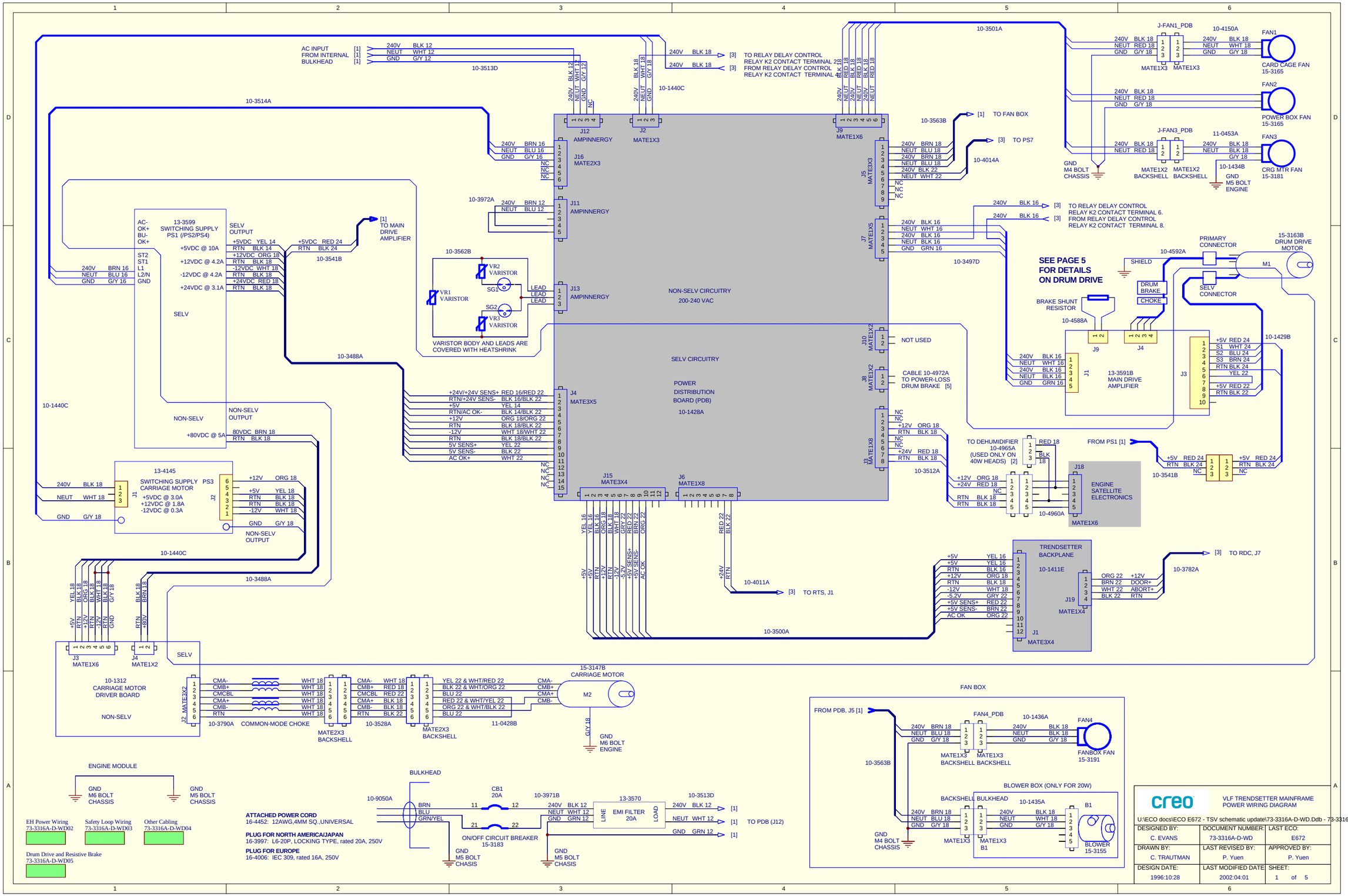
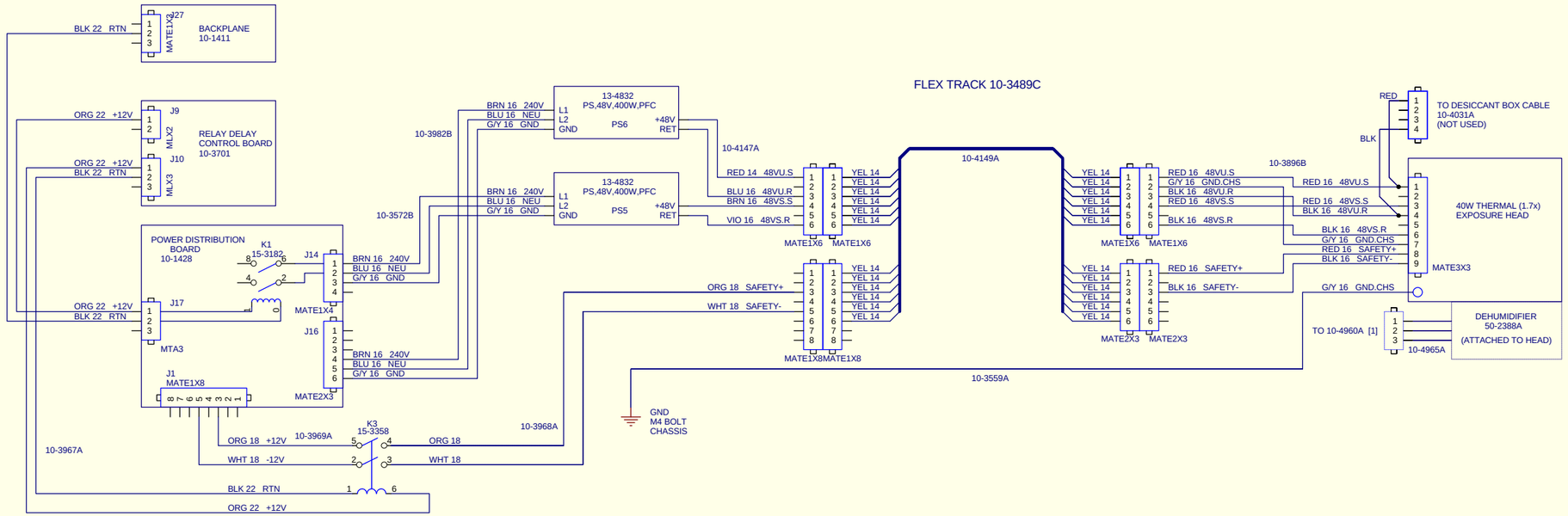
