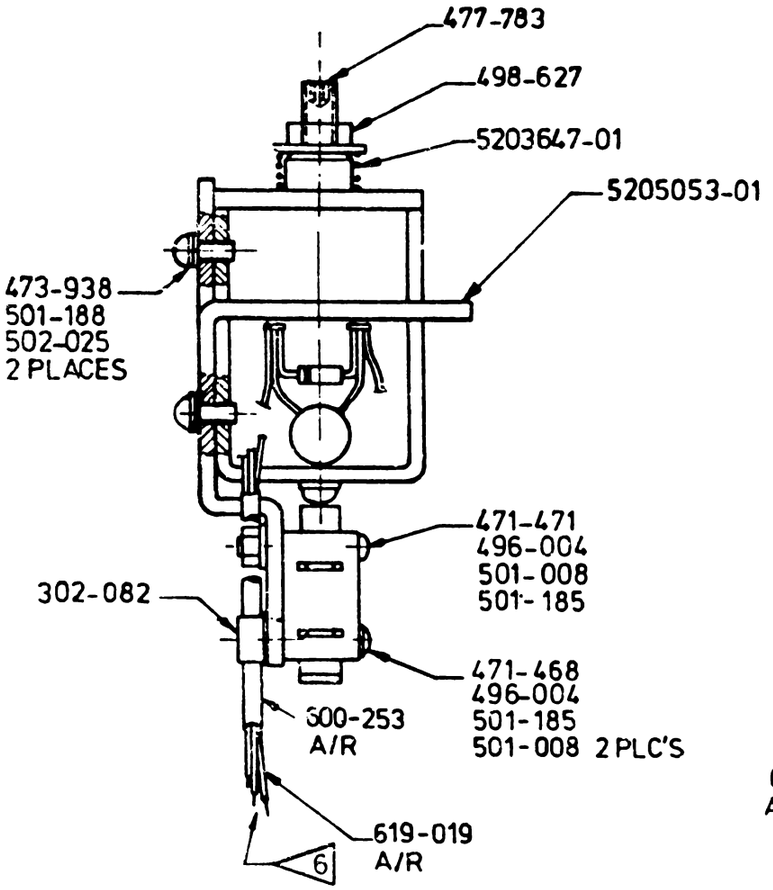
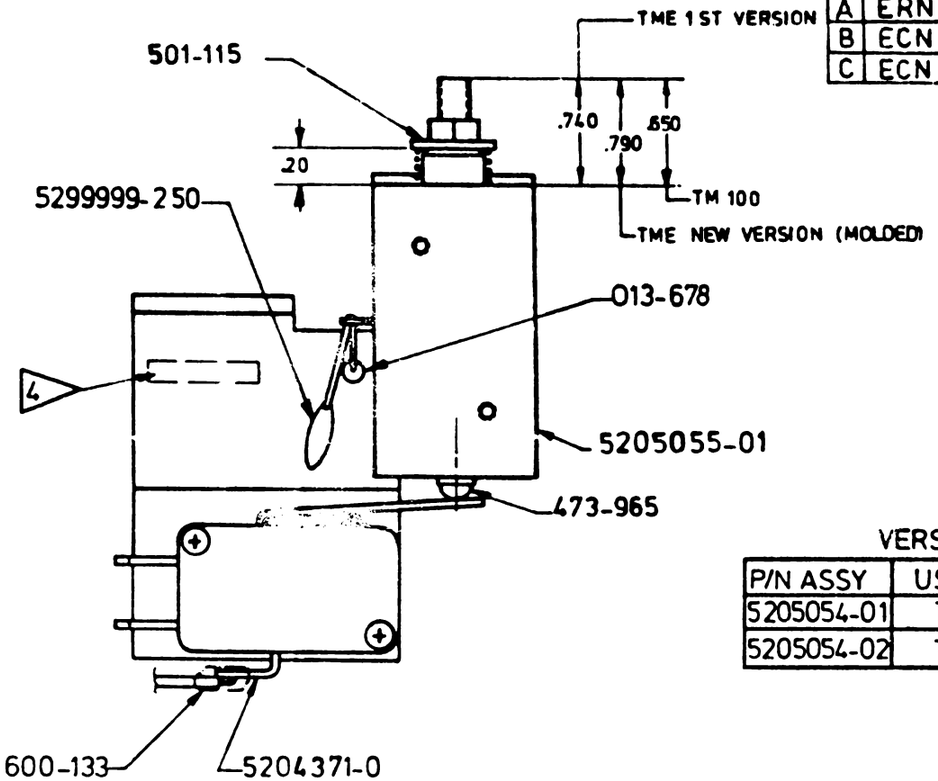
CAIET SCHEME AMPEX ITM 100

uz intern

1986

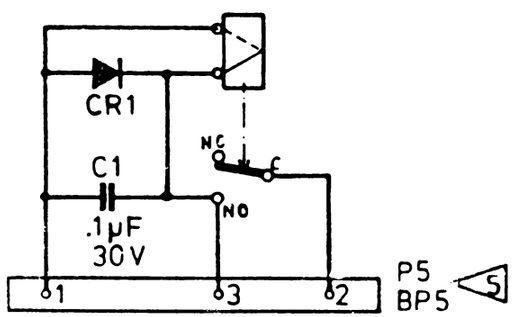
A	ERN N 254				
B	ECN N 2682-2				
C	ECN N 2767-2				





VERSION TABLE

P/N ASSY	USED ON	CONNEC BODY	PIN
5205054-01	TM 100	166-059 (P5)	187-030
5205054-02	TME	167-450 (BP5)	167-671



SCHEMATIC

5 MARK ASSY NO PER VERSION TABLE

4 MARK ASSY NO PER AMPEX STD BD 1-1

3. HEAVY LINE ON DIODE INDICATES CATHODE

2. ASSEMBLE PER AMPEX STD HC2-2

1. ASSY NO TO BE AS PER VERSION TABLE

NOTES

DO NOT SCALE DRAWING

AMPEX

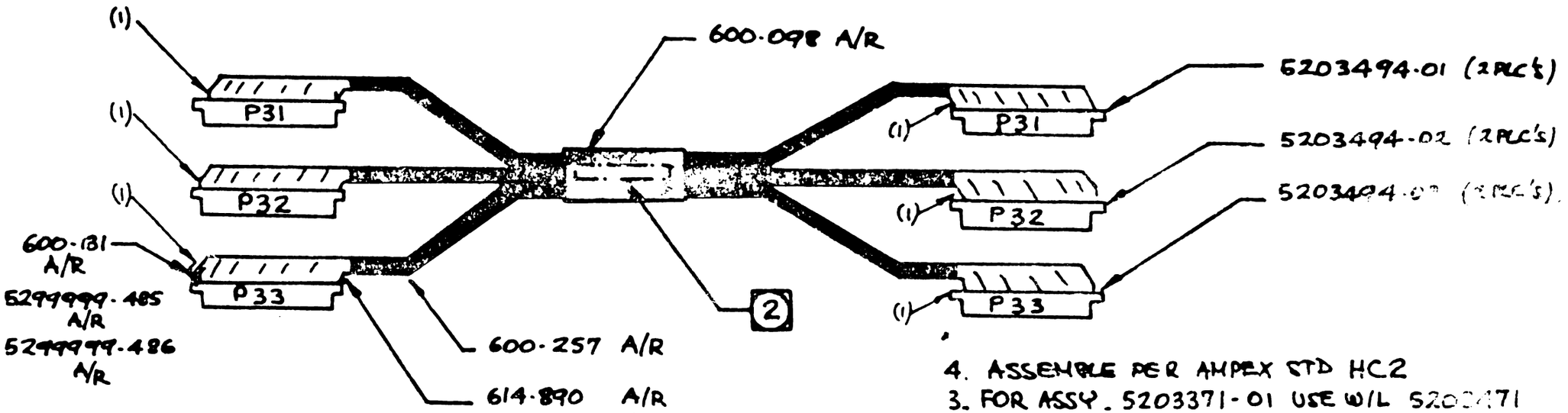
FILE PROTECT ASSY

5205054 TM100-TME

C 5205052 C

NONE SHT 1 OF 1

REVISIONS					
ISSUE	DESCRIPTION	DATE	DRAFTSMAN	DATE	APPROVAL
D	N2388	21/4/81	H. WARE		



4. ASSEMBLE PER AMPEX STD HC2
3. FOR ASSY. 5203371-01 USE W/L 5203471
-5203371-02 " " 5203599
-5203371-03 " " 5204755

(2) MARK P/N DASH & ISSUE LETTER AS PER AMPEX SPEC 3124500

NOTES: 1. FOR B/M SEE 5203371

5203300	TM100
FAL	
NEXT ASSY	1ST USED ON
APPLICATION	

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES
DECIMALS: XX ± , XXX ± ANGLES: ±
BREAK ALL SHARP EDGES APPROX .010 C'BORE AND SPOTFACE CORNER RADII APPROX .010
ROUGHNESS OF ALL MACHINED SURFACES — PER MIL-STD-10

MATERIAL

FINISH

DWG NO 5203371

ENGR		
ENGR		
CHKR	P.J.	21/4/81
DFTSMN		

MODEL

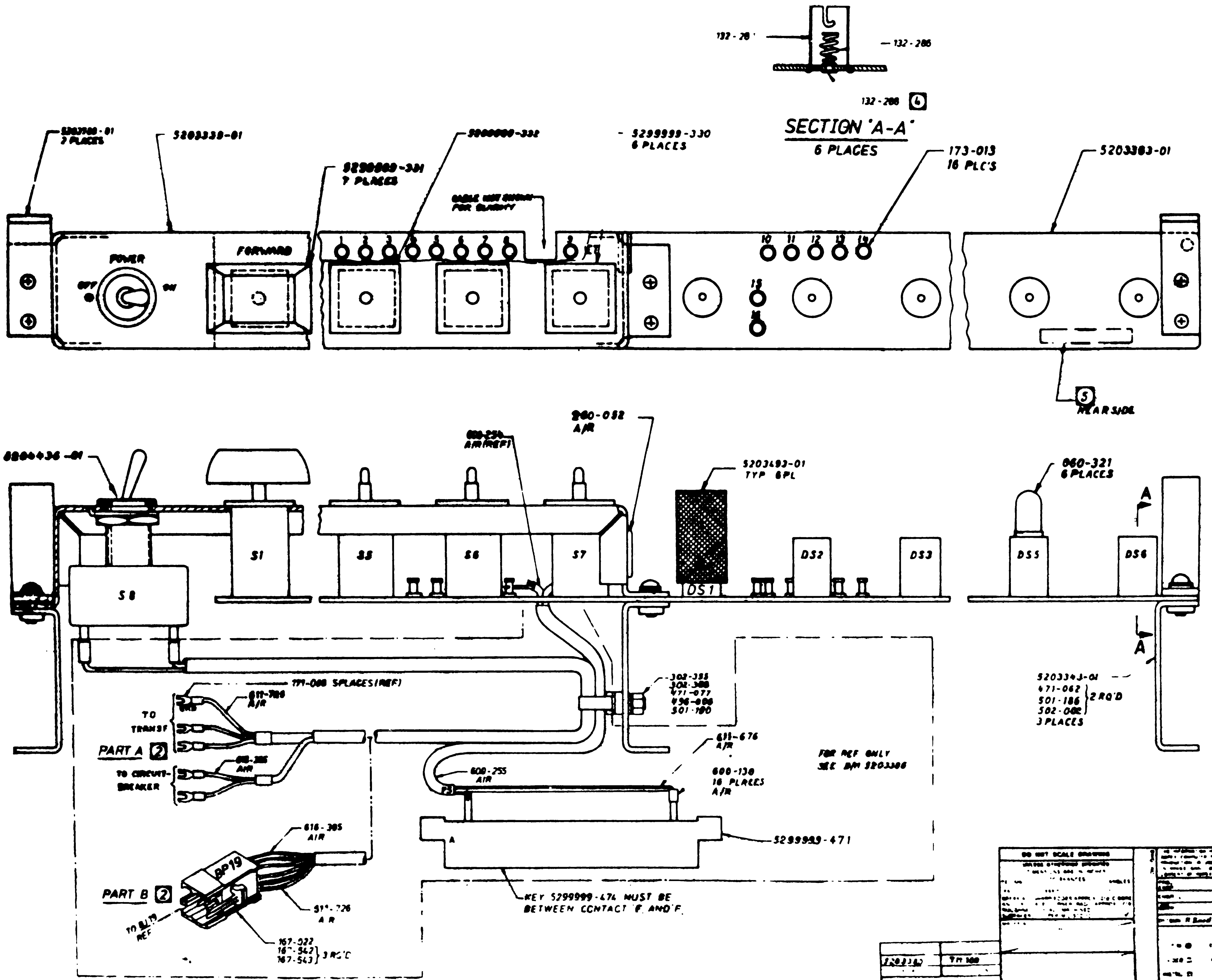
TM X	STACK		
VIDEO	AUDIO	PROF	
INSTRU		CONS	

AMPEX SA HIVELLES BELGIUM

TITLE
CABLE DAISY CHAIN
SET OF CABLE

B/M X ON DWG	NO B/M SEPARATE	SIZE A	DWG NO 5203371	ISSUE A
REF DWG		SCALE —	SHEET 1 OF 1	

QAF 1793/78



VERSION TABLE 2

ASSY NO.	PART A	PART B
5203380-01	5203386-01	NONE
5203380-02	NONE	5203386-02

5 IDENTIFY PER AMPEX SPEC 3124500 PARA 3 RUBBER STAMP PERMISSIBLE
4 SWAGE POST P/N 132-288 PRIOR INSTALLATION OF SPRING P/N 132-286 AND SHELL 132-287
3. FOR REF. WIRE LIST NO. IS 5203385
2 PART NO. TO BE AS PER VERSION TABLE.
1. FOR SCHEMATIC SEE 5203381

NOTES

REV	DESCRIPTION
A	ERN N 1302
B	ECN N 1742
C	ECN N 1769
D	ECN N 1938
E	ECN N 2106
F	ECN N 2455
G	ECN N 2468
H	ECN N 2601/2

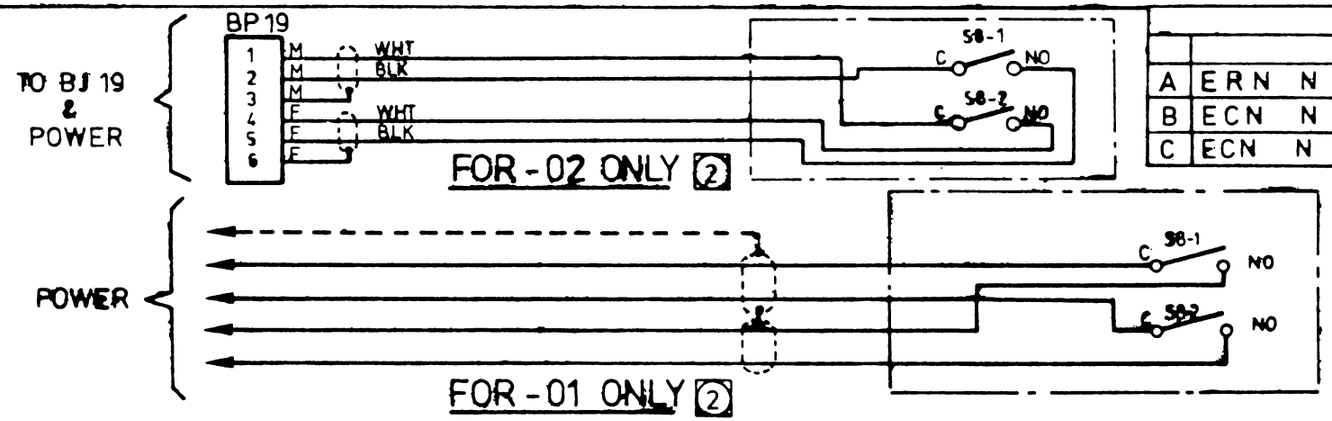
AMPEX

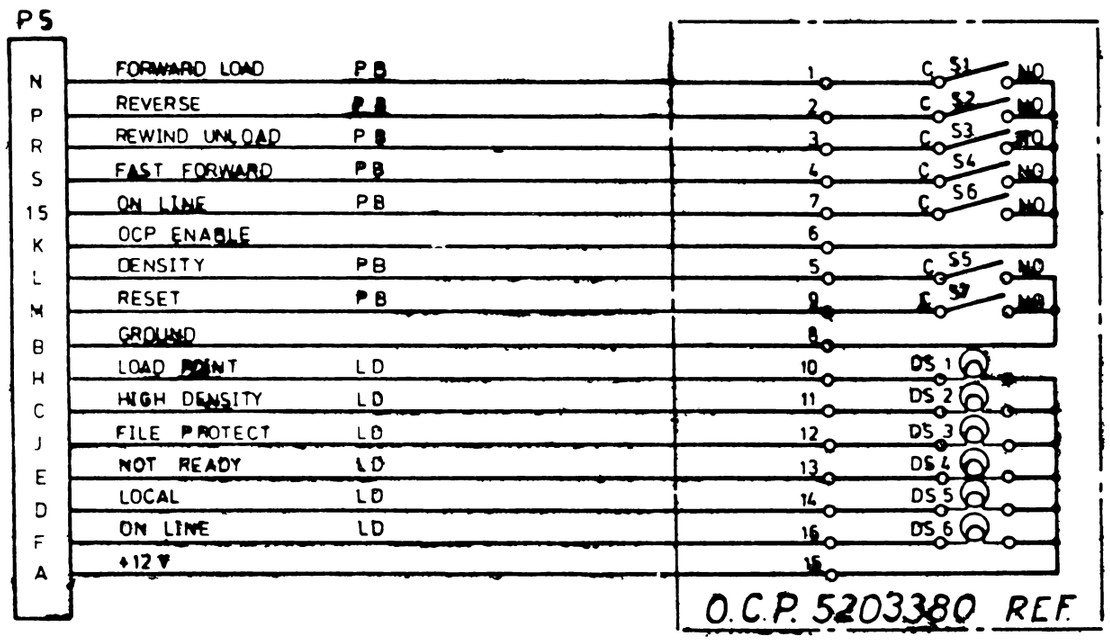
OPERATOR CONTROL PANEL ASSEMBLY

5203382 H

SCALE NONE

1 OF 1





A	ERN N 1302	19 JUL 73			
B	ECN N 1938	4 DEC 74			
C	ECN N 2455	[illegible]			

3. S8 TO BE 4620195 01
   S5 TO BE 5299006-332
   S1,2,3,4,6,7 ARE 5299999-380.
2. P/N TO BE 5203380-XX.
1. FOR REF DWG SEE 5203382.

NOTES:

DO NOT SCALE DRAWING

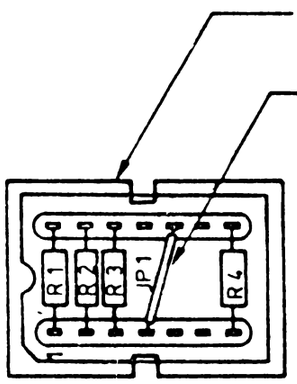
5203380	TM 100

LEMINEUR
QUINET
MARRONE
MAEGERMAN

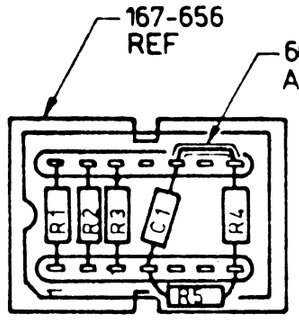
AMPEX S.A. NIVELLES BELGIUM

OPERATOR CONTROL PANEL SCHEMATIC

B	5203381	C
NONE		1 OF 1



FOR ALL DASHES
EXCEPT -05.



FOR -05 ONLY.

REVISIONS					
ISS	DESCRIPTION	DATE	DRAFTSMAN	DATE	APPROVAL
R	ECN N 2731-5				

VERSION TABLE (3)

	PART NUMBER	FUNC IPS	COMPONENTS PART A	PART B	PT C	PART D	PART E	PART F
PE/NRZ ICEM MOTOR	5203541-02	45	049-617	049-868	614-762	049-529	—	—
	-12	37,5	-868	-603			—	—
	-22	25	-870	-662			—	—
	-32	12,5	-874	-874			—	—
	-42	18,75	-872	-873		049-529	—	—
	-03	45	-617	-618		049-613	—	—
	-13	37,5	-868	-869			—	—
	-23	25	-870	-871			—	—
	-43	18,75	-872	-873	614-762		—	—
PE/NRZ EC MOTOR	-04	45	-617	-618	—		—	—
	-14	37,5	-868	-869	—		—	—
	-24	25	-870	-871	—		—	—
	-44	18,75	-872	-873	—		—	—
	-33	12,5	-874	-721	614-762		—	—
	-34	12,5	-874	-721	—		—	—
	-54	50	-866	-868	—		—	—
	5203541-05	45	049-617	049-868	—	049-613	035-883	5299997-432

P/N	REF. DES	
PART A	R2	3
PART B	R1, R3	3
PART C	JP1	3
PART D	R4	3
PART E	C1	3
PART F	R5	3

NOTES:

6. AXIAL LEAD WIRE FROM C1 TO BE INSULATED.
5. IDENTIFY PER AMPEX STD BD1-1.
4. FOR SCHEMATIC SEE 5203542.
3. P/N TO BE AS PER VERSION TABLE.
2. COMPONENT DESIGNATIONS ARE FOR REF ONLY.
1. ASSEMBLE PER AMPEX STD HC2-2.

5203541	TM 100

DO NOT SCALE DRAWING UNLESS OTHERWISE SPECIFIED

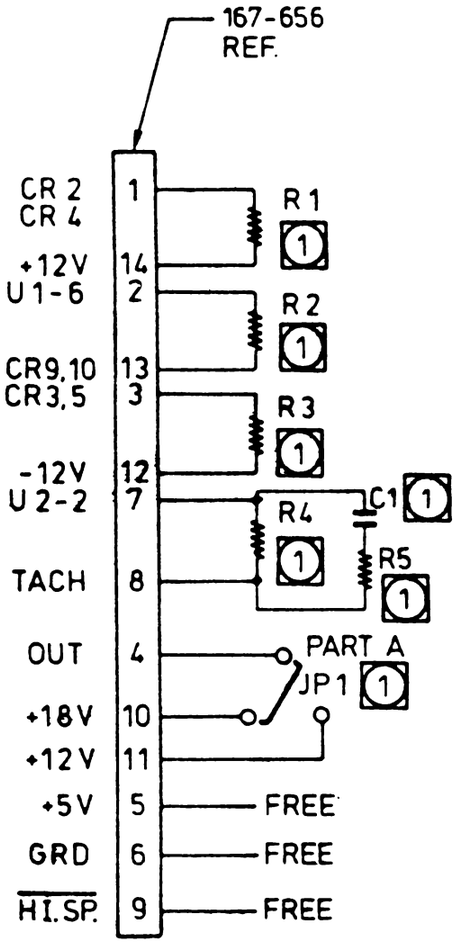
5203543

AMPEX REDWOOD CITY, CALIFORNIA

PCBA OPTION
SERVO SINGLE SPEED

SIZE	DWG NO	REV
B	5203543	R

NONE | 1 OF 1



VERSION TABLE (1)

	PART NUMBER	FUNCTION	COMP. DESIGNATION					
			R2	R1,R3	PART A	R4	C1	R5
PE/NRZ CEM MOTOR	5203541-02	45 IPS	33K	43K	JP1	5.1K	—	—
	-12	37,5 IPS	43K	51K			—	—
	-22	25 IPS	75K	82K			—	—
	-32	12,5 IPS	180K	180K			—	—
	-42	18,75 IPS	110K	130K		5.1K	—	—
PE/NRZ EC MOTOR	-03	45 IPS	33K	47K		15K	—	—
	-13	37,5 IPS	43K	56K			—	—
	-23	25 IPS	75K	91K			—	—
	-43	18,75 IPS	110K	130K	JP1		—	—
	-04	45 IPS	33K	47K	—		—	—
	-14	37,5 IPS	43K	56K	—		—	—
	-24	25 IPS	75K	91K	—		—	—
	-44	18,75 IPS	110K	130K	—		—	—
	-33	12,5 IPS	180K	200K	JP1	15K	—	—
	-34	12,5 IPS	180K	200K	—	15K	—	—
	-54	50 IPS	30K	43K	—	15K	—	—
	5203541-05	45 IPS	33K	43K	—	15K	.068µF	4.3K

3. ALL CAPACITOR VALUES ARE IN MICROFARADS, 50V, 5%.
2. ALL RESISTOR VALUES ARE IN OHMS, 1/8W, ±5%
(1) SEE VERSION TABLE.

NOTES:

REVISIONS					
INS.J	DESCRIPTION	DATE	DRAUGHTSMAN	DATE	APPROVAL
J	ECN N 2058	9-X-74	H.G.		
K	ECN N 2061	11-X-74	H.G.		
L	ECN N 2186	7 VII 75	H.V.		
M	ECN N 2455	14 DEC 77	H.G.		
N	ECN N 2487	4-IV-78	M.DE		
P	ECN N 2731-4	20 OCT 78	H.G.		

