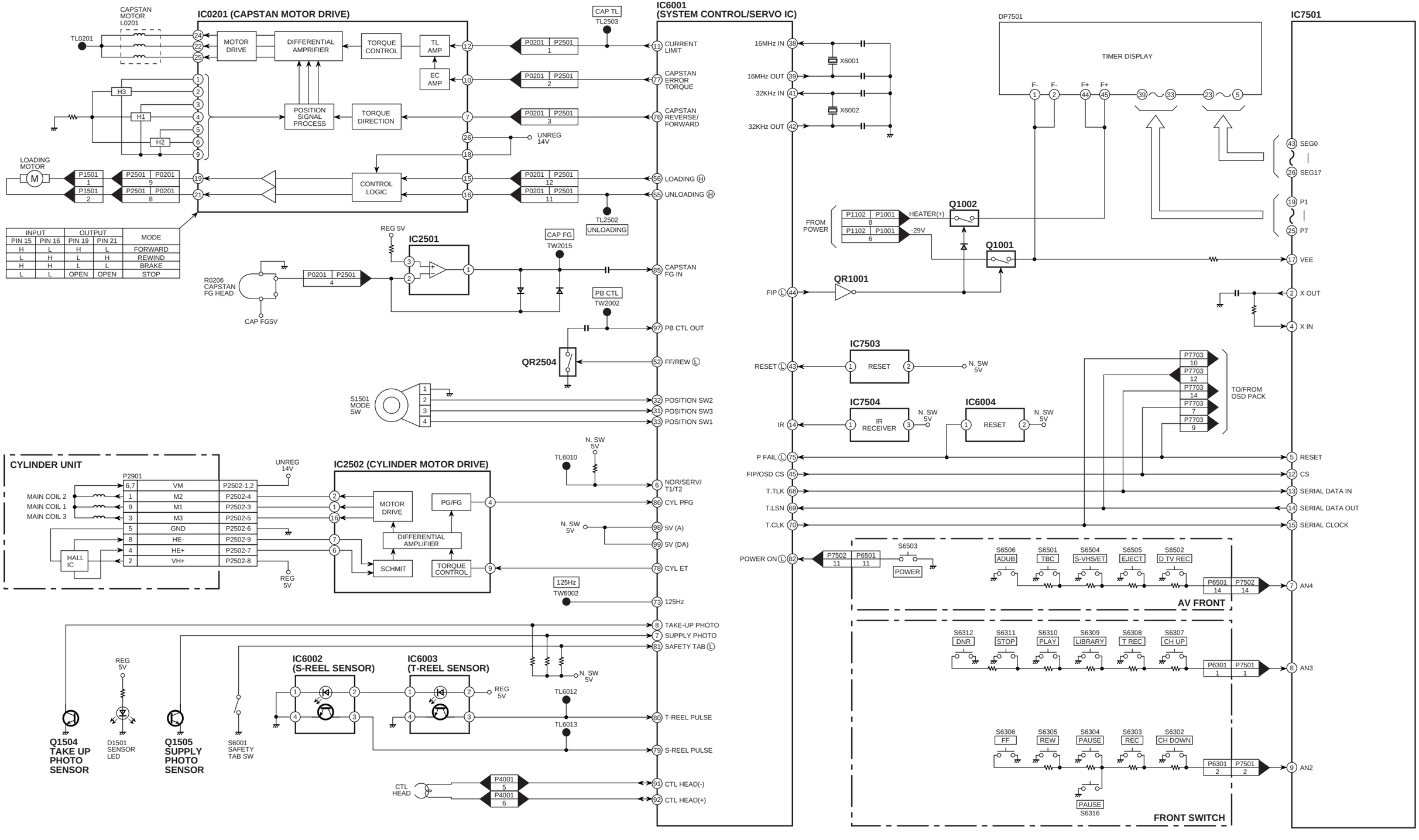
