the Top of it then slowly turn the Tilt Adjustment Screw (C) in the Counterclockwise direction.

### NOTE:

Check the RF Envelope after adjusting the A/C Head, if the RF Waveform differs from Fig. C-5-4, performs Precise Adjustment to flat the RF Waveform.

## 5-3. Precise Adjustment (Azimuth adjustment)

Test Equipment/ Fixture	Connection Point	Test Conditions (Mechanism Condition)	Adjustment Point
<ul style="list-style-type: none"> <li>• Oscilloscope</li> <li>• Alignment Tape (SP)</li> <li>• Screw Driver (+) Type 5mm</li> </ul>	<ul style="list-style-type: none"> <li>• Audio output jack</li> </ul>	<ul style="list-style-type: none"> <li>• Play an Alignment Tape 1KHz, 7KHz Sections</li> </ul>	<ul style="list-style-type: none"> <li>• Azimuth Adjustment Screw (A)</li> <li>• Height Adjustment Screw (B)</li> </ul>
<p><b>Adjustment Procedure</b></p> <ol style="list-style-type: none"> <li>1) Connect the Probe of the Oscilloscope to the Audio Output Jack.</li> <li>2) Alternately adjust the Azimuth Adjustment Screw (A) and the Tilt Adjustment Screw (C) for Maximum Output of the 1Khz and 7Khz segments, while maintaining the flattest Envelope differential between the two Frequencies.</li> </ol>			

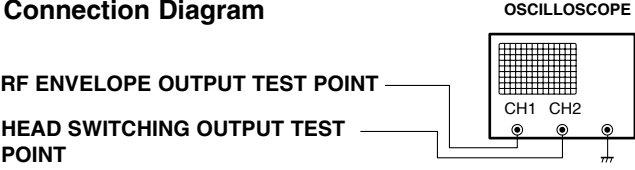
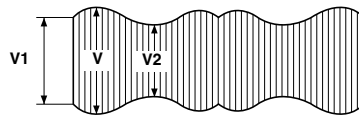


## 6. X-Value Adjustment

Purpose: To obtain compatibility with other VCR (VCP) Models.			
Test Equipment/ Fixture	Connection Point	Test Conditions (Mechanism Condition)	Adjustment Point
<ul style="list-style-type: none"> <li>• Oscilloscope</li> <li>• Alignment tape (SP only)</li> <li>• Screw Driver (+) Type 5mm</li> </ul>	<ul style="list-style-type: none"> <li>• CH-1: PB RF Envelope</li> <li>• CH-2: NTSC: SW 30Hz PAL: SW 25Hz</li> <li>• Head Switching Output Test Point</li> <li>• RF Envelope Output Test Point</li> </ul>	<ul style="list-style-type: none"> <li>• Play an Alignment Tape</li> </ul>	
<p><b>Adjustment Procedure</b></p> <ol style="list-style-type: none"> <li>1) Release the Automatic Tracking to run long enough for Tracking to complete it's Cycle.</li> <li>2) Loosen the Fixed Mounting Screw and move the A/C Head Base Assembly in the direction as shown in the Diagram to find the center of the peak that allows for the maximum Waveform Envelope. This method should allow the 31um Head to be centrally located over the 58um Tape Track.</li> <li>3) Tighten the A/C Head Base Assembly mounting Screw.</li> </ol>		<p><b>Adjustment Diagram</b></p> <p><b>Connection Diagram</b></p>	

# DECK MECHANISM ADJUSTMENT

## 7. Adjustment after Replacing Drum Assembly (Video Heads)

<b>Purpose: To correct for shift in the Roller Guide and X value after replacing the Drum.</b>			
Test Equipment/ Fixture	Connection Point	Test Conditions (Mechanism Condition)	Adjustment Points
<ul style="list-style-type: none"> <li>Oscilloscope</li> <li>Alignment tapes</li> <li>Blank Tape</li> <li>Post Height Adjusting Driver</li> <li>Screw Driver (+) Type 5mm</li> </ul>	<ul style="list-style-type: none"> <li>CH-1: PB RF Envelope</li> <li>CH-2: NTSC: SW 30Hz PAL: SW 25Hz</li> <li>Head Switching Output Test Point</li> <li>RF Envelope Output Test Point</li> </ul>	<ul style="list-style-type: none"> <li>Play the blank tape</li> <li>Play an alignment tape</li> </ul>	<ul style="list-style-type: none"> <li>Guide Roller Precise Adjustment</li> <li>Switching Point</li> <li>Tracking Preset</li> <li>X-Value</li> </ul>
<b>Checking/Adjustment Procedure</b> Play a blank tape and check for tape curling or creasing around the roller guide. If there is a problem, follow the procedure 4. "Guide Roller Height" and 5. "Audio Control (A/C) Head Adjustment".		<b>Connection Diagram</b>  <b>Waveform</b> $V1/V \text{ MAX} \leq 0.7$ $V2/V \text{ MAX} \leq 0.8$ RF ENVELOPE OUTPUT 	
<b>Fig. C-7</b>			

## 8. Check the Tape Travel after Reassembling Deck Assembly.

### 8-1. Check Audio and RF Locking Time during playback and after CUE or REV (FF/REW)

Test Equipment/ Fixture	Specification	Connection Points	Test Conditions (Mechanism Condition)
<ul style="list-style-type: none"> <li>Oscilloscope</li> <li>Alignment tapes (with 6H 3kHz Color Bar Signal)</li> <li>Stop Watch</li> </ul>	<ul style="list-style-type: none"> <li>RF Locking Time: Less than 5 sec.</li> <li>Audio Locking Time: Less than 10sec</li> </ul>	<ul style="list-style-type: none"> <li>CH-1: PB RF Envelope</li> <li>CH-2: Audio Output</li> <li>RF Envelope Output Point</li> <li>Audio Output Jack</li> </ul>	<ul style="list-style-type: none"> <li>Play an alignment tape (with 6H 3kHz Color Bar Signal)</li> </ul>
<b>Checking Procedure</b> Play an alignment tape then change the operating mode to CUE or REV and confirm if the unit meets the above listed specifications.		<b>NOTES:</b> 1) CUE is fast forward mode (FF) 2) REV is the rewind mode (REW) 3) Referenced to the Play mode	

### 8-2. Check for tape curling or jamming

Test Equipment/ Fixture	Specification	Test Conditions (Mechanism Condition)
<ul style="list-style-type: none"> <li>T-160 Tape</li> <li>T-120 Tape</li> </ul>	<ul style="list-style-type: none"> <li>Be sure there is no tape jamming or curling at the beginning, middle or end of the tape.</li> </ul>	<ul style="list-style-type: none"> <li>Run the CUE, REV play mode at the beginning and the end of the tape.</li> </ul>
<b>Checking Procedure</b> 1) Confirm that the tape runs smoothly around the roller guides, drum and A/C head assemblies while abruptly changing operating modes from Play to CUE or REV. This is to be checked at the beginning, middle and end sections of the cassette. 2) Confirm that the tape passes over the A/C head assembly as indicated by proper audio reproduction and proper tape counter performance.		

# MAINTENANCE/INSPECTION PROCEDURE

## 1 Check before starting repairs

The following faults can be remedied by cleaning and oiling. Check the needed lubrication and the conditions of cleanliness in the unit.

Check with the customer to find out how often the unit is used, and then determine that the unit is ready for inspection and maintenance. Check the following parts.

Phenomenon	Inspection	Replacement
Color beats	Dirt on full-erase head	o
Poor S/N, no color	Dirt on video head	o
Vertical or Horizontal jitter	Dirt on video head Dirt on tape transport system	o
Low volume, Sound distorted	Dirt on Audio/control head	o
Tape does not run. Tape is slack	Dirt on pinch roller	o
In Review and Unloading (off mode), the Tape is rolled up loosely.	Clutch Assembly D33K Torque reduced	o
	Cleaning Drum and transport system	Fig. C-9-3

F/E Head

Video Head

A/C Head

Pinch Roller

Belt Capstan

Clutch Assembly D33K

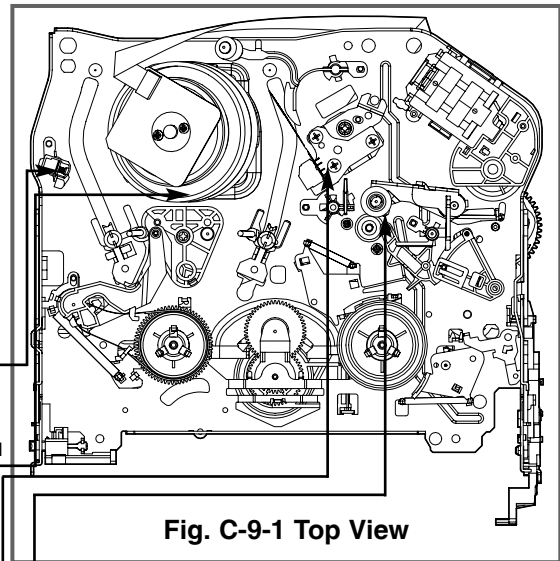


Fig. C-9-1 Top View

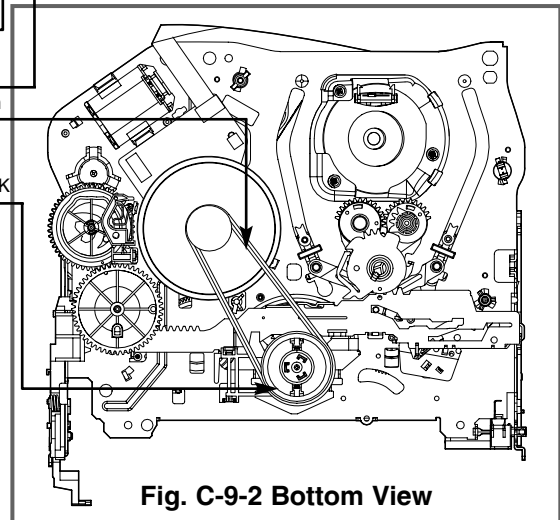


Fig. C-9-2 Bottom View

### NOTE

If locations marked with **o** do not operate normally after cleaning, check for wear and replace. See the EXPLODED VIEWS at the end of this manual as well as the above illustrations See the Greasing (Page 4-22) for the sections to be lubricated and greased.

\* No. (1) ~ (13) Indicates the Tape Path to be traveled from Supply Reel to Take-up Reel.

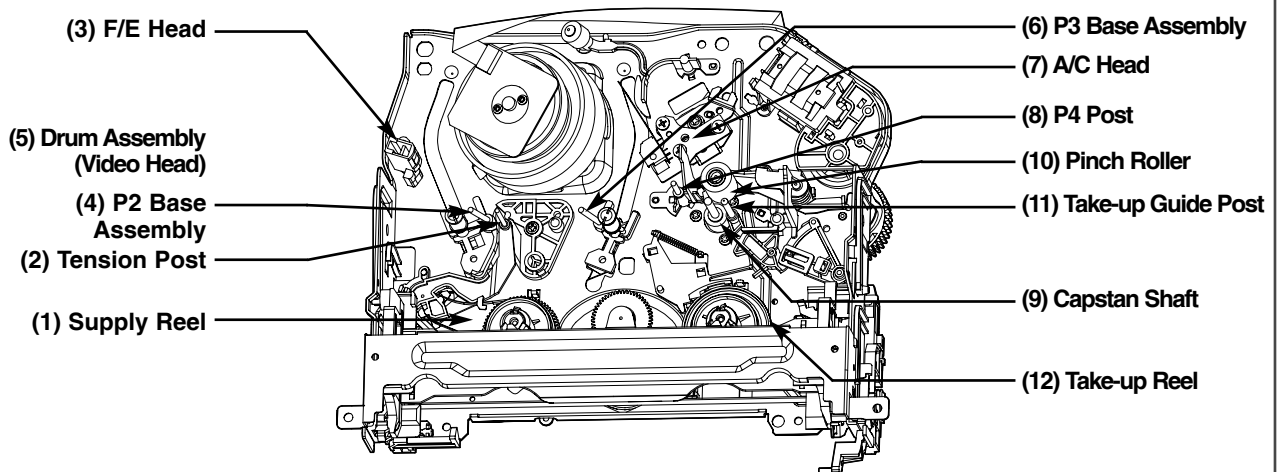


Fig. C-9-3 Tape Transport System

# MAINTENANCE/INSPECTION PROCEDURE

## 2. Required Maintenance

The recording density of a VCR (VCP) is much higher than that of an audio tape recorder. VCR (VCP) components must be very precise, at tolerances of 1/1000mm, to ensure compatibility with other VCRs. If any of these components are worn or dirty, the symptoms will be the same as if the part is defective. To ensure a good picture, periodic inspection and maintenance, including replacement of worn out parts and lubrication, is necessary.

## 3. Scheduled Maintenance

Schedules for maintenance and inspection are not fixed because they vary greatly according to the way in which the customer uses the VCR, and the environment in which the VCR is used.

But, in general home use, a good picture will be maintained if inspection and maintenance is made every 1,000 hours. The table below shows the relation between time used and inspection period.

Table 1

When inspection is necessary / Average hours used per day	About 1 year	About 18 months	About 3 years
One hour	[Bar chart showing inspection interval]		
Two hours	[Bar chart showing inspection interval]		
Three hours	[Bar chart showing inspection interval]		

## 4. Supplies Required for Inspection and Maintenance

- (1) Grease: Kanto G-311G (Blue) or equivalent
- (2) Isopropyl Alcohol or equivalent
- (3) Cleaning Patches
- (4) Grease: Kanto G-381 (Yellow)

## 5) Maintenance Procedure

### 5-1) Cleaning

- (1) Cleaning video head  
First use a cleaning tape. If the dirt on the head is too stubborn to remove by tape, use the cleaning patch. Coat the cleaning patch with Isopropyl Alcohol. Touch the cleaning patch to the head tip and gently turn the head (rotating cylinder) right and left. (Do not move the cleaning patch vertically. Make sure that only the buckskin on the cleaning patch comes into contact with the head. Otherwise, the head may be damaged.) Thoroughly dry the head. Then run the test tape. If Isopropyl Alcohol remains on the video head, the tape may be damaged when it comes into contact with the head surface.
- (2) Clean the tape transport system and drive system, etc, by wiping with a cleaning patch wetted with Isopropyl Alcohol.

### NOTES:

- ① It is the tape transport system which comes into contact with the running tape. The drive system consists of those parts which moves the tape.
- ② Make sure that during cleaning you do not touch the tape transport system with the tip of a screw driver and no that force is that would cause deforming or damage applied to the system.

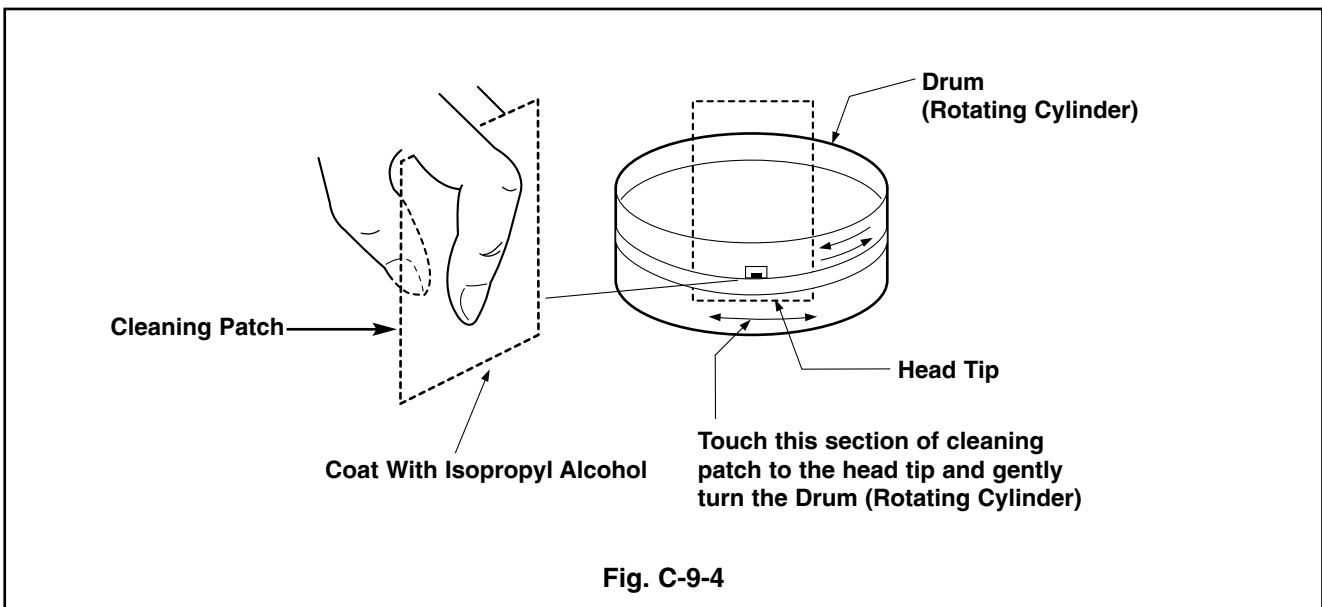


Fig. C-9-4

# MAINTENANCE/INSPECTION PROCEDURE

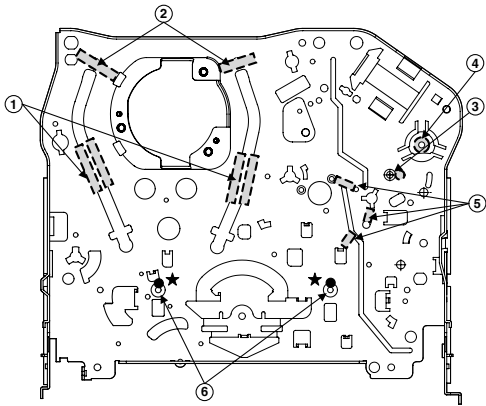
## 5-2) Greasing

### (1) Greasing guidelines

Apply grease, with a cleaning patch. Do not use excess grease. It may come into contact with the tape path or drive system. If this occurs wipe off any excess and clean with cleaning patch using Isopropyl Alcohol.

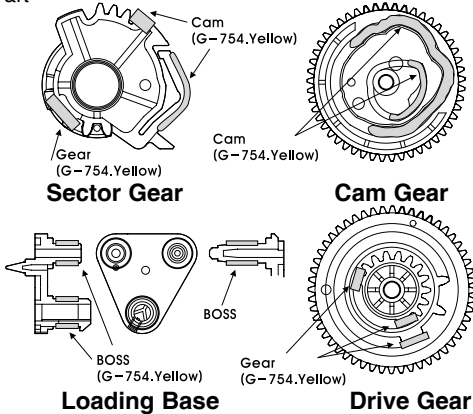
### NOTE:Greasing Points

- |                                   |   |
|-----------------------------------|---|
| 1) Loading Path Inside & Top side | 6) Shaft                                  |
| 2) Tension Base Boss inside Hole  | 7) F/L Arm Assembly of Buming Inside Hole |
| 3) F/L Arm Assembly "U" Groove    | 8) S Reel, T Shaft (G381:Yellow)          |
| 4) Take-up Arm Rubbing Section    | 9) Brake T Groove                         |
| 5) L/D Motor Gear Wheel Part      |   |



**Chassis (Top)**

### Gear Part



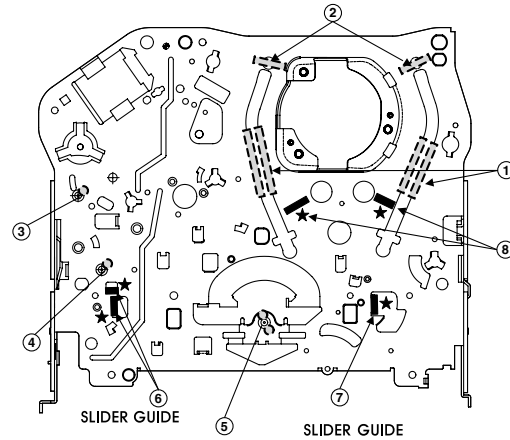
**(L) Side Bracket**

**Door Bracket Assembly**

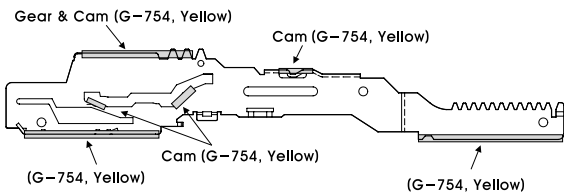
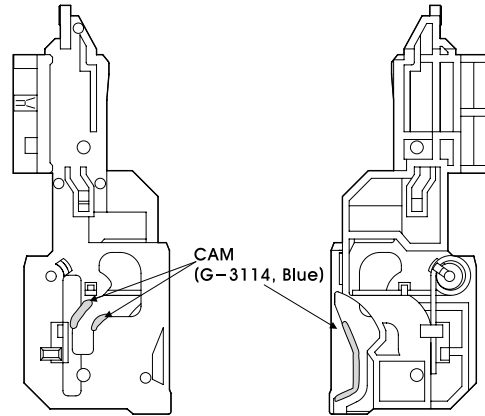
### (2) Periodic greasing

Grease specified locations every 5,000 hours.

