



# **CONTROL PANEL WITH CARD READER/WRITER**

(NOM-20002)

## **CVT MANUAL**

- Before using this product, read this MANUAL carefully to understand the contents herein stated.
- After reading this manual, be sure to keep it available nearby the product or elsewhere convenient for referring to it anytime when necessary.



# **SEGA CORPORATION**



# BEFORE USING THE PRODUCT, BE SURE TO READ THE FOLLOWING:

## To maintain the safety:

To ensure the safe usage of the product, be sure to read the following before using the product. The following instructions are intended for the users, operators and the personnel in charge of the operation of the product. After carefully reading and sufficiently understanding the warning displays and cautions, handle the product appropriately. Be sure to keep this manual nearby the product or elsewhere convenient for referring to it when necessary.

Herein, explanations which require special attention are enclosed with dual lines. Depending on the potentially hazardous degrees, the terms of DANGER, WARNING, CAUTION, etc. are used. Be sure to understand the contents of the displays before reading the text.



Indicates that mishandling the product by disregarding this pictograph will cause severe injury or death.



Indicates that mishandling the product by disregarding this caution will cause a slight hazardous situation which can result in personal injury and/or material damage.



Indicates that mishandling the product by disregarding this warning will cause a potentially hazardous situation which can result in death or serious injury.

## For the safe usage of the product, the following pictographs are used:



Indicates "HANDLE WITH CARE." In order to protect the human body and equipment, this display is attached to places where the Owner's/Service Manual and/or Service Manual should be referred to.



Indicates a "Protective Earth Terminal." Before operating the equipment, be sure to connect it to the Ground.  
(Except the product with which the power cord with earth is used.)

- **Perform work in accordance with the instructions herein stated.**  
Instructions for work are explained by paying attention to the aspect of accident prevention. Failing to perform work as per the instructions can cause accidents. In the case where only those who have technical expertise should perform the work to avoid hazardous situation, the instructions herein state that the serviceman should perform such work.
- **Be sure to turn off power before working on the machine.**  
To prevent electric shock, be sure to turn off power before starting the work in which the worker touches the interior of the product. If the work is to be performed in the power-on status, the Instruction Manual herein always states to that effect.
- **Be sure to ground the Earth Terminal.**  
**(This is not required in the case where a power cord with earth is used.)**  
This product is equipped with the Earth Terminal. When installing the product, Connect the Earth Terminal to the "accurately grounded indoor earth terminal" by using an earth wire. Unless the product is grounded appropriately, the user can be subject to electric shock. After performing repair, etc. for the Control equipment, ensure that the Earth Wire is firmly connected to the Control equipment.
- **Ensure that the Power Supply used is equipped with an Earth Leakage Breaker.**  
This product does not incorporate the Earth Leakage Breaker. Using a power supply which is not equipped with the Earth Leakage Breaker can cause a fire when earth leakage occurs.
- **Be sure to use fuses which meet the specified rating.**  
**(Only for the machines which use fuses.)**  
Using fuses exceeding the specified rating can cause a fire and electric shock.



- **Specification changes (removal of equipment, conversion and addition) not designated by SEGA are not allowed.**  
The parts of the product include warning labels for safety, covers for personal protection, etc. It is very hazardous to operate the product by removing parts and or modifying the circuits. Should doors, lids and protective parts be damaged or lost, refrain from operating the product, and contact where the product was purchased from or the office herein stated.  
SEGA shall not be held responsible for any accidents, compensation for damage to a third party, resulting from the specifications not designated by SEGA.
  - **Ensure that the product meets the requirements of appropriate Electrical Specifications.**  
Before installing the product, check for Electrical Specifications. SEGA products have a nameplate on which Electrical Specifications are described. Ensure that the product is compatible with the power supply voltage and frequency requirements of the location. Using any Electrical Specifications different from the designated Specifications can cause a fire and electric shock.
  - **Install and operate the product in places where appropriate lighting is available, allowing warning labels to be clearly read.**  
To ensure safety for the customers, labels and printed instructions describing potentially hazardous situation are applied to places where accidents can be caused. Ensure that where the product is operated has sufficient lighting allowing the warnings to be read. If any label is peeled off, apply it again immediately. Please place an order with where the product was purchased from or the office herein stated.
  - **When handling the Monitor, be very careful. (Applies only to the product with monitor.)**  
Some of the monitor (TV) parts are subject to high tension voltage. Even after turning off power, some portions are still subject to high tension voltage sometimes. Monitor repair and replacement should be performed only by those technical personnel who have knowledge of electricity and technical expertise.
  - **Be sure to adjust the monitor (projector) properly. (Applies only to the product with monitor.)**  
Do not operate the product leaving on-screen flickering or blurring as it is. Using the product with the monitor not properly adjusted may cause dizziness or a headache to an operator, a player, or the customers.
  - **When transporting or reselling this product, be sure to attach this manual to the product.**  
In the case where commercially available monitors and printers are used in this product, only the contents relating to this product are explained herein. Some commercially available equipment has functions and reactions not stated in this manual. Read this manual together with the specific Instruction Manual of such equipment.
- \* Descriptions herein contained may be subject to improvement changes without notice.  
\* The contents described herein are fully prepared with due care. However, should any question arise or errors be found, please contact SEGA.

## INSPECTIONS IMMEDIATELY AFTER TRANSPORTING THE PRODUCT TO THE LOCATION

Normally, at the time of shipment, SEGA products are in a status allowing for usage immediately after transporting to the location. Nevertheless, an irregular situation may occur during transportation. Before turning on power, check the following points to ensure that the product has been transported in a satisfactory status.

- ☐ Are there any dented portions or defects (cuts, etc.) on the external surfaces of the cabinet?
- ☐ Are Casters and Adjusters damaged?
- ☐ Do the power supply voltage and frequency requirements meet with those of the location?
- ☐ Are all wiring connectors correctly and securely connected? Unless connected in the correct direction, connector connections can not be made accurately. Do not insert connectors forcibly.
- ☐ Do power cords have cuts and dents?
- ☐ Do the fuses used meet specified rating? Is the Circuit Protector in an energized status?
- ☐ Are all accessories available?
- ☐ Can all Doors and Lids be opened with the Accessory keys? Can Doors and Lids be firmly closed?



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## INTRODUCTION

This manual describes the work and procedures needed to modify the control panel of the NAOMI CABINET, NET CITY series, BLAST CITY, and VERSUS CITY series produced by SEGA to the control panel with attached card reader.

The target audience of this document includes the owners, administrators, and operators of the game unit and this kit, as well as the personnel who will be using this kit to perform the modification. Before starting any work, be sure to thoroughly read this manual, the service manual, and the instruction manual supplied with the cabinet, and make sure that you fully understand the details and precautions of the kit and the modification procedure.

This document explains how to perform the work safely and in a way that will prevent accidents after the work is finished. If any accidents arise due to any handling procedures or work performed contrary to the explanations given in this manual, SEGA will take no responsibility whatsoever for any damages, including those to third parties.

Furthermore, after performing the modification, keep this document and the instruction manual supplied with the cabinet carefully in an easily accessible place.

In the unlikely event that the product does not function correctly, DO NOT allow anyone other than a technician to touch the internal system. Turn off the power to the machine, making sure to unplug the electrical cord from the outlet, and contact the office listed below or the point-of-purchase for this product.

If you find it impossible to modify your game machine as instructed by this manual, contact SEGA headquarters, the service center listed below or the retailer where the modification kit was purchased.

Use of this product is unlikely to cause physical injuries or damage to property. However, points that require special attention are indicated by thick underlining, the word "IMPORTANT" and the symbol below.



**IMPORTANT**

Indicates important information that, if ignored, may result in the mishandling of the product and cause faulty operation or damage to the product.

SEGA ENTERPRISES, INC. (U.S.A.)/CUSTOMER SERVICE  
45133 Industrial Drive, Fremont, California 94538, U.S.A.

Phone: (415) 701-6580  
Facsimile: (415) 701-6594



Procedures not described in this manual or marked as 'to be carried out by site maintenance personnel or other qualified professionals' should not be carried out by personnel without the necessary skill or technology. Work carried out by unqualified persons may cause serious accidents, including electrocution.

Parts replacement, maintenance inspections and troubleshooting should be carried out by site maintenance personnel or other qualified professionals. This manual includes directions that potentially dangerous procedures should only be carried out by professionals with the appropriate specialized knowledge.

The 'site maintenance personnel or other qualified professionals' mentioned in this manual are defined as follows:

**Site maintenance personnel:**

Individuals with experience in maintaining amusement equipment, vending machines, etc., working under the supervision of the owner/operator of this product to maintain machines within amusement facilities or similar premises by carrying out everyday procedures such as assembly, maintenance inspections, and replacement of units/ expendable parts.

**Activities to be carried out by site maintenance personnel:**

Amusement equipment/vending machine assembly, maintenance inspection and replacement of units/ expendable parts.

**Other qualified professionals:**

Persons employed by amusement equipment manufacturers, or involved in design, production, testing or maintenance of amusement equipment. The individual should have either graduated from technical school or hold similar qualifications in electrician/electronics/mechanical engineering.

**Activities to be carried out by other qualified professionals:**

Amusement equipment/vending machine assembly, repair/adjustment of electrical/electronic/mechanical parts.



# 1. PRECAUTIONS WHEN PERFORMING THE MODIFICATION

When performing work using the CVT Kit, observe the points listed below and work safely. Improper handling or disregarding the warnings below or elsewhere in the manual may result in injury to the person doing the modification or to a user of the product.

SEGA cannot accept responsibility for damages or injury, including damage to third parties, resulting from failure to read and follow the instructions contained in the manual.



- Carefully read and make sure you understand the contents of this manual before attempting any modifications. Modify the unit in accordance with the instructions in this manual.  
This manual describes how to carry out the modification process safely. Failure to observe instructions in this manual may result in accidents. Follow the instructions and work safely.  
This product and modification kit contain essential safety equipment, such as warning labels and safety shields. Failing to install essential parts or removing warning labels may result in serious accidents.
- To prevent accidents, the procedures described in this manual should be conducted only by qualified and experienced people. Have the site maintenance individual or other qualified professional carry out the modification.  
If your location lacks personnel with the necessary skills, inquire at the office listed in this manual or contact your retailer.
- If work required to be done by a site maintenance individual or other qualified professional is carried out by personnel without the necessary experience or skills, electric shock to players and bystanders may result.
- Conduct work only after ensuring that the power is OFF and the unit is unplugged from the power supply. Working with the power ON can cause electric shock or short-circuits. If work is to be done with the power on, this manual will state so clearly.
- Use of this kit on products not specified by this manual or in ways not described in this manual (modification or equipment addition/removal) may cause fire or electric shock, or injury to players and bystanders. SEGA cannot accept responsibility for damages or injury, including damage caused to third parties, caused by using this kit to make modifications/changes unspecified by SEGA.
- To modify the product safely, have ready:
  - A working area with sufficient light and space.
  - All necessary tools and instruments.
  - Suitable clothing.
  - Steps or stepladder if working in high places
  - Several workers as required.





- Eliminate any environmental conditions or elements that may cause an accident, such as:
  - Sloped, grooved, or raised floor.
  - Watery floor.
  - Slippery floor.
  - Low ceiling.
  - Unsuitable tools and instruments.
- Treat wiring carefully. Damage to wiring can cause electric shock, short-circuiting or fire. Some types of wire are easily damaged, due to their width or connector type. Wire connectors must be correctly connected. Carefully check to make connectors are orientated and connected properly. Carelessly connected wires may result in damage. Because wires are insulated, it is sometimes difficult to determine if they are damaged. Never twist or pull wires.
- Ensure that wires are connected properly. Loose wiring connections may cause an electric shock or fire.
- Monitors (TVs) contain high-voltage components. Even after the power has been turned off, high voltages remain in some of the parts. As there is a risk of electric shock, take extreme care when working around the monitor.
- Check the monitor (projector) adjustment after modification work is complete. Monitor adjustment may be necessary after modification work is done. Do not leave screen flicker or distortion uncorrected. A carelessly adjusted screen image can cause eyestrain or headache in the player or bystanders.
- Do not operate if doors, shields, and other essential safety equipment are damaged or lost during modification. Order replacements for damaged or lost parts from the retailer of the machine or modification kit, and operate only when in a safe operating condition.
- Be careful not to lose any fasteners (screws, nuts, washers) during modification. A metallic fastener dropped on electrified sections may cause a short-circuit or fire. Replace lost fasteners with new ones of the correct size. Using a fastener of the wrong size may cause accidents (for example, the detachment of a fixed part).
- Before doing modification, remove any dust, dirt and foreign objects from the Cabinet. Dust accumulates within the product during use. Dust or foreign objects on the IC board or wire connectors can cause short-circuits or fire.



CAUTION

- Be careful when handling glass or molded parts. Splintered, cracked or fragmented parts resulting from unreasonable loads or impact damage can cause injury.
- Be careful not to over-tighten screws or nuts when fastening glass or plastic parts. Over tightening will damage parts and may cause injuries from splinters etc.
- Certain procedures require more than one person and are noted as such in this manual. These procedures should be performed by at least two people. Performing any of this work alone may cause injuries to the worker or damage to parts.
- Use a stable stool so that work can be carried out safely and surely. Working without a stool could result in a fall or injury.



IMPORTANT

- The IC board must be tested with the logic tester. Do not use other testers.
- The IC board's electronic components can be damaged by static charges transferred by human contact. Before performing operations involving the IC board, be sure to take adequate measures to discharge any static buildup in your body, such as touching a properly-grounded metal surface.
- If you are moving or selling on a product, make sure that you include the instruction manuals for the product both before and after the modification, the service manual and this document.
- Some of the parts included in this kit are commercially available parts that have been altered for use with SEGA products. Should you find a defective part or encounter machine trouble, please contact your retailer or the office listed in this manual.  
Please refrain from contacting manufacturers with enquiries or service requests, as individual parts manufacturers may not accept support calls or be able to provide support services immediately.
- Some parts are not specifically designed and manufactured for this game machine. The manufacturers may discontinue, or change the specifications of, such general-purpose parts. If this is the case, SEGA cannot repair or replace the damaged game machine, whether or not the warranty period has expired.

*Note: The contents herein described are subject to change without notice.*



## 2. KIT CONTENTS

This kit is a CVT Kit suitable for the NAOMI CABINET, NET CITY series, BLAST CITY, and VERSUS CITY series.

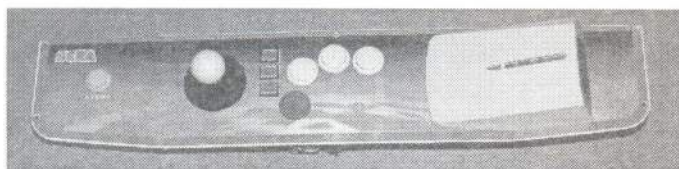
The control panel with attached card reader contained in this kit can be fitted to the above cabinets, giving these cabinets the ability to run games that use IC cards.

Before installation, ensure that all of the parts listed below are in the kit.

The parts list is shown below.

Part name:	CVT MANUAL
Part number (amount):	420-6826-01 (1)
Usage notes & diagram:	This manual
Diagram:	

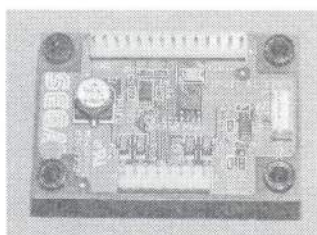
CONTROL PANEL  
NOM-20002 (2)



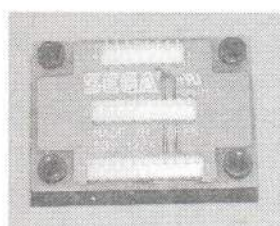
CONVERSION BOARD BRACKET  
NOM-1413 (2)



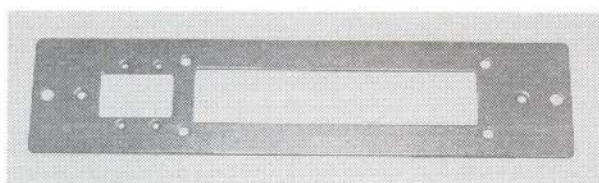
SERIAL CONVERSION BOARD  
839-1233 (2)



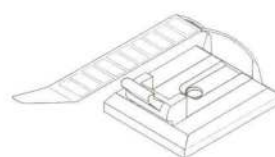
SERIAL CONNECTOR BOARD  
839-1234 (2)



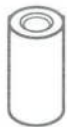
COMMUNICATION PORT  
HOT-1306-01 (2)



CORD CLAMP  
280-5277 (8)



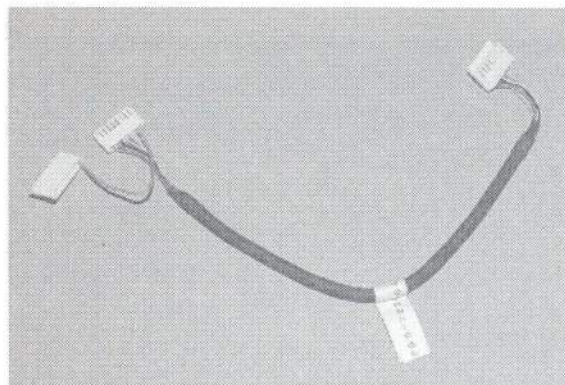
ONE TOUCH COLLAR  
280-5248-10 (8)



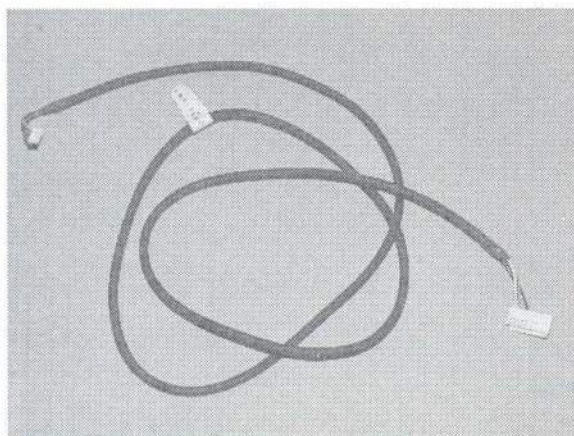
ONE TOUCH BUSHING  
280-5247 (8)



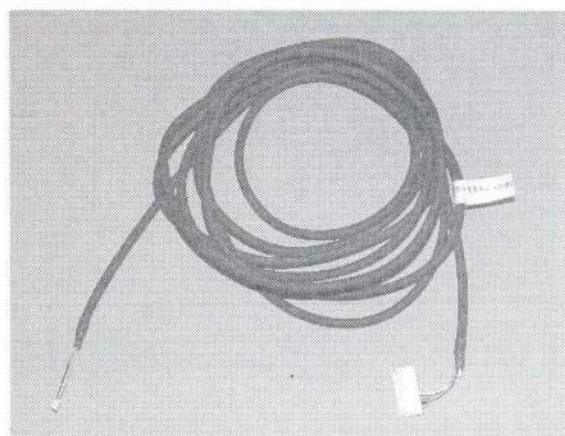
WIRE  
600-7324-01 (1)



