

## BEFORE USING THE PRODUCT, besureto tead 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


WARNING

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

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


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

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


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


Indicates a "Protective Earth Terminal." Before operating the equipment, be sure to connect it to the Ground.
(The step may be omitted for products in which a power cord with earth is used.)
O 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.
O 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.
O 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.
O 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.

## O 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.

O 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.
O 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.
O 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.
O When handling the monitor, be very careful. (Applies only to the product with a monitor.)
Some of the monitor (TV) 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.
O Be sure to adjust the monitor/projector properly.
(Applies only to the product with a monitor/projector.)
Do not operate the product leaving on-screen flickering or blurring as it is. Using the product with the monitor/projector not properly adjusted may cause dizziness or a headache to an operator, a player, or the customers.
O 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.
$\square$ Are there any dented portions or defects (cuts, etc.) on the external surfaces of the cabinet?
$\square$ Are Casters and Adjusters damaged?
ㄱ Do the power supply voltage and frequency requirements meet with those of the location?
$\square$ 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 cords have cuts and dents?
Do the fuses used meet specified ratings? Is the Circuit Protector in an energized status?
ㄱ Are all accessories available?
Can all Doors and Lids be opened with the Accessory Keys? Can Doors and Lids be firmly closed?

## TABLE OF CONTENTS

BEFORE USING THE PRODUCT, BE SURE TO READ THE FOLLOWING:
TABLE OF CONTENTS ..... -i
INTRODUCTION ..... iii
1 HANDLING PRECAUTIONS ..... $\cdot 1$
2 PRECAUTIONS REGARDING INSTALLATION LOCATION ..... -4
2-1 LIMITATIONS OF USAGE ..... 4
2-2 OPERATION AREA ..... 5
3 PRECAUTIONS REGARDING PRODUCT OPERATION ..... - 6
3-1 BEFORE OPERATION ..... 6
3-2 DURING OPERATION (PAYING ATTENTION TO CUSTOMERS) ..... 7
4 PART DESCRIPTIONS ..... -8
5 ACCESSORIES ..... 9
6 INSTALLATION ..... 11
6-1 SECURE THE UNIT AT THE INSTALLATION SITE (MANIPULATE THE ADJUSTERS) ..... 12
6-2 REMOVE SHIPPING BRACKETS ..... 13
6-3 ATTACH PARTITION ..... 15
6-4 CONNECT POWER CORD ..... 16
6-5 ACTIVATE POWER SUPPLY ..... 17
7 PRECAUTIONS WHEN MOVING ..... 18
8 PRIZE REPLACEMENT ..... 19
9 GAME CONTENT ..... 21
10 GAME BOARD ..... 23
11 EXPLANATION OF TEST AND DATA DISPLAY ..... 25
11-1 SWITCH UNIT AND CASH BOX ..... 25
11-2 VFD DISPLAY CONTENT ..... 26
11-3 EXPLANATION OF TEST MODE ..... 31
12 DIP SW SETTINGS ..... 33
13 ARM MECHANISM ..... 37
13-1 ARM REPLACEMENT .....  37
13-2 ADJUSTMENT OF SENSOR BRACKET POSITION ..... 40
13-3 SPRING STRENGTH ADJUSTMENT AND SPRING REPLACEMENT ..... 43
13-4 SHOVEL REPLACEMENT AND ADJUSTMENT ..... 45
13-5 OPEN ARM ANGLE ADJUSTMENT ..... 46
14 MAINTENANCE OF Z-ORIENTED MECHANISM ..... 47
15 COIN SELECTOR ..... 49
15-1 REMOVING THE COIN SELECTOR ..... 49
15-2 REMOVING A JAMMED COIN ..... 50
15-3 CLEANING THE COIN SELECTOR ..... 51
15-4 COIN INSERTION TEST ..... 51
16 REPLACEMENT OF FLUORESCENT LIGHTING, LAMPS, AND FUSES ..... 52
16-1 FLUORESCENT LIGHTING REPLACEMENT ..... 52
16-2 LAMP REPLACEMENT ..... 53
16-3 FUSE REPLACEMENT ..... 56
17 PERIODIC INSPECTION ..... 57
18 ERROR MESSAGES ..... 58
19TROUBLESHOOTING ..... 59
20 DESIGN-RELATED PARTS ..... 60
21 OPTIONAL ITEMS ..... 61
21-1 DOLLAR BILL VALIDATOR ..... 63
21-2 SECURITY BAR ..... 65
21-3 LCD UNIT (LCD CASE + CABLE COVER) ..... 69
21-4 TICKET DISPENSER DOOR ..... 75
21-5 TICKET DISPENSER BOX ..... 8022 PARTS LIST8323WIRE COLOR CODE TABLE12224 WIRING DIAGRAM123

## INTRODUCTION

This manual is intended to provide detailed descriptions together with all the necessary information covering the general operation of electronic assemblies, electro-mechanicals, servicing control, spare parts, etc. for the product, "SEGA UFO CATCHER".

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

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 word "IMPORTANT" and the symbol below

## IMPORTANT

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

\author{

Sega Amusements U.S.A., Inc. <br> 800 Arthur Avenue, Elk Grove Village, IL 60007-5215, U.S.A. <br> | TEL: | $1-847-364-9787$ |
| :--- | :--- |
| TOLL FREE: | $1-888-877-2669$ |
| FAX: | $1-847-427-1065$ |

}

## SPECIFICATIONS

Installation space:
$<$ Full options assembled:
Height:
Weight:
Power, maximum current:
$1,688 \mathrm{~mm}(66.5 \mathrm{in})$ [Width] x 875 mm (34.4 in) [Depth]
$2,023 \mathrm{~mm}(79.6 \mathrm{in})$ [Width] x $1,007 \mathrm{~mm}$ (39.6 in) [Depth] $>$
$1,972 \mathrm{~mm}$ (77.6 in)
$299 \mathrm{~kg}(659.2 \mathrm{lb})$
267 W, 2.4 A (AC 120 V, 60 Hz )

## Definition of 'Site Maintenance Personnel or Other Qualified Individuals'

## A WARNING

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

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

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

## Site maintenance personnel:

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

Activities to be carried out by site maintenance personnel:
Amusement equipment/vending machine assembly, maintenance inspection and replacement of units/expendable parts.

## Other qualified professionals:

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

## 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 and unplug the electrical cord from the outlet. Performing the work without turning the power off can cause an electric shock or short circuit. In the case 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.
- Be sure to perform grounding appropriately. Inappropriate grounding 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.
- Completely make connector connections for IC BD and others. 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.
- Be sure to perform periodic maintenance inspections herein stated.
－This game machine can be installed at a storefront but could tip over due to sudden strong drafts or building winds．It could also tip over from man－made loads．If the game machine does fall down，a serious accident could result．To prevent the machine from falling down，carry out the following procedures and make every effort to operate the machine safely．
－Never place the product at a site that is inclined or has level differences． If there are inclines or level differences，make sure the site is level before placing the machine on it．
－Do not add decorations to the product that will cause its center of gravity to be elevated．Also，be aware that there are cases in which it is illegal to add electrical units to the product interior．
－Make sure that the adjusters are always in contact with the floor．
－Use rope，chain，and／or fixtures for securing furniture to secure the product so that it will not fall down in an earthquake．


## IMPORTANT

－For the IC board circuit inspections，only the logic tester is allowed．The use of a multiple－purpose tester is not permitted，so be careful in this regard．
－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 the ones designed and manufactured not 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. 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.


FIG. 1

## 2 PRECAUTIONS REGARDING INSTALLATION LOCATION

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.
- The operating (ambient) temperature range is from $5^{\circ} \mathrm{C}$ to $35^{\circ} \mathrm{C}\left(5^{\circ} \mathrm{C}\right.$ to $30^{\circ} \mathrm{C}$ with LCD).


## 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 plate 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 7A or higher. Noncompliance 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 7A or higher. Using a cord rated lower than the specified rating can cause a fire and electric shock.


## 2-2 OPERATION AREA

## WARNING

- For the operation of this machine, secure a minimum area of 1.7 m ( 66.9 in ) [W] x 1.6 m (60.0 in) [D]. <Full options assembled: 1.7 m (66.9 in) [W] x 1.8 m (70.9 in) [D]>
- Do not block the ventilation port on the top surface. Heat may build up and cause a fire.
- SEGA shall not be held responsible for damage or compensation for damage to a third party, resulting from the failure to observe this instruction.


## IMPORTANT

In order to transport the machine into a building, the minimum necessary dimensions of the opening (of doors, etc.) are 0.9 m ( 35.4 in ) [W] and 2 m (78.7 in) [H].

Electricity Consumption:
MAX. 2.4 A (AC $120 \mathrm{~V}, 60 \mathrm{~Hz}$ )


FIG. 2-2a Basic Cabinet
FIG. 2-2b Full Options Cabinet (See Section 21.)

## 3 PRECAUTIONS REGARDING PRODUCT OPERATION

## 3-1 BEFORE OPERATION

To avoid injury and trouble, be sure to pay attention to the behavior of visitors and players.

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


- Check if all of the adjusters are in contact with the surface. If they are not, the cabinet can move and cause an accident.
- Do not place items over the ventilation port on the top surface. Heat may build up and cause a fire.
- Do not put any heavy items on this product. Placing heavy items on the product can cause accidents or damage to parts.
- Do not climb on the product. Climbing on the product can cause accidents. To check the top portion of the product, use a stepladder.
- To avoid electric shock, check that none of the door \& cover parts are damaged or missing.
- To avoid electric shock, short circuit and or parts damage, do not put the following items on or in the periphery of the product. Flower vases, flowerpots, cups, water tanks, cosmetics, and receptacles/containers/vessels containing chemicals or water.



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

To avoid injury and trouble, be sure to pay attention to the behavior of visitors and players.

## WARNING

- 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 shocks and short circuits, do not allow customers to unplug the power plug without a justifiable reason.



## 4 PART DESCRIPTIONS



FIG. 4b Rear Panel View

NOTE: For optional items, see Section 21.

## 5 ACCESSORIES

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

TABLE 5 ACCESSORIES

DESCRIPTION：OWNER＇S MANUAL
Part No．（Qty．）：420－7061（1）
Usage notes \＆Diagram：This manual
Parts not labeled with part numbers are as yet unregistered or cannot be registered．Be sure to handle all parts with care，as some parts are not available for purchase separately．
OPERATOR＇S KEY
220－5793－2－A002（4）
For opening／closing the glass door and service door
MASTER KEY
220－5793－2－A001（2）
For opening／closing the back lid
KEYS（3 TYPES）
（2 of each）
－For cash box door
－For bill validator door 1P（left）
－For bill validator door 2P（right）
TRUSS SCREW（CHROME）
000－T00408－0C（2）
For installation，see Section 6－2
POWER CORD
600－7326（1）
For installation，see Section 6－4
TAMPERPROOF WRENCH M4
540－0006－01（1）
Tool
NOTE：The wrench shown in the figure is provided as an
accessory tool but a driver type tool，the 540－0018
（DRIVER TAMPER M4），is also available．If you
wish to purchase it，contact the office indicated
on these instructions or where the product was
purchased．

| SHOVEL STANDARD |
| :--- | :--- |
| BBU－3217（2） |
| For replacement，see Section 13－4 |
| SHOVEL STANDARD |
| UCU－0022（2） |
| For replacement，see Section 13－4 |
| SHOVEL W40 |
| MKW－2120（4） |
| For replacement，see Section 13－4 |
| SHOVEL W60 |
| EG－3404（4） |
| For replacement，see Section 13－4 |
| STICKER DISPLAY BLINDFOLD |
| UCU－2003（2） |
| If the coin setting on the SW unit is set to： |
| ＂12 coins 1 credit＂， |
| ＂16 coins 1 credit＂， |
| then nothing will be displayed for COIN IN on the control |
| panel． |
| Affix a sticker display blindfold to the display． |
| ARM S |
| UCS－3430（4） |
| For replacement，see Section 13 |
| ARM |
| UCS－3432（4） |
| For replacement，see Section 13 |

## A WARNING

To install the unit, follow these instructions in this manual carefully. If the unit is not installed properly, it may cause personal injury or damage to the machine.

Carry out the following five steps to assemble and install the product.

6-1 SECURE THE UNIT AT THE INSTALLATION SITE (MANIPULATE THE ADJUSTERS)
6-2 REMOVE SHIPPING BRACKETS
6-3 ATTACH PARTITION
6-4 CONNECT POWER CORD

## 6-5 ACTIVATE POWER SUPPLY

For assembly and installation, you need a Philips screwdriver, adjustable wrench (for 24 mm hexagonal bolts) and the operator's key.

| OPERATOR'S KEY |
| :--- | :--- |
| PHILIPS SCREWDRIVER <br> (For M4 screws) |
| WRENCH (for M16 HEXAGONAL BOLTS) |

## WARNING

Make sure that all the adjusters are in contact with the floor. Otherwise the cabinet may move, causing an accident.

The product comes with 4 casters and 4 adjusters (Figure 6-1a). After the installation site has been determined, have the adjusters come directly in contact with the floor, establish a gap of about 5 mm between the casters and the floor surface, and adjust the adjusters so that the game machine is level.

1. Move the product to the installation site.
2. Adjust the adjusters so that they come in contact with the floor. Use the wrench to adjust the heights of the adjusters so that the game machine is level.
3. After making adjustments, tighten the adjuster nut upwards so that the adjuster height is fixed.


FIG. 6-1a Bottom View


FIG. 6-1b Adjuster in contact with floor

A 1:100 scale view of the unit. Use it as a reference for installation site layout.



FIG. 6-1c Basic Cabinet


FIG. 6-1d Full Options Cabinet
(See Section 21.)

## 6-2 REMOVE SHIPPING BRACKETS

## CAUTION

- Hold the parts to be removed firmly and then remove the screws that hold them in place. If parts are not held firmly, they may fall and cause an accident.
- Do not move the UFO mechanism while holding onto parts not described in the procedures. You may get your fingers, etc., caught and be injured.


## IMPORTANT

- The mechanism is secured in place for shipment so it will not be damaged during transport. Before activating the power supply, be sure to remove the shipping brackets used to secure the mechanism. If they are not removed, parts may get damaged.
- Shipping brackets are required for preventing damage during transport. Be sure to store them carefully.

1. Open the glass door with the operator's key.

Unlock and open glass door.
(The opposite side can be opened in similar fashion)
2. Remove the screw in the shipping bracket mechanism.

SHIPPING BRACKET MECHANISM


PHOTO 6-2b
3. Move the UFO mechanism to a location where it will be easy to work. Place hand as shown in the photo and move the mechanism. Do not move holding other parts as you may get your fingers caught and be injured. Also, the mechanism itself may become damaged.

4. Remove the screw. Make sure to hold the shipping bracket mechanism so it will not fall down, then remove the screw.

5. Secure in place with the accessory truss screw.
6. Perform steps 3, 4, and 5 again on the opposite side.


PHOTO 6-2e
7. Remove the two screws at the bottom of the shipping center bar.


PHOTO 6-2f
8. Remove the screw at the top of the shipping center bar.
Make sure to hold the shipping center bar, then remove the screw.


PHOTO 6-2g

## 6-3 ATTACH PARTITION

When attaching the partition CL, insert the partition CL into the partition bracket CL.
When attaching the partition front, secure in place with two truss screws.