- |                                   |                              |
|-----------------------------------|------------------------------|
| 1) Loading Path Inside & Top side | 5) Tension Lever Groove      |
| 2) Shaft                          | 6) D33 Clutch Assembly Shaft |
| 3) F/L Gear Rack Moving Section   | 7) "S" Brake Rubbing Section |
| 4) Shaft                          |                              |

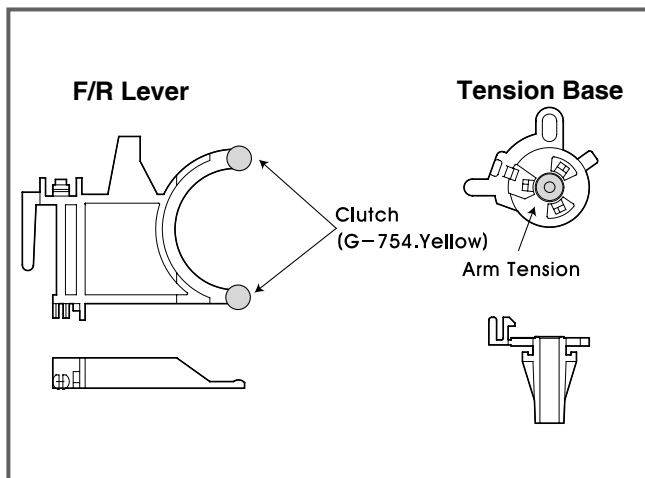


**Chassis (Bottom)**

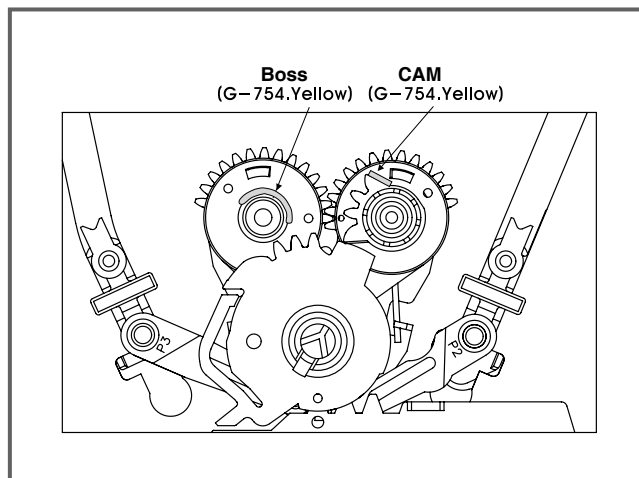


# MAINTENANCE/INSPECTION PROCEDURE

## GEAR , F/R



## GEAR AY, P2 & P3

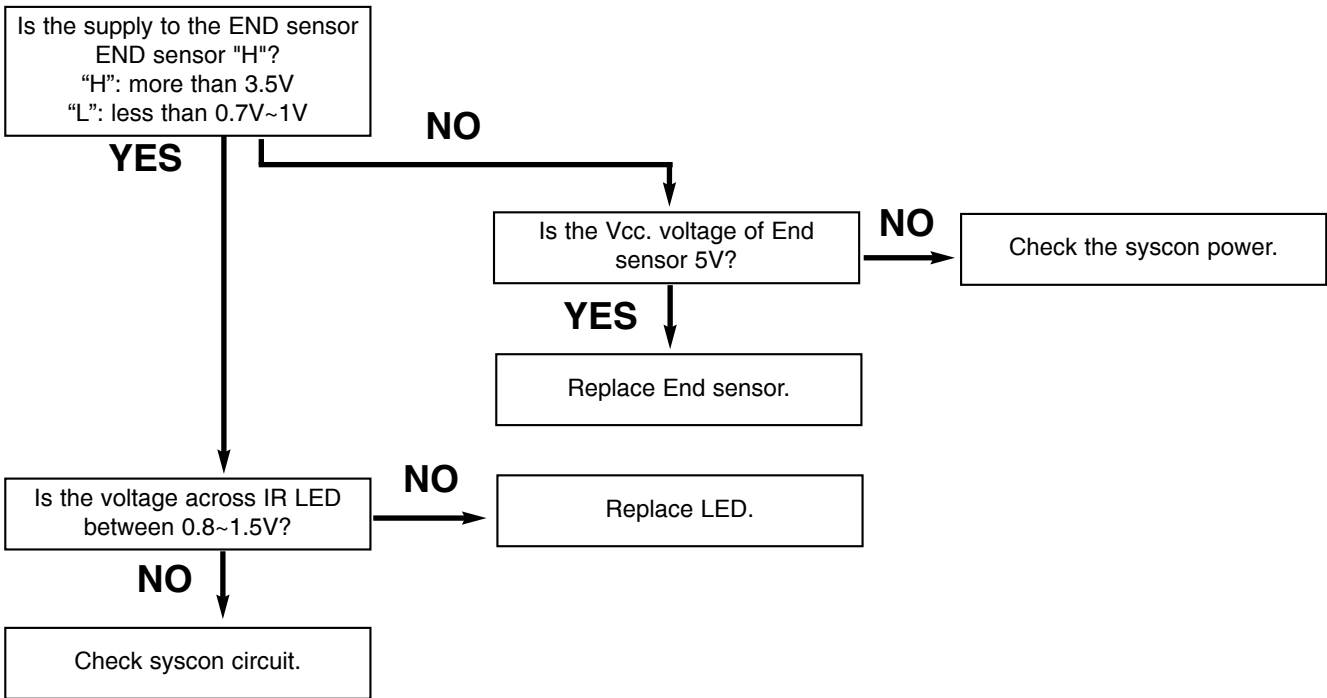




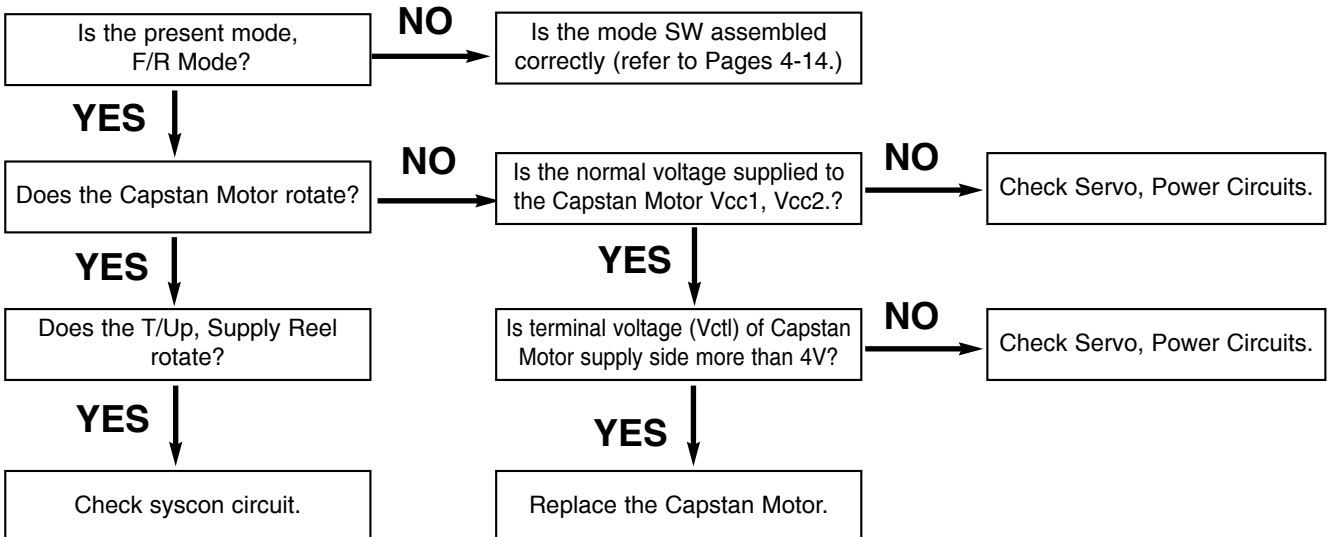
# MECHANISM TROUBLESHOOTING GUIDE

## 1. Deck Mechanism

### A. Auto REW doesn't work

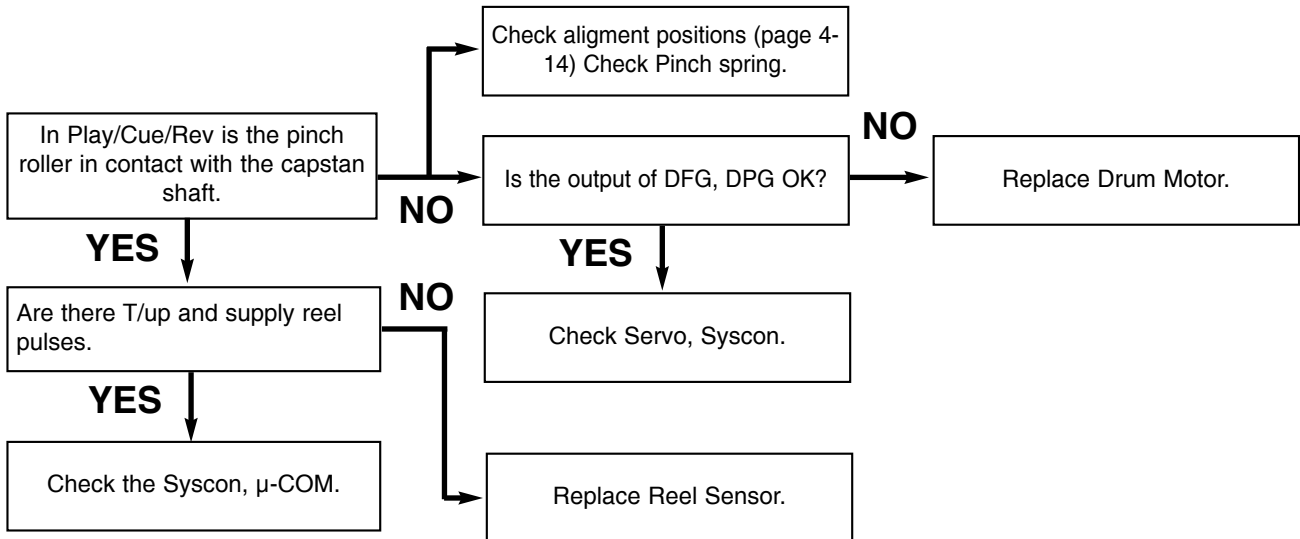


### B. No F/R Mode

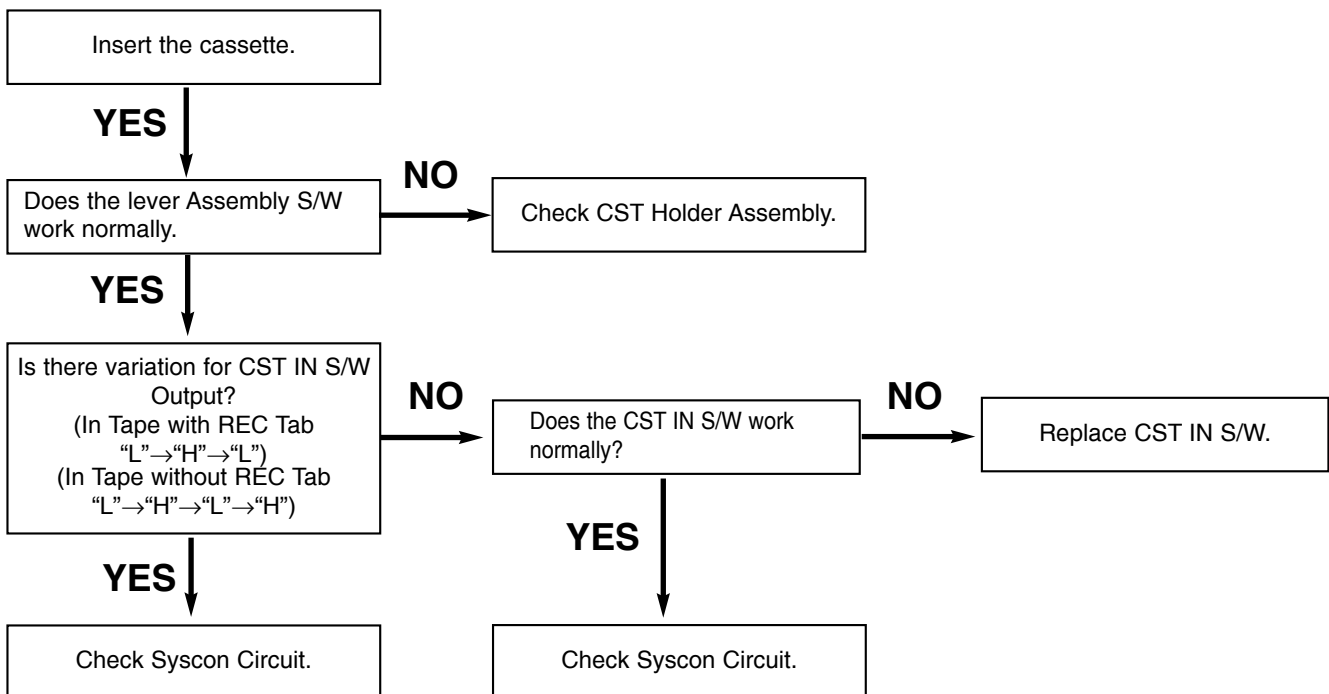


# MECHANISM TROUBLESHOOTING GUIDE

## C. AUTO STOP(PLAY/CUE/REV)

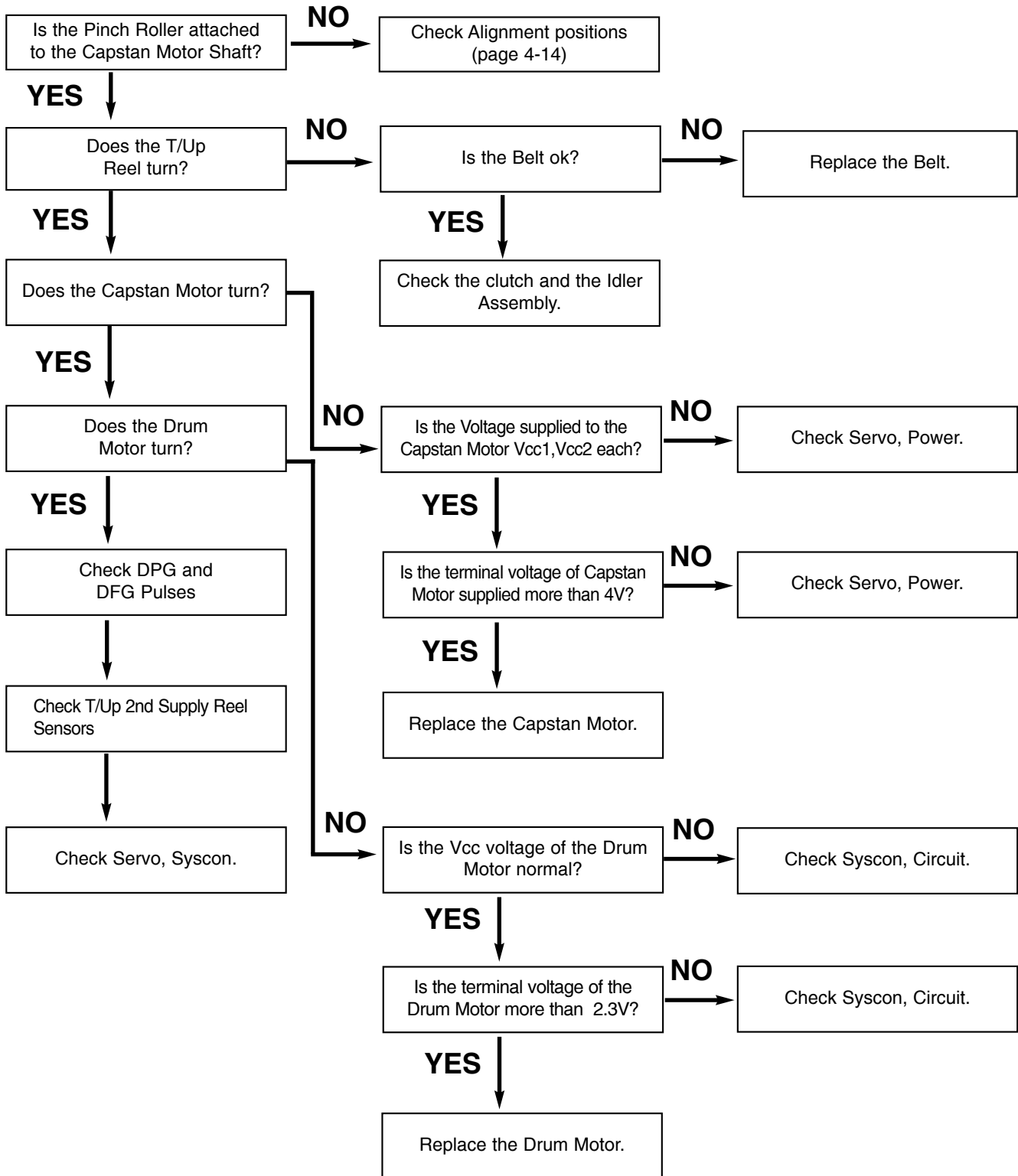


## D. NO CASSETTE LOADING



# MECHANISM TROUBLESHOOTING GUIDE

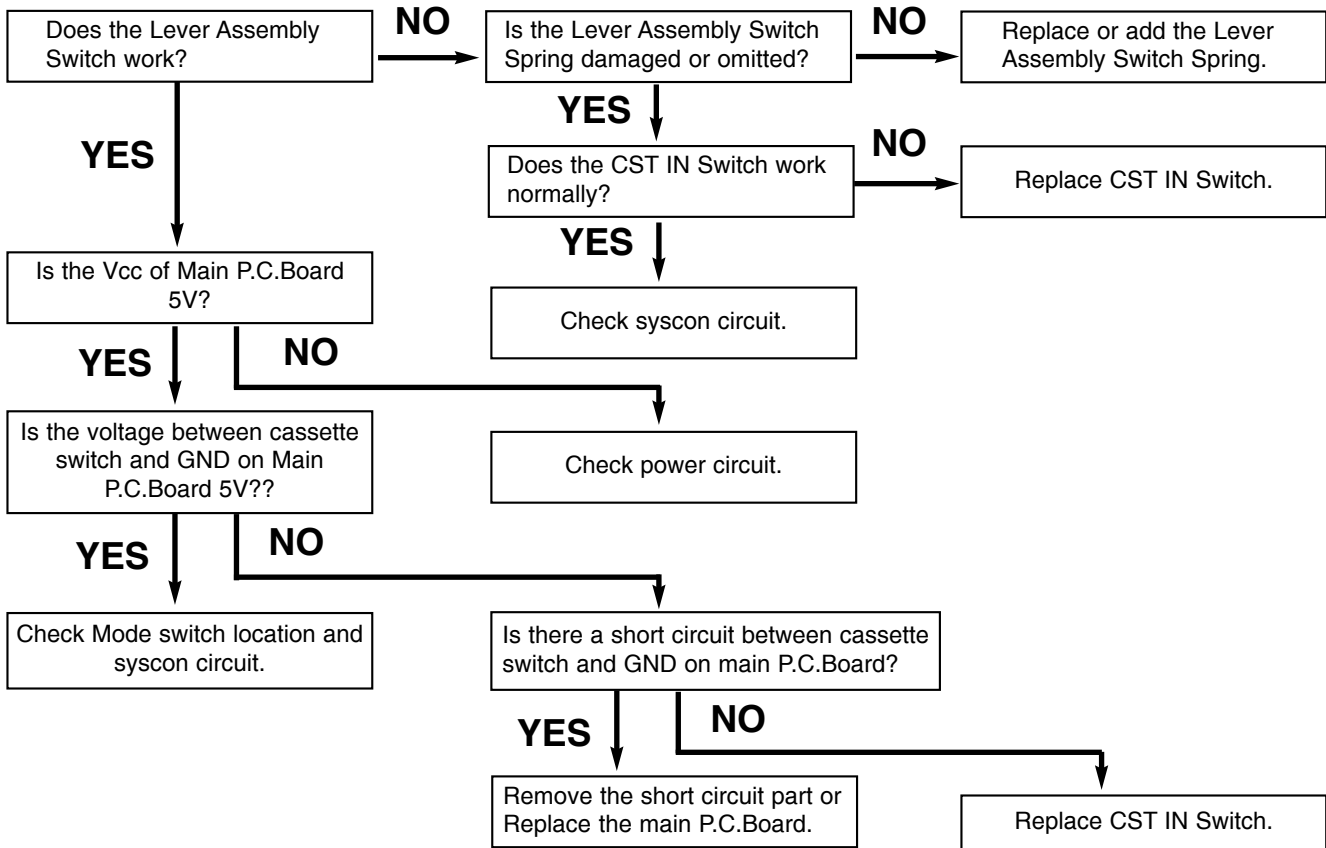
## E. In PB mode Tape presence not sensed.



