

1<sup>st</sup> PRINTING  
May 2016



Sega Amusements International Limited.  
42 Barwell Business Park, Leatherhead Road, Chessington, Surrey, KT9 2NY. United Kingdom.  
Telephone: +44 (0) 208 391 8090 Facsimile: +44 (0) 208 391 8099  
email: mailbox@sega.co.uk Web: <http://www.segaarcade.com>

Sega Corporation  
Canal Side Bldg 1-39-9 Higashi-shinagawa Shinagawa-ku, Tokyo, 140-8583, Japan.  
Telephone: +81-3-687-7133 Facsimile: +81-3-687-7134

© SEGA

Errors and omissions excepted (E&OE)

LUIGI'S MANSION ARCADE

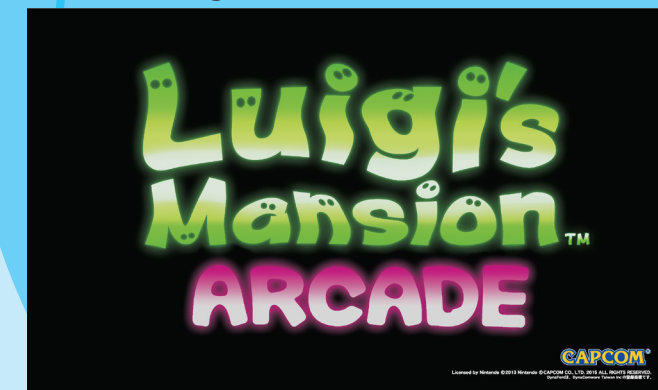
OWNER'S & SERVICE MANUAL

420-0026UK



## OWNER'S & SERVICE MANUAL

Luigi's Mansion Arcade



Licensed by Nintendo ©2013 Nintendo ©CAPCOM CO., LTD. 2015 ALL RIGHTS RESERVED



### IMPORTANT

- Before using this product, read this manual carefully to understand the contents herein stated.
- After reading this manual, be sure to keep it near the product or in a convenient place for easy reference when necessary.


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


### To maintain safety:


To ensure the safe operation of this product, be sure to read the following before usage.

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 close to the product or in a convenient place for future reference.


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

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

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

 **CAUTION** 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 and equipment, this display is attached to places where the Owner's Manual, Serviceman 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 site maintenance personnel should perform such work.
- **Be sure to turn off the power before working on the machine.** To prevent an electric shock, be sure to turn off the power before carrying out any work that requires direct contact with the interior of the product. If the work is to be performed in the power-on status, the Instruction Manual herein always states to that effect.
- **Be sure to ground the Earth Terminal.** (This is not required in the case where a power cord with earth is used.)
- **This product is equipped with the Earth Terminal.** When installing the product, connect the Earth Terminal to the "accurately grounded indoor earth terminal" by using an earth wire. Unless the product is grounded appropriately, the user can be subject to an 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 an electric shock. (Only for the machines which use fuses.) Using fuses exceeding the specified rating can cause a fire and an 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 an 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 situations 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 products with monitors.) Some of the monitor parts are subject to high tension voltage. Even after turning off the 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 properly. (Applies only to products with monitors.) 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 the 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 way, connector connections can not be made accurately. Do not insert connectors forcibly.
- Do power cables have cuts and dents?
- Are all accessories available?
- Can all doors and lids be opened with the accessory keys? Can doors and lids be firmly closed?

# OpenSSL

## LICENSE ISSUES

=====

The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit.

See below for the actual license texts. Actually both licenses are BSD-style Open Source licenses. In case of any license issues related to OpenSSL please contact [openssl-core@openssl.org](mailto:openssl-core@openssl.org).  
OpenSSL License Copyright (c) 1998-2011 The OpenSSL Project. All rights reserved.

1. Redistribution and use in source and binary forms, with or without \* modification, are permitted provided that the following conditions are met:
- 2.
3. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 4.
5. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- 6.
7. All advertising materials mentioning features or use of this software must display the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)"
- 8.
9. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact [openssl-core@openssl.org](mailto:openssl-core@openssl.org).
- 10.
11. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.
- 12.
13. Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)). This product includes software written by Tim Hudson ([tjh@cryptsoft.com](mailto:tjh@cryptsoft.com)).

Original SSLeay License

Copyright (C) 1995-1998 Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)) All rights reserved.

This package is an SSL implementation written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)).

The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson ([tjh@cryptsoft.com](mailto:tjh@cryptsoft.com)). Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement: "This product includes cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com))" The word 'cryptographic' can be left out if the rouines from the library being used are not cryptographic related :-).
4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson ([tjh@cryptsoft.com](mailto:tjh@cryptsoft.com))"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)

This product includes cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)).



# SSLeay

Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)  
All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com).  
The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are adhered to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement: "This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)" The word 'cryptographic' can be left out if the routines from the library being used are not cryptographic related :-).
4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

# libcurl

## COPYRIGHT AND PERMISSION NOTICE

Copyright (c) 1996 - 2016, Daniel Stenberg, daniel@haxx.se, and many contributors, see the THANKS file.

All rights reserved.

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization of the copyright holder.

# MessagePack

=====

Apache License Version 2.0, January 2004 <http://www.apache.org/licenses/>  
TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

Definitions. "License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document. "Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License. "Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity. "You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License. "Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files. "Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types. "Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below). "Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof. "Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution." "Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed. 4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions: (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and (b) You must cause any modified files to carry prominent notices stating that You changed the files; and (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License. You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. 41 Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

## END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work. To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[ ]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives. Copyright [yyyy] [name of copyright owner] Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at <http://www.apache.org/licenses/LICENSE-2.0> Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

# INTRODUCTION

This manual is intended to provide detailed descriptions together with all necessary information covering the general operation of electronic assemblies, electromechanical, servicing control, spare parts, etc., for the product, "LUIGI'S MANSION ARCADE"

This manual is intended for the owners, personnel managers in charge of operation of this product. Operate the product after carefully reading and sufficiently understanding the instructions.

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

Use of this product is unlikely to cause physical injuries or damage to property. However, points that require special attention are indicated by bold text, the words "STOP, IMPORTANT or CAUTION" and the symbols below.

## **IMPORTANT**

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

## **WARNING**    **CAUTION**

**Indicates a warning or caution that, if ignored, may result in the mishandling of the product and cause faulty operation or damage to the product.**

### Sega Amusements International Limited.

42 Barwell Business Park, Leatherhead Road, Chessington, Surrey, KT9 2NY. United Kingdom.

International Sales:	+44 (0) 208 391 8090	Facsimile:	+44 (0) 208 391 8099
email:	mailbox@sega.co.uk	Web:	http://www.segarcade.com

### Sega Corporation

Canal Side Bldg 1-39-9 Higashishinagawa Shinagawa-ku, Tokyo, 140-8583, Japan.

Telephone:	+81-3-687-7133	Facsimile:	+81-3-687-7134
------------	----------------	------------	----------------

### Sega Total Solutions

42 Barwell Business Park, Leatherhead Road, Chessington, Surrey, KT9 2NY. United Kingdom.

Parts & Service:	+44 (0) 208 391 8060	Facsimile:	+44 (0) 208 391 8096
------------------	----------------------	------------	----------------------

### Play It! Amusements, inc.

252 Beinoris Drive, Wood Dale, IL. 60191, USA

Parts & Service:	+00 (1) 224 265 4287
------------------	----------------------

**Definition of 'Site Maintenance Personnel or Other Qualified Individuals** **WARNING**

**Servicing and maintenance work of the contents herein stated should be performed by the SERVICEMAN stipulated as per IEC Standard. Those who do not have technical expertise and knowledge other than the SERVICEMAN are not allowed to perform the work herein stated. Executing aforementioned work by such non-technical personnel can cause serious accidents that may endanger life.**

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

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

**Site maintenance personnel:**

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

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

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

**Other qualified professionals:**

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

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

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



## Electrical & Mechanical Specifications

### SPECIFICATIONS

#### Electrical Consumption

Operating Voltage: AC220-240V

Current: 1.4A [336W]

#### Installed Dimensions.

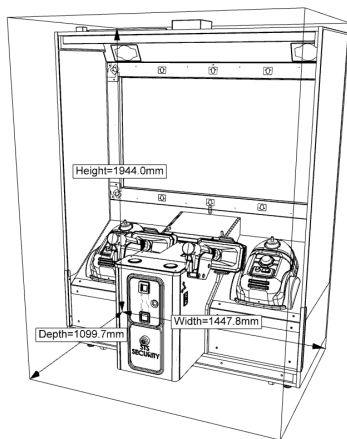
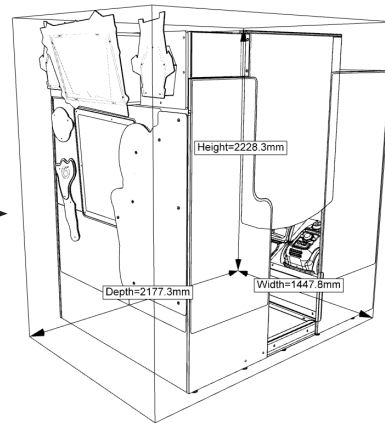
Depth: 2177.3mm

Width: 1447.8mm

Height: 2228.3mm

#### Overall Dimensions. (Installed)

Width: 1447.8mm | Depth: 2177.3mm | Height: 2228.3mm

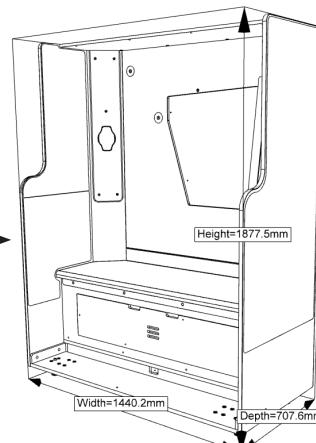


#### Dimensions. (Monitor Cabi)

Width: 1447.8mm | Depth: 1099.7mm | Height: 1994.0mm

#### Dimensions. (Rear Cabi)

Width: 1440.2mm | Depth: 707.6mm | Height: 1877.5mm



## Waste of Electrical and Electronic Equipment (WEEE) Statement.

Waste of Electrical and Electronic Equipment (WEEE) Statement.

The WEEE (Waste of Electrical and Electronic Equipment) directive places an obligation on all EU based manufacturers and importers of Electrical and Electronic Equipment (EEE) to ensure waste equipment is disposed of in accordance with the directive at the end of their useful life.

The symbol shown below will be placed on all products manufactured from 13th August 2005, which indicates this product must NOT be disposed of with other normal waste. Upon purchasing any EEE from SEGA Amusements International Ltd. The user accepts responsibility to dispose of their waste equipment by arranging to return it to a designated UK collection point (AATF) or an Approved Exporter (AE) for the correct recycling of waste electrical and electronic equipment.

For more information on Approved Authorised Treatment Facilities (AATF) within the UK please consult the government website [www.gov.uk](http://www.gov.uk)

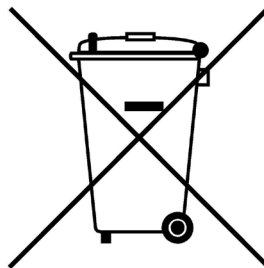
For users outside of the UK EEE should be disposed of in accordance with the local policy on the recycling of Waste Electrical and Electronic Equipment.

## Battery Recycling Statement.

The EC Directive on Batteries and Accumulators (2006/66/EC) aims to minimise the impact of batteries on the environment and encourage the recovery of the materials they contain. To achieve increased collection and recycling of waste batteries, the Directive places 'producer responsibility' obligations on manufacturers and importers of portable, industrial and automotive batteries.

The symbol shown below will be on all equipment fitted with batteries from 26th September 2008 and indicates they must NOT be disposed of with other normal waste. Instead, it is the user's responsibility to dispose of used batteries by arranging to return them to a designated collection point for the correct recycling.

For more information about where you can send your waste batteries for recycling contact your local authority office.



REGISTERED IN ENGLAND REGISTERED NO. 1711515

REGISTERED OFFICE: BLOCK C 42 BARWELL BUSINESS PARK, CHESSINGTON, SURREY KT9 2NY

# TABLE OF CONTENTS

---

<b>INTRODUCTION</b>	<b>vii</b>
<b>1 HANDLING PRECAUTIONS</b>	<b>1</b>
<b>2 PRECAUTIONS REGARDING INSTALLATION LOCATION</b>	<b>5</b>
2-1 LIMITATIONS OF USAGE	6
2-2 OPERATION AREA	7
<b>3 PRECAUTIONS REGARDING PRODUCT OPERATION</b>	<b>9</b>
3-1 BEFORE OPERATION	9
3-2 DURING OPERATION (PAYING ATTENTION TO CUSTOMERS)	11
<b>4 PART DESCRIPTIONS</b>	<b>13</b>
<b>5 ACCESSORIES</b>	<b>16</b>
<b>6 ASSEMBLY AND INSTALLATION</b>	<b>17</b>
6-1 UNPACKING THE CABINET	21
6-2 ASSEMBLING & FITTING THE FLOOR	25
6-3 ASSEMBLING THE OVAC CABI	28
6-4 SITUATING THE CABINET	32
6-5 FITTING THE ASSY ROOF	34
6-6 FITTING THE ASSY DESIGN BOARD	36
6-7 POWER SUPPLY AND OTHER CONNECTIONS	38
6-8 TURNING ON THE POWER	40
6-9 CONFIRMATION OF ASSEMBLY	41
6-10 APPLYING WARNING LABELS (EPILEPTIFORM SEIZURES)	42
<b>7 PRECAUTIONS WHEN MOVING THE MACHINE</b>	<b>43</b>
<b>8 GAME DESCRIPTION</b>	<b>47</b>
8-1 HOW TO START THE GAME	47
8-2 STAGES & LECTURES	47
8-3 CONTROLS	48
8-4 DEFEATING THE ENEMIES	49
8-5 LIMITS WHEN SUCKING UP GHOSTS	50
8-6 Strobombs (Bombs)	50
8-7 Continue	50

<b>9</b>	<b>EXPLANATION OF TEST AND DATA DISPLAY</b>	<b>51</b>
	9-1 SWITCH UNIT AND COIN METER.	52
	9-2 TEST MENU	52
	9-3 GAME TEST MENU	53
	9-4 BOOKKEEPING	54
	9-5 SOFT METER	55
	9-6 PLAY COUNT	56
	9-7 PRIME TIME	57
	9-8 ALL.Net Accounting Status	58
	9-9 INPUT TEST	59
	9-10 COIN TEST	60
	9-11 CONTROLLER TEST	61
	9-12 MONITOR TEST	62
	9-13 SPEAKER TEST	63
	9-14 LAMP TEST	64
	9-15 NETWORK TEST	65
	9-16 APPLICATION DOWNLOAD STATUS	66
	9-17 COIN SETTINGS	67
	9-18 GAME SETTING	68
	9-19 NETWORK SETTING	69
	9-20 SOUND SETTING	70
	9-21 CLOSE SETTING	71
<b>10</b>	<b>CONTROLLER(S), SWITCHES AND BUTTONS</b>	<b>72</b>
	10-1 REMOVING THE CONTROLLER	73
	10-2 DISASSEMBLING THE POLTERGUST CONTROLLER	74
	10-3 REPLACING THE CONTROLLER SENSOR	76
	10-4 REPLACING THE TRIGGER SWITCH	77
	10-5 REPLACING THE STROBULB SWITCH	78
	10-6 REPLACING THE VIBRATING MOTOR	79
	10-7 REMOVING THE SOLENOID ASSY	80
	10-8 REPLACING THE SOLENOID	81
	10-9 REPLACING THE CONTROLLER CABLE	82
<b>11</b>	<b>VIDEO DISPLAY</b>	<b>87</b>
	11-1 GENERAL DESCRIPTION	87
	11-2 CLEANING THE SCREEN	88
	11-3 ON SCREEN ADJUSTMENT METHOD (OSD)	89
<b>12</b>	<b>COIN HANDLING</b>	<b>95</b>
	12-1 CLEANING THE COIN SELECTOR	95
	12-2 FAULT FINDING	98
	12-3 ADJUSTING THE PRICE OF PLAY (EXCEL)	99
	12-4 QUICK VIEW COMMON COIN SETTINGS (USA)	100
	12-5 ADJUSTING THE PRICE COMMON SETTINGS	101
	12-5 UNIVERSAL CARD LINK (UCL)	105



<b>13</b>	<b>LAMPS, LIGHTING &amp; SENSORS</b>	<b>106</b>
	13-1 REPLACING THE UPPER GUN MASK SENSORS	106
	13-2 REPLACING THE LOWER GUN MASK SENSORS	108
	13-3 REPLACING THE START BUTTON LAMPS	110
	13-4 REPLACING THE INTERIOR DOWNLIGHT LEDs	112
	13-5 REPLACING THE CHARACTER LEDs	115
<b>14</b>	<b>PERIODIC INSPECTION</b>	<b>117</b>
	14-1 CLEANING	120
	14-2 CHECKING CONTROLLER STATUS	121
<b>15</b>	<b>TROUBLESHOOTING</b>	<b>122</b>
	15-1 TROUBLESHOOTING (WHEN NO ERROR MESSAGE IS SHOWN)	122
	15-1 CLEANING ERRORS	124
	15-2 ERROR CODES	125
	15-3 LIST OF POLTERGUST MALFUNCTIONS	126
<b>16</b>	<b>GAME BOARD (Nu1.1)</b>	<b>127</b>
	16-1 HANDLING PRECAUTIONS	128
	16-2 GAME BOARD (Nu1.1) - LOCATION & REMOVAL	129
	16-3 Nu1.1 CLEANING	131
	16-3 REPLACING Nu 1.1 GAME BD	133
	16-3 SYSTEM TEST MODE	134
	16-3-1 SYSTEM INFORMATION	136
	16-3-2 STORAGE INFORMATION	138
	16-3-3 JVS TEST	140
	16-3-4 MONITOR TEST	143
	16-3-5 SPEAKER TEST	144
	16-3-6 COIN ASSIGNMENTS	145
	16-3-7 CLOCK SETTINGS	151
	16-3-8 NETWORK SETTINGS	153
<b>17</b>	<b>DESIGN-RELATED PARTS</b>	<b>157</b>
<b>18</b>	<b>PARTS LIST</b>	<b>160</b>
<b>19</b>	<b>PARTS &amp; SERVICE CONTACT INFORMATION</b>	<b>191</b>
<b>20</b>	<b>WIRE COLOUR CODE TABLE</b>	<b>192</b>
<b>21</b>	<b>WIRING DIAGRAMS</b>	<b>193</b>

# 1 HANDLING PRECAUTIONS

When installing or inspecting the machine, be very careful of the following points and pay attention to ensure that the player can enjoy the game safely.

Non-compliance with the following points or inappropriate handling running counter to the cautionary matters herein stated can cause personal injury or damage to the machine.

## WARNING

**Before performing work, be sure to turn the power off. Performing the work without turning the power off can cause an electric shock or short circuit. In cases where work should be performed in the status of power on, this manual always states to that effect.**

**To avoid an electric shock or short circuit, do not plug in or unplug quickly.**

**To avoid an electric shock, do not plug in or unplug with a wet hand.**

**Do not expose power cords or earth wires on the surface, (floor, passage, etc.) If exposed, the power cords and earth wires are susceptible to damage. Damaged cords and wires can cause an electric shock or short circuit.**

**To avoid causing a fire or an electric shock, do not put things on or damage the power cords.**

**When or after installing the product, do not unnecessarily pull the power cord. If damaged, the power cord can cause a fire or an electric shock.**

**In case the power cord is damaged, ask for a replacement through where the product was purchased from or the office herein stated. Using the cord as is damaged can cause fire, an electric shock or leakage.**

**This product MUST be Earthed. Inappropriate Earthing can cause an electric shock.**

**Be sure to use fuses meeting the specified rating. Using fuses exceeding the specified rating can cause a fire or an electric shock.**

**Be sure that connections such as IC BD are made properly. Insufficient insertion can cause an electric shock.**

**Specification changes, removal of equipment, conversion and/or addition, not designated by SEGA are not permitted.**

**Failure to observe this may cause a fire or an electric shock. Non-compliance with this instruction can have a bad influence upon physical conditions of the players or the onlookers, or result in injury during play.**

**SEGA shall not be held responsible for damage, compensation for damage to a third party, caused by specification changes not designated by SEGA.**

**Do not perform any work or change parts not listed in this manual. Doing so may lead to an accident.**

**If you need to perform any work not listed in this manual, request work from the office indicated in this manual or the point of purchase, or inquires for details.**

**Be sure to perform periodic maintenance inspections herein stated.**

## **STOP** IMPORTANT

**For the IC board circuit inspections, only the use of a logic tester is recommended. Using a Multi Tester or General Purpose Tester may result in damage to IC Circuits. 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.**

**Some parts are not designed and manufactured specifically for this game machine. The manufacturers may discontinue, or change the specifications of such general-purpose parts. If this is the case, SEGA cannot repair or replace a failed game machine whether or not a warranty period has expired.**

### CONCERNING THE STICKER DISPLAY

This SEGA product has stickers attached describing the product manufacture No. (Serial No.) and Electrical Specifications. It also has a Sticker describing where to contact for repair and for purchasing parts.

When inquiring about or asking for repairs, mention the Serial No. and Name of Machine indicated on the Sticker. The Serial Number 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 ensure you order the correct parts, mention the Serial No. when contacting the applicable places.

### CONCERNING WARNING DISPLAYS

This 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 could arise. The warning displays are intended for accident prevention for customers and for avoiding hazardous situations relating to maintenance and servicing work. Some portions of the cabinet contain high voltage and may cause accidents if touched. When performing maintenance, be very careful of the warning displays. It is especially important that any complex repair and replacement work not mentioned herein should be performed by those technical personnel who have knowledge of electricity and technical expertise.

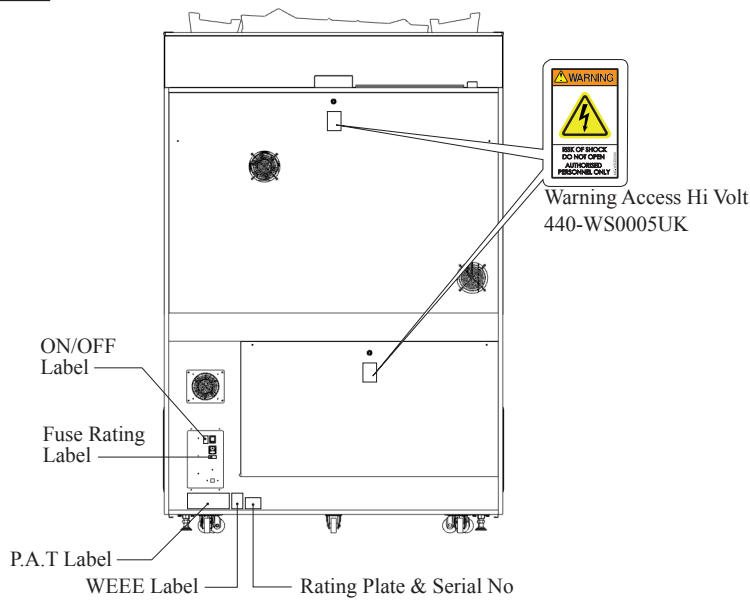
In order to prevent accidents, caution any customer ignoring the warnings to cease and desist immediately.

### VIDEO GAME-INDUCED SEIZURES (VGS) AND PHOTONSENSITIVE EPILEPSY (PSE)

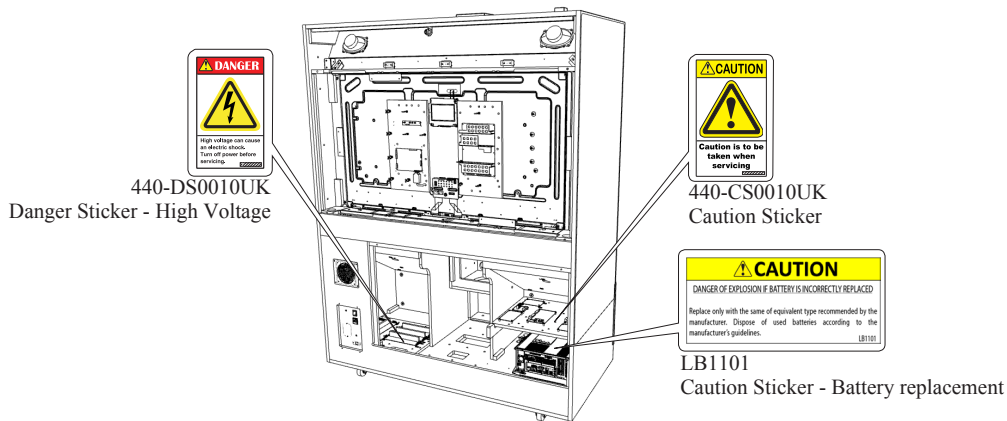
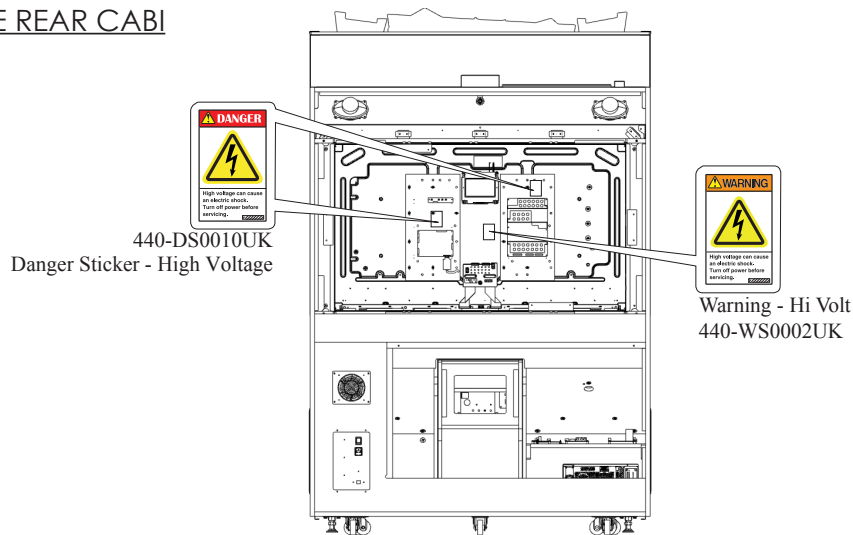
This SEGA product has warning displays on stickers which outline the risk of epilepticform and photosensitive seizures. These warning displays on stickers are applied close in proximity of the device which may promote symptoms of either video game-induced seizures or epilepsy. The warning displays are supplied in several languages and form part of the Installation kit supplied with this product. It is standard practice for the English version of this label to be applied during manufacture, however it is especially important for the operator to apply the same said label in the lanuguage of the country of operation.

# LOCATION OF CAUTION/WARNING LABELS DISPLAY

## OUTSIDE REAR CABI

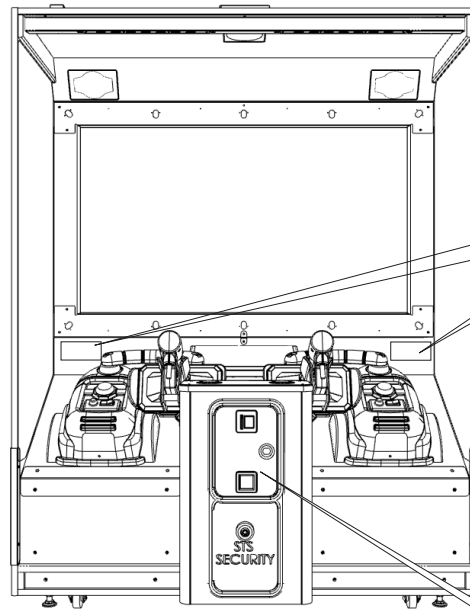


## INSIDE REAR CABI





INSIDE REAR CABI



**CAUTION**  
If you or your child have experienced a convulsive attack, loss of consciousness, etc. due to light stimulus or TV games, or fear that you might experience such symptoms, be very careful of using this machine.  
If you feel sick while playing the game, immediately discontinue use and take a rest.  
440-CS0186-01UK

440-CS0186-01UK  
Epilepsy Sticker

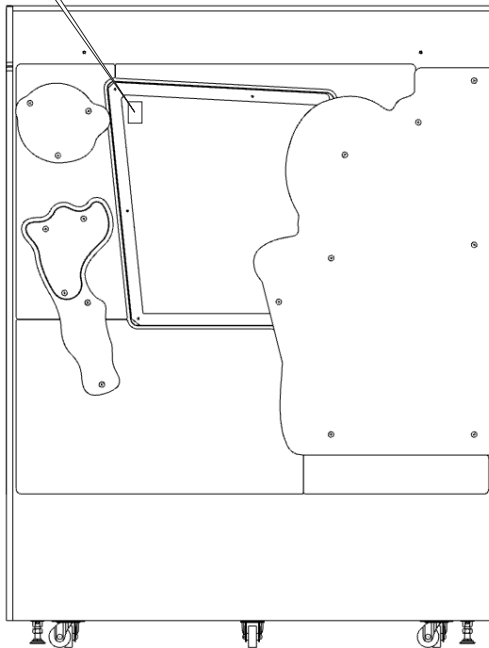


440-CS0010UK  
Caution Sticker



440-CS0361UK  
Caution - Mind Your Head

OUTSIDE REAR CABI



## 2 PRECAUTIONS REGARDING INSTALLATION LOCATION

### WARNING

This product is an indoor game machine. Do not install it outside. Even indoors, avoid installing in places mentioned below so as not to cause a fire, electric shock, injury and/or malfunction.

Places subject to rain or water leakage, or places subject to high humidity in the proximity of an indoor swimming pool and/or shower, etc.

Places subject to direct sunlight, or places subject to high temperatures in the proximity of heating units, etc.

Places filled with inflammable gas or vicinity of highly inflammable/volatile chemicals or hazardous matter.

Dusty places.

Sloped surfaces.

Places subject to any type of violent impact.

Vicinity of anti-disaster facilities such as fire exits and fire extinguishers.

Areas where the temperature exceeds the applicable temperature (ambient temperature) range of 5 to 30 degrees centigrade.

### IMPORTANT

Securing a safe area for operation as described in this manual will ensure safe operation for players and observers.

SEGA shall not be held responsible for damage or compensation for damage to a third party, resulting from the failure to observe this instruction.

## 2-1 LIMITATIONS OF USAGE

### WARNING

Be sure to check the Electrical Specifications. Ensure that this product is compatible with the location's power supply, voltage, and frequency requirements. A label describing Electrical Specifications is attached to the product. Non-compliance with the Electrical Specifications can cause a fire and electric shock.

This product requires a breaker and earth mechanism as part of the location facilities. Using the product without these can cause a fire and electric shock.

Ensure that the indoor wiring for the power supply is rated at 15A or higher (AC single phase 100V ~ 120V area), and 7A or higher (AC220V ~ 240V area). Non-compliance with the Electrical Specifications can cause a fire and electric shock.

Be sure to use an independent power supply equipped with an earth leakage breaker. Using a power supply without an earth leakage breaker can cause an outbreak of fire if a power surge occurs.

Putting many loads on one electrical outlet can cause generation of heat and a fire resulting from overload.

When using an extension cord, ensure that the cord is rated at 15 A or higher (AC 100V ~ 120V area) and 7A or higher (AC220V ~ 240V area). Using a cord rated lower than the specified rating can cause a fire and electric shock.

## 2-2 OPERATION AREA

STOP

### IMPORTANT

To install this product, the entrance must be at least 0.8m in width and 1.95m in height.

Do not attempt to move the product by pushing or pulling on the plastic parts. This may damage the product and may cause personal injury.

### WARNING

- For the operation of this machine, secure a minimum area of 3m (W) x 3.5m (D). These dimensions are necessary to enable the customer to walk around the machine and also to provide adequate ventilation. The player is required to be physically active when playing this game, so there is a possibility of a player falling, so be sure to secure the minimum area around the machine specified in this manual.
- Be sure to provide sufficient space specified in this manual. Do not allow objects to block the ventilation ports. It can cause generation of heat which in turn may cause a fire hazard.
- SEGA shall not be held responsible for damage or compensation for damage to a third party, resulting from the failure to observe this instruction.
- If the machine does not fit through the entryway to the installation location, do not disassemble it without first consulting the instructions. The machine should only be disassembled in accordance with the instructions listed in this manual; do not attempt to disassemble it in any other way. Specific tools and adjustment procedures are required to assemble and disassemble the mechanical parts. Attempting to assemble or disassemble the machine without consulting the instructions may result in accidents during assembly/disassembly and electric shock, short circuits, and/or personal injury during operation. If the machine still does not fit through the entryway after following the procedures in this manual, contact your retailer or the office listed in this manual.
- If the machine is still too large to fit through the entryway after following the procedures listed in this manual, do not tip the machine on its side. Attempting to transport the machine while it is tipped on its side may cause accidents. It may also damage or warp parts of the machine, resulting in accidents during operation.
- To install this product, the entrance must be at least 0.8m in width and 1.95m in height. If the entrance is too narrow, do not tilt the product carelessly. If all the product weight is put on the casters at one side only, there could be damage or deformation, causing serious accidents such as workers getting caught underneath.

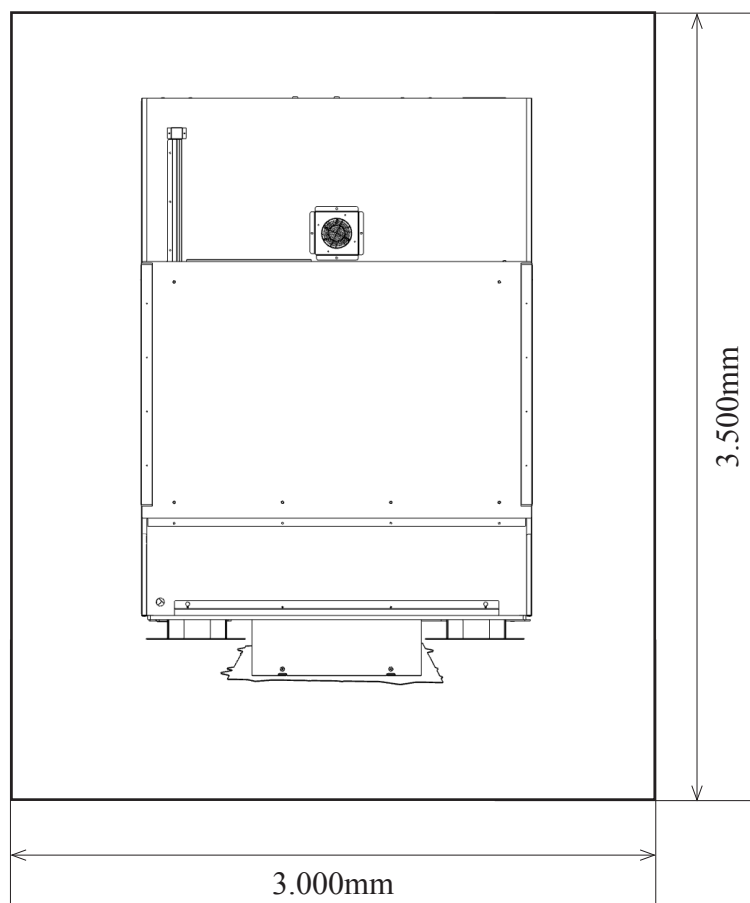
## STOP IMPORTANT

Securing a safe area for operation as described in this manual will ensure safe operation for players and observers.

SEGA shall not be held responsible for damage or compensation for damage to a third party, resulting from the failure to observe this instruction.

### OPERATION AREA

Secure a minimum area of 3.5m x 3m for safety in operation



### 3 PRECAUTIONS REGARDING PRODUCT OPERATION

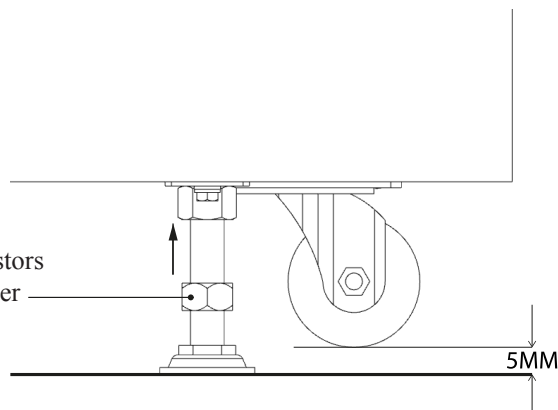
In order to prevent accidents and inappropriate behaviour, please check the following before operating the product.

#### 3-1 BEFORE OPERATION

##### WARNING

- To ensure maximum safety for the players and the customers, ensure that where the product is operated has sufficient lighting to allow any warnings to be read. Operation under insufficient lighting may result in customers bumping into each other or the product causing injury.
- Check if all the Leg Adjusters are in contact with the surface. (The casters should be raised approximately 5mm from the floor) If they are not the cabinet will move and may cause damage to property or injury to a player or observer.
- When lowering the Leg Adjusters, make sure that the gap between the Cabinet and the floor has been closed.
- Do not place any heavy items on this product. Doing so may result in injury or damage to the product.
- Do not climb on this product. Climbing on this product may result in injury or product damage. When checking the upper proportions of this product, always use a step/step ladder.
- To avoid electric shock, always check each door or service hatch for damage and make sure that they are fitted correctly. Never operate this product with doors or service hatches removed.
- Do not place any of the following objects on top of the product, nearby the product or hang them from the ceiling in close proximity to the product as doing so may result in an electric shock, short circuit or damage to parts.
- Flower vases, flower pots, cups, glasses, water tanks, cosmetics and/or any receptacle/container/vessel containing liquid or chemicals.

When the Leg Adjusters are lowered and the Castors raised 5mm. Tighten the Nut to secure the Adjuster





 **CAUTION**

- During daily cleaning, be sure to check the surface of the controllers and other parts that the player touches with his hands for damage, cracks, or loose screws. If a player uses the machine while it is damaged, cracked, or has a loose screw, the player may become injured.
- During daily cleaning, be sure to check the floor for any abnormality, wetness, etc. Failure to do this may result in deliberate tampering or negligence being left undetected.

 **IMPORTANT**

- Players directly hold the controller with their bare hands so it is recommended that wet towels (paper towels) be provided.
- Endeavor to clean the controllers and the floor daily.
- Provide a container or space for storing the customers' hand luggage, etc. To help prevent an accident and also protect parts, establish measures so that customers do not bring rain gear, such as umbrellas, on rainy days, or juice or other beverages, into the area where the machine is installed.
- Inspect the coin insertion slots to make sure that no foreign objects have been inserted and that they have not otherwise been tampered with as this will prevent play.

 **CAUTION**

- Immediately stop such violent acts as hitting and kicking the product. Such violent acts can cause parts damage or cause the cabinet to fall over, resulting in injury.
- Take care to ensure that two persons do not attempt to play a game by grasping a single controller. Failure to heed this precaution may result in a collision between two players which may cause an injury.
- Explain that the attendant will stop the game if he or she judges that a situation is dangerous.
- Take care to ensure that other customers do not touch operating devices during a game. Failure to heed this precaution may result in an accident or cause trouble between customers.
- There are steps and level differences between the floor level and the playing platform. Instruct players to be careful when entering or leaving the game.

## 3-2 DURING OPERATION (PAYING ATTENTION TO CUSTOMERS)

In order to prevent an accident or encourage inappropriate behaviour, the attendant or operator must endeavor to always pay attention to the behaviour of the players and customers. To play this machine involves physical activity undertaken by the player. Sometimes a player or a customer may behave in an unexpected manner. Be adequately aware of safety, and stop any behavior that is considered dangerous.

### WARNING

- For safety reasons, do not allow any of the following people to play the game.
- Those who have high blood pressure or a heart problem.
- Those who have experienced muscle convulsion or loss of consciousness when playing video games, etc.
- Those who have neck or spinal cord problems.
- Those who are intoxicated or under the influence of drugs.
- Pregnant women.
- Those who are not in good health.
- Those who do not follow the attendant's instructions.
- Those who cannot grasp the Control Unit securely because of immobility in fingers, hands or arms.
- Persons who disregard the product's warning displays.
- This product is intended for a single players only. Having two or more persons simultaneously playing this product can result to injury to the player and possible damage to the product.
- Even players who have never been adversely affected by light stimulus might experience dizziness or headache depending on their physical condition when playing the game.
- Small children are especially likely to experience these symptoms. Caution guardians of small children to keep watch on their children during play.
- Advise those who feel sick during play to have a seek medical advice.
- To avoid injury from falls and electric shocks due to spilled drinks, instruct the player not to place heavy items or drinks on the product.
- To avoid electric shocks and short circuits, do not allow customers to put hands and fingers or extraneous matter in the openings of the product or small openings in or around the doors.
- To avoid falls and resulting injury, immediately stop the customer from leaning against or climbing on the product, etc.
- To avoid electric shock and short circuit, do not allow customers to unplug the power plug without a justifiable reason.
- Instruct the guardians of small children to be watchful over their children.
- Children cannot sense danger. Allowing small children to get near a player who is playing the game could result in the children being bumped, struck or knocked down.

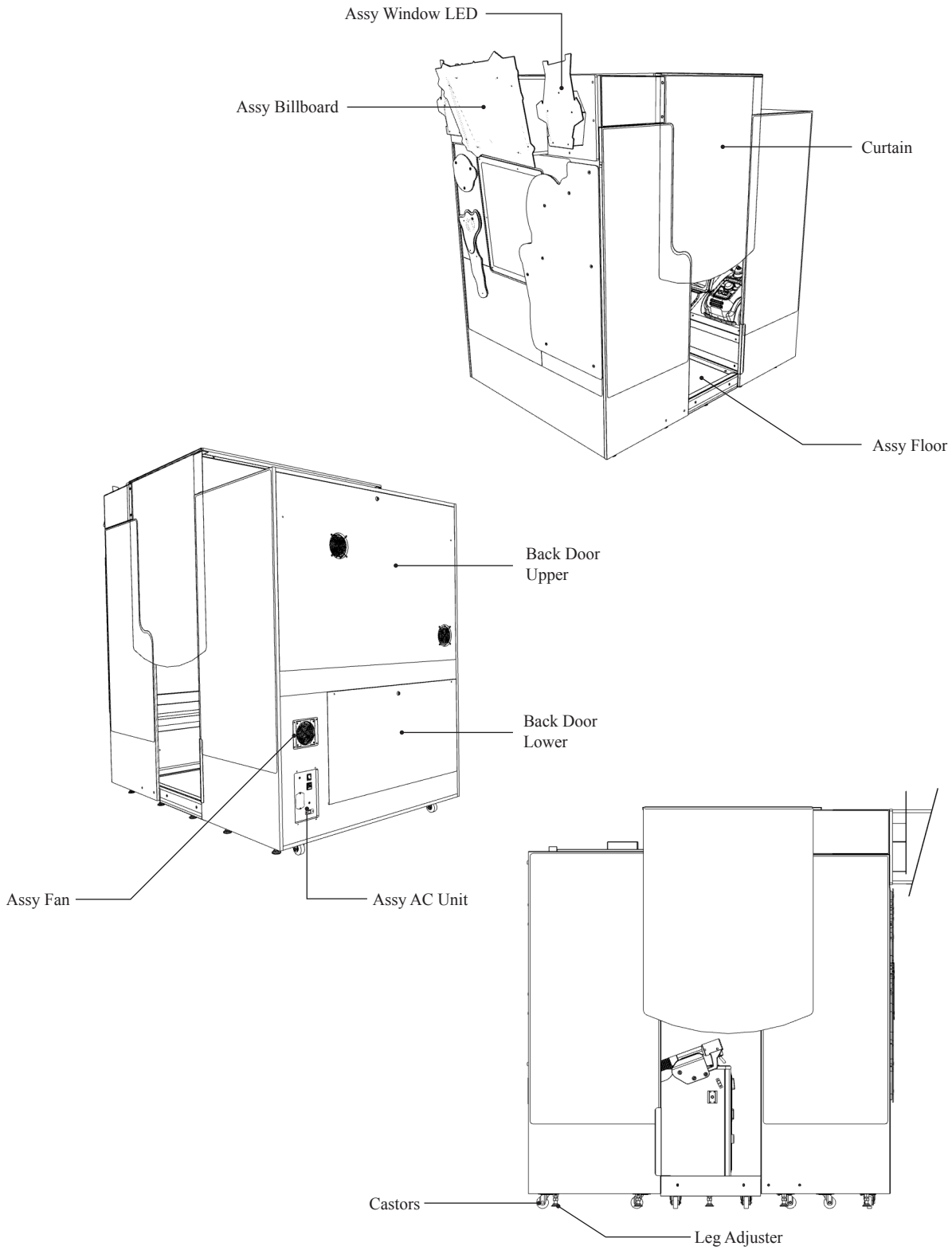
## **STOP** IMPORTANT

In order to avoid accidents, check the following before starting the operation:

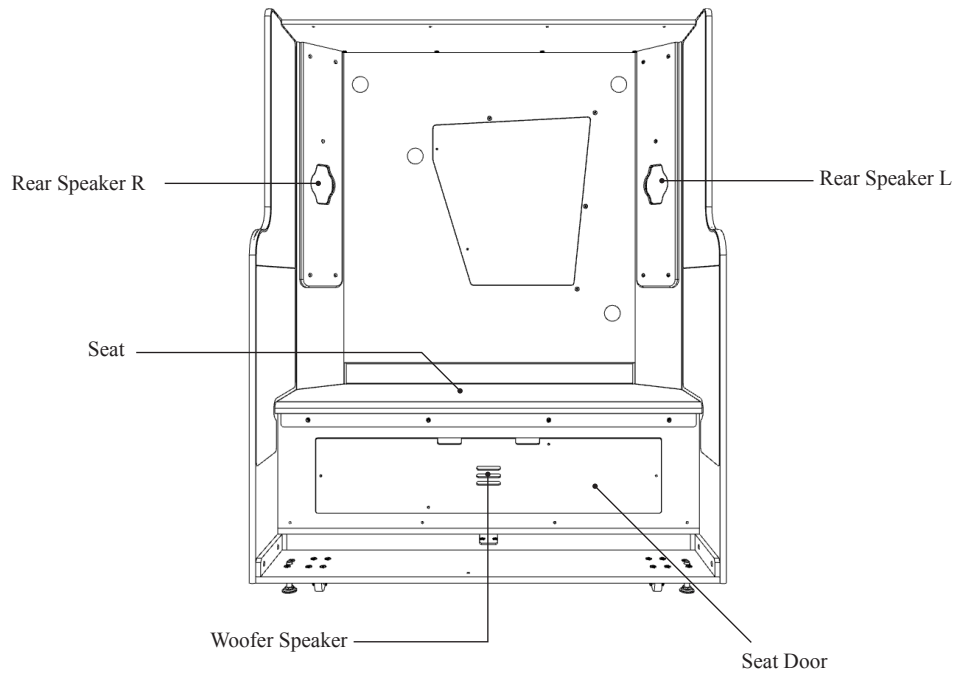
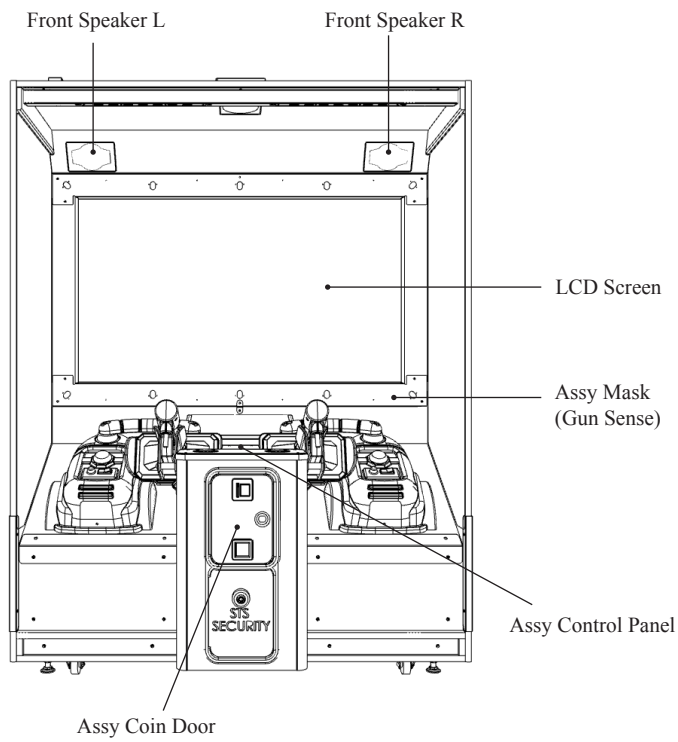
- To ensure maximum safety for the players and the customers, ensure that where the product is operated has sufficient lighting to allow any warnings to be read. Operation under insufficient lighting can cause bodily contact with each other, hitting accident, and/or trouble between customers.
- Be sure to perform appropriate adjustment of the display (LCD Screen). For operation of this machine, do not leave monitor's flickering or deviation as is. Failure to observe this can have a bad influence upon the players' or the customers' physical conditions.
- It is suggested to ensure a space allowing the players who may feel sick while playing the game to take a rest.
- Check that the product is located on a level surface. If the product is placed upon an uneven surface it will rock and can trap feet or fingers between gaps.
- Do not put any heavy item on this product. Items, if placed on this product may fall and cause injury to the player / observer.
- Do not climb on the product. Climbing on the product can cause falling down accidents. To check the top portion of the product, use a step ladder.
- After the end of a game, check to ensure that the player has not forgotten or dropped any belongings.

# 4 PART DESCRIPTIONS

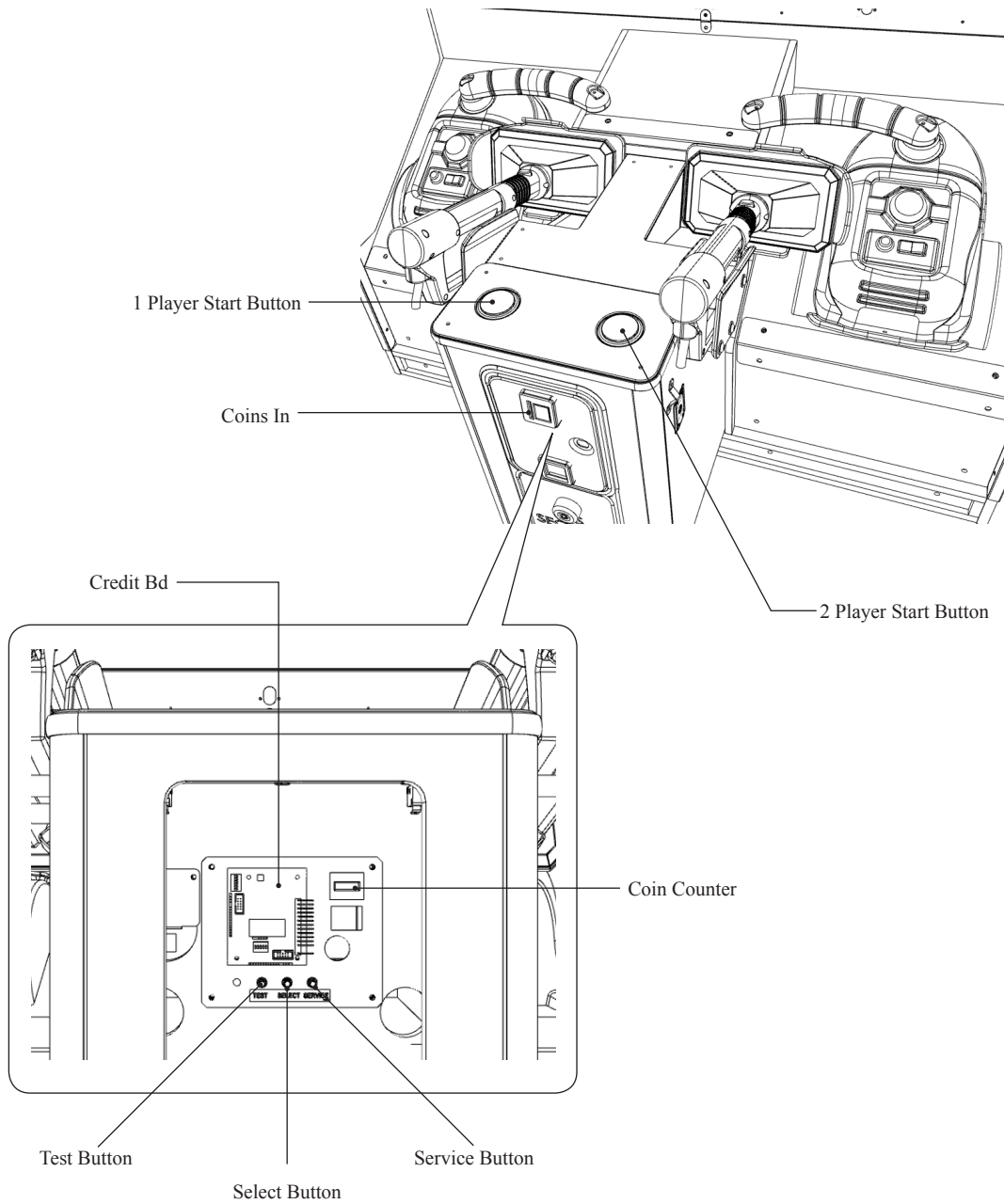
## OUTER CABINET



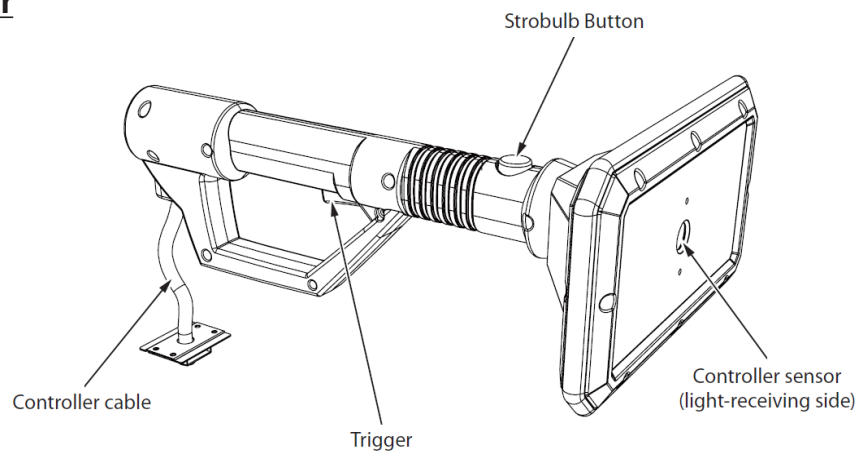
**INNER CABINET**



## CONTROL PANEL



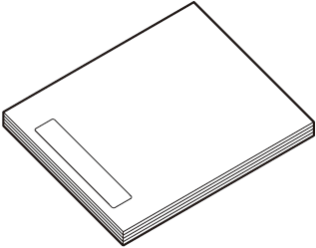
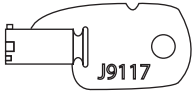
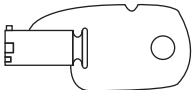
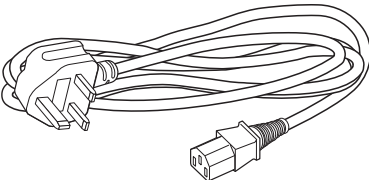
## Poltergust 3000 Controller



## 5 ACCESSORIES

Confirm that the accessories listed in the table below are present when setting up the product. Accessories marked “Spare” in the note column are consumable items but included as spares.

Parts not labeled with part numbers are yet to be assigned. Be sure to handle all parts with care, as some parts are not available for purchase separately.

Part name/Part no.	Description/Use etc.	Qty
OWNERS & SERVICE MANUAL 420-0026UK	This Manual 	1
KEY MASTER	For all service doors 	6
KEY	For Cashbox security door 	2
POWER LEAD LM1227 UK LM1246 EU LM1500 US	Power cord for your region 	1



## **6** ASSEMBLY AND INSTALLATION

### **WARNING**

- Perform assembly work by following the procedure herein stated. Failure to comply with the instructions can cause electric shock.
- Perform assembling as per this manual. Since this is a complex machine, incorrect assembling can cause an electric shock, machine damage and/or improper functioning as per specified performance.
- When assembling, be sure to use additional help from another person(s). Depending on the assembly work, there are some cases in which working by one person alone can cause personal injury or parts damage.
- Adhere strictly to all of the work procedures stipulated in this document. If two or more workers are working at the same time, exercise special caution. If sequences are carried out erroneously, accidents can result. There might also be cases in which the assembly cannot be completed.
- Pay special attention to the surroundings when a multiple number of workers are working at the same time. There is always the danger that a worker might be injured. In assembly and installation of this product, there are procedures in which a stepladder is used, procedures in which heavy objects are attached, and procedures involving connection of a rated power supply of 10 amperes. Carelessness in doing work could lead to grave injuries and even fatalities.
- Ensure that connectors are accurately connected. Incomplete connections can cause electric shock.
- This work should be carried out by the site maintenance personnel or other qualified professionals. Work performed by nontechnical personnel can cause a severe accident such as electric shock. Failing to comply with this instruction can cause a severe accident such as electric shock to the player during operation. If no one with proper technological expertise is available, request service from the office indicated in this document or the point of purchase so as to ensure safety.
- Be careful not to damage the wires. Damaged wires may cause electric shock or short circuit or present a risk of fire.
- Do not leave power cable or earth lines exposed over passageways. Exposure could lead to damage, electric shock or short circuit. Wherever wiring has been laid out on a floor surface, use a wiring protection cover. [Wiring diameter: Power cable, approx. 10 mm – 14 mm]
- Persons who connect indoor power supplies must be qualified electricians. Do not allow anyone without proper qualifications to make such connections. Otherwise there could be electric shock.
- Provide power cables for connecting the indoor power supply to the product. The rating of the power cable must be at least 15 amperes. The cable must conform to this requirement and also be of sufficient length to enable the indoor power supply to be connected to the product without difficulty. Use of a cable that does not meet the requirements can result in a fire or electric shock.

