General Timing Chart / General Circuit Diagram

iR C6800 Series
iR C6800C

Canon

Mar 17 2004

IMPORTANT

This documentation is published by Canon Inc., Japan, to serve as a source of reference for work in the field.

Specifications and other information contained herein may vary slightly from actual machine values or those found in advertising and other printed matter.

Any questions regarding the information contained herein should be directed to the Copier Service Department of the Sales Company.

This documentation is intended for all sales areas, and may contain information not applicable to certain areas.

Reproduction without permission not allowed.

Use of this manual should be strictly supervised to avoid disclosure of confidential information.

COPYRIGHT 2001 CANON INC.

Printed in Japan

Caution

Use of this manual should be strictly supervised to avoid disclosure of confidential information.

Contents

1 General Timing Chart 1
Full color 1
Mono color 2
2 General Circuit Diagram 3
Signal Names 3
General Circuit Diagram 15

1 General Timing Chart

Full color

<Conditions>

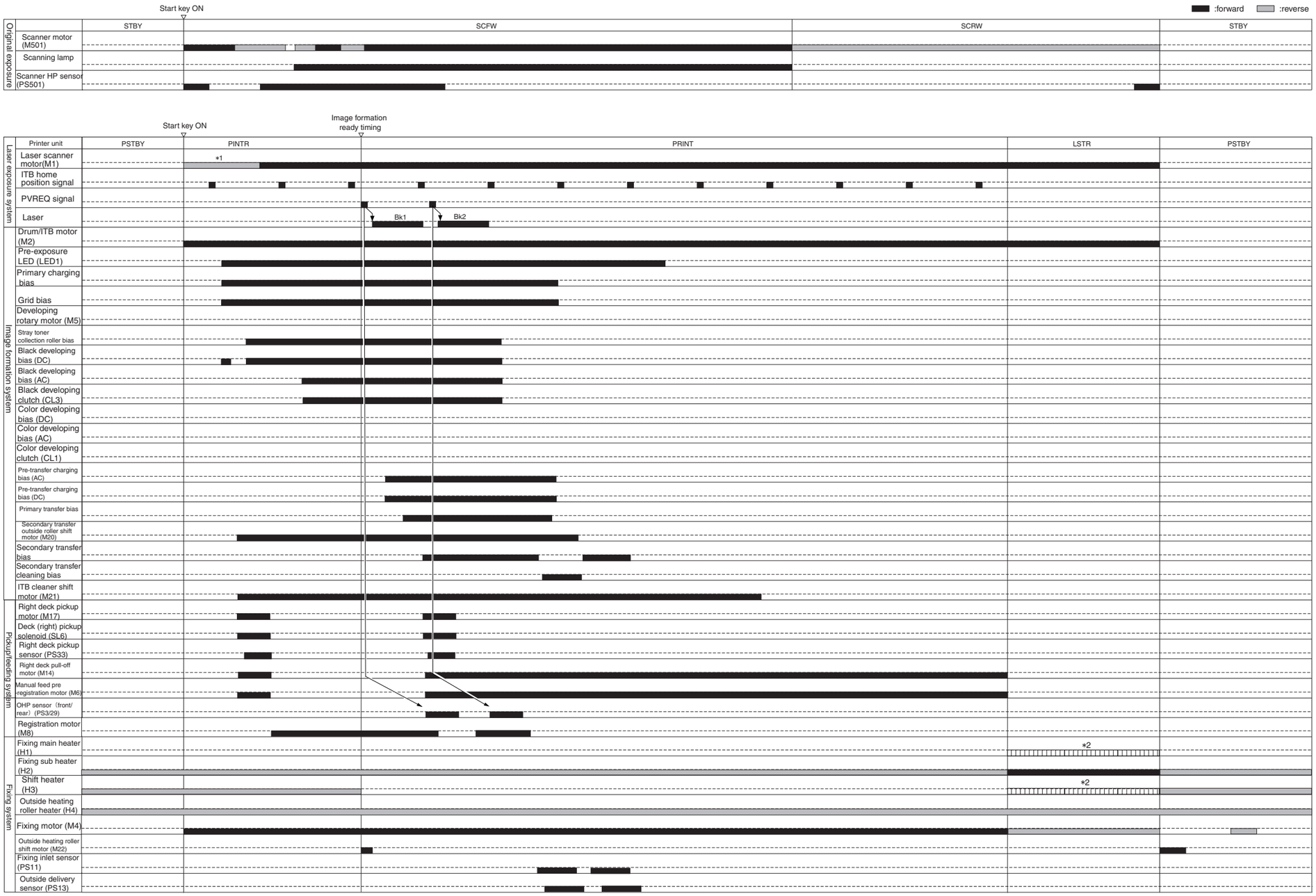
reading: book, 1 A4 original
printing: A4, plain paper, single-sided, full color, 2 prints

*1: interval used to stabilize the rotation.
*2: interval during which the main heater and the sub heater are tuned on alternately.

F-1-1

Mono color

<Conditions>
reading: book mode, 1 A4 original
printing: A4, plain paper, single-sided, mono color, 2 prints



*1: interval used to stabilize the rotation.
*2: interval during which the main heater and the sub heater are tuned on alternately.

F-1-2

Signal Names

List Of Signals

T-2-1

Abbreviation	Signal name
AFTER_TRNS_HP_SNS	post-transfer paper detection signal
ATR_REF	ATR sensor reference signal
ATR_SIG	ATR sensor signal
ATR_VCC	ATR power supply signal
ATR_VSS	ATR sensor light detection signal
ATRLED_ON	ATR sensor light emission signal
ATRSL_ON	ATR shutter solenoid drive signal
BK_CRG_DOOR_OPN	hopper cover open/closed detection signal
BK_DC_CONT	black development DC bias control signal
BK_DEV	black developing bias drive signal
BK_DEV_CL	black development clutch drive signal
BK_TNR_REMAIN	black toner level detection signal
CHD_CLK	side deck clock signal
CHO_RXD	side deck communication signal 0
CHO_RXLOAD*	side deck data request signal
CHO_TXD	side deck communication signal 1
CHO_TXEND*	side deck communication final signal
CHO_TXOUTEN*	side deck data enable signal
CL_CRG_DTC	color toner cartridge present/absent signal
CL_DEV	color developing bias drive signal
CL_TNR_REMAIN	color toner level detection signal (light-receiving segment)
CL_TNR_SNS_ON	color toner level detection signal (light-emitting segment)
CLR_DC_CONT	color developing DC bias control signal
CLR_DEV_CL	color developing clutch drive signal
CLR_TNR_SPLY_CL	color toner supply clutch drive signal

Abbreviation	Signal name
CMNCLK_A1	HVT1 high-voltage bias reference signal
CMNCLK_A1	HVT2 high-voltage bias reference signal
CNT0	laser control signal 0
CNT1	laser control signal 1
CRG_MTR_ON	black toner supply motor drive signal
CST_FEED_M_CLK A	cassette pickup motor drive signal A
CST_FEED_M_CLK AB	cassette pickup motor drive signal AB
CST_FEED_M_CLK B	cassette pickup motor drive signal B
CST_FEED_M_CLK BB	cassette pickup motor drive signal BB
CST_HEAT_ON	cassette heater drive signal
CUAL_FAN	delivery cooling fan 1 drive signal
CUAL_FAN_ERR	delivery cooling fan 1 error detection signal
D_LOAD	finisher start-up signal
DCP_FAN_LOK*	power supply fan lock detection signal
DCP_REM0	power supply remote signal 0
DCP_REM1	power supply remote signal 1
DCP_REM2	power supply remote signal 2
DCP_REM3	power supply remote signal 3
DEIL_FLAP_SL	delivery reversing solenoid drive signal
DEV_BK_AC_ON	black developing AC bias drive signal
DEV_BK_DC_ON	black developing DC bias drive signal
DEV_CL_AC_ON	color developing AC bias drive signal
DEV_CL_DC_ON	color developing DC bias drive signal
DEV_MTR_CLK	developing motor reference signal
DEV_MTR_CW/ CCW	developing motor drive detection switchover signal
DEV_MTR_ID	development motor identification signal
DEV_MTR_LOK*	development motor lock detention signal
DEV_MTR_ON	development motor drive signal
DEV_MTR_SEL	development motor speed switchover signal
DEVBKCLK1	black developing bias reference signal A

Abbreviation	Signal name
DEVCLCLK_A1	color developing bias reference signal A
DEVCLCLK_B1	color developing bias reference signal B
DRAM_HP_SNS	drum HP detection signal
DRUM_HEAT_ON	drum heater drive signal
DRUM_MTR_BRAKE	drum/ITB motor drive direction switchover signal
DRUM_MTR_CLK	drum/ITB motor reference signal
DRUM_MTR_ID	drum/ITB motor identified signal
DRUM_MTR_LOK*	drum/ITB motor lock detection signal
DRUM_MTR_ON	drum/ITB motor drive signal
DRUM_MTR_SEL	drum/ITB motor speed switchover signal
DUP_FEED_SNS	duplexing left detection signal
DUPLEX_CENTER_M_CLK_A	depleting middle motor drive signal A
DUPLEX_CENTER_M_CLK_AB	duplexing middle motor drive signal AB
DUPLEX_CENTER_M_CLK_B	duplexing middle motor drive signal B
DUPLEX_CENTER_M_CLK_BB	duplexing middle motor drive signal BB
DUPLEX_LEFT_M_CLK_A	duplexing left motor drive signal A
DUPLEX_LEFT_M_CLK_AB	duplexing left motor drive signal AB
DUPLEX_LEFT_M_CLK_B	duplexing left motor drive signal B
DUPLEX_LEFT_M_CLK_BB	duplexing left motor drive signal BB
DUPLEX_REV_M_CLK_A	duplexing reversal motor drive signal A
DUPLEX_REV_M_CLK_AB	duplexing reversal motor drive signal AB
DUPLEX_REV_M_CLK_B	duplexing reversal motor drive signal B
DUPLEX_REV_M_CLK_BB	duplexing reversal motor drive signal BB
DUPLEX_RIGHT_M_CLK_A	duplexing right motor drive signal A

Abbreviation	Signal name
DUPLEX_RIGHT_M_CLK_AB	duplexing right motor drive signal AB
DUPLEX_RIGHT_M_CLK_B	duplexing right motor drive signal B
DUPLEX_RIGHT_M_CLK_BB	duplexing right motor drive signal BB
ELIMINATE	static eliminator bias drive signal
ENV_HUM_CLK	environment sensor reference signal
ENV_TEMP	environment sensor detection signal
EPC_SIG	potential sensor reference signal
EPC_SNS_ON	potential sensor detection signal
EX_FIX_HP_SNS	outside heating roller HP detection signal
EX_FIX_P_MTR_A	outside heating roller shift motor drive signal A
EX_FIX_P_MTR_A*	outside heating roller shift motor drive signal A*
EX_FIX_P_MTR_B	outside heating roller shift motor drive signal B
EX_FIX_P_MTR_B*	outside heating roller shift motor drive signal B*
EX_FIX_THM_EDGE_IN	outside heating sub thermistor detection signal
EX_FIX_THM_IN	outside heating main thermistor detection signal
EX-HEAT-ON	outside heating roller heater drive signal
EXP_LED	pre-exposure LED drive signal
EX-TR-ERR	outside heating roller heater error signal
FEED_FAN_4	feed fan 4 drive signal
FEED_FAN1	feed fan 1 drive signal
FEED_FAN1_ERR	feed fan 1 error detection signal
FEED_FAN2	feed fan 2 drive signal
FEED_FAN2_ERR	feed fan 2 error detection signal
FEED_FAN3	feed fan 3 drive signal
FEED_FAN3_ERR	feed fan 3 error detection signal
FEED_FAN4_ERR	feed fan 4 error detection signal
FIN_FAN	exhaust heat cooling fan 2 drive signal
FIN_FAN_LOK*	exhaust heat cooling fan 2 lock detection signal
FIRST_TRN	primary transfer bias drive signal
FIX_ENT_SNS	fixing inlet detention signal
FIX_FAN	fixing exhaust fan drive signal

Abbreviation	Signal name
FIX_FAN_LOK*	fixing exhaust fan lock detection signal
FIX_MTR_BRAKE	fixing motor stop signal
FIX_MTR_CLK	fixing motor reference signal
FIX_MTR_ID	fixing motor identification signal
FIX_MTR_LOK*	fixing motor lock detection signal
FIX_MTR_ON	fixing motor drive signal
FIX_MTR_SEL	fixing motor selection signal
FIX_WEB_REMAIN	fixing web length detection signal
FIX_WEB_SL	web solenoid drive signal
FRONT_DOOR_OPN	front cover detection signal
FSR_UNIT_CNCT*	fixing assembly present/absent detection signal
GRID_CONT	grid bias control signal
HOP_MTR_0	hopper stirring motor drive signal 1
HOP_MTR_1	hopper stirring motor drive signal 0
HV_RMT	high-voltage bias remote signal
HV_RMT	HVT 3 enable signal
IN_DELI_SNS	inside delivery detection signal
ITB_CLN_HP_SNS	ITB cleaner HP detection signal
ITB_CLN_P_MTR_A	ITB cleaner shift motor drive signal A
ITB_CLN_P_MTR_A*	ITB cleaner shift motor drive signal/A
ITB_CLN_P_MTR_B	ITB cleaner shift motor drive signal B
ITB_CLN_P_MTR_B*	ITB cleaner shift motor drive signal/B
ITOP_SNS_A	ITB HP sensor detection signal A
ITOP_SNS_B	ITB HP sensor detection signal B
JOIN_SNS	vertical path confluence detection signal
L_DECK_DTC	left deck paper detection signal
L_DECK_EXIT_SL	left deck confluence solenoid drive signal
L_DECK_FEED_SNS	left deck pickup detection signal
L_DECK_LIFT	left deck lifter motor drive signal
L_DECK_LIMIT_SNS	left deck limit detection signal
L_DECK_M_CLKA	left deck pickup motor drive signal A