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED

5203542

P.J. Jans 8-X-74
GREGOIRE.A 9-X-74

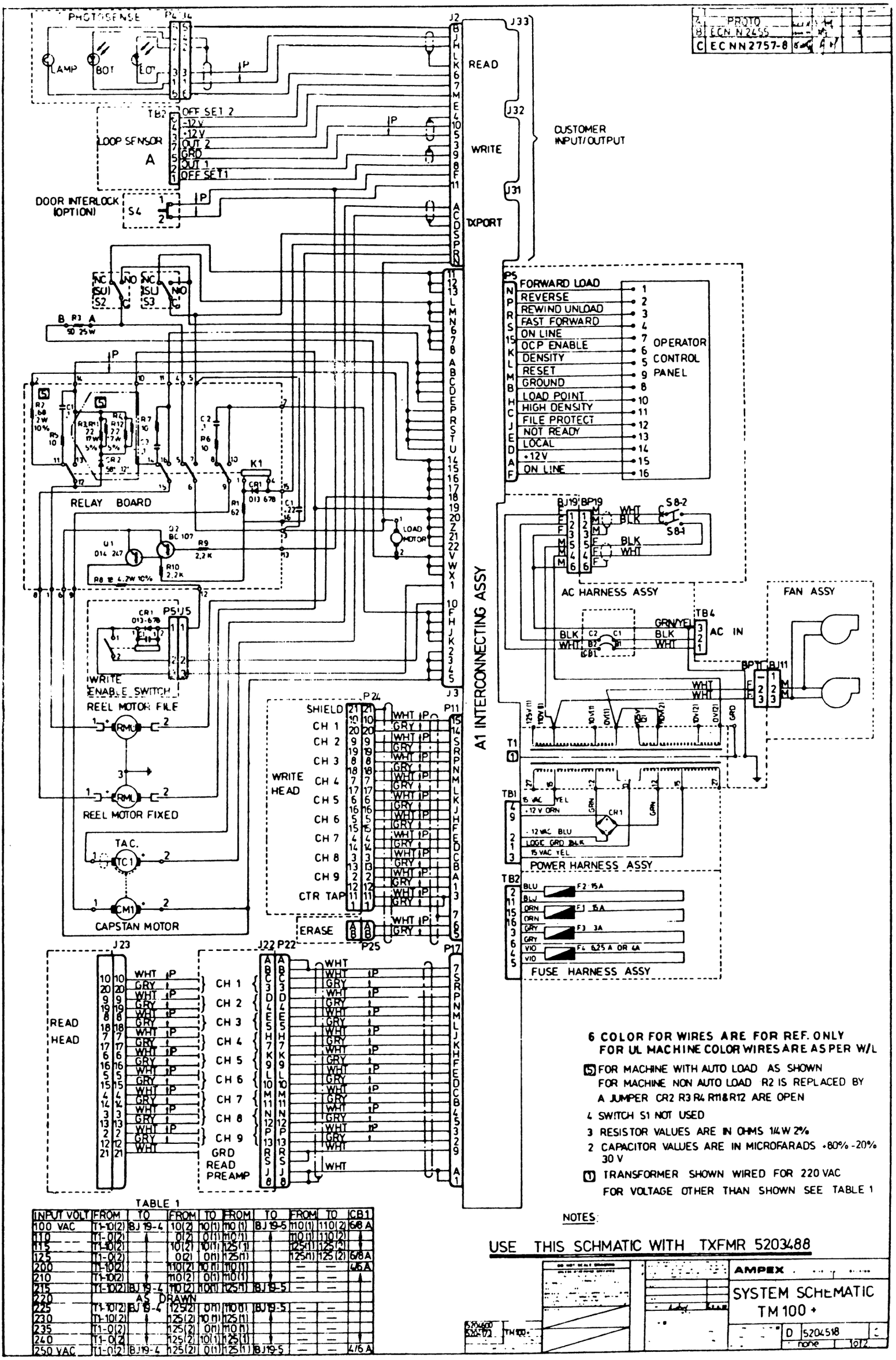
5203541 | IM 100

AMPEX S.A. NIVELLES BELGIUM

SCHEMATIC OPTION
SERVO SINGLE SPEED

B | 5203542 | P

1 OF 1



6 COLOR FOR WIRES ARE FOR REF. ONLY
FOR UL MACHINE COLOR WIRES ARE AS PER W/L

5 FOR MACHINE WITH AUTO LOAD AS SHOWN
FOR MACHINE NON AUTO LOAD R2 IS REPLACED BY A JUMPER CR2 R3 R4 R11 & R12 ARE OPEN

4 SWITCH S1 NOT USED

3 RESISTOR VALUES ARE IN OHMS 1/4 W 2%

2 CAPACITOR VALUES ARE IN MICROFARADS +80% -20% 30 V

1 TRANSFORMER SHOWN WIRED FOR 220 VAC
FOR VOLTAGE OTHER THAN SHOWN SEE TABLE 1

TABLE 1

INPUT VOLT	FROM	TO	FROM	TO	FROM	TO	FROM	TO	CB1
100 VAC	T1-10(2)	BJ 19-4	10(2)	10(1)	10(1)	BJ 19-5	110(1)	110(2)	6/8 A
110	T1-0(2)		0(2)	0(1)	10(1)		110(1)	110(2)	
115	T1-10(2)		10(2)	10(1)	125(1)		125(1)	125(2)	
125	T1-0(2)		0(2)	0(1)	125(1)		125(1)	125(2)	6/8 A
200	T1-10(2)		110(2)	10(1)	110(1)		—	—	4/6 A
210	T1-10(2)		110(2)	0(1)	110(1)		—	—	
215	T1-10(2)	BJ 19-4	110(2)	10(1)	125(1)	BJ 19-5	—	—	
220	AS DRAWN								
225	T1-10(2)	BJ 19-4	125(2)	0(1)	110(1)	BJ 19-5	—	—	
230	T1-10(2)		125(2)	10(1)	125(1)		—	—	
235	T1-0(2)		125(2)	0(1)	110(1)		—	—	
240	T1-0(2)		125(2)	10(1)	125(1)		—	—	
250 VAC	T1-0(2)	BJ 19-4	125(2)	0(1)	125(1)	BJ 19-5	—	—	4/6 A

NOTES:

USE THIS SCHMATIC WITH TXFMR 5203488

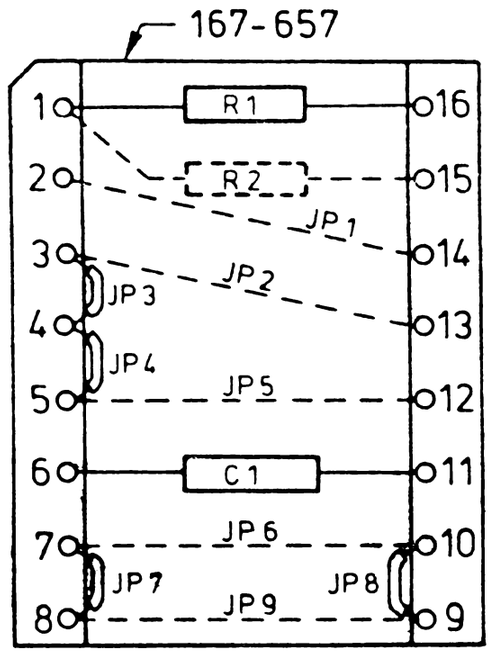
AMPEX

SYSTEM SCHEMATIC TM 100+

D 5204518

none

1012



VERSION TABLE

PART NUMBER	JUMPER JP									R1	R2	C1
	1	2	3	4	5	6	7	8	9			
5203597 - 01			X	X			X	X		X	JP	X
- 02		X			X		X	X		X	JP	X
- 07	X		X		X	X			X	X	JP	X
- 09			X		X		X	X		X	-	X
- 10	X	X			X	X			X	X	JP	X
- 11					X		X	X		X	JP	X

REVISIONS					
ISSUE	DESCRIPTION	DATE	DRAFTSMAN	DATE	APPROVAL
B	ECN N 2487	4 APR 78	M.B.E.		
C	ECN N 2719-2	10 OCT 78			

CONVENIENCE TABLE

FUNCTION		JUMPER JP								
		1	2	3	4	5	6	7	8	9
RUN/STOP FWD/REV	OR	-					-	X	X	-
FWD/STOP REV/STOP		X					X	-	-	X
OFF-LINE INPUT	YES				-	X				
	NO				X	-				
FAST FWD (DDS) INPUT	YES		X	-						
	NO		-	X						

COMPONENT TABLE

PART NO.	REF. DESIGNATION	QTY
615-004	JP1 THRU JP9	A/R
049-613	R1	1
615-004	R2	A/R
034-240	C1	1

NOTES:

5. COMPONENT P/N ARE FOR REF. ONLY.
4. C1 CAPACITOR VALUE TO BE 220pF.5%.500 V.
3. R1 RESISTOR VALUE TO BE 15KOHMS.1/8W.5%.
2. IDENTIFY PER AMPEX STD BD1-1.
1. PART NO. TO BE AS PER VERSION TABLE.

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED

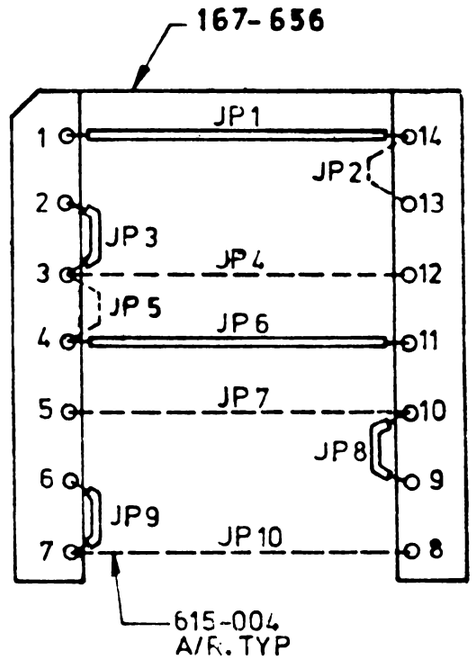
5203598

AMPEX S.A. HIVELLES BELGIUM

JUMPER SOCKET ASSY
16 PINS

5203597	TM 100	B	5203598 C
		NEXT NONE	SHEET 1 OF 1

REVISIONS					
ISS.	DESCRIPTION	DATE	DRAFTSMAN	DATE	APPROVAL
A	ERN N 1988	15-X-74			
		/ /			
C	ECN N 2455	14DEC77	KG		
D	ECN N 2487	4-IV-78	M.BE		



VERSION TABLE

PART NUMBER	JUMPER JP									
	1	2	3	4	5	6	7	8	9	10
5203595-01	X		X			X		X	X	
-02	X					X		X	X	
-03	X		X	X		X		X	X	
-06	X			X		X	X		X	
-07	X			X	X		X			X
-08	X				X		X			X
-09	X		X			X		X		X
5203595-05	X					X	X			X
5203595-04	X			X		X	X			X

CONVENIENCE TABLE

FUNCTION		JUMPER JP									
		1	2	3	4	5	6	7	8	9	10
STATUS,WRITE ENABLE STATUS,FILE PROTECT	OR									X	–
										–	X
STATUS,HI DENS STATUS,LO DENS	OR							X	–		
								–	X		
READY STATUS	YES			–							
	NO			X							
SINGLE DENSITY	YES				X						
	NO				–						
FIRST OCP LAMP BOT ON LINE AND SELECT	OR	X	–								
		–	X								
BOT STATUS IN REVERSE	INDUSTRY					X	–				
	TM					–	X				

2 IDENTIFY PER AMPEX STD BD1-1

1 PART NO. TO BE AS PER VERSION TABLE

NOTES

5203595	TM 100

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED

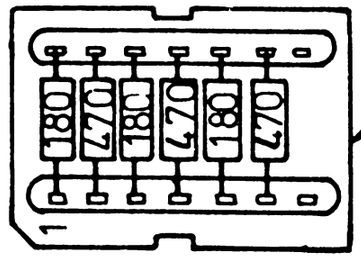
5203596

AMPEX S.A. NIVELLES BELGIUM

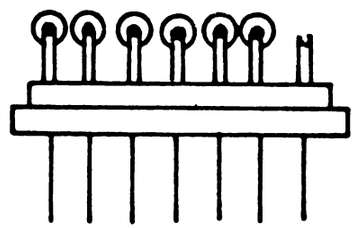
JUMPER SOCKET ASSY
14 PINS

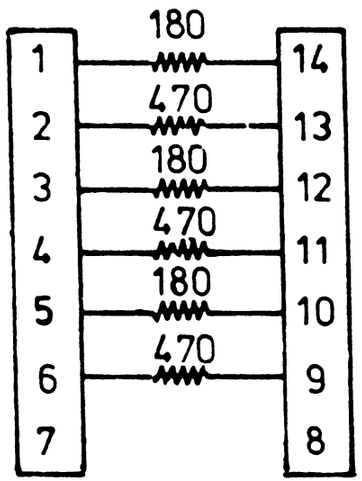
B	5203596	
NONE	1 OF 1	

REVISIONS					
ISSUE	DESCRIPTION	DATE	FINAL CHECK	DATE	APPROVAL
A	ERN N 1304				
B	ECN N 1945	1-III-72 M DE			
D	ECN N 2487	24-10-73 M. DE		23 NOV 73	
E	ECN N 2759	10 NOV 75		10 NOV 75	C. MAHIEU



167 656





(7) MAY BE PURCHASE FROM "BECKMAN RESISTOR NETWORK" TYPE 898-1 MODEL 5203575-01. (VENDOR: "REGULATION MESURE" AVENUE R.VANDENDRIESSCHE,73 1150 BRUXELLES)

6 ALL RESISTOR VALUES ARE IN OHMS, 5%, 1/8 W.

5. P/N FOR RESISTOR OF 470 OHMS IS **041-624**

4. P/N FOR RESISTOR OF 180 OHMS IS **049-758**

3. P/N TO BE 5203575-01

2. MARK **PART NUMBER** PER BD1-1

1. ASSEMBLE PER AMPEX STD.

NOTES:

5203600	TM 100

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED

MATERIAL (7)

AMPEX S.A. NIVELLES BELGIUM

OPTION

TERMINATION RESISTOR

SIZE	DWG. NO.	ISSUE
A	5203575	E

SHEET 1 OF 1

A	ERN N1302	
B	ECN N1742	
C	ECN N1828	

LAST USED	DELETED	NOT USED
R18, 117, 217		R3,5,6,7,9,10,11,14,15,16, 107, 112, 212, 113, 213
C16, 115, 215		C4 THCT, 101, 201, 102, 202, 105, 106, 204, 113, 213, 114, 214
CR 104, 204		
VR2		
TP4, 102, 202		
L 101, 201		
U1, 101, 201		

9 VR 2 IS 013-358

8 L101 201 ARE 540-055, 10 m Hy, 10%

7 U101, 201, ARE 586-045 (MC 7412 CG)

6 U1 IS 586-871 (SN 7413)

5 VR 1 IS 013-257

4 CR 101, 102, 103, 104, 201, 202, 203, 204 ARE 013-598

3 PIN 12 VALUE TO BE DETERMINED BY TEST

2 ALL CAPACITOR VALUES ARE IN UF 100 V, ±10%

1 ALL RESISTOR VALUES ARE IN OHMS, 1/4W ±2%

NOTES

5203330	TM1CC	

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED

5203331

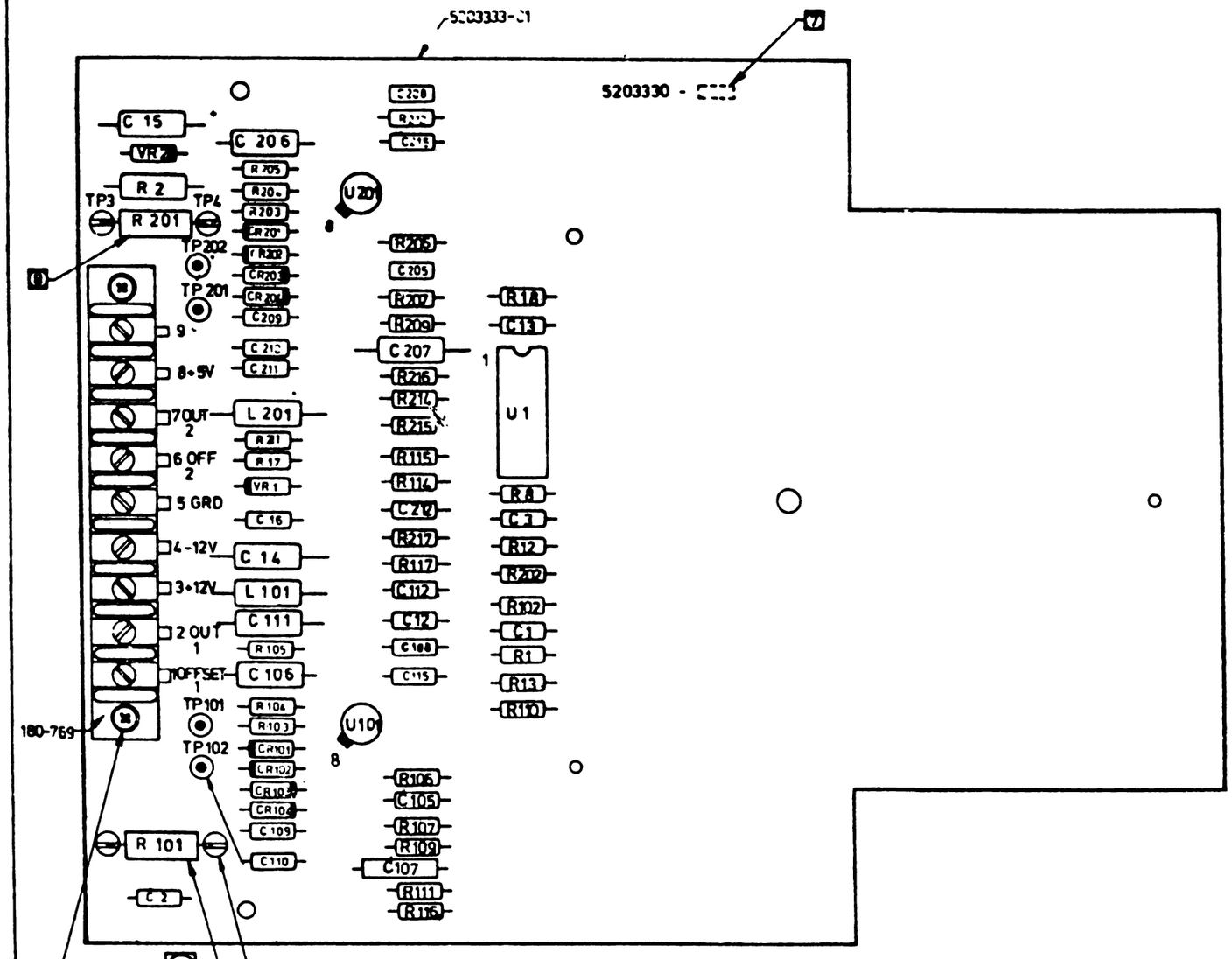
LEMINEUR
ARYS
MARRONE
MATHLES

AMPEX

SCHEMATIC LOOP SEQ
ELECTRONICS

C 5203331

A	ERN N 1302			
B	ECN N 1828			
C	ECN N 2840-2			



PART NO	REF DESIGNATION
013-257	VR 1
013-599	CR 101, 201, 102, 202, 103, 203, 104, 204
5299999-384	C107, 207, 111, 211
034-182	C105, 205
034-347	C208
5299999-362	C109, 209
035-846	C1
037-985	C14, 15
5299997-102	R8, 210
-303	R103, 203
-331	R1
-471	R8, 17, 109, 209
-122	R105, 205
-124	R104, 204
-100	R106, 206
-203	R107, 207
-202	R12, 13, 117, 217
5299997-512	R111, 211, 114, 214, 115, 215, 116, 216
173-012	TP 101, 201, 102, 202
540-055	L101, 201
586-046	U101, 201
586-871	U1
5299999-347	C3, 12, 13, 16, 115, 215, 112, 212
030-945	C110, 210
173-013	TP 1, 2, 3, 4
055-547	C106, 206
5299999-414	C*
013-358	VR 2
5299998-181	R 2
5299997-242	R 102, 202
5299997-391	R 110
034-222	C 108

(8) RESISTORS R101, 201 WILL BE SELECTED BY TEST AND PICKED OUT OF KIT P/N 5203338-01 DELIVERED WITH THIS PCBA

(7) MARK DASH NO AND ISSUE LETTER WITH WHITE INK PER AMPEX STANDARD BD1-1

(6) PLUS SIGN ON CAPACITOR INDICATES POSITIVE

5-FOR BM SEE 5203330
4-FOR SCHEMATIC SEE 5203331
3-PART NO TO BE 5203330-01
2-COMPONENT DESIGNATIONS ARE FOR REF ONLY
1-ASSEMBLE PER AMPEX STANDARDS HC 2-2

NOTES:

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED

5203330	TM 100

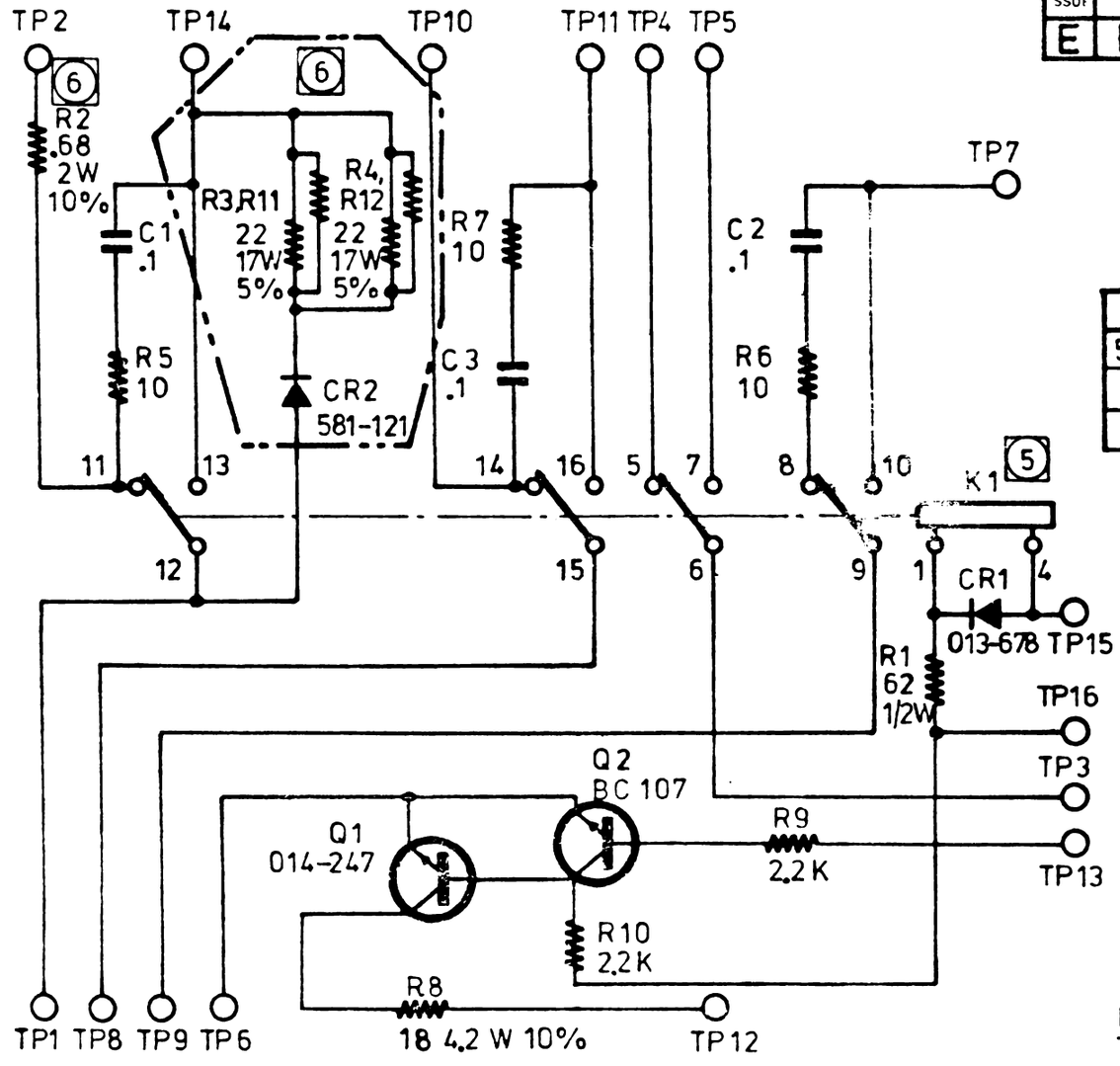
LEMINEUR
QUINET 5 VI 73
MARRONE
MAEGERMAN

AMPEX

PCBA LOOP SENSOR
ELECTRONICS

	C	5203332	C
SCALE NONE		SHEET 1 OF 2	

REVISIONS					
SSUE	DESCRIPTION	DATE	DRAFTSMAN	DATE	APPROVAL
E	ECN N 2149	20-III-74			



VERSION TABLE (6)

ASSY NO.	R2	R3,R4	R11,R12	CR2
5203670-04	USED	USED	OPEN	USED
-05	USED	USED	USED	USED
-06	JUMP	OPEN	OPEN	OPEN

(6) ASSY NO. TO BE AS PER VERSION TABLE.
(5) K1 IS 020-572 (REF. ONLY).
4. Q2 IS 5299999-257.
3. ALL CAPACITOR VALUES ARE IN µF, 100V, ±10%.
2. ALL RESISTOR VALUES ARE IN OHMS, 1/4W, ±2%.
1. FOR ASSEMBLY SEE 5203670.

NOTES: UNLESS OTHERWISE SPECIFIED.