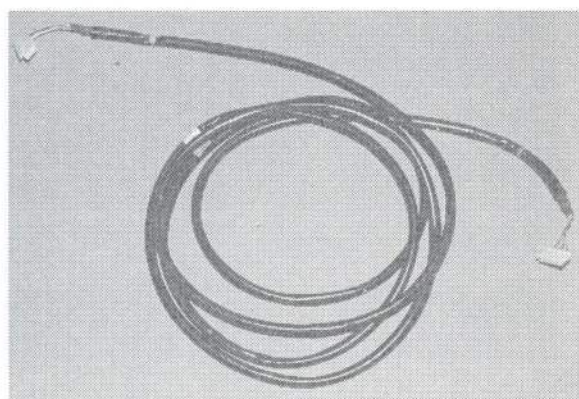
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600-7324-02 (2)



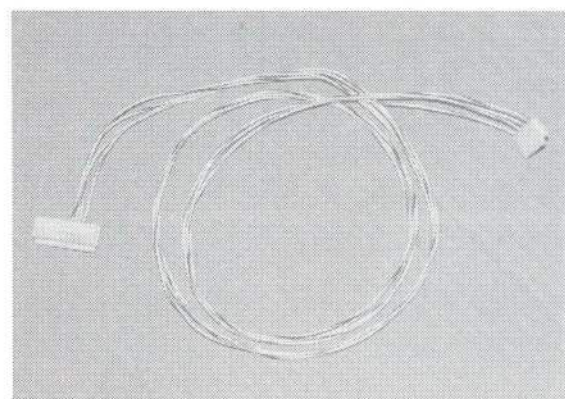
WIRE  
600-7324-03 (1)



WIRE  
600-7324-04 (1)

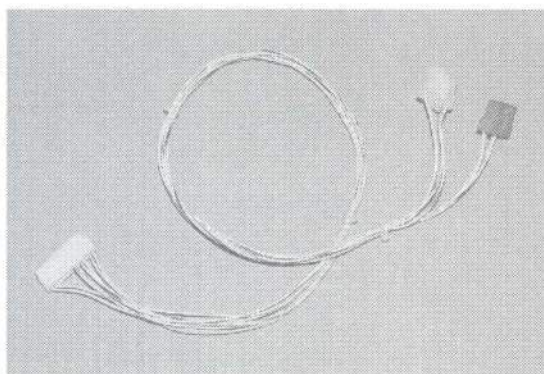


WIRE  
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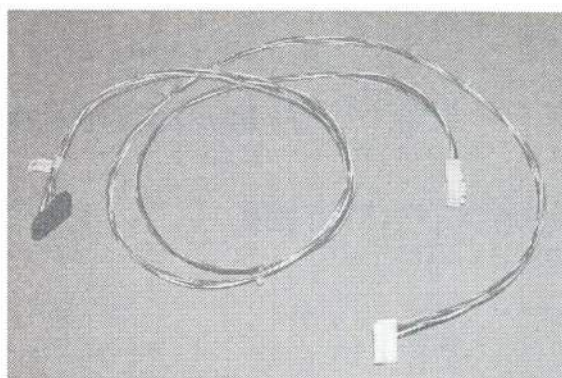




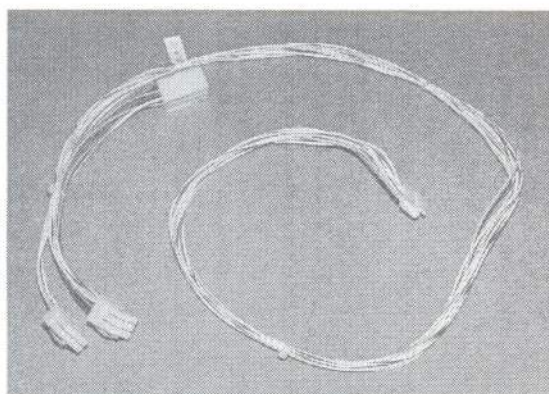
WIRE  
600-7324-11 (1)



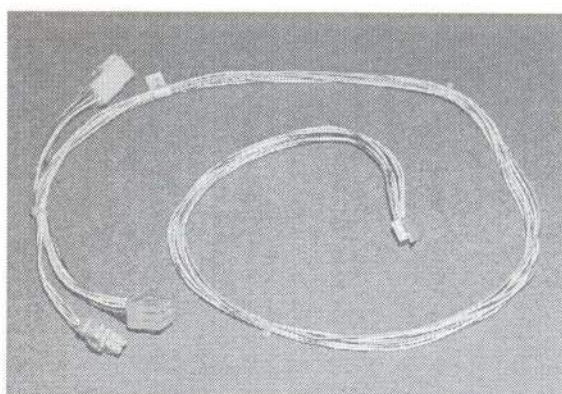
WIRE  
600-7324-14 (1)



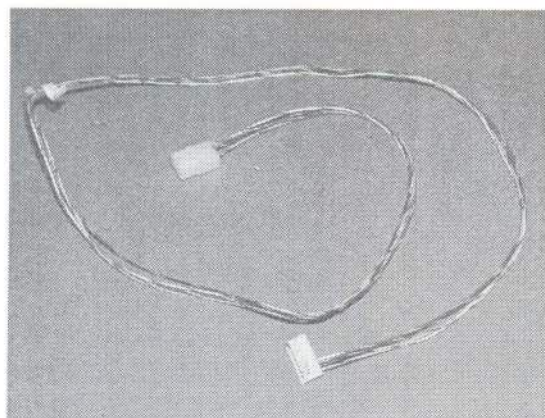
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600-7324-15 (1)



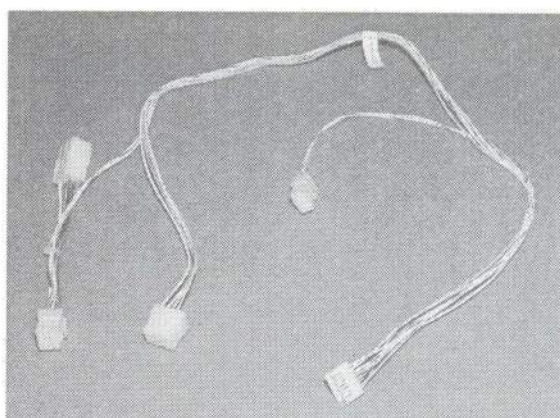
WIRE  
600-7324-16 (1)



WIRE  
600-7324-17 (1)

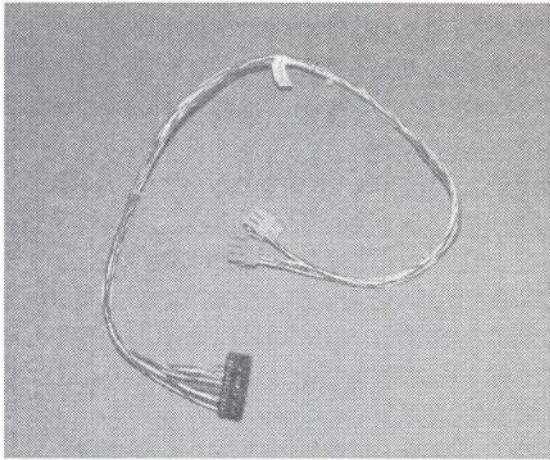


WIRE  
600-7324-18 (2)

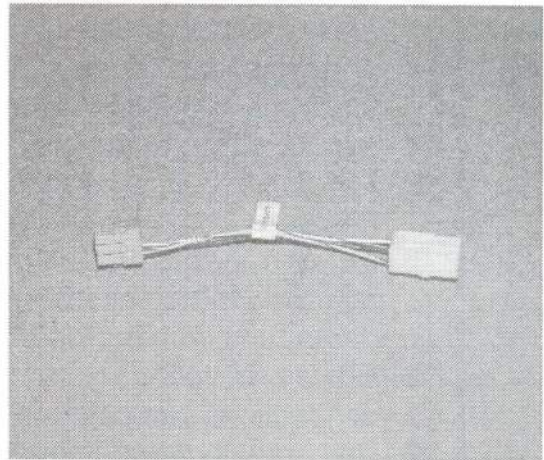




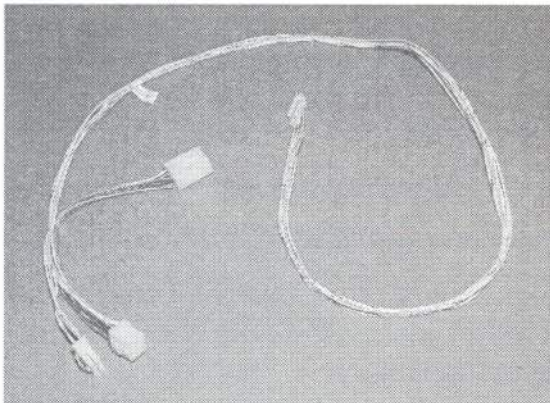
WIRE  
600-7324-19 (1)



WIRE  
600-7324-20 (2)



WIRE  
600-7324-21 (1)



S-TIGHT SCREW  
010-P00410-F (4)



TAPPING SCREW (3 × 12)  
011-F00312 (8)



TAPPING SCREW (3 × 25)  
011-P00325 (8)



FLANGE NUT  
050-F00300 (8)





### 3. MODIFICATION PROCEDURE



- This work should be performed by the site maintenance individual or other qualified professional. Performing work by non-technical personnel can cause a severe accident such as electric shock. Failing to comply with this instruction can cause a severe accident such as electric shock to the player during operation.
- Perform assembly work by following the procedure herein stated. Failure to comply with the instructions can cause electric shock.
- Perform assembling as per this manual. Since this is a complex machine, incorrect assembling can cause an electric shock, machine damage and/or improper functioning as per specified performance.
- Ensure that connectors are accurately connected. Incomplete connections can cause electric shock.
- Be careful not to damage the wires. Damaged wires may cause electric shock or short circuit or present a risk of fire.
- In order to prevent electric shock and short circuit, be sure to turn power off before working on the machine.
- Provide sufficient space so that assembling can be performed. Performing work in places with narrow space or low ceiling may cause an accident and assembly work to be difficult.
- To perform work safely and avoid serious accidents such as the cabinet falling down, do not perform work in places where step-like grade differences, a ditch, or a slope exist.



- When attaching plastic parts, take care not to fasten the screws and nuts too tightly. Failure to observe this instruction may damage these parts and the broken pieces may cause injury.
- When you are opening and closing or attaching and removing the doors and lids, be careful not to pinch your fingers.



- Refer to the instruction manuals for each cabinet for the names of cabinet parts and handling details.
- You will need a Phillips screwdriver, a slotted screwdriver and/or tools supplied with each cabinet (master key, tamper-proof wrench etc.) to carry out the work.

Some of the work described in this manual cannot be carried out by personnel lacking specialized knowledge and skills.

Accidents may result during the work, or later after the work is complete, if it is carried out by personnel lacking the necessary knowledge and skills.

If your location lacks personnel with the necessary skills, inquire at the office listed in this manual or contact your retailer.

The components from the kit that you will use during the modification procedure vary depending on the cabinet you are modifying.

Refer to the following list to verify that you have the correct number of parts.

Parts No.	NAOMI CABINET, NET CITY series (1P)	NAOMI CABINET, NET CITY series (2P versus)	BLAST CITY (1P)	BLAST CITY (2P versus)	VERSUS CITY series
NOM-20002	1	2	1	2	2
NOM-1413	1	2	—	—	—
839-1233	1	2	1	2	2
839-1234	1	2	1	2	1
HOT-1306-01	—	—	—	2	—
280-5248-10	—	—	—	8	—
280-5247	—	—	—	8	—
600-7324-01	1	1	1	1	1
600-7324-02	—	—	1	2	1
600-7324-03	—	—	—	—	1
600-7324-04	—	1	—	1	—
600-7324-10	—	—	1	1	—
600-7324-11	—	—	—	—	1
600-7324-14	—	—	1	1	—
600-7324-15	—	—	1	1	1
600-7324-16	—	—	—	1	—
600-7324-17	—	—	—	1	—
600-7324-18	1	2	—	—	—
600-7324-19	—	—	—	—	1
600-7324-20	—	—	—	—	2
600-7324-21	—	—	—	—	1
010-P00410-F	2	4	—	—	—
011-P00325	4	8	4	8	4
050-F00300	4	8	4	8	8



### 3 — 1 NAOMI CABINET, NET CITY SERIES (1P)

The TRIFORCE (DIMM MEDIA TYPE) is required to perform this procedure.

- ① Referring to the cabinet's instruction manual, remove the control panel currently in use from the cabinet. At this point, leave the control panel base open. Also, the screws for fastening the control panel will be used later, so do not lose them.

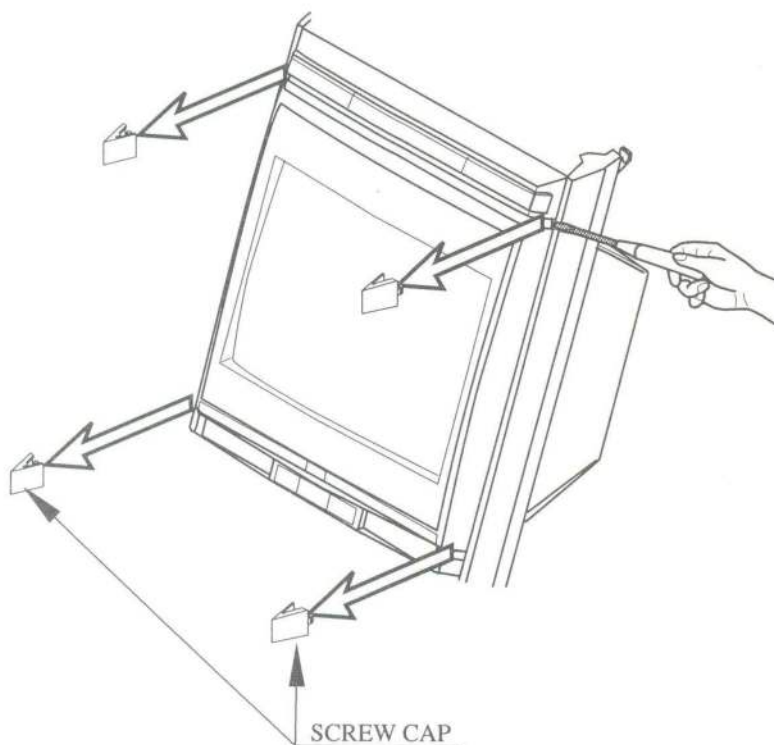


FIG. 3.1 a

- ② Using a slotted screwdriver etc. remove the 4 screw caps from the front panel.

- ③ Remove the 4 tamperproof screws, 2 screws and remove the front panel.

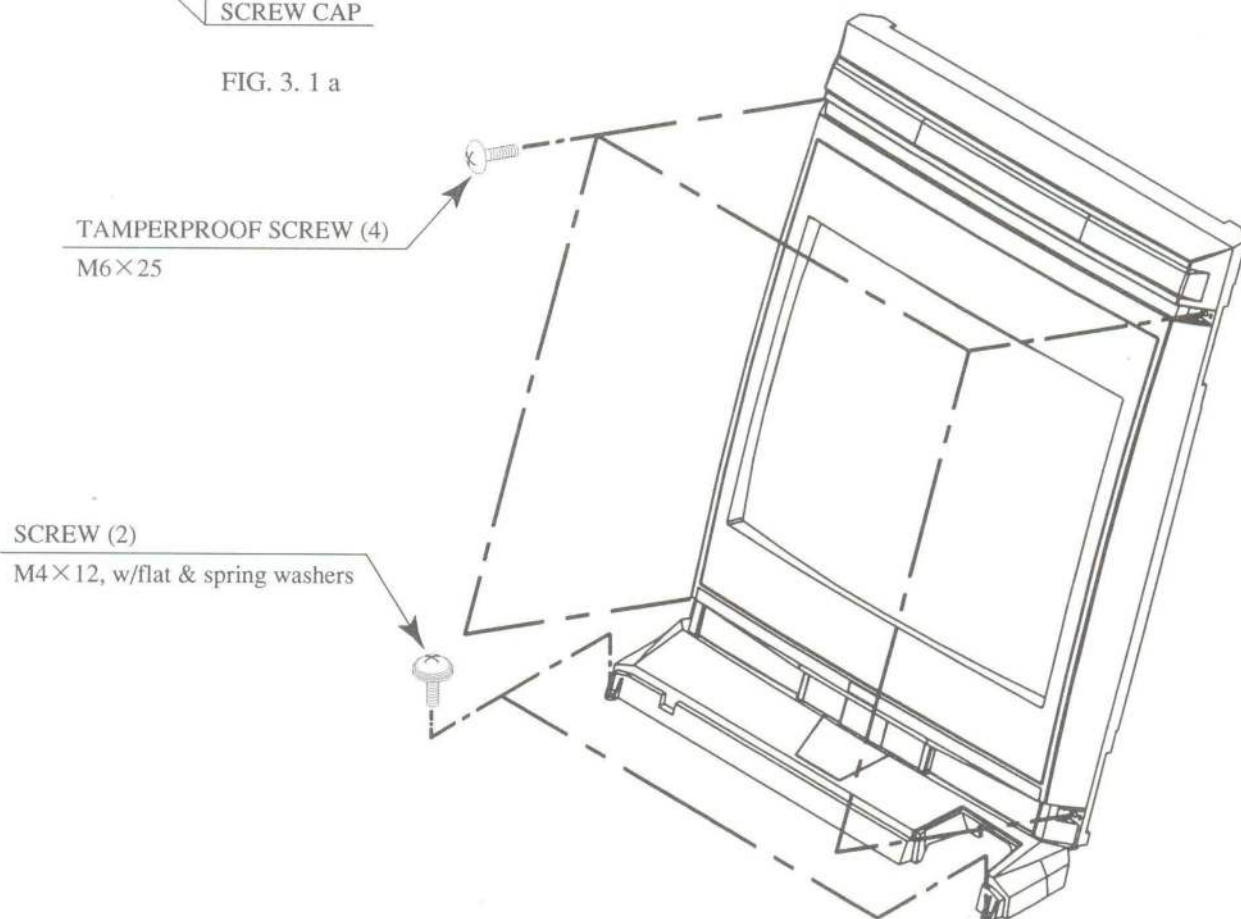


FIG. 3.1 b

- ④ Attach the serial conversion board (839-1233) supplied with the kit to the conversion board bracket (NOM-1413) also supplied with the kit, and fix in place using the 4 flange nuts (M3).

