

Electrical System

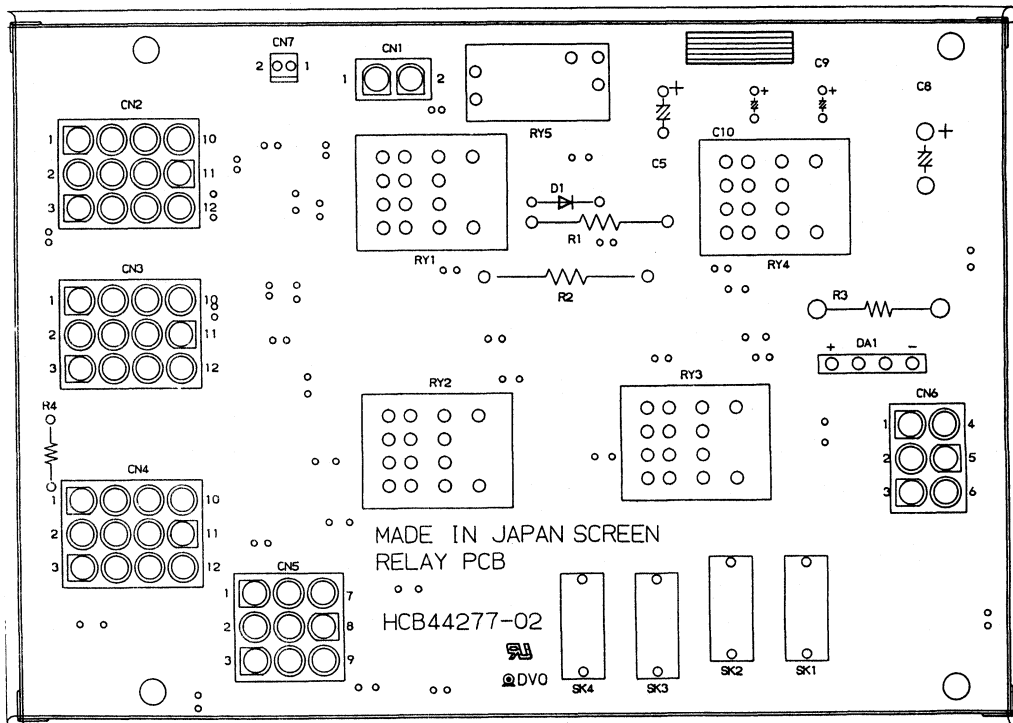
1. Distribution Board Function Check

◆ Installation site power voltage check

- The value measured between terminals **N** and **L** on the distribution board must be within $\pm 10\%$ of the rated voltage.

The same at full load

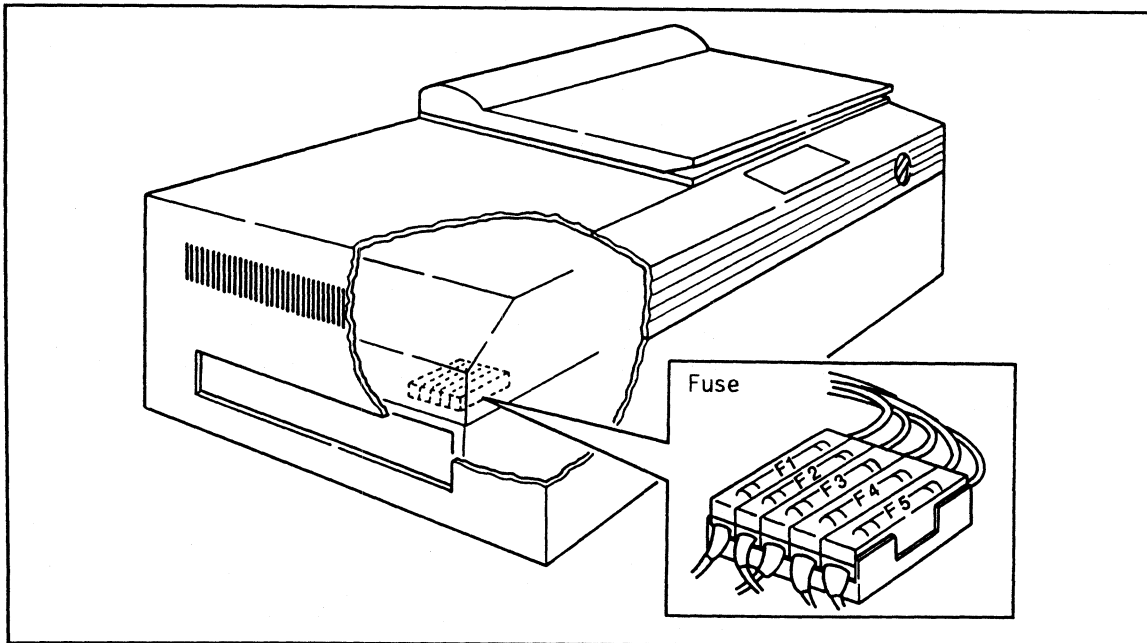
◆ CPU board power supply voltage check



* CN1 is the input terminal (input voltage) on the CPU board.

