

USERGUIDE

PC-RXI Controller



WARNING - Reliance on this Manual Could Result in Severe Bodily Injury or Death!

This manual is out-of-date and is provided only for its technical information, data and capacities. Portions of this manual detailing procedures or precautions in the operation, inspection, maintenance and repair of the product forming the subject matter of this manual may be inadequate, inaccurate, and/or incomplete and cannot be used, followed, or relied upon. Contact Conair at info@conairgroup.com or 1-800-654-6661 for more current information, warnings, and materials about more recent product manuals containing warnings, information, precautions, and procedures that may be more adequate than those contained in this out-of-date manual.

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1. FEATURES

The PC-RX1 controller controls the REMOCON series robot with its sequence control system which is applicable for complicated special robots motion. It is available to control the robot operation just besides the robot by using a pendant type operation panel. All of solenoid valve and proximity switch is controlled by DC-24V and the status of I/O can be seen by LEDs on handy console. Error code for robot malfunction is indicated on the handy console in order to fix the problem easily. Main arm stroke and strip stroke adjustment is available by handy console.

2. STANDARD SPECIFICATION

a) Conditions

	Specification
Power supply	AC 200/220/240V 50/60 Hz
Insulation resistance	Over 5MΩ at DC 500V
Temperature range	0° C ~ + 55° C
Fumidity range	35% ~ 85% RH
Circumstance	No corrosion gas and dust

b) Control

	Specification
Control system	Stored program system
Programming system	ROM fixed sequence program
Program capacity	2000 steps Max.
Handy console Control Voltage	DC 5V
Handy console Power Consumption	Below 150 mA

c) Input/Output

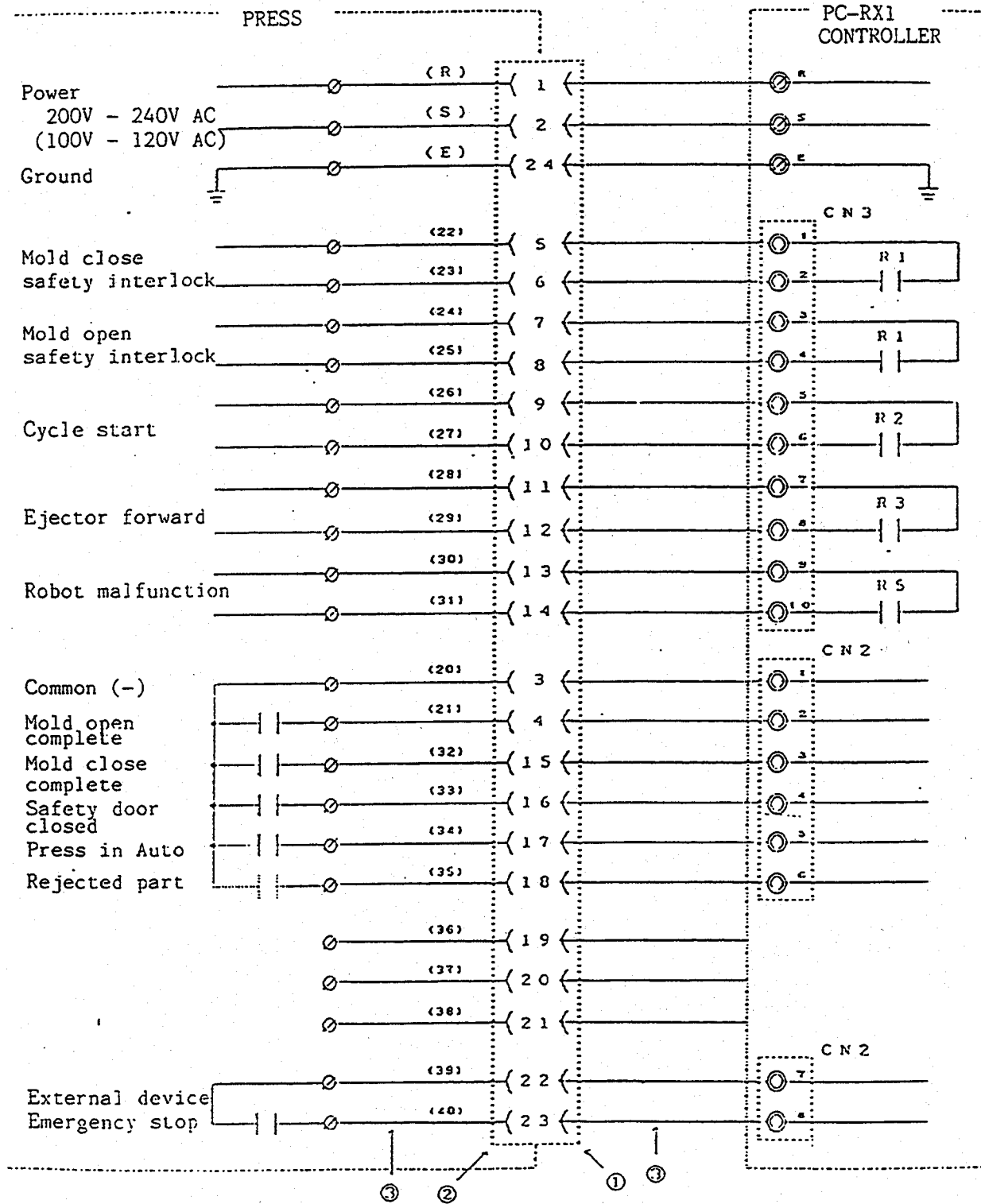
	Specification
Input	DC 24V 7 mA (Open collector)
Transistor output	DC 24V 200 mA (Open collector)
Insulation	Photo-coupler

3 . C A U T I O N O N H A N D L I N G P C - R X 1 C O N T R O L L E R

Make sure the followings before operate the robot with PC-RX1 controller.

- a) Press the keys on handy console by finger. Do not press the keys by sharp shaped tool such as screw driver in order to protect keys from being damaged.
- b) Make sure that the power switch is OFF when connect and disconnect the cables of PC-RX1 controller.
- c) Check if the wiring (interface between the press and robot) is correct after installation of robot. The miss wiring might cause the miss operation or damage the controller or robot.
- d) Keep the PC-RX1 controller in the proper position. Especially, high temperature and/or vibration will cause the problem.

4. I N T E R F A C E BETWEEN THE ROBOT AND PRESS



- ① Plug : S R C N 6 A 2 5 - 2 4 P
- ② Receptacle : S R C N 2 A 2 5 - 2 4 S
- ③ Cable : V C T F 0 . 3 × 2 4 芯

a) Check before wiring

1. Is the press operated correctly ?
2. Is the electrical drawing of the press corresponding to the actual wiring correctly ?
3. Is main power of the press OFF ?

b) Wiring

1. Connect power line (R-black), (S-white) and (E-green).
2. Connect the cables (22-yellow, 23-orange) for mold close safety interlock so that it cut the mold close line of the press as shown below.
3. Connect the cables (24-blue, 25-purple) for mold open safety interlock so that it cut the mold open line of the press as shown below.

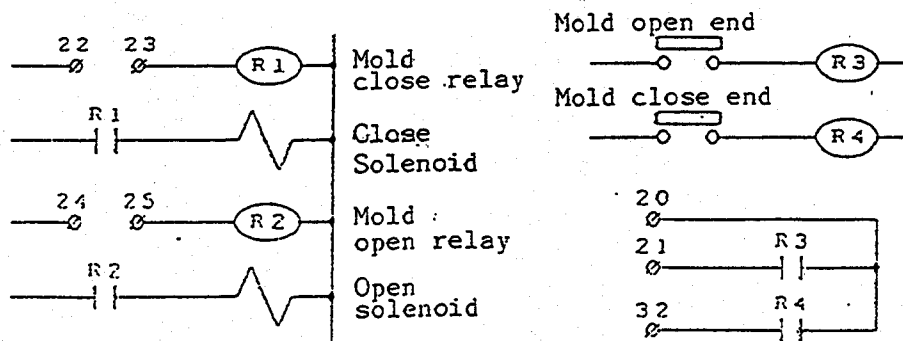
CAUTION !! DO NOT PUT THE CABLES IN THE VALVE LINE

4. Connect the cables (26-light blue, 27-olive) for cycle start into the line that permit the cycle start (mold closing) of the press such as interval timer line.
5. Connect the cables (28-brown, 29-pink) for ejector forward permission so that it cut the ejector forward control line of the press.

CAUTION !! DO NOT PUT THE CABLES IN THE VALVE LINE

6. Connect the cables for mold open complete (21-red), mold close complete (32-yellow/black), safety door closed (33-blue/black), press in auto (34-green/black) as shown below.

CAUTION !! THESE SIGNALS FROM THE PRESS SHOULD BE NORMALLY OPEN DRY CONTACTS.



Note) The circuit depends on the press.

SAFETY DOOR SIGNAL :

When open the door in robot auto operation, robot stops its operation. Make it to home position by manual keys.

MOLD CLOSE END SIGNAL (or Injection signal):

If this signal does not go ON after mold closing, the robot does not go into the mold in next cycle.

