

2ND PRINTING OCT '02

SEGA®



TWIN TYPE
Owner's Manual



SEGA ENTERPRISES, INC. USA

MANUAL NO. 999-1488

VISIT OUR WEBSITE!

The screenshot shows a Mac OS X browser window displaying the SegaService.com website. The browser's address bar shows the URL <http://seuservice.com/>. The website's header features the 'SEGA SERVICE' logo in large, stylized blue letters. To the left of the logo is a small image of a Sega game box. Below the logo is a navigation menu with links for 'Bulletins', 'Darl's Office', 'Game Manuals', 'Search', and 'What's New'. On the left side of the page, there is a sidebar with a 'SEGA SERVICE' logo and a list of links: 'what's new', 'manuals', 'bulletins', 'assemblies', 'Search', 'bulletin Sign-up', 'staff', 'Darl's Office', 'tech service', and 'warranty policy'. Below these links is contact information for Sega Enterprises Inc., USA, including a phone number (415.701.8580) and a fax number (415.701.8594). A 'POWERED BY Mac OS X' logo is centered on the page. Below it is a horizontal menu of links: 'what's new', 'manuals', 'bulletins', 'assemblies', 'Search', 'staff', 'Darl's office', 'technical service', 'warranty', 'corporate info', 'plugins', and 'Non-framed page'. A message states: 'You will need the following items to view this page in its entirety.' Below this message are logos for 'Get Acrobat Reader' (All Platforms) and 'Microsoft Internet Explorer' (Windows and Macintosh).

Address: <http://seuservice.com/>

SEGA SERVICE

what's new
manuals
bulletins
assemblies

Search
bulletin Sign-up

staff
Darl's Office
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home page
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Sega Enterprises Inc.,
USA
Service Department
phone 415.701.8580
fax 415.701.8594

POWERED BY
Mac OS X

[what's new](#) | [manuals](#) | [bulletins](#) | [assemblies](#) | [Search](#) | [staff](#) | [Darl's office](#)
[technical service](#) | [warranty](#) | [corporate info](#) | [plugins](#) | [Non-framed page](#)

You will need the following items to view this page in its entirety.

Get Acrobat Reader
All Platforms

Microsoft Internet Explorer
Windows

Microsoft Internet Explorer
Macintosh

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 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 warning will cause a potentially hazardous situation which can result in death or serious injury.



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.

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



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

- **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, however, 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 w/monitor.)**
Some of the monitor (TV) parts are subject to high tension voltage. Even after running 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 w/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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BEFORE USING THE PRODUCT, BE SURE TO READ THE FOLLOWING:

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SPECIFICATIONS

Installation Space	: 74.3 inches width X 73 inches
Height	: 71.75 inches
Width	: 80 inches
Length	: 68 inches
Weight	: 1565 lbs
Power, maximum current	: 1200 W 10 A (AC 120V 60 Hz AREA)
MONITOR	: 29 inch supplied by Sanwa

INTRODUCTION OF THE OWNERS MANUAL

This Owner's Manual is intended to provide detailed descriptions together with all the necessary information covering the general operation of electronic assemblies, electromechanicals, servicing control, spare parts, etc. as regards the product, **SEGA INITIAL "D" TYPE TWIN.**

This manual is intended for the owners, personnel and managers in charge of operation of the product. Operate the product after carefully reading and sufficiently understanding the instructions. If the product fails to function satisfactorily, non-technical personnel should under no circumstances touch the internal system. Please contact where the product was purchased from.

Use of this product is unlikely to cause physical injuries or damages to property. However, where special attention is required this is indicated by a thick line, the word "IMPORTANT" and its sign in this manual.

Indicates that mishandling the product by disregarding this display can cause the product's intrinsic performance not to be obtained, resulting in malfunctioning.

SEGA ENTERPRISES, INC. (U.S.A.)/CUSTOMER SERVICE
45133 Industrial Drive, Fremont, California 94538, U.S.A.
Phone : (415) 701-6580
Fax : (415) 701-6594

DEFINITION OF LOCATION MAINTENANCE MAN AND SERVICEMAN



Non-technical personnel who do not have technical knowledge and expertise should refrain from performing such work that this manual requires the location's maintenance man or a serviceman to carry out, or work which is not explained in this manual. Failing to comply with this instruction can cause a severe accident such as electric shock.

Ensure that parts replacement, servicing & inspections, and troubleshooting are performed by the location's maintenance man or the serviceman. It is instructed herein that particularly hazardous work should be performed by the serviceman who has technical expertise and knowledge.

The location's maintenance man and serviceman are herein defined as follows:

"Location's Maintenance Man" :

Those who have experience in the maintenance of amusement equipment and vending machines, etc., and also participate in the servicing and control of the equipment through such routine work as equipment assembly and installation, servicing and inspections, replacement of units and consumables, etc. within the Amusement Facilities and or locations under the management of the Owner and Owner's Operators of the product.

Activities of Location's Maintenance Man :

Assembly & installation, servicing & inspections, and replacement of units & consumables as regards amusement equipment, vending machines, etc.

Serviceman :

Those who participate in the designing, manufacturing, inspections and maintenance service of the equipment at an amusement equipment manufacturer.

Those who have technical expertise equivalent to that of technical high school graduates as regards electricity, electronics and or mechanical engineering, and daily take part in the servicing & control and repair of amusement equipment.

Serviceman's Activities :

Assembly & installation and repair & adjustments of electrical, electronic and mechanical parts of amusement equipment and vending machines.

LISTED



5K92

AMUSEMENT MACHINE

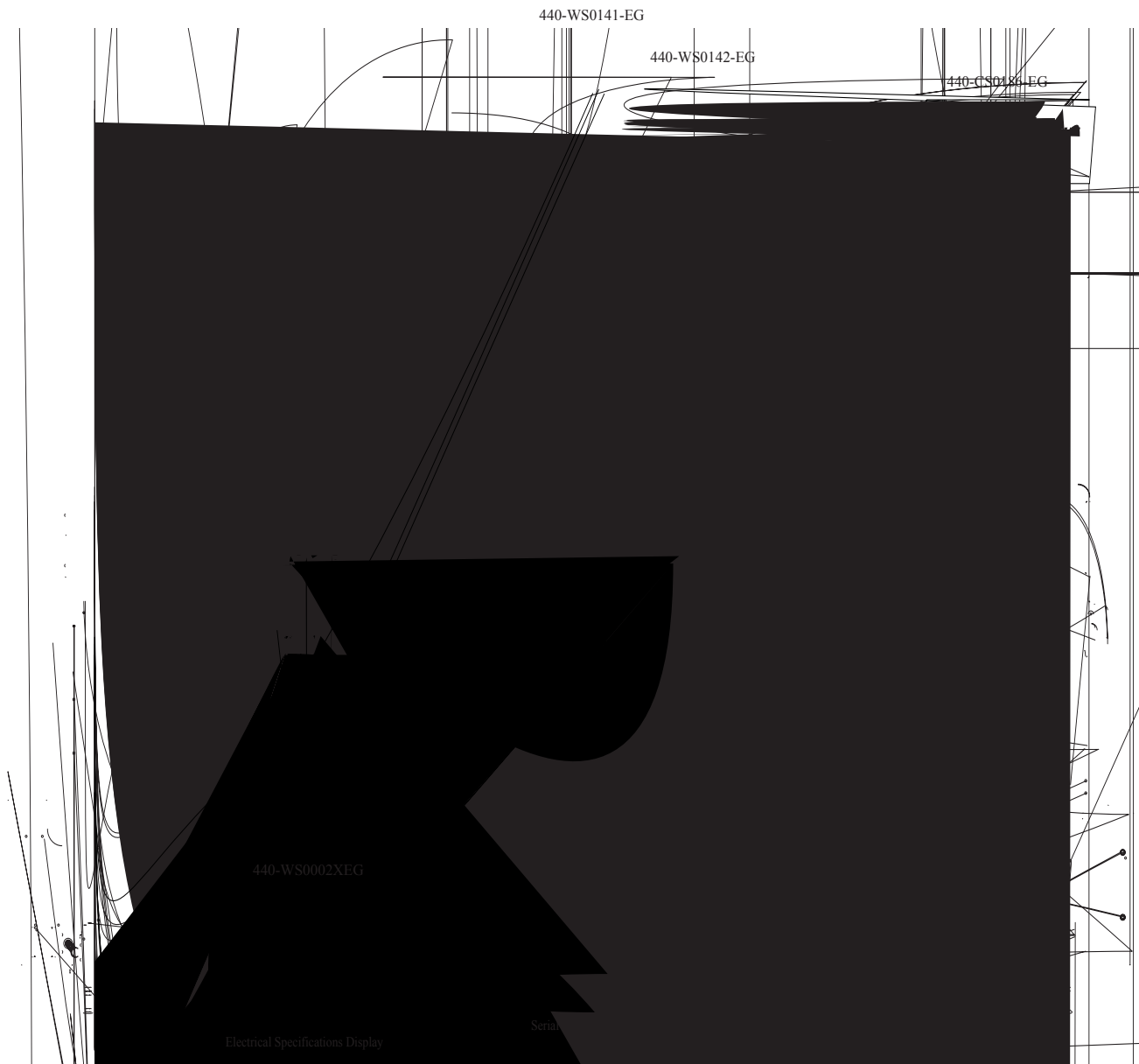
CONCERNING THE STICKER DISPLAY

SEGA product has Stickers describing the product manufacture No. (Serial No.) and Electrical Specifications. Also it has a Sticker describing where to contact for repair and for purchasing parts.

When inquiring about or asking for repair, mention the Serial No. and Name of Machine indicated on the Sticker. The Serial No. indicates the product register. Identical machines could have different parts depending on the date of production. Also, improvements and modifications might have been made after the publication of this Manual. In order to meet the above situations, mention the Serial No. when contacting the applicable places.

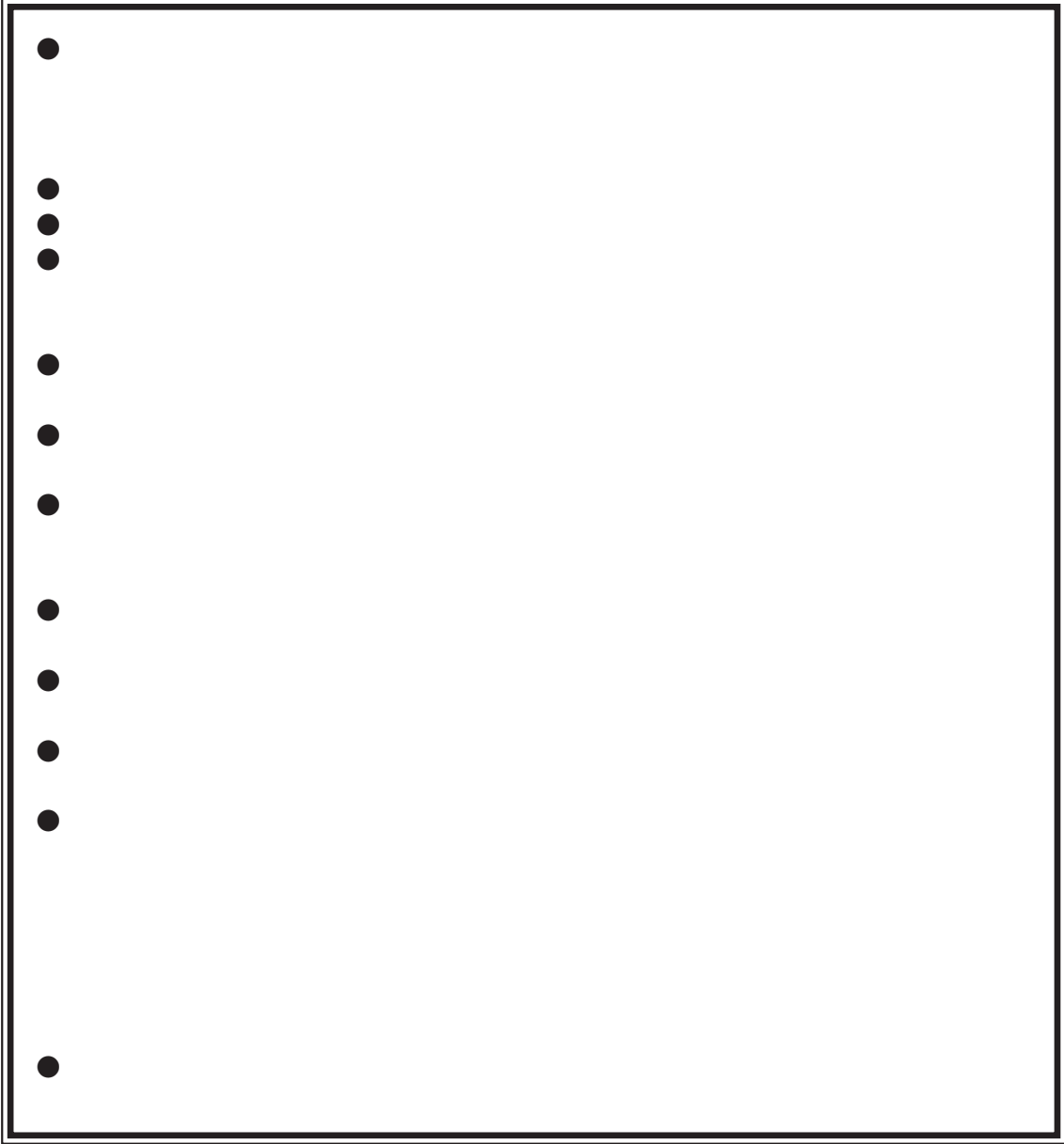
CONCERNING WARNING DISPLAYS

SEGA product has warning displays on Stickers, Labels and or printed instructions adhered / attached to or incorporated in the places where a potentially hazardous situation can arise. The warning displays are intended for accident prevention for the customers and for avoiding hazardous situation relating to maintenance and servicing work. There are some portions in the Cabinet, which are subject to high tension voltage, etc. where accidents can be caused merely by touching. When performing the servicing work, be very careful of the warning displays. Especially, any complex repair and replacement work not mentioned herein, should be performed by those technical personnel who have knowledge of electricity and technical expertise. For the prevention of accidents, caution any customer whose act runs counter to the warnings, as to the effect that he must stop the act.



* NOTE: ILLUSTRATIONS MAY DIFFER FROM ACTUAL PRODUCT

30" J C P F N K P I " R T G E C W V K Q P U





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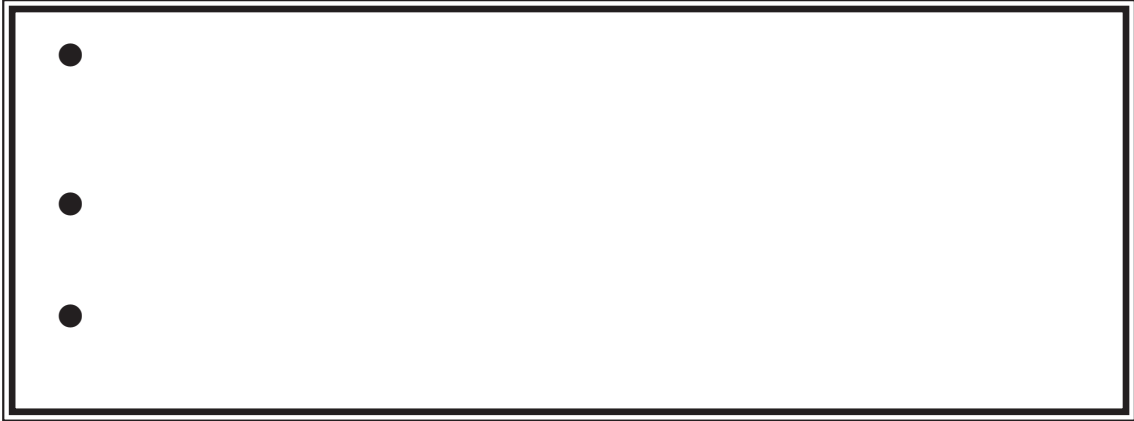
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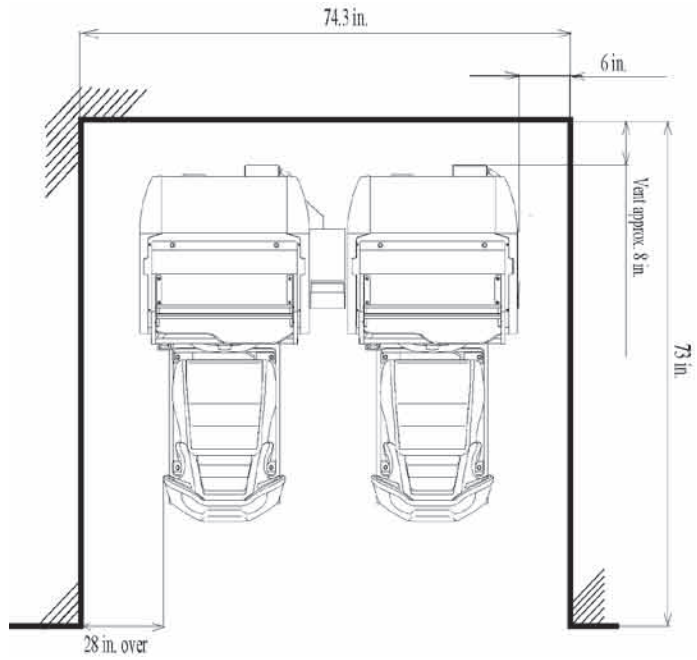


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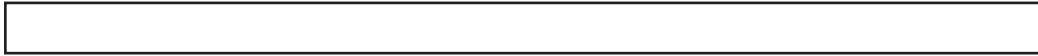
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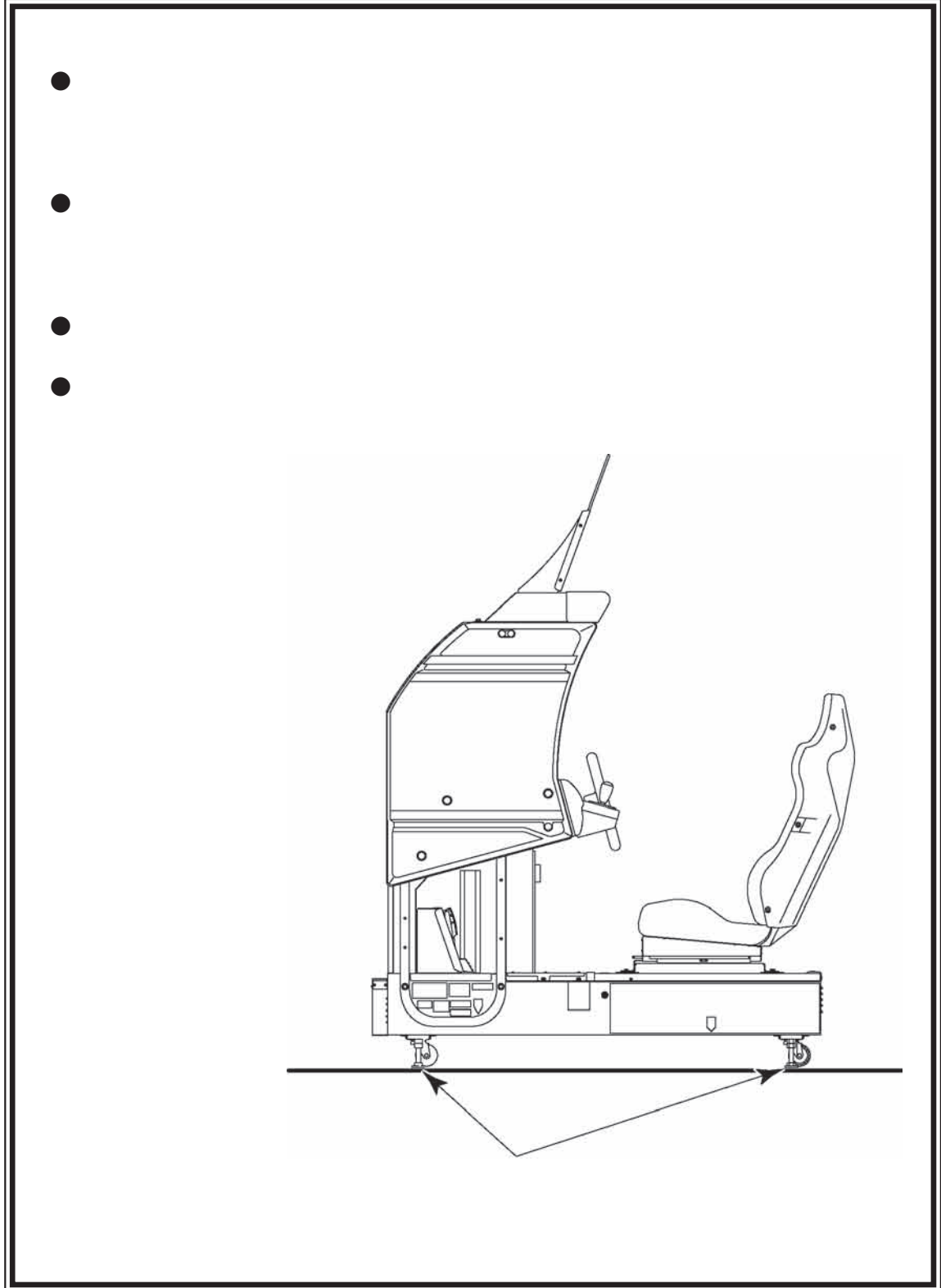
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УСТРОЙСТВО





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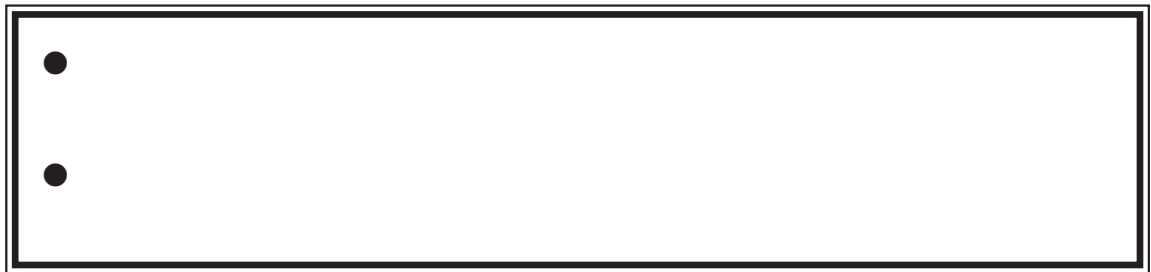
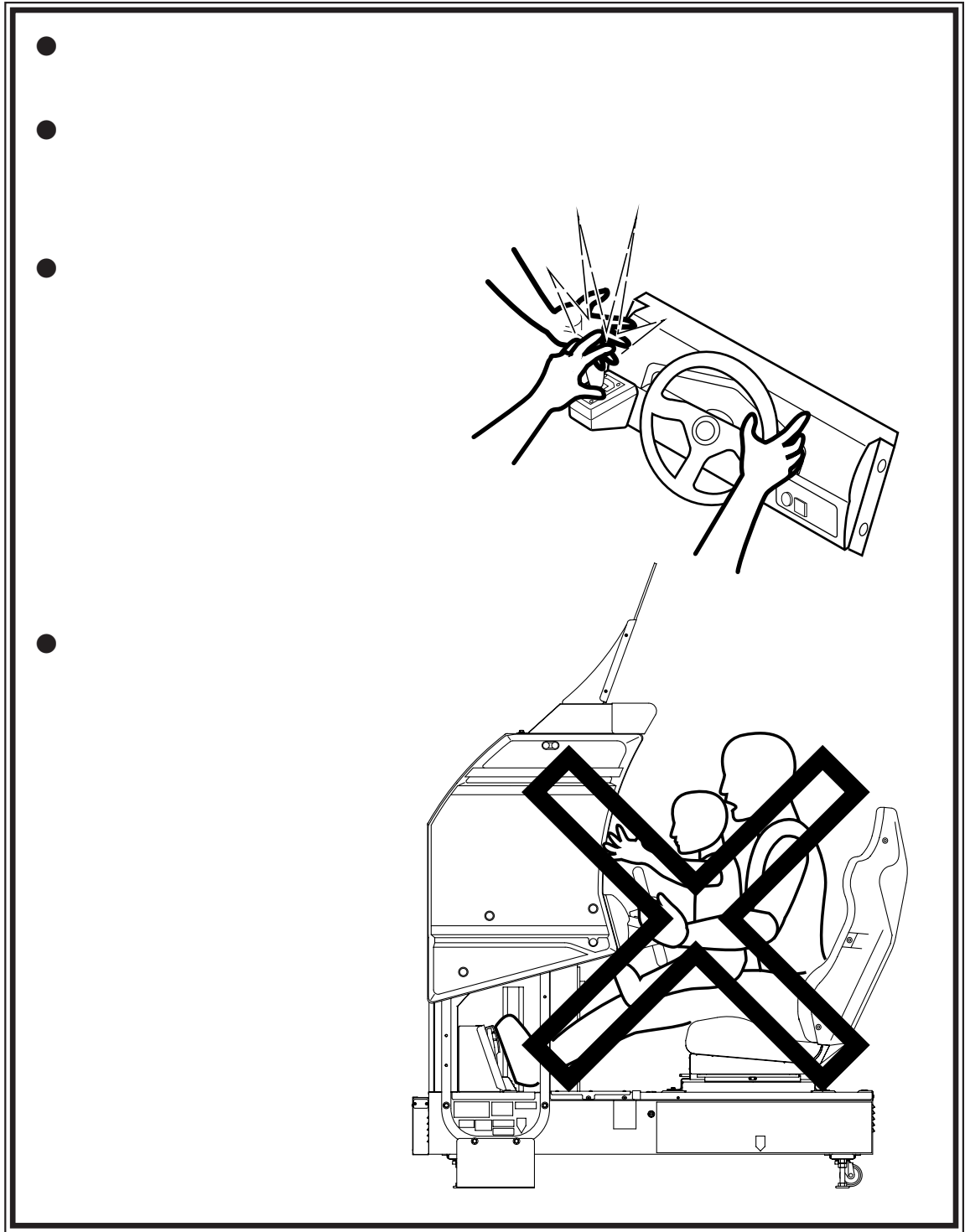
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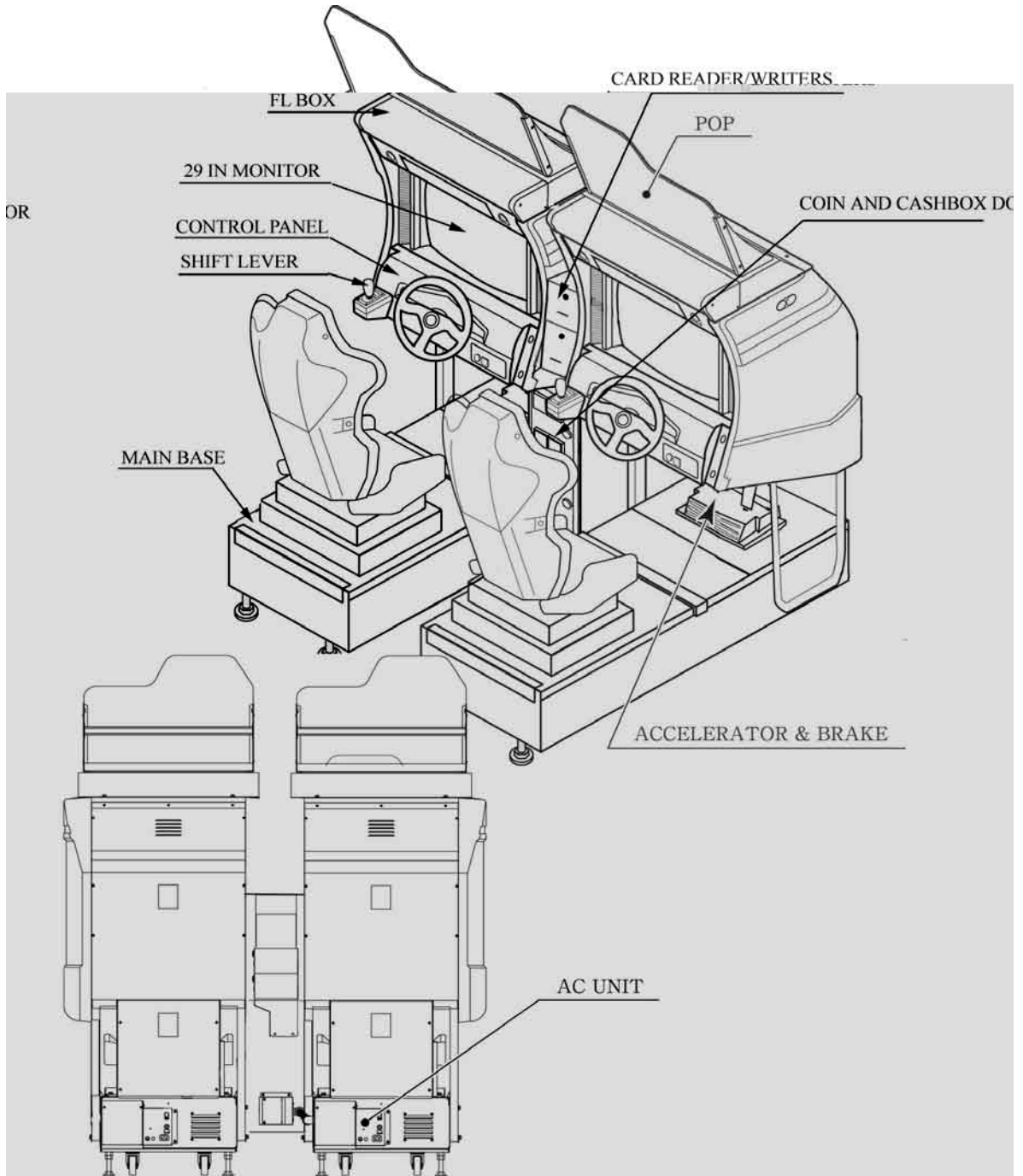
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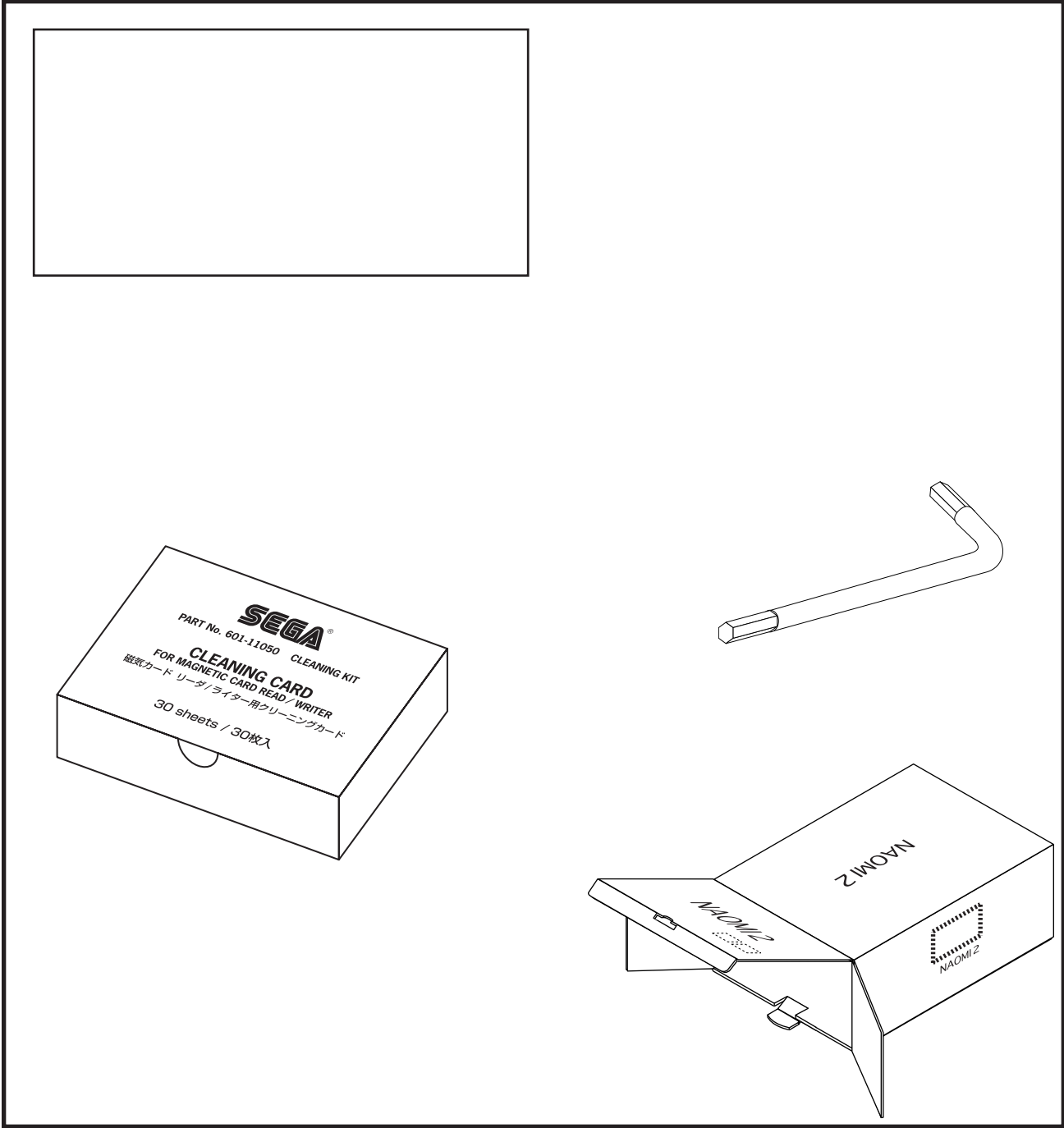
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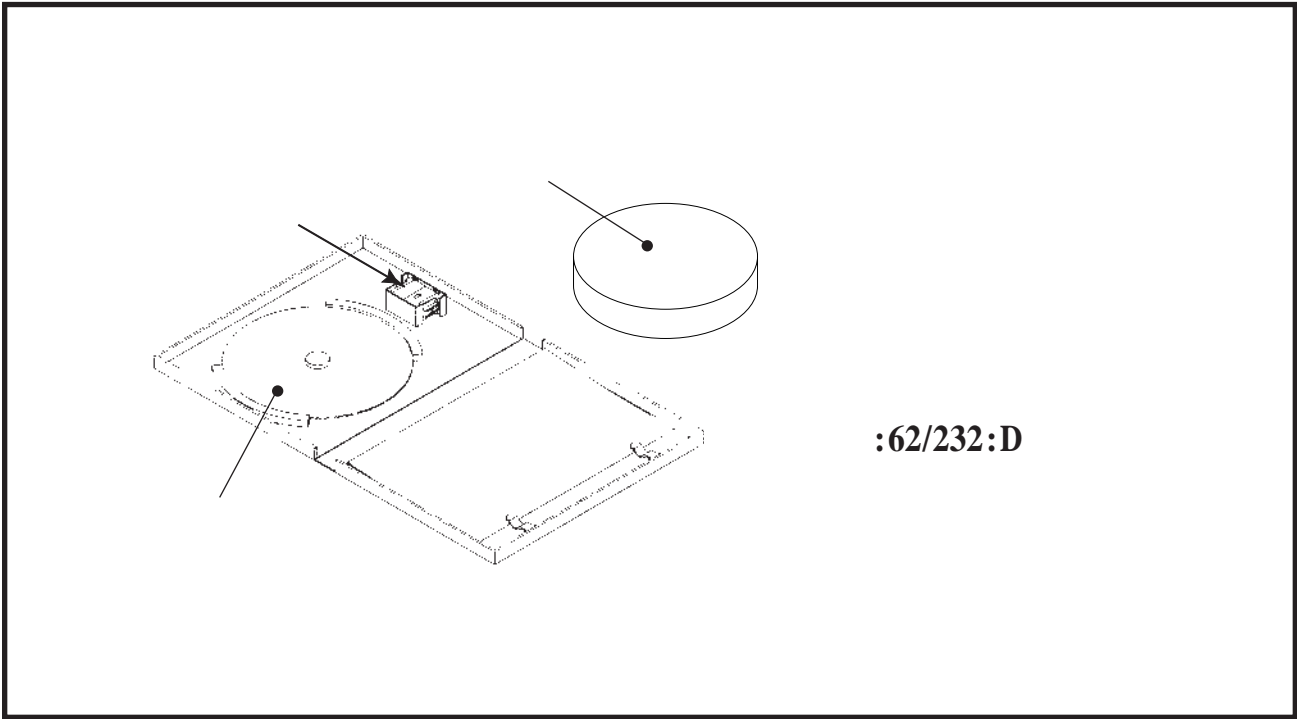
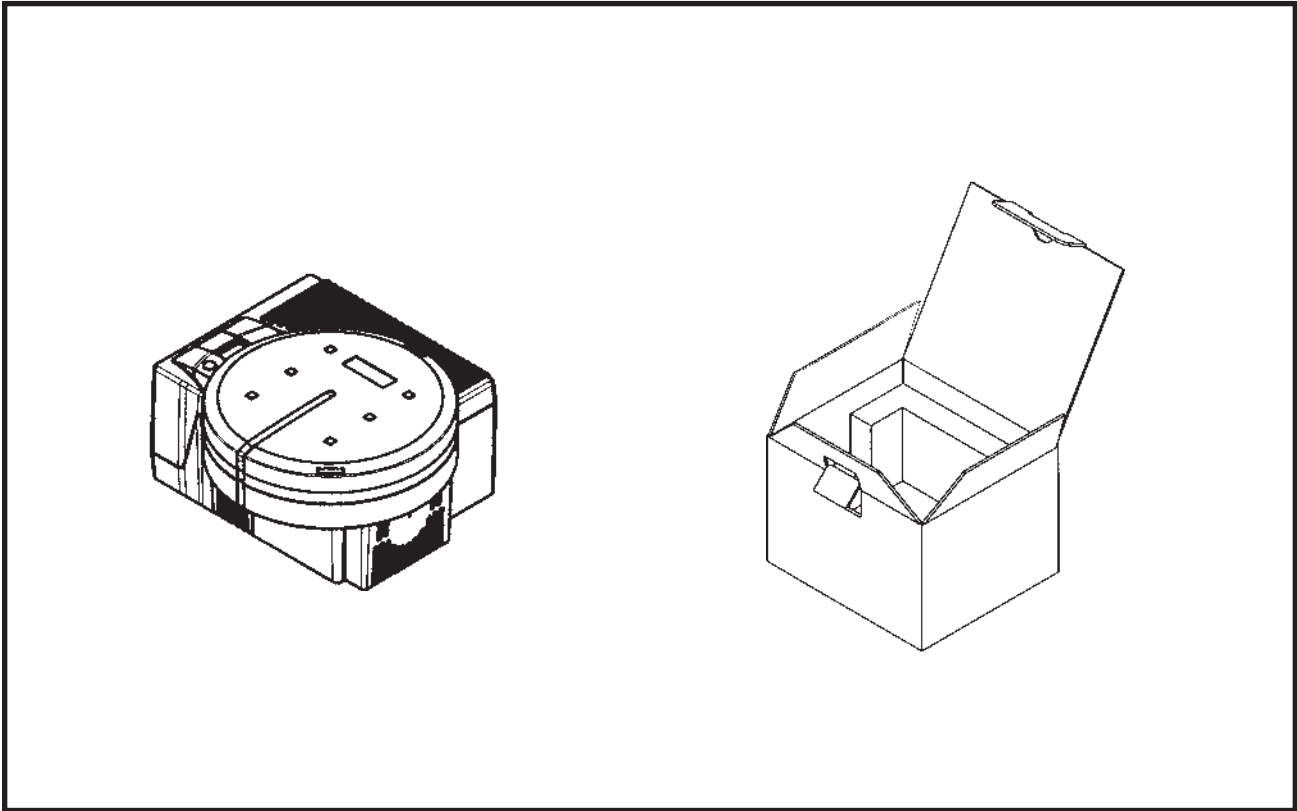


