

ELECTROCOIN AUTOMATICS LTD
UPRIGHT
SERVICE MANUAL

AQUADACK

TAITO CORPORATION

PART NO 64045

AQUAJACK

SPECIFICATIONS:

1. Power Supply	240/220 V AC (Hantarex US 250 alimentación)
2. Power Consumption	40W Adjustahill Dip switches 20" Hantarex < M 141W
3. Play Pricing	11.7461111111180811ul1 Adjustable on Dip switches
4. Power Consumption	20" Hantarex 9000E colour monitor
5. Dimensions	Width : 588mm
4. TV Monitor	Depth : 746mm
5. Dimensions	Height : 1808mm

6. Weight

Approximadamente: 140 KG

* The specifications and appearance may be changed for improvement.

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PRECAUTIONS TO BE OBSERVED WHEN INSTALLING MACHINE

IN THE VIDEO GAME! Es solo para la USUA INDOOR.

THIS VIDEO GAME IS FOR INDOOR USE ONLY.
WHEN INSTALLING AND PLACING IN PLACES MENTIONED BELOW

1. PLACES SUBJECT TO CONDENSATION AND HIGH HUMIDITY/HIGH PROXIMITY
OR AN INDOOR SWIMMING POOL OR SHOWER.
2. PLACES SUBJECT TO DIRECT SUNLIGHT/VICINIDAD DEL ALTO.
3. PLACES SUBJECT TO DIRECT SUNLIGHT/VICINIDAD DEL ALTO.
4. FLAMMABLE OR VOLATILE CHEMICALS/QUÍMICOS EN SUPERFICIES.
5. EVEN SURFACES.
6. VICINITY OF FIRE EXITS AND FIRE EXTINGUISHERS.
7. DUSTY ATMOSPHERE.

INSTALLATION

IT IS IMPORTANT TO AVOID BENDING AND DROPPING OF THIS MACHINE AS CERTAIN PARTS
ARE FRAGILE. UPON REMOVAL OF THE SHIPPING CARTON EXAMINE THE EXTERIOR OF THE CABINET
UPON REMOVAL OF THE SHIPPING CARTON EXAMINE THE EXTERIOR OF THE CABINET
FOR DENTS, CRACKS OR ABSENCE OF PARTS. APPLIANCE SHOULD ONLY BE MADE BY QUALIFIED PERSONNEL FOR
A PERSONNEL OR PANAMA POSITIONS SHOULD ONLY BE MADE BY QUALIFIED PERSONNEL FOR
ANY PURPOSE.

INSPECT THE INTERIOR OF THE CABINET AS FOLLOWS:

A) CHECK THAT ALL POWER CORDS AND CONNECTORS ARE FIRMLY SEATED IN THE EDGE
CONNECTIONS OF THE PCB BOARD. IF ANY CONNECTORS ARE NOT UNNECESSARILY
QUEUED OR PLUGGED INTO CONNECTIONS, CONNECT THEM FIRMLY AS
SOME PROBLEMS MAY OCCUR IF THEY ARE PLUGGED INTO CONNECTIONS WHICH ARE NOT FIRMLY SEATED.

B) CHECK THAT ALL POWER CORDS AND SUB BOARDS ON THE GAME PCB are FIRMLY
SEATED IN THEIR SOCKETS IN THEIR SOCKETS.

C) CHECK ALL SUB ASSEMBLIES SUCH AS THE POWER SUPPLY FOR SECURE MOUNTING.

ENSURE THE MAINS SUPPLY FOR CORRECT OPERATION OF THE MACHINE, AND THAT
THE BIPOLAR PHASES ARE GOOD EARTH CONNECTION.

Safety/Maintenance

HIGH VOLTAGES EXIST WITHIN THE MACHINE. IT IS SO ADVISED THAT ONLY QUALIFIED PERSONNEL SHOULD TOUCH ANY INTERNAL PARTS OF THE MACHINE. HIGH VOLTAGES PRESENT MAY CAUSE FAULTS AND DAMAGE TO THE MACHINE, OFF BEFORE COMMENCING ANY WORK. ALWAYS TURN THE MACHINE OFF BEFORE COMMENCING ANY WORK.