**⚠ WARNING**

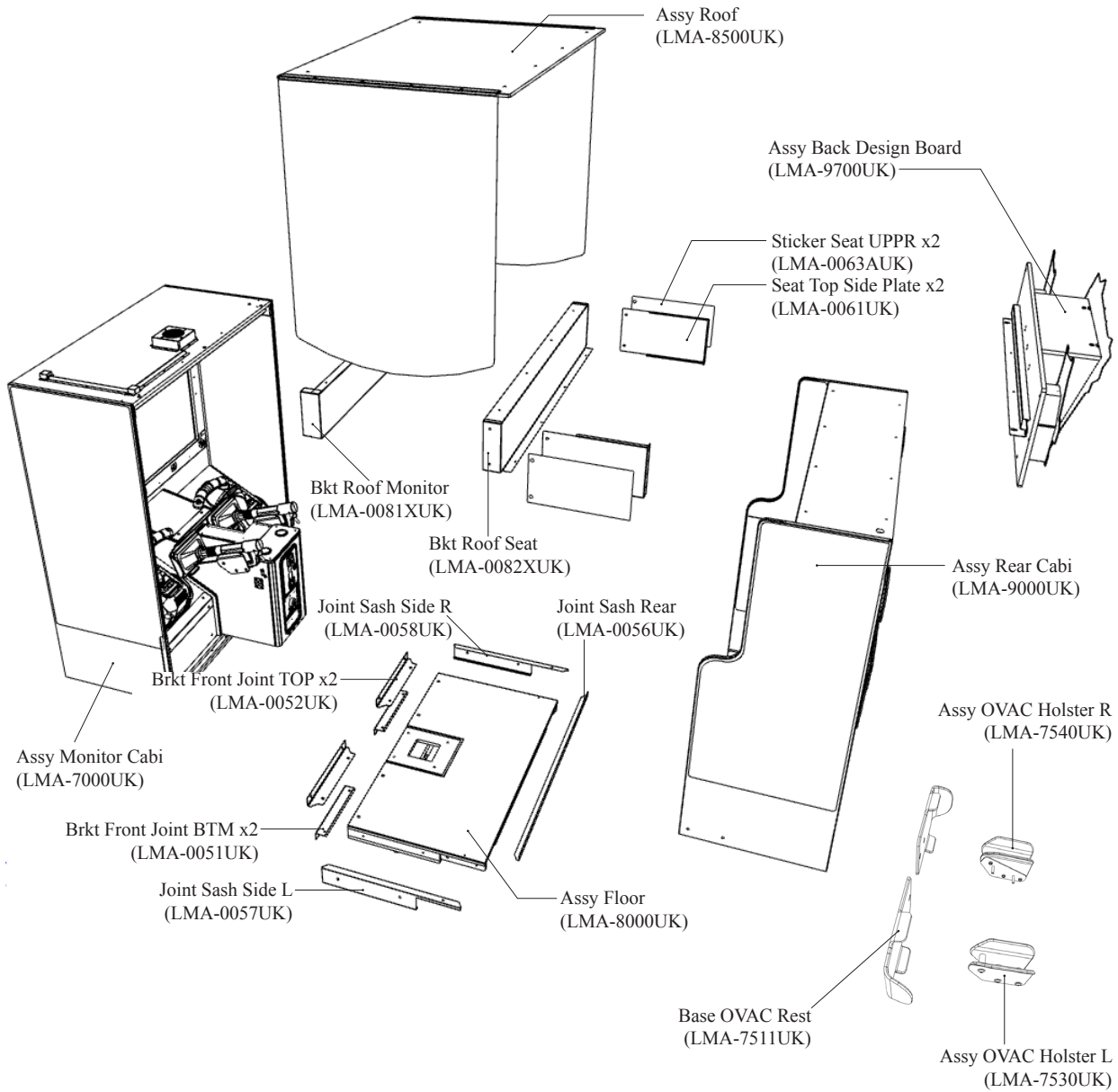
- For the sake of safety and workability, use 3 core coaxial CE/UL approved cables for the power cables (provided).
- When inserting or removing a connector, always hold it by its main part. If you hold it by anything else while doing so, the connections between wire and connector terminal fixtures could be damaged; and there could be a short circuit or fire. There could also be poor connectivity.
- Make sure that all the adjusters are resting on the floor. The cabinet may move and cause an accident if the adjusters are not laid out properly.
- Whenever any fasteners (i.e., screws, nuts and bolts) have been lost, always use replacement fasteners with proper dimensions as specified in this manual. If fasteners of any other dimensions are used, it could cause damage and/or separation of parts that result in secondary accidents.
- Be careful when aligning, attaching or mounting parts so that your head, hands, fingers, etc., do not get caught in anything. If two or more workers are working at the same time, exercise special caution. Failure to be cautious could result in accidental bone fractures or amputation. Check the surroundings carefully before proceeding.
- When connecting wires inside the cabinet, there may be instances in which the indoor lighting does not reach that location. Have a flashlight or other auxiliary lighting equipment on hand. If wires are connected carelessly, there could be an accidental short circuit, fire, etc.
- When tightening bolts and screws, ensure that other parts are suspended properly and bolts and screws are fastened tightly. Be sure to take accident prevention measures such as having another worker support parts. If a part drops or topples over during this work, a serious accident may result.

**⚠ CAUTION**

- Support and hold parts in place securely and fasten them with screws and/or bolts. Use two workers, one to support the part and another to fasten it in place. If a part is not supported securely, it might fall down, resulting in an accident.
- Wear appropriate work clothing so that work can be performed safely. Use gloves and safety shoes to prevent accidents or injuries.
- When installing a wire protection cover over a floor, use a material shaped so that no one passing by will stumble over it. Using a material that could be stumbled over might lead to an accidental fall.
- Be careful in handling plastic parts. Be sure not to tighten screws or nuts too tightly. If such parts are exposed to excessive loads or impact, they might become damaged, resulting in fragments or cracks that could cause accidental injury.

## CABINET CONTENTS

Check the contents before beginning work on installation. If any the parts are missing or damaged, please contact your local Sega office as soon as possible, quoting the serial number and the date of purchase.



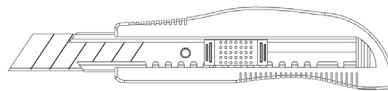
Note: For a complete breakdown of parts (including fixings) contained within the “INSTALLATION KIT” please refer to Item 20 in section ‘18 - Parts List’ of this manual.

## TOOLS REQUIRED

### CAUTION

- Always use the correct tools for the job in hand. Using incorrect tools may result in an inferior installation, damage to parts or injury.

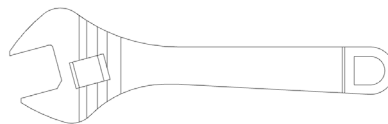
Below is a list showing the tools required for installation. Always use the correct tools for the job in hand. Using incorrect tools may result in an inferior installation, damage to parts or injury.



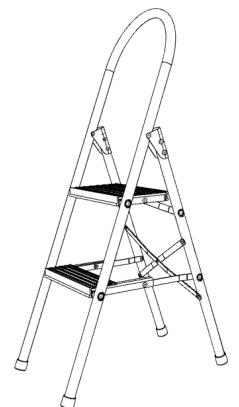
Blade or Knife  
Used for unpacking



Adjustable Wrench 3, 5 & 6  
Used for Assembly



Adjustable Wrench  
Used for lowering Leg Adjusters



Steps or Step Ladder  
Used for Assembly at height

## 6-1 UNPACKING THE CABINET

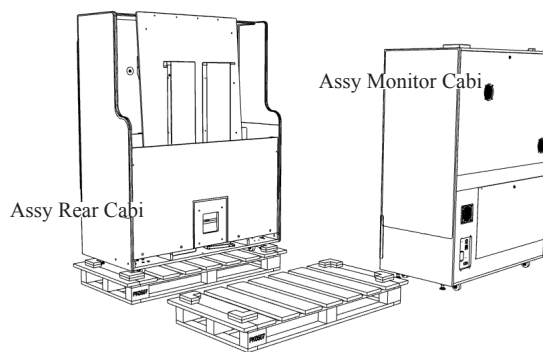
### WARNING

Servicing and maintenance work of the contents herein stated should be performed by the SERVICEMAN stipulated as per IEC Standard. Those who do not have technical expertise and knowledge other than the SERVICEMAN are not allowed to perform the work herein stated. Executing aforementioned work by such nontechnical personnel can cause serious accidents that may endanger life.

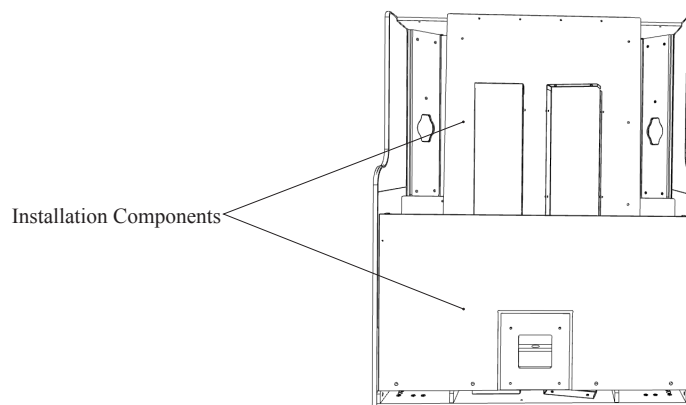
### CAUTION

- Some parts contained within the Assy Rear Cabi for installation are heavy! Please use two people when unpacking the components.
- Installation of the Assy DESIGN BOARD and Assy ROOF are undertaken at a high level. Use a step or step ladder to aid installation.

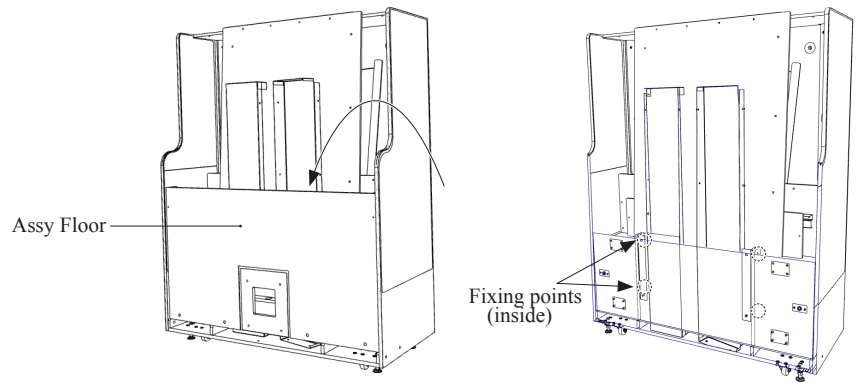
- 1 Using lifting equipment such as a fork lift or a high lift pallet truck, carefully remove the ASSY REAR CABI and the ASSY MONITOR CABI from their pallets.



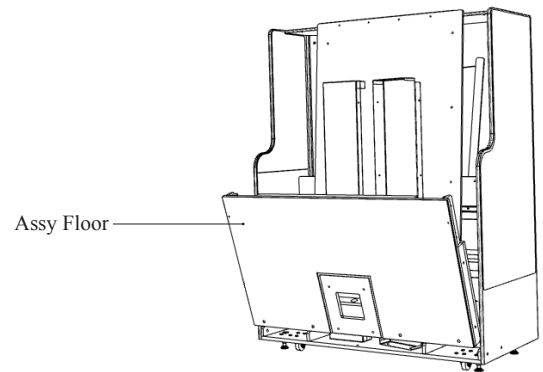
- 2 Located within the ASSY REAR CABI are the components required for installation. Carefully remove the components as illustrated within these instructions.



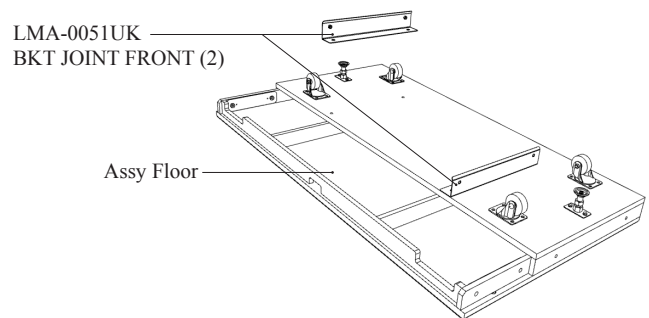
- 3** Use a minimum of two people when removing heavy components. Locate the (4) M8 fixings on the inside of the Assy Floor.



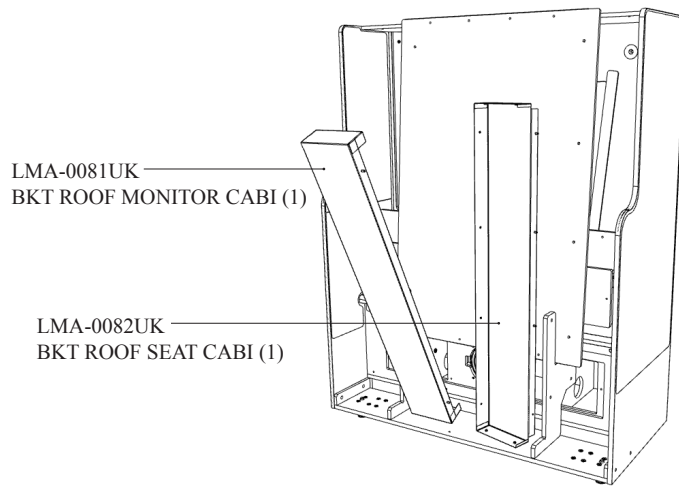
- 4** Remove the (4) fixings and carefully lift the Assy Floor away from the cabinet. Do not discard any fixings or bracketry as they will be required later on during the installation.



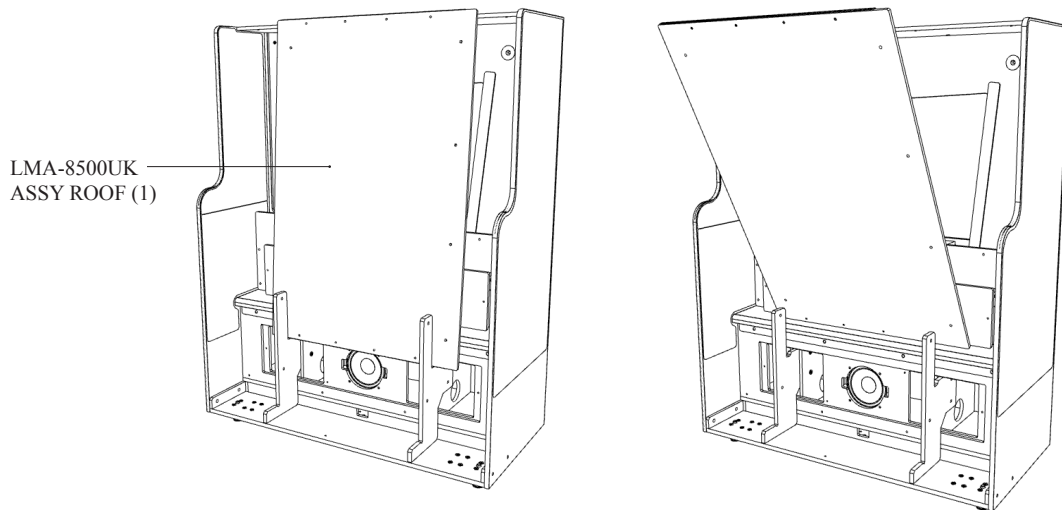
- 5** Remove the (4) fixings which secure the BKT JOINT FLOOR to the ASSY FLOOR. Place both brackets and fixing to one side.



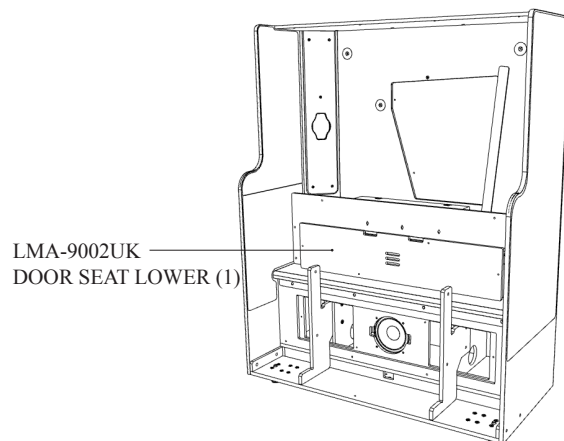
**6** Remove both LMA-0081UK BKT ROOF MONITOR CABI (1) and LMA-0082UK BKT ROOF SEAT CABI (1)



**7** Using (2) people, carefully remove the LMA-8500UK - ASSY ROOF.

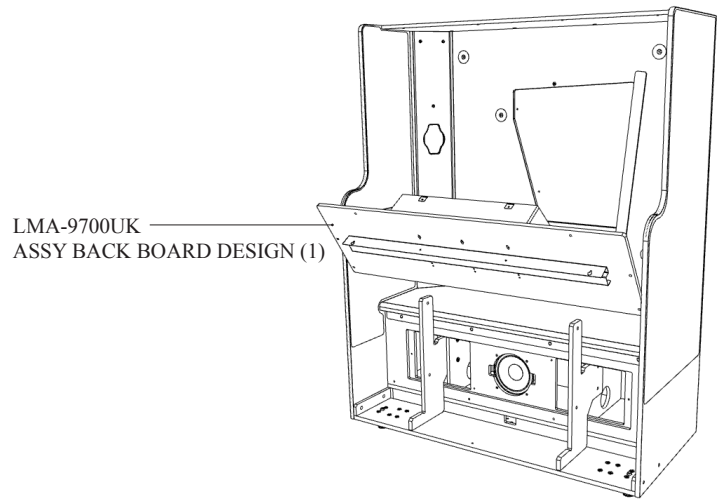


**8** Remove the LMA-9002UK - DOOR SEAT LOWER (1)

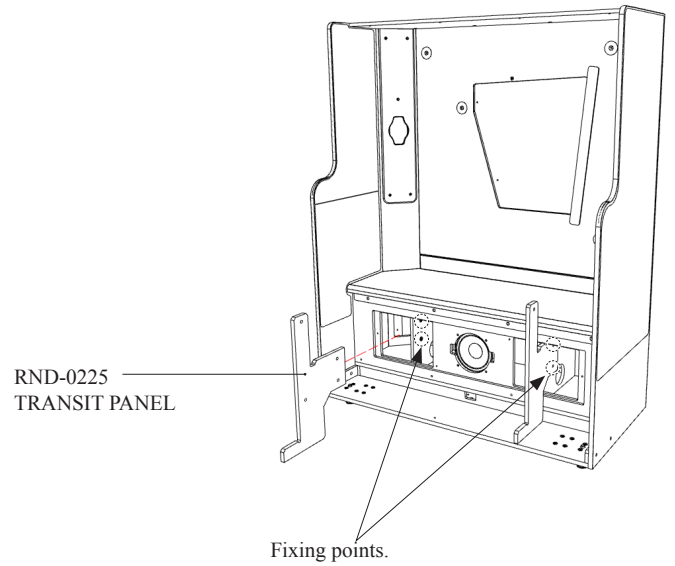




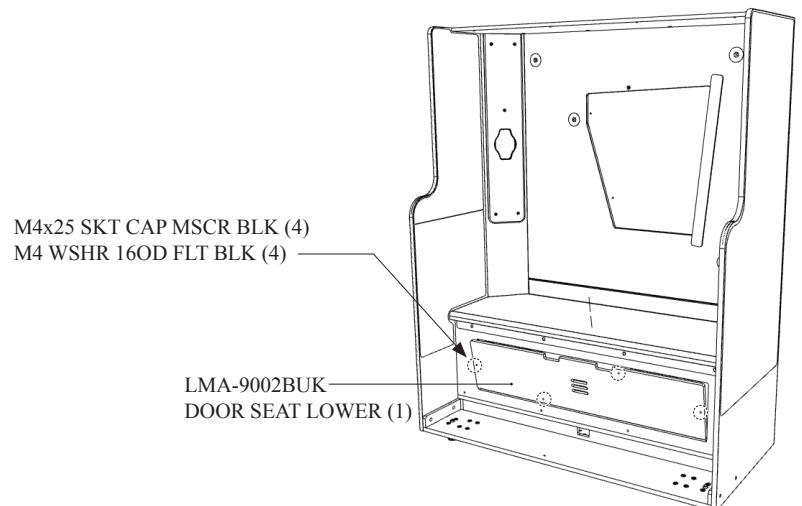
**9** Using (2) people, carefully remove the LMA-9700UK - ASSY BACK BOARD DESIGN.



**10** Remove the (2) fixings which retain each of the (2) TRANSIT PANELS (RND-0225)



**11** Fit the DOOR LOWER SEAT using (4) M4x25 SKT CAP MSCR BLK & (4) M4 WSHR 16OD FLT BLK

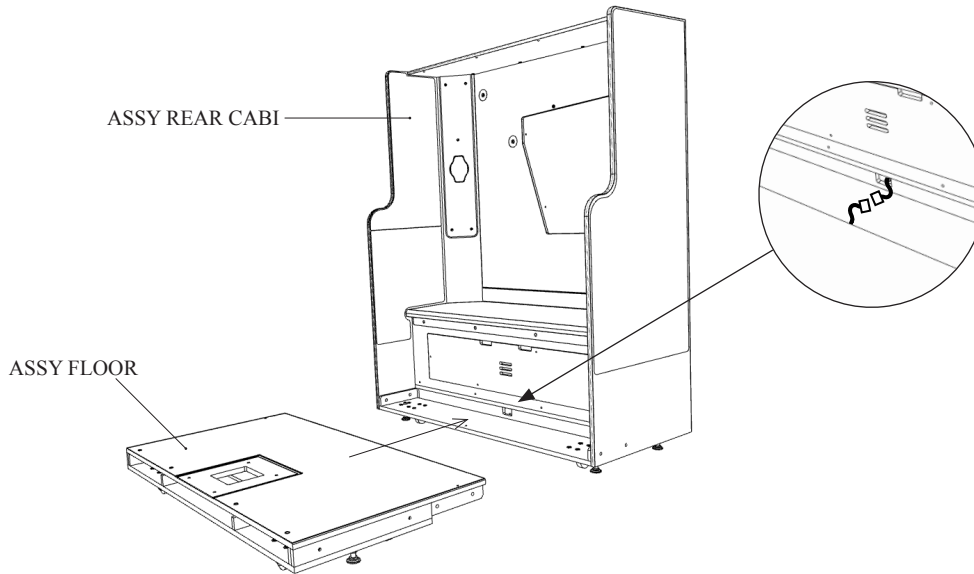


## 6-2 ASSEMBLING & FITTING THE FLOOR

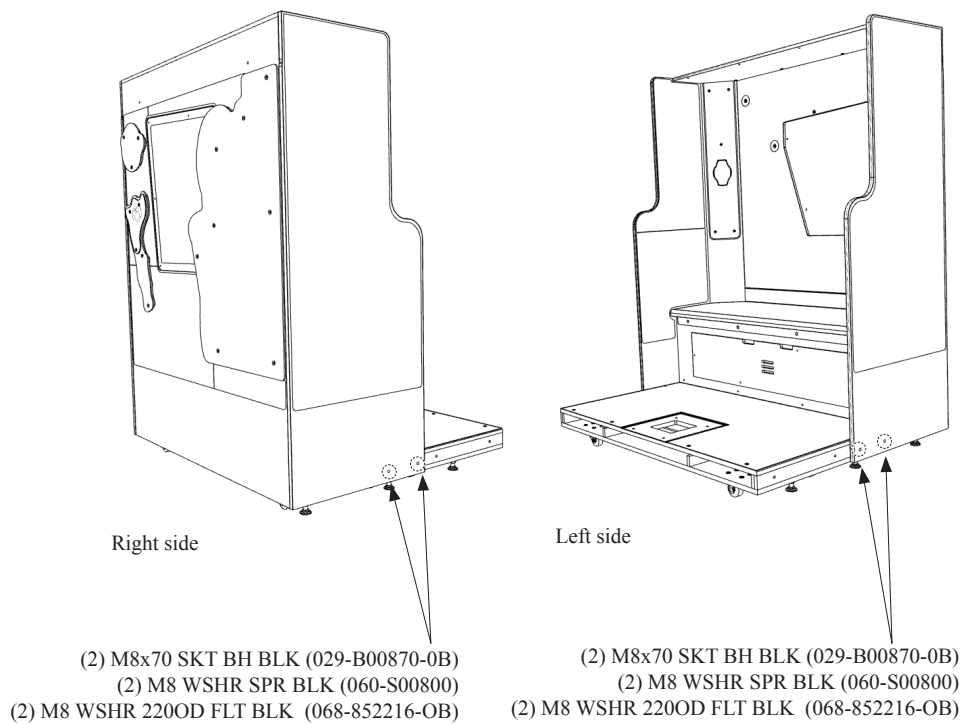
STOP

THE FLOOR ASSY IS HEAVY. USE 2 PEOPLE WHEN ASSEMBLING/INSTALLING.

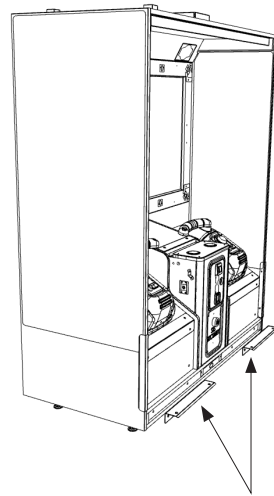
- 1 With the Castors on the floor, carefully wheel the ASSY FLOOR on and into the ASSY REAR CABI. Make connections between the harness before placing the ASSY FLOOR fully into position.



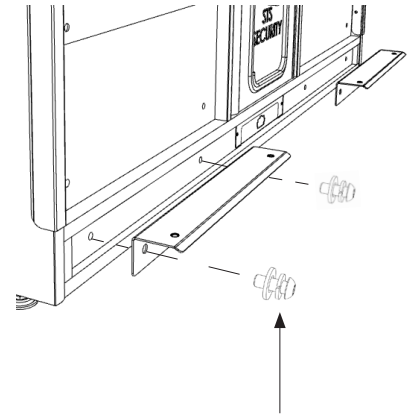
- 2 When in position, secure the ASSY FLOOR to the ASSY REAR CABI using (4) M8x70 SKT BH BLK (029-B00870-0B), (4) M8 WSHR SPR BLK (060-S00800) and (4) M8 WSHR 220OD FLT BLK (068-852216-0B)



- 3** Fit and secure the (2) BKT FRONT JOINT BTM (LMA-0051UK) which were removed from the underside of the ASSY FLOOR when unpacking in Section 6-1, Step 5 - Unpacking the Cabinet. Secure using (4) M8x40 SKT CAP BLK and the associated washers.

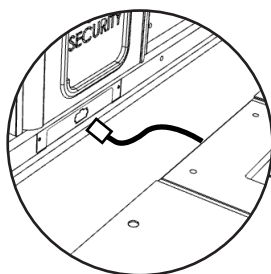


(2) BKT FRONT JOINT BTM  
(LMA-0051UK)

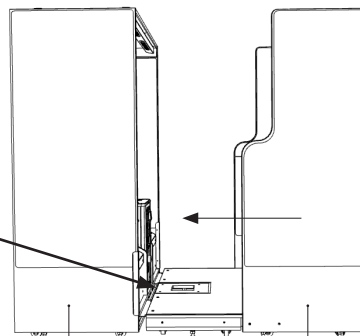


- (4) M8x40 SKT BH BLK (029-B00840-0B)
- (4) M8 WSHR SPR BLK (060-S00800)
- (4) M8 WSHR 220OD FLT BLK (068-852216-0B)

- 4** Carefully push both ASSY REAR CABI and ASSY MONITOR CABI together so that the ASSY FLOOR rests on and aligns with the fixing holes within the TOP and BTM JOINT BKTS. Fit and secure the (2) BKT FRONT JOINT TOP (LMA-0052UK) between the ASSY FLOOR and the ASSY MONITOR CABI. Secure using (8) M8x40 SKT CAP BLK and the associated washers.

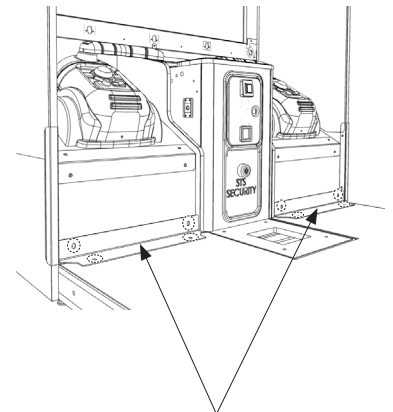


Make connection



Assy Monitor Cabi

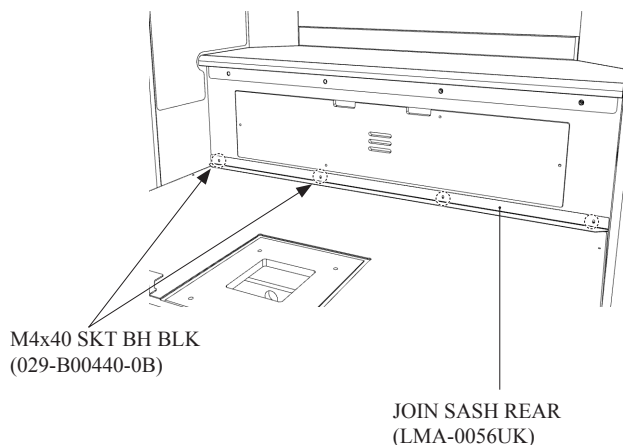
Assy Rear Cabi



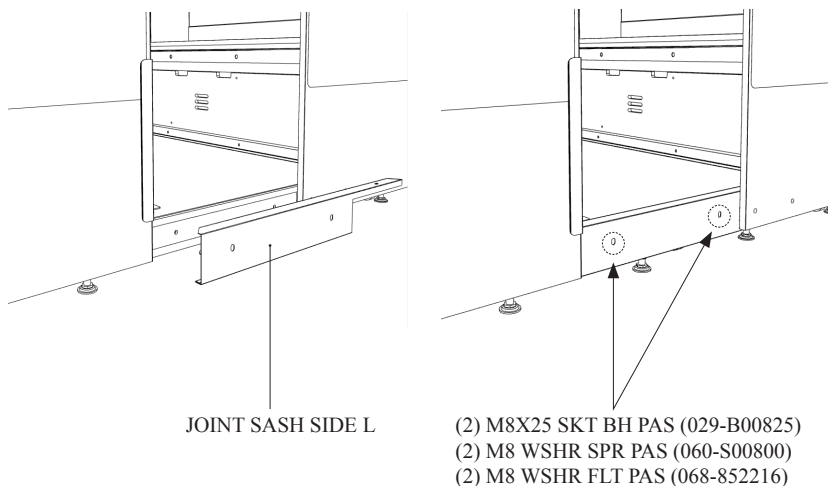
(2) BKT FRONT JOINT TOP  
(LMA-0052UK)

- (8) M8x40 SKT BH BLK (029-B00840-0B)
- (8) M8 WSHR SPR BLK (060-S00800)
- (8) M8 WSHR 220OD FLT BLK (068-852216-0B)

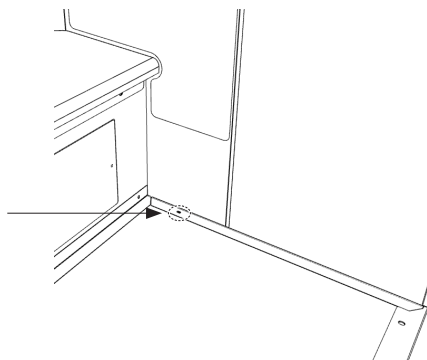
- 5** Fit and secure the JOINT SASH REAR (LMA-0056UK) between the ASSY FLOOR and the ASSY REAR CABI. Secure using (4) M4x40 SKT BH BLK (029-B00440-0B)



- 6** Fit and secure the JOINT SASH SIDE L (LMA-0057UK) & JOINT SASH SIDE R (LMA-0058UK) to the ASSY FLOOR between both ASSY REAR CABI and ASSY MONITOR CABI. Secure using (1) M4x25 SKT BH PAS (068-852216), (1) M4 WSHR 16OD FLT PAS (068-441616) & (2) M8X25 SKT BH PAS (029-B00825), (2) M8 WSHR SPR PAS (060-S00800) and (2) M8 WSHR FLT PAS (068-852216)



- (1) M4x25 SKT BH PAS (068-852216)  
(1) M4 WSHR 16OD FLT PAS (068-441616)

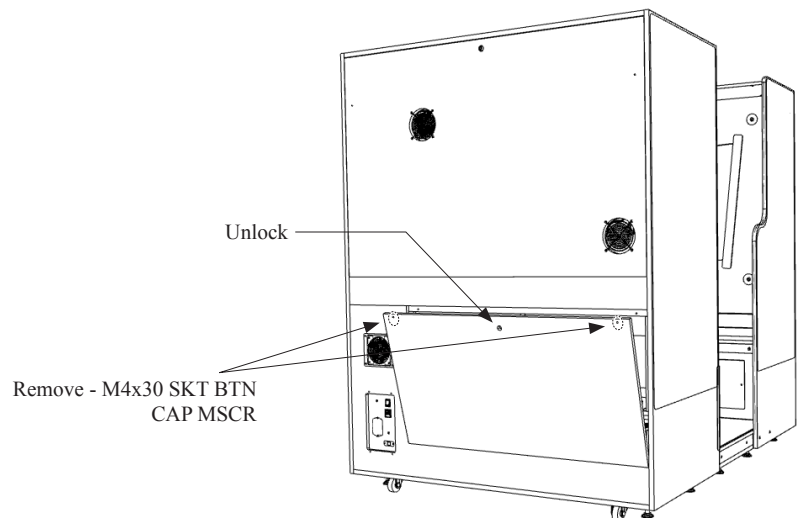


- 7** Repeat Step 7 when fitting the Right Hand JOINT SASH SIDE R (LMA-0058UK)

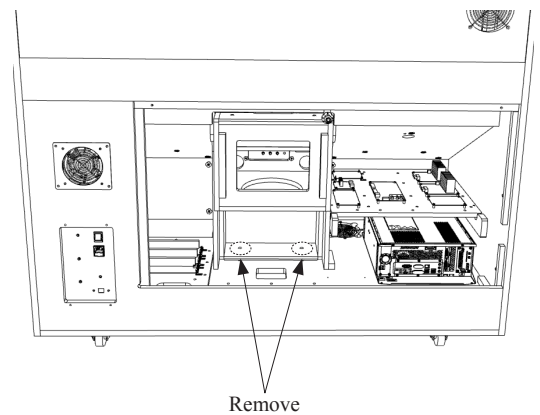
## 6-3 ASSEMBLING THE OVAC CABI

The COIN DOOR and CASH BOX housing is referred to as the OVAC CABI. To set out the OVAC CABI from it's transit position, please follow the instructions below.

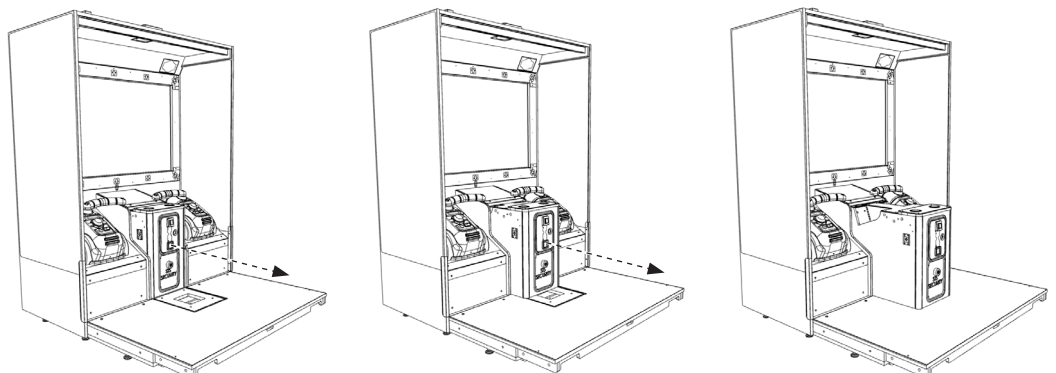
- 1 Unscrew the (2) M4x30 SKT BTN CAP MSCR from the upper corners of the MONITOR CABI DOOR. Using the keys (supplied) unlock and remove.



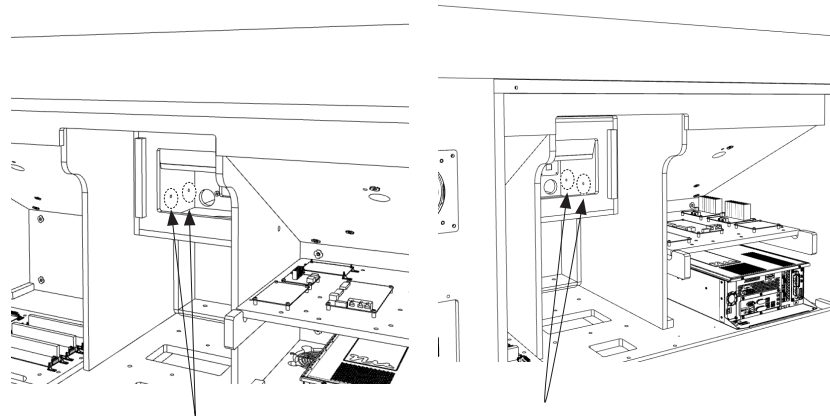
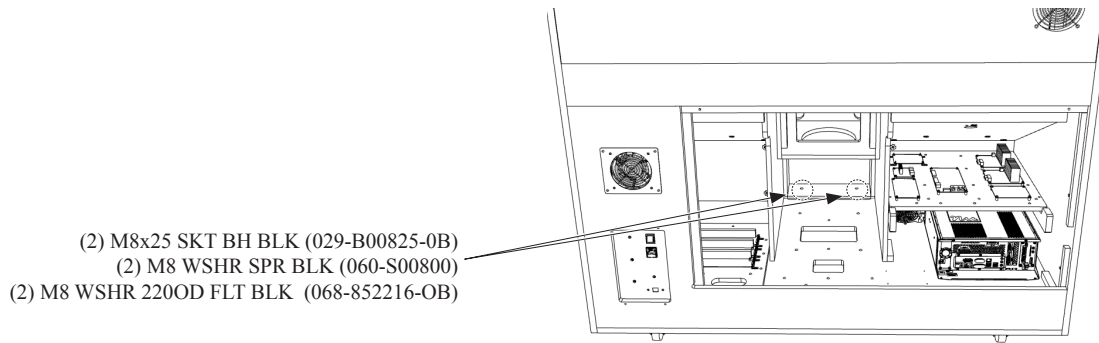
- 2 Locate and remove the (2) M8x25 SKT BH BLK and associated washers from the rear of the ASSY OVAC CABI. (*Do not discard fixings*)



- 3 Gently pull out the OVAC CABI so that it sits within the position set out in the ASSY FLOOR.

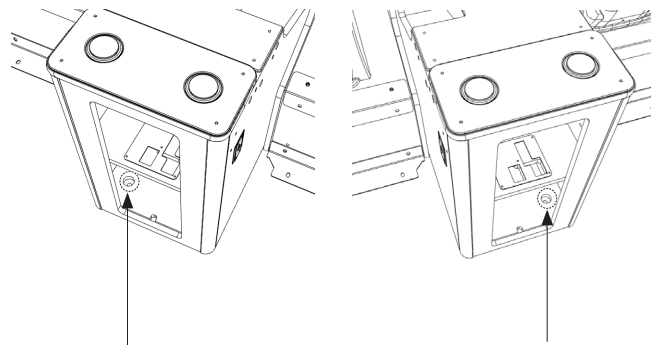
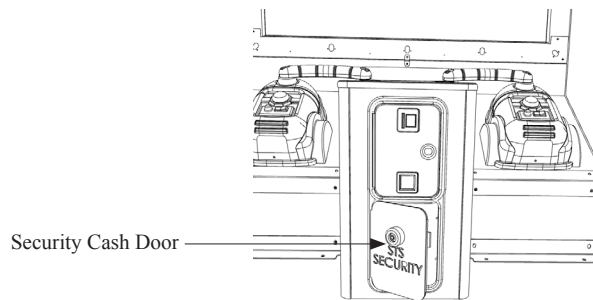


**4** Secure the ASSY OVAC CABI into position using (6) M8x25 SKT BH BLK and associated washers.



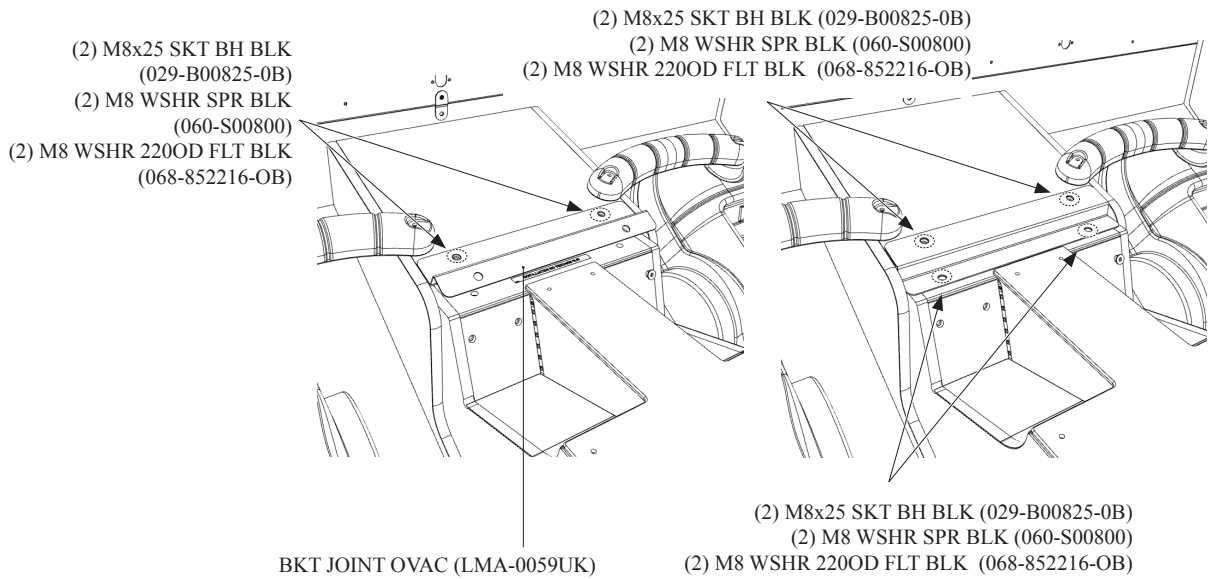
- (2) M8x25 SKT BH BLK (029-B00825-0B)
- (2) M8 WSHR SPR BLK (060-S00800)
- (2) M8 WSHR 220OD FLT BLK (068-852216-0B)

**5** Open the Cash Security door and remove the Cash Box. Locate the fixing points at the floor of the ASSY OVAC CABI and secure using (2) M8x25 SKT BH BLK (029-B00825-0B) and associated washers.

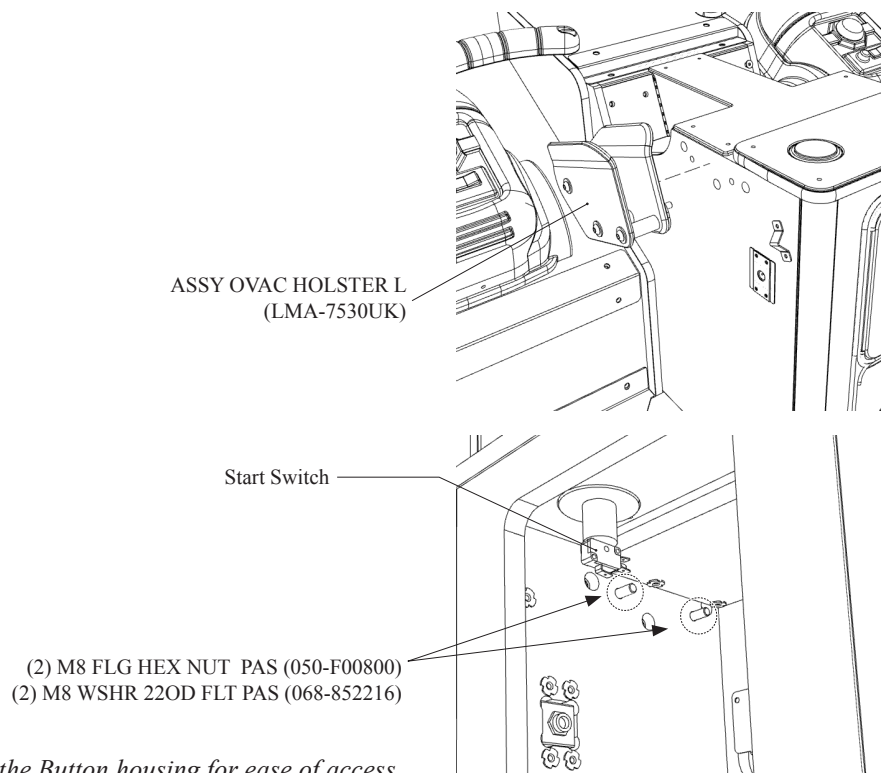


- (1) M8x25 SKT BH BLK (029-B00825-0B)
- (1) M8 WSHR SPR BLK (060-S00800)
- (1) M8 WSHR 220OD FLT BLK (068-852216-0B)

**6** Remove the (2) M8x25 SKT BH BLK which retain the BKT JOINT OVAC (LMA-0059UK). Remove and flip the BKT JOINT OVAC and reposition. Secure using the (2) + (2) M8x25 SKT BH BLK and the additional washers.



**7** Offer the ASSY OVAC HOLSTER L up to the ASSY OVAC CABI and secure from the inside using (2) M8 FLG HEX NUT PAS and (2) M8 WSHR FLAP PAS

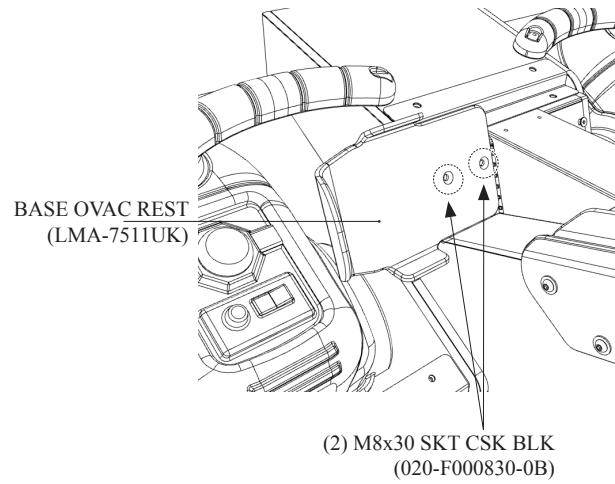


**Tip:**  
 Remove the Start Switches from the Button housing for ease of access.

**8** Repeat Step 7 to fix the ASSY OVAC HOLSTER R to the ASSY OVAC CABI.



- 
- 9** Remove the (2) fixings which currently occupy the fixing points. Offer the BASE OVAC REST (LMA-7511UK) into position and secure using the same fixings.



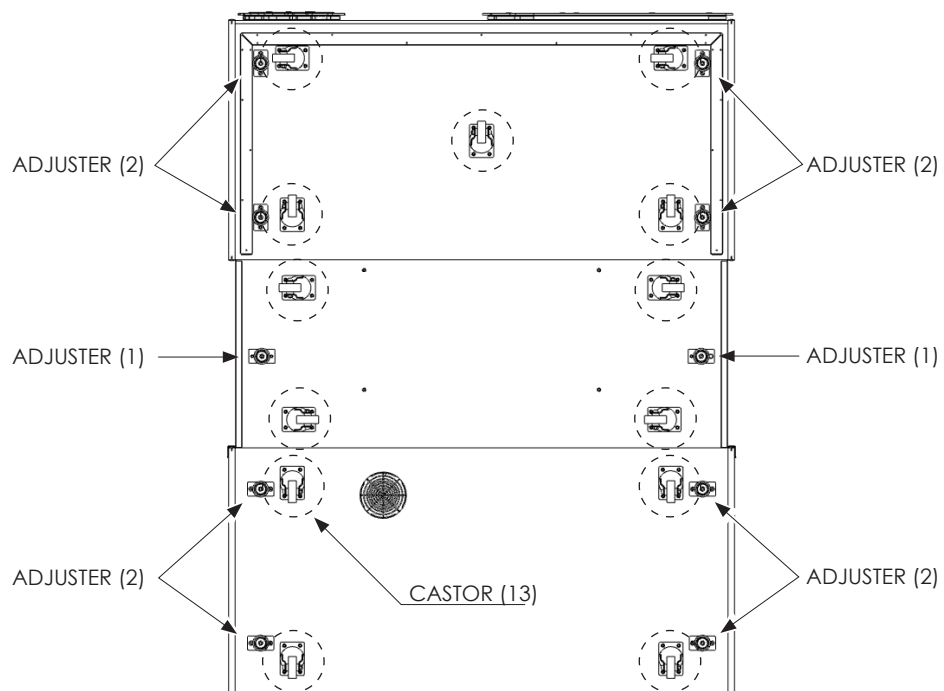
- 
- 10** Repeat Step 9 to fix the BASE OVAC REST (LMA-7511UK) to the Right Hand Side.

## 6-4 SITUATING THE CABINET

### ⚠ WARNING

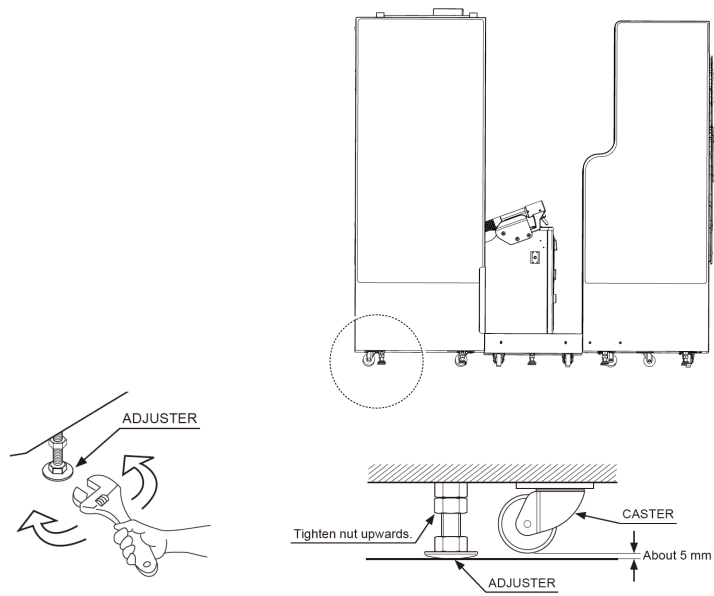
- Prior fitting the ASSY ROOF and ASSY DESIGN BOARD, the machine should be placed into its operating location and the CASTORS raised to prevent any movement whilst working. Failure to fix the cabinet into location prior fitting the ASSY ROOF and the ASSY DESIGN BOARD could lead to the cabinet moving and causing injury.
- Make sure that all the adjusters contact the floor. Otherwise the cabinet could move, causing an accident.
- Provide a ventilation space at least 15cm wide behind the cabinet. There are ventilation holes on the back of the cabinet. Do not block the ventilation holes. Doing so could trap heat inside resulting in fire. It could also result in equipment damage or cause parts to become exhausted prematurely.
- Do not position the product on uneven surfaces or a surface which slopes. Positioning the cabinet on either an uneven or sloped surface may cause the cabinet to become unstable which may result in damage or injury.

The product comes with castors attached to 13 locations. When the installation site has been determined, have the adjusters (10) come in direct contact with the floor. Establish a gap of approximately 5mm between the floor and the castor and adjust the unit so that it will remain level.



Bottom View

- 1** Bring the adjusters into direct contact with the floor. Use a wrench to align the height of the adjusters until the cabinet is perfectly level. Not having the adjusters level will cause the cabinet to rock and move from position..



- 2** Once the leg levellers are down and in position the cabinet can not be moved. Trying to move the cabinet when the levellers are down may cause damage to the product or cause personal injury. Minor adjustments to position can be made if the levellers are raises and the casters come into contact with the floor. Do not attempt to move the cabinet over long distances with the floor attached.

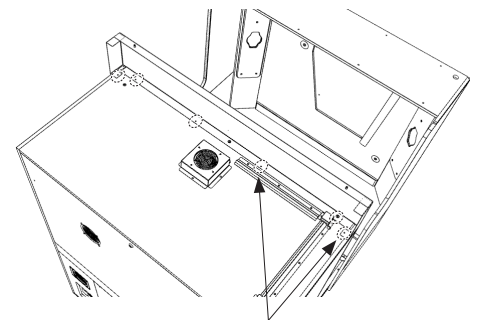
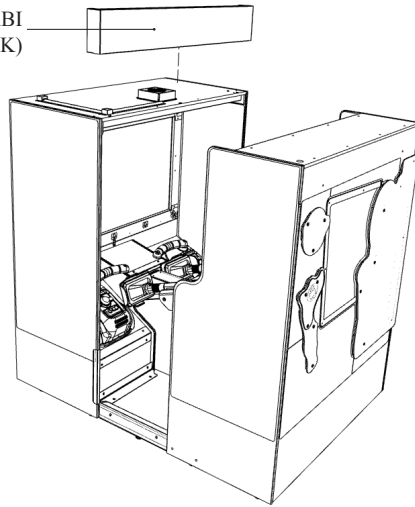
## 6-5 FITTING THE ASSY ROOF

### ⚠ CAUTION

- Some parts contained within the Assy Rear Cabi for installation are heavy! Please use two people when unpacking the components.
- Installation of the Assy DESIGN BOARD and Assy ROOF are undertaken at a high level. Use a step or step ladder to aid installation.

- 1** Using the aid of a step ladder or step, offer the BKT ROOF MONITOR CABI (LMA-0081UK) and place it on the roof of the Monitor Cabi in position shown. Secure using (6) M4x25 SKT BH BLK (029-B00425-0B) and washers.

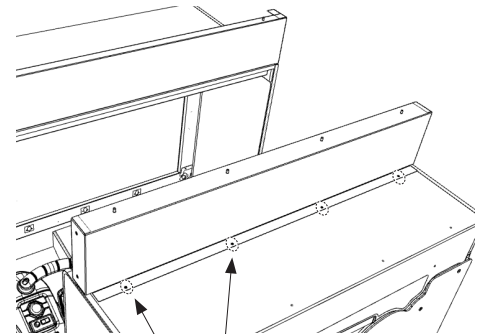
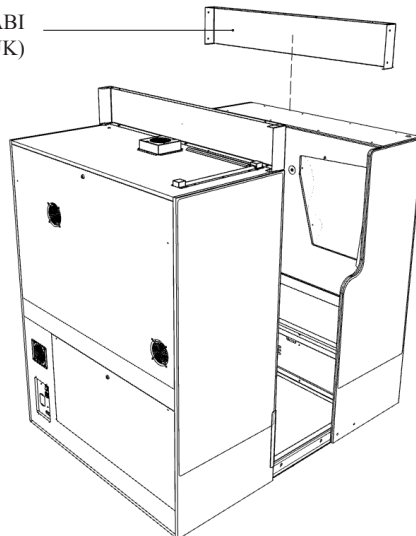
BKT ROOF MONITOR CABI  
(LMA-0081UK)



- (6) M4x25 SKT BH BLK (029-B00425-0B)
- (6) M4 WSHR 16OD FLT BLK (068-441616-0B)

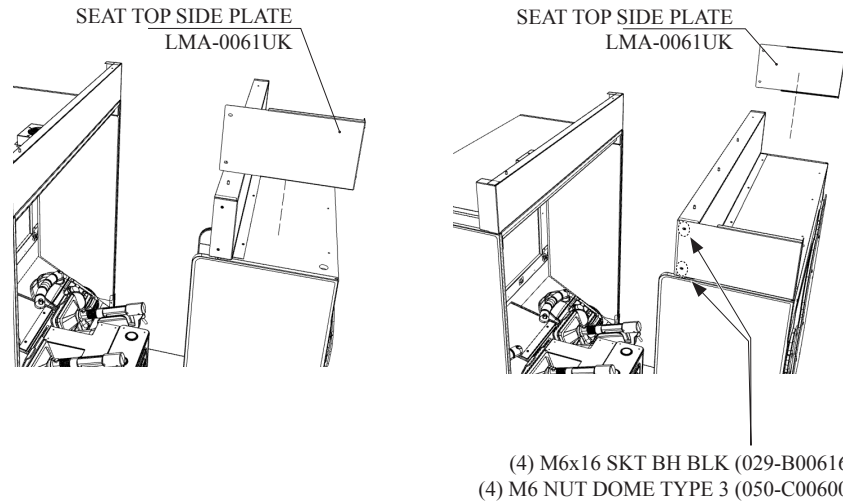
- 2** Using the aid of a step ladder or step, offer the BKT ROOF SEAT CABI (LMA-0082UK) and place it on the roof of the SEAT Cabi in position shown. Secure using (4) M4x25 SKT BH BLK (029-B00425-0B) and washers.

BKT ROOF SEAT CABI  
(LMA-0082UK)

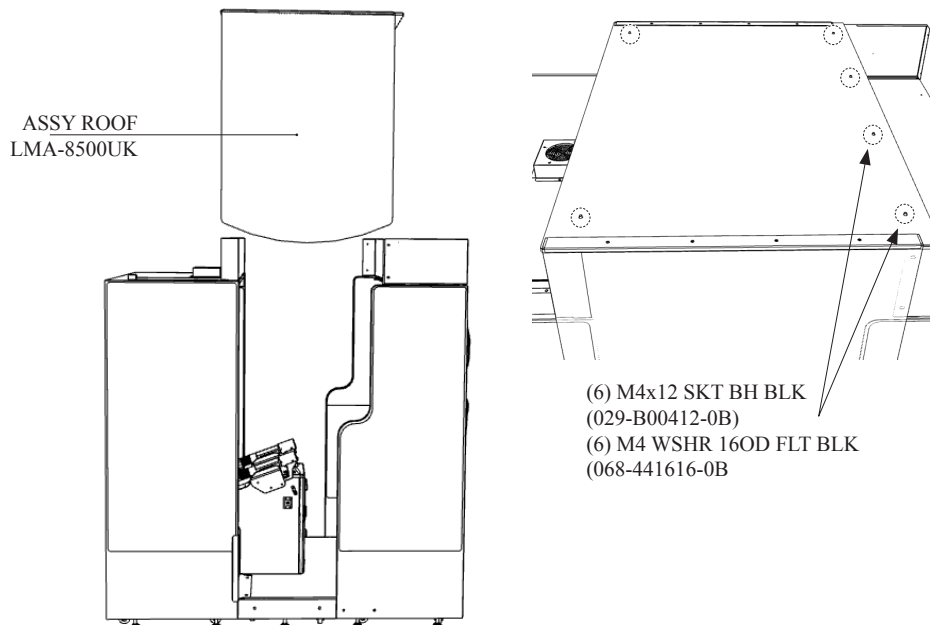


- (4) M4x25 SKT BH BLK (029-B00425-0B)
- (4) M4 WSHR 16OD FLT BLK (068-441616-0B)

- 3** Place the SEAT TOP SIDE PLATES (LMA-0061UK) x2 either side of the BKT ROOF SEAT and secure using (2) M6x16 SKT BH BLK (029-B00616-0B) and (2) M6 NUT DOME TYPE 3 BLK (050-C00600-3B) Repeat the process for both Left and Right Side Plates.



- 4** Place the ASSY ROOF on and over the ROOF BKTS and locate within the locating holes. Be sure to have the ASSY ROOF positioned in the correct orientation. Once in position, fix down using (6) M4x12 SKT BH BLK (029-B00412-0B) and (6) M4 WSHR 16OD FLT BLK (068-441616-0B)

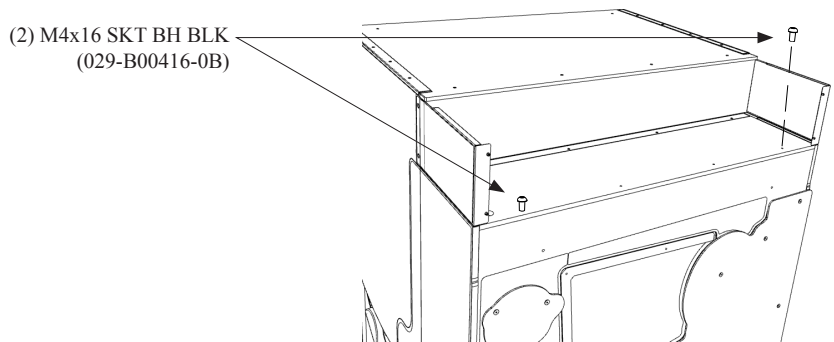


**6-6 FITTING THE ASSY DESIGN BOARD**

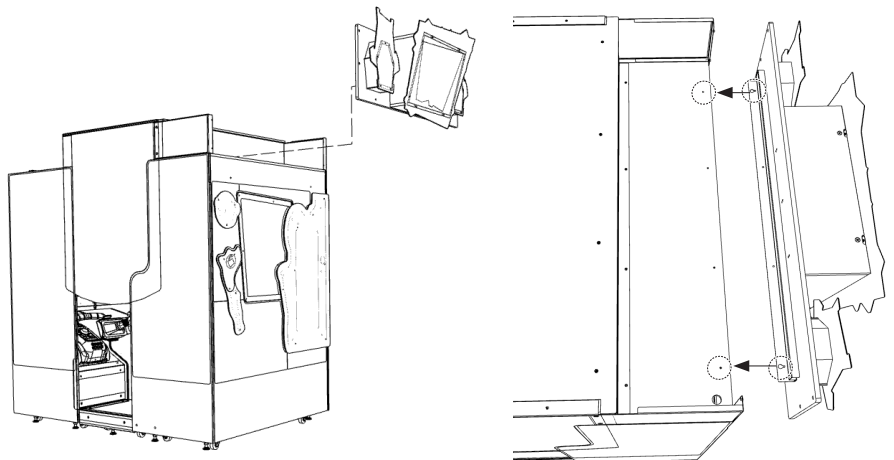
**⚠ CAUTION**

- Some parts contained within the Assy Rear Cabi for installation are heavy! Please use two people when unpacking the components.
- Installation of the Assy DESIGN BOARD and Assy ROOF are undertaken at a high level. Use a step or step ladder to aid installation.