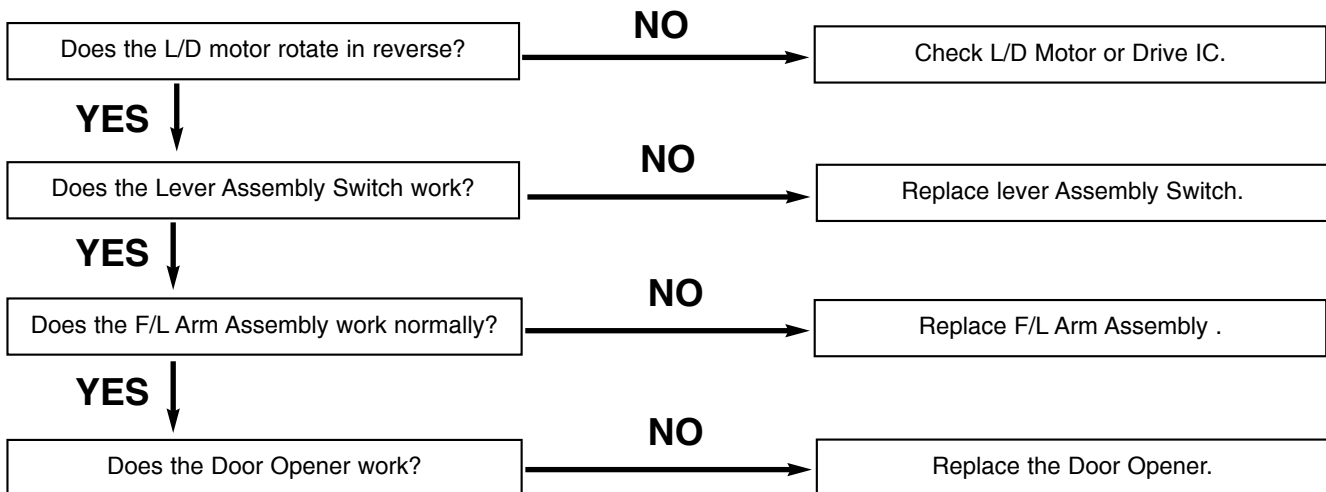
# MECHANISM TROUBLESHOOTING GUIDE

## 2. Front Loading Mechanism

### A. Cassette can not be inserted



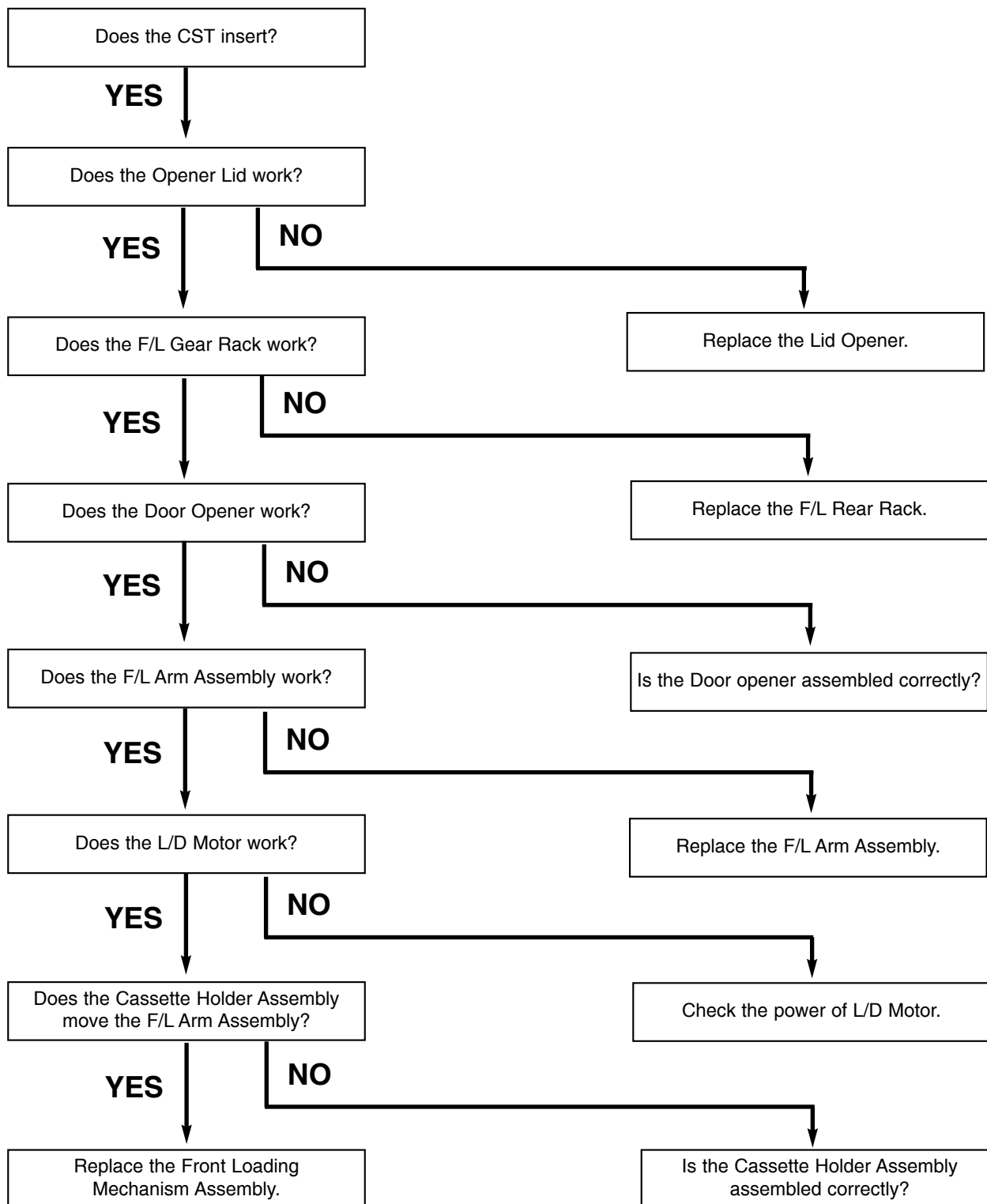
### B. Cassette will not eject



# MECHANISM TROUBLESHOOTING GUIDE

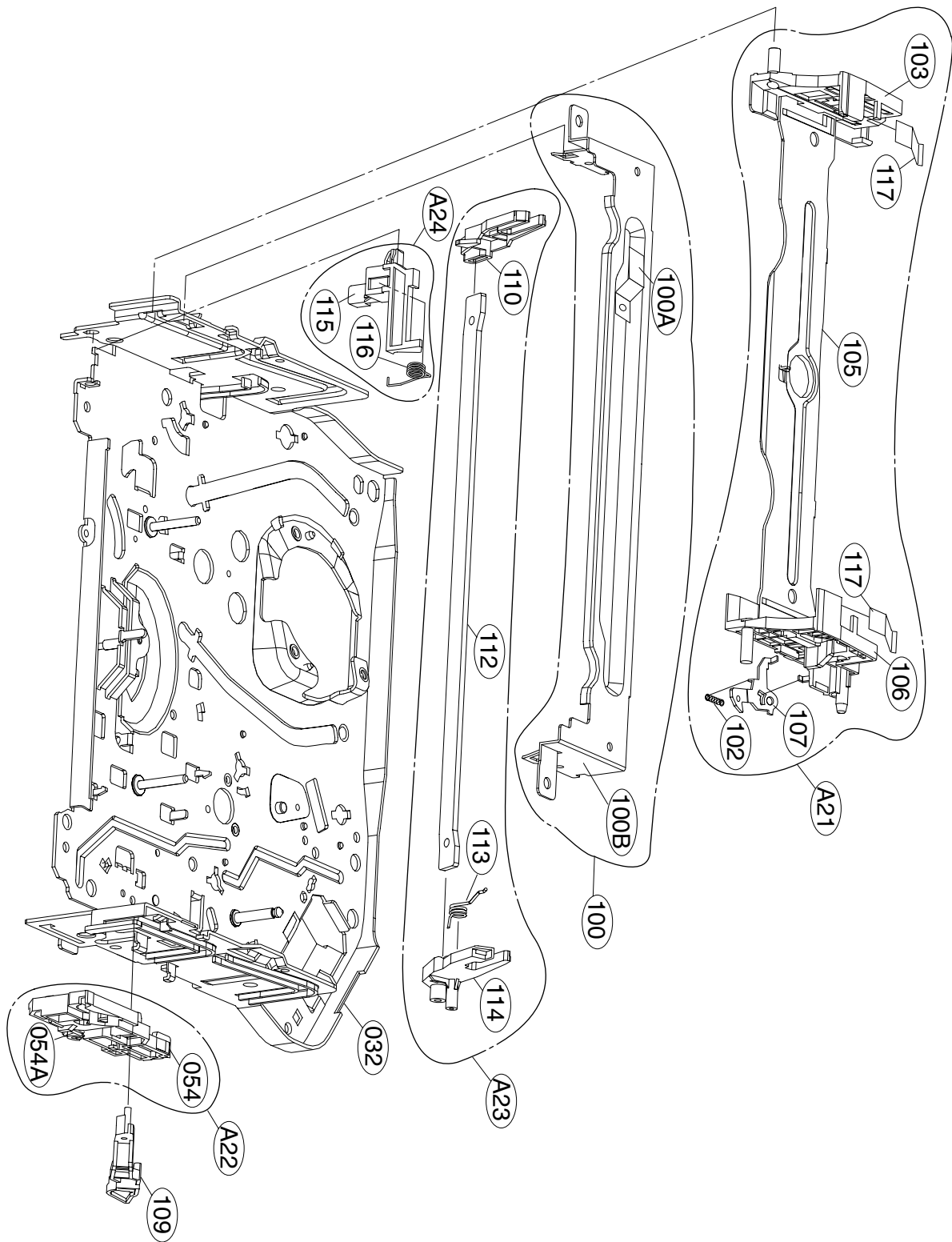
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## C. Cassette will not load



# EXPLODED VIEWS

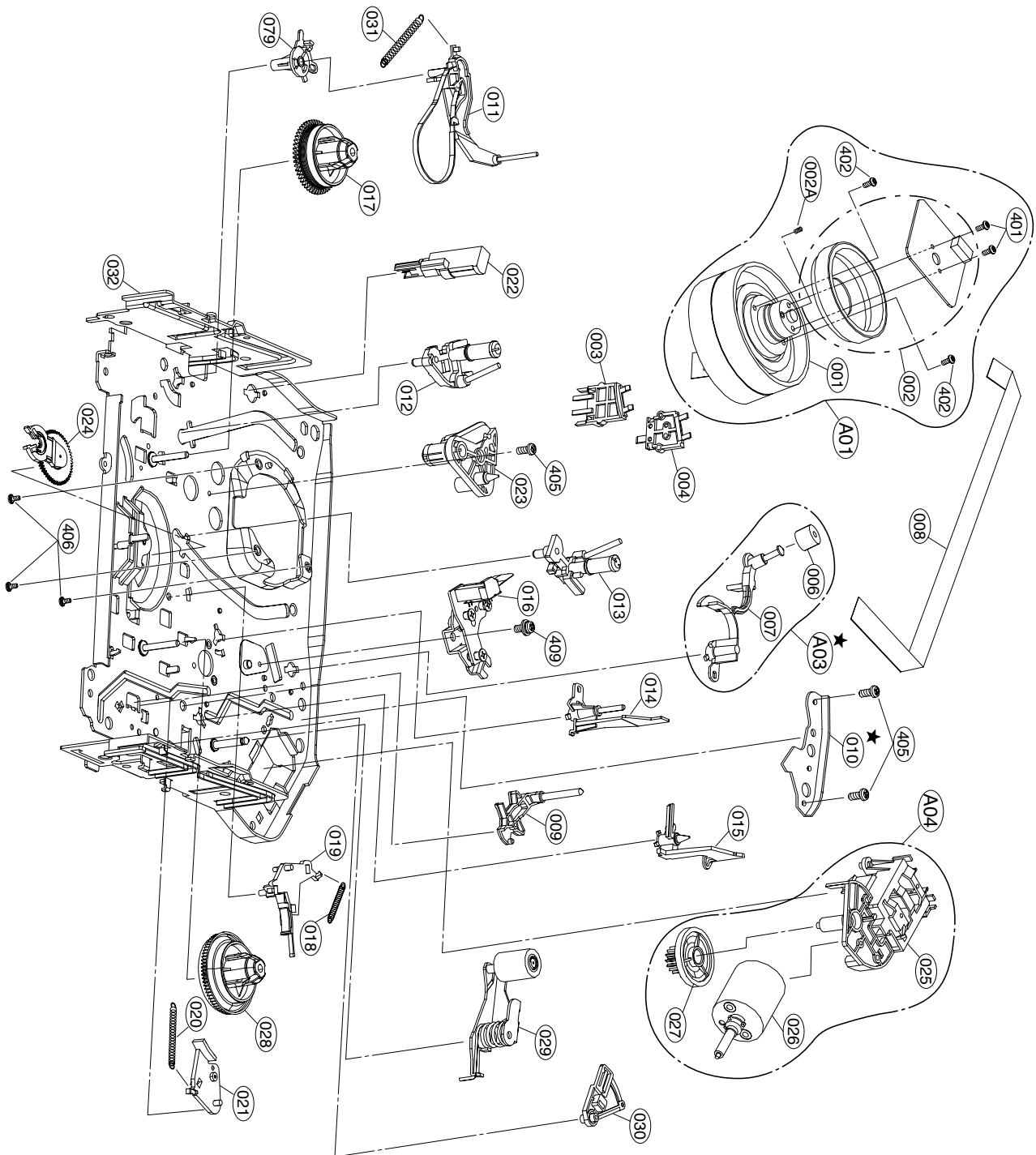
## 1. Front Loading Mechanism Section



# EXPLODED VIEWS

## 2. Moving Mechanism Section (1)

★ OPTIONAL PART



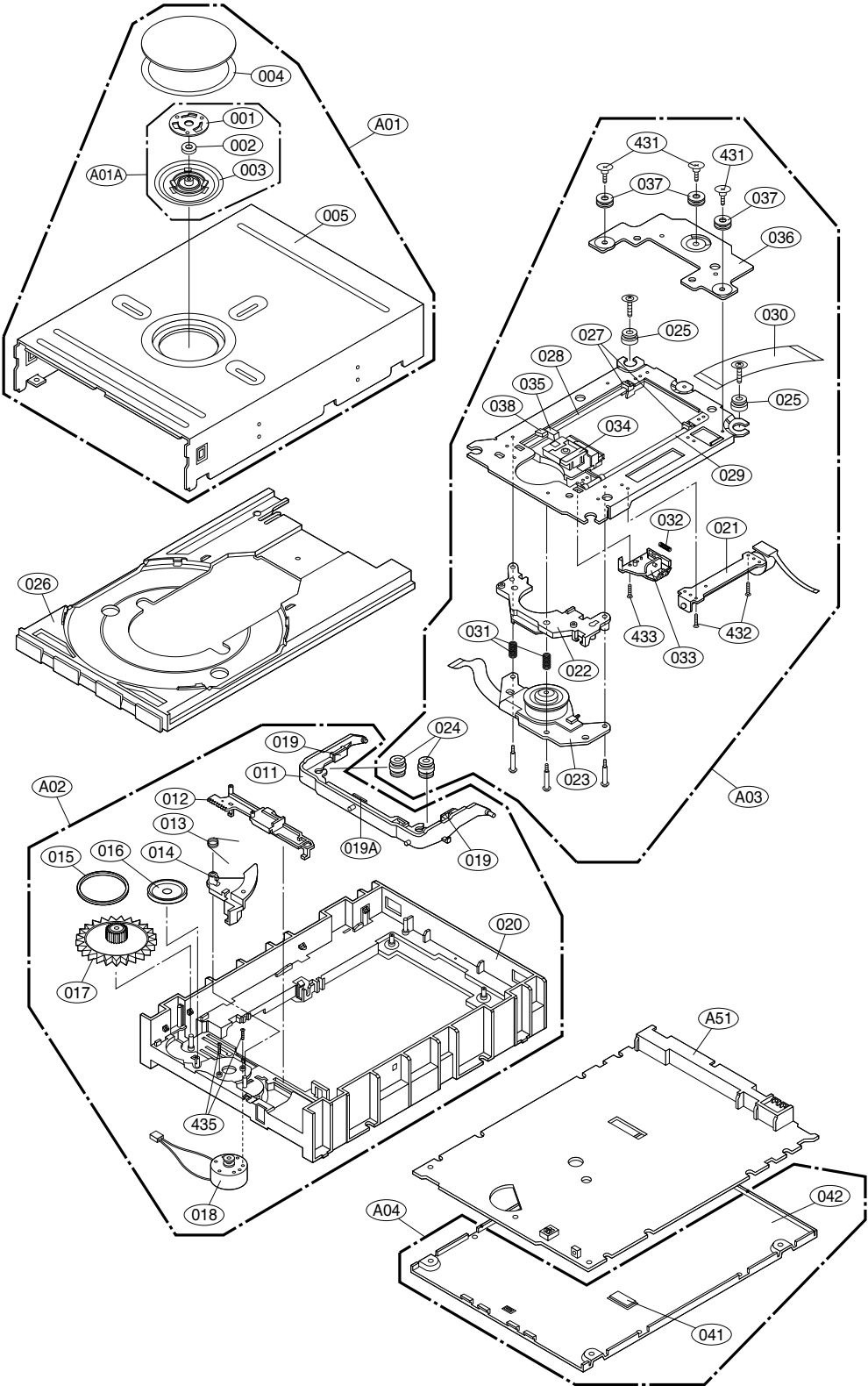






# SECTION 5 MECHANISM OF LOADER PART(RL-01A)

## Deck Mechanism Section(RL-01A)





NOTES) ⚠ Warning  
Parts that are shaded are critical  
With respect to risk of fire or  
electrical shock.

# SECTION 6 REPLACEMENT PARTS LIST

MODEL : LGXBR342(RC59004M AA1UZZ)(ZENITH)

NSP : Not available as service parts.

RUN DATE : 20-DECEMBER-03

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
<b>*** INDIVIDUAL PARTS ***</b>						
		250	3110R-V018F	CASE	RC59004 (A288G) PRESS W/O VENT	
		276	4930R-0383A	HOLDER	FULL-TIMER	
	⚠	300	6410RAHS02D	POWER CORD	AP-10W,SPT-2/18AWG SANGNONG UL	
	⚠	300	6410RAHK02D	POWER CORD	KJ-10W/NISPT-2(ST-HS:80MM) WIT	
		457	353-051E	SCREW	SPECIAL (3X12)	
		463	353-051G	SCREW,DRAWING	+ 2 D3.0 L8.0 MSWR3/FN TB ROUN	
		469	353-051J	SCREW,DRAWING	+ 2 D3.0 L6.5 MSWR3/FN TB ROUN	
<b>*** PACKING ACCESSORY ***</b>						
		801	3835RV0002C	INSTRUCTION ASSEMBLY	VCR RC59004 MOLD AA1UZZ(ZENITH	
		802	3890R-C072C	BOX	VCR RC59004 MOLD AA1UZZ(ZENITH	
		803	3920R-E102A	PACKING,CASING	VCR RC59004 MOLD AA1UZZ(ZENITH	
		804	292-053A	BAG	SOFT(VCP)	NSP
		808	534-008C	BATTERY,MANGANESE	AAAM(R03) SEOTONG 1-5 V - 1PA	
		810	6851R-0039A	CABLE ASSEMBLY	NTSC RF 1.8M + 1W YELLOW 1.8M	
		806	6850R-CAA8E	CABLE,COAXIAL	RF CABLE NTSC KOREA/AMERICA/JA	
		811	6850R-PAA8F	CABLE,COAXIAL	1 WAY COAXIAL DT_HY_HIT_SEIL 1	
		812	6850R-PBA8H	CABLE,COAXIAL	2 WAY COAXIAL RED_WHITE DT_HY	
<b>*** REMOTE CONTROLLER ***</b>						
		900	6711R1N159A	REMOTE CONTROLLER ASSEMBLY	VCR RC59004 MOLD AA1UZZ(ZENITH	
<b>*** CHASSIS ASSEMBLY ***</b>						
		A44	3141R-V016A	CHASSIS ASSEMBLY	MAIN (DVDR+VCR)	NSP
		260	3210R-V009A	FRAME	MAIN MOLD (DVDR+VCR)	NSP
		261	3140R-V009A	CHASSIS	MAIN PRESS (DVDR+VCR)	
		261A	5040H-1016R	RUBBER	VCR VB602M COMBI-2 OTHER FOOT(	
		263	3550R-0535A	COVER	VCR FAN MOLD	
		264	5900R-D004A	FAN,DC	FD126015LB 1N3 YSTECH 60X60X15	
		265	4930R-0348A	HOLDER	POWER CORD (DV6000)	
		320	3720R-D100A	PANEL,VIDEO	VCR BACK PRESS (DVDR+VCR)	
		452	353-051A	SCREW	SPECIAL	
		467	353-046N	SCREW,DRAWING	SPECIAL(3X8 BK.)	
		468	353-025R	SCREW,DRAWING	TAPTITE 3X20 FZMY	
<b>*** PANEL ASSEMBLY , FRONT ***</b>						
		A43	3721R-F390C	PANEL ASSEMBLY,FRONT[NORMAL PA	VCR RC59004 MOLD AA1UZZ(ZENITH	
		280	3720R-F379A	PANEL,VIDEO	VCR RC59004 MOLD AA1UZZ(ZENITH	NSP
		283	3580R-V079A	DOOR,CASE	VCR RC59004 MOLD AA1UZZ(ZENITH	
		284	442-681A	SPRING	DOOR	
<b>*** RL-01A LOADER PART(MD+ELECTRICAL) ***</b>						
		A60	3551R-6917C	COVER ASSEMBLY	VCR DVD RC59000 VCR+DVDR WITH	
		270	4810R-0209A	BRACKET	VCR DRIVE(DVDR+VCR) PRESS	
		466	353-022M	SCREW,DRAWING	TAPTITE 3X6 FZMY PAN S-TYPE	
		A26	6721R-N005C	DECK ASSEMBLY,VIDEO	DVD RL-01C ,MD(R-COMBI)+MODULE	NSP
		A01	3551R-6912A	COVER ASSEMBLY	DVD TOP(DR-01)	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		A01A	4861R-0018A	CLAMP ASSEMBLY	DVD DR-01	
		A02	3041R-D005A	BASE ASSEMBLY	LOADING (DR-01)	
		A03	3041R-D004A	BASE ASSEMBLY	SLED (DR-01)	
		A04	3551R-6911A	COVER ASSEMBLY	DVD BOTTOM(DR-01)	
		001	3300H-1144A	PLATE	YOKE(V3)	NSP
		002	5016H-1005C	MAGNET	NEO32HDH(9.2*4.1*1.3) (V2)	NSP
		003	4860H-1022A	CLAMP	DISC GCC-4120B ,	NSP
		004	3550H-1072A	COVER	CABINET CLAMP (V7)	
		005	3090H-1026C	CABINET	RL-01A(TOP) PRESS	
		011	3040H-1093A	BASE	UP/DOWN GCC-4120B ,	
		012	4974H-1034A	GUIDE	UP/DOWN(Q1)	
		013	4970H-1087A	SPRING	LEVER SWITCH (GM-RT1332A)	
		014	4510H-1054A	LEVER	SWITCH CRD-8484B ,	
		015	4400H-1012A	BELT	LOADING CED-8120B	
		016	4560H-1015A	PULLEY	GEAR (Q1)	
		017	4470H-1115A	GEAR	LOADING(Q1)	
		018	4681R-A008A	MOTOR ASSEMBLY	DVD L/D (DR-01)	
		019	4850H-1011B	CUSHION	BASE PU CED-8120B , ,	
		019A	4850H-1011J	CUSHION	BASE UP/DOWN GCC-4120B , ,	
		020	3040R-D002A	BASE	MAIN DR-01 MOLD	NSP
		021	4680HP5011D	MOTOR(MECH)	SPS-15RF-075KA MOATECH STEPPIN	
		022	4930R-0445A	HOLDER	DVD SPINDLE, DR-01 MOLD	
		023	4680HB1053A	MOTOR(MECH)	MSDH-R006A LGINNOTEK SPINDLE	
		024	5040H-1071A	RUBBER	FRONT GCC-4120B ,	
		025	5040H-1081C	RUBBER	REAR JC2 VIBROISOLATING	
		026	3390R-0022A	TRAY	DVD DISC DR-01 MOLD	
		027	4930H-1092A	HOLDER	SHAFT GCC-4120B ,	
		028	4370H-1079A	SHAFT	P/U(R/CD-RW)	
		029	4370H-1079B	SHAFT	PU JC2 SUS-420J2	
		030	6850R-EA08A	CABLE,FLAT	P=0.5 FFC UL2896 SPECIAL 80 40	
		031	4970H-1138B	SPRING	SKEW JC2 SWP-B	
		032	4970H-1136B	SPRING	GUIDE FEED JC2 SUS 304WPB	
		033	4974R-0054A	GUIDE	DVD FEED, DR-01 MOLD	
		034	6716DMD001A	PICK UP,DVD	HOP-7511T HITACHI COMBO FOR DV	
		035	3040H-1094B	BASE	P/U JC2 SECC	
		036	4810H-1091A	BRACKET	WEIGHT BALANCE JC2 SECC DVA	
		037	5040H-1086A	RUBBER	BRACKET JC2 DVA	
		038	5040H-1078A	RUBBER	ANTI-SHOCK GCC-4120B ,	
		041	5040H-1023Q	RUBBER	GAP PAD(9*18*1)GAP PAD	
		042	3080H-1019F	BOTTOM	MECHA DT - DV-RECORDER	
		431	1SZZH-1062A	SCREW,DRAWING	ROUND D2.0 10.6MM SWRCH18A/FZY	
		432	1SZZH-1020B	SCREW,DRAWING	+ D2.0 3.5MM SWRCH16A/ZNBK 4MM	
		433	1SZZH-1011B	SCREW,DRAWING	+ D1.7 6MM SWRCH16A/NIY 3.5MM	
		435	4000H-1006B	SCREW,DRAWING	+ D1.7 4.5MM SWRCH16A/ZNY 4MM	
		A51	6871R-6678B	PWB(PCB) ASSEMBLY,TOTAL	DR3000ML ALL LOADER	
		AR201	0RRZVTA001V	RESISTOR,DRAWING	82 OHM 1 / 16 W 3216 5% R/TP 8	
		AR202	0RRZVTA001V	RESISTOR,DRAWING	82 OHM 1 / 16 W 3216 5% R/TP 8	
		AR203	0RRZVTA001V	RESISTOR,DRAWING	82 OHM 1 / 16 W 3216 5% R/TP 8	
		AR204	0RRZVTA001V	RESISTOR,DRAWING	82 OHM 1 / 16 W 3216 5% R/TP 8	
		AR205	0RRZVTA001F	RESISTOR,DRAWING	33 OHM 1 / 16 W 3216 5% R/TP 8	
		AR206	0RRZVTA001F	RESISTOR,DRAWING	33 OHM 1 / 16 W 3216 5% R/TP 8	
		AR207	0RRZVTA001F	RESISTOR,DRAWING	33 OHM 1 / 16 W 3216 5% R/TP 8	
		AR208	0RRZVTA001F	RESISTOR,DRAWING	33 OHM 1 / 16 W 3216 5% R/TP 8	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		AR209	0RRZVTA001V	RESISTOR,DRAWING	82 OHM 1 / 16 W 3216 5% R/TP 8	
		AR301	0RR1500Q621	RESISTOR,VARIABLE[METAL GLAZE]	150 OHM 1/16 W 3216 5% R/TP 8	
		AR302	0RR1500Q621	RESISTOR,VARIABLE[METAL GLAZE]	150 OHM 1/16 W 3216 5% R/TP 8	
		AR303	0RR1500Q621	RESISTOR,VARIABLE[METAL GLAZE]	150 OHM 1/16 W 3216 5% R/TP 8	
		B301	0LCCE00005Q	INDUCTOR,CHIP	HH-1H4532-121JT CERATECH R/TP	
		B302	0LCCE00005Q	INDUCTOR,CHIP	HH-1H4532-121JT CERATECH R/TP	
		C1001	0CH1474H946	CAPA,CHIP CERAMIC M/L H.D F/S	0.4700UF 25V Z Y5V(F) 2012 R/T	
		C1002	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C1003	0CS476HD6DC	CAPACITOR,FIXED TANTALUM	47UF 3528 10V 20% SMD R/TP(SMD	
		C1004	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C1005	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C101	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
△		C102	0CS476HD6DC	CAPACITOR,FIXED TANTALUM	47UF 3528 10V 20% SMD R/TP(SMD	
		C103	0CH1333K512	CAPACITOR,CHIP[CERAMIC M/L HD	0.0330UF 50V K B(5YP) 1608 R/T	
		C104	0CH1333K512	CAPACITOR,CHIP[CERAMIC M/L HD	0.0330UF 50V K B(5YP) 1608 R/T	
		C105	0CH1333K512	CAPACITOR,CHIP[CERAMIC M/L HD	0.0330UF 50V K B(5YP) 1608 R/T	
		C106	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C107	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C108	0CS476HD6DC	CAPACITOR,FIXED TANTALUM	47UF 3528 10V 20% SMD R/TP(SMD	
		C109	0CK151CK94A	CAPACITOR,FIXED CERAMIC(HIGH D	150PF 1608 50V 80%,-20% F(Y5V)	
△		C110	0CH1152K512	CAPA,CHIP CERAMIC M/L H.D F/S	1500PF 50V K B 1608 R/TP	
△		C111	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C114	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C115	0CH1222K512	CAPACITOR,CHIP[CERAMIC M/L HD	2200PF 50V K B 1608 R/TP	
		C116	0CH1222K512	CAPACITOR,CHIP[CERAMIC M/L HD	2200PF 50V K B 1608 R/TP	
		C117	0CH1222K512	CAPACITOR,CHIP[CERAMIC M/L HD	2200PF 50V K B 1608 R/TP	
		C118	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C119	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C120	0CS476HD6DC	CAPACITOR,FIXED TANTALUM	47UF 3528 10V 20% SMD R/TP(SMD	
		C121	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C122	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C123	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C124	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C125	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C126	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C127	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C128	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C129	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C130	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C131	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C132	0CH8107F621	CAPA,CHIP AL.ELECTROLYTIC	100UF 16V M 6666 R/TP	
		C133	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C134	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C135	0CH8226C621	CAPACITOR,FIXED ELECTROLYTIC	22UF 6.3V 20% - R/TP	
		C136	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C137	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C138	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C139	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C140	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C141	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C142	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C143	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C144	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C145	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C146	0CH1223K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.022UF 50V Z Y5V(F) 1508 R/TP	
		C147	0CH1223K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.022UF 50V Z Y5V(F) 1508 R/TP	
		C148	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C149	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C150	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C151	0CH1332K562	CAPACITOR,CHIP[CERAMIC M/L HD	3300P 50V K X7R 1.6X0.8 R/TP	
		C152	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C153	0CH1334H946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.33UF 25V 80%,-20% Y5V(F) 201	
		C154	0CH1332K562	CAPACITOR,CHIP[CERAMIC M/L HD	3300P 50V K X7R 1.6X0.8 R/TP	
		C155	0CH1334H946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.33UF 25V 80%,-20% Y5V(F) 201	
		C156	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C157	0CH1330K412	CAPACITOR,FIXED CERAMIC(TEMP.C	33PF 1608 50V 5% X7R R/TP	
		C158	0CH1330K412	CAPACITOR,FIXED CERAMIC(TEMP.C	33PF 1608 50V 5% X7R R/TP	
		C159	0CS476HD6DC	CAPACITOR,FIXED TANTALUM	47UF 3528 10V 20% SMD R/TP(SMD	
		C160	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C161	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C162	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C163	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C164	0CK154CK94A	CAPACITOR,FIXED CERAMIC(HIGH D	0.15UF 1608 50V 80%,-20% F(Y5V	
		C165	0CH1330K412	CAPACITOR,FIXED CERAMIC(TEMP.C	33PF 1608 50V 5% X7R R/TP	
		C166	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C167	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C168	0CH1822K562	CAPACITOR,FIXED CERAMIC(Temp.c	8200PF 50V 10% X7R(X) 1608 R/T	
		C169	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C170	0CH1101K965	CAPACITOR,FIXED CERAMIC(TEMP.C	100PF 1608 50V 10% C0G R/TP	
		C171	0CH1101K965	CAPACITOR,FIXED CERAMIC(TEMP.C	100PF 1608 50V 10% C0G R/TP	
		C172	0CH1101K965	CAPACITOR,FIXED CERAMIC(TEMP.C	100PF 1608 50V 10% C0G R/TP	
		C173	0CH1475D946	CAPACITOR,FIXED CERAMIC(Temp.c	4.7UF 10V 80%,-20% Y5V(F) 2012	
		C174	0CH1101K965	CAPACITOR,FIXED CERAMIC(TEMP.C	100PF 1608 50V 10% C0G R/TP	
		C175	0CH1101K965	CAPACITOR,FIXED CERAMIC(TEMP.C	100PF 1608 50V 10% C0G R/TP	
		C176	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C177	0CH1474H946	CAPA,CHIP CERAMIC M/L H.D F/S	0.4700UF 25V Z Y5V(F) 2012 R/T	
		C178	0CH1225F946	CAPACITOR,FIXED CERAMIC(Temp.c	2.2UF 16V 80%,-20% Y5V(F) 2012	
		C179	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C180	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C181	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C182	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C183	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C184	0CH1682K562	CAPACITOR,CHIP[CERAMIC M/L HD	6800P 50V K X7R 1.6X0.8 R/TP	
		C185	0CH1682K562	CAPACITOR,CHIP[CERAMIC M/L HD	6800P 50V K X7R 1.6X0.8 R/TP	
		C186	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C187	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C189	0CH1471K512	CAPACITOR,FIXED CERAMIC(TEMP.C	470PF 50V 10% B(5YP) 1608 R/TP	
		C190	0CH1471K512	CAPACITOR,FIXED CERAMIC(TEMP.C	470PF 50V 10% B(5YP) 1608 R/TP	
		C191	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C192	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C193	0CH1682K562	CAPACITOR,CHIP[CERAMIC M/L HD	6800P 50V K X7R 1.6X0.8 R/TP	
		C194	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C195	0CH1101K965	CAPACITOR,FIXED CERAMIC(TEMP.C	100PF 1608 50V 10% C0G R/TP	
		C196	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C197	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C198	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C199	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C201	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C202	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C203	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C204	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C205	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C206	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C207	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C208	0CH1332K562	CAPACITOR,CHIP[CERAMIC M/L HD	3300P 50V K X7R 1.6X0.8 R/TP	
		C209	0CH1681K562	CAPACITOR,FIXED CERAMIC(Temp.c	680PF 50V 10% X7R(X) 1608 R/TP	
		C210	0CH1681K562	CAPACITOR,FIXED CERAMIC(Temp.c	680PF 50V 10% X7R(X) 1608 R/TP	
		C211	0CH1681K562	CAPACITOR,FIXED CERAMIC(Temp.c	680PF 50V 10% X7R(X) 1608 R/TP	
		C212	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C213	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C214	0CH1472K562	CAPACITOR,CHIP[CERAMIC M/L HD	4700PF 50V K X7R(X) 1608 R/TP	
		C215	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C216	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C217	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C218	0CH7476C621	CAPACITOR,CHIP[TANTALUM]	47UF 6.3V M 3528 TP(-)	
		C220	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C221	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C222	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C223	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C224	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C225	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C226	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C227	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C228	0CH1472K562	CAPACITOR,CHIP[CERAMIC M/L HD	4700PF 50V K X7R(X) 1608 R/TP	
		C229	0CH1472K562	CAPACITOR,CHIP[CERAMIC M/L HD	4700PF 50V K X7R(X) 1608 R/TP	
		C230	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C231	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C232	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C233	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C234	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C235	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C236	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C237	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C238	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C239	0CK154CK94A	CAPACITOR,FIXED CERAMIC(HIGH D	0.15UF 1608 50V 80%,-20% F(Y5V	
		C241	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C242	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C243	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C244	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C245	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C246	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C247	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C248	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C249	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C251	0CH7476C621	CAPACITOR,CHIP[TANTALUM]	47UF 6.3V M 3528 TP(-)	
		C252	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C253	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C254	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C255	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	