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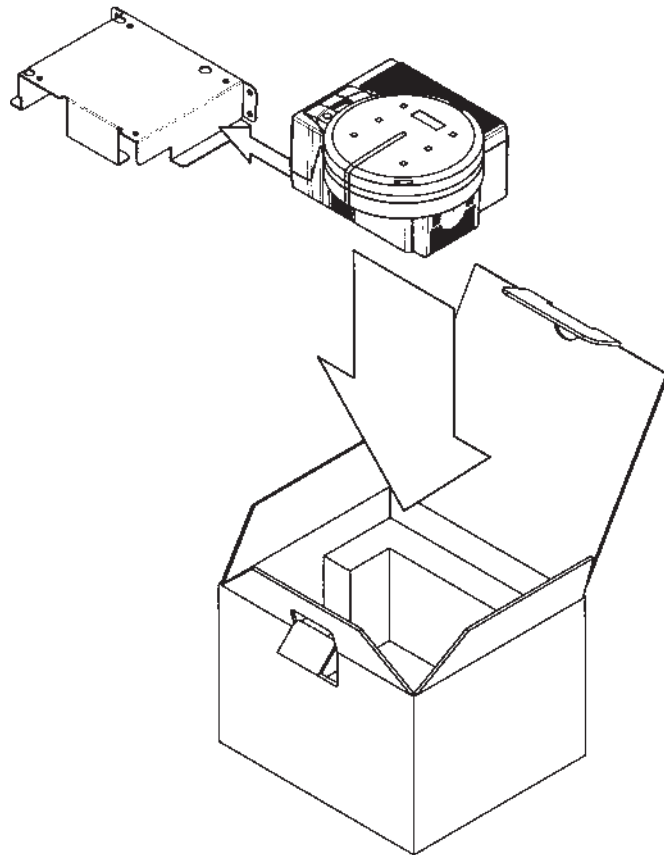
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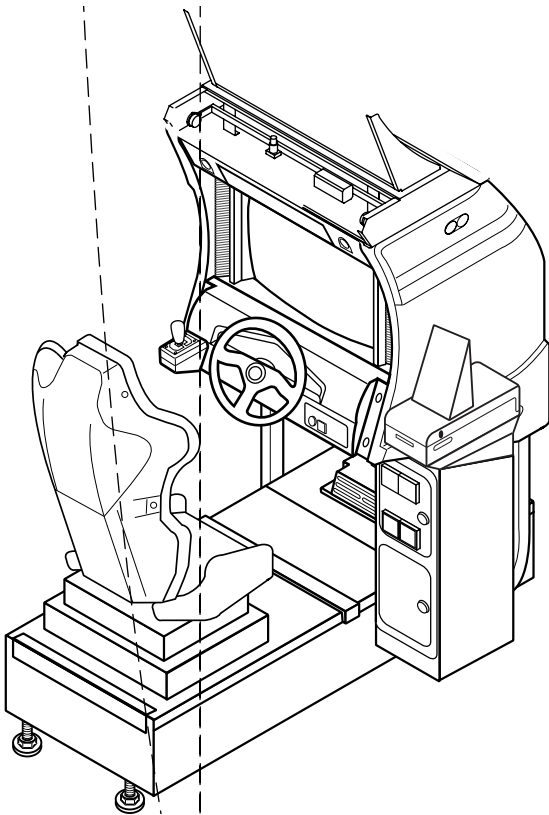
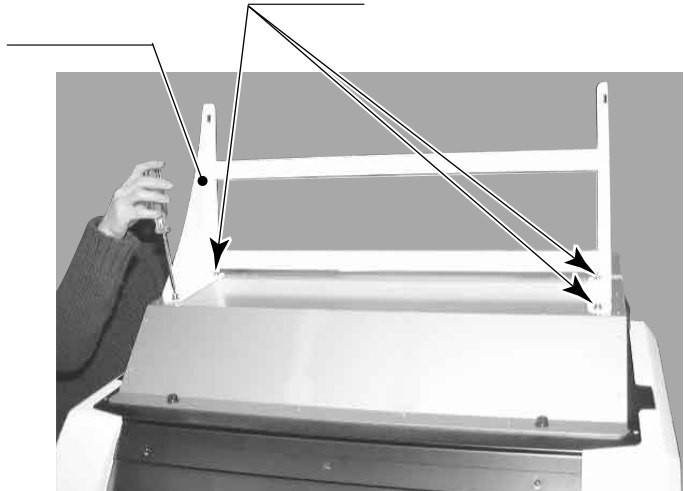
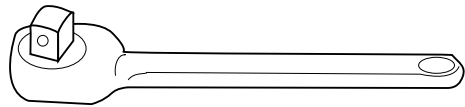
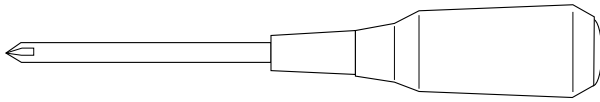
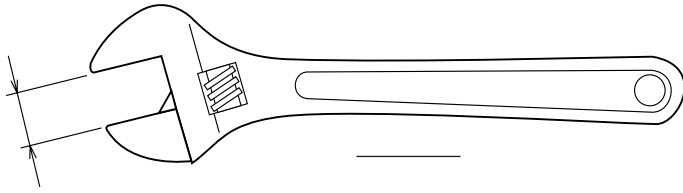
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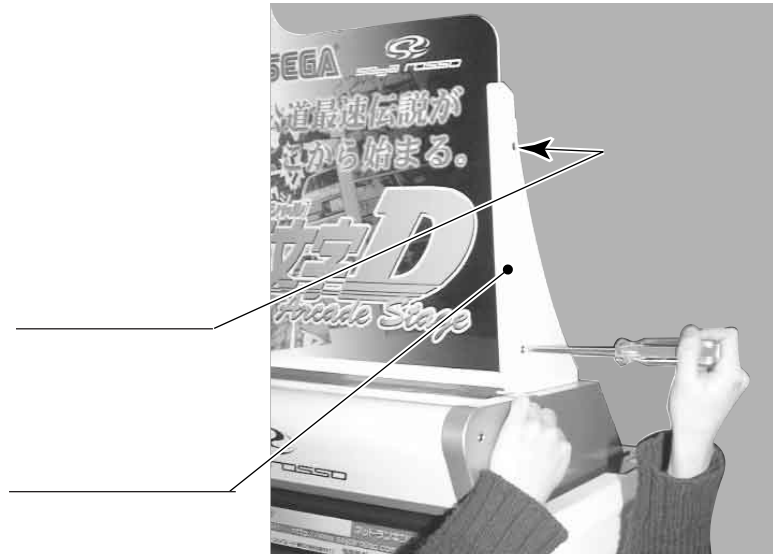
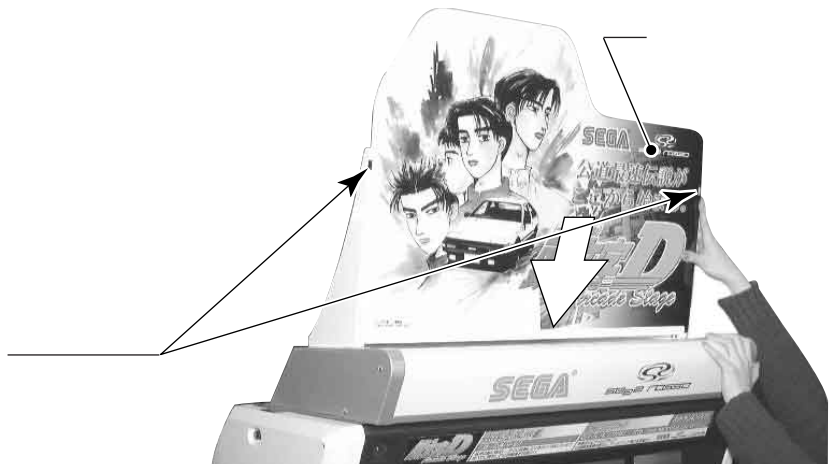


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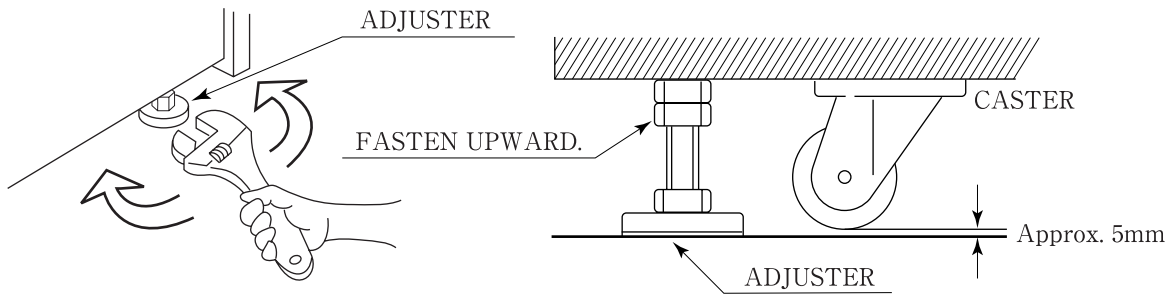
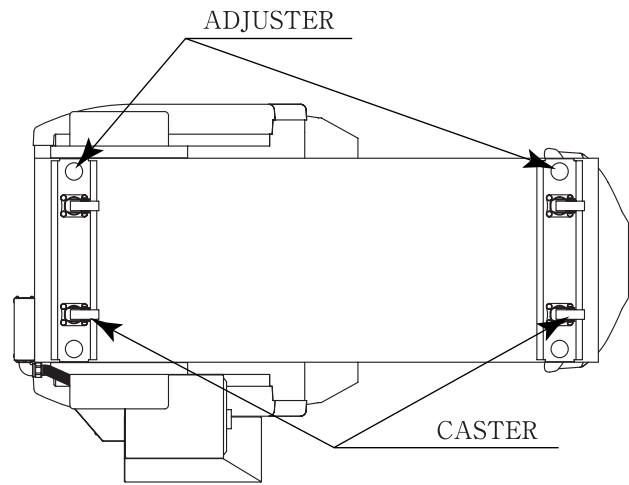
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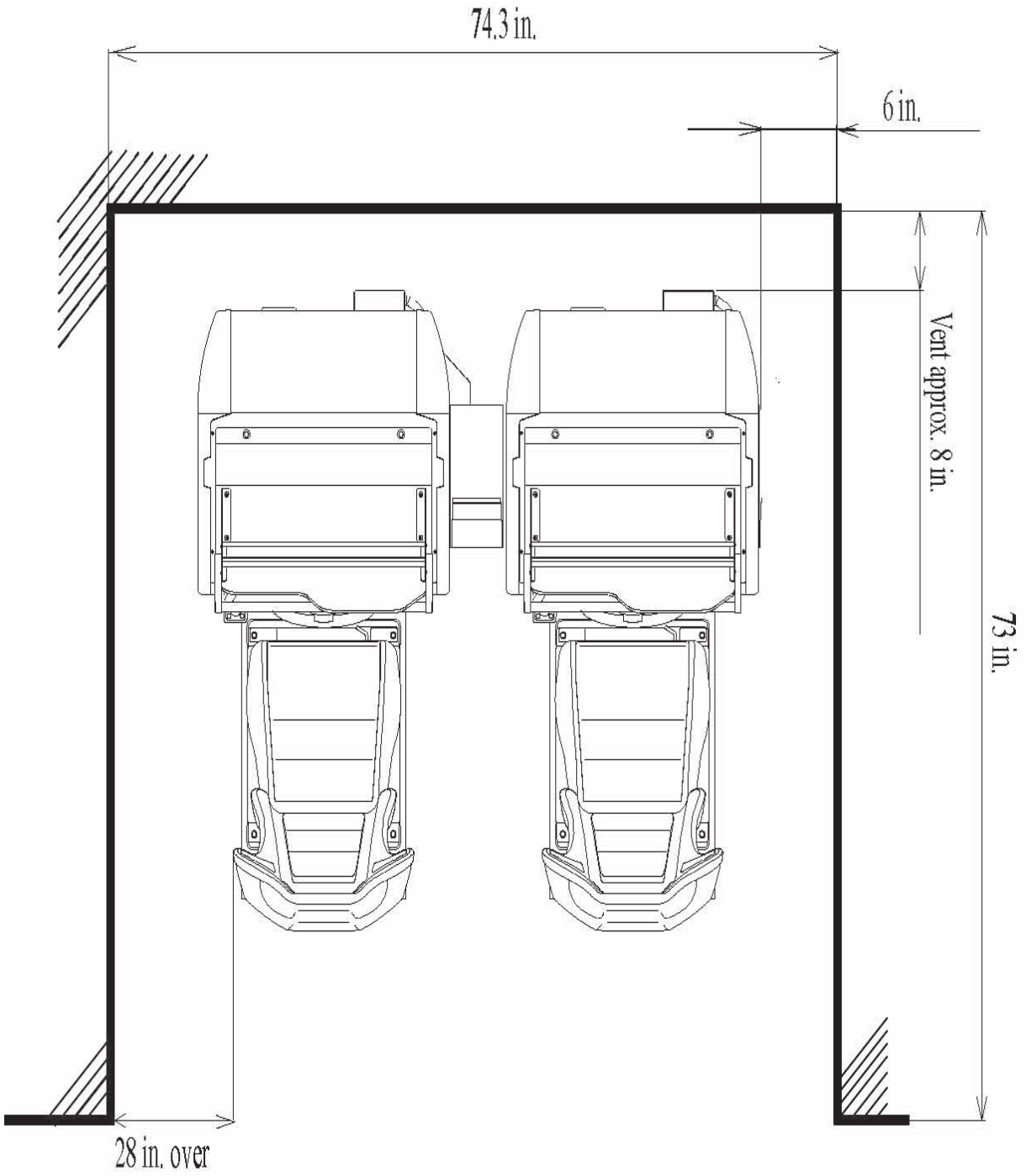






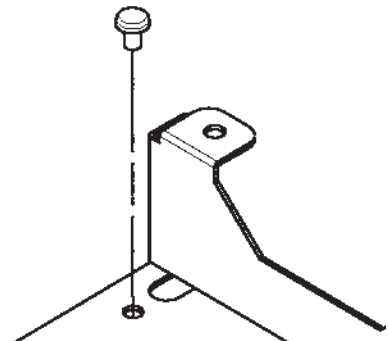
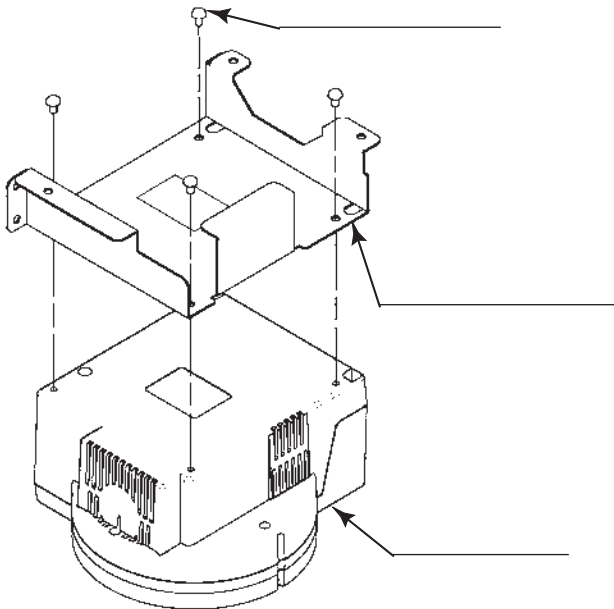
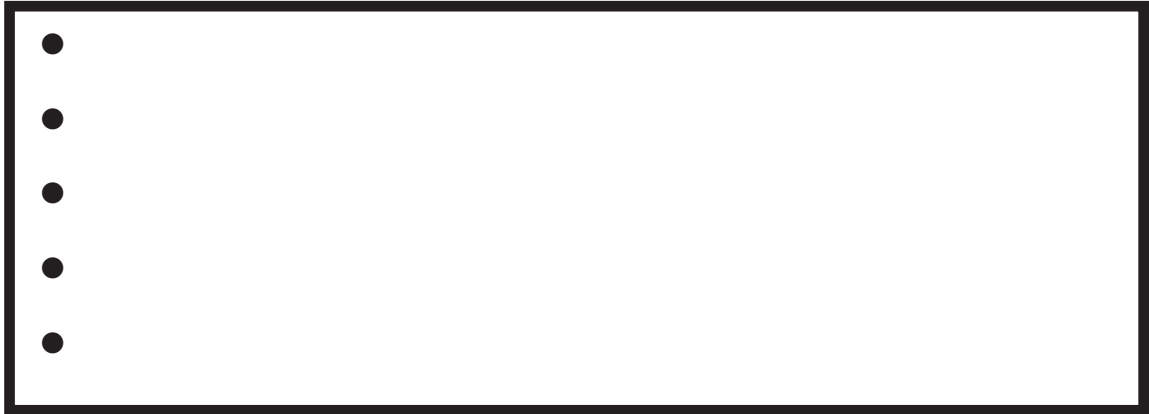
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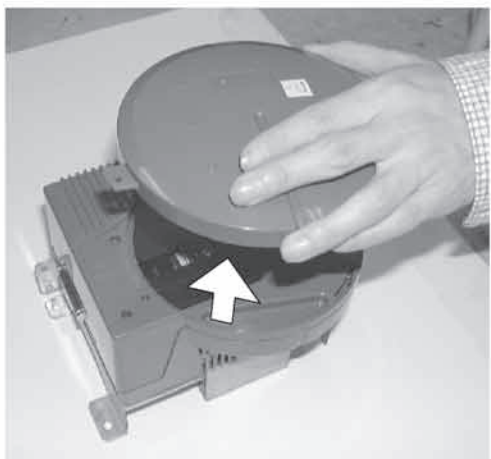
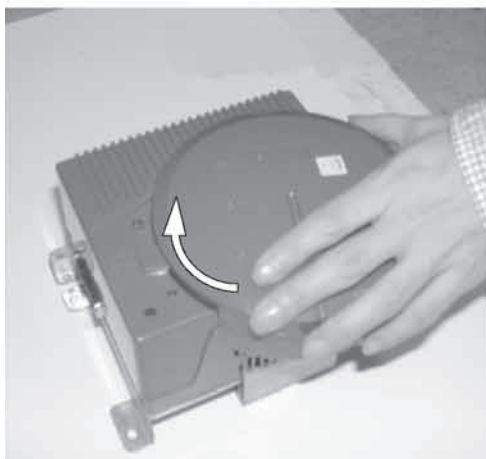
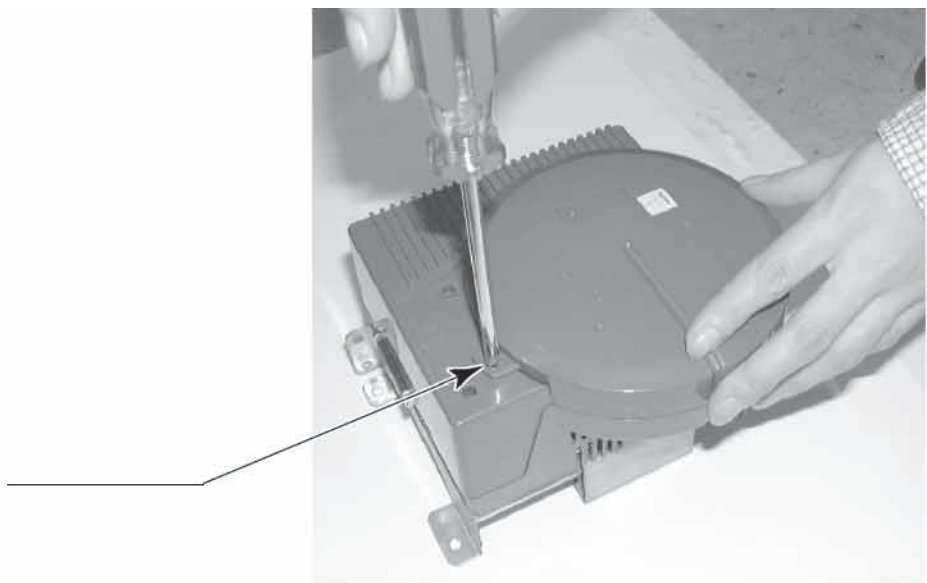




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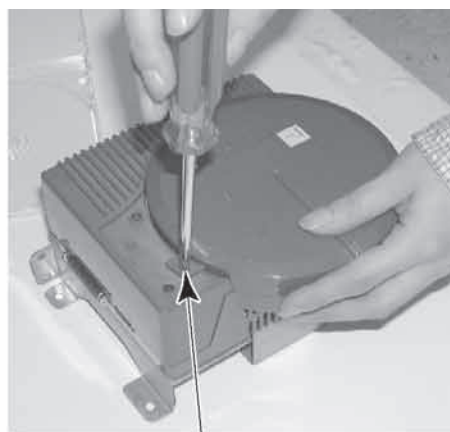


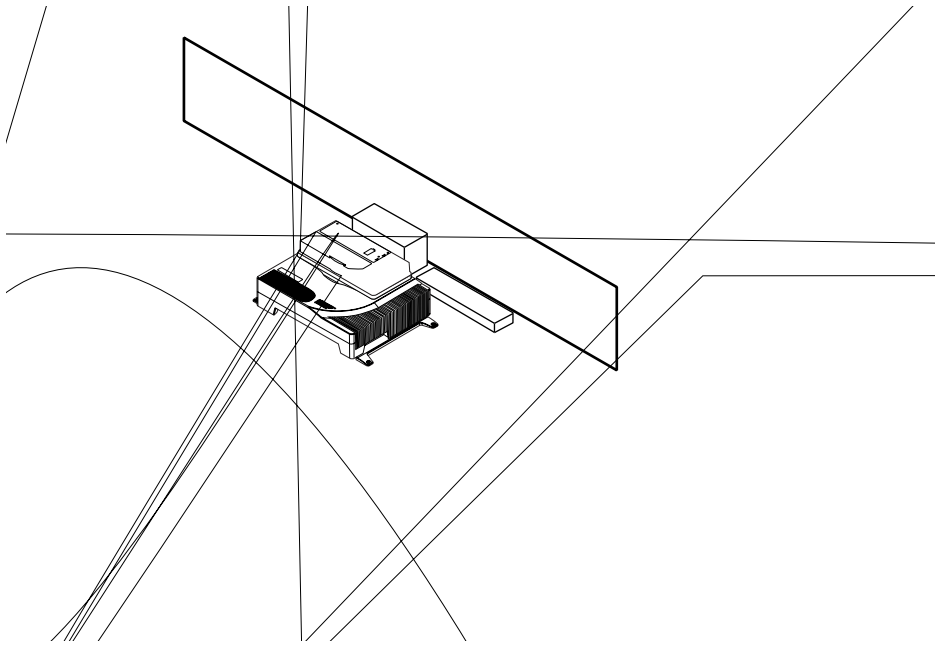
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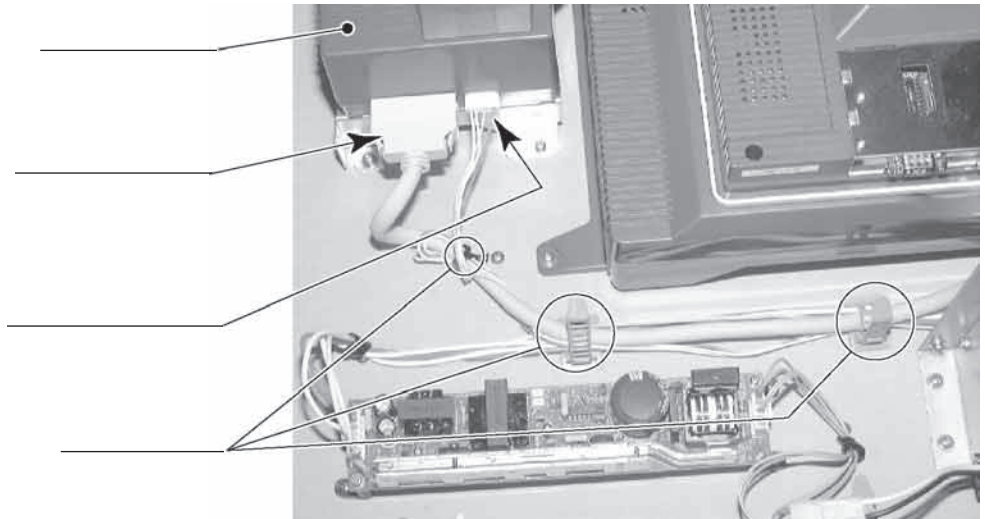
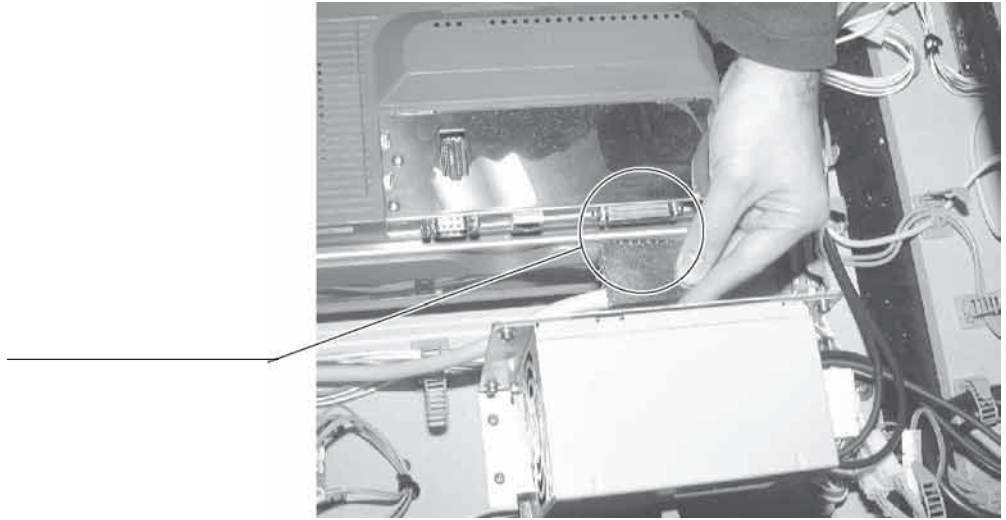


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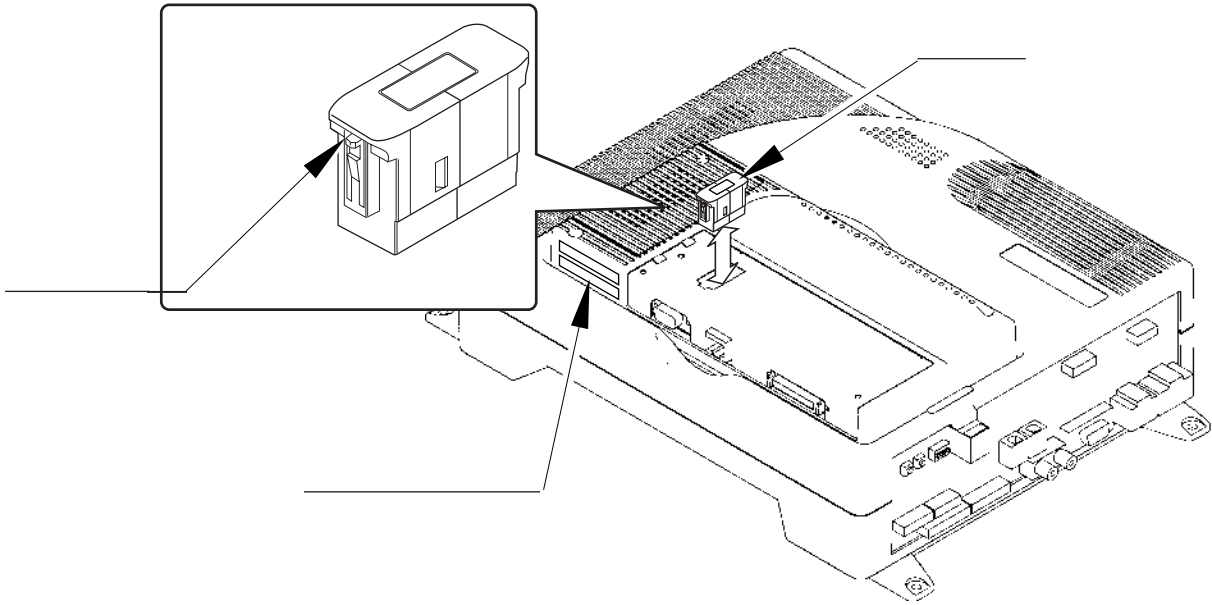
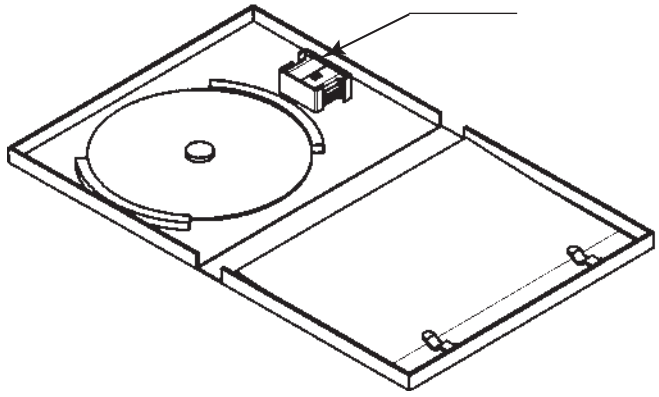


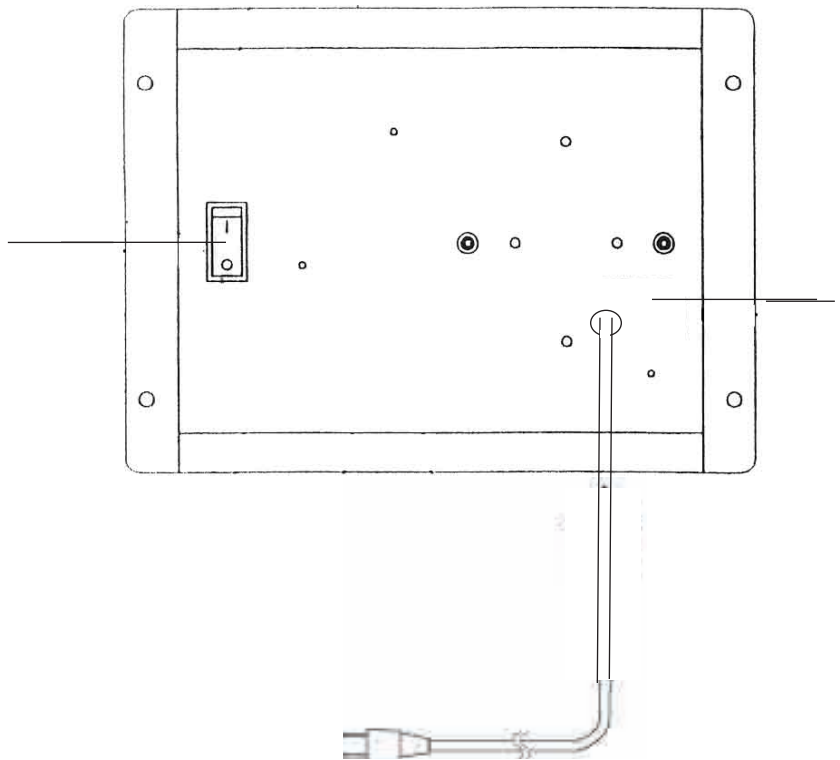




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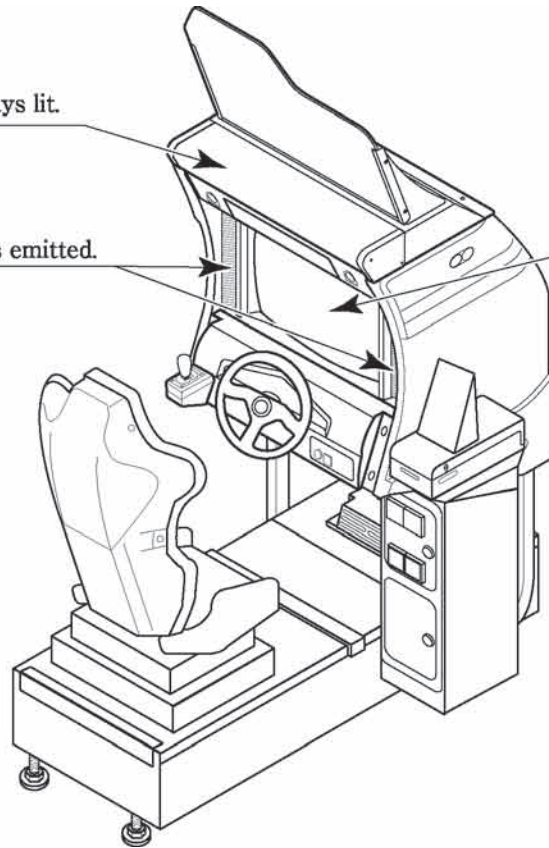