PRESS IN AUTO SIGNAL :

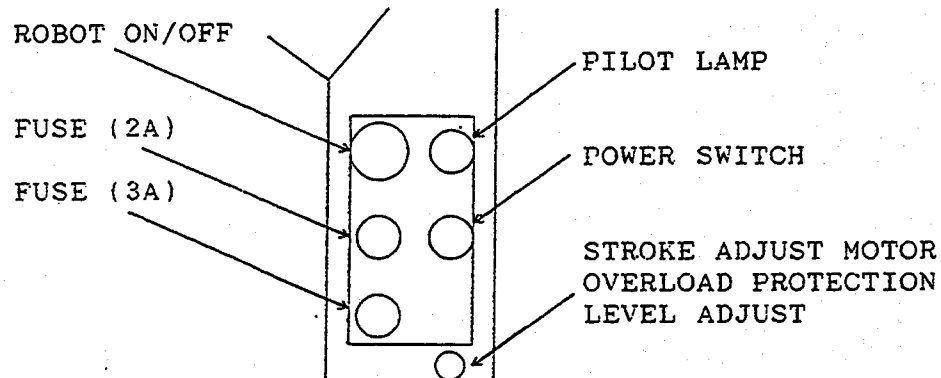
If this signal is not ON, the robot auto operation is not available.

c) Check wiring

1. Connect the short plug to the interface connector. Confirm that the mold open and close functions are OK.
2. Stop the mold opening in between the open end and close end position. Disconnect the short plug, and confirm that the mold open and close function is not available. If close or open, check the wiring.
3. Connect the robot controller and the press. Set the robot mode to "ROBOT OFF" equipped on the main controller. Confirm that mold open/close function is performed.

5. TURN THE POWER SWITCH ON

- a) Turn the power switch on main control box ON after checking the correct wiring between the press and controller.
- b) Power lamp above power switch will light if the power voltage is normal.



Note) Level adjust for overload protection for the remote strip motors is under the power switch. If large mechanical load is on the strip adjust mechanism, it works and motor power is cut off. It is already adjusted before shipment and not necessary to readjust in normal operation.

6. OPERATION MODE

The selection of ROBOT ON/OFF is available by the switch on the control box. High reliability and safety are obtained by not only the program stored in ROM IC but also external hardware circuit.

a) ROBOT OFF mode (Robot not in use)

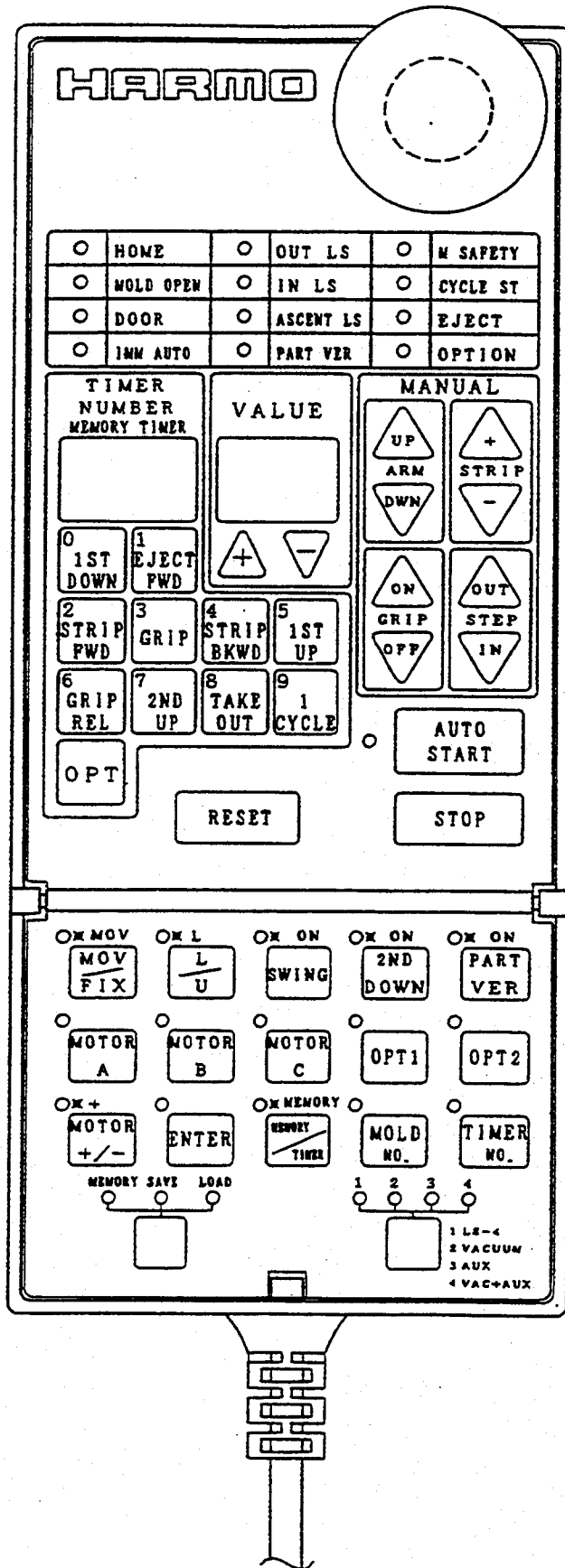
When the key switch is turned to "OFF", the interlock signals for the press are released and press operation is available without robot.

- Note)
1. Power switch should be ON even this switch is turned to OFF.
 2. The mold open/close interlock for the press is effective if either the arm upward end prox. switch (LS-3) or swing outward end prox. switch (LS-1) is OFF.
 3. Cycle start signal and Ejector forward interlock signal goes ON during mold open complete signal is ON.

b) ROBOT ON mode (Robot in use)

When this switch is turned to "ON", the robot operation is available.

7. HANDY CONSOLE



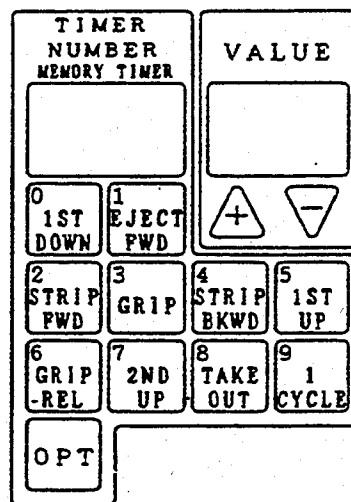
a) INPUT/OUTPUT MONITOR

The status of INPUTs from the press and proximity switches on the robot and OUTPUTs for the press can be seen by red LEDs on handy console.

<input type="checkbox"/>	HOME	<input type="checkbox"/>	OUT LS	<input type="checkbox"/>	M SAFETY
<input type="checkbox"/>	MOLD OPEN	<input type="checkbox"/>	IN LS	<input type="checkbox"/>	CYCLE ST
<input type="checkbox"/>	DOOR	<input type="checkbox"/>	ASCENT LS	<input type="checkbox"/>	EJECT
<input type="checkbox"/>	IMM AUTO	<input type="checkbox"/>	PART VER	<input type="checkbox"/>	OPTION

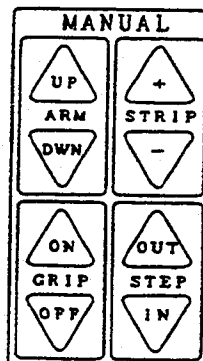
b) TIMER

Timer setting is done by these keys.
Refer to page 12 for timer setting. When indication "E" is blinking in TIMER NUMBER indication, it is indicating error of robot operation.
Refer to page 16 for ROBOT ERROR.



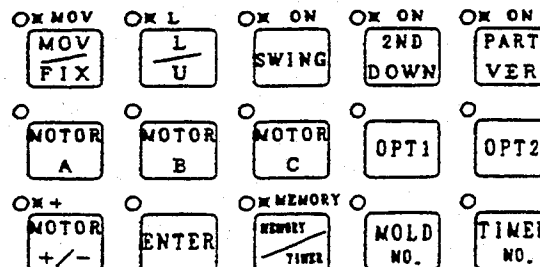
c) MANUAL OPERATION

Operate the robot manually.
Refer to page 15.



d) MODE SET AND STROKE ADJUST

Mode setting and stroke adjustment for up/down and strip motion is done by these keys.
Refer to page 10 and 11.



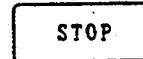
e) AUTO START

Start auto operation by pressing this key. It can start under "ROBOT ON" mode and robot is at home position.



f) STOP

Stop the auto operation. Each cylinder except swing cylinder retracts and release grip when it is pressed. Make the robot to be at home position manually.



g) RESET

When part and/or sprue runner verification is not done in time set for take out motion (T8), both press and robot stops and it alarms. Make sure that there are no part and/or sprue runner in the mold area, then press the RESET key to continue the robot and press operation. This RESET key is not only for miss verification but also for reset errors.



h) EMERGENCY STOP

When press this key, all the output is cut off. Each cylinder except swing cylinder retracts and all contact for interface with press get open.

8. MODE SETTING

Pull up the cover for mode setting and stroke adjustment keys.

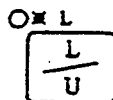
a) Take out direction



MOV : Pick up from movable mold
FIX : Pick up from fixed mold

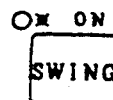
Under the LED lights, the robot picks up the moldings from movable mold.

b) Arm motion



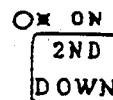
L : "L" type motion
U : "U" type motion

c) Swing ON/OFF



ON : Release at outside mold after second extension.
OFF : Release after strip backward motion in mold area.

d) Second down ON/OFF



ON : Release at second extension end.
OFF : Release at swing outward end without second extension.

