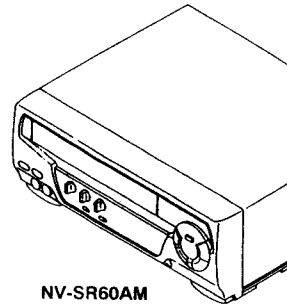
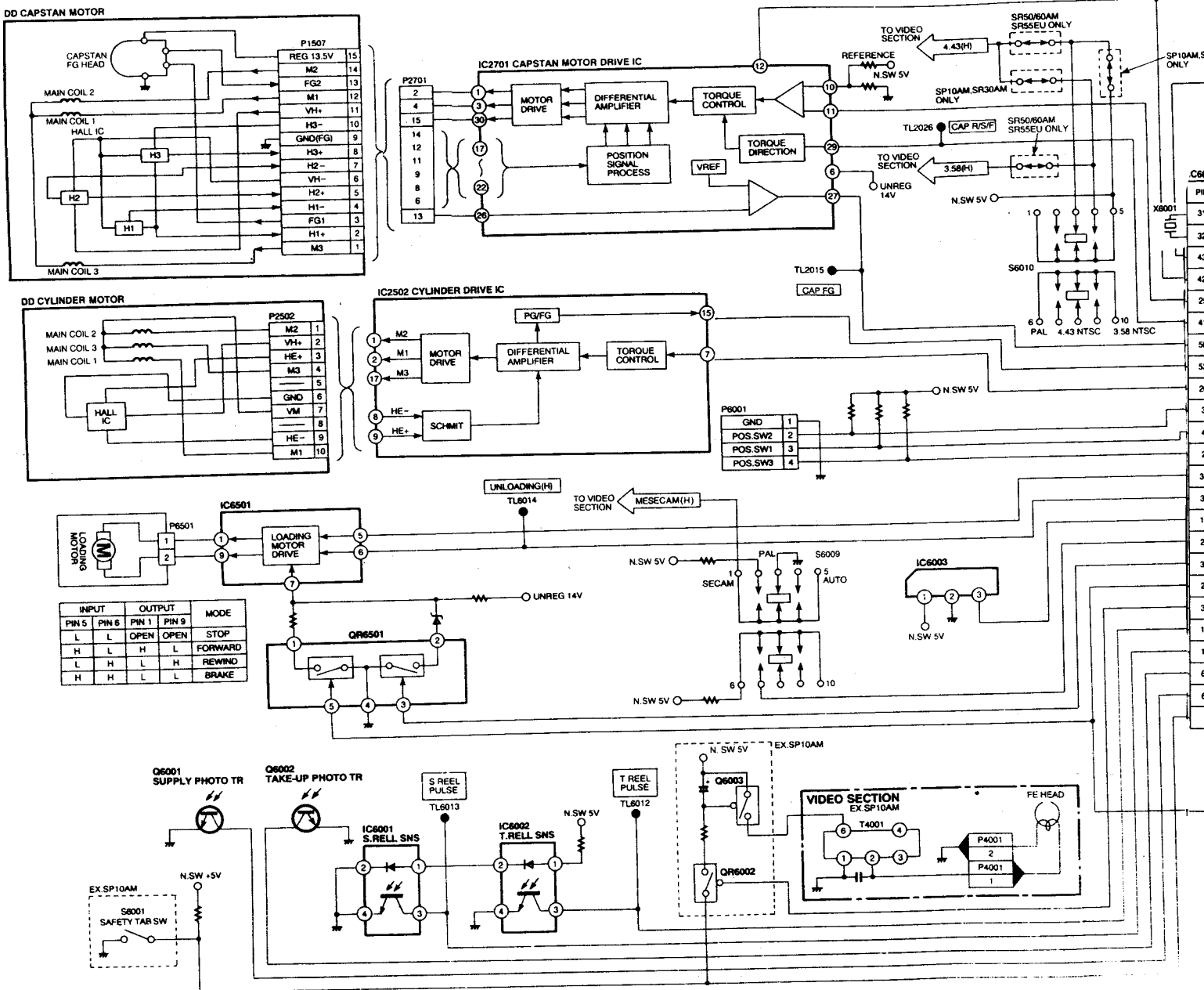


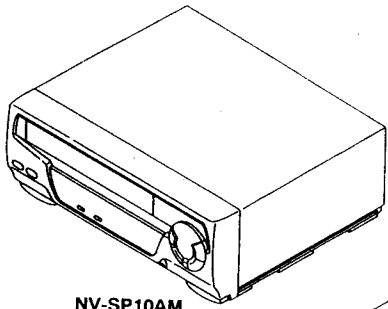
Video Cassette Recorder
Panasonic VHS HQ
PAL / NTSC
NV-SP10AM
NV-SR55EU
NV-SR30/50/60AM
K-MECHANISM