LAST USED	DELETED
R12	
C3	
CR2	
Q2	
K1	

5203670	TM 100
NEXT ASSY	1 ST USED ON
APPLICATION	

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES: DECIMALS xx ± xxx ± ANGLES
BREAK ALL SHARP EDGES APPROX .010 C BORE AND SPOTFACE CORNER RADII APPROX .010
ROUGHNESS OF ALL MACHINED SURFACES — PER MIL STD-10 ✓
MATERIAL
FINISH

DWG NO 5203671

PROJ ENGR		
ENGR		
CHKR		
DFTSMN	GREGOIRE	28-III-74

MODEL
TM ■ STACK □ □
VIDEO □ AUDIO □ PROF □
INSTRU □ □ CONS □

AMPEX S A NIVELLES BELGIUM

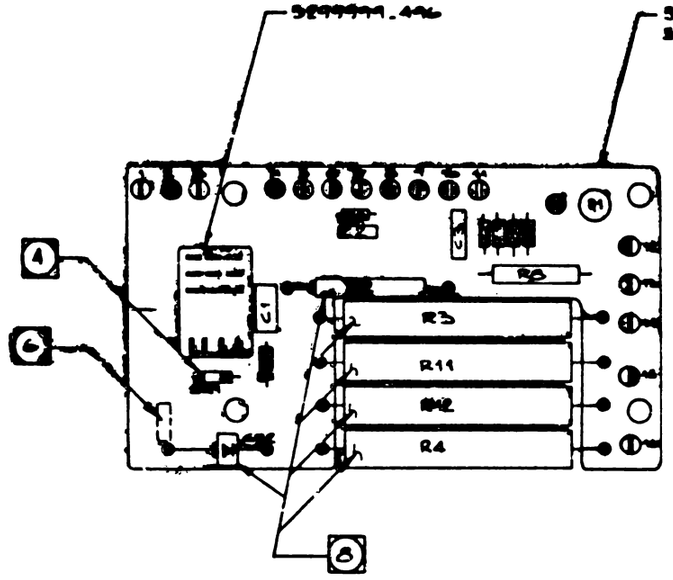
TITLE
SCHEMATIC RELAY BOARD

BM □ NO BM ■
ON DWG □ SEPARATE □
REF DWG □ □

SIZE A | DWG NO 5203671 | E

SCALE NONE | SHEET 1 OF 1

F	SCN N 2374		



PIN	DESCRIPTION
013.678	CR1
014.247	Q1
B	CR2
5299997.100	R5.6.7
5299997.282	R9,R10
B	R11.12
5299998.620	R1
5299999.257	Q2
5299999.347	C1.2.3
B	R2
B	R3.4
5299999.481	R5

B SEE VERSION TABLE

7 PIN TO BE AS PER VERSION TABLE

6 MARK DASH NUMBER AND ISSUE LETTER WITH WHITE INK PER EDA-1

5. FOR SCHEMATIC SEE 5203671.

4 HEAVY LINE ON DIODE INDICATES CATHODE

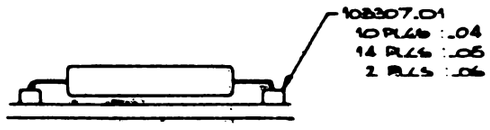
3. FOR BM SEE 5203670

2. COMPONENT DESIGNATIONS ARE FOR REF. ONLY.

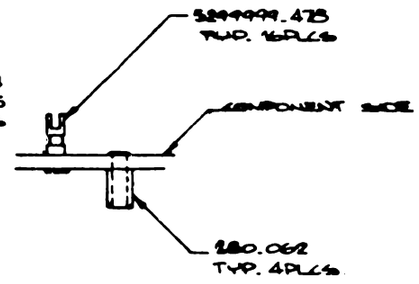
1 ASSEMBLE PER AMPEX STD MC2.2

NOTES:

TYP. TRANSISTOR INSTALLATION



TYP. RESISTOR MOUNTING



DETAIL A-A

ASSY NUMBER	FUNCTION	R2	R3.R4	R11.12	CR2
5203670.04	MERCURE	5299999.475	5299999.481	NONE	581.121
.05	AUTO	5299999.475	5299999.481	5299999.480	581.121
.06	NON AUTO	JUMP 614.762	OPEN	OPEN	OPEN

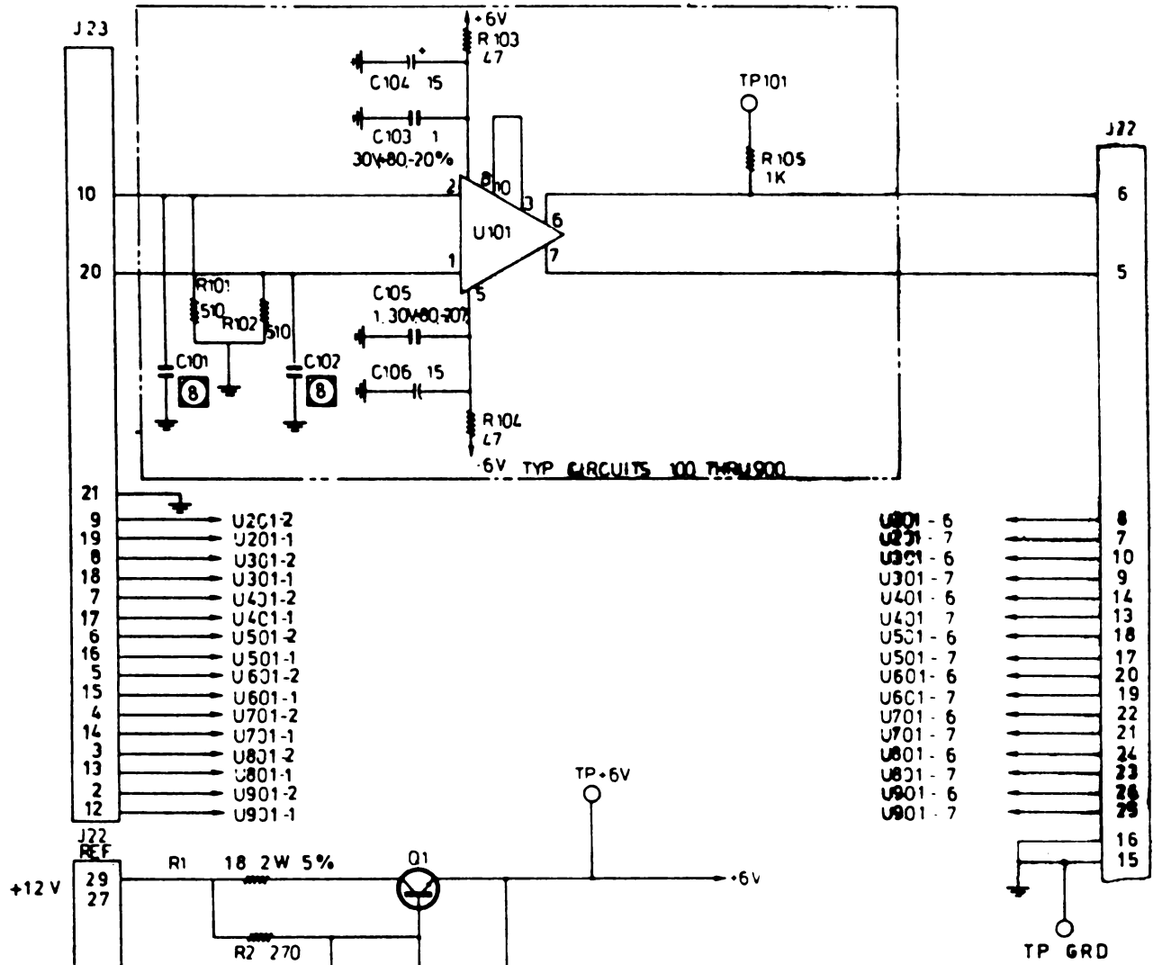
DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED

AMPEX

PCBA. RELAY BD

REF. DWG.

5203670	TM100	C	5203672 F
			1 OF 1



VERSION TABLE (8)

FUNCTION	ASSY NO.
TM 100 & TME LO. SPEED	5203325 - 01
TME HI. SPEED	5203325 - 02

REVISIONS					
S	DESCRIPTION	DATE	DRAFTSMAN	DATE	APPROVAL
A	ERN N 1302				
B	ECN N 1742				
C	ECN N 1806				
D	ECN N 1898				
E	ECN N 2527				

LAST USED	DELETED	NOT USED
TP 101 TH 901		
C 106 TH 906		
U 901		
R 105 TH 905		
R 4		
VR 2		
C 4		
Q 2		
TP GRD. TP-6V. TP+6V		

(8) OPEN FOR -01
P/N 034-177 FOR -02.

7. ALL IC ARE 586-289 (μA733)
6. Q2 IS 014-364
5. Q1 IS 014-247
4. ALL DIODES TO BE 013-224
3. ALL CAPACITOR VALUES ARE IN MICROFARADS. 20V. ±10%
2. ALL RESISTOR VALUES ARE IN OHMS . 1/4W. ±2%
(1) FOR ASSEMBLY SEE VERSION TABLE.

NOTES

PREAMPLIFICATEUR

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED

5203326

5203325	TM 100
NEXT ASSY	
APPLICATION	

LEMINEUR
DEBAISIEUX
MARRONE
MATHUES

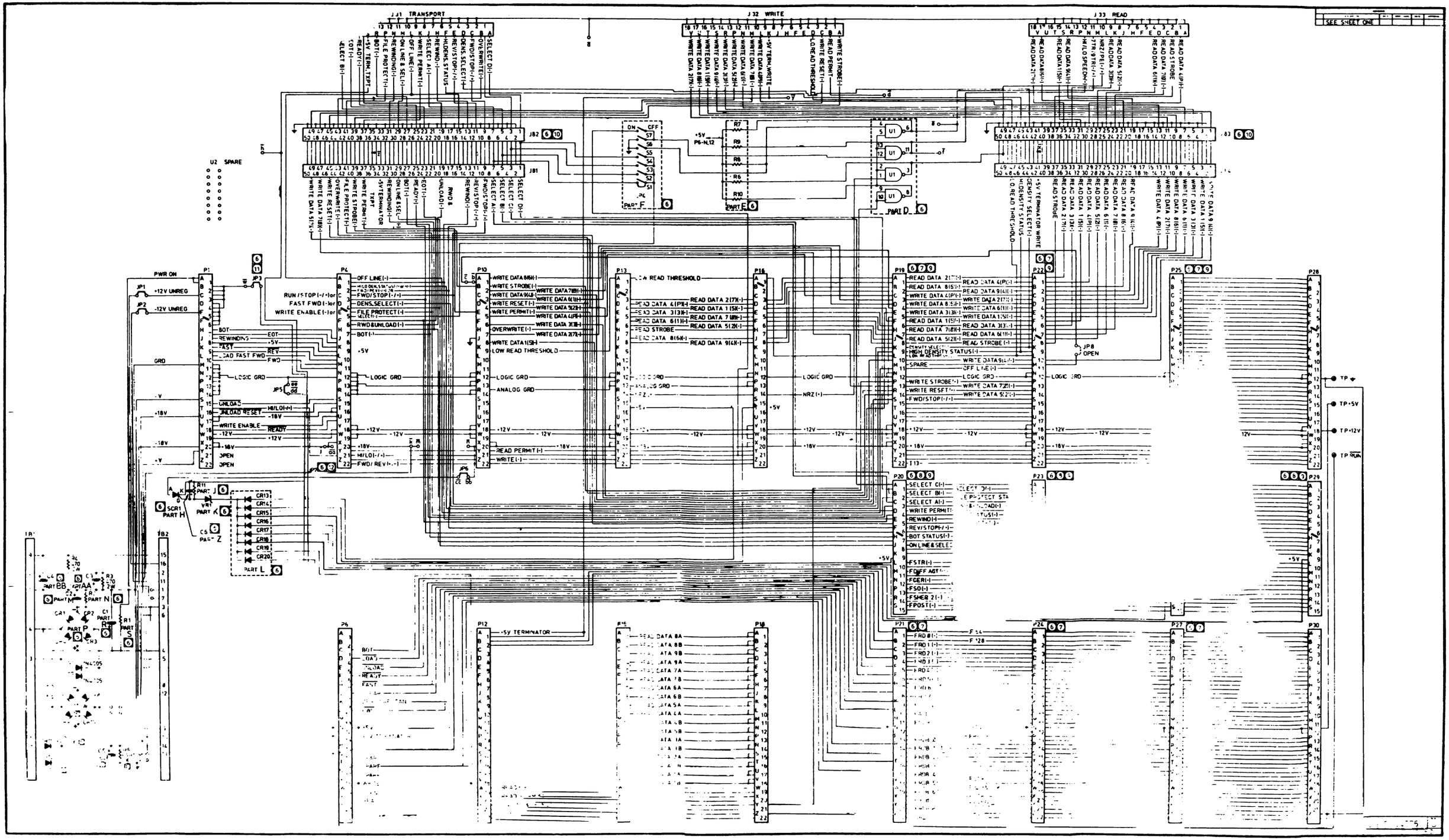
AMPEX

SCHEMATIC

READ PREAMPLIFIER

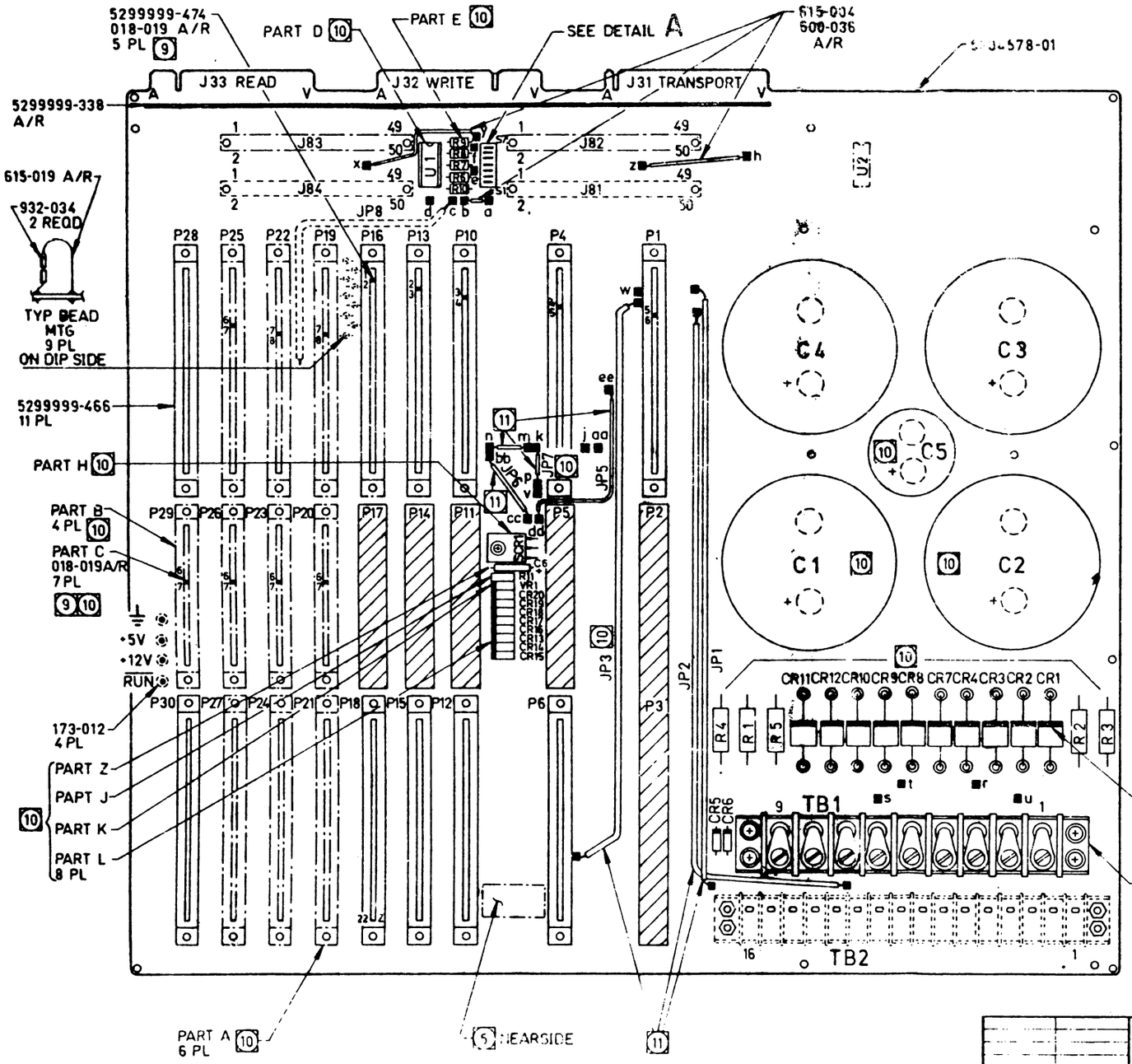
C | 5203326 | E

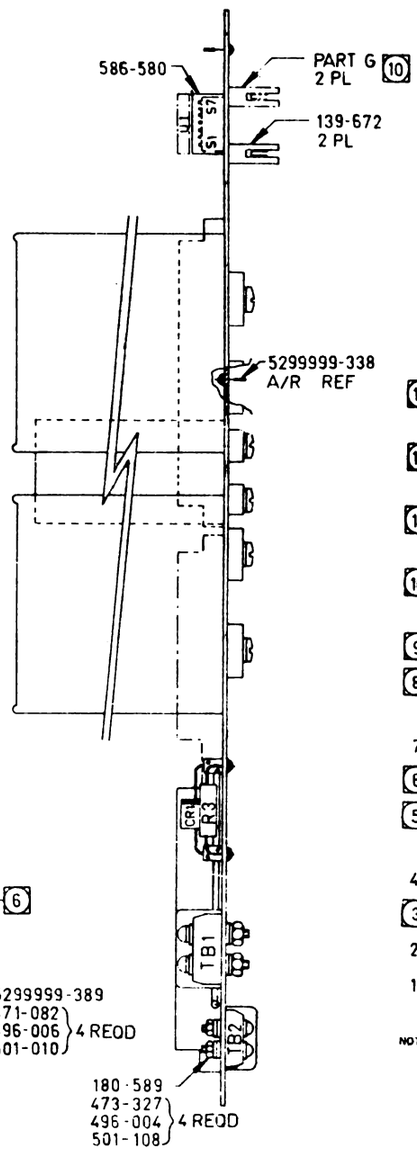
NONE


J31 TRANSPORT
J32 WRITE
J33 READ
SEE SHEET ONE
J82
J81
J83
U2 SPARE
PART F
PART D
PWR ON
JP1 +12V UNREG
JP2 -12V UNREG
JP3
JP5
JP6
JP8 OPEN
RUN/STOP(-/+)or
FAST FWD(-)or
WRITE ENABLE(-)or
BOT
REWIND
FAST
LOAD FAST FWD
GRD
LOGIC GRD
ANALOG GRD
UNLOAD
UNLOAD RESET
WRITE ENABLE
READY
OPEN
+5V TERMINATOR
SCR1 PART H
PART J
PART K
PART L
PART M
PART N
PART P
PART S
CR13
CR14
CR15
CR16
CR17
CR18
CR19
CR20
TP
TP +5V
TP +12V
TP RUN

5204182

REVISIONS					
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE DFTG	ENG	PROG
C		ECN N2708-9			
		REDRAWN NO CHANGE			





[13] 5204180-05,-06,-07,-08 WHEN TFO 5204746-01 IS USED.

[12] 5204180-01,-02,-03,-04 WHEN TFO 5203498-01 IS USED.

[11] ALL JUMPERS TO BE 615-006 & 600-187 UNLESS OTHERWISE SPECIFIED.

[10] INSTALL PARTS PER VERSION TABLE ON SH 2.

[9] INSTALL KEY AS SHOWN.

[8] SCREW & WASHER ARE SUPPLIED WITH CAPACITOR.

7. PLUS SIGN ON CAPACITOR INDICATES POSITIVE.

[6] HEAVY LINE ON DIODE INDICATES CATHODE.

[5] MARK DASH NO. AND ISSUE LETTER WITH WHITE INK PER BD1-1.

4 FOR SCHEMATIC SEE 5204576

[3] FOR ASSY NO. SEE VERSION TABLE.

2. COMPONENT DESIGNATION ARE FOR REF ONLY

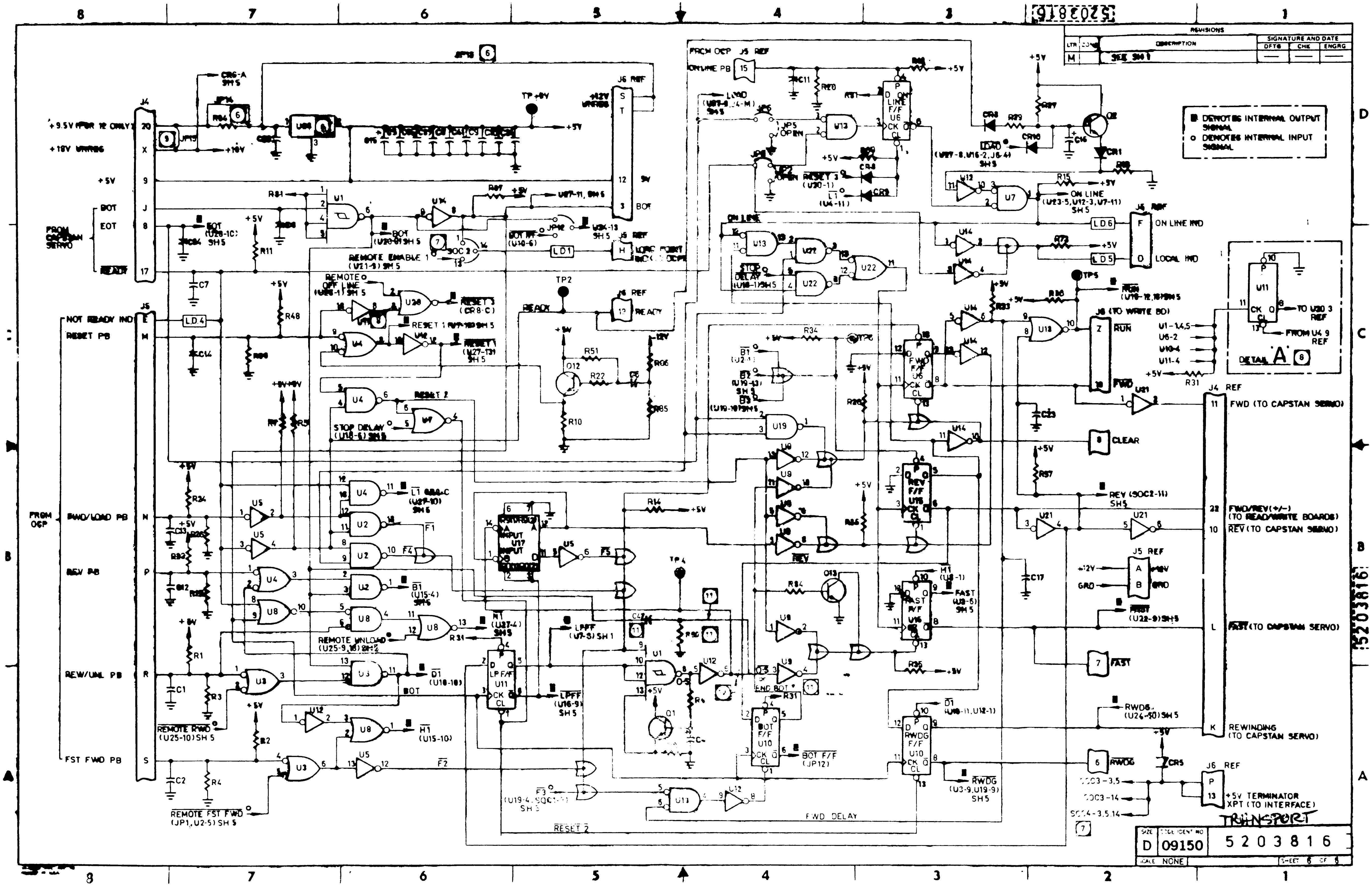
1. ASSEMBLE PER AMPEX STD HC2-2

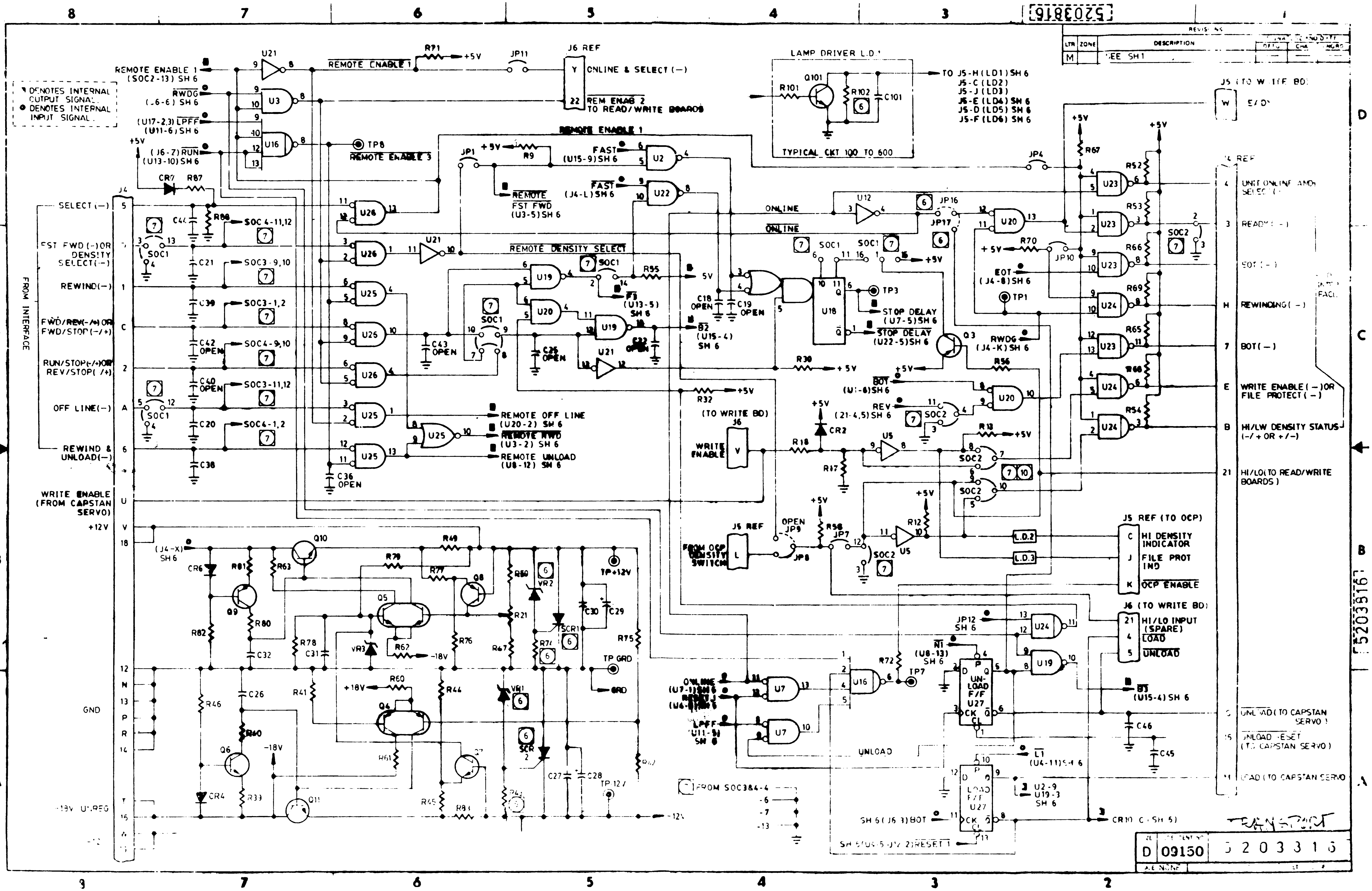
NOTES: UNLESS OTHERWISE SPECIFIED

5204182

FUND de SERTAR

NOTICE	UNLESS OTHERWISE SPECIFIED	SIGNATURE / DATE	AMPEX
		DRAWN BY	PCBA REF DWG INTERCONNECTING TM100+, MOTHER BD ASSY
			D 09150 5 2 0 4 1 8 2