HIGH VOLTAGES MAY EXIST IN ANY MONITOR LINE, EVEN WHEN THE POWER IS DISCONNECTED. EXTREME CAUTION MUST BE TAKEN TO ELECTRICAL PARTS OR THE BODY AND METAL OBJECTS HELD IN YOUR HANDS. INFORMATION ON THE MONITOR IS CONTAINED IN THE MONITOR MANUAL SUPPLIED WITH THIS MACHINE.

Condition

DO NOT USE CLEANSERS OTHER THAN THOSE SPECIFIED. IF THE CONTINUOUS CONNECTION PROTECTION
OF YOUR GAME.

IF THE CONNECTOR OR DISCONNECTION OF THE PCB, OR RESET THE DIP
SWITCHES WHILE THE POWER IS ON.

IF YOU ARE CLEANING THE PANEL, DO NOT DRY WIPE ANY OF
THE PANEL. ACETONE CAN BE USED AS A SURFACE CLEANER. AND RESULT
IN FOULING THE PLASTIC ACRYLIC SURFACES. MAY BE CLEANED WITH ANY NON-
ABRASIVE POLISHER, CLEANER.

PLAY INSTRUCTIONS

1. Yo. Estoy a punto de disparar mi arma que incluye el rifle, el cohete o la bomba para destruir el enemigo en la batalla.

2. Una onda puede ser el final de la destrucción: Bus. 'BME' en la pantalla para iniciar la escena.

3. El juego comienza cuando el jugador ha derrotado al enemigo en los tres niveles de Jack. Los jugadores pueden perder la vida.

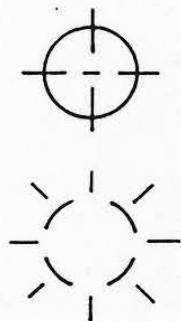
EXPLANACIÓN PARA EL MECANISMO DE FUNCIONES DE CONTROL

Control Method

Al pulsando el Control Method Ajuste H (Ajuste de velocidad) Ltr Right o Up/Down o Up/Down.

Vulcan Gun

Fuego automático completo.



MARK (LOCK ON GUN SIGHT)

MARK (ORDINARY SIGHT)
K ON GUN SIGHT

LOCK ON GUN SIGHT

Si la vista tiene un enemigo, bloquelo con su arma automática y pulse el botón FIRE y se disparará.

Lock es una función que libera la vista del enemigo. Pulse el botón FIRE cuando esté presionado.

START SUSPENSION BUTTON

Three Miles (seis millas) de distancia entre el USN y el enemigo para disparar la primera vez. Si el enemigo no aparece en la pantalla, el primer disparo es añadido.

JUMP BUTTON

Este botón se utiliza para evitar las estacadas y las bolas de fuego.

ACCELERATOR

Desplazamiento rápido si el botón P del Jack se acelera.

5. GAMING PLAY

PRESS Start Missle Button to Start.
La parte de las estrellas.
The screen changes the game mode. Aquajack departs from a garage then the play starts.

ROUND COMPOSITION

There are 8 stages. Despues de fini shing each stage the mapa redondo i>
After finishing each stage the round map is shown so that the player can
showij so the jugad or puede confirmar su score.

ROUND 1	ROUND 2	ROUND 3	ROUND 4	LAKE	ROUND 5	ROUND 6	ROUND 7	ROUND 8	LAKE
ROUND 1	ROUND 2	ROUND 3	ROUND 4	RUINS	ROUND 5	ROUND 6	ROUND 7	ROUND 8	JUNGLE
ROUND 2	ROUND 3	ROUND 4	ROUND 5	Grass Plain Village	ROUND 6	ROUND 7	ROUND 8	JUNGLE	Factory area
ROUND 3	ROUND 4	ROUND 5	ROUND 6	Rocky Mountain	ROUND 7	ROUND 8	ROUND 9	ROUND 10	Enemy base

Each round cada debe ser aclarado por derrotar al Jefe-Mech aparece a las salas (el final o f cada roun d).

6. GAME OVER QUÍ

The game ends when all 8 rounds have been cleared.
El juego termina cuando las 8 rondas han sido limpiadas. El Juego tambien termina cuando t
he game also ends when all stocks of the players' Aquajack have been lost.

7. CONTINUE PLAY

If the Game ends during playing a continued play can be played.

