TSM GIGABIT MASTER CONTROL ELECTRONICS WIRING DIAGRAM

TRENDSETTER

TS400 - QUANTUM
TS800
TS800 - QUANTUM

TS NEWS, NEWS SA
TS AUTOLOADER
TS CONTINUOUS LOAD
TS NEWS - DUAL BAY

THERMAL HEAD OPTIONS

TH1.7
TH2
HYDRA OPTION (Dual TH2)

TSM - GMCE SYSTEM BLOCK DIAGRAM
PAGE_02-GMCE-BLOCK_DIAG.SCH

TSM - GMCE SYSTEM CONFIGURATIONS
PAGE_04-GMCE-CONFIG_TABLE

- TS BASE
- TS AL - (Autoloader Option)
- TS CL - (Continuous Load Option)
- TS NEWS 50, 70, 100, 150, 200, SA
- TS NEWS - (Dual Load Option)

TSM - GMCE/TMCE COMMON SAFETY CIRCUIT
TSM_06-GMCE&TMCE-SAFETY.SCH

- CANBUS
- SAFETY DOOR LOOP
- EMERGENCY STOP SWITCH
- WRITE LASER SAFETY INTERLOCK
- MECHANICAL SAFETY INTERLOCK
- DRUM AMP SAFETY INTERLOCK
- DRUM BRAKE SAFETY INTERLOCK
- PNEUMATIC ACTUATOR SAFETY INTERLOCK
- SERVICE INTERLOCK OVERRIDE SWITCH
- SERVICE INTERLOCK OVERRIDE INDICATORS

TSM - GMCE/TMCE COMMON PDB
TSM_07-GMCE&TMCE-PDB.SCH

- AC POWER INLET
- DOOR LOOP SWITCHES & FRONT DOOR LOCK SOLENOID
- EMERGENCY STOP SWITCHES (SW1 & SW2)
- FAN BOX AC FANS
- FAN BOX COOLANT PUMP
- FAN BOX VACUUM PUMP (PROOFING OPTION)
- SERVICE OVERRIDE SWITCH
- DC FANS (For Carriage and Drum Motors)
- DRUM MOTOR INRUSH CURRENT LIMIT RELAY K1
- POWER SUPPLIES (PS1, PS2, PS3, PS4)
- THERMAL HEAD OPTIONS (1.7X & TH2)

TSM - GMCE VS TMCE PDB WIRING
PAGE_08-CANBUS-PDB.SCH

- CANBUS

TSM - GMCE - ENGINE I/O, PORTS
PAGE_09-GMCE&TMCE-ENGINE_IO.Sch

- CARRIAGE (DRIVE, MOTOR, HOME/AWAYS SENSORS, CONTROL)
- ENGINE SENSORS
- LOAD RAMP SENSOR
- PNEUMATIC SOLENOID DRIVE OUTPUTS
- PLATE FLYOFF SENSOR (RX/TX)
- ENCODER
- DRUM AMP CONTROL

TSM - GMCE VS TMCE BOARD WIRING
PAGE_10-GMCE-VS-TMCE_BRD_WIRING.Sch

- CANBUS
- SERIAL DIAGNOSTIC PORT
- SERIAL WORKSTATION PORT
- SCSI PORT
- ETHERNET

TSM - GMCE/TMCE BOARDS - HYDRA OPTION
PAGE_11-GMCE&TMCE-DRUM_DRIVES.SCH

- Dual Head Interface Board
- Master and Slave MCE Boards
- Encoder Wiring
- Master and Slave Diagnostic Ports
- Master and Slave SCSI Ports
- Hot Link High Speed Serial

TSM - GMCE VS TMCE BOARD WIRING HYDRA OPTION
PAGE_12-GMCE&TMCE_HYDRA_OPTION.Sch

- CANBUS
- SERIAL DIAGNOSTIC PORT
- SERIAL WORKSTATION PORT
- SCSI PORT
- ETHERNET

TSM - GMCE VS TMCE - DEBRIS REMOVAL / TEC BACKBONE
PAGE_13-GMCE-VS-TMCE_HYDRA_OPTION.Sch

- DEBRIS REMOVAL CONTROL
- CHILLER CONTROL
- TEC (Optical and Micro-Switches)

TSM - GMCE/TMCE COMMON - DEBRIS REMOVAL / TEC BACKBONE
PAGE_14-GMCE-VS-TMCE_DEBRIS_REMOVAL.sch

- DEBRIS REMOVAL CONTROL

TSM - AUTOLOADER OPTION (GENINE BOARD)
PAGE_15-GMCE-TMCE_DEBRIS_REMOVAL.sch

- CANBUS
- PICKER PNEUMATIC SOLENOID DRIVE
- PICKER SENSORS
- COVER LOCK SOLENOID
- TABLE PNEUMATIC SOLENOID DRIVE
- TABLE SENSORS
- LOAD RAMP SENSOR
- CORNER LAMPS/STATUS LAMPS
- UNLOAD TABLE MOTOR

TSM - CONTINUOUS LOAD OPTION
PAGE_16-GMCE&TMCE-AUTOLOADER.sch

- CANBUS
- PICKER PNEUMATIC SOLENOID DRIVE
- PICKER SENSORS
- CORNER STATUS LEDs
- TABLE PNEUMATIC SOLENOID DRIVE
- TABLE DRIVE
- TABLE SENSORS
- PRELOADER OPTIONS
- LOAD RAMP SENSOR

TSM - DRUM SERVO CONTROLS
PAGE_17-GMCE&TMCE-CONTINUOUS_LOAD.sch

- AUTOMOTION DRUM AMP - AUTOMOTION ACE

TSM - DUAL BAY OPTION
PAGE_18-GMCE&TMCE-NEWS_DUAL_LOAD.sch

- SOLENOID MANIFOLD
- DUAL BAY SENSORS
- CAN BUS

TSM TURBO MASTER CONTROL ELECTRONICS WIRING DIAGRAM

TRENDSETTER

TS400 - QUANTUM
TS800
TS800 - QUANTUM

TS NEWS, NEWS SA
TS AUTOLOADER
TS CONTINUOUS LOAD
TS NEWS - DUAL BAY

PROOFING

PROOFSETTER SPECTRUM
TRENDSETTER/PROOFSETTER SPECTRUM

THERMAL HEAD OPTIONS

TH1.7
TH2
HYDRA OPTION (Dual TH2)

TSM - TMCE SYSTEM BLOCK DIAGRAM
PAGE_03-TMCE-BLOCK_DIAG.SCH

TSM - TMCE SYSTEM CONFIGURATIONS
PAGE_05-TMCE-CONFIG_TABLE

- **TS BASE**
- **TS AL - (Autoloader Option)**
- **TS AL/PRF - (Autoloader/Spectrum Option)**
- **TS CL - (Continuous Load Option)**
- **TS PRF - (Proofsetter/Spectrum)**
- **TS CL/PRF - (Continuous Load/Spectrum)**
- **TS NEWS 50, 70, 100, 150, 200, SA**
- **TS NEWS - (Dual Load Option)**

TSM - GMCE/TMCE COMMON SAFETY CIRCUIT
PAGE_06-GMCE&TMCE-SAFETY.SCH

- CANBUS
- SAFETY DOOR LOOP
- EMERGENCY STOP SWITCH
- WRITE LASER SAFETY INTERLOCK
- MECHANICAL SAFETY INTERLOCK
- DRUM AMP SAFETY INTERLOCK
- DRUM BRAKE SAFETY INTERLOCK
- PNEUMATIC ACTUATOR SAFETY INTERLOCK
- SERVICE INTERLOCK OVERRIDE SWITCH
- SERVICE INTERLOCK OVERRIDE INDICATORS

TSM - GMCE/TMCE COMMON PDB
PAGE_07-GMCE&TMCE-PDB.SCH

- AC POWER INLET
- DOOR LOOP SWITCHES
- EMERGENCY STOP SWITCHES (SW1 & SW2)
- FRONT DOOR LOCK SOLENOID
- FAN BOX AC FANS
- FAN BOX COOLANT PUMP
- FAN BOX VACUUM PUMP (PROOFING OPTION)
- SERVICE OVERRIDE SWITCH
- DC FANS (For Carriage and Drum Motors)
- DRUM MOTOR INRUSH CURRENT LIMIT RELAY K1
- POWER SUPPLIES (PS1, PS2, PS3, PS4)
- THERMAL HEAD OPTIONS (1.7X & TH2)

TSM - GMCE VS TMCE PDB WIRING
PAGE_08-CANBUS-PDB.SCH

- CANBUS

TSM - TMCE BOARD - ENGINE I/O, PORTS
PAGE_09-GMCE&TMCE-ENGINE_IO.Sch

- CARRIAGE (DRIVE, MOTOR, HOME/AWAYS SENSORS, CONTROL)
- ENGINE SENSORS
- LOAD RAMP SENSOR
- PNEUMATIC SOLENOID DRIVE OUTPUTS
- PLATE FLYOFF SENSOR (RX/TX)
- ENCODER
- DRUM AMP CONTROL

TSM - GMCE VS TMCE BOARD WIRING
PAGE_11-GMCE-VS-TMCE_BRD_WIRING.Sch

- CANBUS
- SERIAL DIAGNOSTIC PORT
- SERIAL WORKSTATION PORT
- SCSI PORT
- ETHERNET

TSM - GMCE/TMCE COMMON - HYDRA OPTION
PAGE_12-GMCE&TMCE-DRUM_DRIVES.SCH

- Dual Head Interface Board
- Master and Slave MCE Boards
- Encoder Wiring
- Master and Slave Diagnostic Ports
- Master and Slave SCSI Ports
- Hot Link High Speed Serial

TSM - GMCE VS TMCE BOARD WIRING HYDRA OPTION
PAGE_13-GMCE&TMCE_HYDRA_OPTION.Sch

- CANBUS
- SERIAL DIAGNOSTIC PORT
- SERIAL WORKSTATION PORT
- SCSI PORT
- ETHERNET

TSM - GMCE VS TMCE - DEBRIS REMOVAL / TEC BACKBONE
PAGE_14-GMCE-VS-TMCE_HYDRA_OPTION.Sch

- DEBRIS REMOVAL CONTROL
- CHILLER CONTROL
- TEC (Optical and Micro-Switches)

TSM - GMCE/TMCE COMMON - HYDRA OPTION
PAGE_15-GMCE-VS-TMCE_DEBRIS_REMOVAL.sch

- DEBRIS REMOVAL CONTROL

TSM - AUTOLOADER OPTION (GENINE BOARD)
PAGE_16-GMCE-TMCE_DEBRIS_REMOVAL.sch

- CANBUS
- PICKER PNEUMATIC SOLENOID DRIVE
- PICKER SENSORS
- COVER LOCK SOLENOID
- TABLE PNEUMATIC SOLENOID DRIVE
- TABLE SENSORS
- LOAD RAMP SENSOR
- CORNER LAMPS/STATUS LAMPS
- UNLOAD TABLE MOTOR

TSM - CONTINUOUS LOAD OPTION
PAGE_17-GMCE&TMCE-AUTOLOADER.sch

- CANBUS
- PICKER PNEUMATIC SOLENOID DRIVE
- PICKER SENSORS
- CORNER STATUS LEDs
- TABLE PNEUMATIC SOLENOID DRIVE
- TABLE DRIVE
- TABLE SENSORS
- PRELOADER OPTIONS
- LOAD RAMP SENSOR

TSM - DRUM SERVO CONTROLS
PAGE_18-GMCE&TMCE-CONTINUOUS_LOAD.sch

- AUTOMOTION DRUM AMP - AUTOMOTION ACE

TSM - DUAL BAY OPTION
PAGE_19-GMCE&TMCE-NEWS_DUAL_LOAD.sch

- SOLENOID MANIFOLD
- DUAL BAY SENSORS
- CAN BUS

TSM - PROOFING OPTION (GENINE BOARD)
PAGE_19-TMCE-PROOFING.SCH

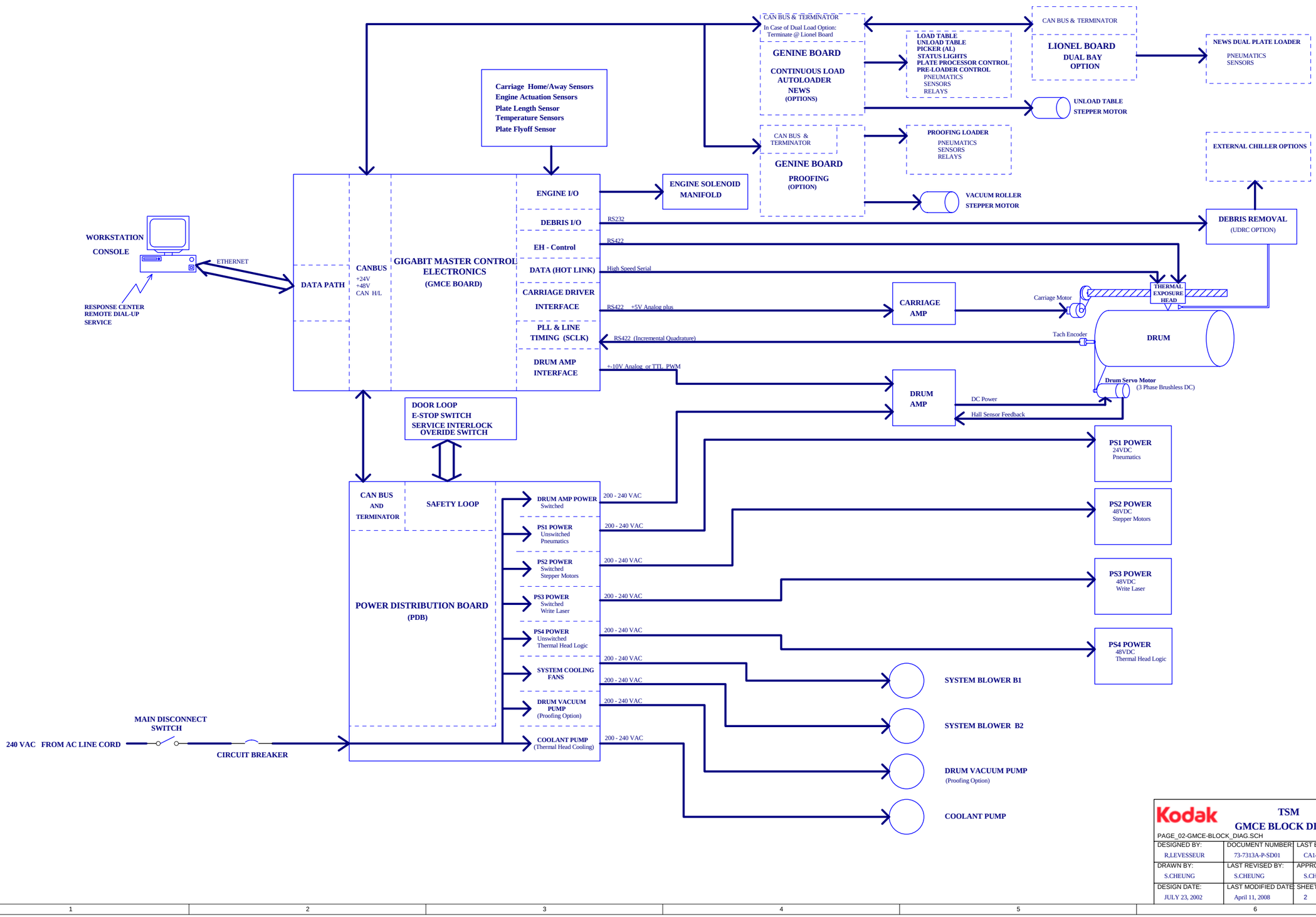
- CANBUS
- PROOFING LOADER OPTICAL SENSORS
- VACUUM ROLLER DRIVE
- VACUUM SENSOR
- PROOFING LOADER PNEUMATIC SOLENOID DRIVE

