

ALIEN $^{\pi \pi}$ \& (C) 1993 TWENTIETH CENTURY FOX FILM CORPORATION. ALL RIGHTS RESERVED.

## OWNER'S MANUAL



Built in the UK by Deith Leisure Limited (A SEGA Company)
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## SPECIFICATIONS

Installation space
Height
Weight
Power, maximum current
$1,360 \mathrm{~mm}(53.5$ in. ) (D) $\times 800 \mathrm{~mm}(31.5 \mathrm{in}).(W)$ $1,930 \mathrm{~mm}(76.0 \mathrm{in}$.) Approx. 215 kg . ( 475 lbs )

230W 1.6A(AC 220V 50 Hz AREA)
220W 1.6A(AC 220 V 60 Hz AREA) 230W 1.5A(AC 240 V 50 Hz AREA) 220W 1.4A (AC 240 V 60 Hz AREA) 28 INCH MONITOR

NOTE: Descriptions in this manual are subject to change without prior notice.

## INTRODUCTION OF THE OWNER'S MANUAL

SEGA ENTERPRISES, LTD., supported by its high eletronic technology of LSIs, microprocessors, etc. and a wealth of experience, has for more than 30 years been supplying various innovative and popular game machines to the world market. This Owner's Manual is intended to provide detailed descriptions together with all the necessary information covering the general operation of electronic assemblies, electromechanicals, servicing control, spare parts, etc. as regards ALIEN ${ }^{3}$ THE GUN, a new SEGA product .

This manual is intended for those who have knowledge of electricity and technical expertise especially in ICs, CRTs, microprocessors, etc. Carefully read this manual to acquire sufficient knowledge before working on the machine. Should there be a malfunction, non-technical personnel should under no circumstances touch the interior system. Should such a case arise, contact our Main Office or the closest branch office listed as follows:

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## 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.
- Be sure to switch the power off before working on the machine.
- To insert or pull out the plug quickly is dangerous.
- It is necessary to make sure that the power cord or grounding wire is not routed in a manner so as to be dangerous. Make sure that grounding connections are made safely at a position where so specified.
- Do not use any fuse that does not meet specified rating.
- Make complete connections for the IC board and other connection. Insufficient insertion of ICs and connectors will lead to unreliability and possible damage to the machine.
- The operating (ambient) temperature range is from $5^{\circ} \mathrm{C}$ to $40^{\circ} \mathrm{C}$.
- When cleaning the Monitor CRT front glass, use a soft dry cloth and glass cleaner. Do not apply chemicals such as thinners, benzene etc.

After confirming that there are no irregularities, turn the power ON.

## 2. PREVENTION OF COUNTERFEITING AND CONVERSION

## LABELLING

To prevent counterfeits and conversions, the following labels are put on all the SEGA products. When handling such goods, be sure to confirm the labels. They are used to prevent illegal acts such as the unauthorized copying of the products and the printed circuit boards thereof or carrying on business by manufacturing similar merchandise or by converting, selling or using such products or printed circuit boards.

## 

## ORIGINAL SEAL

The following seal is put on the machines manufactured by SEGA.

LICENSE SEAL
The following seal is put on all SEGA kits, such as the printed circuit boards.


## COPYRIGHT NOTICE

This SEGA product has the copyright notice as follows:

SEGA 1993

This signifies that this work was disclosed in 1993 and is the property of SEGA ENTERPRISES, LTD.

## 3. PRECAUTIONS CONCERNING INSTALLATION LOCATION

The ALIEN ${ }^{3}$ THE GUN is an indoor game machine. Absolutely do not install it outside. Even indoors, avoid installing in places mentioned below so as to ensure proper usage:
-Places subject to rain or water leakage, or condensation due to humidity. - In the proximity of an indoor swimming pool and/or shower.
-Places subject to direct sunlight.
-Places subject to heat sources from heating units, etc., or hot air.
-Vicinity of highly inflammable/volatile chemicals or hazardous matter. -Sloped surfaces.
-Vicinity of anti-disaster facilities such as fire exits and fire ext inguishers.
-Places subject to any type of violent impact.

- Dusty places.


## INSTALLATION PRECAUTIONS

1) Do not insert more than one electrical plug into the power plug socket.
2) The per unit standard voltage/amperage is $100 \sim 120 \mathrm{~V} / 5 \mathrm{~A}$ and $200 \sim 240 \mathrm{~V} / 3 \mathrm{~A}$.
3) If an extension cord is to be used, use a cord of 5A or higher rating.

Electric current consumption

MAX. 1.6A (AC $220 \mathrm{~V}^{50 \mathrm{~Hz})}$
MAX. 1.6A (AC 220 V 60 Hz )
MAX. $1.5 \mathrm{~A}(\mathrm{AC} 240 \mathrm{~V} 50 \mathrm{~Hz})$
MAX. 1.4A (AC 240 V 60 Hz )

## 4. NAME OF PARTS

3: Ti LAAKA

BILLBOARD
The FL UNIT is mounted on the inside of the BLLLBOARD.

5. SPARES AND ACCESSORIES



| Part No. | Qty | Description | Remarks |
| :---: | :---: | :---: | :---: |
| ALIEN3 / MAN | 1 | Owners Manual, Alien Gun (UK) | Please read |
| 53889750 | 1 | Hantarex Monitor Service Manual |  |
| 540-0006-01 | 1 | Wrench for TMP PRF SCR M4 | Tool |
| 540-0007-01 | 1 | Wrench for TMP PRF SCR M5 | Tool |
| 220-5373 | 1 | Potentiometer, $\mathrm{B}-5 \mathrm{k} \Omega \mathrm{Lin}$ | For spare, refer to section 9 |
| 601-7227 | 2 | Motor Brush | For spare, refer to section 9 |
| E1253 | 1 | Euro Mains Lead with Plug | To convey power to the machine |
|  | 2 | Key, Coin door | For opening/closing door |
|  | 2 | Key, Cash box | For opening/closing door |
|  | 2 | Key, Front service door | For opening/closing door |





TOOL
(TAMPERPROOF WRENCH)

sal) syale does to allunt shl no gnibnotoc
M5 540-0007-01


- The Life Gauge and Gun Power Gauge for the player using the left-hand side gun are displayed on the lower left-hand side of the screen, and those for the player using the right-hand side gun are displayed on the lower right-hand side of the screen.
- When the Life Gauge shows 0 , the game is over.
- When the Gun Power shows 0, the machine gun's consecutive shooting becomes slow. $\qquad$
Note: While the Flamethrower is used, the Gun Power Gauge becomes whitish and shows the remaining fuel.
enche
$\qquad$
After credits are registered, the "pull trigger" message will be shown. Start the game by pulling the trigger. When the game is started, the story and the still image of that STAGE as well as the map of all stages are displayed (pull the trigger when cancelling).
- Destroying the Boss enemy at the end of each stage results in a STAGE CLEAR.
- In each stage, various ITEMS can be found. Shoot and capture them.

Note: Capturing the ITEMs gives various effects such as strengthening the weapons, recovering the Power, etc. Explanations on the ITEMs are given later.


- Depending on the results of each stage (the number of enemies shot, frequency of damage caused to the player, etc.), the player's ranking varies. As regards ranking, explanations are given later.
- The player's name can be entered if his results (points earned as of the GAME OVER time) are placed 15th or higher.


## CONCERNING ITEMS:

Flamethrower

This is fired from the muzzle. Use it to wipe out the enemies. Although powerful, it is not effective against far away enemies.

