[MAINTENANCE MANUAL]

FINE Sodick NC WIRE CUT-EDM

EX21

FOR MACHINE A320(AWT) AND A530(AWT)

POWER SUPPLY & CNC UNIT

MAINTENANCE MANUAL

CONTENTS OF

SCHEMATICS, CHECK-POINTS & PART LIST

FINE Sodick
Sodick Co., Ltd.

Vol. 2.0

Part No. 6100272

Sodick

September 19, 2003

Carl Smith
Murray Machine & Tool Co.
2235 Cabin Hill Road
Nashville, TN. 37214

Dear Carl,

SODICK ENGINEERING would like to provide you with a working knowledge of your Sodick machine. Therefore you will be receiving your schematic diagrams in the near future.

This information is the property of SODICK ENGINEERING. It is CONFIDENTIAL and may not be copied nor shown to anyone outside your employ. In the event your Sodick EDM machine is sold to a third party, these schematic diagrams must be returned to SODICK ENGINEERING.

Please sign below and return one copy to our office. Keep one copy for your records.
Upon receipt of your signed copy, we will send you the schematics that you have requested.

A non-refundable $60.00 per manual fee is needed to cover the cost of printing. Please include your PO# with your signed copy of this form.

I hope this information will aid you in the maintenance of your machine. If you have any questions about this information, please feel free to contact me at our Chicago office (847) 759-6911 or you may fax us at (847) 759-6765.

Sincerely yours,

Ramiro Perucho
Midwest Service Manager

Manual Part Number 6200272	Manual Name EX21 Schematics
Machine Model A530D Serial # T-2164	Control Model EX21

Agreed and accepted: Purchase Order Number PUT ON MASTER CARD 9-17-03

Date: 9-22-03 Please Print Your Name CARL A. SMITH

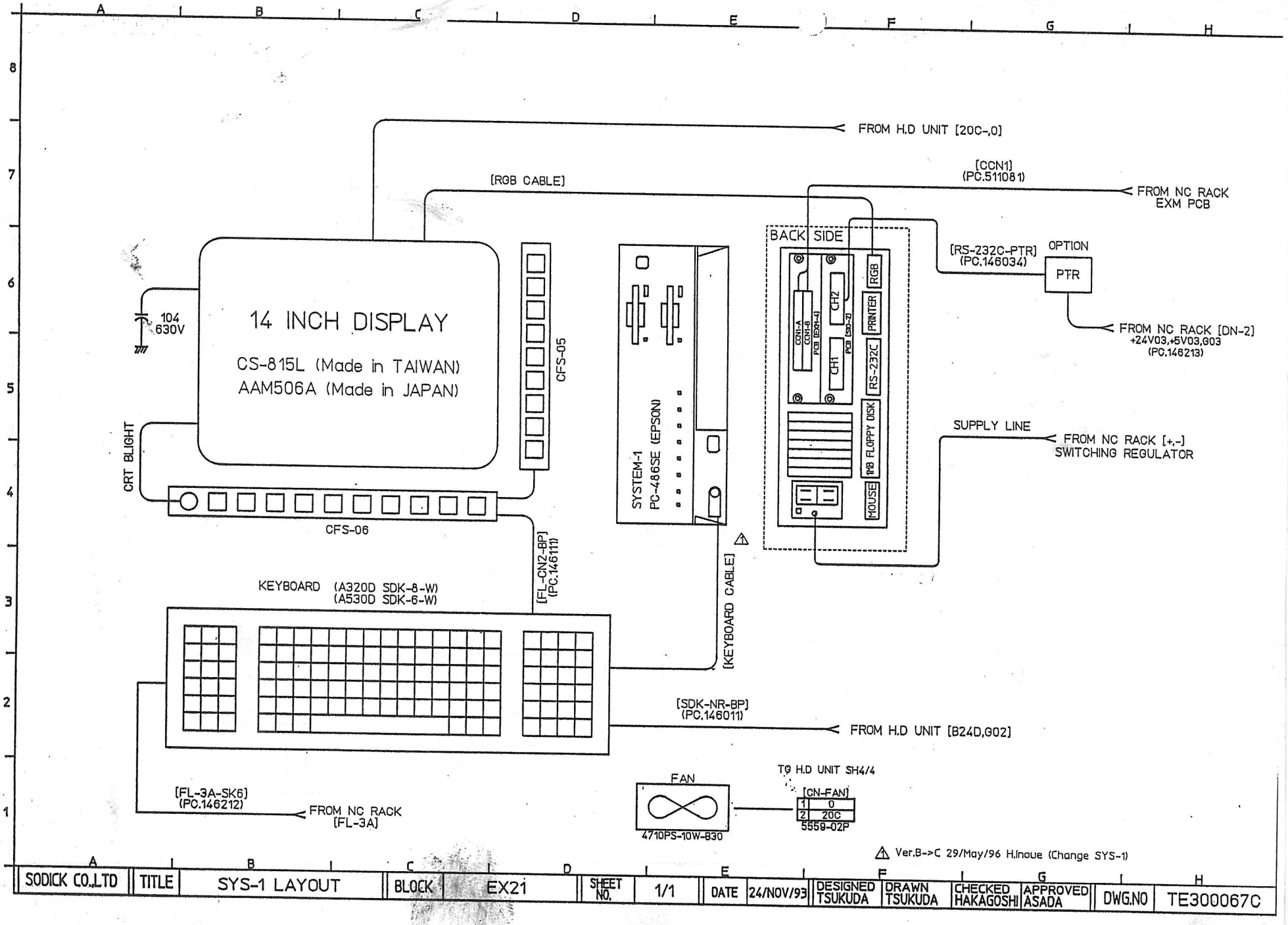
SIGNATURE _____
Signature

NEXT DAY AIR SHIPPING (USE WHOEVER DELIVERS THE EARLIEST IN THE DAY)

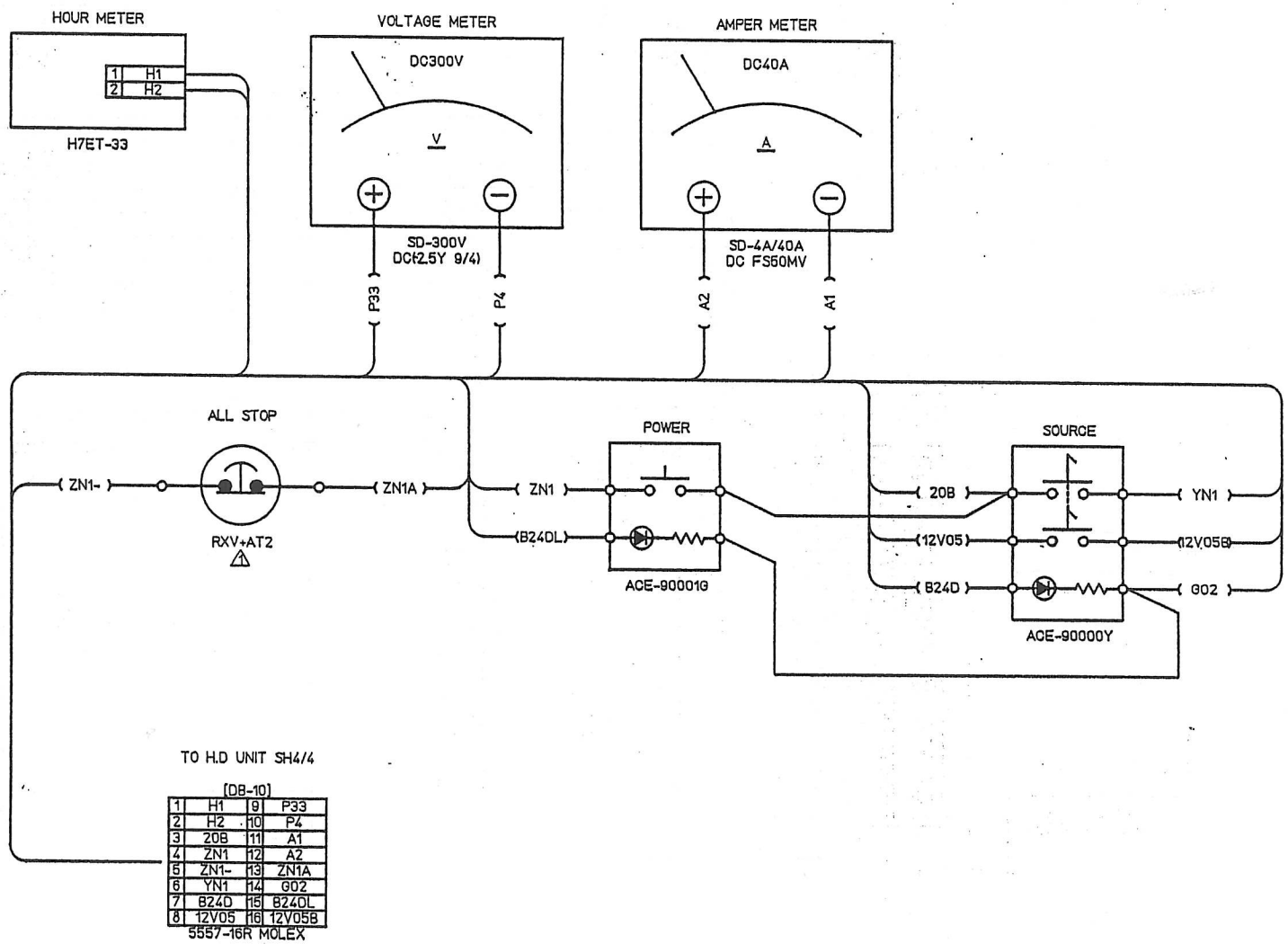
Index

【1】 【Drawing】

DRAWING

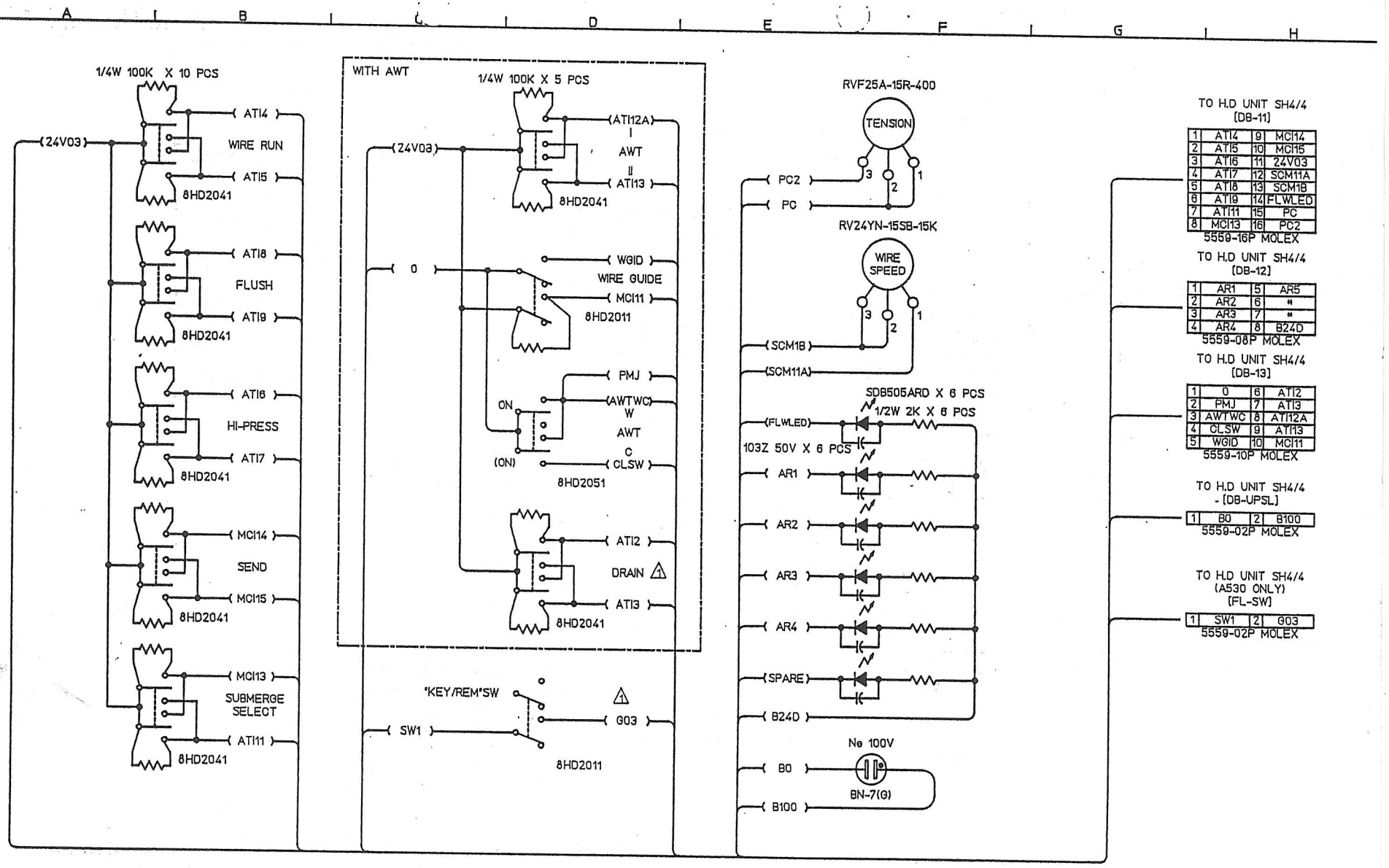


SODICK CO.,LTD	TITLE	SYS-1 LAYOUT	BLOCK	EX21	SHEET NO.	1/1	DATE	24/NOV/93	DESIGNED TSUKUDA	DRAWN TSUKUDA	CHECKED HAKAGOSHI	APPROVED ASADA	DWG.NO	TE300067C



⚠ Ver.A->B 08/Feb/95 M.Hakagoshi (Change Part)

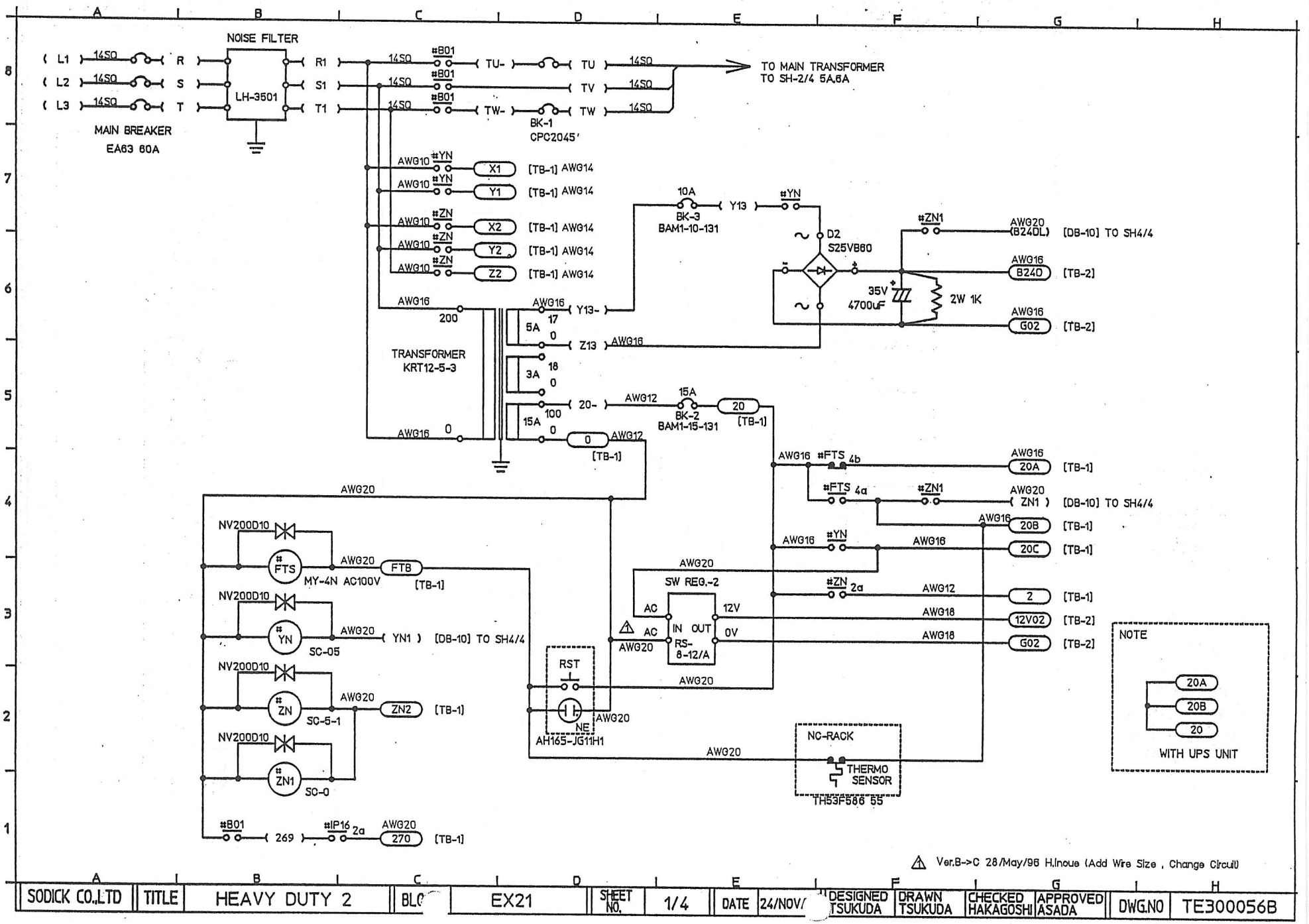
SODICK CO.,LTD	TITLE	FRONT PANEL	BLOCK	EX21	SHEET NO.	1/1	DATE	24/NOV.	DESIGNED	DRAWN	CHECKED	APPROVED	DWG.NO
									NAGAMORI	NAGAMORI	HAKAGOSHI	K.ASADA	TE300069B



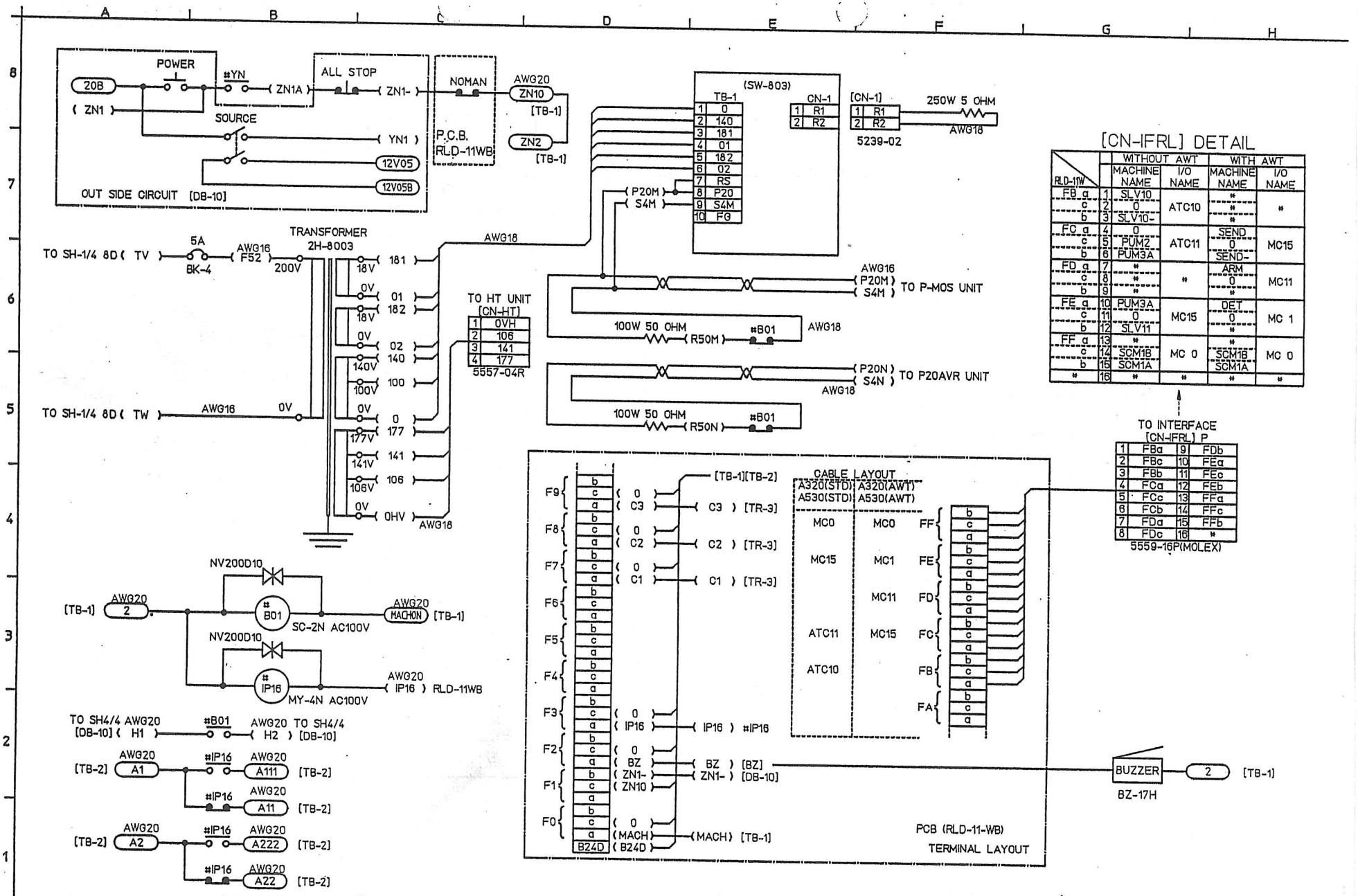
*ON:ALTERNATE
*(ON):MOMENTARY

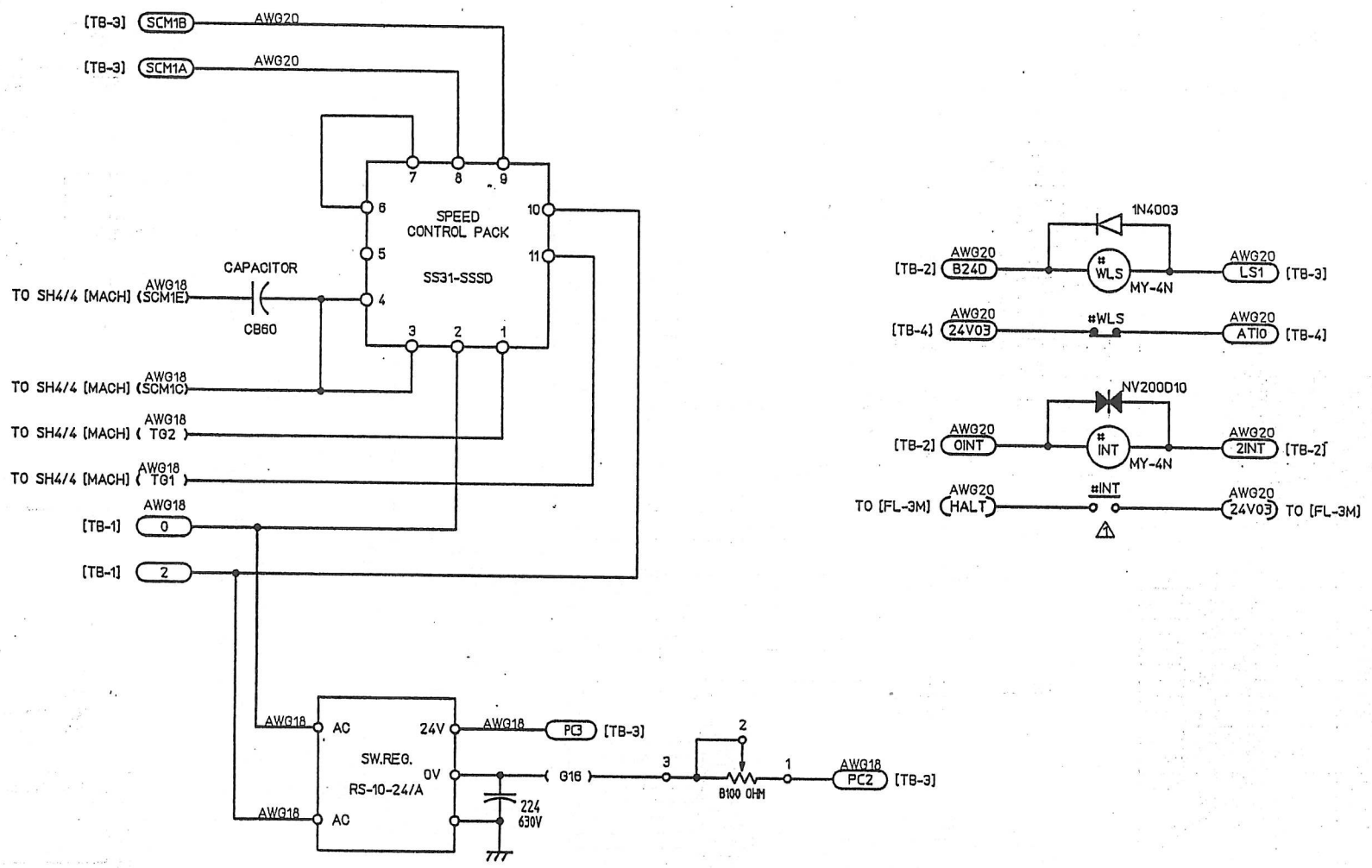
⚠ Ver.A->B 29/May/96 H.Inoue (Repair Mis)

SODICK CO.,LTD	TITLE	SUB PANEL	BLOCK	EX21	SHEET NO.	1/1	DATE	24/NOV/93	DESIGNED NAGAMORI	DRAWN NAGAMORI	CHECKED HAKAGOSHI	APPROVED K.ASADA	DWG.NO	TE300068B



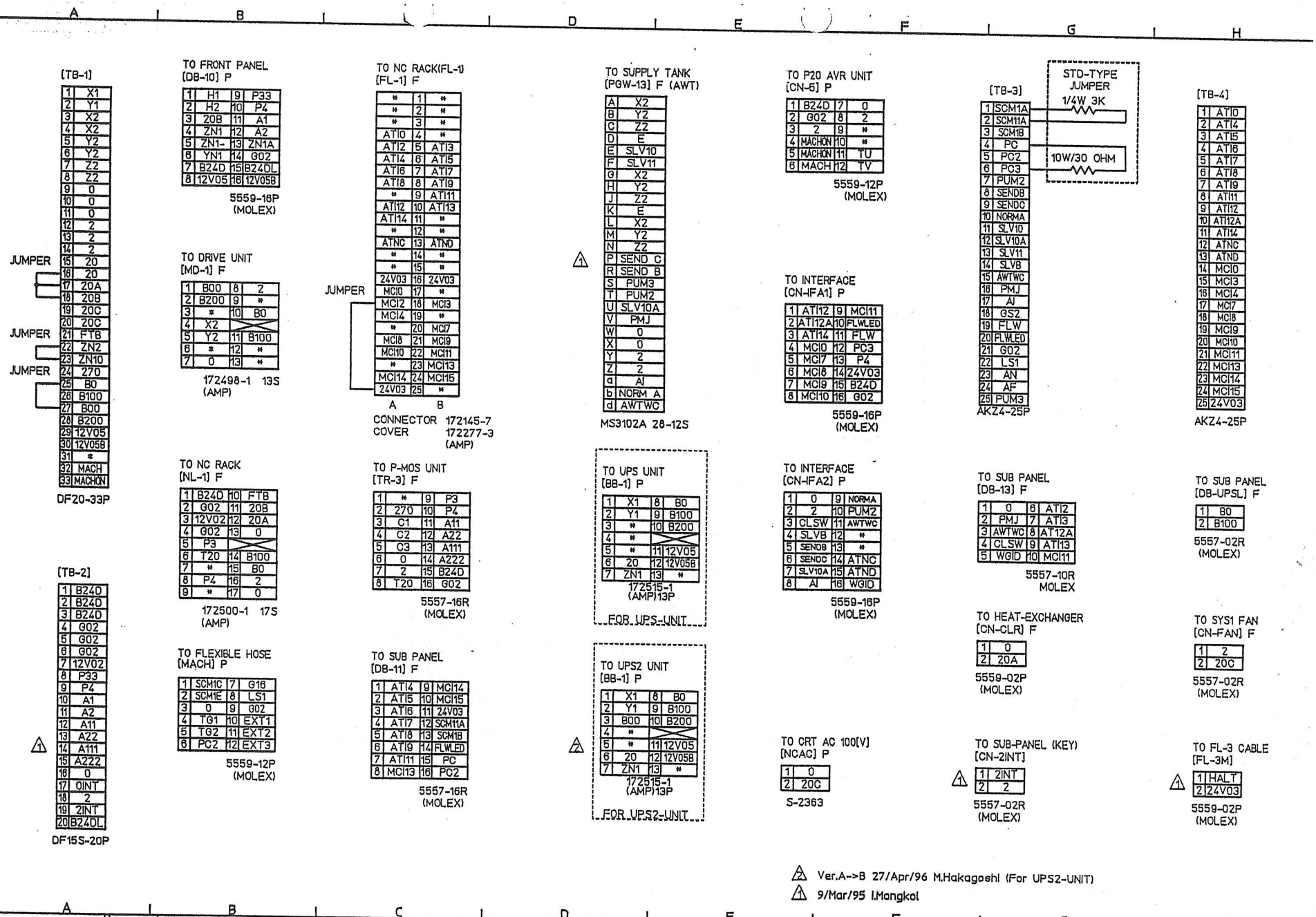
SODICK CO.,LTD	TITLE	HEAVY DUTY 2	BLC	EX21	SHEET NO.	1/4	DATE	24/NOV/	DESIGNED	DRAWN	CHECKED	APPROVED	DWG.NO	
									TSUKUDA	TSUKUDA	HAKAGOSHI	ASADA		TE300056B


POWER
#YN
ALL STOP
ZN1A
ZN1-
NOMAN
AWG20
ZN10
[TB-1]
ZN2
[TB-1]
20B
ZN1
SOURCE
YN1
12V05
12V05B
OUT SIDE CIRCUIT [DB-10]
P.C.B.
RLD-11WB
(SW-803)
TB-1
CN-1
[CN-1]
250W 5 OHM
AWG18
5239-02
P20M
S4M
FG
TRANSFORMER
2H-8003
5A
BK-4
AWG16
F52
200V
TO SH-1/4 8D (TV)
TO SH-1/4 8D (TW)
AWG16
0V
AWG18
TO HT UNIT
[CN-HT]
5557-04R
TO P-MOS UNIT
100W 50 OHM
R50M
#B01
TO P20AVR UNIT
R50N
[CN-IFRL] DETAIL
WITHOUT AWT
WITH AWT
MACHINE NAME
I/O NAME
RLD-11W
ATC10
ATC11
MC15
MC11
MC 1
MC 0
SLV10
SLV10-
PUM2
PUM3A
SLV11
SCM1B
SCM1A
SEND
SEND-
ARM
DET
TO INTERFACE
[CN-IFRL] P
5559-16P(MOLEX)
NV200D10
SC-2N AC100V
MY-4N AC100V
MACH0N
IP16
RLD-11WB
TO SH4/4 AWG20
[DB-10] (H1)
H2) [DB-10]
A1
A111
A11
A2
A222
A22
CABLE LAYOUT
A320(STD) A320(AWT)
A530(STD) A530(AWT)
MC0
MC1
MC11
MC15
ATC11
ATC10
FF
FE
FD
FC
FB
FA
[TB-1][TB-2]
C3) [TR-3]
C2) [TR-3]
C1) [TR-3]
IP16) #IP16
BZ) [BZ]
ZN1-) [DB-10]
MACH) [TB-1]
PCB (RLD-11-WB)
TERMINAL LAYOUT
BUZZER
BZ-17H
Ver.B->C 28/May/96 H.Inoue (Add Wire Size)
SODICK CO.,LTD
TITLE
HEAVY DUTY 2
BLOCK
EX21
SHEET NO.
2/4
DATE
25/APR/94
DESIGNED
INOUE
DRAWN
INOUE
CHECKED
HAKAGOSHI
APPROVED
ASADA
DWG.NO
TE300057C



⚠ Ver.A->B 28/May/96 H.Inoue (Add Wire Size, Change Detail)

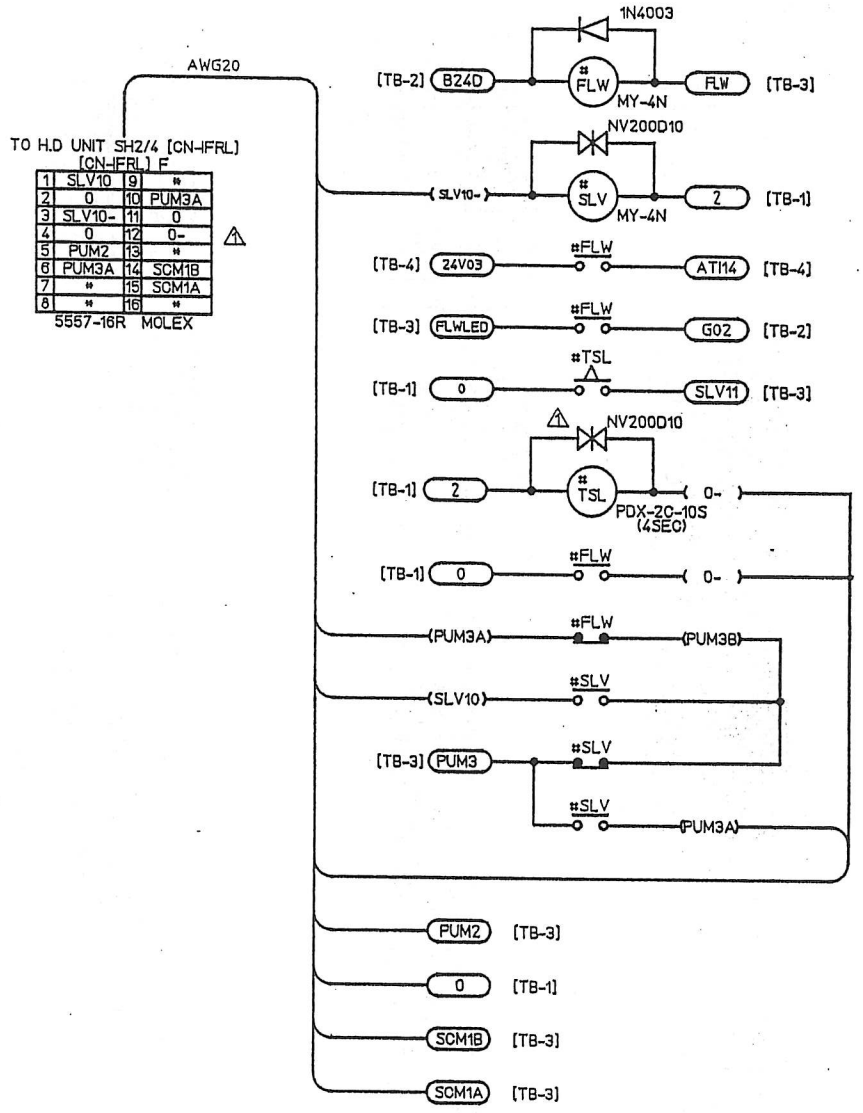
SODICK CO.,LTD	TITLE	HEAVY DUTY 2	BLO	EX21	SHEET NO.	3/4	DATE	24/NOV	DESIGNED TSUKUDA	DRAWN TSUKUDA	CHECKED HAKAGOSHI	APPROVED ASADA	DWG.NO	TE300065B



⚠2 Ver.A->B 27/Apr/96 M.Hakagoshi (For UPS2-UNIT)

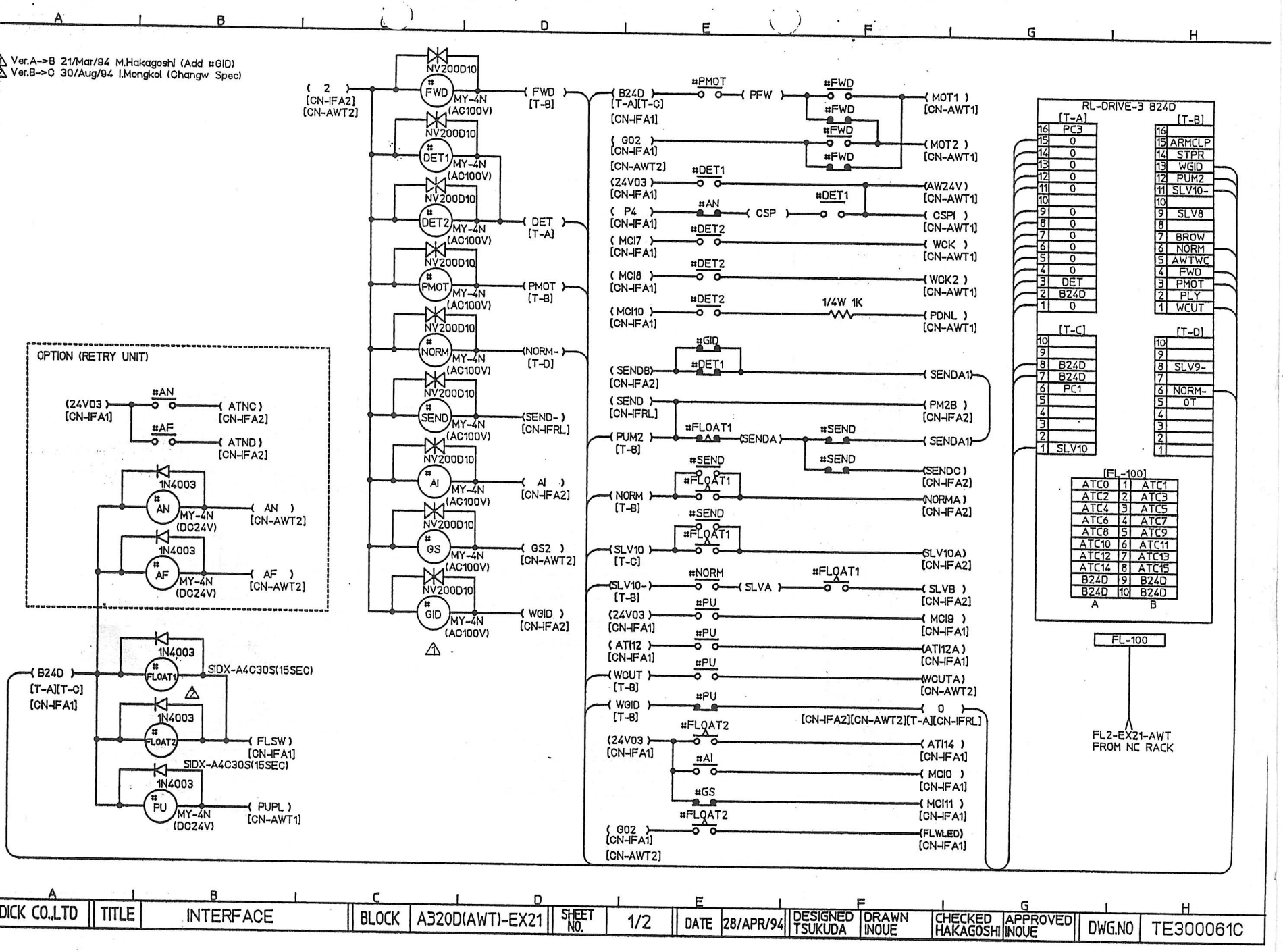
⚠1 9/Mar/95 I.Mangkol

SODICK CO.,LTD	TITLE	HEAVY DUTY 2	BLOCK	EX21	SHEET NO.	4/4	DATE	25/APR/94	DESIGNED INOUE	DRAWN INOUE	CHECKED HAKAGOSHI	APPROVED ASADA	DWG.NO	TE300058B

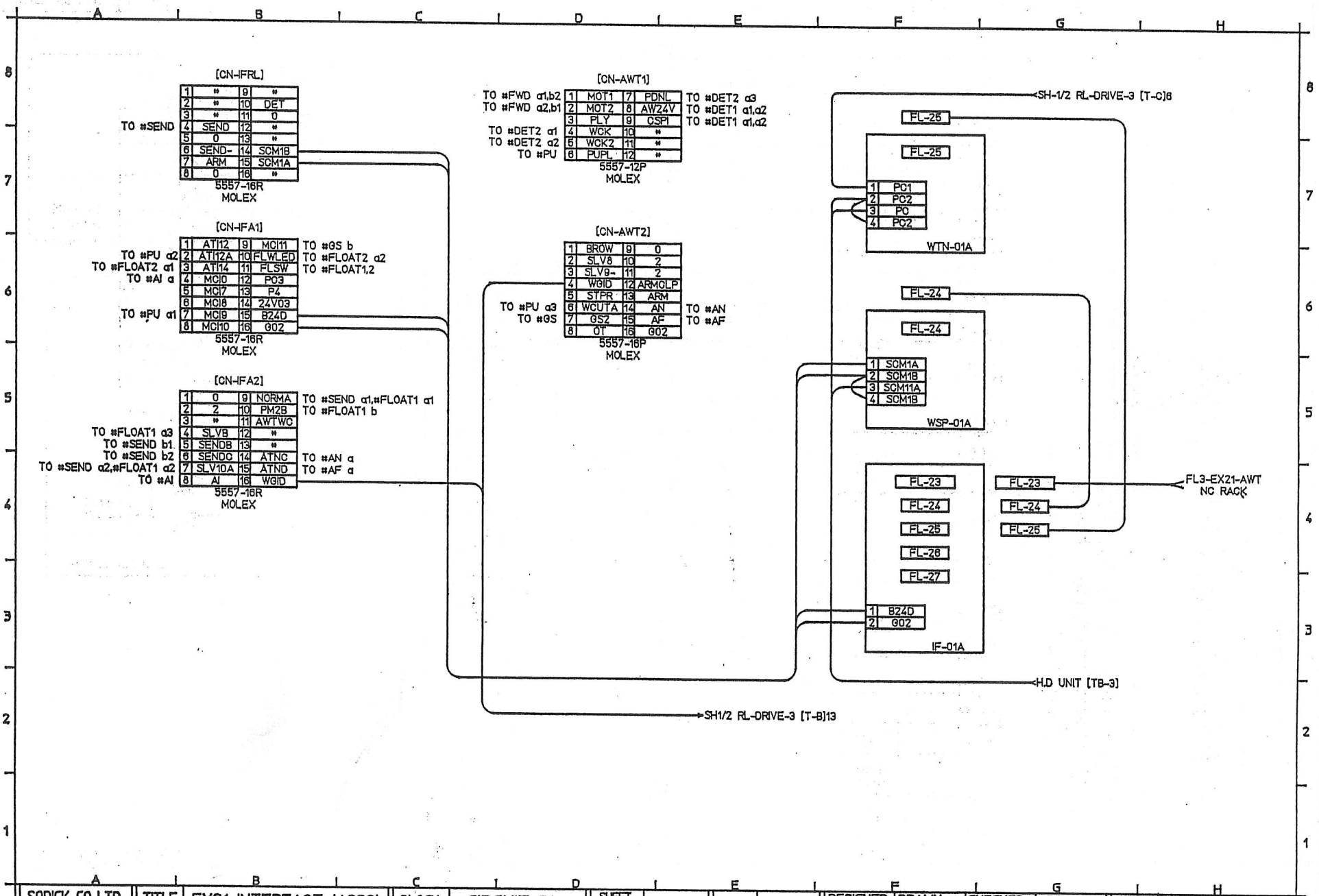


⚠ Ver.A->B 9/Mar/95 I.Mongkol (Add Circuit , Add Wire size)

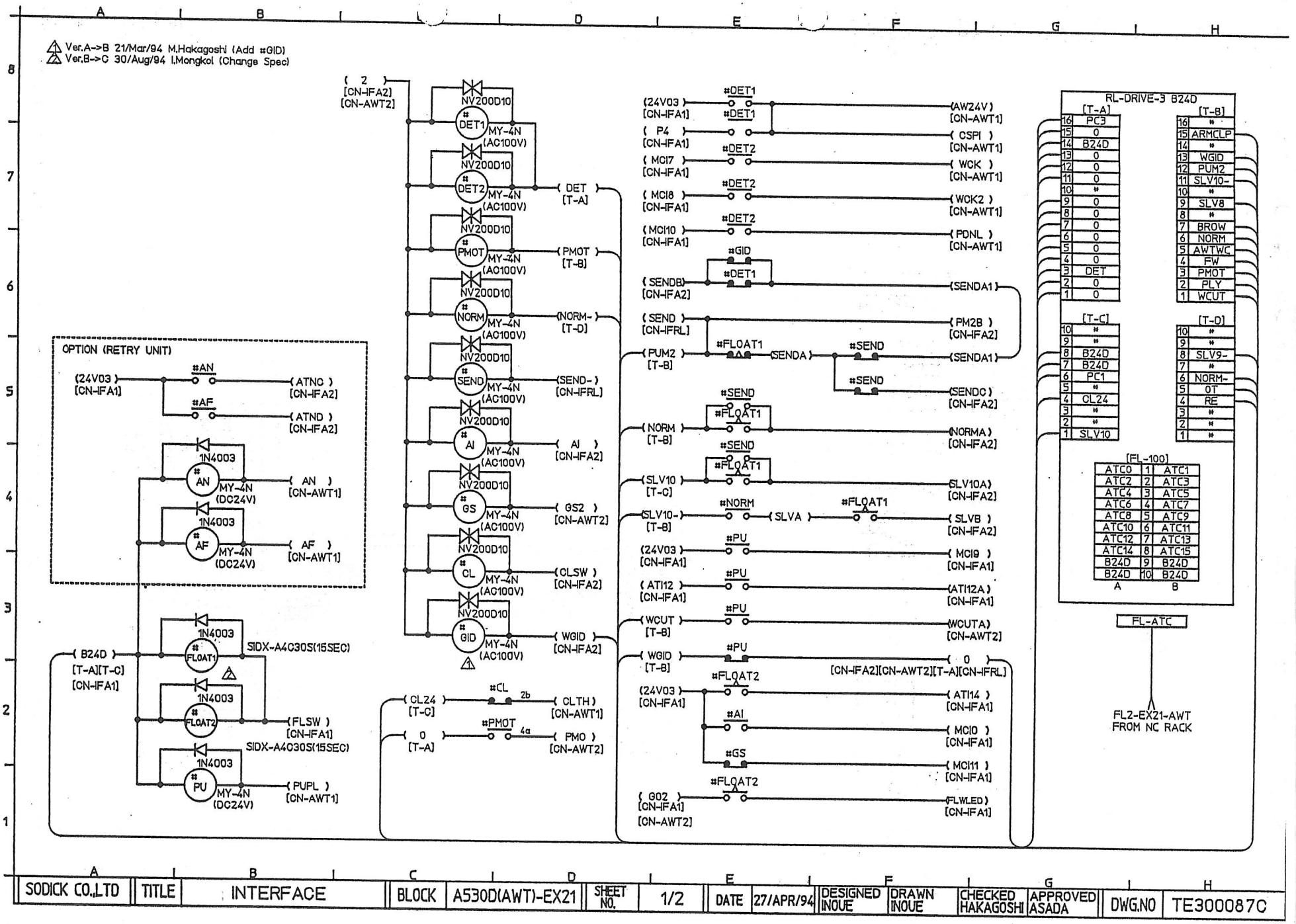
SODICK CO.,LTD	TITLE	INTERFACE	BLO	EX21(STD)	SHEET NO.	1/1	DATE	24/NOV/	DESIGNED NOUE	DRAWN INOUE	CHECKED HAKAGOSHI	APPROVED ASADA	DWG.NO	TE300122B

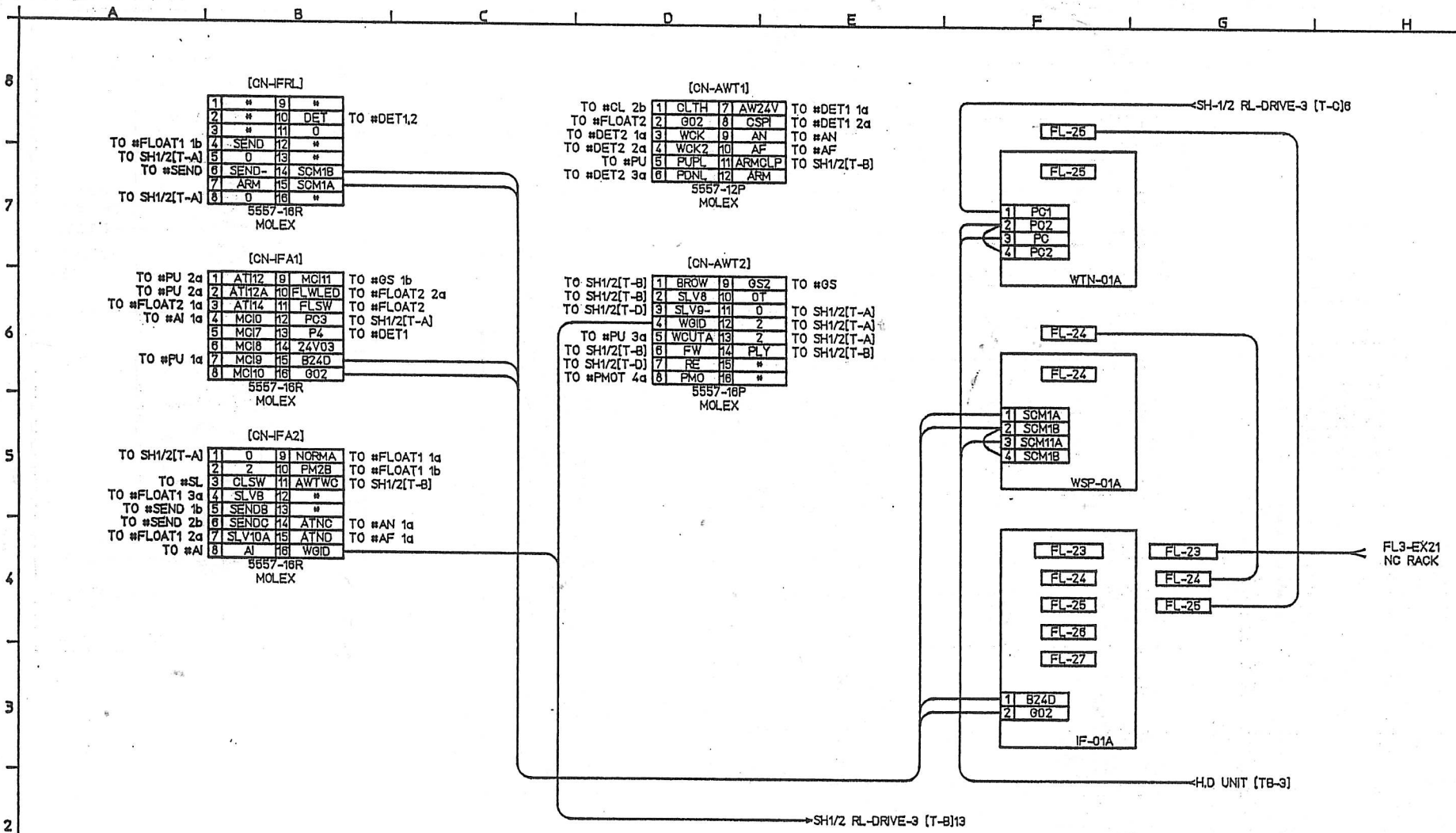


SODICK CO.,LTD	TITLE	INTERFACE	BLOCK	A320D(AWT)-EX21	SHEET NO.	1/2	DATE	28/APR/94	DESIGNED TSUKUDA	DRAWN INOUE	CHECKED HAKAGOSHI	APPROVED INOUE	DWG.NO	TE300061C

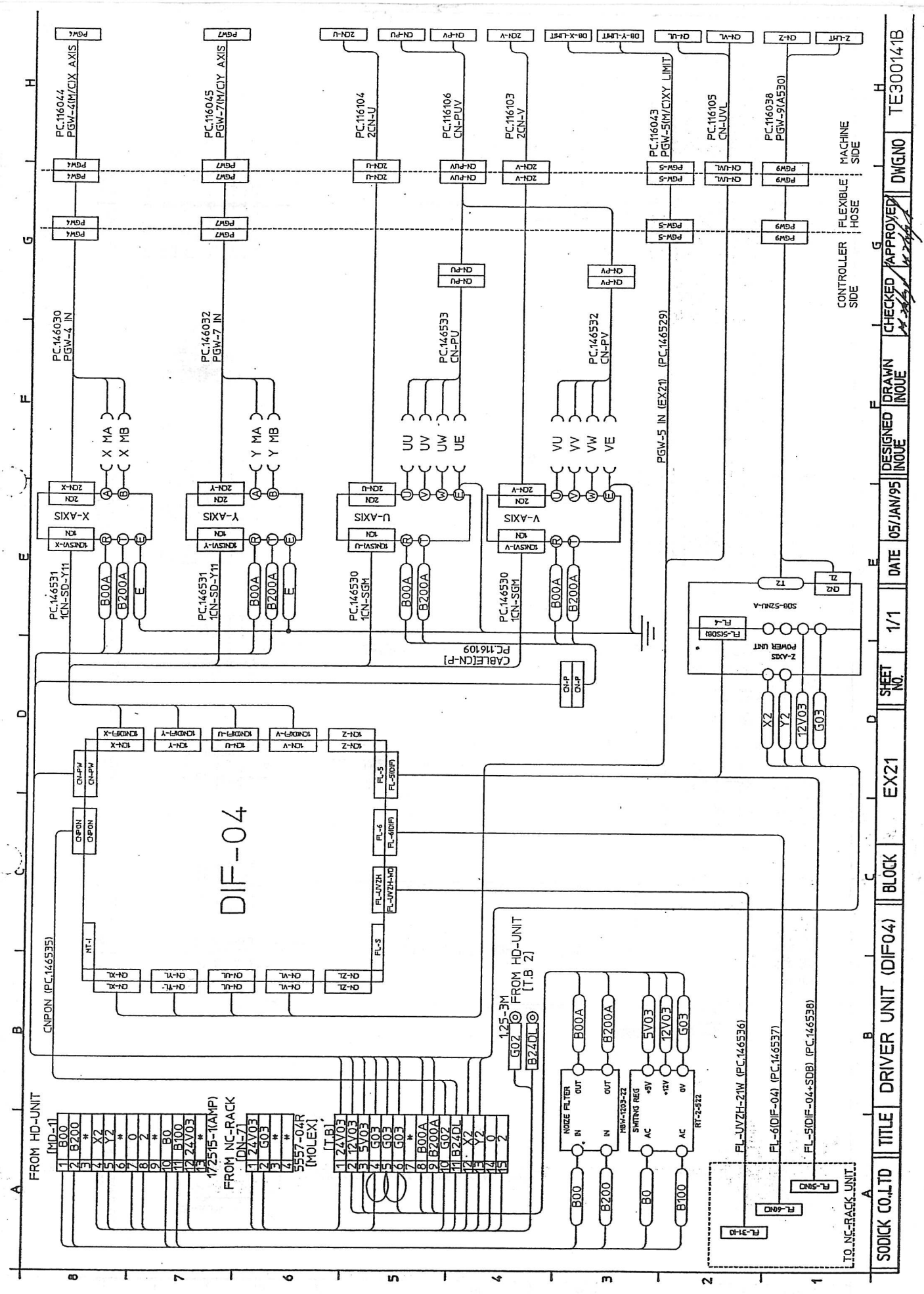


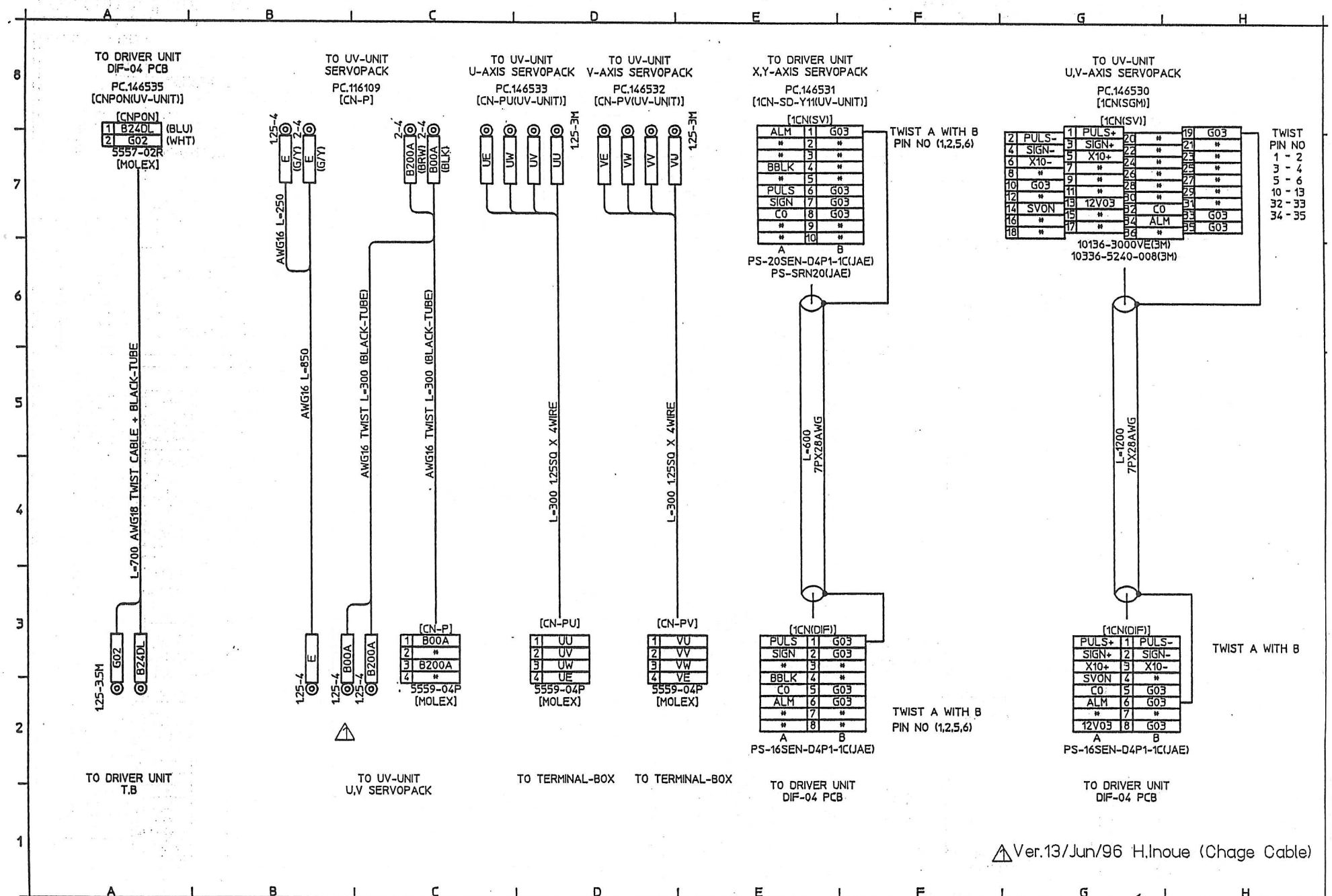
SODICK CO.,LTD	TITLE	EX21 INTERFACE (A320)	BLOCK	CIRCUIT DIA.	SHEET NO.	2/2	DATE	24/NOV/03	DESIGNED TSUKUDA	DRAWN TSUKUDA	CHECKED HAKAGOSHI	APPROVED ASADA	DWG.NO	TE300062A

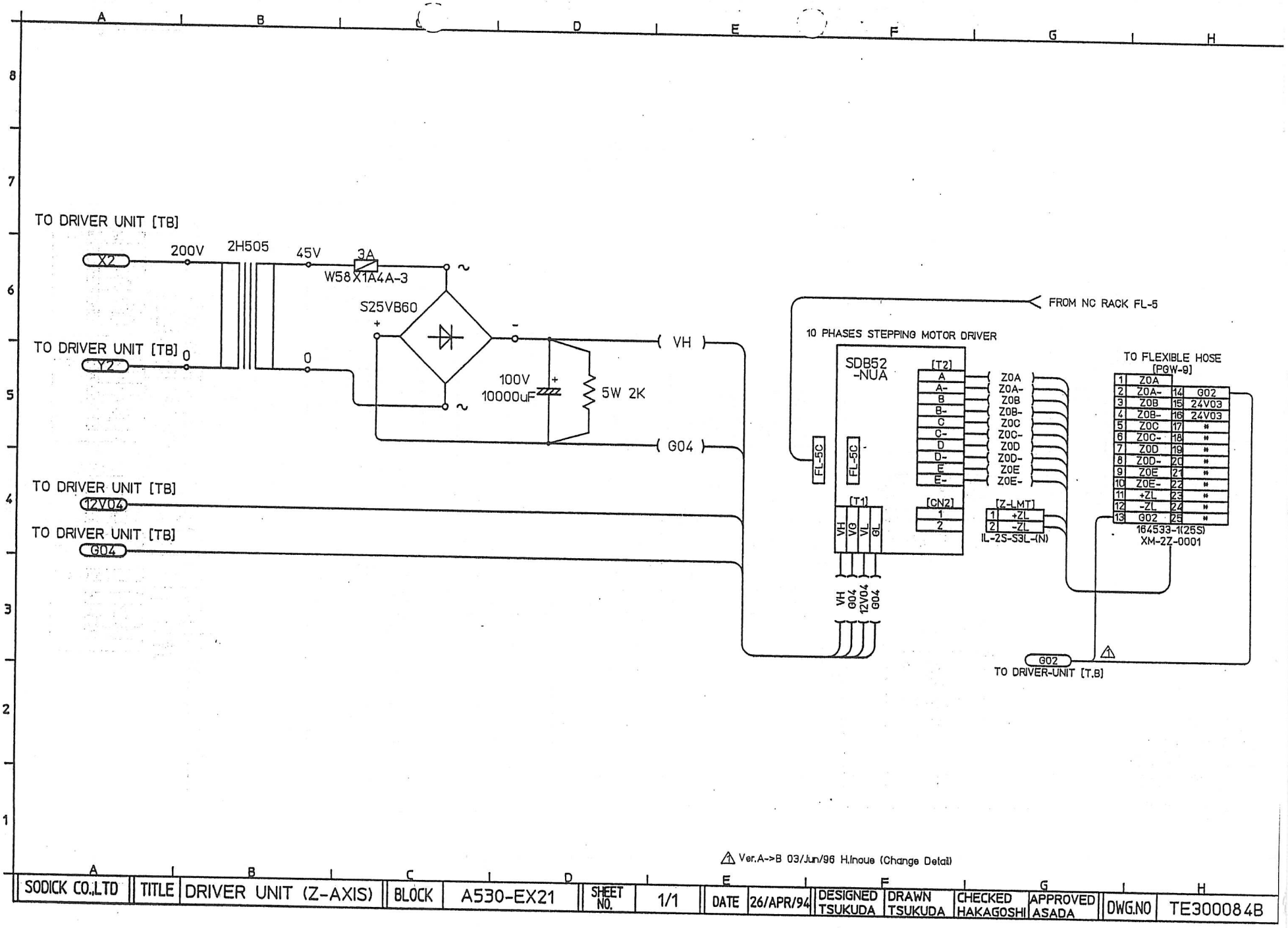

Ver.A->B 21/Mar/94 M.Hakagoshi (Add #GID)
Ver.B->C 30/Aug/94 I.Mongkol (Change Spec)
OPTION (RETRY UNIT)
RL-DRIVE-3 B24D
FL-ATC
FL2-EX21-AWT
FROM NC RACK
SODICK CO.,LTD
TITLE
INTERFACE
BLOCK
A530D(AWT)-EX21
SHEET NO.
1/2
DATE
27/APR/94
DESIGNED INOUE
DRAWN INOUE
CHECKED HAKAGOSHI
APPROVED ASADA
DWG.NO
TE300087C