Kodak

TSM
WIRING, SAFETY AND
SYSTEM BLOCK DIAGRAMS

PAGE_01-GMCE-overall_wiring_diagram.SCH

DESIGNED BY:	DOCUMENT NUMBER:	LAST ECO:
R.LEVESSEUR	73-7313A-P-SD01	CA14372
DRAWN BY:	LAST REVISED BY:	APPROVED BY:
S.CHEUNG	S.CHEUNG	S.CHEUNG
DESIGN DATE:	LAST MODIFIED DATE:	SHEET:
JULY 23, 2002	April 11, 2008	1 of 19

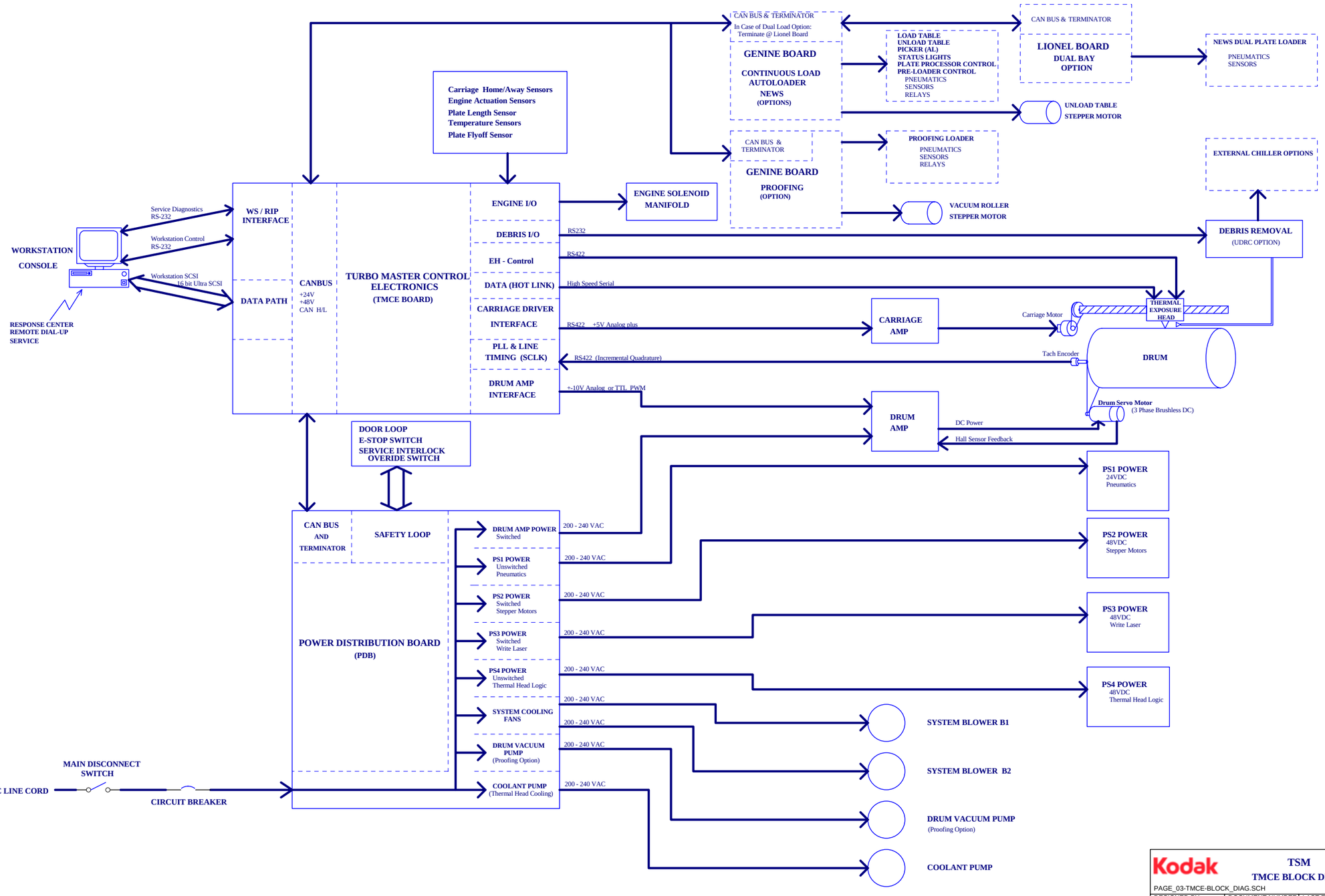


Kodak

TSM
GMCE BLOCK DIAGRAM

PAGE_02-GMCE-BLOCK_DIAG.SCH

DESIGNED BY:	DOCUMENT NUMBER:	LAST ECO:
R.LEVESSEUR	73-7313A-P-SD01	CA14372
DRAWN BY:	LAST REVISED BY:	APPROVED BY:
S.CHEUNG	S.CHEUNG	S.CHEUNG
DESIGN DATE:	LAST MODIFIED DATE:	SHEET:
JULY 23, 2002	April 11, 2008	2 of 19



Kodak

TSM

TMCE BLOCK DIAGRAM

PAGE_03-TMCE-BLOCK_DIAG.SCH

DESIGNED BY:	DOCUMENT NUMBER:	LAST ECO:
R.LEVESSEUR	73-7313A-P-SD01	CA14372
DRAWN BY:	LAST REVISED BY:	APPROVED BY:
S.CHEUNG	S.CHEUNG	S.CHEUNG
DESIGN DATE:	LAST MODIFIED DATE:	SHEET:
JULY 23, 2002	April 11, 2008	3 of 19

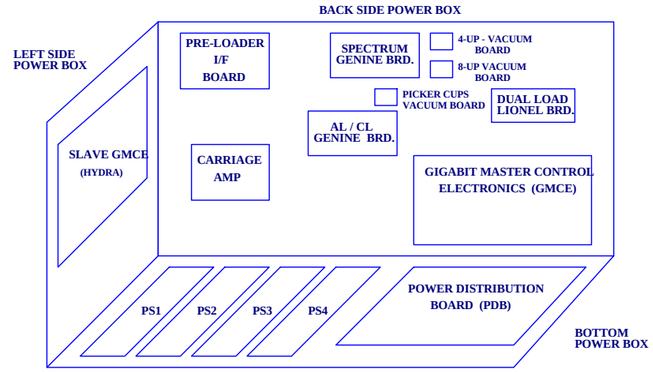
TSM GMCE TRENDSETTER CONFIGURATIONS

MODELS

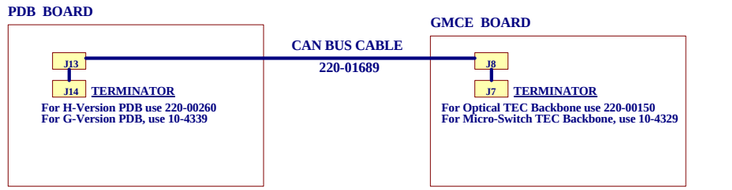
TS400 - QUANTUM
TS800
TS800 - QUANTUM

CONFIGURATIONS

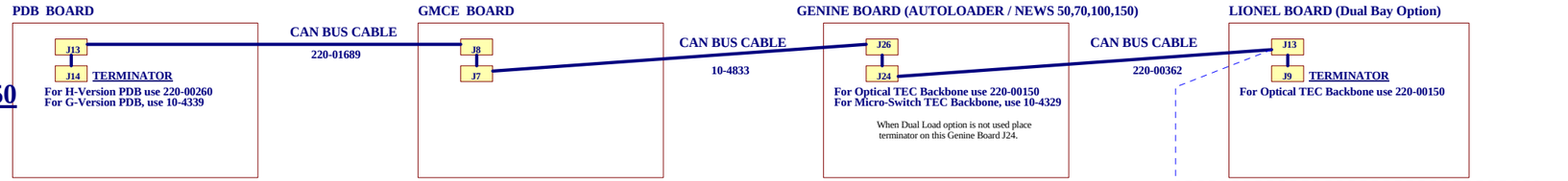
TS BASE, TS NEWS SA (Semi-Automatic)
TS AL - (Autoloader Option)
TS CL - (Continuous Load Option)
TS NEWS 50, 70, 100, 150, 200
TS NEWS SA (Semi_Automatic)
TS NEWS (Dual Bay Option)



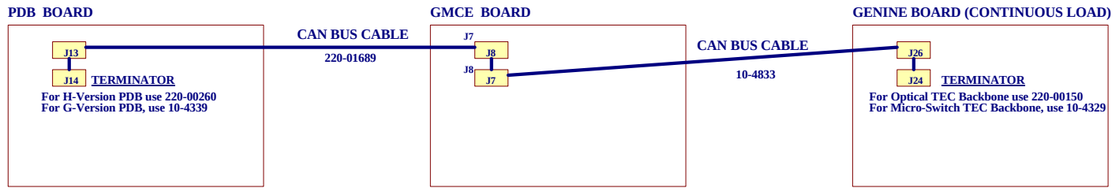
TS BASE
TS NEWS SA



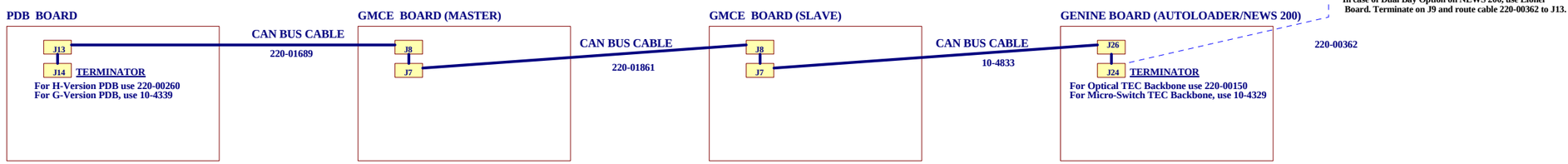
TS AL (Autoloader)
TS NEWS 50, 70, 100, 150

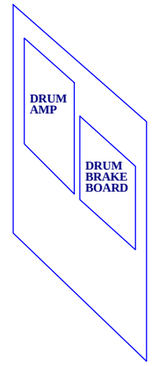


TS CL (Continuous Load)



TS NEWS 200 (Hydra)





In case of Dual Bay Option on NEWS 200, use Lionel Board. Terminate on J9 and route cable 220-00362 to J13.

Kodak

TSM
GMCE SYSTEM
CONFIGURATION OPTIONS

PAGE_04-GMCE-CONFIG_TABLE

DESIGNED BY:	DOCUMENT NUMBER:	LAST ECO:
R.LEVESSEUR	73-7313A-P-SD01	CA14372
DRAWN BY:	LAST REVISED BY:	APPROVED BY:
S.CHEUNG	S.CHEUNG	S.CHEUNG
DESIGN DATE:	LAST MODIFIED DATE:	SHEET:
JULY 23, 2002	April 11, 2008	4 of 19

TSM TMCE TRENDSETTER CONFIGURATIONS

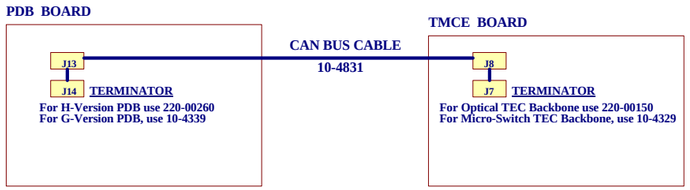
MODELS

TS400 - QUANTUM
TS800
TS800 - QUANTUM

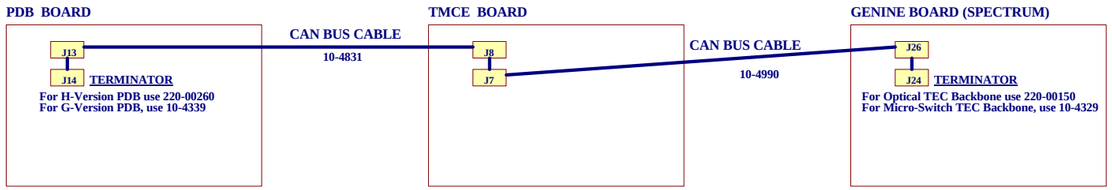
CONFIGURATIONS

TS BASE, TS NEWS SA (Semi-Automatic)
TS AL - (Autoloader Option)
TS AL/SP - (Autoloader/Spectrum Option)
TS CL - (Continuous Load Option)
TS PRF - (Proofsetter/Spectrum)
TS CL/PRF - (Continuous Load/Spectrum)
TS NEWS 50, 70, 100, 150, 200
TS NEWS SA (Semi_Automatic)
TS NEWS (Dual Bay Option)

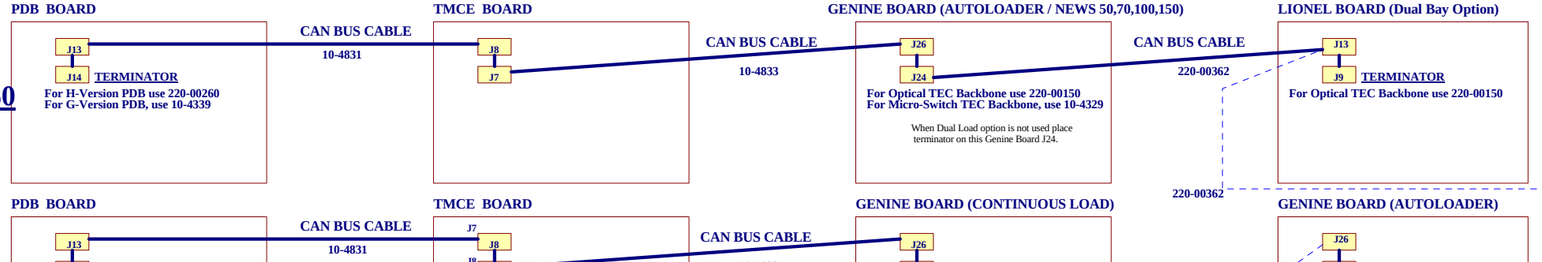
TS BASE
TS NEWS SA



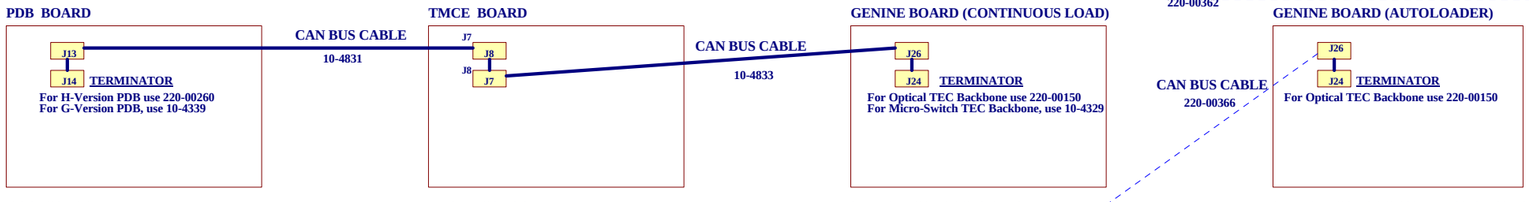
TS PRF (Proofsetter/Spectrum)



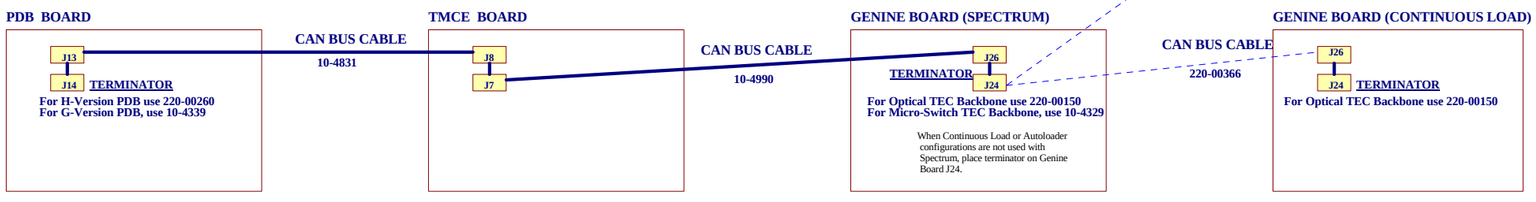
TS AL (Autoloader)
TS NEWS 50, 70, 100, 150