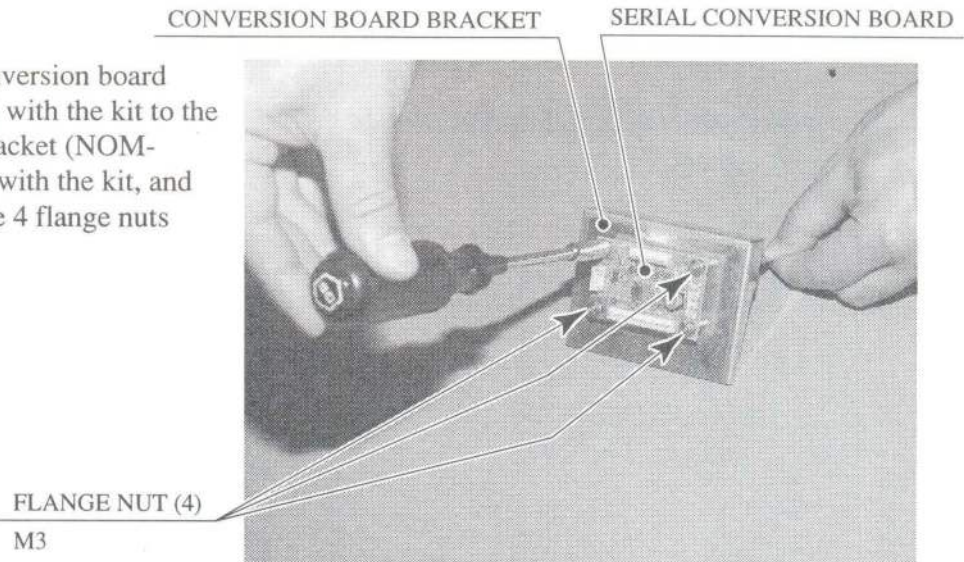


PHOTO 3.1 a

- ⑤ Use the 2 S-tight screws (M4 × 10) to affix the conversion board bracket. If the wires and cord clamps in the cabinet are in the way, remove these and move them out of the way. If there is any dust, refuse or foreign matter inside the cabinet, clean them out of the cabinet. Any dust, refuse or foreign matter on the I/O board could cause a short circuit or fire.

S-TIGHT SCREW (2)  
M4 × 10



PHOTO 3.1 b

- ⑥ Attach the control panel (NOM-20002) supplied with the kit to the cabinet using the screws that you removed earlier. Take care not to damage the wiring as you attach the control panel.
- ⑦ Connect the 8-pin white connector (4 wires) that comes out of the control panel (NOM-20002) to the connector panel of the cabinet.
- ⑧ Connect the 2-pin white connector that comes out of the control panel (NOM-20002) to the connector panel of the cabinet.
- ⑨ Connect the 14-pin connector that comes out of the control panel (NOM-20002) to connector CN3 on the serial conversion board (839-1233).
- ⑩ Connect the 12-pin white connector that comes out of the control panel (NOM-20002) to the wire (600-7324-18) supplied with the kit.



- ⑪ Connect the 15-pin white connector of the wire (600-7324-18) to the connector panel of the cabinet.
- ⑫ Connect the 12-pin white connector of the wire (600-7324-18) to the connector panel of the cabinet.
- ⑬ Connect the 8-pin white connector (2-wire) of the wire (600-7324-18) to the connector from the cabinet that comes out on the left side of the connector panel. Take care, as there is no 8-pin white connector on the connector panel itself.

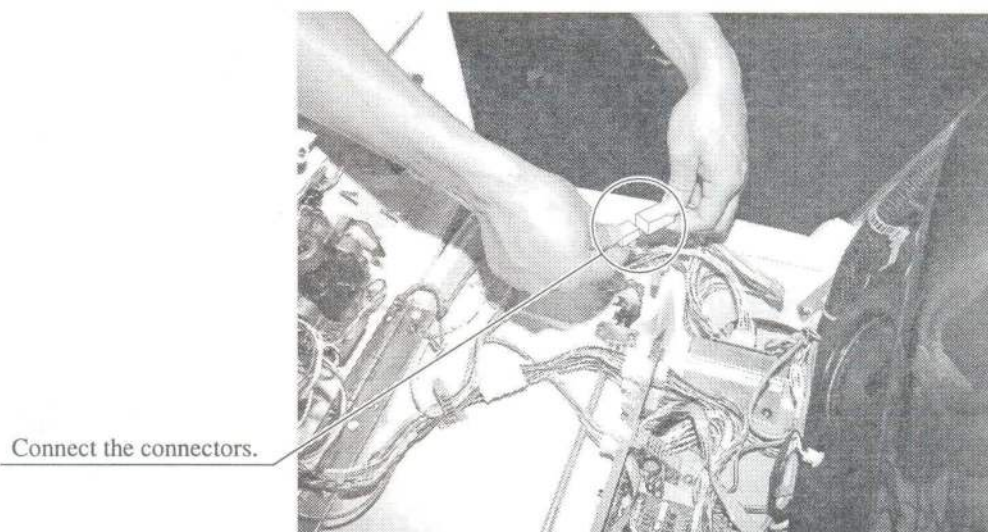


PHOTO 3. 1 c

- ⑭ Connect the 8-pin connector of the wire (600-7324-18) to connector CN1 on the serial conversion board (839-1233).
- ⑮ From the wiring that is clamped near the bottom center of the monitor, remove the 5-pin connector with the letter "A" stuck to it from the cord clamp, and connect it to connector CN2 of the serial conversion board (839-1233).
- ⑯ Re-clamp the cord clamp that you opened.
- ⑰ Use the supplied cord clamp to fix the wires so that they will not be pinched between the lock unit and the hinge.
- ⑱ Attach the front panel that you removed in steps (2) and (3), and close the control panel base. As you close the control panel base, take care not to pinch any wires or connectors.
- ⑲ Refer to the instruction manual for the cabinet to pull the wooden base that the game board is attached to out of the cabinet.
- ⑳ Affix the serial connector board (839-1234) supplied with the kit to the wooden base using the 4 tapping screws (3 × 25).

[When modifying from "Virtua Striker 2002"  
(the original version of TRIFORCE)]

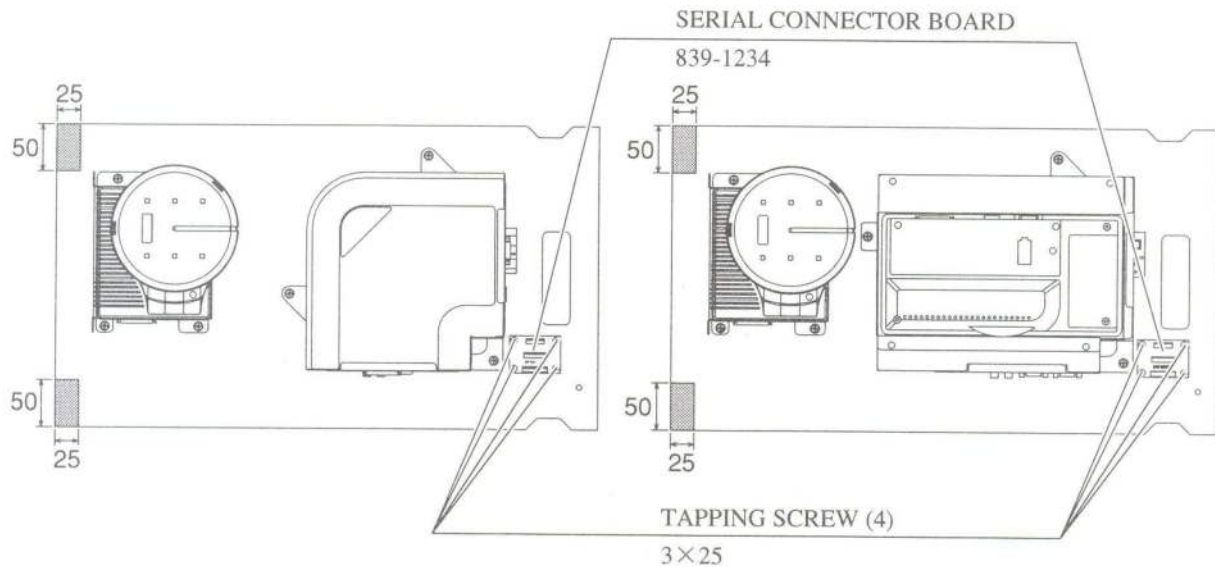


FIG. 3. 1 c

- ②① Connect the 8-pin connector (on the end of the cable that splits into two) of the wire (600-7324-01) supplied with the kit to J3 on the TRIFORCE connector board. Do not connect the connector to anywhere other than the designated location otherwise there is a risk of the parts emitting smoke or being damaged.
- ②② Connect the 10-pin connector of the wire (600-7324-01) to J5 on the TRIFORCE connector board. Do not connect the connector to anywhere other than the designated location otherwise there is a risk of the parts emitting smoke or being damaged.
- ②③ Connect the 8-pin connector of the wire (600-7324-01) to the connector CN1 of the serial connector board (839-1234). Do not connect the connector to anywhere other than the designated location otherwise there is a risk of the parts emitting smoke or being damaged.
- ②④ Use the tapping screw ( $3 \times 12$ ) to affix the cord clamp to the wooden base. Fix the wire (600-7324-01) in place using the cord clamp.

Affix using the cord clamp.

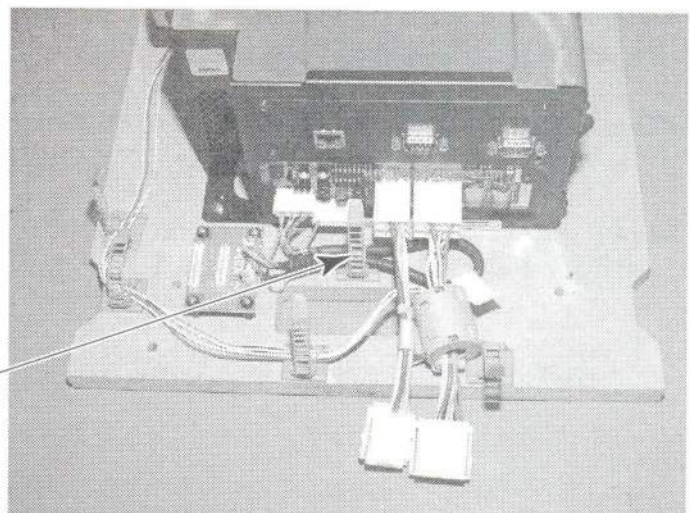


PHOTO 3. 1 d



- ②⑤ Connect the 10-pin connector of the cabinet to connector CN2 on the serial connector board (839-1234).

### NAOMI CABINET/NET CITY (1P)

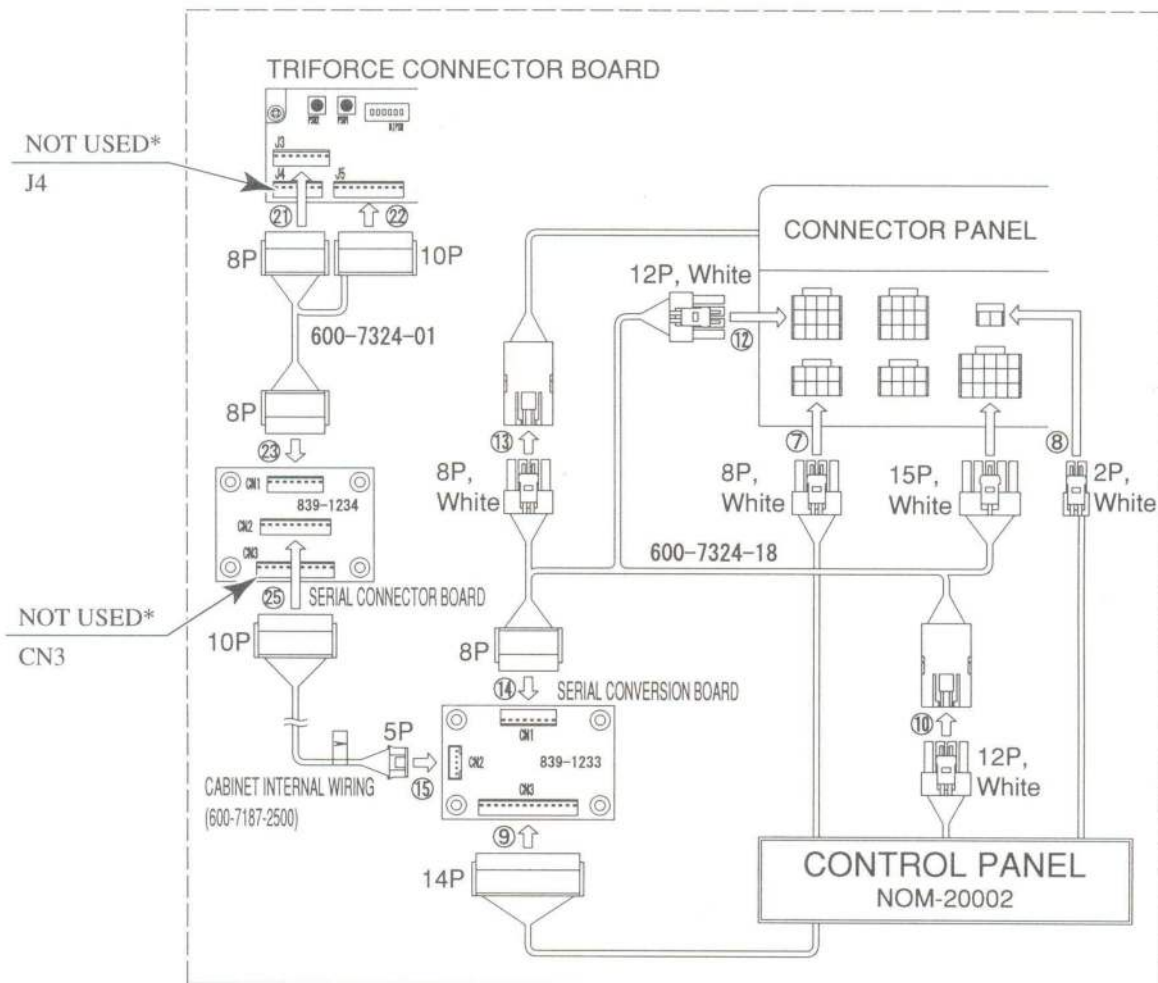


FIG. 3. 1 d

*Note: This product does not use the J4 connector on the TRIFORCE connector board or the CN3 connector on the serial connector board.*

### 3 — 2 NAOMI CABINET, NET CITY SERIES (2P VERSUS)

The TRIFORCE (DIMM MEDIA TYPE) is required before performing the following procedure. The Versus Connection Kit (XKT-0406) is also required to connect 2 cabinets together for versus play. Connect the cabinets for versus play in advance using the Versus Connection Kit (XKT-0406).

- ① Follow steps (1) to (25) in section "3-1" earlier in this manual to modify the player 1 cabinet.
- ② Follow steps (1) to (19) in section "3-1" earlier in this manual to modify the player 2 cabinet.
- ③ Affix the serial connector board (839-1234) supplied with the kit to the wooden base of the player 2 cabinet using the 4 tapping screws ( $3 \times 25$ ).

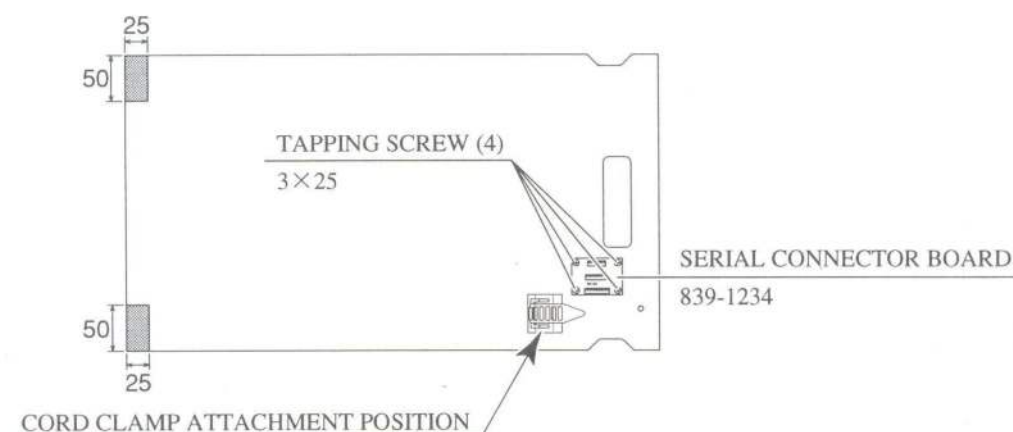


FIG. 3. 2 a

- ④ Put the player 2 wooden base back in the cabinet.
- ⑤ Connect the 10-pin connector of the player 2 cabinet to connector CN2 of the serial connector board (839-1234).
- ⑥ Connect the 11-pin connector of the wire (600-7324-04) supplied with the kit to connector CN3 of the player 1 serial connector board (839-1234).
- ⑦ Connect the 8-pin connector of the wire (600-7324-04) to connector CN1 of the player 2 serial connector board (839-1234). Run the wiring between the player 1 and 2 cabinets through the communication ports of the cabinets.
- ⑧ Use the tapping screw ( $3 \times 12$ ) to affix the cord clamp to the wooden base near the serial connector board. (See FIG. 3.2a)
- ⑨ Fix the wires connected to the serial connector board in place using the cord clamp.



# NAOMI CABINET/NET CITY (2P VERSUS)

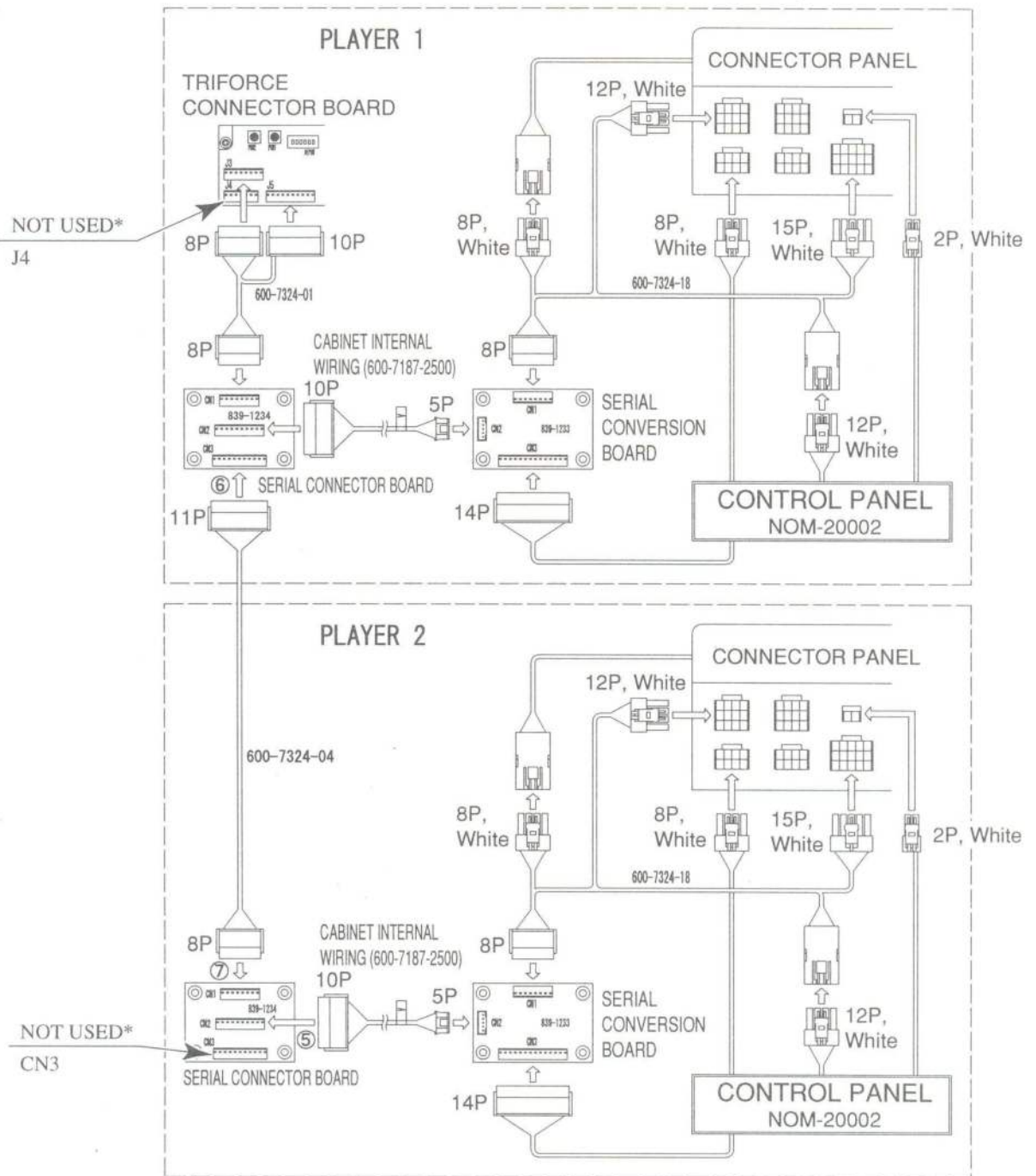


FIG. 3. 2 b

*Note: This product does not use the J4 connector of the TRIFORCE connector board or the CN3 connector of the PLAYER 2 serial connector board.*

### 3 — 3 BLAST CITY (1P)

The TRIFORCE (DIMM MEDIA TYPE) is required to perform this procedure.

