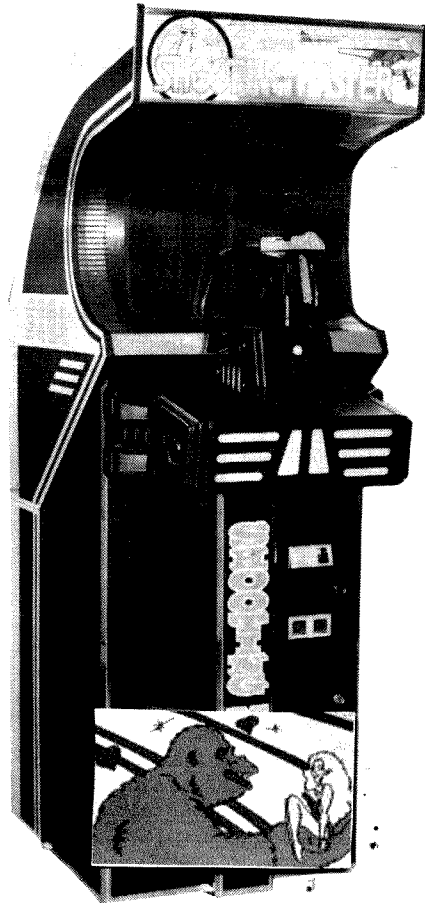


SEGA[®]

SHOOTING MASTER

OWNER'S MANUAL



SEGA ENTERPRISES, LTD.

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SPECIFICATIONS

INSTALLATION SPACE	:	650 mm (W) × 1000 mm (D)
HEIGHT	:	1880 mm
POWER	:	145 W
C. R. T.	:	20"

NOTE

o Descriptions herein contained may be subject to improvement changes without notice.

INTRODUCTION OF THE OWNER'S MANUAL

SEGA ENTERPRISES, LTD., supported by its high electronic technology of LSIs, microprocessors, etc. and a wealth of experience, has for more than 30 years been supplying various innovative and popular game machines to the world market. This OWNER'S manual is intended to provide detailed comments together with all the necessary information covering the operation in general of electronic assemblies, electromechanicals, servicing control, spare parts, etc. as regards the SHOOTING MASTER, a new SEGA product. The manual is intended for those who have knowledge of electricity and technical expertise especially in ICs, CRTs, microprocessors, etc. Carefully read so as to acquire sufficient knowledge before working on the machine. Should there be a malfunction, non-technical personnel should under no circumstance touch the interior system.

1. HANDLING PRECAUTIONS

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

- o Be sure to turn the power off before working on the machine.
- o To insert or pull out the plug quickly is dangerous.
- o It is necessary to make sure that the power cord or the grounding wire is not exposed on the road, etc. in a manner so as to be dangerous. Make sure that grounding connections are made safely at the position where so specified.
- o Do not use any fuse that does not meet the specified rating.
- o Make complete connections for the IC board and other connectors. Insufficient insertion is very dangerous.

Also, for the IC board circuit inspections, only the logic tone is allowed. The use of a tester is not permitted so be careful in this regard. After confirming that there are no irregularities, turn the power ON.

2. PREVENTION OF COUNTERFEITING AND CONVERSION

LABELLING

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

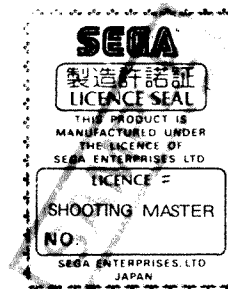
ORIGINAL SEAL

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



LICENCE SEAL

The following seal is put on the kits, such as the printed circuit boards, of SEGA products.



COPYRIGHT NOTICE

This SEGA product has the copyright notice as follows:

© SEGA 1985

This signifies that this work was disclosed in 1985 and is the property of SEGA ENTERPRISES, LTD.

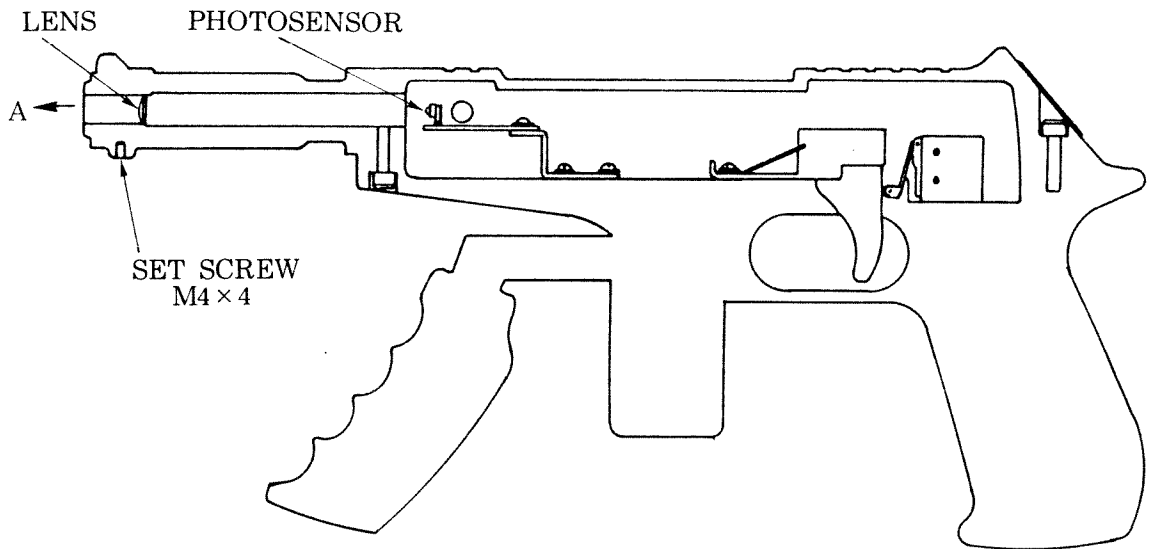
3. PRECAUTIONS CONCERNING THE PLACE OF INSTALLATION

The SHOOTING MASTER is an indoor game machine. Absolutely do not install it outside. Even indoors, avoid installing in places mentioned below so as to ensure proper usage:

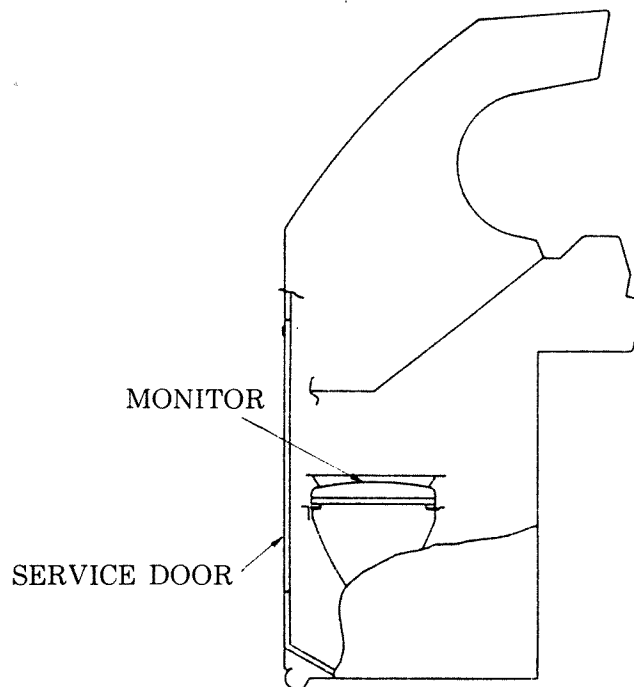
- o Places subject to rain or water leakage, or condensation due to humidity.
- o In the proximity of an indoor swimming pool and/or shower.
- o Places subject to direct sunlight.
- o Places subject to heat sources from heating units, etc., or hot air.
- o Vicinity of highly inflammable/volatile chemicals or hazardous matter.
- o Sloped surfaces.
- o Vicinity of anti-disaster facilities such as fire exits and fire extinguishers.
- o Places subject to any type of violent impact.
- o Dusty places.

8. CAUTIONS FOR OPERATING THE GUN, AND MONITOR CLEANING

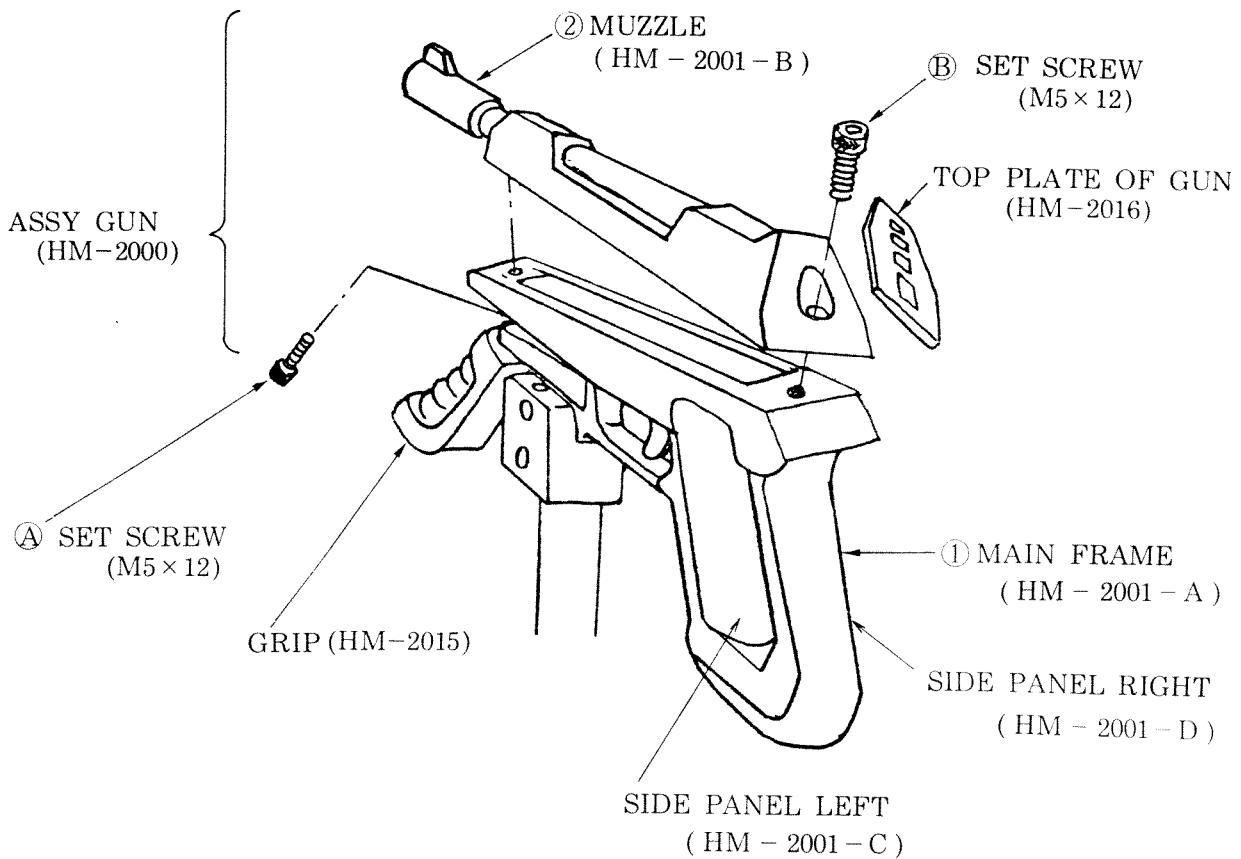
- o A lens and a photosensor are incorporated in the gun, so be careful that these parts' surfaces do not become dirty.