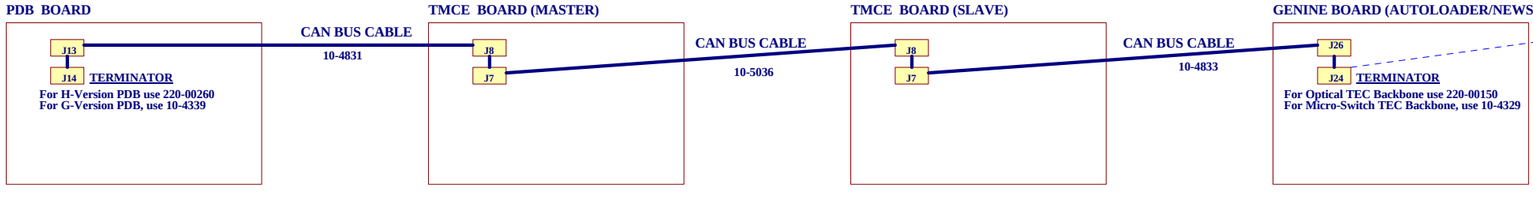
TS CL (Continuous Load)

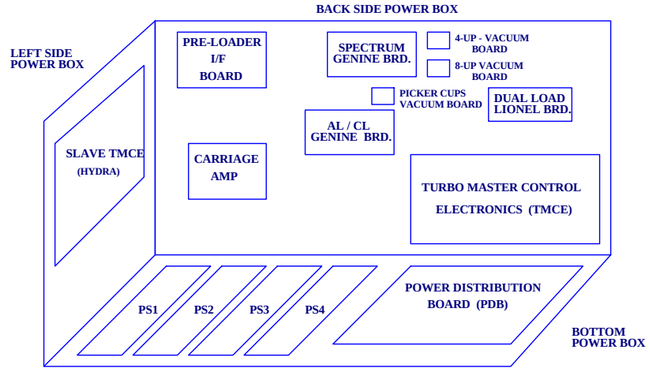


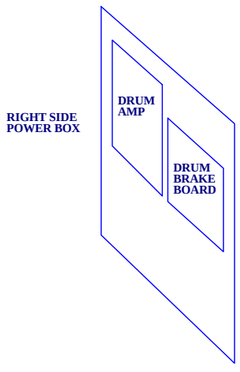
TS CL/PRF (Continuous Load Proofing)



TS NEWS 200 (Hydra)







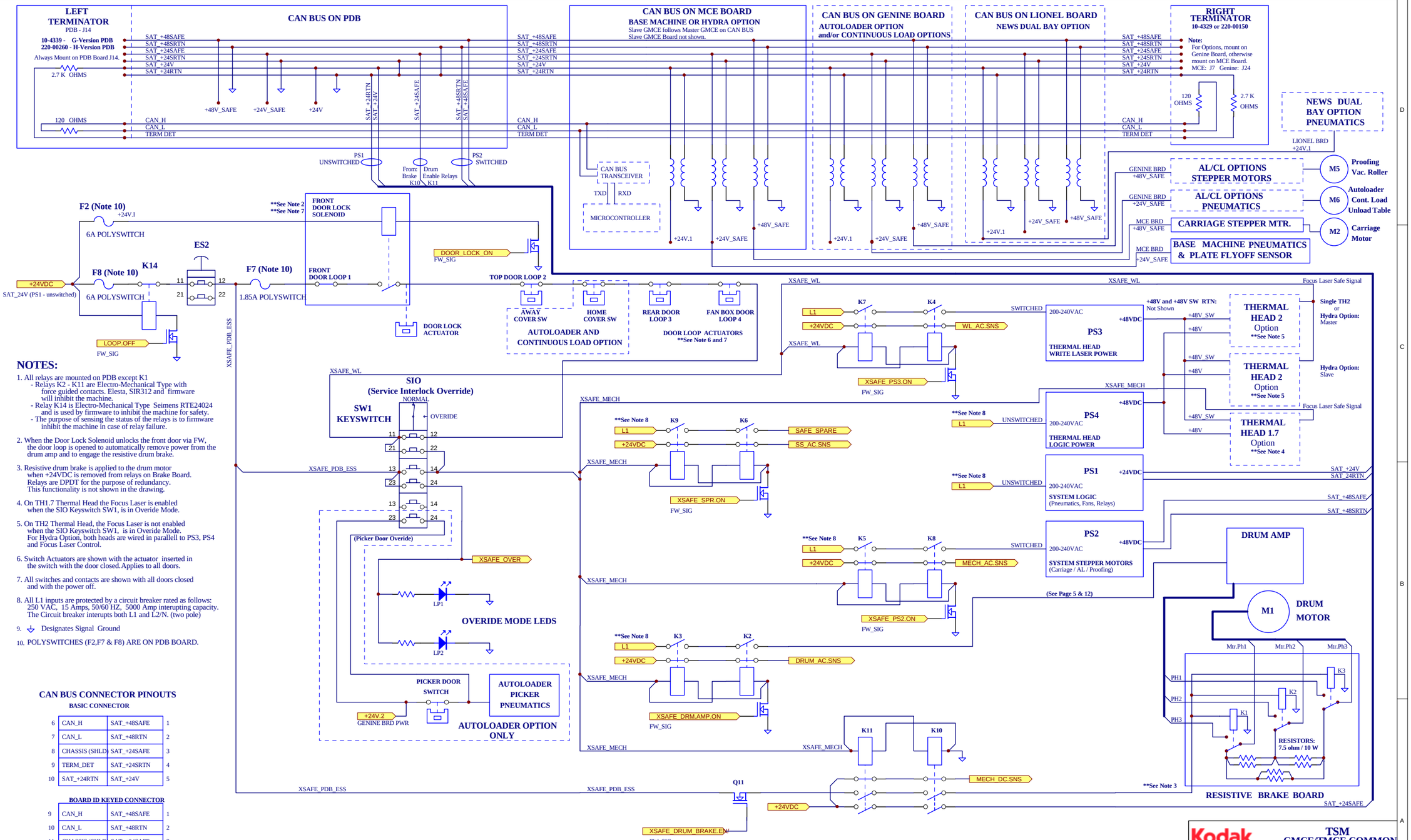
In case of Dual Bay Option on NEWS 200, use Lionel Board. Terminate on J9 and route cable 220-00362 to J13.

Kodak

TSM
TMCE SYSTEM
CONFIGURATION OPTIONS

PAGE_05-TMCE-CONFIG_TABLE

DESIGNED BY:	DOCUMENT NUMBER:	LAST ECO:
R.LEVESSEUR	73-7313A-P-SD01	CA14372
DRAWN BY:	LAST REVISED BY:	APPROVED BY:
S.CHEUNG	S.CHEUNG	S.CHEUNG
DESIGN DATE:	LAST MODIFIED DATE:	SHEET:
JULY 23, 2002	April 11, 2008	5 of 19



NOTES:

1. All relays are mounted on PDB except K1
   - Relays K2 - K11 are Electro-Mechanical Type with force guided contacts. Elesta, SIR312 and firmware will inhibit the machine.
   - Relay K14 is Electro-Mechanical Type Seimens RTE24024 and is used by firmware to inhibit the machine for safety.
   - The purpose of sensing the status of the relays is to firmware inhibit the machine in case of relay failure.
2. When the Door Lock Solenoid unlocks the front door via FW, the door loop is opened to automatically remove power from the drum amp and to engage the resistive drum brake.
3. Resistive drum brake is applied to the drum motor when +24VDC is removed from relays on Brake Board. Relays are DPDT for the purpose of redundancy. This functionality is not shown in the drawing.
4. On TH1.7 Thermal Head the Focus Laser is enabled when the SIO Keyswitch SW1, is in Overide Mode.
5. On TH2 Thermal Head, the Focus Laser is not enabled when the SIO Keyswitch SW1, is in Overide Mode. For Hydra Option, both heads are wired in parallell to PS3, PS4 and Focus Laser Control.
6. Switch Actuators are shown with the actuator inserted in the switch with the door closed. Applies to all doors.
7. All switches and contacts are shown with all doors closed and with the power off.
8. All L1 inputs are protected by a circuit breaker rated as follows: 250 VAC, 15 Amps, 50/60 HZ, 5000 Amp interupting capacity. The Circuit breaker interupts both L1 and L2/N. (two pole)
9. ⏚ Designates Signal Ground
10. POLYSWITCHES (F2,F7 & F8) ARE ON PDB BOARD.

CAN BUS CONNECTOR PINOUTS

BASIC CONNECTOR

6	CAN_H	SAT_+48SAFE	1
7	CAN_L	SAT_+48RTN	2
8	CHASSIS (SHLD)	SAT_+24SAFE	3
9	TERM_DET	SAT_+24SRTN	4
10	SAT_+24RTN	SAT_+24V	5

BOARD ID KEYED CONNECTOR

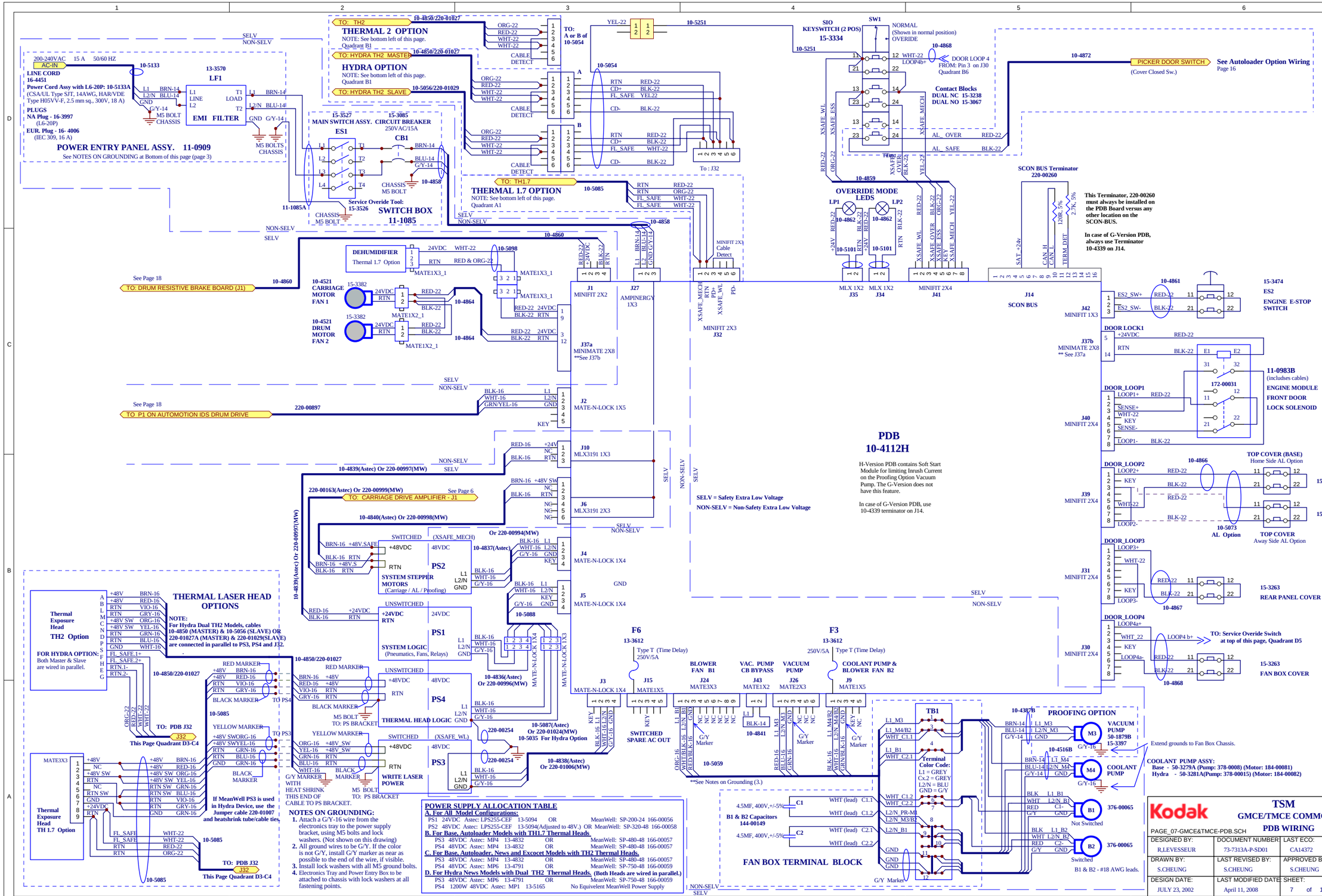
9	CAN_H	SAT_+48SAFE	1
10	CAN_L	SAT_+48RTN	2
11	CHASSIS (SHLD)	SAT_+24SAFE	3
12	TERM_DET	SAT_+24SRTN	4
13	SAT_+24RTN	SAT_+24V	5
14	BRD_LOC+	BRD_LOC+	6
15	BRD_LOC0-	BRD_LOC1-	7
16	BRD_LOC2-	BRD_LOC3-	8

Kodak

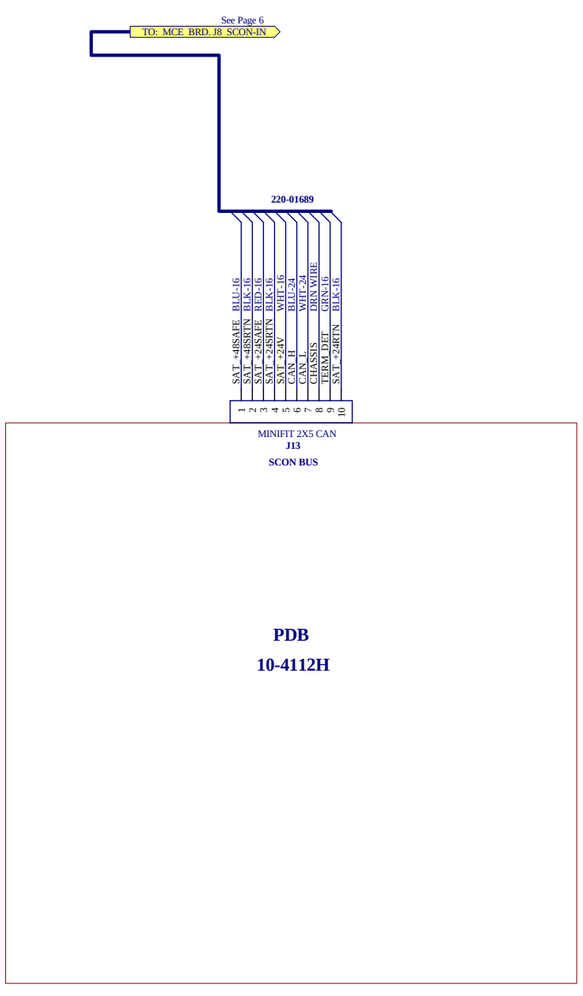
TSM
GMCE/TMCE COMMON SAFETY CIRCUIT

PAGE_06-GMCE&TMCE-SAFETY.SCH

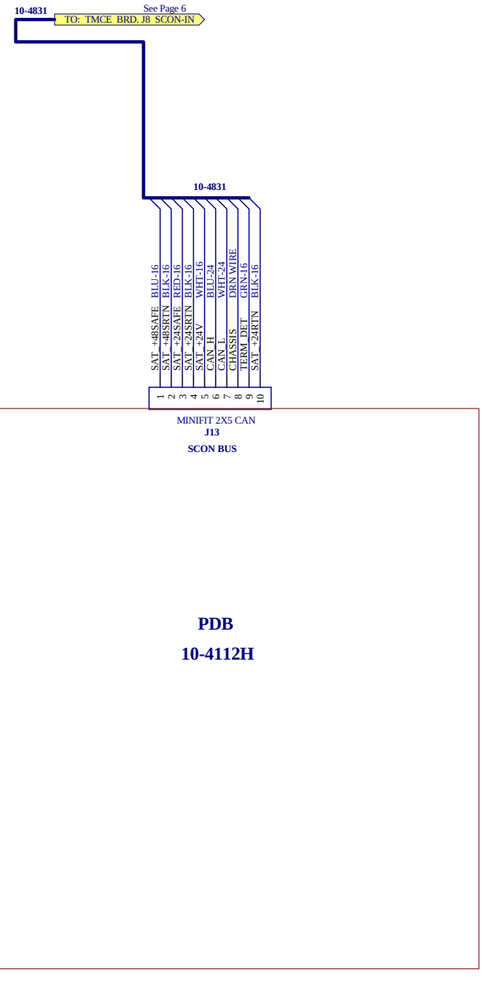
DESIGNED BY:	DOCUMENT NUMBER:	LAST ECO:
R.LEVESSEUR	73-7313A-P-SD01	CA14372
DRAWN BY:	LAST REVISED BY:	APPROVED BY:
S.CHEUNG	S.CHEUNG	S.CHEUNG
DESIGN DATE:	LAST MODIFIED DATE:	SHEET:
JULY 23, 2002	April 11, 2008	6 of 19