◆ Fuse function

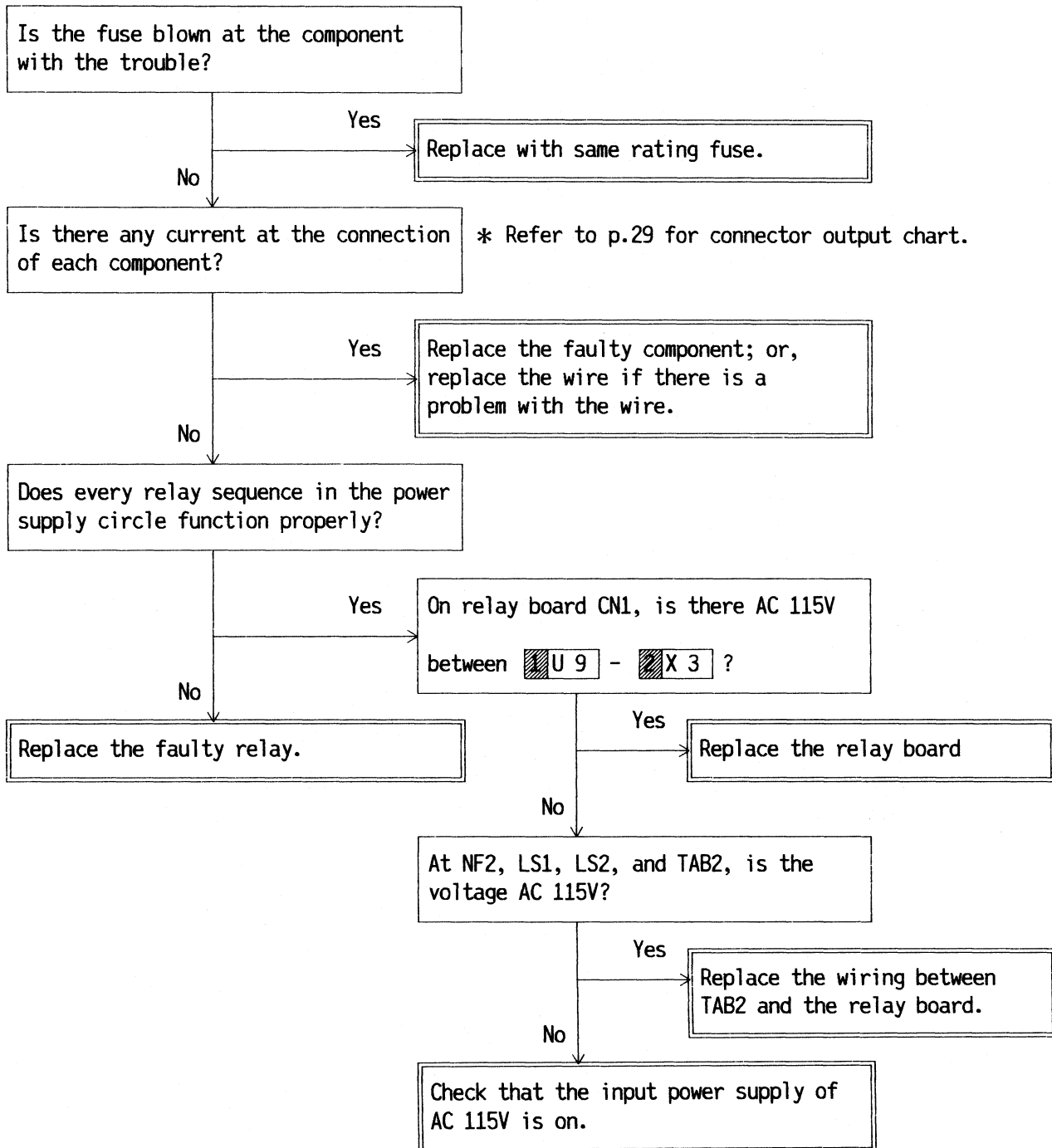
- The distribution board is located in the distribution box at the rear-side of the main body.
- Turn OFF the power switch and main power supply when changing fuses or checking electrical circuits.
- When replacing fuses, always use the same type and rating. Do NOT use different fuses; it may cause mechanical failure or other damage.



















Fuse No.	Rating			Purpose
F 1	250V	0.5A	ϕ 5.2 X 20	Fan 1, fan 2
F 2	250V	3A	ϕ 6.35 X 31.8	H1 (heater)
F 3	250V	12A	CERAMIC ϕ 6.35 X 31.8	LL (light source)
F 4	250V	0.5A	ϕ 6.35 X 31.8	Transformer 1, light source controller
F 5	250V	3A	ϕ 6.35 X 31.8	Relay board, cutter motor, processor motor, copy board motor

2. Troubleshooting





◆ Checking method



• Table 1 Connector Output Chart

C N No.	Connector output	purpose
C N 5 A	Is there AC 115 V between  2 1 -  X 3 ?	M1 forward
C N 5 A	Is there AC 115 V between  3 7 -  X 3 ?	M2 forward
C N 5 A	Is there AC 115 V between  1 5 -  X 3 ?	M3 forward
C N 5 A	Is there AC 115 V between  2 2 -  X 3 ?	M1 reverse
C N 5 A	Is there AC 115 V between  3 9 -  X 3 ?	M2 reverse
C N 3 A	Is there AC 115 V between  X 3 -  4 5 ?	L
C N 3 A	Is there AC 115 V between  1 9 -  X 3 ?	CU
C N 3 A	Is there AC 115 V between  2 6 -  X 3 ?	PL