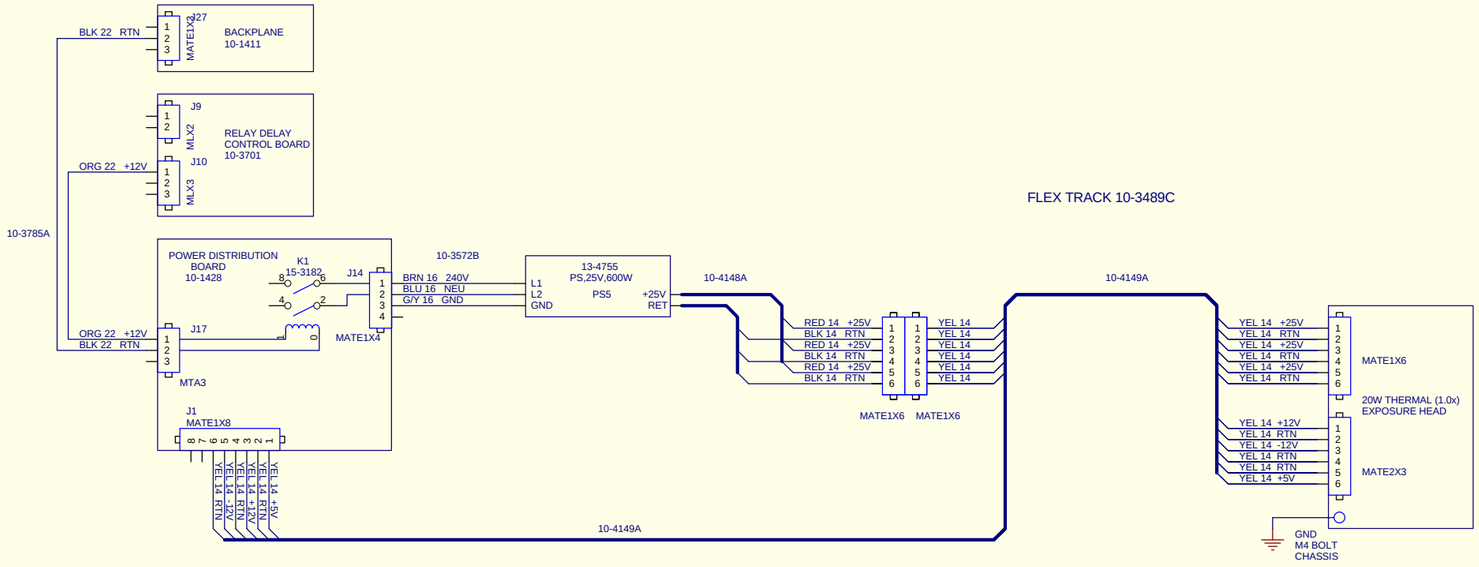