Abbreviation	Signal name
L_DECK_M_CLKAB	left deck pickup motor drive signal AB
L_DECK_M_CLKB	left deck pickup motor drive signal B
L_DECK_M_CLKBB	left deck pickup motor drive signal BB
L_DECK_PAP_HIGHT_SNS	left deck lifter detection signal
L_DECK_PAP_SNS	left deck paper detection signal
L_DECK_REMAIN_SNS0	left deck paper level detection signal A
L_DECK_REMAIN_SNS1	left deck paper level detection signal B
L_DECK_SL	left deck pickup solenoid drive signal
LDPSEL	laser power selection signal
LO_CST_FEED_SNS	cassette 4 pickup detection signal
LO_CST_LIMIT_SNS	cassette 4 limit detention signal
LO_CST_PAP_HIGHT_SNS	cassette 4 lifter detection signal
LO_CST_PAP_SNS	cassette 4 paper detection signal
LO_CST_REMAIN_SNS0	cassette 4 paper level detection signal A
LO_CST_REMAIN_SNS1	cassette 4 paper level detection signal B
LO_CST_SIZE0	cassette 4 paper size detection signal 0
LO_CST_SIZE1	cassette 4 paper size detection signal 1
LO_CST_SIZE2	cassette 4 paper size detection signal 2
LO_CST_SIZE3	cassette 4 paper size detection signal 3
LO_CST_SIZE4	cassette 4 paper size detection signal 4
LO_CST_SL	cassette 4 pickup solenoid drive signal
LOW_CST_LIFT	cassette 4 lifter motor drive signal
MAIN_THM_EDGE_IN	fixing sub thermistor detection signal
MAIN_THM_IN	fixing main thermistor detection signal
MAIN-HEAT-ON	fixing main heater drive signal
MAIN-TR-ERR	fixing main heater error signal
MLT_LAST_PAP_SNS	last sheet detection signal

Abbreviation	Signal name
MLT_PAP_SNS	manual feed paper detection signal
MLT_PAP_WIDTH	manual feed paper width detection signal
MLT_SL	manual feed pickup solenoid drive signal
MLT_TRAY_OPN	manual feed unit open/closed detection signal
MODE	finisher mode switchover signal
OHP_LED0	transparency sensor (front) light emission signal
OHP_LED1	transparency sensor (rear) light emission signal
OHP_SNS0	transparency sensor (rear) light reception signal
OHP_SNS1	transparency sensor (front) light reception signal
OUT_DELI_MTR_A	outside delivery motor drive signal A
OUT_DELI_MTR_A*	outside delivery motor drive signal A*
OUT_DELI_MTR_B	outside delivery motor drive signal B
OUT_DELI_MTR_B*	outside delivery motor drive signal B*
OUT_DELI_SNS	outside delivery paper detection signal
PAP_STAGNATE_SNS	left deck stationary paper detection signal
PATCH_LED_ON	patch image read sensor light emission signal
PATCH_LED_ON	patch image read sensor reference signal
PATCH_LED_REF	patch sensor shutter solenoid drive signal
PATCH_SHUT_SL	patch sensor shutter solenoid drive signal
PATCH_VOP	patch image read sensor detention signal P
PATCH_VOS	patch image read sensor detention signal S
PD_MTR_CLK	side deck clock signal 1
PKIT_FAN	controller cooling fan dire signal
PKIT_FAN_LOK*	controller cooling fan lock detection signal
POST	pre-transfer bias drive signal
POST_AC_ON	pre-transfer bias AC drive signal
POST_CLN_MTR0	pre-transfer charging wire cleaning motor drive signal 0
POST_CLN_MTR1	pre-transfer charging wire cleaning motor drive signal 1
POST_DC_ON	pre-transfer bias DC drive signal
POSTCLK_A1	pre-transfer bias reference signal A

Abbreviation	Signal name
POSTCLK_B1	pre-transfer bias reference signal B
POSTCONT	pre-transfer bias control signal
PRE_REGI_MTR_A	manual feed pre-registration motor drive signal A
PRE_REGI_MTR_A*	manual feed pre-registration motor drive signal A*
PRE_REGI_MTR_B	manual feed pre-registration motor drive signal B
PRE_REGI_MTR_B*	manual feed pre-registration motor drive signal B*
PRE_REGI_SNS	pre-registration paper detection signal
PRESS-HEAT-ON	pressure heater drive signal
PRESS-TR-ERR	pressure heater error signal
PRIM_CLN_MTR0	primary charging wire cleaning motor drive signal 0
PRIM_CLN_MTR1	primary charging wire cleaning motor drive signal 1
PRIM_CONT	primary charging bias control signal
PRIM_EX_FAN	primary charging exhaust fan drive signal
PRIM_EX_FAN_LOK*	primary charging exhaust fan lock signal
PRIM_IN_FAN	primary charging suction fan drive signal
PRIM_IN_FAN_LOK*	primary charging suction fan lock detection
PRIM_ON	primary charging bias drive signal
PRIMARY	primary charging bias drive signal
PRS_THM_EDGE_IN	pressure sub thermistor detection signal
PRS_THM_IN	pressure main thermistor detection signal
R_DECK_DTC	right deck paper detection signal
R_DECK_FEED_SNS	right deck pickup detection signal
R_DECK_LIFT	right deck lifter motor drive signal
R_DECK_LIMIT_SNS	right deck limit detection signal
R_DECK_M_CLKA	right deck pickup motor drive signal A
R_DECK_M_CLKAB	right deck pickup motor drive signal AB
R_DECK_M_CLKB	right deck pickup motor drive signal B
R_DECK_M_CLKBB	right deck pickup motor drive signal BB
R_DECK_PAP_HIGHT_SNS	right deck lifter detection signal

Abbreviation	Signal name
R_DECK_PAP_SNS	right deck paper detection signal
R_DECK_PULL_M_CLKA	right deck pull-off motor drive signal A
R_DECK_PULL_M_CLKAB	right deck pull-off motor drive signal AB
R_DECK_PULL_M_CLKB	right deck pull-off motor drive signal B
R_DECK_PULL_M_CLKBB	right deck pull-off motor drive signal BB
R_DECK_REMAIN_SNS0	right deck paper level detection signal B
R_DECK_REMAIN_SNS1	right deck paper level detection signal A
R_DECK_SL	right deck pickup solenoid drive signal
R_LOW_DOOR_OPN	lower right cover open/closed detection signal
RE_FEED_SNS	duplexing confluence detection signal
REAL_BD*	BD detection signal
REGI_DRIVE_M_CLK_A	registration motor drive signal A
REGI_DRIVE_M_CLK_AB	registration motor drive signal AB
REGI_DRIVE_M_CLK_B	registration motor drive signal B
REGI_DRIVE_M_CLK_BB	registration motor drive signal BB
RELAY_ON	relay drive signal
REV_ALIENATE_SL	reversal interval solenoid drive signal
REV_SNS	reversal detection signal
REV_TATE_PAS_SNS	reversal vertical path detention signal
ROT_MTR_A	developing rotary motor drive signal A
ROT_MTR_A*	developing rotary motor drive signal A*
ROT_MTR_B	developing rotary motor drive signal A*
ROT_MTR_B*	developing rotary motor drive signal B*
ROTARY_HP_SNS	developing rotary HP detection signal
ROTARY_SL	developing rotary fixing solenoid drive signal

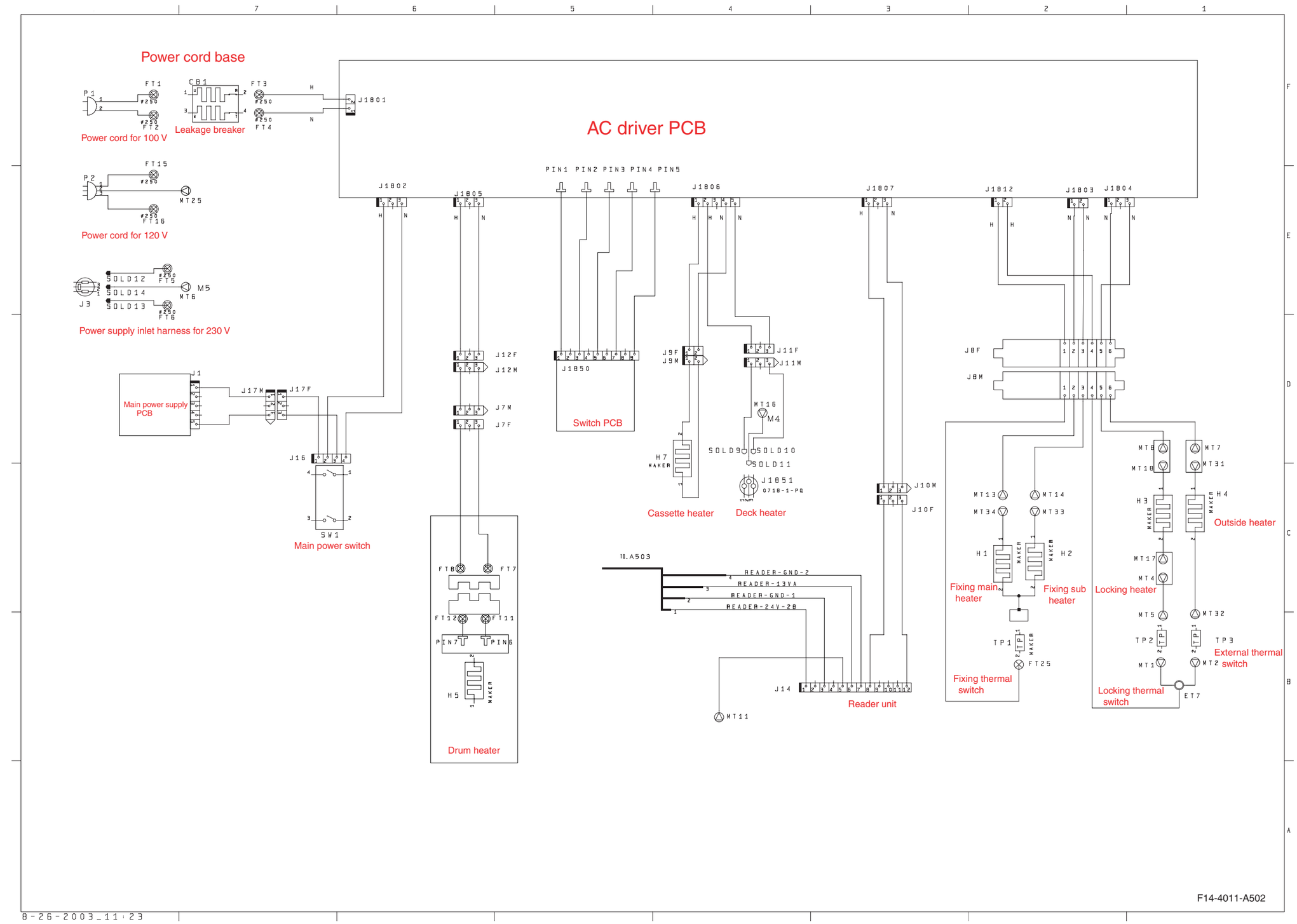
Abbreviation	Signal name
ROTARY_SL_SNS	developing rotary fixing detection signal
RSET	finisher reset signal
SCN_ACC*	scanner motor acceleration signal
SCN_DEC*	scanner motor deceleration signal
SCN_FG_IN*	scanner motor speed detection signal
SEC_ROLL_PRESS_M_A	secondary transfer roller shift motor drive signal A
SEC_ROLL_PRESS_M_A*	secondary roller shift motor drive signal A*
SEC_ROLL_PRESS_M_B	secondary transfer roller shift motor drive signal B
SEC_ROLL_PRESS_M_B*	secondary transfer roller shift motor drive signal B*
SEC_TRNS_HP_SNS	secondary transfer roller HP detection signal
SECOND_TR	secondary transfer bias drive signal
SFTTRAY_CCW	shift tray motor drive signal 0
SFTTRAY_CNCT	shift tray connection detection signal
SFTTRAY_CW	shift tray motor drive signal 1
SFTTRAY_FULL_ON	shift tray full detection signal 1
SFTTRAY_L_HP	shift tray left HP detection signal
SFTTRAY_PAP_FULL	shift tray full detection signal 0
SFTTRAY_PAP_SNS	shift tray paper detection signal
SFTTRAY_R_HP	shift tray right HP detector signal
STPC_RXD	finisher communication signal 0
STPC_TXD	finisher communication signal 1
SUB_HOP_REMAIN	hopper toner level detection signal
SUB-HEAT-ON	fixing sub heater drive signal
SUB-TR-ERR	fixing sub heater error signal
TR_REV_BIAS	secondary transfer reversal bias drive signal
TR1_CRT_SEL	primary transfer current selection signal
TR1_ON	primary transfer bias drive signal
TR1CONT	primary transfer bias control signal
TR1CONTN	primary transfer reverse bias control signal

Abbreviation	Signal name
TR1CRTCONT	primary transfer current control signal
TR1ELM_ON	primary transfer static eliminator bias drive signal
TR1ELM_TRN	primary transfer static eliminator bias drive signal
TR1ELMCONT	primary transfer static eliminator bias control signal
TR1RVSEL	primary transfer reverse bias selection signal
TRNS1_DC	primary transfer DC bias drive signal
UP_CST_FEED_SL	cassettes 3 pickup solenoid drive signal
UP_CST_FEED_SNS	cassette 3 pickup solenoid drive signal
UP_CST_LIFT	cassette 3 lifter motor drive signal
UP_CST_LIMIT_SNS	cassette 3 limit detection signal
UP_CST_PAP_HIGHT_SNS5	cassette 3 lifter detection signal
UP_CST_PAP_SNS	cassette 3 paper detection signal
UP_CST_REMAIN_SNS0	cassette 3 paper level detection signal A
UP_CST_REMAIN_SNS1	cassette 3 paper level detection signal B
UP_CST_SIZE0	cassette 3 paper size detection signal 0
UP_CST_SIZE1	cassette 3 paper size detection signal 1
UP_CST_SIZE2	cassette 3 paper size detection signal 2
UP_CST_SIZE3	cassette 3 paper size detection signal 3
UP_CST_SIZE4	cassette 3 paper size detection signal 4
V_PASS_LOW_M_CLKA	vertical path motor drive signal A
V_PASS_LOW_M_CLKAB	vertical path motor drive signal AB
V_PASS_LOW_M_CLKB	vertical path motor drive signal B
V_PASS_LOW_M_CLKBB	vertical path motor drive signal BB
VDO	video signal 0
VDO*	video signal 1
VPASS_SNS_0	vertical path 0 detection signal
VPASS_SNS1	vertical path 1 paper detection signal
VPASS_SNS2	vertical path 2 paper detection signal