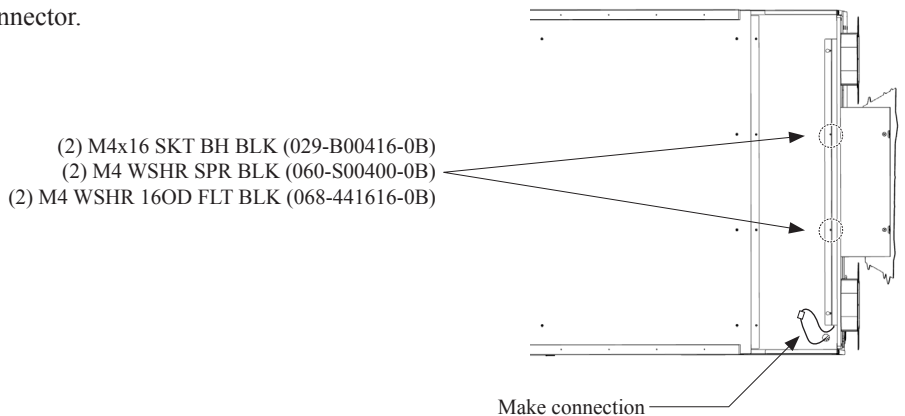
**1** Apply (2) M4x16 SKT BH BLK to the two outmost fixing positions on the top of the ASSY REAR CABI.



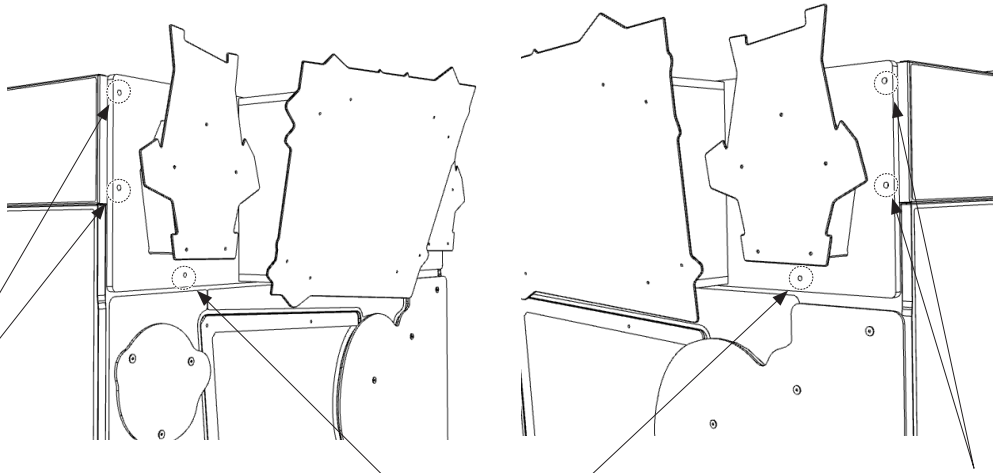
**2** Using 2 people, offer the ASSY DESIGN BOARD up into position and locate its retaining bracket onto the 2 fixings placed in Step 1.



**3** Once in place, fit the remaining (2) M4x16 SKT BH BLK (029-B00416-0B), (2) M4 WSHR SPR BLK (060-S00400-0B) and (2) M4 WSHR 16OD FLT BLK (068-441616-0B). Connect the ASSY DESIGN BOARD connector.



**4** Finally, secure the ASSY DESIGN BOARD in the (6) places shown using (4) M4x16 SKT BH BLK and associated washers and (2) M6x30 SKT BH BLK and associated washers.



- (2) M4x16 SKT BH BLK (029-B00416-0B)
- (2) M4 WSHR SPR BLK (060-S00400-0B)
- (2) M4 WSHR 16OD FLT BLK (068-441616-0B)

- (2) M4x16 SKT BH BLK (029-B00416-0B)
- (2) M4 WSHR SPR BLK (060-S00400-0B)
- (2) M4 WSHR 16OD FLT BLK (068-441616-0B)

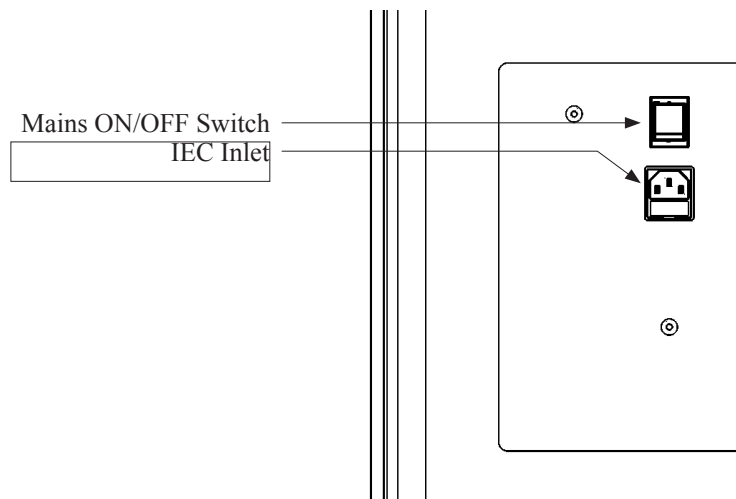
- (2) M6x30 SKT BH BLK (029-B00616-0B)
- (2) M6 WSHR SPR BLK (060-S00600-0B)
- (2) M6 WSHR 16OD FLT BLK (068-652016-0B)

## 6-7 POWER SUPPLY AND OTHER CONNECTIONS

### WARNING

- Use the power supply equipped with an earth leakage breaker. Use of power supply without such a breaker could result in fire if there is a current leakage.
- Have available a securely grounded indoor ground terminal. Without proper grounding, customers could be electrocuted and product operations might not always be stable.
- Do not expose the power cord or ground wire. If these are exposed, customers could stumble over them, for instance, and easily damage them. Additionally, if these lines are damaged, there could be a risk of electrical shock or short circuit. Set these lines at locations where they will not interfere with customer traffic, or attach covers to them.
- After laying out the power cord on the floor, be sure to always protect it. If the power cord is left exposed, it can easily be damaged, resulting in electrical shock.

**1** Confirm that the main switch is at OFF position.



Mains Switch shown in OFF position

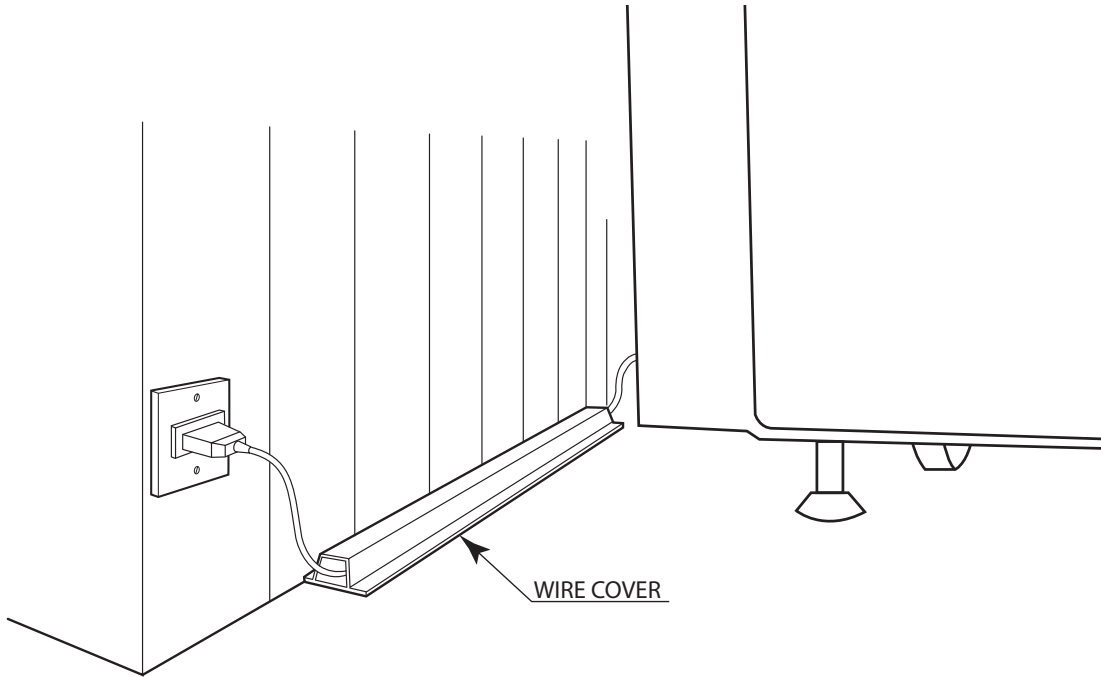


---

**2** Fully insert the power cord connector on the side opposite the power plug into the AC unit IEC inlet. Insert the power cord plug into the outlet.

---

**3** The power code is laid out indoors. Protect the power cord by attaching a wire cover to it.



## 6-8 TURNING ON THE POWER

Set the main switch of the AC unit to ON and engage the power.

When you turn on the power, the Design Board LED's will illuminate. The green LED mood lighting will illuminate. The "Coin In" lamp will light.

The screen will illuminate and display the "loading" screen.

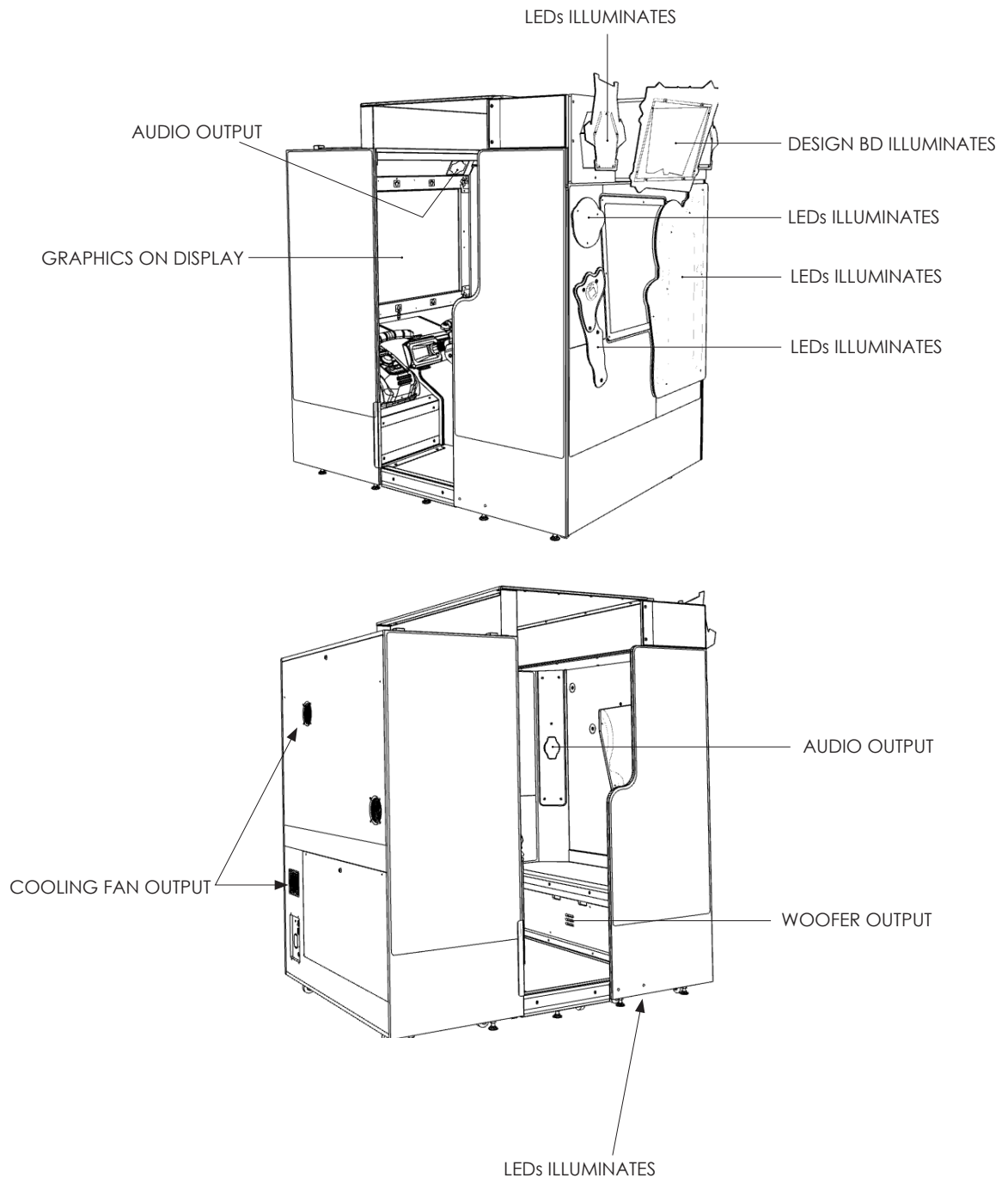
After the start up screen is displayed on the LCD screen, the Advertise (Attract) Mode will begin.

Start up sounds are output from the speakers on the front left and right of the cabinet together with the woofer and the rear left and right speakers.

When a credit is inserted, the Start Buttons will illuminate and the game ready to play.

Even when the power source has been cut off, credit count, ranking data, game settings and bookkeeping data are kept stored in the product. However, fractional coin counts (inserted coins that do not amount to one credit) and bonus adder counts are not kept.

### COMPONENTS WHICH CHANGE STATE WHEN POWER IS APPLIED



## 6-9 CONFIRMATION OF ASSEMBLY

Use the TEST MODE to check whether or not the product has been correctly assembled and whether or not everything operates normally.

### CAUTION

- Please refer to the TEST procedures in Section 9 of this manual.
- If for any reason certain sections of the machine fail to start or certain aspects of the machine do not appear normal. Remove power immediately and investigate.
- Always refer to this manual when fault finding.
- If problems persist please contact your distributor or local SEGA office.

- 1 Turn ON the power switch.
- 2 The Coin Lamp and the Billboard will illuminate.
- 3 The software will load and a logo will appear on screen,
- 4 The attract mode will begin showing the Luigi's Mansion appears on screen.
- 5 Audio can be heard from both left and right speakers, rear and woofer speakers.
- 6 Press the TEST button to enter the GAME TEST MENU screen. (See Chapter 9)
- 7 MONITOR TEST screen  
Select "MONITOR TEST" in SYSTEM TEST MODE to bring up the MONITOR TEST screen.  
The monitor is shipped from the factory pre-adjusted but you may use the MONITOR TEST screen to determine whether it need to be re-adjusted. If adjustment is needed, refer to the section of this manual under the section MONITOR LCD.
- 8 Exit MONITOR TEST and select INPUT TEST
- 9 INPUT TEST screen  
Select "INPUT TEST" in the GAME TEST MODE to bring up the INPUT TEST screen, allowing you to test the input devices to verify operation.
- 10 Press TEST and SERVICE together to exit and return to the GAME TEST MENU. Select OUTPUT TEST.
- 11 OUTPUT TEST screen  
Select "OUTPUT TEST" in the GAME TEST MENU to bring up the OUTPUT TEST screen, allowing you to test devices such as lamps and LED's

## 6-10 APPLYING WARNING LABELS (EPILEPTIFORM SEIZURES)

### ⚠ CAUTION

- The operator **MUST** apply the Epileptiform Seizure Label to this product. Failing to apply this label may result in the player/observer suffering from a photosensitive seizure. Warning the potential player/ observer of this before the start of a game may prevent such accidents.
- It is also important to apply the correct language label for each location. There are nine (9) different language labels - please apply the label which matches your location.

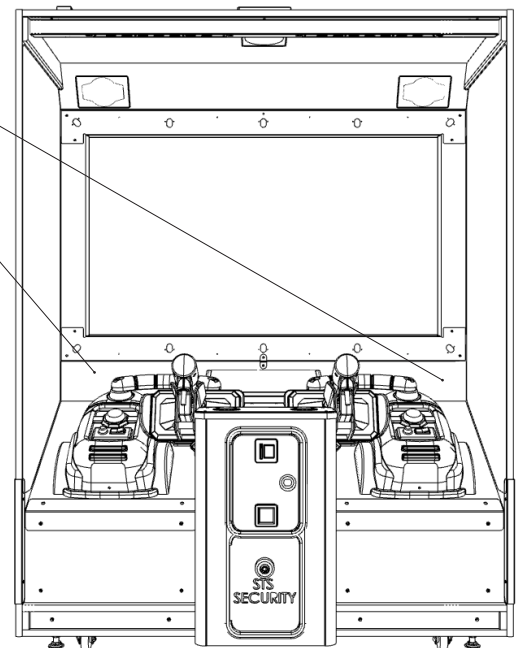
### STOP IMPORTANT

Application of any warning labels must be placed in a location which is easy for the player/observer to read. Please follow the instructions below and apply the label in the location stated.

The Epileptiform Seizure label is supplied in 12 different languages. Please choose the label which matches your language location.



Apply the label centrally to the outer mask (do not apply it to the screen). This location is unobstructed and can be easily read by players.



## **7** PRECAUTIONS WHEN MOVING THE MACHINE

### **WARNING**

- As used in these instructions, the term “moving” refers to moving of the product within the same building, store or facility. These instructions do not cover moving between different buildings, areas, stores or facilities, since diverse factors are involved, not only packaging but also loading onto transport vehicles, and securing the product in place during transport. To transport the product to a different building or store, contact the vendor where the product was purchased or the office indicated in these instructions. Or request that moving be done for you. This product is made up of parts that are of large size and heavy weight. Unless work is entrusted to someone with expertise in packaging and transport of such parts, a serious accident might occur.
- Even when the product is to be moved within the same building, store or facility, contact the point of purchase or the office indicated in these instructions if there will be level differences or narrow or low level entrances while moving. Or request that moving be done for you. Never disassemble the product in any way not covered in these instructions. Otherwise there could be a fire, electric shock and/or short circuit.
- Always disconnect the power cable before moving the product. If it is moved with the power cable connected, the cable could be damaged, causing fire or electric shock.
- A qualified electrician is required for moving product parts within a store and for changing indoor wiring. Do not have work performed by anyone who is not qualified. Otherwise there could be electric shock.
- Have work performed by site maintenance personnel or other qualified individuals. Do not allow people without proper knowledge and technical expertise to work on the product. Otherwise there could be an electric shock or other serious accident. Also, customers could be injured while operating the product.
- Do not try to move this product while it is still assembled. Always remove the Billboard and split the cabinets before moving.
- Because it is structurally difficult for exterior lighting to enter the cabinet, have auxiliary lighting available. Working within a dark environment can lead to accidents.
- For instructions on separation and disassembly of the cabinet, refer to Chapter 6 & 7 of this manual. Failure to follow the instructions given by this manual leaves a high risk of accidents such as electric shock occurring.
- Proceed with checks and tasks as indicated in these instructions. If instructions are not followed, or if tasks and/or checks are neglected, an electric shock or other very serious accident, even fatal accident, can occur. Also, customers could be injured while operating the product.
- Be careful not to damage wiring. Before separating parts that have wiring connections, disconnect the wiring connections, unravel wire bundles and undo fastenings. Only after that, remove fasteners (screws, nuts, etc.). If wiring becomes damaged, there could be an electric shock, short circuit or fire.

## ⚠ WARNING

- When inserting or removing a connector, always hold it by its main part. If you hold it by anything else while doing so, the connections between wire and connector terminal fixtures could be damaged; and there could be a short circuit or fire. There could also be poor connectivity.
- Do not move unit with the adjusters in contact with the floor. Otherwise parts might be damaged or deformed and there might be accidents.
- Whenever any fasteners (e.g. screws, nuts) have been lost, always use replacement fasteners with proper dimensions as specified in this manual. If fasteners of any other dimensions are used, it could cause damage and/or separation of parts that result in secondary accidents.
- Do not place the cabinet on inclines or uneven surfaces. This could result in the unit falling over.
- Check surroundings carefully while moving the unit. If you should get caught between the unit and a wall, for instance, there could be a serious accident.
- Have on hand a number of workers appropriate for each task that needs to be done. Make calculations by approximating that one worker can lift roughly 15 kg of weight. If an insufficient number of workers try to lift a heavy object, it could result in a worker stumbling and the object being dropped, crushing someone or something underneath. Workers could also injure their backs, etc.
- When lifting a heavy object, be sure to carefully consider the area where it will be lifted. If possible, lift the object by its handles or base. If weak fasteners or fragile parts are gripped, they could be damaged under the weight of the object, and this could result in a worker stumbling and the object being dropped, causing personal injury.
- Never disassemble the unit in ways other than those described in this manual. Doing so can cause accidents such as electric shocks, short circuits, and fires.
- Do not attempt to tilt the unit to fit it through narrow doorways. Moving the unit while it is tilted can result in an accident. It can also cause deformations and damage to parts, as well as deviations of fastening positions, which could result in accidents during operation.

## (STOP) IMPORTANT

- If moving through a door or places that may become narrow, i.e corridors or places which have low ceilings such as an elevator, it is recommended that you disassemble the machine to 5 individual components. The ASSY ROOF, the ASSY DESIGN BD, the ASSY FLOOR, the ASSY MONITOR CABI and the ASSY REAR CABI. To aid in disassembly, please follow section 6.2 to 6.6 of this manual in reverse order.

## CAUTION

- Do not push plastic parts or any part associated with the moving mechanism. Do not lift or support the product by any plastic part. Parts can be damaged, and fragments can cause injury.
- Do not push on or hold onto the LCD or controllers to move the unit. Doing so could break the parts and lead to people getting injured..
- Do not stack parts that have been separated or disassembled indiscriminately. The surface of the parts could be damaged or deformed. Significant deformations can result in improper operation and breakdowns.
- Do not lean separated or disassembled parts against a wall or other surface indiscriminately. The parts could be deformed. Accidents could also occur should the parts fall over.
- Do not hold onto the controllers to use as a lever or leverage. Doing so may cause damage resulting in injury to the player or impaired game play.

## IMPORTANT

- If the unit is moved over floor surfaces where there is carpet, decorative panel, etc., there might be friction or soiling.
- Movement by casters can damage the floor, depending on the floor material. Have a mat or thin plate available for moving casters. If rugs, for instance, have been laid out, remove them before moving.
- Be careful not to damage delicate parts as the Controller levers etc whilst moving the product. Always push/pull the product levering from the bolted on metal parts or by the lower sections such as the base.
- Do not apply rope directly to the product's surface. Use protective material at locations where rope is applied taking care not to damage components attached to the machine.

## IMPORTANT

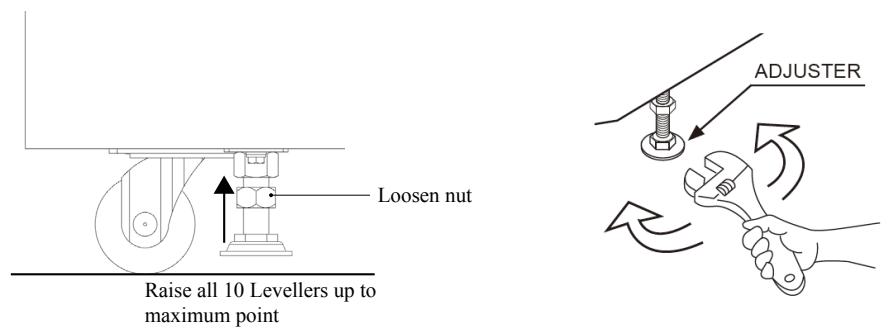
- The strength of this product's joints were not designed such that the product can be moved while assembled over long distance. Attempting to push on the cabinet, etc. to move the unit while assembled can result in damage, deformation, and misalignment of the joints. Abnormalities in the joints can result in improper operation or breakdown in internal mechanisms.

## STOP IMPORTANT

- The cabinet has some delicate areas which when under stress may damage. Do Not move the cabinet by holding onto the area highlighted in grey. Moving the cabinet by using these areas may cause damage or personal injury.



- 1 To relocate the cabinet within the same environment, raise all 10 levellers up to the maximum level. Once all levellers have been raised the cabinet may be moved over a small distance. Do Not attempt to move the cabinet over different levels or in and out of small areas or through doorways without disassembling into the 5 major components described earlier in this manual.



- 2 Once the cabinet has been relocated, follow the installation instructions within section 6 of this manual to safely complete a reinstallation.



## 8 GAME DESCRIPTION

### 8-1 HOW TO START THE GAME

- Insert a coin during the advertisement screens to be taken to the title screen.
- If there haven't been enough credits inserted to start the game, "Please Insert Coins" will be displayed on the bottom of the screen (left and right). Upon inserting enough credits to start the game, the display will change to "Please Press Start."
- Press the start button to start the game. The 1P and 2P sides each have their own start button. The game will start in accordance to the start button pressed.
- Coins can be inserted and a game started (joined in progress) during game play.

NOTE: If the CLOSE SETTING in GAME TEST MENU is set to ON, the machine will not accept coins 15 minutes before the shop closes.

### 8-2 STAGES & LECTURES

- The game will transition from the Gloomy Manor to the Old Clockworks, to the Treacherous Mansion.

- At game start the player can begin the game from the Gloomy Manor or the Old Clockworks. If the game begins from the Old Clockworks it will not be possible to play the Gloomy Manor.



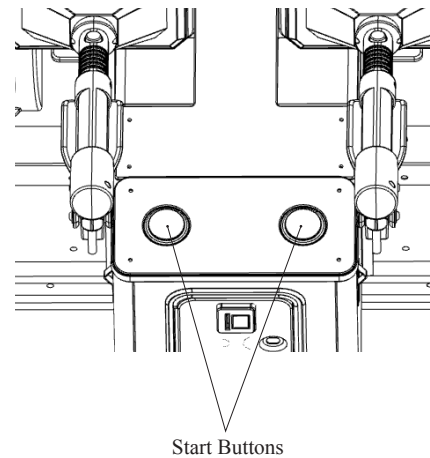
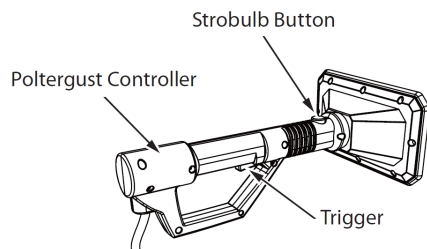
- After selecting a stage the player can choose to listen to E. Gadd's lecture. The lecture is a tutorial stage where the players can learn the basic game operations.



## 8-3 CONTROLS

### Names of Each Part

The names of the parts that will be used for control functions during game play..



### Strobulb

Press and release the Strobulb Button on the Poltergust controller to shine the Strobulb. Hold down the Strobulb button to increase its range. If you use the Strobulb at its greatest range on a ghost, the ghost will be stopped in its tracks for longer than usual.

There is an interval between Strobulb uses (the recharge interval will be displayed on the aiming reticle).



### Vacuumping

Press the trigger to pull pests and objects such as coins out of stunned ghosts (illuminated by the Strobulb).

### Dark Light

There are parts within the game where you will need to use the Dark-Light.

Hold down the Strobulb Button to use the Dark-Light.

### Simple Controls

These control settings are recommended for beginners and young children. After lining up the reticle on enemies and simply holding down either the Strobulb Button or the vacuum trigger, the process of using the Strobulb and sucking up enemies becomes automatic.



## 8-4 DEFEATING THE ENEMIES

There are two basic types of enemies - ghosts and pests.

### Ghosts

You can suck up ghosts while they're stunned with the Strobulb. Each ghost's vitality is displayed by a number. As you vacuum it, its vitality will decrease, and when it reaches zero it will be sucked up.

While being sucked up the ghost will try to escape to the left or right. Follow the on-screen directions with the Poltergust to make it difficult for the ghost to escape.

Pulling the ghost will fill up the Pull Meter. Once it's completely charged, press the Strobulb Button to dish out a great deal of damage.

The ghosts' vitality will be displayed upon receiving the player's attack. Ghosts who don't have a displayed vitality cannot be affected by the Strobulb.

Certain ghosts use objects such as shields, buckets, and mirrors to hide their faces, making them invulnerable to the Strobulb. Hit them with the Strobulb once their faces become visible to stun them.



### Pests

Enemies that aren't ghosts are called pests. Pests can be targeted. They can be defeated by the Strobulb, or by vacuuming.



### Attacking Enemies

There are ghosts that will throw objects, such as books or shoes. If these thrown objects strike the player they will do damage. The thrown objects can be targeted and avoided by sucking them up or using the Strobulb.



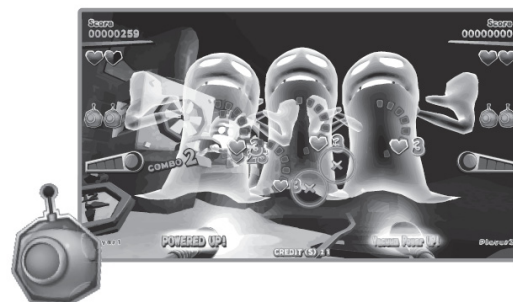
## 8-5 LIMITS WHEN SUCKING UP GHOSTS

It is possible to suck up other ghosts while sucking in one, but it will not be possible to suck up pests, enemy attacks, or objects (such as coins). Understanding this feature will be the key to improving one's technique.

## 8-6 Strobombs (Bombs)

The player receives a fixed number of Strobombs at the start of the game.

Press the start button to use a Strobomb. A Strobomb fills the entire screen with the effects of the Strobomb. Use it well to bring in a large haul of ghosts.



## 8-7 Continue

Upon continuing the player will recover their hearts and also receive a Continue Boost.

### Heart Recovery

When two players are playing, the partner player will recover one heart.

### Continue Boost

The range and suction power of the Poltergust will be increased for the area (room) in which the player continued.

### Ranking

The players ranking will be displayed on the results screen. The ranking is according to the scores recorded on the individual cabinet. The ranking data can be reset under GAME TEST MENU.

NOTE: This game does not support Internet ranking.

## 9 EXPLANATION OF TEST AND DATA DISPLAY

Perform tests and data checks periodically by manipulating the TEST Button and SERVICE Button in the cabinet. Follow the instructions in this chapter to conduct checks when the game machine is first installed, when money is being collected, or when the game machine does not operate properly.

Shown overleaf are the tests and screens to be used for different problems.

### **STOP** IMPORTANT

- The details of changes to test mode settings are saved when you exit from TEST MODE by selecting EXIT from the system test mode menu. Be careful because if the power is turned off before that point, changes to the settings will be lost.
- Use with the specified settings. If settings other than those specified are used, inappropriate operations or malfunction may occur.

In the SYSTEM TEST MODE, the main activities include checking Nu 1.1 information and actions and the setting of coin/credit.

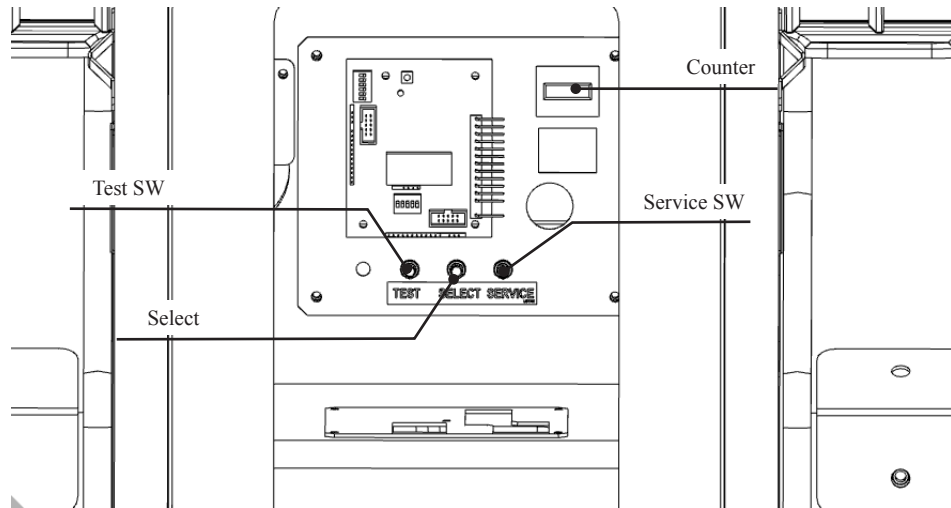
For details, see the GAME BD section of this manual.

### **STOP** IMPORTANT

- Adjust the sound to the optimum volume, taking into consideration the environmental requirements of the installation location.

## 9-1 SWITCH UNIT AND COIN METER.

The SWITCH UNIT and COUNTERS are housed within the COIN TOWER. To access these controls you will need to open the COIN door, the switches and counters can be found directly on the rear panel.



DEVICE	FUNCTION
TEST SW	Press to enter TEST MODE - Also used to enter choices selected within TEST MODE
SERVICE SW	Press for SERVICE CREDIT
SELECT SW	Moves selection within the Test Menu
COIN COUNTER	Counts inserted coins (£0.10 or \$0.10 = 1 count)

## 9-2 TEST MENU

### **STOP** IMPORTANT

The details of changes to Test Mode settings are saved when you exit from each Test Mode by selecting EXIT. Be careful because if the power is turned off before that point, changes to the settings will be lost.

GAME TEST MODE can be used to check the information or the operation of Nu 1.1 Game Board, adjust and perform coin/credit settings. etc

- 1 Press the “TEST switch” on the maintenance panel during a demo to enter test mode.

## 9-3 GAME TEST MENU

Press the “TEST switch” to display the game test menu.

Use the “SELECT switch” to move the arrow cursor, and the “TEST switch” to execute the highlighted menu item.

To exit test mode, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”

```

          GAME TEST MENU          Ver. 0.00.00
→BOOKKEEPING
ALL.Net ACCOUNTING STATUS
INPUT TEST
COIN TEST
CONTROLLER TEST
MONITOR TEST
SPEAKER TEST
LAMP TEST
NETWORK TEST
APPLICATION DOWNLOAD STATUS
COIN SETTING
GAME SETTING
NETWORK SETTING
SOUND SETTING
CLOSE SETTING
BACKUP DATA CLEAR

EXIT

SELECT:SELECT SW.  ENTER:TEST SW.
  
```

GAME TEST MENU

OPTION	CONTENTS
BOOKKEEPING	Displays the play log info (coin input/number of plays/play time, etc.).
*ALL.Net ACCOUNTING STATUS	Displays the connection information for ALL.Net and the accounting information.
INPUT TEST	Perform an operation test for the switch and Poltergust controller.
COIN TEST	Perform an operation test for the coin selector.
CONTROLLER TEST	Perform an operation test for the Poltergust controller.
MONITOR TEST	Perform a display test for the monitor.
SPEAKER TEST	Perform an operation test for the speaker.
LAMP TEST	Perform an operation test for the lamp.
*NETWORK TEST	View information about the network.
*APPLICATION / DOWNLOAD STATUS	Display the application download information.
COIN SETTING	Perform coin and credit settings.
GAME SETTING	Set the game's difficulty.
*NETWORK SETTING	Perform network settings.
SOUND SETTING	Set the sound volume.
CLOSE SETTING	Perform settings for store closing time announcements.
BACKUP DATA CLEAR	Erase all data and return the settings to the factory default settings.
EXIT	End the test mode

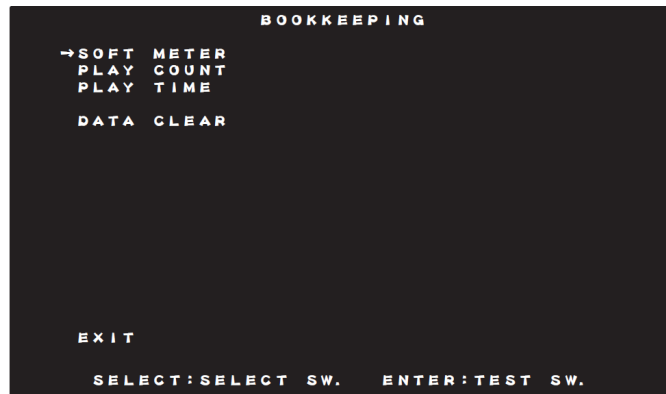
NOTE: Sections marked with an asterisk above are only applicable in the Japanese version.

## 9-4 BOOKKEEPING

This screen displays information such as play times and income data.

Select “SOFT METER,” “PLAY COUNT,” or “PLAY TIME.”

To exit Bookkeeping, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”



BOOKKEEPING SCREEN

SOFT METER	Displays the number of coins inserted, number of credits, and the number of service credits.
PLAY COUNT	Displays the number of games, number of times the game has been started, number of times
the game has been joined, and number of continues.	
PLAY TIME	Displays how long the machine has been powered on, as play time for each category.
DATA CLEAR	Clears all BOOKKEEPING data (SOFT METER, PLAY COUNT, and PLAY TIME).
EXIT	Return to the GAME TEST MENU.



## 9-5 SOFT METER

Displays number of coins inserted, number of credits, and number of service credits.

To exit Soft Meter, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”

```

SOFT METER

COINS                                0
COIN CREDITS                         0
SERVICE CREDITS                     0
TOTAL CREDITS                        0

→EXIT

ENTER: TEST SW.

```

SOFT METER SCREEN

COINS	Displays the number of coins inserted.
COIN CREDITS	Displays the number of credits based on the number of coins inserted.
SERVICE CREDITS	Displayed the number of credits based on the status of the SERVICE switch.
TOTAL CREDITS	Displays the number of credits calculated based on the number of coin credits and the number of service credits.
EXIT	Return to BOOKKEEPING.

Each value is calculated from when the cabinet is installed, or when “BACKUP DATA CLEAR” under “GAME TEST MENU” or “DATA CLEAR” under “BOOKKEEPING” has been executed.

## 9-6 PLAY COUNT

Displays the number of games, game starts, game joins, and continues.

To exit Play Count, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”

```
PLAY COUNT
NUMBER OF GAMES          0
NUMBER OF GAME START    0
NUMBER OF GAME JOIN     0
NUMBER OF CONTINUE      0

→EXIT
ENTER: TEST SW.
```

PLAY COUNT SCREEN

NUMBER OF GAMES	Displays the number of times player 1 and player 2 have played the game.
NUMBER OF GAME START	Displays the number of times player 1 and player 2 have started a game.
NUMBER OF GAME JOIN	Displays the number of times player 1 and player 2 have joined a game.
NUMBER OF CONTINUE	Displays the number of times player 1 and player 2 have continued a game.
EXIT	Return to BOOKKEEPING.

Each value is calculated from when the cabinet is installed, or when “BACKUP DATA CLEAR” under “GAME TEST MENU” or “DATA CLEAR” under “BOOKKEEPING” has been executed.

## 9-7 PRIME TIME

Displays the power-on time as well as the duration of each play.

To exit Play Time, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”

```

PLAY TIME

TOTAL TIME          0D  0H  0M  0S
PLAY TIME          0D  0H  0M  0S

START/JOIN
AVERAGE PLAY TIME          0M  0S
LONGEST PLAY TIME          0M  0S
SHORTEST PLAY TIME        0M  0S

CONTINUE
AVERAGE PLAY TIME          0M  0S
LONGEST PLAY TIME          0M  0S
SHORTEST PLAY TIME        0M  0S

→EXIT

ENTER: TEST SW.
    
```

PRIME TIME SCREEN

TOTAL TIME	Displays the length of time the machine has been turned on in the format of D (days) H (hours) M (minutes) S (seconds).
PLAY TIME	Displays the total game play time in the format of D (days) H (hours) M (minutes) S (seconds).
START/JOIN	Displays the play time information for Start Play and Join Play sessions.
AVERAGE PLAY TIME	Displays the average play time in the format of M (minutes) S (seconds).
LONGEST PLAY TIME	Displays the longest play time in the format of M (minutes) S (seconds).
SHORTEST PLAYTIME	Displays the shortest play time in the format of M (minutes) S (seconds).
CONTINUE	Displays the play time information for Continue sessions of gameplay.
AVERAGE PLAY TIME	Displays the average play time in the format of M (minutes) S (seconds).
LONGEST PLAY TIME	Displays the longest play time in the format of M (minutes) S (seconds).
SHORTEST PLAYTIME	Displays the shortest play time in the format of M (minutes) S (seconds).
EXIT	Return to BOOKKEEPING.

Each value is calculated from when the cabinet is installed, or when “BACKUP DATA CLEAR” under “GAME TEST MENU” or “DATA CLEAR” under “BOOKKEEPING” has been executed.

## 9-8 ALL.Net Accounting Status

Please note that ALL.Net is a service dedicated to the Japanese market and not available in Europe or the Middle East.

This menu allows you to check your ALL.Net connection status and accounting information.

To exit ALL.Net Accounting Status, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”

```

ALL.Net ACCOUNTING STATUS
→ALL.Net SYSTEM CAUTION ON
EXIT

ACCOUNTING MODE          B2
ACCOUNTING STATUS        GOOD

PLAY COUNT
****/**
****/**
****/**

REPORT INFORMATION
REPORT1: ****/**/** **.*.
REPORT2: ****/**/** **.*.

SELECT: SELECT SW.  ENTER: TEST SW.
  
```

ALL.NET STATUS SCREEN

ALL.Net SYSTEM CAUTION	Set the near-full warning to ON or OFF.
EXIT	Return to GAME TEST MENU.
ACCOUNTING MODE	Display the accounting mode. Accounting mode is B2.
ACCOUNTING STATUS	Good: Accounting data is being recorded.
	Bad: Accounting data is not being recorded (check the status of the LAN cable).
PLAY COUNT	Displays the monthly play count (from the top: this month, previous month, and 2 months prior).
REPORT INFORMATION	Displays the closing procedure information.
REPORT1:	Displays the date of the first successful closing procedure.
REPORT2:	Displays the date of the last successful closing procedure

## 9-9 INPUT TEST

Performs button tests for the player 1/2 Poltergust controller, the controller sensor, start button, and maintenance panel switch. The status for the inputs for each part will be displayed on the screen. To exit Input Test, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”

```

INPUT TEST

PLAYER          1P    2P
START BUTTON    OFF  OFF
CONTROLLER BUTTON  OFF  OFF
CONTROLLER LEVER  OFF  OFF
SIGHT-X         0    0
SIGHT-Y         0    0
SCREEN          OUT  OUT

MONITOR STATUS
TEST SW.        OFF
SELECT SW.      OFF
SERVICE SW.    OFF

EXIT:TEST SW. & SELECT SW.
    
```

INPUT TEST SCREEN

PLAYER	Displays the operational status of the Poltergust controllers, controller sensors, and the start buttons for players 1 and 2.
START BUTTON	Displays the operational status of the start button. ON displays when it is pressed.
CONTROLLER BUTTON	Displays the operational status of the Strobuls button. ON displays when it is pressed.
CONTROLLER LEVER	Displays the operational status of the lever. ON displays when it is pressed.
SIGHT-X	Displays the X coordinates of the controller sensor.
SIGHT-Y	Displays the Y coordinates of the operational sensor.
SCREEN	If the controller sensor is within detection range IN will be displayed. If the controller sensor is outside of side range OUT will be displayed. When IN is displayed, the coordinates, indicated by +, display in green for 1P and blue for 2P.

MONITOR STATUS	Displays the operational status for the switches on the maintenance panel.
TEST SW.	Displays the operational status of the TEST switch.
SELECT SW.	Displays the operational status of the SELECT switch.
SERVICE SW.	Displays the operational status of the SERVICE switch.

## 9-10 COIN TEST

Performs an operation test for the coin sensor and the coin blocker.

To exit Coin Test, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”



COIN TEST SCREEN

COIN BLOCKER		Set the coin blocker to ON or OFF. When set to ON the machine will not accept coins.
	SENSOR	Displays the operational status of the coin sensor. Will display ON when a coin is inserted.
	COUNT	Displays the number of operations of the coin sensor. One count will be recorded for each time the coin sensor toggles between ON and OFF. This value will return to 0 once the COIN TEST is concluded.
EXIT		Return to the GAME TEST MENU.

## 9-11 CONTROLLER TEST

Performs a controller test for the player 1/2 Poltergust.

To exit Input Test, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”

```

CONTROLLER TEST

CONTROLLER 1P
→MOTOR          OFF
STATUS          GOOD
SOLENOID        OFF
STATUS          GOOD

CONTROLLER 2P
MOTOR           OFF
STATUS          GOOD
SOLENOID        OFF
STATUS          GOOD

STATUS CLEAR

EXIT

SELECT:SELECT SW.  ENTER:TEST SW.
    
```

CONTROLLER TEST SCREEN

CONTROLLER 1P		Perform an operations test for the player 1 Poltergust controller.
	MOTOR	Turn the vibration motor ON or OFF. When set to ON the vibration motor will activate.
	STATUS	Displays the vibration motor status. GOOD: normal, MOVE ERROR: vibration error, LOCK: lock error.
	SOLENOID	Toggle the solenoid ON or OFF. When set to ON the solenoid will activate.
	STATUS	Displays the solenoid status. GOOD: normal, MOVE ERROR: vibration error, OVERCURRENT: overcurrent error.
CONTROLLER 2P		Perform an operations test for the player 2 Poltergust controller.
	MOTOR	Turn the vibration motor ON or OFF. When set to ON the vibration motor will activate.
	STATUS	Displays the vibration motor status. GOOD: normal, MOVE ERROR: vibration error, LOCK: lock error.
	SOLENOID	Toggle the solenoid ON or OFF. When set to ON the solenoid will activate.
	STATUS	Displays the solenoid status. GOOD: normal, MOVE ERROR: vibration error, OVERCURRENT: overcurrent error.
STATUS CLEAR		Clear the error displays for each status item.
EXIT		Return to the GAME TEST MENU.

NOTE: Even if an abnormality is detected in the CONTROLLER STATUS, executing the STATUS CLEAR will cause GOOD to be displayed. Then the abnormality can be searched for by testing the operation (set to ON) for each controller part.

If there is a problem in the CONTROLLER STATUS, please refer to “10-4 List of Poltergust Controller Issues” to solve the problem.

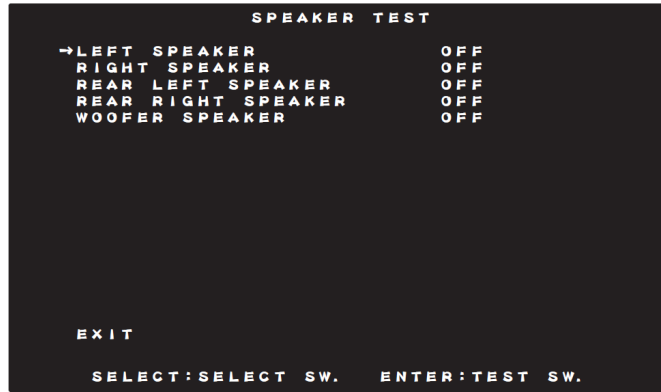




## 9-13 SPEAKER TEST

Performs a speaker operation test.

To exit Speaker Test, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”



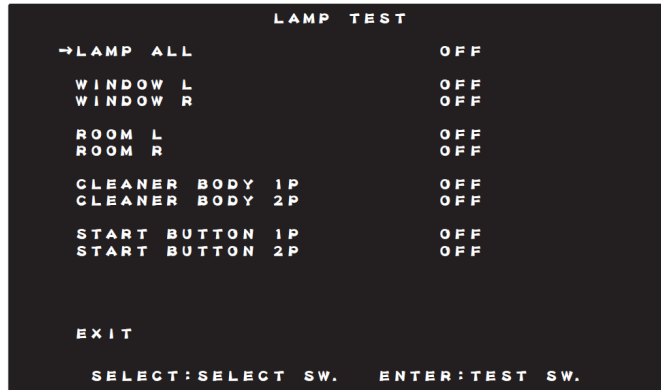
SPEAKER TEST SCREEN

LEFT SPEAKER	Toggle the left speaker ON or OFF. When set to ON a confirmation chime will sound.
RIGHT SPEAKER	Toggle the right speaker ON or OFF. When set to ON a confirmation chime will sound.
REAR LEFT SPEAKER	Toggle the left rear speaker ON or OFF. When set to ON a confirmation chime will sound.
REAR RIGHT SPEAKER	Toggle the right rear speaker ON or OFF. When set to ON a confirmation chime will sound.
WOOFER SPEAKER	Toggle the woofer ON or OFF. When set to ON a confirmation chime will sound.
EXIT	Return to the GAME TEST MENU.

## 9-14 LAMP TEST

Performs a lamp operation test.

To exit Lamp Test, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”



LAMP TEST SCREEN

LAMP ALL	Toggle all lamps ON or OFF. When set to ON the WINDOW L/R, ROOM L/R, and CLEANER BODY 1P/2P will be white, and START BUTTON 1P/2P will illuminate regularly.
WINDOW L	Toggle the left window LED on the outside of the cabinet ON or OFF. When ON, colours will cycle from red, to green, to blue.
WINDOW R	Toggle the right window LED on the outside of the cabinet ON or OFF. When ON, colours will cycle from red, to green, to blue.
ROOM L	Toggle the left ceiling LED on the inside of the cabinet ON or OFF. When ON, colours will cycle from red, to green, to blue.
ROOM R	Toggle the right ceiling LED on the inside of the cabinet ON or OFF. When ON, colours will cycle from red, to green, to blue.
CLEANER BODY 1P	Toggle the 1P Poltergust LED ON or OFF. When ON, colours will cycle from red, to green, to blue.
CLEANER BODY 2P	Toggle the 2P Poltergust LED ON or OFF. When ON, colours will cycle from red, to green, to blue.
START BUTTON 1P	Toggle the 1P start button ON or OFF. It will light up when set to ON.
START BUTTON 2P	Toggle the 2P start button ON or OFF. It will light up when set to ON.
EXIT	Return to the GAME TEST MENU.

## 9-15 NETWORK TEST

Displays network information.

To exit Network Test, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”

```

NETWORK TEST

IP ADDRESS      N/A
GATEWAY         N/A
DNS (LAN)       N/A
HOPS            N/A
LINE TYPE       N/A
DNS (WAN)       N/A
ALL.Net AUTHENTICATION
                N/A

→EXIT

SELECT: SELECT SW.  ENTER: TEST SW.
    
```

NETWORK TEST SCREEN

IP ADDRESS	Obtain an IP address. GOOD: An IP address has been obtained; BAD: An IP address has not been obtained; N/A: Skip.
GATEWAY	Display the default gateway status. GOOD: The value is correct; BAD: The value is incorrect; N/A: Skip.
DNS(LAN)	Display the status of the LAN IP name resolution required for connection to ALL.Net. GOOD: Resolved; BAD: Could not be resolved; N/A: Skip.
HOPS	Display the hop count for connection to ALL.Net. GOOD: Normal hop count; BAD: Hop count failed; N/A: Skip.
LINE TYPE	Displays the connection status for different line types. GOOD: Resolved; BAD: Could not be resolved; N/A: Skip.
DNS(WAN)	Display the status of the WAN IP name resolution required for connection to ALL.Net. GOOD: Resolved; BAD: Could not be resolved; N/A: Skip.
ALL.Net AUTHENTICATION	Display the status of ALL.Net authentication. GOOD: Authentication successful; BAD; Authentication failed; N/A: Skip.
EXIT	Return to the GAME TEST MENU.

NOTE: Information regarding network settings are only applicable in the Japanese version.

## 9-16 APPLICATION DOWNLOAD STATUS

Displays information regarding the application download.

To exit Application Download Status, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”



APPLICATION DOWNLOAD STATUS SCREEN

CURRENT VERSION	Display the current operating version.
NOW DOWNLOAD VERSION	Display the version being downloaded.
DOWNLOAD PERCENTAGE	Display the download progress.
ORDER TIME	Display the date that the download began.
RELEASE TIME	Display the release date of the downloaded application.
DOWNLOAD STATUS	Display the status of the application download. NOTSTART: Download has not started; DOWNLOAD: Currently downloading; COMPLETE: Download complete, awaiting release date; UPDATEREADY: Release date reached, awaiting reboot; UPTODATE: Game application is up-to date; UNKNOWN: No downloadable applications available; ERROR: An error has occurred.
EXIT	Return to the GAME TEST MENU.

NOTE: Information regarding network settings are only applicable in the Japanese version.

## 9-17 COIN SETTINGS

Adjust the coin settings.

To exit Coin Setting, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”



COIN SETTING SCREEN

RATE			
	COIN	Set the number for the rate of coins to credits (from 1 to 9).	Default = 1
	CREDIT	Set the number for the rate of credits to coins (from 1 to 9).	Default = 1
GAME COST			
	START	Set the number of credits needed for a Game Start (from 1 to 9).	Default = 1
	JOIN	Set the number of credits needed for a Game Join (from 1 to 9).	Default = 1
	CONTINUE	Set the number of credits needed for a Continue (from 1 to 9).	Default = 1
	FREE PLAY	Toggle Free Play OFF or ON.	Default = OFF
	EXIT	Return to the GAME TEST MENU.	

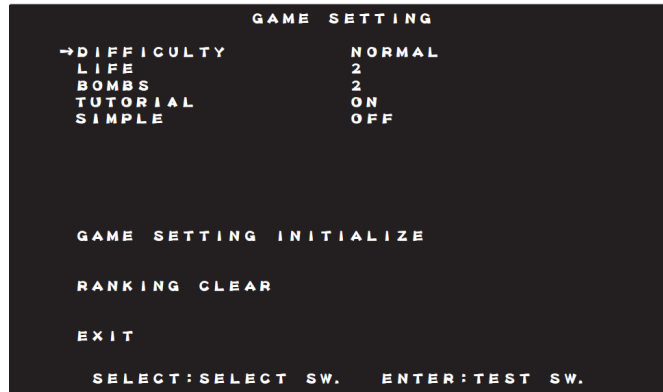
JOIN refers to the settings for any additional players after the first.

Example) START: 2 / JOIN: 2 - 4 credits are required for two players to play. START: 2 / JOIN: 1 - 3 credits are required for two players to play.

## 9-18 GAME SETTING

Adjust the game difficulty.

To exit Game Setting, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”



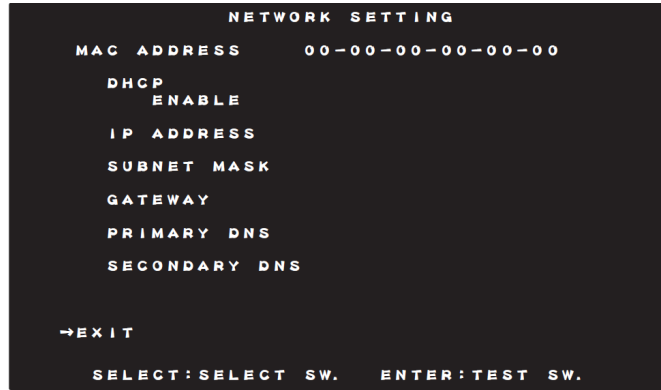
GAME SETTING SCREEN

DIFFICULTY	Set the game's difficulty to EASY, NORMAL, or HARD. (Default = 1)
LIFE	Set the number of hearts of life the player has to 2, 3, or 4. (Default = 2)
BOMBS	Set the number of Strobombs that the player starts with to 1, 2, or 3. (Default = 2)
TUTORIAL	Enable or disable the Tutorial Mode. (Default = ON)
SIMPLE	Enable or disable Simple Controls. (Default = OFF)
GAME SETTING INITIALIZE	Restore all GAME SETTING options to their default settings.
RANKING CLEAR	Clear all score ranking data.
EXIT	Return to the GAME TEST MENU.

## 9-19 NETWORK SETTING

Perform network settings.

To exit Network Setting, use the “SELECT switch” to move the cursor to “EXIT,” and press the “TEST switch.”



NETWORK SETTING SCREEN

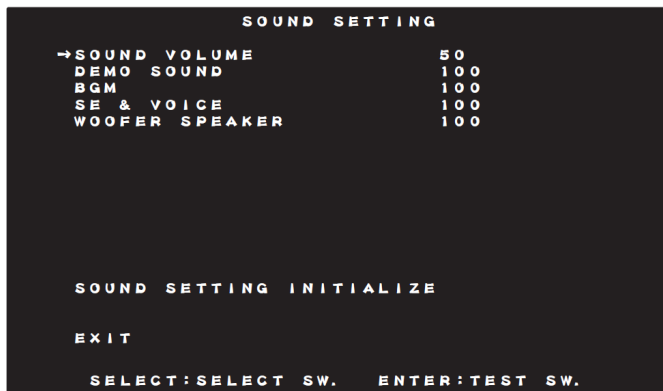
MAC ADDRESS	Display the MAC address.
DHCP	Toggle to ENABLE or DISABLE the DHCP.
IP ADDRESS	Only available when DHCP is disabled.
SUBNET MASK	Only available when DHCP is disabled.
GATEWAY	Only available when DHCP is disabled.
PRIMARY DNS	Only available when DHCP is disabled.
SECONDARY DNS	Only available when DHCP is disabled and PRIMARY DNS settings have been completed.
EXIT	Return to the GAME TEST MENU.

NOTE: Information regarding network settings are only applicable in the Japanese version.

## 9-20 SOUND SETTING

Adjust the overall volume and sound balance settings.

To exit Sound Setting, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”



SOUND SETTING SCREEN

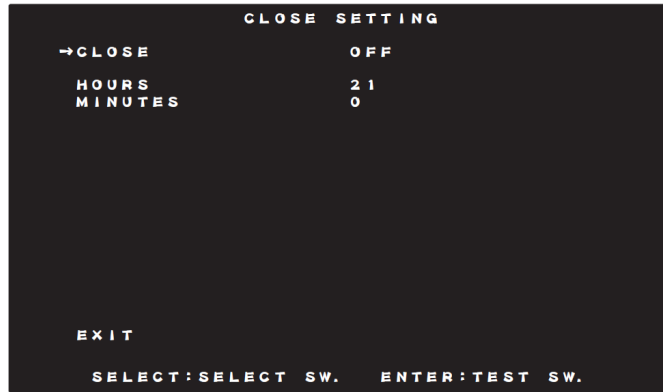
SOUND VOLUME	Set the overall sound volume from 0 (no sound) to 100 (full sound) in increments of 5.
DEMO SOUND	Set the volume of tutorial demo sounds from 0% to 100% in increments of 5.
BGM	Set the volume of in-game background music 0% to 100% in increments of 5.
SE & VOICE	Set the volume of in-game sound effects and dialogue from 0% to 100% in increments of 5.
WOOFER SPEAKER	Set the woofer volume (bass) from 0% to 100% in increments of 5.
SOUND SETTING INITIALIZE	Restore all SOUND SETTING options to their default settings.
EXIT	Return to the GAME TEST MENU.



## 9-21 CLOSE SETTING

Adjust setting for when the shop is going to close.

To exit Close Setting, use the “SELECT switch” to move the arrow cursor to “EXIT,” and press the “TEST switch.”



CLOSE SETTING SCREEN

CLOSE	Toggle the store closing announcement OFF or ON. When turned ON, a notification appears on the LCD monitor 45 minutes prior to the preset closing time. The machine will also stop accepting coins 15 minutes prior to closing time. (DEFAULT: OFF)
HOURS	Set the hour for closing time in a 24-hour format (21/22/23/0/1/2/3/4/5/6/18/19/20). (DEFAULT: 21)
MINUTES	Set the minute for closing time (00/10/20/30/40/50). (DEFAULT: 00)
EXIT	Return to the GAME TEST MENU.

## 10 CONTROLLER(S), SWITCHES AND BUTTONS

### WARNING

- When working with the product, be sure to turn the power off. Working with the power on may cause an electric shock or short circuit.
- Be careful not to damage the wires. Damaged wires may cause an electric shock, short circuit or present a risk of fire.
- Exercise due caution in performing soldering work. If soldering iron is handled carelessly, there could be fires or burns.

### CAUTION

- When fastening plastic parts, be careful not to tighten screws or nuts excessively. If these are tightened to excess, parts could be damaged, resulting in injuries from fragments, etc.
- After the unit has been disassembled and reassembled again, check carefully that the unit has been reassembled correctly.
- Be sure to inspect the outer covers on both gear and hand brake units.
- Assemble so that there is no gap between the L and R covers. If there is a gap or rattling, the players could get fingers or hands caught, resulting in injury.

### IMPORTANT

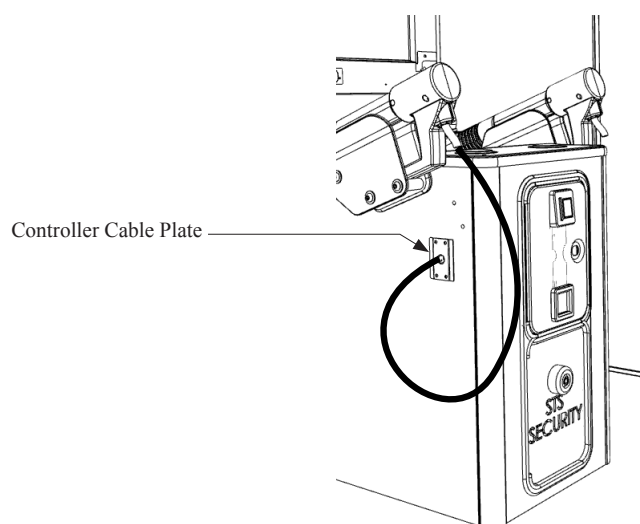
- There is a possibility that the electronic components on the IC Board may be prone to damage by static electricity. Please make sure to discharge any build up of static electricity from your body prior commencing any work.
- Power OFF machine before commencing any work.