- o When the monitor surface becomes dirty, carefully wipe it. If the surface becomes very dirty, the gun's photosensor may not function properly.
- o When cleaning the lens, loosen set screw (M4x4) and remove it in the direction of "A".



9. REMOVING THE UPPER PART OF THE GUN

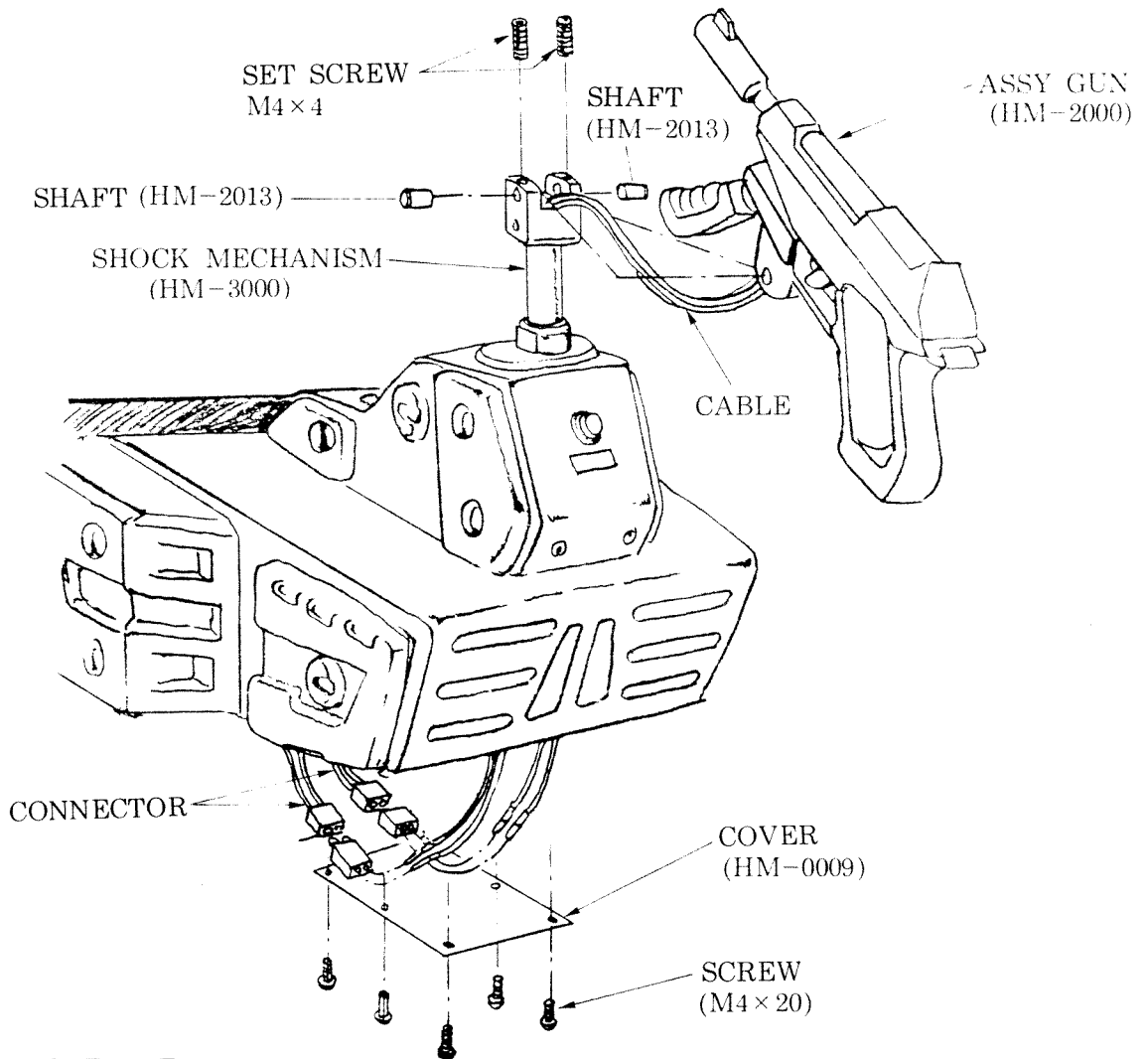


o The upper part (MUZZLE) and the lower part (MAIN FRAME) of the gun can be disassembled.

o For disassembling, remove set screw ① and ③ by using a hexagonal wrench.

10. REMOVING THE GUN

- o When removing the gun from the shock mechanism, follow the procedure mentioned below:



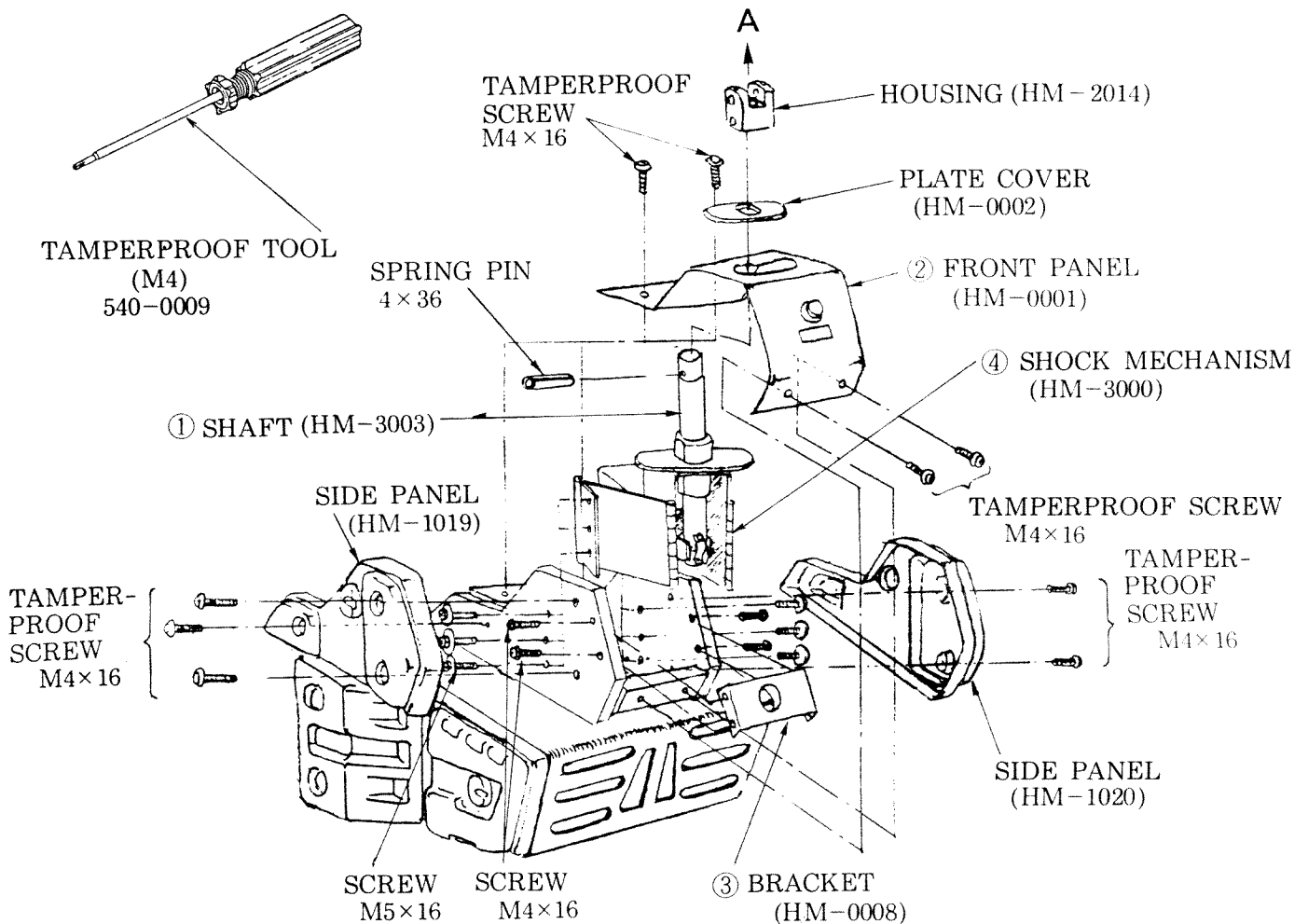
PROCEDURE

- ① Loosen 2 set screws (M4x4).
- ② Remove 2 shafts (HM-2013).
- ③ Take off 6 screws (M4x20) to remove the cover (HM-0009).
- ④ Remove 2 connectors.

In the above procedure, the gun can be removed from the shock mechanism (HM-3000). When handling the cable, utmost care must be taken.

11. DISASSEMBLING THE SHOCK MECHANISM

When servicing the shock mechanism, first remove the gun as per 10. REMOVING THE GUN and then disassemble it in accordance with the following procedure:



PROCEDURE

- ① Take off the spring pin from the SHAFT (HM-3003) and then remove HOUSING (HM-2014) in the direction of "A".
- ② By using the TAMPERPROOF tool, take off 4 TAMPERPROOF SCREWS (M4x16) and then remove FRONT PANEL (HM-0001).
- ③ Take off 4 SCREWS (M4x16) and then remove BRACKET (HM-0008).
- ④ Take off 6 SCREWS (M5x16) and then remove SHOCK MECHANISM (HM-3000).

Removing the shock mechanism in the above procedure allows for the servicing of the spring, solenoid, etc.

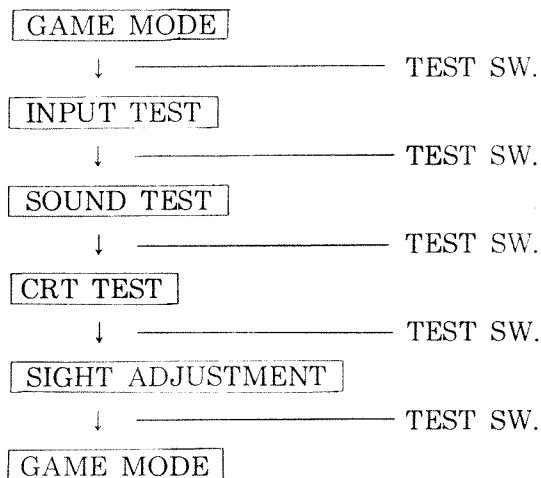
12. SELF-TEST

- o In this test, mainly check to make sure that the printed circuit board accurately functions, that sound and the on-monitor image colors are adjusted, and also that the defective portions are detected.

1. Type of test

- (1) INPUT TEST: To check switches.
- (2) SOUND TEST: To test sound and the sound number display.
- (3) CRT TEST: To test the frame and color bar display.
- (4) SIGHT ADJUSTMENT: To adjust bullet mark deviation.