## Hand Grenade Supply Unit



Every time the player captures this, one hand grenade is replenished.

## 25\% Life Supply Unit

 8\%Recovers $1 / 4$ of the player's power.

100\% Life Supply Unit


Recovers the player's power completely.

## RANKING

- The ranking herein stated refers to the Colonial Marine which the characters operated by the player belong to. Note: The following 21 ranks are based on the ranking of the U. S. Marine Corps.


## Private

## Private First Class

## Lance Corporal

Corporal
Sergeant
Staff Sergeant
Gunnery Sergeant
Master Sergeant
Sergent Major
Warrant Officer
Chief Warrant Officer
Second Lieutenant
First Lieutenant
Captain
Major
Lieutenant Colonel
Colonel
Brigadier General
Major General
Lieutenant General
General

## KNACK OF HOW-TO-EARN HIGH SCORE

Shoot the enemies (some are escaping) and articles appearing in the stage that can be damaged (lights, boxes, etc.), and be very careful not to shoot Marines (if you do, points decrease).

The ranking appearing after a stage may go higher in a slower pace due to the frequency of damage caused to the player, frequency of CONTINUE or shooting the Marine by mistake.

## 8. EXPLANATION OF TEST AND DATA DISPLAY

By operating the switch unit, periodically perform the tests and data check. When installing the machine initially or collecting cash, or when the machine does not function correctly, perform checking in accordance with the explanations given in this section.
The following shows tests and modes that should be utilized as applicable.

| ITEMS |  | DESCRIPTION | REFERENCE SECTIONS |
| :---: | :---: | :---: | :---: |
| INSTA <br> MACH | LLATION OF <br> INE | When the machine is installed, perform the following: <br> 1. Check to see that each setting is as per standard setting made at the time of shipment. <br> 2. In the INPUT TEST mode, check each SW and VR. <br> 3. In the OUTPUT TEST mode, check each motor. <br> 4. In the SELF-TEST mode, check ICs on the IC Board. | $\begin{aligned} & 8-9 \\ & 8-5 \\ & 8-6 \\ & 8-3 \end{aligned}$ |
| MEMO | ORY | Choose MEMORY TEST in the MENU mode to allow the MEMORY to be performed. In this test, PROGRAM RAMs, ROMs, and ICs on the IC Board are checked. | 8-3 |
| $\begin{aligned} & \text { PERIO } \\ & \text { SERVI } \end{aligned}$ | DIC <br> ICING | Periodically perform the following: <br> 1. MEMORY TEST <br> 2. Ascertain each setting. <br> 3. In the INPUT TEST mode, test the CONTROL device <br> 4. In the OUTPUT TEST mode, check each motor. | $\begin{aligned} & 8-3 \\ & 8-9 \\ & 8-5 \\ & 8-6 \end{aligned}$ |
| CONT | ROL SYSTEM | 1. In the INPUT TEST mode, check each SW and VR. <br> 2. Adjust or replace each $S W$ and VR. <br> 3. If the problem can not be solved yet, check the CONTROL's moves. | $\begin{aligned} & 8-5 \\ & 8-4,8-5,9-2 \end{aligned}$ |
| MONIT |  | In the MONITOR ADJUSTMENT mode, check to see if the MONITOR adjustment is appropriately made. | 8-8 |
| IC BOA | D | 1. MEMORY TEST <br> 2. In the SOUND CHECK mode, check the sound related ROMs. | $\begin{aligned} & 8-3 \\ & 8-7 \end{aligned}$ |
| DATA | CHECK | Check such data as game play time and histogram to adjust the difficuity level, etc.. | $\begin{aligned} & 8-11,8-12 \\ & 8-9 \end{aligned}$ |
|  |  |  |  |

### 8.1 SWITCH UNIT

Open the coin chute door and the switch unit shown will appear. The Functioning of each SW is as follows:
(1) SERVICE SW. $\qquad$ Gives credit without registering on the coin meter. (SERVICE BUTTON)
(2) TEST SW. For the handling of the test button. refer to the following pages.

SOUND VOLUME.
Adjust the sound volume of the Speaker

FUSE
When the Gun is subject to an overload, the circuit fuse to protect the motor.


## 8-2 TEST MENU

The Test Menu allows the functioning of each part of the Cabinet to be checked, the monitor to be adjusted, and the coins and game related various settings to be performed.

- Basically, all settings (game, coin, etc.) are performed in the TEST MENU and therefore, DIP SW is not used.
- This cabinet is provided with 2 SERVICE BUTTONs and either can be used.
- Press the TEST BUTTON to cause the following Test Menu to be displayed on the monitor.



## lo noinoq avole sitt is sadanil OVITCAT WOM, rasi sith giturl

Press the SERVICE BUTTON untill the pointer " $\rightarrow$ " is moved to the desired item. Then press the TEST BUTTON.
After the test is complete, move " $\rightarrow$ " to "EXIT" and press the TEST BUTTON to return to the Game Mode.

You may position the pointer to "INDIVIDUAL" and press the TEST BUTTON. The word "INDIVIDUAL" toggles to "CONTINUE". In the "CONTINUE" mode, each push of the TEST BUTTON causes transition to the next item. In the "INDIVIDUAL" mode, only the item indicated by the pointer is tested.

## 8-3 MEMORY TEST

The MEMORY TEST mode is for checking the memory IC operations on the board. "GOOD" is displayed for normal ICs and "BAD" is displayed for abnormal ICs.

| qua srolmmit bue UVGI boau sd 0 |  <br> MEMORY TEST |
| :---: | :---: |
| . .osinom adt no bevisiquil | od or unaM IC 8 GOOD IC 9 GOOD <br> IC 17 GOOD IC 18 GOOD  |
|  | $*$ $*$ RAM TEST $*$ <br> $*$ $*$    <br> IC 16 GOOD IC 36 GOOD  <br> IC 37 GOOD IC 61 GOOD  <br> IC 62 GOOD IC 63 GOOD  <br> IC 64 GOOD IC 65 GOOD  <br> IC 66 GOOD IC 68 GOOD  <br> IC 69 GOOD IC 70 GOOD  <br> IC 71 GOOD IC 74 GOOD  <br> IC 75 GOOD    <br> PUSH TEST BUTTON TO EXIT     |
|  |  |

- The right-hand side of each IC displays the following in the sequential order.

|  |  |  |
| :---: | :---: | :---: |
| (before test) | $\rightarrow \begin{gathered}\text { TEST } \\ \text { (under test) }\end{gathered}$ | GOOD or BAD (test completed) |

- During the test, NOW TESTING flashes at the above portion of PUSH TEST BUTTON TO EXIT.
- When the test is completed, if the results are shown as above, it is satisfactory.
- It takes approximately thirty seconds to complete the test. If the period exceeds thirty seconds, this may have been caused by board malfunctioning.


## Lnow 50 . After finishing the test, pressing the TEST BUTTON allows the MENU mode to return on to the screen.

## 8-4 GUN ADJUSTMENT

Selecting "GUN ADJUSTMENT" causes the following to appear on the monitor screen and this enables the sighting of gun to be set.



- Bring the cursor to CANCEL and press the TEST BUTTON to allow the MENU mode to return on to the screen.
- Bring the cursor to ADJUST and press the TEST BUTTON to have the ADJUST mode appear. The ADJUST mode allows the gun (sight) to be set and adjusted.
- When replacing the game BD. and V. R., be sure to choose ADJUST in this menu for the setting.

