

SEGA®

Out Run

UPRIGHT TYPE

ILLUSTRATED PARTS MANUAL

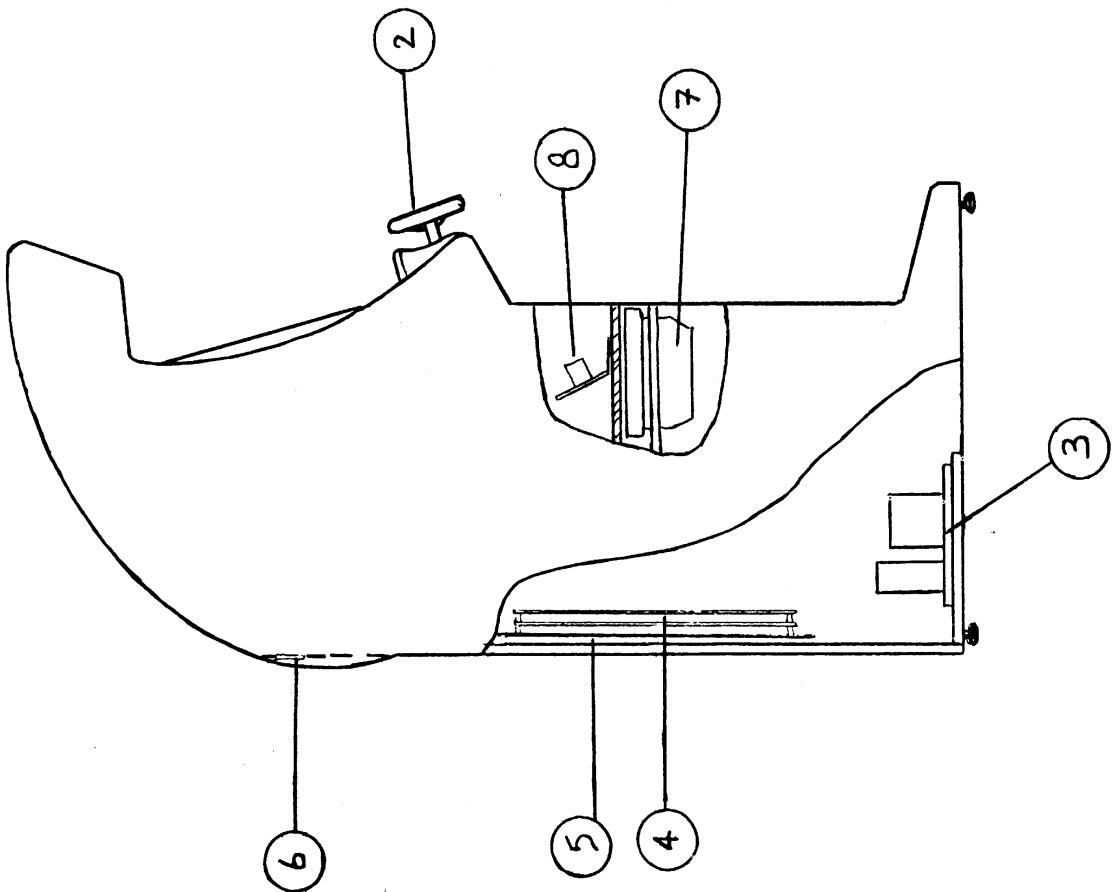
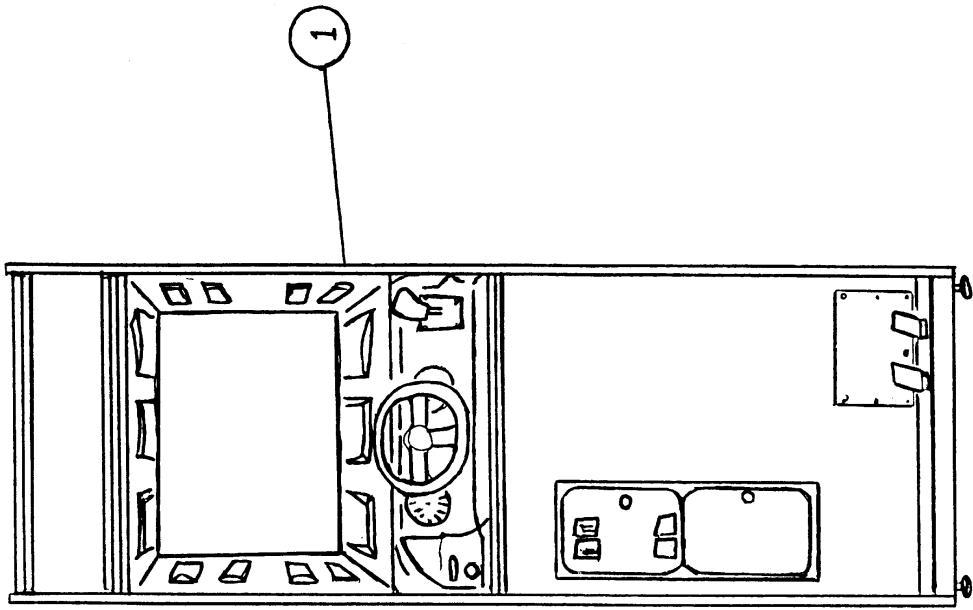


SEGA ENTERPRISES, LTD.

CONTENTS

1.	FINAL ASSY OUTFUN	1
2.	CABINET ASSY OUTFUN	6
3.	AUDIO II P.C.B. ASSY	8
4.	SWITCHING POWER SUPPLY ASSY	10
5.	CONTROL PANEL ASSY	11
6.	ACCELERATOR AND BRAKE ASSY	14
7.	SHIFT LEVER ASSY	16
8.	COIN DOOR ASSY	18
9.	HARNESS INSTALLATION	21