5203816
REVISIONS
LTR
ZONE
DESCRIPTION
SIGNATURE AND DATE
DFTG
CHK
ENGRG
M
SEE SH 1
■ DENOTES INTERNAL OUTPUT SIGNAL
○ DENOTES INTERNAL INPUT SIGNAL
FROM CAPSTAN SERVO
BOT
EOT
READY
+9.5V (FOR 12 ONLY)
+18V UNREG
+5V
J4
J5
J6 REF
+12V UNREG
TP +5V
FROM OCP J5 REF
ON LINE PB
LOAD
RESET 3
ON LINE
ON LINE IND
LOCAL IND
ON LINE F/F U6
NOT READY IND
RESET PB
REMOTE OFF LINE
REMOTE ENABLE 1
RESET 1
RESET 2
STOP DELAY
TP2
READY
FWD F/F U6
REV F/F U15
FAST F/F U16
RUN
J6 (TO WRITE BD)
DETAIL "A"
J4 REF
FWD (TO CAPSTAN SERVO)
CLEAR
FWD/REV (+/-) (TO READ/WRITE BOARDS)
REV (TO CAPSTAN SERVO)
FAST (TO CAPSTAN SERVO)
REWINDING (TO CAPSTAN SERVO)
FROM OCP
FWD/LOAD PB
REV PB
REW/UNL PB
FST FWD PB
REMOTE UNLOAD
REMOTE RWD
REMOTE FST FWD
LP F/F U11
LPFF
BOT F/F U10
RWDG F/F U10
RWDG
END BOT
FWD DELAY
J6 REF
+5V TERMINATOR XPT (TO INTERFACE)
TRANSPORT
SIZE D
CODE IDENT NO 09150
5203816
SCALE NONE
SHEET 6 OF 6



5203816
DENOTES INTERNAL OUTPUT SIGNAL
DENOTES INTERNAL INPUT SIGNAL
REMOTE ENABLE 1 (SOC2-13) SH 6
RWDG (J6-6) SH 6
(U17-2,3) LPFF (U11-6) SH 6
(J6-7) RUN (U13-10) SH 6
REMOTE ENABLE 1
REMOTE ENABLE 3
REM ENAB 2 TO READ/WRITE BOARDS
ONLINE & SELECT (−)
J6 REF
LAMP DRIVER L.D.
TYPICAL CKT 100 TO 600
TO J5-H (LD1) SH 6
J5-C (LD2)
J5-J (LD3)
J5-E (LD4) SH 6
J5-D (LD5) SH 6
J5-F (LD6) SH 6
FAST (U15-9) SH 6
FAST (J4-L) SH 6
REMOTE FST FWD (U3-5) SH 6
REMOTE DENSITY SELECT
FROM INTERFACE
SELECT (−)
FST FWD (−) OR DENSITY SELECT (−)
REWIND (−)
FWD/REV (−/+) OR FWD/STOP (−/+)
RUN/STOP (−/+) OR REV/STOP (−/+)
OFF LINE (−)
REWIND & UNLOAD (−)
WRITE ENABLE (FROM CAPSTAN SERVO)
+12V
GND
REMOTE OFF LINE (U20-2) SH 6
REMOTE RWD (U3-2) SH 6
REMOTE UNLOAD (U8-12) SH 6
ONLINE
STOP DELAY (U7-5) SH 6
STOP DELAY (U22-5) SH 6
RWDG (J4-K) SH 6
EOT (J4-8) SH 6
BOT (U1-6) SH 6
REV (21-4,5) SH 6
WRITE ENABLE
(TO WRITE BD)
J5 REF
FROM OCP DENSITY SWITCH
J5 REF (TO OCP)
HI DENSITY INDICATOR
FILE PROT IND
OCP ENABLE
J6 (TO WRITE BD)
HI/LO INPUT (SPARE)
LOAD
UNLOAD
J5 (TO WRITE BD)
UNIT ONLINE AND SELECT (−)
READY (−)
EOT (−)
REWINDING (−)
BOT (−)
WRITE ENABLE (−) OR FILE PROTECT (−)
HI/LW DENSITY STATUS (−/+ OR +/−)
HI/LO (TO READ/WRITE BOARDS)
UNLOAD (TO CAPSTAN SERVO)
UNLOAD RESET (TO CAPSTAN SERVO)
LOAD (TO CAPSTAN SERVO)
UN-LOAD F/F U27
LOAD F/F U27
SH 6 (J6 3) BOT
CR10 C SH 5
FROM SOC3&4-4
TP+12V
TP GRD
TP 12V
−12V
−18V
+18V
UNLOAD
TRANSPORT
D 09150 5203316

REVISIONS				
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE	
			DFTG	CHK
D		SEE SHEET ONE		

615 - 019
600 - 237
A/R

5203155 01

5203818 - 01

HEAT SINK
5203155 - 01
REF

614-762

NUT 492 - 008
2 REQD

LOCK WASHER
502 - 002 2 REQD

FLAT WASHER
501 - 195
2 REQD

SILICON
GREASE
087 - 388

TSTR

MICA
INSULATOR
014 - 292

INSULATING
BUSH 014 - 2[illegible]

FLAT WASHER

SCREW 471 - 065
2 REQD

PCB
5203818 - 01
REF

501 - 195
2 REQD

TYPICAL TSTR MOUNTING TO 3 3 PLACES

DETAIL MTG
FOR -15 & -16
ONLY
COMPONENTS SIDE
VIEW

INSTALL THIS CAPACITOR
ON DIP SIDE AS SHOWN

ON COMP SIDE

CUT TRACK ON DIP SIDE

INSTALL MICA
INSULATOR 503-308

014 - 292

471 - 065
501 - 195 2 REQD
502 - 002
492 - 008
2 PLACES

DETAIL MTG
FOR C11

TRANSPORT

SIZE	DRAWING NO	
D	09150	5203817

J1

WRITE ENABLE
+12V UNREG
+12V
FWD
-18V
-26V
REVERSE
ZERO REEL
ZERO REEL
-12V
ZERO CAPSTAN TACH. LW.
FAST
REWINDING
+5V
P.S. FAIL TACH. HI.
-12V UNREG
LOAD F/F READY
UNLOAD F/F RESET UNLOAD
+18V
GRD
GRD
EOT
BOT
BOT
EOT/BOT GRD
EOT
LOWER REEL SERVO IN
UPPER REEL SERVO IN
OFFSET UP
OFFSET LOW
CAPSTAN MOTOR GRD
LOAD MOTOR GRD
WRITE ENABLE GRD
LOWER MOTOR FEEDBACK
UPPER MOTOR FEEDBACK
LOWER MOTOR
UPPER MOTOR

J2

J3

J3 REF
F CAPSTAN MOTOR
H
J
K
1 WRITE ENABLE

J2 REF
A TACH. LOW
F DOOR INTERLOCK
C TACH. HI.
3
4
5 GRD
6
M -12V
11 DOOR INTERLOCK
D TACH SHIELD
TP5
E 15 +12V
+12V
+5V
B +5V EOT/BOT LAMP
R RELAY
S SL
P RELAY
N LOAD MOTOR
J3 REF
V LOAD MOTOR
W
X
L +18V
M
N 10 WRITE ENABLE
11 -18V
12
13

SEE SHEET ONE

SEE 5203542

ZERO REEL CR 204-C CR 104-C

JP1

TP1 TP2 TP3 TP4 TP6

U1 U2 U3 U4 U5-A U5-B U5-C U5-D U6-A U6-B U6-C U6-D U7-A U7-B U7-C U7-D U8-A U8-B U8-D U8-E U8-F U9-A U9-B U10-A U10-C U10-D U10-E U10-F

Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11 Q12 Q13 Q15 Q16 Q18 Q19 Q21 Q22 Q23 Q24 Q26 Q165 Q167 Q169 Q171 Q172

CR2 CR3 CR5 CR7 CR8 CR9 CR10 CR15 CR16 CR17 CR18 CR20 CR21 CR23 CR25 CR26 CR27 CR28 CR101 CR102 CR103 CR104

VR1 VR2 VR4 VR5

TO R43
TO R11

UNLOAD CR 101 CR 201

SERVO

AMPEX

SCHEMATIC SERVO BOARD

5203821

D 5203321

REVISIONS				
LTR	DESCRIPTION	DAH	DRAFTSMAN	DATE	APPROVAL
L	SEE SHEET ONE				

173-012
8 PLS.

600-036
A/R

5299999-386

INSTALL INSULATING
BUSH 3 PLS
014-292 2REQ'D

5203341-01
2 PLS

172-008
5 PLS

5203823-01

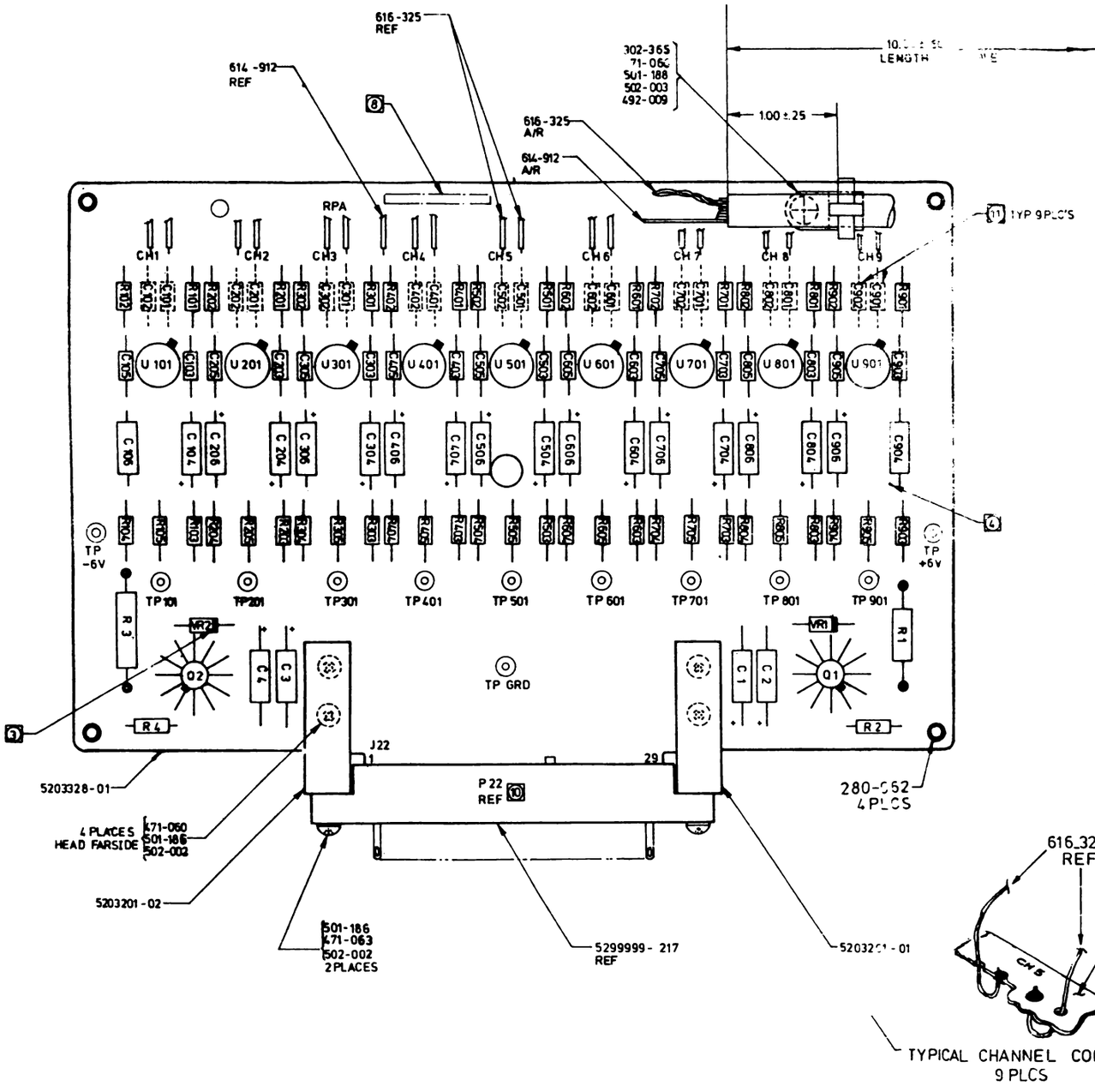
J1 J2 J3

5203820

SERVO

SIZE	CODE IDENT NO	5203822
D	09150	
SCALE	NONE	SHT 2 OF 2

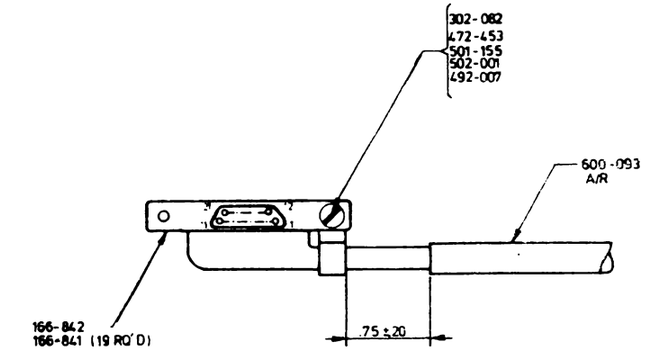
G	ECN N 2527				

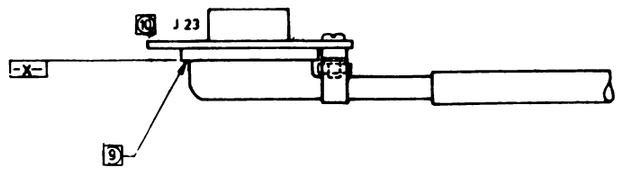


WIRING CHART

CABLE PAIR	CONDUCTOR COLOR	CONNECTOR J23 TERMINAL
CH1	WHITE	10
	GREY	20
CH2	WHITE	9
	GREY	19
CH3	WHITE	8
	GREY	18
CH4	WHITE	7
	GREY	17
CH5	WHITE	6
	GREY	16
CH6	WHITE	5
	GREY	15
CH7	WHITE	4
	GREY	14
CH8	WHITE	3
	GREY	13
CH9	WHITE	2
	GREY	12
SHIELD	GREY	21

PART NO	REFERENCE DESIGNATION
5299999-250	C 103, 105 THRU C 903, 905
013-224	VR 1, 2
014-247	Q 1
014-364	Q 2
037-985	C1, 2, 3, 4, C 104, 106 THRU 904, 906
5299997-102	R 105 THRU 505
5299997-470	R 103, 104 THRU 903, 904
5299997-511	R 101, 102 THRU 901, 902
173-012	TP 101 THRU TP 901, TP+6V, TP-6V, GRD
586-289	U 101 THRU U 901
041-669	R1, R3
5299997-271	R2, R4
(11)	C 101, 102 THRU C 901, 902





(11) OPEN FOR -01
P/N 034-177 FOR -02.

(10) MARK REFERENCE DESIGNATIONS PER AMPEX SPEC 3128856, PARA 3.1

(9) AFTER INSERTING WIRES, POT AREA INDICATED WITH EPOXY 2651-MM (922-327) OR EQUIVALENT.
POTTING COMPOUND NOT TO PROTUDE BEYOND SURFACE -X-

(8) MARK PART NUMBER 5203325-01 AND ISSUE LETTER WITH WHITE INK PER SC 1-1

(7) FOR B/M SEE VERSION TABLE.

6 - FOR WIRE LIST SEE 5203415

5 - COMPONENTS DESIGNATIONS ARE FOR REF ONLY

(4) PLUS SIGN ON CAPACITOR INDICATES POSITIVE

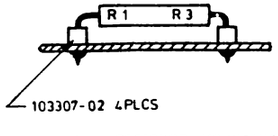
(3) HEAVY LINE ON DIODE INDICATES CATHODE

2 - ASSEMBLE & FABRICATE PER AMPEX HC 2-2

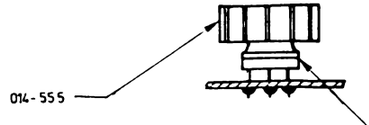
1 - FOR SCHEMATIC SEE 5203326

NOTES:

TYPICAL CHANNEL CONNECT
9 PLCS



TYPICAL RESISTOR MOUNTING



TYPICAL TSTR MOUNTING
WITH HEAT SINK
TYP 2 PLACES

VERSION TABLE (7)

FUNCTION	ASSY NO.
TM100&TMS LO.SPEED	5203325-01
TMS HI.SPEED	5203325-02

PREAMPLIFICATOR

DO NOT SCALE DRAWING		AMPEX	
	LEMINEUR	PCBA READ	
	QUINET	PREAMPLIFIER	
	MARRONE		
	MAGGERMAN	D 5203327	G
5203327		SCALE	1 OF 1

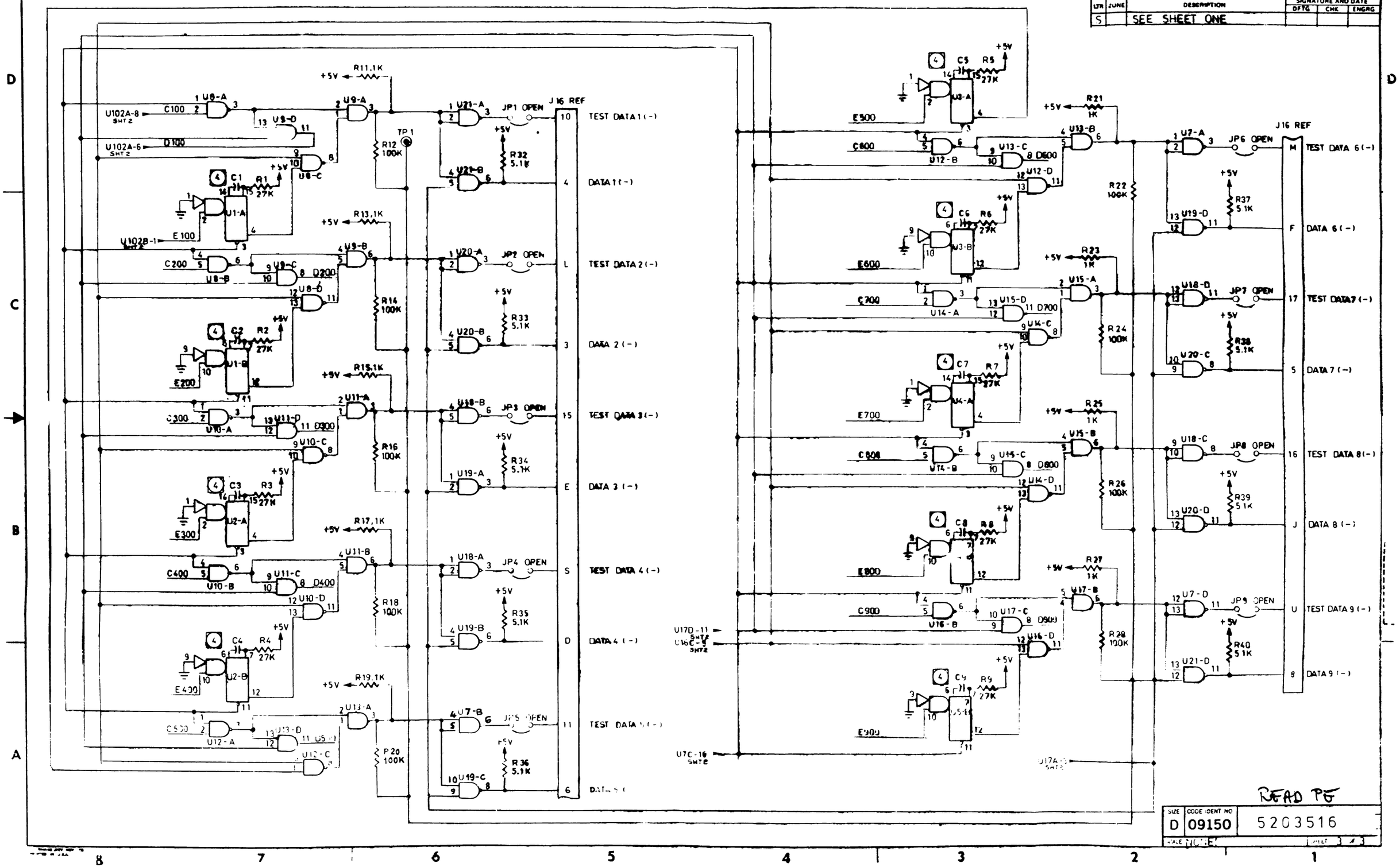
TYPICAL 9 CIPCUITS

REVISIONS			
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE
S		SEE SHEET ONE	

LAST USED	DELETED	NOT USED
CR12		CR1 THRU CR10
VR1		
R125,925	R124,924	
R53		
U102,902		
U22		
JP11,101,901		
TP3, +5V, GRD		
CH1		
C115,915	C114,914	
C24		
Q104,904		
Q4		

D	09150	5203518	

REVISIONS					
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE		
			DFTG	CHK	ENGRG
S		SEE SHEET ONE			

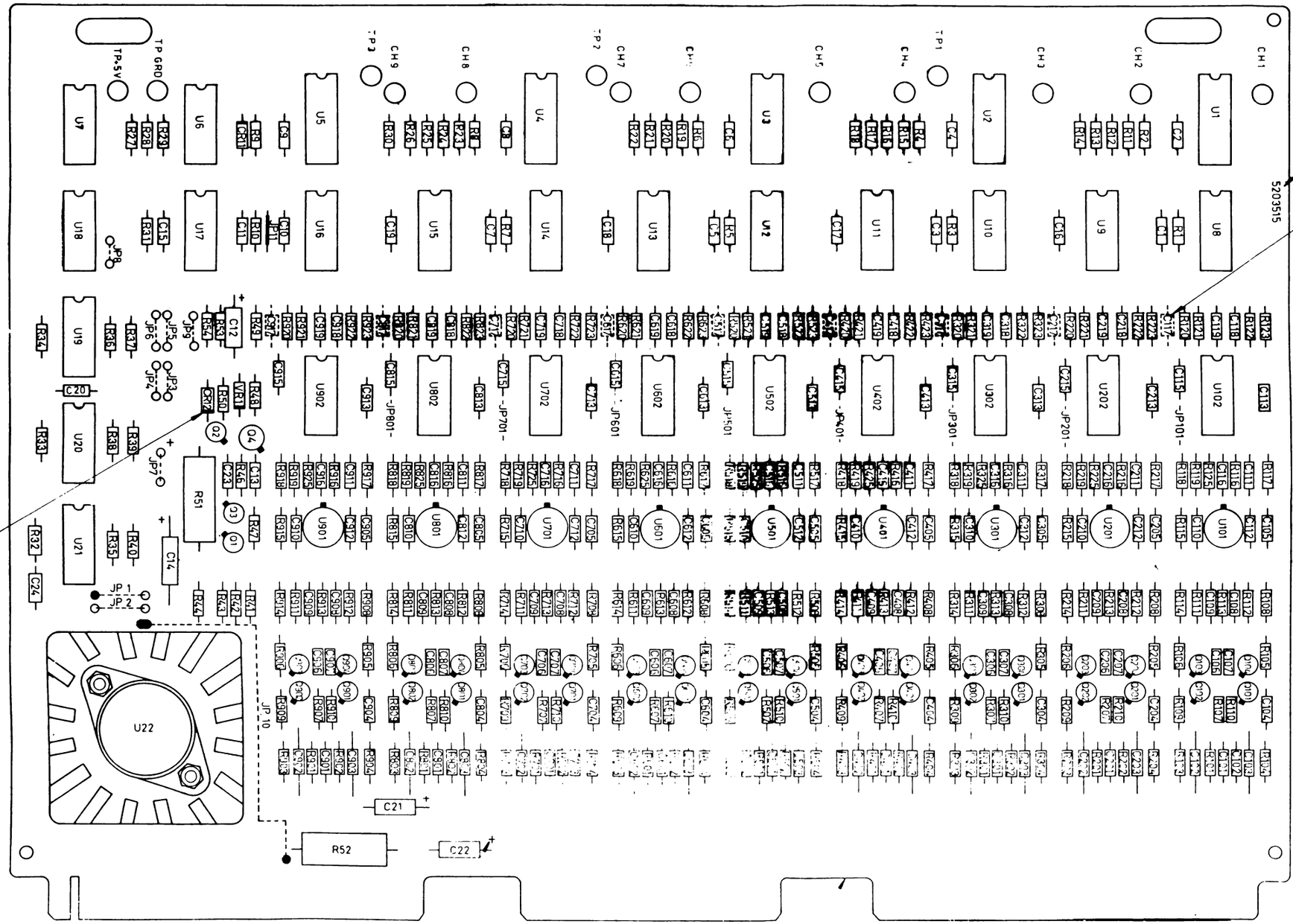


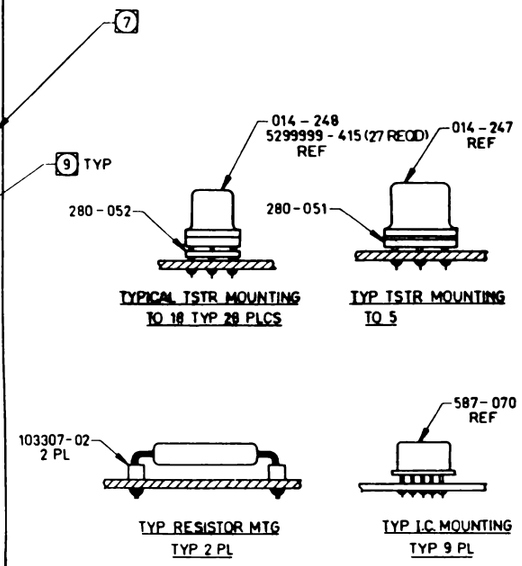
READ PE

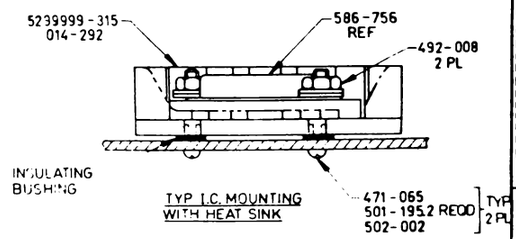
SIZE	CODE IDENT NO	
D	09150	5203516

SCALE NONE SHEET 3 OF 3

REVISIONS					
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE		
			DFTG	CHK	ENGRG
5		SEE SHEET ONE			







