TELESALES

420-6367-01UK REV 1

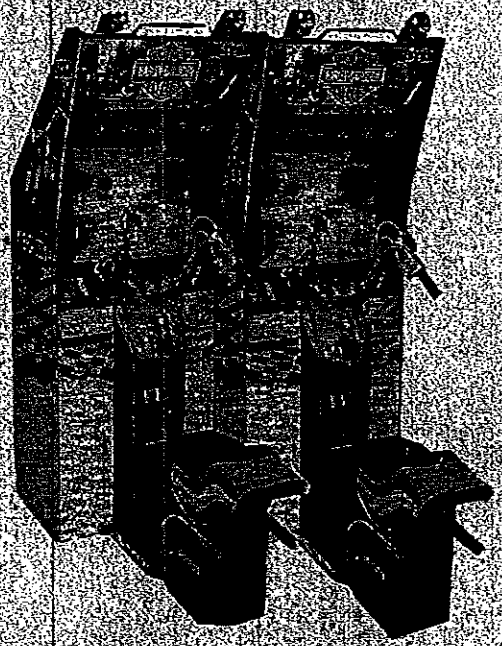
SERVICE MANUAL

SEGA

UNCONTROLLED

Harley-Davidson & L.A.Riders

TWIN



STOP!

(IMPORTANT)

Before using this product, read this SERVICE MANUAL carefully to understand the contents stated herein.
After reading this manual, be sure to keep it available nearby the product or somewhere convenient in order to be able to refer to it whenever necessary.

Manufactured in the UK by

SEGA

MANUFACTURING DIVISION (U.K.)

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1. BEFORE USING THIS PRODUCT

To ensure the safe usage of the product, be sure to read the following before using the product. The following instructions are intended for the use of QUALIFIED SERVICE PERSONNEL ONLY. After carefully reading and sufficiently understanding the instructions should any activity be carried out on the product. Only qualified service personnel should carry out maintenance on the product.

Terms such as WARNING!, CAUTION, and IMPORTANT! Are used where an explanation is given which requires special attention, depending on the potential risk. SEGA is not responsible for injury or damage caused by use in a manner contrary to the instructions stated in this document. In order to prevent accidents warning stickers and printed instructions are applied in the places where a potentially hazardous situation relating to the product could arise. Be sure to comply with these warnings.

WARNING!

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

CAUTION!

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

IMPORTANT!

This is cautionary information which should be complied with when handling the product. Indicates that mishandling the product by disregarding this will cause a potentially hazardous situation which may not result in personal injury but could damage the product.

Be sure to turn off the power and disconnect from the mains supply before working on the machine.

Ensure that the correct fuse(s) is fitted to the machine.

Details of the correct fusing of the machine are enclosed in the Service Manual.

Ensure that only qualified Service Engineers perform any maintenance work on the machine.

Specification changes, removal of equipment, conversion and/or addition, not designated by SEGA are not permitted and will invalidate this product's CE conformity.

The parts of the product also include any warning labels or safety covers for personal protection etc. A potential hazard will be created if the machine is operated while any parts have been removed. Should any doors, lids or protective covers be damaged or lost, do not operate the product. SEGA is not liable in any whatsoever for any injury and/or damage caused by specification changes not designated by SEGA.

Before installing the product, check for the Electrical Specification Sticker, SEGA products have a sticker on which the electrical specifications are detailed. Ensure that the product is compatible with the power supply voltage and frequency requirements of the location in which the machine is to be installed.

Install and operate the machine only in places where appropriate lighting is available, allowing warning stickers to be clearly read.

To ensure maximum safety for both customers and operators, stickers and printed instructions describing potentially hazardous situations are applied to places where accidents could occur. Ensure that where the product is operated has sufficient lighting to allow any warnings to be read. If any sticker or printed warning is removed or defaced, do not operate the machine, until it has been replaced by an identical item.

When handling the monitor, be very careful. (Applies only to product with monitor)

Some of the monitor (TV) parts are subject to high tension voltage. Even after turning off the power some components are still occasionally subject to high tension voltage. Monitor repair and replacement should be performed by qualified service engineers only.

In cases where commercially available monitors and printers are used only the contents relating to this product are stated in this manual. Some commercially available equipment has functions and reactions not stated in this manual. Read this manual in conjunction with the specific manual of such equipment.

Descriptions contained herein may be subject to change without prior notification.

The contents described herein are fully prepared with due care. However, should any question arise or errors be found please contact SEGA.

1.1. *INSPECTIONS IMMEDIATELY AFTER TRANSPORTING THE PRODUCT TO THE LOCATION*

IMPORTANT!

- Inspection should only be carried out by QUALIFIED SERVICE PERSONNEL.

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

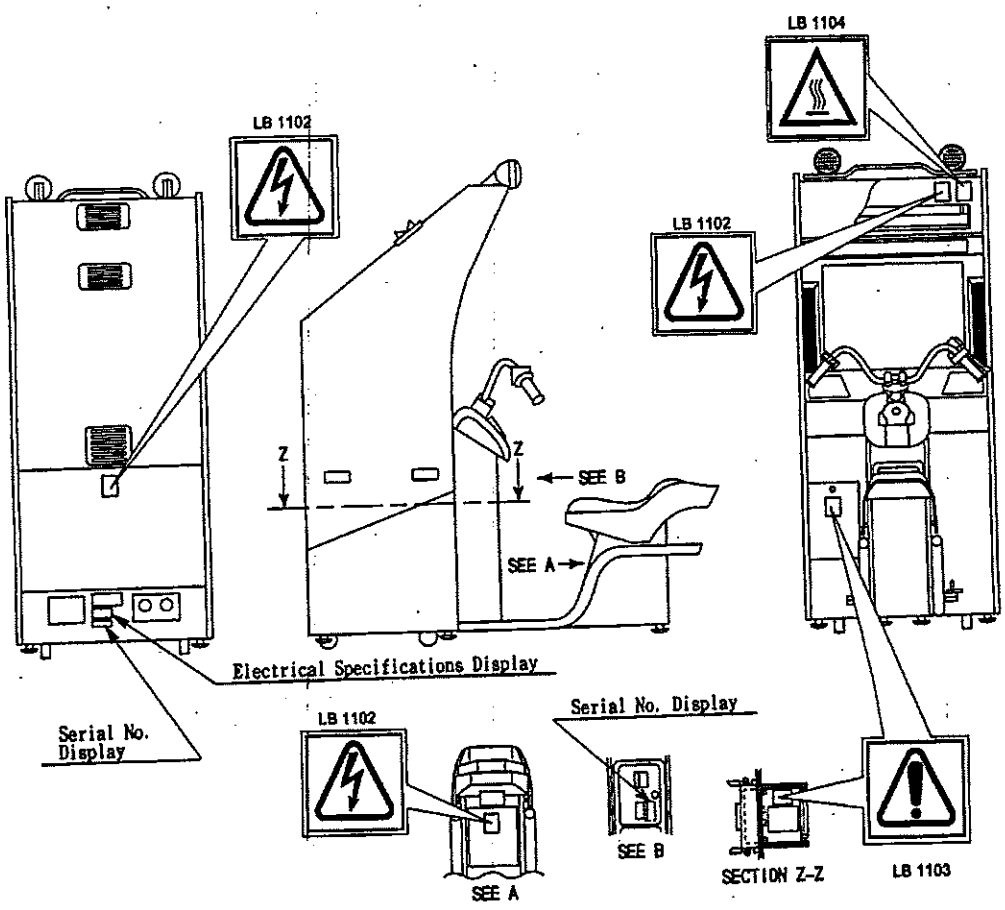
- Are then any dented parts or defects (cuts, etc.) on the external surfaces of the product.?
- Are castors and leg adjusters present and undamaged?
- Do the power supply voltage and frequency requirements meet with the local supply?
- Are all wiring connectors correctly and securely connected? Unless connected in the correct direction, connector connections cannot be made successfully. Do not insert connectors forcibly.
- Are all IC's of each IC BD firmly inserted?
- Does the power cord have any cuts or dents?
- Do fuses meet the specified rating?
- Are such units such as monitors, control equipment, IC BD, etc. firmly secured?
- Are all earth wires connected?
- Are all accessories available?
- Can all doors and lids be opened with the accessory keys and/or tools?

CONCERNING THE STICKER DISPLAY

SEGA product has stickers describing the product manufacture number (Serial Number) and electrical specification. If you require service assistance you will require the Serial Number. Identical machines may have different parts fitted internally. Only by quoting the Serial Number will the correct parts be identified.

CONCERNING WARNING STICKERS

SEGA product has warning displays on stickers, labels or printed instructions adhered/attached to or incorporated in the places where hazardous situations can arise. The warning displays are intended for the accident prevention of customers and service personnel.



SPECIFICATIONS		
Installation Space (cm):	190 X 90	
Height (cm):	196	
Weight (kg):	180	
Power, Max:	Rated Voltage (V.AC):	230
	Rated Current (A):	3A

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

2. INTRODUCTION TO THIS SERVICE MANUAL

SEGA ENTERPRISES LTD., supported by its experience in electronic high technology of VLSI's, microprocessors etc. and with a wealth of experience, have for more than 30 years been supplying various innovative and popular games to the world market. This Service Manual is intended to provide detailed descriptions together with all the necessary information covering the general operation of electronic

3.2. NAME OF PARTS

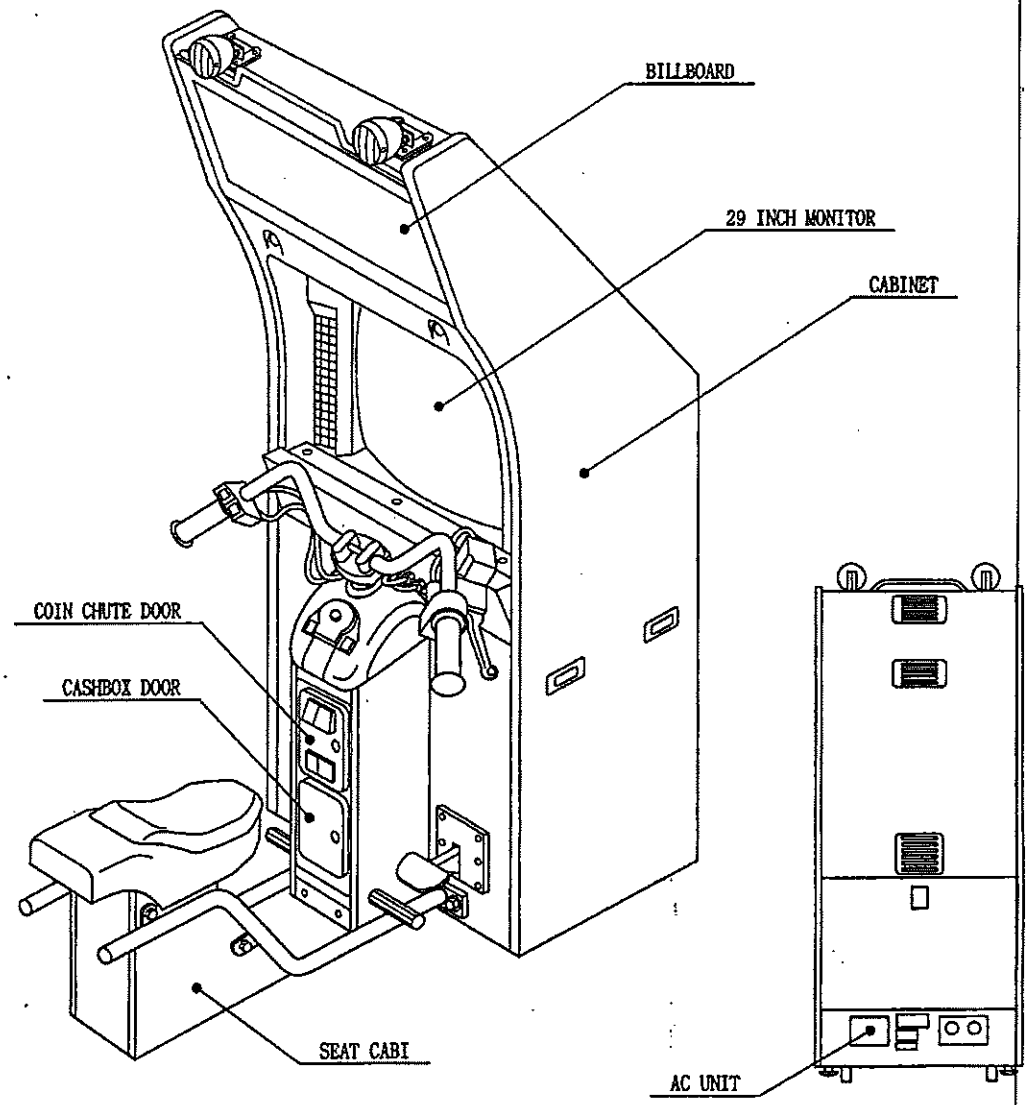


FIG. 4 a OVERVIEW

FIG. 4 b REAR VIEW

	Width (cm)	Length (cm)	Height (cm)	Weight (kg)
CABINET	765	951	1960	158
SEAT CABI	336	1132	617	22
When Assembled	765	1640	1960	180 APPROX

3.3. ACCESSORIES

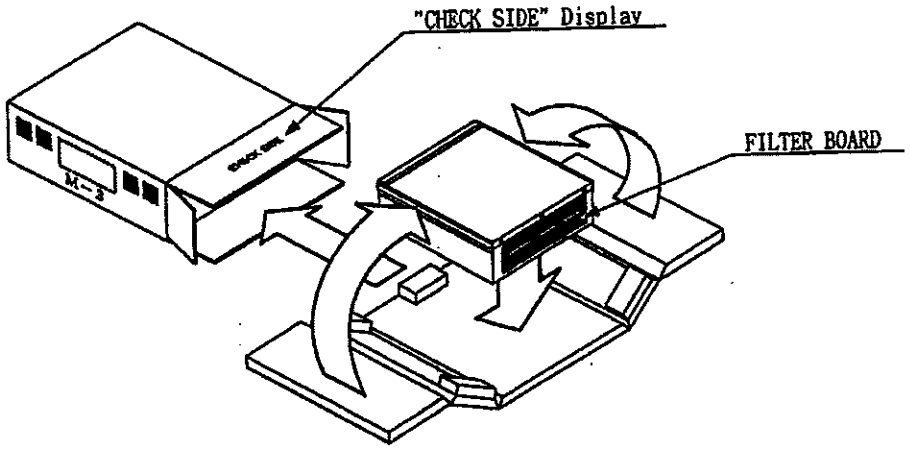
The machine is supplied with an installation kit. Please ensure the following parts are supplied:

	Part No.	Description	Qty /assy
2	HLD-0001UK	UPPER JOINT	1
3	HLD-0002UK	LOWER JOINT	2
4	HLD-0004UK	POP HOLDER	2
5	429-0162-91UK	POP PANEL HLD STD	1
6	422-0655UK	PLAY INSTR HLD STD B	2
7	HLD-0006UK	LOCK BAR	2
204	000-T00620-OC	M6X20 MSCR POSI TH CRM	4
205	030-000830-SB	M8X30 BLT W/S BNP	8
206	060-F00800-OB	M8 WSHR FORM A FLT BNP	8
207	000-T00420-OB	M4X20 MSCR POSI TH BNP	2
208	068-441616-OB	M4 WSHR 16OD FLT BNP	2
403	420-6367-01UK	SERVICE MANUAL HARLEY TWIN UK	1
404	310-5285-290150UK	FLEX TUBE 29-0150CM	2
408	310-5287-29	CONN L29	4
411	220-5373	POT VOL CONT B-5K OHM	1
412	600-6275-0500	CABLE FIBER OPTIC 5mm x 500cm	2
413	514-5078-5000	FUSE 5X20 CERAMIC SB 5000mA	2

STOP

IMPORTANT!

- When returning the GAME BOARD for repair or replacement, be sure to package the entire ASSY SHIELD CASE in the original card transit box - THERE ARE NO USER-SERVICEABLE PARTS INSIDE.
- Failure to return the GAME BOARD in this manner may invalidate the warranty.



Wrap the ASSY SHIELD CASE with the packaging material and put it in the original transit box as shown. Putting it upside down or packing otherwise in the manner not shown can damage the GAME BOARD and parts.

3.4. ASSEMBLY INSTRUCTIONS

WARNING!

- Perform the assembly by following the procedure herein stated. Failure to comply with the instructions, for example, inserting the plug into an outlet at a stage not mentioned in this manual can cause an electric shock
- Assembling should be performed as per this manual. Since this is a complex machine, erroneous assembling can cause damage to the machine, or malfunction to occur.
- Do not attempt to complete this work alone, a minimum of 2 people are required.

IMPORTANT!

- Assembly should only be carried out by QUALIFIED SERVICE PERSONNEL.

When carrying out the assembly work, follow the procedure in the following 4 item sequence

STEP 1 ASSEMBLING THE CABINET

STEP 2 SECURING IN PLACE (LEG ADJUSTER ADJUSTMENT)

STEP 3 POWER SUPPLY

STEP 4 ASSEMBLY CHECK

Note that the parts contained within the installation kit are required for the assembly work.

CAUTION!

- Fit all fixings loosely first as detailed in step 1, then position all components before finally tightening fixings at step 2.

3.4.1. ASSEMBLING THE CABINET

IMPORTANT!

- This operation should only be carried out by QUALIFIED SERVICE PERSONNEL.

1. Tightly fit the seat cabi to the main cabinet as shown
2. Secure in place using 2 hexagon bolts and 2 truss screws
3. Attach the earth wire using the earth screw.
4. Connect the plug connector.

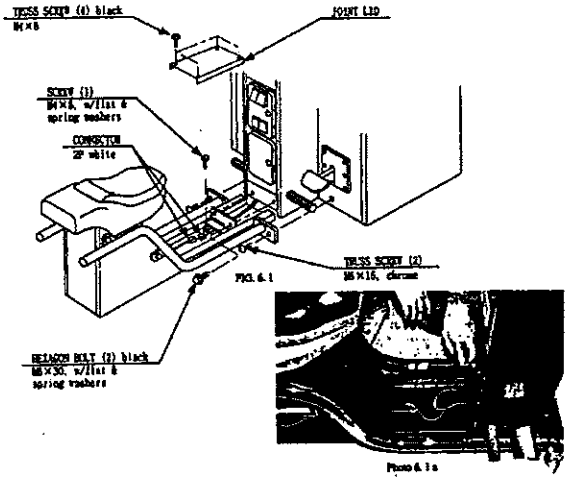
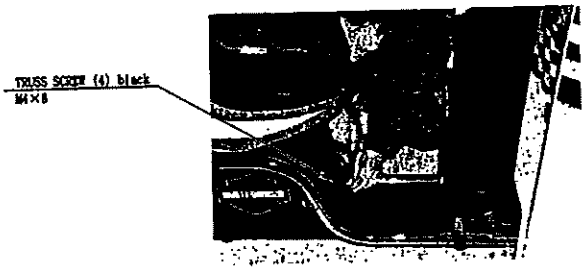


Photo 6.1a

5. Install the joint lid

Photo 6. 1 b

6. Secure the joint lid using 4 screws



3.4.2. SECURING IN PLACE (LEG ADJUSTER ADJUSTMENT)

CAUTION!

- Make sure all of the leg adjusters are in contact with the floor. If they are not the machine may move and cause injury. This operation requires 2 people.

STOP

IMPORTANT!

- This operation should only be carried out by QUALIFIED SERVICE PERSONNEL.

This machine has 4 castors and 6 leg adjusters. When the installation position is decided. Unscrew the leg adjusters so that they raise each castor a minimum of 5mm from the floor. Make sure the machine is level.

1. Move the machine to the installation position. When installing close to a wall ensure passage is available to allow the player to get into the machine.
2. Cause all of the adjusters to come into contact with the floor. By using a wrench make adjustments in the height of the adjusters to ensure the machine is level.
3. After making adjustments fasten the adjuster nut upwards to secure the height of the adjuster.

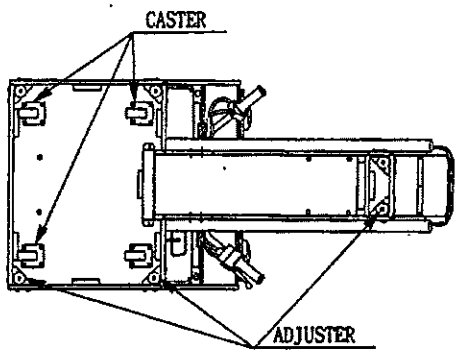
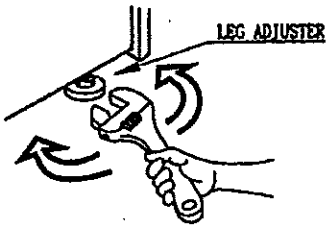
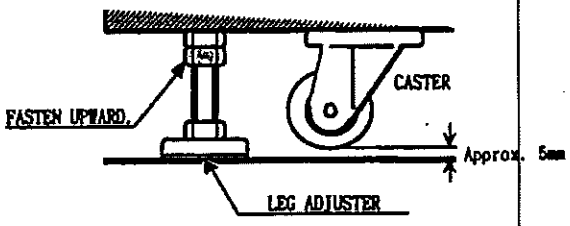


FIG. 6.2 a BOTTOM VIEW





After securing the leg adjuster bolts, fully tighten all bolts temporarily attached in 1 above.

Ensure adequate ventilation is maintained as detailed below

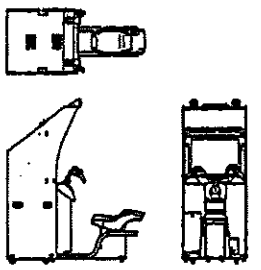


FIG. 6.2 c
Refer to this Fig. (Scale:1/100) for the layout of the place of installation.

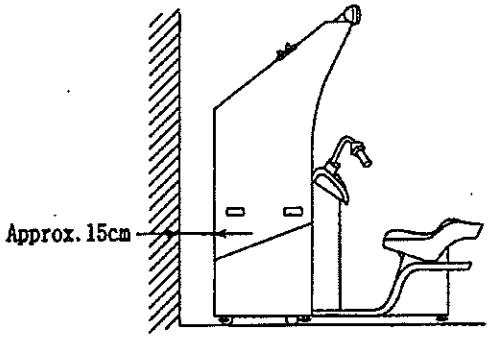


FIG. 6.2 d
Provide sufficient space so as to allow for ventilation by the ventilation fan.

3.4.3. POWER SUPPLY CONNECTION

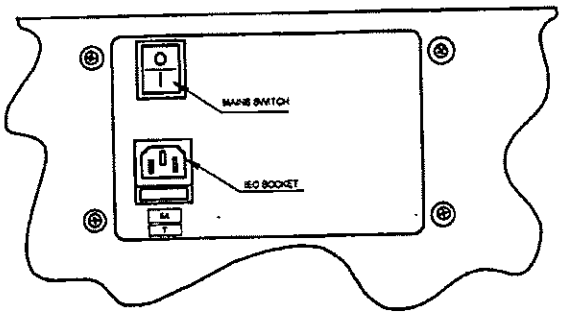
WARNING!

STOP

IMPORTANT!

- This operation may only be carried out once the machine has been completely assembled.
- This operation should only be carried out by QUALIFIED SERVICE PERSONNEL.

1. The socket outlet shall be installed near the equipment and shall be easily accessible.
2. Insert the mains cord into the wall outlet.
3. Insert the IEC plug into the IEC socket on the AC unit on the back of the machine.
4. Switch on the power supply at the wall outlet.
5. Switch on the mains switch on the AC unit of the machine.



3.4.4. ASSEMBLY CHECK

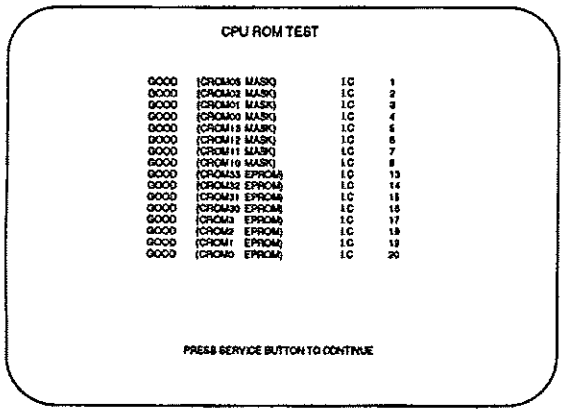
STOP

IMPORTANT!

- This operation should only be carried out by QUALIFIED SERVICE PERSONNEL.

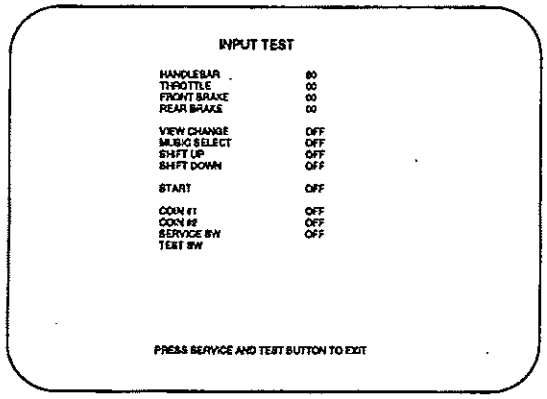
In the TEST MODE , ascertain that the assembly has been made correctly and the IC board is satisfactory (refer to section 5.1.2.2).

In the test mode perform the following test

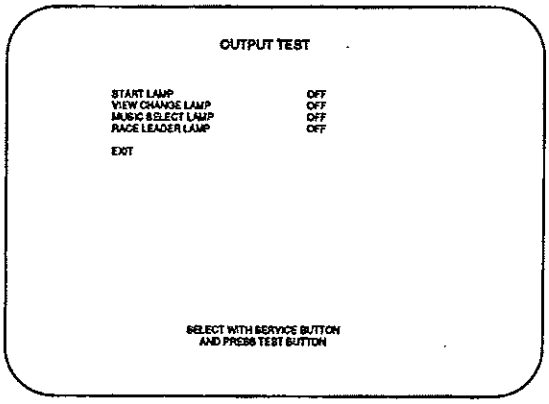


Selecting the MEMORY TEST on the test mode menu screen causes the on board memory to be tested automatically.

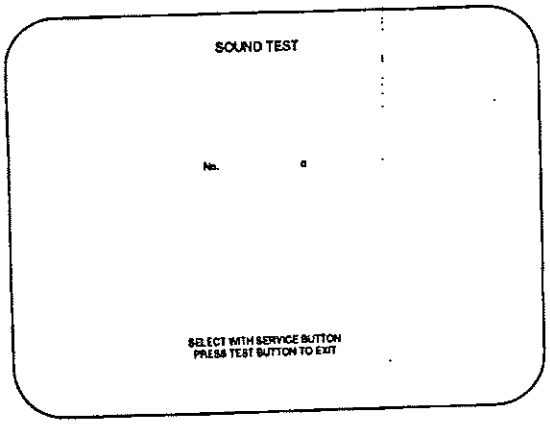
The game board is satisfactory if the display beside each IC. No. shows GOOD



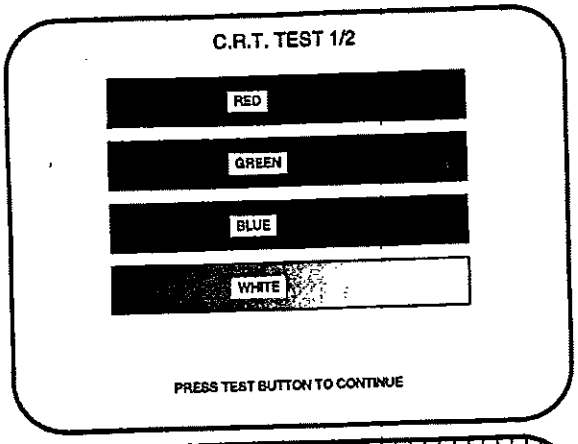
Selecting the INPUT TEST on the test mode menu screen causes the screen on which each switch and VR can be tested to be displayed.
Press each switch in turn to test it.
Check the display of each VR value for the Handlebar, throttle and brakes.
If the values are not satisfactory refer to section XXXXX



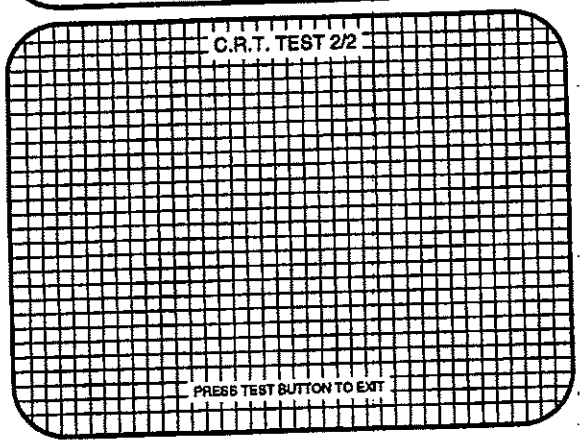
In the output test mode carry out lamp tests to ensure all lamps are working correctly.



In the TEST mode selecting SOUND TEST causes the screen shown to be displayed.
Check to see that the sound emitted from each speaker and the volume is satisfactory



In the TEST mode menu, selecting CRT TEST allows the screen shown to be displayed.
Although the monitors have been adjusted at the time of shipment from the factory make an assessment as to whether further adjustment is required. If it is refer to the monitor manual supplied.
Use the DEMAG SW on the VTS bracket for the colour deviation caused by the monitors magnetisation.



Perform the above tests at the time of monthly inspection.