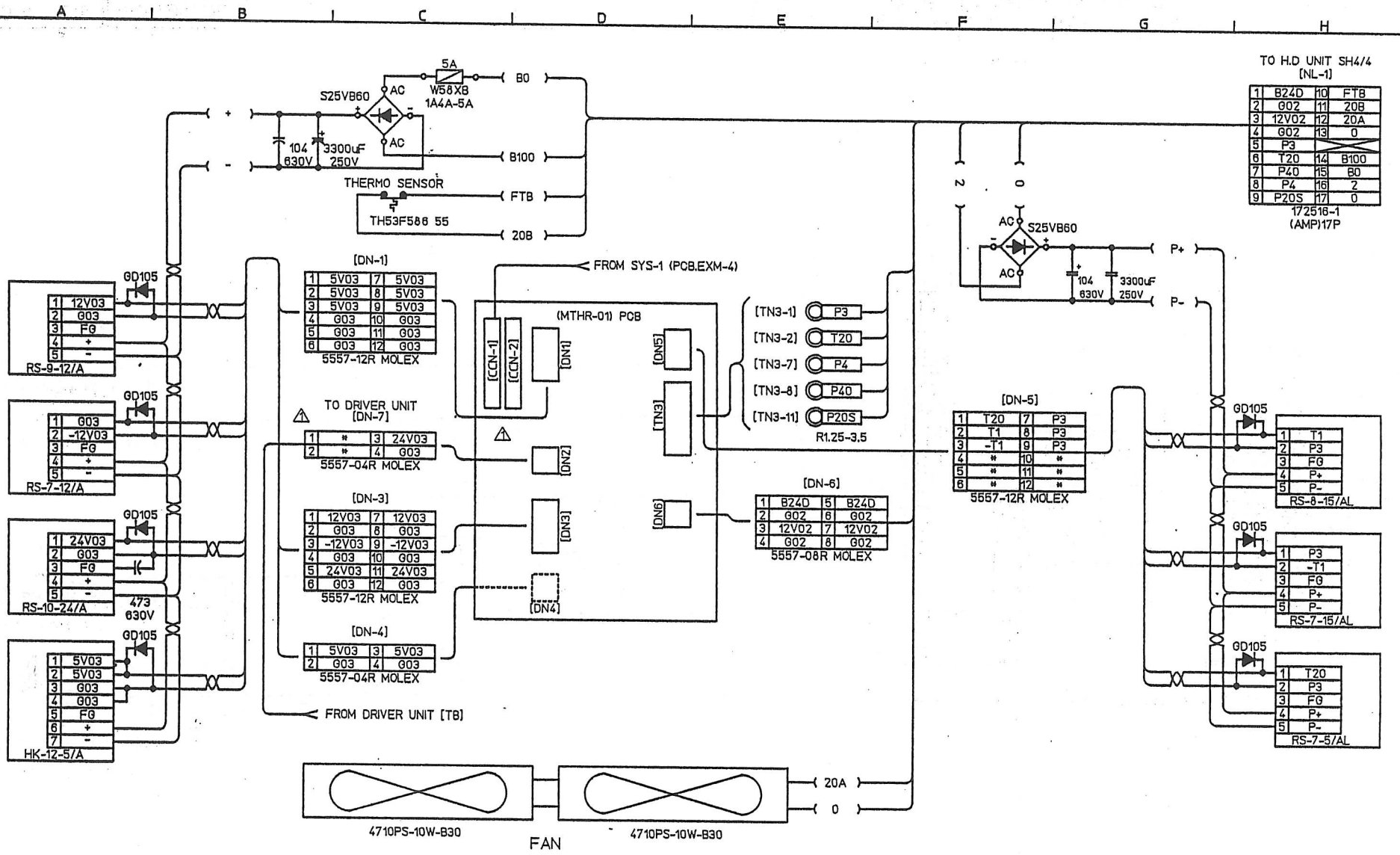


SODICK CO.,LTD	TITLE	EX21 INTERFACE AWT(A530)	BLOCK	CIRCUIT DIA.	SHEET NO.	2/2	DATE	24/NOV/98	DESIGNED TSUKUDA	DRAWN TSUKUDA	CHECKED HAKAGOSHI	APPROVED ASADA	DWG.NO	TE300088A


SODICK CO.,LTD
TITLE
DRIVER UNIT (DIF04)
BLOCK
EX21
SHEET NO.
1/1
DATE
05/JAN/95
DESIGNED
INOUE
DRAWN
INOUE
CHECKED
APPROVED
DWG.NO
TE300141B
DIF-04
FROM HD-UNIT [MD-1]
FROM NC-RACK [DN-7]
TO NC-RACK UNIT
CNPON (PC.146535)
PC.146531 1CN-SD-Y11
PC.146530 1CN-SGM
PC.146533 CN-PU
PC.146532 CN-PV
PC.146030 PGW-4 IN
PC.146032 PGW-7 IN
PC.146529)
PGW-5 IN (EX21) (PC.146529)
PC.116044 PGW-4(M/C)X AXIS
PC.116045 PGW-7(M/C)Y AXIS
PC.116104 2CN-U
PC.116106 CN-PUV
PC.116103 2CN-V
PC.116043 PGW-5(M/C)XY LIMIT
PC.116105 CN-UVL
PC.116038 PGW-9(A530)
MACHINE SIDE
FLEXIBLE HOSE
CONTROLLER SIDE
X-AXIS
Y-AXIS
U-AXIS
V-AXIS
Z-AXIS POWER UNIT
FL-6(DIF-04) (PC.146537)
FL-5(DIF-04+SDB) (PC.146538)
FL-UVZH-Z1W (PC.146536)
NOISE FILTER
SWITCHING REG
125-3M
FROM HD-UNIT [T.B 2]

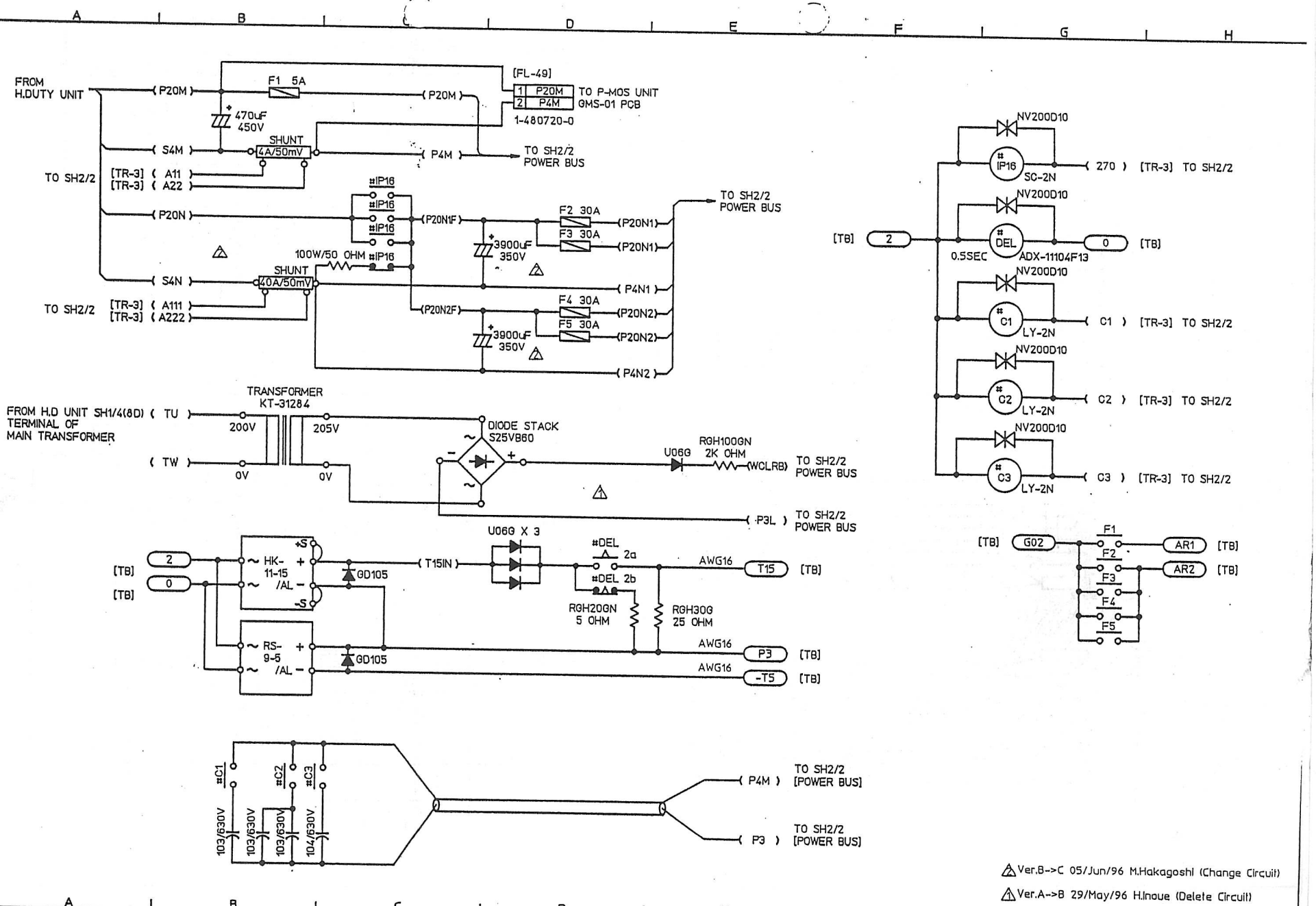

TO DRIVER UNIT
DIF-04 PCB
PC.146535
[CNPON(UV-UNIT)]
[CNPON]
1 B24DL (BLU)
2 G02 (WHT)
5557-02R
[MOLEX]
L=700 AWG18 TWIST CABLE + BLACK-TUBE
125-3.5M
G02
B24DL
TO DRIVER UNIT
T.B
TO UV-UNIT
SERVOPACK
PC.116109
[CN-P]
125-4
E (G/Y)
2-4
E (G/Y)
AWG16 L=250
AWG16 L=850
AWG16 TWIST L=300 (BLACK-TUBE)
B00A
B200A
[CN-P]
1 B00A
2 *
3 B200A
4 *
5559-04P
[MOLEX]
TO UV-UNIT
U,V SERVOPACK
TO UV-UNIT
U-AXIS SERVOPACK
PC.146533
[CN-PU(UV-UNIT)]
UE
UW
UV
UU
125-3M
L=300 1.25SQ X 4WIRE
[CN-PU]
1 UU
2 UV
3 UW
4 UE
5559-04P
[MOLEX]
TO TERMINAL-BOX
TO UV-UNIT
V-AXIS SERVOPACK
PC.146532
[CN-PV(UV-UNIT)]
VE
VW
VV
VU
125-3M
L=300 1.25SQ X 4WIRE
[CN-PV]
1 VU
2 VV
3 VW
4 VE
5559-04P
[MOLEX]
TO TERMINAL-BOX
TO DRIVER UNIT
X,Y-AXIS SERVOPACK
PC.146531
[1CN-SD-Y11(UV-UNIT)]
[1CN(SV)]
ALM 1 G03
* 2 *
* 3 *
BBLK 4 *
* 5 *
PULS 6 G03
SIGN 7 G03
CO 8 G03
* 9 *
* 10 *
A B
PS-20SEN-D4P1-1C(JAE)
PS-SRN20(JAE)
TWIST A WITH B
PIN NO (1,2,5,6)
L=600
7PX28AWG
[1CN(DIF)]
PULS 1 G03
SIGN 2 G03
* 3 *
BBLK 4 *
CO 5 G03
ALM 6 G03
* 7 *
* 8 *
A B
PS-16SEN-D4P1-1C(JAE)
TWIST A WITH B
PIN NO (1,2,5,6)
TO DRIVER UNIT
DIF-04 PCB
TO UV-UNIT
U,V-AXIS SERVOPACK
PC.146530
[1CN(SGM)]
[1CN(SV)]
2 PULS- 1 PULS+ 20 * 19 G03
4 SIGN- 3 SIGN+ 22 * 21 *
6 X10- 5 X10+ 24 * 23 *
8 * 7 * 26 * 25 *
10 G03 9 * 28 * 27 *
12 * 11 * 30 * 29 *
14 SVON 13 12V03 32 CO 31 *
16 * 15 * 34 ALM 33 G03
18 * 17 * 36 * 35 G03
10136-3000VE(3M)
10336-5240-008(3M)
TWIST
PIN NO
1 - 2
3 - 4
5 - 6
10 - 13
32 - 33
34 - 35
L=1200
7PX28AWG
[1CN(DIF)]
PULS+ 1 PULS-
SIGN+ 2 SIGN-
X10+ 3 X10-
SVON 4 *
CO 5 G03
ALM 6 G03
* 7 *
12V03 8 G03
A B
PS-16SEN-D4P1-1C(JAE)
TWIST A WITH B
TO DRIVER UNIT
DIF-04 PCB
⚠Ver.13/Jun/96 H.Inoue (Chage Cable)
SODICK CO.,LTD
TITLE
DRIVER-UNIT CABLE
BL(
EX21
SHEET NO.
1/1
DATE
05/JAN
DESIGNED
INOUE
DRAWN
INOUE
CHECKED
APPROVED
DWG.NO
TE300143B


TO DRIVER UNIT [TB]
X2
200V
2H505
45V
3A
W58X1A4A-3
S25VB60
TO DRIVER UNIT [TB]
Y2
0
0
100V
10000uF
5W 2K
VH
G04
TO DRIVER UNIT [TB]
12V04
TO DRIVER UNIT [TB]
G04
FROM NC RACK FL-5
10 PHASES STEPPING MOTOR DRIVER
SDB52
-NUA
FL-5C
FL-5C
[T1]
VH
VB
VL
GL
[T2]
A
A-
B
B-
C
C-
D
D-
E
E-
Z0A
Z0A-
Z0B
Z0B-
Z0C
Z0C-
Z0D
Z0D-
Z0E
Z0E-
[CN2]
1
2
[Z-LMT]
1 +ZL
2 -ZL
IL-2S-S3L-(N)
TO FLEXIBLE HOSE
[P9W-9]
1 Z0A
2 Z0A- 14 G02
3 Z0B 15 24V03
4 Z0B- 16 24V03
5 Z0C 17 "
6 Z0C- 18 "
7 Z0D 19 "
8 Z0D- 20 "
9 Z0E 21 "
10 Z0E- 22 "
11 +ZL 23 "
12 -ZL 24 "
13 G02 25 "
164533-1(25S)
XM-2Z-0001
VH
G04
12V04
G04
G02
TO DRIVER-UNIT [T.B]
⚠ Ver.A->B 03/Jun/96 H.Inoue (Change Detail)
SODICK CO.,LTD
TITLE
DRIVER UNIT (Z-AXIS)
BLOCK
A530-EX21
SHEET NO.
1/1
DATE
26/APR/94
DESIGNED
TSUKUDA
DRAWN
TSUKUDA
CHECKED
HAKAGOSHI
APPROVED
ASADA
DWG.NO
TE300084B



⚠ Ver.B->C 29/May/96 H.Inoue (Add Detail)

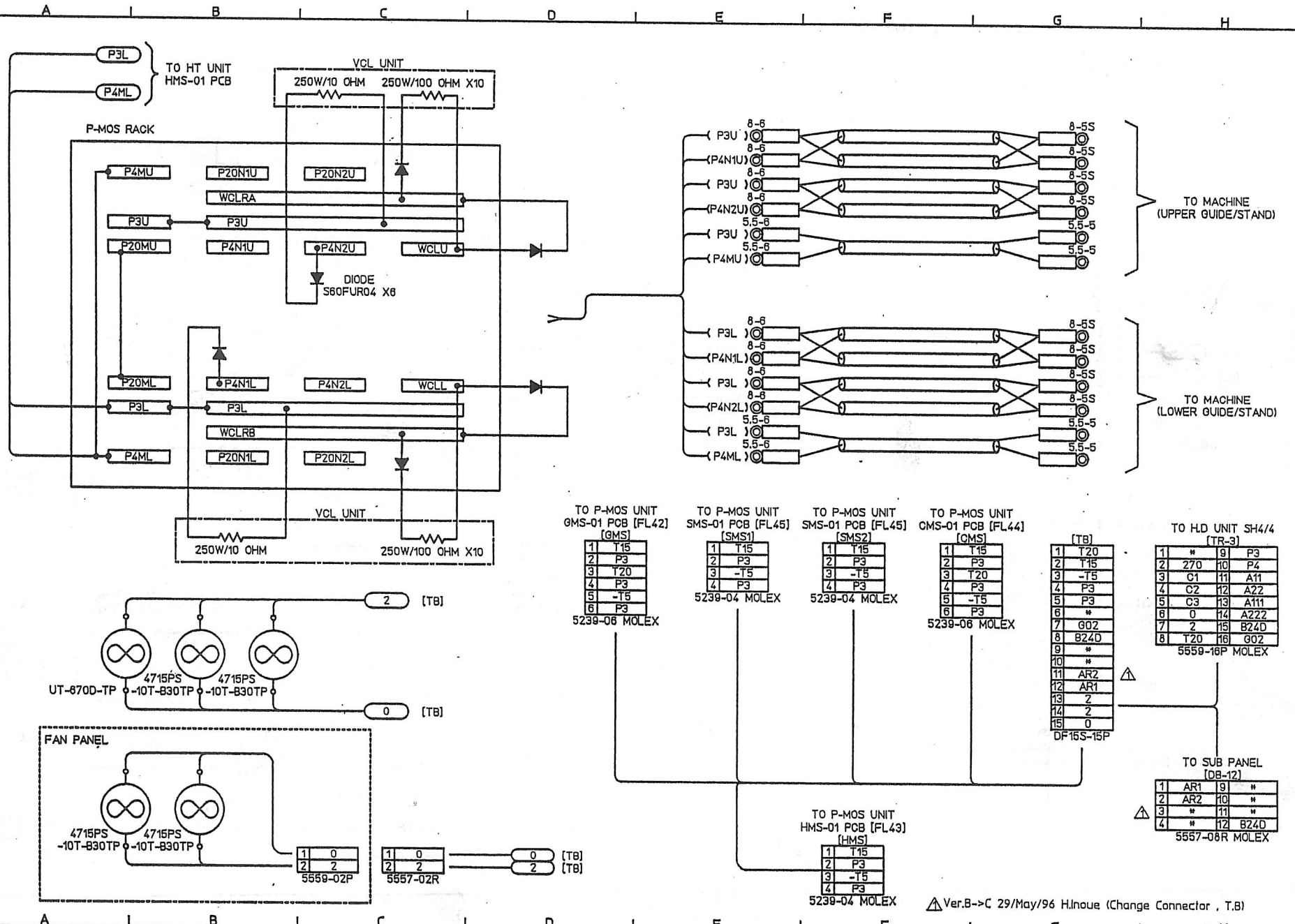
SODICK CO.,LTD	TITLE	NC RACK	BL(	EX21	SHEET NO.	1/1	DATE	24/NOV.	DESIGNED	DRAWN	CHECKED	APPROVED	DWG.NO	TE300070C
									TSUKUDA	TSUKUDA	HAKAGOSHI	ASADA		



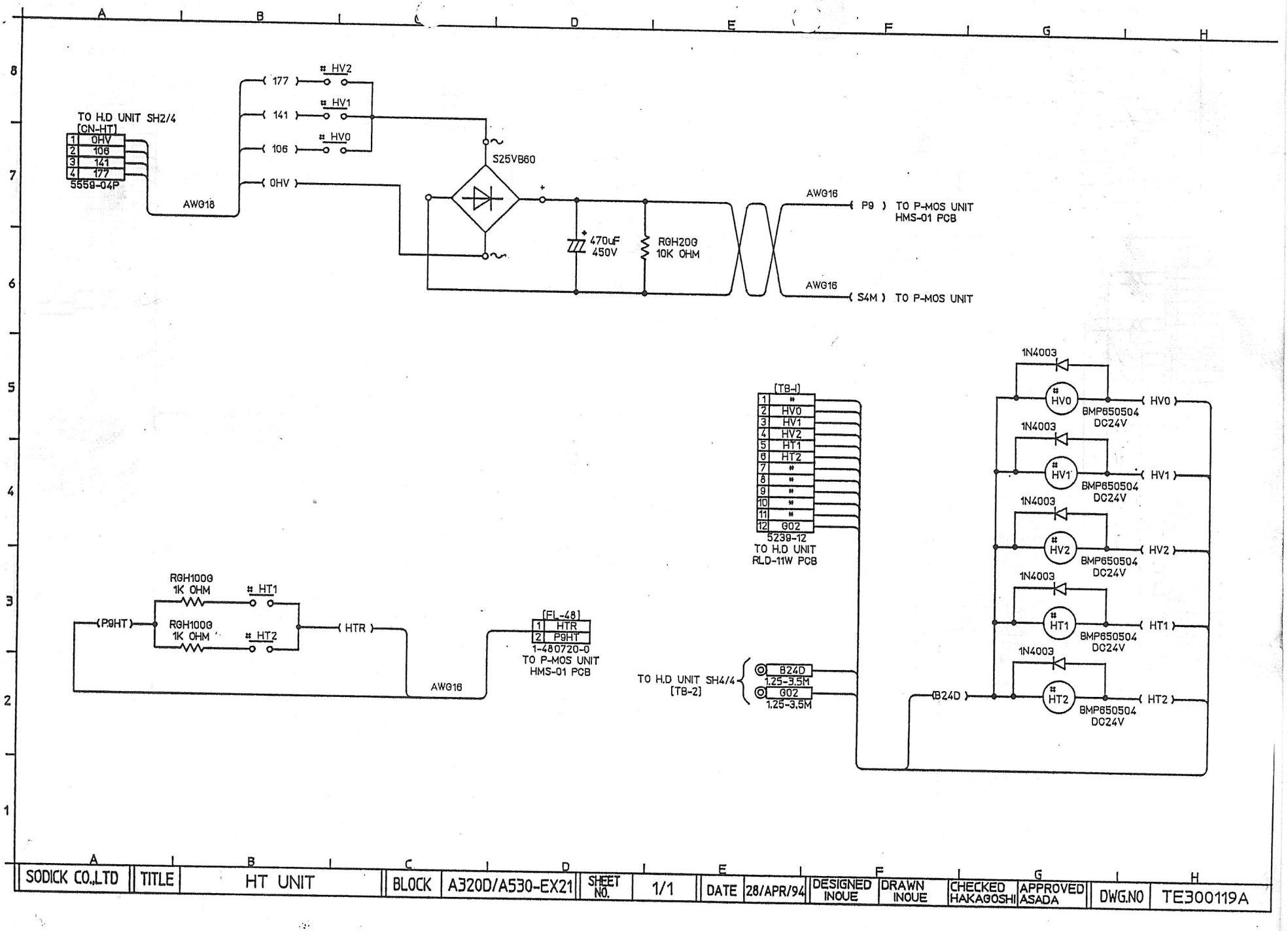
△ Ver.B->C 05/Jun/96 M.Hakagoshi (Change Circuit)

△ Ver.A->B 29/May/96 H.Inoue (Delete Circuit)

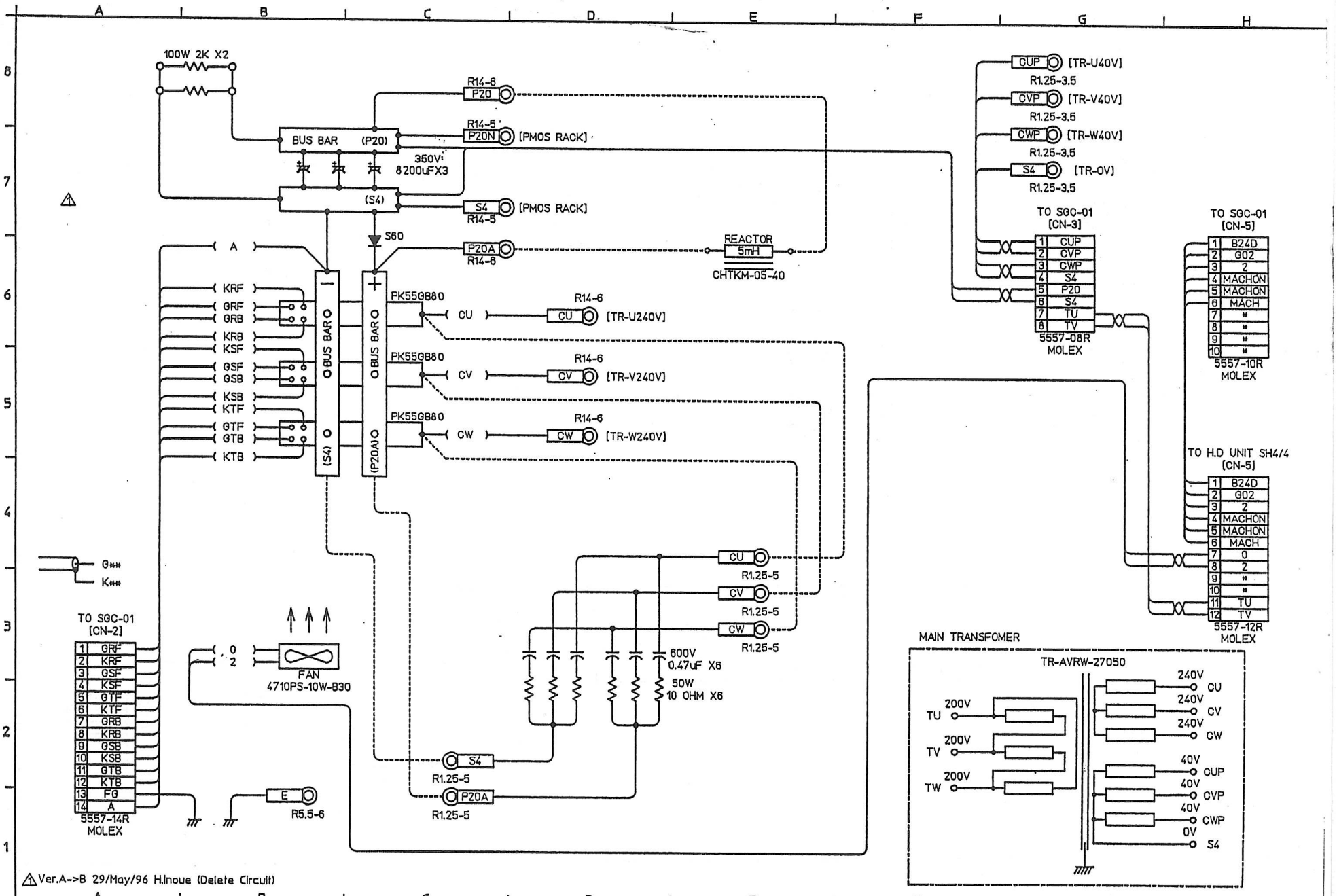
SODICK CO.,LTD	TITLE	P-MOS UNIT	BLOCK	EX21	SHEET NO.	1/2	DATE	24/NOV/93	DESIGNED	DRAWN	CHECKED	APPROVED	DWG.NO	TE300054C
									NAGAMORI	NAGAMORI	HAKAGOSHI	ASADA		



SODICK CO.,LTD	TITLE	P-MOS UNIT	BL	EX21(HT)	SHEET NO.	2/2	DATE	26/APR	DESIGNED	DRAWN	CHECKED	APPROVED	DWG.NO	
									INOUE	INOUE	HAKAGOSHI	ASADA		TE300055C



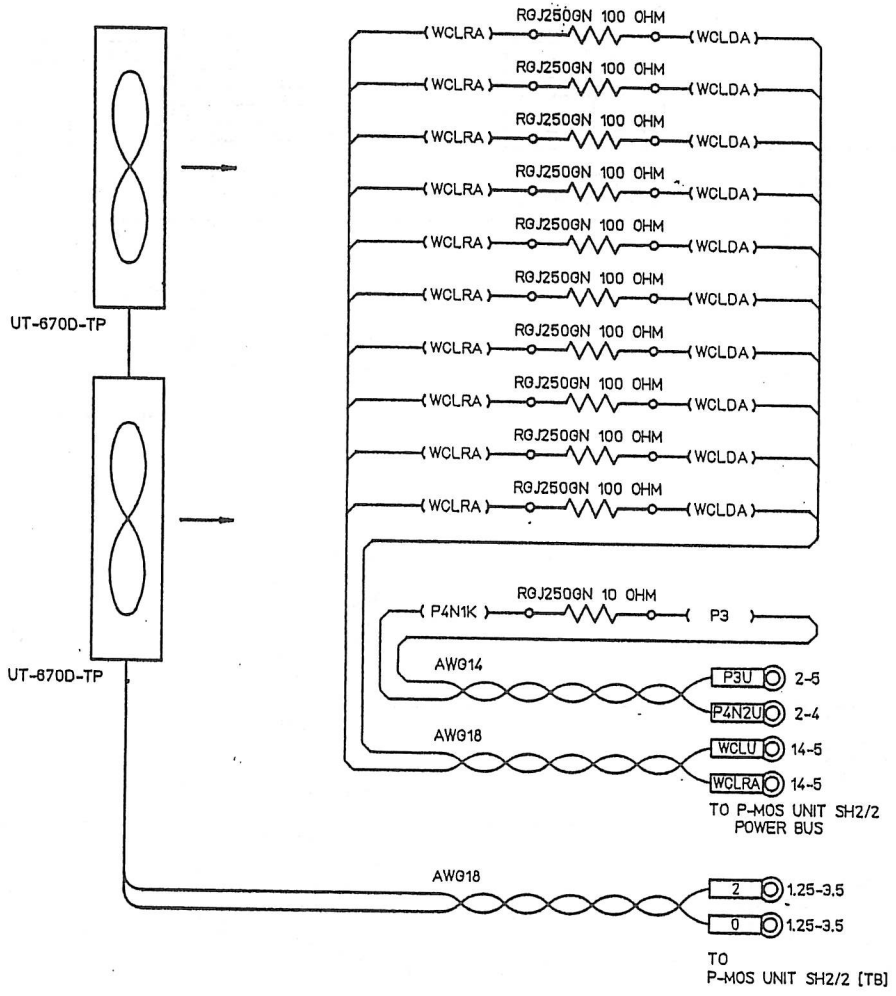
SODICK CO.,LTD	TITLE	HT UNIT	BLOCK	A320D/A530-EX21	SHEET NO.	1/1	DATE	28/APR/94	DESIGNED INOUE	DRAWN INOUE	CHECKED HAKAGOSHI	APPROVED ASADA	DWG.NO	TE300119A



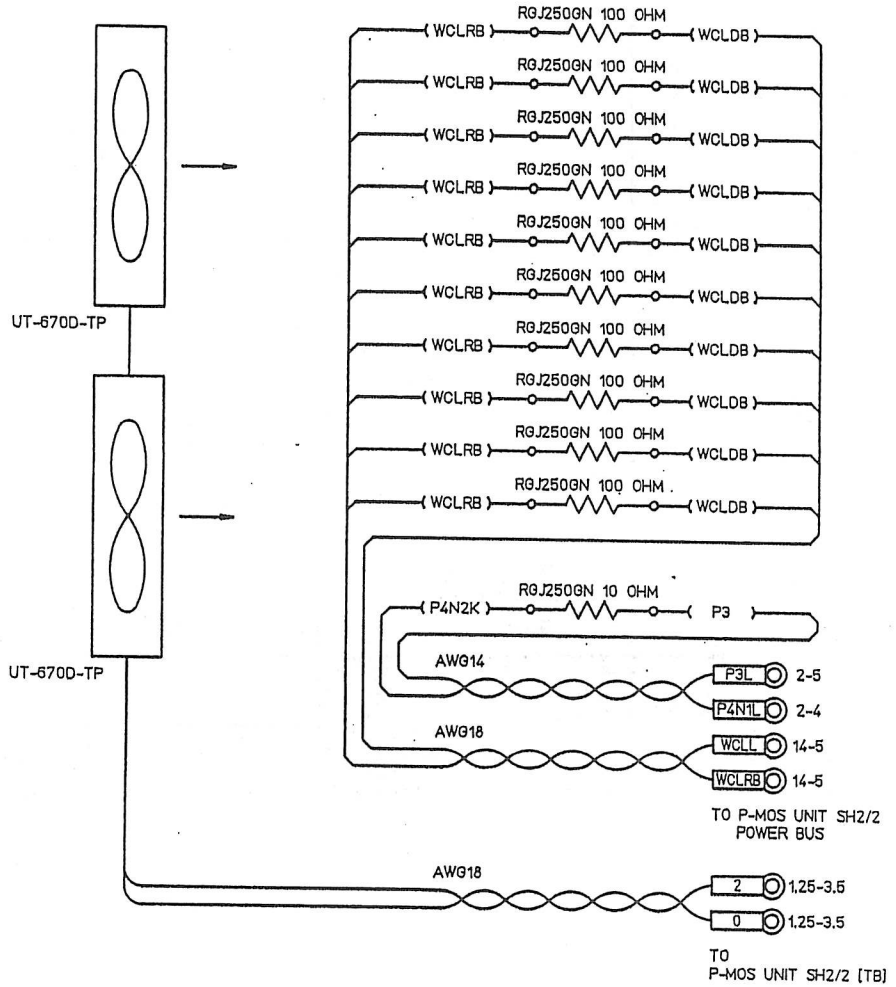
⚠Ver.A->B 29/May/96 H.Inoue (Delete Circuit)

SODICK CO.,LTD	TITLE	P20AVR UNIT	BL	EX21	SHEET NO.	1/1	DATE	7/MAY	DESIGNED TSUKUDA	DRAWN TSUKUDA	CHECKED HAKAGOSHI	APPROVED ASADA	DWG.NO	TE300008B

UPPER SIDE VCL-UNIT



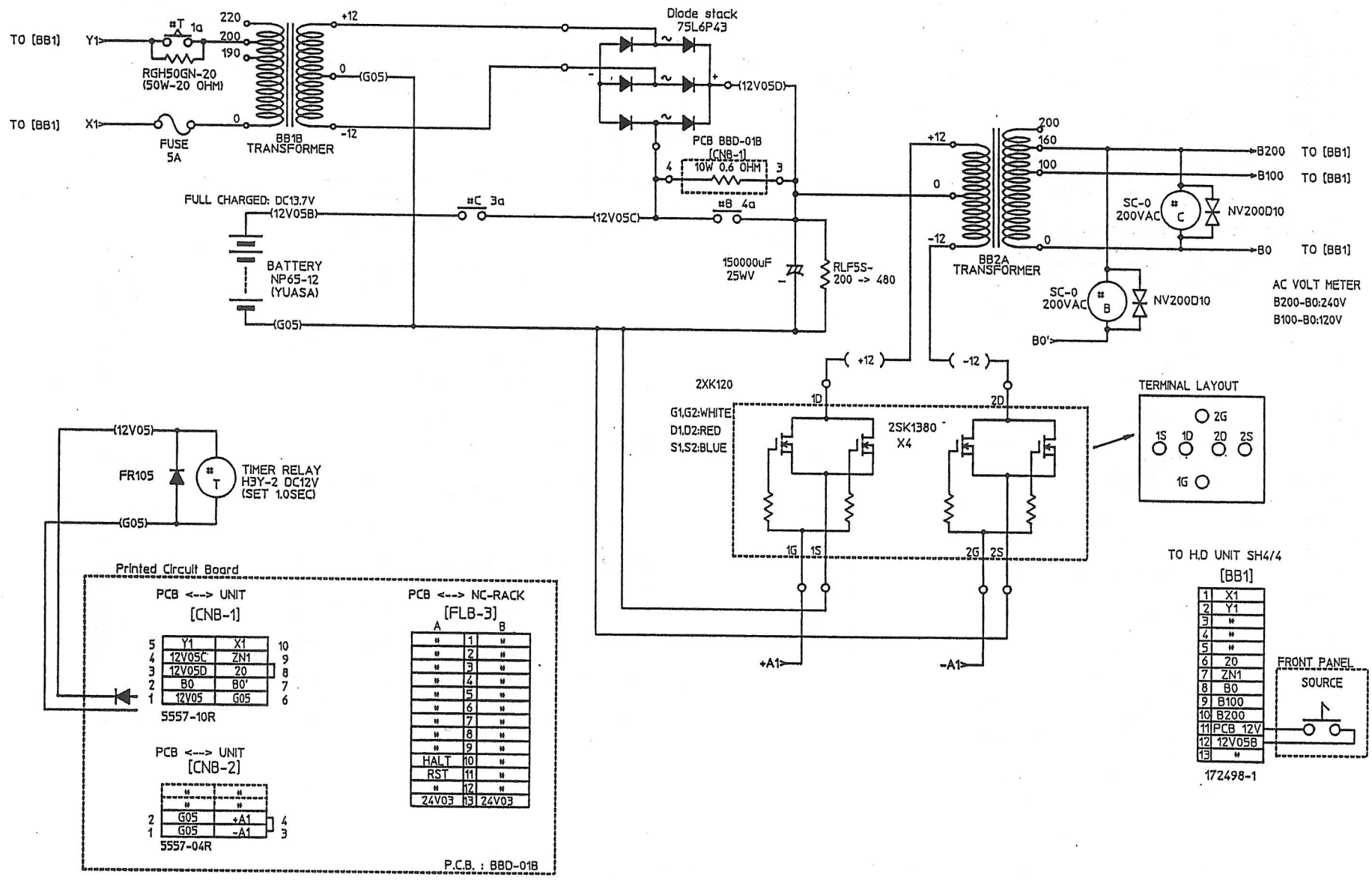
LOWER SIDE VCL-UNIT



⚠ Ver.A->B 21/Apr/94 M.Hakagoshi (1 -> 2 Floar)

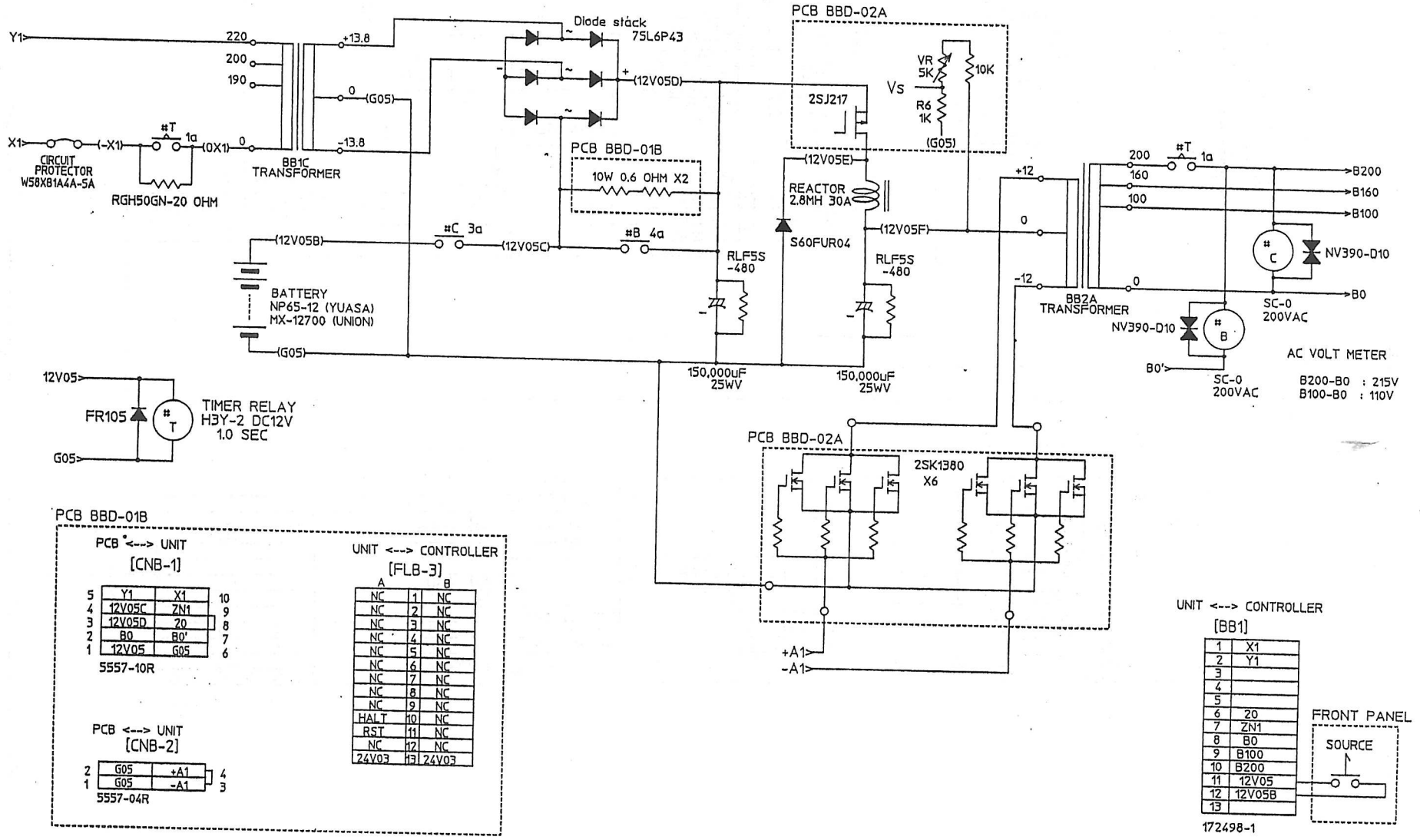
SODICK CO.,LTD	TITLE	VCL UNIT	BLOCK	EX21	SHEET NO.	1/1	DATE	24/NOV/93	DESIGNED	DRAWN	CHECKED	APPROVED	DWG.NO	TE300066B
									NAGAMORI	NAGAMORI	HAKAGOSHI	ASADA		

Circuit version : 3-1

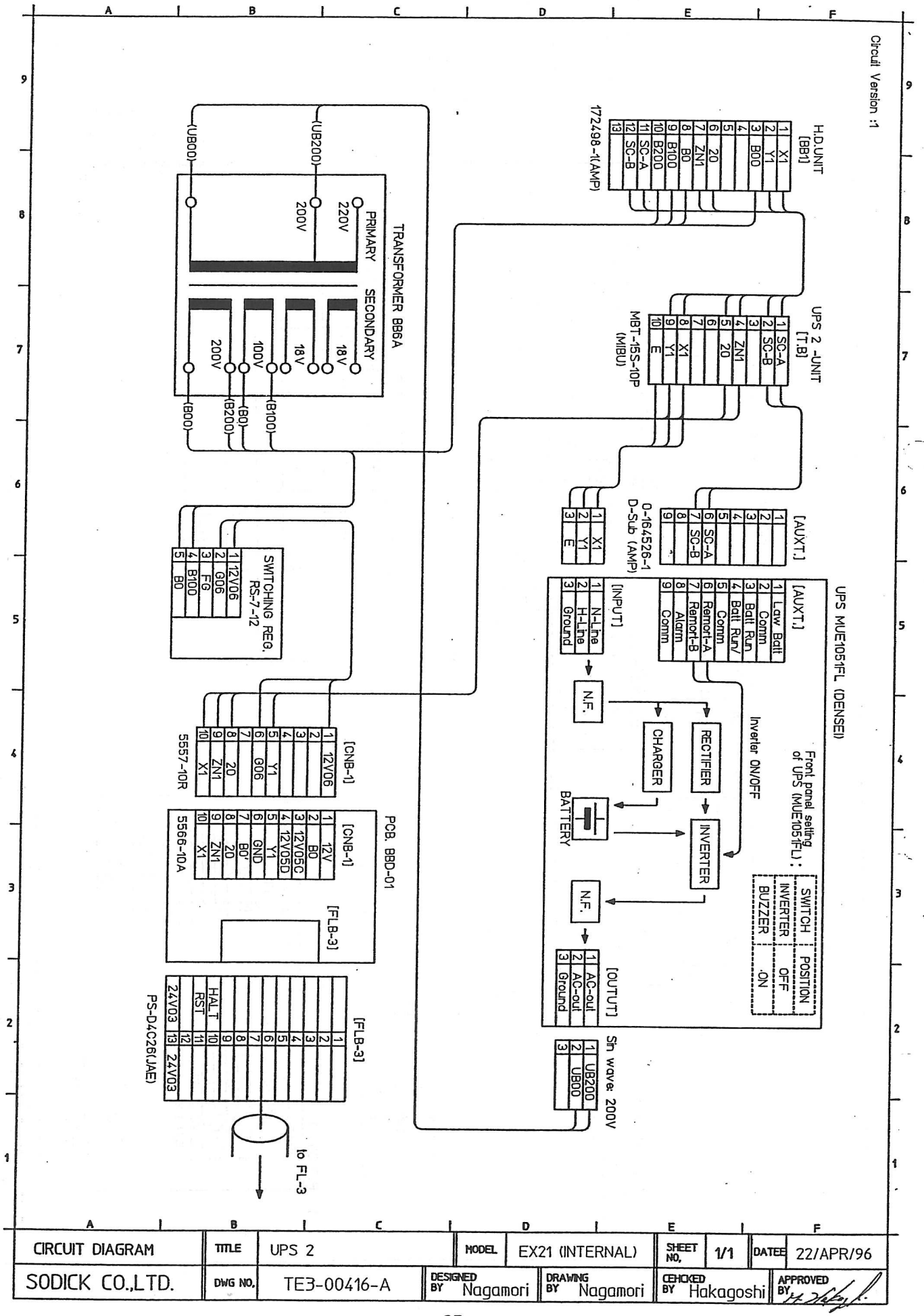


SODICK CO.,LTD	TITLE	UPS UNIT	BL	EX21	SHEET NO.	1/1	DATE	11/SEP/	DESIGNED NAGAMORI	DRAWING NAGAMORI	CHECKED HAKAGOSHI	APROVED HAKAGOSHI	DWG.NO	ET300023E

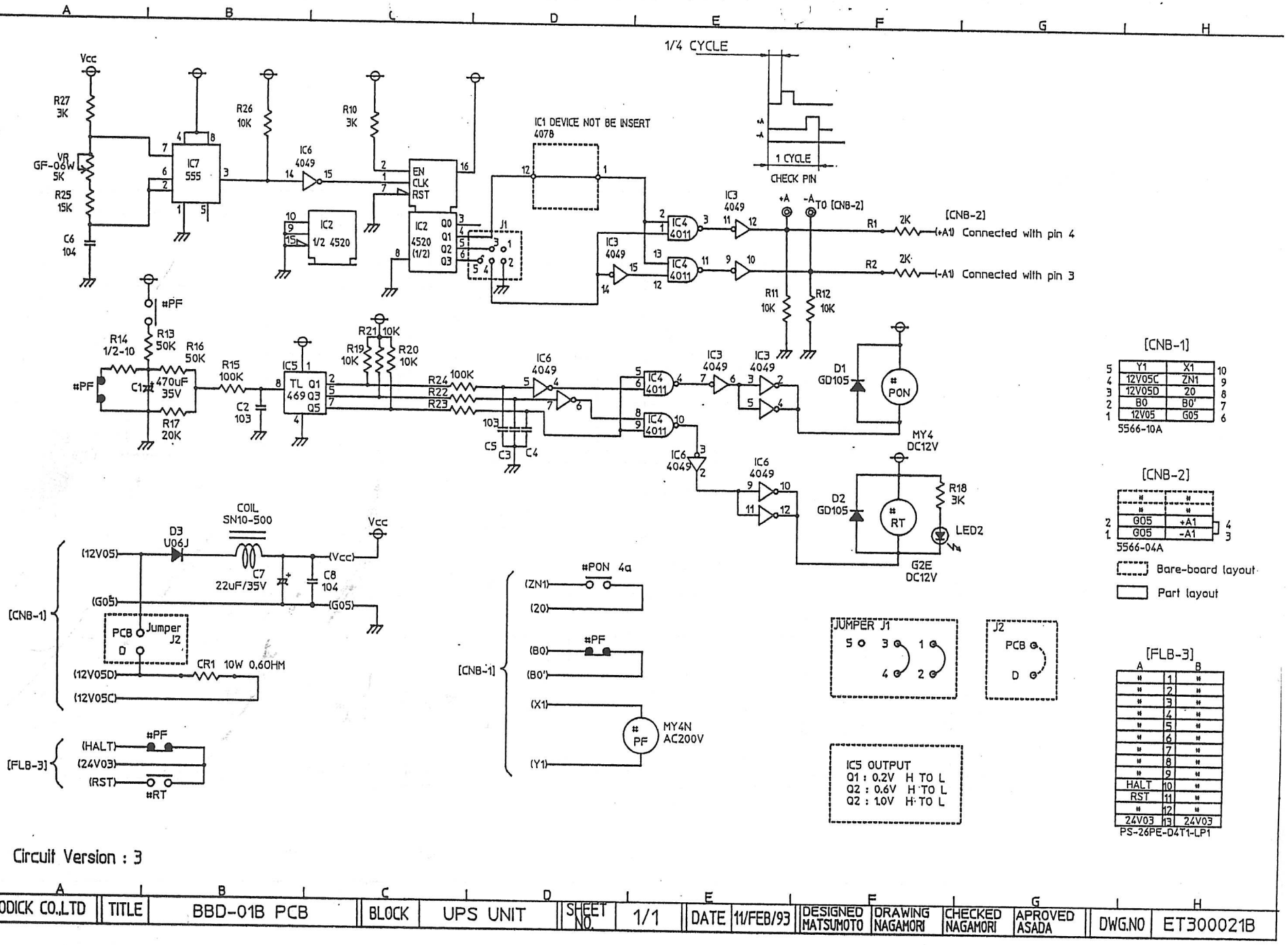
CIRCUIT VERSION : 7



SODICK CO.,LTD	TITLE	UPS UNIT	BLOCK	ALL	SHEET NO.	1/1	DATE	22/AUG/95	DESIGNED BY NAGAMORI	DRAWING BY NAGAMORI	CHECKED BY HAKAGOSHI	APROVED BY	DWG.NO	TE300140D

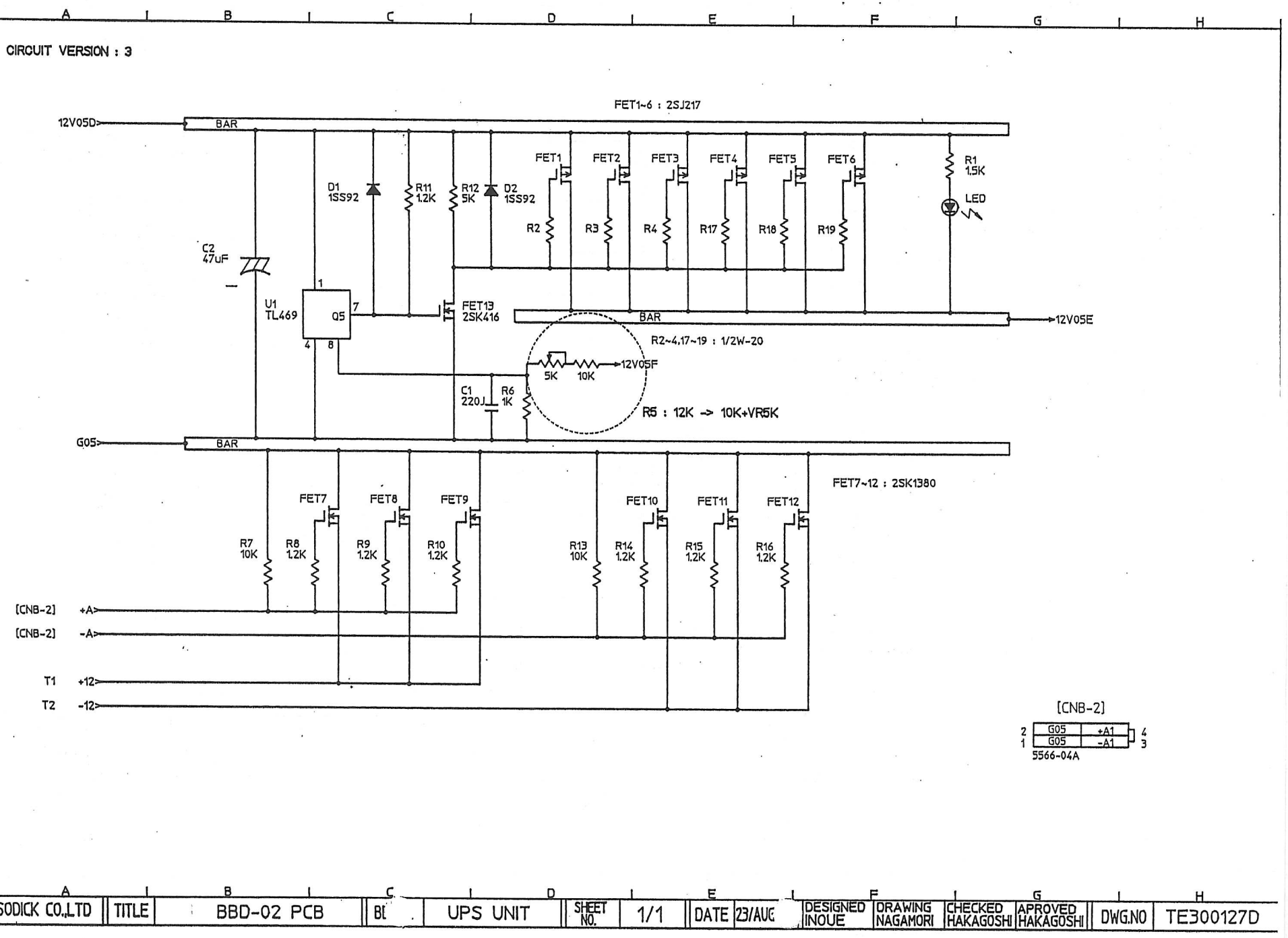


CIRCUIT DIAGRAM	TITLE	UPS 2	MODEL	EX21 (INTERNAL)	SHEET NO.	1/1	DATEE	22/APR/96	
SODICK CO.,LTD.	DWG NO.	TE3-00416-A	DESIGNED BY	Nagamori	DRAWING BY	Nagamori	CEHCKED BY	Hakagoshi	APPROVED BY

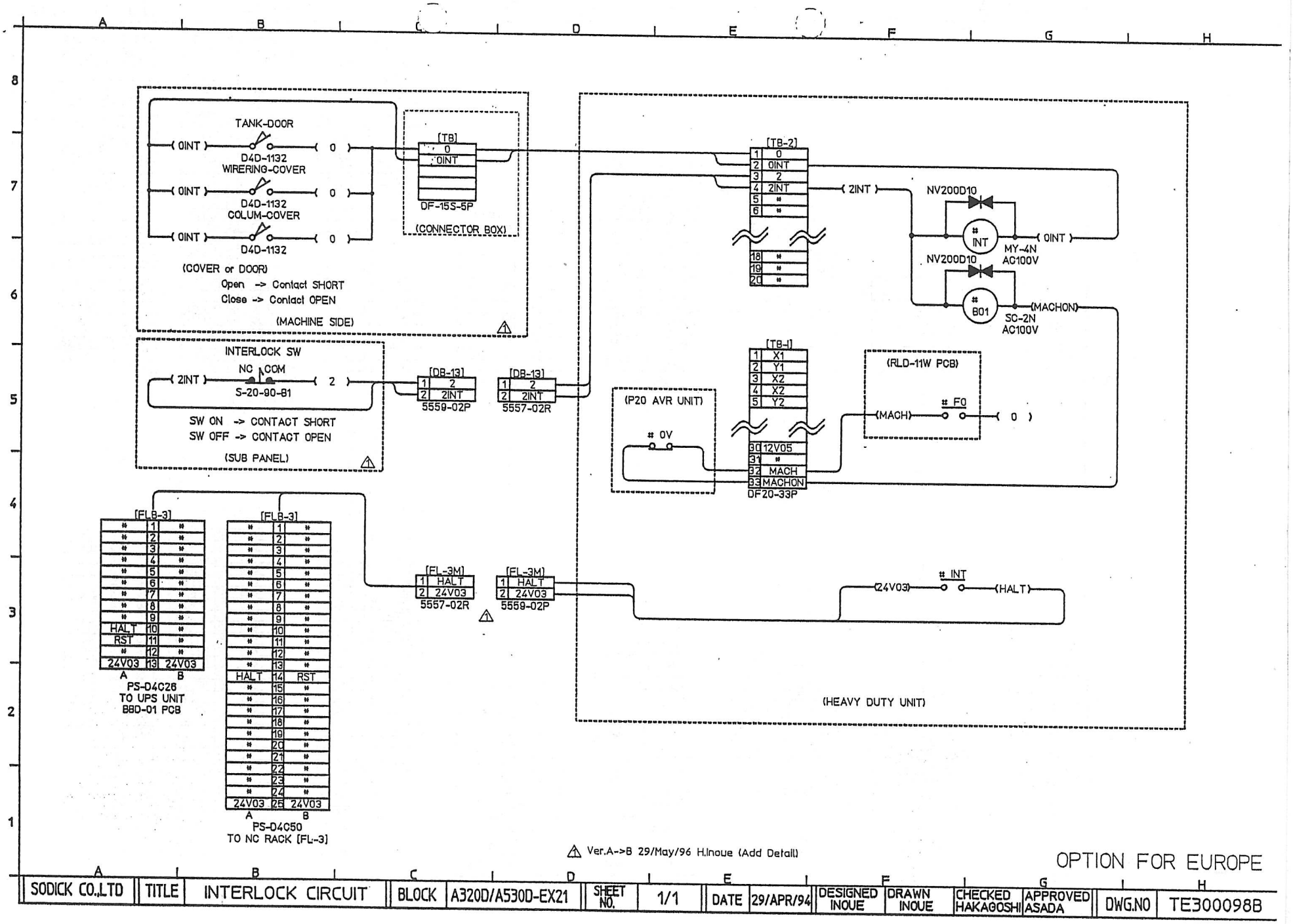


Circuit Version : 3

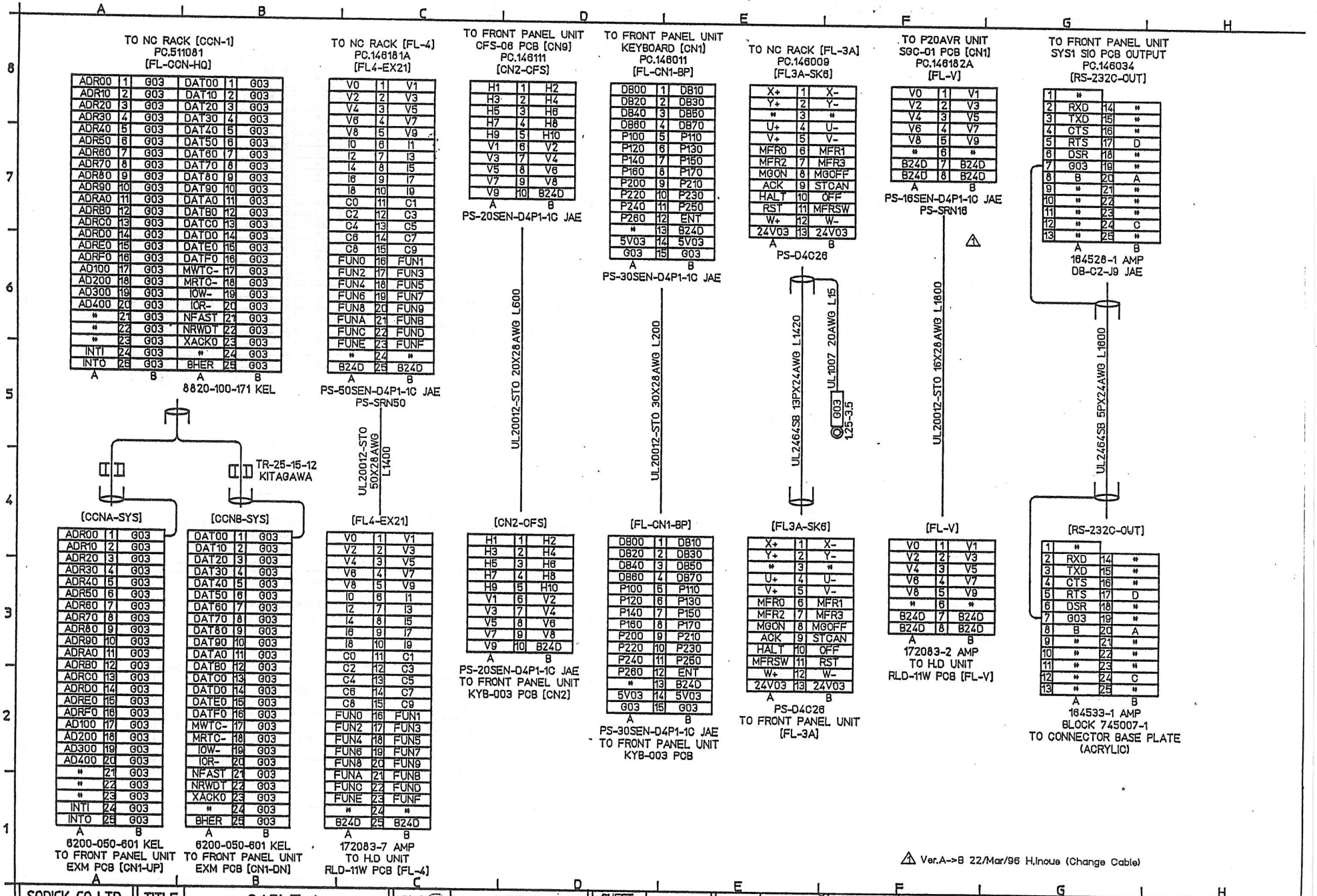
SODICK CO.,LTD	TITLE	BBD-01B PCB	BLOCK	UPS UNIT	SHEET NO.	1/1	DATE	11/FEB/93	DESIGNED MATSUMOTO	DRAWING NAGAMORI	CHECKED NAGAMORI	APROVED ASADA	DWG.NO	ET300021B



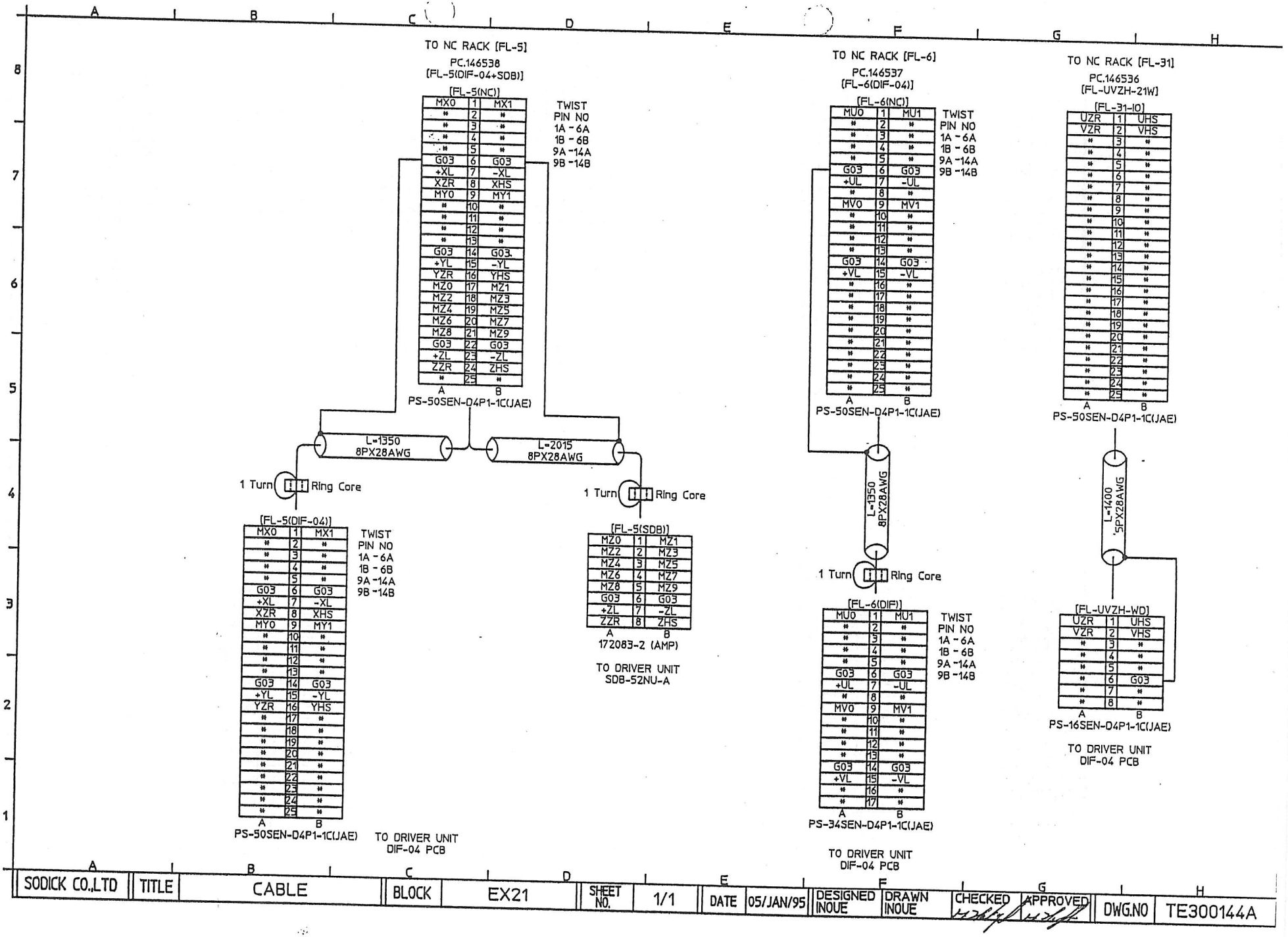
SODICK CO.,LTD	TITLE	BBD-02 PCB	BL	UPS UNIT	SHEET NO.	1/1	DATE	23/AUG	DESIGNED	DRAWING	CHECKED	APROVED	DWG.NO	TE300127D
									INOUE	NAGAMORI	HAKAGOSHI	HAKAGOSHI		