## 6-4 CONNECT POWER CORD

## WARNING

- Use a power supply equipped with an electric leakage circuit breaker. If you use a power supply without an electric leakage circuit breaker, a short circuit may occur and start a fire.
- After laying out the power cord on the floor, make sure that it is securely protected from exposure. If the cord is exposed anywhere, it could easily be damaged if a customer should trip or stumble over it. Such damages could cause accidents from electrical shocks or short circuits. Either lay out the cord so it will not interfere with customer traffic, or protect it with a cover.

1. There is an AC unit on the cabinet rear panel. The AC unit has a main switch and an inlet for connecting the power cord.
2. Confirm that the main switch is OFF.

3. The power cord is inserted from the bottom of the cabinet and comes out through a hole in the AC unit. However, it is not absolutely necessary to pass the cord through the hole. In some cases, depending on the environment in which the unit will be used, you can connect the power cord directly into the inlet.


РНОТО 6-4
4. Insert the power cord connector into the inlet securely.
5. Insert the power cord plug into the power outlet securely.
6. Lay out the power cord. Place a cover over the laid out power cord so that it will be protected.


FIG. 6-4b Power Cord Layout

## 6-5 ACTIVATE POWER SUPPLY

On this product, there is a power supply switch on the AC unit on the cabinet rear panel and on the internal switch unit. (The internal switch unit is inside the service door. Use the operator's key to open the service door.)

Even when both of these switches are ON, there will be no power unless the glass doors on right and left are closed securely. Normally, leave one of these switches ON and turn the other power supply switch ON/OFF to use.
When the power supply is activated, the billboard, the internal fluorescent lighting, and the left and right fluorescent lights all turn on.
Now we will check the operation (initialization) of all motors and sensors in the UFO mechanism of this product.
These operations are also carried out upon completion of the test mode.
When in [Display mode], all of the 7 -segment displays (numeric display, hereafter "7-seg display") read "-", the game cannot be played, and coins are returned. Initialization also does not take place. (See Section 12.)

## INITIALIZATION

During initialization, the UFO mechanism moves in the following sequence.
If an error is discovered during this series of operations, an error message is displayed and the UFO mechanism stops. (See Section 18)

1. UFO returns to home position (above the prize drop-out slot).
2. UFO moves toward the back of the cabinet. When it reaches the back limit, the UFO stops.
3. UFO moves sideways toward the center of the cabinet. When it reaches the center limit, the UFO stops.
4. UFO descends. When it reaches the lower limit, the UFO rises. Upon reaching the upper limit, the UFO stops.
5. UFO moves toward the front of the cabinet. When it reaches the front limit, the UFO stops.
6. UFO moves sideways toward the home position. Upon reaching the home position, the UFO stops. During stages 1 to 6 above, the UFO arm remains at the angle it assumed when the power supply was activated.
7. The UFO arm opens and closes.
8. After the arm closes, the catch sensor inside the UFO is initialized. This operation cannot be seen, but an error message will be displayed if there is an error in the sensor.

When the above initialization procedures are complete, the customer-standby status is assumed.
In this product, credits are remembered even if the power has been cut off. However, partial credits attained for multiple coins and bonus adder counts are deleted. If credits remain, the game-play status is assumed upon completion of initialization.


FIG. 6-5 Initialization of UFO mechanism on player 1 side (left seat)

## 7 PRECAUTIONS WHEN MOVING

$$
\begin{aligned}
& \text { A WARNING } \\
& \text { Carefully observe the following when moving the product. Failure to follow these } \\
& \text { instructions may result in personal injury during movement and/or damage to the } \\
& \text { cabinet. } \\
& \text { - Disconnect the power cord plug before moving the product. Be careful not to } \\
& \text { damage the power cable during movement. } \\
& \text { - To move the product over the floor, retract the adjusters and have the casters } \\
& \text { come in contact with the floor. } \\
& \text { - After the casters are in contact with the floor, exercise special caution, as the } \\
& \text { unit could move by itself if the floor is inclined. } \\
& \text { - To lift the cabinet, always lift it holding the bottom. If you lift the cabinet holding } \\
& \text { other areas, parts or attachments could be damaged due to the weight of the } \\
& \text { cabinet. }
\end{aligned}
$$

## CAUTION

－Do not press on glass components while moving the product．Careless handling could cause damage to other parts．Fragments may also cause injury．
－When moving the cabinet over areas with level differences and the cabinet is projected to tilt due to the incline，attach shipping brackets and secure the UFO mechanism in place．If the UFO mechanism is not secured in place，parts could be damaged．


FIG．7a


FIG．7b

## 8 PRIZE REPLACEMENT

## A CAUTION

－Observe and follow the conditions listed below for prizes used with this product． Failure to follow the conditions could lead to product malfunctions and components may be damaged．The prizes themselves may also be damaged．
－Prizes can be stacked up to a maximum height of 40 cm （ 15.7 in ），and 800 g （ 1.8 lb ）or less in weight．If this limit is exceeded，there could be product malfunctions and components may be damaged．The prizes themselves may also be damaged．
－Exercise special care when handling glass components．Careless handling could cause damage to the glass．Fragments may also cause injury．
－If the larger arm L has been attached，enlarge the prize drop－out slot for large－ size prizes．Otherwise there could be malfunctions or damage when the arm makes contact．The prizes themselves may also be damaged．
－Do not place prizes on，or suspend them from，the mechanism rail or moveable parts．This could cause product malfunctions and components may be damaged．
－Even if prizes meet the conditions set forth in these instructions，there could be unexpected faulty operations due to prize materials，shapes，and／or centers of gravity．

Prizes can be stacked up to a maximum height of 40 cm （ 15.7 in ）， and $800 \mathrm{~g}(1.8 \mathrm{lb})$ or less in weight．


FIG． 8

## CHANGING THE PRIZE DROP-OUT SLOT

If arm $L$ has been attached for large-size prizes, enlarge the prize drop-out slot.
(These instructions are for the 2P side drop-out slot.)

1. Loosen the 2 plastic-head screws.

2. Support the bottom of the corner partition and slide it to widen the drop-out slot. Do not press down on the top of the corner partition (acrylic) to slide. Excessive force could damage components.


PHOTO 8b
3. Tighten the 2 plastic-head screws that were loosened.


## 9 GAME CONTENT

The following explanations apply when the product functions normally. If the product behaves in a manner at variance with the content below, there may be a malfunction of some sort. Try to identify the cause of the problem immediately and repair it so that the unit can be operated normally.

## HOW TO PLAY

In this product, the internal fluorescent lighting (for both billboard and internal lighting), and the left and right fluorescent lights light up when there is electrical continuity.
During customer-standby status, the UFO mechanism is stationary at the home position (above the prize drop-out slot).
All the buttons' lights on the control panel go out and the BGM outputs standby music.
The BGM can also be set for no output.
Play fee and play count are displayed on the 7 -seg displays on the control panel.
When in [Display mode], all of the 7 -seg displays read "-", the game cannot be played, and coins (or bills) are returned. (See Section 12.)

1. When coins are inserted, the time remaining (how long the UFO mechanism can be operated) and the number of games remaining are displayed on the 7 -seg displays at the seat that is being playing.

UFO mechanism is stationary at home position.


FIG. 9a Customer-standby Status
2. When 9 credits are exceeded, no more coins are accepted. (The coins are returned.)

For example, if it is set so that 1 coin equals 2 credits and 8 credits have been established, the total becomes 10 credits when the next coin is inserted. At this time, the 7 -seg display blinks alternately between " 1 " and " 0 " and no more coins can be accepted.


FIG. 9b Control Panel
3. When the lever is manipulated, time count begins and the UFO mechanism moves in the direction in which the lever is manipulated.
4. The arm of the UFO mechanism opens automatically whenever time runs out or the DOWN BUTTON has been pressed.

5．When the arm of the UFO mechanism opens completely，the UFO mechanism begins to descend．

6．Whenever the UFO mechanism comes in contact with a prize or other obstacle，or when the wire is stretched to its full length，the UFO mechanism stops descending and the arm closes．

7．After the arm has closed，the UFO mechanism begins to ascend．When it reaches the upper limit sensor，the UFO mechanism moves back to home position．

8．When the UFO mechanism reaches the home position，the arm opens．

9．When a prize passes the sensor，the fanfare rings．

10．When the arm opens and closes， 1 game is complete． If no credits remain at this time and the 7 －seg display reads 0 ，the game is over．The BGM switches back to standby music．If credits remain， the next game can be played．

11．If the lever is not manipulated for 90 seconds， 1 credit is erased and the UFO mechanism arm opens and descends at the current position．The arm then closes and ascends and the UFO mechanism returns to home position．


FIG．9c

## 10 GAME BOARD

## WARNING

- Before performing work, be sure to turn the power off and unplug the electrical cord from the outlet. Performing the work without turning the power off can cause an electric shock or short circuit.
- Be careful not to damage the wires. Damaged wires may cause an electric shock, short circuit or present a risk of fire.
- Do not expose the Game Board, etc. for any reason. Doing so may cause electric shock or malfunctioning.


## CAUTION

The chip components on IC boards can be damaged by electrostatic discharge from the human body. Before handling an IC board, always neutralize any static charge in the body by touching a grounded metal surface.

To access the game board, remove the 2 tamperproof screws on the back side of the cabinet, then use the master key to remove the back lid. The game board is inside.


## GAME BOARD CONFIGURATION DIAGRAM

## GAME BD UCU V2: 834-14760

The DIP SWs on the game board are not used for game settings but must all be set to OFF.


## CONNECTORS AND INPUT/OUTPUT

[CN1 (JST RA34P)]: Switch, Analog Input
[CN2 (JST RA50P)]: Switch, Sensor Input
[CN3 (JST RA16P)]: Power Supply Input
[CN4 (JST NH25P)]: Lamp, Catch Motor Output
[CN5 (JST NH12P)]: Ticket Output
[CN7 (JST RA40P)]: Meter, AC Motor Output
[CN8 (JST NH4P)]: Speaker Output
[CN9 (JST NH3P)]: Sound Volume Input
[CN10 (JST NH16P)]: 7-seg Display Output
[CN11 (JST NH10P)]: 7-seg Display Output
[CN12 (JST NH6P)]: Not used.
[CN14 (JST NH8P)]: Not used.
[CN15 (JST NH5P)]: DIPSW BD Signal

## 11 EXPLANATION OF TEST AND DATA DISPLAY

## 11-1 SWITCH UNIT AND CASH BOX

## WARNING

Do not touch any areas other than those indicated. Touching other areas may cause accidents from electrical shocks or short circuits.

## IMPORTANT

If the coin meter circuit is left detached, games cannot be played.

When you open the service door at the bottom of the cabinet front panel, you will find a switch unit deep inside. The functions of each button on the switch unit are as described below.


FIG. 11-1

| - VFD Display: | Monitor for displaying conditions such as income data. |
| :--- | :--- |
| - 1P Power Knob: | Adjusts the strength of the 1P UFO mechanism spring. <br> Adjustment ranges from 00 (weakest) to 99 (strongest). |
| - 2P Power Knob: | Adjusts the strength of the 2P UFO mechanism spring. <br> Adjustment ranges from 00 (weakest) to 99 (strongest). |
| - Select Button: | Used when switching VFD display content. |
| - Clear Button: | Used when clearing data displayed on VFD. |

- Test Button:

Separated for 1P and 2P. Used when entering the test mode and when completing the test mode.

- Service Button: Separated for 1P and 2P. Used when increasing the number of credits for service without tabulating the coin meter. If this button is pressed when an error has occurred, the error sound stops. If it is pressed in test mode, credits are cleared.
- Sound Volume:
- Meter:
- Coin Meter:
- Sub Power Supply Switch:

Adjusts the game music volume. Set for a suitable volume in consideration of the surrounding environment.

Count content set with DIP SW2 is displayed on meter 1 and meter 2.
Separated for 1P and 2P. Counts the number of coins inserted in the coin slot.
This is a power supply switch. The main switch is located on the AC unit on the cabinet rear panel. There is power when both switches are ON.

Open the cash box door to find the cash box inside.


## 11-2 VFD DISPLAY CONTENT

Normally, the POWER setting screen is displayed.
When the select button is pressed, the current credit status can be displayed on VFD.
Each time the select button is pressed, the screen changes.

If there are no operations for 60 seconds, the POWER setting screen is restored.
When the select button is kept depressed for 2 seconds or longer, [Current count] and [Total count] can be toggled.
In [Current count], upon switching to [Service count since last clearing], the screen will return to [Income since last clearing].
In [Total count], upon switching to [Backup clear], the screen will return to [Total income count].

To clear data, enter test mode. Press the clear button when [CLEAR?] is displayed, and the data can be cleared. In [Current count], it is possible to clear the data but the data cannot be cleared without being in test mode (The clear screen will not be displayed).

In [Total count], backup data cannot be cleared without both 1 P and 2 P being in test mode (The clear screen will not be displayed).
The data backup period lasts for two days after power has been cut off.

## DISPLAY CONTENT

## [Current count]

Total counts since the data had last been cleared are displayed. Examples include today's income, income after replacement of prizes, etc. (Data items can be cleared independently)

Current count
CURRNT
COUNT

Income since last clearing
Displays income count since data had last been cleared. (One unit $=25$ cents $)$

| 1P: 000000 | current <br> 2P: 000000 |
| :--- | :--- |

Display during 1P test mode
1P CoinCount 000000 CLEAR?

Display during 2P test mode

```
2P CoinCount
    000000 CLEAR?
```

Play count since last clearing
Displays prize-out count since data had last been cleared.

| 1P: 000000 | current |
| :--- | :--- |
| 2P: 000000 | prize |

Display during 1P test mode

$$
\begin{array}{ll}
\text { 1P } & \text { PrizeCount } \\
& 000000 \text { CLEAR? }
\end{array}
$$

Display during 2 P test mode

```
2P PrizeCount
000000 CLEAR?
```


## Play count since last clearing

Displays play count since data had last been cleared. Since this is the play count, the display may differ from income depending on the setting.

```
1P:000000 current
2P: 000000 credit
```

Display during 1P test mode

```
1P CreditCount
    000000 CLEAR?
```

Display during 2P test mode

```
2P CreditCount
    000000 CLEAR?
```

Payout rate since last clearing
Displays rate calculated from play count and prize-out count since data had last been cleared.

| 1P: $000 \%$ | current |
| :--- | :--- |
| 2P: $000 \%$ | payout |

Service count since last clearing
Displays number of games played using service button since data had last been cleared.

| 1P: 000000 | current |
| :--- | :--- |
| 2P: 000000 | service |

Display during 1P test mode

$$
\begin{array}{ll}
\text { 1P } & \begin{array}{l}
\text { ServiceCount } \\
\\
000000 \text { CLEAR? }
\end{array}
\end{array}
$$

Display during 2P test mode

```
2P ServiceCount
000000 CLEAR?
```


## [Total Count]

Even when data has been cleared in [Current count], data in total count is not erased. This data accumulates unless the backup data is cleared.

Total count
TOTAL
COUNT

Total income count
Displays total income count until backup is cleared.

| 1P: 000000 | total |
| :--- | :--- |
| 2P: 000000 | coin |

Total prize-out count
Displays total prize-out count until backup is cleared.

| $1 \mathrm{P}: 000000$ | total |
| :--- | :--- |
| $2 \mathrm{P}: 000000$ | prize |

Total play count
Displays total play count until backup is cleared.

| 1P: 000000 | total |
| :--- | :--- |
| 2P: 000000 | credit |

Total payout rate
Displays rate calculated from total play count and total prize-out count until backup is cleared.

| 1P: 000000 | total |
| :--- | :--- |
| 2P: 000000 | payout |

Total service count
Displays total service count until backup is cleared.

| $1 \mathrm{P}: 000000$ | total |
| :--- | :--- |
| $2 \mathrm{P}: 000000$ | service |

Backup data clear (Display when both 1P and 2P in test mode)
All data can be cleared. ([Current count] and [Credit] are also cleared)

```
BACKUP DATA
    CLEAR?
```


## DISPLAY FLOW-CHART

The screen changes each time the select button is pressed.
If no other buttons are pressed and no operations are performed for 60 seconds, the POWER setting screen is restored.
When the select button is kept depressed for 2 seconds or longer, [Current count] and [Total count] can be toggled.