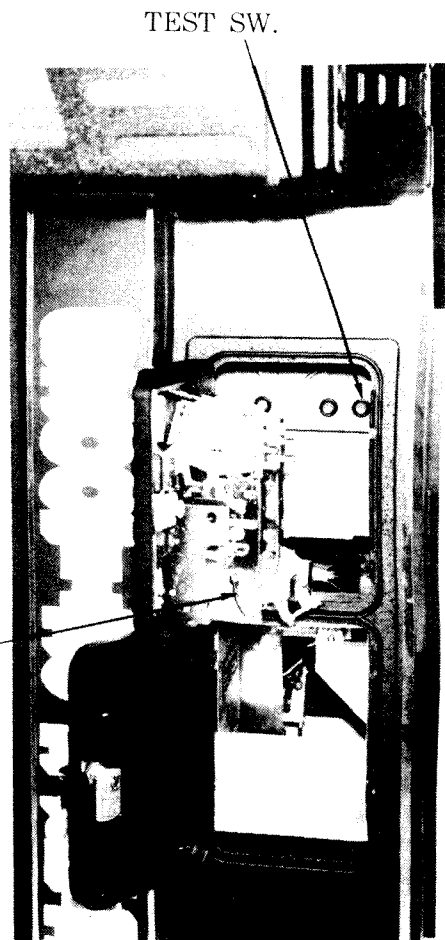
2. Operating method



3. Descriptions by test item

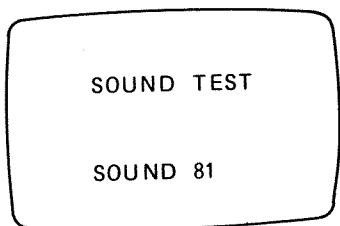
(1) INPUT TEST

INPUT TEST		
COIN		
SWITCH 1		ON
SWITCH 2		
START	SW	
SERVICE	SW	
TEST	SW	



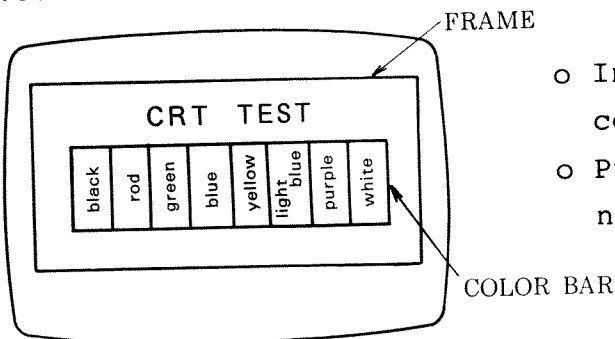
- o When any of the switches shown in the left-hand side table are turned on, "ON" will be displayed on the right-hand side of the corresponding switch name.
- o When pressing TEST SW., "ON" will be momentarily displayed and then TEST proceeds to the next item.

(2) SOUND TEST



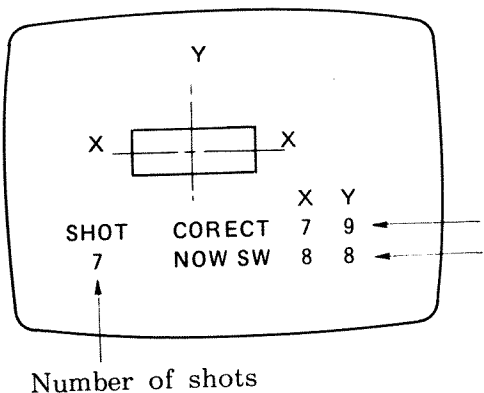
- o Simultaneously when SOUND NUMBER is displayed on the screen, the corresponding sound is emitted (the sound numbers start from 81).
- o Pushing the START SW. changes the sound number and that particular sound is simultaneously emitted.
- o Push TEST SW. to proceed to the next test.

(3) CRT TEST



- o In this test, the 8 primary colors can be checked.
- o Push TEST SW. to proceed to the next test.

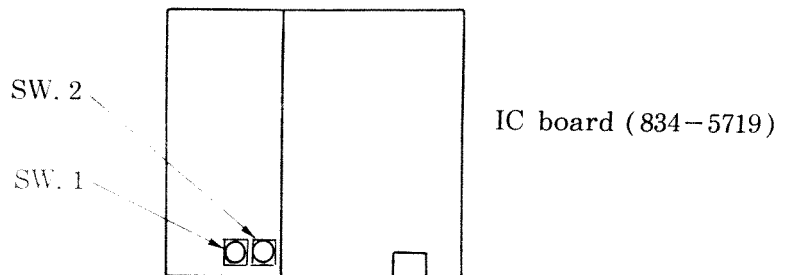
(4) SIGHT ADJUSTMENT



- (a) Shoot at the + sighted target on the screen 5 ~ 8 times.
- (b) Next, set your sight in a manner so as to meet the X Y numbers shown on the right-hand side of CORRECT.
- (c) Set SIGHT to the X Y numbers shown on the right-hand side of "NOW SW.". The present rotary switch values are X = 8 and Y = 8
- (d) Set SIGHT to X = 7 Y = 9.
- (e) Adjust SIGHT again and shoot at the sighted target 5 to 8 times.
- (f) Similarly repeat and make sure that the "CORRECT" values and "NOW SW." values become identical (repeat 2-3 times).

NOTES

1. Depending on the bullet mark deviation at the time of shooting, the X Y values sometimes slightly vary every time a shot is made. However, this poses no problem as long as the bullet mark shown on the screen approximately matches the sighted target.
2. SW. 1 corresponds with Y, and SW. 2 with X.
3. Before making adjustments, the sighted target position and the bullet mark position will not match.
4. Decreasing the Y (SW. 1) value will result in the bullet marks moving upward.
Decreasing the X (SW. 2) value will result in the bullet marks moving to the left-hand side.

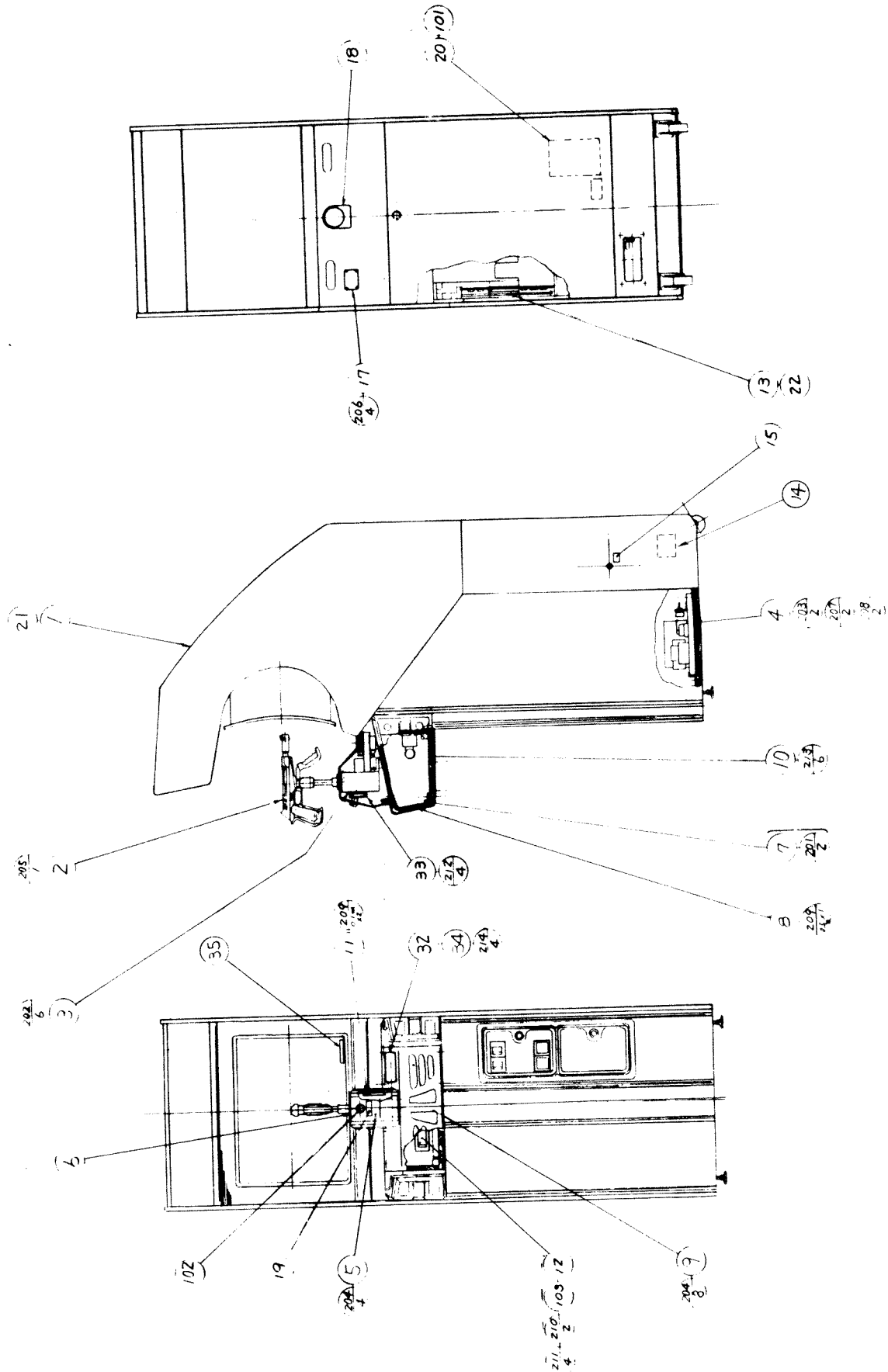


When the testing is finished, push the TEST button.
The game mode will then return.