S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C256	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C257	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C258	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C259	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C260	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C261	0CH7476C621	CAPACITOR,CHIP[TANTALUM]	47UF 6.3V M 3528 TP(-)	
		C262	0CH7476C621	CAPACITOR,CHIP[TANTALUM]	47UF 6.3V M 3528 TP(-)	
		C263	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C264	0CH1330K412	CAPACITOR,FIXED CERAMIC(TEMP.C	33PF 1608 50V 5% X7R R/TP	
		C265	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C302	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C303	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C304	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C305	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C306	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C307	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C308	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C309	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C310	0CH7476C621	CAPACITOR,CHIP[TANTALUM]	47UF 6.3V M 3528 TP(-)	
		C311	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C312	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C313	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C314	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C315	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C316	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C319	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C320	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C321	0CH7476C621	CAPACITOR,CHIP[TANTALUM]	47UF 6.3V M 3528 TP(-)	
		C322	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C323	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C324	0CH1106F944	CAPACITOR,FIXED CERAMIC(Temp.c	10UF 3216 16V 80%,-20% R/TP SL	
		C325	0CS476HD6DC	CAPACITOR,FIXED TANTALUM	47UF 3528 10V 20% SMD R/TP(SMD	
		C326	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C327	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C328	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C329	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C330	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C331	0CH8107F621	CAPA,CHIP AL.ELECTROLYTIC	100UF 16V M 6666 R/TP	
		C332	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C333	0CH8107C621	CAPACITOR,CHIP[AL. ELECTROLYTI	100UF 6.3V M 85STD(CYL) R/TP	
		C334	0CS476HD6DC	CAPACITOR,FIXED TANTALUM	47UF 3528 10V 20% SMD R/TP(SMD	
		C335	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C336	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C337	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C338	0CH1104H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.1000UF 25V Z Y5V(F) 1508 R/T	
		C339	0CH8107C621	CAPACITOR,CHIP[AL. ELECTROLYTI	100UF 6.3V M 85STD(CYL) R/TP	
		C340	0CS476HD6DC	CAPACITOR,FIXED TANTALUM	47UF 3528 10V 20% SMD R/TP(SMD	
		CN101	6630HXE440D	CONNECTOR (CIRC),FFC/FPC	04-6240-040-003800 ELCO 40PIN	
		CN102	6630XE00204	CONNECTOR (CIRC),FFC/FPC	04-6232-504-015-800 ELCO 4P 1.	
		CN103	6630XE00313	CONNECTOR (CIRC),FFC/FPC	04-6232-513-015-800 ELCO 13P 1	
		D101	0DSRM00148A	DIODE,SWITCHING	1SS355 ROHM R/TP SOD323 90V 22	
		D201	0DSRM00148A	DIODE,SWITCHING	1SS355 ROHM R/TP SOD323 90V 22	
		D301	0DSRM00148A	DIODE,SWITCHING	1SS355 ROHM R/TP SOD323 90V 22	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		D302	0DL210008GA	LED	SML-210MT R/TP ROHM GREEN 16	
		D303	0DL210008GA	LED	SML-210MT R/TP ROHM GREEN 16	
	△	IC101	0ISTLKE014A	IC,STANDARD LOGIC	KIC7W08FK KEC 8PIN-US8 R/TP DU	
	△	IC102	0IJR340400B	IC,JRC	NJM3404AV SIP-8 TP SINGLE-SUPP	
		IC103	0IPRPRH008A	IC,PERIPHERALS	BU2501FV ROHM 20PIN,SSOP R/TP	
		IC104	0ILNRRH015A	IC,LINEAR	BA5962FVM ROHM SSOP TP TILT	
	△	IC105	0ILNRRH025A	IC,LINEAR	BD7905BFS-E2 ROHM SSOP-A54 R/T	
		IC106	0IJR340300A	IC,JRC	NJM3403AV - - - -	
		IC107	0ILNRNE006A	IC,LINEAR	UPC3320 NEC TQFP-120P TRAY RF	
		IC108	0IPRPF011A	IC,PERIPHERALS	NC7SB3157 FAIRCHILD 6PIN,SC70	
		IC201	0IMMREB006A	IC,MEMORIES	M12L16161A-7T-TI ELITE MEMORY	
		IC202	0ILNRNE007A	IC,LINEAR	UPD63620 NEC LQFP-216P TRAY DS	
		IC203	0IPMGA1007A	IC,POWER MANAGEMENT	AAT3528ICX-3.00-200-T1 ANALOGI	
		IC301	0IMMRAL007A	IC,MEMORIES	AT93C86-10TI-2.7 ATMEL 8PIN TS	
		IC302	0IMCRNE029A	IC,MICRO CONTROLLER	UPD76F0047 NEC 100PIN-TQFP TRA	
		IC303	0IPMGRH009A	IC,POWER MANAGEMENT	BA25BCOFP ROHM 3PIN,TO252 R/TP	
		IC304	0IPMKE011A	IC,POWER MANAGEMENT	KIA78D33F KEC DPAK R/TP 3.3V L	
	△	L101	6140H-B003G	INDUCTOR,CHIP	NLC322522T-100K 10MH TDK	
	△	L102	6140H-B003G	INDUCTOR,CHIP	NLC322522T-100K 10MH TDK	
		L103	6140H-B003G	INDUCTOR,CHIP	NLC322522T-100K 10MH TDK	
		L104	6140H-B003G	INDUCTOR,CHIP	NLC322522T-100K 10MH TDK	
		L202	0LCCE00005N	INDUCTOR,CHIP	HH-1M2012-221JTA CERATECH R/TP	
		L203	6140H-B003G	INDUCTOR,CHIP	NLC322522T-100K 10MH TDK	
		L204	0LCCE00005N	INDUCTOR,CHIP	HH-1M2012-221JTA CERATECH R/TP	
		L301	6140H-B003G	INDUCTOR,CHIP	NLC322522T-100K 10MH TDK	
		L302	0LCCE00005N	INDUCTOR,CHIP	HH-1M2012-221JTA CERATECH R/TP	
		L303	0LCCE00005N	INDUCTOR,CHIP	HH-1M2012-221JTA CERATECH R/TP	
		L304	0LCCE00005N	INDUCTOR,CHIP	HH-1M2012-221JTA CERATECH R/TP	
		Q301	0TRKE80041A	TRANSISTOR,BIPOLARS	KTC3265Y KEC R/TP SOT23 30V 80	
		Q302	0TRKE80041A	TRANSISTOR,BIPOLARS	KTC3265Y KEC R/TP SOT23 30V 80	
		R101	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R102	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R103	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R104	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R105	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R106	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R107	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R108	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R109	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R112	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R113	0RH0101D622	RESISTOR,METAL GLAZED(CHIP)	1 OHM 1 / 10 W 2012 5.00% D	
		R114	0RH0101D622	RESISTOR,METAL GLAZED(CHIP)	1 OHM 1 / 10 W 2012 5.00% D	
		R115	0RH0101D622	RESISTOR,METAL GLAZED(CHIP)	1 OHM 1 / 10 W 2012 5.00% D	
		R118	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R119	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R120	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R121	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R122	0RH6802C622	RESISTOR,METAL GLAZED(CHIP)	68K OHM 1 / 16 W 1608 5.00% D	
		R124	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R125	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R126	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R127	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R128	0RH1502C622	RESISTOR,METAL GLAZED(CHIP)	15K OHM 1 / 16 W 1608 5.00% D	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R129	0RH2702C622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 16 W 1608 5.00% D	
		R131	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R132	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R133	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R134	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R135	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R136	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R137	0RH1502C622	RESISTOR,METAL GLAZED(CHIP)	15K OHM 1 / 16 W 1608 5.00% D	
		R138	0RH0181D622	RESISTOR,METAL GLAZED(CHIP)	1.8 OHM 1 / 10 W 2012 5.00% D	
		R139	0RH0181D622	RESISTOR,METAL GLAZED(CHIP)	1.8 OHM 1 / 10 W 2012 5.00% D	
		R141	0RH0181D622	RESISTOR,METAL GLAZED(CHIP)	1.8 OHM 1 / 10 W 2012 5.00% D	
		R142	0RH0181D622	RESISTOR,METAL GLAZED(CHIP)	1.8 OHM 1 / 10 W 2012 5.00% D	
		R144	0RH0822C622	RESISTOR,METAL GLAZED(CHIP)	82 OHM 1 / 16 W 1608 5.00% D	
		R145	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R146	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R147	0RH1502C622	RESISTOR,METAL GLAZED(CHIP)	15K OHM 1 / 16 W 1608 5.00% D	
		R148	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R149	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R150	0RH4702C622	RESISTOR,METAL GLAZED(CHIP)	47K OHM 1 / 16 W 1608 5.00% D	
		R151	0RH4702C622	RESISTOR,METAL GLAZED(CHIP)	47K OHM 1 / 16 W 1608 5.00% D	
		R152	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R153	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R154	0RH6800C622	RESISTOR,METAL GLAZED(CHIP)	680 OHM 1 / 16 W 1608 5.00% D	
		R155	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R156	0RH1004C622	RESISTOR,METAL GLAZED(CHIP)	1M OHM 1 / 16 W 1608 5.00% D	
		R157	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R158	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R159	0RH1004C622	RESISTOR,METAL GLAZED(CHIP)	1M OHM 1 / 16 W 1608 5.00% D	
		R160	0RJ6201C677	RESISTOR,METAL GLAZED(CHIP)	6.2K OHM 1/16 W 5% 1608 R/TP	
		R161	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R162	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R163	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R164	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R165	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R166	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R167	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R168	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R169	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R170	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R171	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R172	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R173	0RH5600C622	RESISTOR,METAL GLAZED(CHIP)	560 OHM 1 / 16 W 1608 5.00% D	
		R174	0RH5600C622	RESISTOR,METAL GLAZED(CHIP)	560 OHM 1 / 16 W 1608 5.00% D	
		R175	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R176	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R202	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R203	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R204	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R205	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R206	0RH0472C622	RESISTOR,METAL GLAZED(CHIP)	47 OHM 1 / 16 W 1608 5.00% D	
		R207	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R208	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R209	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R210	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R211	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R212	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R213	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R214	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R215	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R216	0RH3302C622	RESISTOR,METAL GLAZED(CHIP)	33K OHM 1 / 16 W 1608 5.00% D	
		R217	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R218	0RH2702C622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 16 W 1608 5.00% D	
		R219	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R220	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R221	0RH0822C622	RESISTOR,METAL GLAZED(CHIP)	82 OHM 1 / 16 W 1608 5.00% D	
		R222	0RH0822C622	RESISTOR,METAL GLAZED(CHIP)	82 OHM 1 / 16 W 1608 5.00% D	
		R223	0RH0822C622	RESISTOR,METAL GLAZED(CHIP)	82 OHM 1 / 16 W 1608 5.00% D	
		R224	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R225	0RH0562C622	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 16 W 1608 5.00% D	
		R226	0RH0562C622	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 16 W 1608 5.00% D	
		R227	0RH0562C622	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 16 W 1608 5.00% D	
		R228	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R229	0RH1004C622	RESISTOR,METAL GLAZED(CHIP)	1M OHM 1 / 16 W 1608 5.00% D	
		R230	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R231	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R232	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R233	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R234	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R235	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R236	0RH2202C622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 16 W 1608 5.00% D	
		R237	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R238	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R239	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R240	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R241	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R243	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R244	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R245	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R247	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R249	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R250	0RH0822C622	RESISTOR,METAL GLAZED(CHIP)	82 OHM 1 / 16 W 1608 5.00% D	
		R251	0RH0822C622	RESISTOR,METAL GLAZED(CHIP)	82 OHM 1 / 16 W 1608 5.00% D	
		R252	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R253	0RH0822C622	RESISTOR,METAL GLAZED(CHIP)	82 OHM 1 / 16 W 1608 5.00% D	
		R254	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R255	0RH0822C622	RESISTOR,METAL GLAZED(CHIP)	82 OHM 1 / 16 W 1608 5.00% D	
		R256	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R257	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R258	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R259	0RH0472C622	RESISTOR,METAL GLAZED(CHIP)	47 OHM 1 / 16 W 1608 5.00% D	
		R260	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R301	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R302	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R303	0RH4702C622	RESISTOR,METAL GLAZED(CHIP)	47K OHM 1 / 16 W 1608 5.00% D	
		R304	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R305	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R306	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R307	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R308	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R309	0RH4702C622	RESISTOR,METAL GLAZED(CHIP)	47K OHM 1 / 16 W 1608 5.00% D	
		R310	0RH4702C622	RESISTOR,METAL GLAZED(CHIP)	47K OHM 1 / 16 W 1608 5.00% D	
		R311	0RH1500C622	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 5.00% D	
		R312	0RH1500C622	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 5.00% D	
		R313	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R314	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R315	0RH0822C622	RESISTOR,METAL GLAZED(CHIP)	82 OHM 1 / 16 W 1608 5.00% D	
		R316	0RH4703C622	RESISTOR,METAL GLAZED(CHIP)	470K OHM 1 / 16 W 1608 5.00% D	
		R317	0RH1500C622	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 5.00% D	
		R318	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R319	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R320	0RH1500C622	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 5.00% D	
		R321	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R322	0RH1004C622	RESISTOR,METAL GLAZED(CHIP)	1M OHM 1 / 16 W 1608 5.00% D	
		R323	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R324	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R325	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R326	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R327	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R328	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R329	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R330	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R331	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R332	0RH2202C622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 16 W 1608 5.00% D	
		R333	0RH2202C622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 16 W 1608 5.00% D	
		R334	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R335	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R336	0RH3301C622	RESISTOR,METAL GLAZED(CHIP)	3.3K OHM 1 / 16 W 1608 5.00% D	
		R337	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R338	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R339	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R340	0RH4700C622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 16 W 1608 5.00% D	
		R341	0RH4700C622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 16 W 1608 5.00% D	
		R342	0RH4700C622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 16 W 1608 5.00% D	
		R343	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R344	0RH4702C622	RESISTOR,METAL GLAZED(CHIP)	47K OHM 1 / 16 W 1608 5.00% D	
		R345	0RH4702C622	RESISTOR,METAL GLAZED(CHIP)	47K OHM 1 / 16 W 1608 5.00% D	
		R346	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R347	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R348	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R349	0RH1500C622	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 5.00% D	
		R350	0RH1500C622	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 5.00% D	
		R351	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R352	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R353	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R354	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R355	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R356	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R357	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R358	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		SW301	6600KW3004C	SWITCH,MICRO	SW2AB-254-10 SHINMEI 5VDC 10MA	
		SW302	558-026I	SWITCH,TACT	JTP-1236A JEIL - - TACT	
		X201	6212BB3241A	RESONATOR,CERAMIC	CSTCE16M9V53R-0 MURATA 16.934M	
		X301	6212BB3242A	RESONATOR,CERAMIC	CSTCE20M0V53-R0 MURATA 20.00MH	
<b>*** PWB(PCB) ASSEMBLY ,TIMER,KEY ***</b>						
		A50	6871R-2428A	PWB(PCB) ASSEMBLY,TOTAL	VDR COMBI KEYBOARD	
		C601	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C602	0CE4774C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SRA,SS 6.3V 20% FM5 TP 5	
		C603	0CN223AK948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 50V Z F TA26 S	
		C604	0CN1040K948	CAPACITOR,FIXED TUBULAR(High d	0.1UF D 50V 80%,-20% F(Y5V) TA	
		C605	0CN1040K948	CAPACITOR,FIXED TUBULAR(High d	0.1UF D 50V 80%,-20% F(Y5V) TA	
		D601	ODD133009AA	DIODE,SWITCHING	1SS133 DETECT,SW TP	
		D602	ODD133009AA	DIODE,SWITCHING	1SS133 DETECT,SW TP	
		DIG601	6302R-V220A	DIGITRON	HNV-12SM58T SSSDI SEG VFD VCR+	
		IC601	0IPRPNE001A	IC,PERIPHERALS	UPD16315GB-3BS NEC 44 QFP BK F	
		IC601	0IPRPPY002A	IC,PERIPHERALS	PT6315 PTC 44 LQFP TRAY VFD DR	
		L601	0LR8200J025	INDUCTOR,RADIAL LEAD	820UH 5% 4X5 TR5	
		LED601	0DL325319AA	LED	SPR325MVWT31 TP ROHM GREEN/RED	
		LED602	0DLRH0209AA	LED	ROHM SLR-342PGT31 TP GREEN 6.3	
		LED603	0DLRH0209AA	LED	ROHM SLR-342PGT31 TP GREEN 6.3	
		LED604	0DL112000AJ	DIODE,LED	DL-11S2RNS(SUPER,RED,03)KOC	
		LED605	0DL112000AJ	DIODE,LED	DL-11S2RNS(SUPER,RED,03)KOC	
		Q601	0TR319909AF	TRANSISTOR,BIPOLARS	KTC3199-BL MINI TP KEC	
		Q602	0TR126709AC	TRANSISTOR	KTA1267-GR MINI TP KEC	
		R601	0RD1001F608	RESISTOR,FIXED CARBON FILM	1K OHM 1/6 W 5% TA26	
		R602	0RD1001F608	RESISTOR,FIXED CARBON FILM	1K OHM 1/6 W 5% TA26	
		R603	0RD1001F608	RESISTOR,FIXED CARBON FILM	1K OHM 1/6 W 5% TA26	
		R604	0RD5602F608	RESISTOR,FIXED CARBON FILM	56K OHM 1/6 W 5% TA26	
		R605	0RD3300F608	RESISTOR,FIXED CARBON FILM	330 OHM 1/6 W 5% TA26	
		R606	0RD0471F608	RESISTOR,FIXED CARBON FILM	4.7 OHM 1/6 W 5% TA26	
		R607	0RD0471F608	RESISTOR,FIXED CARBON FILM	4.7 OHM 1/6 W 5% TA26	
		R610	0RD1001F608	RESISTOR,FIXED CARBON FILM	1K OHM 1/6 W 5% TA26	
		R611	0RD6800F608	RESISTOR,FIXED CARBON FILM	680 OHM 1/6 W 5% TA26	
		R612	0RD8200F608	RESISTOR,FIXED CARBON FILM	820 OHM 1/6 W 5% TA26	
		R613	0RD1201F608	RESISTOR,FIXED CARBON FILM	1.2K OHM 1/6 W 5% TA26	
		R614	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K OHM 1/6 W 5% TA26	
		R615	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K OHM 1/6 W 5% TA26	
		R616	0RD3301F608	RESISTOR,FIXED CARBON FILM	3.3K OHM 1/6 W 5% TA26	
		R617	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K OHM 1/6 W 5% TA26	
		R621	0RD6800F608	RESISTOR,FIXED CARBON FILM	680 OHM 1/6 W 5% TA26	
		R622	0RD8200F608	RESISTOR,FIXED CARBON FILM	820 OHM 1/6 W 5% TA26	
		R623	0RD1201F608	RESISTOR,FIXED CARBON FILM	1.2K OHM 1/6 W 5% TA26	
		R624	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K OHM 1/6 W 5% TA26	
		R631	0RD1500F608	RESISTOR,FIXED CARBON FILM	150 OHM 1/6 W 5% TA26	
		R632	0RD1500F608	RESISTOR,FIXED CARBON FILM	150 OHM 1/6 W 5% TA26	
		R633	0RD1500F608	RESISTOR,FIXED CARBON FILM	150 OHM 1/6 W 5% TA26	
		R634	0RD1500F608	RESISTOR,FIXED CARBON FILM	150 OHM 1/6 W 5% TA26	
		R635	0RD3300F608	RESISTOR,FIXED CARBON FILM	330 OHM 1/6 W 5% TA26	
		R636	0RD1001F608	RESISTOR,FIXED CARBON FILM	1K OHM 1/6 W 5% TA26	
		R637	0RD2200F608	RESISTOR,FIXED CARBON FILM	220 OHM 1/6 W 5% TA26	
		R638	0RD1801F608	RESISTOR,FIXED CARBON FILM	1.8K OHM 1/6 W 5% TA26	
		RC601	6712R1638GB	REMOTE CONTROLLER RECEIVER	TSOP4438RF1 VISHAY 38KHZ =TSOP	
		RC601	6712R1638GA	REMOTE CONTROLLER RECEIVER	TSOP1838RF1 VISHAY(TEMIC) 37-	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		SW601	556-282C	SWITCH,TACT	SKQSQED ALPS DC 12 V 50 MA TA	
		SW601	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW602	556-282C	SWITCH,TACT	SKQSQED ALPS DC 12 V 50 MA TA	
		SW602	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW603	556-282C	SWITCH,TACT	SKQSQED ALPS DC 12 V 50 MA TA	
		SW603	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW604	556-282C	SWITCH,TACT	SKQSQED ALPS DC 12 V 50 MA TA	
		SW604	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW605	556-282C	SWITCH,TACT	SKQSQED ALPS DC 12 V 50 MA TA	
		SW605	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW606	556-282C	SWITCH,TACT	SKQSQED ALPS DC 12 V 50 MA TA	
		SW606	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW607	556-282C	SWITCH,TACT	SKQSQED ALPS DC 12 V 50 MA TA	
		SW607	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW608	556-282C	SWITCH,TACT	SKQSQED ALPS DC 12 V 50 MA TA	
		SW608	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW610	556-282C	SWITCH,TACT	SKQSQED ALPS DC 12 V 50 MA TA	
		SW610	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW611	556-282C	SWITCH,TACT	SKQSQED ALPS DC 12 V 50 MA TA	
		SW611	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW612	556-282C	SWITCH,TACT	SKQSQED ALPS DC 12 V 50 MA TA	
		SW612	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW613	556-282C	SWITCH,TACT	SKQSQED ALPS DC 12 V 50 MA TA	
		SW613	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW614	556-282C	SWITCH,TACT	SKQSQED ALPS DC 12 V 50 MA TA	
		SW614	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
<b>*** BOARD ASSEMBLY , TOTAL (VCR) ***</b>						
		A46	3501R-2427A	BOARD ASSEMBLY	VCR RC5900M	
		323	3111R-0089E	CASE ASSEMBLY	PRE AMP SLIM COMBI C-CORE A NO	
		C301	0CQ2232L559	CAPACITOR,FIXED FILM	0.022UF S 63V 10% PP NI TP5	
		C302	0CE4764K638	CAPACITOR,FIXED ELECTROLYTIC	47M SRA 50V M FM5 TP(5)	
		C303	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C304	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C305	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C306	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C308	0CE4764C638	CAPACITOR,ELECTROLYTIC	47M SRA 6.3V M FM5 TP(5)	
		C310	0CE2264F638	CAPACITOR,ELECTROLYTIC	22M SRA 16V M FM5 TP(5)	
		C311	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C312	0CE3364F638	CAPACITOR,ELECTROLYTIC	33M SRA 16V M FM5 TP(5)	
		C313	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C314	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C315	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C316	0CH1272K516	CHIP CAPA CERAMIC M/L H.D F/S	2700P 50V K B 2.0X1.2 R/TP	
		C317	0CH1821K516	CAPACITOR,FIXED CERAMIC(Temp.c	820PF 50V 10% B(5YP) 2012 R/TP	
		C319	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C320	0CH4391K416	CAPACITOR,CHIP[CERAMIC M/L TC	390PF 50V J NP0 2012 R/TP	
		C321	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C322	0CH4101K406	CAPACITOR,FIXED CERAMIC(High d	100PF 50V 5% SL 2012 R/TP	
		C323	0CH4101K406	CAPACITOR,FIXED CERAMIC(High d	100PF 50V 5% SL 2012 R/TP	
		C324	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C325	0CE4764C638	CAPACITOR,ELECTROLYTIC	47M SRA 6.3V M FM5 TP(5)	
		C327	0CE2264F638	CAPACITOR,ELECTROLYTIC	22M SRA 16V M FM5 TP(5)	
		C328	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C329	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C330	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C331	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C332	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C333	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C334	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C335	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C336	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C337	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C338	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C339	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C340	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C341	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C342	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C343	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C344	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C346	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C347	0CH1473K516	CHIP CAPA CERAMIC M/L H.D F/S	0.047U 50V K X7R 2.0X1.2 R/TP	
		C348	0CH1473K516	CHIP CAPA CERAMIC M/L H.D F/S	0.047U 50V K X7R 2.0X1.2 R/TP	
		C349	0CH1333K566	CAPACITOR,CHIP[CERAMIC M/L HD	0.0330UF 50V K X7R(X) 2012 R/T	
		C350	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C351	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C352	0CE4764C638	CAPACITOR,ELECTROLYTIC	47M SRA 6.3V M FM5 TP(5)	
		C354	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C355	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C360	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C361	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C362	0CH1182K516	CAPACITOR,FIXED CERAMIC(Temp.c	1800PF 50V 10% B(5YP) 2012 R/T	
		C363	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C500	0CE4774C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SRA,SS 6.3V 20% FM5 TP 5	
		C501	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C502	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C503	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C504	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C505	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C508	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C514	0CH4240K416	CAPACITOR,CHIP[CERAMIC M/L TC	24PF 50V J NP0 2012 R/TP	
		C515	0CH4270K416	CHIP CAPA CERAMIC M/L T.C F/S	27P 50V J COG 2.0X1.2 R/TP	
		C519	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C520	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C525	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C526	0CE4764K638	CAPACITOR,FIXED ELECTROLYTIC	47M SRA 50V M FM5 TP(5)	
		C531	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C534	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C535	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C542	0CH4681K416	CAPA,CHIP CERAMIC M/L T.C F/S	680PF 50V J NP0 2012 R/TP	
		C543	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C544	0CH1473K516	CHIP CAPA CERAMIC M/L H.D F/S	0.047U 50V K X7R 2.0X1.2 R/TP	
		C545	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C546	0CE4764H638	CAPACITOR,FIXED ELECTROLYTIC	47M SRA 25V M FM5 TP(5)	
		C551	0CH1333H516	CHIP CAPA CERAMIC M/L H.D F/S	0.033U 25V K B 2.0X1.25 R/TP	
		C552	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C561	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	