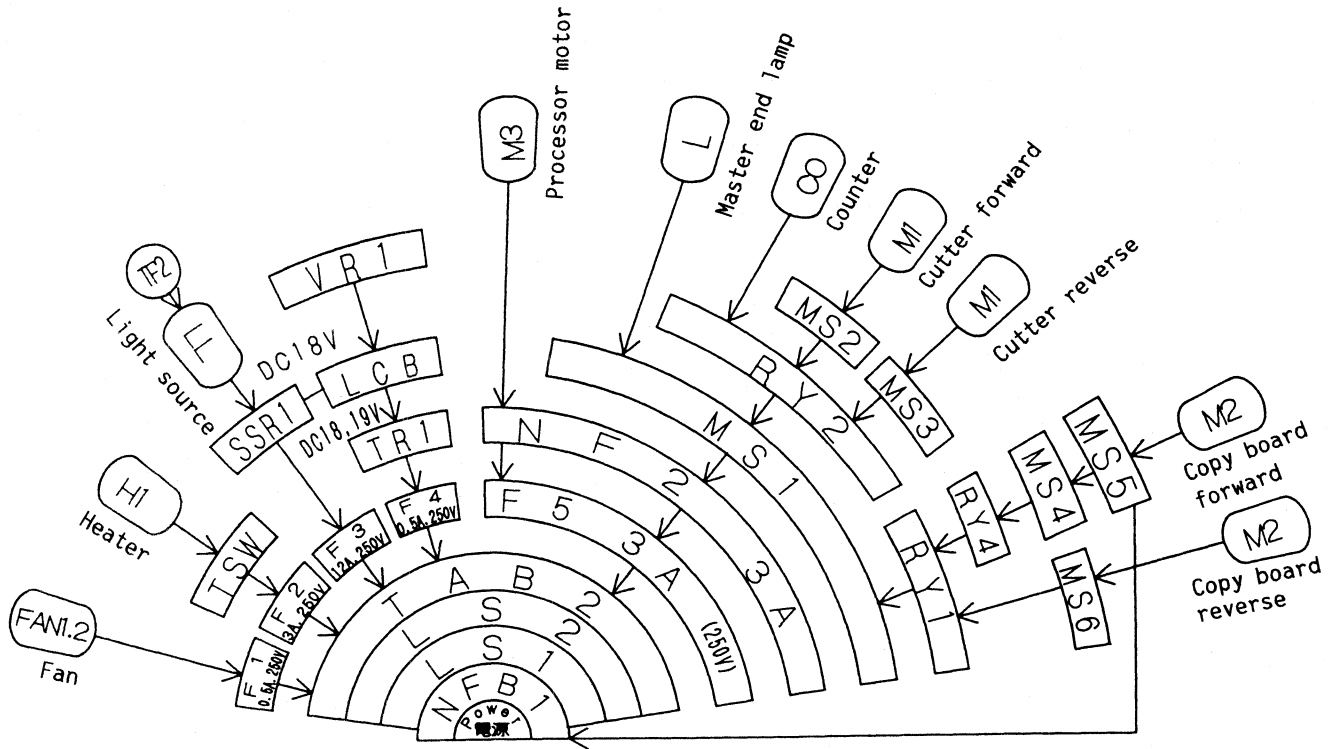
• Check point for other connectors

Component	Connector No.	Connector output
* LL	J14	Is there AC 80 V between  2 -  X 3 ?
H1	J2	Is there AC 115 V between  U 5 -  X 3 ?

* When checking LL, turn the light intensity adjustment variable register to the maximum position.

◆ Trouble-check table

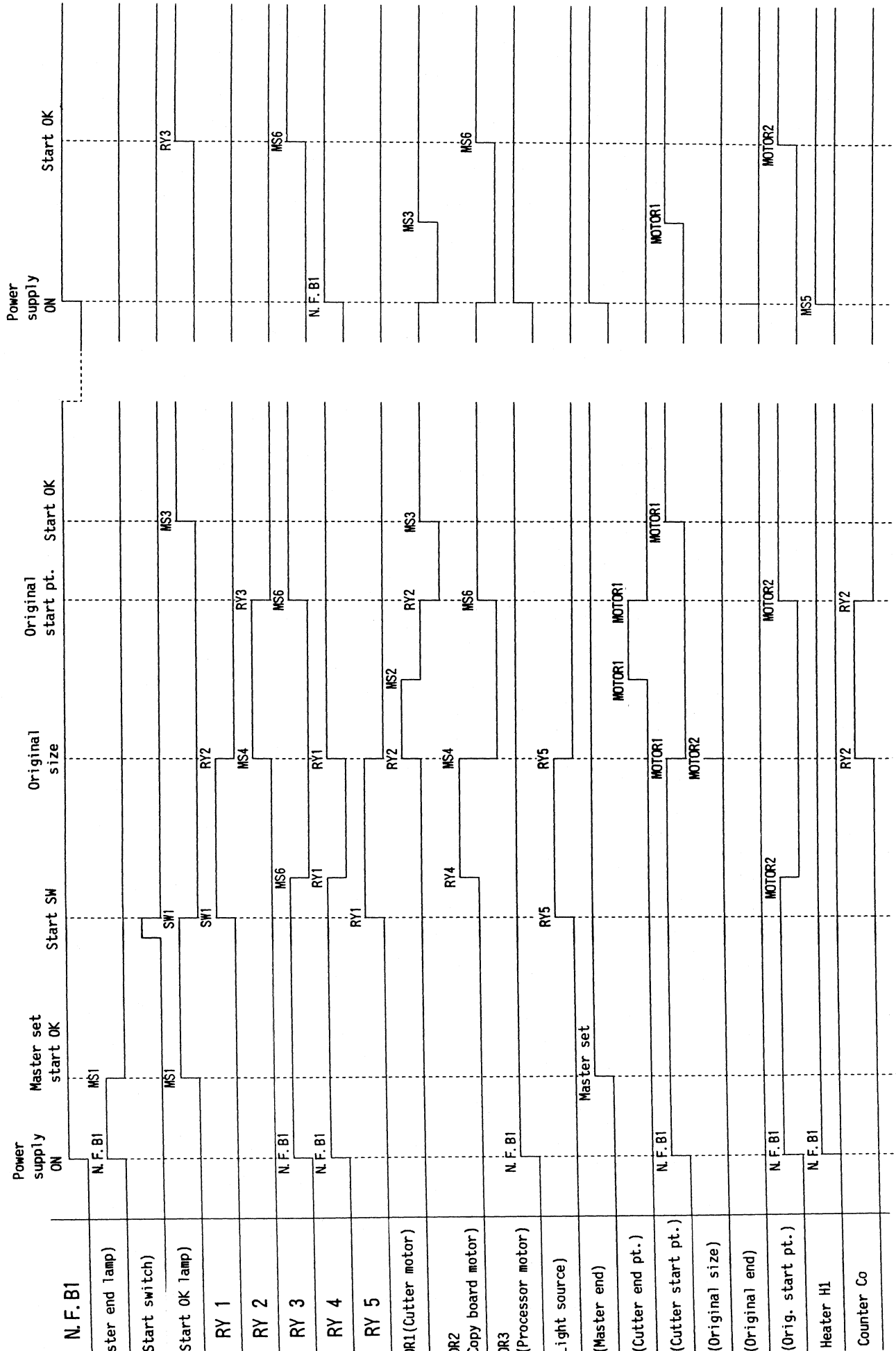
If a line is drawn from the trouble point to the center, the items that need to be checked are shown.