AC INPUT FROM INTERNAL BULKHEAD
240V BLK 12
NEUT WHT 12
GND G/Y 12
10-3513D
10-1440C
10-3514A
J12 AMPINNERGY
J2 MATE1X3
J9 MATE1X6
J16 MATE2X3
J11 AMPINNERGY
J13 AMPINNERGY
J4 MATE3X5
J15 MATE3X4
J6 MATE1X8
NON-SELV CIRCUITRY
200-240 VAC
SELV CIRCUITRY
POWER DISTRIBUTION BOARD (PDB)
10-1428A
TO RELAY DELAY CONTROL
RELAY K2 CONTACT TERMINAL 2
FROM RELAY DELAY CONTROL
RELAY K2 CONTACT TERMINAL
10-3501A
10-3563B
TO FAN BOX
TO PS7
10-4014A
J-FAN1_PDB
10-4150A
FAN1
CARD CAGE FAN
15-3165
FAN2
POWER BOX FAN
15-3165
J-FAN3_PDB
11-0453A
FAN3
CRG MTR FAN
15-3181
MATE1X3
MATE1X2 BACKSHELL
GND
M4 BOLT
CHASSIS
10-1434B
GND
M5 BOLT
ENGINE
10-3497D
TO RELAY DELAY CONTROL
RELAY K2 CONTACT TERMINAL 6.
FROM RELAY DELAY CONTROL
RELAY K2 CONTACT TERMINAL 8.
J7 MATE1X5
J10 MATE1X2
NOT USED
J8 MATE1X2
CABLE 10-4972A
TO POWER-LOSS
DRUM BRAKE [5]
J3 MATE1X8
10-3512A
SEE PAGE 5
FOR DETAILS
ON DRUM DRIVE
PRIMARY CONNECTOR
SELV CONNECTOR
SHIELD
DRUM BRAKE
CHOKE
15-3163B
DRUM DRIVE MOTOR
M1
10-4592A
BRAKE SHUNT RESISTOR
10-4588A
J9
J4
J1
13-3591B
MAIN DRIVE AMPLIFIER
J3
10-1429B
10-3541B
TO DEHUMIDIFIER
10-4965A
(USED ONLY ON
40W HEADS) [2]
10-4960A
FROM PS1 [1]
J18
ENGINE
SATELLITE
ELECTRONICS
MATE1X6
10-3782A
TO RDC, J7
TRENDSETTER
BACKPLANE
10-1411E
J19
MATE1X4
J1
MATE3X4
10-4011A
TO RTS, J1
10-3500A
13-3599
SWITCHING SUPPLY
PS1 (/PS2/PS4)
AC-
OK+
BU-
OK+
ST2
ST1
L1
L2/N
GND
SELV
OUTPUT
+5VDC @ 10A
+12VDC @ 4.2A
-12VDC @ 4.2A
+24VDC @ 3.1A
SELV
10-3541B
[1] TO MAIN DRIVE AMPLIFIER
10-3972A
10-3562B
VR1 VARISTOR
VR2 VARISTOR
VR3 VARISTOR
SG1
SG2
VARISTOR BODY AND LEADS ARE
COVERED WITH HEATSHRINK
10-3488A
NON-SELV
OUTPUT
+80VDC @ 5A
13-4145
SWITCHING SUPPLY PS3
CARRIAGE MOTOR
+5VDC @ 3.0A
+12VDC @ 1.8A
-12VDC @ 0.3A
NON-SELV
OUTPUT
10-1440C
10-3488A
J3 MATE1X6
J4 MATE1X2
SELV
10-1312
CARRIAGE MOTOR
DRIVER BOARD
NON-SELV
J2_MATE3X2
10-3790A
COMMON-MODE CHOKE
MATE2X3 BACKSHELL
10-3528A
MATE2X3 BACKSHELL
11-0428B
15-3147B
CARRIAGE MOTOR
M2
GND
M6 BOLT
ENGINE
ENGINE MODULE
GND
M6 BOLT
CHASSIS
GND
M5 BOLT
CHASSIS
EH Power Wiring
73-3316A-D-WD02
Safety Loop Wiring
73-3316A-D-WD03
Other Cabling
73-3316A-D-WD04
Drum Drive and Resistive Brake
73-3316A-D-WD05
ATTACHED POWER CORD
16-4452: 12AWG,4MM SQ.,UNIVERSAL
PLUG FOR NORTH AMERICA/JAPAN
16-3997: L6-20P, LOCKING TYPE, rated 20A, 250V
PLUG FOR EUROPE
16-4006: IEC 309, rated 16A, 250V
BULKHEAD
10-9050A
CB1
20A
ON/OFF CIRCUIT BREAKER
15-3183
10-3971B
13-3570
EMI FILTER
20A
LINE
LOAD
10-3513D
TO PDB (J12)
GND
M5 BOLT
CHASIS
FAN BOX
FROM PDB, J5 [1]
10-3563B
FAN4_PDB
10-1436A
FAN4
FANBOX FAN
15-3191
MATE1X3 BACKSHELL
BLOWER BOX (ONLY FOR 20W)
10-1435A
B1
BLOWER
15-3155
GND
M4 BOLT
CHASSIS
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VLF TRENDSETTER MAINFRAME
POWER WIRING DIAGRAM
U:\ECO docs\ECO E672 - TSV schematic update\73-3316A-D-WD.Ddb - 73-3316A-D-WD01
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SHEET: 1 of 5