S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C566	0CH4102K416	CAPACITOR, FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C567	0CH4102K416	CAPACITOR, FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C568	0CH4102K416	CAPACITOR, FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C569	0CH4102K416	CAPACITOR, FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C570	0CH4180K416	CHIP CAPA CERAMIC M/L T.C F/S	18P 50V J C 2.0X1.2 R/TP	
		C571	0CH4180K416	CHIP CAPA CERAMIC M/L T.C F/S	18P 50V J C 2.0X1.2 R/TP	
		C572	0CH1223K516	CAPA, CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C573	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C574	0CH4102K416	CAPACITOR, FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C577	0CH1223K516	CAPA, CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C578	0CE2274C638	CAPACITOR, ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C579	0CE2274C638	CAPACITOR, ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C580	0CH1223K516	CAPA, CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C581	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C582	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C583	0CH4102K416	CAPACITOR, FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C584	0CE4764C638	CAPACITOR, ELECTROLYTIC	47M SRA 6.3V M FM5 TP(5)	
		C585	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C586	0CE1064F638	CAPACITOR, ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C588	0CH4102K416	CAPACITOR, FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C589	0CH4221K416	CAPA, CHIP CERAMIC M/L T.C F/S	220P 50V J 2.0X1.25 R/TP	
		C590	0CH1105F946	CAPACITOR, CHIP CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C592	0CE1064F638	CAPACITOR, ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C593	0CH4471K416	CAPA, CHIP CERAMIC M/L T.C F/S	470P 50V J 2.0*1.25 R/TP	
		C594	0CH1104K946	CAPACITOR, FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C595	0CH4120K416	CHIP CAPA CERAMIC M/L T.C F/S	12P 50V NPO 2.0X1.25 R/TP	
		C596	0CH4180K416	CHIP CAPA CERAMIC M/L T.C F/S	18P 50V J C 2.0X1.2 R/TP	
		C597	0CH4681K416	CAPA, CHIP CERAMIC M/L T.C F/S	680PF 50V J NP0 2012 R/TP	
		C598	0CH1104K946	CAPACITOR, FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C599	0CH1223K516	CAPA, CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C601	0CE4774C638	CAPACITOR, FIXED ELECTROLYTIC	470UF SRA, SS 6.3V 20% FM5 TP 5	
		C602	0CE4774C638	CAPACITOR, FIXED ELECTROLYTIC	470UF SRA, SS 6.3V 20% FM5 TP 5	
		C606	0CE1064F638	CAPACITOR, ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C607	0CH1104K946	CAPACITOR, FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C608	0CH1104K946	CAPACITOR, FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C609	0CE1064F638	CAPACITOR, ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C610	0CE4774C638	CAPACITOR, FIXED ELECTROLYTIC	470UF SRA, SS 6.3V 20% FM5 TP 5	
		C611	0CE1074F638	CAPACITOR, ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C612	0CE1074F638	CAPACITOR, ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C613	874-000T	WIRE COPPER TIN COATED	D=0.6 ROLL	
		C614	0CH1223K516	CAPA, CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C616	0CH1104K946	CAPACITOR, FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C617	0CH4101K406	CAPACITOR, FIXED CERAMIC(High d	100PF 50V 5% SL 2012 R/TP	
		C618	0CH4101K406	CAPACITOR, FIXED CERAMIC(High d	100PF 50V 5% SL 2012 R/TP	
		C619	0CH4270K416	CHIP CAPA CERAMIC M/L T.C F/S	27P 50V J COG 2.0X1.2 R/TP	
		C620	0CH1223K516	CAPA, CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C622	0CH1223K516	CAPA, CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C635	0CE1064F638	CAPACITOR, ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C636	0CE1064F638	CAPACITOR, ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C637	0CE1064F638	CAPACITOR, ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C638	0CE2264F638	CAPACITOR, ELECTROLYTIC	22M SRA 16V M FM5 TP(5)	
		C639	0CE1064F638	CAPACITOR, ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C640	0CE1064F638	CAPACITOR, ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C641	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C642	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C643	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C644	874-000T	WIRE COPPER TIN COATED	D=0.6 ROLL	
		C645	0CE4774C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SRA,SS 6.3V 20% FM5 TP 5	
		C648	0CH4102K416	CAPACITOR,FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C649	0CH4102K416	CAPACITOR,FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C650	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C651	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C652	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C653	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C701	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C702	0CH1682K516	CAPACITOR,FIXED CERAMIC(Temp.c	6800PF 50V 10% B(5YP) 2012 R/T	
		C703	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C706	0CH4820K416	CAPA,CHIP CERAMIC M/L T.C F/S	82P 50V J COG 2.0X1.2 R/TP	
		C707	0CH4820K416	CAPA,CHIP CERAMIC M/L T.C F/S	82P 50V J COG 2.0X1.2 R/TP	
		C708	0CE4774C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SRA,SS 6.3V 20% FM5 TP 5	
		C709	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C710	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C712	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C713	0CH4560K416	CHIP CAPA CERAMIC M/L T.C F/S	56P 50V J NPO 2.0X1.25 R/TP	
		C715	0CH4390K416	CAPA,CHIP CERAMIC M/L T.C F/S	39P 50V J COG 2.0X1.2 R/TP	
		C718	0CE4764C638	CAPACITOR,ELECTROLYTIC	47M SRA 6.3V M FM5 TP(5)	
		C721	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C722	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C723	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C724	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C727	0CE4764C638	CAPACITOR,ELECTROLYTIC	47M SRA 6.3V M FM5 TP(5)	
		C754	0CH4560K416	CHIP CAPA CERAMIC M/L T.C F/S	56P 50V J NPO 2.0X1.25 R/TP	
		C755	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C756	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C757	0CE4764C638	CAPACITOR,ELECTROLYTIC	47M SRA 6.3V M FM5 TP(5)	
		C760	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C761	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C764	0CH1152K516	CAPACITOR,FIXED CERAMIC(Temp.c	1500PF 50V 10% B(5YP) 2012 R/T	
		C765	0CH1152K516	CAPACITOR,FIXED CERAMIC(Temp.c	1500PF 50V 10% B(5YP) 2012 R/T	
		C766	0CE3354K638	CAPACITOR,FIXED ELECTROLYTIC	3.3UF SRA,SS 50V 20% FM5 TP 5	
		C769	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C772	0CH4050K016	CAPA,CHIP CERAMIC M/L T.C F/S	5P 50V C COG 2.0X1.2 R/TP	
		C773	0CH4100K416	CAPA,CHIP CERAMIC M/L T.C F/S	10PF 50V J NP0 2012 R/TP	
		C774	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C802	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C803	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C804	0CH1105F946	CAPACITOR,CHIP CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C805	0CH1105F946	CAPACITOR,CHIP CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C806	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C807	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C808	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C810	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C812	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C813	0CH1682K516	CAPACITOR,FIXED CERAMIC(Temp.c	6800PF 50V 10% B(5YP) 2012 R/T	
		C814	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C815	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C816	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C817	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C818	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C819	0CH1682K516	CAPACITOR,FIXED CERAMIC(Temp.c	6800PF 50V 10% B(5YP) 2012 R/T	
		C820	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C821	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C822	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C823	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C824	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C825	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C826	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C828	0CE4744K638	CAPACITOR,ELECTROLYTIC	0.47M SRA 50V M FM5 TP(5)	
		C829	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C830	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C870	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C871	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C884	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C885	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		CS501	6600M000026	SWITCH,PUSH	MPU12970MLB0 VCR CST IN S/W MI	
		D801	0DR104009AB	DIODE,RECTIFIERS	RL104 R. TP GULF SEMICONDUCTOR	
		D802	0DR104009AB	DIODE,RECTIFIERS	RL104 R. TP GULF SEMICONDUCTOR	
		ES501	4931R-0078A	HOLDER ASSEMBLY	DECK/MECHA END(S)	
		ES502	4931R-0078A	HOLDER ASSEMBLY	DECK/MECHA END(S)	
		F601	6200HJC901A	FILTER(CIRC),EMC	CFI06B1H101MF SAMHWA TP 2-5K	
		F602	6200HJC901A	FILTER(CIRC),EMC	CFI06B1H101MF SAMHWA TP 2-5K	
		F603	6200HJC901A	FILTER(CIRC),EMC	CFI06B1H101MF SAMHWA TP 2-5K	
		F604	6200HJC901A	FILTER(CIRC),EMC	CFI06B1H101MF SAMHWA TP 2-5K	
		F605	6200HJC901A	FILTER(CIRC),EMC	CFI06B1H101MF SAMHWA TP 2-5K	
		F606	6200HJC901A	FILTER(CIRC),EMC	CFI06B1H101MF SAMHWA TP 2-5K	
		FL301	633-032K	COIL,IFT	BIAC OSC,1CHIP 5V(KS-75M) KWAN	
		IC301	0ILNRSA012A	IC,LINEAR	LA71206M-MPB SANYO 80PIN QFP T	
		IC501	0IMCRM1001A	IC,MICRO CONTROLLER	M37760FFHGP MITSUBISHI 100,QFP	
		IC503	0ICS241600B	IC,CATALYST	CAT24WC16P 8P DIP ST 16K SERIA	
		IC504	0IKE703100A	IC,KEC	KIA7031P 3P 3.1V RESET(TAPING)	
		IC505	0IKE704200B	IC,KEC	KIA7042P 3P 4.2V RESET(TAPING)	
		IC601	0IPRPMT008A	IC,PERIPHERALS	MM1623XFBE MITSUMI 28PIN SOP R	
		IC602	0IJR223400D	IC,JRC	NJM2234L SIP8 ST S/W IC(3INPUT	
		IC701	0ILNRMN002B	IC,LINEAR	MSP3425G-QG-B8-V3 MICRONAS 44	
		IC801	0IPH960500A	IC,PHILIPS	TDA9605H QFP44 BK HIFI AMP+HIF	
		JK601	6612J00025E	JACK,RCA	RCA/DIN-36(SILVER) YUQIU	
		JK603	6612K00003B	JACK,FIBER OPTIC	PLT131/T5/12(12MBPS) EVERLIGHT	
		L301	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L303	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L304	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L305	0LR0102K035	INDUCTOR RADIAL LEAD	10M K 6X6 L5 TP	
		L501	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L510	0LR0682K035	INDUCTOR RADIAL LEAD	68M K 6X6 L5 TP	
		L511	0LR0221J0N5	INDUCTOR,RADIAL LEAD	2.2UH 5% TP 3X5 TR5	
		L512	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L602	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L603	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L605	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L606	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		L607	0LR0101K035	INDUCTOR RADIAL LEAD	1.0M K 6X6 L5 TP	
		L608	0LR0101K035	INDUCTOR RADIAL LEAD	1.0M K 6X6 L5 TP	
		L704	0LR0102K035	INDUCTOR RADIAL LEAD	10M K 6X6 L5 TP	
		L705	0LR0102K035	INDUCTOR RADIAL LEAD	10M K 6X6 L5 TP	
		L801	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L875	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		LD501	4931R-0077A	HOLDER ASSEMBLY	LED(S)	
		MS501	6600JB8005C	SWITCH,MODE	MMS00721ZMB0 MIC 5VDC 1MA D-35	
		MS501	6600JR3002B	SWITCH,MODE	SSS-51MD-2 SLIM MODE SWICH SH	
		P3D03	561-251B	CONNECTOR(CIRC),DRAWING	GB201-2P-TS-B(LGC)	
		Q301	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q302	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q303	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q304	0TR320509AB	TRANSISTOR	KTC3205-TP-Y (KTC2236A)KEC	
		Q305	0TR928009AD	TRANSISTOR	KSA928A-Y,TO-92L TP SAMSUNG TO	
		Q305	0TR127309AA	TRANSISTOR	KTA1273-TP-Y (KTA966A)KEC	
		Q306	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q307	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q308	0TR928009AD	TRANSISTOR	KSA928A-Y,TO-92L TP SAMSUNG TO	
		Q308	0TR127309AA	TRANSISTOR	KTA1273-TP-Y (KTA966A)KEC	
		Q309	0TR103009AA	TRANSISTOR	CHIP KRC103S-T1(NC)22-22 KEC	
		Q310	0TR103009AC	TRANSISTOR	KRA103S-T1(PC)22-22 CHIP KEC	
		Q501	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q503	0TR127309AA	TRANSISTOR	KTA1273-TP-Y (KTA966A)KEC	
		Q504	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q505	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q507	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q601	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q602	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q605	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q701	0TR320509AB	TRANSISTOR	KTC3205-TP-Y (KTC2236A)KEC	
		Q702	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q703	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		R301	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R302	0RH2702D622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 10 W 2012 5.00% D	
		R303	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R304	0RH2201D622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 10 W 2012 5.00% D	
		R305	0RH5600D622	RESISTOR,METAL GLAZED(CHIP)	560 OHM 1 / 10 W 2012 5.00% D	
		R306	0RH0472D622	RESISTOR,METAL GLAZED(CHIP)	47 OHM 1 / 10 W 2012 5.00% D	
		R307	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R308	0RH0221D622	RESISTOR,METAL GLAZED(CHIP)	2.2 OHM 1 / 10 W 2012 5.00% D	
		R309	0RH2202D622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 10 W 2012 5.00% D	
		R310	0RH2201D622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 10 W 2012 5.00% D	
		R311	0RH5601D622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 10 W 2012 5.00% D	
		R312	0RH4702D622	RESISTOR,METAL GLAZED(CHIP)	47K OHM 1 / 10 W 2012 5.00% D	
		R313	0RH1801D622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 10 W 2012 5.00% D	
		R316	0RH1801D622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 10 W 2012 5.00% D	
		R317	0RH5601D622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 10 W 2012 5.00% D	
		R318	0RH3303D622	RESISTOR,METAL GLAZED(CHIP)	330K OHM 1 / 10 W 2012 5.00% D	
		R319	0RH1202D622	RESISTOR,METAL GLAZED(CHIP)	12K OHM 1 / 10 W 2012 5.00% D	
		R320	0RH1500D622	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 10 W 2012 5.00% D	
		R321	0RH2702D622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 10 W 2012 5.00% D	
		R322	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R326	0RH1502D622	RESISTOR,METAL GLAZED(CHIP)	15K OHM 1 / 10 W 2012 5.00% D	
		R327	0RH6801D622	RESISTOR,METAL GLAZED(CHIP)	6.8K OHM 1 / 10 W 2012 5.00% D	
		R328	0RH1501D622	RESISTOR,METAL GLAZED(CHIP)	1.5K OHM 1 / 10 W 2012 5.00% D	
		R331	0RH2201D622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 10 W 2012 5.00% D	
		R332	0RH1801D622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 10 W 2012 5.00% D	
		R333	0RH1201D622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 10 W 2012 5.00% D	
		R334	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R335	0RH8201D622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 10 W 2012 5.00% D	
		R336	0RH1202D622	RESISTOR,METAL GLAZED(CHIP)	12K OHM 1 / 10 W 2012 5.00% D	
		R337	0RH2202D622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 10 W 2012 5.00% D	
		R338	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R339	0RH1802D622	RESISTOR,METAL GLAZED(CHIP)	18K OHM 1 / 10 W 2012 5.00% D	
		R340	0RH1501D622	RESISTOR,METAL GLAZED(CHIP)	1.5K OHM 1 / 10 W 2012 5.00% D	
		R341	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R342	0RH4700D622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 10 W 2012 5.00% D	
		R344	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R346	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R348	0RH2202D622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 10 W 2012 5.00% D	
		R349	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R350	0RH3901D622	RESISTOR,METAL GLAZED(CHIP)	3.9K OHM 1 / 10 W 2012 5.00% D	
		R351	0RH1003D622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 10 W 2012 5.00% D	
		R352	0RH6803D622	RESISTOR,METAL GLAZED(CHIP)	680K OHM 1 / 10 W 2012 5.00% D	
		R501	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R502	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R504	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R505	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R506	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R507	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R508	0RH2702D622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 10 W 2012 5.00% D	
		R509	0RH6800D622	RESISTOR,METAL GLAZED(CHIP)	680 OHM 1 / 10 W 2012 5.00% D	
		R510	0RH1501D622	RESISTOR,METAL GLAZED(CHIP)	1.5K OHM 1 / 10 W 2012 5.00% D	
		R511	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R512	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R514	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R515	0RH2700D622	RESISTOR,METAL GLAZED(CHIP)	270 OHM 1 / 10 W 2012 5.00% D	
		R517	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R518	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R519	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R520	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R521	0RH2701D622	RESISTOR,METAL GLAZED(CHIP)	2.7K OHM 1 / 10 W 2012 5.00% D	
		R522	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R523	0RH5601D622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 10 W 2012 5.00% D	
		R524	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R525	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R526	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R527	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R528	0RH2701D622	RESISTOR,METAL GLAZED(CHIP)	2.7K OHM 1 / 10 W 2012 5.00% D	
		R529	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R531	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R533	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R534	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R535	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R536	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R537	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R538	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R539	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R541	0RH2201D622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 10 W 2012 5.00% D	
		R543	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R544	0RH1003D622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 10 W 2012 5.00% D	
		R546	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R547	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R550	0RH2200D622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 10 W 2012 5.00% D	
		R553	0RH2200D622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 10 W 2012 5.00% D	
		R554	0RH1004D622	RESISTOR,METAL GLAZED(CHIP)	1M OHM 1 / 10 W 2012 5.00% D	
		R555	0RH2200D622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 10 W 2012 5.00% D	
		R556	0RH2202D622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 10 W 2012 5.00% D	
		R557	0RH2702D622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 10 W 2012 5.00% D	
		R558	0RH2202D622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 10 W 2012 5.00% D	
		R560	0RH5600D622	RESISTOR,METAL GLAZED(CHIP)	560 OHM 1 / 10 W 2012 5.00% D	
		R563	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R564	0RH2702D622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 10 W 2012 5.00% D	
		R566	0RH2701D622	RESISTOR,METAL GLAZED(CHIP)	2.7K OHM 1 / 10 W 2012 5.00% D	
		R569	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R570	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R571	0RH2200D622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 10 W 2012 5.00% D	
		R575	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R576	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R577	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R578	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R579	0RH5602D622	RESISTOR,METAL GLAZED(CHIP)	56K OHM 1 / 10 W 2012 5.00% D	
		R580	0RH1202D622	RESISTOR,METAL GLAZED(CHIP)	12K OHM 1 / 10 W 2012 5.00% D	
		R581	0RH2201D622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 10 W 2012 5.00% D	
		R582	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R583	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R586	0RH1801D622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 10 W 2012 5.00% D	
		R587	0RH1801D622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 10 W 2012 5.00% D	
		R588	0RH2701D622	RESISTOR,METAL GLAZED(CHIP)	2.7K OHM 1 / 10 W 2012 5.00% D	
		R589	0RH1501D622	RESISTOR,METAL GLAZED(CHIP)	1.5K OHM 1 / 10 W 2012 5.00% D	
		R592	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R593	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R594	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R595	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R596	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R597	0RH2201D622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 10 W 2012 5.00% D	
		R598	0RH1201D622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 10 W 2012 5.00% D	
		R599	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R5C6	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R601	0RH0752D622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 10 W 2012 5.00% D	
		R602	0RH0752D622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 10 W 2012 5.00% D	
		R603	0RH0752D622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 10 W 2012 5.00% D	
		R606	0RH0682D622	RESISTOR,METAL GLAZED(CHIP)	68 OHM 1 / 10 W 2012 5.00% D	
		R607	0RH0752D622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 10 W 2012 5.00% D	
		R608	0RH0752D622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 10 W 2012 5.00% D	
		R609	0RH0752D622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 10 W 2012 5.00% D	
		R610	0RH0752D622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 10 W 2012 5.00% D	
		R611	0RH0222D622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 10 W 2012 5.00% D	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R612	0RH0222D622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 10 W 2012 5.00% D	
		R613	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R615	0RH0752D622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 10 W 2012 5.00% D	
		R616	0RH0752D622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 10 W 2012 5.00% D	
		R617	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R618	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R619	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R621	0RH5601D622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 10 W 2012 5.00% D	
		R622	0RH5601D622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 10 W 2012 5.00% D	
		R627	0RH0222D622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 10 W 2012 5.00% D	
		R628	0RH0562D622	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 10 W 2012 5.00% D	
		R629	0RH0752D622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 10 W 2012 5.00% D	
		R630	0RH1200D622	RESISTOR,METAL GLAZED(CHIP)	120 OHM 1 / 10 W 2012 5.00% D	
		R638	0RH3902D622	RESISTOR,METAL GLAZED(CHIP)	39K OHM 1 / 10 W 2012 5.00% D	
		R639	0RH5601D622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 10 W 2012 5.00% D	
		R640	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R641	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R642	0RH1200D622	RESISTOR,METAL GLAZED(CHIP)	120 OHM 1 / 10 W 2012 5.00% D	
		R701	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R704	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R705	0RH2200D622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 10 W 2012 5.00% D	
		R706	0RH2200D622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 10 W 2012 5.00% D	
		R715	0RH2201D622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 10 W 2012 5.00% D	
		R716	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R717	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R718	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R719	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R721	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R722	0RH3302D622	RESISTOR,METAL GLAZED(CHIP)	33K OHM 1 / 10 W 2012 5.00% D	
		R723	0RH8201D622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 10 W 2012 5.00% D	
		R724	0RH3301D622	RESISTOR,METAL GLAZED(CHIP)	3.3K OHM 1 / 10 W 2012 5.00% D	
		R725	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R726	0RH3302D622	RESISTOR,METAL GLAZED(CHIP)	33K OHM 1 / 10 W 2012 5.00% D	
		R727	0RH8201D622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 10 W 2012 5.00% D	
		R728	0RH3301D622	RESISTOR,METAL GLAZED(CHIP)	3.3K OHM 1 / 10 W 2012 5.00% D	
		R729	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R730	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R753	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R754	0RH3301D622	RESISTOR,METAL GLAZED(CHIP)	3.3K OHM 1 / 10 W 2012 5.00% D	
		R755	0RH3301D622	RESISTOR,METAL GLAZED(CHIP)	3.3K OHM 1 / 10 W 2012 5.00% D	
		R758	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R759	0RH5601D622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 10 W 2012 5.00% D	
		R801	0RH3304D622	RESISTOR,METAL GLAZED(CHIP)	3.3M OHM 1 / 10 W 2012 5.00% D	
		R802	0RH3302D622	RESISTOR,METAL GLAZED(CHIP)	33K OHM 1 / 10 W 2012 5.00% D	
		R803	0RH2701D622	RESISTOR,METAL GLAZED(CHIP)	2.7K OHM 1 / 10 W 2012 5.00% D	
		R804	0RH3902D622	RESISTOR,METAL GLAZED(CHIP)	39K OHM 1 / 10 W 2012 5.00% D	
		R805	0RH2701D622	RESISTOR,METAL GLAZED(CHIP)	2.7K OHM 1 / 10 W 2012 5.00% D	
		R806	0RH3302D622	RESISTOR,METAL GLAZED(CHIP)	33K OHM 1 / 10 W 2012 5.00% D	
		R807	0RH4700D622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 10 W 2012 5.00% D	
		R808	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R809	0RH1802D622	RESISTOR,METAL GLAZED(CHIP)	18K OHM 1 / 10 W 2012 5.00% D	
		R810	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R811	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R812	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R813	0RH5600D622	RESISTOR,METAL GLAZED(CHIP)	560 OHM 1 / 10 W 2012 5.00% D	
		R814	0RH5600D622	RESISTOR,METAL GLAZED(CHIP)	560 OHM 1 / 10 W 2012 5.00% D	
		R821	0RH2201D622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 10 W 2012 5.00% D	
		R822	0RH1003D622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 10 W 2012 5.00% D	
		R823	0RH2201D622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 10 W 2012 5.00% D	
		R824	0RH1003D622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 10 W 2012 5.00% D	
		R825	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R826	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R856	0RH5600D622	RESISTOR,METAL GLAZED(CHIP)	560 OHM 1 / 10 W 2012 5.00% D	
		R857	0RH5600D622	RESISTOR,METAL GLAZED(CHIP)	560 OHM 1 / 10 W 2012 5.00% D	
		RS501	6500RAB008A	SENSOR	KIT-3001A REEL SENSOR KODENSHI	
		RS502	6500RAB008A	SENSOR	KIT-3001A REEL SENSOR KODENSHI	
		TU701	6700NFNL04A	TUNER	TADM-H102F(US,LGIT) LG INOTEK	
		X301	6202R2357AE	RESONATOR,CRYSTAL	HC49U SSANG TAE 3-579575MHZ 1	
		X301	6202R2357AG	RESONATOR,CRYSTAL	HC49U SSANGTAE 3-579575MHZ 1	
		X501	6202R-DA01B	RESONATOR,CRYSTAL	CFS-308 CITIZEN 32.768KHZ +/-	
		X501	6202R-DA01B	RESONATOR,CRYSTAL	CFS-308 CITIZEN 32.768KHZ +/-	
		X502	6212AA2148F	RESONATOR,CRYSTAL	HC-49S KITELCO 14.31818MHZ +/-	
		X751	529-021Q	RESONATOR,CRYSTAL	49U BUBANG 18432000HZ 30PPM 16	
		ZD701	0DZ560009CB	DIODE,ZENER	MTZ5.6C TP(26MM) ROHM 5.6V	
<b>*** BOARD ASSEMBLY , TOTAL (POWER) ***</b>						
		A47	3501R-2257A	BOARD ASSEMBLY	VCR DVR+VCR SMPS	
		A47A	6871R-2257A	PWB(PCB) ASSEMBLY,TOTAL	DVR+VCR EVENT SMPS	
		255	3550R-0517A	COVER	VCR SMPS(DVDR+VCR) PRESS	
		256	3550R-0522A	COVER	VCR INSULATION OTHER	
		257	3110R-V020A	CASE	SMPS(DVDR+VCR) PRESS	
		469	353-051J	SCREW,DRAWING	+ 2 D3.0 L6.5 MSWR3/FN TB ROUN	
		BC101	636-004C	FILTER(CIRC),EMC	BEAD CORE BFS3550R2FD8,R T/P	
		BC102	636-004C	FILTER(CIRC),EMC	BEAD CORE BFS3550R2FD8,R T/P	
		BD101	0DRGF00011A	DIODE,RECTIFIERS	GBU6J GULF ST NON 600V 6A 175A	
	△	C101	624-088F	CAPACITOR,DRAWING	PCX2 275V 0.1UF,M (PILKO)	
	△	C102	624-088F	CAPACITOR,DRAWING	PCX2 275V 0.1UF,M (PILKO)	
		C103	0CE277JR6A0	CAPACITOR,FIXED ELECTROLYTIC	270UF SMH,HC 250V 20% VNSN BUL	
		C105	0CQ1031Y519	CAPACITOR,FIXED FILM	0.01UF D 630V 10% PE NI TP5	
		C106	624-087G	CAPACITOR	HIGH-VOL 68PF/1KV SMPS SAMHWA	
		C108	624-085D	CAPACITOR	CE 47UF/50V KME (SMPS)	
	△	C110	0CG1020U630	CAPACITOR,SEMI CERAMIC	1000PF 400V M E(Z5U) R	
	△	C111	0CG2220U630	CAPACITOR,SEMI CERAMIC	2200 PF 400V M E R (NK,AD,SD)	
		C112	0CQ4732K409	CAPACITOR,FIXED FILM	0.047UF S 50V 5% PE TP5	
		C114	0CQ4732K409	CAPACITOR,FIXED FILM	0.047UF S 50V 5% PE TP5	
		C115	0CQ1031Y519	CAPACITOR,FIXED FILM	0.01UF D 630V 10% PE NI TP5	
		C116	624-087G	CAPACITOR	HIGH-VOL 68PF/1KV SMPS SAMHWA	
		C117	624-085D	CAPACITOR	CE 47UF/50V KME (SMPS)	
		C119	0CN1040K948	CAPACITOR,FIXED TUBULAR(High d	0.1UF D 50V 80%,-20% F(Y5V) TA	
		C120	0CN1040K948	CAPACITOR,FIXED TUBULAR(High d	0.1UF D 50V 80%,-20% F(Y5V) TA	
		C121	0CQ4732K409	CAPACITOR,FIXED FILM	0.047UF S 50V 5% PE TP5	
		C122	0CE108BF630	CAPACITOR,FIXED ELECTROLYTIC	1000UF KME 16V M FM5 BULK	
		C123	0CE2282F611	CAPACITOR,FIXED ELECTROLYTIC	2200UF KMF 16V 20% BK7.5 FL	
		C124	0CE3376D638	CAPACITOR,ELECTROLYTIC	330UF SMS 10V M FM5 TP5	
		C125	624-082H	CAPACITOR	CE 1000UF/10V SHL(10*12.5)T/P	
		C126	0CE2282F611	CAPACITOR,FIXED ELECTROLYTIC	2200UF KMF 16V 20% BK7.5 FL	
		C128	0CE337EK630	CAPACITOR,AL.ELECTROLYTIC	330UF KMG 50V M FM5 BULK	