1 FINAL ASSY., OUTRUN UPRIGHT (KR-00002AT)



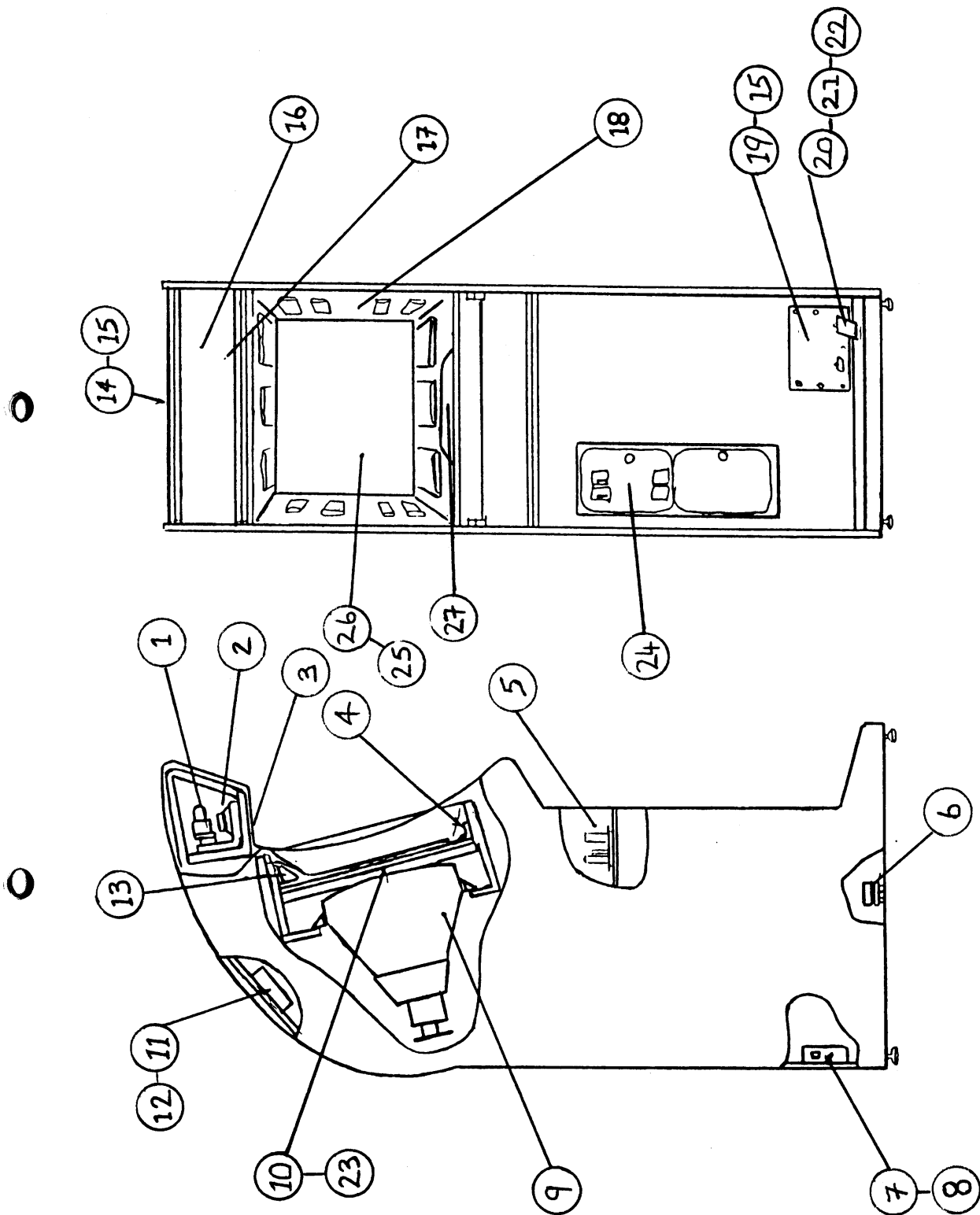
FINAL ASSY., OUTFUN UPRIGHT (KR-00002AT)

ITEM NO.	PART NO.	DESCRIPTION
1.	KR-1600AT	CABINET ASSY.
2.	KR-11001	ASSY. CONTROL PANEL
3.	A043363-510R	ASSY. POWER SUPPLY
4.	834-6065-06	MAIN P.C.B. OUTFUN
5.	KR-0013AT	GROUND PLANE
6.	117-5113	NAME PLATE
7.	038091-01	CASH BOX
8.	KR-1720AT 039457-01 62-039 80931 A002465-02	ASSY. SWITCH UNIT COMPONENT BRACKET SWITCH, SERVICE COIN METER STICKER COIN METER

The following items have been placed in a plastic bag, and are located in the base of the game.

540-0009-01	WRENCH FOR TMPSCR M8
540-0006-01	WRENCH FOR TMPSCR M4
540-0007-01	WRENCH FOR TMPSCR M5
540-0015-01	WRENCH FOR TMPSCR M6
220-5130	VOL. CONTROL POT. B5K OHM
601-5635	BRUSH
420-5305-02AT	OWNER'S MANUAL
420-5305-PL	PARTS LIST MANUAL
TM-274	MONITOR MANUAL

FINAL ASSY., OUTRUN UPRIGHT
(KR-00002AT) CONTD.,



FINAL ASSY., OUTFUN UPRIGHT
(KR-00002AT) CONTD.,

ITEM NO.	PART NO.	DESCRIPTION
1.	A042160-03	FLUORESCENT LIGHT ASSY.
	KR-1606AT	LIGHT PANEL (PLYWOOD)
	142043-001	CHOKE, BALLAST 220 V, 50 HZ
	179220-001	STARTER HOLDER
	035835-01	CONN. Y LEAD
	171079-001	STARTER 220 V
	70-303	18" FL. LIGHT
	99-11012	1" CLAMP
	A005493-01	LIGHT HARNESS ASSY.
2.	148007-003	5" RD. SPEAKER
3.	KR-1064XAT	FRAME LOWER SPEAKER
4.	HN-1040AT	HOLDER BRACKET
5.	A043661-OR	AUDIO AUX. P.C.B.
6.	839-0048	SSR BD. DC. MOTOR
7.	040036-03	PLATE, ON/OFF
	61-162A	SWITCH, ON/OFF
	78-2111P	STRAIN RELIEF
	178031-001	LOCKING RING
8.	009992-01	COVER, ON/OFF SWITCH
9.	139016-1007	19" MONITOR
10.	HN-1038AT	MASK BOARD
11.	171002-103	FAN 220 V
12.	M0-1051XAT	GRILLE, FAN
13.	KR-1612AT	MASK BRACKET
14.	KR-1065XAT	FRAME UPPER, RETAINER
15.	82-8116B	MACH. SCREW BT. HD. SOC. CAP.
16.	423-0031ATG	GLASS ATTRACTION
17.	423-0031ATD	DECAL ATTRACTION
18.	KR-1068	WINDOW MASK
19.	KR-12002	BRAKE PEDAL ASSY.
20.	KR-1071	ACCEL. PEDAL
21.	063-0064	E RING
22.	KR-1073	SHAFT

