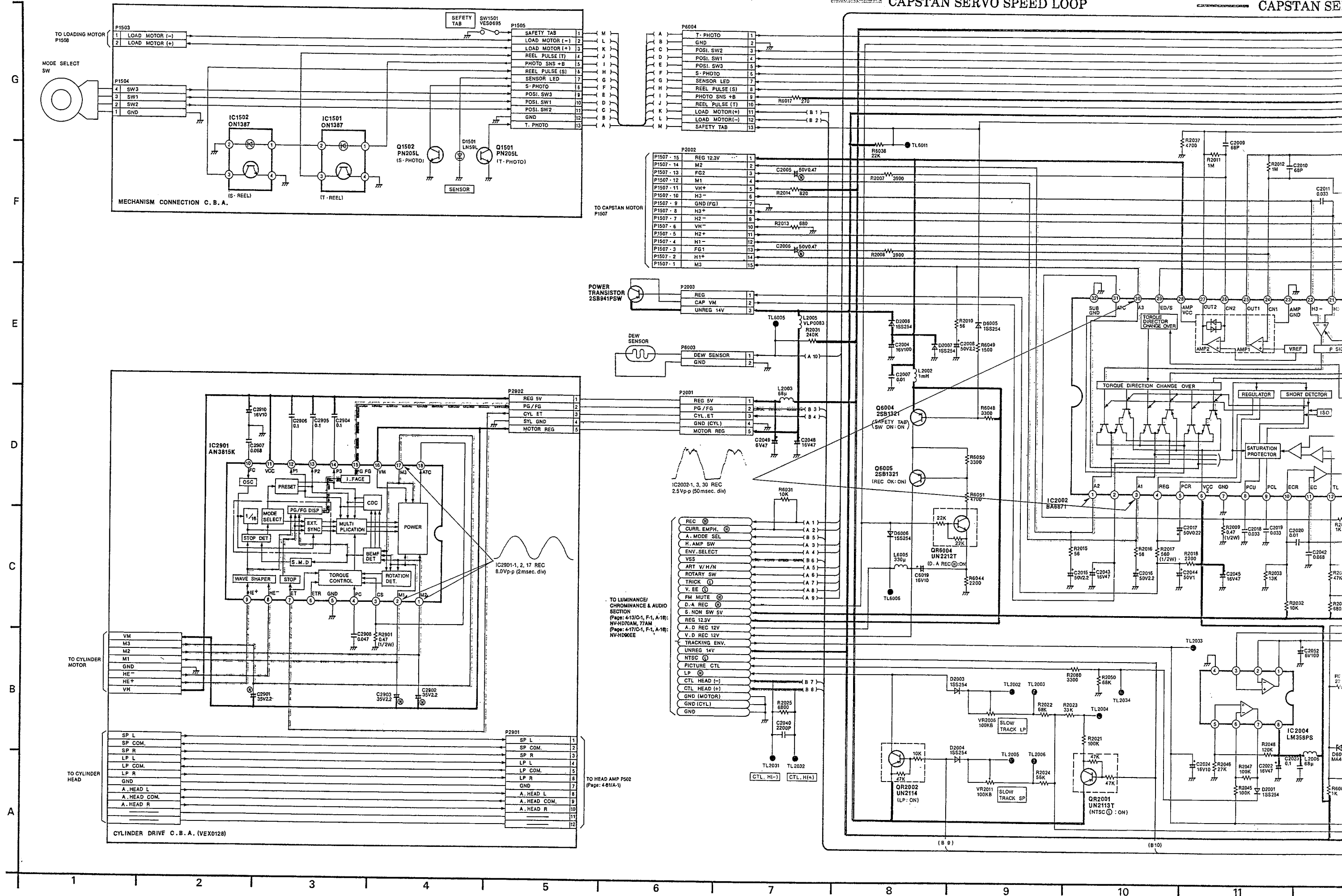


4-3. SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC DIAGRAM

POWER

SYSTEM CONTROL & SERVO SECTION

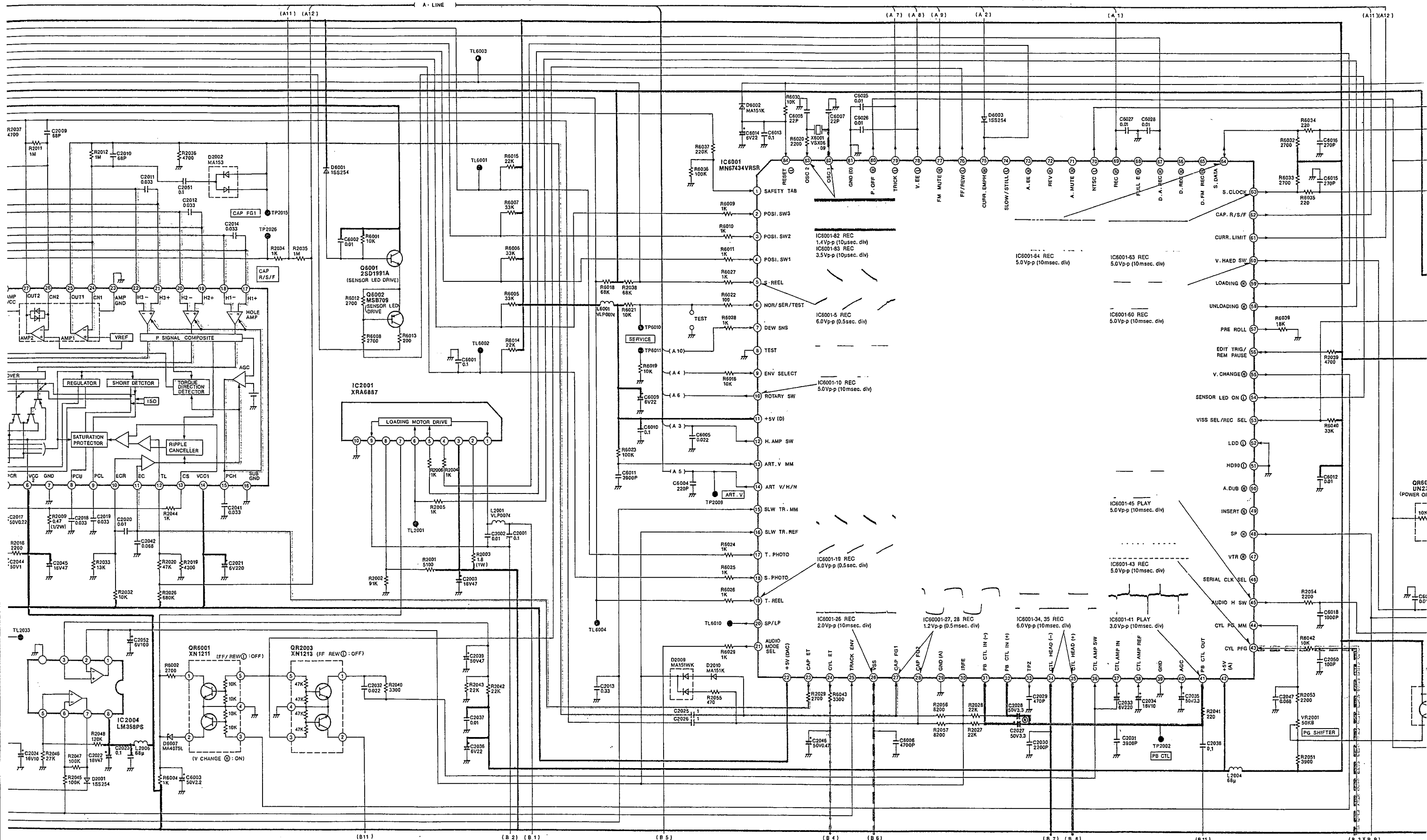
SYSTEM CONTROL & SERVO SECTION



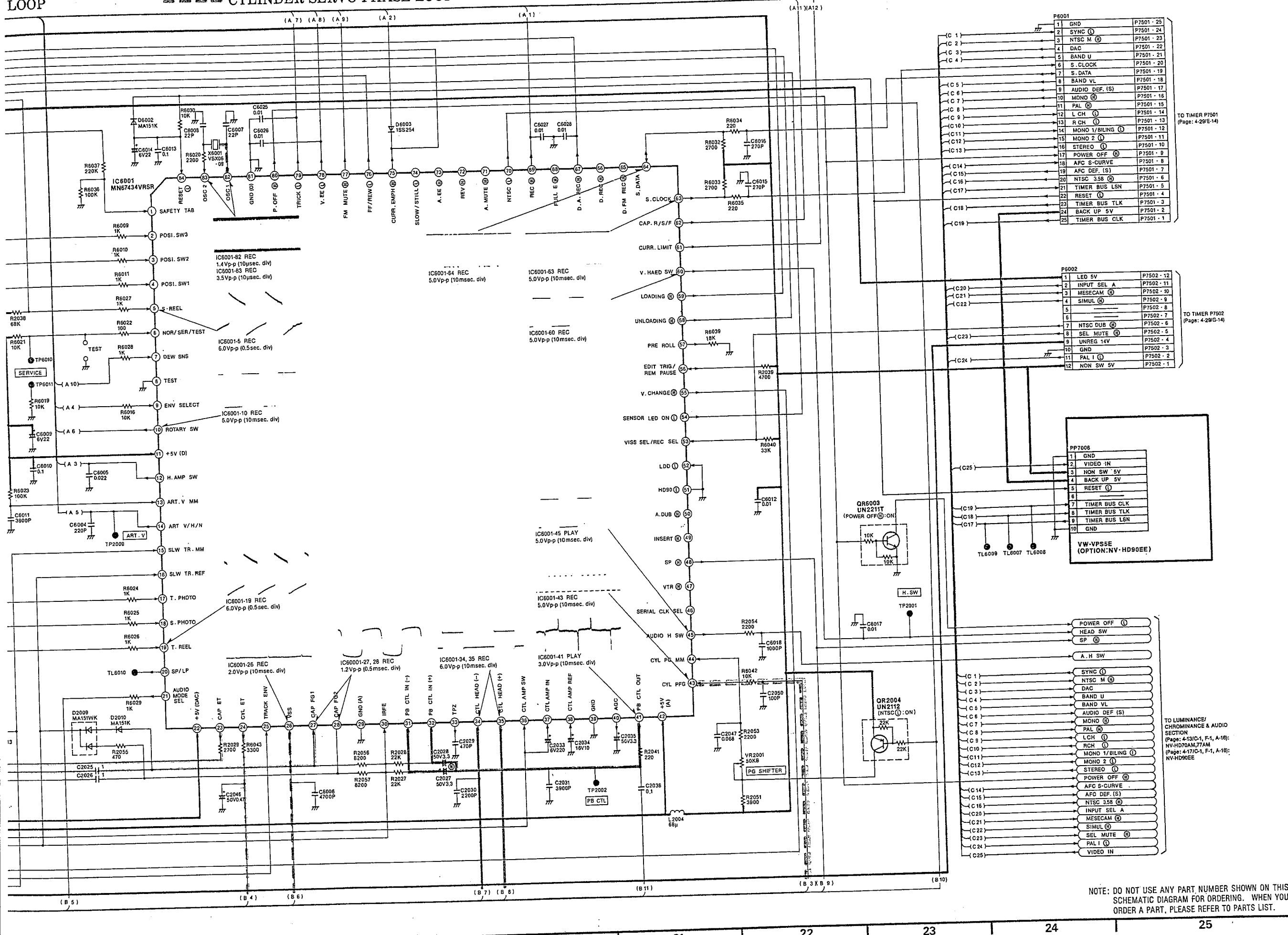
CAPSTAN SERVO PHASE LOOP

CYLINDER SERVO SPEED LOOP

CYLINDER SERVO PHASE LOOP



CYLINDER SERVO PHASE LOOP

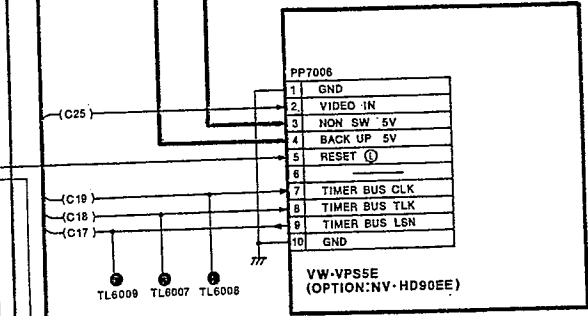


P6001		
1	GND	P7501 - 25
2	SYNC (S)	P7501 - 24
3	NTSC M (S)	P7501 - 23
4	DAC	P7501 - 22
5	BAND U	P7501 - 21
6	S. CLOCK	P7501 - 20
7	S. DATA	P7501 - 19
8	BAND VL	P7501 - 18
9	AUDIO DEF. (S)	P7501 - 17
10	MONO (S)	P7501 - 16
11	PAL (S)	P7501 - 15
12	L CH (S)	P7501 - 14