S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C129	0CE2282F611	CAPACITOR, FIXED ELECTROLYTIC	2200UF KMF 16V 20% BK7.5 FL	
		C130	0CE227CH618	CAPACITOR, FIXED ELECTROLYTIC	220UF SHL, SD 25V 20% FL TP 5	
		C131	624-085D	CAPACITOR	CE 47UF/50V KME (SMPS)	
		C132	624-085D	CAPACITOR	CE 47UF/50V KME (SMPS)	
		C133	0CE2276F638	CAPACITOR, ELECTROLYTIC	220U SMS 16V M FM5 TP(5)	
		C134	0CE1074F638	CAPACITOR, ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C135	0CE4754K638	CAPACITOR, FIXED ELECTROLYTIC	4.7UF SRA, SS 50V 20% FM5 TP 5	
		C136	0CE477BH630	CAPACITOR, AL. ELECTROLYTIC	470UF KME TYPE 25V M FM5 BULK	
		C137	624-085D	CAPACITOR	CE 47UF/50V KME (SMPS)	
		C139	0CE108EH610	CAPACITOR, FIXED ELECTROLYTIC	1000UF KMG 25V 20% BULK FL	
		C140	624-082G	CAPACITOR, FIXED ELECTROLYTIC	CE 470UF/25V SHL(10*12.5)T/P	
		C141	0CQ1042K409	CAPACITOR, FIXED FILM	0.1UF S 50V 5% PE TP5	
		C150	0CE3376D638	CAPACITOR, ELECTROLYTIC	330UF SMS 10V M FM5 TP5	
		C151	0CE3376D638	CAPACITOR, ELECTROLYTIC	330UF SMS 10V M FM5 TP5	
		C152	0CE3376D638	CAPACITOR, ELECTROLYTIC	330UF SMS 10V M FM5 TP5	
		C153	0CN223AK948	CAPACITOR, TUBULAR (HIGH DIELEC)	0.022UF 50V Z F TA26 S	
		C154	0CE3376D638	CAPACITOR, ELECTROLYTIC	330UF SMS 10V M FM5 TP5	
		C155	0CE1074F638	CAPACITOR, ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C156	0CE4754K638	CAPACITOR, FIXED ELECTROLYTIC	4.7UF SRA, SS 50V 20% FM5 TP 5	
		C157	624-085D	CAPACITOR	CE 47UF/50V KME (SMPS)	
		D101	0DD221009AA	DIODE, RECTIFIERS	ERA22-10 KFLB, TP ,R T/P, FUJI	
		D101	0DD010009CA	DIODE, RECTIFIERS	EG01C TP SANKEN - - - - -	
		D102	0DD010009AC	DIODE, RECTIFIERS	EU01W(R-FORM) TP SANKEN	
		D103	0DD221009AA	DIODE, RECTIFIERS	ERA22-10 KFLB, TP ,R T/P, FUJI	
		D103	0DD010009CA	DIODE, RECTIFIERS	EG01C TP SANKEN - - - - -	
		D104	0DD010009AC	DIODE, RECTIFIERS	EU01W(R-FORM) TP SANKEN	
		D121	0DR158220AA	DIODE, RECTIFIERS	1N5822 BK RECTRON DO201AD 40V	
		D122	4811R-0043A	BRACKET ASSEMBLY	FMB-G24H_HEAT SINK	
		D123	4811R-0043A	BRACKET ASSEMBLY	FMB-G24H_HEAT SINK	
		D124	0DR104510AA	DIODE, RECTIFIERS	B10A45V1 BK KEC TO220 45V 10A	
		D125	0DD400000AD	DIODE, RECTIFIERS	RU4YX BK SANKEN - - - - -	
		D126	0DD400000AD	DIODE, RECTIFIERS	RU4YX BK SANKEN - - - - -	
		D127	0DD010009AC	DIODE, RECTIFIERS	EU01W(R-FORM) TP SANKEN	
		D128	0DD010009AC	DIODE, RECTIFIERS	EU01W(R-FORM) TP SANKEN	
		D129	0DD010009AC	DIODE, RECTIFIERS	EU01W(R-FORM) TP SANKEN	
		D130	0DD010009AC	DIODE, RECTIFIERS	EU01W(R-FORM) TP SANKEN	
		D132	0DR104009AB	DIODE, RECTIFIERS	RL104 R. TP GULF SEMICONDUCTOR	
		D134	0DD133009AA	DIODE, SWITCHING	1SS133 DETECT, SW TP	
		D151	0DR104009AB	DIODE, RECTIFIERS	RL104 R. TP GULF SEMICONDUCTOR	
		D153	0DR202000AB	DIODE, RECTIFIERS	HER202 BK RECTRON - 100V 2A 60	
		D155	0DR104009AB	DIODE, RECTIFIERS	RL104 R. TP GULF SEMICONDUCTOR	
△		F101	0FS1601B51B	FUSE, SLOW BLOW	1600MA 250 V 5.2X20 CY/GL KS /	
		FH01	586-008B	HOLDER	FUSE CLIP TP SINSUNG	
		FH02	586-008B	HOLDER	FUSE CLIP TP SINSUNG	
△		IC101	0IPMGFA053A	IC, POWER MANAGEMENT	FSDL0365RN FAIRCHILD 8PIN, DIP	
△		IC102	657-063A	SENSOR	LTV-817B, PHOTO COUPLER(LITEON)	
		IC103	0IKE431000A	IC, KEC	KIA431 3 PIN TP	
		IC103	0ISS431000A	IC, SAMSUNG ELECTRONICS	KA431AZ (LM431AZ)	
		IC104	0IPMGFA053A	IC, POWER MANAGEMENT	FSDL0365RN FAIRCHILD 8PIN, DIP	
△		IC105	657-063A	SENSOR	LTV-817B, PHOTO COUPLER(LITEON)	
		IC106	0IKE431000A	IC, KEC	KIA431 3 PIN TP	
		IC106	0ISS431000A	IC, SAMSUNG ELECTRONICS	KA431AZ (LM431AZ)	
		IC151	4811R-0043G	BRACKET ASSEMBLY	378R05_HEATSINK	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		IC154	4811R-0043B	BRACKET ASSEMBLY	378R33_HEAT SINK	
		IC157	0IPMGFA031A	IC,POWER MANAGEMENT	KA278R12TSTU FAIRCHILD 4P TO-2	
		IC160	4811R-0049C	BRACKET ASSEMBLY	VCR RC590M 1.8V REG SC1566_HEA	
	△	L101	6200RLB007C	FILTER(CIRC),EMC	LFOR SERIES(TOROIDAL COIL) SAM	
	△	L102	6200JB8013R	FILTER(CIRC),EMC	SQ2626 SAMWAH TECOM BK SQ2424	
		L121	633-088G	COIL,CHOKE	CHOCK(22MH) 5MM TOKO TP	
		L122	633-088G	COIL,CHOKE	CHOCK(22MH) 5MM TOKO TP	
		L123	6140RCC009A	COIL,RF	BAR CHOKE COIL 2 PIN 10 UHCCAR	
		L125	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L127	633-088G	COIL,CHOKE	CHOCK(22MH) 5MM TOKO TP	
		Q120	0TR141409AA	TRANSISTOR	KTD1414(TO220IS) CUTING TP KEC	
		Q121	0TR103009AF	TRANSISTOR,BIPOLARS	KRA103M(KRA2203) KEC TP TO92M	
		Q122	0TR319809AC	TRANSISTOR	KTC3198-TP-BL (KTC1815)KEC	
		Q122	0TR319909AF	TRANSISTOR,BIPOLARS	KTC3199-BL MINI TP KEC	
		Q123	0TR126809BA	TRANSISTOR,BIPOLARS	KTA1268-BL TP KEC	
		Q124	0TR127309AA	TRANSISTOR	KTA1273-TP-Y (KTA966A)KEC	
		Q125	0TR319809AC	TRANSISTOR	KTC3198-TP-BL (KTC1815)KEC	
		Q125	0TR319909AF	TRANSISTOR,BIPOLARS	KTC3199-BL MINI TP KEC	
		Q126	0TR320509AB	TRANSISTOR	KTC3205-TP-Y (KTC2236A)KEC	
		R100	0RD1504H632	RESISTOR,FIXED CARBON FILM	1.5M OHM 1/2 W 5.00% MF10	
		R103	0RS5602K619	RESISTOR,FIXED METAL OXIDE FIL	56K OHM 2 W 5.00% TR	
		R105	0RD0472F608	RESISTOR,FIXED CARBON FILM	47 OHM 1/6 W 5% TA26	
		R107	0RF0200F708	RESISTOR,VARIABLE[CARBON FILM]	0.2 OHM 1/6 W 10% TA26	
		R112	0RS1003K619	RESISTOR,FIXED METAL OXIDE FIL	100K OHM 2 W 5.00% TR	
		R113	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 OHM 1/6 W 5% TA26	
		R115	0RS1003K619	RESISTOR,FIXED METAL OXIDE FIL	100K OHM 2 W 5.00% TR	
		R121	0RD2200F608	RESISTOR,FIXED CARBON FILM	220 OHM 1/6 W 5% TA26	
		R122	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K OHM 1/6 W 5% TA26	
		R123	0RD1001F608	RESISTOR,FIXED CARBON FILM	1K OHM 1/6 W 5% TA26	
		R124	0RN3301F408	RESISTOR,FIXED METAL FILM	3.3K OHM 1/6 W 1% TA26	
		R125	0RN2701F408	RESISTOR,FIXED METAL FILM	2.7K OHM 1/6 W 1% TA26	
		R126	0RD2700F608	RESISTOR,FIXED CARBON FILM	270 OHM 1/6 W 5% TA26	
		R127	0RS1200J619	RESISTOR,FIXED METAL OXIDE FIL	120 OHM 1 W 5.00% TR	
		R128	0RD0471F608	RESISTOR,FIXED CARBON FILM	4.7 OHM 1/6 W 5% TA26	
		R129	0RD0471F608	RESISTOR,FIXED CARBON FILM	4.7 OHM 1/6 W 5% TA26	
		R130	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K OHM 1/6 W 5% TA26	
		R131	0RD1800F609	RESISTOR,FIXED CARBON FILM	180 OHM 1/6 W 5.00% TA52	
		R132	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K OHM 1/6 W 5% TA26	
		R133	0RD1001F608	RESISTOR,FIXED CARBON FILM	1K OHM 1/6 W 5% TA26	
		R134	0RD1802F608	RESISTOR,FIXED CARBON FILM	18K OHM 1/6 W 5% TA26	
		R135	0RD3300F608	RESISTOR,FIXED CARBON FILM	330 OHM 1/6 W 5% TA26	
		R136	0RD3300F608	RESISTOR,FIXED CARBON FILM	330 OHM 1/6 W 5% TA26	
		R137	0RD4702F608	RESISTOR,FIXED CARBON FILM	47K OHM 1/6 W 5% TA26	
		R138	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K OHM 1/6 W 5% TA26	
		R140	0RD1201F608	RESISTOR,FIXED CARBON FILM	1.2K OHM 1/6 W 5% TA26	
		R141	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K OHM 1/6 W 5% TA26	
		R143	0RD1001F608	RESISTOR,FIXED CARBON FILM	1K OHM 1/6 W 5% TA26	
		R144	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K OHM 1/6 W 5% TA26	
		R145	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K OHM 1/6 W 5% TA26	
		R146	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K OHM 1/6 W 5% TA26	
		R147	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K OHM 1/6 W 5% TA26	
		R149	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K OHM 1/6 W 5% TA26	
		R150	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K OHM 1/6 W 5% TA26	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R151	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K OHM 1/6 W 5% TA26	
		R154	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K OHM 1/6 W 5% TA26	
		R155	0RS0562J619	RESISTOR,FIXED METAL OXIDE FIL	56 OHM 1 W 5.00% TR	
		R156	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K OHM 1/6 W 5% TA26	
		R157	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K OHM 1/6 W 5% TA26	
		R159	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K OHM 1/6 W 5% TA26	
		R160	0RS1200J619	RESISTOR,FIXED METAL OXIDE FIL	120 OHM 1 W 5.00% TR	
		R161	0RN1801F408	RESISTOR,FIXED METAL FILM	1.8K OHM 1/6 W 1% TA26	
		R162	0RN3601F408	RESISTOR,FIXED METAL FILM	3.6K OHM 1/6 W 1.00% TA26	
		R163	0RD2700F608	RESISTOR,FIXED CARBON FILM	270 OHM 1/6 W 5% TA26	
		R167	0RN3301F408	RESISTOR,FIXED METAL FILM	3.3K OHM 1/6 W 1% TA26	
		R168	0RN1801F408	RESISTOR,FIXED METAL FILM	1.8K OHM 1/6 W 1% TA26	
△		T101	6170RNGW23A	TRANSFORMER,SMPS[COIL]	EER2828 COMPLEX MODEL SOOJUNG	
△		T102	6170RNGW23B	TRANSFORMER,SMPS[COIL]	EER2828 COMPLEX MODEL SOOJUNG	
		TH01	6322B62204A	THERMISTOR,PTC	NTPAN4R0LDRB0 MURATA 4.0OHM 15	
△		V101	656-004C	VARISTOR,DRAWING	SVC681D-10A SAMHWA 4.0 CUT	
		ZD103	0DZ120009CA	DIODE,ZENER	MTZ12B TP ROHM-K	
		ZD151	0DZ330009BF	DIODE,ZENER	GDZJ3.3B TP GRANDE DO34 0.5W 3	
		ZD151	0DZ330009CD	DIODE,ZENER	MTZJ3.3B TP ROHM-K DO34 0.5W 3	
		ZD151	0DZ332609FA	DIODE,ZENER	UZ-3.3BSB 26MM TP PYUNG CHANG	
		ZD151	0DZ337729AA	DIODE,ZENERS	MTZ3.3B,T-77(26MMTP) TP ROHM -	
		ZD152	0DZ132609BB	DIODE,ZENER	UZ-13BSA 26MM TP PYUNG CHANG	
		ZD153	0DZ300000MB	DIODE,ZENERS	UZ-30BSC 26MM PYUNG CHANG TP D	
<b>*** DECK ASSEMBLY , TOTAL (VCR) ***</b>						
		A00	6721R-0841A	DECK ASSEMBLY,VIDEO	DECK/MECHA D35S(M) (4HF, NT, A	NSP
		A03	4261R-0025A	ARM ASSEMBLY	DECK/MECHA CLEANER	
		A11	4471R-0005A	GEAR ASSY	P3	
		A12	4471R-0004A	GEAR ASSY	P2	
		A21	4931R-0076A	HOLDER ASSEMBLY	CST(S)	
		A22	4471R-0006A	GEAR ASSY	RACK F/L	
		A23	4261R-0023A	ARM ASSY	F/L	
		A24	4511R-0002A	LEVER ASSEMBLY	SWITCH(S)	
		001	6723R-D306E	DRUM(CIRC) ASSEMBLY	SUB D35(S)-6CH NTSC(8C6S)	NSP
		002A	5202R00002C	BRUSH,CARBON	ASSY D33 (TIP+2 SPRING) 1.4,	
		003	4930R-0376A	HOLDER	DECK/MECHA FPCB(6CH) - D35S, D	
		004	5006R-0042A	CAP	DECK/MECHA FPCB - D35S, D37V O	
		006	4580R-0004A	ROLLER	CLEANER	
		007	4260R-0039A	ARM	CLEANER	
		008	6850R-HG18Z	CABLE,FLAT	P=1.25 FFC UL2896(0.05X0.8) 7	
		009	4260R-0045A	ARM	T/UP(D35 SLIM)	
		011	4261R-0022A	ARM ASSY	TENSION(D35)	
		012	3041R-0037A	BASE ASSY	P2	
		013	3041R-0038A	BASE ASSY	P3	
		014	3041R-0039A	BASE ASSY	P4	
		015	5870R-0005A	OPENER	LID(D35)	
		016	3041R-0036B	BASE ASSEMBLY	A/C HEAD (TDK)	
		016	3041R-0036A	BASE ASSEMBLY	A/C HEAD (ALPS)	
		017	4408R-0003A	REEL	S	
		018	4970R-0140A	SPRING	COIL RS D35	
		019	4421R-0008A	BRAKE ASSEMBLY	RS	
		020	4970R-0128A	SPRING	COIL D35 (TB)	
		021	4421R-0006A	BRAKE ASSY	T	
		023	3040R-V001A	BASE	LOADING(S) MOLD	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		024	4261R-0024A	ARM ASSEMBLY	IDLER (H)	
		025	4810R-0111A	BRACKET	L/D	NSP
		026	4680R-D006A	MOTOR(MECH)	LOADING RF-370CA-12560 MABUCHI	NSP
		027	4470R-0093A	GEAR	DECK/MECHA WHEEL OTHER	NSP
		028	4408R-0004A	REEL	T	
		030	4510R-0043A	LEVER	T/UP	
		031	4970R-0123A	SPRING	COIL TENSION(D35)	
		032	3141R-0040B	CHASSIS ASSEMBLY	D35(S)	
		051	4400R-0005A	BELT	CAPSTAN	
		052A	4980R-0023A	SUPPORTER	CAPSTAN(D35)	
		054	4470R-0100A	GEAR	RACK F/L	
		054A	4970R-0124B	SPRING	COIL D35 (RACK F/L)	
		055	4470R-0126A	GEAR	DRIVE(S)	
		056	4470R-0127A	GEAR	CAM(S)	
		058	4421R-0007A	BRAKE ASSY	CAPSTAN	
		060	4510R-0040A	LEVER	F/R(D35)	
		061	4265R-0005A	CLUTCH ASSEMBLY	D35 (M)	
		064	4470R-0098A	GEAR	SECTOR(D35)	
		065	4261R-0021A	ARM ASSY	P3	NSP
		066	4970R-0122A	SPRING	COIL D35	NSP
		067	4470R-0095A	GEAR	P3	NSP
		068	4470R-0094A	GEAR	P2	NSP
		069	4970R-0122A	SPRING	COIL D35	NSP
		070	4261R-0020A	ARM ASSY	P2	NSP
		076	4510R-0047A	LEVER	SPRING	
		077	3300R-M116A	PLATE	SLIDER	
		078	4510R-0041A	LEVER	TENSION	
		079	3040R-0056A	BASE	TENSION(D35)	
		100	3301R-M192A	PLATE ASSEMBLY	TOP(S)	
		100A	3300R-0184A	PLATE	GND	
		100B	3300R-M196A	PLATE	TOP(S) PRESS SECC 0.8T	
		102	4970R-0130A	SPRING	COIL D35 (STOPPER)	
		103	4930R-0378A	HOLDER	SIDE(S-L)	NSP
		105	4930R-0379A	HOLDER	CST(S)	NSP
		106	4930R-0377A	HOLDER	SIDE(S-R)	NSP
		107	4510R-0044A	LEVER	STOPPER	NSP
		109	5870R-0006A	OPENER	DOOR(S)	
		110	4260R-0035A	ARM	F/L(L)	NSP
		112	3070R-0002A	BODY	F/L	NSP
		113	4970R-0127A	SPRING	COIL D35 (F/L(R))	NSP
		114	4260R-0036A	ARM	F/L(R)	NSP
		115	4510R-0053A	LEVER	SWITCH(S)	
		116	4970R-0163A	SPRING	COIL D35S SWITCH	
		117	3300R-M137A	PLATE	SPRING CST	
		402	1MPC0261418	SCREW MACHINE,PAN HEAD	D 2.6 L 4.0 MSWR3/FZY	
		405	1SZZR-0031B	SCREW,DRAWING	+ 1 D2.6 L5.8 SWRCH16A/FZY TAP	
		406	1MEC0302018	PAN HEAD MACHINE SCREW S/W +	D 3.0 L 6.0 MSWR3/FZY	
		409	1SZZR-0032B	SCREW,DRAWING	+ 1 D2.6 L5.0 SWRCH18A/FZY TAP	
		410	1APF0262218	SCREW TAP TITE(B),PAN HEAD	D2.6 L6.8 MSWR3/FZY	
		517	1WZZR-0004D	WASHER	STOPPER	
		518	1WZZR-0004A	WASHER	STOPPER	
<b>*** BOARD ASSEMBLY , TOTAL (JACK) ***</b>						
		A48	3501R-6697A	BOARD ASSEMBLY	DVD VDR+VCR FRONT JACK BD	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		JK761	6612B00010A	JACK,DIN	PSJ 007B( S-VHS-JACK) PARK ELE	
		JK762	6612JH002NA	JACK,RCA	RCA-104-02(WHITE) YUQUIU	
		JK763	6612JH002NB	JACK,RCA	RCA-104-03(RED) YUQUIU	
		JK764	6612JH002NC	JACK,RCA	RCA-104-05(YELLOW) YUQUIU	
		L701	636-004C	FILTER(CIRC),EMC	BEAD CORE BFS3550R2FD8,R T/P	
		L702	636-004C	FILTER(CIRC),EMC	BEAD CORE BFS3550R2FD8,R T/P	
		L703	636-004C	FILTER(CIRC),EMC	BEAD CORE BFS3550R2FD8,R T/P	
		L704	636-004C	FILTER(CIRC),EMC	BEAD CORE BFS3550R2FD8,R T/P	
		L705	636-004C	FILTER(CIRC),EMC	BEAD CORE BFS3550R2FD8,R T/P	
		R761	ORD0752F608	RESISTOR,FIXED CARBON FILM	75 OHM 1/6 W 5.00% TA26	
		R764	ORD0752F608	RESISTOR,FIXED CARBON FILM	75 OHM 1/6 W 5.00% TA26	
		R765	ORD0752F608	RESISTOR,FIXED CARBON FILM	75 OHM 1/6 W 5.00% TA26	
		R766	ORD0752F608	RESISTOR,FIXED CARBON FILM	75 OHM 1/6 W 5.00% TA26	
		R767	ORD0752F608	RESISTOR,FIXED CARBON FILM	75 OHM 1/6 W 5.00% TA26	
		ZD761	0DZ680009CA	DIODE ZENER	MTZ6.8C TP ROHM-K	
		ZD762	0DZ680009CA	DIODE ZENER	MTZ6.8C TP ROHM-K	
		ZD763	0DZ680009CA	DIODE ZENER	MTZ6.8C TP ROHM-K	
		ZD764	0DZ680009CA	DIODE ZENER	MTZ6.8C TP ROHM-K	
		ZD765	0DZ680009CA	DIODE ZENER	MTZ6.8C TP ROHM-K	
		ZD766	0DZ680009CA	DIODE ZENER	MTZ6.8C TP ROHM-K	
		ZD767	0DZ680009CA	DIODE ZENER	MTZ6.8C TP ROHM-K	
		ZD768	0DZ680009CA	DIODE ZENER	MTZ6.8C TP ROHM-K	
		ZD769	0DZ680009CA	DIODE ZENER	MTZ6.8C TP ROHM-K	
		ZD770	0DZ680009CA	DIODE ZENER	MTZ6.8C TP ROHM-K	
		ZD771	0DZ680009CA	DIODE ZENER	MTZ6.8C TP ROHM-K	
		ZD772	0DZ680009CA	DIODE ZENER	MTZ6.8C TP ROHM-K	
<b>*** SUB PWB ASSEMBLY,TOTAL (VDR MAIN) ***</b>						
		A52	6885R-2300D	SUB PWB(PCB) ASSEMBLY	RC59004M NORTH AMERICA PGM (ZE	
	△	C101	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
	△	C102	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C103	0CS337GC6DC	CAPACITOR,FIXED TANTALUM	330UF 7343 6.3V 20% SMD R/TP(S	
		C105	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C106	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C107	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C108	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C109	0CS337GC6DC	CAPACITOR,FIXED TANTALUM	330UF 7343 6.3V 20% SMD R/TP(S	
	△	C110	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
	△	C111	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C112	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C113	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C114	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C117	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C118	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C119	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C120	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C121	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C124	0CH4220K412	CAPA,CHIP CERAMIC M/L T.C F/S	22P 50V J COG 1.6X0.8 R/TP	
		C125	0CS106HF6DC	CAPACITOR,FIXED TANTALUM	10UF 3528 16V 20% SMD R/TP(SMD	
		C130	0CH8227C621	CAPACITOR,CHIP[AL. ELECTROLYTI	220UF 6.3V M 105STD (CYL) R/TP	
		C131	0CH4220K412	CAPA,CHIP CERAMIC M/L T.C F/S	22P 50V J COG 1.6X0.8 R/TP	
		C133	0CH8227C621	CAPACITOR,CHIP[AL. ELECTROLYTI	220UF 6.3V M 105STD (CYL) R/TP	
		C134	0CH8227C621	CAPACITOR,CHIP[AL. ELECTROLYTI	220UF 6.3V M 105STD (CYL) R/TP	
		C135	0CH7226D621	CAPACITOR,CHIP[TANTALUM]	22UF 10V M 3528 TP(-)	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C136	0CH7226D621	CAPACITOR,CHIP[TANTALUM]	22UF 10V M 3528 TP(-)	
		C138	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C139	0CH7475D611	CAPACITOR,FIXED TANTALUM	4.7UF 10V 20% 3216 TP(-)	
		C140	0CH7475D611	CAPACITOR,FIXED TANTALUM	4.7UF 10V 20% 3216 TP(-)	
		C142	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C143	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C144	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C145	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C146	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C147	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C148	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C149	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C150	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C151	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C152	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C153	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C154	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C155	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C156	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C157	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C158	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C159	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C160	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C1601	0CH8227C621	CAPACITOR,CHIP[AL. ELECTROLYTI	220UF 6.3V M 105STD (CYL) R/TP	
		C1602	0CH8227C621	CAPACITOR,CHIP[AL. ELECTROLYTI	220UF 6.3V M 105STD (CYL) R/TP	
		C1603	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C1604	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C161	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C162	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C163	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C164	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C165	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C166	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C167	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C168	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C169	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C170	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C171	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C172	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C173	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C174	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C175	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C176	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C177	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C178	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C179	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C180	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C181	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C182	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C183	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C184	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C186	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C187	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C188	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C189	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C190	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C191	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C192	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C194	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C195	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C196	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C197	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C198	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C199	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C1A0	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C1A1	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C1A2	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C1A3	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C1A4	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C1A5	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C1A6	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C1A7	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C1A8	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C1A9	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C1E1	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C1E2	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C1E3	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C1E4	0CH7106C611	CAPACITOR,FIXED TANTALUM	10UF 6.3V 20% 3216 TP(-)	
		C1E8	0CE827ZX6DC	CAPACITOR,FIXED ELECTROLYTIC	820UF FX 2.5V 20% SMD R/TP(SMD	
		C1E9	0CH8227C621	CAPACITOR,CHIP[AL. ELECTROLYTI	220UF 6.3V M 105STD (CYL) R/TP	
		C1F1	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C1F2	0CH8227C621	CAPACITOR,CHIP[AL. ELECTROLYTI	220UF 6.3V M 105STD (CYL) R/TP	
		C1F3	0CH8227C621	CAPACITOR,CHIP[AL. ELECTROLYTI	220UF 6.3V M 105STD (CYL) R/TP	
		C1F4	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C1F5	0CH8227C621	CAPACITOR,CHIP[AL. ELECTROLYTI	220UF 6.3V M 105STD (CYL) R/TP	
		C1F6	0CH8227C621	CAPACITOR,CHIP[AL. ELECTROLYTI	220UF 6.3V M 105STD (CYL) R/TP	
		C1F7	0CH8227C621	CAPACITOR,CHIP[AL. ELECTROLYTI	220UF 6.3V M 105STD (CYL) R/TP	
		C1G4	0CH1330K412	CAPACITOR,FIXED CERAMIC(TEMP.C	33PF 1608 50V 5% X7R R/TP	
		C1G5	0CH1330K412	CAPACITOR,FIXED CERAMIC(TEMP.C	33PF 1608 50V 5% X7R R/TP	
		C1G7	0CS337GC6DC	CAPACITOR,FIXED TANTALUM	330UF 7343 6.3V 20% SMD R/TP(S	
		C201	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C202	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C203	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C204	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C207	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C209	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C210	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C212	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C213	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C214	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C215	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C216	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C217	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C218	0CH7226D621	CAPACITOR,CHIP[TANTALUM]	22UF 10V M 3528 TP(-)	
		C221	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C222	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C225	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C229	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C230	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C232	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C233	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C234	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C235	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C2601	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C303	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C306	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C307	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C308	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C309	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C311	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C313	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C316	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C323	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C326	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C329	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C331	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C332	0CH1224K512	CAPACITOR,FIXED CERAMIC(TEMP.C	0.22UF 50V 10% B(5YP) 1608 R/T	
		C333	0CH1224K512	CAPACITOR,FIXED CERAMIC(TEMP.C	0.22UF 50V 10% B(5YP) 1608 R/T	
		C334	0CH1224K512	CAPACITOR,FIXED CERAMIC(TEMP.C	0.22UF 50V 10% B(5YP) 1608 R/T	
		C335	0CH7105F611	CAPA,CHIP TANTALUM	1.0U 16V M 3.2X1.6 TP-	
		C336	0CH7105F611	CAPA,CHIP TANTALUM	1.0U 16V M 3.2X1.6 TP-	
		C337	0CH7105F611	CAPA,CHIP TANTALUM	1.0U 16V M 3.2X1.6 TP-	
		C346	0CH7226D621	CAPACITOR,CHIP[TANTALUM]	22UF 10V M 3528 TP(-)	
		C348	0CH4271K412	CAPACITOR,FIXED CERAMIC(HIGH D	270PF 50V 5% NP0 1608 R/TP	
		C349	0CH4271K412	CAPACITOR,FIXED CERAMIC(HIGH D	270PF 50V 5% NP0 1608 R/TP	
		C350	0CH4271K412	CAPACITOR,FIXED CERAMIC(HIGH D	270PF 50V 5% NP0 1608 R/TP	
		C353	0CH4220K412	CAPA,CHIP CERAMIC M/L T.C F/S	22P 50V J COG 1.6X0.8 R/TP	
		C354	0CH4220K412	CAPA,CHIP CERAMIC M/L T.C F/S	22P 50V J COG 1.6X0.8 R/TP	
		C401	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C402	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C403	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C404	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C405	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C406	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C407	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C408	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C409	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C410	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C411	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C412	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C413	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C414	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C415	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C416	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C417	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C418	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C419	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C420	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C421	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	