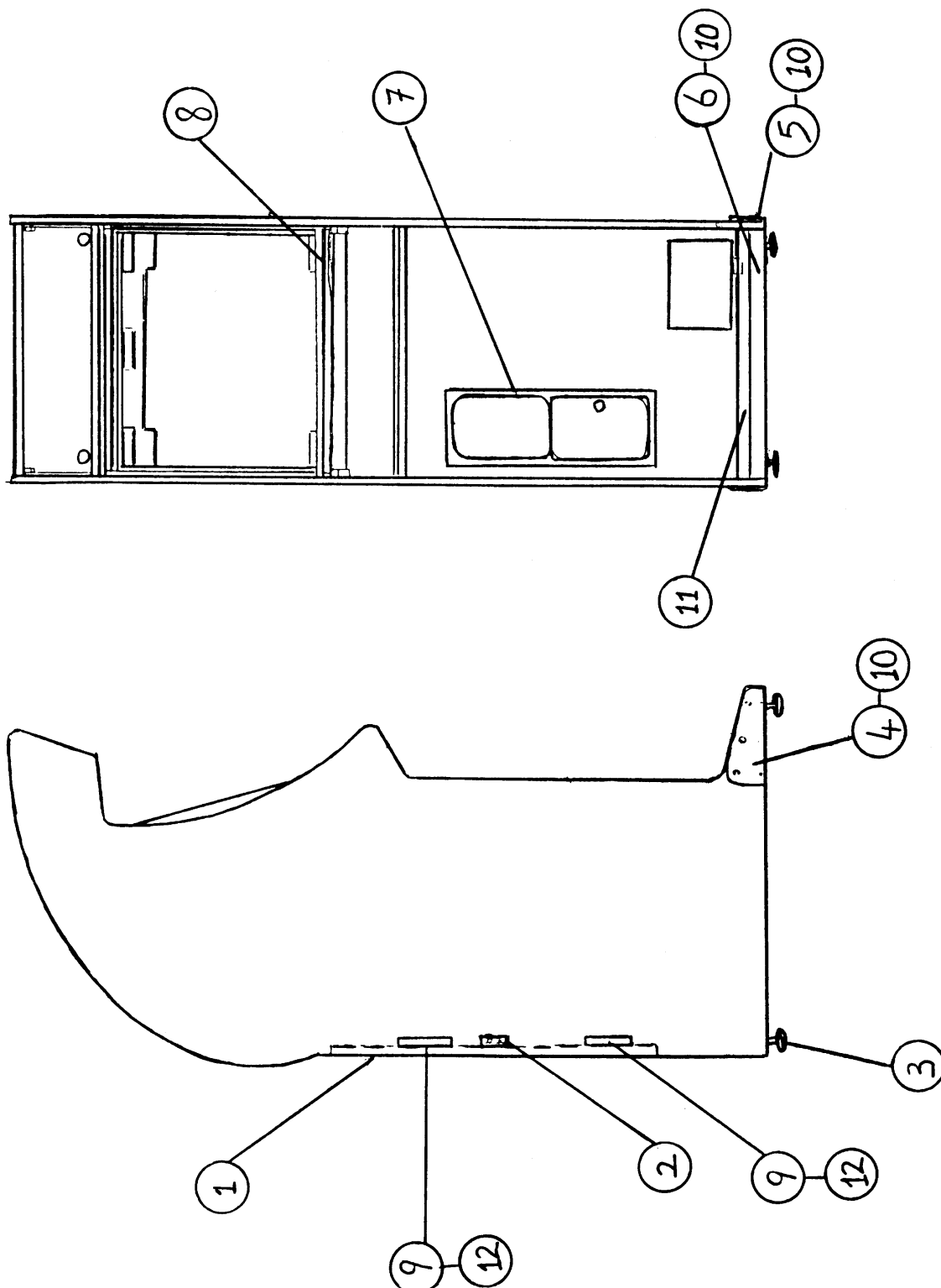
FINAL ASSY., OUTRUN UPRIGHT
(KR-00002AT) CONTD.,

ITEM NO.	PART NO.	DESCRIPTION
23.	AB-1206	TV BEZEL
24.	A037619-XXTS	COIN DOOR TOP SECTION WITH HARNESS

(Please note currency denomination)

25.	AB-1151Y	TV MASK GREY SMOKE
26.	HN-1039XAT	SHIELD MONITOR
27.	422-0168-91	GAME PLAY INSTRUCTIONS

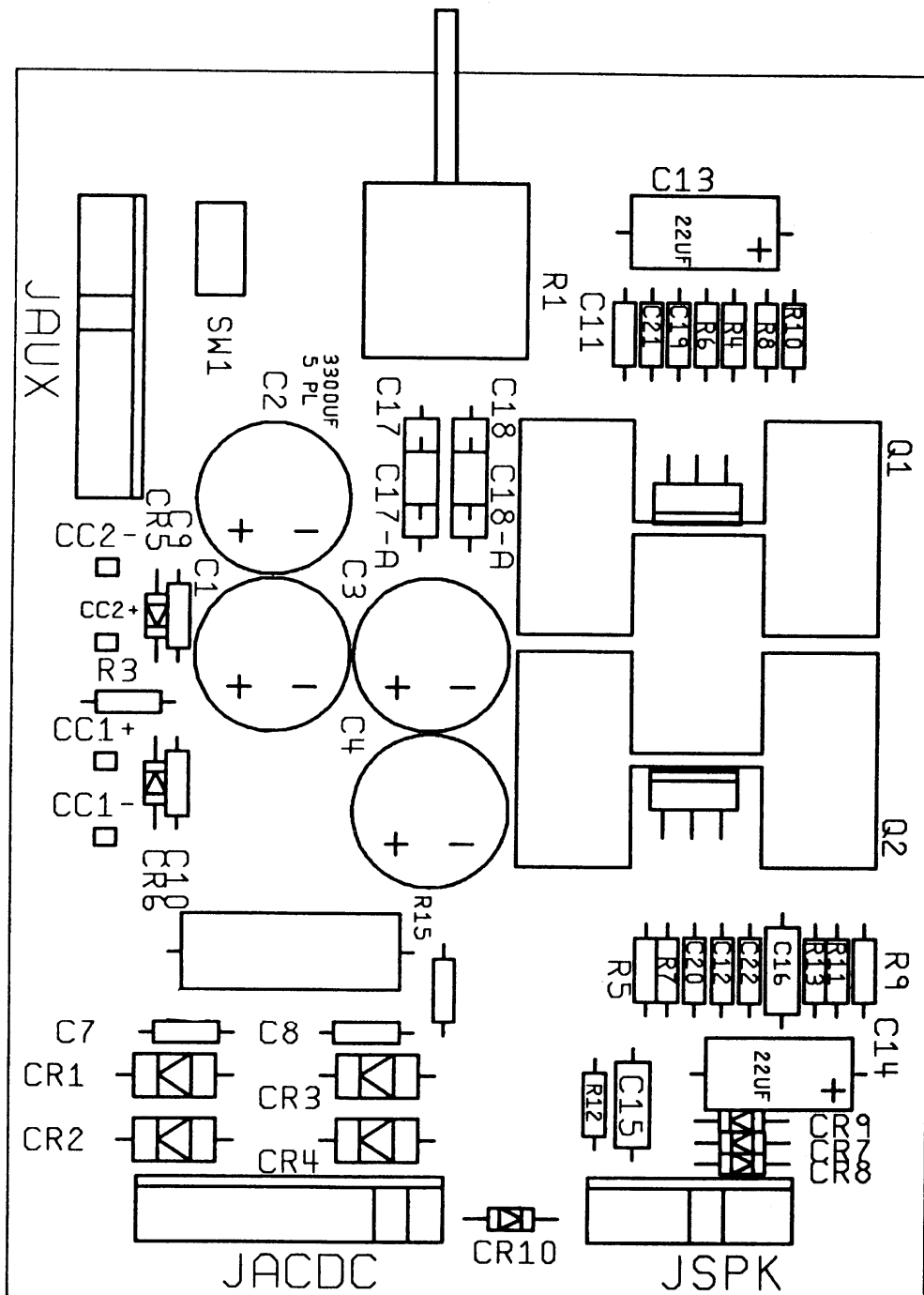
2 ASSY., CABINET OUTRUN UPRIGHT
(KR-1600AT)



ASSY., CABINET OUTRUN UPRIGHT
(KR - 1600AT)