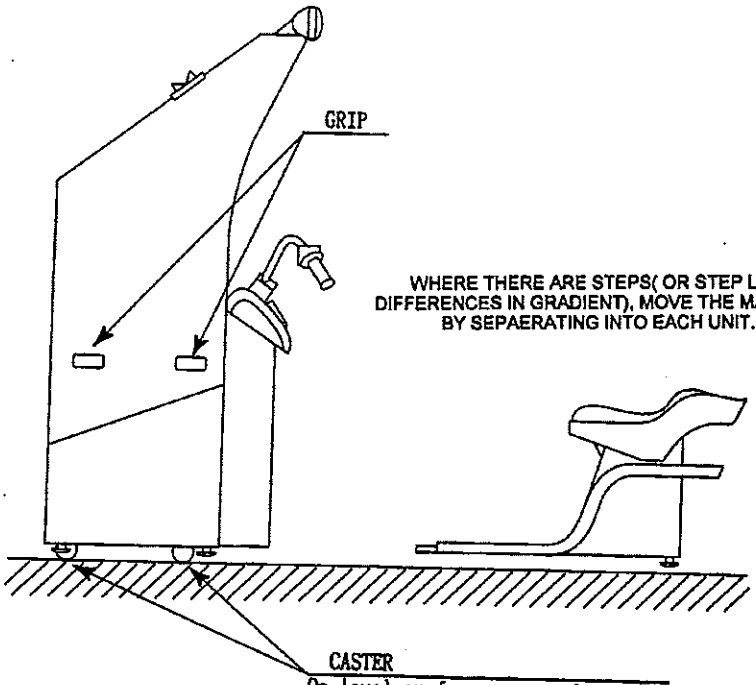
3.4.5. MOVING THE MACHINE

CAUTION!

- When moving the machine, be sure to remove the plug from the power supply. Moving the machine with the plug inserted can cause the power cord to be damaged, resulting in a fire or electric shock.
- When moving the machine, retract the leg adjusters fully and ensure the casters make contact with the floor. During movement pay careful attention so that the casters or leg adjusters do not damage any other cabling laid on the floor. Such damage could result in a fire or electric shock.

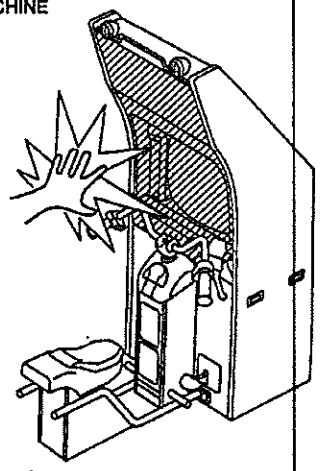
IMPORTANT!

- This operation should only be carried out by QUALIFIED SERVICE PERSONNEL.



On level surfaces, move the machine by causing the casters to make contact with the surfaces.

WHERE THERE ARE STEPS(OR STEP LIKE DIFFERENCES IN GRADIENT), MOVE THE MACHINE BY SEPAERATING INTO EACH UNIT.



Pushing the glass made or plastic parts can damage the parts and cause injury.
Also, moving the machine by holding the handlebar can damage the handlebar.

3.5. FUSES

WARNING!

- Never touch places other than those specified. Touching places other than those specified can cause electric shock and short circuit. Disconnect the machine from the supply before attempting the replacement of any fuse.

IMPORTANT!

- FUSES should only be replaced by QUALIFIED SERVICE PERSONNEL.

There are a number of fuses used on this machine to protect the user and the machine from damage. Only replace the fuse once you have remove the cause of its failure. Detailed below is a list of the fuses used, their location and if relevant P.C.B. reference:

PART NUMBER	LOCATION	TYPE & DETAILS	QTY
514-5078-5000	IEC INLET	5A 250V TYPE T HRC	1
400-5330-02	F1 SMPSU	4A 250V 20mm T HRC	1
514-5078-5000	CONN BD	5A 250V 20mm T HRC	1
514-5080-10000UK	TRANSFORMER 12V SEC	10A 250V 32mm T. HRC	1
514-5080-10000UK	TRANSFORMER 23V SEC	10A 250V 32mm T. HRC	2
838-11650-32	EQ. AMP F1	6.3A 250V T HRC	1
838-13142	BASS AMP REF F101,F201	6.3A 250V T HRC	2

There are also fuses located on the Monitor PCB. Refer to the relevant Monitor manual supplied to reference these fuses.

3.6. MAINTENANCE

3.6.1. FRONT BRAKE

3.6.1.1. VOLUME ADJUSTMENT

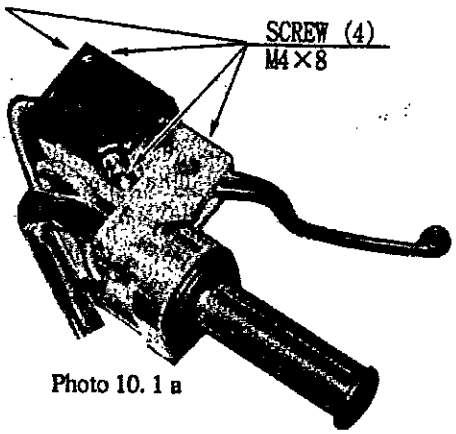


Photo 10. 1 a

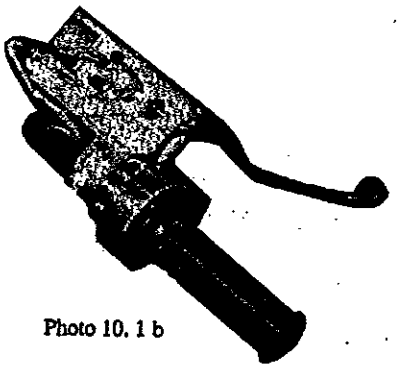


Photo 10. 1 b

1. Remove the 4 screws and remove the VR cover.
2. Loosen the 2 screws which secure the VR bracket to move the VR bracket.
3. Adjust the gear mesh and fasten the 2 screws which secure the VR bracket.
4. Move the brake lever fully through its range and check to see the Volume shafts revolvable range is not exceeded.
5. After adjustment perform the Volume setting in test mode.

3.6.1.2. VOLUME REPLACEMENT.

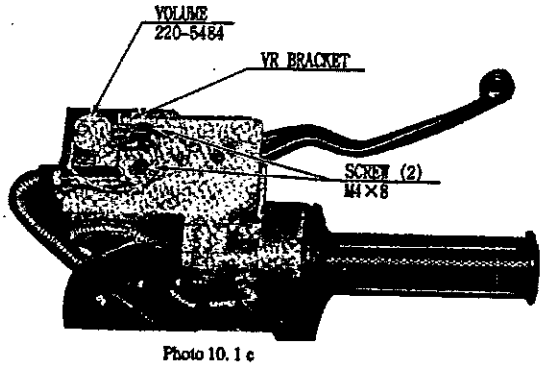


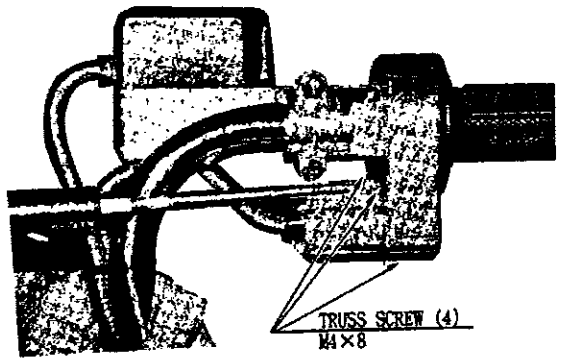
Photo 10. 1 c

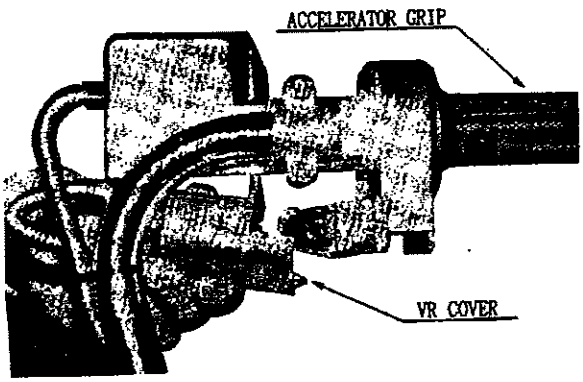
Replace the volume if it is malfunctioning.

1. Remove the 2 screws holding the VR bracket.
2. Remove the Volume gear from the Volume shaft and remove the volume form the VR bracket to replace the volume.
3. After replacement be sure to perform the Volume setting in the test mode.

3.6.2. ACCELERATOR

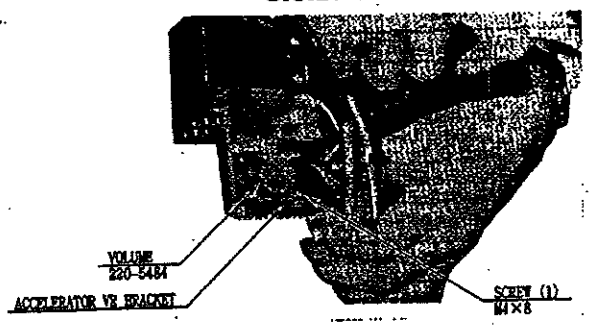
3.6.2.1. VOLUME ADJUSTMENT





1. Remove the 4 screws and the VR cover
2. Loosen the screw which secures the VR bracke to move the VR bracket.
3. Move the VR bracket to disengage the gear mesh.
4. By adjusting gear mesh, fasten the screw which secures the VR to the bracket.
5. Turn the accelerator fully to check the Volume shafts moveable range is not exceeded.
6. Be sure to perform the volume setting in the test mode.

3.6.2.2. VOLUME REPLACEMENT.



Replace the volume if it is faulty.

1. Remove the screw which secures the VR bracket.
2. Remove the volume gear from the volume shaft and remove the volume form the VR bracket and replace the volume.
3. Perform the volume setting in the test mode.

3.6.3. HANDLEBAR

3.6.3.1. REMOVAL

1. Remove the 4 screws from the monitor mask cover as shown.

2. Disconnect the connectors and remove the mask cover.

Note. The monitor adjustment board is located behind the mask cover. Lift the plastic sheet and use a plastic adjustment tool to alter the monitor controls.

③ Remove the bolt w/hexagon hole and pull out the handle from the shaft.

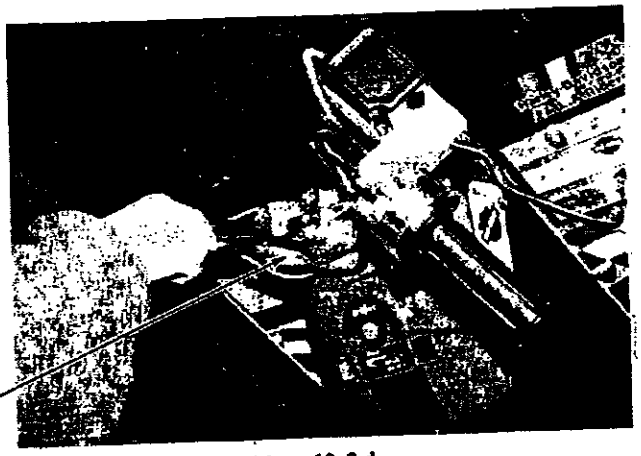
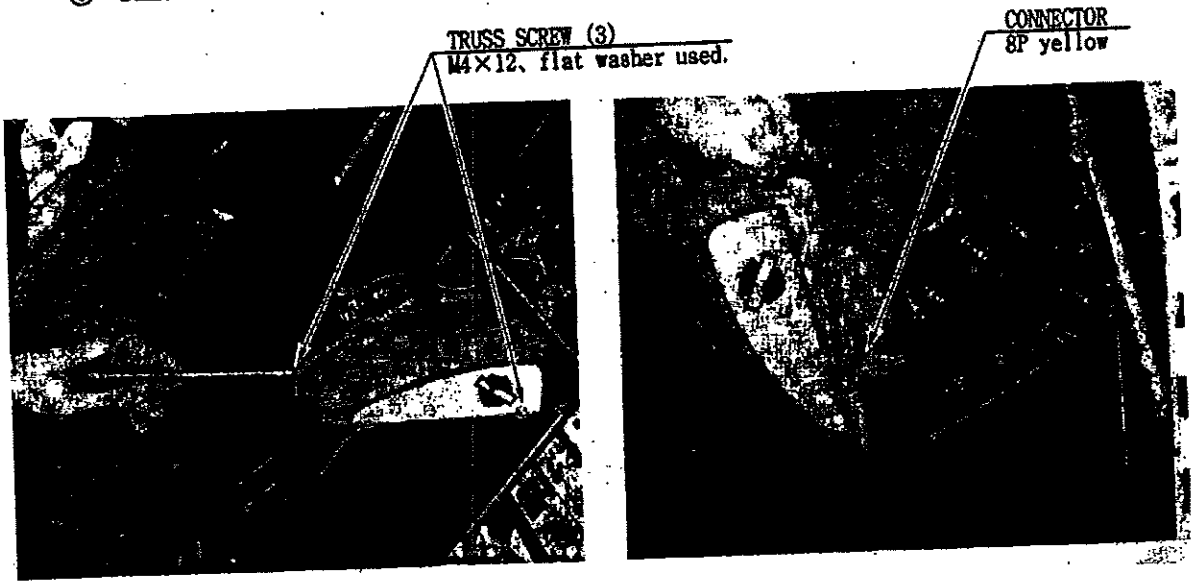


Photo 10.3 d

Photo 10.3 e

④ Take out the 3 screws, disconnect the connector inside the tank, and remove the tank.



⑤ Remove the screw which secures the earth wire.

SCREW (1)
M4×8,
w/flat & spring washers

Photo 10.3 g

⑥ Remove the 4 hexagon nuts which secure the centering mecha. By viewing the centering mecha from above, remove the hexagon nuts from the 4 corners only.

HEXAGON NUT (4)
M8
w/flat & spring washers

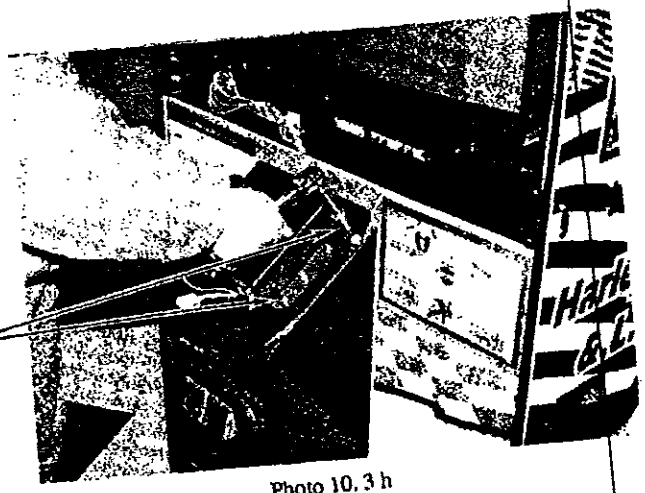
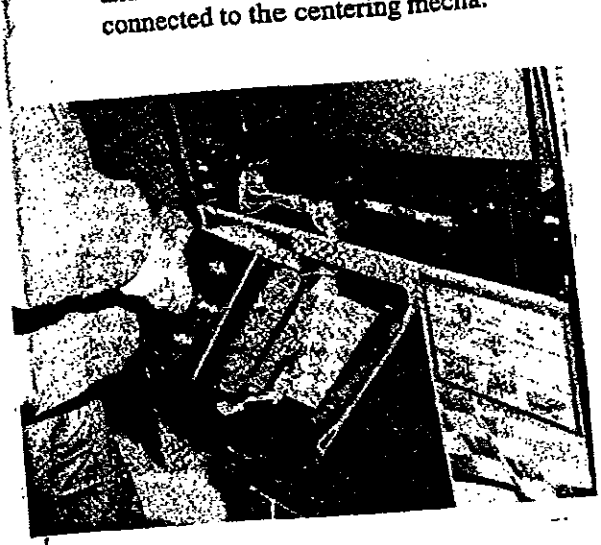
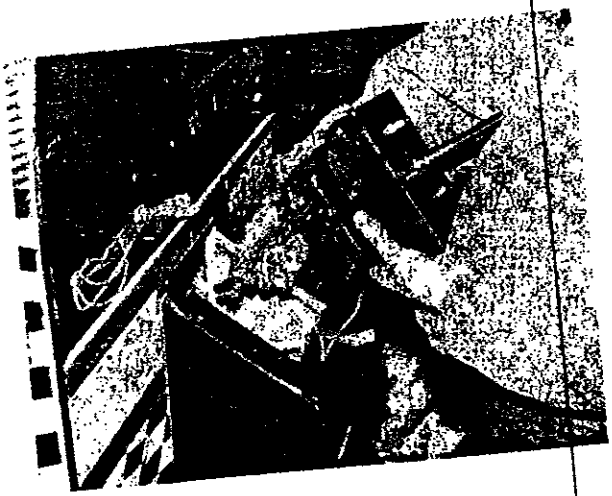


Photo 10.3 h

⑦ Carefully lift the centering mecha and disconnect the connector connected to the centering mecha.





3.6.3.2. VOLUME ADJUSTMENT

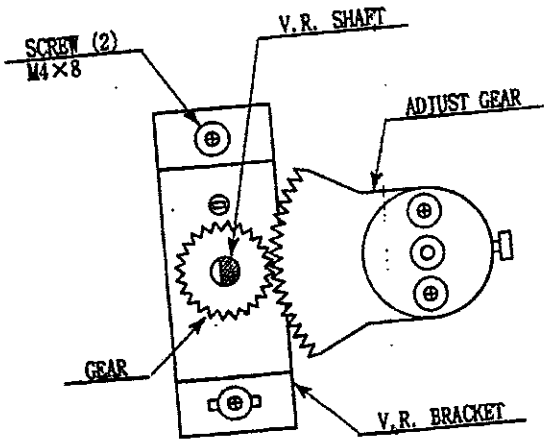


FIG. 10.3

1. Loosen the 2 screws which secure the VR bracket to move the VR bracket.
2. Move the VR bracket to disengage the ADJUST GEAR mesh and move the VR shaft in the manner so that the VR shaft cut portion faces away from the ADJUST GEAR as shown.
3. Have the gears meshed and tighten the 2 screws.
4. Carefully turn the handle shaft to check the value variation is within the mobile range of the Volume.
5. After finishing adjustments be sure to perform the Volume setting in test mode.

3.6.3.3. VOLUME REPLACEMENT

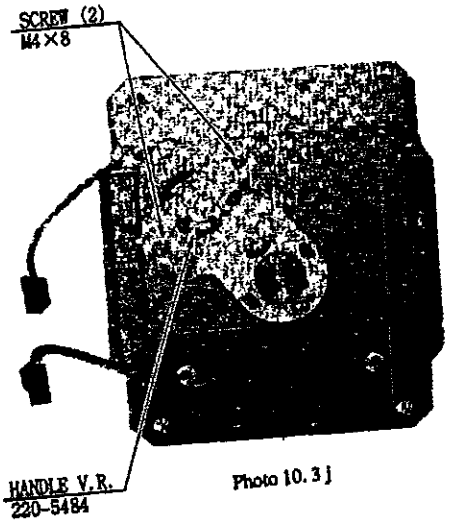
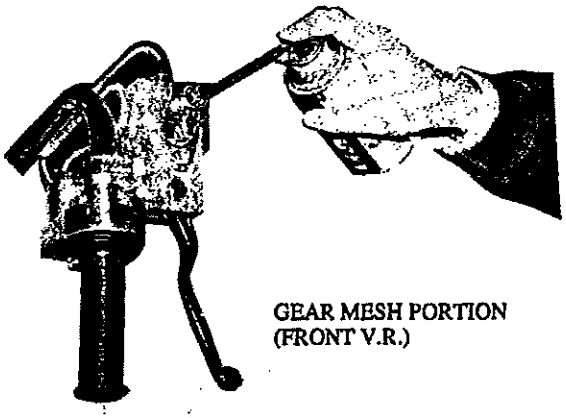


Photo 10.3 J

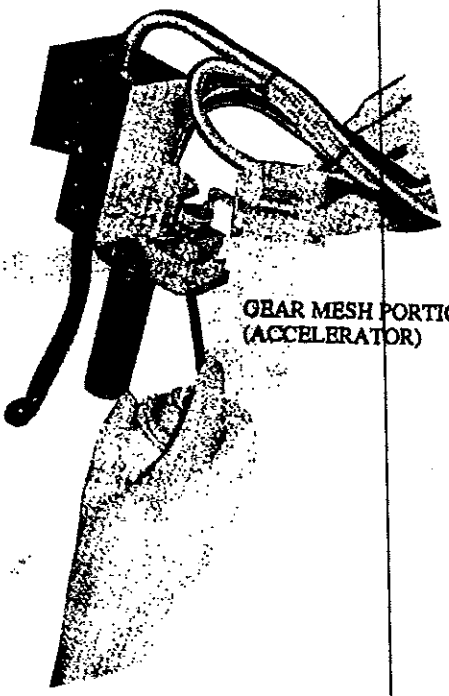
1. Take out the 2 screws which secure the volume bracket and remove the volume bracket.
2. Remove the volume gear from the volume shaft and remove the volume from the VR bracket and replace.
3. After replacement perform the volume setting in test mode.

3.6.4. GREASING

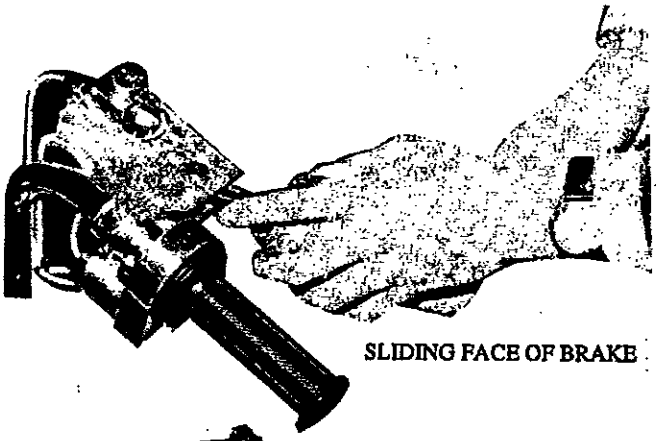
Once every three months apply grease to the following areas. For greasing use a proprietary spray grease.



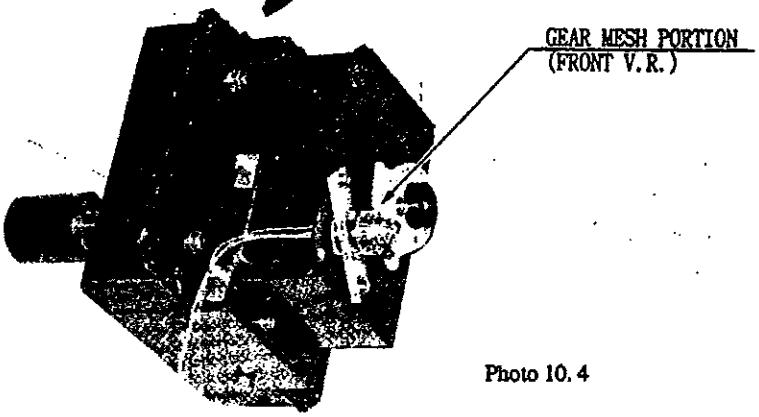
GEAR MESH PORTION
(FRONT V.R.)



GEAR MESH PORTION
(ACCELERATOR)



SLIDING FACE OF BRAKE



GEAR MESH PORTION
(FRONT V.R.)

Photo 10. 4

3.6.5. FOOT BRAKE MECHA

3.6.5.1. REMOVAL

To remove the foot brake mecha :

1. Remove the 6 screws.
2. Disconnect the connector and remove the foot brake from the cabinet.

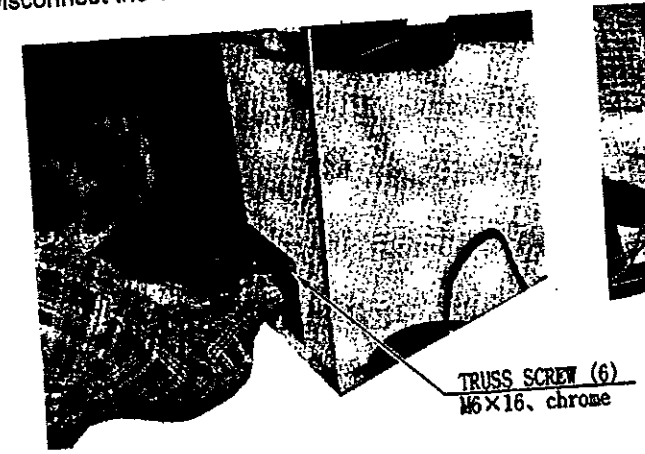


Photo 11.1 a

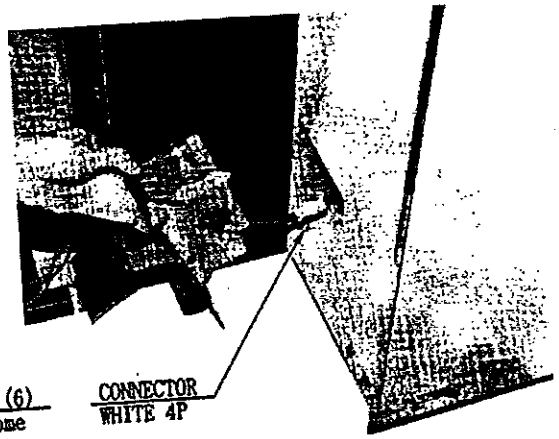
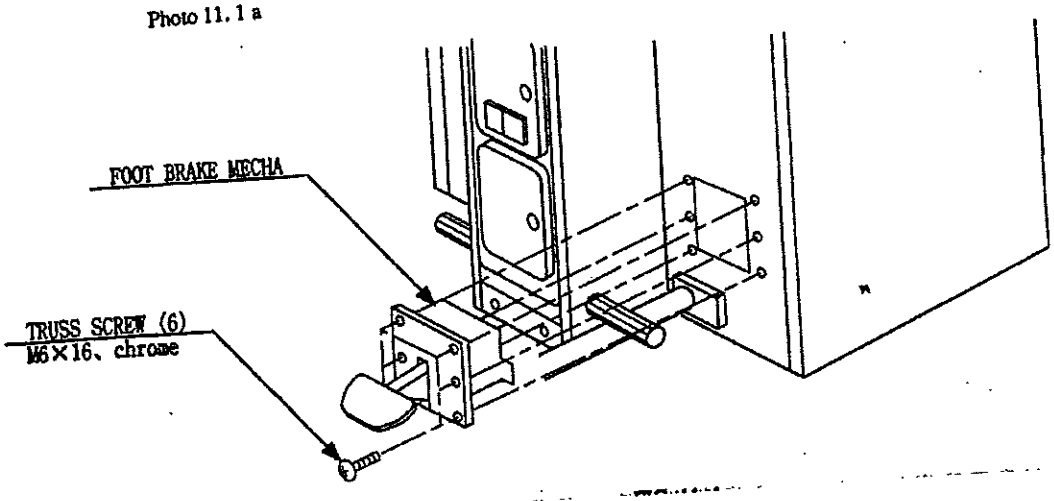
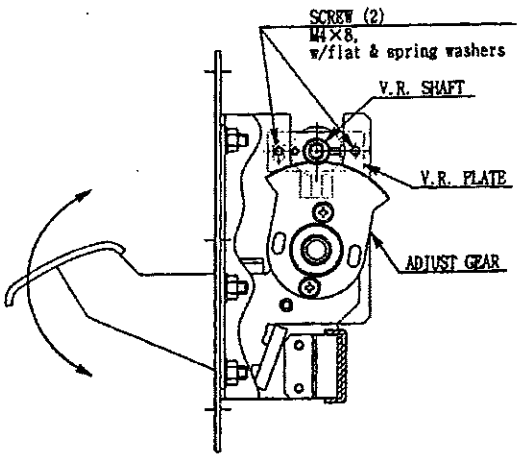


Photo 11.1 b



3.6.5.2. VOLUME ADJUSTMENT.



1. Loosen the 2 screws which secure the VR plate to move the VR plate.
2. Move the VR plate to disengage the Adjust gear mesh. Move the Volume shaft and ensure that, when no force is exerted, the cut face of the shaft faces the direction shown.
3. Have the gears meshed and tighten the 2 screws. At this point adjust gear backlash.
4. Carefully move the pedal fully within its range to check if the volume range is exceeded.
5. Perform the Volume setting in test mode.

3.6.5.3. VOLUME REPLACEMENT

1. Remove the 2 screws securing the VR plate and remove the VR plate.
2. Remove the Volume gear from the Volume shaft and remove the volume form the VR plate and replace.
3. Perform the Volume setting in test mode.

3.6.5.4. GREASING

Once every three months apply grease to the following areas. Use a proprietary spray grease.