## POWER SETTINGS

Spring strength can be changed within the range of 00 to 99 by turning the power knob.
When the knob is turned to the right, the spring becomes stronger ( low level of difficulty ). When it is turned to the left, the spring becomes weaker ( high level of difficulty ).
1 P and 2 P can be changed independently.
When the knob is turned, the POWER value is shown on the VFD.
To display current POWER without turning the knob, press and hold down on the select button while pressing the clear button. Current POWER is shown on the VFD.

| 1 P | POWER: | 00 |
| :--- | :--- | :--- |
| 2 P | POWER: | 99 |

In the case shown in the figure above, 1 P is set to high level of difficulty and 2 P is set to low level of difficulty.

The power can be changed during operation so there is no need to reactivate the power supply.
Power becomes effective after changes have been made.

## 11-3 EXPLANATION OF TEST MODE

When the test button is pressed, the mechanism stops operating and test mode is established.
When in test mode, the test mode number is displayed on the 7 -seg display.
There are a total of 4 test mode types. Test mode number is changed using the down button and operation is done using the lever.
To end test mode, press the test button once again.
When initialization completes normally, the credits before test mode are restored and game mode is re-established. However, partial credits attained for multiple coins are deleted.

Coins are not accepted during test mode. If the service button is pressed during test mode, credits are cleared.


Sensor status, etc., are displayed in accordance with the test mode number. (See TABLE 11-3a.)


FIG. 11-3a
TABLE 11-3a

| Test Mode Number | Operation Content |
| :---: | :--- |
| Test mode 1 | UFO mechanism moves forward/backward/left/right as the lever is moved <br> forward/backward/left/right. |
| Test mode 2 | UFO mechanism moves up/down as the lever is moved forward/backward. |
| Test mode 3 | When the lever is manipulated, the arm opens/closes repeatedly. |
| Test mode 4 | Prize sensor and down switch lamp can be checked. |



Moves forward/backward/left/right



Moves up/down


Arm opens/closes

FIG. 11-3c

During test mode, the content for the small 7 -seg display are as indicated below.
If the limit sensor is entered or operation has just begun, " 0 " is displayed.

TABLE 11-3b

| Test Mode Number | 7-Seg Display Reads | Content |
| :---: | :---: | :---: |
| Test mode 1 | $\begin{aligned} & 7-\operatorname{seg} 1 \\ & 7-\operatorname{seg} 2 \\ & 7-\operatorname{seg} 3 \\ & 7-\operatorname{seg} 4 \end{aligned}$ | Limit sensor LEFT <br> Limit sensor RIGHT <br> Limit sensor FWD <br> Limit sensor BACK |
| Test mode 2 | $\begin{aligned} & 7-\operatorname{seg} 1 \\ & 7-\operatorname{seg} 2 \\ & 7-\operatorname{seg} 3 \\ & 7-\operatorname{seg} 4 \end{aligned}$ | Limit sensor UP <br> Limit sensor DOWN $\qquad$ $\qquad$ |
| Test mode 3 | 7 -seg 1 <br> 7 -seg 2 <br> 7 -seg 3 <br> 7 -seg 4 | Open sensor $\qquad$ $\qquad$ |
| Test mode 4 | $\begin{aligned} & 7-\operatorname{seg} 1 \\ & 7-\operatorname{seg} 2 \\ & 7-\operatorname{seg} 3 \\ & 7-\operatorname{seg} 4 \end{aligned}$ <br> (Down switch also lights up in response to prize sensor) | Prize sensor $\qquad$ $\qquad$ $\qquad$ |

WARNING
Turn off the power supply before changing DIP SW. If the power is left on while DIP SW are changed, electrical shock may occur.

## IMPORTANT

- Make sure the DIP SW that are designated to be OFF are turned OFF. If DIP SW are set to other than prescribed settings, there will be instances when behavior is not suited to actual operations.
- Changed settings do not become effective until the power supply has been reactivated after changing DIP SW.
- The DIP SW on the game board are not used for game settings but must all be set to OFF.

With this product, settings can be changed to those shown in the table by changing the DIP SW (DIP Switch) settings on the switch unit.
DIP SW 1 adjusts coin credit settings; DIP SW 2 sets common game operations for 1P and 2P; DIP SW 3 and 4 set the game operations for 1 P and 2 P , respectively.

FIG. 12

## COIN SETTINGS



Coin credit settings (credits awarded per coin) are set using DIP SW 1.
When 9 credits are exceeded, no more coins are accepted and the coins are returned.
However, if 1 coin is worth 2 credits or more, and 8 credits are remaining, 10 credits or more are established (10 credits or more can be established, depending on the setting).

For example, if it is set so that 1 coin equals 2 credits and 8 credits have been established, the total becomes 10 credits when the next coin is inserted. At this time, the 7 -seg displays blink alternately between " 1 " and " 0 " and no more coins can be accepted.
When FREE PLAY is selected, " is shown on the 7 -seg display and games can be played without engaging the coin and service switches.

## SETTING COMMON GAME OPERATIONS FOR 1P AND 2P

Common game operations for 1P and 2P are set with DIP SW 2.

## BGM SOUND

Sounds for when the unit is in customer-standby status or when a game is being played can be set.
BGM1: Two music pieces change each time a game is completed.
BGM2: Game music is played also while in customer-standby status.
BGM3: Two Christmas songs change each time a game is completed.
OFF: No music is heard during customer-standby status or game play.

## METER SETTINGS

TOTAL COIN (4 are counted for \$1) /TOTAL PRIZE

- METER 1: 1P + 2P total coins are counted.
- METER 2: $1 \mathrm{P}+2 \mathrm{P}$ total prizes are counted.

TOTAL COIN (25ф) /TOTAL BILL

- METER 1: $1 \mathrm{P}+2 \mathrm{P}$ total 25 -cent coins are counted.
- METER 2: $1 \mathrm{P}+2 \mathrm{P}$ total bills are counted. 1 is counted for $\$ 1$.

1P PRIZE/2P PRIZE

- METER 1: 1P prizes are counted.
- METER 2: 2P prizes are counted.


## 1P BILL/2P BILL

- METER 1: 1P, 1 is counted for $\$ 1$
- METER 2: 2P, 1 is counted for $\$ 1$


## CRIME PREVENTION MODE

To prevent theft, an alarm sounds whenever the prize sensor activates during customer-standby status.

## PRIZE COUNT (during customer-standby)

If the prize sensor activates during customer-standby, there is an option to count it as a prize-out or not. (Prize-out is counted even while crime prevention mode is operating)

## ERROR RETRY

Will retry once when an error occurs.

## SETTING GAME OPERATIONS FOR 1P AND 2P SEPERATELY

Settings can be changed for game operations on the 1 P side using DIP SW 3 and the 2 P side using DIP SW 4.

## PLAY TIME

Sets the time period during which manipulations can be made during game play.

## GAME MODE

NORMAL MODE (1 credit for 1game)
1 credit allows for 1 game to be played.

TIMER MODE (Games can be played any number of times during the time period.)
Games can be played any number of times if still within the time period.

## TICKET OUT

Sets the amount of tickets dispensed for 1 game.
NOTE: Ticket dispenser is an optional item.

## DISPLAY MODE

Setting so that games cannot be played (for display, etc.).
In this mode, coins are not accepted and games cannot be played. All of the 7-seg displays read "-" and coins are returned. Initialization also does not take place.

## PRIZE SENSOR

Setting to use the prize sensor. Prize sensor is used when set to [ON]. If the sensor breaks down, set to [OFF]. The sensor will not respond to any action and prizes are not counted when obtained. Even when set to ON and the sensor is broken, [Crime Prevention Mode] and [Prize Count (during customerstandby)] will not work.

DIP SW1 COIN SETTINGS

| DIP_SW1 |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COIN 1P | 1 COIN 1 CREDIT | OFF | OFF | OFF | OFF |  |  |  |  |
|  | 2 COINS 1 CREDIT | ON | OFF | OFF | OFF |  |  |  |  |
|  | 3 COINS 1 CREDIT | OFF | ON | OFF | OFF |  |  |  |  |
|  | 4 COINS 1 CREDIT | ON | ON | OFF | OFF |  |  |  |  |
|  | 5 COINS 1 CREDIT | OFF | OFF | ON | OFF |  |  |  |  |
|  | 6 COINS 1 CREDIT | ON | OFF | ON | OFF |  |  |  |  |
|  | 7 COINS 1 CREDIT | OFF | ON | ON | OFF |  |  |  |  |
|  | 8 COINS 1 CREDIT | ON | ON | ON | OFF |  |  |  |  |
|  | 9 COINS 1 CREDIT | OFF | OFF | OFF | ON |  |  |  |  |
|  | 12 COINS 1 CREDIT | ON | OFF | OFF | ON |  |  |  |  |
|  | 16 COINS 1 CREDIT | OFF | ON | OFF | ON |  |  |  |  |
|  | 20 COINS 1 CREDIT | ON | ON | OFF | ON |  |  |  |  |
|  | 4 COINS 1 CREDIT 8 COIN 1 EXTRA CREDIT | OFF | OFF | ON | ON |  |  |  |  |
|  | 4 COINS 1 CREDIT 20 COIN 1 EXTRA CREDIT | ON | OFF | ON | ON |  |  |  |  |
|  | 8 COINS 1 CREDIT 20 COIN 1 EXTRA CREDIT FREE PLAY | OFF | ON | ON | ON |  |  |  |  |
|  |  | ON | ON | ON | ON |  |  |  |  |
| COIN 2P | 1 COIN 1 CREDIT |  |  |  |  | OFF | OFF | OFF | OFF |
|  | 2 COINS 1 CREDIT |  |  |  |  | ON | OFF | OFF | OFF |
|  | 3 COINS 1 CREDIT |  |  |  |  | OFF | ON | OFF | OFF |
|  | 4 COINS 1 CREDIT |  |  |  |  | ON | ON | OFF | OFF |
|  | 5 COINS 1 CREDIT |  |  |  |  | OFF | OFF | ON | OFF |
|  | 6 COINS 1 CREDIT |  |  |  |  | ON | OFF | ON | OFF |
|  | 7 COINS 1 CREDIT |  |  |  |  | OFF | ON | ON | OFF |
|  | 8 COINS 1 CREDIT |  |  |  |  | ON | ON | ON | OFF |
|  | 9 COINS 1 CREDIT |  |  |  |  | OFF | OFF | OFF | ON |
|  | 12 COINS 1 CREDIT |  |  |  |  | ON | OFF | OFF | ON |
|  | 16 COINS 1 CREDIT |  |  |  |  | OFF | ON | OFF | ON |
|  | 20 COINS 1 CREDIT |  |  |  |  | ON | ON | OFF | ON |
|  | 4 COINS 1 CREDIT 8 COIN 1 EXTRA CREDIT |  |  |  |  | OFF | OFF | ON | ON |
|  | 4 COINS 1 CREDIT 20 COIN 1 EXTRA CREDIT |  |  |  |  | ON | OFF | ON | ON |
|  | 8 COINS 1 CREDIT 20 COIN 1 EXTRA CREDIT |  |  |  |  | OFF | ON | ON | ON |
|  | FREE PLAY |  |  |  |  | ON | ON | ON | ON |

DIP SW2 SETTING COMMON GAME OPERATIONS FOR 1P AND 2P

| DIP_SW2 |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BGM SOUND | BGM1 | OFF | OFF |  |  |  |  |  |  |
|  | BGM2 | ON | OFF |  |  |  |  |  |  |
|  | BGM3 (X'mas) | OFF | ON |  |  |  |  |  |  |
|  | OFF | ON | ON |  |  |  |  |  |  |
| METER SETTINGS | TOTAL COIN/TOTAL PRIZE <br> TOTAL COIN (25ф) /TOTAL BILL <br> 1P PRIZE/2P PRIZE <br> 1P BILL/2P BILL |  |  | OFF | OFF |  |  |  |  |
|  |  |  |  | ON | OFF |  |  |  |  |
|  |  |  |  | OFF | ON |  |  |  |  |
|  |  |  |  | ON | ON |  |  |  |  |
| CRIME PREVENTION <br> MODE | $\begin{aligned} & \text { ON } \\ & \text { OFF } \end{aligned}$ |  |  |  |  | OFF |  |  |  |
|  |  |  |  |  |  | ON |  |  |  |
| PRIZE COUNT | $\begin{aligned} & \text { OFF } \\ & \text { ON } \end{aligned}$ |  |  |  |  |  | OFF |  |  |
|  |  |  |  |  |  |  | ON |  |  |
| ERROR RETRY | $\begin{aligned} & \hline \mathrm{ON} \\ & \mathrm{OFF} \end{aligned}$ |  |  |  |  |  |  |  | OFF |
|  |  |  |  |  |  |  |  |  | ON |

NOTE: Set No. 7 switch to OFF.

DIP SW3 (1P) DIP SW4 (2P) SETTING GAME OPERATIONS FOR 1P AND 2P SEPERATELY

| DIP_SW3,4 |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PLAY TIME | 15 s | OFF | OFF | OFF |  |  |  |  |  |
|  | 20s | ON | OFF | OFF |  |  |  |  |  |
|  | 30s | OFF | ON | OFF |  |  |  |  |  |
|  | 40s | ON | ON | OFF |  |  |  |  |  |
|  | 50s | OFF | OFF | ON |  |  |  |  |  |
|  | 60s | ON | OFF | ON |  |  |  |  |  |
|  | 90s | OFF | ON | ON |  |  |  |  |  |
|  | 120s | ON | ON | ON |  |  |  |  |  |
| GAME MODE | NORMAL MODE (1credit 1game) <br> TIMER MODE (Continuous game in time) |  |  |  | OFF |  |  |  |  |
|  |  |  |  |  | ON |  |  |  |  |
| TICKET OUT | $\begin{aligned} & \hline 0 \\ & 1 \\ & 2 \\ & 3 \end{aligned}$ |  |  |  |  | OFF | OFF |  |  |
|  |  |  |  |  |  | ON | OFF |  |  |
|  |  |  |  |  |  | OFF | ON |  |  |
|  |  |  |  |  |  | ON | ON |  |  |
| DISPLAY MODE | $\begin{aligned} & \hline \text { OFF } \\ & \text { ON } \end{aligned}$ |  |  |  |  |  |  | OFF |  |
|  |  |  |  |  |  |  |  | ON |  |
| PRIZE SENSOR | $\begin{aligned} & \hline \text { ON } \\ & \text { OFF } \end{aligned}$ |  |  |  |  |  |  |  | OFF |
|  |  |  |  |  |  |  |  |  | ON |

## 13 ARM MECHANISM

## WARNING

- Before performing work, be sure to turn the power off and unplug the electrical cord from the outlet. Performing the work without turning the power off can cause an electric shock or short circuit.
- Be careful not to damage the wires. Damaged wires may cause an electric shock, short circuit or present a risk of fire.


