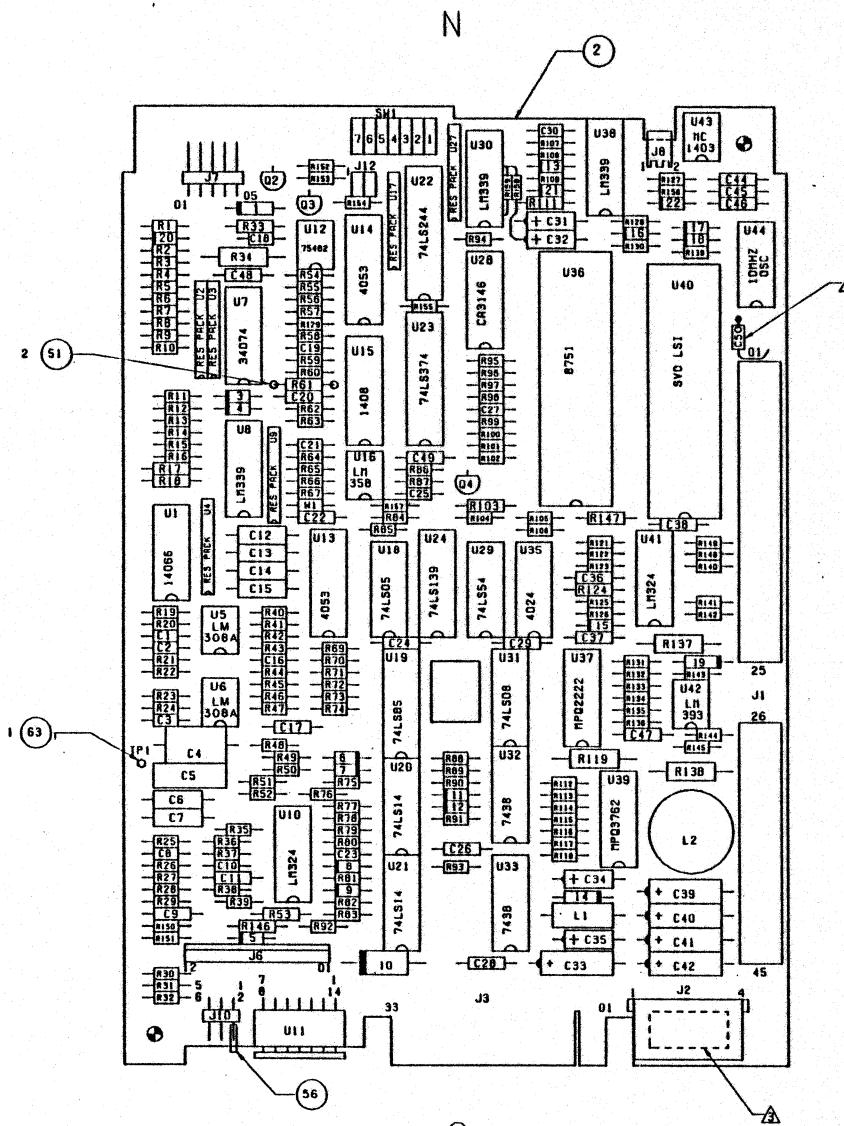


FOR DOCUMENT STATUS SEE REVISION STATUS SHEET



NOTES: (UNLESS OTHERWISE SPECIFIED)

1. ASSEMBLE PER 5970II27 . EXCEPT PARAGRAPH 3.8.3 .
 2. MAXIMUM COMPONENT HEIGHT .38.
EXCEPT L2,J12,02,03 & SOCKET (ITEM 32) .40
 - △ 3. MARK ASSEMBLY NO. IN APPROXIMATE LOCATION
SHOWN ON BACK (SOLDER) SIDE PER I2AI099P1.
 4. FOR SCHEMATIC DIAGRAM, SEE ITEM I.
 5. COMPONENT MARKING WITHOUT ALPHA PREFIX
ARE DIODES.
 6. SOLID BAND ON DIODES AND VOLTAGE REGULATORS
INDICATE CATHODE END.
 7. GENERAL WORKMANSHIP PER 10I20300.
 - △ 8. CLIP PIN O1 OF US AND U6 FLUSH TO IC
PRIOR TO INSTALLATION.
 - △ 9. U36 (ITEM 23) AND U40 (ITEM 19) TO BE INSTALLED
AT PWA TEST.
 - △ 10. DRILL HOLE,PUSH LEAD OF C50 NORTH THRU TO BACK: SOLDER
TO U4-14. SLEEVE LEAD OF C50-S. SOLDER TO GND BUSS.
 - H. SW1 (ITEM 50) SHOULD BE INSTALLED
WITH ALL SWITCH POSITIONS OPEN (OFF).

100

MATERIAL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	AMMOTIC PERIPHERALS INC.	DENNIS SUSIE EVANS	DB-15-B4	TITLE	PWA	SIZE	DRAWING NUMBER	CD	REV
FINISH	TOOL STEEL	5000 DIVISION OF GTE CONTROL DATA CORPORATION	CHIEF D. COLEMAN	8-15-84		ESDI SERVO	D	77739750	6	08
3-PLATE	PLATE	OKLAHOMA CITY, OKLAHOMA	ENGR. R. NORMAN	8-15-84						
4	5	WREN II	MFG.							
DO NOT SCALE DRAWING				DATA SHEET NO. 77739750	X	?	SCALE	2/1	SHEET	1 of 3F
							DIST.	A23-AYS		

8

7

6

5

4

3

2

1

RES	PL ITER
R1	162
R2	181
R3	181
R4	181
R5	167
R6	168
R7	167
R8	182
R9	165
R10	186
R11	187
R12	186
R13	114
R14	115
R15	151
R16	151
R17	109
R18	109
R19	172
R20	136
R21	136
R22	122
R23	139
R24	142
R25	140
R26	140
R27	110
R28	149
R29	140
R30	166
R31	166
R32	166
R33	102
R34	97
R35	144
R36	140
R37	172
R38	145
R39	165
R40	189
R41	185
R42	189
R43	189
R44	141
R45	111
R46	178
R47	154
R48	143
R49	114
R50	114
R51	179
R52	180
R53	105
R54	153
R55	128

RES	PL ITER
R56	153
R57	172
R58	129
R59	129
R60	128
R61	108
R62	117
R63	163
R64	164
R65	120
R66	120
R67	165
R68	-
R69	137
R70	142
R71	124
R72	141
R73	131
R74	130
R75	127
R76	167
R77	172
R78	127
R79	127
R80	113
R81	140
R82	144
R83	167
R84	162
R85	181
R86	162
R87	116
R88	181
R89	181
R90	181
R91	164
R92	167
R93	159
R94	125
R95	162
R96	173
R97	150
R98	169
R99	163
R100	181
R101	169
R102	118
R103	180
R104	119
R105	148
R106	146
R107	121
R108	132
R109	170
R110	-

RES	PL ITER
R111	107
R112	157
R113	152
R114	159
R115	152
R116	157
R117	181
R118	157
R119	101
R120	-
R121	127
R122	151
R123	135
R124	104
R125	116
R126	118
R127	137
R128	126
R129	159
R130	171
R131	147
R132	118
R133	134
R134	158
R135	163
R136	172
R137	100
R138	99
R139	181
R140	112
R141	118
R142	113
R143	123
R144	174
R145	167
R146	105
R147	106
R148	127
R149	158
R150	160
R151	160
R152	161
R153	159
R154	181
R155	156
R156	165
R157	181
R158	167
R159	172

CAP	PL ITER
C1	86
C2	78
C3	77
C4	75
C5	87
C6	83
C7	83
C8	79
C9	82
C10	80
C11	94
C12	83
C13	83
C14	83
C15	83
C16	84
C17	81
C18	76
C19	85
C20	94
C21	89
C22	88
C23	93
C24	94
C25	91
C26	94
C27	93
C28	94
C29	94
C30	93
C31	70
C32	67
C33	74
C34	67
C35	71
C36	94
C37	94
C38	94
C39	72
C40	68
C41	69
C42	72
C43	-
C44	94
C45	94
C46	94
C47	94
C48	94
C49	94
C50	94

IC	PL ITER
U1	15
U2	30
U3	37
U4	31
U5	11
U6	11
U7	20
U8	6
U9	38
U10	9
U11	28
U12	5
U13	22
U14	22
U15	18
U16	12
U17	40
U18	24
U19	21
U20	8
U21	8
U22	34
U23	35
U24	36
U25	-
U26	-
U27	37
U28	26
U29	16
U30	6
U31	10
U32	17
U33	17
U34	-
U35	14
U36	23
U37	25
U38	6
U39	27
U40	19
U41	9
U42	7
U43	13
U44	64

DIO	PL ITER
CRI	54
CR2	-
CR3	45
CR4	45
CR5	45
CR6	48
CR7	48
CR8	45
CR9	49
CR10	44
CR11	45
CR12	45
CR13	45
CR14	47
CR15	45
CR16	45
CR17	45
CR18	45
CR19	47
CR20	45

CONN	PL ITER
J1	54
J2	55
J3	-
J4	-
J5	-
J6	59
J7	58
J8	60
J9	-
J10	62
J11	-
J12	52
J13	56

IND	PL ITER
L1	65
L2	66

SWCH	PL ITER
SM1	50

JUMP	PL ITER
H1	190

DI	PL ITER

DISR	PL ITER
A23-RYS	1

CD	REV
0	10

SHEET	2
-------	---

1	1
---	---

3	3
---	---

2	2
---	---

1	1
---	---

D	77739750
---	----------

0	10
---	----

D 77739750-6 10

8

7

6

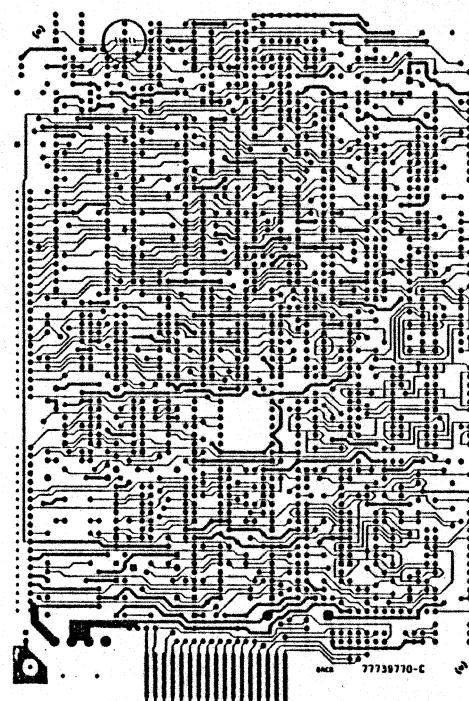
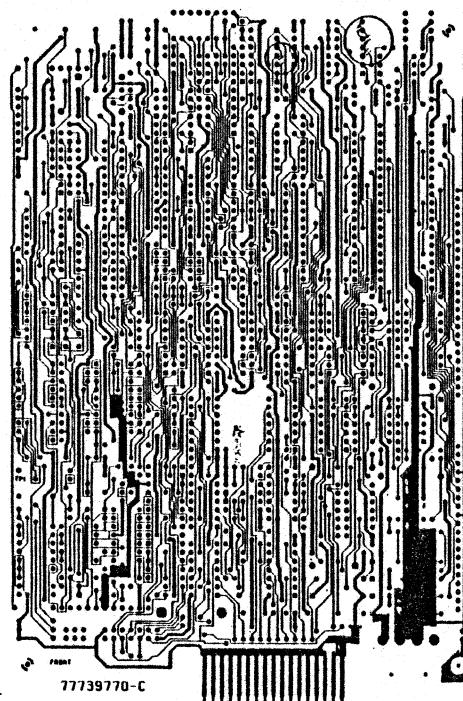
5

4

3

2

N

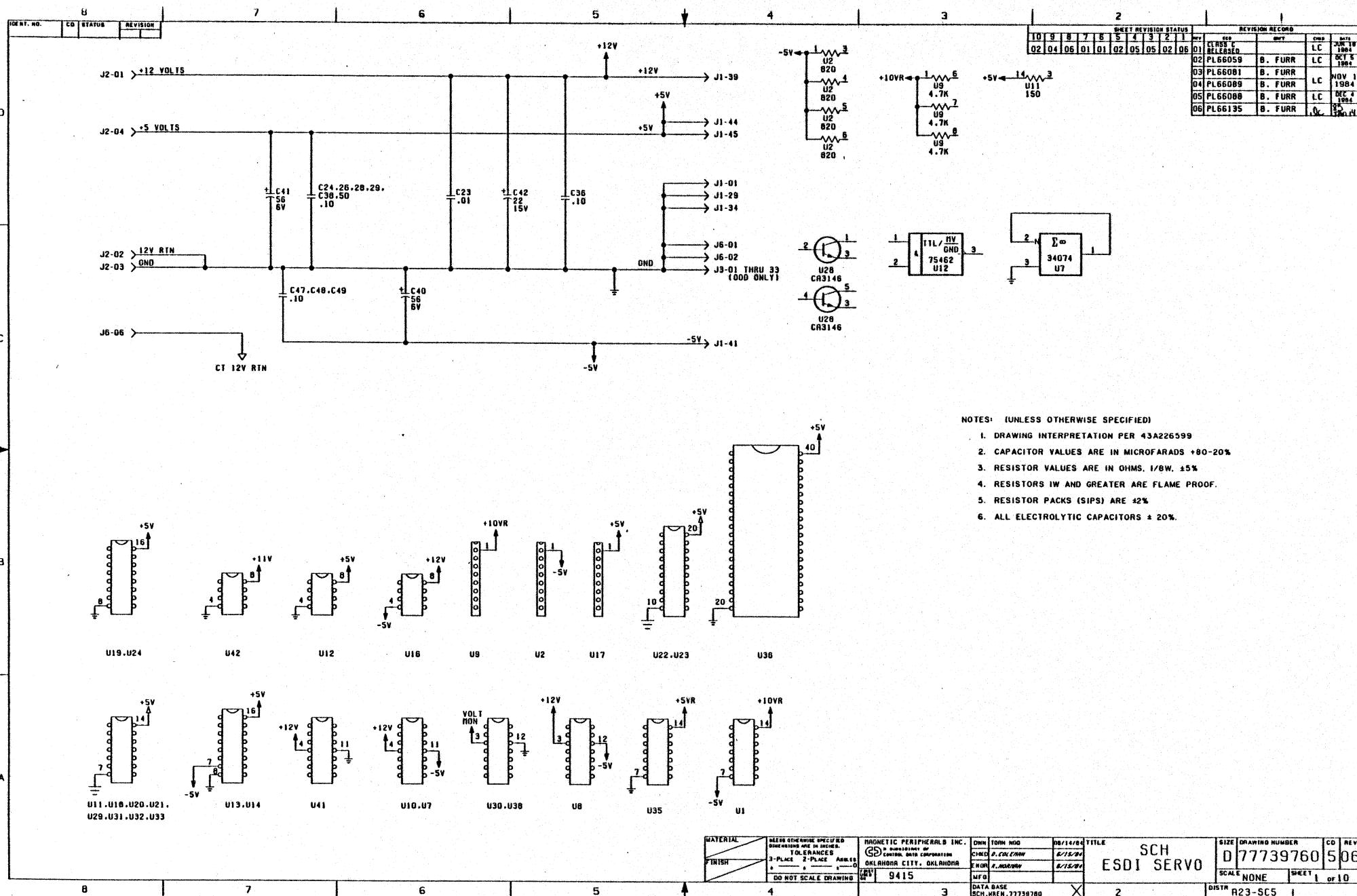


VERIFY CONNECTIONS	
FROM	TO
R158-S	C32+(W)
R158-N	U30-5
R159-N	R158-N
R159-S	U30-01
GND	U44-14(+5V)
U44-14(+5V)	GND

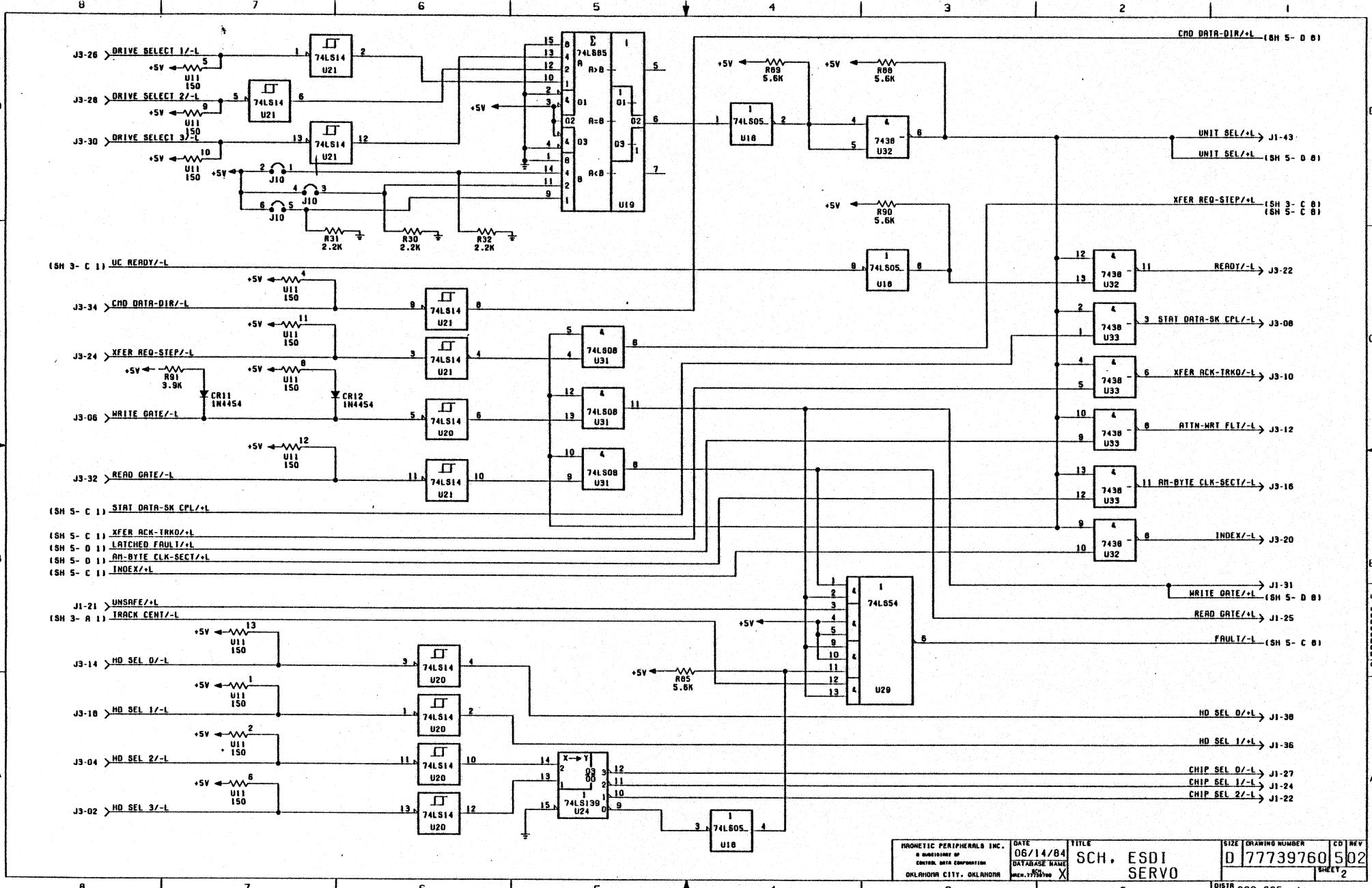
JUMPER LIST	
FROM	TO
U38-04	U38-07
U38-10	U38-07
U38-04	U43-02
U38-05	U38-06
U38-06	R156-W
U7 - 1	U7 - 2
U7 - 3	C48-E(GND)

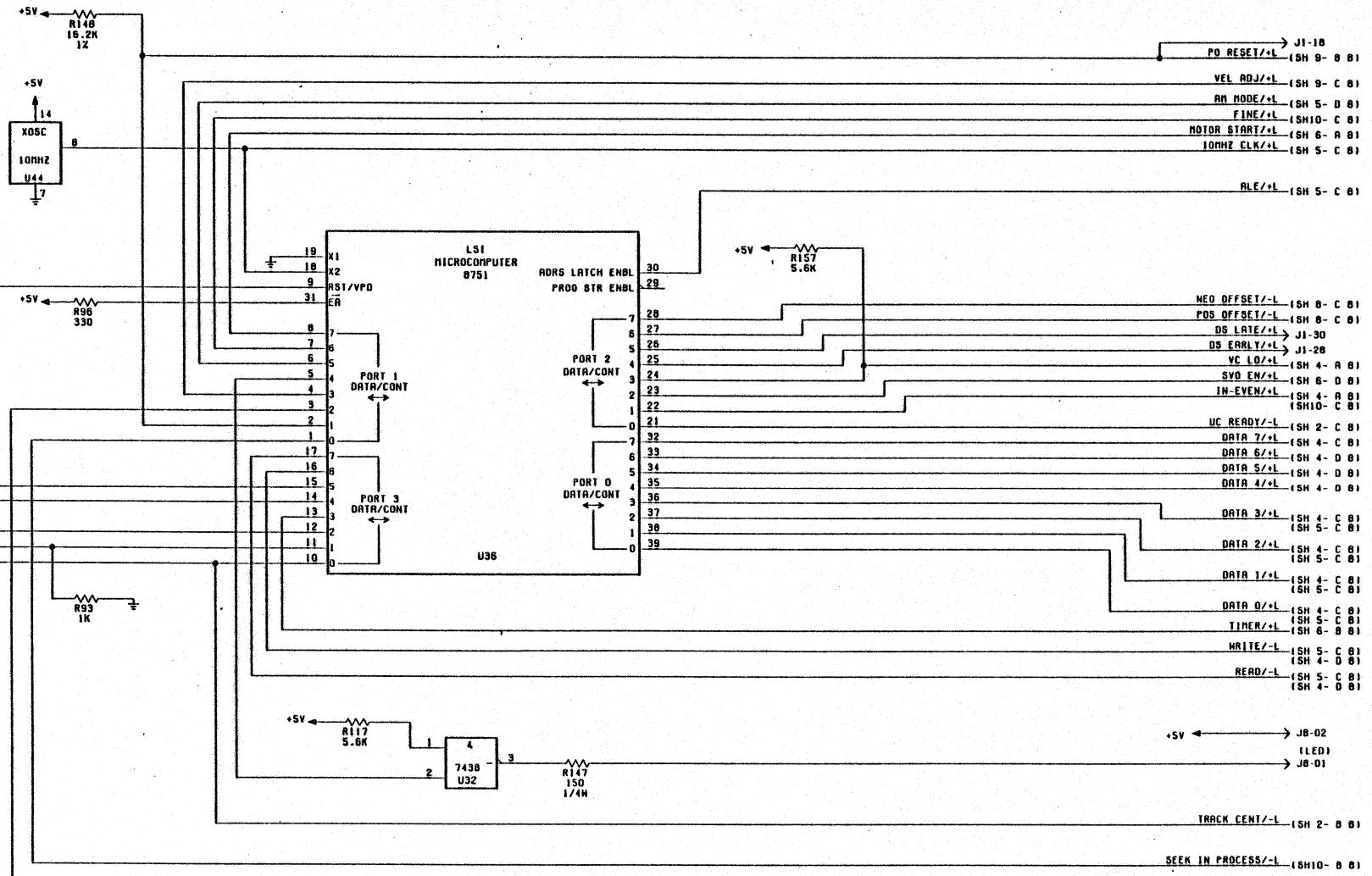
TOTAL CUT RUNS 6

MATERIAL FINISH	Unless otherwise specified, Dimensions are in inches. TOLERANCES 3-Plane 2-Plane Angle 1 2 1	CHD ENDS MFR	FILE PWA ESDI SERVO	SIZE DRAWING NUMBER SCALE SHEET
	GD MAGNETIC PERIPHERALS INC A Division of Comshare OKLAHOMA CITY, OKLAHOMA	4	3	D 77739750 6/05 3 - 3
DO NOT SCALE DRAWING	WRN II			A23-AY5



MATERIAL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.	MAGNETIC PERIPHERALS INC.		
FINISH	TOLERANCES 3-PLACE 2-PLACE ANGLES			D. SUBSIDIARY OF CD CONTROL DATA CORPORATION
	± .005	± .010	± 1°	OKLAHOMA CITY, OKLAHOMA
DO NOT SCALE DRAWING				PRINTED REV. 9415





MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION		DATE 06/14/84	TITLE SCH. ESDI SERVO	SIZE D 77739760 505	CD REV SHEET 3
DATABASE NAME MEN.77739760	X				

DISTR A23-SCS 1

(SH 6- D 1) +2.5V REF

(SH 3- B 1) WRITE/-L

(SH 3- B 1) READ/-L

(SH 5- C 1) BUS ENABLE/-L

(SH 3- C 1) DATA 6/+L

(SH 3- C 1) DATA 5/+L

(SH 3- C 1) DATA 4/+L

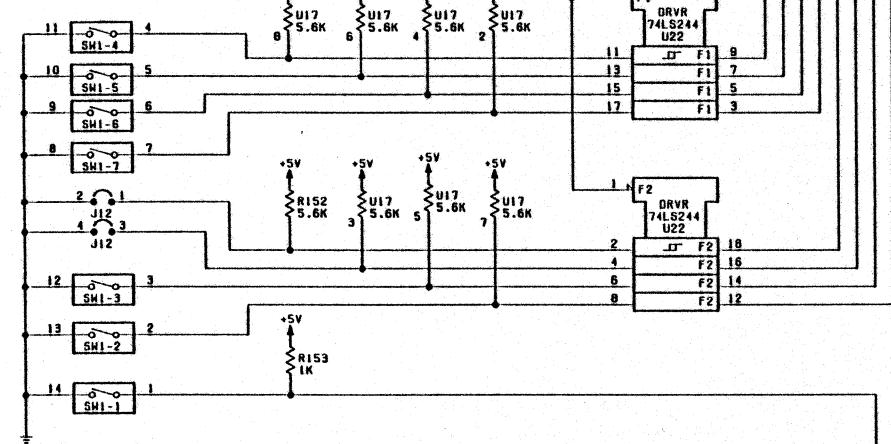
(SH 3- B 1) DATA 3/+L

(SH 3- B 1) DATA 2/+L

(SH 3- B 1) DATA 1/+L

(SH 3- B 1) DATA 0/-L

(SH 3- C 1) DATA 7/+L



(SH 3- C 1) IN-EVEN/-L

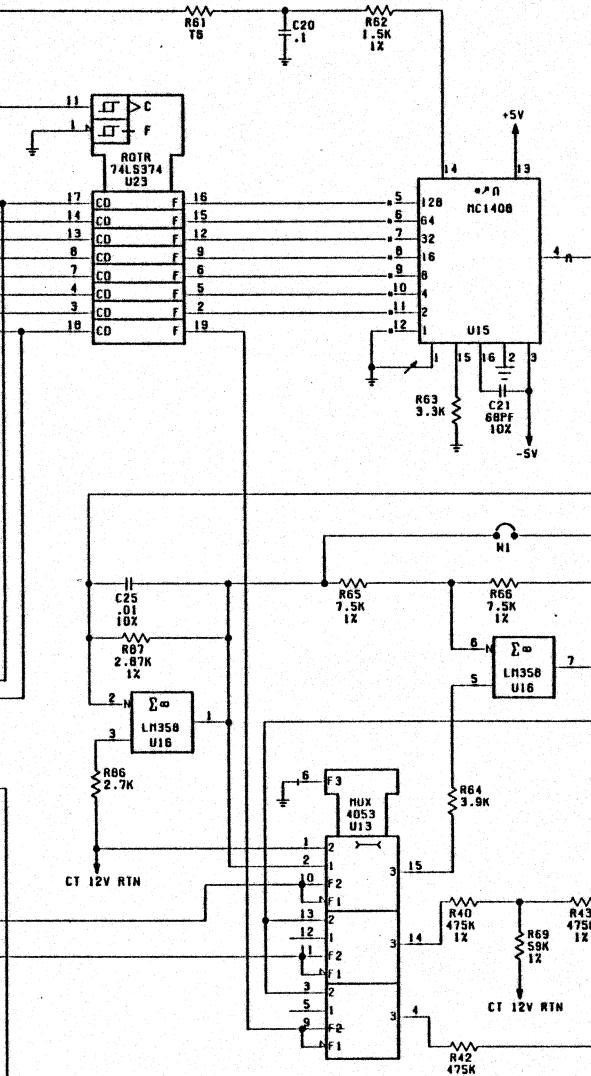
(SH 3- C 1) VC LO/-L

CONFIGURATION SWITCH SETTINGS

SWITCH NO.	ON	OFF			
SH1-1	SELF-SEEK	OFF			
SH1-2	MOTOR CONTROL	OFF			
SH1-3	INTER-RED	OFF			
SH1-7	SERIAL MODE	OFF			
SECTORS/TRACK	SH1-3	SH1-4			
17	ON	ON			
16	OFF	ON			
34	ON	OFF			
32	OFF	OFF			
FORMAT NODE	SH1-5	SH1-8			
ADDRESS MARK	ON	ON			
BYT CLOCK	OFF	ON			
SECTOR PULSE	OFF	OFF			
SECTOR PULSE	ON	OFF			

J12 CONFIGURATION

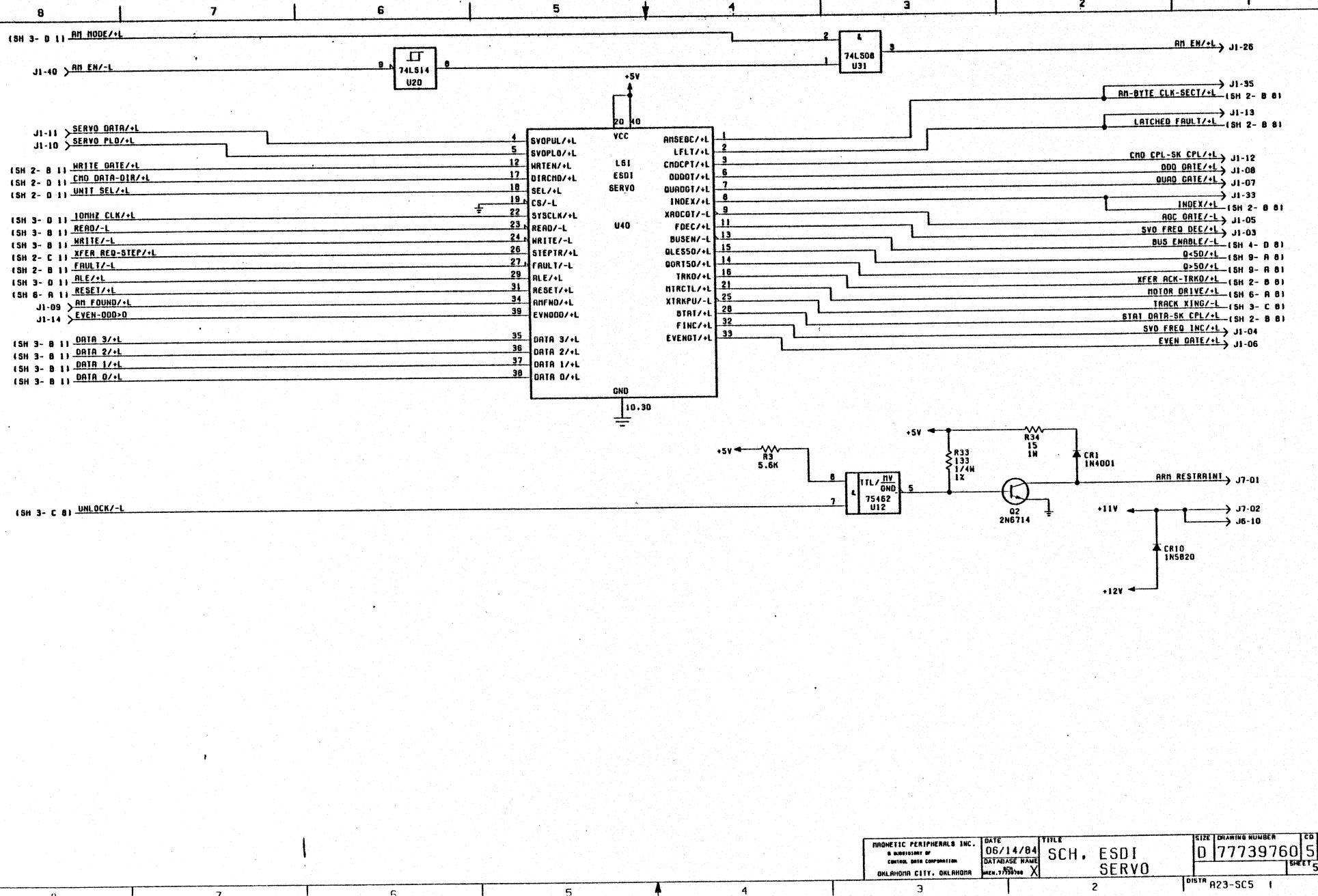
	3-4	1-2	#HEADS
CLOSED	CLOSED	3	
CLOSED	OPEN	5	
OPEN	CLOSED	7	
OPEN	OPEN	8	



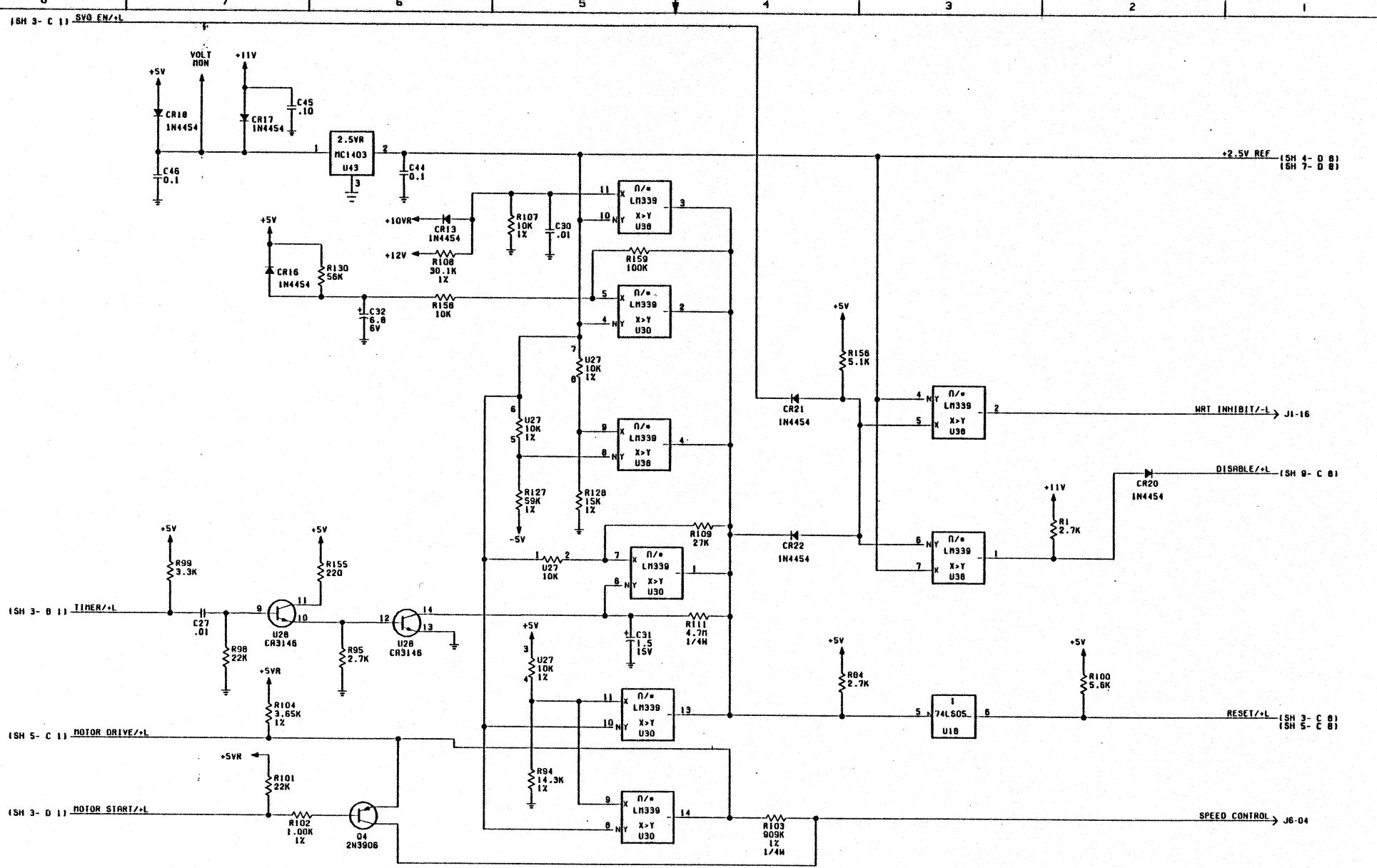
NETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA MUR. 77739760 X	DATE 06/14/84	TITLE SCH. ESDI SERVO	SIZE D	DRAWING NUMBER 77739760 505
---	------------------	--------------------------	-----------	--------------------------------

SELF SEEK/L (SH 3- B 8)

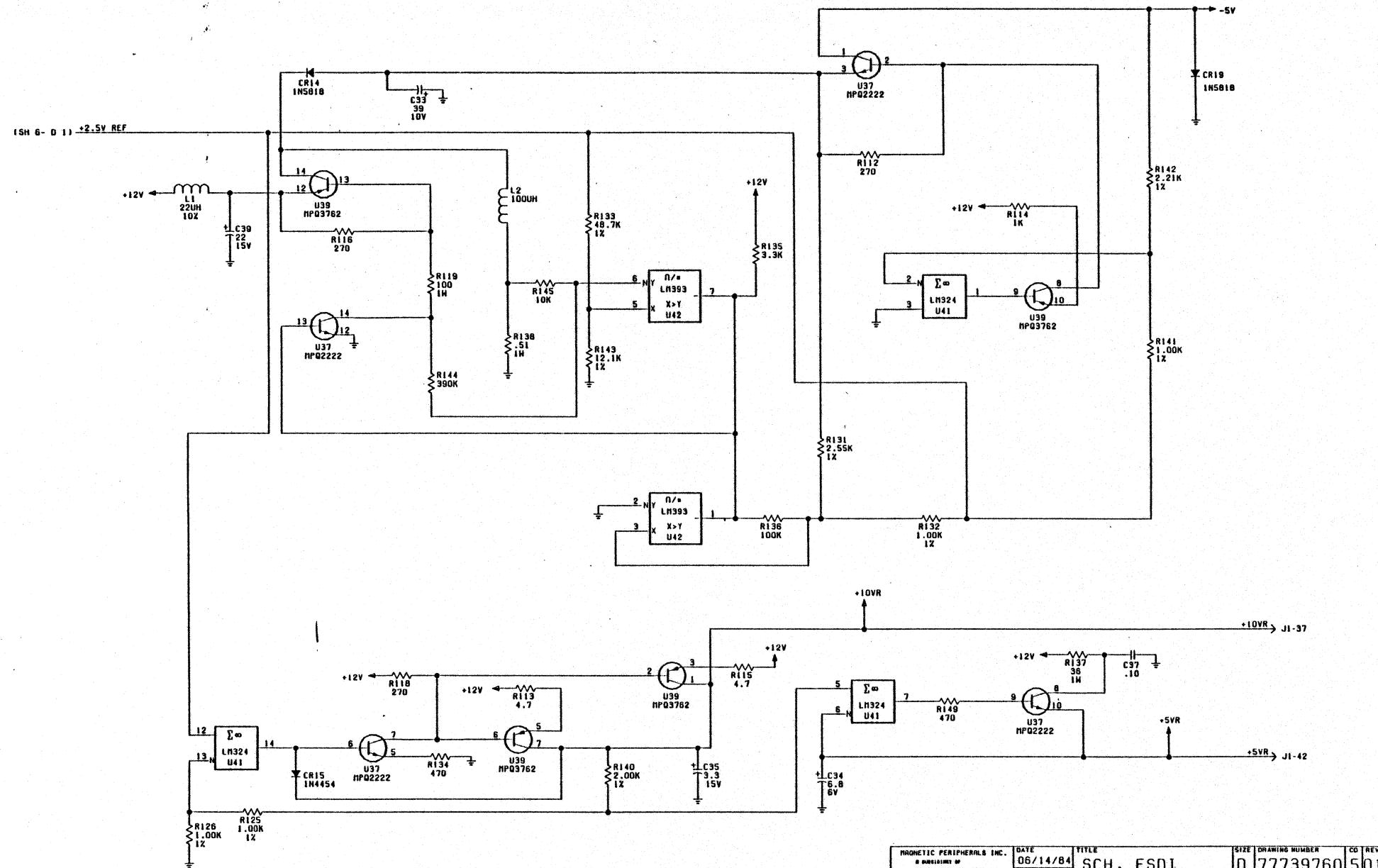
DISTR H23-SC5 1



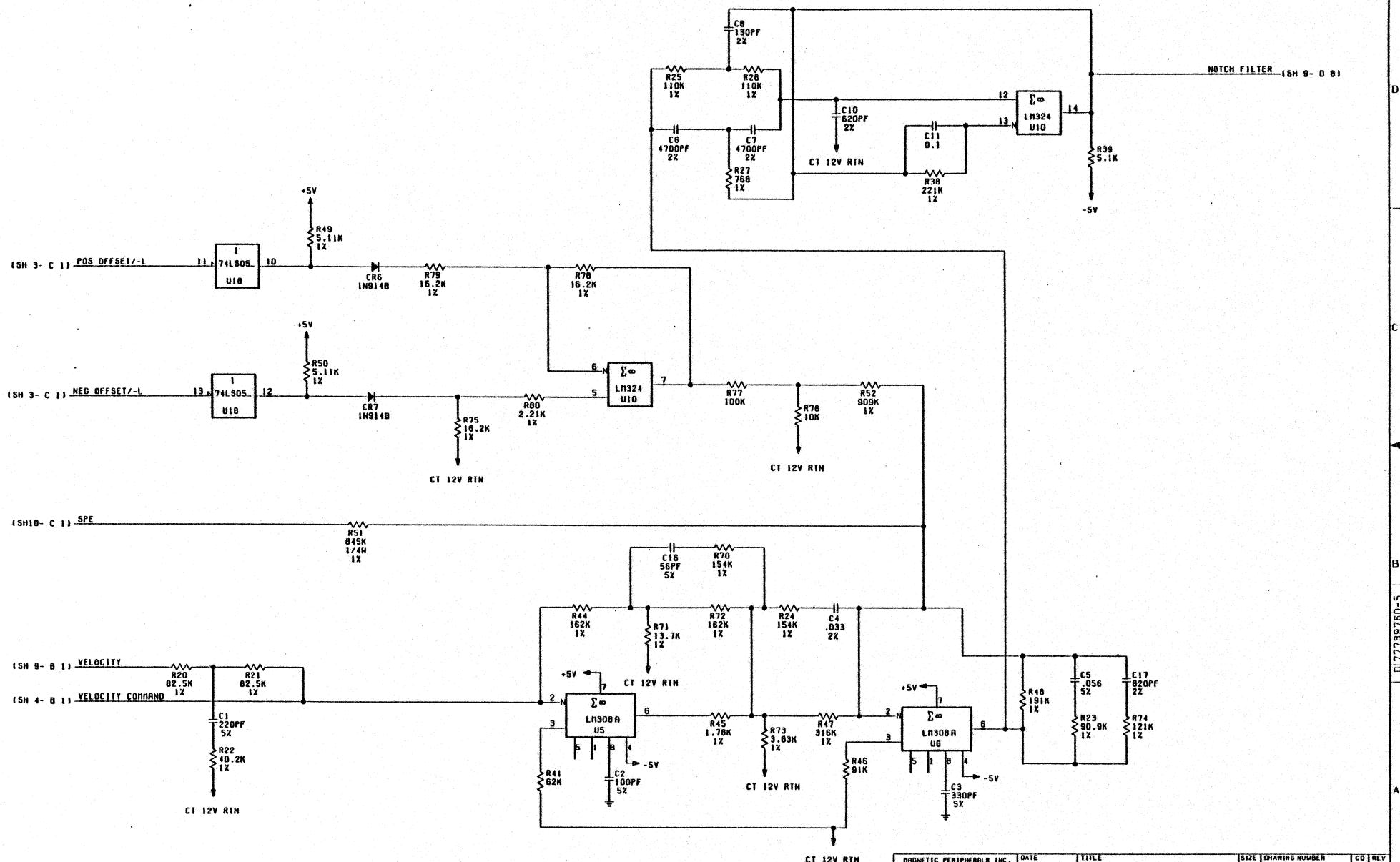
6 NOVEMBER 1984
DRAFTING STAMP
OKLAHOMA CITY, OKLAHOMA



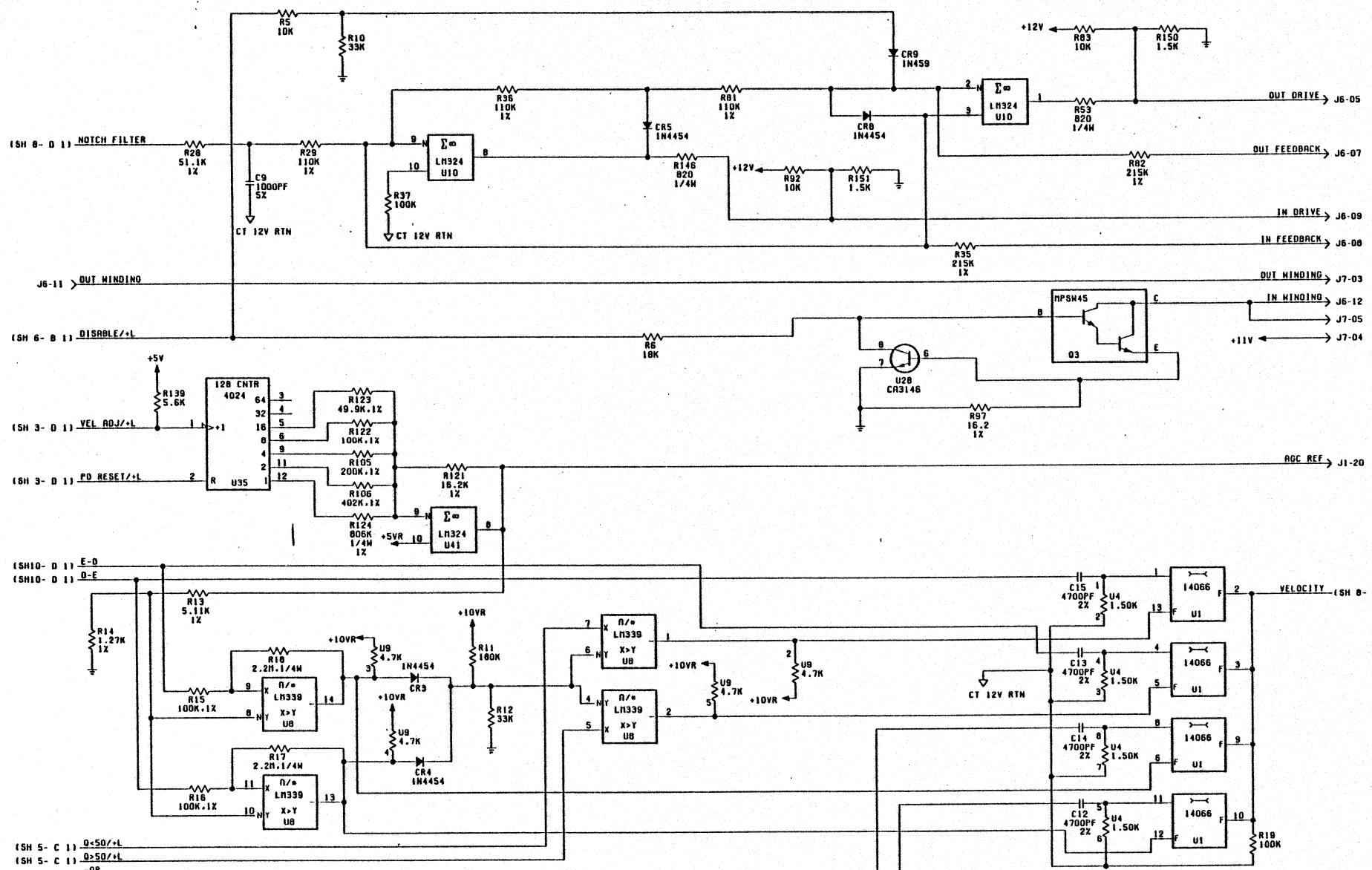
MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF COMPAQ DATA CORPORATION		DATE 06/14/84	TITLE SCH. ESDI DATABASE NAME MEM.T7010	SIZE D	DRAWING NUMBER 77739760	CD REV 501
OKLAHOMA CITY, OKLAHOMA		SERVO				SHEET 6