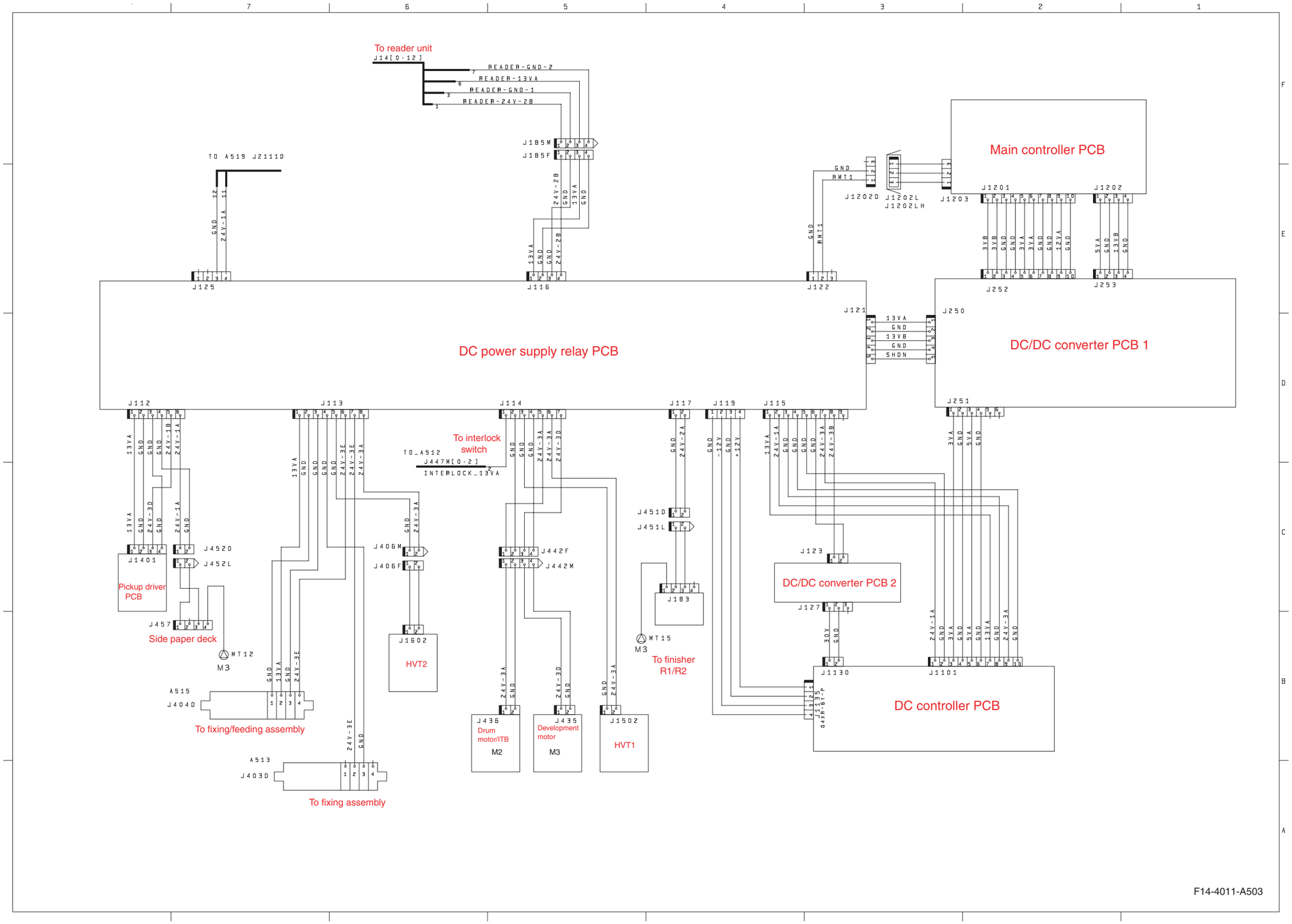
Abbreviation	Signal name
VPASS_SNS3	vertical path 3 paper detection signal
VPASS_SNS4	vertical path 4 paper detection signal
WASTE_TNR_ERRO	waste toner screw lock detection signal
YOKO_REGI_CLK_A	laser scanner motor drive signal A
YOKO_REGI_CLK_A*	laser scanner motor drive signal A*
YOKO_REGI_CLK_B	laser scanner motor drive signal B
YOKO_REGI_CLK_B*	laser scanner motor drive signal B*
YOKO_REGI_SNS	horizontal registration detection signal
ZERO_CROSS	zero-cross detection signal

General Circuit Diagram

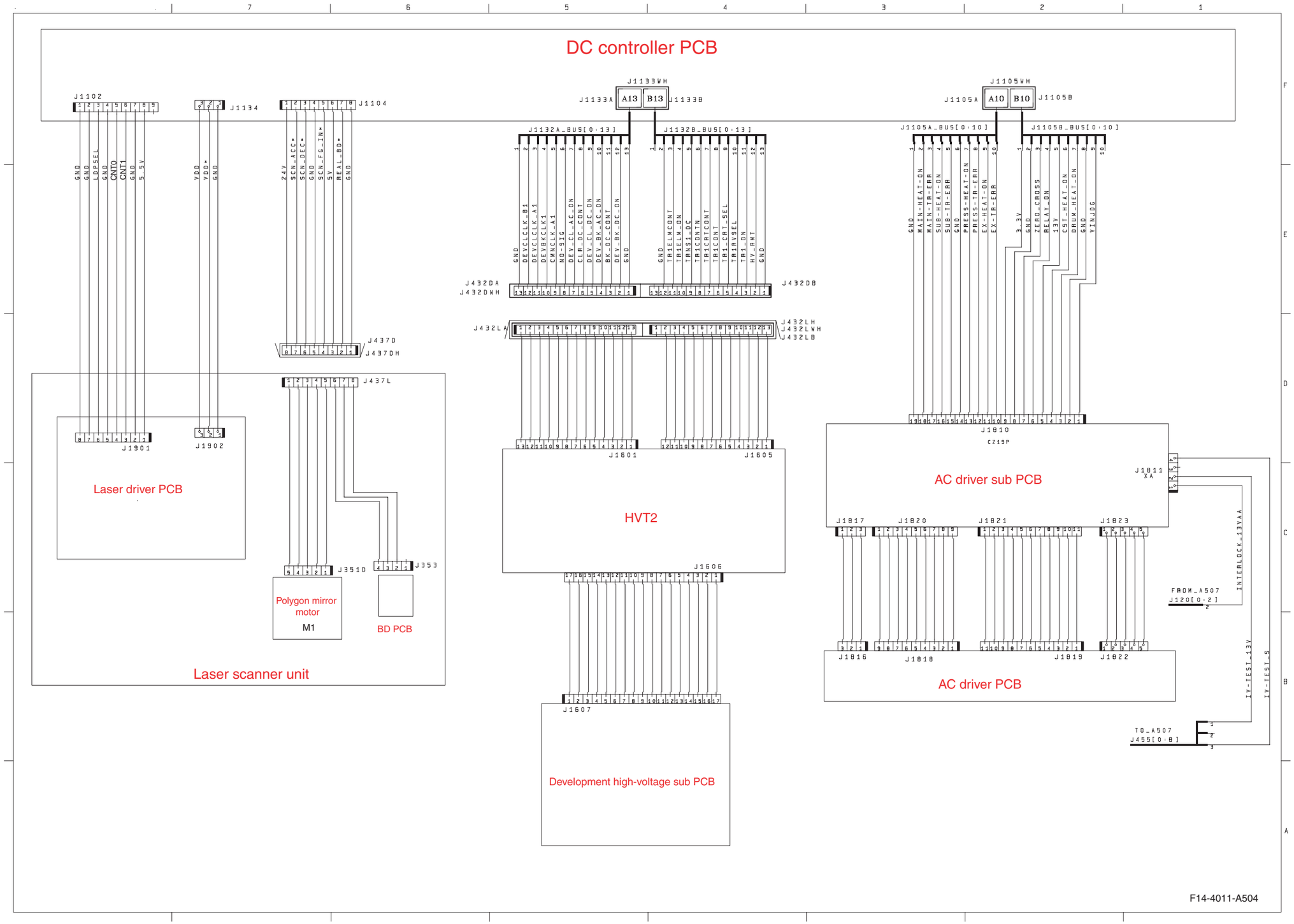
General Circuit Diagram 1 (Printer)



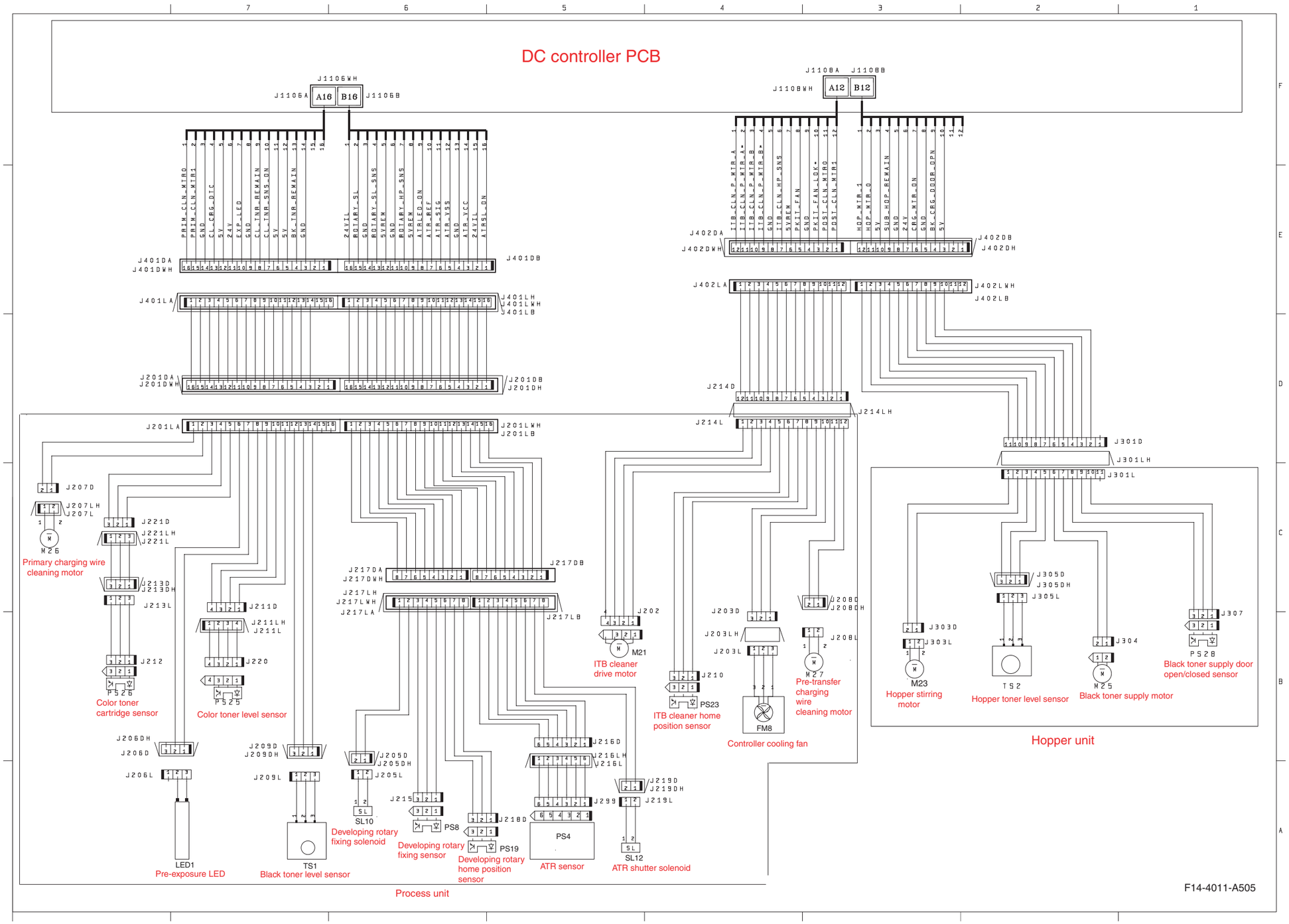
F-2-1


To reader unit
J14[0:12]
READER-GND-2
READER-13VA
READER-GND-1
READER-24V-2B
J185M
J185F
TO A519 J2111D
GND
24V-1A
J125
13VA
GND
GND
24V-2B
J116
Main controller PCB
J1201
J1202
J1203
J1202D
J1202L
J1202LH
GND
RMT1
J122
3VB
3VB
GND
GND
3VA
3VA
GND
GND
12VA
GND
5VA
GND
13VB
GND
J252
J253
DC power supply relay PCB
J121
13VA
GND
13VB
GND
SHDN
J250
DC/DC converter PCB 1
J251
J112
J113
J114
J117
J119
J115
To interlock switch
TO_A512
J447M[0:2]
INTERLOCK_13VA
J451D
J451L
J123
DC/DC converter PCB 2
J127
J1183
J1401
Pickup driver PCB
J452D
J452L
J457
Side paper deck
MT12
M3
J406M
J406F
J1602
HVT2
A515
J404D
To fixing/feeding assembly
A513
J403D
To fixing assembly
J442F
J442M
J436
Drum motor/ITB
M2
J435
Development motor
M3
J1502
HVT1
MT15
M3
To finisher R1/R2
J1130
J1101
DC controller PCB
F14-4011-A503

F-2-2


DC controller PCB
J1102
J1134
J1104
J1133WH
J1133A
A13
B13
J1133B
J1105WH
J1105A
A10
B10
J1105B
J1132A_BUS[0:13]
J1132B_BUS[0:13]
J1105A_BUS[0:10]
J1105B_BUS[0:10]
GND
DEVCLCLK_B1
DEVCLCLK_A1
DEVBKCLK1
CWNCLK_A1
NO_SIG
DEV_CL_AC_ON
CLR_DC_CONT
DEV_CL_DC_ON
DEV_BK_AC_ON
BK_DC_CONT
DEV_BK_DC_ON
TR1ELWCONT
TR1ELW_ON
TRNS1_DC
TR1CONTN
TR1CRTCONT
TR1CONT
TR1_CRT_SEL
TR1AVSEL
TR1_DN
HV_AMT
VDD
VDD*
24V
SCN_ACC*
SCN_DEC*
SCN_FG_IN*
5V
REAL_BD*
5.5V
CNT0
CNT1
LDPSEL
MAIN-HEAT-ON
MAIN-TR-ERR
SUB-HEAT-ON
SUB-TR-ERR
PRESS-HEAT-ON
PRESS-TR-ERR
EX-HEAT-ON
EX-TR-ERR
3.3V
ZERO-CROSS
RELAY-ON
13V
CST-HEAT-ON
DRUM-HEAT-ON
VINJOG
J437D
J437DH
J437L
J432DA
J432DWH
J432DB
J432LA
J432LH
J432LWH
J432LB
J1901
J1902
J1601
J1605
J1810
CZ19P
J1811
XA
Laser driver PCB
HVT2
AC driver sub PCB
J1817
J1820
J1821
J1823
J1816
J1818
J1819
J1822
AC driver PCB
FROM_A507
J120[0:2]
INTERLOCK_13VAA
IV-IFSI_13V
IV-IFSI_S
TO_A507
J455[0:8]
J351D
J353
Polygon mirror motor
M1
BD PCB
Laser scanner unit
J1606
J1607
Development high-voltage sub PCB
F14-4011-A504