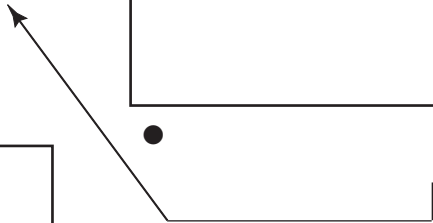
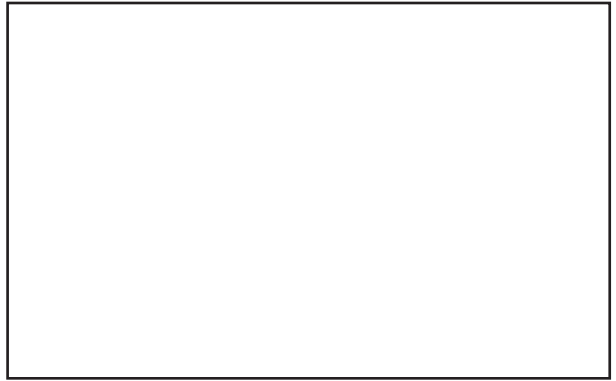
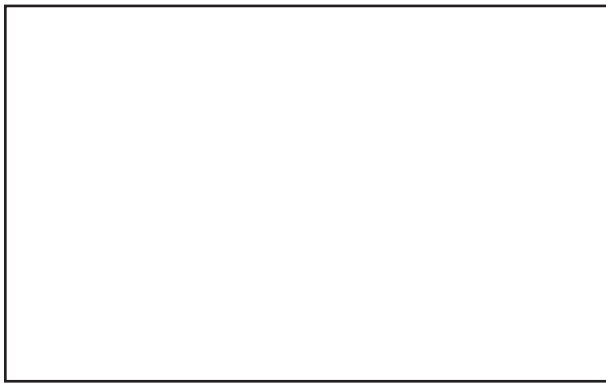
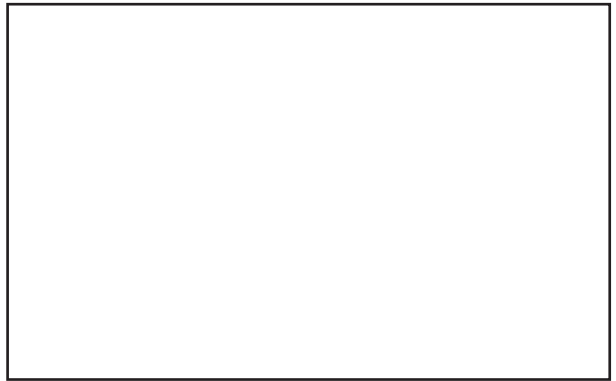
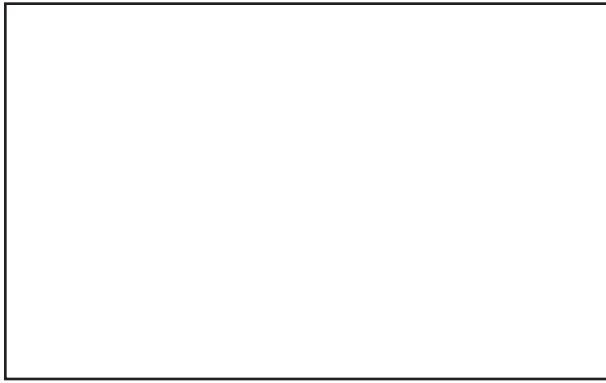


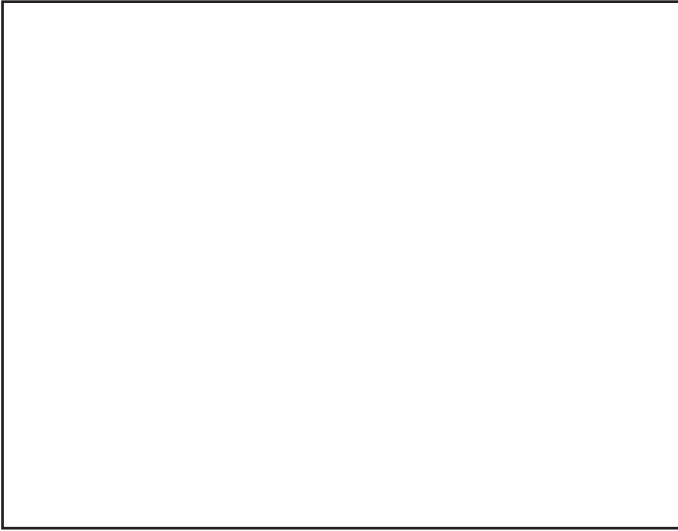
Fluorescent lamps are always lit.

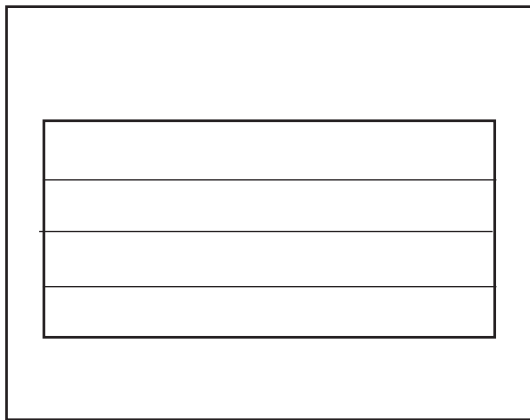
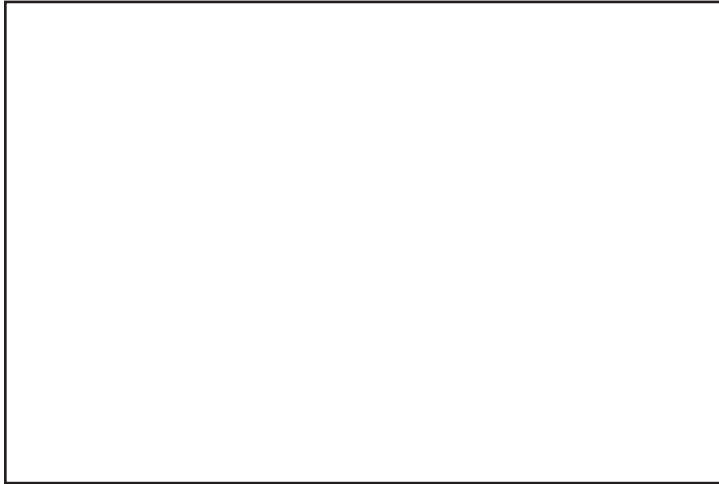
Sound is emitted.

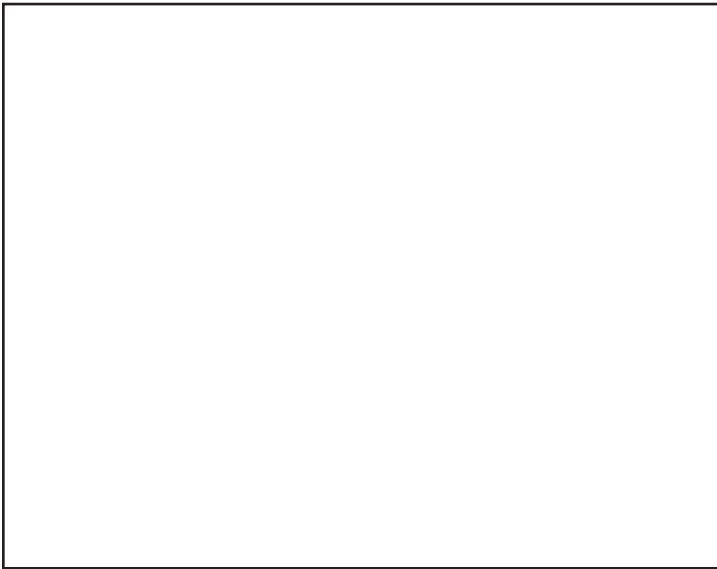
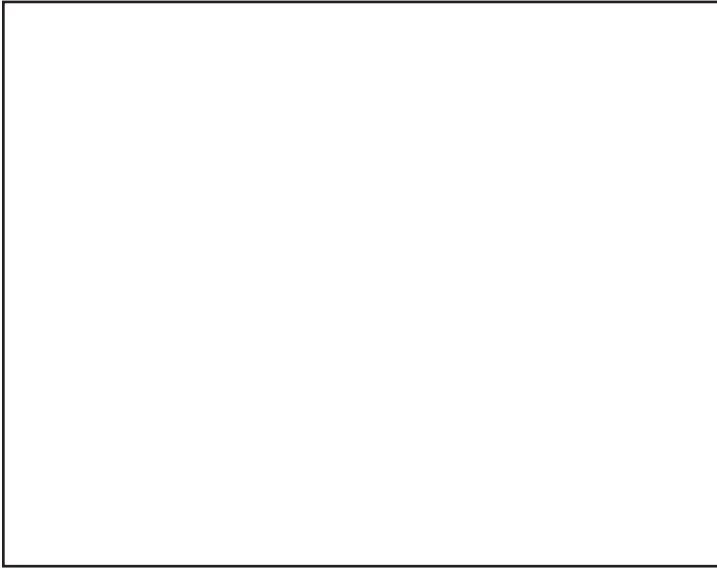
On-screen images are outputted.







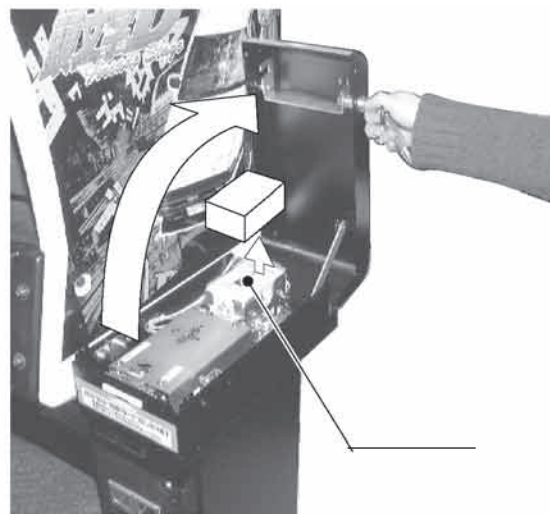
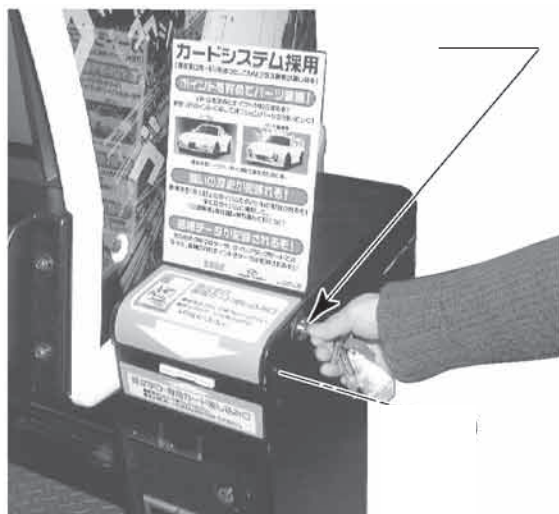


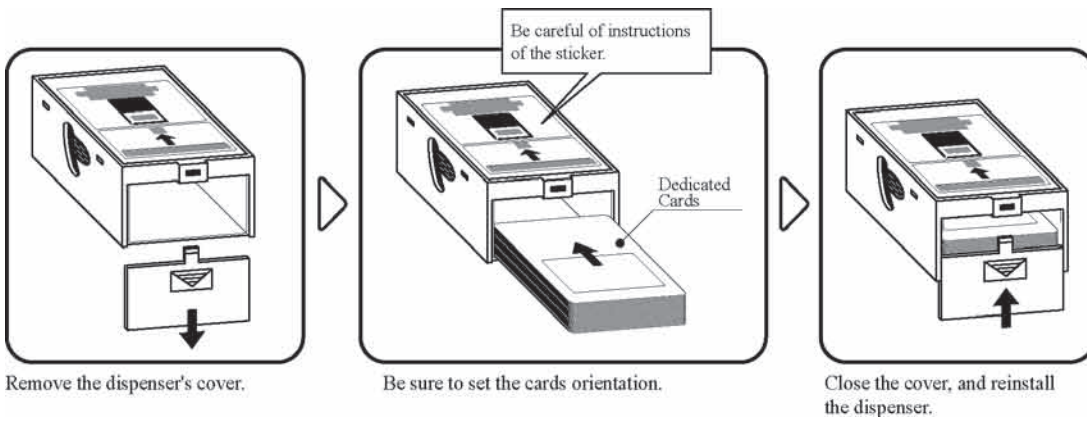


90"ECTF"TGCFGT1Y TKVGT

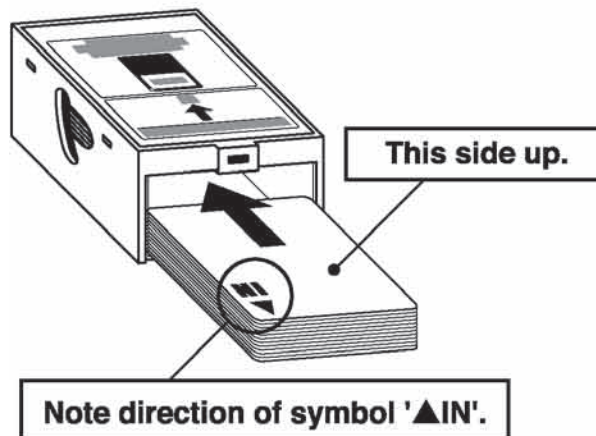


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-

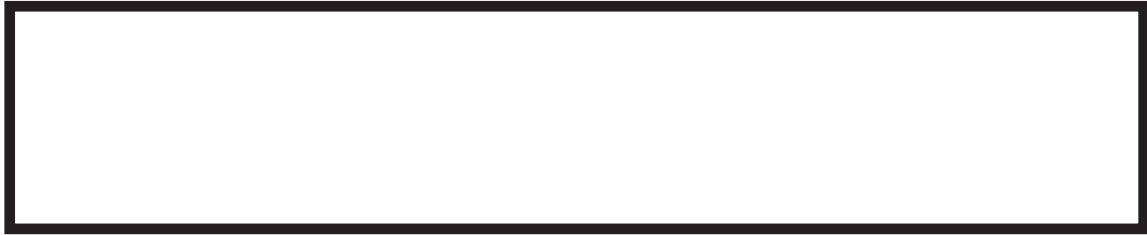




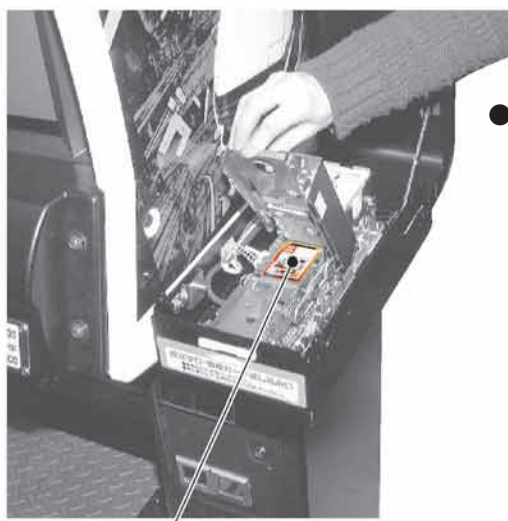
Load cards in the correct orientation.







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-
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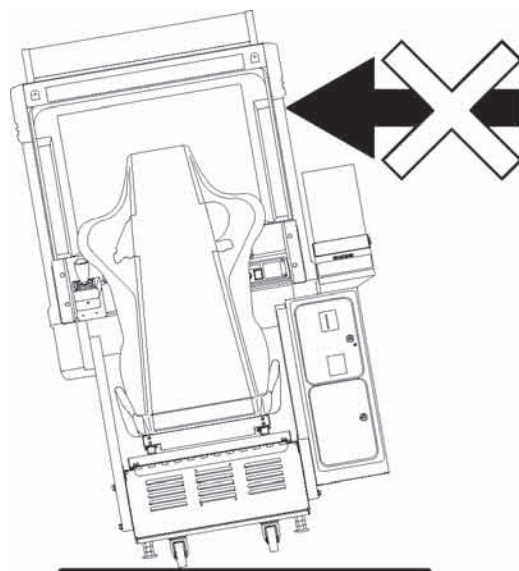
:0"RTGECWVKQPU" Y JGP" OQXKP I "VJG" OCE JKPG

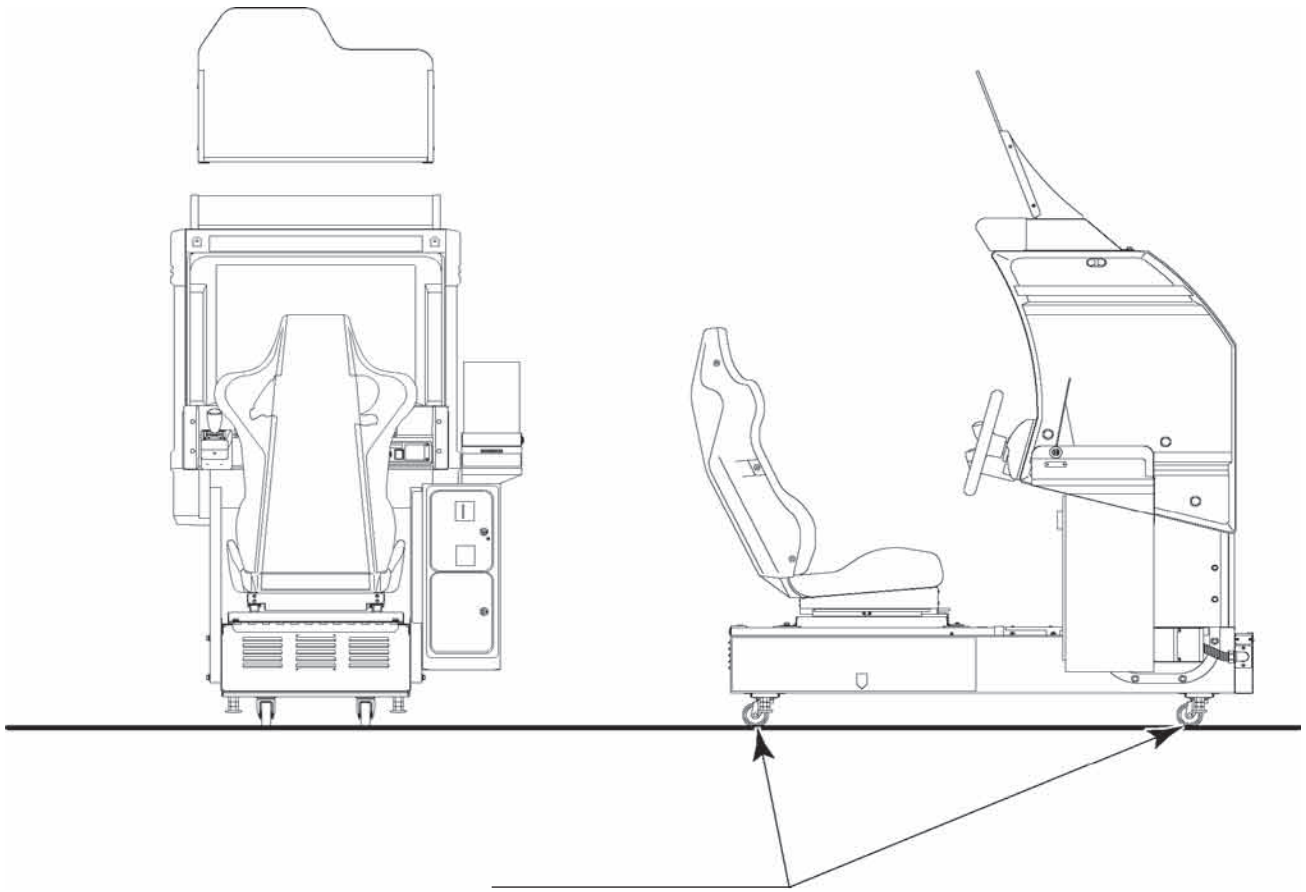


<ul style="list-style-type: none">•••

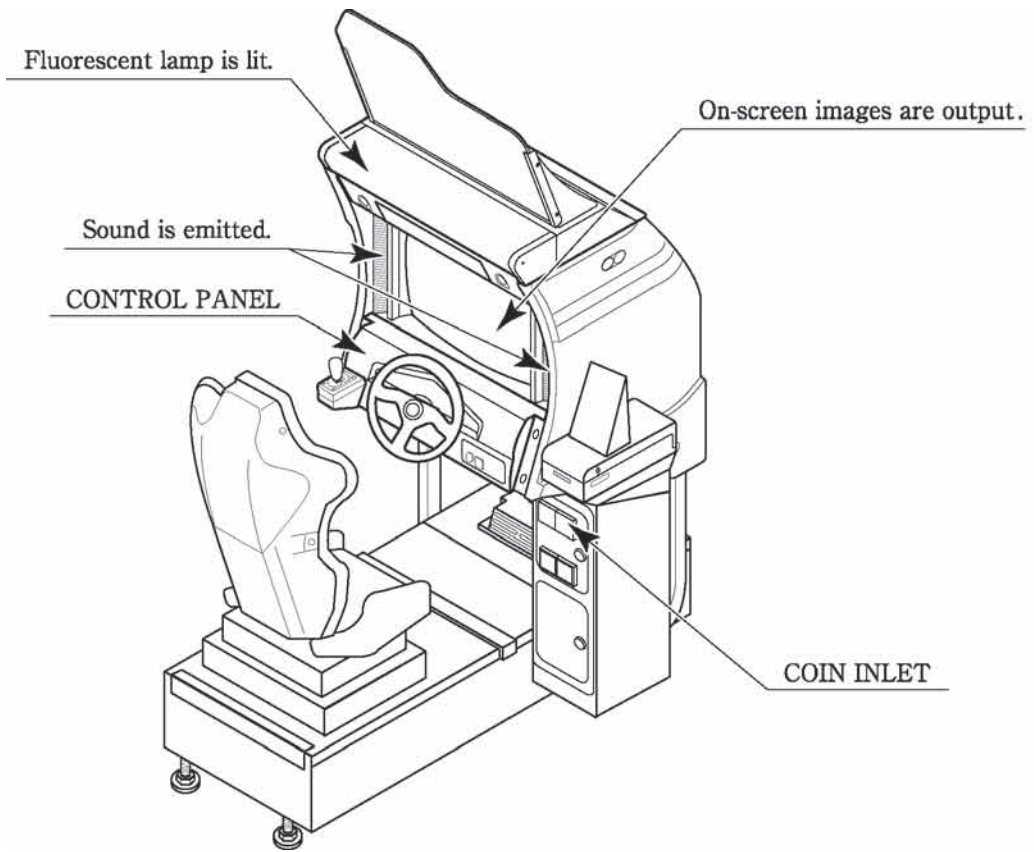


--





;0" I COG"FGUETKRVKQP







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Result

BATTLE RESULT

TOTAL TIME

LAP TIME



ADVANTAGE +

Point

BATTLE POINTS	750pts
VICTORY BONUS	0pts
ADVANTAGE BONUS	0pts
PTS. ACQUIRED	750pts
TOTAL POINTS	750pts




OPTION A

YOU NOW HAVE **2000** TUNING POINTS

INSTALL:  **WHEELS**

NEXT TUNE-UP **6000pts**

CONTINUE?



COLE : MUST BE CAUSE I'M A MEMBER OF THE FASTEST TEAM OUT THERE, THE SPEED STARS. **10**





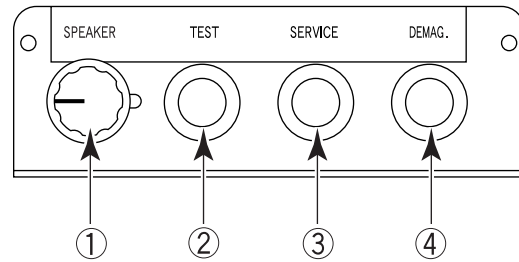
320""GZRNCPCVKQP"QH"VGUV"CPF"FCVC"FKURNC[



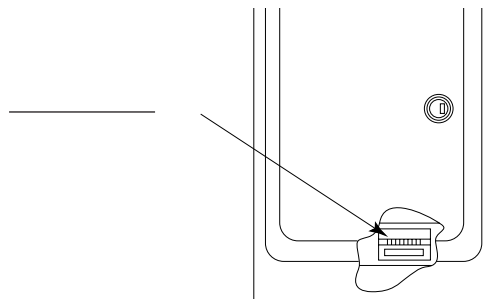
YCTPKPI#



KORQTVCPV#



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KORQTVCPV#

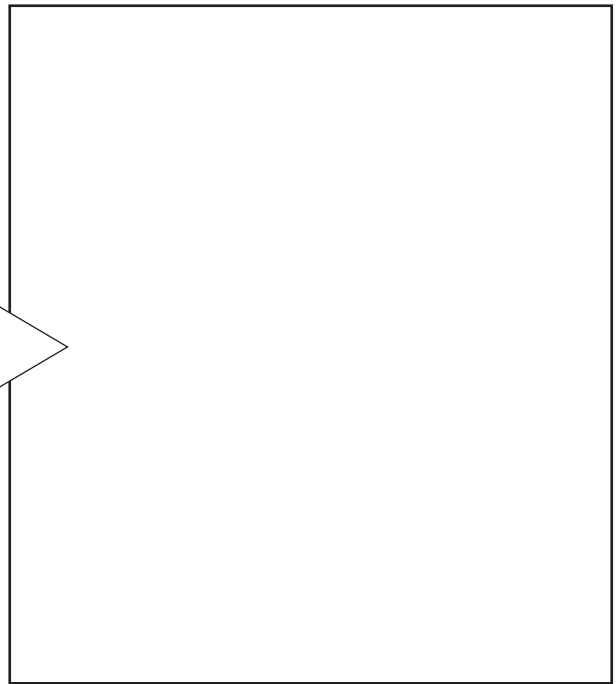
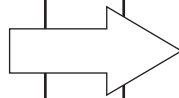
<ul style="list-style-type: none">••••

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KORQTVCPV#

<ul style="list-style-type: none">••



B. INPUT TEST

Select INPUT TEST to display the following screen and check the status of input devices. This test should be used periodically to check that each input device is functioning correctly.

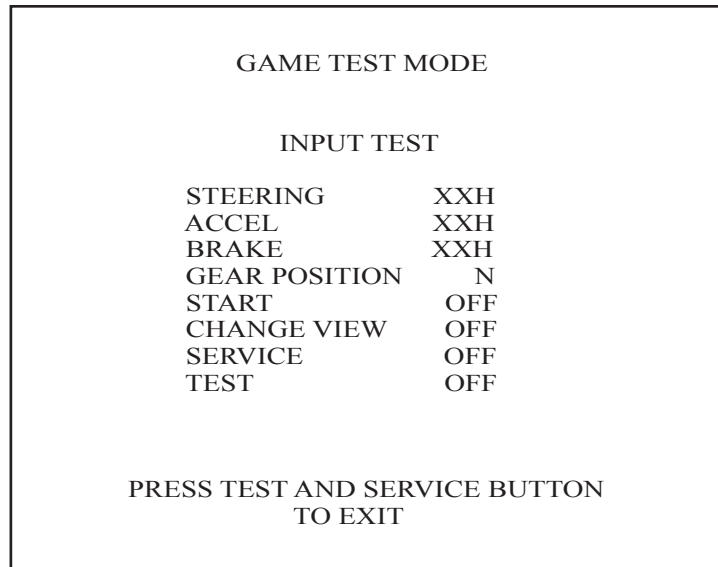
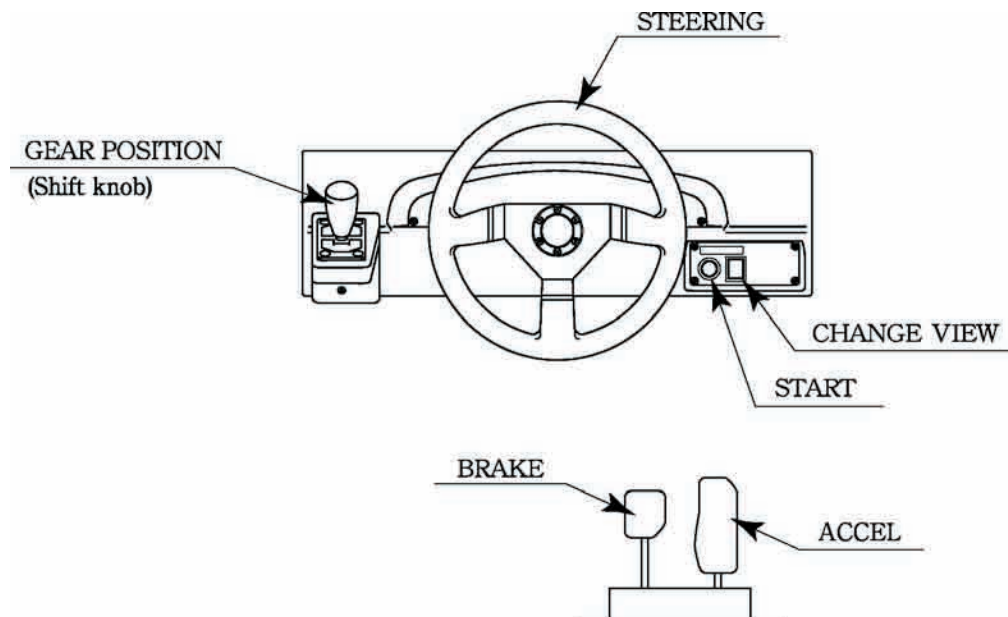


FIG. 10. 3 b INPUT TEST Screen

Test the STEERING, ACCEL and BRAKE controls to ensure that they are functioning properly and that the parameters change smoothly as each input device is operated.

Display N, UP and DOWN using the GEAR POSITION. N should display there is no control input. Verify that both UP and DOWN display in sync with the position of the shift knob.

Press the START, CHANGE VIEW, SERVICE and TEST Buttons. If functioning correctly, each indicator will switch from OFF to ON.



Press the SERVICE and TEST Buttons simultaneously to return to the Game Test Menu screen.

C. OUTPUT TEST

Select OUTPUT TEST to display the following screen and check the status of each lamp. This test should be used periodically to check that the lamps are functioning correctly.

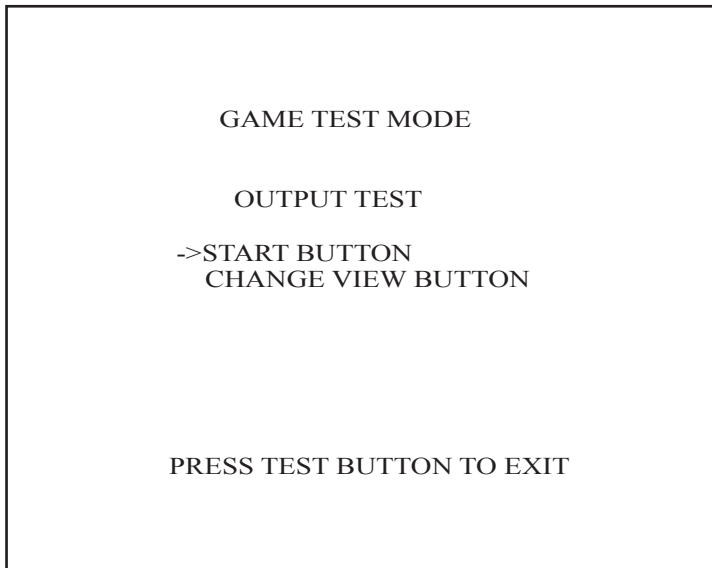


FIG. 10. 3 c OUTPUT TEST Screen

The cursor toggles automatically between START Button and CHANGE VIEW Button, and each lamp lights up.

Move the cursor to EXIT and press the TEST Button to return to the Game Test Menu screen.

D. FORCE FEEDBACK



If you select FORCE FEEDBACK, the STEERING will rotate automatically when you press the TEST Button. The STEERING will also rotate automatically during FORCE TEST. Make sure that no one is touching the STEERING before running these tests as contact may cause injury.

When you select "FORCE FEEDBACK", a connection test runs and the STEERING rotates. When the connection check completes, a screen similar to the one below is displayed, and you may adjust the STEERING resistance.

```
GAME TEST MODE
FORCE FEEDBACK
(MIN 0 : MAX 10 : DEFAULT 4)
FORCE =  XX
      UP
      DOWN
FORCE TEST (FORCE = 4)
      CENTER  OFF
      RIGHT   OFF
      LEFT    OFF
-> EXIT
SELECT WITH SERVICE BUTTON
AND PRESS TEST BUTTON
```

FIG. 10. 3 d FORCE FEEDBACK Screen

- **FORCE:** Set the STEERING resistance
The smaller the value, the weaker the resistance; the larger the value, the stronger the resistance.
(Minimum value is 0; the maximum value is 10. The default setting is 4.)
Move the cursor to UP or DOWN and press the TEST Button to change the value.
- **FORCE TEST:** Verifies the STEERING motor is working properly
Conducted when the STEERING resistance is set at 4.
Toggle between OFF and ON by aligning to CENTER and pressing the TEST Button.
The STEERING will rotate and stop in the center position. Pressing the SERVICE Button moves the cursor to the next menu item and CENTER changes to OFF. Control of the STEERING is then released.

When the RIGHT menu item is ON, the STEERING rotates to the right as far as possible and then stops. Press the SERVICE Button again to turn it OFF and release control of the STEERING.

When the LEFT menu item is ON, the STEERING rotates to the left as far as possible and then stops. Press the SERVICE Button again to turn it OFF and release control of the STEERING.

Move the cursor to EXIT and press the TEST Button to return to the Game Test Menu screen.

E. INPUT ASSIGNMENTS

Select INPUT ASSIGNMENTS to display the following screen.