S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C422	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C423	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C425	0CH4220K412	CAPA,CHIP CERAMIC M/L T.C F/S	22P 50V J COG 1.6X0.8 R/TP	
		C426	0CH4220K412	CAPA,CHIP CERAMIC M/L T.C F/S	22P 50V J COG 1.6X0.8 R/TP	
		C427	0CH1473K942	CAPACITOR,FIXED CERAMIC(Temp.c	0.047UF 50V 80%,-20% Y5V(F) 16	
		C428	0CH1473K942	CAPACITOR,FIXED CERAMIC(Temp.c	0.047UF 50V 80%,-20% Y5V(F) 16	
		C429	0CH1473K942	CAPACITOR,FIXED CERAMIC(Temp.c	0.047UF 50V 80%,-20% Y5V(F) 16	
		C430	0CH1473K942	CAPACITOR,FIXED CERAMIC(Temp.c	0.047UF 50V 80%,-20% Y5V(F) 16	
		C431	0CH1473K942	CAPACITOR,FIXED CERAMIC(Temp.c	0.047UF 50V 80%,-20% Y5V(F) 16	
		C432	0CH1473K942	CAPACITOR,FIXED CERAMIC(Temp.c	0.047UF 50V 80%,-20% Y5V(F) 16	
		C433	0CH1473K942	CAPACITOR,FIXED CERAMIC(Temp.c	0.047UF 50V 80%,-20% Y5V(F) 16	
		C434	0CH1473K942	CAPACITOR,FIXED CERAMIC(Temp.c	0.047UF 50V 80%,-20% Y5V(F) 16	
		C435	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C436	0CS106HF6DC	CAPACITOR,FIXED TANTALUM	10UF 3528 16V 20% SMD R/TP(SMD	
		C437	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C438	0CS106HF6DC	CAPACITOR,FIXED TANTALUM	10UF 3528 16V 20% SMD R/TP(SMD	
		C439	0CS106HF6DC	CAPACITOR,FIXED TANTALUM	10UF 3528 16V 20% SMD R/TP(SMD	
		C440	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C441	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C442	0CS106HF6DC	CAPACITOR,FIXED TANTALUM	10UF 3528 16V 20% SMD R/TP(SMD	
		C443	0CS106HF6DC	CAPACITOR,FIXED TANTALUM	10UF 3528 16V 20% SMD R/TP(SMD	
		C444	0CS106HF6DC	CAPACITOR,FIXED TANTALUM	10UF 3528 16V 20% SMD R/TP(SMD	
		C445	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C446	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C4A0	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C629	0CH4101K412	CHIP CAPA CERAMIC M/L T.C F/S	100P 50V J COG 1.6X0.8 R/TP	
		C632	0CH8105K611	CAPACITOR,FIXED ELECTROLYTIC	1UF 50V 20% 85STD (CYL) R/TP	
		C633	0CH4101K412	CHIP CAPA CERAMIC M/L T.C F/S	100P 50V J COG 1.6X0.8 R/TP	
		C634	0CH8106F611	CAPACITOR,CHIP[AL. ELECTROLYTI	10UF 16V M 85STD(CYL) R/TP	
		C635	0CH8106F611	CAPACITOR,CHIP[AL. ELECTROLYTI	10UF 16V M 85STD(CYL) R/TP	
		C636	0CH4101K412	CHIP CAPA CERAMIC M/L T.C F/S	100P 50V J COG 1.6X0.8 R/TP	
		C637	0CH4220K412	CAPA,CHIP CERAMIC M/L T.C F/S	22P 50V J COG 1.6X0.8 R/TP	
		C638	0CH4220K412	CAPA,CHIP CERAMIC M/L T.C F/S	22P 50V J COG 1.6X0.8 R/TP	
		C639	0CH8106F611	CAPACITOR,CHIP[AL. ELECTROLYTI	10UF 16V M 85STD(CYL) R/TP	
		C640	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C641	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C642	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C643	0CH8105K611	CAPACITOR,FIXED ELECTROLYTIC	1UF 50V 20% 85STD (CYL) R/TP	
		C644	0CH8106F611	CAPACITOR,CHIP[AL. ELECTROLYTI	10UF 16V M 85STD(CYL) R/TP	
		C645	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C646	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C647	0CH8106F611	CAPACITOR,CHIP[AL. ELECTROLYTI	10UF 16V M 85STD(CYL) R/TP	
		C648	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C650	0CH8106F611	CAPACITOR,CHIP[AL. ELECTROLYTI	10UF 16V M 85STD(CYL) R/TP	
		C651	0CH4101K412	CHIP CAPA CERAMIC M/L T.C F/S	100P 50V J COG 1.6X0.8 R/TP	
		C652	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C7401	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C7601	0CH1272K512	CAPACITOR,FIXED CERAMIC(Temp.c	2700PF 50V 10% B(5YP) 1608 R/T	
		C7603	0CH8226F611	CAPACITOR,CHIP[AL. ELECTROLYTI	22UF 16V M 85STD(CYL) R/TP	
		C7604	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C7606	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C7607	0CH8226F611	CAPACITOR,CHIP[AL. ELECTROLYTI	22UF 16V M 85STD(CYL) R/TP	
		C7608	0CH1182K562	CAPACITOR,CHIP[CERAMIC M/L HD	1800P 50V K X7R 1.6X0.8 R/TP	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C7609	0CH8105K611	CAPACITOR, FIXED ELECTROLYTIC	1UF 50V 20% 85STD (CYL) R/TP	
		C7610	0CH1104K942	CAPACITOR, CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C7611	0CH1182K562	CAPACITOR, CHIP[CERAMIC M/L HD	1800P 50V K X7R 1.6X0.8 R/TP	
		C7612	0CH8226F611	CAPACITOR, CHIP[AL. ELECTROLYTI	22UF 16V M 85STD(CYL) R/TP	
		C7613	0CH4820K412	CHIP CAPA CERAMIC M/L T.C F/S	82P 50V J COG 1.6X0.8 R/TP	
		C7614	0CH8105K611	CAPACITOR, FIXED ELECTROLYTIC	1UF 50V 20% 85STD (CYL) R/TP	
		C7615	0CH1104K942	CAPACITOR, CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C7616	0CH4561K412	CAPACITOR, FIXED CERAMIC(High d	560PF 50V 5% NP0 1608 R/TP	
		C7617	0CH8226F611	CAPACITOR, CHIP[AL. ELECTROLYTI	22UF 16V M 85STD(CYL) R/TP	
		C7618	0CH8227C621	CAPACITOR, CHIP[AL. ELECTROLYTI	220UF 6.3V M 105STD (CYL) R/TP	
		C7619	0CH1104K942	CAPACITOR, CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C7620	0CH8226F611	CAPACITOR, CHIP[AL. ELECTROLYTI	22UF 16V M 85STD(CYL) R/TP	
		C7621	0CH8226F611	CAPACITOR, CHIP[AL. ELECTROLYTI	22UF 16V M 85STD(CYL) R/TP	
		C7622	0CH1272K512	CAPACITOR, FIXED CERAMIC(Temp.c	2700PF 50V 10% B(5YP) 1608 R/T	
		C7623	0CH1272K512	CAPACITOR, FIXED CERAMIC(Temp.c	2700PF 50V 10% B(5YP) 1608 R/T	
		C7624	0CH1272K512	CAPACITOR, FIXED CERAMIC(Temp.c	2700PF 50V 10% B(5YP) 1608 R/T	
		C7625	0CH1104K942	CAPACITOR, CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C7626	0CH4561K412	CAPACITOR, FIXED CERAMIC(High d	560PF 50V 5% NP0 1608 R/TP	
		C7627	0CH8226F611	CAPACITOR, CHIP[AL. ELECTROLYTI	22UF 16V M 85STD(CYL) R/TP	
		C7628	0CH1104K942	CAPACITOR, CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C7629	0CH8226F611	CAPACITOR, CHIP[AL. ELECTROLYTI	22UF 16V M 85STD(CYL) R/TP	
		C7630	0CH4820K412	CHIP CAPA CERAMIC M/L T.C F/S	82P 50V J COG 1.6X0.8 R/TP	
		C7631	0CH1330K412	CAPACITOR, FIXED CERAMIC(TEMP.C	33PF 1608 50V 5% X7R R/TP	
		C7632	0CH1330K412	CAPACITOR, FIXED CERAMIC(TEMP.C	33PF 1608 50V 5% X7R R/TP	
		C7711	0CH1104K942	CAPACITOR, CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C7712	0CH1104K942	CAPACITOR, CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C7713	0CH8107F611	CAPACITOR, CHIP[AL. ELECTROLYTI	100UF 16V M 85STD(CYL) R/TP	
		C7714	0CH8226F611	CAPACITOR, CHIP[AL. ELECTROLYTI	22UF 16V M 85STD(CYL) R/TP	
		C7715	0CH1102K512	CAPACITOR, FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C7716	0CH8106F611	CAPACITOR, CHIP[AL. ELECTROLYTI	10UF 16V M 85STD(CYL) R/TP	
		C7717	0CH4101K412	CHIP CAPA CERAMIC M/L T.C F/S	100P 50V J COG 1.6X0.8 R/TP	
		C7718	0CH1104K942	CAPACITOR, CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		IC1057	0IMMRFU005A	IC, MEMORIES	MBM29DL640E90TN FUJITSU 48 TSO	
		IC1092	0IMMRHY052A	IC, MEMORIES	HY5DU281622DT-6 HYNIX 66P, TSOP	
		IC1093	0IMMRHY052A	IC, MEMORIES	HY5DU281622DT-6 HYNIX 66P, TSOP	
		IC1094	0IMMRHY052A	IC, MEMORIES	HY5DU281622DT-6 HYNIX 66P, TSOP	
		IC1095	0IMMRHY052A	IC, MEMORIES	HY5DU281622DT-6 HYNIX 66P, TSOP	
		IC1097	0IPMGMB001A	IC, POWER MANAGEMENT	ML6554CU MICRO LINEAR 16PIN PS	
		IC1099	0ILNRL004A	IC, LINEAR	DMN-8600 LSI LOGIC 308PIN BGA	
		IC2001	0ISTLPH041A	IC, STANDARD LOGIC	74LVT125PW PHILIPS 14PIN TSSOP	
		IC2033	0ISTLPH039A	IC, STANDARD LOGIC	74LVC04APW PHILIPS 14PIN TSSOP	
		IC2066	0ISTLAT005A	IC, STANDARD LOGIC	EPM3032ATC44-10 ALTERA 44PIN T	
		IC2068	0ISTLPH035A	IC, STANDARD LOGIC	74ABT245PW PHILIPS 20PIN TSSOP	
		IC2069	0ISTLPH036A	IC, STANDARD LOGIC	74ABT541PW PHILIPS 20PIN TSSOP	
		IC2070	0ISTLPH035A	IC, STANDARD LOGIC	74ABT245PW PHILIPS 20PIN TSSOP	
		IC2071	0ISTLPH036A	IC, STANDARD LOGIC	74ABT541PW PHILIPS 20PIN TSSOP	
		IC2075	0ISTLPH040A	IC, STANDARD LOGIC	74LVC08APW PHILIPS 14PIN TSSOP	
		IC2076	0ISTLPH044A	IC, STANDARD LOGIC	74LVT273PW PHILIPS 20PIN TSSOP	
		IC2078	0ISTLPH044A	IC, STANDARD LOGIC	74LVT273PW PHILIPS 20PIN TSSOP	
		IC2080	0ISTLPH037A	IC, STANDARD LOGIC	74LVC541APW PHILIPS 20PIN TSSO	
		IC2084	0ISTLPH042A	IC, STANDARD LOGIC	74LVT16245B DGG PHILIPS 48PIN	
		IC2085	0ISTLPH043A	IC, STANDARD LOGIC	74LVT16373A DGG PHILIPS 48PIN	
		IC2090	0ISTLPH038A	IC, STANDARD LOGIC	74LVC827APW PHILIPS 24PIN TSSO	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		IC2601	0ISTLPH037A	IC,STANDARD LOGIC	74LVC541APW PHILIPS 20PIN TSSO	
		IC3048	0IPRPTI017A	IC,PERIPHERALS	TSB41AB3 TEXAS INSTRUMENT 80PI	
		IC4002	0ISTLAT007A	IC,STANDARD LOGIC	EPM3064ATC44-10 ALTERA 44PIN Q	
		IC4003	0ILNRPH008A	IC,LINEAR	SAA7104H PHILIPS 64PIN QFP TRA	
		IC4004	0ILNRPH008A	IC,LINEAR	SAA7104H PHILIPS 64PIN QFP TRA	
		IC4009	0ILNRPH007A	IC,LINEAR	SAA7115 PHILIPS 100PIN LQFP TR	
		IC6904	0ILNRON005A	IC,LINEAR	MC33202DR2 ON SEMI 8PIN SOP R/	
		IC6905	0IPRPCI006A	IC,PERIPHERALS	CS5333-KZR CIRRUS LOGIC 16PIN	
		IC7401	0ISTLPH055A	IC,STANDARD LOGIC	74HCT125 PHILIPS 14PIN,TSSOP R	
		IC7601	0IPRPCI002B	IC,PERIPHERALS	CS4392-KZR CIRRUS LOGIC 20 TSS	
		IC7602	0IJR553200A	IC,JRC	NJM5532 OP AMP JRC	
		IC7711	0IPMGJR012A	IC,POWER MANAGEMENT	NJM2274R JRC VSP8 R/TP LOW POW	
△		L101	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
△		L102	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L103	6140H-A001A	FILTER(CIRC),EMC	BEAD C,HH-1H4532-121JT.CERATEH	
		L104	6140H-A001A	FILTER(CIRC),EMC	BEAD C,HH-1H4532-121JT.CERATEH	
		L105	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L106	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L107	6140H-A001A	FILTER(CIRC),EMC	BEAD C,HH-1H4532-121JT.CERATEH	
		L109	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L110	6140H-A001A	FILTER(CIRC),EMC	BEAD C,HH-1H4532-121JT.CERATEH	
		L111	6140H-A001A	FILTER(CIRC),EMC	BEAD C,HH-1H4532-121JT.CERATEH	
		L112	6140H-A001A	FILTER(CIRC),EMC	BEAD C,HH-1H4532-121JT.CERATEH	
		L114	0LCMU00011A	INDUCTOR,CHIP	LQH66SN3R3M03 MURATA R/TP	
		L115	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L116	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		L117	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		L118	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		L119	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		L1601	6140H-A001A	FILTER(CIRC),EMC	BEAD C,HH-1H4532-121JT.CERATEH	
		L1602	6140H-A001A	FILTER(CIRC),EMC	BEAD C,HH-1H4532-121JT.CERATEH	
		L300	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L303	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L401	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L402	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L403	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L404	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L405	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L406	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L407	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L603	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L604	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L7601	6140H-B003G	INDUCTOR,CHIP	NLC322522T-100K 10MH TDK	
		L7602	6140H-B003G	INDUCTOR,CHIP	NLC322522T-100K 10MH TDK	
		LD102	0DLRH0128AA	LED	ROHM SML-010VT R/TP RED .	
		PN7401	6630XE00115	CONNECTOR (CIRC),FFC/FPC	04-6232-015-010-000/JE500-B1.0	
		PN7601	6630XE00130	CONNECTOR (CIRC),FFC/FPC	04-6232-030-010-000 ELCO 30P 1	
		Q502	0TR103009AA	TRANSISTOR	CHIP KRC103S-T1(NC)22-22 KEC	
		Q503	0TR103009AA	TRANSISTOR	CHIP KRC103S-T1(NC)22-22 KEC	
		Q504	0TR103009AA	TRANSISTOR	CHIP KRC103S-T1(NC)22-22 KEC	
		Q7601	0TR387509AB	TRANSISTOR,BIPOLARS	KTC3875S-Y-T1(ALY) KEC TP TO9	
		Q7602	0TR387509AB	TRANSISTOR,BIPOLARS	KTC3875S-Y-T1(ALY) KEC TP TO9	
		Q7603	0TR103009AM	TRANSISTOR	KRC103S TP KEC SOT-23 22K-22K	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		Q7604	0TR103009AM	TRANSISTOR	KRC103S TP KEC SOT-23 22K-22K	
		R101	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R102	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R103	0RH6802C422	RESISTOR,METAL GLAZED(CHIP)	68K OHM 1 / 16 W 1608 1.00% D	
		R104	0RH1201C422	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 1.00% D	
		R105	0RH0102C622	RESISTOR,METAL GLAZED(CHIP)	10 OHM 1 / 16 W 1608 5.00% D	
		R106	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R107	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R108	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R109	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R110	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R111	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R112	0RH0682C622	RESISTOR,METAL GLAZED(CHIP)	68 OHM 1 / 16 W 1608 5.00% D	
		R113	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R114	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R115	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R116	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R117	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R118	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R119	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R120	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R121	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R122	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R123	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R124	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R125	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R126	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R127	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R128	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R130	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R133	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R134	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R135	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R136	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R137	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R138	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R139	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R140	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R141	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R142	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R143	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R144	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R145	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R146	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R147	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R148	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R150	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R151	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R153	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R154	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R156	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R157	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R158	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R159	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R160	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R1606	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R1607	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R161	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R162	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R163	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R164	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R165	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R166	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R167	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R168	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R169	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R170	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R171	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R172	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R173	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R174	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R179	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R180	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R181	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R182	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R187	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R188	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R189	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R190	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R195	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R196	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R197	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R198	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R1A0	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R1A1	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R1A2	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R1A3	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R1A7	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R201	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R202	0RH0682C622	RESISTOR,METAL GLAZED(CHIP)	68 OHM 1 / 16 W 1608 5.00% D	
		R203	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R204	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R205	0RH0682C622	RESISTOR,METAL GLAZED(CHIP)	68 OHM 1 / 16 W 1608 5.00% D	
		R206	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R207	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R208	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R210	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R211	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R214	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R215	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R216	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R217	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R218	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R219	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R222	0RH3301C622	RESISTOR,METAL GLAZED(CHIP)	3.3K OHM 1 / 16 W 1608 5.00% D	
		R223	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	