MAGNETIC PERIPHERALS INC.		DATE		TITLE		SIZE	DRAWING NUMBER	CO	REV
A DIVISION OF CONTROL DATA CORPORATION		06/14/84		DATAPAC NAME SCH. ESDI					
OKLAHOMA CITY, OKLAHOMA		MACH. TYPE NO. VME-7770-160		SERVO		D	77739760	501	
						SHEET	1		



8 7 6 5 4 3 2 1 | DIST A23-SCS I



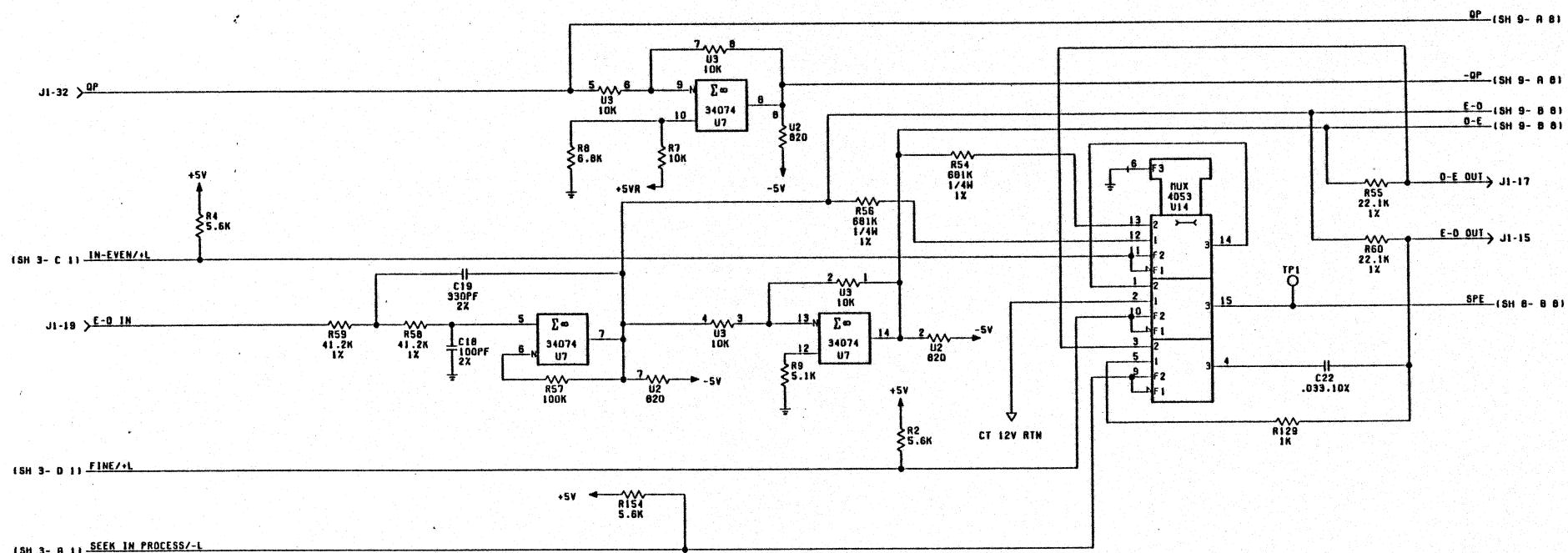
(SH 5- C 1) Q<5
(SH 5- C 1) Q>5
(SH10- D 1) -QP
(SH10- D 1) QP

MAGNETIC PERIPHERALS
A SUBSIDIARY OF
CONTROL DATA CORPORATION
OKLAHOMA CITY, OK

LS INC.	DATE 06/14/84	TITLE SCH
FOR	DATABASE NAME BCN. WBN 722360344	
LAHOOA		

ESDI
SERV

SIZE	DRAWING NUMBER	CD	REV
D	77739760	504	
		SHEET	9



MAGNETIC PERIPHERALS
A SUBSIDIARY OF
CONTROL DATA CORPORATION
OKLAHOMA CITY, OKLAHOMA

4
ME
X TITLE SCH. ESDI SERV(

SIZE DRAWING NUMBER CD REV
D 77739760 502
SHEET 1 OF

8
IDENT. NO. CO STATUS REVISION

7

6

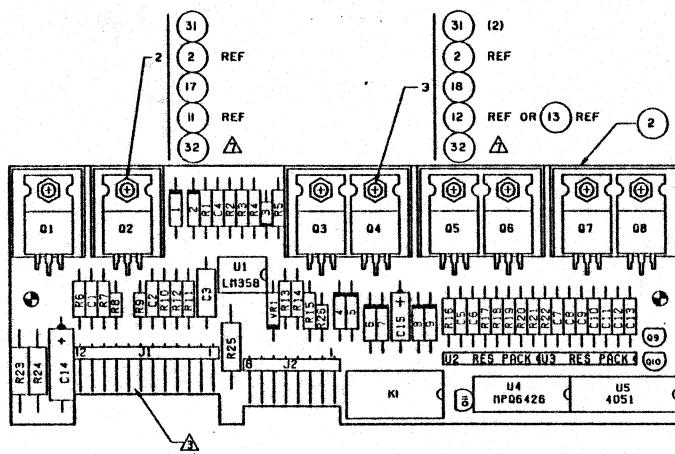
5

4

3

2

1



RES	PL	ITEM
R1	29	
R2	28	
R3	28	
R4	40	
R5	28	
R6	20	
R7	28	
R8	27	
R9	27	
R10	34	
R11	38	
R12	26	
R13	38	
R14	38	
R15	39	
R16	38	
R17	30	
R18	30	
R19	30	
R20	30	
R21	30	
R22	30	
R23	24	
R24	24	
R25	25	
R26	43	

CAP	PL	ITEM
C1	20	
C2	20	
C3	35	
C4	21	
C5	21	
C6	21	
C7	21	
C8	20	
C9	20	
C10	20	
C11	20	
C12	20	
C13	20	
C14	19	
C15	42	

TSTR	PL	ITEM
01	11	
02	11	
03	13	
04	12	
05	13	
06	12	
07	13	
08	12	
09	14	
010	14	
011	10	

D10	PL	ITEM
CR1	15	
CR2	15	
CR3	16	
CR4	41	
CR5	41	
CR6	41	
CR7	41	
CR8	41	
CR9	41	

IC	PL	ITEM
U1	6	
U2	8	
U3	9	
U4	7	
U5	5	

VOLT	PL	ITEM
VRI	36	

CONN	PL	ITEM
J1	22	
J2	23	

RELAY	PL	ITEM
K1	37	

MATERIAL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES 3-PLACE 1-PLACE ANGLE	HONEYWELL INC. A SUBSIDIARY OF COMPUTER DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	SUBIE EVANS 03-15-84	TITLE	PWA	SIZE	DRAWING NUMBER	CO	REV
FINISH	*	CD	CHKD D. COLEMAN 03-26-84	ENGR STEVEN HOLBINGER 03-26-84	MFG	D	77760550	203	
DO NOT SCALE DRAWING		HREN II				SCALE	2/1	SHEET	1 of 1
						DATA BASE	X	DIST	A23-RY5 1

8

7

6

5

4

3

2

1

D 17760550-2

IDENT. NO.
CD
STATUS
REVISION

7

6

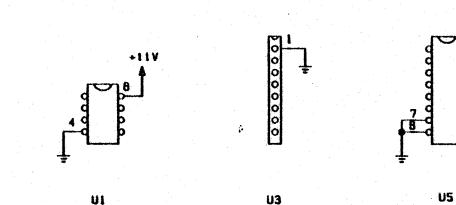
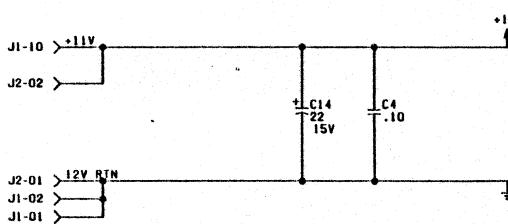
5

4

3

2

1



- NOTES: (UNLESS OTHERWISE SPECIFIED)
1. DRAWING INTERPRETATION PER 43A226599
 2. CAPACITOR VALUES ARE IN MICROFARADS +80-20%
 3. RESISTOR PACKS (SIPS) ARE ±2%
 4. RESISTOR VALUES ARE IN OHMS.
 5. PHASE AND SENSOR SEQUENCE IS A,B,C.
SENSOR DECODE SEQUENCE IS 5,1,3,2,6,4 FOR
PHASE DECODES OF AB,AC,BC,BA,CA,CB.

MATERIAL	CLASS OTHERWISE SPECIFIED	MANUFACTURER	DNW	REV FURN	DX-07-04	TITLE	SCH.	SIZE	DRAWING NUMBER	CD	REV
FINISH	DIMENSIONS IN INCHES. TOLERANCES 3-PLACE ±2-PLACE ANGLES	CD MAGNETIC PERIPHERALS INC. DATA SYSTEMS CORPORATION OKLAHOMA CITY, OKLAHOMA	CHNO:	McLaren	5-26-74		MOTOR CONTROL	D	77760560	1	01
DO NOT SCALE DRAWING			ENGR:	McLaren	3-26-74						
			MRNO:	HREN II							
			DATA BASE	SCH.HREN.77760560							

8

7

6

5

4

3

2

D 77760560-1

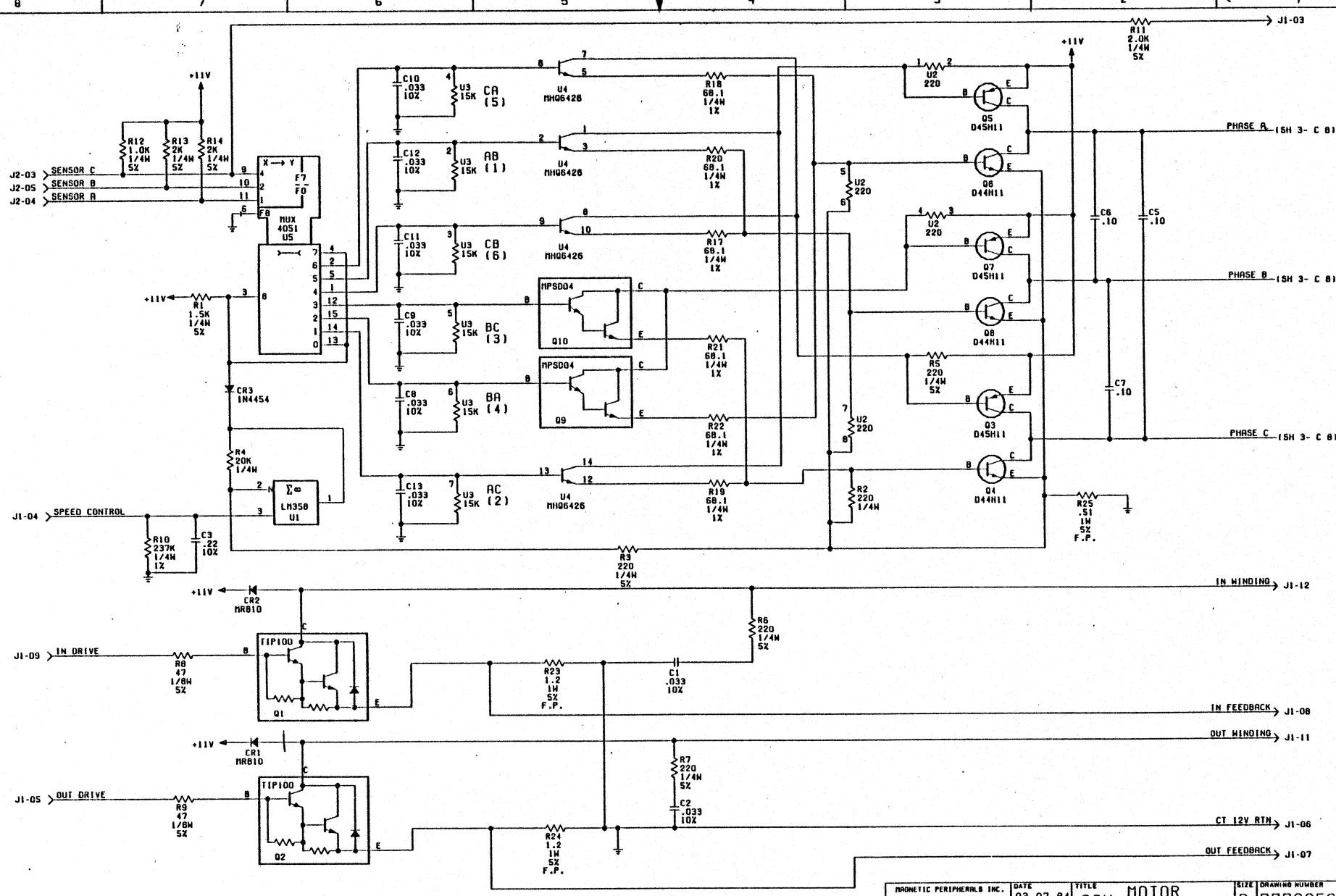
DISTR A23-SC5 1

A

B

D

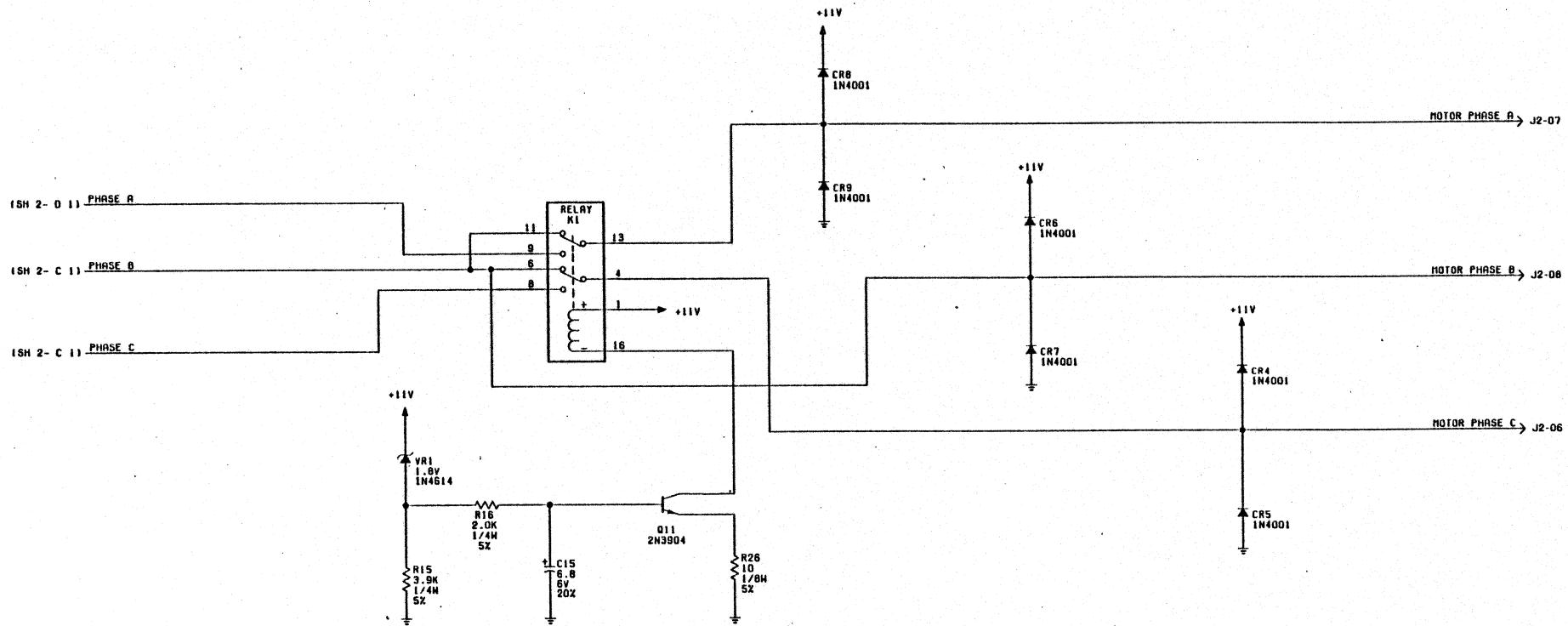
C



MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA MEN-77760560		DATE 03-07-84 DATABASE NAME MEN-77760560	TITLE SCH. MOTOR CONTROL	SIZE D	DRAWING NUMBER 77760560-1	CD 01
---	--	---	--------------------------------	-----------	------------------------------	----------

SHEET 2

DISTR A23-SC5 1



MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA MCH-77760560	DATE 03-07-84	TITLE SCH. MOTOR CONTROL	SIZE D 77760560	CD REV 101
				SHEET 3 F

DISTR A23-SCS I

8

7

6

5

4

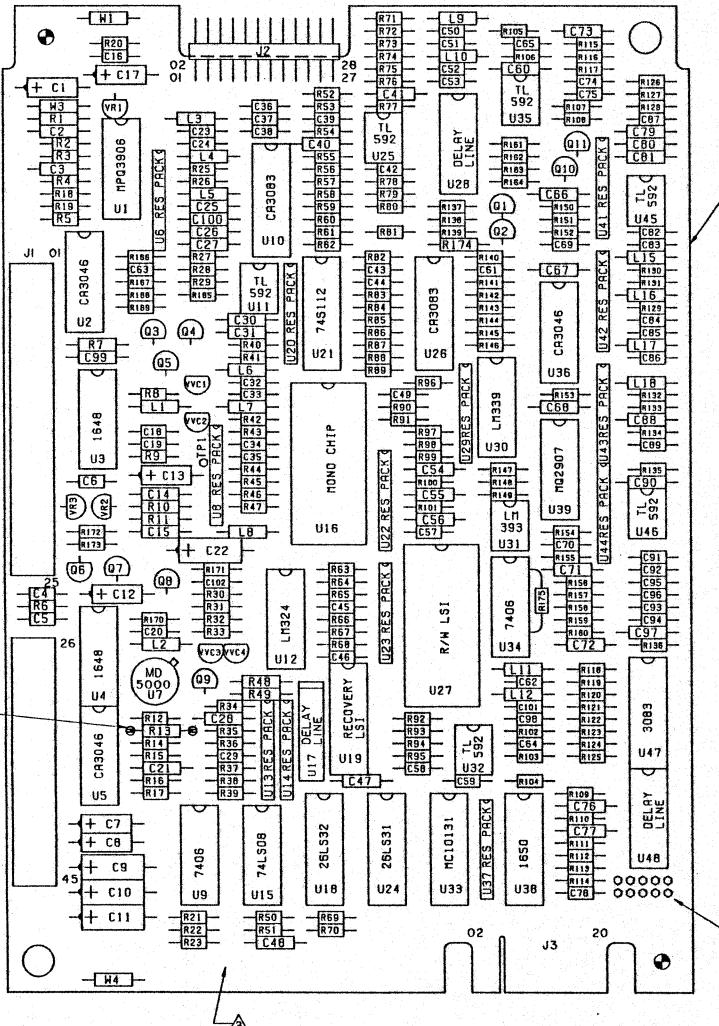
3

2

1

IDENT. NO. CD STATUS REVISION

SHEET REVISION STATUS		REVISION RECORD		
REV	ECO	SPRT	CMD	DATE
FOR DOCUMENT STATUS SEE REVISION STATUS SHEET				



JUMPER LIST	
FROM	TO
UI8-04	UI8-I2 (GND)
UI9-13	UI9-16 (+5V)
U30-12 A	R91-W (-5V)

VERIFY CONNECTIONS	
FROM	TO
RI75-N	U34-14
RI75-S	U34-9

NOTES: (UNLESS OTHERWISE SPECIFIED)

1. ASSEMBLE PER 5970II27, EXCEPT PARAGRAPH 3.6.3.
2. MAXIMUM COMPONENT HEIGHT .30 EXCEPT JI AND U27. 0.33, AND ITEMS 177, 0.25
- △ 3. MARK ASSEMBLY NO. IN APPROXIMATE LOCATION SHOWN PER 12A1099P1.
4. FOR SCHEMATIC DIAGRAM, SEE ITEM I.
5. COMPONENT MARKING WITHOUT ALPHA PREFIX ARE DIODES.
6. SOLID BAND ON DIODES AND VOLTAGE REGULATORS INDICATE CATHODE END.
7. GENERAL WORKMANSHIP PER 10120300.
- △ 8. CLIP PIN 12 OF IC U30. INSTALL JUMPER TO LEAD OF IC.

MATERIAL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES 3-PLACE 2-PLACE ANGLE	CD A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DW D. HUBBLE CHK D. COLEMAN ENGR R. NORMAN MFG	DE-15-B4 TITLE 6-15-94 PWA. WREN II ESDI DATA	SIZE DRAWING NUMBER D 77760600 502
FINISH	---	---	---	---	CD REV
DO NOT SCALE DRAWING		DATA BASE DWG.WREN.77760620 X		SCALE 2/1	SHEET 1 of 2
				DISTR A23-AYS I	

8

7

6

5

4

3

2

1

D

RES	PL ITEM
R1 169	
R2 115	
R3 115	
R4 142	
R5 150	
R6 151	
R7 164	
R8 147	
R9 151	
R10 171	
R11 171	
R12 142	
R13 175	
R14 121	
R15 172	
R16 110	
R17 158	
R18 151	
R19 149	
R20 147	
R21 149	
R22 116	
R23 135	
R24 -	
R25 136	
R26 136	
R27 131	
R28 131	
R29 174	
R30 130	
R31 133	
R32 111	
R33 112	
R34 116	
R35 129	
R36 124	
R37 143	
R38 120	
R39 123	
R40 114	
R41 114	
R42 113	
R43 113	
R44 146	
R45 126	
R46 145	
R47 157	
R48 148	
R49 152	
R50 153	
R51 132	
R52 136	
R53 139	
R54 189	
R55 190	

RES	PL ITEM
R56 190	
R57 198	
R58 190	
R59 190	
R60 146	
R61 192	
R62 193	
R63 160	
R64 155	
R65 157	
R66 162	
R67 130	
R68 133	
R69 136	
R70 136	
R71 180	
R72 180	
R73 184	
R74 184	
R75 198	
R76 198	
R77 117	
R78 136	
R79 198	
R80 198	
R81 149	
R82 166	
R83 183	
R84 183	
R85 185	
R86 161	
R87 109	
R88 185	
R89 153	
R90 137	
R91 202	
R92 182	
R93 145	
R94 182	
R95 145	
R96 201	
R97 191	
R98 194	
R99 119	
R100 114	
R101 162	
R102 109	
R103 154	
R104 154	
R105 139	
R106 144	
R107 122	
R108 122	
R109 168	
R110 168	
R115 142	
R116 116	
R117 118	
R118 179	
R119 125	
R120 120	
R121 179	
R122 107	
R123 125	
R124 163	
R125 163	
R126 115	
R127 115	
R128 170	
R129 141	
R130 179	
R131 179	
R132 187	
R133 187	
R134 174	
R135 139	
R136 108	
R137 205	
R138 179	
R139 179	
R140 197	
R141 199	
R142 199	
R143 109	
R144 161	
R145 196	
R146 196	
R147 149	
R148 153	
R149 200	
R150 127	
R151 120	
R152 139	
R153 128	
R154 134	
R155 114	
R156 120	
R157 120	
R158 188	
R159 188	
R160 153	
R161 122	
R162 195	
R163 127	
R164 120	
R165 140	

RES	PL ITEM
R111 139	
R112 147	
R113 147	
R114 165	
R115 142	
R116 116	
R117 118	
R118 144	
R119 204	
R120 203	

RES	PL ITEM
R166 120	
R167 159	
R168 181	
R169 144	
R170 120	
R171 159	
R172 181	
R173 144	
R174 204	
R175 203	

CAP	PL ITEM
C1 84	
C56 90	
C57 81	
C58 99	
C59 99	
C60 77	
C6 75	
C7 94	
C8 95	
C9 98	
C10 97	
C11 97	
C12 95	
C13 95	
C14 77	
C15 77	
C16 91	
C17 93	
C18 75	
C19 75	
C20 75	
C21 77	
C22 97	
C23 103	
C24 102	
C25 77	
C26 77	
C27 77	
C28 76	
C29 103	
C30 77	
C31 77	
C32 78	
C33 63	
C34 75	
C35 99	
C36 99	
C37 99	
C38 99	
C39 75	
C40 77	
C41 77	
C42 99	
C43 89	
C44 89	
C45 87	
C46 75	
C47 77	
C48 77	
C49 92	
C50 78	
C51 82	
C52 99	
C53 99	
C54 90	
C55 90	

IC	PL ITEM
U1 12	
U2 13	
U3 5	
U4 5	
U5 13	
U6 36	
U7 25	
U8 42	
U9 19	
U10 14	
U11 17	
U12 15	
U13 31	
U14 38	
U15 10	
U16 24	
U17 27	
U18 29	
U19 7	
U20 39	
U21 26	
U22 44	
U23 37	
U24 28	
U25 17	
U26 14	
U27 8	
U28 30	
U29 45	
U30 16	
U31 18	
U32 17	
U33 21	
U34 19	
U35 17	
U36 13	
U37 35	
U38 6	
U39 11	
U40 -	
U41 43	
U42 31	
U43 36	
U44 38	
U45 17	
U46 17	
U47 14	
U48 30	

IND	PL ITEM
L1 54	
L2 58	
L3 56	
L4 56	
L5 60	
L6 59	
L7 59	
L8 61	
L9 57	
L10 57	
L11 60	
L12 60	
L13 -	
L14 -	
L15 54	
L16 54	
L17 56	
L18 56	
L19 -	

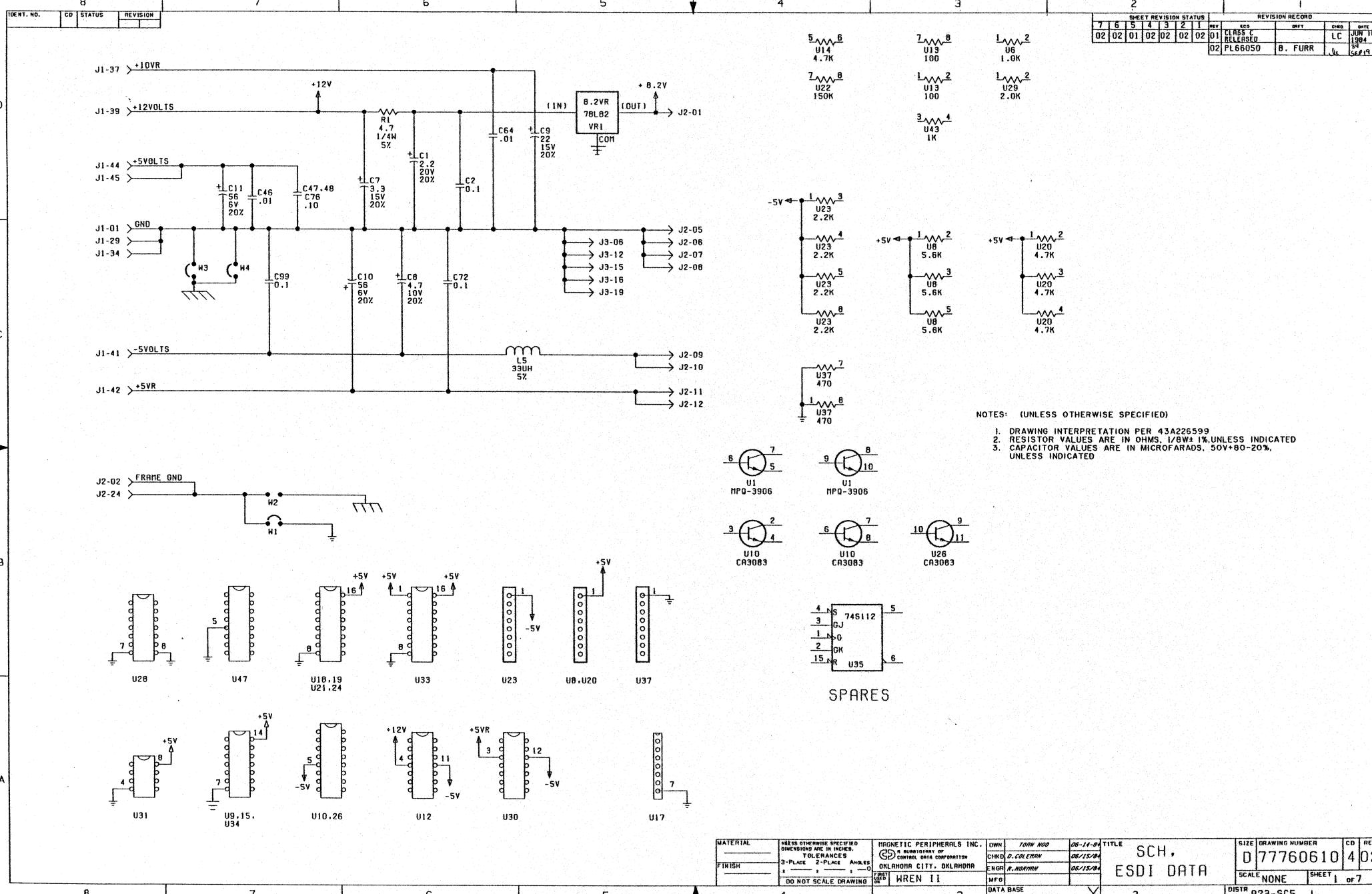
VARI	PL	ITEM
VVC1	49	
VVC2	49	
VVC3	49	
VVC4	49	

TSTR	PL	ITEM
01	52	
02	52	
03	47	
04	47	
05	47	
06	47	
07	47	
08	47	
09	50	
010	52	
011	52	

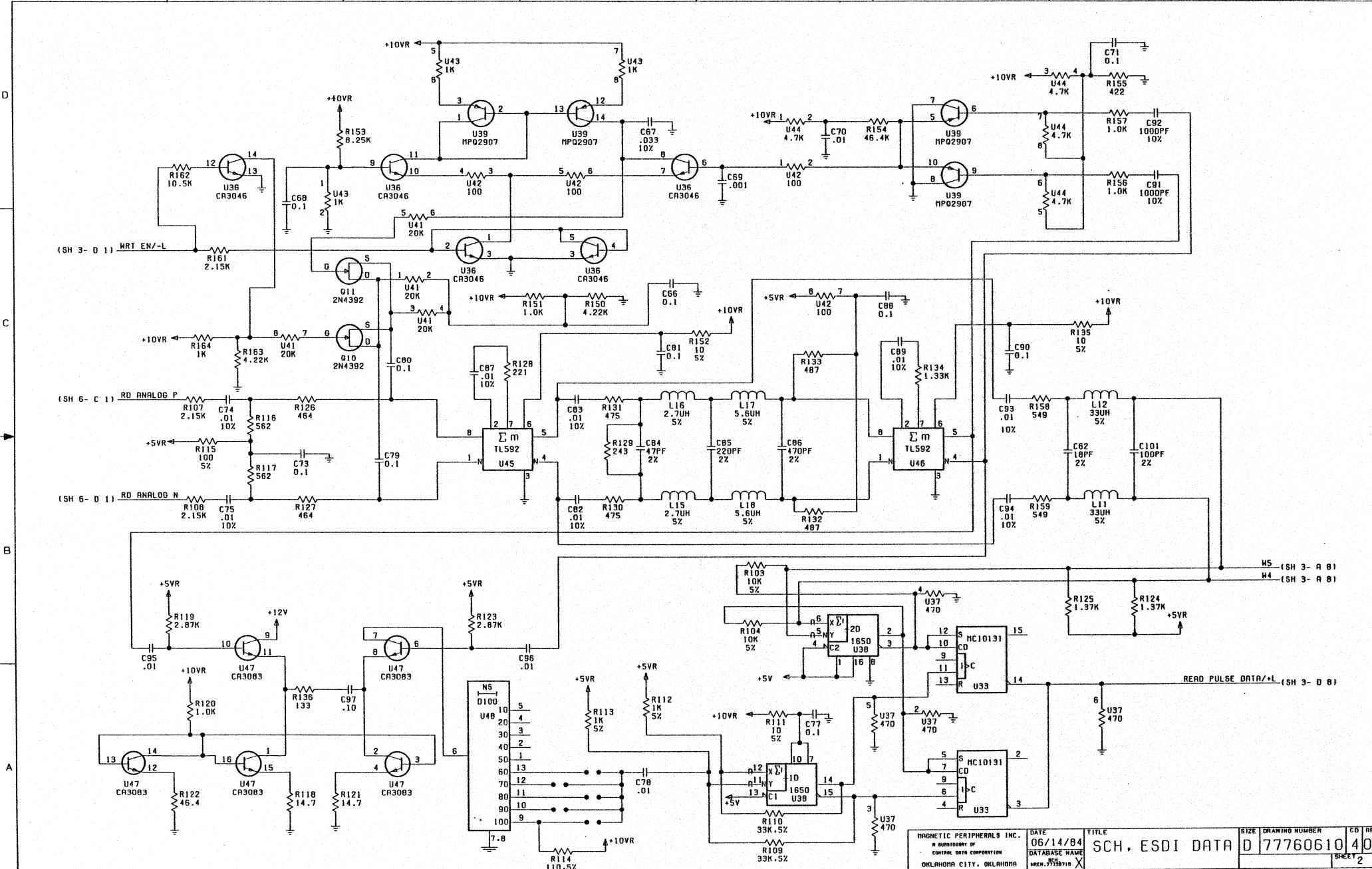
CONN	PL	ITEM
J1	66	
J2	68	
J3	-	

MAGNETIC PERIPHERALS INC.
A SUBSIDIARY OF
CONTROL DATA CORPORATION
OKLAHOMA CITY, OKLAHOMA
06-15-84
PWA, ESDI
DATA
DATE
DATABASE
REV
D 77760600 502
SHEET 2 F

DISTR R23-RYS 1



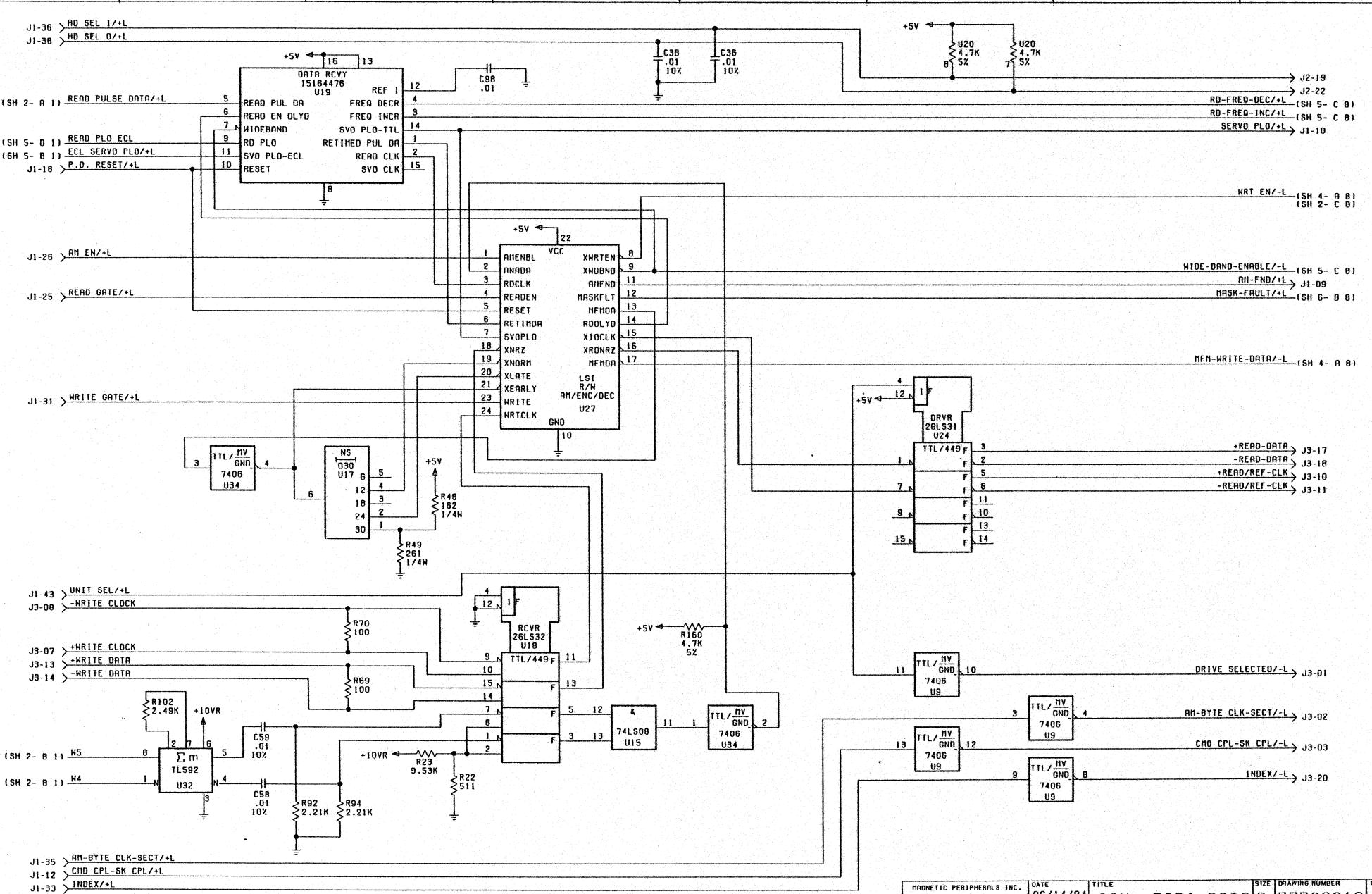
8 / 6 5 4 3 2 1



8 / 7 6 5 4 3 2 1

SHEET 2

DISTR A23-SC5 I



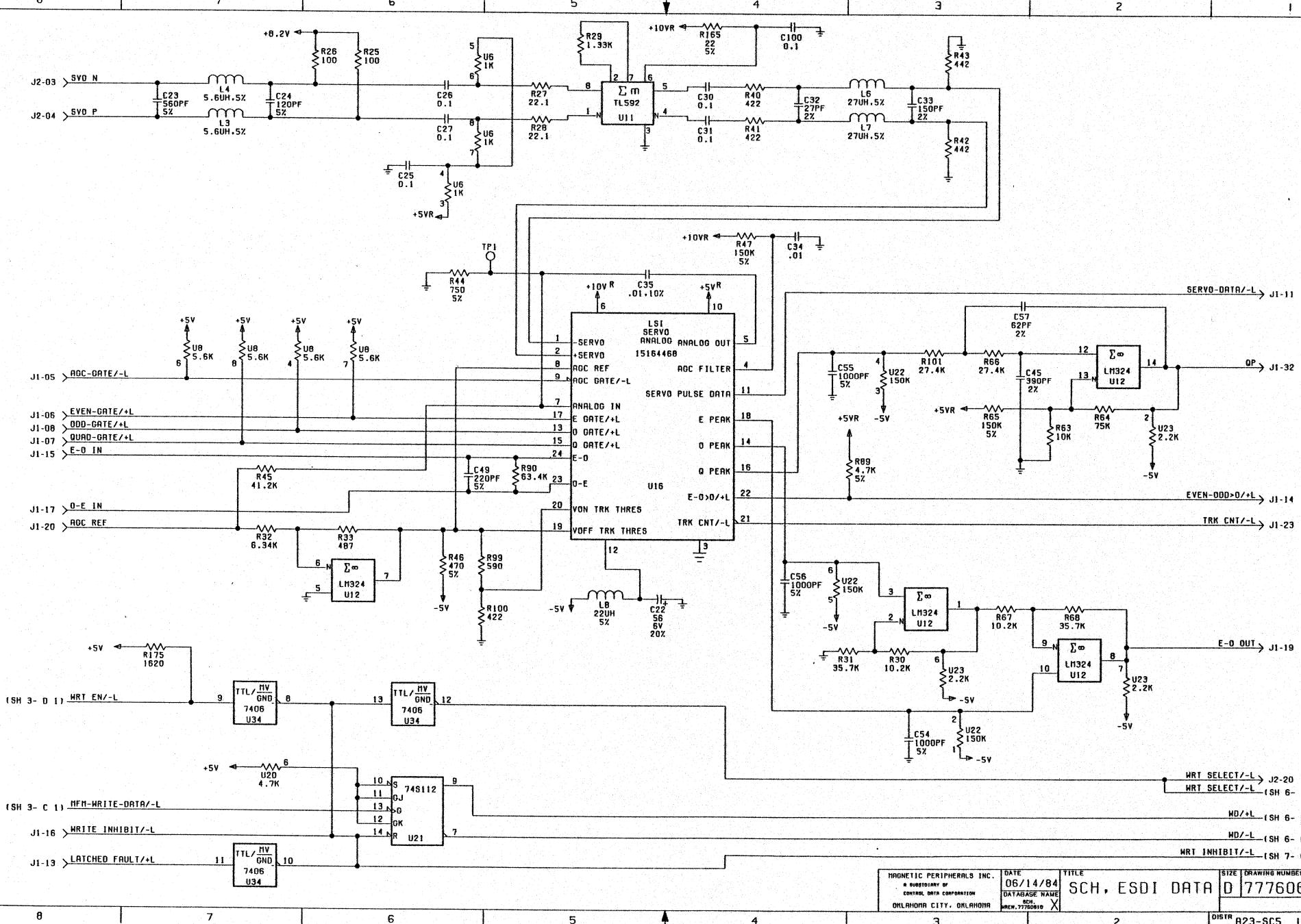
MAGNETIC PERIPHERALS INC.
A SUBSIDIARY OF
CONTROL DATA CORPORATION
OKLAHOMA CITY, OKLAHOMA

DATE
06/14/88
DATABASE NAME
SCH.
MREF-72780810

TITLE
SC

H. ESDI DATA D

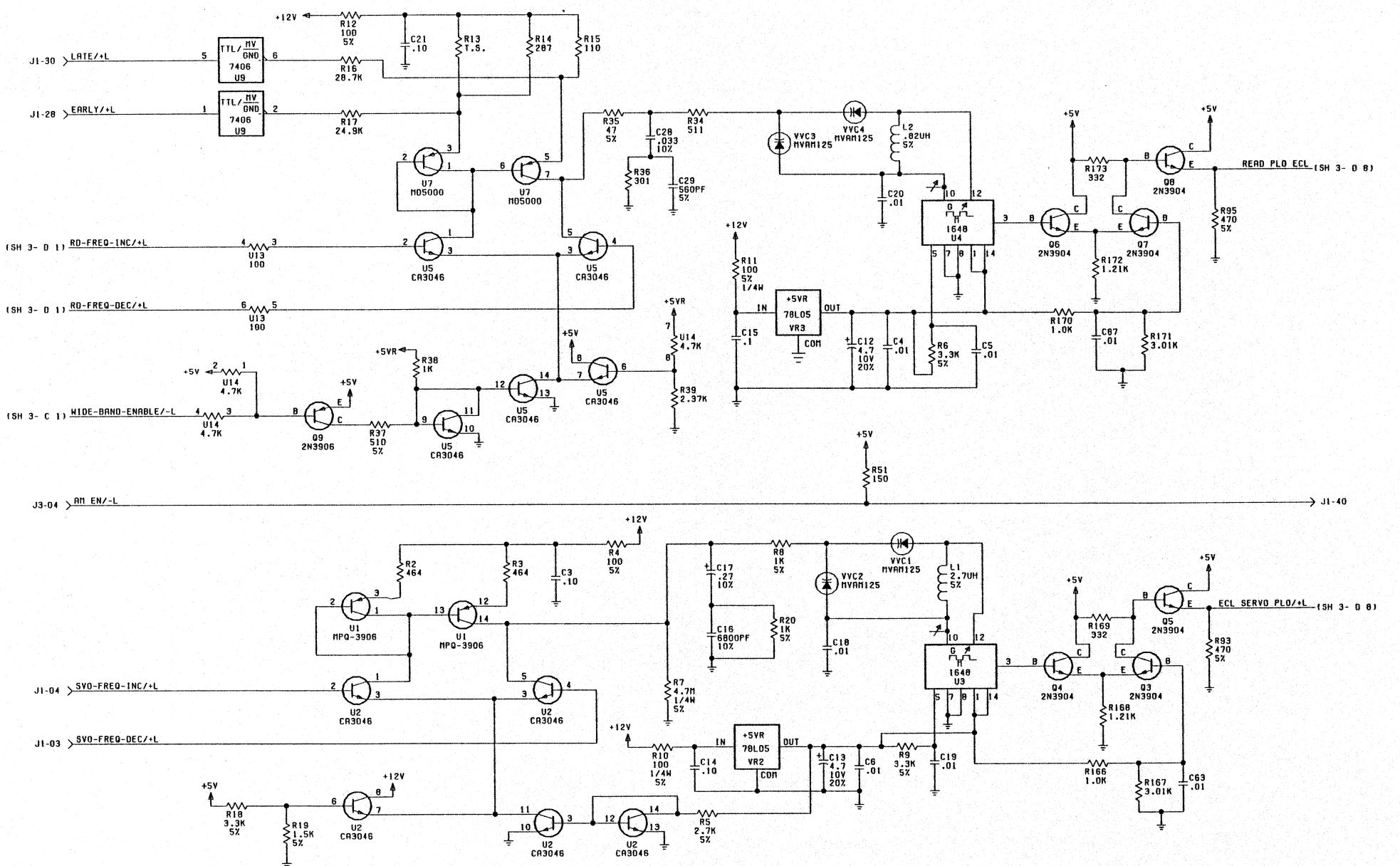
DRAWING NUMBER	CD	REV
77760610	4	02
SHEET		3



MAGNETIC PERIPHERALS INC.
A SUBSIDIARY OF
CONTROL DATA CORPORATION
OKLAHOMA CITY, OKLAHOMA
DATE 06/14/84
DATABASE NAME SCH.77760610
REV. A
DRAWING NUMBER D 77760610 402
D 77760610 402