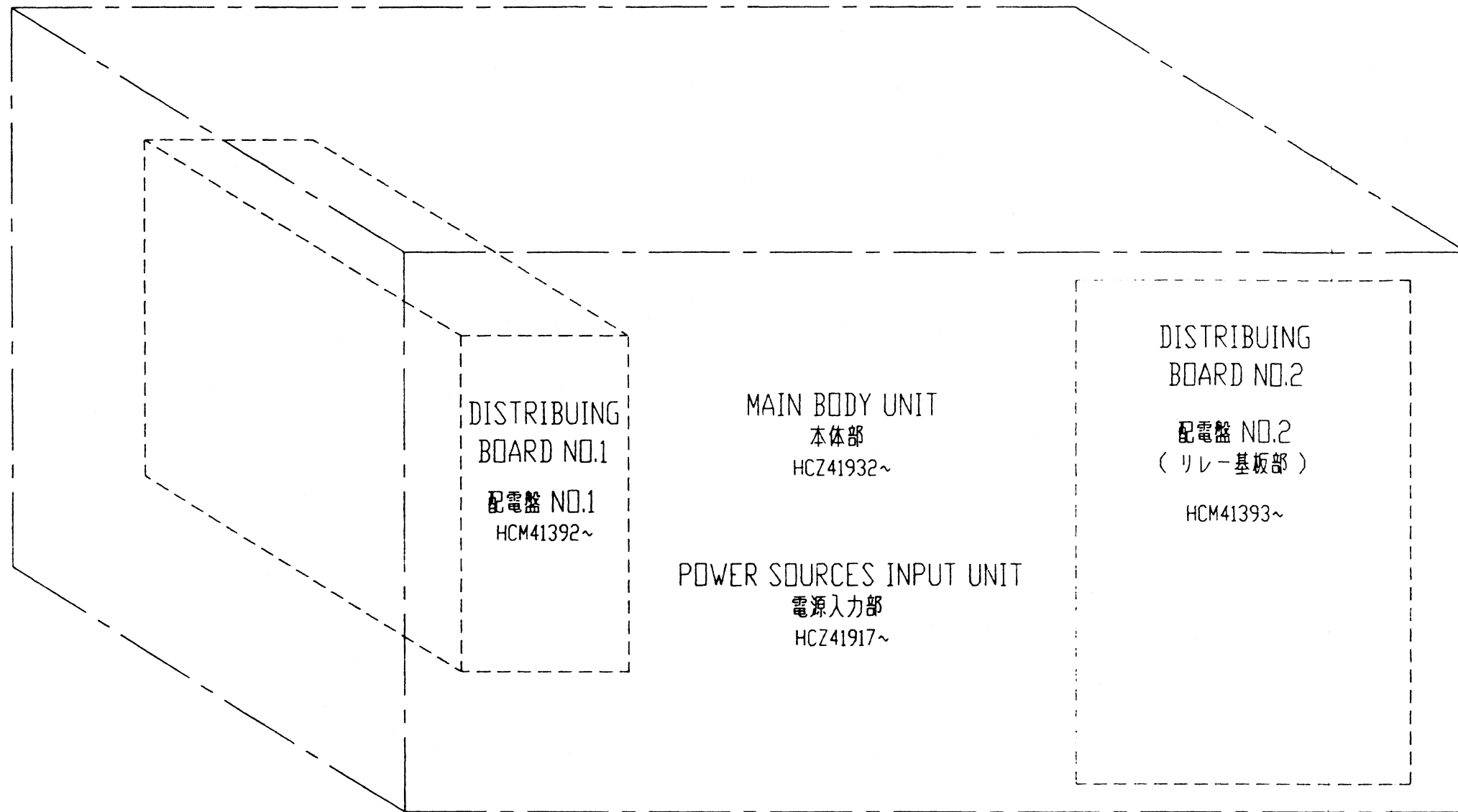
◆ Timing chart

(B) MS 5 (Original end recovery), or original or cutter is not at start point

(A) Normal



DWG NO. HCW41998

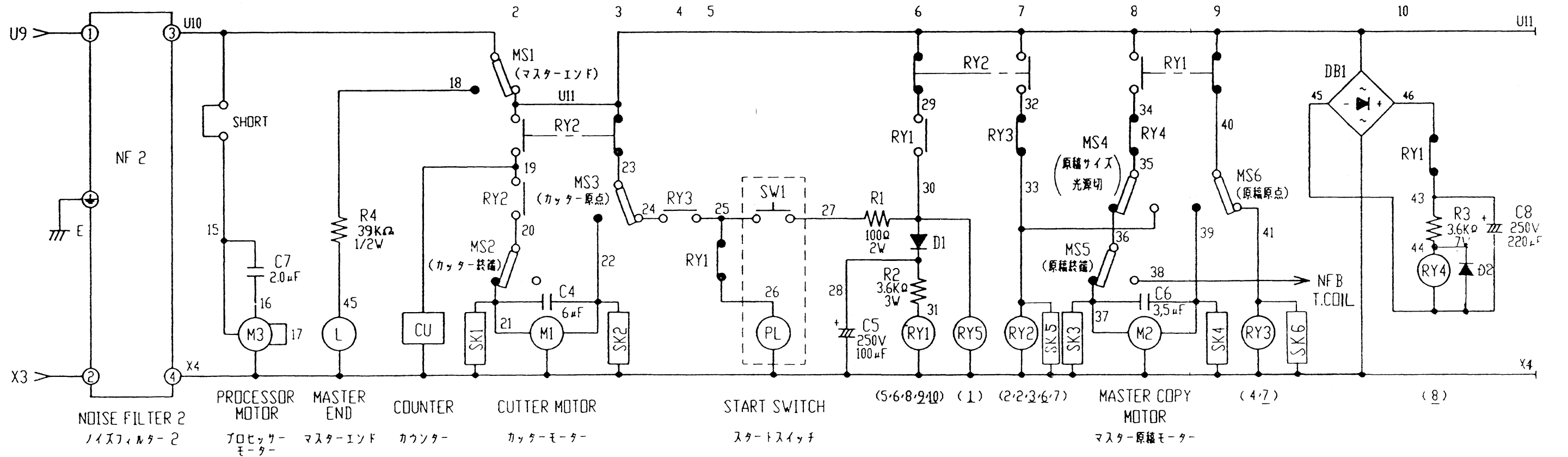
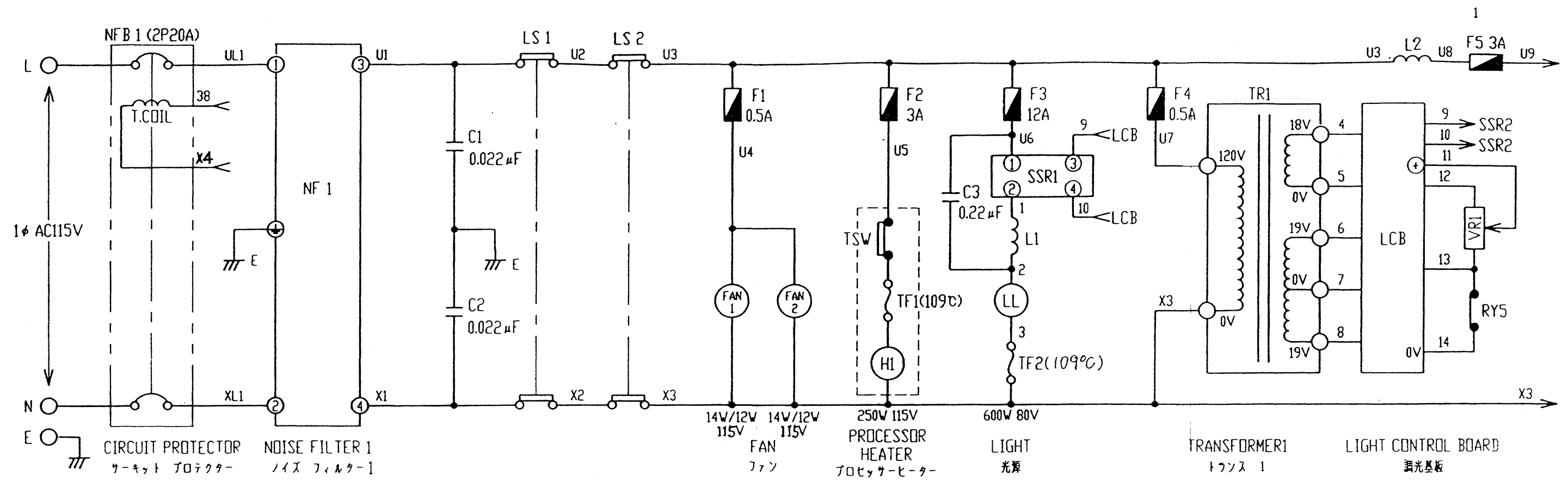