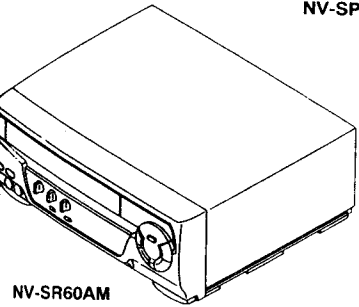
NV-SR60AM

SYSTEM CONTROL & SERVO SECTION BLOCK DIAGRAM

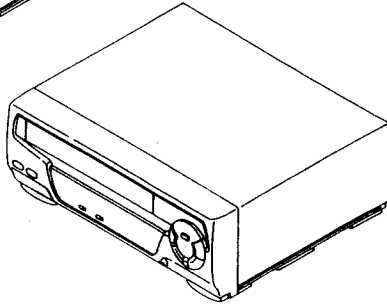




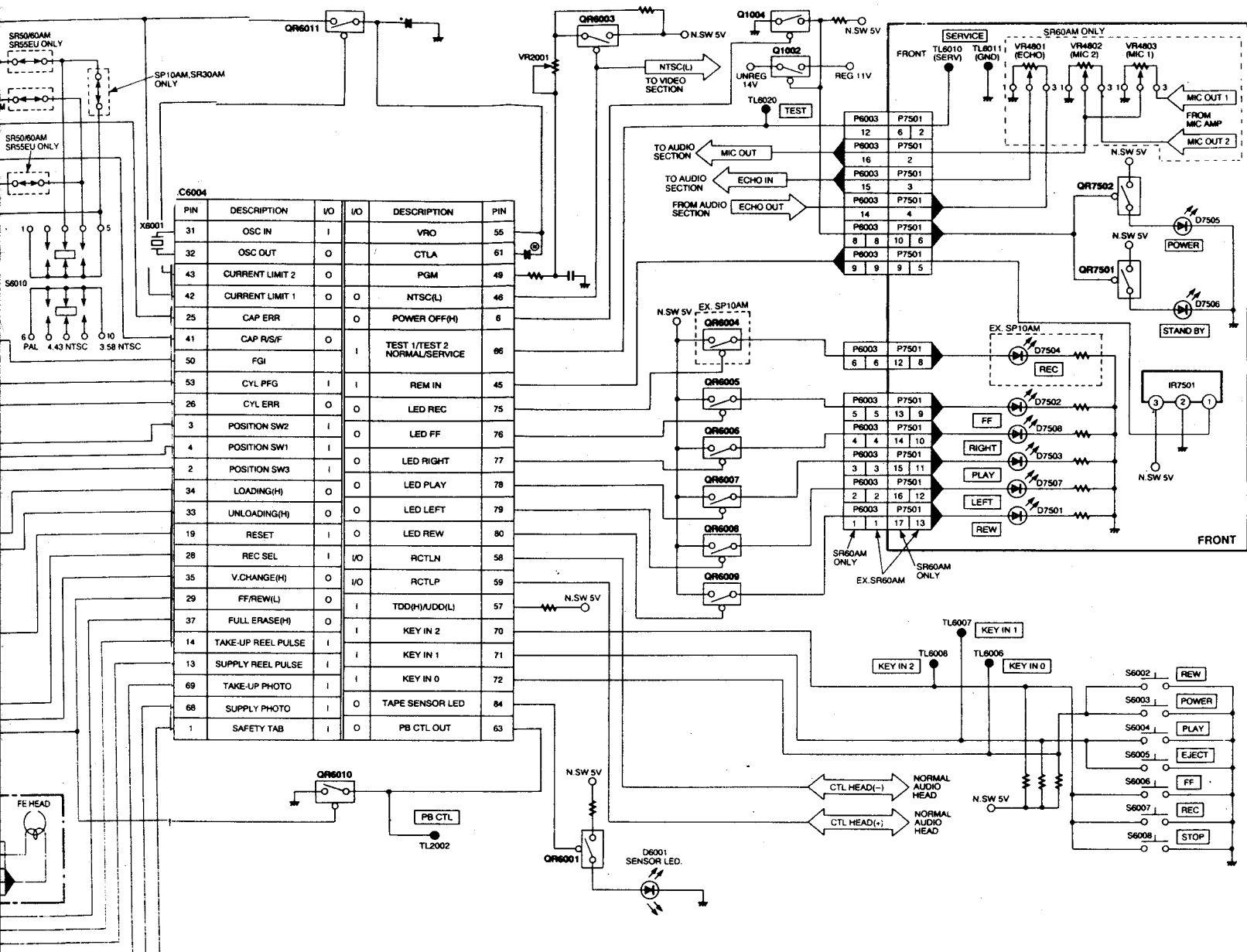
NV-SP10AM



NV-SR60AM

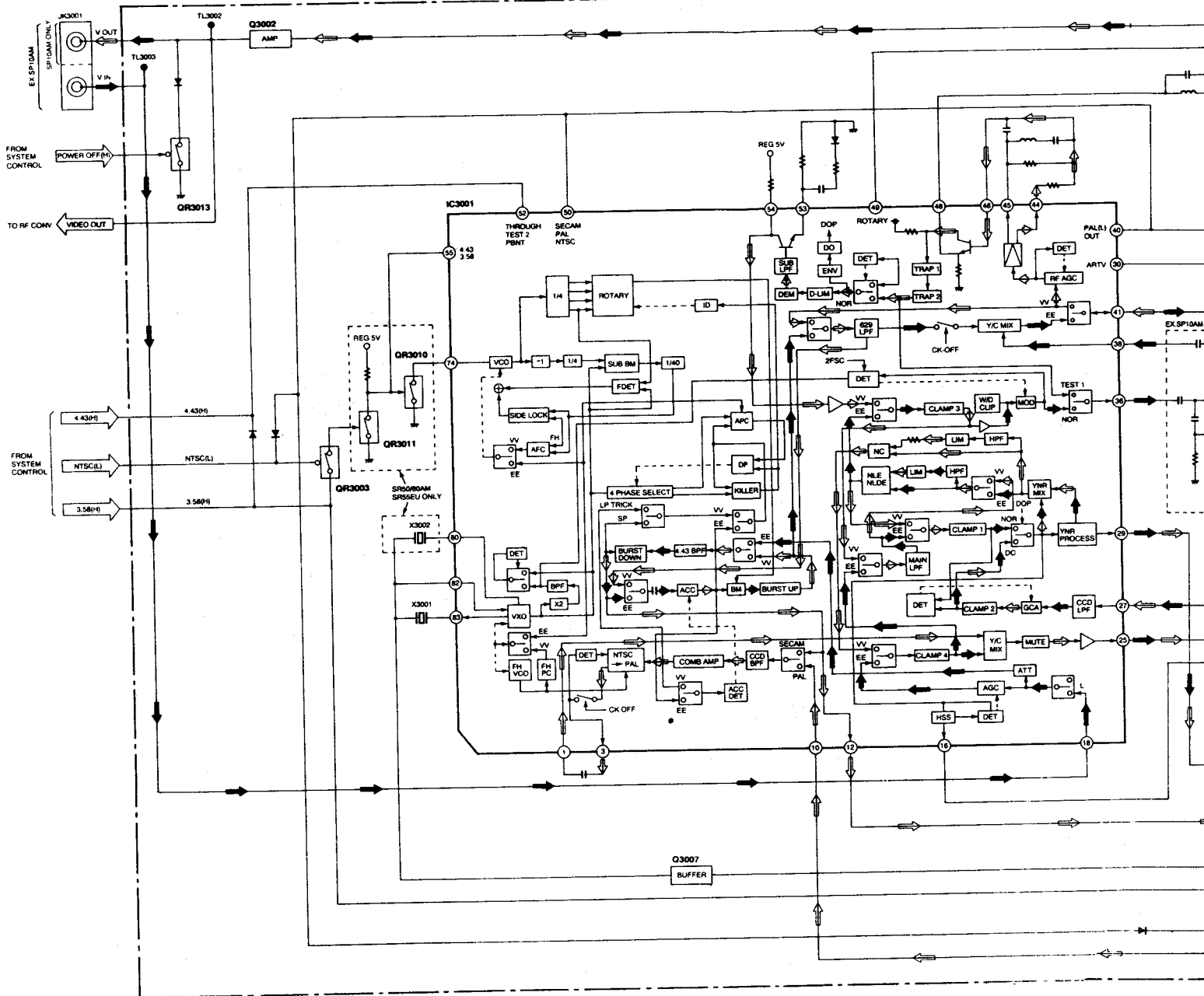


NV-SR30/50AM, SR55EU



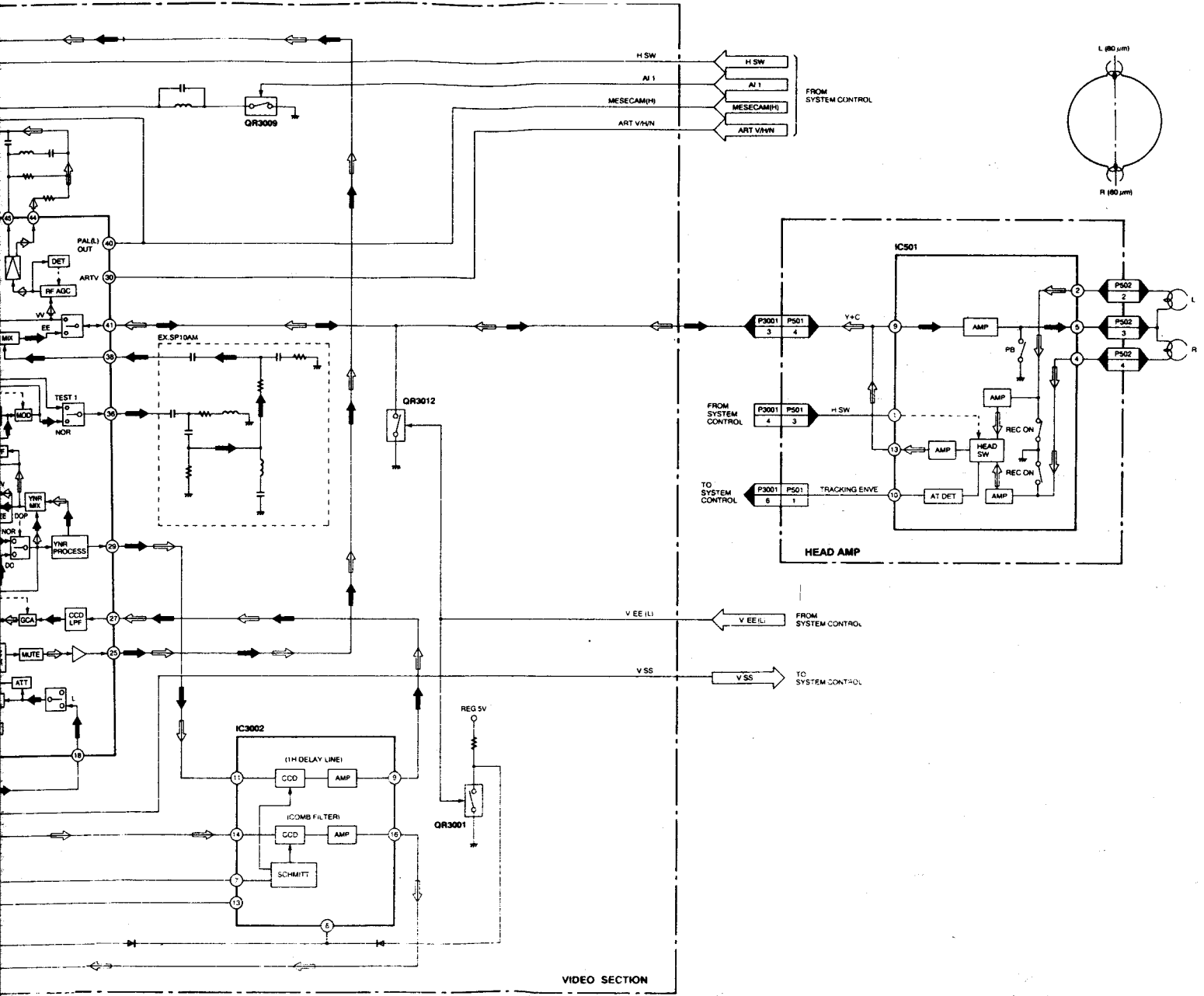
3-4. VIDEO SECTION BLOCK DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE

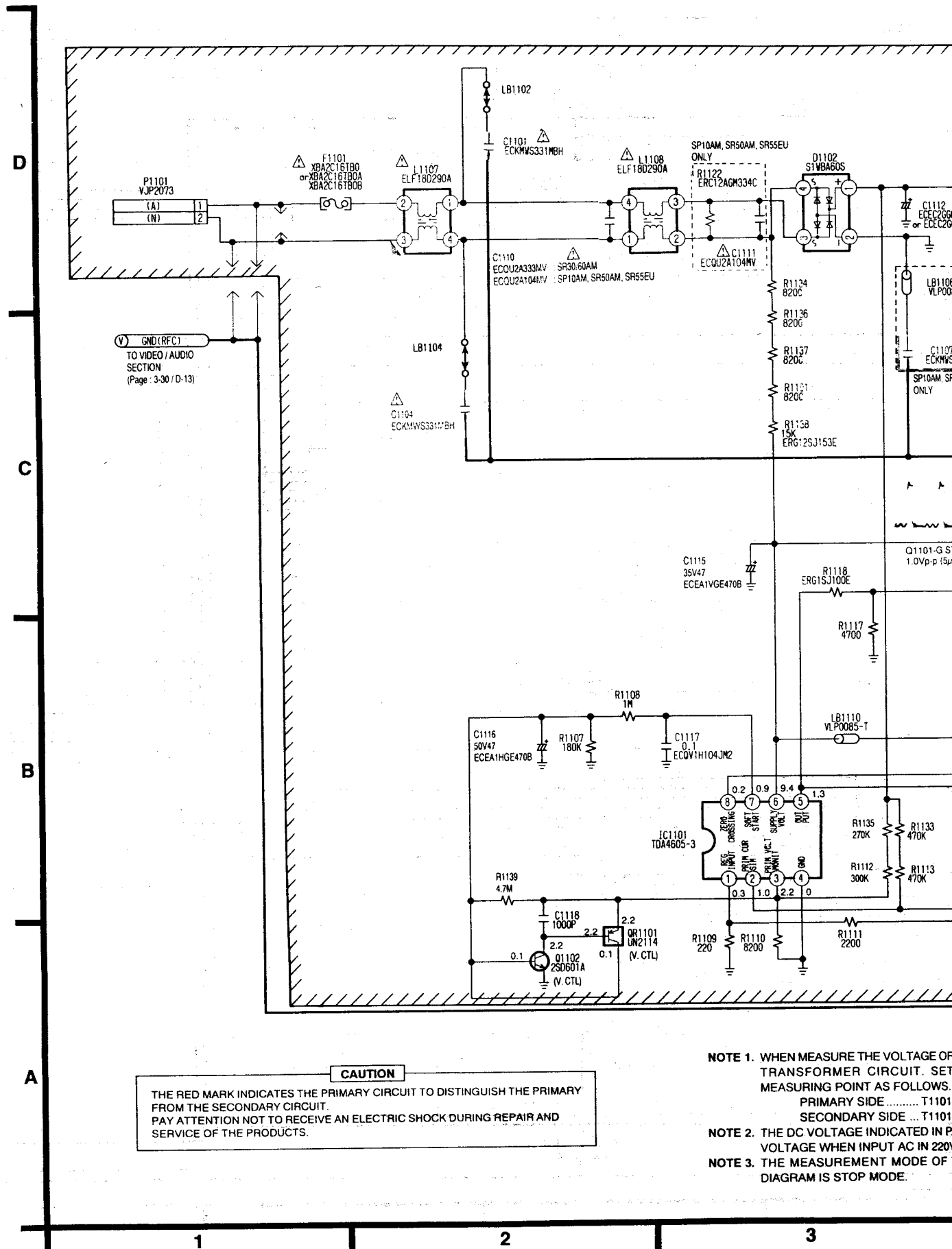


IN REC MODE

← VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE



POWER SECTION IN MAIN SCHEMATIC DIAGRAM

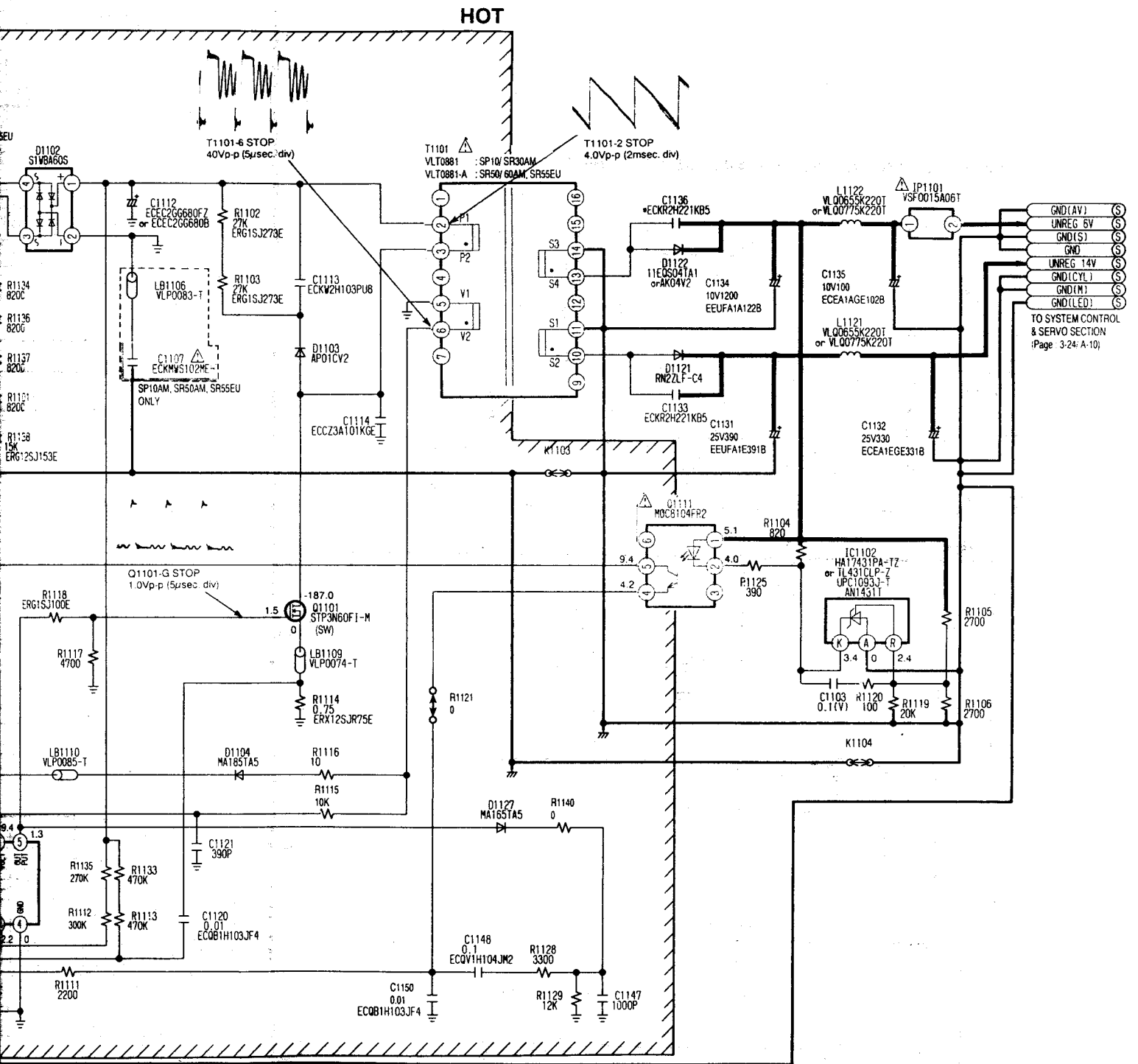


(V) GND(RFC)
TO VIDEO / AUDIO
SECTION
(Page : 3-30 / D-13)

CAUTION

THE RED MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

- NOTE 1. WHEN MEASURE THE VOLTAGE OF TRANSFORMER CIRCUIT. SET MEASURING POINT AS FOLLOWS.
PRIMARY SIDE T1101
SECONDARY SIDE ... T1101
- NOTE 2. THE DC VOLTAGE INDICATED IN P VOLTAGE WHEN INPUT AC IN 220V
