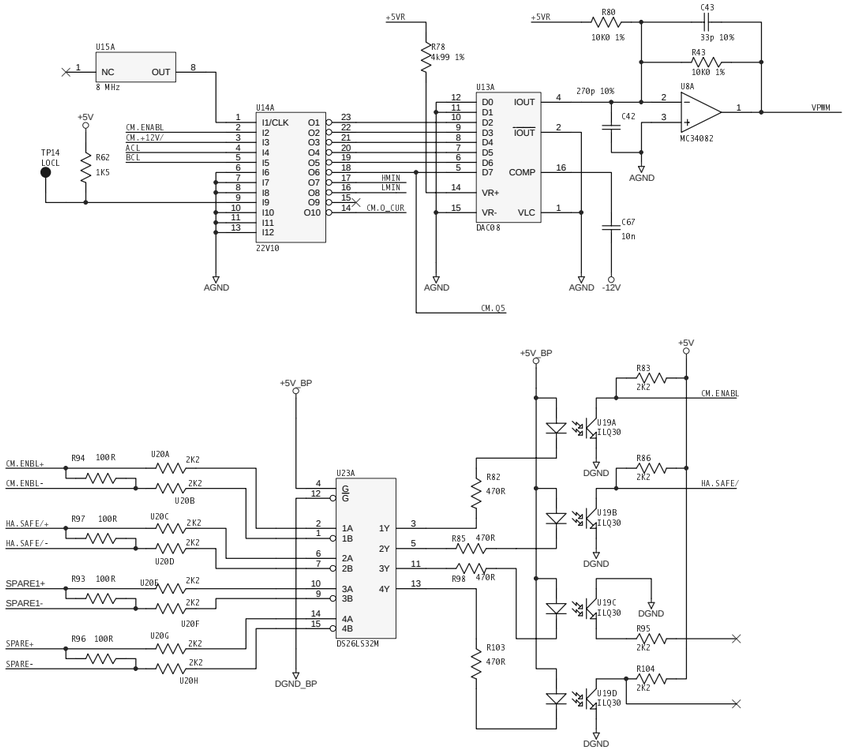
STEPPER MOTOR DRIVE
SD1312CA2.SCH

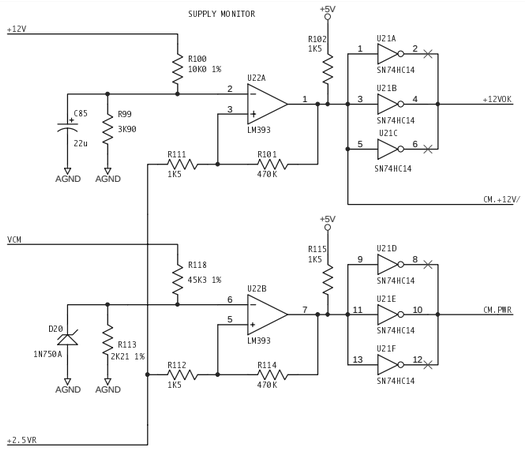
CARRIAGE MOTOR PSU + REF
SD1312CA3.SCH

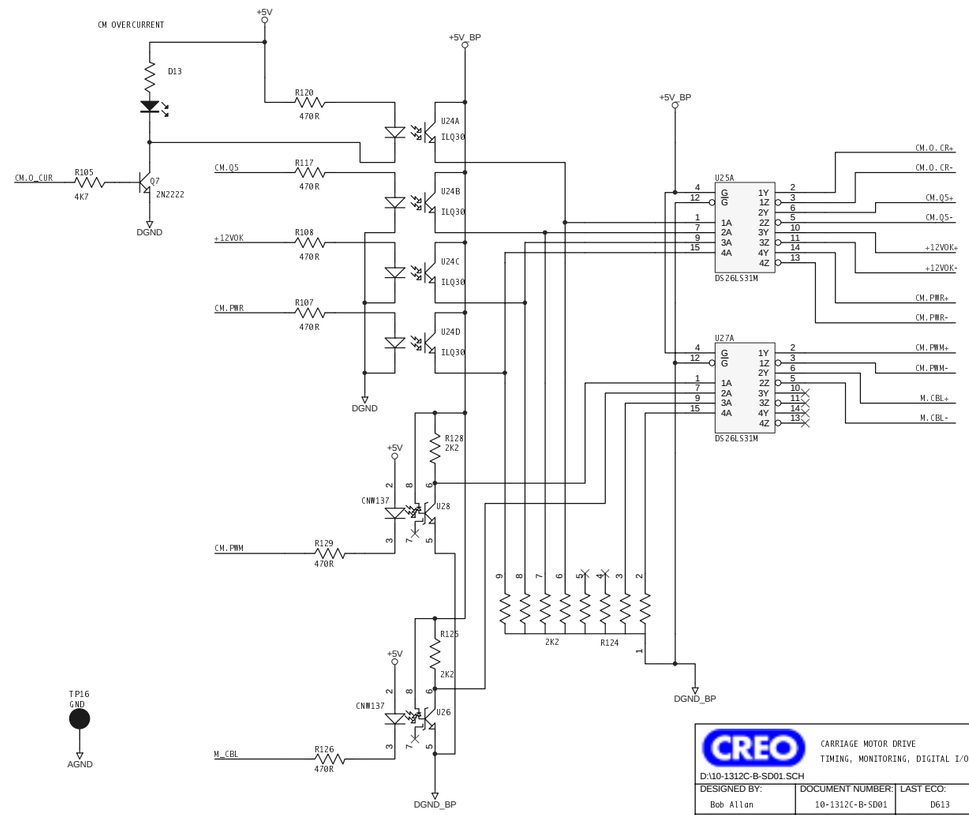
SUPPLY MONITOR