FRONT SIDE
前面

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SYM	REVISION	DATE	APPROVED

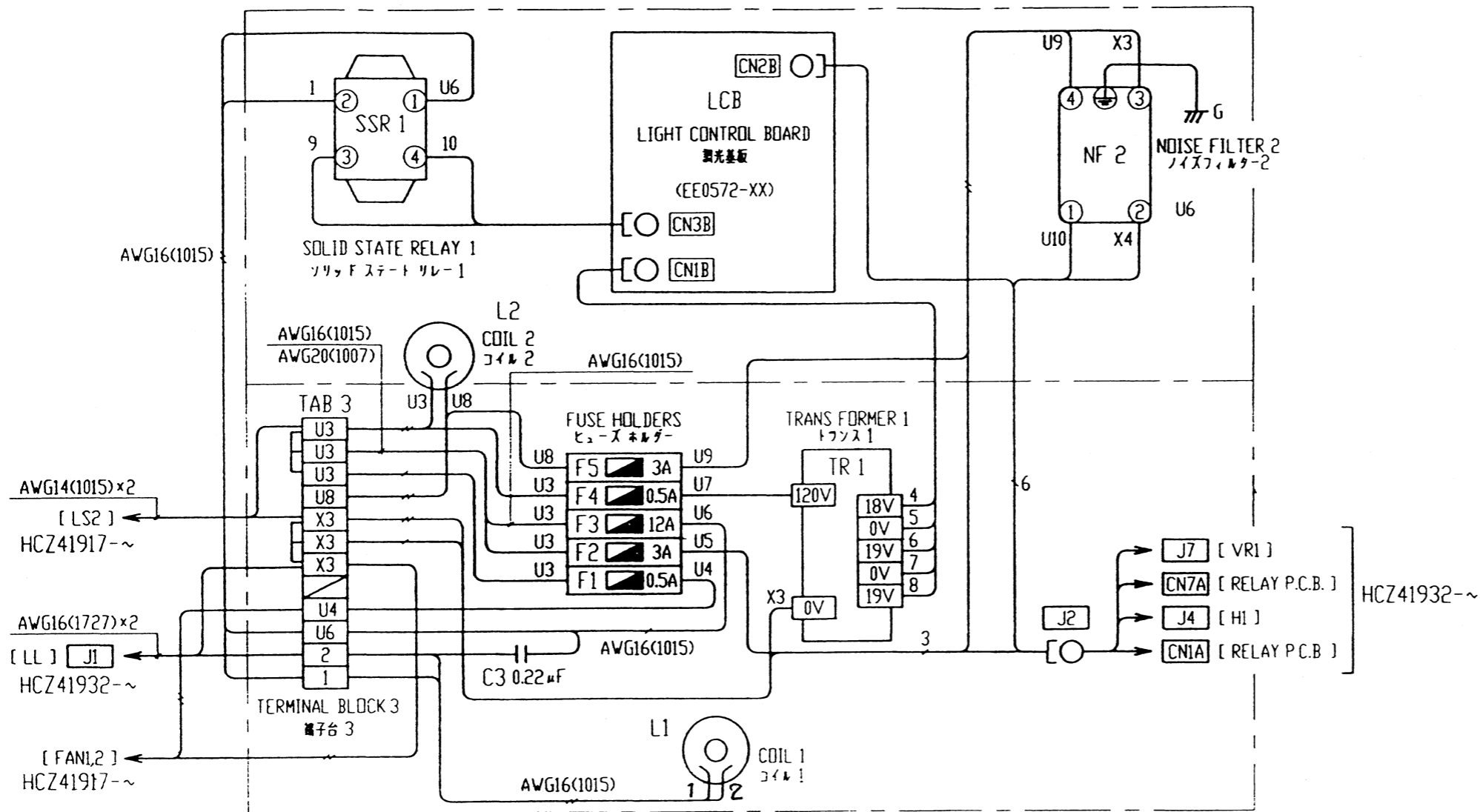
DESIGN	S.ITD	TITLE WIRING DIA. 配線図 ★	
DRAWING	S.ITD		
CHECKED	F.Fukuhara		
APPROVED	F.Fukuhara		
DATE	'93.07.30		
MODEL	CP-282-SS	DWG NO.	HCW41998

DWG NO. HCS42625



DESIGN	F.Fukuhara	TITLE WIRING SYSTEM DIA. 系統図	
DRAWING	S.ITO		
CHECKED	I.AOKI		
APPROVED	F.Fukuhara		
DATE	'93.08.20		
MODEL	cp-282-ss	DWG NO.	HCS42625

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- L2 : # SN13-500
- NF2 : # ZCB 2203-11
- SSR1 : # SF-16DA-HI-5
- TAB3 : # UF1003-20A (12P)
- F.HOLDERS : # F-65AB-1P (x1), F-65BB-1P (x4)
- F.HOLDERS COVER : # F-651C (x5)
- F1,4 : # GGC1/2 0.5A 250V
- F2,5 : # GGC3 3A 250V
- F3 : # 314012 12A 250V
- TR1 : # PTR-254-01
- L1 : # SN-R-10
- C3 : # ECQ-U2AZZ4MV
- SHORT PIN : # F2122(3P)x2