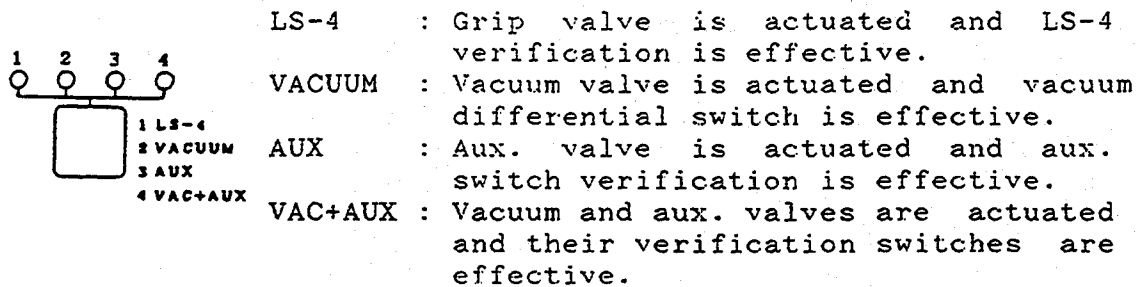
e) Part verification ON/OFF



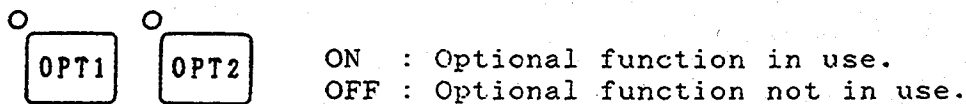
ON : Part verification is effective for mold close interlock.
OFF : Part verification is not effective.

CAUTION : When set to "OFF", mold closes regardless with part remain in the mold area.
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f) Valve and Part verification select

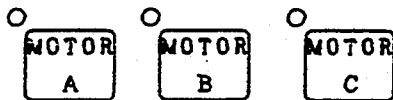


h) Option 1 - 2



9. REMOTE STROKE ADJUSTMENT

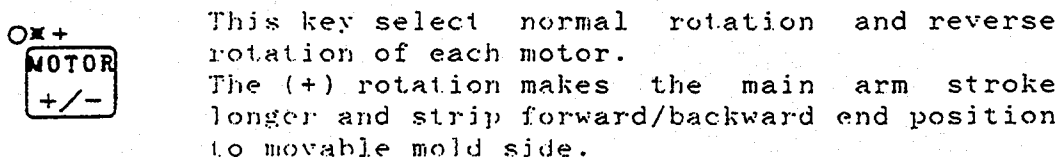
Adjust each stroke by MOTOR A - C key and +/- key.



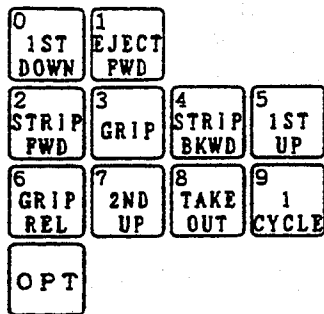
a) Motor operation key

- MOTOR A : For main arm stroke adjustment.
- B : For main arm strip backward end position adjustment.
- C : For main arm strip forward end position adjustment.

b) Motor rotation change



10. TIMER SETTING



The PC-RX1 controller has ten (10) timers as standard.

Set time increases by 0.1 second in range of 0 - 9.9 sec., and by 1.0 sec. in range of 10 - 99 sec..

TIMER SETTING IS AVAILABLE IN MANUAL AND AUTO OPERATION.

a) Timer functions

T-0 : 1ST DOWN



First extension delay.
From mold open up to first extension.

T-1 : EJECT FWD



Ejector forward timing control.
From first extension start up to ejector forward interlock release.

Note : Time set for this timer should be less than one cycle robot operation time.

T-2 : STRIP FWD



Strip forward motion delay.
From arm up end switch goes OFF up to start strip forward.

T-3 : GRIP



Grip delay.
In "L" motion mode, start at strip forward start and up to grip.
In "U" motion mode, start at arm up end switch goes OFF and up to grip.

T-4 : STRIP BKWD



Strip backward motion delay.
From grip ON up to start strip backward.

T-5 : 1ST UP

5
1ST
UP

First retraction delay.
From strip backward start up to first retraction.

T-6 : GRIP REL

6
GRIP
REL

Grip release delay.
From arm up end switch goes OFF up to grip release.

T-7 : 2ND UP

7
2ND
UP

Second retraction delay.
From grip release up to second retraction.

T-8 : TAKE OUT

8
TAKE
OUT

Take out timer.
From mold open complete signal goes ON up to buzzer alarms when part verification is not done.

This timer is reset when part verification and arm up end switch go ON before it elapses. If they do not go ON, it alarms and the robot and press stop. Set the timer value longer than actual take out time.

To continue the operation, press RESET key after checking no part and/or sprue runner in the mold.

T-9 : 1 CYCLE

9
1
CYCLE

1 cycle monitor timer.
From mold open complete signal goes ON up to buzzer alarms when the robot does not returned to home position by some problems.

If the robot 1 cycle operation is finished before it elapses, it is reset and the operation is continued.
Set the timer value longer than normal cycle time.

OPT : Optional timers

OPT

The optional four timers (T-10 to T-13) are available.

Press OPT key, then press keys for T-01 to T-09. For example, if press OPT and T-02 keys, timer setting for T-12 is available.

b) Timer setting

The timer number and timer value are indicated by the 7 segment LEDs. Press timer number first and set timer value by (+) and (-) keys.

Example)

Press T-02 key.

TIMER
NUMBER
MEMORY TIMER

02

VALUE

08

It indicates Timer number and preset timer value.



Press (+), (-) key to set new value.

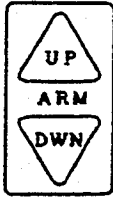
2.5

Set value is indicated.

1.1. MANUAL OPERATION

Manual operation is available while the mold is fully opened (mold open signal is ON).

a) ARM UP/DOWN



UP : For arm retraction
 DWN : For arm extension under mold open complete signal is ON or swing outward end swicth is ON.

b) STRIP +/-



+ : For strip forward
 - : For strip backward

c) GRIP ON/OFF



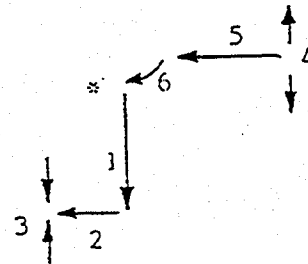
ON : For grip
 OFF : For grip release

d) STEP IN/OUT

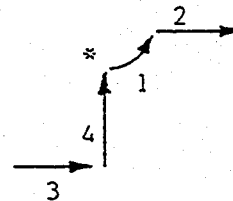


The following motion is available step by step.


- IN : * Home position
 1 Arm first extension
 2 Strip forward
 3 Grip
 4 Release
 5 Arm second extension
 6 Swing inward



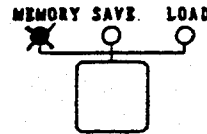
- OUT : * Home position
 1 Swing inward
 2 Arm second extension
 3 Strip forward
 4 Arm first retraction



12. MOLD MEMORY PROGRAM

1. Push  key to light the LED " MEMORY " on. at

the same time, " MEMORY " LED on the



is light on automatically.

(On auto operation, the above 2 memory LEDs are not lights on)

2. 2 digits number display

TIMER
NUMBER
MEMORY TIMER

flash on and




off, and the numbers showing

TIMER
NUMBER
MEMORY TIMER



When the numbers flash on and off, the left number "(MEMORY)" showing mold number and the right number "(TIMER)" showing timer number.

3. To change the mold numbers, press  key.

10 different mold numbers can be set from 0 through 9.

4. To change the timer numbers, press



key.

14 different timer numbers can be set from 0 through 13. When using timer 10~13, a dot mark is shown on the display.

If the timer number is 12, the display

showing



Set the each timer values to press

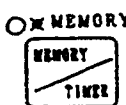



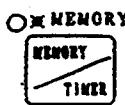
key.


5. Set required motion sequence by press each mode key.

13. MOLD MEMORY SAVE

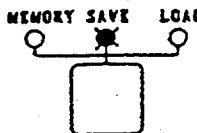
PROGRAM SAVE


(1) Press  button after all modes set, then the  indication blinks.

NOTE) When press  button the status of mode set LEDs is changed to that of program 0. However the desired set modes are remained in the controller.

(2) Press  button to set desired program number.

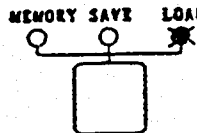
(3) Press select button to make "SAVE" LED present.



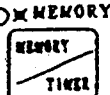
(4) Press  button to save the program memorized by the above procedure.

NOTE) Saving is finished by the above procedure (1) ~ (4), but the indication is still blinking. Robot operation is not available while it blinks.

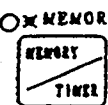
(5) Press select button to make "LOAD" LED present.



(6) Press  button.

(7) Then press  button so the blink stops.

Now the AUTO operation is available.


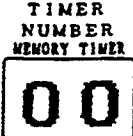

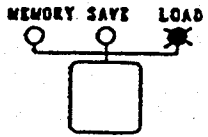

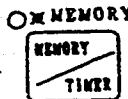
NOTE) If press  button in above procedure (2) ~ (5), the desired set modes become invalid and modes changes to the below.

Pick up	-----	fixed
Motion	-----	U type
Swing	-----	OFF
Parts verification	-----	OFF

In this case, set the desired modes again and perform the procedure from above (1).

14. MOLD MEMORY RECALL

PROGRAM LOAD

- (1) Press  button, then the  indication blinks.
- (2) Press  button to call each program number.
- (3) Press select button to make 'LOAD' LED present. 
- (4) Press  button.
- (5) Then press  button. Loading is finished.

15. ERROR CODE

When error occurred on the robot, "E" will blink on the 7 segment LEDs for timer number and error number will be indicated on the LEDs for timer value.