MASTER TIMING

CM OVERCURRENT



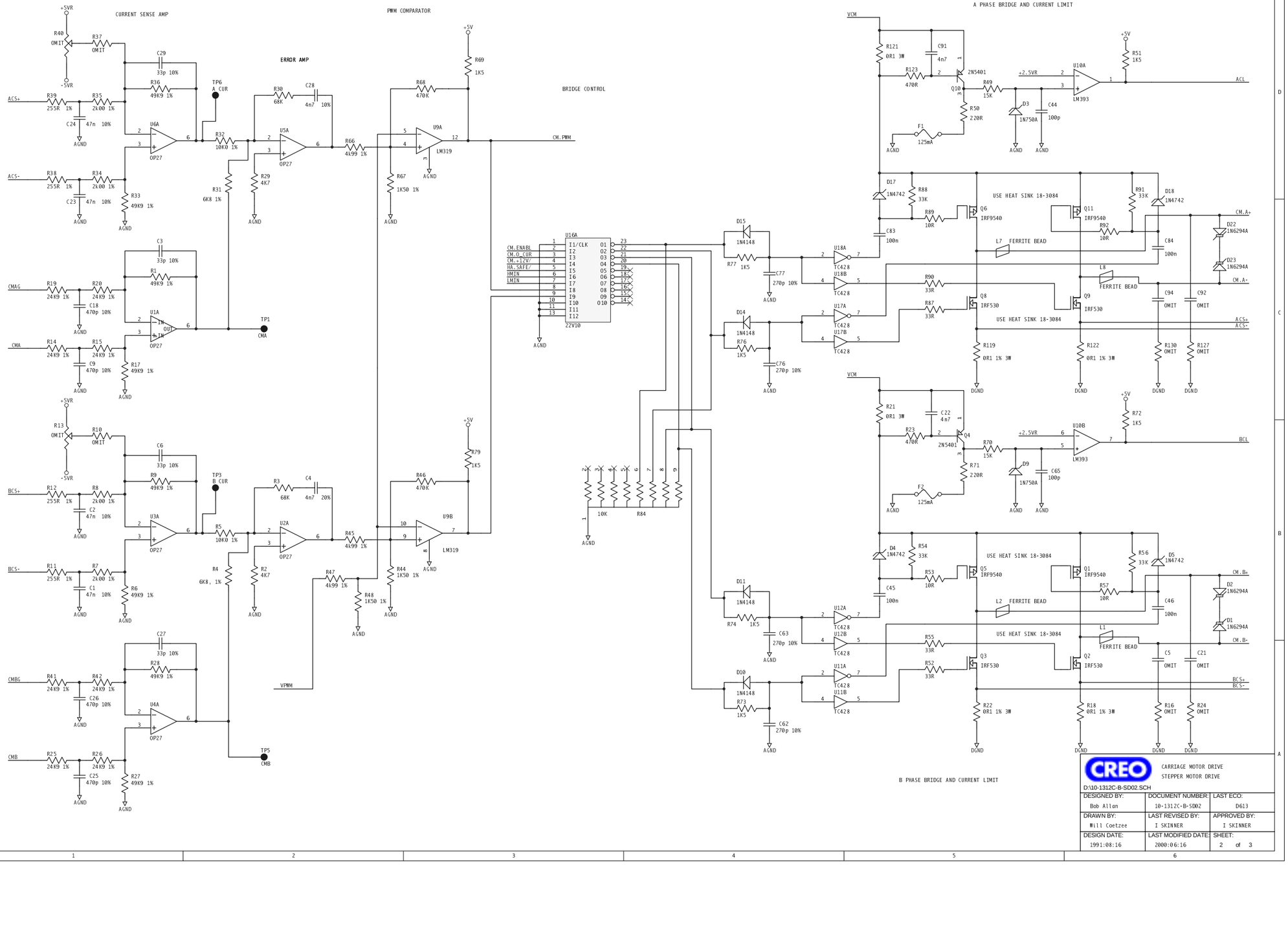


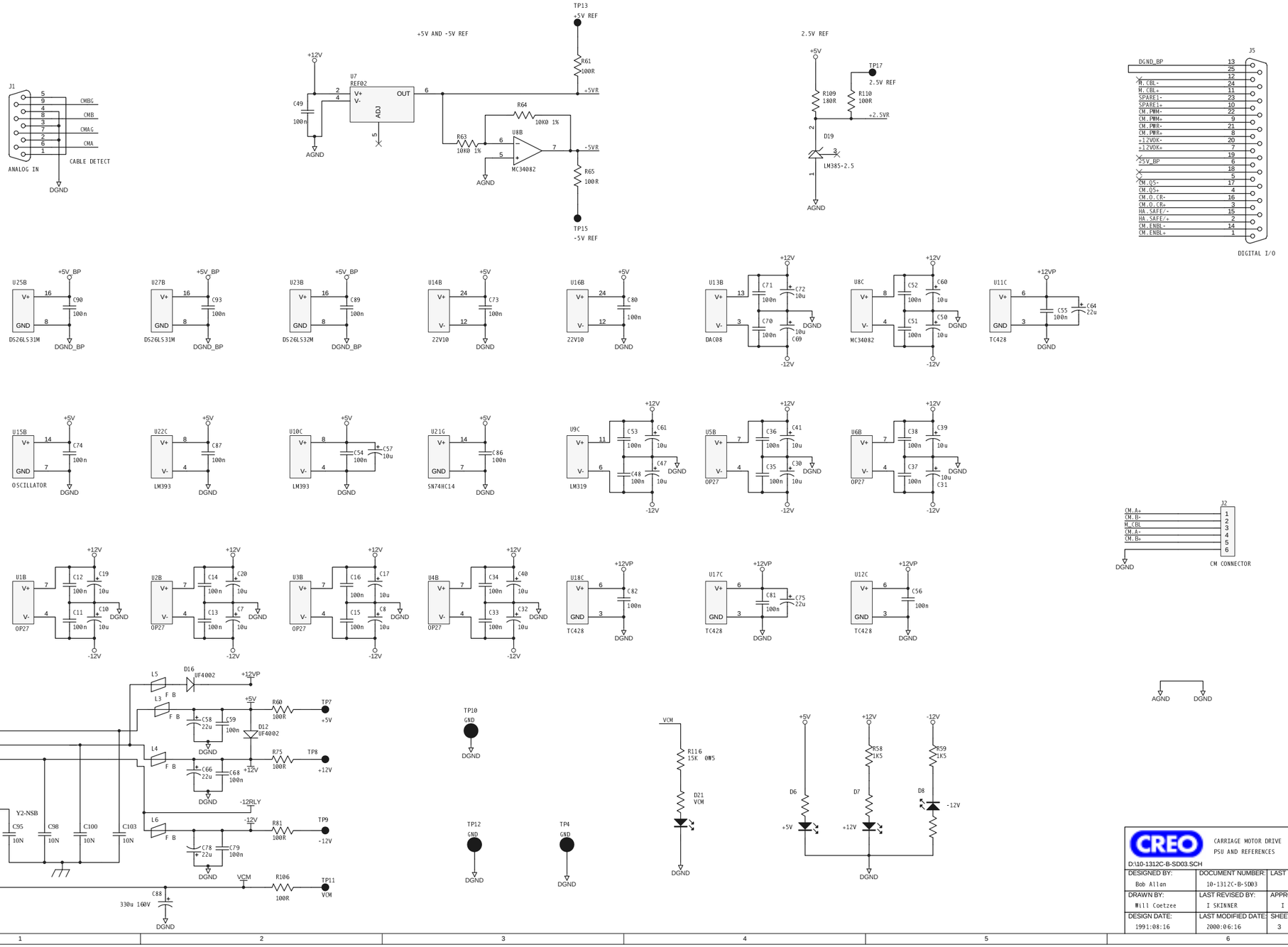


TP2 GND AGND

TP16 GND AGND

CREO — CARRIAGE MOTOR DRIVE TIMING, MONITORING, DIGITAL I/O		
D:\10-1312C-B-SD01.SCH		
DESIGNED BY: Bob Allan	DOCUMENT NUMBER: 10-1312C-B-SD01	LAST ECO: D613
DRAWN BY: Will Coetzee	LAST REVISED BY: I SKINNER	APPROVED BY: I SKINNER
DESIGN DATE: 1991:08:16	LAST MODIFIED DATE: 2000:06:16	SHEET: 1 of 3