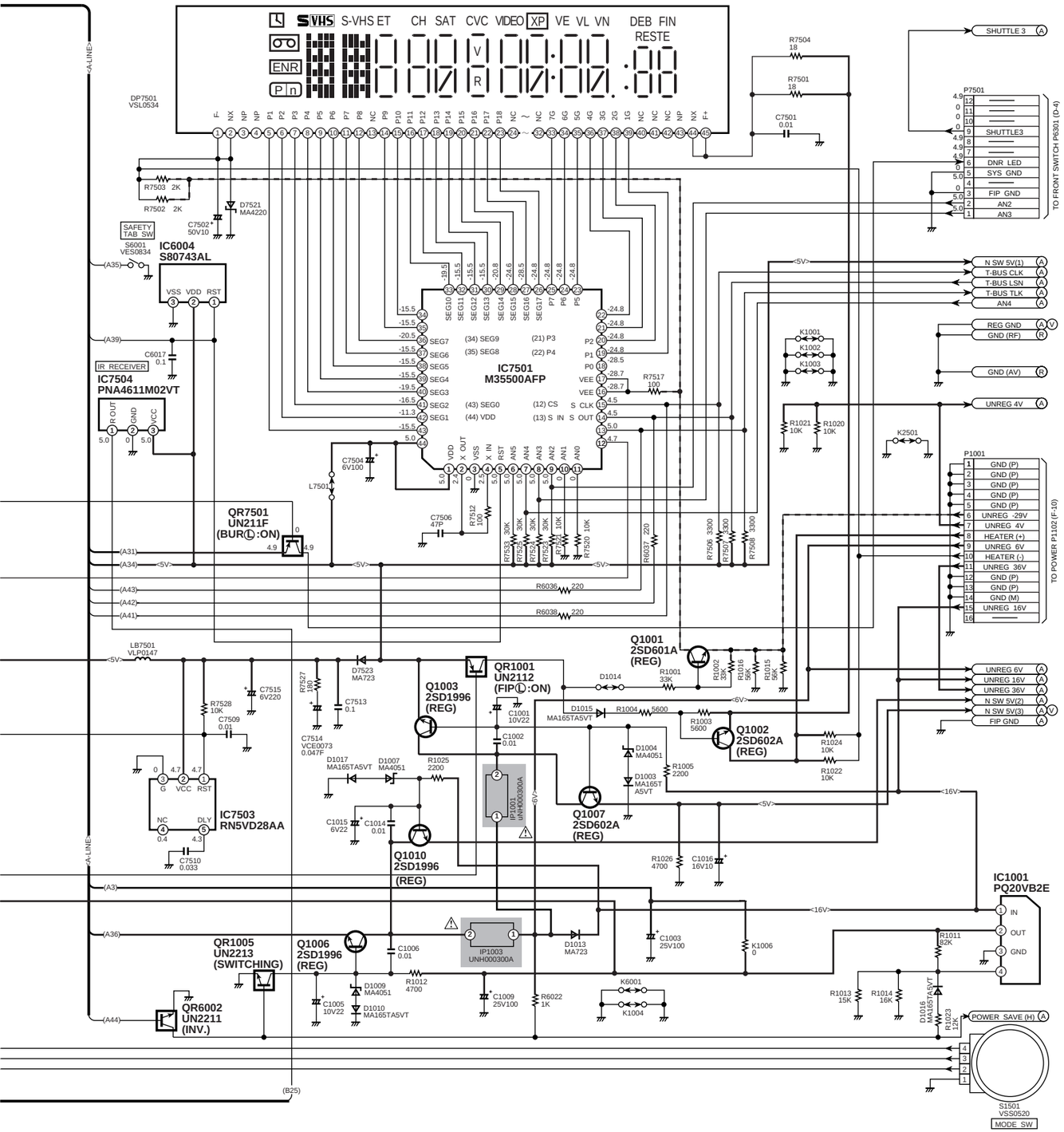