## STOP IMPORTANT

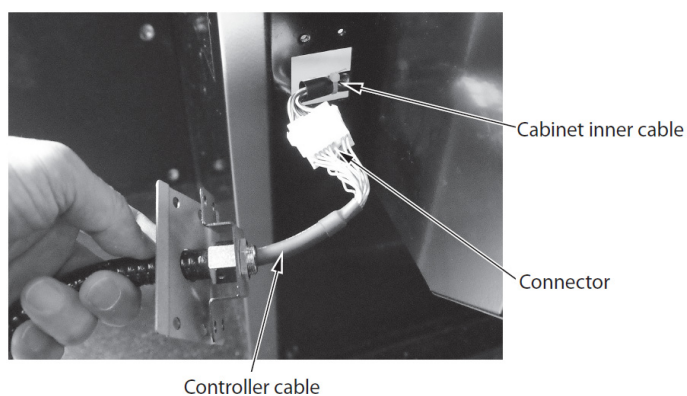
Some fixings are small. Be careful not to lose any fixings. In particular the small flat washer within the lever grip.

### 10-1 REMOVING THE CONTROLLER

- 1 Turn OFF the power to the machine and remove the Power cable.
- 2 Using a 3mm Hexagon Key wrench. Remove the (4) M4x12 SKT CAP SCR from the plate at the base of the Controller Cable



- 3 Carefully remove the Controller cable Base Plate and extract the harness until the connector can be visible. Disconnect the connector and remove.



- 4 Reverse Steps 2 to 3 when replacing Controller Unit.

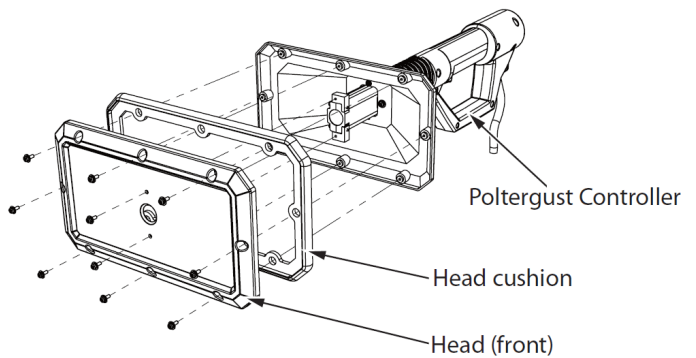
## 10-2 DISASSEMBLING THE POLTERGUST CONTROLLER

### ⚠ CAUTION

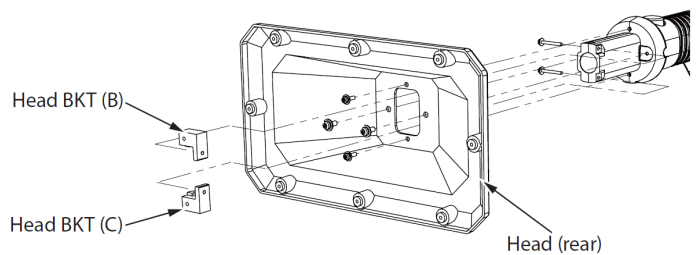
- Always remove power, switch off the machine and remove the power cable before attempting any work.

Refer to “10-1 Removing the Controller” to remove the Poltergust controller.

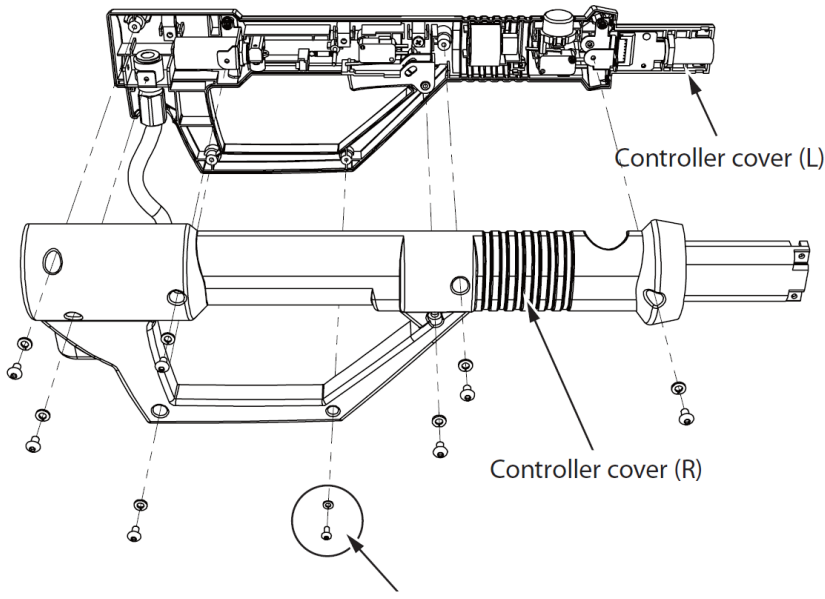
- 1 Remove power from the machine and disconnect the mains power connector.
- 2 Refer to “10-1 Removing the Controller” to remove the Poltergust controller.
- 3 Remove the screws (10), then separate the head (front) from the head cushion.



- 4 Remove the screws (4) and remove the head (rear).



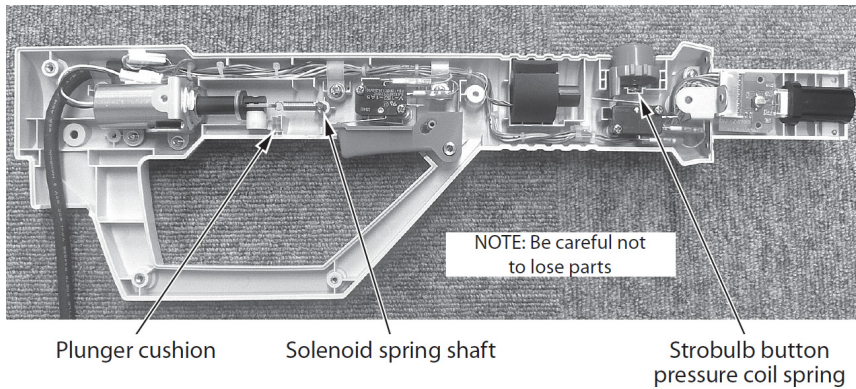
**5** Set down the Poltergust controller as illustrated below. Remove the screws (8) and spring washers (8) and remove the controller cover.



NOTE: The screw and spring washer are of different sizes only in this location.

NOTE: All of the internal controller parts are attached to the controller cover (L). Do not remove the controller cover (L) screws until disassembly.

NOTE: The solenoid spring shaft, plunger cushion, and Strobulo button trigger lower pressure coil spring are held in place between the controller cover (L/R). Be careful not to lose any small parts when disassembling.



**6** When replacing the unit, follow the Steps in reverse order, taking care that the harness and vibration motor assembly do not become caught, and checking the position of the screws..

For more caution details about the vibration motor assembly's placement, refer to "10-6 Replacing the Vibration Motor."

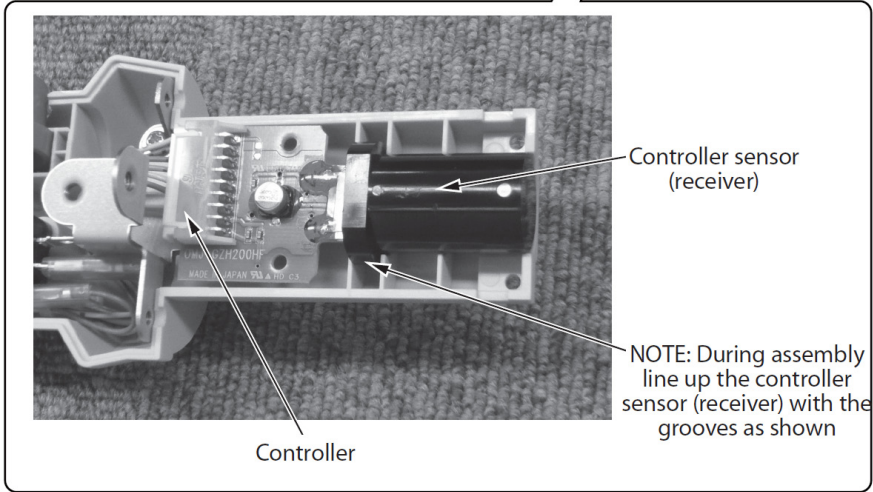
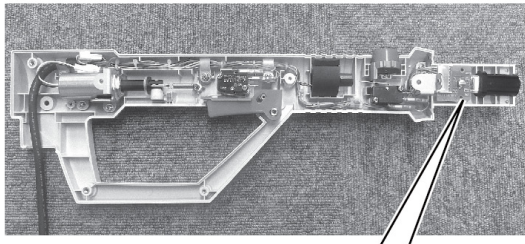
## 10-3 REPLACING THE CONTROLLER SENSOR

**⚠ CAUTION**

- Always remove power, switch off the machine and remove the power cable before attempting any work.

Refer to “10-3 Disassembling the Poltergust Controller” to disassemble the Poltergust controller.

- 1 Remove power from the machine and disconnect the mains power connector.
- 2 Refer to “10-3 Disassembling the Poltergust Controller” to disassemble the Poltergust controller.
- 3 Remove the connector (1), and remove the controller sensor (receiver).



- 4 Reverse the directions to replace the unit, taking care for the points outlined below.

NOTE: The controller sensor (receiver) is weak to static electricity. If the operator's body is charged with static electricity at the time of handling it may result in damage to the part. Be sure to discharge any static electricity before performing any operations.

NOTE: Do not under any circumstances disassemble the controller sensor (receiver). Also, do not touch the upper knob at the top of the controller sensor. Disassembling or touching the sensor may result in malfunction.

NOTE: Check the connector's orientation and shape to prevent damage to the electrical circuits.

## 10-4 REPLACING THE TRIGGER SWITCH

### ⚠ CAUTION

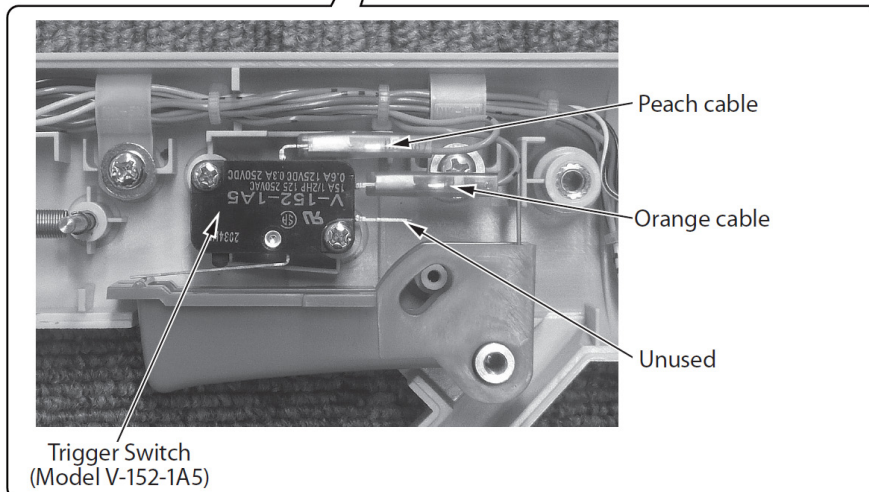
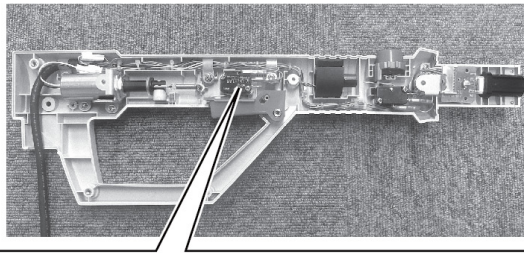
- Always remove power, switch off the machine and remove the power cable before attempting any work.

Refer to “10-3 Disassembling the Poltergust Controller” to disassemble the Poltergust controller.

**1** Remove power from the machine and disconnect the mains power connector.

**2** Refer to “10-3 Disassembling the Poltergust Controller” to disassemble the Poltergust controller.

**3** Remove the fast on terminals (2) and screws (2) and remove the trigger switch.



**4** Reverse the directions to replace the unit, paying special attention to the location of the trigger switch's fast on terminal connections.



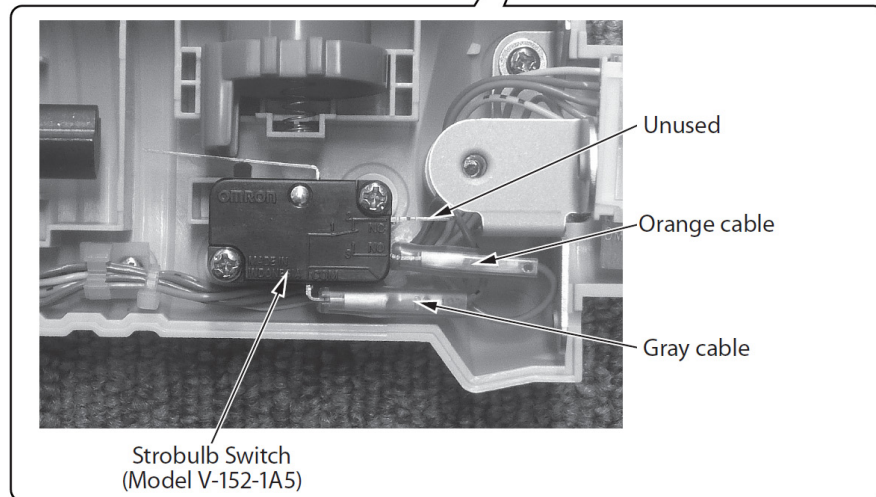
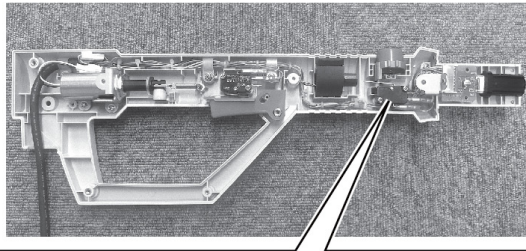
## 10-5 REPLACING THE STROBULB SWITCH

### ⚠ CAUTION

- Always remove power, switch off the machine and remove the power cable before attempting any work.

Refer to “10-3 Disassembling the Poltergust Controller” to disassemble the Poltergust controller.

- 1 Remove power from the machine and disconnect the mains power connector.
- 2 Refer to “10-3 Disassembling the Poltergust Controller” to disassemble the Poltergust controller.
- 3 Remove the fast on terminals (2) and screws (2) and remove the Strobulb switch.



- 4 Reverse the directions to replace the unit, paying special attention to the location of the trigger switch's fast on terminal connections.



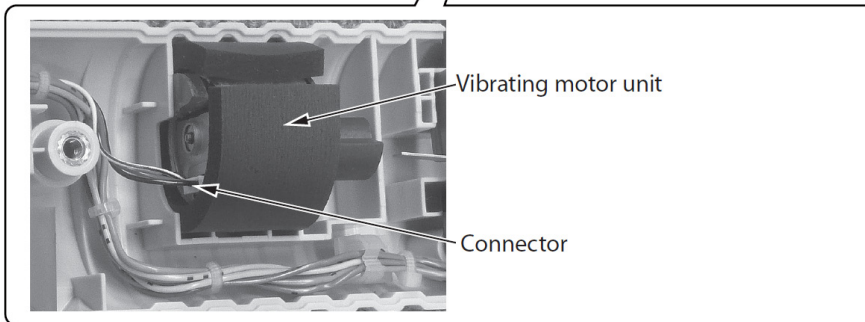
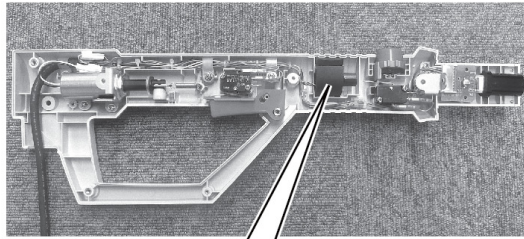
## 10-6 REPLACING THE VIBRATING MOTOR

### ⚠ CAUTION

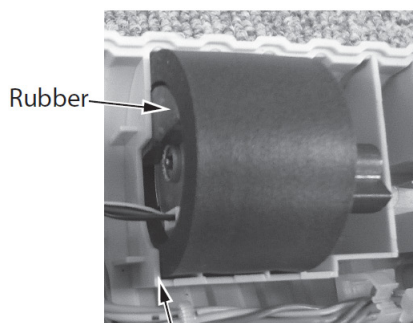
- Always remove power, switch off the machine and remove the power cable before attempting any work.

Refer to “10-3 Disassembling the Poltergust Controller” to disassemble the Poltergust controller.

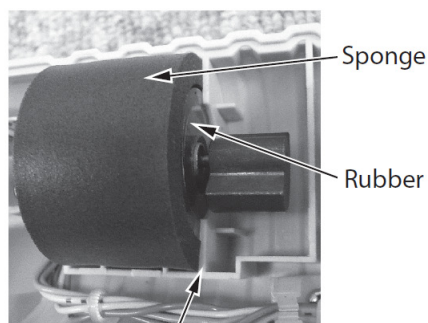
- 1 Remove power from the machine and disconnect the mains power connector.
- 2 Refer to “10-3 Disassembling the Poltergust Controller” to disassemble the Poltergust controller.
- 3 Remove the connector (1) and remove the vibrating motor assembly.



- 4 Reverse the directions to replace the unit. Take care that the sponge and rubber around the vibrating motor has not caught on or been pinched by the plastic ribs around the unit.



Rib around the installed unit



Rib around the installed unit

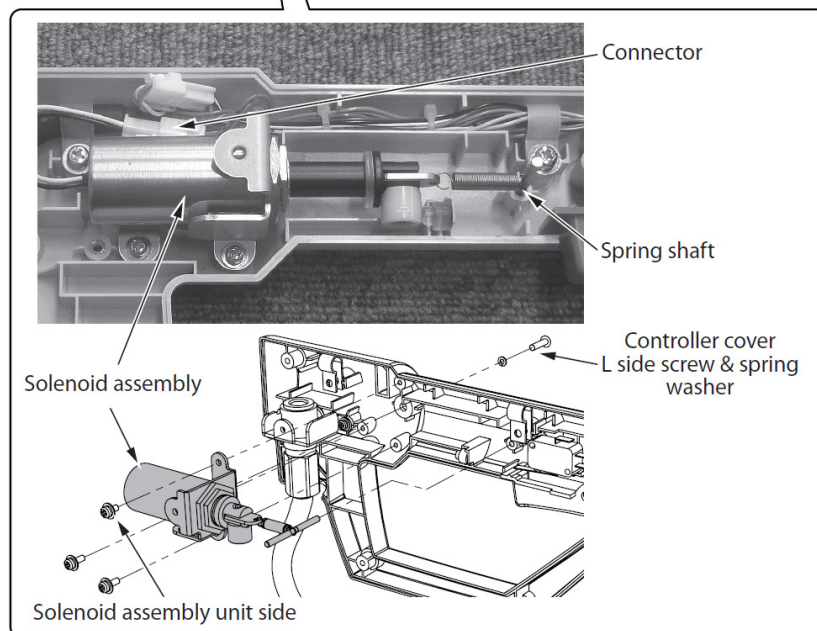
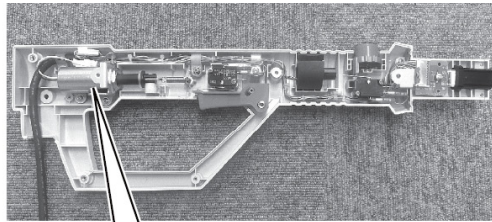
## 10-7 REMOVING THE SOLENOID ASSY

### ⚠ CAUTION

- Always remove power, switch off the machine and remove the power cable before attempting any work.

Refer to “10-3 Disassembling the Poltergust Controller” to disassemble the Poltergust controller.

- 1 Remove power from the machine and disconnect the mains power connector.
- 2 Refer to “10-3 Disassembling the Poltergust Controller” to disassemble the Poltergust controller.
- 3 Remove the connector (1) and the spring shaft that holds the spring.
- 4 Remove the screw (1) and spring washer from the L side controller cover, then remove the screw (1) from the solenoid assembly unit and remove the unit.



- 5 Reverse the directions to replace the unit.

## 10-8 REPLACING THE SOLENOID

### ⚠ CAUTION

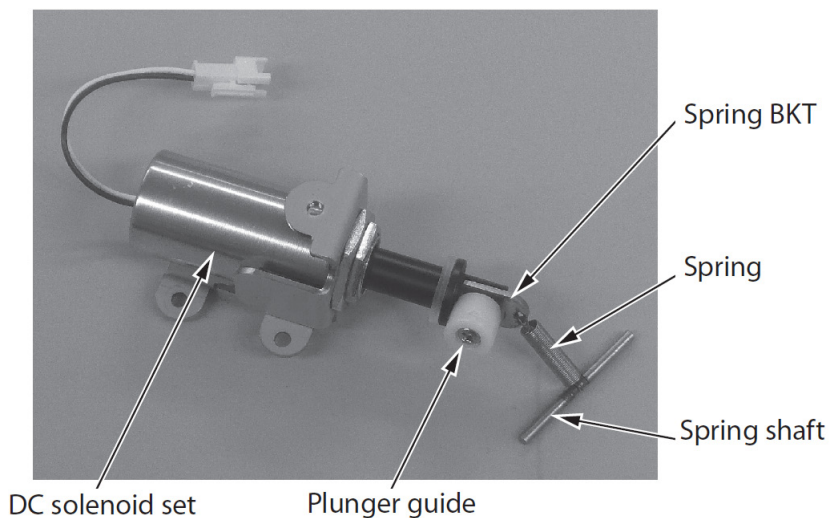
- Always remove power, switch off the machine and remove the power cable before attempting any work.

Refer to “10-7 Removing the Solenoid Assembly” and remove the solenoid assembly.

- 1 Remove power from the machine and disconnect the mains power connector.
- 2 Refer to “10-7 Removing the Solenoid Assembly” and remove the solenoid assembly.
- 3 Remove the screw (1) from the solenoid assembly and remove the plunger guide and spring BKT.

*NOTE: If you remove the spring BKT, the spring and shaft are also connected.*

- 4 Replace the DC solenoid set with a new part.



- 5 Reverse the directions to replace the unit.

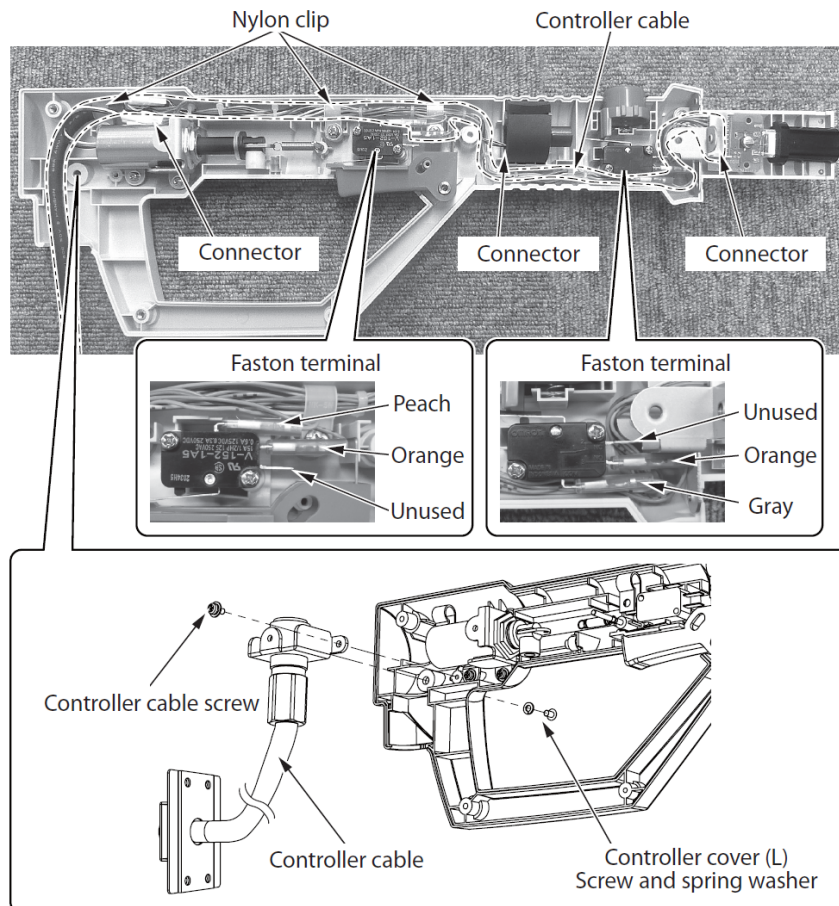
## 10-9 REPLACING THE CONTROLLER CABLE

### ⚠ CAUTION

- Always remove power, switch off the machine and remove the power cable before attempting any work. Failure to remove power may result in injury or fire hazard.
- Two qualified technicians or maintenance engineers are needed in order to perform this operation.

Refer to “10-3 Disassembling the Poltergust Controller” to disassemble the Poltergust controller.

- 1 Remove power from the machine and disconnect the mains power connector.
- 2 Refer to “10-3 Disassembling the Poltergust Controller” to disassemble the Poltergust controller.
- 3 Remove the nylon clips (3), connectors (3), and the fast on terminals (4).
- 4 Remove the screw (1) and spring washer (1) from the controller cover L, and remove the screw (1) from the controller cable, then remove the controller cable.





**5** To reassemble the controller, follow the directions in reverse order, attaching the controller cable first, and then the remaining parts.

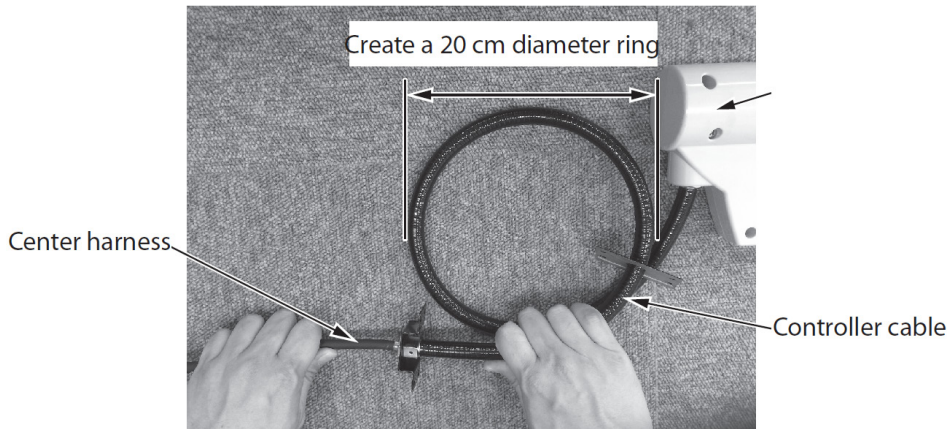
**6** Perform the following operation before attaching the plate at the base of the controller cable to the cabinet.

*NOTE: From this point on, the maintenance must be performed with two workers to ensure a secure installation.*

**STOP IMPORTANT**

- The following maintenance procedure is necessary to prevent players from being injured in the event that the protective metal tubing encasing the controller cable at the base of the controller is damaged in any way. This procedure must be performed.

**7** One of the maintenance workers must make a 20 cm diameter ring with the controller cable. Lightly pull the centre harness cable and hold in this position.

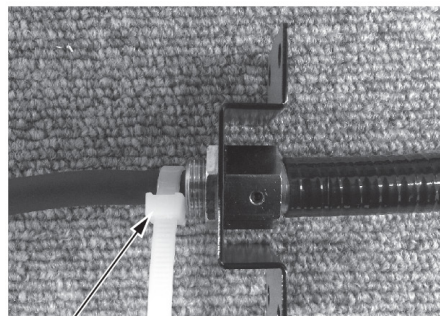
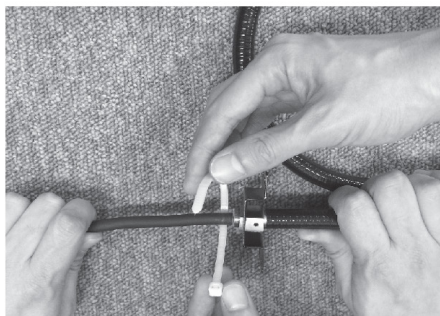


**8** With the cable in position from step 6, the other maintenance worker must strongly tie the harness at the centre base with the cable tie.

*NOTE: Be careful that the harness base does not slide out of position. Tighten so that the harness is properly caught.*



Cable tie

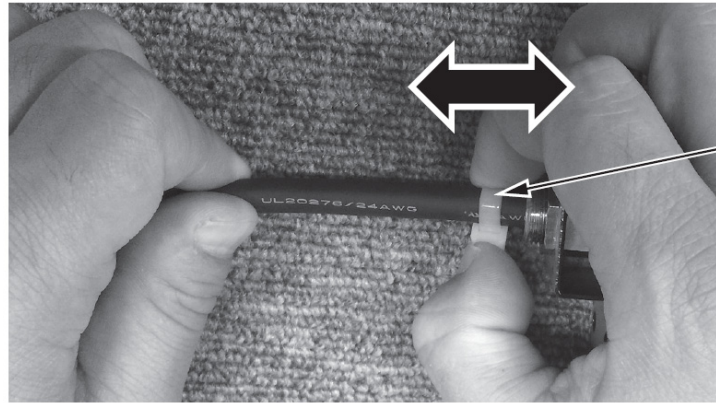


Strongly tighten the harness base with the cable tie

**9** While holding the centre harness in place, take the tie from step 7 and, by trying to move it left and right as illustrated below, confirm that it is firmly in place.

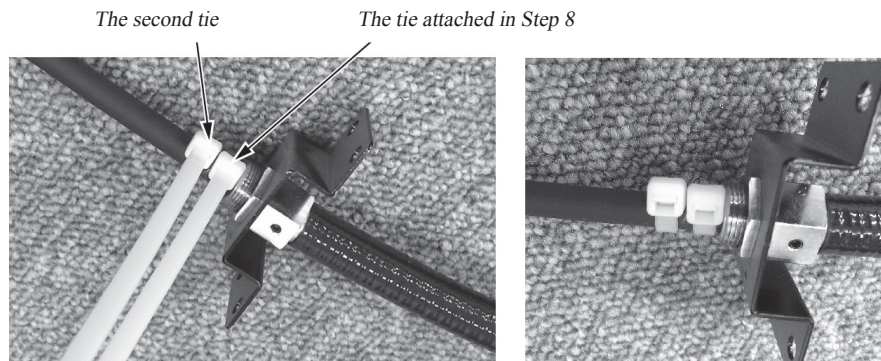
*NOTE: If the tie is movable, tighten it further.*

**10** While holding the centre harness in place, take the tie from step 7 and, by trying to move it left and right as illustrated below, confirm that it is firmly in place.



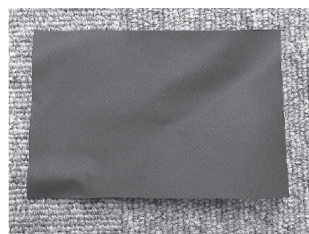
**11** Attach the second cable tie next to the one attached in step 7. Attach tightly similarly to the first tie.

**12** After attaching, cut off the excess length from the tie.

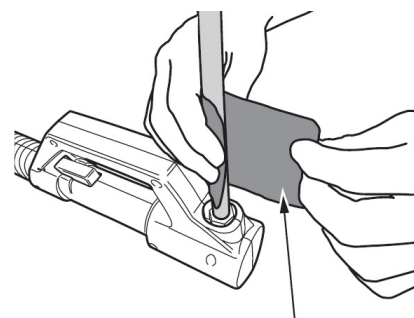


**13** Wrap the piece of tarp around the controller cable at the base of the Poltergust controller. Wrap it with the short end (8 cm) oriented vertically, and the long end (12 cm) horizontally.

*NOTE: This process can be made simpler if one person wraps the tarp while another person holds the cable in place.*



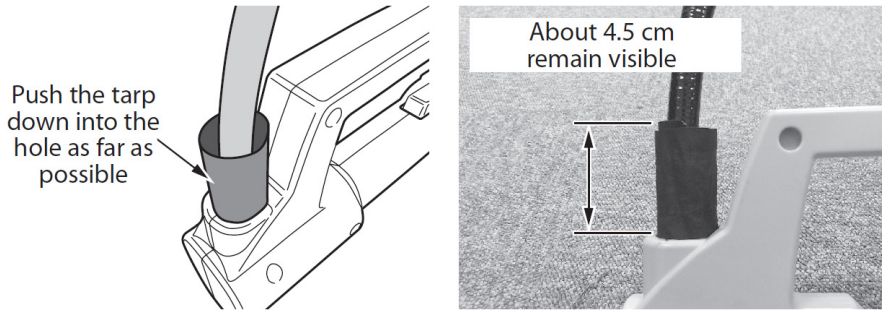
Tarp  
*NOTE: Either side can be used.*



Wrap around the cable

**14** Push the tarp wrapped around the cable in step 11 down as far as possible into the hole at the base of the controller.

*NOTE: When fully pushed down, about 4.5 cm of the tarp should remain visible.*

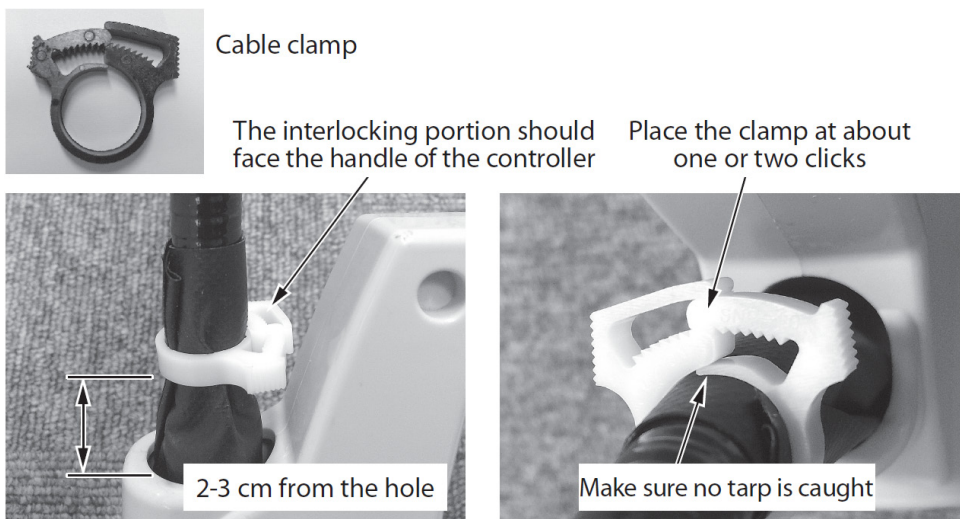


**15** Taking care that the tarp doesn't slip out of the hole, fold over the loose part of the tarp as shown in the image below.



**16** The person not holding the tarp in place will use a cable clamp to apply a temporary stopper. Ensure that the clamp is about 2 to 3 cm from the hole, and that the interlocking portion of the clamp is on the side of the controller's handle.

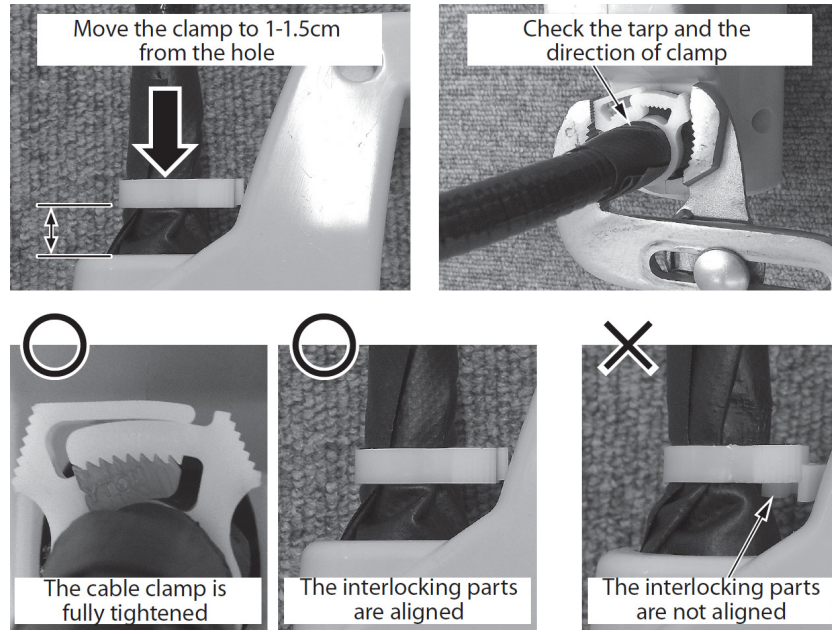
*NOTE: Put the clamp in place at about one or two clicks and ensure that none of the tarp is caught in the clamp.*





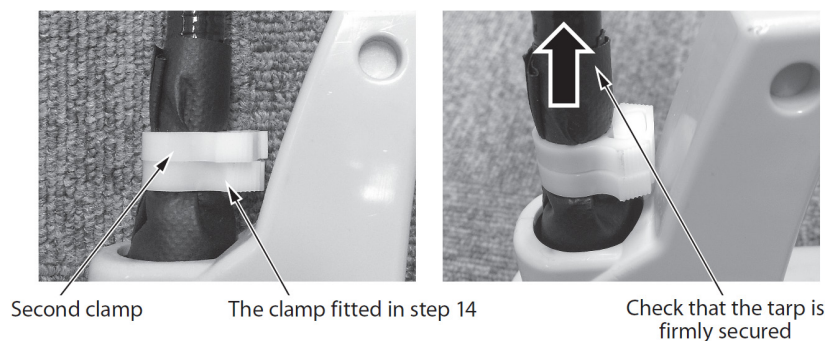
**17** Move the clamp from step 14 down along the tarp to about 1 to 1.5 cm from the hole. Checking that none of the tarp is caught in the clamp, and that the interlocking portion of the clamp is still facing the handle of the controller, tighten the clamp as far as it will go, using pliers or a similar tool.

*NOTE: Check that the interlocking parts of the clamp are vertically aligned. If not, straighten them using pliers or a similar tool.*



**18** Attach a second snapper hose clamp just above the one fitted in step 15, making sure that it is secured just as tightly.

**19** Check that the clamps are properly secure, and that the tarp does not move upwards along the cable when pulled.



**20** Refer to “10-3 Disassembling the Poltergust Controller” to disassemble the Poltergust controller.



# 11 VIDEO DISPLAY

## CAUTION

The LCD display screen is adjusted prior to leaving the factory. Avoid any unnecessary adjustment.

## IMPORTANT

- If the adjustment method in this manual does not resolve the problem contact the customer service number in this manual or your supplier.
- Do not stick tape, stickers or anything else onto the screen. Any kind of adhesive may damage the surface of the screen.

### 11-1 GENERAL DESCRIPTION

This specification applies to the 54.6 inch Colour TFT-LCD Module P550HVN02.0. This LCD module has a TFT

active matrix type liquid crystal panel 1,920x1,080 pixels, and diagonal size of 54.6 inch. This module supports

1,920x1080 mode. Each pixel is divided into Red, Green and Blue sub-pixels or dots which are arranged in vertical

stripes. Gray scale or the brightness of the sub-pixel colour is determined with a 10-bit gray scale signal for each

dot.

The P550HVN02.0 has been designed to apply the 10-bit 2 channel LVDS interface method. It is intended to

support displays where high brightness, wide viewing angle, high colour saturation, and high colour depth.

\* General Information

Items	Specification	Unit	Note
Active Screen Size	54.6	Inch	
Display Area	1209.6(H) x 680.4(V)	mm	
Outline Dimension	1235.6(H) x 706.4(V) x 25.5(D)	mm	1
Driver Element	a-Si TFT active matrix		
Display Colours	10 bit (8bit+FRC), 1073.7M	Colours	
Number of Pixels	1,920x1080	Pixel	
Pixel Pitch	0.21 (H) x 0.63(W)	mm	
Pixel Arrangement	RGB vertical stripe		
Display Operation Mode	Normally Black		
Display Orientation	Landscape/Portrait Enable		
Surface Treatment	AG		Haze = 11%

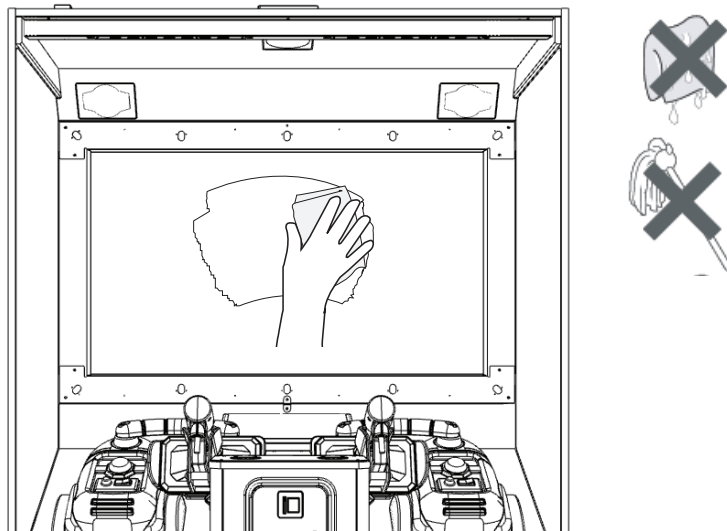
## 11-2 CLEANING THE SCREEN

### CAUTION

- Since the LCD display screen is susceptible to damage, pay careful attention to its handling. When cleaning, refrain from using water or volatile chemicals.
- Do not climb onto the control panel. This could lead to injuries, such as bumping your head or falling down.
- When reaching across the control panel to clean the screen there is a risk of hurting your shoulder or arm. Use a step ladder to reach higher places.

When the screen surface becomes dirty with dust, etc., clean it by using a soft cloth such as gauze. When water, and volatile chemicals such as benzene, thinner, etc., spill on the screen surface, it may be subject to damage, therefore, do not use them.

For stronger stains, moisten a soft lint free cloth with detergent heavily diluted in water. Wring out the cloth thoroughly before cleaning the screen.



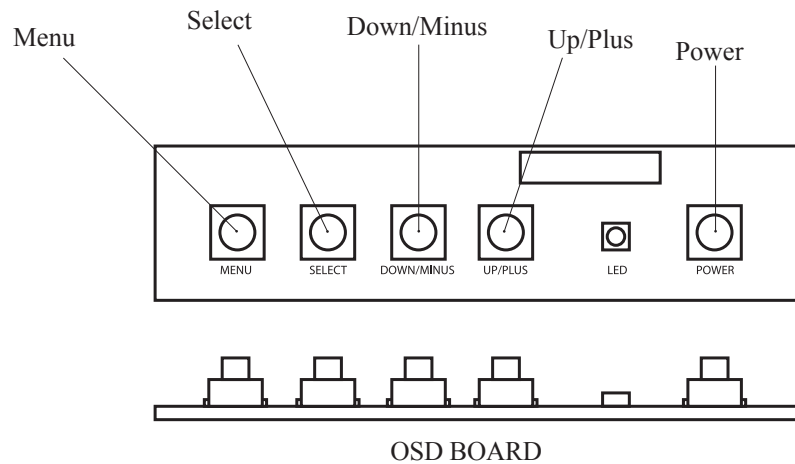
## 11-3 ON SCREEN ADJUSTMENT METHOD (OSD)

### STOP IMPORTANT

- If the adjustment method in this manual does not resolve the problem contact the customer service number in this manual or your supplier.
- Do not stick tape, stickers or anything else onto the screen. Any kind of adhesive may damage the surface of the screen.
- The screen has been finely adjusted prior leaving the factory. Do not unnecessarily adjust the screen.

#### OSD (On Screen Display)

The OSD offers the user various possibilities of customizing the appearance of the TFT display. By using the OSD Board, brightness, contrast, input selection, OSD appearance and much more can be adjusted easily.



#### Operation and Buttons

Item	Description
Menu	Enter OSD main menu Leave sub menu Leave OSD main menu
Select	Navigate down in menu
Down/Minus	Navigate left in main menu Decrease value
Up/Plus	Navigate right in main menu Increase value
Power	Turn power on/off
2 colour LED	Red/Green

## Hot Keys

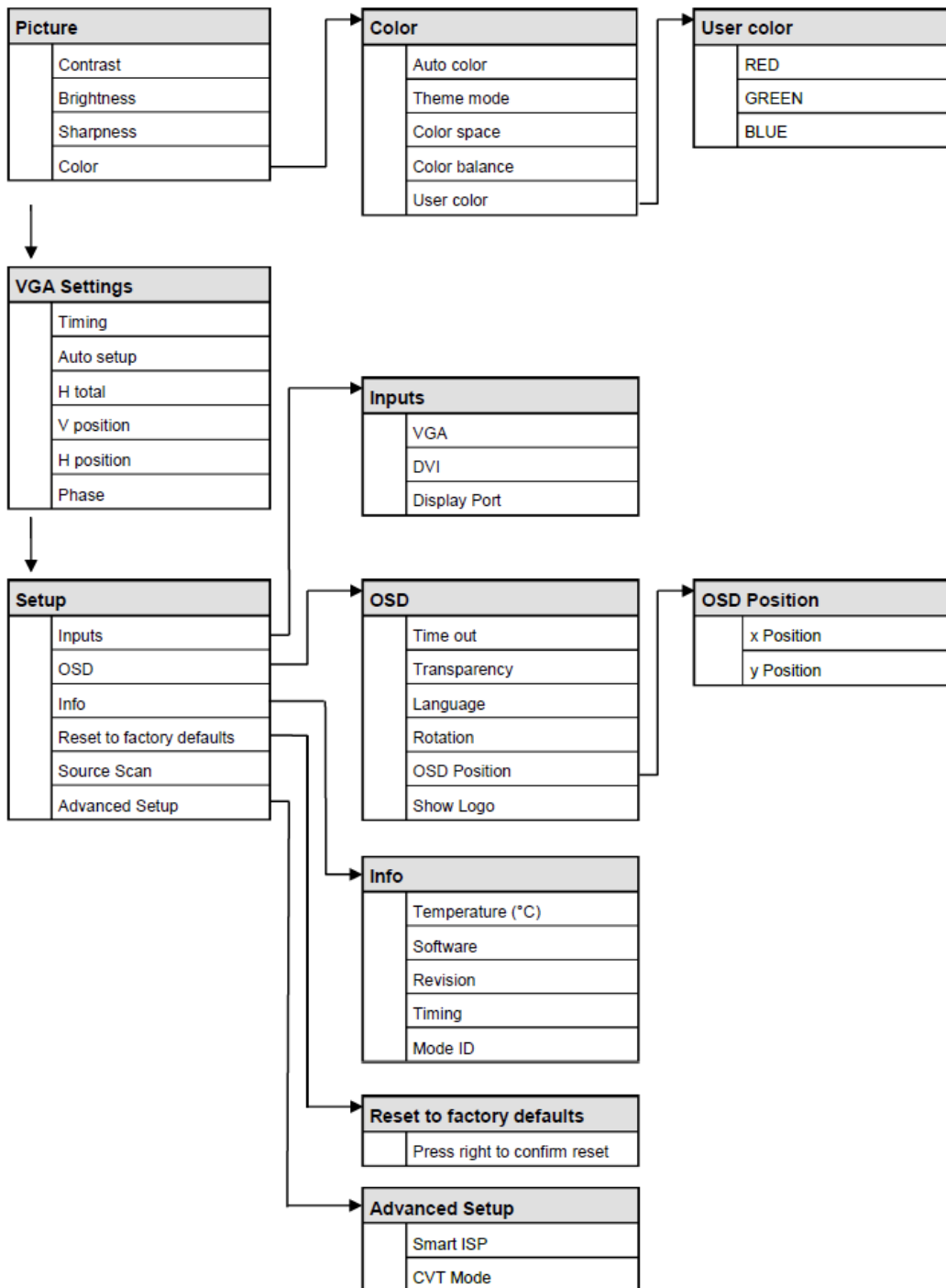
The OSD offers hot key functions. To access these functions the user must not open the OSD via the Main Menu. The hotkey functions offer direct access to each equivalent function.

Button	Direct access
Up/Plus	Source select, switch to next input
Down/Minus	Brightness
Select	Auto adjust

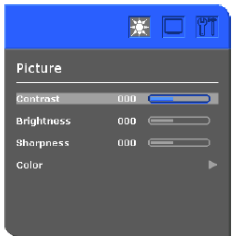
## OSD Status LED

Condition	Description
Amber flashing	Standby (Searching Input)
Green flashing	Searching display mode (Source)
Green ON	OK (Displaying signal)
Red ON	Power off

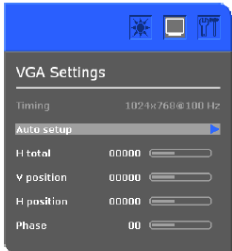
# OSD Structure




Picture Menu

	Picture	Contrast
		Brightness
		Sharpness
		Color


VGA Settings Menu

	VGA Settings	Timing
		Auto setup
		H total
		V position
		H position
		Phase

Setup Menu

	Setup	Inputs
		OSD
		Info
		Reset to factory defaults
		Source scan
		Advanced Setup

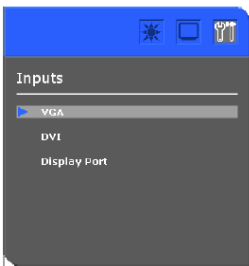
Colour Menu

	Color	Auto color
		Theme mode
		Gamma
		Color balance
		User color


**User Colour Menu**

	User color	RED
		GREEN
		BLUE


**Input Menu**

	Inputs	VGA
		DVI
		DisplayPort


**OSD Menu**

	OSD	Time out
		Transparency
		Language
		Rotation
		OSD Position
		Show logo

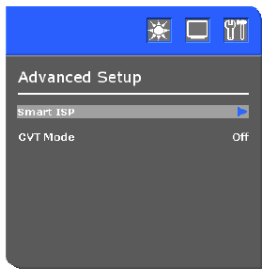
**OSD Position Menu**

	OSD Position	x Position
		y Position

**Info Menu**

	Info	Temperature (°C)
		Software
		Revision
		Timing
		Mode ID

**Advance Setup Menu**

	Advanced Setup	Smart ISP
		CVT Mode



## 12 COIN HANDLING

### Handling the Coin Jam

If the coin is not rejected when the REJECT button is pressed, open the coin chute door and open the selector gate. After removing the jammed coin, put a normal coin in and check to see that the selector correctly functions.

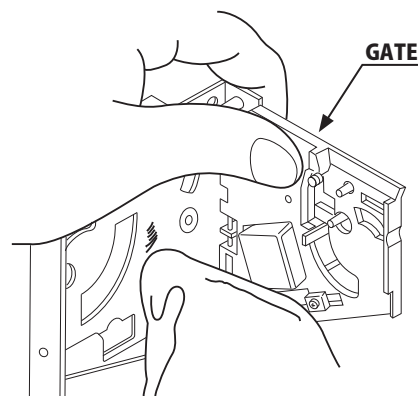
### 12-1 CLEANING THE COIN SELECTOR

#### STOP IMPORTANT

- Remove and clean smears by using a soft cloth dipped in water or diluted chemical detergent and then squeezed dry.
- Never apply machine oil, etc. to the Coin Selector.
- After cleaning the Coin Selector, insert a regular coin in the normal working status and ensure that the selector correctly functions.

The Coin Selector should be cleaned once every 3 months.  
When cleaning, follow the procedure below:

- 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 (Small soft Paint Brush, etc.)



12-1 FIG 1

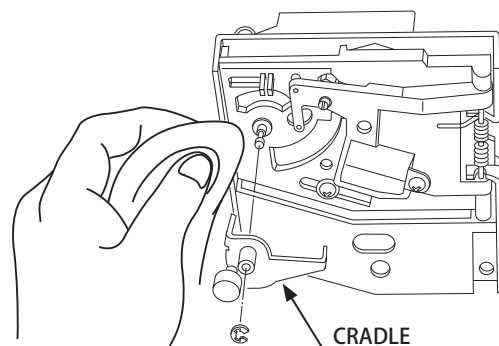
## CLEANING THE COIN SELECTOR (MECHANICAL).

**1** Remove and clean smears by using a soft cloth dipped in water or diluted chemical detergent and then squeezed dry.

**2** Remove the CRADLE.. When removing the retaining ring (E ring) be very careful so as not to bend the rotary shaft.

**3** Remove stain from the rotary shaft and shaft receiving portions by wiping off with a soft cloth, etc.

**4** After wiping off as per previous step, further apply a dry cloth to completely dry the Coin Selector.



12-1 FIG 2

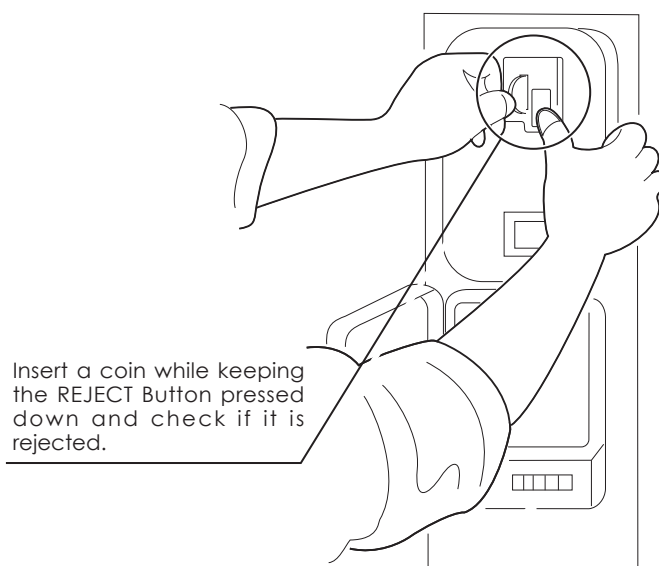
### Coin Insertion Test

Once every month, when performing the Coin SW Test, simultaneously check the following:

Does the Coin Meter count satisfactorily?

Does the coin drop into the cashbox correctly?

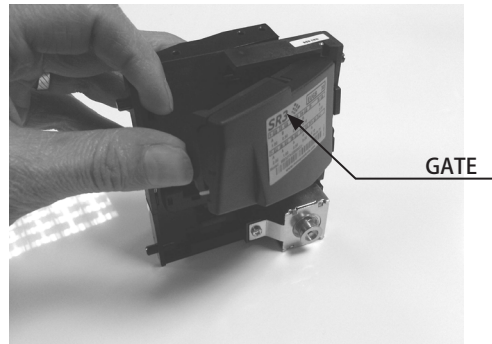
Is the coin rejected when inserted while keeping the REJECT Button pressed down?



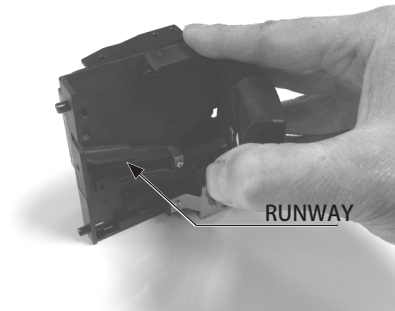
12-1 FIG 3

## CLEANING THE COIN SELECTOR (SR3)

- 1** Remove and clean smears by using a damp soft cloth dipped in water. DO NOT use any diluted chemical detergent or cleansing agent as this will impair the workings of the component.



- 2** Open the reject gate to gain access to the rundown path.



- 3** Remove the dirt and stains from the runway by wiping off with a soft damp cloth.



- 4** After wiping off as per previous step, further apply a dry cloth to completely dry the coin Selector.

## 12-2 FAULT FINDING

### Fault Finding

The following information is presented for customers' guidance in rectifying a fault but does not cover all possible causes.

All acceptors with electronic faults should be returned to an approved service centre for repair.

12

COIN HANDLING

SYMPTOM	INVESTIGATE	POSSIBLE CAUSE
Acceptor does not work (all coins reject)	Connector	Poor Contact
		Loose Wire
	Power Supply	Not switched on
		Incorrect voltage
		Inadequate current
		Rise time too slow
	Inhibit all inputs	Acceptor Inhibited
	Accept gate	Gate not free or dislocated
	Accept channel	Obstruction
	Reject gate	Not fully closed
	LED on rear cover RED	EEPROM chksm error
SR Sensor fault		
Credit opto fault		
Credit sensor blocked		
	Reject lever pressed	
LED on rear cover YELLOW	Reinstall power	
Poor Acceptance	Power Supply	Voltage less than 10v (Voltage drops when coil engages)
	Accept gate	Gate jam or dislocated
	Connector	Loose
	Coin rundown	Dirty
	Bank Select	Both banks enabled
Coin stick or jam in acceptor.	Accept channel	Acceptor dirty or may have some damage
	Accept gate	
	Reject gate	
A true coin type rejects	Label	Coin not programmed
No accept signal	Connector	Loose or broken wire
	Accept channel	Path dirty or obstructed

## 12-3 ADJUSTING THE PRICE OF PLAY (EXCEL)

### STOP IMPORTANT

- The price of play is determined by the configuration of switches located on either an EXCEL board or VTS board. The type of board used is determined by product location. Switch settings for both types of board remain the same.

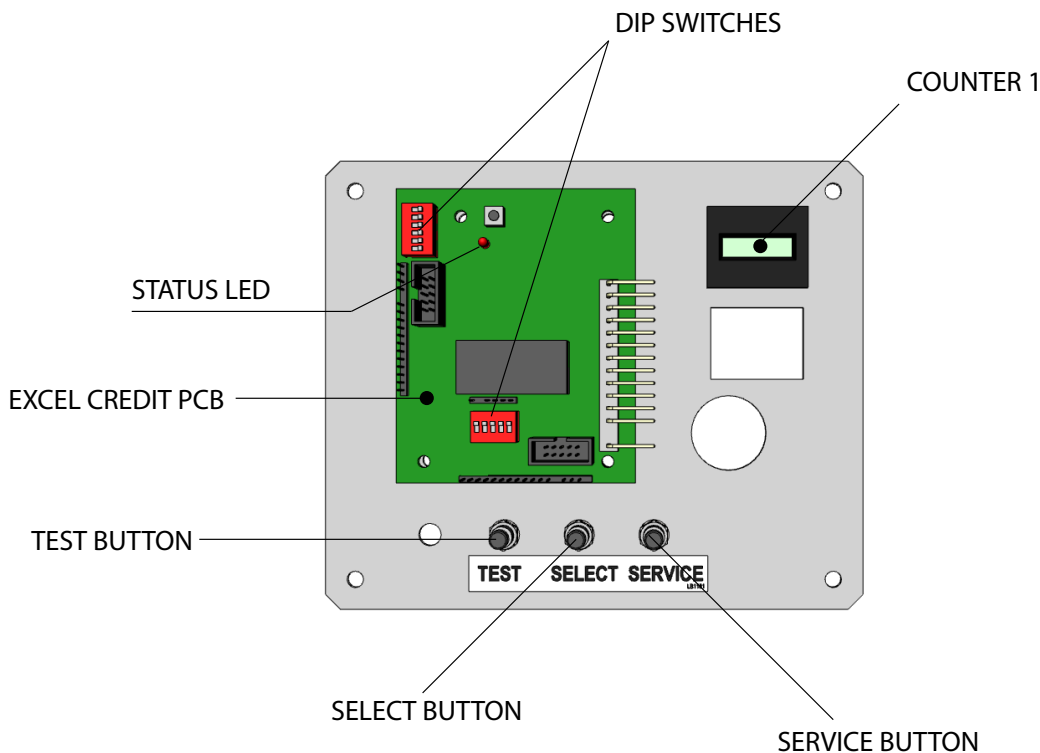
To adjust the price of play ALL credit setting are adjusted via the EXCEL CREDIT BOARD.

#### IMPORTANT!

The CREDIT SETTINGS within the SYSTEM TEST MODE must be set to **1 coin 1 credit** to allow the CREDIT BOARD to function correctly.

The VTS BD has a built in Credit Board. This is controlled by 2 DIL Switches. These allow the operator to select the price of play, type of coin acceptor and region.

#### EXCEL Credit Board



#### DIL SW3 (Regional Settings)

Adjust these switches to specify the type of Coin Acceptor used and currency.