## CAUTION

- When securing plastic components, be careful not to tighten screws or nuts excessively. This may cause damage to the components. Fragments may also cause injury.
- Before starting to manipulate the arm mechanism, cut off the power supply durng customer-standby status. Otherwise there could be malfunctions or damage.


## 13-1 ARM REPLACEMENT

To replace to arm L, enlarge the prize drop-out slot. (See Section 8)
For the following procedures, an M3 slotted screwdriver is required.

1. Cut off the power supply in customer-standby status.
2. Use the operator's key to open the glass door.
3. Move the UFO mechanism to a location where it will be easy to work. Place hand as shown in the photo and move the mechanism. Do not move holding other parts as you may get your fingers caught and be injured. Also, the mechanism itself may become damaged.


PHOTO 13-1a
4. Loosen the two screw shafts on the back of the UFO mechanism.

5. Remove the UFO front cover


PHOTO 13-1c
6. Use a slotted screwdriver to loosen the bolts that holds the arm in place.


PHOTO 13-1d
7. There are U-shaped notches on the mechanism mask. Slide the mechanism mask toward you and then remove it.

NOTE: For arm replacement on the opposite (left) side, slide the mask mechanism away from you and then remove it. (Notch orientations are different)


FIG. 13-1


PHOTO 13-1e
8. Remove the arm and attach the arm S or L replacement.
9. Refer to step 7 and reattach the mechanism mask. Pay special attention to the direction of the U-shaped notch when attaching.


PHOTO 13-1f
10. Use a slotted screwdriver to tighten the bolt that holds the arm in place (which had been loosened).

11. The arm on the opposite (left) side can be replaced by following the same procedure.

NOTE: When attaching or removing the mechanism mask as indicated in steps 7 and 9, remember that the slide direction is different. Slide the mechanism mask away from you to remove it; slide it toward you to attach it.

## 13-2 ADJUSTMENT OF SENSOR BRACKET POSITION

When changing the arm size or to limit the range in which the UFO mechanism can move horizontally, change the position of the sensor bracket. The UFO mechanism stops where the sensor bracket is located. The sensor brackets are in a symmetrical spatial relationship with respect to 1 P and 2 P .

1. Loosen the wing screw and move the sensor bracket HP (Home Position) to the location indicated by the sticker.


PHOTO 13-2a
When attaching arm L(2P):


When attaching arm M (2P):


When attaching arm S (2P):


FIG. 13-2a
2. Tighten the wing screw.


PHOTO 13-2b
3. Follow the above procedures to adjust the sensor bracket limit on the opposite side.


PHOTO 13-2c

The sensor bracket limit positions and areas where the UFO mechanism cannot be moved to are as shown in the illustration.


FIG. 13-2b

## LIMITS ON FORWARD／BACKWARD MOVEMENT OF UFO MECHANISM

To limit the range in which the UFO mechanism can be moved forward／backward，change the position of the sensor bracket limit．The UFO mechanism stops where the sensor bracket limit is located．

1．Loosen the wing screw at the rear of the Y－oriented mechanism．


РНOTO 13－2e

2．Move the sensor bracket limit to the desired location and tighten the wing screw．


PHOTO 13－2f

The sensor bracket limit positions and areas where the UFO mechanism cannot be moved to are as shown in the illustration．


## 13-3 SPRING STRENGTH ADJUSTMENT AND SPRING REPLACEMENT

## SPRING ADJUSTMENT

Spring strength can be adjusted in three stages according to the position of the shift bracket. At a position close to the spring, the spring is weak (high level of difficulty). The farther the shift bracket is from the spring, the stronger becomes the spring (low level of difficulty). In addition, slight adjustments can be made with the POWER setting. (See Section 11-2.)

1. Grasp the knob of the slide spring to loosen the connection with the shift bracket so that the spring can be moved to the right or left. Move the spring to the desired position.
2. Move the slide spring on the opposite side to the same position. (Establishes uniform strength on the right and left.)

Positon far from spring (low level of difficulty).
Intermediate position (intermediate level of difficulty).
Position near the spring (high level of difficulty).


FIG. 13-3a


PHOTO 13-3a

When arm size has been replaced, even if the spring position on the shift bracket is the same, the arm gripping force (level of difficulty) will change.

The figure below shows arms of equivalent gripping force. Use it as a guide for setting level of difficulty.
Example) If the spring is at the rightmost position in the shift bracket when arm $L$ is attached, and if the spring is at the leftmost position in the shift bracket when arm $S$ is attached, arm gripping forces will be approximately equal.


FIG. 13-3b

## SPRING REPLACEMENT

1．Grasp the slide spring knob and remove the slide


PHOTO 13－3b

2．Remove the slide spring from the spring bracket．

Remove slide spring from spring bracket．

3．Attach a new slide spring．

4．Repeat the above procedure on the opposite side and replace．

## 13-4 SHOVEL REPLACEMENT AND ADJUSTMENT

## IMPORTANT

After shovels have been replaced, confirm during initialization that the shovels do not overlap each other when the arm is closed.

Select a shovel in accordance to the prizes being used. Remove the two flat head screws and replace shovel.
As shown in the figure, attach a long shovel to the right side.
EG-3405Y / UCU-3411 or BBU-3217 / UCU-0022 are used as a set.


FIG. 13-4

## SHOVEL OVERLAP ADJUSTMENT

1. Loosen the two wing screws.
2. Turn the adjustment screw to adjust the distance between shovels.
3. After adjusting so the shovels do not overlap, tighten the two loosened wing screws.


## 13-5 OPEN ARM ANGLE ADJUSTMENT

In cases such as when the arm comes in contact with the UFO cover, the open arm angle should be adjusted. For the following procedures, an M3 Philips screwdriver or a screwdriver/spanner for M3 hexagonal nuts is required.

1. Loosen the two screws. Hold the arm mechanism at this time so it will not fall.


PHOTO 13-5a
2. Remove the arm mechanism.

Be especially careful when removing, as there are connections.

## ARM MECHANISM

3. Loosen the two flange nuts.


PHOTO 13-5c
4. Slide the sensor bracket arm laterally to adjust the open arm angle.
When the arm is slid to side A , the open arm angle becomes large. When the arm is slid to side $B$, the angle becomes small.


PHOTO 13-5d
5. Tighten the flange nuts and follow the above procedure in reverse order to attach the arm mechanism. Be sure to confirm at this time that no wiring has been caught.

## 14 MAINTENANCE OF Z-ORIENTED MECHANISM

## A WARNING

- Before performing work, be sure to turn the power off and unplug the electrical cord from the outlet. Performing the work without turning the power off can cause an electric shock or short circuit.
- Be careful not to damage the wires. Damaged wires may cause an electric shock, short circuit or present a risk of fire.


## IMPORTANT

- Use only prescribed grease. Using other types of grease could cause damage to components.
- Apply grease only to prescribed locations. Otherwise, operations may become defective and component materials may be altered.

Apply grease to the following areas once every three months.
For spray grease, use grease mate (PART No. 090-0066).

## APPLYING GREASE TO INTERIOR OF Z-ORIENTED MECHANISM

An M4 Philips screwdriver is required for the following procedure.

1. Remove the two connectors.


PHOTO 14a
2. Remove the two truss screws on the back side.


PHOTO 14b
3. Loosen the two truss screws on the front side.

TRUSS SCREW (2), chrome M4 x 8


PHOTO 14c
4. Remove the Z-oriented mechanism.


PHOTO 14d
5. Insert spray grease nozzle into the hole for greasing and apply grease.


PHOTO 14e
6. Carry out the above procedures in reverse order to reattach the mechanism. Be sure to confirm at this time that no wiring has been caught.

## 15 COIN SELECTOR

## WARNING

- Before performing work, be sure to turn the power off and unplug the electrical cord from the outlet. Performing the work without turning the power off can cause an electric shock or short circuit.
- Be careful not to damage the wires. Damaged wires may cause an electric shock, short circuit or present a risk of fire.


## 15-1 REMOVING THE COIN SELECTOR

## 1. Turn the power off.

2. Unlock with the operator's key and open the service door. selector.


PHOTO 15-1a


PHOTO 15-1b
4. Push up the stopper that holds the coin selector in place.


PHOTO 15-1c
5. Open the back hold cover.


PHOTO 15-1d
6. While paying attention to the lockout lever, slide the coin selector slightly to the right, then remove it by pulling it forward.


PHOTO 15-1e


PHOTO 15-1f

## 15-2 REMOVING A JAMMED COIN

When the coin return button fails to refund coins, open the service door and open the selector gate. Once the jammed coin is removed, insert a standard coin to ensure that the selector is working properly.

## 15-3 CLEANING THE COIN SELECTOR

## IMPORTANT

- Remove and clean smears using a soft cloth dipped in water or diluted chemical detergent and then wrung dry.
- Never apply machine oil, etc. to the coin selector.
- After cleaning the coin selector, properly insert a standard coin to ensure that the selector functions correctly.

The coin selector should be cleaned once every 3 months. When cleaning, follow the procedures below:

1. Open the gate and remove dust using a soft brush (made of wool, etc.).
2. Remove and clean smears by using a soft cloth dipped in water or diluted chemical detergent and then wrung dry.
3. Remove the cradle. When detaching the retaining ring (E ring), be extra careful not to bend the rotational axis.
4. Use a soft cloth to wipe any dirt/debris off the rotational axis and bearings.
5. After wiping as described in the previous step, use a dry cloth, etc. to dry the coin selector completely.

Fig. 15-3b
Fig. 15-3a


## 15-4 COIN INSERTION TEST

Carry out a coin insertion test once per month. At the same time, check the following points:
$\square$ Does the Coin Meter count properly?
$\square$ Do coins drop into the Cashbox correctly?
$\square$ Are coins rejected when inserted while holding down the Reject Button?

## 16 REPLACEMENT OF FLUORESCENT LIGHTING, LAMPS, AND FUSES

## 16-1 FLUORESCENT LIGHTING REPLACEMENT

## Replacement of Fluorescent Ceiling Lamps

Remove fluorescent ceiling lamps by pushing them toward the right and replace.

## Replacement of Fluorescent Lamps on Sides



FIG. 16-1

1. Turn the power off.
2. Loosen the two screws and remove the switch cover. Hold the switch cover (L) while removing so it will not fall.
3. Remove fluorescent lamps by pushing them upward and replace. (See FIG. 16-1.)


PHOTO 16-1

## 16-2 LAMP REPLACEMENT

## Replacement of Down Button Lamp

## A CAUTION

- Be careful not to damage the wires. Damaged wires may cause an electric shock, short circuit or present a risk of fire.
- When fixing the plastic parts, do not fasten the screws and nuts too tightly. Failure to observe this instruction may damage these parts and as a result the broken pieces of these parts may cause a person injury.

The provided tamperproof wrench is required for the following procedures.

1. Turn the power off.
2. Remove the 7 tamperproof screws, then remove the control panel.

3. Hold the switch component between your fingers and remove it from the button base. Be careful not to damage wiring connected to the switch.


PHOTO 16-2b


PHOTO 16-2c
5. Attach the connector so that it goes to the right side and return the control panel to its original position.


PHOTO 16-2d


PHOTO 16-2e

## Selector Button Lamp Replacement

## 1. Turn the power off.

2. Unlock with the operator's key and open the service door.


PHOTO 16-2f


PHOTO 16-2g

- The work must only be carried out by personnel with electrical appliance knowledge. Shocks and other serious accidents may result if the work is carried out by unqualified individuals.
- Before performing work, be sure to turn the power off and unplug the electrical cord from the outlet. Performing the work without turning the power off can cause an electric shock or short circuit.
- After eliminating the cause of a blown fuse, replace the fuse. Depending on the cause of the fuse blow, continued use with the blown fuse may cause the generation of heat and present a risk of fire.
- Be sure to use fuses of the specified rating. Using fuses exceeding the specified rating may cause fire or electric shock.

The provided tamperproof wrench is required for the following procedures.

1. Turn the power off.
2. Remove the 2 tamperproof screws, unlock with the master key and open the back lid.


PHOTO 16-3a
3. The 2 fuses are located at the back of the left side. When replacing them, make sure that the ratings are correct.


## 17 PERIODIC INSPECTION

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

## A WARNING

- Be sure to check once a year to see whether Power Cords are damaged, the plug is securely inserted, dust has accumulated between the Socket Outlet and the Power Plug, etc. Using the product with accumulated dust can cause fire and electric shock.
- Never use a water jet, etc. to clean inside and outside the cabinet. If the machine gets wet for any reason, do not use it until it has completely dried.
- Periodically, around once a year, get in touch with the place of contact herein stated or the Distributor, etc. where the product was purchased from, regarding internal cleaning. Using the product with accumulated dust in the interior can cause a fire or accident. Note that professional cleaning will require a fee.
- 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 anomalies such as odors from burning.

TABLE 17 PERIODIC INSPECTION TABLE

| ITEMS | DESCRIPTION | PERIOD | REFERENCE |
| :--- | :--- | :--- | :--- |
| CABINET | Check that adjustors in contact with <br> floor | Daily | See Section 3 |
|  | Apply Grease | 3 months | See Section 13 |
| FLUORESCENT LIGHTING | Inspection of Lighting Equipment | As necessary | See Section 16 |
| COIN SELECTOR | Coin Insertion Test | Monthly | See Section 15 |
|  | Cleaning | Tri-monthly | See Section 15 |
| GLASS DOOR | Cleaning | As necessary | See below. |
| CABINET SURFACES | Cleaning | As necessary | See below. |
| ELECTRICAL/ELECTRONIC COMPONENTS | Inspection | As necessary | See above. |
| INTERIOR | Cleaning | Annually | See above. |
| POWER SUPPLY PLUG | Inspection and Cleaning | Annually | See above. |

## Cleaning the Cabinet Surfaces

When the cabinet surfaces become dirty, remove stains with a soft cloth soaked in water or diluted (with water) chemical detergent and then wrung dry. To avoid damaging the finish, do not use such solvents as thinner, benzene, etc. (other than ethyl alcohol) or abrasives (bleaching agent and chemical dust-cloth).
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.

## Cleaning the Glass Door

The glass door can easily become dirty so be sure to clean it often. Use regular glass cleaners and wipe both glass surfaces. If you are using a spray glass cleaner, be sure to wipe away cleaner left on surrounding non-glass areas.

## 18 ERROR MESSAGES

When an error occurs in the mechanism, a number corresponding to the error is displayed on the 7 -seg displays on the side (1P or 2P) that the error has occurred. Press the test switch to enter test mode.

Test the mechanism and confirm the location of the error before exiting test mode.
After initialization, credits attained before the error are restored and the game resumes. (Partial credits attained for multiple coins are deleted). For details, see [11-3 Explanation of Test Mode].
When an error has occurred, the credits are displayed in 2 digits on the small $7-\mathrm{seg}$ displays.
If an error of unknown cause occurs and cannot be resolved, or if the same error occurs frequently, turn the power off and contact the office indicated on these instructions or where the product was purchased.