F-2-3


DC controller PCB
J1106WH
J1106A
A16
B16
J1106B
J1108A
J1108B
J1108WH
A12
B12
J401DA
J401DWH
J401DB
J401LA
J401LH
J401LWH
J401LB
J201DA
J201DWH
J201DB
J201DH
J201LA
J201LWH
J201LB
J402DA
J402DWH
J402DB
J402DH
J402LA
J402LWH
J402LB
J214D
J214L
J214LH
J301D
J301LH
J301L
J207D
J207LH
J207L
J221D
J221LH
J221L
J213D
J213DH
J213L
J211D
J211LH
J211L
J212
J220
J217DA
J217DWH
J217DB
J217LH
J217LWH
J217LA
J217LB
J202
J203D
J203LH
J203L
J208D
J208DH
J208L
J210
J303D
J303L
J305D
J305DH
J305L
J304
J307
J206DH
J206D
J206L
J209D
J209DH
J209L
J205D
J205DH
J205L
J215
J218D
J216D
J216LH
J216L
J299
J219D
J219DH
J219L
M26
Primary charging wire cleaning motor
Color toner cartridge sensor
Color toner level sensor
LED1
Pre-exposure LED
TS1
Black toner level sensor
SL10
Developing rotary fixing solenoid
PS8
Developing rotary fixing sensor
PS19
Developing rotary home position sensor
PS4
ATR sensor
SL12
ATR shutter solenoid
M21
ITB cleaner drive motor
PS23
ITB cleaner home position sensor
FM8
Controller cooling fan
M27
Pre-transfer charging wire cleaning motor
M23
Hopper stirring motor
TS2
Hopper toner level sensor
M25
Black toner supply motor
PS28
Black toner supply door open/closed sensor
Process unit
Hopper unit
F14-4011-A505

F-2-4

DC controller PCB

J1107

J1121

J381D
J381DH

J381L

MT29

MT30

J382D
J382DH

J382L

SL1

Manual feed pickup solenoid

J384

PS6

Manual feed paper sensor

J388D
J388DH

J388L

J383D
J383DH

J383L

UN13

Manual feed paper width sensor

J386D
J386DH

J386L

J385

PS7

Last paper sensor

J387

PS31

Vertical path 0 sensor

Multifeeder unit

J438D
J438DH

J438L

J431D
J431DH

J431L

J267D
J267LH

J261D
J261LH

J267L

MT21

MT22

J263

PS30

ITB home position sensor (rear)

J264

PS1

ITB home position sensor (front)

J261L

J266D
J266DH

J266L

J265D
J265DH

J265L

SL11

Patch image read sensor shutter solenoid

J262

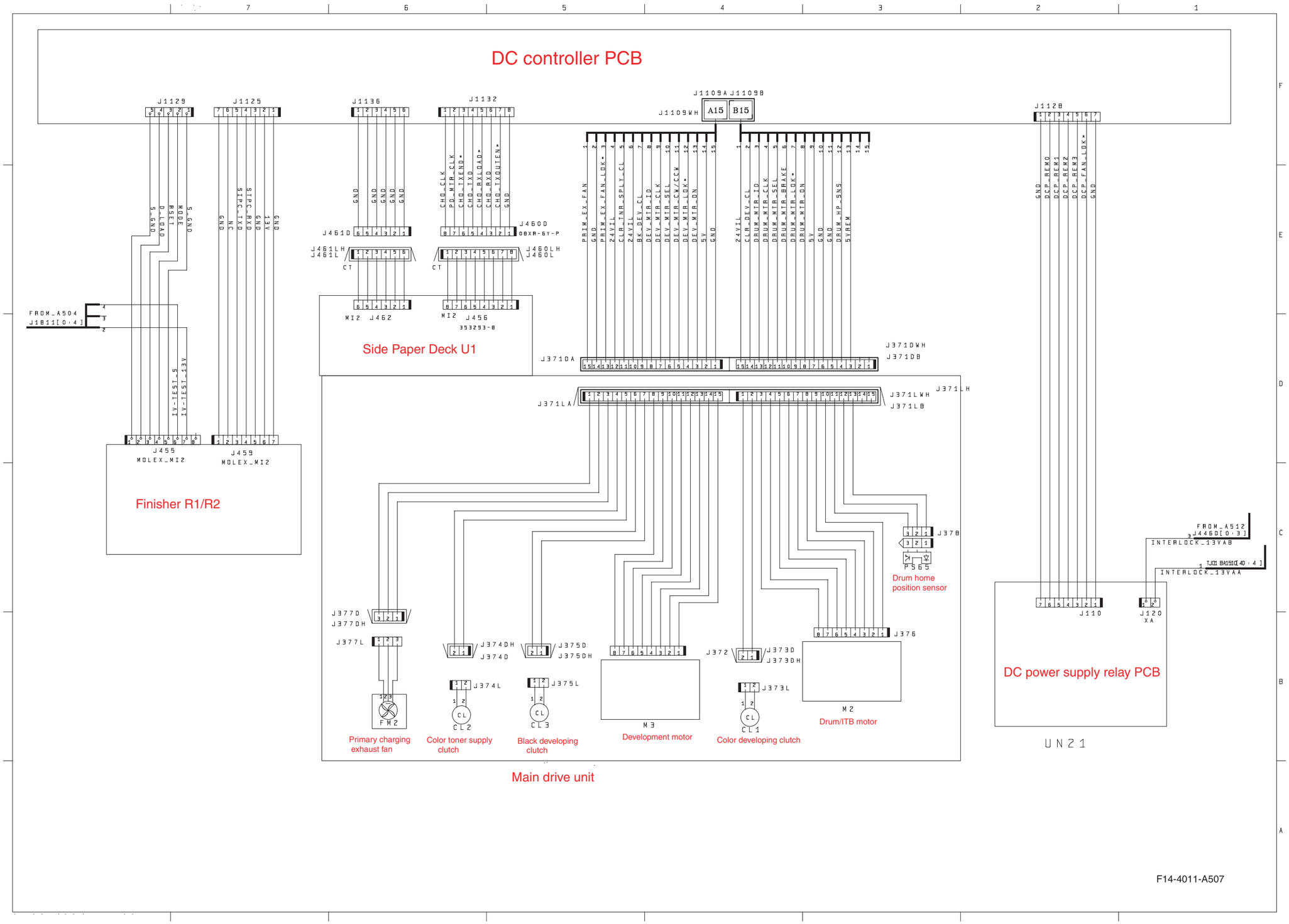
PS2

Patch image read sensor

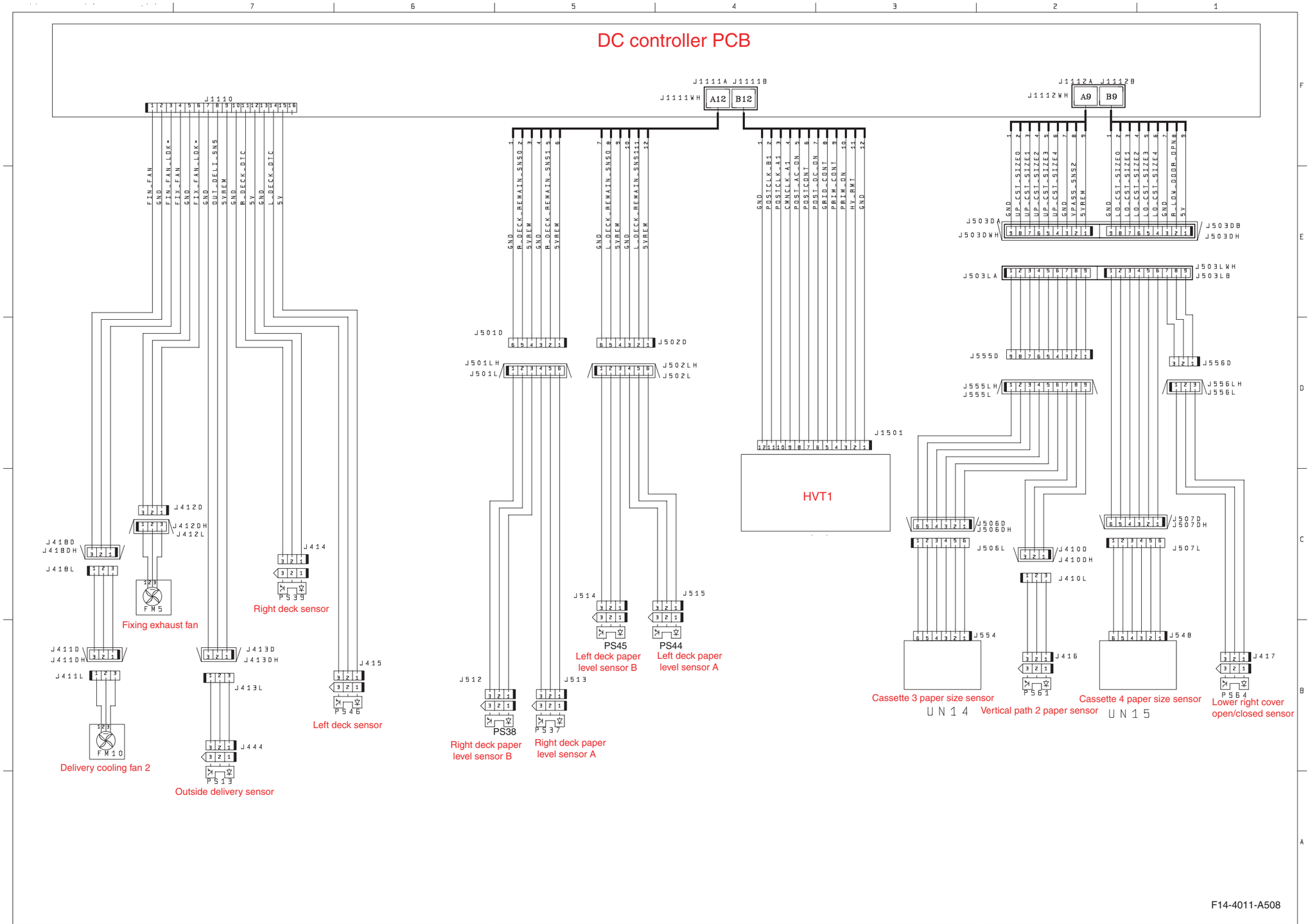
ITB unit

F14-4011-A506

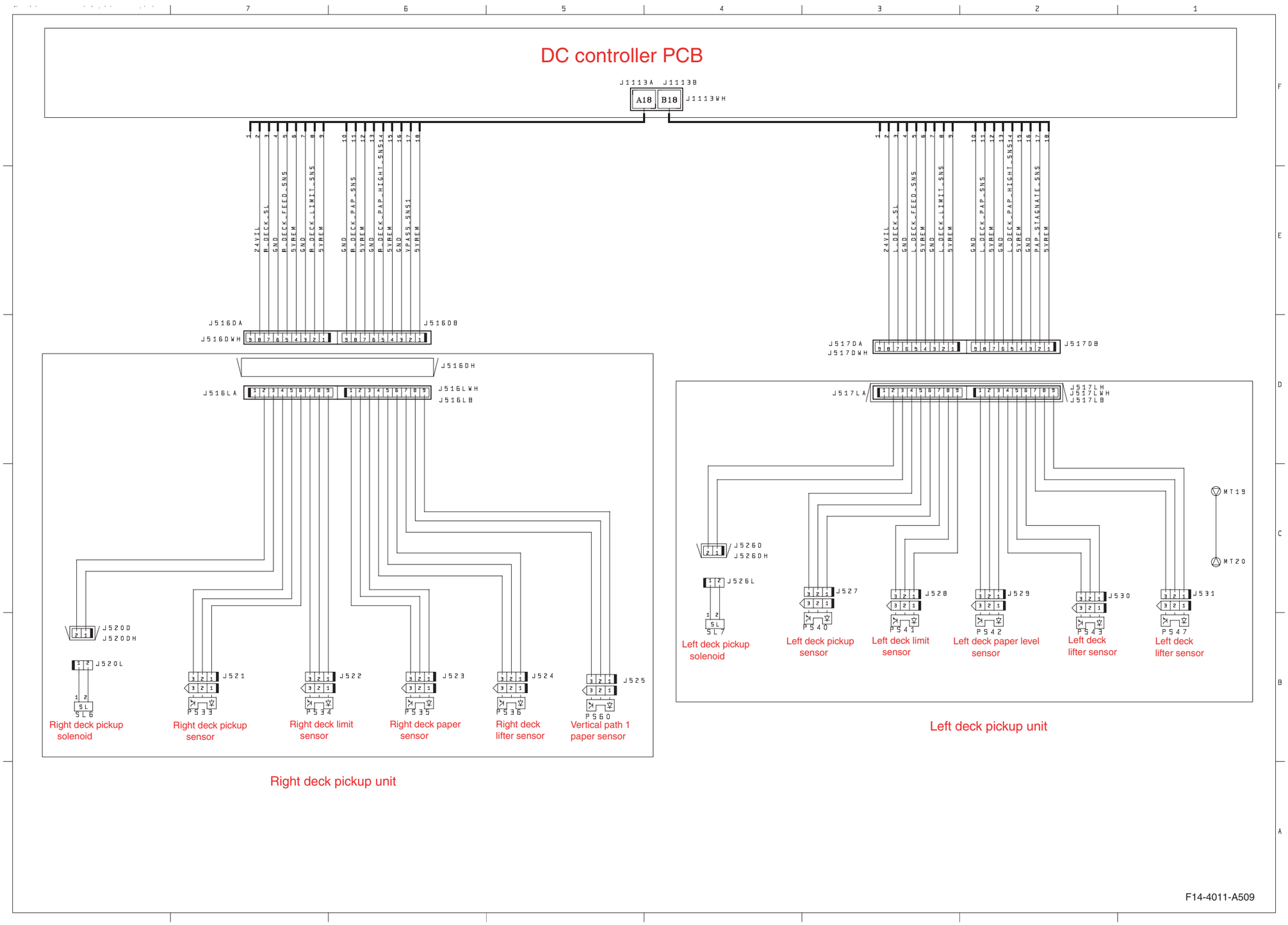
F-2-5


DC controller PCB
J1129
J1125
J1136
J1132
J1109A J1109B
J1109WH
A15
B15
J1128
J461D
J460D
08XR-6Y-P
J461LH
J461L
J460LH
J460L
CT
MI2 J462
MI2 J456
353293-8
Side Paper Deck U1
FROM_A504
J1811[0:4]
J455
MOLEX_MI2
J459
MOLEX_MI2
Finisher R1/R2
J371DA
J371DWH
J371DB
J371LA
J371LWH
J371LB
J371_LH
J377D
J377DH
J377L
J374DH
J374D
J374L
J375D
J375DH
J375L
J372
J373D
J373DH
J373L
J376
J378
P565
FM2
CL2
CL3
CL1
M3
M2
Primary charging exhaust fan
Color toner supply clutch
Black developing clutch
Development motor
Color developing clutch
Drum/ITB motor
Drum home position sensor
Main drive unit
FROM_A512
J446D[0:3]
INTERLOCK_13VAB
TJ01 BA15D[0:4]
INTERLOCK_13VAA
J110
J120
XA
DC power supply relay PCB
UN21
F14-4011-A507