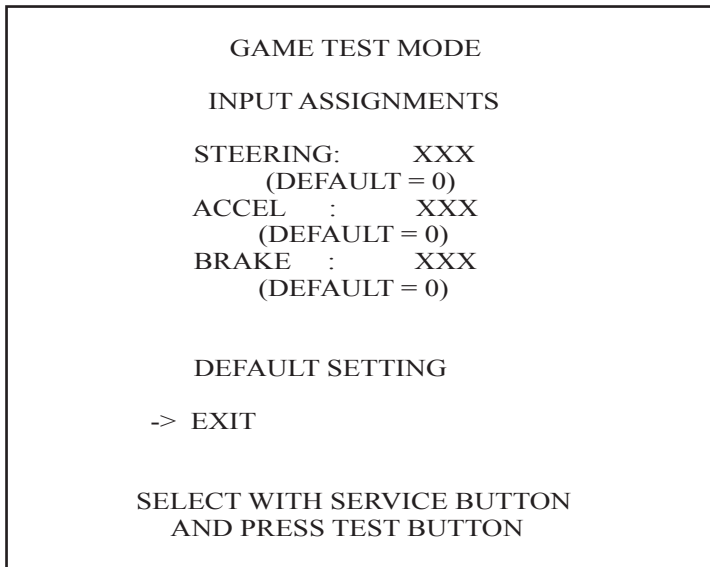


FIG. 10. 3 ea INPUT ASSIGNMENTS Screen

You can adjust each of the menu items by moving the cursor to the menu item and pressing the TEST Button.

Return all settings to the default settings with DEFAULT SETTING.

- STEERING: Make adjustments to STEERING
Press the TEST Button to display the following screen.

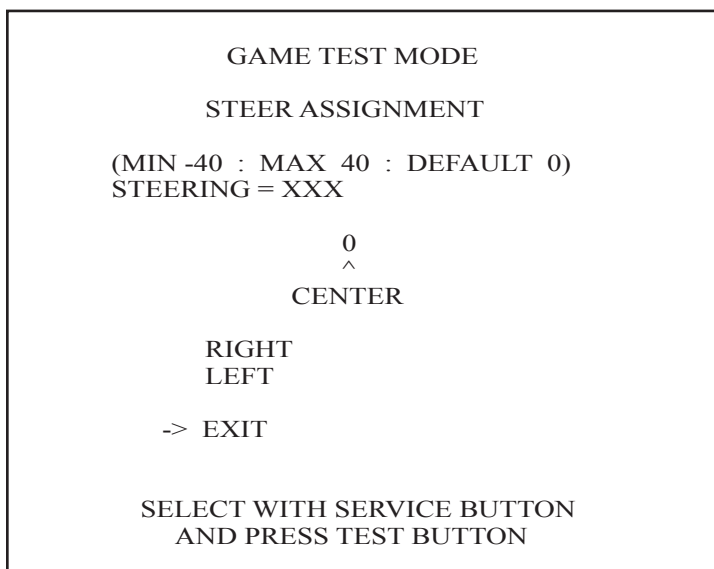


FIG. 10. 3 eb STEER ASSIGNMENTS Screen

Center the STEERING. When the "0" displayed is not exactly aligned with the "^" mark above CENTER, use the cursor to select RIGHT or LEFT and move the "0" until it is displayed directly above the "^" mark.

Move the cursor to RIGHT and press the TEST Button to move the "0" to the right. Each time you press the TEST Button, "0" moves slightly to the right. Move the cursor to LEFT and press the TEST Button to move the "0" to the left. Each time you press the TEST Button, "0" moves slightly to the left.

Move the cursor to EXIT and press the TEST Button to return to the INPUT ASSIGNMENTS screen.

- ACCEL: Make adjustments to ACCEL
Press the TEST Button to display the following screen.

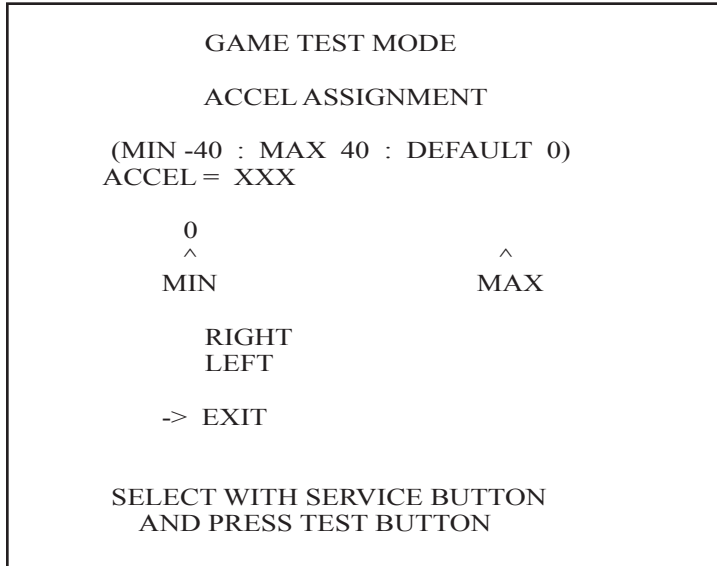


FIG. 10. 3 ec ACCEL ASSIGNMENTS Screen

Adjust the distance between "0" displayed and the "^" mark equally so that when your foot is off the ACCEL pedal, the "0" on the left is aligns with the "^" above MIN and when you press the ACCEL pedal down all the way, the "0" on the right is aligns with the "^" mark above MAX.

Move the cursor to RIGHT and press the TEST Button to move "0" to the right. Each press of the TEST Button moves "0" slightly to the right.

Move the cursor to LEFT and press the TEST Button to move "0" to the left. Each press of the TEST Button moves "0" slightly to the left.

Move the cursor to EXIT and press the TEST Button to return to the INPUT ASSIGNMENTS screen.

- BRAKE: Make adjustments to BRAKE
Press the TEST Button to display the following screen.

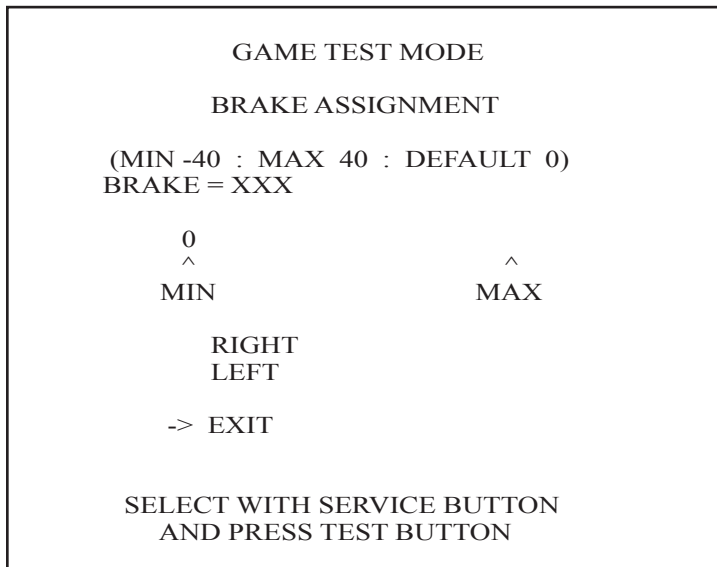


FIG. 10. 3 ed BRAKE ASSIGNMENTS Screen

Adjust the distance between "0" displayed and the "^" mark equally so that when your foot is off the BRAKE pedal, the "0" on the left is aligns with the "^" above MIN and when you press the BRAKE pedal down all the way, the "0" on the right is aligns with the "^" mark above MAX.

Move the cursor to RIGHT and press the TEST Button to move "0" to the right. Each press of the TEST Button moves "0" slightly to the right.

Move the cursor to LEFT and press the TEST Button to move "0" to the left. Each press of the TEST Button moves "0" slightly to the left.

Move the cursor to EXIT and press the TEST Button to return to the INPUT ASSIGNMENTS screen.

F. GAME ASSIGNMENTS

Select GAME ASSIGNMENTS to display the current game settings and make changes.

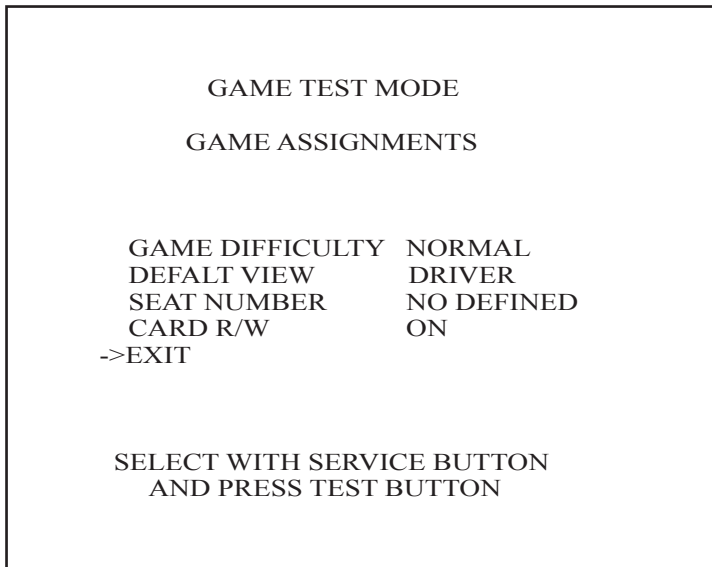


FIG. 10. 3 f GAME ASSIGNMENTS Screen

The GAME DIFFICULTY menu item is only displayed when the SEAT NUMBER is set to either 1 or NO DEFINED.

- **GAME DIFFICULTY:** Set the level of difficulty for the game
You may select one of 5 different levels of difficulty: VERY EASY, EASY, NORMAL, HARD or VERY HARD.
This setting does not affect the speed of rivals in "Legend of the Streets" mode.
- **DEFAULT VIEW:** Set the view perspective at the start of races
You may select one of the following 2 settings: DRIVER view or REAR view.
- **SEAT NUMBER:** Assign seat numbers to seats in each arcade unit for network play
If you have two arcade units side by side, make sure you assign different seat numbers; the seat on the left would be 1 and the one on the right would be 2. If the unit will not be used for network play, set the SEAT NUMBER to NO DEFINED.
You may select one of the following 3 settings: 1, 2 or NO DEFINED.
- **CARD R/W:** Set the existence of the card reader/writer; normally, this should be ON

Changes to settings are not enabled until Test Mode is exited. After changing settings, be sure to exit Test Mode.

After changing the settings, select EXIT and press the TEST Button to return to the Game Test Menu screen.

G. CARD R/W TEST



Clean the card reader/writer periodically.

Test the functionality of or clean the CARD R/W (read/writer).
The CARD R/W should be tested and cleaned periodically.

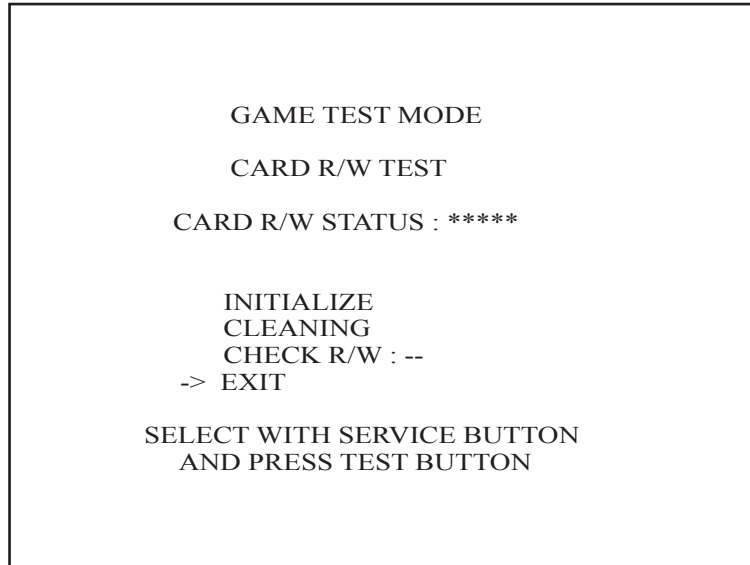


FIG. 10. 3 g CARD R/W TEST Screen

The cursor can move to the following items:

- INITIALIZE: Initialization
- CLEANING: Cleaning
- CHECK R/W: R/W Operation Check

Depending on the R/W running mode, one of the following is displayed in "*****" in "CARD R/W STATUS : *****":

- READY Now waiting (Clear to Send Command)
- INITIAL Now initializing (Not Clear to Send Command)
- CLEAN Now cleaning (Not Clear to Send Command)
- GET Cards are being taken out from the dispenser (Not Clear to Send Command)
- SAVE Sample data is saved onto the card (Not Clear to Send Command)
- LOAD Load card data and compares it with sample data (Not Clear to Send Command)
- OUT Eject cards (Not Clear to Send Command)
- SHUTTER Now closing/opening the shutter (Not Clear to Send Command)
- ERROR Error (Clear to Initialize Command Only)

While a status with a note of "Not Clear to Send Command " in parentheses is on-screen, no operations are accepted. If such a status has occurred, wait until the operation in that status stops automatically and the display comes to READY.

Occasionally, the "INFORMATION" field on the screen outputs one of the instructions below, although it usually displays NO ERROR.

While cleaning is in progress, waiting in the ready mode for inserting a cleaning card:

-- PLEASE INSERT CLEANING CARD --

After the operation check, waiting for the ready mode for ejecting the card:

-- PLEASE REMOVE --

When an error occurs, its type are displayed in the "INFORMATION" field:

- NO ERROR Nomal Completion
- CAN'T LOAD Loading Error
- CAN'T SAVE Writting Error
- DRAW CARD ERROR Error in Taking Card from dispenser
- CARD STUFFED Card Jamming
- SHUTTER ERROR Shutter Error
- WRONG DATA Data Error, Dispenser Card Empty
- CONNECTION ERROR Connection Error
- SCIF ERROR RC-232C Communication Error
- UNKNOWN EROR Unknown Error

The "---" field in "CHECK R/W : ---" shows the result of the operation check.

- Not Checked
- OK No Failure
- NG Failure

CLEANING PROCESS

Cleaning refers to the optional cleaning of the heads on the CARD R/W.
Refer to section <7-2> Head Cleaning for details on the use of the cleaning card.

- Select "CLEANING" and press the TEST Button.
- If the CARD R/W is not initialized, it will be initialized first. :INITIALIZE is displayed.
- The following message appears to show that the R/W is ready for insertion of the cleaning card:
-- PLEASE INSERT CLEANING CARD --
- Insert the cleaning card into the R/W.
On the screen, the status display is replaced with "CLEAN", and cleaning begins.
- Once cleaning ends after a lapse of a certain time, the R/W automatically ejects the card.
The status display changes from "CLEAN" to "READY."
NO ERROR is displayed on the screen.

TESTING FUNCTIONALITY

The operation check takes out each card from the dispenser, and writes the sample data onto it. The check then loads and reads it, and checks whether the read data matches the sample data. Then, the check ejects the card. When you draw out the card at this time, the entire process of the check is completed. The functionality test uses 1 card from the dispenser.

- Select "CHECK R/W" and press the TEST button.
R/W operates automatically as follows:
- If the CARD R/W is not initialized, it will be initialized first. :INITIALIZE is displayed.
- Close the shutter: SHUTTER is displayed.
- Takes out the card from the dispenser: GET is displayed.
- Saves the sample data onto the card: SAVE is displayed.
- Print the sample data onto the card: PRINT is displayed.
- Loads the data on the card for comparison with the sample data: LOAD is displayed.
- Open the shutter: SHUTTER is displayed.
- Ejects the card: OUT is displayed.
- Draws out the card. Now the entire process of the check is completed.

If execution of the operation check results in display of NG, check the error condition. If you can take action against the error, execute the operation check again after you take the proper action. If you cannot take action against the error, repeat the check several times. If the result of the check is still NG, clean the R/W.
If the subsequent execution of the operation check still results in NG, the R/W may be faulty.

If an error occurs, it is cleared by executing the INITIALIZE command.
Note that, when an error has occurred, the R/W only accepts this command (except EXIT).

H. CLOSE SETTING

Select CLOSE SETTING to display the following screen.
Change the setting for the time when the store closes.
The game will be unusable for card play starting 15 minutes before the time you set until 6:00 AM the next morning.

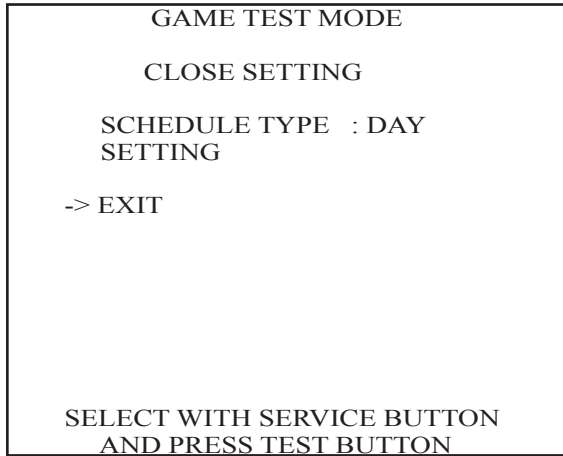


FIG. 10. 3 ha CLOSE SETTING Screen

You can set SCHEDULE TYPE to DAY, WEEK or OFF. Press the TEST Button to select the item. (The unit is shipped with SCHEDULE TYPE set to OFF.)

Move the cursor to SETTING and press the TEST Button to display the appropriate time setting screen.

- DAY: Set the daily store closing time. This time setting will be used every day

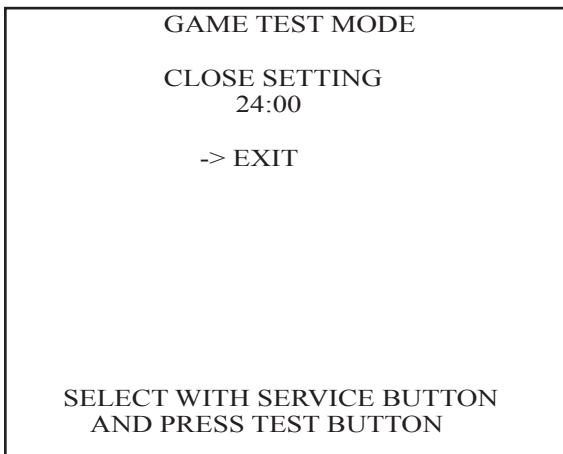


FIG. 10. 3 hb CLOSE SETTING (DAY) Screen

Set the daily store closing time. When you press the SERVICE Button, the "hour" display will begin to flash. Press the TEST Button to select any hour from "19" to "26".

Press the SERVICE Button again to accept the "hour" selection. Once accepted, the "minute" display will then begin to flash. Press the TEST Button to select one of the following "minute" options: "00, 15, 30, 45". Press the SERVICE Button again to accept the "minute" selection.

When complete, move the cursor to EXIT. If you press the SERVICE Button when the cursor is next to EXIT, the "hour" display will begin to flash again indicating that you can change the settings.

Move the cursor to EXIT and press the TEST Button to return to the CLOSE SETTING screen.

- WEEK: Set a different store close time for each day of the week

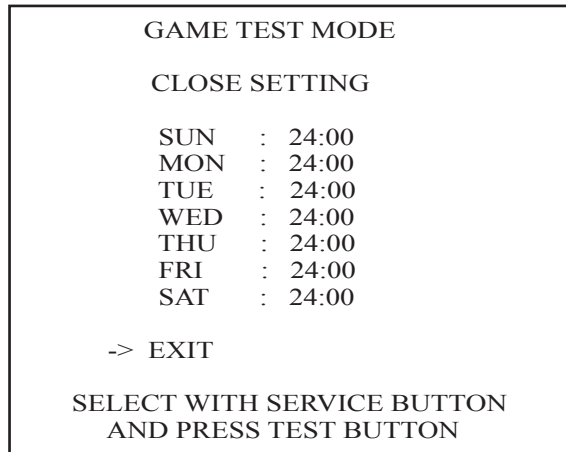


FIG. 10. 3 hc CLOSE SETTING (WEEK) Screen

Set the store closing time for each day of the week. When you press the SERVICE Button, the "hour" display will begin to flash. Press the TEST Button to select any hour from "19" to "26". Press the SERVICE Button again to accept the "hour" selection. Once accepted, the "minute" display will then begin to flash. Press the TEST Button to select one of the following "minute" options: "00, 15, 30, 45". Press the SERVICE Button again to accept the "minute" selection. Once accepted, the "hour" display for the next day of the week will begin to flash. Set the "hour" and "minute" settings in the same fashion as described above.

When you have completed setting the time for SAT, move the cursor to EXIT. If you press the SERVICE Button when the cursor is next to EXIT, the "hour" display for SUN will begin to flash again indicating that you can change the settings.

Move the cursor to EXIT and press the TEST Button to return to the CLOSE SETTING screen.

- OFF: Do not set any store closing times. Other SETTING items are not displayed

I. BOOKKEEPING

Select BOOKKEEPING to display the following screens of operating status data. Each time the TEST Button is pressed, the ensuing page appears. Pressing the TEST Button while the 5/5 page is displayed causes the Game Test Menu to return on the screen.

GAME TEST MODE	
BOOKKEEPING 1/5	
NUMBER OF GAMES	0
NUMBER OF NETWORK PLAY	0
NUMBER OF CARD	0
NUMBER OF CARD PLAY	0
PLAY TIME	0D 0H 0M 0S
AVERAGE PLAY TIME	0M 0S
LONGEST PLAY TIME	0M 0S
SHORTEST PLAY TIME	0M 0S
PLAY TIME HISTOGRAM	
0M 0S ~ 0M59S	0
1M 0S ~ 1M59S	0
2M 0S ~ 2M29S	0
2M30S ~ 2M59S	0
3M 0S ~ 3M29S	0
3M30S ~ 3M59S	0
4M 0S ~ 4M29S	0
4M30S ~ 4M59S	0
5M 0S ~ 5M29S	0
5M30S ~ 5M59S	0
6M 0S ~ 6M29S	0
OVER 6M30S	0
PRESS TEST BUTTON TO CONTINUE	

FIG. 10. 3 i BOOKKEEPING (1/5) Screen

- NUMBER OF GAMES: total number of games played
- NUMBER OF NETWORK PLAY: total number of network games played
- NUMBER OF CARD: total number of cards purchased
- NUMBER OF CARD PLAY: number of games played with cards
(selecting continue during card play gets added to this count)
- PLAY TIME: total amount of game play time
- AVERAGE PLAY TIME: average game play time
- LONGEST PLAY TIME: longest game play time
- SHORTEST PLAY TIME: shortest game play time
- PLAY TIME HISTOGRAM: table of play times

Press the TEST Button to move to screen 2/5 of BOOKKEEPING.

FIG. 10. 3 i BOOKKEEPING (2/5) Screen

- GAME/LEGEND OF THE STREETS: Displays the number of times each rival character was selected in "Legend of the Street" mode. "MYOGI-1" refers to the first rival in MYOGI which is "COLE"

Press the TEST Button to move to screen 3/5 of BOOKKEEPING.

FIG. 10. 3 i BOOKKEEPING (3/5) Screen



Press the TEST Button to move to screen 4/5 of BOOKKEEPING.

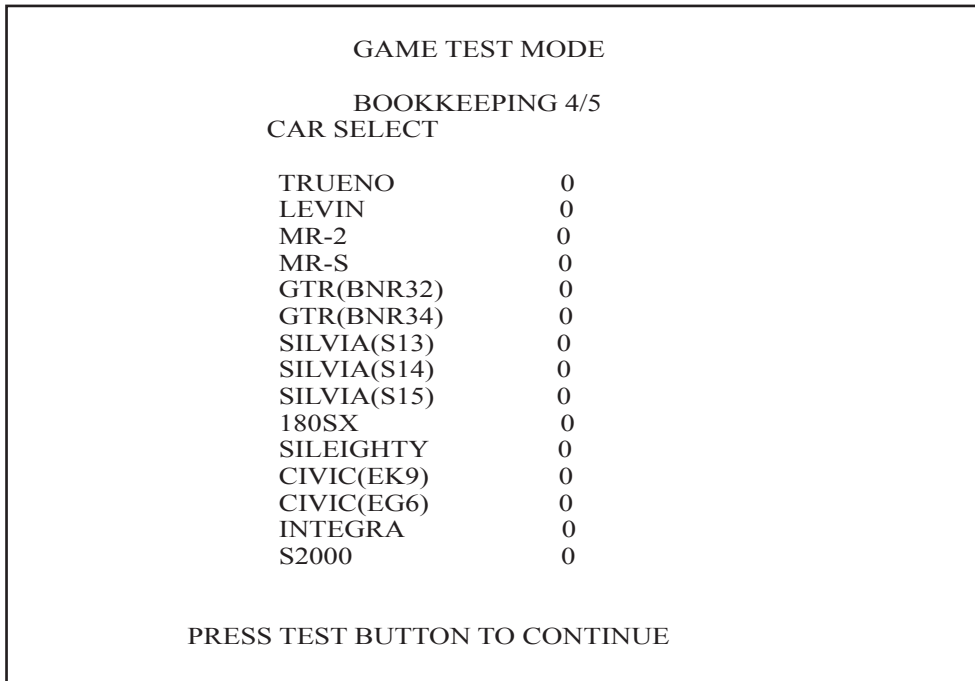


FIG. 10. 3 i BOOKKEEPING (4/5) Screen

- CAR SELECT: Displays the number of times each car was selected

Press the TEST Button to move to screen 5/5 of BOOKKEEPING.

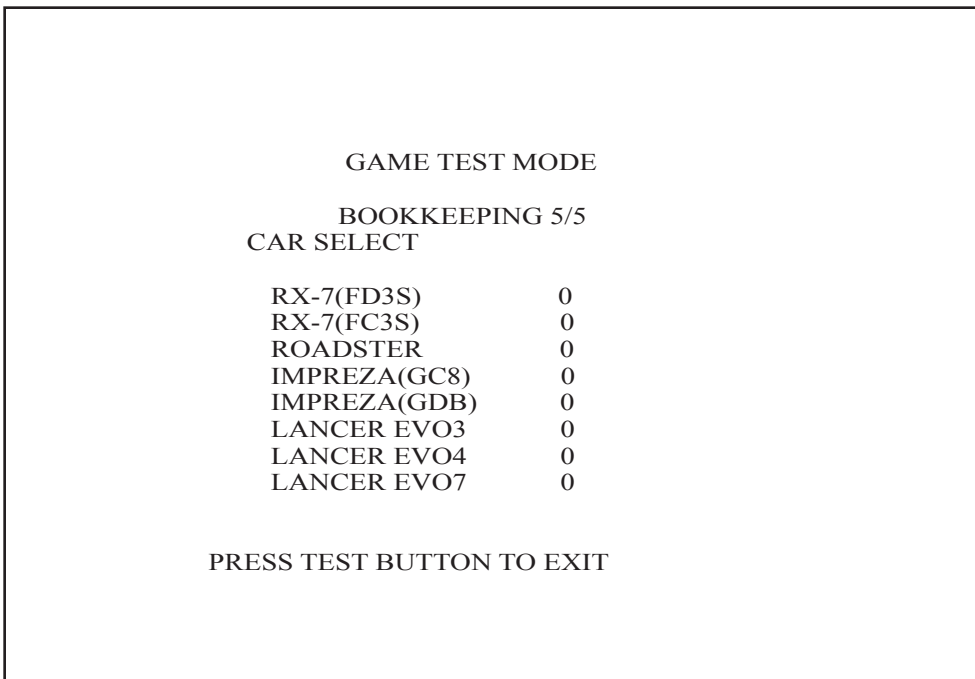


FIG. 10. 3 i BOOKKEEPING (5/5) Screen

Move the cursor to EXIT and press the TEST Button to return to the Game Test Menu screen.

J. BACKUP DATA CLEAR

Delete all BOOKKEEPING screen data. Use BACKUP DATA CLEAR in the SYSTEM TEST MODE to delete data about coin/credit collection.

Deleting this data does not affect the game settings or other data stored by the game.

Deleting this data will delete the data showing how many times the CARD R/W was used.

After deleting the data, the CARD R/W automatically enters Head Cleaning mode.

Refer to section <7-2> Head Cleaning for more information about head cleaning.

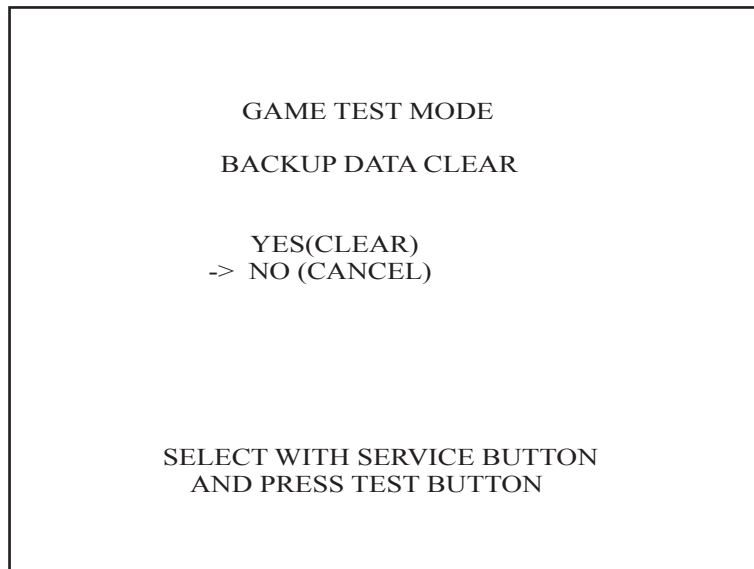


FIG. 10. 3 j BACKUP DATA CLEAR Screen

To clear data, use the SERVICE Button to move the cursor to YES (CLEAR) and then press the TEST Button. When the data has been cleared, the message "COMPLETED" will be displayed.

Press the TEST Button again to return to the Game Test Menu screen.

Move the cursor to NO (CANCEL) and press the TEST Button to return to the Game Test Menu screen without clearing the data.

11. CONTROL PANEL



- In order to prevent an electric shock and short circuit, be sure to turn power off before performing work by touching the interior parts of the product.
- Be careful not to damage the wires. Damaged wires may cause electric shock or short circuit or present a fire risk.
- Do not touch undesignated places. Touching places not designated can cause electric shock or short circuit.
- This work should be performed by the Location's Maintenance Man or Serviceman. Performing work by non-technical personnel can cause electric shock hazard.
- Do not perform work other than those specified in this Manual in order to prevent accidents during performing work and operation after performing work. Performing work not specified in this Manual may require special training for this product. If performing work other than those stated in this manual is required for repair, contact the offices herein stated in this manual or where you purchased the product from and ask for repair or inquire how to repair.
- Be very careful when soldering. Handling a soldering iron carelessly may result in a fire or a burn.
- Be extremely careful when heating the heat-shrinkable tube. Failure to do so may result in a fire or burns.



- Exercise extreme caution when handling the internal parts of the Control Panel. Watch out for damage, warping and loss. The loss of just one piece may result in damage to or lead to faulty operation of the entire unit.
- When securing the plastic-made parts, do not excessively fasten screws and nuts. Failure to observe this may damage the parts and cause injury due to fragments resulting from damage.



Be sure to perform volume's move value setting in the Volume Setting in the Test Mode after replacing or adjusting the Volume. (See 10-3E.)

11-1 REMOVING THE CONTROL PANEL

Poor handle response/lack of response when adjusting the Volume in Test Mode may be caused by faulty Volume alignment and/or a damaged Volume.

Follow the instructions below to adjust the gear alignment and/or replace the Volume.

If the Volume Shaft is rotating within its normal area of mobility, there is little chance the Volume can be damaged by rotating the handle as far as possible to the left/right. With the handle in the center position, i.e. straight, and the Volume Shaft in the same direction shown in the diagram, attach the Volume so that it aligns properly with the gears. In order to adjust or replace the Volume, follow the instructions below to remove the Control Panel.

A 5 mm hexagonal wrench is required for the following procedure.

- Turn off the power.
- Remove the 6 hexagon socket screws from the Control Panel.

HEXAGON SOCKET SCREW (total 6), black

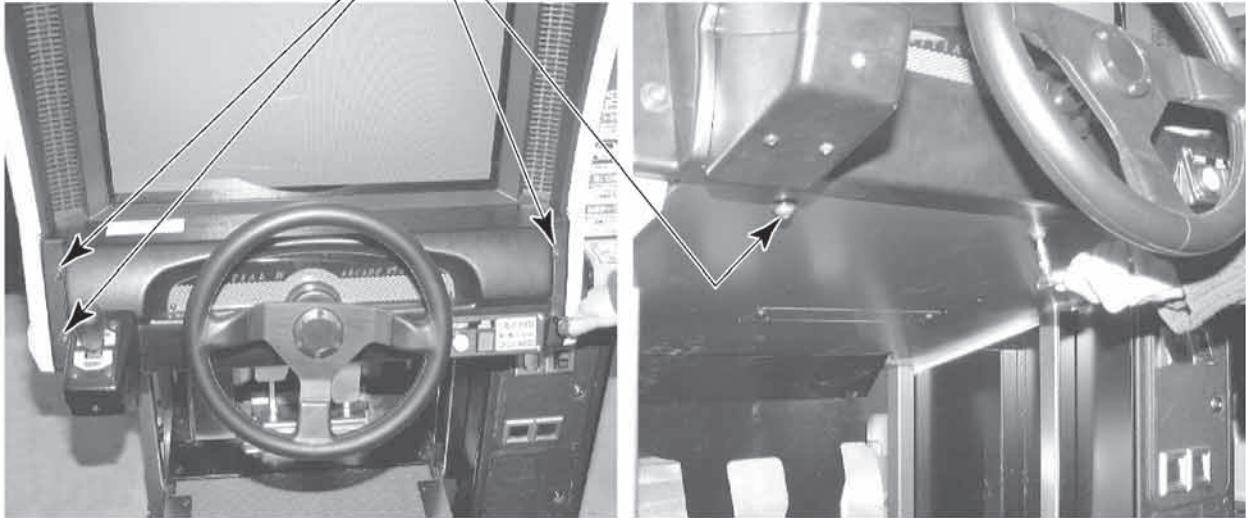
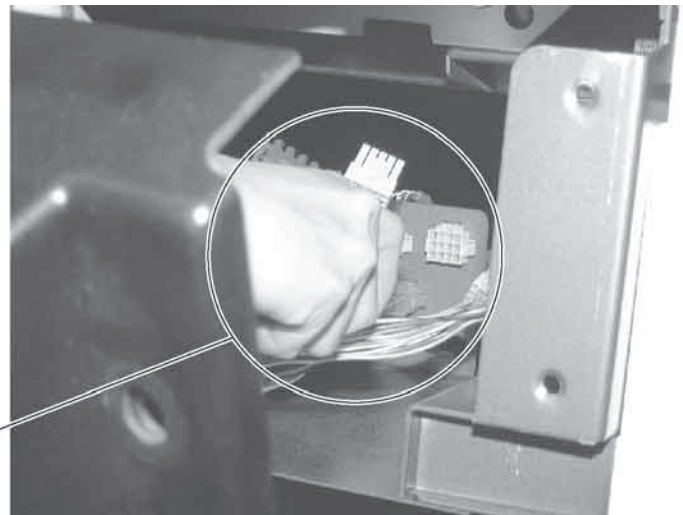


PHOTO 11. 1 a

- Unplug the 5 connectors and remove the Control Panel. Be careful not to damage any of the wiring.