ITEM NO.	PART NO.	DESCRIPTION
1.	KR-1611AT	REAR DOOR
2.	A038881-01	ASSY. LOCK MECH.
3.	78-3201	SWIVEL ADJUSTER
4.	KR-1609AT	BRACKET UNDER RIGHT
5.	KR-1610AT	BRACKET UNDER LEFT
6.	KR-1602AT	BRACKET SUPPORT
7.	99-15074FB	COIN DOOR FRAME
8.	KR-1605AT	BRACKET HOLDER
9.	035851-01	HINGE
10.	046-0001AT	NAIL
11.	KR-1604	FLOOR MAT
12.	75-5520B	1/4 - 20 CARRIAGE BOLT

3 AUDIO II P.C.B. ASSEMBLY, A043661-0R



AUDIO II P. C. B. ASSEMBLY, A043661-0R

CAPACITORS

C1-C4	3300 μ F, 25 V Radial Electrolytic Capacitor	123003-338
C7-C12	.1 μ F, 50 V Ceramic Capacitor	122002-104
C13-C14	22 μ F, 35 V Electrolytic Capacitor	24-350226
C15-C18	.22 μ F, 25 V Ceramic Capacitor	122006-224
C19-C20	.001 μ F, 50 V Ceramic Capacitor	122002-102
C21-C22	.1 μ F, 50 V Ceramic Capacitor	122002-104

DIODES

CR1-CR4	Type-1N5401 Diode	31-1N5401
CR5-CR10	Type-1N4001 Diode	31-1N4001

CONNECTORS

JACDC	Key 2, 9 Ckt., .156-Inch Ctr. Header Connector	179213-009
JAUX	Key 6, 9 Ckt., .156-Inch Ctr. Header Connector	179213-009
JSPK	Key 3, 6 Ckt., .156-Inch Ctr. Header Connector	179213-006

INTEGRATED CIRCUITS

Q1-Q2	Type-TDA-2030 Amplifier	137301-001
-------	-------------------------	------------

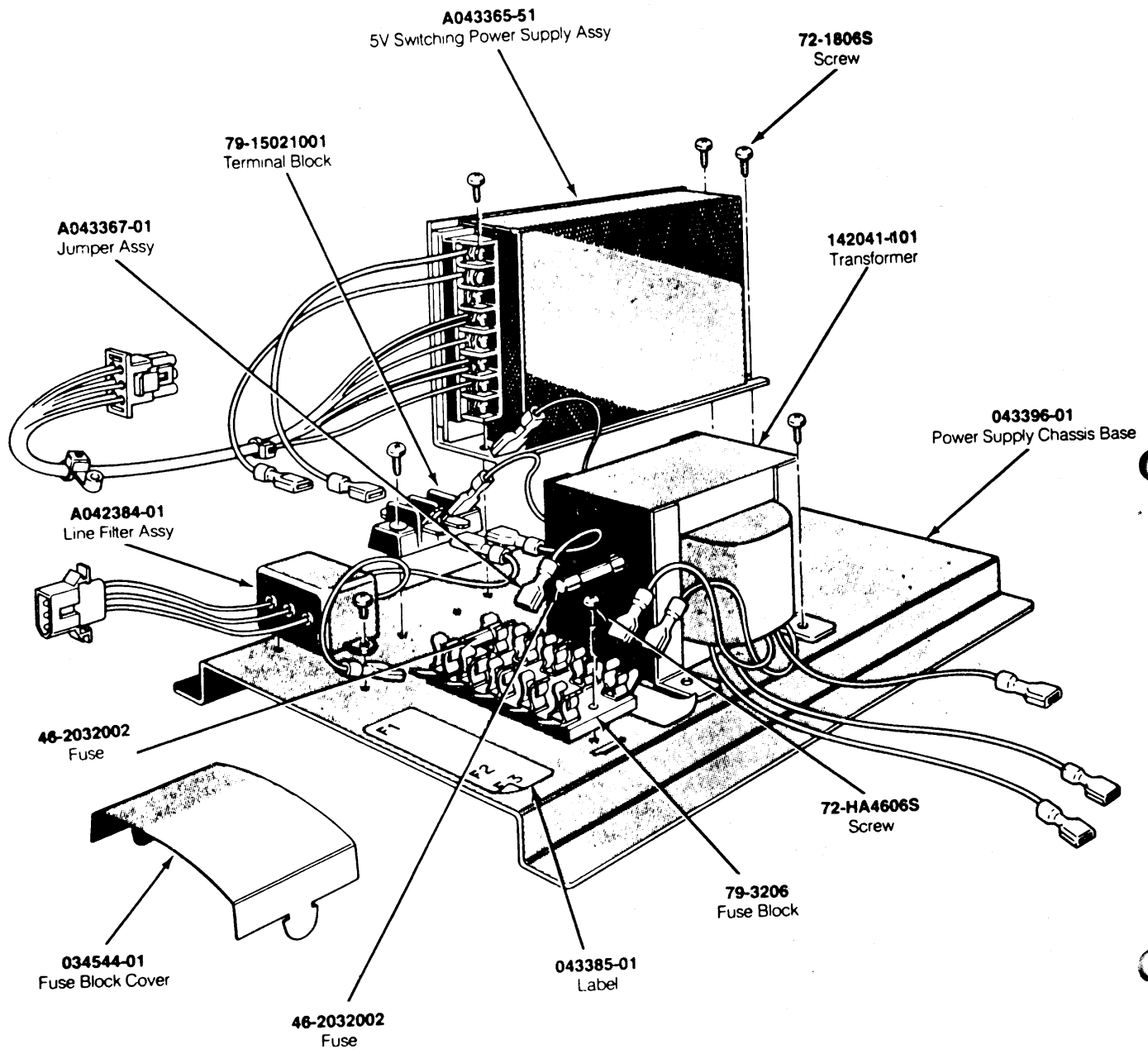
RESISTORS

R1	10 k Ohm, Dual Horizontal Pot Resistor	119011-103
R3	10 Ohm, 5%, 1/4 W Resistor	110000-100
R6-R7	22 k Ohm, 5%, 1/4 W Resistor	110000-223
R8-R9	33 k Ohm, 5%, 1/4 W Resistor	110000-333
R4-R5	0 Ohm, 5%, 1/4 W Resistor	110005-001
R10-R11	240 Ohm, 5%, 1/4 W Resistor	110000-241
R12-R13	1 Ohm, 5%, 1/4 W Resistor	110000-010