13. PARTS LIST

① TOP ASSY SEGA SHOOTING MASTER (HM-0000)

(D-1/3)



①

TOP ASSY SEGA SHOOTING MASTER (HM-0000)

(D-2/3)

ITEM NO.	PART NO.	DESCRIPTION
1	HM-1000	ASSY CABINET
2	HM-2000	ASSY GUN
3	HM-3000	ASSY SHOCK MECHANISM
4	HM-4000	ASSY POWER SUPPLY
5	HM-0001	FRONT PANELA
6	HM-0002	PLASTIC COVER
7	HM-0003	PLATE HOLDER
8	HM-0004	DESIGN PLATE
9	HM-0005	FRONT PANEL B
10	HM-0009	LID
11	HM-0007	SHOCKABSORBER
12	UC-1017	FL BRACKET
13	83497	STICKER ARROW
14	560-5085	STEP DOWN TRANSFORMER
	882	SEGA SHOOTING MASTER (90-240V 50/60 Hz)
15	83005	STICKER MAIN SW PUSH ON PUSH OFF
17	80027XY	NAME PLATE ELEC SPEC.
18	421-5185	STICKER SAFETY INSTR
19	421-6103	STICKER START
20	421-6173	ADJUST INSTR SH SHOOTING MASTER
21	421-5800-22	ORIGINAL SEAL SHOOTING MASTER
22	834-5719	ASSY IC BOARD SHOOTING MASTER
23	80207X	STICKER SEGA INFORMATIONS
24	83602	STICKER SERIAL NO INFORMATIONS
25	80198X	STICKER POSSESSION INFORMATIONS
26	83618	STICKER BUSINESS INFORMATIONS
27	SGB-1035X	KEY BAG
28	SGM-2675	POLYETHYLENE BAG 240x370
29	SGM-3640	POLYETHYLENE COVER HN UPRIGHT
30	420-5267	OWNER'S MANUAL SHOOTING MASTER
31	SGB-3634-11	WIRE HARN START SW
	211-0087	CONN PLUG AMP 4P BROWN
32	422-0070	PLAY INSTR PLATE SHOOTING MASTER
33	HM-0008	BRACKET
34	HM-2006	SPRING
	421-6186-1	DENOMINATION SHEET 2x25¢
	421-6186-2	DENOMINATION SHEET 25¢
	421-6186-3	DENOMINATION SHEET 2x1DM 5DM
	421-6186-4	DENOMINATION SHEET 2x1Fr
	421-6186-5	DENOMINATION SHEET 500L
	421-6186-6	DENOMINATION SHEET 5Fr 10Fr
	421-6186-7	DENOMINATION SHEET 2x5SH 10SH
	421-6186-8	DENOMINATION SHEET 3x1Kr
	421-6186-9	DENOMINATION SHEET 2x\$1
	421-6186-11	DENOMINATION SHEET 100WON
101	601-0769	STAPLE MAX #3
102	509-0161	PUSH-BUTTON SWITCH IT YELLOW W/LAMP
103	309-5099-01	ASSY FL LIGHT 10W PALUCK
104	211-0041	CONN PIN AMP
	540-0006	WRENCH FOR TAMP PRF SCR M4

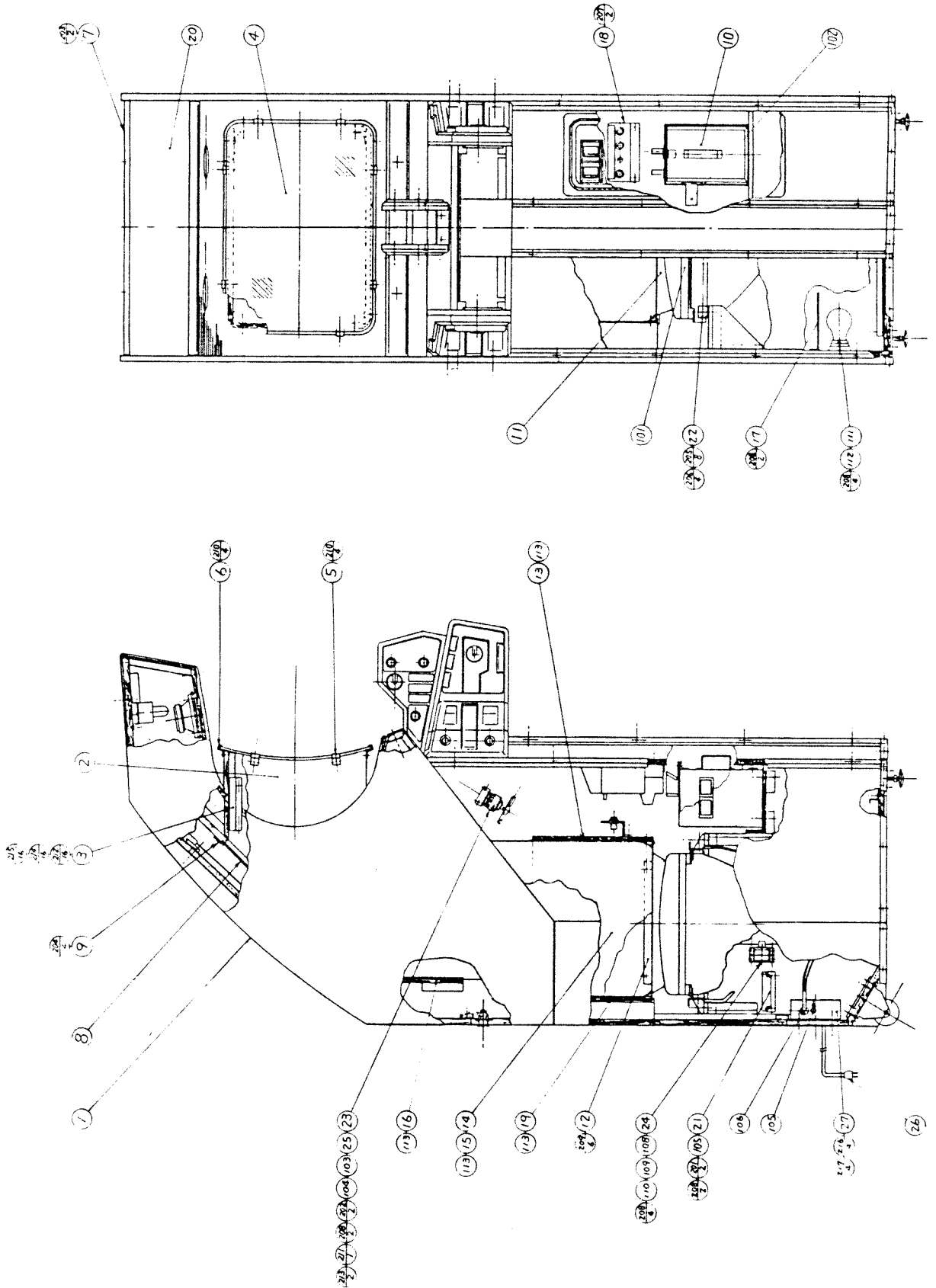
① TOP ASSY SEGA SHOOTING MASTER (HM-0000)

(D-3/3)

ITEM NO.	PART NO.	DESCRIPTION
201	000-0414-S	M SCR PH W/S M4×14
202	000-0516-FS	M SCR PH W/F & S M5×16
203	000-0530	M SCR PH M5×30
204	008-0416	TMP PRF SCR TH M4×16
205	045-0016	SPR PIN 4×36
206	046-0001	SCR NAIL THH STAINLESS 1.5×16
207	060-0005	FLT WSHR M5
208	061-0005	SPR WSHR M5
209	244-098	DOUBLE FACE TAPE 10mm×50m/ROLL
210	005-3113-F	W SCR RH W/F 3.1×13
211	010-0406-F	S-TITE SCR 4×6
212	000-0416	M SCR PH M4×16
213	000-0420	M SCR PH M4×20
214	000-0408	TMP PRF SCR TH M4×8

② ASSY CABINET (HM-1000)

(D-1/3)



②

ASSY CABINET (HM-1000)

(D-2/3)

ITEM NO.	PART NO.	DESCRIPTION
1	HM-1001	ASSY SUB CABINET
2	HM-1022	MASK
3	HM-1023	HOLDER
4	HM-1024	WINDOW GLASS
5	HM-1025	HOLDER A
6	HM-1026	HOLDER B
7	HM-1027	ORNAMENT FRAME UPPER
8	HM-1028	MIRROR
9	HM-1029	MIRROR HOLDER
10	HM-1030	CASH BOX
11	HM-1031	TV MASK 20
12	HM-1032	BRACKET
13	HM-1033	DESIGN SHEET A
14	HM-1034	DESIGN SHEET B
15	HM-1035	DESIGN SHEET C
16	HM-1036	DESIGN SHEET D
17	HM-1037	LAMP COVER
18	HM-1038	SW UNIT
19	HM-1040	DESIGN SHEET E
20	423-0012	DESIGN PLATE SHOOTING MASTER
21	MO-0006	CONNECTOR BRACKET 36P
22	TY-1019	BRACKET TV
23	FO-1013X	BRACKET
24	105-0064	BRACKET MAIN SW
25	280-5041	SPACER TUBE 4
26	600-0110	CABLE & PLUG ASSY 0.16×41×3 L=3m (USA)
	600-5007	CABLE & PLUG ASSY W/EARTH (200~240V AREA)
27	MO-1215Y	COVER
29	SGB-3634-12	WIRE HARN COIN METER 1
	211-0086	CONN PLUG AMP 3P BROWN
30	SGB-3634-1	WIRE HARN AC100V
	211-0121	CONN CAP AMP 4P RED
31	SGB-3634-2	WIRE HARN EARTH
	211-0167	TERM LUG ROUND ID 5
32	SGB-3634-4	WIRE HARN MAIN
	209-5009	CONN 36P PCB
	211-0044	CONN CAP AMP 2P WHITE
	211-0082	CONN CAP AMP 4P BROWN
	211-0060	CONN CAP AMP 3P WHITE
	211-0081	CONN CAP AMP 3P BROWN
	211-0120	CONN CAP AMP 3P YELLOW
	211-0119	CONN CAP AMP 3P ORANGE
	211-0046	CONN CAP AMP 6P WHITE
	211-0126	CONN CAP AMP 6P YELLOW
	211-0025	CONN PLUG AMP 12P WHITE
33	SGB-3634-5	WIRE HARN FL & LAMP
	211-0115	CONN CAP AMP 2P RED
	211-0080	CONN CAP AMP 2P BROWN
	211-0117	CONN CAP AMP 2P YELLOW
	211-0116	CONN CAP AMP 2P ORANGE
	211-0118	CONN CAP AMP 3P RED
	211-0089	CONN PLUG AMP 9P BROWN
34	SGB-3634-B	WIRE HARN JUMP
	211-0116	CONN CAP AMP 2P ORANGE
	212-5033	CONN FEM 2P (MOLEX)

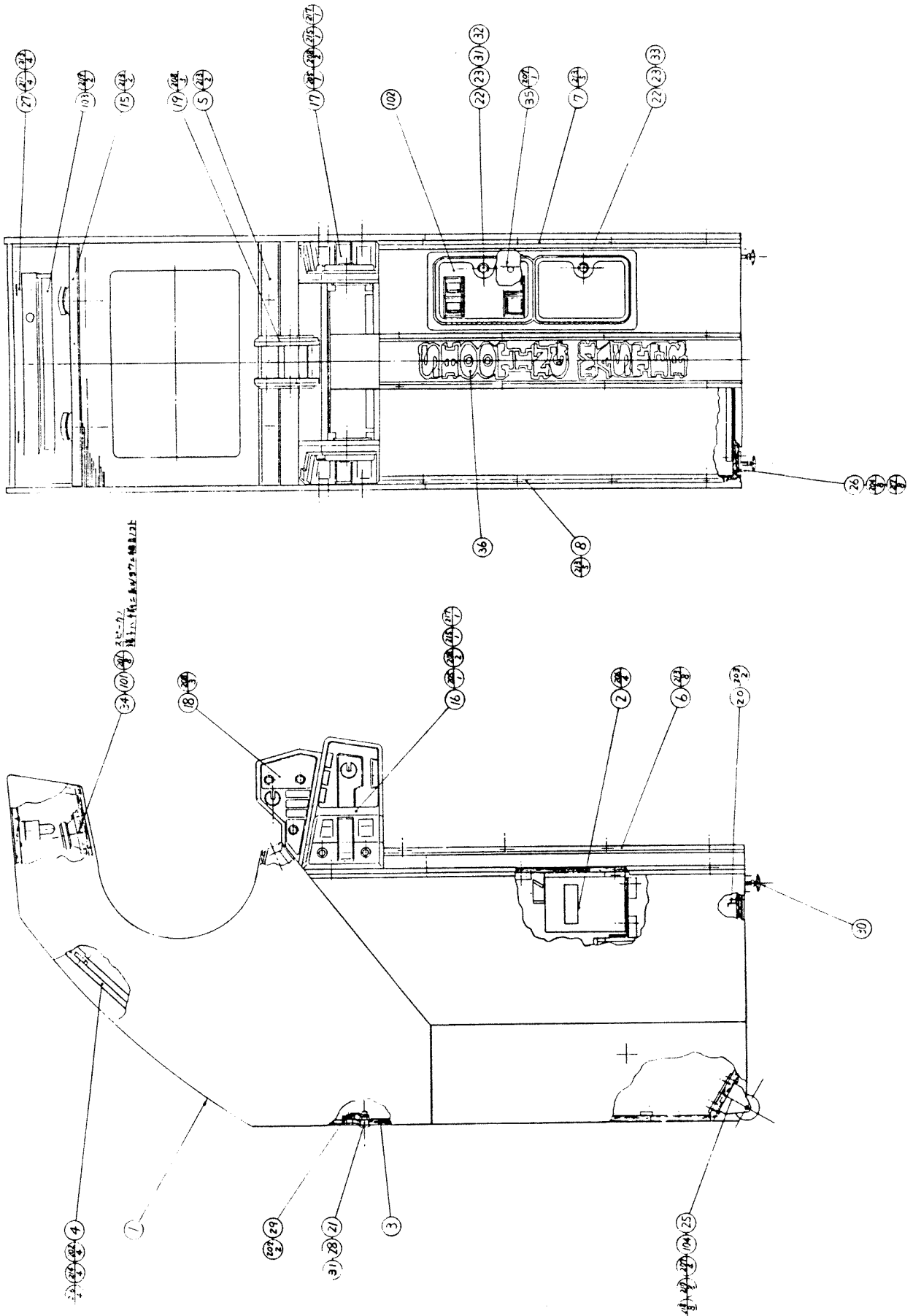
② ASSY CABINET (HM-1000) (D-3/3)