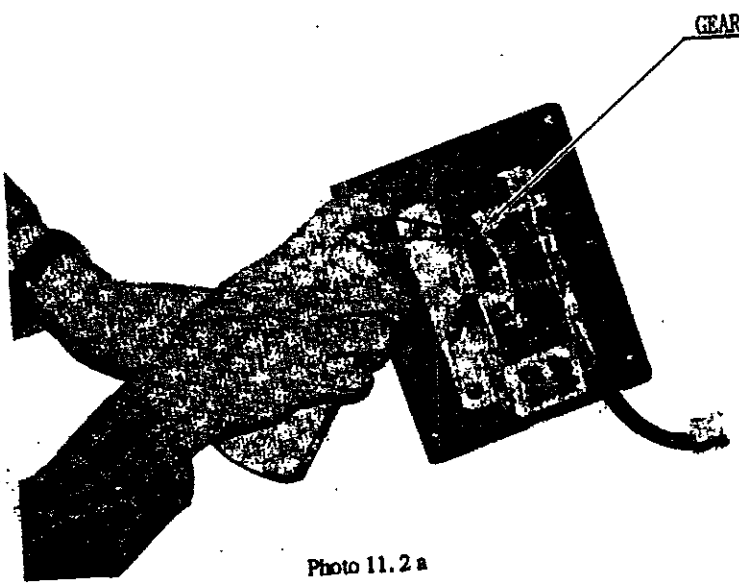


Photo 11.2 a

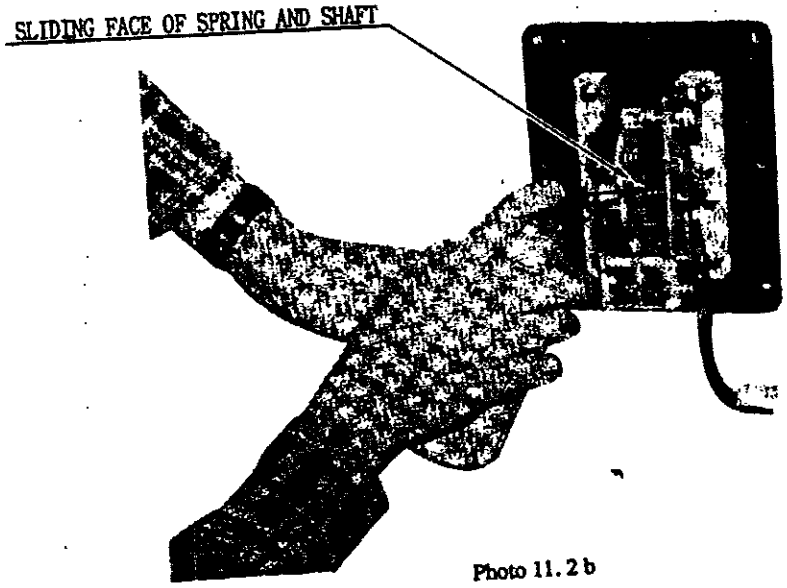


Photo 11.2 b

3.7. *REPLACEMENT OF FLUORESCENT LAMP AND OTHER LAMPS*

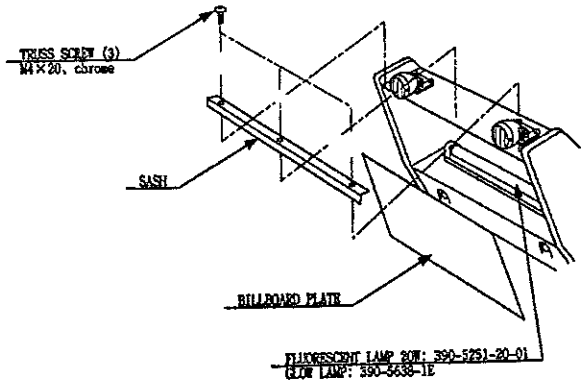
WARNING!

- Never touch places other than those specified. Touching places other than those specified can cause electric shock and short circuit. Disconnect the machine from the supply before attempting the replacement of any lamp.

IMPORTANT!

- Lamps should only be replaced by QUALIFIED SERVICE PERSONNEL.

3.7.1. FLUORESCENT LAMP REPLACEMENT



1. Remove the 3 screws securing the sash in place.
2. Remove the sash and the billboard plate to see the fluorescent.
3. Replace the fluorescent lamp.
4. Replace the billboard plate and sash

3.7.2. LAMP REPLACEMENT

① Take out the screw to remove the lamp from the lamp body.

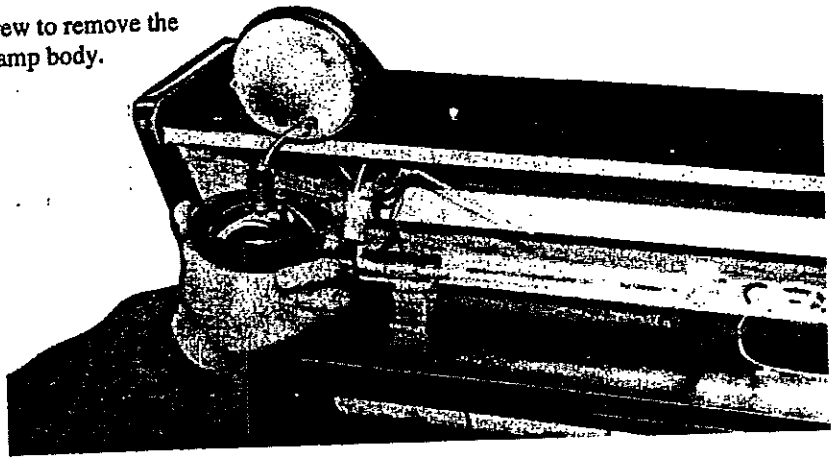


Photo 14 a

② By using a flat blade screwdriver, remove the 3 inside fasteners.

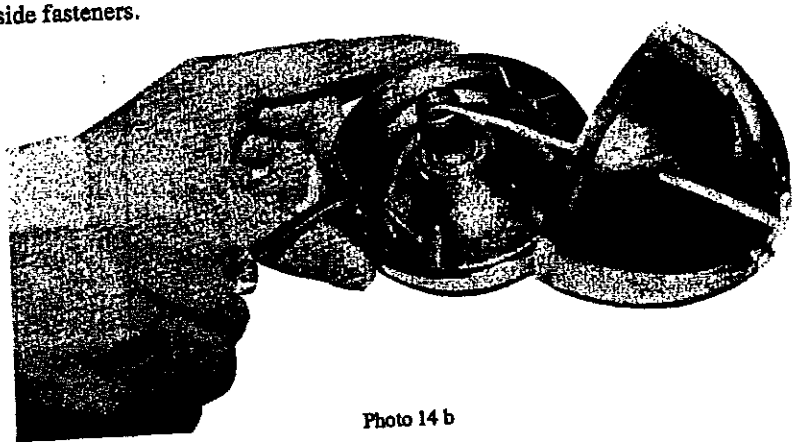


Photo 14 b

③ As shown left, disassemble the lamp parts and replace the lamp.

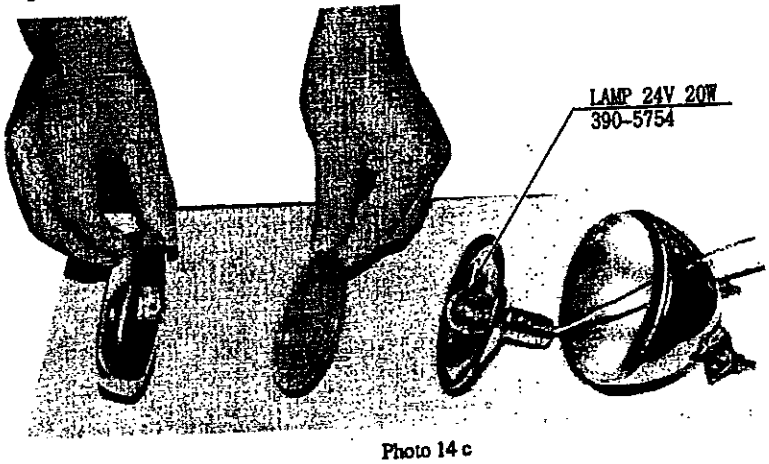


Photo 14 c

3.8. TROUBLESHOOTING

STOP
IMPORTANT!

- These procedures should only be carried out by QUALIFIED SERVICE PERSONNEL.

If a problem occurs, first check the wiring connections.

PROBLEMS	CAUSE	COUNTERMEASURES
When the main switch is turned ON, the machine is not activated	The power is not ON.	Firmly insert the plug into the outlet.
	Incorrect power source/voltage.	Make sure that the power supply/voltage are correct.
	AC Unit CIRCUIT PROTECTION DEVICE (ie; fuse) was activated due to an instantaneous overcurrent.	First, remove the cause of overcurrent and reinstate the circuit protection device to its original status. Then identify the cause of the fault on the item which caused the overcurrent & fix.
The colour image on the screen is incorrect	Incorrect monitor adjustment.	Make appropriate adjustments. SEE SECTION 5.1.2.7
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.
Sound is not emitted	Sound volume adjustment is not correct.	Adjust the volume setting on the VTS bracket. 5.1.1
	Malfunctioning BD and Amp.	Perform Sound Test to check it. 5.1.2.6
	Connector connection is incorrect	Check connector connection from Base to Speaker
Operation of Accel. And Brake are not satisfactory	V.R. position deviated	Adjust V.R. value in the test mode. 3.6.1 , 3.6.2
	VR malfunctioning	Replace the V.R. 3.6.1,3.6.2
	ADJUST GEAR's engagement is not correct	Adjust the engagement of ADJUST GEAR. 3.6.1,3.6.2
Handlebar not satisfacory	VR position deviated..	Adjust V.R. value in the test mode. 3.6.3
	V.R. malfunctioning	Replace V.R. 3.6.3
The fluorescent lamp does not light up	Fluorescent lamp needs replacement	Replace the fluorescent lamp. 33.7.1
	The connector is disconnected	Check connector connections in the billboard case. 3.7.1
The LEADER lamp does not light up	The lamp needs replacement.	Replace the lamp. 3.7.2
	The connector is disconnected	Check connector connections in the billboard case. 3.7.2
Interactive play is not possible	Communication cable is disconnected	Connect the cable.
	Settings for communication play are not correct	Ensure that GAME ASSIGNMENTS settings are correct. 3.10

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3.9. GAMEBOARD

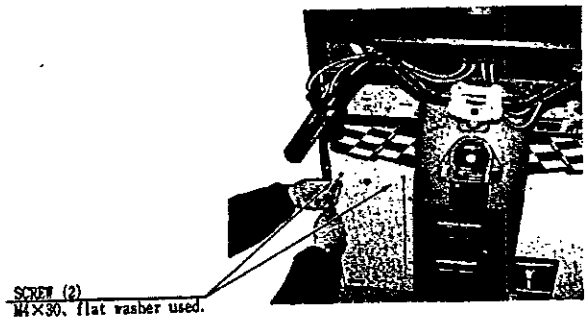
WARNING!

- Turn off the mains power and remove the power cord before opening the machine.

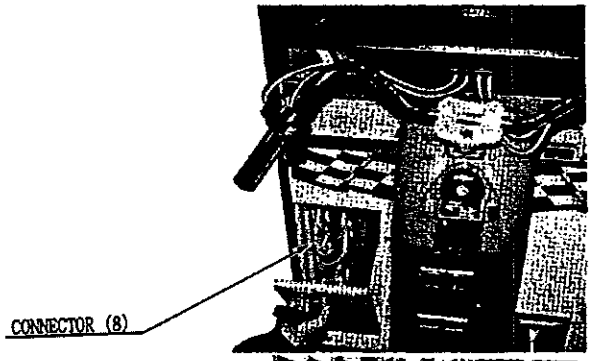
IMPORTANT!

- The GAME BOARD should not require any work to be carried out upon it. All settings and tests can be achieved without access to the GAME BOARD.
- All work to be carried out by QUALIFIED SERVICE PERSONNEL

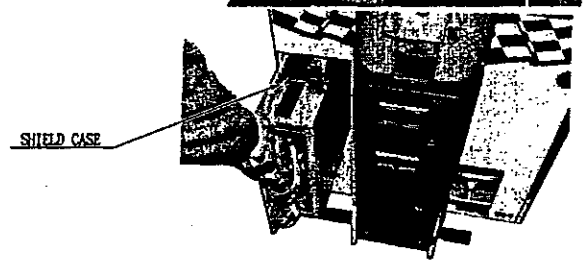
3.9.1. REMOVING THE BOARD



1. Remove the 2 screws holding the front door in place and unlock and remove the door.



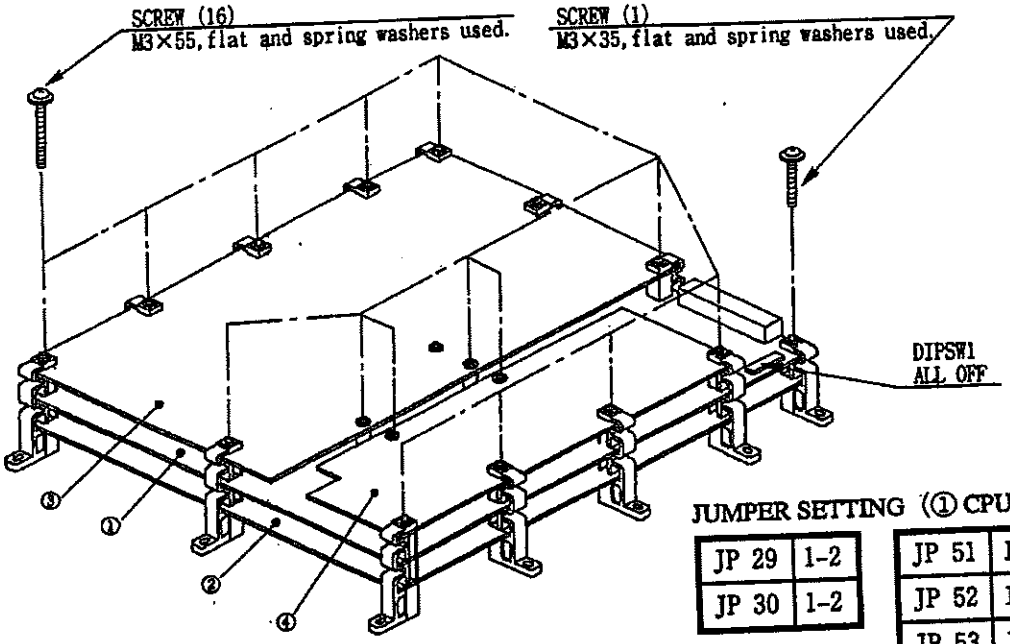
2. Disconnect all connectors connected to the shield case.



3. Remove the 2 screws from the shield case board and slide the board out.
4. Remove the 4 screws from the shield case brackets.
5. Carefully turn the shield case over and remove the earth.
6. Package the shield case in its original box and return to SEGA. There are no user servicable parts inside.

3.9.2. COMPOSITION OF THE GAME BOARD

GAME BOARD HARLEY DAVIDSON (833-13325)



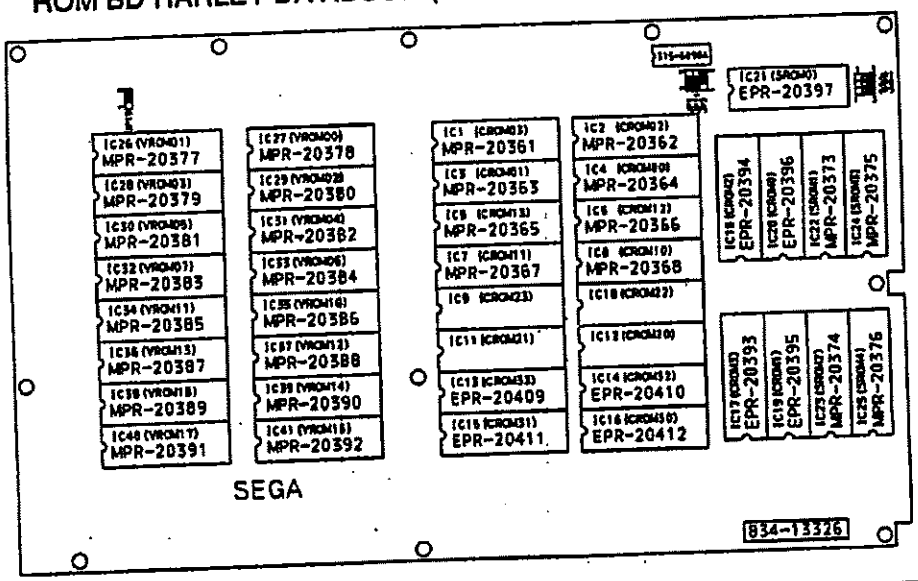
JUMPER SETTING (① CPU BD)

JP 29	1-2
JP 30	1-2

JP 51	1-2
JP 52	1-2
JP 53	1-2

FIG. 17. 2

ROM BD HARLEY DAVIDSON (834-13326)



JUMPER SETTING

JP1	1-2
JP2	2-3
JP7	2-3
JP8	2-3
JP9	2-3
JP11	1-2
JP13	2-3

ITEM NUMBER	PART NUMBER	DESCRIPTION
1	837-12715	MODEL3 STEP2 CPU BOARD
2	837-12716	MODEL3 STEP2 VIDEO BOARD
3	834-13326	ROM BD HARLEY DAVIDSON
4	837-11861-91	MODEL3 COMM BD COM

3.10. COMMUNICATION PLAY

STOP
IMPORTANT!

- Linking machines should only be carried out by QUALIFIED SERVICE PERSONNEL.

By linking 4 machines together up to 4 people can play simultaneously.

3.10.1. INSTALLATION PRECAUTIONS

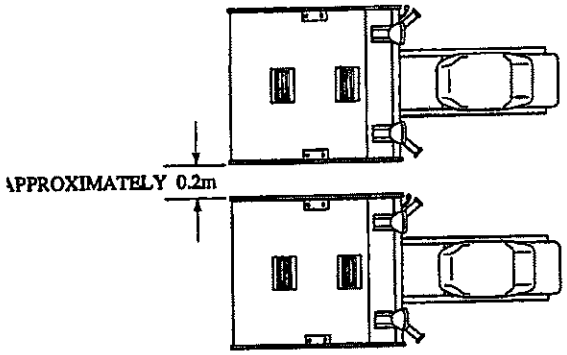


FIG. 19.1

1. Since multiple machines are to be linked it is important that there is sufficient power available to supply the machines.
2. Due to the parts used for communication play the interval between the machines is 20cm. If the parts are not installed then adjacent players could come into contact and injury could occur.

3.10.2. CONNECTING THE COMMUNICATION CABLES

Connect machines with the protest tube provided and pass the communication cables through the tube. Depending on the number of machines to be linked connect the cables as shown in the following pages.

Photo 19.2 a

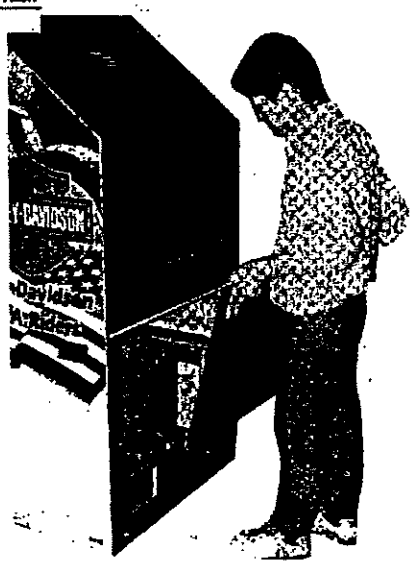


Photo 19.2 b

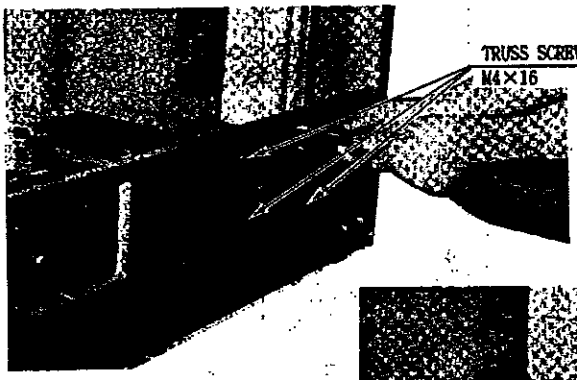


Photo 19.2 c

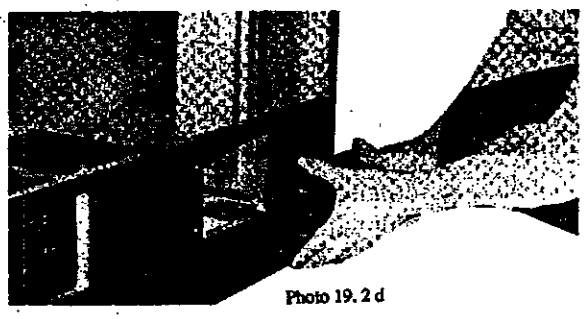
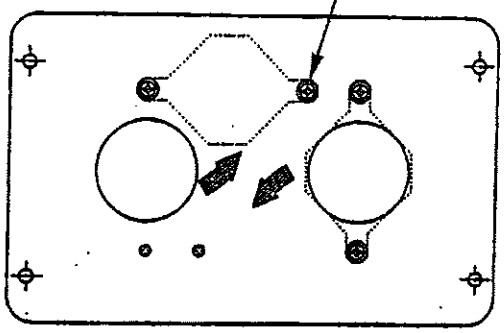


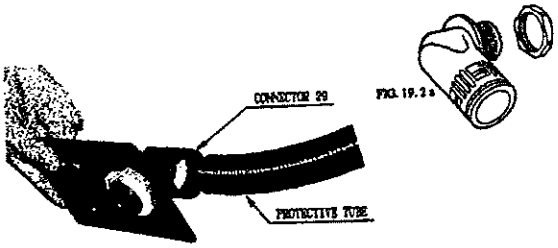
Photo 19.2 d

1. Take out the 2 screws and remove the back door.
2. Take out the 4 screws and remove the fibre lid base.

After securing Connector 29, secure Fiber Lid with the screw.



3. Loosen the screw and turn the fibre lid so as to install connector 29 to the fibre lid base. Remove the nut from connector 29 and insert connector 29 into the fibre lid base then fasten with the nut.



4. Insert the protective tube into connector 29. With a click sound the tube is secured.

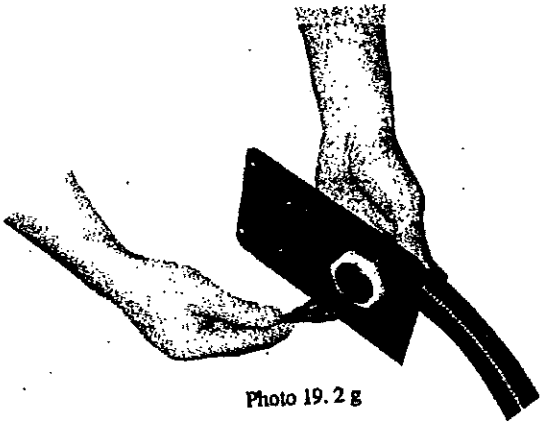
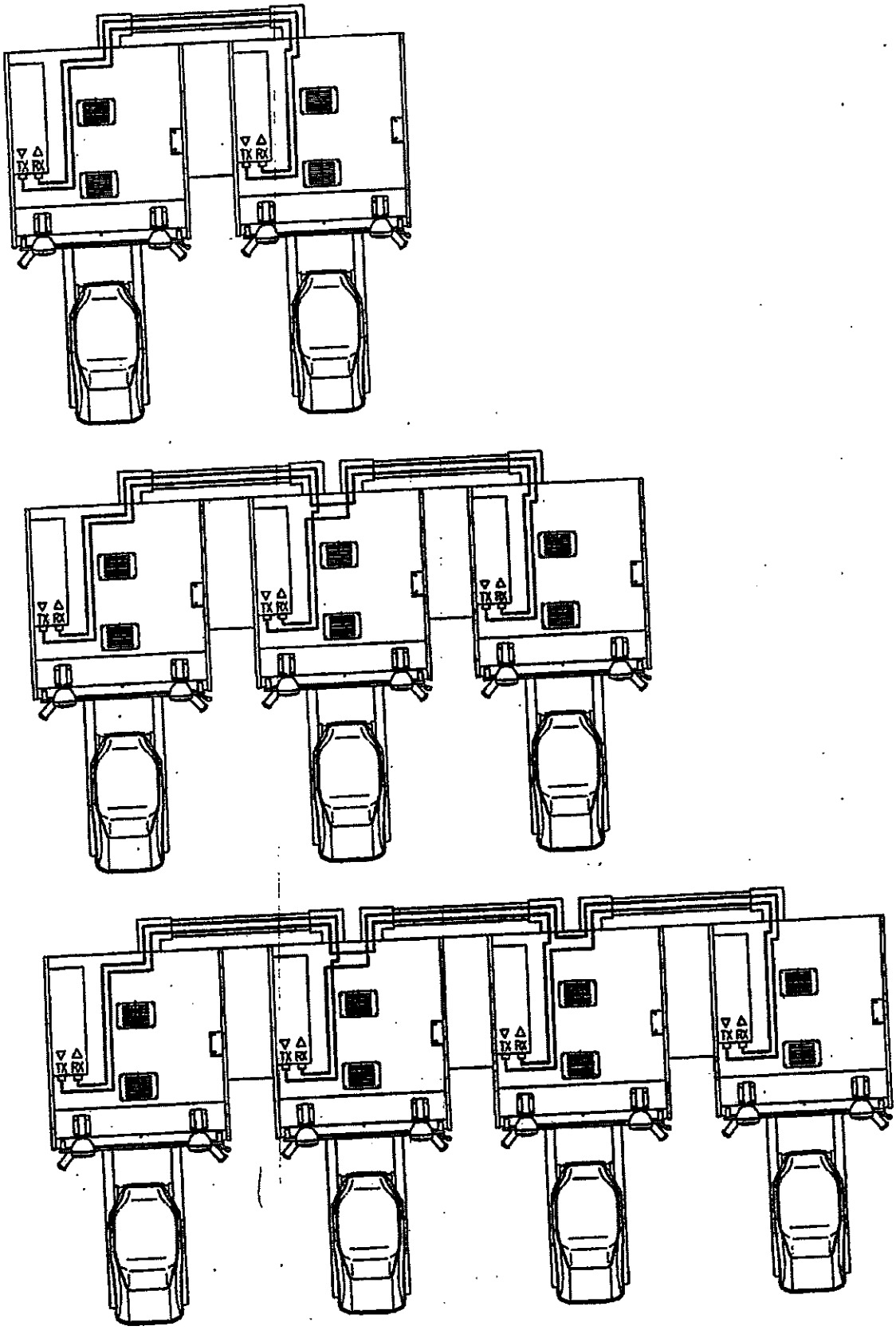


Photo 19. 2 g

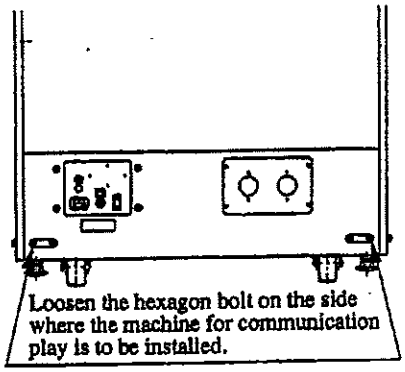
5. Pass the communication cables through the protect tube.
6. Reinstall the fibre lid base to its original position

7. Take out the 2 screws and unlock and remove the front door.
8. The communication cable insertion connector is on the top right of the filter board. Remove the cap and insert the cables.



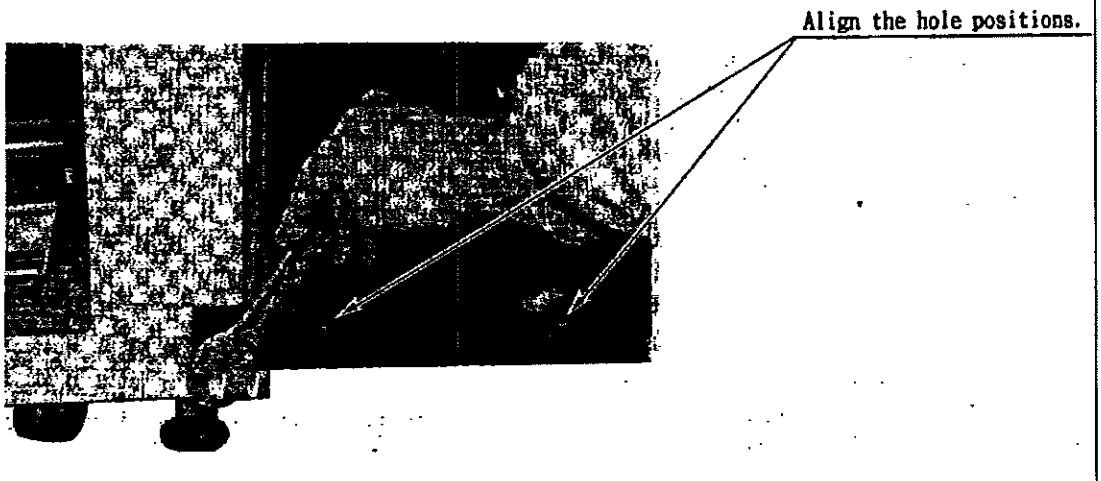
3.10.3. CONNECTING THE MACHINES.

Provided in the installation kit are the upper and lower joints to hold the linked machines together.

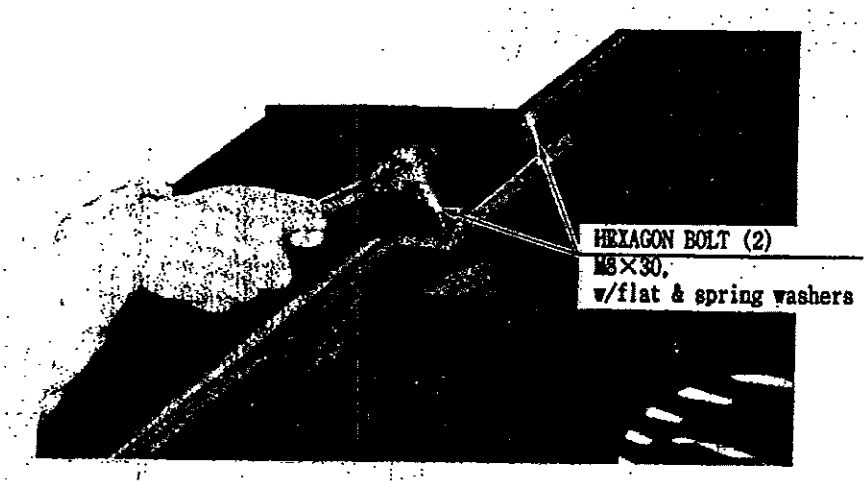


To fit the lower joint loosen the hexagon bolts on the side where the machine is to be placed and slide the lower joint into position. Tighten the bolts.