CURRENT SENSE AMP
PWM COMPARATOR
ERROR AMP
BRIDGE CONTROL
A PHASE BRIDGE AND CURRENT LIMIT
B PHASE BRIDGE AND CURRENT LIMIT
+5VR
-5VR
+5V
AGND
DGND
VCM
ACS+
ACS-
CMAG
CMA
BCS+
BCS-
CMBG
CMB
TP6 A CUR
TP1 CMA
TP3 B CUR
TP5 CMB
CM.PWM
VPWM
ACL
BCL
CM.A+
CM.A-
CM.B+
CM.B-
ACS+
ACS-
BCS+
BCS-
U16A
22V10
CM.ENABL
CM.O_CUR
CW.+12V/
HA.SAFE/
HMIN
LMIN
OP27
LM319
LM393
TC428
IRF9540
IRF530
2N5401
1N4742
1N6294A
1N750A
1N4148
USE HEAT SINK 18-3084
FERRITE BEAD
CREO
CARRIAGE MOTOR DRIVE
STEPPER MOTOR DRIVE
D:\10-1312C-B-SD02.SCH
DESIGNED BY: Bob Allan
DOCUMENT NUMBER: 10-1312C-B-SD02
LAST ECO: D613
DRAWN BY: Will Coetzee
LAST REVISED BY: I SKINNER
APPROVED BY: I SKINNER
DESIGN DATE: 1991:08:16
LAST MODIFIED DATE: 2000:06:16
SHEET: 2 of 3


J1
ANALOG IN
CABLE DETECT
CMBG
CMB
CMAG
CMA
DGND
+5V AND -5V REF
TP13
+5V REF
R61
100R
+5VR
+12V
U7
REF02
V+
V-
OUT
ADJ
C49
100n
AGND
R64
10K0 1%
R63
10K0 1%
U8B
MC34082
-5VR
R65
100R
TP15
-5V REF
2.5V REF
+5V
TP17
2.5V REF
R109
180R
R110
100R
+2.5VR
D19
LM385-2.5
J5
DIGITAL I/O
DGND_BP
M.CBL-
M.CBL+
SPARE1-
SPARE1+
CM.PWM-
CM.PWM+
CM.PWR-
CM.PWR+
+12VOK-
+12VOK+
+5V_BP
CM.QS-
CM.QS+
CM.O.CR-
CM.O.CR+
HA.SAFE/-
HA.SAFE/+
CM.ENBL-
CM.ENBL+
U25B
DS26LS31M
U27B
DS26LS31M
U23B
DS26LS32M
U14B
22V10
U16B
22V10
U13B
DAC08
U8C
MC34082
U11C
TC428
U15B
OSCILLATOR
U22C
LM393
U10C
LM393
U21G
SN74HC14
U9C
LM319
U5B
OP27
U6B
OP27
J2
CM CONNECTOR
CM.A+
CM.B-
M.CBL
CM.A-
CM.B+
U1B
OP27
U2B
OP27
U3B
OP27
U4B
OP27
U18C
TC428
U17C
TC428
U12C
TC428
AGND
DGND
D16
UF4002
+12VP
L5
L3
L4
L6
F B
J3
CON6
+5 volts
+12 volts
-12 volts
J4
CON2
+80 volts
Y2-NSB
C95
10N
C98
10N
C100
10N
C103
10N
C88
330u 160V
D12
UF4002
R60
100R
R75
100R
R81
100R
R106
100R
TP7
+5V
TP8
+12V
TP9
-12V
TP11
VCM
-12RLY
TP10
GND
TP12
GND
TP4
GND
VCM
R116
15K 0W5
D21
VCM
D6
D7
D8
R58
1K5
R59
1K5
CREO
CARRIAGE MOTOR DRIVE
PSU AND REFERENCES
D:\10-1312C-B-SD03.SCH
DESIGNED BY: Bob Allan
DOCUMENT NUMBER: 10-1312C-B-SD03
LAST ECO: D613
DRAWN BY: Will Coetzee
LAST REVISED BY: I SKINNER
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DESIGN DATE: 1991:08:16
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SHEET: 3 of 3