- NOTE 3. THE MEASUREMENT MODE OF DIAGRAM IS STOP MODE.



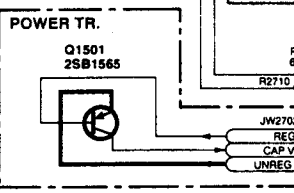
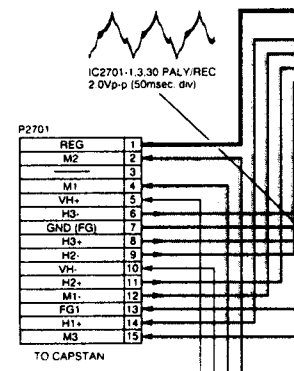
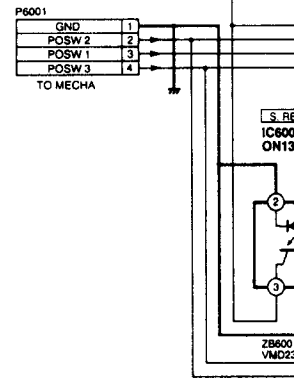
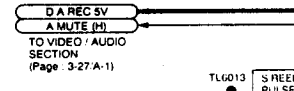
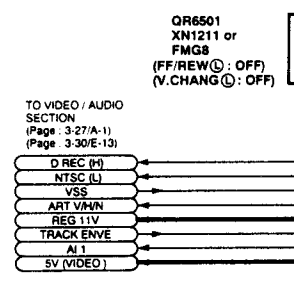
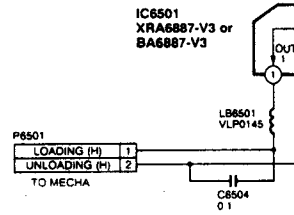
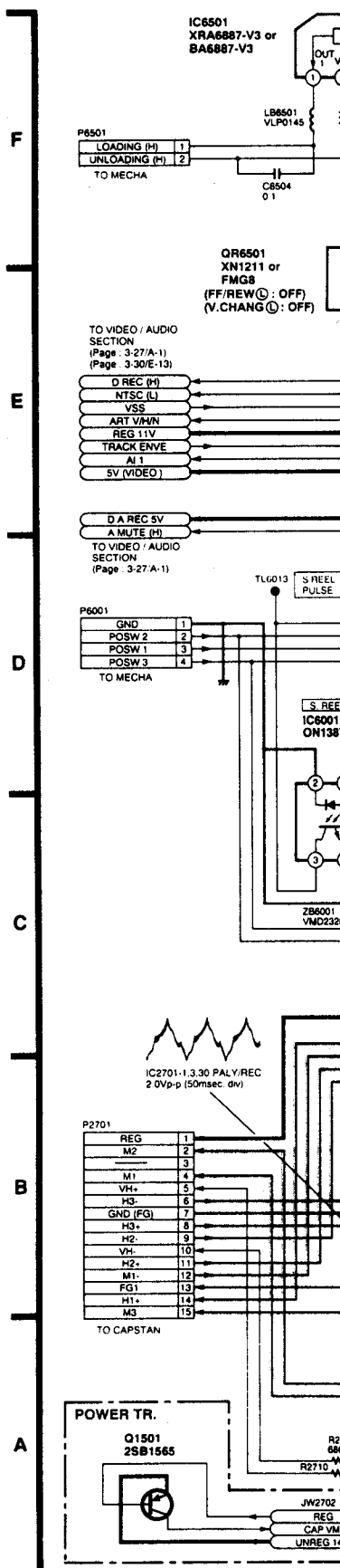
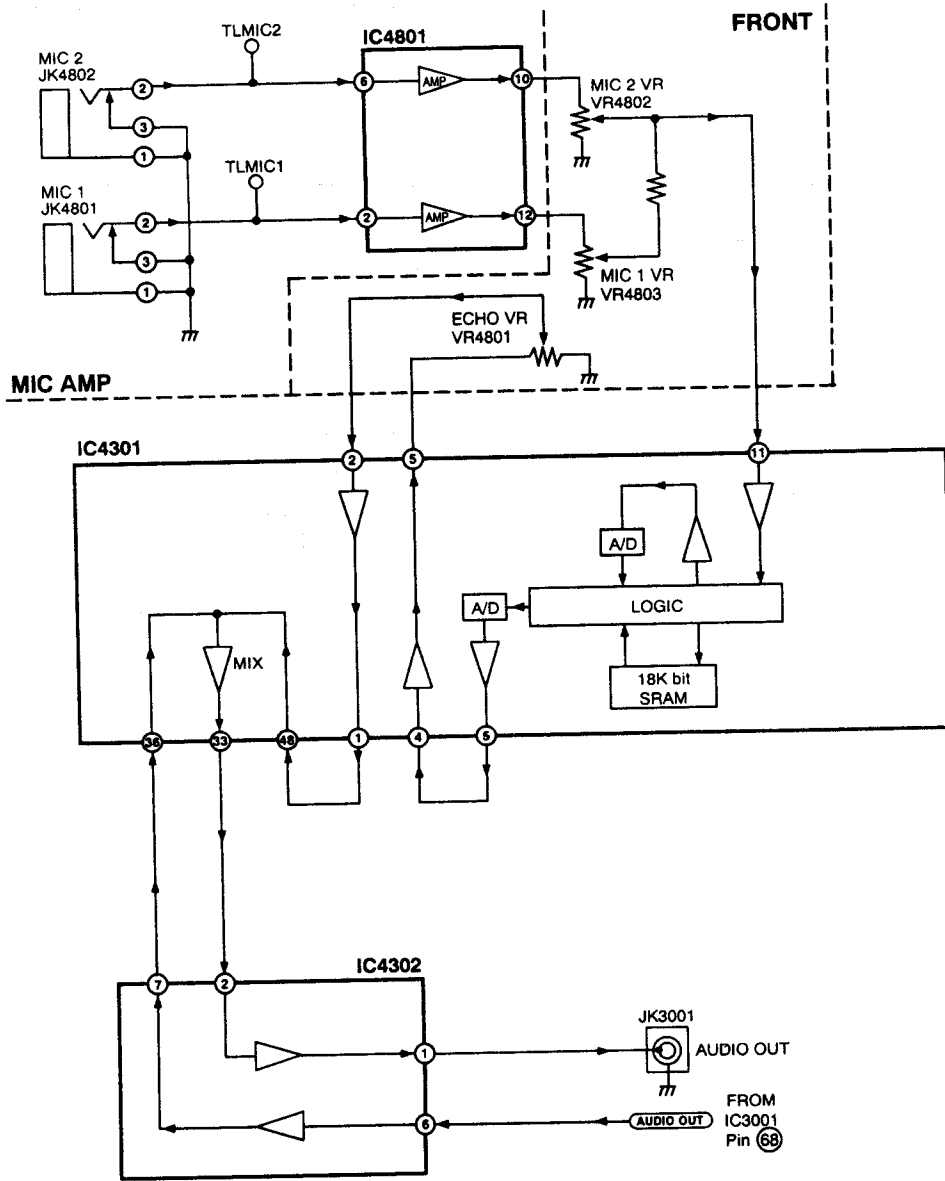
MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT. SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.