ITEM NO.	PART NO.	DESCRIPTION
35	SGB-3634-9	WIRE HARN EXT
	SGB-3042	EXT BD 36P
	209-0025	CONN 44P PCB
	212-5034	CONN FEM 6P (MOLEX)
	212-5076	CONN FEM 4P (MOLEX)
	209-0023	CLOSED END CONN S TYPE
	211-0041	CONN PIN AMP
	211-0042	CONN SOCKET AMP
	211-0005	SOCKET ELEMENT (MOLEX 2578T)
	280-0474	CONN CONTACT (AMP 170482-1)
101	200-5044	ASSY CLR DISPL 20 TYPE (NANA0 MC-2030-S)
102	221-5064	MAG CNTR 6DIG DC5V
103	S-93024	MOTOR 100V 50-60Hz 2500-3000rpm (JAPAN SERVO P116-1)
104	S-94416	FAN 74 ϕ (ROKUGO SEISAKUSYO #6075 74 ϕ CW 3.5 ϕ)
105	280-0417	TERMINAL BINDING POST BLACK (SATO T-65007AN TYPE12mm)
106	280-0418	BSHG STRAIN PLF 8.3
107	280-0419	HARNES LUG
108	509-0039	SW PUSH BTN TYPE
109	509-0049	SW STOPPER ϕ 12
110	601-0444	C & R COMBINATION ELEMENT 0.1 μ F & 120 Ω
113	601-0769	STAPLE MAX #3
36	SGB-3634-17	WIRE HARN M & L
	211-0085	CONN PLUG AMP 2P BROWN
201	000-0310	M SCR PH M3 \times 10
202	000-0335	M SCR PH M3 \times 35
203	000-0416	M SCR PH M4 \times 16
204	000-0420FS	M SCR PH W/FS M4 \times 20
205	000-0508	M SCR PH M5 \times 8
206	000-0510-FS	M SCR PH W/FS M5 \times 10
207	005-3110	W SCR RH 3.1 \times 10
208	005-3113-F	W SCR RH W/F 3.1 \times 13
209	006-3110	W SCR FH 3.1 \times 10
210	008-0410	TMP PRF SCR TH M4 \times 10
211	028-0003	SET SCR PH M3 \times 8
212	029-0047	M SCR PH BLK M4 \times 10
213	061-0003	SPR WSHR M3
214	061-0004	SPR WSHR M4
215	069-0024	FLT WSHR BLK M4
216	031-0425	CRG BLT M4 \times 25
217	051-0004	FLG NUT M4

3

ASSY SUB CABINET (HM-1001)

(D-1/3)



③

ASSY SUB CABINET (HM-1001) (D-2/3)

ITEM NO.	PART NO.	DESCRIPTION
1	HM-1002	WOODEN CABINET
2	HM-1003	CASH BOX COVER
3	HM-1004	SERVICE DOOR LOWER
4	HM-1005	SERVICE DOOR UPPER
5	HM-1006	ORNAMENT FRAME
6	HM-1007	ORNAMENT CORNER
7	HM-1008	ORNAMENT CORNER LEFT
8	HM-1009	ORNAMENT CORNER RIGHT
15	HM-1016	ORNAMENT FRAME LOWER
16	HM-1017	SIDE PANEL A RIGHT
17	HM-1018	SIDE PANEL A LEFT
18	HM-1019	SIDE PANEL B RIGHT
19	HM-1020	SIDE PANEL B LEFT
20	HM-1021	BRACKET
21	DP-1148X	LOCKING TONGUE
22	DP-1167	TNG LKG
23	HN-1050	SPACER RING
25	TA-1065	NUT PLATE
26	TI-1079	LEG ADJUSTER BRKT
27	UC-1017	FL BRACKET
28	117-0062	PLATE LOCK RETAINER
29	117-5098	TONGE RETAINER PLATE
30	601-0455	LEG ADJUSTER
31	220-5044-01	MAGNETIC LOCK W/O KEY
32	220-5045-01	KEY MASTER FOR 220-5044-01
33	220-5046	MAGNETIC LOCK W/KEY
34	AN-1107	GUARD PLATE
35	109-0045	KEY HOLDER
36	HM-1041	STICKER FRONT HM
40	SGB-3634-14	WIRE HARN COIN CHUTE DOOR
	211-0105	CONN PLUG AMP 6P YELLOW
41	SGB-3634-15	WIRE HARN SP
	211-0043	CONN PLUG AMP 2P WHITE
42	SGB-3634-16	WIRE HARN FL
	211-0095	CONN PLUG AMP 2P ORANGE
	211-0041	CONN PIN AMP
	280-0472	FASTON RCPT 110
	280-5015	FASTON RCPT 187
101	130-5001	SPKR 8 OHM 120 \varnothing (TOKYO CONE PAPER)
102	220-5128-01	ASSY COIN CHUTE 2 DOOR USA 25 \varnothing TWIN
	220-5128-04	ASSY COIN CHUTE 2 DOOR 1DM 5DM
	220-5128-06	ASSY COIN CHUTE 2 DOOR FRANCE 1Fr TWIN
	220-5128-07	ASSY COIN CHUTE 2 DOOR FRANCE 5Fr 10Fr
	220-5128-08	ASSY COIN CHUTE 2 DOOR ITALY 500L
	220-5128-09	ASSY COIN CHUTE 2 DOOR AUSTRIA 5SH 10SH
	220-5128-10	ASSY COIN CHUTE 2 DOOR DENMARK 1Kr TWIN
	220-5128-11	ASSY COIN CHUTE 2 DOOR HONG MONG \$1 TWIN
	220-5128-12	ASSY COIN CHUTE 2 DOOR SWISS 1Fr TWIN
	220-5128-13	ASSY COIN CHUTE 2 DOOR KOREA 100 WON TWIN
103	390-5108-01	ASSY FL LIGHT 15W 50Hz PALUCK
104	601-0391	CASTER (HAMMER BRAND NO. 440-R D=65mm)

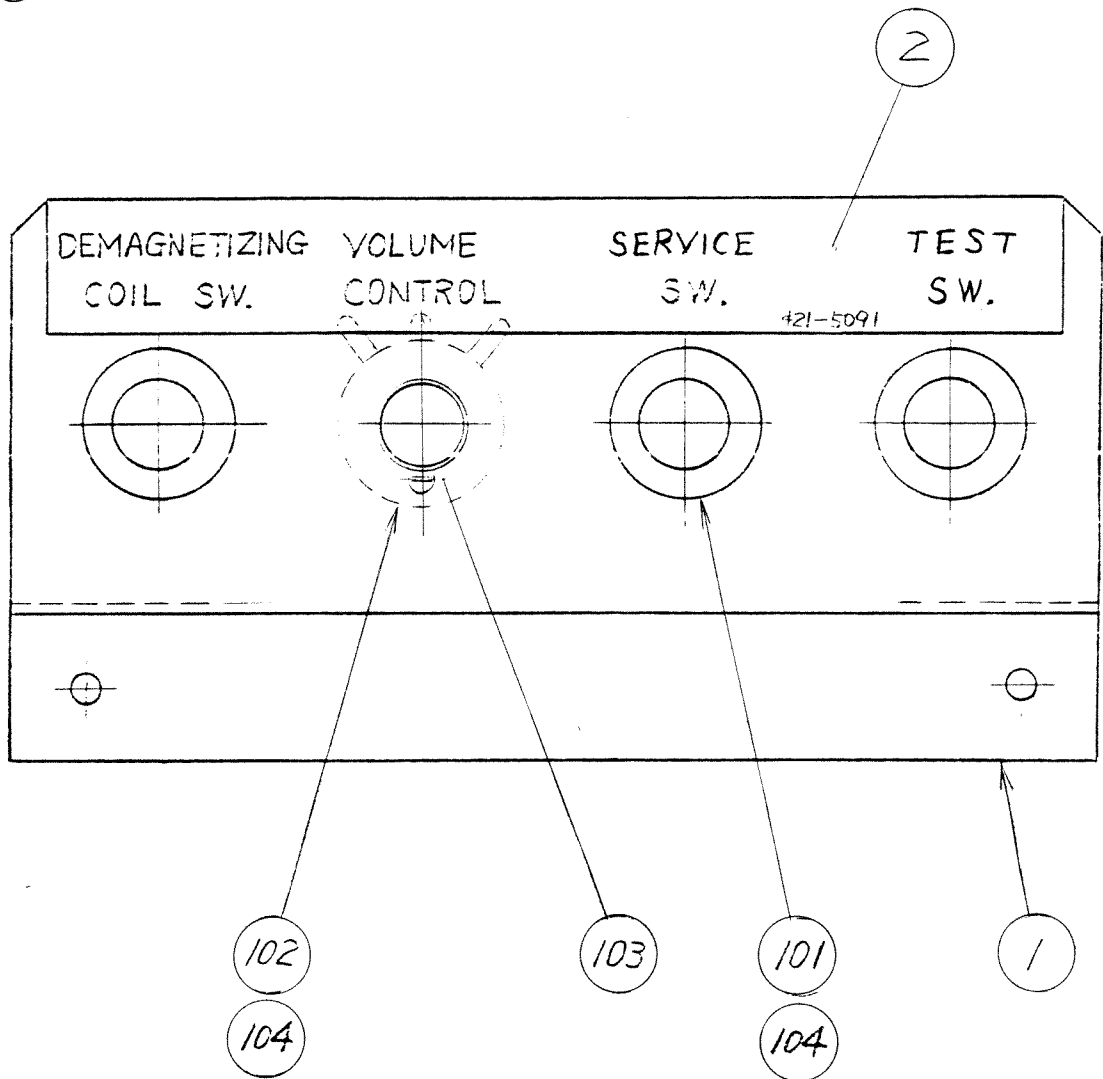
3

ASSY SUB CABINET (HM-1001)