CONNECTOR (5)
BROWN: 4P
YELLOW: 10P,12P
RED: 3P,6P

PHOTO 11. 1 b

11-2 ADJUSTING/REPLACING THE VOLUME

ADJUSTMENT PROCEDURE

- Loosen the 2 screws that secure the VR Bracket and move the VR Bracket to adjust the angle and condition of the gear alignment.
- Keeping the handle straight, align the gears so that the direction of the D Cut side of the Volume Shaft matches that shown in the diagram.
- Tighten the 2 screws and secure the VR Base.

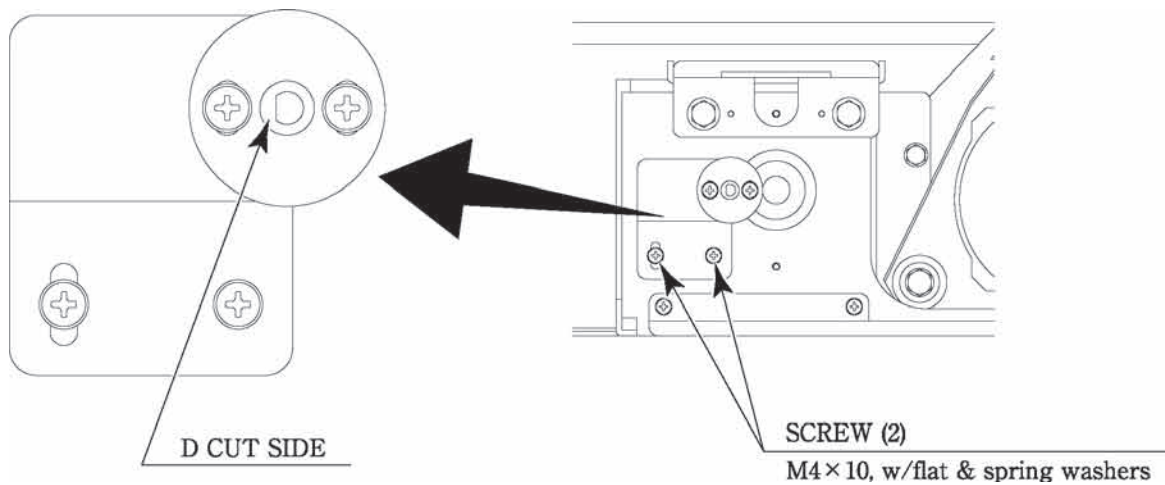


FIG. 11. 2 a

- After making adjustments, use the Volume Setting Screen to set the Volume (refer to 10-3E). The recommended value for the handle Volume is "80H" when the handle is set straight. Verify that the value decreases when the handle is rotated to the left and increases when rotated to the right. Use the Test Mode to view the Volume value (refer to 10-3B).

REPLACEMENT PROCEDURE

This procedure requires the following tools: Philips screwdriver for the M4 screws, 2 mm hexagonal wrench, 11—12mm monkey wrench, nipper, cutter, wire stripper, soldering iron and industrial dryer.

- Remove the connectors.
- Remove the 2 screws securing the VR Bracket and remove the entire Bracket and Volume.

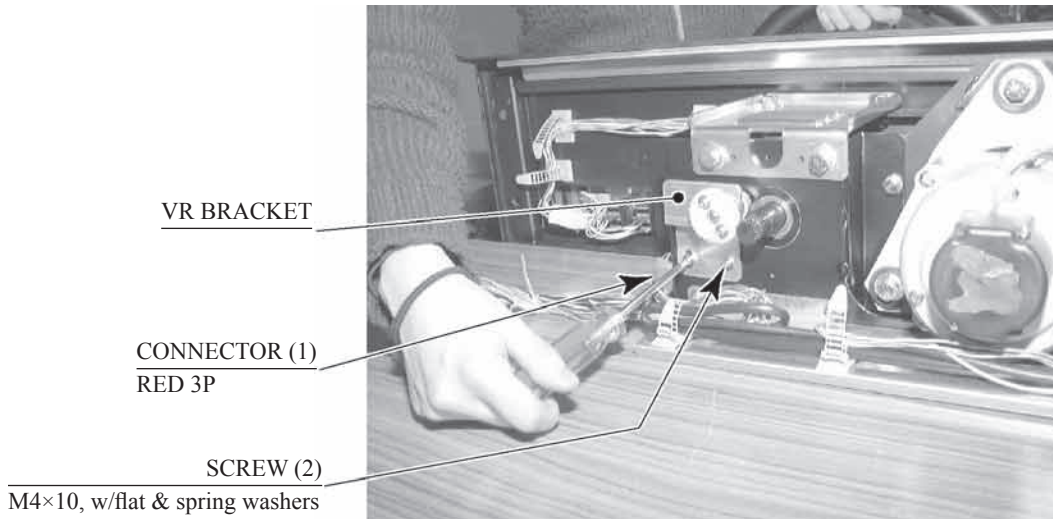


PHOTO 11. 2

- Loosen the 2 hexagon socket screws on the Gear Holder and remove the Gear Holder.
- Remove the nut securing the VR Bracket, then separate the Volume from the VR Bracket and replace it.

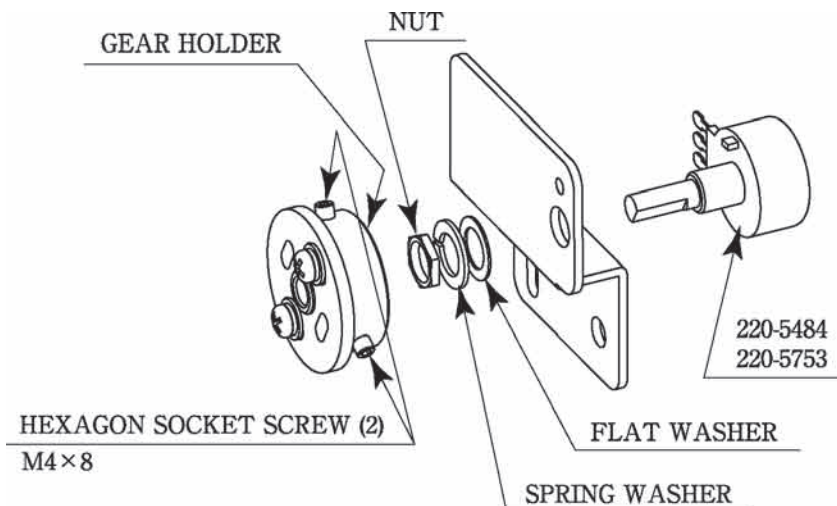


FIG. 11. 2 b

11-3 GREASING



- Grease is inflammable and must never be close to fire.
- Grease may be apt to be erroneously used or drunk, and must not be placed in a location where children can access.



- Grease does harm to your body if you aspirate it. Do not perform any work related to grease in a location where ventilation is insufficient.
- If grease enters an eye, eye irritation may be caused. Take care to prevent it from entering your eyes (for example, by wearing protective goggles). Should grease enter an eye, rinse it in clean water and have your illness diagnosed by a doctor.
- If grease touches a human skin, skin irritation may be caused. Take care to prevent grease from touching your skin (for example, by wearing protective gloves). Should grease touch your skin, fully wash it using water and soap.



- Be sure to use the designated type of grease. If a non-designated type grease is used, components may break.
- The period for greasing specified herein is a standard. Apply greasing to the specified portions as occasion arises.

Use spray grease once every three months to grease up the gear mesh portion of the constituent parts.

Use "Grease Mate" (part number 090-0066) for the spray grease.

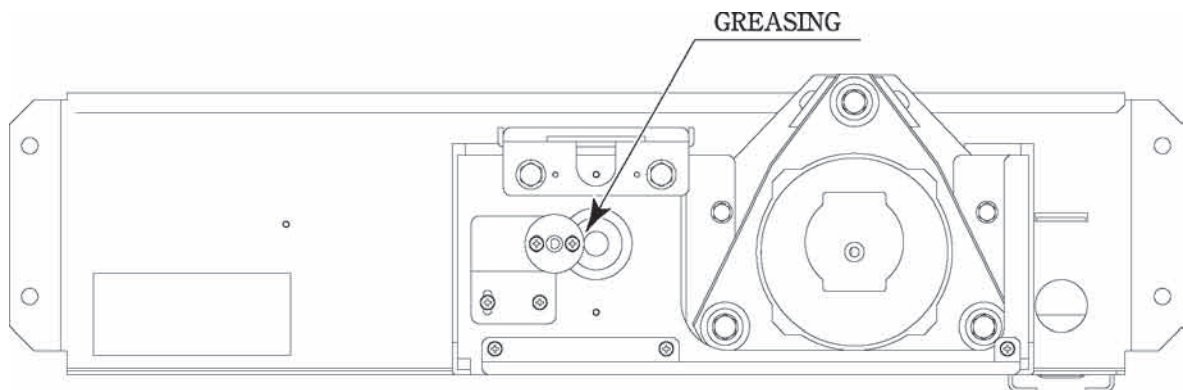


FIG. 11. 3

12. SHIFT LEVER

In the Test Mode, if the SHIFT LEVER's SW can not be inputted satisfactorily, replace the Switch. Apply greasing to the Mechanism's sliding portion once every 3 months. When performing the above work, remove the Shift Lever Unit.



- Before starting to work, ensure that the Power SW is OFF. Failure to observe this can cause electric shock and short circuit hazards.
- Use care so as not to damage wirings. Damaged wiring can cause electric shock and short circuit hazards.

12-1 REMOVING THE SHIFT LEVER

- Turn the Power SW off.
- Remove the 4 Tamperproof Screws to lift the Shift Lever Unit.
- Disconnect the Connector to remove the Shift Lever Unit.
- When reinstalling, follow the procedure opposite as when removing. At this time, ensure that "DOWN" display appears on the upper part as shown.
- After reinstalling, be sure to check INPUT TEST in the test mode. (See 10-3B.)

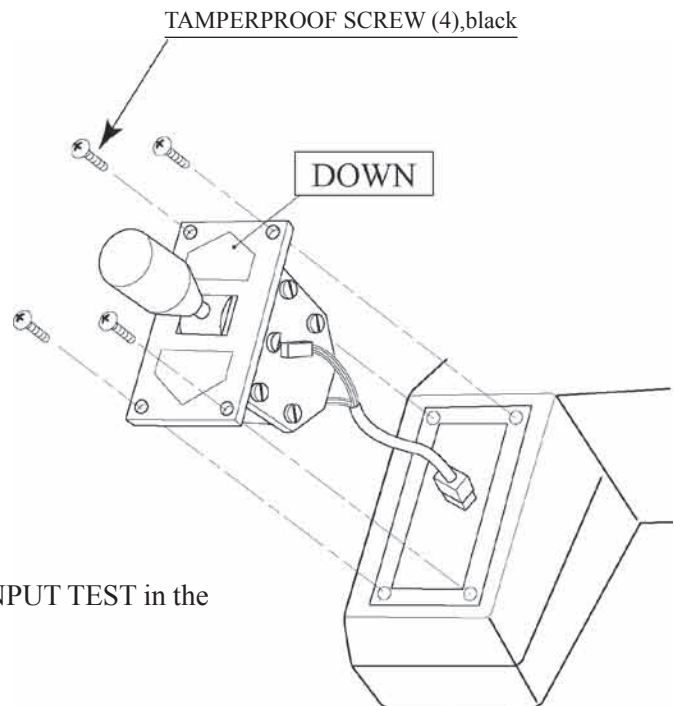


FIG. 12. 1

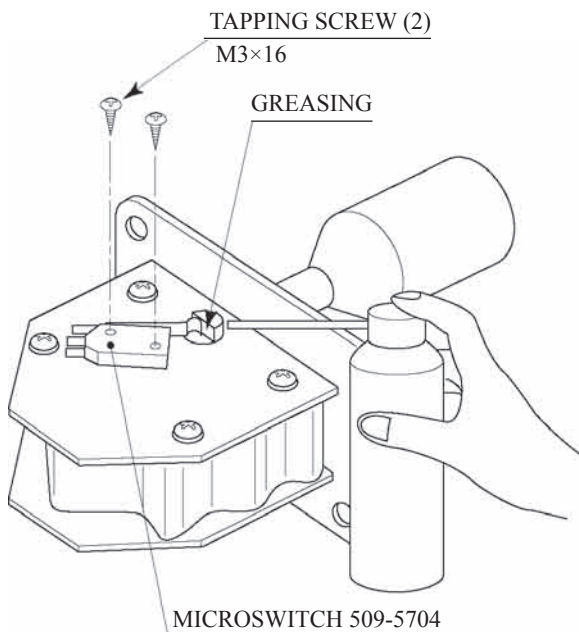


FIG. 12. 2

12-2 SWITCH REPLACEMENT

- Disconnect the wiring Connector of the Switch to be replaced.
- Remove the 2 Tapping Screws to replace the Microswitch.

12-3 GREASING

Apply greasing once in 3 months to the specified portions.

For spray grease, use NOK KLUBER L 60 or Grease Mate (Part No. 090-0066).

13. ACCELERATOR & BRAKE



- Before starting to work, ensure that the Power SW is OFF. Failure to observe this can cause electric shock or short circuit.
- Use care so as not to damage wirings. Damaged wiring can cause electric shock or short circuit.
- Do not touch undesignated places. Touching places not designated can cause electric shock or short circuit.
- This work should be performed by the Location's Maintenance Man or Serviceman. Performing work by non-technical personnel can cause electric shock hazard.
- When performing work such as parts replacement other than those specified in this manual, be sure to contact where you purchased the product from. Confirm the work procedures and obtain precautions from where you purchased the product prior to performing work. Inappropriate parts replacement and/or installation with erroneous adjustment can cause an overload or the parts to come into contact, resulting in an electric shock, a short circuit, and a fire.



Be sure to perform volume's move value setting in the Volume Setting in the Test Mode after replacing or adjusting the Volume. (See 10-3E.)

If Accel. and Brake operation is not satisfactory, adjustment of volume installation position or volume replacement is needed. Also, be sure to apply greasing to the gear mesh portion once every 3 months.

13-1 ADJUSTING OR REPLACING THE VOLUME

The following tools are required for the operations below: Phillips screwdrivers for M4 and M5. The appropriate value for both ACCEL. Volume and Brake Volume is under 30H when released and over C0H when stepped on. Check Volume values in the TEST mode. Since work is performed inside the energized cabinet, be very careful so as not to touch undesignated places. Touching places not specified can cause electric shock or short circuit.

ADJUSTING PROCEDURE

- Take out the 2 truss screws and remove the Front Cover from the Accel. & Brake Unit (FIG. 13. 1

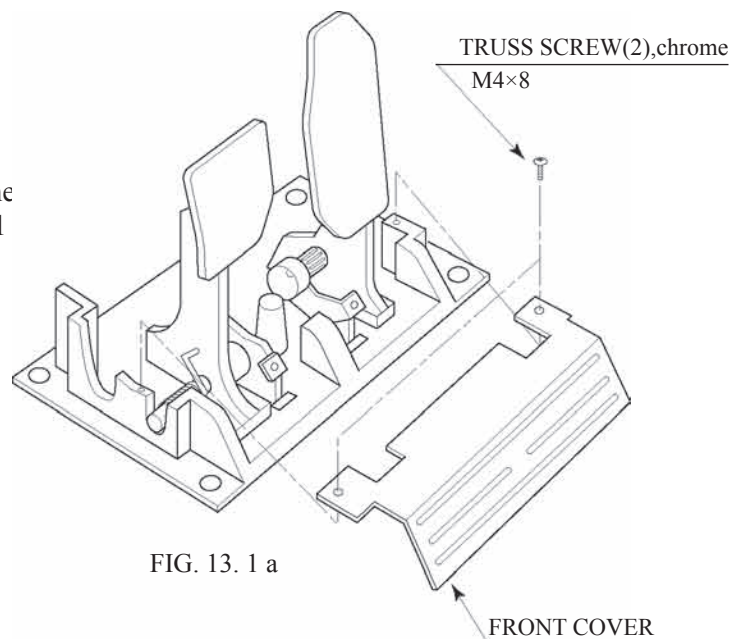
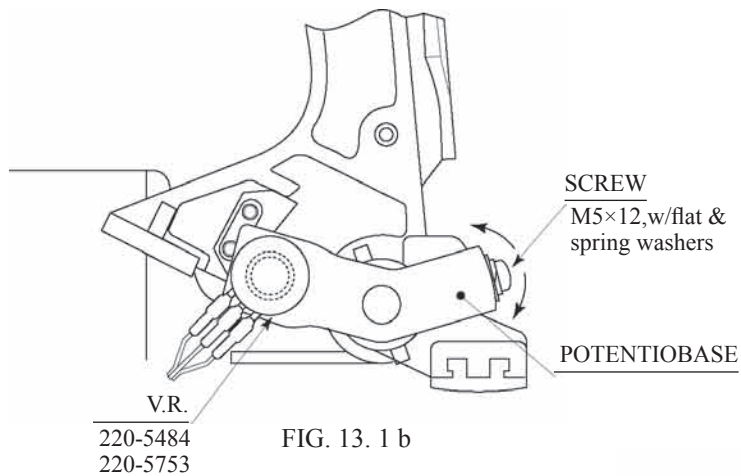


FIG. 13. 1 a



- Loosen the screw which secure the Potentiobase, and adjust the Volume value by moving the Base. (FIG. 13. 1 b)
- Secure the Potentiobase.
- Perform volume setting in the volume setting mode. (See 10-3E.)

REPLACING THE VOLUME

- Turn the power off.
- Take out the 2 screws and remove the Potentiocover (FIG. 13. 1 c).
- Disconnect the connector of the volume to be replaced.
- Remove the screw which secures the Potentiobase (FIG. 13. 1 b).
- Remove the Potentiobase together with the volume as is attached. (FIG. 13. 1 c)
- Remove the base and the gear to replace the volume.
- Adjust the volume as per the previous page after replacing.

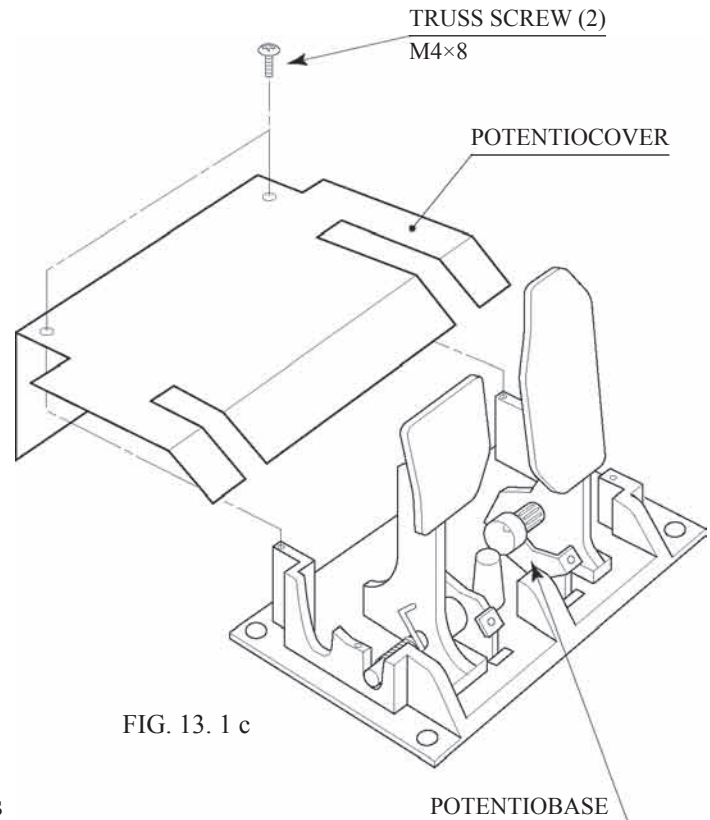


FIG. 13. 1 c

13-2 GREASING



Be sure to use the designated grease. Using undesignated grease can cause parts damage.

Use spray grease once every three months to grease up the Spring and gear mesh portion. For spray greasing, use GREASE MATE (PART No. 090-0066).

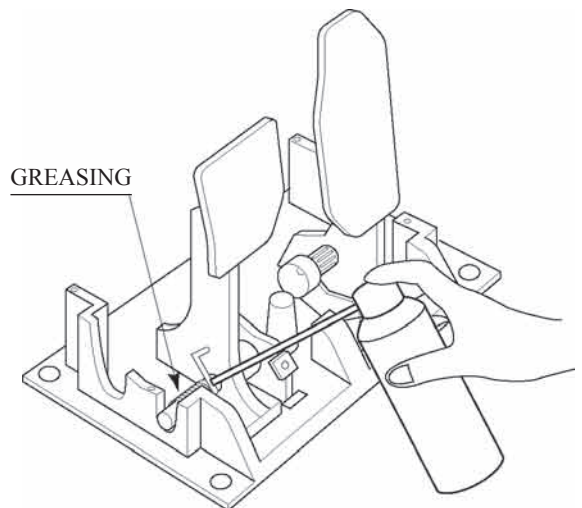


FIG. 13. 2

HANDLING THE COIN JAM

CLEANING THE COIN SELECTOR



IMPORTANT!

- (1) Turn the power for the machine OFF. Open the coin chute door.
- (2) Remove the coin selector from the coin chute door.
- (3) Open the gate and dust off by using a soft brush (made of wool, etc.).
- (4) Remove and clean smears by using a soft cloth dipped in water or diluted chemical detergent and then squeezed dry.

(E ring), be very careful so as not to bend the rotary shaft.

- (6) Remove stain from the rotary shaft and shaft receiving portions by wiping off with a soft cloth, etc.
- (7) After wiping off as per (6) above, further apply a dry cloth, etc. to cause the coin selector to dry completely.

COIN METER

- Does the Coin Meter count satisfactorily?
- Does the coin drop into the Cashbox correctly?
- Is the coin rejected when inserted while keeping the Reject Button pressed down?

COIN DOOR

Tom Happ
 tom.happ@happcontrols.com
 Happ Controls
 106 Garlich Drive
 Elk Grove, IL. 60007
 Ph. 847-593-6161 ext. 107
 Fx. 847-956-2091

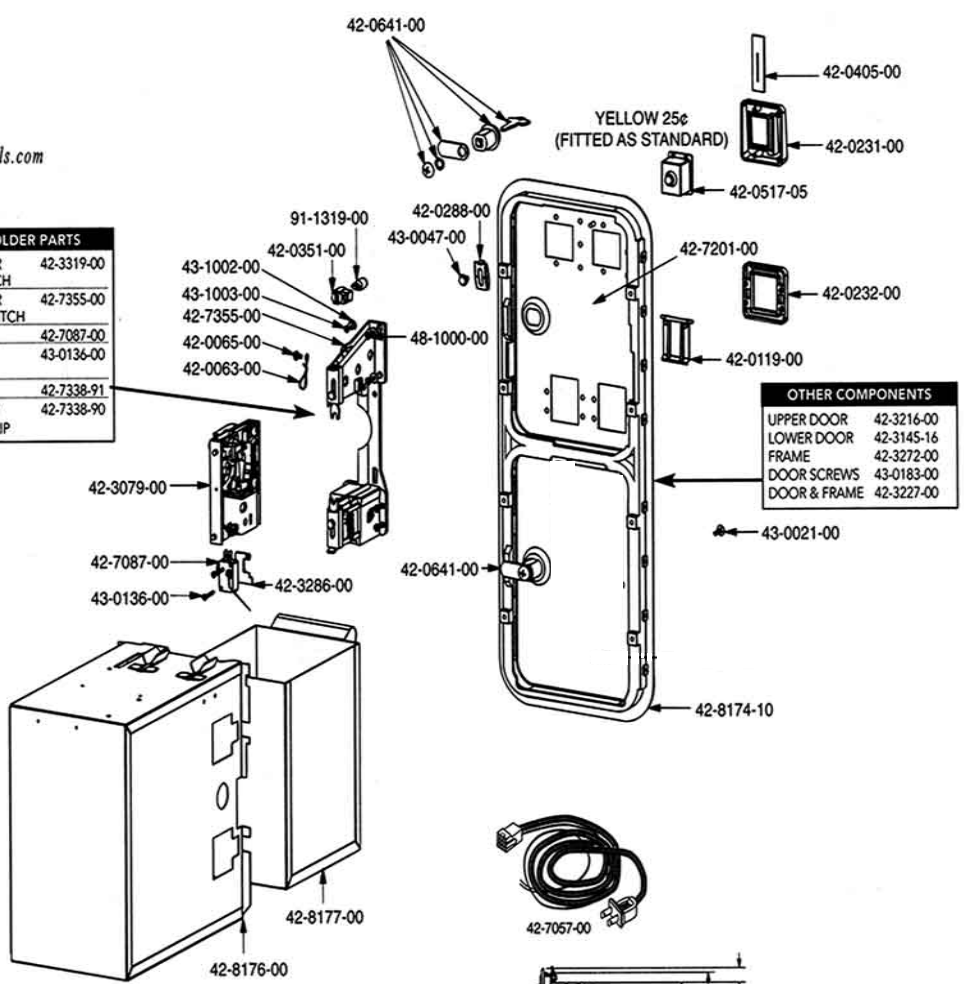
Visit our website <http://www.happcontrols.com>

EXCLUSIVE!

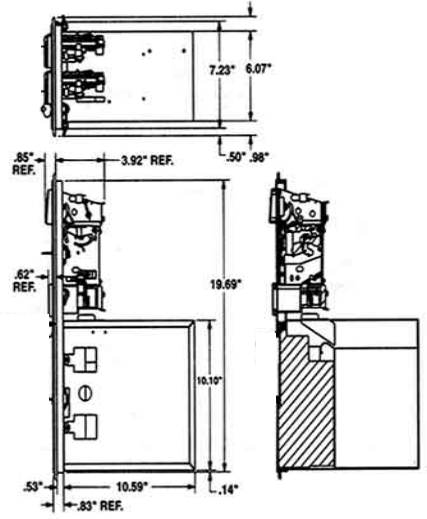
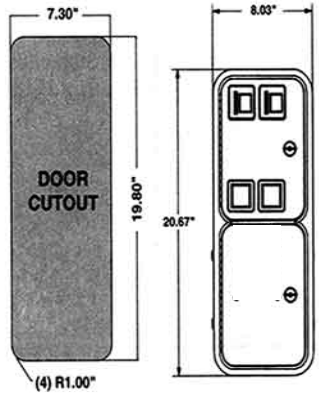
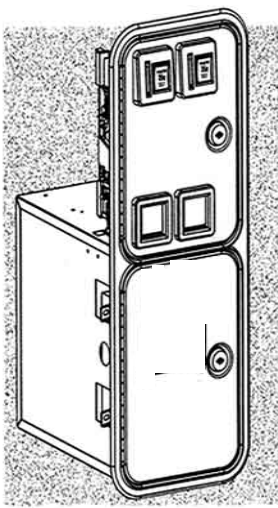
Custom "Guardian" Security Hasp available to protect your dollars,

GUARDIAN

MECH HOLDER PARTS	
MECH HOLDER W/COIN SWITCH	42-3319-00
MECH HOLDER W/O COIN SWITCH	42-7355-00
COIN SWITCH	42-7087-00
SCREW FOR COIN SWITCH	43-0136-00
METAL CLIP	42-7338-91
THUMBSCREW FOR METAL CLIP	42-7338-90



OTHER COMPONENTS	
UPPER DOOR	42-3216-00
LOWER DOOR	42-3145-16
FRAME	42-3272-00
DOOR SCREWS	43-0183-00
DOOR & FRAME	42-3227-00



15. MONITOR

15-1 CAUTIONS AND WARNINGS CONCERNING THE SAFETY FOR HANDLING THE MONITORS

Before handling the monitors, be sure to read the following explanations and comply with the caution/warning instructions given below. Note that the caution/warning symbol marks and letters are used in the instructions.



Indicates that handling the monitors erroneously by disregarding this warning may cause a potentially hazardous situation, which could result in death or serious injury.



Indicates that handling the monitors by disregarding this caution may cause a potentially hazardous situation, which could result in personal injury and or material damage.



Indicates that access to a specific part of the equipment is forbidden.



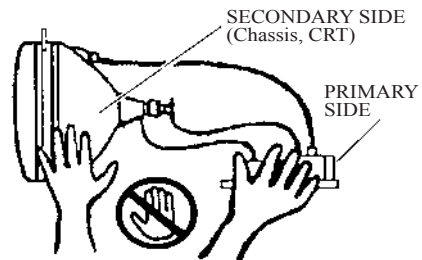
Indicates the instruction to disconnect a power connector or to unplug.



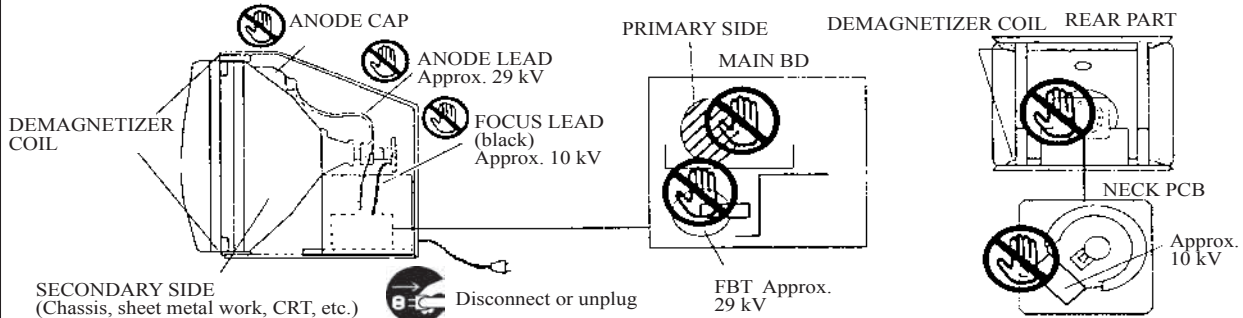
- When performing such work as installing and removing the monitor, inserting and disconnecting the external connectors to and from monitor interior and the monitor, be sure to disconnect the power connector (plug) before starting the work. Proceeding the work without following this instruction can cause electric shock or malfunctioning.
- Using the monitor by converting it without obtaining a prior permission is not allowed. SEGA shall not be liable for any malfunctioning and accident caused by said conversion.



- Primary side and Secondary side
The monitor's circuit which is divided into the Primary side and Secondary side, is electrically isolated. Do not touch the primary side, or do not touch both the primary side and the secondary side simultaneously. Failing to observe the instruction can cause electric shock and this is very dangerous. When making monitor adjustments, use a non-conductive driver and make adjustment without touching any part other than the Adjustment V. R. and knob. Also, be sure not to cause a short-circuit to the Primary side and Secondary side. If short-circuited, it can cause electric shock or malfunctioning, which is very dangerous.



- High-tension Voltage
Some of the parts inside monitor are subject to high-tension voltage in excess of 20,000 volts and very dangerous. Therefore, do not touch the monitor interior. Should soldering & paper wastes, etc. be mixed in the monitor interior, turn the power off so as not to cause malfunctioning or fire hazard.



- Connecting the CRT and PCB
For combining the CRT and PCB, use the specified part No. to maintain the status of adjustments made at the factory. The anode of the CRT itself will be accumulatively charged as time elapses, generating high-tension voltage which is very dangerous. The monitor should be used with the Chassis, CRT and PCB assembled. When repair, etc. is required at the time of malfunctioning, be sure to send it in an "as is assembled" condition. If these are disassembled, what's charged to said high tension voltage can be discharged, causing a very hazardous situation. Therefore, under no circumstances should it be disassembled.

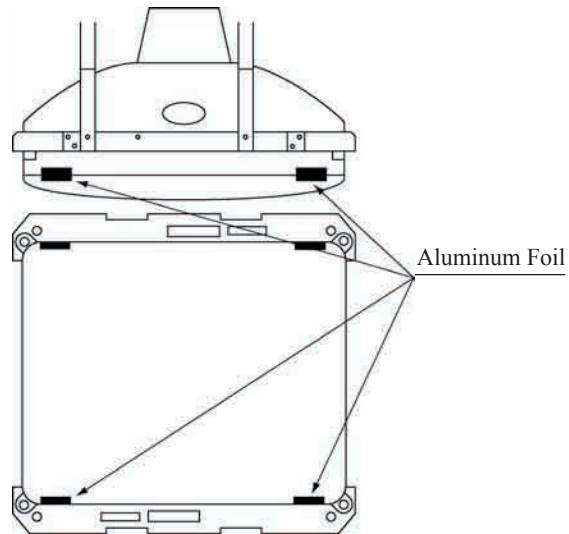


- Static Electricity
Touching the CRT surface sometimes causes you to slightly feel electricity. This is because the CRT surfaces are subject to static and will not adversely affect the human body.
- Installation and removal
Ensure that the Magnetizer Coil, FBT (Fly-Back Transformer), Anode Lead and Focus Lead are not positioned close to the sheet metal work's sharp edges, etc. and avoid damaging the insulated portions so as not to cause electric shock and malfunctioning. (For the name of parts, refer to the above Figures).



For the purpose of static prevention, special coating is applied to the CRT face of this product. To protect the coating, pay attention to the following points. Damaging the coating film can cause electric shock to the customers.

- Do not apply or rub with a hard item (a rod with pointed edge, pen, etc.) to or on the CRT surfaces.
- Avoid applying stickers, seals, etc. on the CRT face.
- Do not remove aluminum foils from the CRT corners. Removing the aluminum foils can cause static prevention effects to be lowered.



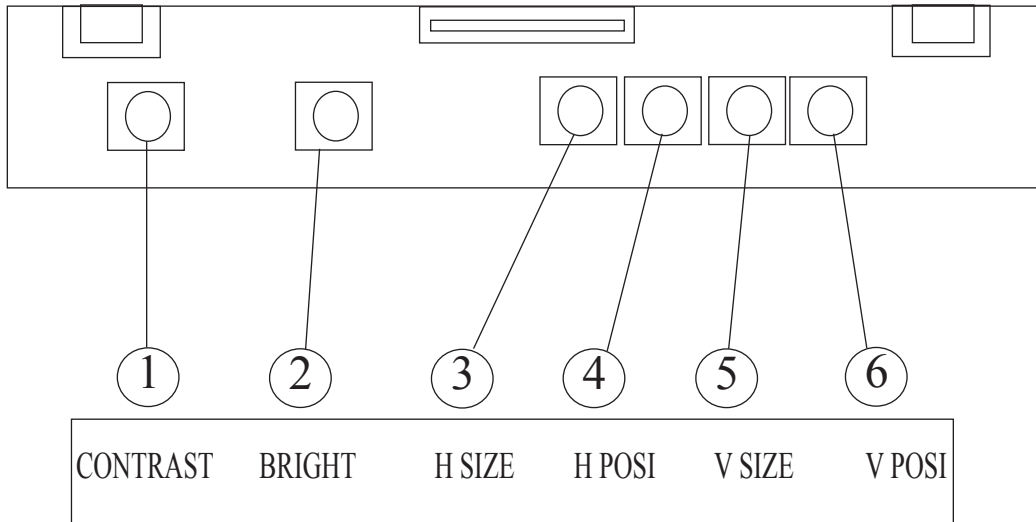
15-2 CLEANING THE CRT SURFACES



Static preventive coating is applied to the CRT surfaces. When cleaning, pay attention to the following points. Peeling off of static preventive coat can cause electric shock.

- Remove smears by using a dry, soft cloth (flannels, etc.). Do not use a coarse gauze, etc.
- For smear removing solvent, alcohol (ethanol) is recommended. When using chemical detergent, be sure to follow instructions below:
 - Dilute chemical detergent with water and dip a soft cloth in and then thoroughly wring it to wipe smears off.
 - Do not use a chemical detergent containing an abradant, powder or bleaching agent.
 - Do not use alkaline chemical detergents such as "glass cleaner" available on the market or solvents such as thinner, etc.
- Do not rub or scratch the CRT face with hard items such as brushes, scrub brush, etc.