PRIMARY SIDE T1101-(5)
 SECONDARY SIDE ... T1101-(11) or (14)
 DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IN 220V.
 MEASUREMENT MODE OF THE DC VOLTAGE ON THIS SCHEMATIC IS STOP MODE.

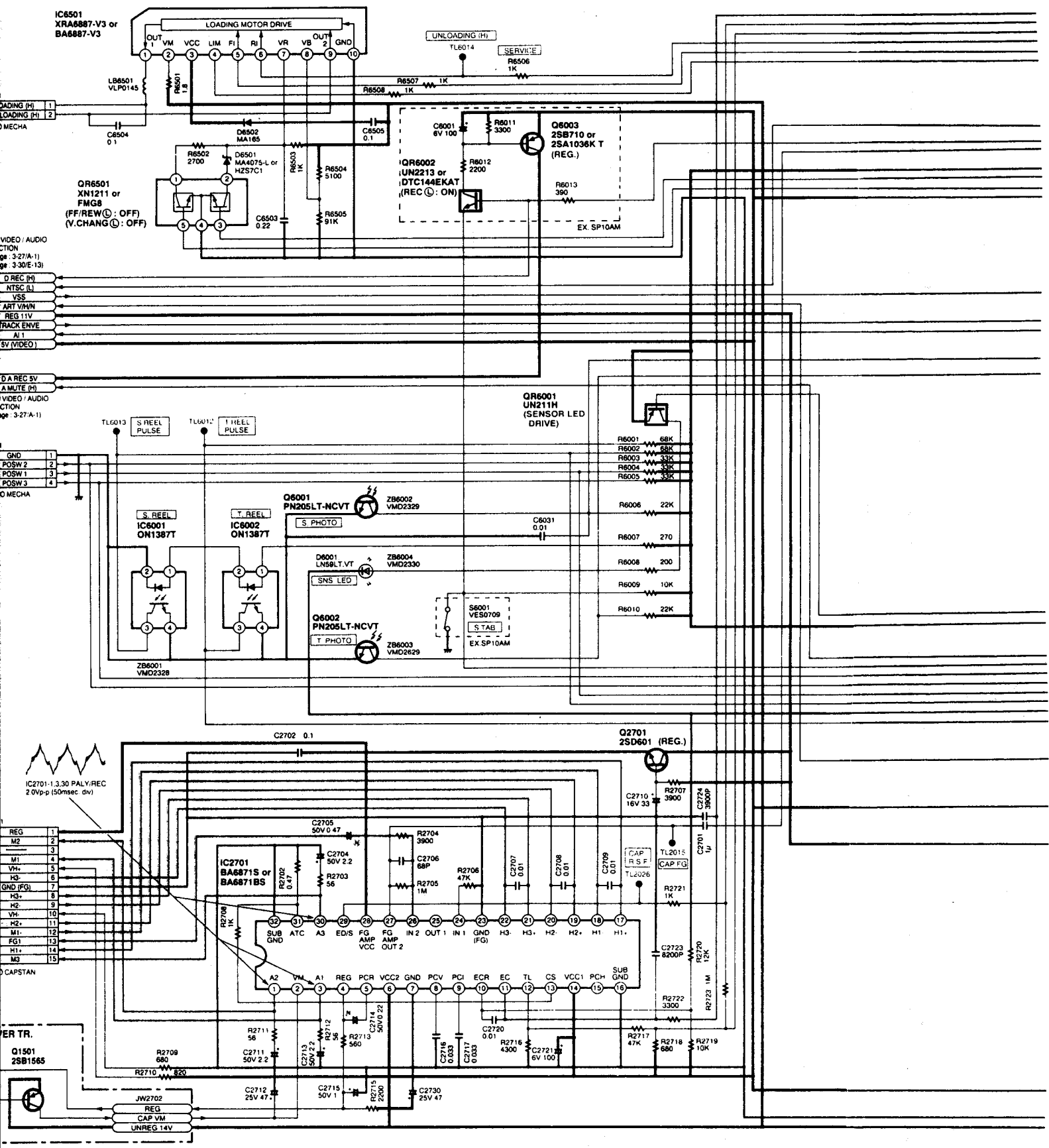
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.
 WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

IMPORTANT SAFETY NOTICE :
 COMPONENTS IDENTIFIED WITH THE MARK Δ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
 WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

KARAOKE SECTION BLOCK DIAGRAM (NV-SR60AM ONLY)