TABLE 18

| No. | 7-seg Display Reads | Cause |
| :---: | :---: | :---: |
| 0 | 00E | BACK limit sensor in the X-direction does not turn ON. |
| 1 | 01E | BACK limit sensor in the X-direction does not turn OFF. |
| 2 | 02E | FWD limit sensor in the X-direction does not turn ON. |
| 3 | 03E | FWD limit sensor in the X-direction does not turn OFF. |
| Corrective Measure: Errors involving left/right movements. Check the limit sensor and its operation in test mode 1. (See Section 11) |  |  |
| 4 | 04E | BACK limit sensor in the Y-direction does not turn ON. |
| 5 | 05E | BACK limit sensor in the Y-direction does not turn OFF. |
| 6 | 06E | FWD limit sensor in the Y-direction does not turn ON. |
| 7 | 07E | FWD limit sensor in the Y-direction does not turn OFF. |
| Corrective Measure: Errors involving forward/backward movements. Check the limit sensor and its operation in test mode 1. (See Section 11) |  |  |
| 8 | 08E | UP limit sensor in the Z-direction does not turn ON. |
| 9 | 09E | UP limit sensor in the Z-direction does not turn OFF. |
| 10 | 10E | DOWN limit sensor in the Z-direction does not turn ON. |
| 11 | 11 E | DOWN limit sensor in the Z-direction does not turn OFF. |
| Corrective Measure: Errors involving up/down movements. Check the limit sensor and its operation in test mode 2. (See Section 11) |  |  |
| 12 | 12E | Open sensor does not turn ON. |
| 13 | 13E | Open sensor does not turn OFF. |
| Corrective Measure: Errors involving open/close movements. Check the open sensor and its operation in test mode 3. (See Section 11) |  |  |
| 14 | 14E | There is no coin meter attached. |
| Corrective Measure: Errors involving the coin meter. Check the meter, its operation, and wire connections. |  |  |
| 15 | 15E | Problem with the prize sensor. |
| Corrective Measure: Errors involving the prize sensor. Check the prize sensor and its operation in test mode. (See Section 11) |  |  |
| 20 | 20E | Problem with the X -axis. |
| Corrective Measure: Errors involving the X-axis. Check the limit sensor and its operation in test mode 1. |  |  |
| 21 | 21E | Problem with the Y-axis. |
| Corrective Measure: Errors involving the Y-axis. Check the limit sensor and its operation in test mode 1. |  |  |

If the following errors occur after the power supply has been activated, there may be a problem with the DIP SW board.


## 19 TROUBLESHOOTING

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

## A WARNING

- In order to prevent electric shock and short circuit, be sure to turn the power off and unplug the electrical cord from the outlet before working on the machine.
- Be careful not to damage wiring. Damaged wiring may cause electric shock or short circuit.
- After fixing the problems regarding the Circuit Protector, reinstate the Circuit Protector. Depending on the cause of the problem, using the Circuit Protector without addressing the malfunction can generate heat and can present a fire hazard.


FIG. 19a

## CIRCUIT PROTECTOR

The Circuit Protector uses a bimetal to break the circuit. Due to the heat, the machine cannot be restarted until it cools. Wait at least 1 minute before restarting. (Press the button in.)


## 20 DESIGN-RELATED PARTS

For the Warning Display Stickers, refer to Section1.


FIG. 20a Basic Cabinet


FIG. 20b Full Options Cabinet (See Section 21.)

## 21 OPTIONAL ITEMS

## WARNING

- The work must only be carried out by personnel with electrical appliance knowledge. Shocks and other serious accidents may result if the work is carried out by unqualified individuals.
- Before performing work, be sure to turn the power off and unplug the electrical cord from the outlet. Performing the work without turning the power off can cause an electric shock or short circuit.
- Be careful not to damage the wires. Damaged wires may cause an electric shock, short circuit or present a risk of fire.

The following optional items are available for the SEGA UFO CATCHER.

- Dollar Bill Validator: 2 sets
- Security Bar

Coin Security Bar: 1 set
Bill Security Bar: 2 sets

- LCD Unit

LCD Case + Cable Cover: 1 set
LCD Monitor: 1 set

- Ticket Dispenser Door: 2 sets
- Ticket Dispenser Box

Ticket Dispenser Box L: 1 set
Ticket Dispenser Box R: 1 set


FIG. 21a


FIG. 21b


FIG. 21c

## 21-1 DOLLAR BILL VALIDATOR

## DOLLAR BILL VALIDATOR INSTALLATION

## IMPORTANT

Be sure to use the "AE2432" or "AE2632" dollar bill validator made by MEI.

Install the dollar bill validators on the 2 bill validator doors on the left and right of the cabinet front panel.

1. Turn the power off.
2. Unlock with key and open the bill validator door.

3. Remove the 4 flange nuts, then remove the blind plate.


PHOTO 21-1b
4. Attach the dollar bill validator with the 4 flange nuts that were removed.


PHOTO 21-1c

## 5. Connect the one connector.



PHOTO 21-1d

NOTE: The photos show installation on the cabinet left side. Install the bill validator on the right side in the same manner.

## DIP SWITCH SETTINGS

Set the DIP SWITCHES for use as illustrated below.

AE2432

|  | \$1 |  |  |
| :--- | :---: | :---: | :---: |
| 1 | free |  |  |
| 2 | free |  |  |
| 3 | free |  |  |
| 4 | ON |  |  |
| 5 | OFF |  |  |
| 6 | OFF |  | ON |
| 7 | OFF |  |  |
| 8 | ON |  |  |

AE2632

|  | $\$ 1, \$ 5, \$ 10$ |  |
| :---: | :---: | :---: |
| 1 | $\$ 1, \$ 5, \$ 10, \$ 20$ |  |
| 2 | free |  |
| 3 | free |  |
| 4 | free |  |
| 5 | ON |  |
| 6 | ON |  |
| 7 | OFF |  |
| 8 | OFF |  |

NOTE: Normal operation cannot be guaranteed for settings other than those listed above.


PHOTO 21-1e

NOTE: For details on bill validator handling, inspection, changing settings, etc., refer to the sticker attached or the [Bill Acceptor (Validator) "Installation Guide"] provided with the bill validator.

## 21-2 SECURITY BAR

The following types of security bars are available.

- Coin Security Bar: 1 set
- Bill Security Bar: 2 sets


PHOTO 21-2a


PHOTO 21-2b

## COIN SECURITY BAR INSTALLATION

1. Turn the power off.
2. Unlock with key and open the right bill validator door.

3. Remove the 3 flange nuts on the inside of the bill validator door, then remove the 3 carriage bolts from the cabinet front side. Be careful not to drop or lose the flange nuts.


PHOTO 21-2d

7. Set the spacer in the coin security bar and secure it in place on the cabinet with the 3 flange nuts that were removed.


PHOTO 21-2g
8. Close both the left and right service doors.

## BILL SECURITY BAR INSTALLATION

1. Turn the power off.
2. Unlock with key and open the left bill validator door.


PHOTO 21-2h


PHOTO 21-2i
3. Remove the 3 flange nuts on the inside of the bill validator door, then remove the 3 carriage bolts from the cabinet

4. Set the bill security hook on the cabinet and secure it in place with the 3 flange nuts that were removed.


PHOTO 21-2I
5. Unlock the glass door with the operator's key and open it.


PHOTO 21-2m
6. Remove the 2 flange nuts inside the cabinet, then remove the 2 carriage bolts from the cabinet front side.

7. Close the left bill validator door.
8. Set the bill security bar on the cabinet and secure it in place with the 2 flange nuts that were removed.


PHOTO 21-2p

NOTE: Follow the same procedure to install the bill security bar on the right side. There are no differences in procedure for the left and right sides.

## 21-3 LCD UNIT (LCD CASE + CABLE COVER)

## IMPORTANT

Always use an LCD monitor provided by SEGA.

## LCD UNIT ASSEMBLY

1. Assemble the LCD case and cable cover with the 4 screws.

2. Remove the 4 flange nuts, then remove the LCD bracket.
3. Remove the LCD monitor stand, then connect the AC adapter.

NOTE: The LCD monitor may differ from the one shown in the photo.


PHOTO 21-3c
4. Use the 4 truss screws to attach the LCD bracket to the monitor.
(Attach the LCD bracket so that the wooden area held down by two points is on the upper side.)

5. Return the LCD bracket with monitor attached to the LCD case and secure it in place with the 4 flange nuts removed in step 2. Be careful not to damage the cables.


PHOTO 21-3f


PHOTO 21-3g
6. Pass the power cable through the hole on the underside of the LCD CASE and connect it to the AC Adapter. Bundle the cables and secure them in place with a cable tie.


PHOTO 21-3h


PHOTO 21-3i

NOTE: Tune the monitor before assembly. After attaching the monitor to the inside panel, the tuning button becomes hidden, and tuning may become difficult.

## INSTALLATION OF LCD UNIT ON CABINET

1. Remove the 2 truss screws from inside the cabinet.


PHOTO 21-3j
2. Remove the 2 tamperproof screws on the left and right of the cabinet rear panel.
3. Remove the 1 tamperproof screw in the center, then remove backboard B.
Hold backboard B at this time so it will not fall while working.


PHOTO 21-31
4. Remove the backboard upper bracket from backboard B.

5. Use the 2 provided truss screws to install the LCD unit hook to the backboard upper bracket.


PHOTO 21-3n
6. Attach the LCD unit hook to backboard A (the side with no sticker should face the outer side of the cabinet).


PHOTO 21-30
7. Load backboard A onto the cabinet rear panel, then secure it in place by reversing the steps used to remove the truss screw in the center and the 2 tamperproof screws on the left and right from backboard B. Hold backboard A at this time so it will not fall while working.
8. Secure in place with 2 truss screws from inside the cabinet.


PHOTO 21-3p


РНОТО 21-3q
9. Suspend the LCD unit on the LCD hooks.

Have 2 people do this job, as the assembled LCD unit weighs over 15 kg .


PHOTO 21-3r
10. Use the 4 truss screws provided to secure the LCD cover to the inside of the cabinet. Make sure that the LCD cover does not fall while working.


PHOTO 21-3s
11. Remove the 2 tamperproof screws, unlock with the master key and open the back lid.


PHOTO 21-3t


PHOTO 21-3u
12. Secure the LCD unit with 2 screws from the inside of the cabinet.

13. Close the back lid and lock.

## 21-4 TICKET DISPENSER DOOR

## IMPORTANT

Be sure to use the "DL-1275" ticket dispenser made by Deltronic Labs, Inc.

This set contains:
Ticket Dispenser Door: 2 sets (same for both the cabinet side and ticket dispenser box side)


PHOTO 21-4a

1. Turn the power off.
2. Unlock the bill validator door using the bill validator door key and open it.


PHOTO 21-4b
3. Remove the nut and washers, then remove the earth wire secured to the bill validator door.

4. Disconnect the wire harness connector attached to the cabinet inside the bill validator door.


PHOTO 21-4d
5. Remove the 3 screws, then remove the bill validator door.


PHOTO 21-4e
6. After detaching the cord clamp securing the ticket bin's wire harness, remove the 4 flange nuts, then remove the ticket bin.


PHOTO 21-4f

TICKET BIN


FLANGE NUT (4)
M4
7. Secure the ticket dispenser door using the 3 screws removed in step 4.

TICKET DISPENSER DOOR


PHOTO 21-4h
8. Secure the earth wire to the ticket dispenser door with the nut and washers removed in step 3.


PHOTO 21-4i
9. Connect the connector, and secure it to the cord clamp located inside the cabinet.

10. Secure the ticket bin in place using the 4 flange nuts, and after securing the wire harness to the cord clamp, connect the level sensor switch's faston terminal.

NOTE: When securing the wire harness, secure the earth wire to the 2 cord clamps backside. Also, make sure there isn't too much slack in the wire harness extending from the cabinet.


PHOTO 21-4m

## How to Set Tickets

After you are finished attaching the ticket dispenser, turn the power on, set the tickets, then press the button to adjust. Refer to the user's manual for the ticket dispenser for additional details.


PHOTO 21-4n

## 21-5 TICKET DISPENSER BOX

## IMPORTANT

Be sure to use the "DL-1275" ticket dispenser made by Deltronic Labs, Inc.

This set contains:

- Ticket Dispenser Box L: 1set
- Ticket Dispenser Box R: 1set

PHOTO 21-5a

1. Turn the power off.
2. Remove the 5 truss screws on the cabinet side.

Remove the 4 tamperproof screws, then remove the hole lid.
TAMPERPROOF SCREW (4)
TRUSS SCREW (5)
3. Loosely fasten the 3 bolts on the upper side in place.
4. Use 3 bolts on the lower side to secure the box joint bracket in place.


PHOTO 21-5c
5. Unlock the ticket dispenser door using the ticket dispenser door key and open it.


PHOTO 21-5d
6. After detaching the cord clamp securing the ticket bin's wire harness, remove the 4 flange nuts, then remove the ticket bin.

7. Hook the ticket dispenser box on the 3 loosely fastened bolts on the upper side, then secure them and the 2 bolts on the lower side.

8. Pass the ticket dispenser box connector through the wiring hole on the cabinet side.

Open the back lid, then pass the ticket dispenser box connector through the wiring hole inside the cabinet.

9. Open the bill validator door then connect the connector.


PHOTO 21-5j
10. Secure the ticket bin in place using the 4 flange nuts, secure the wire harness to the cord clamp, then connect the level sensor switch's faston terminal.

NOTE: When securing the wire harness, secure the earth wire to the 2 cord clamps backside. Also, make sure there isn't too much slack in the wire harness extending from the cabinet.


PHOTO 21-5k

## 22 PARTS LIST

(1) TOP ASSY UCU V2 (UCU-00001)
$\qquad$ (2) ASSY CABINET (UCU-1000-01)
(15) ASSY GLASS DOOR L (UCU-1100-01)
(16) ASSY GLASS DOOR R
(UCU-1110-01)
(17) ASSY BACK LID
(UCU-1150)
(18) ASSY CTRL PNL PLATE
(UCU-2000)
(19) ASSY X MECHA $1 P$ $\qquad$ (20) ASSY X MECHA (UCU-3000)
(UCU-3050)
(21) ASSY X MECHA 2P $\qquad$ (20) ASSY X MECHA (UCU-3010) (UCU-3050)
(22) ASSY Y MECHA
(UCU-3100)
(23) ASSY Z MECHA
(UCU-3200)
(24) ASSY PIPE (UCU-3300)
(25) ASSY UFO MECHA $\qquad$ (26) ASSY ARM MECHA (UCU-3410X) (UCU-3400) $\qquad$
$\qquad$ (3) ASSY SUB CABINET $\qquad$ (4) CABINET (UCU-1001-01) (UCU-1002-01)
(5) ASSY WIRE
(UCU-6002)
(6) ASSY SPEAKER
(UCS-1050X)
(7) ASSY SERVICE DOOR (UCU-1060)
(8) SW UNIT
(UCU-1070)
(9) AC UNIT
(UCU-1080-01)
(10) ASSY PRIZE SENSOR
(USS-1200)
(11) ASSY FL BASE L
(UCU-1300)
(12) ASSY FL BASE R
(UCU-1310-01)
(13) SIDE FL UNIT
(UCU-1320-01)
(14) FLAP UNIT

- (27) ASSY REAR COVER
(UCS-3450)
(28) ASSY MAIN BD
(UCU-4000-01)