Clean the CRT surfaces once a week. When cleaning, pay attention to the above caution so that the antistatic coating will not come off.



- ① CONTRAST..... Adjust image contrast.
- ② BRIGHT..... Controls screen brightness.
- ③ H. SIZE.....Controls horizontal screen size.
- ④ H. POSI.....Controls horizontal display position on screen.
- ⑤ V. SIZE.....Controls vertical screen size.
- ⑥ V. POSI.....Controls vertical display position on screen.

16. REPLACING THE FLUORESCENT LAMP/OTHER LAMPS



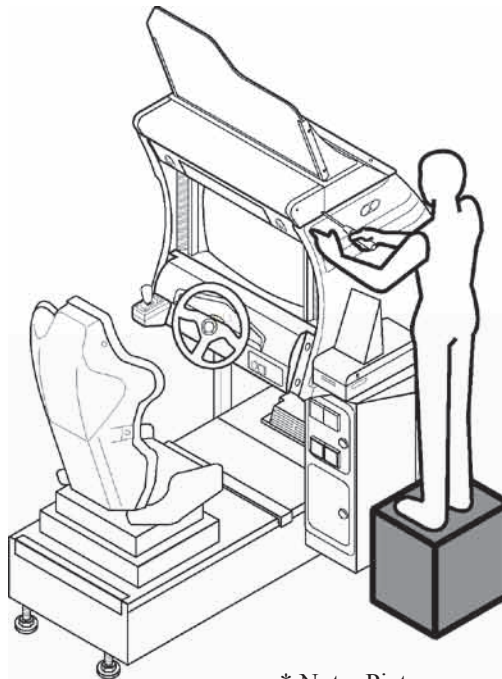
- When performing work, be sure to turn power off. Working with power on can cause electric shock and short circuit hazards.
- The Fluorescent Lamp, when it gets hot, can cause burn. Be very careful when replacing the Fluorescent Lamp.
- Be sure to use lamps of the designated rating. Using lamps of undesignated rating can cause a fire or malfunctioning.



- To perform work safely and securely, be sure to prepare a step which is in a secure and stable condition. Performing work without using the step can cause violent falling down accidents.
- Be careful when handling the plastic parts. Failure to observe this may cause injury due to damage or fragments resulting from damage.



When replacing the fluorescent lamps, it is recommended to replace the glow bulb as well.

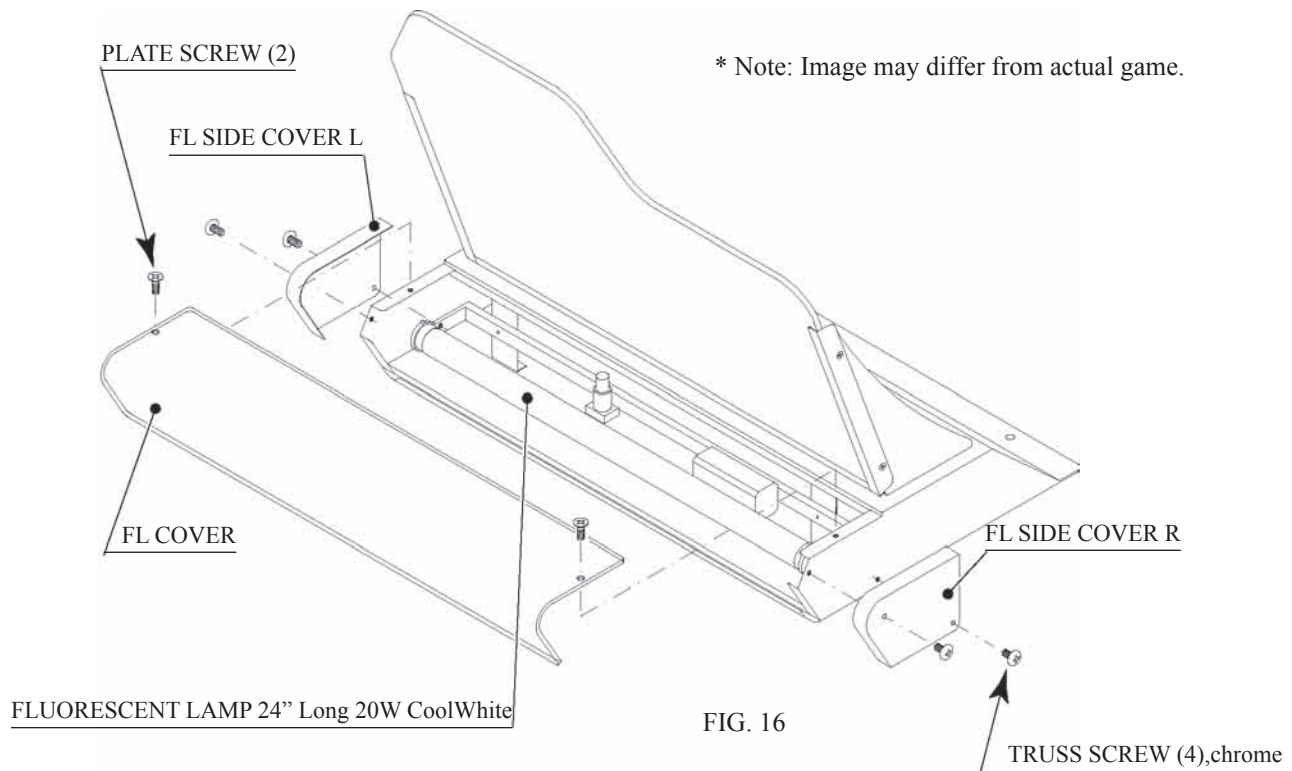


* Note: Picture may appear different then acutal Unit.

When performing work, prepare a step.

FLUORESCENT LAMPS IN THE FL BOX

- Turn off the power.
- Remove the 2 Truss screws and remove FL Side Cover R.
- Remove the 2 Truss screws and remove FL Side Cover L from the opposite side in the same manner.
- Remove the 2 Plate screws and remove the FL Cover.
- Fluorescent lamps may be replaced once the FL Cover is removed.



START BUTTON LAMP, CHANGE VIEW BUTTON LAMP

- Turn off the power.
- Remove the 4 truss screws secur the Button Plate.

TRUSS SCREW (4),chrome
M4×10

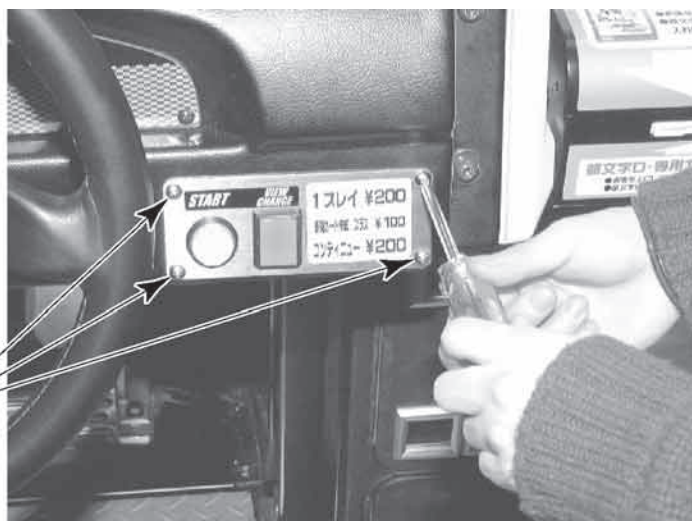


PHOTO 16 a

* Note: Button Plate will appear different on US Games.

- Remove the Button Plate.
The Button Plate contains wiring connections. Remove this panel, taking care not to damage the wiring.
- Disconnect the connector.

CONNECTOR (1)
YELLOW 12P

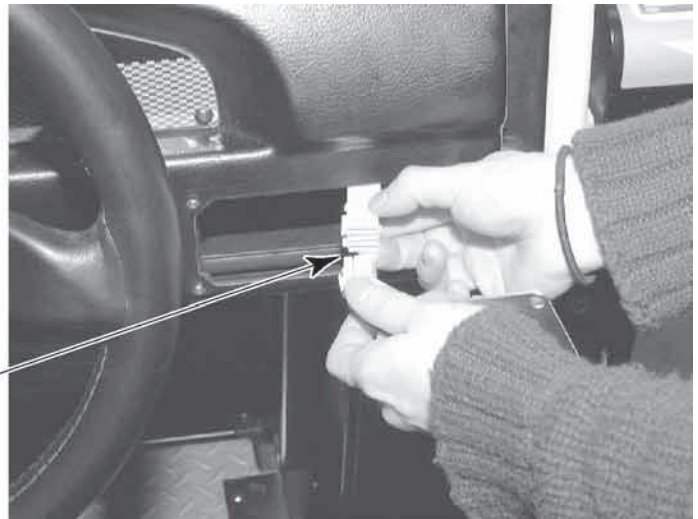


PHOTO 16 b

- There is a metal fitting at the base of the buttons on the Button Plate. Rotate this metal fitting to unlock it, then remove the wiring connection from the button.

UNLOCK

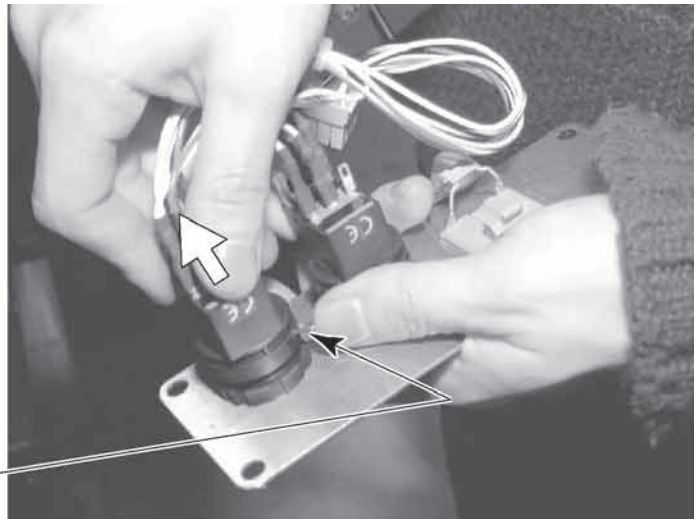
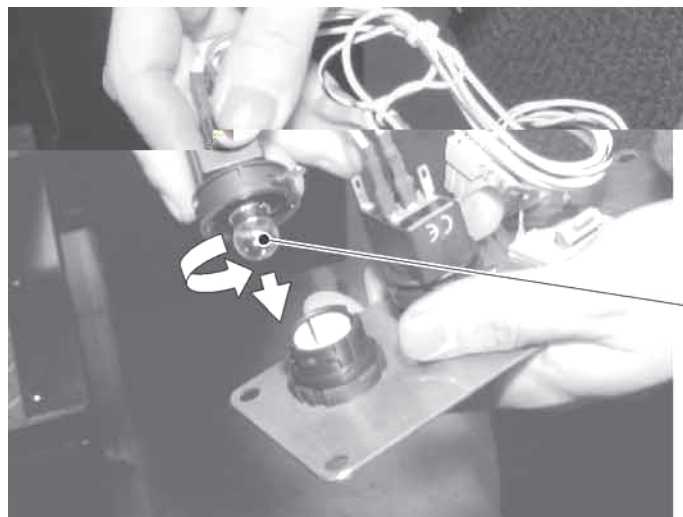


PHOTO 16 c

- Press and turn the lamp counter-clockwise to remove it.



LAMP 6.3V 1W

PHOTO 16 d

17. PERIODIC INSPECTION TABLE

The items listed below require periodic check and maintenance to retain the performance of this machine and to ensure safe business operation.

When handling the controller, the player will be in direct contact with it . In order to always allow the player to enjoy the game, be sure to clean it regularly. Also, it is advisable to provide wet tissue, etc. available for player use.



- Be sure to check once a year to see if Power Cords are damaged, the plug is securely inserted, dust is accumulated between the Socket Outlet and the Power Plug, etc. Using the product with dust as is accumulated can cause fire and electric shock hazards.
- Never use a water jet, etc. to clean inside and outside the cabinet. If wetness occurs for any reason, do not use the product until it has completely dried.
- Periodically once a year, request the place of contact herein stated or the Distributor, etc. where the product was purchased from, as regards the internal cleaning. Using the product with dust as is accumulated in the interior without cleaning can cause a fire or accident. Note that cleaning the interior parts can be performed on a pay-basis.

TABLE 17

ITEMS	DESCRIPTION	PERIOD	REFERENCE
CABINET	Check Adjusters'contact with surface.	Daily	3
CARD READER/WRITER	Head cleaning	Every 101 counts of the card reader/writer or Daily	7
CONTOROL PANEL	Cleaning	As necessary	--
	Inspection of VR	Monthly	10, 11
	Inspection of adjusting gear mesh	Trimonthly	11-2
	Greasing	Trimonthly	11-3
SHIFT LEVER	Inspection of SW	Monthly	10, 12
	Greasing	Trimonthly	12-3
ACCEL. & BRAKE	Inspection of VR	Monthly	10, 13
	Gear and Spring portion greasing	Trimonthly	13-2
MONITOR	SCREEN cleaning.	Weekly	15-2
	Check adjustments.	Monthly or when moving.	6, 10, 15
COIN CHUTE DOOR	Inspection of COIN SW	Monthly	10
	Coin insertion test	Monthly	14
	Cleaning of COIN SELECTOR.	Trimonthly	14
SEAT	Greasing to the seat rail	Trimonthly	FIG.17
GAME BD	MEMORY TEST	Monthly	10
	Check settings.	Monthly	10
POWER SUPPLY PLUG	Inspection and cleaning	Annually	See above.
INTERIOR	Cleaning		
CABINET SURFACES	Cleaning	As necessary	Next Page

CLEANING THE CABINET SURFACES

When the cabinet surfaces are badly soiled, remove stains with a soft cloth dipped in water or diluted (with water) chemical detergent and squeezed dry. To avoid damaging surface finish, do not use such solvents as thinner, benzine, etc. other than ethyl alcohol, or abrasives, bleaching agent and chemical dustcloth.

SEAT (Greasing to Seat Rail Portion)

Move the Seat to the rearmost position and apply spray greasing to the portion shown at the right once every 3 months by using NOK KLUBER L60 or GREASE MATE SEGA PART No. 090-0066. After greasing, move the Seat a few times forward and backward so as to allow the grease to be applied all over uniformly. Be sure to wipe grease which attaches to the surfaces of the PROTECT RUBBER on the Seat Rail, or any excess grease.

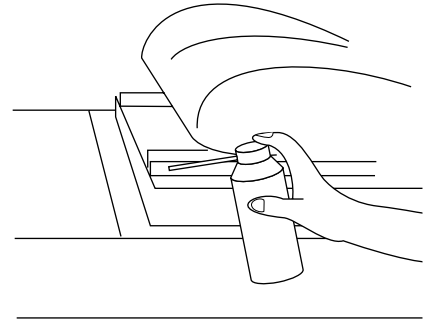


FIG. 17

18. TROUBLESHOOTING

18-1 CARD READER/WRITER

If this machine detects an error during the operation of the Card Reader/Writer, it will display the error messages listed below. Perform the appropriate maintenance based on the content of the error message displayed.

Should an error occur, do not attempt to open the top cover of the Card Reader/Writer. The unit will attempt to save the data to the customer's card and restore the game if the top cover is closed and the RESTORE command (hold down the Start button + Change View button for a short time) is used. However, attempting to use the RESTORE command after the top cover has been opened may force the game to shut down and not save data to the card.

When the game shuts down or the unit is reset, the data on the customer's card is not saved. In order to save customer data, perform the proper maintenance carefully.

TABLE 18. 1 a

ERROR DISPLAY	CAUSE	COUNTERMEASURES
Error occurred while reading card. Card will be ejected without saving data. Please press the Start and Change View buttons.	This message is displayed after several failed attempts to read the card at the end of the game.	Press the Start button and Change View button at the same time to eject the card and end the game.
Error occurred while saving data. Please notify a store attendant. Please press the Start and Change View buttons.	This message is displayed after several failed attempts to save data to the card at the end of the game.	Leave the card in place and press the Start button and Change View button at the same time to retry the save operation. Remove the card and press the Start button and Change View button at the same time to restore or end the game. If this error occurs several times, use Test Mode to perform manual cleaning. (See 10-3G.)
Printing error. Card will be ejected without printing or saving data. Please press the Start and Change View buttons.	This message is displayed after several failed attempts to print at the end of the game.	Press the Start button and Change View button at the same time to eject the card and end the game.
A shutter error has occurred. Please remove any cards present in card insertion slot. Please press the Start and Change View buttons.	This message is displayed when the shutter is forced open or if the unit detects a problem with the shutter. This message is displayed when the unit is unable to open/close the shutter.	Correct the problem, then press the Start button and Change View button at the same time to restore the game. Circumstance may force the game to shut down. Correct the problem, then press the Start button and Change View button at the same time to restore the game.

TABLE 18.1 a

ERROR DISPLAY	CAUSE	COUNTERMEASURES
This card cannot be used. Card will be ejected without saving data. Please press the Start and Change View buttons.	This message is displayed when the card in the Card Reader/Writer is not a proper player card at the end of the game.	Press the Start button and Change View button at the same time to eject the card and end the game.
Card jam. Ejecting card. Please press the Start and Change View buttons.	This message is displayed when various operations fail because of dirty rollers or heads.	Press the Start button and Change View button at the same time to eject the card and restore the game. If this error occurs several times, use Test Mode to perform manual cleaning. (See 10-3G.)
There is a problem with the card reader/writer. Please notify a store attendant. Please turn off the power and start again.	This message is displayed when there is a problem with the Card Reader/Writer and it sends improper signals.	Verify there are no problems with the shutter and that the top cover is closed and then restart the unit. (See 7-3.)
The card reader/writer is not responding. Please notify a store attendant. Check the card reader/writer is connected properly, turn off the power and start again.	This message is displayed at power-up during advertisements when the Card Reader/Writer is not connected properly or when it is broken and unresponsive.	Verify that the Card Reader/Writer is connected properly and then restart the unit. (See Section 24.)
SCIF Error. Please notify a store attendant. Check that the card reader/writer is connected properly, turn off the power and start again.	This message is displayed when a communication error occurs between the Card Reader/Writer and the game board.	Verify that the Card Reader/Writer is connected properly and then restart the unit. (See Section 24.) If this error occurs several times, check the immediate area for sources of possible interference.
Card jam. Remove the card and press the Start and Change View buttons. If the card cannot be removed, please notify a store attendant.	This message is displayed when various operations fail because of dirty rollers or heads. This message is displayed when a card jam is suspected when there should be no card in the Card Reader/Writer.	Leave the card in place and press the Start button and Change View button to retry the operation. Remove the card and press the Start button and Change View button at the same time to restore or end the game (refer to 7-3). If this error occurs several times, use Test Mode to perform manual cleaning. (See 10-3G.) Press the Start button and Change View button at the same time after removing the card or correcting the problem to restore the game. (See 7-3.)

The following error messages are displayed when problems are detected during unit power-up (during initialization of the Card Reader/Writer). Perform the appropriate maintenance based on the content of the error message displayed.

TABLE 18.1 b

ERROR DISPLAY	CAUSE	COUNTERMEASURES
CARD R/W ERROR!	This message is displayed at power-up when the Card Reader/Writer is not connected properly or when it is broken and unresponsive.	Verify that the Card Reader/Writer is connected properly and then restart the unit. (See Section 24). If broken, contact the company from whom the unit was purchased.
PLEASE INSERT CLEANING CARD.	This message is displayed when the conditions prompting an automatic Card Reader/Writer cleaning are met.	Perform the Card Reader/Writer cleaning. (See 7-2.)
PLEASE WAIT	This message is displayed during network setup while the other unit is being initialized.	This message disappears once initialization of the other network game unit is complete.
CAN'T EJECT	This message is displayed at power-up when, after attempting to do so, the Card Reader/Writer is unable to eject a card for some reason. This message is displayed at power-up when the shutter cannot be opened/closed properly.	Remove all cards from the Card Reader/Writer. (See 7-3.) Verify that there are no problems with the shutter and then restart the unit. If this error occurs several times, contact the company from whom the unit was purchased.

The following messages are displayed when there are limits to the Card Reader/Writer Operation Mode. The messages are displayed in the upper right of the screen during advertisements. The message content is updated after the "SEGA LOGO" is displayed. If the message is not one displayed intentionally by the Operation Mode, perform the appropriate maintenance based on the content of the error message displayed.

TABLE 18.1 c

ERROR DISPLAY	CAUSE	COUNTERMEASURES
The machine is currently unable to issue new cards. Please see a store attendant to have the machine restocked with cards.	The Card Reader/Writer Dispenser is empty (no cards).	Restock the Dispenser with cards. (See 7-1.) If no cards are available, contact the company from whom the unit was purchased.
Cards may not be used at this time.	Cards may not be used due to the Store Closing setting being activated.	If there is a mistake in the settings, use Test Mode to change the Store Closing setting. (See 10-3.) If the setting is correct, but not operating properly, check the internal clock settings on the game board (Refer to the Service Manual.)

18-2 TROUBLESHOOTING (WHEN NO ERROR MESSAGE IS SHOWN)



- In order to prevent electric shock and short circuit, be sure to turn power off before performing work.
- Be careful so as not to damage wirings. Damaged wiring can cause electric shock or short circuit.
- After removing the cause of the functioning of the Circuit Protector, reinstate the Circuit Protector. Depending on the cause of the functioning, using the Circuit Protector as is without removing the cause can cause generation of heat and fire hazard.
- In the event that a problem cannot be resolved by employing the procedures listed in this Manual, be sure to request service from the office shown on this Manual or the dealer from whom the product was originally purchased. Attempts to employ procedures other than those specified in this Manual can cause electrical shock, shorting, or fire.
- In the event of a problem that is not described here, be sure to contact the office shown on this Manual or the dealer from whom the product was originally purchased. Careless attempts at repair can result in electrical shock, shorting, or fire.

If a problem occurs, first check to make sure that the wiring connectors are properly connected.

TABLE 18. 2

PROBLEM	CAUSE	COUNTERMEASURES
When the main SW is turned ON, the machine is not activated.	The power is not ON.	Firmly insert the plug into the outlet.
	Incorrect power source/voltage.	Make sure that the power supply/voltage are correct.
	The CIRCUIT PROTECTOR functioned due to momentary overcurrent.	After eliminating the cause of overload, have the Circuit Protector of the AC Unit restored. (See Section 6 4 , Refer to the following.)
	The fuse of the connect board was blown out due to momentary overcurrent.	After eliminating the cause of overload, replace the specified rating fuse. (Fig. 18. 2 b)
Fluorescent lamp inside FL box doesn't light up.	Connector connection fault.	Check connector connections between the Cabinet and the FL box.
	Fluorescent lamp and Glow lamp need replacement.	Replace the fluorescent lamp and the glow lamp. (See Section16.)

CIRCUIT PROTECTOR

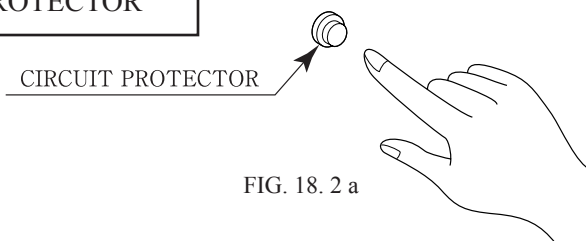


FIG. 18. 2 a

Functions due to the activation of bimetal. To restore the function, wait for approximately one minute or longer until the bimetal cools off. (Press the Button.)

TABLE 18.2

PROBLEM	CAUSE	COUNTERMEASURES
Sound is not emitted.	Sound volume adjustment is not correct.	Adjust the Switch Unit's sound adjustment volume . (See Section 10.)
	Faulty connections for various connectors.	Check the connections for the game board, amp, speakers and Volume connectors.
	Malfunctioning BD, Amp. and Speaker.	Perform SOUND TEST. (See Service Manual.)
Sounds are emitted and the lamps are lit, but the screen is black.	Faulty connections for the visual signal connector or the monitor power connector.	Check the connections for the monitor and game board connectors.
	Broken monitor.	Contact the company from whom the unit was purchased.
Irregular/uneven colors on the monitor screen.	Magnetization of the CRT.	Press the Demag. switch on the switch unit. (See Section 10.)
Colors on the monitor screen are strange.	Faulty connection for the visual signal connector.	Check the visual signal connector connection and make sure it is secured properly.
	Screen adjustment is not appropriate.	Make adjustment appropriately. (See Section 15.)
The on-screen image sways and/or shrinks.	The power source and voltage are no correct.	Make sure that the power supply and voltage are correct.
Does not accept input from any switch or volume.	Faulty connector connections.	Check the connection for the I/O Board and Cabinet connector.
		Check the power for the I/O Board.
Does not accept input from the Shift Lever.	Faulty connector connections.	Check the connections for the connectors in the Control Panel and between the Control Panel and the Cabinet.
	Broken Microswitch.	Replace the Microswitch (MICROSWITCH 509-5704).
STEERING (Servomotor) response is incorrect.	Incomplete power on check.	Power on and verify that the power on check completes properly. (See Section 6 5 .)
	Deviation of the volume value.	Adjust the volume value in the Test Mode. (See Section 10.)
	Volume gear engagement fault.	Adjust the engagement of the gear. (See Sections 10 & 11.)
	Volume malfunctioning.	Replace the volume. (See Section 11.)
	Detached wires.	Check for faulty wire connections around moving parts. When replacing wires, secure them so that they do not touch any moving parts.

TABLE 18. 2

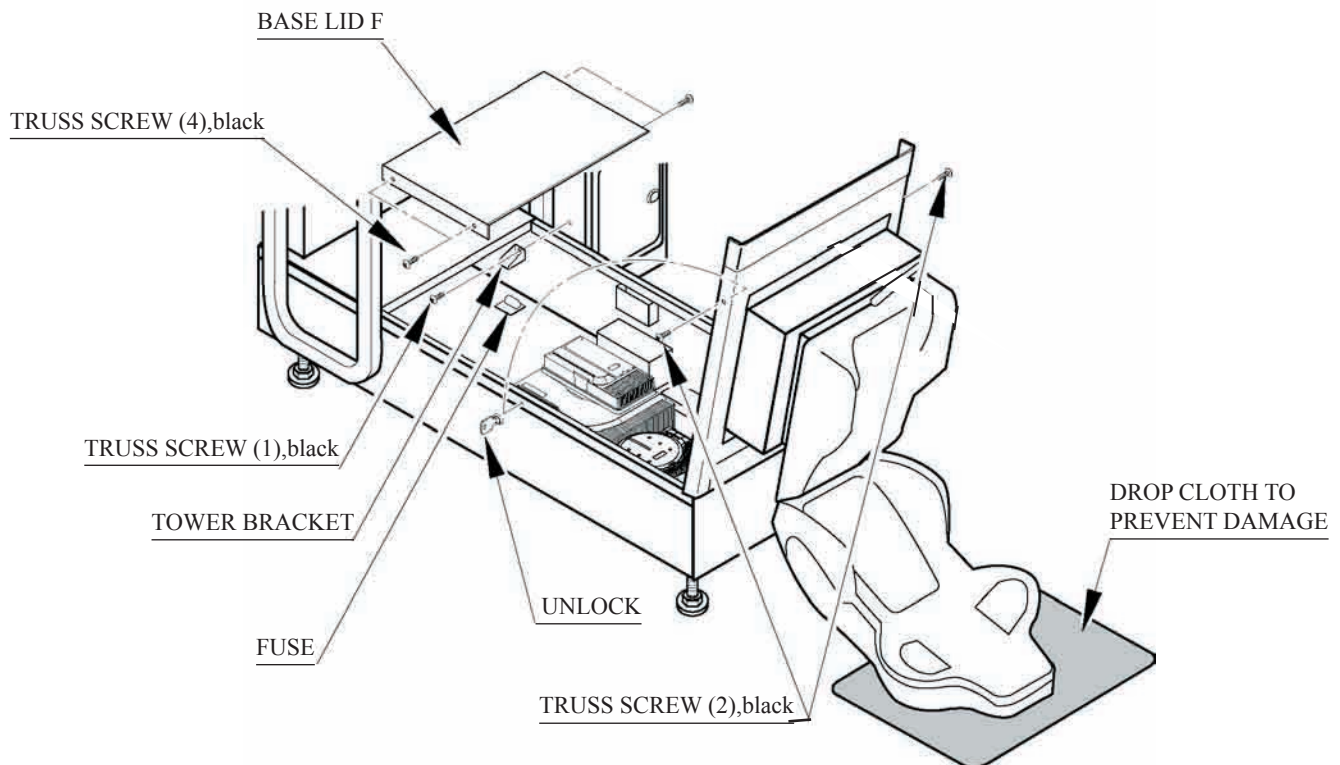
No response from Steering (Servomotor).	Failure of power-on checking procedure.	Reconnect the power and complete a power-on checking procedure. (See Section 6 5 .)
	Faulty connector connections.	Check the connections for the connectors between the Game Board and Servodriver and between the Servodriver and the Servomotor.
	Thermal element in the Servodriver is operating.	□
	Momentary overload caused a fuse on the Servodriver to blow.	
Steering (Servomotor) is weak in its force feedback.	Aging of the force feedback mechanism.	
Unsatisfactory Accel and Brake operation.	Incorrect volume setting.	
	Faulty Volume attachment or adjust gear alignment.	
	Faulty connector connection.	
	Failure of the volume.	
Start button and Change View button input does not work and they do not flash.	Faulty connector connections.	
Start button and Change View button input works, but they do not flash.	Unverified settings or operation.	
	The lamp is burnt out.	
Failure of the network play.	Network play is wrongly set.	
	Communication cables are disconnected. Communication cables are wrongly connected.	
	Damage of communication cables.	

REPLACING FUSES



- In case fuse replacements other than those stated in this manual are necessary, contact where you purchased the product from for inquiries regarding this matter.
- Fuse replacements other than those specified can cause accidents and are strictly forbidden.
- In order to prevent an electric shock, be sure to turn power off and unplug from the socket outlet before performing work by touching the internal parts of the product.
- Be careful so as not to damage wirings. Damaged wiring can cause electric shock and short circuit accidents.
- Be sure to use fuses meeting specified rating. Using fuses exceeding the specified rating can cause fire and electric shock accidents.
- After eliminating the cause of the blowing of fuse, replace the fuse. Depending on the cause of fuse blowing, continued use with the fuse as is blown can cause generation of heat and fire hazard.

Fuses are located on the top of the Connector Board inside the Cockpit Base. Lower the Seat and remove the Tower Bracket and Base Lid F to replace fuses.



19. GAME BOARD



- In order to prevent electric shock and short circuit hazards, be sure to turn power off before performing work.
- Be careful not to damage the wires. Damaged wires may cause electric shock or short circuit or present a fire risk.
- Do not expose the Game BD, etc. without a good reason. Failure to observe this can cause electric shock hazard or malfunctioning.



Static electricity from your body may damage some electronics devices on the IC board. Before handling the IC board, touch a grounded metallic surface so that the static electricity can be discharged.

19-1 REMOVING THE GD-ROM DRIVE

- Turn the power off.
- Remove 1 screw from each side of Base Lid R.
- Unlock the base with the Master Key.
- Turn the Lock Handle on Base Lid R to unlock the lid.
- Lower the seat towards the backrest. Slowly lower the backrest until it touches the floor to prevent damage to the seat part. Put a drop cloth on the floor to prevent damaging the surface of the seat part.

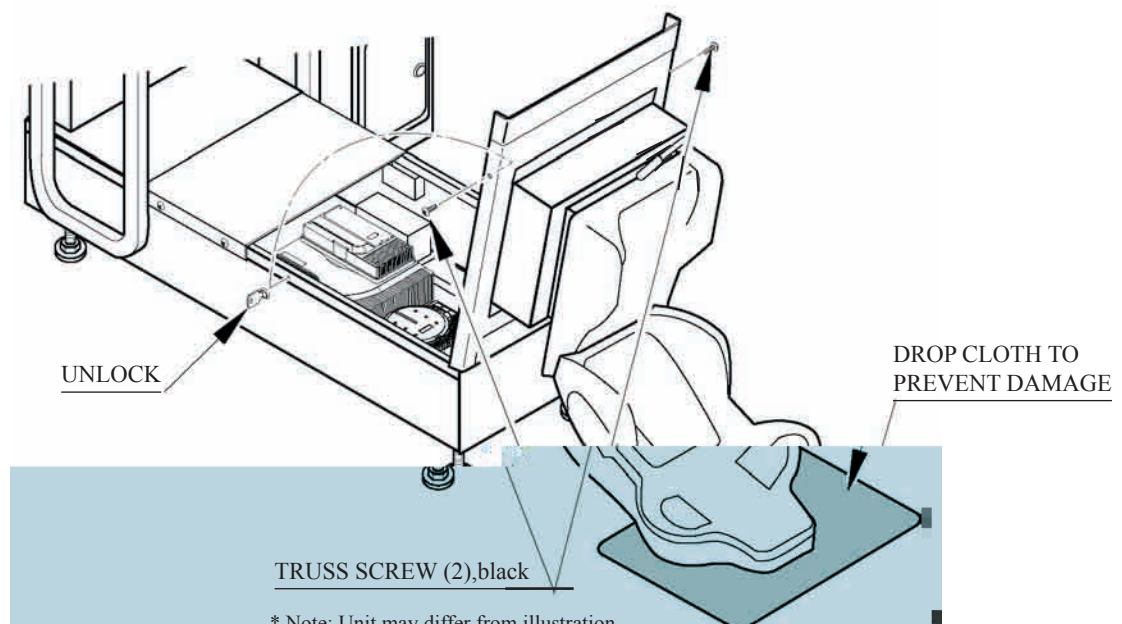


FIG. 19. 1

- Remove the GD cable connector and the power cord connector from the GD-ROM drive.

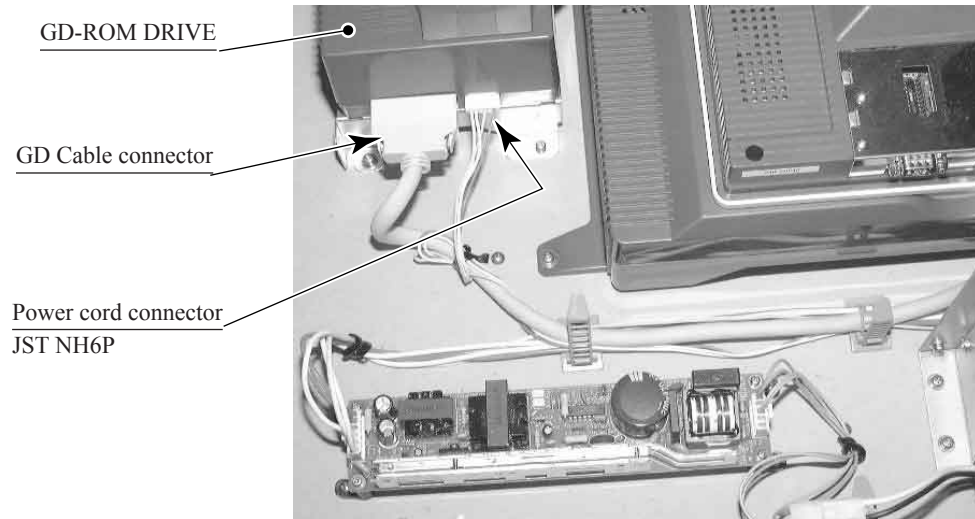


PHOTO 19. 2 a

- Remove the 4 screws to remove the GD-ROM drive.