Default = SW1&SW2 ON - NRI in parallel mode, Sterling.

#### TEST BUTTON

Provides access to the TEST MENU when pressed.

#### SERVICE BUTTON

Provides a SERVICE CREDIT when pressed

#### Status LED

Flashes when functioning.

#### CHANNEL 1

To Coin Acceptor (SR3/NRI TYPE.)

#### DIL SW1 (credit settings)

Adjust to required price of pay.

#### SELECT BUTTON

Selects options when in TEST.

# 12-4 QUICK VIEW COMMON COIN SETTINGS (USA)

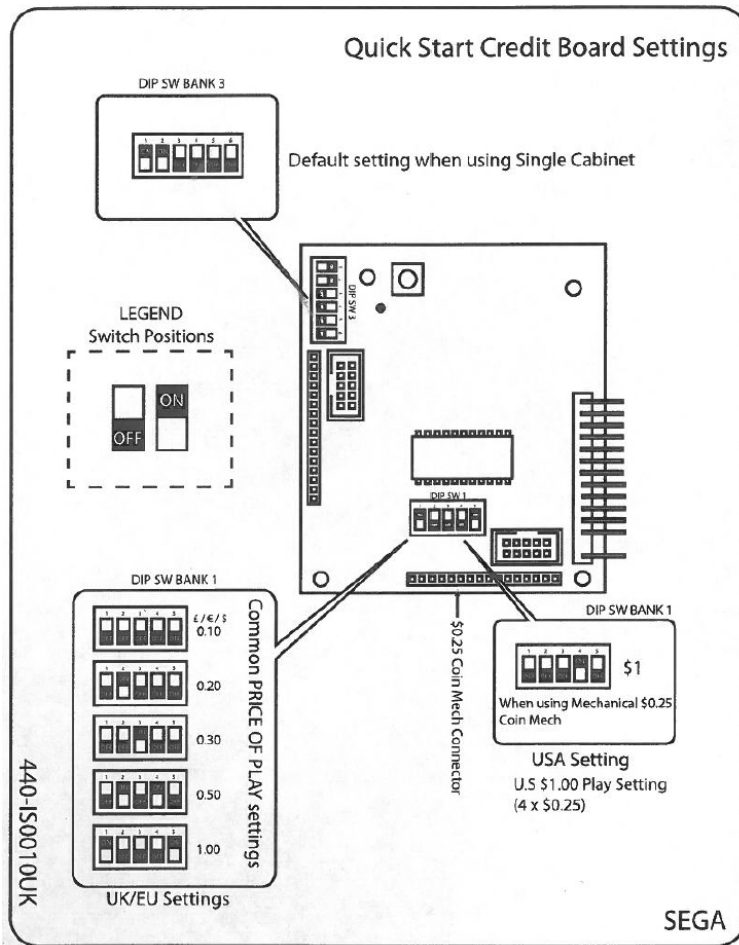


FIG. 12-4

DIL SWITCH BANK ONE (5 way SW1)						
Item	Price	SW1	SW2	SW3	SW4	SW5
1	25cent	OFF	OFF	OFF	OFF	OFF
3	50cent	OFF	ON	OFF	OFF	OFF
5	75cent	OFF	OFF	ON	OFF	OFF
9	\$1.00	OFF	OFF	OFF	ON	OFF
16	\$2.00	ON	ON	ON	ON	OFF
DIL SWITCH BANK TWO (6 way SW3)						
Type	SW1	SW2	SW3	SW4	SW5	SW6
USA	OFF	OFF	OFF	OFF	OFF	OFF

Table 1 12-4

## 12-5 ADJUSTING THE PRICE COMMON SETTINGS

SEGA EXCEL CREDIT BOARD PRICE OF PLAY SETTINGS

Play Price £ / € / \$	Bonus adder	BANK 1						
		1	2	3	4	5		
1 0.10	No Bonus	OFF	OFF	OFF	OFF	OFF		
2 0.10	0.50 = 6 plays	ON	OFF	OFF	OFF	OFF		
3 0.20	No Bonus	OFF	ON	OFF	OFF	OFF		
4 0.20	0.50 = 3 plays	1.00 = 6 plays	2.00 = 12 plays	ON	ON	OFF	OFF	OFF
5 0.30	No Bonus	OFF	OFF	ON	OFF	OFF		
6 0.30	-	1.00 = 4 plays	2.00 = 8 plays	ON	OFF	ON	OFF	OFF
7 0.30	0.50 = 2 plays	1.00 = 4 plays	-	OFF	ON	ON	OFF	OFF
8 0.40	No Bonus	OFF	OFF	OFF	ON	OFF		
8 0.40	-	1.00 = 3 play	2.00 = 6 plays	ON	OFF	OFF	ON	OFF
9 0.50	No Bonus	OFF	ON	OFF	ON	OFF		
10 0.50	-	1.00 = 3 plays	2.00 = 6 plays	ON	ON	OFF	ON	OFF
11 0.50	-	1.00 = 2 plays	2.00 = 5 plays	OFF	OFF	ON	ON	OFF
12 0.60	No Bonus	ON	OFF	ON	ON	OFF		
13 0.60	-	1.00 = 2 plays	2.00 = 4 plays	OFF	ON	ON	ON	OFF
14 0.80	No Bonus	ON	ON	ON	ON	OFF		
15 0.80	-	1.50 = 2 plays	-	OFF	OFF	OFF	OFF	ON
16 1.00	No Bonus	ON	OFF	OFF	OFF	OFF	ON	
17 1.00	-	-	2.00 = 3 plays	OFF	ON	OFF	OFF	ON
18 1.00	-	2.00 = 2 plays	4.00 = 5 plays	ON	ON	OFF	OFF	ON
19 1.50	No Bonus	OFF	OFF	ON	OFF	ON		
20 1.50	-	2.00 = 2 plays	-					
21 2.00	No Bonus	OFF	ON	ON	OFF	ON		
22 2.00	-	-	5.00 = 3 plays					
23 3.00	No Bonus	OFF	OFF	OFF	ON	ON		
24 3.00	-	-	5.00 = 2 plays	ON	OFF	OFF	ON	ON
25 5.00	No Bonus	OFF	ON	OFF	ON	ON		
26 5.00	-	-	10.00 = 3 plays	ON	ON	OFF	ON	ON
27 7.50	No Bonus	OFF	OFF	ON	ON	ON		
28 7.50	-	-	10.00 = 2 plays	ON	OFF	ON	ON	ON
29 10.00	No Bonus	OFF	ON	ON	ON	ON		
30 FREE	Free Play	ON	ON	ON	ON	ON		

\*All shaded areas are default price of play values with no additional bonuses

Table 2 12-4

Credit Board Mode Settings Switch 3																			
Country	Setting	Switch 3 Setting					Coin Validator Programming												
		SW1	SW2	SW3	SW4	SW5	SW6	COIN1	COIN2	COIN3	COIN4	COIN5	COIN6	COIN7	COIN8	COIN9	COIN10	COIN11	COIN12
UK	Coin Controls C220 Parallel	OFF	OFF	OFF	OFF		£1	50p new	20p	10p	-	50p old	-	-					
UK	Coin Controls C220 Binary	ON	OFF	OFF	OFF		£1	50p new	20p	10p	-	50p old	-	£2					
UK	Coin Controls C220 Binary	OFF	ON	OFF	OFF		£1	50p new	20p	10p	-	£2	-	50p old					
UK	Coin Controls C220 Binary	ON	ON	OFF	OFF		£1	50p new	20p	10p	-	£2	-	50p old					
UK	Coin Controls SR3 Parallel	ON	ON	OFF	OFF		£1	50p new	20p	10p	-	£2	-	50p old					
UK	Coin Controls SR3 Parallel	OFF	OFF	ON	OFF		£2	£1	50p new	20p	10p	-	-	-	50p old				
Euro	Coin Controls SR3 Parallel	OFF	OFF	ON	OFF		€2	€1	50¢	20¢	10¢	-	-	-	50p old				
UK	Mars MEMS 111 Parallel	ON	OFF	ON	OFF		£1	£2	20p	10p	50p new	50p old							
UK	NRI Parallel	OFF	ON	ON	OFF		10p	20p	50p	£1	£2	-							
Belgium	Parallel	ON	ON	ON	OFF		-	50Bf	20Bf	5Bf									
Holland	Parallel	OFF	ON	ON	OFF		-	5NLG	2.5NLG	1NLG									
Austria	SR3 Parallel	ON	OFF	OFF	ON		20Sch	10Sch	5Sch	1Sch									
Spain	Coin Controls C220 Binary	OFF	ON	OFF	ON		500Pta	200Pta	100Pta	50Pta	25Pta	200Pt old	50Pta old	25Pta old					
Spain	SR3/NRI Parallel	ON	ON	OFF	ON		500Pta	200Pta	100Pta	50Pta	25Pta	-	200Pta old	50Pta old	25Pta old				
Spain	Coin Controls C220 Parallel	OFF	OFF	ON	ON		100Pta	50Pta new	-	25Pta new	-	50Pta old	-	25Pta old					
Portugal Euro	Parallel	ON	OFF	ON	ON		200Es	100Es	50Es	-	-	-	-	-					
	TBA				OFF		TBA												
							TBA												
	Channels					ON	OFF	Direct Mode											
						ON	ON	2 channel Mode											

Note: These switch settings are under constant review and may change due to world currency updates.  
 Set SW 1 according to the option settings found in the relevant Price of Play Settings Table on the following pages.  
 Set SW 3 on the VTS /Excel board as shown in the table above corresponding to the country required.

**Please Note**  
 The credit board automatically sets the validator for parallel and binary operation through an output on pin 8 of the 17 way pinstrip. For the feature to work it is necessary for the validator interconnecting cable to include at wire at this position



**ADVANCE SETTINGS    STERLING PRICE OF PLAY SETTINGS (SW1)**

	Price	Bonus					DIL Switch 1				
							1	2	3	4	5
1	10p	50p = 5 plays	£1 = 10 plays	£2 = 20 plays		OFF	OFF	OFF	OFF	OFF	
2	10p	50p = 6 plays @ 8.33p per play	£1 = 12 plays @ 8.33p per play	£2 = 24 plays @ 8.33p per play		ON	OFF	OFF	OFF	OFF	
3	20p	50p = 2.5 plays	£1 = 5 plays	£2 = 10 plays		OFF	ON	OFF	OFF	OFF	
4	20p	50p = 3 plays @ 16.66p per play	£1 = 6 plays @ 16.66p per play	£2 = 12 plays @ 16.66p per play		ON	ON	OFF	OFF	OFF	
5	30p	50p = 1.66 plays	£1 = 3.33 plays	£2 = 6.66 plays		OFF	OFF	ON	OFF	OFF	
6	30p	50p = 1.66 plays	£1 = 4 plays @ 25p per play	£2 = 8 plays @ 25p per play		ON	OFF	ON	OFF	OFF	
7	30p	50p = 2 plays @ 25p per play	£1 = 4 plays @ 25p per play	£2 = 8 plays @ 25p per play		OFF	ON	ON	OFF	OFF	
8	30p	50p = 2 plays @ 25p per play	£1 = 3 plays @ 33.33p per play	£2 = 6 plays @ 33.33p per play		ON	ON	ON	OFF	OFF	
9	40p	50p = 1.25 plays	£1 = 2.5 plays	£2 = 5 plays		OFF	OFF	OFF	ON	OFF	
10	40p	50p = 1.25 plays	£1 = 3 plays @ 33.3p per play	£2 = 6 plays @ 33.3p per play		ON	OFF	OFF	ON	OFF	
11	50p	50p = 1 play	£1 = 2 plays	£2 = 4 plays		OFF	ON	OFF	ON	OFF	
12	50p	50p = 1 play	£1 = 3 plays @ 33.3p per play	£2 = 6 plays @ 33.3p per play		ON	ON	OFF	ON	OFF	
13	50p	50p = 1 play	£1 = 2 plays	£2 = 5 plays @ 40p per play		OFF	OFF	ON	ON	OFF	
14	60p	50p = 0.83 play	£1 = 1.66 plays	£2 = 3.33 plays		ON	OFF	ON	ON	OFF	
15	60p	50p = 0.83 play	£1 = 2 plays @ 50p per play	£2 = 4 plays @ 50p per play		OFF	ON	ON	ON	OFF	
16	80p	50p = 0.62 play	£1 = 1.25 plays	£2 = 2.5 plays		ON	ON	ON	ON	OFF	
17	80p	£1 = 1.25 plays	£1.50 = 2 plays @ 75p per play	£2 = 2.5 plays		OFF	OFF	OFF	OFF	ON	
18	£1	2x50p = 1 play	£1 = 1 play	£2 = 2 plays		ON	OFF	OFF	OFF	ON	
19	£1	2x50p = 1 play	£1 = 1 play	£2 = 3 plays @ 66.6p per play		OFF	ON	OFF	OFF	ON	
20	£1	2x50p = 1 play	£2 = 2 plays	£4 = 5 plays @ 80p per play		ON	ON	OFF	OFF	ON	
21	£1.50	3x50p = 1 play	£1 = 0.66 plays	£3 = 2 plays		OFF	OFF	ON	OFF	ON	
22	£1.50	3x 50p = 1 play	£1 = 0.66 plays	£2 = 2 plays @ £1 per play		ON	OFF	ON	OFF	ON	
23	£2	4x 50p = 1 play	£1 = 0.5 play	£2 = 1 play		OFF	ON	ON	OFF	ON	
24	£2	4x 50p = 1 play	£1 = 0.5 play	£5 = 3 plays @ £1.66 per play		ON	ON	ON	OFF	ON	
25	£3	6x50p = 1 play	£1.50 = 0.5 play	£3 = 1 play		OFF	OFF	OFF	ON	ON	
26	£3	6x50p = 1 play	£1.50 = 0.5 play	£5 = 2 plays @ £2.50 per play		ON	OFF	OFF	ON	ON	
27	£5	£1 = 0.2 play	£5 = 1 play	£10 = 2 plays		OFF	ON	OFF	ON	ON	
28	£5	£1 = 0.2 play	£5 = 1 play	£10 = 3 plays @ £3.33p per play		ON	ON	OFF	ON	ON	
29	£7.50	£5 = 0.66 play	£10 = 1.33 plays	£15 = 2 plays		OFF	OFF	ON	ON	ON	
30	£7.50	£5 = 0.66 play	£10 = 1.33 plays	£10 = 2 plays @ £5 per play		ON	OFF	ON	ON	ON	
31	£10	£10 = 1 play	£20 = 2 plays	£30 = 3 play		OFF	ON	ON	ON	ON	
32		Free Play					ON	ON	ON	ON	ON

	Price	Bonus					DIL Switch 1				
							1	2	3	4	5
1	10¢	50¢ = 5 plays	€1 = 10 plays	€2 = 20 plays		OFF	OFF	OFF	OFF	OFF	
2	10¢	50¢ = 6 plays @ 8.33p per play	€1 = 12 plays @ 8.33¢ per play	€2 = 24 plays @ 8.33¢ per play		ON	OFF	OFF	OFF	OFF	
3	20¢	50¢ = 2.5 plays	€1 = 5 plays	€2 = 10 plays		OFF	ON	OFF	OFF	OFF	
4	20¢	50¢ = 3 plays @ 16.66¢ per play	€1 = 6 plays @ 16.66¢ per play	€2 = 12 plays @ 16.66¢ per play		ON	ON	OFF	OFF	OFF	
5	30¢	50¢ = 1.66 plays	€1 = 3.33 plays	€2 = 6.66 plays		OFF	OFF	ON	OFF	OFF	
6	30¢	50¢ = 1.66 plays	€1 = 4 plays @ 25¢ per play	€2 = 8 plays @ 25¢ per play		ON	OFF	ON	OFF	OFF	
7	30¢	50¢ = 2 plays @ 25¢ per play	€1 = 4 plays @ 25¢ per play	€2 = 8 plays @ 25¢ per play		OFF	ON	ON	OFF	OFF	
8	30¢	50¢ = 2 plays @ 25¢ per play	€1 = 3 plays @ 33.33¢ per play	€2 = 6 plays @ 33.33¢ per play		ON	ON	ON	OFF	OFF	
9	40¢	50¢ = 1.25 plays	€1 = 2.5 plays	€2 = 5 plays		OFF	OFF	OFF	ON	OFF	
10	40¢	50¢ = 1.25 plays	€1 = 3 plays @ 33.33¢ per play	€2 = 6 plays @ 33.33¢ per play		ON	OFF	OFF	ON	OFF	
11	50¢	50¢ = 1 play	€1 = 2 plays	€2 = 4 plays		OFF	ON	OFF	ON	OFF	
12	50¢	50¢ = 1 play	€1 = 3 plays @ 33.33¢ per play	€2 = 6 plays @ 33.33¢ per play		ON	ON	OFF	ON	OFF	
13	50¢	50¢ = 1 play	€1 = 2 plays	€2 = 5 plays @ 40¢ per play		OFF	OFF	ON	ON	OFF	
14	60¢	50¢ = 0.83 play	€1 = 1.66 plays	€2 = 3.33 plays		ON	OFF	ON	ON	OFF	
15	60¢	50¢ = 0.83 play	€1 = 2 plays @ 50¢ per play	€2 = 4 plays @ 50¢ per play		OFF	ON	ON	ON	OFF	
16	80¢	50¢ = 0.62 play	€1 = 1.25 plays	€2 = 2.5 plays		ON	ON	ON	ON	OFF	
17	80¢	€1 = 1.25 plays	€1.50 = 2 plays @ 75¢ per play	€2 = 2.5 plays		OFF	OFF	OFF	OFF	ON	
18	€1	2x50¢ = 1 play	€1 = 1 play	€2 = 2 plays		ON	OFF	OFF	OFF	ON	
19	€1	2x50¢ = 1 play	€1 = 1 play	€2 = 3 plays @ 66.6¢ per play		OFF	ON	OFF	OFF	ON	
20	€1	2x50¢ = 1 play	€2 = 2 plays	€4 = 5 plays @ 80¢ per play		ON	ON	OFF	OFF	ON	
21	€1.50	3x50¢ = 1 play	€1 = 0.66 plays	€3 = 2 plays		OFF	OFF	ON	OFF	ON	
22	€1.50	3x 50¢ = 1 play	€1 = 0.66 plays	€2 = 2 plays @ €1 per play		ON	OFF	ON	OFF	ON	
23	€2	4x 50¢ = 1 play	€1 = 0.5 play	€2 = 1 play		OFF	ON	ON	OFF	ON	
24	€2	4x 50¢ = 1 play	€1 = 0.5 play	€5 = 3 plays @ €1.66 per play		ON	ON	ON	OFF	ON	
25	€3	6x50¢ = 1 play	€1.50 = 0.5 play	€3 = 1 play		OFF	OFF	OFF	ON	ON	
26	€3	6x50¢ = 1 play	€1.50 = 0.5 play	€5 = 2 plays @ €2.50 per play		ON	OFF	OFF	ON	ON	
27	€5	€1 = 0.2 play	€5 = 1 play	€10 = 2 plays		OFF	ON	OFF	ON	ON	
28	€5	€1 = 0.2 play	€5 = 1 play	€10 = 3 plays @ 3.33¢ per play		ON	ON	OFF	ON	ON	
29	€7.50	€5 = 0.66 play	€10 = 1.33 plays	€15 = 2 plays		OFF	OFF	ON	ON	ON	
30	€7.50	€5 = 0.66 play	€10 = 1.33 plays	€10 = 2 plays @ €5 per play		ON	OFF	ON	ON	ON	
31	€10	€10 = 1 play	€20 = 2 play	€30 = 3 play		OFF	ON	ON	ON	ON	
32			Free Play			ON	ON	ON	ON	ON	

## 12-5 UNIVERSAL CARD LINK (UCL)

The purpose of the UNIVERSAL CARD LINK is to harmonize the Coin-Operated Industry for a common/standard Card Reader Interface. Having a standard to which manufacturers of Video, Redemption and Card Systems adheres to eliminates confusion and simplified the coin handling process.

Connections / Functionality.

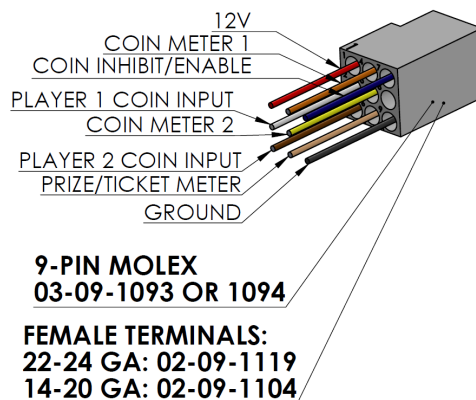
Pin 1	+12v- Supply to Card System = Minimum of 2A available for the card systems and a Max of 3A.
Pin 2	Player 1 or Coin 1 - input to the game PCB. This pin is used for games with only one coin input.
Pin 3	Empty - this is an unused pin and could be used for future expansion or other requirements.
Pin 4	Coin meter 1 - is connected to the coin meter 1 output from the game PCB and can be used by card systems for monitoring purposes. Not used if the game doesn't have this output.
Pin 5	Empty - this is an unused pin and could be used for future expansion or other requirements.
Pin 6	Prize or ticket Meter- is connected to the Prize or Ticket Meter output from the game PCB and can be used by card systems for monitoring purposes. Not used if the game doesn't have this output.
Pin 7	Coin Inhibit/Enable- is connected to the Coin or Note Inhibit/Enable output from the Game PCB and is used where the game has this feature for disabling any payment. This is normally for states like New Jersey that limit the amount of money that can be inserted at one time.
Pin 8	Ticket Run/Enable - is connected to the ticket run line between the game PCB and ticket dispenser in standard redemption games. This is commonly used for systems using paperless or E-ticket.
Pin 9	Ground- is connected to the common Ground connection, the same ground as the Game PCB.

### Note:

This connector has been designed for use in many different types of games and from all different game manufacturers; because of this, some pin connections will not be populated in all games. The pins that are used will depend on the type of game and the specific inputs and outputs that the game and the manufacturer uses. Along with incorporating this Universal Card Link into your products, you will NEED to apply the "UCL" symbol decal near and on the connector or coin mech/door area to allow the customer to easily recognize that their game can be quickly hooked up to a debit card system.



1	DC+12V
2	P1 COIN IP
3	P2 COIN IP
4	COIN COUNTER 1
5	COIN COUNTER 2
6	PRIZE/TICKET/COUNTER
7	COIN INHIBIT/ENABLE
8	SPARE
9	GND



## 13 LAMPS, LIGHTING & SENSORS

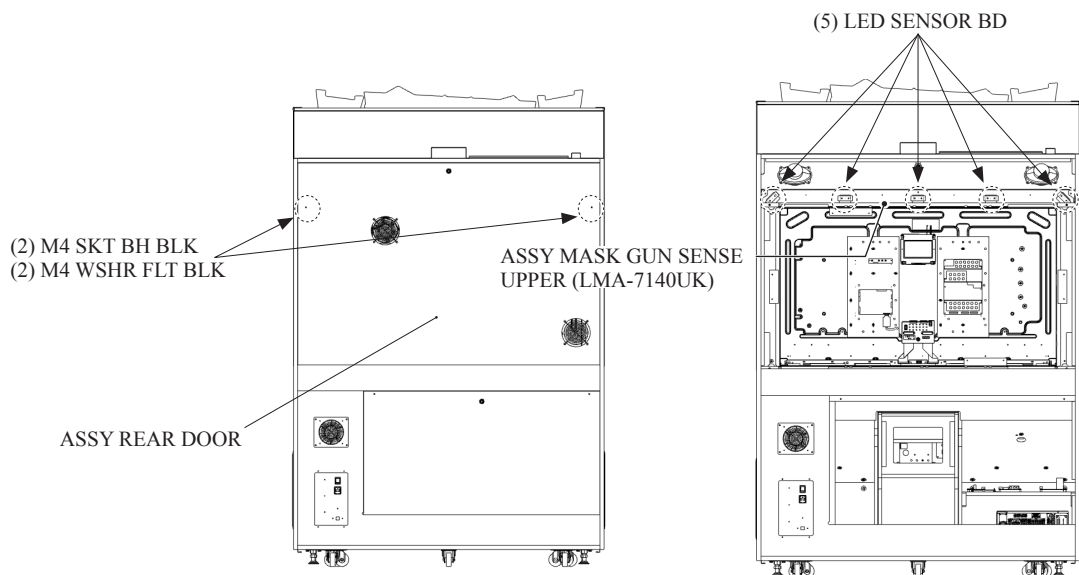
### 13-1 REPLACING THE UPPER GUN MASK SENSORS

#### WARNING

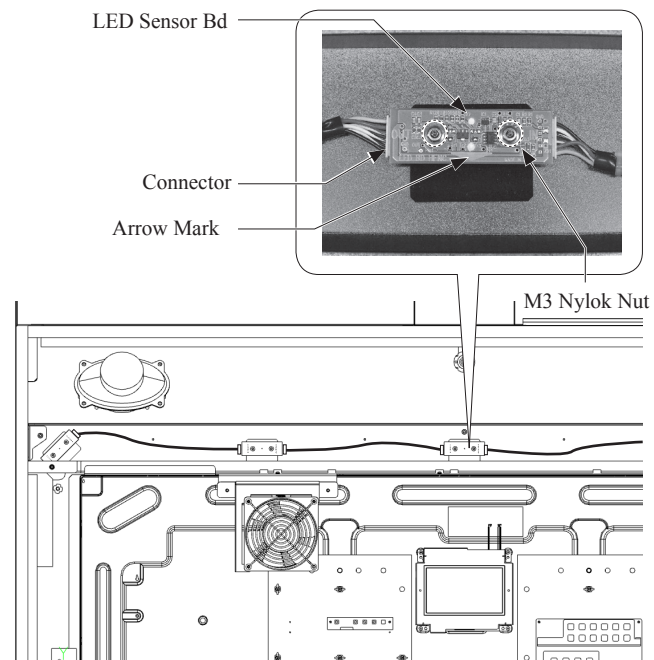
- Work should be carried out by a qualified maintenance person(s) or technician. Failing to use qualified personnel may result in injury or electric shock.
- Turn off the power and remove the mains connector from the machine before attempting any work..
- Take care not to damage any wiring. Damaged wires can cause and electric shock or fire hazard.

Depending on the environment it is recommended that the Sensor Windows are checked frequently to ensure that they are kept clean. Failing to keep the Sensor Windows clean will affect the performance of the game. Clean the outside of the using a soft damp lint free cloth. Use a compressed air blower such as a keyboard air aerosol to clean the inside of the windows.

- 1 Remove the power from the machine and disconnect the mains input connector from the wall socket.
- 2 Remove the (2) M4 SKT BH BLK Screws from the upper corners of the ASSY REAR DOOR. Using (2) people, unlock the door and place to one side. The (5) LED SENSOR BDs can be located along the top edge.



- 
- 3** Locate the Controller Sensor Bd and carefully disconnect the connectors either side. Loosen and remove the (2) M3 Nylock nuts and carefully remove the Controller Sensor Bd. Take note of the direction of the arrow. All arrows should point inwards towards the LCD Screen.



- 
- 4** When putting the LED Sensor Bd back in place, follow the steps in reverse order, paying careful attention to the direction of the sensors.

---

NOTE: The controller sensor (light-up side) must be installed with the arrow markings facing inwards toward the LCD monitor, as shown in the picture above. For example, the LED SENSOR BDs installed above the LCD monitor show the arrow markings pointing down; the LED SENSOR BDs installed below the LCD monitor show the arrow markings pointing up.

## 13-2 REPLACING THE LOWER GUN MASK SENSORS

### WARNING

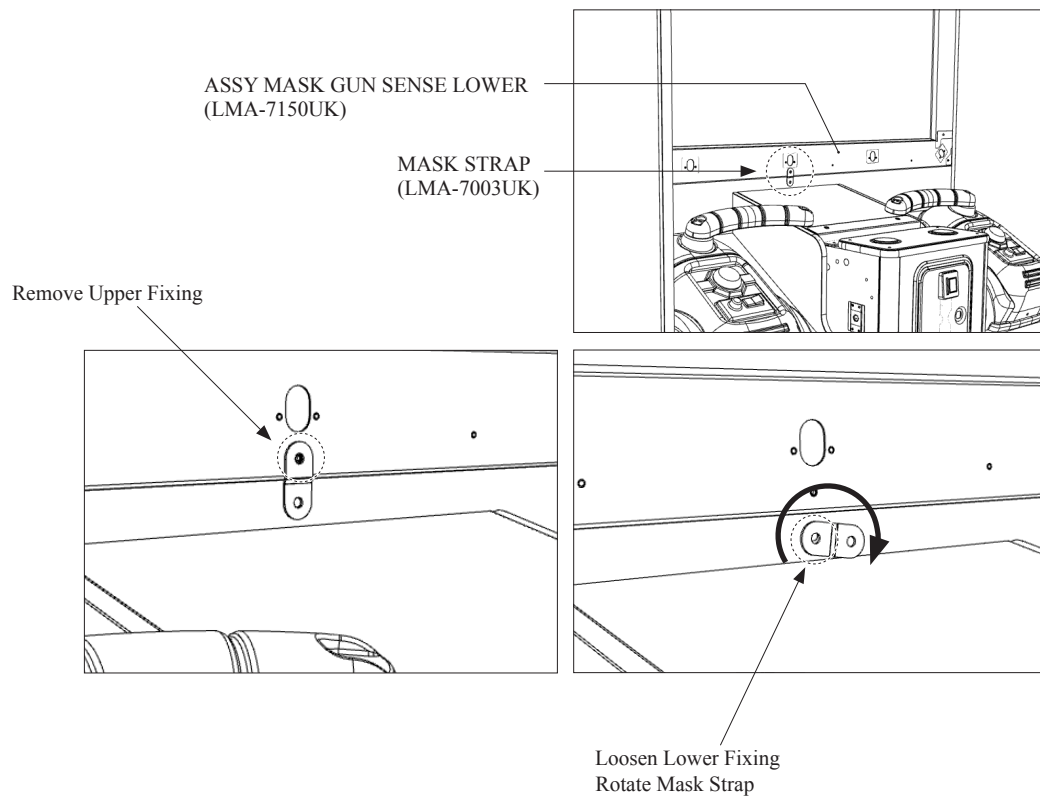
- Work should be carried out by a qualified maintenance person(s) or technician. Failing to use qualified personnel may result in injury or electric shock.
- Turn off the power and remove the mains connector from the machine before attempting any work..
- Take care not to damage any wiring. Damaged wires can cause and electric shock or fire hazard.

Depending on the environment it is recommended that the Sensor Windows are checked frequently to ensure that they are kept clean. Failing to keep the Sensor Windows clean will affect the performance of the game.

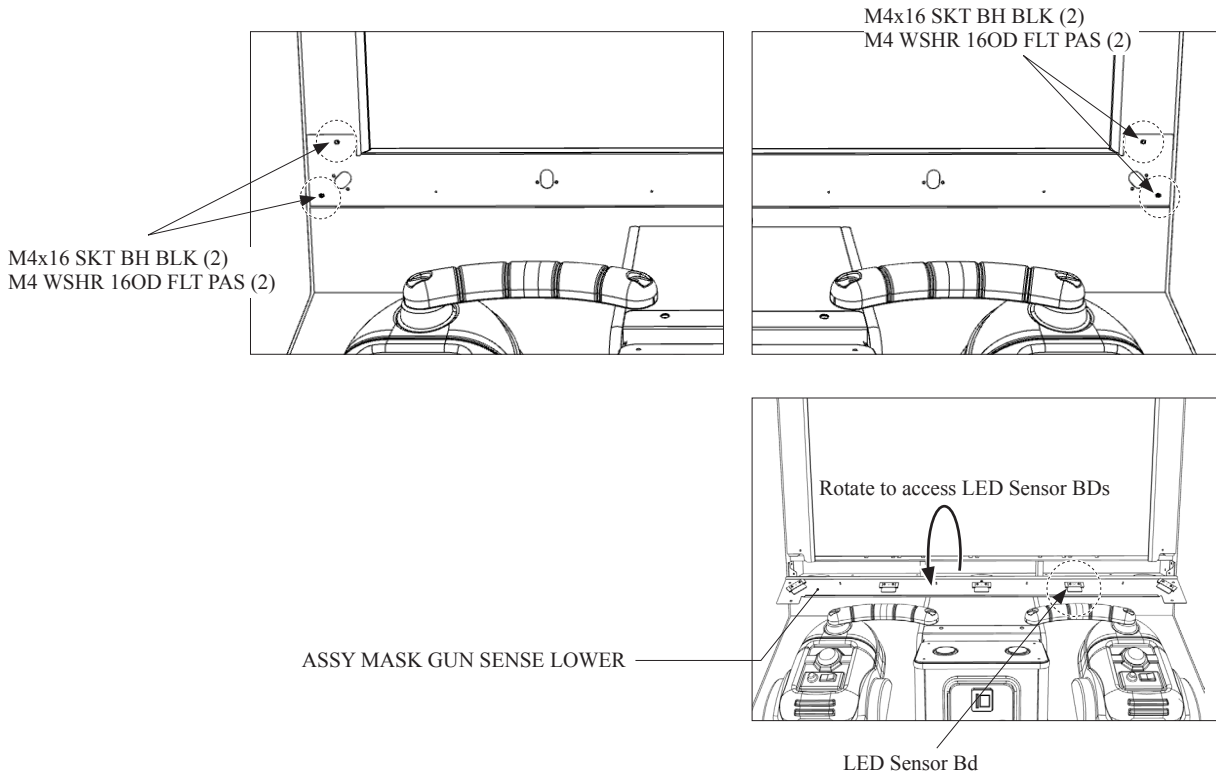
Clean the outside of the using a soft damp lint free cloth. Use a compressed air blower such as a keyboard air aerosol to clean the inside of the windows.

**1** Remove the power from the machine and disconnect the mains input connector from the wall socket.

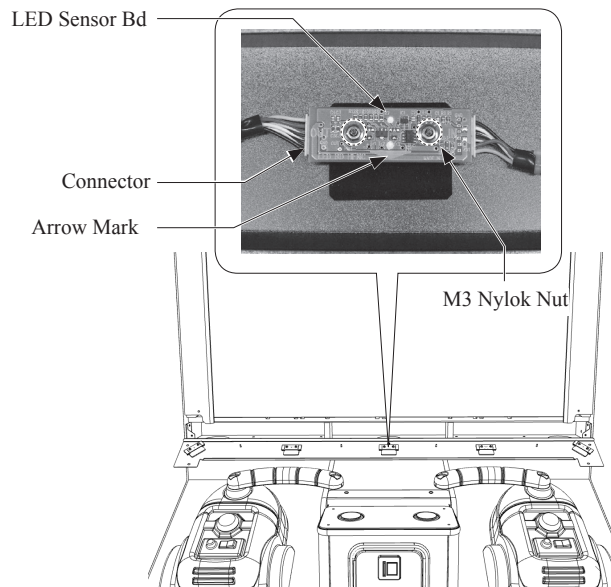
**2** Locate the MASK STRAP (LMA-7003UK) positioned in the Centre of the ASSY MASK GUN SENSE LOWER. Loosen the lower fixing and remove the upper fixing.



**3** Remove the (4) M4x16 SKT BH BLK machine screws from the corners of the ASSY MASK GUN SENSE LOWER. Carefully rotate to reveal the LED Sensor BDs on reverse side.



**4** Locate the Controller Sensor Bd and carefully disconnect the connectors either side. Loosen and remove the (2) M3 Nylock nuts and carefully remove the Controller Sensor Bd. Take note of the direction of the arrow. All arrows should point inwards towards the LCD Screen.



**5** When putting the LED Sensor Bd back in place, follow the steps in reverse order, paying careful attention to the direction of the sensors.

**NOTE:** The controller sensor (light-up side) must be installed with the arrow markings facing inwards toward the LCD monitor, as shown in the picture above. For example, the LED SENSOR BDs installed above the LCD monitor show the arrow markings pointing down; the LED SENSOR BDs installed below the LCD monitor show the arrow markings pointing up towards the LED Screen.



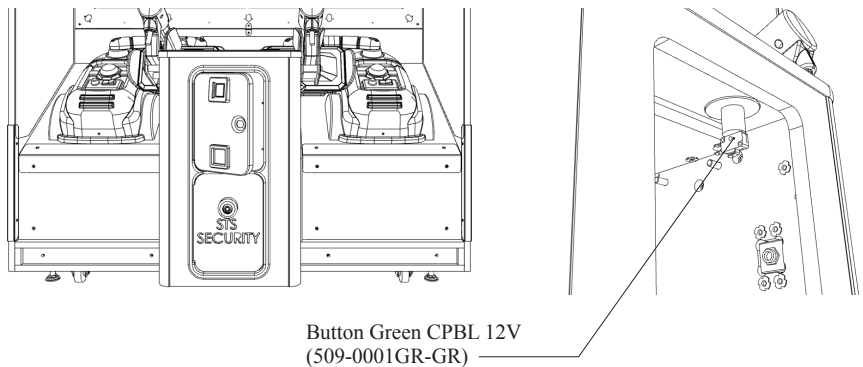
## 13-3 REPLACING THE START BUTTON LAMPS

### WARNING

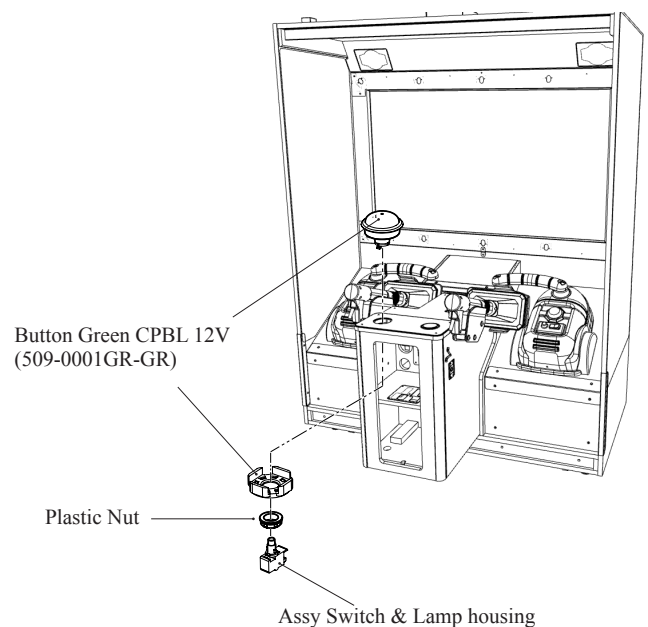
- Work should be carried out by a qualified maintenance person(s) or technician. Failing to use qualified personnel may result in injury or electric shock.
- Turn off the power and remove the mains connector from the machine before attempting any work..
- Take care not to damage any wiring. Damaged wires can cause an electric shock or fire hazard.

**1** Remove the power from the machine and disconnect the mains input connector from the wall socket.

**2** Using the key, open the Coin Door. The START BUTTONS can be found on the inside upper wall.

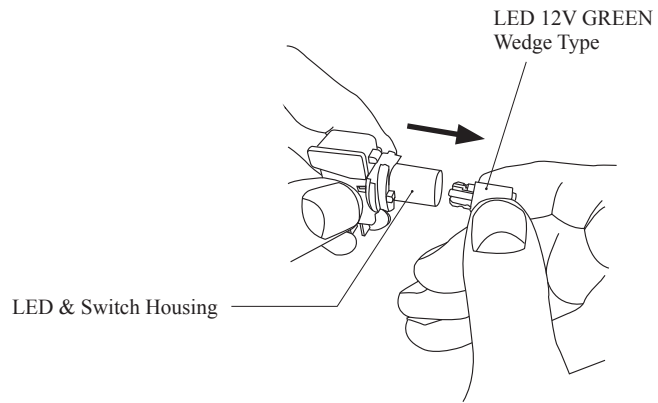


**3** Remove the bottom connector from the start button to be replaced. Clasp the Switch & Lamp housing between your finger and thumb and gently pull down on it. Remove the plastic nuts and remove the button if needed.

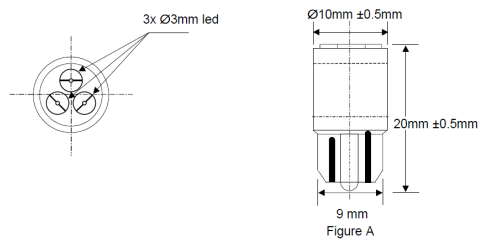




**4** Once the Switch and Lamp housing has been removed from the Button. Remove the LED lamp by again clapping it between your finger and thumb and gently pull to remove. *Note: Do not twist the LED whilst it is in the holder.*



**5** Replace the LED lamp with that of the same type and voltage.



Absolute Maximum Ratings AT  $T_a=25^\circ\text{C}$

Parameter	Max	Unit
Power dissipation	240	mW
Continuous Forward Current	20	mA
Peak Forward Current (1/10 Duty Cycle 0.1 ms Pulse Width)	60	mA
Operation Temperature Range	-25°C to +85°C	
Storage Temperature Range	-40°C to +85°C	

**6** Replace the LED lamp and reassemble following Steps 2-4 in reverse order.

## 13-4 REPLACING THE INTERIOR DOWNLIGHT LEDs

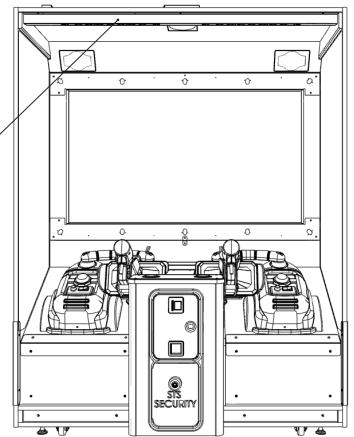
### WARNING

- Work should be carried out by a qualified maintenance person(s) or technician. Failing to use qualified personnel may result in injury or electric shock.
- Turn off the power and remove the mains connector from the machine before attempting any work..
- Take care not to damage any wiring. Damaged wires can cause and electric shock or fire hazard.

**1** Remove the power from the machine and disconnect the mains input connector from the wall socket.

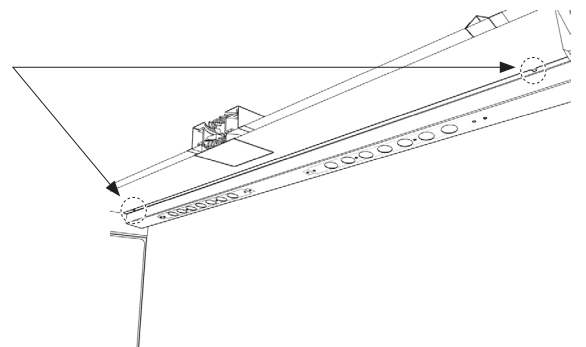
**2** Locate the ASSY TOP DOWNLIGHT LED positioned on the interior roof of the ASSY MONITOR CABI.

ASSY TOP DOWNLIGHT LED  
LMA-7180UK

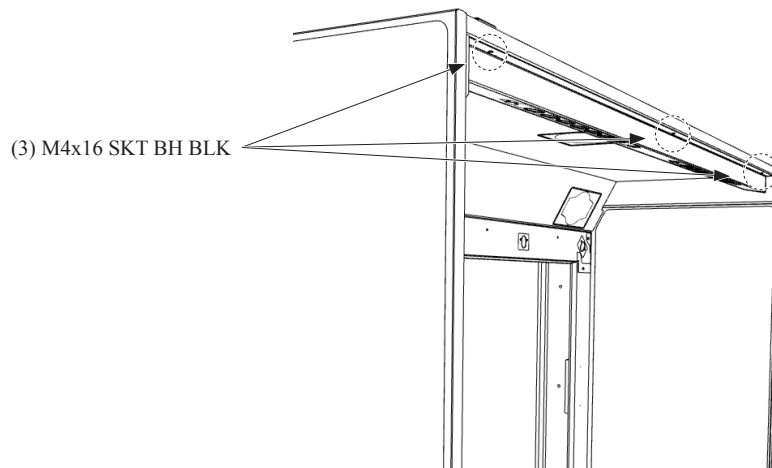


**3** Loosen the (2) M4x16 Socket Button Head Machine Screws positioned on the inside of the Cabinet.

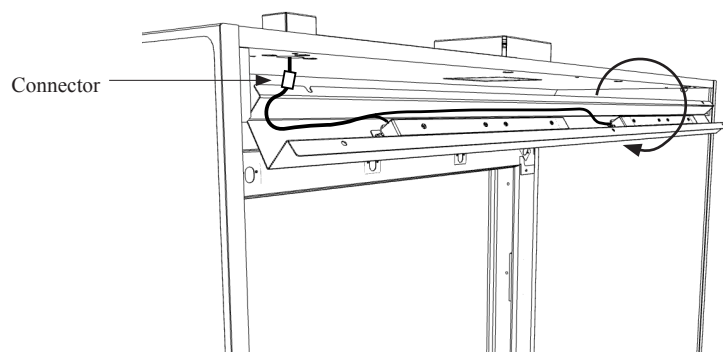
Loosen (2) M4x16 SKT BH BLK



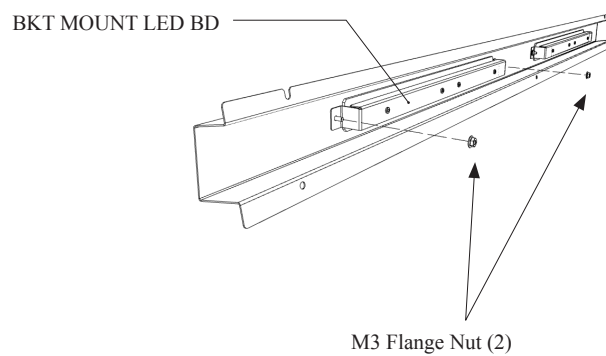
- 
- 4** Remove the (3) M4x16 SKT BH BLK machine screws and associated washers



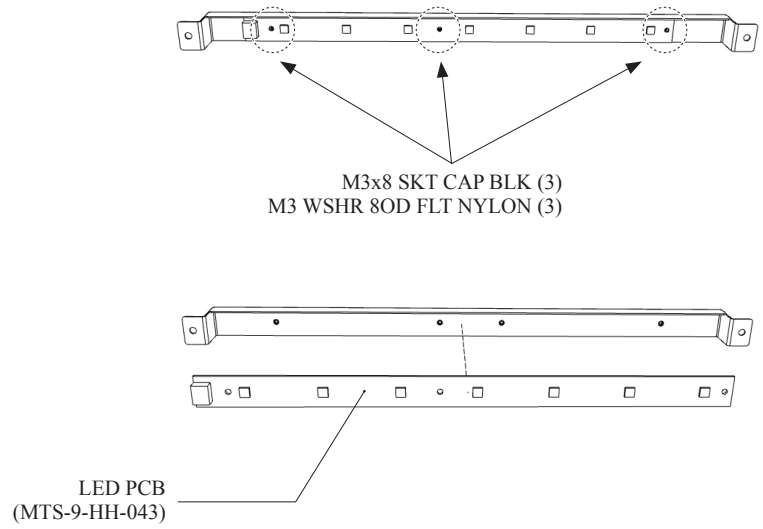
- 
- 5** Carefully turn the ASSY TOP DOWNLIGHT LED to reveal the connector and disconnect. Remove the assembly from the cabinet.



- 
- 6** Remove the (2) M4 FLG NUT from the BKT MOUNT LED BD.



- 
- 7 Remove the (3) M3x8 SKT BH BLK machine screws and separate the LED PBD from the BKT MOUNT LED BD.



- 
- 8 Replace the LED PCB and reassemble following Steps 3 to 7 in reverse order.

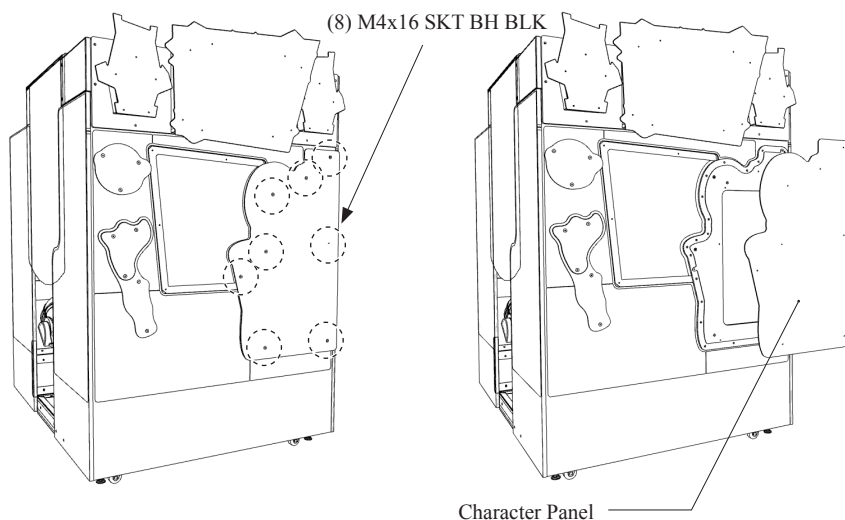
## 13-5 REPLACING THE CHARACTER LEDs

### WARNING

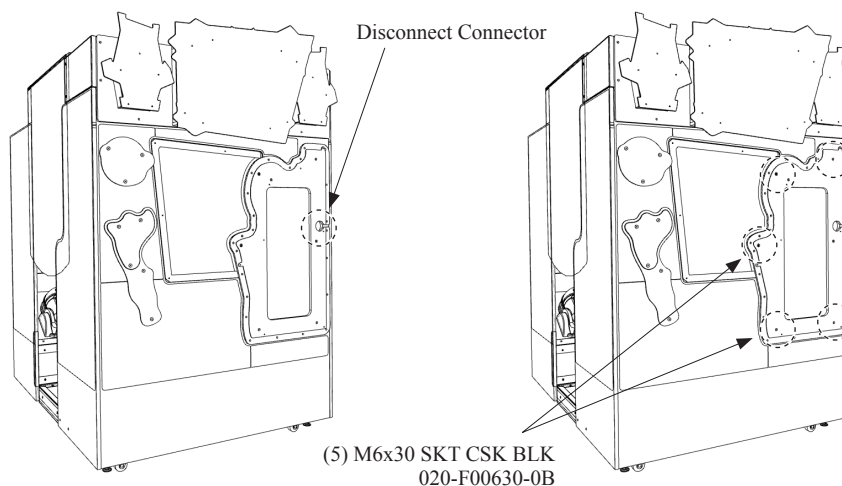
- Work should be carried out by a qualified maintenance person(s) or technician. Failing to use qualified personnel may result in injury or electric shock.
- Turn off the power and remove the mains connector from the machine before attempting any work..
- Take care not to damage any wiring. Damaged wires can cause and electric shock or fire hazard.

**1** Remove the power from the machine and disconnect the mains input connector from the wall socket.

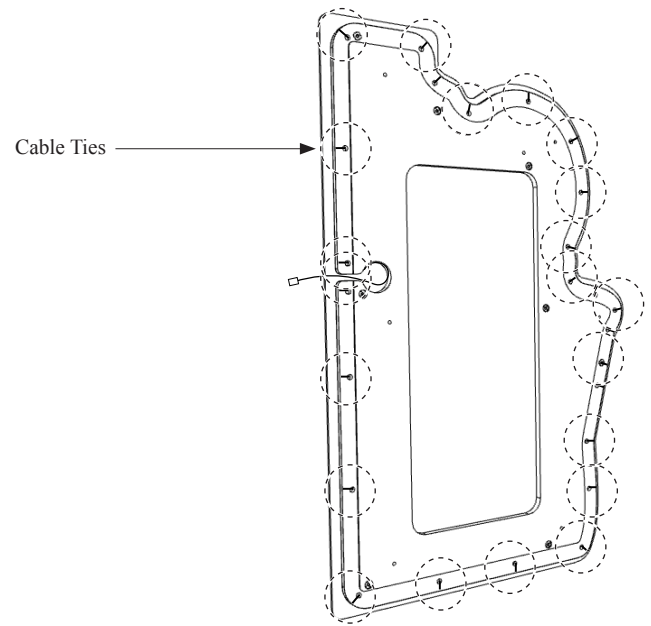
**2** Remove the (8) M4x16 SKT BH BLK and (8) M4 WSHR FLT BLK from the CHARACTER PANEL. Once separated, carefully place to one side.



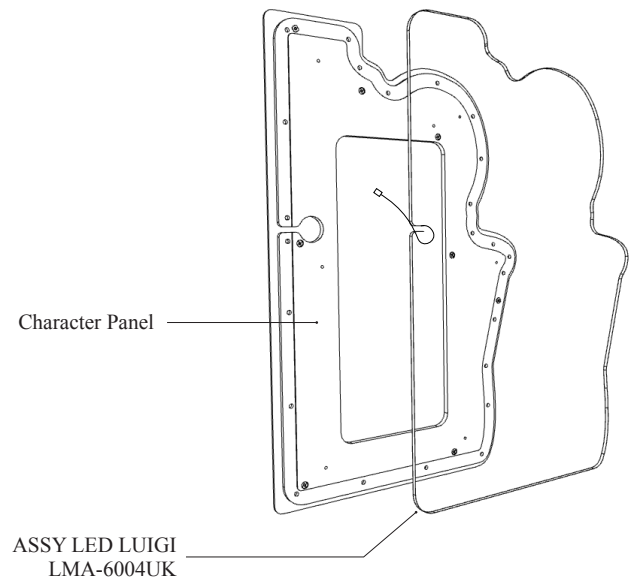
**3** Disconnect the connector to the Character LED BD. Remove the (5) M6x30 Countersunk Socket Screws which secure the Character Panel to the Cabinet.



- 4** Using a pair of wire cutters, snip the 24 Cable Ties which secure the ASSY LED LUIGI around the perimeter of the Character Panel.



- 6** Once all the Cable Ties have been removed, carefully peel away the ASSY LED LUIGI from the Character Panel.



- 7** Replace the ASSY LED LUIGI and reassemble following Steps 1 to 6 in reverse order. Note: All Character LEDs are fitted in the same way. Use these instructions as a guide to replace the others.

## 14 PERIODIC INSPECTION

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.

### WARNING

- Every 6 months check to see if power cords are damaged, the plug is securely inserted, dust is accumulated between the socket outlet and the power plug, etc. Dust will accumulated if using the product regularly. Continued use with the presence of accumulated dust may result in a fire and or electric shock.
- There is the danger of accidents involving electrical shorts circuits or fire caused by factors such as the deterioration of insulation in electrical and electronic equipment over time. Check that there are no abnormalities such as odours from burning.
- For all normal maintenance procedures, always turn off the power before beginning. Starting the procedures with the power still on can result in electric shocks or short circuits.
- Do not use a water jet (high pressure washing device) or hose to clean this product. It was not designed to be cleaned by a water jet. Water could get inside and cause electrocution or short circuits. The product could also be damaged in such a way that it is difficult to repair.

### CAUTION

- Be careful not to get your fingers caught when opening/closing or attaching/removing doors, lids and other such parts.
- When working inside the cabinet, you could get caught on parts or scratch yourself on them. Check the inside of the cabinet and be aware of where the parts are before performing the work.

**Cleaning the Cabinet Surfaces**

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

Some general-purpose household, kitchen and furniture cleaning products may contain strong solvents that degrade plastic components, coatings, and print. Before using any cleaning product, read the product's cautionary notes carefully and test the product first on a small area that is not highly visible.

**DISPLAY (LCD SCREEN Cleaning)**

When the Display LCD Screen surfaces are dirty, smudges or greasy, gently wipe the display with a dry, lint-free, soft cloth. If you see a scratch-like mark on your display, it might be a stain which has been transferred from food like matter when the screen was depressed from the outside. To avoid damaging surface finish, do not use such solvents as thinner, benzene, etc. the same applies to ethyl alcohol, or abrasives, bleaching agent and chemical dustcloths.

Wipe or dust the stain gently with a dry, soft cloth. If the stain remains, moisten a lint-free, soft cloth with water or a 50-50 mixture of isopropyl alcohol and water that does not contain impurities. Wring out as much of the liquid as possible and wipe the display again; do not let any liquid drip from the cloth.

Antistatic and purpose made LCD cleaning wipes are also acceptable alternatives.

**STOP IMPORTANT**

- **When cleaning the surface, always use a dry soft lint free cloth. It maybe necessary to dampen the cloth to remove heavier stains.**
- **Please adhere to the following when using a detergent.**
- **When using a detergent to remove stronger stains, only use a small amount of neutral household detergent diluted with water. Use a soft lint free cloth to wipe the surfaces. Always wring out the cloth before applying.**
- **Do not apply a wet cloth to clean the surface.**
- **Do not use abrasive detergents such as a bleach or any acidic or alkaline detergents. Do not use any agents such as thinners or solvents such as alcohol (ethanol).**
- **Do not vigorously rub the surface. Do not use a brush or scourer.**
- **Always take care when cleaning the floor surfaces. Be aware of the side frame and avoid any sudden movements.**



## PERIODIC INSPECTION TABLE

PERIOD	ITEMS	DESCRIPTION
As appropriate	CABINET SURFACE	Cleaning
	ELECTRONIC COMPONENTS	Inspection
	OUTER LIGHTING	Inspection
	CURTAIN	Cleaning/Inspection
	WINDOWS	Clean/Inspection
Daily	CABINET	Confirm adjusters contact floor
		Stability
	CONTROLLER	Cleaning /Loose Screws
		Operation/Calibration
CASH BOX	Empty Coins	
COIN ACCEPTOR	Check Operation	
Weekly	1P & 2P BUTTONS	Check Input/Output
	COIN ACCEPTOR	Clean
Monthly	SPEAKERS	Check volume
	LEVER MECH	Check Output in Test
	INTERIOR LIGHTING	Check Output in Test
	GAME BD Nu 1.1	Settings check
Every 3 Months	COIN SELECTOR	Cleaning
	CABINET INTERIOR	Cleaning/Inspection
Every 6 Months	GAME BD Nu 1.1	Cleaning
	POWER PLUG	Inspection, Cleaning
	POWER LEAD	Inspection

### **STOP** IMPORTANT

**Do not use organic solvents such as thinner, benzene, or gasoline. These may cause the material of the machine to degrade.**

Wipe clean dirty areas of the cabinet using a soft dry cloth. If the dirt is hard to remove, wipe clean using a soft cloth dipped in a neutral detergent, then lightly scrub with a damp cloth, and finally wipe down with a soft dry cloth.

## 14-1 CLEANING

### STOP IMPORTANT

**Do not use organic solvents such as thinner, benzene, or gasoline. These may cause the material of the machine to degrade.**

#### Cleaning the Monitor

Wipe clean dirty areas of the cabinet using a soft dry cloth.

If the dirt is hard to remove, wipe clean using a soft cloth dipped in a neutral detergent, then lightly scrub with a damp cloth, and finally wipe down with a soft dry cloth.

#### Cleaning the Coin Selector

Wipe clean dirty areas of the cabinet using a soft dry cloth. If the dirt is hard to remove, wipe clean using a soft cloth dipped in a neutral detergent, then lightly scrub with a damp cloth, and finally wipe down with a soft dry cloth.

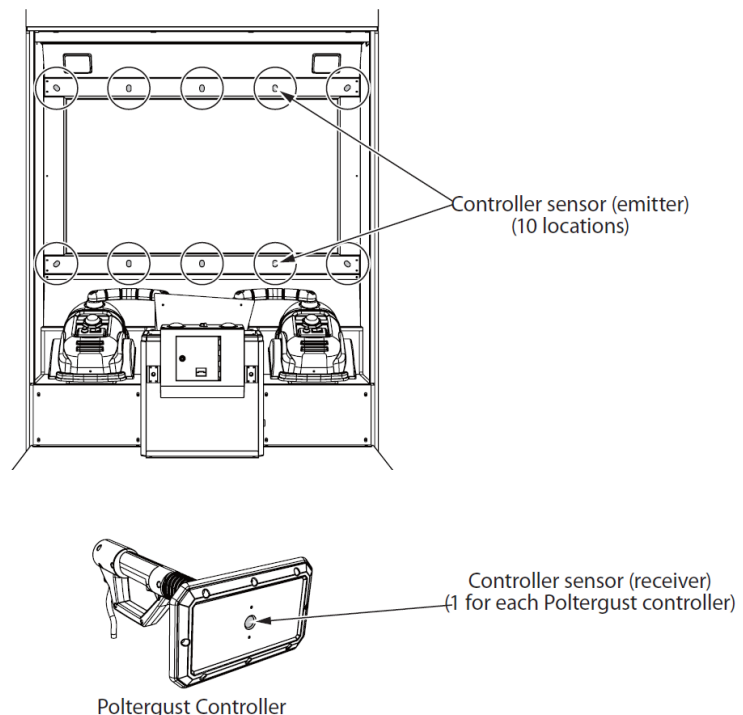
Refer to section 12 “Coin Handling for detailed information.