* After the player or the continue play reaches 0:0 Insert Coin(s) for credit and Press Start
* Al final del juego o de la continuacion jugar reches 0:0, Inser C oin(s) para crédito y botón de
iniBoton de prensa.

8.. NAME REGISTRATION

When the Player's score is ranked in the Top Ten places, his name registration can be made.
Cuando la puntuación del Jugador esta clasificada en las Top Dígitos, holas. nombre regis
In such case by controlling Aquajack and pressing the Stage Button when it reaches the regis
tro puede ser m ade. (En tal caso por controlar) Aquajack amJ pressillg thl' Start Button
desired letter. (Only three letters can be controlled). Aquajack amJ pressillg thl' Start Button
when it reaches a wish letter. (Sólo tres letras pueden usar IX').

9.. Niveles Difficulty levels:

By using the Dip Switches the difficulty levels can be changed in 4 steps.

In detail, refer to the table for settings.

TEST MODE

COIN A : OFF COIN A
SERVICE : OFF
1 PLAYER : OFF
1 PLAYER SELECT : OFF
T: off 1 SW1: 01'1 P SW2 : OFr I' S
W3 : 01'1' I P LH U : off 0 : OFF L :
OFF R : OFF 8 H H 7 H 6 5 H H H
1 P SW1 : OFF
1 P SW2 : OFF
4 H SW3 : OFF

COIN B TILT : OFF 0
TILT : 01'1' SELECT : off 2 I' S
2 PLAYER : OFF
2 PLAYER SELECT : OFF
W1 : off 2 I' SW2 : off 2 P S
W3 : off 2 I' LH U : OFr 0 : O
FF L : 01'1' R : OFr L : ON
H 2 OFF W1 : OFF
2 P SW2 : OFF
2 P SW3 : OFF

1 P LH U : OFF
D : OFF
L : OFF
R : OFF

RAM OK
RAM OK

2 P LH U : OFF
D : OFF
L : OFF
R : OFF

DIP SSW	8	7	6	5	4	3	2	1	L = ON
A II A	H	H	H	H	H	L	H	H	H = OFF
B	H	H	H	H	H	H	H	H	

SOUND CODE : 00H

RAM OK
RAM OK

AQUAJACK

TEST 1

CROSSHATCH

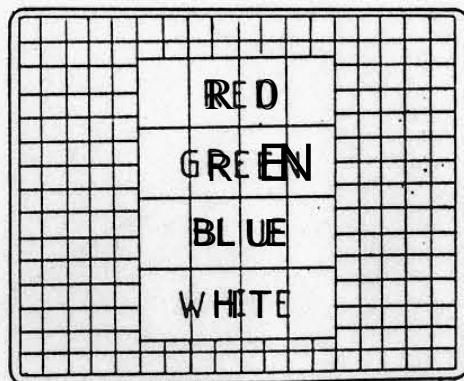
By turning On until the Dip Switch is advanced to the principle PC board and by turning off the main switch, a pattern of a screen will change to the test mode menu.

CRT TEST

At this Cross Hatch and other bars are displayed on the screen. Colors and brightness can be adjusted.

I AQUA JACK

CROSS HATCH



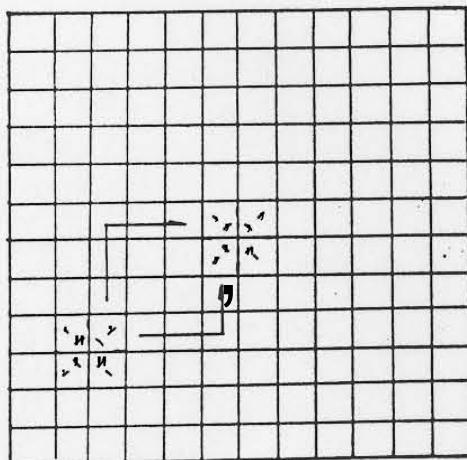
Whether the service switch is on or off, press the test button to exit and return to the next test.

ADJUS'T TEST

This test can be used to initialize the Up/Down Left/Right movement of the Steering Mech. Adjust position using ADJ X and ADJ Y potentiometers as necessary with Ol direction with the steering wheel in the central position.

NOTE: A DIP switch AND A POTENTIAL READING ISOLATOR IS PLACED ON THE SIDE OF THE MONITOR DOOR MOUNTED ON YOUR KETTLE HORCHETES.