When ADJUST is selected, the following screen appears:


- In this mode, carefully move the left-hand side and right-hand side guns within the mobile range. Move them fully in the horizontal direction. When moving them vertically, however, be sure to stop them before going beyond the normal mobile range so as to avoid a kickback reaction.
- Pressing the TEST BUTTON causes the GUN ADJUSTMENT setting to be registered, allowing the MENU mode to return on to the screen.


## 8-5 INPUT TEST

Selecting "INPUT TEST" causes the following to appear on the monitor screen and this enables the status of each switch and GUN(CONTROLLER) to be checked.




- If the values corresponding to GUN $(\mathrm{L}-\mathrm{R})$ and $\mathrm{GUN}(\mathrm{U}-\mathrm{D})$, are within the range of $00 \sim \mathrm{FF}$ (hexadecimal), they are satisfactory.
- Press the TEST BUTTON to cause the the menu mode to return on to the screen.

Note: TRIGGER refers to the gun trigger and BUTTON refers to the button attached to the gun.

Note: In this mode, periodically check the status of each SW and GUN.


## 8-6 OUTPUT TEST

Selecting the "OUTPUT TEST" causes the following to appear on the monitor. This mode allows the gun's VIBRATE MOTOR to be tested.


- By bringing the arrow to each of the test items and pressing the TEST BUTTON, if ON is displayed on the screen and the vibration of the guns attached to the cabinet is ascertained, it is satisfactory. As seen from the front of the cabinet, the left-hand side gun is for 1 P and the right-hand side one is for 2 P .
- The gun is activated while the switch is depressed. When the switch is released, OFF is displayed and the gun ceases to operate.
- Bring the " $\rightarrow$ " to "EXIT" and press the TEST BUTTON to return to the Menu mode.


## 8-7 SOUND TEST

Choose SOUND TEST to cause the following mode to appear on the monitor so that SOUND MEMORY check can be performed.


- Bring the arrow to B.G.M. for background music and move it to S.E. for sound effects.
- At No. 0, however, sound will not be emitted.
- Bring the " $\rightarrow$ " to "EXIT" and press the TEST BUTTON to return to the Menu mode.


## 8-8 C.R.T. TEST

(1) RGB color adjusting screen (1/2)

This page is for adjusting the monitor color.


PUSH TEST BUTTON TO CONTINUE

Red, green, and blue are darkest on the leftmost scale and get brighter by 31 gradations to the right. The contrast of the monitor is normal, if the white color bar is black in the leftmost position and is white in the rightmost position.
Press the TEST BUTTON to turn a page.
(2) Monitor size adjusting screen (2/2)

This page is for checking the monitor size.
When adjusting the monitor size, be careful so that grids do not go off of the screen.


Press the TEST BUTTON to return to the Menu.

## 8-9 GAME ASSIGNMENTS

In this mode, the present game setting is displayed and also, the game setting changes can be made.


## - GAME DIFFICULTY The game difficulty is classified into 8 different categories from EASI EST to EXTRA HARDEST. (EASIEST $\sim$ EXTRA HARDEST)

Game difficulty is classified into the following 8 different levels:
EASIEST
EASIER
EASY
NORMAL
HARD
HARDER
EXTRA HARD

## HARDEST

- GUN VIBRATION Gun vibration YES or NO can be set.
- Bring the arrow mark $(\rightarrow)$ to EXIT and press the TEST BUTTON to return to the Menu.

The "COIN ASSIGNMENTS" mode permits you to set the start number of credits, as well as the basic numbers of coins and credits. This mode expresses "how many coins correspond to how many credits.".


Note: COIN CHUTE TYPE

INDIVIDUAL: Each player uses a coin chute which accepts coins independently.

COMMON: Coins are accepted in common for both players.

As a standard, it is set to "INDIVIDUAL."

- For COIN/CREDIT SETTING, refer to TABLE 1 (INDIVIDUAL) and TABLE 2 (COMMON).
- Choosing the MANUAL SETTING allows a finer classification settings to be made.
- Bring the arrow mark $(\rightarrow)$ to EXIT and press the TEST BUTTON to return to the Menu.

TABLE 1 COIN/CREDIT SETTING
(COIN CHUTE INDIVIDUAL TYPE)

| NAME OF SETTING | FUNCTIONING OF EACH COIN CHUTE |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| SETTING \#1 | 1 | COIN | 1 | CREDIT |
| SETTING \#6 | 1 | COIN | 2 | CREDITS |
| SETTING \#8 | 1 | COIN | 3 | CREDITS |
| SETTING \#9 | 1 | COIN | 4 | CREDITS |
| SETTING \#10 | 1 | COIN | 5 | CREDITS |
| SETTING \#11 | 1 | COIN | 6 | CREDITS |
| SETTING \#12 | 2 | COINS | 1 | CREDIT |
| SETTING \#15 | 1 | COIN | 1 | CREDIT |
| SETTING \#26 |  | 2 | COINS | 3 | CREDITS

TABLE 2 COIN/CREDIT SETTING (COIN CHUTE COMMON TYPE)

| NAME OF SETTING | FUNCTIONING OF COIN CHUTE\#1 |  |  |  | FUNCTIONING OF COIN CHUTE \#2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SETTING \#1 |  | COIN | 1 | CREDIT |  | 1 COIN | 1 | CREDIT |
| SETTING \#2 |  | COIN | 1 | CREDIT |  | 1 COIN | 2 | CREDITS |
| SETTING \#3 |  | COIN | 1 | CREDIT |  | COIN | 3 | CREDITS |
| SETTING \#4 |  | COIN | 1 | CREDIT |  | COIN | 4 | CREDITS |
| SETTING \#5 |  | COIN | 1 | CREDIT |  | COIN | 5 | CREDITS |
| SETTING \#6 |  | COIN | 2 | CREDITS |  | COIN | 2 | CREDITS |
| SETTING \#7 |  | COIN | 2 | CREDITS |  | COIN | 5 | CREDITS |
| SETTING \#8 |  | COIN | 3 | CREDITS |  | COIN | 3 | CREDITS |
| SETTING \#9 |  | COIN | 4 | CREDITS |  | COIN | 4 | CREDITS |
| SETTING \#10 |  | COIN | 5 | CREDITS |  | COIN | 5 | CREDITS |
| SETTING \#11 |  | COIN | 6 | CREDITS |  | COIN | 6 | CREDITS |
| SETTING \#12 |  | COINS | 1 | CREDIT |  | COINS | 1 | CREDIT |
| SETTING \#13 |  | COINS | 1 | CREDIT |  | COIN | 1 | CREDIT |
| SETTING \#14 |  | COINS | 1 | CREDIT |  | COIN | 2 | CREDITS |
| SETTING \#15 |  | COIN COINS | $3$ | CREDIT CREDITS |  | COIN <br> COINS |  | CREDIT CREDITS |
| SETTING \#16 |  | $\begin{aligned} & \hline \text { COIN } \\ & \text { COINS } \end{aligned}$ | $3$ | CREDIT CREDITS |  | COIN |  | CREDITS |
| SETTING \#17 | 3 | COINS | 1 | CREDIT | 3 | COINS | 1 | CREDIT |
| SETTING \#18 | 4 | COINS | 1 | CREDIT |  | COINS | 1 | CREDIT |
| SETTING \#19 | 1 | COIN <br> COINS <br> COINS <br> COINS | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 5 \end{aligned}$ | CREDIT CREDITS CREDITS CREDITS |  | COIN <br> COINS <br> COINS <br> COINS | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 5 \end{aligned}$ | CREDIT CREDITS CREDITS CREDITS |
| SETTING \#20 | $4$ | COIN <br> COINS <br> COINS <br> COINS | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 5 \\ & \hline \end{aligned}$ | CREDIT CREDITS CREDITS CREDITS |  | COIN | $5$ | CREDITS |
| SETTING \#21 |  | $\begin{aligned} & \text { COINS } \\ & \text { COINS } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \\ & \hline \end{aligned}$ | CREDIT <br> CREDITS |  | COIN | 2 | CREDITS |
| SETTING \#22 | 2 4 5 | COINS COINS COINS | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & \hline \end{aligned}$ | CREDIT CREDITS CREDITS | $\begin{aligned} & 2 \\ & 4 \\ & 5 \\ & \hline \end{aligned}$ | COINS COINS COINS | $\begin{aligned} & \hline 1 \\ & 2 \\ & 3 \\ & \hline \end{aligned}$ | CREDIT CREDITS CREDITS |
| SETTING \#23 | 2 4 5 | COINS COINS COINS | $\begin{aligned} & \hline 1 \\ & 2 \\ & 3 \\ & \hline \end{aligned}$ | CREDIT CREDITS CREDITS |  | COIN | 3 | CREDITS |
| SETTING \#24 | 1 2 3 4 5 | COIN <br> COINS <br> COINS <br> COINS <br> COINS | $\begin{aligned} & \hline 1 \\ & 2 \\ & 3 \\ & 4 \\ & 6 \\ & \hline \end{aligned}$ | CREDIT CREDITS CREDITS CREDITS CREDITS | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ | COIN <br> COINS <br> COINS <br> COINS <br> COINS | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 6 \end{aligned}$ | CREDIT CREDITS CREDITS CREDITS CREDITS |
| SETTING \#25 | 2 3 4 5 | COIN <br> COINS <br> COINS <br> COINS <br> COINS | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 6 \end{aligned}$ | CREDIT CREDITS CREDITS CREDITS CREDITS |  | COIN | 6 | CREDITS |
| SETTING \#26 |  |  | PL |  |  |  | PLA |  |