(D-3/3)

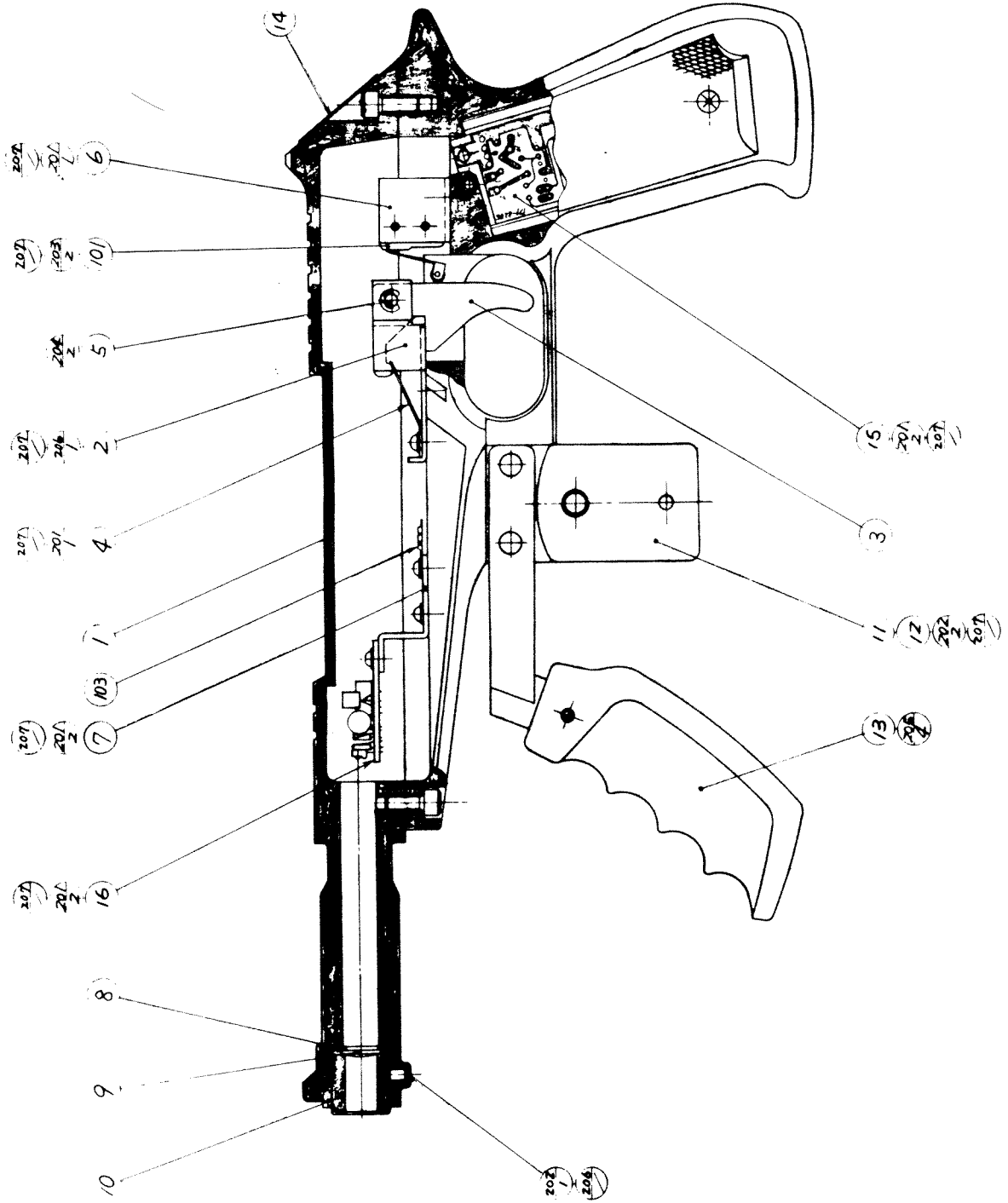
ITEM NO.	PART NO.	DESCRIPTION
201	000-0416-FS	M SCR PH W/FS M4×16
202	000-0425	M SCR PH M4×25
203	000-0514	M SCR PH M5×14
204	000-0520	M SCR PH M5×20
205	000-0525	M SCR PH M5×25
206	001-0416	M SCR FH M4×16
207	005-3113-F	W SCR RH W/F 3.1×13
208	008-0416	TMP PRF SCR TH M4×16
209	010-0406-F	S-TITE SCR 4×6
210	030-0625	HEX BLT M6×25
211	031-0425	CRG BLT M4×25
213	051-0004	FLG NUT M4
214	060-0004	FLT WSHR M4
215	060-0005	FLT WSHR M5
216	061-0004	SPR WSHR M4
217	061-0005	SPR WSHR M5
218	061-0006	SPR WSHR M6

④ SW UNIT (HM-1038) (D-1/1)



ITEM NO.	PART NO.	DESCRIPTION
1	HM-1039	CONTROL BRKT
2	421-5091	STICKER CONT INST
3	SGB-3634-10	WIRE HARN SW UNIT
	211-0094	CONN PLUG AMP 2P RED
	211-0103	CONN PLUG AMP 6P WHITE
	211-0041	CONN PIN AMP (AMP 350687-1)
101	509-5028	SWITCH PB IM
102	475-0049	RHEOSTAT 100Ω 10W
103	240-0125	KONB METAL (SATO K-29)
104	280-0472	FASTON RCPT 110

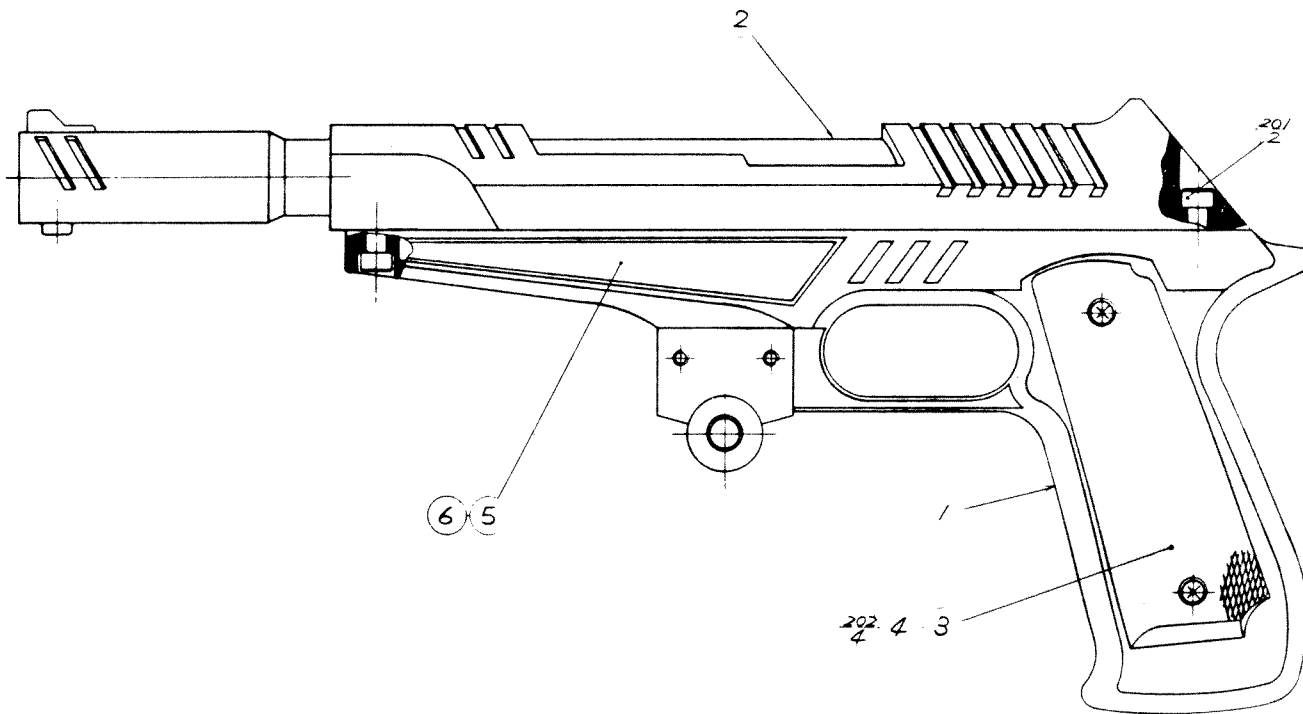
⑤ ASSY GUN (HM-2000) (D-1/2)



⑤ ASSY GUN (HM-2000) (D-2/2)