There are 2 lower joints provided for the front and rear of the machine.



To fit the upper joint use the M8X30 bolts provided and attach the joint bracket to the top of the machine as shown.



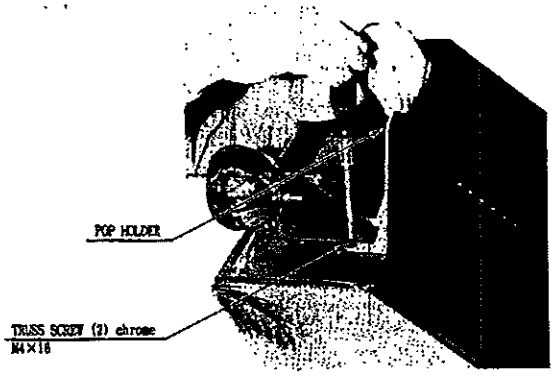


Figure 19.2a

To install the pop holder remove the 2 rear screws on the lamp holder and position the pop holder over the holes. Replace the screws.

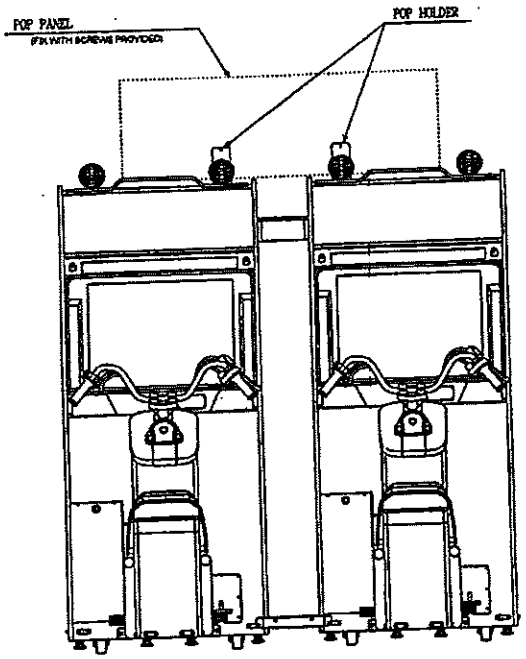


FIG. 19.2a

In a similar as described above connect the communication cable to the other machines and install the joint parts.

To install the pop panel use the M4x20 screws and M4 large washers provided. Screw the pop panel to the pop holders.

3.10.4. COMMUNICATION PLAY SETTINGS

When all the machines are linked enter test mode and enter network assignments.

Set the left hand machine to master and Cabinet ID 1. Set all others to slave and cabinet ID 2,3 or 4 as applicable.

With the communication play setting on, a network check is executed on power up and exiting test mode.

If a fault is detected an error message will appear.

Check all linked machines are on and no Cabinet ID numbers are duplicated. Then carry out the network check.

3.11. PERIODIC CHECK AND INSPECTION

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

WARNING!

- Be sure to check annually to see if the power cords are damaged. The plug is securely inserted and that there is no dust in the interior of the machine or between the socket and the power cord. Using the product in an unclean condition may cause a fire or electric shock.

IMPORTANT!

- Periodic checks should only be carried out by QUALIFIED SERVICE PERSONNEL.

DESCRIPTION	WHAT TO CHECK	INTERVAL
HANDLE MECHA	Check the V.R. value	Monthly
	Check adjust gear engagement	Every 3 months
	Greasing of gears	Every 3 months
ACCELERATOR & BRAKE	Check the V.R. value	Monthly
	Check adjust gear engagement	Every 3 months
	Greasing of gears	Every 3 months
MONITOR / PROJECTOR	Clean screen	Weekly
	Check adjustment	Monthly
GAME BD	Memory Test	Monthly
	Game Assignments	Monthly
INTERIOR	Clean	Annually
POWER SUPPLY CORD	Check condition	Annually
CABINET SURFACE	Clean	As required
CONTROL PANEL	Lamp operation	Monthly
	Check switch operation	Monthly
COIN MECHANISM	Check SW (If Fitted)	Monthly

3.11.1. CLEANING.

Clean the cabinet as required. Do not use solvent based cleaners. Do not use a water jet to clean the cabinet.

4. HOW TO PLAY

The following are operations and responses obtained when the machine functions satisfactorily. Any functioning different from the following may have been caused by a fault. Immediately investigate and eliminate the cause of the fault to ensure satisfactory operation.

When energised the billboard lamp is always lit.

During ADVERTISE (when no coins are inserted) the contents of game and HOW TO PLAY are audio-visually explained. Note 1.

The status of the on tank buttons will change to and from lighting up/flashing/Lights-out.

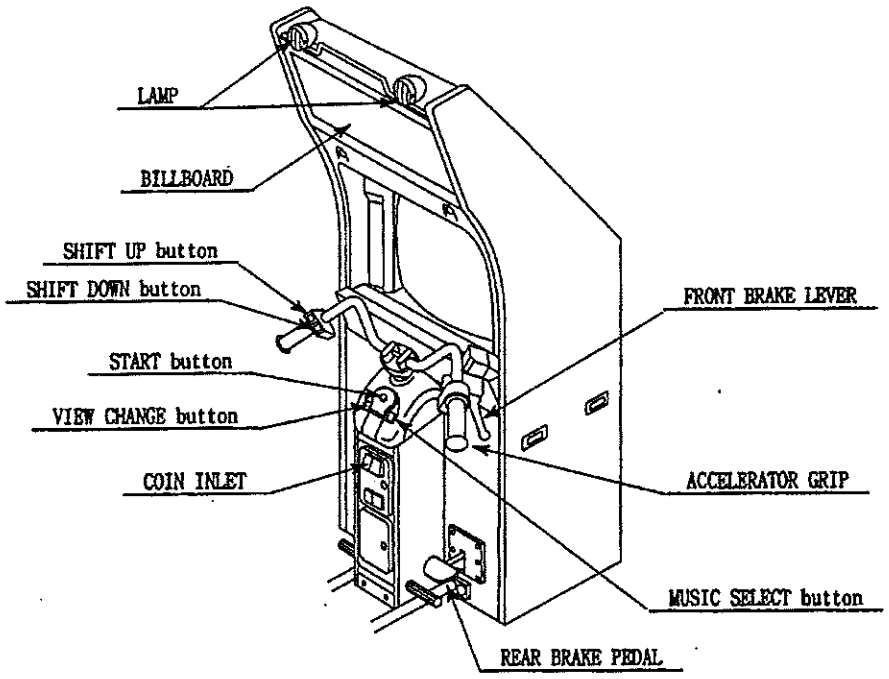
Although the start button is unlit during advertise it will blink if even one coin is inserted and is always lit during game play.

The view change and music select buttons are unlit during Advertise and lit when the select mode is displayed. During game play they flash alternately.

The two lamps of the billboard flash during Advertise and select mode display, light up during game play and flash for approximately 3 seconds when passing a checkpoint.

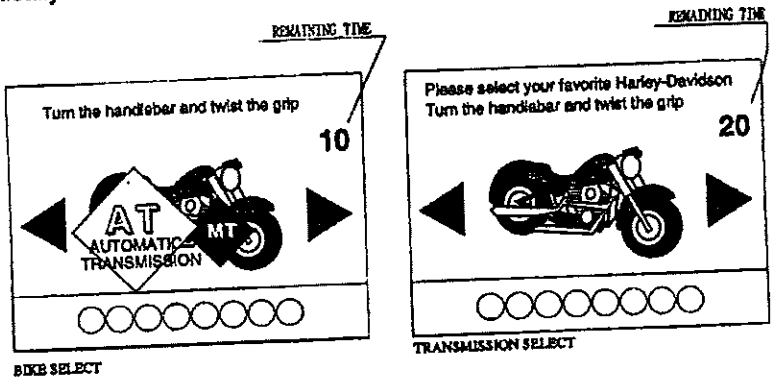
In communication play the lamps light up in game play, flash for approximately 3 seconds when passing a checkpoint in first place and light out for approximately 3 seconds when passing a checkpoint in second place or lower.

Insert coins to gain credits (maximum of 9 credits - any further coins will not receive credits). The display changes from "INSERT COINS" to "PUSH START" to indicate that the game is ready to play. Note that a game set to USA allows up to 24 credits to be counted

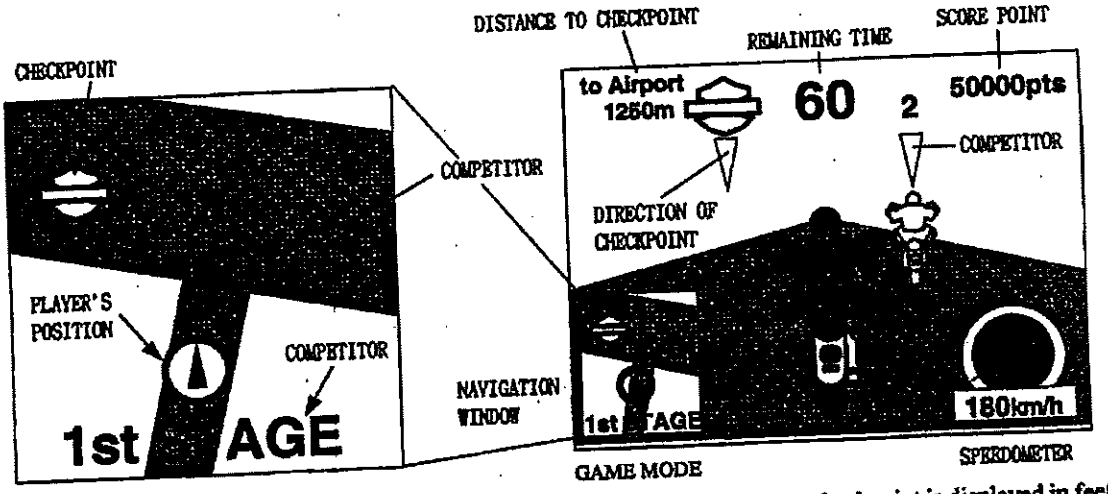


1. Be seated
2. Insert coins. When one play worth of credits is inserted, the Select mode appears.
3. Select in order of BIKE and TRANSMISSION. Turn the handlebar to select and turn the ACCELERATOR to decide. Note 2

When the select mode is displayed, countdown starts. At count 0 , BIKE and TRANSMISSION being selected are automatically selected.



4. When TRANSMISSION is decided the race starts. The checkpoint (destination) is displayed on the screen, the TIME LIMIT countdown starts. At the same time the race starts, the View change button and Music select button alternately flash on /off. Pressing the view change button changes the view point in the game mode. Pressing the Music select button changes the background music.
5. The distance to the checkpoint is displayed In the upper left section of the screen . The remaining time is indicated on the upper centre, score points on the upper right, navigation window (map) on the lower left and the speedometer on the lower right.



In the Specifications for USA, the distance to a checkpoint is displayed in feet and the Speedometer indicates MPH.

6. Run towards the checkpoint by judging the route from the arrows and the NAVIGATION WINDOW. Passing the checkpoint within the time limit results in a Stage Clear. The time limit is extended and the next checkpoint is displayed.

7. If the player fails to pass the checkpoint within the time limit the game is over.
8. Passing all of the checkpoints results in a game clear. Note 3. The successful palyer can see the ending mode.
9. After a game over the accomplishment results are displayed on the map.
10. If the player scores high points the NAME ENTRY mode appears. Turn the handlebar, select character, and turn the accelerator to register the initial etc.

Note 1. Setting change can be made to no sound output during ADVERTISE.

Note 2. In the case where several machines are linked for communication play, the bike appearing first in the Select mode is predetermined by the ID number of each cabinet set for the communication play.

Note 3. The setting of the number of checkpoints required for game clear is changeable.

KNACK OF GAME PLAY.

- To make full use of bike characteristics.

Each of the 5 types of bike has specific characteristics. High points can be earned by fully utilising the bike characteristics and selecting the type which best suites the player.

- To memorise the courses.

The player will surely accomplish a game clear by selecting the course on which he can make full use of the bike characteristics instead of relying on the map and arrow.

5. MAINTENANCE INSTRUCTIONS

5.1. EXPLANATION OF TEST AND DATA DISPLAY

Use the switches on the VTS to enter the TEST MODE. This will allow you to carry out post installation and periodic checks and adjustments. The following section details the function of each of the tests:

STOP
IMPORTANT!

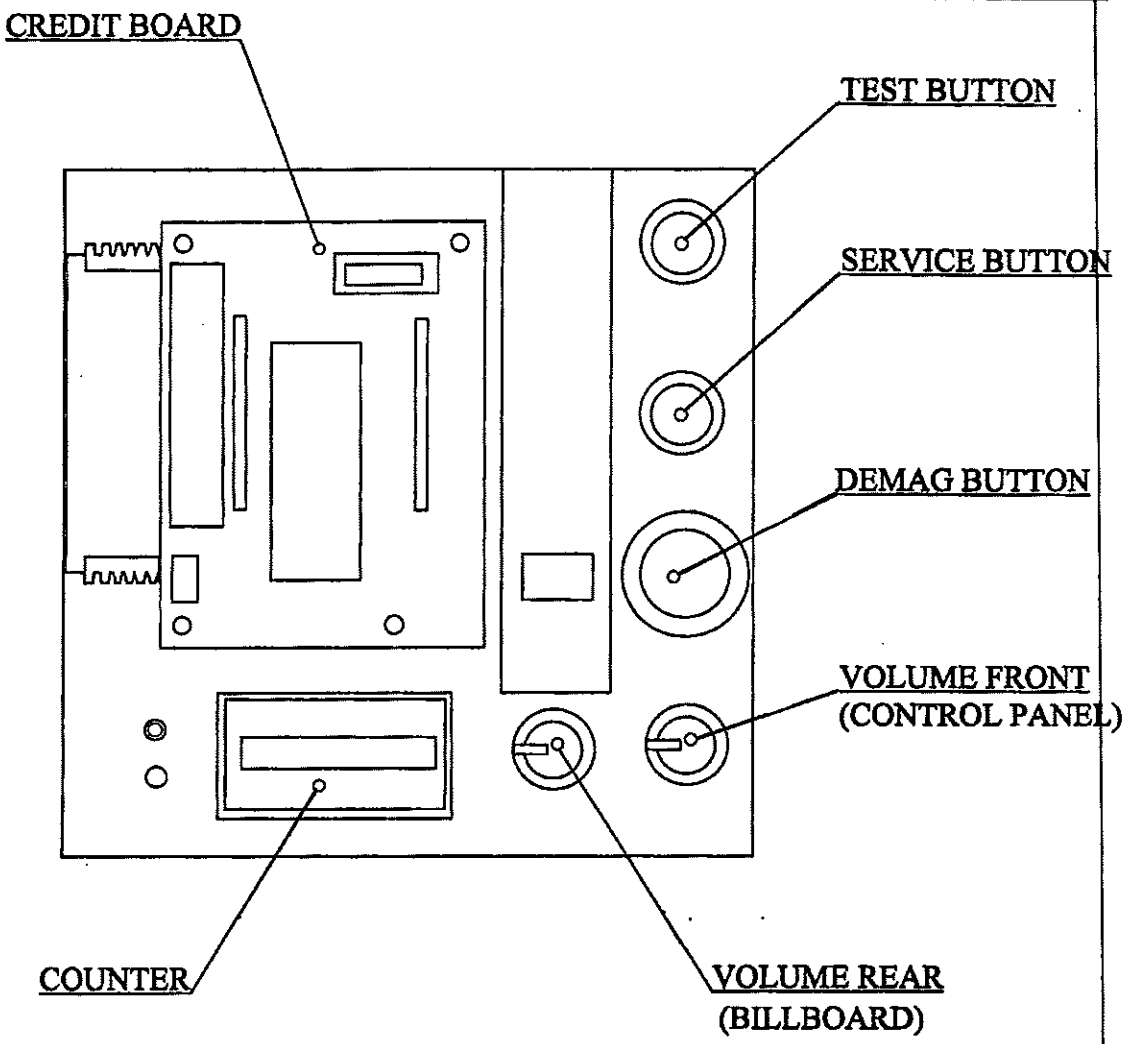
- Be very careful about entering TEST MODE. If the machine you wish to test is linked to other machines, exiting test on your machine will cause a network check to be carried out. This will disable all other machines linked to it.

ITEM	DESCRIPTION	INTERVAL	REFERENCES
INSTALLATION OF THE MACHINE	When the machine is installed perform the following checks: • Check to see that each setting is as per the standard settings input at the time of shipment. • In the INPUT TEST mode, check each switch and V.R. • In the OUTPUT TEST mode, check each of the lamps. • In the MEMORY TEST mode check all of the IC's on the IC BD.	Monthly	3.4.4 5.1.2.4 5.1.2.5 5.1.2.2
MEMORY	• On the TEST MENU screen choosing the MEMORY TEST allows self test to be performed. In this test RAM & ROM are tested.	Monthly	5.1.2.2
PERIODIC CHECKS	Periodically perform the following • MEMORY TEST. • Ascertain each setting. • In the INPUT TEST mode, test the control devices. • In the OUTPUT TEST mode, check each of the lamps.	Monthly	5.1.2.2 5.1.2.4 5.1.2.5
CONTROL SYSTEM	• In the INPUT TEST mode, check each switch and V.R. • Adjust or replace each switch and V.R.	Monthly	5.1.2.4. 3.6
MONITOR	• In the C.R.T. TEST mode, check to ensure the monitor is adjusted correctly • Clean screen (switch off machine and remove the plug)	Monthly Weekly	5.1.2.7
IC BOARD	MEMORY TEST • In the SOUND TEST mode, check the sound related ROMs	Monthly	5.1.2.6
DATA CHECK	• Check such data as held in the bookkeeping screens, relating to number and length of plays	Monthly	5.1.2.16
EXTERIOR MAINTENANCE	• Clean surfaces	Monthly	3.11.1

5.1.1. VTS ASSEMBLY

CAUTION!

- Do not touch places other than those specified. Touching places not specified could cause an electric shock or short circuit.



Opening the Coin Chute door will reveal the VTS Assembly shown above. The function of each switch is as follows.

TEST BUTTON (TEST SW)	Used to enter TEST mode. Also has function during TEST mode. Refer to the later section detailing TEST mode.
SERVICE BUTTON (SERVICE SW)	Gives credits without registering on the coin counter. Also used during TEST mode.
DEMAG <OPTIONAL>	Elimnates colour unevenness from the monitor screen.
VOLUME CONTROL FRONT	Adjusts the volume of the speakers.
VOLUME CONTROL REAR	Adjusts the volume of the BASS SHAKER.

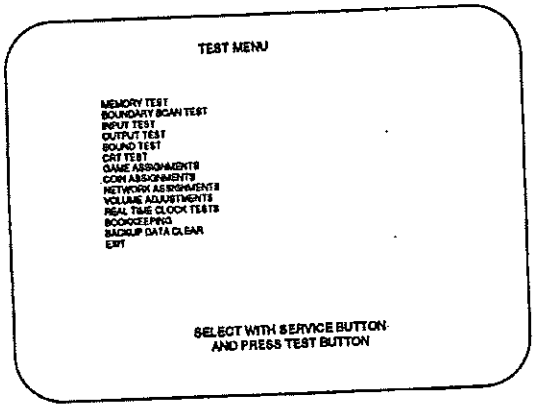
5.1.2. TEST MODE

The TEST MODE allows the functioning of each part of the machine to be checked. In addition game configuration and coin configuration changes can be made within TEST MODE.

STOP
IMPORTANT!

- When setting changes are made within TEST MODE, be sure to exit from TEST MODE using the exit options. If you turn the power off and then on without having exited correctly the changes you made will not take effect.

5.1.2.1.TEST MENU



Press the TEST BUTTON to bring up the screen shown to the left.

Press the SERVICE BUTTON to move downwards through the list. The current selection is shown by the arrow.

Press the TEST BUTTON to activate the selected test.

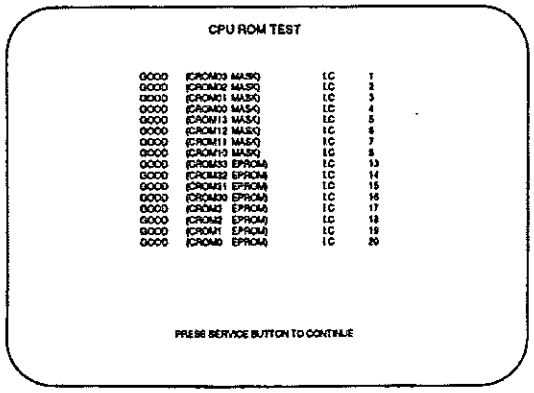
To finish TEST MODE, move the arrow to EXIT and press the TEST.

In the test mode the following buttons can be used for operation.

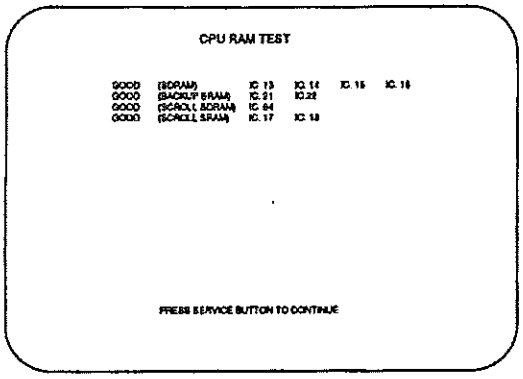
SHIFT UP & VIEW CHANGE buttons	To move upwards
SHIFT DOWN & VIEW CHANGE BUTTONS	To move downward
START button	The selected items execution and OK

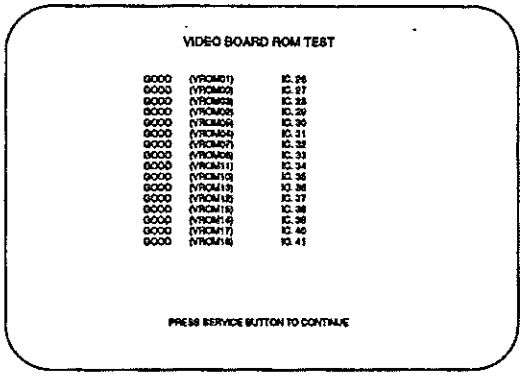
5.1.2.2. MEMORY TEST

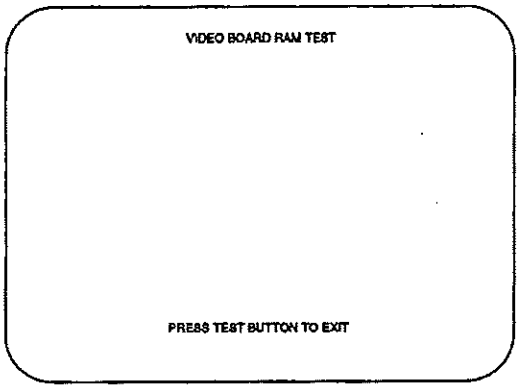
When you select memory test, test of each IC on the IC board is carried out in the following order CPU ROM TEST, CPU RAM TEST, VIDEO BOARD ROM TEST, VIDEO BOARD RAM TEST.



- During the test "TESTING NOW" will be displayed instead of "PRESS SERVICE BUTTON TO CONTINUE" and "PRESS TEST BUTTON TO EXIT"
- As a result of the test GOOD will be displayed if the IC is satisfactory and BAD will be displayed if the IC is abnormal.
- When the test is complete if the following screens are displayed it is satisfactory.
- After finishing the VIDEO BOARD RAM TEST press the test button to exit..

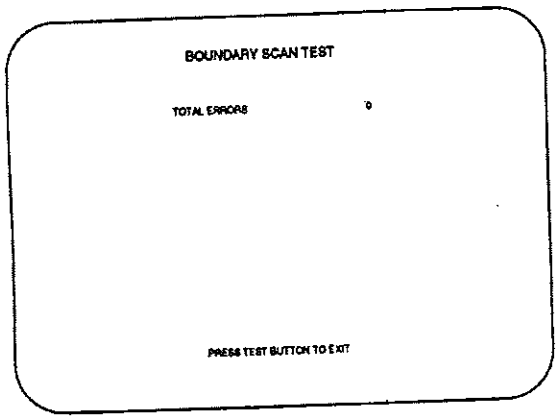






5.1.2.3. BOUNDARY SCAN TEST.

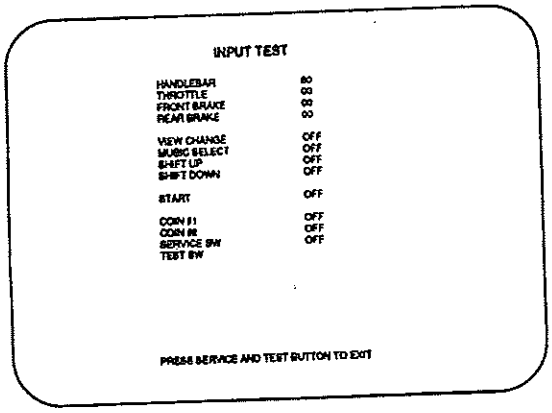
Selecting "BOUNDARY SCAN TEST" causes the gameboards testing as regards hardware to be carried out.



- When the test is completed if the results shown to the left are displayed it is satisfactory.
- After finishing the test press the Test button to have the menu mode return. Next turn the power off and then turn it back on again. To avoid malfunctioning, have the Board initialised by turning the power off then on.
- If there are any hardware problems, error message is displayed. Please contact the offices stated herein or where the product was purchased.

5.1.2.4. INPUT TEST.

Selecting INPUT TEST displays the following screen and enables the checking of all switches and VR's to be carried out.



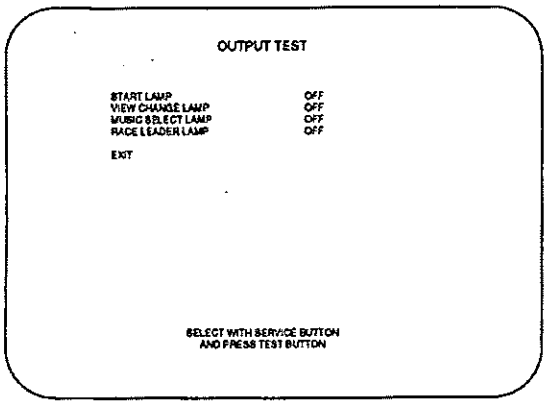
- By pressing each switch in turn check the display changes from OFF to ON
- Simultaneously pressing the SERVICE and TEST button returns to the main screen.

Note. The volume values in this test are obtained by converting the minimum value to 00 and the maximum value to FF from the Volume values set in the Volume setting mode and thus, differ from the values displayed in the Volume setting mode.

- When the handlebar is turned fully from left to right , if the handlebar value varies form 00 to FF and is around 80 when returned to the centre position then everything is satisfactory.
- When the accelerator is moved if the Throttle value varies from 00 to FF and returns to 00 when no force is exerted then everything is satisfactory.
- When the Front brake is pulled if the Front Brake value varies from 00 to FF and returns to 00 when the brake is fully released then it is satisfactory.
- When the Rear Brake is depressed fully if the Rear Brake value varies from 00 to FF and returns to 00 when the brake is released then it is satisfactory.

5.1.2.5. OUTPUT TEST.

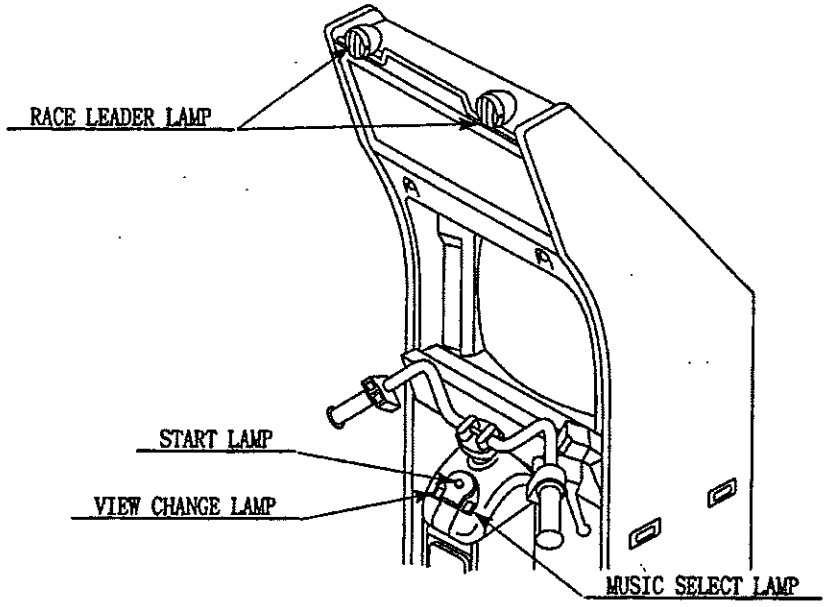
In OUTPUT TEST mode all the lamps on the machine can be tested



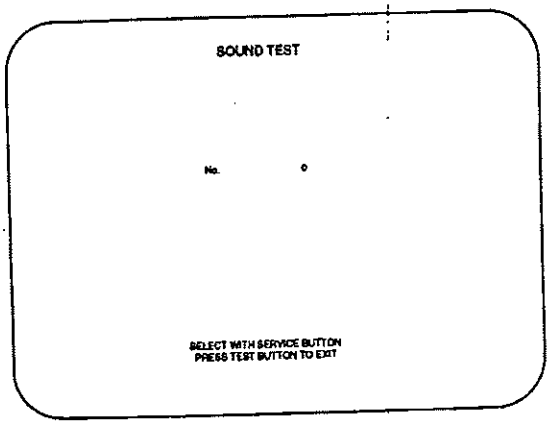
Press the service button to bring the arrow to the desired lamp and press the test button to see it working. The display will change from OFF to ON.