#### Cleaning the Controller Sensor

Wipe clean dirty areas of the cabinet using a soft dry cloth. If the dirt is hard to remove, wipe clean using a soft cloth dipped in a neutral detergent, then lightly scrub with a damp cloth, and finally wipe down with a soft dry cloth.

NOTE: Avoid letting the controller sensor get scratched or otherwise damaged. A damaged sensor may result in the Poltergust’s detection abilities being impaired.

NOTE: Clean the sensor of the Poltergust controller every day in order to maintain the controller’s accuracy.

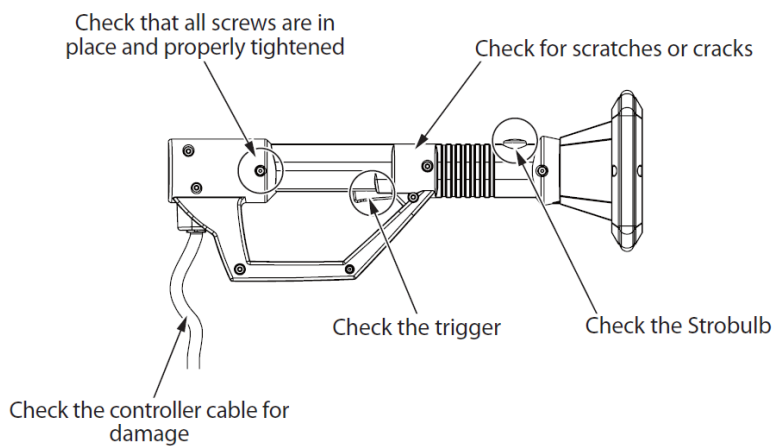


## 14-2 CHECKING CONTROLLER STATUS

### STOP IMPORTANT

**Do not use organic solvents such as thinner, benzene, or gasoline. These may cause the material of the machine to degrade.**

Check the Poltergust controller every day for any scratches or cracks on the outer surfaces, any loose or lost screws, damage to the controller cable, and to ensure that the Strobuls button and trigger are functioning properly. Allowing a player to play with a faulty controller may result in injury.



NOTE: Please refer to section 9 of this manual Test and Data Display "Input Test" when checking the Strobuls button and trigger.

## 15 TROUBLESHOOTING

### 15-1 TROUBLESHOOTING (WHEN NO ERROR MESSAGE IS SHOWN)

#### WARNING

- 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.

#### Replacing Fuses

#### WARNING

- 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.
- 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.

 **WARNING**

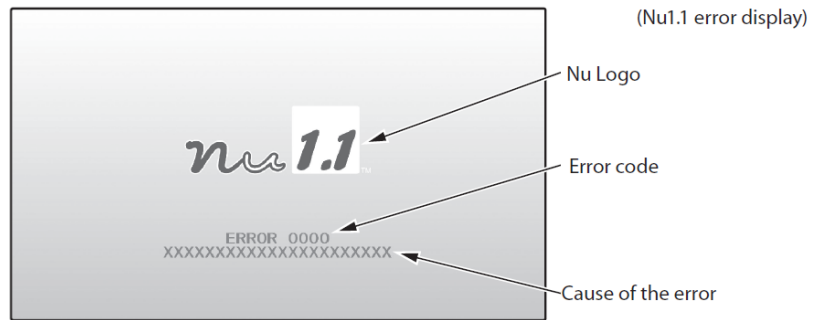
- This work should be performed by site maintenance personnel or other skilled professionals. Work performed by non-technical personnel can cause a severe accident such as an electric shock. If there are no site maintenance personnel or other skilled professionals available, turn the power off immediately and contact the office given in this manual or from the point of purchase.
- When working with the product, be sure to turn the power off. Working with the power on may cause an electric shock or short circuit. When working with the product, be sure to turn the power off. Working with the power on may cause an electric shock or short circuit.
- Be careful not to damage the wires. Damaged wires may cause electric shock or short circuit or present a fire risk.
- After the cause of circuit protector activation has been removed, have the circuit protector re-engaged. If the unit is used continuously as is, there could be heat generation or fire, depending on the cause of the activation.
- When the power has been engaged or the TEST MODE has been terminated, initialization takes place automatically. If anyone is near the product, they could come in contact or collide with it. Check carefully to be sure that no one is near the product and that no tools or items have been left on the product, then engage the power or terminate TEST MODE.
- If problems other than those covered in this manual arise, or if no improvements can be noted after measures given in this manual have been taken, do not take measures indiscriminately. Cut off the power immediately and contact the office shown in this manual or the dealer from whom the product was originally purchased. Indiscriminate countermeasures could lead to unforeseeable accidents. They could also result in permanent damages. Also, if the power is left on while there is an abnormality, a fire, electric shock or other serious accident can occur.

 **IMPORTANT**

- If an error message is displayed, identify the cause right away and take the appropriate countermeasures. Leaving the error unaddressed could result in a breakdown.
- If a problem occurs, first inspect the connection of any wiring connectors.
- 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.

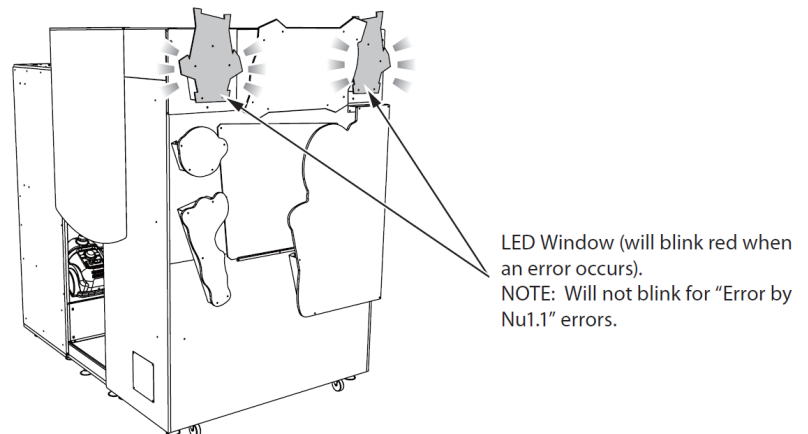
## 15-1 CLEANING ERRORS

This machine has two types of errors - "Error by Nu1.1" and "Error on system side." When an error occurs the error code will display on the LCD screen. All error codes except for 3001 - 3003 are "Error by Nu1.1" errors. Please consult section 16 of this Service Manual" and remove the cause of the error.



Error codes 3001 - 3003 are "Error by system side" errors.

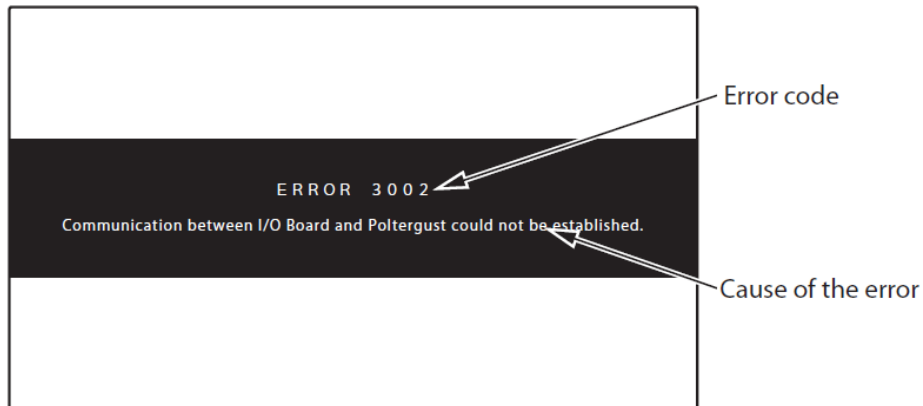
An LED window on the outside of the machine will blink red, and the error code will be displayed on the LCD screen. Confirm the error codes in "8-3 Error Code List," then remove the cause of the error.



The error code may not display on the LCD screen even if the LED window on the cabinet outer is blinking red. In that case there is a malfunction with the Poltergust controller. Please refer to "15-3 List of Poltergust Malfunctions" and remove the cause of the error.

## 15-2 ERROR CODES

An error code will be displayed if there is trouble with the machine.



ERROR CODE	ERROR NAME	CAUSE	SOLUTION
3001	Communication Error (I/O)	Communication between the PC and I/O Board could not be established.	Confirm that the Nu1.1 COM1 (IO) connector and the main control board AMO-10028 CIRCLINK(2) are properly connected. Once confirmed, turn off the power, wait five seconds and turn the power back on.
3001	Communication Error (Poltergust)	Communication between the I/O Board and Poltergust could not be established.	Confirm that the main control board AMO-10028 CIRCLINK(2) and the controller CPU BD board OMC-GZH200N-C are properly connected. Once confirmed, turn off the power, wait five seconds and turn the power back on.
3003	Communication Error (LED)	Communication between the PC and I/O Board (LED) could not be established.	Confirm that the Nu1.1 COM2 (LED) connector and the main control board AMO-10028 CIRCLINK(2) are properly connected. Once confirmed, turn off the power, wait five seconds and turn the power back on.

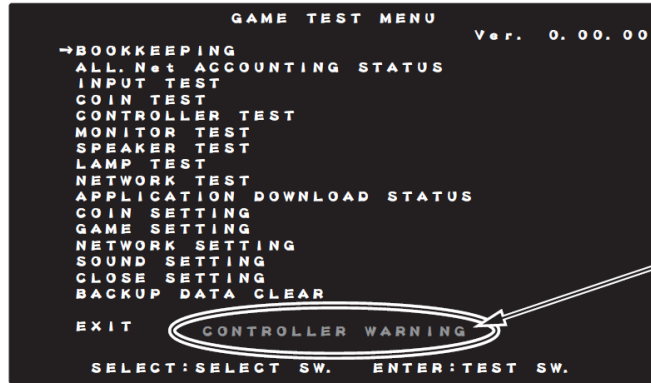
NOTE: If the error fails to be resolved after taking the necessary remedy steps, contact your local SEGA office or distributor.

## 15-3 LIST OF POLTERGUST MALFUNCTIONS

If the LED window on the cabinet outer is blinking red but there is no error code displayed on the LCD screen, then there is a malfunction with the Poltergust controller.

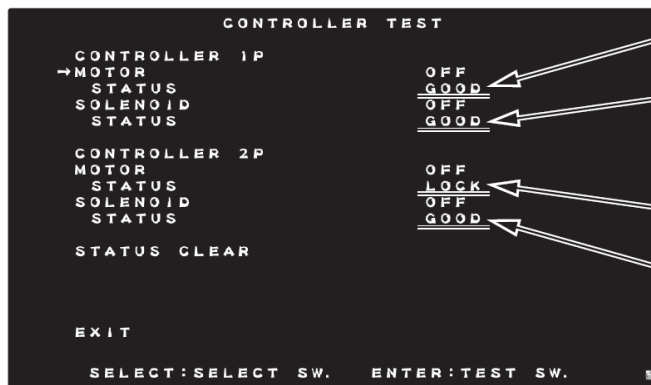
NOTE: If “CONTROLLER WARNING” still displays after taking the necessary remedy steps, contact your local SEGA office or distributor.

Press the “TEST switch” on the maintenance panel to go into test mode. “CONTROLLER WARNING” will be displayed as shown in the diagram.



CONTROLLER WARNING

Select “CONTROLLER TEST” to determine which part of the controller is malfunctioning.



1P Vibration motor status  
1P solenoid status  
2P Vibration motor status  
2P solenoid status

Part	Status	Cause	Solution
1P/2P MOTOR STATUS	GOOD	There are no problems with the operation of the vibration motor.	No action required
	MOVE ERROR	The vibration motor is not operating.	Check that the cable is not disconnected. If nothing is wrong with the cable, then check to see if there is anything wrong with the motor itself or the controller drive board.
	LOCK	The vibration motor is locked.	Check to see that no foreign objects are stuck in the vibration motor. If not, check to see if there is anything wrong with the motor itself or the controller drive board.
1P/2P SOLENOID STATUS	GOOD	There are no problems with the operation of the solenoid.	No action required
	MOVE ERROR	The solenoid is not operating.	Check that the cable is not disconnected. If nothing is wrong with the cable, then check to see if there is anything wrong with the solenoid itself or the controller drive board.
	OVERCURRENT	An overcurrent has run through the solenoid.	Check that the cable has not short-circuited. If nothing is wrong with the cable, then check to see if there is anything wrong with the solenoid itself or the controller drive board.



## 16 GAME BOARD (Nu1.1)

### WARNING

- When working with the product, be sure to turn the power off. Working with the power on may cause an electric shock or short circuit.
- Be careful not to damage the wires. Damaged wires may cause an electric shock, short circuit or present a risk of fire.
- Do not use this product with connectors other than those that were connected and used with the game board at the time of shipping. Do not carelessly connect wires to connectors that were not used at the time of shipping, as this may cause overheating, smoke or fire damage.

### CAUTION

In this product, setting changes are made during the test mode. The game board need not be operated. Use the game board, etc. as is with the same setting made at the time of shipment so as not to cause electric shock and malfunctioning.

### IMPORTANT

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.

## 16-1 HANDLING PRECAUTIONS

16

GAME BOARD

### WARNING

- To prevent electric shock or IC Board malfunctioning, be sure to turn off the power for the cabinet when installing or removing the IC Board.
- Extraneous matter such as dust on the IC Board can cause the IC Board to generate heat and result in a fire due to short circuit, etc. Ensure the IC Board surfaces are always kept clean.
- Always follow the usage conditions from SEGA as well as the usage conditions for the cabinet you are using for Nu1.1. Failure to do so may cause an overheating and fire.

### IMPORTANT

- Be sure to connect the IC Board and connectors completely. Insufficient insertion can damage IC Board, etc.
- For the IC Board circuit inspection, only the use of Logic Tester is permitted. The use of ordinary testers is not permitted as these can damage the IC Board.
- Do not subject the IC Board to static electricity when installing the IC Board in the cabinet or when connecting wire harness connectors to the IC Board.
- When soldering buttons, etc. to the wire harnesses, be sure to remove the wire harnesses from the IC Board so as not to subject the IC Board to heat.
- Some parts are the ones designed and manufactured not specifically for this product. The manufacturers may discontinue, or change the specifications of, such general-purpose parts. If this is the case, SEGA cannot repair or replace a failed product whether or not a warranty period has expired.

### IMPORTANT

- It is important that the Nu1.1 Game Bd is cleaned free from dust regularly. If dust accumulates within the Nu1.1 Game bd, the Game bd may malfunction.
- If any components are removed during cleaning be sure to reconnect them in the same manner as they were removed. Ill fitted components may malfunction, become faulty or may possibly cause a fire hazard.
- If you are unsure about refitting components then please contact the point of sale to arrange for a return or replacement Nu1.1 Game Bd.

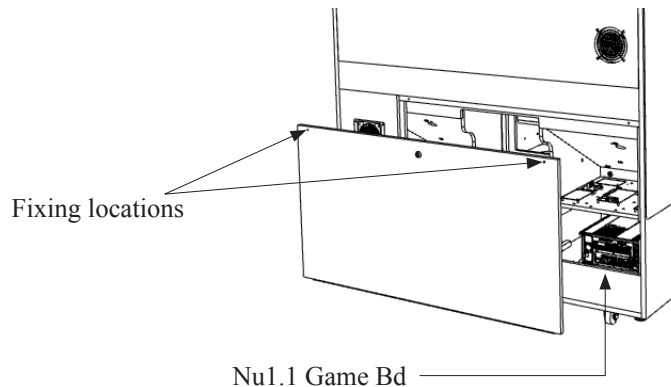
## 16-2 GAME BOARD (Nu1.1) - LOCATION & REMOVAL

### **⚠ WARNING**

- When returning the game board after making repairs or replacements, make sure that there are no errors in the connection of connectors. Erroneous connections can lead to electrical shock, short circuits or fires.
- When connecting a connector, check the direction carefully. Connectors must be connected in only one direction. If indiscriminate loads are applied in making connections, the connector or its terminal fixtures could be damaged, resulting in electrical shock, short circuits or fires.

The Nu1.1 Game Bd is fitted at the rear of the cabinet and mounted to the inside RH base.

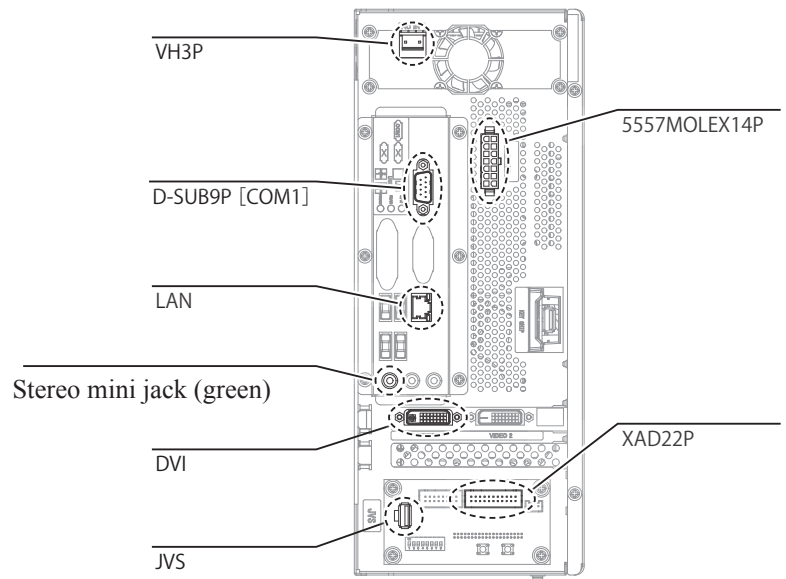
- 1** Remove the power from the machine and disconnect the Power lead.
- 2** Remove the (2) fixings from the upper corners of the door. Unlock and remove the door using the key (supplied)
- 3** The Nu1.1 is located directly inside mounted to the right hand side of the cabinet..



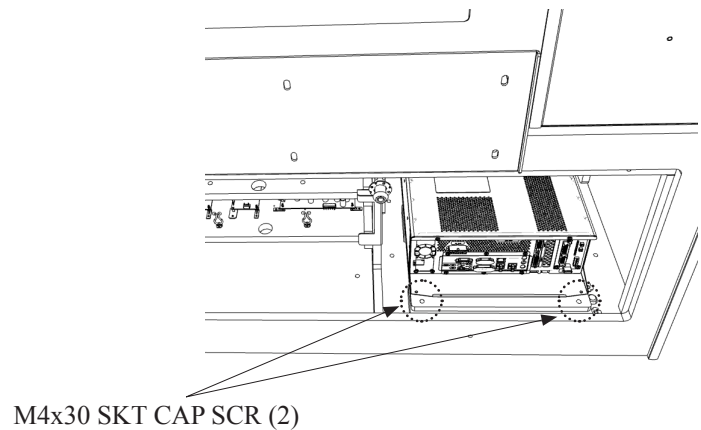
- 4** Prepare to disconnect all the connections to the face of the Nu1.1 Game Bd.



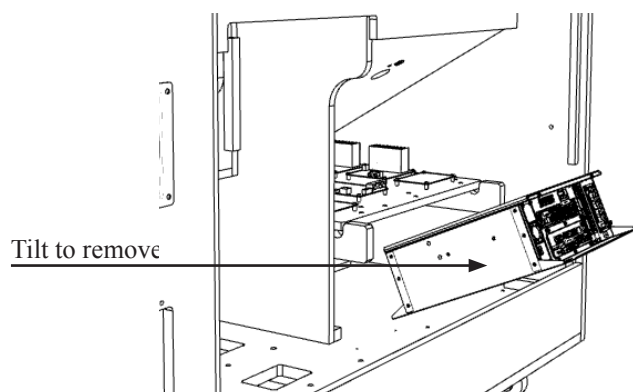
- 5** Carefully disconnect all connectors attached to the Nu1.1 Game Board. The VGA video cable (type D-sub) and DVI cable can be disconnected by loosening the thumb screws either side of the connector. A small flat bladed screwdriver may be used if these seem too tight.



- 6** Remove the (2) fixings which secure the Nu1.1 mount to the cabinet.



- 7** Carefully tilt the Nu1.1 Game Board to remove. Taking care not to damage any wires..



- 8** Reassemble and fit the Nu1.1 back into position by following Steps 2 to 7 in this process in revers order.

## 16-3 Nu1.1 CLEANING

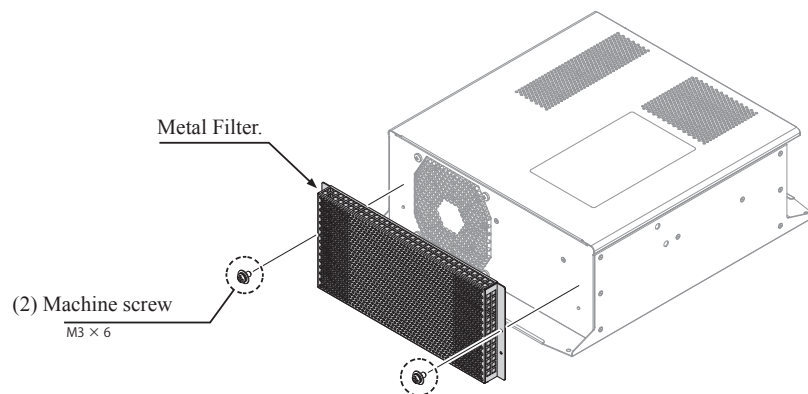
### STOP IMPORTANT

- If either ERROR 0090 or ERROR0091 are displayed then the Game bd must be cleaned and made free from dust particles. These ERRORS have been put in place to prevent the Game bd from overheating in not cleaned on a regularly basis.

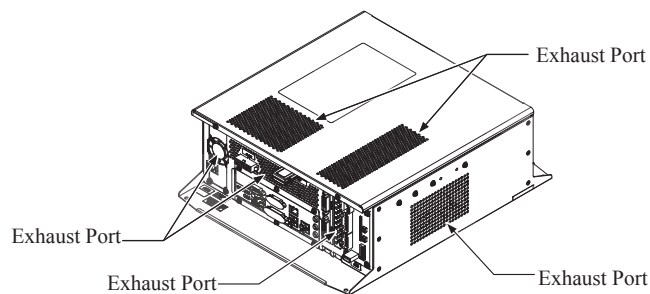
It is important that once a year the cooling vents are cleaned and made free from dust. Please refer to section 16-2 for the Nu1.1 removal procedure.

**1** Refer to section 16-2 of this manual for removal of the Nu1.1 Game Bd procedure.

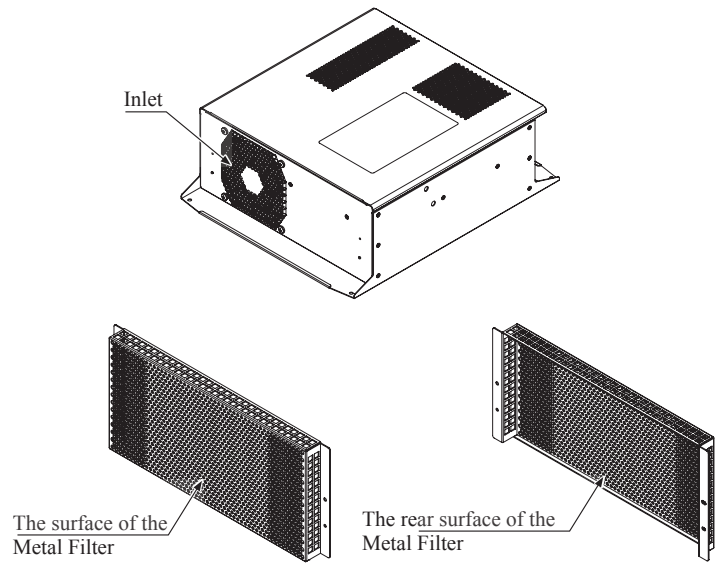
**2** Remove the (2) M3x6 machine screws located either side of the rear vent. (opposing side to the connectors).



**3** Clean both intake and exhaust ports using a vacuum cleaner with a hand brush attachment or similar.



- 
- 4** Clean both front and back sides of the Metal filters.

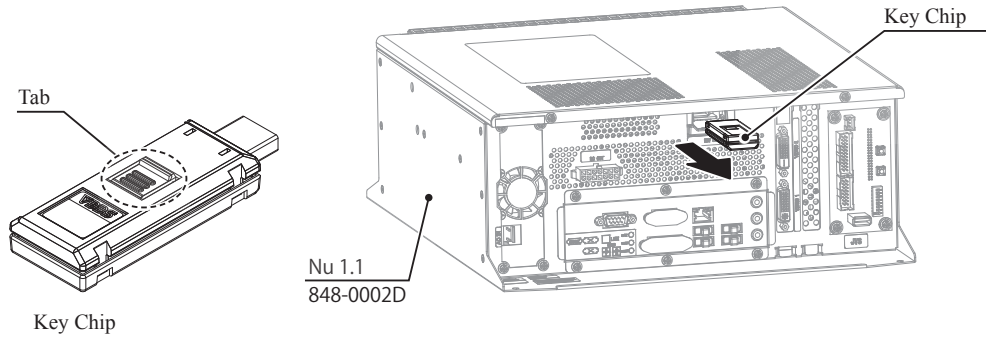


- 
- 5** Also clean the inside of the cabinet in the area where the Game Bd is housed. This will prevent debris being attracted to the newly cleaned filters.

- 
- 6** To reassemble please follow these instructions in reverse order. To mount Game Bd back into the cabinet please follow instructions 3 to 8 in section 16-2.

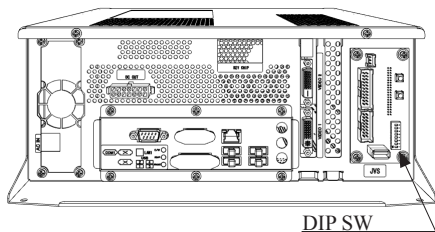
## 16-3 REPLACING Nu 1.1 GAME BD

- 1 Remove power from the machine and disconnect the power cable.
- 2 Refer to section 16-1 Nu 1.1 Removal to remove the Game bd.
- 3 Once the Nu 1.1 Game Board has been removed, unplug the key chip from the Nu 1.1.



- 4 Insert the Key Chip into the replacement Nu 1.1 Game bd (See Step 3)

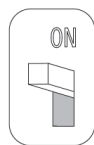
- 5 Set up the DIP SW as per the original Nu 1.1 Game Bd. If you are operating just 1 cabinet without any communication then please set up machine as the “main machine” (1P). If however you are operating a number of cabinets (1 to 4) with communication, then set the DIP SW to the corresponding cabinet position. (See DIP SW settings below.)



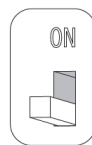
### DIP SW Settings

#### Cabinet 1

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



ON



OFF

- 6 Reassemble and reconnect the Nu 1.1 Game Bd by following in reverse order procedures 2 to 8 in section 16-2 of this manual.

## 16-3 SYSTEM TEST MODE

### STOP IMPORTANT

The details of changes to Test Mode settings are saved when you exit from each Test Mode by selecting EXIT. Be careful because if the power is turned off before that point, changes to the settings will be lost.

### STOP IMPORTANT

- Settings other than coin settings are saved at the point the TEST Button is pressed after selecting EXIT at each TEST screen. Be careful because if the power is turned off before that point, changes to the settings will be lost.
- Coin settings are saved at the point the TEST Button is pressed after selecting EXIT at the SYSTEM TEST MODE screen. Be careful because if the power is turned off before that point, changes to the settings will be lost.
- This manual does not explain the GAME TEST MODE that is used for such as setting the difficulty of games. Refer to the manual for each game.
- The TEST screen display may change depending on the OS version.

SYSTEM TEST MODE can be used to check the information or the operation of the Nu, adjust monitor color, and perform coin/credit settings.

Press the TEST Button to enter the test mode and to display the following SYSTEM TEST MODE.

```
                SYSTEM TEST MODE

SYSTEM INFORMATION
STORAGE INFORMATION
JVS TEST
MONITOR TEST
SPEAKER TEST
COIN ASSIGNMENTS
CLOCK SETTING
NETWORK SETTING
->EXIT

                SELECT WITH SERVICE BUTTON
                AND PRESS TEST BUTTON
```

SYSTEM TEST MODE screen

#### CONTROLS

- Press the SERVICE Button to select menu item.
- Press the TEST Button to execute the selected item.
- Select EXIT and press the TEST Button to return to the game play screen.



## MENU ITEMS

<b>SYSTEM INFORMATION</b>	Displays system information. (See 3-1.)
<b>STORAGE INFORMATION</b>	Displays information on the game stored in the program. (See 3-2.)
<b>JVS TEST</b>	Displays information on the connected JVS I/O boards. (See 3-3.)
<b>MONITOR TEST</b>	Displays the screen to check the output of the monitor. (See 3-4.)
<b>SPEAKER TEST</b>	Displays the screen to test the output of the speaker. (See 3-5.)
<b>COIN ASSIGNMENTS</b>	Displays the screen to alter the credit settings. (See 3-6.)
<b>CLOCK SETTING</b>	Displays the screen to set the date and time. (See 3-7.)
<b>NETWORK SETTING</b>	Displays the screen to determine network settings or to test the network. (See 3-8.)

## 16-3-1 SYSTEM INFORMATION

The SYSTEM INFORMATION screen displays system information.

```

SYSTEM INFORMATION  1/2

KEYCHIP
  KEYCHIP ID      ****-*****
  GAME ID         *****
  MODEL TYPE      **
  REGION          EXP
MAIN BOARD
  MAIN ID         AAV*-*****
  REGION          EXP
  OS VERSION      **.*.**
  MEMORY SIZE     ***MB
  CPU TEMP.       ** [C]
STORAGE DEVICE
  MAIN STORAGE SIZE ***GB
  SUB STORAGE SIZE ***GB
GRAPHIC DEVICE
  DEVICE ID       **.*.**
  BIOS VERSION    **.*.**

PRESS TEST BUTTON TO NEXT
    
```

SYSTEM INFORMATION 1/2 screen

### CONTROLS

Press the TEST Button to move to the SYSTEM INFORMATION 2/2 screen.

### MENU ITEMS

<b>KEYCHIP</b>	<b>KEYCHIP ID</b>	The serial number of the key chip
	<b>GAME ID</b>	The game ID of the key chip
	<b>MODEL TYPE</b>	The model type
	<b>REGION</b>	The region setting of the key chip
<b>MAIN BOARD</b>	<b>MAIN ID</b>	The serial number of the game board
	<b>REGION</b>	The region setting of the game board
	<b>OS VERSION</b>	The version of the system program (OS)
	<b>MEMORY SIZE</b>	The onboard memory size
	<b>CPU TEMP.</b>	The temperature of the CPU in Celsius
<b>STORAGE DEVICE</b>	<b>MAIN STORAGE SIZE</b>	The capacity of the main storage
	<b>SUB STORAGE SIZE</b>	The capacity of the sub storage
<b>GRAPHIC DEVICE</b>	<b>DEVICE ID</b>	The graphic device's ID
	<b>BIOS VERSION</b>	The graphic device's software version

```

SYSTEM INFORMATION 2/2

ERROR LOG

ERROR **** ***/**/** **:**
ERROR **** ***/**/** **:**
ERROR **** ***/**/** **:**
ERROR **** ***/**/** **:**
ERROR **** ***/**/** **:**
ERROR **** ***/**/** **:**
ERROR **** ***/**/** **:**
ERROR **** ***/**/** **:**
ERROR **** ***/**/** **:**
ERROR **** ***/**/** **:**

PRESS TEST BUTTON TO EXIT

```

SYSTEM INFORMATION 2/2 screen

**CONTROLS**

Press the TEST Button to return to the SYSTEM TEST MODE screen.

**MENU ITEMS**

<b>ERROR LOG</b>	History list of the error occurred Displays the most recent 10 errors that have occurred in the past. It may not be displayed depending on the version of the installed system program. It may not also be displayed depending on the error.
------------------	---



## MENU ITEMS

Application Title	Name of installed game program
<b>FILE LIST</b>	Displays the file name for the installed game image. A single page displays up to 10 files. If the files cannot be displayed on a single page, it is possible to switch to and view other pages by selecting NEXT and PREVIOUS.
<b>NEXT</b>	Advances to the next page.
<b>PREVIOUS</b>	Returns to the previous page.
<b>FORMAT SUB STORAGE</b>	<p>Formats the hard disk drive (HDD). Erases all files including the game program currently installed.</p> <p>Select the item and press the TEST Button. YES and NO displays to the right of the item. Press the SERVICE Button to move the underline for selecting items. Move the underline to YES and press the TEST Button to initialize settings and reboot. When the process has completed after rebooting, a message displays that states "DO NOT TURN OFF THE POWER..."</p> <p>When NO is selected, the screen returns to the STORAGE INFORMATION screen without erasing files.</p>
<b>UNINSTALL</b>	<p>The game program currently installed can be erased. Performing this action erases all game programs. It is not possible to select and erase specific files.</p> <p>Select the item and press the TEST Button, YES and NO displays to the right of the item. Press the SERVICE Button to move the underline for selecting items. Move the underline to YES and press the TEST Button to erase the files. If TEST MODE ends, an error is displayed. (See Chapter 4.)</p> <p>When NO is selected, the screen returns to the STORAGE INFORMATION screen without erasing files.</p>

## 16-3-3 JVS TEST

The JVS TEST screen displays information on the connected JVS I/O boards. The screen display will vary depending on the JVS I/O board that is connected. The following figure is one example.

```

                                JVS TEST

      INPUT TEST
      NODE                      1/1
->EXIT

      NAME                      SEGA CORPORATION ; I/O BD JVS ;
                                837-14572 ; Ver1.00 ; 2005/10

      CMD VER                    1.3
      JVS VER                    2.0
      COM VER                    1.0
      SWITCH                    2 PLAYER(S) 14 BIT(S)
      COIN                      2 SLOT(S)
      ANALOG                    8 CH
      ROTARY                    0 CH
      KEYCODE                   0
      SCREEN                    X:0 Y:0 CH:0
      GENERAL IN                0 BIT(S)
      CARD                      0 SLOT(S)
      HOPPER OUT                0 CH
      DRIVER OUT                20CH
      ANALOG OUT                0 CH
      CHARACTER                 CHARA:0 LINE:0
      BACKUP                    0

                                SELECT WITH SERVICE BUTTON
                                AND PRESS TEST BUTTON
```

JVS TEST screen (when connecting JVS I/O boards)

### CONTROLS

- Press the SERVICE Button to select menu item. Items displayed in grey cannot be selected.
- Press the TEST Button to execute the selected item.
- Select EXIT and press the TEST Button to return to the SYSTEM TEST MODE screen.

## MENU ITEMS

<b>INPUT TEST</b>	Advances to the JVS I/O board INPUT TEST screen.
<b>NODE</b>	The currently displayed JVS I/O board number and the total number of connected JVS I/O Boards. When there are multiple JVS I/O boards, press the TEST Button while selecting a board to switch between the JVS I/O boards.
<b>NAME</b>	Name of the connected JVS I/O board, etc.
<b>CMD VER</b>	Command format version
<b>JVS VER</b>	JV standard (JVS) version
<b>COM VER</b>	Communication version
<b>SWITCH</b>	Number of players and number of 1P switches
<b>COIN</b>	Number of coin slots
<b>ANALOG</b>	Number of analog channels
<b>ROTARY</b>	Number of rotary encoders
<b>KEYCODE</b>	Key code input active/inactive
<b>SCREEN</b>	Screen position input (X axis, Y axis, number of channels)
<b>GENERAL IN</b>	Number of standard switches
<b>CARD</b>	Number of card slots
<b>HOPPER OUT</b>	Number of hoppers
<b>DRIVER OUT</b>	Number of standard output drivers
<b>ANALOG OUT</b>	Number of analog output channels
<b>CHARACTER</b>	Number of characters/lines displayed
<b>BACKUP</b>	Backup present/absent

The following displays when there are no JVS I/O boards connected.

```

                JVS TEST

                NO JVS NODE

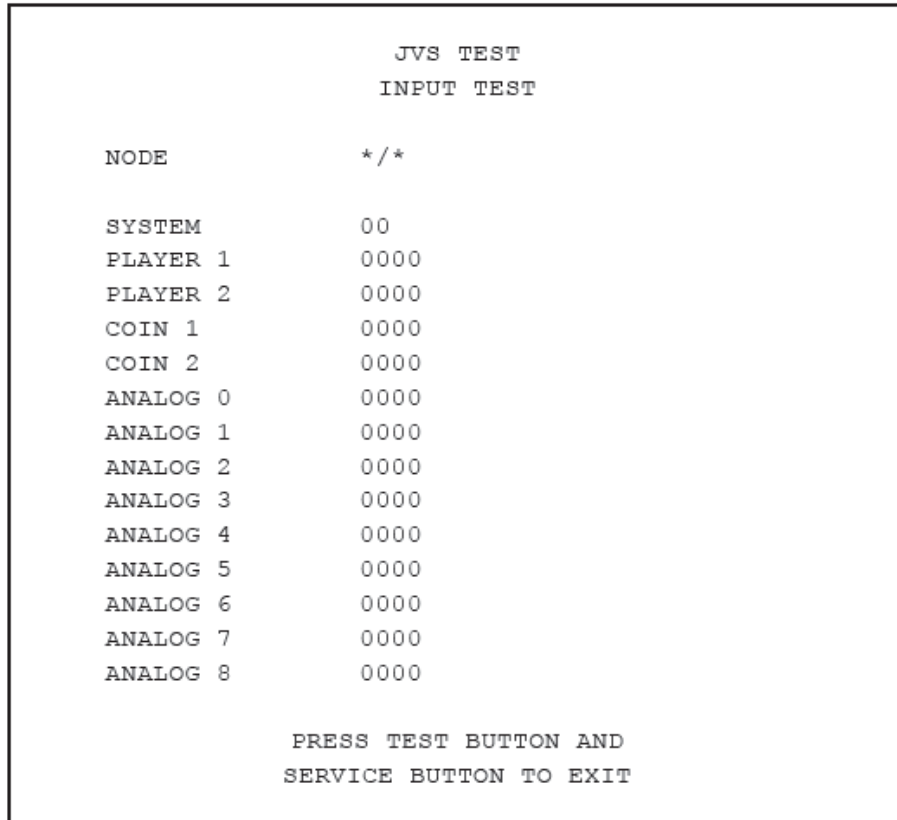
->EXIT

        SELECT WITH SERVICE BUTTON
        AND PRESS TEST BUTTON
    
```

JVS TEST screen (when not connecting JVS I/O boards)

## JVS INPUT TEST

Use the JVS INPUT TEST to test the JVS I/O board input. The hexadecimal input information from the JVS I/O board will be displayed in real time. The screen display will vary depending on the JVS I/O board that is connected. The following figure is one example.



```

                JVS TEST
            INPUT TEST

NODE           */*

SYSTEM         00
PLAYER 1       0000
PLAYER 2       0000
COIN 1         0000
COIN 2         0000
ANALOG 0       0000
ANALOG 1       0000
ANALOG 2       0000
ANALOG 3       0000
ANALOG 4       0000
ANALOG 5       0000
ANALOG 6       0000
ANALOG 7       0000
ANALOG 8       0000

                PRESS TEST BUTTON AND
                SERVICE BUTTON TO EXIT

```

JVS INPUT TEST screen

### CONTROLS

Press the SERVICE and TEST Buttons simultaneously to return to the JVS TEST screen.

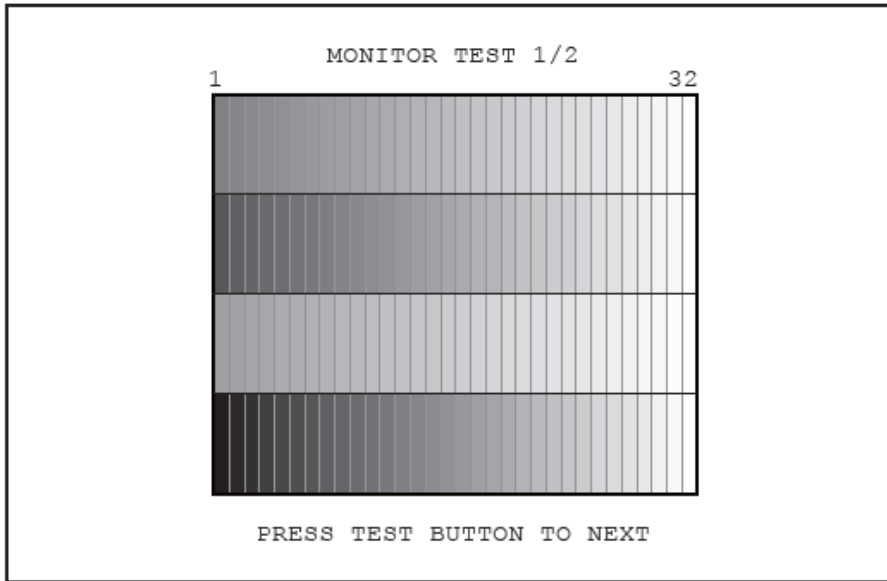
### MENU ITEMS

<b>SYSTEM</b>	System switch input data
<b>PLAYER</b>	Player number and player switch input data
<b>COIN</b>	Slot number and coin input data
<b>ANALOG</b>	Channel number and analog input data



## 16-3-4 MONITOR TEST

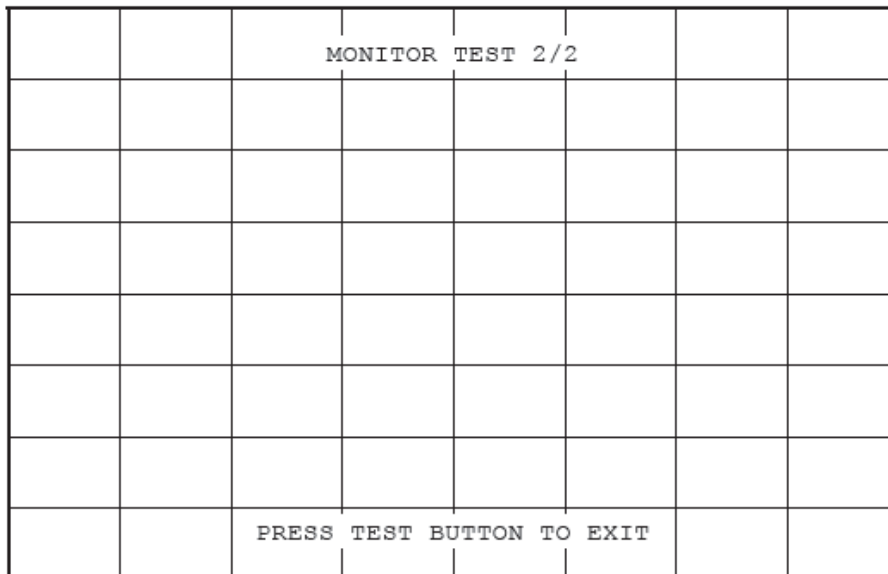
Use MONITOR TEST to check the output of the monitor.



MONITOR TEST 1/2 screen

### CONTROLS

- Displays a gradation of red, green, blue and white from the top in that order. "1" is the darkest, and moving towards "32" incrementally becomes lighter. Ensure that each color displays correctly.
- Press the TEST Button to move to the MONITOR TEST 2/2 screen.



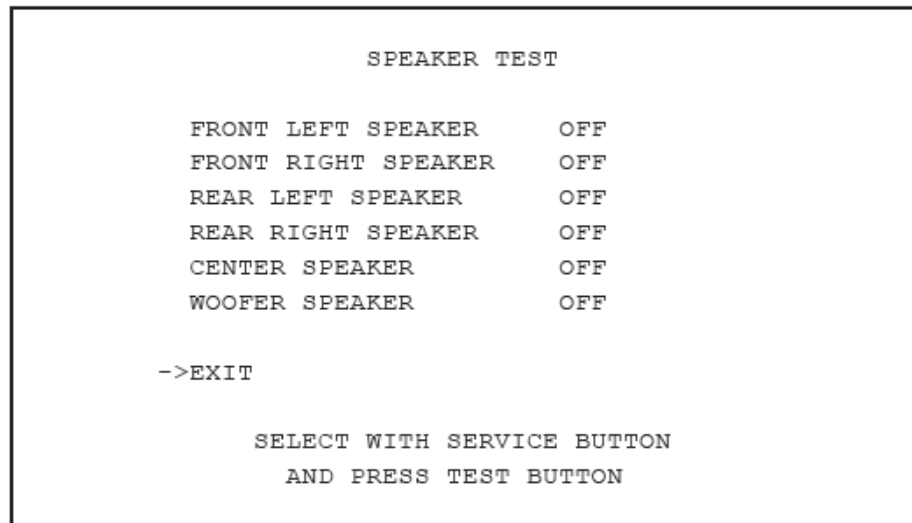
MONITOR TEST 2/2 screen

### CONTROLS

- A grid displays on the entire screen. Ensure there are no distortions on the display.
- Press the TEST Button to return to the SYSTEM TEST MODE screen.

## 16-3-5 SPEAKER TEST

Use SPEAKER TEST to check the output of each speaker.



SPEAKER TEST screen

### CONTROLS

- Press the SERVICE Button to select each speaker.
- Press the TEST Button to toggle between ON and OFF to the right of the selected speaker. When set to ON, a test sound will be emitted from that speaker. It is possible to set multiple speakers to emit the test sound at the same time. Depending on the cabinet used, some items will be displayed but no sound will be emitted.
- Select EXIT and press the TEST Button to return to the SYSTEM TEST MODE screen.

## 16-3-6 COIN ASSIGNMENTS

Sets the coin/credit (charge).

To enable the changed settings, return to the SYSTEM TEST MODE screen and exit. After exiting the screen, the changes to the settings are saved and the changes are then enabled. If the power is turned off without exiting, the changed settings are not saved.

There are designated coin/credit settings depending on the game program. Refer to the manual for each game for details.

```
                COIN ASSIGNMENTS

COIN CHUTE TYPE      COMMON
SERVICE TYPE        COMMON
COIN CHUTE #1 COIN TO CREDIT RATE
  1 COIN(S) COUNT AS 1 CREDIT(S)
COIN CHUTE #2 COIN TO CREDIT RATE
  1 COIN(S) COUNT AS 1 CREDIT(S)
DETAIL SETTING
GAME COST SETTING
->EXIT

                SELECT WITH SERVICE BUTTON
                AND PRESS TEST BUTTON
```

COIN ASSIGNMENTS screen (COIN CHUTE TYPE: COMMON)

### CONTROLS

- Press the SERVICE Button to select menu item.
- Press the TEST Button to change settings for the selected item, or proceed to the selected settings screen.
- Select EXIT and press the TEST Button to return to the SYSTEM TEST MODE screen.

MENU ITEMS

<b>COIN CHUTE TYPE</b>	Specify according to the cabinet coin chute specifications.	
	<b>COMMON</b>	This is for cabinets that use a coin chute shared by multiple players. Coins inserted by each player are handled as shared credit. Up to 2 coin chutes (#1, #2) can be used, and it is possible to set a coin chute multiplier for #1 and #2 separately.
	<b>INDIVIDUAL</b>	This is for cabinets set up for each coin chute for multiple players. Coins inserted by each player are handled as credit for each individual player. The setting for the coin chute multiplier is common to each coin chute.
<b>SERVICE TYPE</b>	Sets the operation for when pressing the SERVICE Button, when there are multiple SERVICE buttons.	
	<b>COMMON</b>	All players receive service credit no matter which SERVICE Button is pressed.
	<b>INDIVIDUAL</b>	The player that corresponds to the SERVICE Button being pressed only receives credit.
<b>COIN/CREDIT SETTING</b>	Sets the amount of credit associated with inserted coins. "X COIN(S) COUNT AS Y CREDIT(S)" indicates that when X coins are inserted, Y credits are received. Setting to FREE PLAY allows you to play the game without credits. When COIN CHUTE TYPE is set to COMMON, the coin chute #2 setting is limited to a certain extent more than the coin chute #1 setting.	
<b>DETAIL SETTING</b>	Advances to a screen for more detailed settings than COIN/CREDIT SETTING to set the amount of credit associated with inserted coins. (See 3-6-1.) When using DETAIL SETTINGS, settings for the COIN/CREDIT SETTING are disabled.	
<b>GAME COST SETTING</b>	Advances to a screen where settings can be specified such as for the required quantity of credits to begin a game. (See 3-6-2.) The range for setting values, the screen display and other similar items are different depending on the game program. Refer to the manual for each game for details.	

**COIN/CREDIT SETTING TABLE 1-1 (COIN CHUTE TYPE: COMMON)**

When operating coin chute #1, coin chute #2 is linked to the operation and changes accordingly.

COIN CHUTE #1 COIN TO CREDIT RATE	COIN CHUTE #2 COIN TO CREDIT RATE
1 coin counts as 1 credit	1 coin counts as 1 credit
2 coins count as 1 credit	2 coins count as 1 credit
3 coins count as 1 credit	3 coins count as 1 credit
4 coins count as 1 credit	4 coins count as 1 credit
5 coins count as 1 credit	5 coins count as 1 credit
1 coin counts as 2 credits	1 coin counts as 2 credits
1 coin counts as 3 credits	1 coin counts as 3 credits
1 coin counts as 4 credits	1 coin counts as 4 credits
1 coin counts as 5 credits	1 coin counts as 5 credits
Free play (no coins required)	Free play (no coins required)

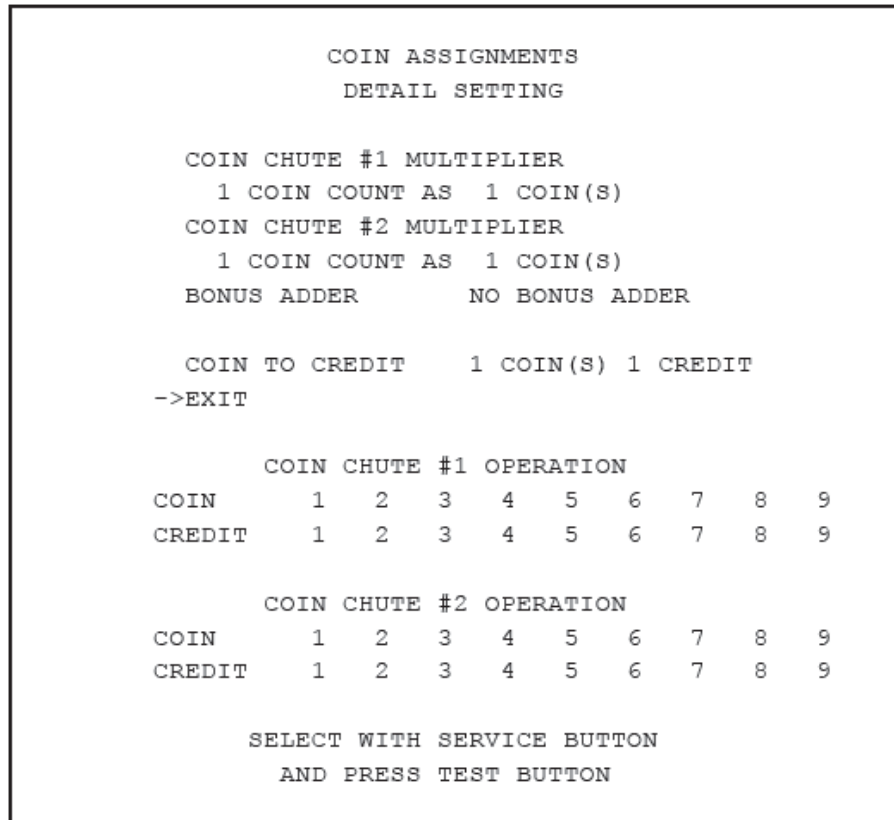
**COIN/CREDIT SETTING TABLE 1-2 (COIN CHUTE TYPE: COMMON)**

When operating coin chute #2, coin chute #1 does not change.

COIN CHUTE #1 COIN TO CREDIT RATE	COIN CHUTE #2 COIN TO CREDIT RATE
Same as table 1-1 above.	1 coin counts as 1 credit
	1 coin counts as 2 credits
	1 coin counts as 3 credits
	1 coin counts as 4 credits
	1 coin counts as 5 credits

**COIN/CREDIT SETTING TABLE 2 (COIN CHUTE TYPE: INDIVIDUAL)**

COIN CHUTE #1 COIN TO CREDIT RATE	COIN CHUTE #2 COIN TO CREDIT RATE
1 coin counts as 1 credit	When set to INDIVIDUAL, coin chute #1 and coin chute #2 have the same coin/credit setting.
2 coins count as 1 credit	
3 coins count as 1 credit	
4 coins count as 1 credit	
5 coins count as 1 credit	
1 coin counts as 2 credits	
1 coin counts as 3 credits	
1 coin counts as 4 credits	
1 coin counts as 5 credits	
Free play (no coins required)	



DETAIL SETTING screen (COIN CHUTE TYPE: COMMON)

**CONTROLS**

- Press the SERVICE Button to select menu item.
- Press the TEST Button to change the selected item's setting.
- Select EXIT and press the TEST Button to return to the COIN ASSIGNMENTS screen.

**MENU ITEMS**

<p><b>COIN CHUTE #* MULTIPLIER</b></p>	<p>Sets how many coins to count for a single inserted coin.                  "1 COIN COUNT AS X COIN(S)" [1 coin inserted counts as X coin(s)] indicates that 1 coin is converted into X number of coins.                  When COIN CHUTE TYPE is set to COMMON, coin chute #1 and #2 can be set separately.</p>
<p><b>BONUS ADDER</b></p>	<p>Sets how many coins converted at COIN CHUTE #* MULTIPLIER are required to give 1 bonus coin.                  When COIN CHUTE TYPE is set to COMMON, the sum of the number of coins for coin chute #1 and #2 is used for the calculation.                  "X COINS GIVE 1 EXTRA COIN" (X coins inserted successively award 1 bonus coin) indicates that 1 bonus coin is given for X amount of coins.                  The NO BONUS ADDER setting means that no bonus coin is given.</p>
<p><b>COIN TO CREDIT</b></p>	<p>"X COIN(S) 1 CREDIT" [X coin(s) give 1 credit] indicates that X number of coins is converted to 1 credit.</p>

**DETAIL SETTING 1 (COIN CHUTE TYPE: COMMON)**

<b>COIN CHUTE #1 MULTIPLIER</b>
1 coin inserted counts as 1 coin
1 coin inserted counts as 2 coins
1 coin inserted counts as 3 coins
1 coin inserted counts as 4 coins
1 coin inserted counts as 5 coins
1 coin inserted counts as 6 coins
1 coin inserted counts as 7 coins
1 coin inserted counts as 8 coins
1 coin inserted counts as 9 coins

<b>COIN CHUTE #2 MULTIPLIER</b>
1 coin inserted counts as 1 coin
1 coin inserted counts as 2 coins
1 coin inserted counts as 3 coins
1 coin inserted counts as 4 coins
1 coin inserted counts as 5 coins
1 coin inserted counts as 6 coins
1 coin inserted counts as 7 coins
1 coin inserted counts as 8 coins
1 coin inserted counts as 9 coins

**DETAIL SETTING 2 (COIN CHUTE TYPE: INDIVIDUAL)**

<b>COIN CHUTE #1 MULTIPLIER</b>
1 coin inserted counts as 1 coin
1 coin inserted counts as 2 coins
1 coin inserted counts as 3 coins
1 coin inserted counts as 4 coins
1 coin inserted counts as 5 coins
1 coin inserted counts as 6 coins
1 coin inserted counts as 7 coins
1 coin inserted counts as 8 coins
1 coin inserted counts as 9 coins

<b>COIN CHUTE #2 MULTIPLIER</b>
When set to <b>INDIVIDUAL</b> , coin chute #1 and coin chute #2 have the same coin/credit setting.

**DETAIL SETTING 3 (BONUS ADDER)**

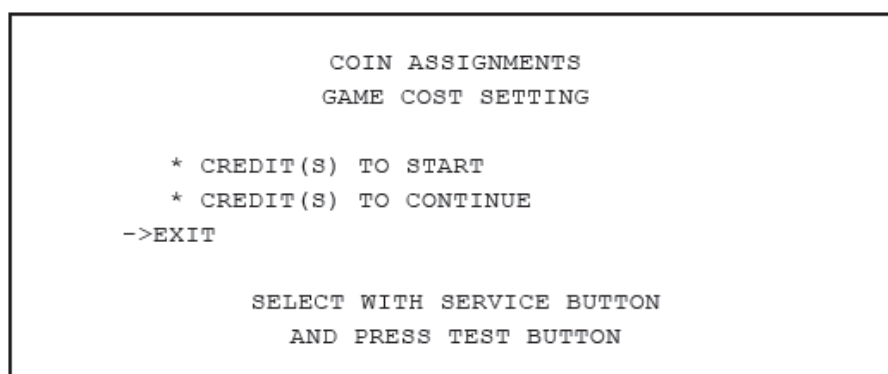
No bonus coin given
2 coins inserted successively award 1 bonus coin
3 coins inserted successively award 1 bonus coin
4 coins inserted successively award 1 bonus coin
5 coins inserted successively award 1 bonus coin
6 coins inserted successively award 1 bonus coin
7 coins inserted successively award 1 bonus coin
8 coins inserted successively award 1 bonus coin
9 coins inserted successively award 1 bonus coin

**DETAIL SETTING 4 (COIN TO CREDIT)**

1 coin gives 1 credit
2 coins give 1 credit
3 coins give 1 credit
4 coins give 1 credit
5 coins give 1 credit
6 coins give 1 credit
7 coins give 1 credit
8 coins give 1 credit
9 coins give 1 credit

## GAME COST SETTINGS

The range for setting values, the screen display and other similar items are different depending on the game program. The following figure is one example.



GAME COST SETTING screen

### CONTROLS

- Press the SERVICE Button to select menu item.
- Press the TEST Button to change the selected item's setting.
- Select EXIT and press the TEST Button to return to the COIN ASSIGNMENTS screen.

### MENU ITEMS

* credit(s) to start	Sets the number of credits required to start the game.
* credit(s) to continue	Sets the number of credits required to continue the game.

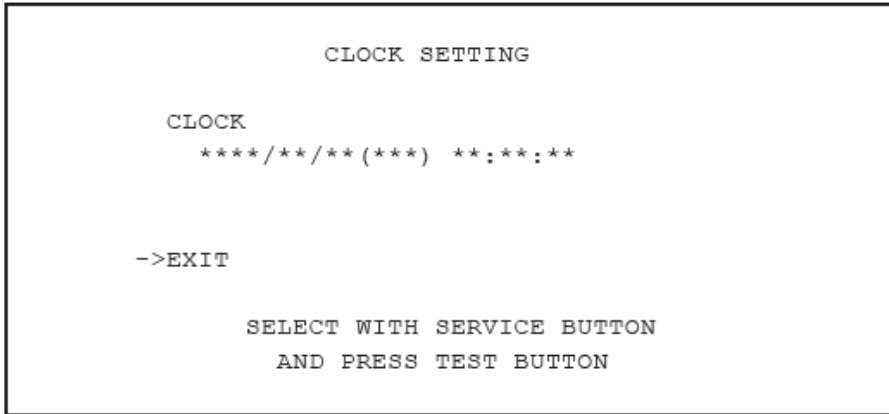


## 16-3-7 CLOCK SETTINGS

Use **CLOCK SETTING** to set the date and time. Displays the current date and time. This can also be changed. Ensure the date and time is set correctly because it is used for error logs, game test mode **BOOKKEEPING** and other such features.

Be aware that changing the time setting may make it not possible to play ALL.Net compatible games.

ALL.Net compatible games are time synchronized by ALL.Net authentication when the game program is started, and the time setting is overwritten. Set up a network environment that can connect to an ALL.Net server.