13	R CH (S)	P7501 - 13
14	MONO 1/BILING (S)	P7501 - 12
15	MONO 2 (S)	P7501 - 11
16	STEREO (S)	P7501 - 10
17	POWER OFF (S)	P7501 - 9
18	AFC S-CURVE	P7501 - 8
19	AFC DEF. (S)	P7501 - 7
20	NTSC 3.58 (S)	P7501 - 6
21	TIMER BUS LSN	P7501 - 5
22	RESET (S)	P7501 - 4
23	TIMER BUS TLK	P7501 - 3
24	BACK UP 5V	P7501 - 2
25	TIMER BUS CLK	P7501 - 1

TO TIMER P7501
(Page: 4-29/E-14)

P6002		
1	LED 5V	P7502 - 12
2	INPUT SEL A	P7502 - 11
3	MESECAM (S)	P7502 - 10
4	SIMUL (S)	P7502 - 9
5		P7502 - 8
6		P7502 - 7
7	NTSC DUB (S)	P7502 - 6
8	SEL MUTE (S)	P7502 - 5
9	UNREG 14V	P7502 - 4
10	GND	P7502 - 3
11	PAL 1 (S)	P7502 - 2
12	NON SW 5V	P7502 - 1

TO TIMER P7502
(Page: 4-28/G-14)



POWER OFF (S)	(C 1)
HEAD SW	(C 2)
SP (S)	(C 3)
A. H SW	(C 4)
SYNC (S)	(C 5)
NTSC M (S)	(C 6)
DAC	(C 7)
BAND U	(C 8)
BAND VL	(C 9)
AUDIO DEF. (S)	(C 10)
MONO (S)	(C 11)
LCH (S)	(C 12)
RCH (S)	(C 13)
MONO 1/BILING (S)	(C 14)
MONO 2 (S)	(C 15)
STEREO (S)	(C 16)
POWER OFF (S)	(C 17)
AFC S-CURVE	(C 18)
AFC DEF. (S)	(C 19)
NTSC 3.58 (S)	(C 20)
INPUT SEL A	(C 21)
MESECAM (S)	(C 22)
SIMUL (S)	(C 23)
SEL MUTE (S)	(C 24)
PAL 1 (S)	(C 25)
VIDEO IN	(C 25)

TO LUMINANCE/
CHROMINANCE & AUDIO
SECTION
(Page: 4-13/C-1, F-1, A-18);
NV-HD7AM, 77AM
(Page: 4-17/S-1, F-1, A-18);
NV-HD90EE

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

SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (SP MODE)