S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R320	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R329	0RH1203C622	RESISTOR,METAL GLAZED(CHIP)	120K OHM 1 / 16 W 1608 5.00% D	
		R330	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R331	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R332	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R334	0RJ1004C477	RESISTOR,METAL GLAZED(CHIP)	1M OHM 1/16 W 1% 1608 R/TP	
		R335	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R345	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R348	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R349	0RH5101C622	RESISTOR,METAL GLAZED(CHIP)	5100 OHM 1 / 16 W 1608 5.00% D	
		R350	0RH5101C622	RESISTOR,METAL GLAZED(CHIP)	5100 OHM 1 / 16 W 1608 5.00% D	
		R351	0RH5101C622	RESISTOR,METAL GLAZED(CHIP)	5100 OHM 1 / 16 W 1608 5.00% D	
		R352	0RH0562C422	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 16 W 1608 1.00% D	
		R353	0RH0562C422	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 16 W 1608 1.00% D	
		R354	0RH0562C422	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 16 W 1608 1.00% D	
		R355	0RH0562C422	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 16 W 1608 1.00% D	
		R356	0RH0562C422	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 16 W 1608 1.00% D	
		R357	0RH0562C422	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 16 W 1608 1.00% D	
		R358	0RH0562C422	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 16 W 1608 1.00% D	
		R359	0RH0562C422	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 16 W 1608 1.00% D	
		R360	0RH0562C422	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 16 W 1608 1.00% D	
		R361	0RH0562C422	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 16 W 1608 1.00% D	
		R3613	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R3614	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R3615	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R3616	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R362	0RH0562C422	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 16 W 1608 1.00% D	
		R3621	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R3622	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R3623	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R3624	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R3625	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R3626	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R3627	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R3628	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R3629	0RH5601C622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 16 W 1608 5.00% D	
		R363	0RH0562C422	RESISTOR,METAL GLAZED(CHIP)	56 OHM 1 / 16 W 1608 1.00% D	
		R3630	0RH5601C622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 16 W 1608 5.00% D	
		R3631	0RH5601C622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 16 W 1608 5.00% D	
		R364	0RJ6201C477	RESISTOR,METAL GLAZED(CHIP)	6.2K OHM 1/16 W 1% 1608 R/TP	
		R365	0RH6800C622	RESISTOR,METAL GLAZED(CHIP)	680 OHM 1 / 16 W 1608 5.00% D	
		R366	0RH6800C622	RESISTOR,METAL GLAZED(CHIP)	680 OHM 1 / 16 W 1608 5.00% D	
		R372	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R373	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R375	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R376	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R4001	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R4002	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R4003	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R4004	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R4005	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R4006	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R403	0RH0682C622	RESISTOR,METAL GLAZED(CHIP)	68 OHM 1 / 16 W 1608 5.00% D	





S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R493	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R494	0RH5600C622	RESISTOR,METAL GLAZED(CHIP)	560 OHM 1 / 16 W 1608 5.00% D	
		R495	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R497	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R498	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R4A0	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R4A1	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R648	0RH5601C622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 16 W 1608 5.00% D	
		R650	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R651	0RH7501C622	RESISTOR,METAL GLAZED(CHIP)	7.5K OHM 1 / 16 W 1608 5.00% D	
		R652	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R653	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R654	0RH5601C622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 16 W 1608 5.00% D	
		R655	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R656	0RH0512C622	RESISTOR,METAL GLAZED(CHIP)	51 OHM 1 / 16 W 1608 5.00% D	
		R657	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R658	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R659	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R661	0RH7501C622	RESISTOR,METAL GLAZED(CHIP)	7.5K OHM 1 / 16 W 1608 5.00% D	
		R662	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R663	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R664	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R668	0RH1202C622	RESISTOR,METAL GLAZED(CHIP)	12K OHM 1 / 16 W 1608 5.00% D	
		R669	0RH1202C622	RESISTOR,METAL GLAZED(CHIP)	12K OHM 1 / 16 W 1608 5.00% D	
		R670	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R671	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R690	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R7601	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R7602	0RH4700C622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 16 W 1608 5.00% D	
		R7603	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R7604	0RH4700C622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 16 W 1608 5.00% D	
		R7605	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R7606	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R7609	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R7610	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R7611	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R7612	0RH8201C622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 16 W 1608 5.00% D	
		R7613	0RH8201C622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 16 W 1608 5.00% D	
		R7614	0RH6801C622	RESISTOR,METAL GLAZED(CHIP)	6.8K OHM 1 / 16 W 1608 5.00% D	
		R7615	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R7616	0RH6801C622	RESISTOR,METAL GLAZED(CHIP)	6.8K OHM 1 / 16 W 1608 5.00% D	
		R7617	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R7618	0RH6801C622	RESISTOR,METAL GLAZED(CHIP)	6.8K OHM 1 / 16 W 1608 5.00% D	
		R7619	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R7620	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R7621	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R7622	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R7624	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R7625	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R7626	0RH6801C622	RESISTOR,METAL GLAZED(CHIP)	6.8K OHM 1 / 16 W 1608 5.00% D	
		R7627	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R7631	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R7634	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R7635	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R7636	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R7637	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R7638	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R7641	0RH5600C622	RESISTOR,METAL GLAZED(CHIP)	560 OHM 1 / 16 W 1608 5.00% D	
		R7642	0RH5600C622	RESISTOR,METAL GLAZED(CHIP)	560 OHM 1 / 16 W 1608 5.00% D	
		R7711	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R7712	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R7713	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R7714	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		RR101	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR102	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR103	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR104	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR105	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR106	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR107	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR108	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR109	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR110	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR111	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR112	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR113	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR114	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR115	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR116	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR117	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR118	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR119	0RRZVTA001G	RESISTOR,DRAWING	51 OHM 1 / 16 W 3216 5% R/TP 8	
		RR120	0RR0222Q62A	RESISTOR,DRAWING	22 OHM 1/16 W 3216 5.00% R/TP	
		RR121	0RR0222Q62A	RESISTOR,DRAWING	22 OHM 1/16 W 3216 5.00% R/TP	
		RR122	0RR0222Q62A	RESISTOR,DRAWING	22 OHM 1/16 W 3216 5.00% R/TP	
		RR123	0RR1002Q62C	RESISTOR,DRAWING	100 OHM 1/16W 5.00% 3216 8	
		RR124	0RR1002Q62C	RESISTOR,DRAWING	100 OHM 1/16W 5.00% 3216 8	
		RR125	0RR1002Q62C	RESISTOR,DRAWING	100 OHM 1/16W 5.00% 3216 8	
		RR126	0RR1002Q62C	RESISTOR,DRAWING	100 OHM 1/16W 5.00% 3216 8	
		RR127	0RR1002Q62C	RESISTOR,DRAWING	100 OHM 1/16W 5.00% 3216 8	
		RR128	0RRZVTA001F	RESISTOR,DRAWING	33 OHM 1 / 16 W 3216 5% R/TP 8	
		RR129	0RRZVTA001F	RESISTOR,DRAWING	33 OHM 1 / 16 W 3216 5% R/TP 8	
		RR130	0RRZVTA001F	RESISTOR,DRAWING	33 OHM 1 / 16 W 3216 5% R/TP 8	
		RR131	0RRZVTA001F	RESISTOR,DRAWING	33 OHM 1 / 16 W 3216 5% R/TP 8	
		RR132	0RRZVTA001F	RESISTOR,DRAWING	33 OHM 1 / 16 W 3216 5% R/TP 8	
		RR133	0RRZVTA001F	RESISTOR,DRAWING	33 OHM 1 / 16 W 3216 5% R/TP 8	
		RR201	0RR0222Q62A	RESISTOR,DRAWING	22 OHM 1/16 W 3216 5.00% R/TP	
		RR202	0RR0222Q62A	RESISTOR,DRAWING	22 OHM 1/16 W 3216 5.00% R/TP	
		RR203	0RR0222Q62A	RESISTOR,DRAWING	22 OHM 1/16 W 3216 5.00% R/TP	
		RR204	0RR0222Q62A	RESISTOR,DRAWING	22 OHM 1/16 W 3216 5.00% R/TP	
		RR205	0RR0222Q62A	RESISTOR,DRAWING	22 OHM 1/16 W 3216 5.00% R/TP	
		RR206	0RR0222Q62A	RESISTOR,DRAWING	22 OHM 1/16 W 3216 5.00% R/TP	
		RR207	0RR0222Q62A	RESISTOR,DRAWING	22 OHM 1/16 W 3216 5.00% R/TP	
		RR301	0RR1002Q62C	RESISTOR,DRAWING	100 OHM 1/16W 5.00% 3216 8	
		RR302	0RR1002Q62C	RESISTOR,DRAWING	100 OHM 1/16W 5.00% 3216 8	
		RR401	0RR1002Q62C	RESISTOR,DRAWING	100 OHM 1/16W 5.00% 3216 8	

S	AL	LOCA. NO.	PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		RR402	0RR1002Q62C	RESISTOR,DRAWING	100 OHM 1/16W 5.00% 3216 8	
		RR403	0RR1002Q62C	RESISTOR,DRAWING	100 OHM 1/16W 5.00% 3216 8	
		X102	6212AB2135C	RESONATOR,CRYSTAL	HC-49/SM BUBANG 13.5 MHZ +/- 5	
		X301	6212AB2246C	RESONATOR,CRYSTAL	HC-49/SM BUBANG 24.576MHZ +/-	
		X401	6212AB2246C	RESONATOR,CRYSTAL	HC-49/SM BUBANG 24.576MHZ +/-	