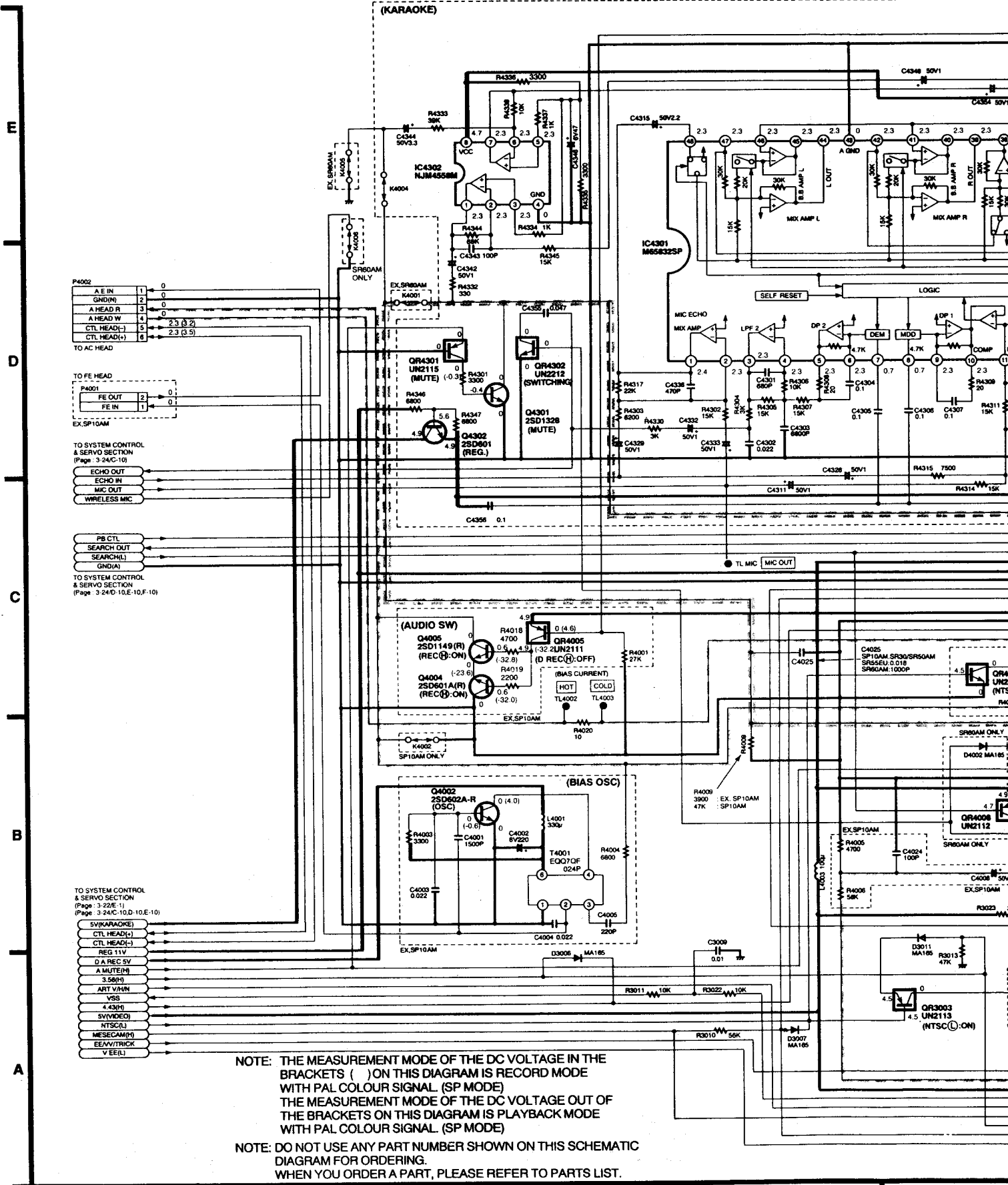


SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC DIAGRAM



VIDEO / AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM

VIDEO



P4002

A/E IN	1	0
GNDIN	2	0
A HEAD R	3	0
A HEAD W	4	0
CTL HEAD(-)	5	2.3 (3.2)
CTL HEAD(+)	6	2.3 (0.5)

TO AC HEAD

TO FE HEAD

P4001

FE OUT	2	0
FE IN	1	0

EX.SP10AM

TO SYSTEM CONTROL & SERVO SECTION
(Page 3-24C-10)

ECHO OUT	0
ECHO IN	0
MIC OUT	0
WIRELESS MIC	0

TO SYSTEM CONTROL & SERVO SECTION
(Page 3-24D-10,E-10,F-10)

PB CTL	0
SEARCH OUT	0
SEARCH IN	0
GNDIA	0

TO SYSTEM CONTROL & SERVO SECTION
(Page 3-22E-1)
(Page 3-24C-10,D-10,E-10)

SV(KARAOKE)	0
CTL HEAD(+)	0
CTL HEAD(-)	0
REG.11V	0
D/A REC SV	0
A MUTE(H)	0
3.58(H)	0
ART V/M/N	0
VSS	0
4.43(V)	0
SV(VIDEO)	0
NTSC(L)	0
MESECAM(H)	0
EEAV/TRICK	0
V EE(L)	0

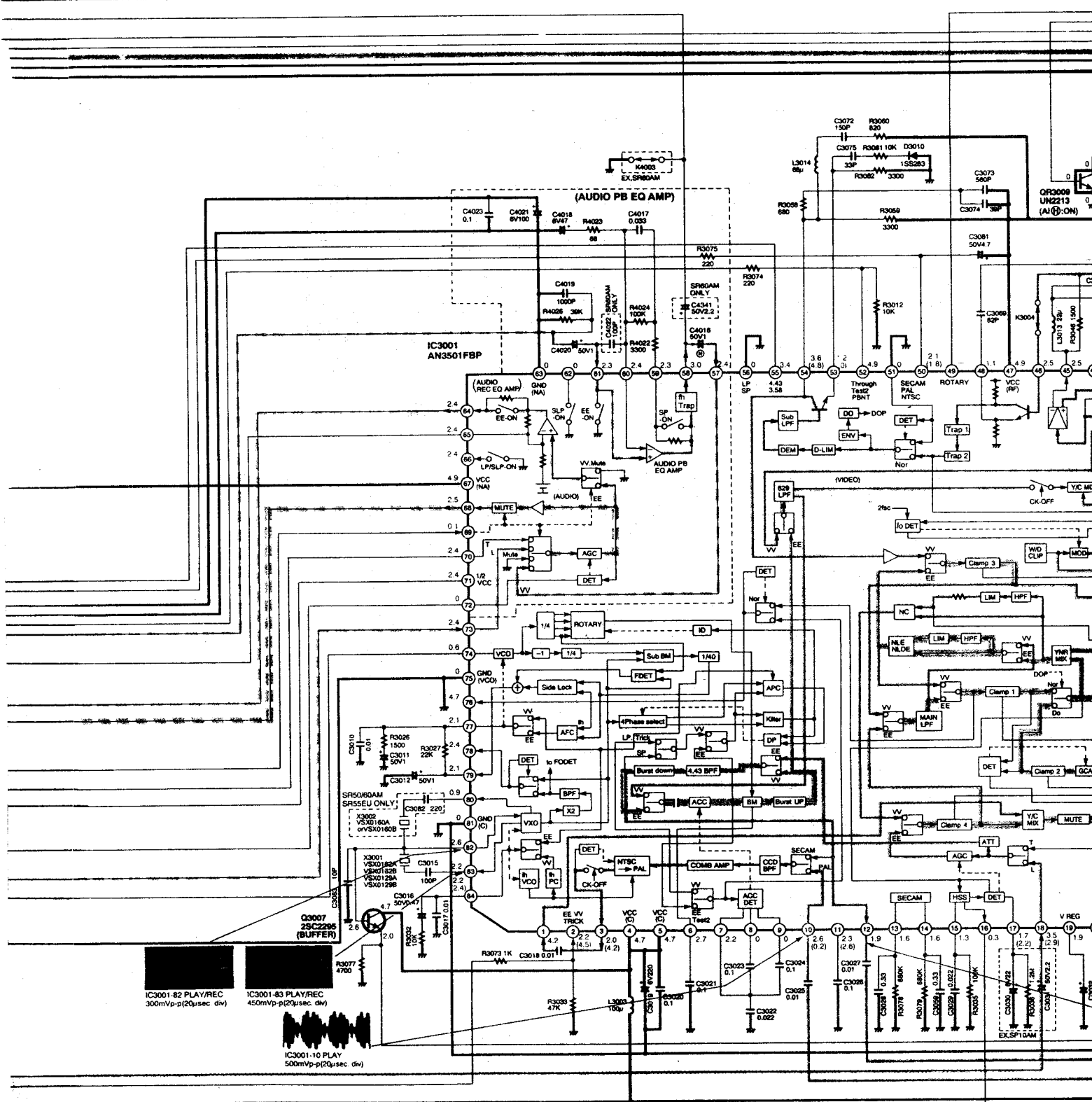
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS () ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.
WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

1 2 3

----- AUDIO MAIN SIGNAL PATH IN REC MODE

----- AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



IC3001-82 PLAY/REC
300mVp-p(20µsec div)

IC3001-83 PLAY/REC
450mVp-p(20µsec div)

IC3001-10 PLAY
500mVp-p(20µsec div)