ERR NO.	Cause	Remedy
10	Pressed AUTO START key when LS-2 (Swing in end switch) is OFF.	Check wiring and position adjustment for LS-2 swing inward end switch.
11	LS-2 got OFF during take out motion.	
12	LS-2 is OFF after returned to home and T-9 elapsed.	
15	Pressed AUTO START key when swing out end s/w LS-1 is ON.	Check wiring and position adjustment for LS-1 swing outward end switch.
16	LS-1 went ON during take out motion.	
17	1 cycle timer elapsed after swing out motion, and LS-1 is OFF.	
20	Pressed AUTO START key when LS-3 (Arm up end switch) is OFF.	Check wiring and position adjustment for LS-3 arm upward end switch.
21	LS-3 is ON after T-9 elapsed from first extension up to first retraction.	
22	Timer 9 elapsed from first extension up to swing out end, and LS-3 is OFF,	
23	Timer 9 elapsed from second extension up to second retraction, and LS-3 is ON.	
24	Timer 9 elapsed from second extension up to swing in end, and LS-3 is OFF.	

ERR NO.	Cause	Remedy
30	Pressed AUTO START key when part verification switch is ON.	
31	Part verification miss ! Part verification is OFF after first retraction and T-8 elapsed.	Check wiring and position adjustment for part verification switches (LS-4,VS-1,LS-14).
32	Part verification got OFF in swing out motion.	
40	Pressed AUTO START key, when safety door signal is OFF.	
41	Safety door signal got OFF from first extension up to retraction end.	Operate the robot with safety door closed.
42	Extend arm by manual key under safety door closed, then close and opened the door.	
43	Press in auto signal went OFF in robot auto operation.	
45	The arm is not on strip forward or backward end position.	Make it on normal position.
50	Cycle error	Different error number is indicated by pressing STOP key.

90 Communicatio error

Between the pendant and controller
 swap out pendant to see if problem goes away
 swap out cable to " " " " " "
 Swap out controller " " " " " "

When the error occurred, press STOP key so that the alarm stops. Then fix the error cause and press RESET key to clear the error indication.

16. TROUBLE SHOOTING GUIDE

Refer to the following trouble shooting guide for the problem which is not shown by error codes.

Problem	Check list	Remedy
Power does not go ON	1 Power switch ON ? 2 Interface cable connected ? 3 Fuses blown out ? 4 Power of press ON ?	1 Turn the switch ON 2 Connect the cable 3 Replace fuses 4 Check the press
Molds do not close	1 Arm in the mold area? 2 Part verification ON? 3 Mold safety interlock 4 Cycle start signal	1 Move arm by [UP] key 2 Adjust, Replace, check the wiring 3 Check output & wiring 4 Check output & wiring
Molds do not open	1 Arm in the mold area? 2 Mold safety interlock	1 Move arm by [UP] key 2 Check output & wiring
Ejector does not function	1 Eject forward signal 2 Eject delay timer	1 Check output & wiring 2 Adjust timer value
Auto operation not available	1 Press in auto ? 2 Robot home position ?	1 Check the press 2 Return to home by manual key
No arm extension	1 Mold open end signal 2 Swing out/in end s/w 3 Down speed controller 4 Down solenoid valve 5 Air tube, seals	1 Check wiring 2 Check, replace switch Check wiring 3 Adjust or replace 4 Replace the valve 5 Replace tube, seals
No arm retraction	1 Up solenoid valve 2 Air tube, seals	1 Replace the valve 2 Replace tube, seals
No strip forward	1 strip speed control 2 Strip solenoid valve 3 Air tube, seals	1 Adjust or replace 2 Replace the valve 3 Replace tube or cyl.
No strip backward	1 Strip speed control 2 Strip solenoid valve 3 Air tube, seals	1 Adjust or replace 2 Replace the valve 3 Replace tube or cyl.
No swing motion	1 Is main arm down end? 2 Part verification ON? 3 Swing speed control 4 Swing solenoid valve 5 Air tube, seals	1 Move the main up 2 Check, replace switch Check wiring 3 Adjust or replace 4 Replace the valve 5 Replace tube or cyl.

Problem	Check list	Remedy
No grip	1 Gripper position OK ? 2 Air pressure correct? 3 Grip solenoid valve 4 Tube, seal in gripper 5 Molding stuck on mold	1 Adjust the position 2 Adjust air pressure 3 Replace the valve 4 Replace tube or seal 5 Use release agent Maintain mold
No vacuum	1 Mode setting correct? 2 Air pressure correct? 3 Vacuum solenoid valve 4 Tube 5 Molding stuck on mold	1 Set vacuum mode 2 Adjust air pressure 3 Replace the valve 4 Replace tube 5 Use release agent Maintain mold

Conair has made the largest investment in customer support in the plastics industry. Our service experts are available to help with any problem you might have installing and operating your equipment. Your Conair sales representative also can help analyze the nature of your problem, assuring that it did not result from misapplication or improper use.

WE'RE HERE TO HELP

To contact Customer Service personnel, call:



HOW TO CONTACT CUSTOMER SERVICE

From outside the United States, call: 814-437-6861

You can commission Conair service personnel to provide on-site service by contacting the Customer Service Department. Standard rates include an on-site hourly rate, with a one-day minimum plus expenses.

If you do have a problem, please complete the following checklist before calling Conair:

- Make sure you have all model, serial and parts list numbers for your particular equipment. Service personnel will need this information to assist you.
- Make sure power is supplied to the equipment.
- Make sure that all connectors and wires within and between loading control and related components have been installed correctly.
- Check the troubleshooting guide of this manual for a solution.
- Thoroughly examine the instruction manual(s) for associated equipment, especially controls. Each manual may have its own troubleshooting guide to help you.
- Check that the equipment has been operated as described in this manual.
- Check accompanying schematic drawings for information on special considerations.

BEFORE YOU CALL ...

Additional manuals and prints for your Conair equipment may be ordered through the Customer Service or Parts Departments for a nominal fee.

EQUIPMENT GUARANTEE

Conair guarantees the machinery and equipment on this order, for a period as defined in the quotation from date of shipment, against defects in material and workmanship under the normal use and service for which it was recommended (except for parts that are typically replaced after normal usage, such as filters, liner plates, etc.). Conair's guarantee is limited to replacing, at our option, the part or parts determined by us to be defective after examination. The customer assumes the cost of transportation of the part or parts to and from the factory.

PERFORMANCE WARRANTY

Conair warrants that this equipment will perform at or above the ratings stated in specific quotations covering the equipment or as detailed in engineering specifications, provided the equipment is applied, installed, operated and maintained in the recommended manner as outlined in our quotation or specifications.

Should performance not meet warranted levels, Conair at its discretion will exercise one of the following options:

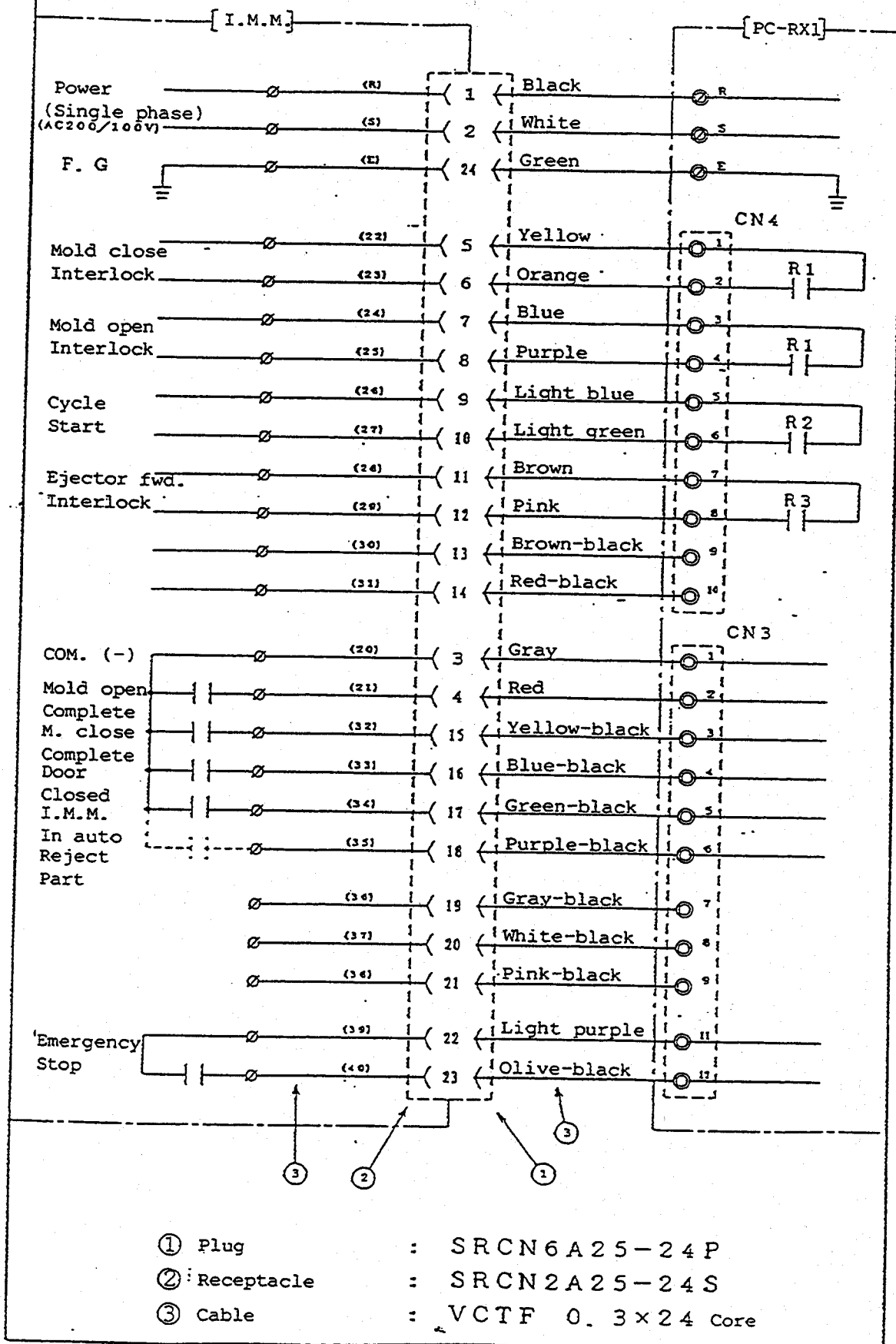
- Inspect the equipment and perform alterations or adjustments to satisfy performance claims. (Charges for such inspections and corrections will be waived unless failure to meet warranty is due to misapplication, improper installation, poor maintenance practices or improper operation.)
- Replace the original equipment with other Conair equipment that will meet original performance claims at no extra cost to the customer.
- Refund the invoiced cost to the customer. Credit is subject to prior notice by the customer at which time a Return Goods Authorization Number (RGA) will be issued by Conair's Service Department. Returned equipment must be well crated and in proper operating condition, including all parts. Returns must be prepaid.