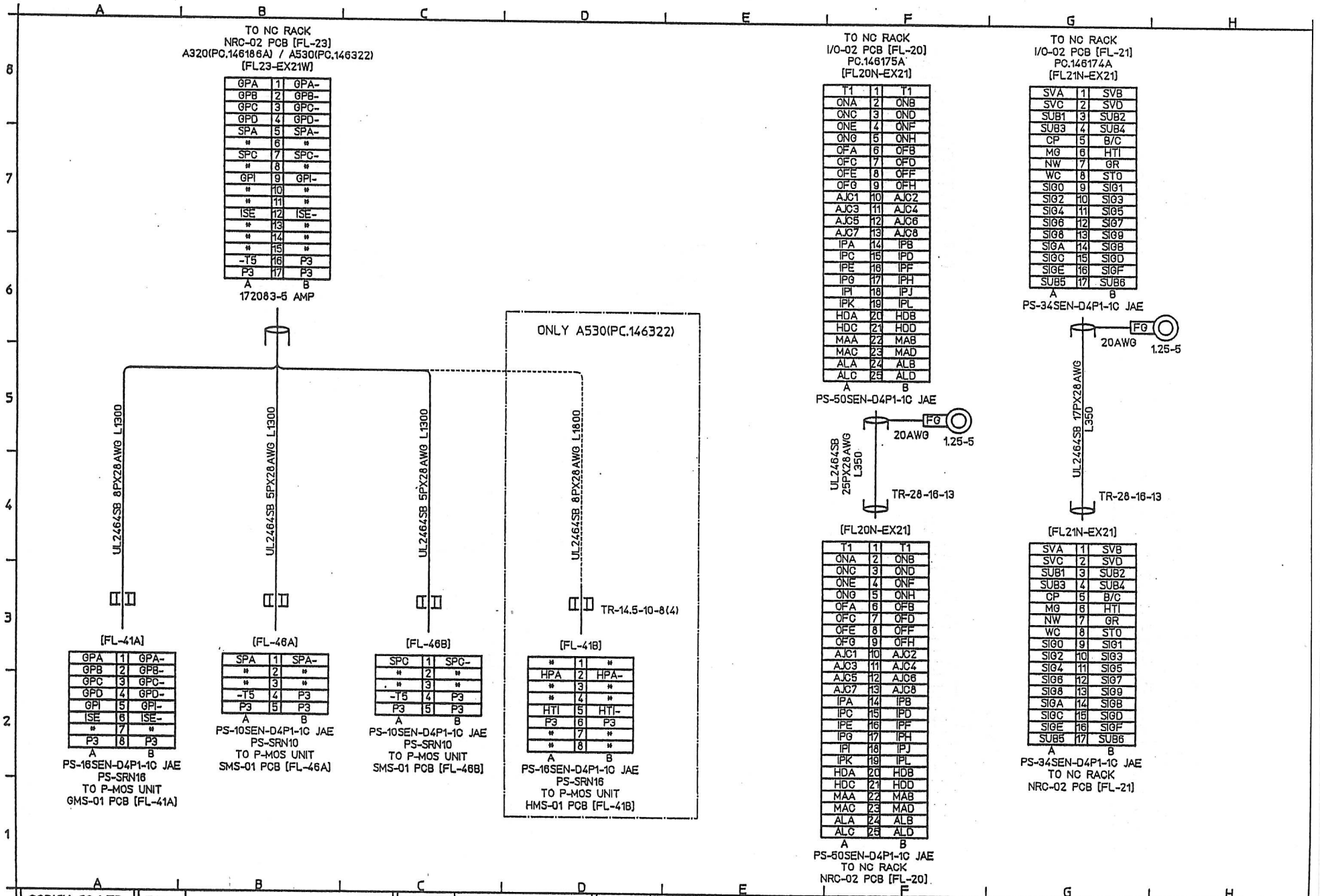
SODICK CO.,LTD	TITLE	INTERLOCK CIRCUIT	BLOCK	A320D/A530D-EX21	SHEET NO.	1/1	DATE	29/APR/94	DESIGNED INOUE	DRAWN INOUE	CHECKED HAKAGOSHI	APPROVED ASADA	DWG.NO	TE300098B

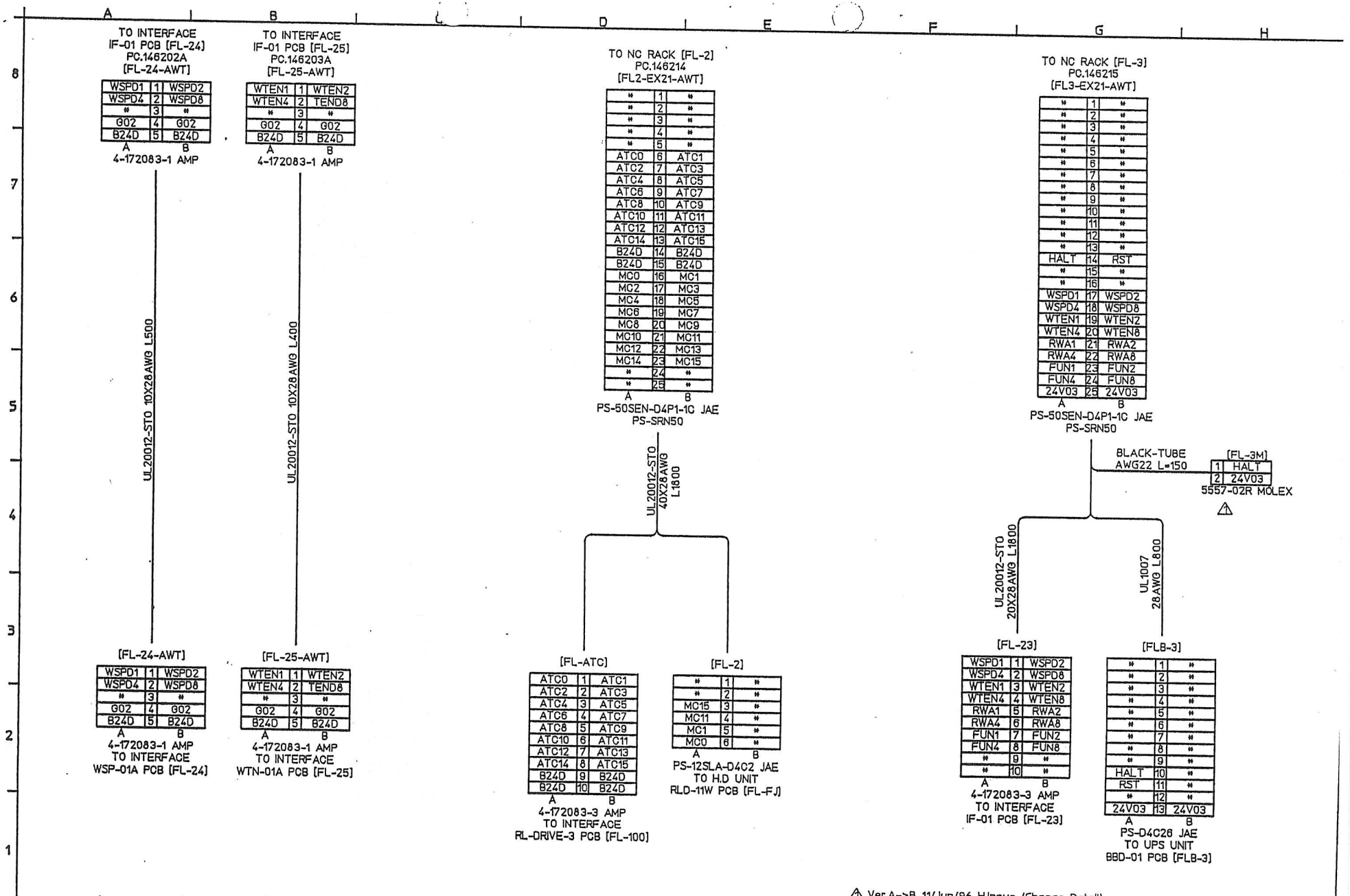


SODICK CO.,LTD	TITLE	CABLE 1	BLO	EX21	SHEET NO.	1/6	DATE	10/NOV/	DESIGNED NAGAMORI	DRAWN NAGAMORI	CHECKED HAKAGOSHI	APPROVED K.SASADA	DWG.NO	TE300074B



SODICK CO.,LTD	TITLE	CABLE	BLOCK	EX21	SHEET NO.	1/1	DATE	05/JAN/95	DESIGNED INOUE	DRAWN INOUE	CHECKED	APPROVED	DWG.NO	TE300144A


TO NC RACK
NRC-02 PCB [FL-23]
A320(PC.146186A) / A530(PC.146322)
[FL23-EX21W]
GPA 1 GPA-
GPB 2 GPB-
GPC 3 GPC-
GPD 4 GPD-
SPA 5 SPA-
* 6 *
SPC 7 SPC-
* 8 *
GPI 9 GPI-
* 10 *
* 11 *
ISE 12 ISE-
* 13 *
* 14 *
* 15 *
-T5 16 P3
P3 17 P3
A B
172083-5 AMP
ONLY A530(PC.146322)
UL2464SB 8PX28AWG L1300
UL2464SB 5PX28AWG L1300
UL2464SB 5PX28AWG L1300
UL2464SB 8PX28AWG L1800
TR-14.5-10-8(4)
[FL-41A]
GPA 1 GPA-
GPB 2 GPB-
GPC 3 GPC-
GPD 4 GPD-
GPI 5 GPI-
ISE 6 ISE-
* 7 *
P3 8 P3
A B
PS-16SEN-D4P1-1C JAE
PS-SRN16
TO P-MOS UNIT
GMS-01 PCB [FL-41A]
[FL-46A]
SPA 1 SPA-
* 2 *
* 3 *
-T5 4 P3
P3 5 P3
A B
PS-10SEN-D4P1-1C JAE
PS-SRN10
TO P-MOS UNIT
SMS-01 PCB [FL-46A]
[FL-46B]
SPC 1 SPC-
* 2 *
* 3 *
-T5 4 P3
P3 5 P3
A B
PS-10SEN-D4P1-1C JAE
PS-SRN10
TO P-MOS UNIT
SMS-01 PCB [FL-46B]
[FL-41B]
* 1 *
HPA 2 HPA-
* 3 *
* 4 *
HTI 5 HTI-
P3 6 P3
* 7 *
* 8 *
A B
PS-16SEN-D4P1-1C JAE
PS-SRN16
TO P-MOS UNIT
HMS-01 PCB [FL-41B]
TO NC RACK
I/O-02 PCB [FL-20]
PC.146175A
[FL20N-EX21]
T1 1 T1
ONA 2 ONB
ONC 3 OND
ONE 4 ONF
ONG 5 ONH
OFA 6 OFB
OFC 7 OFD
OFE 8 OFF
OFG 9 OFH
AJC1 10 AJC2
AJC3 11 AJC4
AJC5 12 AJC6
AJC7 13 AJC8
IPA 14 IPB
IPC 15 IPD
IPE 16 IPF
IPG 17 IPH
IPI 18 IPJ
IPK 19 IPL
HDA 20 HDB
HDC 21 HDD
MAA 22 MAB
MAC 23 MAD
ALA 24 ALB
ALC 25 ALD
A B
PS-50SEN-D4P1-1C JAE
FG
20AWG
1.25-5
UL2464SB 25PX28AWG L350
TR-28-16-13
[FL20N-EX21]
T1 1 T1
ONA 2 ONB
ONC 3 OND
ONE 4 ONF
ONG 5 ONH
OFA 6 OFB
OFC 7 OFD
OFE 8 OFF
OFG 9 OFH
AJC1 10 AJC2
AJC3 11 AJC4
AJC5 12 AJC6
AJC7 13 AJC8
IPA 14 IPB
IPC 15 IPD
IPE 16 IPF
IPG 17 IPH
IPI 18 IPJ
IPK 19 IPL
HDA 20 HDB
HDC 21 HDD
MAA 22 MAB
MAC 23 MAD
ALA 24 ALB
ALC 25 ALD
A B
PS-50SEN-D4P1-1C JAE
TO NC RACK
NRC-02 PCB [FL-20]
TO NC RACK
I/O-02 PCB [FL-21]
PC.146174A
[FL21N-EX21]
SVA 1 SVB
SVC 2 SVD
SUB1 3 SUB2
SUB3 4 SUB4
CP 5 B/C
MG 6 HTI
NW 7 GR
WC 8 STO
SIG0 9 SIG1
SIG2 10 SIG3
SIG4 11 SIG5
SIG6 12 SIG7
SIG8 13 SIG9
SIGA 14 SIGB
SIGC 15 SIGD
SIGE 16 SIGF
SUB5 17 SUB6
A B
PS-34SEN-D4P1-1C JAE
FG
20AWG
1.25-5
UL2464SB 17PX28AWG L350
TR-28-16-13
[FL21N-EX21]
SVA 1 SVB
SVC 2 SVD
SUB1 3 SUB2
SUB3 4 SUB4
CP 5 B/C
MG 6 HTI
NW 7 GR
WC 8 STO
SIG0 9 SIG1
SIG2 10 SIG3
SIG4 11 SIG5
SIG6 12 SIG7
SIG8 13 SIG9
SIGA 14 SIGB
SIGC 15 SIGD
SIGE 16 SIGF
SUB5 17 SUB6
A B
PS-34SEN-D4P1-1C JAE
TO NC RACK
NRC-02 PCB [FL-21]
SODICK CO.,LTD
TITLE
CABLE 3
EX21
SHEET NO.
3/6
DATE
10/NOV.
DESIGNED NAGAMORI
DRAWN NAGAMORI
CHECKED HAKAGOSHI
APPROVED K.ASADA
DWG.NO
TE300076B


TO INTERFACE
IF-01 PCB [FL-24]
PC.146202A
[FL-24-AWT]
WSPD1 1 WSPD2
WSPD4 2 WSPD8
* 3 *
G02 4 G02
B24D 5 B24D
A B
4-172083-1 AMP
UL20012-STO 10X28AWG L500
[FL-24-AWT]
WSPD1 1 WSPD2
WSPD4 2 WSPD8
* 3 *
G02 4 G02
B24D 5 B24D
A B
4-172083-1 AMP
TO INTERFACE
WSP-01A PCB [FL-24]
TO INTERFACE
IF-01 PCB [FL-25]
PC.146203A
[FL-25-AWT]
WTEN1 1 WTEN2
WTEN4 2 TEND8
* 3 *
G02 4 G02
B24D 5 B24D
A B
4-172083-1 AMP
UL20012-STO 10X28AWG L400
[FL-25-AWT]
WTEN1 1 WTEN2
WTEN4 2 TEND8
* 3 *
G02 4 G02
B24D 5 B24D
A B
4-172083-1 AMP
TO INTERFACE
WTN-01A PCB [FL-25]
TO NC RACK [FL-2]
PC.146214
[FL2-EX21-AWT]
* 1 *
* 2 *
* 3 *
* 4 *
* 5 *
ATC0 6 ATC1
ATC2 7 ATC3
ATC4 8 ATC5
ATC6 9 ATC7
ATC8 10 ATC9
ATC10 11 ATC11
ATC12 12 ATC13
ATC14 13 ATC15
B24D 14 B24D
B24D 15 B24D
MC0 16 MC1
MC2 17 MC3
MC4 18 MC5
MC6 19 MC7
MC8 20 MC9
MC10 21 MC11
MC12 22 MC13
MC14 23 MC15
* 24 *
* 25 *
A B
PS-50SEN-D4P1-1C JAE
PS-SRN50
UL20012-STO
40X28AWG
L1800
[FL-ATC]
ATC0 1 ATC1
ATC2 2 ATC3
ATC4 3 ATC5
ATC6 4 ATC7
ATC8 5 ATC9
ATC10 6 ATC11
ATC12 7 ATC13
ATC14 8 ATC15
B24D 9 B24D
B24D 10 B24D
A B
4-172083-3 AMP
TO INTERFACE
RL-DRIVE-3 PCB [FL-100]
[FL-2]
* 1 *
* 2 *
MC15 3 *
MC11 4 *
MC1 5 *
MC0 6 *
A B
PS-12SLA-D4C2 JAE
TO H.D UNIT
RLD-11W PCB [FL-FJ]
TO NC RACK [FL-3]
PC.146215
[FL3-EX21-AWT]
* 1 *
* 2 *
* 3 *
* 4 *
* 5 *
* 6 *
* 7 *
* 8 *
* 9 *
* 10 *
* 11 *
* 12 *
* 13 *
HALT 14 RST
* 15 *
* 16 *
WSPD1 17 WSPD2
WSPD4 18 WSPD8
WTEN1 19 WTEN2
WTEN4 20 WTEN8
RWA1 21 RWA2
RWA4 22 RWA8
FUN1 23 FUN2
FUN4 24 FUN8
24V03 25 24V03
A B
PS-50SEN-D4P1-1C JAE
PS-SRN50
BLACK-TUBE
AWG22 L=150
[FL-3M]
1 HALT
2 24V03
5557-02R MOLEX
UL20012-STO
20X28AWG L1800
UL1007
28AWG L800
[FL-23]
WSPD1 1 WSPD2
WSPD4 2 WSPD8
WTEN1 3 WTEN2
WTEN4 4 WTEN8
RWA1 5 RWA2
RWA4 6 RWA8
FUN1 7 FUN2
FUN4 8 FUN8
* 9 *
* 10 *
A B
4-172083-3 AMP
TO INTERFACE
IF-01 PCB [FL-23]
[FL8-3]
* 1 *
* 2 *
* 3 *
* 4 *
* 5 *
* 6 *
* 7 *
* 8 *
* 9 *
HALT 10 *
RST 11 *
* 12 *
24V03 13 24V03
A B
PS-D4C26 JAE
TO UPS UNIT
BBD-01 PCB [FL8-3]
⚠ Ver.A->B 11/Jun/96 H.Inoue (Change Detail)
SODICK CO.,LTD
TITLE
CABLE 4(AWT)
BLOCK
EX21
SHEET NO.
4/6
DATE
10/NOV/93
DESIGNED NAGAMORI
DRAWN NAGAMORI
CHECKED HAKAGOSHI
APPROVED K.ASADA
DWG.NO
TE300077B

TO FRONT PANEL UNIT
OUTPUT TERMINAL
PC.146035
[RS-232C-PTR]

1	*		
2	TXD	14	*
3	RXD	15	*
4	RTS	16	*
5	CTS	17	C
6	A	18	*
7	G03	19	*
8	B	20	DSR
9	*	21	*
10	*	22	*
11	*	23	*
12	*	24	D
13	*	25	*
	A		B

164528-1 AMP
DB-C2-J9 JAE

UL2464SB 5PX24AWG L1700

[RS-232C-PTR]

1	*		
2	RXD	14	*
3	TXD	15	*
4	CTS	16	*
5	RTS	17	D
6	DSR	18	*
7	G03	19	*
8	B	20	A
9	*	21	*
10	*	22	*
11	*	23	*
12	*	24	C
13	*	25	*
	A		B

164528-1 AMP
DB-C2-J9 JAE
TO PTR UNIT

TO NC RACK [DN-2]
PC.146213
[CN-PTR-EX21]

1	6V03
2	G03
3	24V03
4	G03

5557-04R MOLEX

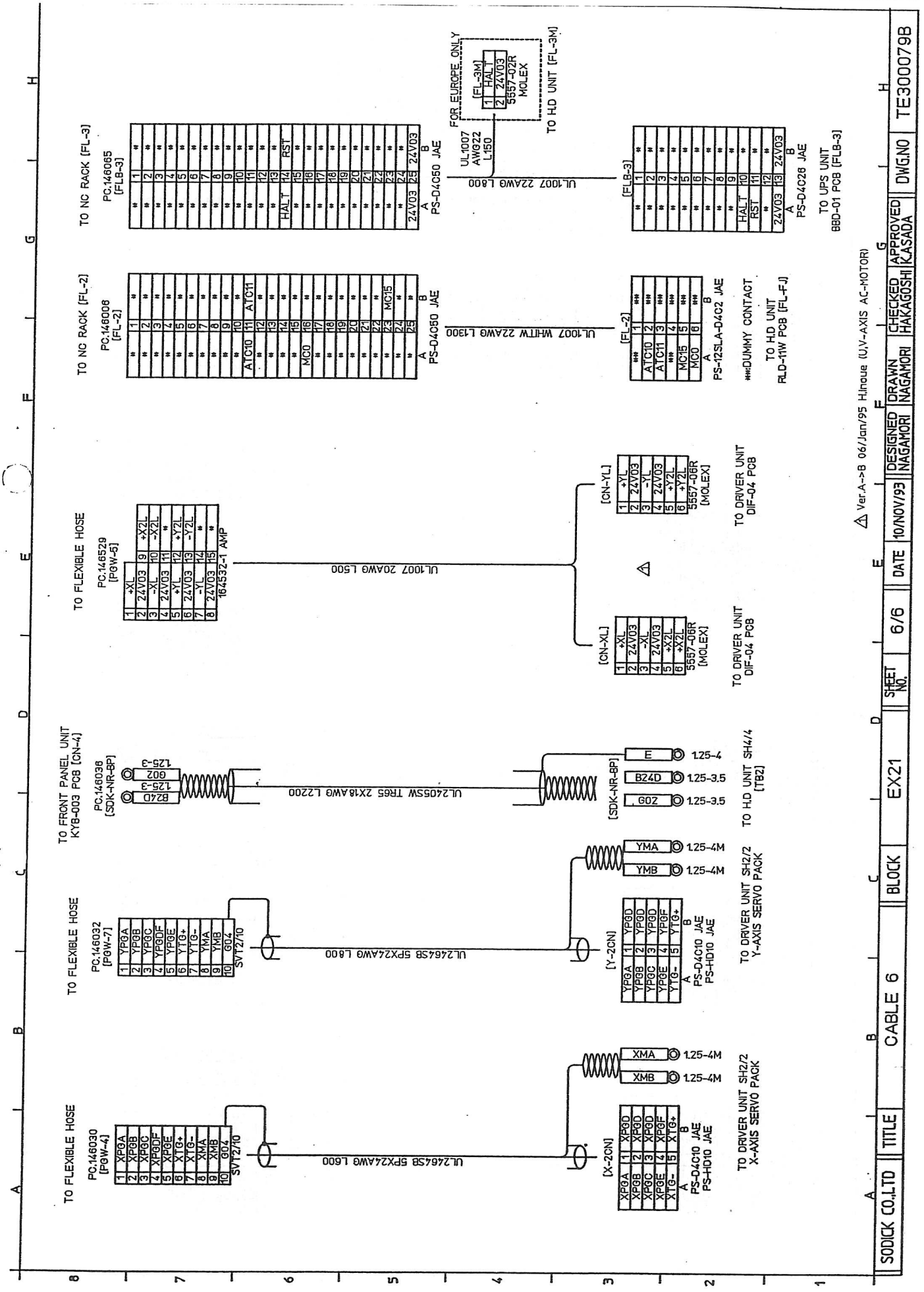
UL1007 AWG20 L800

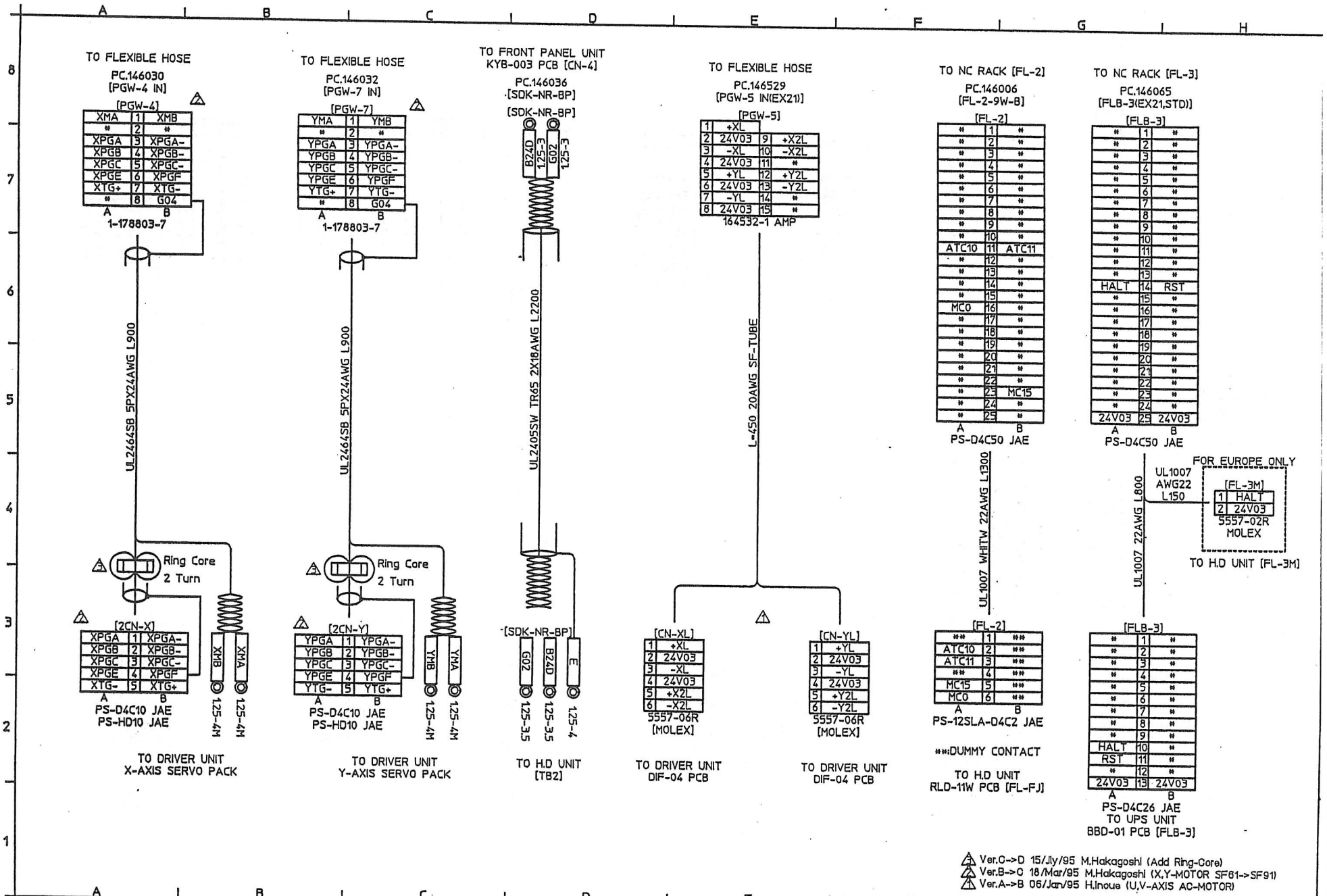
24V03 BT-125-9
G03 BT-125-9
5V03 BT-125-9
G03 BT-125-9

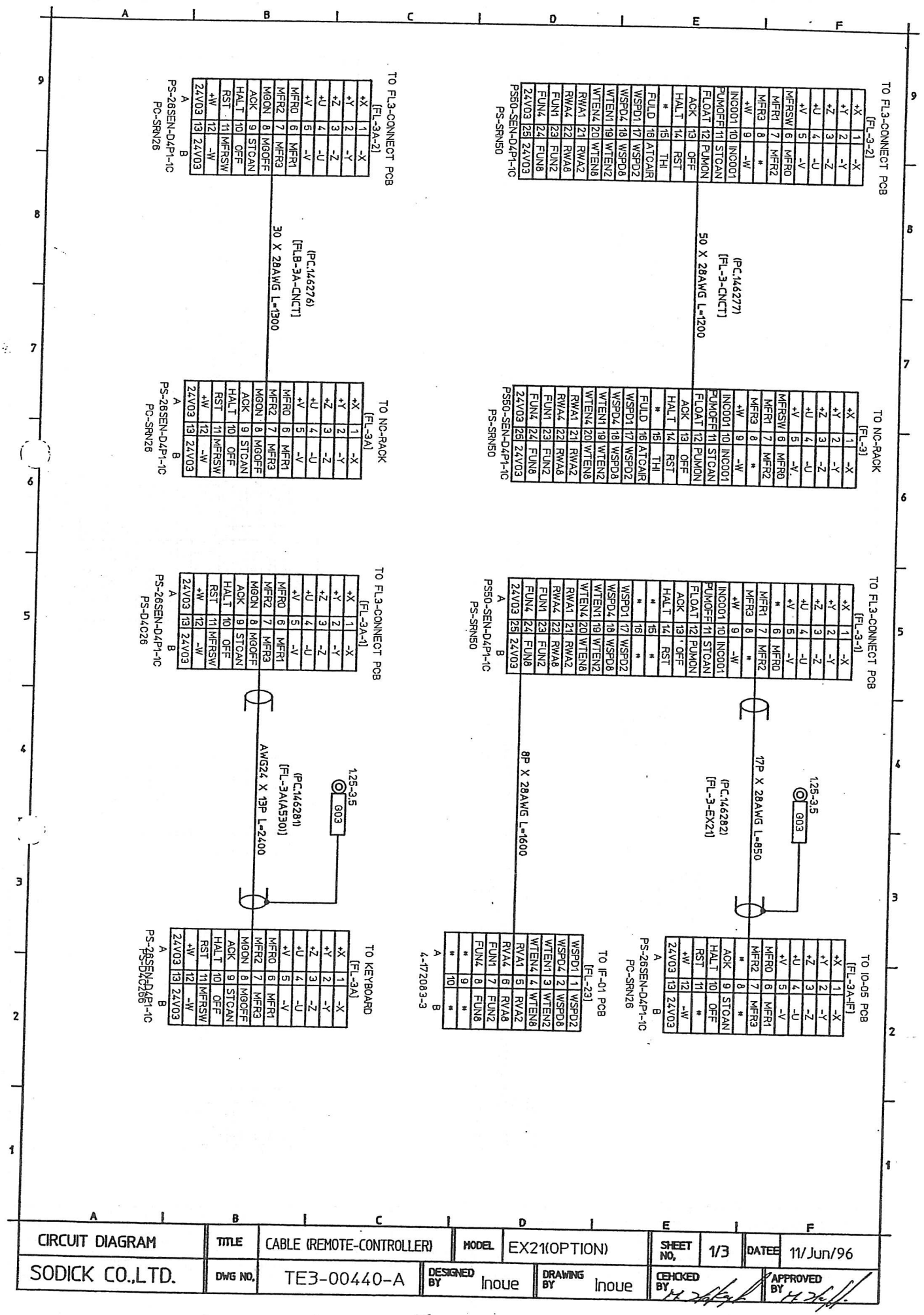
TO PTR UNIT

* OPTION

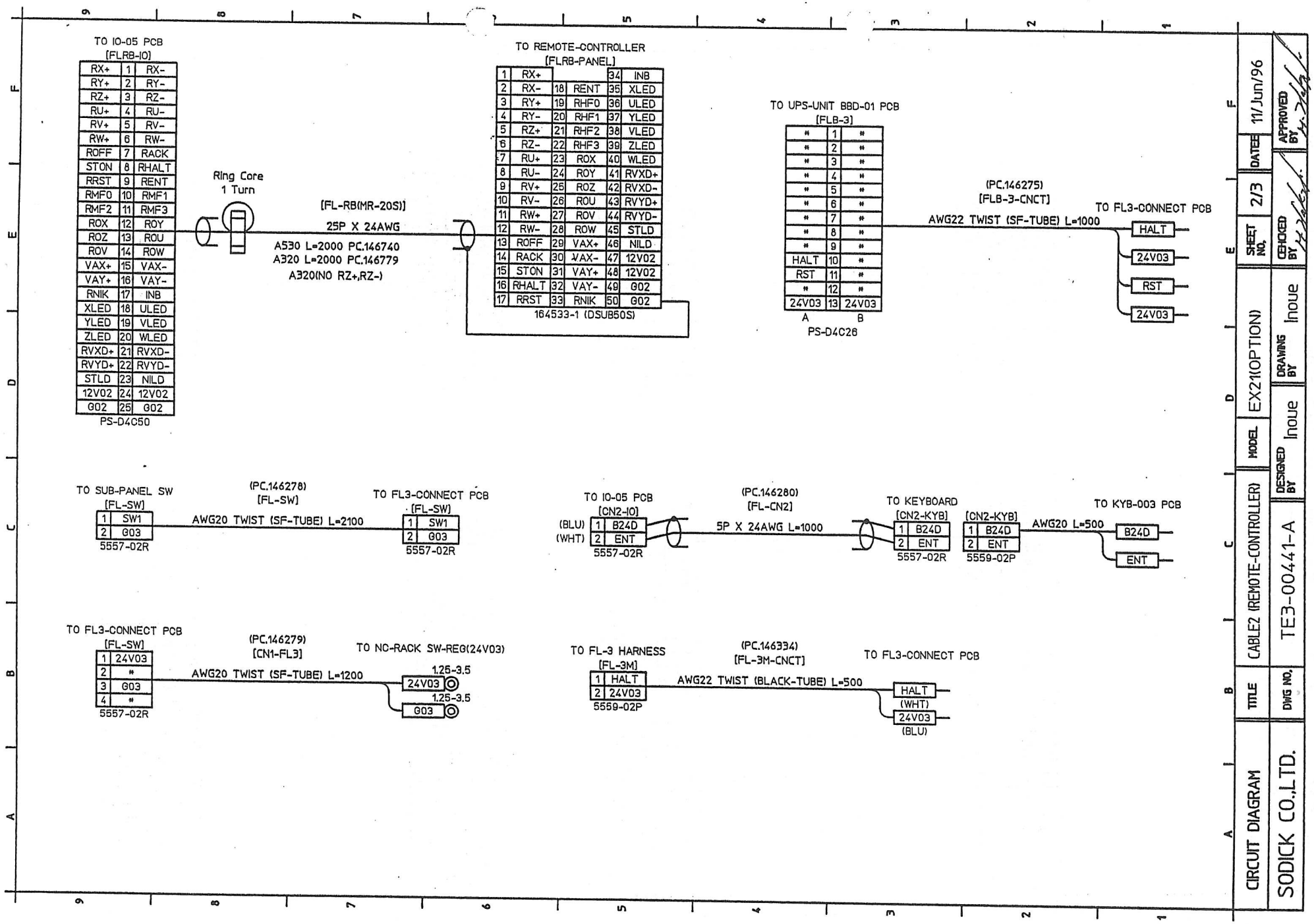
SODICK CO.,LTD	TITLE	CABLE 5(PTR)	BL	EX21	SHEET NO.	5/6	DATE	10/NOV.	DESIGNED NAGAMORI	DRAWN NAGAMORI	CHECKED HAKAGOSHI	APPROVED K.ASADA	DWG.NO	TE300078A


TO NC RACK [FL-3]
PC.146065 [FLB-3]
TO NC RACK [FL-2]
PC.146006 [FL-2]
PS-D4050 JAE
UL1007 22AWG L800
UL1007 WHITW 22AWG L300
FOR EUROPE ONLY
[FL-3M] HALT 24V03 5557-02R MOLEX
TO H.D UNIT [FL-3M]
[FLB-3]
[FL-2]
PS-12SLA-D402 JAE
***:DUMMY CONTACT
TO H.D UNIT RLD-11W PCB [FL-FJ]
TO UPS UNIT BBD-01 PCB [FLB-3]
PS-D4028 JAE
TO FLEXIBLE HOSE
PC.146529 [PGW-5]
164532-1 AMP
UL1007 20AWG L500
[CN-YL]
[CN-XL]
5557-06R [MOLEX]
TO DRIVER UNIT DIF-04 PCB
TO FRONT PANEL UNIT KYB-003 PCB [CN-4]
PC.146036 [SDK-NR-BP]
UL2405SW TR65 2X18AWG L2200
[SDK-NR-BP]
TO H.D UNIT SH4/4 [TB2]
TO FLEXIBLE HOSE
PC.146032 [PGW-7]
UL2464SB SPX24AWG L800
[Y-2CN]
PS-D4010 JAE PS-HD10 JAE
TO DRIVER UNIT SH2/2 Y-AXIS SERVO PACK
TO FLEXIBLE HOSE
PC.146030 [PGW-4]
UL2464SB 5PX24AWG L600
[X-2CN]
TO DRIVER UNIT SH2/2 X-AXIS SERVO PACK
Ver.A->B 06/Jan/95 H.Inoue (U,V-AXIS AC-MOTOR)
SODICK CO.,LTD
TITLE
CABLE 6
BLOCK
EX21
SHEET NO.
6/6
DATE
10/NOV/93
DESIGNED NAGAMORI
DRAWN NAGAMORI
CHECKED HAKAGOSHI
APPROVED KASADA
DWG.NO
TE300079B

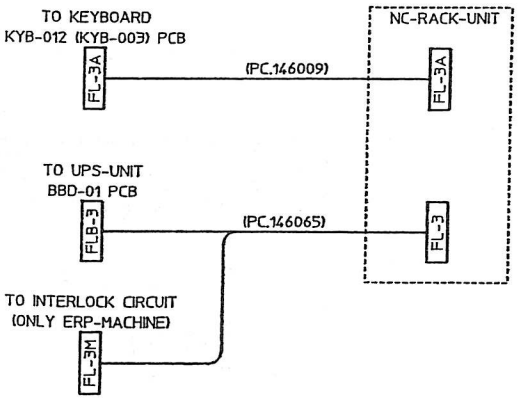

TO FLEXIBLE HOSE
PC.146030
[PGW-4 IN]
[PGW-4]
XMA 1 XMB
* 2 *
XPGA 3 XPGA-
XPGB 4 XPGB-
XPGC 5 XPGC-
XPGE 6 XPGF
XTG+ 7 XTG-
* 8 G04
A B
1-178803-7
UL2464SB 5PX24AWG L900
Ring Core
2 Turn
[2CN-X]
XPGA 1 XPGA-
XPGB 2 XPGB-
XPGC 3 XPGC-
XPGE 4 XPGF
XTG- 5 XTG+
A B
PS-D4C10 JAE
PS-HD10 JAE
XMB
XMA
125-4M
125-4M
TO DRIVER UNIT
X-AXIS SERVO PACK
TO FLEXIBLE HOSE
PC.146032
[PGW-7 IN]
[PGW-7]
YMA 1 YMB
* 2 *
YPGA 3 YPGA-
YPGB 4 YPGB-
YPGC 5 YPGC-
YPGE 6 YPGF
YTG+ 7 YTG-
* 8 G04
A B
1-178803-7
UL2464SB 5PX24AWG L900
Ring Core
2 Turn
[2CN-Y]
YPGA 1 YPGA-
YPGB 2 YPGB-
YPGC 3 YPGC-
YPGE 4 YPGF
YTG- 5 YTG+
A B
PS-D4C10 JAE
PS-HD10 JAE
YMB
YMA
125-4M
125-4M
TO DRIVER UNIT
Y-AXIS SERVO PACK
TO FRONT PANEL UNIT
KYB-003 PCB [CN-4]
PC.146036
[SDK-NR-8P]
[SDK-NR-8P]
B24D
125-3
G02
125-3
UL2405SW TR6S 2X18AWG L2200
[SDK-NR-8P]
G02
B24D
E
125-3.5
125-3.5
125-4
TO H.D UNIT
[TB2]
TO FLEXIBLE HOSE
PC.146529
[PGW-5 IN(EX21)]
[PGW-5]
1 +XL
2 24V03 9 +X2L
3 -XL 10 -X2L
4 24V03 11 *
5 +YL 12 +Y2L
6 24V03 13 -Y2L
7 -YL 14 *
8 24V03 15 *
164532-1 AMP
L=450 20AWG SF-TUBE
[CN-XL]
1 +XL
2 24V03
3 -XL
4 24V03
5 +X2L
6 -X2L
5557-06R
[MOLEX]
TO DRIVER UNIT
DIF-04 PCB
[CN-YL]
1 +YL
2 24V03
3 -YL
4 24V03
5 +Y2L
6 -Y2L
5557-06R
[MOLEX]
TO DRIVER UNIT
DIF-04 PCB
TO NC RACK [FL-2]
PC.146006
[FL-2-9W-8]
[FL-2]
ATC10 11 ATC11
HALT 14 RST
MC0 16
MC15 23
24V03 25 24V03
A B
PS-D4C50 JAE
UL1007 WHITW 22AWG L1300
[FL-2]
** 1 **
ATC10 2 **
ATC11 3 **
** 4 **
MC15 5 **
MC0 6 **
A B
PS-12SLA-D4C2 JAE
**:DUMMY CONTACT
TO H.D UNIT
RLD-11W PCB [FL-FJ]
TO NC RACK [FL-3]
PC.146065
[FLB-3(EX21,STD)]
[FLB-3]
HALT 10 *
RST 11 *
24V03 13 24V03
A B
PS-D4C50 JAE
UL1007 22AWG L800
UL1007
AWG22
L150
FOR EUROPE ONLY
[FL-3M]
1 HALT
2 24V03
5557-02R
MOLEX
TO H.D UNIT [FL-3M]
[FLB-3]
HALT 10 *
RST 11 *
24V03 13 24V03
A B
PS-D4C26 JAE
TO UPS UNIT
BBD-01 PCB [FLB-3]
Ver.C->D 15/Jly/95 M.Hakagoshi (Add Ring-Core)
Ver.B->C 18/Mar/95 M.Hakagoshi (X,Y-MOTOR SF61->SF91)
Ver.A->B 06/Jan/95 H.Inoue (U,V-AXIS AC-MOTOR)
SODICK CO.,LTD
TITLE
CABLE 6
BL'
EX21
SHEET NO.
6/6
DATE
05/JAN.
DESIGNED
NAGAMORI
DRAWN
NAGAMORI
CHECKED
HAKAGOSHI
APPROVED
K.ASADA
DWG.NO
TE300079D



CIRCUIT DIAGRAM	TITLE	CABLE (REMOTE-CONTROLLER)	MODEL	EX21(OPTION)	SHEET NO.	1/3	DATEE	11/Jun/96	
SODICK CO.,LTD.	DWG NO.	TE3-00440-A	DESIGNED BY	Inoue	DRAWING BY	Inoue	CEHCKED BY		APPROVED BY

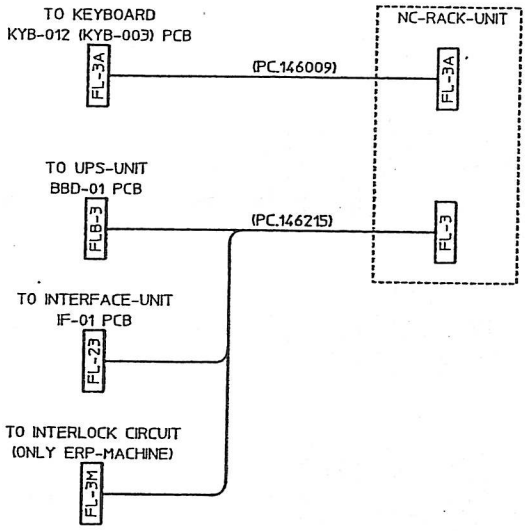

TO I0-05 PCB
[FLRB-I0]
RX+ 1 RX-
RY+ 2 RY-
RZ+ 3 RZ-
RU+ 4 RU-
RV+ 5 RV-
RW+ 6 RW-
ROFF 7 RACK
STON 8 RHALT
RRST 9 RENT
RMF0 10 RMF1
RMF2 11 RMF3
ROX 12 ROY
ROZ 13 ROU
ROV 14 ROW
VAX+ 15 VAX-
VAY+ 16 VAY-
RNIK 17 INB
XLED 18 ULED
YLED 19 VLED
ZLED 20 WLED
RVXD+ 21 RVXD-
RVYD+ 22 RVYD-
STLD 23 NILD
12V02 24 12V02
G02 25 G02
PS-D4C50
Ring Core
1 Turn
[FL-RB(MR-20S)]
25P X 24AWG
A530 L=2000 PC.146740
A320 L=2000 PC.146779
A320(NO RZ+,RZ-)
TO REMOTE-CONTROLLER
[FLRB-PANEL]
1 RX+ 34 INB
2 RX- 18 RENT 35 XLED
3 RY+ 19 RHF0 36 ULED
4 RY- 20 RHF1 37 YLED
5 RZ+ 21 RHF2 38 VLED
6 RZ- 22 RHF3 39 ZLED
7 RU+ 23 ROX 40 WLED
8 RU- 24 ROY 41 RVXD+
9 RV+ 25 ROZ 42 RVXD-
10 RV- 26 ROU 43 RVYD+
11 RW+ 27 ROV 44 RVYD-
12 RW- 28 ROW 45 STLD
13 ROFF 29 VAX+ 46 NILD
14 RACK 30 VAX- 47 12V02
15 STON 31 VAY+ 48 12V02
16 RHALT 32 VAY- 49 G02
17 RRST 33 RNIK 50 G02
164533-1 (DSUB50S)
TO UPS-UNIT BBD-01 PCB
[FLB-3]
* 1 *
* 2 *
* 3 *
* 4 *
* 5 *
* 6 *
* 7 *
* 8 *
* 9 *
HALT 10 *
RST 11 *
* 12 *
24V03 13 24V03
A B
PS-D4C26
(PC.146275)
[FLB-3-CNCT]
AWG22 TWIST (SF-TUBE) L=1000
TO FL3-CONNECT PCB
HALT
24V03
RST
24V03
TO SUB-PANEL SW
[FL-SW]
1 SW1
2 G03
5557-02R
(PC.146278)
[FL-SW]
AWG20 TWIST (SF-TUBE) L=2100
TO FL3-CONNECT PCB
[FL-SW]
1 SW1
2 G03
5557-02R
TO I0-05 PCB
[CN2-I0]
(BLU) 1 B24D
(WHT) 2 ENT
5557-02R
(PC.146280)
[FL-CN2]
5P X 24AWG L=1000
TO KEYBOARD
[CN2-KYB]
1 B24D
2 ENT
5557-02R
[CN2-KYB]
1 B24D
2 ENT
5559-02P
AWG20 L=500
TO KYB-003 PCB
B24D
ENT
TO FL3-CONNECT PCB
[FL-SW]
1 24V03
2 *
3 G03
4 *
5557-02R
(PC.146279)
[CN1-FL3]
AWG20 TWIST (SF-TUBE) L=1200
TO NC-RACK SW-REG(24V03)
1.25-3.5
24V03
1.25-3.5
G03
TO FL-3 HARNESS
[FL-3M]
1 HALT
2 24V03
5559-02P
(PC.146334)
[FL-3M-CNCT]
AWG22 TWIST (BLACK-TUBE) L=500
TO FL3-CONNECT PCB
HALT
(WHT)
24V03
(BLU)
TITLE CIRCUIT DIAGRAM
DWG NO. TE3-00441-A
CABLE2 (REMOTE-CONTROLLER)
MODEL EX21(OPTION)
DESIGNED BY Inoue
DRAWING BY Inoue
CHECKED BY
SHEET NO. 2/3
DATE 11/Jun/96
APPROVED BY
SODICK CO.,LTD.

[A320 (STD)]



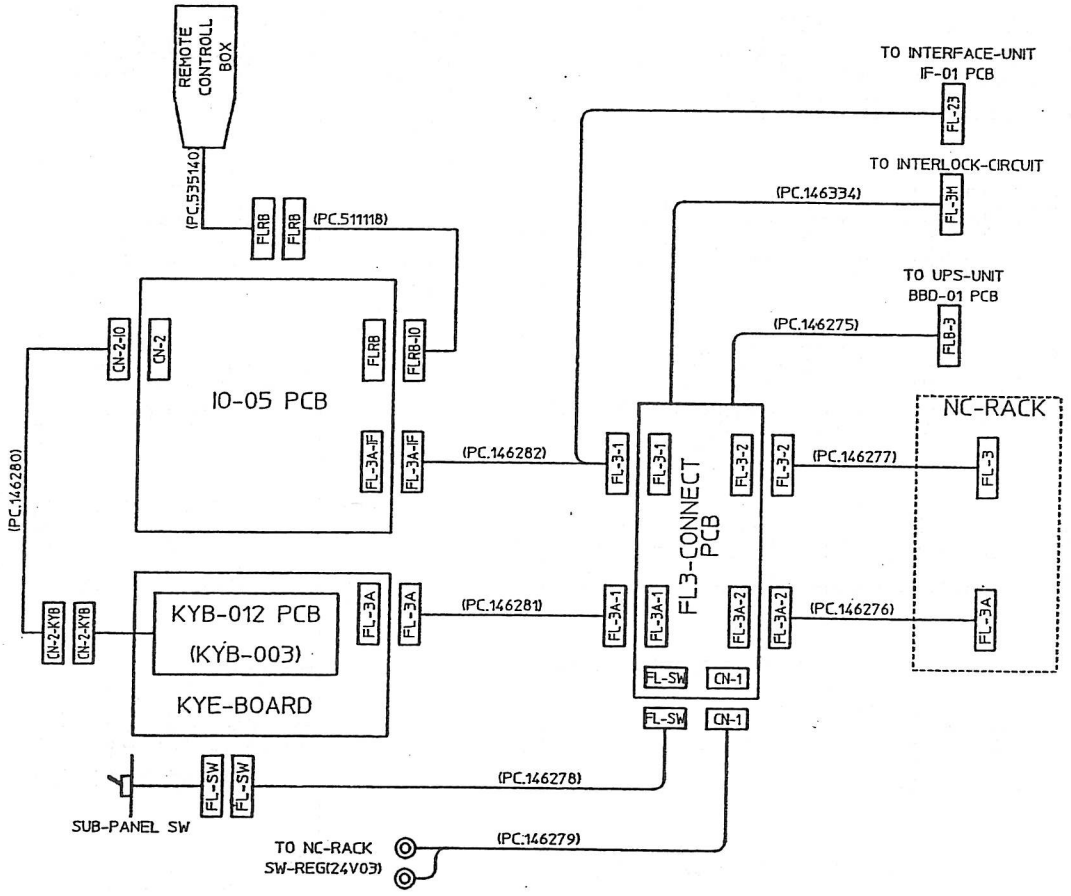
[cf.DRAWING:TE300074B,79D]

[A320 (AWT)]



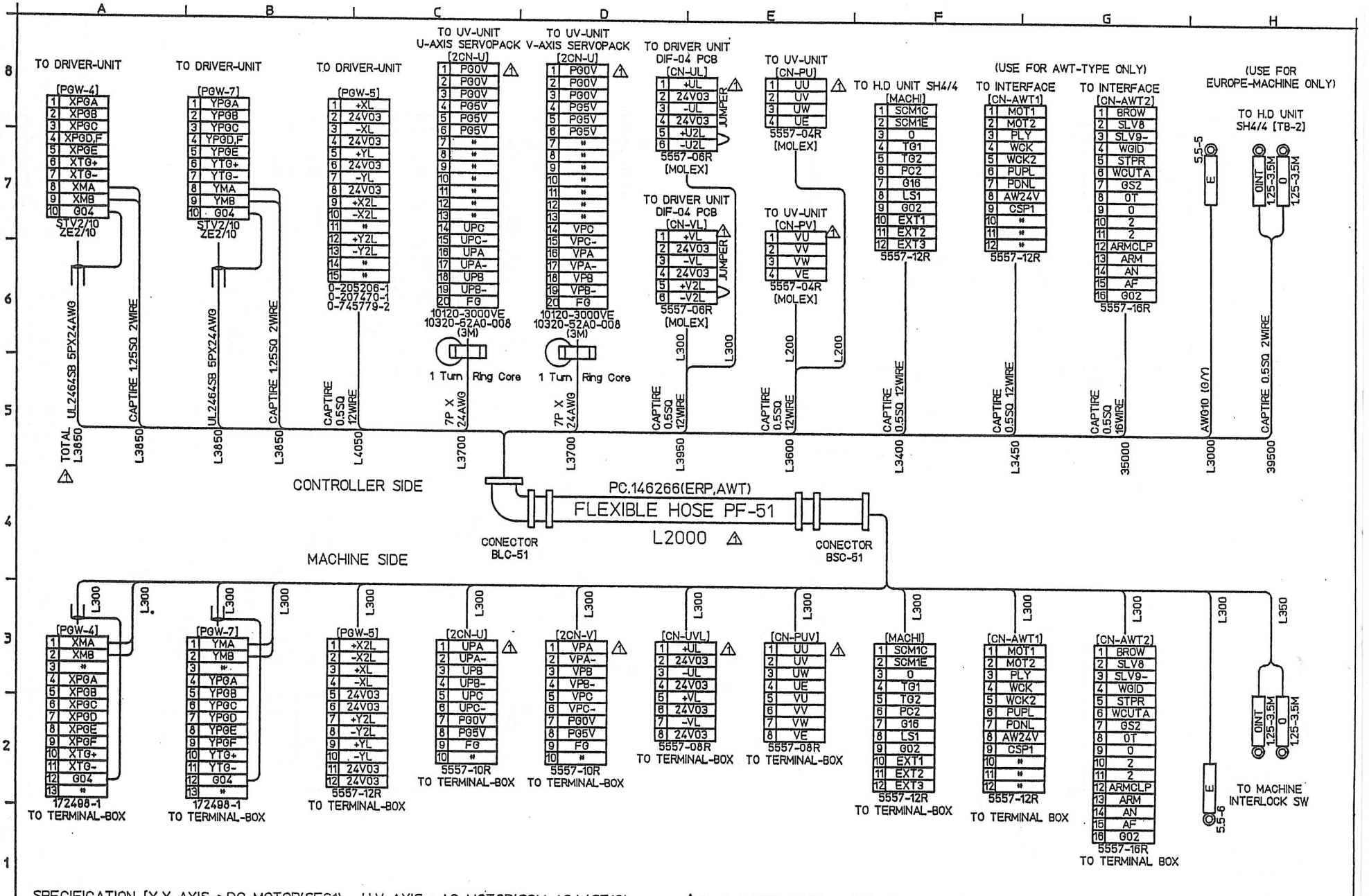
[cf.DRAWING:TE300074B,77B]

[A530 (STD/AWT)]



[cf.DRAWING:TE300440A,441A]

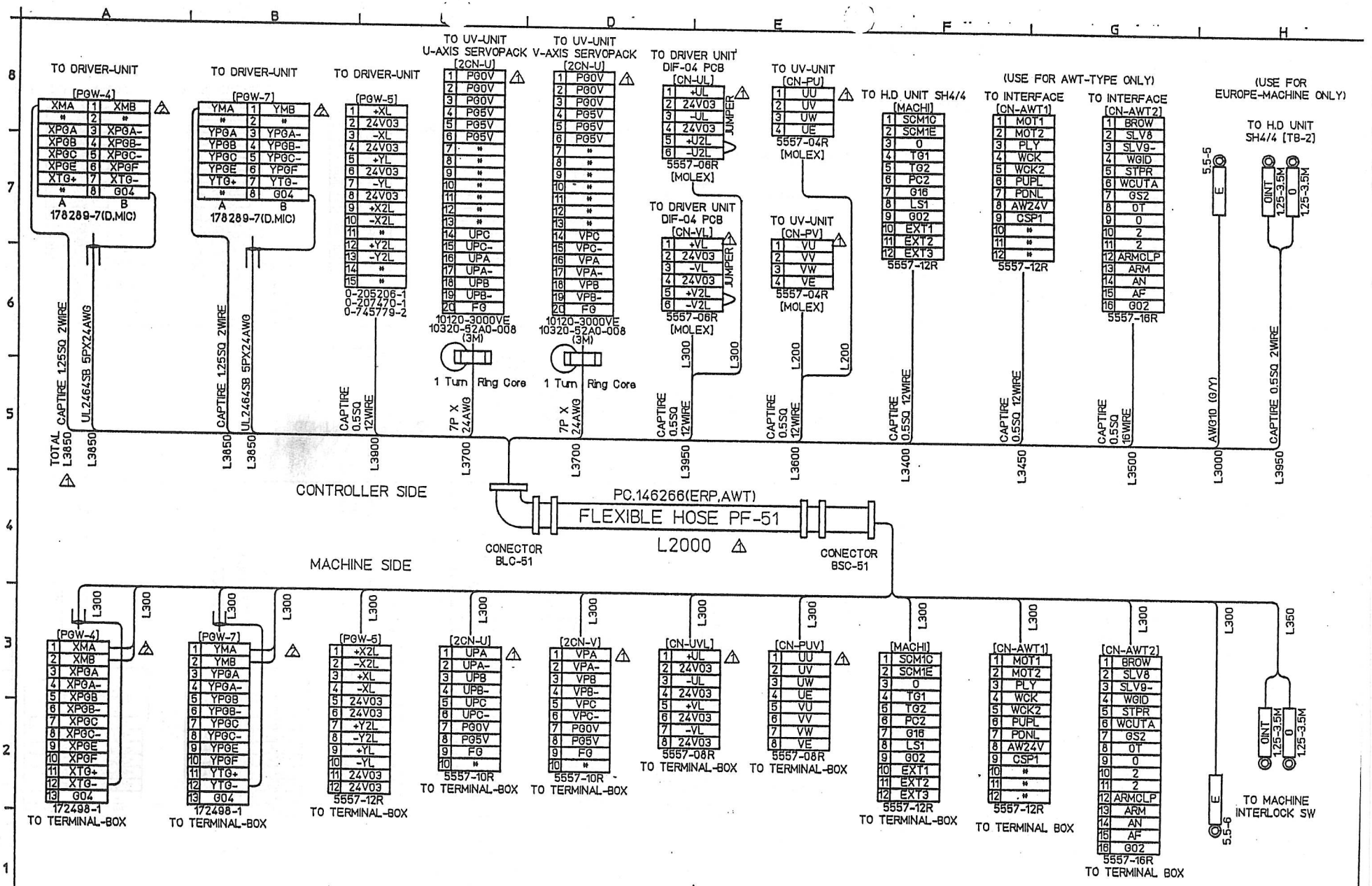
CIRCUIT DIAGRAM	TITLE	LAYOUT OF AROUND FL-3	MODEL	EX21(OPTION)	SHEET NO.	2/3	DATEE	11/Jun/96
SODICK CO.,LTD.	DWG NO.	TE3-00442-A	DESIGNED BY	Inoue	DRAWING BY	Inoue	CEHCKED BY	APPROVED BY

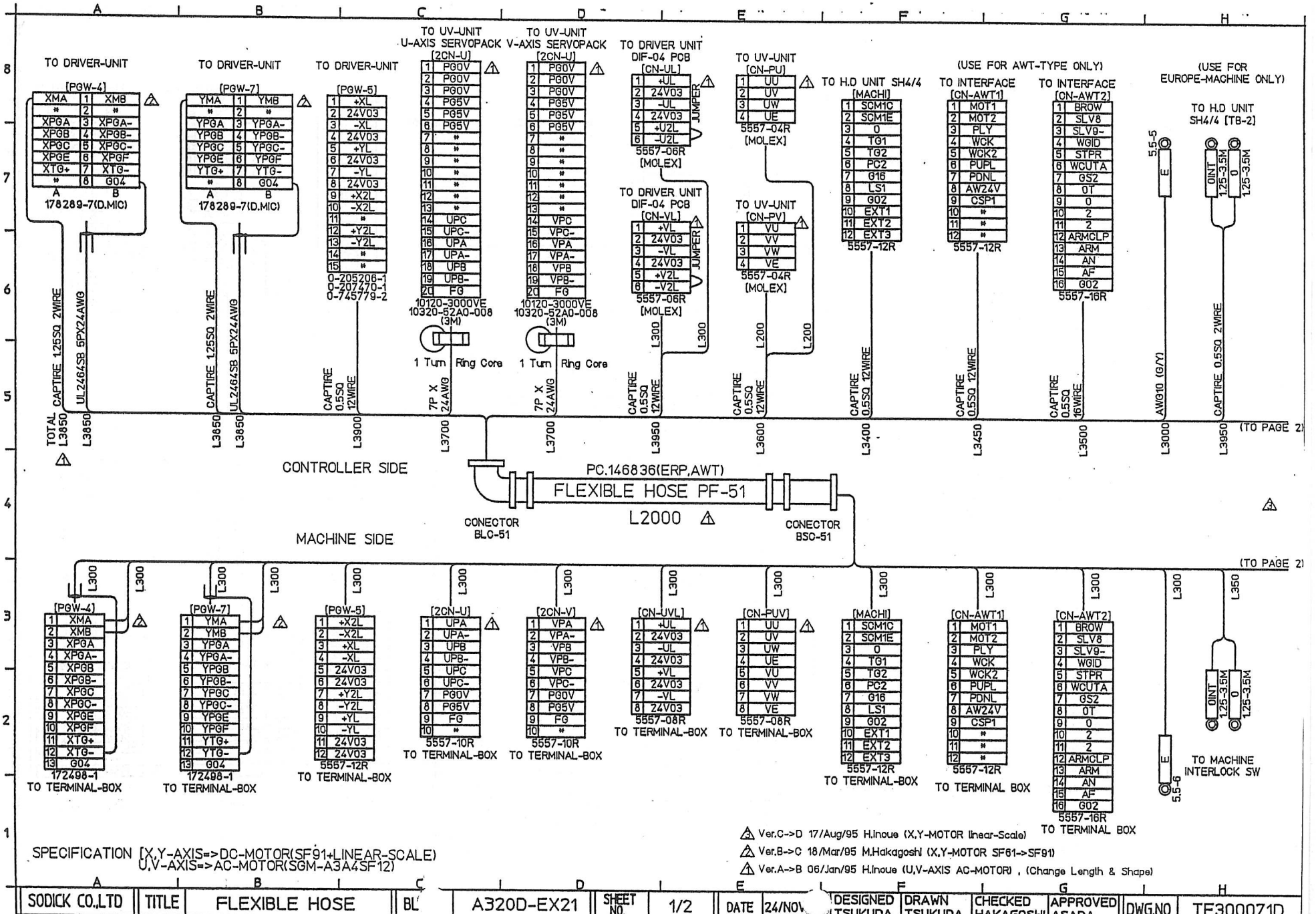


SPECIFICATION [X,Y-AXIS=>DC-MOTOR(SF61) , U,V-AXIS=>AC-MOTOR(SGM-A3A4SF12)

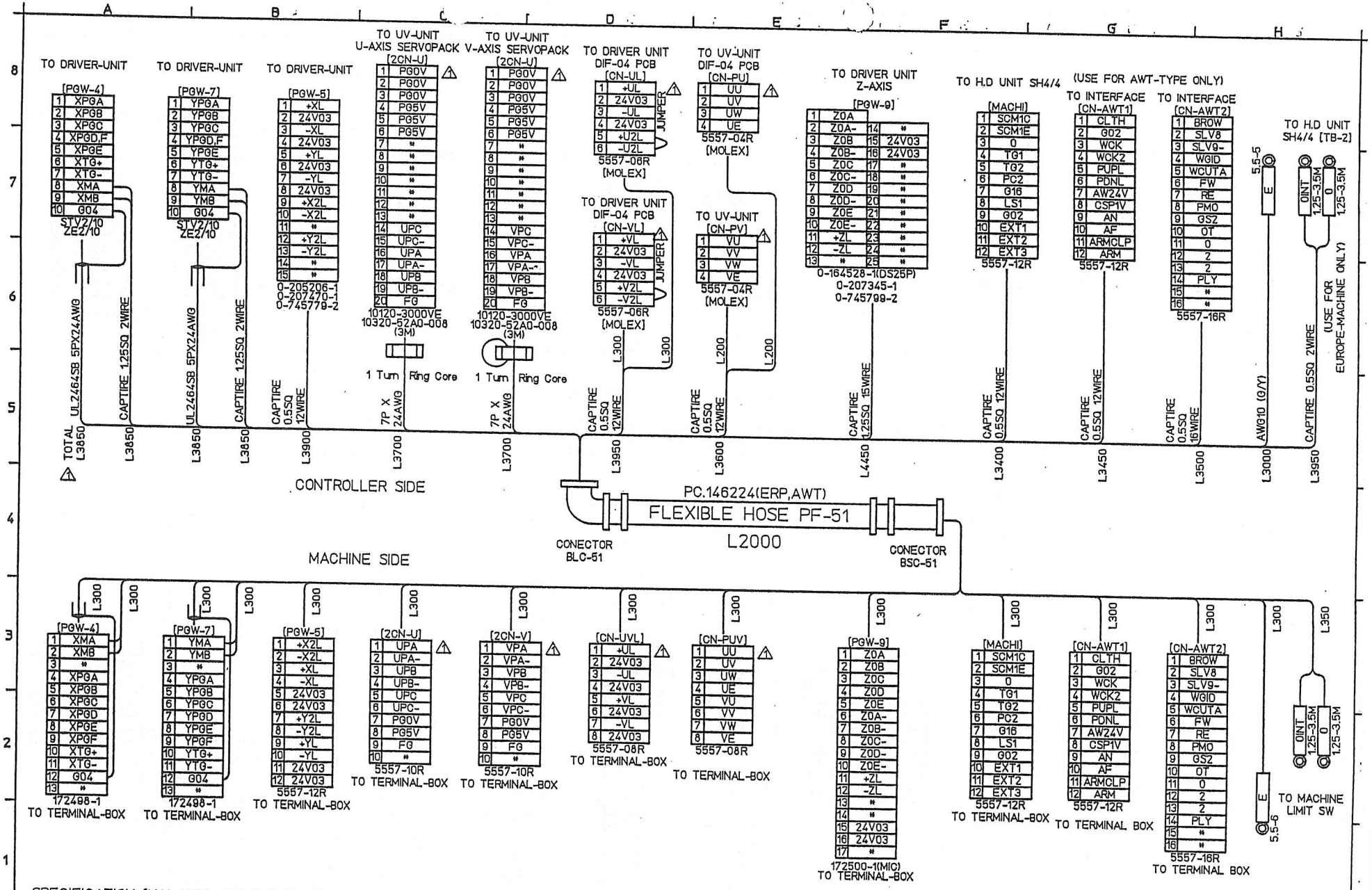
⚠ Ver.A->B 06/Jan/95 H.Inoue (U,V-AXIS AC-MOTOR) , (Change Length & Shape)