DISTR R23-SC5 I

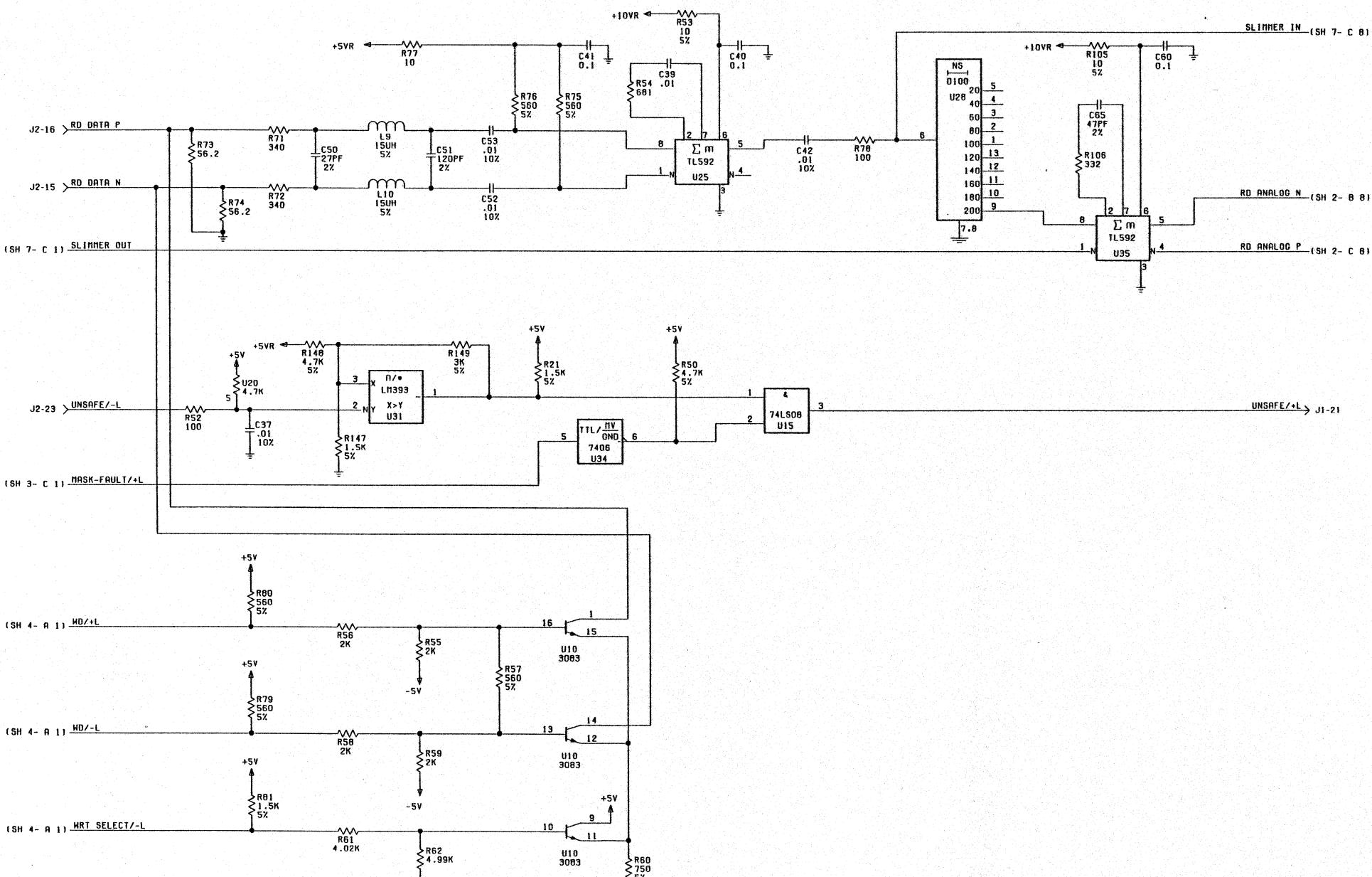
SHEET 4



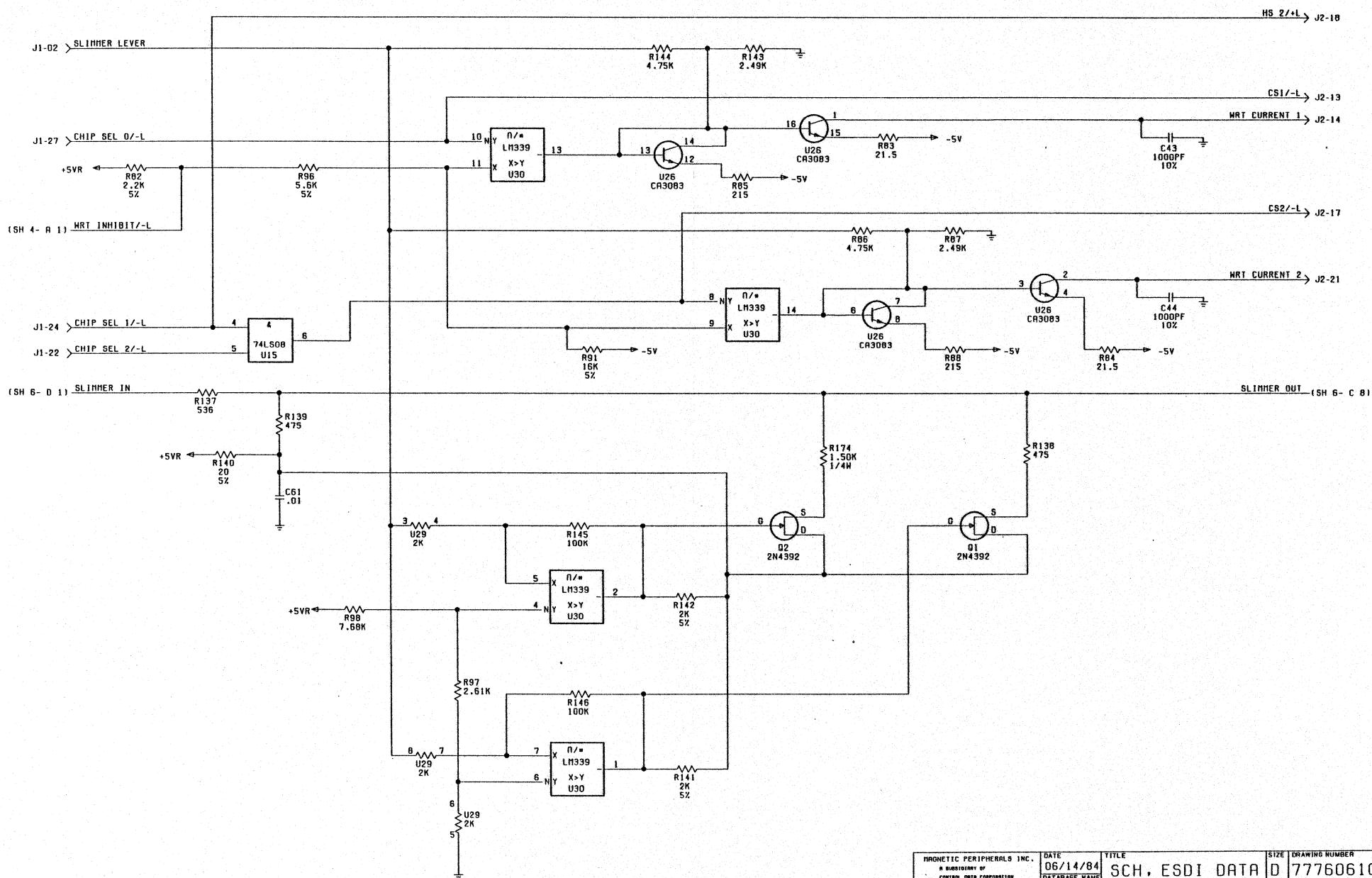
MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DATE 06/14/84	TITLE SCH., ESDI DATA	SIZE D 77760610	REV 401
	NUMBER REF. 77760610			

8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
 D | D | C | C | C | C | B | B |
 A | A | A | A | A | A | A | A |
 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
 D | D | C | C | C | C | B | B |

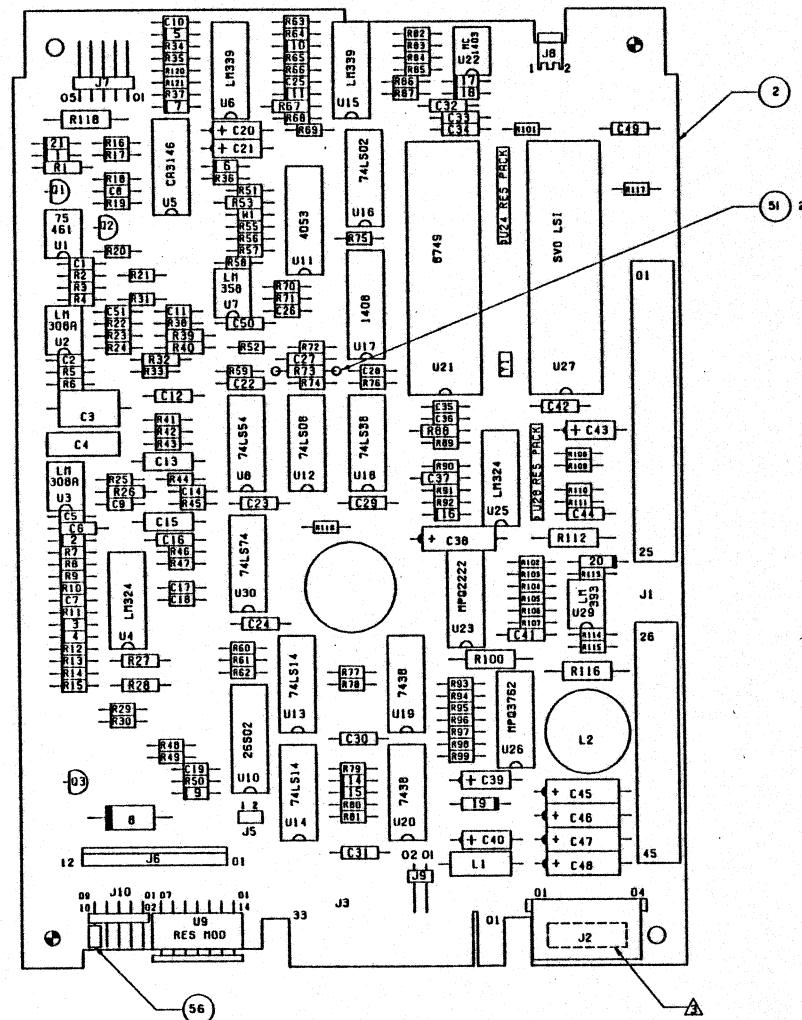
DISTR P23-SC5 1 | SHEET 5



MMONETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION	DATE 06/14/84	TITLE SCH. ESDI DATA	SIZE D	DRAWING NUMBER 77760610	CD 4	REV. 02
OKLAHOMA CITY, OKLAHOMA	DATABASE NAME WREN-77760610				SHEET 6	



MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF COMTRON DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DATE 06/14/84	TITLE DATABASE FOR WREN, 7777010 X	SIZE D	DRAWING NUMBER 77760610	CD REV 402
		SCH, ESDI DATA			SHEET 7 F



NOTES: (UNLESS OTHERWISE SPECIFIED)

1. ASSEMBLE PER 5970H127, EXCEPT PARAGRAPH 3.8.3
 2. MAXIMUM COMPONENT HEIGHT .38
EXCEPT ITEM 32 AND ZE TO BE .40 MAXIMUM,
 3. MARK ASSEMBLY NO. IN APPROXIMATE LOCATION
SHOWN ON BACK (SOLDER) SIDE PER 12A1099P1.
 4. FOR SCHEMATIC DIAGRAM, SEE ITEM 1.
 5. COMPONENT MARKING WITHOUT ALPHA PREFIX
ARE DIODES.
 6. SOLID BAND ON DIODES AND VOLTAGE REGULATORS
INDICATE CATHODE END.
 7. U21 (ITEM 23), U27 (ITEM 19) AND R73 (ITEM 10B)
TO BE INSTALLED AT PWA TEST.
 8. GENERAL WORKMANSHIP PER 10I20300.
 9. CLIP PIN OF FLUSH WITH IC ON U2 AND U3
(ITEM 11) PRIOR TO INSTALLATION.

MATERIAL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE .010. 3-PLACE .2-PLACE . ANEAS FINISH	MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF THE CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DW SUSIE EVANS BT-24-84 CD CHARLES D. COLEMAN 7-24-84 FIN EDWARD H. BENKHIMER 7-24-84	TITLE PWA SERVO-5	SIZE DRAWING NUMBER CD REV
DO NOT SCALE DRAWING		REV HREN II	MFG	D 77760650	007
4	3	1	2	1	2
4-1/2" X 11" BASE DWG. NO. HREN .77760650		X	2	0151A R23-AY5 I	1 of 2F

8

7

6

5

4

3

2

1

RES	PL ITEM
R1	181
R2	142
R3	111
R4	146
R5	142
R6	131
R7	135
R8	140
R9	140
R10	172
R11	144
R12	140
R13	144
R14	167
R15	175
R16	169
R17	162
R18	156
R19	163
R20	168
R21	122
R22	173
R23	138
R24	146
R25	178
R26	104
R27	103
R28	103
R29	160
R30	167
R31	124
R32	179
R33	143
R34	165
R35	159
R36	171
R37	162
R38	138
R39	182
R40	182
R41	139
R42	130
R43	140
R44	110
R45	140
R46	165
R47	145
R48	160
R49	167
R50	141
R51	150
R52	137
R53	182
R54	-
R55	165

RES	PL ITEM
R56	120
R57	120
R58	164
R59	166
R60	183
R61	169
R62	118
R63	170
R64	167
R65	132
R66	121
R67	107
R68	162
R69	180
R70	162
R71	118
R72	117
R73	108
R74	159
R75	149
R76	163
R77	166
R78	166
R79	164
R80	149
R81	156
R82	126
R83	121
R84	121
R85	137
R86	125
R87	121
R88	106
R89	158
R90	112
R91	118
R92	118
R93	157
R94	152
R95	159
R96	152
R97	157
R98	157
R99	166
R100	101
R101	166
R102	147
R103	110
R104	134
R105	158
R106	163
R107	172
R108	162
R109	161
R110	118

RES	PL ITEM
TSTR	PL ITEM
D1	43
D2	49
D3	41

IND	PL ITEM
L1	65
L2	66

XTAL	PL ITEM
Y1	64
	63

CAP	PL ITEM
C1	84
C2	78
C3	75
C4	87
C5	77
C6	82
C7	93
C8	93
C9	93
C10	93
C11	85
C12	81
C13	83
C14	79
C15	83
C16	94
C17	80
C18	93
C19	91
C20	70
C21	67
C22	94
C23	94
C24	94
C25	93
C26	91
C27	94
C28	89
C29	94
C30	94
C31	94
C32	94
C33	94
C34	94
C35	76
C36	90
C37	94
C38	74
C39	67
C40	71
C41	94
C42	94
C43	68
C44	94
C45	72
C46	69
C47	69
C48	72
C49	94
C50	94
C51	93

CONN	PL ITEM
J1	53
J2	54
J3	55
J4	-
J5	57
J6	59
J7	58
J8	60
J9	61
J10	62

IC	PL ITEM
U1	5
U2	11
U3	11
U4	9
U5	26
U6	6
U7	12
U8	16
U9	32
U10	28
U11	24
U12	22
U13	10
U14	8
U15	6
U16	15
U17	18
U18	14
U19	17
U20	17
U21	33
U22	23
U23	13
U24	25
U25	30
U26	9
U27	27
U28	19
U29	31
U30	21

DIO	PL ITEM
CR1	35
CR2	35
CR3	35
CR4	36
CR5	35
CR6	35
CR7	35
CR8	34
CR9	35
CR10	35
CR11	35
CR12	-
CR13	-
CR14	35
CR15	35
CR16	35
CR17	35
CR18	35
CR19	38
CR20	38
CR21	38

MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA		DATE 07-24-84	TITLE PWA, SERVO-5	SIZE D 77760650 008
		DATA BASE NAME X		SHEET 2 F
DRAWING NUMBER REV				

8

7

6

5

4

3

2

1

D

C

B

A

A

I

D

C

B

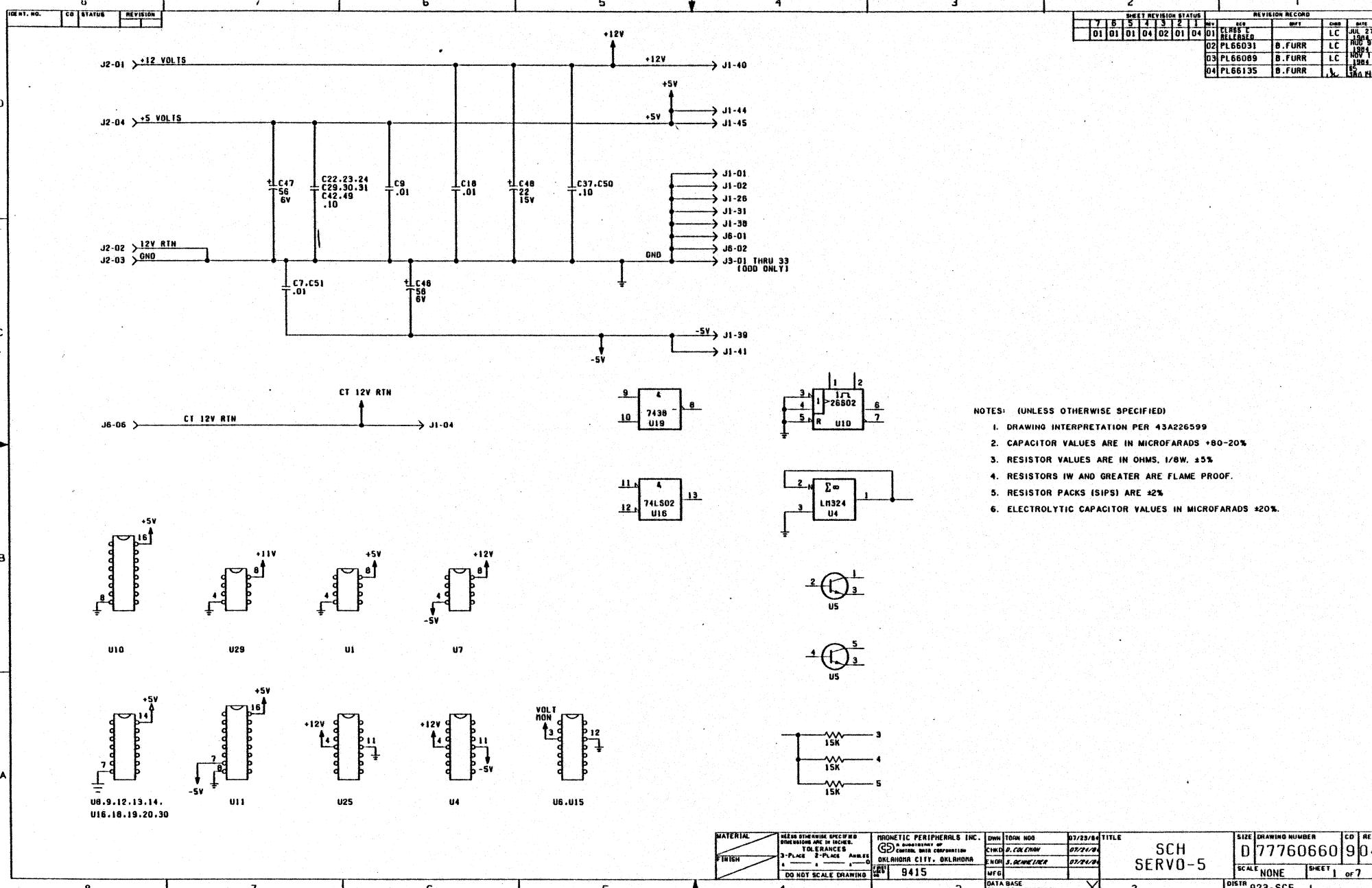
A

I

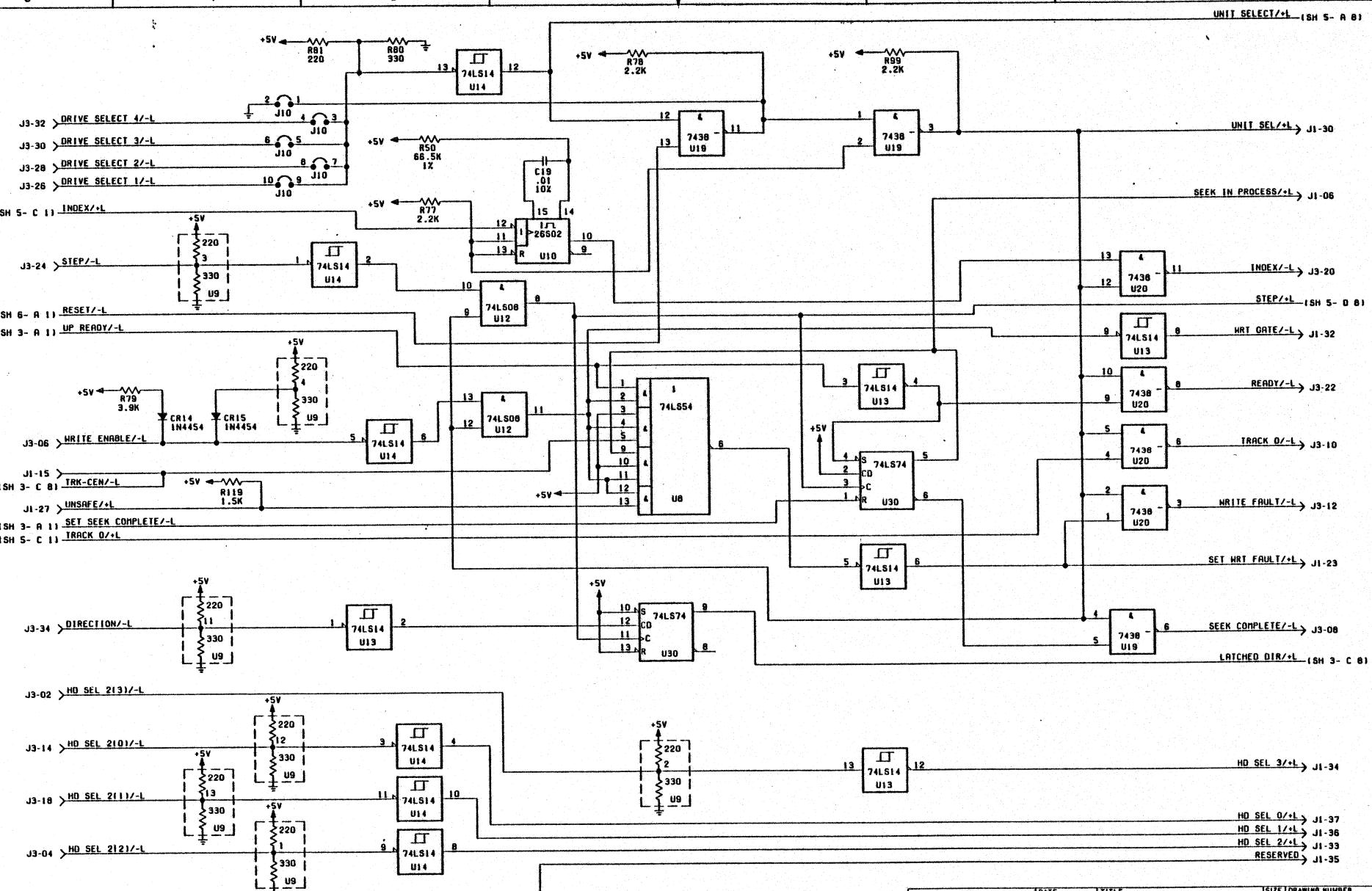
F

E

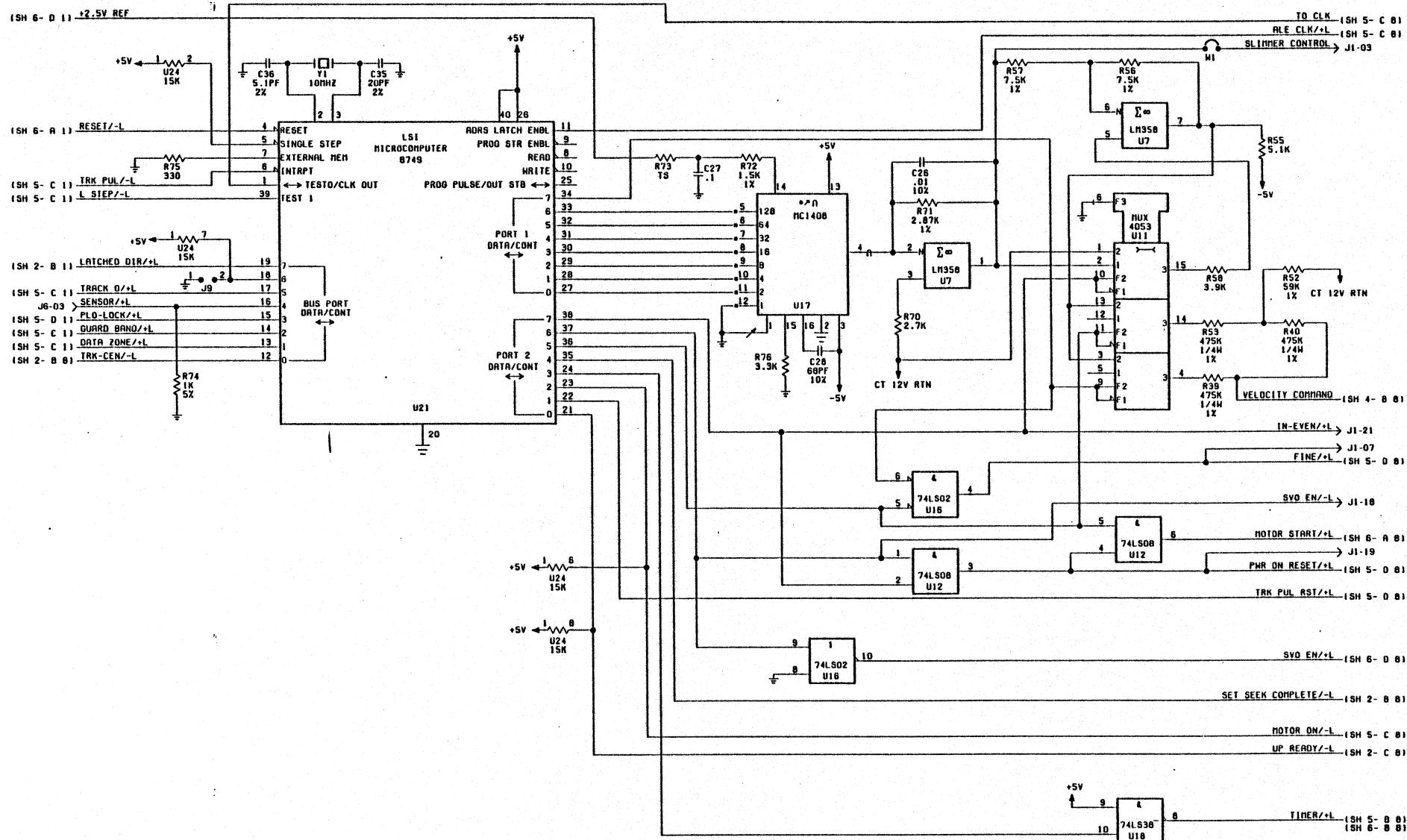
017760650-0



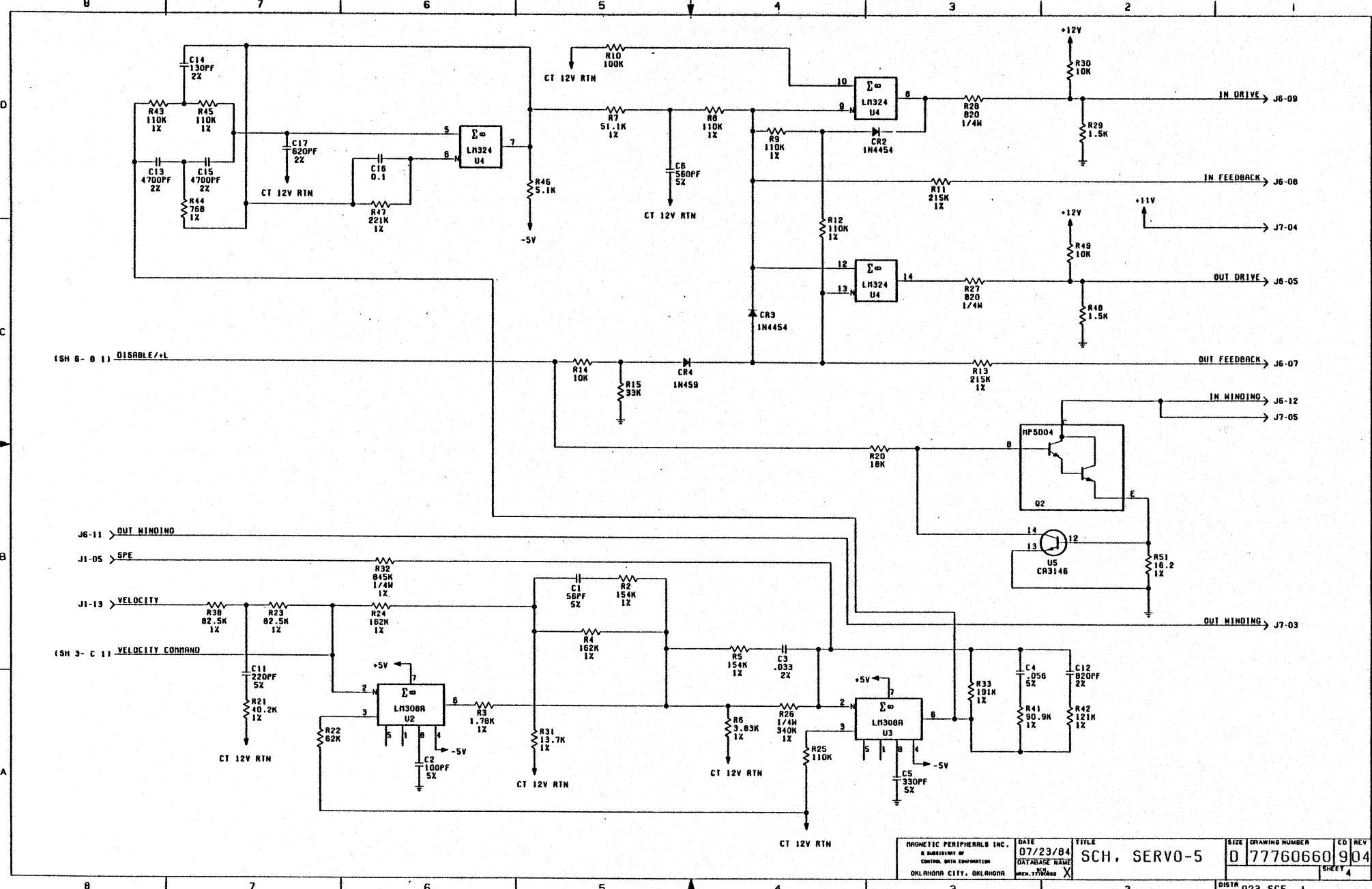
MATERIAL FINISH	MEANS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOP SURFACES 3-PLACE 2-PLACE ANGLES 4-PLACE 3-PLACE C	INDUSTRIAL DIVISION OF CENTRAL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DNN CINR ENGR MFG	TORN NO. 07/27/84 07/27/84 07/27/84 9415	TITLE SERVO-5	SIZE D	DRAWING NUMBER 77760660	CD REV 904
DO NOT SCALE DRAWING						SCALE NONE	SHEET 1 of 7	DISTR R23-SC5

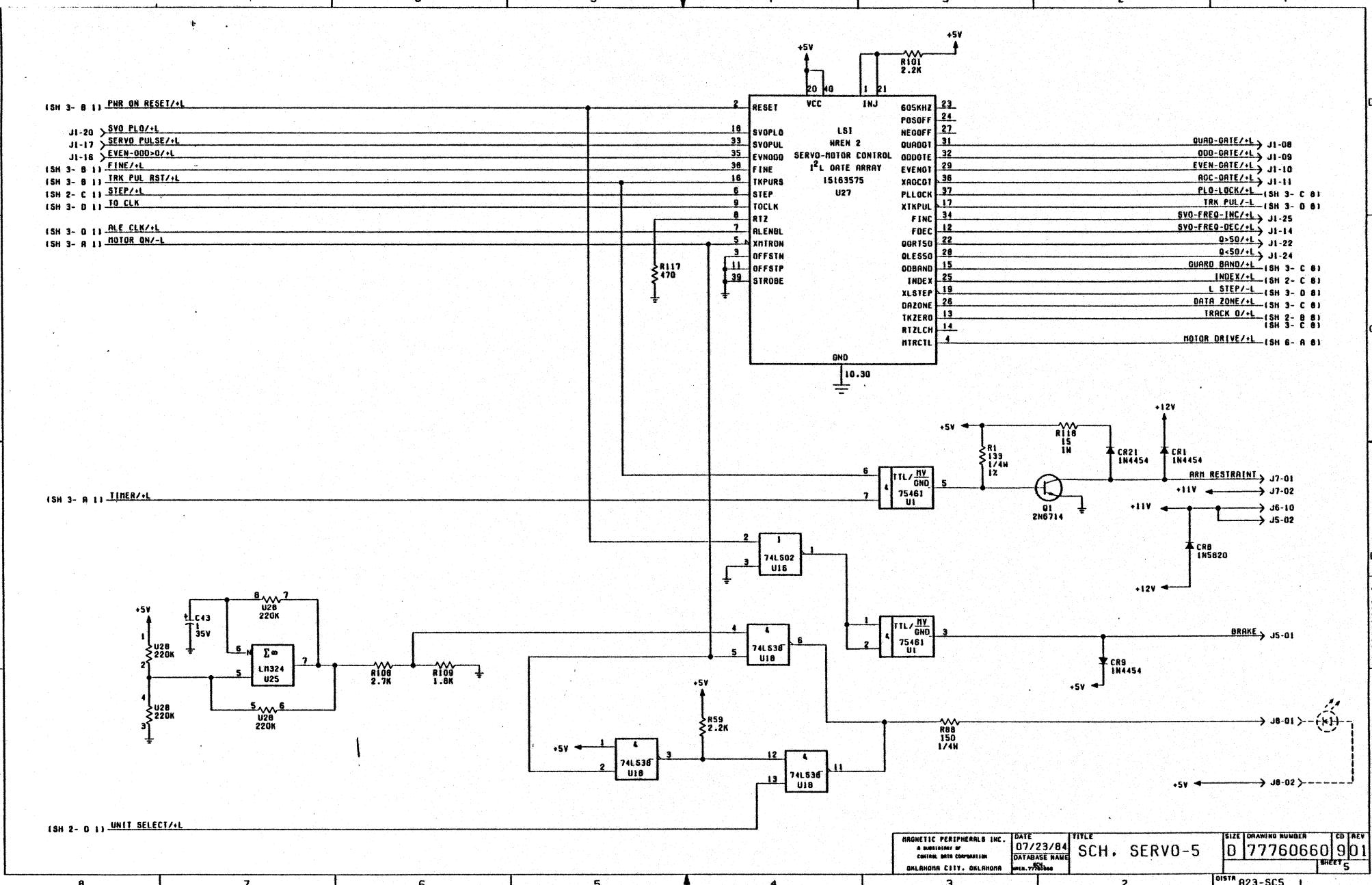


MAGNETIC PERIPHERALS INC. A DIVISION OF CENTRAL DATA CORPORATION		TITLE	SIZE	DRAWING NUMBER	CD	REV
OKLAHOMA CITY, OKLAHOMA		SCH. SERVO-5	D	777606660	901	
					SHEET	2



ARITHMETIC PERIPHERALS INC.		DATE	TITLE	SIZE	DRAWING NUMBER	CO	REV
A SUBSIDIARY OF COMPAQ DATA CORPORATION		07/23/84	SCH. SERVO-5	D	77760660	902	
OKLAHOMA CITY, OKLAHOMA		DATABASE NAME				SHEET 3	

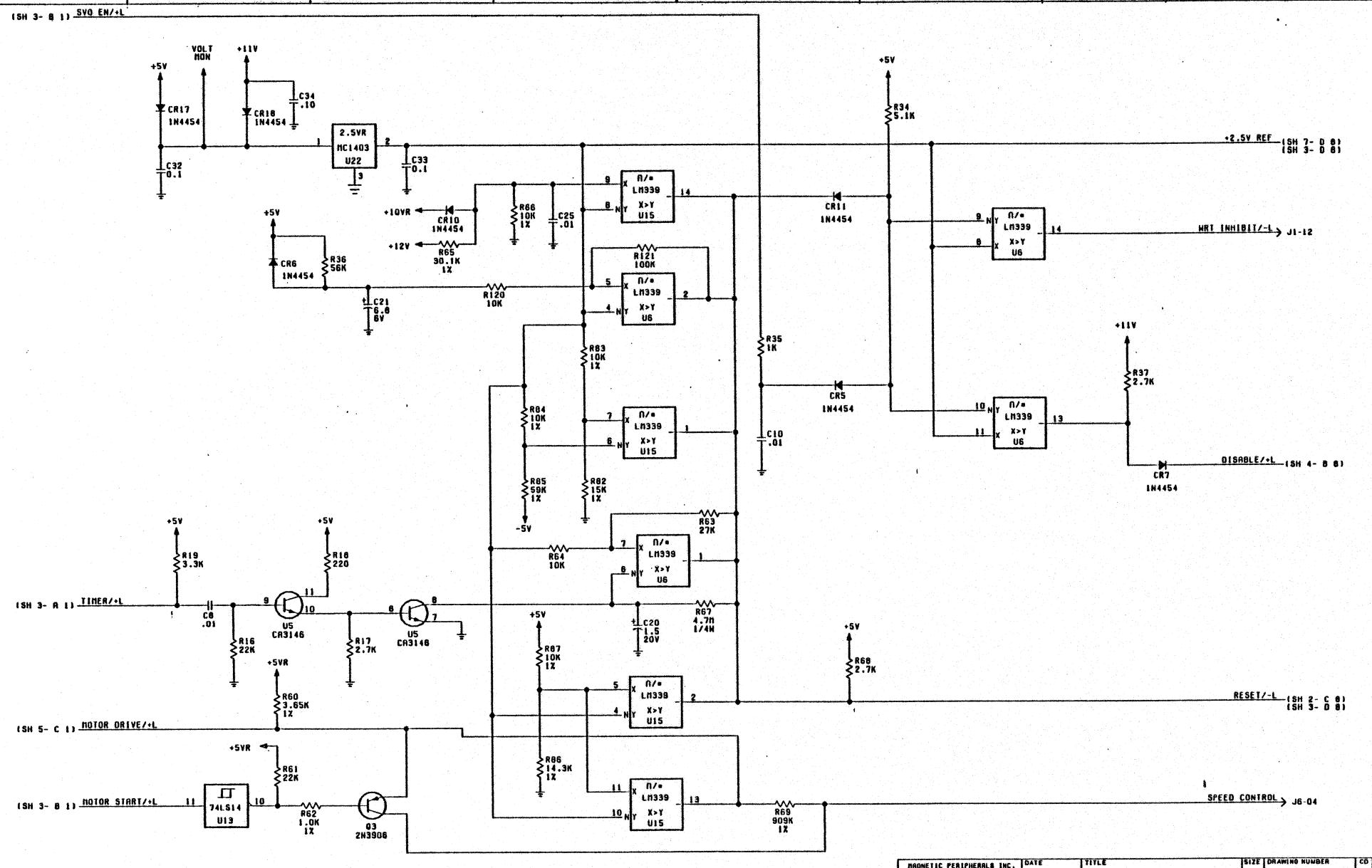




(SH 2- 0 1) UNIT SELECT/L

MAGNETIC PERIPHERALS INC.		TITLE	SIZE	DRAWING NUMBER	CD	REV
A BUSINESS OF COMTRONICS DATA CORPORATION		SCH. SERVO-5	D	777606660	9	01
OKLAHOMA CITY, OKLAHOMA		DATE	07/23/84	DATA BASE NAME		
				WREN, T. J.		

8 7 6 5 ↑ 4 3 2 DISTR A23-SC5



MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA MURKIN, P.O. 3600	DATE 07/23/84 DATABASE NAME NO. 3600	TITLE SCH. SERVO-5	SIZE D 77760660	CO REV 901
--	---	-----------------------	--------------------	---------------

1 DIST# A23-SC5 1

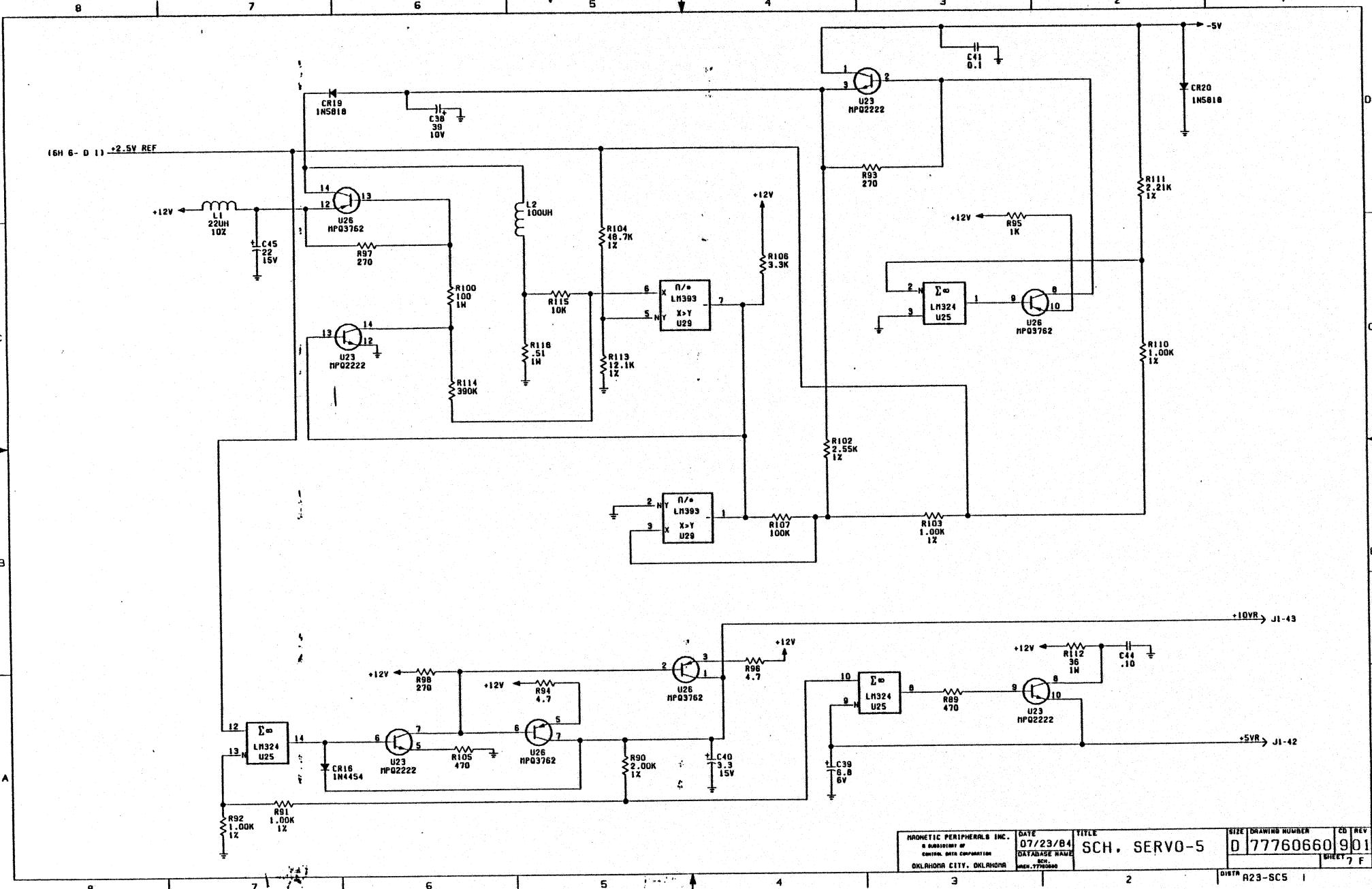
2 DIST# A23-SC5 1

3 DIST# A23-SC5 1

4 DIST# A23-SC5 1

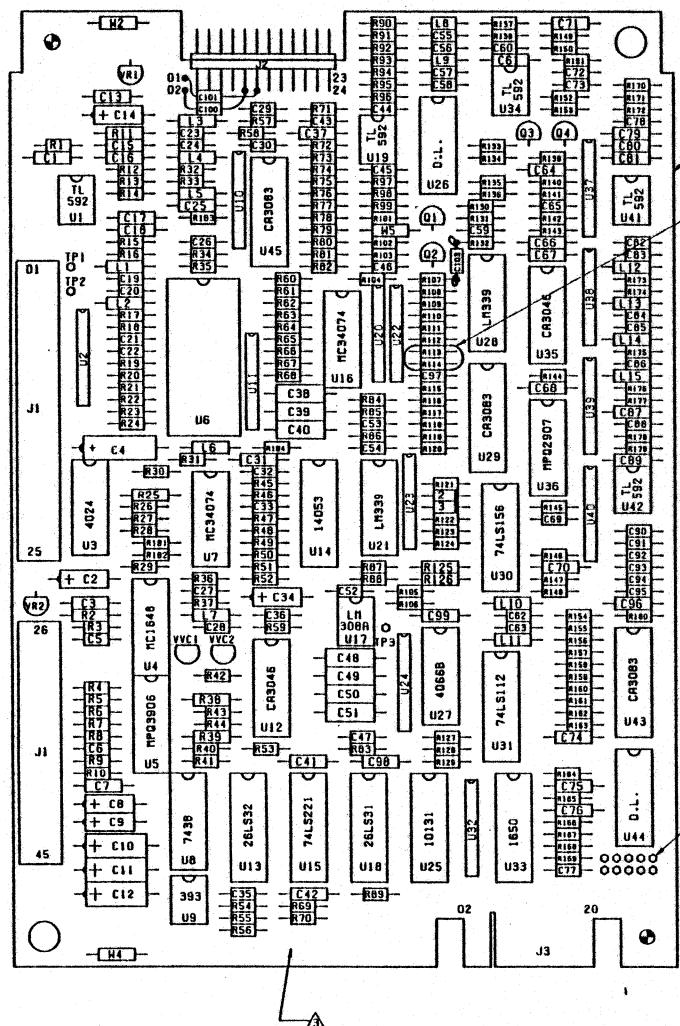
5 DIST# A23-SC5 1

6 DIST# A23-SC5 1



MAGNETIC PERIPHERALS INC.		DATE	TITLE	SIZE	DRAWING NUMBER	CD	REV
A SUBSIDIARY OF CONTROL DATA CORPORATION		07/23/84	SCH. SERVO-5	D	77760660	901	
OKLAHOMA CITY, OKLAHOMA			DATABASE NAME RCH. SERVO-5			WHEAT	7 F

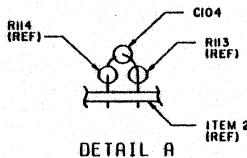
SHEET REVISION STATUS		REVISION RECORD			
REV	DATE	REV	DATE	REV	DATE
FOR DOCUMENT STATUS SEE REVISION STATUS SHEET					



VERIFY CONNECTIONS	
FROM	TO
C100-W	GND
C100-E	J2-10
C101-W	GND
C101-E	J2-12
C103-N	GND
C103-S	U28-02
C104-E	U28-01
C104-W	GND

(2)

SEE DETAIL A



ITEM 2 (REF)

(13)

NOTES: (UNLESS OTHERWISE SPECIFIED)

1. ASSEMBLE PER 5970H27, EXCEPT PARAGRAPH 3.8.3.
2. MAXIMUM COMPONENT HEIGHT .30 EXCEPT J1 0.31 AND ITEM 168: 0.25.
3. MARK ASSEMBLY NO. IN APPROXIMATE LOCATION SHOWN PER 12A1099P1.
4. FOR SCHEMATIC DIAGRAM, SEE ITEM 1.
5. COMPONENT MARKING WITHOUT ALPHA PREFIX ARE DIODES.
6. SOLID BAND ON DIODES AND VOLTAGE REGULATORS INDICATE CATHODE END.
7. GENERAL WORKMANSHIP PER 10120300.