REF. NO.	IC2001																			
MODE	1	2	3	4	5	6	7	8	9	10										
STOP	1.8	15.2	15.2	0	0	0	7.4	9.9	4.7	0										
PLAY	1.6	14.8	14.8	0	0	0	7.4	9.8	0.3	0										
REC	4.2	14.8	14.8	0	0	0	7.4	9.8	2.4	0										
F.F	5.7	14.7	14.9	0	0	0	14.9	9.8	4.2	0										
REW	6.2	14.8	14.8	0	0	0	14.9	9.9	4.4	0										
REF. NO.	IC2002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.5	4.6	0.5	14.4	0.4	15.0	0	4.7	0.8	3.0	0.2	0.4	0.1	5.2	1.4	0	2.3	2.3	2.3	2.3
PLAY	2.9	4.6	2.8	13.8	2.1	14.9	0	1.3	0.8	3.0	2.7	0.5	0.1	5.2	1.4	0	2.3	2.4	2.4	2.4
REC	2.9	4.6	2.8	13.7	2.1	14.9	0	0.6	0.6	3.0	2.7	0.4	0.1	5.2	1.4	0	2.3	2.4	2.4	2.4
F.F	7.3	14.7	7.5	6.4	12.9	14.8	0	0.9	0.7	3.0	2.4	0.5	0.2	5.2	1.4	0	2.4	2.4	2.4	2.4
REW	7.3	14.8	7.3	12.5	12.9	14.9	0	0.6	0.7	3.0	2.7	0.4	0.1	5.2	1.4	0	2.3	2.3	2.3	2.3
REF. NO.	IC2002																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32								
STOP	2.3	2.3	0	5.8	6.0	6.1	6.0	11.8	2.1	0.5	0	0								
PLAY	2.4	2.4	0	3.6	6.0	6.1	6.1	11.8	0.1	2.9	0.1	0								
REC	2.4	2.3	0	6.1	6.0	6.1	6.1	11.8	0	2.9	0.1	0								
F.F	2.4	2.4	0	6.1	6.0	6.1	6.1	11.8	0	6.6	0.1	0								
REW	2.3	2.3	0	6.1	6.0	6.1	6.1	11.8	5.2	7.8	0.1	0								
REF. NO.	IC2004																			
MODE	1	2	3	4	5	6	7	8												
STOP	2.6	2.6	2.6	0	2.7	2.8	3.8	12.2												
PLAY	2.6	2.6	2.6	0	2.7	2.8	2.2	12.2												
REC	2.6	2.6	2.6	0	2.8	2.8	4.7	12.1												
F.F	2.6	2.6	2.6	0	2.8	2.8	3.5	12.2												
REW	2.6	2.6	2.6	0	2.8	2.8	2.6	12.2												
REF. NO.	IC2901																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP	14.3	14.3	0.1	1.1	0	2.5	2.5	2.6	2.5	2.7	5.1	3.8	3.8	3.8	1.3	15.0	14.3	0.1		
PLAY	14.5	15.1	0.1	1.1	0	2.6	2.5	2.6	2.5	2.7	5.1	3.8	3.7	3.9	1.4	14.9	14.6	0.1		
REC	14.9	14.9	0.1	1.0	0	2.6	2.5	2.6	2.5	2.7	5.1	4.8	3.8	3.8	1.1	14.8	14.5	6.0		
F.F	14.8	15.1	0.1	1.1	0	0	2.5	2.6	2.5	2.7	5.1	3.8	3.7	3.9	1.1	14.8	15.0	0.1		