- ① Referring to the cabinet's instruction manual, remove the control panel currently in use from the cabinet. At this point, leave the control panel base open. Also, the screws for fastening the control panel will be used later, so do not lose them.
- ② Attach the serial conversion board (839-1233) supplied with the kit to the control panel (NOM-20002) supplied with the kit, and fix in place using the 4 flange nuts (M3).

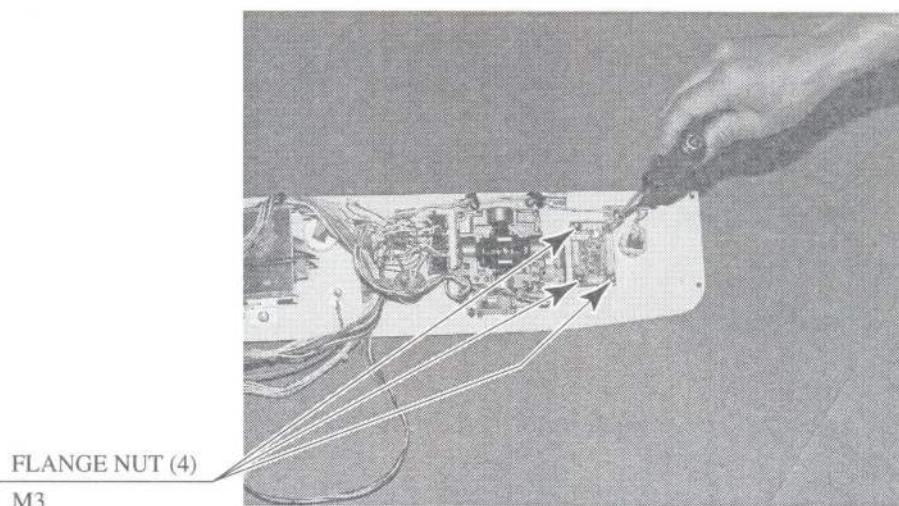


PHOTO 3. 3 a

- ③ Connect the 14-pin connector that comes out of the control panel (NOM-20002) to connector CN3 of the serial conversion board (839-1233).
- ④ Affix the wire using the harness lug. Fix the excess portions of the wire in place using the cord clamp to prevent the wire from getting in the way.

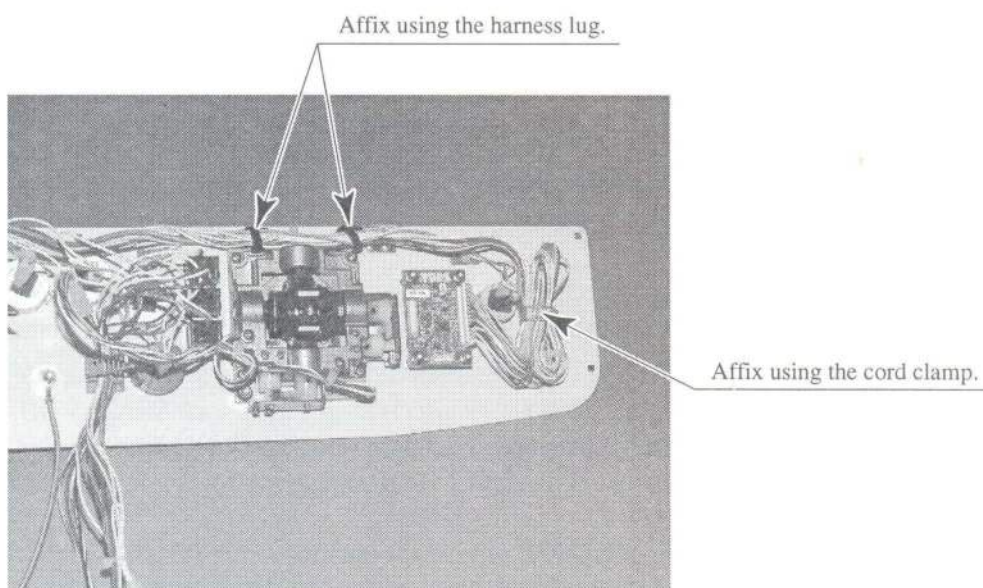


PHOTO 3. 3 b



- ⑤ Attach the control panel (NOM-20002) supplied with the kit to the cabinet using the screws that you removed earlier. Take care not to damage the wiring as you attach the control panel.
- ⑥ Connect the 2-pin white connector that comes out of the control panel (NOM-20002) to the wire that is connected to the cabinet connector panel.
- ⑦ Connect the 5-pin connector of the wire (600-7324-02) supplied with the kit to connector CN2 of the serial conversion board (839-1233).
- ⑧ Feed the 10-pin connector side of the wire (600-7324-02) through the hole in the cabinet to the inside of the cabinet.

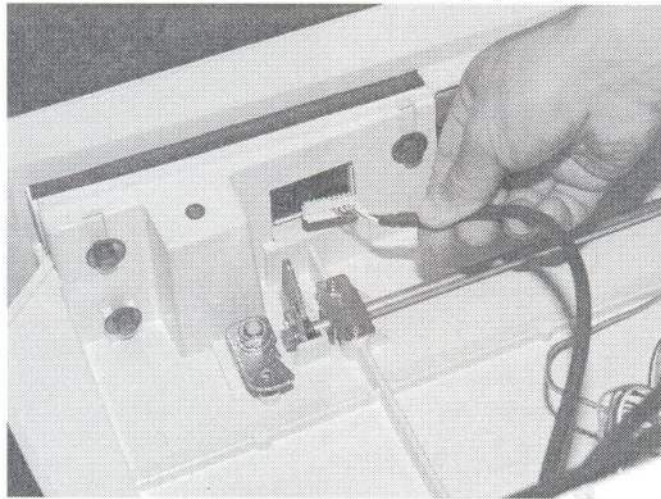


PHOTO 3. 3 c

- ⑨ Connect the 12-pin white connector (13-wire) of the wire (600-7324-15) supplied with the kit to the cabinet connector panel.
- ⑩ Connect the 10-pin white connector of the wire (600-7324-15) to the cabinet connector panel.
- ⑪ Connect the 8-pin connector of the wire (600-7324-15) to connector CN1 of the serial conversion board (839-1233).
- ⑫ Connect the 12-pin white connector (9-wire) that comes out of the control panel (NOM-20002) to the wire (600-7324-15).
- ⑬ Connect the 8-pin white connector that comes out of the control panel (NOM-20002) to the wire (600-7324-14) supplied with the kit.
- ⑭ Feed the end of the wire (600-7324-14) with the 10-pin and 26-pin connectors through the hole in the cabinet to the inside of the cabinet. Affix the wire using the cord clamp so that the wire does not get pinched between the hinge and the analog stick unit.

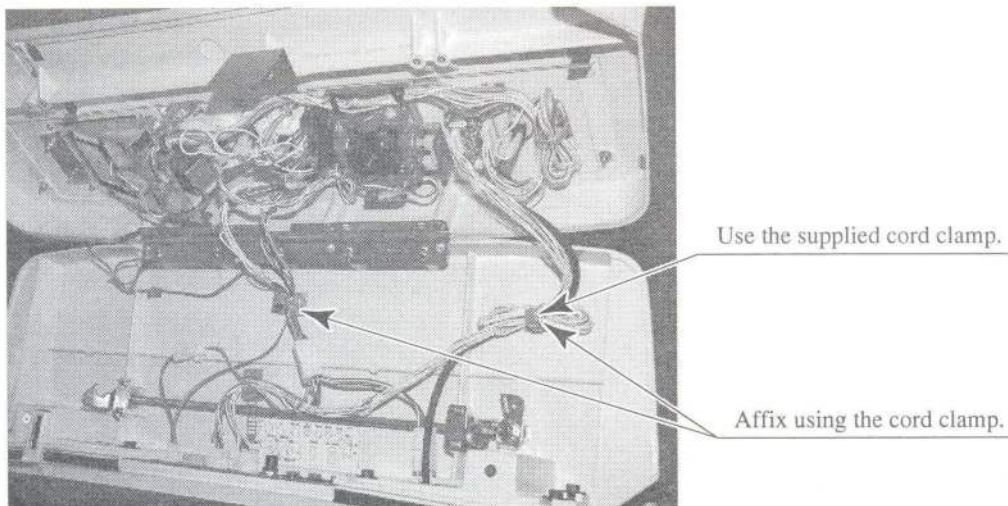


PHOTO 3. 3 d

- ⑮ Close the control panel base. As you close the control panel base, take care that you do not pinch any of the wires or connectors.
- ⑯ Refer to the instruction manual for the cabinet to pull the wooden base that the game board is attached to out of the cabinet.
- ⑰ Affix the serial connector board (839-1234) supplied with the kit to the wooden base using the 4 tapping screws (3 × 25).

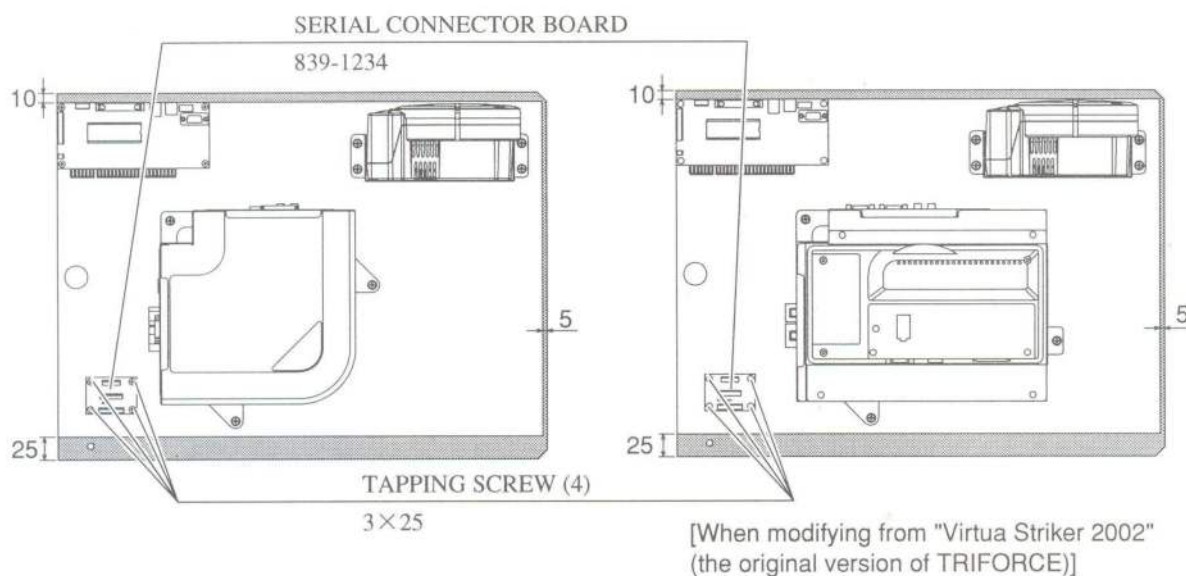
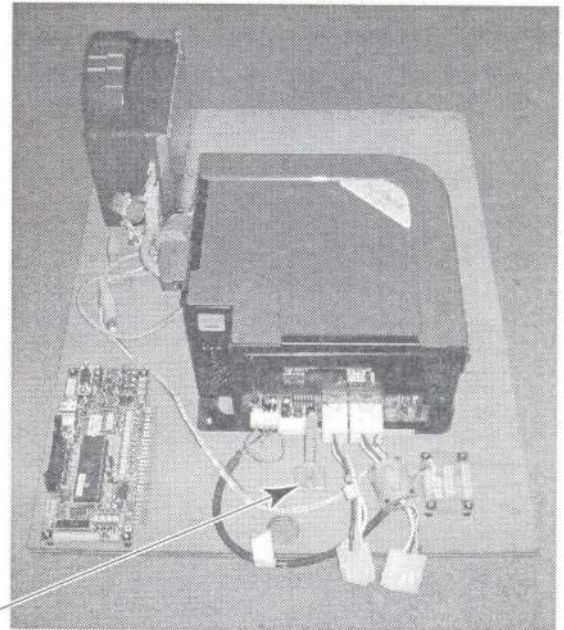


FIG. 3. 3 a

- ⑱ Connect the 8-pin connector (on the end of the cable that splits into two) of the wire (600-7324-01) supplied with the kit to J3 on the TRIFORCE connector board. Do not connect the connector to anywhere other than the designated location otherwise there is a risk of the parts emitting smoke or being damaged.
- ⑲ Connect the 10-pin connector of the wire (600-7324-01) to J5 on the TRIFORCE connector board. Do not connect the connector to anywhere other than the designated location otherwise there is a risk of the parts emitting smoke or being damaged.



- ②⑩ Connect the 8-pin connector of the wire (600-7324-01) to the connector CN1 of the serial connector board (839-1234). Do not connect the connector to anywhere other than the designated location otherwise there is a risk of the parts emitting smoke or being damaged.
- ②⑪ Use the tapping screw (3 × 12) to affix the cord clamp to the wooden base.



Affix using the cord clamp.

PHOTO 3. 3 e

- ②⑫ Check that the jumper socket (JP1) of the I/O board (838-13683-93) is plugged into the B side. If it is plugged into the A side, re-attach the jumper on the B side. Refer to FIG. 3.3c for the position of the jumper socket.

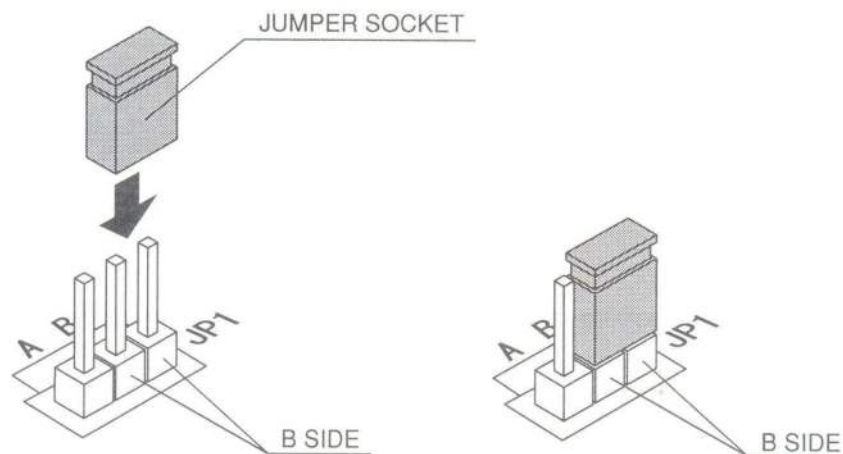


FIG. 3. 3 b

- ②⑬ Connect the 10-pin connector of the wire (600-7324-02) that you fed through from the control panel in step (8) to connector CN2 of the serial connector board (839-1234).
- ②⑭ Connect the 14-pin connector of the wire (600-7324-10) supplied with the kit to connector CN3 of the I/O board (838-13683-93).

- ②⑤ Connect the 8-pin connector of the wire (600-7324-10) to connector CN8 of the cabinet terminal board (839-0894).



PHOTO 3.3 f

- ②⑥ Connect the 26-pin connector of the wire (600-7324-14) that you fed through from the control panel in step (8) to connector CN7 of the I/O board (838-13683-93).

Connect to CN6.

- ②⑦ Connect the 10-pin connector of the wire (600-7324-14) to connector CN6 of the cabinet terminal board (839-0894).

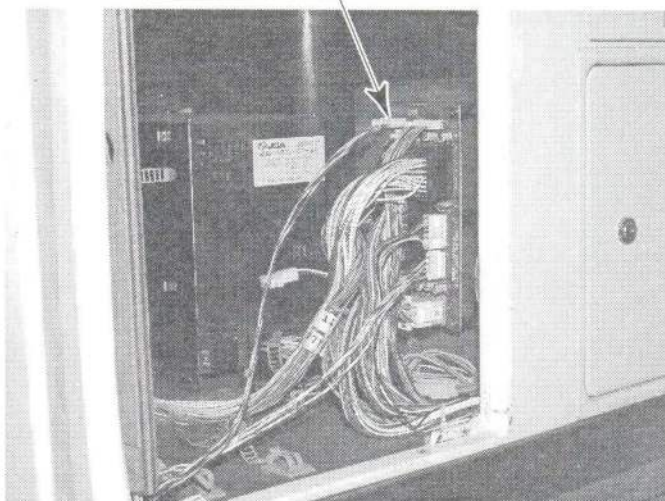


PHOTO 3.3 g

- ②⑧ Affix the wire using the cord clamp.