MANUAL SETTING
When the MANUAL SETTING is selected, the following appears on the screen:


TABLE 3 MANUAL SETTING

| COIN TO CREDIT | 1 COIN 1 CREDIT |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2 COINS | 1 CR | EDIT |  |
|  | 3 | 3 COINS | 1 CREDIT |  |  |
|  |  | 4 COINS | 1 CREDIT |  |  |
|  |  | 5 COINS | 1 CREDIT |  |  |
|  | 6 | 6 COINS | 1 CREDIT |  |  |
|  |  | 7 CoINS | 1 CREDIT |  |  |
|  |  | 8 COINS | 1 CREDIT |  |  |
|  |  | 9 COINS | 1 CREDIT |  |  |
| Q BMAD 70 S[1\%M\|SK |  |  |  |  |  |
| BONUS ADDER$\begin{array}{lll} 20 & M O & H 0 \\ 20 & \text { MO } & H 0 \\ 20 & \text { MO } & H 0 \\ 20 & \text { M0 } & H 0 \end{array}$ | NO BONUS ADDER |  |  |  |  |
|  | 2 COINS GIVE 1 EXTRA COIN |  |  |  |  |
|  | 3 COINS GIVE 1 EXTRA COIN |  |  |  |  |
|  | 4 COINS GIVE 1 EXTRA COIN |  |  |  |  |
|  | 5 COINS GIVE 1 EXTRA COIN |  |  |  |  |
|  | 6 COINS GIVE 1 EXTRA COIN |  |  |  |  |
| sith lo moll sit moit nson th .ni Juy . 5 El zi abla hond -fiol arla | 7 COINS GIVE 1 EXTRA COIN |  |  |  |  |
|  | 8 COINS GIVE 1 EXTRA COIN |  |  |  |  |
|  | 9 COINS GIVE 1 EXTRA COIN |  |  |  |  |
|  |  |  |  |  |  |
| COIN CHUTE MULTIPLIER <br> GSDrm 9 <br>  (boluwo tonai $x$ | 1 COIN COUNTS AS 1 COIN |  |  |  |  |
|  | 1 COIN COUNTS AS 2 COINS |  |  |  |  |
|  | 1 COIN COUNTS AS 3 CoINS |  |  |  |  |
|  | 1 COIN COUNTS AS 4 COINS |  |  |  |  |
|  | 1 CoIN COUNTS AS 5 coins |  |  |  |  |
|  |  | 1 COIN COUNTS AS |  | 6 COINS |  |
|  |  | 1 COIN COUNTS AS |  | 7 COINS |  |
|  |  | 1 CoIN COUNTS AS |  | 8 COINS |  |
|  |  | 1 COIN COUNTS AS |  | 9 C | COINS |

## 8-11 BOOKKEEPING

This mode allows each of the CREDIT/TIME/GAME data to be ascertained.


- COIN CHUTE
- TOTAL COIN
- COIN CREDIT
- TOTAL CREDIT
- NUMBER OF GAME
- GAME PLAY TIME

Number of coins put in. As seen from the front of the cabinet, the righthand side is \#1 and the left- hand side is \#2.
Total number of activations of coin chutes
Credits registered by both the left and right SERVICE BUTTONs.
Total number of credits (COIN CREDITS + SERVICE CREDITS)
Total play by both 1 P and 2 P
Total time of play by both 1 P and 2 P (in a simultaneous play, the overlapped time is not counted.)

- Press the TEST BUTTON to proceed to the next page.


## BOOKKEEPING $2 / 2$

TIME HISTOGRAM

```
    0 MOOS~ 0 M29S 0
    0 M30S~0 M59S 0
    1 M00S~ 1 M29S 0
    1 M30S~ 1 M59S 0
    2 MO0S~ 2 M29S 0
    2 M30S~ 2 M59S 0
    3 MOOS~ 3 M29S 0
    3 M30S~ 3 M59S 0
    4 MOOS~4 M29S 0
    4 M30S~4 M59S 0
    5M00S~9M59S 0
OVER 10MOOS 0
```


## PUSH TEST BUTTON TO EXIT

- TIME HISTOGRAM shows the number of players whose play became "GAME OVER" in each of the above time periods.
- Press the TEST BUTTON to return to the Menu.


## 8-12 BACKUP DATA CLEAR

Clears the contents of BOOKKEEPING.


When clearing, bring " $\rightarrow$ " to "YES" and when not clearing, to "NO", by using the SERVICE BUTTON, and then push the TEST BUTTON.
When the data has been cleared, "COMPLETED" will be displayed. Bring " $\rightarrow$ " to "NO" and press the TEST BUTTON to cause the Menu mode to return on to the screen.

## 9. CONTROLLER

In the TEST menu, when the CONTROLLER's V.R. values can not be adjusted to the allowable range, it is necessary to adjust the V.R. installation position or replace the V.R.. Also, be sure to apply grease for the mechanism part every 3 months.
To perform the above-mentioned work, remove the CONTROLLER from the cabinet.

## 9-1 REMOVING THE CONTROLLER

(1) Take off the SERVICE DOOR from the CONTROLLER to be removed.
(2) Disconnect 7 CONNECTORs inside the SERVICE DOOR ( 3 P red, 3 P blue, 2 P red, 2 P blue, 2 P black, and 1P white 2).
(3) Take off 12 TAMPERPROOF SCREWs to remove the 2 MECHA COVERs.
(4) Take out the 6 HEXAGON BOLTs and remove the CONTROLLER. First, make sure that the wires are free and then carefully lift it up.