IC0201 (CAPSTAN MOTOR DRIVE)
CAPSTAN MOTOR L0201
TL0201
MOTOR DRIVE
DIFFERENTIAL AMPRIFIER
TORQUE CONTROL
TL AMP
EC AMP
POSITION SIGNAL PROCESS
TORQUE DIRECTION
CONTROL LOGIC
H1
H2
H3
LOADING MOTOR
P1501 1
P1501 2
P2501 P0201 9
P2501 P0201 8
P0201 P2501 1
P0201 P2501 2
P0201 P2501 3
P0201 P2501 12
P0201 P2501 11
UNREG 14V
CAP TL
TL2503
TL2502 UNLOADING
CURRENT LIMIT
CAPSTAN ERROR TORQUE
CAPSTAN REVERSE/ FORWARD
LOADING (H)
UNLOADING (H)
INPUT PIN 15 PIN 16
OUTPUT PIN 19 PIN 21
MODE
H L H L FORWARD
L H L H REWIND
H H L L BRAKE
L L OPEN OPEN STOP
REG 5V
IC2501
R0206 CAPSTAN FG HEAD
CAP FG5V
P0201 P2501 4
CAP FG
TW2015
CAPSTAN FG IN
PB CTL
TW2002
PB CTL OUT
QR2504
FF/REW (L)
S1501 MODE SW
POSITION SW2
POSITION SW3
POSITION SW1
IC6001 (SYSTEM CONTROL/SERVO IC)
16MHz IN
16MHz OUT
32KHz IN
32KHz OUT
X6001
X6002
FROM POWER
P1102 P1001 8
P1102 P1001 6
HEATER(+)
-29V
Q1002
Q1001
QR1001
FIP (L)
DP7501
TIMER DISPLAY
F- F- F+ F+
IC7501
SEG0
SEG17
P1
P7
VEE
X OUT
X IN
IC7503
RESET (L)
RESET
N. SW 5V
IC7504
IR
IR RECEIVER
IC6004
P7703 10
P7703 12
P7703 14
P7703 7
P7703 9
TO/FROM OSD PACK
P FAIL (L)
FIP/OSD CS
T.TLK
T.LSN
T.CLK
RESET
CS
SERIAL DATA IN
SERIAL DATA OUT
SERIAL CLOCK
POWER ON (L)
P7502 11
P6501 11
S6503
POWER
S6506 ADUB
S6501 TBC
S6504 S-VHS/ET
S6505 EJECT
S6502 D TV REC
P6501 14
P7502 14
AN4
AV FRONT
S6312 DNR
S6311 STOP
S6310 PLAY
S6309 LIBRARY
S6308 T REC
S6307 CH UP
P6301 1
P7501 1
AN3
S6306 FF
S6305 REW
S6304 PAUSE
S6303 REC
S6302 CH DOWN
P6301 2
P7501 2
AN2
PAUSE S6316
FRONT SWITCH
CYLINDER UNIT
P2901
6,7 VM P2502-1,2
1 M2 P2502-4
9 M1 P2502-3
3 M3 P2502-5
5 GND P2502-6
8 HE- P2502-9
4 HE+ P2502-7
2 VH+ P2502-8
MAIN COIL 2
MAIN COIL 1
MAIN COIL 3
HALL IC
UNREG 14V
REG 5V
IC2502 (CYLINDER MOTOR DRIVE)
MOTOR DRIVE
PG/FG
DIFFERENTIAL AMPLIFIER
SCHMIT
TORQUE CONTROL
TL6010
N. SW 5V
NOR/SERV/ T1/T2
CYL PFG
5V (A)
5V (DA)
CYL ET
125Hz
TW6002
125Hz
TAKE-UP PHOTO
SUPPLY PHOTO
SAFETY TAB (L)
IC6002 (S-REEL SENSOR)
IC6003 (T-REEL SENSOR)
TL6012
TL6013
T-REEL PULSE
S-REEL PULSE
CTL HEAD
P4001 5
P4001 6
CTL HEAD(-)
CTL HEAD(+)
Q1504 TAKE UP PHOTO SENSOR
D1501 SENSOR LED
Q1505 SUPPLY PHOTO SENSOR
S6001 SAFETY TAB SW