Purchaser must notify Conair in writing of any claim and provide a customer receipt and other evidence that a claim is being made.

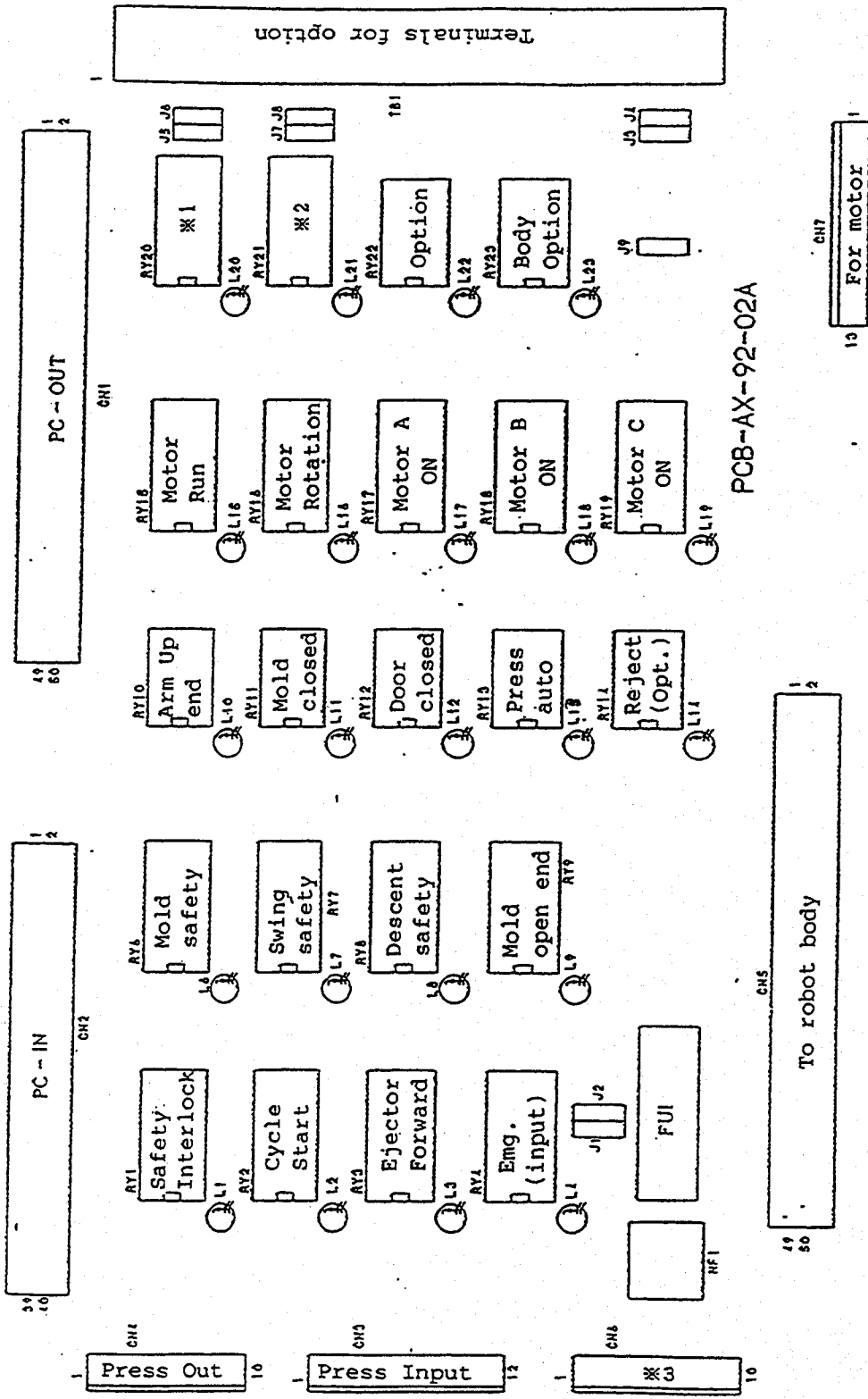
WARRANTY LIMITATIONS

Except for the Equipment Guarantee and Performance Warranty stated above, Conair disclaims all other warranties with respect to the equipment, express or implied, arising by operation of law, course of dealing, usage of trade or otherwise, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.