READ PE

D	09150	5203517

REVISIONS					
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE		
			DFTG	CHK	ENGRG
		SEE SHEET ONE			

FROM PREAMPLIFIER

CHANNEL 1

J17

27

29

18

14

R101 1K

R102 1K

C101 2.2 25V -10 +100%

C103 2.2 25V -10 +100%

C102 10

R103 5.1K

R106 5.1K

Q101

Q102

R121 500 1W

R116 220

R117 220

R118 680 1/2W

-12V

J18

18

17

R104 1K

+12V

C105 2.2 25V -10 +100%

TP102

C104 10

R105 1K

R107 1K

C112 10

R114 2.7K

C113 10

R115 2.7K

C107 2.2 25V -10 +100%

C106 10

R109 2.7K

R108 1K

R112 1K

C110 10

R110 1K

C4 .1

C5 -6V

R111 1K

R113 1K

U101

U103

U102

CLIP LEVEL

R46

U105-A

U105-B

U105-C

U105-D

U104-14

U105-14

U101-1

U102-1

U103-1

C117 .1

U101-4

U102-4

C111 .1

U101-8

U102-8

C109 .1

U2-8

C116 10

U104

R120

CR102

Q9-C

R122 10K

R119 10K 1W

CR101

Q8-C

TP4

R222 THRU R922

TP5

J16 REF

4	READ DATA 1 (5)(-)	
10	DATA 1 (-)	
3	READ DATA 2 (7)(-)	
L	DATA 2 (-)	
E	READ DATA 3 (3)(-)	
15	DATA 3 (-)	
D	READ DATA 4 (P)(-)	
S	DATA 4 (-)	
6	READ DATA 5 (2)(-)	
11	DATA 5 (-)	
F	READ DATA 6 (1)(-)	
M	DATA 6 (-)	
5	READ DATA 7 (0)(-)	
17	DATA 7 (-)	
J	READ DATA 8 (6)(-)	
15	DATA 8 (-)	
B	READ DATA 9 (4)(-)	
-	DATA 9 (-)	
B	READ STROBE (+)	
-	READ STROBE (-)	
-	GRD	

U13-A R8 5.1K

U13-B R7 5.1K

U13-C R15 5.1K

U13-D R14 5.1K

U9-A R9 5.1K

U9-B R10 5.1K

U9-C R13 5.1K

U9-D R12 5.1K

U5-A R11 5.1K

U12-A

U12-B

U11-A

U11-B

U10-A

U10-B

U8-A

U8-B

U7-A

U4-3

U4-4

U4-13

U4-11

U4-5

U4-12

U4-2

U4-1

U4-10

U204-6

U304-6

U404-6

U504-6

U604-6

U704-6

U804-6

U904-6

H1/LO(-/+)

READ PERMIT(-)

NRZ(+)

FWD/REV(+/-)

LOW READ THRESHOLD(-)

WRITE(-)

LOGIC GRD

+5V

+18V

J16

21

Y

14

22

A

Z

N

12

T

X

22

R3 1K

U2-A

U2-B

R37 1.8K

R34 5.1K

CR3

Q6

CR4

R41 10

R39 1.8K

R35 5.1K

CR2

Q7

CR5

R40 10K 1W

R38 10

R36 1.8K

U3-A

U3-B

U5-4

U5-13

R49.1K

R4 1K

R48 1K

U2-D

R43 10

R44 10

CR7

Q9 10

CR102 THRU CR902

U2-E

R42 10

R45 10

CR6

Q8 10

JP3

CR101 THRU CR901

R23 5.1K

R22 5.1K

R24 5.1K

TP GRD (6)

R25 5.1K

R26 430 1/2W

Q2

Q3

R28 390 1/2W

TP3

CLIP LEVEL

Q4

Q5

R32 1.8K 1/2W

R31 1.8K

R30 5.1K

R29 470

CR8

R27 12 1/2W

CR1

R5 100

R47 3.10W 5%

U14

C27 .1

C35 15,20V 10%

C26

C25

C36 1

C37

C28

C29 15,20V 10%

C30

R6

U1-B

U1-C

U1-D

U3-D

U5-C

R33 1.8K

TP2

R49

R17 1.8K

U5-D

500V 5% C39 2200pF

500V 5% C41 1500pF

300V 5% C32 820pF

R21 1.8K

R20 1.3K

R18 220

R19 390

JP1

JP2

C34 10

TP1

U6

U4

U2-F

U104-5 THRU U904-5

J17 REF

J18 REF

FROM PREAMPLIFIER

CHANNEL 2

CHANNEL 3

CHANNEL 4

CHANNEL 5

CHANNEL 6

R201

R202

R301

R302

R401

R402

R501

R502

NOTES
UNLESS TO INTERFACE
NOTES
OUTPUTS TO
MOTHER CARD
IN INSTALL

READ PERMIT(+)

REMOTE ENABLE 2

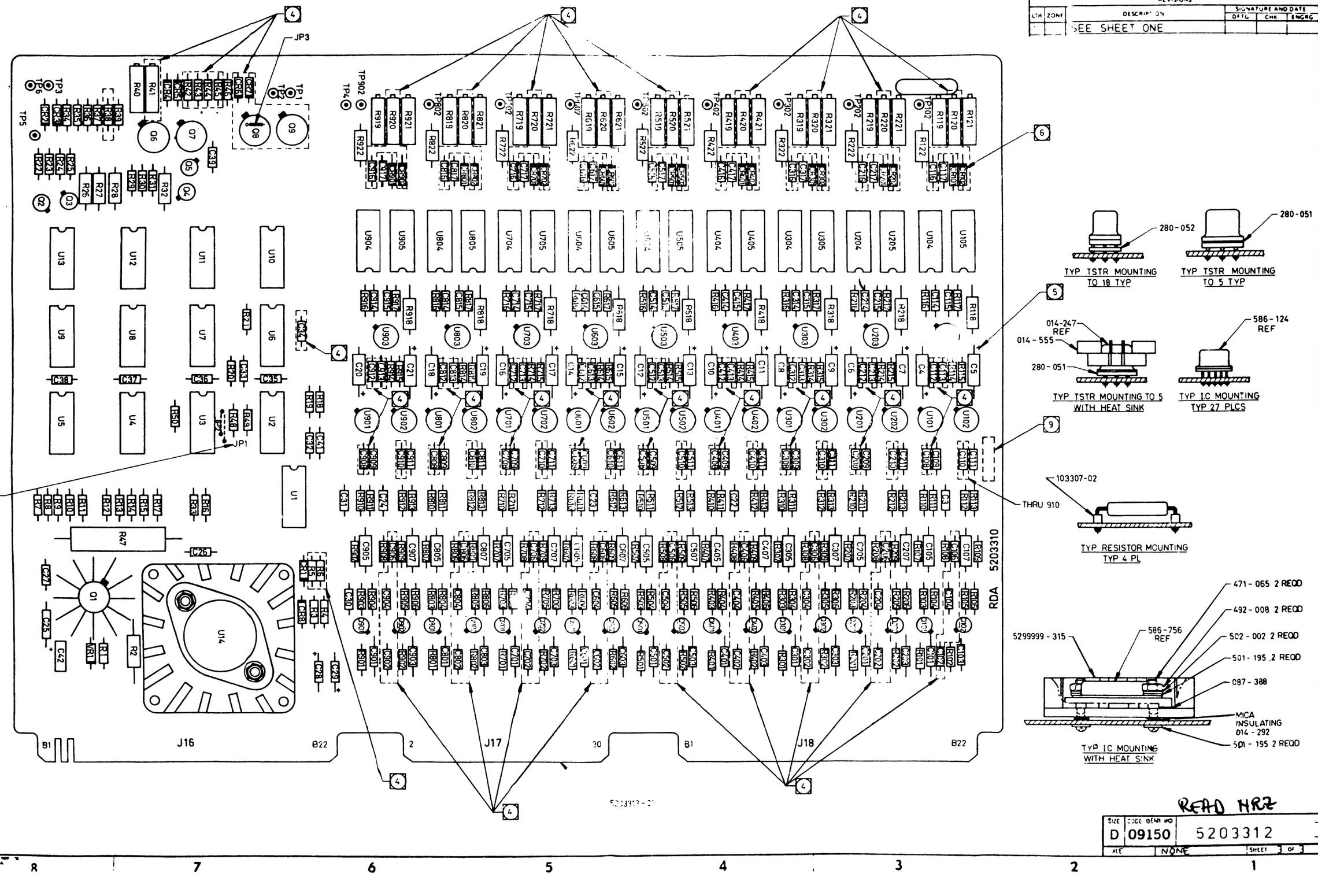
J16 REF

READ NRZ

SIZE	CODE IDENT NO	
D	09150	5203311

SCALE 1 : 1 SHEET 3 OF 3

REVISIONS				
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE DFTG	CHK	ENGRG
		SEE SHEET ONE			



READ HRZ

SIZE	CODE IDENT NO	5203312
D	09150	
ALE	NONE	SHEET 1 OF 1

REVISIONS					
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE		
			DRTR	CHK	ENGR
E		SEE SH1	—	—	—

WRITE ENABLE +V
+5V TERMINATOR
WCK(−) 800/1600(+/−)
WRITE RESET(−)
RUN
OVER WRITE(−)
REV(−)
SERVO GND
WRITE PERMIT(−)
READY
REMOTE ENABLE 2
+5V
WRITE(−)
READ PERMIT(−)
+18V
+12V
−12V
LOGIC GND

CR14-K SH1
TO U44-12 SH3
TO CKT100-5 THRU CKT900-5
TO CKT100-2 THRU CKT900-2
TO CKT100-3 THRU CKT300-3
TO CKT700-3 THRU CKT900-3
TO CKT400-3 THRU CKT600-3
TO CKT100-4 THRU CKT900-4
TO CKT100-6 THRU CKT900-6
WCK
NRZ
WRITE RESP
DEGAUSS
WRITE
FF ENABLE
SOC6 -2
+5V
CENTER TAP
ERASE HEAD
READ PERMIT
JP4 OR R39
VR3 OPEN
SCR OPEN
NR2 U43 12 SH1
DEGAUSS P

5204751

REVISIONS					
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE DFTG	CHK	ENGRG
E		SEE SH 1	—	—	—

CR14-K,SH3

WD4(-) J10 5 — SOC3 180 — SOC3 470 — J12 J 8

U18 LS14 · U21 LS04 · U20 LS00 · U12 LS107 (CK, J, K, CL, Q) · CR401 IN4446 · R401 1K +5V · R403 180 · Q401 2N2369A · CR403 IN4446 · C402 750P · CR402 IN4446 · R402 1K +5V · Q402 2N2369A · R404 180

U9 LS08 · U20 LS00 · SOC8, C5 · R405 +5V · U19 121 · U20 LS00

CKT400

WRITE HEAD CH4

CR14-K,SH3

WD5(-) J10 4 — SOC3 180 — SOC3 470 — J12 M 11

U18 LS14 · U21 LS04 · U14 LS00 · U15 LS107 (CK, J, K, CL, Q) · CR501 IN4446 · R501 1K +5V · R503 180 · Q501 2N2369A · CR503 IN4446 · C502 750P · CR502 IN4446 · R502 1K +5V · Q502 2N2369A · R504 180

U27 LS08 · U14 LS00 · SOC7, C1 · R505 +5V · U13 121 · U14 LS00

CKT500

WRITE HEAD CH5

CR14-K,SH3

WD6(-) J10 3 — SOC4 180 — SOC4 470 — J12 H 7

U18 LS14 · U21 LS04 · U17 LS00 · U15 LS107 (CK, J, K, CL, Q) · CR601 IN4446 · R601 1K +5V · R603 180 · Q601 2N2369A · CR603 IN4446 · C602 750P · CR602 IN4446 · R602 1K +5V · Q602 2N2369A · R604 180

CKT100-2 THRU CKT300-2 SH1

U41-4 SH3 — FF CLR 3

U27 LS08 · U17 LS00 · SOC7, C2 · R605 +5V · U16 121 · U17 LS00

CKT600

WRITE RES P

CKT100-4 THRU CKT300-4 SH1 — U34-6 SH3

CKT100-5 THRU CKT300-5 SH1

CKT100-6 THRU CKT300-6 SH1

WRITE HEAD CH6

CR14-K,SH3

WD7(-) J10 2 — SOC5 180 — SOC5 470 — J12 F 6

U32 LS14 · U33 LS04 · U23 LS00 · U24 LS107 (CK, J, K, CL, Q) · CR701 IN4446 · R701 1K +5V · R703 180 · Q701 2N2369A · CR703 IN4446 · C702 750P · CR702 IN4446 · R702 1K +5V · Q702 2N2369A · R704 180

U27 LS08 · U23 LS00 · SOC7, C3 · R705 +5V · U22 121 · U23 LS00

CKT700

WRITE HEAD CH7

CR14-K,SH3

WD8(-) J10 A — SOC5 180 — SOC5 470 — J12 E 5

U32 LS14 · U33 LS04 · U26 LS00 · U24 LS107 (CK, J, K, CL, Q) · CR801 IN4446 · R801 1K +5V · R803 180 · Q801 2N2369A · CR803 IN4446 · C802 750P · CR802 IN4446 · R802 1K +5V · Q802 2N2369A · R804 180

U27 LS08 · U26 LS00 · SOC7, C4 · R805 +5V · U25 121 · U26 LS00

CKT800

WRITE HEAD CH8

CR14-K,SH3

WD9(-) J10 C — SOC5 180 — SOC5 470 — J12 C 3

U41-2 SH1 — FF CLR2

U32 LS14 · U33 LS04 · U29 LS00 · U30 LS107 (CK, J, K, CL, Q) · CR901 IN4446 · R901 1K +5V · R903 180 · Q901 2N2369A · CR903 IN4446 · C902 750P · CR902 IN4446 · R902 1K +5V · Q902 2N2369A · R904 180

U31 LS08 · U29 LS00 · SOC7, C5 · R905 +5V · U28 121 · U29 LS00

CKT900

WRITE HEAD CH9

WRITE

D	09150	5204751

REVISIONS					
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE DFTG	CHK	ENGRG
D		N/739			
		REDRAWN NO CHANGE			
E		CONN2820-3			

LAST USED	DELETED	OPEN
VR4		VR3
CR15,903	CR8,9,10,11,12,13	CR15
Q6,902		
R39,905	R21,35	R34
C32,902	C101 THRU 901	C12,31,32
SOC8		
U44		
TP5		
JP5		
SCR1		SCR1
W1		

VERSION TABLE (4)

	ASSY P/N	DESCRIPTION
TM100+/TME	5204750-01	JP4
TM100	5204750-02	R39(6Ω,9W,5%)

SPARES

(4) SEE VERSION TABLE.

3. ALL CAPACITORS VALUES TO BE IN FARAD.
2. ALL RESISTORS VALUES TO BE IN OHM 1/4W 2%.
1. FOR B/M SEE 5204750.

NOTES: UNLESS OTHERWISE SPECIFIED

PARTS LIST ☐

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES
TOL ± .2 PL .3 PL ANLR
REMOVE BURRS AND SHARP EDGES
INTERPRET DIMENSIONS PER ANSI Y14.5

SIGNATURE	DATE
DRAWN BY	
CHK BY	
DFTG APVD	
ENGRG APVD	
AUTH BY	

MATERIAL
FINISH

AMPEX MEMORY PRODUCTS DIVISION 200 N. Main Street El Segundo, California 90245

SCHEMATIC WRITE ELEC PE/NRZ

SIZE	CODE IDENT NO	
D	09150	5 2 0 4 7 5 1

SCALE NONE | DO NOT SCALE THIS PRINT | SHEET 1 OF 3

5204751

REVISIONS					
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE		
			DFTG	CHK	ENGRG
D		SEE SHEET 1	–		

5204753-01

TP1 TP2 TP3 TP4 TP5

R16 R105 R205 R305 R405 R505 R605 R705 R805 R905

C32 OMIT

C18 R6 C4 R5 R4 C3 R3 C2

U1 R23 R21 VR1 C15 R24 C16 R20

U2 C12 OPEN C11 C13 VR2 R31

U34 U35 CR1 U36 U37 U38 C19 U39

U40 U41 U42 R2 U43 R1 JP3 JP2 JP1 SOC6 REF. R32 U44 C14 R30

W1

U4 U5 U6 C21 U7 U8 C22 U9 U10 U11 U12

C20

U13 C23 U14 U15 U16 C24 U17 C25 U18 U19 U20 U21

U22 C26 U23 U24 U25 U26 U27 U28 U25 U30

C29

C28 REF SOC7 SOC8 SOC3 REF SOC4 SOC5

U31 U32 U33

REF. OPEN C31

C30

6

Q6 Q2 VR4 Q5 Q3 Q4 C27 C1

R17 R14 R13 R12 R11 R15 CR4 C6 R9 C7 CR7 R10 C5 R8 C42 R7 C43 R33 R26 R21 R22 R27 CR5

SOC1 REF SOC2 REF.