Check the lamp is working and press test again to switch it off.

If the cabinet type is set to "DELUXE" in Game assignment mode then "CABINET LOCK" is displayed instead of "RACE LEADER LAMP"



5.1.2.6. SOUND TEST.



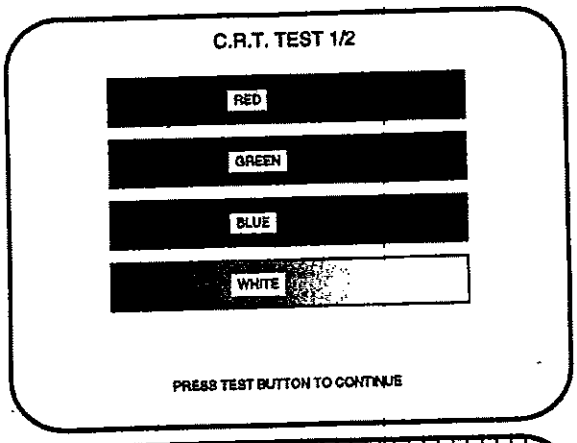
This enables sounds used in the game to be checked.

Sound related memory and each speaker are checked.

Press the Service button to change the number and sound emitted.

Press Test button to exit.

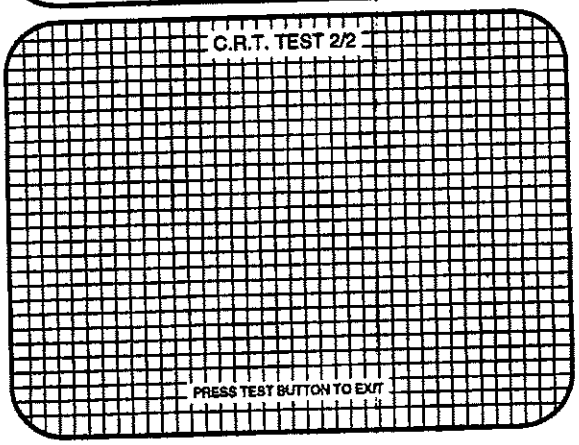
5.1.2.7. CRT TEST



Selecting CRT TEST allows the monitor to be adjusted if required.

CRT (1/2) enables colour adjustment to be checked.

The colour of the bars is red, green, blue, white, and is darkest at the left and becomes brighter towards the right.

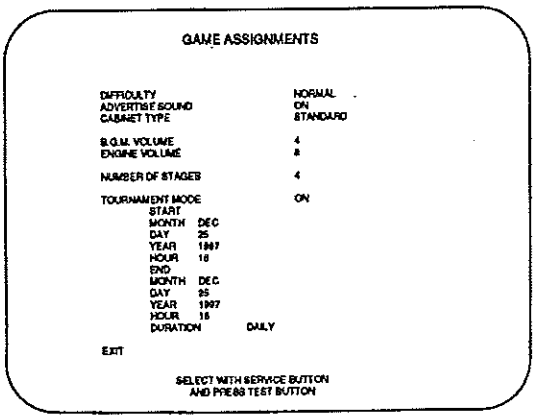


CRT (2/2) allows screen size and distortion to be checked.

Check to see if the cross hatch frame goes out of the screen and if the lines are distorted.

Press the Test button to return to the main menu.

5.1.2.8. GAME ASSIGNMENTS



Selecting GAME ASSIGNMENTS allows the current game settings to be checked and changed.

In the case of communication play all settings are as per the master unit except for Cabinet Type, BGM Volume and Engine Volume.

SETTING CHANGE PROCEDURE

1. Press Service button to move arrow to the desired item.
2. Choose the desired setting change item by using the TEST button .
3. To return to the MENU mode move the arrow to exit and press TEST.

DIFFICULTY

The remaining time awarded at the start of game is set in increments of 5 seconds

ADVERTISE SOUND

Sets whether advertise sound is emitted or not. ON/OFF

CABINET TYPE

Set to "DELUXE" or "STANDARD" as applicable. Setting to the wrong type can cause the following failure.

- In communication play the Race Leader Lamp does not flash correctly.
- The cabinet appearing in the operation explanation mode differs from that being used.

B.G.M. VOLUME

BGM Volume adjustment (1~8)

ENGINE VOLUME

ENGINE Volume adjustment (1~8)

NUMBER OF STAGES

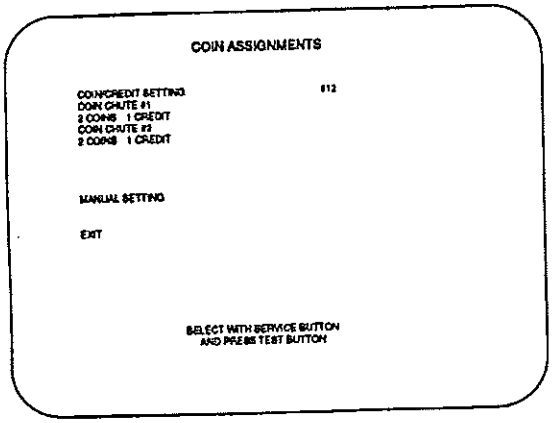
Sets the number of stages required to accomplish game clear (3,4,5)

TOURNAMENT MODE

During the period set special bookkeeping for ranking etc is kept. When set to ON , as shown above, the date of TOURNAMENT mode start, the end date of TOURNAMENT mode, and items of bookkeeping periods are displayed. DURATION refers to the unit of bookkeeping periods, which can be selected from DAILY, WEEKLY, BI-WEEKLY and MONTHLY.

Note: Be sure to set the present time and date when the TOURNAMENT mode is set to on. (See Real Time Clock Test)

5.1.2.9.COIN ASSIGNMENTS



The "COIN ASSIGNMENTS " mode permits the number of credits for start and basic numbers of coins to credits to be set.

COIN/CREDIT SETTING — Number of coins per credit. Can be set as per the following table.

MANUAL SETTING — Allows for finer settings.

SETTING CHANGE PROCEDURE.

1. Press the service button to bring the arrow to COIN/CREDIT setting.
2. Press test button to choose the desired setting.
3. Move arrow to exit and press test button to return to Menu mode.

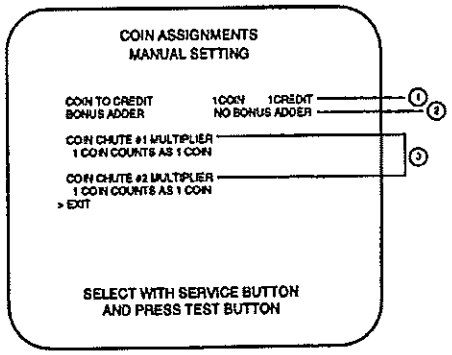
5.1.2.10.COIN/CREDIT SETTING (COIN CHUTE COMMON TYPE)

SETTING	FUNCTIONING OF COIN CHUTE #1		FUNCTIONING OF COIN CHUTE #2	
SETTING #1	1 COIN	1 CREDIT	1 COIN	1 CREDIT
SETTING #2	1 COIN	2 CREDITS	1 COIN	1 CREDIT
SETTING #3	1 COIN	3 CREDIT	1 COIN	1 CREDIT
SETTING #4	1 COIN	4 CREDITS	1 COIN	1 CREDIT
SETTING #5	1 COIN	5 CREDITS	1 COIN	1 CREDIT
SETTING #6	1 COIN	2 CREDITS	1 COIN	2 CREDITS
SETTING #7	1 COIN	5 CREDITS	1 COIN	2 CREDITS
SETTING #8	1 COIN	3 CREDITS	1 COIN	3 CREDITS
SETTING #9	1 COIN	4 CREDITS	1 COIN	4 CREDITS
SETTING #10	1 COIN	5 CREDITS	1 COIN	5 CREDITS
SETTING #11	1 COIN	6 CREDITS	1 COIN	6 CREDITS
SETTING #12	2 COINS	1 CREDIT	2 COINS	1 CREDIT
SETTING #13	1 COIN	1 CREDIT	2 COINS	1 CREDIT
SETTING #14	1 COIN	2 CREDITS	2 COINS	1 CREDIT
SETTING #15	1 COIN 2 COINS	1 CREDIT 3 CREDITS	1 COIN 2 COINS	1 CREDIT 3 CREDITS
SETTING #16	1 COIN	3 CREDITS	1 COIN 2 COINS	1 CREDIT 3 CREDITS
SETTING #17	3 COINS	1 CREDIT	3 COINS	1 CREDIT
SETTING #18	4 COINS	1 CREDIT	4 COINS	1 CREDIT
SETTING #19	1 COIN 2 COINS 3 COINS 4 COINS	1 CREDIT 2 CREDITS 3 CREDITS 5 CREDITS	1 COIN 2 COINS 3 COINS 4 COINS	1 CREDIT 2 CREDITS 3 CREDITS 5 CREDITS
SETTING #20	1 COIN	5 CREDITS	1 COIN 2 COINS 3 COINS 4 COINS	1 CREDIT 2 CREDITS 3 CREDITS 5 CREDITS
SETTING #21	5 COINS	1 CREDIT	5 COINS	1 CREDIT
SETTING #22	1 COIN	2 CREDITS	3 COINS 5 COINS	1 CREDIT 2 CREDITS
SETTING #23	2 COINS 4 COINS 5 COINS	1 CREDIT 2 CREDITS 3 CREDITS	2 COINS 4 COINS 5 COINS	1 CREDIT 2 CREDITS 3 CREDITS
SETTING #24	1 COIN	3 CREDITS	2 COINS 4 COINS 5 COINS	1 CREDIT 2 CREDITS 3 CREDITS
SETTING #25	1 COIN 2 COINS 3 COINS 4 COINS 5 COINS	1 CREDIT 2 CREDITS 3 CREDITS 4 CREDITS 6 CREDITS	1 COIN 2 COINS 3 COINS 4 COINS 5 COINS	1 CREDIT 2 CREDITS 3 CREDITS 4 CREDITS 6 CREDITS
SETTING #26	1 COIN	6 CREDITS	1 COIN 2 COINS 3 COINS 4 COINS 5 COINS	1 CREDIT 2 CREDITS 3 CREDITS 4 CREDITS 6 CREDITS
SETTING #27	FREE PLAY		FREE PLAY	

5.1.2.11.COIN/CREDIT SETTING (COIN CHUTE INDIVIDUAL TYPE)

SETTING	FUNCTIONING OF COIN CHUTE #1	
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 2 COINS	1 CREDIT 3 CREDITS
SETTING #17	3 COINS	1 CREDIT
SETTING #18	4 COINS	1 CREDIT
SETTING #19	1 COIN 2 COINS 3 COINS 4 COINS	1 CREDIT 2 CREDITS 3 CREDITS 5 CREDITS
SETTING #21	5 COINS	1 CREDIT
SETTING #22	3 COINS 5 COINS	1 CREDITS 2 CREDITS
SETTING #23	2 COINS 4 COINS 5 COINS	1 CREDIT 2 CREDITS 3 CREDITS
SETTING #25	1 COIN 2 COINS 3 COINS 4 COINS 5 COINS	1 CREDIT 2 CREDITS 3 CREDITS 4 CREDITS 6 CREDITS
SETTING #27	FREE PLAY	

5.1.2.12.MANUAL SETTING



1. Determines conversion coin/credit
2. This sets how many conversion coins should be inserted to obtain one SERVICE CREDIT.
3. This sets how many inserted tokens one conversion coin represents.

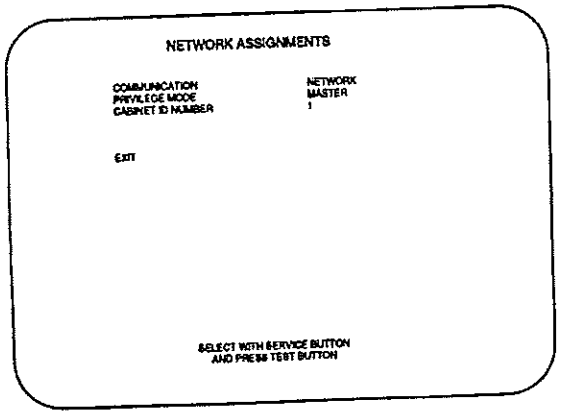
MANUAL SETTING

COIN TO CREDIT	1 COIN	1 CREDIT
	2 COINS	1 CREDIT
	3 COINS	1 CREDIT
	4 COINS	1 CREDIT
	5 COINS	1 CREDIT
	6 COINS	1 CREDIT
	7 COINS	1 CREDIT
	8 COINS	1 CREDIT
	9 COINS	1 CREDIT

BONUS ADDER	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
	7 COINS GIVE 1 EXTRA COIN
	8 COINS GIVE 1 EXTRA COIN
	9 COINS GIVE 1 EXTRA COIN

COIN CHUTE MULTIPLIER	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 COINS

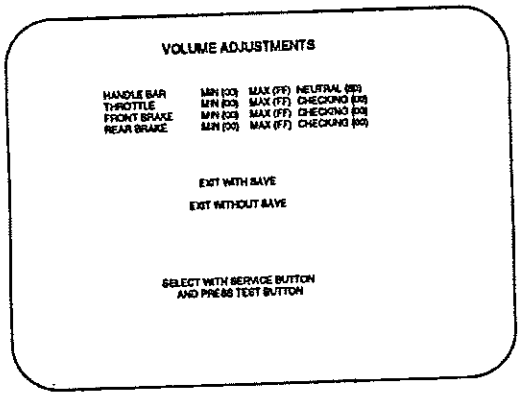
5.1.2.13. NETWORK ASSIGNMENTS



- COMMUNICATION: Select NETWORK or STAND ALONE. When NETWORK is selected the following are displayed.
- PRIVILEGE MODE: In the case when several machines are used for interactive play set one to MASTER and the others to SLAVE.. The game assignments set on the master will apply for the slave cabinets as well. Changing the settings on the slave cabinets will have no effect.
- CABINET ID NUMBER: When several machines are linked set the CABINET ID NUMBER in the order of 1,2,3,4 starting from the left hand cabinet as viewed from the front. Be careful not to duplicate any numbers or set in the wrong order. This will cause the game display to be incorrect.

5.1.2.14. VOLUME ADJUSTMENTS.

In the case of an appropriate value not being displayed in the INPUT test mode then the volume values can be adjusted in this mode.

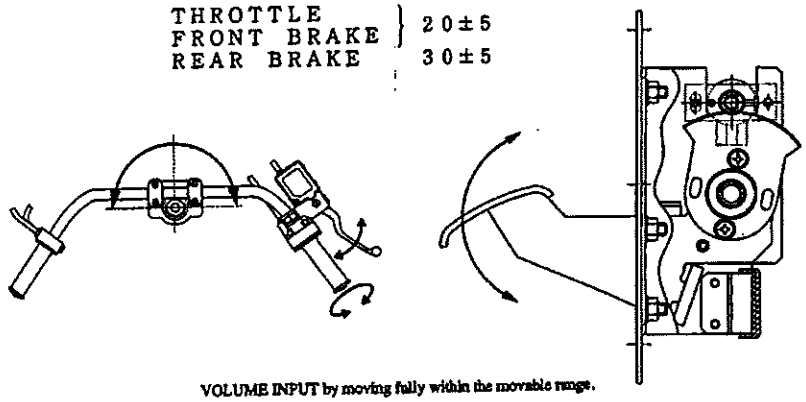


Set the volume value by moving the Handlebar, Accelerator, Front brake and Rear brake fully through their useable range.

The value in parenthesis ( ) shows the real value and differs from that shown in the INPUT test mode.

Appropriate values for each VR are shown below.

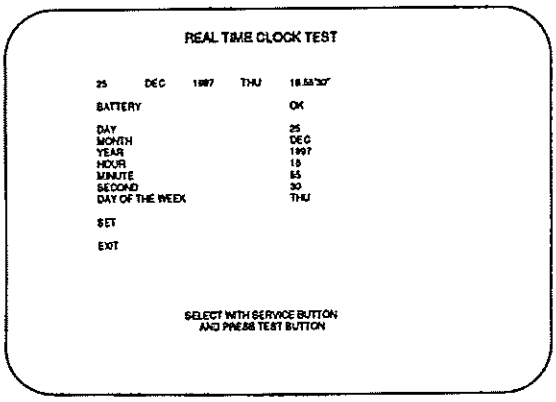
HANDLE BAR	80±5
THROTTLE	20±5
FRONT BRAKE	20±5
REAR BRAKE	30±5



VOLUME INPUT by moving fully within the movable range.
FIG. 9. 12 b

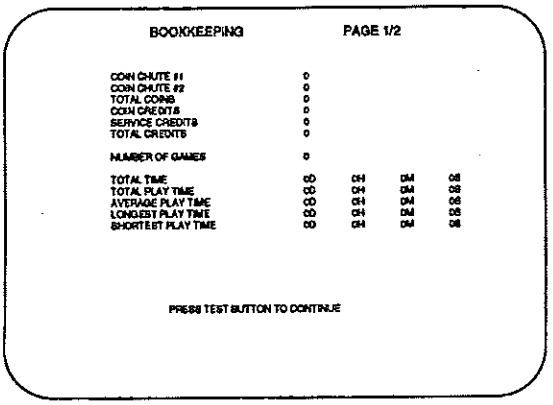
5.1.2.15. REAL TIME CLOCK TEST.

The system of this product has calendar functions. In game assignments if the TOURNAMENT mode is set to on ensure that the present time is correct.



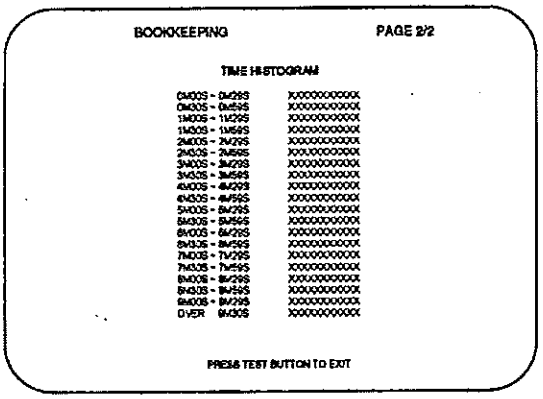
- Bring the arrow to the item to be changed by pressing the service button.
- Press the test button to change the item to the current month, day or year etc.
- Move the arrow to set and press the test button. The system calendar display changes to the time set.
- BATTERY indicates the status of the on board battery. If ERROR is displayed contact the office where the machine was purchased.

5.1.2.16. BOOKKEEPING.

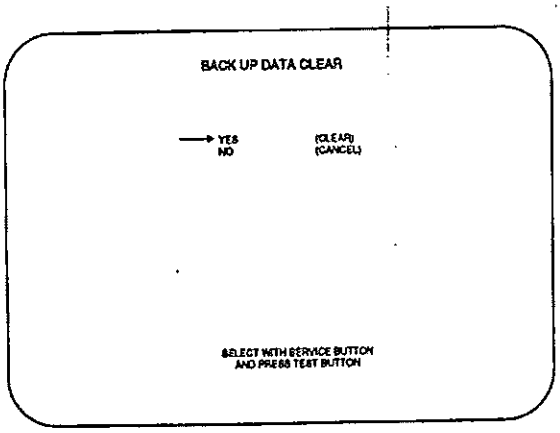


Selecting bookkeeping allows the bookkeeping data to be viewed.

- COIN CHUTE: Number of coins put in the machine.
- TOTAL COINS: Total number of coins inserted in each coin chute.
- COIN CREDITS: Number of credits registered by inserting coins.
- SERVICE CREDITS: Credits registered by the service button.
- TOTAL CREDITS: Total number of credits .
- TOTAL TIME: The total energised time.
- TIME HISTOGRAM: By-playtime play frequency.



5.1.2.17. BACKUP DATA CLEAR.



The contents of bookkeeping can be cleared in this mode.

To clear the contents move the arrow to YES and press the test button.

To leave the data intact move the arrow to NO and press the test button.

5.2. COIN MECH INSTALLATION AND CREDIT BOARD SET UP

5.2.1. INTRODUCTION

Game credits between the Coin Mechanism and the game board for this machine are controlled by a *Klingon* 2 board. This electronic circuit allows the price of play to be set for a range of different countries. These functions are set on Dual In Line (DIL) PCB mounted switches.

DIL-2 is used to set the currency (or coin ratio) and DIL-1 the price of play. Refer to the Tables on the following pages for the correct settings for your environment.

The *Klingon2* board pictured below is mounted on the VTS Bracket within the Coin Chute Tower.

The *Klingon2* board is connected to the coin validator and lamps via a dedicated wiring harness depending upon the coin validator used:

Wiring Harness	Validator	
LM1006	Coin Controls	(15 way connector)
LM1007	Mars	(13 way connector)
LM1008	Mechanical	See note 2
N/A	NRI	See note 1

Notes

1. If NRI mechanisms are to be used, these should be ordered with the highest denomination coin on coin path #1 and the lowest denomination on coin path #4. The *Klingon 2* board should be then be set up for either the UK or Switzerland settings. A minimum connecting lead length of 600mm is required.
2. Mechanical coin mechanisms may be connected in parallel allowing two identical mechanisms to be fitted.

5.2.2. KLINGON 2 CREDIT BOARD OPTION SETTINGS

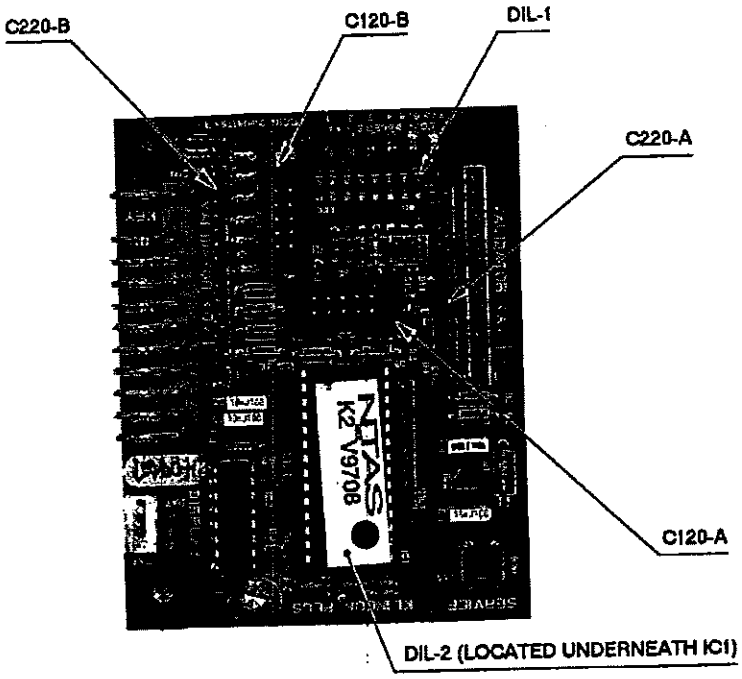
Universal Currency Settings - DIL Switch 2

4	3	2	1	Currency	C1	C2	C3	C4	C5	C6	C7	C8
↓	off	off	off	UK (p)	100	50	20	10	-	200	-	50(old)
↓	off	off	ON	Belgium (BFr)	-	50	20	5	-	-	-	-
↓	off	ON	off	Spain (Pta)	500	200	100	50	-	25	-	200(old)
↓	off	ON	ON	Germany (DM)	10	5	2	1	-	-	-	-
↓	ON	off	off	Netherlands (NLG)	-	5	2.5	1	-	-	-	-
↓	ON	off	ON	Portugal (Es)	100	50	-	-	-	-	-	-
↓	ON	ON	off	Austria (Sch)	20	10	5	1	-	-	-	-
↓	ON	ON	ON	Switzerland (SFr)	5	2	1	-	-	-	-	-
OFF	↑	↑	↑	Direct Mode	↑	↑	↑	↑	↑	↑	↑	↑
ON	↑	↑	↑	2 Channel Mode	↑	↑	↑	↑	↑	↑	↑	↑

Note: These switch settings are under constant review and may change due to world currency updates.

Set DIL switches (DIL-1) SW-1 to SW-5 according to the option settings found in the relevant Price Of Play Settings Table on the following pages.

Set DIL switches (DIL-2) on the *Klingon 2* board located under the IC socket as shown in the table above. SW-4 must always be set 'ON. Care must be exercised when removing IC-1 so as not to damage its lead-outs pins. After setting the switches return the IC to its socket with the package indent mark adjacent to the board edge.



The "Klingon 2" board.

5.2.2.1.PRICE OF PLAY SETTINGS UNIVERSAL

Universal Credit Settings - DIL Switch 1

Currency	Value of each U	Value of each Meter Pulse
UK	10 p	10 p
Belgium	5 BFr	5 BFr
Spain	25 Pta	25 Ptas
Germany	1 DM	1 DM
Holland	½ NLG	½ NLG
Portugal	25 Es	25 Es
Austria	1 Sch	1 Sch
Switzerland	1 SFr	1 SFr

DIL Switch 1 Settings

Per Game	Bonus	5	4	3	2	1
1U						
1U	6 for 5U					ON
2U					ON	
2U	3 for 5U				ON	ON
3U				ON		
3U	2 for 5U			ON		ON
4U				ON	ON	
4U	3 for 10U			ON	ON	ON
5U			ON			
5U	5 for 20U		ON			ON
6U			ON		ON	
6U	2 for 10U		ON		ON	ON
8U			ON	ON		
8U	3 for 20U		ON	ON		
10U			ON	ON	ON	
10U	3 for 20U		ON	ON	ON	ON
12U		ON				
15U		ON				ON
20U		ON			ON	
25U		ON			ON	ON
30U		ON		ON		
35U		ON		ON		ON
40U		ON		ON	ON	
45U		ON		ON	ON	ON
50U		ON	ON			
Free		ON	ON	ON	ON	ON

Coin Mech Mode
DIL Switch 1

6	7	8	
n/u	ON	ON	Binary
n/u	OFF	OFF	Parallel

The price of play settings for each country can be worked out by combining the two tables above.