CLOCK SETTING screen

### CONTROLS

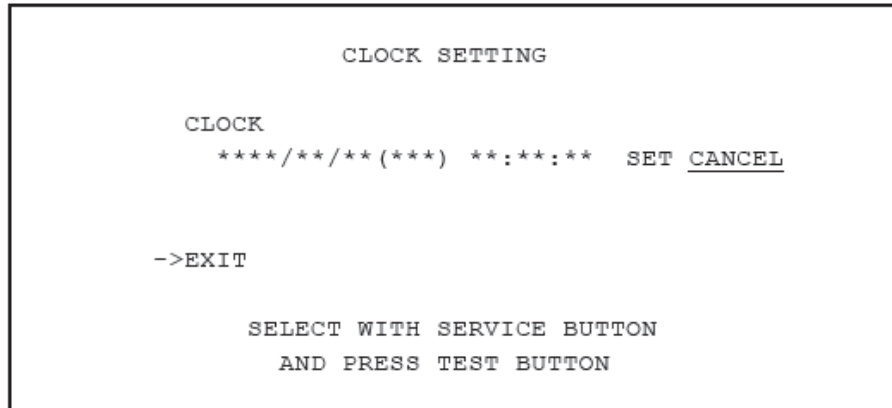
- Press the **SERVICE** Button to select menu item.
- Select **EXIT** and press the **TEST** Button to return to the **SYSTEM TEST MODE** screen.

### MENU ITEMS

<b>CLOCK</b>	Displays the current date and time. Select the item and press the <b>TEST</b> button to change the date and time.
--------------	--

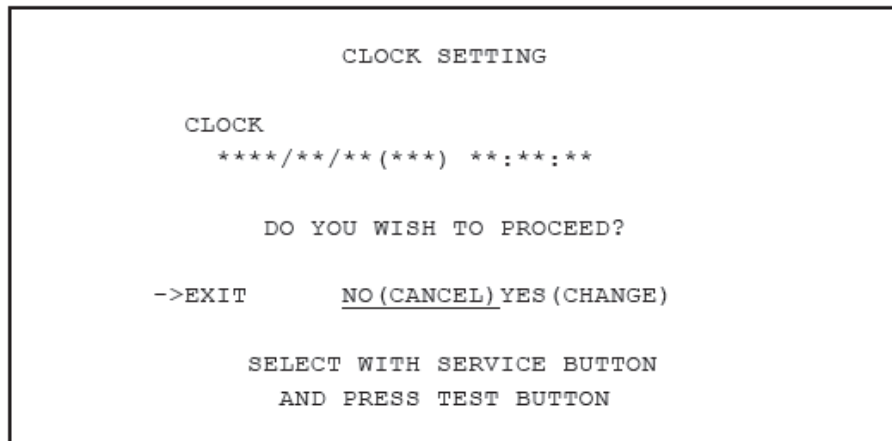
## How to set the time

- 1 Press the SERVICE Button to move through the selections of CANCEL→Year→Month→Day→Hour→Minutes→Seconds→SET→CANCEL→...in that order. Press the TEST Button to increase the value of the selected item. Also, press and hold the TEST Button to increase the value. Select CANCEL and then press the TEST button to return to the CLOCK SETTING screen.



CLOCK SETTING screen (while changing)

- 2 Select SET and then select EXIT, and press the TEST Button. A confirmation message displays.

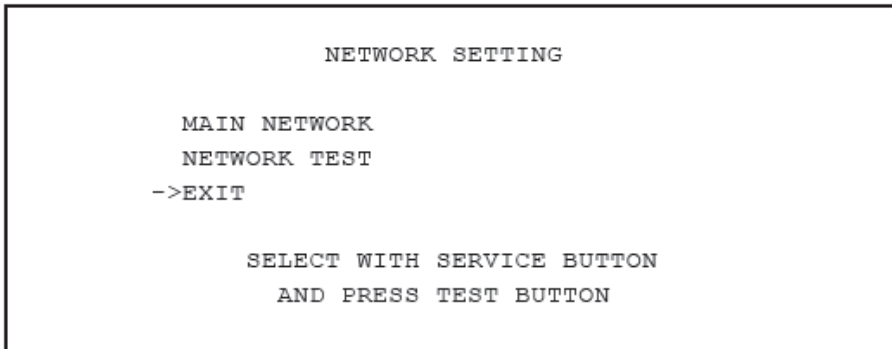


CLOCK SETTING screen (confirmation message)

- 3 Press the SERVICE Button and select from NO (CANCEL) or YES (CHANGE). When YES (CHANGE) is selected and the TEST Button is pressed, the changes are saved and the screen returns to the SYSTEM TEST MODE screen. When NO (CANCEL) is selected and the TEST Button is pressed, the screen returns to the SYSTEM TEST MODE screen without saving the changes.

## 16-3-8 NETWORK SETTINGS

Use NETWORK SETTING to determine network settings or to test the network.  
There is no need to alter these settings for a game that does not use a network.



NETWORK SETTING (Setting Menu) screen

### CONTROLS

- Press the SERVICE Button to select menu item.
- Press the TEST Button to execute the selected item.
- Select EXIT and press the TEST Button to return to the SYSTEM TEST MODE screen.

### MENU ITEMS

MAIN NETWORK	Performs a network setting.
NETWORK TEST	Performs a network test.

The screen display will vary depending on the game program. The following figure is one example.

```

                                NETWORK SETTING
                                MAIN NETWORK

MAC ADDRESS      *-*-*-*-*-*-*-*-*-*
DHCP             *-*-*-*-*
IP ADDRESS
  ***.***.***.***
SUBNET MASK
  ***.***.***.***
GATEWAY
  ***.***.***.***
PRIMARY DNS
  ***.***.***.***
SECONDARY DNS
  ***.***.***.***
->EXIT

                                SELECT WITH SERVICE BUTTON
                                AND PRESS TEST BUTTON
    
```

MAIN NETWORK screen

**CONTROLS**

- Press the SERVICE Button to select menu item.
- Press the TEST button to display the underline for SET and CANCEL to the right of the character string under the selected item.

```

->SUBNET MASK
  ***.***.***.*** SET CANCEL
GATEWAY
  ***.***.***.***
PRIMARY DNS
  ***.***.***.***
SECONDARY DNS
  ***.***.***.***
EXIT
    
```

MAIN NETWORK screen (while changing)

- With the underline displayed, press the SERVICE button to move the underline.
- Pressing the TEST Button increases the value at the location where the underline is displayed.
- When saving the value for the changed setting, move the underline to SET and press the TEST Button. If you do not want to save the changes, move the underline to CANCEL and press the TEST Button.
- When the underline is selecting either SET or CANCEL and the TEST Button is pressed, SET, CANCEL and the underline disappear.
- Select EXIT and press the TEST Button to return to the NETWORK SETTING (Setting Menu) screen.

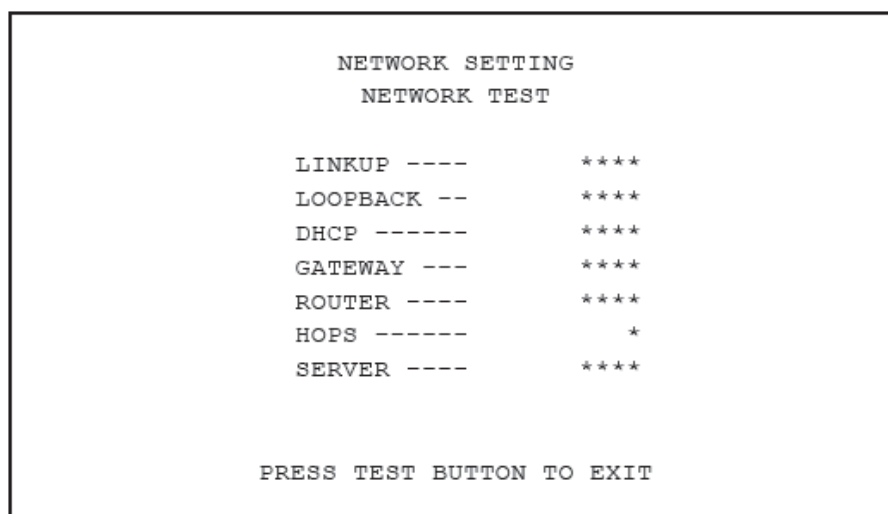
## MENU ITEMS

<b>MAC ADDRESS</b>	The individual ID number assigned to each device using the Ethernet.	
<b>DHCP</b>	Set automatic acquisition of network settings.	
	<b>ENABLE</b>	Acquire network settings automatically.
	<b>DISABLE</b>	Input network settings manually.
<b>IP ADDRESS</b>	A setting required for the network. See the manual supplied with each game software for the correct setting. After setting the numbers, select SET and press the TEST Button to save the setting. When DHCP is set to ENABLE, this item cannot be selected.	
<b>SUBNET MASK</b>		
<b>GATEWAY</b>		
<b>PRIMARY DNS</b>		
<b>SECONDARY DNS</b>		

## NETWORK TEST

This section is for performing operation tests for communication connectivity. No operation is possible until the test results are displayed.

The screen display will vary depending on the game program. The following figure is one example.



NETWORK TEST screen

### CONTROLS

Press the TEST Button to return to the NETWORK SETTING (Setting Menu) screen.

### MENU ITEMS

<b>LINKUP</b>	LAN cable connection status.
<b>LOOPBACK</b>	The Nu network function operation status.
<b>DHCP</b>	Status of communication settings acquisition when DHCP is set to ENABLE.
<b>GATEWAY</b>	Status of connection with title router, etc.
<b>ROUTER</b>	Status of connection with ALL.Net router.
<b>HOPS</b>	Number of router connections to ALL.Net router.
<b>SERVER</b>	Status of connection with ALL.Net server.

The status of determining items is as listed in the table below:

<b>CHECK</b>	Indicates that the item is currently being checked.
<b>GOOD</b>	Indicates that the item is functioning normally.
<b>BAD</b>	Indicates that the item is not functioning normally. (Damaged, incorrect settings, etc.)
<b>N/A</b>	Indicates that the item has not been checked. (Prerequisites have not been met, etc.)

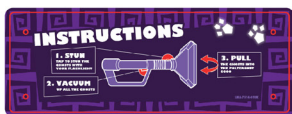
# 17 DESIGN-RELATED PARTS

For the warning display stickers, refer to Section 1.

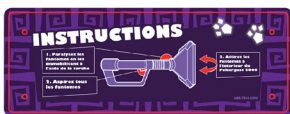


LMA-7514UK - PLATE T CTRL PNL PRINT

## Luigi's Mansion Instructions



LMA-7514-01UK - PLATE T CTRL PNL ENGLISH



LMA-7514-02UK - PLATE T CTRL PNL FRENCH PRINT



LMA-7514-03UK - PLATE T CTRL PNL TURKISH PRINT



LMA-7514-04UK - PLATE T CTRL PNL ITALIAN PRINT



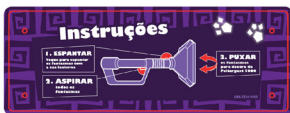
LMA-7514-05UK - PLATE T CTRL PNL SPANISH PRINT



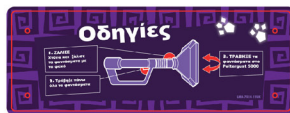
LMA-7514-06UK - PLATE T CTRL PNL RUSSIAN PRINT



LMA-7514-08UK - PLATE T CTRL PNL ARABIC



LMA-7514-09UK - PLATE T CTRL PNL PORTUGUESE PRINT



LMA-7514-11UK - PLATE T CTRL PNL GREEK PRINT







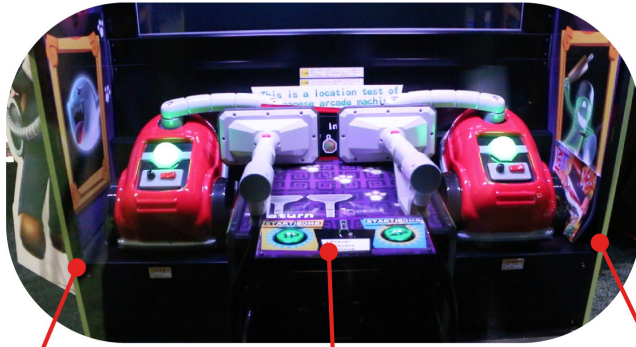
LMA-9556UK  
Sticker Rear Cabi RH Side Inner Lwr

LMA-9555UK  
Sticker Rear Cabi LH Side Inner Lwr



# INTERIOR

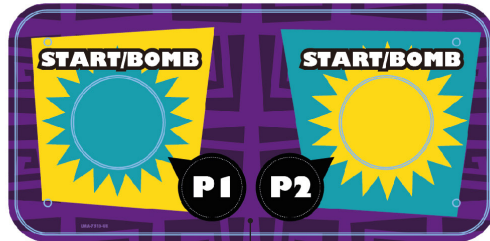
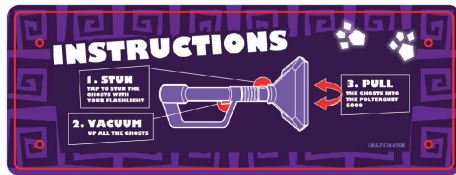
LMA-9553UK  
Sticker Rear Cabi LH Side Inner Up



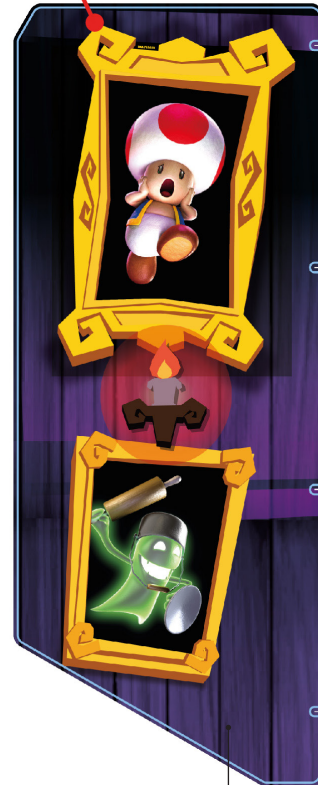
LMA-9554UK  
Sticker Rear Cabi RH Side Inner Up



LMA-7514UK  
Plate T CTRL PNL



LMA-7513UK  
Plate PNL Button

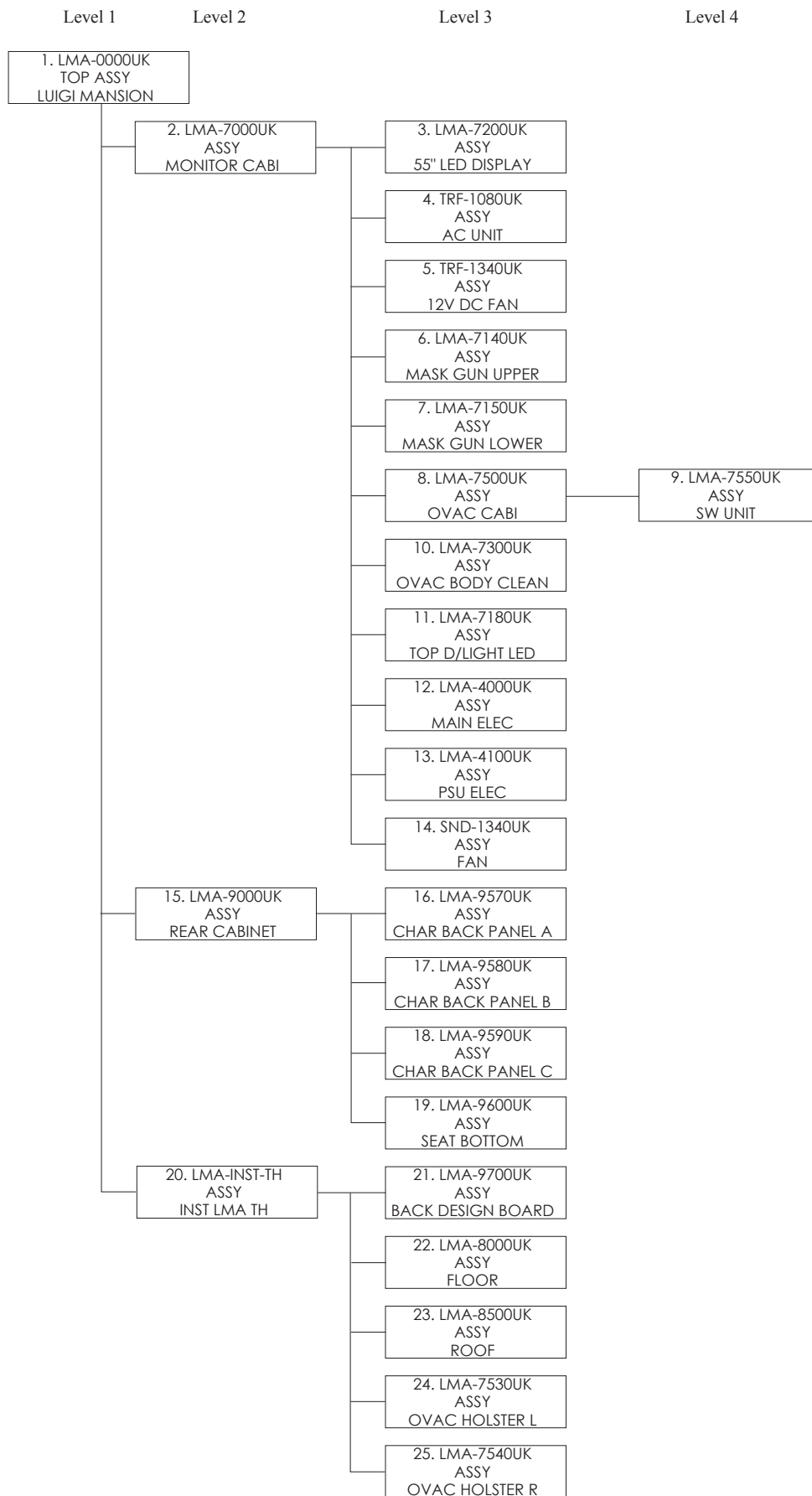


LMA-7054UK  
Sticker Front Cabi RH Side Inner

LMA-7053UK  
Sticker Front Cabi LH Side Inner

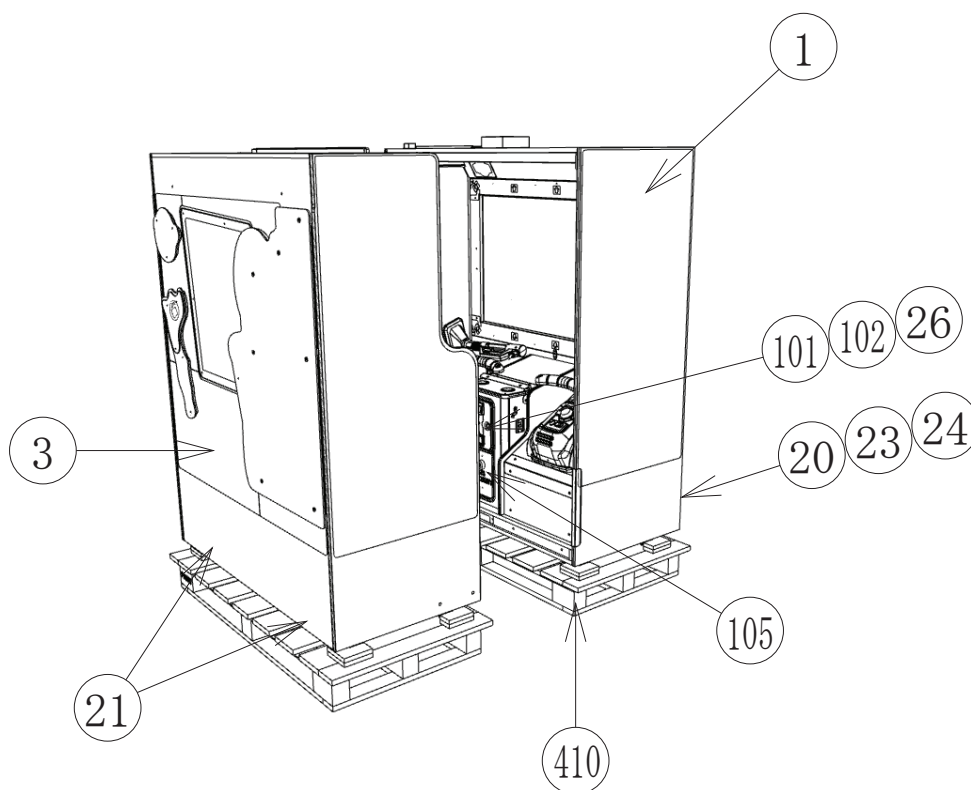
# 18 PARTS LIST

## ASSY TOP LUIGI'S MANSION ARCADE



# ① ASSY TOP LUIGI'S MANSION (LMA-0000UK)

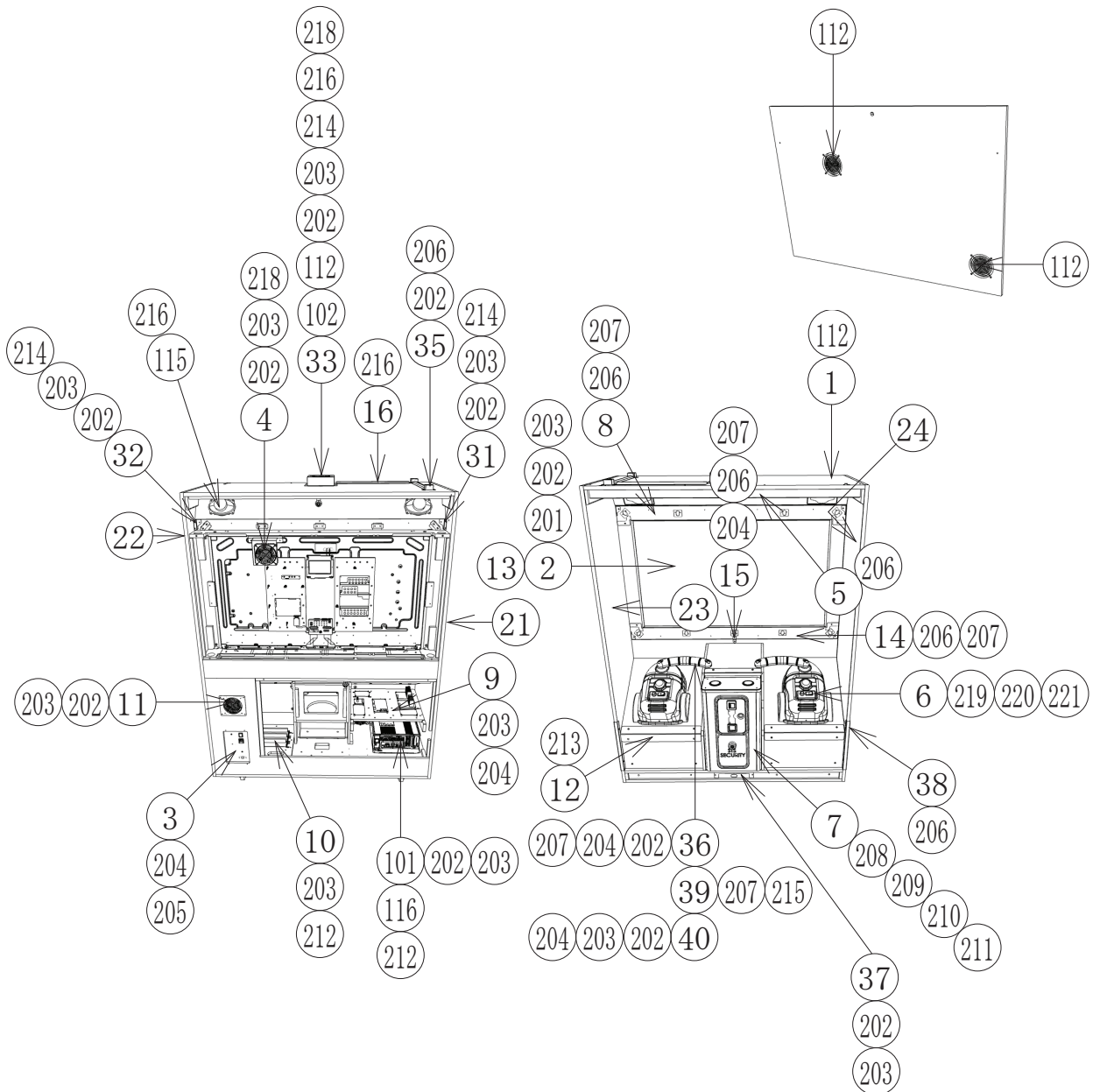
(D-1/1)



ITEM NO	PART NO	DESCRIPTION	QTY
*1	LMA-7000UK	ASSY MONITOR CABI	1
*3	LMA-9000UK	ASSY REAR CABINET	1
*20	421-7988-91UK	STICKER SERIAL NUMBER UK	2
*21	440-WS0100UK	WARNING LABEL FORK HERE	4
*22	440-DS0010UK	LABEL DANGER HI VOLT (see warning labels)	4
*23	LB1046	LABEL TESTED FOR ELEC. SAFETY	1
*24	LB1130	LABEL WEEE WHEELIE BIN	1
*25	440-CS0186-01UK	STICKER CAUTION EPILEPSY (see warning labels)	1
*26	440-CS0010UK	LABEL CAUTION GENERIC (see warning labels)	2
*101	220-5374-01	DOOR DFMD W/FR&LOCK C120 UNIV	1
*102	220-5575UK	LOCK (J9117) KEY TO LIKE 22MM W CAM	1
*103	OS1247	ALUMINIUM STICKY CLIP ASK-3	3
*105	220-5727-01B	DOOR CASH H.S. STS	1
**1	220-5575-280UK	LOCK(J9117) 28MM W/O CAM	1
*201	029-B00840	M8X40 SKT BH PAS	8
*202	060-S00800	M8 WSHR SPR PAS	12
*203	068-852216	M8 WSHR 22OD FLT PAS	12
*204	029-B00825	M8X25 SKT BH PAS	4
*401	LMA-INST-TH	ASSY INST LMA TH (see ASSY no20)	1
*402	RND-0225	PANEL TRANSIT LMA	2
*410	PK0507	PALLET LMA TH	2
*412	440-PL0100UK	LABEL PACKING (not shown)	4
*413	440-PL0200UK	LABEL UNPACKING (not shown)	4

② ASSY MONITOR CABI (LMA-7000UK)

(D-1/2)



ITEM	PART NO	DESCRIPTION	QTY
**1	LMA-7002UK	ASSY FRONT CABINET	1
**2	LMA-7200UK	ASSY 55 LED DISPLAY	1
**3	LMA-1080UK	ASSY AC UNIT	1
**4	TRF-1340UK	ASSY 12V DC FAN	1
**5	LMA-7180UK	ASSY TOP DOWNLIGHT LED	1
**6	LMA-7300UK	ASSY OVAC BODY CLEANER	2
**7	LMA-7500UK	ASSY OVAC CABI	1
**8	LMA-7140UK	ASSY MASK GUN SENSE UPPER	1
**9	LMA-4000UK	ASSY MAIN ELEC	1
**10	LMA-4100UK	ASSY PSU ELEC	1
**11	SND-1340UK	ASSY FAN	1
**12	LMA-7015UK	BRKT KICK SLOPING SHELF	2
**13	TRF-1209UK	GLASS LED 55 SCREEN PROTECT	1
**14	LMA-7150UK	ASSY MASK GUN SENSE LOWER	1
**15	LMA-7003UK	MASK STRAP	1
**16	LMA-7016UK	COVER ELEC ROOF	2

## ② ASSY MONITOR CABI (LMA-7000UK)

(D-2/2)

**21	LMA-7051UK	STICKER FRONT CABI LH SIDE	1
**22	LMA-7052UK	STICKER FRONT CABI RH SIDE	1
**23	LMA-7053UK	STICKER FRONT CABI LH SIDE INNER	1
**24	LMA-7054UK	STICKER FRONT CABI RH SIDE INNER	1
**31	LMA-7005UK	BRKT CORNER SECURE SENSOR BAR	2
**32	LMA-7006UK	BRKT CORNER SECURE ADJ SENSOR BAR	2
**33	LMA-7007UK	COVER FAN TOP	1
**34			1
**35	LMA-7012UK	BRKT TOP CONN PL COVER	2
**36	LMA-7013UK	BRKT BASE CLEANER HOSE	2
**37	LMA-7014UK	PLATE FLOOR CONN PL	1
**38	LMA-7515UK	BRKT KICK CHEEK	2
**39	LMA-7515UK	CLEANER HOSE	2
**40	LMA-7306UK	CLEANER SHAFT	2
**101	848-0002D-02	ASSY CASE NU W HDD	1
**102	260-0012-01UK	FAN DC 12V RoHS EEC0381B1-000U-A99	1
**112	FN1012	FAN GUARD METAL 120MM (FG-12)	5
**115	130-04030-E	SPKR ELIP 4OHM 30W VIS DX4X6P	2
**116	LB1101	LABEL WARNING BATTERY	1
**201	000-P00420	M4X20 MSCR PAN PAS	6
**202	060-S00400	M4 WSHR SPR PAS	38
**203	068-441616	M4 WSHR 16OD FLT PAS	38
**204	029-B00425-0B	M4X25 SKT BH BLK	33
**205	050-F00400	M4 NUT FLG SER PAS	4
**206	029-B00416-0B	M4X16 SKT BH BLK	22
**207	068-441616-0B	M4 WSHR 16OD FLT BLK	20
**208	029-B00870-0B	M8X70 SKT BH BLK	6
**209	060-S00800-0B	M8 WSHR SPR BLK	8
**210	068-852216-0B	M8 WSHR 22OD FLT BLK	8
**211	029-B00825-0B	M8X25 SKT BH BLK	2
**212	000-P00450	M4X50 MSCR PAN PAS	6
**213	029-B00825-0B	M8X25 SKT BH BLK	8
**214	029-B00412	M4X12 SKT BH PAS	18
**215	029-B00412-0B	M4X12 SKT BH BLK	4
**216	012-P00412-FB	N8x1/2" S/TAP FLG BLK	18
**218	050-U00400	M4 NUT NYLOK PAS	4
**219	029-B00625	M6X25 SKT BH PAS	6
**220	060-S00600	M6 WSHR SPR PAS	6
**221	068-652016	M6 WSHR 20OD FLT PAS	6
**301	LMA-60003UK	WH AC GAMEBOARD	1
**302	LMA-60006UK	WH SERIAL GAMEBOARD	1
**303	LMA-60011UK	WH DC EXTN A	1
**304	LMA-60012UK	WH REAR FAN	1
**305	LMA-60013UK	WH CAB TO FLOOR	1
**306	LMA-60014UK	WH MONITOR MASK TO ROOF	1
**307	LMA-60021UK	WH VACUUM LED	1
**308	LMA-60022UK	WH CTRL TO TOWER	1
**309	LMA-60025UK	WH DBA	1
**310	LMA-60018UK	WH GUN LED LINK C	2

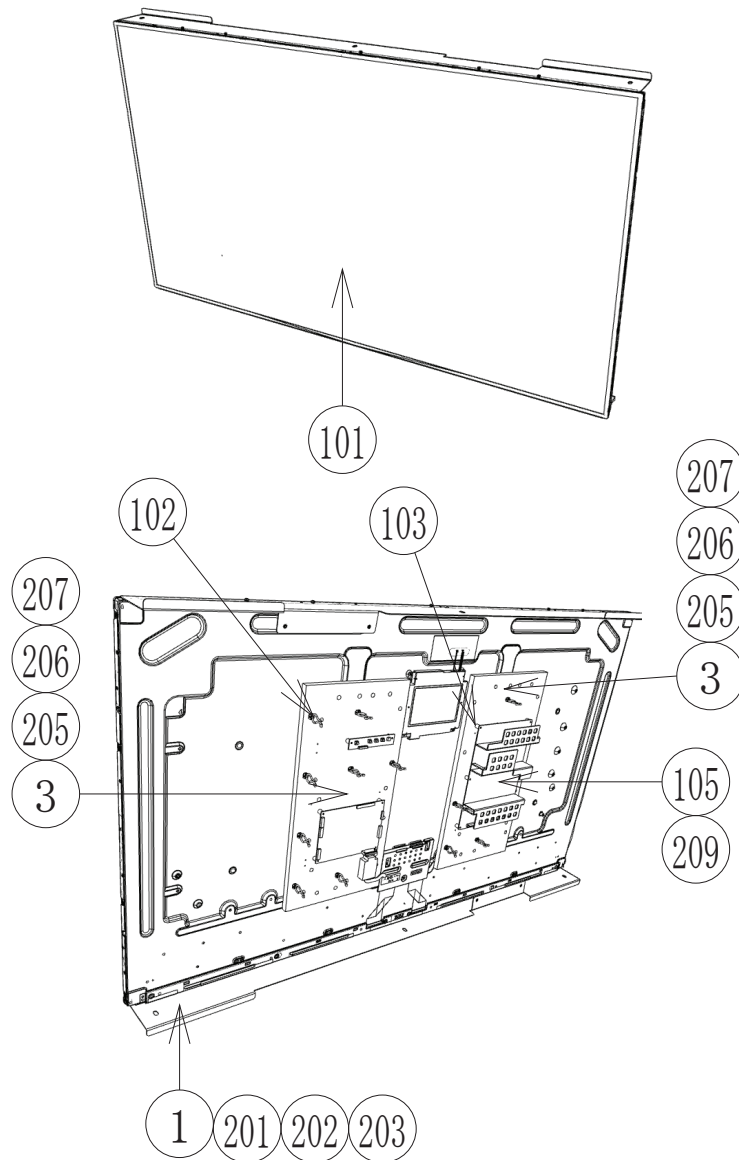


### ③ ASSY 55" LED DISPLAY (LMA-7200UK)

(D-1/1)

18

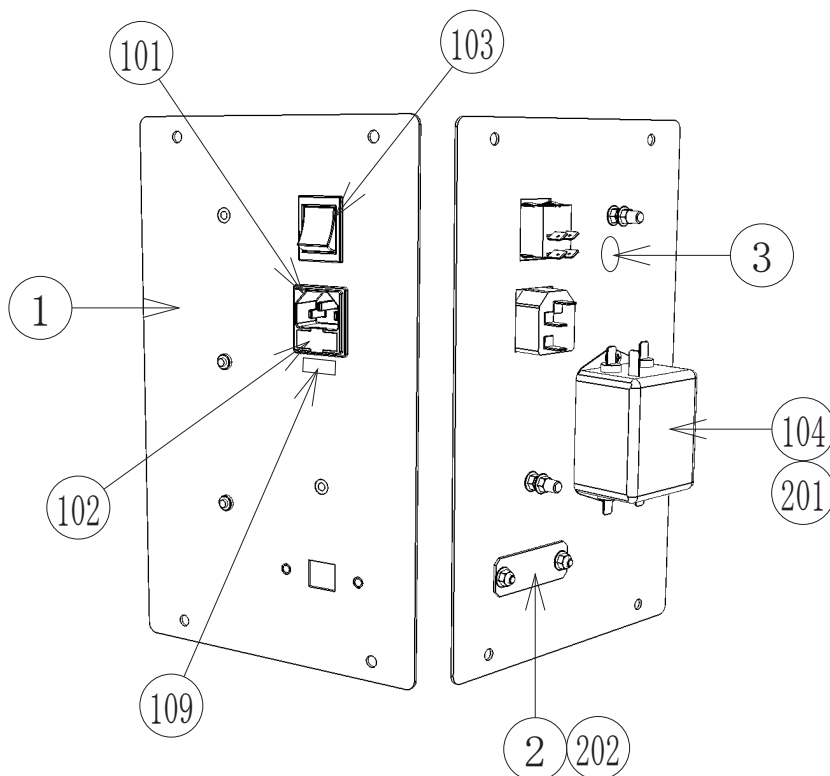
PARTS LIST



ITEM NO	PART NO	DESCRIPTION	QTY
***1	TRF-1206UK	BRKT LED MOUNT	2
***3	TRF-1210UK	PNL PRISMA BD DMODUL MNT 55	2
***101	200-6055-03-AUO	55" LED AUO P550HVN02.2	1
***102	280-A01264-WX	ROUTER TWIST D12 SO6.4 WOOD X	8
***103	280-L00811-OS	STANDOFF 7.94OD 3.56ID 11.11L	12
***105	400-283-51224	PSU 55" LED DPS-283APA-ESS5	1
***201	020-B00308-0B	M3X8 SKT BH BLK	10
***202	060-S00300	M3 WSHR SPR PAS	12
***203	060-F00300	M3 WSHR FORM A FLT PAS	12
***205	020-000820-0Z	M8X20 SKT CAP OZ	4
***206	060-S00800	M8 WSHR SPR PAS	4
***207	068-852216	M8 WSHR 22OD FLT PAS	4
***209	012-P00320	N4X3/4" S/TAP PAN PAS	12
			6
***301	LMA-6004	WH AC MONITOR	1
***302	EP1393	FERRITE TDK ZCAT3035-1330	1

# ④ ASSY AC UNIT (TRF-1080UK)

(D-1/1)



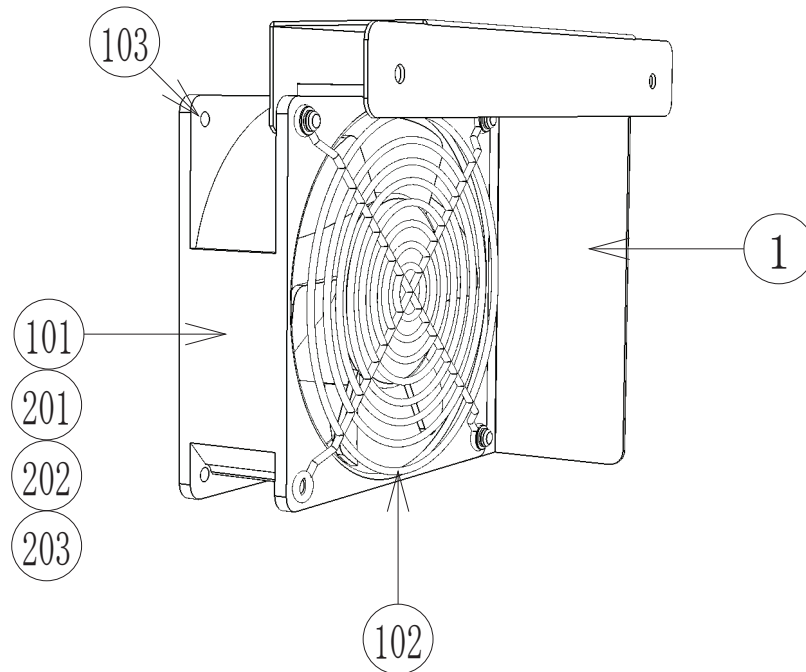
ITEM NO	PART NO	DESCRIPTION	QTY
***1	DV-1081UK	PLATE AC	1
***2	ST-0403UK	PLATE AC CAP	1
***3	LB1096	STICKER PROTECTIVE EARTH	1
***4	LB1131	LABEL ON / OFF	1
***101	EP1302	EUROSOCKET FUSED 10A 250VAC	1
***102	514-5078-3150	FUSE 3.15 X 20 CERAMIC SB 3150mA	2
***103	SW1109	SWITCH ROCKER 250V AC	1
***104	EP1419	FILTER SCHAFFNER 2030-16-06	1
***108	310-5029-D508	HEAT SHRINK SLEEVING 50.8DIA	4
***109	LB1126-3150-250	FUSE LABEL 3.15A 250V	1
***201	000-P00408	M4X8 MSCR PAN PAS	2
***202	050-F00400	M4 NUT FLG SER PAS	4
***203	060-S00400	M4 WSHR SPR PAS	2
***301	TRF-60001UK	WH AC IN	1
***303	TRF-60029UK	WH AC FEED	1
***304	600-9040-44K	WIRE HARN EARTH 400MM M4/M4 K	1

⑤ ASSY 12VDC FAN (TRF-1340UK)

(D-1/1)

18

PARTS LIST

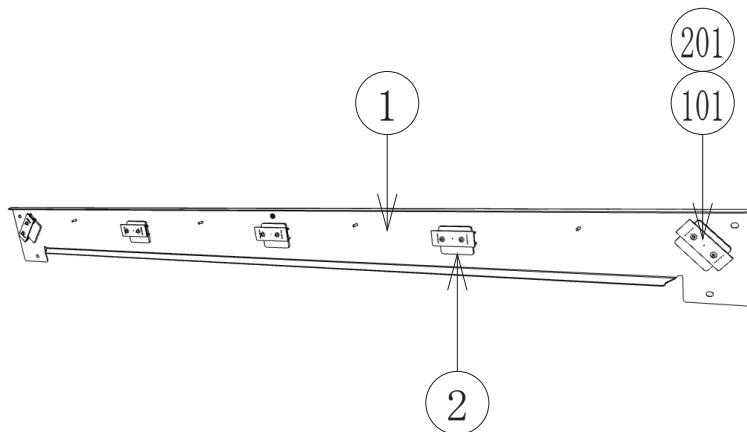


ITEM NO	PART NO	DESCRIPTION	QTY
***1	GST-1008UK	BRKT FAN	1
***101	260-0012-01UK	FAN DC 12V RoHS EEC0381B1-000U-A99	1
***102	FN1012	FAN GUARD METAL 120MM (FG-12)	2
***103	OS1195	RIVET SNAP SR-4080B	5
***201	000-P00312	M3X12 MSCR PAN PAS	3
***202	060-S00300	M3 WSHR SPR PAS	3
***203	060-F00300	M3 WSHR FORM A FLT PAS	3



⑥ ASSY MASK GUN SENSE UPPER (LMA-7140UK)

(D-1/1)



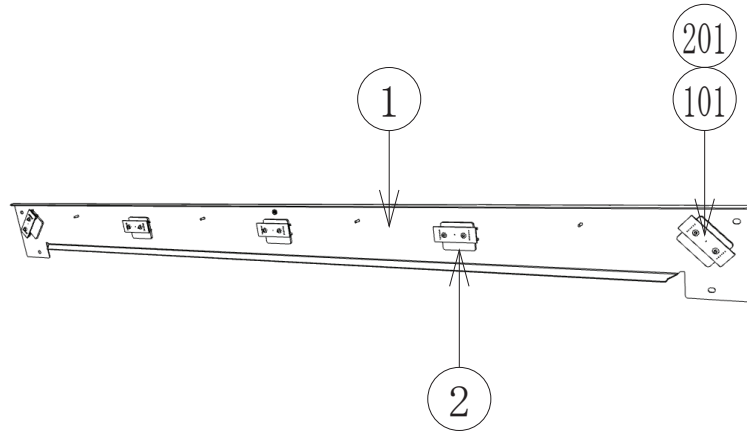
ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-7141UK	MASK GUN SENSE	1
***2	LMA-7142UK	LED FILTER PLATE	5
***101	HFNC-1	LED BD HFNC-1 (SERIALLED)	5
***102	OS1249	P CLIP 6.5MM	4
***201	050-U00300	M3 NUT NYLOK PAS	14
***301	LMA-60016UK	WH GUN LED LINK A	4
***302	LMA-60017UK	WH GUN LED LINK B	2

⑦ ASSY MASK GUN SENSE LOWER (LMA-7150UK)

(D-1/1)

18

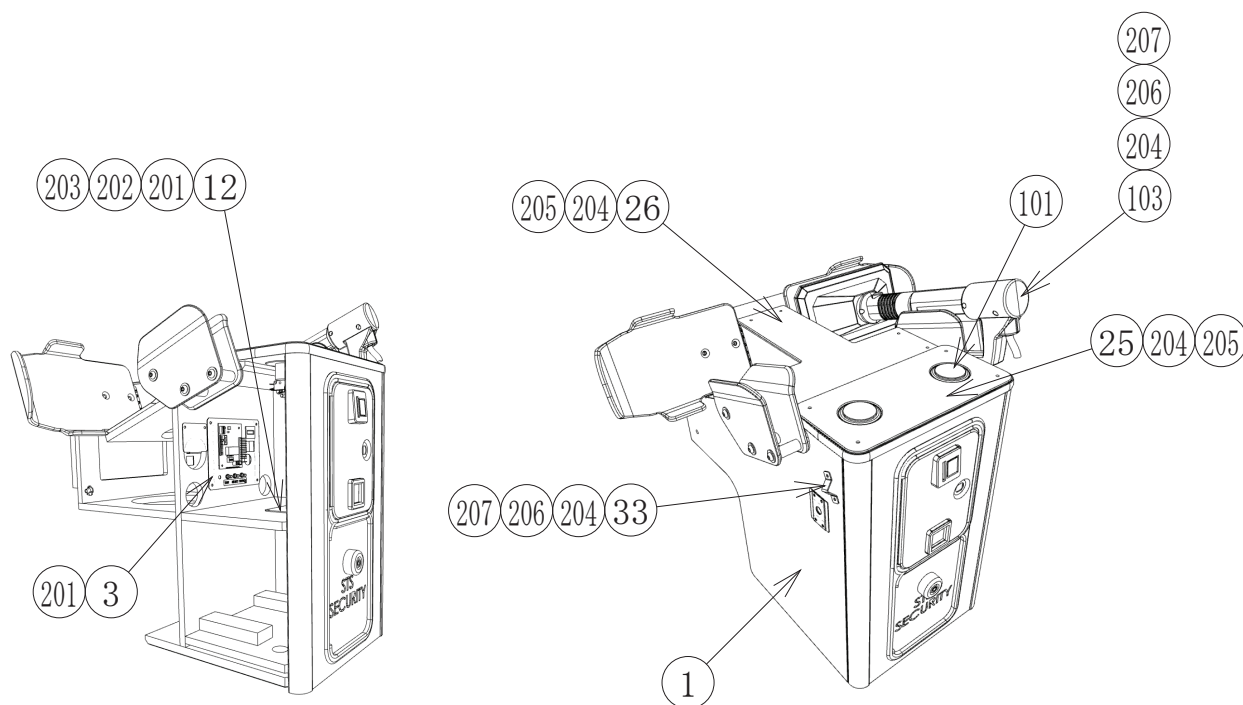
PARTS LIST



ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-7141UK	MASK GUN SENSE	1
***2	LMA-7142UK	LED FILTER PLATE	5
***101	HFNC-1	LED BD HFNC-1 (SERIALLED)	5
***102	OS1249	P CLIP 6.5MM	4
***201	050-U00300	M3 NUT NYLOK PAS	14
***301	LMA-60016UK	WH GUN LED LINK A	3
***302	LMA-60017UK	WH GUN LED LINK B	2

# 8 ASSY OVAC CABI (LMA-7500UK)

(D-1/1)



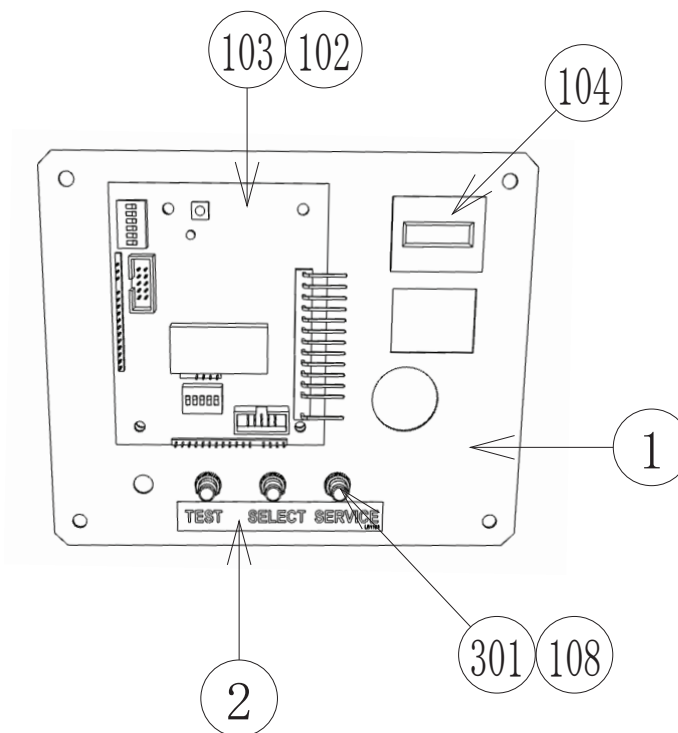
ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-7502UK	ASSY OVAC CABINET	1
***3	LMA-7550UK	ASSY SW UNIT	1
***12	DUT-0302UK	COIN PATH PLATE	1
***13	PP1087	BOX CASH FOR MINI DOOR	1
***25	LMA-7513UK	PLATE PNL BTN	1
***26	LMA-7514UK	PLATE T CTRL PNL	1
***27	LMA-7516UK	INSERT OVAC HEAD	2
***33	GST-7911UK	TUBE CLAMP	2
**101	509-0001GR-GR	BTN GREEN CPBL 12V GREEN LED	2
**103	LMAAE00013	CONTROLLER ASSEMBLY (D#KA531990)	2
**201	000-P00420	M4X20 MSCR PAN PAS	9
**202	060-S00400	M4 WSHR SPR PAS	5
**203	060-F00400	M4 WSHR FORM A FLT PAS	5
**204	029-B00425-0B	M4X25 SKT BH BLK	22
**205	068-441616-0B	M4 WSHR 16OD FLT BLK	10
**206	060-S00400-0B	M4 WSHR SPR BLK	12
**207	060-F00400-0B	M4 WSHR FORM A FLT BLK	12
**301	LMA-60024UK	WH START BUTTONS	1
**302	LMA-60030UK	WH CONTROLLER LED	1
**303	LMA-6007UK	ASSY LED CONTROLLER	2
**308		WH SR3 RIBBON CABLE	1

# ⑨ ASSY SW UNIT (LMA-7550UK)

(D-1/1)

18

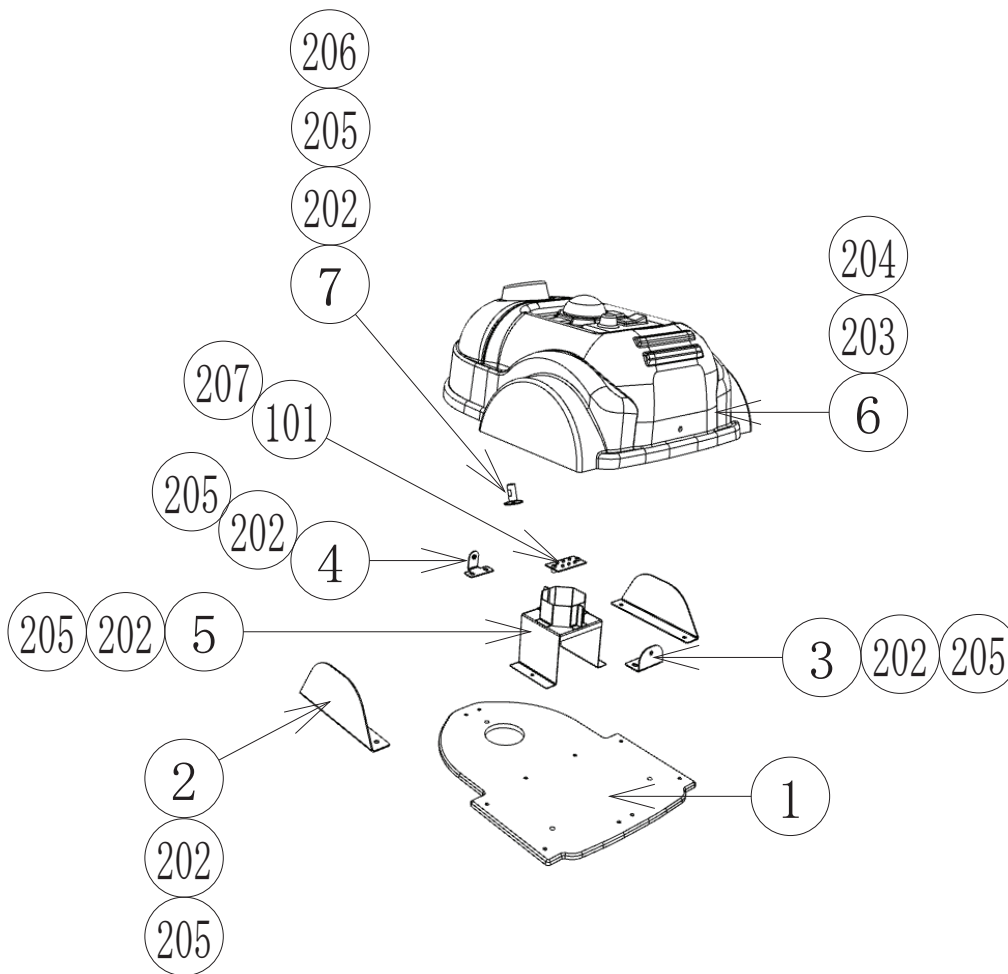
PARTS LIST



ITEM NO	PART NO	DESCRIPTION	QTY
****1	LMA-7551UK	SW BRKT DUAL METER NO SW V BD	1
****2	LB1181	LABEL LMA SWITCH UNIT	1
****102	280-L00706-PM	STANDOFF 6.4MM HOLE PM	4
****103	EP1380-01	CREDIT BOARD EXCEL	1
****104	220-5643UK	COIN METER SMALL 12V	1
****105	OS1247	ALUMINIUM STICKY CLIP ASK-3	1
****107	OS1098	CRIMP BELL END SMALL	4
****108	601-0460	CABLE TIE NYLON 100MM	2
****301	LMA-60023UK	WH COIN HANDLING	1

⑩ ASSY OVAC BODY CLEANER (LMA-7300UK)

(D-1/1)



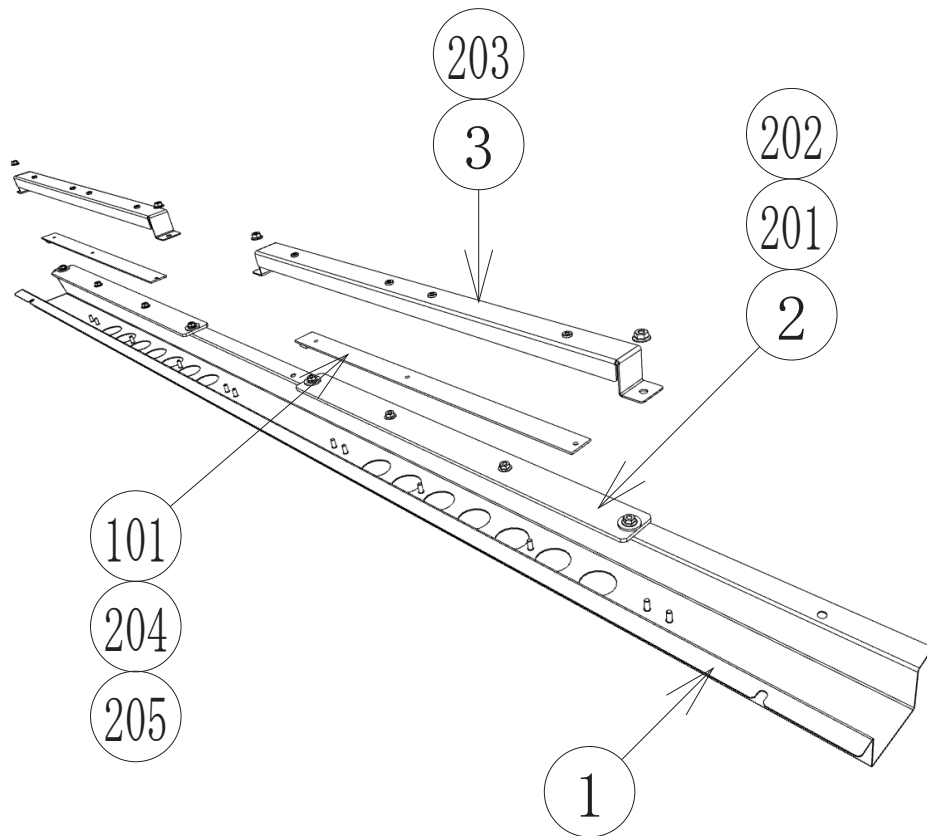
ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-7301UK	BASE CLEANER BODY MAIN	1
***2	LMA-7302UK	BRKT FIX CLEANER SIDE	2
***3	LMA-7303UK	BRKT FIX CLEANER BTM	1
***4	LMA-7304UK	BRKT FIX CLEANER TOP	1
***5	LMA-7305UK	BRKT CLEANER BODY LED	1
***6	LMACJ01002	CLEANER MAIN BODY	1
***7	LMA-7306UK	CLEANER SHAFT	1
***101	MTS-9-HH-015CAP	LED PCB MTS-9-HH-015CAP-1 (CLEANERLEDS)	1
***202	068-441616	M4 WSHR 16OD FLT PAS	11
***203	029-B00416-0B	M4X16 SKT BH BLK	2
***204	068-441616-0B	M4 WSHR 16OD FLT BLK	2
***205	029-B00412	M4X12 SKT BH PAS	11
***206	060-S00400	M4 WSHR SPR PAS	1
***207	020-B00316-0B	M3X16 SKT BH BLK	2

⑪ ASSY TOP D/LIGHT LED (LMA-7180UK)

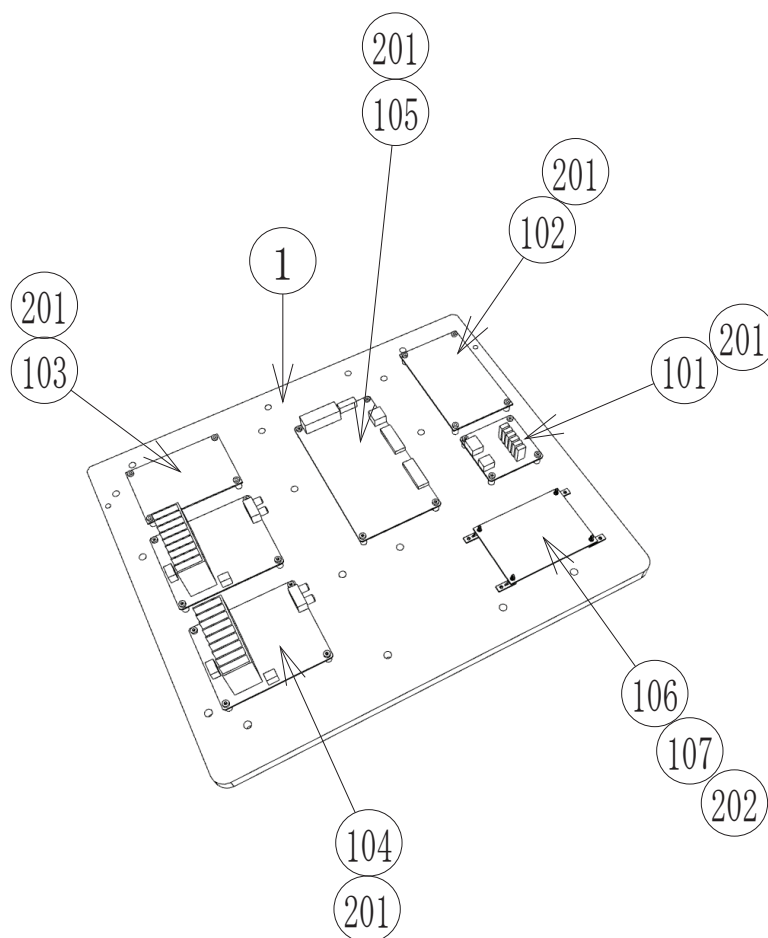
(D-1/1)

18

PARTS LIST



ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-7181UK	BASE TOP DOWNLIGHT	1
***2	LMA-7182UK	COVER LED	2
***3	LMA-7183UK	BRKT MTG LED BD	2
***101	MTS-9-HH-043	LED PCB MTS-9-HH-043 (ROOFLEDUNIT)	2
***201	068-441616	M4 WSHR 16OD FLT PAS	8
***202	050-U00400	M4 NUT NYLOK PAS	8
***203	050-F00400	M4 NUT FLG SER PAS	4
***204	020-B00308-0B	M3X8 SKT BH BLK	6
***205	068-330808-PN	M3 WSHR 8OD FLT NYLON	6
***301	LMA-60019UK	WH ROOF LED	1