AC-IN
200-240VAC 15 A 50/60 HZ
LINE CORD
16-4451
Power Cord Assy with L6-20P: 10-5133A
(CSA/UL Type SJT, 14AWG, HAR/VDE
Type H05VV-F, 2.5 mm sq., 300V, 18 A)
PLUGS
NA Plug - 16-3997
(L6-20P)
EUR. Plug - 16- 4006
(IEC 309, 16 A)
POWER ENTRY PANEL ASSY. 11-0909
See NOTES ON GROUNDING at Bottom of this page (page 3)
EMI FILTER
LF1
MAIN SWITCH ASSY. CIRCUIT BREAKER
ES1
CB1
250VAC/15A
SWITCH BOX
11-1085
Service Overide Tool:
15-3526
THERMAL 2 OPTION
HYDRA OPTION
THERMAL 1.7 OPTION
TO: A or B of 10-5054
SIO
KEYSWITCH (2 POS)
15-3334
SW1
NORMAL
(Shown in normal position)
OVERIDE
Contact Blocks
DUAL NC 15-3238
DUAL NO 15-3067
PICKER DOOR SWITCH
(Cover Closed Sw.)
See Autoloader Option Wiring
Page 16
OVERRIDE MODE
LEDS
SCON BUS Terminator
220-00260
This Terminator, 220-00260
must always be installed on
the PDB Board versus any
other location on the
SCON-BUS.
In case of G-Version PDB,
always use Terminator
10-4339 on J14.
DEHUMIDIFIER
Thermal 1.7 Option
CARRIAGE MOTOR FAN 1
DRUM MOTOR FAN 2
TO: DRUM RESISTIVE BRAKE BOARD (J1)
TO: P1 ON AUTOMOTION IDS DRUM DRIVE
220-00897
TO: CARRIAGE DRIVE AMPLIFIER - J1
220-00163(Astec) Or 220-00999(MW)
10-4839(Astec) Or 220-00997(MW)
10-4840(Astec) Or 220-00998(MW)
Or 220-00994(MW)
PDB
10-4112H
H-Version PDB contains Soft Start
Module for limiting Inrush Current
on the Proofing Option Vacuum
Pump. The G-Version does not
have this feature.
In case of G-Version PDB, use
10-4339 terminator on J14.
SELV = Safety Extra Low Voltage
NON-SELV = Non-Safety Extra Low Voltage
SWITCHED MODE POWER SUPPLIES
PS1
PS2
PS3
PS4
SYSTEM LOGIC
(Pneumatics, Fans, Relays)
SYSTEM STEPPER MOTORS
(Carriage / AL / Proofing)
WRITE LASER POWER
THERMAL HEAD LOGIC
THERMAL LASER HEAD OPTIONS
Thermal Exposure Head TH2 Option
Thermal Exposure Head TH 1.7 Option
FOR HYDRA OPTION:
Both Master & Slave are wired in parallel.
NOTE:
For Hydra Dual TH2 Models, cables
10-4850 (MASTER) & 10-5056 (SLAVE) OR
220-01027A (MASTER) & 220-01029(SLAVE)
are connected in parallel to PS3, PS4 and J32.
TO: PDB J32
This Page Quadrant D3-C4
If MeanWell PS3 is used
in Hydra Device, use the
Jumper cable 220-01007
and heatshrink tube/cable ties.
NOTES ON GROUNDING:
1. Attach a G/Y-16 wire from the electronics tray to the power supply bracket, using M5 bolts and lock washers. (Not shown on this drawing)
2. All ground wires to be G/Y. If the color is not G/Y, install G/Y marker as near as possible to the end of the wire, if visible.
3. Install lock washers with all M5 ground bolts.
4. Electronics Tray and Power Entry Box to be attached to chassis with lock washers at fastening points.
POWER SUPPLY ALLOCATION TABLE
A. For All Model Configurations:
PS1 24VDC Astec: LPS255-CEF 13-5094 OR MeanWell: SP-200-24 166-00056
PS2 48VDC Astec: LPS255-CEF 13-5094(Adjusted to 48V.) OR MeanWell: SP-320-48 166-00058
B. For Base, Autoloader Models with TH1.7 Thermal Heads
PS3 48VDC Astec: MP4 13-4832 OR MeanWell: SP-480-48 166-00057
PS4 48VDC Astec: MP4 13-4832 OR MeanWell: SP-480-48 166-00057
C. For Base, Autoloader, News and Excocet Models with TH2 Thermal Heads.
PS3 48VDC Astec: MP4 13-4832 OR MeanWell: SP-480-48 166-00057
PS4 48VDC Astec: MP6 13-4791 OR MeanWell: SP-750-48 166-00059
D. For Hydra News Models with Dual TH2 Thermal Heads. (Both Heads are wired in parallel.)
PS3 48VDC Astec: MP6 13-4791 OR MeanWell: SP-750-48 166-00059
PS4 1200W 48VDC Astec: MP1 13-5165 No Equivelent MeanWell Power Supply
FAN BOX TERMINAL BLOCK
B1 & B2 Capacitors
144-00149
4.5MF, 400V,+/-5%
PROOFING OPTION
VACUUM PUMP
50-1879B
15-3397
COOLANT PUMP
50-3279A (Pump: 378-0008) (Motor: 184-00081)
Hydra - 50-3281A(Pump: 378-00015) (Motor: 184-00082)
Extend grounds to Fan Box Chassis.
ENGINE MODULE
FRONT DOOR
LOCK SOLENOID
11-0983B
(includes cables)
ENGINE E-STOP
SWITCH
ES2
15-3474
TOP COVER (BASE)
Home Side AL Option
TOP COVER
Away Side AL Option
REAR PANEL COVER
FAN BOX COVER
Not Switched
Switched
B1 & B2 - #18 AWG leads.
Kodak
TSM
GMCE/TMCE COMMON
PDB WIRING
PAGE_07-GMCE&TMCE-PDB.SCH
DESIGNED BY: R.LEVESSEUR
DOCUMENT NUMBER: 73-7313A-P-SD01
LAST ECO: CA14372
DRAWN BY: S.CHEUNG
LAST REVISED BY: S.CHEUNG
APPROVED BY: S.CHEUNG
DESIGN DATE: JULY 23, 2002
LAST MODIFIED DATE: April 11, 2008
SHEET: 7 of 19

GMCE Version



TMCE Version



Kodak

TSM

GMCE VS TMCE

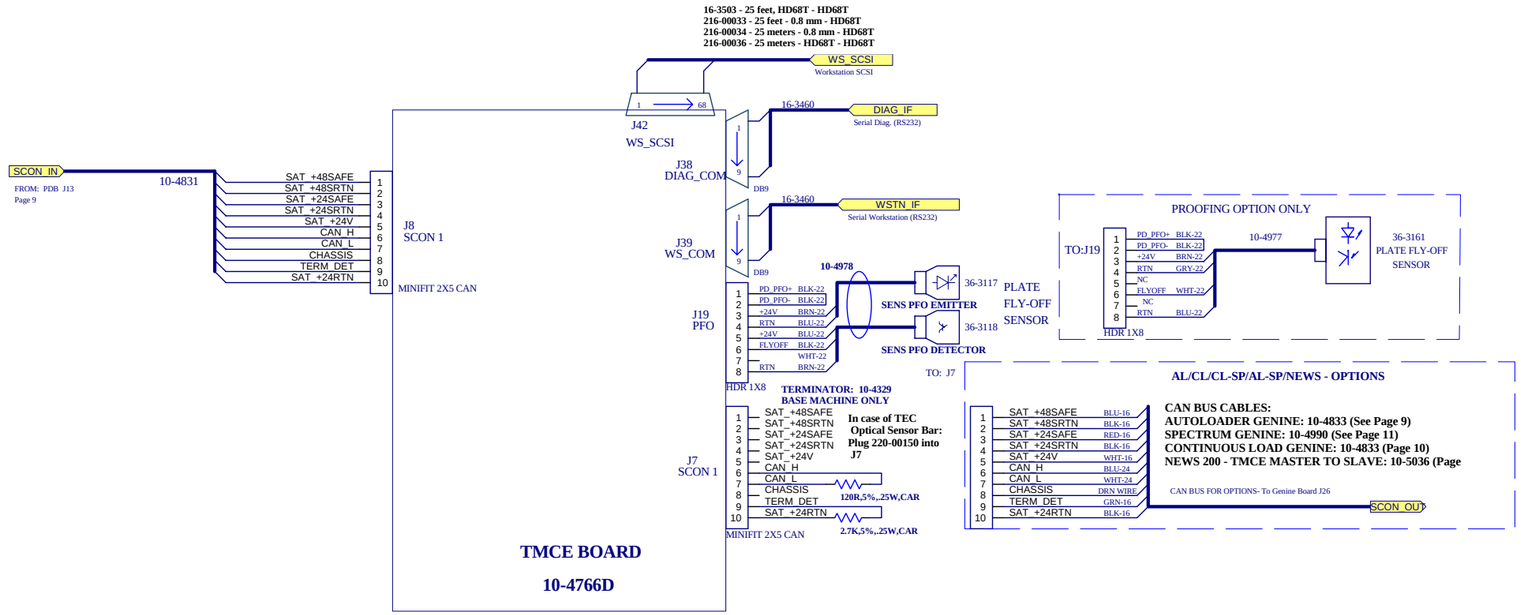
PDB WIRING

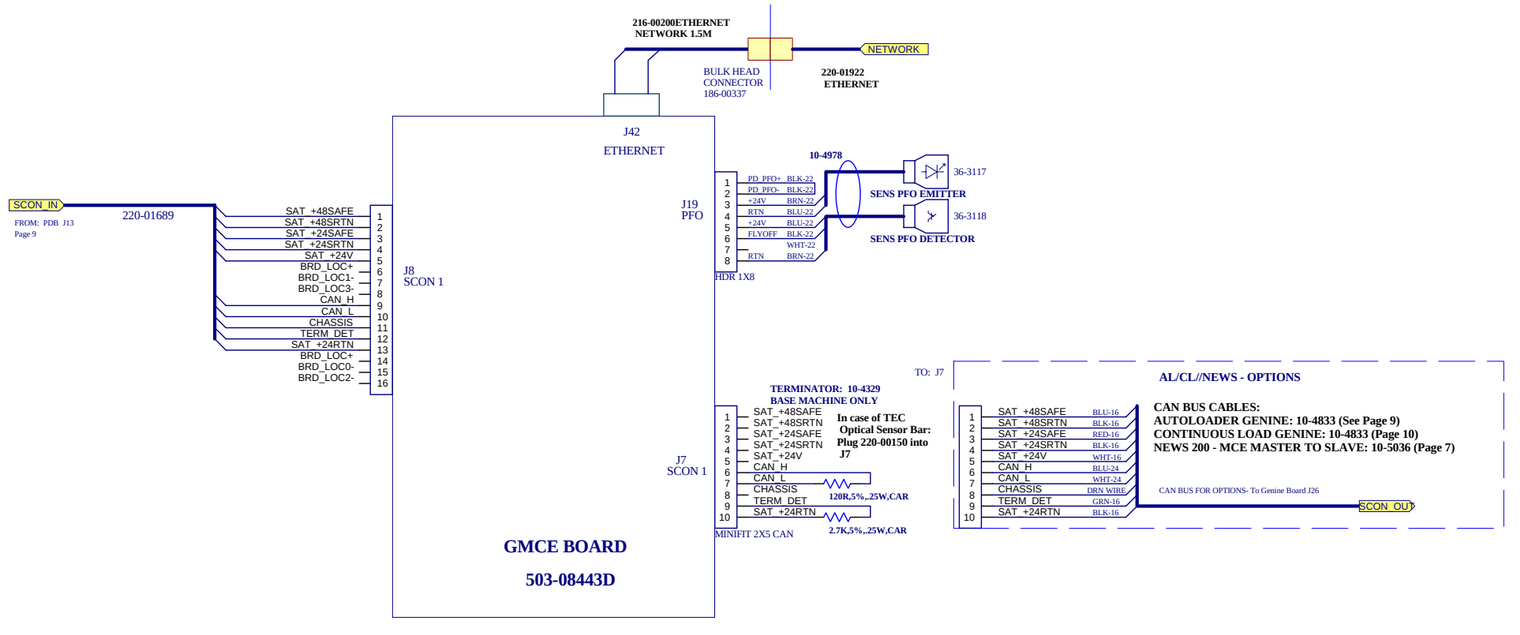
PAGE_08-CANBUS-PDB.SCH

DESIGNED BY:	DOCUMENT NUMBER:	LAST ECO:
R.LEVESSEUR	73-7313A-P-SD01	CA14372
DRAWN BY:	LAST REVISED BY:	APPROVED BY:
S.CHEUNG	S.CHEUNG	S.CHEUNG
DESIGN DATE:	LAST MODIFIED DATE:	SHEET:
JULY 23, 2002	April 11, 2008	8 of 19