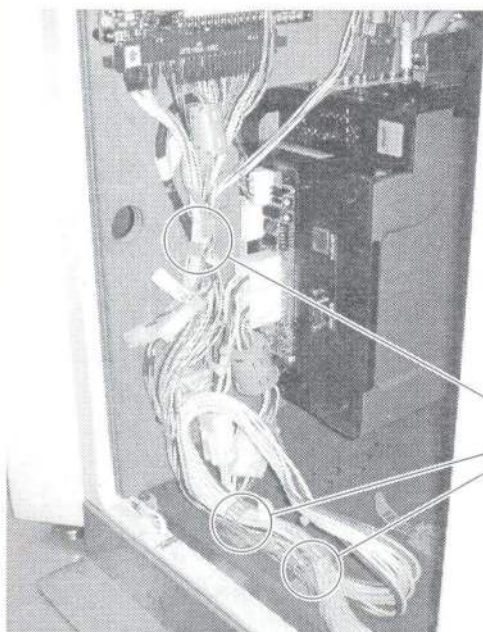


PHOTO 3.3 h



# BLAST CITY (1P)

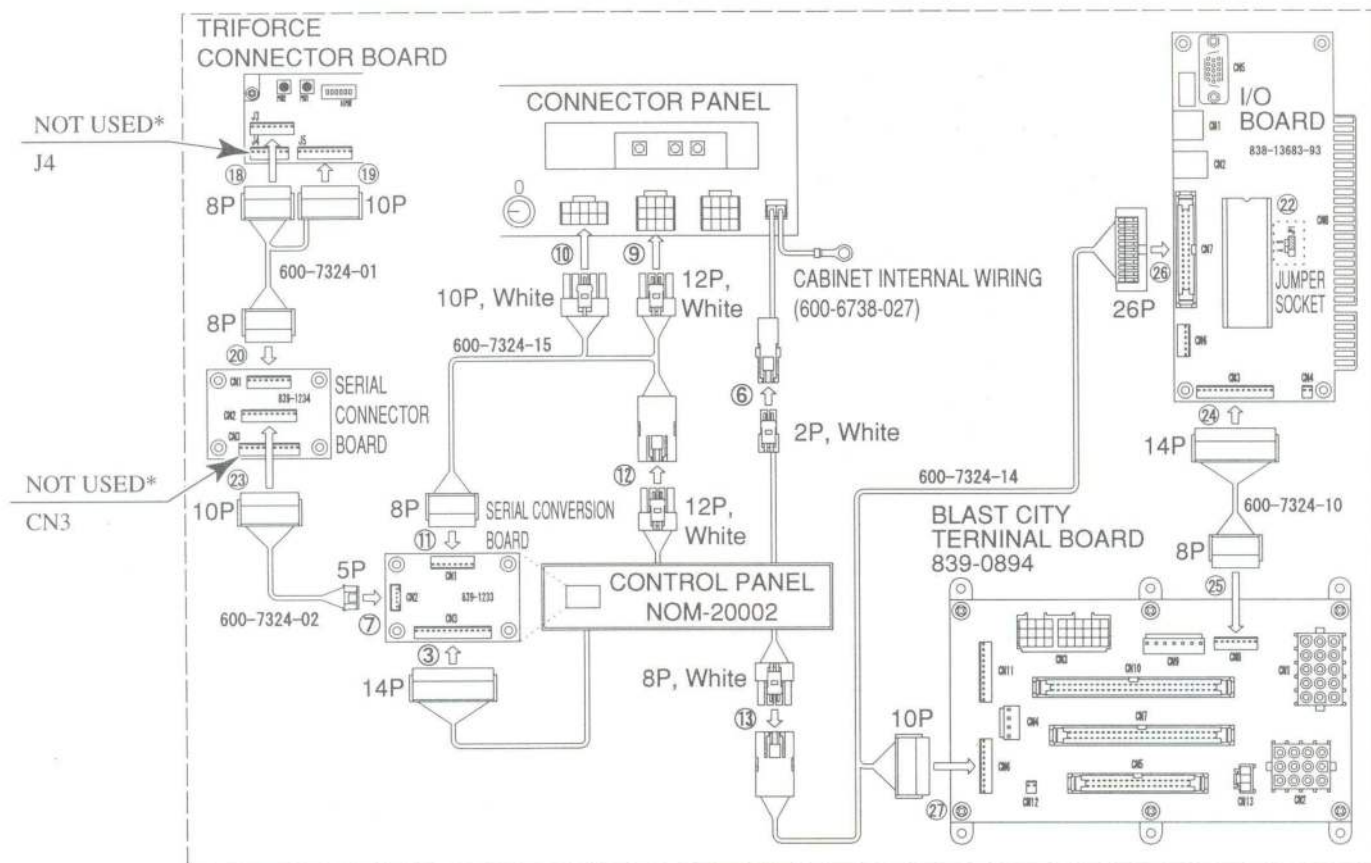


FIG. 3. 3 c

*Note: This product does not use the J4 connector of the TRIFORCE connector board or the CN3 connector of the PLAYER 2 serial connector board.*

### 3 — 4 BLAST CITY (2P VERSUS)

The TRIFORCE (DIMM MEDIA TYPE) is required for this procedure. The Versus Connection Kit (XKT-0448) is also required to connect 2 cabinets together for versus play.

- ① Attach the 4 one-touch collars (280-5248-10) to the rear face of the communication port (HOT-1306-01) from the kit, and the 4 one-touch bushings (280-5247) to the front face. The face where the model number is displayed is the rear face.

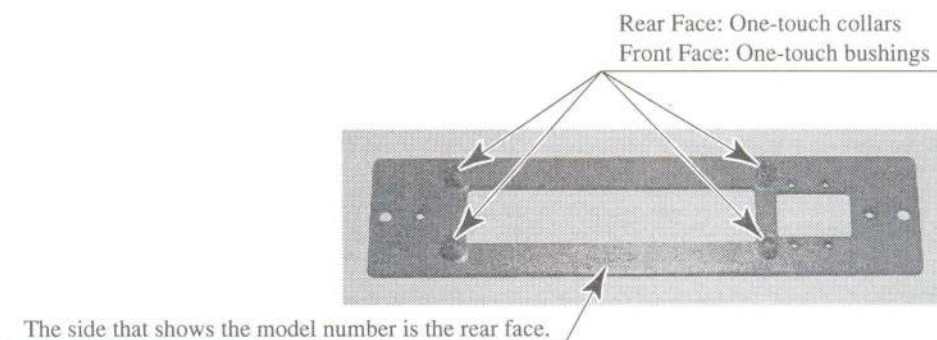


PHOTO 3.4 a

- ② Remove the 4 screws (M3 × 20) from the communication unit (HOT-1310) supplied with the Versus Connection Kit (XKT-0448) and remove the Versus Connection Kit communication port (HOT-1306).

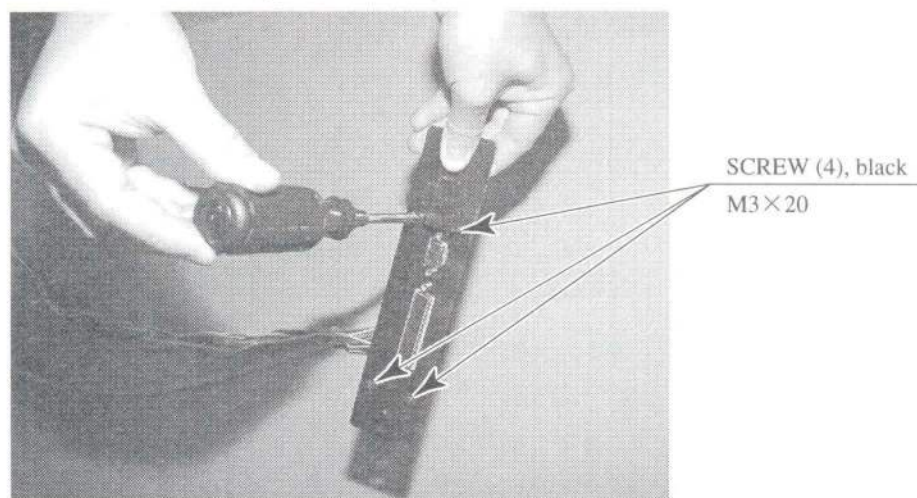


PHOTO 3.4 b

- ③ Attach the communication port (HOT-1306-01) from this kit to the communication unit (HOT-1310) using the screws that you removed earlier. Repeat steps (1) to (3) for the 1P and 2P sides to make 2 sets.
- ④ Connect the cabinets for versus play using the Versus Connection Kit (XKT-0448).
- ⑤ Follow steps (1) to (28) from section "3-3" to modify the player 1 cabinet.
- ⑥ Follow steps (1) to (8) from section "3-3" to modify the player 2 cabinet.
- ⑦ Connect the 12-pin yellow connector of the wire (600-7324-16) supplied with the kit to the connector panel of the player 2 cabinet.



- ⑧ Connect the 10-pin white connector of the wire (600-7324-16) to the connector panel of the player 2 cabinet.
- ⑨ Connect the 8-pin connector of the wire (600-7324-16) to connector CN1 of the player 2 serial conversion board (839-1233). Affix the wire using the cord clamp.
- ⑩ Connect the 12-pin white connector that comes out of the player 2 control panel (NOM-20002) to the wire (600-7324-16). Affix the wire using the cord clamp so that the wires and connectors do not get pinched by the hinge.
- ⑪ Connect the 8-pin white connector that comes out of the player 2 control panel (NOM-20002) to the wire (600-7324-17) supplied with the kit. Affix the wire using the cord clamp.
- ⑫ Feed the 11-pin connector end of the wire (600-7324-17) through the hole in the cabinet to the inside of the cabinet.
- ⑬ Close the player 2 control panel base. As you close the control panel base, take care not to pinch any of the wires or connectors.
- ⑭ Refer to the instruction manual of the cabinet to pull the wooden base that has the game board mounted on it out of the player 2 cabinet.
- ⑮ Affix the serial connector board (839-1234) supplied with the kit to the player 2 wooden base using the 4 tapping screws (3 × 25).

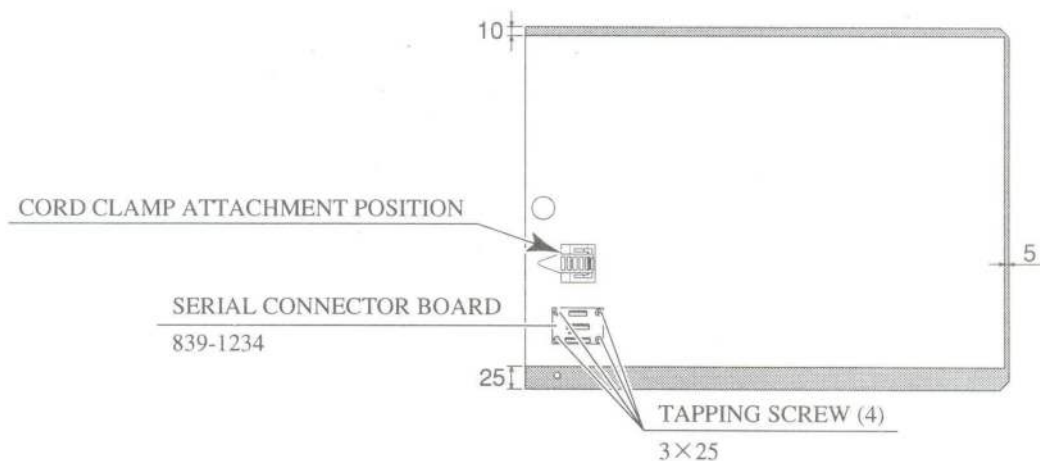


FIG. 3. 4 a

- ⑯ Use the tapping screw (3 × 12) to affix the cord clamp to the wooden base near the serial connector board. (See FIG. 3.4a)
- ⑰ Put the player 2 wooden base back in the cabinet.
- ⑱ Connect the 10-pin connector of the wire (600-7324-02) that you fed through from the player 2 control panel in step (8) of section "3-3" to connector CN2 of the player 2 serial connector board (839-1234).
- ⑲ Connect the 11-pin connector of the wire (600-7324-04) supplied with the kit to connector CN3 of the player 1 serial connector board (839-1234).
- ⑳ Connect the 8-pin connector of the wire (600-7324-04) to connector CN1 of the player 2 serial connector board (839-1234). Run the wiring between the player 1 and 2 cabinets through the communication ports of the cabinets.

- ②① Connect the 11-pin connector of the wire (600-7324-17) that you fed through from the control panel in step (12) to connector CN11 of the player 2 cabinet terminal board (839-0894). If there is already a wire attached to the connector, unplug that wire then connect the wire as described.
- ②② Fix the wires connected to the serial connector board in place using the cord clamp.

### BLAST CITY (2P VERSUS)

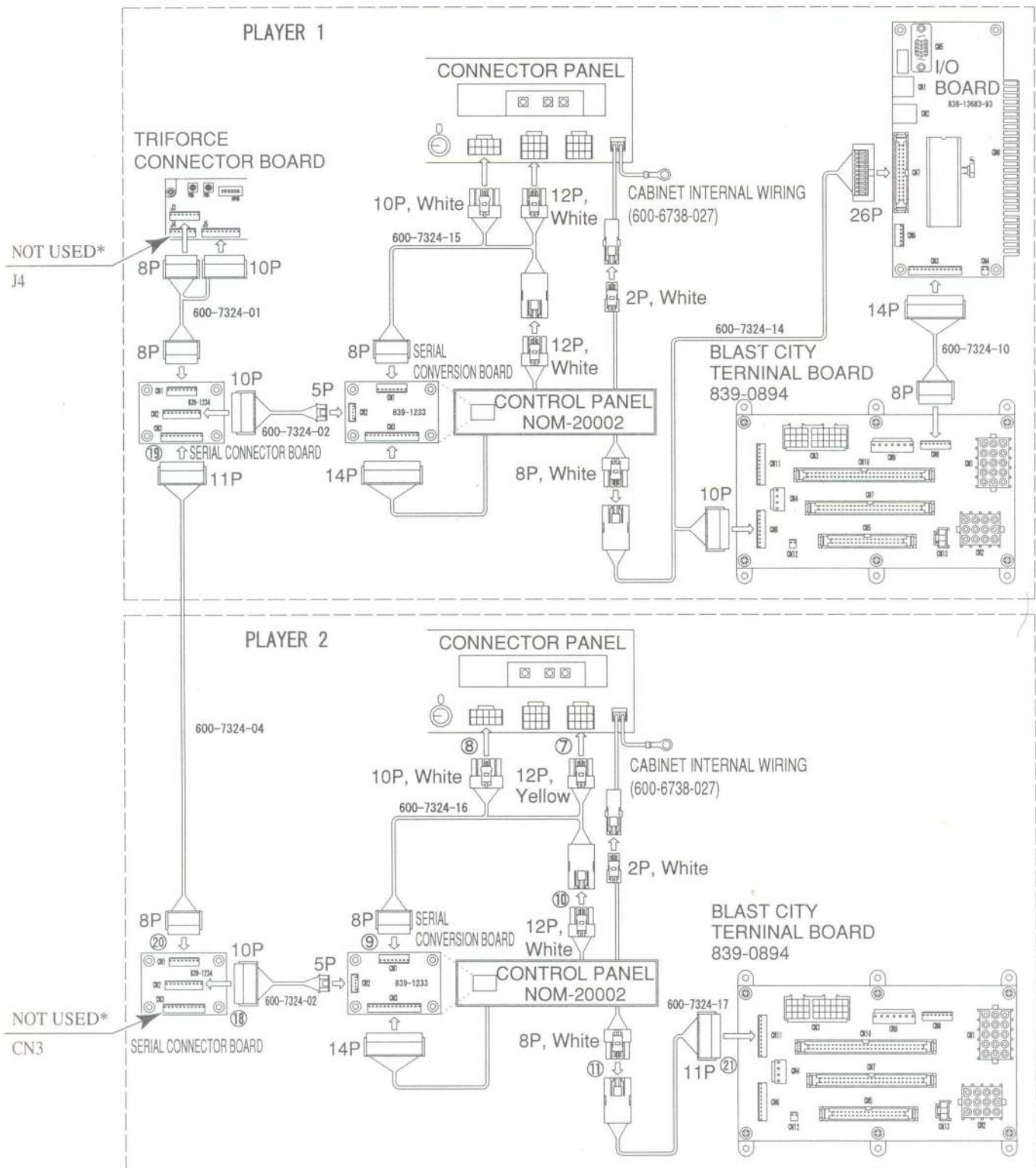


FIG. 3. 4 b

*Note: This product does not use the J4 connector of the TRIFORCE connector board or the CN3 connector of the PLAYER 2 serial connector board.*



### 3 — 5 VERSUS CITY SERIES

The TRIFORCE (DIMM MEDIA TYPE) is required to perform this procedure.

Perform the work from steps (1) to (6) on both the player 1 and player 2 sides.

- ① Referring to the cabinet's instruction manual, remove the control panel currently in use from the cabinet. At this point, leave the control panel base open. Also, the screws for fastening the control panel will be used later, so do not lose them.
- ② Attach the serial conversion board (839-1233) supplied with the kit to the control panel (NOM-20002) supplied with the kit, and fix in place using the 4 flange nuts (M3).

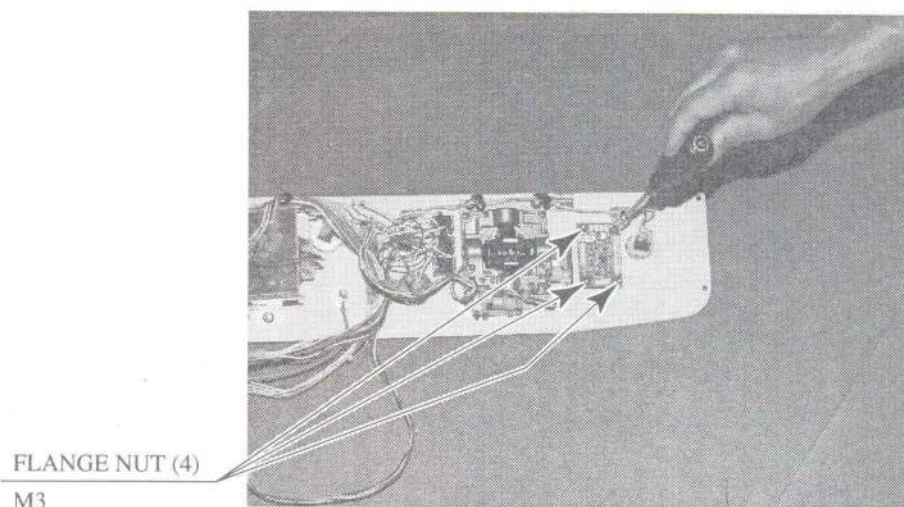


PHOTO 3. 5 a

- ③ Connect the 14-pin connector that comes out of the control panel (NOM-20002) to connector CN3 of the serial conversion board (839-1233).
- ④ Affix the wire using the harness lug. Fix the excess portions of the wire in place using the cord clamp to prevent the wire from getting in the way.