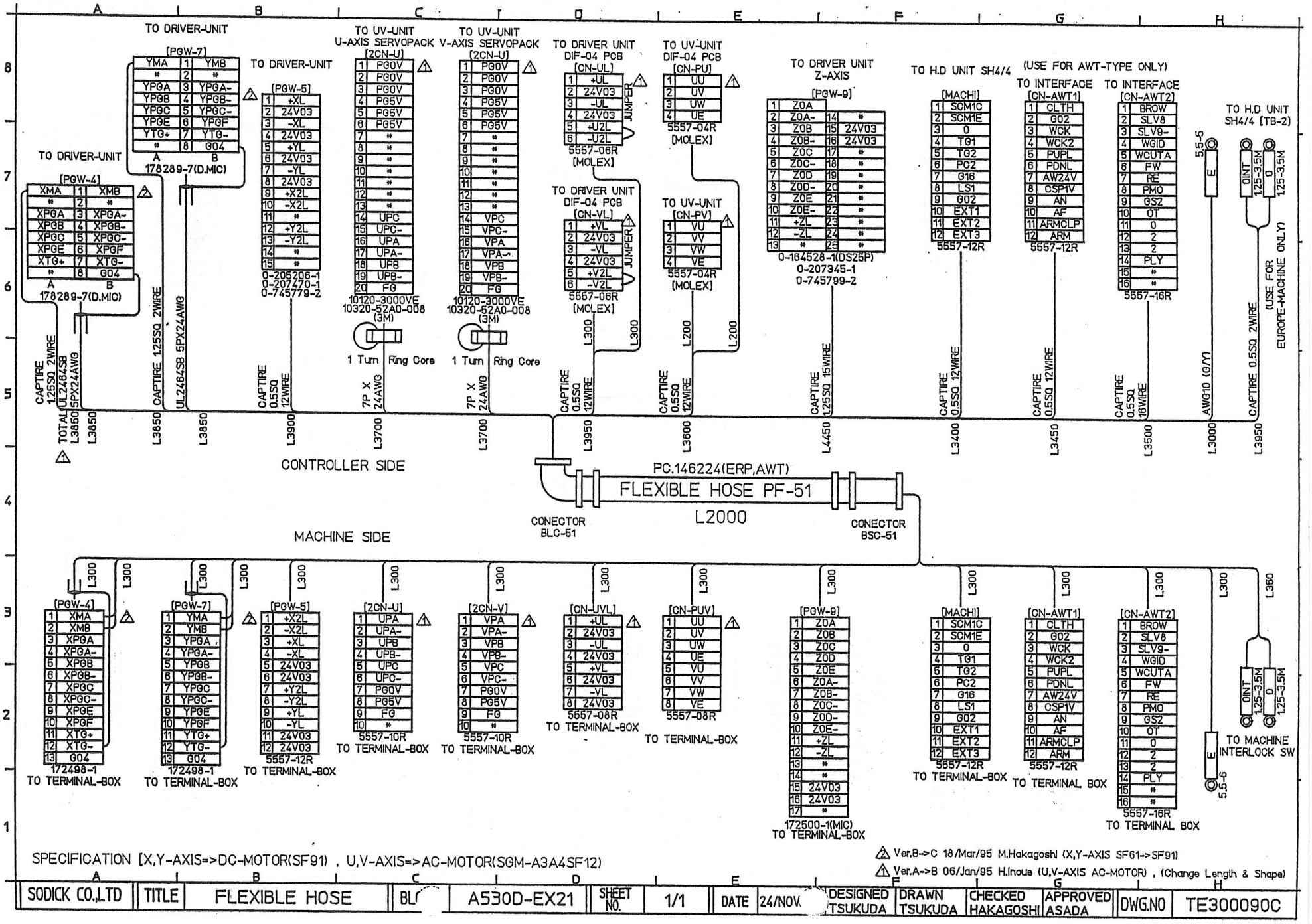
SODICK CO.,LTD	TITLE	FLEXIBLE HOSE	BL	A320D-EX21	SHEET NO.	1/1	DATE	24/NOV.	DESIGNED	DRAWN	CHECKED	APPROVED	DWG.NO	TE300071B
									TSUKUDA	TSUKUDA	HAKAGOSHI	ASADA		

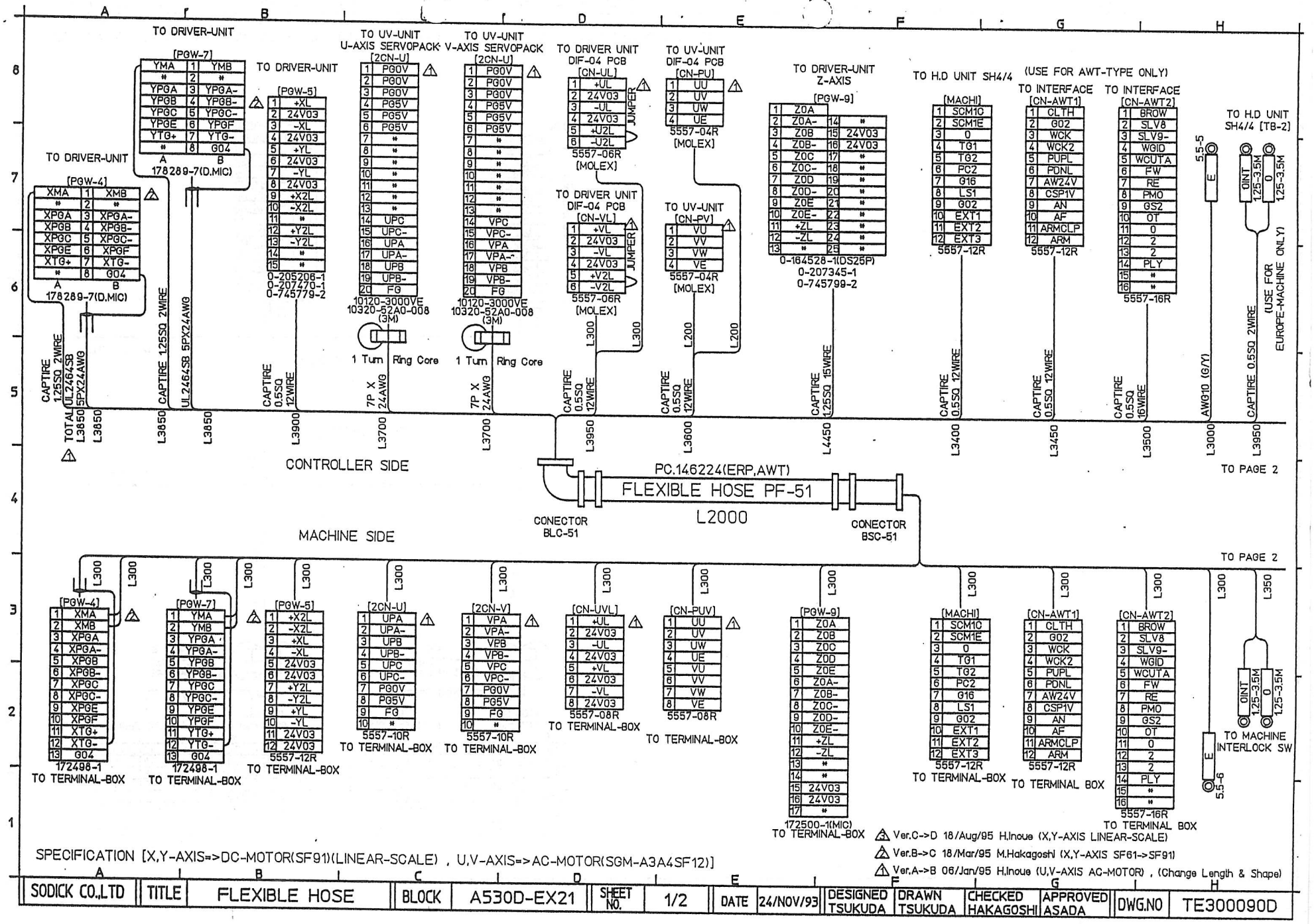

TO DRIVER-UNIT
[PGW-4]
178289-7(D.MIC)
TO DRIVER-UNIT
[PGW-7]
178289-7(D.MIC)
TO DRIVER-UNIT
[PGW-5]
0-205206-1
0-207470-1
0-745779-2
TO UV-UNIT
U-AXIS SERVOPACK
[2CN-U]
10120-3000VE
10320-52A0-008
(3M)
TO UV-UNIT
V-AXIS SERVOPACK
[2CN-U]
10120-3000VE
10320-52A0-008
(3M)
TO DRIVER UNIT
DIF-04 PCB
[CN-UL]
5557-06R
[MOLEX]
TO DRIVER UNIT
DIF-04 PCB
[CN-VL]
5557-06R
[MOLEX]
TO UV-UNIT
[CN-PU]
5557-04R
[MOLEX]
TO UV-UNIT
[CN-PV]
5557-04R
[MOLEX]
TO H.D UNIT SH4/4
[MACHI]
5557-12R
(USE FOR AWT-TYPE ONLY)
TO INTERFACE
[CN-AWT1]
5557-12R
TO INTERFACE
[CN-AWT2]
5557-16R
(USE FOR EUROPE-MACHINE ONLY)
TO H.D UNIT
SH4/4 [TB-2]
CAPTIRE 1.25SQ 2WIRE
UL2464SB 5PX24AWG
CAPTIRE 0.5SQ 12WIRE
CAPTIRE 0.5SQ 16WIRE
AWG10 (G/Y)
1 Turn Ring Core
7P X 24AWG
JUMPER
CONTROLLER SIDE
MACHINE SIDE
PC.146266(ERP,AWT)
FLEXIBLE HOSE PF-51
L2000
CONECTOR BLC-51
CONECTOR BSC-51
172498-1
TO TERMINAL-BOX
5557-12R
TO TERMINAL-BOX
5557-10R
TO TERMINAL-BOX
5557-08R
TO TERMINAL-BOX
TO TERMINAL BOX
5557-16R
TO TERMINAL BOX
TO MACHINE INTERLOCK SW
SPECIFICATION [X,Y-AXIS=>DC-MOTOR(SF91) , U,V-AXIS=>AC-MOTOR(SGM-A3A4SF12)
Ver.B->C 18/Mar/95 M.Hakagoshi (X,Y-MOTOR SF61->SF91)
Ver.A->B 06/Jan/95 H.Inoue (U,V-AXIS AC-MOTOR) , (Change Length & Shape)
SODICK CO.,LTD
TITLE
FLEXIBLE HOSE
BLOCK
A320D-EX21
SHEET NO.
1/1
DATE
24/NOV/93
DESIGNED TSUKUDA
DRAWN TSUKUDA
CHECKED HAKAGOSHI
APPROVED ASADA
DWG.NO
TE300071C



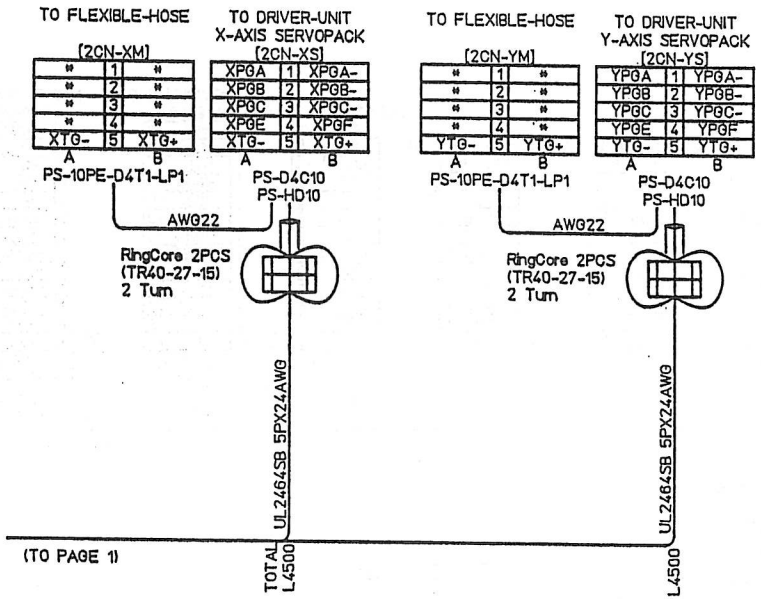
SODICK CO.,LTD	TITLE	FLEXIBLE HOSE	BL	A320D-EX21	SHEET NO.	1/2	DATE	24/NOV	DESIGNED	DRAWN	CHECKED	APPROVED	DWG.NO	TE300071D
									TSUKUDA	TSUKUDA	HAKAGOSHI	ASADA		

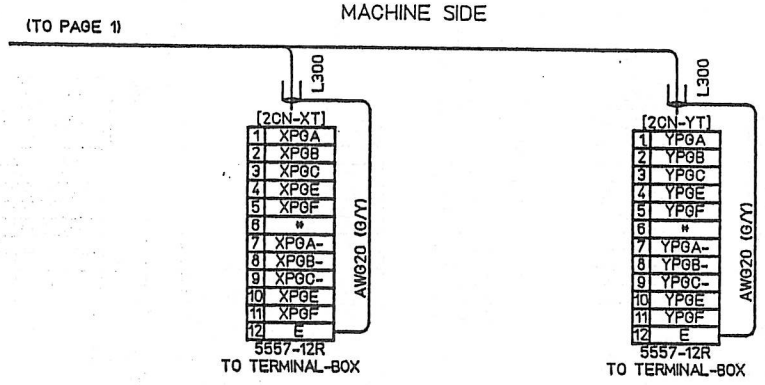

TO DRIVER-UNIT
[PGW-4]
XPGA
XPGB
XPGC
XPGD,F
XPGE
XTG+
XTG-
XMA
XMB
G04
STV2/10
ZE2/10
UL2464SB 5PX24AWG
CAPTIRE 1.25SQ 2WIRE
TOTAL L3850
L3850
TO DRIVER-UNIT
[PGW-7]
YPGA
YPGB
YPGC
YPGD,F
YPGE
YTG+
YTG-
YMA
YMB
G04
STV2/10
ZE2/10
UL2464SB 5PX24AWG
CAPTIRE 1.25SQ 2WIRE
L3850
L3850
TO DRIVER-UNIT
[PGW-5]
+XL
24V03
-XL
24V03
+YL
24V03
-YL
24V03
+X2L
-X2L
+Y2L
-Y2L
0-205206-1
0-207470-1
0-745779-2
CAPTIRE 0.5SQ 12WIRE
L3900
TO UV-UNIT
U-AXIS SERVOPACK
[2CN-U]
PG0V
PG0V
PG0V
PG5V
PG5V
PG5V
UPC
UPC-
UPA
UPA-
UPB
UPB-
FG
10120-3000VE
10320-52A0-008
(3M)
1 Turn Ring Core
7P X 24AWG
L3700
TO UV-UNIT
V-AXIS SERVOPACK
[2CN-U]
PG0V
PG0V
PG0V
PG5V
PG5V
PG5V
VPC
VPC-
VPA
VPA-
VPB
VPB-
FG
10120-3000VE
10320-52A0-008
(3M)
1 Turn Ring Core
7P X 24AWG
L3700
TO DRIVER UNIT
DIF-04 PCB
[CN-UL]
+UL
24V03
-UL
24V03
+U2L
-U2L
5557-06R
[MOLEX]
JUMPER
TO DRIVER UNIT
DIF-04 PCB
[CN-VL]
+VL
24V03
-VL
24V03
+V2L
-V2L
5557-06R
[MOLEX]
JUMPER
L300
L300
CAPTIRE 0.5SQ 12WIRE
L3950
TO UV-UNIT
DIF-04 PCB
[CN-PU]
UU
UV
UW
VE
5557-04R
[MOLEX]
TO UV-UNIT
[CN-PV]
VU
VV
VW
VE
5557-04R
[MOLEX]
L200
L200
CAPTIRE 0.5SQ 12WIRE
L3600
TO DRIVER UNIT
Z-AXIS
[PGW-9]
Z0A
Z0A-
Z0B
Z0B-
Z0C
Z0C-
Z0D
Z0D-
Z0E
Z0E-
+ZL
-ZL
24V03
24V03
0-164528-1(DS25P)
0-207345-1
0-745799-2
CAPTIRE 1.25SQ 15WIRE
L4450
TO H.D UNIT SH4/4
[MACHI]
SCM1C
SCM1E
0
TG1
TG2
PC2
G16
LS1
G02
EXT1
EXT2
EXT3
5557-12R
CAPTIRE 0.5SQ 12WIRE
L3400
(USE FOR AWT-TYPE ONLY)
TO INTERFACE
[CN-AWT1]
CLTH
G02
WCK
WCK2
PUPL
PDNL
AW24V
CSP1V
AN
AF
ARMCLP
ARM
5557-12R
CAPTIRE 0.5SQ 12WIRE
L3450
TO INTERFACE
[CN-AWT2]
BROW
SLV8
SLV9-
WGID
WCUTA
FW
RE
PMO
GS2
OT
0
2
2
PLY
CAPTIRE 0.5SQ 16WIRE
L3500
5.5-5
E
AWG10 (G/Y)
L3000
TO H.D UNIT
SH4/4 [TB-2]
ONT
0
1.25-3.5M
1.25-3.5M
CAPTIRE 0.5SQ 2WIRE
L3950
(USE FOR EUROPE-MACHINE ONLY)
CONTROLLER SIDE
PC.146224(ERP,AWT)
FLEXIBLE HOSE PF-51
L2000
CONECTOR BLC-51
CONECTOR BSC-51
MACHINE SIDE
L300
L350
[PGW-4]
XMA
XMB
XPGA
XPGB
XPGC
XPGD
XPGE
XPGF
YTG+
YTG-
G04
172498-1
TO TERMINAL-BOX
[PGW-7]
YMA
YMB
YPGA
YPGB
YPGC
YPGD
YPGE
YPGF
YTG+
YTG-
G04
172498-1
TO TERMINAL-BOX
[PGW-5]
+X2L
-X2L
+XL
-XL
24V03
24V03
+Y2L
-Y2L
+YL
-YL
24V03
24V03
5557-12R
TO TERMINAL-BOX
[2CN-U]
UPA
UPA-
UPB
UPB-
UPC
UPC-
PG0V
PG5V
FG
5557-10R
TO TERMINAL-BOX
[2CN-V]
VPA
VPA-
VPB
VPB-
VPC
VPC-
PG0V
PG5V
FG
5557-10R
TO TERMINAL-BOX
[CN-UVL]
+UL
24V03
-UL
24V03
+VL
24V03
-VL
24V03
5557-08R
TO TERMINAL-BOX
[CN-PUV]
UU
UV
UW
VE
VU
VV
VW
VE
5557-08R
TO TERMINAL-BOX
[PGW-9]
Z0A
Z0B
Z0C
Z0D
Z0E
Z0A-
Z0B-
Z0C-
Z0D-
Z0E-
+ZL
-ZL
24V03
24V03
172500-1(MIC)
TO TERMINAL-BOX
[MACHI]
SCM1C
SCM1E
0
TG1
TG2
PC2
G16
LS1
G02
EXT1
EXT2
EXT3
5557-12R
TO TERMINAL-BOX
[CN-AWT1]
CLTH
G02
WCK
WCK2
PUPL
PDNL
AW24V
CSP1V
AN
AF
ARMCLP
ARM
5557-12R
TO TERMINAL BOX
[CN-AWT2]
BROW
SLV8
SLV9-
WGID
WCUTA
FW
RE
PMO
GS2
OT
0
2
2
PLY
5557-16R
TO TERMINAL BOX
L300
E
5.5-6
ONT
0
1.25-3.5M
1.25-3.5M
TO MACHINE LIMIT SW
SPECIFICATION [X,Y-AXIS=>DC-MOTOR(SF61) , U,V-AXIS=>AC-MOTOR(SGM-A3A4SF12)
⚠ Ver.A->B 06/Jan/95 H.Inoue (U,V-AXIS AC-MOTOR) , (Change Length & Shape)
SODICK CO.,LTD
TITLE
FLEXIBLE HOSE
BLOCK
A530D-EX21
SHEET NO.
1/1
DATE
24/NOV/93
DESIGNED TSUKUDA
DRAWN TSUKUDA
CHECKED HAKAGOSHI
APPROVED ASADA
DWG.NO
TE300090B


TO DRIVER-UNIT
[PGW-7]
178289-7(D.MIC)
TO DRIVER-UNIT
[PGW-5]
0-205206-1
0-207470-1
0-745779-2
TO UV-UNIT
U-AXIS SERVOPACK
[2CN-U]
10120-3000VE
10320-52A0-008
(3M)
TO UV-UNIT
V-AXIS SERVOPACK
[2CN-U]
10120-3000VE
10320-52A0-008
(3M)
TO DRIVER UNIT
DIF-04 PCB
[CN-UL]
5557-06R
[MOLEX]
TO UV-UNIT
DIF-04 PCB
[CN-PU]
5557-04R
[MOLEX]
TO DRIVER UNIT
DIF-04 PCB
[CN-VL]
5557-06R
[MOLEX]
TO UV-UNIT
[CN-PV]
5557-04R
[MOLEX]
TO DRIVER UNIT
Z-AXIS
[PGW-9]
0-164528-1(DS25P)
0-207345-1
0-745799-2
TO H.D UNIT SH4/4
(USE FOR AWT-TYPE ONLY)
TO INTERFACE
[CN-AWT1]
TO INTERFACE
[CN-AWT2]
[MACHI]
5557-12R
5557-16R
TO H.D UNIT
SH4/4 [TB-2]
1 Turn Ring Core
7P X 24AWG
JUMPER
CONTROLLER SIDE
MACHINE SIDE
PC.146224(ERP,AWT)
FLEXIBLE HOSE PF-51
L2000
CONECTOR
BLC-51
CONECTOR
BSC-51
TO TERMINAL-BOX
TO MACHINE
INTERLOCK SW
172498-1
172500-1(MIC)
SPECIFICATION [X,Y-AXIS=>DC-MOTOR(SF91) , U,V-AXIS=>AC-MOTOR(SGM-A3A4SF12)
Ver.B->C 18/Mar/95 M.Hakagoshi (X,Y-AXIS SF61->SF91)
Ver.A->B 06/Jan/95 H.Inoue (U,V-AXIS AC-MOTOR) , (Change Length & Shape)
SODICK CO.,LTD
TITLE
FLEXIBLE HOSE
A530D-EX21
SHEET NO.
1/1
DATE
24/NOV.
DESIGNED TSUKUDA
DRAWN TSUKUDA
CHECKED HAKAGOSHI
APPROVED ASADA
DWG.NO
TE300090C



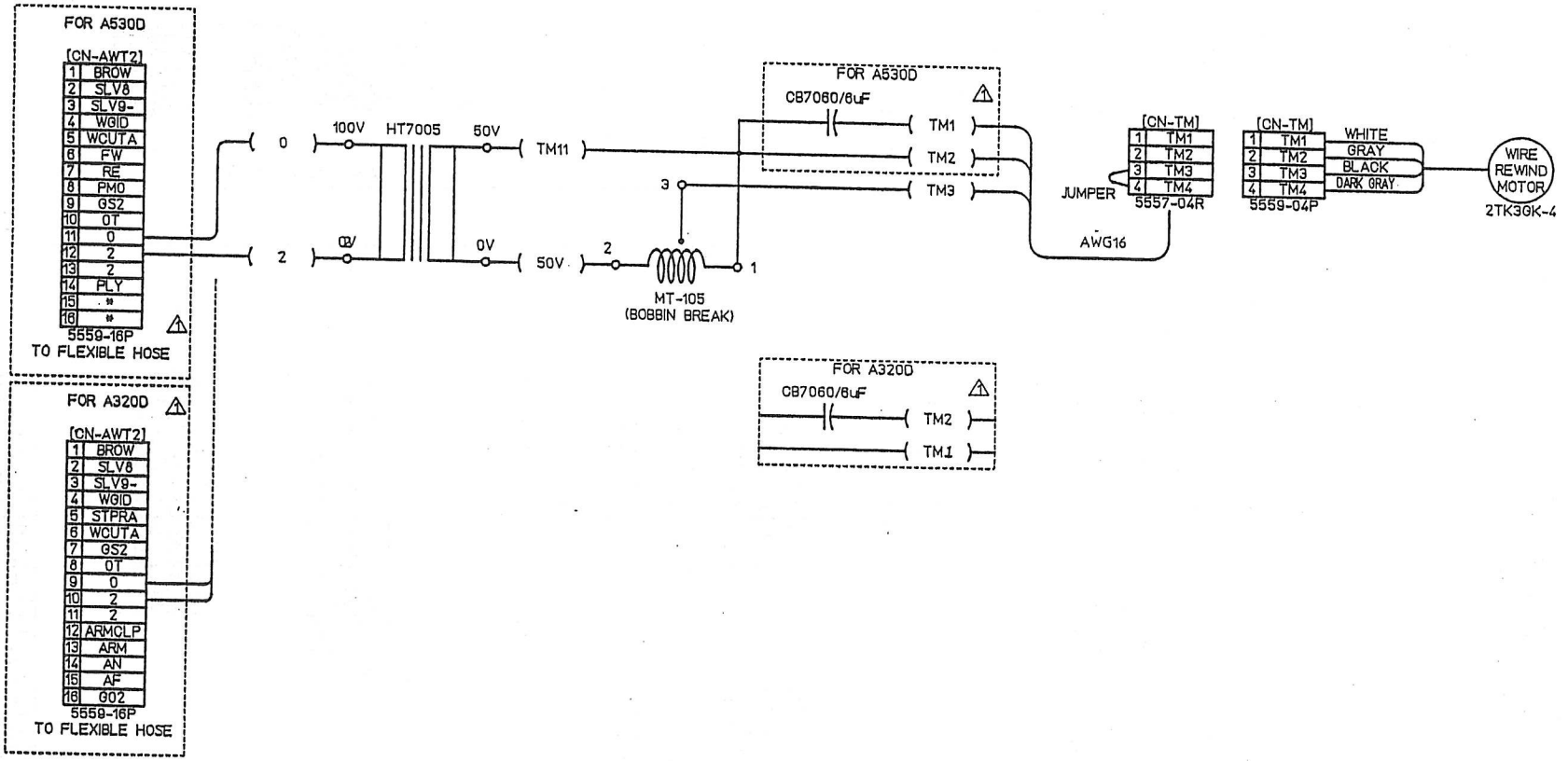
SODICK CO.,LTD	TITLE	FLEXIBLE HOSE	BLOCK	A530D-EX21	SHEET NO.	1/2	DATE	24/NOV/93	DESIGNED TSUKUDA	DRAWN TSUKUDA	CHECKED HAKAGOSHI	APPROVED ASADA	DWG.NO	TE300090D





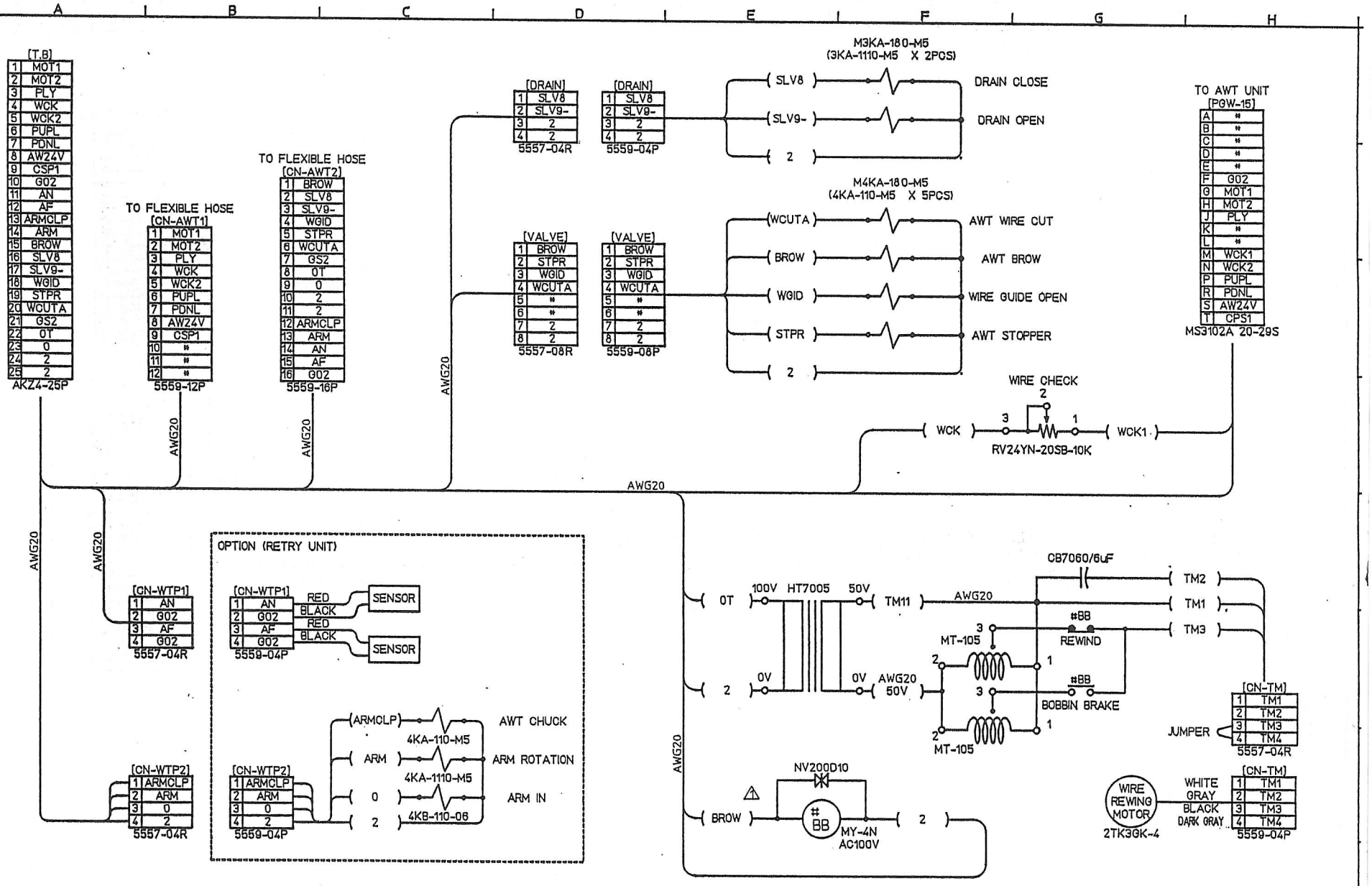
SPECIFICATION [X,Y-AXIS=>DC-MOTOR(SF91)(LINEAR-SCALE) , U,V-AXIS=>AC-MOTOR(SGM-A3A4SF12)]

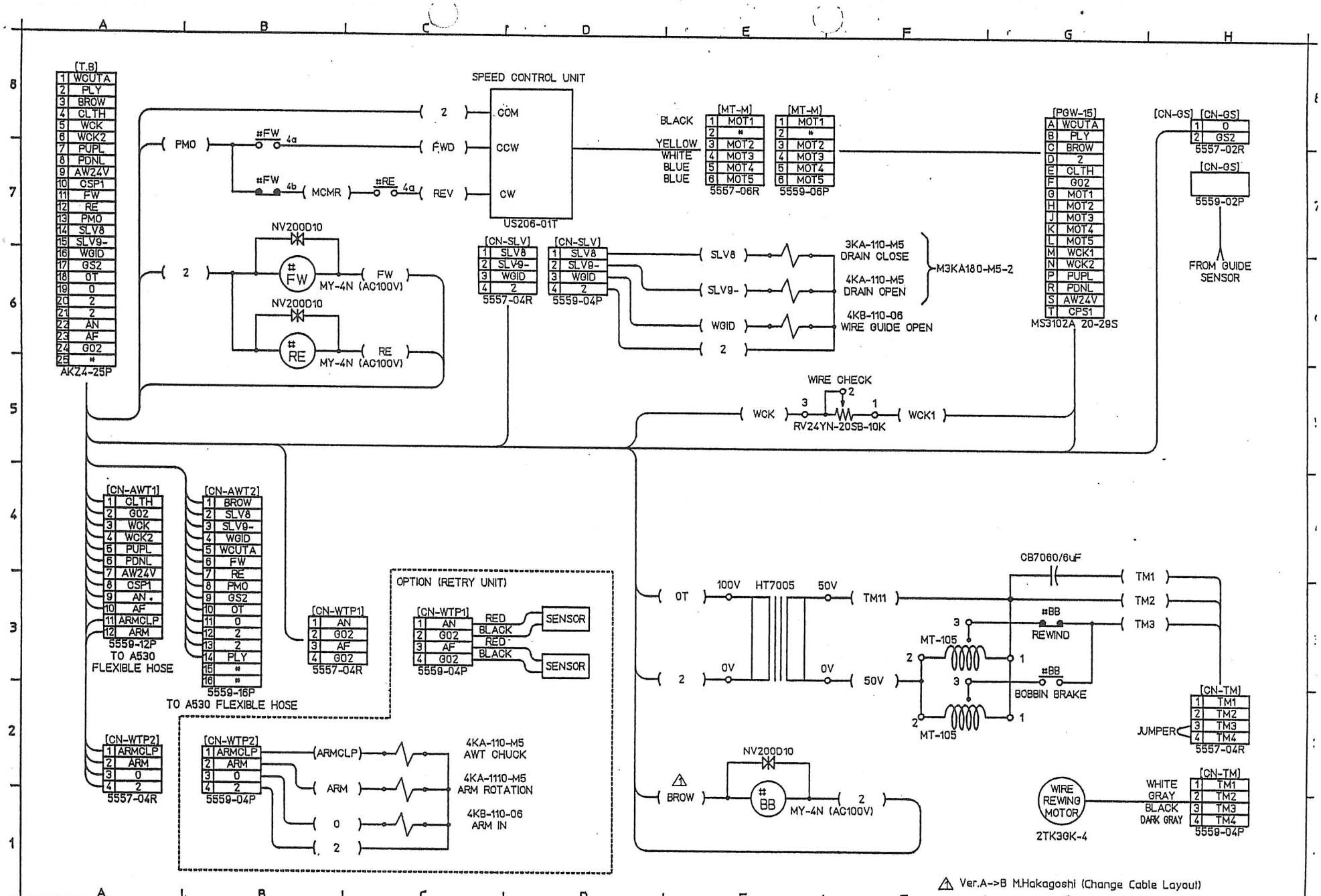
SODICK CO.,LTD	TITLE	FLEXIBLE HOSE	BLK	A320D,A530D-EX21	SHEET NO.	2/2	DATE	24/NOV	DESIGNED INOUE	DRAWN INOUE	CHECKED	APPROVED	DWG.NO	TE300439A



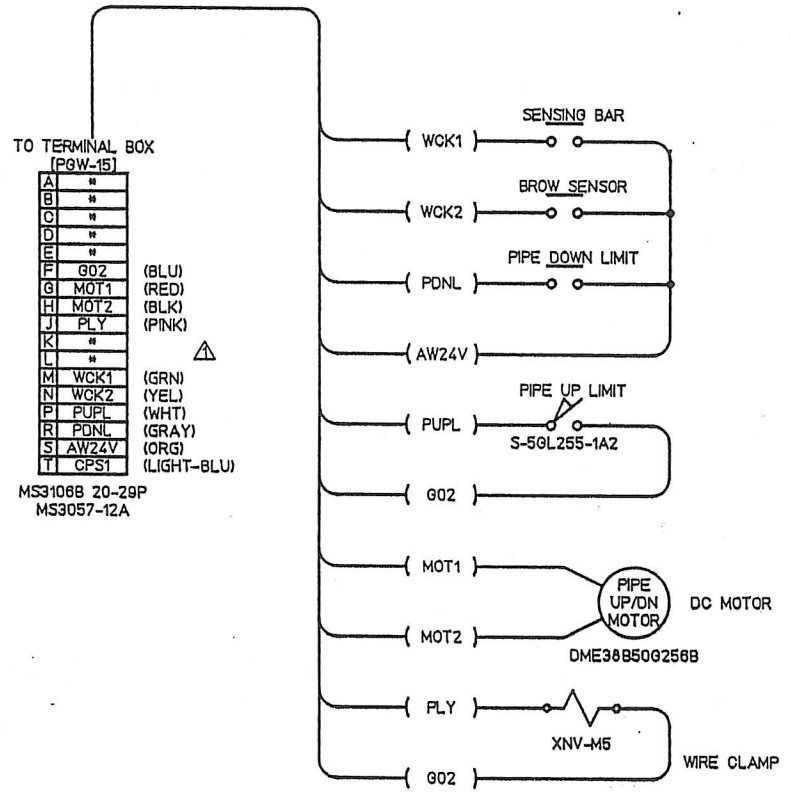
⚠ Ver.B->C 03/Jun/96 H.Inoue (A530D,A320 Common)

SODICK CO.,LTD	TITLE	TERMINAL BOX (WITHOUT AWT)	BLOCK	A530D,A320D	SHEET NO.	1/1	DATE	28/APR/94	DESIGNED	DRAWN	CHECKED	APPROVED	DWG.NO	TE300107C
									INOUE	INOUE	HAKAGOSHI	ASADA		


(T.B)
1 MOT1
2 MOT2
3 PLY
4 WCK
5 WCK2
6 PUPL
7 PDNL
8 AW24V
9 CSP1
10 G02
11 AN
12 AF
13 ARMCLP
14 ARM
15 BROW
16 SLV8
17 SLV9-
18 WGID
19 STPR
20 WCUTA
21 GS2
22 OT
23 0
24 2
25 2
AKZ4-25P
TO FLEXIBLE HOSE
(CN-AWT1)
1 MOT1
2 MOT2
3 PLY
4 WCK
5 WCK2
6 PUPL
7 PDNL
8 AW24V
9 CSP1
10 *
11 *
12 *
5559-12P
TO FLEXIBLE HOSE
(CN-AWT2)
1 BROW
2 SLV8
3 SLV9-
4 WGID
5 STPR
6 WCUTA
7 GS2
8 OT
9 0
10 2
11 2
12 ARMCLP
13 ARM
14 AN
15 AF
16 G02
5559-16P
AWG20
[DRAIN]
1 SLV8
2 SLV9-
3 2
4 2
5557-04R
[DRAIN]
1 SLV8
2 SLV9-
3 2
4 2
5559-04P
M3KA-180-M5
(3KA-1110-M5 X 2PCS)
SLV8
SLV9-
2
DRAIN CLOSE
DRAIN OPEN
[VALVE]
1 BROW
2 STPR
3 WGID
4 WCUTA
5 *
6 *
7 2
8 2
5557-08R
[VALVE]
1 BROW
2 STPR
3 WGID
4 WCUTA
5 *
6 *
7 2
8 2
5559-08P
M4KA-180-M5
(4KA-110-M5 X 5PCS)
WCUTA
BROW
WGID
STPR
2
AWT WIRE CUT
AWT BROW
WIRE GUIDE OPEN
AWT STOPPER
TO AWT UNIT
(PGW-15)
A *
B *
C *
D *
E *
F G02
G MOT1
H MOT2
J PLY
K *
L *
M WCK1
N WCK2
P PUPL
R PDNL
S AW24V
T CPS1
MS3102A 20-29S
WIRE CHECK
WCK
WCK1
RV24YN-20SB-10K
[CN-WTP1]
1 AN
2 G02
3 AF
4 G02
5557-04R
[CN-WTP1]
1 AN
2 G02
3 AF
4 G02
5559-04P
RED
BLACK
RED
BLACK
SENSOR
SENSOR
OPTION (RETRY UNIT)
[CN-WTP2]
1 ARMCLP
2 ARM
3 0
4 2
5557-04R
[CN-WTP2]
1 ARMCLP
2 ARM
3 0
4 2
5559-04P
ARMCLP
ARM
0
2
4KA-110-M5
4KA-1110-M5
4KB-110-06
AWT CHUCK
ARM ROTATION
ARM IN
0T
2
100V
0V
HT7005
50V
0V
TM11
AWG20
50V
CB7060/6uF
TM2
TM1
TM3
#BB
REWIND
MT-105
#BB
BOBBIN BRAKE
MT-105
JUMPER
[CN-TM]
1 TM1
2 TM2
3 TM3
4 TM4
5557-04R
[CN-TM]
1 TM1
2 TM2
3 TM3
4 TM4
5559-04P
WIRE REWING MOTOR
2TK3GK-4
WHITE
GRAY
BLACK
DARK GRAY
NV200D10
BROW
#BB
MY-4N
AC100V
2
Ver.A->B 28/Mar/94 M.Hakagoshi (Change Cable Layout)
SODICK CO.,LTD
TITLE
TERMINAL BOX
A320D (AWT)
SHEET NO.
1/1
DATE
7/MAY
DESIGNED INOUE
DRAWN INOUE
CHECKED HAKAGOSHI
APPROVED ASADA
DWG.NO
TE300046B

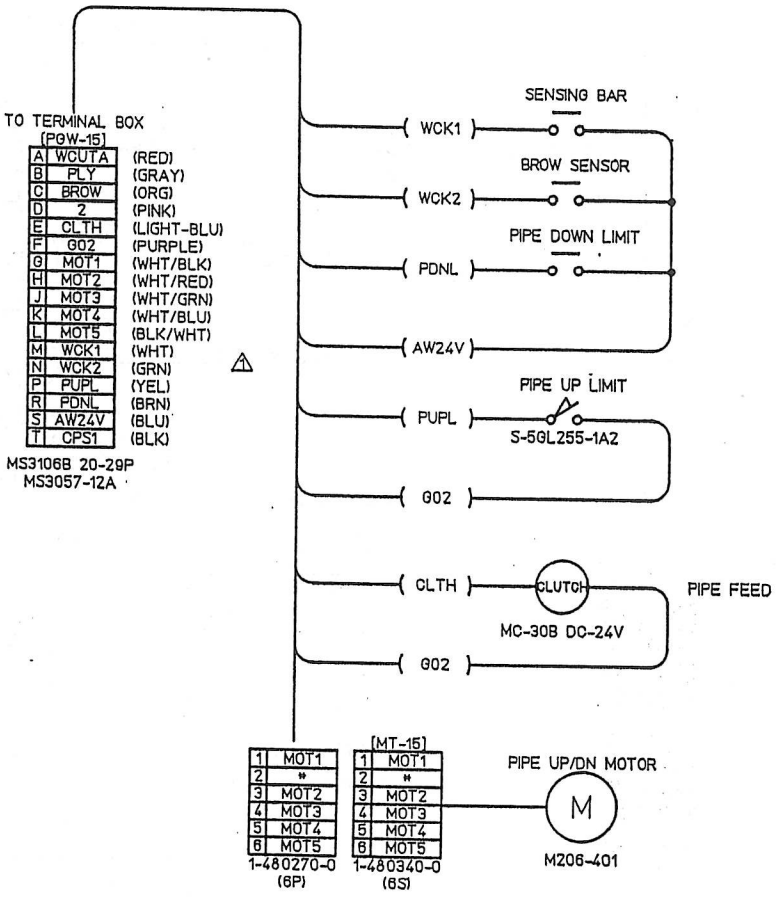


SODICK CO.,LTD	TITLE	TERMINAL BOX	BLOCK	A530D(AWT)	SHEET NO.	1/1	DATE	27/APR/94	DESIGNED	DRAWN	CHECKED	APPROVED	DWG.NO	TE300095B
									TSUKUDA	TSUKUDA	HAKAGOSHI	ASADA		



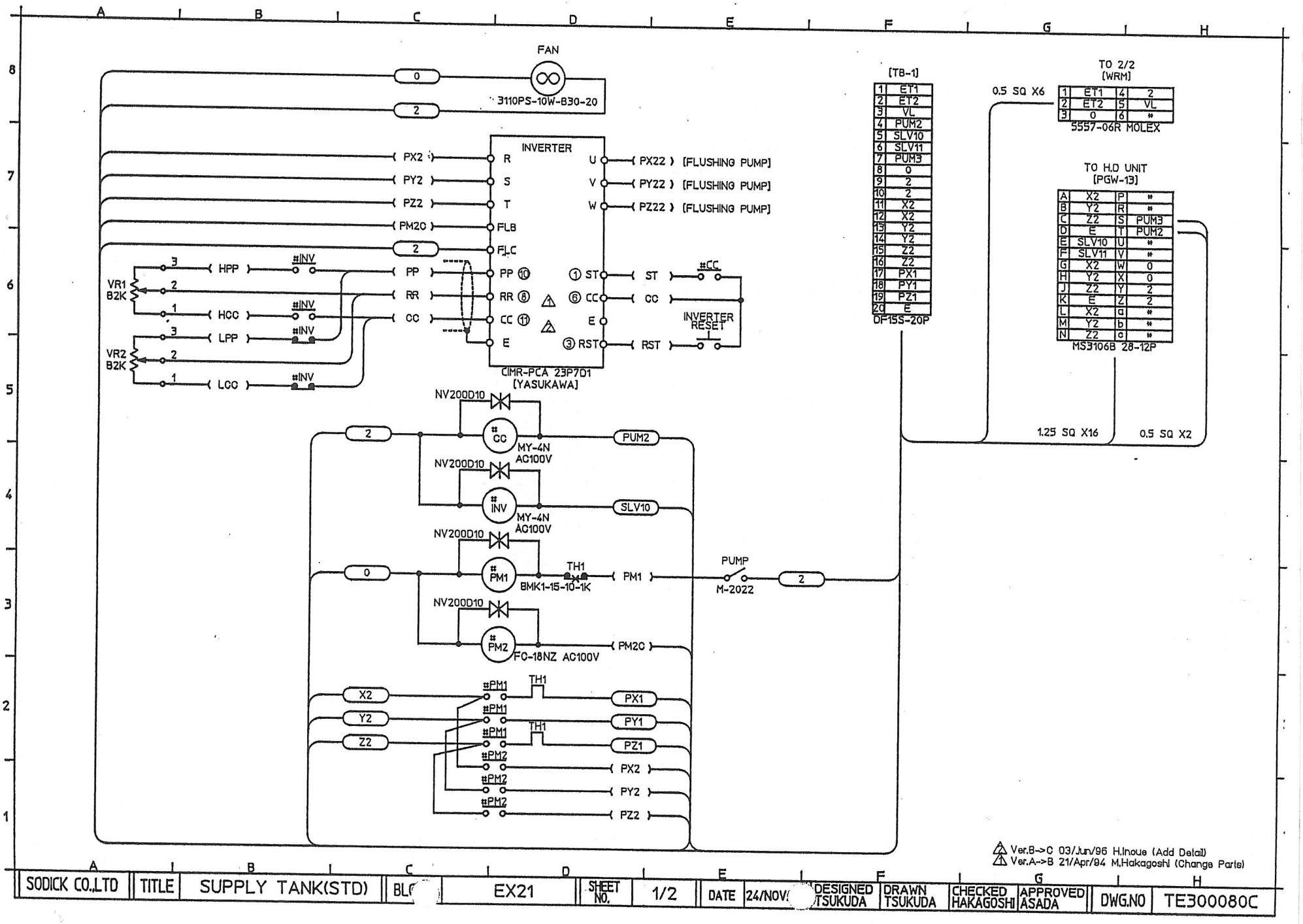
⚠ Ver.A->B 30/May/96 H.Inoue (Add Color)

SODICK CO.,LTD	TITLE	AWT UNIT	BLOCK	A320D(AWT)	SHEET NO.	1/1	DATE	7/MAY/	DESIGNED	DRAWN	CHECKED	APPROVED	DWG.NO	TE300120B
									INOUE	INOUE	HAKAGOSHI	ASADA		

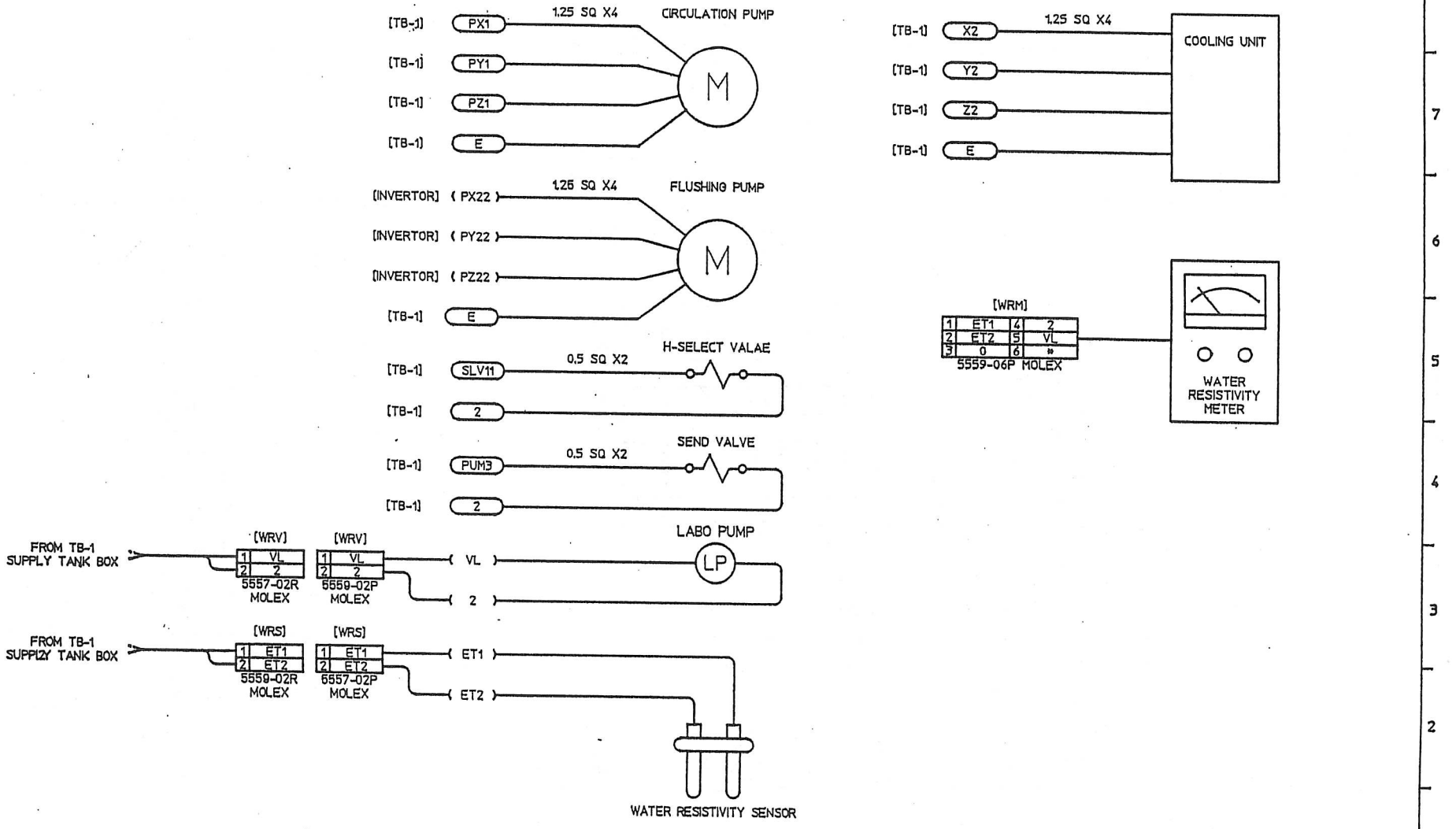


⚠ Ver.A->B 30/May/96 H.Inoue (Add Color)

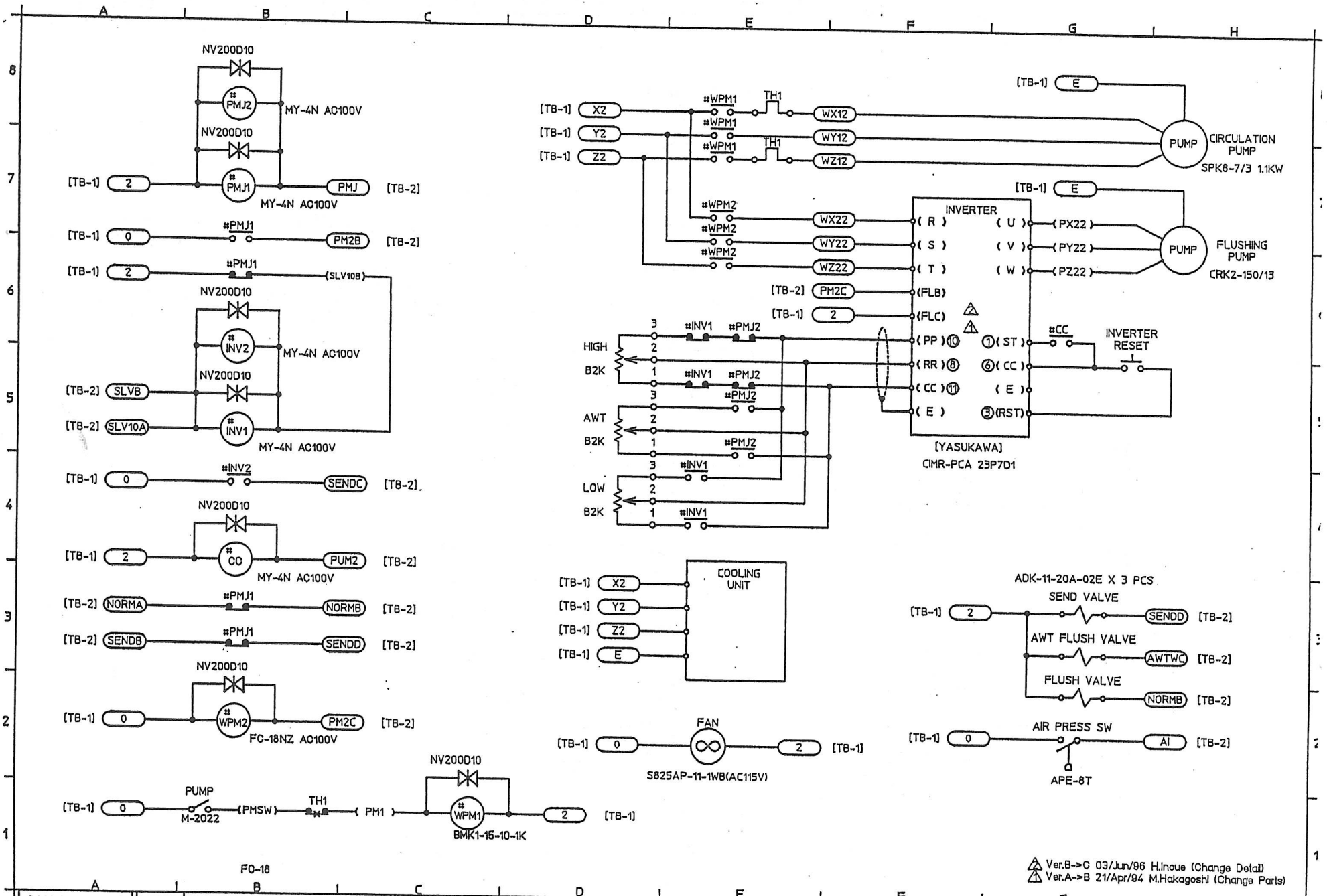
SODICK CO.,LTD	TITLE	AWT UNIT	BLOCK	A530D(AWT)	SHEET NO.	1/1	DATE	7/MAY/94	DESIGNED INOUE	DRAWN INOUE	CHECKED HAKAGOSHI	APPROVED ASADA	DWG.NO	TE300121B



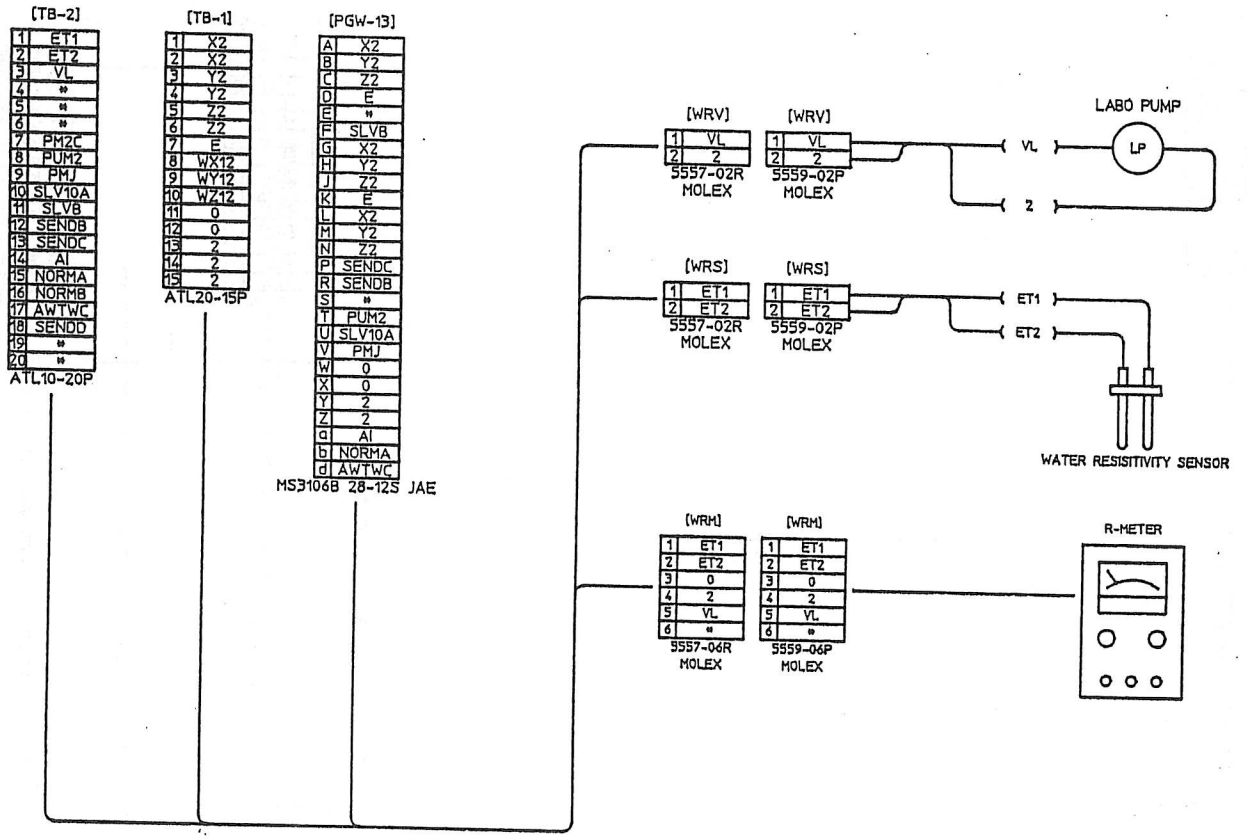
SODICK CO.,LTD	TITLE	SUPPLY TANK(STD)	BL	EX21	SHEET NO.	1/2	DATE	24/NOV	DESIGNED TSUKUDA	DRAWN TSUKUDA	CHECKED HAKAGOSHI	APPROVED ASADA	DWG.NO	TE300080C



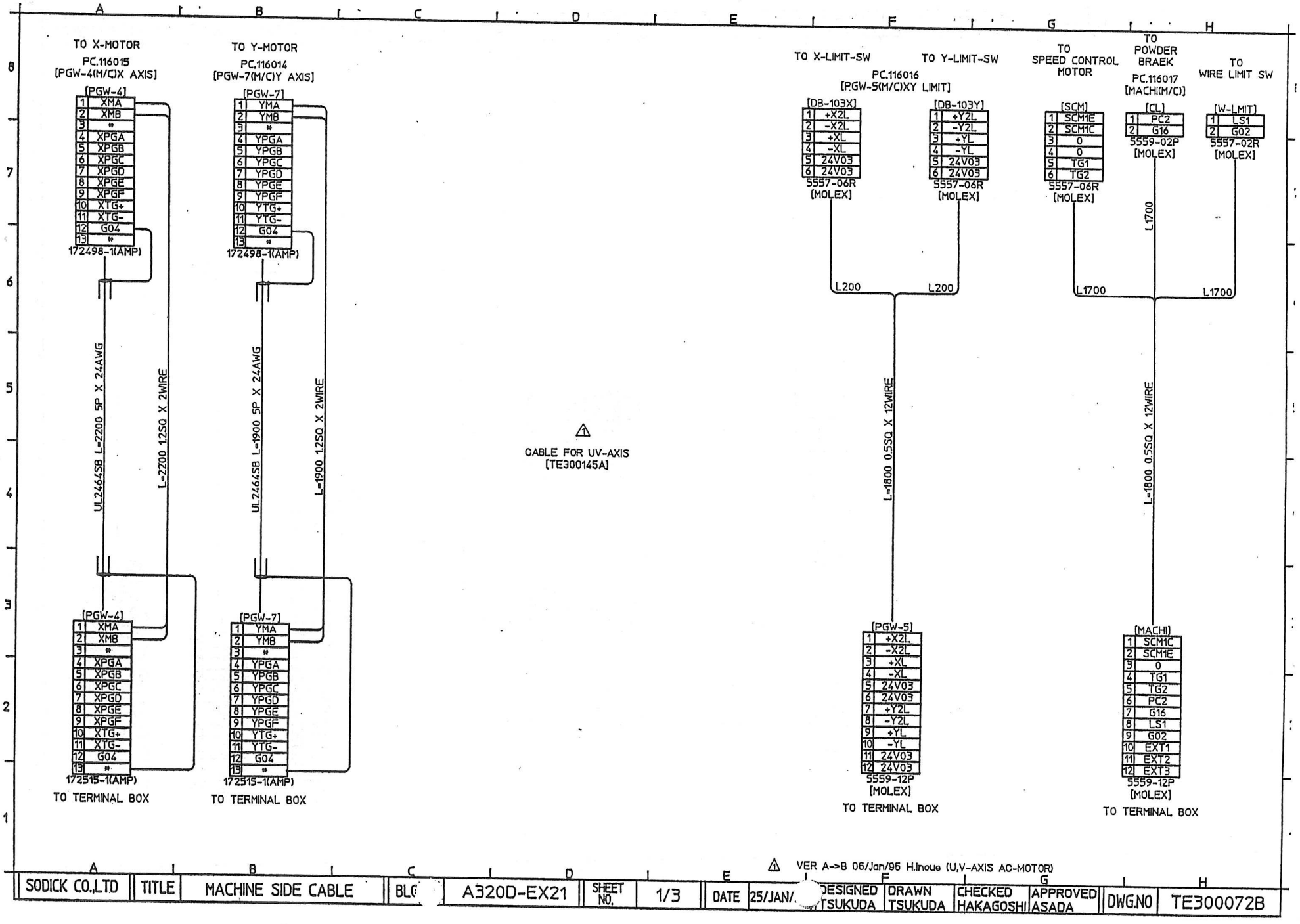
SODICK CO.,LTD	TITLE	EX21 SUPPLY TANK (D)	BLOCK	CIRCUIT DIA.	SHEET NO.	2/2	DATE	24/NOV/93	DESIGNED TSUKUDA	DRAWN TSUKUDA	CHECKED HAKAGOSHI	APPROVED ASADA	DWG.NO	TE300081A

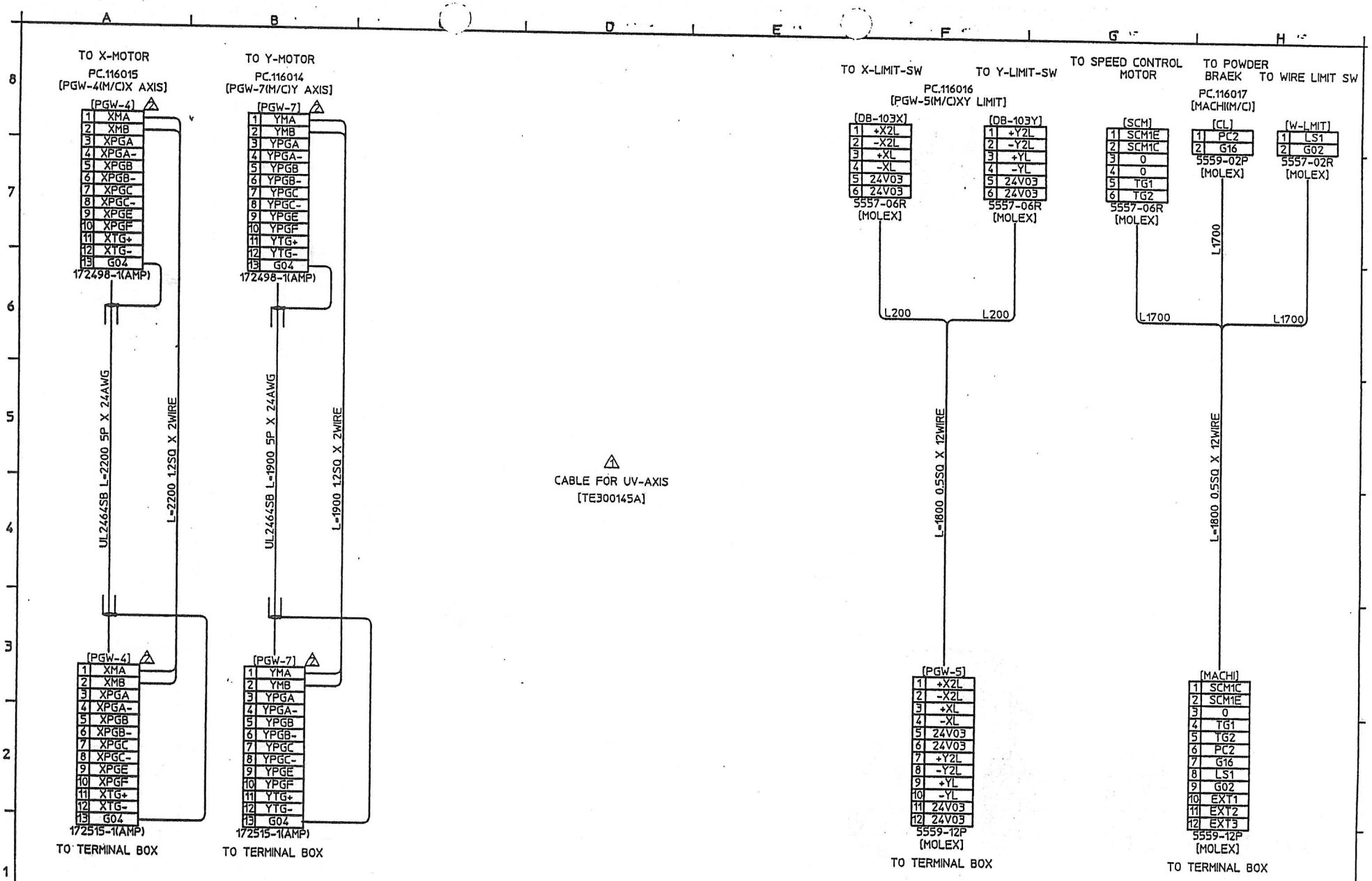


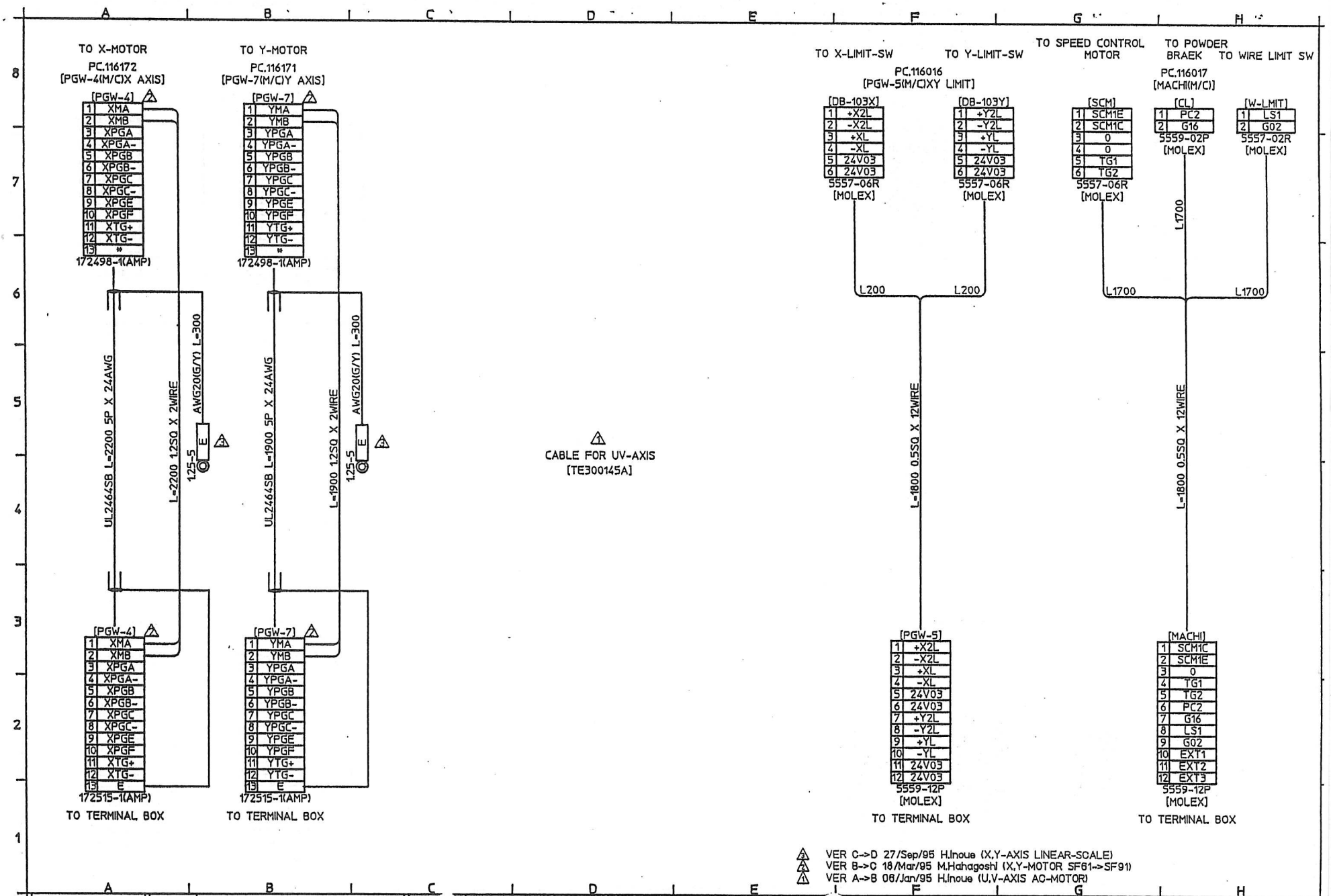
SODICK CO.,LTD	TITLE	SUPPLY TANK(AWT)	BLO	EX21	SHEET NO.	1/2	DATE	27/APR/	DESIGNED TSUKUDA	DRAWN TSUKUDA	CHECKED HAKAGOSHI	APPROVED KASADA	DWG.NO	TE300082C