## (1) TOP ASSY UCU V2 (UCU-00001)



| ITEM NO. | PART NO. | DESCRIPTION NOTE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | UCU-1000-01 | ASSY CABINET | 101 | 220-5794 | CLY LOCK W/KEYS |
| 2 | UCU-1100-01 | ASSY GLASS DOOR L | 102 | 390-6836-32 | FL FO32/841/XP/ECO SYLVANIA |
| 3 | UCU-1110-01 | ASSY GLASS DOOR R | 103 | 390-6836-25 | FL FO25/841/XP/ECO SYLVANIA |
| 4 | UCU-1150 | ASSY BACK LID | 104 | 280-5275-SR10 | CORD CLAMP SR10 |
| 5 | UCU-2000 | ASSY CTRL PNL PLATE | 105 | 601-0460 | PLASTIC TIE BELT 100 MM |
| 6 | UCU-3000 | ASSY X MECHA 1P | 106 | 280-5124-04 | NYLON CLAMP NK04 |
| 7 | UCU-3010 | ASSY X MECHA 2P |  |  |  |
| 8 | UCU-3100 | ASSY Y MECHA | 201 | 000-P00408-W | M SCR PH W/FS M4x8 |
| 9 | UCU-3200 | ASSY Z MECHA | 202 | 000-T00408-0C | M SCR TH CRM M4x8 |
| 10 | UCU-3300 | ASSY PIPE | 203 | 008-T00408-0C | TMP PRF SCR TH CRM M4x8 |
| 11 | UCU-3400 | ASSY UFO MECHA | 204 | 008-T00412-0C | TMP PRF SCR TH CRM M4x12 |
| 12 | UCU-4000-01 | ASSY MAIN BD | 205 | 000-P00425-S | M SCR PH W/S M4x25 |
| 13 | UCU-0001 | SIDE GLASS | 206 | 050-F00400 | FLG NUT M4 |
| 14 | UCU-0002 | SIDE GLASS SASH A | 207 | 068-441616-0C | FLT WSHR CRM 4.4-16x1.6 |
| 15 | UCU-0003 | SIDE GLASS SASH B L | 208 | 068-552016-0C | FLT WSHR CRM 5.5-20x1.6 |
| 16 | UCU-0004 | SIDE GLASS SASH B R | 209 | 000-P00406-0C | M SCR PH CRM M4x6 |
| 17 | UCU-0005 | SHIPPING BRKT TOP | 210 | 000-P00410-0C | M SCR PH CRM M4x10 |
| 18 | UCU-0006 | SHIPPING CENTER BAR | 211 | 000-P00410-W | M SCR PH W/FS M4x10 |
| 19 | UCS-0007X | SHIPPING BRKT MECHA | 212 | 020-000410-02 | HEX SKT H CAP SCR BLK $0 Z \mathrm{M} 4 \times 10$ |
| 20 | UCU-0007 | GLASS EDGE GUARD A | 213 | 060-F00400 | FLT WSHR M4 |
| 21 | UCU-0008 | GLASS EDGE GUARD B | 214 | 060-S00400 | SPR WSHR M4 |
| 22 | UCU-0009X | FL COVER PLATE | 215 | FAS-600004 | SPR WSHR CRM M4 |
| 23 | UCU-0010X | SW COVER L | 218 | 008-T00416-0C | TMP PRF SCR TH CRM M4x16 |
| 24 | UCU-0011X | SW COVER R | 219 | FAS-000189 | M SCR TH CRM M6x10 |
| 25 | UCU-0012 | BILLBOARD FRONT | 220 | 050-H00400 | HEX NUT M4 |
| 26 | UCU-0013 | BILLBOARD LEFT |  |  |  |
| 27 | UCU-0014 | BILLBOARD RIGHT | 301 | UCU-60026 | WH EARTH BILL |
| 28 | UCU-0015 | BILLBOARD WASHER | 302 | UCU-60052 | WH BILLVALIDATOR 2 |
| 29 | UCU-0016 | BILL VALIDATOR DOOR |  |  |  |
| 30 | UCU-0017 | BILL DOOR CUSSION | 401 | 420-7061 | OWNERS MANUAL UCU V2 ENG |
| 31 | UCU-0042 | BLIND PLATE | 402 | UCS-3430 | ARM S |
| 32 | DP-1148X | LKG TNG | 403 | UCS-3432 | ARM L |
| 33 | UCU-0018 | BACK BD UPPER BRKT | 404 | EG-3404 | SHOVEL W60 |
| 37 | 421-11416 | STICKER CAUTION FORK | 405 | MKW-2120 | SHOVEL W40 |
| 38 | 421-8479-01 | STICKER INSTR SUNLIGHT ENG | 406 | BBU-3217 | SHOVEL STANDARD |
| 39 | 421-7974-01 | STICKER CAUTION GLASS ENG | 407 | 600-7326 | AC CABLE CONNECT TYPE USA 15A |
| 41 | 421-6690-01 | STICKER 120V | 408 | 220-5793-2-A001 | KEY MASTER A001 |
| 42 | 440-WS0002XEG | STICKER W POWER OFF ENG | 409 | 220-5793-2-A002 | KEY MASTER A002 |
| 43 | 440-WS0286-EG | STICKER W DO NOT OPEN ENG | 410 | SGM-4111Y | KEY BAG |
| 44 | UCU-0043 | HOLE LID | 411 | 540-0006-01 | WRENCH M4 TMP SCR |
| 45 | UCU-0041 | STICKER BACK BOARD | 412 | USS-3418 | SLIDE SPRING |
| 46 | UCU-0040 | BACK BOARD B | 413 | 000-T00408-0C | M SCR TH CRM M4x8 |
| 47 | 440-WS0027-EG | STICKER W HIGH TEMP WIDE ENG | 414 | UCU-0022 | SHOVEL STANDARD |
| 48 | 421-12285 | STICKER DIP SW | 415 | UCU-2003 | STICKER DISPLAY BLINDFOLD |
| 49 | UCU-1002-B | STICKER LEFT |  |  |  |
| 50 | UCU-1002-C | STICKER RIGHT |  |  |  |
| 51 | UCU-1002-D | STICKER FRONT A |  |  |  |
| 52 | UCU-1002-E | STICKER FRONT B |  |  |  |
| 53 | UCU-1002-F | STICKER FRONT C |  |  |  |
| 55 | SGM-4511 | POLY COVER 1100×1900x2000 |  |  |  |
| 56 | 421-6653-01 | TAG FOR SHIPPING ENG |  |  |  |
| 57 | 421-6119-91 | STICKER FCC |  |  |  |
| 58 | 440-CS0316-EG | STICKER C PRIZEDOOR ENG |  |  |  |
| 60 | 421-12292 | STICKER OPTION |  |  |  |

## (2) ASSY CABINET (UCU-1000-01)

 (Including opposite side)



(8)



| $($ gin |
| :---: |
| $-\infty$ |


$<1$

| ITEM NO. | PART NO. | DESCRIPTION | NOTE |
| :---: | :---: | :---: | :---: |
| 1 | UCU-1001-01 | ASSY SUB CABINET |  |
| 2 | UCS-1050X | ASSY SPEAKER |  |
| 3 | UCU-1060 | ASSY SERVICE DOOR |  |
| 4 | UCU-1070 | SW UNIT |  |
| 5 | UCU-1080-01 | AC UNIT |  |
| 6 | USS-1200 | ASSY PRIZE SENSOR |  |
| 7 | UCU-1300 | ASSY FL BASE L |  |
| 8 | UCU-1310-01 | ASSY FL BASE R |  |
| 9 | UCU-1320-01 | SIDE FL UNIT |  |
| 10 | UCU-1340-01 | FLAP UNIT |  |
| 11 | 839-1276R | CREDIT BD US |  |
| 12 | UCU-1003 | CTRL PNL COVER |  |
| 13 | UCU-1004 | LEVER BRKT |  |
| 14 | UCU-1005 | CASH BOX DOOR |  |
| 15 | DP-1148X | LKG TNG |  |
| 16 | UCU-1006 | FIELD PLATE L |  |
| 17 | UCU-1007 | FIELD PLATE R |  |
| 18 | UCU-1008 | CHUTE ADJUST PLATE L |  |
| 19 | UCU-1009 | CHUTE ADJUST PLATE R |  |
| 20 | UCU-1010 | PARTITION HOLDER L |  |
| 21 | UCU-1011 | PARTITION HOLDER R |  |
| 22 | UCU-1012 | CORNER PARTITION L |  |
| 23 | UCU-1013 | CORNER PARTITION R |  |
| 24 | UCU-1014 | FIX PARTITION |  |
| 25 | UCU-1015 | PARTITION BRKT CL |  |
| 26 | UCU-1016 | PARTITION CL |  |
| 27 | UCU-1017 | PARTITION FRONT |  |
| 28 | UCU-1018 | PARTITION BRKT FRONT |  |
| 29 | UCU-1019 | SPEAKER COVER |  |
| 30 | UCU-1020 | WIRE COVER |  |
| 31 | UCU-1021 | PRIZE SENSOR COVER L |  |
| 32 | UCU-1022 | PRIZE SENSOR COVER R |  |
| 33 | 253-5366 | CASH BOX |  |
| 34 | 421-12106-01 | STICKER BULB 3.8W14V UL |  |
| 101 | 220-5794 | CLY LOCK W/KEYS |  |
| 102 | 560-5563-V | XFMR100-120V100V120V24V WB |  |
| 103 | 601-11480-8 | PLAPOINT L=8 |  |
| 104 | 601-11480-20 | PLAPOINT L=20 |  |
| 105 | 509-6121-01 | JOYSTICK 8WAY 50-6070-10(HAPP) |  |
| 106 | 280-6581-29 | BUSHING NB-29 |  |
| 201 | 000-P00308-W | M SCR PH W/FS M3x8 |  |
| 202 | 000-P00408-W | M SCR PH W/FS M4x8 |  |
| 203 | 000-T00408-0C | M SCR TH CRM M4x8 |  |
| 204 | 000-T00416-0C | M SCR TH CRM M4x16 |  |
| 205 | 008-T00408-0С | TMP PRF SCR TH CRM M $4 \times 8$ |  |
| 206 | 050-F00400 | FLG NUT M4 |  |
| 207 | 050-F00600 | FLG NUT M6 |  |
| 208 | 068-441616-0C | FLT WSHR CRM 4.4-16x1.6 |  |
| 209 | 000-P00410-W | M SCR PH W/FS M4x10 |  |
| 210 | 060-S00400 | SPR WSHR M4 |  |
| 211 | 060-F00400 | FLT WSHR M4 |  |
| 212 | 050-H00400 | HEX NUT M4 |  |
| 301 | UCU-60013 | WH JOY STICK |  |

## (3) ASSY SUB CABINET (UCU-1001-01)



| ITEM NO. | PART NO. | DESCRIPTION | NOTE |
| :---: | :---: | :---: | :---: |
| 1 | UCU-1002-01 | CABINET |  |
| 2 | UCU-1023 | COIN CHUTE LOWER |  |
| 3 | UCS-1007 | SASH UPPER |  |
| 4 | UCS-1008X | SASH SIDE |  |
| 5 | UCU-1024 | SASH LOWER |  |
| 6 | UCU-1025 | BOX ADJUST WALL L |  |
| 7 | UCU-1026 | BOX ADJUST WALL R |  |
| 8 | UCU-1027 | HOOK UPPER L |  |
| 9 | UCU-1028 | HOOK LOWER L |  |
| 10 | UCU-1029 | HOOK UPPER R |  |
| 11 | UCU-1030 | HOOK LOWER R |  |
| 12 | UCU-1031 | FL GLASS |  |
| 13 | UCU-1032 | FL GLASS SHEET |  |
| 14 | UCU-1033 | FL GLASS SASH A L |  |
| 15 | UCU-1034 | FL GLASS SASH A R |  |
| 16 | UCU-1035 | FL GLASS SASH B |  |
| 17 | UCU-0007 | GLASS EDGE GUARD A |  |
| 18 | UCU-1036 | GLASS EDGE GUARD C |  |
| 19 | UCU-1037 | LOOVER COVER |  |
| 20 | 253-5460-02 | AIR VENT WHITE |  |
| 21 | UCS-1046 | FLAP CUSHION T10 |  |
| 22 | UCS-1022 | DOOR CUSHION |  |
| 23 | UCU-1038 | AC UNDER COVER |  |
| 24 | USS-1023 | FLAP STOPPER |  |
| 25 | USS-1024 | DOOR ADJUSTER |  |
| 26 | UCU-1039 | TNG CUSHION |  |
| 27 | UCU-6002 | ASSY WIRE |  |
| 101 | 509-5753 | LINE INTERRUPT SW |  |
| 102 | 280-5277 | CORD CLAMP 18 |  |
| 103 | 280-5292 | CORD CLAMP 18 PUSH TYPE |  |
| 104 | 280-5275-SR10 | CORD CLAMP SR10 |  |
| 105 | 280-6581-29 | BUSHING NB-29 |  |
| 201 | 000-P00312-W | M SCR PH W/FS M $3 \times 12$ |  |
| 202 | 000-P00408-W | M SCR PH W/FS M4x8 |  |
| 203 | 000-T00408-0С | M SCR TH CRM M4x8 |  |
| 204 | 010-F00308 | S-TITE SCR FH M3x8 |  |
| 205 | 050-F00400 | FLG NUT M4 |  |
| 206 | 050-F00600 | FLG NUT M6 |  |
| 207 | 031-000620-0C | CRG BLT CRM M6x20 |  |
| 301 | UCU-60007 | WH FL EXT |  |
| 302 | UCU-60017 | WH PRIZE SENSOR |  |
| 303 | UCU-60050 | WH AC PRI 2 |  |

## (4) CABINET (UCU-1002-01)




| ITEM NO. | PART NO. | DESCRIPTION | NOTE |
| :---: | :--- | :--- | :--- |
| 1 | UCU-1002-01-A |  |  |
|  |  | CABINET BLANK |  |
| 101 | $601-8714$ | CASTER FAI100 |  |
| 102 | $601-5699 \mathrm{X}$ | LEG ADJUSTER BOLT M16x75 |  |
|  |  |  |  |
| 201 | $030-001020-\mathrm{S}$ | HEX BOLT W/S M10x20 |  |
| 202 | $060-$ F01000 | FLT WSHR M10 |  |
| 203 | $050-\mathrm{H01600}$ | HEX NUT M16 |  |

## (5) ASSY WIRE (UCU-6002)

This is comprised of the following wire harnesses. ASSY drawing is not available.

| ITEM NO. | PART NO. | DESCRIPTION | NOTE |
| :---: | :--- | :--- | :--- |
|  |  |  |  |
| 101 | $601-0460$ | PLASTIC TIE BELT $100 \mathrm{M} / \mathrm{M}$ |  |
| 102 | $310-5033-15-160$ | SPIRAL TUBE 15160 CM |  |
|  |  |  |  |
| 301 | UCU-60003 | WH AC SEC |  |
| 302 | UCU-60009 | WH DIPSW BD |  |
| 303 | UCU-60054 | WH CABINET 1 |  |
| 304 | UCU-60057 | WH FL EXT 2 |  |
| 305 | UCU-60058 | WH CABINET 2 |  |
| 306 | UCU-60059 | WH CREDIT BD 2 |  |
| 307 | UCU-60060 | WH SP EXT 2 |  |

## (6) ASSY SPEAKER (UCS-1050X)



NOTE: Pay close attention to the surface orientation of the cross-section (slanted line) area.

| ITEM NO. | PART NO. | DESCRIPTION | NOTE |
| :---: | :--- | :--- | :--- |
| 1 | UAT-1051 | SPEAKER BASE |  |
| 101 | $130-5034$ | SPEAKER 8 OHM 10W F 100A59-1 |  |
| 201 | $012-P 00408$ | TAP SCR \#2 PH 4x8 |  |