MISCELLANEOUS

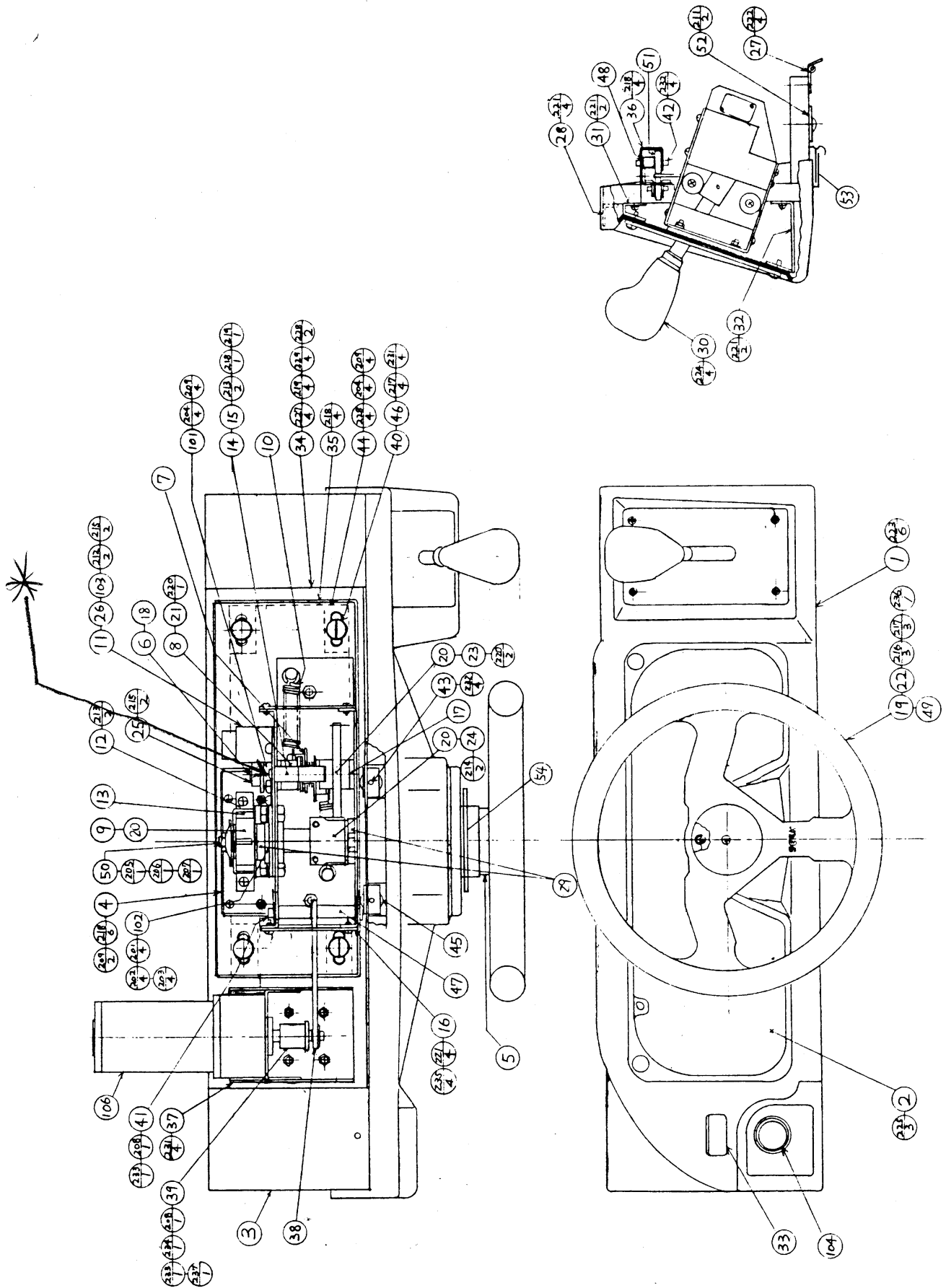
SW1	SPDT Miniature Slide Self-Test Switch	69-004
TP28-TP29	6-32 x 3/8-Inch Cross-Recessed Pan-Head Screw	72-1606S
TP28-TP29	6-32 Nut/Washer Assembly	75-99516
TP28-TP29	Thermal Compound	78-16001
TP28-TP29	Type-TDA-230 Heat Sink	178190-032
	Hot Melt Adhesive	106006-001
	Test Point	179051-001

4 SWITCHING / LINEAR POWER SUPPLY ASSEMBLY A043363-51AT



Part No.	Description
043396-51	Power Supply Chassis Base
A043365-51	5V Switching Power Supply Assembly
A042384-01	Line Filter Assembly
A043367-01	Jumper Assembly
46-2032002	Fuse, 2 A, Normal-Blow, 250 V
72-HA4606S	Screw, Thread-Forming, Pan-Head, Cross-Recessed, #6-32 x 3/8-Inch
72-1806S	Screw, #8-32 x 3/8-Inch-Long, Cross-Recessed, Pan-Head
79-15021001	Terminal Block, 2-Position
79-3206	Fuse Block, 5-Position
034544-01	Cover, Fuse Block
043385-01	Label, Power Supply (Fuses)
142041-101	Transformer

5 ASSY CONTROL PANEL (KR-11001) (D-1/3)



ASSY CONTROL PANEL (KR-11001) (D-2/3)