CONNECT NO.	PIN NO.	WIRE NO.	DESTINATION 行先	
CN1B	1	8	TR1	EI
	2	7		
	3	6		
	4	NC		
	5	5		
	6	4		
CN2B	1	14	J2 (RELAY P.C.B.)	EI
	2	12	(VRI)	
	3	11	J2	
	4	13		
CN3B	1	9	SSR1	EI
	2	10		
J2	1	11	J7	UN
	2	12		
	3	13		
	4	13	CN7A	
	5	14		
	6	U5	J4	
	7	X8		
	8	U10	CN1A	
	9	X4		

EI : EI CONNECTOR
EI コネクタ-

UN : UNIVERSAL MATEN-N-LOCK CONNECTOR
ユニバーサル マテンロックコネクタ-

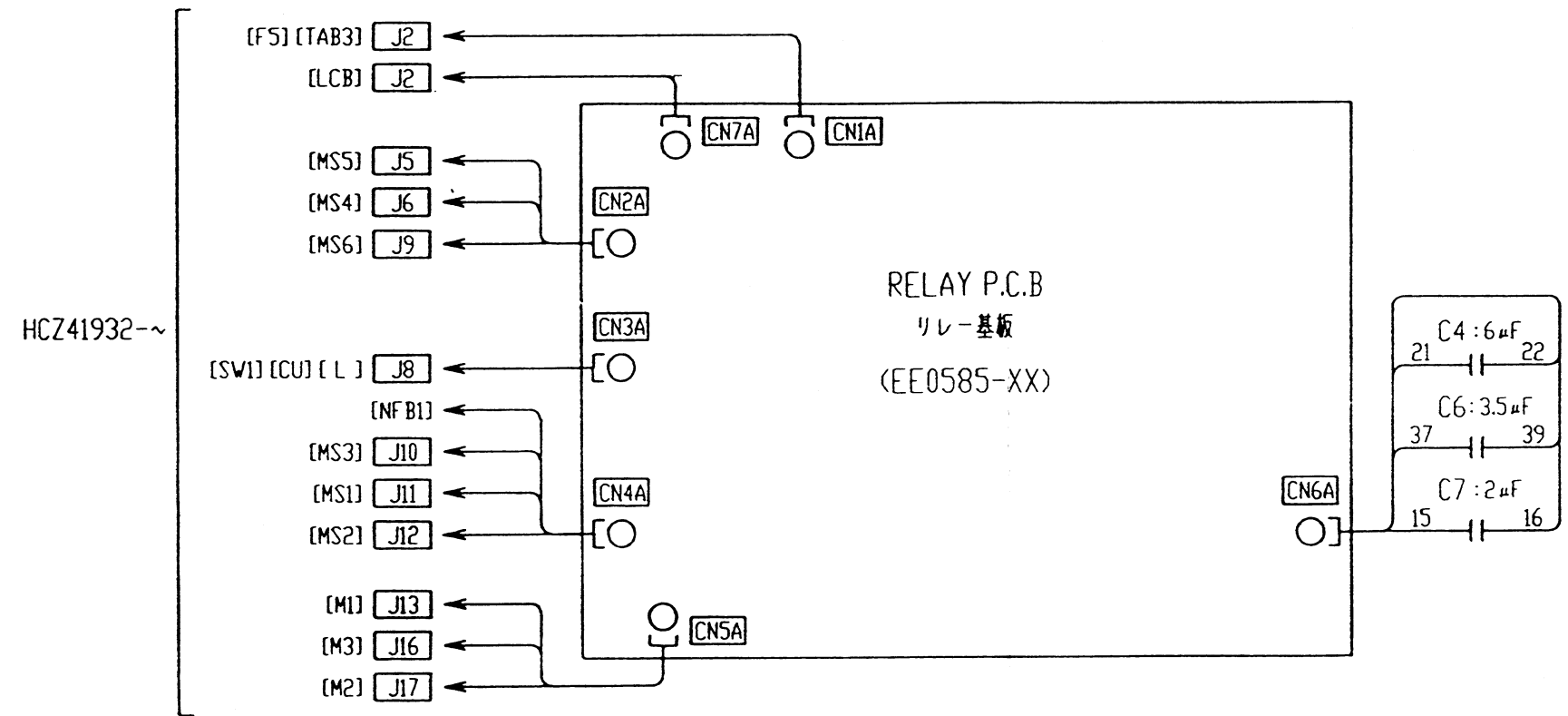
-NOTE- (注)

1. UNLESS OTHER WISE SPECIFIED BE SURE TO USE AWG20(1007) FOR THE ELECTRICAL WIRES.
指定なき電線は AWG20(1007) を使用する事。

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DESIGN	F.Fukuhara	TITLE DISTRIBUTION BOARD NO.1 CONNECTION DIA 配電盤 NO.1 結線図	
DRAWING	S.Ito		
CHECKED	I.AOKI		
APPROVED	F.Fukuhara		
DATE	'93.08.20		
MODEL	CP-282-SS	DWG NO.	HCM41392

C6 : #CH35UL
 C4 : #CH60UL
 C7 : #CH20UL



CONN. NO.	PIN NO.	WIRE NO.	DESTINATION	
CN1A	1	U10	J2	UN
	2	X4		
CN2A	1	40	J9(MS6)	UN
	2	41		
	3	39		
	4	X4		
	5	X4		
	6	33		
	7	38		
	8	X4		
	9	35		
	10	37		
	11	36		
	12	36		
CN3A	1	26	J8(PL)	UN
	2	26		
	3	X4		
	4	45		
	5	X4		
	6	X3		
	7	19		
	8	X4		
	9	25		
	10	15		
	11	U8		
	12	27		
CN4A	1	20	J12(MS2)	UN
	2	21		
	3	18		
	4	X4		
	5	NC		
	6	U11		
	7	38		
	8	NC		
	9	U10		
	10	23		
	11	24		
	12	22		
CN5A	1	15	J16(M3)	UN
	2	16		
	3	39		
	4	X4		
	5	X4		
	6	X4		
	7	21		
	8	22		
	9	37		
CN6A	1	21	C4	UN
	2	37		
	3	15		
	4	22		
	5	39		
	6	16		
CN7A	1	13	J2	EI
	2	14		