Presione botón de inicio para comenzar Test.



DIP SWITCH SETTINGS

DIP SW A

1	- - T - -	i	1	2	3	4	5	6	7	8
CAMI STYLIN'	MOVING NON MOVING	OFF ON								
SOUND INVERSION	NORMAL INVERSION	OFF ON								
TEST MODE:	NORMAL TEST MODI.			OFF ON						
DEMO SOUND	WITH WITHOUT				OFF ON					
COIN A	1 COIN 1 PLAY 2 COIN 1 PLAY 3 COIN 1 PLAY 4 COIN 1 PLAY					OFF ON OFF ON	OFF ON			
COIN B	1 COIN 2 PLAY 1 COIN 3 PLAY 1 COIN 4 PLAY 1 COIN 6 PLAY							OFF ON OFF ON	OFF ON	

1

DIP SW B

		1	2	3	4	5	6	7	8
DIFFICULTY LEVEL	B A C D	OFF ON OFF ON	OFF ON						
VONUS	\$0000 \$10000 \$100000 \$1000000			OFF ON OFF ON	" OFF ON				
STOCK OF PLAYER LIVES	5 4 3 2 1					OFF ON OFF ON	OFF ON		

J

DIP SWITCH SETTINGS V-2

<u>None</u>	<u>Play every 5</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>
01' Por cada £1 f-or Bonus Games				Y	O..				
cada £2 1 pulse por									Not used
crédito 2 Pulses pc	on	on							
For every 10p 20p 30p	off	on							
for 40p 50p £1 60p 1rl	on	off							
For every £2	off	off							
1 Pulse per credit						on			
2 Pulses per credit						off			

Price per play

10p	on	on	on
20p	off	on	on
30p	on	off	on
40p	off	off	on
50p	on	on	off
60p	off	on	off
£1	on	off	off
£2	off	off	off

£2 1, 011 011

Please note! Aunque el valor de la moneda insertada sea menor que el precio de juego, se awardará el premio correspondiente si se inserta una moneda de mayor valor en el mismo intervalo de tiempo.

EXAMPLES OF SETTINGS (FOR £1 INSERTED)

Price of Play	Bonus Games	Credits	Bonus	Total
10p	off	10	None	10
10p	For every 50p	10	2	12
10p	For every £1	10	1	11
20p	off	5	None	5
20p	For every 50p	5	2	7
20p	For every £1	5	1	6
30p	off	3	None	3
30p	For every 50p	3	2	5
30p	For every £1	3	1	4
40p	off	2	None	3
40p	For every 50p	2	2	4
40p	For every £1	2	1	3
50p	off	2	None	2
50p	For every £1	2	1	3

INPUT INFORMATIONPIN COLOURFUNCIÓN

1. YELLBLK	10P MICROSWITCH NO OPEN COLLECTOR INPUT FOR MICROSWITCH
2. NIC	10P OR MICROSWITCH INPUT. OPEN COLLECTOR INPUT.
LKWHITBLU	10P INPUT (MS 111 SENTINEL)
4. NIC	20P INPUT (MICROSWITCH)
5. WHTIGRN	10P INPUT (MICROSWITCH) 201 I
NIC NIC	50P INPUT (MICROSWITCH)
3. WHTBLIBLK	INPUT (MS 111 SENTINEL) 501 IN
4. NIC NIC	51 INPUT (MICROSWITCH)
5. WHTGRNYEL	PUT (MICROSWITCH) 501 INP
h. NIC BLUIBLK	0 VOLTS (10 INHIBIT)
7. WHITBLUYEL	0 VOLTS (20P INHIBIT)
O. NIC BLUORG	0 VOLTS (10 INHIBIT)
J. WHTBLEWHT	0 VOLTS (11 INHIBIT)
10. BLUBLACK	0 VOLTS (12 INHIBIT)
II. BLUBLACK	0 VOLTS
I. BLUORG	0 VOLTS
13. BLUWHT	0 VOLTS
14. BLACK	+ 12v DC
15. BLACK	+ 12v DC
16. BLACK	+ 12v DC
'7. NIC BLUVIO	- POSITIVE COMMON FOR MS111SENTINEL
ORANGE	METER OUTPUT (NPN OPEN COLLECTOR)
19. ORANGE	CREDIT OUTPUT (NPN OPEN COLLECTOR)
ORGBLKBK	0 VOLTS
ORANGE	
21. BLUVIO	
22. NOTES	1) Use 00 volts for negative common if plugging into MS 125 separator unit.
23. ORGIBLK	2) Assegure that there is no resistor or diodes connected across any input pins V12.4
24. NIC	da. en las entradas de la tarjeta de adaptador para el circuito integrado.