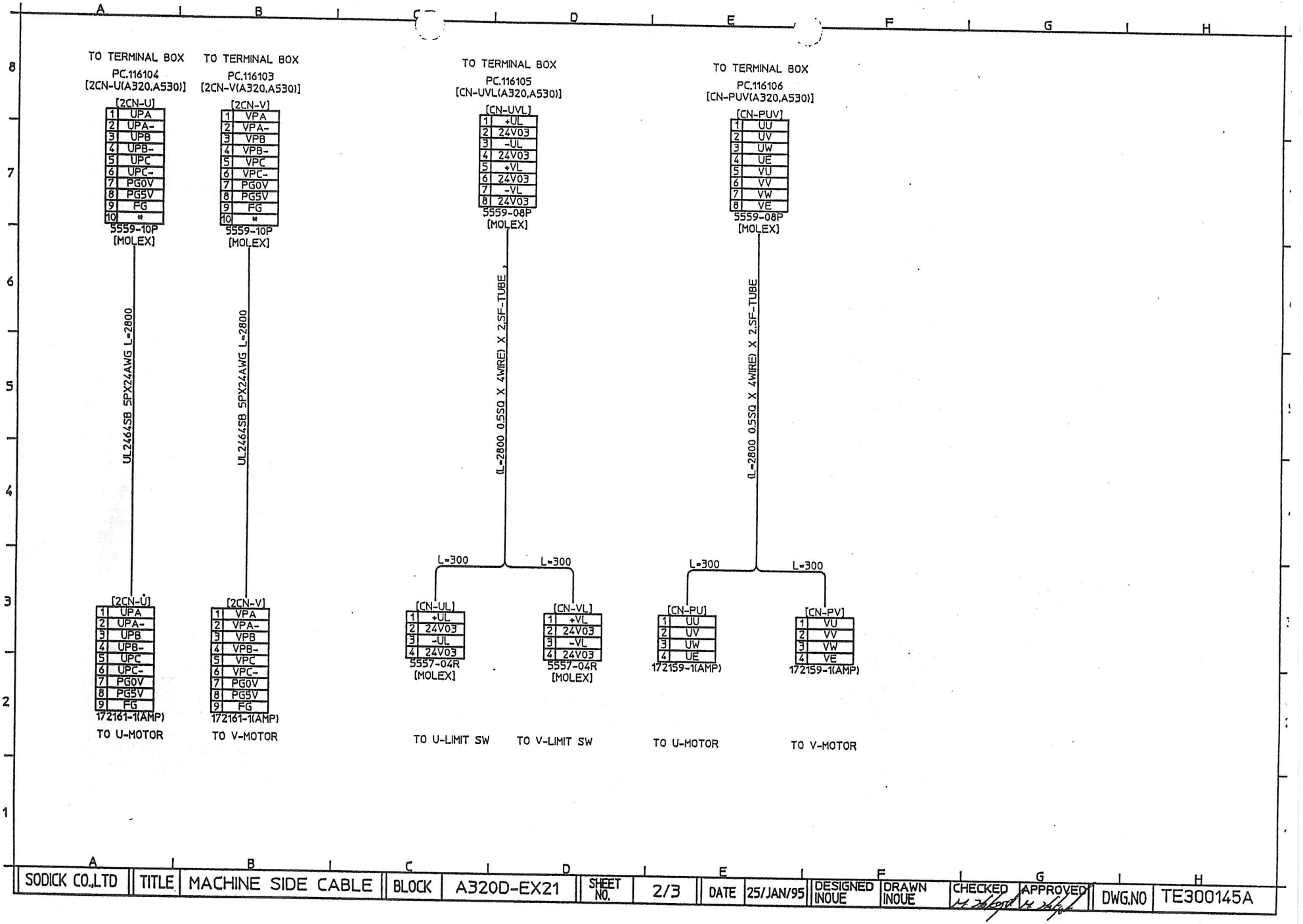


SODICK CO.,LTD	TITLE	EX21 SUPPLY TANK (AWT)	BLOCK	CIRCUIT DIA.	SHEET NO.	2/2	DATE	24/NOV/93	DESIGNED NAGAMORI	DRAWN NAGAMORI	CHECKED HAKAGOSHI	APPROVED KASADA	DWG.NO	TE300083A

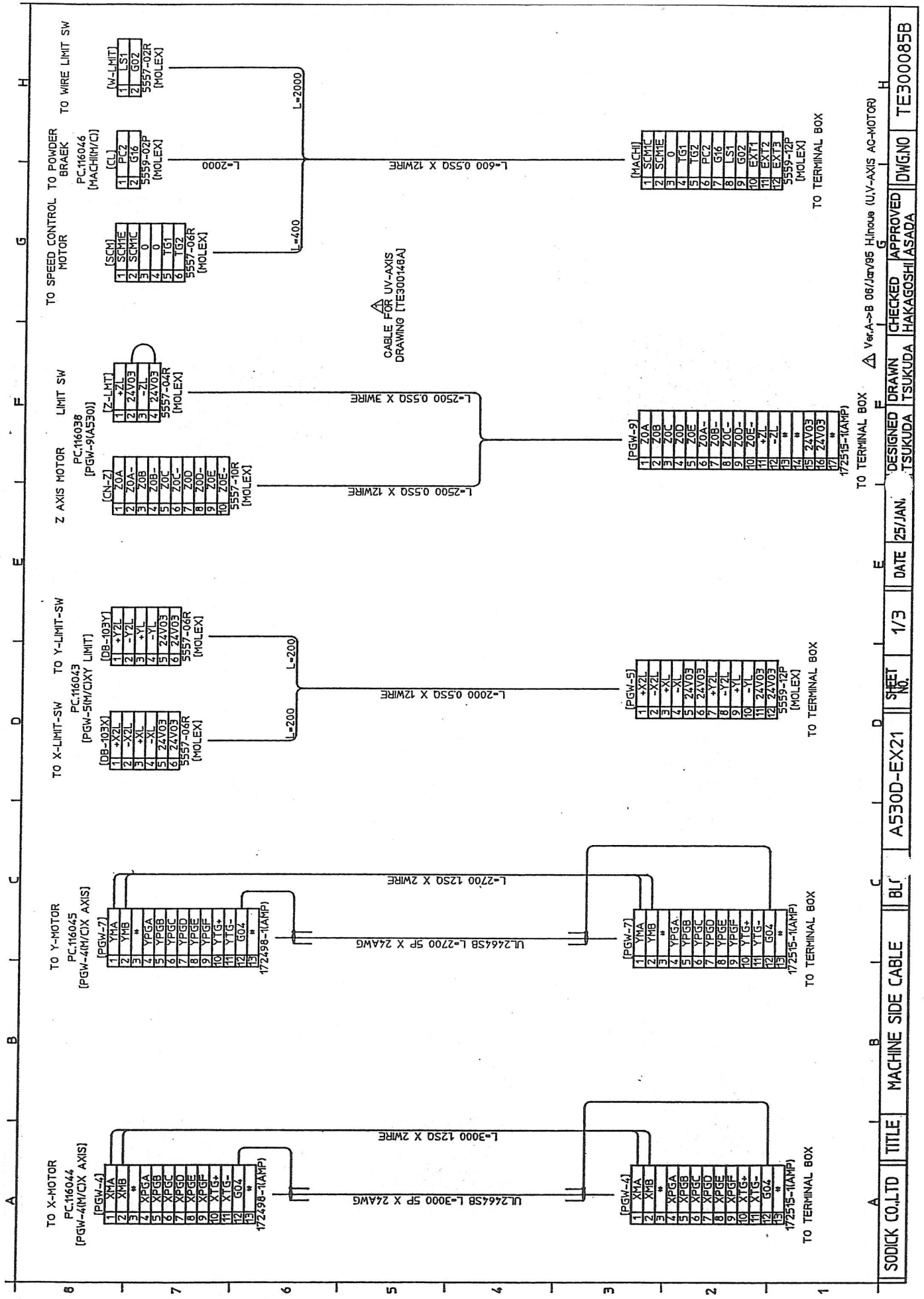

TO X-MOTOR
PC.116015
[PGW-4(M/C)X AXIS]
[PGW-4]
1 XMA
2 XMB
3 *
4 XPGA
5 XPGB
6 XPGC
7 XPGD
8 XPGE
9 XPGF
10 XTG+
11 XTG-
12 G04
13 *
172498-1(AMP)
UL2464SB L=2200 5P X 24AWG
L=2200 1.2SQ X 2WIRE
[PGW-4]
1 XMA
2 XMB
3 *
4 XPGA
5 XPGB
6 XPGC
7 XPGD
8 XPGE
9 XPGF
10 XTG+
11 XTG-
12 G04
13 *
172515-1(AMP)
TO TERMINAL BOX
TO Y-MOTOR
PC.116014
[PGW-7(M/C)Y AXIS]
[PGW-7]
1 YMA
2 YMB
3 *
4 YPGA
5 YPGB
6 YPGC
7 YPGD
8 YPGE
9 YPGF
10 YTG+
11 YTG-
12 G04
13 *
172498-1(AMP)
UL2464SB L=1900 5P X 24AWG
L=1900 1.2SQ X 2WIRE
[PGW-7]
1 YMA
2 YMB
3 *
4 YPGA
5 YPGB
6 YPGC
7 YPGD
8 YPGE
9 YPGF
10 YTG+
11 YTG-
12 G04
13 *
172515-1(AMP)
TO TERMINAL BOX
1 CABLE FOR UV-AXIS
[TE300145A]
TO X-LIMIT-SW
TO Y-LIMIT-SW
PC.116016
[PGW-5(M/C)XY LIMIT]
[DB-103X]
1 +X2L
2 -X2L
3 +XL
4 -XL
5 24V03
6 24V03
5557-06R
[MOLEX]
[DB-103Y]
1 +Y2L
2 -Y2L
3 +YL
4 -YL
5 24V03
6 24V03
5557-06R
[MOLEX]
L200
L200
L=1800 0.5SQ X 12WIRE
[PGW-5]
1 +X2L
2 -X2L
3 +XL
4 -XL
5 24V03
6 24V03
7 +Y2L
8 -Y2L
9 +YL
10 -YL
11 24V03
12 24V03
5559-12P
[MOLEX]
TO TERMINAL BOX
TO SPEED CONTROL MOTOR
[SCM]
1 SCM1E
2 SCM1C
3 0
4 0
5 TG1
6 TG2
5557-06R
[MOLEX]
L1700
TO POWDER BRAEK
PC.116017
[MACHI(M/C)]
[CL]
1 PC2
2 G16
5559-02P
[MOLEX]
L1700
L=1800 0.5SQ X 12WIRE
[MACHI]
1 SCM1C
2 SCM1E
3 0
4 TG1
5 TG2
6 PC2
7 G16
8 LS1
9 G02
10 EXT1
11 EXT2
12 EXT3
5559-12P
[MOLEX]
TO TERMINAL BOX
TO WIRE LIMIT SW
[W-LIMIT]
1 LS1
2 G02
5557-02R
[MOLEX]
L1700
1 VER A->B 06/Jan/95 H.Inoue (U,V-AXIS AC-MOTOR)
SODICK CO.,LTD
TITLE
MACHINE SIDE CABLE
BLG
A320D-EX21
SHEET NO.
1/3
DATE
25/JAN/
DESIGNED TSUKUDA
DRAWN TSUKUDA
CHECKED HAKAGOSHI
APPROVED ASADA
DWG.NO
TE300072B

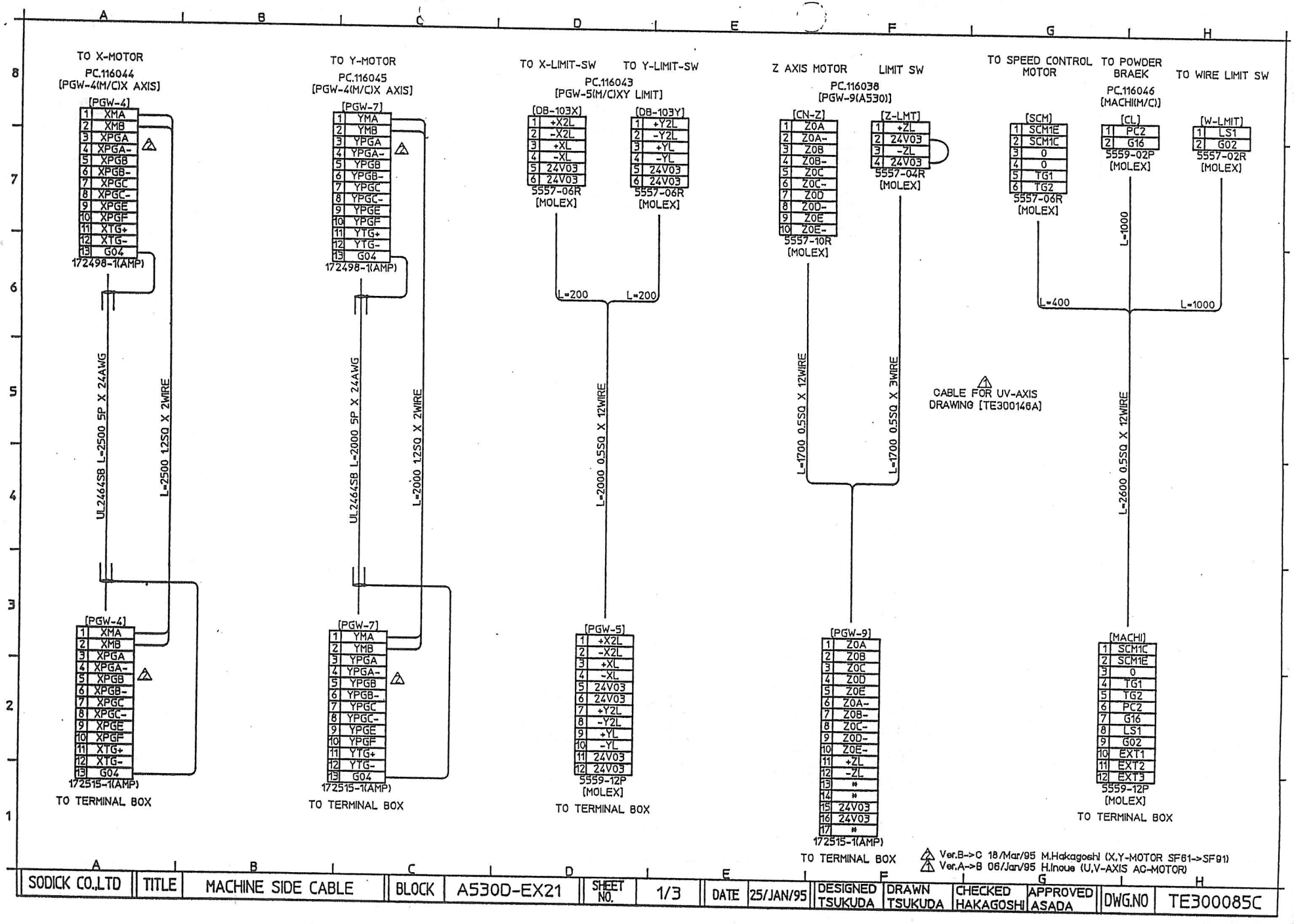

TO X-MOTOR
PC.116015
[PGW-4(M/C)X AXIS]
[PGW-4]
1 XMA
2 XMB
3 XPGA
4 XPGA-
5 XPGB
6 XPGB-
7 XPGC
8 XPGC-
9 XPGE
10 XPGF
11 XTG+
12 XTG-
13 G04
172498-1(AMP)
UL2464SB L=2200 5P X 24AWG
L=2200 12SQ X 2WIRE
[PGW-4]
1 XMA
2 XMB
3 XPGA
4 XPGA-
5 XPGB
6 XPGB-
7 XPGC
8 XPGC-
9 XPGE
10 XPGF
11 XTG+
12 XTG-
13 G04
172515-1(AMP)
TO TERMINAL BOX
TO Y-MOTOR
PC.116014
[PGW-7(M/C)Y AXIS]
[PGW-7]
1 YMA
2 YMB
3 YPGA
4 YPGA-
5 YPGB
6 YPGB-
7 YPGC
8 YPGC-
9 YPGE
10 YPGF
11 YTG+
12 YTG-
13 G04
172498-1(AMP)
UL2464SB L=1900 5P X 24AWG
L=1900 12SQ X 2WIRE
[PGW-7]
1 YMA
2 YMB
3 YPGA
4 YPGA-
5 YPGB
6 YPGB-
7 YPGC
8 YPGC-
9 YPGE
10 YPGF
11 YTG+
12 YTG-
13 G04
172515-1(AMP)
TO TERMINAL BOX
CABLE FOR UV-AXIS
[TE300145A]
TO X-LIMIT-SW
TO Y-LIMIT-SW
PC.116016
[PGW-5(M/C)XY LIMIT]
[DB-103X]
1 +X2L
2 -X2L
3 +XL
4 -XL
5 24V03
6 24V03
5557-06R
[MOLEX]
[DB-103Y]
1 +Y2L
2 -Y2L
3 +YL
4 -YL
5 24V03
6 24V03
5557-06R
[MOLEX]
L200
L200
L=1800 0.5SQ X 12WIRE
[PGW-5]
1 +X2L
2 -X2L
3 +XL
4 -XL
5 24V03
6 24V03
7 +Y2L
8 -Y2L
9 +YL
10 -YL
11 24V03
12 24V03
5559-12P
[MOLEX]
TO TERMINAL BOX
TO SPEED CONTROL MOTOR
TO POWDER BRAEK
TO WIRE LIMIT SW
PC.116017
[MACHI(M/C)]
[SCM]
1 SCM1E
2 SCM1C
3 0
4 0
5 TG1
6 TG2
5557-06R
[MOLEX]
[CL]
1 PC2
2 G16
5559-02P
[MOLEX]
[W-LMIT]
1 LS1
2 G02
5557-02R
[MOLEX]
L1700
L1700
L1700
L=1800 0.5SQ X 12WIRE
[MACHI]
1 SCM1C
2 SCM1E
3 0
4 TG1
5 TG2
6 PC2
7 G16
8 LS1
9 G02
10 EXT1
11 EXT2
12 EXT3
5559-12P
[MOLEX]
TO TERMINAL BOX
VER B->C 18/Mar/95 M.Hahagoshi (X,Y-MOTOR SF61->SF91)
VER A->B 06/Jan/95 H.Inoue (U,V-AXIS AC-MOTOR)
SODICK CO.,LTD
TITLE
MACHINE SIDE CABLE
BLOCK
A320D-EX21
SHEET NO.
1/3
DATE
25/JAN/95
DESIGNED TSUKUDA
DRAWN TSUKUDA
CHECKED HAKAGOSHI
APPROVED ASADA
DWG.NO
TE300072C

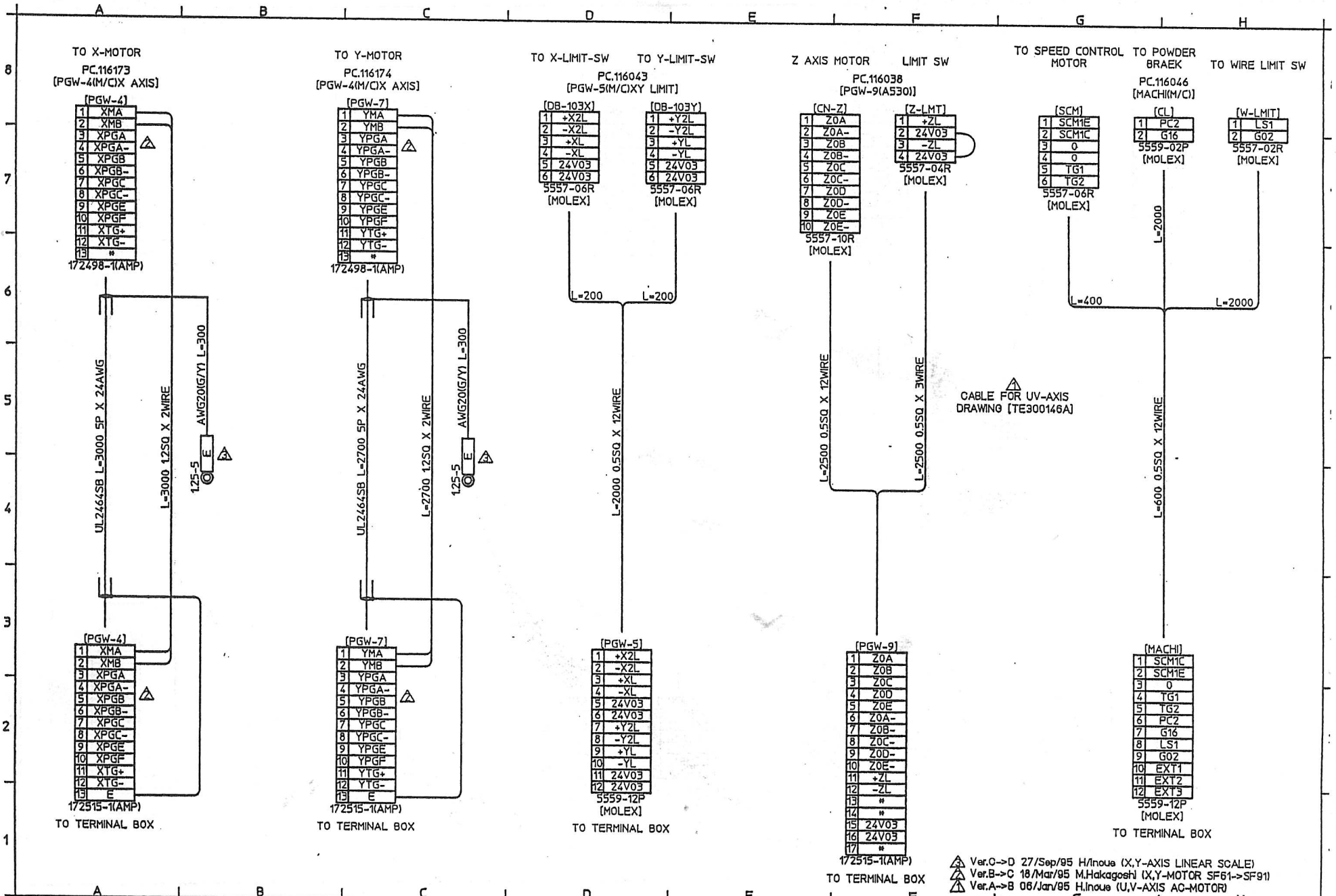

TO X-MOTOR
PC.116172
[PGW-4(M/C)X AXIS]
[PGW-4]
1 XMA
2 XMB
3 XPGA
4 XPGA-
5 XPGB
6 XPGB-
7 XPGC
8 XPGC-
9 XPGE
10 XPGF
11 XTG+
12 XTG-
13
172498-1(AMP)
TO Y-MOTOR
PC.116171
[PGW-7(M/C)Y AXIS]
[PGW-7]
1 YMA
2 YMB
3 YPGA
4 YPGA-
5 YPGB
6 YPGB-
7 YPGC
8 YPGC-
9 YPGE
10 YPGF
11 YTG+
12 YTG-
13
172498-1(AMP)
UL2464SB L=2200 5P X 24AWG
L=2200 12SQ X 2WIRE
AWG20(G/Y) L-300
125-5
E
UL2464SB L=1900 5P X 24AWG
L=1900 12SQ X 2WIRE
AWG20(G/Y) L-300
125-5
E
[PGW-4]
1 XMA
2 XMB
3 XPGA
4 XPGA-
5 XPGB
6 XPGB-
7 XPGC
8 XPGC-
9 XPGE
10 XPGF
11 XTG+
12 XTG-
13 E
172515-1(AMP)
TO TERMINAL BOX
[PGW-7]
1 YMA
2 YMB
3 YPGA
4 YPGA-
5 YPGB
6 YPGB-
7 YPGC
8 YPGC-
9 YPGE
10 YPGF
11 YTG+
12 YTG-
13 E
172515-1(AMP)
TO TERMINAL BOX
CABLE FOR UV-AXIS
[TE300145A]
TO X-LIMIT-SW
TO Y-LIMIT-SW
PC.116016
[PGW-5(M/C)XY LIMIT]
[DB-103X]
1 +X2L
2 -X2L
3 +XL
4 -XL
5 24V03
6 24V03
5557-06R
[MOLEX]
[DB-103Y]
1 +Y2L
2 -Y2L
3 +YL
4 -YL
5 24V03
6 24V03
5557-06R
[MOLEX]
L200
L200
L=1800 0.5SQ X 12WIRE
[PGW-5]
1 +X2L
2 -X2L
3 +XL
4 -XL
5 24V03
6 24V03
7 +Y2L
8 -Y2L
9 +YL
10 -YL
11 24V03
12 24V03
5559-12P
[MOLEX]
TO TERMINAL BOX
TO SPEED CONTROL MOTOR
TO POWDER BRAEK
TO WIRE LIMIT SW
PC.116017
[MACHI(M/C)]
[SCM]
1 SCM1E
2 SCM1C
3 0
4 0
5 TG1
6 TG2
5557-06R
[MOLEX]
[CL]
1 PC2
2 G16
5559-02P
[MOLEX]
[W-LMIT]
1 LS1
2 G02
5557-02R
[MOLEX]
L1700
L1700
L1700
L=1800 0.5SQ X 12WIRE
[MACHI]
1 SCM1C
2 SCM1E
3 0
4 TG1
5 TG2
6 PC2
7 G16
8 LS1
9 G02
10 EXT1
11 EXT2
12 EXT3
5559-12P
[MOLEX]
TO TERMINAL BOX
3 VER C->D 27/Sep/95 H.Inoue (X,Y-AXIS LINEAR-SCALE)
2 VER B->C 18/Mar/95 M.Hahagoshi (X,Y-MOTOR SF61->SF91)
1 VER A->B 06/Jan/95 H.Inoue (U,V-AXIS AC-MOTOR)
SODICK CO.,LTD
TITLE
MACHINE SIDE CABLE
BL(
A320D-EX21
SHEET NO.
1/3
DATE
25/JAN.
DESIGNED TSUKUDA
DRAWN TSUKUDA
CHECKED HAKAGOSHI
APPROVED ASADA
DWG.NO
TE300072D

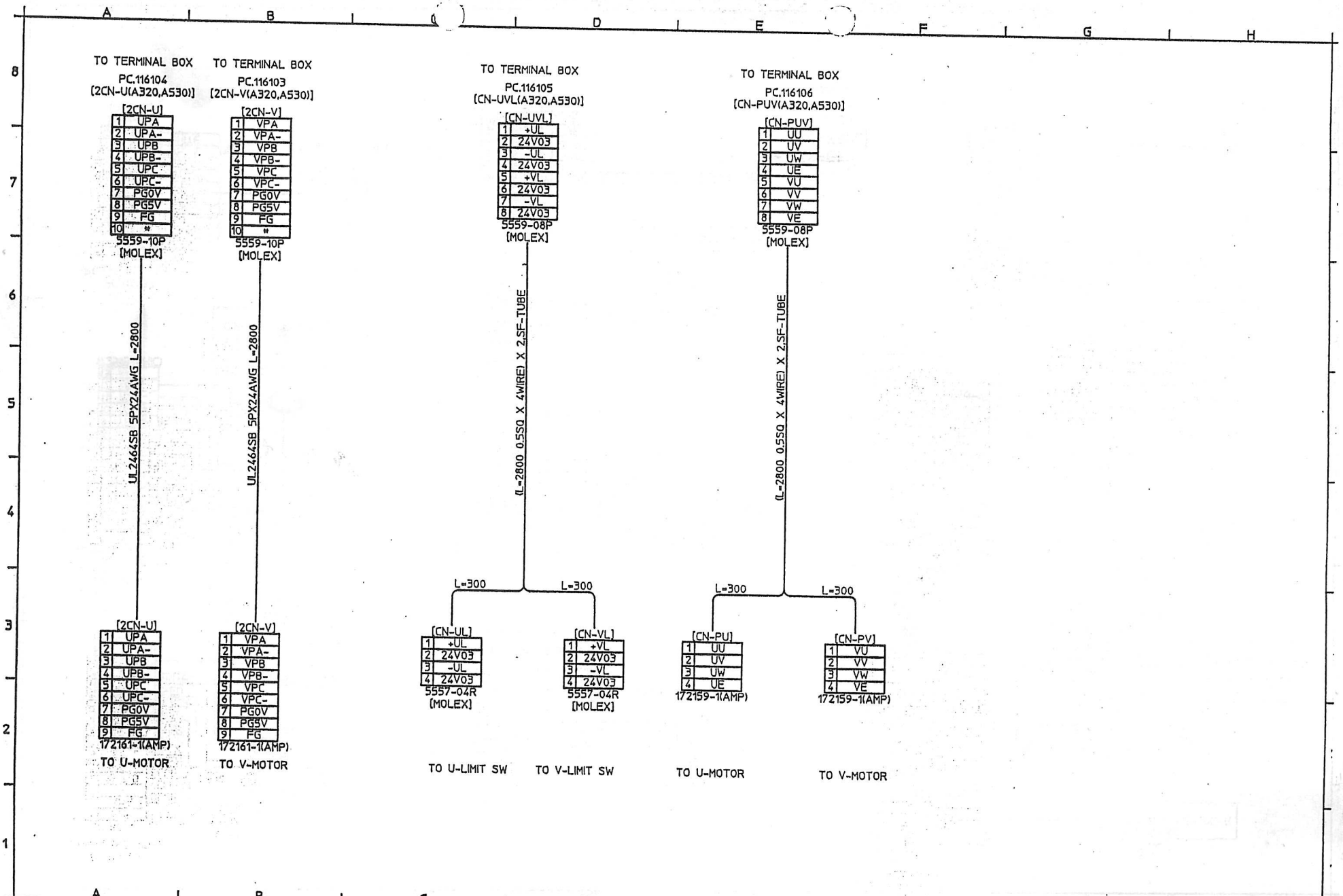


SODICK CO.,LTD	TITLE	MACHINE SIDE CABLE	BLOCK	A320D-EX21	SHEET NO.	2/3	DATE	25/JAN/95	DESIGNED INOUE	DRAWN INOUE	CHECKED	APPROVED	DWG.NO	TE300145A

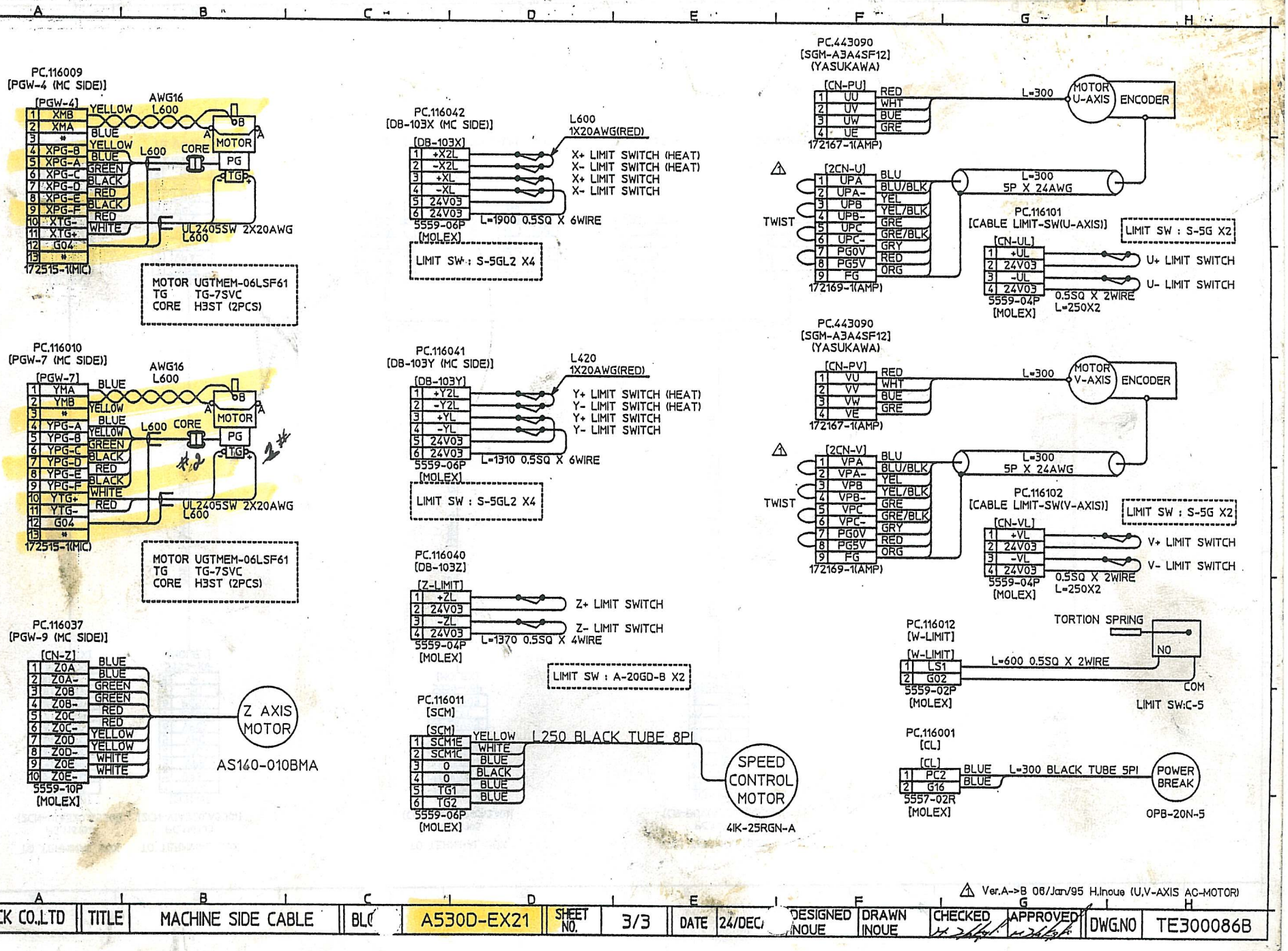

TO X-MOTOR
PC.116044
[PGW-4(M/C)X AXIS]
[PGW-4]
TO Y-MOTOR
PC.116045
[PGW-4(M/C)X AXIS]
[PGW-7]
TO X-LIMIT-SW
TO Y-LIMIT-SW
PC.116043
[PGW-5(M/C)XY LIMIT]
[DB-103X]
[DB-103Y]
Z AXIS MOTOR
LIMIT SW
PC.116038
[PGW-9(A530)]
[CN-Z]
[Z-LMT]
TO SPEED CONTROL MOTOR
TO POWDER BRAEK
PC.116046
[MACH(M/C)]
[SCM]
[CL]
TO WIRE LIMIT SW
[W-LMT]
CABLE FOR UV-AXIS
DRAWING [TE300148A]
L=3000 12SQ X 2WIRE
UL2464SB L-3000 5P X 24AWG
L-2700 12SQ X 2WIRE
UL2464SB L-2700 5P X 24AWG
L-2000 0.5SQ X 12WIRE
L=200
L-2500 0.5SQ X 3WIRE
L-2500 0.5SQ X 12WIRE
L-600 0.5SQ X 12WIRE
L=2000
L=400
TO TERMINAL BOX
Ver.A->B 08/Jan/95 H.Inoue (U,V-AXIS AC-MOTOR)
SODICK CO.,LTD
TITLE
MACHINE SIDE CABLE
A530D-EX21
SHEET NO.
1/3
DATE
25/JAN.
DESIGNED
TSUKUDA
DRAWN
TSUKUDA
CHECKED
HAKAGOSHI
APPROVED
ASADA
DWG.NO
TE300085B

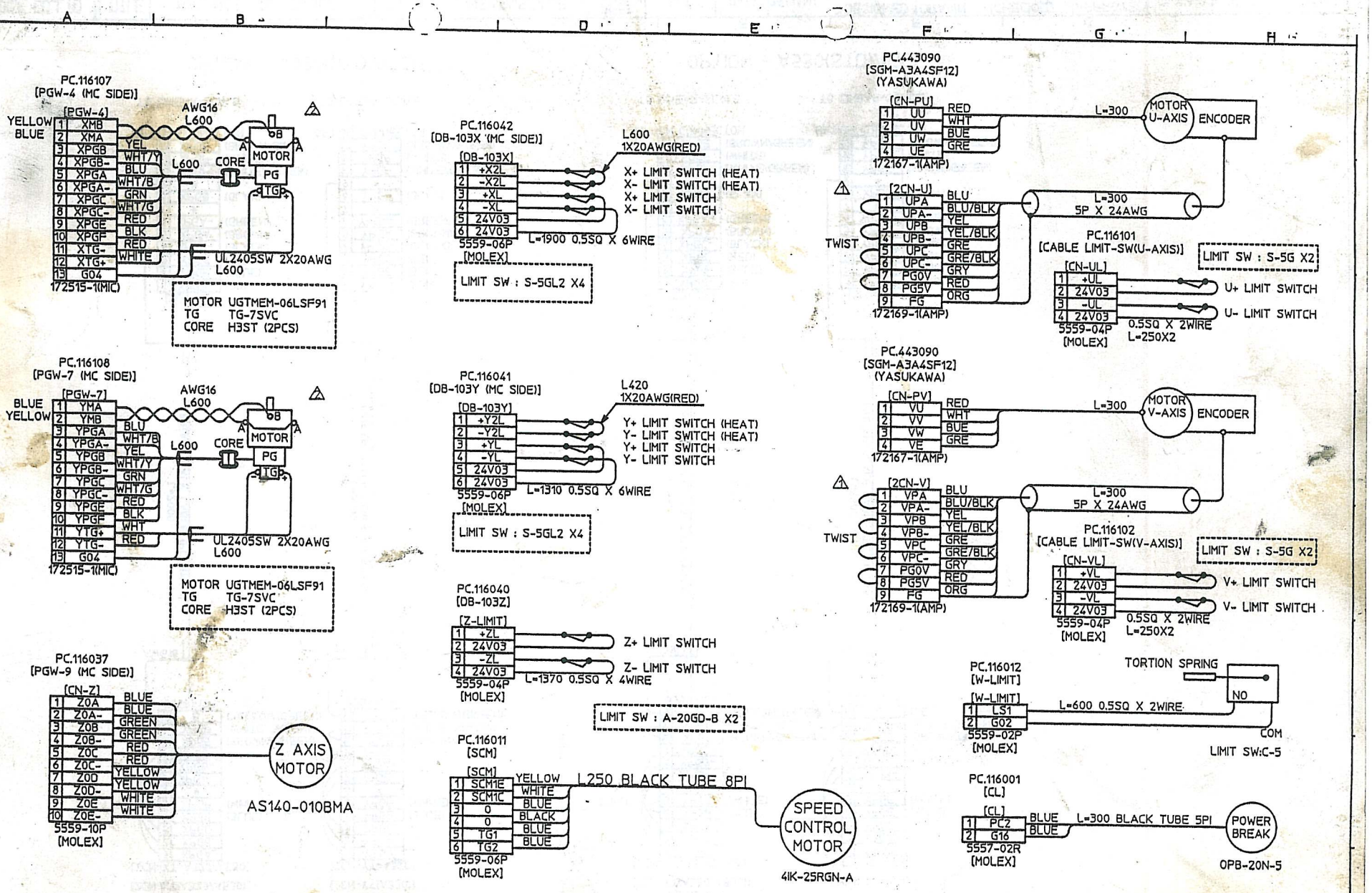

TO X-MOTOR
PC.116044
[PGW-4(M/C)X AXIS]
[PGW-4]
1 XMA
2 XMB
3 XPGA
4 XPGA-
5 XPGB
6 XPGB-
7 XPGC
8 XPGC-
9 XPGE
10 XPGF
11 XTG+
12 XTG-
13 G04
172498-1(AMP)
UL2464SB L=2500 5P X 24AWG
L=2500 1.25SQ X 2WIRE
[PGW-4]
172515-1(AMP)
TO TERMINAL BOX
TO Y-MOTOR
PC.116045
[PGW-4(M/C)X AXIS]
[PGW-7]
1 YMA
2 YMB
3 YPGA
4 YPGA-
5 YPGB
6 YPGB-
7 YPGC
8 YPGC-
9 YPGE
10 YPGF
11 YTG+
12 YTG-
13 G04
172498-1(AMP)
UL2464SB L=2000 5P X 24AWG
L=2000 1.25SQ X 2WIRE
[PGW-7]
172515-1(AMP)
TO TERMINAL BOX
TO X-LIMIT-SW
TO Y-LIMIT-SW
PC.116043
[PGW-5(M/C)XY LIMIT]
[DB-103X]
1 +X2L
2 -X2L
3 +XL
4 -XL
5 24V03
6 24V03
5557-06R
[MOLEX]
[DB-103Y]
1 +Y2L
2 -Y2L
3 +YL
4 -YL
5 24V03
6 24V03
5557-06R
[MOLEX]
L=200
L=200
L=2000 0.5SQ X 12WIRE
[PGW-5]
1 +X2L
2 -X2L
3 +XL
4 -XL
5 24V03
6 24V03
7 +Y2L
8 -Y2L
9 +YL
10 -YL
11 24V03
12 24V03
5559-12P
[MOLEX]
TO TERMINAL BOX
Z AXIS MOTOR
LIMIT SW
PC.116038
[PGW-9(A530)]
[CN-Z]
1 Z0A
2 Z0A-
3 Z0B
4 Z0B-
5 Z0C
6 Z0C-
7 Z0D
8 Z0D-
9 Z0E
10 Z0E-
5557-10R
[MOLEX]
[Z-LMT]
1 +ZL
2 24V03
3 -ZL
4 24V03
5557-04R
[MOLEX]
L=1700 0.5SQ X 12WIRE
L=1700 0.5SQ X 3WIRE
[PGW-9]
1 Z0A
2 Z0B
3 Z0C
4 Z0D
5 Z0E
6 Z0A-
7 Z0B-
8 Z0C-
9 Z0D-
10 Z0E-
11 +ZL
12 -ZL
13 *
14 *
15 24V03
16 24V03
17 *
172515-1(AMP)
TO TERMINAL BOX
CABLE FOR UV-AXIS
DRAWING [TE300146A]
TO SPEED CONTROL MOTOR
TO POWDER BRAEK
TO WIRE LIMIT SW
PC.116046
[MACHI(M/C)]
[SCM]
1 SCM1E
2 SCM1C
3 0
4 0
5 TG1
6 TG2
5557-06R
[MOLEX]
[CL]
1 PC2
2 G16
5559-02P
[MOLEX]
[W-LMIT]
1 LS1
2 G02
5557-02R
[MOLEX]
L=400
L=1000
L=1000
L=2600 0.5SQ X 12WIRE
[MACHI]
1 SCM1C
2 SCM1E
3 0
4 TG1
5 TG2
6 PC2
7 G16
8 LS1
9 G02
10 EXT1
11 EXT2
12 EXT3
5559-12P
[MOLEX]
TO TERMINAL BOX
Ver.B->C 18/Mar/95 M.Hakagoshi (X,Y-MOTOR SF61->SF91)
Ver.A->B 06/Jan/95 H.Inoue (U,V-AXIS AC-MOTOR)
SODICK CO.LTD
TITLE
MACHINE SIDE CABLE
BLOCK
A530D-EX21
SHEET NO.
1/3
DATE
25/JAN/95
DESIGNED
TSUKUDA
DRAWN
TSUKUDA
CHECKED
HAKAGOSHI
APPROVED
ASADA
DWG.NO
TE300085C

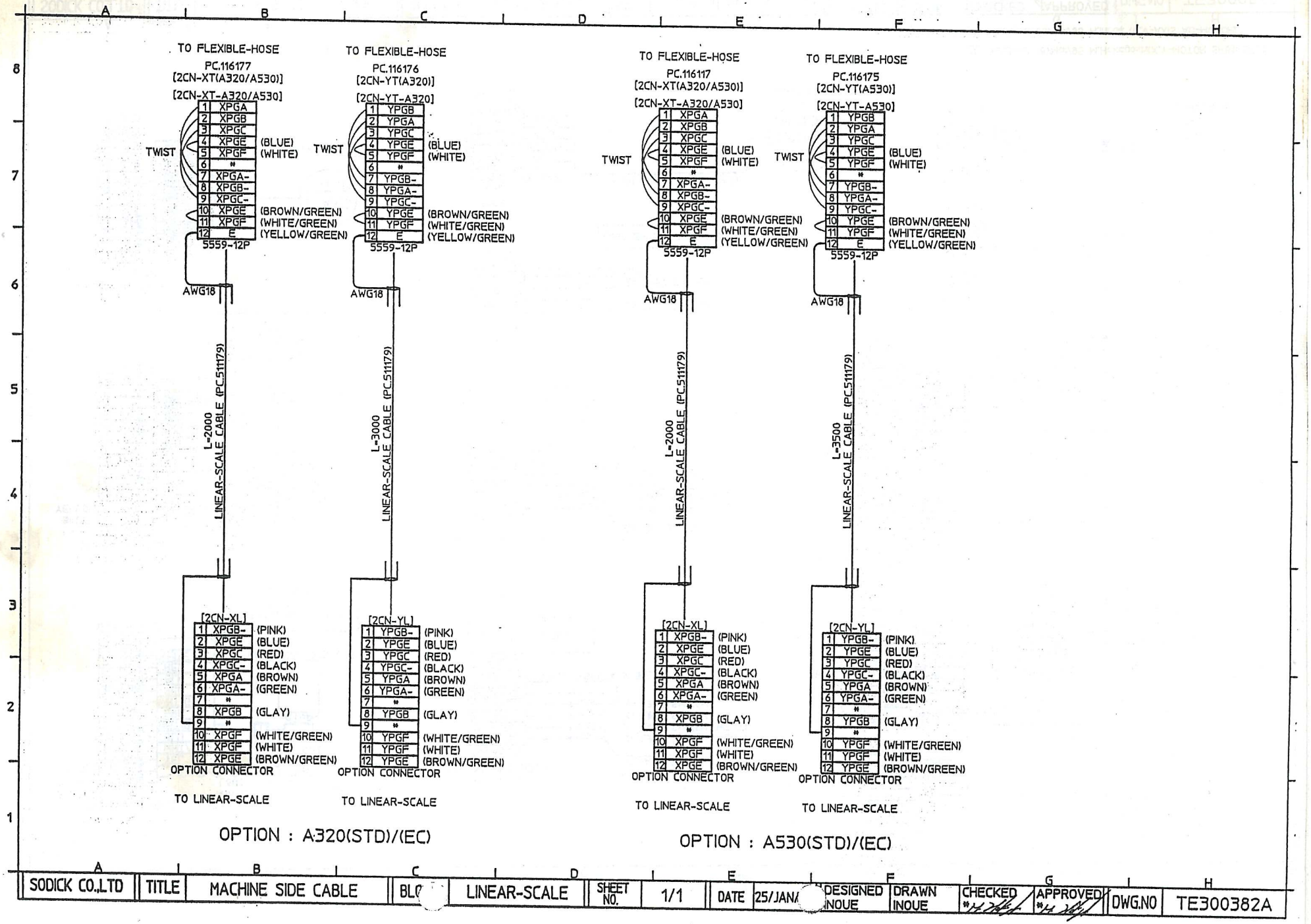

TO X-MOTOR
PC.116173
[PGW-4(M/C)X AXIS]
[PGW-4]
1 XMA
2 XMB
3 XPGA
4 XPGA-
5 XPGB
6 XPGB-
7 XPGC
8 XPGC-
9 XPGE
10 XPGF
11 XTG+
12 XTG-
13 *
172498-1(AMP)
UL2464SB L=3000 5P X 24AWG
L=3000 12SQ X 2WIRE
AWG20(G/Y) L=300
125-5
E
[PGW-4]
1 XMA
2 XMB
3 XPGA
4 XPGA-
5 XPGB
6 XPGB-
7 XPGC
8 XPGC-
9 XPGE
10 XPGF
11 XTG+
12 XTG-
13 E
172515-1(AMP)
TO TERMINAL BOX
TO Y-MOTOR
PC.116174
[PGW-4(M/C)X AXIS]
[PGW-7]
1 YMA
2 YMB
3 YPGA
4 YPGA-
5 YPGB
6 YPGB-
7 YPGC
8 YPGC-
9 YPGE
10 YPGF
11 YTG+
12 YTG-
13 *
172498-1(AMP)
UL2464SB L=2700 5P X 24AWG
L=2700 12SQ X 2WIRE
AWG20(G/Y) L=300
125-5
E
[PGW-7]
1 YMA
2 YMB
3 YPGA
4 YPGA-
5 YPGB
6 YPGB-
7 YPGC
8 YPGC-
9 YPGE
10 YPGF
11 YTG+
12 YTG-
13 E
172515-1(AMP)
TO TERMINAL BOX
TO X-LIMIT-SW
TO Y-LIMIT-SW
PC.116043
[PGW-5(M/C)XY LIMIT]
[DB-103X]
1 +X2L
2 -X2L
3 +XL
4 -XL
5 24V03
6 24V03
5557-06R
[MOLEX]
[DB-103Y]
1 +Y2L
2 -Y2L
3 +YL
4 -YL
5 24V03
6 24V03
5557-06R
[MOLEX]
L=200
L=200
L=2000 0.5SQ X 12WIRE
[PGW-5]
1 +X2L
2 -X2L
3 +XL
4 -XL
5 24V03
6 24V03
7 +Y2L
8 -Y2L
9 +YL
10 -YL
11 24V03
12 24V03
5559-12P
[MOLEX]
TO TERMINAL BOX
Z AXIS MOTOR
LIMIT SW
PC.116038
[PGW-9(A530)]
[CN-Z]
1 Z0A
2 Z0A-
3 Z0B
4 Z0B-
5 Z0C
6 Z0C-
7 Z0D
8 Z0D-
9 Z0E
10 Z0E-
5557-10R
[MOLEX]
[Z-LMT]
1 +ZL
2 24V03
3 -ZL
4 24V03
5557-04R
[MOLEX]
L=2500 0.5SQ X 12WIRE
L=2500 0.5SQ X 3WIRE
[PGW-9]
1 Z0A
2 Z0B
3 Z0C
4 Z0D
5 Z0E
6 Z0A-
7 Z0B-
8 Z0C-
9 Z0D-
10 Z0E-
11 +ZL
12 -ZL
13 *
14 *
15 24V03
16 24V03
17 *
172515-1(AMP)
TO TERMINAL BOX
CABLE FOR UV-AXIS
DRAWING [TE300146A]
TO SPEED CONTROL MOTOR
TO POWDER BRAEK
TO WIRE LIMIT SW
[SCM]
1 SCM1E
2 SCM1C
3 0
4 0
5 TG1
6 TG2
5557-06R
[MOLEX]
PC.116046
[MACHI(M/C)]
[CL]
1 PC2
2 G16
5559-02P
[MOLEX]
[W-LMIT]
1 LS1
2 G02
5557-02R
[MOLEX]
L=2000
L=400
L=2000
L=600 0.5SQ X 12WIRE
[MACHI]
1 SCM1C
2 SCM1E
3 0
4 TG1
5 TG2
6 PC2
7 G16
8 LS1
9 G02
10 EXT1
11 EXT2
12 EXT3
5559-12P
[MOLEX]
TO TERMINAL BOX
Ver.C->D 27/Sep/95 H.Inoue (X,Y-AXIS LINEAR SCALE)
Ver.B->C 18/Mar/95 M.Hakagoshi (X,Y-MOTOR SF61->SF91)
Ver.A->B 06/Jan/95 H.Inoue (U,V-AXIS AC-MOTOR)
SODICK CO.,LTD
TITLE
MACHINE SIDE CABLE
BLC
A530D-EX21
SHEET NO.
1/3
DATE
25/JAN/
DESIGNED TSUKUDA
DRAWN TSUKUDA
CHECKED HAKAGOSHI
APPROVED ASADA
DWG.NO
TE300085D



SODICK CO.,LTD	TITLE	MACHINE SIDE CABLE	BLOCK	A530D-EX21	SHEET NO.	2/3	DATE	25/JAN/95	DESIGNED	DRAWN	CHECKED	APPROVED	DWG.NO	TE300146A
									INOUE	INOUE				

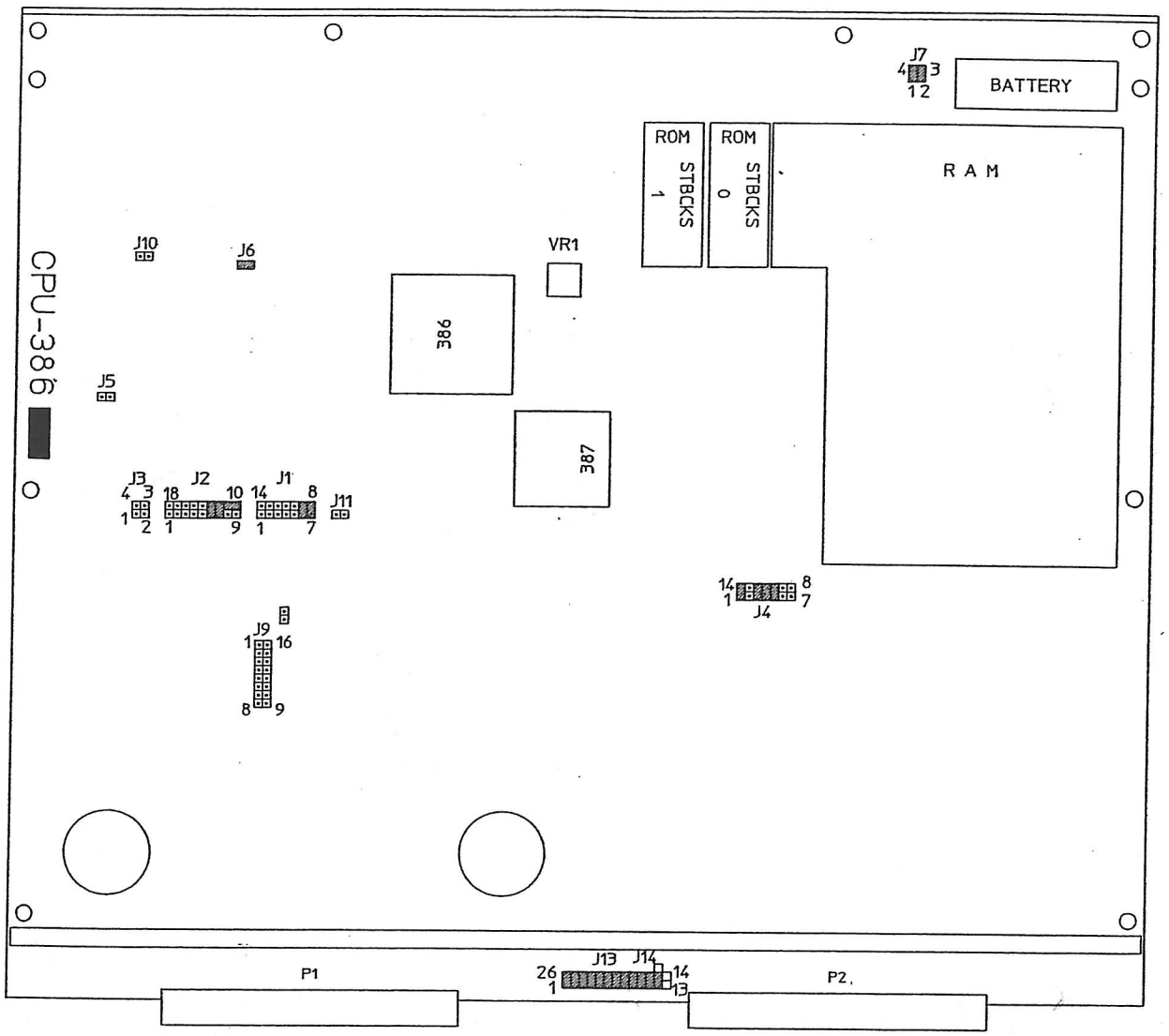

PC.116009
[PGW-4 (MC SIDE)]
[PGW-4]
XMB
XMA
XPG-B
XPG-A
XPG-C
XPG-D
XPG-E
XPG-F
XTG-
XTG+
G04
172515-1(MIC)
AWG16
L600
YELLOW
BLUE
YELLOW
BLUE
GREEN
BLACK
RED
BLACK
RED
WHITE
CORE
MOTOR
PG
TG
UL2405SW 2X20AWG
L600
MOTOR UGTMEM-06LSF61
TG TG-7SVC
CORE H3ST (2PCS)
PC.116010
[PGW-7 (MC SIDE)]
[PGW-7]
YMA
YMB
YPG-A
YPG-B
YPG-C
YPG-D
YPG-E
YPG-F
YTG+
YTG-
G04
172515-1(MIC)
BLUE
YELLOW
BLUE
YELLOW
GREEN
BLACK
RED
BLACK
WHITE
RED
AWG16
L600
CORE
MOTOR
PG
TG
1#
2#
UL2405SW 2X20AWG
L600
MOTOR UGTMEM-06LSF61
TG TG-7SVC
CORE H3ST (2PCS)
PC.116037
[PGW-9 (MC SIDE)]
[CN-Z]
Z0A
Z0A-
Z0B
Z0B-
Z0C
Z0C-
Z0D
Z0D-
Z0E
Z0E-
5559-10P
[MOLEX]
BLUE
BLUE
GREEN
GREEN
RED
RED
YELLOW
YELLOW
WHITE
WHITE
Z AXIS MOTOR
AS160-010BMA
PC.116042
[DB-103X (MC SIDE)]
[DB-103X]
+X2L
-X2L
+XL
-XL
24V03
24V03
5559-06P
[MOLEX]
L600
1X20AWG(RED)
X+ LIMIT SWITCH (HEAT)
X- LIMIT SWITCH (HEAT)
X+ LIMIT SWITCH
X- LIMIT SWITCH
L=1900 0.5SQ X 6WIRE
LIMIT SW : S-5GL2 X4
PC.116041
[DB-103Y (MC SIDE)]
[DB-103Y]
+Y2L
-Y2L
+YL
-YL
24V03
24V03
5559-06P
[MOLEX]
L420
1X20AWG(RED)
Y+ LIMIT SWITCH (HEAT)
Y- LIMIT SWITCH (HEAT)
Y+ LIMIT SWITCH
Y- LIMIT SWITCH
L=1310 0.5SQ X 6WIRE
LIMIT SW : S-5GL2 X4
PC.116040
[DB-103Z]
[Z-LIMIT]
+ZL
24V03
-ZL
24V03
5559-04P
[MOLEX]
Z+ LIMIT SWITCH
Z- LIMIT SWITCH
L=1370 0.5SQ X 4WIRE
LIMIT SW : A-20GD-B X2
PC.116011
[SCM]
[SCM]
SCM1E
SCM1C
0
0
TG1
TG2
5559-06P
[MOLEX]
YELLOW
WHITE
BLUE
BLACK
BLUE
BLUE
L250 BLACK TUBE 8PI
SPEED CONTROL MOTOR
4IK-25RGN-A
PC.443090
[SGM-A3A4SF12]
(YASUKAWA)
[CN-PU]
UU
UV
UW
UE
172167-1(AMP)
RED
WHT
BUE
GRE
L=300
MOTOR U-AXIS
ENCODER
[2CN-U]
UPA
UPA-
UPB
UPB-
UPC
UPC-
PG0V
PG5V
FG
172169-1(AMP)
BLU
BLU/BLK
YEL
YEL/BLK
GRE
GRE/BLK
GRY
RED
ORG
TWIST
L=300
5P X 24AWG
PC.116101
[CABLE LIMIT-SW(U-AXIS)]
[CN-UL]
+UL
24V03
-UL
24V03
5559-04P
[MOLEX]
0.5SQ X 2WIRE
L=250X2
LIMIT SW : S-5G X2
U+ LIMIT SWITCH
U- LIMIT SWITCH
PC.443090
[SGM-A3A4SF12]
(YASUKAWA)
[CN-PV]
VU
VV
VW
VE
172167-1(AMP)
RED
WHT
BUE
GRE
L=300
MOTOR V-AXIS
ENCODER
[2CN-V]
VPA
VPA-
VPB
VPB-
VPC
VPC-
PG0V
PG5V
FG
172169-1(AMP)
BLU
BLU/BLK
YEL
YEL/BLK
GRE
GRE/BLK
GRY
RED
ORG
TWIST
L=300
5P X 24AWG
PC.116102
[CABLE LIMIT-SW(V-AXIS)]
[CN-VL]
+VL
24V03
-VL
24V03
5559-04P
[MOLEX]
0.5SQ X 2WIRE
L=250X2
LIMIT SW : S-5G X2
V+ LIMIT SWITCH
V- LIMIT SWITCH
PC.116012
[W-LIMIT]
[W-LIMIT]
LS1
G02
5559-02P
[MOLEX]
L=600 0.5SQ X 2WIRE
TORTION SPRING
NO
COM
LIMIT SW:C-5
PC.116001
[CL]
[CL]
PC2
G16
5557-02R
[MOLEX]
BLUE
BLUE
L=300 BLACK TUBE 5PI
POWER BREAK
OPB-20N-5
Ver.A->B 06/Jan/95 H.Inoue (U,V-AXIS AC-MOTOR)
SODICK CO.,LTD
TITLE
MACHINE SIDE CABLE
BLC
A530D-EX21
SHEET NO.
3/3
DATE
24/DEC
DESIGNED
INOUE
DRAWN
INOUE
CHECKED
APPROVED
DWG.NO
TE300086B


PC.116107
[PGW-4 (MC SIDE)]
[PGW-4]
YELLOW
BLUE
XMB
XMA
XPGB
XPGB-
XPGA
XPGA-
XPGC
XPGC-
XPGE
XPGF
XTG-
XTG+
G04
172515-1(MIC)
AWG16
L600
YEL
WHT/Y
BLU
WHT/B
GRN
WHT/G
RED
BLK
RED
WHITE
CORE
MOTOR
PG
TG
UL2405SW 2X20AWG
L600
MOTOR UGTMEM-06LSF91
TG TG-7SVC
CORE H3ST (2PCS)
PC.116108
[PGW-7 (MC SIDE)]
[PGW-7]
BLUE
YELLOW
YMA
YMB
YPGA
YPGA-
YPGB
YPGB-
YPGC
YPGC-
YPGE
YPGF
YTG+
YTG-
G04
172515-1(MIC)
BLU
WHT/B
YEL
WHT/Y
GRN
WHT/G
RED
BLK
WHT
RED
MOTOR UGTMEM-06LSF91
TG TG-7SVC
CORE H3ST (2PCS)
PC.116037
[PGW-9 (MC SIDE)]
[CN-Z]
Z0A
Z0A-
Z0B
Z0B-
Z0C
Z0C-
Z0D
Z0D-
Z0E
Z0E-
5559-10P
[MOLEX]
BLUE
BLUE
GREEN
GREEN
RED
RED
YELLOW
YELLOW
WHITE
WHITE
Z AXIS
MOTOR
AS140-010BMA
PC.116042
[DB-103X (MC SIDE)]
[DB-103X]
+X2L
-X2L
+XL
-XL
24V03
24V03
5559-06P
[MOLEX]
L600
1X20AWG(RED)
X+ LIMIT SWITCH (HEAT)
X- LIMIT SWITCH (HEAT)
X+ LIMIT SWITCH
X- LIMIT SWITCH
L=1900 0.5SQ X 6WIRE
LIMIT SW : S-5GL2 X4
PC.116041
[DB-103Y (MC SIDE)]
[DB-103Y]
+Y2L
-Y2L
+YL
-YL
24V03
24V03
5559-06P
[MOLEX]
L420
1X20AWG(RED)
Y+ LIMIT SWITCH (HEAT)
Y- LIMIT SWITCH (HEAT)
Y+ LIMIT SWITCH
Y- LIMIT SWITCH
L=1310 0.5SQ X 6WIRE
LIMIT SW : S-5GL2 X4
PC.116040
[DB-103Z]
[Z-LIMIT]
+ZL
24V03
-ZL
24V03
5559-04P
[MOLEX]
Z+ LIMIT SWITCH
Z- LIMIT SWITCH
L=1370 0.5SQ X 4WIRE
LIMIT SW : A-20GD-B X2
PC.116011
[SCM]
[SCM]
SCM1E
SCM1C
0
0
TG1
TG2
5559-06P
[MOLEX]
YELLOW
WHITE
BLUE
BLACK
BLUE
BLUE
L250 BLACK TUBE 8PI
SPEED
CONTROL
MOTOR
4IK-25RGN-A
PC.443090
[SGM-A3A4SF12]
(YASUKAWA)
[CN-PU]
UU
UV
UW
UE
172167-1(AMP)
RED
WHT
BUE
GRE
L=300
MOTOR
U-AXIS
ENCODER
[2CN-U]
UPA
UPA-
UPB
UPB-
UPC
UPC-
PG0V
PG5V
FG
172169-1(AMP)
BLU
BLU/BLK
YEL
YEL/BLK
GRE
GRE/BLK
GRY
RED
ORG
TWIST
L=300
5P X 24AWG
PC.116101
[CABLE LIMIT-SW(U-AXIS)]
LIMIT SW : S-5G X2
[CN-UL]
+UL
24V03
-UL
24V03
5559-04P
[MOLEX]
U+ LIMIT SWITCH
U- LIMIT SWITCH
0.5SQ X 2WIRE
L=250X2
PC.443090
[SGM-A3A4SF12]
(YASUKAWA)
[CN-PV]
VU
VV
VW
VE
172167-1(AMP)
RED
WHT
BUE
GRE
L=300
MOTOR
V-AXIS
ENCODER
[2CN-V]
VPA
VPA-
VPB
VPB-
VPC
VPC-
PG0V
PG5V
FG
172169-1(AMP)
BLU
BLU/BLK
YEL
YEL/BLK
GRE
GRE/BLK
GRY
RED
ORG
TWIST
L=300
5P X 24AWG
PC.116102
[CABLE LIMIT-SW(V-AXIS)]
LIMIT SW : S-5G X2
[CN-VL]
+VL
24V03
-VL
24V03
5559-04P
[MOLEX]
V+ LIMIT SWITCH
V- LIMIT SWITCH
0.5SQ X 2WIRE
L=250X2
PC.116012
[W-LIMIT]
[W-LIMIT]
LS1
G02
5559-02P
[MOLEX]
TORTION SPRING
NO
COM
L=600 0.5SQ X 2WIRE
LIMIT SW:C-5
PC.116001
[CL]
[CL]
PC2
G16
5557-02R
[MOLEX]
BLUE
BLUE
L=300 BLACK TUBE 5PI
POWER
BREAK
OPB-20N-5
Ver.B->C 18/Mar/95 M.Hakagoshi(X,Y-MOTOR SF61>SF91)
Ver.A->B 08/Jan/95 H.Inoue (U,V-AXIS AC-MOTOR)
SODICK CO.,LTD
TITLE
MACHINE SIDE CABLE
BLOCK
A530D-EX21
SHEET NO.
3/3
DATE
24/DEC/94
DESIGNED
INOUE
DRAWN
INOUE
CHECKED
APPROVED
DWG.NO
TE300086C


TO FLEXIBLE-HOSE
PC.116177
[2CN-XT(A320/A530)]
[2CN-XT-A320/A530]
1 XPGA
2 XPGB
3 XPGC
4 XPGE (BLUE)
5 XPGF (WHITE)
6 *
7 XPGA-
8 XPGB-
9 XPGC-
10 XPGE (BROWN/GREEN)
11 XPGF (WHITE/GREEN)
12 E (YELLOW/GREEN)
TWIST
5559-12P
AWG18
L=2000
LINEAR-SCALE CABLE (PC.511179)
[2CN-XL]
1 XPGB- (PINK)
2 XPGE (BLUE)
3 XPGC (RED)
4 XPGC- (BLACK)
5 XPGA (BROWN)
6 XPGA- (GREEN)
7 *
8 XPGB (GLAY)
9 *
10 XPGF (WHITE/GREEN)
11 XPGF (WHITE)
12 XPGE (BROWN/GREEN)
OPTION CONNECTOR
TO LINEAR-SCALE
TO FLEXIBLE-HOSE
PC.116176
[2CN-YT(A320)]
[2CN-YT-A320]
1 YPGB
2 YPGA
3 YPGC
4 YPGE (BLUE)
5 YPGF (WHITE)
6 *
7 YPGB-
8 YPGA-
9 YPGC-
10 YPGE (BROWN/GREEN)
11 YPGF (WHITE/GREEN)
12 E (YELLOW/GREEN)
TWIST
5559-12P
AWG18
L=3000
LINEAR-SCALE CABLE (PC.511179)
[2CN-YL]
1 YPGB- (PINK)
2 YPGE (BLUE)
3 YPGC (RED)
4 YPGC- (BLACK)
5 YPGA (BROWN)
6 YPGA- (GREEN)
7 *
8 YPGB (GLAY)
9 *
10 YPGF (WHITE/GREEN)
11 YPGF (WHITE)
12 YPGE (BROWN/GREEN)
OPTION CONNECTOR
TO LINEAR-SCALE
OPTION : A320(STD)/(EC)
TO FLEXIBLE-HOSE
PC.116117
[2CN-XT(A320/A530)]
[2CN-XT-A320/A530]
1 XPGA
2 XPGB
3 XPGC
4 XPGE (BLUE)
5 XPGF (WHITE)
6 *
7 XPGA-
8 XPGB-
9 XPGC-
10 XPGE (BROWN/GREEN)
11 XPGF (WHITE/GREEN)
12 E (YELLOW/GREEN)
TWIST
5559-12P
AWG18
L=2000
LINEAR-SCALE CABLE (PC.511179)
[2CN-XL]
1 XPGB- (PINK)
2 XPGE (BLUE)
3 XPGC (RED)
4 XPGC- (BLACK)
5 XPGA (BROWN)
6 XPGA- (GREEN)
7 *
8 XPGB (GLAY)
9 *
10 XPGF (WHITE/GREEN)
11 XPGF (WHITE)
12 XPGE (BROWN/GREEN)
OPTION CONNECTOR
TO LINEAR-SCALE
TO FLEXIBLE-HOSE
PC.116175
[2CN-YT(A530)]
[2CN-YT-A530]
1 YPGB
2 YPGA
3 YPGC
4 YPGE (BLUE)
5 YPGF (WHITE)
6 *
7 YPGB-
8 YPGA-
9 YPGC-
10 YPGE (BROWN/GREEN)
11 YPGF (WHITE/GREEN)
12 E (YELLOW/GREEN)
TWIST
5559-12P
AWG18
L=3500
LINEAR-SCALE CABLE (PC.511179)
[2CN-YL]
1 YPGB- (PINK)
2 YPGE (BLUE)
3 YPGC (RED)
4 YPGC- (BLACK)
5 YPGA (BROWN)
6 YPGA- (GREEN)
7 *
8 YPGB (GLAY)
9 *
10 YPGF (WHITE/GREEN)
11 YPGF (WHITE)
12 YPGE (BROWN/GREEN)
OPTION CONNECTOR
TO LINEAR-SCALE
OPTION : A530(STD)/(EC)
SODICK CO.,LTD
TITLE
MACHINE SIDE CABLE
LINEAR-SCALE
SHEET NO.
1/1
DATE
25/JAN/
DESIGNED INOUE
DRAWN INOUE
CHECKED
APPROVED
DWG.NO
TE300382A

PC BOARD
JUMPER & FUNCTION

CPU-386 JUMPER SETTING (VER 12) & FUNCTION



J1	6-9
	7-8
J2	6-13
	7-12
	10-11
J4	1-14
	3-12
	4-11

J13	1-26
	2-25
	3-24
	4-23
	5-22
	6-21
	7-20
	8-19
	9-18
	10-17
	11-16
	12-15

J5	OPEN
J6	CLOSE
J10	OPEN
J11	OPEN
J12	OPEN

[Construction]
CPU : 80386 16MHz
80387 16MHz
RAM : 1MByte
ROM : 256KByte
Address program(ST BACKS Ver.2)

* System program is stationed on the RAM.