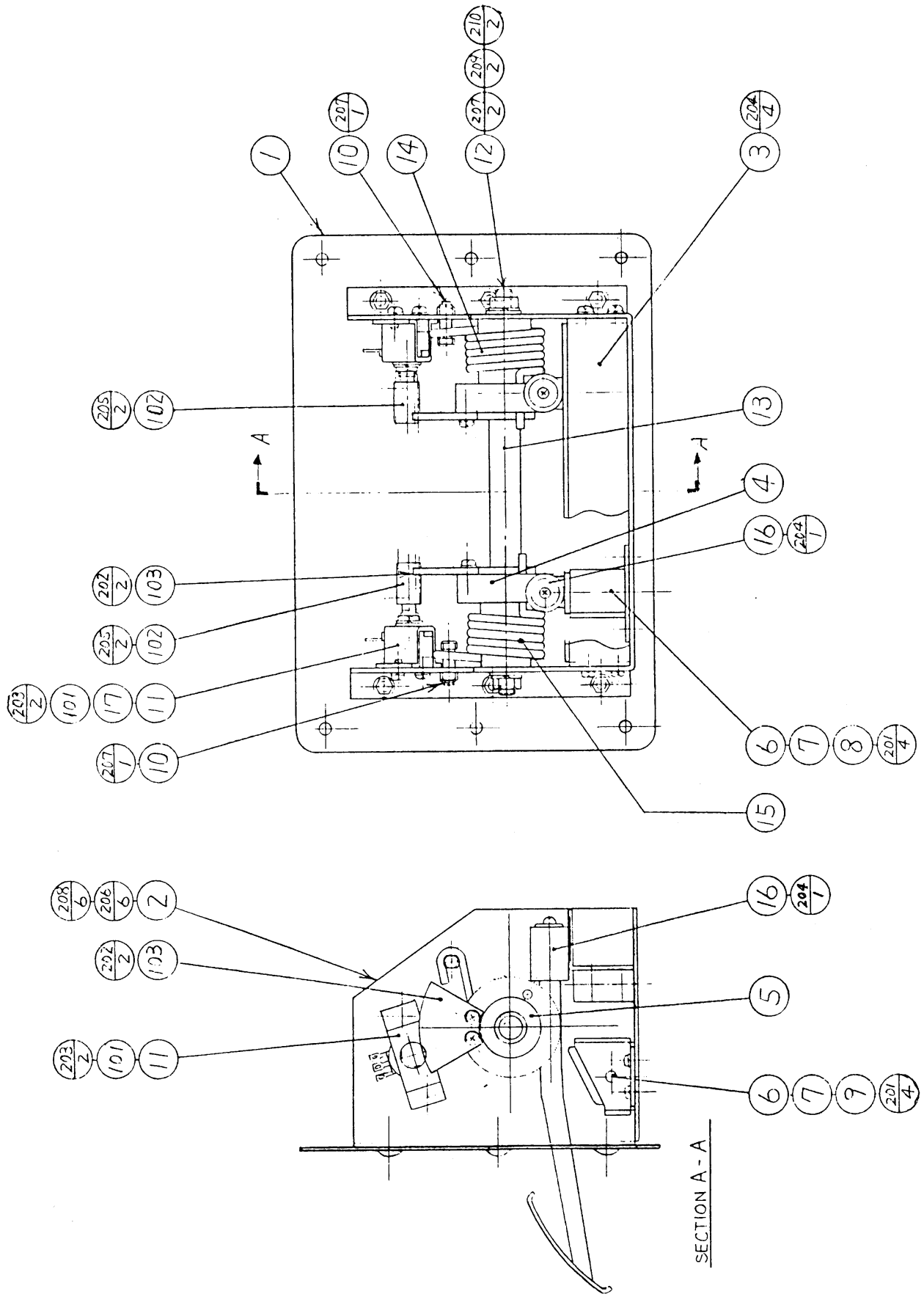
ITEM NO.	PART NO.	DESCRIPTION
1	KR-1133	CONTROL PANEL
2	KR-1134	METER PANEL
3	KR-1132	CONT WOODEN BASE
4	KR-1105X	HANDLE BASE
5	KR-1106X	STEERING WHEEL SHAFT
6	KR-1107	SHAFT
7	KR-1108	ARM PLATE
8	KR-1109X	ARM BAR
9	KR-1110Y	STEERING WHEEL STOPPER
10	KR-1111X	EXTENSION SPRING
11	KR-1112	VOLUME BRACKET
12	KR-1113	BUMPER BRACKET
13	KR-1114	BUMPER
14	KR-1115	STOPPER
15	KR-1116	RUBBER STOPPER
16	KR-1117	PLATE
17	KR-1119	COLLAR B
18	KR-1120	SPACER A
19	KR-1121X	STEERING HANDLE \varnothing 270
20	KR-1122	KEY A
21	KR-1123	KEY B
22	KR-1125X	HANDLE EMBLEM
23	KR-1126	GEAR A
24	KR-1127	GEAR B
25	KR-1128	GEAR C
26	KR-1129	GEAR D
27	KR-1130	HINGE 590
28	KR-1131	BRACKET
29	KR-1118	COLLAR A
30	KR-13001	ASSY SHIFT LEVER S
31	KR-1141	BRACKET A
32	KR-1142	BRACKET B
33	117-5133	START PLATE
34	KR-1143	BASE
35	KR-1144	SLIDE BASE
36	KR-1145	ROLLER BRACKET
37	KR-1146	MOTOR BRACKET
38	KR-1147	ROD
39	KR-1148	CAM
40	KR-1149	SHOULDER SCREW
41	KR-1150	SHAFT
42	KR-1151	SHAFT LONG
43	KR-1152	SHAFT SHORT
44	KR-1153	SLIDE PLATE
45	KR-1154	ROLLER A
46	KR-1155	PLASTIC WASHER
47	KR-1156	COLLAR
48	KR-1157	SPACER
49	KR-1165	SPACER
50	KR-1137	STOPPER WASHER
51	KR-1164	ROLLER B
52	KR-1171	PLATE
53	KR-1173	COVER PLATE
54	KR-1174	SPACER

ASSY CONTROL PANEL (KR-11001) (D-3/3)

ITEM NO.	PART NO.	DESCRIPTION
	SGB-3751-13	WIRE HARN HANDLE VR
	211-0059	CONN PLUG AMP 3P WHITE
	SGB-3751-14	WIRE HARN START SW
	211-0100	CONN PLUG AMP 4P RED
	280-0472	FASTON RCPT 110
	SGB-3751-19	WIRE HARN DC MOTOR
	211-0094	CONN PLUG AMP 2P
	209-0023	CONN CLOSED END
101	100-5015	BEARING ϕ 10
102	100-5035	BEARING ϕ 20
103	220-5130	VOL CONT B-5K OHM
104	509-5053	PUSH BTN SWITCH GREEN W/LAMP
105	211-0041	CONN PIN AMP
106	350-5086	MOTOR DC 45V
107	280-5008	CORD CLAMP ϕ 15
108	280-0419	HARNESS LUG
109	601-0460	TIE BELT
201	030-0825	HEX BLT M8x25
202	060-0008	FLT WSHR M8
203	061-0008	SPR WSHR M8
204	054-0005	U NUT M5
205	050-0010	HEX NUT M10
206	069-0009	FLT WSHR 10.5-28x2
207	061-0010	SPR WSHR M10
208	060-0010	FLT WSHR M10
209	060-0005	FLT WSHR M5
211	008-0512	TMP PRF SCR TH M5x12
212	000-0408-FS	M SCR PH WFS M4x8
213	000-0510-FS	M SCR PH W/FS M5x10
214	028-0010	SET SCR HEX SKT CP M5x8
215	028-0014	SET SCR HEX SKT CP UNBR M4x4
216	029-0078	TMP PRF SCR TH M6x16
217	061-0006	SPR WSHR M6
218	000-0510-S	M SCR PH W/S M5x10
219	069-0022	FLT WSHR 5.5-14x1
220	028-0007	SET SCR HEX SKT CP UNBR M4x10
221	000-0416-FS	M SCR PH M4x16 W/FS
222	008-0516	TMP PRF SCR TH M5x16
223	008-0416	TMP PRF SCR TH M4x16
224	008-0408	TMP PRF SCR TH M4x8
225	001-0420	M SCR FHT M4x20
227	000-0514-S	M SCR PH 5x14 W/S
228	001-0516	M SCR FH 5x16
229	005-3516	W SCR RH 3.5x16
231	054-0006	U NUT M6
232	045-0003	COT PIN 1.6x12
233	045-0005	COT PIN 2x15
234	028-0012	SET SCR CHEESE HEAD SPECIAL M5x12
235	054-0004	U NUT M4
236	008-0425	TMP PRF SCR TH M4x25
237	045-0014	SPR PIN UNBR 3x26
238	005-3113	W SCR RH 3.1x13
239	006-3113	W SCR FH 3.1x13