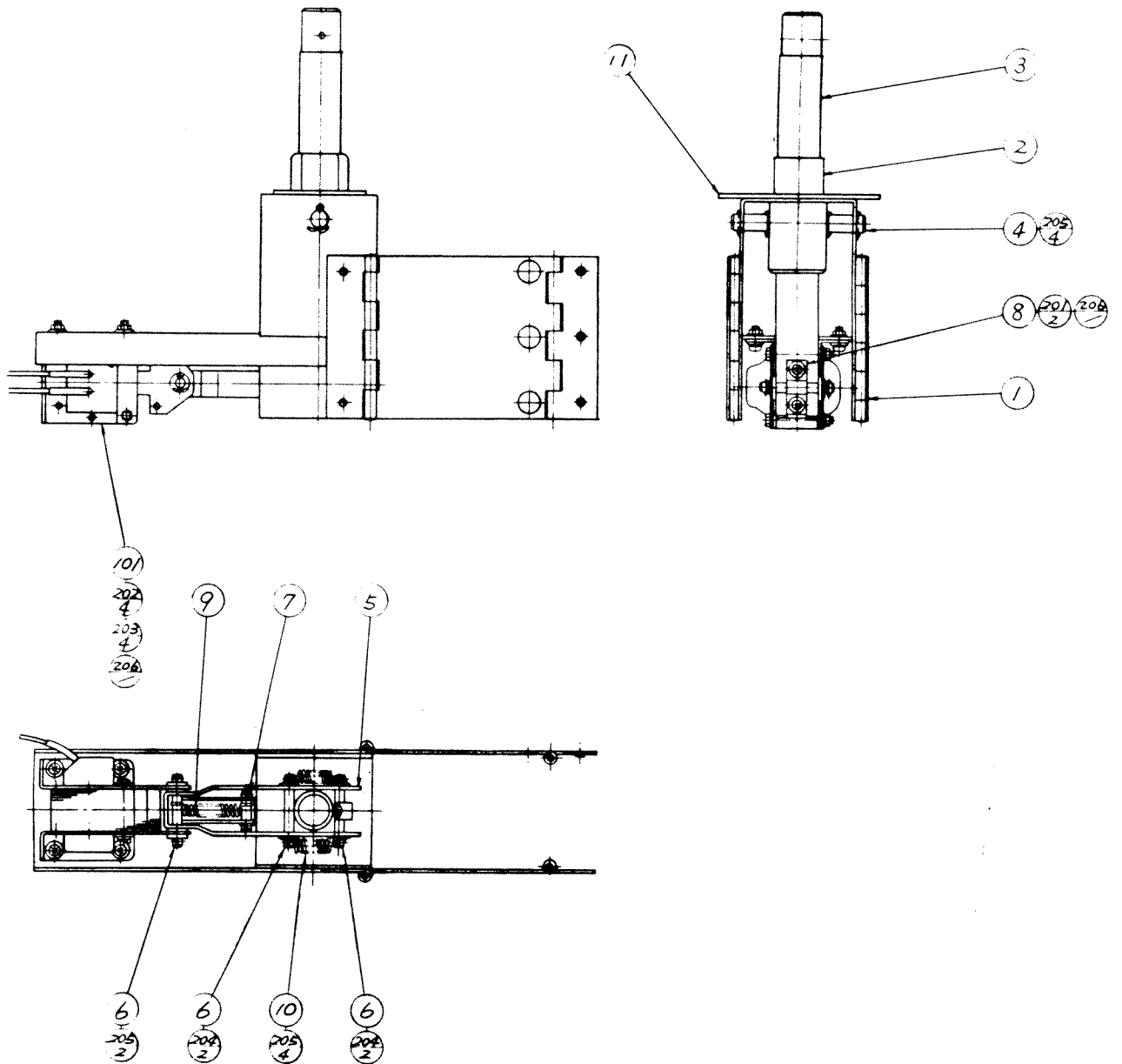
ITEM NO	PART NO.	DESCRIPTION
1	HM-2001	SUB-ASSY GUN
2	HM-2004	TRIGGER BRACKET
3	HM-2005	TRIGGER
4	HM-2006	SPRING
5	HM-2007	SHAFT
6	HM-2008	SWITCH BRACKET
7	HM-2009	BRACKET
8	HM-2010	RUBBER WASHER
9	HM-2011	LENS D=12 f=90
10	HM-2012	MUZZLE
11	HM-2013	SHAFT
12	HM-2014	HOUSING
13	HM-2015	ASSY GRIP
14	HM-2016	TOP PLATE OF GUN
15	834-5716	ASSY TRIGGER BD
16	834-5717	ASSY PHOTO TRANSISTOR BD
17	SGB-3634-7	WIRE HARN GUN
	211-0095	CONN PLUG AMP 2P ORANGE
	211-0099	CONN PLUG AMP 3P YELLOW
101	509-5102	SWITCH MICRO TYPE (MULON SL-2NW5)
102	211-0041	CONN PIN AMP
103	211-0167	TERM LUG ROWND ID. 5
201	000-0308-FS	M SCR PH W/F & M3x8
202	028-0014	SET SCR HEX SKT CP POINT UNBR M4x4
203	029-0004	M SCR PH M2x10
204	065-0003	ERING 3mm
205	008-0408	TMP PRF SCR TH M4x8
206	001-0306	M SCR FH M3x6
207	244-044	GLUE SCREW LOCK (HI-LOCK P.80 50CC TOHOKASEI)

⑥ SUB - ASSY GUN (HM-2001) (D-1/1)



ITEM NO.	PART NO.	DESCRIPTION
1	HM-2001-A	MAIN FRAME
2	HM-2001-B	MUZZLE
3	HM-2001-C	SIDE PLATE LEFT
4	HM-2001-D	SIDE PLATE RIGHT
5	HM-2002	PLASTIC GRIP LEFT COLT MK 1V
6	HM-2003	PLASTIC GRIP RIGHT COLT MK 1V
201	028-0012	SET SCR HEX SKT H CAP SCR UNBR M5×12
202	029-0026	TMP PRF SCR PH BLK M4×8

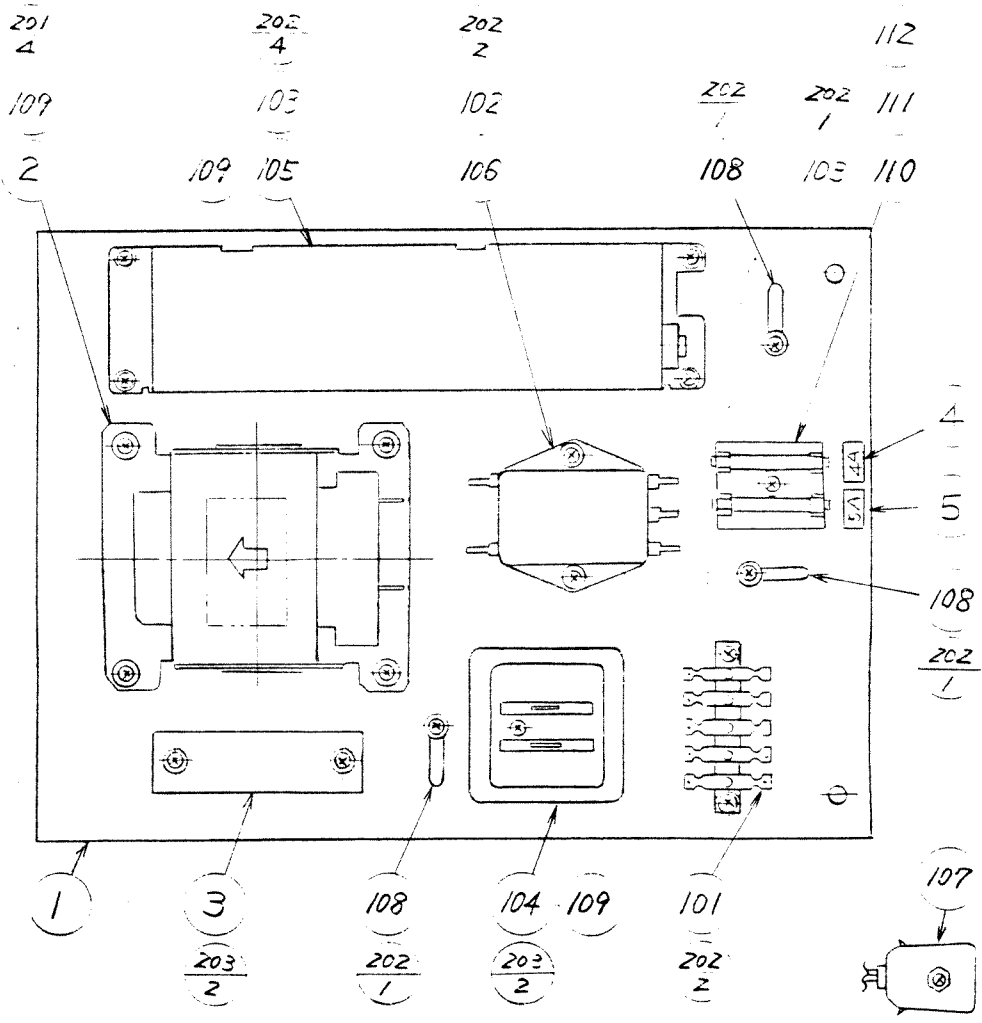
⑦ ASSY SHOCK MECHANISM (HM-3000) (D-1/2)



⑦ ASSY SHOCK MECHANISM (HM-3000) (D-2/2)

ITEM NO.	PART NO.	DESCRIPTION
1	HM-3001	MECHANISM BASE
2	HM-3002	HOUSING
3	HM-3003	SHAFT
4	HM-3004	SHAFT
5	HM-3005	JOINT
6	HM-3006	SHAFT
7	HM-3007	SHAFT
8	HM-3008	HOLDER
9	HM-3009	EXTENSION SPRING
10	HM-3010	EXTENSION SPRING
11	HM-3011	PLASTIC COVER
12	SGB-3634-6 211-0097	WIRE HARN SHOCK SOL CONN PLUG AMP 3P RED
101	124-5009	SOLENOID AC100V 3Kg
102	211-0041	CONN PIN AMP
201	010-0406-F	S-TITE SCR PH W/F M4×6
202	000-0514-FS	M SCR PH W/FS M5×14
203	051-0005	FLG NUT M5
204	060-0006	FLT WSHR M6
205	045-0003	COT PIN 1.6×12 (155-014)
	045-0004	COT PIN 1.6×15 (155-004)
206	244-044	GLUE SCREW LOCK (HI-LOCK P.80 50CC TOHOKASEI)

⑧ ASSY PWR SPLY (HM-4000) (D-1/2)

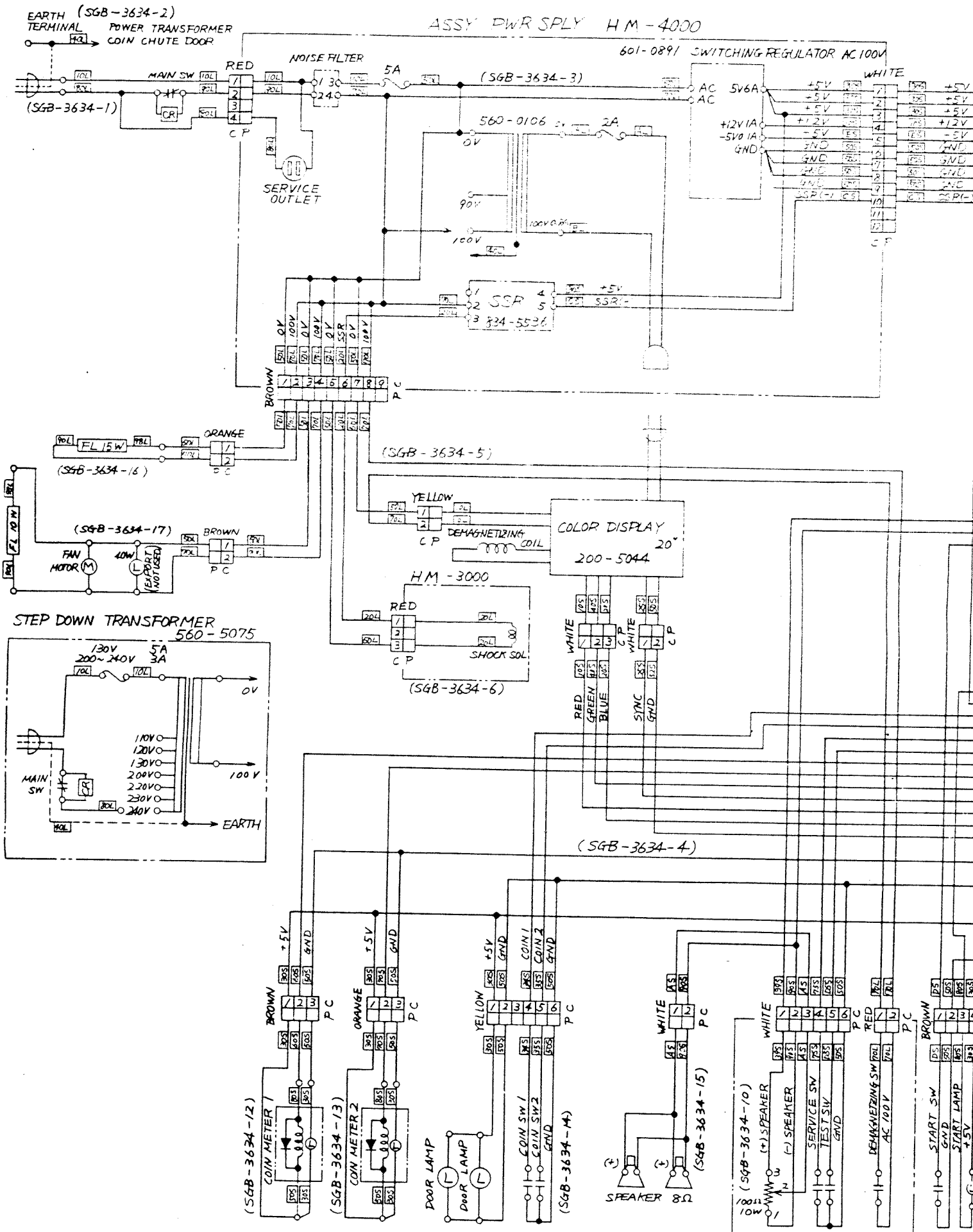


⑧ ASSY PWR SPLY (HM-4000) (D-2/2)