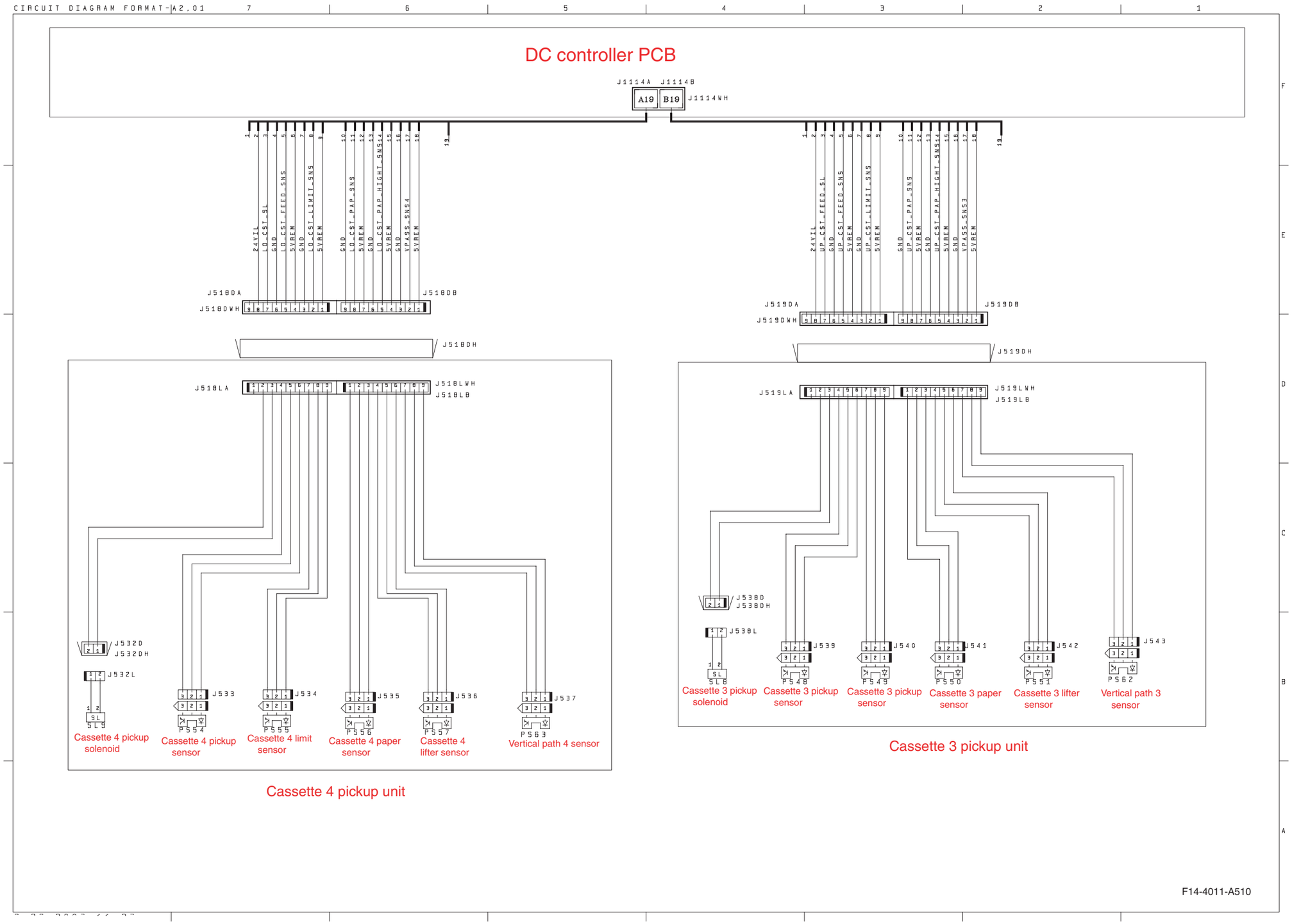
F-2-6


DC controller PCB
J1110
J1111A J1111B
J1111WH
A12
B12
J1112A J1112B
J1112WH
A9
B9
FIN_FAN
GND
FIN_FAN_LOK*
FIX_FAN
GND
FIX_FAN_LOK*
GND
OUT_DELI_SNS
5VREM
GND
R_DECK_DTC
5V
GND
L_DECK_DTC
5V
R_DECK_REMAIN_SNS0_2
5VREM
GND
R_DECK_REMAIN_SNS1_5
5VREM
L_DECK_REMAIN_SNS0_8
5VREM
GND
L_DECK_REMAIN_SNS111
5VREM
GND
POSICLK_B1
POSICLK_A1
CMNCLK_A1
POST_AC_ON
POSTCONT
POST_DC_ON
GRID_CONT
PRIM_CONT
PRIM_ON
HV_AMT
GND
J1501
HVT1
GND
UP_CST_SIZE0
UP_CST_SIZE1
UP_CST_SIZE2
UP_CST_SIZE3
UP_CST_SIZE4
GND
VPASS_SNS2
5VREM
GND
LO_CST_SIZE0
LO_CST_SIZE1
LO_CST_SIZE2
LO_CST_SIZE3
LO_CST_SIZE4
GND
R_LOW_DOOR_OPN
5V
J503D
J503DH
J503DB
J503DH
J503DWH
J503LA
J503LWH
J503LB
J555D
J556D
J555LH
J555L
J556LH
J556L
J501D
J502D
J501LH
J501L
J502LH
J502L
J506D
J506DH
J507D
J507DH
J506L
J507L
J410D
J410DH
J410L
J514
J515
J512
J513
J554
J548
J416
J417
J412D
J412DH
J412L
J414
J418D
J418DH
J418L
J413D
J413DH
J413L
J415
J411D
J411DH
J411L
J444
FM5
Fixing exhaust fan
PS39
Right deck sensor
PS45
Left deck paper level sensor B
PS44
Left deck paper level sensor A
PS46
Left deck sensor
PS38
Right deck paper level sensor B
PS37
Right deck paper level sensor A
Cassette 3 paper size sensor
UN14
Vertical path 2 paper sensor
PS61
Cassette 4 paper size sensor
UN15
PS64
Lower right cover open/closed sensor
FM10
Delivery cooling fan 2
PS13
Outside delivery sensor
F14-4011-A508

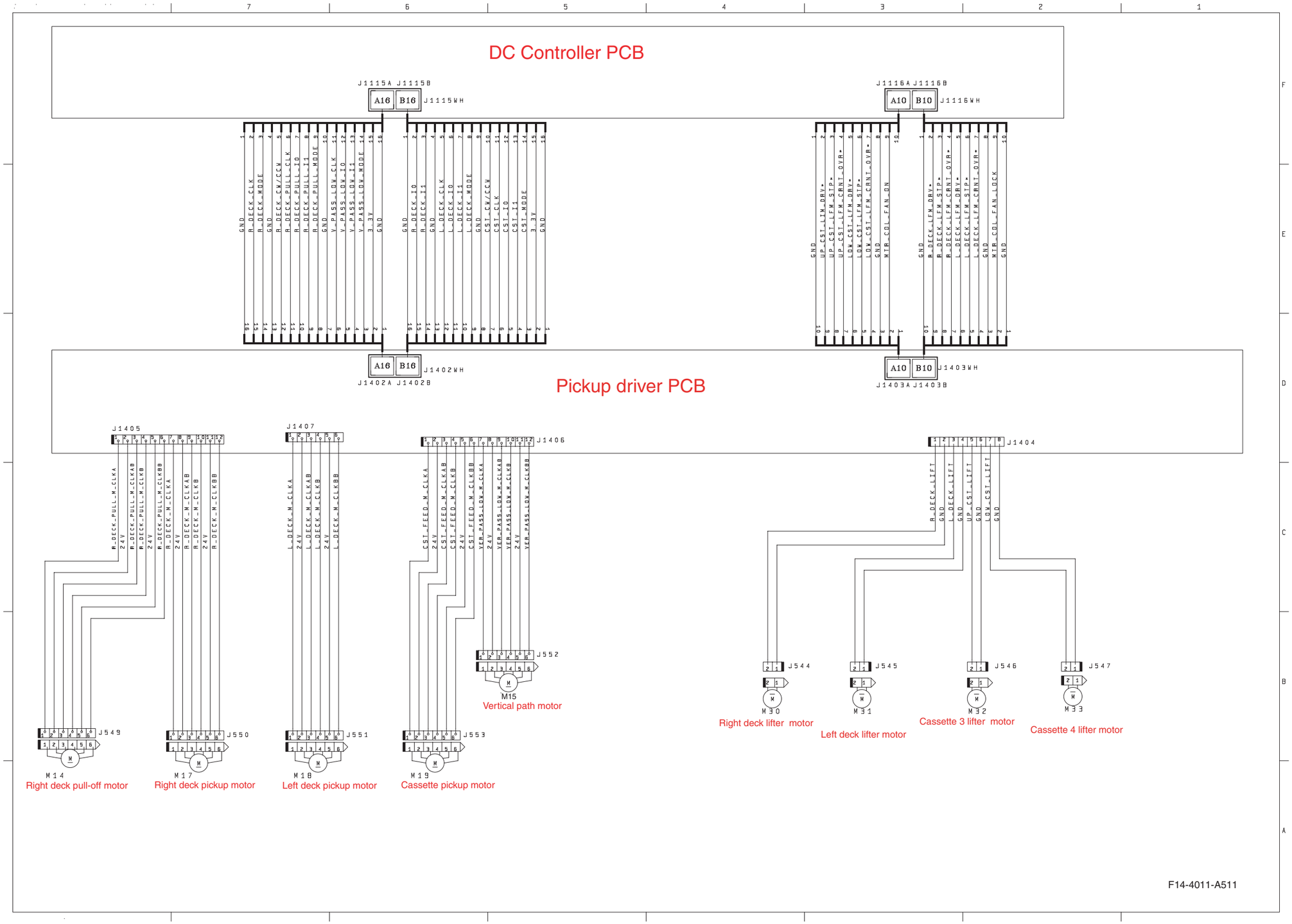
F-2-7


DC controller PCB
J1113A J1113B
A18 B18
J1113WH
J516DA
J516DWH
J516DB
J516DH
J516LA
J516LWH
J516LB
J520D
J520DH
J520L
J521
J522
J523
J524
J525
Right deck pickup solenoid
Right deck pickup sensor
Right deck limit sensor
Right deck paper sensor
Right deck lifter sensor
Vertical path 1 paper sensor
Right deck pickup unit
J517DA
J517DWH
J517DB
J517LA
J517LH
J517LWH
J517LB
MT19
MT20
J526D
J526DH
J526L
J527
J528
J529
J530
J531
Left deck pickup solenoid
Left deck pickup sensor
Left deck limit sensor
Left deck paper level sensor
Left deck lifter sensor
Left deck lifter sensor
Left deck pickup unit
F14-4011-A509

F-2-8


CIRCUIT DIAGRAM FORMAT-A2.01
DC controller PCB
J1114A J1114B
A19 B19
J1114WH
J518DA J518DB
J518DWH
J518DH
J518LA
J518LWH
J518LB
J532D
J532DH
J532L
SL9
Cassette 4 pickup solenoid
J533
P554
Cassette 4 pickup sensor
J534
P555
Cassette 4 limit sensor
J535
P556
Cassette 4 paper sensor
J536
P557
Cassette 4 lifter sensor
J537
P563
Vertical path 4 sensor
Cassette 4 pickup unit
J519DA J519DB
J519DWH
J519DH
J519LA
J519LWH
J519LB
J538D
J538DH
J538L
SL8
Cassette 3 pickup solenoid
J539
P548
Cassette 3 pickup sensor
J540
P549
Cassette 3 pickup sensor
J541
P550
Cassette 3 paper sensor
J542
P551
Cassette 3 lifter sensor
J543
P562
Vertical path 3 sensor
Cassette 3 pickup unit
F14-4011-A510

F-2-9


DC Controller PCB
J1115A J1115B
A16 B16 J1115WH
J1116A J1116B
A10 B10 J1116WH
A16 B16 J1402WH
J1402A J1402B
A10 B10 J1403WH
J1403A J1403B
Pickup driver PCB
J1405
J1407
J1406
J1404
J549
J550
J551
J553
J552
J544
J545
J546
J547
M14
Right deck pull-off motor
M17
Right deck pickup motor
M18
Left deck pickup motor
M19
Cassette pickup motor
M15
Vertical path motor
M30
Right deck lifter motor
M31
Left deck lifter motor
M32
Cassette 3 lifter motor
M33
Cassette 4 lifter motor
F14-4011-A511

F-2-10

DC controller PCB

J1117WH
J1117A A13 B13 J1117B

GND
UP_CST_REMAIN_SNS0_2
5VREM
GND
UP_CST_REMAIN_SNS1_5
5VREM

J504D
J504LH
J504L
J508
J509
Cassette 3 paper level sensor A
Cassette 3 paper level sensor B

GND
LO_CST_REMAIN_SNS0_8
5VREM
GND
LO_CST_REMAIN_SNS11_12
5VREM

J505D
J505LH
J505L
J510
J511
Cassettes 4 paper level sensor A
Cassette 4 paper left sensor B

TO_A507
J120[0,2]
INTERLOCK_13VAB
InterLock13V

FROM_A503
J114[0,7]
INTERLOCK_13VA
13VA

J446D
J446DH
J446L
J441F
J441M
SOLD1
SW11
Manual feed unit open/closed switch

J447M
J447F
J448M
J448F
J458F
J458M
FT462
SW12
FT461
FT452
FT451
Front cover switch

SOLD3
SW16
Fixing/feeding lock switch

FRONT_DOOR_OPN
GND
J424D
J424LH
J424L
J449D
J449DH
J449L

WASTE_TNR_ERRO
GND
J425D
J425L
J425LH
FT471
SW14
FT472
Feedscrew lock detecting switch