MATERIAL	UNLESS OTHERWISE SPECIFIED SILVER LEAD, 100% LEAD TOLERANCES	INDUSTRIAL PERIPHERALS INC.	DNN	SUSIE EVANS	08-21-64	TITLE	PWA	SIZE	DRAWING NUMBER	CD	REV
FINISH	3-PLACE 2-PLACE ANGLES	© 1964 INDUSTRIAL DATA CORPORATION	CHNO.	D. COLEMAN	08-21-64		DATA-5	D	77761580	8	04
DO NOT SCALE DRAWING		OKLAHOMA CITY, OKLAHOMA	SNR.	B. DENNETHIER	08-21-64			SCALE	2/1	SHEET	1 or 2
		WREN II	MFG								
		DATA BASE	DATA BASE	WREN II	X						

RES	PLATE
R1	140
R2	103
R3	151
R4	142
R5	115
R6	115
R7	120
R8	125
R9	143
R10	153
R11	193
R12	131
R13	131
R14	197
R15	114
R16	114
R17	113
R18	119
R19	146
R20	185
R21	157
R22	145
R23	119
R24	114
R25	162
R26	161
R27	102
R28	160
R29	186
R30	129
R31	281
R32	136
R33	136
R34	137
R35	144
R36	130
R37	150
R38	164
R39	156
R40	211
R41	145
R42	147
R43	145
R44	151
R45	151
R46	150
R47	181
R48	181
R49	151
R50	144
R51	181
R52	131
R53	131
R54	151
R55	151

RES	PL ITEM
R56	188
R57	153
R58	153
R59	147
R60	144
R61	130
R62	130
R63	133
R64	130
R65	158
R66	152
R67	130
R68	165
R69	116
R70	105
R71	210
R72	139
R73	167
R74	167
R75	121
R76	167
R77	167
R78	146
R79	123
R80	123
R81	149
R82	121
R83	132
R84	133
R85	185
R86	185
R87	186
R88	165
R89	142
R90	180
R91	180
R92	117
R93	117
R94	121
R95	121
R96	139
R97	104
R98	120
R99	109
R100	109
R101	163
R102	207
R103	209
R104	121
R105	186
R106	156
R107	207
R108	202
R109	198
R110	167

RES	PL
R111	201
R112	167
R113	196
R114	167
R115	203
R116	206
R117	203
R118	204
R119	206
R120	204
R121	188
R122	190
R123	192
R124	152
R125	164
R126	164
R127	153
R128	154
R129	154
R130	209
R131	122
R132	122
R133	120
R134	154
R135	122
R136	210
R137	135
R138	181
R139	127
R140	120
R141	135
R142	127
R143	126
R144	124
R145	134
R146	111
R147	124
R148	126
R149	141
R150	111
R151	111
R152	121
R153	122
R154	131
R155	131
R156	106
R157	121
R158	121
R159	109
R160	109
R161	121
R162	111
R163	111
R164	191
R165	191

RES	PUB TYPE
R166	13
R167	14
R168	14
R169	18
R170	11
R171	11
R172	11
R173	16
R174	16
R175	23
R176	11
R177	11
R178	19
R179	13
R180	10
R181	12
R182	12
R183	19
R184	1

CAP	PLATE
C1	77
C2	95
C3	77
C4	96
C5	75
C6	75
C7	77
C8	94
C9	95
C10	96
C11	96
C12	96
C13	77
C14	174
C15	77
C16	77
C17	77
C18	77
C19	78
C20	83
C21	75
C22	99
C23	174
C24	171
C25	77
C26	92
C27	75
C28	75
C29	95
C30	10
C31	76
C32	81
C33	81
C34	9
C35	91
C36	9
C37	7
C38	91
C39	91
C40	9
C41	7
C42	7
C43	7
C44	7
C45	9
C46	7
C47	8
C48	8
C49	8
C50	8
C51	8
C52	7
C53	6
C54	8
C55	7

CAP	PL TEN
C56	80
C57	89
C58	99
C59	89
C60	171
C61	77
C62	84
C63	82
C64	77
C65	74
C66	77
C67	76
C68	77
C69	75
C70	77
C71	77
C72	99
C73	99
C74	77
C75	77
C76	77
C77	75
C78	88
C79	77
C80	77
C81	77
C82	99
C83	99
C84	171
C85	217
C86	216
C87	77
C88	99
C89	77
C90	89
C91	89
C92	99
C93	99
C94	75
C95	75
C96	77
C97	89
C98	77
C99	77
C100	77
C101	77
C102	-
C103	89
C104	89

IC	PL
U1	17
U2	42
U3	9
U4	5
U5	12
U6	24
U7	15
U8	19
U9	18
U10	36
U11	44
U12	13
U13	29
U14	7
U15	25
U16	16
U17	27
U18	26
U19	17
U20	31
U21	18
U22	36
U23	31
U24	40
U25	2
U26	36
U27	8
U28	1
U29	1
U30	2
U31	2
U32	3
U33	6
U34	1
U35	1
U36	1
U37	4
U38	3
U39	3
U40	3
U41	1
U42	1
U43	1
U44	3
U45	1

IND	
L1	5
L2	5
L3	5
L4	5
L5	5
L6	1
L7	1
L8	1
L9	1
L10	1
L11	1
L12	1
L13	1
L14	1
L15	1

CONN	
J1	
J2	
J3	

DIO	
CR1	
CR2	
CR3	

TSTR
Q1
D2
D3
Q4

VARI
CAP
VVC1
VVC2

VOLT
REC
VR1
VR2

JUMP
H1
H2
H3
H4
H5

PL
ITEM
49
49

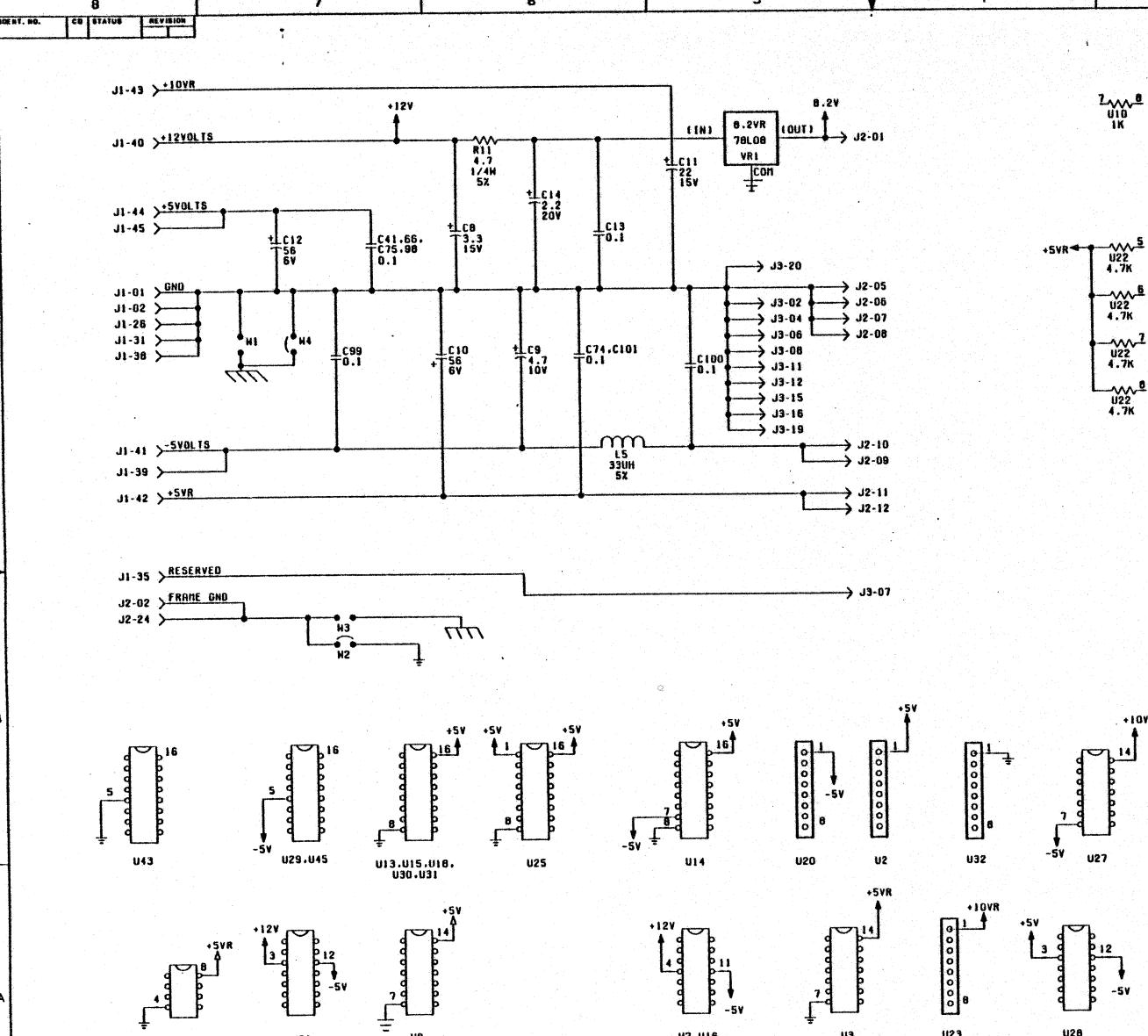
VOLT
REG
VR1
VR2

JUMP

D10
CR1
CR2
CR3

ARMONIC PERIPHERAL INC. A SUBSIDIARY OF COMPAQ DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DATE 09-21-84	TITLE PWA, DATA-5	SIZE D	DRAWING NUMBER 77761580	ED 804	REV SHEET 2 F
	DATA BASE NAME NAME, INC. 7721580	X				
			DISTR	PWA, DATA-5		

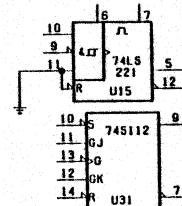
SHEET REVISION STATUS							REVISION RECORDS			
7	8	5	4	3	2	1	REV.	DATE	CHG.	DATE
04	01	01	01	01	04	04	01	100-5 RELEASED	LC	88P 21 08/05/88
							02	PL66073	B. FURR	LC 08/05/88
							03	PL66101		
							04	PL66125	B. FURR	JL 88C 08/05/88

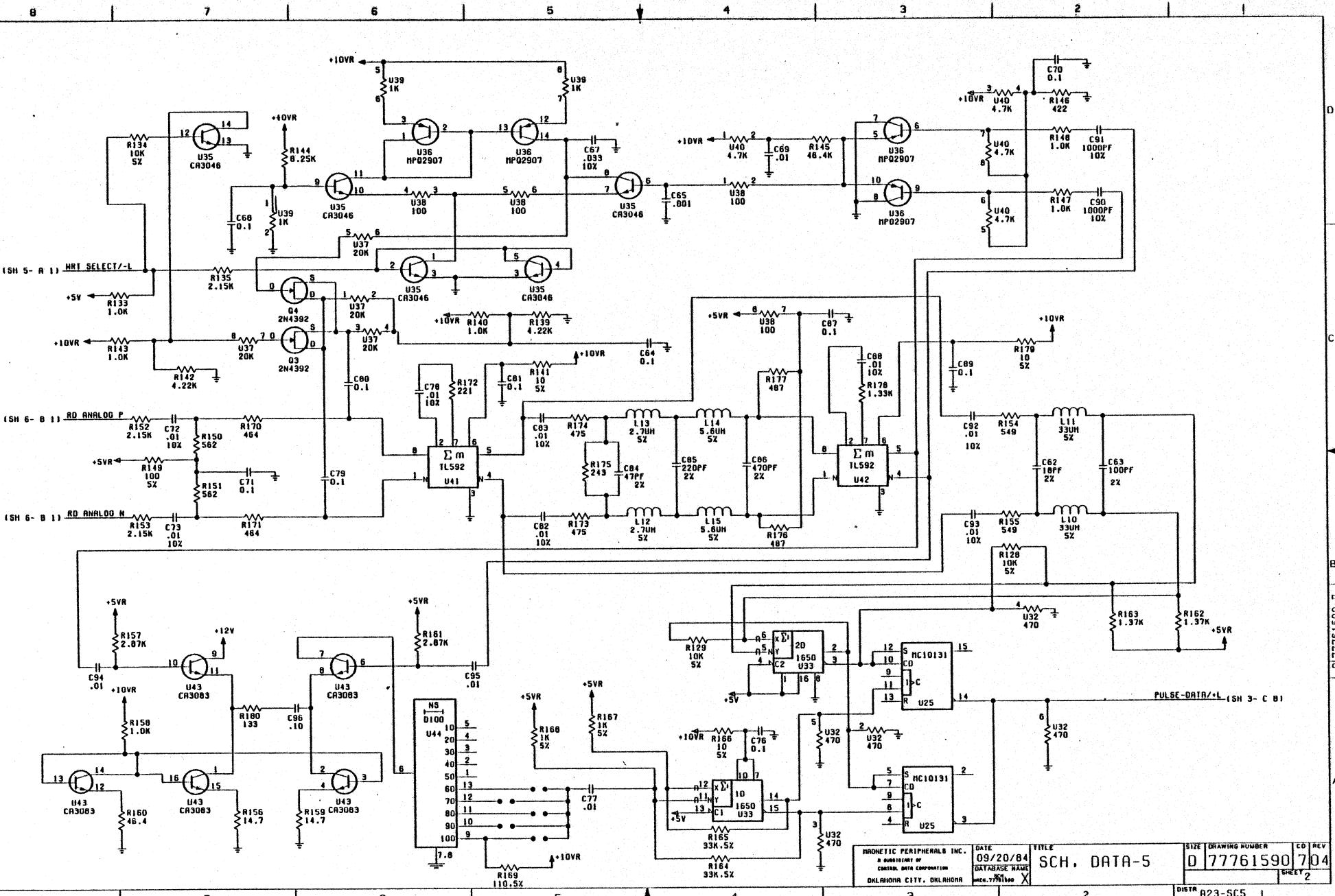


NOTES: (UNLESS OTHERWISE SPECIFIED)

1. DRAWING INTERPRETATION PER 43A226599
 2. RESISTOR VALUES ARE IN OHMS, 1/8W ± 1% UNLESS INDICATED
 3. CAPACITOR VALUES ARE IN MICROFARADS, UNLESS INDICATED

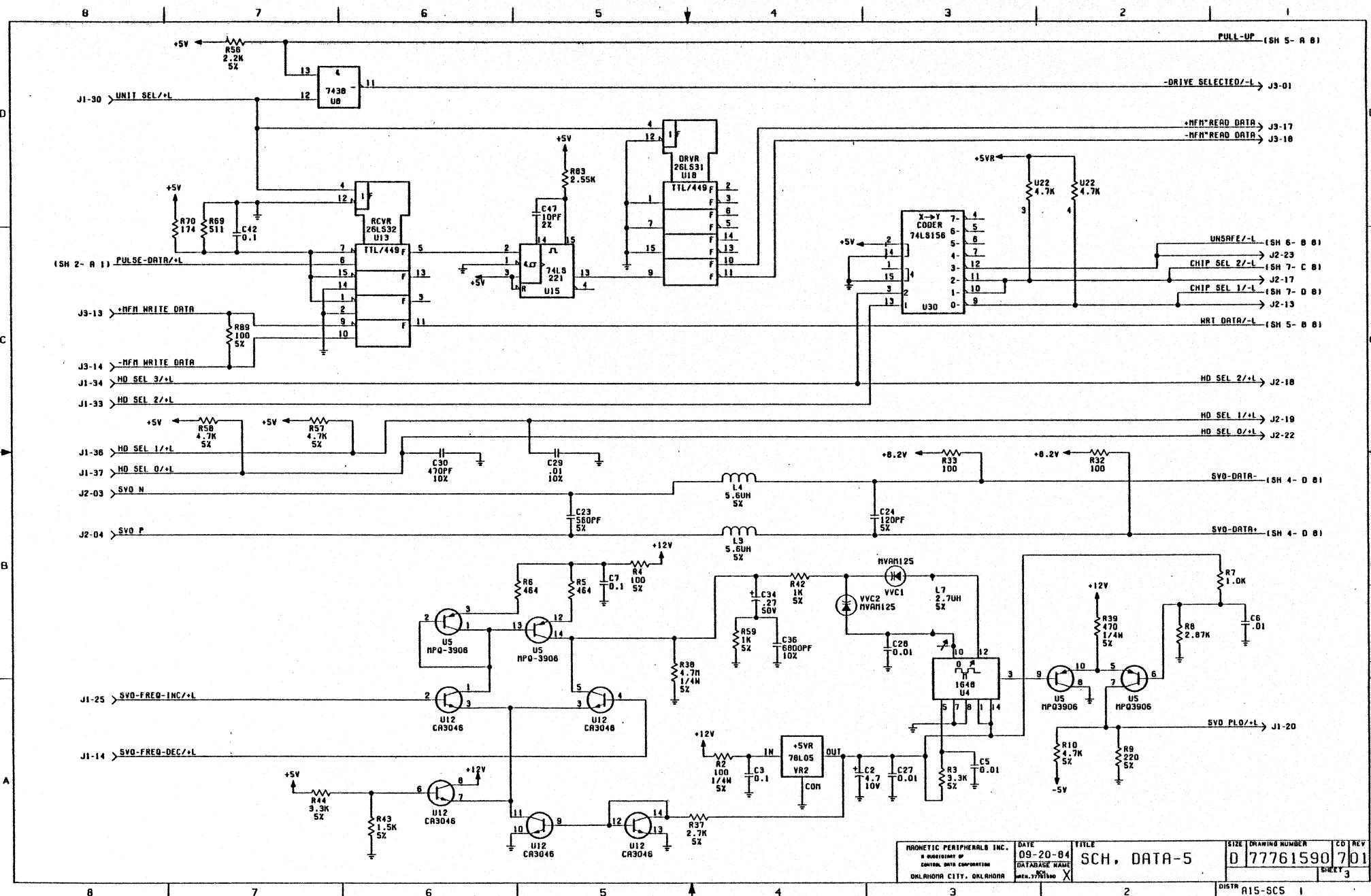
SPARES



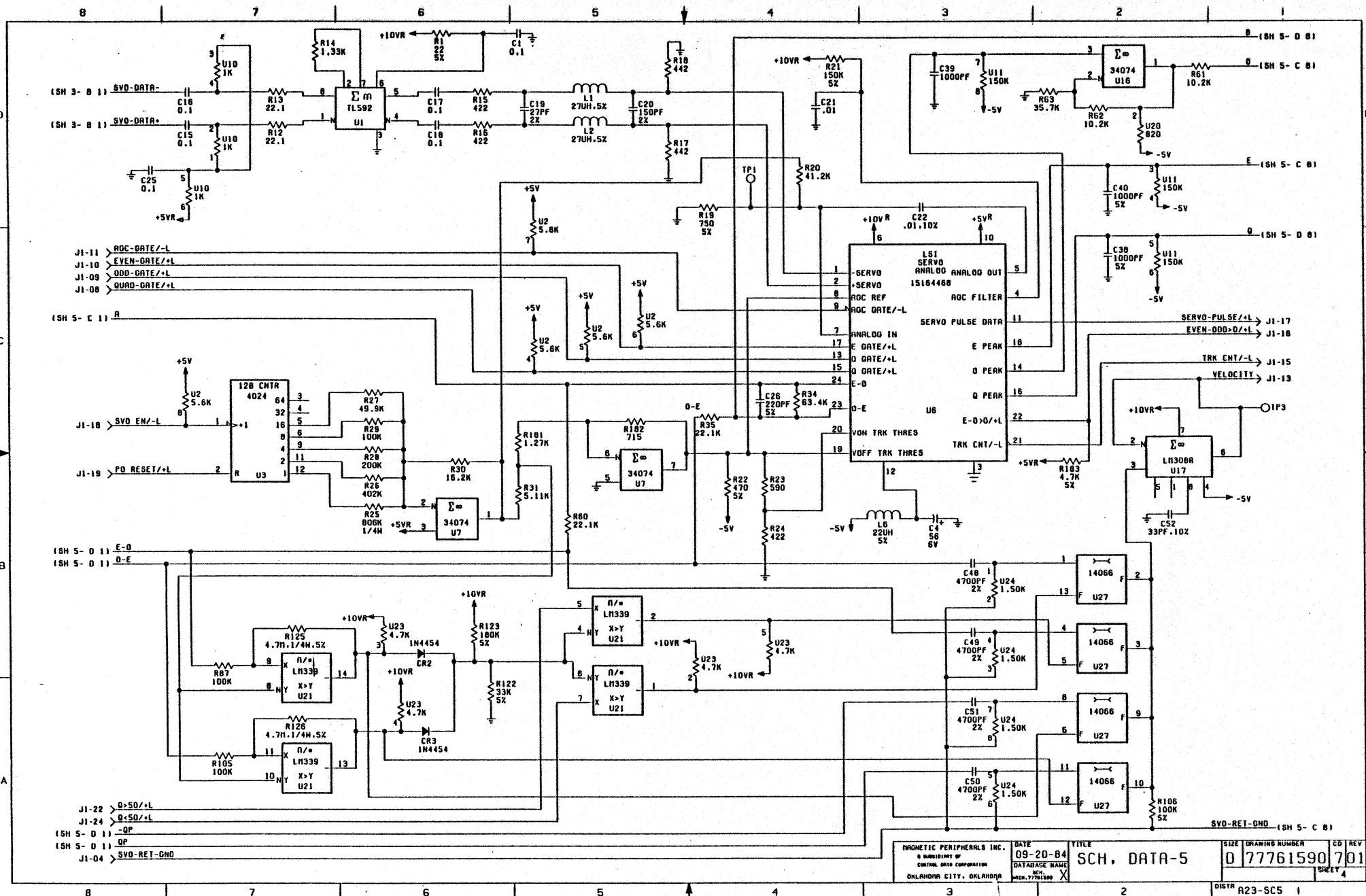


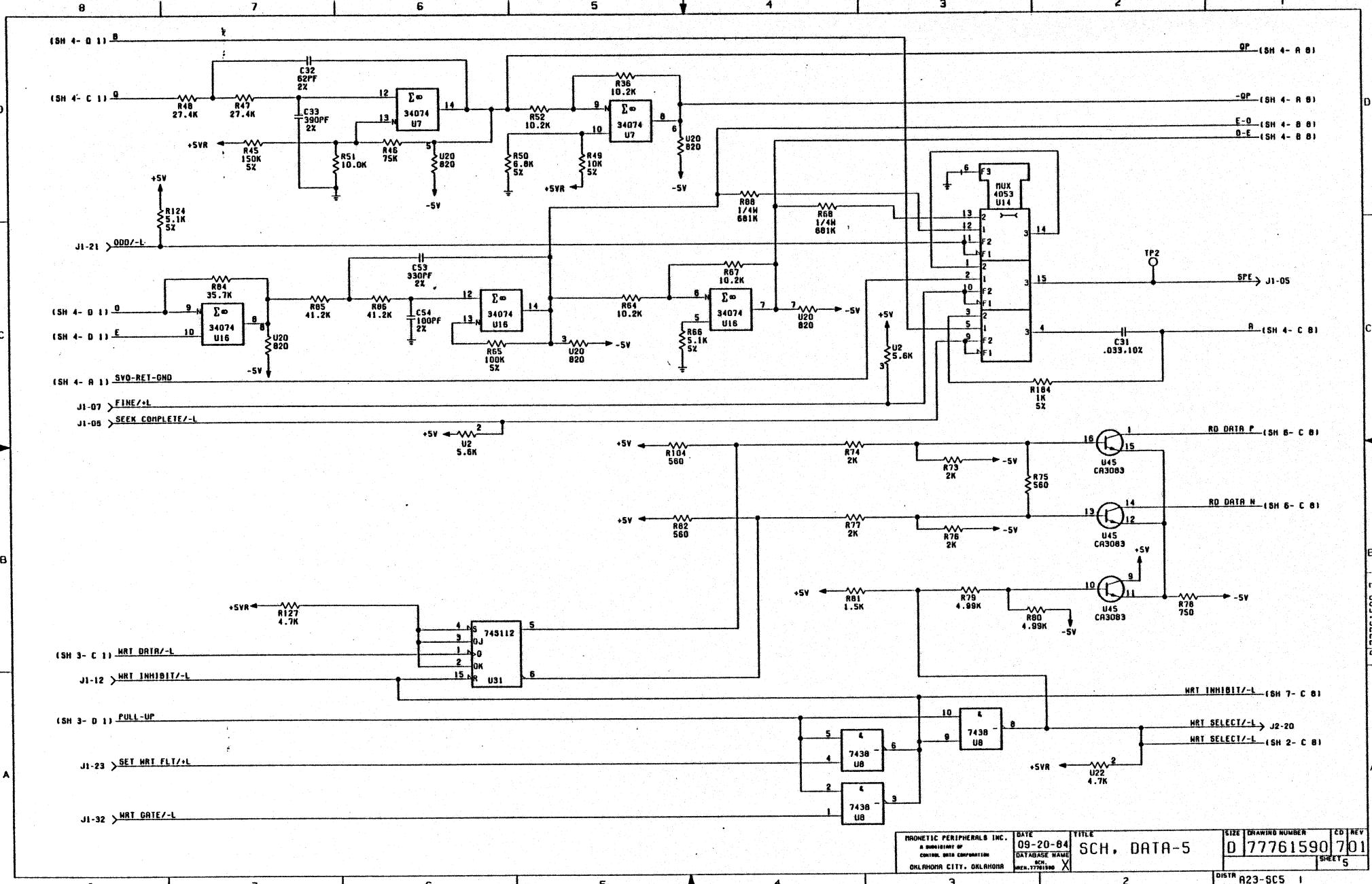
MAGNETIC PERIPHERALS INC.
A SUBSIDIARY OF
CONTROL DATA CORPORATION
OKLAHOMA CITY, OKLAHOMA
DATE 09/20/84
DATABASE NAME MCH771590 X
TITLE SCH. DATA-5
SIZE D 77761590 CO 704
REV SHEET 2

DISTRA A23-SC5 I



MAGNETIC PERIPHERALS INC.		DATE	TITLE	SIZE	DRAWING NUMBER	CD	REV
A SUBSIDIARY OF COMPAQ DATA CORPORATION		09-20-84	SCH. DATA-5	D	77761590	701	
OKLAHOMA CITY, OKLAHOMA		DATABASE NAME MPC-7700/16				SHEET 3	



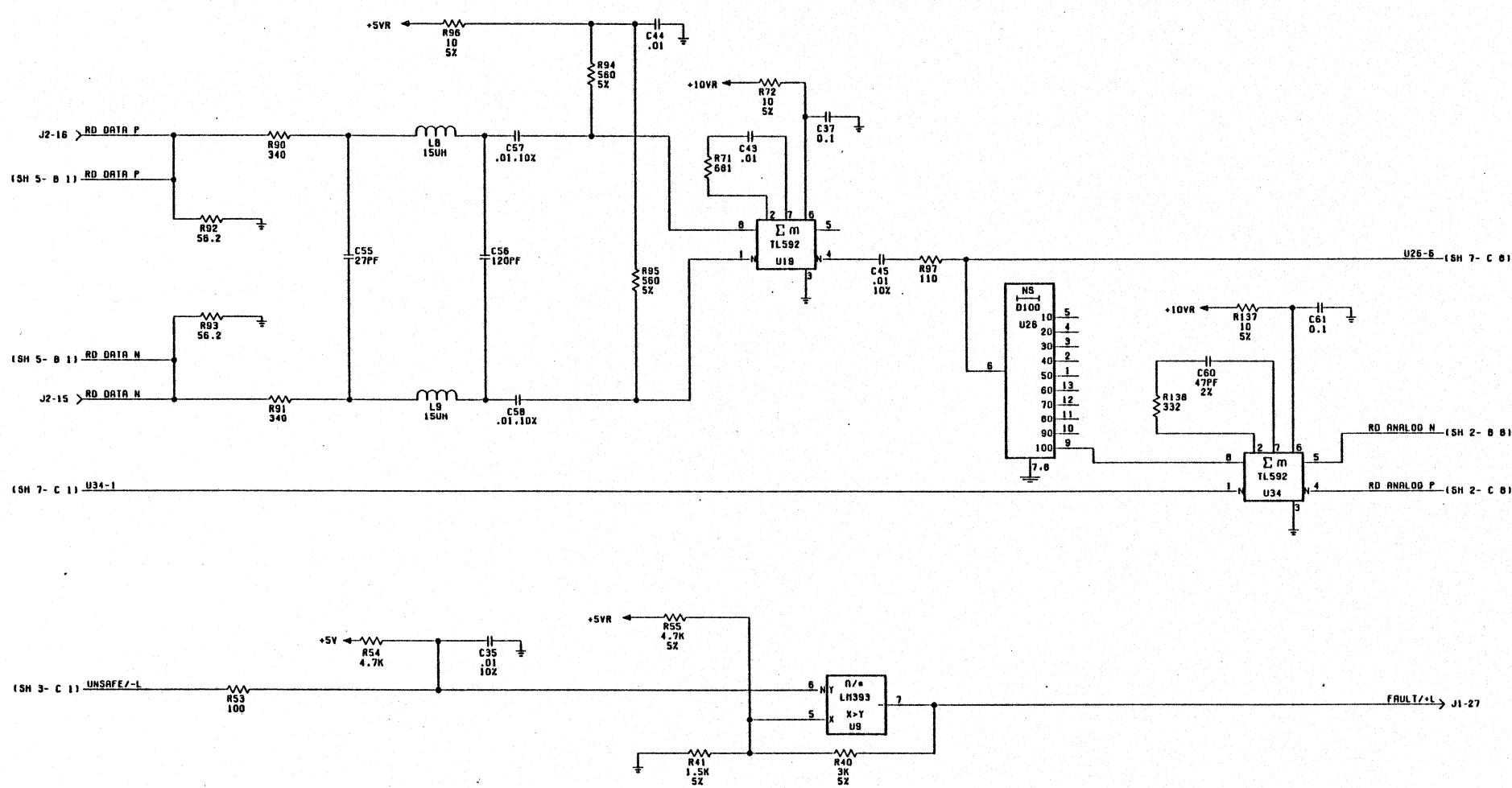


MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DATE 09-20-84	TITLE SCH., DATA-5	SIZE D	DRAWING NUMBER 77761590	CD REV 701
	DATABASE NAME SCH. MEN.77761590	X			

DISTR A23-SC5 1

SHEET 5

0177761590-7



MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DATE 09-20-84	TITLE SCH. DATA-5	SIZE D 77761590	CD REV 701
	DATABASE NAME ROM		SHEET 6	

DISTR A23-SC5 1

8

7

6

5

4

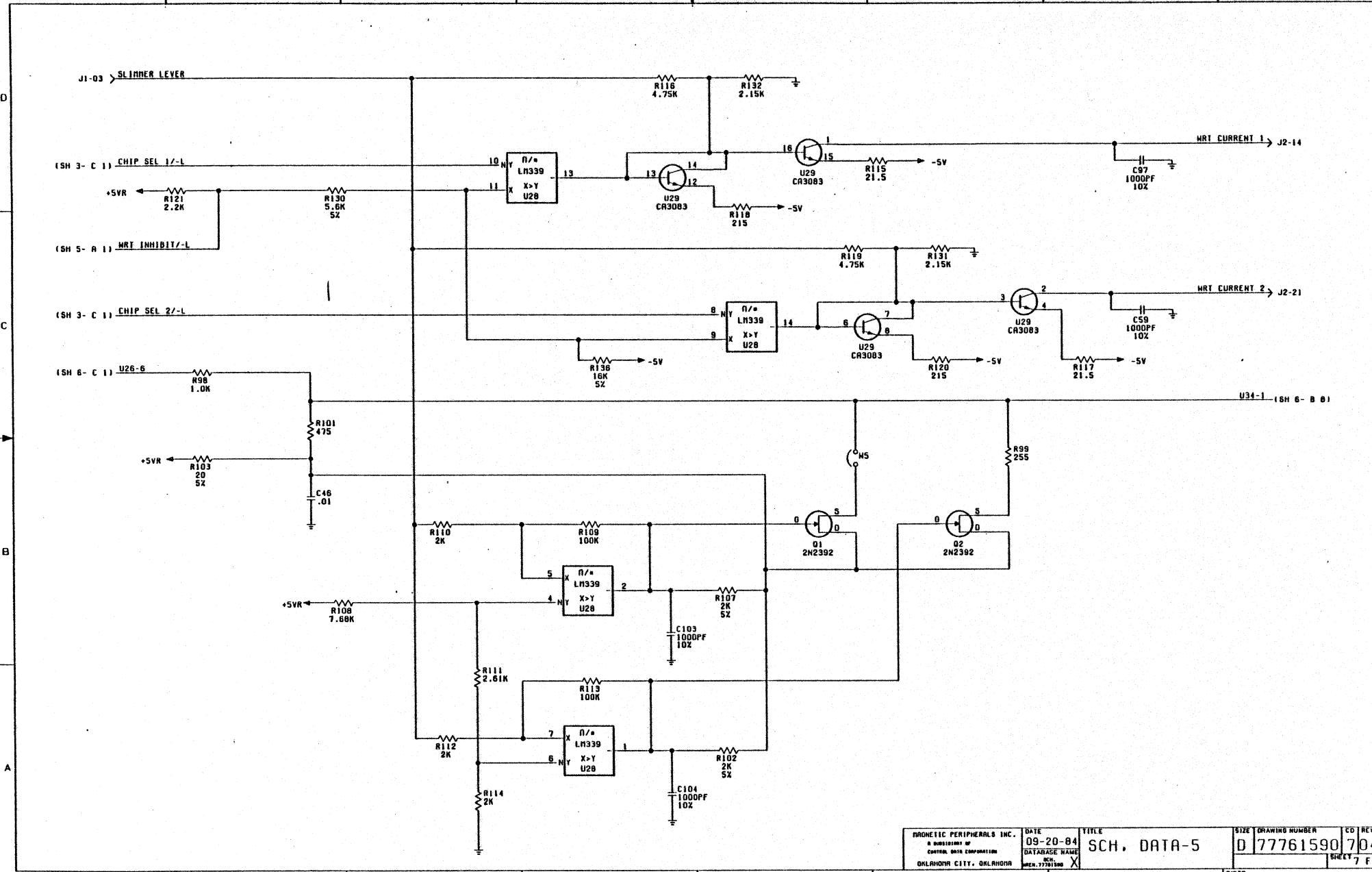
3

2

1

0177761590-7

8 7 6 5 4 3 2 1



8

7

6

5

4

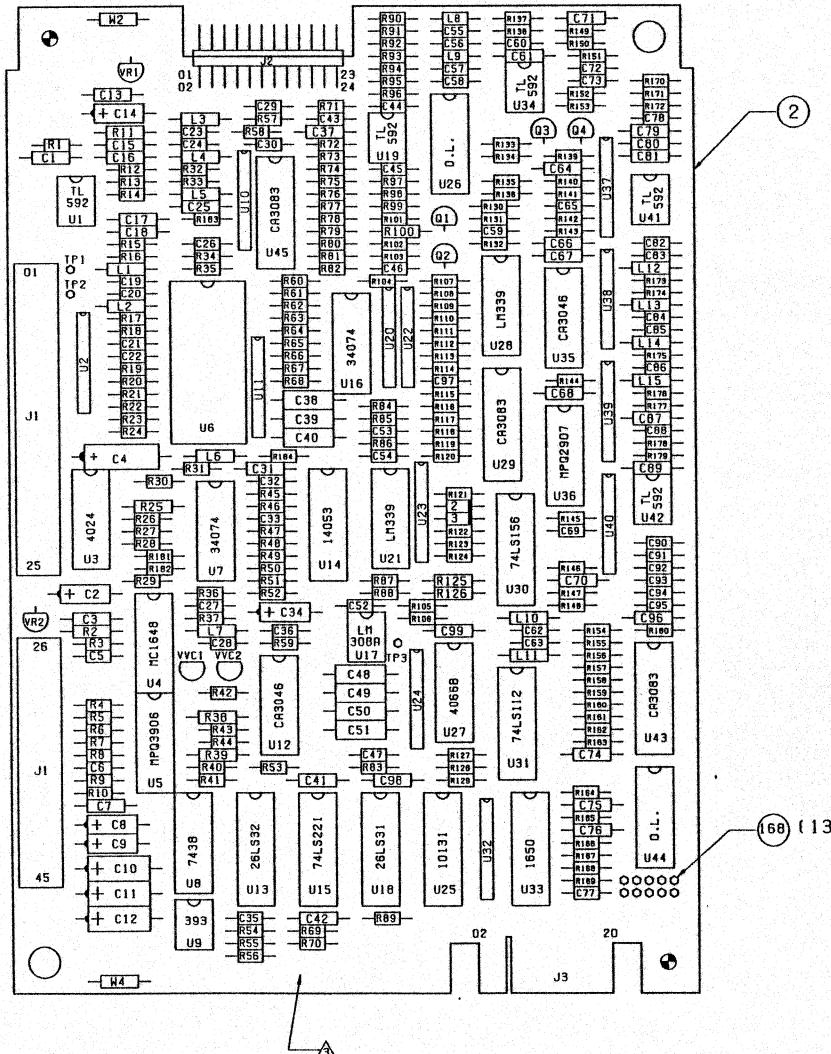
3

2

1

IDENT. NO. CO STATUS REVISION

SHEET REVISION STATUS		REVISION RECORD			
REV	ECO	DATE	REV	ECO	DATE
FOR DOCUMENT STATUS SEE REVISION STATUS SHEET					



NOTES: (UNLESS OTHERWISE SPECIFIED)

1. ASSEMBLE PER 59701127 , EXCEPT PARAGRAPH 3.8.3 .
2. MAXIMUM COMPONENT HEIGHT .30 EXCEPT J1:0.31 AND ITEM 168: 0.25;
3. MARK ASSEMBLY NO. IN APPROXIMATE LOCATION SHOWN PER 1241099P1.
4. FOR SCHEMATIC DIAGRAM, SEE ITEM I.
5. COMPONENT MARKING WITHOUT ALPHA PREFIX ARE DIODES.
6. SOLID BAND ON DIODES AND VOLTAGE REGULATORS INDICATE CATHODE END.
7. GENERAL WORKMANSHIP PER 10120300.

MATERIAL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES 3-PLACE 2-PLACE ANGLES	IRIONETIC PERIPHERALS INC.	DWN	SUSIE EVANS	03-12-84	TITLE	PWA	SIZE	DRAWING NUMBER	CO	REV
FINISH		© 1984 IRIONETIC CORPORATION OKLAHOMA CITY, OKLAHOMA	CHKD	D. COLEMAN	03-12-84			D	77762050	1	06
			ENGR	S. DENNERLICH	03-13-84						
			MFG								
	DO NOT SCALE DRAWING	FIRST SR	WREN II								

DATA BASE Dwg. WREN.77762070 X

8

7

6

5

4

3

2

1

DISTR A23-RYS 1

8 7 6 5 4 3 2 1

RES	PL ITEM
R1 140	
R2 103	
R3 151	
R4 142	
R5 115	
R6 115	
R7 120	
R8 125	
R9 143	
R10 153	
R11 193	
R12 131	
R13 131	
R14 197	
R15 114	
R16 114	
R17 113	
R18 113	
R19 146	
R20 185	
R21 157	
R22 145	
R23 119	
R24 114	
R25 162	
R26 161	
R27 102	
R28 160	
R29 186	
R30 129	
R31 126	
R32 136	
R33 136	
R34 197	
R35 144	
R36 130	
R37 150	
R38 164	
R39 158	
R40 211	
R41 149	
R42 147	
R43 149	
R44 151	
R45 157	
R46 155	
R47 184	
R48 184	
R49 154	
R50 148	
R51 182	
R52 130	
R53 136	
R54 153	
R55 153	

RES	PL ITEM
R56 188	
R57 153	
R58 153	
R59 147	
R60 144	
R61 130	
R62 130	
R63 133	
R64 130	
R65 156	
R66 152	
R67 130	
R68 165	
R69 116	
R70 105	
R71 218	
R72 139	
R73 167	
R74 167	
R75 121	
R76 167	
R77 167	
R78 146	
R79 123	
R80 123	
R81 149	
R82 121	
R83 132	
R84 133	
R85 185	
R86 185	
R87 186	
R88 165	
R89 142	
R90 180	
R91 180	
R92 117	
R93 117	
R94 121	
R95 121	
R96 139	
R97 136	
R98 109	
R99 163	
R100 104	
R101 163	
R102 207	
R103 208	
R104 121	
R105 186	
R106 156	
R107 207	
R108 202	
R109 196	
R110 167	

RES	PL ITEM
R111 201	
R112 167	
R113 196	
R114 167	
R115 203	
R116 206	
R117 115	
R118 204	
R119 206	
R120 204	
R121 188	
R122 190	
R123 192	
R124 152	
R125 159	
R126 159	
R127 153	
R128 154	
R129 154	
R130 209	
R131 122	
R132 122	
R133 120	
R134 154	
R135 122	
R136 210	
R137 139	
R138 181	
R139 127	
R140 120	
R141 139	
R142 127	
R143 120	
R144 128	
R145 134	
R146 114	
R147 120	
R148 120	
R149 142	
R150 118	
R151 118	
R152 122	
R153 122	
R154 138	
R155 138	
R156 106	
R157 125	
R158 120	
R159 106	
R160 107	
R161 125	
R162 112	
R163 112	
R164 190	
R165 190	

RES	PL ITEM
R166 139	
R167 147	
R168 147	
R169 187	
R170 115	
R171 115	
R172 111	
R173 163	
R174 163	
R175 214	
R176 110	
R177 110	
R178 197	
R179 139	
R180 100	
R181 124	
R182 166	
R183 153	
R184 147	

CAP	PL ITEM
C1 77	
C2 95	
C3 77	
C4 96	
C5 75	
C6 75	
C7 77	
C8 94	
C9 95	
C10 96	
C11 98	
C12 96	
C13 77	
C14 174	
C15 77	
C16 77	
C17 77	
C18 77	
C19 78	
C20 83	
C21 75	
C22 99	
C23 176	
C24 177	
C25 77	
C26 92	
C27 75	
C28 75	
C29 99	
C30 100	
C31 76	
C32 81	
C33 87	
C34 93	
C35 99	
C36 91	
C37 77	
C38 90	
C39 90	
C40 90	
C41 77	
C42 77	
C43 75	
C44 75	
C45 99	
C46 75	
C47 86	
C48 88	
C49 88	
C50 88	
C51 68	
C52 79	
C53 85	
C54 82	
C55 78	

CAP	PL ITEM
C56 80	
C57 99	
C58 99	
C59 89	
C60 171	
C61 77	
C62 84	
C63 82	
C64 77	
C65 74	
C66 77	
C67 76	
C68 77	
C69 75	
C70 77	
C71 77	
C72 99	
C73 99	
C74 77	
C75 77	
C76 77	
C77 75	
C78 99	
C79 77	
C80 77	
C81 77	
C82 99	
C83 99	
C84 171	
C85 217	
C86 216	
C87 77	
C88 35	
C89 6	
C90 89	
C91 89	
C92 99	
C93 99	
C94 75	
C95 75	
C96 77	
C97 89	
C98 77	
C99 77	
C100 14	

IC	PL ITEM
U1 17	
U2 42	
U3 9	
U4 5	
U5 12	
U6 24	
U7 15	
U8 19	
U9 18	
U10 36	
U11 44	
U12 19	
U13 29	
U14 7	
U15 25	
U16 15	
U17 27	
U18 28	
U19 17	
U20 37	
U21 16	
U22 39	
U23 39	
U24 40	
U25 21	
U26 30	
U27 8	
U28 16	
U29 14	
U30 23	
U31 26	
U32 35	
U33 6	
U34 17	
U35 13	
U36 11	
U37 43	
U38 31	
U39 36	
U40 38	
U41 17	
U42 17	
U43 14	
U44 30	
U45 14	

DIO	PL ITEM
CR1 -	
CR2 50	
CR3 50	

NETRONIC PERIPHERALS INC.
A SUBSIDIARY OF
CONTROL DATA CORPORATION
OKLAHOMA CITY, OKLAHOMA
DATE 03-12-84
DATABASE X
S/N. 77762050-1
TITLE PWA.DAT-A-5
SIZE D 77762050 1 06
REV F

VARI	PL ITEM
VVC1	49
VVC2	49

JUMP	PL ITEM
H1 -	
H2 194	
H3 -	
H4 194	
H5 -	

DISTR A23-RY5 I

SHEET 2 F

A

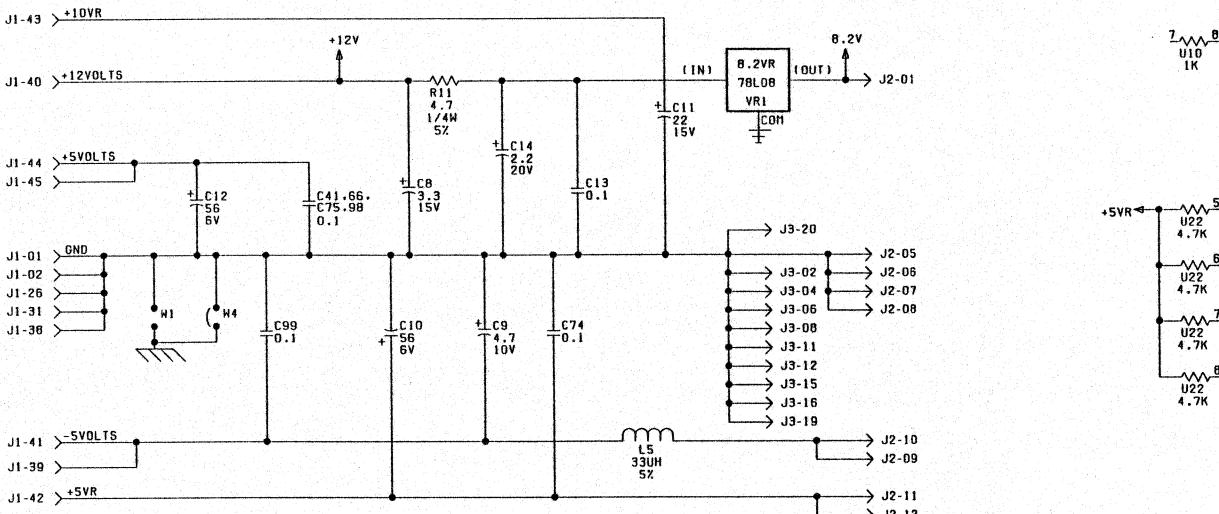
B

C

D

E

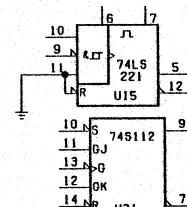
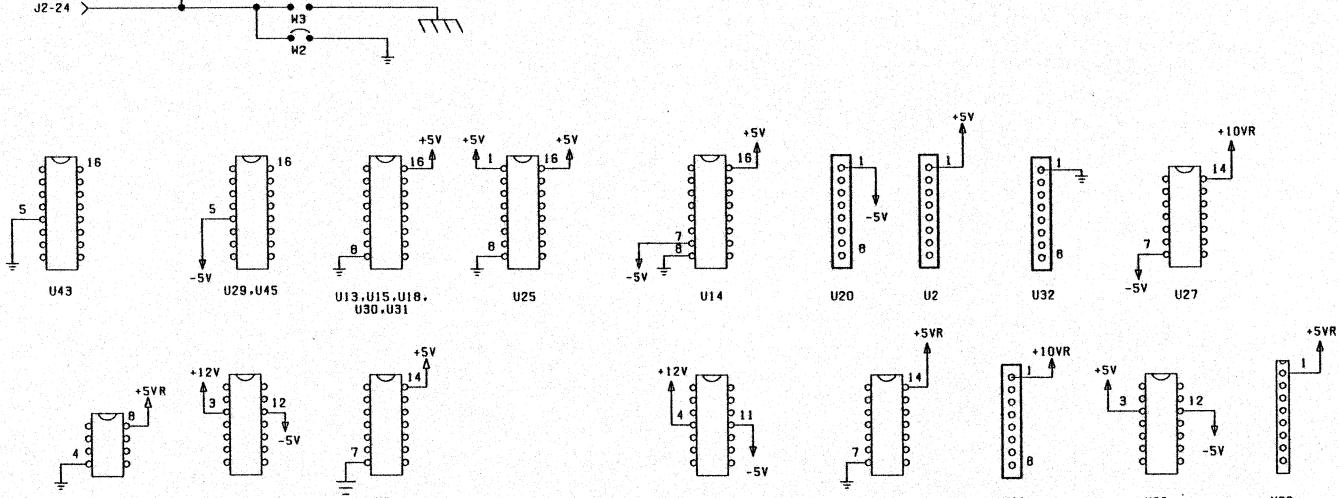
SHEET REVISION STATUS				REVISION RECORD			
7	6	5	4	3	2	1	REV.
04	04	05	05	02	04	05	01 CIRCUIT RELEASED S. REBELL LC MAY 7 1994
							02 PL66010 S. EVANS LC MAY 21 1994
							03 PL66036 S. EVANS LC MAY 29 1994
							04 PL66046 B. FURR LC SEP 17 1994
							05 PL66054 B. FURR LC SEP 24 1994