NOTE : THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

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

NOTE : DO NOT USE ANY PARTS 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)

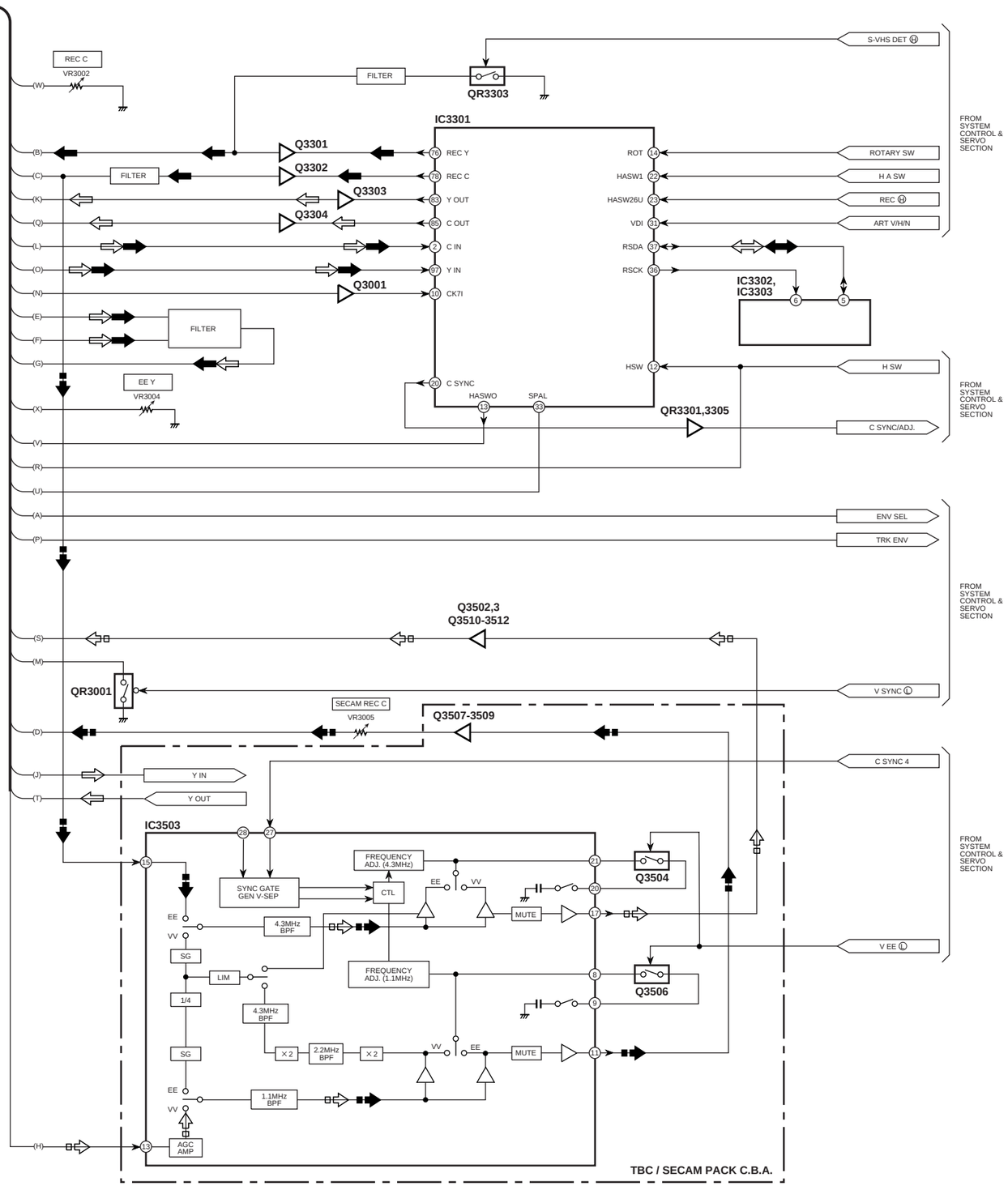
Ref.No.	IC1001										IC2501									
MODE	1	2	3	4							1	2	3	4	5	6	7	8		
STOP	15.9	14.1	0	1.1							2.4	2.4	2.4	0	0	0	0	4.9		
PLAY	15.4	14.1	0	1.1							2.4	2.4	2.4	0	0	0	0	4.9		
REC	15.4	14.1	0	1.1							2.4	2.4	2.4	0	0	0	0	4.9		
F.F	15.4	14.1	0	1.1							2.4	2.4	2.4	0	0	0	0	4.9		
REW	15.4	14.1	0	1.1							2.4	2.4	2.4	0	0	0	0	4.9		
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	4.3	0	2.3	4.6	0	5	4.9	4.7	1.8	0	0	1.9	0	5.0	0	0	4.5	4.7	0	4.7
PLAY	4.3	0	2.3	4.6	0	5	4.9	4.7	3.2	0	4.7	1.9	0	5.0	4.3	0	4.5	4.7	4.6	4.7
REC	4.3	4.6	2.3	4.6	0	5	4.9	4.7	3.4	0	4.7	1.9	0	5.0	4.3	0	4.5	4.7	0	4.7
F.F	4.3	0	2.3	4.6	0	5	4.9	4.7	0.7	0	4.9	1.9	0	5.0	0	0	4.5	4.7	0	4.7
REW	4.3	0	2.3	4.6	0	5	4.9	4.7	3.2	0	4.9	1.9	0	5.0	0	0	4.5	4.7	0	4.7
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	0	0	0	0	4.7	0	0	0	4.7	4.7	4.7	0	0	0	0	0	4.7	4.7	-	0
PLAY	0	0	0	4.7	4.7	0	0	4.7	4.7	4.7	4.7	0	0	0	0	0	4.7	4.7	-	0
REC	4.6	4.6	4.6	0	4.7	4.6	4.6	0	4.7	4.7	4.7	0	0	0	0	0	4.7	4.7	-	0
F.F	0	0	0	0	4.7	0	0	0	4.7	4.7	4.7	4.7	0	0	0	0	4.7	4.7	-	0
REW	0	0	0	0	4.7	0	0	0	4.7	4.7	4.7	4.7	0	0	0	0	4.7	4.7	-	0
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	1.0	1.3	4.7	0	4.7	0	0	0	0	0	0	4.7	0	0	0	0	4.7	4.7	4.7	0