NOTE: The V. R. is attached underneath the CONTROLLER Therefore, be sure to position it sideways so as not to cause damage to the V. R.



FIG. 9. 1 REMOVING THE CONTROLLER

## 9-2 ADJUSTMENT \& REPLACEMENT OF V.R.

When the V.R. value is set in the GUN ADJUSTMENT of the TEST menu, if the COTROLLER's sight does not correctly function, it is necessary to adjust the V.R. installation position, or replace the V.R..

## V.R. ADJUSTMENT

(1) Loosen the 2 screws (which secure the V.R. BRACKET) to move the V.R. BRACKET.
(2) Move the V.R. BRACKET to disengage the GEAR and ADJUST GEAR. Move the V.R. SHAFT and make sure that the cut portion of the V.R. SHAFT faces the opposite side of the ADJUST GEAR as shown in Fig. 9. 2.
(3) Cause the GEAR to be engaged and tighten the 2 screws. At this time, make backlash adjustments.
(4) Carefully swing the gun in the horizontal and vertical directions and check to see if the V.R. value is within the allowable range.
(5) After making adjustments, reset the V.R. value in the GUN ADJUSTMENT in the TEST menu.

g\%.LIMTVOY ЗसT DVTVOLET I. P.DF
(1) Remove the SCREWs "A" that fasten the VR BRACKET. The VR BRACKET becomes unfastened and the VR GEAR disengaged from the HANDLE GEAR.
(2) Remove the VR GEAR from the VR. Then, replace the VR.
(3) After the replacement of the VR, newly set the VR value in the VOLUME ADJUSTMENT mode. (Refer to the preceding page.)

## 9－3 REPLACEMENT OF MOTOR BRUSH

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CAUTION：When replacing the brush，be very careful so as not to drop it in the machine．

When 1P GUN or 2P GUN display is ON in the OUTPUT TEST screen in the TEST mode，if the gun does not vibrate，first check the CIRCUIT PROTECTOR of the SWITCH UNIT．
If the circuit protector is satisfactorily
working，check the motor brushes．

## REMOVING THE MOTOR BRUSH

（1）Take off the 4 TAMPERPROOF SCREWs and remove 2 SHAFT COVERs B．
（2）The MOTOR appears as shown in the
Fig．at the right．Turn the cap with a
 screwdriver，etc．，to remove the brush．
If the motor brushes are worn out as shown，replace them．
Be sure to replace both of the brushes at the same time．


FIG．9． 3 REPLACING THE MOTOR BRUSH

## 9-4 REPLACEMENT OF TRIGGER SW

When the TRIGGER is pulled, if ON is not shown in the TRIGGER display in the TEST menu "INPUT TEST" screen, the MICRO SW may be malfunctioning. In that case, it is necessary to replace the MICRO SW.

## REMOVING THE GRIP:

(1) Take off 7 TAMPERPROOF SCREWs A and remove COVER RIGHT.
(2) Take off 5 TAMPERPROOF SCREWs and remove COVER LEFT with COVER BRACKET as is attached to it (or it could be removed), while paying attention to the wires.
(3) Disconnect the CONNECTOR which is connected to the GRIP.
(4) Remove the GRIP by taking out the 6 HEXAGON NUTs. M5 $\times 12$


FIG. 9. 4 REMOVING THE GRIP

## REPLACING THE MICRO SW:

(1) Take off 2 TAMPERPROOF SCREWs A and 3 TAMPERPROOF SCREWs B to remove GRIP RIGHT.
$\qquad$ (2) In this status, the MICRO SW can be replaced.

WZ OSDMM ads spefigo

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FIG. 9. 5 REPLACING THE MICRO SW

[^0]
## 9-5 GREASING

Apply greasing for the following portions every 3 months:

OGUN DRIVE portion OSLIDE RAIL

Apply the grease from the 4 replenishment ports (on each side).
OV.R. GEAR portion
OForward/Backward turning SHAFT
OHorizontally sliding portion

## O GUN DRIVE portion:

Apply grease to the pin's portion marked with slant lines.


## HORIZONTALLY SLIDING PORTION:

Apply grease to the portions marked with slant lines (to the surfaces where the following items come into contact with each other):

SPACER RING \& SWING BRACKET
SWING BRACKET \& SPACER BLOCK A; and SPACER BLOCK B \& MECHA BASE


## 10. REPLACEMENT OF FLUORESCENT LAMP

In a manner as shown below, replace the Fluorescent lamp.


## 11. EXPLANATION OF COIN SELECTOR

## HANDLING THE COIN JAM

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

## CLEANING THE COIN SELECTOR

The coin selector should be cleaned once every 3 months. When cleaning, follow the procedure below:
(1)

Turn the power for the machine OFF. Open the coin chute door.

Open the gate and dust off by using a soft brush (made of wool, etc.).
(3)

Remove stain by wiping with a soft cloth which contains water or chemical detergent.
(4) Remove the CRADLE. When removing the retaining ring (E ring), be very careful so as not to bend the shaft.
(5) Remove stain from the shaft and pillow portions by wiping off with a soft cloth, etc.

(6) After wiping off as per 5 above, further apply a dry cloth, etc. to cause the coin selector to dry completely.
Absolutely do not apply machine oil, eic. to the coin selector.

After cleaning the coin selector, inseri a regular coin in the normal working status and ascertain that the selector correctly functions.


## 12.MONITOR ADJUSTMENTS

Do not operate the ADJUSTMENT knobs without good reason.
A certain portion of the monitor is subject to a high voltage and therefore be very careful of this point.When making adjustment, utilize a resinous Alignment Screwdriver. Make adjustments from the BACK DOOR side.


For further information please refer to the Hantarex Service Manual supplied in the Spares and Accessories Kit.

## 13. PERIODIC INSPECTION TABLE

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

|  | Item | Interval | Reference |
| :--- | :--- | :--- | :--- |
| PERIODIC CHECK | SELF TEST, MEMORY CHECK |  | Monthly |
|  | CHECK EACH SETTING | $8-3,8-7$ |  |
| CONTROLLER | CHECK THE VOLUME VALUE | Monthly | $8-9,8-10$ |
|  | GREASING | Trimonthly | $9-5$ |
| COIN SELECTOR | CLEANING | Trimonthly | 11 |

## REMOVING THE FRONT GLASS:

Remove the FRONT GLASS when cleaning the back side of it. First, remove GLASS HOLDER UPPER only. Then, put your hand through the square hole in the back side of GLASS HOLDER UPPER, and pull the FRONT GLASS towards you.