[FUNCTION]
1.Automatic joint of circuler interpolation
2.Interfreuce check and avoiding
3.Graphic data calculation
4.Coordinate rotation
5.Error check
6.Switch check

[VR1]
Adjusting timing level for changeover battery to normal power supply.
Do not touch.

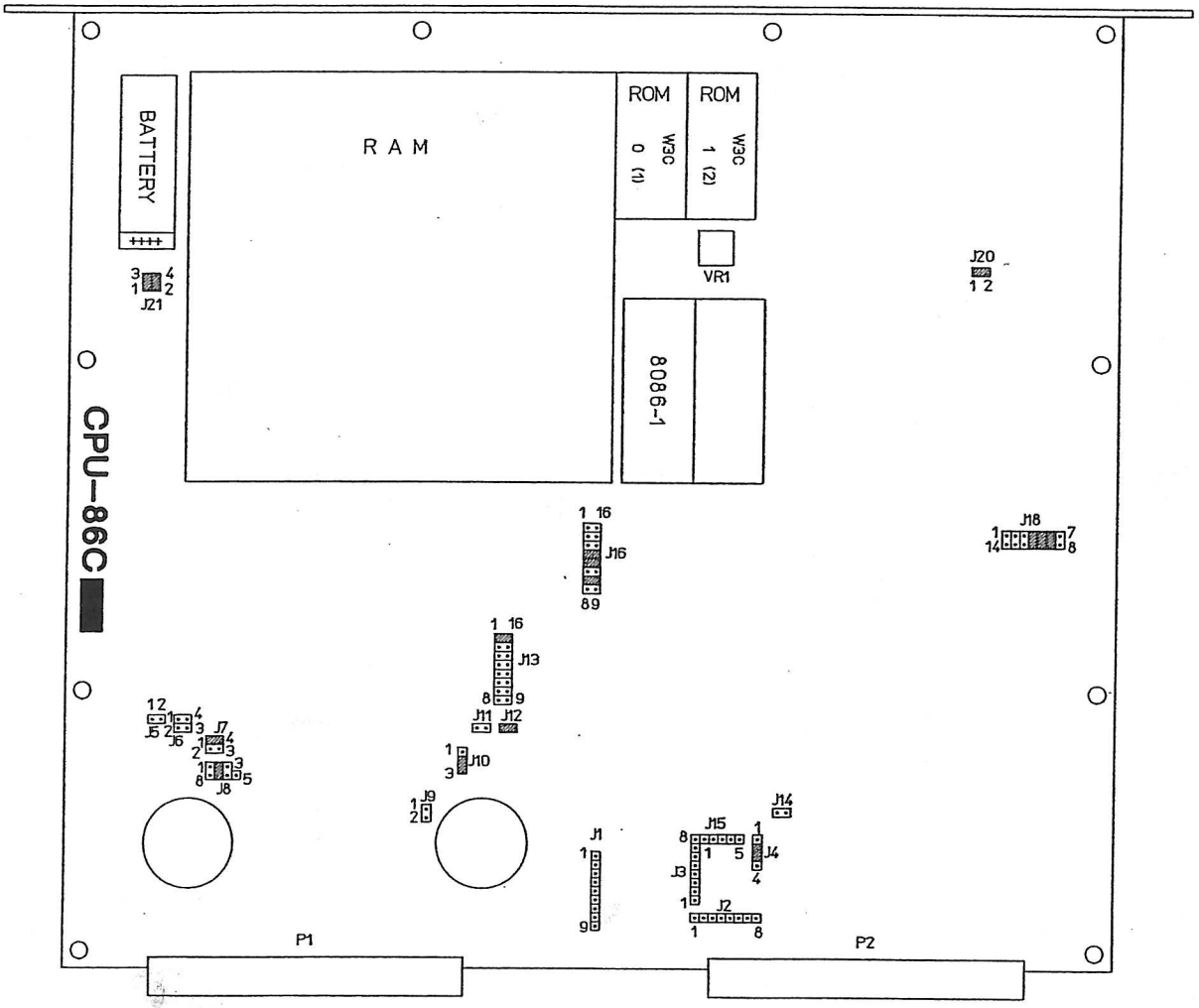
[Explanation for LED]

O LED1	Red	Power supply Normaly lighting
O LED2	Green	Multibus access Normalylighting
O LED3	Yellow	CPU work condition Slow blinking
O LED4	Yellow	CPU work condition Blinking when analize NC program

If blinking interval is abnormal, impossible to continue working. Has to be installed system again or exchange CPU board.

JUMPER	TITLE	CPU-386(SLV)	MODEL	EX21	SHEET NO.	1/1	DATE	22-JUN-94	
SODICK CO.,LTD.	DWG NO.	TE300466A	DESIGNED NAGAMORI	DRAWING NAGAMORI	CEHCKED ASADA	APPROVED ASADA			

CPU-86 JUMPER SETTING (VER 5) & FUNCTION



J4	2-3
J7	1-4
J8	2-7
J10	2-3
J12	1-2
J13	1-16
J16	4-13
	5-12
	7-10

J18	4-11
	5-10
	6-9
J20	1-2
J21	1-3
	2-4

[Construction]
CPU : 8086-1 10MHz
RAM : 256KByte
ROM : 256KByte
System program (SYS3*2)

[Function]
1.Interpolation part
2.positioning part
3.Motor drive data output & input part
4.Sub output part
5.And as same MARK-EX control (CPU3)

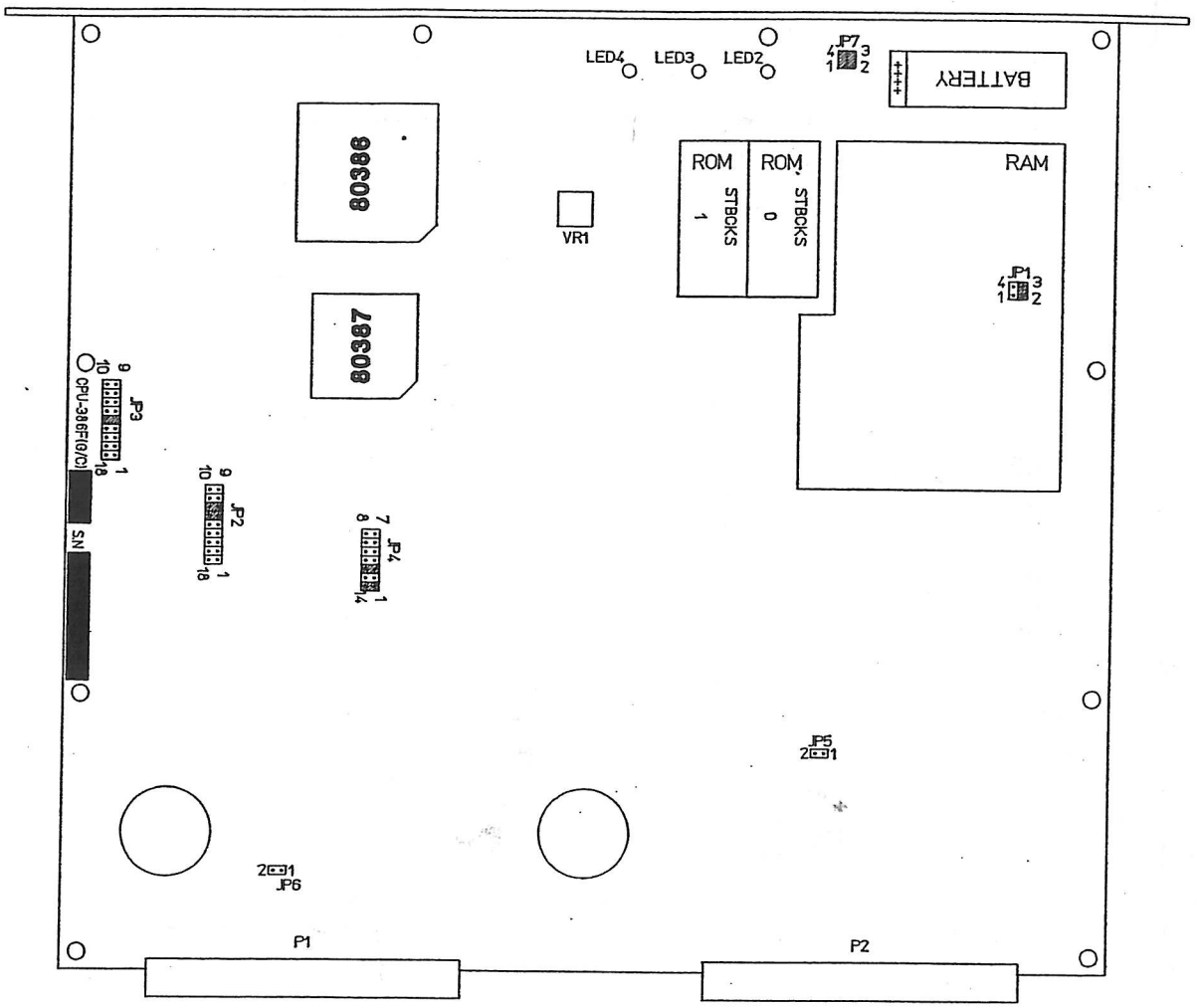
[VR1]
Adjusting timing level for changeover battery to normal power supply.
Do not touch.

[Explanation for LED]

LED1	Green	Multibus access Normaly lighting
LED2	Yellow	CPU work condition When running NC program. Normaly light or not
LED3	Red	System load When system loading quick blinking. Other not lighting

JUMPER	TITLE	CPU-86	MODEL	EX21	SHEET NO.	1/1	DATE	22-JUN-94	
SODICK CO.,LTD.	DWG NO.	TE300467A	DESIGNED NAGAMORI	DRAWING NAGAMORI	CEHCKED ASADA	APPROVED ASADA			

CPU-386(G/C SML) JUMPER SETTING (VER 3)



JP1	2-3
JP2	6-13
	7-12
JP3	5-14
JP4	1-12
	3-14

[Construction]
CPU : 80386DX25
RAM : 1 M Bytes
ROM : 256K Bytes
Address program (STBCKS ver 2)
System program stationed on the RAM

JP7	1-4
	2-3

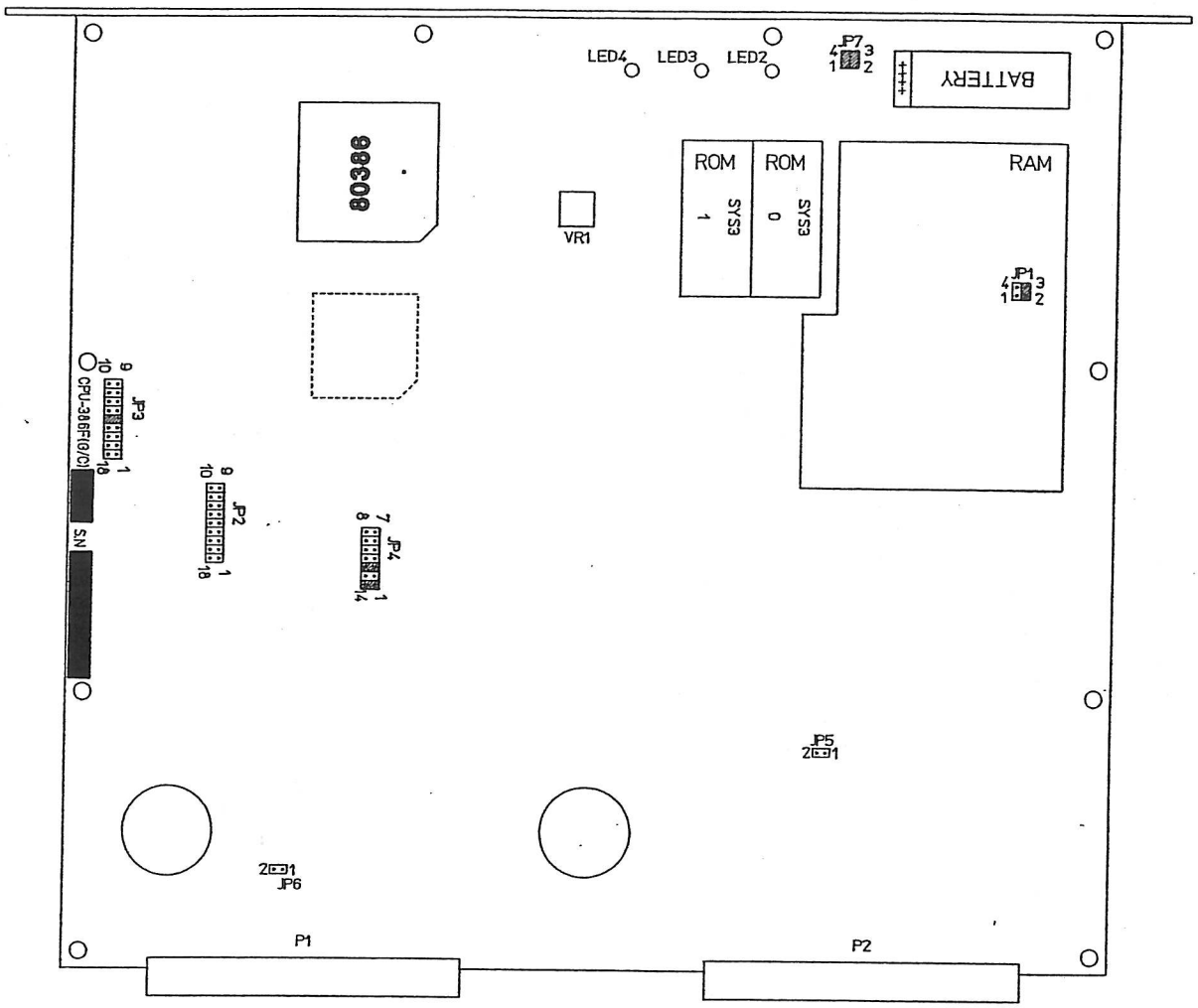
[VR1]
Adjusting timing level for changeover battery to normal power supply.
Do not touch.

[Explanation for LED]

LED2	Green	Multibus access Normaly lighting
LED3	Yellow	CPU work condition Slow blinking
LED4	Yellow	CPU work condition Blinking when analize NC-program

JUMPER	TITLE	CPU-386 (G/C SML)	MODEL	EX21	SHEET NO.	1/1	DATE	14-JUN-96	
SODICK CO.,LTD.	DWG NO.	TE300475A	DESIGNED INOUE	DRAWING INOUE	CEHCKED NAGAMORI	APPROVED			

CPU-386 (TYPE-86) JUMPER SETTING (VER 3)



JP1	2-3
JP3	5-14
JP4	1-12
	3-14

JP7	1-4
	2-3

[Construction]
CPU : 80386DX25
RAM : 512K Bytes
ROM : 256K Bytes
System program (SYS3*2)

[VR1]
Adjusting timing level for changeover battery to normal power supply.
Do not touch.

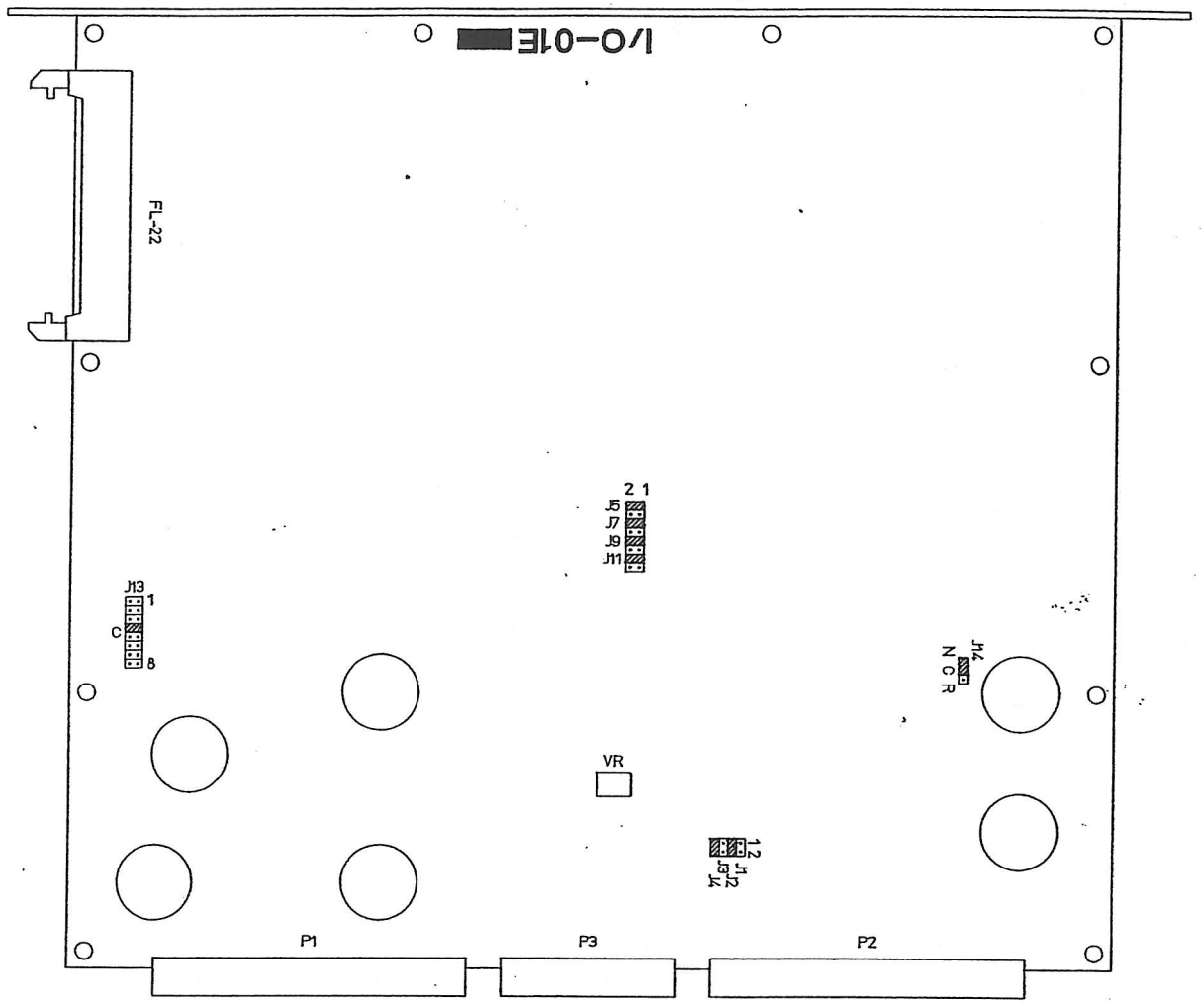
[Explanation for LED]

LED2	Green	Multibus access Normaly lighting
LED3	Yellow	CPU work condition
LED4	Yellow	CPU work condition

STATUS	LED2	LED3	FUNCTION
WAIT 1	none	none	waiting stand-by voltage (2 seconds)
WAIT 2	blink	blink	slow blinking 5 times
INIT.IO	light	light	initializing I/O
WAIT 3	nonek	blink	waiting system-1,2 to ready
READY	blink	nonek	LED3 is very slow blinking as normal condition

JUMPER	TITLE	CPU-386 (TYPE86)	MODEL	EX21	SHEET NO.	1/1	DATE	14-JUN-96	
SODICK CO.,LTD.	DWG NO.	TE300476A	DESIGNED INOUE	DRAWING INOUE	CEHCKED NAGAMORI	APPROVED			

I/O-01 JUMPER SETTING (VER 6) & FUNCTION



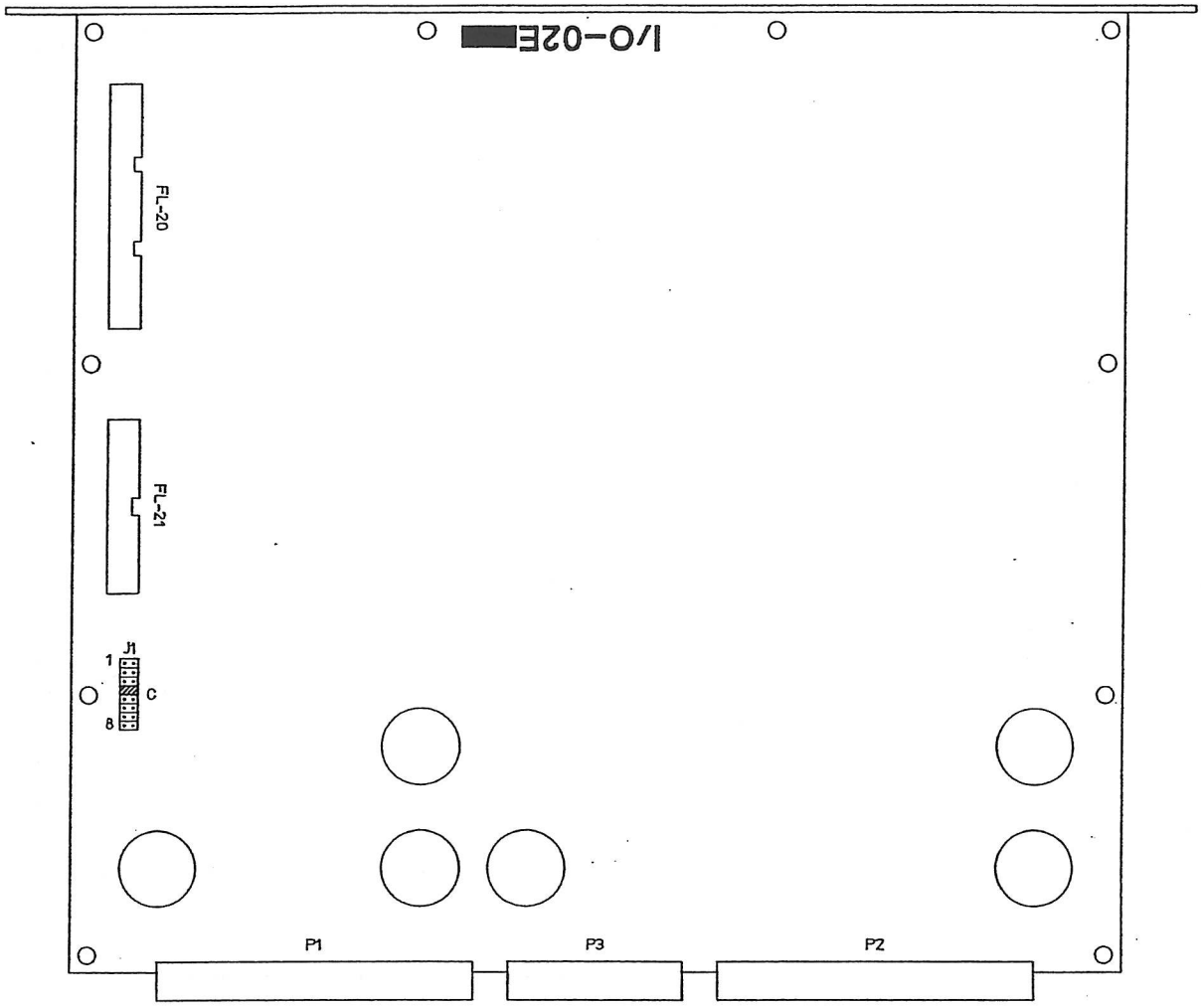
J2	1-2
J4	1-2
J5	1-2
J7	1-2
J9	1-2
J11	1-2
J13	C-4
J14	C-N

[Function]
Input/output folowing signal
1.Remote control box or keyboard,
*Each axes opration by JOG
*Changeover MFR JOG speed
*Each switch opration and sensing
*AWT opration
2.Wire speed NC control
3.Wire tension NC control
4.Wire pre-cutting device system opration
5.Slug removal system opration
6.Hardware power recovery system opration

[Connection]
P1 : Multibus
P2 : Input/output signal
P3 : Input/output signal
FL-22 : Input/output signal

JUMPER	TITLE	I/O-01	MODEL	EX21	SHEET NO.	1/1	DATE	22-JUN-94	
SODICK CO.,LTD.	DWG NO.	TE300468A	DESIGNED NAGAMORI	DRAWING NAGAMORI	CEHCKED ASADA	APPROVED ASADA			

I/O-02 JUMPER SETTING (VER 11) & FUNCTION [56 us]



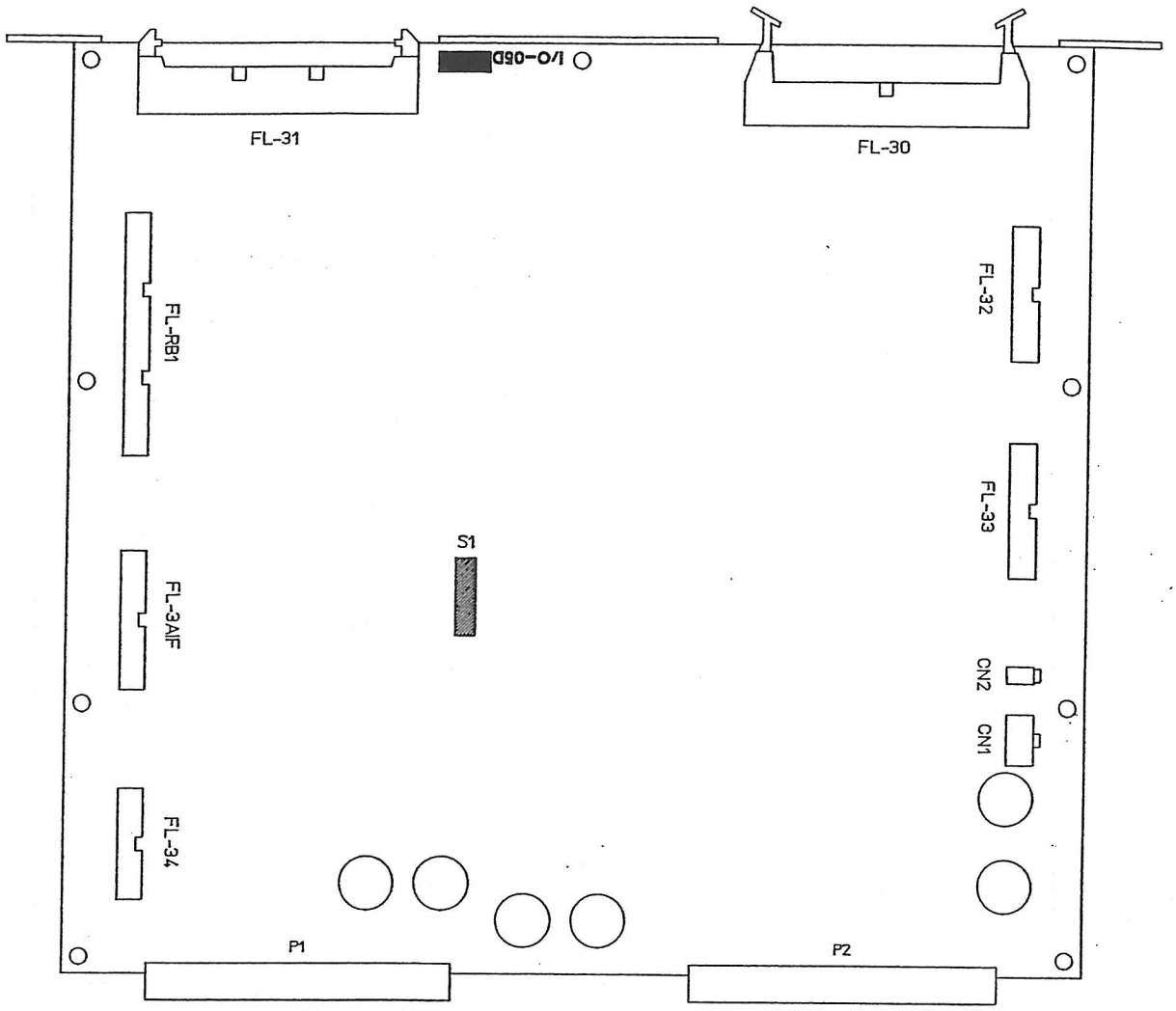
J1	C-4

[Function]
Input/output folowing signal
1.Motor control for each axis
2.Each axis limit,heat and rero signal input
3.NOMAN and BUZZER signal output
4.Machining on/off signal output
5.Machining condition,
*V.I.C. output
*Changeover IP16 relay
*Machining parameter output
*Sig 0 to F input
6.Signal tower run/off output

[Connction]
P1 : Multibus
P2 : Input/output signal
P3 : Input/output signal
FL-20 : To NRC-02(HQ)
FL-21 : To NRC-02(HQ)

JUMPER	TITLE	I/O-02	MODEL	EX21	SHEET NO.	1/1	DATE	22-JUN-94	
SODICK CO.,LTD.	DWG NO.	TE300469A	DESIGNED NAGAMORI	DRAWING NAGAMORI	CEHCKED ASADA	APPROVED ASADA			

I/O-05 JUMPER SETTING & FUNCTION



S1	-1	OFF
	-2	OFF
	-3	OFF
	-4	OFF
	-5	ON
	-6	OFF
	-7	OFF
	-8	OFF

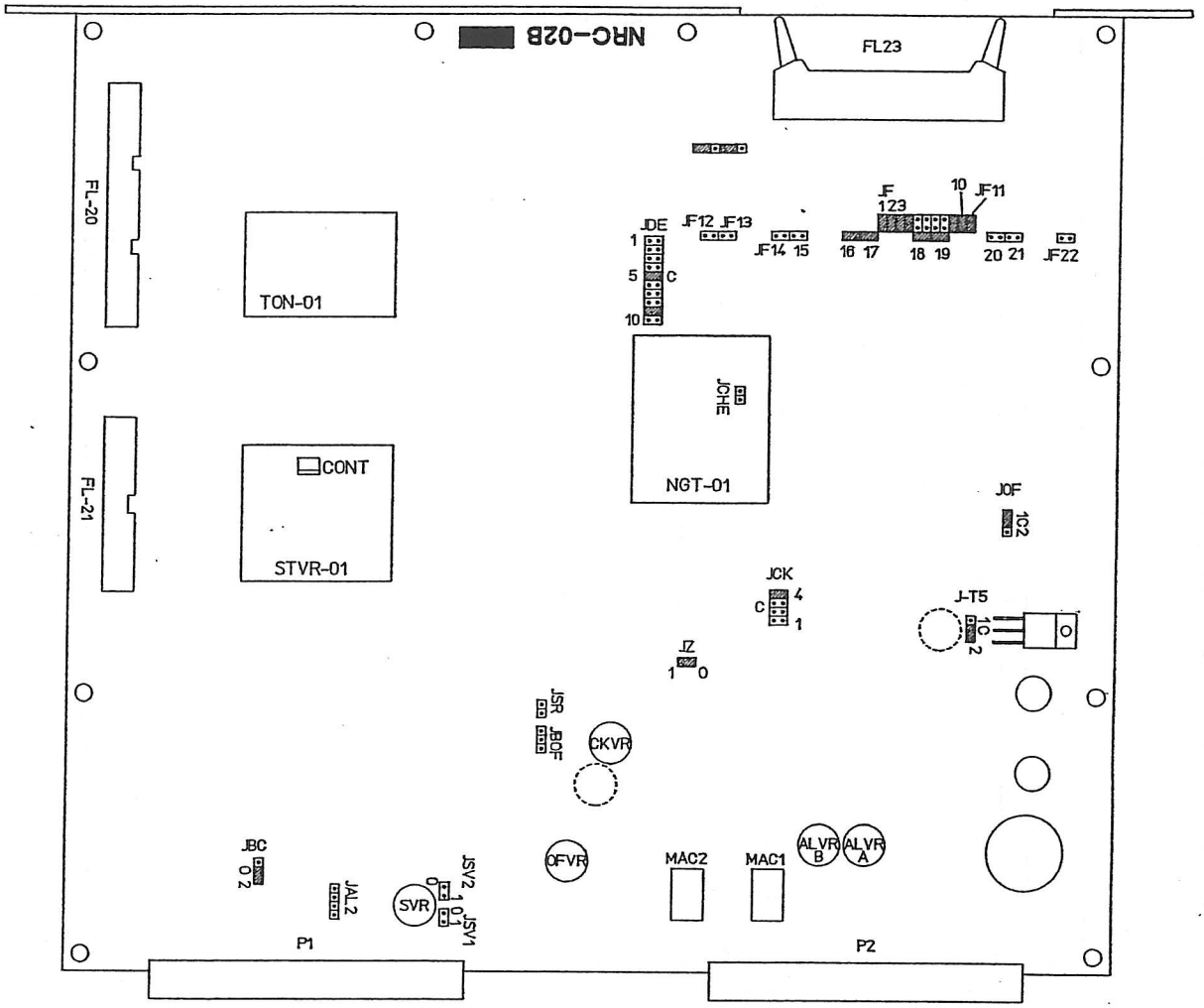
[Function]
Input/output folowing signal
1.Each axis heat and zero signal input (U.V.W axis)
2.Changeover minimum movement select output (0.1um or 1um)
3.Changeover MFR switch (remote control box side or keyboard side)
4.ST level select output

[Connection]

P1	: Multibus
P2	:
CN1	:
CN2	: To KYB-003 or KYB-012
FL-30	:
FL-31	:
FL-32	: To STVR-01 on NRC-02(HQ)
FL-RB1	: From remote control box
FL-3AIF	: To MTHR-01

JUMPER	TITLE	I/O-05		MODEL	EX21		SHEET NO.	1/1	DATE 22-JUN-94
SODICK CO.,LTD.	DWG NO.	TE300470A	DESIGNED NAGAMORI		DRAWING NAGAMORI		CEHCKED ASADA		APPROVED ASADA

NRC-02(HQ) JUMPER SETTING (VER 5) & FUNCTION



JF1	CLOSE	JF12	OPEN
JF2	CLOSE	JF13	OPEN
JF3	CLOSE	JF14	OPEN
JF4	CLOSE	JF15	OPEN
JF5	OPEN	JF16	CLOSE
JF6	OPEN	JF17	CLOSE
JF7	OPEN	JF18	CLOSE
JF8	OPEN	JF19	CLOSE
JF9	CLOSE	JF20	OPEN
JF10	CLOSE	JF21	OPEN
JF11	CLOSE	JF22	OPEN

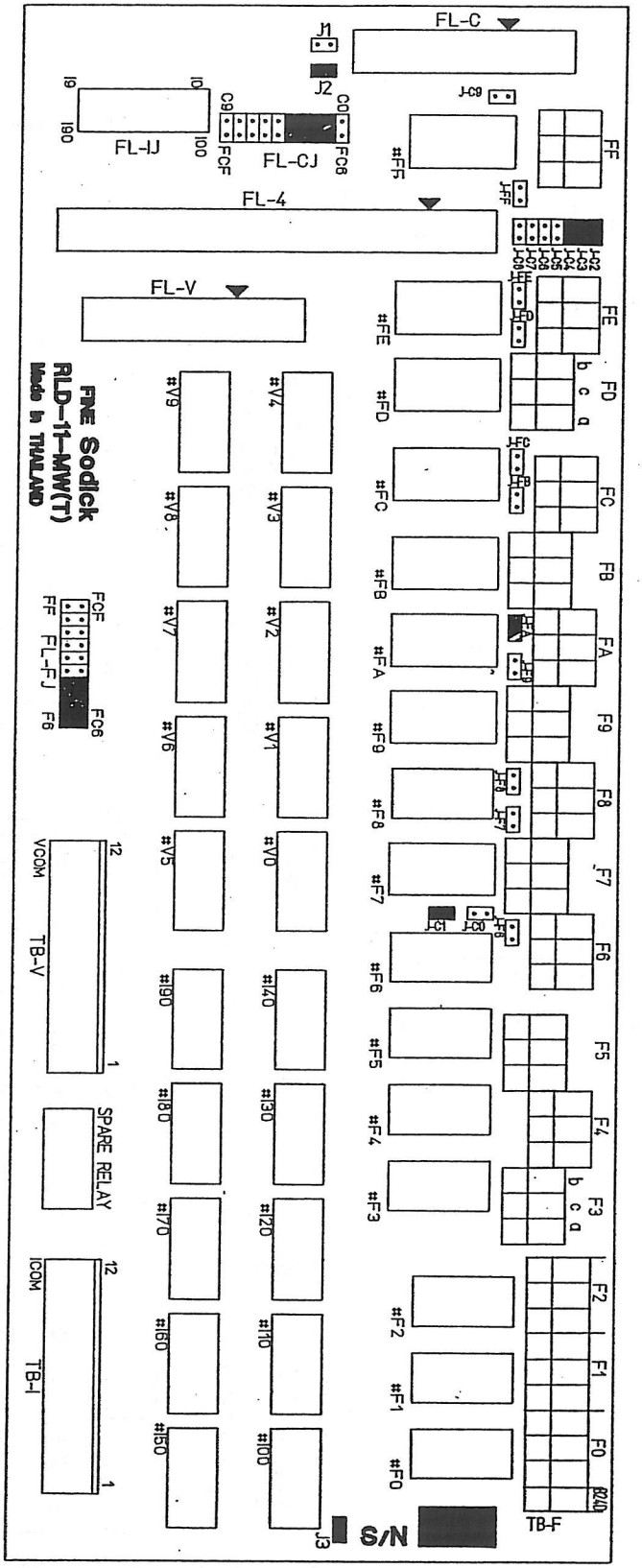
JIS1	C-1
JIS3	C-1
JDE	C-5
	C-9
JOF	C-1
J-T5	C-2
JCK	C-4
JZ	0-1
JBC	0-2

[Function]
Discharge and servo part
1.Oscillation of main GATE signal (ON time, OFF time)
2.Oscillation of TM GATE signal (ON time, OFF time)
3.Detection of discharge gap
4.Contact check (ST opration)
5.Servo condition input
6.Output of IP
7.Cut-off control
8.High peak control

[Connection]
P1 :
P2 :
FL-20 : To I/O-02
FL-21 : To I/O-02
FL-23 : To P-MOS board (SMS-01,GMS-01 & HMS-01)
CONT : To I/O-05

JUMPER	TITLE	NRC-02(HQ)	MODEL	EX21	SHEET NO.	1/1	DATE	22-JUN-94	
SODICK CO.,LTD.	DWG NO.	TE300471A	DESIGNED NAGAMORI	DRAWING NAGAMORI	CEHCKED ASADA	APPROVED ASADA			

RLD-11W JUMPER SETTING

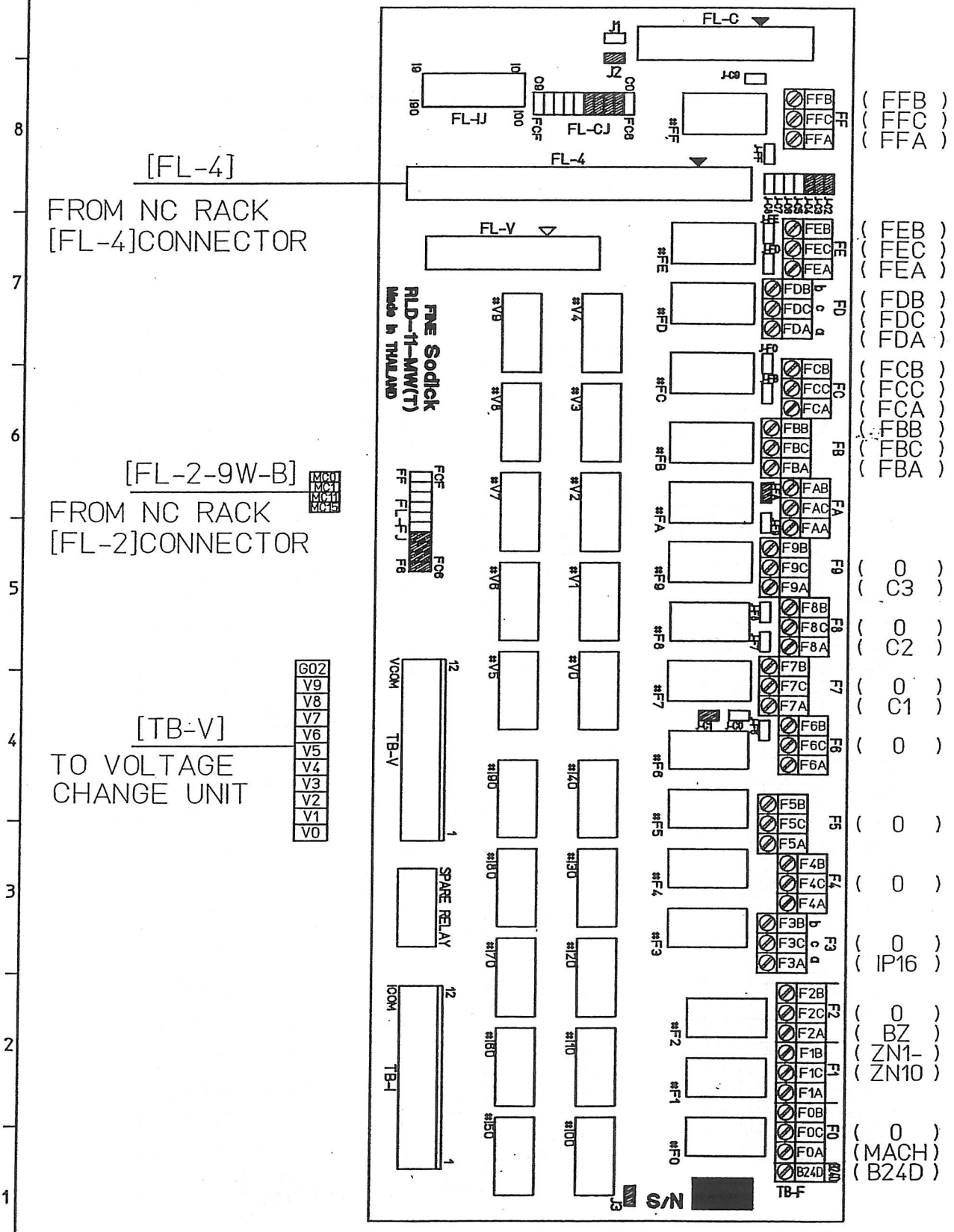


FL-CJ	C1-FC7
	C2-FC8
	C3-FC9
	C4-FCA
FL-FJ	F6-FC6
	F7-FC7
	F8-FC8
	F9-FC9

J1	OPEN
J2	CLOSE
J3	CLOSE
J-C0	OPEN
J-C1	CLOSE
J-C2	CLOSE
J-C3	CLOSE
J-C4	CLOSE
J-C5	OPEN
J-C6	OPEN
J-C7	OPEN
J-C8	OPEN
J-C9	OPEN
J-F6	OPEN
J-F7	OPEN
J-F8	OPEN
J-F9	OPEN
J-FA	CLOSE
J-FB	OPEN
J-FC	OPEN
J-FD	OPEN
J-FE	OPEN
J-FF	OPEN

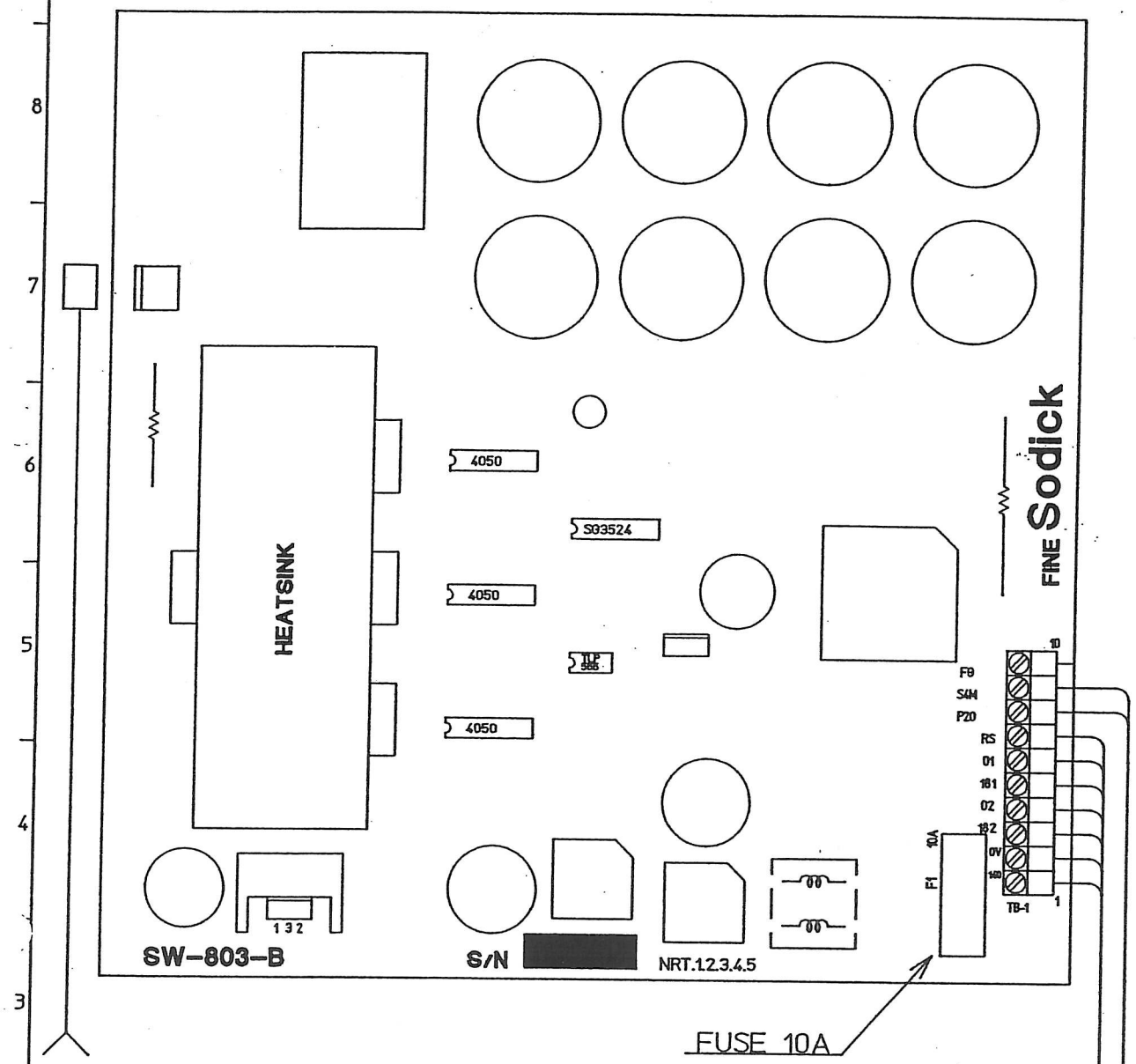
JUMPER	TITLE	RLD-11W	MODEL	EX21	SHEET NO.	1/1	DATE	07-JUN-94	
SODICK CO.,LTD.	DWG NO.	TE300472A	DESIGNED BY NAGAMORI	DRAWING BY NAGAMORI	CEHCKED BY		APPROVED BY		

RLD-11W
CABLE LAYOUT



LAYOUT	TITLE	RLD-11W	MODEL	EX21	SHEET NO.	1/1	DATE	19-NOV-93	
SODICK CO.,LTD.	DWG NO.	TE300473A	DESIGNED BY TSUKUDA	DRAWING BY TSUKUDA	CEHCKED BY TSUKUDA	APPROVED BY			

SW-803 CABLE LAYOUT



LAYOUT	TITLE	SW-803	MODEL	EX21	SHEET NO.	1/1	DATE 19-NOV-93
SODICK CO.,LTD.	DWG NO.	TE300474A	DESIGNED BY TSUKUDA	DRAWING BY TSUKUDA	CEHCKED BY TSUKUDA	APPROVED BY	

EX-21 I/O ADDRESS

I/O-01	A0080H ~ A00FEH
I/O-02	A0000H ~ A005EH
I/O-05	A0100H ~ A018EH

ADDRESS	I/O	SIGNAL	FUNCTION (OUTPUT TO UNIT OR INPUT FROM UNIT)
A0000H	OUT	ONA-H	GATE ON PULSE SELECT (I/O-02 → NRC-02)
A0002H	OUT	OFFA-H	GATE OFF PULSE SELECT (I/O-02 → NRC-02)
A0004H	OUT	AJC1-8	(NOT USED)
A0006H	OUT	IPA-L	IP SELECT (I/O-02 → NRC-02 → P-MOS)
A0008H	OUT	HDA-D	HP SELECT (I/O-02 → NRC-02)
A000AH	OUT	MAA-D	MA SELECT (I/O-02 → NRC-02)
A000CH	OUT	SVA-D	SV SELECT (I/O-02 → NRC-02)
A000EH	OUT	MX0-9	X AXIS MOTOR PULSE (WD-003 → SERVO PACK)
A0010H	OUT	MY0-9	Y AXIS MOTOR PULSE (WD-003 → SERVO PACK)
A0012H	OUT	MZ0-9	Z AXIS MOTOR PULSE (SDB-52NUA DRIVER AT A530)
A0014H	OUT	MU0-9	U AXIS MOTOR PULSE (WD-003 → MOTOR)
A0016H	OUT	MV0-9	V AXIS MOTOR PULSE (WD-003 → MOTOR)
A0018H	OUT	MW0-9	W AXIS MOTOR PULSE (NOT USED)
A001AH	OUT	V0-9	V SELECT (RLD-11W → SGC-01 → SCR)
A001CH	OUT	I0-9	I SELECT (NOT USED)
A001EH	OUT	C0-9	C SELECT (RLD-11W → #C1,#C2,#C3)
A0020H	IN	+,-*L	X.Y.Z AXIS LIMIT (X.Y:WD-003 Z:SDB-52NUA)
A0022H	IN	+,-*L	U.V.W AXIS LIMIT (U.V:WD-003 W:NOT USED)
A0024H	IN	*ZR	X.Y.Z AXIS ZERO PULSE (X.Y:WD-003 Z:NOT USED)
A0026H	IN	*HS	X.Y.Z AXIS HEAT LIMIT (X.Y:WD-003 Z:NOT USED)
A0028H	IN	SIG0-7	SIG 0-7 : SERVO (NRC-02 → I/O-02)
A002AH	IN	SIG8-F	SIG 8-F : 8(ST) (NRC-02 → I/O-02)
A002CH	IN		(NOT USED)
A002EH	IN		(NOT USED)
A0030H	OUT	CP	SV16 (NOT USED)
A0032H	OUT	B/C	(NOT USED)
A0034H	OUT	MG	(NOT USED)
A0036H	OUT	HTI	HTI (I/O-02 → NRC-02)
A0038H	OUT	NW	(NOT USED)
A003AH	OUT	GR	ST ON (I/O-02 → NRC-02)
A003CH	OUT	WC	(NOT USED)
A003EH	OUT	ST0	(NOT USED)
A0040H	OUT	FU0	MACHINING ON (I/O-02 → RLD-11W → #B01)
A0042H	OUT	FU1	NOMAN ON (I/O-02 → RLD-11W)
A0044H	OUT	FU2	BUZZER ON (I/O-02 → RLD-11W → BUZZER)
A0046H	OUT	FU3	IP16 SELECT (I/O-02 → RLD-11W → #IP16)
A0048H	OUT	FU4	PIKA (NOT USED)
A004AH	OUT	FU5	PIKA0 (NOT USED)
A004CH	OUT	FU6	PIKA1 (NOT USED)
A004EH	OUT	FU7	(NOT USED)
A0050H	OUT	FU8	PAT0 (NOT USED)
A0052H	OUT	FU9	PAT1 (NOT USED)
A0054H	OUT	FUA	PAT2 (NOT USED)
A0056H	OUT	FUB	(NOT USED)
A0058H	OUT	FUC	(NOT USED)
A005AH	OUT	FUD	(NOT USED)
A005CH	OUT	FUE	(NOT USED)
A005EH	OUT	FUF	(NOT USED)

ADDRESS	I/O	SIGNAL	FUNCTION (OUTPUT TO UNIT OR INPUT FROM UNIT)
A0080H	IN	MCI0	AIR SENSOR (#AI → I/O-01)
A0081H	IN	MCI1	OIL LIMIT
A0082H	IN	MCI2	WATER LIMIT
A0083H	IN	MCI3	
A0084H	IN	MCI4	
A0085H	IN	MCI5	HIGH PRESSURE ON (SUB PANEL → I/O-01)
A0086H	IN	MCI6	HIGH PRESSURE OFF (SUB PANEL → I/O-01)
A0087H	IN	MCI7	AWT ZAKUSTU SENSOR (AWT → #DET → I/O-01)
A0088H	IN	MCI8	AWT BROW SENSOR (AWT → #DET → I/O-01)
A0089H	IN	MCI9	AWT PIPE UP LIMIT (AWT → #PU → I/O-01)
A008AH	IN	MCI10	AWT PIPE DOWN LIMIT (AWT → #DET → I/O-01)
A008BH	IN	MCI11	WIRE GUIDE SENSOR
A008CH	IN	MCI12	AWT FLOAT
A008DH	IN	MCI13	SUBMERGE ON (SUB PANEL → I/O-01)
A008EH	IN	MCI14	SEND ON (SUB PANEL → I/O-01)
A008FH	IN	MCI15	SEND OFF (SUB PANEL → I/O-01)
A0090H	IN	ATI0	WIRE BREAK LIMIT (#WLS → I/O-01)
A0091H	IN	ATI1	WIRE TENSION OFF
A0092H	IN	ATI2	DRAIN ON (SUB PANEL → I/O-01)
A0093H	IN	ATI3	DRAIN OFF (SUB PANEL → I/O-01)
A0094H	IN	ATI4	WIRE RUN ON (SUB PANEL → I/O-01)
A0095H	IN	ATI5	WIRE RUN OFF (SUB PANEL → I/O-01)
A0096H	IN	ATI6	HI-PRESS ON (PUMP ON) (SUB PANEL → I/O-01)
A0097H	IN	ATI7	HI-PRESS OFF (PUMP OFF) (SUB PANEL → I/O-01)
A0098H	IN	ATI8	FLUSH ON (SUB PANEL → I/O-01)
A0099H	IN	ATI9	FLUSH OFF (SUB PANEL → I/O-01)
A009AH	IN	ATI10	OIL SELECT (NOT USED)
A009BH	IN	ATI11	SUBMERGE OFF (SUB PANEL → I/O-01)
A009CH	IN	ATI12	AWT 1 (SUB PANEL → I/O-01)
A009DH	IN	ATI13	AWT 2 (SUB PANEL → I/O-01)
A009EH	IN	ATI14	FLOAT SENSOR (#FL → I/O-01)
A009FH	IN	ATI15	THERMO SENSOR (NOT USED)
A00A0H	OUT	MC0	WIRE RUN (I/O-1 → RLD-11W → WSP-01 → SS31)
A00A1H	OUT	MC1	AWT DETECT (I/O-1 → RLD-11W → #DET1,2)
A00A2H	OUT	MC2	HARDING (NOT USED)
A00A3H	OUT	MC3	EC ON (NOT USED)
A00A4H	OUT	MC4	TENSION OFF (NOT USED)
A00A5H	OUT	MC5	WIRE SPEED (NOT USED)
A00A6H	OUT	MC6	CLAMP ELECTRODE (NOT USED)
A00A7H	OUT	MC7	FLUSH ON (NOT USED)
A00A8H	OUT	MC8	(NOT USED)
A00A9H	OUT	MC9	(NOT USED)
A00AAH	OUT	MC10	(NOT USED)
A00ABH	OUT	MC11	AWT ARM (I/O-01 → RLD-11W)
A00ACH	OUT	MC12	(NOT USED)
A00ADH	OUT	MC13	(NOT USED)
A00AEH	OUT	MC14	(NOT USED)
A00AFH	OUT	MC15	SEND (I/O-01 → RLD-11W)