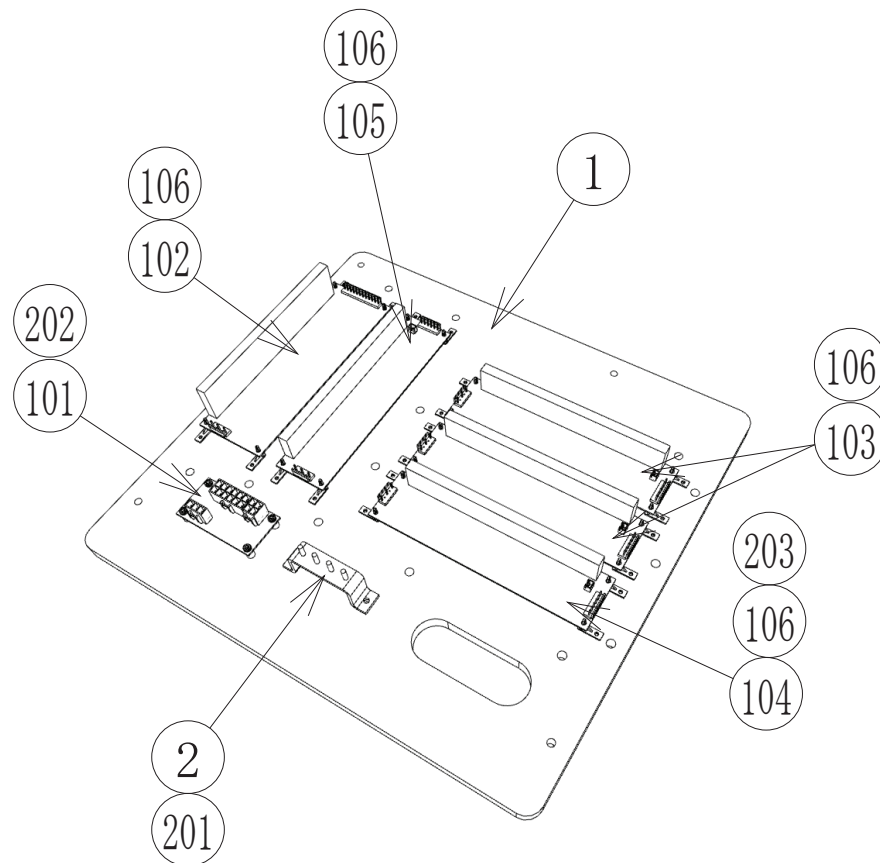
ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-4001UK	WOODEN BASE MAIN	1
***101	MTS-9-HH-044	LED DRIVE PCB (MTS-9-HH-044)	1
***102	AMO-14063	DRIVE PCB ASSY AMO-14063	1
***103	D#RA50053X	ASSY AMO-14067 DAMP(2)	1
***104	D#RA50018	AMP PCB ASSY AMT-04035	2
***105	AMO-10028	IO BOARD (AMO-10028)	1
***106	OMC-GZH200N-C	CONTROLLER CPU BD (OMC-GZH200N-C)	1
***107	OS1011	PCB FEET RICHCO LCBS-L-5-01	4
***201	012-P00325	N4X1" S/TAP PAN PAS	24
***202	012-P00312	N4X1/2" S/TAP PAN PAS	4
***301	LMA-60007UK	WH AUDIO OUT	1
***302	LMA-60008UK	WH DC AUDIO	1
***303	LMA-60009UK	WH SPEAKERS FRONT	1
***304	LMA-60010UK	WH I/O	1

⑬ ASSY PSU ELEC (LMA-41000UK)

(D-1/1)

18

PARTS LIST

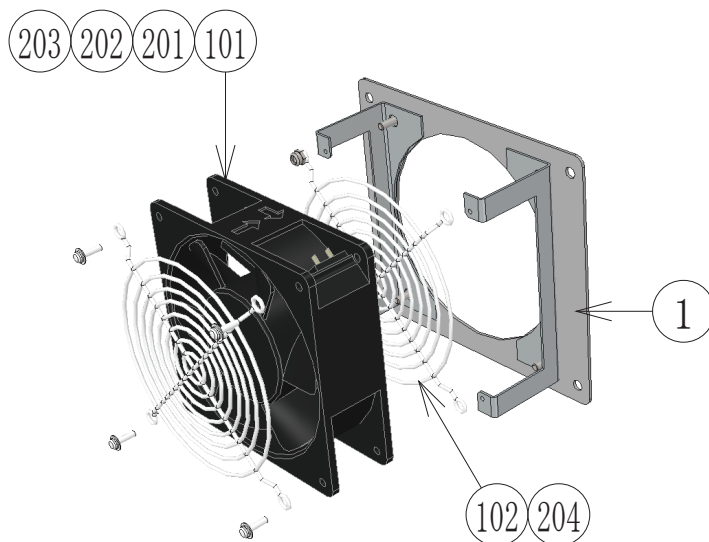


ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-4101UK	WOODEN BASE PSU	1
***2	CFB-4003-01UK	EARTH TERMINAL PLATE	1
***101	838-14551-02UK	AC DISTRIBUTION BOARD	1
***102	400-150-024-01	PSU 24VDC 150W MW LPP-150-24	1
***103	400-075-012-01	PSU 12VDC 75W MW LPS-75-12	2
***104	400-075-024-01	PSU 24VDC 75W MW LPS-75-24	1
***105	400-075-005-01	PSU 5VDC 75W MW LPS-75-5	1
***106	OS1011	PCB FEET RICHSO LCBS-L-5-01	20
***201	012-P00412-FB	N8x1/2" S/TAP FLG BLK	2
***202	012-P00325	N4X1" S/TAP PAN PAS	4
***203	012-P00312	N4X1/2" S/TAP PAN PAS	20
***301	LMA-60002UK	WH AC DIST	1
***302	LMA-60005UK	WH DC DIST	1



⑭ ASSY FAN (SND-1340UK)

(D-1/1)



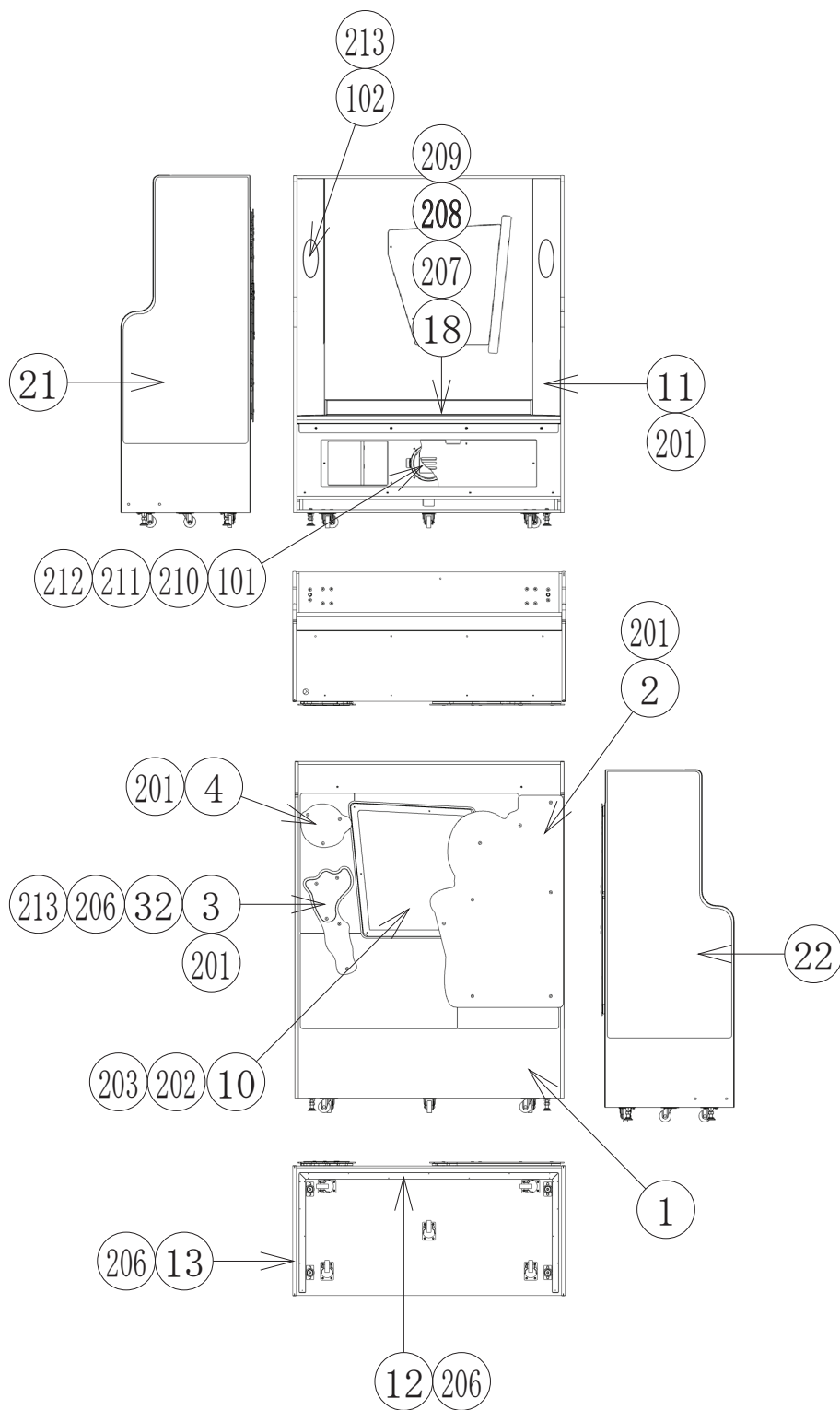
ITEM NO	PART NUMBER	DESCRIPTION	QTY
***1	SND-1341UK	BRKT FAN MTG	1
***101	260-0012-01UK	FAN DC 12V AXIAL	1
***102	FN1012	FAN GUARD METAL 120MM (FG-12)	2
***201	020-B00316-0B	M3X16 SKT BH BLK	4
***202	060-S00300-0B	M3 WSHR SPR BLK	4
***203	060-F00300-0B	M3 WSHR FORM A FLT BLK	4
***204	050-U00400	M4 NUT NYLOK PAS	4
***301	DB-60030UK	WH LED WHT	1

⑮ ASSY REAR CABI (LMA-9000UK)

(D-1/2)

18

PARTS LIST



# 15 ASSY REAR CABI (LMA-9000UK)

(D-2/2)

ITEM NO	PART NO	DESCRIPTION	QTY
**1	LMA-9002UK	ASSY REAR CABINET	1
**2	LMA-9570UK	ASSY CHAR BACK PNL A	1
**3	LMA-9580UK	ASSY CHAR BACK PNL B	1
**4	LMA-9590UK	ASSY CHAR BACK PNL C	1
**10	LMA-9009UK	REAR WINDOW	1
**11	LMA-9003UK	PANEL SPEAKER COVER	2
**12	LMA-9004UK	COVER LED WIDTH	1
**13	LMA-9005UK	COVER LED SIDE	2
**18	LMA-9600UK	ASSY SEAT BTM	1
**21	LMA-9551UK	STICKER REAR CABI LH SIDE	1
**22	LMA-9552UK	STICKER REAR CABI RH SIDE	1
**23	LMA-9553UK	STICKER REAR CABI LH SIDE INNER UPPER	1
**24	LMA-9554UK	STICKER REAR CABI RH SIDE INNER UPPER	1
**25	LMA-9555UK	STICKER REAR CABI LH SIDE INNER LOWER	1
**26	LMA-9556UK	STICKER REAR CABI RH SIDE INNER LOWER	1
**27	LMA-9557UK	STICKER BACK LOWER L	1
**28	LMA-9558UK	STICKER BACK LOWER R	1
**29	LMA-9559UK	STICKER BACK UPPER L	1
**30	LMA-9560UK	STICKER BACK UPPER R	1
**31	LMA-9006UK	COVER FIXING PATCH	4
**32	LMA-9007UK	LIGHT COVER BACK PNL	1
**101	130-020-04080	SPEAKER 4 OHM 80W WS 20E	1
**102	130-04030-E	SPKR ELIP 4OHM 30W VIS DX4x6P	2
**201	020-F00630-0B	M6X30 SKT CSK BLK	19
**202	029-B00416-0B	M4X16 SKT BH BLK	6
**203	068-441616-0B	M4 WSHR 16OD FLT BLK	6
**206	012-P03512-FB	N6x1/2" S/TAP FLG BLK	23
**207	029-B00840-0B	M8X40 SKT BH BLK	4
**208	060-S00800-0B	M8 WSHR SPR BLK	4
**209	068-852216-0B	M8 WSHR 22OD FLT BLK	4
**210	000-F00435	M4X35 MSCR CSK PAS	4
**211	060-S00400	M4 WSHR SPR PAS	4
**212	050-U00400	M4 NUT NYLOK PAS	4
**213	012-P00412-FB	N8x1/2" S/TAP FLG BLK	10
**301	LMA-60015UK	WH REAR CAB LIGHTING	1
**302	LMA-60027UK	WH BILLBOARD TO REAR	1
**303	LMA-6001UK	ASSY LED D/L SIDE	2
**304	LMA-6002UK	ASSY LED D/L REAR	1

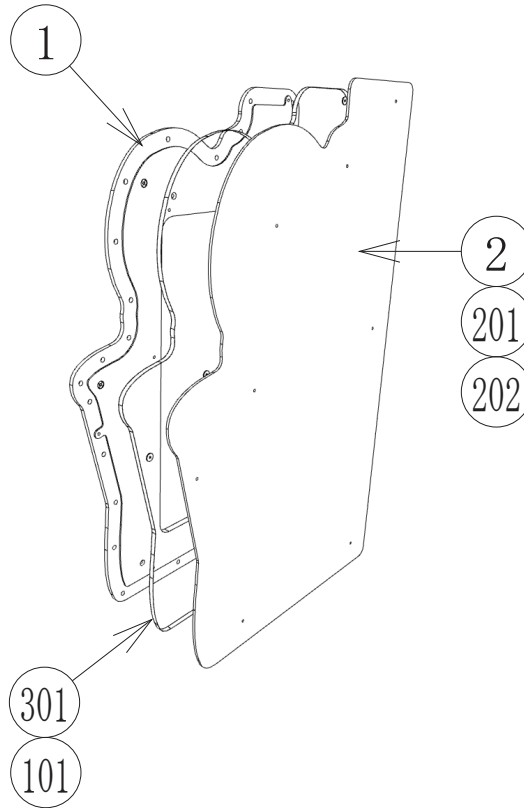
Please see Section 17 - Design related Parts

①⑥ ASSY CHAR BACK PNL A (LMA-9570UK)

(D-1/1)

18

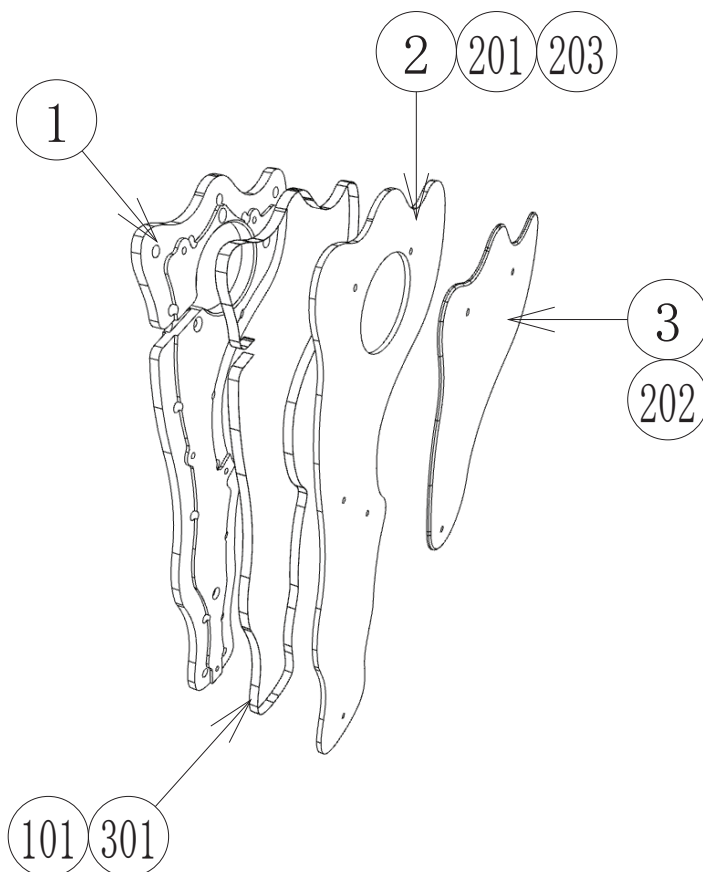
PARTS LIST



ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-9571UK	PANEL SUPPORT CHAR BACK A	1
***2	LMA-9572UK	PANEL CHAR BACK A	1
***101	601-0460	CABLE TIE 100MM	24
***201	029-B00416-0B	M4X16 SKT BH BLK	8
***202	068-441616-0B	M4 WSHR 16OD FLT BLK	8
***301	LMA-6004UK	ASSY LED LUIGI	1

17 ASSY CHAR BACK PNL B (LMA-9580UK)

(D-1/1)



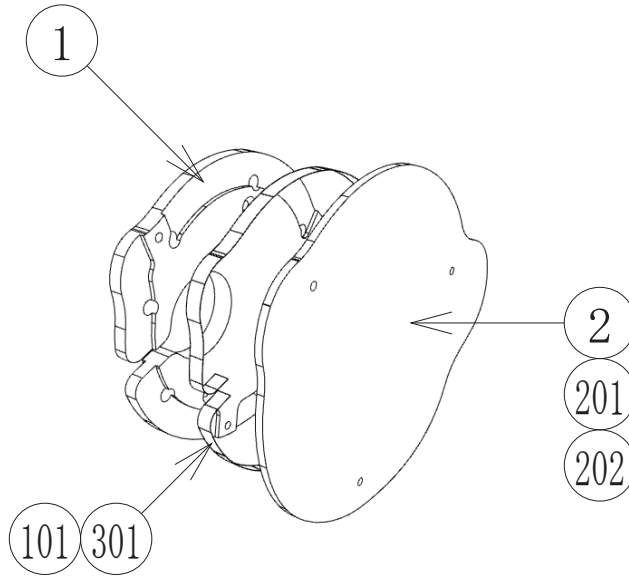
ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-9581UK	PANEL SUPPORT CHAR BACK B	1
***2	LMA-9582UK	PANEL CHAR BACK B	1
***3	LMA-9583UK	PLATE TOP CHAR BACK B	1
***101	601-0460	CABLE TIE 100MM	16
***201	029-B00416-0B	M4X16 SKT BH BLK	2
***202	029-B00425-0B	M4X25 SKT BH BLK	3
***203	068-441616-0B	M4 WSHR 16OD FLT BLK	5
***301	LMA-6005UK	ASSY LED GHOST LARGE	1

18 ASSY CHAR BACK PNL C (LMA-9590UK)

(D-1/1)

18

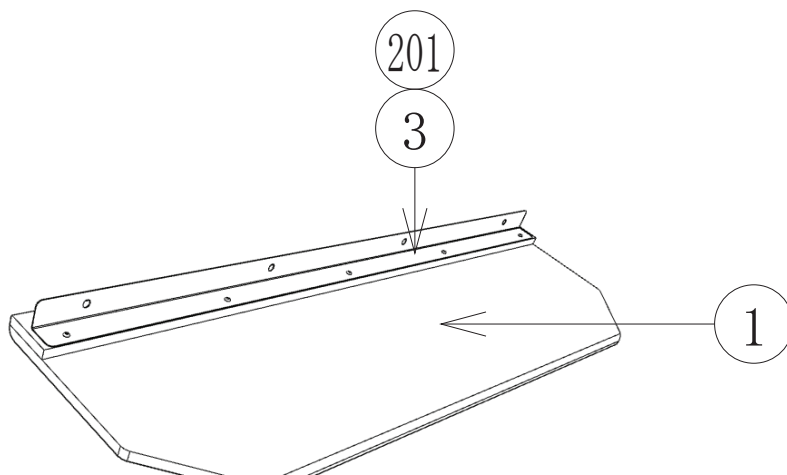
PARTS LIST



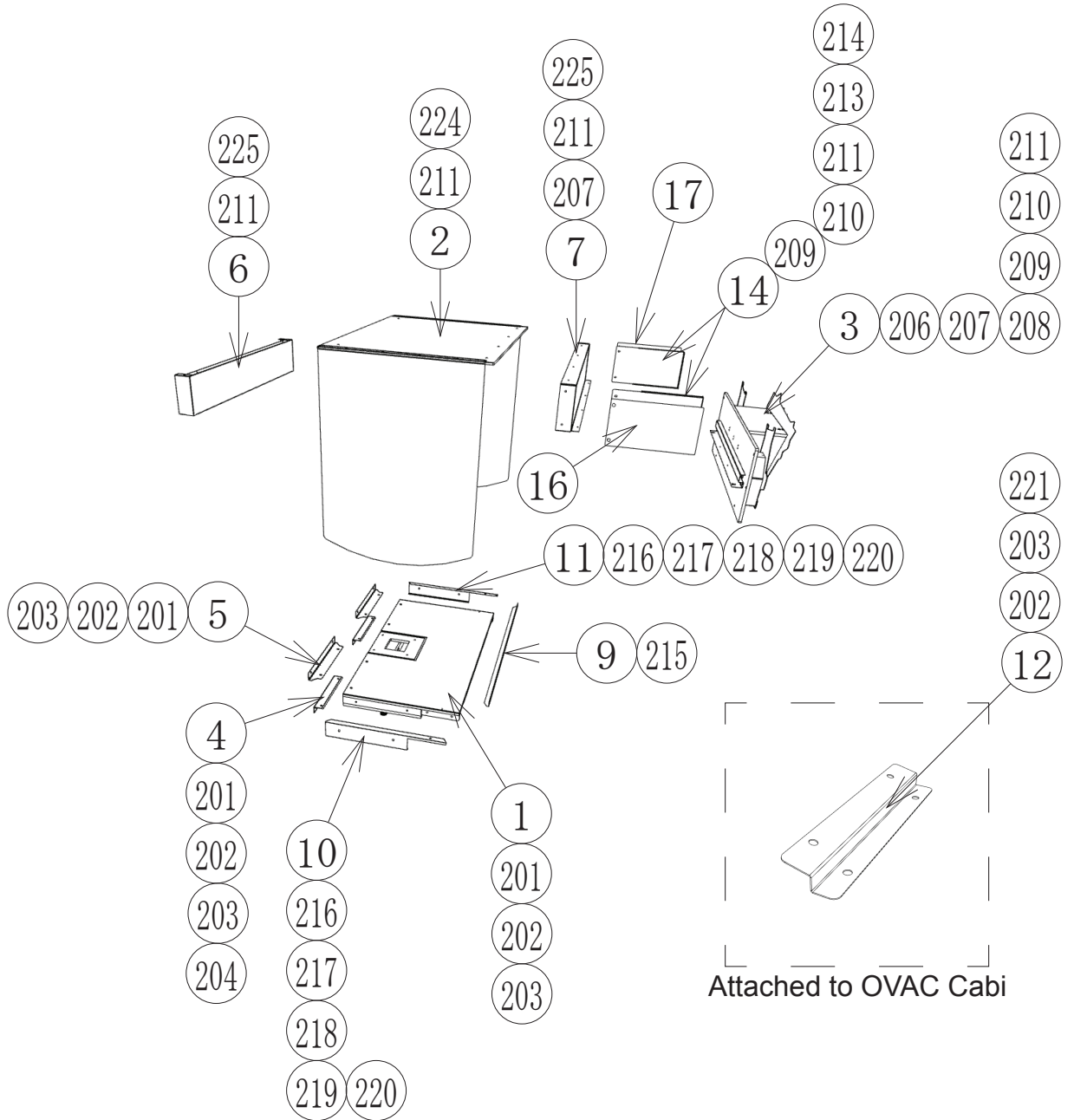
ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-9591UK	PANEL SUPPORT CHAR BACK C	1
***2	LMA-9592UK	PANEL CHAR BACK C	1
***101	601-0460	CABLE TIE 100MM	7
***201	029-B00416	M4X16 SKT BH PAS	3
***202	068-441616	M4 WSHR 16OD FLT PAS	3
***301	LMA-6006UK	ASSY LED GHOST SMALL	1

①9 ASSY SEAT BTM (LMA-9600UK)

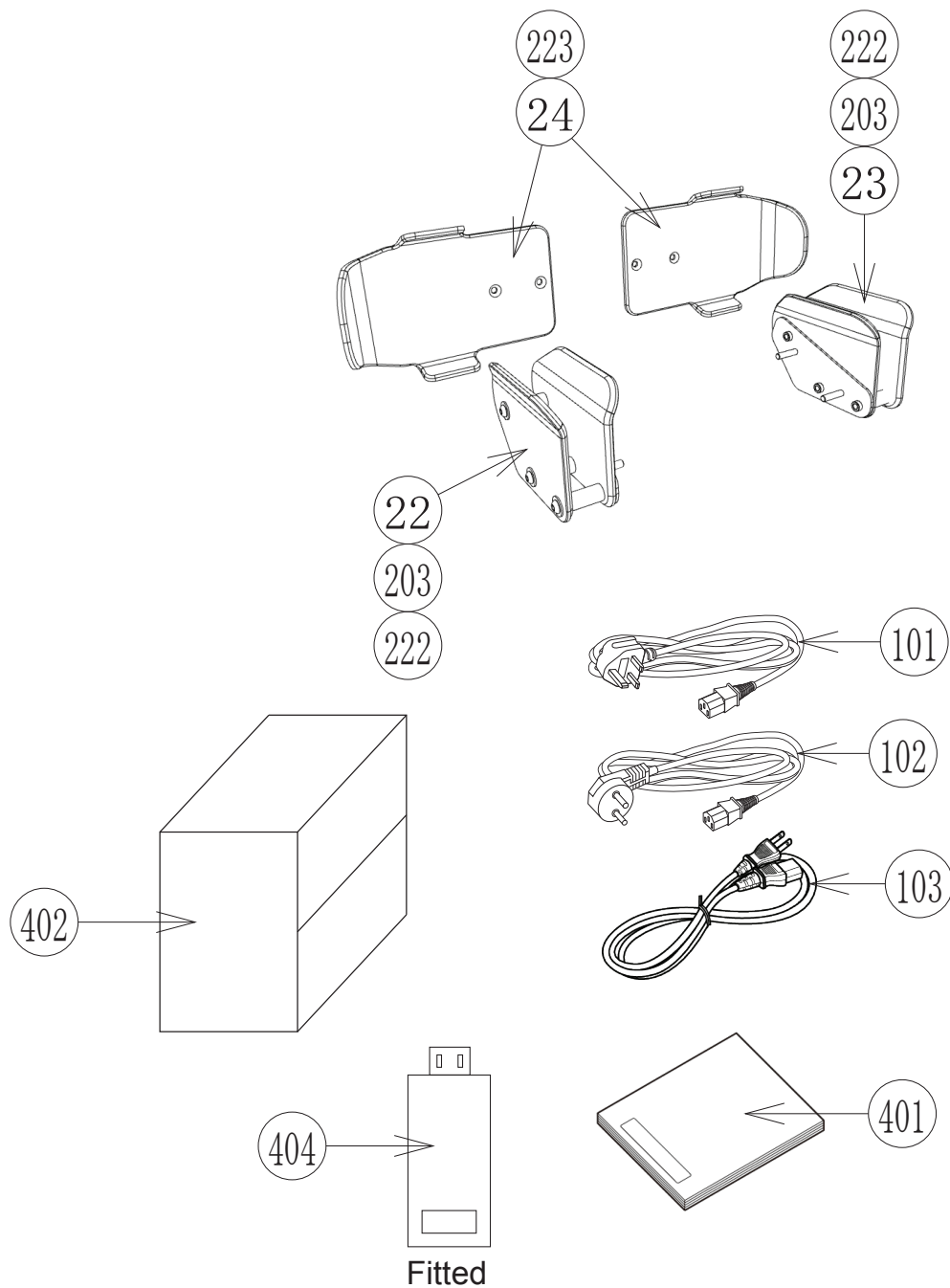
(D-1/1)



ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-9601UK	ASSY SEAT WOOD	1
***3	LMA-9603UK	SEAT FIX BRKT	1
***201	029-B00625-0B	M6X25 SKT BH BLK	5







20 ASSY INSTALLATION KIT (LMA-INST-STD)

(D-3/4)

18

PARTS LIST

ITEM NO	PART NO	DESCRIPTION	QTY
**1	LMA-8000UK	ASSY FLOOR	1
**2	LMA-8500UK	ASSY ROOF	1
**3	LMA-9700UK	ASSY BACK DESIGN BOARD	1
**4	LMA-0051UK	BRKT FRONT JOINT BTM	2
**5	LMA-0052UK	BRKT FRONT JOINT TOP	2
**6	LMA-0081XUK	BRKT ROOF MONITOR	1
**7	LMA-0082XUK	BRKT ROOF SEAT	1
**9	LMA-0056UK	JOINT SASH REAR	1
**10	LMA-0057UK	JOINT SASH SIDE L	1
**11	LMA-0058UK	JOINT SASH SIDE R	1
**12	LMA-0059UK	BRKT JOINT OVAC CABI	1
**14	LMA-0061UK	SEAT TOP SIDE PLATE L	2
**15			
**16	LMA-0063UK	STICKER SEAT UPPER L	1
**17	LMA-0064UK	STICKER SEAT UPPER R	1
**20	440-CS0186UK	STICKER C EPILEPSY MULTI	1
**22	LMA-7530UK	ASSY OVAC HOLSTER L	1
**23	LMA-7540UK	ASSY OVAC HOLSTER R	1
**24	LMA-7511UK	BASE OVAC REST	2
**25	LB1182	LABEL LMA INSTALL 01	1
**30	LMA-7514-MUK	PLAY INSTR SH MULTI	1
**101	LM1227	UK MAINS LEAD 10A WITH PLUG	1
**102	LM1246	EUROLEAD 10A EUROPEAN SOCKET	1
**103	LM1500UK	MAINS LEAD USA/IEC	1
**201	029-B00840-0B	M8X40 SKT BH BLK	12
**202	060-S00800-0B	M8 WSHR SPR BLK	18
**203	068-852216-0B	M8 WSHR 22OD FLT BLK	22
**204	029-B00870-0B	M8X70 SKT BH BLK	4
**206	060-S00600-0B	M6 WSHR SPR BLK	2
**207	068-652016-0B	M6 WSHR 20OD FLT BLK	10
**208	029-B00630-0B	M6X30 SKT BH BLK	2
**209	029-B00416-0B	M4X16 SKT BH BLK	8
**210	060-S00400-0B	M4 WSHR SPR BLK	6
**211	068-441616-0B	M4 WSHR 16OD FLT BLK	22
**213	029-B00616-0B	M6X16 SKT BH BLK	4
**214	050-C00600-3B	M6 NUT DOME TYPE 3 BLK	4
**215	029-B00440-0B	M4X40 SKT BH BLK	4
**216	029-B00825	M8X25 SKT BH PAS	4
**217	060-S00800	M8 WSHR SPR PAS	4
**218	068-852216	M8 WSHR 22OD FLT PAS	4
**219	029-B00425	M4X25 SKT BH PAS	2
**220	068-441616	M4 WSHR 16OD FLT PAS	2
**221	029-B00825-0B	M8X25 SKT BH BLK	2

## 20 ASSY INSTALLATION KIT (LMA-INST-STD)

(D-4/4)

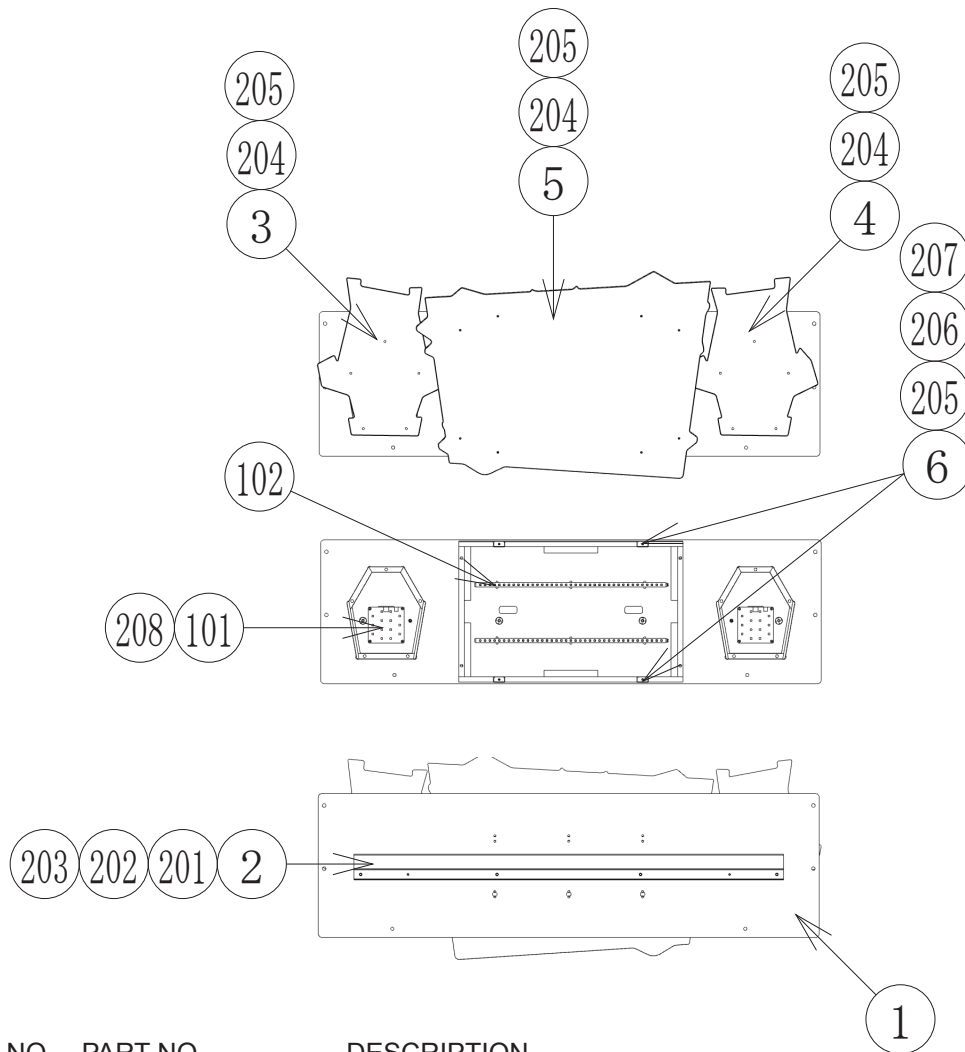
**222	050-F00800	M8 NUT FLG SER PAS	4
**223	020-F00830-0B	M8X30 SKT CSK BLK	4
**224	029-B00412-0B	M4X12 SKT BH BLK	6
**225	029-B00425-0B	M4X25 SKT BH BLK	10
**301	LMA-60020UK	WH ROOF FAN & LED (not shown)	1
**302	LMA-60028UK	WH FLOOR TO REAR (not shown)	1
**401	420-0026UK	MANUAL LUIGI MANSION TH	1
**402	PK0480	BOX INST KIT GST	1
**403	OS1019	SELF SEAL BAG 9X12.3/4	1
**404		KEY CHIP RGW GST	1

21 ASSY BACK DESIGN BOARD (LMA-9700UK)

(D-1/1)

18

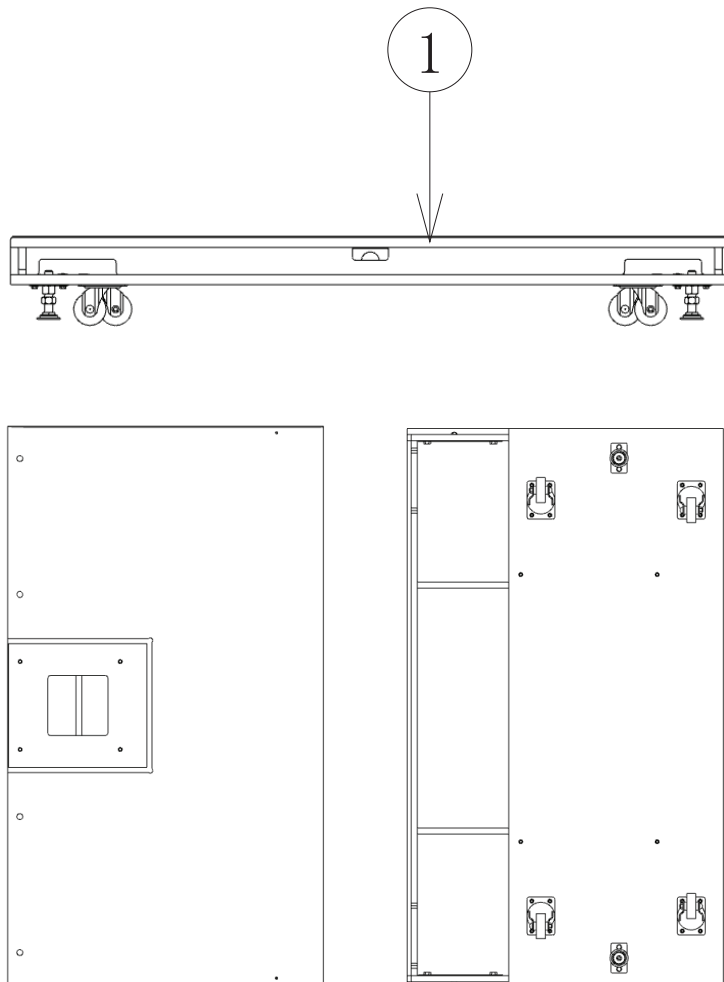
PARTS LIST



ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-9701UK	BACK DESIGN BOARD	1
***2	LMA-9702UK	STAY BACK DESIGN BOARD	1
***3	LMA-9703UK	PLATE BACK DESIGN BD L	1
***4	LMA-9704UK	PLATE BACK DESIGN BD R	1
***5	LMA-9705UK	HEADER BACK DESIGN BD	1
***6	LMA-9706UK	BRKT HEADER SECURE	4
***101	MTS-9-HH-140	LED PCB MTS-9-HH-140 (BILLBOARD)	2
***102	390-2112-050WUK	LED STRIP RIGID WHT 12V 50CM	2
***103	601-0460	CABLE TIE NYLON 100MM	6
***201	029-B00625	M6X25 SKT BH PAS	4
***202	068-652016	M6 WSHR 20OD FLT PAS	4
***203	060-S00600	M6 WSHR SPR PAS	4
***204	029-B00412-0B	M4X12 SKT BH BLK	18
***205	068-441616-0B	M4 WSHR 16OD FLT BLK	22
***206	029-B00416-0B	M4X16 SKT BH BLK	4
***207	060-S00400-0B	M4 WSHR SPR BLK	4
***208	012-P00325	N4X1" S/TAP PAN PAS	8
***301	LMA-60026UK	WH BILLBOARD	1
***302	LMA-6003UK	ASSY LED BILLBOARD	2

22 ASSY FLOOR (LMA-8000UK)

(D-1/1)



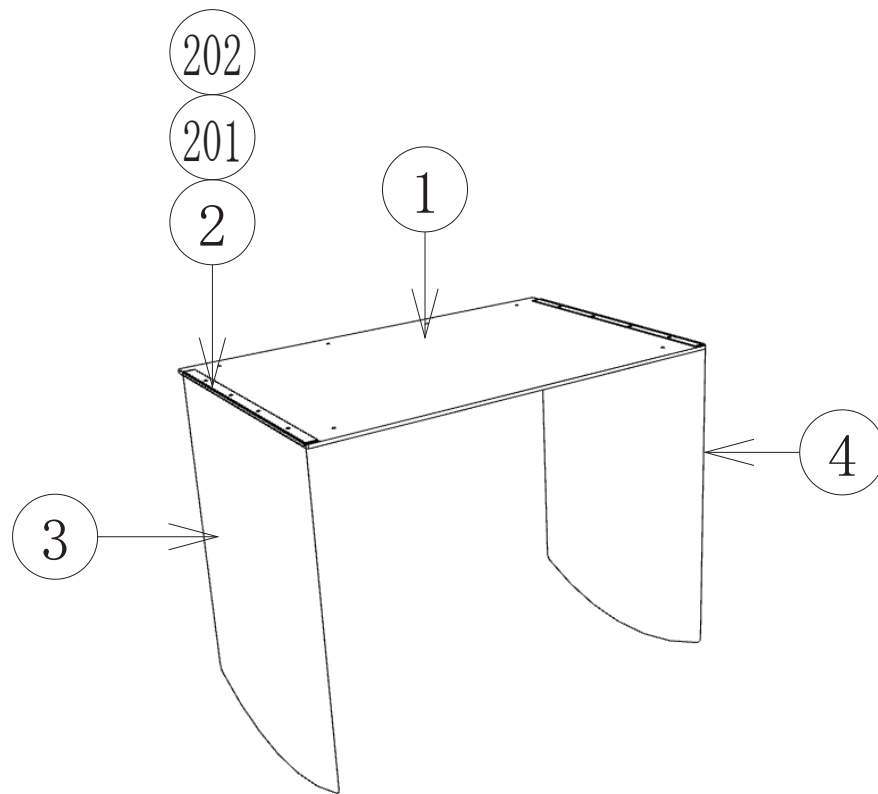
ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-8002UK	ASSY FLOOR	1
****2	LMA-8002-BUK	SEAT BASE NUT PLATE 01	2
****3	LMA-8002-CUK	SEAT BASE NUT PLATE 02	2

23 ASSY ROOF (LMA-8500UK)

(D-1/1)

18

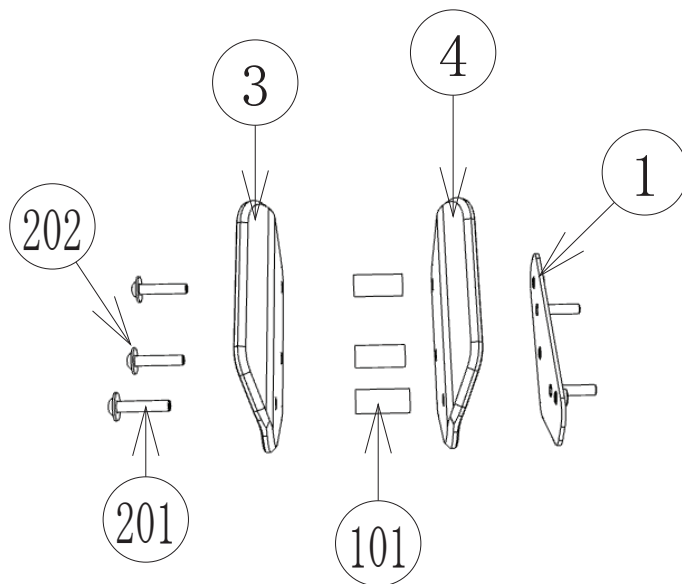
PARTS LIST



ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-8501UK	ROOF TOP WOOD	1
***2	LMA-8502UK	BRKT SIDE CURTAIN STOPPER	2
***3	LMA-8503UK	SIDE CURTAIN L	1
***4	LMA-8504UK	SIDE CURTAIN R	1
***201	029-B00416-0B	M4X16 SKT BH BLK	8
***202	068-441616-0B	M4 WSHR 16OD FLT BLK	8

24 ASSY OVAC HOLSTER L (LMA-7530UK)

(D-1/1)



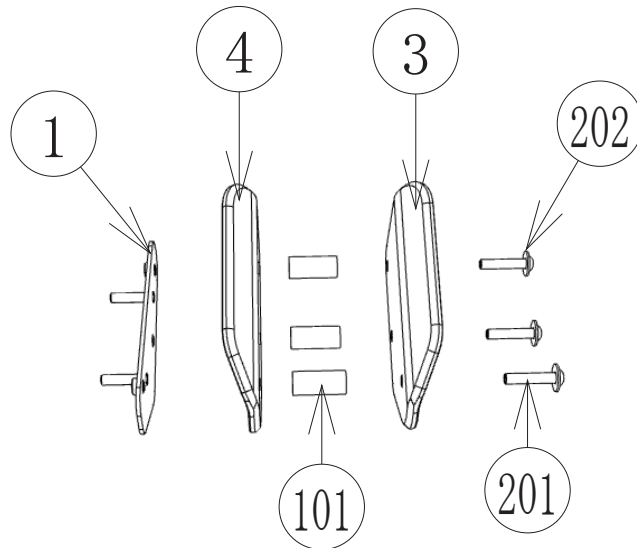
ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-7531UK	PLATE OVAC MTG L	1
***3	LMA-7533UK	PLATE OVAC RETAIN L	1
***4	LMA-7534UK	PLATE OVAC RETAIN R	1
***101	280-L01840-OB	STANDOFF 18OD 8.2ID 40L BLK	3
***201	029-B00870-0B	M8X70 SKT BH BLK	3
***202	068-852216-0B	M8 WSHR 22OD FLT BLK	3

25 ASSY OVAC HOLSTER R (LMA-7540UK)

(D-1/1)

18

PARTS LIST



ITEM NO	PART NO	DESCRIPTION	QTY
***1	LMA-7541UK	PLATE OVAC MTG R	1
***3	LMA-7533UK	PLATE OVAC RETAIN L	1
***4	LMA-7534UK	PLATE OVAC RETAIN R	1
***101	280-L01840-OB	STANDOFF 18OD 8.2ID 40L BLK	3
***201	029-B00870-0B	M8X70 SKT BH BLK	3
***202	068-852216-0B	M8 WSHR 22OD FLT BLK	3



## 19 PARTS & SERVICE CONTACT INFORMATION

### - SEGA TOTAL SOLUTIONS -

42 Barwell Business Park  
Leatherhead Road,  
Chessington,  
Surrey,  
KT9 2NY  
United Kingdom

Parts/Customer Service : +44 (0) 208 391 8060

Technical Support : +44 (0) 208 391 8072



### - PLAY IT AMUSEMENTS -

252 Beinoris Drive,  
Wood Dale,  
IL,  
60191,  
United States of America

Parts/Customer Service : +01 (874) 364 9787

Technical Support : +01 (874) 364 7775



## 20 WIRE COLOUR CODE TABLE

### ⚠ WARNING

The DC power wire colour for this product is different from previous SEGA titles. Working from the previous wire colors will create a high risk of fire.

The colour codes for the wires used in the diagrams in the following chapter are as follows.

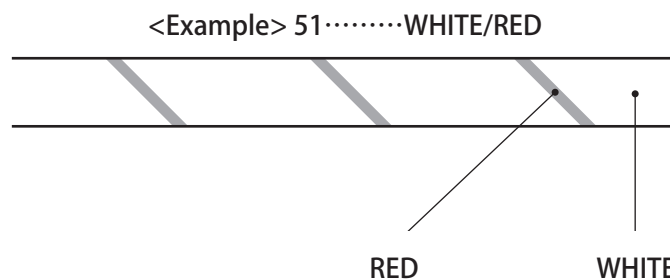
A	PINK
B	SKY BLUE
C	BROWN
D	PURPLE
E	LIGHT GREEN

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

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

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

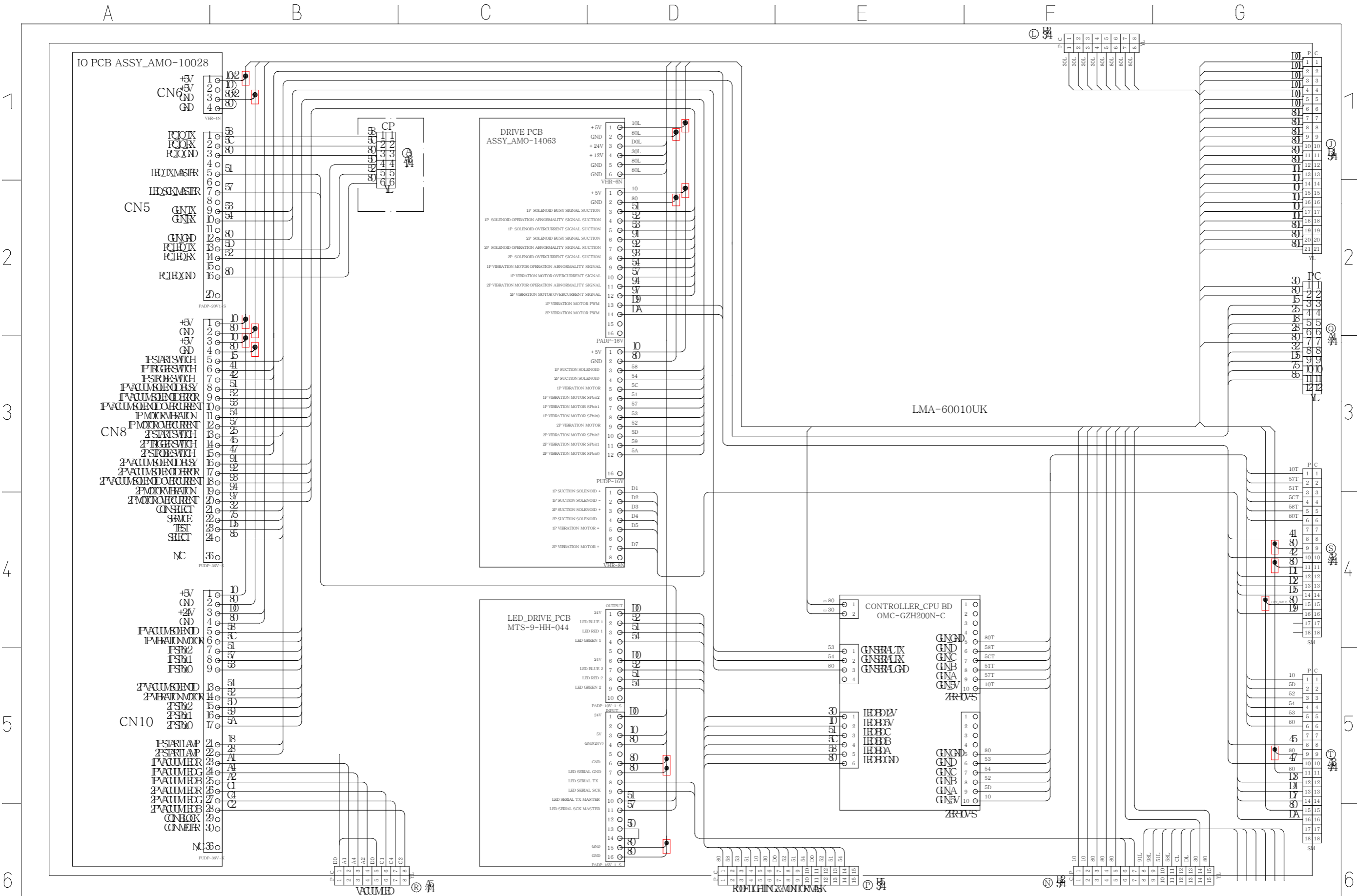
Note 1: If the right-hand side numeral is not 0, that particular wire has a spiral colour code. The left-hand side character shows the base colour and the right-hand side one, the spiral colour.



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

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



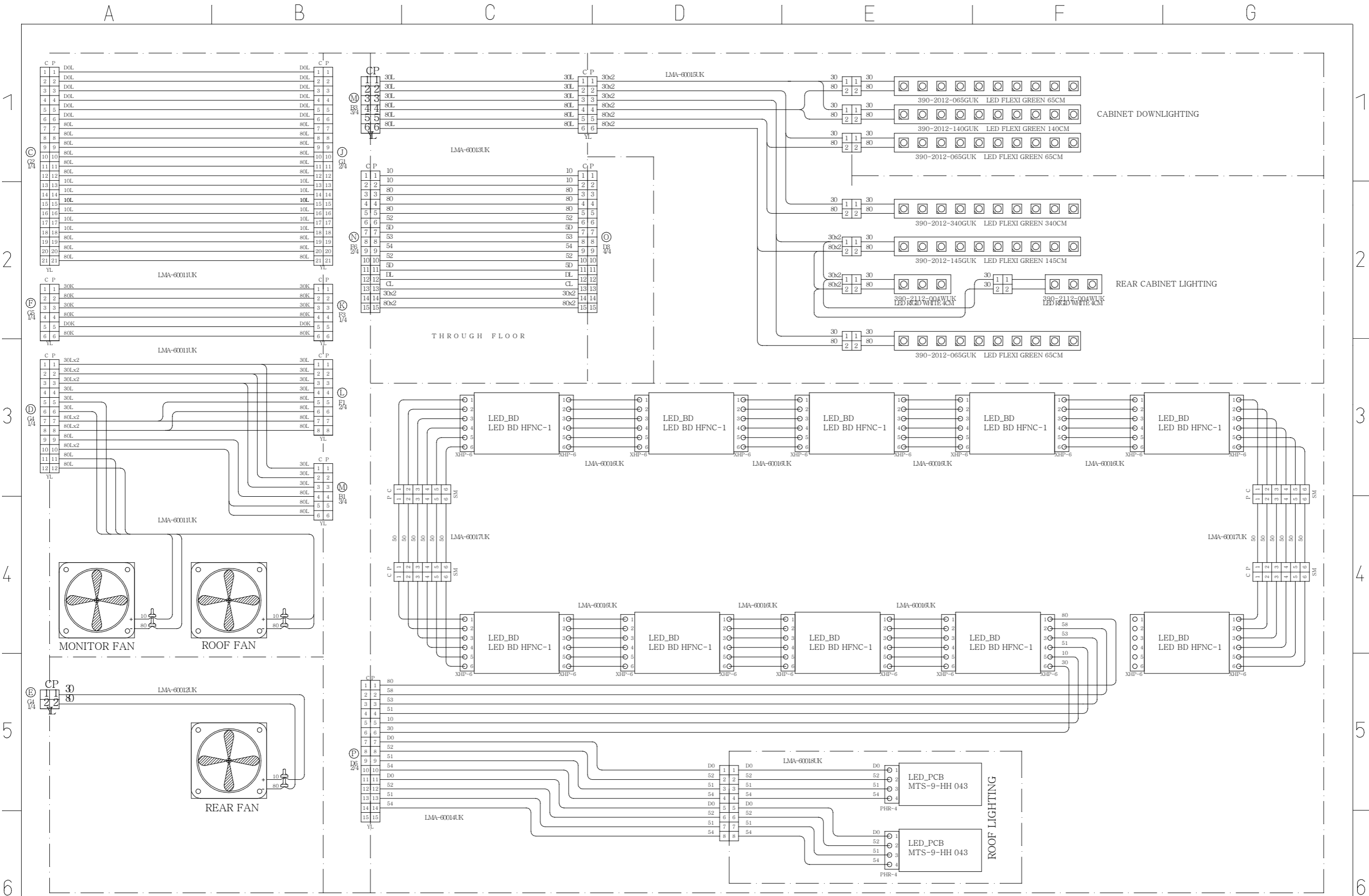


8	BLACK	E	LIGHT GREEN	43	EARTH WIRE
7	ORANGE	D	PURPLE	7	AWG18 UL1672
5	WHITE	C	BROWN	7	AWG20 UL1672
4	GREEN	B	SKY BLUE	U	AWG16 UL1015
3	YELLOW	A	PINK	K	AWG18 UL1015
2	BLUE	A	PINK	L	AWG20 UL1007
1	RED	9	GRAY	T	AWG22 UL1007
					AWG24 UL1007

LMA-0000UK  
PART NUMBER

DRAWN  
RA

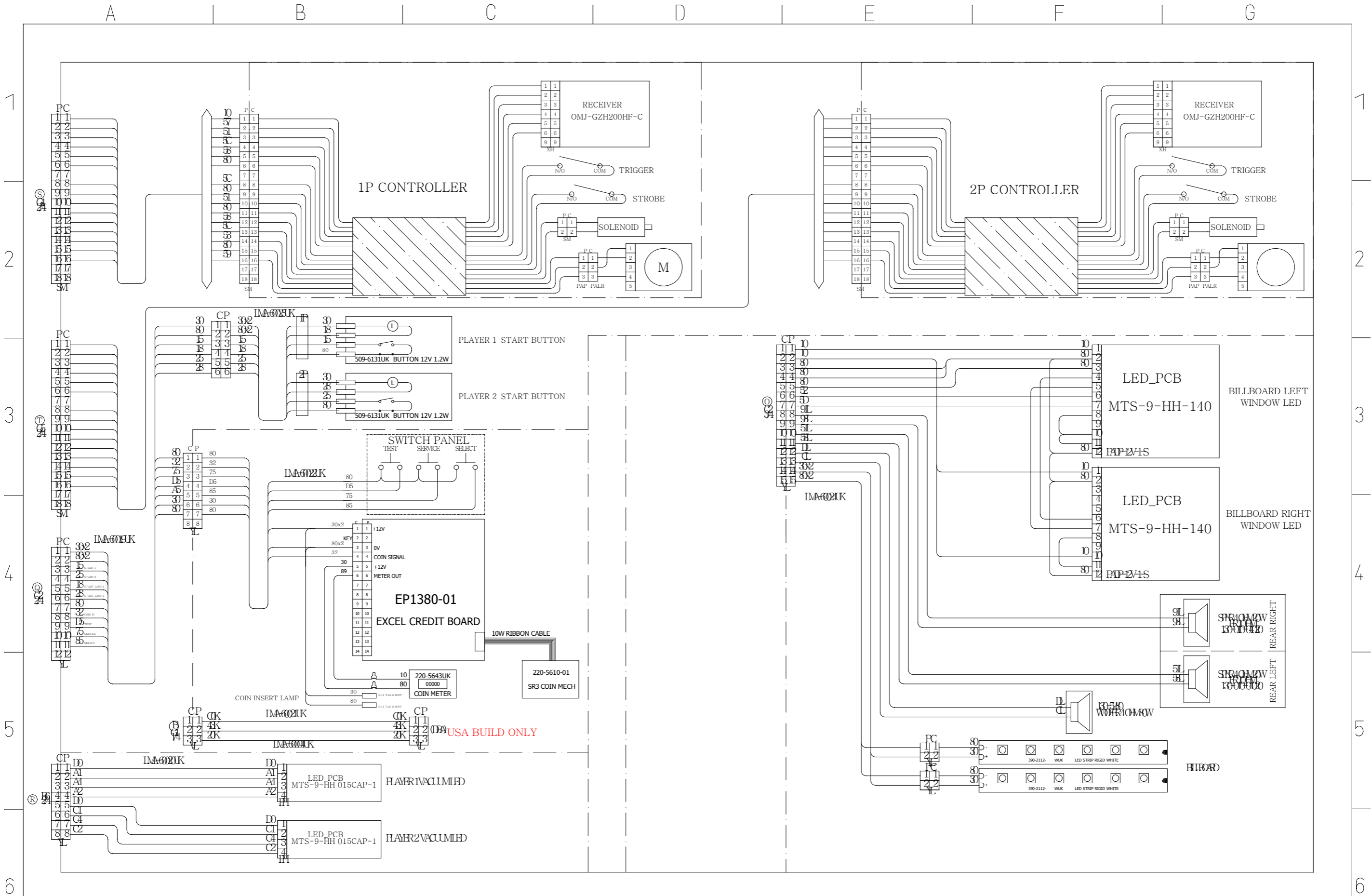
SEGA AMUSEMENTS EUROPE LTD PAGE 2 OF 4 THIS DRAWING WILL IN NO WAY BE COPIED, TO BE RETURNED ON DEMAND.  
LUGI'S MANSION ARCADE ORIGINAL SIZE A2



8	BLACK	E	LIGHT GREEN	43	EARTH WIRE
7	ORANGE	D	PURPLE	7	AWG18 UL1672
5	WHITE	C	BROWN	U	AWG16 UL1015
4	GREEN	B	SKY BLUE	K	AWG18 UL1015
3	YELLOW	A	PINK	L	AWG20 UL1007
2	BLUE			AWG22 UL1007	
-1	RED	9	GRAY	T	AWG24 UL1007

LMA-0000UK	RA
PART NUMBER	DESCRIPTION

SEGA AMUSEMENTS EUROPE LTD	PAGE 3 OF 4	THIS DRAWING WILL IN NO WAY BE COPIED, TO BE RETURNED ON DEMAND.
LUIGI'S MANSION ARCADE		ORIGINAL SIZE A2



8	BLACK	E	LIGHT GREEN	43	EARTH WIRE
7	ORANGE	D	PURPLE	?	AW618 UL1672
5	WHITE	C	BROWN	U	AW620 UL1672
4	GREEN	B	SKY BLUE	K	AW616 UL1015
3	YELLOW	A	PINK	L	AW618 UL1015
2	BLUE	9	GRAY	L	AW620 UL1007
1	RED			A	AW622 UL1007
				T	AW624 UL1007

LMA-0000UK  
PART NUMBER

DRAWN  
RA

SEGA AMUSEMENTS EUROPE LTD PAGE 4 OF 4 THIS DRAWING WILL IN NO WAY BE COPIED TO BE RETURNED ON DEMAND.

LUIGI'S MANSION ARCADE

ORIGINAL SIZE  
A2