ENCODER ASSEMBLY
380-00107
ENC1
"HOT LINK CABLE"
10-4849
THERMAL 1.7 OPTION
TO: J1
10-5057
10-4848
10-5086
Thermal Exposure Head TH2 Option
Thermal Exposure Head TH1.7 Option
SIG.
GND
ENGINE TEMPERATURE
10-0967
YEL-22
BLK-22
MATE1X3
COOLANT TEMPERATURE
220-00235 (PRELIMINARY)
MATE 1x2
10-4846
BALLSCREW TEMPERATURE
TO: J2
EH_CTRL
J2
EH_CTRL
HDB44F
PD.TEMP+
YEL-22 ENG.TEMP+
PD.TEMP-
BLK-22 ENG.TEMP-
J30
MCE_FRAME
10-4847B
D-Version MCE
PD.LS.TEMP+
LS.TEMP+
PD.LS.TEMP-
LS.TEMP-
J46
MCE_BLLSCRW
UA1 BRN-24
UA2 GRY-24
UA0 RED-24
NC
PD+ BLK-24
PA1 GRN-24
PA1 PNK-24
PA0 BLU-24
PA0 BLK-24
NC
PD- BLK-GRY-24
PB1 WHT-GRN-24
+5V BRN-GRN-24
RTN WHT-24
+5V BLU-24
NC
HDB15M
J20
DRUM_ENC
J1
HDR 2X10IDC
P32
J26
CA_CTRL
See Page 5
FROM: PS2 - 48 V.SAFE
220-00163
CARRIAGE POWER
BRN-16 +48V.SAFE
BLK-16 RTN
500-01147
CARRIAGE AMP
FAN 3
376-00023
RED-22 +48VDC
BLK-22 RTN
10-4834
CARRIAGE CONTROL
503C01525
CARRIAGE AMP DRIVE
MINIMATE 2X4
HDR 2X10IDC
CARRIAGE MOTOR ASSY
11-1133
(c/w pulley and cable)
184-00012B
M2
PHA+ WHT-18
PHB- RED-18
CD+
PHA- GRN-18
PHB+ BLK-18
NC
CD-
SHIELD
M5 Bolt
CHASSIS
MCE-DA
J35
DB15M
220-00884
DRUM AMPLIFIER CONTROL
RED-22 DA.+5V
NC
BLK-22 DA.DIR
WHT-22 DA.PWM
NC
YEL-22 /DA.FAULT
GRY-22 /DA.COM
NC
BRN-22 DA.ENBL
WHT-22 GND
BLU-22 DA.BRAKE
ORG-22 DA.RUN
ORG-22 LR.QUE
VIO-22 DA.CD/COM
SHIELD
MDA.DIG
See Page 12
MLX 1X3
HDR 1X3 MLX
220-02338
HDR 1X3 MLXLATCH
LOAD RAMP PLATE SENSOR (MIDDLE)
36-3210
(News Options Only)
DA +5V RED-22
LR.QUE ORG-22
GND WHT-22
GMCE BOARD
503-08433D
TMCE BOARD
10-4766D
NOTE:
See page 8, Quadrant B4, for TEC Backbone Wiring.
10-5105
DB37F
DB37M
J4
AWAY SIDE SENSORS
10-5102
(Ribbon Cable)
LEC RETRACT Away
RED-GRN-24
WHT-RED-24
BLU-WHT-24
ROLLER RETRACT Away
RED-24
WHT-24
GRN-24
TEC RETRACT Away
RED-BLK-24
ORG-RED-24
BLU-RED-24
(Reverse Logic) LEC EXTEND Away
RED-24
BLU-24
GRN-24
ROLLER EXTEND Away
ORG-24
YEL-24
WHT-24
10-4982
CARRIAGE AWAY SENSOR
RED
BLK
WHT
GRN
MINIFIT 2X2
Cable Detect
TEC EXTEND Away
RED-24
WHT-24
GRN-24
EXIT DOOR
(CL OPTION: LOADER DOOR)
36-3222 Closed
(Base & Sp)
RED-24
WHT-24
GRN-24
LOAD RAMP (Top Out - AL Option)
36-3222
RED-WHT-BLK-24
BLU-BLK-24
GRN-WHT-BLK-24
OPERATOR INTERFACE
HDR 2X5
J16
10-4994
HDR 2X5
10-4340
START BUTTON ASSEMBLY
SW-PB
LOAD
IMAGING
ERROR
USER INTERFACE BOARD
503-00011
J6
HOME SIDE SENSORS
10-5103
(Ribbon Cable)
10-5106
LEC RETRACT Home 36-3222
ROLLER RETRACT Home 36-3222
TEC RETRACT Home 36-3222
LEC (Reverse Logic) EXTEND Home 36-3222
ROLLER EXTEND Home 36-3222
RED
BLK
WHT
GRN
CARRIAGE HOME SENSOR 10-4982
MINIFIT 2X2
LOAD RAMP Out (Bottom) 36-3222
TEC EXTEND Home 36-3222
LOAD RAMP PLATE SENSOR (HOME) 36-3210
HDR 1X3 MLXLATCH
10-5155
LOAD RAMP PLATE SENSOR (AWAY) 36-3210
(News Options Only)
NOTE:
See page 8, Quadrant B4, for TEC Backbone Wiring.
J12
LTPS
SOL_DRV
J10
HDR 2X13
MTA 1X6
10-4863
10-4845
SOLENOID BLOCK
DRV0S - LR_Drive
DRV1S - AJ_Drive
DRV2S - TEC_UnlockDrive
DRV3S - TEC_Drive
DRV4S - RLR_Drive
DRV5S - LEC_Drive
DRV6S - DOOR_ExitDoorDrive
DRV7S - AUTO_CupsDrive
DB25M
Engine Solenoid Block
50-1649
NOTE: DRV7S- AUTO_CupsDrive for Autoloader only.
Kodak
TSM
GMCE/TMCE COMMON
ENGINE I/O BOARD WIRING
PAGE_09-GMCE&TMCE-ENGINE_IO.Sch

DESIGNED BY:	DOCUMENT NUMBER:	LAST ECO:
R.LEVESSEUR	73-7313A-P-SD01	CA14372
DRAWN BY:	LAST REVISED BY:	APPROVED BY:
S.CHEUNG	S.CHEUNG	S.CHEUNG
DESIGN DATE:	LAST MODIFIED DATE:	SHEET:
JULY 23, 2002	April 11, 2008	9 of 19





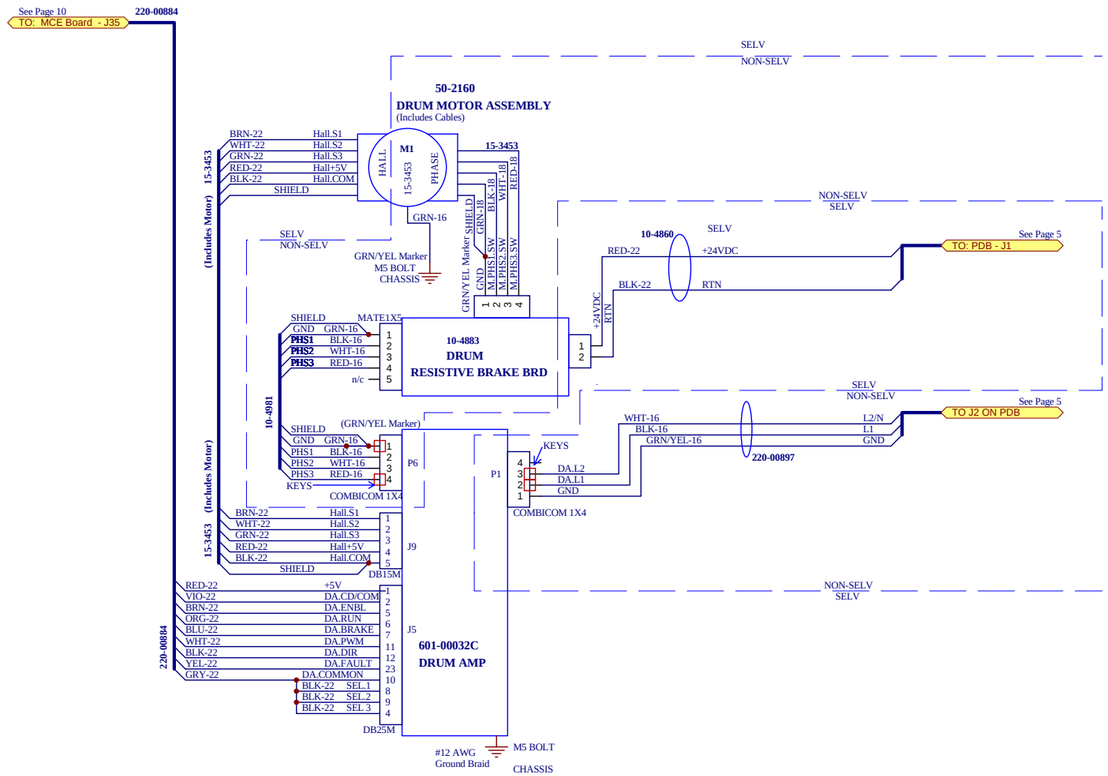
Kodak

TSM
GMCE/TMCE
EXP-BUS WIRING

PAGE_10-GMCE-VS-TMCE_BRD_WIRING.Sch

DESIGNED BY:	DOCUMENT NUMBER:	LAST ECO:
R.LEVESSEUR	73-7313A-P-SD01	CA14372
DRAWN BY:	LAST REVISED BY:	APPROVED BY:
S.CHEUNG	S.CHEUNG	S.CHEUNG
DESIGN DATE:	LAST MODIFIED DATE:	SHEET:
JULY 23, 2002	April 11, 2008	10 of 19

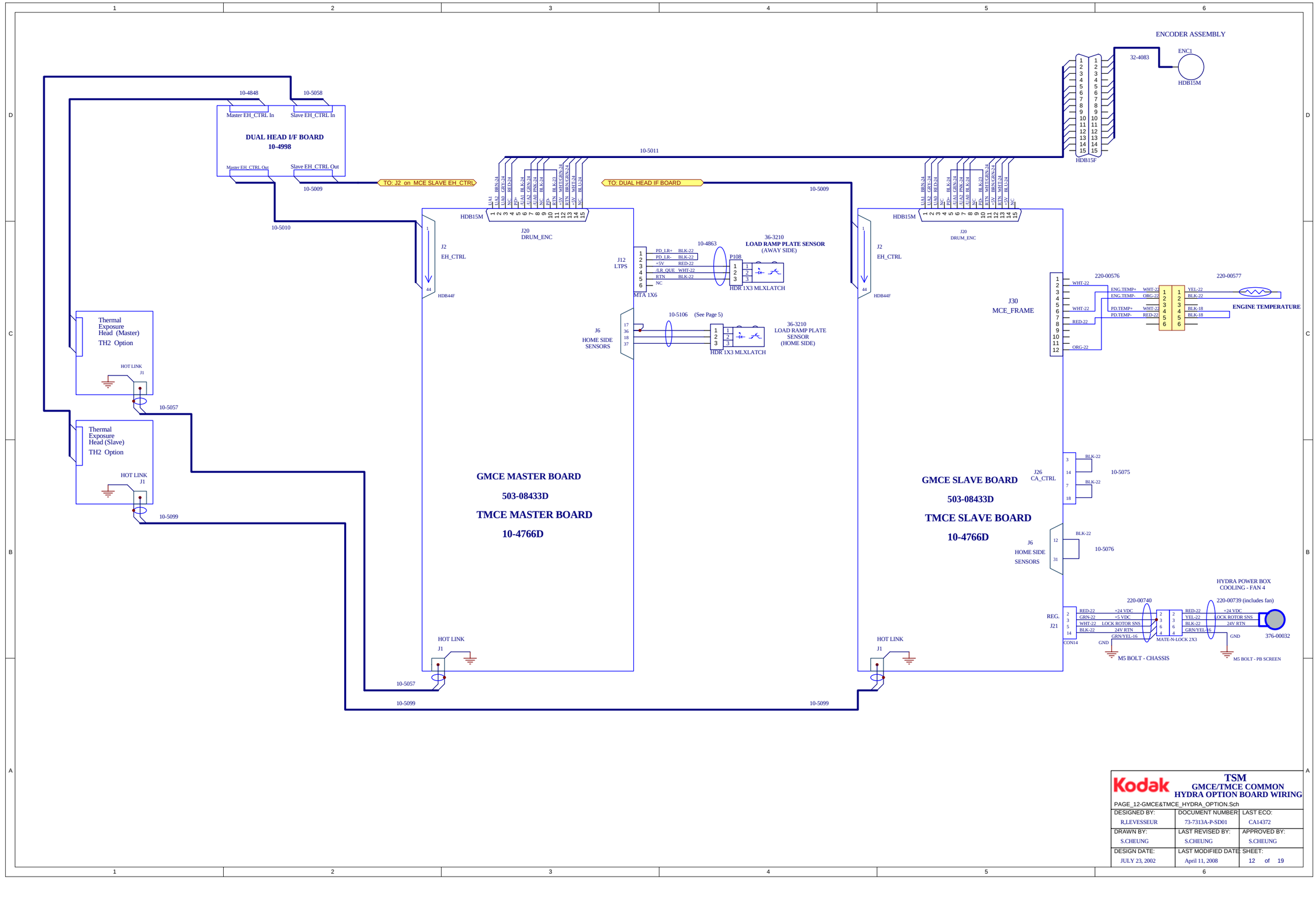
601-00032C
AUTOMOTION DRUM AMPLIFIER



Kodak **TSM DRUM DRIVE WIRING**

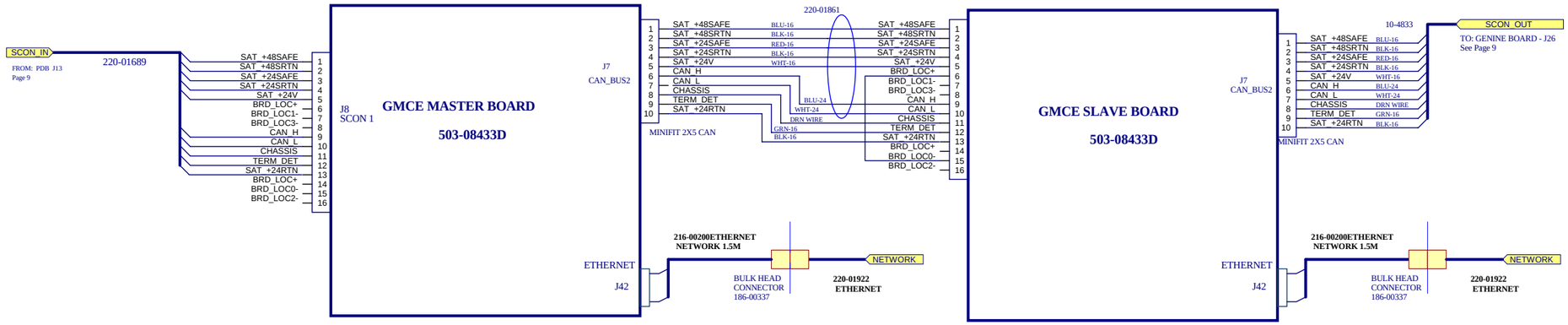
PAGE_11-GMCE&TMCE-DRUM_DRIVES.SCH

DESIGNED BY:	DOCUMENT NUMBER:	LAST ECO:
R.LEVESSEUR	73-7313A-P-SD01	CA14372
DRAWN BY:	LAST REVISED BY:	APPROVED BY:
S.CHEUNG	S.CHEUNG	S.CHEUNG
DESIGN DATE:	LAST MODIFIED DATE:	SHEET:
JULY 23, 2002	April 11, 2008	11 of 19