5.2.2.2.PRICE OF PLAY SETTINGS FOR THE UK (£ = Pound Sterling)

Parallel 4 Coin Validator

1	2	3	4
£1	50p new (50p) old	20p	10p

C220 Binary Mode Validator

1	2	3	4	5	6	7	8
£1	50p (new)	20p	10p		£2		50p (old)

C120 Validator

1	2	3	4	5	6
£1	50p new 50p old	20p	10p	n/u	£2

*DIL Switch 2 (situated beneath NTAS chip)*Settings

Mode	1	2	3	4
Direct Mode	OFF	OFF	OFF	OFF
2 Channel Mode	OFF	OFF	OFF	ON

DIL Switch 1 Settings

Per Game	Bonus	5	4	3	2	1
10p						
10p	6 for 50p					ON
20p					ON	
20p	3 for 50p				ON	ON
30p				ON		
30p	2 for 60p			ON		ON
40p				ON	ON	
40p	3 for £1			ON	ON	ON
50p			ON			
50p	5 for £2		ON			ON
60p			ON		ON	
60p	2 for £1		ON		ON	ON
80p			ON	ON		
80p	3 for £2		ON	ON		ON
£1			ON	ON	ON	
£1	3 for £2		ON	ON	ON	ON
£1.20		ON				
£1.50		ON				ON
£2.00		ON			ON	
£2.50		ON			ON	ON
£3.00		ON		ON		
£3.50		ON		ON		ON
£4.00		ON		ON	ON	
£4.50		ON		ON	ON	ON
£5.00		ON	ON			
Free Play		ON	ON	ON	ON	ON

Coin Mech Mode DIL Switch 1

6	7	8	
n/u	ON	ON	Binary
n/u	OFF	OFF	Parallel

5.2.2.3.PRICE OF PLAY SETTINGS FOR BELGUIM (BFr = Belgian Franc)

Parallel 4 Coin Validator

1	2	3	4
	50	20	5

C220 Binary Mode Validator

1	2	3	4	5	6	7	8
	50	20	5				

C120 Validator

1	2	3	4	5	6
	50	20	5		

DIL Switch 2 Settings

Mode	4	3	2	1
Direct Mode	OFF	OFF	OFF	ON
2 Channel Mode	ON	OFF	OFF	ON

DIL Switch 1 Settings

Per Game	Bonus	5	4	3	2	1
5 BFr						
5 BFr	6 for 25 BFr					ON
10 BFr					ON	
10 BFr	3 for 25 BFr				ON	ON
15 BFr				ON		
15 BFr	2 for 25 BFr			ON		ON
20 BFr				ON	ON	
20 BFr	3 for 50 BFr			ON	ON	ON
25 BFr			ON			
25 BFr	5 for 100 BFr		ON			ON
30 BFr			ON		ON	
30 BFr	2 for 60 BFr		ON		ON	ON
40 BFr			ON	ON		
40 BFr	3 for 100 BFr		ON	ON		ON
50 BFr			ON	ON	ON	
50 BFr	3 for 100 BFr		ON	ON	ON	ON
60 BFr		ON				
75 BFr		ON				ON
100 BFr		ON			ON	
125 BFr		ON			ON	ON
150 BFr		ON		ON		
175 BFr		ON		ON		ON
200 BFr		ON		ON	ON	
225 BFr		ON		ON	ON	ON
250 BFr		ON	ON			
Free Play		ON	ON	ON	ON	ON

Coin Mech Mode DIL Switch 1

6	7	8	
n/u	ON	ON	Binary
n/u	OFF	OFF	Parallel

5.2.2.4.PRICE OF PLAY SETTINGS FOR SPAIN (Pta = Peseta)

Parallel 4 Coin Validator

1	2	3	4
500	200 (200)	100	50 (50)

C220 Binary Mode Validator

1	2	3	4	5	6	7	8
500	200	100	50		25		(200)

C120 Validator

1	2	3	4	5	6
500	200 (200)	100	50 (50)		25 (25)

DIL Switch 2 Settings

Mode	4	3	2	1
Direct Mode	OFF	OFF	ON	OFF
2 Channel Mode	ON	OFF	ON	OFF

DIL Switch 1 Settings

Per Game	Bonus	5	4	3	2	1
25 Pta						
25 Pta	6 for 125 Pta					ON
50 Pta					ON	
50 Pta	3 fo 125 Pta				ON	ON
75 Pta				ON		
75 Pta	2 for 125 Pta			ON		ON
100 Pta				ON	ON	
100 Pta	3 for 250 Pta			ON	ON	ON
125 Pta			ON			
125 Pta	5 for 500 Pta		ON			ON
150 Pta			ON		ON	
150 Pta	2 for 250 Pta		ON		ON	ON
200 Pta			ON	ON		
200 Pta	3 for 500 Pta		ON	ON		ON
250 Pta			ON	ON	ON	
250 Pta	3 for 500 Pta		ON	ON	ON	ON
300 Pta		ON				
375 Pta		ON				ON
500 Pta		ON			ON	
625 Pta		ON			ON	ON
750 Pta		ON		ON		
875 Pta		ON		ON		ON
1000 Pta		ON		ON	ON	
1125 Pta		ON		ON	ON	ON
1250 Pta		ON	ON			
Free Play		ON	ON	ON	ON	ON

Coin Mech Mode DIL Switch 1

6	7	8	
n/u	ON	ON	Binary
n/u	OFF	OFF	Parallel

5.2.2.5.PRICE OF PLAY SETTINGS FOR THE NETHERLANDS
(NLG = Netherlands Guilder)

Parallel 4 Coin Validator

1	2	3	4
	5	2.5	1

C220 Binary Mode Validator

1	2	3	4	5	6	7	8
	5	2.5	1				

C120 Validator

1	2	3	4	5	6
	5	2.5	1		

DIL Switch 2 Settings

Mode	4	3	2	1
Direct Mode	OFF	ON	OFF	OFF
2 Channel Mode	ON	ON	OFF	OFF

DIL Switch 1 Settings

Per Game	Bonus	5	4	3	2	1
0.5 NLG						
0.5 NLG	6 for 2.5 NLG					ON
1 NLG					ON	
1 NLG	3 for 2.5 NLG				ON	ON
1.5 NLG				ON		
1.5 NLG	2 for 2.5 NLG			ON		ON
2 NLG				ON	ON	
2 NLG	3 for 5 NLG			ON	ON	ON
2.5 NLG			ON			
2.5 NLG	5 for 10 NLG		ON			ON
3 NLG			ON		ON	
3 NLG	2 for 5 NLG		ON		ON	ON
4 NLG			ON	ON		
4 NLG	3 for 10 NLG		ON	ON		ON
5 NLG			ON	ON	ON	
5 NLG	3 for 10 NLG		ON	ON	ON	ON
6 NLG		ON				
7.5 NLG		ON				ON
10 NLG		ON			ON	
12.5 NLG		ON			ON	ON
15 NLG		ON		ON		
17.5 NLG		ON		ON		ON
20 NLG		ON		ON	ON	
22.5 NLG		ON		ON	ON	ON
25 NLG		ON	ON			
Free Play		ON	ON	ON	ON	ON

Coin Mech Mode DIL Switch 1

6	7	8	
n/u	ON	ON	Binary
n/u	OFF	OFF	Parallel

5.2.2.6.PRICE OF PLAY SETTINGS FOR PORTUGAL (Es = Escudo)

Parallel 4 Coin Validator

1	2	3	4
100	50		

C220 Binary Mode Validator

1	2	3	4	5	6	7	8
100	50						

C120 Validator

1	2	3	4	5	6
100	50				

DIL Switch 2 Settings

Mode	4	3	2	1
Direct Mode	OFF	ON	OFF	ON
2 Channel Mode	ON	ON	OFF	ON

DIL Switch 1 Settings

Per Game	Bonus	5	4	3	2	1
25 Es						
25 Es	6 for 125 Es					ON
50 Es					ON	
50 Es	3 for 125 Es				ON	ON
75 Es				ON		
75 Es	2 for 125 Es			ON		ON
100 Es				ON	ON	
100 Es	3 for 250 Es			ON	ON	ON
125 Es			ON			
125 Es	5 for 500 Es		ON			ON
150 Es			ON		ON	
150 Es	2 for 250 Es		ON		ON	ON
200 Es			ON	ON		
200 Es	3 for 500 Es		ON	ON		ON
250 Es			ON	ON	ON	
250 Es	3 for 500 Es		ON	ON	ON	ON
300 Es		ON				
375 Es		ON				ON
500 Es		ON			ON	
625 Es		ON			ON	ON
750 Es		ON		ON		
875 Es		ON		ON		ON
1000 Es		ON		ON	ON	
1125 Es		ON		ON	ON	ON
1250 Es		ON	ON			
Free Play		ON	ON	ON	ON	ON

Coin Mech Mode DIL Switch 1

6	7	8	
n/u	ON	ON	Binary
n/u	OFF	OFF	Parallel

5.2.2.7.PRICE OF PLAY SETTINGS FOR AUSTRIA (Sch = Schilling)

Parallel 4 Coin Validator

1	2	3	4
20	10	5	1

C220 Binary Mode Validator

1	2	3	4	5	6	7	8
20	10	5	1				

C120 Validator

1	2	3	4	5	6
20	10	5	1		

DIL Switch 2 Settings

Mode	4	3	2	1
Direct Mode	OFF	ON	ON	OFF
2 Channel Mode	ON	ON	ON	OFF

DIL Switch 1 Settings

Per Game	Bonus	5	4	3	2	1
1 Sch						
1 Sch	6 for 5 Sch					ON
2 Sch					ON	
2 Sch	3 for 5 Sch				ON	ON
3 Sch				ON		
3 Sch	2 for 5 Sch			ON		ON
4 Sch				ON	ON	
4 Sch	3 for 10 Sch			ON	ON	ON
5 Sch			ON			
5 Sch	5 for 20 Sch		ON			ON
6 Sch			ON		ON	
6 Sch	2 for 10 Sch		ON		ON	ON
8 Sch			ON	ON		
8 Sch	3 for 20 Sch		ON	ON		ON
10 Sch			ON	ON	ON	
10 Sch	3 for 20 Sch		ON	ON	ON	ON
12 Sch		ON				
15 Sch		ON				ON
20 Sch		ON			ON	
25 Sch		ON			ON	ON
30 Sch		ON		ON		
35 Sch		ON		ON		ON
40 Sch		ON		ON	ON	
45 Sch		ON		ON	ON	ON
50 Sch		ON	ON			
Free Play		ON	ON	ON	ON	ON

Coin Mech Mode DIL Switch 1

6	7	8	
n/u	ON	ON	Binary
n/u	OFF	OFF	Parallel

5.2.2.8.PRICE OF PLAY SETTINGS FOR SWITZERLAND (SFr = Swiss Franc)

Parallel 4 Coin Validator

1	2	3	4
5	2	1	

C220 Binary Mode Validator

1	2	3	4	5	6	7	8
5	2	1					

C120 Validator

1	2	3	4	5	6
5	2	1			

DIL Switch 2 Settings

Mode	4	3	2	1
Direct Mode	OFF	ON	ON	ON
2 Channel Mode	ON	ON	ON	ON

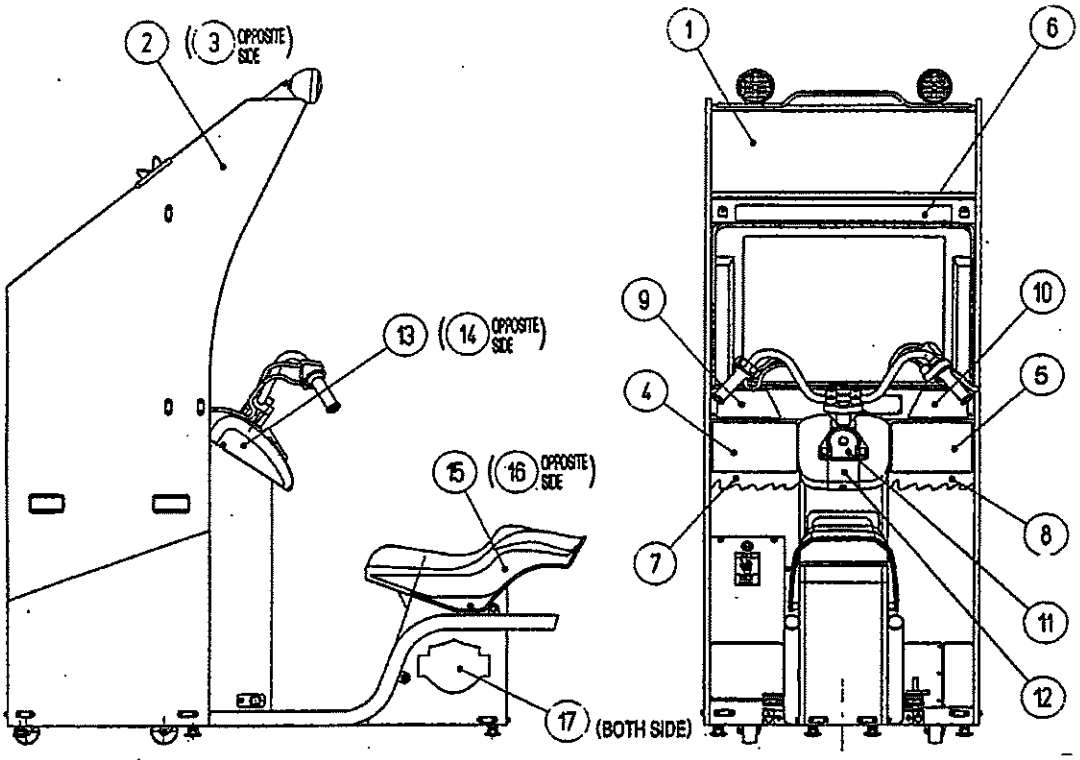
DIL Switch 1 Settings

Per Game	Bonus	5	4	3	2	1
1 SFr						
1 SFr	6 for 5 SFr					ON
2 SFr					ON	
2 SFr	3 for 5 SFr				ON	ON
3 SFr				ON		
3 SFr	2 for 5 SFr			ON		ON
4 SFr				ON	ON	
4 SFr	3 for 10 SFr			ON	ON	ON
5 SFr			ON			
5 SFr	5 for 20 SFr		ON			ON
6 SFr			ON		ON	
6 SFr	2 for 10 SFr		ON		ON	ON
8 SFr			ON	ON		
8 SFr	3 for 20 SFr		ON	ON		ON
10 SFr			ON	ON	ON	
10 SFr	3 for 20 SFr		ON	ON	ON	ON
12 SFr		ON				
15 SFr		ON				ON
20 SFr		ON			ON	
25 SFr		ON			ON	ON
30 SFr		ON		ON		
35 SFr		ON		ON		ON
40 SFr		ON		ON	ON	
45 SFr		ON		ON	ON	ON
50 SFr		ON	ON			
Free Play		ON	ON	ON	ON	ON

Coin Mech Mode DIL Switch 1

6	7	8	
n/u	ON	ON	Binary
n/u	OFF	OFF	Parallel

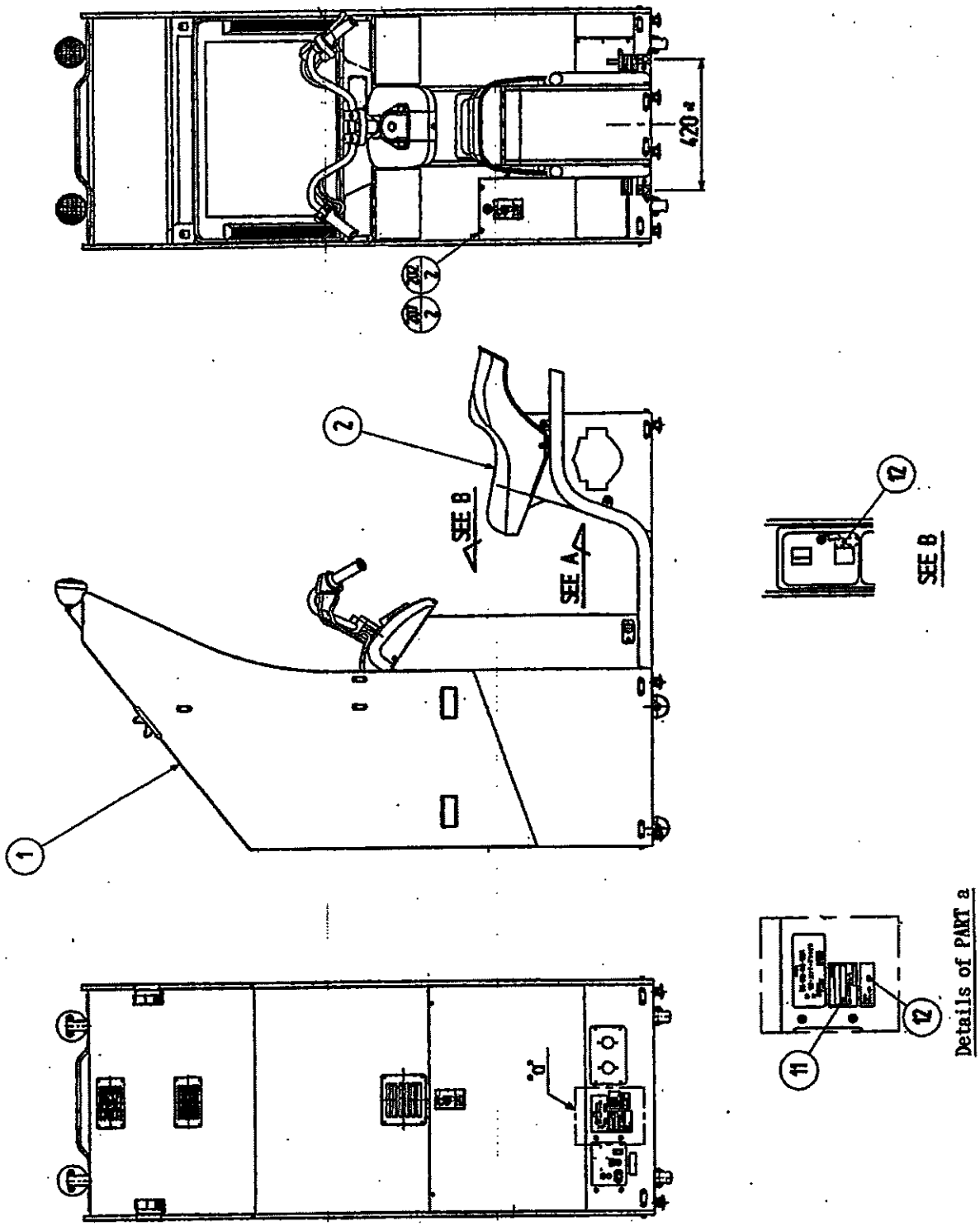
6. DESIGN RELATED PARTS



No.	PART NUMBER	QTY	DESCRIPTION
1	423-0318-91	1	BILLBOARD PLATE HLD STD
2	HLD-1110X	1	STICKER CABI L
3	HLD-1111X	1	STICKER CABI R
4	422-0654	1	PLAY INSTR HLD STD A
5	422-0655UK	1	PLAY INSTR HLD STD B
6	422-0656-91	1	SUB INSTR HLD STD
7	HLD-1117	1	STICKER CABI FRONT L
8	HLD-1118	1	STICKER CABI FRONT R
9	HLD-1104-A	1	STICKER MASK COVER L
10	HLD-1104-BX	1	STICKER MASK COVER R
11	HLD-1082-B	1	STICKER FUEL TANK A
12	HLD-1082-C	1	STICKER FUEL TANK B
13	HLD-1082-DX	1	STICKER TANK L
14	HLD-1082-EX	1	STICKER TANK R
15	HLD-3055-B	1	STICKER REAR FENDER L
16	HLD-3055-C	1	STICKER REAR FENDER R
17	HLD-3051-CX	2	STICKER BAR AND SHIELD

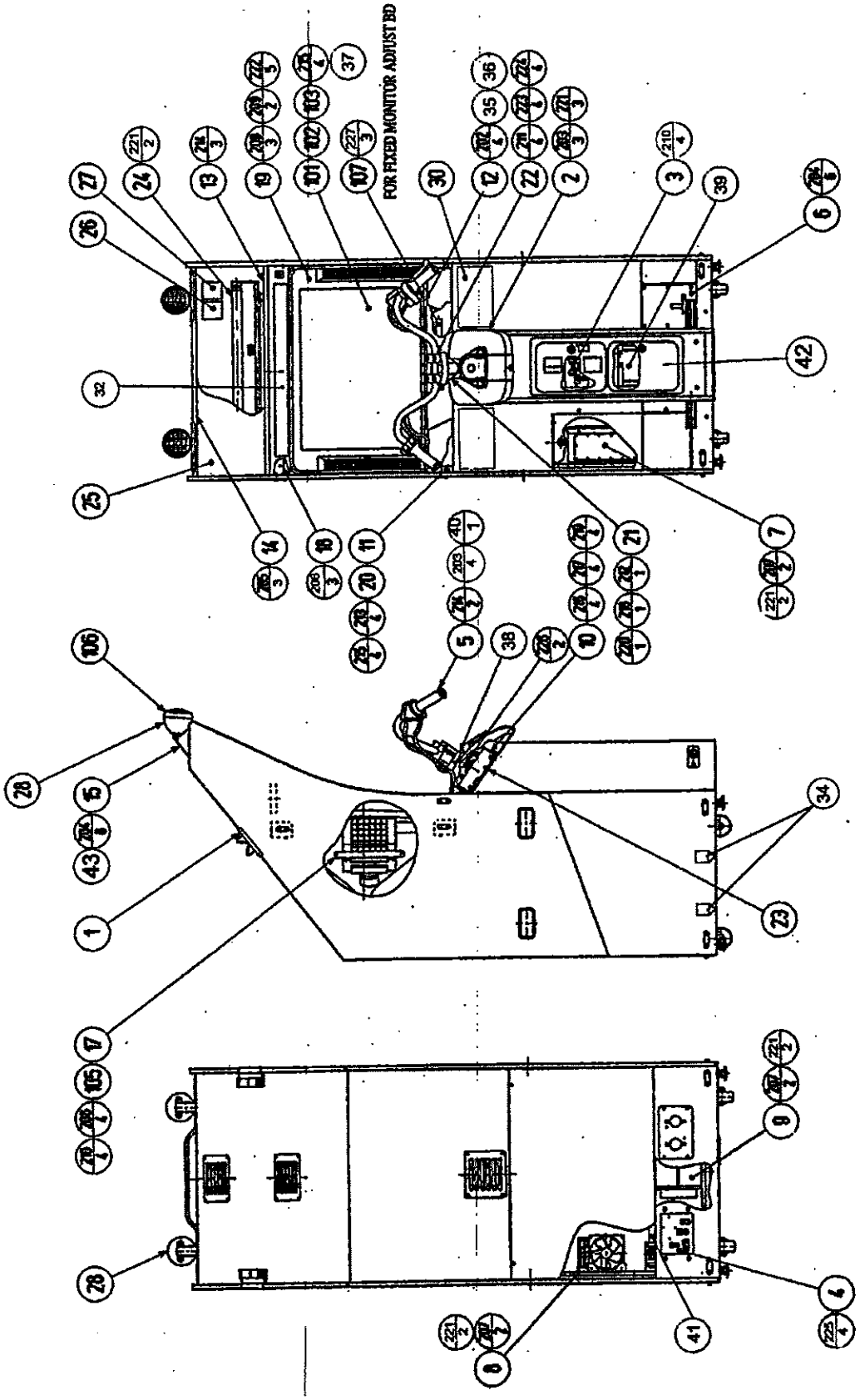
7. PARTS LIST

7.1. HLD-00001UK



	Part No.	Description	Component Ref	Qty /assy
1	HLD-10001UK	ASSY CABINET UK		2
2	HLD-3050UK	ASSY SEAT CABI UK		2
11	421-7987UK-HLD-U	STICKER ELEC SPEC UK HLD STD	BOTH CABI'S BY AC BRKT	2
12	421-7988-91UK	STICKER SERIAL NUMBER UK	1-EA SEAT & CABI LHS & RHS	4
14	SGM-3883	POLYETHYLEN COVER 950X750X1800	1EA MAIN CABINETS	2
15	SGM-4429	POLY COVER 800X300X900	1EA SEAT UNITS	2
18	HLD-INST-KIT	ASSY INSTALLATION KIT HLD TWIN		1
19	PK0142	CARTON SEAT HLD TWIN		2
20	PK0143	CARTON CABI HLD TWIN		2
21	PK0144	PALLET SEAT HLD TWIN		2
22	PK0145	PALLET CABI HLD TWIN		2
202	000-T00430-OC	M4X30 MSCR POSI TH CRM	FRONT DOORS 2-EA	4
207	068-441616-OC	M4 WSHR 16OD FLT CRM	FRONT DOORS 2-EA	4

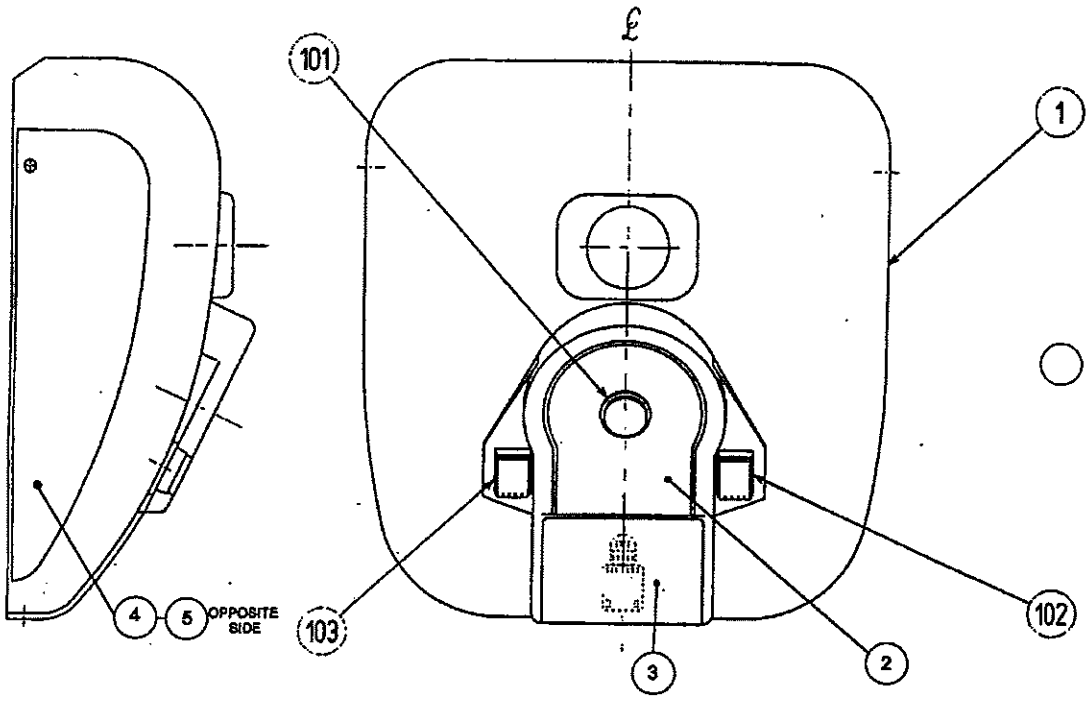
7.2. HLD-10001UK



	Part No.	Description	Component Ref	Qty /assy
1	HLD-1100UK	ASSY SUB CABI STD UK		1
2	HLD-1080UK	ASSY FUEL TANK UK		1
3	HLD-1560UK	ASSY VTS HLD UK		1
4	JPT-1540UK	ASSY AC UNIT		1
5	HLD-2000-01	ASSY HANDLE EXP		1
6	HLD-2800	ASSY FOOT BRAKE MECHA		1
7	HLD-4700UK	ASSY MAIN BD STD UK		1
8	HLD-4500UK	ASSY ELEC UK		1
9	HLD-4600UK	ASSY PWR SPLY		1
10	MJT-3650	ASSY CENTERING MECHA		1
11	HLD-1103UK	MASK HOLDER LOWER UK		1
12	HLD-1104UK	MASK COVER		1
13	HLD-1105	SASH LOWER		1
14	HLD-1106	SASH UPPER		1
15	HLD-1107	LAMP HOLDER		2
17	HLD-1109	SP BRKT	(105)-2	2
18	GBN-1076	MASK SUPPORT		1
19	TTR-1067UK	MONITOR MASK FST		1
20	117-5235	PLATE 6-30	(11)-2	2
21	MJT-3603	MOUNT BLOCK		1
22	MJT-3612	HANDLE HOLDER		2
23	HLD-1116UK	TANK BASE		1
24	HLD-1130UK	ASSY FL UK		1
25	423-0318-91UK	BILLBOARD PLATE HLD STD		1
26	LB1104	STICKER CAUTION, HOT SURFACE	NEAR FL ASSY -1	1
27	LB1102	STICKER DANGEROUS VOLTAGE		4
28	421-7501-49	STICKER 24V 20W	(15)-1 EA	2
29	DYN-0010UK	DENOMI PLATE		1
30	422-0654	PLAY INSTR HLD STD A		1
32	422-0656-91	SUB INSTR HLD STD	(19)-1	1
34	421-7020UK	STICKER CAUTION FORK		4
35	HLD-1104-A	STICKER MASK COVER L	(12)-LHS	1
36	HLD-1104-BX	STICKER MASK COVER R	(12)-RHS	1
37	GBN-1080-BUK	MONITOR WATER GUARD	(101)-1	1
38	MJT-3005	CALLAR	(10)-1	1
39	PP1087	BOX CASH FOR MINI DOOR		1
40	HLD-1127UK	COVER PLATE	(5)-1	1
41	JPT-1513UK	MECH SHIELD B	BEHIND AC BRACKET	1
42	CH1102	DOOR DFMD C220 UNIVERSAL		1
43	OS1209	RUBBER EDGE STRIP	(15)-4X0.055M	0.22
101	200-5395-24-1SA	29 CRT ASSY FOR TERMINAL		1
102	280-5112UK	BUSH FOR FST TV		4
103	PP1001	COLLAR FOR NANAO MONITOR		4
105	130-5152	SPEAKER BOX MINI DOME 12W		2
106	390-5753	ASSY LAMP 24V 20W		2
107	280-L00716-OS	STANDOFF 7OD 4ID 16L	REMOTE BD-3	3
108	OS1177	TAPE D/S PVC 50mm X 50 M ROLL	(101)-0.6	0.6
109	601-6231-C220	EDGING NEW TYPE		0.9
110	EP1317	FERRITE CORE ROUND CABLE CL	(101)-2;'REMOTE LEADS MON BD	
201	FX0012	M6 WSHR 25OD FLT BZP	(101)-4	4
202	000-T00408-OB	M4X8 MSCR POSI TH BNP	(12)-4	4