40W (1.7x) THERMAL EXPOSURE HEAD WIRING



20W (1.0x) THERMAL EXPOSURE HEAD WIRING



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VLF TRENDSETTER MAINFRAME
EXPOSURE HEAD POWER WIRING

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1996:10:28	2002:04:01	2 of 5

USED FOR AUTOLOADER OPTION ONLY

TABLE AUTOMATION DISABLED
WHEN AL ABORT OR SAFETY LOOP OPEN
(+24VSAFE REMOVED)

TO GNE0
J27
+24V SAFE RED 22
RTN BLK 22
10-4449B
J4
MTA6L

SELV
FROM PDB, J5[1]
10-4014A
240V BLK 22
NEUT WHT 22
GND G/Y 22
L1
L2
GND
13-4870
PS,24V,25W
PS7
+24V
RTN
NON-SELV 200-240VAC
GND
M4 BOLT
CHASSIS
SELV

RED 22 ISO 24VDC
BLK 22 ISO RTN
10-4014A
J2
MATE1X2

RED 22 +24VDC
BLK 22 RTN
10-4011A
J1
MTA3L
FROM PDB, J1[1]

RED 22 REG_SIG
BLK 22 GND
10-4012A
J3
MTA10
TO ESE, J25 [3]

+24V
6 K2 1
2 3
5 4
15-3359
Registration/Table Safety
Electronics
10-4006B

J8
REG_NO RED 22 10-4008A
ISO RTN BLK 22
ISO RTN BLK 22
ISO RTN BLK 22
MINIFIT2X2
10-4007A
to registration pins
MINIFIT2X2

J7
+24V RED 22 10-4009A
RTN BLK 22
MINIFIT1X2
MINIFIT1X2
10-4919A [4]

J5
+24V +24V RED 22 10-4016B
+24V RED 22
+24V (TABLE UP) BLK 22
+24V (TABLE DN) BLK 22
MTA8L

10-1443C
15-3355
SW3
NOTE: SW3 CONTACTS CLOSED WHEN TABLE IN UP POSITION.

10-1443C
15-3355
SW4
NOTE: SW4 CONTACTS CLOSED WHEN TABLE IN DOWN POSITION.

J6
+24V (TABLE UP) RED 22
+24V (TABLE DN) BLK 22
MTA4L

10-4010A
MOLEX 1X3

10-4906A
MOLEX 1X3
+24V (TABLE UP) RED 22
+24V (TABLE DN) RED 22
10-4319A

TABLE DOWN TABLE UP
A 24V SOLENOID 24V SOLENOID B
10-4319A
TABLE UP BLK 22
TABLE DN BLK 22

MINIFIT1X2

FROM RTS, J3 [3]
RED 22 REG_SIG
BLK 22 GND
10-4012A
J25
MTA9

TO 10-1441B (5880)
OR 10-3551C (5080)
PDOOR SENSORS
IN HOOD
WHT 22 10-4320B WHT 22
BLK 22 BLK 22
GRN 22 GRN 22
BLK 22 BLK 22
RED 22 RED 22
BLK 22 BLK 22
+5V (pullup) WHT 22
RTN BLK 22
+5V (pullup) RED 22
RTN GRN 22
N.C.
N.C.
N.C.
N.C.
N.C.
N.C.
J20
MTA16