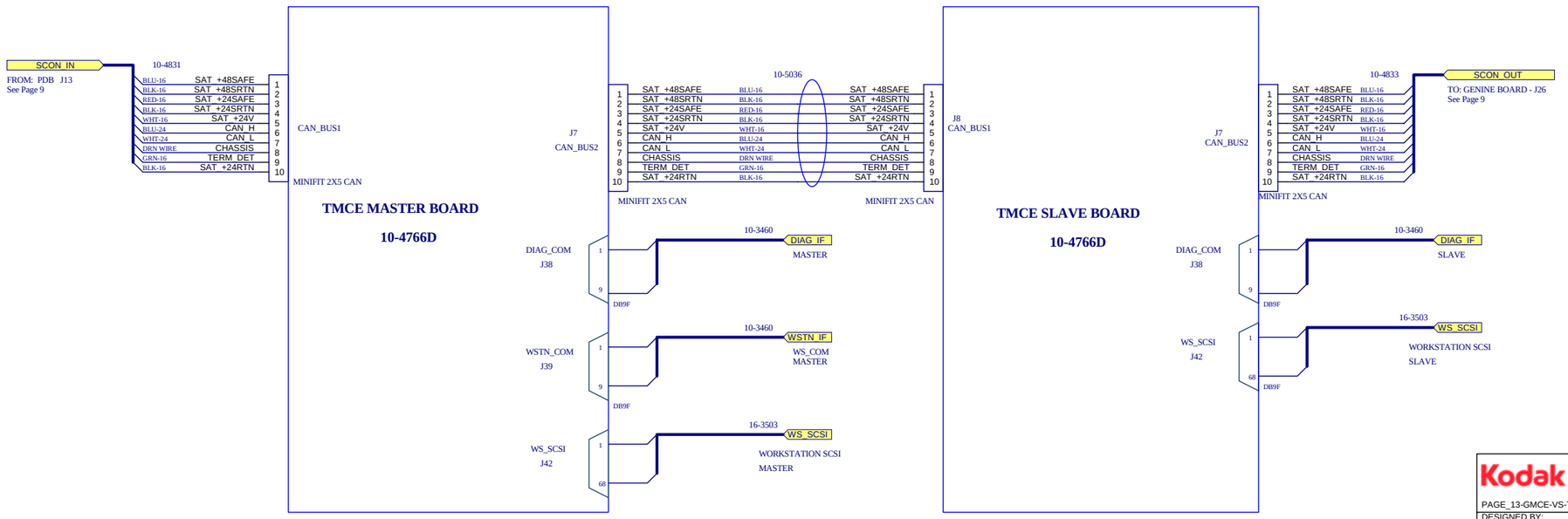


Kodak	**TSM**
	GMCE/TMCE COMMON
	HYDRA OPTION BOARD WIRING
PAGE_12-GMCE&TMCE_HYDRA_OPTION.Sch	
DESIGNED BY: R.LEVESSEUR	DOCUMENT NUMBER: 73-7313A-P-SD01
DRAWN BY: S.CHEUNG	LAST REVISED BY: S.CHEUNG
DESIGN DATE: JULY 23, 2002	LAST MODIFIED DATE: April 11, 2008
LAST ECO: CA14372	APPROVED BY: S.CHEUNG
SHEET: 12 of 19	

GMCE VERSION



TMCE VERSION



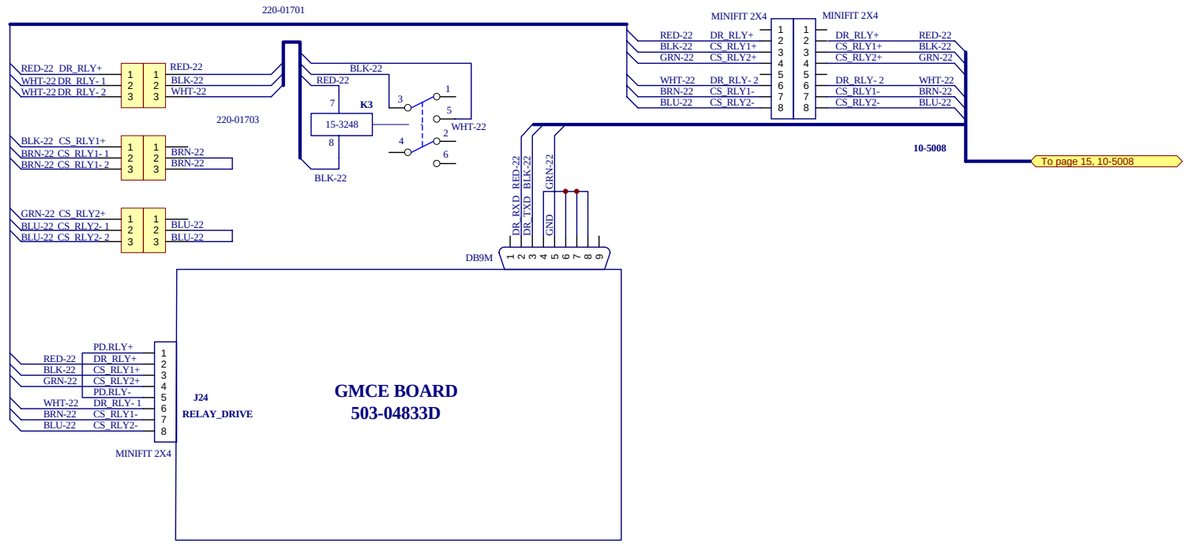
TSM

GMCE/TMCE COMMUNICATION HYDRA OPTION BOARD WIRING

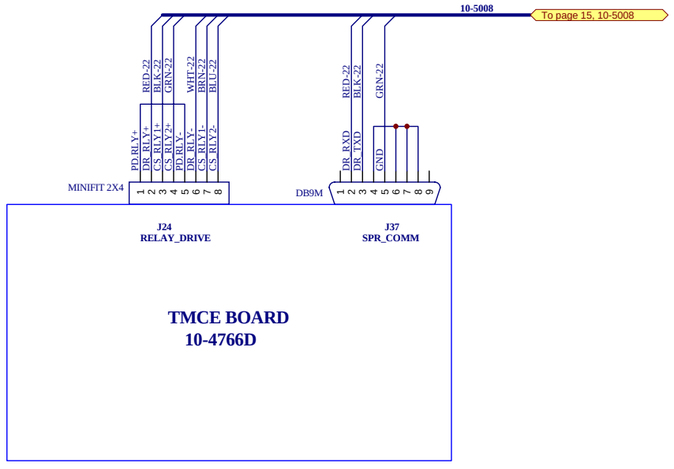
PAGE_13-GMCE-VS-TMCE_HYDRA_OPTION.Sch

DESIGNED BY:	DOCUMENT NUMBER:	LAST ECO:
R.LEVESSEUR	73-7313A-P-SD01	CA14372
DRAWN BY:	LAST REVISED BY:	APPROVED BY:
S.CHEUNG	S.CHEUNG	S.CHEUNG
DESIGN DATE:	LAST MODIFIED DATE:	SHEET:
JULY 23, 2002	April 11, 2008	13 of 19

GMCE VERSION



TMCE VERSION



Kodak	TSM GMCE/TMCE BOARD WIRING TEC BACKBONE, DEBRIS REMOVAL /CHILLER OPTION	
PAGE_14-GMCE-VS-TMCE_DEBRIS_REMOVAL.sch		
DESIGNED BY: R.LEVESSEUR	DOCUMENT NUMBER: 73-7313A-P-SD01	LAST ECO: CA14372
DRAWN BY: S.CHEUNG	LAST REVISED BY: S.CHEUNG	APPROVED BY: S.CHEUNG
DESIGN DATE: JULY 23, 2002	LAST MODIFIED DATE: April 11, 2008	SHEET: 14 of 19

From page 14, 10-5008A

J5
SPARE_IO

10-5008

1	+DSEN.LED18			
14	-DSEN.LED18			
2	DSEN_C18	DR_STAT1+ (LID_PRESENT)		RED-22
15	DSEN_E18	DR_STAT1-		WHT-22
3	+DSEN.LED19	FLOW_SW+		BLK-22
16	-DSEN.LED19	FLOW_SW-		RED-22
4	DSEN_C19	DR_STAT2+ (FILTER_FULL)		RED-22
17	DSEN_E19	DR_STAT2-		BLK-22
5	+DSEN.LED20	FLOW_SW_PD+		BLU-22
18	-DSEN.LED20	FLOW_SW_PD-		WHT-22
6	DSEN_C20	CS_CD+		GRN-22
19	DSEN_E20	CS_CD-		BLU-22
7	+DSEN.LED21			
20	-DSEN_LED21			
8	-DSEN.C21			
21	-DSEN_E21			
9	+DSEN.LED22			
22	-DSEN.LED22			
10	-DSEN.C22			
23	-DSEN.E22			
11	+DSEN.LED23			
24	-DSEN.LED23			
12	-DSEN.C23			
25	-DSEN.E23			
13				

DB25

BLU-24 TEC_SW+
GRY-24 TEC_SW-
BLK-24 TEC_PD-
BLU-24 TEC_PD+
YEL-24 UNLOCK_SNS_E
BRN-24 UNLOCK_SNS_C
BLK-24 UNLOCK_SNSL-
ORG-24 UNLOCK_SNSL+
BLK-24 LOCK_SNS_E
BLU-24 LOCK_SNS_C
BLK-24 LOCK_SNSL-
RED-24 LOCK_SNSL+

10-5008

U67
MOTOROLA MPX
VACUUM SENSOR
(For UDRC-B Option)

SEE NOTE ON THIS PAGE.

GMCE BOARD
503-04833D

TMCE BOARD
10-4766D

Debris Collection Vacuum Pressure Tube

To: Thermal Head
Debris Collection Nozzle

MINIFIT 2X8

GRN-22	15	15	CS_CD+	BLK-22	1
BLU-22	16	16	CS_CD-	BLK/WHT-22	9
BLK-22	7	7	CS_RLY1+	BLU-22	2
BRN-22	8	8	CS_RLY1-	BLU/BLK-22	10
GRN-22	9	9	CS_RLY2+	WHT-22	3
BLU-22	10	10	CS_RLY2-	RED-22	11
BLK-22	2	2	DR_TXD	BLU/WHT-22	4
RED-22	1	1	DR_RXD	ORG/RED-22	12
RED-22	5	5	DR_RLY+	GRN-22	5
WHT-22	6	6	DR_RLY-	GRN/BLK-22	13
RED-22	11	11	DR_STAT1+	RED-22	6
WHT-22	12	12	DR_STAT1-	RED/BLK-22	14
	13	13	DR_STAT2+	ORG-22	7
	14	14	DR_STAT2-	ORG/BLK-22	15
GRN-22	3	3	GND	GRN/WHT-22	8
RED-22	n/c	4	n/c		

10-5007

TRENDSETTER BULKHEAD

SERIAL CABLE TO UDRC CABINET
10-4561

UDRC BULKHEAD — DB15F / DB15M

UDRC BULKHEAD — DB15F / DB15M

UNIVERSAL DEBRIS REMOVAL CABINET

J2 — DB15F

OPTIONS:
UDRC-B
or
UDRC-L

1x2 Minifit-Plug

1x2 Minifit-Rec.

UDRC-L Option Only

RED-22 BLK-22

UDRC-B Option Only

BLK-22 RED-22

BLK-22 BLK-22 -COM
RED-22 RED-22 +EXC
OUT

Setra Vacuum Sensor
(UDRC-L Option Only)

13-5127 0-25" WC For TEH1.7

13-5172 0-50" WC For TH2

NOTE: MOUNT INSIDE POWER BOX.

220-00411 (preliminary- requires part # & cable length change)

BLK-18 TEMP2+
BLK-18 TEMP2-

TH2.7 Coolant Pressure Switch
172-00045

PD+ BLU-22
PD- WHT-22
BLK-18

NOTE:
Connect the vacuum tubing from the debris collection nozzle to the appropriate sensor:
1) If a UDRC-B is installed, connect the vacuum tubing to the LOW pressure port of the Motorola sensor at U67 on the MCE board
2) If a UDRC-L is installed, connect the vacuum tubing to the LOW pressure port of the Setra sensor

MINIFIT 2X6

RED-24	1	1		
BLK-24	2	2		
BLU-24	3	3		
PRP-24	4	4		
ORG-24	5	5		
BLK-24	6	6		
BRN-24	7	7		
YEL-24	8	8		
BLK-24	9	9	BLK-24	Cable Detect
BLK-24	12	12	RED-22	
GRY-24	10	10	BLK-22	
BLU-24	11	11		

220-00148 (8-PAGE)

10-5008

RED BLK WHT GRN — MLX 1X4 — **LOCK** **10-3683**

RED BLK WHT GRN — MLX 1X4 — **UNLOCK** **10-3683**

C8P
E8P

OPTICAL TEC BACKBONE

J3
DIGITAL OUTPUTS

HDB15F

J1
DIGITAL INPUTS

DB37F

220-00152

ORG-24 ORG-BLK-24 GRN-BLK-24 — SENS # 1 **36-3210**

RED-BLK-24 ORG-RED-24 BLU-RED-24 — SENS #2 **36-3210**

ORG-24 ORG-BLK-24 GRN-BLK-24 — SENS #3 **36-3210**

RED-WHT-BLK-24 BLU-BLK-24 GRN-BLK-WHT-24 — SENS #4 **36-3210**

RED-GREN-24 WHT-RED-24 BLU-WHT-24 — SENS #5 **36-3210**

RED-BLK-24 ORG-RED-24 BLU-RED-24 — SENS #6 **36-3210**

TEC MAGNET SENSOR
I/F BOARD
503-00050

J4
24V POWER

1X2 MINIFIT

RED-22 BLK-22 — SAT_+24V SAT_+24RTN — RED-22 BLK-22 — +24V RTN

220-00150

TO:
J8 on MCE board in case of Base machine. (See Page 6)

J24 on Genine board in case of AL (Page 9), NEWS200 (Page7), Continuous Load (Page 10) or Spectrum (Page 11)

MINIFIT 2X5 CAN

1	SAT_+48SAFE
2	SAT_+48SRTN
3	SAT_+24SAFE
4	SAT_+24SRTN
5	SAT_+24V
6	CAN_H
7	CAN_L
8	CHASSIS
9	TERM_DET
10	SAT_+24RTN

120R,5%,.25W,CAR
2.7K,5%,.25W,CAR

MICRO-SWITCH TEC BACKBONE

10-5108

This connector plugs into 10-5008. (This Page) (Either Optical or Microswitch TEC is compatible with 10-5008)

RED BLK WHT GRN — MLX 1X4 — **LOCK** **10-3683**

RED BLK WHT GRN — MLX 1X4 — **UNLOCK** **10-3683**

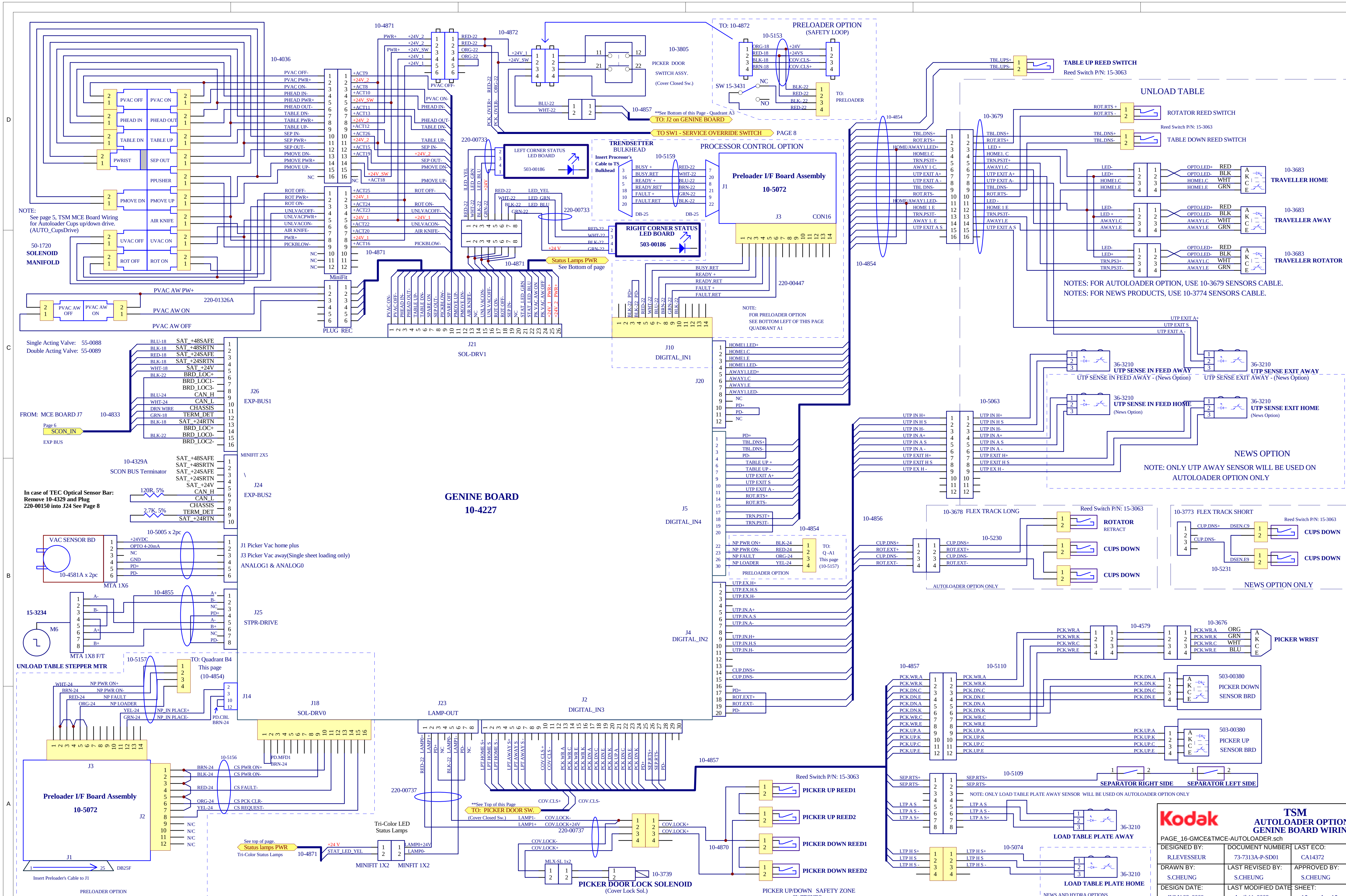
BLK-24 Cable Detect

WHT-24
GRN-24 GRN-24 GRN-24

TEC Magnet Detection Switches (Limit Switches)