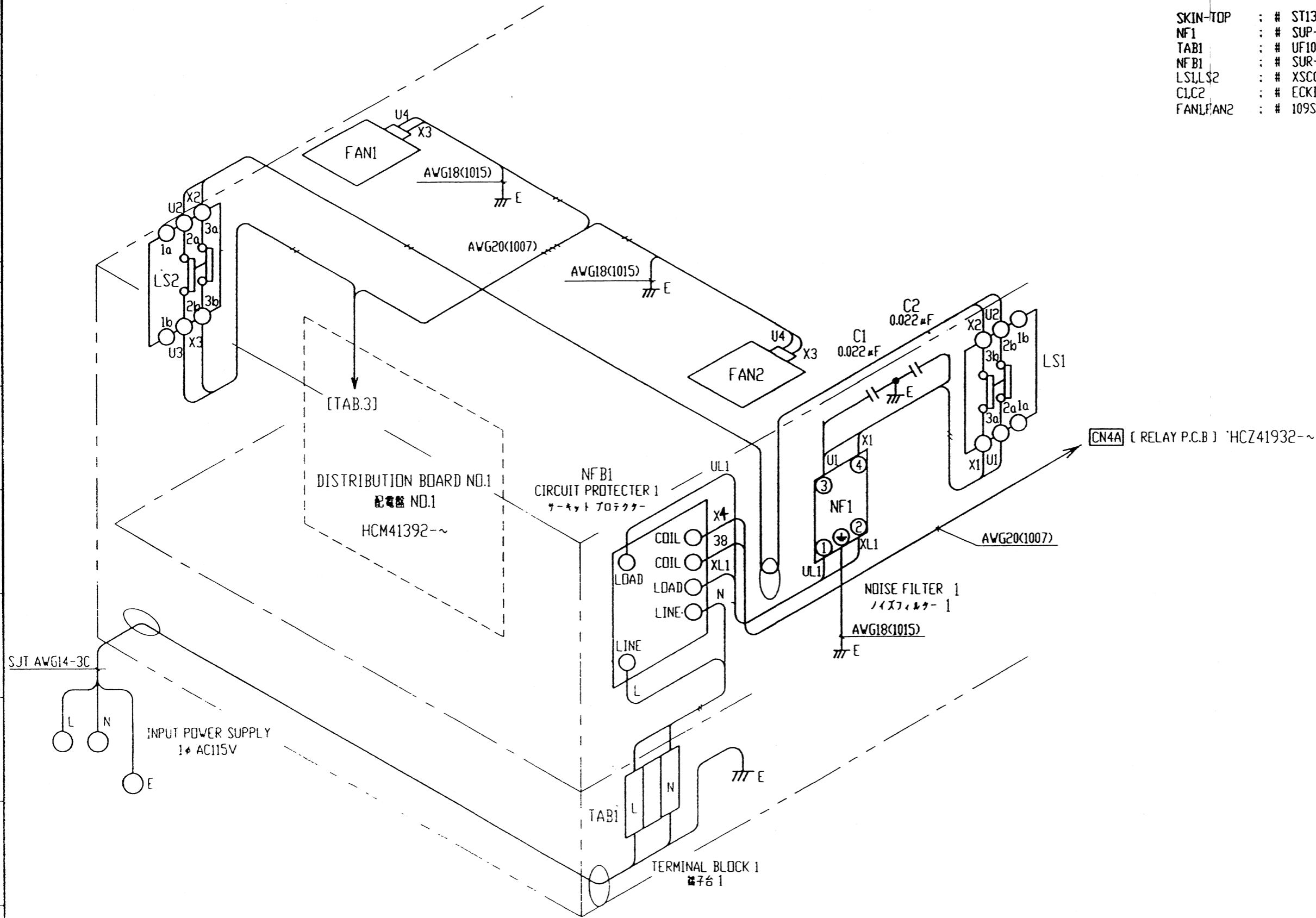
UN : UNIVERSAL MATE-N-LOCK CONNECTOR
 E1 : E1 CONNECTOR

-NOTE- (注)
 1. UNLESS OTHERWISE SPECIFIED BE SURE TO USE AWG20(1007) FOR THE ELECTRICAL WIRES.
 指定なき電線は AWG20(1007) を使用する事。

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DESIGN	F.Fukuhara	TITLE DISTRIBUTION BOARD NO.2 CONNECTION DIA. (RELAY P.C.B) 配電盤 NO.2 結線図 (リレー基板)	
DRAWING	S.ITO		
CHECKED	I.AOKI		
APPROVED	F.Fukuhara		
DATE	'93.08.20		
MODEL	cp-282-SS	DWG NO.	HCM41393

SKIN-TOP : # ST13.5
 NF1 : # SUP-E20H-EP
 TAB1 : # UF1005-20S 3P
 NFB1 : # SUR-F-41-SP,AC100V-62-20A
 LS1,LS2 : # XSC06ACAA72
 C1,C2 : # ECKDMS221E(0.022μF 2000V)
 FAN1,FAN2 : # 109S024UL