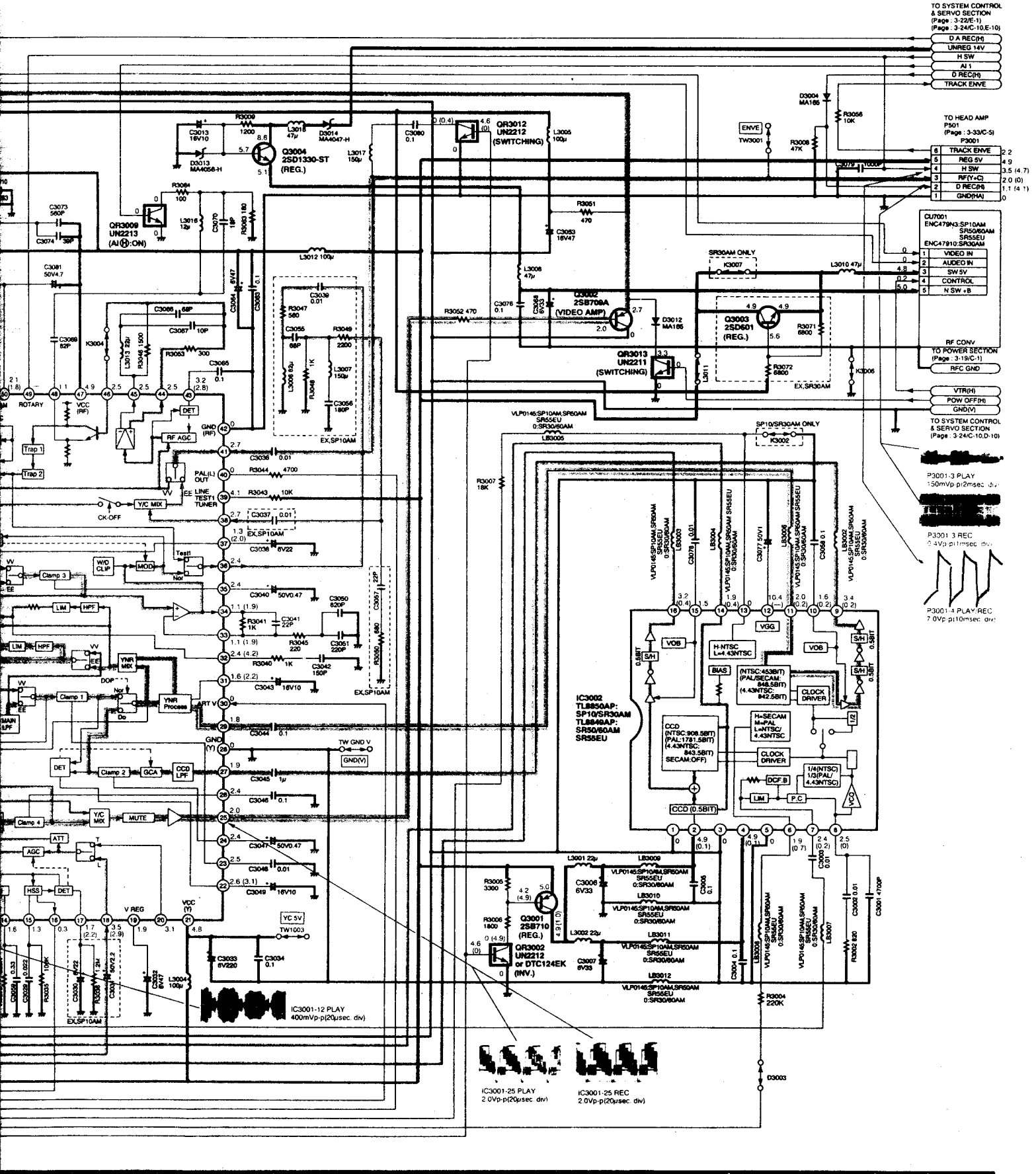
7

8

9

10

PLAYBACK MODE



TO SYSTEM CONTROL & SERVO SECTION
(Page 3-22E-1)
(Page 3-24C-10E-10)

D A REC(H)
UNREG 14V
H SW
A I
D REC(H)
TRACK ENVE

TO HEAD AMP P501 (Page 3-33C-5) P3001

6 TRACK ENVE 2.2
5 REG 5V 4.9
4 H SW 3.5 (4.7)
3 RF(Y+C) 2.0 (0)
2 D REC(H) 1.1 (4.1)
1 GND(H) 0

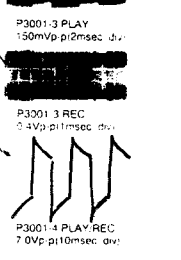
CL7001 ENC479N3:SP10AM SR5060AM SR55U ENC47910:SP30AM

1 VIDEO IN 0
2 AUDED IN 4.8
3 SW 5V 3.5 (4.7)
4 CONTROL 2.0 (0)
5 N SW + B 5.0

RF CONV TO POWER SECTION (Page 3-19C-1) RFC GND

VTR(H) POW OFF(H) GND(V)

TO SYSTEM CONTROL & SERVO SECTION (Page 3-24C-10D-10)