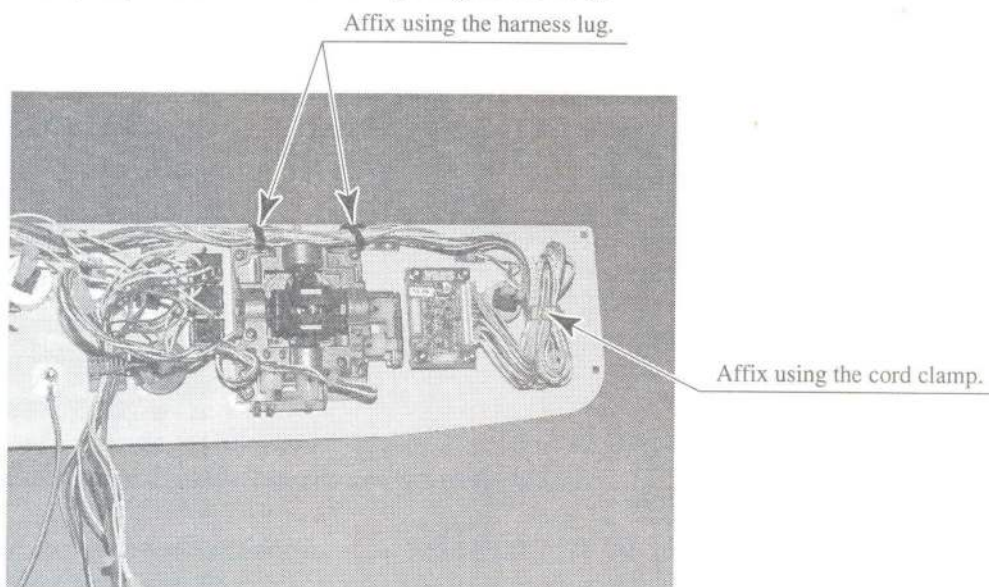


PHOTO 3. 5 b

- ⑤ Attach the control panel (NOM-20002) supplied with the kit to the cabinet using the screws that you removed earlier. Take care not to damage the wiring as you attach the control panel.
- ⑥ For NEW VERSUS CITY cabinets, connect the 2-pin white connector that comes out of the control panel (NOM-20002) to the wire that is connected to the cabinet connector panel. For VERSUS CITY cabinets, remove the wire from the 2-pin white connector that comes out of the control panel. Connect the earth wire that is connected to the cabinet connector panel to the control panel stud (screw unit) that you removed.  
Perform steps (1) to (6) on both the player 1 and player 2 sides.
- ⑦ Connect the 12-pin yellow connector of the wire (600-7324-20) supplied with the kit to the cabinet connector panel on the player 1 side.
- ⑧ Connect the 8-pin white connector that comes out of the player 1 control panel (NOM-20002) to the wire (600-7324-20).
- ⑨ Connect the 12-pin white connector of the wire (600-7324-15) supplied with the kit to the cabinet connector panel on the player 1 side.
- ⑩ Connect the 10-pin white connector of the wire (600-7324-15) to the cabinet connector panel on the player 1 side.
- ⑪ Connect the 8-pin connector of the wire (600-7324-15) to connector CN1 of the player 1 serial conversion board (839-1233).
- ⑫ Connect the 12-pin white connector that comes out of the player 1 control panel (NOM-20002) to the wire (600-7324-15).
- ⑬ Connect the 5-pin connector of the wire (600-7324-02) supplied with the kit to connector CN2 of the player 1 serial conversion board (839-1233).
- ⑭ Feed the 10-pin connector side of the wire (600-7324-02) through the hole in the cabinet to the inside of the cabinet.

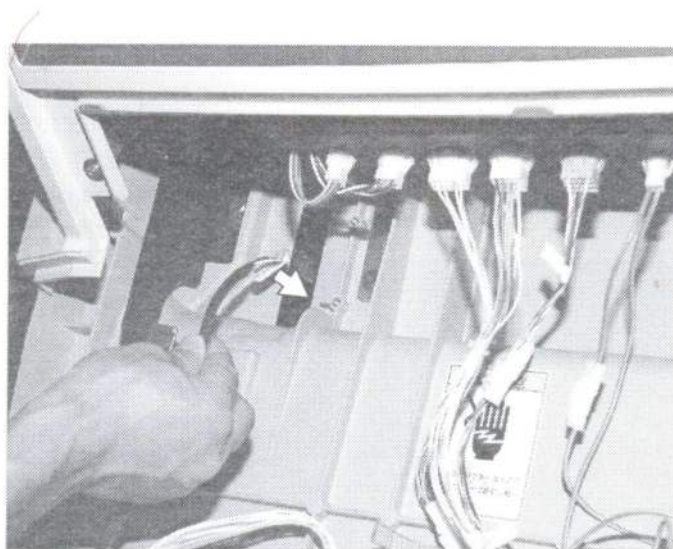


PHOTO 3. 5 c

- ⑮ Connect the 12-pin yellow connector of the wire (600-7324-20) supplied with the kit to the cabinet connector panel on the player 2 side.
- ⑯ Connect the 8-pin white connector that comes out of the player 2 control panel (NOM-20002) to the wire (600-7324-20).



- ⑰ Connect the 12-pin white connector of the wire (600-7324-21) supplied with the kit to the player 2 cabinet connector panel.
- ⑱ Connect the 10-pin white connector of the wire (600-7324-21) to the player 2 cabinet connector panel.
- ⑲ Connect the 8-pin connector of the wire (600-7324-21) to connector CN1 of the player 2 serial conversion board (839-1233).
- ⑳ Connect the 12-pin white connector that comes out of the player 2 control panel (NOM-20002) to the wire (600-7324-21).
- ㉑ Connect the 5-pin connector of the wire (600-7324-03) supplied with the kit to connector CN2 of the player 2 serial conversion board (839-1233).
- ㉒ Feed the 11-pin connector side of the wire (600-7324-03) through the hole in the cabinet to the inside of the cabinet, and run the wiring to the player 1 side.

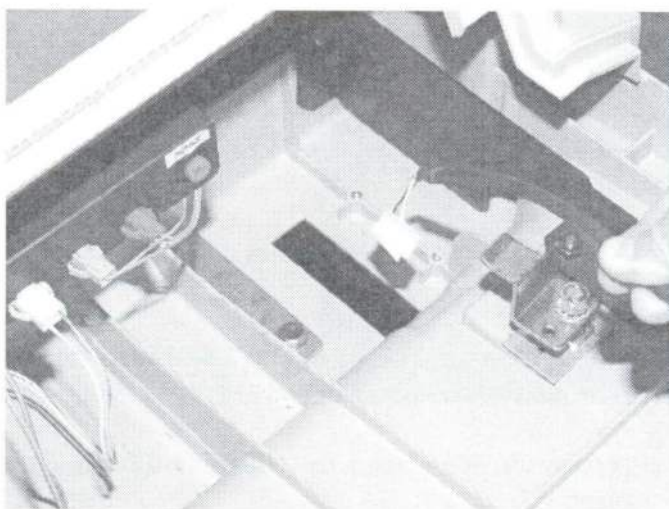


PHOTO 3. 5 d

- ㉓ Affix the wire using the cord clamp so that the wires and connectors do not get pinched by the hinge or the analog stick unit.

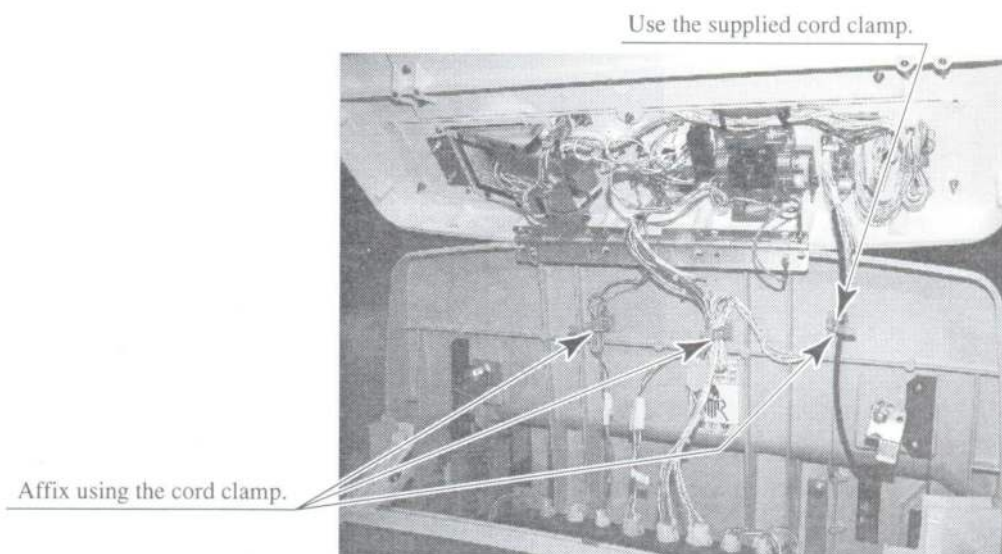
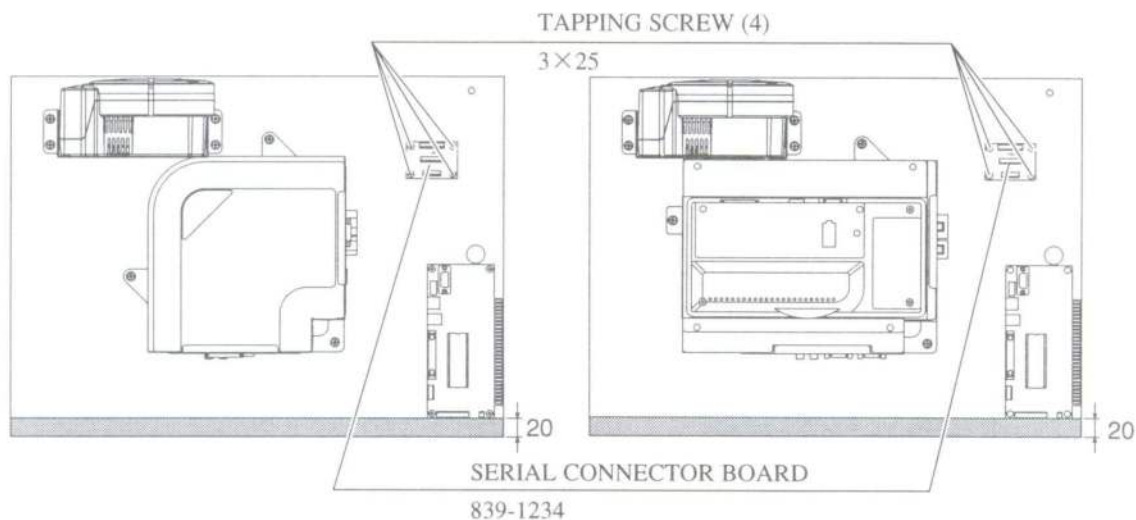


PHOTO 3. 5 e

- ②④ Close the player 1 and player 2 control panel bases. As you close the control panel bases, take care that you do not pinch any of the wires or connectors.
- ②⑤ Refer to the instruction manual for the cabinet to pull the wooden base that the game board is attached to out of the cabinet.
- ②⑥ Affix the serial connector board (839-1234) supplied with the kit to the wooden base using the 4 tapping screws (3 × 25).



[When modifying from "Virtua Striker 2002"  
(the original version of TRIFORCE)]

FIG. 3. 5 a

- ②⑦ Connect the 8-pin connector (on the end of the cable that splits into two) of the wire (600-7324-01) supplied with the kit to J3 on the TRIFORCE connector board. Do not connect the connector to anywhere other than the designated location otherwise there is a risk of the parts emitting smoke or being damaged.
- ②⑧ Connect the 10-pin connector of the wire (600-7324-01) to J5 on the TRIFORCE connector board. Do not connect the connector to anywhere other than the designated location otherwise there is a risk of the parts emitting smoke or being damaged.
- ②⑨ Connect the 8-pin connector of the wire (600-7324-01) to the connector CN1 of the serial connector board (839-1234). Do not connect the connector to anywhere other than the designated location otherwise there is a risk of the parts emitting smoke or being damaged.

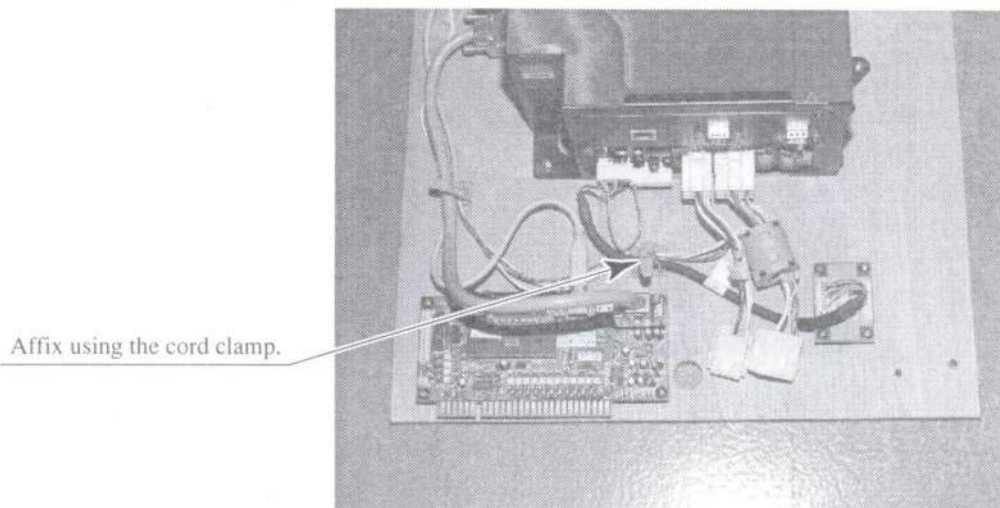


PHOTO 3. 5 f



- ③⑩ Use the tapping screw (3 × 12) to affix the cord clamp to the wooden base. Fix the wire in place using the cord clamp. (See PHOTO 3.5f)
- ③⑪ Check that the jumper socket (JP1) of the I/O board (838-13683-93) is plugged into the B side. If it is plugged into the A side, re-attach the jumper on the B side. Refer to FIG. 3.5c for the position of the jumper socket.

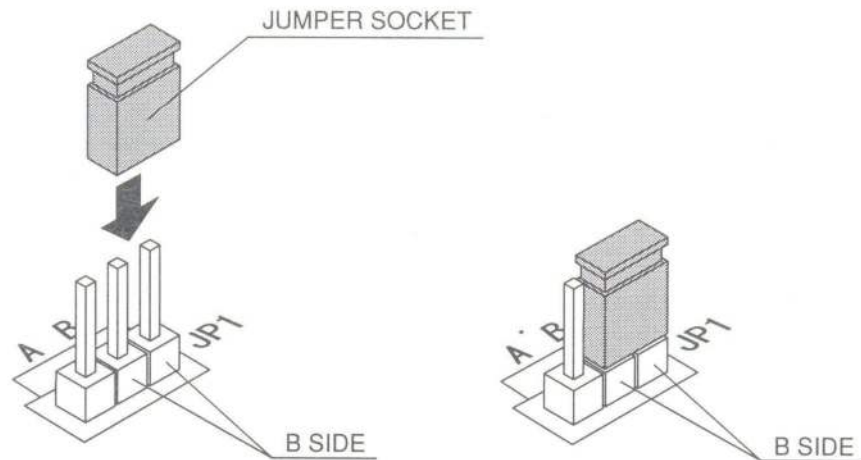


FIG. 3. 5 b

- ③⑫ Connect the 10-pin connector of the wire (600-7324-02) that you fed through from the control panel in step (14) to connector CN2 of the serial connector board (839-1234).
- ③⑬ Connect the 11-pin connector of the wire (600-7324-03) that you fed through from the control panel in step (22) to connector CN3 of the serial connector board (839-1234).
- ③⑭ Connect the 14-pin connector of the wire (600-7324-11) supplied with the kit to connector CN3 of the I/O board (838-13683-93). If a wire is already connected to the connector, unplug that wire from the connector then connect the wire as described.
- ③⑮ Connect the 10-pin white connector and 10-pin red connector of the wire (600-7324-11) to the cabinet connector panel.



PHOTO 3. 5 g

③⑥ Connect the 26-pin connector of the wire (600-7324-19) supplied with the kit to connector CN7 of the I/O board (838-13683-93).

③⑦ Connect the 12-pin yellow connector and 12-pin blue connector of the wire (600-7324-19) to the cabinet connector panel. If a wire is already connected to the connector, unplug that wire from the connector then connect the wire as described.

Connect the connector.

12P, Yellow  
12P, Blue

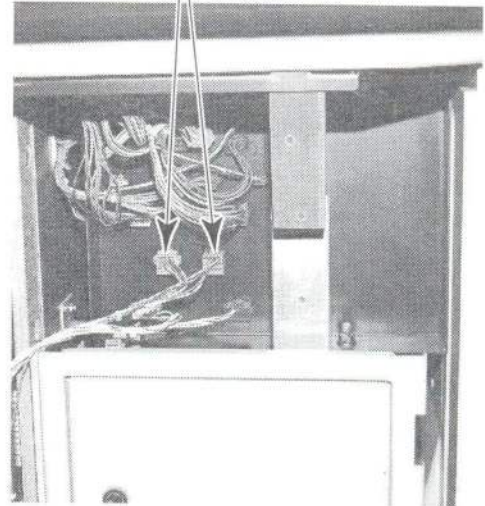


PHOTO 3. 5 h

③⑧ Affix the wire using the cord clamp.

### NEW VERSUS CITY

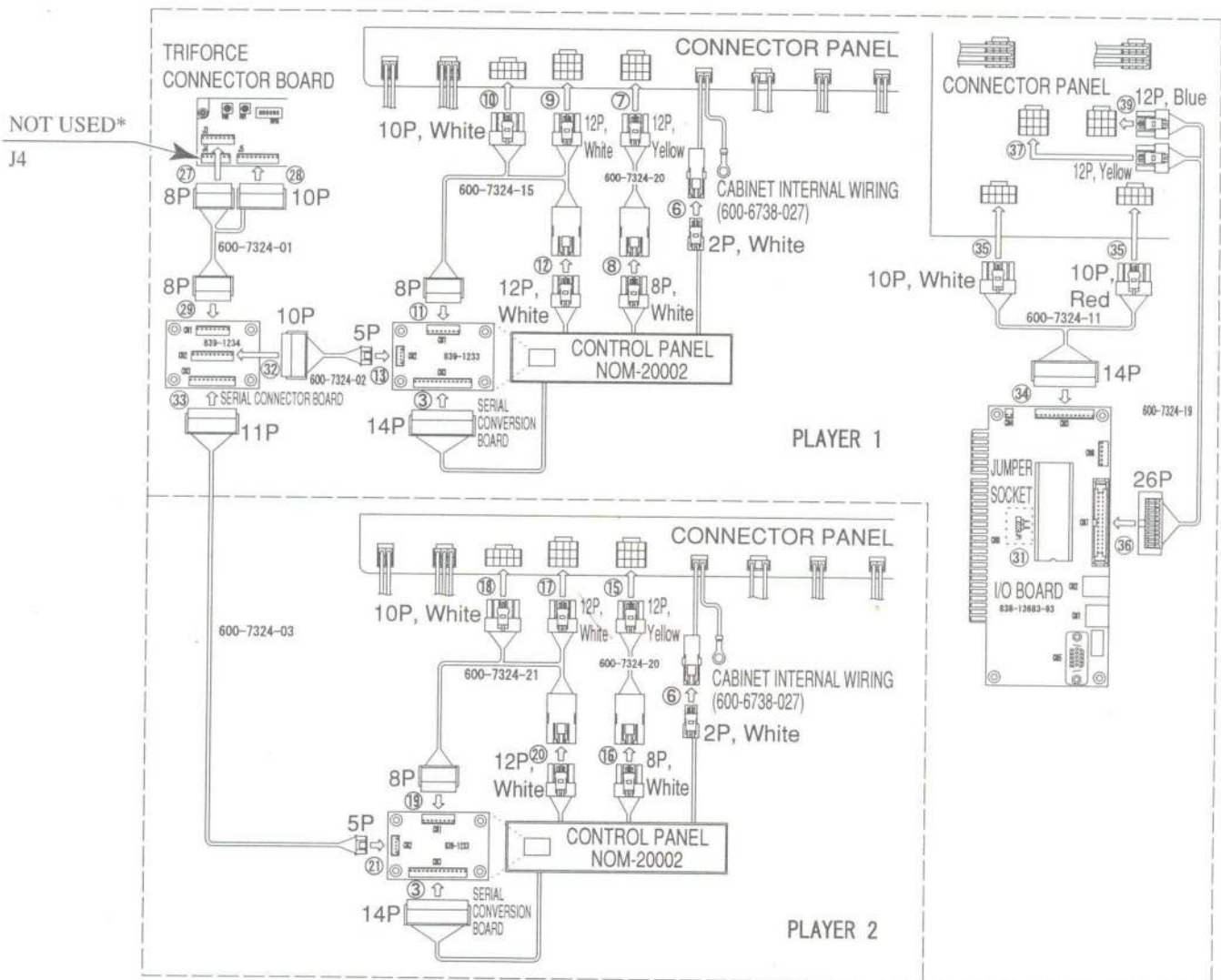


FIG. 3. 5 c

*Note: This product does not use the J4 connector of the TRIFORCE connector board.*



## 4. CARD READER/WRITER UNIT (IC CARD READER/WRITER)



- When working with the product, be sure to turn the power off. Working with the power on can cause an electric shock or short circuit.
- Be careful not to damage the wires. Damaged wires may cause an electric shock, short circuit or present a risk of fire.
- Be careful not to lose the fasteners for the screws and nuts. Contact between metal fasteners and electrically live parts can cause an electric shock, short circuit or fire.