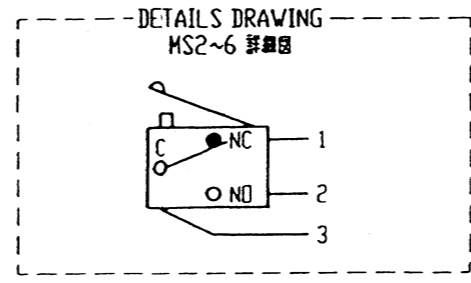
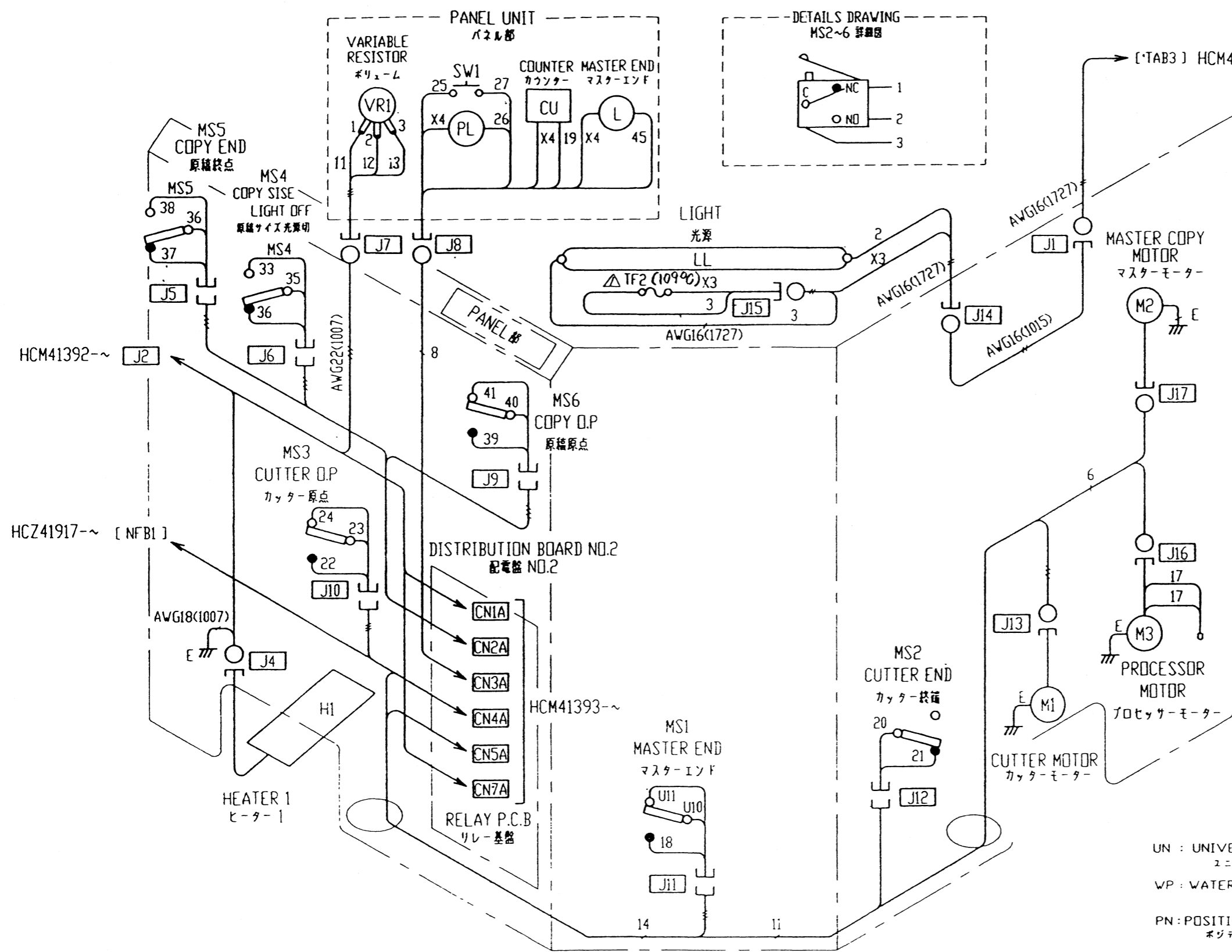


-NOTES-(注)

- NF1 CONNECTION OF WIRES.
 BE SURE TO USE A (#60465-2) FOR NF1 CONNECTION
 OF WIRE AND BE SURE TO USE A (#DNF14-250F1B) FOR C1,C2.
 NF1の結線
 NF1の端子に#60465-2を付け、そしてC1、C2には#DNF14-250F1Bを取り付ける。
- UNLESS OTHERWISE SPECIFIED BE SURE TO USE AWG14(1015)
 FOR THE ELECTRICAL WIRES.
 指定なき電線はAWG14(1015)を使用する事。

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DESIGN	F.Fukuhara	TITLE	POWER SOURCES INPUT UNIT CONNECTION DIA. 電源入力部 結線図
DRAWING	S.ITD		
CHECKED	I.AOKI		
APPROVED	F.Fukuhara		
DATE	'93.08.20		
MODEL	cp-282-ss	DWG NO.	HCZ41917



CODE	WIRE NO.	WIRE COLOR
M1	21	GRY (灰)
	22	LIGHT BLU (青)
	X3	RED (赤)
M2	37	GRY (灰)
	39	LIGHT BLU (青)
	X3	RED (赤)
M3	15	BLK (黒)
	16	LIGHT BLU (青)
	17	BLU (青)
	17	LIGHT BLU (青)
	X3	RED (赤)
	X3	RED (赤)

CONN. NO.	PIN NO.	WIRE NO.	DESTINATION	行先
J4	1	U5	H1	WP
	2	X3		
	3			
J5	4		MS5	PN
	5			
	6			
J6	7		MS4	PN
	1	37		
	2	38		
J7	3	35	VR1	UN
	1	11		
	2	12		
J8	3	13	CU	UN
	1	19		
	2	X4		
J9	3	45	L	UN
	4	X4		
	5	25		
J10	6	27	SW1	UN
	7	26		
	8	X4		
J11	9		SW1(PL)	UN
	1	39		
	2	41		
J12	3	40	MS6	PN
	1	22		
	2	24		
J13	3	23	MS3	PN
	1	U8		
	2	U9		
J14	3	18	MS1	PN
	1	21		
	2	20		
J15	3		MS2	PN
	1	21		
	2	22		
J16	3	X4	M1	UN
	1	2		
	2	X3		
J17	3	J15	LL	UN
	1	3		
	2	X3		
J1	1	15	M3	UN
	2	16		
	3	X3		
J2	1	37	M2	UN
	2	39		
	3	X4		
J3	1	2	J14	UN
	2	X3		
	3	X3		

- VR1 : #RV30YNI5SB10K0HM
- SW1 : #A3G7-90A1-HIEG
- LL : #QR80-600DSF
- CU : #F873C AC110V
- TF2 : #MT92271(109°C)
- H1 : #250W115V
- MS1 : #C-5-1A6
- MS2~6 : #V3L-5105-D8
- M1 : #3RJ10GB-AUL
- M2 : #3RK15A-AUL
- M3 : #3IJ10GB-AUL
- : #JN218-216
- L : #KB02KS1
- : #AT-488-Y
- : #AT-615

UN : UNIVERSAL MATEN-N-LOCK CONNECTOR
ユニバーサル ノイテンロックコネクタ

WP : WATER PROOF CONNECTOR
防水コネクタ

PN : POSITIVE LOCK CONNECTOR
ポジティブロック コネクタ

- NOTES - (注)
- UNLESS OTHERWISE SPECIFIED BE SURE TO AWG20(1007) FOR THE ELECTRICAL WIRES.
指定なき電線は AWG20 (1007)を使用する事。
 - USE AWG18(1015) FOR THE GROUND WIRE, USE A TOOTHED WASHER AND BE SURE TO GROUND SECURELY.
アース線には、AWG18(1015)を使用し 丸チップに歯付ワッシャーを用いて 確実にアースを取る事。

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DESIGN	F.Fukuhara	TITLE	MAIN BODY UNIT CONNECTION DIA. 本体部 結線図
DRAWING	S.Ito		
CHECKED	I.AOKI		
APPROVED	F.Fukuhara		
DATE	'93.08.20		
MODEL	CP-282-SS	DWG NO.	HCZ41932