NOTE: En la tarjeta adaptadora el pin 10 es linkado a pin 24, y este linkado al pin 24. Si se linka el pin 10 a pin 25, estos enlaces deben ser eliminados completamente. Luego se linka el pin 24 a la tarjeta de adaptador. Esto luego utilice la tarjeta de la unidad del medidor de tarjeta de crédito.

3) El medidor siempre fija el total a \$10.00 independientemente de la cantidad de crédito.

4) More than one coin mech may be fed into the PCB.

- e.g. A) S10 S10 S10 C) S10 S10 S10
 hasta el otro) X MS 1 II X X X MS 125 X
 entine) S10 X MS 125
 D) S10 X Sentinel

5) La tarjeta de crédito se suministra con una tarjeta de crédito estanca.
 (Parte N° 1688) Se suministra una malla de cobre para amplificar el bloques de conexión r.

Recomendación sobre los conectores.

PIN COLOURFUNCIÓN

1. ORANGEPI	+12VDC SUPPLY (LAMP
NOK 3. NIC	SUPPLY) COIN MEVER SWING TO
4. WII	IN INPUT TO GAME PCB .
TREDACBLACK	TO COIN METER
6. ORGBLKRRED	Ov DC
5. BLACK	COIN INPUT TO GAME PCB.
6. ORGIBLK	

2X WAY EDGE CONNECTION

BLK	GND	A	1		GND	BLK
BLK	GND	B	2		GND	BLK
PNK	+5V	C	3		+5V	PNK
PNK	+5V	D	4		+5V	PNK
VIO	-SV"	E	5		-5V	VIO
ORG	+12V	F	6		+12V	ORG
KEYWAY		H	7		KEYWAY	
GRY/BLK	L. SOUND (-)	J	8		L SOUND (+)	GRY/WHT
GRY/BLK	R SOUND (-)	K	9		R SOUND (+)	GRY/WHT
YEL/RED	VOL.2	L	10		VOL.1	YEL/BRN
YEL/GRN	VOL.3	M	11			
		N	12		SERVICE SW	RED/ORG
		P	13			
		R	14			
BLU/PNK	VULCAN GUN	S	15		MISSILE START	GRY/GRN
YEL/BLK	COIN B	T	16		JUMP	BLU/YEL
		U	17		COIN A	ORG/BLK
		V	18		METER A	WHT/ORG
YEL/BLU	ACCELERATOR	W	19			
GRN	VIDEO GRN	X	20			
WHT	V-SYNC	Y	21		VIDEO RED	RED
		Z	22		VIDEO BLU	BLU
		AA	23		VIDEO GND	BLKBLU
		AB	24			
		AC	25			
		AD	26			
BLK	GND	AE	27		GND	BLK
BLK	GND	AF	28		GND	BLK

AQUAJACK

CONNECTORS

<u>CONNECTOR B</u>	<u>P.S.I.</u>	<u>9 WAY AMP M+L PLUG MALE PINS</u>
1	+5v	PNK
2	-5v	PNK
3	(GND)	BLK
4	(GND)	BLK
5	(GND)	BLK
6		
7		
8	+12v	ORG
9	-5v	VIO

<u>CONNECTOR C</u>	<u>MONITOR SUPPLY</u>	<u>4 WAY AMP M+L PLUG MALE PINS</u>
1	0v	BRN
2	12v	KEW
3	0v	ORG
4	220v	YEL

<u>CONNECTOR D</u>	<u>MONITOR</u>	<u>12 WAY AMP M+L PLUG FEMALE PINS (RED)</u>
1	VIDEO GND	BLK/BLU
2		
3	VIDEO BLU	BLU
4	V-SYNC	WHT
5	VIDEO RED	RED
6	VIDEO GRN	GRN
7	0v	BRN
8		
9		
10	220k	YEL
11	135v	RED
12	0v	ORG