6 ASSY ACCEL & BRAKE U/R (KR-12002)

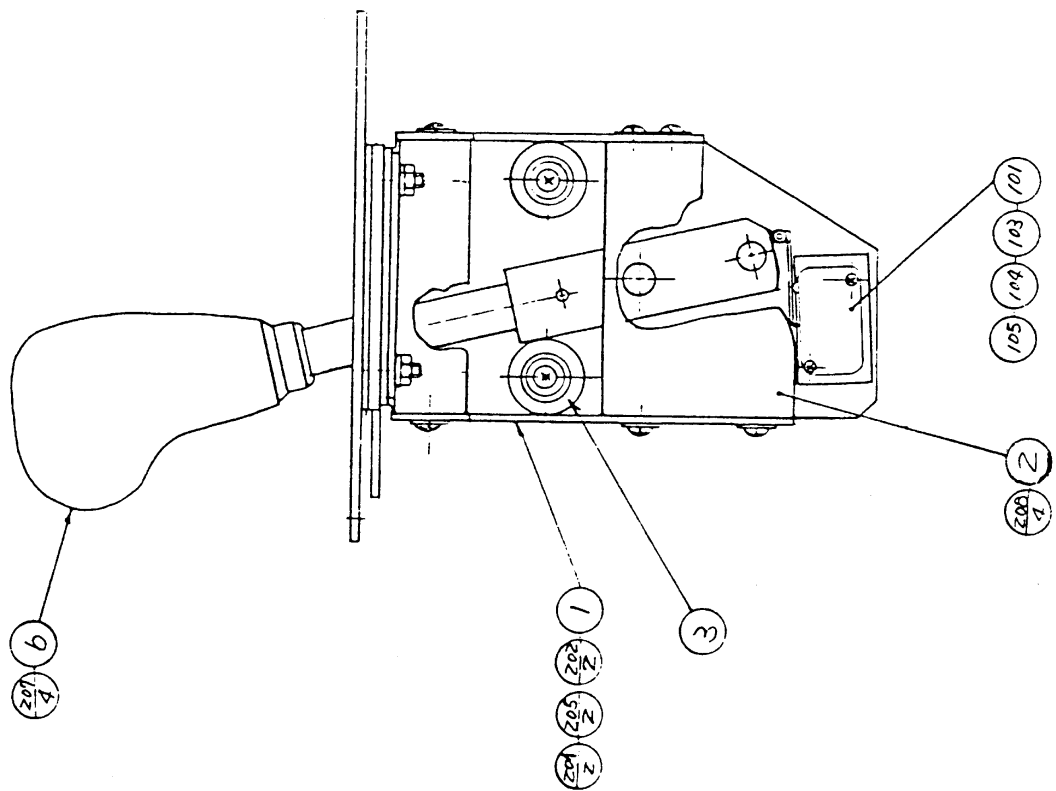
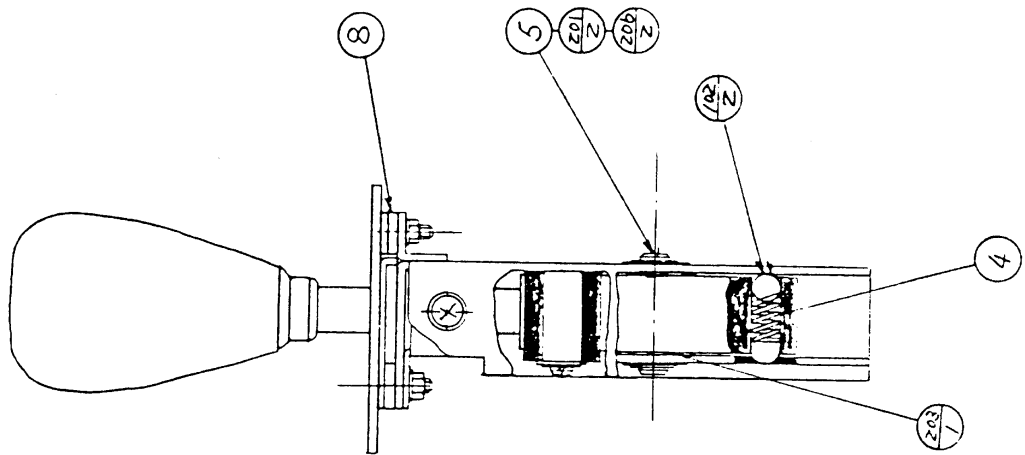
(D-1/2)



ASSY ACCEL & BRAKE U/R (KR-12002) (D-2/2)

ITEM NO.	PART NO.	DESCRIPTION
1	KR-1216	LID
2	KR-1217	PEDAL BRACKET
3	KR-1218	STOPPER BRACKET
4	KR-1219	ACCEL BAR
5	KR-1220	BRAKE BAR AND PEDAL
6	KR-1221	BUMPER BRACKET A
7	KR-1222X	BUMPER BRACKET B
8	KR-1223	BUMPER A
9	KR-1224	BUMPER B
10	KR-1225	SPRING STOPPER
11	KR-1205	VR BRACKET
12	KR-1208	SHAFT BRAKE ACCEL
13	KR-1209	COLLAR
14	KR-1210	TORSION SPRING A
15	KR-1211	TORSION SPRING B
16	KR-1213	BUMPER
18	SGB-3751-12 211-0045	WIRE HARN ACCEL & BRAKE VR CONN PLUG AMP 6P WHITE
101	220-5130	VOL CONT B-5K OHM
102	601-5410	GEAR 15 Ø6
103	601-5423	GEAR 1/6
104	211-0041	CONN PIN AMP
105	280-5008	CORD CLAMP Ø15
106	601-0460	TIE BELT
201	000-0406-S	M SCR PH W/S M4×6
202	000-0408-S	M SCR PH W/S M4×8
203	000-0408-FS	M SCR PH W/FS M4×8
204	000-0510-FS	M SCR PH W/FS M5×10
205	028-0002	SET SCR PH SPCL M3×6
206	031-0514-B	CRG BLT BLK M5×14
207	050-0008	HEX NUT M8
208	051-0005	FLG NUT M5
209	060-0008	FLT WSHR M8
210	061-0008	SPR WSHR M8

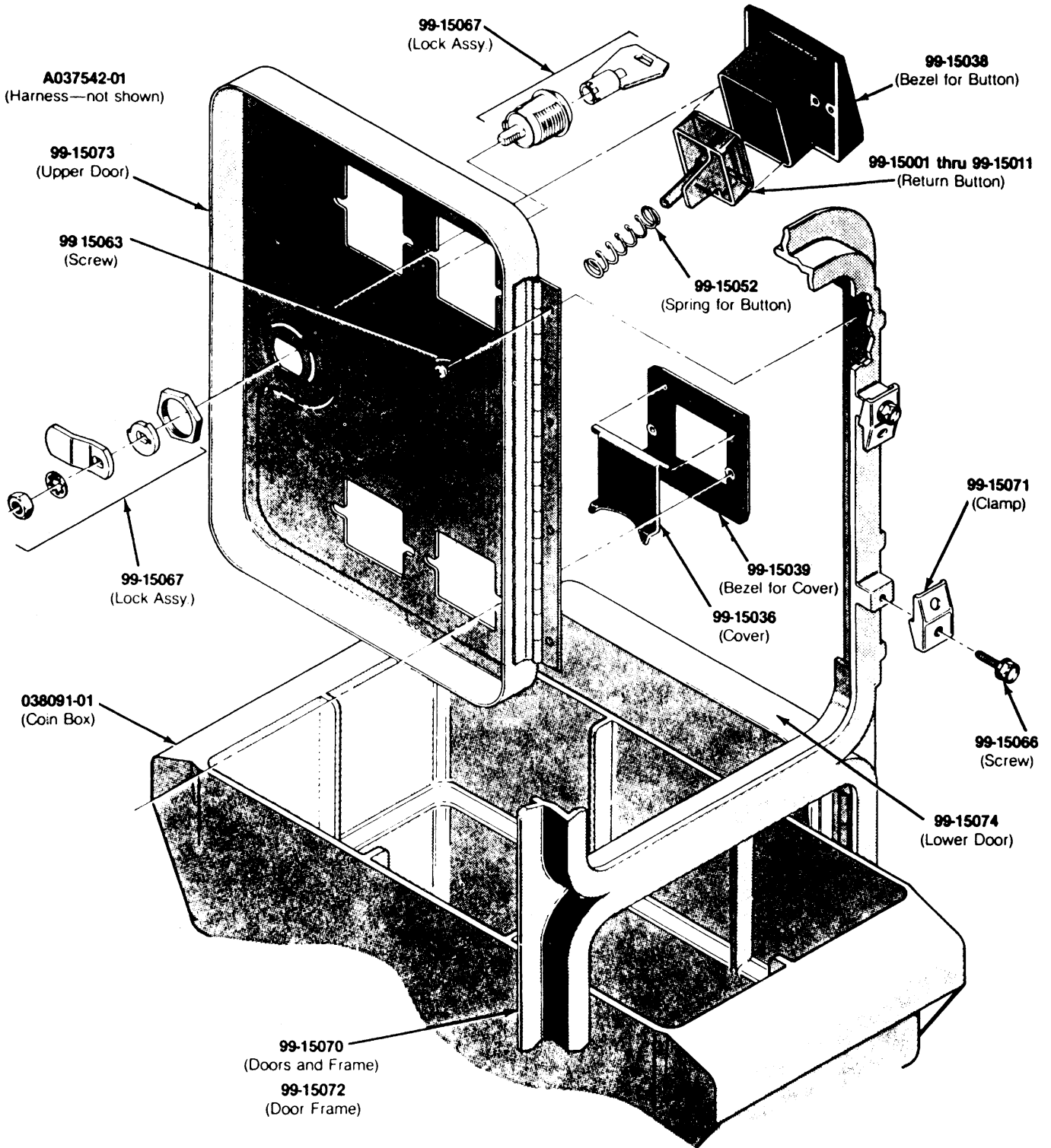
7 ASSY SHIFT LEVER S (KR-13001) (D-1/2)