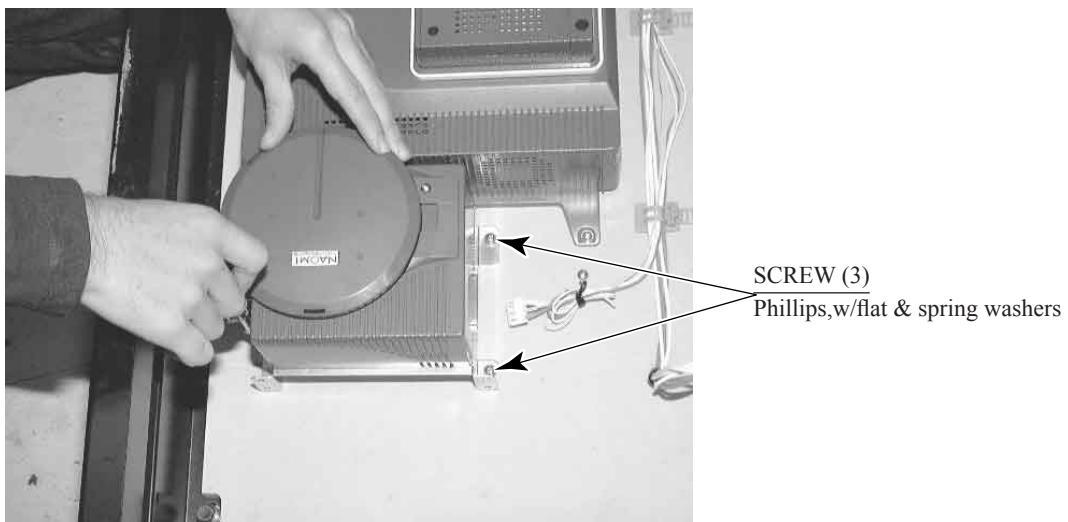
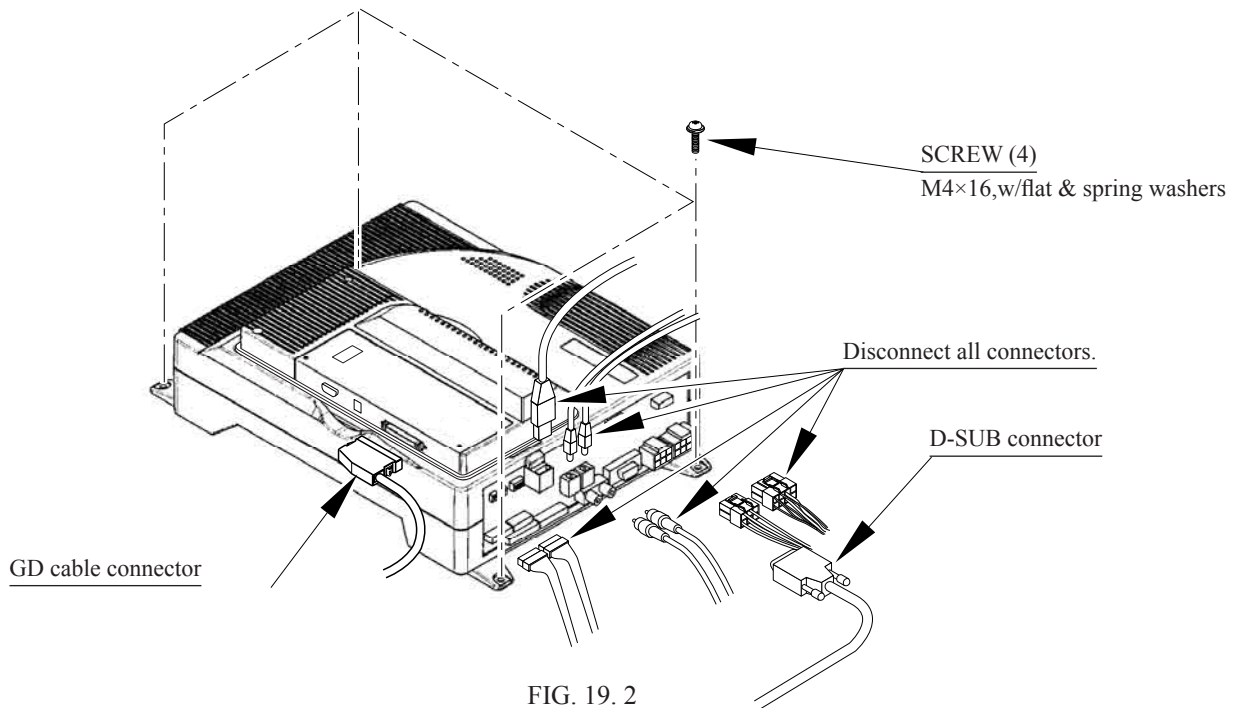


PHOTO 19. 2 b

19-2 REMOVING THE GAME BOARD

- Follow the above described action to open cabinet
- Remove all the connectors from the filter board on the Game Board. Also remove the GD cable connector from the DIMM board.
- Remove the 4 screws that fix the Game Board.



19-3 COMPOSITION OF GAME BOARD

ASSY CASE NAT TOF USA (840-0108D-01) :USA

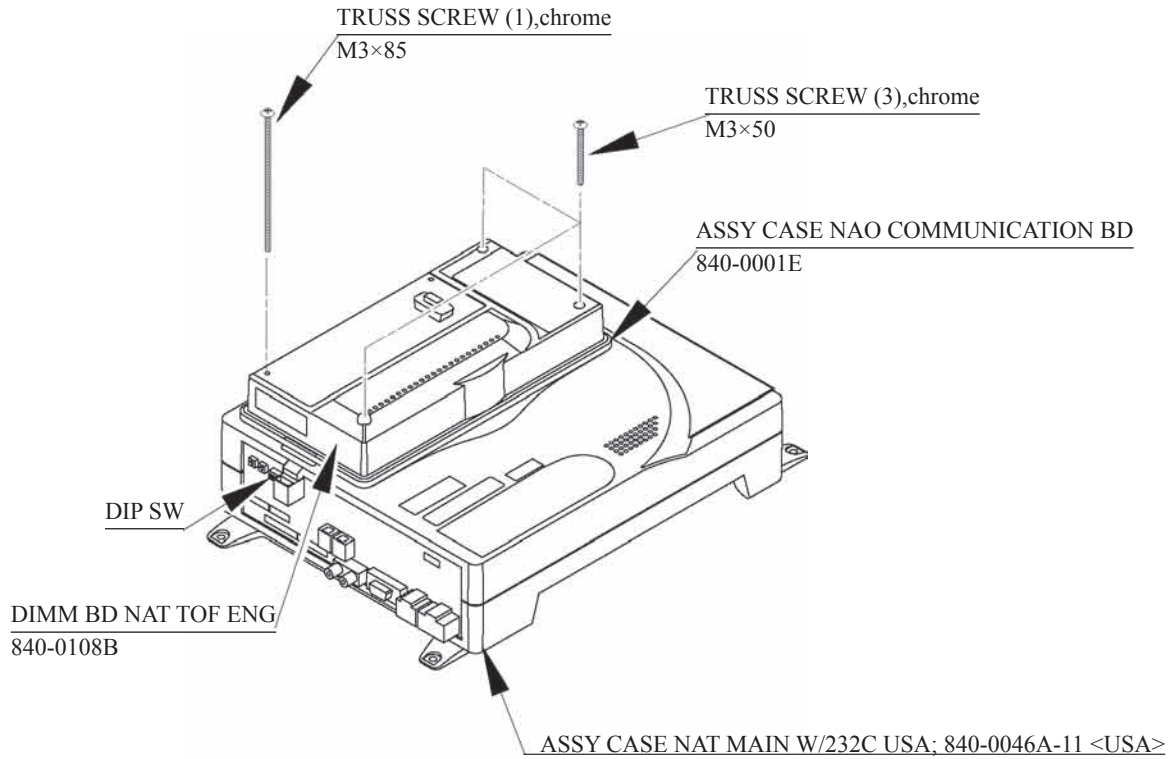


FIG. 19. 3 a

DIP SW SETTING

In this product, set all the DIP SW to OFF.

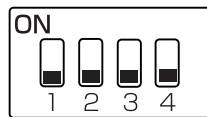


FIG. 19. 3 b

20. COMMUNICATION PLAY

20-1 SETTING FOR COMMUNICATION PLAY

Change the game setting for each seat in a manner so as to meet communication play. If the setting is not correct, communication play cannot be played.

SETTING FOR COMMUNICATION PLAY

- Turn the linked machines' power on.
- Cause all of the machines to enter the test mode. (10-3.)
- Select the GAME ASSIGNMENTS.
- Perform the SEAT NUMBER setting in the GAME ASSIGNMENTS screen. Set one of the machines to "1" and the other to "2".

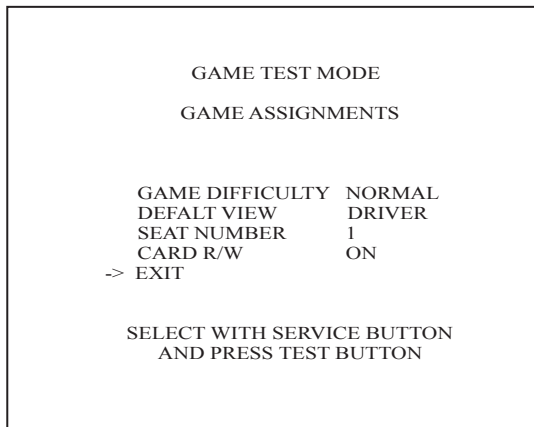


FIG. 20. 3

- Cause all of the machines to exit from the test mode. After the test mode, the screens proceed to and display the Network Check.
- When network checking is finished, the system displays Advertise Screen. This indicates successful completion of setting. If SEAT NUMBER setting is wrong, Network Check Screen appears, but it does not change to Advertise Screen. Normally the Network Check takes several 10 seconds. If the screen does not proceed from the Network Check screen, some sorts of errors such as incorrect setting, incorrect connection or malfunctioning of the communication cable can be considered.

20-2 NETWORK PLAY PRECAUTIONS

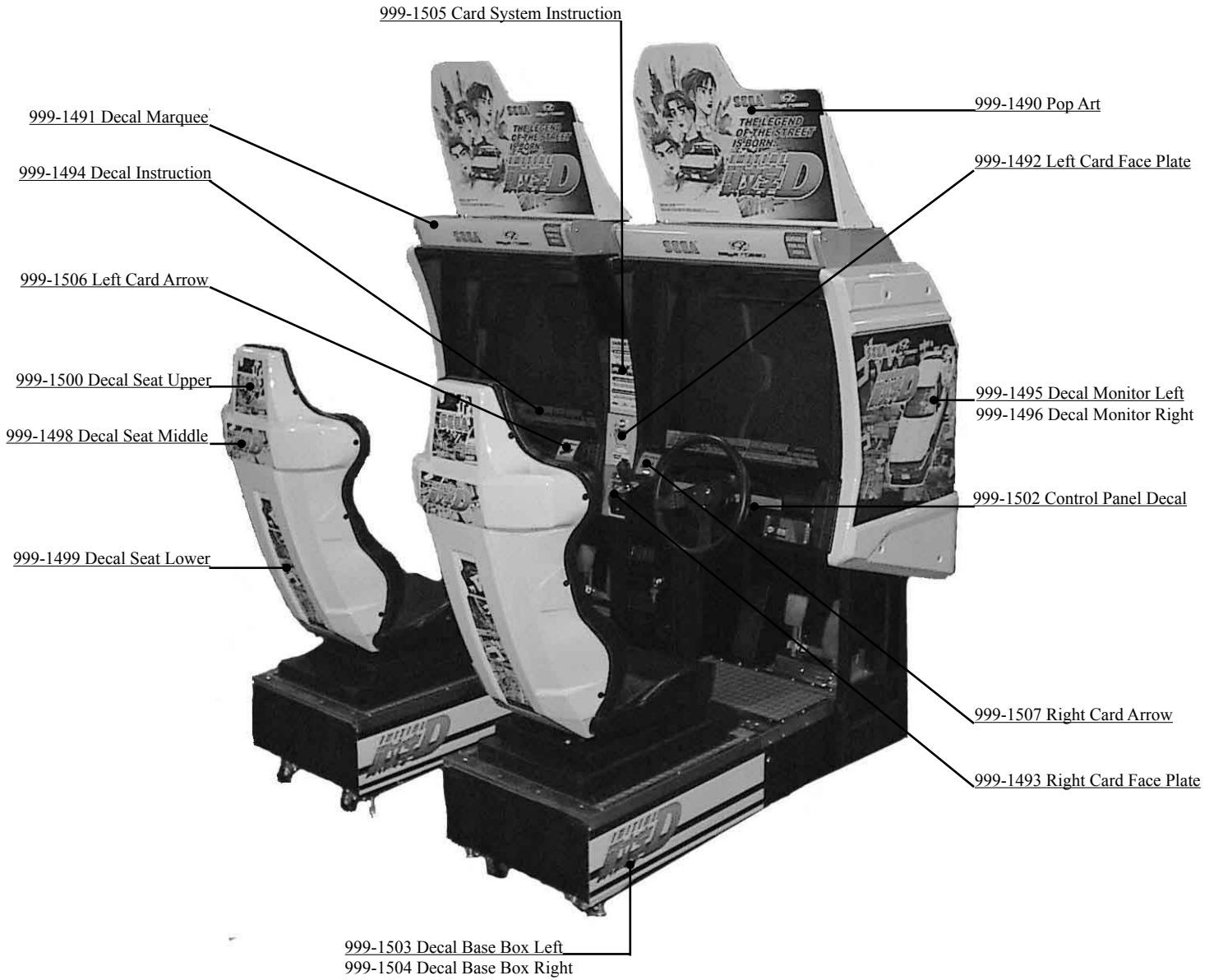


- In network play, difficulty level and other settings are made from Seat Number 1. Changing the settings at Seat Number 1 also changes the settings for Seat Number 2. Settings for Seat Number 2 cannot be changed from Seat Number 2 and so will not appear in the list of settings.
- Should a network connection fail during network play, gameplay will be suspended and the Network Check Screen will be displayed.
- If one of the units attached for network play enters Test Mode, the other unit will display the Network Check Screen.
- Even when units are connected for network play, each seat, each game may be given different cost settings. Incorrect cost settings may cause budget balancing problems.

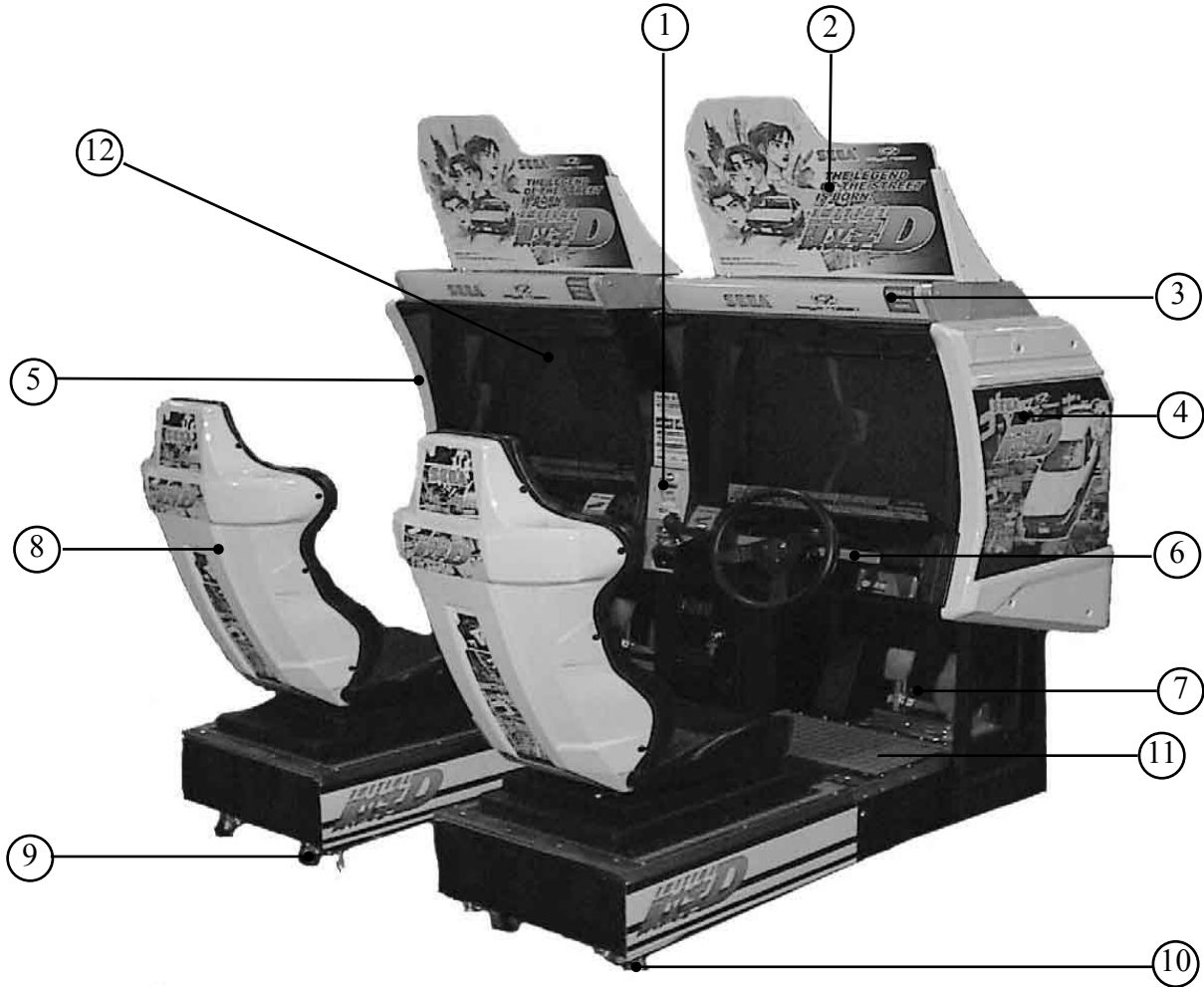
The operation of a unit when connected to another for network play is different than that of a stand-alone unit. Administration of network units should be handled carefully. Entering Test Mode will cause any other machines set up for network play to display the Network Check Screen. When customers are playing the game, do not enter Test Mode on any network play-enabled machine.

21. DESIGN RELATED PARTS

For the warning display stickers, refer to Section 1.

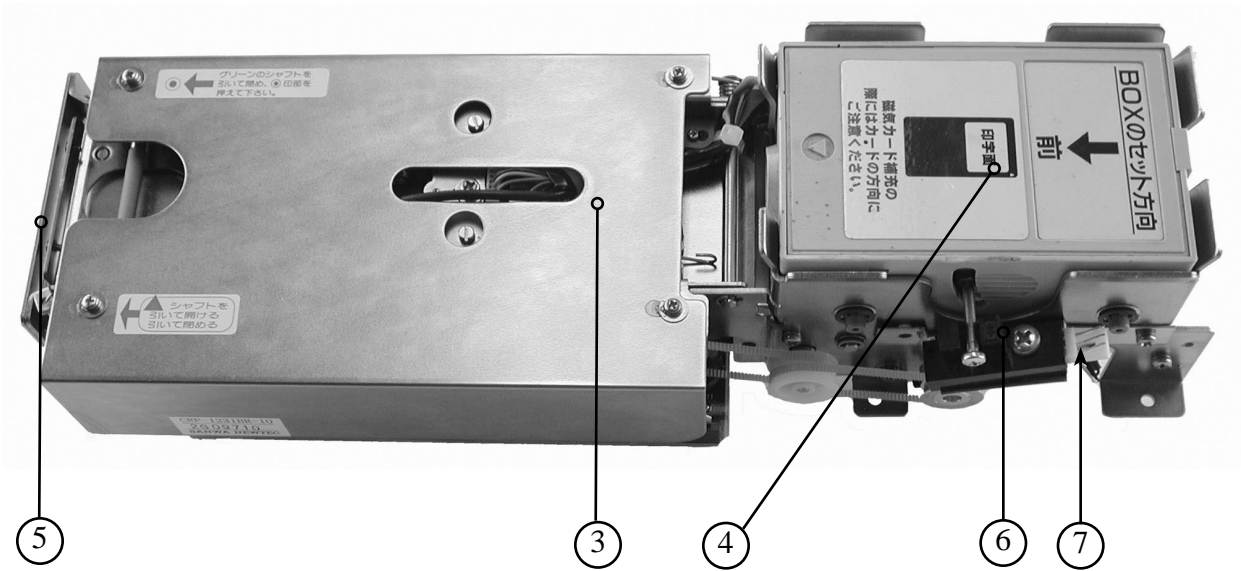


22. PARTS LIST



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	601-11082	Card Unit	
2		Assy Pop Panel	
3		Assy Marquee	
4	999-1547	Cover Side Cap R White Blank	
5	999-1546	Cover Side Cap L White Blank	
6	TOF-2000	Assy Control Panel	
7	SPG-2200	Assy Accel and Brake	
8	TOF-1600	Assy Seat	
9	999-0167	Leg Leveler	
10	999-0169	Caster	
11	999-1548	Grey Floor Mat Initial "D"	
12	999-0313	Monitor Glass 24 5/16 X 21 3/16 X 3/16 Gray tint, (Tempered)	

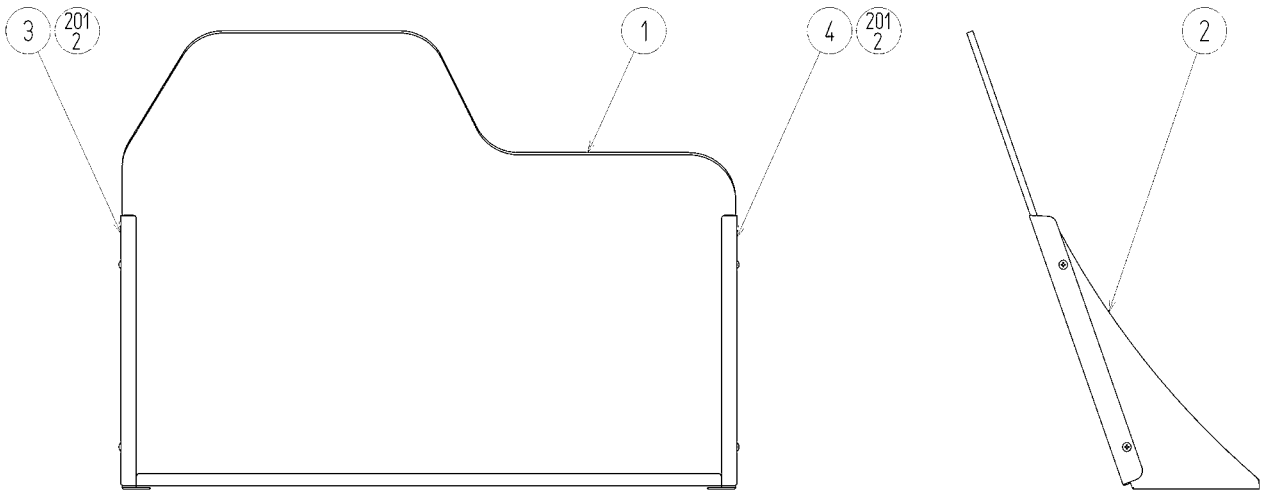
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7	;;;/37;4	Qrvkecn"Uykvej"Dtcemgv	

""Cuu{"Rqr



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 "" 4 "" ; ; ; /376; "" RQR" J QNFGT
 "" 5 "" ; ; ; /3772 "" RQR"UCUJ "N
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"" 423 ""NQECN"RWTEJ CUG "" O"UET"VJ"ETO": /54zz3l4ö

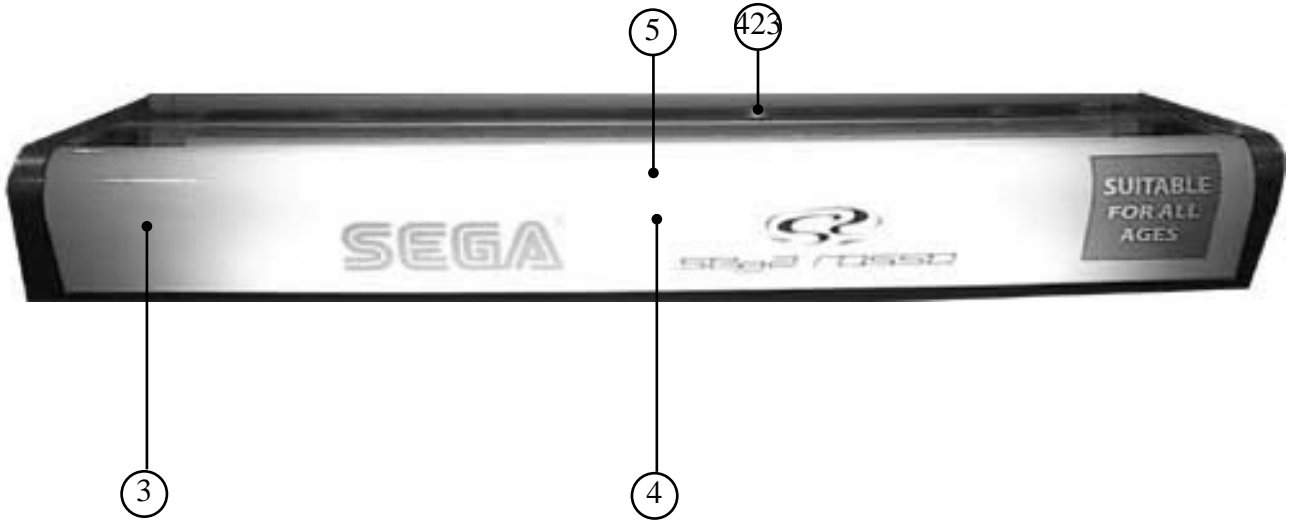
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"""" Cuu{"Octswgg



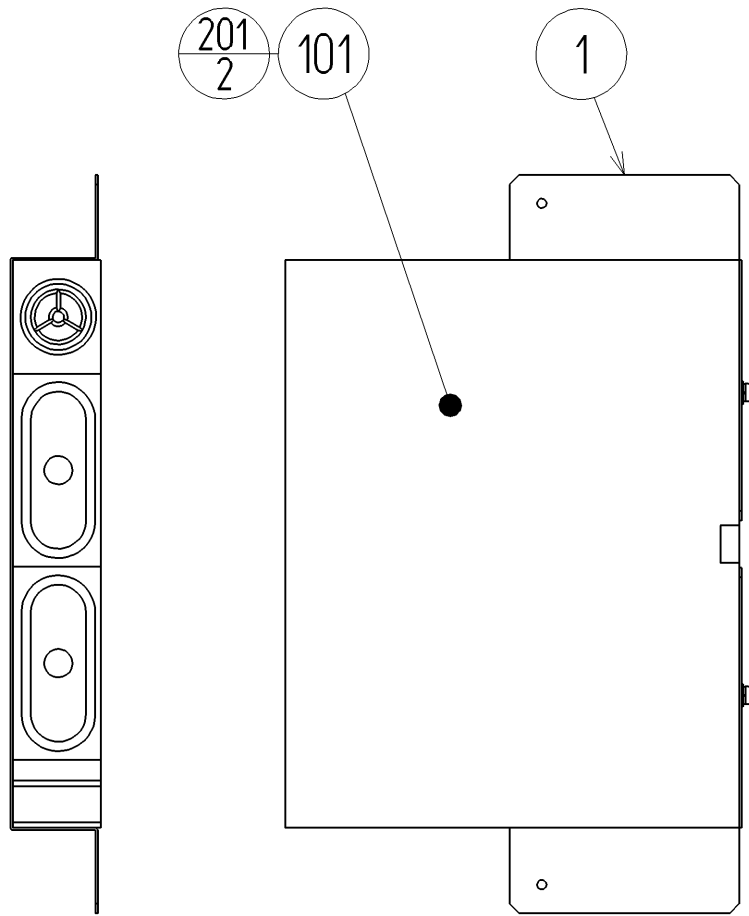
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"""" 423 """" 222/V2262:/2E """" O"UET"VJ"ETO"O6 :



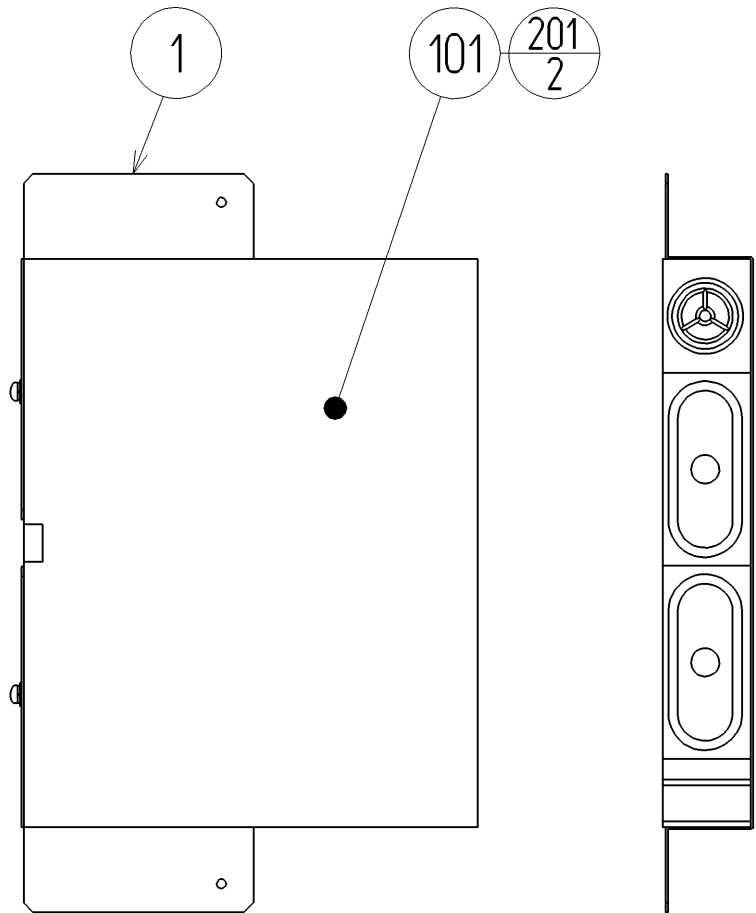
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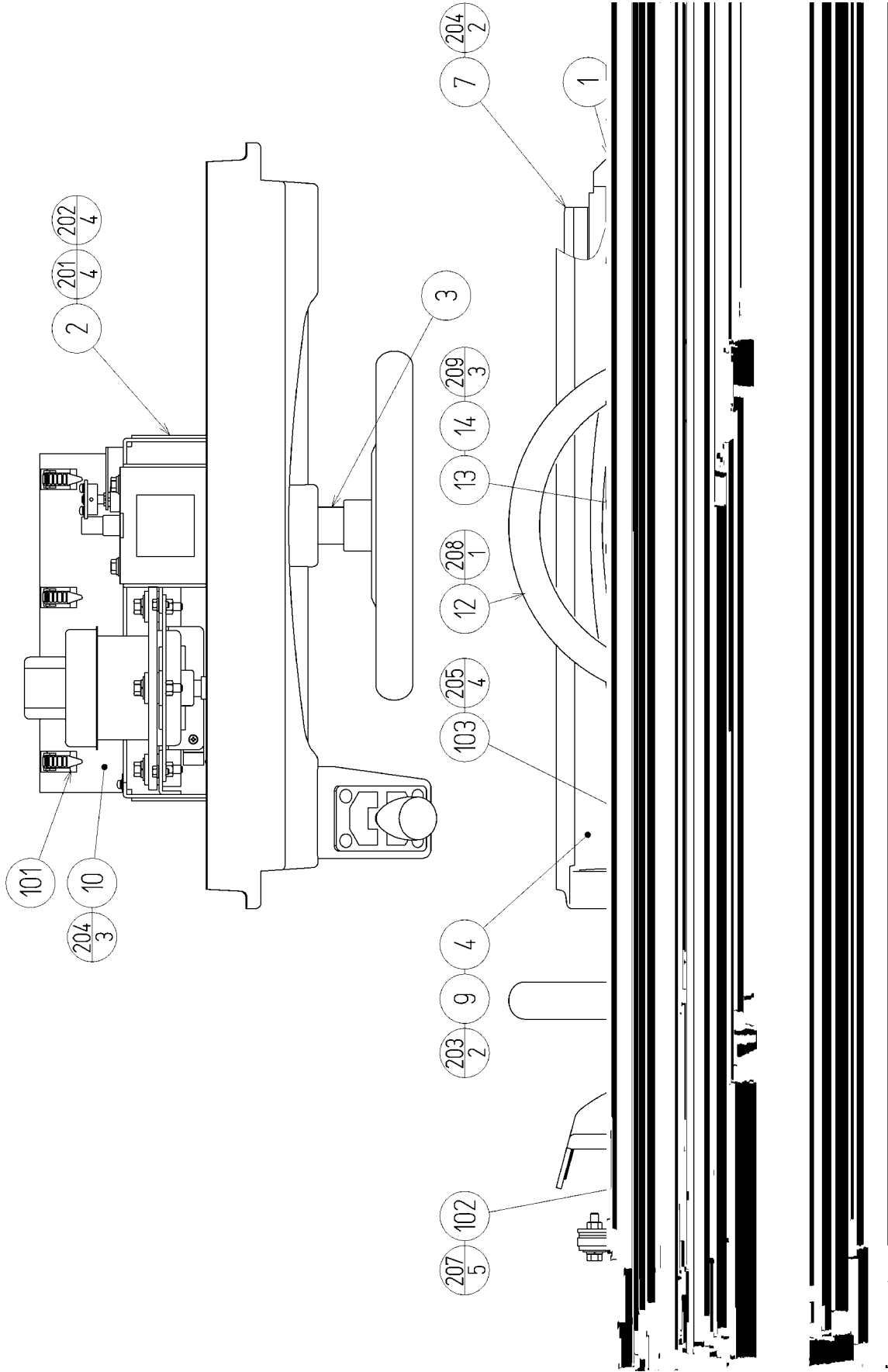