R36 C36 OPEN

Q1 U3

C8 C17 VR3 C41 SCR1 OPEN OPEN OPEN

C16 C9 C10

JP4 or R39

R901 R902 R801 R802 R701 R702 R601 R602 R501 R502 R401 R402 R301 R302 R201 R202 R101 R102

R903 R904 R803 R804 R703 R704 R603 R604 R503 R504 R403 R404 R303 R304 R203 R204 R103 R104

C902 C802 C702 C602 C502 C402 C302 C202 C102

J10 J11 J12

COMPONENT SIDE

014-679
280-051

TYP XTR MTG FOR U1,U2 & Q2
SCALE: NONE

TYP XTR MTG FOR Q4
SCALE: NONE

280-052

TYP TO-18 XTR MTG
TYP 21 PLCS
SCALE: NONE

103307-02
2 PLCS

TYP RES MTG
FOR R103 THRU R903
& R104 THRU R904
TYP 18 PLCS
10 FOR R39 (ONLY FOR -02 VERSION)
SCALE: NONE

103307-01
2 PLCS

TYP RES MTG
FOR R36, R26, R27
SCALE: NONE

582-115
8PLC'S

5299999-315

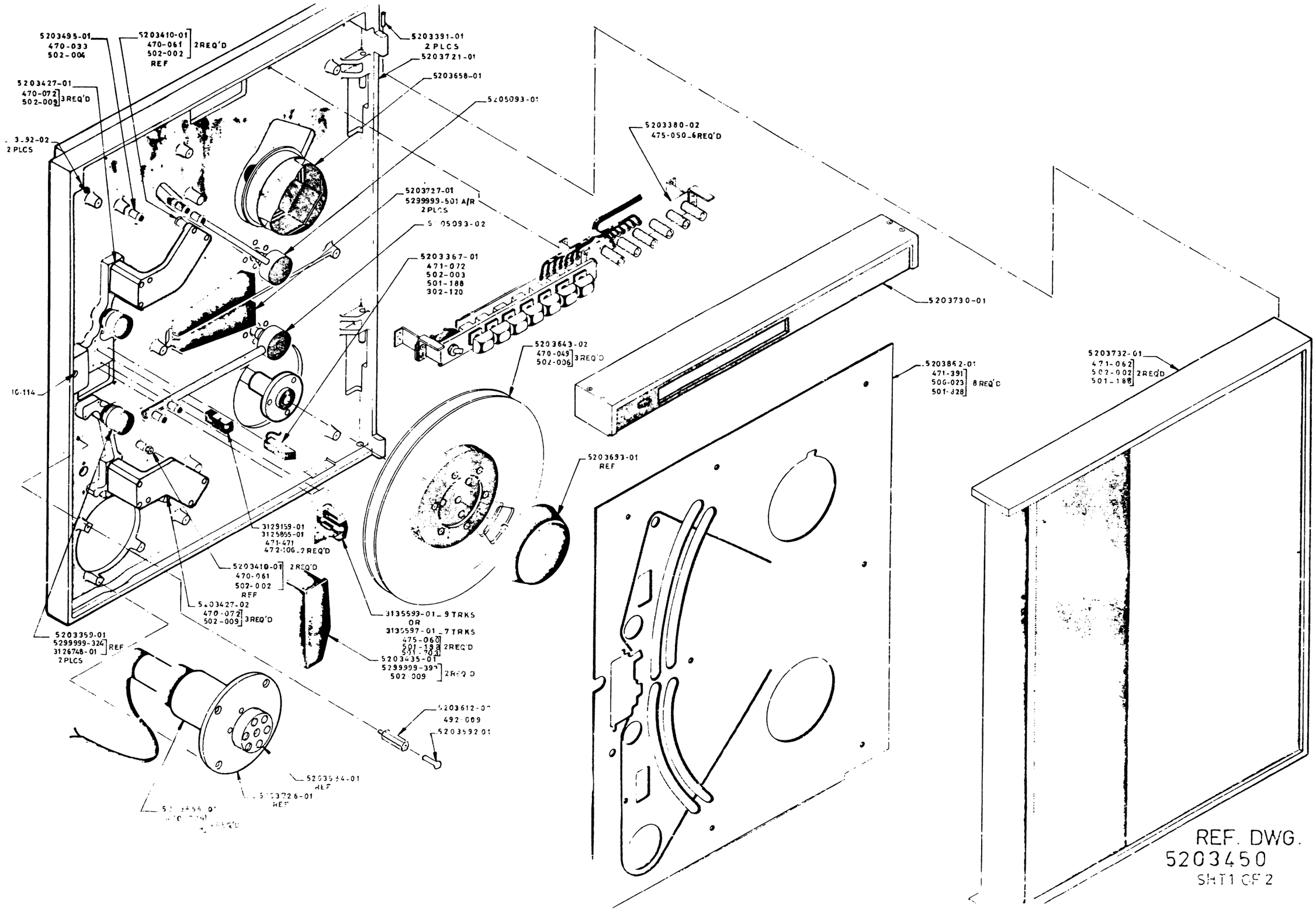
014-292
2 PLCS
087-388
A/R

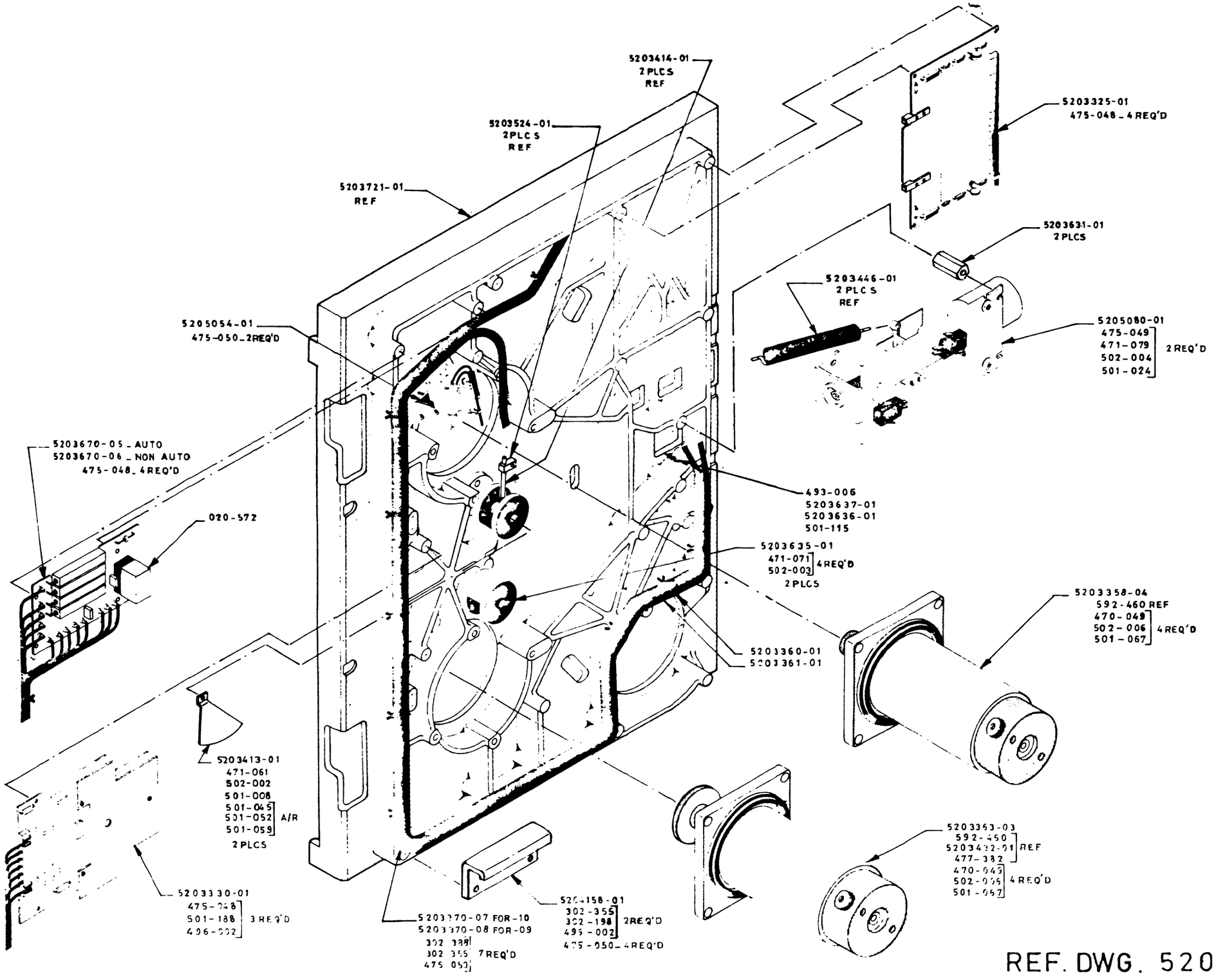
492-008
501-195
502-032
471-055
2PL

TYP MTG FOR Q1, U3
SCALE: NONE

WRITE

SIZE	CODE IDENT NO	5204752
D	09150	
SCALE		SHEET 2 OF 2

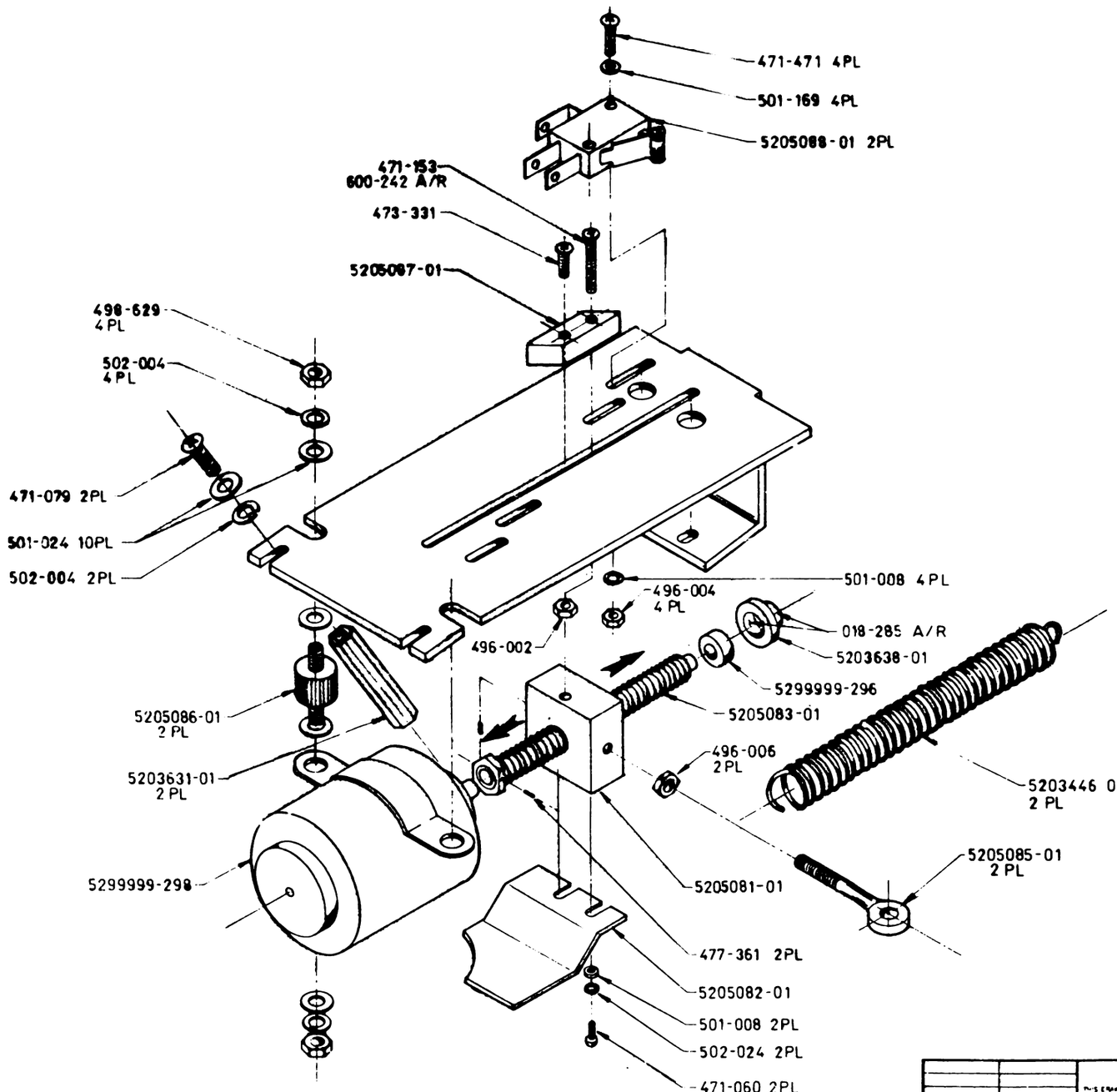

5203495-01
470-033
502-004
5203410-01
470-061
502-002
REF
2REQ'D
5203427-01
470-072
502-009
3REQ'D
3-92-02
2PLCS
5203391-01
2PLCS
5203721-01
5203658-01
5205093-01
5203380-02
475-050 6REQ'D
5203727-01
5299999-501 A/R
2PLCS
5205093-02
5203367-01
471-072
502-003
501-188
302-120
5203730-01
5203643-02
470-049
502-036
3REQ'D
5203842-01
471-391
506-023
501-328
8REQ'D
5203732-01
471-062
502-002
501-188
2REQ'D
IC-114
5203693-01
REF
3129159-01
3125855-01
471-471
472-106 2REQ'D
5203410-01
470-061
502-002
REF
2REQ'D
5203427-02
470-072
502-009
3REQ'D
3135599-01 9TRKS
OR
3135597-01 7TRKS
475-060
501-188
501-703
2REQ'D
5203359-01
5299999-324
3126748-01
REF
2PLCS
5203435-01
5299999-397
502-009
2REQ'D
5203612-01
492-009
5203592-01
5203534-01
REF
5203726-01
REF
REF. DWG.
5203450
SHT 1 OF 2

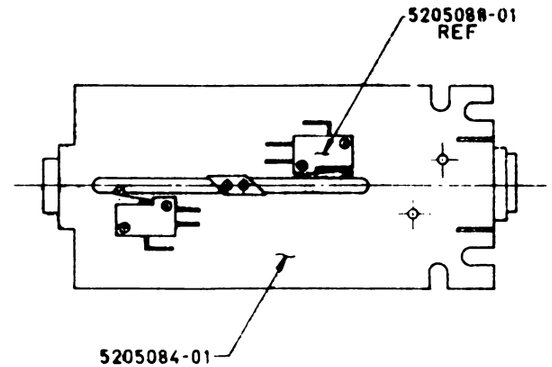


REF. DWG. 5203450

SHT 2 OF 2

REVISIONS					
LTR	ZONE	DESCRIPTION	DATE	CHK	APPD
D		PROTO			
E		ERN N2621			
F		ECN N2733-2			
G		ECN N2763-2			
		REDRAWN NO CHANGE			





1. ASSEMBLE PER AMPEX STDS.

NOTES: UNLESS OTHERWISE SPECIFIED

NOTICE

UNLESS OTHERWISE SPECIFIED

MATERIAL

AMPEX

LOAD SYSTEM ASSY.
(REF. DWG)

SIZE	FSCM NO.	DWG NO.
D	09150	5205089

SEE SHEET ONE

8PLC'S 476-582 501-185

4PLC'S 501-185

REF CARD CAGE WELDED

REF INTERCONN BD ASSY FOR -01,-03,-05,-07 -11,-13,-15,-17

DETAIL 'A'

4-EN J6B,8B ARE NOT INSTALLED ON MOTHER BD. FOR -02,-04,-06,-08 -12,-14,-16,-18

REAR VIEW

280-007

264-004

475-085 8PLC'S

3107903-17

PART B

SEE DETAIL 'A'

157-451

157-542 2PLC'S

171-066 3PLC'S

473-331 2PLC'S

157-450

157-588

157-543 2PLC'S

FROM T-AIR

496-005

501-009

472-487 4PLC'S

501-067

501-055

501-009 475-047

473-328

302-067

501-008

302-061

473-328

302-066

501-008

302-061

S204534-01 A/R

503-047

925154S-02

530-218

TYP 18 PLC'S FOR -01,-03,-05,-07,-11,-13,-15,-17

TYP 10 PLC'S FOR -02,-04,-06,-08,-12,-14,-16,-18

S204501-02

S204182-01

S203837-01

PART F

FOR AC HARNESS

157-023

157-542 3PLC'S

157-543

501-009

4PLC'S 496-005

S205100-01

475-085 or 475-050 2PLC'S

591-027 2PLC'S

FOR BP11

SUPPLIED WITH CIRCUIT B'KT.

085-001

TYP 4PLC'S FOR -01,-02 -03,-04,-11,-12,-13,-14

TYP 5PLC'S FOR -05,-06 07,-08,-15,-16,-17,-18

F1,F2 P/N 070-017

F3 070-001

F4 PART G

F5 PART H

PART A

TYPICAL MOUNTING FOR INTERCONNECT BOARD ASSY

503-992

501-166

473-327

REF INTERCONN BD. ASSY

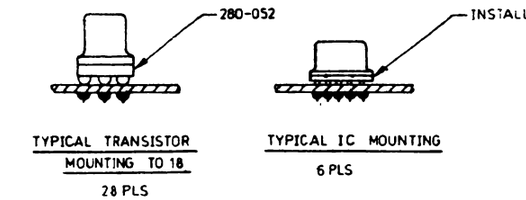
REF CARD CAGE WELDED

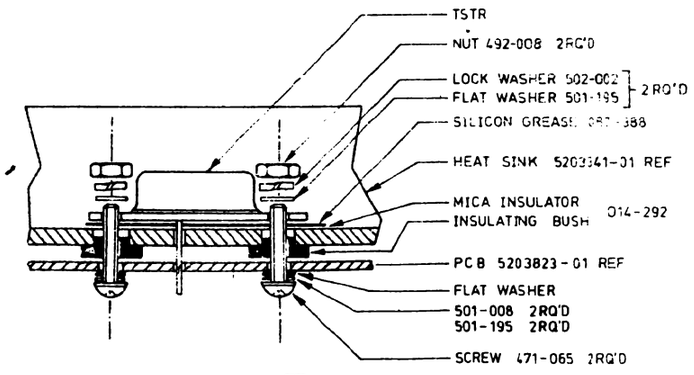
TYP 20 PLC'S FOR -02,-04,-06,-08,-12,-14,-16,-18

TYP 40 PLC'S FOR -01,-03,-05,-07,-11,-13,-15,-17

5205057 G

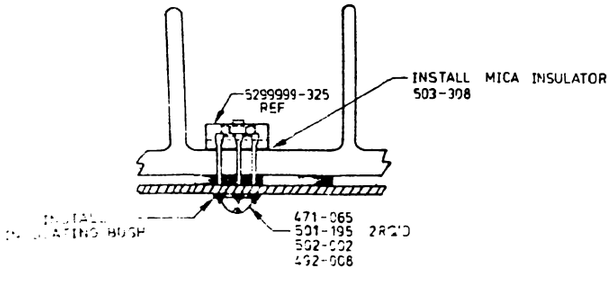
SHEET 2 OF 2





TYPICAL TSTR MOUNTING TO 3 (10)

7 PLS.



TYPICAL TRIAC MOUNTING

P/N	
013-166	CR1,2
013-257	VR3
358	VR4,5
277	Q13
357	Q19
5	C13
037-152	R14
037-835	C105,206
PART A	C
9	C
735	C11
041-581	
PART E	
766	
055-961	C
173-012	TP1
380-465	Q
380-466	Q
581-157	
109	
124	
269	
282	
326	
581	Q7
784	Q9
871	
566-390	
PART B	
5299997-100	R1
101	R10,25,26
102	R
103	
104	R
112	R
PART C	
104	
5299997-152	R8
153	R15,17,69
162	R3,4
181	R47,63
201	R70
222	R20 59,60,61 86,90,91
242	R31,105,206
243	R118,218
271	R58
272	R6
273	R73,78,82,28,99
302	R9,11,58,43
363	R112,212
391	R46,57,72,77,81
471	R 41,21,22,102,112,70
510	R90,96
511	R103,203
512	R40,65,93
562	R5,7,34
563	R30,33
680	R18
822	R95,97,117,2
823	R19,114,214
821	R65
5299997-911	R64
5299998-102	R87
5299996-121	R48
5299998-152	R88
581-457	VR2
5299999-256	Q3,5,7 102,104,202,204
257	Q4,6,8,10,12 14,15 THRU 18,20,21,101,103,201,203,1,2,26,11
262	R51,98,120,220,52
318	R49,50
319	R122,222
325	Q25
347	C1, 5,17,22,24 THRU 27,102,103,104,202,203,204
362	C23
250	C6,7,101,105,201,205
386	SOC 1
5299999-387	C9,10,29,108,109,110, 208,209,210
PART D	C8
614-762	JP2
OPEN	R35,36,37
OPEN	Q9,24
5299997-123	R85
037-733	C4

	REVISIONS				
	DESCRIPTION	DATE	DRAFTSMAN	DATE	APPROVAL
A	ECN N 1978/N2026				
B	ECN N 2201	13 MAY	KY		
C	ECN N 2204	21-MAY-75	KG		
D	ECN N 2205	1-9-75	KG		
E	ECN N 2214	15-SEP-75	KG		
F	ECN N 2218	22-X-75	KG		
G	ECN N 2292	30-XII-75	KG		
H	ECN N 2492	16 FEB 76	KG		
J	ECN N 2610	7 JUIN 76	LL		
K	ECN N 2714/3	13 OCT 76	M B E		
L	ECN N 2751-3	3 JANV 77	KG		

TABLE 1 (9)

FUNCTION	ASSY NO.	PART A	PART B	PART C	PART D	PART E
AUTO >12.5 IPS	5203820-10	037-746	OPEN	OPEN	OPEN	041-762
N.AUTO>12.5 IPS	5203820-20	OPEN	OPEN	OPEN	OPEN	041-762
AUTO 12.5 IPS	5203820-11	037-746	OPEN	OPEN	OPEN	041-444
N.AUTO 12.5 IPS	5203820-21	OPEN	OPEN	OPEN	OPEN	041-444

(11) THESE COMPONENTS ARE OPEN

(10) DO NOT USE MICA INSULATOR ON Q 106,206.

(9) SEE TABLE 1.

(8) HEAVY LINE ON DIODES INDICATES CATHODE.

7. FOR SCHEMATIC SEE 5203821.

(6) MARK DASH NO. & ISSUE LETTER WITH WHITE INK PER BD1-1.

5. TRIMPOTS NOT TO BE SUBMERGED IN WATER.

(4) PLUS SIGN ON CAPACITOR INDICATES POSITIVE.

3. P/N TO BE AS PER TABLE 1.

2. COMPONENT DESIGNATIONS ARE FOR REF. ONLY.

1. ASSEMBLE PER AMPEX STD HC2-2.

NOTES:

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED

5203822

5203820 TM 100

AMPEX S.A. NIVELLES BELGIUM

PCBA

SERVO BOARD

D 5203822 L

NONE SHT 1 OF 2

LAST USED	
R99	CR28,104,204
R124,224	Q26,106,206
TP6,101,201	JP2
C29,110,210	U10,101,201
VR5,101,201	SOC.1

NOT USED	DELETED
R16,38,44,45	
R104,204	
C107,207	
C3	
CR6,11,12,13,14,24,1	

	DESCRIPTION	DATE	DRAFTSMAN	CHK	APPROVED
A	ECN N 1978/N2026				
B	ECN N 2144				
C	ECN N 2201				
D	ECN N 2204				
E	ECN N 2205				
F	ECN N 2214				
G	ECN N 2218				
H	ECN N 2292				
J	ECN N 2497				
K	ECN N 2610				
L	ECN N 2714/2				
M	ECN N 2751-2				

INTEGRATED CIRCUIT LIST

AMPEX P/N	586-109	586-124	586-269	586-282	586-326	586-581	586-784	586-871	586-890
COM. P/N	SN 7402 N	µA710 C	µA 741	MC 1439	SN7404 N	SN 7403 N	SN 7438 N	SN 7413 N	SN 7417 N
REF. DES.	U5	U3, U4	U1, U2	U101, U201	U8	U7	U6	U9	U10

VERSION TABLE (14)

P/N	COMPONENT DESIG.				
	C14	JP1	C8	R27	R13
5203820-10	47µF, 20V	OPEN	OPEN	OPEN	360K
5203820-20	OPEN	OPEN	OPEN	OPEN	360K
5203820-11	47uF, 20V	OPEN	OPEN	OPEN	680K
5203820-21	OPEN	OPEN	OPEN	OPEN	680K

DASH NO.	FUNCTION
-21	NON AUTO 12.5 IPS
-11	AUTO 12.5 IPS
-20	NON AUTO > 12.5 IPS
-10	AUTO > 12.5 IPS

18 JP2 TO BE 614-762
17 FOR PCBA R.DWG. SEE 5203822
16. FOR B/M SEE' 5203820
15. THIS SCHEMATIC MUST BE USED WITH SCHEMATIC 5203541.
14 SEE VERSION TABLE.
13. Q19 IS 014-597.
12. Q13 IS 014-247.
11. Q25 IS 5299999-325.
10. Q4,6,8,10,12,15 THRU 18,20,21,101,103,201,203, 1, 2,14,26,11ARE 5299999-257
9. Q3,5,7,9, 102,104,202,204 ARE 5299999-256.
8. Q22,105,205 ARE 580-466.
7. Q23,24,106,206 ARE 580-465.
6. ~~VR5 IS 013-226.~~
5. VR4,5 ,101,201 ARE 013-358; VR1,2 ARE 581-457.
4. VR3 IS 013-257.
3. ALL DIODES ARE 581-157 EXCEPT CR102,103,202,203 ARE 013-168.
2. ALL CAPACITOR VALUES ARE IN µF, 100V.
1. ALL RESISTOR VALUES ARE IN OHMS 1/4W, 2%.

NOTES: UNLESS OTHERWISE SPECIFIED.

DO NOT SCALE DRAWING

5203821

GREGOIRE

AMPEX

SCHEMATIC SERVO BOARD

SIZE	DRAWING NO.	REV
C	5203821	M

NONE | 1 OF 2

5203822

REV LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE DFTG	CHK	ENGR
L		ECN2652-2- REDRAWN NO CHANGE			
M		ECNN2825-2			

REF	PART NO	DESCRIPTION	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
R1	5299997-221	220Ω 1/4W 2%										X	X	X	X	X	X	X																																				
R2	-221	220Ω										X	X	X	X	X	X	X																																				
R3	-331	330Ω										X	X	X	X	X	X	X																																				
R4	-331	330Ω										X	X	X	X	X	X	X																																				
R5	-182	1.8K										X	X	X	X	X	X	X																																				
R6	-123	12K										X	X	X	X	X	X	X																																				
R7	-182	1.8K										X	X	X	X	X	X	X																																				
R8	-331	330Ω										X	X	X	X	X	X	X																																				
R9	-182	1.8K										X	X	X	X	X	X	X																																				
R10	-391	390Ω										X	X	X	X	X	X	X																																				
R11	-102	1K										X	X	X	X	X	X	X																																				
R12	-681	680Ω										X	X	X	X	X	X	X																																				
R13	-681	680Ω										X	X	X	X	X	X	X																																				
R14	-182	1.8K										X	X	X	X	X	X	X																																				
R15	-821	820K										X	X	X	X	X	X	X																																				
R16	-391	390Ω										X	X	X	X	X	X	X																																				
R17	-111	110Ω										(6)	X	X	(6)	(6)	(6)	(6)																																				
R17	-221	220Ω										X	(6)	(6)	(6)	(6)	(6)	(6)																																				
R17	5299997-431	430Ω 1/4W 2%										(6)	(6)	(6)	X	X	X	X																																				
R18	5299998-152	1.5K 1/2W 2%										X	(6)	(6)	(6)	(6)	(6)	(6)																																				
R18	5299998-222	2.2K 1/2W 2%										(6)	(6)	(6)	X	X	X	X																																				
R18	5299998-331	330Ω 1/2W 2%										(6)	X	X	(6)	(6)	(6)	(6)																																				
R19	5299997-221	220Ω 1/4W 2%										X	X	X	X	X	X	X																																				
R20	5299997-231	330Ω 1/4W 2%										X	X	X	X	X	X	X																																				
R21	068-869	RES VAR 2K 3/4W										X	X	X	X	X	X	X																																				
R22	5299997-822	8.2K 1/4W 2%										X	X	X	X	X	X	X																																				
R23	-221	220Ω										X	X	X	X	X	X	X																																				
R24	-221	220Ω										X	X	X	X	X	X	X																																				
R25	-331	330Ω										X	X	X	X	X	X	X																																				
R26	-331	330Ω										X	X	X	X	X	X	X																																				
R27	-273	27K										X	X	X	X	X	X	X																																				
R28	-182	1.8K										X	X	X	X	X	X	X																																				
R29	-102	1K										X	X	X	X	X	X	X																																				
R30	-182	1.8K										X	X	X	X	X	X	X																																				
R31	-182	1.8K										X	X	X	X	X	X	X																																				
R32	-182	1.8K										X	X	X	X	X	X	X																																				
R33	-182	1.8K										X	X	X	X	X	X	X																																				
R34	-182	1.8K										X	X	X	X	X	X	X																																				
R35	-182	1.8K										X	X	X	X	X	X	X																																				
R36	-182	1.8K										X	X	X	X	X	X	X																																				
R37	-182	1.8K										X	X	X	X	X	X	X																																				
R38	-102	1K										X	X	X	X	X	X	X																																				
R39	-121	120Ω										X	X	X	X	X	X	X																																				
R40	-470	47Ω										X	X	X	X	X	X	X																																				
R41	5299997-102	1K 1/4W 2%										X	X	X	X	X	X	X																																				
R42	048-044	2K 1/4W 1%										X	X	X	X	X	X	X																																				
R43	5299997-101	100Ω 1/4W 2%										(6)	(6)	(6)	(6)	X	(6)	X																																				
R44	5299997-911	910Ω 1/4W 2%										X	X	X	X	X	X	X																																				
R45	5299997-390	39Ω 1/4W 2%										X	X	X	X	X	X	X																																				
R46	5299997-123	12K 1/4W 2%										X	X	X	X	X	X	X																																				

(12) TRACK TO BE CUT FOR -15 & -16 ONLY

(11) ONLY FOR -15 & -16

(10) FOR -13 THRU -16, SOC 2 P/N 5203595-01, -02, -03 & -06 ARE NOT ALLOWED.

(9) JP15 CONSIST OF 2 PTH CONNECTING J4-20 & J4-X.

(8) SEE DETAIL A ON SHEET 6 OF 6.

(7) FOR SOC 1 SEE 5203598 OR 5204161.
FOR SOC 2 SEE 5203596.
FOR SOC 3 & 4 SEE 5203575.

(6) ALL THESE COMPONENTS ARE NOT USED IN THIS DASH.

5. ALL JUMPERS ARE 615-004 EXCEPT JUMPER 12 (614-762).

4. FOR REF DWG SEE 5203817.

(3) FOR IC PIN VOLTAGE SEE TABLE ON THIS SHEET.

2. FOR B/M SEE 5203815.

1. FOR ALL COMPONENTS VALUE & P/N SEE SH 1, 2, 3 & 4.

NOTES: UNLESS OTHERWISE SPECIFIED

LAST USED	NOT USED	DELETED
C48	——	——
C101 THRU C601	——	——
CR10	——	——
VR3	——	——
SCR2	——	——
Q13	——	——
Q101 THRU Q601	——	——
R69	——	——
R102 THRU R602	——	——
TP1+5V, GRD, +12V, -12V	——	——
U28	——	——
JP17	——	——

INTEGRATED CIRCUITS TABLE (3)

AMPEX P/N	586-075	586-079	586-108	586-109	586-164	586-248	586-325	586-326	586-533	586-756	586-784	586-871
COMMERCIAL REF	SN 7400N	SN 7440N	SN 7474N	SN 7402N	SN 7401N	SN 7490N	SN 7405N	SN 7404N	SN 74121N	LM 309K	SN 7438N	SN 7413N
COMPONENT REF	U3, U4, U22	U16	U6, U10, U11, U15, U27	U7, U8, U13, U20, U25, U26	U2, U19	U17	U5, U9, U14, U21	U12	U18	U28	U23, U24	U1
VOLTAGE PINS	14	14	14	14	14	5	14	14	14	2	14	14
GROUND PINS	7	7	7	7	7	10	7	7	7	3	7	7

5203815 | LM 100

NOTICE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES.