NOTES: (UNLESS OTHERWISE SPECIFIED)

1. DRAWING INTERPRETATION PER 43A226599
2. RESISTOR VALUES ARE IN OHMS, 1/8W±1%, UNLESS INDICATED
3. CAPACITOR VALUES ARE IN MICROFARADS, UNLESS INDICATED

SPARES

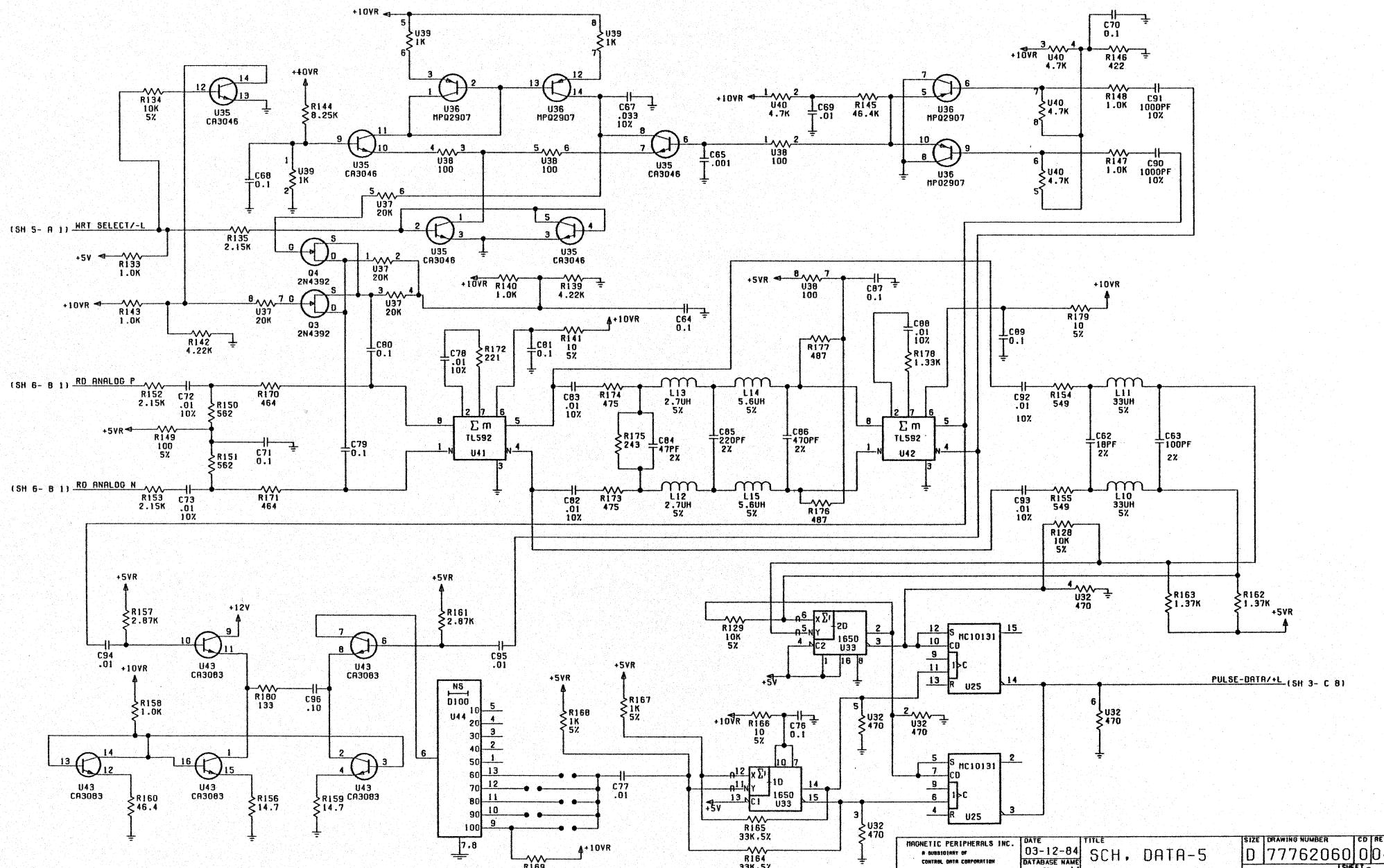


MATERIAL	LESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.	000 FLIPF	D3-12-84	TITLE	SIZE	DRAWING NUMBER
FINISH	TOLERANCES	CHLD	0. COLEMAN	SCH. DATA-5	CD	REV.
	3-PLACE 2-PLACE ANGLES	CHLD	3-12-84		D	005
	DO NOT SCALE DRAWING	ENGR	S. GENHEIMER			
		MFG				

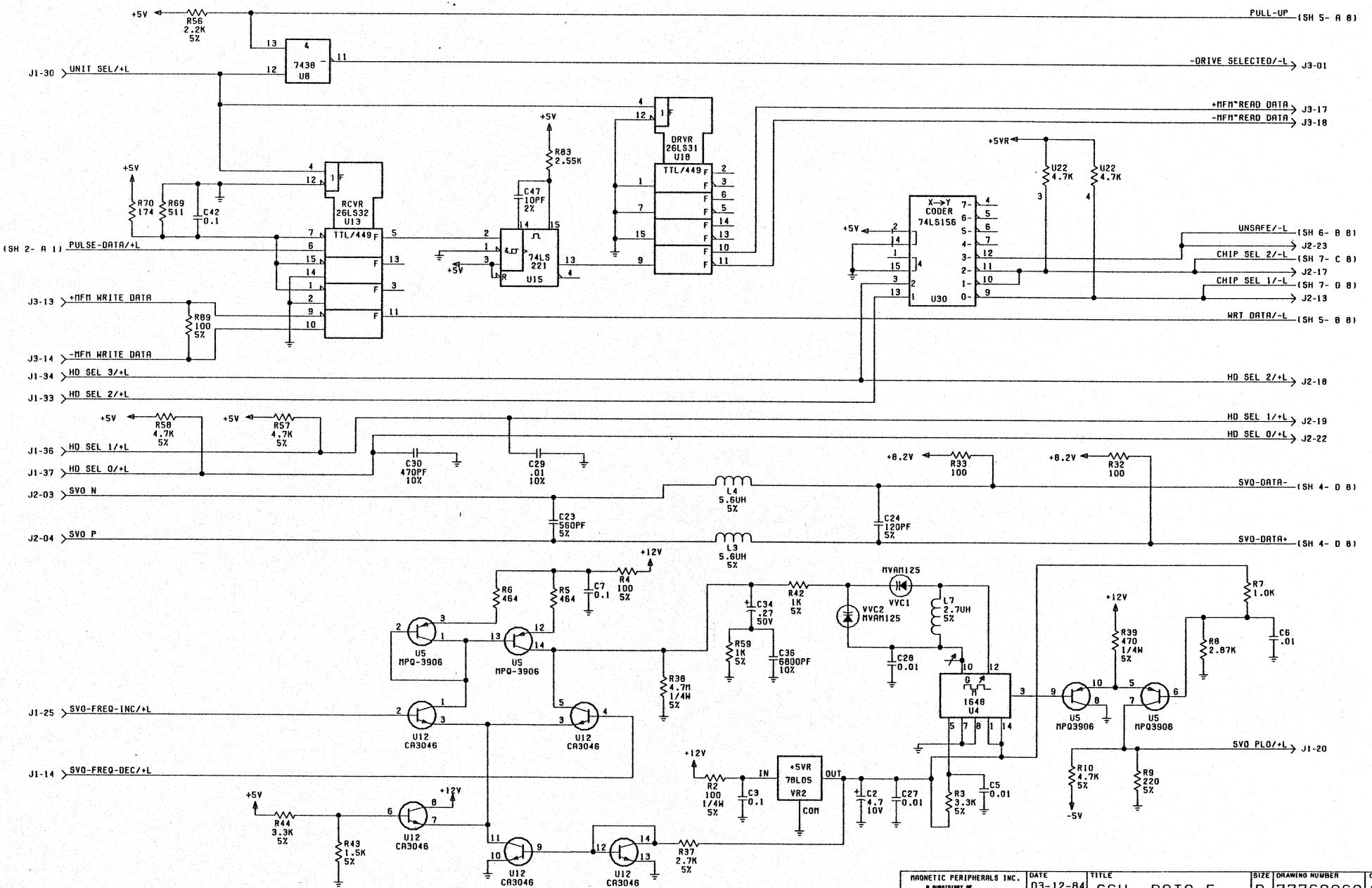
WREN II

DATA BASE SCH.MRN.77762060 X

DISTR A23-SC5 I OF 7F

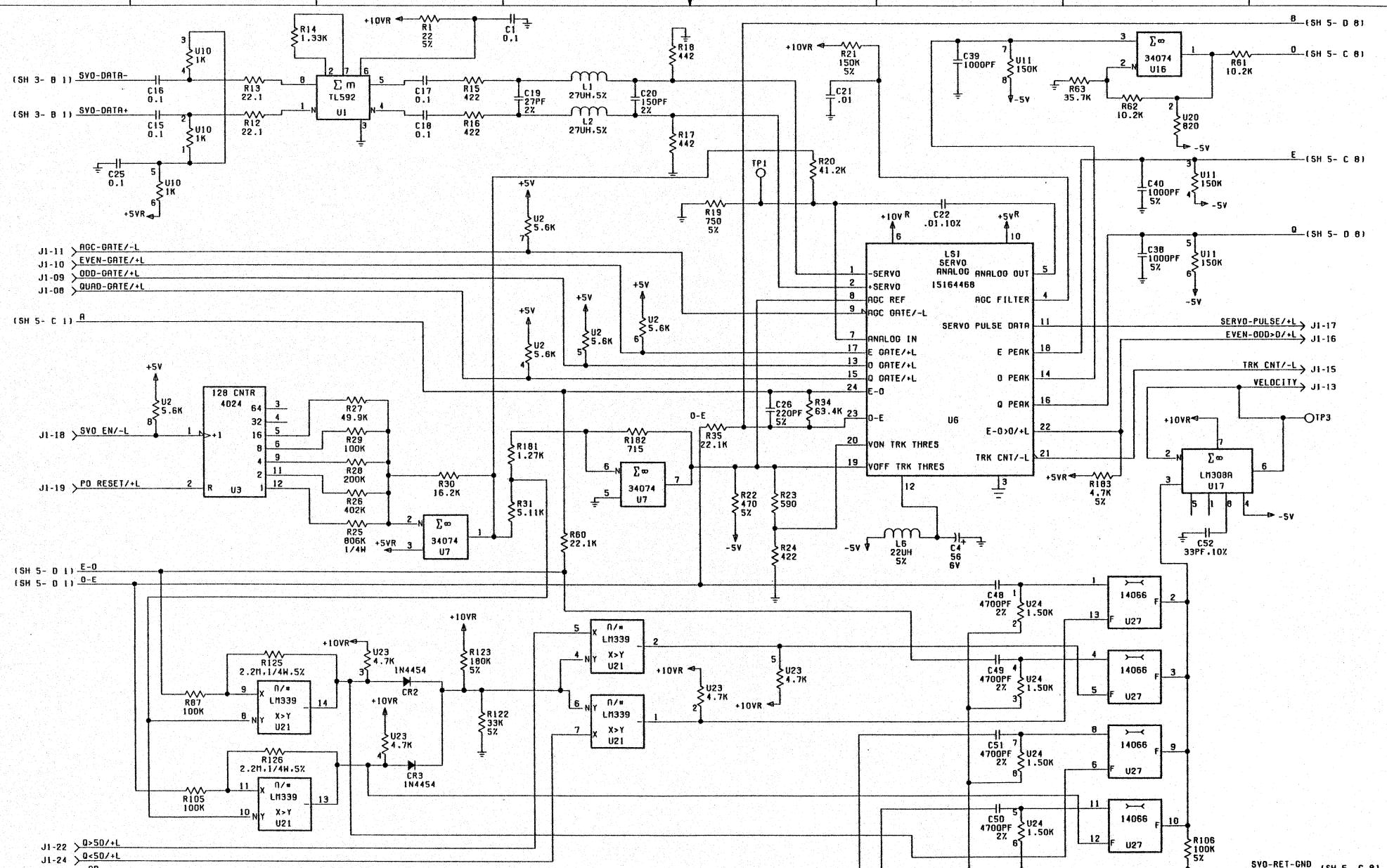


DISTR A23-SCS I



MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DATE 03-12-84 DATABASE NAME SCH MEN.773800	TITLE SCH., DATA-5	SIZE D	DRAWING NUMBER 77762060	CD 002
---	--	-----------------------	-----------	----------------------------	-----------

DISTR A15-SC5 | SHEET 3



J1-22 > Q>50/+L
J1-24 > Q<50/+L
(SH 5- D 1) -QP
(SH 5- D 1) QP
J1-04 > SVO-RET-GNO

MAGNETIC PERIPHERALS
A SUBSIDIARY OF
CONTROL DATA CORPORATION
OKLAHOMA CITY, OKLA.

INC.	DATE
	03-1
	DATABASE
HOMA	SCH MREN.7776

2-84 S

LE
SCH,

DATA

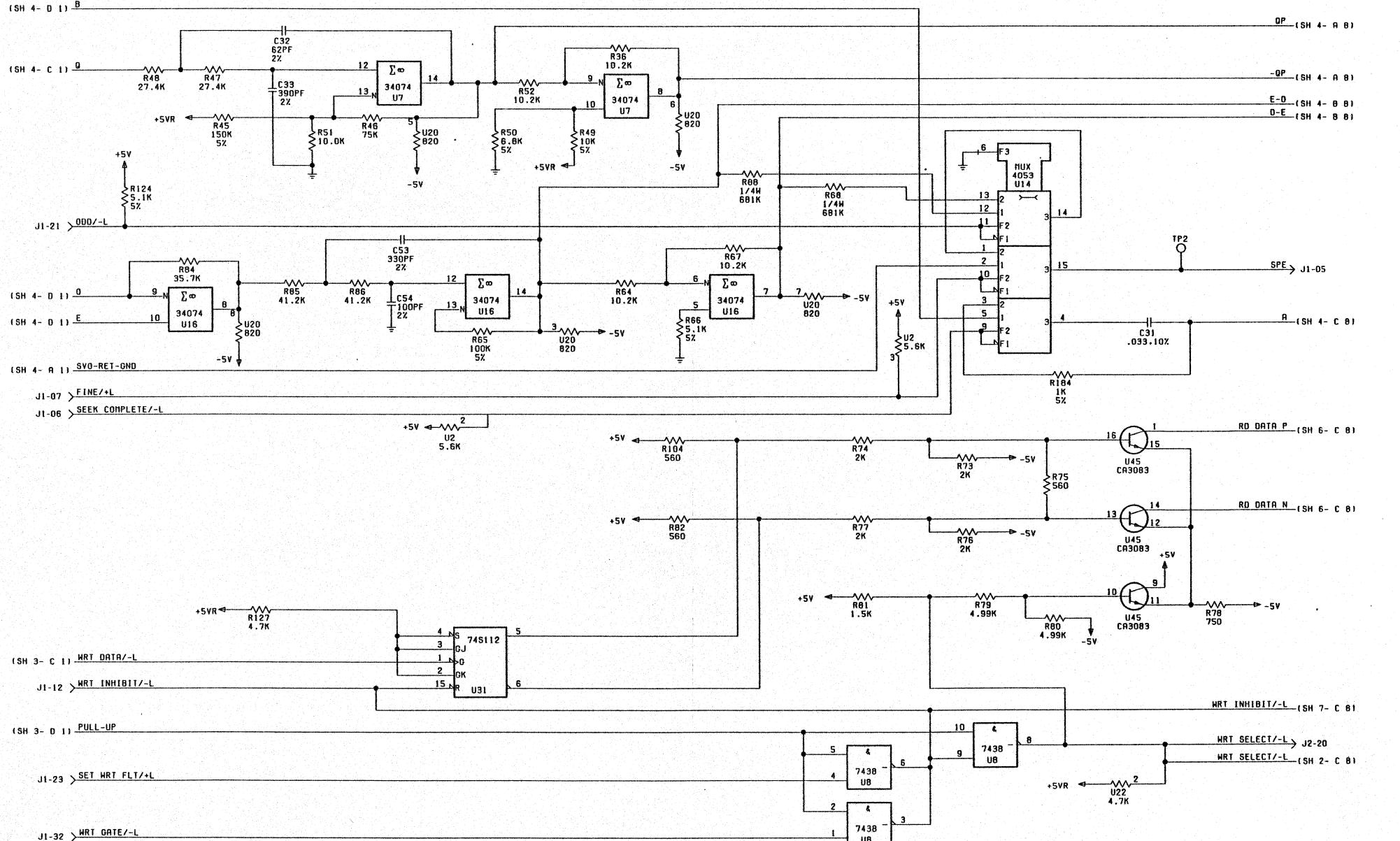
1-5

SIZE	D
	7

DRAWING NUMBER
77762

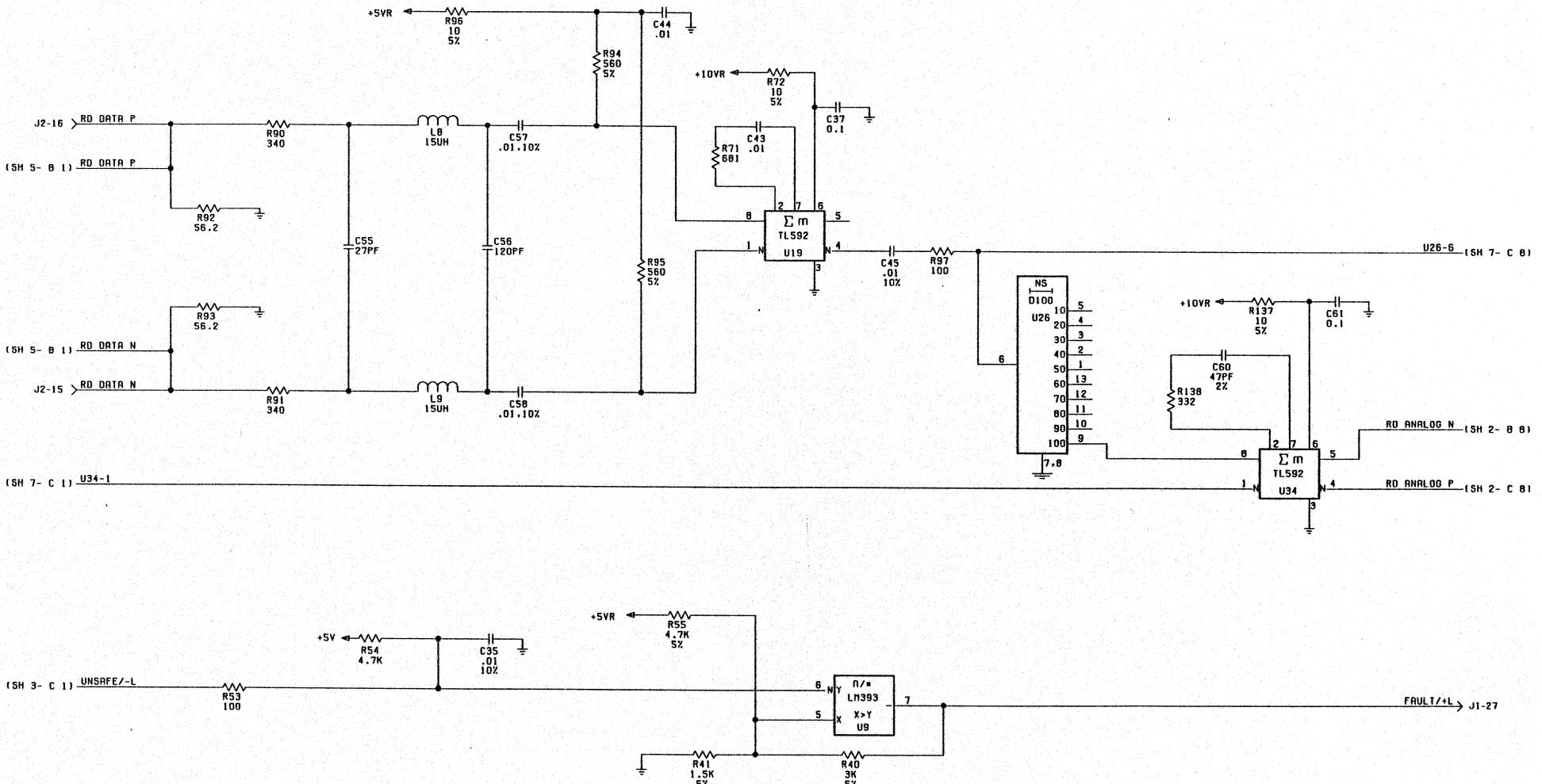
BER
2060
SHEE

CD REV
005
4



MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DATE 03-12-84	TITLE SCH., DATA-5	SIZE D	DRAWING NUMBER 77762060-0005	CD REV SHEET 5
---	------------------	-----------------------	-----------	---------------------------------	-------------------

DISTR A23-SC5 1

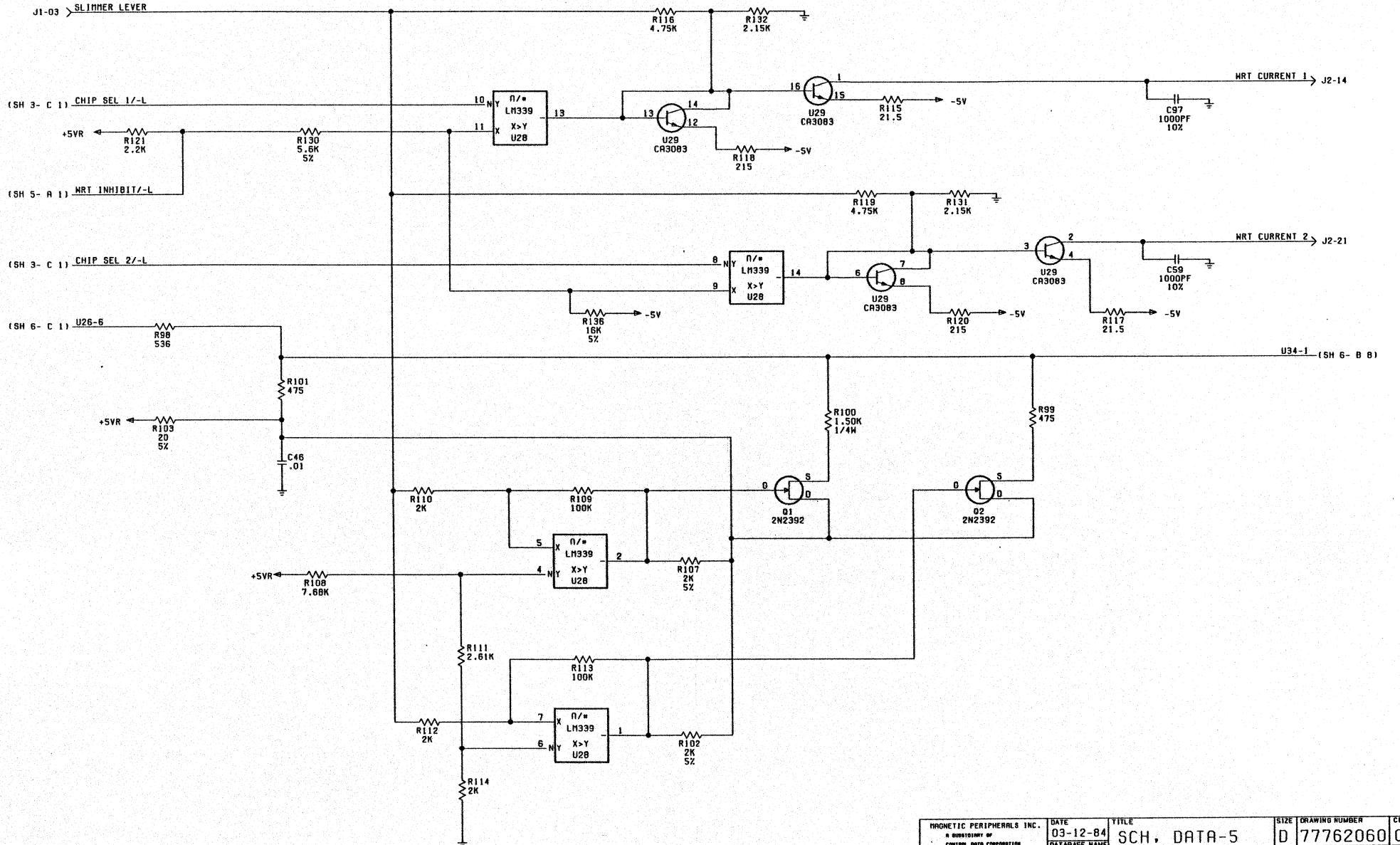


MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DATE 03-12-84	TITLE SCH., DATA-5	SIZE D 77762060	CD REV 004
	DATABASE NAME SCH. MCH.77762060	X		
				SHEET 6

8 7 6 5 4 3 2 1

3 2 1

DISTR A23-SC5 1



MAGNETIC PERIPHERALS INC.
A SUBSIDIARY OF
CONTROL DATA CORPORATION
OKLAHOMA CITY, OKLAHOMA

DATE	03-12-84
DATABASE NAME	SCH. EN.77762080 X

LE
SCH, DATA-5

SIZE	DRAWING NUMBER	CD	REV
D	77762060	0	04
		SHEET	7 F

8

7

6

5

4

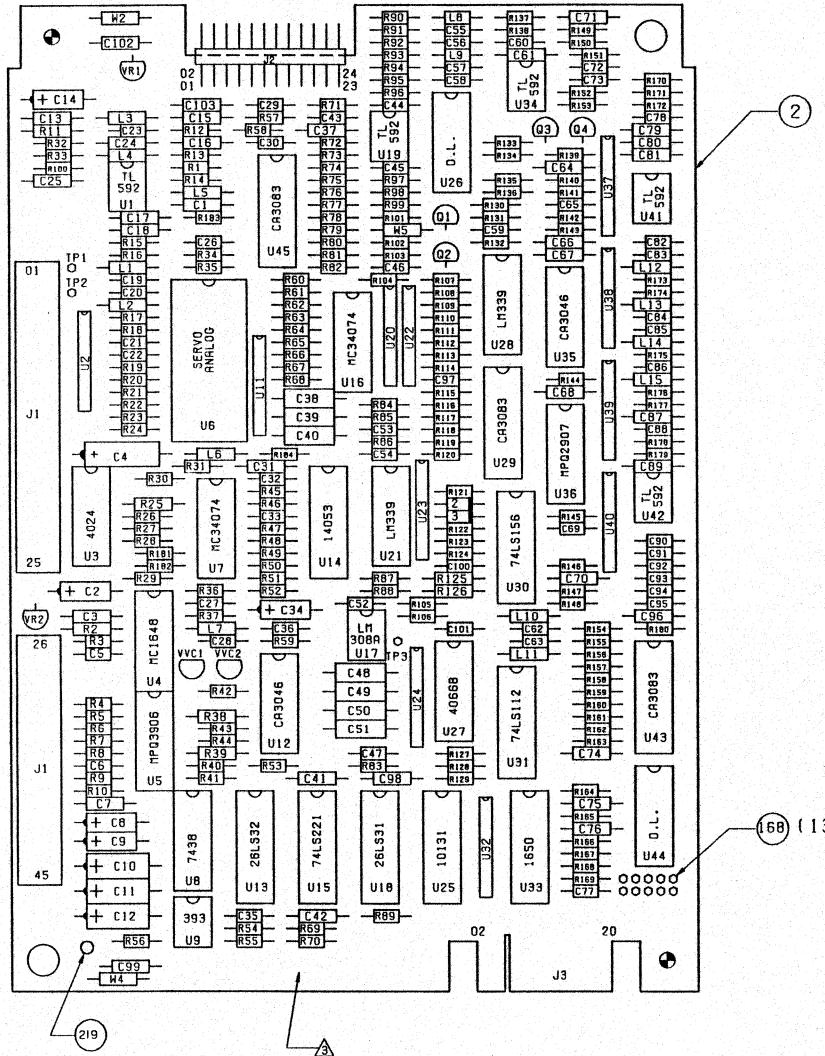
3

2

D

IDENT. NO. C.D STATUS REVISION

SHEET REVISION STATUS		REVISION RECORD			
KEY	ECN	DMT	CRS	DATE	
FOR DOCUMENT STATUS SEE REVISION STATUS SHEET					



RES	PL ITEM
R1	140
R2	103
R3	151
R4	142
R5	115
R6	115
R7	120
R8	125
R9	143
R10	153
R11	193
R12	131
R13	131
R14	197
R15	114
R16	114
R17	113
R18	113
R19	146
R20	185
R21	157
R22	145
R23	119
R24	114
R25	162
R26	161
R27	102
R28	160
R29	186
R30	129
R31	126
R32	135
R33	135
R34	137
R35	144
R36	130
R37	150
R38	164
R39	158
R40	211
R41	149
R42	147
R43	149
R44	151
R45	157
R46	155
R47	184
R48	184
R49	154
R50	148
R51	182
R52	130
R53	136
R54	153
R55	153

RES	PL ITEM
R56	188
R57	153
R58	153
R59	147
R60	144
R61	190
R62	130
R63	133
R64	130
R65	156
R66	152
R67	130
R68	165
R69	116
R70	105
R71	218
R72	139
R73	167
R74	167
R75	121
R76	167
R77	167
R78	146
R79	123
R80	123
R81	149
R82	121
R83	132
R84	133
R85	185
R86	185
R87	166
R88	165
R89	142
R90	180
R91	180
R92	117
R93	117
R94	121
R95	121
R96	139
R97	109
R98	120
R99	104
R100	147
R101	163
R102	207
R103	208
R104	121
R105	186
R106	156
R107	207
R108	202
R109	196
R110	167

RES	PL ITEM
R111	201
R112	167
R113	196
R114	167
R115	203
R116	206
R117	203
R118	204
R119	206
R120	204
R121	188
R122	190
R123	192
R124	152
R125	139
R126	159
R127	153
R128	154
R129	154
R130	209
R131	122
R132	122
R133	120
R134	154
R135	122
R136	210
R137	139
R138	181
R139	127
R140	120
R141	139
R142	127
R143	120
R144	128
R145	134
R146	114
R147	120
R148	120
R149	122
R150	122
R151	121
R152	122
R153	122
R154	138
R155	138
R156	106
R157	125
R158	120
R159	106
R160	107
R161	125
R162	112
R163	112
R164	190
R165	190

CAP	PL ITEM
C1	77
C2	95
C3	77
C4	96
C5	75
C6	75
C7	77
C8	94
C9	95
C10	96
C11	98
C12	96
C13	77
C14	174
C15	77
C16	77
C17	77
C18	77
C19	78
C20	83
C21	75
C22	99
C23	176
C24	90
C25	77
C26	92
C27	75
C28	75
C29	99
C30	100
C31	76
C32	81
C33	87
C34	93
C35	99
C36	91
C37	77
C38	90
C39	90
C40	90
C41	77
C42	77
C43	75
C44	75
C45	99
C46	75
C47	86
C48	88
C49	88
C50	86
C51	88
C52	79
C53	85
C54	82
C55	78

CAP	PL ITEM
C56	80
C57	99
C58	99
C59	89
C60	171
C61	77
C62	84
C63	82
C64	77
C65	74
C66	77
C67	76
C68	77
C69	75
C70	77
C71	77
C72	99
C73	99
C74	77
C75	77
C76	77
C77	75
C78	99
C79	77
C80	77
C81	77
C82	99
C83	99
C84	171
C85	217
C86	216
C87	77
C88	99
C89	77
C90	89
C91	89
C92	99
C93	99
C94	75
C95	75
C96	77
C97	89
C98	77
C99	77
C100	101
C101	101
C102	77
C103	77

IC	PL ITEM
U1	17
U2	42
U3	9
U4	5
U5	12
U6	24
U7	15
U8	19
U9	18
U10	-
U11	44
U12	13
U13	29
U14	7
U15	25
U16	15
U17	27
U18	28
U19	17
U20	37
U21	16
U22	39
U23	39
U24	40
U25	21
U26	30
U27	8
U28	16
U29	14
U30	23
U31	26
U32	35
U33	6
U34	17
U35	13
U36	11
U37	43
U38	31
U39	36
U40	38
U41	17
U42	17
U43	14
U44	30
U45	14

IND	PL ITEM
L1	59
L2	59
L3	56
L4	56
L5	60
L6	61
L7	54
L8	57
L9	57
L10	60
L11	60
L12	54
L13	54
L14	56
L15	56

TSTR	PL ITEM
Q1	52
Q2	52
Q3	52
Q4	52

VARI	PL ITEM
VRC1	49
VVC2	49

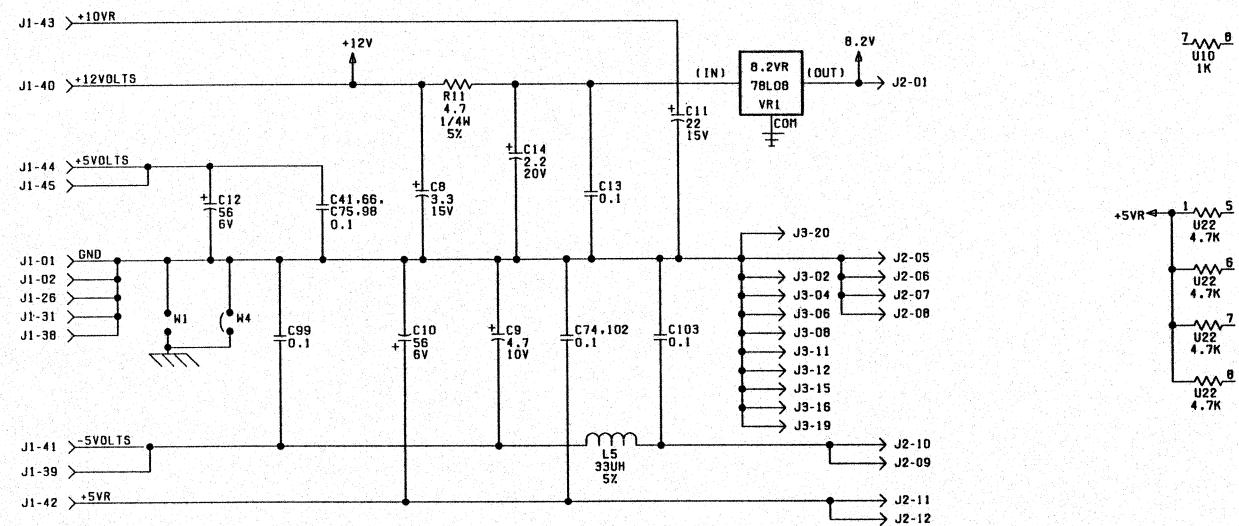
VOLT	PL ITEM
VR1	51
VR2	53

DIO	PL ITEM
CR1	-
CR2	50
CR3	50

MAGNETIC PERIPHERALS INC.
A SUBSIDIARY OF
CONTROL DATA CORPORATION
OKLAHOMA CITY, OKLAHOMA

DATE 09-27-84 TITLE PWA.DATAS-5
DATABASE X FILE NUMBER 77763450 CO 201
REV F

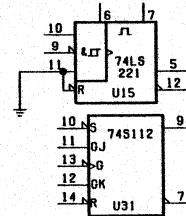
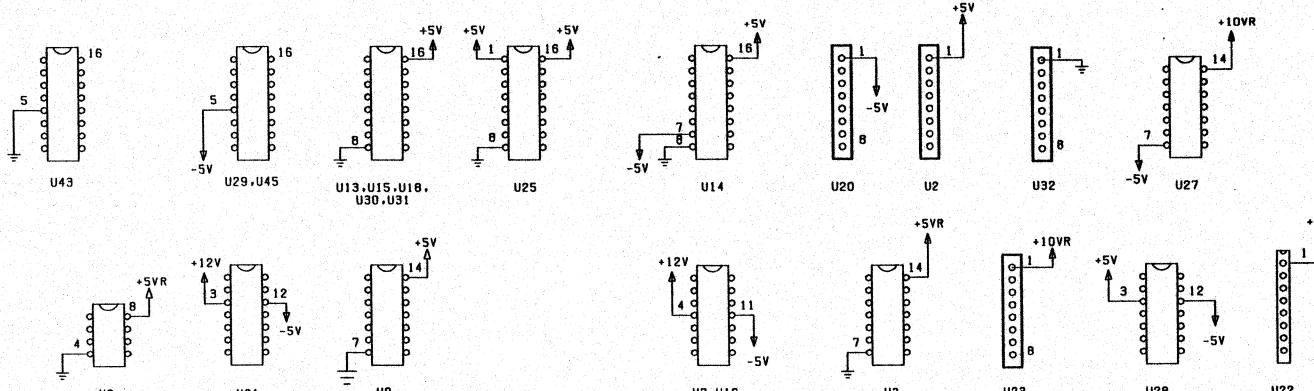
SHEET REVISION STATUS							REVISION RECORD				
7	6	5	4	3	2	1	REV	ECO	DRFT	CND	DATE
01	01	01	01	01	01	01	01	CLASS C RELEASED		01	84 07/07/2



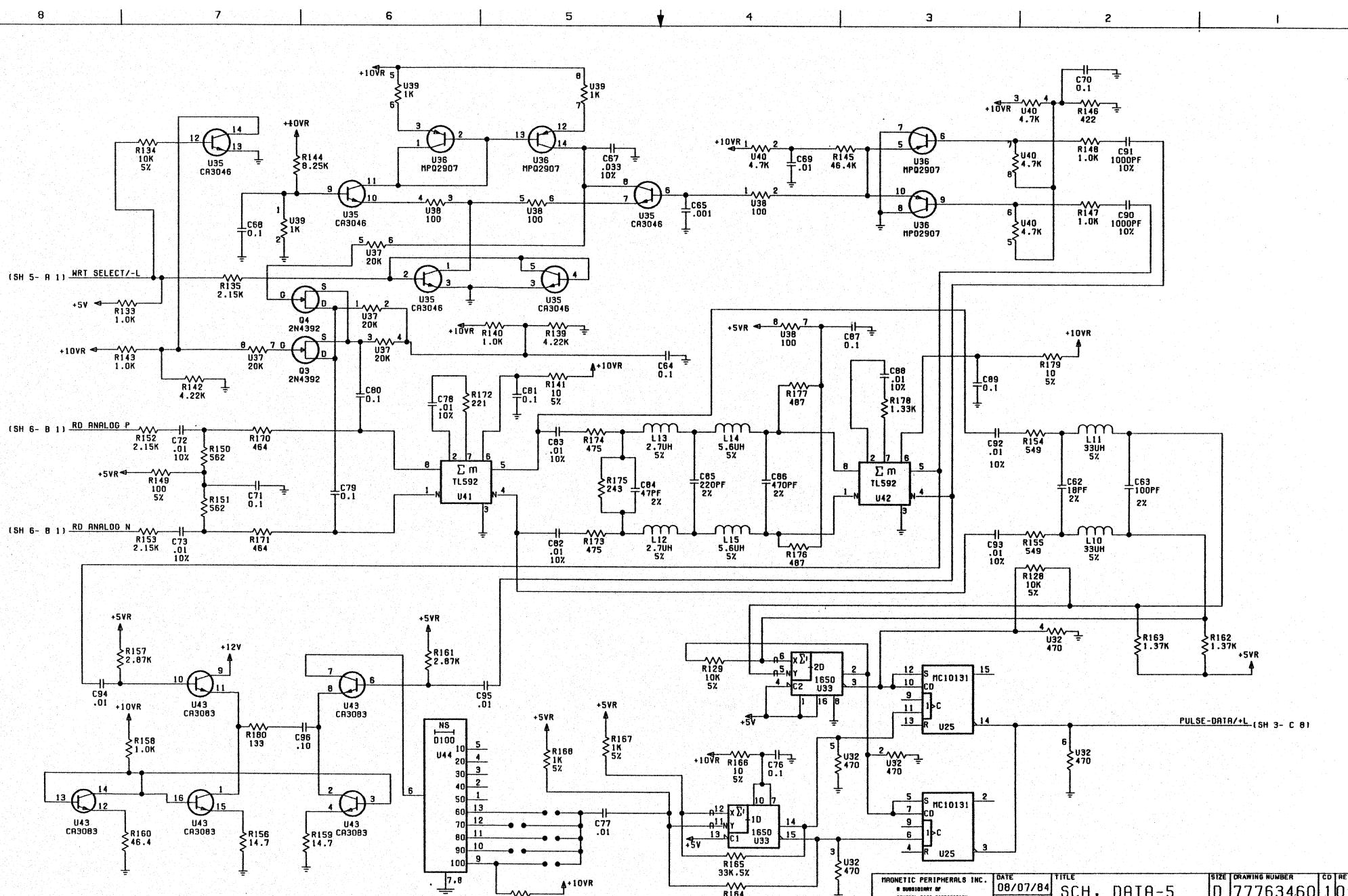
NOTES: (UNLESS OTHERWISE SPECIFIED)

1. DRAWING INTERPRETATION PER 43A226599
 2. RESISTOR VALUES ARE IN OHMS, 1/8W \pm 1%, UNLESS INDICATED
 3. CAPACITOR VALUES ARE IN MICROFARADS, UNLESS INDICATED