<u>CONNECTOR E</u>	<u>COIN MFCII</u>	<u>6 WAY AMP M+L SOCKET MALE PINS</u>
1	+12v	ORG
2	+5v	INK
3	COIN B	YEL/BLK
4	CHEMUT BD	WHT/REV
5	GNB	BLK
6	COIN A	ORG/BLK

<u>CONNECTOR C</u>		<u>STEERING MECH</u>	<u>16 WAY, AMP M+F SOCKET MALE PINS</u>
1		MULCAN GND	BLK/WHITE;
2		JHMII	BLK/WHITE;
3		JHMII	BLK/WHITE;
4		JHMII OWN LEFT/RIGHT STAN (MISSILE)	BLK/WHITE (ORG/GRN) (GRY/GRN)
5			
6			
7			
8			
9			
10		+5V	IPNT:
11		GND	BLK
12		GND	BLK;
13		EARTH	GRN/YEL

<u>CONNECTOR D</u>		<u>SURVIVIT BRKT</u>	<u>ROTARY SW & PART NO 13 PAULK 1026 MINI PUSH BUTTON (PART NO 43ECG5A02)</u>
1		SERVICE GND	BLK
2		SERVICE SW	RED/ORG
3		VOL 1	YEUBRN
4		VOL 2	YE/RED
5		VOL 3	YEUGRN
6		VOL GND	BLK

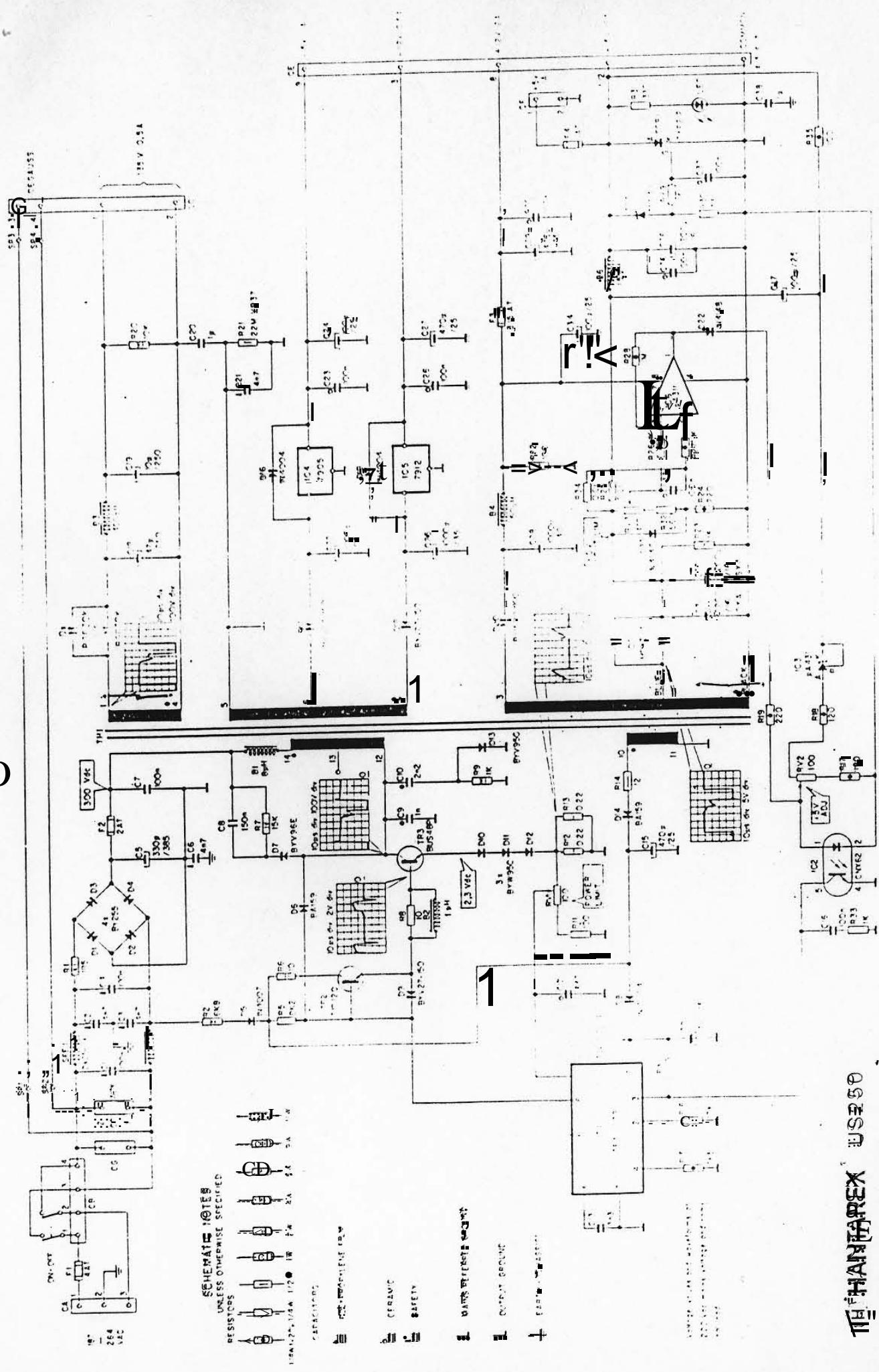
<u>CONNECTOR E</u>		<u>METER</u>	<u>3 WAY AMP M+F SOCKET MALE PINS</u>
1		+5V	METER
2		CREDIT BD	WHT/RED
3		METER A	WHT/ORG