IC3001-12 PLAY 400mVp-p/20sec. div

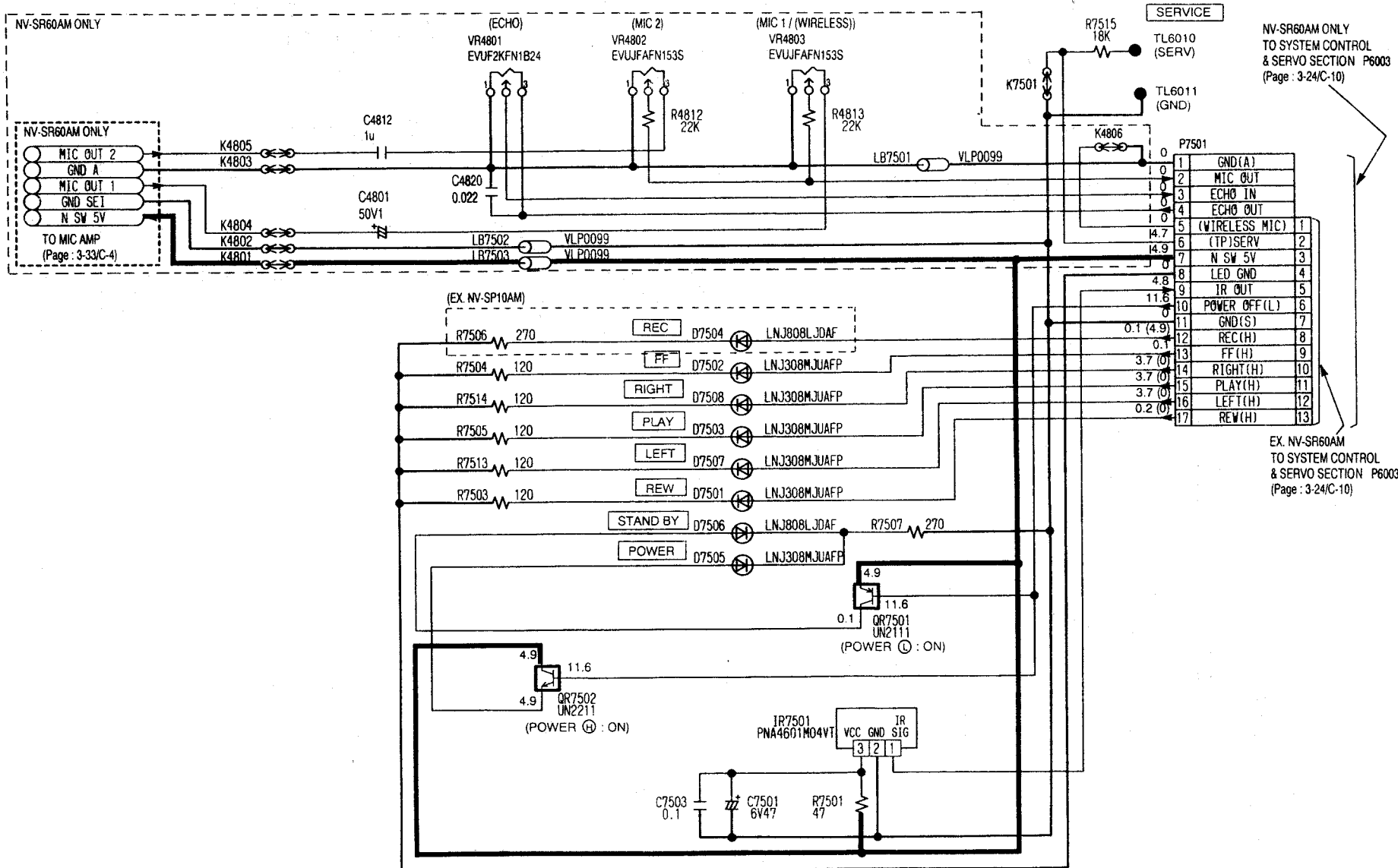
IC3001-25 PLAY 2.0Vp-p/20sec. div

IC3001-25 REC 2.0Vp-p/20sec. div

SYSTEM CONTROL & SERVO SECTION ICs DC VOLTAGE

REF NO.	IC2502																																																											
PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18																																										
STOP	14.5	14.5	0	0.1	0	2.4	4.0	0.6	0.4	1.0	4.9	4.1	4.1	3.7	4.9	14.5	14.5	0																																										
PLAY	14.3	13.1	0	0.4	0	2.4	2.3	0.5	0.4	2.6	4.9	3.5	3.5	3.6	1.0	13.9	14.2	0																																										
REC	14.4	13.3	0	0.4	0	2.4	2.3	0.5	0.4	2.5	4.9	3.4	3.5	3.5	1.3	14.0	13.1	0																																										
FF	14.1	13.2	0	0.4	0	2.4	2.4	0.5	0.5	2.6	4.9	3.5	3.5	3.6	1.3	13.6	13.4	0																																										
REW	13.9	12.8	0	0.5	0	2.4	2.4	0.5	0.5	2.5	4.9	3.6	3.6	3.6	1.1	13.6	13.7	0																																										
REF NO.	IC2701																																																											
PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20																																								
STOP	1.8	4.4	1.8	13.8	1.1	14.5	0	0	0.4	2.8	0.7	0.3	0	5.0	1.4	0	2.2	2.2	2.2	2.2																																								
PLAY	2.3	4.4	2.3	13.0	1.6	13.9	0	0.5	0.6	2.8	2.5	0.3	0	5.0	1.3	0	2.2	2.2	2.2	2.2																																								
REC	2.3	4.4	2.3	13.0	1.6	13.9	0	0.5	0.6	2.8	2.5	0.3	0	5.0	1.3	0	2.2	2.2	2.2	2.2																																								
FF	3.7	13.6	7.3	4.9	11.7	13.6	0	0.7	0.7	2.8	1.9	0.3	0	5.0	1.4	0	2.2	2.3	2.2	2.2																																								
REW	3.3	13.7	6.8	6.2	11.8	13.7	0	0.6	0.7	2.8	2.1	0.3	0	5.0	1.4	0	2.2	2.2	2.2	2.2																																								
REF NO.	IC2701																																																											
PIN NO.	21	22	23	24	25	26	27	28	29	30	31	32																																																
STOP	2.2	2.2	0	0	9.5	5.2	5.1	10.2	2.4	1.8	0	0																																																
PLAY	2.2	2.2	0	0	9.6	—	5.1	10.2	0	2.3	0	0																																																
REC	2.2	2.2	0	0	9.6	—	5.2	10.2	0	2.1	0	0																																																
FF	2.2	2.2	0	0	9.6	5.1	5.2	10.1	0	5.8	0.2	0																																																
REW	2.2	2.2	0	0	9.5	5.1	5.1	10.1	4.7	7.4	0	0																																																
REF NO.	IC6001				IC6002				IC6003																																																			
PIN NO.	1	2	3	4	1	2	3	4	1	2	3																																																	
STOP	1.1	0	4.8	0	2.2	1.0	0	0	4.8	0	4.8																																																	
PLAY	1.0	0	4.7	0	2.2	1.0	4.7	0	4.7	0	4.7																																																	
REC	1.0	0	4.6	0	2.2	1.0	4.6	0	4.7	0	4.6																																																	
FF	1.1	0	4.1	0	2.2	1.1	2.6	0	4.7	0	4.7																																																	
REW	1.1	0	2.6	0	2.2	1.1	2.5	0	4.7	0	4.7																																																	
REF NO.	IC6004																																																											
PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20																																								
STOP	3.8	4.8	0	4.8	0	0	0	0	0	0	0	0	4.8	0	4.8	4.8	4.8	4.8	4.8	0																																								
PLAY	3.7	4.7	0	0	0	0	0	0	0	4.6	0	0	4.6	4.7	4.7	4.7	4.7	4.7	4.7	0																																								
REC	0	4.6	0	0	0	0	0	4.7	0	0	0	0	4.6	4.6	4.6	4.6	4.6	4.6	4.6	0																																								
FF	0	4.7	4.7	0	0.1	0	0	0	0	0	0	0	2.9	2.5	0	4.7	4.7	4.7	4.7	0																																								
REW	0	4.7	4.7	0	0.1	0	0	0	0	0	1.1	0	2.6	2.4	0	4.7	4.7	4.7	4.7	0																																								
REF NO.	IC6004																																																											
PIN NO.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40																																								
STOP	4.8	0	0	4.8	0.7	4.0	4.8	0	4.7	0	2.4	2.5	0	0	4.7	0	0	0	0	0																																								
PLAY	4.3	0	0	4.7	2.5	2.3	4.7	0	4.6	0	—	—	0	0	4.6	0	0	0	0	0																																								
REC	4.2	0	0	4.6	2.5	2.3	4.7	0	4.6	0	—	—	0	0	4.6	0	4.6	4.6	0	4.6																																								
FF	3.6	0	0	0.4	1.8	2.4	4.7	0	0	0	—	—	0	0	0	0	0	0	0	0																																								
REW	4.2	0	0	4.7	2.0	1.2	4.7	0	0	0	—	—	0	0	0	0	0	0	0	0																																								
REF NO.	IC6004																																																											
PIN NO.	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60																																								
STOP	2.4	4.7	4.1	4.8	4.8	4.8	4.8	0	4.8	2.3	4.8	0	4.9	2.3	2.4	2.4	4.8	2.3	2.3	4.8																																								
PLAY	0	4.6	4.0	2.2	4.8	4.7	4.7	0	3.3	2.3	4.7	0	1.0	2.3	2.3	2.3	4.7	2.3	2.3	4.7																																								
REC	0	4.6	4.0	4.6	4.8	4.6	4.6	0	3.3	2.3	4.6	0	1.1	2.3	2.3	2.3	4.6	2.7	3.5	4.6																																								
FF	0	4.7	4.1	4.7	4.9	4.7	4.7	0	3.4	2.3	4.7	0	1.1	2.3	2.3	2.3	4.7	2.3	2.3	4.7																																								
REW	4.7	4.7	4.1	4.7	4.9	4.7	4.7	0	3.3	2.3	4.7	0	1.1	2.3	2.3	2.3	4.7	2.3	2.3	4.7																																								

FRONT SCHEMATIC DIAGRAM



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS () ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
 THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NV-SR60AM ONLY
 TO SYSTEM CONTROL
 & SERVO SECTION P6003
 (Page : 3-24/C-10)

EX. NV-SR60AM
 TO SYSTEM CONTROL
 & SERVO SECTION P6003
 (Page : 3-24/C-10)

D
C
B
A

1 2 3 4 5 6

A B C A B C