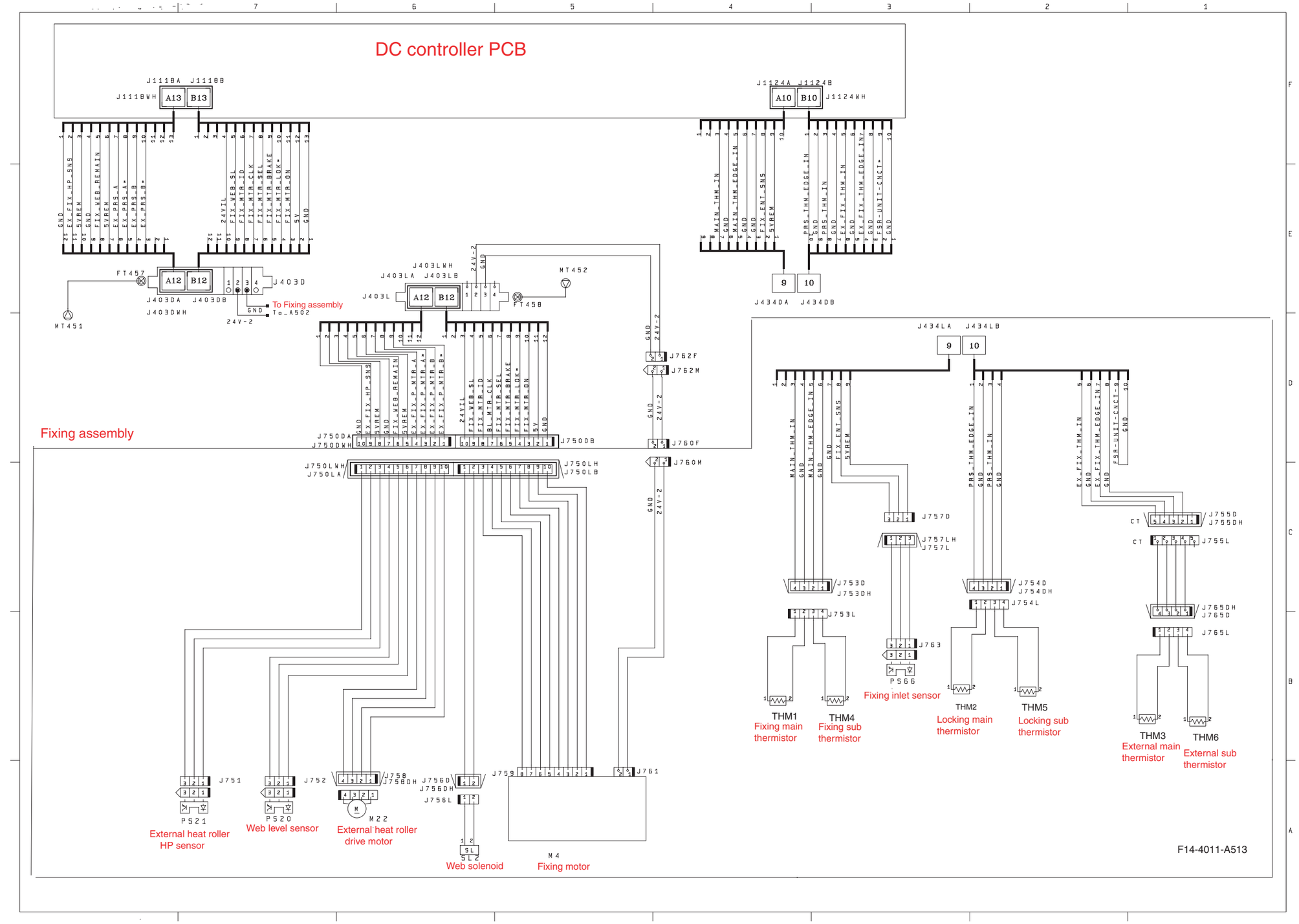
GND
JOIN_SNS
5VREM
J439D
J439LH
J439L
J419
Vertical path confluence sensor

PRIM_IN_FAN
GND
PRIM_IN_FAN_LOK*
GND
MLT_TRAY_OPN
5V
J433D
J433DH
J433L
J420DH
J420D
J420L
FM1
Primary charging suction fan

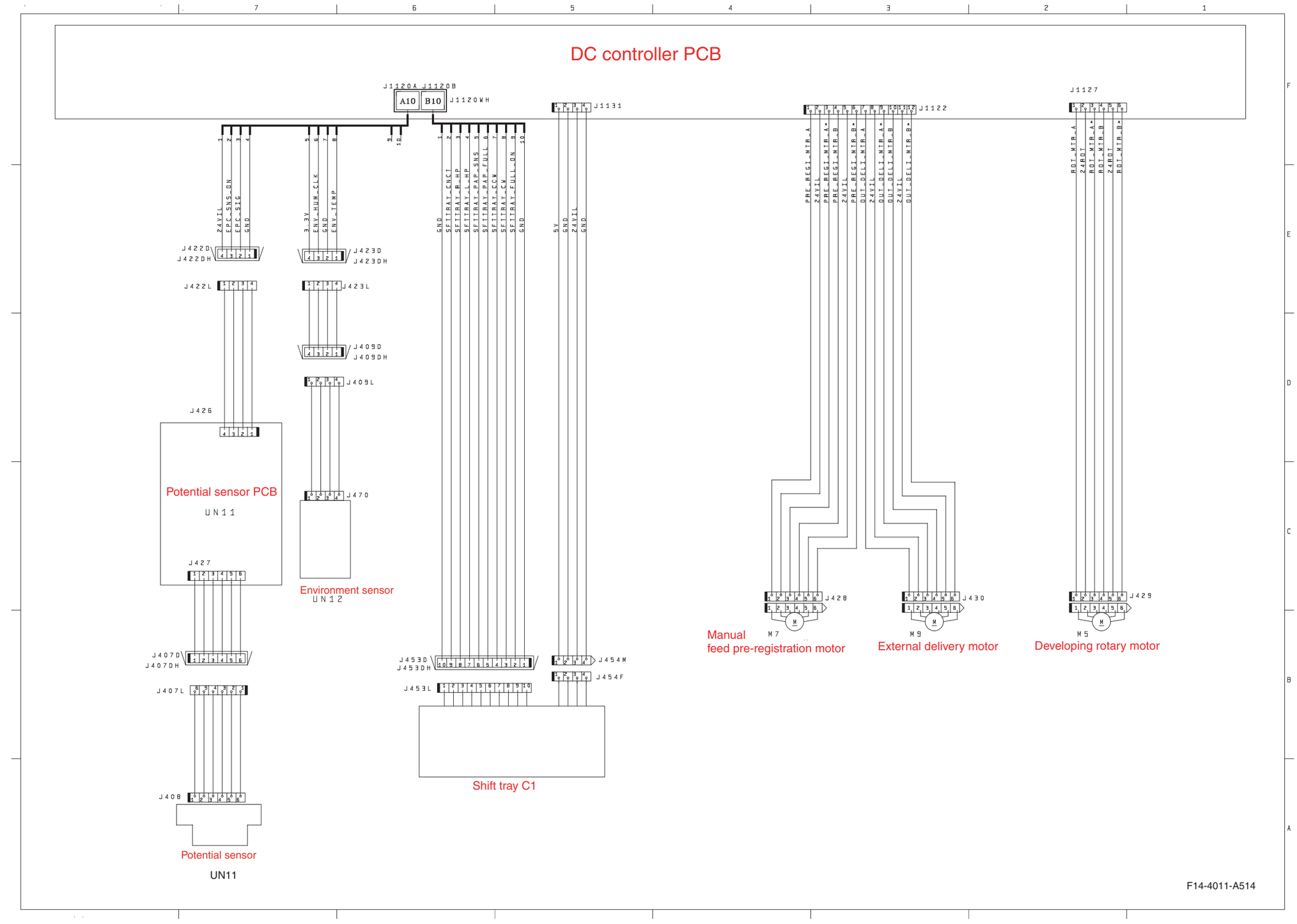
J445D
J445LH
J445L
J421
Manual feed unit open/closes sensor

F14-4011-A512

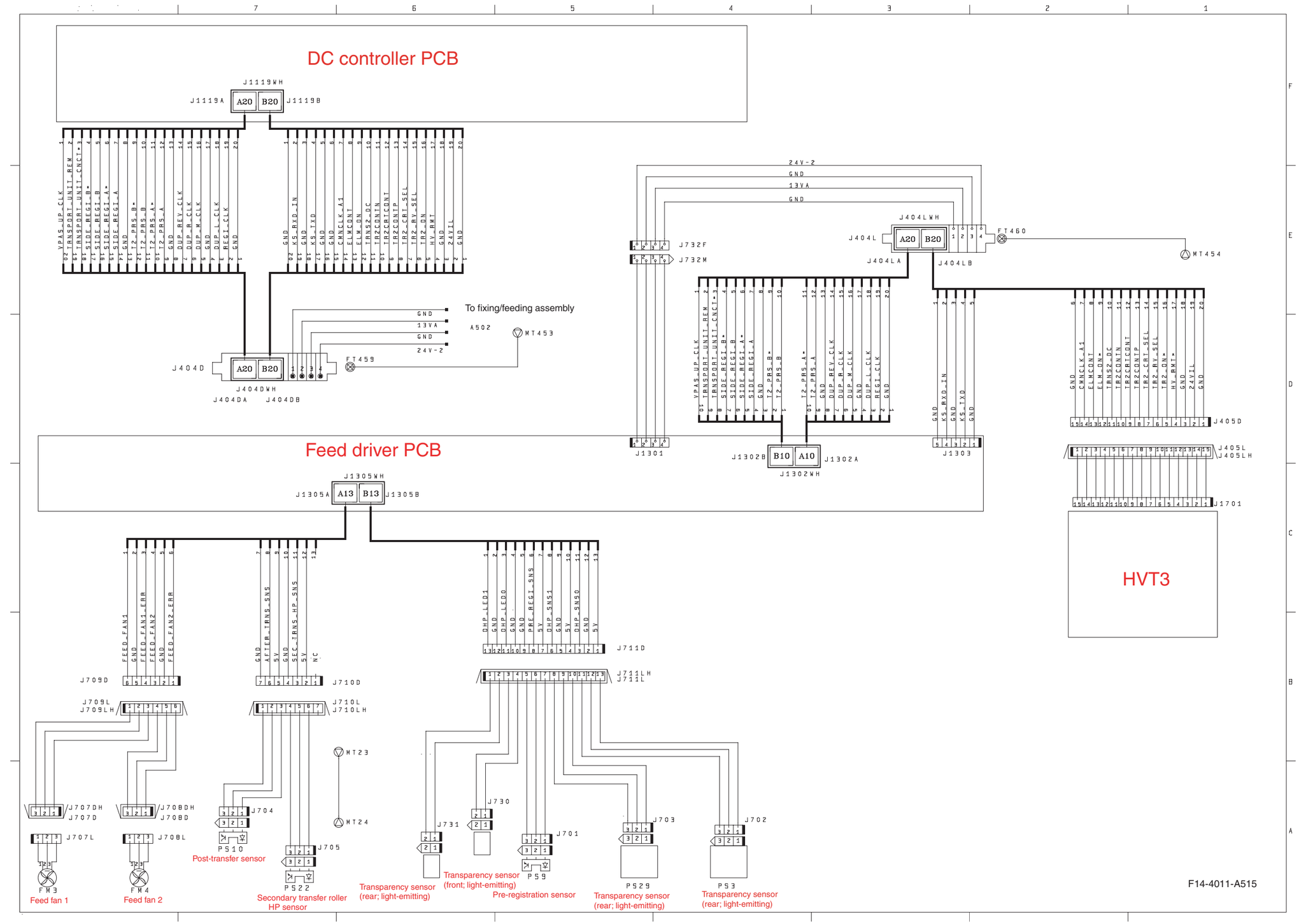
F-2-11


DC controller PCB
Fixing assembly
To Fixing assembly
To_A502
External heat roller HP sensor
Web level sensor
External heat roller drive motor
Web solenoid
Fixing motor
Fixing inlet sensor
THM1 Fixing main thermistor
THM4 Fixing sub thermistor
THM2 Locking main thermistor
THM5 Locking sub thermistor
THM3 External main thermistor
THM6 External sub thermistor
F14-4011-A513

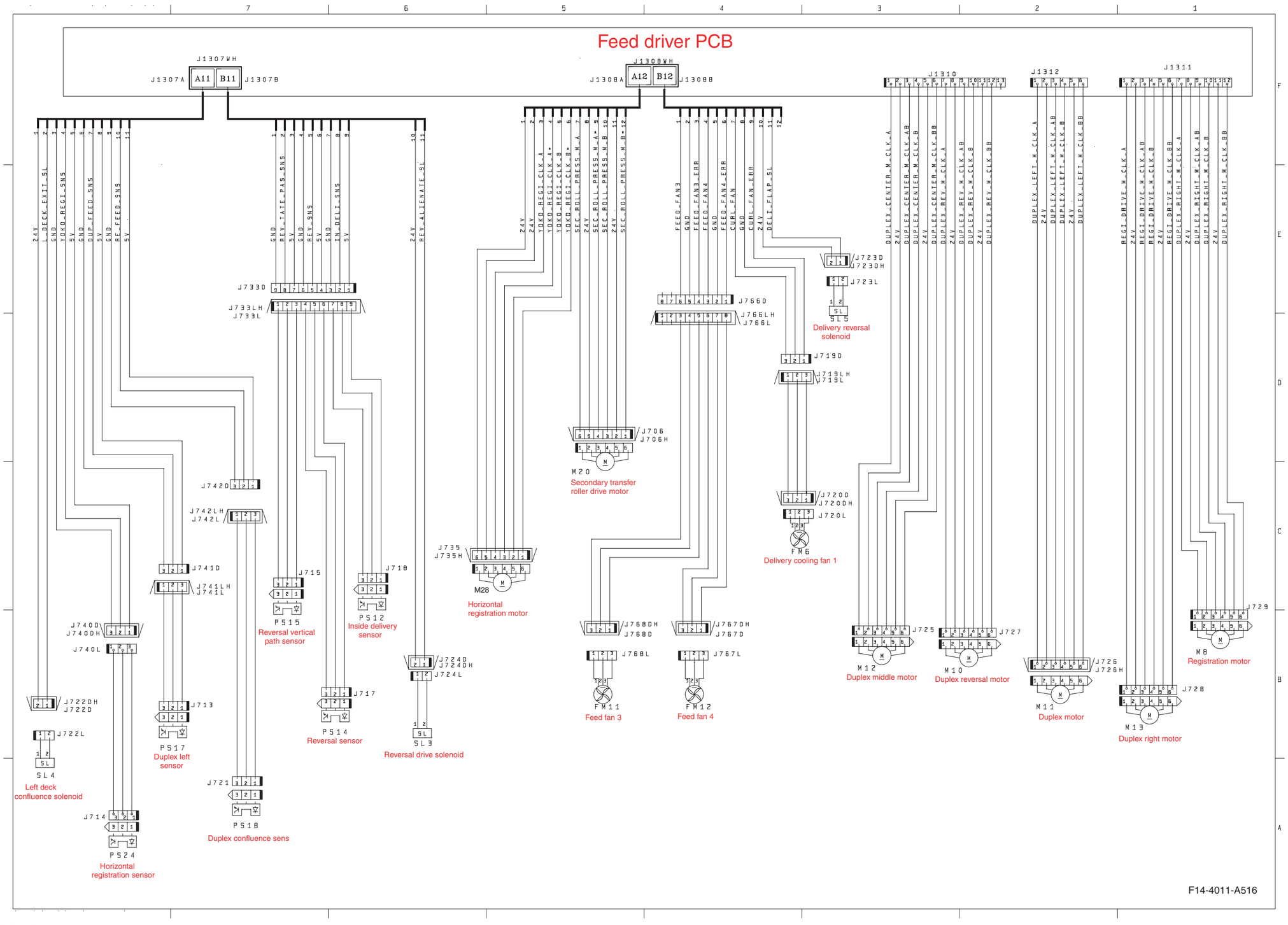
F-2-12


DC controller PCB
J1120A J1120B
A10 B10
J1120WH
J1131
J1122
J1127
J422D
J422DH
J422L
J423D
J423DH
J423L
J409D
J409DH
J409L
J426
Potential sensor PCB
UN11
J427
J407D
J407DH
J407L
J408
Potential sensor
UN11
J470
Environment sensor
UN12
J453D
J453DH
J453L
J454M
J454F
Shift tray C1
J428
M7
Manual
feed pre-registration motor
J430
M9
External delivery motor
J429
M5
Developing rotary motor
F14-4011-A514