ADDRESS	I/O	SIGNAL	FUNCTION (OUTPUT TO UNIT OR INPUT FROM UNIT)
A00B0H	OUT	AT0	AWT CUTTER (I/O-01 → RLD-3)
A00B1H	OUT	AT1	AWT WIRE CLAMP (I/O-01 → RLD-3)
A00B2H	OUT	AT2	AWT PIPE MOTOR (I/O-01 → RLD-3)
A00B3H	OUT	AT3	AWT PIPE UP/DOWN (I/O-01 → RLD-3)
A00B4H	OUT	AT4	AWT FLUSH (I/O-01 → RLD-3)
A00B5H	OUT	AT5	FLUSH SOLENOID VALVE (I/O-01 → RLD-3)
A00B6H	OUT	AT6	AWT BROW (I/O-01 → RLD-3)
A00B7H	OUT	AT7	DRAIN OPEN (I/O-01 → RLD-3)
A00B8H	OUT	AT8	DRAIN CLOSE (I/O-01 → RLD-3)
A00B9H	OUT	AT9	OIL/WATER SELECT (NOT USED) (I/O-01 → RLD-3)
A00BAH	OUT	AT10	HIGH PRESSURE/SEND (I/O-01 → RLD-3)
A00BBH	OUT	AT11	FLUSH (I/O-01 → RLD-3)
A00BCH	OUT	AT12	WIRE GUIDE (I/O-01 → RLD-3)
A00BDH	OUT	AT13	AWT CLUTCH (I/O-01 → RLD-3)
A00BEH	OUT	AT14	AWT ARM CLAMP (I/O-01 → RLD-3)
A00BFH	OUT	AT15	TENSION OFF (I/O-01 → RLD-3)
A00C0H	IN	+,-*	X.Y.Z +/- JOG (KEYBOARD,REMOCON → I/O-01)
A00C2H	IN	+,-*	U.V.W +/- JOG (KEYBOARD,REMOCON → I/O-01)
A00C4H	IN	MFR0-3	M.F.R 0,1,2,3 (KEYBOARD,REMOCON → I/O-01)
A00C6H	IN	MFR SW	(NOT USED)
A00CEH	OUT	*MFR*	(NOT USED)
A00D0H	IN	INC10	(NOT USED)
A00D1H	IN	INC1	(NOT USED)
A00D2H	IN	INC01	(NOT USED)
A00D3H	IN	INC001	(NOT USED)
A00D4H	IN	INC0001	(NOT USED)
A00D5H	IN	ST CAN	ST CANCEL (KEYBOARD,REMOCON → I/O-01)
A00D6H	IN	FLOAT	(NOT USED)
A00D7H	IN	PUMP	(NOT USED)
A00D8H	IN	ACK	ACK (KEYBOARD,REMOCON → I/O-01)
A00D9H	IN	OFF	OFF (KEYBOARD,REMOCON → I/O-01)
A00DAH	IN	HALT	HALT (KEYBOARD,REMOCON → I/O-01)
A00DBH	IN	RST	RST (KEYBOARD,REMOCON → I/O-01)
A00DCH	IN	PUM-OFF	(NOT USED)
A00DDH	IN	THI	(NOT USED)
A00DEH	IN	FULD	(NOT USED)
A00DFH	IN	ATC AIR	(NOT USED)

ADDRESS	I/O	SIGNAL	FUNCTION (OUTPUT TO UNIT OR INPUT FROM UNIT)
A00E0H	IN	E0I	(NOT USED)
A00E1H	IN	E1I	(NOT USED)
A00E2H	IN	E2I	(NOT USED)
A00E3H	IN	E3I	(NOT USED)
A00E4H	IN	E4I	(NOT USED)
A00E5H	IN	E5I	(NOT USED)
A00E6H	IN	E6I	(NOT USED)
A00E7H	IN	E7I	(NOT USED)
A00E8H	IN	E8I	(NOT USED)
A00E9H	IN	E9I	(NOT USED)
A00EAH	IN	EAI	(NOT USED)
A00EBH	IN	EBI	(NOT USED)
A00ECH	IN	ECI	(NOT USED)
A00EDH	IN	EDI	(NOT USED)
A00EEH	IN	EEI	(NOT USED)
A00EFH	IN	EFI	(NOT USED)
A00E0H	OUT	E00	(NOT USED)
A00E1H	OUT	E10	(NOT USED)
A00E2H	OUT	E20	(NOT USED)
A00E3H	OUT	E30	(NOT USED)
A00E4H	OUT	E40	(NOT USED)
A00E5H	OUT	E50	(NOT USED)
A00E6H	OUT	E60	(NOT USED)
A00E7H	OUT	E70	(NOT USED)
A00E8H	OUT	E80	(NOT USED)
A00E9H	OUT	E90	(NOT USED)
A00EAH	OUT	EA0	(NOT USED)
A00EBH	OUT	EB0	(NOT USED)
A00ECH	OUT	EC0	(NOT USED)
A00EDH	OUT	ED0	(NOT USED)
A00EEH	OUT	EE0	(NOT USED)
A00EFH	OUT	EF0	(NOT USED)
A00F0H	OUT	I/079	0-12V (S CODE) (NOT USED)
A00F8H	OUT	WSPD1-8	WIPE SPEED (I/O-01 → WSP-01)
A00FAH	OUT	WTEN1-8	WIRE TENSION (I/O-01 → WTN-01)
A00FCH	OUT	WRA1-8	(NOT USED)
A00FEH	OUT	FUN1-8	(NOT USED)
A00A0H	IN	ATNA	(NOT USED)
A00A0H	IN	ATNB	(NOT USED)
A00A0H	IN	ATNC	(NOT USED)
A00A0H	IN	ATND	(NOT USED)
A00A0H	IN	ATNE	(NOT USED)
A00A0H	IN	ATNF	(NOT USED)
A00A0H	IN	ATNG	(NOT USED)
A00A0H	IN	ATNH	(NOT USED)

ADDRESS	I/O	SIGNAL	FUNCTION (OUTPUT TO UNIT OR INPUT FROM UNIT)
A0100H	OUT	A*LD..	ZERO SET LAMP (I/O-5 → REMOCON)
A0102H	OUT	AV*D..	VERTICAL SET LAMP (I/O-5 → REMOCON)
A0104H	OUT	SB10-7	ST LED (I/O-5 → REMOCON)
A0106H	OUT	SB20-7	
A0108H	OUT	SB30-7	
A010AH	OUT	SB40-7	
A010CH	OUT	SB50-7	
A010EH	OUT	SX0-7	X AXIS 1/0.1um SELECT (NOT USED)
A0110H	OUT	SY0-7	Y AXIS 1/0.1um SELECT (NOT USED)
A0112H	OUT	SZ0-7	Z AXIS 1/0.1um SELECT (NOT USED)
A0114H	OUT	SU0-7	U AXIS 1/0.1um SELECT (NOT USED)
A0116H	OUT	SV0-7	V AXIS 1/0.1um SELECT (NOT USED)
A0118H	OUT	SW0-7	W AXIS 1/0.1um SELECT (NOT USED)
A011AH	OUT		
A011CH	OUT		
A011EH	OUT		
A0120H	IN	A0*	ZERO SET
A0122H	IN	VA*	VERTICAL
A0124H	IN	*ZR	U.V.W AXIS ZERO
A0126H	IN	*HS	U.V.W AXIS HEAT
A0128H	IN	SB60-7	
A012AH	IN	SB70-7	
A012CH	IN	SB80-7	
A012EH	IN	SB90-7	
A0130H	OUT	OP00	THERMO CONTROL (NOT USED)
A0132H	OUT	OP01	RESISTANCE CONTROL(NOT USED)
A0134H	OUT	OP02	DOUBLE FLOAT (NOT USED)
A0136H	OUT	OP03	(NOT USED)
A0138H	OUT	OP04	(NOT USED)
A013AH	OUT	OP05	(NOT USED)
A013CH	OUT	OP06	(NOT USED)
A013EH	OUT	OP07	(NOT USED)
A0140H	OUT	OP08	(NOT USED)
A0142H	OUT	OP09	(NOT USED)
A0144H	OUT	OP010	(NOT USED)
A0146H	OUT	OP011	(NOT USED)
A0148H	OUT	OP012	(NOT USED)
A014AH	OUT	OP013	(NOT USED)
A014CH	OUT	OP014	(NOT USED)
A014EH	OUT	OP015	(NOT USED)
A0150H	OUT	OP0A	(NOT USED)
A0152H	OUT	OP0B	(NOT USED)
A0154H	OUT	OP0C	(NOT USED)
A0156H	OUT	OP0D	(NOT USED)
A0158H	OUT	OP0E	(NOT USED)
A015AH	OUT	OP0F	(NOT USED)
A015CH	OUT	OP0G	(NOT USED)
A015EH	OUT	OP0H	(NOT USED)

ADDRESS	I/O	SIGNAL	FUNCTION (OUTPUT TO UNIT OR INPUT FROM UNIT)
A0160H	IN	OPI0	THERMO IN (NOT USED)
A0162H	IN	OPI1	RESISTANCE IN (NOT USED)
A0164H	IN	OPI2	DOUBLE IN (NOT USED)
A0166H	IN	OPI3	WIRE IN (NOT USED)
A0168H	IN	OPI4	(NOT USED)
A016AH	IN	OPI5	(NOT USED)
A016CH	IN	OPI6	(NOT USED)
A016EH	IN	OPI7	(NOT USED)
A0170H	IN	OPI8	(NOT USED)
A0172H	IN	OPI9	(NOT USED)
A0174H	IN	OPI10	(NOT USED)
A0176H	IN	OPI11	(NOT USED)
A0178H	IN	OPI12	(NOT USED)
A017AH	IN	OPI13	(NOT USED)
A017CH	IN	OPI14	(NOT USED)
A017EH	IN	OPI15	(NOT USED)
A0180H	IN	OPIA	(NOT USED)
A0182H	IN	OPIB	(NOT USED)
A0184H	IN	OPIC	(NOT USED)
A0186H	IN	OPID	(NOT USED)
A0188H	IN	OPIE	(NOT USED)
A018AH	IN	OPIF	(NOT USED)
A018CH	IN	OPIG	(NOT USED)
A018EH	IN	OPIH	(NOT USED)

Installation check

1. OHM CHECK

1.1 ALL NUT FIT CHECK ☐

1.2 ALL CABLE CONNECT ☐

* ALL PC.BOARD INSERT
* ANALOG TESTER RANGE X10K & X1K

CHECK POINT		STANDARD	MEASURE	REMARK
E	R1,S1,T1	∞		
E	TU,TV,TW	∞		
E	CU,CV,CW	∞		
TU	CU,CV,CW	∞		
E	X1,Y1	∞		
E	X2,Y2,Z2	∞		
E	PRI,SEC	∞		
E	0,2,20C	∞		
E	G03,G04	3M-∞		
E	G02	∞		
E	P3,P4	∞		
E	B0,B100,B200	∞		RANGE X10K
E	VESSEL	SHORT		
0	G02,G03,G04	∞		
0	P3,P4	∞		
X1	0	∞		
X1	G02,G03,G04	∞		
X1	P3,P4	∞		
G02	G03	∞		
G02	P3,P4	∞		
G03	P3,P4	∞		
CRT FRAME	VESSEL	∞		
P3	P4	30-33K		
P4	P3	30-33K		RANGE X1K
S4N	S4M	∞		
S4M	S4N	40K		
P3	P4	55K		
P4	P3	55K		RANGE X1K
S4M	S4N	∞		(BS2)
MAIN P3	NR-P3	∞		

2. VOLTAGE CHECK

* ALL PC.BOARD TAKE OFF
* DIGITAL TESTER

CONDITION	NO.	CHECK POINT	PLACE	STANDARD	MEASURE
MAIN BREAKER ON	000	R1-S1	HEAVY DUTY #B01	200	
	001	R1-T1		200	
	002	S1-T1		200	

* SOURCE SW. ON

2.1 UPS B0,B100 ADJUST 16 MS(ADJ AT BBD-01 VR) ☐

2.2 NC-RACK +,- VOLTAGE ADJ 130 V(ADJ AT BBD-02 VR) ☐

CONDITION	NO.	CHECK POINT	PLACE	STANDARD	MEASURE
SOURCE SW. ON	000	X1-Y1	HEAVY DUTY TB.	195-205	
	001	0-20C		95-105	
	002	B0-B100		100-110	
	003	B0-B200		210-220	
	004	B24D-G02	MOTHER BOARD TB.	23-25	
	005	12V02-G02		12.15	
	006	5V03-G03		5.26	
	007	12V03-G03		12.15	
	008	-12V03-G03		-12.15	
	009	24V03-G03		24.15	
POWER SW. ON	010	T1-P3		15.15	
	011	-T1-P3		-15.15	
	012	T20-P3		5.15	
	013	24V03-G03	DRIVER UNIT TB.	24.0	
	014	12V03-G03		12.0	
	015	5V03-G03		5.0	
	016	T15-P3	P-MOS TB.	15.15	
	017	-T5-P3		-5.15	
POWER SW. ON (BS2)	018	T15-P3	BS2 UNIT	15.20	
	019	-T5-P3		-5.20	
	020	T20-P3		5.20	
	021	-T5-P3	NC-RACK UNIT	-5.20	

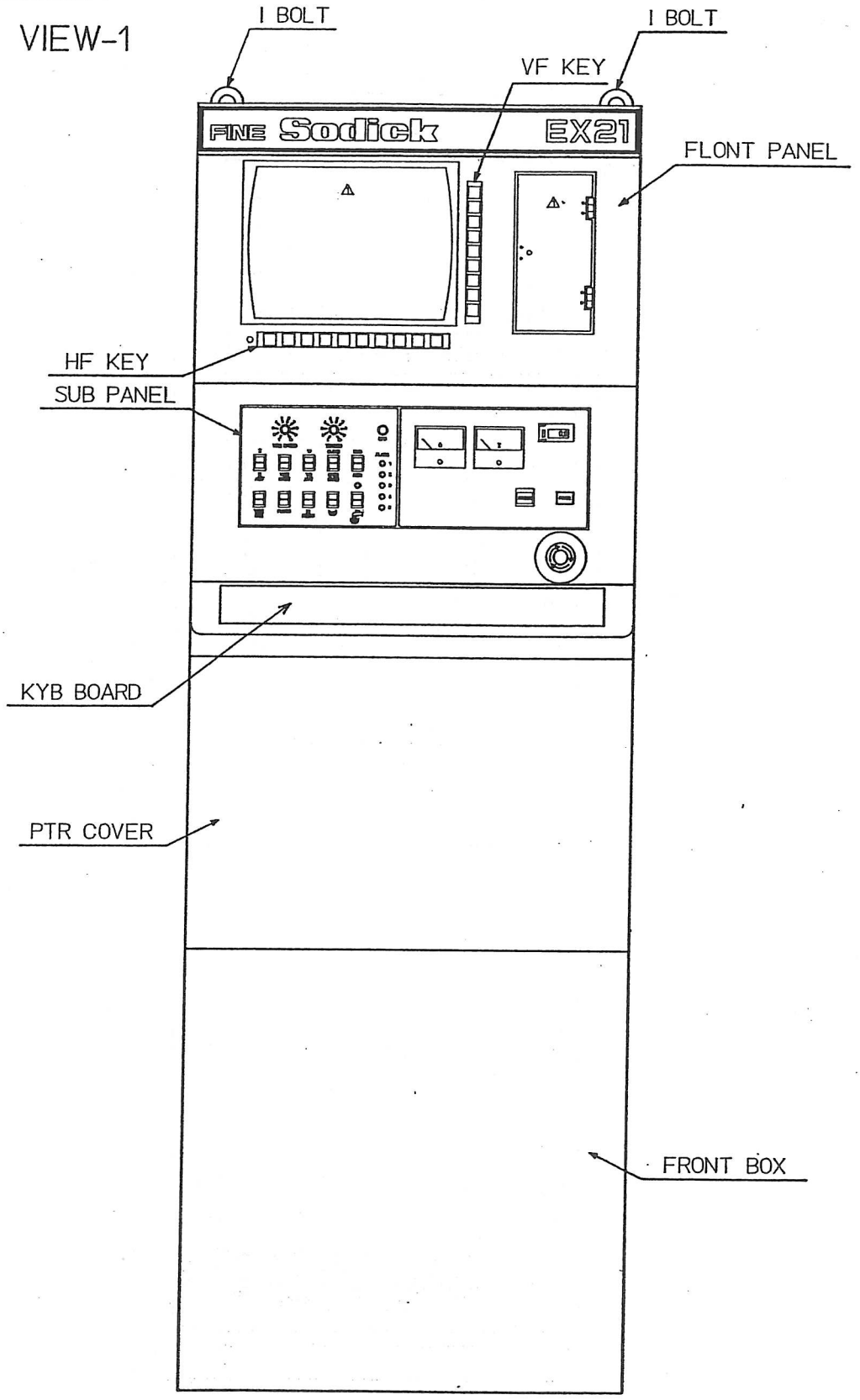
3. DISCHARGE CHECK

- MACH ON #B01 ON
- HOUR METER CHECK
- SW-803 80V ADJUST

NO.	CONDITION	STANDARD TYPE		BS2 TYPE	
		STANDARD+-0.5V	MEASURE	STANDARD+-0.5V	MEASURE
000	V0	60V		60V	
001	V1	80V		80V	
002	V2	100V		100V	
003	V3	264V		264V	
004	V4	*		20V	
005	V5	*		30V	
006	V6	*		40V	
007	V7	*		50V	
008	V8	*		60V	
009	V9	*		80V	

PARTS LIST

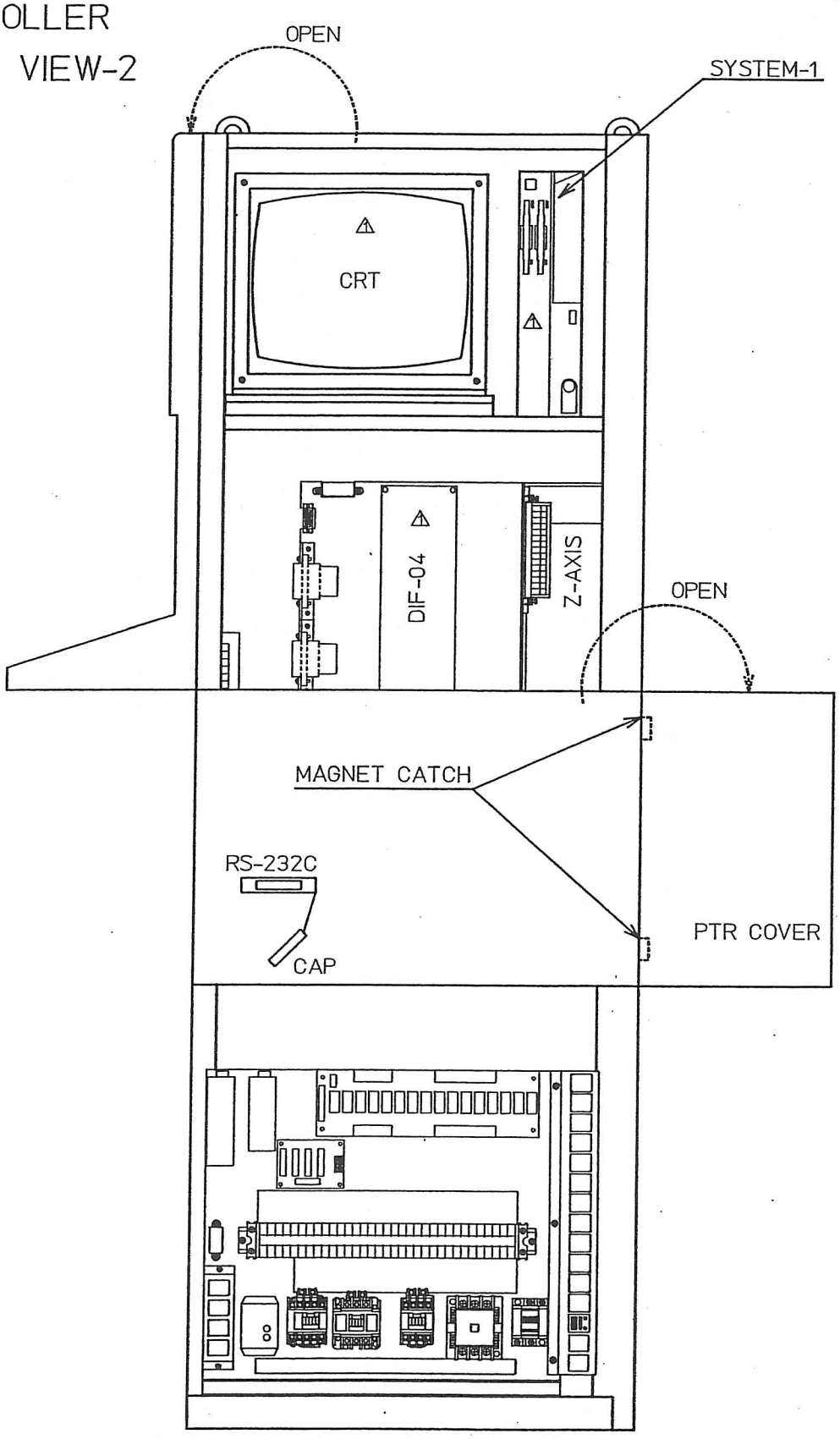
CONTROLLER
FRONT VIEW-1



Δ Ver.A->B 12/Jun/96 H.Inoue

LAYOUT	TITLE	FRONT VIEW-1	MODEL	EX21	SHEET NO.	1/1	DATE	19-NOV-93	
SODICK CO.,LTD.	DWG NO.	TE300445B	DESIGNED BY TSUKUDA	DRAWING BY TSUKUDA	CEHCKED BY TSUKUDA	APPROVED BY			

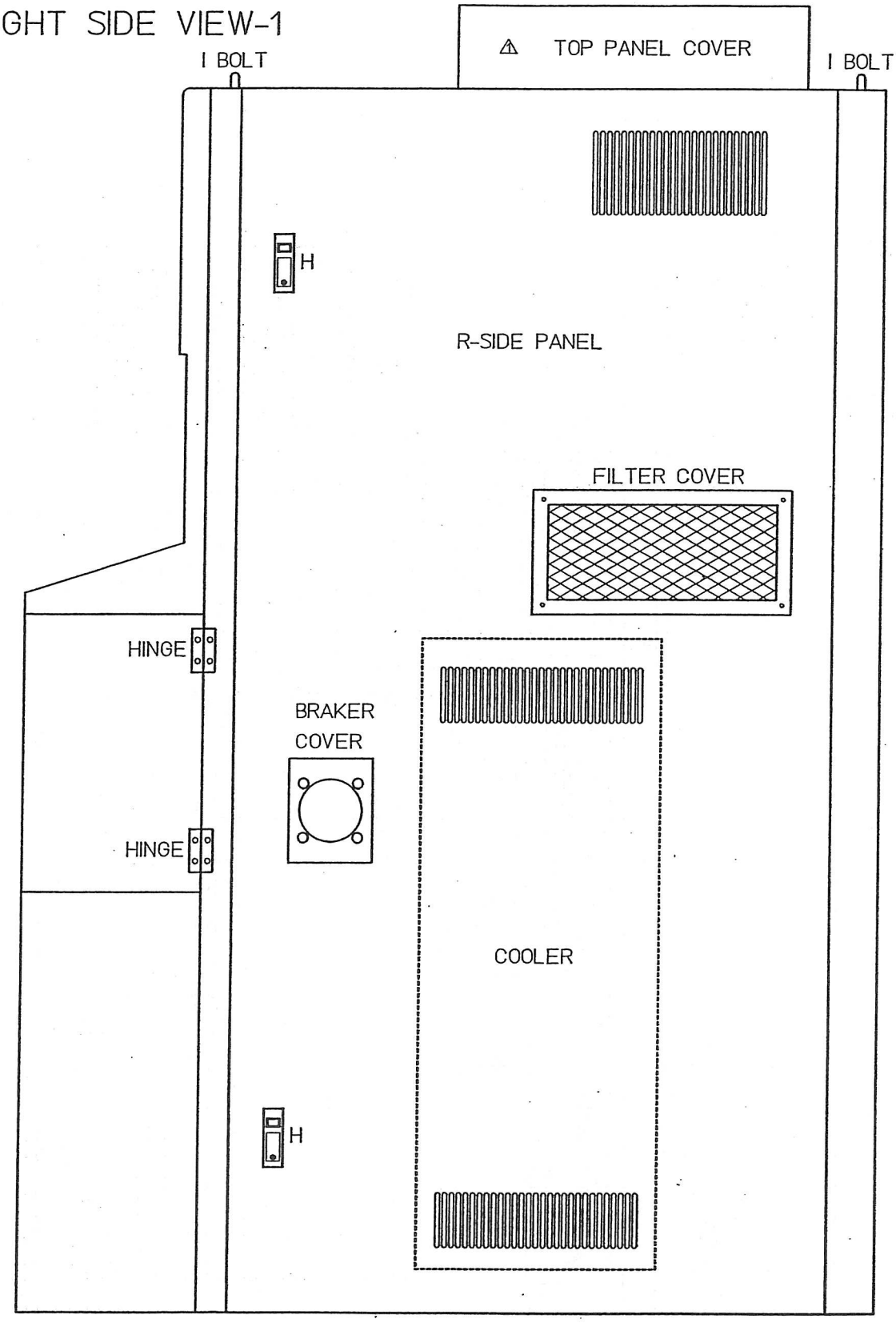
CONTROLLER
FRONT VIEW-2



⚠Ver.A->B 12/Jun/96 H.Inoue

LAYOUT	TITLE	FRONT VIEW-2	MODEL	EX21	SHEET NO.	1/1	DATE	19-NOV-93	
SODICK CO.,LTD.	DWG NO.	TE300446B	DESIGNED BY TSUKUDA	DRAWING BY TSUKUDA	CEHCKED BY TSUKUDA	APPROVED BY			

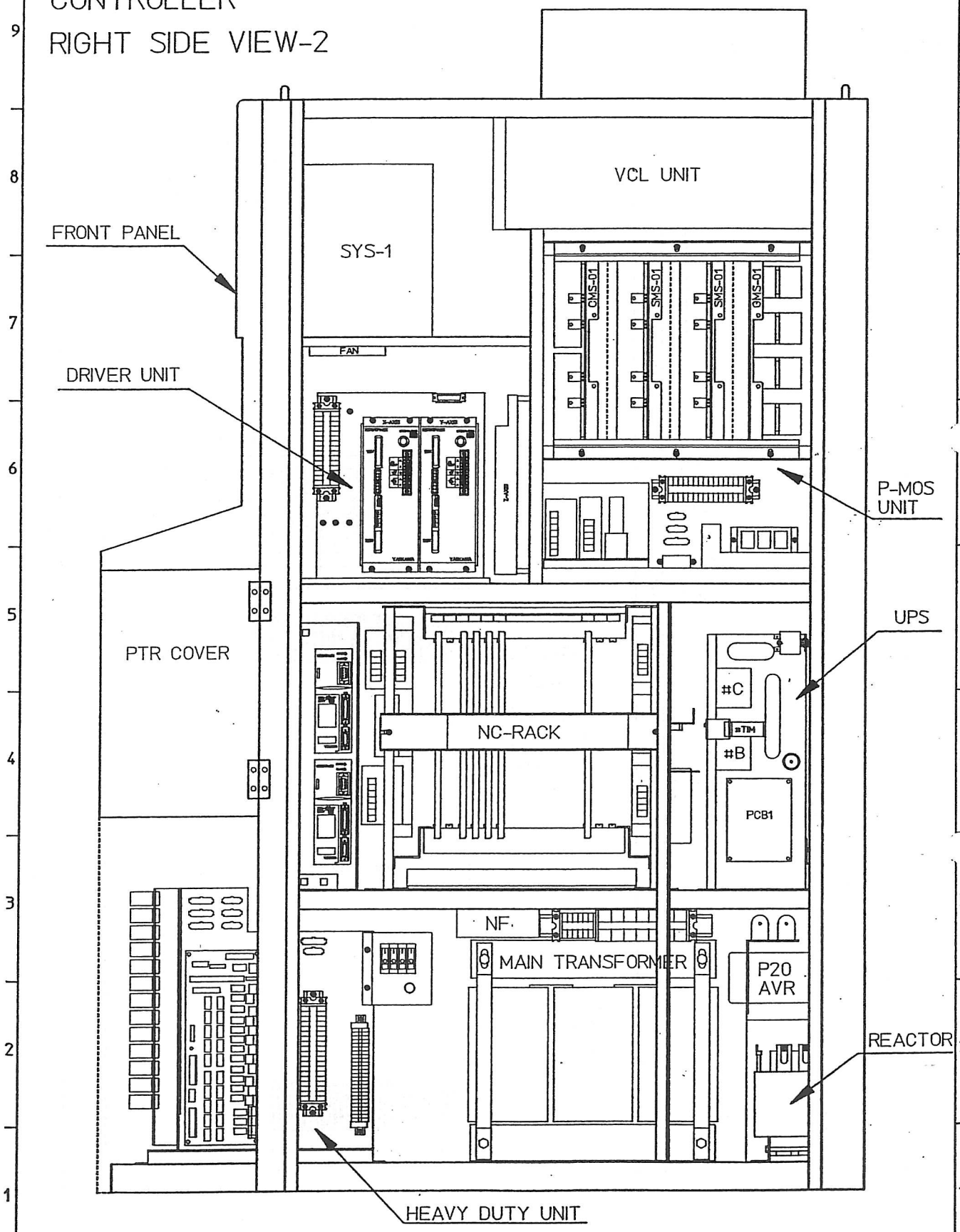
CONTROLLER
RIGHT SIDE VIEW-1



⚠ Ver.A->B 14/Jun/96 H.Inoue

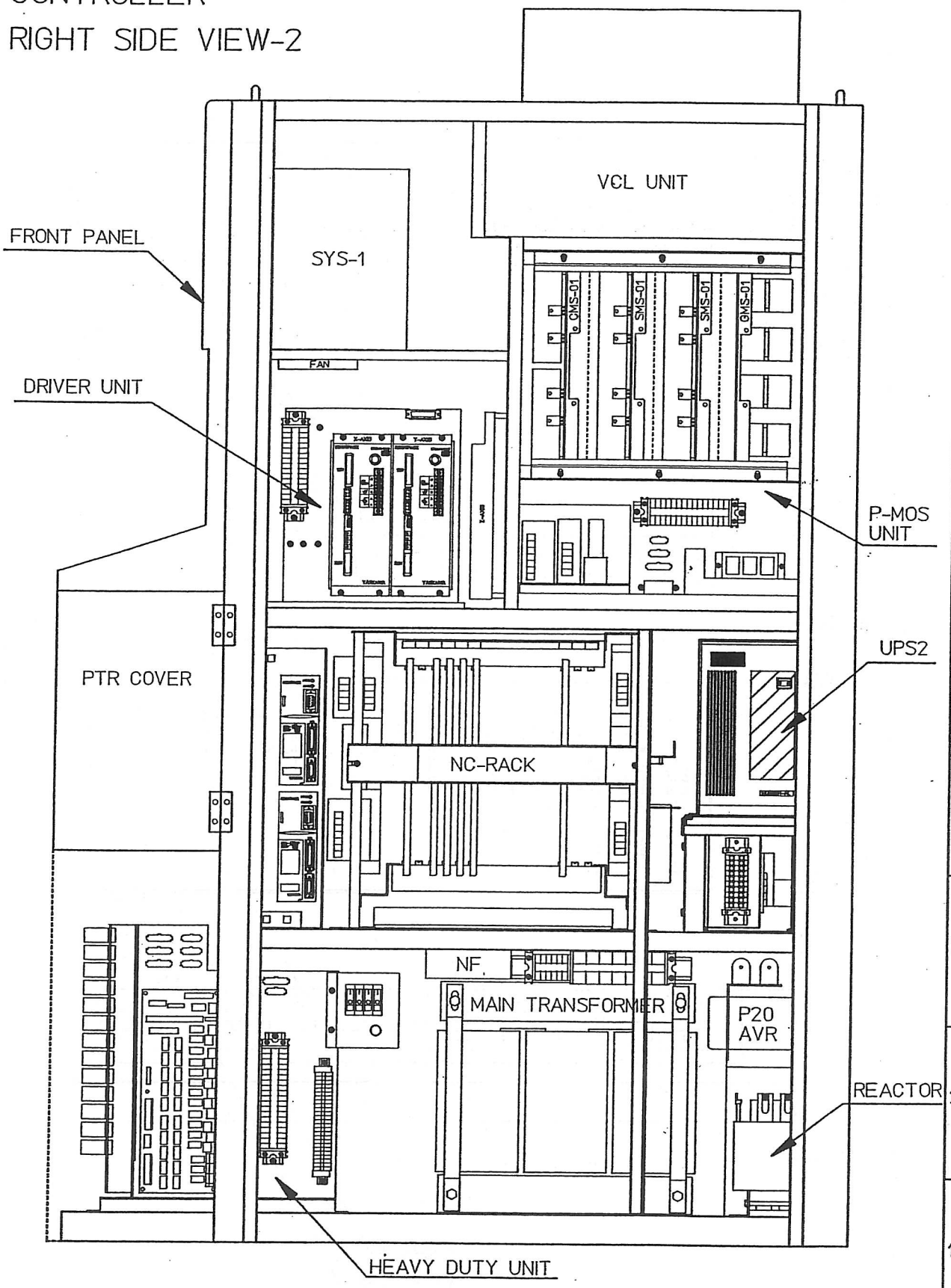
LAYOUT	TITLE	RIGHT SIDE VIEW-1	MODEL	EX21	SHEET NO.	1/1	DATE 19-NOV-93
SODICK CO.,LTD.	DWG NO.	TE300457B	DESIGNED BY TSUKUDA	DRAWING BY TSUKUDA	CEHCKED BY TSUKUDA	APPROVED BY	

CONTROLLER
RIGHT SIDE VIEW-2



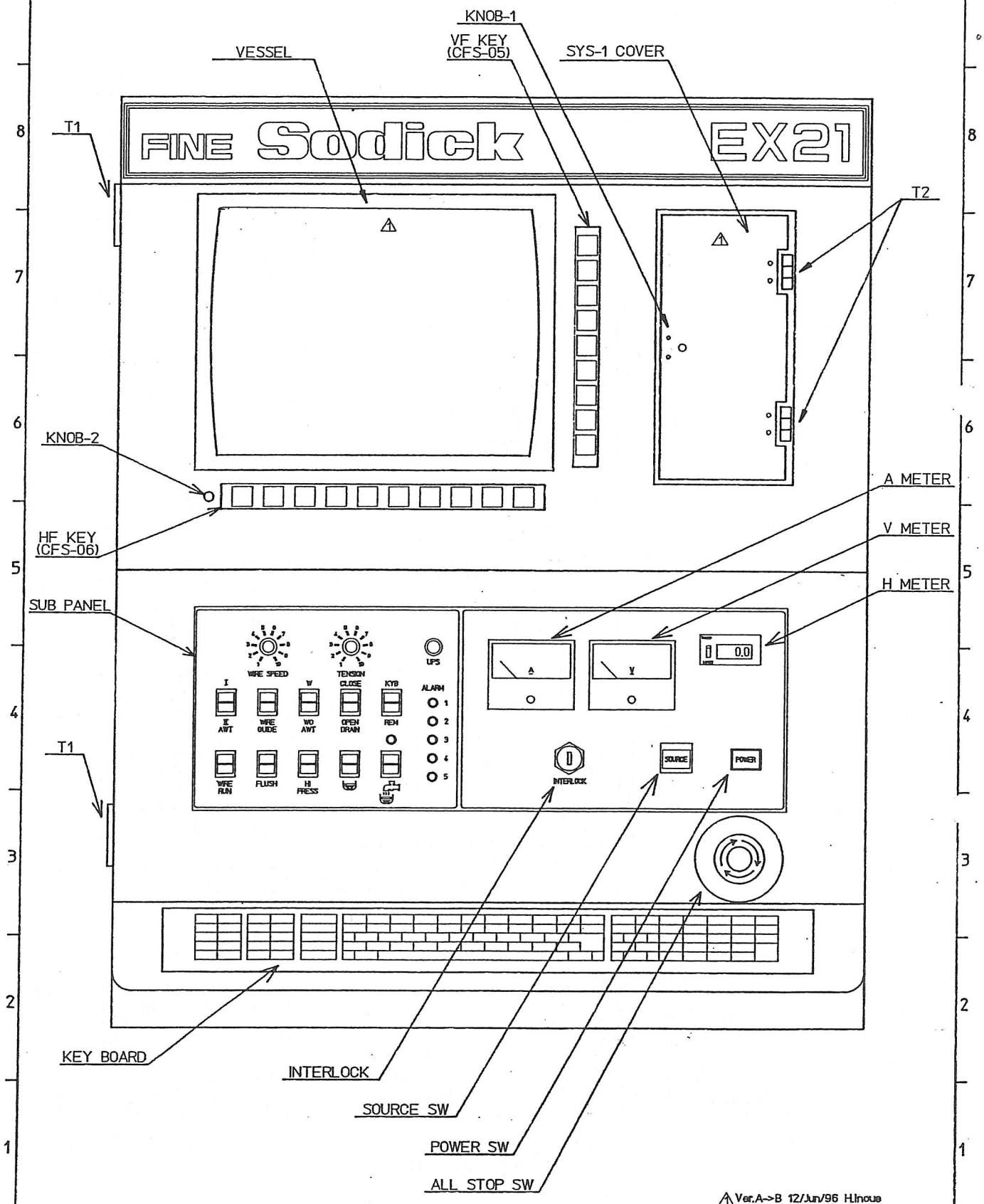
LAYOUT	TITLE	RIGHT SIDE VIEW-2	MODEL	EX21	SHEET NO.	1/1	DATE	13-JUN-96	
SODICK CO.,LTD.	DWG NO.	TE300458C	DESIGNED BY INOUE	DRAWING BY NAGAMORI	CEHCKED BY HAKAGOSHI	APPROVED BY			

CONTROLLER
RIGHT SIDE VIEW-2



LAYOUT	TITLE	RIGHT SIDE VIEW-2	MODEL	EX21	SHEET NO.	1/1	DATE	25-JUN-94	
SODICK CO.,LTD.	DWG. NO.	TE300458B	DESIGNED BY INOUE	DRAWING BY NAGAMORI	CEHCKED BY HAKAGOSHI	APPROVED BY			

FRONT PANEL



⚠Ver.A->B 12/Jun/96 H.Inoue

LAYOUT	TITLE	FRONT PANEL	MODEL	EX21	SHEET NO.	1/1	DATE	19-NOV-93	
SODICK CO.,LTD.	DWG NO.	TE300444B	DESIGNED BY TSUKUDA	DRAWING BY NAGAMORI	CEHCKED BY HAKAGOSHI	APPROVED BY H. Hakagoshi			

PARTS LIST

UNIT : FRONT PANEL

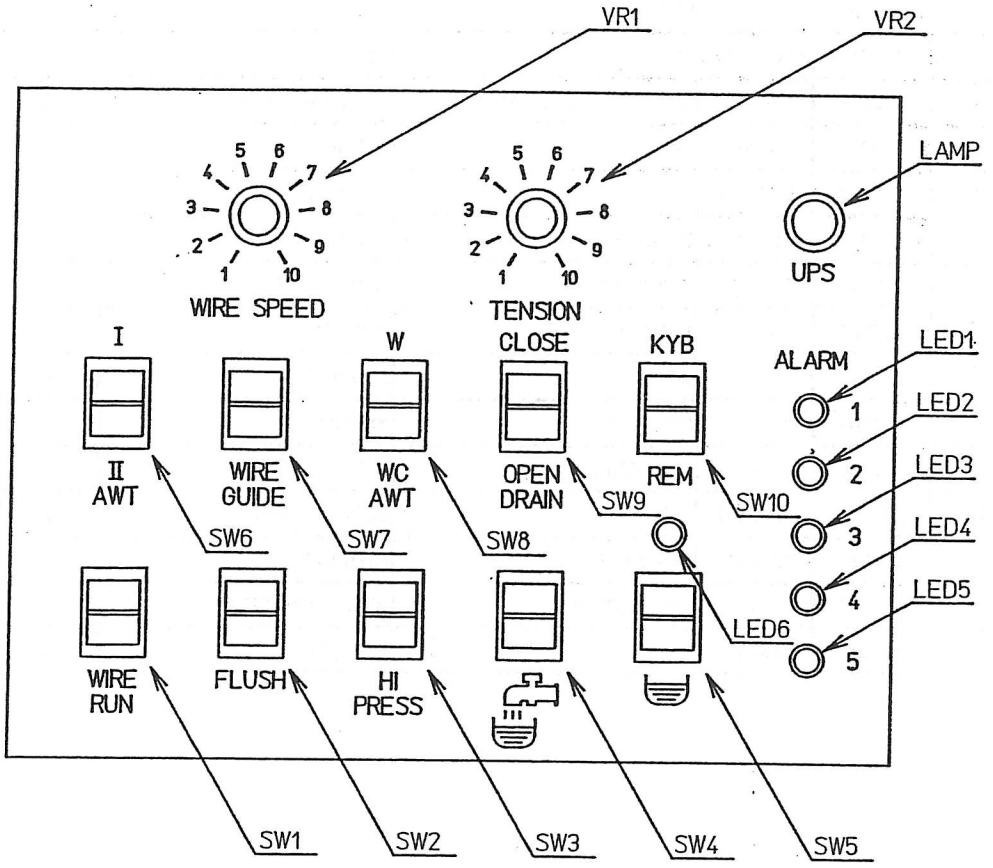
ITEM	T.CODE	J.CODE	PARTS NAME	SPECIFICATION	Q'TY	DWG. NO.
VF KEY	147034	-	P.C BOARD	CFS-05	1	
	524025	2080064	SWITCH COVER	VF 9P	1	
	539097	4160082	PLATE	SWITCH PANEL 9P	1	
HF KEY	147034	-	P.C BOARD	CFS-06	1	
	524024	2080065	SWITCH COVER	HF 10P	1	
	539096	4160081	PLATE	SWITCH PANEL 10P	1	
SYS-1 COVER	142029A	-	FLOPPY DOOR	EX21	1	TH300015B
	539397	2081089	NYLON LATCH	C-130	1	
KNOB-1	142031A	-	FDD KNOB	EX21 (SUS304)	1	TH400029
T2	539080	2080078	HINGE	TH-61-SUS-1	2	
KNOW-2	539086	2660038	KNOB	020-2252	1	
	539025	2660005	CAP	040-1625	1	
T1	539079	2081204	HINGE	B-202-3K	2	
SUB PANEL	141112A	4000271	SUB PANEL	EX21 AWT	1	EH300418
	141133	-	SUB PANEL	EX21 (STD)	1	
A METER	535110	2560394	AMPERE METER	SD-4A/40A DC FS50 mV	1	
V METER	535111	2560393	VOLT METER	SD-300V DC	1	
H METER	535011	2560011	HOUR METER	H7ET-33	1	
SOURCE SW	524018	2610869	SWITCH	ACE 90000Y	1	
	533011	2590432	COVER	ACD 1864B	1	
POWER SW	524019	2610870	SWITCH	ACE 90001G	1	
ALL STOP SW	524005	2610769	SWITCH	AVN301N-R	1	
	524064	2611895	SWITCH	RXV+AT2	1	
KEYBOARD	535013	2640837	KEYBOARD	SDK-8-E	1	A320
	535012	2640474	KETBOARD	SDK-6-W	1	A530
	147009	4180533	P.C BOARD	KYB-003 (BP)	1	
	147058	4180852	P.C BOARD	KYB-012	1	
INTERLOCK	524052	2611670	SWITCH	S-20-90-B1	1	ERP COLD
	142053A	-	FP-BOX3 COVER (MA)	EX21	1	

PARTS LIST

UNIT : CRT UNIT

ITEM	T.CODE	J.CODE	PARTS NAME	SPECIFICATION	Q'TY	DWG. NO.
CAPACITOR	526068	2510005	CAPACITOR METAL POL	FPD22J104K2 630V	1	
CRT	535109	2641852	CRT	AAM 506A	1	
VESSEL	539404	4114673	VESSEL	NF (ALL)ALUMINM DIC556,	1	20516

SUB PANEL



TO HEAVY DUTY UNIT
[DB-11]

1	ATI4	9	MCI14
2	ATI5	10	MCI15
3	ATI6	11	24V03
4	ATI7	12	SCM1A
5	ATI8	13	SCM1B
6	ATI9	14	FLWLED
7	ATI11	15	PC
8	ATI113	16	PC2

5559-16P

TO P-MOS UNIT
[DB-11]

1	AR1	5	AR5
2	AR2	6	*
3	AR3	7	*
4	AR4	8	B24D

5559-08P

ALARM DETAIL

ALARM 1	P-MOS CIRCUIT (P20M-FUSE)
ALARM 2	P-MOS CIRCUIT (P20N-FUSE)
ALARM 3	(NOT USE)
ALARM 4	(NOT USE)
ALARM 5	(NOT USE)

(P20M-FUSE : F1)
(P20M-FUSE : F2,3,4,5)

(cf . DRAWING [TE30054B])

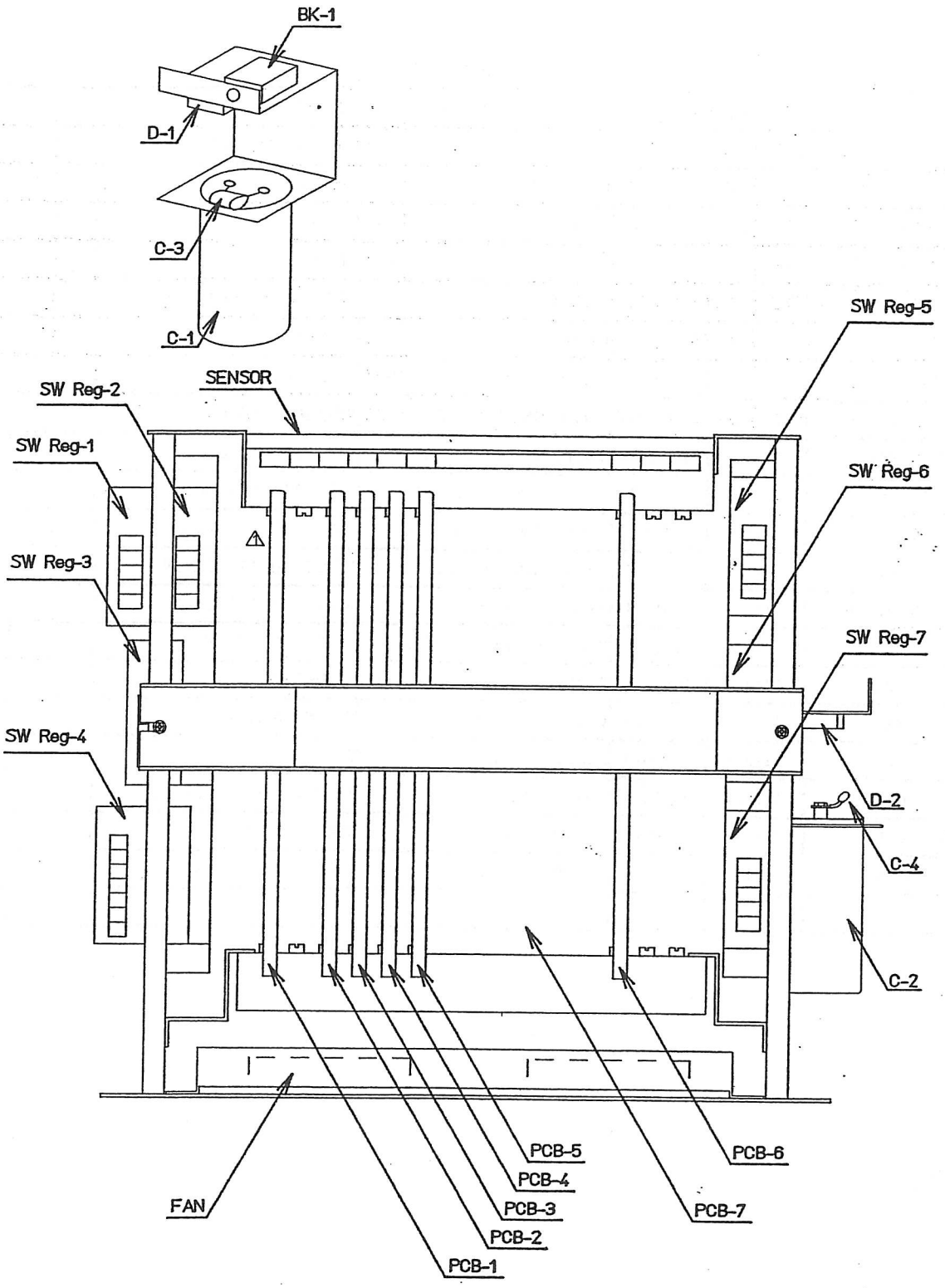
LAYOUT	TITLE	SUB PANEL	MODEL	EX21	SHEET NO.	1/1	DATE	25-JUN-94	
SODICK CO.,LTD.	DWG NO.	TE300447A	DESIGNED BY TSUKUDA	DRAWING BY NAGAMORI	CEHCKED BY HAKAGOSHI	APPROVED BY			

PARTS LIST

UNIT : SUB PANEL

ITEM	T.CODE	J.CODE	PARTS NAME	SPECIFICATION	Q'TY	DWG. NO.
VR - 1	523015	2500598	VARIABLE RESISTOR	RV24YN-15SB-15K	1	
	539358	2660045	KNOB	021-4425	1	
	539357	2660049	CAP	040-4625	1	
VR - 2	523019	2501145	VARIABLE RESISTOR	RVF25A-15R-400	1	
	539358	2660045	KNOB	021-4425	1	
	539357	2660049	CAP	040-4625	1	
SW 1 - 6,9	524062	2610763	SWITCH	8HD2041	7	
	522045	2500104	RESISTOR	RN1/4-100K	14	
SW 7,10	524061	2610762	SWITCH	8HD2011	2	
	522045	2500104	RESISTOR	RB1/4-100K	4	
SW 8	524063	2611027	SWITCH	8HD2051	1	
	522045	2500104	RESISTOR	RN1/4-100K	2	
LED1 - 6	527026	2540091	LED	SDB 505-ARD	6	
	522027	2500879	RESISTOR	RN1/2-2K	6	
	529183	-	CAPACITOR	RT-HE70TKYF103Z	6	
LAMP	539284	2651605	LAMP	BN-7(G)	1	

NC RACK VIEW-1



⚠ Ver.A->B 12/Jun/96 H.Inoue

LAYOUT	TITLE	NC RACK VIEW-1	MODEL	EX21	SHEET NO.	1/1	DATE	29-JUN-94	
SODICK CO.,LTD.	DWG NO.	TE300451B	DESIGNED BY TSUKUDA	DRAWING BY NAGAMORI	CEHCKED BY HAKAGOSHI	APPROVED BY			

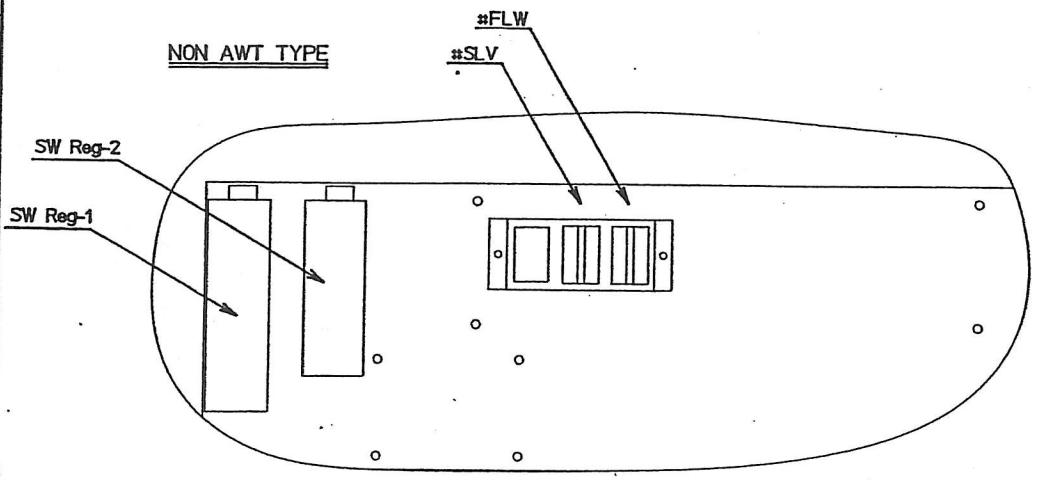
PARTS LIST

UNIT : NC RACK

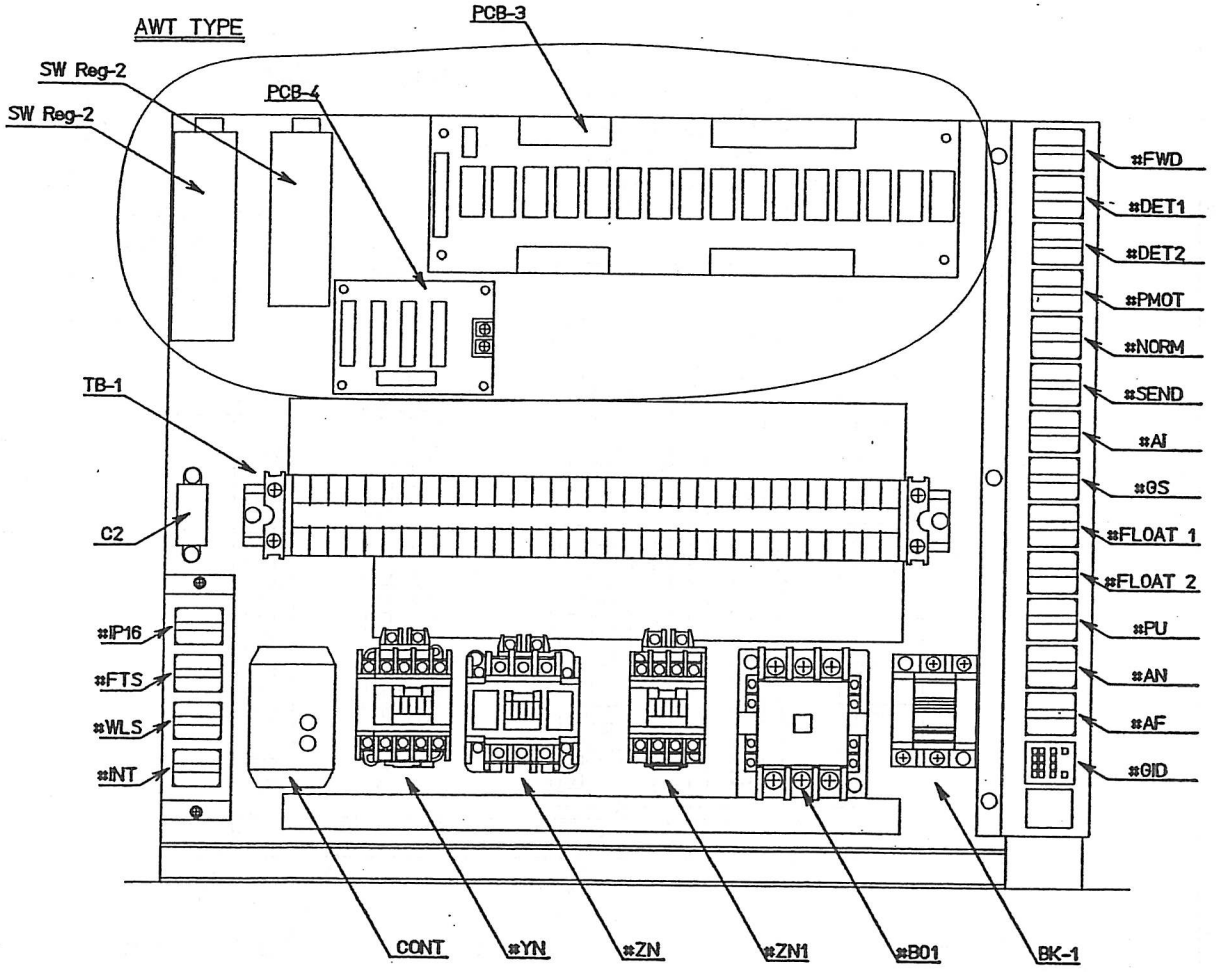
ITEM	T.CODE	J.CODE	PARTS NAME	SPECIFICATION	Q'TY	DWG. NO.
PCB-1	534164	4181427	P.C BOARD	CPU-386 (G/C SML)	1	
PCB-2	534165	4181530	P.C BOARD	CPU-386 (TYPE 86)	1	
PCB-3	147024	-	P.C BOARD	I/O-01	1	
PCB-4	147023	-	P.C BOARD	I/O-02B	1	(56 us)
PCB-5	147062D	4180864	P.C BOARD	I/O-05 (CE) (VER.17)	1	
PCB-6	147063	4180907	P.C BOARD	NRC-02 (HQ)	1	
PCB-7	147064	4180855	P.C BOARD	MTHR-01	1	
SW REG-1	535038	2641231	SWITCHING REGULATOR	RS-7-12/A 10W DC12V	1	G03
SW REG-2	535039	2641232	SWITCHING REGULATOR	RS-9-12/A 25W DC12V	1	G03
SW REG-3	535040	2641233	SWITCHING REGULATOR	RS-10-24/A 50W DC24V	1	G03
SW REG-4	535118	2642101	SWITCHING REGULATOR	HK-12-5/A 150W DC5V	1	G03
SW REG-5	535037	2640695	SWITCHING REGULATOR	RS-8-15/AL 15W DC15V	1	P3
SW REG-6	535034	2641194	SWITCHING REGULATOR	RS-7-15/AL 10W DC15V	1	P3
SW REG-7	535033	2641195	SWITCHING REGULATOR	RS-R-5/AL 10W DC5V	1	P3
FAN	534014	2651233	FAN	4710PS-10W-B30	2	
BK-1	538006	2580023	CIRCUIT BREAKER	W58XB1A4A-5A	1	
D-1	527048	2540520	DIODE STACK	S25VB60	2	
C-1,2	526019	5210277	CAPACITOR	HCGF3A-2E-332Y 250V 3300u	2	
C-3,4	526139	5210879	CAPACITOR	QXJ2J 104KTPT	2	
SENSOR	539344	2652067	TERMO SENSOR	TH53F586 55C	1	

HEAVY DUTY UNIT VIEW-1

NON AWT TYPE

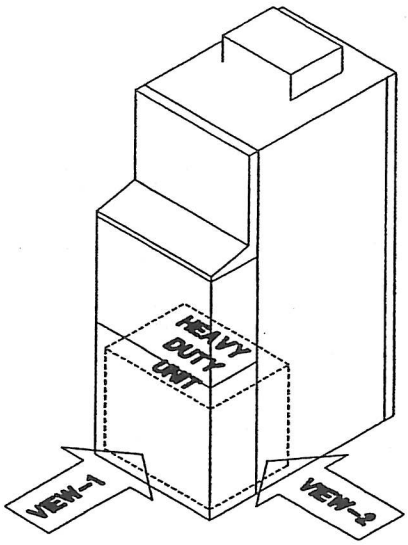


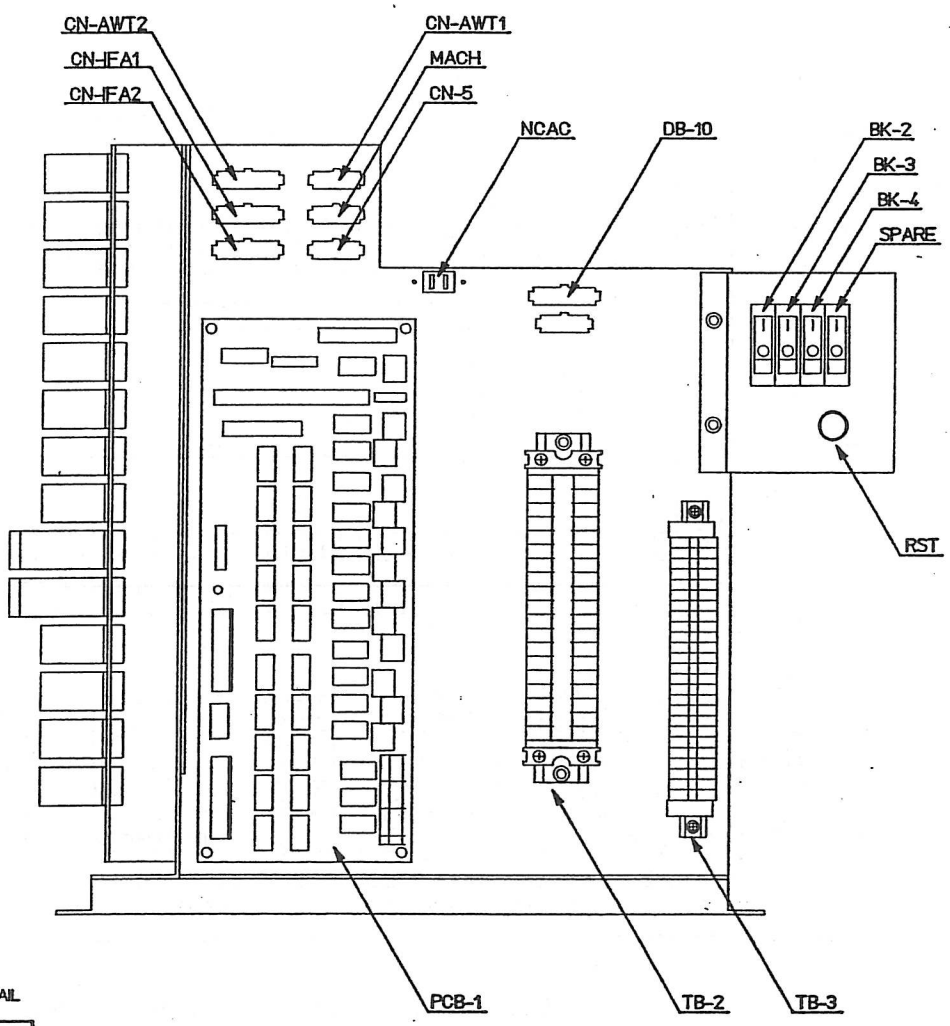
AWT TYPE



LAYOUT	TITLE	HEAVY DUTY UNIT VIEW-1	MODEL	EX21	SHEET NO.	1/1	DATE	26-JUN-94	
SODICK CO.,LTD.	DWG NO.	TE300448A	DESIGNED BY	TSUKUDA	DRAWING BY	NAGAMORI	CEHCKED BY	HAKAGOSHI	APPROVED BY

HEAVY DUTY UNIT VIEW-2



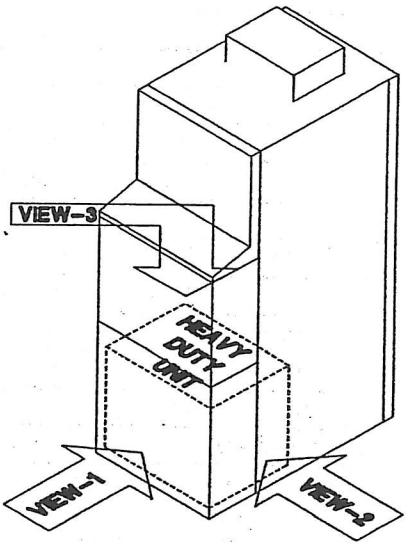


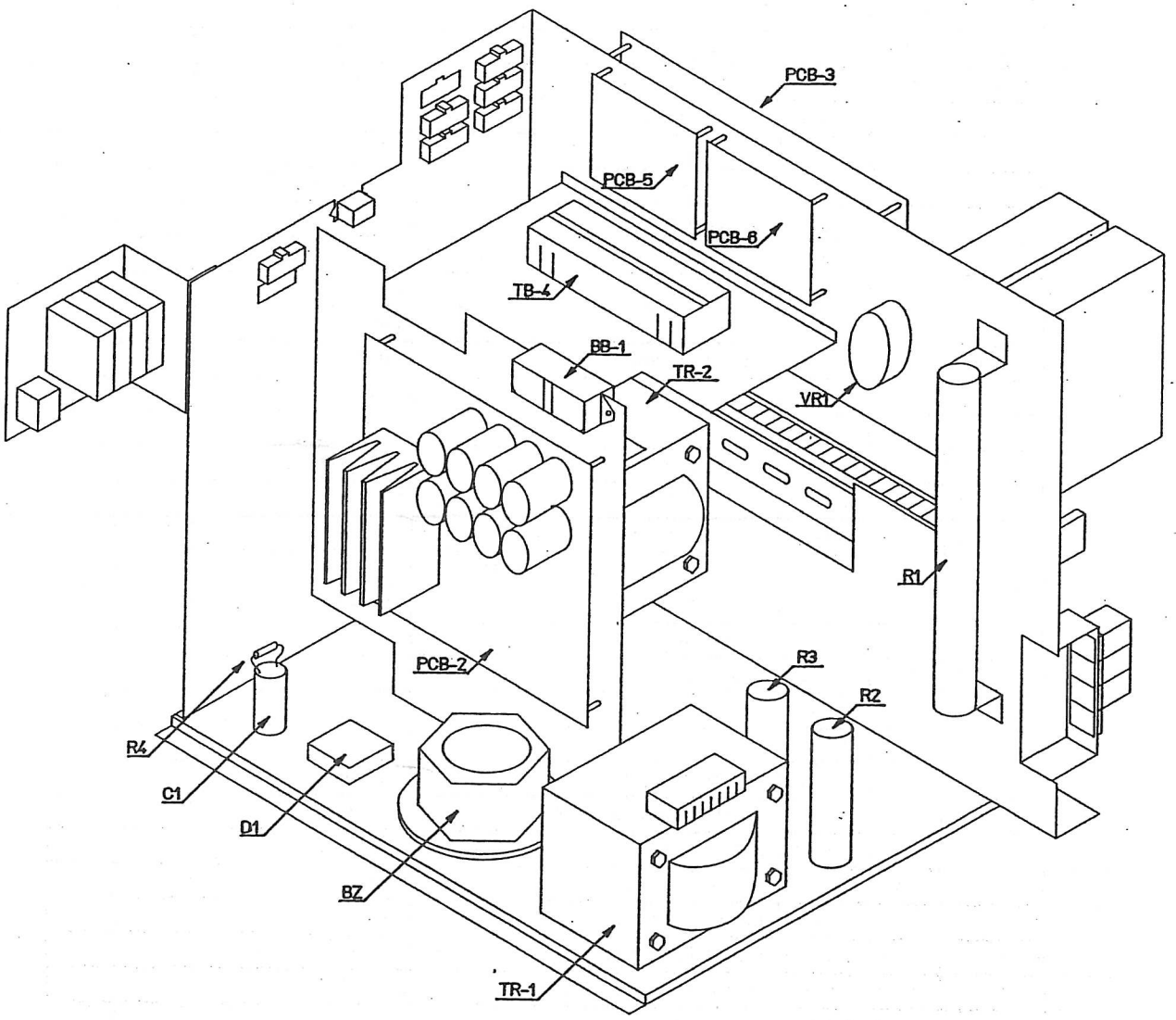
BREAKER DETAIL

BK-1	20
BK-2	B24D
BK-3	P20M
BK-4	(SPARE)