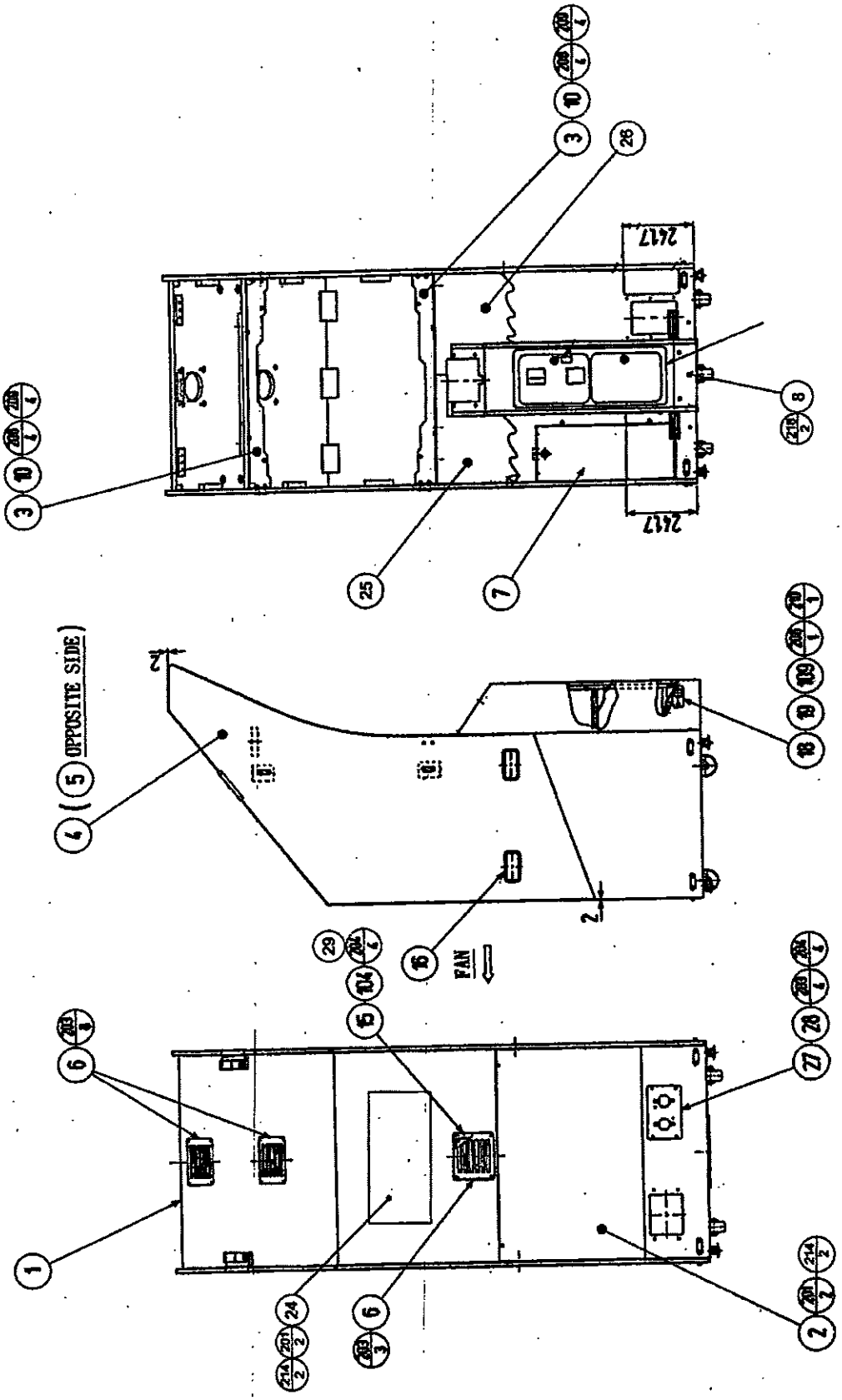
203	000-T00412-OC	M4X12 MSCR POSI TH CRM	(2)-3,(5)-4,(29)-4	11
204	000-T00420-OB	M4X20 MSCR POSI TH BNP	(6)-6,(15)-8	14
205	000-T00420-OC	M4X20 MSCR POSI TH CRM	(14)-3	3
206	000-P00416-W	M4X16 MSCR POSI PAN W/FS PAS	(105)-4,(18)-3	7
207	FX0038	M4X20 MSCR POSI PAN BZP	(7)-2,(8)-2,(9)-2	6
208	000-T00516-OB	M5X16 MSCR POSI TH BNP	(19)-3	3
209	000-T00530-OB	M5X30 MSCR POSI TH BNP	(19)-2	2
210	FX0155	N6X1/2" S/TAP POSI FLG BZP	(17)-4,(3)-4	7
211	020-000620-OZ	M6X20 MSCR SKT CAP BNP	(22)-4	4
212	020-001020-OZ	M10X20 MSCR SKT CAP BNP	(21)-1	1
213	031-000630-OC	M6X30 CRG BLT CRM	(11)-4	4
214	FX0011	M4 NUT FLG SER BZP	(13)-3,(15)-2,(5)-2	7
215	FX0013	M6 NUT FLG SER BZP	(11)-4,(101)-4	8
216	FX0213	M8 NUT BZP	(10)-4	4
217	FX0365	M8 WSHR FORM A FLT BZP	(10)-4	4
218	000-F1000-OB	M10 WSHR FORM A FLT BNP	(21)-1	1
219	FX0261	M8 WSHR SPR BZP	(10)-4	4
220	060-S01000-OB	M10 WSHR SPR BNP	(21)-1	1
221	068-441616-OC	M4 WSHR 16OD FLT CRM	(24)-2,(2)-3,(7)-2,(8)-2,(9)-2	11
222	FS1027	M5 WSHR 19OD FLT BNP	(19)-2,(4)-4	6
223	FX0413	M6 WSHR FORM A BNP	(22)-4	4
224	FX0398	M6 WSHR SPR BNP	(22)-4	4
225	FS1007	M5X25 MSCR SKT BH BNP	(4)-4	4
226	000-P00435-S	M4X35 MSCR POSI PAN W/S	(24)-2	2
227	000-P00325-W	M3X25 MSCR POSI PAN W/FS PAS	REMOTE BD -3	3
228	000-P00408-W	M4X8 MSCR POSI PAN W/FS PAS	(10),(3),2x(18),(LINK PLATE)	5
229	FX0072	M3X12 MSCR POSI CSK BZP	(40)-2	2
230	FX0165	N8X1/2" S/TAP POSI FLG BNP	(41)-2	2
231	050-F00400	M4 NUT FLG	(307)-1	1
301	600-9130-44K	WIRE HARN EARTH,1300mm,2xM4	(3) TO MONITOR BRKT	1
302	LM9411	LOOM EARTH 600mm	(4)-1 TO LINK PLATE	1

7.3. HLD-1080UK



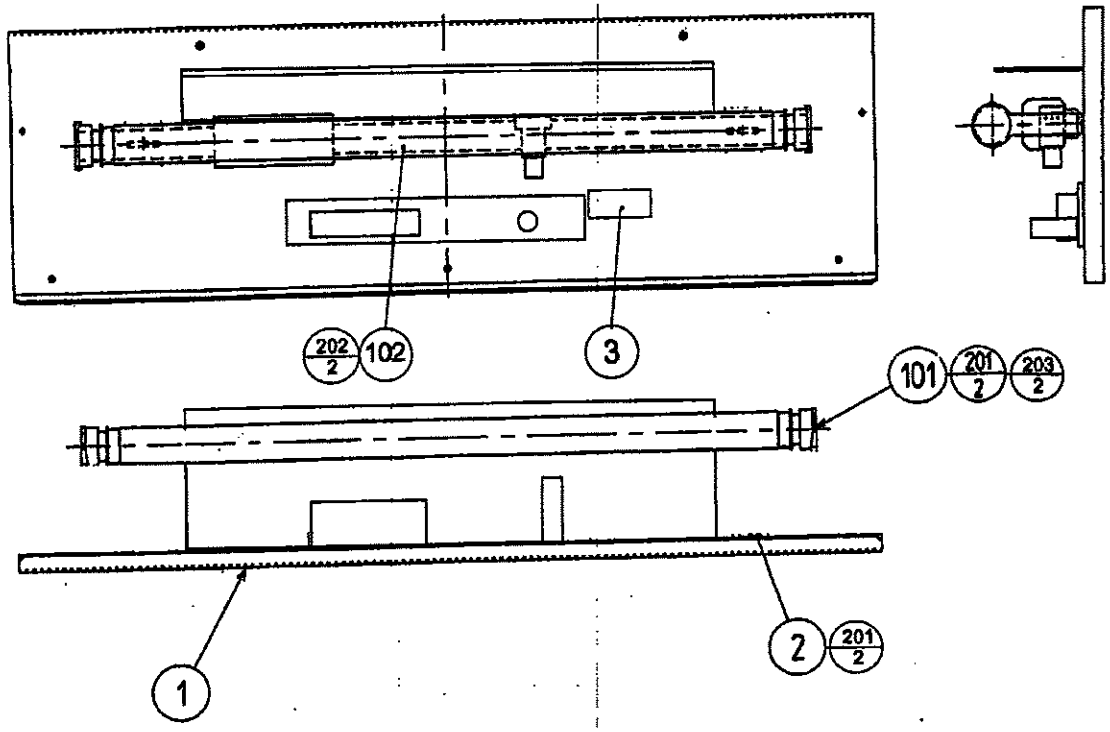
	Part No.	Description	Component Ref	Qty /assy
1	HLD-1082-A	FUEL TANK BLANK		1
2	HLD-1082-B	STICKER FUEL TANK A		1
3	HLD-1082-C	STICKER FUEL TANK B		1
4	HLD-1082-DX	STICKER TANK L		1
5	HLD-1082-EX	STICKER TANK R		1
101	509-0161	SW PB TYPE 1T YEL W/LAMP		1
102	509-5779-RE-CVT	SW PB W/LAMP 6V RED		1
103	509-5779-YE-CVT	SW PB W/LAMP 6V YELLOW		1
301	600-6985-045	WIRE HARN FUEL TANK		1

7.4. HLD-1100UK



	Part No.	Description	Component Ref	Qty /assy
1	HLD-1101UK	WOODEN CABINET		1
2	HLD-1102UK	BACK DOOR		1
3	GBN-1074XUK	MONITOR SUPPORT		2
4	HLD-1110X	STICKER CABI L		1
5	HLD-1111X	STICKER CABI R		1
6	105-5239-04	AIR VENT BLACK		3
7	HLD-1121UK	FRONT DOOR		1
8	HLD-0005UK	CASTOR BRKT	TO FRONT OF CCT	1
10	117-5235	PLATE 6-30	(3)-4	4
15	HN-1042X	FAN BRKT	(104)-2	2
16	253-5396-91	CABINET HANDLE		4
18	HLD-1114	FOOT REST		2
19	HLD-1115	STEP RUBBER	(18)-2	2
21	HLD-1150UK	ASSY DC HARNESS UK		1
24	HLD-1126UK	MONITOR DOOR		1
25	HLD-1117	STICKER CABI FRONT L		1
26	HLD-1118	STICKER CABI FRONT R		1
27	HLD-1119UK	FIBRE LID BASE		1
28	HLD-1122	FIBRE LID		2
29	FN1012	MESH GUARD METAL 120mm FAN	(104)-1	1
104	260-0011-02	AXIAL FLOW FAN AC100V 50-60Hz		1
109	253-5416UK	END CAP UK	(18)-2	2
110	MA1007	CASTOR SWIVEL 63mm NYLON	(8)-1	1
111	280-A02064-WX	ROUTER TWIST D20 SO6.4 WOOD X		11
112	280-A01264-WX	ROUTER TWIST D12 SO6.4 WOOD X		8
113	280-A00500-WX	ROUTER TWIST D5 WOOD XLAR		16
114	280-N01010-0B	SLIT HARN WRAP 10mm DIA 1M BLK	(313) - 600mm	1
115	PP1067	COVER PLASTIC POWER SUPPLY	CASTOR PLATES	2
201	000-T00425-OB	M4X25 MSCR POSI TH BNP	(2)-2,(24)-2	4
203	000-T00420-OB	M4X20 MSCR POSI TH BNP	(6)-12,(27)-4	16
204	000-P00312-W	M3X12 MSCR POSI PAN W/FS PAS	(104)-4,(28)-4	8
206	030-000620-SB	M6X20 BLT W/S BNP	(18)-1	1
208	031-000630-OC	M6X30 CRG BLT CRM	(3)-8	8
209	FX0013	M6 NUT FLG SER BZP	(3)-8	8
210	FX0400	M8 WSHR FORM A FLT BNP	(18)-1	1
214	068-441616-OB	M4 WSHR 16OD FLT BNP	(2)-2,(24)-2	4
215	000-P00412-W	M4X12 MSCR POSI PAN W/FS PAS	(3)-2,(104)-1	3
216	FX0449	M4 WSHR TOOTH EXT CSK BZP	(104)-1	1
217	OS1195	RIVET SNAP MOSS SR1811	(29)-4	4
218	FX0195	M8X25 SET BZP	(8)-2	2
219	FX0273	M6X12 SET BZP	(110)-4	4
301	600-6985-026	WIRE HARN SPEAKER		1
306	600-6985-032UK	WIRE HARN EXT AC100V		1
307	600-6985-033UK	WIRE HARN FL		1
308	600-6985-035UK	WIRE HARN EXT RGB		1
311	600-6985-207UK	WIRE HARN FAN EXT		1
312	600-6985-004	WIRE HARN EXT SMALL LAMP		1
313	600-6985-030UK	WIRE HARN EXT BASS SHAKER		1
314	600-6985-034	WIRE HARN EXT LEADER LAMP	TEMPORARY	1
315	600-9065-44K	WIRE HARN EARTH 650mm M4/M4	(3)-1 TO (3)-1	1

7.5. HLD-1130UK

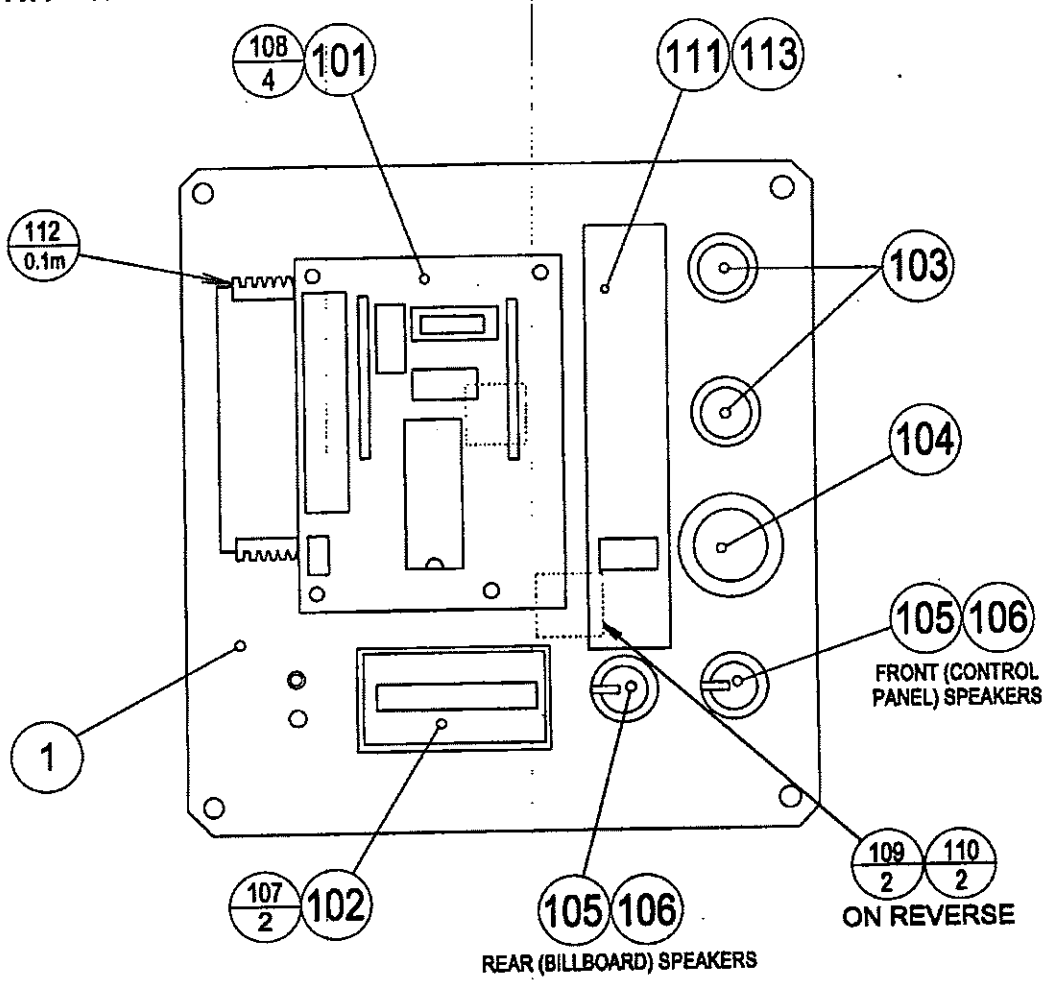


	Part No.	Description	Component Ref	Qty /assy
1	HLD-1131UK	WOOD BASE		1
2	HLD-1132UK	BRKT		1
3	421-7501-17	STICKER FL 20W	(101)-1	1
101	390-5695-20-AUK	FL TRAY 110V 20W		1
102	390-5695-18-BUK	FL TUBE 18W 600L 25.4DIA WHITE		1
103	280-A00500-WX	ROUTER TWIST D5 WOOD XLAR		3
201	FX0163	N8X1/2" S/TAP POSI FLG BZP	(2)-2,(101)-2	4
202	FX0021	M4X8 MSCR POSI PAN BZP	(102-CLIPS)-2	2
203	068-441616	4.4 WSHR 16X1.6 FLT BZP	(101)-2	2

7.6. HLD-1150UK

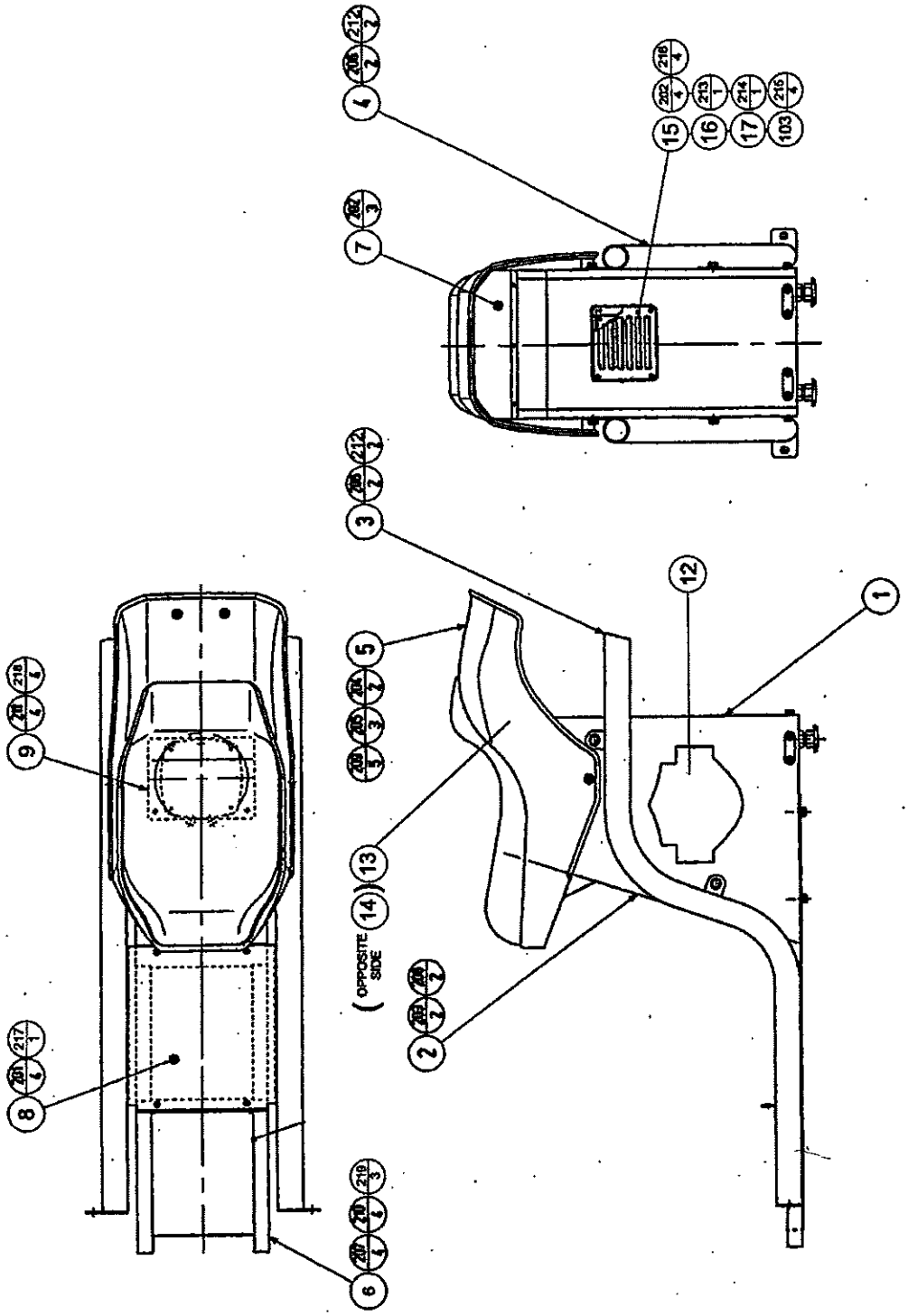
	Part No.	Description	Component Ref	Qty /assy
101	280-N01010-OB	SKIT HARN WRAP 10mm DIA	037UK & 038UK ON TRUNK	0.6
102	OS1174	CABLE TIE NYLON 100mm	WIRE TRUNK	17
301	600-6985-027UK	WIRE HARN EXT SW REGU 10P		1
302	600-6985-028UK	WIRE HARN EXT SW REGU 12P		1
303	600-6985-029UK	WIRE HARN EXT SW REGU 12P		1
304	600-6985-031UK	WIRE HARN EXT SOUND VR		1
305	600-6985-036UK	WIRE HARN EXT COIN		1
306	600-6985-037UK	WIRE HARN EXT CNTRL PNL		1
307	600-6985-038UK	WIRE HARN EXT CNTRL VR		1
308	600-6985-039	WIRE HARN EXT SSR		1
309	600-9090-44K	WIRE HARN EARTH 900mm M4/M4	(12)TO MONITOR BRKT LWR	1

7.7. HLD-1560UK



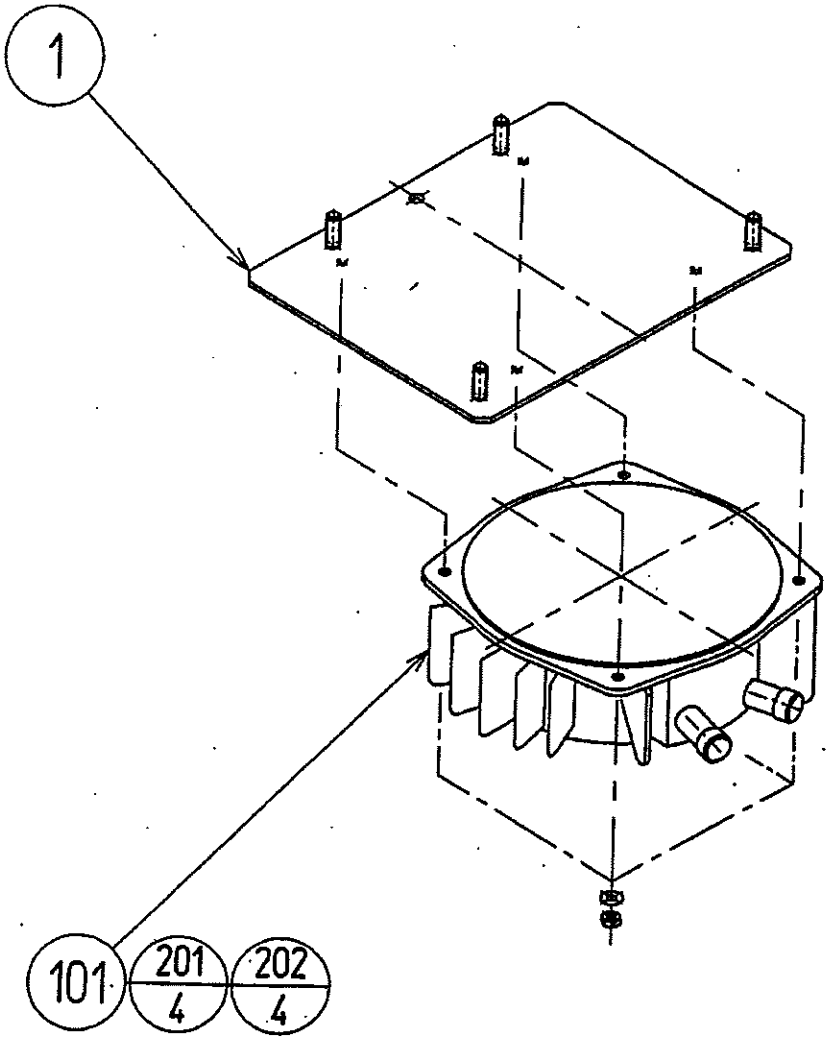
	Part No.	Description	Component Ref	Qty /assy
1	JPT-1561UK	VTS BRKT		1
101	EP1374	CREDIT BD KLINGON PLUS		1
102	EP1003	COUNTER IMPULSE, PANEL W/CLIP		1
103	SW1100	SWITCH MOMENTARY 0.11" TAB	TOP 2 HOLES	2
104	SW1108	SWITCH PB MOMENT 35A SNAPIN	3RD HOLE DOWN	1
105	EP1331	POT 4.7K LIN 0.11" TAB	TABS FACING UPWARDS	2
106	EP1018	KNOB 15MM DIA FOR 6.3MM SHAFT	(105)-2	2
107	OS1098	CRIMP BELL END SMALL	(102)-2	2
108	280-L02040-PS	STANDOFF 20mm 4mm HOLE PANEL S	(101)-4	4
109	OS1181	CABLE TIE BASE 19mmSq SELF/ADH		2
110	OS1174	CABLE TIE, NYLON 100mm		2
111	HLD-1562UK	STICKER VTS		1
112	601-5526-1000	BUSH 1.6t 1000mm	100mm ON ITEM (1)	0.1
113	LB1028	LABEL 110VAC MINI YELL/BLK	NEXT TO DEGAUSS SWITCH	1
201	000-P00408-W	M4X8 MSCR POSI PAN W/FS PAS	(EARTH)-1	1
301	600-6985-101UK	WIRE HARN VTS HLD TW		1
302	LM9212	LOOM EARTH 400mm	VTS TO COIN DOOR	1
303	600-9220-44K	WIRE HARN EARTH 2200mm M4/M4 K	VTS TO AC BRKT	1

7.8. HLD-3050UK



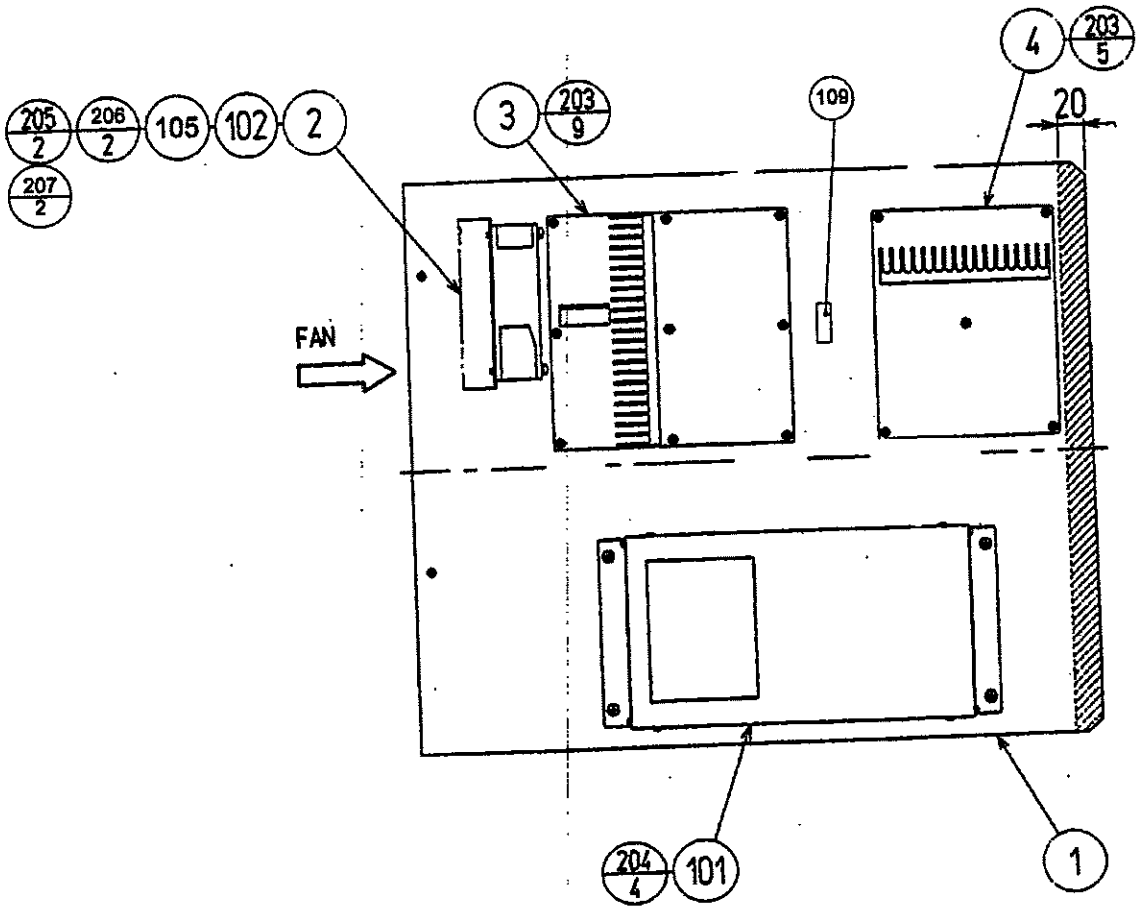
	Part No.	Description	Component Ref	Qty /assy
1	HLD-3051UK	SEAT CABINET UK		1
2	HLD-3052UK	MAINTENANCE LID		1
3	HLD-3053	EX PIPE L		1
4	HLD-3054	EX PIPE R		1
5	HLD-3055-01	REAR FENDER UK		1
6	HLD-3057UK	JOINT FRAME		1
7	HLD-3058UK	FENDER STAY UK		1
8	HLD-3059UK	JOINT LID		1
9	HLD-3600	ASSY VIBRATOR		1
12	HLD-3051-CX	STICKER BAR AND SHIELD	(1)-2	2
13	HLD-3055-B	STICKER REAR FENDER L	(5)-1	1
14	HLD-3055-C	STICKER REAR FENDER R	(5)-1	1
15	HN-1042X	FAN BRKT	(103)-2	2
16	105-5239-04	AIR VENT BLACK		1
17	FN1012	MESH GUARD METAL 120mm FAN		1
103	260-0011-02	AXIAL FLOW FAN AC100V 50-60Hz		1
104	280-A00500-WX	ROUTER TWIST D5 WOOD XLAR		5
201	000-T00408-OB	M4X8 MSCR POSI TH BNP	(8)-4	4
202	000-T00416-OB	M4X16 MSCR POSI TH BNP	(7)-3,(16)-4	7
203	000-T00425-OB	M4X25 MSCR POSI TH BNP	(2)-2	2
204	000-T00412-OC	M4X12 MSCR POSI TH CRM	(5)-4	4
205	000-T00425-OC	M4X25 MSCR POSI TH CRM	(5)-3	3
206	030-000820-SC	M8X20 BLT W/S CRM	(3)-2,(4)-2	4
207	030-000860-SB	M8X60 BLT W/S BNP	(6)-4	4
208	068-441616-OB	M4 WSHR 16OD FLT BNP	(2)-2	2
209	068-441616-OC	M4 WSHR 16OD FLT CRM	(5)-7	7
210	FS1014	M8 WSHR FORM C FLT BNP	(6)-4	4
211	FX0219	M6 NUT NLK BZP	(9)-4	4
212	060-F00800-0C	M8 WSHR FORM A FLT CRM	(3)-2,(4)-2	4
213	000-P00408-W	M4X8 MSCR POSI PAN W/FS PAS	(103)-1,(6)-2	3
214	FX0449	M4 WSHR TOOTH EXT CSK BZP	(103)-1	1
215	000-P00312-W	M3X12 MSCR POSI PAN W/FS PAS	(15)-4	4
216	OS1195	RIVET SNAP MOSS SR1811	(103)-4	4
217	FX0011	M4 NUT FLG SER BZP	(8)-1	1
218	FX0248	M6 WSHR FORM A FLT BZP	(9)-4	4
219	280-B01110-PM	SADDLE CLAMP 11X10 PANEL MED	3x(6)	3
301	600-6985-025UK	WIRE HARN BASS SHAKER IN		1
303	600-6985-208UK	WIRE HARN VIBRATOR FAN		1
304	600-6985-210UK	WIRE HARN VIBRATOR FAN EXT		1
305	LM9211	LOOM EARTH 400mm	-6	1