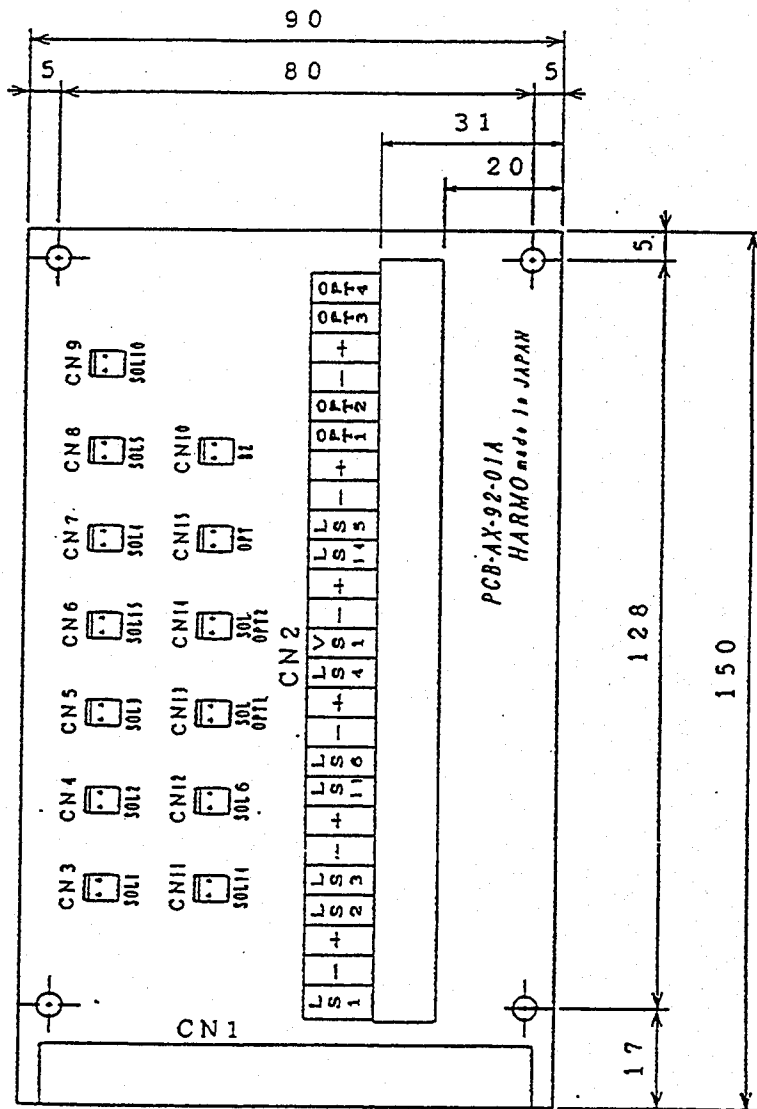
INTERFACE BETWEEN THE AX ROBOT AND INJECTION MOLDING MACHINE



INTERFACE PCB IN THE PC-RX1 CONTROLLER

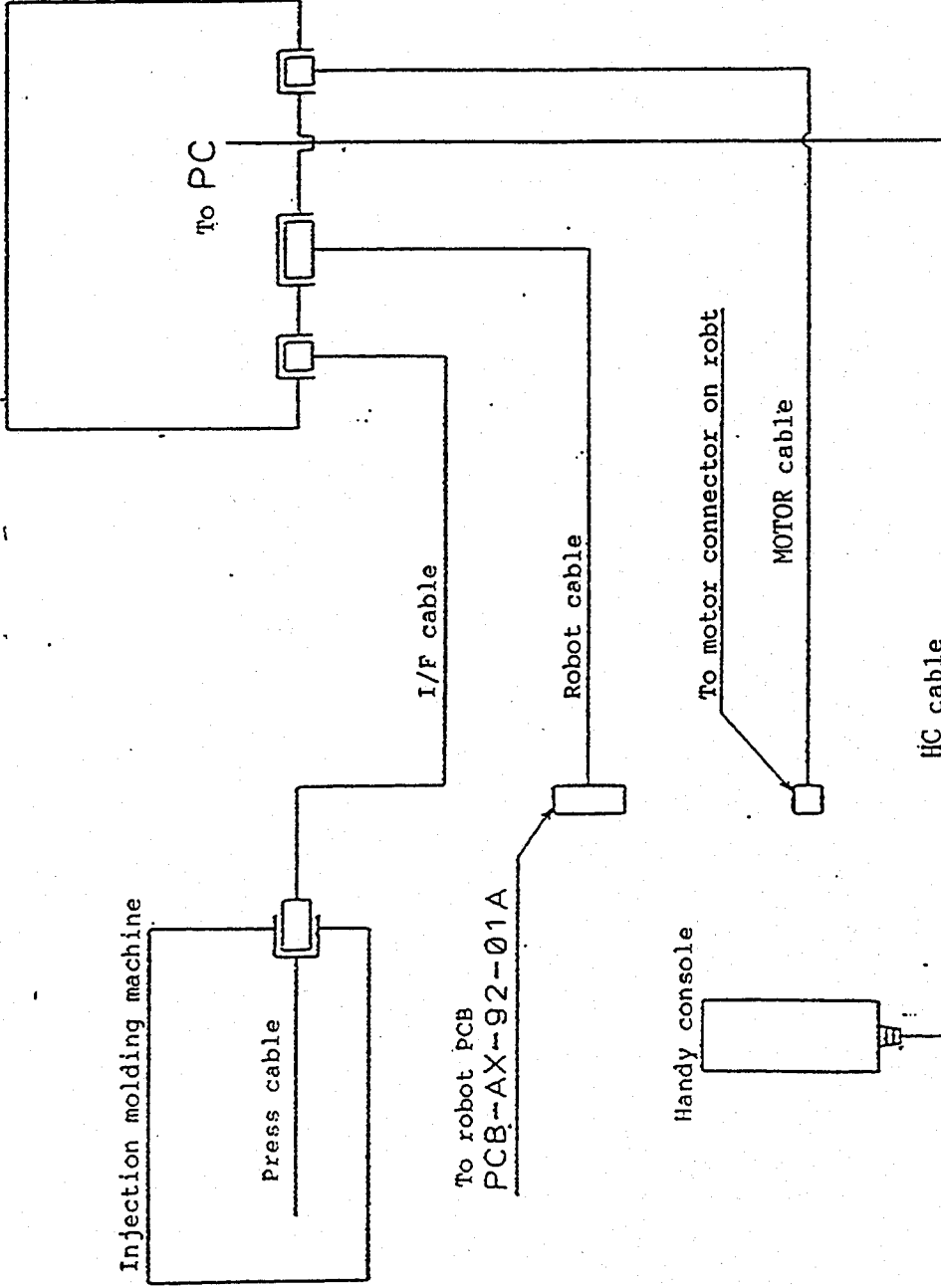


- * 1 : Option, Motor D ON (AXF-G type)
- * 2 : Option, Motor E ON (AXF-G type)
- * 3 : Power use/no use etc.



UNIT	TRIAL ANGLES	RE SCALE	PCS	MATERIAL	TREATMENT
1	1	1	1		
DESIGNED BY	92-5	久保田	MODEL AX		
DRAWN BY	92-5	酒井	NAME		
FILE/				AX 本体基板	
HARMO CO., LTD. プラスチック事業部			DRAWING NO.		

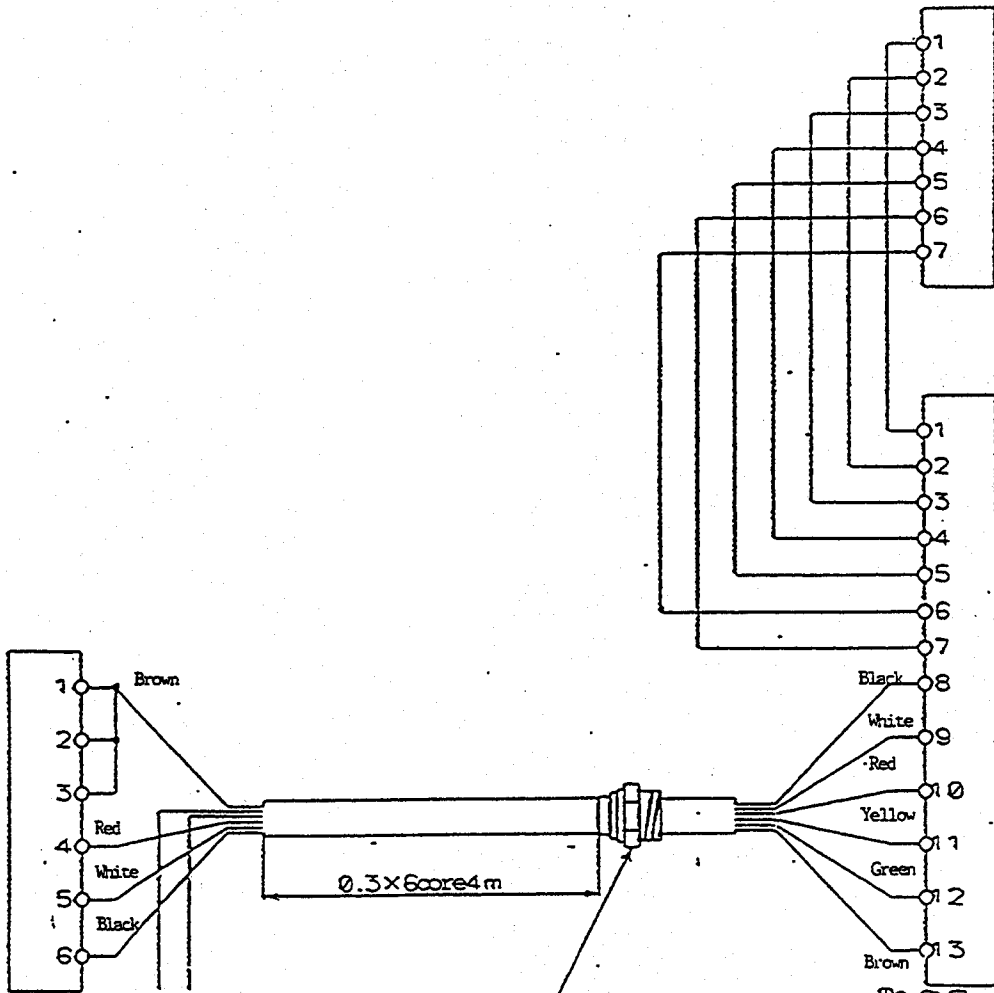
Controller PC-RX1



記号	訂正	年月日氏名	設計	92.9.26	久保田	機種名	PC-RX1	
			製図	92.9.26	宮川	CABLE CONNECTION		
			検図	...		名称	PC-RX1 ケーブル名称図	
			承認	...				
			尺					
			度					
			個					
			数					
			株式会社 東芝					図番

NICHIATU H4P-SFH-AA
(Pin BHF-002T-0.8BS)