GRN-24 GRN-24 GRN-24

Kodak	**TSM - GMCE/TMCE**		
	DEBRIS REMOVAL/CHILLER OPTION		
	TEC BACKBONE		
	COMMON BOARD WIRING		
PAGE_15-GMCE-TMCE_DEBRIS_REMOVAL.sch			
DESIGNED BY: R.LEVESSEUR	DOCUMENT NUMBER: 73-7313A-P-SD01	LAST ECO: CA14372	
DRAWN BY: S.CHEUNG	LAST REVISED BY: S.CHEUNG	APPROVED BY: S.CHEUNG	
DESIGN DATE: JULY 23, 2002	LAST MODIFIED DATE: April 11, 2008	SHEET: 15 of 19	



Kodak

TSM
AUTOLOADER OPTION
GENINE BOARD WIRING

PAGE_16-GMCE&TMCE-AUTOLOADER.sch

DESIGNED BY:	DOCUMENT NUMBER:	LAST ECO:
R,LEVESSEUR	73-7313A-P-SD01	CA14372
DRAWN BY:	LAST REVISED BY:	APPROVED BY:
S.CHEUNG	S.CHEUNG	S.CHEUNG
DESIGN DATE:	LAST MODIFIED DATE:	SHEET:
JULY 23, 2002	April 11, 2008	16 of 19

CONTINUOUS LOAD SOLENOID MANIFOLD

PHYSICAL ORIENTATION

PKR_UP
PKR_CUPS_OUT
TABLE_UP
PKR_PVAC_ON
TABLE_PUSH_ON
EDOOR_OPEN
PKR_VAC_ON
TABLE_VAC_ON
TABLE_ROT_ON

SOLENOID MANIFOLD ASSY.
500-00992
Single Acting Valve: 55-0771

WIRING

TABLE_VAC_ON
PKR_VAC_ON
PKR_CUPS_OUT
PKR_UP
EDOOR_OPEN
TABLE_UP
TABLE_PUSH_ON
PKR_PVAC_ON
TABLE_ROT_ON

BLK-24 RED-24

220-00346

TBL_VAC_ON PWR+24V
PKR_VAC_ON PKR_CUPS_OUT PWR+24V
PKR_UP EDOOR_OPEN PWR+24V
TABLE_UP TABLE_PUSH_ON PWR+24V
PKR_PVAC_ON TBL_ROT_ON PWR+24V
NC

NOTE: TSM MCE Board Wiring
for Autoloader Cups up/down drive.
CL uses the same drive for the Table Unload Cups.
(AUTO_CupsDrive)

220-00218

VIO-22 RED-22 BLU-22 ORG-22 RED-24 BLK-22 WHT-22 RED-24 GRN-22 BRN-22 RED-24 GRY-22 YEL-22 RED-24 NC NC

TBL_VAC_ON PWR+24V
PKR_VAC_ON PKR_CUPS_OUT
PKR_UP EDOOR_OPEN
TABLE_UP TABLE_PUSH_ON
PKR_PVAC_ON TBL_ROT_ON

220-00218

STAT_LED_YEL
STAT_LED_GRN
STAT_LED_BLU
PWR 24 V -

WHT-22 GRN-22 BLK-22 RED-24 RED-24 RED-24

220-00733

RED-22 WHT-22 BLK-22 GRN-22

LEFT CORNER STATUS LED BOARD
503-00186

RED-22 WHT-22 BLK-22 GRN-22

LEFT CORNER STATUS LED BOARD
503-00186

TRENDSETTER BULKHEAD

Insert Processor's Cable to TS Bulkhead

10-5159

BUSY.RET RED-22
READY + WHT-22
READY.RET BLU-22
FAULT + BRN-22
FAULT.RET BLK-22

DB-25 DB-25

Preloader I/F Board Assembly
10-5072
J1

J3 CON16

PROCESSOR CONTROL OPTION

PKR_VAC_ON TABLE_UP PKR_CUPS_OUT PCKR_PVAC_ON TBL_PUSH_ON STAT_LED_GRN EDOOR_OPEN TBL_VAC_ON TBL_ROT_ON STAT_LED_YEL STAT_LED_BLU PKR_UP -24V_1 PWR+ -24V_2 PWR-

220-00447

BUSY + BUSY.RET READY + READY.RET FAULT + FAULT.RET

BLK-22 PD- RED-22 PD+ WHT-22 BLK-22 GRN-22 BLK-22

CON14

J21
SOL-DRV1

J10
DIGITAL_IN1

J20
HOME/AWAY

HOME1.LED+
HOME1.C
HOME1.E
HOME1.LED-
AWAY1.LED+
AWAY1.C
AWAY1.E
AWAY1.LED-
NC
PD+
PD-
NC

PD+
TBL.DNS+
TBL.DNS-
PD-
TABLE UP +
TABLE UP -
UTP EXIT A+
UTP EXIT S
UTP EXIT A -
ROT.RTS+
ROT.RTS-

TRN.PS3T+
TRN.PS3T-

J5
DIGITAL_IN4

10-4854

TO: Q -A1 This page (10-5157)

PL PWR ON+ BLK-24
PL PWR ON- RED-24
PL FAULT ORG-24
PL LOADER YEL-24

PRELOADER OPTION

UTP.EX.H+
UTP.EX.H.S
UTP.EX.H-

UTP.IN.A+
UTP.IN.A.S
UTP.IN.A-

J4
DIGITAL_IN2

UTP.IN.H+
UTP.IN.H.S
UTP.IN.H-

CUP.DNS+
CUP.DNS-

PD+
ROT.EXT+
ROT.EXT-
PD-

J23
LAMP-OUT

LAMP1+ LAMP1- PD- NC LAMP2+ LAMP2- PD- NC

J2
DIGITAL_IN3

LPT.HOME.S+ LPT.HOME.S- LPT.HOME.S.- LPT.AWAY.S+ LPT.AWAY.S- LPT.AWAY.S.- PKR_CUPS.HOME.A PKR_CUPS.HOME.C PKR_CUPS.HOME.E PKR_CUPS.HOME.K PKR_CUPS.AWAY.A PKR_CUPS.AWAY.C PKR_CUPS.AWAY.E PKR_CUPS.AWAY.K PKR_DN.A PKR_DN.C PKR_DN.E PKR_DN.K PKR_UP.A PKR_UP.C PKR_UP.E PKR_UP.K PD+ PD- ORG/WHT-24

ORG/BLK-24 BLU/BLK-24 WHT/BLK-24 BLK-24 GRN-24 RED/BLK-24 BLU-24 RED-24 ORG-24 WHT-24 BLK/RED-24 ORG/RED-24 BLU/RED-24 WHT/RED-24 BLK/WHT-24 RED/WHT-24 GRN/WHT-24 BLU/WHT-24 ORG/GRN-24 BLK/GRN-24 WHT/BLK/RED-24 RED/BLK/WHT-24

220-00349

In case of Continuous Load with Proofing Option: Use CAN BUS Cable 220-00366 between CL Genine and Proofing Genine.

FROM: MCE BOARD J7
See Page 6
SCON_IN
EXP BUS
10-4833

BLU-18 SAT_+48SAFE
BLK-18 SAT_+48SRTN
RED-18 SAT_+24SAFE
BLK-18 SAT_+24SRTN
WHT-18 SAT_+24V
BLK-22 BRD_LOC+
BRD_LOC1-
BRD_LOC3-
BLU-24 CAN_H
WHT-24 CAN_L
DRN WIRE CHASSIS
GRN-18 TERM_DET
BLK-18 SAT_+24RTN
BLK-22 BRD_LOC+
BRD_LOC0-
BRD_LOC2-

J26
EXP-BUS1

MINIFIT 2X5

10-4329A
SCON BUS Terminator

SAT_+48SAFE
SAT_+48SRTN
SAT_+24SAFE
SAT_+24SRTN
SAT_+24V
CAN_H
CAN_L
CHASSIS
TERM_DET
SAT_+24RTN

120R, 5%
2.7K, 5%

J24
EXP-BUS2

GENINE BOARD
10-4227

10-5005

VAC SENSOR BD
10-4581A

+24VDC
OPTO 4-20mA
NC
GND
PD+
PD-

MTA 1X6

J1
ANALOG1

15-3234
M6

10-4855

A- B- A+ B+
A+ B- NC PD+ A- B+ NC PD-

MTA 1X8 F/T

J25
STPR-DRIVE

UNLOAD TABLE STEPPER MTR

TBL.UP5+
TBL.UP5-

TABLE UP REED SWITCH
Reed Switch P/N: 15-3063

UNLOAD TABLE

ROT.RTS +
ROT.RTS -

ROTATOR REED SWITCH
Reed Switch P/N: 15-3063

TBL.DNS+
TBL.DNS-

TABLE DOWN REED SWITCH

10-4854

TBL.DNS+
ROT.RTS+
HOME/AWAY1.LED+
HOME1.C
TRN.PS3T+
AWAY1.C
UTP EXIT A+
UTP EXIT A-
TBL.DNS-
ROT.RTS-
HOME/AWAY1.LED-
HOME 1 E
TRN.PS3T-
AWAY 1. E
UTP EXIT A S

10-4854

10-3679

**NEWS:
10-3774

LED+ LED- HOME1.C HOME1.E
LED+ LED- AWAY1.C AWAY1.E
LED+ LED- TRN.PS3+ TRN.PS3T-

OPTO.LED+ RED
OPTO.LED- BLK
HOME1.C WHT
HOME1.E GRN

10-3683
TRAVELLER HOME

OPTO.LED+ RED
OPTO.LED- BLK
AWAY1.C WHT
AWAY1.E GRN

10-3683
TRAVELLER AWAY

OPTO.LED+ RED
OPTO.LED- BLK
AWAY1.C WHT
AWAY1.E GRN

10-3683
TRAVELLER ROTATOR

**NOTE: FOR NEWS CL OPTION, USE 10-3774 SENSORS CABLE.
**NOTE: FOR NON-NEWS CL OPTION, USE 10-3679 SENSORS CABLE.

UTP EXIT A+
UTP EXIT S
UTP EXIT A -

36-3210
UTP SENSE IN
UTP SENSE IN AWAY - (News Option)

36-3210
UTP SENSE EXIT
UTP SENSE EXIT AWAY - (News Option)

10-5063

UTP IN H+
UTP IN H S
UTP IN H-
UTP IN A+
UTP IN A S
UTP IN A -
UTP EXIT H+
UTP EXIT H S
UTP EX H -

36-3210
UTP SENSE IN HOME
(News Option)

36-3210
UTP SENSE EXIT HOME
(News Option)

NEWS OPTION

NOTE: UTP AWAY SENSOR WILL BE USED ON NON-NEWS CL OPTION.

10-3678 FLEX TRACK LONG
10-3773 FLEX TRACK SHORT

10-4856

CUP.DNS+
ROT.EXT+
CUP.DNS-
ROT.EXT-

Reed Switch P/N: 15-3063

ROTATOR RETRACT
CUPS DOWN
CUPS DOWN
CUPS DOWN

NON-NEWS OPTION ONLY

DSEN.C9
DSEN.E9

Reed Switch P/N: 15-3063

CUPS DOWN
CUPS DOWN

NEWS OPTION ONLY

220-00358

PKR_CUPS.HOME.A
PKR_CUPS.HOME.K
PKR_CUPS.AWAY.A
PKR_CUPS.AWAY.K
PKR_DN.A
PKR_DN.K
PKR_UP.A
PKR_UP.K
PKR_CUPS.HOME.C
PKR_CUPS.HOME.E
PKR_CUPS.AWAY.C
PKR_CUPS.AWAY.E
PKR_DN.C
PKR_DN.E
PKR_UP.C
PKR_UP.E

2x8 MINIFIT

ORG-24 WHT-24 RED-24
PKR_CUPS.HOME.A PKR_CUPS.HOME.C PKR_CUPS.HOME.E

PICKER CUPS HOME
36-3222

ORG-24 WHT-24 RED-24
PKR_CUPS.AWAY.A PKR_CUPS.AWAY.C PKR_CUPS.AWAY.E

PICKER CUPS AWAY
36-3222

RED-22 BLU-22 BLK-22
PKR_DN.A PKR_DN.C PKR_DN.E

PICKER DOWN
36-3222

BRN-22 WHT-22 GRN-22
PKR_UP.A PKR_UP.C PKR_UP.E

PICKER UP
36-3222

220-00349

NOTE: LOAD TABLE PLATE AWAY SENSOR WILL BE USED ON NON-NEWS OPTIONS ONLY

2X4 MINIFIT

LTP A S GRN-24
LTP A S - RED/BLK-24
LTP A S+ BLK-24

LTP A S
LTP A S -
LTP A S+

220-00384

LOAD TABLE PLATE SENSOR

36-3210

NEWS — LOAD TABLE PLATE AWAY

2X2 MINIFIT

LTP H S+ ORG/BLK-24
LTP H S BLU/BLK-24
LTP H S - WHT/BLK-24

LTP H S+
LTP H S
LTP H S -

10-5074

36-3210

LOAD TABLE PLATE HOME

NEWS AND HYDRA OPTIONS

Kodak

TSM
CONTINUOUS LOAD OPTION
GENINE BOARD WIRING

PAGE_17-GMCE&TMCE-CONTINUOUS_LOAD.sch

DESIGNED BY:	DOCUMENT NUMBER:	LAST ECO:
R.LEVESSEUR	73-7313A-P-SD01	CA14372
DRAWN BY:	LAST REVISED BY:	APPROVED BY:
S.CHEUNG	S.CHEUNG	S.CHEUNG
DESIGN DATE:	LAST MODIFIED DATE:	SHEET:
JULY 23, 2002	April 11, 2008	17 of 19

DUAL BAY SOLENOID MANIFOLD

BLK-22 PLATE STACK HEIGHT ACT_0
WHT-22 STACKER ACT_1
ORG-22 ARM ACT_2
YEL-22 (SPARE) ACT_3
BRN-22 PWR+24V
GRN-22 PWR+24V
BLU-22 PWR+24V
RED-24 PWR+24V (SPARE)

220-00847

ACT_0 PLATE_STACK_HEIGHT
ACT_1 STACKER
ACT_2 ARM
PWR+24V

ACT_0 BLK-24 PWR+24V RED-24 — A C — Clamp Cylinder
ACT_1 BLK-24 PWR+24V RED-24 — A C — STACKER
ACT_2 BLK-24 PWR+24V RED-24 — A C — ARM

SOLENOID MANIFOLD ASSY.