ITEM NO.	PART NO.	DESCRIPTION
1	HM-4001	BASE
2	560-0106	PWR XFMR U-90V U-100V
3	834-5536	ASSY SSR BOARD
4	80424	STICKER 2 AMPERE
5	80426	STICKER 5 AMPERE
6	SGB-3634-3	WIRE HARN PWR SPLY
	211-0100	CONN PLUG AMP 4P RED
	211-0084	CONN CAP AMP 9P BROWN
	211-0047	CONN CAP AMP 12P WHITE
	211-0041	CONN PIN AMP (AMP 350687-1)
	211-0142	CONN SOCKET AMP (AMP 350536-1)
101	211-0174	TERM 5P
102	280-0472	FASTON RCRT 110
103	280-5015	FASTON RCRT 187
104	601-0484	OUTLET AC TYPE
105	601-0891	SW RGLTR AC 100V
106	601-0429	NOISE FILTER 250V 4A
107	600-5133	CABLE & CONN 300L
108	280-0149	HARNESS LUG
109	211-0167	TERM LUG ROWND ID. 5
110	514-0046	FUSE HOLDER 2P 125V-10A (SAT OF-2)
111	514-0032	FUSE 2A \varnothing 6.4 \times 30mm
112	514-0034	FUSE 5A \varnothing 6.4 \times 30mm
201	000-0416-FS	M SCR PH M4 \times 16 W/F & S
202	005-3113-F	W SCR 3.1 \times 13 W/F
203	005-3120	W SCR 3.1 \times 20

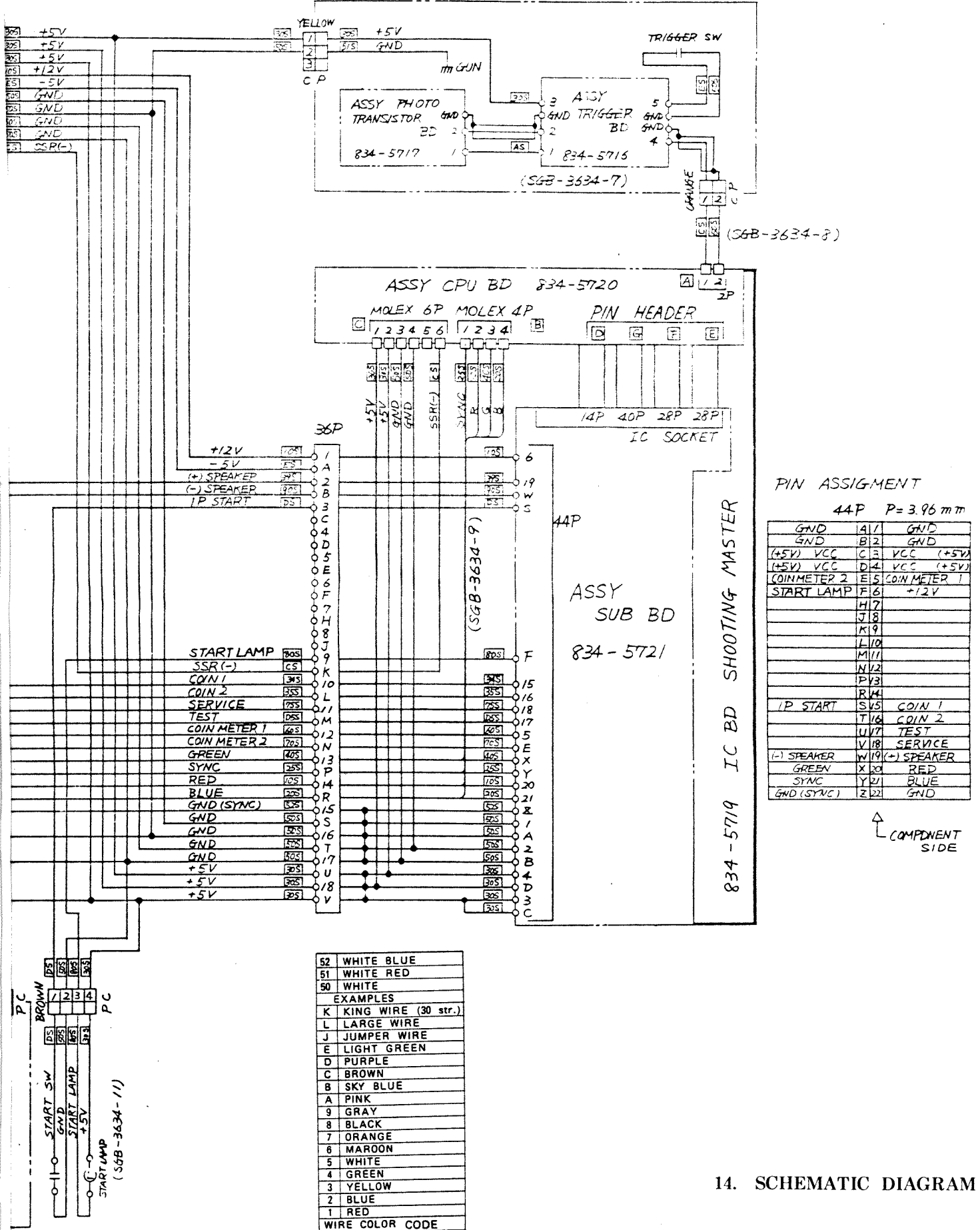
ASSY PWR SPLY H M - 4000

601-0891 SWITCHING REGULATOR AC 100V



SW UNIT H M - 1035

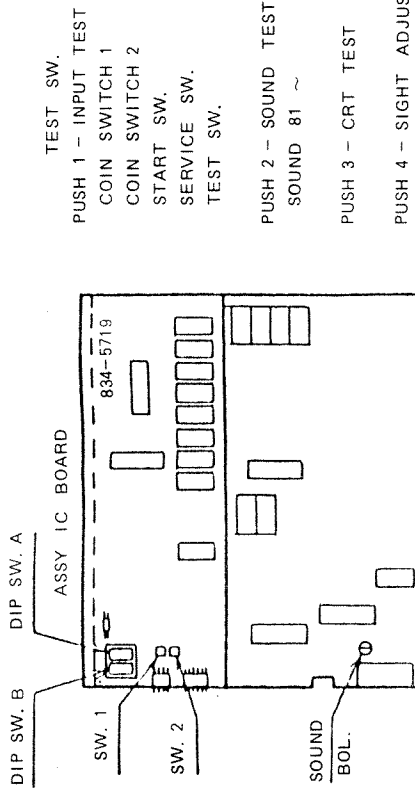
ASSY GUN HM-2000



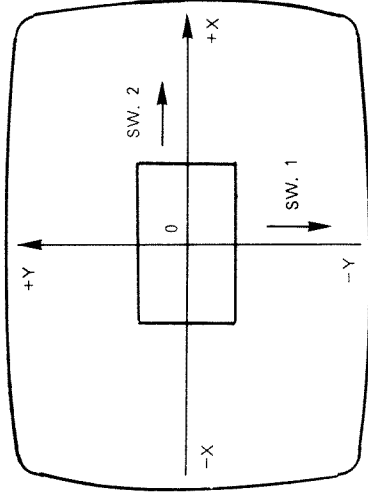
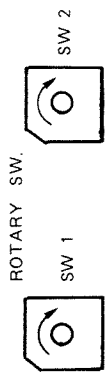
14. SCHEMATIC DIAGRAM

ADJUSTMENTS FOR IC BOARD (SHOOTING MASTER)

COIN/CREDIT OPTION SWITCH	DIP SW. A							
	1	2	3	4	5	6	7	8
1 COIN	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1 COIN	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
1 COIN	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
1 COIN	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
1 COIN	ON	OFF	ON	OFF	ON	OFF	ON	OFF
2 COINS	OFF	ON	ON	OFF	ON	ON	ON	OFF
3 COINS	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
2 COINS	ON	OFF	ON	ON	OFF	ON	ON	ON
3 COINS	ON	ON	ON	ON	ON	ON	ON	ON
1 COIN	OFF	OFF	ON	ON	OFF	OFF	ON	ON
2 COINS	ON	ON	ON	ON	ON	ON	ON	ON
3 COINS	ON	ON	ON	ON	ON	ON	ON	ON
4 COINS	ON	ON	ON	ON	ON	ON	ON	ON
5 COINS	ON	ON	ON	ON	ON	ON	ON	ON
1 COIN	ON	OFF	ON	ON	ON	OFF	ON	ON
2 COINS	OFF	ON	ON	ON	OFF	ON	ON	ON
3 COINS	ON	ON	ON	ON	ON	ON	ON	ON
1 COIN	ON	ON	ON	ON	ON	ON	ON	ON



- TEST SW.
- PUSH 1 - INPUT TEST
- COIN SWITCH 1
- COIN SWITCH 2
- START SW.
- SERVICE SW.
- TEST SW.
- PUSH 2 - SOUND TEST
- SOUND 81 ~
- PUSH 3 - CRT TEST
- PUSH 4 - SIGHT ADJUSTMENT



STANDARD
X = 8
Y = 8

OPTION SWITCH SETTING	DIP SW. B							
	1	2	3	4	5	6	7	8
ADVERTISE SOUND	OFF	ON						
NUMBER OF PLAYER	3 MEN	OFF	OFF					
	4 MEN	ON	OFF					
	5 MEN FREE	ON	ON					
EXTRA PLAYER					OFF	OFF		
100000					ON	ON		
150000					OFF	OFF		
200000					ON	ON		
300000					ON	ON		
GAME DIFFICULTY	EASY						OFF	OFF
	MEDIUM						ON	ON
	HARD						OFF	OFF
HARDEST							ON	ON
							ON	ON
NUMBER OF SHOTS IN 1 SECOND	5	OFF						
	3	ON						

	0	1	2	3	4	5	6	7	9	A	B	C	D	E	F	
X	-16	-14	-12	-10	-8	-6	-4	-2	0	+2	+4	+6	+8	+10	+12	+14
Y	-16	-14	-12	-10	-8	-6	-4	-2	0	+2	+4	+6	+8	+10	+12	+14

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