REMOVE BURRS AND SHARP EDGES

MATERIAL

FINISH

SIGNATURE | DATE

DRAWN BY

CHK BY

AMPEX

MEMORY PRODUCTS DIVISION

SCHEMATIC TRANSPORT ELECTRONICS

SIZE D | CODE IDENT NO 09150 | 5203816

SCALE NONE | DO NOT SCALE THIS PRINT | SHEET 1 OF 6

REF	PART NO	DESCRIPTION
R47	5299997-822	8.2 K 1/4W 2%
R48	5299997-221	220 Ω 1/4W 2%
R49	043-870	.5 Ω 10W 5%
R50	5299997-331	330Ω 1/4W 2%
R51	-153	15K
R52	-512	5.1K
R53	-512	5.1K
R54	-512	5.1K
R55	-182	1.8K
R56	-222	2.2K
R57	-182	1.8K
R58	-182	1.8K
R59	5299997-682	6.8K 1/4W 2%
R60	5299998-152	1.5K 1/2W 2%
R61	5299998-751	750 Ω 1/2W 2%
R62	5299998-152	1.5K 1/2W 2%
R63	5299998-751	750 Ω 1/2W 2%
R64	5299999-429	6 Ω 9W 5%
R65	5299997-512	5.1K 1/4W 2%
R66	-512	5.1K
R67	-182	1.8K
R68	-512	5.1K
R69	-512	5.1K
R70	-182	1.8K
R71	-182	1.8K
R72	-100	10 Ω
R73	-361	360 Ω
R74	5299997-101	100 Ω 1/4W 2%
R75	048-044	2K 1/4W 2%
R76	5299997-821	802 Ω 1/4W 2%
R77	-820	82 Ω
R78	-222	2.2K
R79	-102	1K
R80	-470	47 Ω
R81	-121	120 Ω
R82	5299997-123	12K 1/4W 2%
R83	043-870	.5 Ω 10W 5%
R84	5299997-182	1.8K 1/4W 2%
R85	-102	1K
R86	-102	1K
R87	-181	180 Ω
R88	-471	470Ω
R89	5299997-182	1.8K 1/4W 2%
R90	5299997-102	1K 1/4W 2%
R101	5299997-102	1K 1/4W 2%
R201		
R301		
R401		
R501		
R601	5299997-102	1K 1/4W 2%
R102	041-099	270 Ω 1W 5%
R202		
R302		
R402		
R502		
R602	041-099	270 Ω 1W 5%
CR1	581-157	1N4446
CR2	581-157	1N4446
CR3	581-157	1N4446
CR4	013-695	1N4156
CR5	013-678	1N4385
CR6	013-695	1N4156
CR7	581-157	1N4446
CR8	581-157	1N4446
CR9	581-157	1N4446
CR10	581-157	1N4446
Q1	013-354	1N965B
Q2	013-354	1N965B
Q3	013-202	1N1825
Q11	054-337	2N4442
Q12	054-337	2N4442

REVISIONS					
LTR	ZON	DESCRIPTION	SIGNATURE AND DATE DFTG	CHK	ENGRG
M		SEE SH 1	—	—	—

5203816

D	09150	5 2 0 3 8 1 6	
NEXT ASSY NONE		SHEET 2 OF 6	

8 7 6 5 4 3 2 1

REF	PART NO	DESCRIPTION	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
U1	586-871	SN7413N										X	X	X	X	X	X	X																																			
U2	" -164	SN7401N										X	X	X	X	X	X	X																																			
U3	" -075	SN7400N										X	X	X	X	X	X	X																																			
U4	" -075	SN7400N										X	X	X	X	X	X	X																																			
U5	" -325	SN7405N										X	X	X	X	X	X	X																																			
U6	" -108	SN7474N										X	X	X	X	X	X	X																																			
U7	" -109	SN7402N										X	X	X	X	X	X	X																																			
U8	" -109	SN7402N										X	X	X	X	X	X	X																																			
U9	" -325	SN7405N										X	X	X	X	X	X	X																																			
U10	" -108	SN7474N										X	X	X	X	X	X	X																																			
U11	" -108	SN7474N										X	X	X	X	X	X	X																																			
U12	" -326	SN7404N										X	X	X	X	X	X	X																																			
U13	" 109	SN7402N										X	X	X	X	X	X	X																																			
U14	" -325	SN7405N										X	X	X	X	X	X	X																																			
U15	" -108	SN7474N										X	X	X	X	X	X	X																																			
U16	" -079	SN7440N										X	X	X	X	X	X	X																																			
U17	" -248	SN7490N										X	X	X	X	X	X	X																																			
U18	" -533	SN74121N										X	X	X	X	X	X	X																																			
U19	" -164	SN7401N										X	X	X	X	X	X	X																																			
U20	" -109	SN7402N										X	X	X	X	X	X	X																																			
U21	" -325	SN7405N										X	X	X	X	X	X	X																																			
U22	" -075	SN7400N										X	X	X	X	X	X	X																																			
U23	" -784	SN7438N										X	X	X	X	X	X	X																																			
U24	" -784	SN7438N										X	X	X	X	X	X	X																																			
U25	" -109	SN7402N										X	X	X	X	X	X	X																																			
U26	" -109	SN7402N										X	X	X	X	X	X	X																																			
U27	" -108	SN7474N										X	X	X	X	X	X	X																																			
U28	586-756	LM309K TO 3										X	(6)	(6)	(6)	(6)	(6)	(6)																																			
U29	589-288	LM323K TO 3										(6)	X	X	X	X	X	X																																			
Q1	5299999-257	BC107B NPN										X	X	X	X	X	X	X																																			
Q2	5299999-257	BC107B NPN										X	X	X	X	X	X	X																																			
Q3	5299999-256	BC177B PNP										X	X	X	X	X	X	X																																			
Q4	014-697	MD3251A TO 5										X	X	X	X	X	X	X																																			
Q5	014-597	CD474 TO 5										X	X	X	X	X	X	X																																			
Q6	5299999-257	BC107B NPN										X	X	X	X	X	X	X																																			
Q7	5299999-257	BC107B NPN										X	X	X	X	X	X	X																																			
Q8	5299999-256	BC177B PNP										X	X	X	X	X	X	X																																			
Q9	5299999-256	BC177B PNP										X	X	X	X	X	X	X																																			
Q10	580-465	MJ4033 TO 3 NPN										X	X	X	X	X	X	X																																			
Q11	580-466	MJ4030 TO 3 PNP										X	X	X	X	X	X	X																																			
Q12	5299999-257	BC107B NPN										X	X	X	X	X	X	X																																			
Q13	5299999-257	BC107B NPN										X	X	X	X	X	X	X																																			
Q101	014-248	2N2222 NPN										X	X	X	X	X	X	X																																			
Q201	"	"										X	X	X	X	X	X	X																																			
Q301	"	"										X	X	X	X	X	X	X																																			
Q401	"	"										X	X	X	X	X	X	X																																			
Q501	"	"										X	X	X	X	X	X	X																																			
Q601	014-248	2N2222 NPN										X	X	X	X	X	X	X																																			
TP1	173-012											X	X	X	X	X	X	X																																			
TP2	"	"										X	X	X	X	X	X	X																																			
TP3	"	"										X	X	X	X	X	X	X																																			
TP4	"	"										X	X	X	X	X	X	X																																			
TP5	"	"										X	X	X	X	X	X	X																																			
TP6	"	"										X	X	X	X	X	X	X																																			
TP7	"	"										X	X	X	X	X	X	X																																			
TP8	173-012											X	X	X	X	X	X	X																																			
TP+5V	173-012											X	X	X	X	X	X	X																																			
TPGRD	173-012											X	X	X	X	X	X	X																																			
TP+12V	173-012											X	X	X	X	X	X	X																																			
TP-12V	173-012											X	X	X	X	X	X	X																																			

REVISIONS					
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE		
			DFTG	CHK	ENGR
M		SEE SH 1			

5203816

D	09150	5203815	
NONE			5

REF	PART NO	DESCRIPTION	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
C1	5299999-347	.1uF 100V										X	X	X	X	X	X	X																																		
C2	5299999-347	.1uF 100V										X	X	X	X	X	X	X																																		
C3	5299999-347	.1uF 100V										X	X	X	X	X	X	X																																		
C4	037-985	15uF 20V										X	X	X	X	X	X	X																																		
C5	5299999-347	.1uF 100V										X	X	X	X	X	X	X																																		
C6	037-985	15uF 20V										X	X	X	X	X	X	X																																		
C7	5299999-347	.1uF 100V										X	X	X	X	X	X	X																																		
C8	↓	↓										X	X	X	X	X	X	X																																		
C9												X	X	X	X	X	X	X																																		
C10												X	X	X	X	X	X	X																																		
C11												X	X	X	X	X	X	X																																		
C12												X	X	X	X	X	X	X																																		
C13												X	X	X	X	X	X	X																																		
C14	5299999-347	.1 uF 100V										X	X	X	X	X	X	X																																		
C15	037-985	15 uF 20V										X	X	X	X	X	X	X																																		
C16	037-985	15 uF 20V										X	X	X	X	X	X	X																																		
C17	034-950	1000 pF 100V										X	X	X	X	X	X	X																																		
C18	OPEN																																																		
C19	OPEN																																																	
C20	5299999-349	.022 uF 250V										X	X	X	X	X	X	X																																		
C21	5299999-349	.022 uF 250V										X	X	X	X	X	X	X																																		
C22	OPEN																																																	
C23	034-950	1000 pF 100V										X	X	X	X	X	X	X																																		
C24	5299999-347	.1 uF 100V										X	X	X	X	X	X	X																																		
C25	OPEN																																																	
C26	5299999-349	.022 uF 250V										X	X	X	X	X	X	X																																		
C27	030-945	1uF 50V 20%										X	X	X	X	X	X	X																																		
C28	037-985	15 uF 20V										X	X	X	X	X	X	X																																		
C29	037-985	15 uF 20V										X	X	X	X	X	X	X																																		
C30	030-945	1 uF 50V 20%										X	X	X	X	X	X	X																																		
C31	030-945	1 uF 50V 20%										X	X	X	X	X	X	X																																		
C32	5299999-349	.022 uF 250V										X	X	X	X	X	X	X																																		
C33	5299999-347	.1uF 100V										X	X	X	X	X	X	X																																		
C34	5299999-347	.1uF 100V										X	X	X	X	X	X	X																																		
C35	5299999-347	.1uF 100V										X	X	X	X	X	X	X																																		
C36	OPEN																																																	
C37	5299999-347	.1uF 100V										X	X	X	X	X	X	X																																		
C38	5299999-349	.022 uF 250V										X	X	X	X	X	X	X																																		
C39	5299999-349	.022 uF 250V										X	X	X	X	X	X	X																																		
C40	OPEN																																																	
C41	5299999-347	.1uF 100V										X	X	X	X	X	X	X																																		
C42	OPEN																																																	
C43	OPEN																																																	
C44	5299999-349	.022 uF 250V										X	X	X	X	X	X	X																																		
C45	5299999-347	.1 uF 100V										X	X	X	X	X	X	X																																		
C46	034-320	750 pF 300V 5%										X	X	X	X	X	X	X																																		
C101	5299999-347	.1uF 100V										X	X	X	X	X	X	X																																		
C201	↓	↓										X	X	X	X	X	X	X																																		
C301												X	X	X	X	X	X	X																																		
C401												X	X	X	X	X	X	X																																		
C501												X	X	X	X	X	X	X																																		
C301	5299999-347	.1 uF 100V										X	X	X	X	X	X	X																																		
JP1	615-004											X	X	X	X	(6)	X	(6)																																		
JP2	OPEN																																																	
JP3	615-004											X	X	X	X	X	X	X																																		
JP4	615-004											X	X	X	X	X	X	X																																		
JP5	OPEN																																																	
JP6	615-004											X	X	X	X	X	X	X																																		
JP7	↓											X	X	X	X	X	X	X																																		
JP8												X	X	X	X	(6)	X	(6)																																		
JP9												(6)	(6)	(6)	(6)	X	(6)	X																																		
JP10												X	X	X	X	X	X	X																																		
JP11	615-004											X	X	X	X	X	X	X																																		
JP12	614-762											X	X	X	X	X	X	X																																		
JP13	615-013/600-237											(6)	X	(6)	(6)	(6)	(6)	(6)																																		
R64	615-013/600-237											(6)	(6)	X	X	X	X	X																																		
JP16	615-013/600-237											(6)	(6)	X	X	X	X	X																																		
JP18	(1)											X	X	(6)	(6)	(6)	(6)	(6)																																		
JP19	615-004											X	X	X	X	(6)	X	(6)																																		
JP17	614-762											(6)	(6)	(6)	(6)	X	(6)	X																																		

REVISIONS					
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE		
			DFTG	CHK	ENGR
M		SEE SH 1			

SIZE	CODE IDENT NO	5203816
D	09150	
SCALE NONE		SHEET 6 OF 6

5203816

(10) VERSION TABLE

P/N	IPS	BPI	STROBED	REVDESKEW	R38	JP1	JP2	JP3	R42,43	R44,45	R120 THRU R920	CR6,7,102 THRU CR902	Q8,09	R5	R6	C102,104,108,110 113 THRU C902, 904,908,910,913	C106,112,115 THRU C906,912,916	C34	R41
5203310-01	45/50	556-800	YES	YES	8.2K	YES	OPEN	NO	1.8K	5.1K	10K,1W	581-157	014-364	180	470	620PF,300V,5%	820PF,300V,5%	2700PF,500V,5%	10K,1W
5203310-02	45/50	200-800	YES	YES	22K	YES	OPEN	NO	1.8K	5.1K	10K,1W	581-157	014-364	180	470	620PF,300V,5%	820PF,300V,5%	2700PF,500V,5%	10K,1W
5203310-03	45/50	556-800	NO	YES	8.2K	OPEN	YES	NO	1.8K	5.1K	10K,1W	581-157	014-364	5.1K	OPEN	620PF,300V,5%	820PF,300V,5%	2700PF,500V,5%	10K,1W
5203310-04	45/50	200-800	NO	YES	22K	OPEN	YES	NO	1.8K	5.1K	10K,1W	581-157	014-364	5.1K	OPEN	620PF,300V,5%	820PF,300V,5%	2700PF,500V,5%	10K,1W
5203310-05	45/50	556-800	YES	NO	8.2K	YES	OPEN	YES	OPEN	OPEN	OPEN	OPEN	OPEN	180	470	620PF,300V,5%	820PF,300V,5%	2700PF,500V,5%	10K,1W
5203310-06	45/50	200-800	YES	NO	22K	YES	OPEN	YES	OPEN	OPEN	OPEN	OPEN	OPEN	180	470	620PF,300V,5%	620PF,300V,5%	2700PF,500V,5%	10K,1W
5203310-07	45/50	556-800	NO	NO	8.2K	OPEN	YES	YES	OPEN	OPEN	OPEN	OPEN	OPEN	5.1K	OPEN	620PF,300V,5%	820PF,300V,5%	2700PF,500V,5%	10K,1W
5203310-08	45/50	200-800	NO	NO	22K	OPEN	YES	YES	OPEN	OPEN	OPEN	OPEN	OPEN	5.1K	OPEN	620PF,300V,5%	820PF,300V,5%	2700PF,500V,5%	10K,1W
5203310-09	45/50	800-800	NO	NO	1.8K	OPEN	YES	YES	OPEN	OPEN	OPEN	OPEN	OPEN	5.1K	OPEN	620PF,300V,5%	820PF,300V,5%	2700PF,500V,5%	OPEN
5203310-10	45/50	800-800	NO	YES	1.8K	OPEN	YES	NO	1.8K	5.1K	10K,1W	581-157	014-364	5.1K	OPEN	620PF,300V,5%	820PF,300V,5%	2700PF,500V,5%	OPEN
5203310-11	37.5	556-800	YES	YES	8.2K	YES	OPEN	NO	1.8K	5.1K	10K,1W	581-157	014-364	180	470	750PF,300V,5%	1000PF,100V,5%	3300PF,300V,5%	10K,1W
5203310-12	37.5	200-800	YES	YES	22K	YES	OPEN	NO	1.8K	5.1K	10K,1W	581-157	014-364	180	470	750PF,300V,5%	1000PF,100V,5%	3300PF,300V,5%	10K,1W
5203310-13	37.5	556-800	NO	YES	8.2K	OPEN	YES	NO	1.8K	5.1K	10K,1W	581-157	014-364	5.1K	OPEN	750PF,300V,5%	1000PF,100V,5%	3300PF,300V,5%	10K,1W
5203310-14	37.5	200-800	NO	YES	22K	OPEN	YES	NO	1.8K	5.1K	10K,1W	581-157	014-364	5.1K	OPEN	750PF,300V,5%	1000PF,100V,5%	3300PF,300V,5%	10K,1W
5203310-15	37.5	556-800	YES	NO	8.2K	YES	OPEN	YES	OPEN	OPEN	OPEN	OPEN	OPEN	180	470	750PF,300V,5%	1000PF,100V,5%	3300PF,300V,5%	10K,1W
5203310-16	37.5	200-800	YES	NO	22K	YES	OPEN	YES	OPEN	OPEN	OPEN	OPEN	OPEN	180	470	750PF,300V,5%	1000PF,100V,5%	3300PF,300V,5%	10K,1W
5203310-17	37.5	556-800	NO	NO	8.2K	OPEN	YES	YES	OPEN	OPEN	OPEN	OPEN	OPEN	5.1K	OPEN	750PF,300V,5%	1000PF,100V,5%	3300PF,300V,5%	10K,1W
5203310-18	37.5	200-800	NO	NO	22K	OPEN	YES	YES	OPEN	OPEN	OPEN	OPEN	OPEN	5.1K	OPEN	750PF,300V,5%	1000PF,100V,5%	3300PF,300V,5%	10K,1W
5203310-19	37.5	800-800	NO	NO	1.8K	OPEN	YES	YES	OPEN	OPEN	OPEN	OPEN	OPEN	5.1K	OPEN	750PF,300V,5%	1000PF,100V,5%	3300PF,300V,5%	OPEN
5203310-20	37.5	800-800	NO	YES	1.8K	OPEN	YES	NO	1.8K	5.1K	10K,1W	581-157	014-364	5.1K	OPEN	750PF,300V,5%	1000PF,100V,5%	3300PF,300V,5%	OPEN
5203310-21	24-25	556-800	YES	YES	8.2K	YES	OPEN	NO	1.8K	5.1K	10K,1W	581-157	014-364	180	470	1100PF,500V,5%	1500PF,500V,5%	4700PF,300V,5%	10K,1W
5203310-22	24-25	200-800	YES	YES	22K	YES	OPEN	NO	1.8K	5.1K	10K,1W	581-157	014-364	180	470	1100PF,500V,5%	1500PF,500V,5%	4700PF,300V,5%	10K,1W
5203310-23	24-25	556-800	NO	YES	8.2K	OPEN	YES	NO	1.8K	5.1K	10K,1W	581-157	014-364	5.1K	OPEN	1100PF,500V,5%	1500PF,500V,5%	4700PF,300V,5%	10K,1W
5203310-24	24-25	200-800	NO	YES	22K	OPEN	YES	NO	1.8K	5.1K	10K,1W	581-157	014-364	5.1K	OPEN	1100PF,500V,5%	1500PF,500V,5%	4700PF,300V,5%	10K,1W
5203310-25	24-25	556-800	YES	NO	8.2K	YES	OPEN	YES	OPEN	OPEN	OPEN	OPEN	OPEN	180	470	1100PF,500V,5%	1500PF,500V,5%	4700PF,300V,5%	10K,1W
5203310-26	24-25	200-800	YES	NO	22K	YES	OPEN	YES	OPEN	OPEN	OPEN	OPEN	OPEN	180	470	1100PF,500V,5%	1500PF,500V,5%	4700PF,300V,5%	10K,1W
5203310-27	24-25	556-800	NO	NO	8.2K	OPEN	YES	YES	OPEN	OPEN	OPEN	OPEN	OPEN	5.1K	OPEN	1100PF,500V,5%	1500PF,500V,5%	4700PF,300V,5%	10K,1W
5203310-28	24-25	200-800	NO	NO	22K	OPEN	YES	YES	OPEN	OPEN	OPEN	OPEN	OPEN	5.1K	OPEN	1100PF,500V,5%	1500PF,500V,5%	4700PF,300V,5%	10K,1W
5203310-29	24-25	800-800	NO	NO	1.8K	OPEN	YES	YES	OPEN	OPEN	OPEN	OPEN	OPEN	5.1K	OPEN	1100PF,500V,5%	1500PF,500V,5%	4700PF,300V,5%	OPEN
5203310-30	24-25	800-800	NO	YES	1.8K	OPEN	YES	NO	1.8K	5.1K	10K,1W	581-157	014-364	5.1K	OPEN	1100PF,500V,5%	1500PF,500V,5%	4700PF,300V,5%	OPEN
5203310-99					OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
5203310-34	12.5	200-800	NO	YES	22K	OPEN	YES	NO	1.8K	5.1K	10K,1W	581-157	014-364	5.1K	OPEN	2200PF,500V,5%	3300PF,300V,5%	.01uF,250V,10%	10K,1W
5203310-35	12.5	556-800	YES	NO	8.2K	YES	OPEN	YES	OPEN	OPEN	OPEN	OPEN	OPEN	180	470	2200PF,500V,5%	3300PF,300V,5%	.01uF,250V,10%	10K,1W
5203310-32	12.5	200-800	YES	YES	22K	YES	OPEN	NO	1.8K	5.1K	10K,1W	581-157	014-364	180	470	2200PF,500V,5%	3300PF,300V,5%	.01uF,250V,10%	10K,1W
5203310-37	12.5	556-800	NO	NO	8.2K	OPEN	YES	YES	OPEN	OPEN	OPEN	OPEN	OPEN	5.1K	OPEN	2200PF,500V,5%	3300PF,300V,5%	.01uF,250V,10%	10K,1W
5203310-38	12.5	200-800	NO	NO	22K	OPEN	YES	YES	OPEN	OPEN	OPEN	OPEN	OPEN	5.1K	OPEN	2200PF,500V,5%	3300PF,300V,5%	.01uF,250V,10%	10K,1W
5203310-39	12.5	800-800	NO	NO	1.8K	OPEN	YES	YES	OPEN	OPEN	OPEN	OPEN	OPEN	5.1K	OPEN	2200PF,500V,5%	3300PF,300V,5%	.01uF,250V,10%	OPEN

5203310 TM100
NEXT ASSY | USED ON
APPLICATION

NOTICE
THIS DRAWING SHALL NOT BE DUPLICATED, USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH PROVIDED OR DISCLOSED, IN WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF AMPEX CORPORATION PROVIDED, HOWEVER THAT IF THIS DRAWING IS SPECIFIED TO BE DELIVERED TO THE GOVERNMENT OR TO A GOVERNMENT CONTRACTOR PURSUANT TO A GOVERNMENT PRIME OR SUBCONTRACT THE GOVERNMENT MAY MAKE SUCH USE OF THIS DRAWING AS IS PERMITTED BY THE APPLICABLE DATA CLAUSE SET FORTH IN SUCH GOVERNMENT PRIME OR SUBCONTRACT

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES
TOL ± | 2 PL | 3 PL | ANGLES
REMOVE BURRS AND SHARP EDGES
MATERIAL
FINISH

SIGNATURE	DATE
DRAWN BY	
CHK BY	
DFTG APVD	
ENGRG APVD	
AUTH BY	

PARTS LIST

AMPEX COMPUTER PRODUCTS DIVISION Marina del Rey, California 90291

SCHEMATIC READ ELECTRONICS TM 100

SIZE D | CODE IDENT NO 09150 | 5203311

SCALE | DO NOT SCALE THIS PRINT | SHEET 1 OF 3

REVISIONS					
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE DATE	CHK	APPROVED
		SEE SHEET ONE			

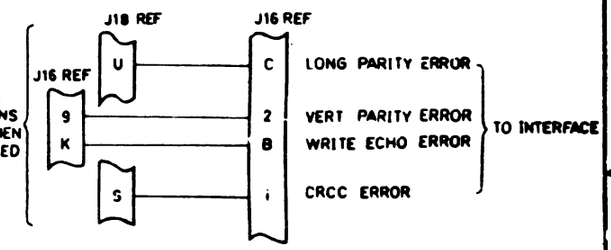
[10] VERSION TABLE

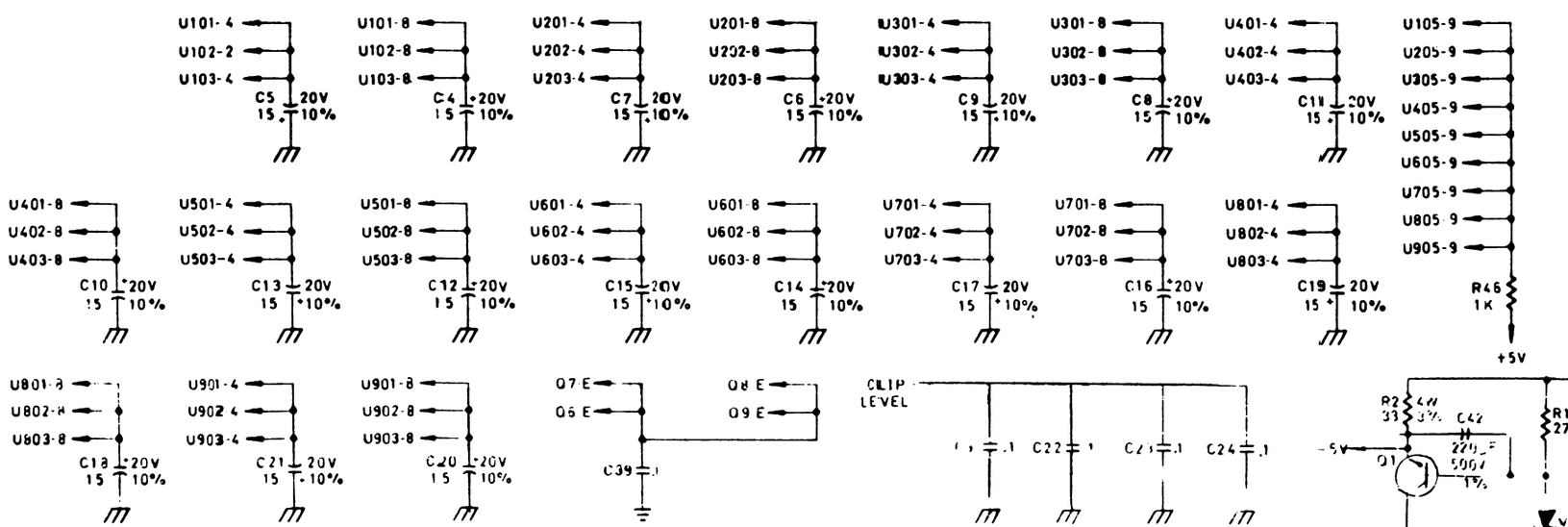
P/N	IPS	BPI	STROBED	REVDESKEW	R38	JP1	JP2	JP3	R42,43	R44,45	R120 THRU R920	CR6,7,102 THRU CR902	Q8,Q9	R5	R6	C102,104,108,110,113 THRU C902,904,908,910,913	C106,112,116 THRU C906,912,916	C34	R41
5203310-40	12.5	800-800	NO	YES	1.8K	OPEN	YES	NO	1.8K	5.1K	10K, 1W	581-157	014-364	5.1K	OPEN	2200PF. 500V. 5%	3300PF. 300V. 5%	.01μF. 250V. 10%	OPEN
5203310-63	75	556-800	NO	YES	8.2K	OPEN	YES	NO	1.8K	5.1K	10K, 1W	581-157	014-364	5.1K	OPEN	390PF. 500V. 5%	500PF. 500V. 5%	1500PF. 500V. 5%	10K, 1W
5203310-64	75	200-800	NO	YES	22K	OPEN	YES	NO	1.8K	5.1K	10K, 1W	581-157	014-364	5.1K	OPEN	390PF. 500V. 5%	500PF. 500V. 5%	1500PF. 500V. 5%	10K, 1W
5203310-67	75	556-800	NO	NO	8.2K	OPEN	YES	YES	OPEN	OPEN	OPEN	OPEN	OPEN	5.1K	OPEN	390PF. 500V. 5%	500PF. 500V. 5%	1500PF. 500V. 5%	10K.1W
5203310-68	75	200-800	NO	NO	22K	OPEN	YES	YES	OPEN	OPEN	OPEN	OPEN	OPEN	5.1K	OPEN	390PF. 500V. 5%	500PF. 500V. 5%	1500PF. 500V. 5%	10K.1W
5203310-69	75	800-800	NO	NO	1.8K	OPEN	YES	YES	OPEN	OPEN	OPEN	OPEN	OPEN	5.1K	OPEN	390PF. 500V. 5%	500PF. 500V. 5%	1500PF. 500V. 5%	OPEN
5203310-70	75	800-800	NO	YES	1.8K	OPEN	YES	NO	1.8K	5.1K	10K, 1W	581-157	014-364	5.1K	OPEN	390PF. 500V. 5%	500PF. 500V. 5%	1500PF. 500V. 5%	OPEN

INTEGRATED CIRCUIT LIST

AMPEX P/N	586-075	586-124	586-326	586-411	586-533	586-756	586-784	586-647
COM P/N	SN7400N	μA710C	SN7404N	MC1805P	SN74121N	LM 309K	SN7438N	SN74107N
REF DES	U3, U105 THRU U905	U101,102,103 THRU U901,902,903	U1, U2	U4	U6, U104 THRU U904	U14	U5, 9, 13	U7, 8, 10, 11, 12
GRD PIN	7	1	7	7	7	3	7	7
VCC PIN	14	8, 4	14	14	14	2	14	14

LAST USED	DELETED
R50, 122 THRU 922	
C42, 117 THRU 917	C1, 2, 40
CR8, 102 THRU 902	
TP6, 102 THRU 902	101 THRU 901
U14, 105 THRU 905	
Q9, 102 THRU 902	
VR1	
JP3	





[10] SEE VERSION TABLE.