REW	14.6	14.5	0.1	1.1	0	2.6	2.5	2.6	2.5	2.7	5.1	3.8	3.7	3.8	1.1	14.8	14.9	0.1		
REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.4	4.8	0	0	0.1	5.1	0	0	3.7	4.9	5.2	0	0	0	0	2.6	4.9	5.0	4.8	0
PLAY	0.5	5.0	0	0	4.5	5.1	0	0	3.8	5.2	5.2	0	0	0	0	2.6	4.8	4.9	4.4	0
REC	0	5.1	0	0	0.1	5.1	0	0	4.3	5.1	5.2	0	0	0	0	2.6	5.1	5.1	5.1	0
F.F	0.4	4.9	4.6	0	1.7	4.8	0	0	3.6	5.2	5.2	0	0	0	0	2.6	4.8	4.8	1.8	0
REW	0.6	4.4	4.6	0	1.8	4.9	0	0	2.9	3.8	5.2	0	0	0	0	2.6	4.7	4.7	2.4	0
REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	5.2	5.2	0.2	2.5	1.9	2.9	2.8	2.6	0	2.6	2.4	2.7	5.0	0	0	0	2.6	2.6	0	2.6
PLAY	5.2	5.2	2.7	2.5	3.3	2.6	2.6	2.6	0	2.6	2.5	2.7	2.8	0	0	0	2.6	2.6	0	2.9
REC	5.2	5.2	2.7	2.5	0.8	2.5	2.5	2.5	0	2.6	2.4	2.7	5.1	3.7	3.8	0	2.6	2.5	0	2.5
F.F	5.2	5.2	2.7	2.5	2.6	2.8	2.7	2.7	0	2.6	2.5	2.7	4.8	0	0	0	2.6	2.6	0	3.1
REW	5.2	5.2	2.7	2.5	1.4	2.6	2.6	2.6	0	2.6	2.5	2.7	4.8	0	0	0	2.5	2.5	0	3.1
REF. NO.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	2.5	5.1	1.6	3.3	0	4.4	0	5.1	0	0	0	0	4.8	5.2	5.1	5.1	0.3	0	0	4.1
PLAY	2.6	5.1	1.3	3.6	3.8	3.8	0	5.1	0	0	0	0	4.7	0.1	5.1	5.1	0.5	0	0	5.2
REC	2.6	5.1	1.2	3.7	0	4.6	0	5.1	0	0	0	0	5.1	0	5.1	5.2	0	0	0	5.2
F.F	2.6	5.1	1.3	3.2	0	4.5	0	5.1	0	0	0	0	4.4	0.1	0	5.0	0.7	0	0	5.2
REW	2.6	5.1	2.0	3.1	0	4.7	0	5.1	0	0	0	0	4.2	0.1	0	5.0	0.7	0	0	4.4
REF. NO.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	5.1	2.1	4.6	4.4	0	0	0	0	0.1	5.1	0	5.2	5.2	0	0	5.1	0	0	5.1	0.1
PLAY	5.1	0	4.5	4.5	0	0	0	0	0.1	5.1	0	0	0	0	0	5.0	0	4.8	5.1	0.1
REC	5.1	0	4.6	4.7	5.2	5.2	5.1	5.2	5.2	5.1	0	0	5.2	0	0	5.1	0	0	5.1	0.1
F.F	5.1	1.7	4.7	4.7	0	0	0	0	0.1	5.2	0	0	5.2	0	0	0	0	0	5.2	0.1
REW	5.1	5.2	4.6	4.5	0	0	0	0	0.1	5.2	0	5.2	5.2	0	0	0	0	1.0	5.2	0.1
REF. NO.	IC6001																			
MODE	81	82	83	84																
STOP	0	2.5	2.6	4.8																
PLAY	0	2.3	2.6	4.8																
REC	0	2.4	2.6	4.9																
F.F	0	2.4	2.6	4.8																
REW	0	2.4	2.6	4.8																