To;
MOTOR CONTROL
PCB

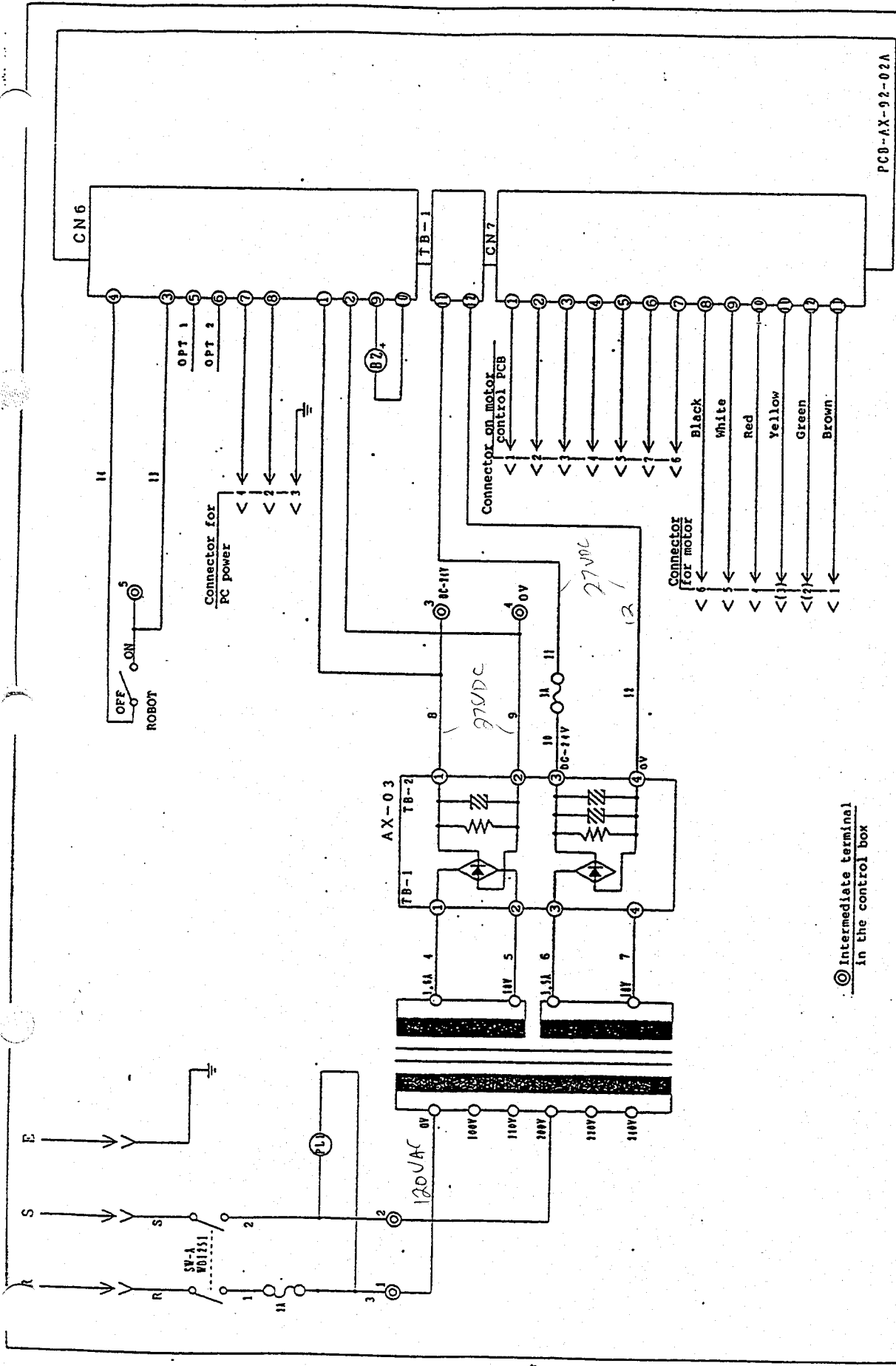


NICHIATU MLP-06
(Pin LLM-01T-1.3)

CAPCON
OHM OA-1

To CN7
MOLEX 5102-13

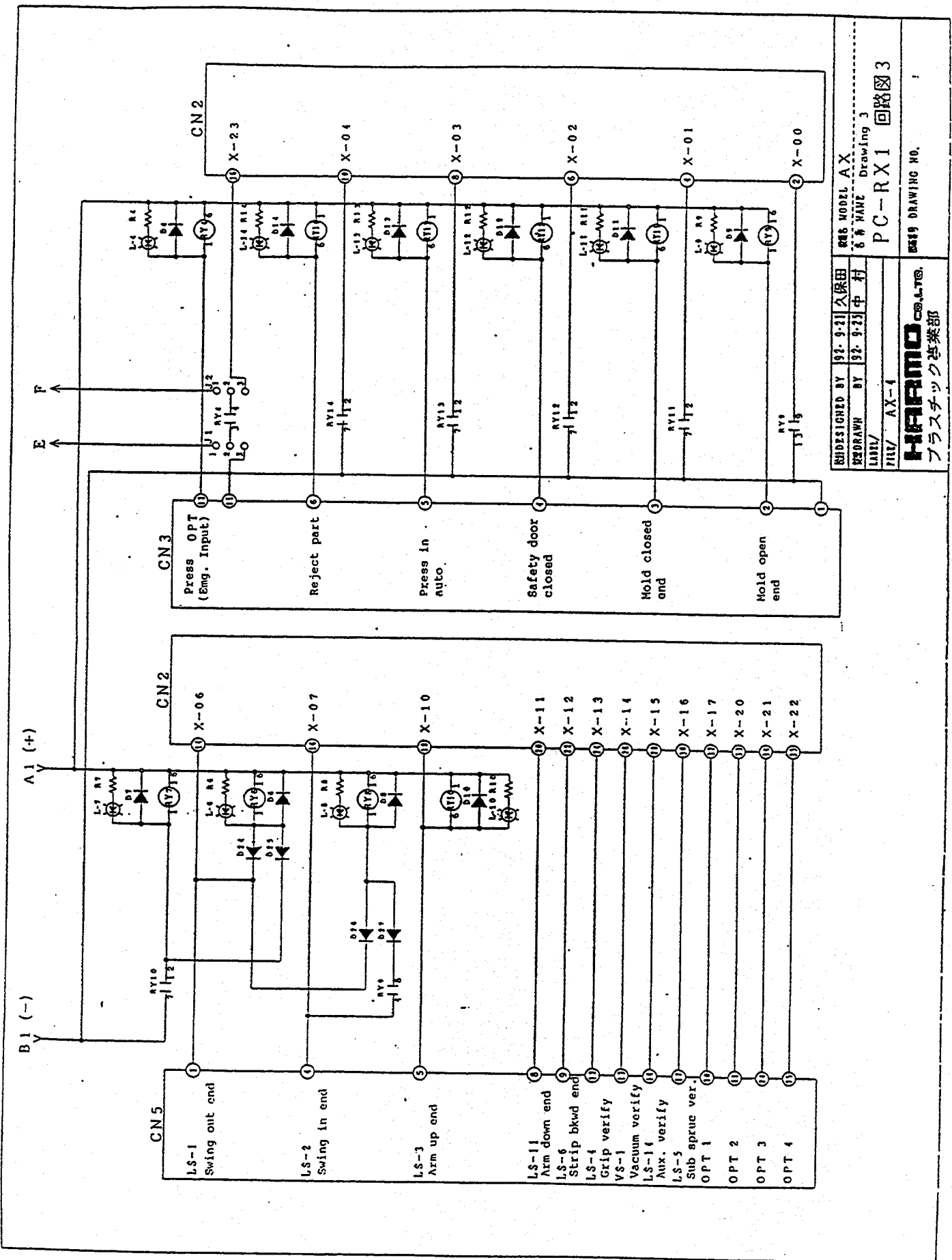
				尺 寸	設 計	92.9.25	久保田	機種名 PC-RX1
				個 数	製 図	92.9.25	宮川	
					検 査	..		MOTOR CABLE ASSY
					承 認	..		名称 モーターケーブル Assy
記 号	訂 正	年 月 日	氏 名	HARANO				図 番



⊙ Intermediate terminal
in the control box

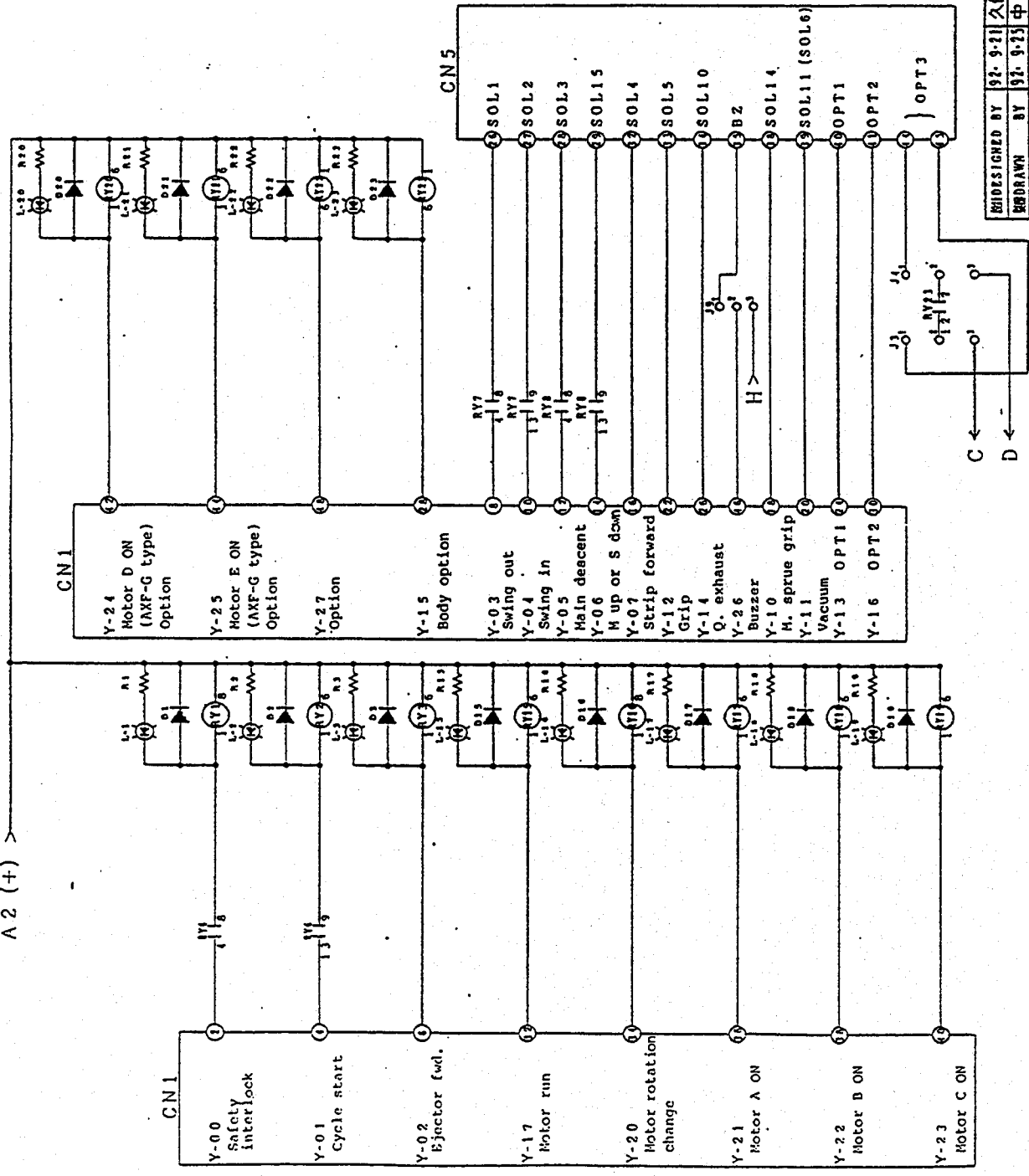
PCD-AX-92-02A

DESIGNED BY	92.9.21	久保田
PROGRAM	BY	92.9.25 中村
FILE/		
FILE/	AX-2	
HAFAMCO CO.,LTD. プラスチック専業部		
DESIGN DRAWING NO.		
PC-RX1 回路図 1		



DESIGNED BY	92.9.21 久保田	RES MODEL AX
DRAWN BY	92.9.23 中行	6 # NAME Drawing 3
FILE/	AX-4	PC-RX1 回路図 3
HAFAMCO CO.,LTD. プラスチック事業部		DESIGN DRAWING NO.