## (7) ASSY SERVICE DOOR (UCU-1060)


ITEM NO. PART NO. $\quad$ DESCRIPTION $\quad$ NOTE

| 1 | UCU-1064 | SERVICE DOOR |
| :--- | :--- | :--- |
| 2 | UCU-1062 | STICKER SERVICE DOOR |
| 3 | UCU-1063 | LT SOLENOID BRKT FOR LORENZO |
| 4 | DP-1148X | LKG TNG |
| 5 | $421-12106-02$ | STICKER BULB 2.2W12V UL |
|  |  |  |
| 101 | $220-5793-1-A 002$ | CLY LOCK MASTER W/O KEY A002 |
| 102 | $124-5088$ | SOL QL-102 DC12V FOR 220-5310 |
| 103 | $220-5208-05$ | COIN CHUTE REJ 25 AD-81P |
| 104 | $220-5786-91$ | C.C BRKT A0710 (LORENZO) |
| 105 | $601-6316-$ S8 | TIE BELT W/CLAMP S8 |
| 106 | $601-0460$ | PLASTIC TIE BELT 100 M/M |
| 107 | $280-5275-$ SR10 | CORD CLAMP SR10 |
|  |  |  |
| 201 | $000-P 00308-W$ | M SCR PH W/FS M3x8 |
| 202 | $000-P 00408-W$ | M SCR PH W/FS M4x8 |
| 203 | $050-F 00400$ | FLG NUT M4 |
| 301 |  |  |
| 302 | UCS-60031 | WH EARTH DOOR |
|  | UCU-60015 | WH SERVICE DOOR |

## (8) SW UNIT (UCU-1070)



| ITEM NO. | PART NO. | DESCRIPTION | NOTE |
| :---: | :--- | :--- | :--- |
|  |  |  |  |
| 1 | UCU-1071 | SW AND VOL PLATE |  |
| 3 | $837-14485 R$ | DIPSW BD USS |  |
|  | $421-12100$ | STICKER SW UNIT UCU |  |
| 101 | $220-5798-01$ | MAG CNTR 4P MZ674-DC5V-D41 JC |  |
| 102 | $220-5798-02$ | MAG CNTR 6P MZ674-DC5V-D42 JC |  |
| 103 | $509-6102-V-B$ | SW ROCKER J8 V-B AJ8202BF |  |
| 104 | $601-0460$ | PLASTIC TIE BELT 100 M/M |  |
| 201 | $050-F 00300$ |  |  |
|  |  | FLG NUT M3 |  |

## (9) AC UNIT (UCU-1080-01)



| ITEM NO. | PART NO. | DESCRIPTION | NOTE |
| :---: | :--- | :--- | :--- |
|  |  |  |  |
| 1 | UCU-1082 | AC BRKT |  |
| 2 | $421-7468-01$ | STICKER C.P W/PIC |  |
| 101 | $214-0202$ | AC INLET PANEL TYPE |  |
| 102 | $270-5020$ | NOISE FILTER AC250V 6A |  |
| 103 | $509-6102-$ V-B | SW ROCKER J8 V-B AJ8202BF |  |
| 104 | $512-5046-91-05$ | C.P 5A CE UL NRW10-5A-TK2421 |  |
| 105 | $280-5275-$ SR10 | CORD CLAMP SR10 |  |
| 106 | $601-0460$ | PLASTIC TIE BELT 100 M/M |  |
|  |  |  |  |
| 201 | $010-P 00308-F$ | S-TITE SCR PH W/F M3x8 |  |
| 202 | $060-S 00400$ | SPR WSHR M4 |  |
| 203 | $060-F 00400$ | FLT WSHR M4 |  |
| 204 | $050-H 00400$ | HEX NUT M4 |  |
|  |  |  |  |
| 301 | UCS-60035 | WCU-60021 EARTH FILTER L | WH AC UNIT |
| 302 |  |  |  |

## (10) ASSY PRIZE SENSOR (USS-1200)



| ITEM NO. | PART NO. | DESCRIPTION | NOTE |
| :---: | :--- | :--- | :--- |
| 1 | UCS-1202 |  |  |
| 101 | $370-5173-01$ | PRIZE SENSOR PLATE B |  |
|  |  | PHOTO SENSOR OMT-15DJST-YL |  |
| 201 | $012-P 00314$ |  |  |
| 202 | FAS-680014 | TAP SCR \#2 PH 3x14 |  |

## (11) ASSY FL BASE L (UCU-1300)



| ITEM NO. | PART NO. | DESCRIPTION |
| :---: | :--- | :--- |
|  |  |  |
| 1 | UCU-1301 | NOTE |
| 2 | UCU-1302 | CEILING FL BASE L |
| 3 | UCU-1303 | FL HOLDER BRKT A |
| 101 | $214-0271-91$ | FL SOCKET 26.424.2001.50 BJB |
| 102 | $280-6581-8$ | BUSHING NB-8 |
| 103 | $601-0460$ | PLASTIC TIE BELT 100 M/M |
|  |  |  |
| 201 | $000-P 00408-W$ | M SCR PH W/FS M4x8 |
|  |  |  |
| 301 | UCU-60025 |  |

## (12) ASSY FL BASE R (UCU-1310-01)



| ITEM NO. | PART NO. | DESCRIPTION |
| :---: | :--- | :--- |
|  |  |  |
| 1 | UCU-1313 | NOTE |
| 2 | UCU-1302 | CEILING FL BASE R2 |
| 3 | UCU-1303 HOLDER BRKT A |  |
| 4 | $421-12109-32 T 8$ | FL HOLDER BRKT B |
| 5 | $421-12107$ | STICKER FL RATING 32T8 |
|  |  | STICKER HOT SURFACE UL |
| 101 | $214-0272-91$ |  |
| 102 | $390-6895$ | FL SOCKET 26.424.2101.50 BJB |
| 103 | $601-0460$ | INVERTER QHE 2x32T8/UNV ISN-SC |
| 104 | $209-0032-91$ | PLASTIC TIE BELT 100 M/M |
| 105 | $270-5116$ | CONN CLOSED END |
|  |  | FERRITE CORE TDK ZCAT2032-0930 |
| 201 | $000-P 00408-W$ | M SCR PH W/FS M4x8 |
| 202 | $000-P 00410-W$ | M SCR PH W/FS M4x10 |
| 203 | $068-441616$ | FLT WSHR 4.4-16x1.6 |
|  |  |  |
| 301 | UCU-60023 | WH FL 1 |
| 302 | UCU-60024 | WH FL 2 |
| 303 | UCU-60084 | WH FL SOCKET 2 |

## (13) SIDE FL UNIT (UCU-1320-01)



| ITEM NO. | PART NO. | DESCRIPTION |
| :---: | :--- | :--- |
|  |  |  |
| 1 | UCU-1321 | NOTE |
| 2 | $421-12109-25 T 8$ | SIDE FL BASE |
| 101 | $214-0271-91$ | STICKER FL RATING 25T8 |
| 102 | $214-0272-91$ | FL SOCKET 26.424.2001.50 BJB |
| 103 | $390-6896$ | FL SOCKET 26.424.2101.50 BJB |
| 104 | $280-5275-$ SR10 | INVERTER QTP 1x32T8/UNV ISN-SC |
| 105 | $209-0032-91$ | CORD CLAMP SR10 |
| 106 | $601-0460$ | CONN CLOSED END |
|  |  | PLASTIC TIE BELT 100 M/M |
| 201 | $050-F 00400$ |  |
| 202 | $068-441616$ |  |
|  |  | FLG NUT M4 |
| 301 | UCU-60022 | FLT WSHR 4.4-16x1.6 |
| 302 | UCU-60084 |  |
|  |  | WH FL SIDE |
|  |  | WH FL SOCKET 2 |

## (14) FLAP UNIT (UCU-1340-01)



Attach (101) in the condition in which it was delivered, then turn it 90 degrees.

| ITEM NO. | PART NO. | DESCRIPTION | NOTE |
| :---: | :--- | :--- | :--- |
|  |  |  |  |
| 1 | UCU-1348 | FLAP PANEL |  |
| 2 | UCU-1342 | STICKER FLAP |  |
| 3 | UCU-1343 | FLAP HINGE |  |
| 4 | UCU-1344 | DAMPER BRKT A |  |
| 5 | UCU-1345 | DAMPER BRKT B |  |
| 6 | UCU-1346 | DAMPER SLEEVE |  |
| 7 | UCU-1347 | FLAP INNER |  |
|  |  |  |  |
| 101 | $601-11728$ | TORQUE DAMPER TD14A1-20K-R |  |
|  |  |  |  |
| 201 | $000-P 00320-W$ | M SCR PH W/FS M3x20 |  |
| 202 | $000-T 00408-0 C$ | M SCR TH CRM M4x8 |  |
| 203 | $050-F 00400$ | FLG NUT M4 |  |

## (15) ASSY GLASS DOOR L (UCU-1100-01)

 for affixing

| ITEM NO. | PART NO. | DESCRIPTION | NOTE |
| :---: | :--- | :--- | :--- |
|  |  |  |  |
| 1 | UCU-1105 | FRONT GLASS |  |
| 2 | USS-1102 | LOCK BRKT |  |
| 3 | USS-1103 | LOCK PLATE |  |
| 4 | USS-1104 | LOCKING TONGUE |  |
| 5 | UCU-1106 | LOCK BRKT LOWER |  |
| 6 | UCU-1107 | INTERLOCK PLATE L |  |
| 7 | UCU-1109 | LOCK SPACER PLATE |  |
| 101 | $220-5793-1-A 002$ | CLY LOCK MASTER W/O KEY A002 |  |

## (16) ASSY GLASS DOOR R (UCU-1110-01)



| ITEM NO. | PART NO. | DESCRIPTION | NOTE |
| :---: | :--- | :--- | :--- |
|  |  |  |  |
| 1 | UCU-1105 | FRONT GLASS |  |
| 2 | USS-1102 | LOCK BRKT |  |
| 3 | USS-1103 | LOCK PLATE |  |
| 4 | USS-1104 | LOCKING TONGUE |  |
| 5 | UAT-1413 | DOOR STOPPER RUBBER |  |
| 6 | UCU-1106 | LOCK BRKT LOWER |  |
| 7 | UCU-1108 | INTERLOCK PLATE R |  |
| 8 | UCU-1109 | LOCK SPACER PLATE |  |
| 101 | $220-5793-1-A 002$ | CLY LOCK MASTER W/O KEY A002 |  |

## (17) ASSY BACK LID (UCU-1150)



| ITEM NO. | PART NO. | DESCRIPTION | NOTE |
| :---: | :--- | :--- | :--- |
|  |  |  |  |
| 1 | UCU-1151X | BACK LID |  |
| 2 | DP-1167 | TNG LKG |  |
| 101 | $220-5793-1-A 001$ | CLY LOCK MASTER W/O KEY A001 |  |

## (18) ASSY CTRL PNL PLATE (UCU-2000)



UCU-2001
UCU-2002
509-5406S
UCU-60014

CTRL PNL PLATE
CTRL PNL SHEET
SW PUSH BUTTON 60M-W(OBSA-60M)
WH CTRL SW

## (19) ASSY X MECHA 1P (UCU-3000)



| ITEM NO. | PART NO. | DESCRIPTION |
| :---: | :--- | :--- |
|  |  |  |
| 1 | UCU-3050 | NOTE |
| 2 | USS-3001X | ASSY X MECHA |
| 3 | USS-3002X | SENSOR DOG HP FIX |
| 4 | USS-3003X | SENSOR DOG HP 1P |
| 5 | UCS-3014X | SENSOR DOG LIMIT |
| 6 | $421-11866-02$ | NUT PLATE S |
| 7 | $421-11867-02$ | STICKER DOG POS 1P HOME ENG |
|  |  | STICKER DOG POS 1P LIMIT ENG |
| 201 | $032-000408-0 C$ | WING BLT CRM M4x8 |
| 202 | $000-P 00410-W$ | M SCR PH W/FS M4x10 |

000-P00410-W
M SCR PH W/FS M4x10

## (20) ASSY X MECHA (UCU-3050)



| ITEM NO. | PART NO. | DESCRIPTION | NOTE |
| :---: | :---: | :---: | :---: |
| 1 | 105-5450-697 | MECHA RAIL L=697 |  |
| 2 | UCS-3001X | STOPPER |  |
| 3 | USS-3051Y | CARRIAGE X |  |
| 4 | UCS-3004X | NUT PLATE COMMON |  |
| 5 | UCU-3005 | NUT PLATE CB X2 |  |
| 6 | UCS-3006X | MOTOR BRKT X |  |
| 7 | UCS-3007X | X MECHA BRKT |  |
| 8 | UCS-3009X | PULLEY BRKT |  |
| 9 | UCS-3010 | PULLEY SHAFT |  |
| 10 | UCS-3012X | CABLEBEAR BRKT X FIX |  |
| 11 | UCS-3013X | CABLEBEAR BRKT X MOVE |  |
| 12 | 253-5522 | BELT HOLDER S3M 06 |  |
| 13 | 350-5667 | PULLEY A (30 S3M 06) |  |
| 14 | 350-5668 | PULLEY B (30 S3M 06) |  |
| 15 | 440-CS0245-EG | STICKER C GEAR S ENG |  |
| 101 | 100-5272 | BEARING 22 (DR-22-B2) |  |
| 102 | 350-5669-01 | MOTOR AC100V 2W 1/20 W/CONN |  |
| 103 | 601-11102 | TIMING BELT 500 S3M 06 |  |
| 104 | 601-0460 | PLASTIC TIE BELT $100 \mathrm{M} / \mathrm{M}$ |  |
| 105 | 370-5251 | PHOTO INTERRUPTER KI1301-BB |  |
| 106 | 280-5277 | CORD CLAMP 18 |  |
| 107 | 280-5275-SR10 | CORD CLAMP SR10 |  |
| 108 | 601-6231-C040 | EDGING NEW TYPE L=40 |  |
| 201 | 065-E00600 | E RING 6MM |  |
| 202 | 000-P00308-W | M SCR PH W/FS M3x8 |  |
| 203 | 000-P00408-S | M SCR PH W/S M4x8 |  |
| 204 | 000-P00410-W | M SCR PH W/FS M4x10 |  |
| 205 | 000-P00510-W | M SCR PH W/FS M5x10 |  |
| 206 | 050-H00500 | HEX NUT M5 |  |
| 207 | 028-P00310-P | SET SCR PH CUP P M $3 \times 10$ |  |
| 208 | 020-000410-0Z | HEX SKT H CAP SCR BLK $0 Z \mathrm{M} 4 \times 10$ |  |
| 209 | 060-S00400 | SPR WSHR M4 |  |
| 210 | 060-F00400 | FLT WSHR M4 |  |
| 211 | 000-P00408 | M SCR PH M4x8 |  |
| 212 | 000-P00412-S | M SCR PH W/S M4x12 |  |
| 301 | UCU-60018 | WH CABLE BEAR X |  |

## (21) ASSY X MECHA 2P (UCU-3010)


ITEM NO. PART NO. DESCRIPTION NOTE

| 1 | UCU-3050 | ASSY X MECHA |
| :--- | :--- | :--- |
| 2 | USS-3001X | SENSOR DOG HP FIX |
| 3 | USS-3003X | SENSOR DOG LIMIT |
| 4 | USS-3011X | SENSOR DOG HP 2P |
| 5 | UCS-3014X | NUT PLATE S |
| 6 | $421-11866-03$ | STICKER DOG POS 2P HOME ENG |
| 7 | $421-11867-03$ | STICKER DOG POS 2P LIMIT ENG |
|  |  |  |
| 201 | $032-000408-0 C$ | WING BLT CRM M4x8 |
| 202 | $000-P 00410-W$ | M SCR PH W/FS M4x10 |