VOLTAGE CHART

SYSTEM CONTROL & SERVO TRANSISTORS DC VOLTAGE CHART (SP MODE)

REF. NO.	Q1503			Q6001			Q6002			Q6004			Q6005					
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B			
STOP	15.1	4.6	14.5	5.2	15.0	5.7	5.2	0.2	5.2	12.2	12.2	11.5	12.2	0.2	12.2			
PLAY	14.9	4.6	14.2	5.1	14.9	5.7	5.1	5.1	4.4	12.2	12.2	11.4	12.2	0.2	12.2			
REC	14.8	4.6	14.2	5.1	14.8	5.7	5.1	5.1	4.3	12.1	12.0	11.4	12.0	11.8	11.3			
F.F	14.9	14.8	14.1	5.1	14.8	5.7	5.1	5.1	4.3	12.2	12.2	11.4	12.2	0.2	12.1			
REW	14.8	13.4	14.1	5.1	14.8	5.7	5.1	5.0	4.3	12.2	12.2	11.4	12.2	0.2	12.2			
REF. NO.	QR2002			QR2003					QR6001					QR6003				
MODE	E	C	B	1	2	3	4	5		1	2	3	4	5		E	C	B
STOP	5.2	0.3	5.1	0	0	5.1	0	5.1		0	0	5.1	0	5.1		0	12.8	0.1
PLAY	5.2	0.3	5.1	0	0	5.1	0	5.1		0	0	5.1	0	5.1		0	12.8	0.1
REC	5.2	0.3	5.1	0	0	5.1	0	5.1		0	0	5.1	0	5.1		0	12.8	0.1
F.F	5.2	0.3	5.1	0	0.7	0	0	0		14.8	10.6	0	0	0		0	12.8	0.1
REW	5.2	0.3	5.1	0	1.7	0	0	0		14.8	10.4	0	0	0		0	12.8	0.1
REF. NO.	QR6004																	
MODE	E	C	B															
STOP	0	11.7	0															
PLAY	0	12.1	0															
REC	3.6	3.8	5.1															
F.F	0.8	12.1	0															
REW	0	12.1	0															