- When you are opening and closing or attaching and removing the doors and lids, be careful not to pinch your fingers.
- The solenoid on the card reader/writer unit may become hot. Take care as there is a risk of accidental burns.

### 4 — 1 CLEANING THE CARD READER/WRITER UNIT



Observe the following points to prevent damage when cleaning accessory surfaces.

- Remove smears using a dry, soft cloth (flannel, etc.). Do not use coarse gauze or other harsh materials.
- For smear removing solvent, alcohol (ethanol) is recommended. When using chemical detergent, be sure to follow the instructions below:
  - Soak a soft cloth in a neutral household detergent diluted with water. Wring the cloth well then clean down the surface.
  - Do not use bleach or detergent that contains abrasive agents.
  - Do not use alkaline chemical detergents such as "glass cleaner" available on the market or solvents such as thinner, etc.
- Do not scrape or scratch surfaces using brushes, scouring pads or other hard cleaning utensils.

Clean the interior of the card reader/writer unit once a month.

At the same time, check to make sure that no intentional damage has been done to the game unit.

Because IC cards are inserted into the card reader/writer unit for each play, it may become dirty and foreign matter may collect in the unit.

- ① Turn the power off.
- ② Refer to the cabinet instruction manual (Owner's Manual) and remove the Control Panel from the cabinet.

FLANGE NUT (4)  
M4

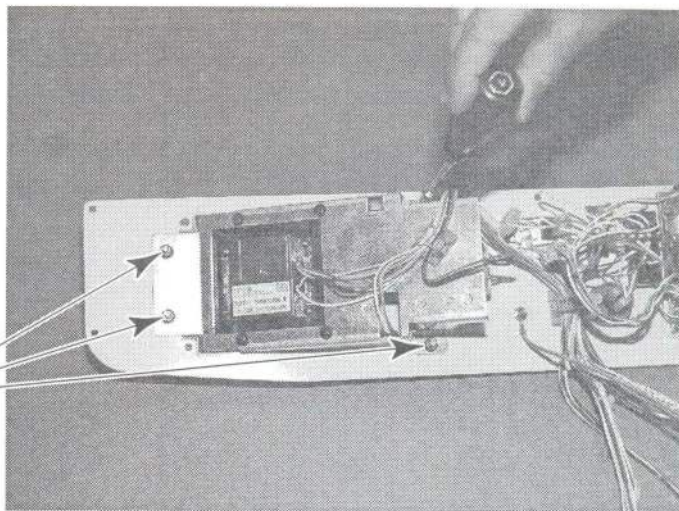


PHOTO 4. 1 a

- ③ To avoid damaging the Control Panel, place a corrugated cardboard sheet or other protective material on a flat stable surface before putting the Control Panel down.

CARD READER/WRITE UNIT

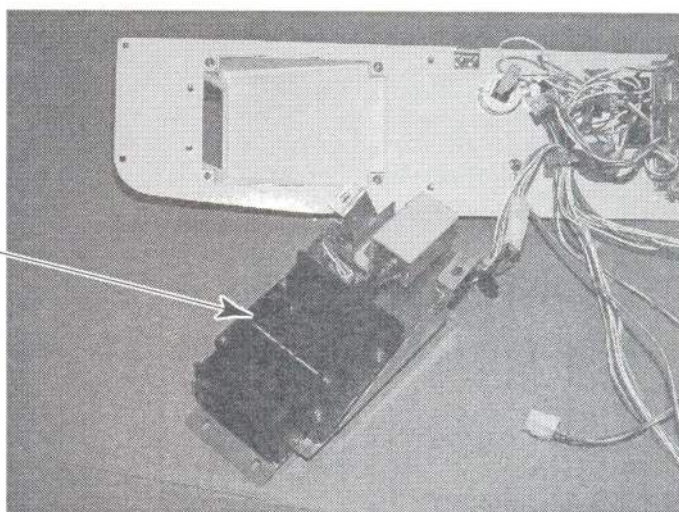


PHOTO 4. 1 b

- ④ Remove the 4 flange nuts and pull out the IC card RW unit. Leave the wiring connected at this time.

- ⑤ Undo the 4 screws and remove the RW Guide Upper.

RW GUIDE UPPER

SCREW (4)  
4×10, w/flat & spring washers

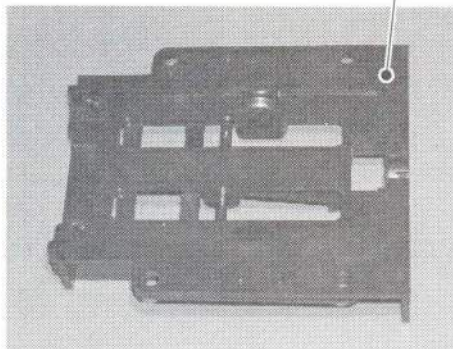
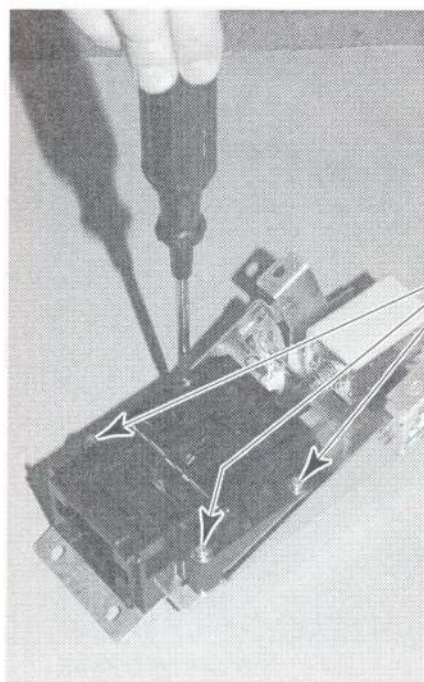


PHOTO 4. 1 c



- ⑥ Wipe any dirt off the surfaces that touch the IC cards. Clear any foreign matter that has collected in the unit. The roller is a small component, so take the same precautions that you would for the screws to avoid losing it.

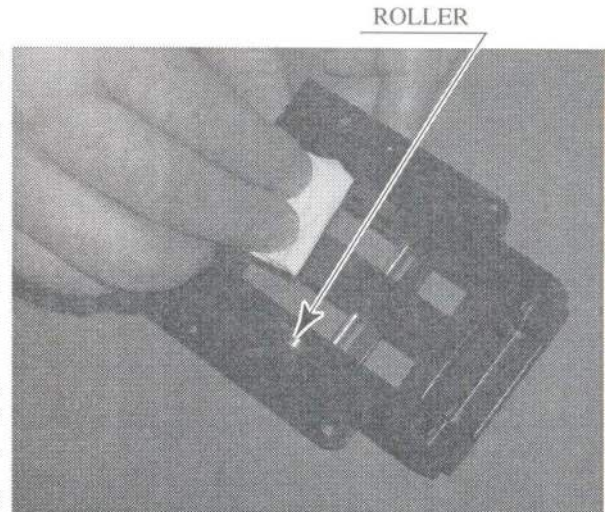
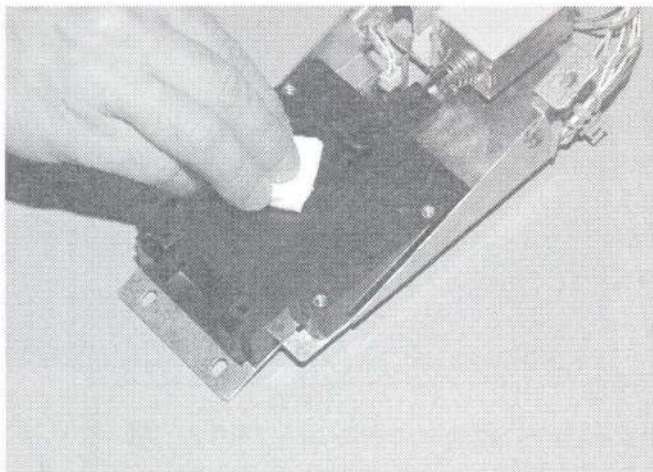


PHOTO 4. 1 d

- ⑦ If you wipe the unit using a moist cloth, make sure that the unit is completely dry.
- ⑧ When you are reattaching the RW guide upper, attach the lock arm to the RW guide upper.

LOCK ARM

RW GUIDE UPPER

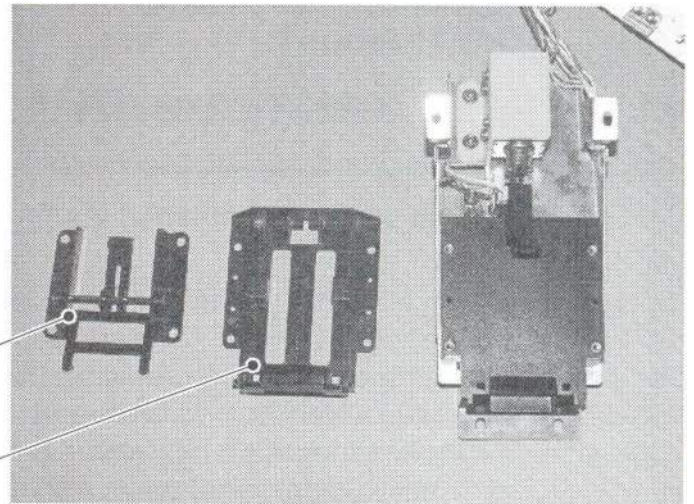


PHOTO 4. 1 e

- ⑨ Attach the RW guide upper by inserting the push rod from the RW guide lower into the hole in the RW guide upper. Take care not to lose the roller at this time.

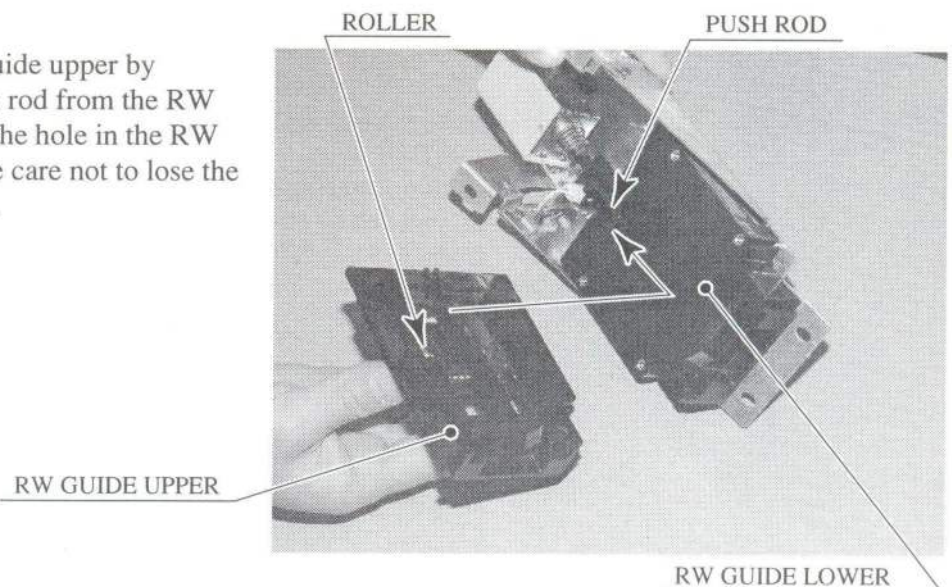


PHOTO 4. 1 f

⑩ Attach the lock arm and secure it with 4 screws. Take note of the following points when you are attaching this component. Additionally, after attaching the lock arm, move the push rod with your hand to make sure that it works correctly and that the tab passes through the hole.

- Insert the lock arm into the lower side of the push rod.
- Hook the spring onto the rib.

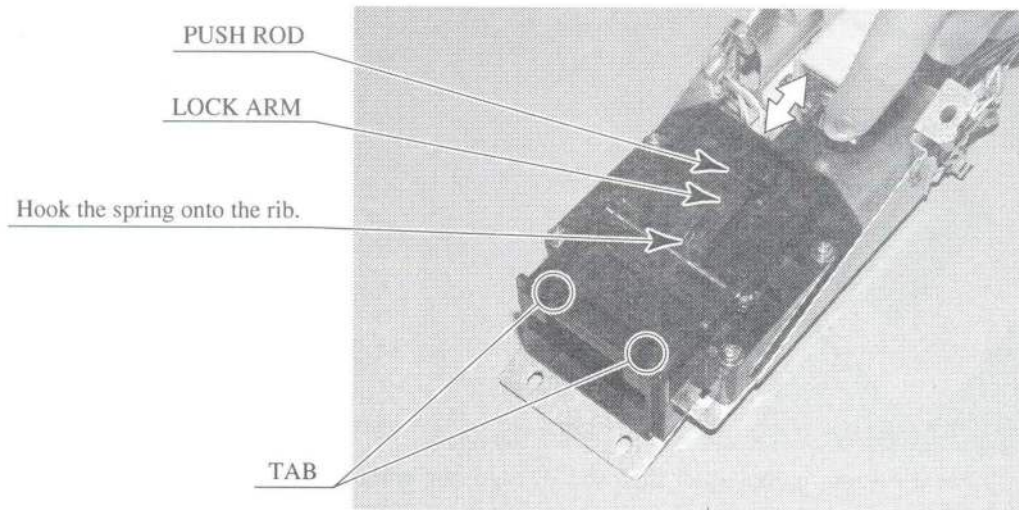


PHOTO 4. 1 g



## 4 — 2 FIXING JAMMED CARDS

If an IC card becomes jammed, push out the IC card using your fingertips through the square hold in the RW guide upper.

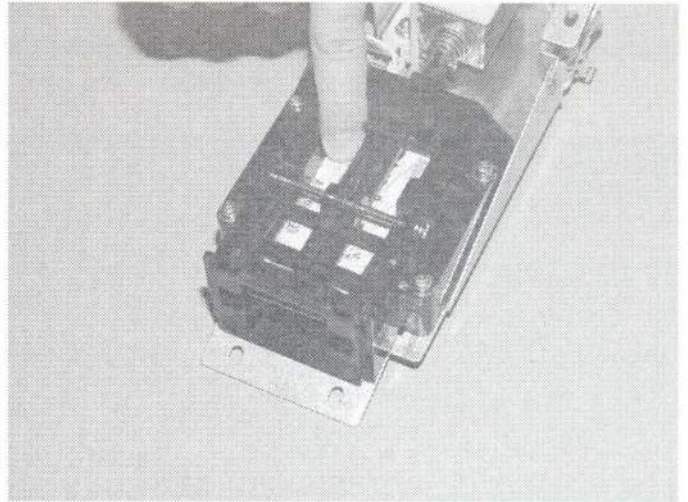


PHOTO 4.2

If an IC card becomes jammed, it may be due to one of the following various reasons.

- Foreign matter other than the IC card has entered the slot.
- A thread or other foreign matter is stuck to the IC card.
- 3 or more cards have been inserted at once.

If there is a sticker attached to the IC card, although it may be possible to continue to play games normally, the card may become jammed when 2 cards are inserted together, such as when renewing the card.

After removing the jammed card, make sure you find the cause of the jam.

### 4 — 3 REPLACING THE CARD READER/WRITER

If the RW unit or the IC card reader/writer fitted to the RW unit malfunctions or becomes damaged, use the following procedure to remove and replace the card reader/writer.

- ① Unplug the connector.

Unplug the connector.

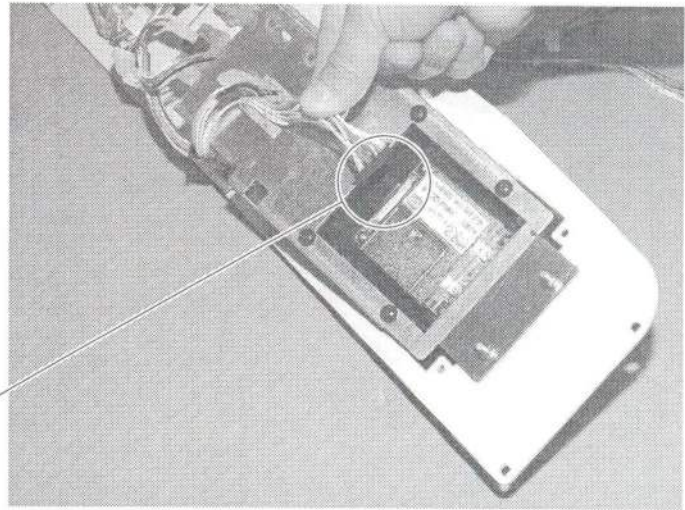
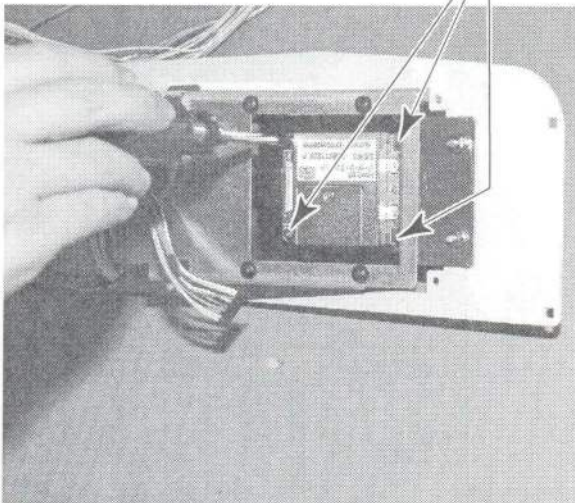


PHOTO 4.3 a

- ② Undo the 4 tapping screws and remove the IC card reader/writer.