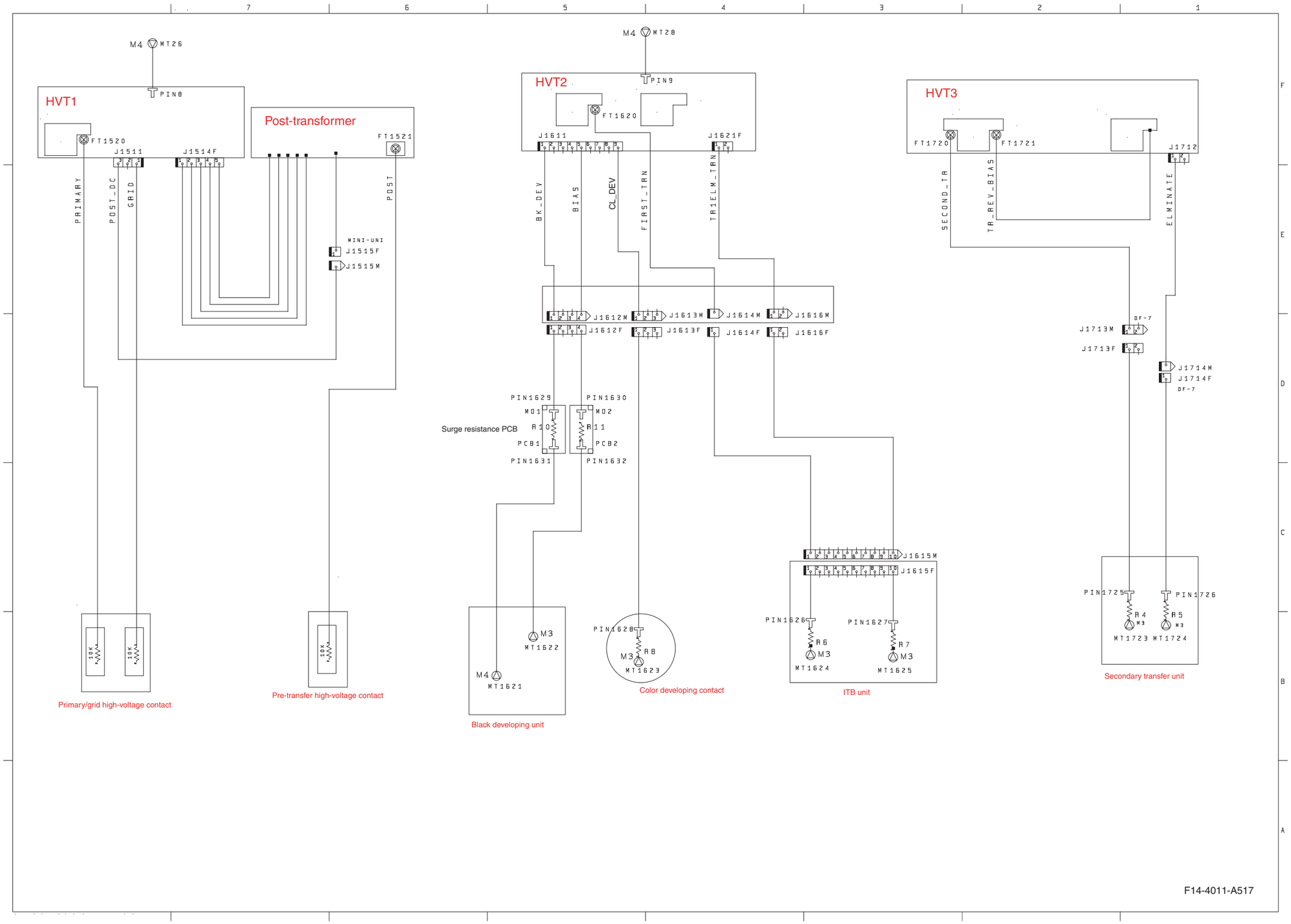
F-2-13


DC controller PCB
J1119WH
J1119A
A20
B20
J1119B
VPAS_UP_CLK
TRANSPORT_UNIT_REM
TRANSPORT_UNIT_CNCT*3
SIDE_REGI_B*
SIDE_REGI_B
SIDE_REGI_A*
SIDE_REGI_A
GND
T2_PRS_B*
T2_PRS_B
T2_PRS_A*
T2_PRS_A
GND
DUP_REV_CLK
DUP_R_CLK
DUP_M_CLK
GND
DUP_L_CLK
REGI_CLK
GND
GND
KS_RXD_IN
GND
KS_TXD
GND
GND
CMNCLK_A1
ELMCONT
ELM_ON*
TRNS2_DC
TR2CONTN
TR2CRICONT
TR2CONTP
TR2_CRT_SEL
TR2_RY_SEL
TR2_ON*
HV_RMT*
GND
24V1L
GND
To fixing/feeding assembly
GND
13VA
GND
24V-2
A502
MT453
FT459
J404D
J404DWH
J404DA
J404DB
24V-2
GND
13VA
GND
J732F
J732M
J404L
J404LWH
J404LA
J404LB
FT460
MT454
J1301
J1302B
B10
A10
J1302A
J1302WH
J1303
J405D
J405L
J405LH
J1701
Feed driver PCB
J1305WH
J1305A
A13
B13
J1305B
FEED_FAN1
GND
FEED_FAN1_ERR
FEED_FAN2
FEED_FAN2_ERR
GND
AFTER_TRNS_SNS
5V
GND
SEC_TRNS_HP_SNS
5V
NC
DHP_LED1
GND
DHP_LED0
GND
GND
PRE_REGI_SNS
5V
DHP_SNS1
GND
5V
DHP_SNS0
GND
5V
J709D
J710D
J711D
J709L
J709LH
J710L
J710LH
J711LH
J711L
J707DH
J707D
J708DH
J708D
J707L
J708L
J704
J705
J730
J731
J701
J703
J702
MT23
MT24
PS10
Post-transfer sensor
PS22
Secondary transfer roller HP sensor
FM3
Feed fan 1
FM4
Feed fan 2
Transparency sensor (rear; light-emitting)
Transparency sensor (front; light-emitting)
PS9
Pre-registration sensor
PS29
Transparency sensor (rear; light-emitting)
PS3
Transparency sensor (rear; light-emitting)
HVT3
F14-4011-A515

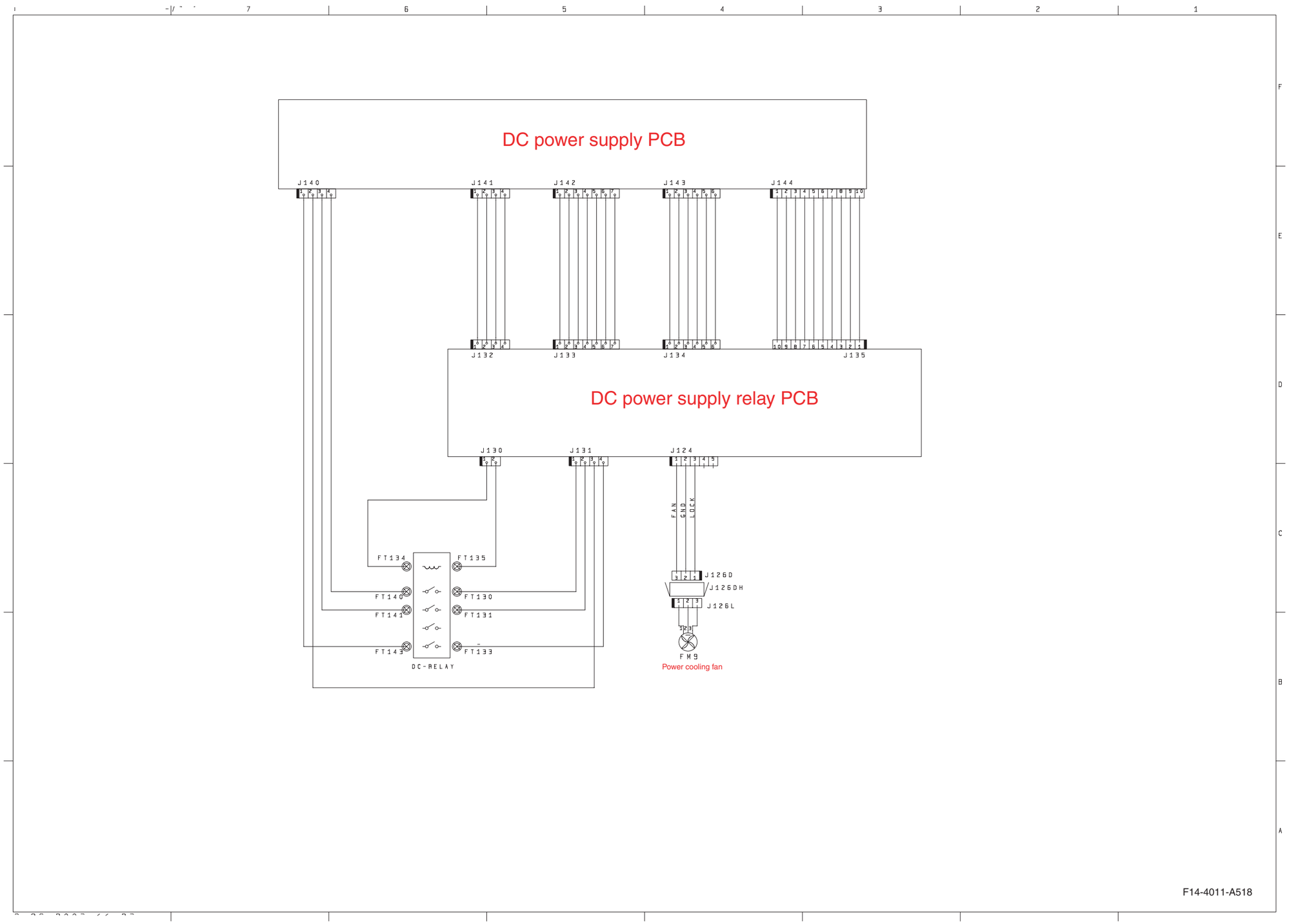
F-2-14


Feed driver PCB
J1307WH
J1307A
A11
B11
J1307B
J1308WH
J1308A
A12
B12
J1308B
J1310
J1312
J1311
J733D
J733LH
J733L
J742D
J742LH
J742L
J741D
J741LH
J741L
J740D
J740DH
J740L
J722DH
J722D
J722L
SL4
Left deck confluence solenoid
J714
PS24
Horizontal registration sensor
J713
PS17
Duplex left sensor
J721
PS18
Duplex confluence sens
J715
PS15
Reversal vertical path sensor
J717
PS14
Reversal sensor
J718
PS12
Inside delivery sensor
J724D
J724DH
J724L
SL3
Reversal drive solenoid
J735
J735H
M28
Horizontal registration motor
J706
J706H
M20
Secondary transfer roller drive motor
J768DH
J768D
J768L
FM11
Feed fan 3
J767DH
J767D
J767L
FM12
Feed fan 4
J766D
J766LH
J766L
J723D
J723DH
J723L
SL5
Delivery reversal solenoid
J719D
J719LH
J719L
J720D
J720DH
J720L
FM6
Delivery cooling fan 1
J725
M12
Duplex middle motor
J727
M10
Duplex reversal motor
J726
J726H
M11
Duplex motor
J729
M8
Registration motor
J728
M13
Duplex right motor
F14-4011-A516