9. ALL JUMPERS ARE 614-762.
8. Q4,Q5 ARE 014-505.
7. Q6,Q7 ARE 014-364.
6. Q2,Q3,Q101, Q102 THRU Q901, Q902 ARE 014-248.
5. Q1 IS 014-247.
4. VR1 IS 013-983.
3. ALL DIODE ARE 581-157.
2. ALL CAPACITOR VALUES ARE IN MICROFARADS 30V+80% -20%.
1. ALL RESISTOR VALUES ARE IN OHMS, 1/4W, ± 2%.

NOTES: UNLESS OTHERWISE SPECIFIED

SIZE	CODE IDENT NO	5203311
D	09150	
SCALE	NONE	SHEET 2 OF 3

(4) VERSION TABLE 1

	45 IPS	45-50 IPS	37.5 IPS	37.5 IPS	25 IPS	25 IPS H/P	12.5 IPS	18.75 IPS	COMMON
	-01	-05	-11	-15	-21	-25	-31	-41	-99
R107 THRU 907	100Ω	100Ω	100Ω	100Ω	82 Ω	82Ω	150Ω	120Ω	OPEN
R10	18K	18K	27K	27K	39K	39K	39K	47K	OPEN
R113 THRU 913	2K	2K	2K	2K	2K	2K	2K	2K	OPEN
R115 THRU 915	22K	22K	27K	27K	27K	27K	22K	33K	OPEN
R116 THRU 916	22K	13K	27K	27K	27K	18K	22K	33K	OPEN
R114 THRU 914	27K	27K	22K	22K	22K	22K	22 K	22K	OPEN
C101 THRU 901	220pF	220pF	300pF	300pF	390pF	[illegible]pF	680pF	500pF	OPEN
C109 THRU 909	560pF	560pF	390pF	390pF	820pF	[illegible]pF	1500pF	1500pF	OPEN
C104 THRU 904	.1µF	.033µF	.1µF	.022µF	.1 µF	[illegible]F	.1µF	.1 µF	OPEN
C1 THRU 9	.010µF	.010 µF	.015 µF	.015 µF	.022µF	.022µF	.047µF	.033 µF	OPEN
C107 THRU 907	33pF	33 pF	47pF	47pF	82 pF	82pF	620pF	100 pF	OPEN
C106 THRU 906	JUMP	JUMP	JUMP	JUMP	JUMP	JUMP	JUMP	JUMP	OPEN
C111 THRU 911	33pF	33pF	47pF	47pF	82pF	82pF	100pF	100pF	OPEN
R41	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
R42	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
R43	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
R44	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
R53	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
R111 THRU 911	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
CR12	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
Q1	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
Q2	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
Q103 THRU 903	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN

(5) INTEGRATED CIRCUIT TABLE 2

AMPEX P/N	586-075	586-109	586-549	586-581	586-756	586-784	586-797	587-478	587-249
COMMERCIAL P/N	SN7400N	SN7402N	LM1414	SN7403N	LM309K	SN7438N	SN74123N	LM318H	SN7409N
REF. DES.	U8.10.12.14.16	U6	U102 THRU 902	U7.18	U22	U9.20.21	U1 THRU 5	U101 THRU 901	U9.11.13.15.17
VOLTAGE PIN	14	14	3,10(+12V)7.14(-6V)	14	2	14	16	7(+12V) 4(-12V)	14
GROUND PIN	7	7	11	7	CASE	7	8		7

C117 THRU 917	OPEN
JP1 THRU 10	OPEN

(9) FOR -31 ONLY:
R114 THRU R914 (RES 22K) BECOME C109 THRU C909 (CAP 1500pF); C109 THRU C909 (CAP 1500pF) BECOME R114 THRU R914 (RES 22K).

8. FOR ASSY REF DWG SEE 5203517.
7. ALL RESISTOR VALUES ARE IN OHMS, 1/4W, 2%.
6. ALL CAPACITOR VALUES ARE IN MICROFARADS, 100V.
(5) FOR I.C. SEE TABLE 2.
(4) SEE VERSION TABLE 1.
3. Q1 IS OPEN.
   Q2 IS OPEN.
   Q3 IS 014-248.
   Q4 IS 014-247.
   Q101.102.104-Q901.902.904 ARE 5299999-415.
2. CR11 IS 013-188.
   CR12 IS OPEN.
   CR10 IS 013-599.
1. VR1 IS 013-983.

NOTES: UNLESS OTHERWISE SPECIFIED

REVISIONS			
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE
N		ECN N 2507	
P		ECN N 2648 1	
R		ECN N 271[illegible]	
S		ECN N 2752	

UNLESS OTHERWISE SPECIFIED

AMPEX

SCHEMATIC READ
ELECTRONICS P/E

D 09150 5203516

COMMUN -99

P/N	DESCRIPTION
013-188	CR11
013-983	VR1
014-247	Q4
014-248	Q3
5299999-415	Q101,102,104 THRU 901,902,904
586-797	U1 THRU U5
586-109	U6
586-581	U7,18
586-075	U8,10,12,14,16
587-249	U9,11,13,15,17
586-784	U19,20,21
586-756	U22
586-478	U101 THRU 901
586-549	U102 THRU 902
059-274	R51
5299997-102	R11,13,15,17,19,21,23,25,27,29,31,101,102,105,106 THRU 901,902,905,906 30,118 THRU 918,125 THRU 925
-103	R110 THRU 910
-104	R12,14,16,18,20,22,24,26,28
-123	R47
-182	R45,46,108,109,112,117 THRU 908,909,912 917
-220	R49
5299997-271	R50

P/N	DESCRIPTION
5299997-273	R1 THRU R9
-183	R123 THRU 923
-512	R32 THRU R40,103,104,120 THRU 903,904,920
-202	R121 THRU 921
5299997-752	R119,122 THRU 919,922
5299998-391	R48
5299999-429	R52
5299997-222	R124 THRU 924
034-213	C11
5299999-250	C13,23,110,112,116 THRU 910,912,916
-347	C15 THRU C20,24,105,113,115,118,119 THRU 905,913,915,918,919
-387	C102,103,108,114 THRU 902,903,908,914
5299999-367	C10
037-385	C12,14,21,22
614-762	JP11,101 THRU 901
173-012	CH1 THRU CH4, TP1 THRU TP3, TP GRD, +5V

REVISIONS				
LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE DFTG	CHK
P		ECN N 2507		
R		ECN N 2648-2		
S		ECN N 27[illegible]/2		

DESCRIPT.	PART NUMBER														
	45 IPS		45-50 IPS		37.5 IPS		37.5 IPS		25 IPS		25 IPS H/P	12.5 IPS	18.75 IPS			
	-01		-05		-11		-15		-21		-25	-31	-41			
R107 THRU 907	5299997-101		5299997-101		5299997-101		5299997-101		5299997-820		5299997-820	5299997-151	5299997-121			
R10	5299997-183		5299997-183		5299997-273		5299997-273		5299997-393		5299997-393	5299997-393	5299997-473			
R113 THRU 913	5299997-202		5299997-202		5299997-202		5299997-202		5299997-202		5299997-202	5299997-202	5299997-202			
R115 THRU 915	5299997-223		5299997-223		5299997-273		5299997-273		5299997-273		5299997-273	5299997-223	5299997-333			
R116 THRU 916	5299997-223		5299997-133		5299997-273		5299997-273		5299997-273		5299997-183	5299997-223	5299997-333			
R114 THRU 914	5299997-273		5299997-273		5299997-223		5299997-223		5299997-223		5299997-223	5299997-223	5299997-223			
C101 THRU 901	034-240		034-240		034-199		034-199		034-289		034-288	034-930	056-292			
C109 THRU 909	034-931		034-931		034-288		034-288		034-283		034-283	034-970	034-970			
C104 THRU 904	5299999-347		5299999-372		5299999-347		5299999-340		5299999-347		5299999-347	5299999-347	5299999-347			
C1 THRU C9	5299999-362		5299999-362		5299999-363		5299999-363		5299999-349		5299999-349	5299999-364	5299999-372			
C107 THRU 907	034-962		034-962		034-181		034-181		034-940		034-940	034-228	034-938			
C106 THRU 906	614-762		614-762		614-762		614-762		614-762		614-762	614-762	614-762			
C111 THRU 911	034-962		034-962		034-181		034-181		034-940		034-940	034-177	034-938			
R41	OPEN		OPEN		OPEN		OPEN		OPEN		OPEN	OPEN	OPEN			
R42	OPEN		OPEN		OPEN		OPEN		OPEN		OPEN	OPEN	OPEN			
R43	OPEN		OPEN		OPEN		OPEN		OPEN		OPEN	OPEN	OPEN			
R44	OPEN		OPEN		OPEN		OPEN		OPEN		OPEN	OPEN	OPEN			
R53	OPEN		OPEN		OPEN		OPEN		OPEN		OPEN	OPEN	OPEN			
R111 THRU 911	OPEN		OPEN		OPEN		OPEN		OPEN		OPEN	OPEN	OPEN			
CR12	OPEN		OPEN		OPEN		OPEN		OPEN		OPEN	OPEN	OPEN			
Q1	OPEN		OPEN		OPEN		OPEN		OPEN		OPEN	OPEN	OPEN			
Q2	OPEN		OPEN		OPEN		OPEN		OPEN		OPEN	OPEN	OPEN			
Q103 THRU 903	OPEN		OPEN		OPEN		OPEN		OPEN		OPEN	OPEN	OPEN			

~~[10] FOR -31 ONLY. R116 THRU R914 (P/N 5299997-223) BECOME C109 THRU C909 (P/N 034-970); C108 THRU C908 (P/N 034-970) BECOME R114 THRU R914 (P/N 5299997-223).~~

[9] ALL COMPONENT IN DOTTED LINES ARE OPEN.

8 ALL JUMPERS TO BE 614-762

[7] MARK DASH NUMBER AND ISSUE LETTER WITH WHITE INK PER BD1-1.

[6] PLUS SIGN ON CAPACITOR INDICATES POSITIVE.

[5] HEAVY LINE ON DIODE INDICATES CATHODE.

4 FOR SCHEMATIC SEE 5203516.

3 FOR B/M SEE 5203515

2 ASSEMBLE PER AMPEX STD HC2-2.

1 FOR ALL COMPONENTS SEE TABLE.

NOTES: UNLESS OTHERWISE SPECIFIED

NOT USED	JP1,4,5,6,7,8,9,10
OPEN	CR[illegible]
OPEN	CH[illegible]

5203515 TM 100

UNLESS OTHERWISE SPECIFIED

DRAWN
CHK'D
DFTG APVD
ENGR APVD
AUTHOR

AMPEX COMPUTER PRODUCTS DIVISION Redwood City, California 94063

PCBA READ ELECTRONICS P/E

SIZE D | CODE IDENT NO 09150 | 5203517

SHEET 1 OF 2

P/N	REF DESIGNATIONS
013-257	VR2
581-157	CR1,2,3,6,101 THRU 901,102 THRU 902,103 THRU 903
013-678	CR4,5,14
013-696	CR7
013-983	VR1
014-247	Q4
014-597	Q2
(10)	JP4 OR R39
030-945	C14
034-177	C2
034-288	C1
037-990	C9,10,16
041-486	R27,R36
041-671	R26
058-753	R105 THRU 905
173-012	TP1 THRU TP5
580-465	Q1
586-124	U2
586-269	U1
586-533	U4,7,10,13,16,19,22,25,28,34.
586-756	U3
586-759	U40
586-871	U44
586-890	U43
587-510	U5,8,11,14,17,20,23,26,29,35,42.
587-533	U21,33,37
587-534	U9,27,31
587-750	U38
589-042	U6,12,15,24,30,36
587-947	U18,32,39,41 (SN74LS14)

P/N	REF DESIGNATIONS
5299997-102	R11,13,17,22,23,28,32,101 THRU 901, 102 THRU 902
-123	R12
-152	R 15
-182	R14
-221	R4,6
-222	R1,2
-241	R18 19
-271	R3,5
-331	R9,25,31
-332	R20,33,
-393	R29
-470	R10
-471	R30
-562	R24
5299997-922	R8,38
034-320	C102 THRU 902
5299999-256	Q5
-257	Q3,6
-250	C6,7,8,11,13,17 THRU 30
-362	C3,4
-364	C5
5299999-347	C15
014-581	Q101 THRU 901,102 THRU 902
5299999-416	R103 THRU 903 104 THRU 904
5299997-511	R37
5299999-338	W1 (BUS BAR)
013-934	VR4
058-944	R16
5299998-332	R7

VERSION TABLE (10)(11)

	ASSY P/N	JP4 or R39
TM 100+/TME	5204750-01	615-012 & 600-237
TM 100 (11)	5204750-02	5299999-429

REVISIONS

LTR	ZONE	DESCRIPTION	SIGNATURE AND DATE DFTG	CHK	ENGRG
A		PROTO			
B		N2661			
C		N2695-3			
D		N2820-4			

(11) FOR 5204750-02 ONLY: APPLY F.E.B. N 119.

(10) SEE VERSION TABLE.

9. ASSY P/N TO BE AS PER VERSION TABLE.
8. FOR SCHEMATIC SEE 5204751
7. JP1,2,3,5 ARE ON SOC 6.
(6) MARK PART NO. AND ISSUE LTR WITH WHITE INK PER 3124500, PARA 3.1.
5. TRIMPOTS NOT TO SUBMERGED IN WATER.
4. HEAVY LINE ON DIODE INDICATES CATHODE.
3. PLUS SIGN ON CAPACITORS INDICATES POSITIVE.
2. COMPONENT DESIGNATIONS ARE FOR REFERENCE ONLY.
1. ASSEMBLE PER AMPEX STDS.

NOTES: UNLESS OTHERWISE SPECIFIED

PARTS LIST (X)

NOTICE

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UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES
TOL ± | 2 PL | 3 PL | ANGLE
REMOVE BURRS AND SHARP EDGES
MATERIAL
FINISH

SIGNATURE	DATE
DRAWN BY	2-8-11
CHK BY	
DFTG APVD	
ENGRG APVD	
MFG APVD	

AMPEX COMPUTER PRODUCTS DIVISION Marina del Rey, California 90291

PCBA — WRITE ELECTRONICS PE/NRZ TM 100-TME

SIZE	CODE IDENT NO.	
D	09150	5204752

SCALE — DO NOT SCALE THIS PRINT SHEET 1 OF 1

B	ECN N 2319
C	ECN N 2407
D	ECN N 2486

VERSION TABLE ⓓ

MODEL & SPEED	FUNCTION DESCRIPTION	ASSY PART NO.	REF. DWG.	PART A ⓒ	B ⓓ	C ⓔ	D	E	F	G ⓕ	H	J	K	L	M	N	P	R	S	T ⓖ	U ⓗ	V	W	X	Y	Z	AA ⓘ	BB ⓙ
TME UP TO 50 IPS WITH TXFMR 5203488-01 "OR" 5204830-01	W. SEL. SW./ W. OVERVLT. PROTECT.	5204575 - 01	5204577	USED	USED	USED	NONE	NONE	119 - 234	USED	2N 4442	330Ω, 1/4W, 2%	1N 751 A, CD 32	1N 4446	4300μF, 25V	470Ω, 2W, 5%	MR 751	43000μF, 25V	470Ω, 2W, 5%	YES	YES	22000μF, 15V, 2%	MR 751	470Ω, 2W, 5%	MR 751	15μF, 20V, 10%	48000μF, 40V
	W/O F 1000		-02	NOT USED	NOT USED	NOT USED	NONE	NONE	JP 4	NOT USED	NONE	NONE	NONE	NONE												NONE	
	W. F 1000 SEL. SW.		-03	USED	USED	USED	NONE	NONE	119 - 234	USED	NONE	NONE	NONE	NONE												NONE	
	W/O F 1000 D. CH.		-04	NOT USED	NOT USED	NOT USED	SN 7438 N	5.1KΩ, 1/4W, 2%	119 - 234	NOT USED	NONE	NONE	NONE	NONE												NONE	
	W. F 1000 / W. OVERVLT. PROTECT.		-05	USED	USED	USED	NONE	NONE	JP 4	USED	2N 4442	330Ω, 1/4W, 2%	1N 751 A, CD 32	1N 4446												15μF, 20V, 10%	
	W/O F 1000/ W. OVERVLT. PROTECT.		-06	NOT USED	NOT USED	NOT USED	NONE	NONE	JP 4	NOT USED	2N 4442	330Ω, 1/4W, 2%	1N 751 A, CD 32	1N 4446												15μF, 20V, 10%	
	W. F 1000		-07	USED	USED	USED	NONE	NONE	JP 4	USED	NONE	NONE	NONE	NONE												NONE	
	W/O F 1000 D.CH/W.OVERVLT. PROT.	5204575 - 08	5204577	NOT USED	NOT USED	NOT USED	SN 7438 N	5.1KΩ, 1/4W, 2%	119 - 234	NOT USED	2N 4442	330Ω, 1/4W, 2%	1N 751 A, CD 32	1N 4446	4300μF, 25V	470Ω, 2W, 5%	MR 751	43000μF, 25V	470Ω, 2W, 5%	YES	YES	22000μF, 15V, 2%	MR 751	470Ω, 2W, 5%	MR 751	15μF, 20V, 10%	48000μF, 40V
TM 100 + TXFMR 5203488-01	W. F 1000	5204180 - 01	5204182	USED	USED	USED	NONE	NONE	JP 4	USED	NONE	NONE	NONE	NONE	4300μF, 25V	470Ω, 2W, 5%	MR 751	43000μF, 25V	470Ω, 2W, 5%	YES	YES	NONE	NONE	NONE	NONE	NONE	48000μF, 40V
	W/O F 1000		-02	NOT USED	NOT USED	NOT USED	NONE	NONE	JP 4	NOT USED																	
	W/F 1000 & SELECT SWITCH		-03	USED	USED	USED	NONE	NONE	119-234	USED																	
	W/O F 1000 FULL DAISY CHAIN		-04	NOT USED	NOT USED	NOT USED	SN 7438 N	5.1KΩ, 1/4W, 2%	119-234	NOT USED												NONE		NONE	NONE		
TM 100 + TXFMR 5204746-01	W. F 1000		-05	USED	USED	USED	NONE	NONE	JP 4	USED												22000μF, 15V, 2%		470Ω, 2W, 5%	MR 751		
	W/O F 1000		-06	NOT USED	NOT USED	NOT USED	NONE	NONE	JP 4	NOT USED																	
	W/F 1000 & SELECT SWITCH		-07	USED	USED	USED	NONE	NONE	119-234	USED																	
	W/O F1000 FULL DAISY CHAIN	5204180 - 08	5204182	NOT USED	NOT USED	NOT USED	SN 7438 N	5.1KΩ, 1/4W, 2%	119-234	NOT USED	NONE	NONE	NONE	NONE	4300μF, 25V	470Ω, 2W, 5%	MR 751	43000μF, 25V	470Ω, 2W, 5%	YES	YES	22000μF, 15V, 2%	NONE	470Ω, 2W, 5%	MR 751	NONE	48000μF, 40V
TME LO/HI SPEED TXFMR 5204831-01	W. SEL. SW/W. OVERVOLT. PROTECT	5204875 - 01	5204877	USED	USED	USED	NONE	NONE	119-234	USED	2N 4442	330Ω, 1/4W, 2%	1N 751 A, CD 32	1N 4446	15600μF, 25V	39 KΩ, 2W, 5%	NONE	15600μF, 25V	39 KΩ, 2W, 5%	YES	YES	22000μF, 15V, 2%	MR 751	470Ω, 2W, 5%	MR 751	15μF, 20V, 10%	48000μF, 40V
	W/O F 1000		-02	NOT USED	NOT USED	NOT USED	NONE	NONE	JP 4	NOT USED	NONE	NONE	NONE	NONE												NONE	
	W/F 1000 SEL. SW.		-03	USED	USED	USED	NONE	NONE	119-234	USED	NONE	NONE	NONE	NONE												NONE	
	W/O F 1000 D.CH.		-04	NOT USED	NOT USED	NOT USED	SN 7438 N	5.1KΩ, 1/4W, 2%	119-234	NOT USED	NONE	NONE	NONE	NONE												NONE	
	W.F 1000/ W. OVERVLT. PROTECT		-05	USED	USED	USED	NONE	NONE	JP 4	USED	2N4442	330Ω, 1/4W, 2%	1N751A, CD 32	1N 446												15μF, 20V, 10%	
	W/O F 1000/ W. OVERVOLT. PROTECT		-06	NOT USED	NOT USED	NOT USED	NONE	NONE	JP 4	NOT USED	2N4442	330Ω, 1/4W, 2%	1N751A, CD 32	1N 446												15μF, 20V, 10%	
	W/F 1000		-07	USED	USED	USED	NONE	NONE	JP 4	USED	NONE	NONE	NONE	NONE												NONE	
	W/O F 1000 D.CH/W.OVERVLT. PROT.	5204875 - 08	5204877	NOT USED	NOT USED	NOT USED	SN 7438 N	5.1KΩ, 1/4W, 2%	119-234	NOT USED	2N4442	330Ω, 1/4W, 2%	1N 751 A, CD 32	1N 446	15600μF, 25V	39 KΩ, 2W, 5%	NONE	15600μF, 25V	39KΩ, 2W, 5%	YES	YES	22000μF, 15V, 2%	MR 751	470Ω, 2W, 5%	MR 751	15μF, 20V, 10%	48000μF, 40V

LAST USED	NOT USED	DELETE
U2		
C6		
R11		
SCR 1		
CR 21		
VR 1		
JP 5		
TB 2		
P30	P2,3,5,7,8,9,11,16,17	
J34	J1 THRU J33, J34, TB1, TB2	
S7		
RT		
PART BB		

DESGN.	CMPT. REF.
PART D	U1
E	P5
F	S1 OR P4
H	SCR 1
J	R 11
K	J33
L	CR 1 THRU CR 20
M	C2
N	P2
P	J34
R	C1
S	R1
T	C5
U	J1

ASSY PART NO.	JUMPER						
	"a" to "s"	"h" to "z"	"m" to "n"	"x" to "y"	"bb" to "cc"	"dd" to "ee"	JP 8
5204575 - 01 THRU - 08	YES	YES	YES	YES	YES	YES	NO
5204180 - 01 THRU - 08	YES	YES	YES	YES	YES	YES	NO
5204875 - 01 THRU - 08	YES	YES	YES	YES	YES	YES	NO

AMPEX

SCHEMATIC