## (22) ASSY Y MECHA (UCU-3100)



| ITEM NO. | PART NO. | DESCRIPTION | NOTE |
| :---: | :---: | :---: | :---: |
| 1 | 105-5450-613 | MECHA RAIL L=613 |  |
| 2 | USS-3103X | SENSOR DOG Y |  |
| 3 | USS-3003X | SENSOR DOG LIMIT |  |
| 4 | USS-3052X | CARRIAGE Y |  |
| 5 | USS-3101X | ROLLER BRKT |  |
| 6 | UCU-3102 | Z MECHA COVER |  |
| 7 | UCS-3001X | STOPPER |  |
| 8 | UCS-3004X | NUT PLATE COMMON |  |
| 9 | UCS-3009X | PULLEY BRKT |  |
| 10 | UCS-3010 | PULLEY SHAFT |  |
| 11 | UCS-3014X | NUT PLATE S |  |
| 12 | UCS-3101X | NUT PLATE CB Y |  |
| 13 | UCS-3102X | MOTOR BRKT Y |  |
| 14 | UCS-3105X | CABLEBEAR BRKT Y MOVE |  |
| 15 | UCM-3104X | CABLEBEAR BRKT Y FIX |  |
| 16 | 253-5522 | BELT HOLDER S3M 06 |  |
| 17 | 350-5667 | PULLEY A (30 S3M 06) |  |
| 18 | 350-5668 | PULLEY B (30 S3M 06) |  |
| 19 | 440-CS0245-EG | STICKER C GEAR S ENG |  |
| 101 | 100-5272 | BEARING 22 (DR-22-B2) |  |
| 102 | 350-5669-01 | MOTOR AC100V 2W 1/20 W/CONN |  |
| 103 | 601-11103 | TIMING BELT 444 S3M 06 |  |
| 104 | 601-0460 | PLASTIC TIE BELT $100 \mathrm{M} / \mathrm{M}$ |  |
| 105 | 370-5251 | PHOTO INTERRUPTER KI1301-BB |  |
| 106 | 280-5277 | CORD CLAMP 18 |  |
| 107 | 280-5275-SR10 | CORD CLAMP SR10 |  |
| 201 | 065-E00600 | E RING 6MM |  |
| 202 | 000-P00308-W | M SCR PH W/FS M3x8 |  |
| 203 | 000-P00408-S | M SCR PH W/S M4x8 |  |
| 204 | 000-P00410-W | M SCR PH W/FS M4x10 |  |
| 205 | 000-P00510-W | M SCR PH W/FS M5x10 |  |
| 206 | 050-H00500 | HEX NUT M5 |  |
| 207 | 028-P00310-P | SET SCR PH CUP P M3x10 |  |
| 208 | 020-000408-0Z | HEX SKT CAP SCR BLK OZ M4x8 |  |
| 209 | 020-000410-0Z | HEX SKT H CAP SCR BLK $0 Z \mathrm{M} 4 \times 10$ |  |
| 210 | 060-S00400 | SPR WSHR M4 |  |
| 211 | 060-F00400 | FLT WSHR M4 |  |
| 212 | 050-F00400 | FLG NUT M4 |  |
| 213 | 032-000408-0C | WING BLT CRM M4x8 |  |
| 214 | 000-P00412-S | M SCR PH W/S M4x12 |  |
| 301 | USS-60017 | WH MECHA Y |  |
| 302 | UCU-60019 | WH CABLE BEAR Y |  |

## (23) ASSY Z MECHA (UCU-3200)


(2)
$10 \cdot \frac{24}{48}$
(27) (27) (102)

| ITEM NO. | PART NO. | DESCRIPTION NOTE |  |
| :---: | :---: | :---: | :---: |
| 1 | UCU-3201 | Z MECHA BASE |  |
| 2 | UCM-3202 | MOTOR BRKT |  |
| 3 | UCM-3203X | GEAR BOX BRKT |  |
| 4 | UCM-3204X | BEARING BRKT |  |
| 5 | UCM-3205X | PULLEY COVER BRKT |  |
| 6 | UCM-3206 | WORM WHEEL |  |
| 7 | UCM-3207Y | SENSOR BRKT LIFT-UP |  |
| 8 | UCM-3208X | SENSOR BRKT LIFT-DOWN |  |
| 9 | UCM-3209Y | SENSOR DOG LIFT-UP |  |
| 10 | UCU-3212 | LIFT WIRE |  |
| 11 | UCS-3205 | MAIN SHAFT |  |
| 12 | UCS-3206X | WIRE STOPPER |  |
| 13 | UCS-3207X | SENSOR DOG LIFT-DOWN |  |
| 14 | UCS-3208 | TENSION SHAFT |  |
| 15 | UCS-3209 | WIRE GUIDE |  |
| 16 | UCM-3210X | STOPPER BRKT |  |
| 17 | UCS-3215 | TORSION SPRING |  |
| 18 | UCR-3210X | WIRE GUIDE A |  |
| 19 | UCM-3211 | TENSION PULLEY |  |
| 20 | DCR-3601 | gear box |  |
| 21 | DCR-3602 | GEAR COVER |  |
| 22 | DCR-3603 | DRUM COVER |  |
| 23 | DCR-3605 | WORM GEAR A |  |
| 24 | DCR-3607 | PULLEY 1A |  |
| 25 | DCR-3613X | NUT PLATE |  |
| 101 | 100-5444 | BEARING 8 (NSK F625zZ) |  |
| 102 | 350-5807 | MOTOR AC100V 10W UL |  |
| 103 | 100-5301 | BEARING 6 (626zz) |  |
| 104 | 100-5089 | BEARING 6PH (80F-0605) |  |
| 105 | 100-5398 | ROLLER BEARING 22 (DU-22-H6) |  |
| 106 | 601-11105 | COUPLING 6-6 (NBK L035-S) |  |
| 107 | 601-11107 | HINGE (TAKIGEN B-1100-1) |  |
| 108 | 370-5161 | PHOTO INTERRUPTER GP1A71A |  |
|  | 370-5284 | PHOTO INTERRUPTER GP1A71AJO00F |  |
| 109 | 280-5275-SR10 | CORD CLAMP SR10 |  |
| 110 | 152-0244 | CAP MOPC4.5M20 JSU20X455AQA |  |
| 201 | 000-P00308-W | M SCR PH W/FS M3x8 |  |
| 202 | 000-P00304 | M SCR PH M $3 \times 4$ |  |
| 203 | 000-F00408 | M SCR FH M $4 \times 8$ |  |
| 204 | FAS-000133 | M SCR PH W/FS CRM M3X16 |  |
| 205 | 012-P00308 | TAP SCR \#2 PH 3x8 |  |
| 206 | 020-000410-0z | HEX SKT H CAP SCR BLK $0 Z$ M $4 \times 10$ | \% |
| 207 | 020-000512-02 | HEX SKT H CAP SCR BLK $0 Z$ M $5 \times 12$ | ${ }_{7}$ |
| 208 | 028-C00308-P | SET SCR CH CUP P M $3 \times 8$ | 0 |
| 209 | 050-F00400 | FLG NUT M4 | $\frac{5}{6}$ |
| 210 | 060-500400 | SPR WSHR M4 | 9 |
| 211 | 060-500500 | SPR WSHR M5 | 22 |
| 212 | 065-E00400 | E RING 4MM |  |
| 213 | 060-500300 | SPR WSHR M3 |  |
| 214 | 050-F00300 | FLG NUT M3 |  |
| 301 | UCU-60020 | WH MECHA Z |  |

## (24) ASSY PIPE (UCU-3300)



NOTE: Screw components must be coated with thread sealant (ThreeBond \#1401C or equivalent).
Make sure that sealant does not seep out.

| ITEM NO. | PART NO. | DESCRIPTION |
| :---: | :--- | :--- |
|  |  |  |
| 1 | UCM-3301 | FLANGE |
| 2 | UCU-3302 | PIPE S |
| 3 | UCM-3303 | STOPPER A UPPER |
| 4 | UCM-3304 | STOPPER S LOWER |
| 5 | UCU-3305 | PIPE A |
| 6 | UCU-3306 | PIPE B |
| 7 | UCU-3307 | PIPE C |
| 8 | UCU-3308 | PIPE D |
| 9 | UCS-3306 | STOPPER A LOWER |
| 10 | UCS-3307 | STOPPER B UPPER |
| 11 | UCS-3308 | STOPPER B LOWER |
| 12 | UCS-3309 | STOPPER C UPPER |
| 13 | UCS-3310 | STOPPER C LOWER |
| 14 | UCS-3311 | STOPPER D UPPER |
|  |  | TAP SCR PH \#2 CRM 2.6X6 |

## (25) ASSY UFO MECHA (UCU-3400)



| ITEM NO. | PART NO. | DESCRIPTION |
| :---: | :--- | :--- |
|  |  |  |
| 1 | UCU-3410X | ASSY ARM MECHA |
| 2 | UCS-3450 | ASSY REAR COVER |
| 3 | UCS-3401 | UFO COVER FRONT |
| 4 | UCS-3402 | CLEAR PLATE |
| 5 | UCS-3403 | KNOB BOLT |
| 6 | UCU-3401 | DESIGN SHEET UCU |
|  |  |  |
| 101 | $280-5275-$ SR10 | CORD CLAMP SR10 |
| 102 | $280-5124-03$ | NYLON CLAMP NK03 |
|  |  |  |
| 201 | $000-P 00308-W$ | M SCR PH W/FS M3x8 |
| 202 | $000-P 00408$ | M SCR PH M4x8 |
| 203 | $060-$ S00400 | SPR WSHR M4 |
| 204 | $060-F 00400$ | FLT WSHR M4 |
| 205 | $000-T 00408-0 C$ | M SCR TH CRM M4x8 |
|  |  |  |
| 301 | UCS-60020 | WH CURL CORD |
| 302 | UCS-60021 | WH ARM |

## (26) ASSY ARM MECHA (UCU-3410X)



| ITEM NO. | PART NO. | DESCRIPTION |
| :---: | :--- | :--- |
|  |  |  |
| 1 | USS-3411 | NOTE |
| 2 | USS-3412X | ARM MECHA BRKT UPPER |
| 3 | UCS-3413 | RAIL GUIDE |
| 4 | DPT-3158X | PINION GEAR |
| 5 | UCS-3414 | SLIDER W/RACK |
| 6 | UCS-3415X | SENSOR BRKT ARM |
| 7 | USS-3417 | SHIFT BRKT |
| 8 | USS-3418 | SLIDE SPRING |
| 9 | USS-3413X | ARM HOLDER |
| 10 | UCR-3313 | ARM SHAFT |
| 11 | DPT-3101 | ARM BASE ADJ |
| 12 | UCS-3425 | ADJUST SCREW |
| 13 | UCS-3426X | SPRING BRKT |
| 14 | UCS-3431 | ARM M |
| 15 | EG-3405Y | SHOVEL W30 |
| 16 | USS-3414X | ARM FIX BRKT |
| 17 | USS-3415 | MECHA MASK |
| 18 | USS-3416X | ARM FIX BOLT |
| 19 | UCS-3418X | NUT PLATE FOR RAIL |
| 20 | UCS-3421X | NUT PLATE FOR MOTOR |
| 21 | $440-C S 0245-$ EG | STICKER C GEAR S ENG |
| 22 | UCU-3411 | SHOVEL W30 |
|  |  |  |
| 101 | $350-5526-01$ | MOTOR PULSE DC12V |
| 102 | $370-5161$ | PHOTO INTERRUPTER GP1A71A |
|  | $370-5284$ | PHOTO INTERRUPTER GP1A71AJ000F |
|  |  |  |
| 201 | $000-P 00308-W$ | M SCR PH W/FS M3x8 |
| 202 | $000-P 00305-S$ | M SCR PH W/S M3x5 |
| 203 | $000-F 00305$ | M SCR FH M3x5 |
| 204 | $012-P 00408$ | TAP SCR \#2 PH 4x8 |
| 205 | $028-A 00304-P$ | SET SCR HEX SKT CUP P M3x4 |
| 206 | $032-000408-0 C$ | WING BLT CRM M4x8 |
| 207 | $050-F 00300$ | FLG NUT M3 |
| 208 | $065-E 00300$ | M SCR TH CRM M3X6 WSH W/S BLK M3X6 |
| 209 | FAS-000001 | FAS-000045 |
| 210 | $060-S 00400$ | $060-F 00400$ |

## (27) ASSY REAR COVER (UCS-3450)



| ITEM NO. | PART NO. | DESCRIPTION | NOTE |
| :---: | :--- | :--- | :--- |
|  |  |  |  |
| 1 | UCS-3451 | UFO COVER REAR |  |
| 2 | UCS-3452 | SCREW SHAFT |  |
| 201 | $065-E 00200$ | E RING 2MM |  |

## (28) ASSY MAIN BD (UCU-4000-01)



## NOTES:

1. Make sure that there is no parts, wiring, etc. in the slash mark portions.
2. All game board DIP SW should be set to OFF.

| ITEM NO. | PART NO. | DESCRIPTION NOTE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | UCS-4001 | WOODEN BASE | 109 | 514-5138-5000 | FUSE SG5013 5x20 5000MA 250 V |
| 2 | 834-14760 | GAME BD UCU V2 | 110 | 310-5029-F20 | SUMITUBE F F 20MM |
| 3 | 105-5496 | PL STICKER PLATE UL A |  |  |  |
| 4 | 440-CS0282XEG | STICKER C FUSE REPLACEMENT ENG | 201 | 011-T03516 | TAP SCR TH 3.5x16 |
| 5 | 421-12108-5000 | STICKER FUSE RATING 5A | 202 | 000-P00310-W | M SCR PH W/FS M $3 \times 10$ |
| 6 | 421-12108-2000 | STICKER FUSE RATING 2A | 203 | 011-T03512 | TAP SCR TH $3.5 \times 12$ |
|  |  |  | 204 | 011-F00310 | TAP SCR FH $3 \times 10$ |
| 101 | 400-5421-03005 | YSW REGU LCA30S-5-Y | 205 | 011-P00325 | TAP SCR PH $3 \times 25$ |
| 102 | 400-5421-07512 | SW REGU LCA75S-12 | 206 | 011-P00312 | TAP SCR PH $3 \times 12$ |
| 103 | 280-6681 | L-LOCK LT-320PCG |  |  |  |
| 104 | 280-0419 | HARNESS LUG | 301 | USS-60004 | WH MAIN BD VOL |
| 105 | 280-5277 | CORD CLAMP 18 | 302 | USS-60005 | WH MAIN BD SP |
| 106 | 838-14411R12 | SSR BD 12EA | 303 | USS-60007 | WH MAIN BD 4 |
| 107 | 514-5093 | FUSE HLDR F-64AB COVER | 304 | UCU-60011 | WH MAIN BD AC |
| 108 | 514-5138-2000 | FUSE SG5013 5x20 2000MA 250V | 305 | UCU-60055 | WH MAIN BD NEW 1 |
|  |  |  | 306 | UCU-60056 | WH MAIN BD NEW 2 |

## 23 WIRE COLOR CODE TABLE

THE WIRE COLOR CODE is as follow:
A PINK
B SKY BLUE
C BROWN
D PURPLE
E LIGHT GREEN

Wires other than those of any of the above 5 single colors will be displayed by 2 alphanumeric characters.
1 RED
2 BLUE
3 YELLOW
4 GREEN
5 WHITE
7 ORANGE
8 BLACK
9 GRAY

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

Note 1: If the right-hand side numeral is not 0 , that particular wire has a spiral color code. The left-hand side character shows the base color and the right-hand side one, the spiral color.
<Example> 51........WHITE/RED


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

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