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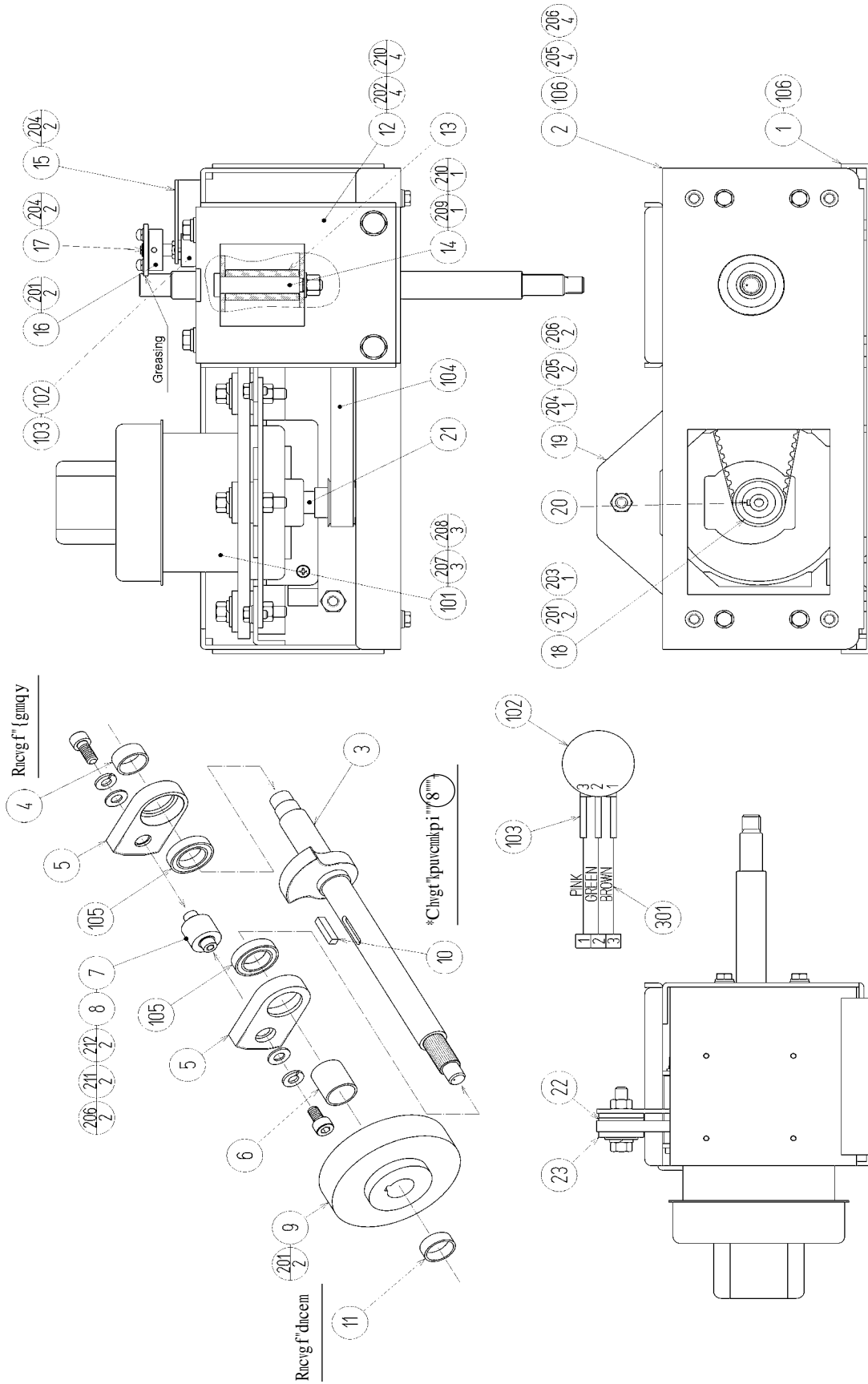
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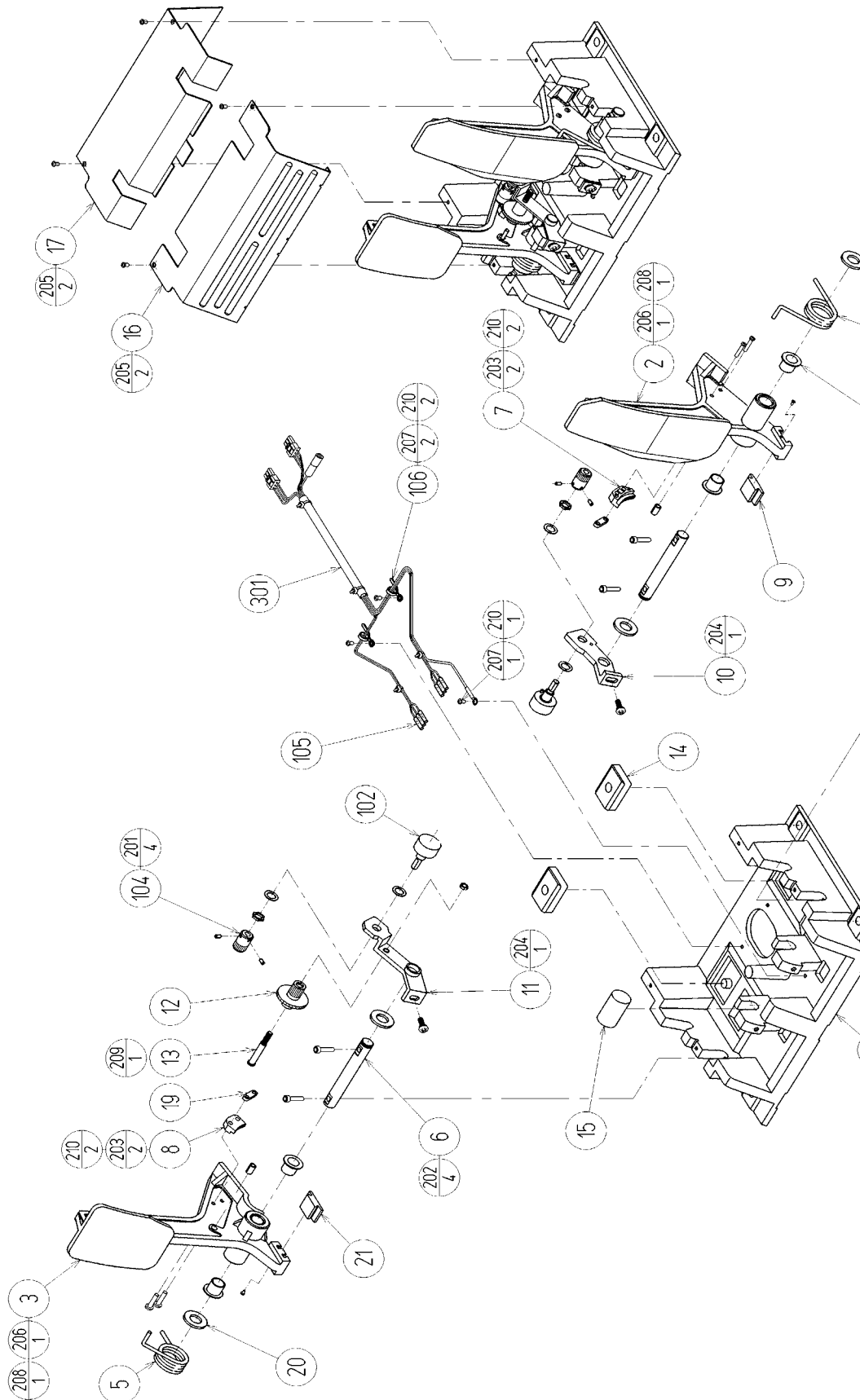
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***** 7 ***** VQH/4226 ***** U J K H V" E Q X G T" W R R G T
***** 8 ***** VQH/4227 ***** U J K H V" E Q X G T" N Q Y G T
***** 9 ***** VQH/4228 ***** E Q X G T" J Q N F G T
***** ; ***** VQH/4229 ***** E W U J K Q P
***** ; ***** VQH/422 : ***** E V T N" R P N" R N C V G
***** 32 ***** VQH/422 ; ***** Y K T G" J Q N F G T
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***** 324 ***** 4:2/263; ***** J C T P G U U" N W I
***** 325 ***** 832/262: /; 3 ***** W R I F Q Y P" U J K H V G T" C N
***** 326 ***** 823/2682 ***** R N C U V K E" V K G" D G N V" 322" O O
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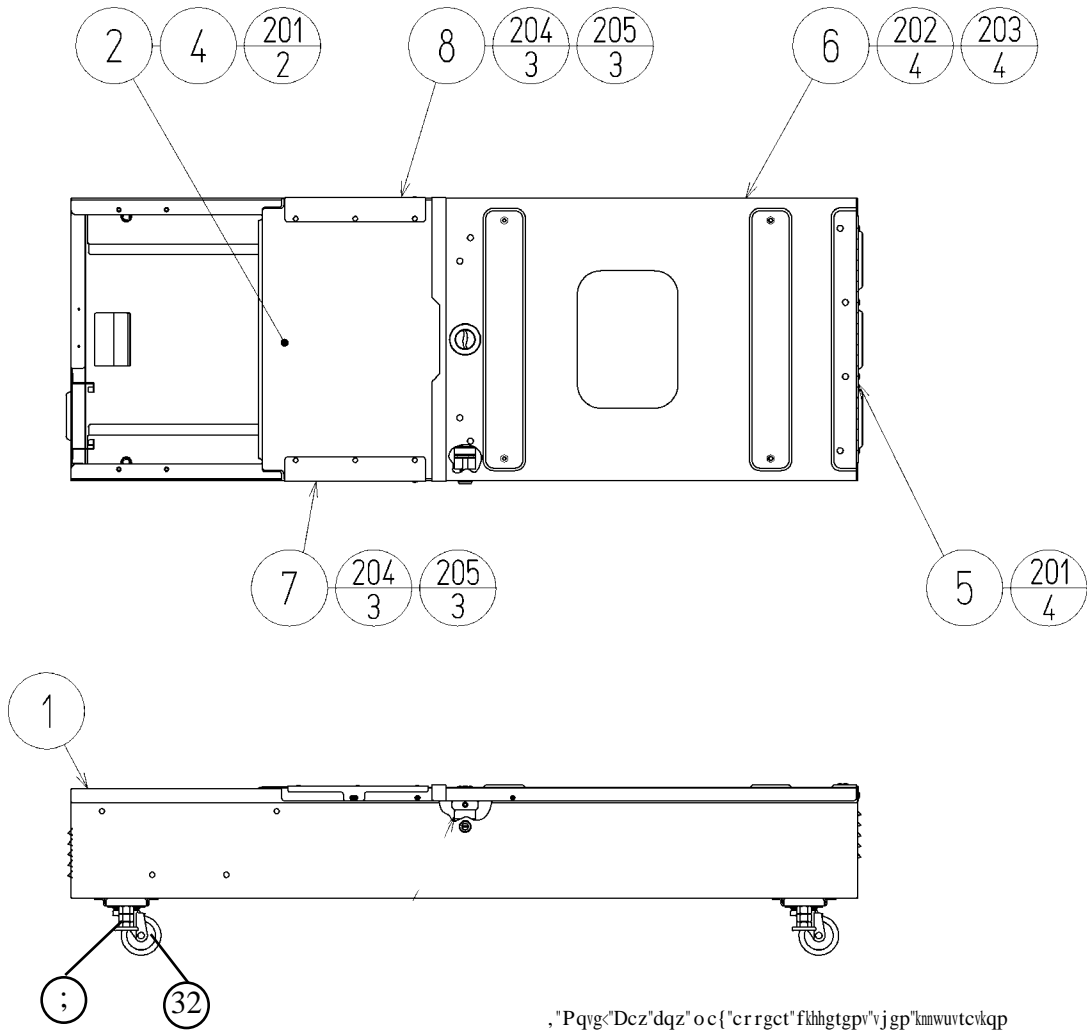
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"" "" 425 "" "" 222/R22642 "" "" O"UET"RJ"O6 42
"" "" 426 "" "" 222/R2272:/Y "" "" O"UET"RJ" YIHU"O7 :
"" "" 427 "" "" 222/V2262:/2E "" "" O"UET"VJ"ETO"O6 :
"" "" 428 "" "" HCU/672227 "" "" URT"RKP"DNM"Q\"8 32
"" "" 429 "" "" 222/R22627 "" "" O"UET"RJ"O6 7
"" "" 42: "" "" HCU/222223 "" "" O"UET"VJ"ETO"O5 8
"" "" 42; "" "" 272/J 22722 "" "" JGZ"PWV"O7
"" "" 432 "" "" 282/H22622 "" "" HNV"YUJ T"O6

CUU ["DCUG"DQZ"*VQH/3742+



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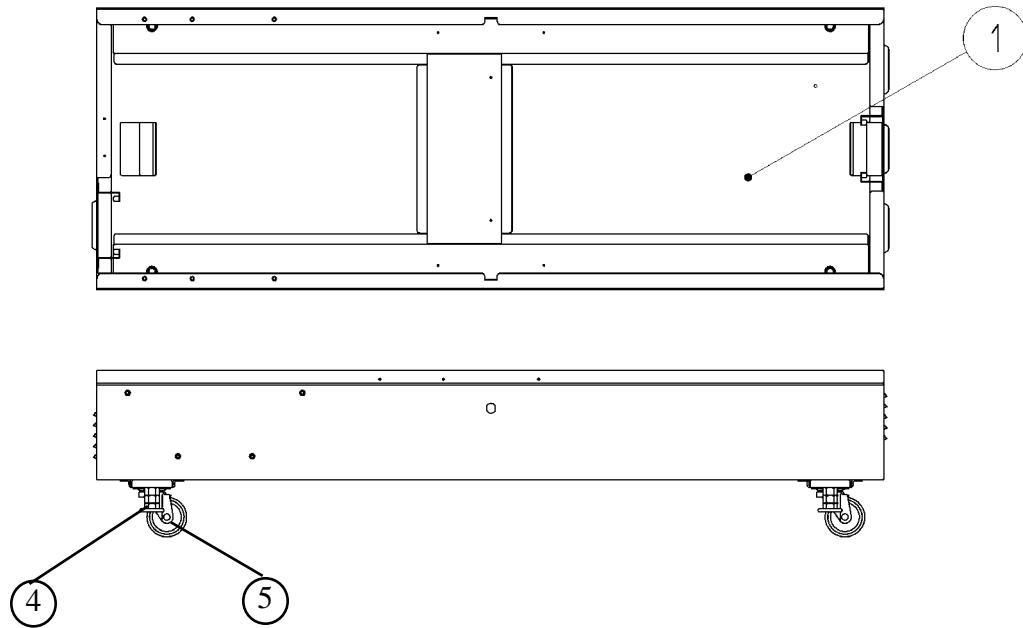
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"" KVGO "PQ0 "" RCTV" PQ0 "" FGUETRVRKQP "" PQVG

3	VQH/3743	O CKP"DCUG
4	F [P/4225	DCUG"NKF"H
6	UF Y/3324Z	HNQQT"OCV
7	F [P/4228	J K P I G"6:2
8	HTK/3732Z	CUU ["DCUG"NKF"T
9	F [P/4229Z	NKF"GF I G"N
:	F [P/422;Z	NKF"GF I G"T
;	;;;/2389	NG I "NGXGNGT
32	;;;/238;	ECUVGT

423	222/V22734/2D	O"UET"V J"DNM"O7 34
424	253/222736/2D	ET I"DNV"DNM"O7 36
425	272/H22722	HNI "PWV"O7
426	253/222636/2E	ET I"DNV"ETO"O6 36
427	272/H22622	HNI "PWV"O6

OCKP"DCUG



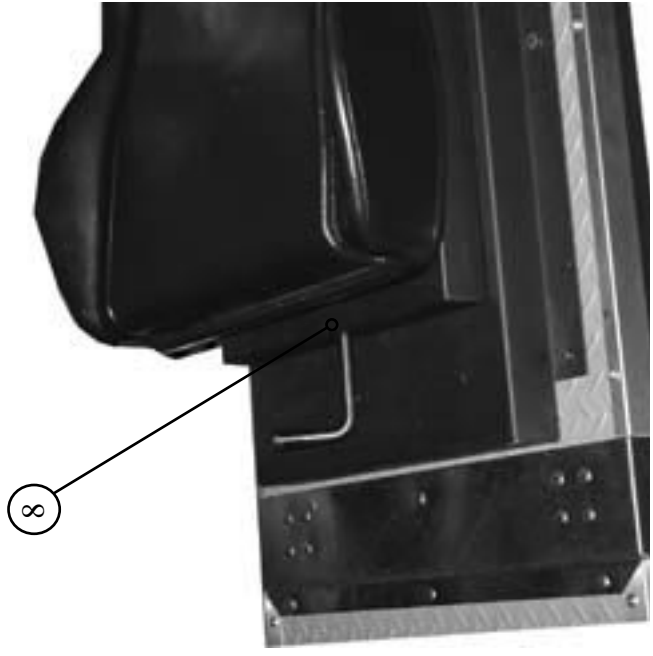
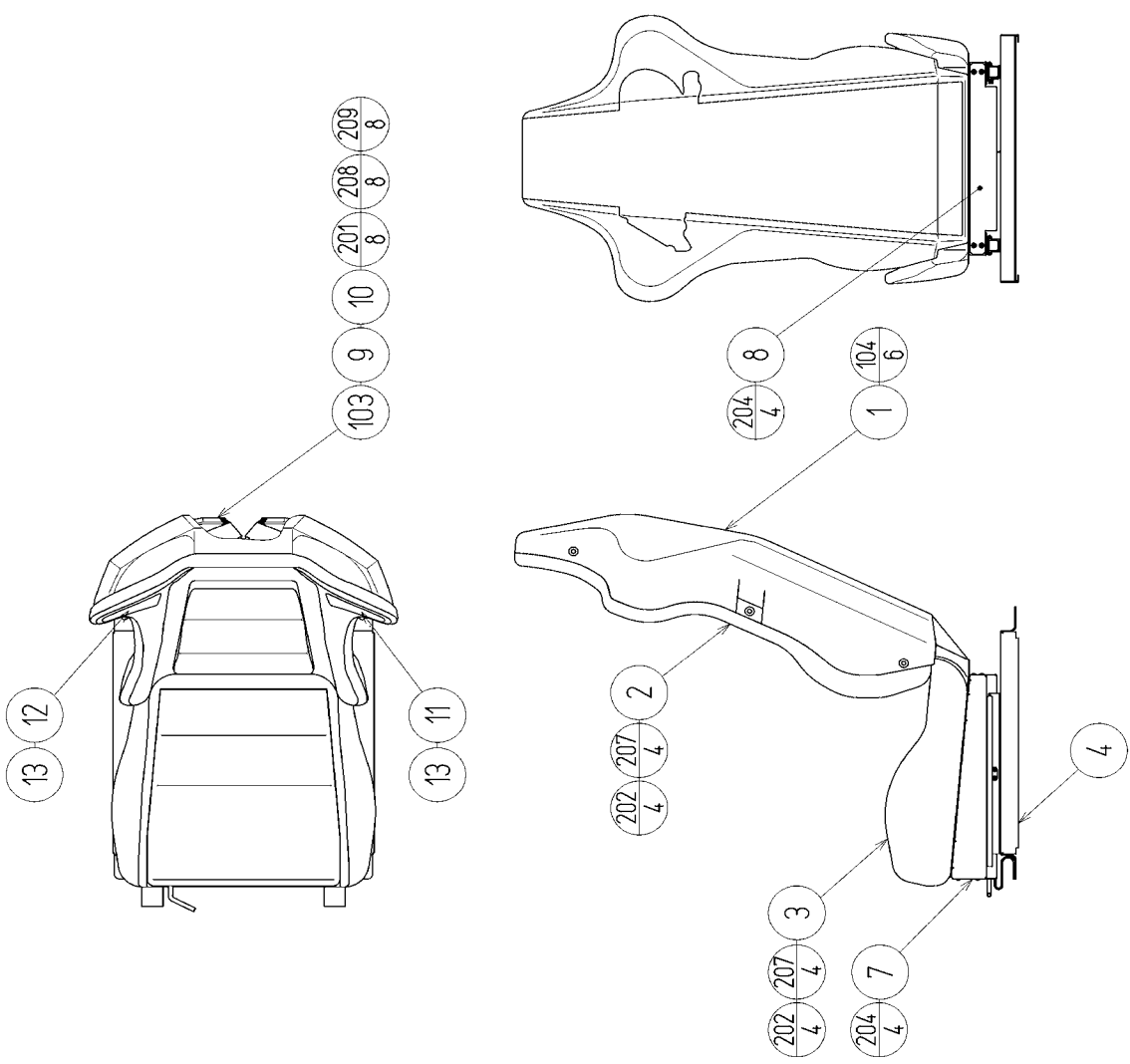
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3 HTK/3723/C" OCKP"DCUG"DNC PM

4 ; ; /2389" NG I "NGXGNGT

5 ; ; /238; " ECUVGT

.....



***** CUU ["UGCV"*****

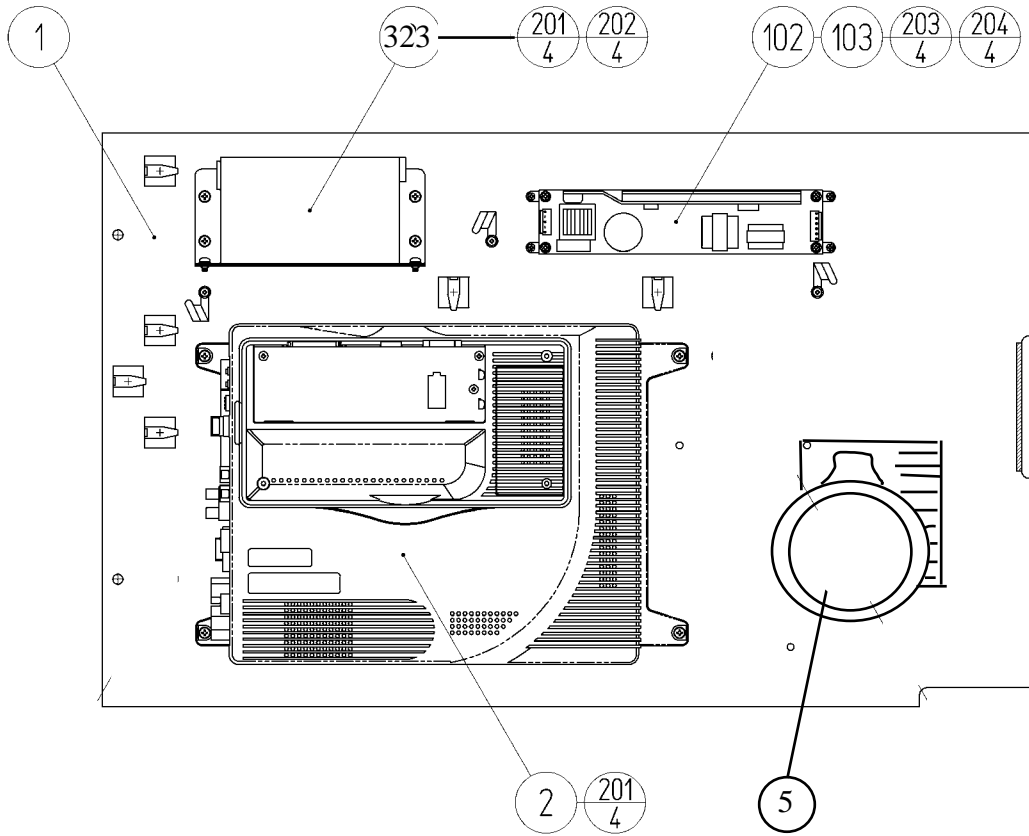
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***** 3 ***** VQH/3825/23 ***** UGCV"DCEM"EQXGT"GP I
***** 4 ***** FWV/4424 ***** WRRGT"UGCV
***** 5 ***** FWV/4425 ***** NQ YGT"UGCV
***** 6 ***** VQH/3823 ***** UGCV"DCUG
***** 7 ***** UVE/3826 ***** UGCV"HTCOG*4+
***** 8 ***** UVEE/229:3 ***** UGCV"VWTVNG
***** 9 ***** HTK/5529 ***** HTQPV"VTC ["EQXGT
***** : ***** PET/4628 ***** TGCT"VTC ["EQXGT
***** ; ***** KP [/3524/D ***** OCUM"EWUJKQP"UKFG
***** 32 ***** UVE/3829 ***** UR"OQWPV"DTMV
***** 33 ***** UVE/382: ***** URGCMGT"PGV"N
***** 34 ***** UVE/382; ***** URGCMGT"PGV"T
***** 35 ***** VQH/3826 ***** PGV"EQXGT"U J

***** 325 ***** 352/73:8/;3 ***** FWO O ["URGCMGT
***** 326 ***** 4:2/74;9 ***** UETKXGV": "3M53

***** 423 ***** 222/R22632/Y ***** O"UET"RJ"YIHU"O6 32
***** 424 ***** 252/222:72/U ***** JGZ"DNV"YIU"O: 72
***** 425 ***** 252/222:38/U ***** JGZ"DNV"YIU"O: 38
***** 426 ***** 222/V2262:/2D ***** O"UET"VJ"DNM"O6 :
***** 427 ***** 272/J 22:22 ***** JGZ"PWV"O:
***** 428 ***** 282/U22:22 ***** URT"YUJT"O:
***** 429 ***** 28:/:74438 ***** HNV"YUJT":07/44" 308
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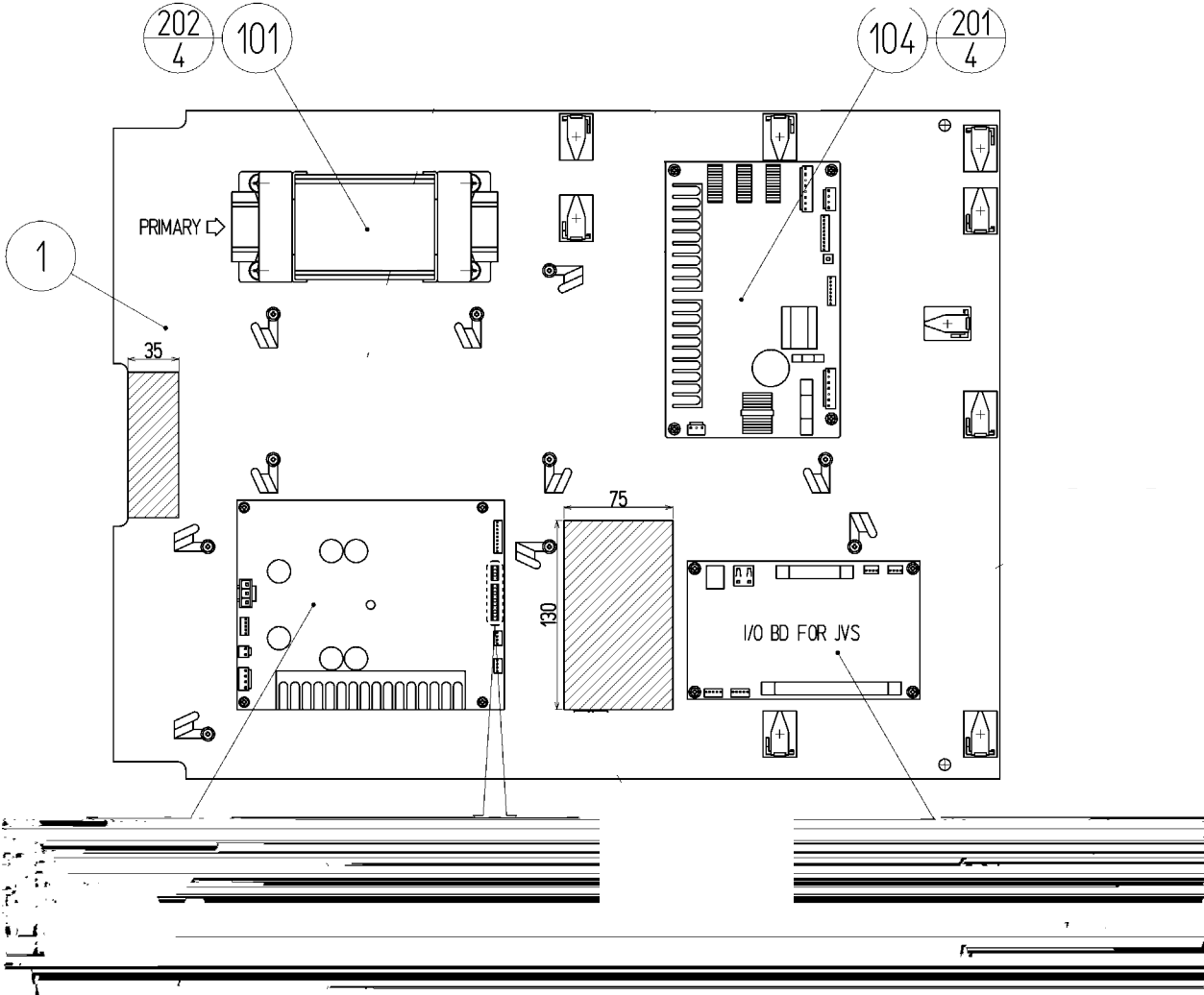
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KVGO" PQ0 "RCTV" PQ0 FGUETRVRKQP PQVG

3 VQH/6723 OCKP"DF"DCUG
 4 :62/22;3F/33 CUU ["ECUG"PCV"TVI454E" (EQO"WUC "" >WUC@
 5 ZMV/2:55 IF/TQO"FTKXG

323 622/75;9/23 UY"TG I W"HQT"LXU"XC
 324 622/7643/29734 UY"TG I W



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***** CUU ["GNGE"DF" *****

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***** 3 ***** PET/6823***** YQQFGP"DCUG"GNGE

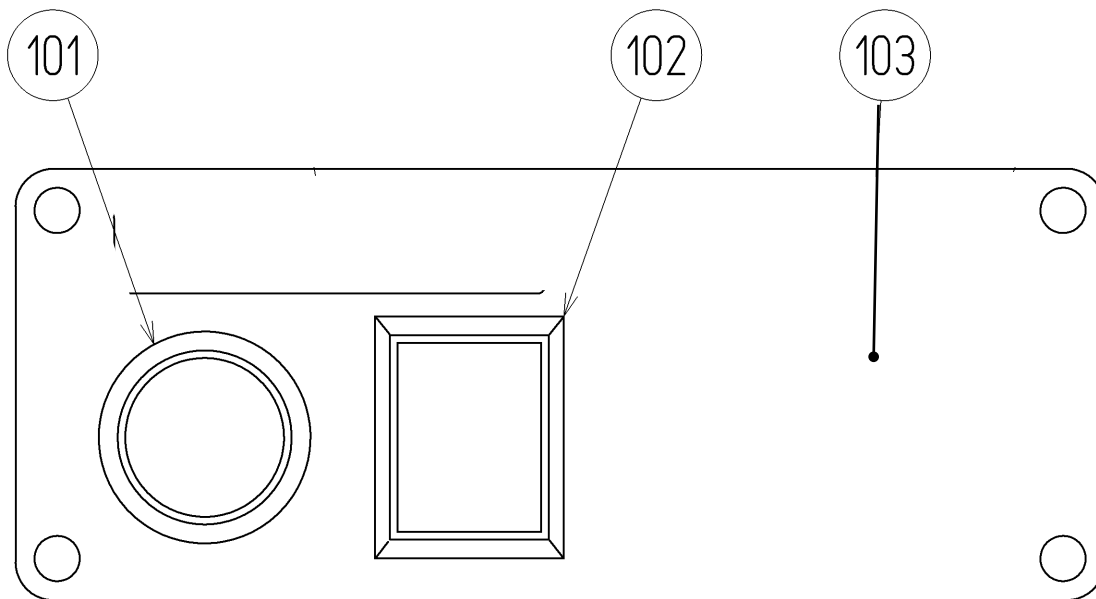
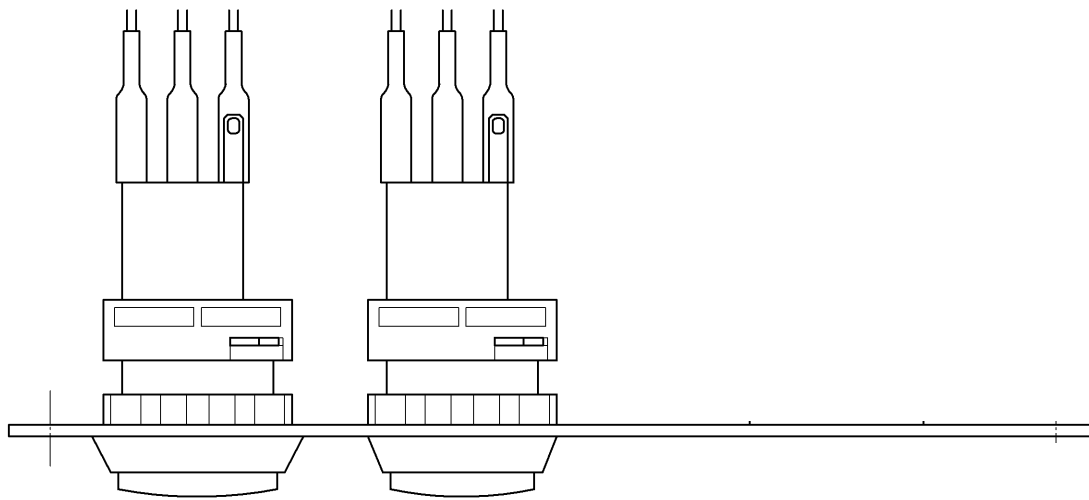
***** 5 ***** :59/35773/;4***** KIQ"EQPVTQN"DF"HQT"LXU

***** 323 ***** ZHOT"322/342X"322X907C ***** I T C P F < 2 2 7 6 / 6 8 7 / 3 2 3 "

***** 325 ***** :5:/3579: ***** RYT"COR"4E J " ("OKZGT

***** 326 ***** :5:/36396 ***** UGTXQ"OQVQT"FTKXG"DF"OKFK

CUU ["UY "RNCVG"



KVGO "PQ0" "RCTV" PQ0 "FGUETKRVKQP" "PQVG"
323 "J CRR"EQPVTQNU "UVCTV"DWVVQP"%79/4222/577"
324 "J CRR"EQPVTQNU "XKG Y"DWVVQP"%79/4222/84"
325 " ; ; /372 ; "DWVVQP"RNCVG

450" YKTG"EQNQT"EQFG"VCDNG

V J G" YKTG"EQNQT"EQFG"ku"cu"hqmqy <

- ***** C***** RKPM
- ***** D***** UM ["DNWG
- ***** E***** DTQ Y P
- ***** F***** RWTRNG
- ***** G***** NK I J V" I TGGP

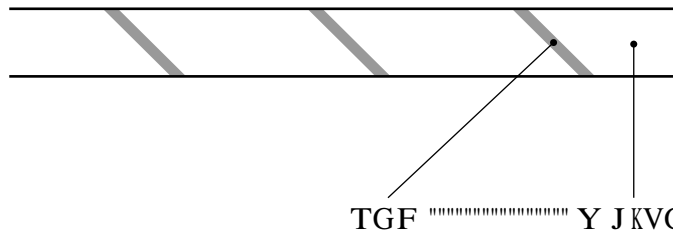
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- ***** 3***** TGF
- ***** 4***** DNWG
- ***** 5***** [GNNQ Y
- ***** 6***** I TGGP
- ***** 7***** Y J KVG
- ***** 9***** QTCP I G
- ***** :***** DNCEM
- ***** ;***** ITC[

Kh"vjg"tki jv/jcpf"ukfg"pw ogtcn"qh"vjg"eqfg"ku"2."vjgp"vjg"yktg"yknn"dg"qh"c"ukping"eqnqt"ujqyp" d{"vjg"nghv/jcpf"ukfg"pw ogtcn"*ugg"vjg"cdqyg+0

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*****>Gzco rng@"*****73" í í í "Y J KVG"l"TGf"



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- *****W<***** CY I 38
- *****M<***** CY I 3:
- *****N<***** CY I 42
- *****Pqpg<***** CY I 44

Pqvgu<

Warranty

Your new Sega Product is covered for a period of 90 days from the date of shipment. This certifies that the Printed Circuit Boards, Power Supplies and Monitor are to be free of defects in workmanship or materials under normal operating conditions. This also certifies that all Interactive Control Assemblies are to be free from defects in workmanship and materials under normal operating conditions. No other product in this machine is hereby covered.

Sellers sole liability in the event a warranted part described above fails shall be, at its option, to replace or repair the defective part during the warranty period. For Warranty claims, contact your Sega Distributor.

Should the Seller determine, by inspection that the product was caused by Accident, Misuse, Neglect, Alteration, Improper Repair, Installation or Testing, the warranty offered will be null and void.

Under no circumstances is the Seller responsible for any loss of profits, loss of use, or other damages.

This shall be the exclusive written Warranty of the original purchaser expressed in lieu of all other warranties expressed or implied. Under no circumstance shall it extend beyond the period of time listed above.



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