## 14. TROUBLESHOOTING

| PROBLEM | CAUSE | COUNTERMEASURES |  |
| :---: | :---: | :---: | :---: |
| Main SW is turned ON but the machine is not functioning. | The power is not supplied. <br> The power supply voltage is not correct. <br> Blowing off of fuse due to | Make sure that the plug is fully inserted into the plug socket. <br> Make sure that the power supply voltage is correct. <br> Replace $A C$ unit fuse. |  |
|  | instantaneous overcurrent. | FUSE $6.4 \phi \times 305000 \mathrm{~mA} 125 \mathrm{~V}$ <br> (514-5036-5000) | AC 100~120V AREA |
|  |  | FUSE $6.4 \phi \times 303000 \mathrm{~mA} 250 \mathrm{~V}$ (514-5037-3000) | AC 220~240V AREA |
|  | Blowing off of fuse due to instantaneous overcurrent. | Replace power supply fuse: FUSE $6.4 \phi \times 304000 \mathrm{~mA} 125 \mathrm{~V}$ (514-5036-4000) |  |
| Sound is not emitted. | VR setting is incorrect. | Adjust the SW unit and VOLUME ADJUSTMENT (refer to 8-1). |  |
| CONTROLLER (GUN) MOTOR does not function. | The protector functioned due to an instantaneous overcurrent. <br> The Motor Brushes are worn out. | Cause the functioning of the SW unit Circuit Protector to restore to its original condition (refer to 8-1). <br> Replace the Motor Brushes (refer to 9-3). |  |
| The Fluorescent lamp does not light up. | The Fluorescent tube is burnt out. | Replace the Fluorescent tube with an FL 30W tube (refer to Sction 10). |  |
| During game play, CONTROLLER sight is not correct (deviates). | GUN ADJUSTMENT is incorrect. | Perform ADJUSTMENT and SETTING correctly as per GUN ADJUSTMENT in the TEST menu (refer to 8-4). |  |
| During game play, CONTROLLER's TRIGGER SW does not operate. | SW malfunctioning. | Replace SW (refer to 9-4). |  |
| The on-screen image of the monitor sways and or shrinks. | The power source and voltage are not correct. | Make sure that the power supply and voltage are correct. |  |

## 15. GAME BOARD

## 15-1 COMPOSITION OF GAME BOARD



## 15-2 INPUT AND OUTPUT

## GAME BD ALIEN 3 THE GUN



## INPUT AND OUTPUT RELATIONS



PWR SPLY
$\rightarrow$ CONTROLLER MOTOR (AIN-4000) $\qquad$

| THaI gavo AhDam gaxorte | $\operatorname{sen} 1-41 \mathrm{~A}$ | $\varepsilon$ |
| :---: | :---: | :---: |
| THOIS SEVOD AHDEIM SコXOTT2 | SMA-LAIA | $\Delta$ |
|  | COOS-VLA | 2 |
| THDIS 19 MOI29G | d00S-VIA | $\bar{\partial}$ |

## 16. DESIGN RELATED PARTS


(5)

| No | PART NO. | DESCRIPTION |
| :---: | :--- | :--- |
| 1 | $423-0207$ | BILLBOARD PLATE AIN |
| 2 | $422-0460-01$ | PLAY INSTR SH AIN ENG |
| 3 | AIN-1042 | STICKER MECHA COVER LEFT |
| 4 | AIN-1043 | STICKER MECHA COVER RIGHT |
| 5 | AIN-2005 | DESIGN PL LEFT |
| 6 | AIN-2006 | DESIGN PL RIGHT |

17. PARTS LIST
(1) TOP ASSY ALIEN 3 THE GUN


ITEM NO.

## 1

2 4 5 6 13 14 15

PART NO.
AIN-0100
AIN-1000
OUT-0003
$421-5800-215$
$421-6594$
$421-7987$
$421-7988$
$421-6709$
$421-6671$
SGM-3784

000-P00520-W
601-6604-30
SGM-2675
420-6101-01
220-5381
SGM-4111
540-0006-01
540-0007-01
220-5130
220-5373
601-7227
514-5036-4000
514-5036-5000
514-5037-3000 BVG-0026
000-P00525-W
421-6690~
421-6119-91
421-6120-91

DESCRIPTION

## ASSY SHIELD CASE

ASSY CABINET
SHIELD CASE STOPPER
ORIGINAL SEAL ALIEN 3 THE GUN
STICKER SERIAL NO.INFO
STICKER ELEC SPEC
STICKER SERIAL NUMBER STICKER SERVICE INSTR ENG STICKER DANGER HIGH VOLTAGE POLYETHYLENE COVER $950 \times 1500 \times 1900$

M SCR PH W/FS M5 $\times 20$
CARTON BOX 30
POLYETHYLENE BAG $240 \times 370$
OWNERS MANUAL ALIEN 3 THE GUN ENG
KEY MASTER FOR 220-5380
KEY BAG
WRENCH FOR TAMP PRF SCR DUAL TYPE M4 WRENCH FOR TAMP PRF SCR DUAL TYPE M5 VOL CONT B-5K OHM
VOL CONT B-5K OHM
MOTOR BRUSH
FUSE $6.4 \phi \times 304000 \mathrm{~mA} 125 \mathrm{~V}$
FUSE $6.4 \phi \times 305000 \mathrm{~mA} 125 \mathrm{~V}$
FUSE $6.4 \phi \times 303000 \mathrm{~mA} 250 \mathrm{~V}$
SHIPPING BRACKET
M SCR PH W/FS M5 $\times 25$
STICKER~V
STICKER FCC STICKER SEGA USA

AC100~120V AREA AC200~240V AREA

FOR USA
FOR USA


(7)


ITEM NO. PART NO.
DESCRIPTION

| 1 | AIN-0101 | SHIELD CASE BRET |
| :--- | :--- | :--- |
| 2 | $105-5150$ | SHIELD CASE FOR SYS 32 |
| 3 | $253-5354$ | BD GUIDE |
| 4 | $839-0476-01$ | FLT BD SYSTEM 32(W/O JUMPER) |
| 5 | $421-5563$ | STICKER ARROW |
| 6 | AIN-0102 | SHIELD CASE PLATE |
| 7 | $834-9877-01$ | GAME BD ALIEN 3 THE GUN USA |
| 7 | $834-9877-02$ | GAME BD ALIEN 3 THE GUN EXP |
| 101 | $280-5203-4$ |  |
|  |  | RACK CARD GUIDE L=215.9 |
| 201 | $000-P 00408-W$ | M SCR PH W/FS MA |
| 202 | $012-P 00406$ | TAP SCR PH 4 6 |
|  |  |  |
| 301 | CE15645 | WIRE YARN SHIELD ADD |
| 302 | CE15632 | WIRE HERN LINE OUT SHIELD |