PLAY	1.0	1.3	4.7	0	4.7	0	0	0	0	0.3	0	4.7	0	0	0	0	4.7	4.7	4.7	0
REC	1.0	1.3	4.7	0	3.5	0	0	0	0	0.3	0	4.7	0	0	0	0	4.7	4.7	4.7	4.7
F.F	1.0	1.3	4.7	0	4.7	0	0	0	0	4.6	0	0	0	0	0	0	4.7	4.7	4.7	0
REW	1.0	1.3	4.7	0	4.7	0	0	0	0	4.6	0	0	0	0	0	0	4.7	4.7	4.7	0
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	4.6	0	5.0	0	4.7	4.7	4.7	4.3	4.5	4.5	2.7	3.5	0	0	5.0	0	0	2.3	4.9	4.9
PLAY	4.6	0	5.0	0	4.7	4.7	4.7	4.3	4.5	4.5	3.5	2.5	0	0	5.0	0	2.4	2.3	4.9	4.9
REC	4.6	0	5.0	0	4.9	4.9	4.9	4.3	4.5	4.5	3.5	2.5	0	0	5.0	0	2.4	2.3	4.9	4.9
F.F	4.6	0	5.0	0	4.7	4.7	4.7	4.3	4.5	4.5	2.7	3.5	0	0	5.0	0	4.7	2.3	2.4	2.4
REW	4.6	0	5.0	0	4.7	4.7	4.7	4.3	4.5	4.5	2.7	3.5	0	0	5.0	4.7	4.7	2.3	2.4	2.4
Ref.No.	IC6001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	0	5.0	0.3	0.3	2.4	1.3	4.6	0	2.4	2.4	0	0	0	2.4	2.4	0	2.4	5.0	5.0	4.7
PLAY	0	5.0	0.3	0	2.4	1.3	4.6	0	2.4	2.4	0	0	0	2.4	2.4	0	2.4	5.0	5.0	4.7
REC	0	5.0	4.6	0.3	2.4	1.3	4.6	0	2.4	2.4	2.7	2.7	0	2.4	2.4	0	2.4	5.0	5.0	4.7
F.F	0	5.0	0.3	0.3	2.4	1.3	4.6	0	2.4	2.4	0	0	0	2.4	2.4	0	2.4	5.0	5.0	4.7
REW	0	5.0	0.3	0.3	2.4	1.3	4.6	0	2.4	2.4	0	0	0	2.4	2.4	0	2.4	5.0	5.0	4.7
Ref.No.	IC6002					IC6003					IC6004									
MODE	1	2	3	4		1	2	3	4		1	2	3							
STOP	0	1.0	4.9	0		1.0	2.2	4.9	0		5.0	5.0	0							
PLAY	0	1.0	4.9	0		1.0	2.2	4.9	0		5.0	5.0	0							
REC	0	1.0	4.9	0		1.0	2.2	4.9	0		5.0	5.0	0							
F.F	0	1.0	2.4	0		1.0	2.2	4.9	0		5.0	5.0	0							
REW	0	1.0	2.4	0		1.0	2.2	4.9	0		5.0	5.0	0							