7.9. HLD-3600



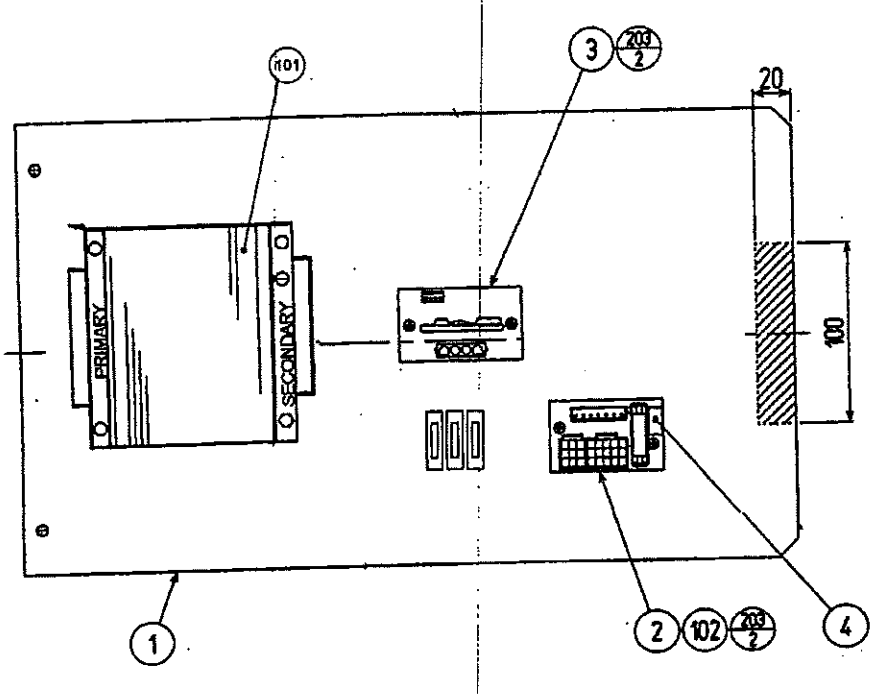
	Part No.	Description	Component Ref	Qty /assy
1	HLD-3601	MOUNT PLATE		1
101	130-5172	BASS SHAKER		1
201	FX0008	M4 NUT NLK BZP		4
202	FX0009	M4 WSHR FORM A FLT BZP	(101)-4	4
301	600-6985-044UK	WIRE HARN VIBRATOR		1

7.10. HLD-4500UK



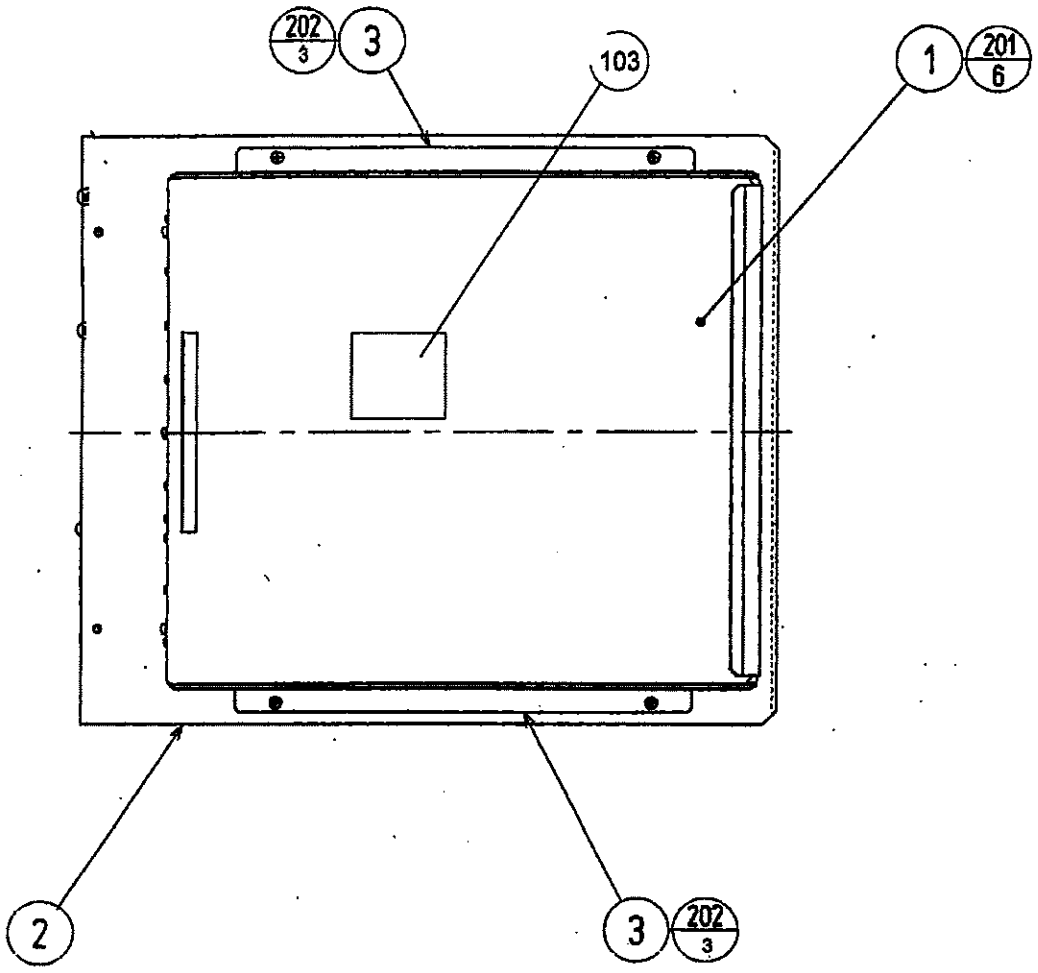
	Part No.	Description	Component Ref	Qty /assy
1	HLD-4501UK	WOODEN BASE ELEC		1
2	JPT-4102UK	FAN BRKT		1
3	838-13142	BASS AMP 50WX2		1
4	838-11650-36	EQ. PWR AMP HLD STD		1
101	400-5330-02-91	SW REGU FOR MODEL 3		1
102	260-0011-02	AXIAL FLOW FAN AC100V 50-60Hz		1
105	FN1012	MESH GUARD METAL 120mm FAN	(102)-2	2
106	280-A02064-WX	ROUTER TWIST D20 SO6.4 WOOD X		2
107	280-A01264-WX	ROUTER TWIST D12 SO6.4 WOOD X		5
108	280-A00500-WX	ROUTER TWIST D5 WOOD XLAR		5
109	421-6595-5000-F	STICKER FUSE 5000mA TYPE F	(306)-1	1
201	FX0163	N8X1/2" S/TAP POSI FLG BZP	(2)-2	2
203	FX0151	N4X1" S/TAP POSI PAN BZP	(3)-9,(4)-5	14
204	000-P00416-W	M4X16 MSCR POSI PAN W/FS PAS	(101)-4	4
205	000-P00450-W	M4X50 MSCR POSI PAN W/FS BZP	(105-2,102-1)-2	2
206	OS1195	RIVET SNAP MOSS SR1811	(105)-2EA	4
207	FX0011	M4 NUT FLG SER BZP	(205)-2	2
208	EP1307	FUSE 5AMP QB 32mm	(306)-1	1
209	FX0150	N4X5/8" S/TAP POSI CSK BZP	(306)-1	1
210	EP1361	FUSE HOLDER COVER 1 1/4"	(306)-1	1
301	600-6985-012	WIRE HARN SW REGU 10P		1
302	600-6985-013	WIRE HARN SW REGU 12P		1
303	600-6985-014	WIRE HARN SOUND AC		1
304	600-6985-015	WIRE HARN SOUND PASS		1
305	600-6985-016	WIRE HARN SOUND IN		1
306	600-6985-017UK	WIRE HARN BASS SHAKER OUT		1
307	600-6985-018	WIRE HARN SOUND VR		1
308	600-6985-019	WIRE HARN SPEAKER OUT		1

7.11. HLD-4600UK



	Part No.	Description	Component Ref	Qty /assy
1	HLD-4601UK	WOODEN BASE PWR SPLY		1
2	838-11856UK	CONN BD W/FUSE		1
3	839-1011-01	SSR 1 EA BD		1
4	421-6595-5000-T	STICKER FUSE 5000mA TYPE T	(2)-1 TEMPORARY	1
5	421-6595-10000-T	STICKER FUSE 10000mA TYPE T	ON FUSE HOLDERS-3	3
101	560-5380UK	TRANSFORMER HRD TW		1
102	514-5078-5000	FUSE 5X20 CERAMIC SB 5000mA	(2)-1	1
103	514-5080-10000UK	FUSE 32X6.35 HRC SB 10000mA	FUSEHOLDERS-3	3
104	EP1361	FUSE HOLDER COVER 1 1/4"	FUSEHOLDERS -3	3
105	PP1108	FUSE COVER 20X6mm	(2)-1	1
106	280-A01264-WX	ROUTER TWIST D12 SO6.4 WOOD X		1
107	280-A01264-WX	ROUTER TWIST D12 SO6.4 WOOD X		5
108	280-A00500-WX	ROUTER TWIST D5 WOOD XLAR		4
203	FX0151	N4X1" S/TAP POSI PAN BZP	(2)-2,(3)-2	4
204	000-P00616-W	M6X16 MSCR POSI PAN W/FS PAS	(101)-4	4
205	FX0150	N4X5/8" S/TAP POSI CSK BZP	FUSEHOLDERS	3
301	600-6985-006UK	WIRE HARN AC100V OUT		1
302	600-6985-007UK	WIRE HARN CONN BD OUT		1
303	600-6985-008UK	WIRE HARN CONN BD MONITOR		1
304	600-6985-009UK	WIRE HARN XFMR OUT 12/23V		1
305	600-6985-010	WIRE HARN SSR		1
306	600-6985-011UK	WIRE HARN SW REGU AC		1
307	600-6985-208UK	WIRE HARN FUSED AC OUT 23V		1
308	600-6985-209UK	WIRE HARN FUSED AC OUT 12.8V		1
309	LM9712	LOOM EARTH 1500mm	XFMR TO MECHA	1
310	600-9120-45K	WIRE HARN EARTH,1200mm,M4,M5	XFMR TO VTS	1
311	600-9110-45K	WIRE HARN EARTH,1100mm,M4,M5	XFMR TO BIKE	1
312	600-9020-45Z	WIRE HARN BRAID 200mm M4,M5	XFMR TO AC BRKT	1

7.12. HLD-4700UK

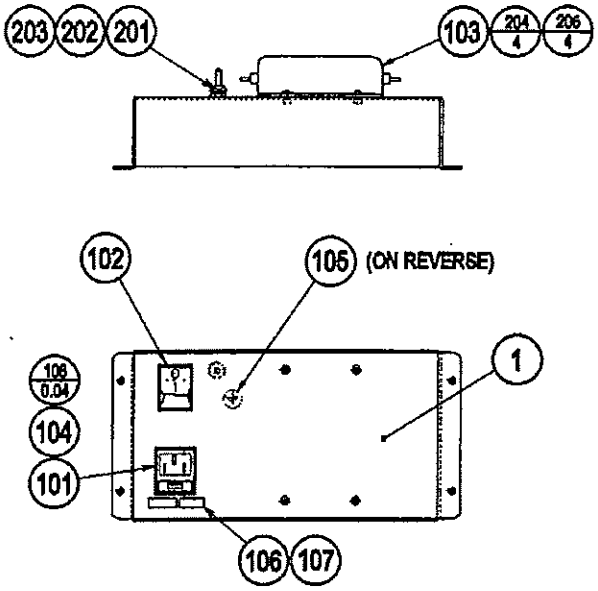


	Part No.	Description	Component Ref	Qty /assy
1	HLD-4400	ASSY SHIELD CASE		1
2	HLD-4701UK	WOODEN BASE MAIN BD		1
3	105-5241	SHIELD CASE BRKT		2
101	280-A02064-WX	ROUTER TWIST D20 SO6.4 WOOD X		4
102	280-A01264-WX	ROUTER TWIST D12 SO6.4 WOOD X		1
103	LB1101	STICKER WARNING BATTERY	(1)-LID	1
104	EP1317	FERRITE CORE ROUND CABLE CLAMP	(303)-1	1
201	000-P00408-W	M4X8 MSCR POSI PAN W/FS PAS	(3)-6,EARTH-1	7
202	000-P00416-W	M4X16 MSCR POSI PAN W/FS PAS	(2)-2EA	4
301	600-6985-020	WIRE HARN MODEL 3 DC		1
302	600-6985-021	WIRE HARN MODEL 3 SOUND		1
303	600-6985-022	WIRE HARN MODEL 3 RGB		1
304	600-6985-023	WIRE HARN MODEL 3 DIGITAL I/O		1
305	600-6985-024	WIRE HARN ANALOG I/O		1
306	600-9090-45K	WIRE HARN EARTH,900mm,M4,M5	(3)-1	1

7.13. HLD-INST-KIT

	Part No.	Description	Component Ref	Qty /assy
1	PK0146	CARTON INST KIT HLD TWIN UK		1
2	HLD-0001UK	UPPER JOINT		1
3	HLD-0002UK	LOWER JOINT		2
4	HLD-0004UK	POP HOLDER		2
5	429-0162-91UK	POP PANEL HLD STD		1
6	422-0655UK	PLAY INSTR HLD STD B		2
7	HLD-0006UK	LOCK BAR		2
204	000-T00620-OC	M6X20 MSCR POSI TH CRM	EXHAUST PIPES 2-EA	4
205	030-000830-SB	M8X30 BLT W/S BNP		8
206	060-F00800-OB	M8 WSHR FORM A FLT BNP		8
207	000-T00420-OB	M4X20 MSCR POSI TH BNP		2
208	068-441616-OB	M4 WSHR 16OD FLT BNP		2
402	OS1019	SELF SEAL BAG 9X12.3/4		1
403	420-6367-01UK	SERVICE MANUAL HARLEY TWIN UK		1
404	310-5285-290150UK	FLEX TUBE 29-0150CM		2
408	310-5287-29	CONN L29		4
411	220-5373	POT VOL CONT B-5K OHM		1
412	600-6275-0500	CABLE FIBER OPTIC 5mm x 500cm		2
413	514-5078-5000	FUSE 5X20 CERAMIC SB 5000mA		2

7.14. HLD-1540UK



	Part No.	Description	Component Ref	Qty /assy
1	JPT-1541UK	AC BRKT		1
101	EP1302	EUROSOCKET FUSED 10A 250Vac		1
102	SW1109	SWITCH ROCKER 250V AC		1
103	EP1344	FILTER EMI 10A BLP		1
104	514-5078-5000	FUSE 5X20 CERAMIC SB 5000mA	(101)-1	1
105	LB1096	STICKER PROTECTIVE EARTH	NEXT TO EARTH STUD ON INSIDE	1
106	LB1000	LABEL 5A (AC BRKT FUSE)	NEXT TO (101) ON OUSTIDE	1
107	LB1100	STICKER FUSE TYPE T	NEXT TO (101) ON OUTSIDE	1
108	310-5029-D508	HEAT SHRINK SLEEVING 50.8DIA	AROUND EUROSOCKET	0.04
201	FX0210	M4 NUT BZP	(EARTH)-1	1
202	FX0243	M4 WSHR SPR BZP	(EARTH)-1	1
203	FX0011	M4 NUT FLG SER BZP	(EARTH)-1	1
204	FX0399	M3X8 MSCR POSI PAN BZP	(103)-4	4
205	FX0263	M3 WSHR FORM A FLT BZP	(103)-4	4
301	600-6925-001UK	WIRE HARN AC BRKT(JPT U/R)		1
302	600-6985-002UK	WIRE HARN AC OUT (PRIMARY)		1

8. APPENDIX A - ELECTRICAL SCHEMATIC

8.1. WIRE COLOURS

THE WIRE COLOUR CODE IS AS FOLLOWS:

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

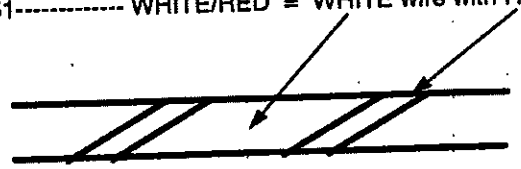
Wires other than those of any of the colours listed above will be displayed by 2 alphanumeric characters:

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

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

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

[Example] 51---------- WHITE/RED = WHITE wire with RED stripes

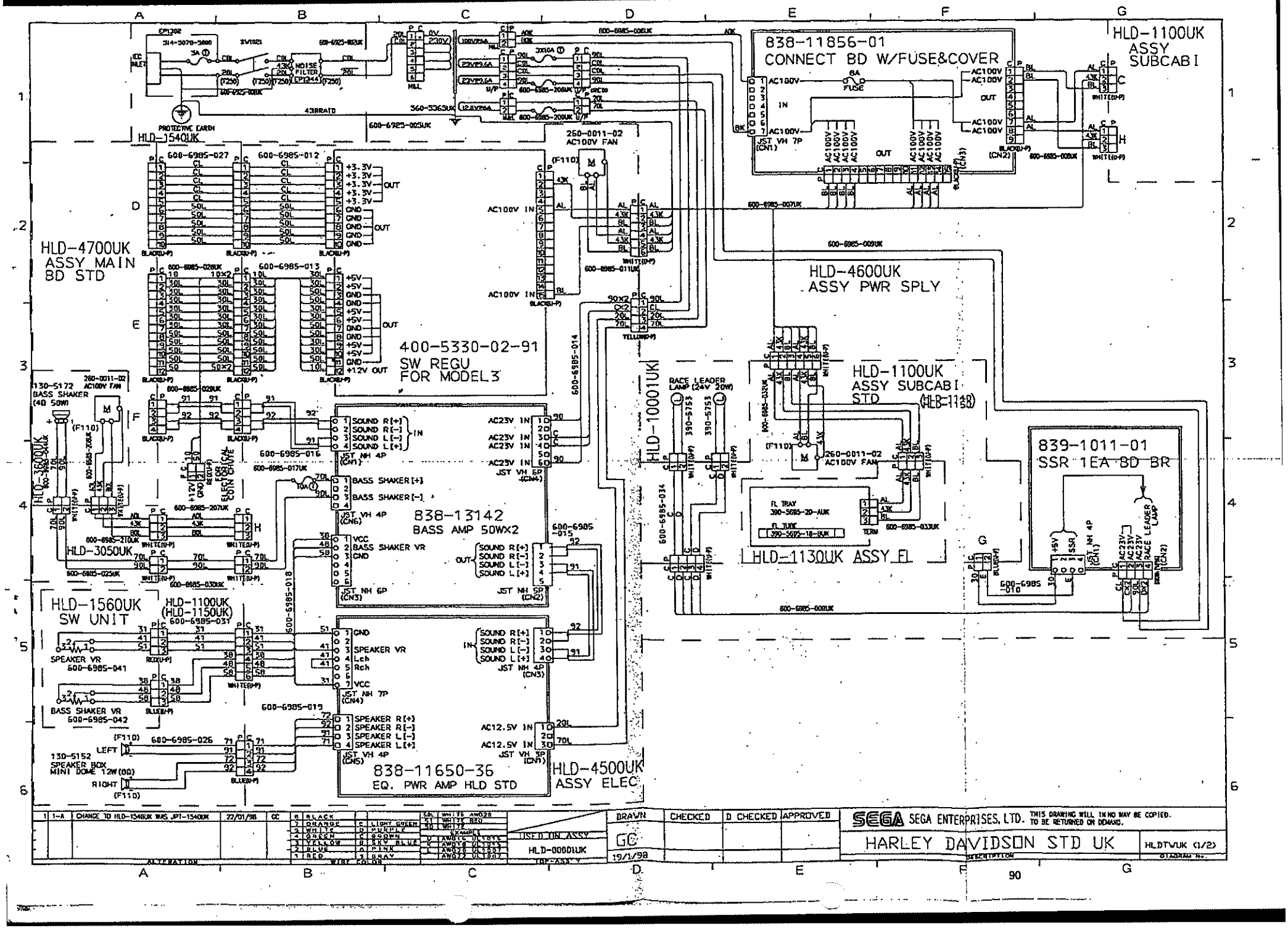


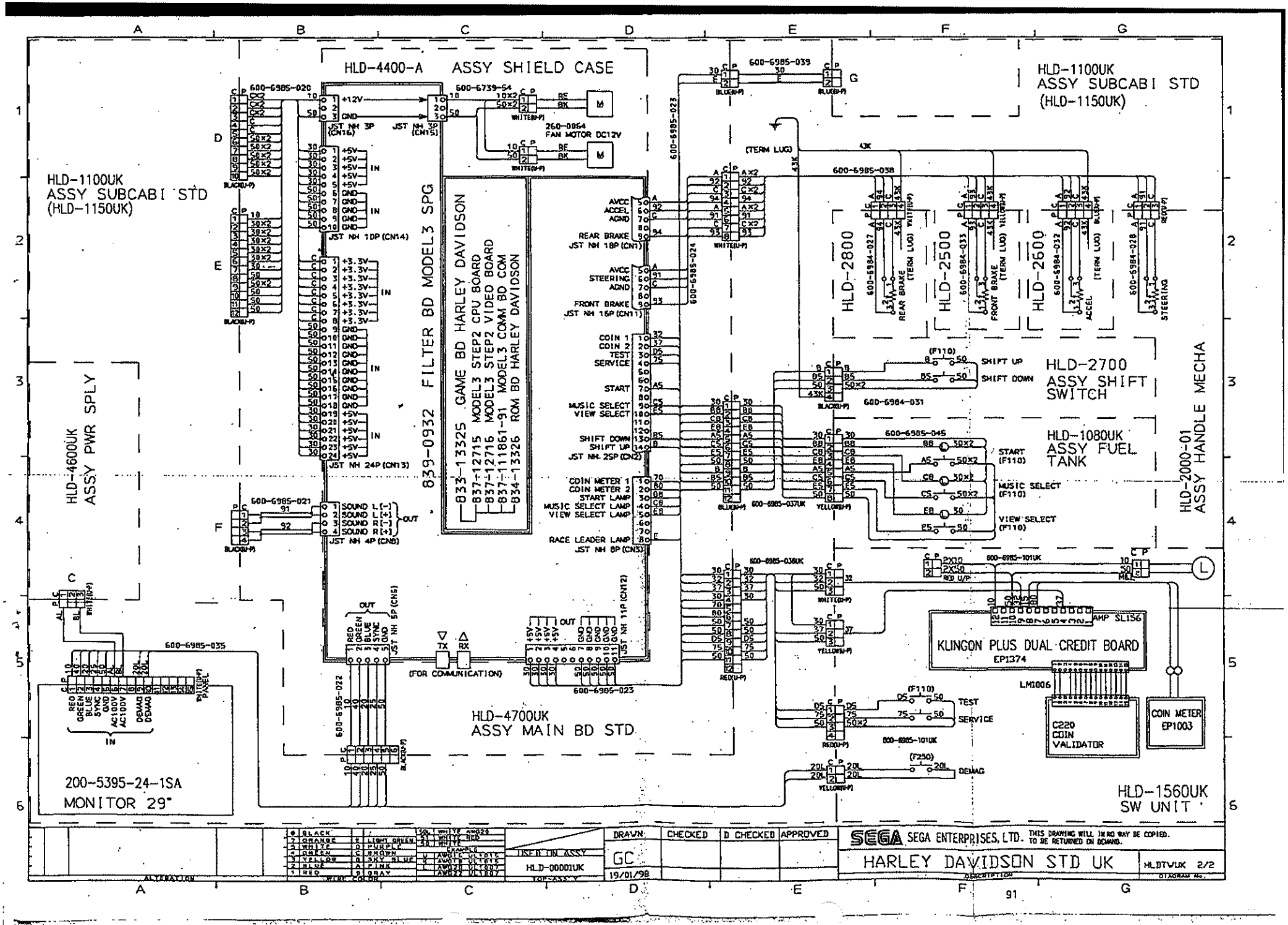
Note 2: The character following the wire colour code indicates the size of the wire.

K:	AWG18, UL1015
L:	AWG20, UL1007
None	AWG22, UL1007

8.2. ELECTRICAL SCHEMATIC

The following 3 pages contains the electrical schematic for this machine.


838-11856-01
CONNECT BD W/FUSE&COVER
HLD-1100UK
ASSY
SUBCABI
HLD-4700UK
ASSY MAIN
BD STD
400-5330-02-91
SW REGU
FOR MODEL3
HLD-4600UK
ASSY PWR SPLY
HLD-1100UK
ASSY SUBCABI
STD
(HLB-1158)
HLD-10001UK
839-1011-01
SSR 1EA BD BR
838-13142
BASS AMP 50WX2
HLD-1130UK ASSY FL
HLD-1560UK
SW UNIT
HLD-1100UK
(HLD-1150UK)
838-11650-36
EQ. PWR AMP HLD STD
HLD-4500UK
ASSY ELEC
HLD-1540UK
HLD-3600UK
HLD-3050UK
260-0011-02
AC100V FAN
130-5172
BASS SHAKER
130-5152
SPEAKER BOX
MINI DOME 12W(OD)
RACE LEADER
LAMP (24V 20W)
FL TRAY
390-5695-20-AUK
FL TUBE
390-5692-18-BUK
SEGA SEGA ENTERPRISES, LTD.
THIS DRAWING WILL IN NO WAY BE COPIED.
TO BE RETURNED ON DEMAND.
HARLEY DAVIDSON STD UK
HLDTWUK (1/2)
DRAWN
CHECKED
D CHECKED
APPROVED
GC
19/1/98
HLD-0000IUK
CHANGE TO HLD-1540UK WAS JPT-1540UK
22/01/98
GC


HLD-4400-A ASSY SHIELD CASE
839-0932 FILTER BD MODEL3 SPG
833-13325 GAME BD HARLEY DAVIDSON
837-12715 MODEL3 STEP2 CPU BOARD
837-12716 MODEL3 STEP2 VIDEO BOARD
837-111861-91 MODEL3 COMM BD COM
834-13326 ROM BD HARLEY DAVIDSON
HLD-1100UK
ASSY SUBCABI STD
(HLD-1150UK)
HLD-4600UK
ASSY PWR SPLY
HLD-4700UK
ASSY MAIN BD STD
HLD-2800
HLD-2500
HLD-2600
HLD-2700
ASSY SHIFT
SWITCH
HLD-1080UK
ASSY FUEL
TANK
HLD-2000-01
ASSY HANDLE MECHA
KLINGON PLUS DUAL CREDIT BOARD
EP1374
C220
COIN
VALIDATOR
COIN METER
EP1003
200-5395-24-1SA
MONITOR 29"
HLD-1560UK
SW UNIT
JST NH 3P (CN16)
JST NH 3P (CN15)
JST NH 10P (CN14)
JST NH 24P (CN13)
JST NH 4P (CN8)
JST NH 5P (CN9)
JST NH 11P (CN12)
JST NH 18P (CN1)
JST NH 16P (CN11)
JST NH 2SP (CN2)
JST NH 8P (CN3)
260-0864
FAN MOTOR DC12V
(FOR COMMUNICATION)
SHIFT UP
SHIFT DOWN
START (F110)
MUSIC SELECT (F110)
VIEW SELECT (F110)
TEST
SERVICE
DEMAG
COIN METER
DRAWN
CHECKED
D CHECKED
APPROVED
GC
19/01/98
HLD-00001UK
SEGA ENTERPRISES, LTD.
HARLEY DAVIDSON STD UK
HLDTVUK 2/2