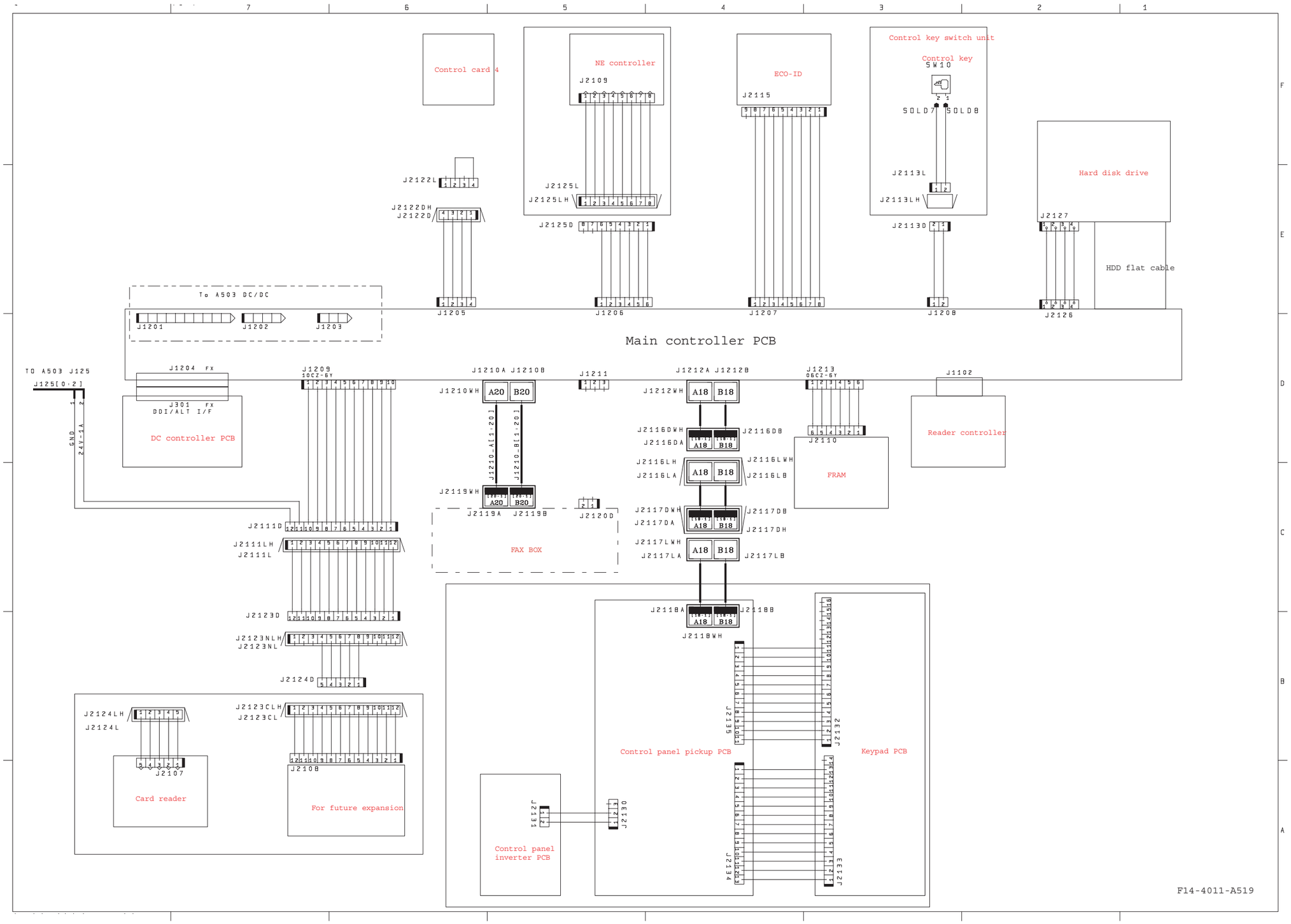
F-2-15


HVT1
M4 MT26
PIN8
FT1520
J1511
J1514F
PRIMARY
POST_DC
GRID
Post-transformer
FT1521
POST
MINI-UNI
J1515F
J1515M
HVT2
M4 MT28
PIN9
FT1620
J1611
J1621F
BK_DEV
BIAS
CL_DEV
FIRST_TRN
TR1ELM_TRN
J1612M
J1613M
J1614M
J1616M
J1612F
J1613F
J1614F
J1616F
PIN1629
PIN1630
M01
M02
R10
R11
PCB1
PCB2
Surge resistance PCB
PIN1631
PIN1632
HVT3
FT1720
FT1721
J1712
SECOND_TR
TR_REV_BIAS
ELMINATE
DF-7
J1713M
J1713F
J1714M
J1714F
DF-7
10K
10K
Primary/grid high-voltage contact
10K
Pre-transfer high-voltage contact
M3
MT1622
M4
MT1621
Black developing unit
PIN1628
R8
M3
MT1623
Color developing contact
J1615M
J1615F
PIN1626
PIN1627
R6
M3
MT1624
R7
M3
MT1625
ITB unit
PIN1725
PIN1726
R4
M3
R5
M3
MT1723
MT1724
Secondary transfer unit
F14-4011-A517

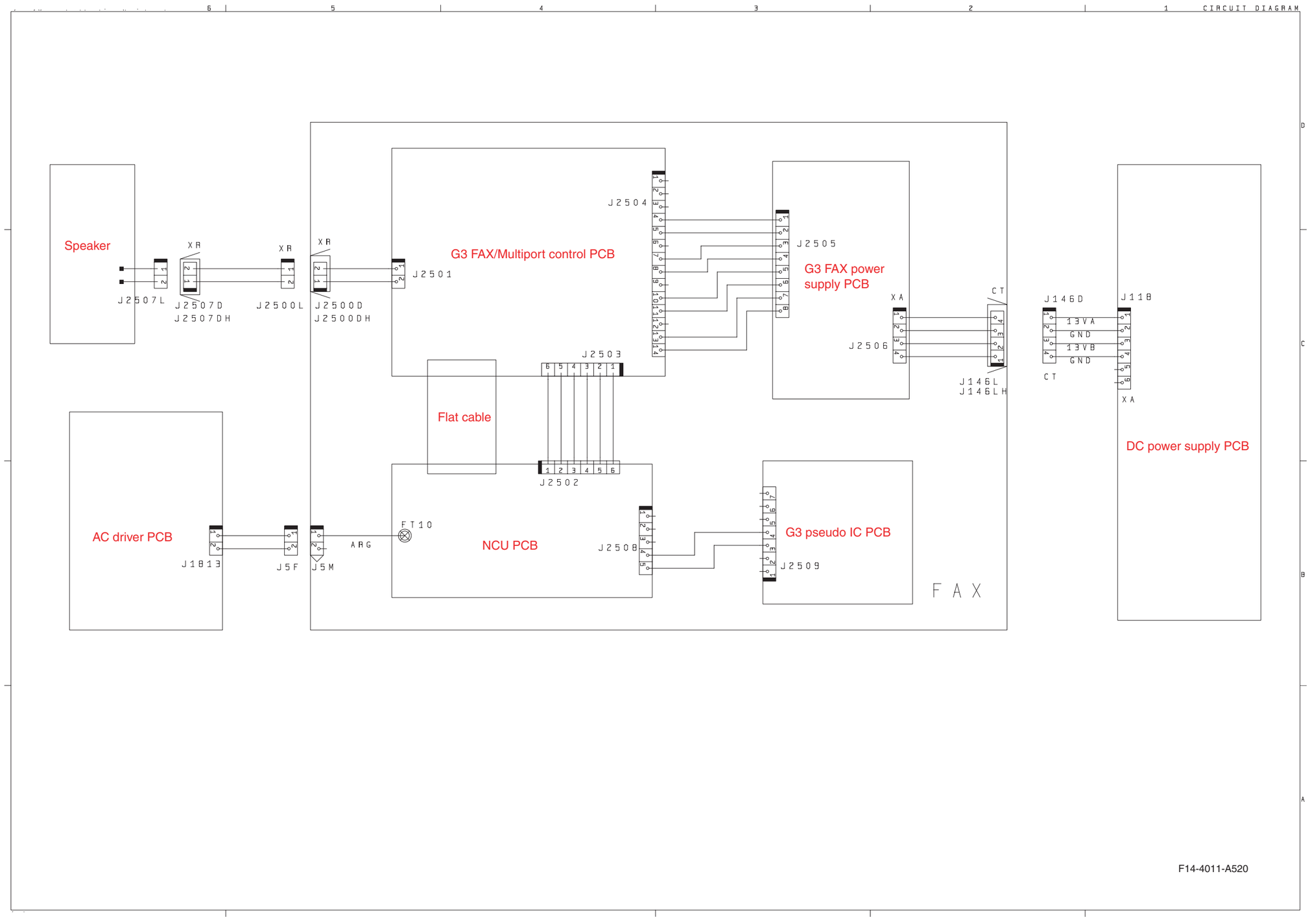
F-2-16


DC power supply PCB
J140
J141
J142
J143
J144
J132
J133
J134
J135
DC power supply relay PCB
J130
J131
J124
FT134
FT135
FT140
FT130
FT141
FT131
FT143
FT133
DC-RELAY
FAN
GND
LOCK
J126D
J126DH
J126L
FM9
Power cooling fan
F14-4011-A518

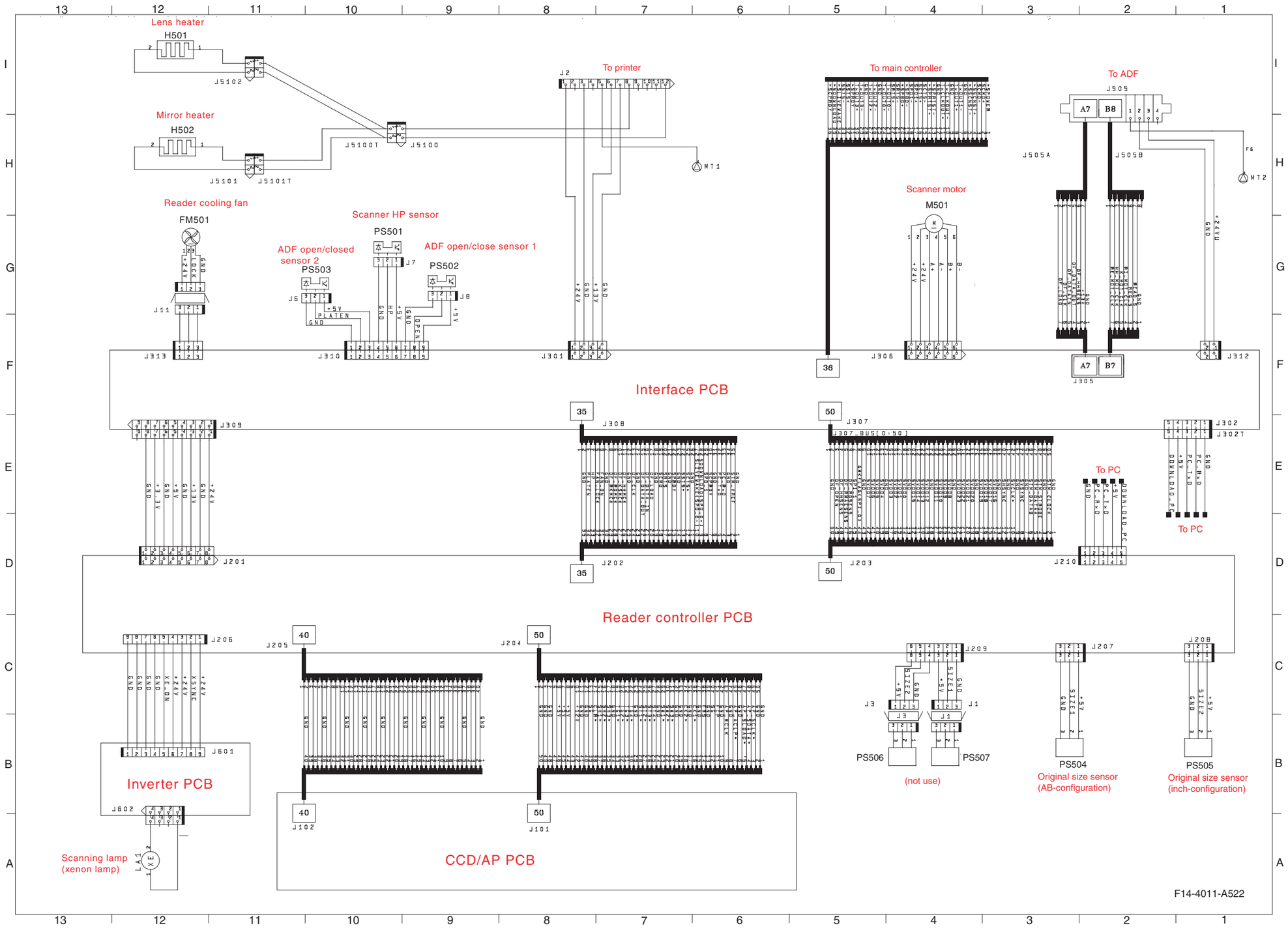
F-2-17


Control card 4
NE controller
J2109
ECO-ID
J2115
Control key switch unit
Control key
SW10
SOLD7
SOLD8
J2113L
J2113LH
J2113D
Hard disk drive
J2127
HDD flat cable
J2126
J2122L
J2122DH
J2122D
J2125L
J2125LH
J2125D
J1205
J1206
J1207
J1208
To A503 DC/DC
J1201
J1202
J1203
Main controller PCB
TO A503 J125
J125[0:2]
GND
24V-1A
J1204 FX
J301 FX DDI/ALT I/F
DC controller PCB
J1209
10CZ-6Y
J1210A J1210B
J1210WH
A20
B20
J1210_A1:20]
J1210_B1:20]
J2119WH
J2119A
J2119B
J1211
J2120D
FAX BOX
J1212A J1212B
J1212WH
A18
B18
J2116DWH
J2116DA
J2116DB
J2116LH
J2116LA
J2116LWH
J2116LB
J2117DWH
J2117DA
J2117DB
J2117DH
J2117LWH
J2117LA
J2117LB
J1213
06CZ-6Y
J2110
FRAM
J1102
Reader controller
J2111D
J2111LH
J2111L
J2123D
J2123NLH
J2123NL
J2124D
J2118A
J2118B
J2118WH
J2124LH
J2124L
J2107
Card reader
J2123CLH
J2123CL
J2108
For future expansion
J2135
J2132
Control panel pickup PCB
Keypad PCB
J2131
Control panel inverter PCB
J2134
F14-4011-A519

F-2-18


CIRCUIT DIAGRAM
Speaker
J2507L
XR
J2507D
J2507DH
XR
J2500L
XR
J2500D
J2500DH
J2501
G3 FAX/Multiport control PCB
J2504
J2505
G3 FAX power supply PCB
XA
J2506
CT
J146L
J146LH
J146D
13VA
GND
13VB
GND
CT
J118
XA
DC power supply PCB
J2503
Flat cable
J2502
AC driver PCB
J1813
J5F
J5M
ARG
FT10
NCU PCB
J2508
G3 pseudo IC PCB
J2509
FAX
F14-4011-A520

F-2-19


Lens heater
H501
J5102
Mirror heater
H502
J5101
J5101T
J5100T
J5100
To printer
J2
MT1
To main controller
To ADF
J505
J505A
J505B
A7
B8
A7
B7
J305
FG
MT2
Scanner motor
M501
J306
Reader cooling fan
FM501
J311
J313
Scanner HP sensor
PS501
ADF open/closed sensor 2
PS503
ADF open/close sensor 1
PS502
J310
J301
36
Interface PCB
J309
J201
35
J308
J202
50
J307
J307_BUS[0:50]
J203
To PC
J210
J302
J302T
To PC
Reader controller PCB
J206
J601
Inverter PCB
J602
Scanning lamp
(xenon lamp)
40
J205
40
J102
50
J204
50
J101
CCD/AP PCB
J209
J3
J1
PS506
PS507
(not use)
J207
PS504
Original size sensor
(AB-configuration)
J208
PS505
Original size sensor
(inch-configuration)
F14-4011-A522

F-2-20

Mar 17 2004

Canon