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

Ref.No.	Q1001			Q1003			Q1006			Q1007			Q1010			Q1504		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	+	-	
STOP	-29.1	-29.0	-28.4	5.0	5.6	5.7	5.0	5.6	5.6	5.1	5.6	5.7	5.0	5.6	5.6	4.7	0	
PLAY	-29.1	-29.0	-28.4	5.0	5.6	5.7	5.0	5.6	5.6	5.1	5.6	5.7	5.0	5.6	5.6	4.7	0	
REC	-29.4	-29.0	-28.4	5.0	5.6	5.7	5.0	5.6	5.6	5.1	5.6	5.7	5.0	5.6	5.6	4.7	0	
F.F	-29.4	-29.4	-28.7	5.0	5.6	5.7	5.0	5.6	5.6	5.1	5.6	5.7	5.0	5.6	5.6	4.7	0	
REW	-29.4	-29.4	-28.7	5.0	5.6	5.7	5.0	5.6	5.6	5.1	5.6	5.7	5.0	5.6	5.6	4.7	0	
Ref.No.	Q1505																	
MODE	+	-																
STOP	4.9	0																
PLAY	4.9	0																
REC	4.9	0																
F.F	4.9	0																
REW	4.9	0																
Ref.No.	QR1001			QR1005			QR2504			QR2505			QR6001			QR6002		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	5.0	4.9	0	0	5.6	0	0	0	4.7	0	0	0	4.9	0	4.7	0	0	4.7
PLAY	5.0	4.9	0	0	5.6	0	0	0	4.7	0	0	0	4.9	0	4.7	0	0	4.7
REC	5.0	4.9	0	0	5.6	0	0	0	4.7	0	0	4.4	4.9	0	4.7	0	0	4.7
F.F	5.0	4.9	0	0	5.6	0	0	1.8	0	0	0	0	4.9	0	4.7	0	0	4.7
REW	5.0	4.9	0	0	5.6	0	0	1.8	0	0	0	0	4.9	0	4.7	0	0	4.7
Ref.No.	QR6003																	
MODE	E	C	B															
STOP	0	0	0															
PLAY	0	4.3	0															
REC	0	0	0															
F.F	0	0	0															
REW	0	0	0															

VIDEO MAIN SIGNAL PATH IN REC MODE (SECAM SIGNAL ONLY)
VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE (SECAM SIGNAL ONLY)
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