J32
MORE DETAIL ON [4]
MTA8L

*CABLE 10-5053A CONNECTS
TO PDB CONNECTOR OF
CABLE 10-3563B PINS 7 AND 8

TO GENINE 0 BOARD J1
FOR AL MODE
+24V
10-4453B
GND
MTA6L
K3
15-3359

10-5053A
PIN 7 LINE WHT 18
PIN 8 NEUT BLK 18
GND G/Y 18
POWER SUPPLY 24V
FOR S-CONVEYOR
MANUAL MODE
10-3563B
J5
BASE PDB
TO FANBOX
CHASSIS
NON-SELV CIRCUITRY
200-240 VAC
SELV CIRCUITRY
24V
10-5049A

RELAY 15-3248 IS USED
IN PLACE OF RELAY
15-3359 FOR MANUAL
MODE S-CONVEYOR
OPTION ONLY.
K3
15-3248
10-5050A
+24V
GND
TO CONVEYOR BULKHEAD
CABLE 10-5093A
MOLEX 1X2

*POWER SUPPLY AND CABLES 10-5049A,10-5050A, AND 10-5053A
ARE ONLY ADDED TO MACHINES WITH S-CONVEYOR MANUAL MODE OPTION

AUTOLOADER
BASE TSV

10-4905A
AUTOLOADER EN
TABLE_VALVE_UP_24V
TABLE_VALVE_DOWN_24V
SAFETY_KEY_SW
J30
MTA8L
10-1426
Engine Satellite
Electronics

+24V
+24V
TO EXT. ALARM 10-4983A
J29
MTA8L

J27
+24V RED 22
LEC EXTEND BLK 22
MORE DETAIL ON [4]
MTA8L

J26
LEC RETRACTBLK 22
TEC RETRACTBLK 22
ROLLER BLK 22
MORE DETAIL ON [4]
MTA8L

SW1
SAFETY INTERLOCK OVERRIDE
KEY SWITCH
3 POSITIONS
CENTER
(LASER/MECH HAZARDS) UP DOWN (MECHANICAL HAZARDS)
WHT 22
BLK 22
RED 22
BRN 22
24 22 24 14 12 14
23 21 23 13 11 13

11-0804B SIO KEYSWITCH
ASSEMBLY COMPRISES
RDC BOARD, SIO KEYSWITCH,
FLASHING LEDS, AND CABLES

SELV CIRCUITRY
10-1440C
NON-SELV CIRCUITRY
200-240 VAC
FROM PDB (J2-1) [1] 240V BLK 18 6 8 BLK 18 [1] TO PS3
FROM PDB (J7-3) [1] 240V BLK 16 2 4 BLK 16 [1] TO MAIN DRIVE AMPLIFIER
SELV CIRCUITRY
0 K2 1
15-3144

10-4322A
+24V BLK 22
5 4
2 3
+24V RED 22
1 K1 6
15-3358
MINIFIT2X3
+24V RED 22
+24V RED 22
+24V RED 22
+24V RED 22
+24V RED 22
10-4319A

LEC RETRACT LEC EXTEND
A 24V SOLENOID 24V SOLENOID B
TEC RETRACT
A 24V SOLENOID
ROLLER
A 24V SOLENOID

old: 10-3723A
new: 10-4924A
MECH(NO) RED 22
+12V(S) ORG 22
+12V(S) ORG 22
LASER/MECH(NO) WHT 22
DOOR(SW) BRN 22
MECH(NC) BRN 22
DOOR(SW) BLK 22
LASER(NC) BLK 22
J3
MTA1X10

J2 MATE1X2
ORG 22 +12V
ORG 22 +12V
BLK 22 RTN
BLK 22 RTN
10-4321A

J1 MTA1X3
BRN 22 +12V
BLU 22 RTN
NC
10-3783A
PLATE FLYOFF
LASER EMITTER

J4 MTA1X2
RED 22 +12V
BLK 22 +12V
10-4936A
RED 22
BLK 22
10-4942A
12 11
15-3474
EMERGENCY-STOP
SWITCH NEAR TABLE
SW2
EMERGENCY-STOP SWITCH
NEAR DRUM
10-1338A. SWITCH: 15-3474
21 22