FOR USA FOR OTHERS


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| ITEM NO. | PART NO. | DESCRIPTION |
| :---: | :---: | :---: |
| 1 | AIN-1001 | ASSY SUB-CABINET |
| 2 | AIN-1021 | SW UNIT |
| 3 | AIN-1023 | AC UNIT |
| 4 | AIN-1024 | FL UNIT |
| 5 | AIN-1025 | ASSY MONITOR 29 |
| 6 | AIN-1028 | ASSY WIRE |
|  | CE15619 | WIRE HARN MAIN |
|  | CE15643 | WIRE HARN A/D 1 |
|  | CE15644 | WIRE HARN A/D 2 |
|  | $600-6314-19$ | Wh2 WIRE HARN EXT COIN |
|  | 600-6314-20 | WIRE HARN EXT SOUND |
|  | CE 15639 | WIRE HARN EXT VOLUME |
|  | CE 15640 | LINE FILTER A |
|  | 601-0460 | PLASTIC TIE BELT 100 mm |
| 7 | AIN-1029 | BILLBOARD SASH UPPER |
| 8 | AIN-1030 | BILLBOARD SASH LOWER |
| 9 | AIN-1031 | FRONT GLASS |
| 10 | AIN-1032 | RUBBER PACKING |
| 11 | AIN-1033 | GLASS HOLDER UPPER |
| 12 | AIN-1034 | GLASS HOLDER LOWER |
| 13 | AIN-1035 | CUSHION |
| 14 | AIN-1036 | WOODEN MASK |
| 15 | AIN-1037 | MIRROR BRKT |
| 16 | AIN-1038 | MIRROR |
| 17 | AIN-1039 | MIRROR SASH |
| 18 | AIN-1040 | MIRROR HOLDER |
| 19 | AIN 1041 | MECHA COVER |
| 20 | AIN-1042 | STICKER MECHA COVER LEFT |
| 21 | AIN-1043 | STICKER MECHA COVER RIGHT |
| 22 | AIN-2000 | ASSY CONTROLLER |
| 23 | AIN-4000 | ASSY PWR SPLY |
| 24 | 253-5366 | CASH BOX |
| 26 | 421-7020 | STICKER CAUTION FORK |
| 27 | 421-7308~ | DENOMINATION SHEET 1GAME ~ |
| 28 | 422-0460-01 | PLAY INSTR SH AIN ENG |
| 29 | 423-0207 | BILLBOARD PLATE AIN |
| 101 | 280-0419 | HARNESS LUG |
| 102 | 280-5009-01 | CORD CLAMP 21 |
| 201 | 000-P00412-W | M SCR PH W/FS M $4 \times 12$ |
| 202 | 000-P00420-W | M SCR PH W/FS M $4 \times 20$ |
| 203 | 000-P00430-W | M SCR PH W/FS M $4 \times 30$ |
| 204 | 000-P00530-S | M SCR PH W/S M $5 \times 30$ |
| 205 | 008-T00408-0C | TMP PRF SCR TH CRM M $4 \times 8$ |
| 206 | 008-T00420-OB | TMP PRF SCR TH BLK M $4 \times 20$ |
| 207 | 000-T00516-OB | M SCR TH BLK M5×16 |
| 208 | 005-R03110 | W SCR RH $3.1 \times 10$ |
| 209 | 005-F03113 | W SCR FH $3.1 \times 13$ |
| 210 | 030-000612-S | HEX BLT W/S M6×12 |
| 211 | 030-000840-S | HEX BLT W/S M8 $\times 40$ |


| ITEM NO． | PART NO． |
| :---: | :--- |
|  |  |
| 212 | $050-\mathrm{F} 00400$ |
| 213 | $060-\mathrm{F} 00600$ |
| 214 | $060-\mathrm{F} 00800$ |
| 215 | $069-000001$ |
| 216 | $090-0024$ |
|  |  |
| 301 | CE 15641 |
| 302 | $600-6314-44$ |
| 303 | $600-6314-45$ |
| 304 | $600-6314-46$ |
| 305 | $600-6314-47$ |

DESCRIPTION
OMTAA9
OИ MaTI

ISOI－VIX
FLT WSHR M6
FLT WSHR M8
ESOS－ HIA
＋50I－VIA
FLT WSHR 5．5－20×1．6
SCOCH ELEC．TAPE UL10 $19 \mathrm{~mm} \times 55 \mathrm{~mm}$
WIRE HARN EXT MOTOR
WIRE HARN EARTH CONT R
WIRE HARN EARTH CONT L
WIRE HARN EARTH COIN SW WIRE HARN EARTH COIN METER
c． H 20－003
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bEOI－VIA
2EOI－12A
aEOI－VIA
CEDL－VIA
gEOL NIIA
REDT－FIA
OWOL－VIA
1 MOL VIA
SbOL－YLA
EMOI－ИIA
000S．VIA
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2－0EC00q－000 NOS
50－80100T－800 20S
ERO－ach00T－800
205

go－dIc00T－000
ros
$01 \times 1.8 \mathrm{HR}$ KOZ W
OIIEOS－z00
ह11807－200
305
E1 $\times 1.8$ HT \％， 2 W
SI XaM ZWW Tas XAH
2－Sta000－080
pas

2－048000－0E0
OIS
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## (5) METER UNIT (AIN-1020).

This unit is included on the VTS Bracket on machines built in the UK See (6).


ITEM No... PART No.

DLM/MP-1029
DI-
M2067D 12V
F207
E0611 PS
F0755I
F357
E1031 PS
CB-005
CE15631
CE15646

## DESCRIPTION

VTS Label Type B 1
Impulse Counter, Panel . 1

Control Knob, $15 \mathrm{~mm} \quad 1$
Push Button 3
Potentiometer, 5 k LIN 1
Fuse Holder, 20 mm (Type FX0377) 2
Fuse, 2A 20 mm Anti-surge 2
Klingon Credit Board 1
Wire Harness, VTS 1
Wire Harness, Volume SW 1
QTY
VTS Panel Bracket Type B 1
VTS Label Type B 1
1

3
1
2




ITEM No. PART No.

MP-001B
E4666 PS
E5018 PS
E1415 PS
E1043 PS
CE15014

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DESCRIPTION QTY

Multi-switch bracket 1
Rocker Switch (on/off) 1
"Cherry" Switch 1
Filter RFI Eurosocket 1
Fuse, 4A $20 \mathrm{~mm} \quad 1$
Wiring Harness, Multi-sw brk 1
. OV MaTI
(8) FL UNIT

(9) ASSY MONITOR 29 (AIN-1025) Not applicable to UK built machines





| ITEM NO. | PART NO. | DESCRIPTION | antsha |
| :---: | :---: | :---: | :---: |
| 1 | AIN-2101 | MECHA BASE | thwnot -0te |
| 2 | AIN-2102 | SPACER BLOCK A | O08LKRE-080 |
| 3 | AIN-2103 | STOPPER WMALH TEH | (KP) $02 \mathrm{C}-090$ |
| 4 | AIN-2104 | STOPPER STAY | 000.102.000 |
| 5 | AIN-2105 | d. STOPPER BRACKET | 150-S50000-500 |
| 6 | AIN-2106 | 8 20 SWING BASE | 5090-090 |
| 7 | AIN-2107 | SPACER BLOCK B | \$100-000 |
| 8 | AIN-2108 | RING | E100-60 |
| 9 | AIN-2109 | RING SPACER HITSUR 4 | \%NMF-200 |
| 10 | AIN-2110 | SWING BRACKET |  |
| 11 | AIN-2111 | SLIDE PLATE | 088819 |
| 12 | AIN-2112 | STAY 040 KHAESE [1] | 182 c 139 |
| 13 | AIN-2113 | RUBBER | toktis |
| 14 | AIN-2114 | SLIDE SHAFT | ckexig |
| 15 | AIN-2115 | BUMPER | Hecki3 |
| 16 | AIN-2116 | CUNTROLLER SHAFT | OPEC 135 |
| 17 | AIN-2117 | T. SHAFT COVER B IEMIN | 0005173 |
| 18 | AIN-2118 | EXT SPRING |  |
| 19 | AIN-2119 | HOLE COVER A |  |
| 20 | AIN-2120 | VR BRKT LOWER |  |
| 21 | GLC-2107 | VR BRKT |  |
| 22 | GUN-2629 | GUIDE RING $140^{\circ}$ |  |
| 23 | 601-6005 | ADJUST GEAR |  |
| 24 | 601-5410 | GEAR 15 ¢ 6 |  |
| 25 | GLC-2122 | GEAR PLATE |  |
| 26 | AIN-2121 | HOLE COVER B |  |
| 101 | 220-5130 | VOL CONT B-5K OHM |  |
| 101 | 220-5373 | VOL CONT B-5K OHM |  |
| 102 | 280-5008 | CORD CLAMP $\phi 15$ |  |
| 103 | 280-5207 | HARNESS LUG CC-1005 |  |
| 104 | 601-5962-59 | BUSH 3.2T |  |
| 105 | 601-5962-90 | BUSH 3.2T |  |
| 106 | 601-5962-110 | BUSH 3.2T |  |
| 107 | 310-5029-F20 | SUMITUBE F F20MM |  |
| 201 | 000-F00308 | M SCR FH M $3 \times 8$ |  |
| 202 | 000-F00416 | M SCR FH M $4 \times 16$ |  |
| 203 | 000-F00512 | M SCR FH M $5 \times 12$ |  |
| 204 | 000-P00408-W | M SCR PH W/FS M $4 \times 8$ |  |
| 205 | 000-P00412-W | M SCR PH W/FS M $4 \times 12$ |  |
| 206 | 008-T00408-OB | TMP PRF SCR TH BLK M $4 \times 8$ |  |
| 207 | 028-P00308-F | SET SCR PH FLAT P M $3 \times 8$ |  |
| 208 | 028-P00416-P | SET SCR PH CUP P M $4 \times 16$ |  |
| 209 | 030-000612-S | HEX BLT W/S M6×12 |  |
| 210 | 050-H00600 | HEX NUT M6 |  |
| 211 | 050-H00800 | HEX NUT M8 |  |
| 212 | 050-H01000 | HEX NUT M10 |  |
| 213 | 050-H01400 | HEX NUT M14 |  |
| 214 | 050-U00400 | U NUT M4 |  |
| 215 | 050-U00500 | U NUT M5 |  |
| 219 | 060-F01200 | FLT WSHR M12 |  |