AV FRONT C.B.A.
JK6502
CPN
C IN
Y IN
S-VIDEO IN
AV3 VIDEO IN
JK6501
VIDEO IN
P6501 P7502
IC3201
R (26um)
L'(49um)
R'(49um)
L (26um)
HEAD AMP C.B.A.
TO CYLINDER HEAD
P501
P502 P3002
IC3001
TO/FROM TV TUNER
CONV VIDEO
TV V IN
S3901
AV2 (DECODER/EXT)
<PB+12V>
<BLUE>
<GREEN>
<RED>
<BLANKING>
<VIDEO OUT>
<VIDEO IN>
Q3905
IC3902
SW1
SW2
SW3
QR3902
PB H
AV1 (TV)
L
R
L'
R'
ENV DET
D REC ON
REC ZAP
AT
630K BPF
RF AGC
630K TRAP
HI TRAP
PEARKING
REC
PB
S-ET REC EO
S-VHS REC EO
VHS REC EO
GCA (BUS)
(SECAM-L PB)
AGC
NC
6M LPF
VV
EE
GCA
CLP
LPF
DC SHIFTER(CLP)
BURST +6dB
BPF
V X O
X3001
KI1
VREF
HA SW
HEAD SW
Q3201
IC3901
LEF
SW4
SW5
Q3901
JK3904 S-VIDEO OUT
JK3902
AV4 VIDEO OUT
PP7701
PS3905 PP3905
PS3904 PP3904
OSD PACK C.B.A.
(A)
(B)
(C)
(D)
(W)
(E)
(F)
(G)
(X)
(H)
(J)
(K)
(L)
(M)
(N)
(O)
(P)
(Q)
(R)
(S)
(T)
(U)
(V)


REC C
VR3002
(W)
FILTER
QR3303
S-VHS DET H
IC3301
Q3301
Q3302
Q3303
Q3304
Q3001
(B)
(C)
(K)
(Q)
(L)
(O)
(N)
(E)
(F)
(G)
FILTER
FILTER
REC Y
REC C
Y OUT
C OUT
C IN
Y IN
CK7I
ROT
HASW1
HASW26U
VDI
RSDA
RSCK
ROTARY SW
H A SW
REC H
ART V/H/N
IC3302,
IC3303
FROM SYSTEM CONTROL & SERVO SECTION
EE Y
VR3004
(X)
(V)
(R)
(U)
C SYNC
HASWO
SPAL
HSW
H SW
C SYNC/ADJ.
QR3301,3305
FROM SYSTEM CONTROL & SERVO SECTION
(A)
(P)
ENV SEL
TRK ENV
Q3502,3
Q3510-3512
(S)
(M)
QR3001
V SYNC L
FROM SYSTEM CONTROL & SERVO SECTION
SECAM REC C
VR3005
Q3507-3509
(D)
(J)
(T)
Y IN
Y OUT
C SYNC 4
IC3503
SYNC GATE GEN V-SEP
CTL
FREQUENCY ADJ. (4.3MHz)
FREQUENCY ADJ. (1.1MHz)
Q3504
Q3506
MUTE
4.3MHz BPF
LIM
1/4
2.2MHz BPF
1.1MHz BPF
AGC AMP
EE
VV
SG
(H)
V EE L
FROM SYSTEM CONTROL & SERVO SECTION
TBC / SECAM PACK C.B.A.

AUDIO MAIN SIGNAL PATH IN REC MODE

AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

IC4501

JK6501
AV3
(AV FRONT)
AUDIO IN (R)
AUDIO IN (L)
P6501 1 — P7502 1
P6501 3 — P7502 3
AV FRONT C.B.A.

JK3906
AV1
(TV)
AUDIO OUT (R)
AUDIO IN (R)
AUDIO OUT (L)
AUDIO IN (L)
PS3902 8 — PP3902 8
PS3902 2 — PP3902 2
PS3902 7 — PP3902 7
PS3902 1 — PP3902 1

JK3902
AUDIO OUT (R)
AUDIO OUT (L)

JK3905
AV2
(DECODER)
AUDIO OUT (R)
AUDIO IN (R)
AUDIO OUT (L)
AUDIO IN (L)
PS3902 10 — PP3902 10
PS3902 5 — PP3902 5
PS3902 9 — PP3902 9
PS3902 4 — PP3902 4

QR4505 MUTE
QR4507 MUTE
QR4503 MUTE
QR4504 MUTE
MUTE

LINE SELECT
DECODER SELECT
OUTPUT SELECT
INPUT SELECT
NORMAL SELECT
MIX AMP

REC LEVEL CONTROL

SELECT SW CONTROL
MUTE CONTROL
VOLUME CONTROL
IIC BUS INTERFACE
SYS IIC DATA
SYS IIC CLOCK
TO/FROM SYSTEM CONTROL & SERVO