SPARES

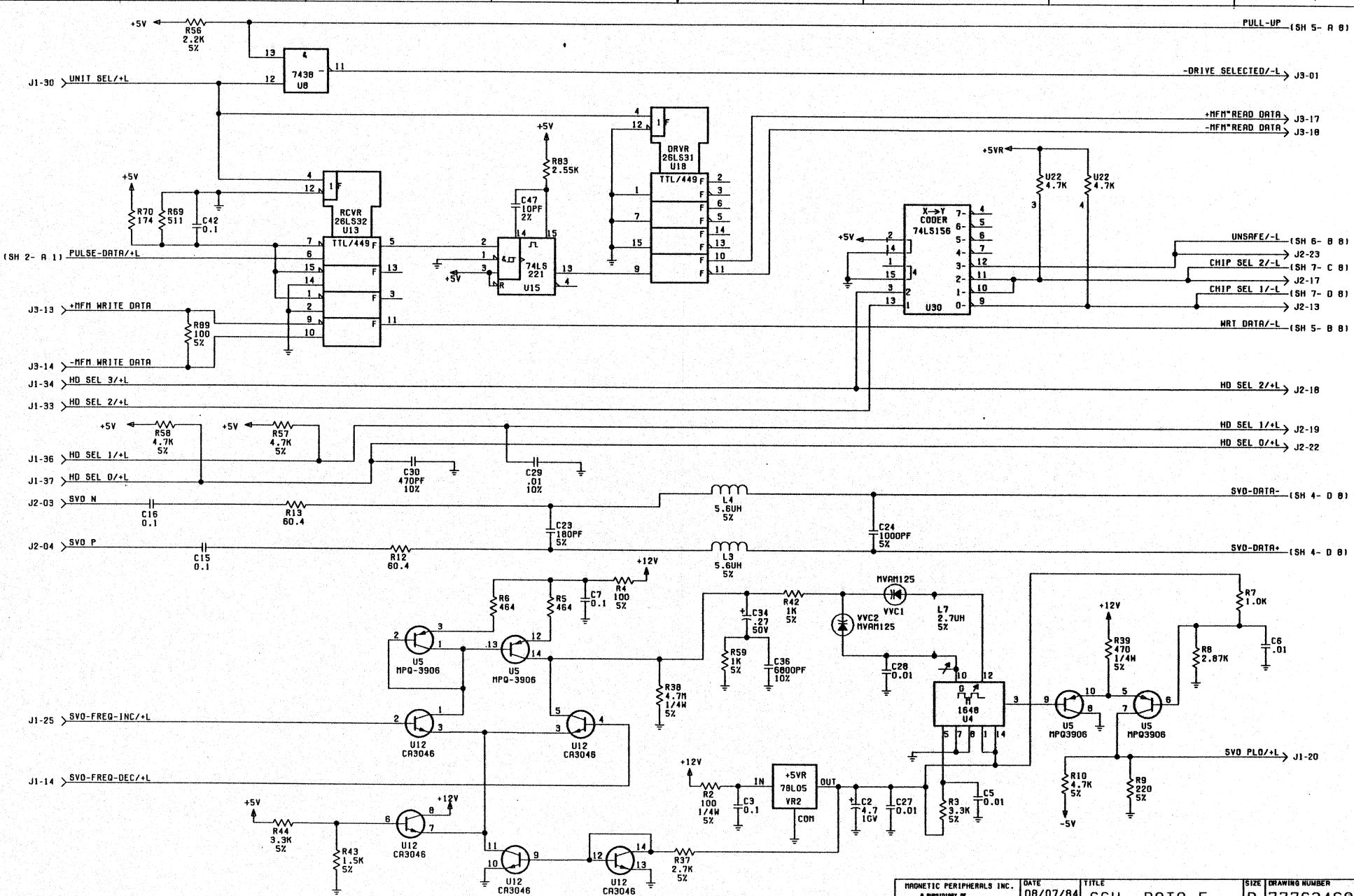


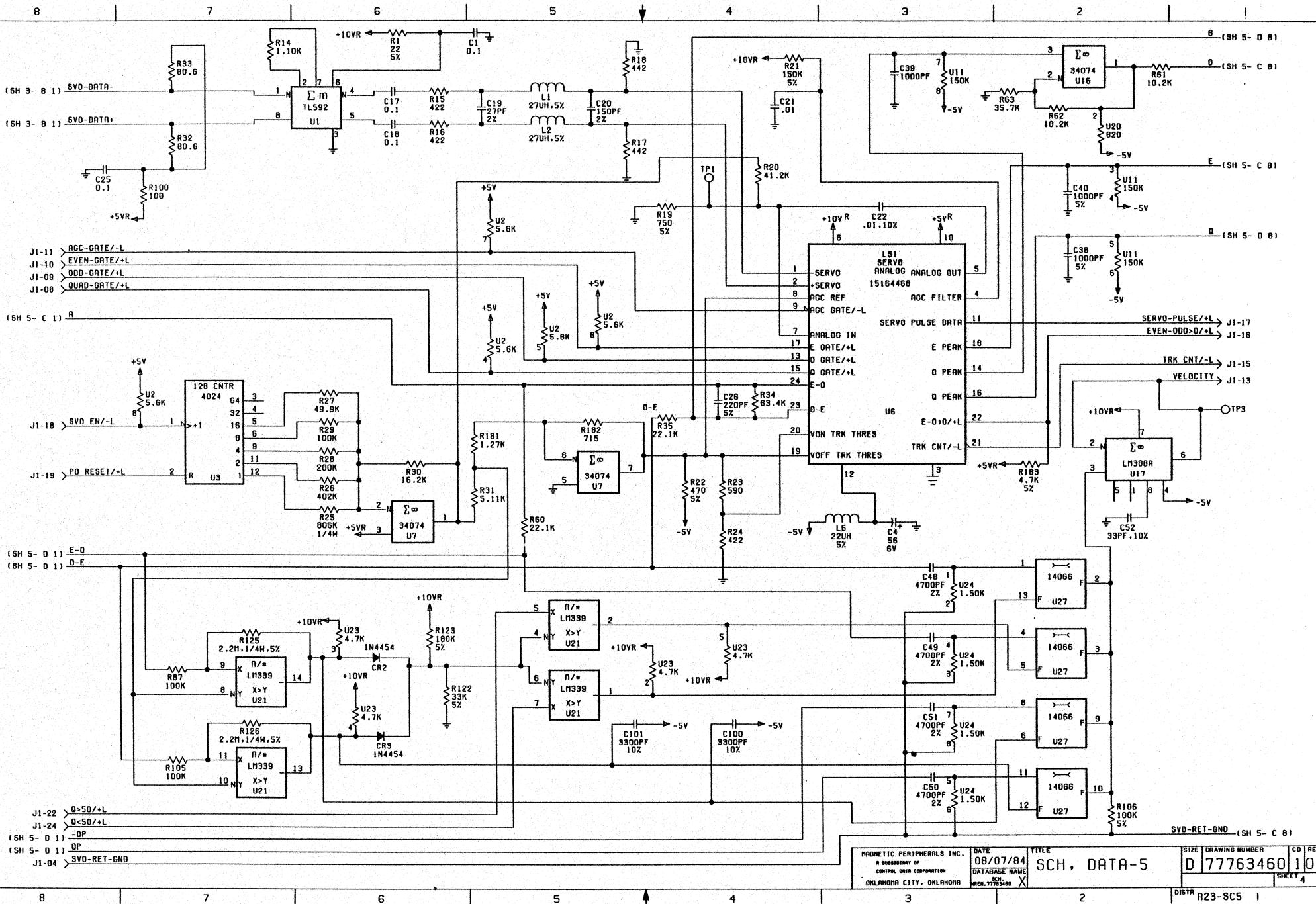
MATERIAL	MASS OTHERWISE SPECIFIED TOLERANCES	ARITHMETIC PERIPHERALS INC.	DWN	FORM NO.	09/27/84	TITLE	SIZE	DRAWING NUMBER	CD	REV
FINISH	3-PLACE	2-PLACE	ANGLES	CHND	Alphacore 1/16"	SCH. DATA-5	D	77763460	1	01
	1	+	0	ENGR	S. Linkens 10-1-84		SCALE	NONE	1	OF 7F
DO NOT SCALE DRAWING	DATA	WREN II	MFG							
4	3	DATA BASE SCH. DATA-5 77763460	X	2		DISTR	A23-SC5	1		

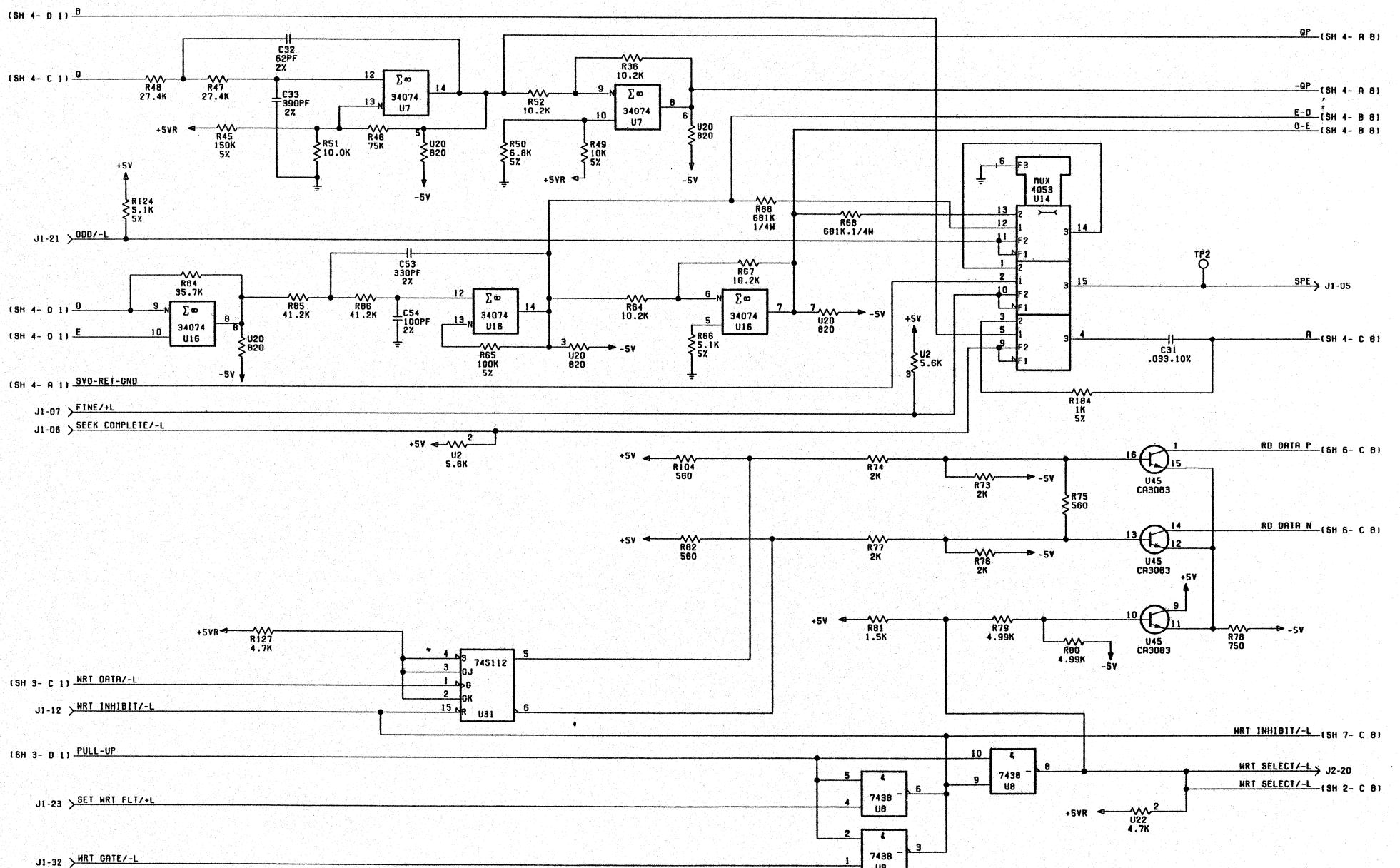


MAGNETIC PERIPHERALS INC. DATE 08/07/84 TITLE SCH. DATA-5
A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA DRAWING NUMBER D 77763460 101
REv. 100.77763460 X SHEET 2

DISTR R23-SC5 I







MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF COMPAQ DATA CORPORATION	DATE 08/07/84	TITLE DATABASE NAME SCH, DATA-5	SIZE D	DRAWING NUMBER 77763460	ED 101	REV.
OKLAHOMA CITY, OKLAHOMA	REP'D. BY: MPP/TB/MS					SHEET 5

8

7

6

5

4

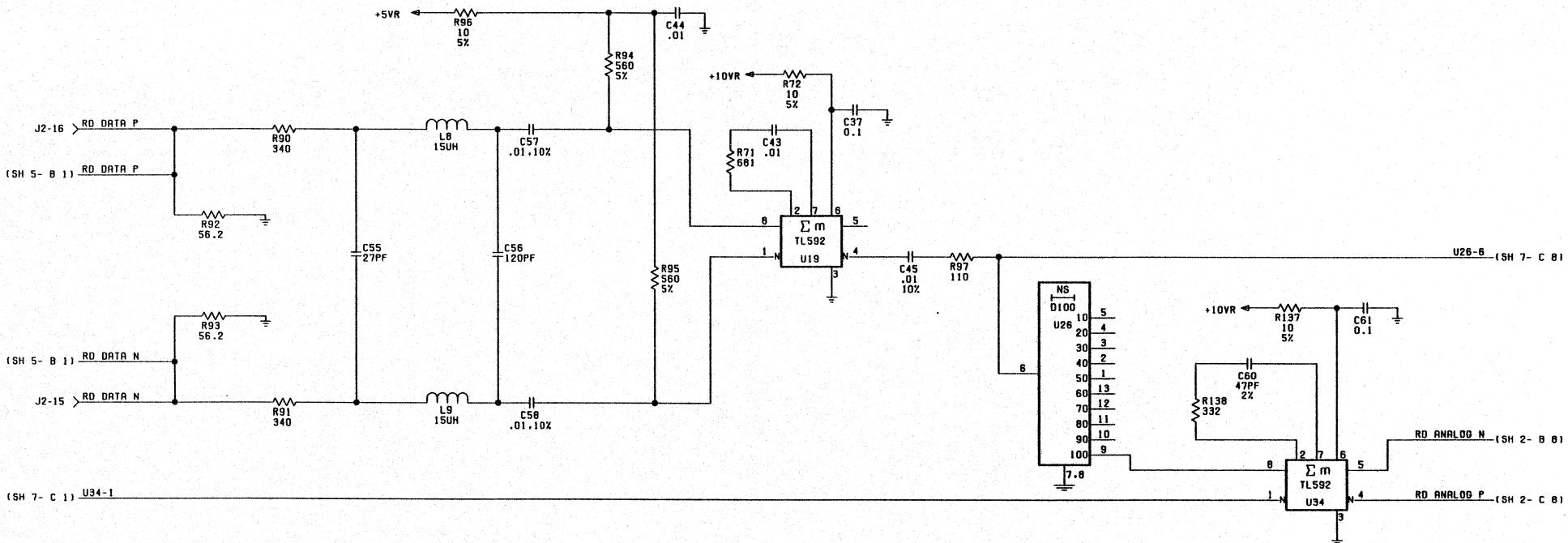
3

2

1

D

D



8

7

6

5

4

3

2

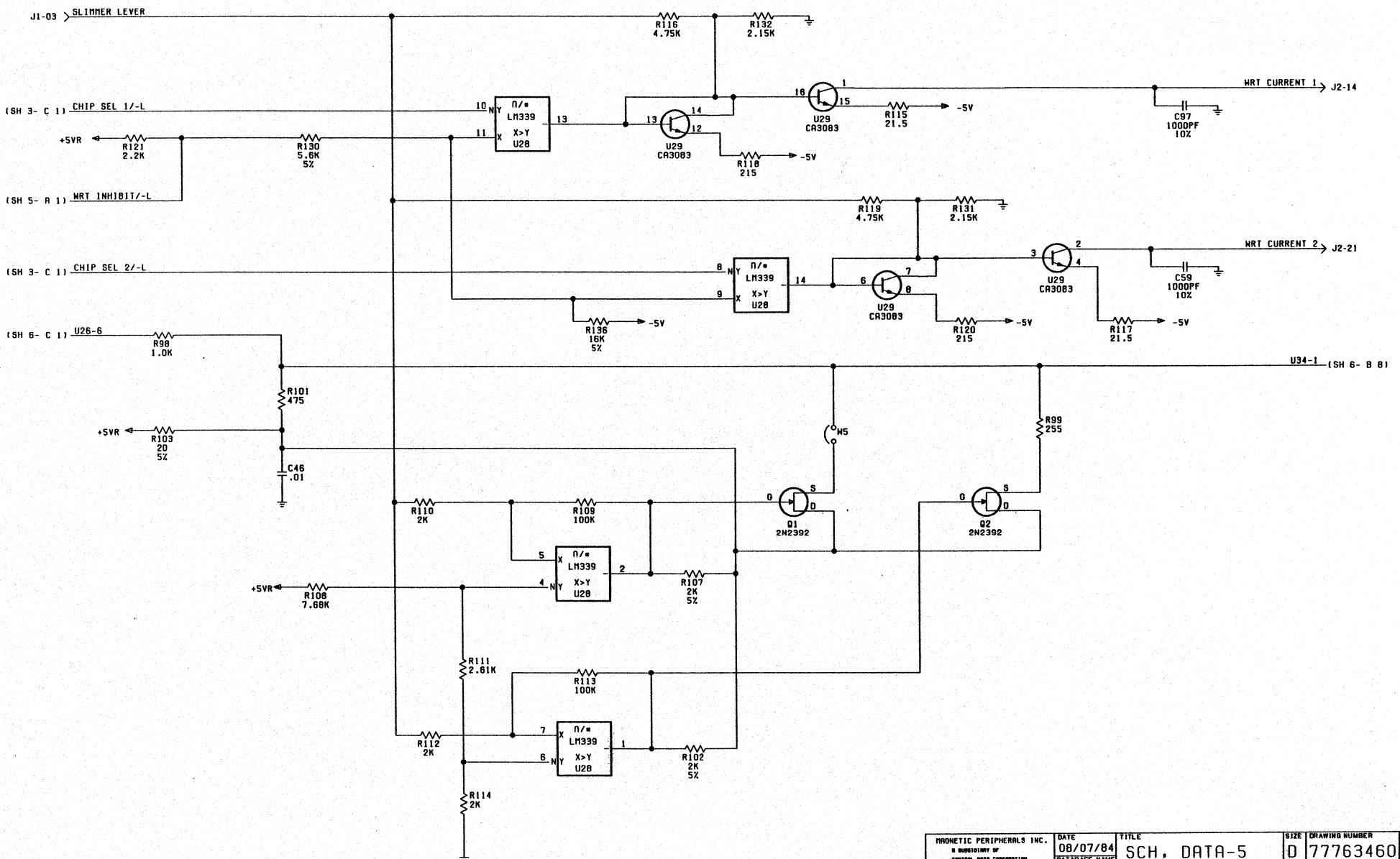
1

A

A

MAGNETIC PERIPHERALS INC.		DATE	TITLE	
A SUBSIDIARY OF CONTROL DATA CORPORATION		08/07/84	SCH. DATA-5	
OKLAHOMA CITY, OKLAHOMA		DATA BASE NAME MCN.77763460 X	SIZE	DRAWING NUMBER
D	77763460	1	01	CD REV
				SHEET 6

DISTR A23-SC5 I



IDENT. NO. CD STATUS REVISION

7

6

5

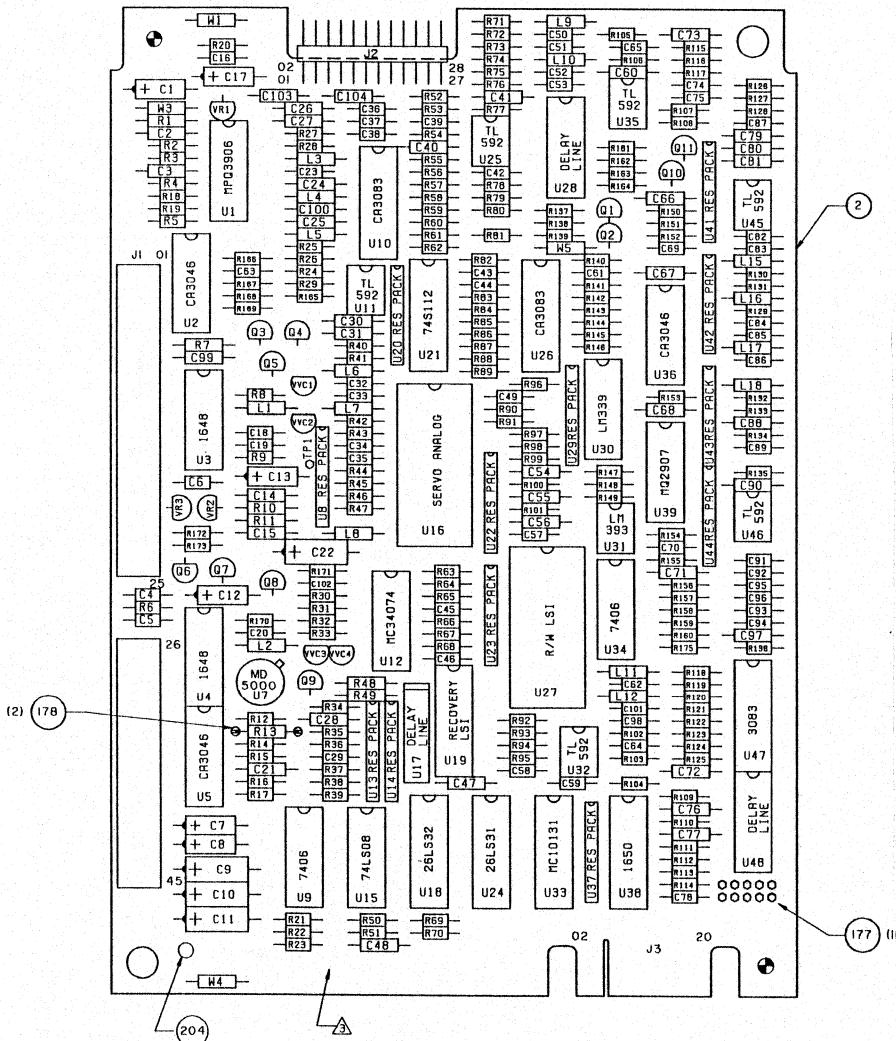
4

3

2

1

SHEET REVISION STATUS			REVISION RECORD		
REV	ECO	DRFT	REV	ECO	DRFT
FOR DOCUMENT STATUS SEE REVISION STATUS SHEET					



NOTES: (UNLESS OTHERWISE SPECIFIED)

1. ASSEMBLE PER 5970II27, EXCEPT PARAGRAPH 3.8.3.
2. MAXIMUM COMPONENT HEIGHT .30 EXCEPT J1 AND U27, 0.33, AND ITEMS 177, 0.25
- △ 3. MARK ASSEMBLY NO. IN APPROXIMATE LOCATION SHOWN PER 12A1099PI.
4. FOR SCHEMATIC DIAGRAM, SEE ITEM I.
5. COMPONENT MARKING WITHOUT ALPHA PREFIX ARE DIODES.
6. SOLID BAND ON DIODES AND VOLTAGE REGULATORS INDICATE CATHODE END.
7. GENERAL WORKMANSHIP PER 10120300.

MATERIAL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES 3-PLACE OR 4-PLACE ANGLES	MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DWNR D. HURBLE 09-28-84	TITLE PWA, ESDI DATA	SIZE DRAWING NUMBER D 77763500	CD REV 401
FINISH		ENGR S. Anderson	10-104			
DO NOT SCALE DRAWING		TEST MFG	10-104			
DATA BASE PHB.HREN.77763520		X				
SCALE 2/1	SHEET 1	OF 2				

8

7

6

5

4

3

2

1

DISTR A23-RY5

8

7

6

5

4

3

2

1

RES	PL ITEM
R1	169
R2	115
R3	115
R4	142
R5	150
R6	151
R7	164
R8	147
R9	151
R10	171
R11	171
R12	142
R13	175
R14	121
R15	172
R16	110
R17	158
R18	151
R19	149
R20	147
R21	149
R22	116
R23	135
R24	-
R25	136
R26	136
R27	131
R28	131
R29	174
R30	130
R31	133
R32	111
R33	112
R34	116
R35	129
R36	124
R37	143
R38	120
R39	123
R40	114
R41	114
R42	113
R43	113
R44	146
R45	126
R46	145
R47	157
R48	148
R49	152
R50	153
R51	132
R52	136
R53	139
R54	189
R55	190

RES	PL ITEM
R56	180
R57	198
R58	190
R59	190
R60	146
R61	192
R62	193
R63	160
R64	155
R65	157
R66	162
R67	130
R68	133
R69	136
R70	136
R71	180
R72	180
R73	184
R74	184
R75	198
R76	198
R77	117
R78	172
R79	198
R80	198
R81	149
R82	166
R83	183
R84	183
R85	185
R86	161
R87	109
R88	185
R89	153
R90	137
R91	202
R92	182
R93	145
R94	182
R95	145
R96	201
R97	191
R98	194
R99	119
R100	114
R101	162
R102	109
R103	154
R104	154
R105	139
R106	144
R107	122
R108	122
R109	168
R110	168
R111	139
R112	147
R113	147
R114	165
R115	142
R116	118
R117	118
R118	179
R119	125
R120	120
R121	173
R122	107
R123	125
R124	163
R125	163
R126	115
R127	115
R128	170
R129	141
R130	179
R131	179
R132	187
R133	187
R134	174
R135	139
R136	108
R137	120
R138	186
R139	179
R140	197
R141	199
R142	199
R143*	78
R144	161
R145	196
R146	196
R147	149
R148	153
R149	200
R150	127
R151	120
R152	139
R153	128
R154	134
R155	114
R156	120
R157	120
R158	188
R159	188
R160	153
R161	122
R162	195
R163	127
R164	120
R165	140

RES	PL ITEM
R111	139
R112	147
R113	147
R114	165
R115	144
R116	120
R117	159
R118	181
R119	144
R120	120
R121	159
R122	181
R123	203

RES	PL ITEM
R116	120
R117	159
R118	181
R119	144
R120	120
R121	173
R122	107
R123	125
R124	163
R125	163
R126	115
R127	115
R128	170
R129	141
R130	179
R131	179
R132	187
R133	187
R134	174
R135	139
R136	108
R137	120
R138	186
R139	179
R140	197
R141	199
R142	199
R143*	78
R144	149
R145	166
R146	183
R147	183
R148	185
R149	198
R150	153
R151	161
R152	196
R153	196
R154	196
R155	199
R156	199
R157	120
R158	139
R159	128
R160	134
R161	114
R162	120
R163	127
R164	120
R165	140

CAP	PL ITEM
C1	84
C2	77
C3	77
C4	75
C5	75
C6	75
C7	94
C8	95
C9	98
C10	97
C11	97
C12	95
C13	95
C14	77
C15	77
C16	91
C17	93
C18	75
C19	75
C20	75
C21	77
C22	97
C23	103
C24	102
C25	77
C26	77
C27	77
C28	76
C29	103
C30	77
C31	77
C32*	78
C33	83
C34	75
C35	99
C36	99
C37	99
C38	99
C39	75
C40	77
C41	77
C42	99
C43	89
C44	89
C45	87
C46	75
C47	77
C48	77
C49	92
C50	78
C51	82
C52	99
C53	99
C54	90
C55	90

CAP	PL ITEM
C56	90
C57	81
C58	99
C59	99
C60	77
C61	75
C62	79
C63	75
C64	75
C65	69
C66	77
C67	76
C68	77
C69	99
C70	75
C71	77
C72	77
C73	77
C74	99
C75	99
C76	77
C77	77
C78	75
C79	77
C80	77
C81	77
C82	99
C83	99
C84	69
C85	73
C86	66
C87	99
C88	77
C89	99
C90	77
C91	89
C92	89
C93	99
C94	99
C95	75
C96	75
C97	77
C98	75
C99	77
C100	77
C101	80
C102	75
C103	77
C104	77

IC	PL ITEM
U1	12
U2	13
U3	5
U4	5
U5	13
U6	36
U7	25
U8	42
U9	19
U10	14
U11	17
U12	15
U13	31
U14	38
U15	10
U16	24
U17	27
U18	29
U19	7
U20	39
U21	26
U22	44
U23	37
U24	28
U25	17
U26	14
U27	8
U28	30
U29	45
U30	16
U31	16
U32	17
U33	21
U34	19
U35	17
U36	13
U37	35
U38	6
U39	11
U40	-
U41	43
U42	31
U43	36
U44	38
U45	17
U46	17
U47	14
U48	30

IND	PL ITEM
L1	54
L2	58
L3	56
L4	56
L5	60
L6	59
L7	59
L8	61
L9	57
L10	57
L11	60
L12	60
L13	-
L14	-
L15	54
L16	54
L17	56
L18	56
L19	-

VARI	PL ITEM
VVC1	49
VVC2	49
VVC3	49
VVC4	49

JUMP	PL ITEM
W1	176
W2	-
W3	176
W4	176
W5	176

CONN	PL ITEM
J1	66
J2	68
J3	-

DISTRA23-RYS I

8

9

10

11

12

13

14

15

16

17

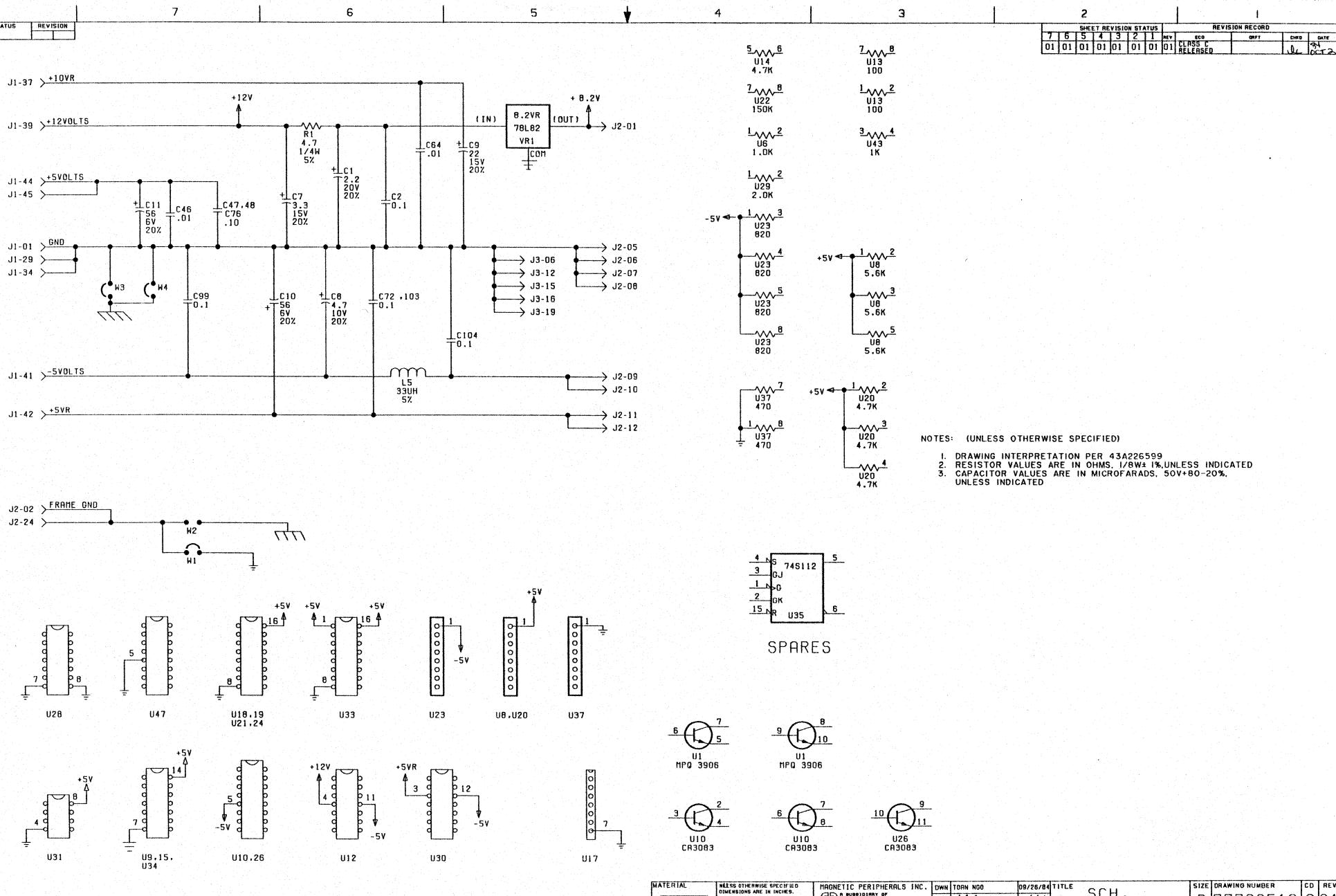
18

19

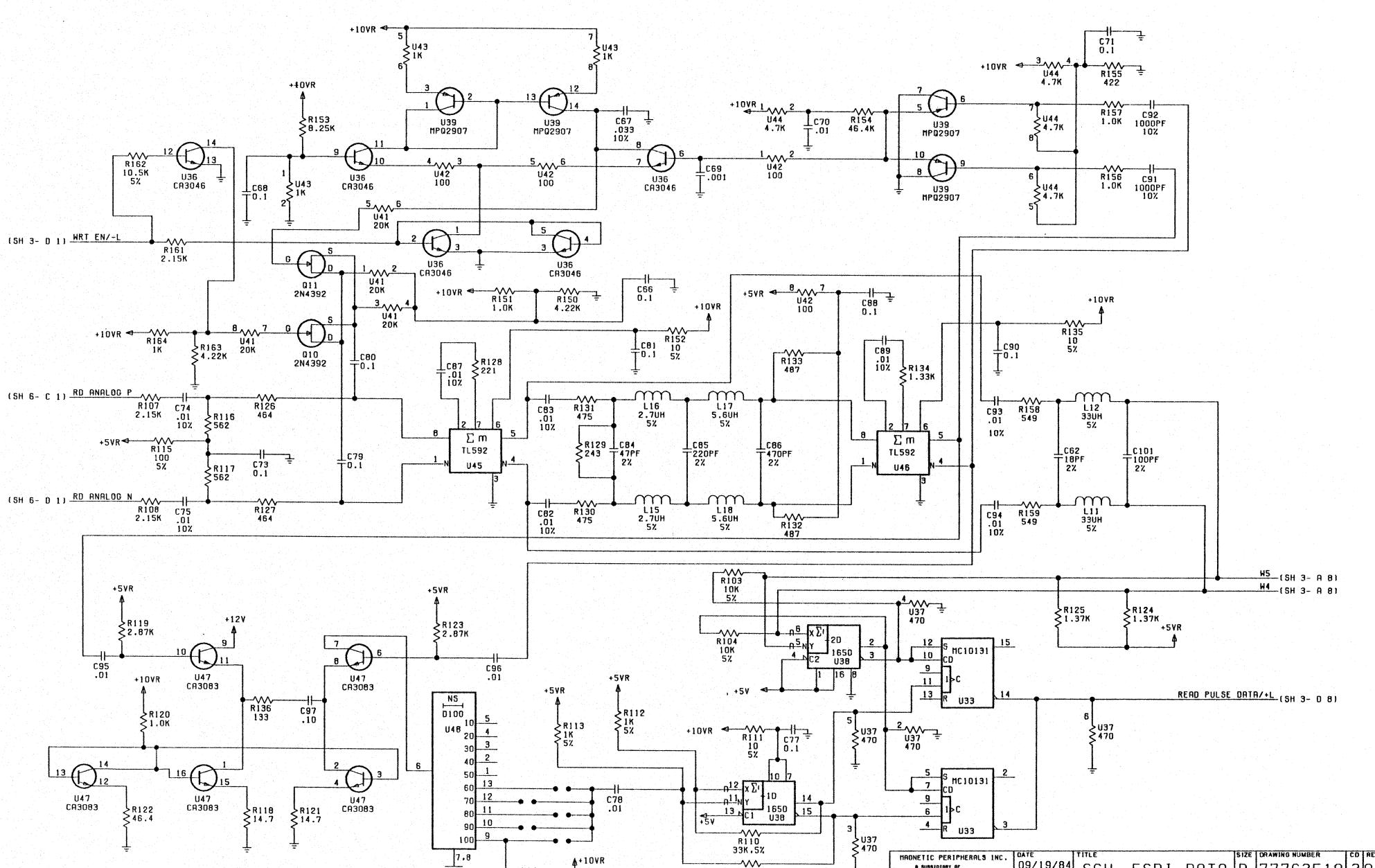
20

21

22

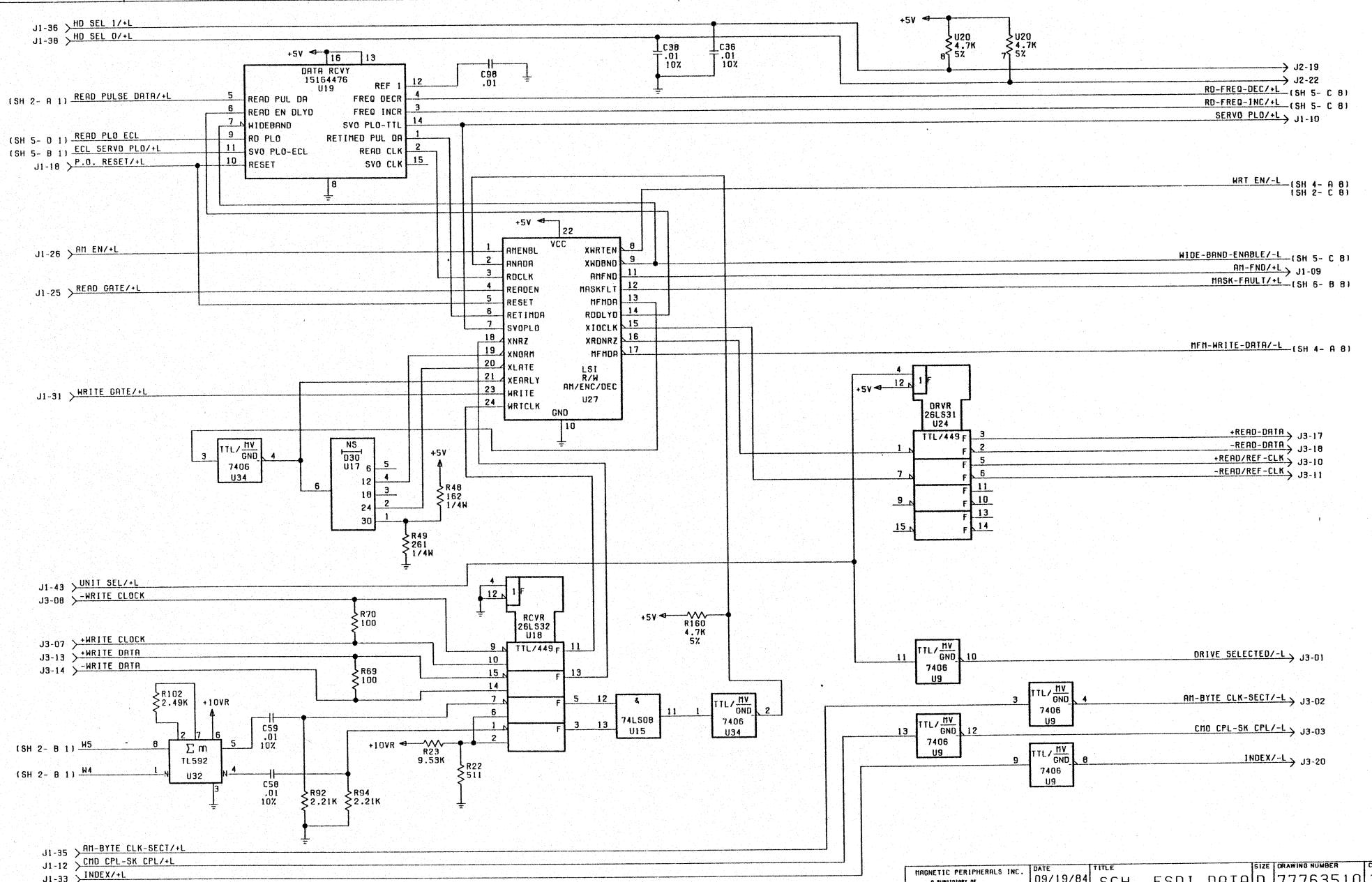


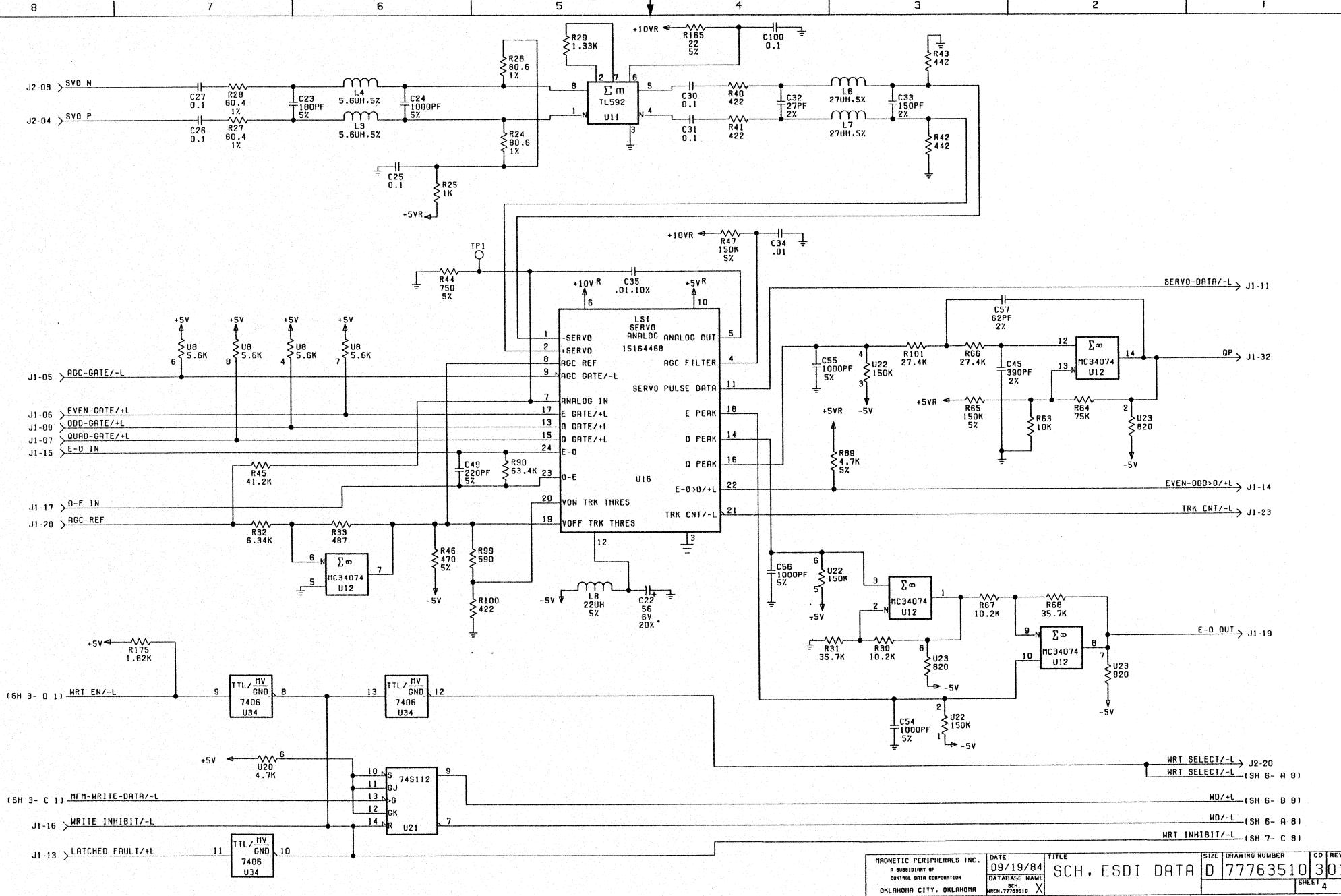
MATERIAL	MILITARY SPECIFICATION TOLERANCES ARE IN INCHES.			MAGNETIC PERIPHERALS INC.	DWN	TORN NO.	09/26/84	TITLE	SCH.	SIZE	DRAWING NUMBER	CD	REV.	
FINISH	TOLERANCES			CD	A DIVISION OF THE BUREAU OF STANDARDS, U.S. GOVERNMENT OKLAHOMA CITY, OKLAHOMA			ENGR	S. Lohman	10-1-84	ESDI DATA	D	77763510	301
	3-PLACE	2-PLACE	ANODES					MFG			SCALE	NONE	SHEET	1 OF 7
DO NOT SCALE DRAWING				RELEASER	WRN II	DATA BASE				2	DISTR	A23-SC5	I	
4						SCH.IREN.77763510			X					



MAGNETIC PERIPHERALS INC.
A SUBSIDIARY OF CONTROL DATA CORPORATION
OKLAHOMA CITY, OKLAHOMA
DATE 09/19/84
DATABASE NAME SCH
REF. 77763510 X
TITLE SCH, ESDI DATA
SIZE D 77763510
DRAWING NUMBER 301
CD REV
SHEET 2

DISTR A23-SC5 I





8	7	6	5	4	3	2	1
MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA				DATE 09/19/84 DATABASE NAME SCH PN: 77763510 X			
				TITLE SCH, ESDI DATA			
				SIZE 0			
				DRAWING NUMBER 77763510 301			
				CO REV			

8 7 6 5 4 3 2 1

D D C C B B A A

WRT SELECT/-L → J2-20

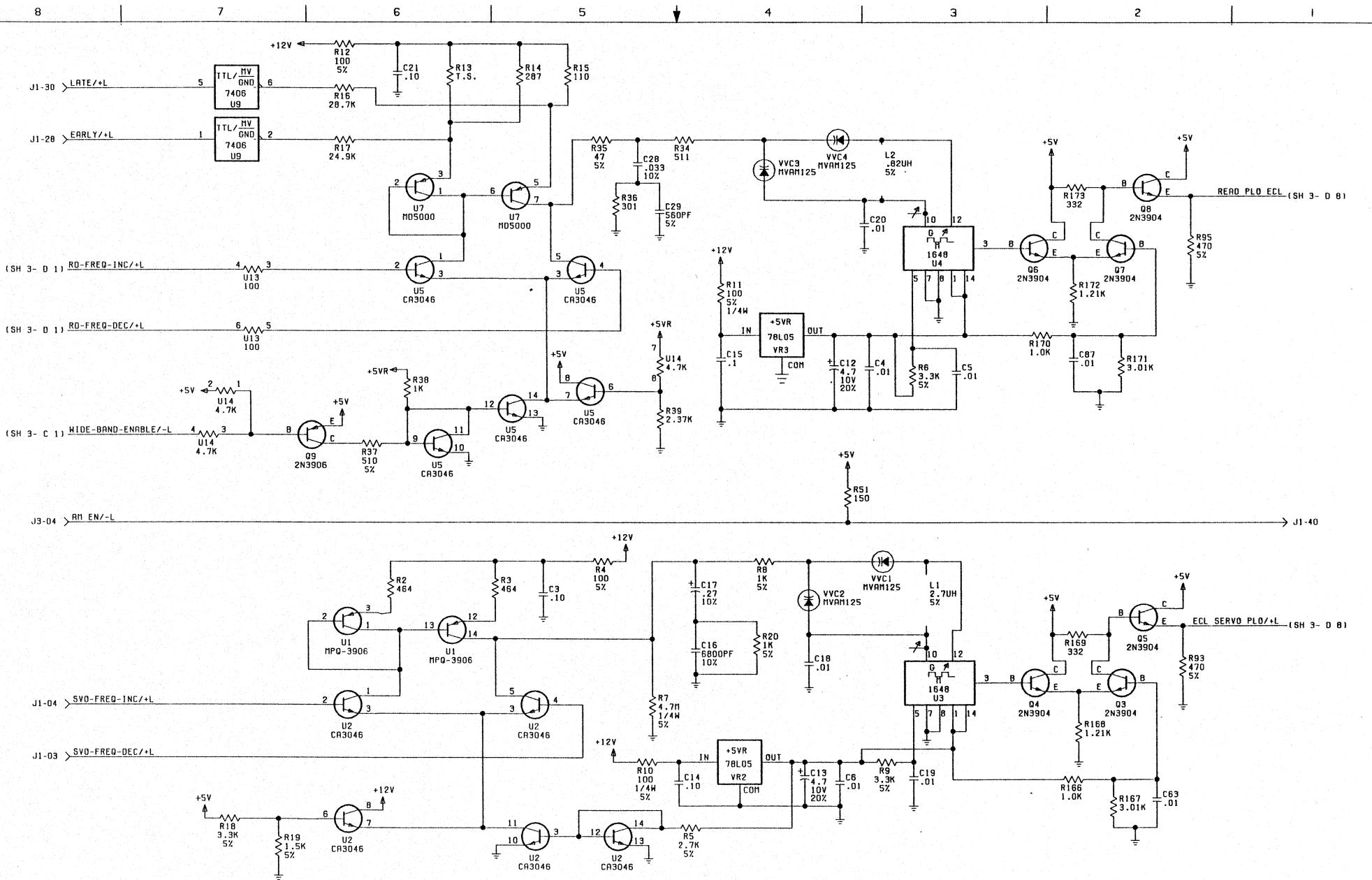
WRT SELECT/-L → (SH 6- B 8)

HD/+L → (SH 6- B 8)

HD/-L → (SH 6- A 8)