A 2 (+) >

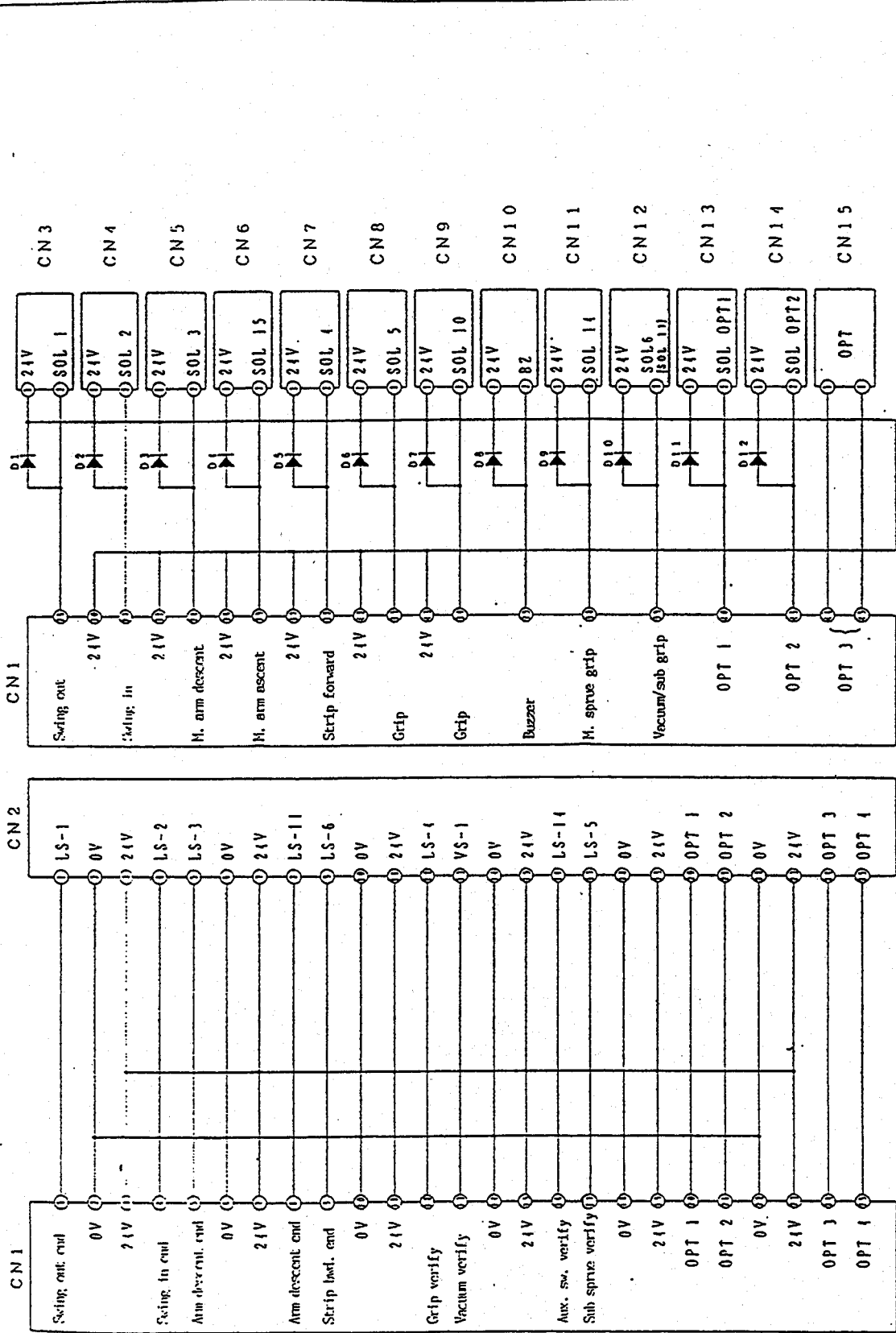


DESIGNED BY 92.9.21 久保田
 DRAWN BY 91.9.13 中村
 FILE/ AX-5

REV MODEL AX
 S # NAME Drawing 4
 PC-RX1 回路図 4

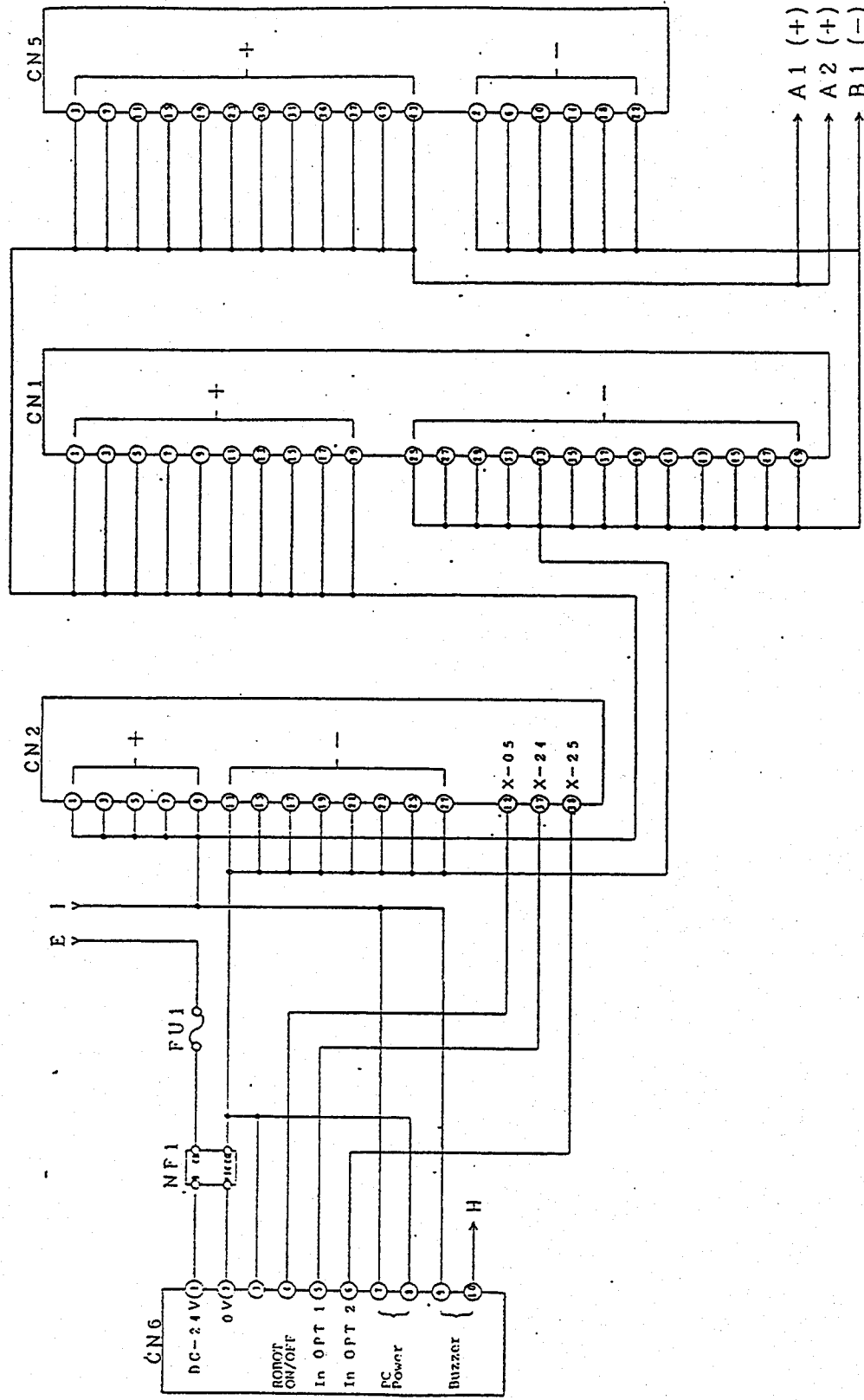
HARMCO 株式会社
 プラスチック事業部

8889 DRAWING NO.



CN1 DDK FRC5-C50LS1-ON
 CN2 KINERN P2.5/5-2J1
 P2.5/5-3J1
 P2.5/5-10J1 x 2
 CH3~CN15 NICEX 5045-02-A
 D1~D12 NIEN INTER 10D1

DESIGNED BY	92.9.21	久保田
DRAWN BY	92.9.21	中村
UNIT	mm	
1111/AX-1		
HAFMO CO.,LTD.		
プラスチック事業部		
MODEL	AX	
NAME	AX 本体基板回路	
DRAWING NO.	8511	



REDESIGNED BY 92.9.21 久保田
 REDRAWN BY 92.9.25 中村
 LABEL/ AX-3
 FILE/ AX-3

048 MODEL AX
 6 # NAME Drawing 2

PC-RX1 回路図 2

5858 DRAWING NO.

HIFAMCO CO.,LTD.
 プラスチック亭 営業部