Single Acting Valves: 55-0771

220-00846

ACT_0 PLATE STACK HEIGHT
ACT_1 PWR+24V
ACT_2 STACK/ER
ACT_3 PWR+24V
BRN-22 ARM
GRN-22 PWR+24V
BLU-22 PWR+24V
YEL-22 (SPARE)
RED-24 PWR+24V

J2
SOL-DRV1

220-00844

220-01436
STOP BLOCK CYCLINDER SENSOR

DESEN_LED4+ RED-24 — 5V+ BRN-26
DESEN_C4 BLK-24 — SEN_OUT BLK-26
DESEN_E4 WHT-24 — RNT BLU-26
170-00064
SENS,REED SW

DESEN_LED5+ BLK/RED-24
DESEN_C5 BLK/WHT-24
DESEN_E5 BLK/BLU-24
36-3222
ARM HOME IN

DESEN_LED7- RED/GRN-24
DESEN_LED7+ RED/ORG-24
DESEN_C7 RED/WHT-24
DESEN_E7 RED/BLK-24
RED
BLK
WHT
GRN
10-3683
PLATE STACK HEIGHT

J7
DIGITAL_IN2

RED-24 DESEN_LED4+
BLK-24 DESEN_C4
WHT-24 DESEN_E4
BLK/RED-24 DESEN_LED5+
BLK/WHT-24 DESEN_C5
BLK/BLU-24 DESEN_E5
RED/ORG-24 DESEN_LED7+
RED/WHT-24 DESEN_C7
RED/BLK-24 DESEN_E7
RED/GRN-24 DESEN_LED7-

BLU-18 SAT_+48SAFE
BLK-18 SAT_+48SRTN
RED-18 SAT_+24SAFE
BLK-18 SAT_+24SRTN
WHT-18 SAT_+24V
BLK-22 BRD_LOC+
BRD_LOC1-
BRD_LOC3-
BLU-24 CAN_H
WHT-24 CAN_L
DRN WIRE CHASSIS
GRN-18 TERM_DET
BLK-18 SAT_+24RTN
BLK-22 BRD_LOC+
BRD_LOC0-
BRD_LOC2-

FROM: GENINE BOARD J24
SCON_IN
220-00362

J13
SCON11

LIONEL BOARD
10-4801B

10-4329A
SCON BUS Terminator
SAT_+48SAFE
SAT_+48SRTN
SAT_+24SAFE
SAT_+24SRTN
SAT_+24V
120R, 5% CAN_H
CAN_L
CHASSIS
2.7K, 5% TERM_DET
SAT_+24RTN

MINIFIT 2X5
J9
EXP-BUS

In case of TEC Optical Sensor Bar: Remove 10-4329 and Plug 220-00150 into J9

J8
DIGITAL_IN3

RED-22 DESEN_LED11+
WHT-22 DESEN_C11
BLK-22 DESEN_E11

220-00845

DESEN_LED11+ RED-22
DESEN_C11 WHT-22
DESEN_E11 BLK-22
36-3222
ARM AWAY IN

Kodak

TSM
DUAL BAY OPTION
LIONEL BOARD WIRING

PAGE_18-GMCE&TMCE-NEWS_SOL_LOAD.SCH

DESIGNED BY:	DOCUMENT NUMBER:	LAST ECO:
R.LEVESSEUR	73-7313A-P-SD01	CA14372
DRAWN BY:	LAST REVISED BY:	APPROVED BY:
S.CHEUNG	S.CHEUNG	S.CHEUNG
DESIGN DATE:	LAST MODIFIED DATE:	SHEET:
JULY 23, 2002	April 11, 2008	18 of 19

CAB,ASSY,OPTO SENS,REFLEC

10-3676 SENSOR **VAC RLR DRV INDEX** — ORG, GRN, WHT, BLU

10-3676 SENSOR **CASS. LATCH, AWAY SIDE** — ORG, GRN, WHT, BLU

10-3676 SENSOR **CASS. 4UP** — ORG, GRN, WHT, BLU

10-3676 SENSOR **CASS. 8UP** — ORG, GRN, WHT, BLU

10-4986 CAB,ASSY,SES_AWAY-GEN,TS-P

RED-24	+DSEN.LED6	RED-24	+DSEN.LED7
BLK-24	-DSEN.LED6	BLK-24	-DSEN.LED7
WHT-24	DSEN.C6	WHT-24	DSEN.C7
GRN-24	DSEN.E6	GRN-24	DSEN.E7
RED-24	+DSEN.LED8		
BLK-24	-DSEN.LED8		
WHT-24	DSEN.C8		
GRN-24	DSEN.E8		

10-3676 SENSOR **TAPE RLR, AWAY SIDE** — ORG, GRN, WHT, BLU

MINI-FIT 2X4

RED-22		RED-24	+DSEN.LED4
BLK-22		BLK-24	-DSEN.LED4
YEL-22		WHT-24	DSEN.C4
VIO-22		GRN-24	DSEN.E4
		RED-24	+DSEN.LED5
		BLK-24	-DSEN.LED5
		WHT-24	DSEN.C5
		GRN-24	DSEN.E5
RED-22			
BLK-22			
YEL-22			
VIO-22			
BRN-18			

MINI-FIT 2X4

10-4989A

BLK-22 HOME.C HOME.E — BLK-22 AWAY.C AWAY.E — BLK-22 PD+ PD- — 10-5100

10-5062

ACT8+	
ACT9+	
ACT10+	
ACT12+	YEL-22
ACT14+	GRN-22
ACT16+	BLU-22
ACT18+	VIO-22
ACT20+	BRN-22
ACT22+	GRY-22
ACT24+	PINK-22
ACT26+	BEIGE-22
ACT28-	WHT-22
SP_VRIdleRelay	
RED-22	+24V.SAFE

MINIFIT2X11

SP_AirJetsOnDrv	BLK 22
SP_VR4upVacOnDrv	BLK 22
SP_TRupDrv	BLK 22
SP_VRUpDrv	BLK 22
SP_VRDownDrv	BLK 22
SP_CRTiltRetractDrv	BLK 22
SP_CRTiltExtendDrv	BLK 22
SP_CRMainExtendDrv	BLK 22
SP_CRMainRetractDrv	BLK 22
SP_DvacGeneratorOnDrv	BLK 22
SP_VR8UpVacOnDrv	BLK 22
+24V.SAFE	RED 22
+24V.SAFE	RED 22
+24V.SAFE	RED 22
+24V.SAFE	RED 22
+24V.SAFE	RED 22
+24V.SAFE	RED 22
+24V.SAFE	RED 22
+24V.SAFE	RED 22
+24V.SAFE	RED 22
+24V.SAFE	RED 22
+24V.SAFE	RED 22

CAB,ASSY,PSD-GEN,TS-P 10-4991

10-3673A CAB, ASSY, PAVM-PD

AIR JET 1 — VAC RLR 4 UP — ADHESIVE RLR — VAC RLR UP — VAC RLR DOWN

DVAC GENERATOR ON — CLEANING TILT DWN — CLEANING TILT UP — CLEANING RLR UP — CLEANING RLR DWN

VAC RLR 8 UP

15-3359 VR - Relay — K2

2	A+	RED-22
4	B-	WHT-22
5	B-(R)	WHT-22
3	A+(R)	RED-22

See VAC RLR MOTOR - This Page — TO: VR MOTOR — 10-4985

In case of Continuous Load with Proofing Option:
Use CAN BUS Cable 220-00366 between
CL Genine and Proofing Genine.

10-4990

FROM: TMCE BOARD - J7 — Page 6 — SCON_IN — EXP BUS

MINIFIT 2X8

BLU-18	SAT_+48SAFE	1
BLK-18	SAT_+48SRTN	2
RED-18	SAT_+24SAFE	3
BLK-18	SAT_+24SRTN	4
WHT-18	SAT_+24V	5
BLK-22	BRD_LOC+	6
	BRD_LOC1-	7
	BRD_LOC3-	8
BLU-24	CAN_H	9
WHT-24	CAN_L	10
DRN WIRE	CHASSIS	11
GRN-18	TERM_DET	12
BLK-18	SAT_+24RTN	13
	BRD_LOC+	14
	BRD_LOC0-	15
	BRD_LOC2-	16

HDR 2X10 — **J4 DIGITAL_IN2** — **J20 HOME/AWAY** — HDR2X13 IDC

J26 EXP-BUS1

J21 SOL-DRV1

GENINE BOARD
10-4227A

In case of TEC Optical Sensor Bar:
Remove 10-4329 and Plug 220-00150 into J24
See Page 8

10-4329A SCON BUS Terminator — 120R 5% — 2.7K 5%

MINIFIT 2X5

SAT_+48SAFE	1
SAT_+48SRTN	2
SAT_+24SAFE	3
SAT_+24SRTN	4
SAT_+24V	5
CAN_H	6
CAN_L	7
CHASSIS	8
TERM_DET	9
SAT_+24RTN	10

J24 EXP-BUS2

VR RLY Contacts — See K2 Relay (This Page)

A+R	RED-22	A+	1
B-R	WHT-22	B-	2
		NC	3
		WHT-22 PD+	4
		A-	5
		B+	6
		NC	7
		PD-	8

2X4 AMP MINI M-N-L

J25 STPR-DRIVE

BLK-22 — B- WHT-22 A+ RED-22 — BLK-22

10-4985 CAB,ASSY,VRLR DR-GEN,TS-P

A- WHT-22 B- — A+ WHT-22 B+

A1

15-3267 **M5** **VAC RLR MOTOR**

J3 ANALOG0

RED-22	1
VIO-22	2
YEL-22	3
WHT-22	4
BLU-22	5
BLK-22	6

J1 ANALOG1

10-5005 CAB,ASSY,VACSENS-GEN,TS-P

J1

1	RED-22	+24V
2	VIO-22	4-20mA
3	YEL-22	
4	WHT-22	GND
5	BLU-22	CD+
6	BLK-22	CD-

8-UP VAC SENSOR BRD **10-4581A** — 1X6 LOCKING

10-5005 CAB,ASSY,VACSENS-GEN,TS-P

+24V	1
SIGNAL(4-20mA)	2
GND	3
CD+	4
CD-	5
	6

RED-22 VIO-22 YEL-22 WHT-22 BLU-22 BLK-22

J1

1	
2	
3	
4	
5	
6	

4-UP VAC SENSOR BRD **10-4581A** — 1X6 LOCKING

J5 DIGITAL_IN4 — HDR 2X17

+DSEN.LED16	1	2	
DSEN.C16	3	4	
DSEN.E16	5	6	
+DSEN.LED17	7	8	
-DSEN.LED17	9	10	
DSEN.C17	11	12	
DSEN.E17	13	14	
-DSEN.LED18	15	16	
+DSEN.LED18	17	18	
DSEN.C18	19	20	
DSEN.E18	21	22	
-DSEN.LED19	23	24	
+DSEN.LED19	25	26	
DSEN.C19	27	28	
DSEN.E19	29	30	
-DSEN.LED20	31	32	
+DSEN.LED20	33	34	
DSEN.C20			
DSEN.E20			
-DSEN.LED21			
+DSEN.LED21			
DSEN.C21			
DSEN.E21			
-DSEN.LED22			
+DSEN.LED22			
DSEN.C22			
DSEN.E22			
-DSEN.LED23			
+DSEN.LED23			
DSEN.C23			
DSEN.E23			

J2 DIGITAL_IN3 — HDR 2X15

10-4988 CAB,ASSY,SP_HOME-GEN

CAB,ASSY,SP_AWAY-GEN 10-4987

+DSEN.LED9	1	2	
DSEN.C9	3	4	
DSEN.E9	5	6	
-DSEN.LED9	7	8	
+DSEN.LED10	9	10	
DSEN.C10	11	12	
DSEN.E10	13	14	
-DSEN.LED10	15	16	
+DSEN.LED11	17	18	
DSEN.C11	19	20	
DSEN.E11	21	22	
-DSEN.LED11	23	24	
+DSEN.LED12	25	26	
DSEN.C12	27	28	
DSEN.E12	29	30	
-DSEN.LED12			
+DSEN.LED13			
DSEN.C13			
DSEN.E13			
-DSEN.LED13			
+DSEN.LED14			
DSEN.C14			
DSEN.E14			
-DSEN.LED14			

AWAY SIDE PANEL
NOTE: Sensors 1 - 6 are part of cable assembly

+DSEN.LED9	ORG	SENSOR 3 **VAC RLR DRUM**
-DSEN.LED9	GRN	
DSEN.C9	WHT	
DSEN.E9	BLU	
+DSEN.LED10	ORG	
-DSEN.LED10	GRN	SENSOR 1 **VAC RLR NEUTRAL**
DSEN.C10	WHT	
DSEN.E10	BLU	
+DSEN.LED11	ORG	
-DSEN.LED11	GRN	SENSOR 2 **VAC RLR CASS.**
DSEN.C11	WHT	
DSEN.E11	BLU	
+DSEN.LED12	ORG	
-DSEN.LED12	GRN	SENSOR 4 **CLEANING RLR DRUM**
DSEN.C12	WHT	
DSEN.E12	BLU	
+DSEN.LED13	ORG	
-DSEN.LED13	GRN	SENSOR 6 **CLEANING RLR NEUTRAL**
DSEN.C13	WHT	
DSEN.E13	BLU	
+DSEN.LED14	ORG	
-DSEN.LED14	GRN	SENSOR 5 **CLEANING RLR CASS.**
DSEN.C14	WHT	
DSEN.E14	BLU	

HOME SIDE PANEL
NOTE: Sensors 1 - 6 are part of cable assembly

+DSEN.LED16	ORG	SENSOR 3 **VAC RLR DRUM**
-DSEN.LED16	GRN	
DSEN.C16	WHT	
DSEN.E16	BLU	
+DSEN.LED17	ORG	
-DSEN.LED17	GRN	SENSOR 1 **VAC RLR NEUTRAL**
DSEN.C17	WHT	
DSEN.E17	BLU	
+DSEN.LED18	ORG	
-DSEN.LED18	GRN	SENSOR 2 **VAC RLR CASS.**
DSEN.C18	WHT	
DSEN.E18	BLU	
+DSEN.LED19	ORG	
-DSEN.LED19	GRN	SENSOR 4 **CLEANING RLR DRUM**
DSEN.C19	WHT	
DSEN.E19	BLU	
+DSEN.LED20	ORG	
-DSEN.LED20	GRN	SENSOR 6 **CLEANING RLR NEUTRAL**
DSEN.C20	WHT	
DSEN.E20	BLU	
+DSEN.LED21	ORG	
-DSEN.LED21	GRN	SENSOR 5 **CLEANING RLR CASS.**
DSEN.C21	WHT	
DSEN.E21	BLU	

+DSEN.LED22	ORG	10-3676A SENSOR **CASS. LATCH, HOME SIDE**
-DSEN.LED22	GRN	
DSEN.C21	WHT	
DSEN.E21	BLU	
+DSEN.LED23	ORG	10-3676A SENSOR **TAPE RLR, HOME SIDE**
-DSEN.LED23	GRN	
DSEN.C23	WHT	
DSEN.E23	BLU	

CAB,ASSY,OPTO SENSOR REFLECT

Kodak

TSM
PROOFING OPTION
GENINE BOARD WIRING

PAGE_19-TMCE-PROOFING.SCH

DESIGNED BY: R.LEVESSEUR	DOCUMENT NUMBER: 73-7313A-P-SD01	LAST ECO: CA14372
DRAWN BY: S.CHEUNG	LAST REVISED BY: S.CHEUNG	APPROVED BY: S.CHEUNG
DESIGN DATE: JULY 23, 2002	LAST MODIFIED DATE: April 11, 2008	SHEET: 19 of 19