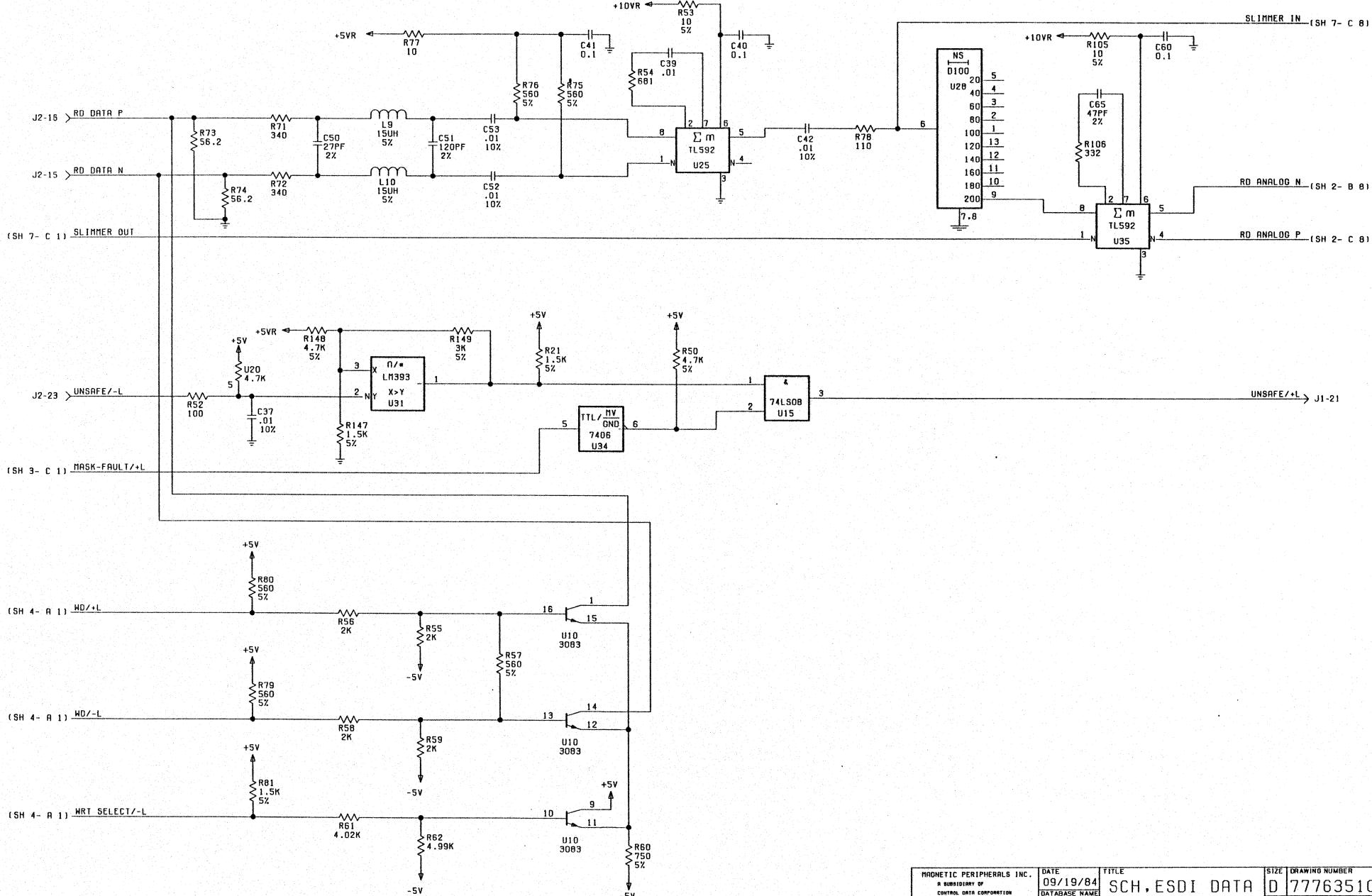
WRT INHIBIT/-L → (SH 7- C 8)

DISTR R23-SC5 1



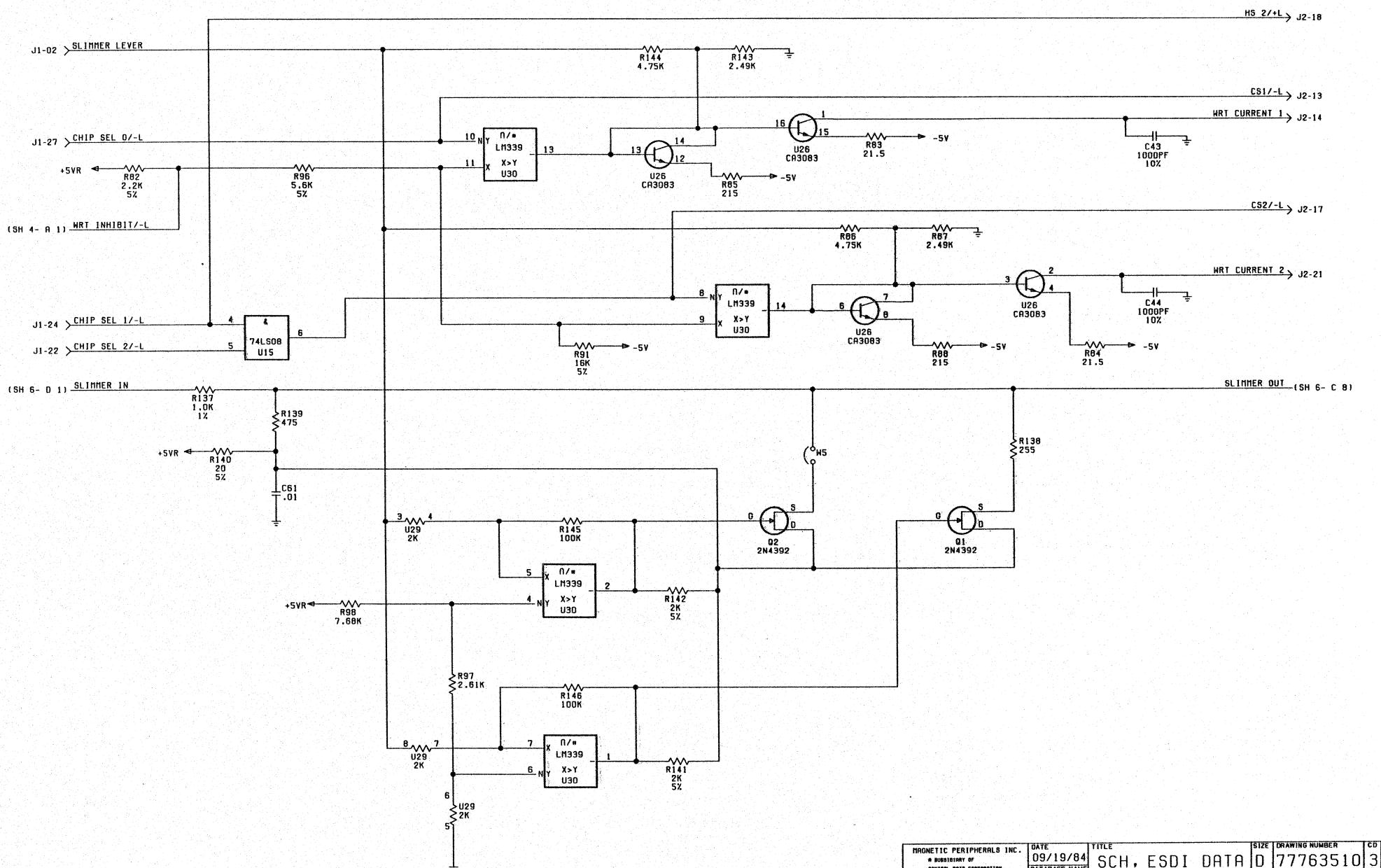
MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DATE 09/19/84 DATABASE NAME MEN-77763510 X	TITLE SCH. ESDI DATA	SIZE D 77763510 3 01	CD REV
---	---	-------------------------	-------------------------	--------

DISTR A23-SC5 1 SHEET 5



MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DATE 09/19/84	TITLE SCH, ESDI DATA	SIZE D 77763510	REV 301
DATA SHEET NO. MREN-77763510 X				

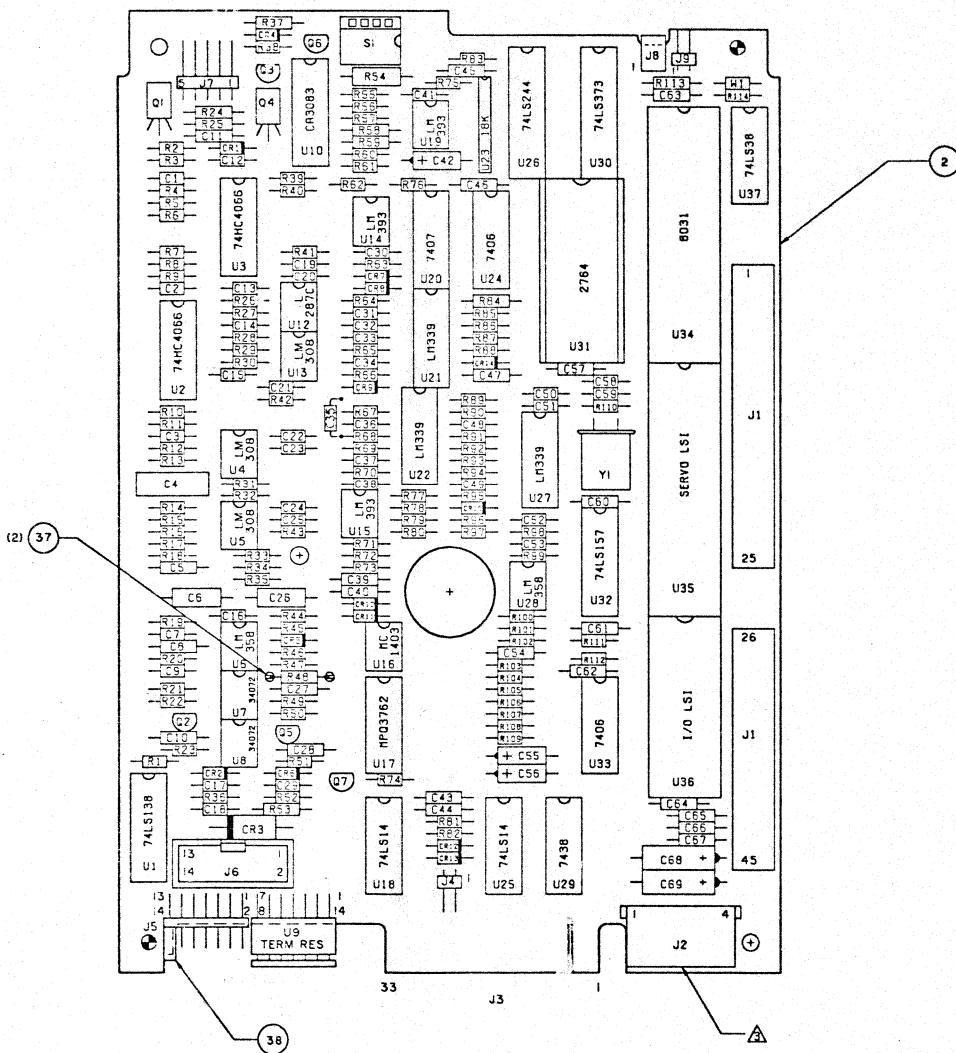
DISTR A23-SC5 1



MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DATE 09/19/84	TITLE SCH, ESDI DATA	SIZE D 77763510	CD REV 301
	DATABASE NAME SOI, MLEN, 77763510 X			

DISTR A23-SC5 1

077763510-3



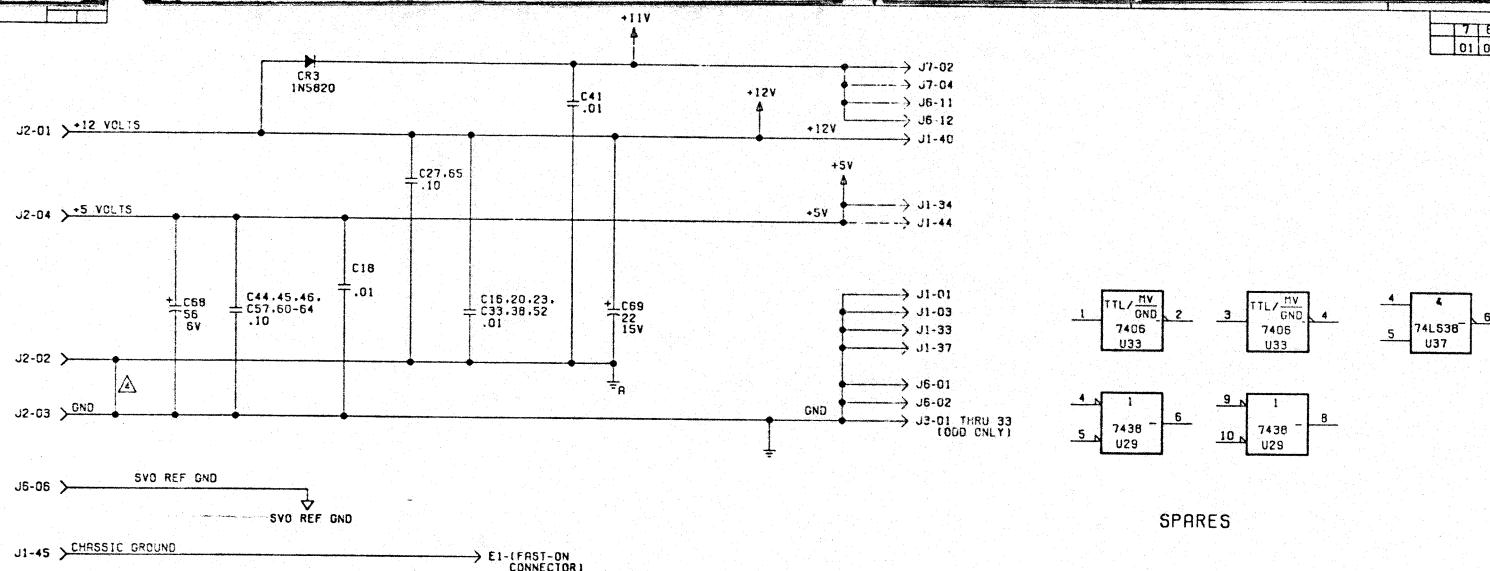
NOTES: (UNLESS OTHERWISE SPECIFIED)

- I. ASSEMBLE PER 59701127, EXCEPT PARAGRAPH 3.8.3.
 2. MAXIMUM COMPONENT HEIGHT SEE SHEET 3.
 - △ 3. MARK ASSEMBLY NO. IN APPROXIMATE LOCATION SHOWN PER 12A1099PI ON BACK (SOLDER SIDE).
 4. FOR SCHEMATIC DIAGRAM, SEE ITEM I.
 5. GENERAL WORKMANSHIP PER 1012030U.
 6. PACKAGING AND HANDLING PER CDC 1.60.010.
 7. SOLID BAND ON DIODES AND VOLTAGE REGULATORS INDICATES CATHODE END.
 - △ 8. U31 (ITEM 1B) AND R48 (ITEM 87) TO BE INSTALLED AT PWA TEST.
 - △ 9. J2 BOTTOM TAB PROTRUSION .085 MAXIMUM.
 - △ 10. REMOVE PIN 1 OF U4, U5 AND U13 (ITEM II).
 - △ 11. INSTALL SOCKETS (ITEMS 32 AND 148) BEFORE IC
 - △ 12. Q1 (ITEM 160) AND Q4 (ITEM 29) TO BE LAID DOWN WITH FLAT SIDE UP.
 13. PWA CLEANLINESS PER CDC 1.60.0H, EXCEPT PARAGRAPH 6.1.2 TO BE 15 MICROGRAMS PER SQUARE INCH MAXIMUM.
 14. THE PWA MUST NOT BE TOUCHED IN COMPONENT OR RUN AREAS. THE PWA SHOULD BE HANDLED BY THE EDGES OR CORNERS.

X05 12-09-85 T/F
 X04 11-21-85 SRG
 X03 11-13-85 T/F
 X02 11-12-85 T/F
 X01 10-23-85 T/F

MATERIAL	UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES	MAGNETIC PERIPHERALS INC.		OWN	BOB FURP	10-22-62	TITLE	PWA,	SIZE	DRAWING NUMBER	CO	REV			
		(G) SOUTHERN INFORMATION		CHG'D	Zeng Fend	10-13-62			D	77764050	9	01			
FINISH	3-PLACE 2-PLACE AMES	OKLAHOMA CITY, OKLAHOMA		ENGR											
	*	FST		WDL											
DO NOT SCALE DRAWING												SCALE	2/1	SHEET	1 OF 4
4	3	DRAWINGS PWA, WREN, .7764050		X	2	DISTR A24-ARYS I									

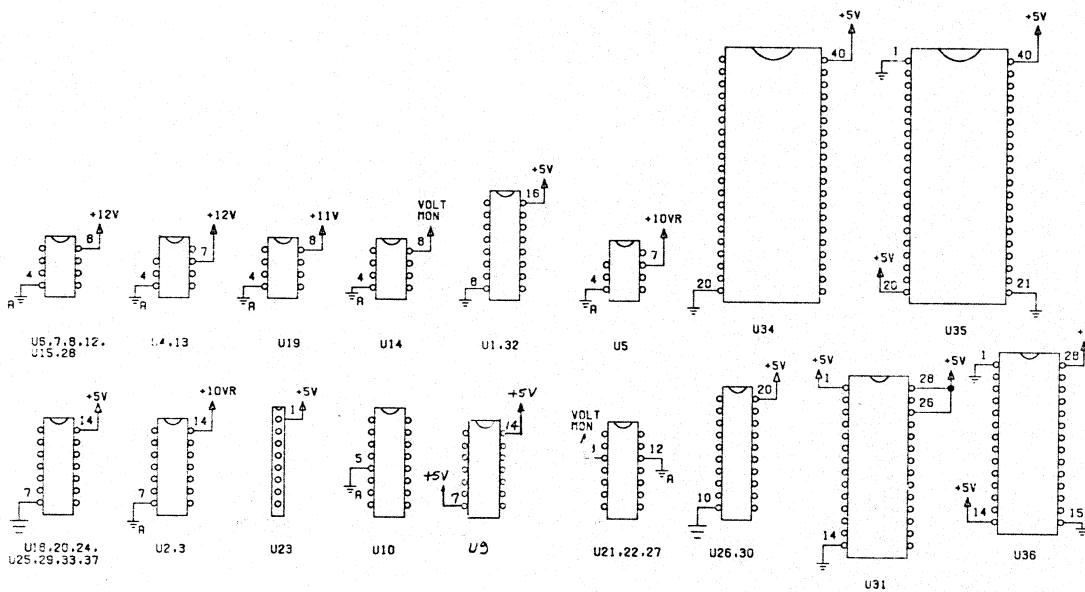
SHEET REVISION STATUS								REVISION RECORD			
7	6	5	4	3	2	1	REV	ECO	DRFT	CHG	DATE
01	01	01	01	01	01	01	01	01	01	01	RELEASED



SPARES

NOTES: (UNLESS OTHERWISE SPECIFIED)

- I. CAPACITOR VALUES ARE IN MICROFARADS. +80-20%, 50V EXCEPT ELECTROLYTIC ARE $\pm 20\%$
2. RESISTOR VALUES ARE IN OHMS. 1/8W, $\pm 5\%$
3. RESISTORS 1W AND GREATER ARE FLAME PR OFD.
4. \triangle DENOTES ANALOG GROUND.
LOGIC GROUND AND ANALOG GROUND ARE TIED TOGETHER AT THE CONNECTOR.
5. GUARD REQUIREMENTS
 \triangle GUARD WITH +2.5 VREF
 \triangle GUARD WITH SVO REF GND
 \triangle GUARD WITH +5V REF
6. R48 AND R103 GND TO BE CLOSE TO U13-3(GND).

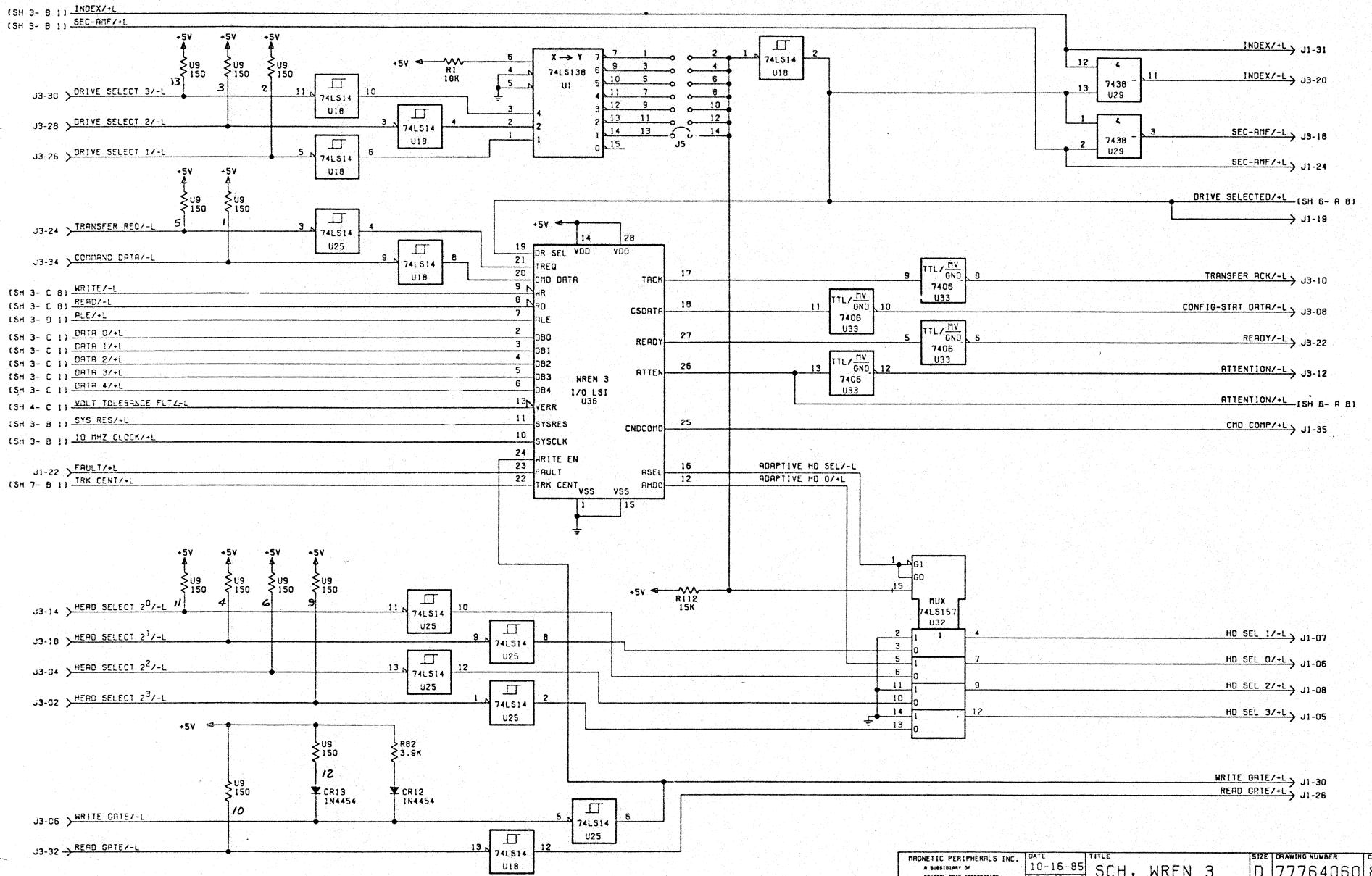


REV X05 12-09-85 *TP*
REV X04 11-21-85 SRG
REV X03 11-13-85 *TP*
REV X02 11-12-85 *TP*
REV X01 10-30-85 *TP*

MATERIAL	LESS OTHERWISE SPECIFIED	SIZE	DRAWING NUMBER
FINISH	DIMENSIONS ARE IN INCHES.	DIM	D 77764060 801
3-PLACE	VOLTS & DISTANCES	REV	REV
2-PLACE	ANGLES	DATE	10-16-85
		ENSR	10-17-85
		ENSR	
MFG		DATA BASE	SCH.WREN_7764060
DO NOT SCALE DRAWING		DATA BASE	X
LEN 3-94166		SCH.WREN_7764060	

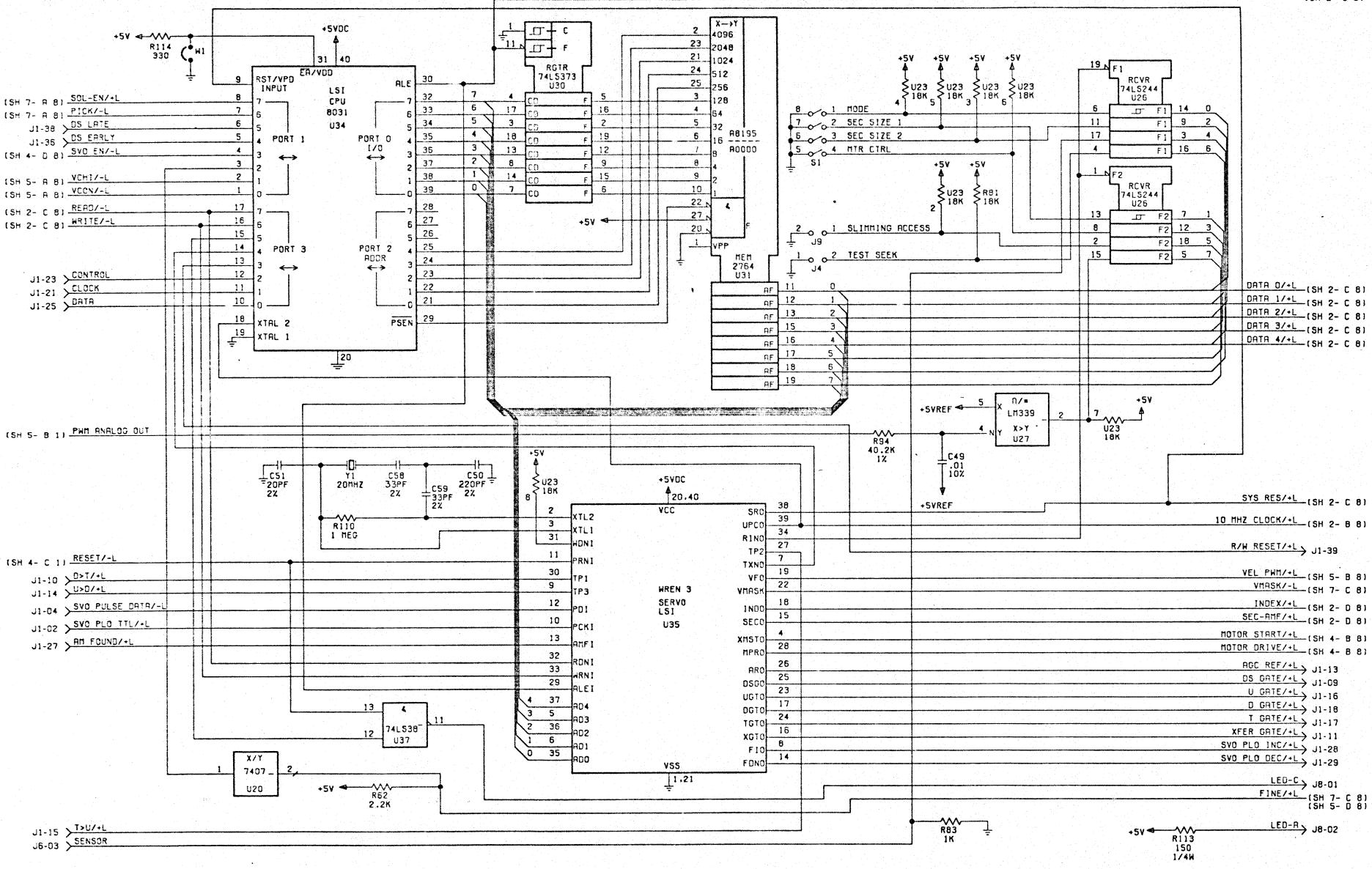
SCH
WREN 3 SERVO

SIZE D 77764060 801
SCALE NONE SHEET 1 OF 7
DISTR A24-SC5 1



MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DATE 10-16-85 DATABASE NAME SCH. WREN.77764060 X	TITLE SCH. WREN 3 SERVO	SIZE D	DRAWING NUMBER 77764060	CD REV 001
---	--	-------------------------------	-----------	----------------------------	---------------

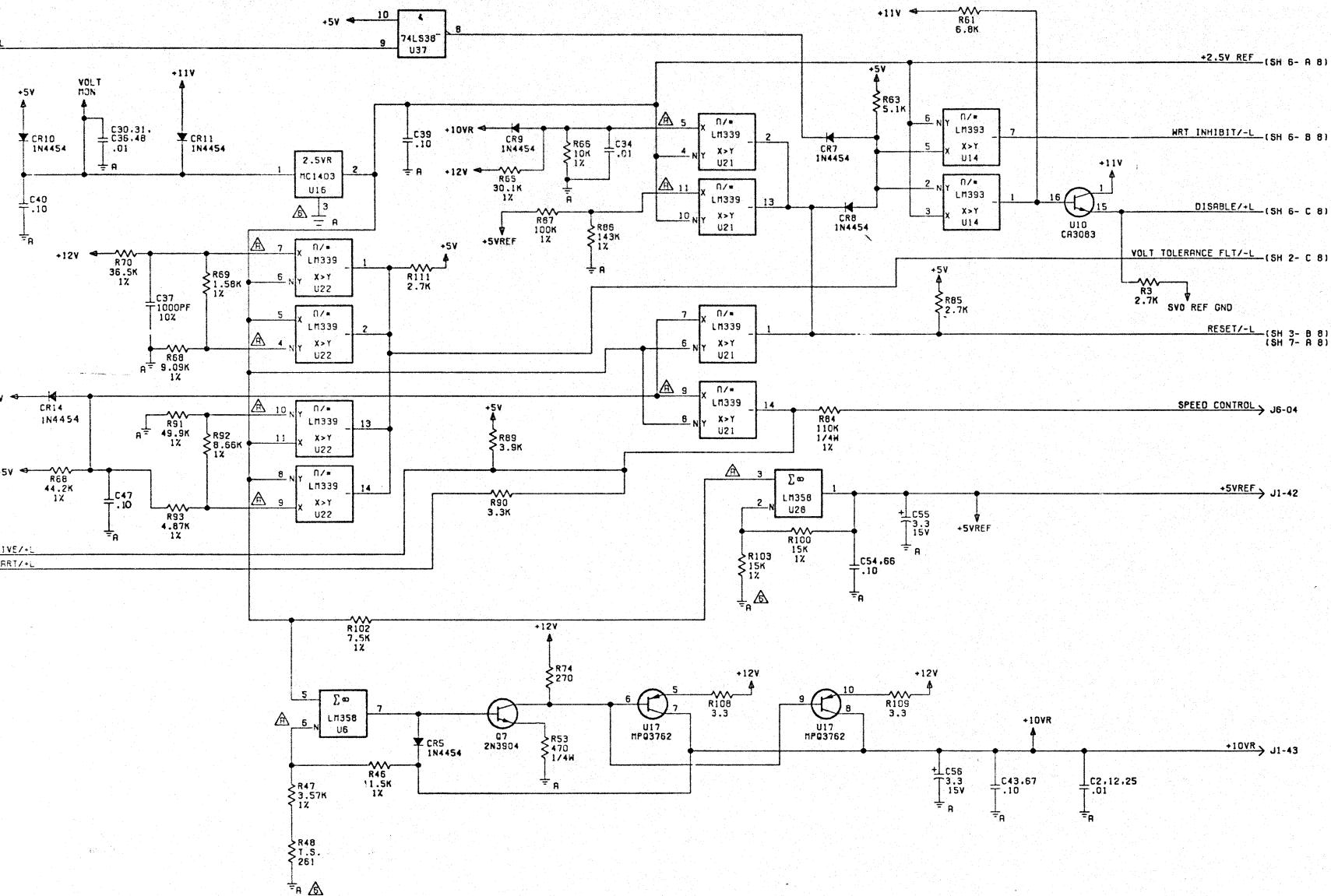
8 7 6 5 4 3 2 1 DISTRA24-SC5 1



MAGNETIC PERIPHERALS INC.		DATE	TITLE		SIZE	DRAWING NUMBER	CO	REV
A SUBSIDIARY OF	CONTROL DATA CORPORATION	10-16-85	WREN 3	SERVO	D	77764060	801	

DISTR R24-SC5 1

(SH 3- D 8) SVO EN/-L



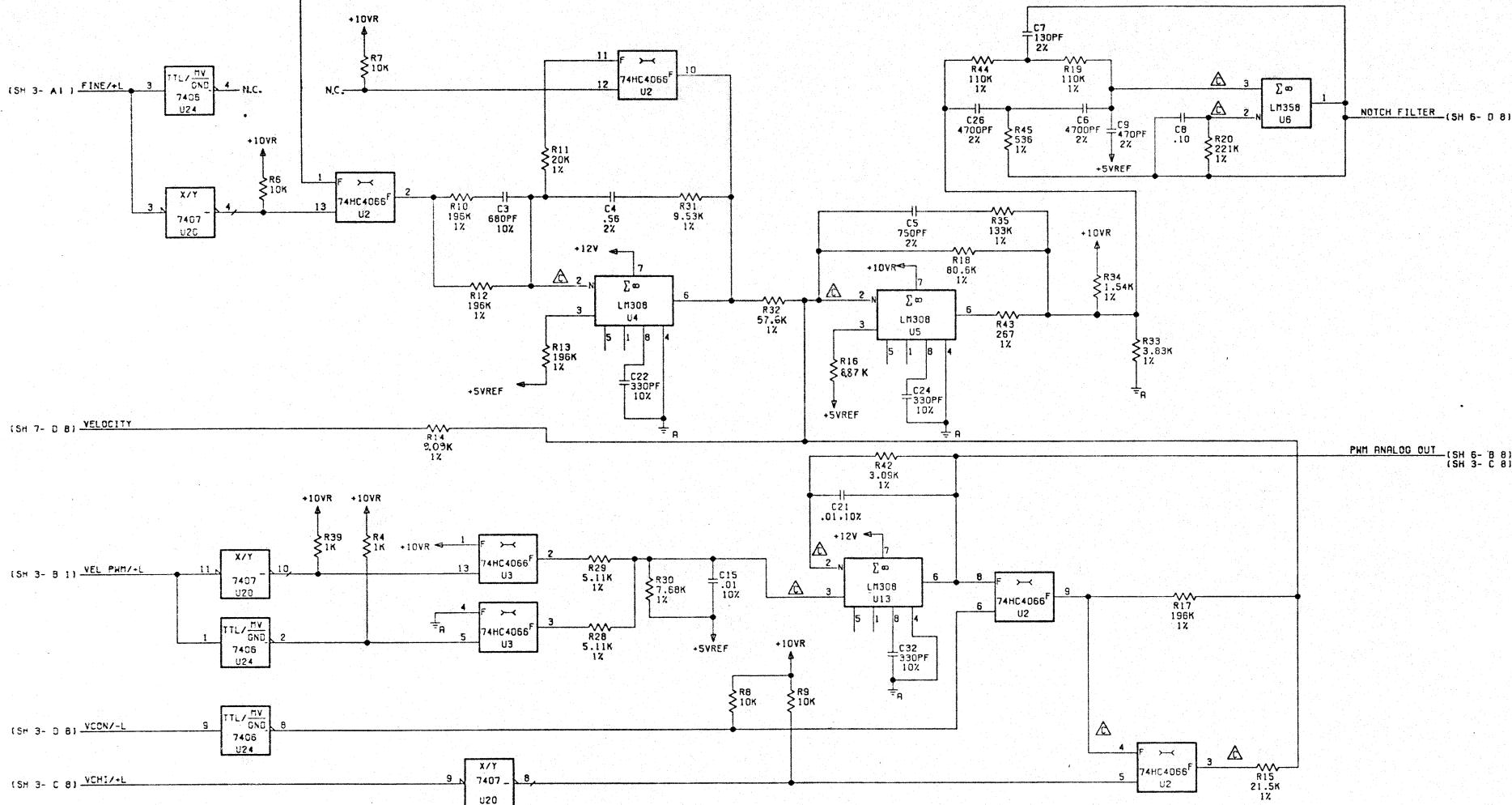
MAGNETIC PERIPHERALS INC.
A SUBSIDIARY OF
CONTROL DATA CORPORATION
OKLAHOMA CITY, OKLAHOMA

DATE 10-16-85 TITLE SCH. WREN 3
DATABASE NAME SERVO
REV. 3C14774060 X SHEET 4

SIZE D 77764060 801
DISTR A24-SC5 1

J1-12 > SPE

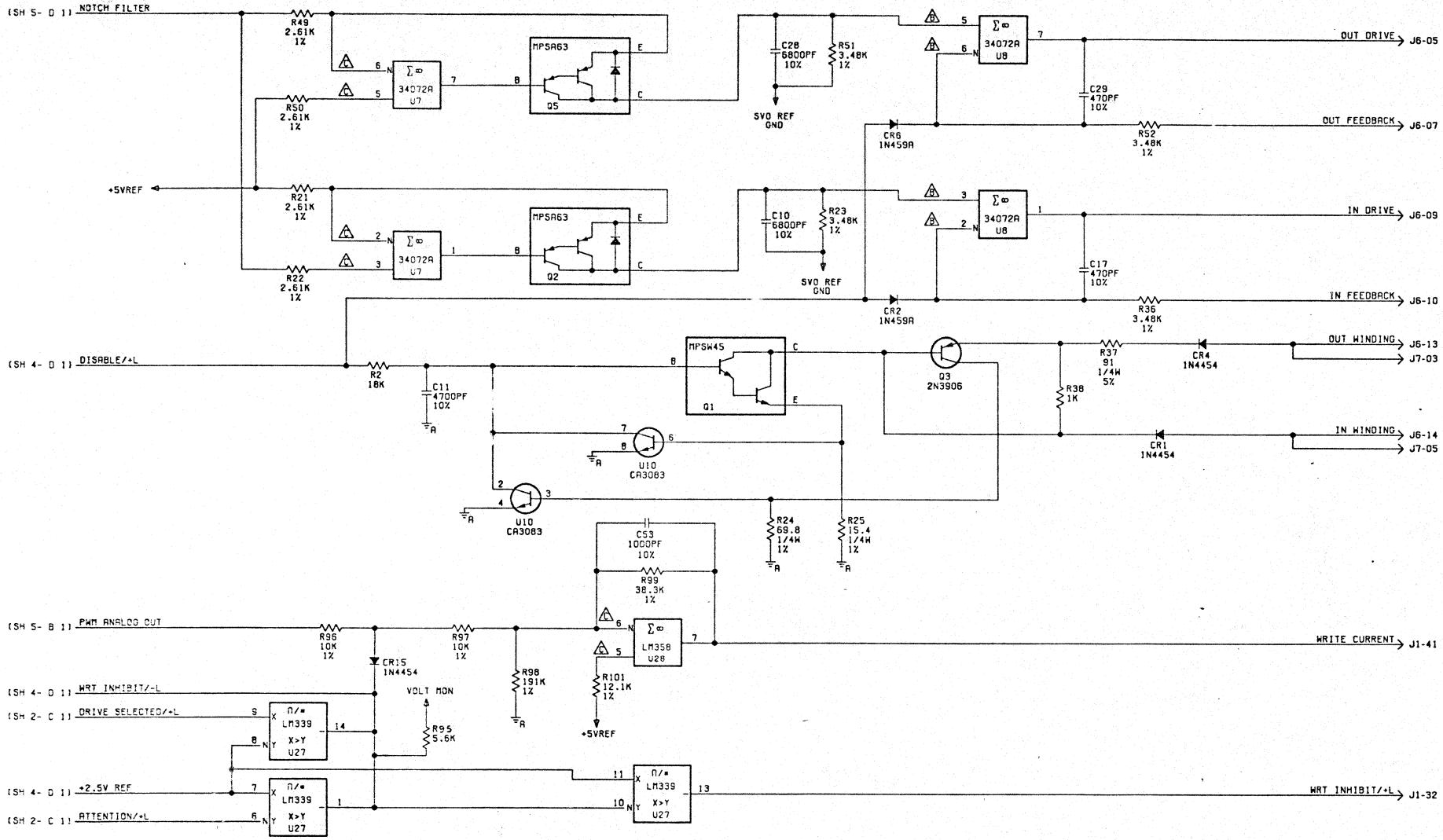
SPE (SH 7- D 8)



REV X05 12-09-85
REV X03 11-13-85

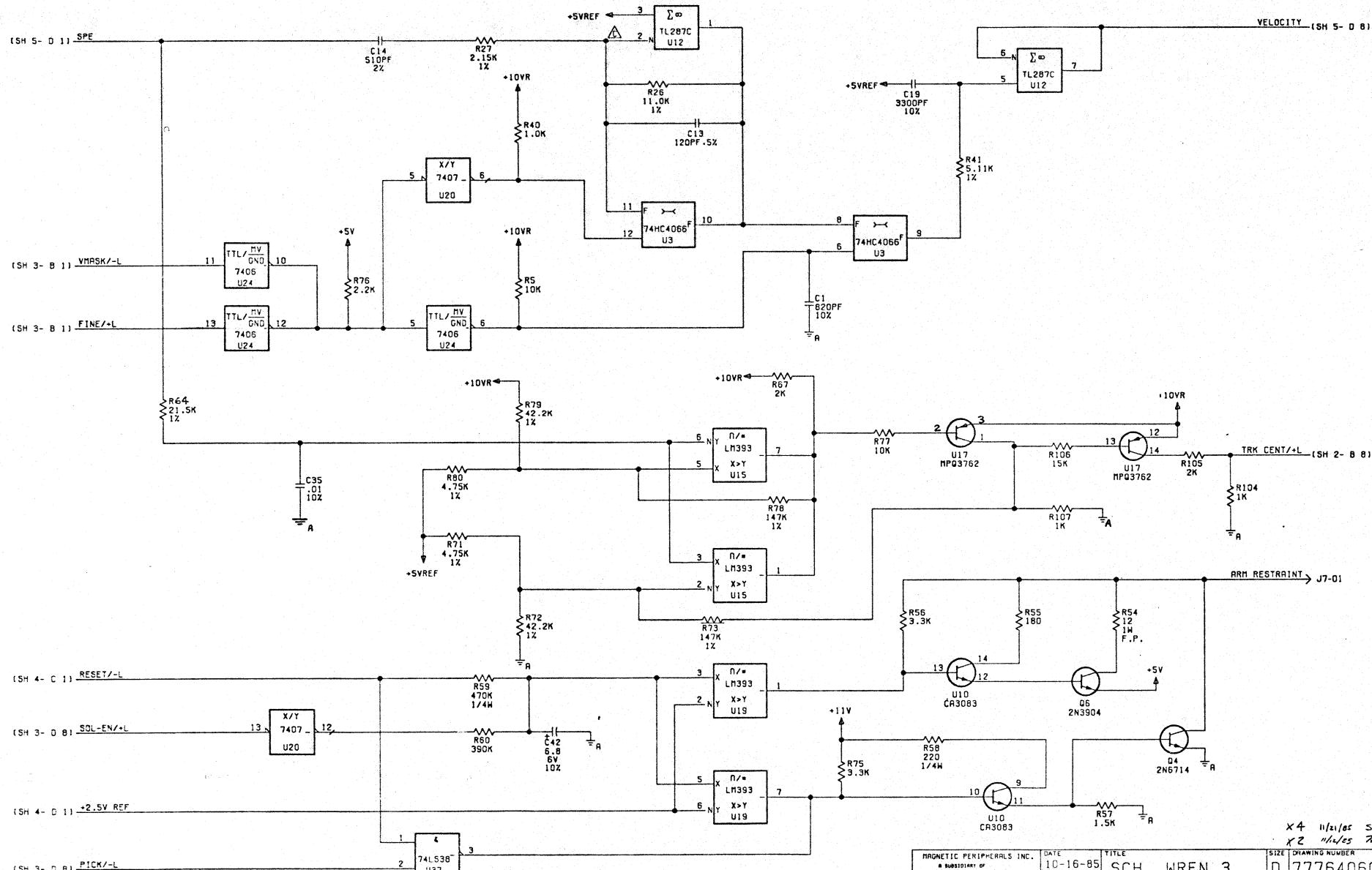
MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DATE 10-16-85 DATABASE NAME MPC-77764060	TITLE SCH, WREN 3 SERVO	SIZE D DRAWING NUMBER 77764060 CO/REV 801
			Sheets 5

DISTR A24-SC5 1



IRONMATIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DATE 10-16-85	TITLE SCH. WREN 3 SERVO	SIZE D	DRAWING NUMBER 77764050	CD REV 801
				X	
					SHEET 6

8 7 6 5 4 3 2 1 DISTR A24-SC5 I



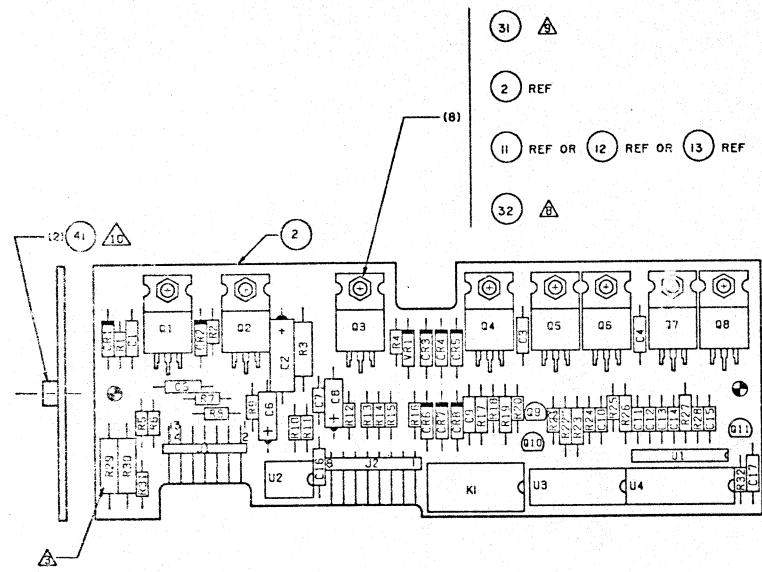
MAGNETIC PERIPHERALS INC.
A SUBSIDIARY OF
CONTROL DATA CORPORATION
OKLAHOMA CITY, OKLAHOMA
SCHEMATIC NO. 77764060 X

DATE 10-16-85 TITLE SCH. WREN 3
DRAWING NUMBER D 77764060 801
SHEET 7F

x4 11/21/85 SRG
x2 miles

SIZE D 77764060 801
REV C
DISTR A24-SC5 1

SHEET REVISION STATUS		REVISION RECORD		
REV	ECO	REV	CWD	DATE
O1	CLASS C PRE-RELEASED			



RES	PL ITEM
R1	28
R2	28
R3	25
R4	38
R5	28
R6	39
R7	28
R8	38
R9	34
R10	39
R11	29
R12	28
R13	38
R14	38
R15	26
R16	39
R17	30
R18	28
R19	30
R20	33
R21	28
R22	30
R23	30
R24	28
R25	28
R26	30
R27	30
R28	28
R29	24
R30	24
R31	39
R32	38

CAP	PL ITEM
C1	20
C2	19
C3	21
C4	21
C5	20
C6	43
C7	35
C8	40
C9	21
C10	42
C11	42
C12	42
C13	42
C14	42
C15	42
C16	21
C17	21

TSTR	PL ITEM
Q1	11
Q2	11
Q3	13
Q4	12
Q5	13
Q6	12
Q7	13
Q8	12
Q9	10
Q10	14
Q11	14

DIO	PL ITEM
CR1	15
CR2	15
CR3	16
CR4	16
CR5	16
CR6	16
CR7	16
CR8	16

IC	PL ITEM
U1	9
U2	6
U3	7
U4	5

VOLT REG	PL ITEM
VR1	36

CONN	PL ITEM
J1	22
J2	23

NOTES: (UNLESS OTHERWISE SPECIFIED)

1. ASSEMBLE PER 5970127, EXCEPT PARAGRAPH 3.8.3.
2. MAXIMUM COMPONENT HEIGHT 0.25, EXCEPT KI IS 0.40.
3. MARK ASSEMBLY NO. BACK SIDE IN APPROXIMATE LOCATION SHOWN PER 12A1099PI.
4. FOR SCHEMATIC DIAGRAM, SEE ITEM I.
5. GENERAL WORKMANSHIP PER 10120300.
6. PACKAGING AND HANDLING PER CDC 1.60.010.
7. SOLID BAND ON DIODES AND VOLTAGE REGULATORS INDICATES CATHODE END.
8. TORQUE 3.5 - 4.0 IN/LBS BEFORE SOLDERING. AFTER INITIAL TIGHTENING, THE TORQUE MAY RELAX TO A MINIMUM OF 2.0 IN/LBS.
9. STUD (ITEM 3) PROTRUSION ON BACK (SOLDER SIDE) 0.03 MAXIMUM AFTER FLOW SOLDER.
10. INSTALL STANOFF (ITEM 4) ON BACK (SOLDER SIDE) AFTER FLOW SOLDER.