J8 MATE1X4
RED 22 +12V
RED 22 +12V
BLK 22 DOOR+
BLK 22 ABORT+
NC
RED 22
BLK22
10-4096A
Note: The abort switches are normally closed

J9
TO 10-3983A
WRITE LASER
RELAY ON PDB

TSV RELAY DELAY
CONTROL BOARD
10-4827A

AUTOLOADER (ADD'L CONTACT BLOCK)
BASE TSV

10-3721A
LP1
+12V RED 24
RTN BLK 24
FLASHING LEDS
LP2
+12V RED 24
RTN BLK 24
10-3721A
J5 CON1X2
J6 CON1X2
J7 MTA1X4
+12V ORG 22
DOOR+ BRN 22
ABORT+ WHT 22
RTN BLK 22
10-3782A
[1]
FROM BACKPLANE
(J19)

Rear Panel (Encoder Side)
Rear Panel (Motor Side)
11 12 RED 22 +12V
21 22 BLK 22 DOOR+
10-4097A

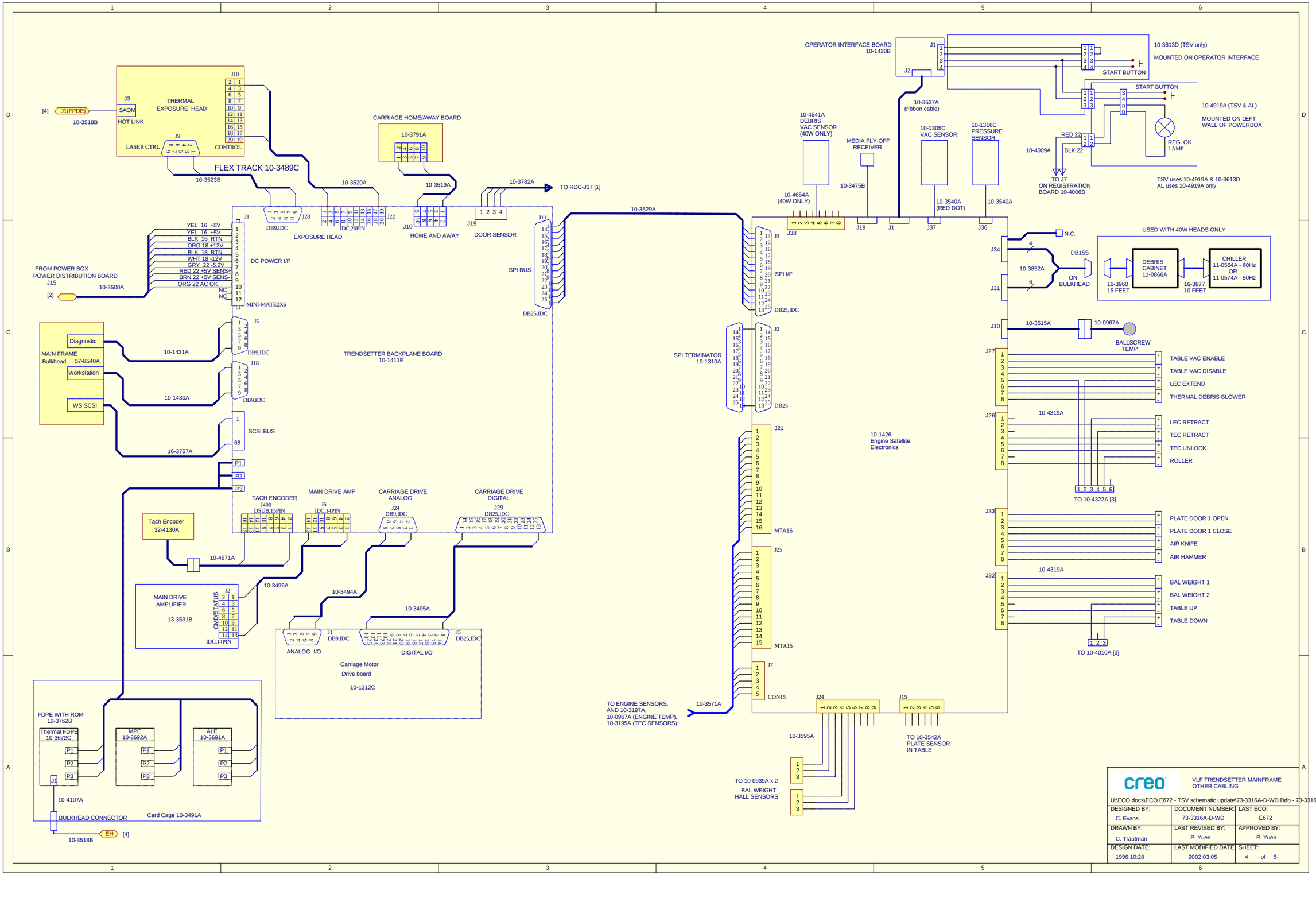
Front Panel
Fan Box Panel
Encoder Side Panel
Motor Side Panel