A H SW
TW4511
AUDIO H. SW
FROM SYSTEM CONTROL & SERVO

RCH REC/PB PROCESS
LCH REC/PB PROCESS
D. O. C
B. P. F
MODULATOR/ DEMODULATOR
PB FM ENVE
TW4502
FM MIX OUT
TW4501

TO TUNER
RFC AUDIO OUT

IC4502
FROM DECODER
TUNER AUDIO (R)
TUNER AUDIO (L)
AMP
TUN R
TUN L

IC3001
FROM TV DEMODU
Q7601
TUNER AUDIO (N)
MUTE
SW GAIN
A. HEAD (W)
ALC
TO/FROM AC HEAD
A. HEAD (R)

Hi-Fi AUDIO HEAD
L
R
AUDIO HEAD-R
AUDIO HEAD-L
P501 8
P501 9
P501 10

IC551
AGC
PREAMP /SW
REC IN
RF OUT
AUDIO H. SW
D. FM REC H
P503 P3001 7 7
P503 P3001 8 8
P503 P3001 4 4
P503 P3001 5 5
FROM SYSTEM CONTROL & SERVO

HEAD AMP C. B. A.

CAUTION

THE STRIPED FRAME 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.

HOT

P1101 VJS3306
AC INLET
F1180 VSF0243C16
C1123 1000P
LB1121 0
L1120 ELF15N005A
L1121 ELF17N004A
C1120 0.1
R1120 330K
C1121 0.1
D1140 S1WBA80
LB1122 0
C1140 400V 68
LB1120 0
C1122 1000P
C1300 0.1
D1301 ERA15-08V5
D1300 ERA15-08V5
LB1123 0
LB1124 0
C1124 1000P
R1154 3.9M
R1153 4.7M
D1302 RD100E
R1155 27K
C1150 100P
C1151 0.01
D1150 AP01CV2
T1150 ETE28K121AZ
P2
P1
NC
V1
V2
R1200 2.7
D1200 MA185
R1180 10K
D1180 MA4220H
IC1150 STRM6559LF
16.7
START
O.V.P
LATCH
DRIVE
REG
TRIGER
T.S.D
O.S.C
O.C.P
-500
0.3
1.3
LB1150 VLP0056
R1183 1500
R1151 330
R1152 470
R1150 0.82
C1114 35V47
D1182 MA7300B
D1181 MA700
R1181 100
R1182 120K
C1180 6V330
C1181 1000P
IP1230 0
C1232 100P
D1230 ERA22-04
C1230 50V82
L1230 100u
C1231 0.01
C1242 100P
D1240 AK04V2
L1240 22u
C1240 10V1200
C1241 10V1000
C1252 100P
D1250 RL2ZPLF-C4
C1250 25V1000
L1250 22u
C1251 25V1000
IP1270 0
C1272 100P
D1270 ERA22-04
C1270 50V120
L1270 100u
C1271 0.01
C1262 220P
D1260 21DQ06FC4
C1260 10V1800
L1260 22u
C1261 10V1000
IP1280 VSF0015A10T
C1280 10V390
C1282 0.01
D1280 11EQS06
C1281 0.01
P1102
1 GND
2 GND
3 GND
4 GND
5 GND
6 UNREG -29V
7 UNREG 4V
8 HEATER(+)
9 UNREG 6V
10 HEATER(-)
11 UNREG 36V
12 GND
13 GND
14 GND(MOTOR)
15 UNREG 16V
16 ——
TO SYSTEM CONTROL & SERVO SECTION P1001(C-13)
Q1200 PC123FY2
14.3
1.3
5.9
4.8
R1201 2200
D1183 1SS254
C1201 8200P
R1202 270
R1203 560
R1207 2700
R1206 2700
R1205 6800
IC1200 HA17431PA
4.5
2.5
C1202 0.1
R1204 2700

NOTE:THE MEASURMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE1:WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT,SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE..... ⏚
SECONDARY SIDE... ⏚

NOTE2:THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 220V.

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 ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,USE ONLY THE SAME TYPE.

F E D C B A

1 2 3 4 5 6 7 8 9 10