101 10/11/87

MATERIAL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	MAGNETIC PERIPHERALS INC.	OWN: SUSIE EVANS 10-18-85 TITLE: PWA, FINISH: 3-PLACE 2-PLACE ANODES 69 CONTROL DATA CORPORATION DO NOT SCALE DRAWING 4 FIRST REN III	SIZE: DRAWING NUMBER: D 77774070 501 REV: CO: 1
CHKO:		ENGR:		
ENGR:		MFG:		
MFG:		DATA BASE: PWB.REN.77774090 X	SCALE: NONE	SHEET: 1 OF 1
			DISTR: R24-HYS 1	

8		
---	--	--

7

6

5

4

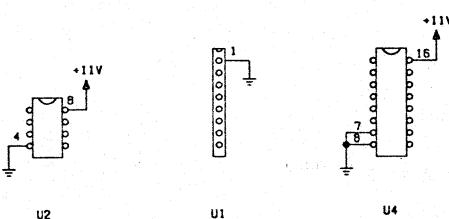
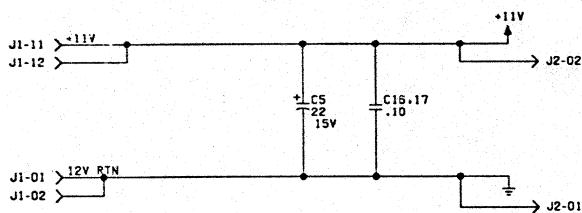
3

2

1

CD	STATUS	REVISION
----	--------	----------

SHEET REVISION STATUS			REVISION RECORD			
3	2	1	REV	ECB	OFFT	CMB
01	01	01	01	01	01	01



NOTES: (UNLESS OTHERWISE SPECIFIED)

1. CAPACITOR VALUES ARE IN MICROFARADS. 50V. +80-20%. EXCEPT ELECTROLYTIC ARE ±20%
2. RESISTOR PACK (U1) IS ±2%
3. RESISTOR VALUES ARE IN OHMS. 1/8W. ±5%
4. PHASE AND SENSOR SEQUENCE IS A,B,C. SENSOR DECODE SEQUENCE IS 5,1,3,2,6,4 FOR PHASE DECODES OF AB,AC,BC,BA,CA,CB.
- △ 5. THE SOURCE OF SVO REF GND IS AT THE JUNCTION OF R27 AND R28 WHERE THEY ARE TIED TO GROUND

D 77774080-4

MATERIAL FINISH	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.		NETWEIGHT OF CONTROLLING DRAWING OKLAHOMA CITY, OKLAHOMA	DRAWING NO. CHKO ENGR	10-24-82 WREN III	TITLE SCH. WREN 3 MOTOR CONTROL	SIZE D 77774080 REV 4 01
	TOLERANCES 3-PLACE	2-PLACE ANGLES					
DO NOT SCALE DRAWING		MFG		DATA BASE SCH.WREN.77774080		SCALE NONE	SHEET 1 of 3

8

7

6

5

4

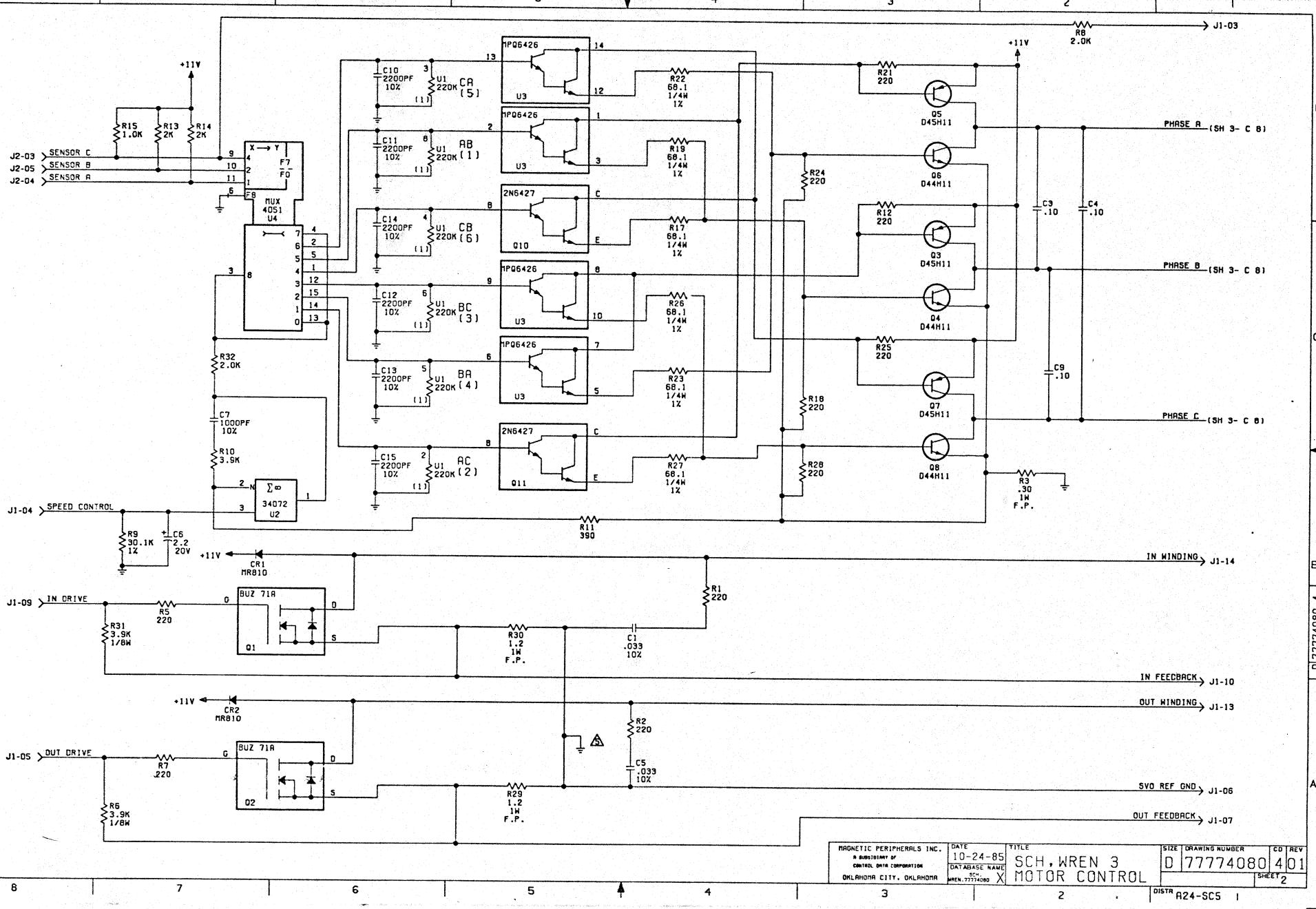
3

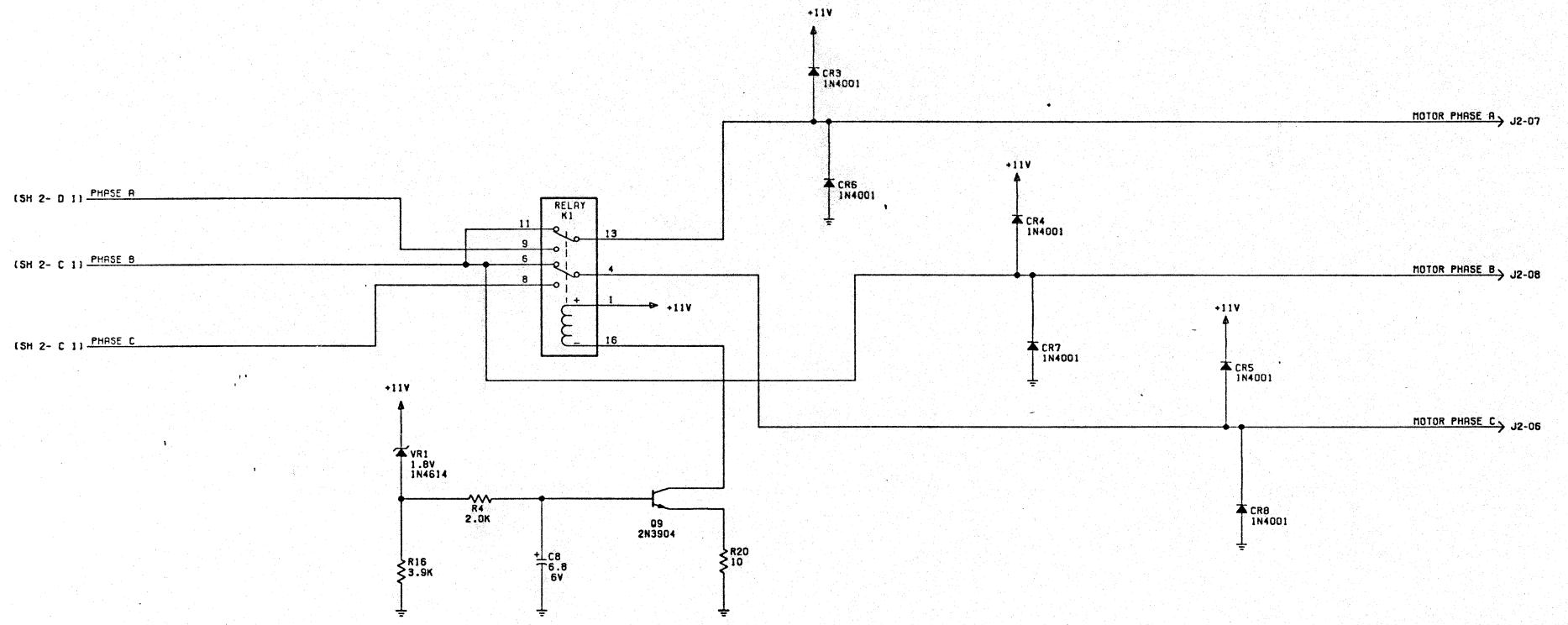
2

1

X01 10/11/85

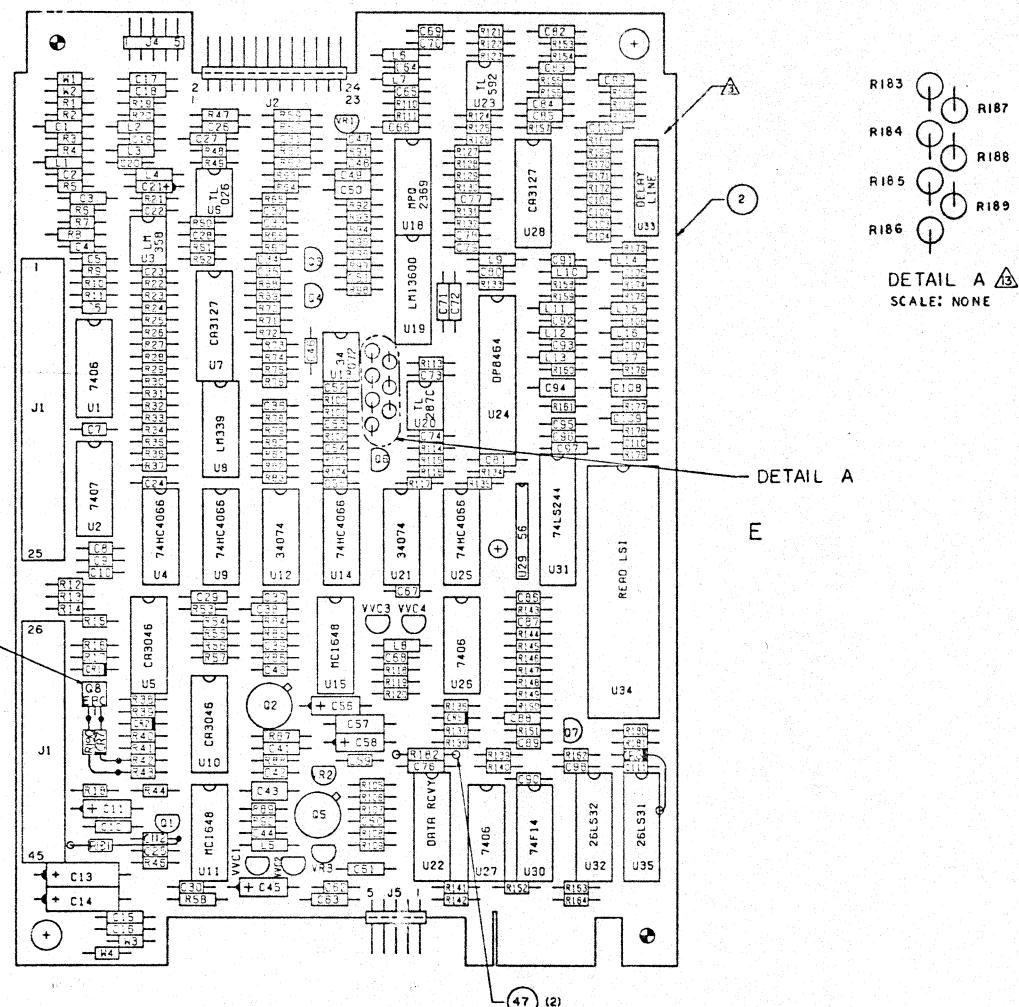
DIST R24-SC5 1



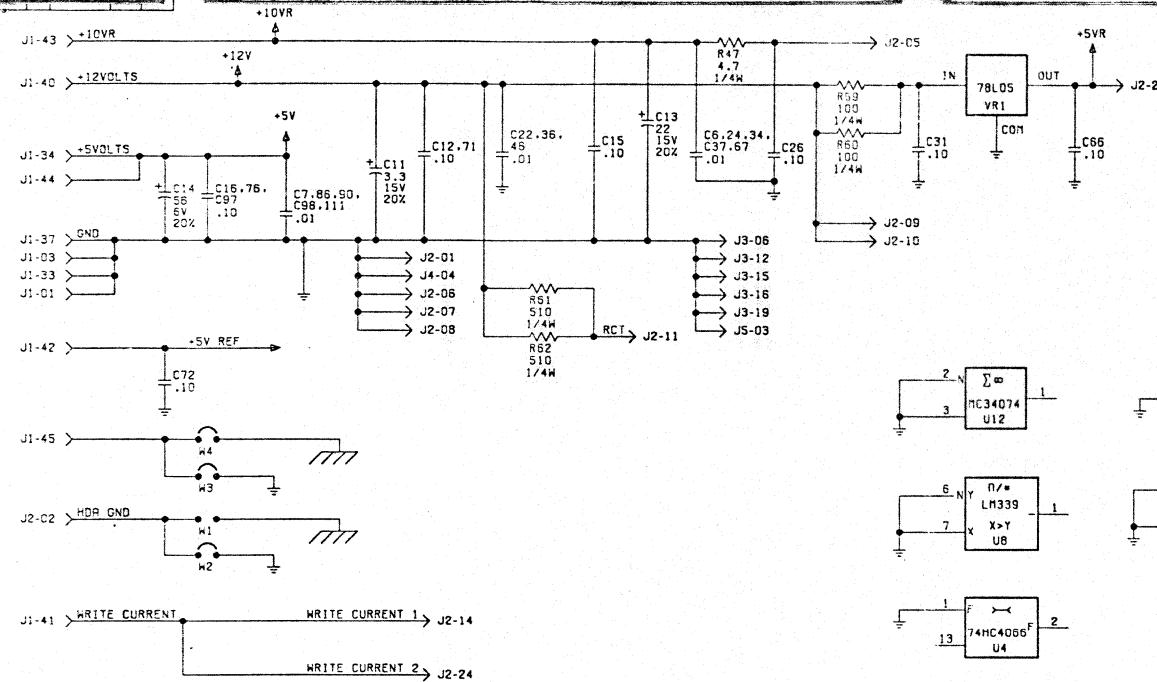


D 77774080-4

MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA		DATE 10-24-85	TITLE SCH. WREN 3 DATABASE NAME WREN.7774080	SIZE D	DRAWING NUMBER 77774080	CD REV 401
			X MOTOR CONTROL			SHEET 3 F



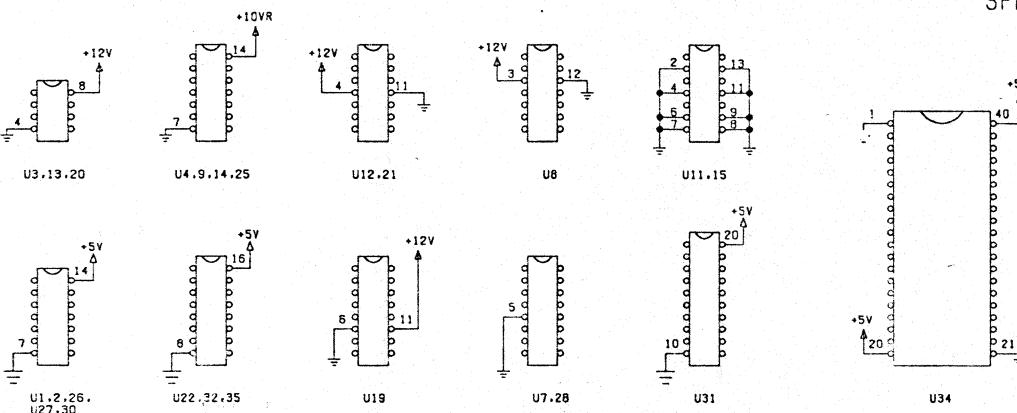
9	6	7	5	4	3	2	1	KEY	ECN	DRFT	CWD	DATE
01	01	01	01	01	01	01	01	ELASS C				



NOTES: (UNLESS OTHERWISE SPECIFIED)

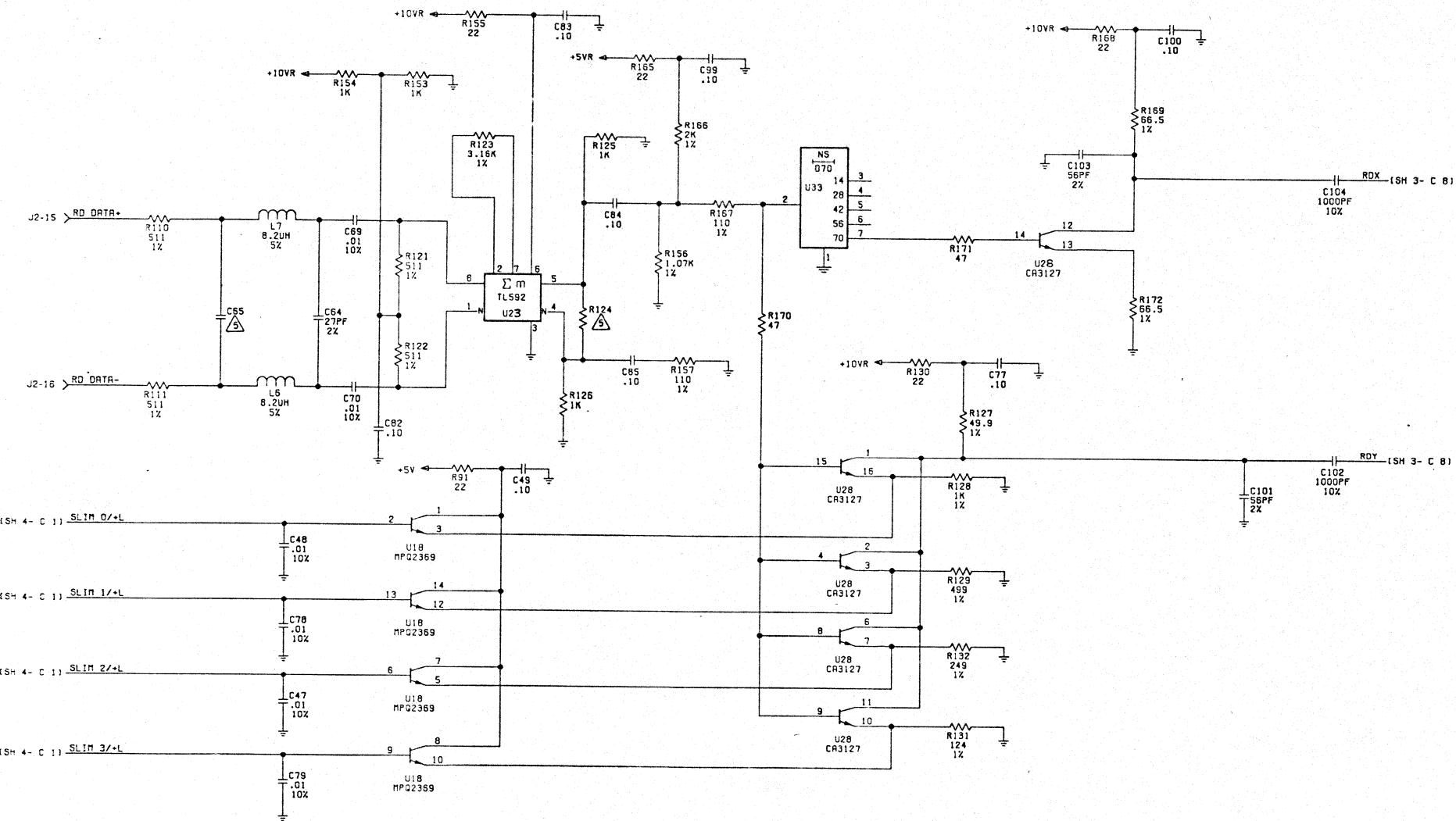
1. CAPACITOR VALUES ARE IN MICROFARADS, +80-20%, 50V EXCEPT ELECTROLYTIC ARE ±20%.
2. RESISTOR VALUES ARE IN OHMS, 1/8W, ±5%.
3. RESISTORS 1W AND GREATER ARE FLAME PROOF.
4. GUARDING REQUIREMENTS.
 - △ GUARD WITH GROUND
 - △ GUARD WITH +5V REF
 - △ GUARD WITH VOLTAGE DIVIDER
5. R45, R124, C65 NOT USED

SPARES

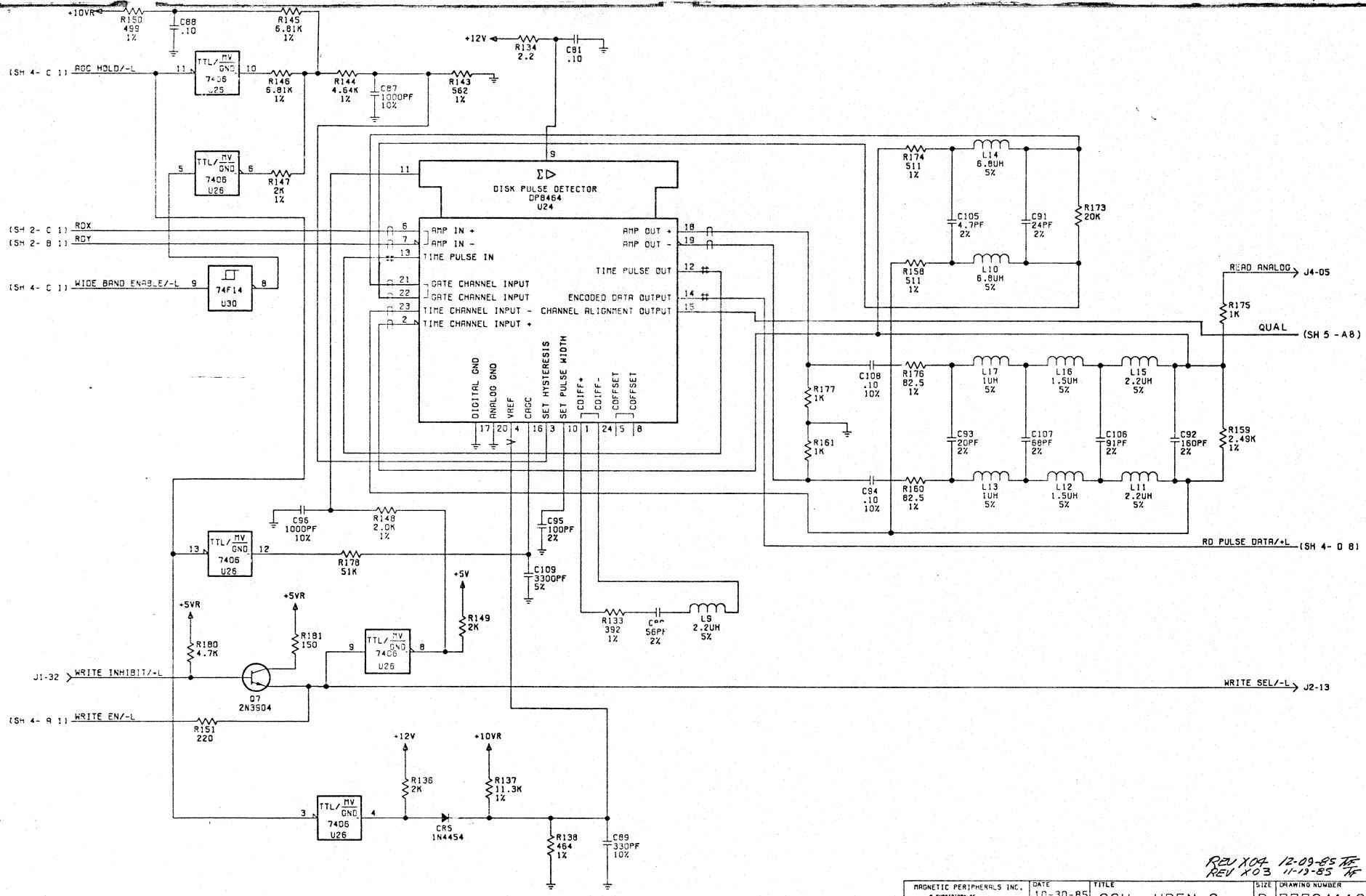


REV X04 12-09-85
REV X03 11-19-85
REV X02 11/12/85
REV X01 11/5/85

MATERIAL	UNLESS OTHERWISE SPECIFIED DIMENS & AMT IN INCHES. TO C. 3-PLACE 2-PLACE ANGLES	MANUFACTURER	OWN/IRON NO.	10-30-85	TITLE	SCH.	SIZE	DRAWING NUMBER	CO	REV
INSTR	CD A SUBSIDIARY OF CONTROL DATA CORPORATION	ENG'D	4-5-85		WREN III-94166		D	77764110	1	01
DO NOT SCALE DRAWING		TYPE	DATA BASE	SHEET		SCALE	None	SHEET	1	of 9
		25%	SCH.WREN.77764110	X		DISTR	A24-SC5			



REV X02 11-12-85 TM

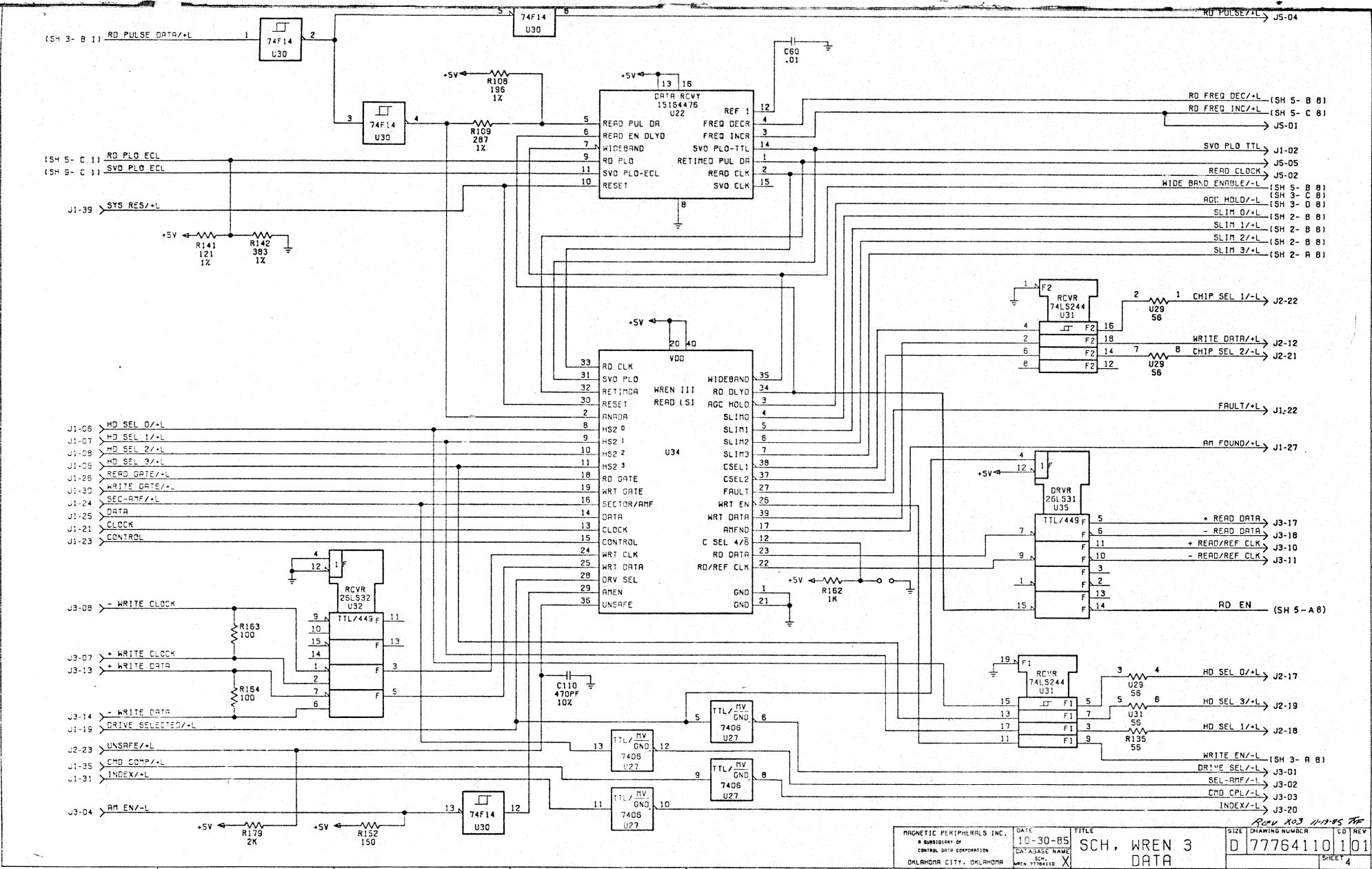


REV X04 12-09-85
REV X03 11-19-85

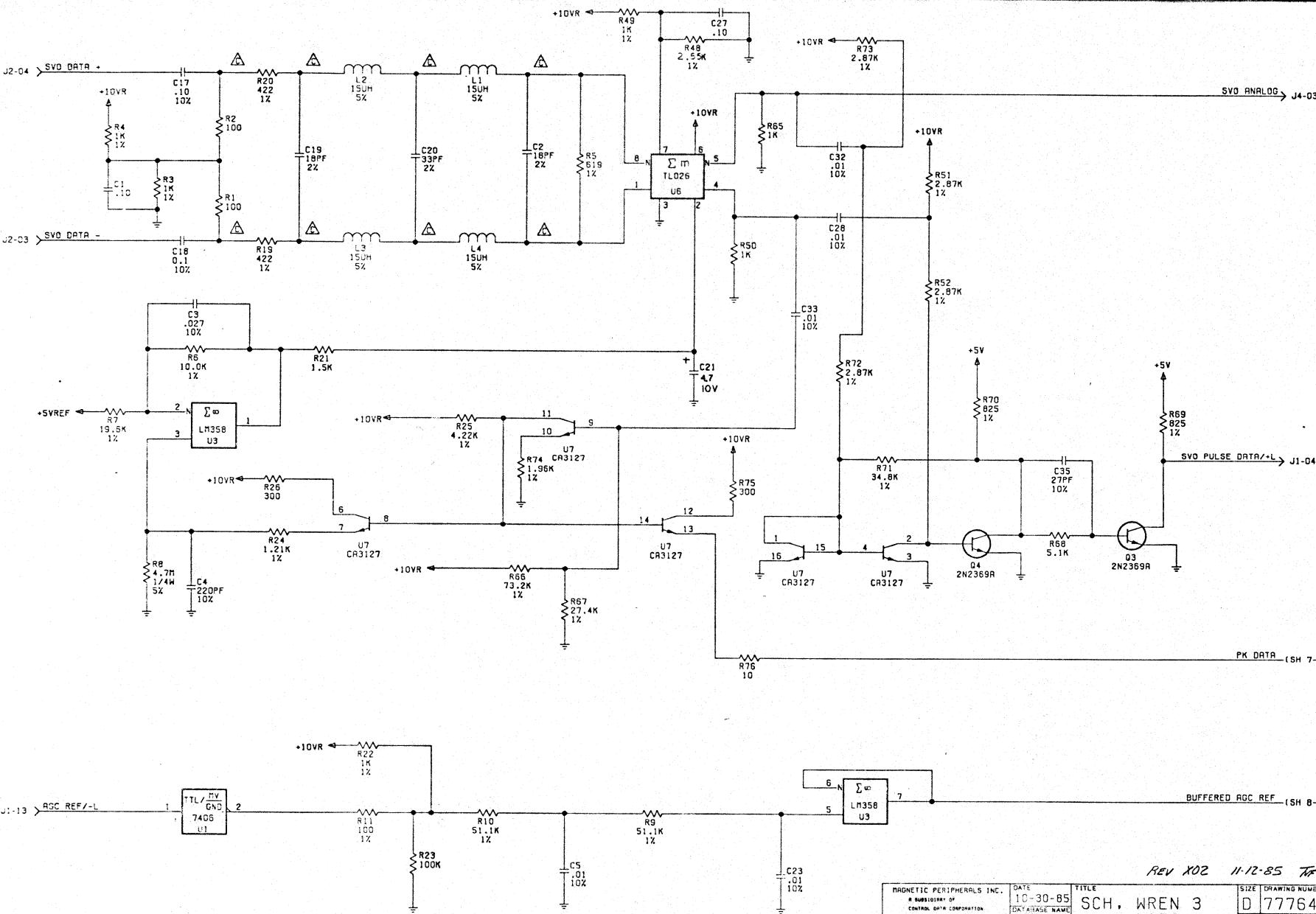
MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA MCN:77764110	DATE 10-30-85 DATABASE NAME SCH, WREN 3 MCN:77764110	TITLE SCH, WREN 3 DATA	SIZE D	DRAWING NUMBER 77764110	CO REV 101
---	--	------------------------------	-----------	----------------------------	---------------

SHEET 3

8 7 6 5 4 3 2 1 DIST R24-SC5 I

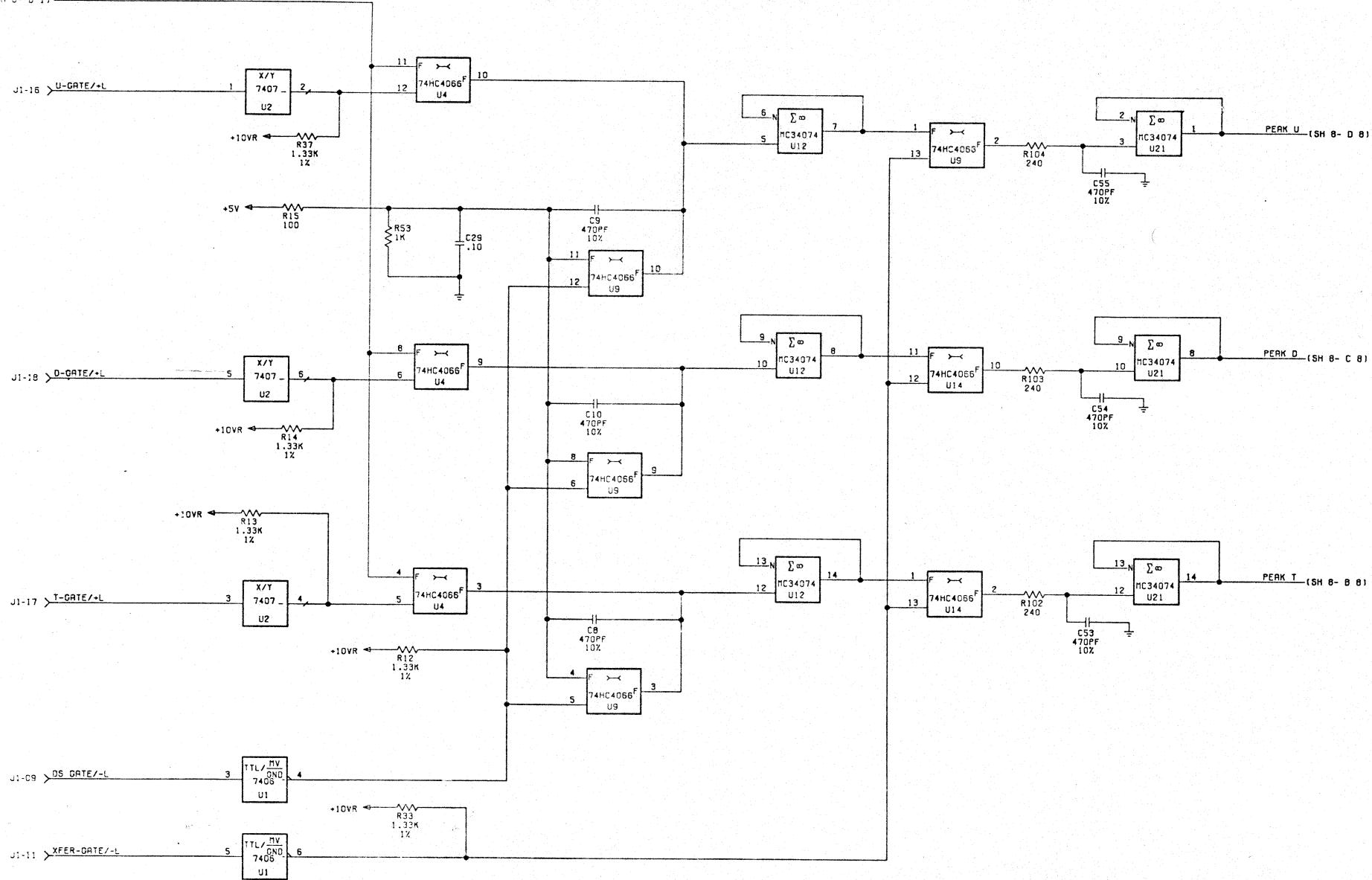


MAGNETIC PERIPHERALS INC.		DATE	TITLE	SIZE	DRAWING NUMBER	COPY REV
# SUBSIDIARY OF COMPAQ DATA CORPORATION		10-30-85	SCH. WREN 3	D	77764110	101
OKLAHOMA CITY, OKLAHOMA		DATA SHELL	DATA			
						SHEET 1



REV X02 11-12-85 TR
 MAGNETIC PERIPHERALS INC.
 A SUBSIDIARY OF CONTROL DATA CORPORATION
 OKLAHOMA CITY, OKLAHOMA
 DATE 10-30-85
 DRAWING NUMBER SCH. WREN 3
 SHEET 6
 SIZE D 77764110 101
 CO REV

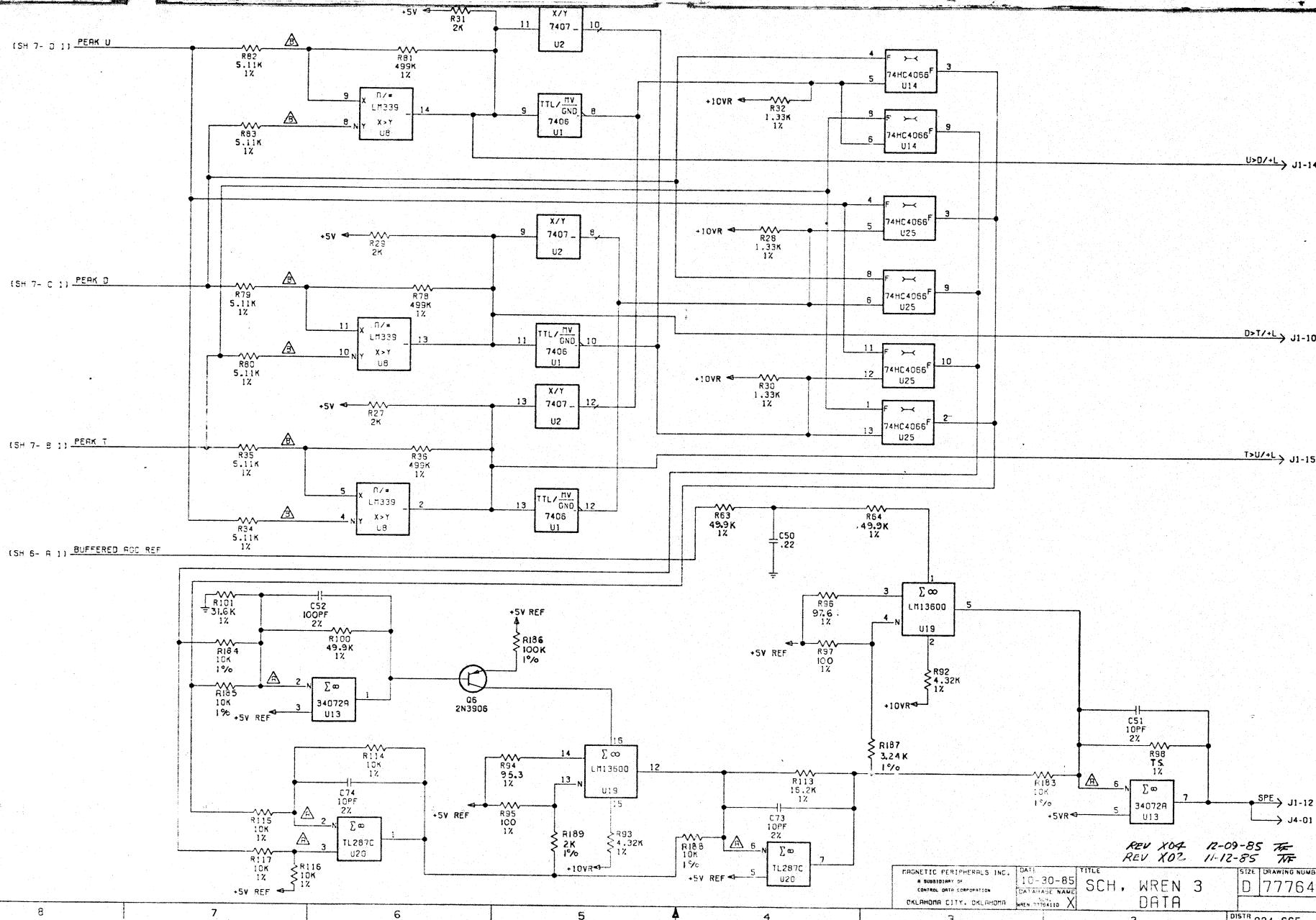
DISTR R24-SC5 I



MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF CONTROL DATA CORPORATION OKLAHOMA CITY, OKLAHOMA	DATE 10-30-85	TITLE SCH. WREN 3 DATA	SIZE D	DRAWING NUMBER 77764110-1	CD REV 01
---	------------------	------------------------------	-----------	------------------------------	--------------

SHEET 7

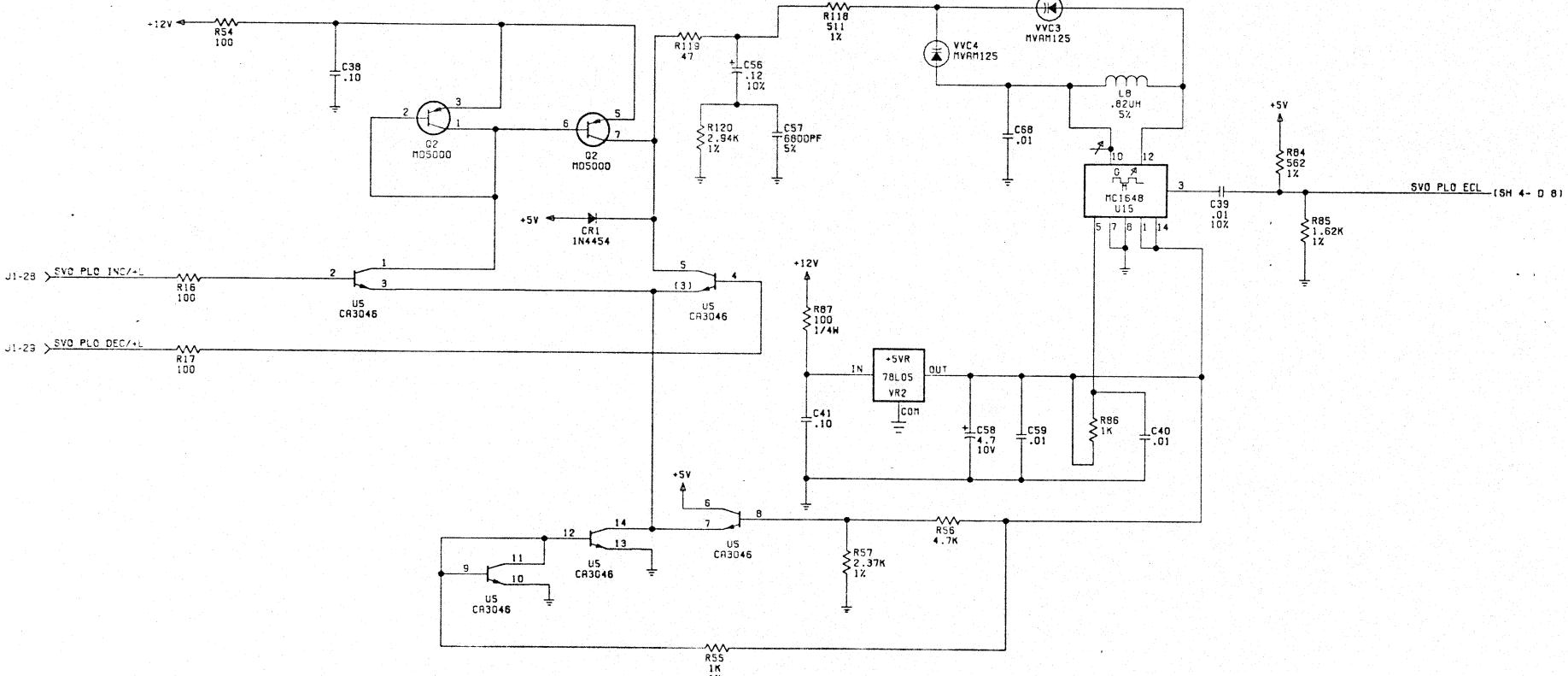
DISTR R24-SC5 1



REV X04 12-09-85 TR
REV X02 11-12-85 TM

SIZE DRAWING

MAGNETIC PERIPHERALS INC.		DATE	TITLE	SIZE	DRAWING NUMBER	CD	REV
A SUBSIDIARY OF CONTROL DATA CORPORATION		10-30-85	SCH. WREN 3	D	77764110	101	
OKLAHOMA CITY, OKLAHOMA		DRAWING NAME	X				
		WREN 1755410	DATA				



MAGNETIC PERIPHERALS INC. A SUBSIDIARY OF COMTECH DATA CORPORATION OKLAHOMA CITY, OKLAHOMA		DATE 10-30-85	TITLE SCH. WREN 3 DATA	SIZE D	DRAWING NUMBER 77764110	CO REV 101
		CATALOGUE NAME WREN-1764110 X				

8 7 6 5 4 3 2 Distr R24-SC5 I 9 F