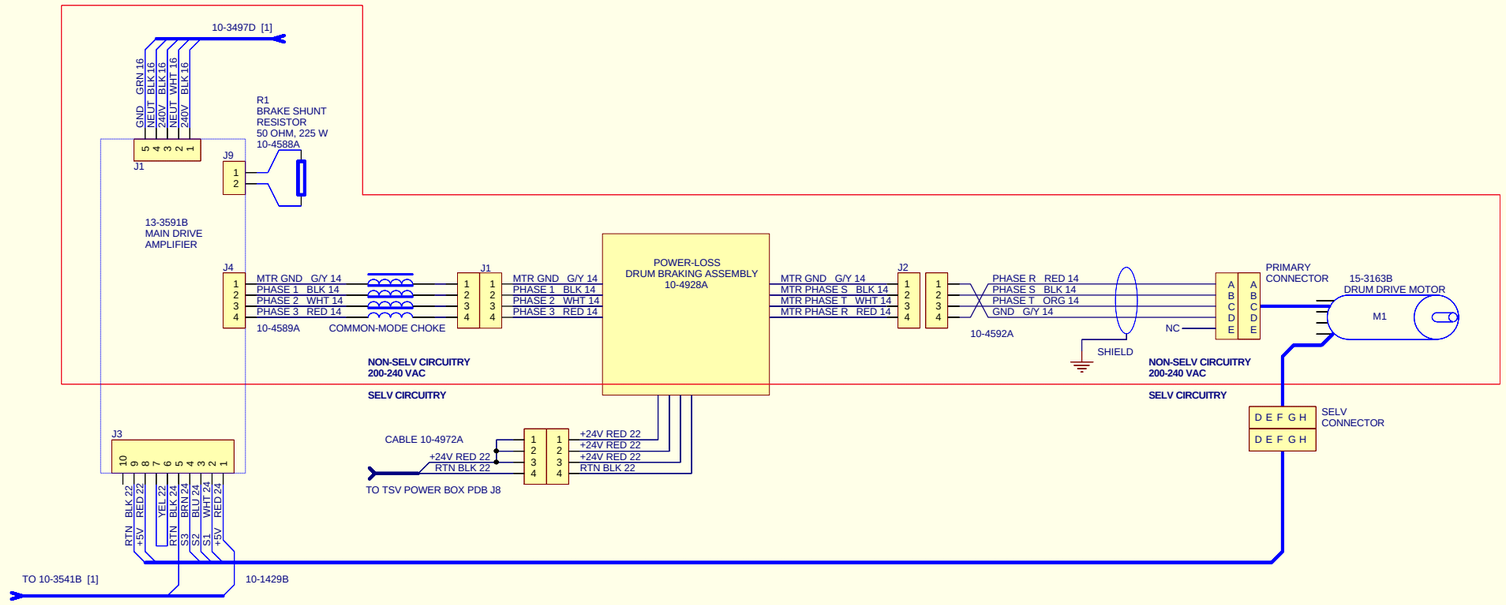
SIGNAL FOR ONE-CYCLE OPERATION WHEN MACHINE IS IN SERVICE OVERRIDE STATE

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VLF TRENDSETTER MAINFRAME
SAFETY LOOP