LAYOUT	TITLE	HEAVY DUTY UNIT VIEW-2	MODEL	EX21	SHEET NO.	1/1	DATE 29-JUN-94
SODICK CO.,LTD.	DWG NO.	TE300449A	DESIGNED BY TSUKUDA	DRAWING BY NAGAMORI	CEHCKED BY HAKAGOSHI	APPROVED BY	

HEAVY DUTY UNIT VIEW-3



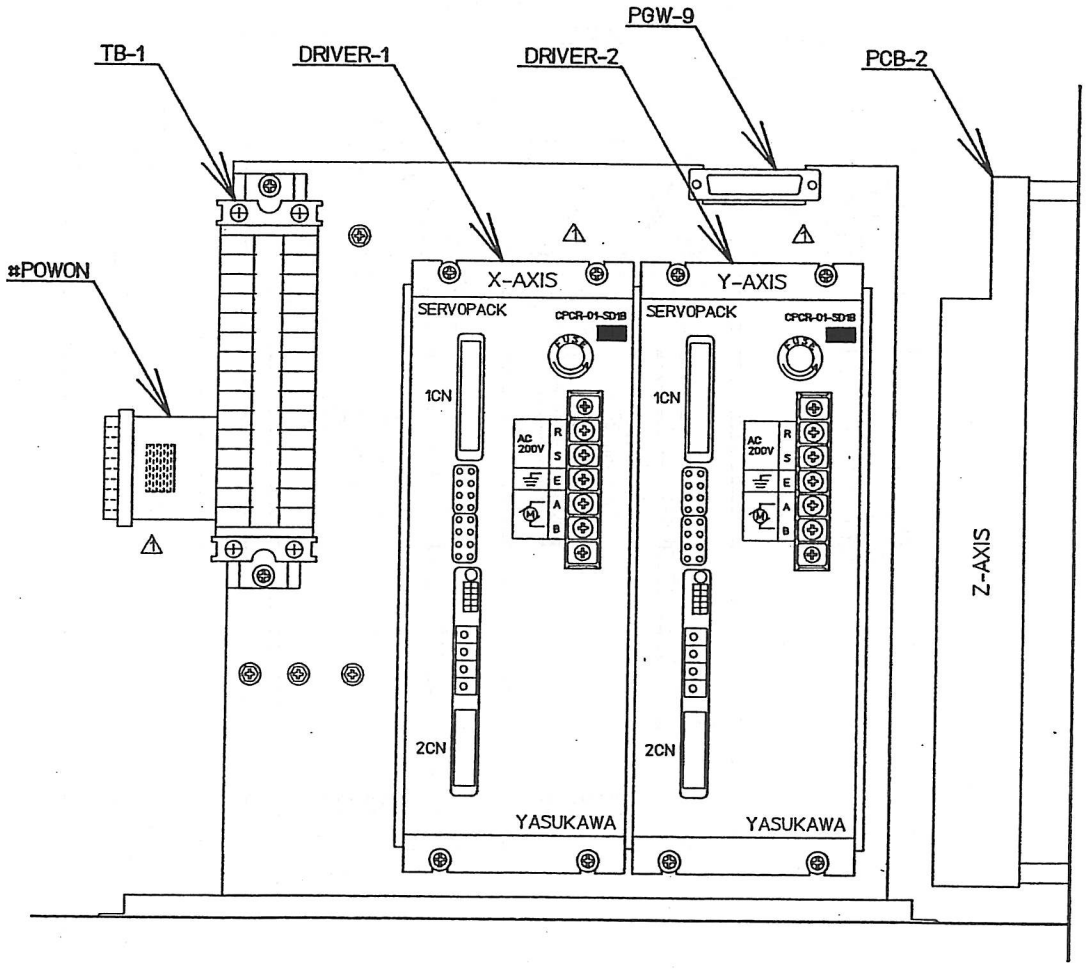


LAYOUT	TITLE	HEAVY DUTY UNIT VIEW-3	MODEL	EX21		SHEET NO.	1/1	DATE	29-JUN-94
SODICK CO.,LTD.	DWG NO.	TE300450A	DESIGNED BY NAGAMORI	DRAWING BY NAGAMORI	CEHCKED BY HAKAGOSHI	APPROVED BY			

UNIT : HEAVY DUTY UNIT

ITEM	T.CODE	J.CODE	PARTS NAME	SPECIFICATION	Q'TY	DWG.NO.
SW REG - 1	535025	2640133	SWITCHING REGULATOR	RS-10-24 50W DC24V	1	
SW REG - 2	535027	2640134	SWITCHING REGULATOR	RS-8-12 15W DC12V	1	
TB - 1	532119	2600373	TERMINAL BLOCK	DF20-33P	1	
TB - 2	532118	2600409	TERMINAL BLOCK	DF15S-20P	1	
TB - 3,4	532114	2600035	TERMINAL BLOCK	AKZ4-25P	1	
CONT	535004	2640029	CONTROL PACK	SS31 - SSSD	1	
	535005	2650069	CONTROL PACK SOCKET	11PFA	1	
# YN1	538085	2570816	RELAY (MAGNET)	SC-05 AC100V 3P+2a	1	
# ZN	538084	2570500	RELAY (MAGNET)	SC-5-1 AC100V 3P+2a	1	
# ZN1	538086	2570783	RELAY (MAGNET)	SC-0 AC100V 3P+1a	1	
# B01	538021	2570093	RELAY (MAGNET)	SC-2N AC100V 3P+2a2b	1	
BK - 1	531036	2580084	CIRCUIT BREAKER	CP-C20-45	1	
# IP16, # FIS, # INT	538017	2570203	RELAY	MY-4N AC100V	13	
# SLV, # FWD	538033	2650216	RELAY SOCKET	PY14-Y1	13	
# DET1, DET2	527008	2540315	SURGE KILLER	NV200D10	13	
# PMOT, # NORM						
# SEND, # AI						
# GS, # GID						
# WLS, # FLW	538018	2570206	RELAY	MY-4N DC24V	7	
# FLOAT1, #FLOAT2	538033	2650216	RELAY SOCKET	PY14-Y1	7	
# PU, # AN	527002	2540333	DIODE	1N4003TP	7	
# AP						
PCB - 1	147054	-	P.C BOARD	RLD-11-W(T)	1	ET300025
PCB - 2	147015	4180498	P.C BOARD	SW-803	1	
PCB - 3	147070	4180578	P.C BOARD	RL-DRIVER-3B24D	1	
PCB - 4	147067	4180164	P.C BOARD	ID-01A	1	
PCB - 5	147069	4180542	P.C BOARD	WSP-01A	1	
PCB - 6	147068	4180337	P.C BOARD	WTN-01A	1	
C1			CAPACITOR	CB60	1	
C2	526018	2510634	CAPACITOR	HCG6B1V4721	1	
R1	145015	-	RESISTOR	RGH 250GN 5	1	
R2,R3	145012	-	RESISTOR	RGH 100GN 50	2	
R4	522005	2500214	RESISTOR	RLF2B-1K	1	
D1	527068	2540292	DIODE STACK (SINGLE BRIDGE)	KBPC2506 (25A 600V)	1	
VR1	523018	2501144	VARIABLE RESISTOR	RVF25A-15R-100	1	
BZ	534001	2650643	BUZZER	BZ-17 AC100V	1	
TR-1	145001	2520135	TRANSFORMER	KRT-12-5-3	1	
TR-2	145006	-	TRANSFORMER	2H-8003	1	
BK-2	538003	2580104	CIRCUIT BREAKER	BAM115131	1	
BK-3	538002	2580103	CIRCUIT BREAKER	BAM110131	1	
BK-4	538001	2580118	CIRCUIT BREAKER	BAM105131	1	
RST	524004	2610511	SWITCH	AH165-JG11H1	1	
NCAC	539001	2650024	AC PLAG	S-2363T	1	
DB-10	532060	2590586	CONNECTOR	5559-16P	1	
CN-IFA1	532060	2590586	CONNECTOR	5559-16P	1	
CN-IFA2	532060	2590586	CONNECTOR	5559-16P	1	
CN-AWT1	532058	2590305	CONNECTOR	5559-12P	1	
CN-AWT2	532060	2590305	CONNECTOR	5559-16P	1	
MACH	532058	2590305	CONNECTOR	5559-12P	1	
CN-5	532058	2590305	CONNECTOR	5559-12P	1	

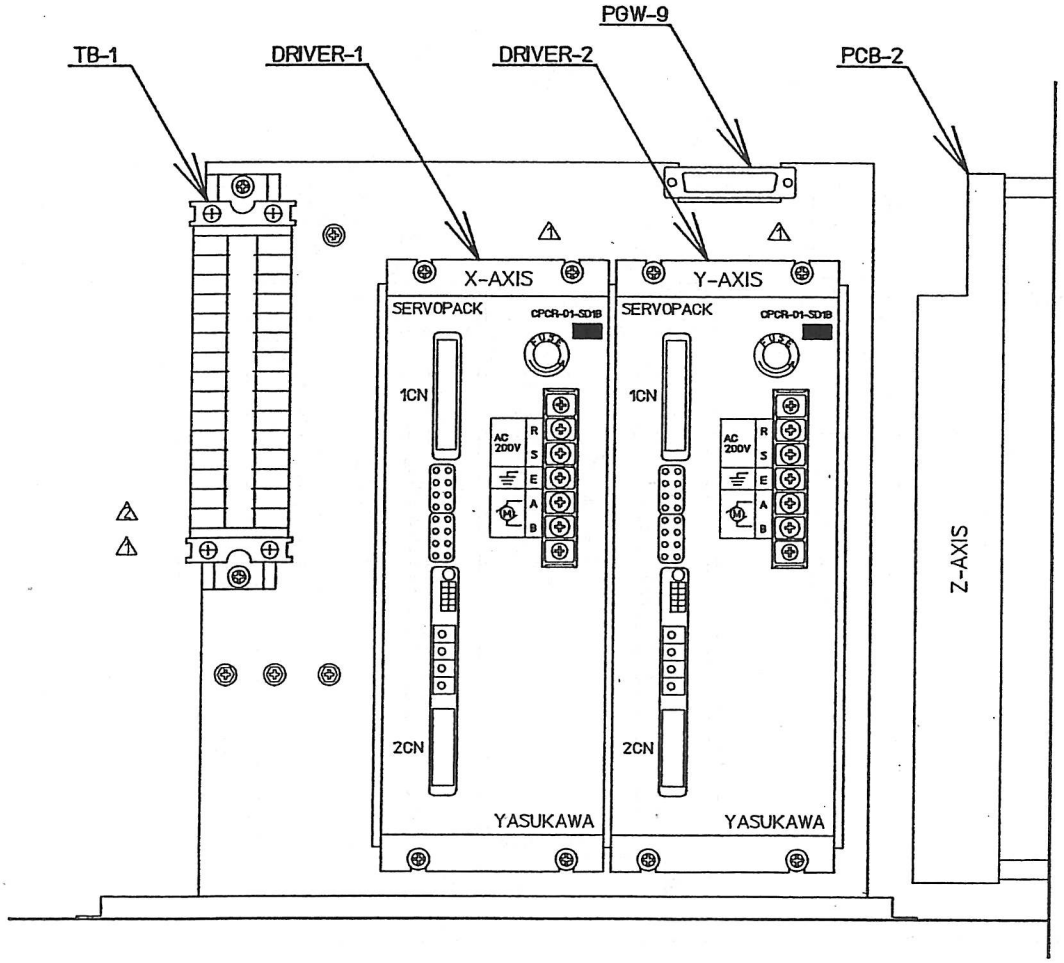
DRIVER UNIT VIEW-1



⚠ Ver.A->B 12/Jun/96 H.Inoue

LAYOUT	TITLE	DRIVER UNIT VIEW-1	MODEL	EX21	SHEET NO.	1/1	DATE	25-JUN-94	
SODICK CO.,LTD.	DWG NO.	TE300453B	DESIGNED BY TSUKUDA	DRAWING BY NAGAMORI	CEHCKED BY HAKAGOSHI	APPROVED BY			

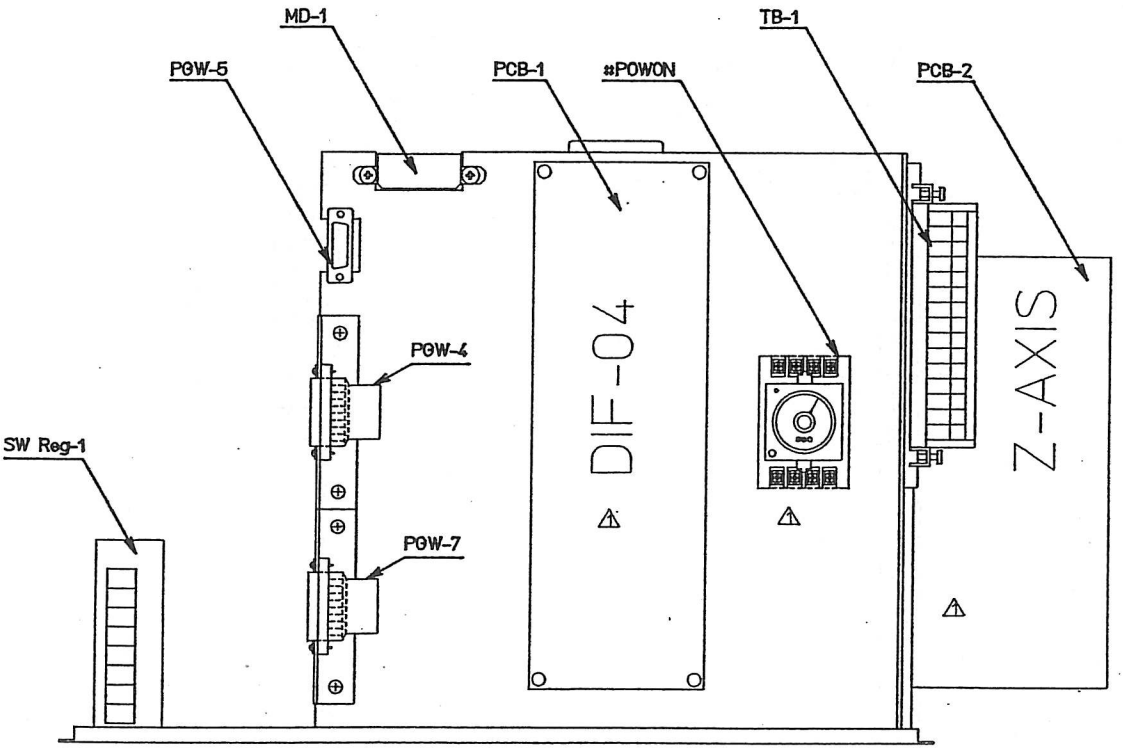
DRIVER UNIT VIEW-1



⚠ Ver.B->C 12/Jun/96 H.Inoue
⚠ Ver.A->B 12/Jun/96 H.Inoue

LAYOUT	TITLE	DRIVER UNIT VIEW-1	MODEL	EX21	SHEET NO.	1/1	DATE	25-JUN-94	
SODICK CO.,LTD.	DWG NO.	TE300453C	DESIGNED BY TSUKUDA	DRAWING BY NAGAMORI	CEHCKED BY HAKAGOSHI	APPROVED BY			

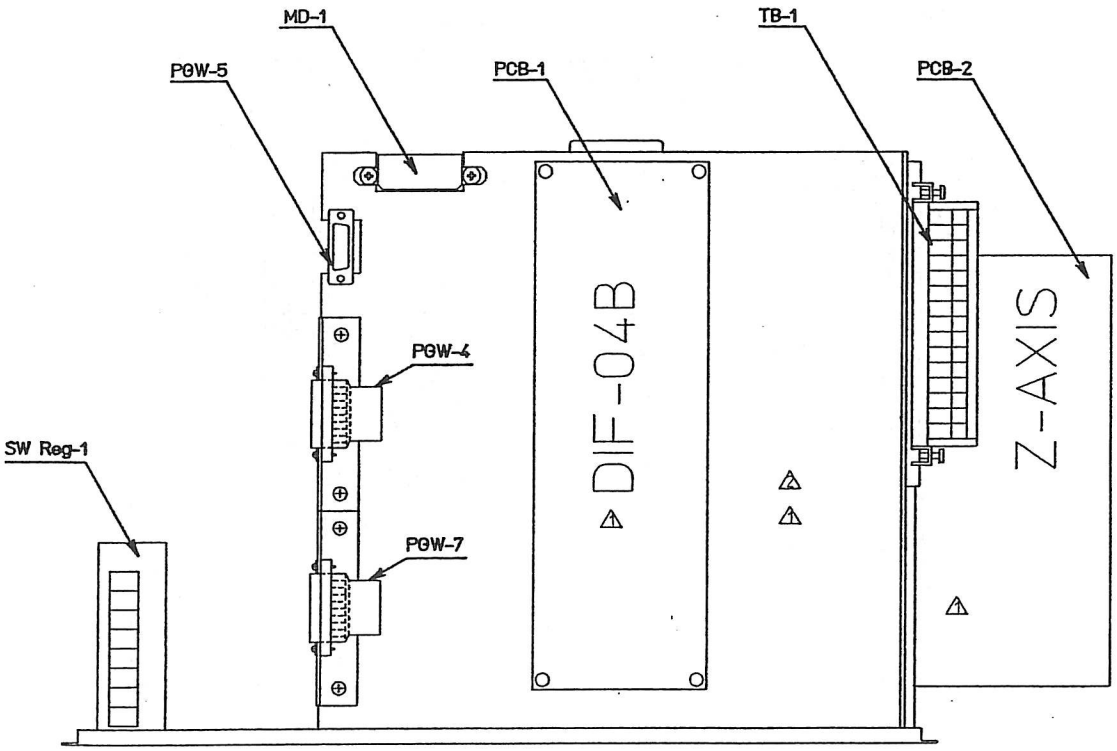
DRIVER UNIT VIEW-2



⚠ Ver.A->B 12/Jun/96 H.Inoue

LAYOUT	TITLE	DRIVER UNIT VIEW-2	MODEL	EX21		SHEET NO.	1/1	DATE	25-JUN-94
SODICK CO.,LTD.	DWG NO.	TE300455B	DESIGNED BY TSUKUDA	DRAWING BY NAGAMORI		CEHCKED BY HAKAGOSHI		APPROVED BY	

DRIVER UNIT VIEW-2



⚠2 Ver.B->C 12/Jun/96 H.Inoue
⚠1 Ver.A->B 12/Jun/96 H.Inoue

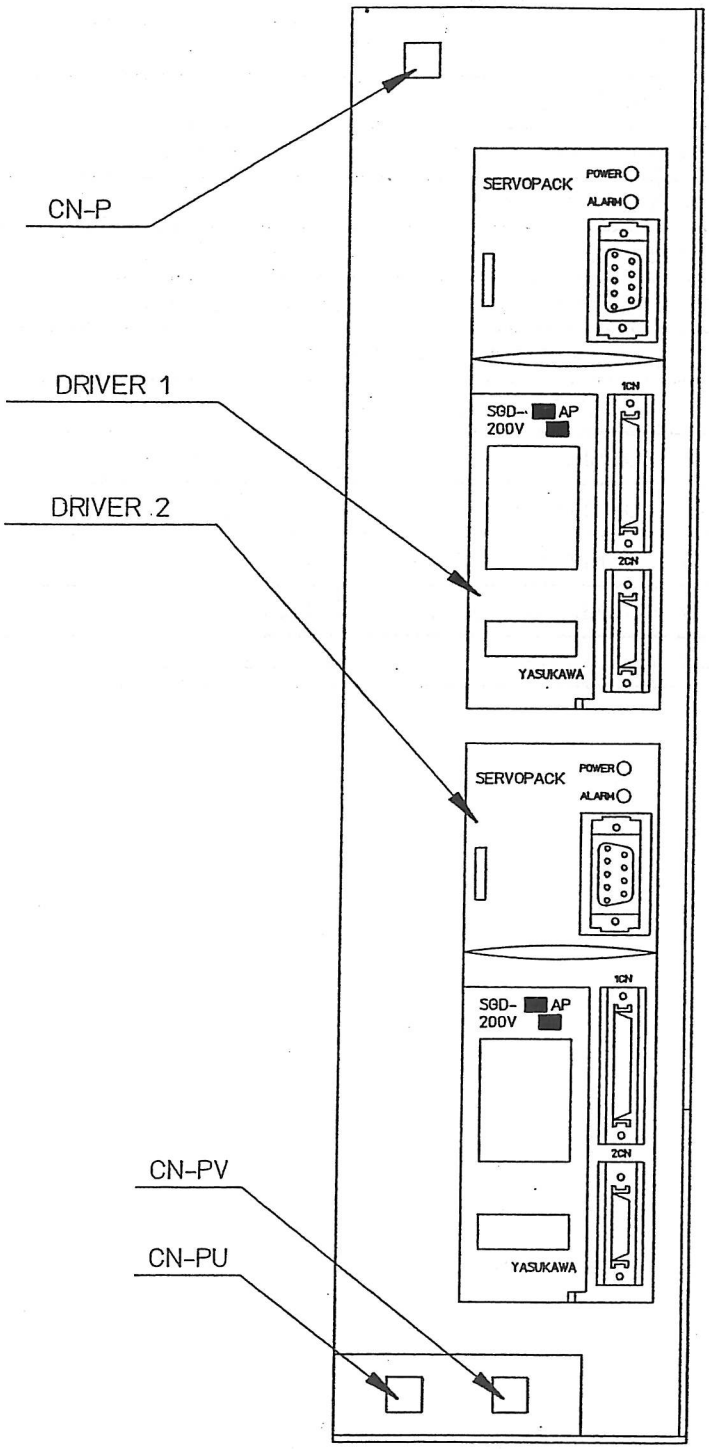
LAYOUT	TITLE	DRIVER UNIT VIEW-2	MODEL	EX21	SHEET NO.	1/1	DATE	25-JUN-94	
SODICK CO.,LTD.	DWG NO.	TE300455C	DESIGNED BY TSUKUDA	DRAWING BY NAGAMORI	CEHCKED BY HAKAGOSHI	APPROVED BY			

PARTS LIST

UNIT : DRIVER UNIT

ITEM	T.CODE	J.CODE	PARTS NAME	SPECIFICATION	Q'TY	DWG. NO.
UV - UNIT	141292		UV-UNIT	EX21-A320,A530	1	
P.C.B -1	147101C		P.C.BOARD	DIF-04 (VER.6)	1	
P.C.B -2	534081	4180304	P.C.BOARD	52NU-A1 (1.5A)	1	
NOISE FILTER	535017	2640177	NOISE FILTER	MBW-1203-22	1	
SW REG - 1	535029	2640138	SWITCHING	RT-2-522/A	1	
DRIVER 1-2	535293	2642691	SERVOPACK	CPCR-01-SC1BY138	2	
TB-1	523117		TERMINAL BLOCK	DF153-15P	1	
	533013		LATCHING BLOCK	XM-2Z-0001	4	
MD-1	532012	2590584	CONNECTOR	0-172515-1 (13P)	1	
PGW-5	532003	2590204	CONNECTOR	0-164532-1 (DS15S)	1	
PGW-4	532385	2592369	CONNECTOR (DAINAMIC)	178803-7	1	
PGW-7	532385	2592369	CONNECTOR (DAINAMIC)	178803-7	1	
PGW-9	532004	2590205	CONNECTOR	0-164533-1 (DS25S)	1	

UV UNIT VIEW-1



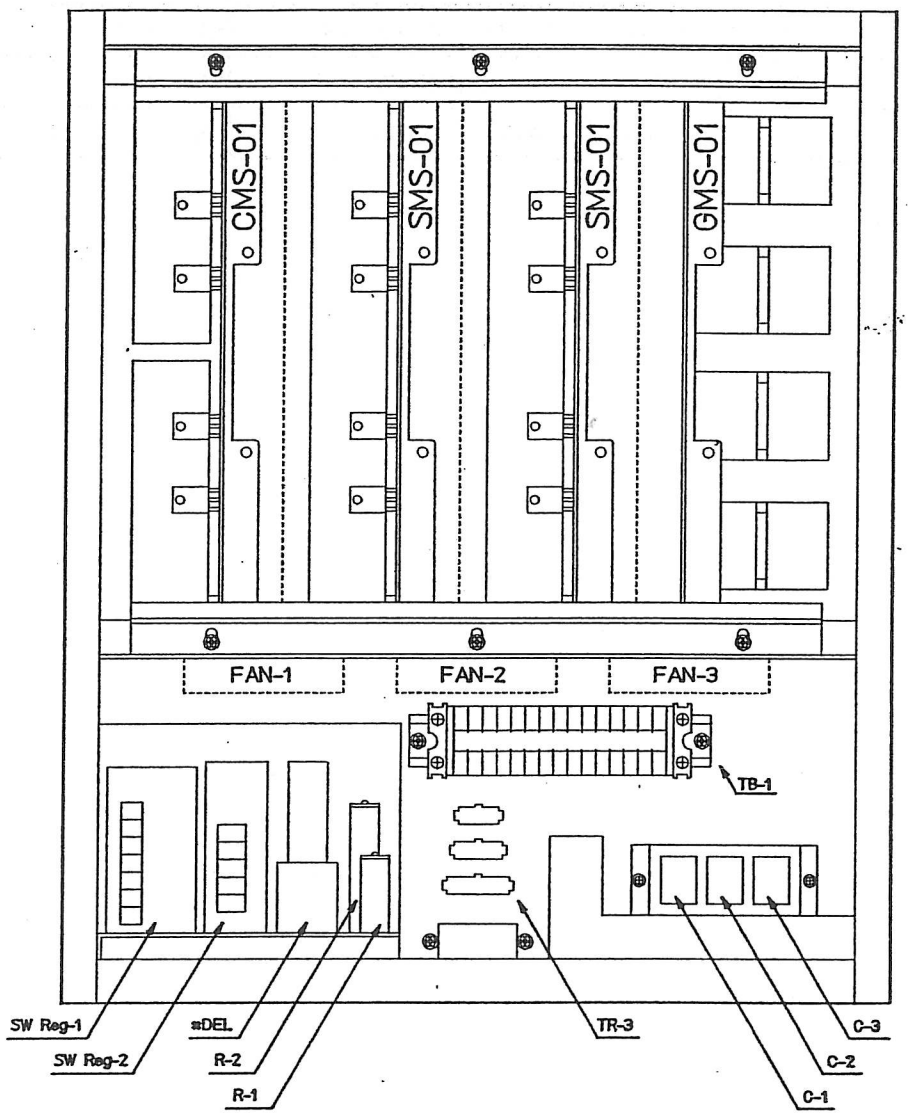
LAYOUT	TITLE	UV UNIT VIEW-1	MODEL	EX21	SHEET NO.	1/1	DATE	12-JUN-96	
SODICK CO.,LTD.	DWG NO.	TE300456A	DESIGNED BY INOUE	DRAWING BY INOUE	CEHCKED BY		APPROVED BY		

PARTS LIST

UNIT : UV-UNIT

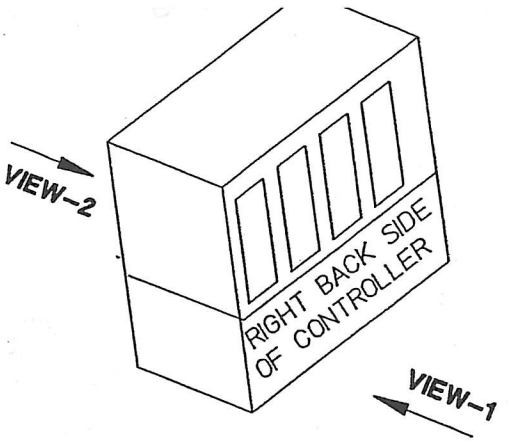
ITEM	T.CODE	J.CODE	PARTS NAME	SPECIFICATION	Q'TY	DWG. NO.
DRIVER 1 - 2	535246	2642477	SERVOPACK	SGD - A3APY91	2	
CN - P	532054	2590301	CONNECTOR	5559 - 04P	1	
CN - PU	532054	2590301	CONNECTOR	5559 - 04P	1	
CN - PV	532054	2590301	CONNECTOR	5559 - 04P	1	

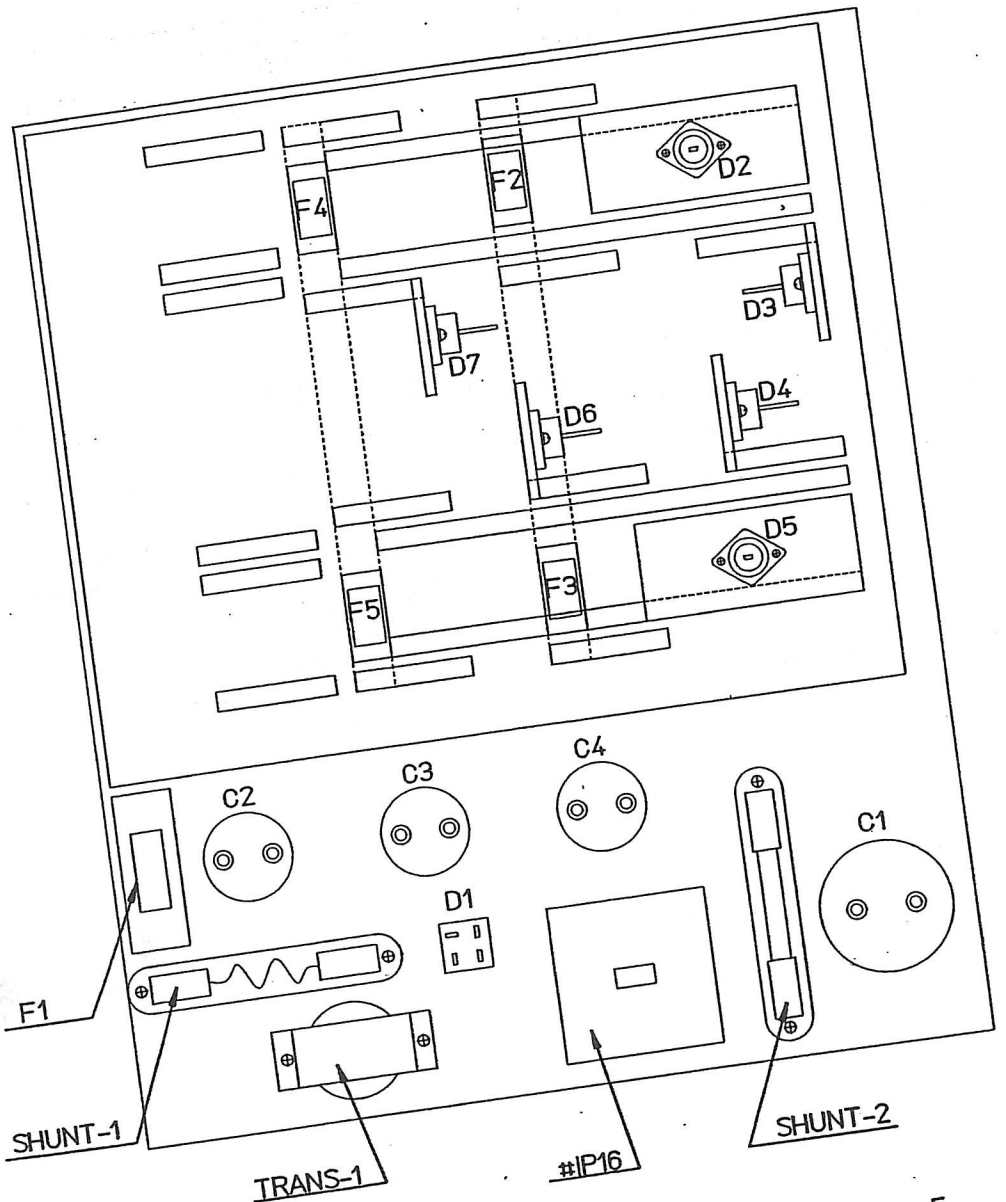
P-MOS UNIT VIEW-1



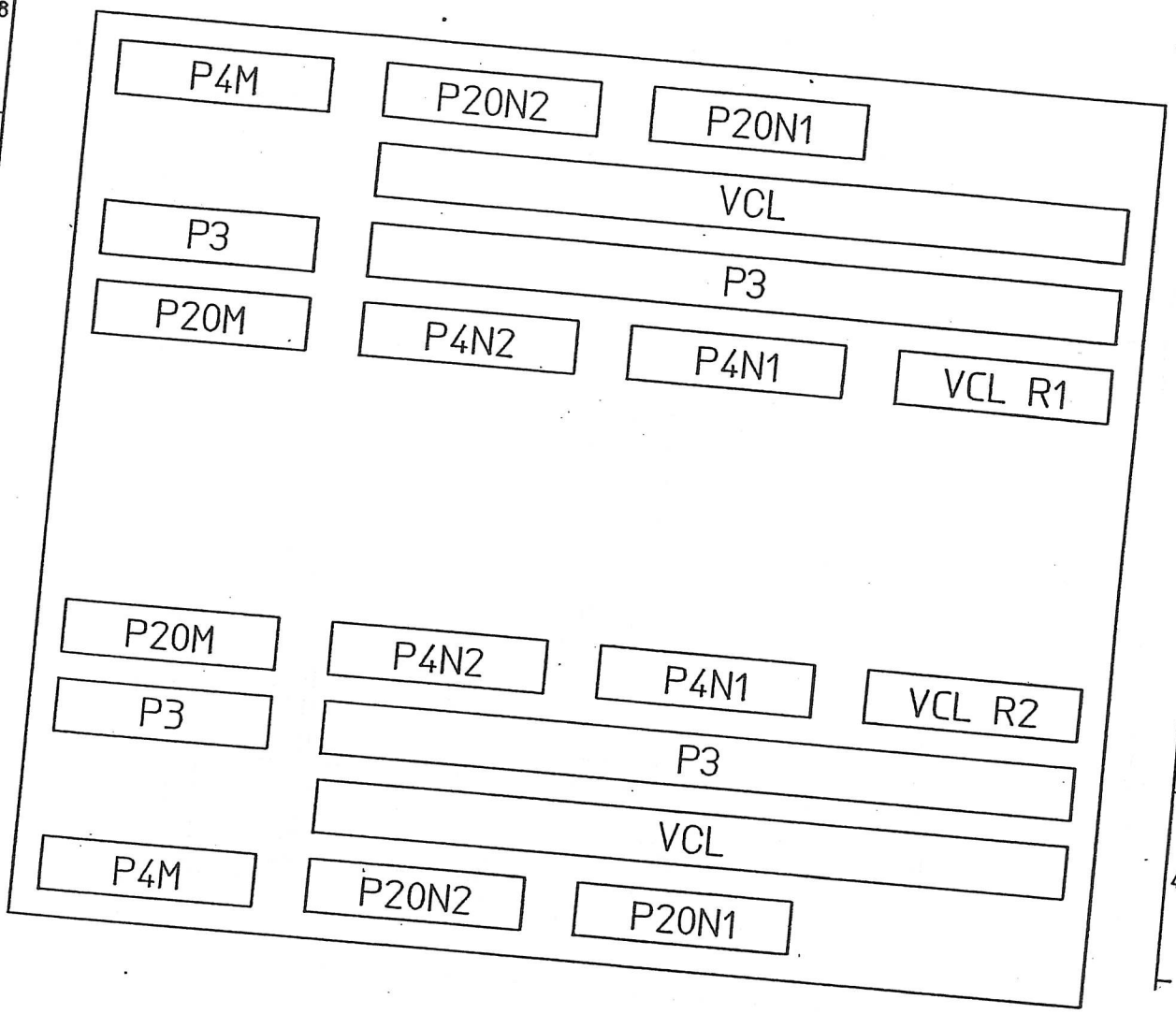
LAYOUT	TITLE	P-MOS UNIT VIEW-1	MODEL	EX21	SHEET NO.	1/1	DATE	29-JUN-94	
SODICK CO.,LTD.	DWG NO.	TE300452A	DESIGNED BY TSUKUDA	DRAWING BY NAGAMORI	CEHCKED BY HAKAGOSHI	APPROVED BY			

P-MOS UNIT VIEW-2





LAYOUT	TITLE	P-MOS UNIT VIEW-2	MODEL	EX21	SHEET NO.	1/1	DATE 13/Jun/96
SODICK CO.,LTD.	DWG NO.	TE300464A	DESIGNED BY INOUE	DRAWING BY INOUE	CEHCKED BY		APPROVED BY



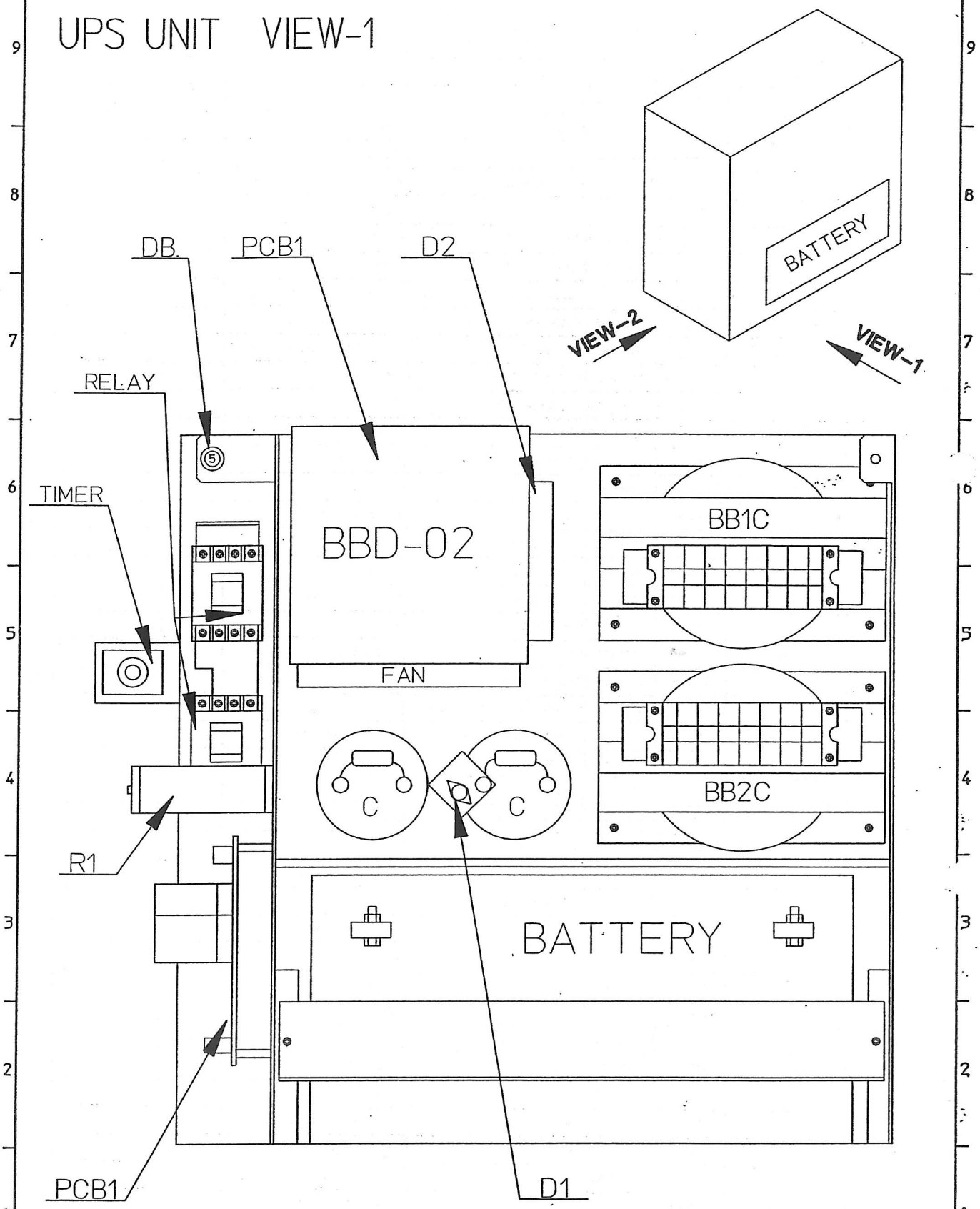
LAYOUT	TITLE	POWER BUS	MODEL	EX21	SHEET NO.	1/1	DATE	19-NOV-93	
SODICK CO.,LTD.	DWG NO.	TE300465A	DESIGNED BY TSUKUDA	DRAWING BY TSUKUDA	CEHCKED BY TSUKUDA	APPROVED BY			

PARTS LIST

UNIT : P-MOS UNIT

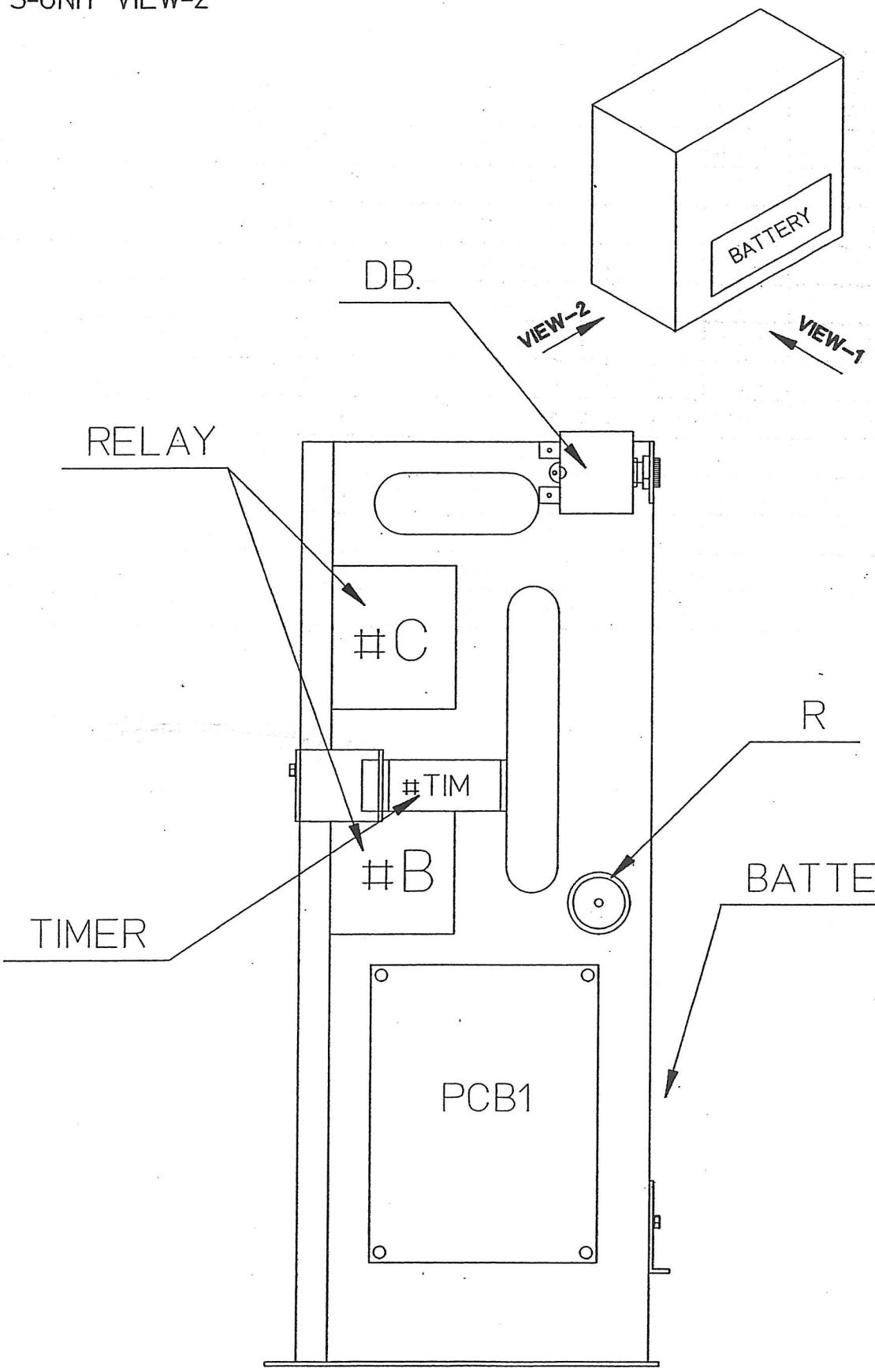
ITEM	T.CODE	J.CODE	PARTS NAME	SPECIFICATION	Q'TY	DWG. NO.
GMS-01	147006	4180643	P.C BOARD	GMS-01	1	
SMS-01	147014	4180646	P.C BOARD	SMS-01	2	
CMS-01	147005	4180645	P.C BOARD	CMS-01	1	
FAN-1,2	534017	2650142	FAN	4715PS-10T-B30-B37	2	
	534008	4170044	FINGER GUARD	PG-47	2	
FAN-3	534003	2650531	FAN	UT-670D-TP	1	
	534005	4170185	FINGER GUARD	G 172 - 10 HA	1	
TB-1	532117	2600372	TERMINAL BLOCK	DF15S-15P	1	
SW RGB-1	535174		SWITCHING REGULATOR	RS-9-E/A 25W DC5V	1	
SW RGB-2	535175	2642618	SWITCHING REGULATOR	HK-11-15 100W DC15V.	1	
# DEL	538041	2570610	RELAY (TIMER)	ADX-11104F13 0.5 SEC	1	
	538033	2650216	RELAY SOCKET	PY14-Y1	1	
	527008	2540315	SURGE KILLERJ	NV200D01	1	
R-1	145010	-	RESISTOR	RGH 20GN 5	1	
R-2	145011	-	RESISTOR	RGH 30G 25	1	
TR-3	532060	2590586	CONNECTOR	5559-16P	1	
C-1	538039	2570196	RELAY	LY-2N AC100V	1	
	538032	2650211	RELAY SOCKET	PT08	1	
	538034	2650227	RELAY SOCKET ADAPTOR	PYC-P	1	
	526067	2510184	CAPACITOR	FPD22J103K2 630V	1	
	527008	2540315	SURGE KILLER	NV200D10	1	
C-2	538039	2570196	RELAY	LY-2N AC100V	1	
	538032	2650211	RELAY SOCKET	PT08	1	
	538034	2650227	RELAY SOCKET ADAPTOR	PYC-P	1	
	526067	2510184	CAPACITOR	FPD22J103K2 630V	2	
	526008	2540315	SURGE KILLER	NV200D10	1	
C-3	538039	2570196	RELAY	LY-2N AC100V	1	
	538032	2650211	RELAY SOCKET	PT08	1	
	538034	2650227	RELAY SOCKET ADAPTOR	PYC-P	1	
	526068	2510005	DAPACITOR	FPD22J104K2 630V	1	
	527008	2540315	SURGE KILLER	NV200D10	1	
F 1	531002	2580156	FUSE	P450H 5A	1	
	531010	2580105	FUSE HOLDER	P4-4S	1	
	538036	2560307	SOCKET ADAPTOR	SA-301B	2	
F 2 - 5	531047	2580559	FUSE	UP500 50A	4	
	531011	2580182	FUSE HOLDER	UPH	4	
D-1	527048	2540520	DIODE STAKE	S25VB63	1	
D-2 - 7	527014	2540037	DILER	S60FUR04	6	
R-3	145014	2500447	RESISTOR	RGH 100GN 2K	1	
R-4	145075	-	RESISTOR	RGH 100GN 50	1	
C-1	526021	2510602	CAPACITOR	PWN3B2W222-1 450V 2200u	1	
C-2 - 4	526022	2510297	CAPACITOR	PWN3B2W471-1 450V 470u	3	
TRANS-1	145003	-	TRANSFORMER	KT-31284	1	
SHUNT-1	535024	2650371	SHUNT	4A/50mV	1	
SHUNT-2	535115	2650049	SHUNT	40A/50mV	1	
# IP 16	538021	2570093	RELAY	SC-2N 3P+2a,2b AC100V	1	

UPS UNIT VIEW-1



LAYOUT	TITLE	UPS UNIT VIEW-1	MODEL	EX21	SHEET NO.	1/1	DATE	25-JUN-94	
SODICK CO.,LTD.	DWG NO.	TE300460A	DESIGNED BY NAGAMORI	DRAWING BY NAGAMORI	CEHCKED BY HAKAGOSHI	APPROVED BY			

UPS-UNIT VIEW-2



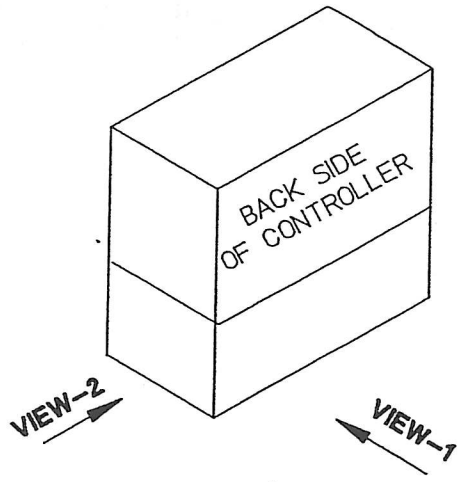
LAYOUT	TITLE	UPS-UNIT VIEW-2	MODEL	EX21	SHEET NO.	1/1	DATE	13-JUN-96	
SODICK CO.,LTD.	DWG NO.	TE300461A	DESIGNED BY INOUE	DRAWING BY INOUE	CEHCKED BY		APPROVED BY		

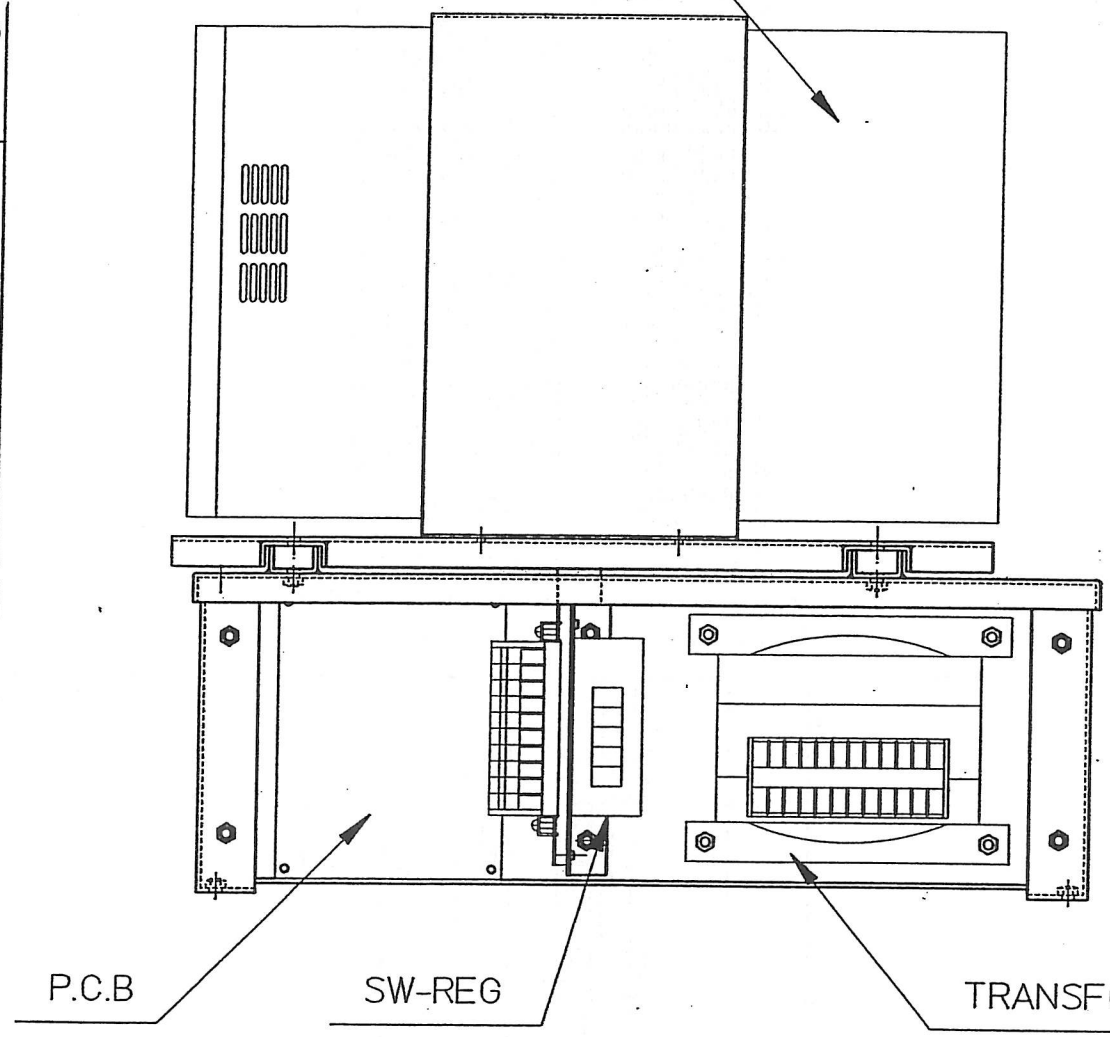
PARTS LIST

UNIT : UPS. UNIT T.

ITEM	T.CODE	J.CODE	PARTS NAME	SPECIFICATION	Q'TY	DWG.NO.
BATTERY	539305		BATTERY	UNION (MX - 12700)	1	NP 65 - 12
PCB1	147050B		P.C BOARD	BBD - 01B	1	ET 300021B
PCB2	147100		P.C BOARD	BBD-02A	1	
R1	145067		RESISTOR	RGH 50GN 20 OHM	1	
BB1C	145080C		TRANSFORMER	UPS BB1 C	1	
BB2C	145079C		TRANSFORMER	UPS BB2 C	1	
C	526132		CAPACITOR ALUM ELEC	HCG7 - A -1 - 154 - I 25V	2	
D1	527014		DIODE	860 FUR04	1	
D2	527064		DIODE	75L6P43	1	
FAN	534124		FAN (AC)	471 OPS - 23T - B30 -A00	1	
DB.	538006		CIRCUIT BREAKER	W58XB1A4A - 5A	1	
RELAY	538102		RELAY (MAGNET)	SC - 0 1 A AC200V 3P+1A	2	
	528062		RELAY SOCKET ADAPTOR	729H - 4	1	
TIMER	538		RELAY (TIMER)	H37 - 2 DC 12 V 5S EC	1	

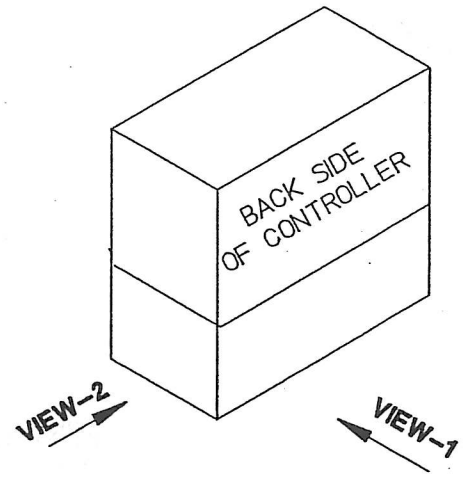
UPS2-UNIT VIEW-1

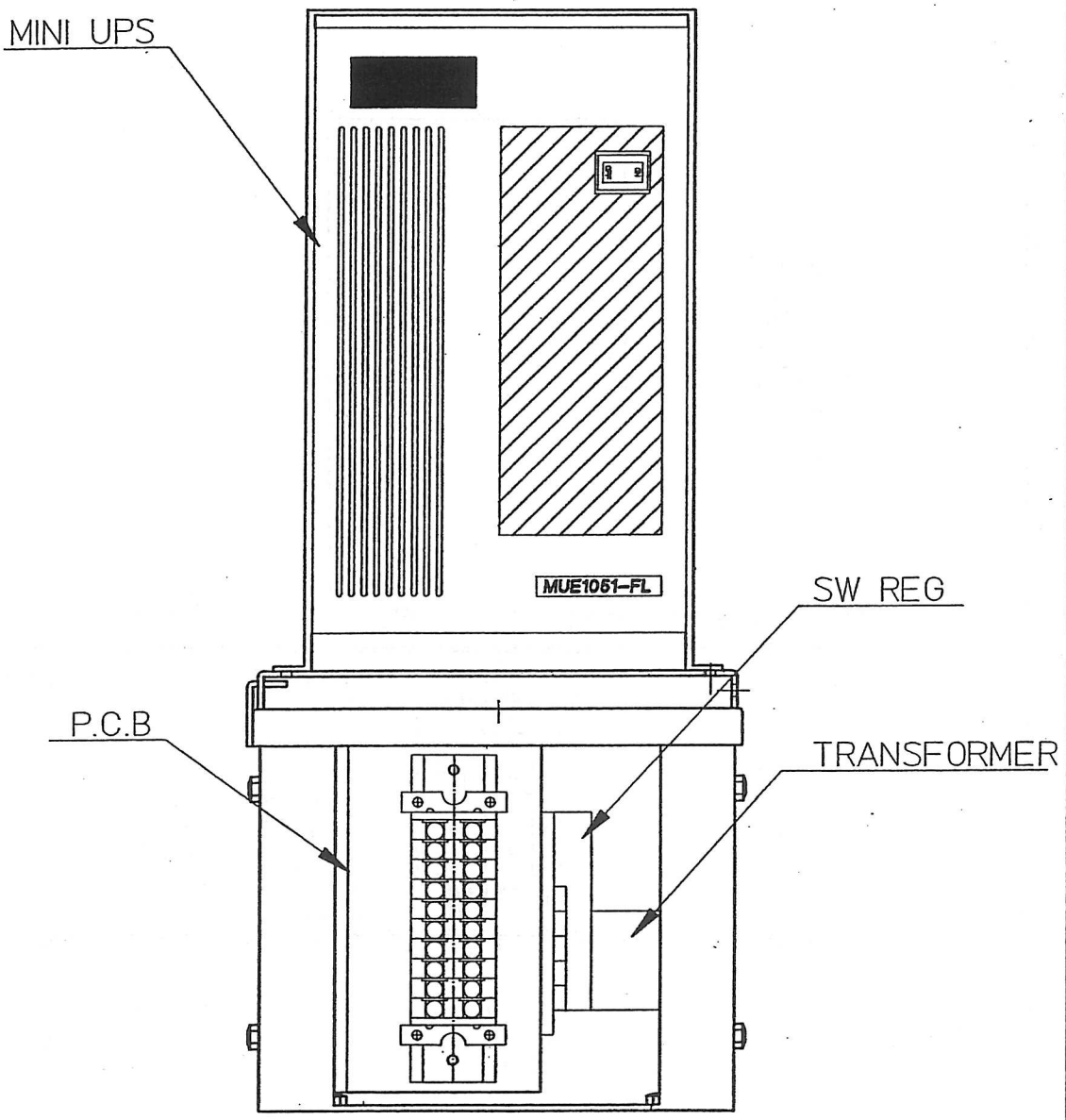




LAYOUT	TITLE	UPS2-UNIT VIEW-1	MODEL	EX21	SHEET NO.	1/1	DATE	13/Jun/96	
SODICK CO.,LTD.	DWG NO.	TE300462A	DESIGNED BY INOUE	DRAWING BY INOUE	CEHCKED BY		APPROVED BY		

UPS2-UNIT VIEW-2





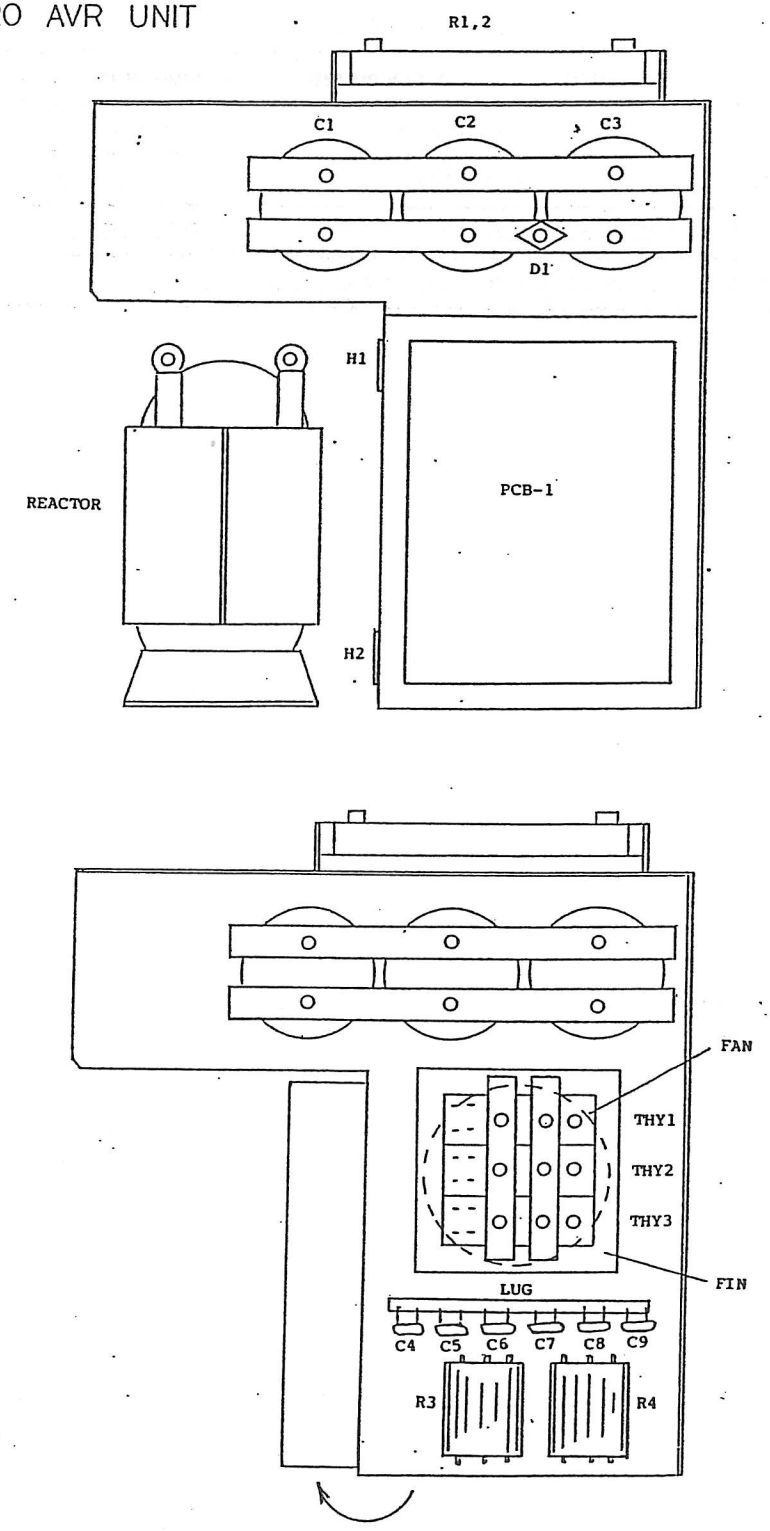
LAYOUT	TITLE	UPS2-UNIT VIEW-2	MODEL	EX21		SHEET NO.	1/1	DATE	13/Jun/96
SODICK CO.,LTD.	DWG NO.	TE300463A	DESIGNED BY INOUE	DRAWING BY INOUE	CEHCKED BY	APPROVED BY			

PARTS LIST

UNIT : UPS UNIT

ITEM	T.CODE	J.CODE	PARTS NAME	SPECIFICATION	Q'TY	DWG. NO.
TRANSFORMER	145129A		TRANSFORMER	UPS BB6A	1	TE400085A
P.C.B.	147050C		P.C.BOARD	BBD-01 (UPS82)	1	
MINI UPS	534183A	2642755	MINI UPS	MUE1051-FLUBE	1	
SW REG	535062	2640372	SWITCHING REGULATOR	RS-7-12	1	

P20 AVR UNIT



	TITLE	P20 AVR UNIT	MODEL	EX21	SHEET NO.	1/1	DATE	14 Jun 96
SODICK CO.,LTD.	DWG NO.	TE300477A	DESIGNED BY	Inoue	DRAWING BY	Inoue	CHECKED BY		APPROVED BY	

PARTS LIST

UNIT : P20 AVR UNIT

ITEM	T.CODE	J.CODE	PARTS NAME	SPECIFICATION	Q'TY	DWG.NO.
REACRTO	145042	2640989	REACTOR	CHTKM-05-40	1	0.5 mH 40A
PCB-1	147013	4180774	P.C. BOARD	SGC-01-11W	1	
R1,2	145014	2500447	RESISTOR	RGH100GN-2K	2	100W 2K
C1 - 3	526096	2510749	CAPACITOR	PWN3A2V 822-2	3	350V 8200 u
THVI - 3	527058	2540484	THYRISTOR	PK55GB80	3	
FIN	539161	4170341	HEAT SINK	KUH-SAVR	1	
FAN	534014	2651233	FAN	4710PS-10W-B30	1	AC 100 V
LUG	532164	2660079	LUG TERMINAL	CV-18P L	1	
C4 - 9	526066	2510267	CAPACITOR	QXF2J474KRPT	6	600 V 0.47 u
R3,4	521034	2500685	RESISTOR	RHA-50N-30X3	2	50W 30
D1	527014	2540037	DIODE	S60FUR04	1	
H1,2	435008	2080809	HINGE	B-1075 (LEFT)	2	

PARTS LIST

UNIT : VCL UNIT

ITEM	T.CODE	J.CODE	PARTS NAME	SPECIFICATION	Q'TY	DWG. NO.
R1 - R20	145008	-	RESISTOR	RGJ250GN-100	20	250W 100
R21,R22	145007	-	RESISTOR	RGJ250GN-10	2	250W 100
FAN 1 - 2	534003	2650531	FAN	UT-670D-TP	2	

P.C. 9134199
1st ed. 18 June 1996