<u>CONNECTOR F</u>		<u>SPEAKERS</u>	<u>STRIP ONLY</u>
1		SPEAKER (+)	GRY/WHT
2		SPEAKER (-)	GRY/BLK
3		SPEAKER (+)	GRY/WHT
4		SPEAKER (-)	GRY/BLK

<u>CONNECTOR G</u>		<u>FOOT PEDAL</u>	<u>4 WAY AMP M+F MINI SOCKET MALE PINS</u>
1		GND	BLK
2		ACCELERATOR	YEL/BLK
3			
4		EARTH	GRN/YEL

<u>CONNECTOR 1</u>	(X-N)	<u>6 WAY JST 0.1 PITCH WART NO 11JSH6P-SHE-AA</u>
1	GNR	BLK
2	#Sv	PNK
3	UP/DOWN	GRN/RED
4	LEFT/RIGHT	BRN/GRN
5	UP/DOWN	BLU/RED
6	LEFT/RIGHT	ORG/GRN
<u>CONNECTOR M</u>	<u>ADJUST LIP/DOWN</u>	<u>1K POT (PART NO 3bAF23L1N1K)</u>
1	GNR	BLK
2	LIP/DOWN	GRN/RED
3	#Sv	PNK
<u>CONNECTOR N</u>	<u>ADJUST LEFT/RIGHT</u>	<u>1K POT WART NO 36FA23L1N1K1</u>
1	GNR	BLK
2	LEFT/RIGHT	BRN/GRN
3	48v	PNK

Yo



ELECTROCOIN AUTOMATICS LTD

After Sales Department de Servicio - CARDIFF.

We're delighted to offer this important introduction to the NEW service department - Electrocoin After Sales - CARDIFF.

Horario de trabajo normal - 08.00 - 16.00 Monday - Fridays

Teléfono número 02223730505 (Este teléfono es ahora exclusivo de Electrocoin After Sales).

Después de las 16.00 horas de los sábados y domingos y en emergencias, el horario debe ser contactado en el siguiente número de teléfono 08866536195.

Para las siguientes preguntas por favor contacte:

Spares & Repairs - Phil Hayes - **Phil Hayes Spares Dept**
mación Ian Colley Workshop M"n"ger Mike Callan Spares Li.; Rep"ir C
Vertecallie Tipperation - Ian Colley

Workshop Manager - Mike Callan

Spares & Repairs Accounts - Julie Tipper

N.B.

Electrocoin Automatics at Cardiff is responsible for all Kina manufactured machines
and also products from other manufacturers.

Para garantizar un servicio eficiente y rápido el retorno de piezas defectuosas es esencial.

Lleve su problema a la oficina más cercana de las instalaciones ofrecidas por el departamento
de After Sales, así asumiendo que su máquina debe ser atendida en todo momento.

PHIL HAYES PUGH
After Sales Manager.
Manager!