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[4]
J1(FPDE)
10-3518B
J3
SAOM
HOT LINK
THERMAL
EXPOSURE HEAD
J10
J9
LASER CTRL
CONTROL
FLEX TRACK 10-3489C
10-3523B
10-3520A
CARRIAGE HOME/AWAY BOARD
10-3791A
10-3519A
10-3782A
TO RDC-J17 [1]
J28
DB9,IDC
J22
IDC,20PIN
EXPOSURE HEAD
J10
HOME AND AWAY
J19
DOOR SENSOR
10-3529A
FROM POWER BOX
POWER DISTRIBUTION BOARD
J15
[2]
10-3500A
YEL 16 +5V
YEL 16 +5V
BLK 16 RTN
ORG 18 +12V
BLK 18 RTN
WHT 18 -12V
GRY 22 -5.2V
RED 22 +5V SENS+
BRN 22 +5V SENS-
ORG 22 AC OK
NC
NC
J1
DC POWER I/P
MINI-MATE2X6
J11
SPI BUS
DB25,IDC
J3
SPI I/F
DB25,IDC
OPERATOR INTERFACE BOARD
10-1420B
J1
J2
10-3537A
(ribbon cable)
10-3613D (TSV only)
MOUNTED ON OPERATOR INTERFACE
START BUTTON
START BUTTON
10-4919A (TSV & AL)
MOUNTED ON LEFT
WALL OF POWERBOX
REG. OK
LAMP
RED 22
BLK 22
10-4009A
TO J7
ON REGISTRATION
BOARD 10-4006B
TSV uses 10-4919A & 10-3613D
AL uses 10-4919A only
10-4641A
DEBRIS
VAC SENSOR
(40W ONLY)
10-4654A
(40W ONLY)
MEDIA FLY-OFF
RECEIVER
10-3475B
10-1305C
VAC SENSOR
10-1316C
PRESSURE
SENSOR
10-3540A
(RED DOT)
10-3540A
J38
J19
J1
J37
J36
USED WITH 40W HEADS ONLY
N.C.
J34
DB15S
10-3852A
ON
BULKHEAD
J31
DEBRIS
CABINET
11-0866A
16-3960
15 FEET
16-3877
10 FEET
CHILLER
11-0564A - 60Hz
OR
11-0574A - 50Hz
J10
10-3515A
10-0967A
BALLSCREW
TEMP
J27
TABLE VAC ENABLE
TABLE VAC DISABLE
LEC EXTEND
THERMAL DEBRIS BLOWER
10-4319A
J26
LEC RETRACT
TEC RETRACT
TEC UNLOCK
ROLLER
TO 10-4322A [3]
J33
PLATE DOOR 1 OPEN
PLATE DOOR 1 CLOSE
AIR KNIFE
AIR HAMMER
10-4319A
J32
BAL WEIGHT 1
BAL WEIGHT 2
TABLE UP
TABLE DOWN
TO 10-4010A [3]
Diagnostic
MAIN FRAME
Bulkhead 57-8540A
Workstation
WS SCSI
10-1431A
10-1430A
16-3767A
J5
J18
DB9,IDC
SCSI BUS
P1
P2
P3
TRENDSETTER BACKPLANE BOARD
10-1411E
SPI TERMINATOR
10-1310A
DB25
J2
MTA16
J21
10-1426
Engine Satellite
Electronics
J25
MTA15
J7
CON15
TO ENGINE SENSORS,
AND 10-3197A,
10-0967A (ENGINE TEMP),
10-3195A (TEC SENSORS).
10-3571A
J24
J15
10-3595A
TO 10-3542A
PLATE SENSOR
IN TABLE
TO 10-0939A x 2
BAL WEIGHT
HALL SENSORS
Tach Encoder
32-4130A
10-4671A
TACH ENCODER
J400
DSUB,15PIN
MAIN DRIVE AMP
J6
IDC,14PIN
CARRIAGE DRIVE
ANALOG
J24
DB9,IDC
CARRIAGE DRIVE
DIGITAL
J29
DB25,IDC
MAIN DRIVE
AMPLIFIER
13-3591B
J2
CMD/STATUS
IDC,14PIN
10-3496A
10-3494A
10-3495A
J1
DB9,IDC
ANALOG I/O
J5
DB25,IDC
DIGITAL I/O
Carriage Motor
Drive board
10-1312C
FDPE WITH ROM
10-3762B
Thermal FDPE
10-3672C
MPE
10-3692A
ALE
10-3691A
P1
P2
P3
J1
10-4107A
BULKHEAD CONNECTOR
Card Cage 10-3491A
EH
[4]
10-3518B
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VLF TRENDSETTER MAINFRAME
OTHER CABLING
U:\ECO docs\ECO E672 - TSV schematic update\73-3316A-D-WD.Ddb - 73-3316A-D-WD04
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VLF TRENDSETTER MAINFRAME
DRUM DRIVE AND RES. BRAKE

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