ITEM NO．PART NO．
220
221
222
223
224
225
226
227
228
301
302
303
304
305
306
307
060－S00600
060－S00800
060－S01000
060－S01400
069－000022－OB
090－0002
090－0012
090－0013
000－F00420
CE 15580
CE15581
CE15582
CE15583
CE15584
CE15589
CE15590

OMTЯA9

## OM MSTI

SPR WSHR M6
SPR WSHR M8
FLT WSHR M10
SPR WSHR M14
FLT WSHR BLK 8．5－25×1．6
GLUE，CEMEDINE No．3000RS
SCREW LOCK
GREASE
M SCR FH M $4 \times 20$
TEXOAM゙日 EMTVZ
WIRE HARN L／R 3 ClL 12
WIRE HARN UP／DN
WIRE HANR EXT SHOT 1
WIRE HARN EXT SHOT 2 WIRE HARN EXT MOTOR WIRE HARN EARTH MECHA WIRE HARN EARTH SHAFT


MHO スR－8 TVOQ JOV
MHO スR－E ThOO JOV
そ \＆ $9 \mathrm{M} / \mathrm{D}$ asiog

TS．E HeUR
TS．E HaUs
TLEHZU日



10ts－via SOISVILA EOIS－M1A boIs－hia zOIS．VIA DOIS－MLA rorchia sOIS－VIA eots－nLa OLIS－HIA IIIS．MLA SIIS－VIA EIIS－MIA AISS．VLA $215 . \mathrm{VIA}$
「ULGULA
8115－hl：
RIIS－VIA
OSIS．KiA rois－5u esas－रुण0 $2000-100$ $01 \mathrm{M}-100$ SSTS－9．10
ISICVILA
(12) CONTROL UNIT (AIN-2200)


ITEM NO. PART NO.
1

AIN-2201
AIN-2300 AIN-2202 AIN-2203 AIN-2204 AIN-2205 AIN-2206 AIN-2207 AIN-2208 AIN-2209 AIN-2210 AIN-2211 AIN-2212 AIN-2400 AIN-2213X 100-5169 280-5207 509-5524-01

000-P00412-W 010-P00308-F 050-U00400 050-U00500 050-U00600 060-F00500 060-F00600 060-S00400 060-S00500 060-S00600 090-0012 090-0013

600-6314-42

DESCRIPTION
BASE CENTER ASSY MOTOR JOINT BRACKET JOINT BAR SPACER
PIN
COM SPRING
SPRING BRACKET
BASE LEFT
BASE RIGHT
FRONT BRACKET
REAR BRACKET
BASE FRONT ASSY GRIP JOINT SPACER

SLIDE RAIL
HARNESS LUG CC-1005 PUSH BUTTON SW BLUE

M SCR PH W/FS M $4 \times 12$
S-TITE SCR PH W/F M3 $\times 8$
U NUT M4
U NUT M5
U NUT M6
FLT WSHR M5
FLT WSHR M6
SPR WSHR M4
SPR WSHR M5
SPR WSHR M6 SCREW LOCK GREASE

WIRE HARN PUSH SW
(13) ASSY MOTOR (AIN-2300)


## homqievesic

## ,OHTHAG


(14) ASSY GRIP (AIN-2400)


ITEM NO. PART NO.
DESCRIPTION

AIN-2401
AIN-2402
AIN-2403
AIN-2404
AIN-2405
509-5080
280-5207
310-5029-D10
201
202
203
204
205
301
008-T00512-OB
AIN-2406
010-P00308-F
050-C00500-3B
090-0070
600-6314-41

GRIP BASE
GRIP LEFT
GRIP RIGHT
LEVER
TORSION SPRING
SW MICRO TYPE
HARNESS LUG CC-1005
SUMITUBE F D10MM
TMP PRF SCR TH BLK M $5 \times 12$
TMP PRF SCR PH BLK M $5 \times 25$
S-TITE SCR PH W/F M3 $\times 8$
CAP NUT TYPE3 BLK M5
GREASE 248 (SOLVEST 248)
WIRE HARN MICRO SW

Components and layout will differ on UK machines


ITEM No. PART No.

1
2
3
4
5
6

201
202
203
204
205
301
302
303
304
305
306
307
308
309

E0507
601-6227-01
AIN-4001
1146
000AY004
000AY005

005-R02725
CE15634
CE15635
CE15636
CE15620
CE15628
CE15626
CE15627
CE15625
CE15624

## DESCRIPTION

Wooden Base (Part of Cabinet) Mains Transformer $2 \times 18.5 \mathrm{~V}$ @ 5 A 2A DC SSR Board ( 2 ccts ) Rectifier Board DC 24 V

Switch Mode Power Supply module Power Amp W/SW Regu 12V 5A

No. $8 \times 1 / 2$ FLG HD SCR
W SCR RH $2.7 \times 25$
Wiring Harness, Trans 18.5 V
Wiring Harness, Rect. BD
Wiring Harness, Speaker
Wiring Harness, SSR BD
Wiring Harness, PSU Mains int.
Wiring Harness, Trans int. A
Wiring Harness, Trans int. B
Wiring Harness, Switch Mode int.
Wiring Harness, Low Voltage int.

## 18. WIRE COLOR CODE TABLE

THE WIRE COLOR CODE is as follows :
A PINK
B SKY BLUE
C BROWN
D PURPLE
E LIGHT GREEN
Wires other than those of any of the above 5 single colors will be displayed by 2 alphanumeric characters.

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

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

Note 1 : If the right-hand side alphnumeric 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 1 : The character following the wire color code indicates the size of the wire.

K : A W G 18, U L 1015
L: A W G 20, U L 1007
None: A W G 22, U L 1007

Wire colours may differ on UK machines



CEI56i9

V.T.S O-
ERPCKET
?
Gills
DoorSwitch.


## minm

CE15641


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