TAPPING SCREW (4)  
3×6



IC CARD RW  
601-11132

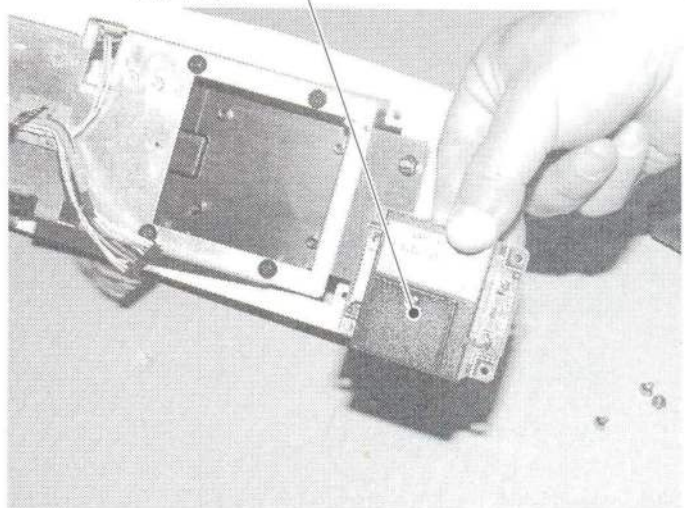


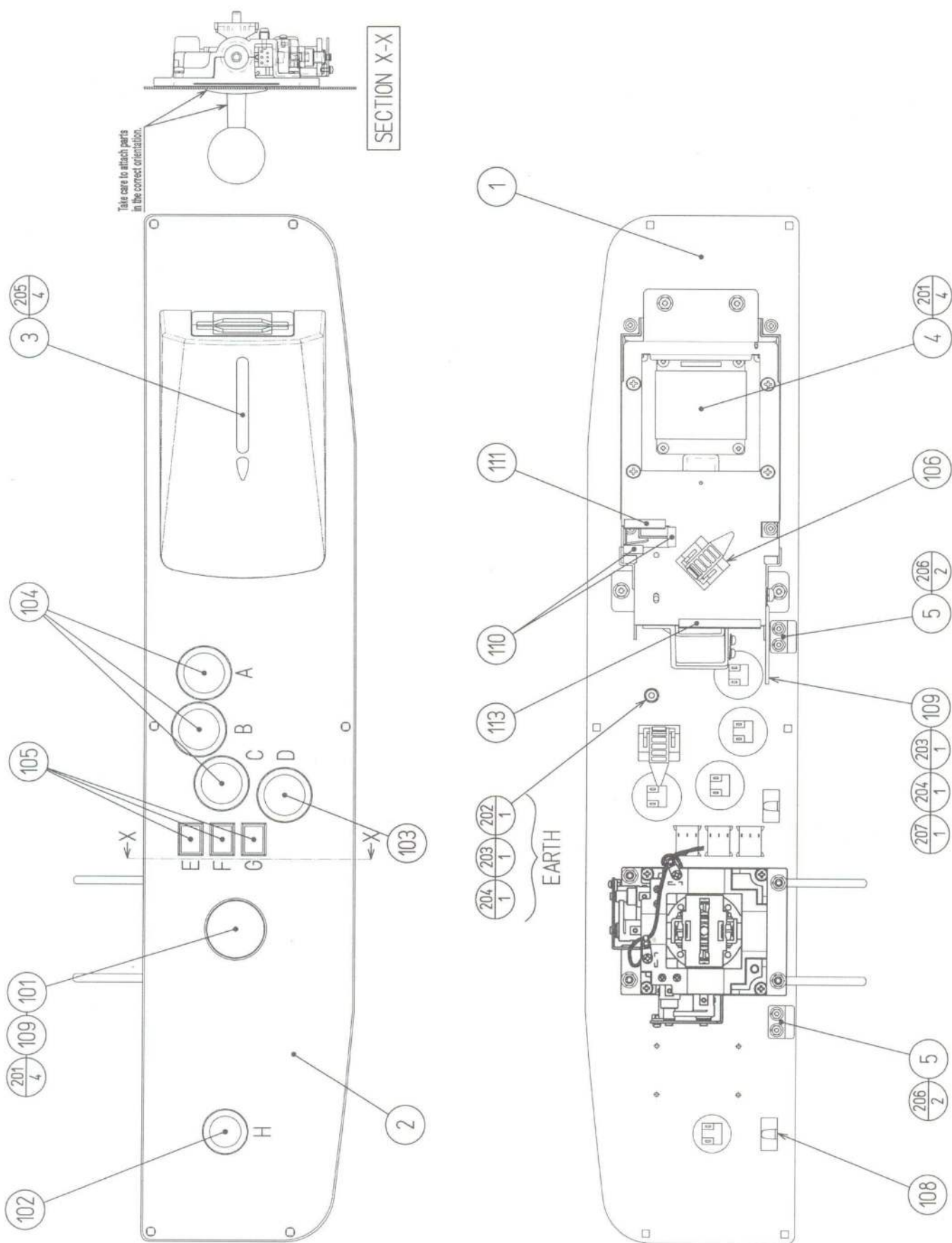
PHOTO 4.3 b



## 5. PARTS LIST

① ASSY CONT PNL 1A4B3B W/CARD RW (NOM-20002)

(D-1/2)



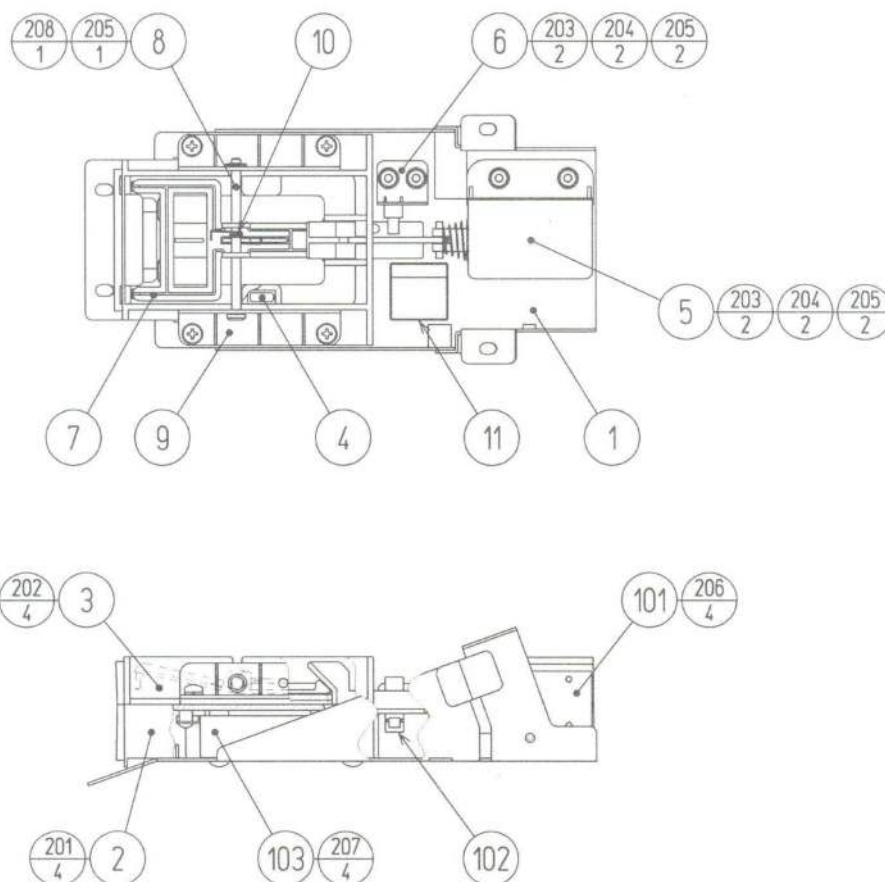
① ASSY CONT PNL 1A4B3B W/CARD RW (NOM-20002)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	NOM-2007	CONT PNL BASE 1A4B3B RW	
2	NOM-2008	CONT PNL PLATE 1A4B3B RW	
3	NOM-2004	RW COVER	
4	NOM-2100	IC CARD RW UNIT	
5	NOM-2006	PLATE HOOK	
101	610-0698-91-01	ASSY ANALOG JOY 25 WHITE	
102	509-5756-01	SW PB D24 YELLOW	
103	509-5755-08	SW PB D30 VERMILION	
104	509-5755-09	SW PB D30 WHITE	
105	509-6054-01	SW PB FHM-1WXXCB3S2011	
106	280-5277	CORD CLAMP 18	
107	601-0460	PLASTIC TIE BELT 100 MM	
108	280-5275-SR10	CORD CLAMP SR10	
109	280-0419	HARNESS LUG	
110	601-6231-B012	EDGING NEW TYPE (L=12MM)	
111	601-6231-B025	EDGING NEW TYPE	
112	310-5029-D20	SUMITUBE F D 20MM	
113	601-6231-B050	EDGING NEW TYPE	
114	270-5116	FERRITE CORE TDK ZCAT2032-0930	
201	050-F00400	FLG NUT M4	
202	050-H00400	HEX NUT M4	
203	060-S00400	SPR WSHR M4	
204	060-F00400	FLT WSHR M4	
205	000-P00308-W	M SCR PH W/FS M3 × 8	
206	050-F00300	FLG NUT M3	
207	000-P00408	M SCR PH M4 × 8	
301	600-6227-09	WIRE HARN CONT PNL EARTH	
302	600-7324-05	WH SERIAL CONV BD & R/W	
303	600-7324-12	WH CONT PNL 4B3B	
304	600-7324-13	WH EXT CONTROLLER	



## ② IC CARD RW UNIT (NOM-2100)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	NOM-2101	RW BASE	
2	TBA-1662	RW GUIDE LOWER	
3	TBA-1663	RW GUIDE UPPER	
4	CFB-1664	ROLLER	
5	CFB-1665	SOL BASE	
6	CFB-1666	SENSOR BRKT	
7	TBA-1667	LOCK ARM	
8	TBA-1668	SHAFT	
9	TBA-1669	SHAFT GUIDE	
10	125-5225	TOR SPRING LOCK ARM	
11	440-WS0179-JP	STICKER W HI TEMP M	
101	610-0685	SOLENOID UNIT	
102	370-5161	PHOTO INTERRUPTER GP1A71A	
103	601-11132	IC CARD READER HW210 (TAMURA)	
201	FAS-120001	TAP SCR #2 TH BLK 4 × 10	
202	000-P00410-W	M SCR PH W/FS M4 × 10	
203	050-H00400	HEX NUT M4	
204	060-S00400	SPR WSHR M4	
205	060-F00400	FLT WSHR M4	
206	000-P00308-W	M SCR PH W/FS M3 × 8	
207	FAS-120017	TAP SCR #2 TH 3 × 6	
208	065-E00300	E RING 3MM	





## 6. WIRE COLOR CODE TABLE

THE WIRE COLOR CODE is as follow:

A	PINK
B	SKY BLUE
C	BROWN
D	PURPLE
E	LIGHT GREEN

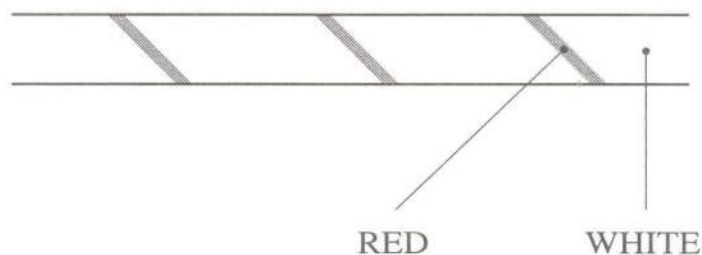
Wires other than those of any of the above 5 single colors will be displayed by 2 alphanumeric characters.

1	RED
2	BLUE
3	YELLOW
4	GREEN
5	WHITE
7	ORANGE
8	BLACK
9	GRAY

If the right-hand side numeral of the code is 0, then the wire will be of a single color shown by the left-hand side numeral (see the above).

Note 1: If the right-hand side alphanumeric is not 0, that particular wire has a spiral color code. The left-hand side character shows the base color and the right-hand side one, the spiral color.

<Example> 51 ..... WHITE / RED



Note 2: The character following the wire color code indicates the size of the wire.

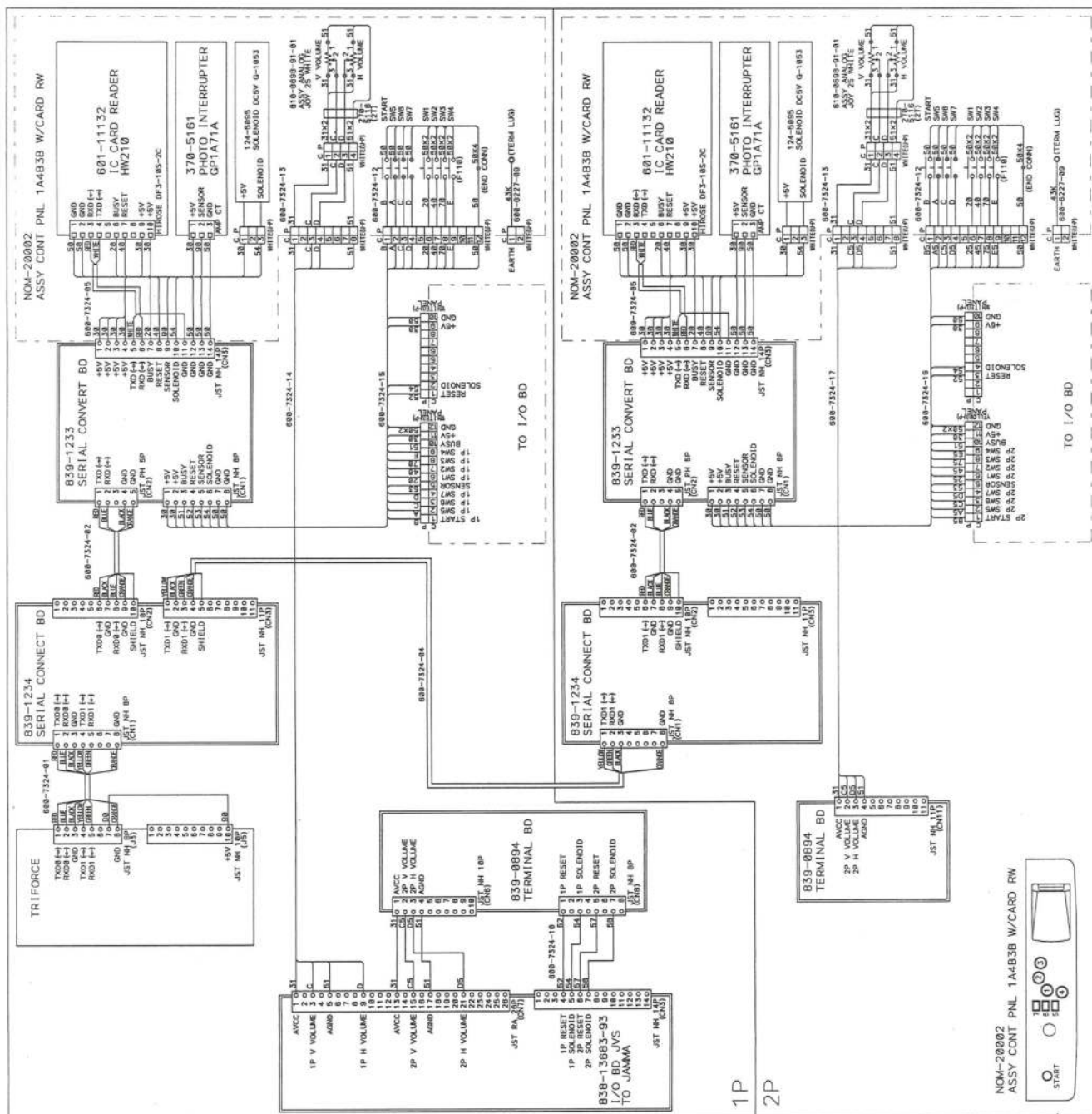
U:	AWG16
K:	AWG18
L:	AWG20
None:	AWG22





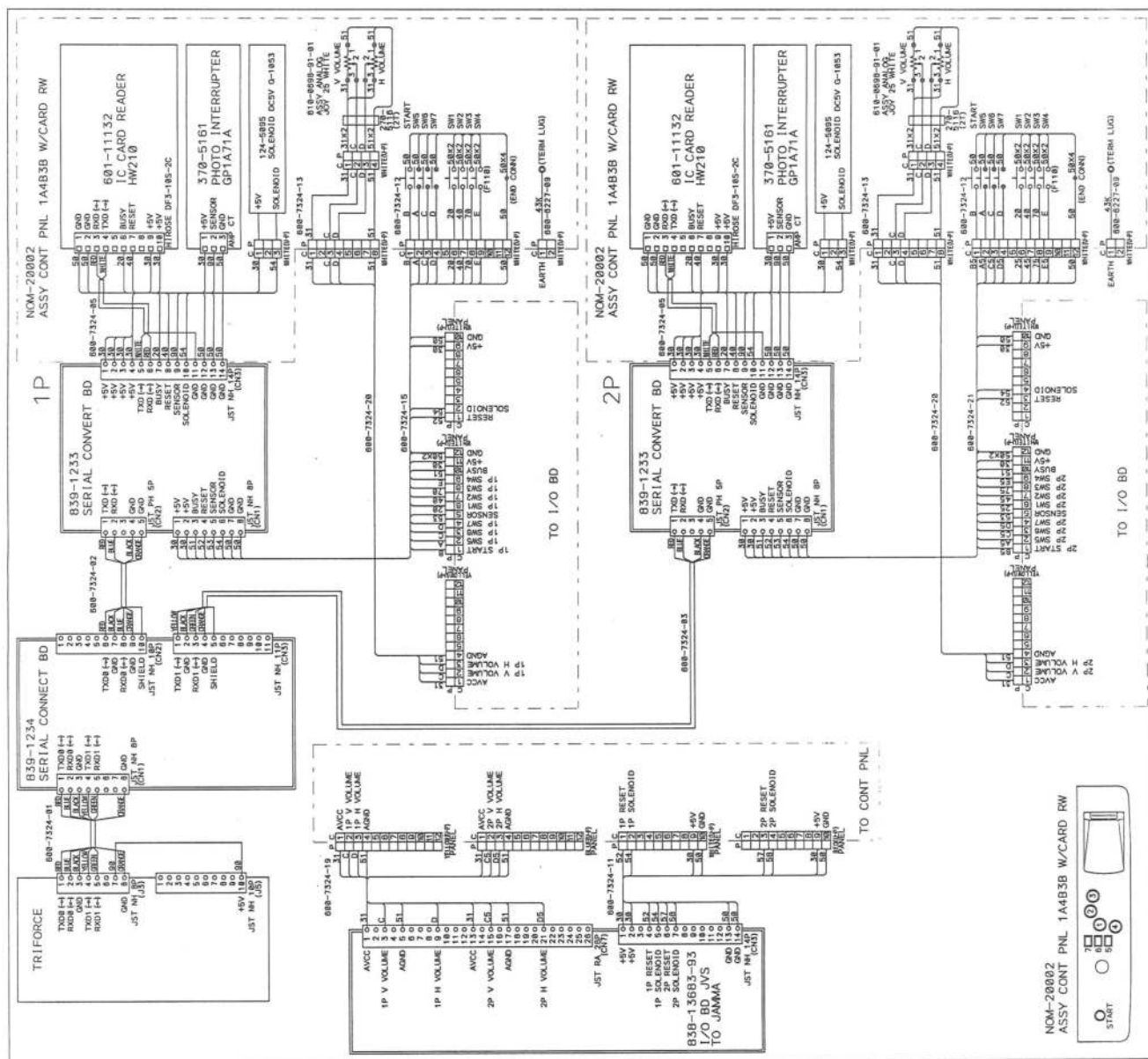






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