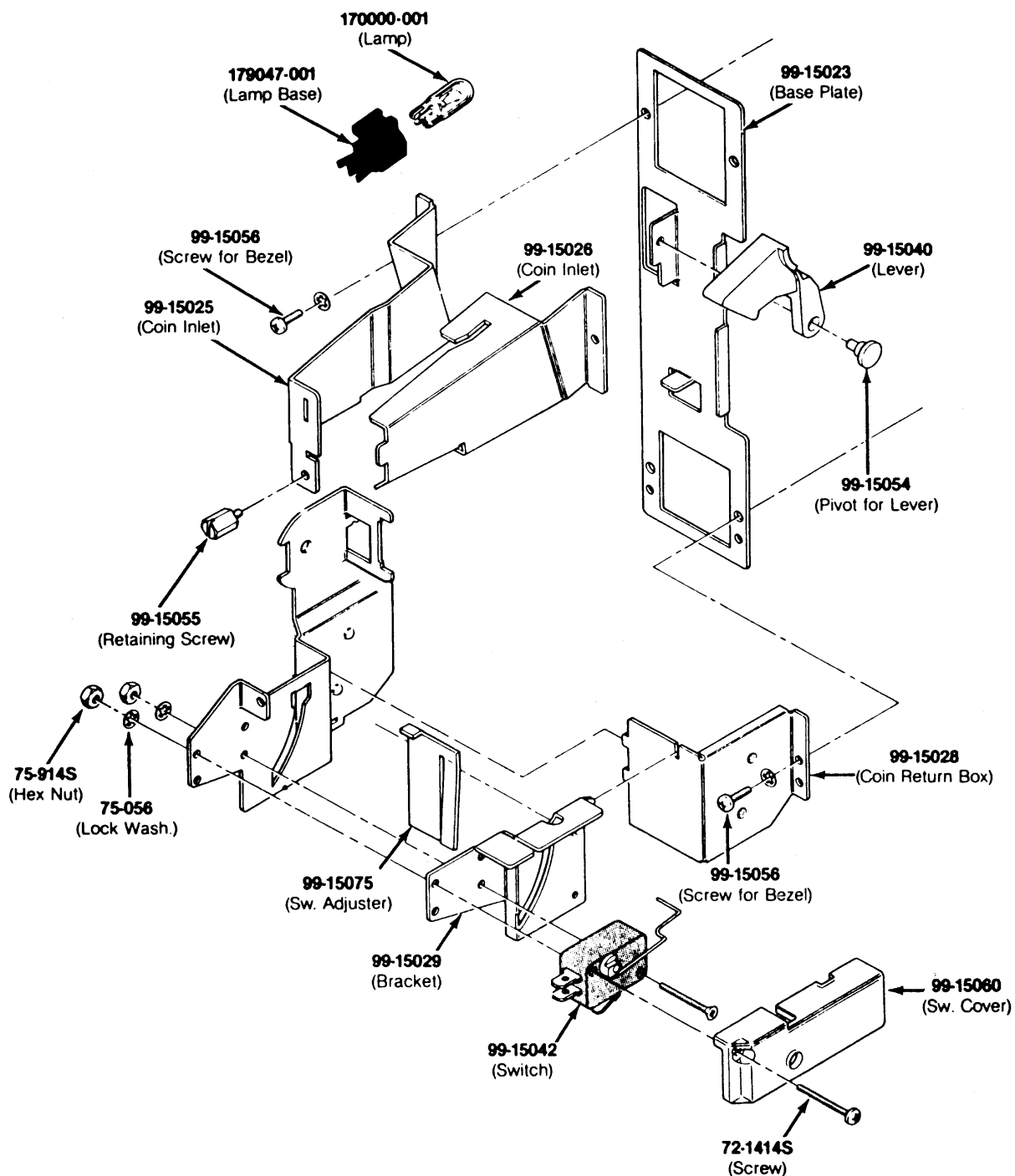
ASSY SHIFT LEVER S (KR-13001) (D-2/2)

ITEM No.	PART No.	DESCRIPTION
1	KR-1312	SHIFT BRACKET B
2	KR-1314	COVER BRACKET B
3	KR-1303	STOPPER
4	KR-1320	COMPRESSION SPRING
5	KR-1304	SHAFT
6	KR-1315	SUB ASSY SHIFT LEVER
7	SGB-3740-5	WIRE HARN SHIFT SW
	211-0043	CONN PLUG AMP 2P WHITE
	280-5015	FASTON RCPT 187
8	KR-1316	SPACER
9	KR-1318	MOUNT BRACKET
101	211-0041	CONN PIN AMP
102	101-5004	STEEL BALL \varnothing 8.7312
103	509-5088	SW MICRO TYPE
104	310-0012	PAPER INSULATOR
105	117-0141	LOCK PLATE
201	069-0005	FLT WHIR SPECIAL 8.3-14.3×0.5
202	000-0408-FS	M SCR PH W/FS M4×8
203	069-0049	NYLON WASHER SPECIAL 8.5-14×1
204	000-0316	M SCR PH M3×16
205	069-0007	FLT WSHR
206	065-0006	E RING 6mm
207	054-0004	M4 U NUT
208	010-0408-F	S-TITE SCR W/F M4×8

8 COIN DOOR ASSY., A037619-XX



COIN DOOR ASSY., A037619-XX

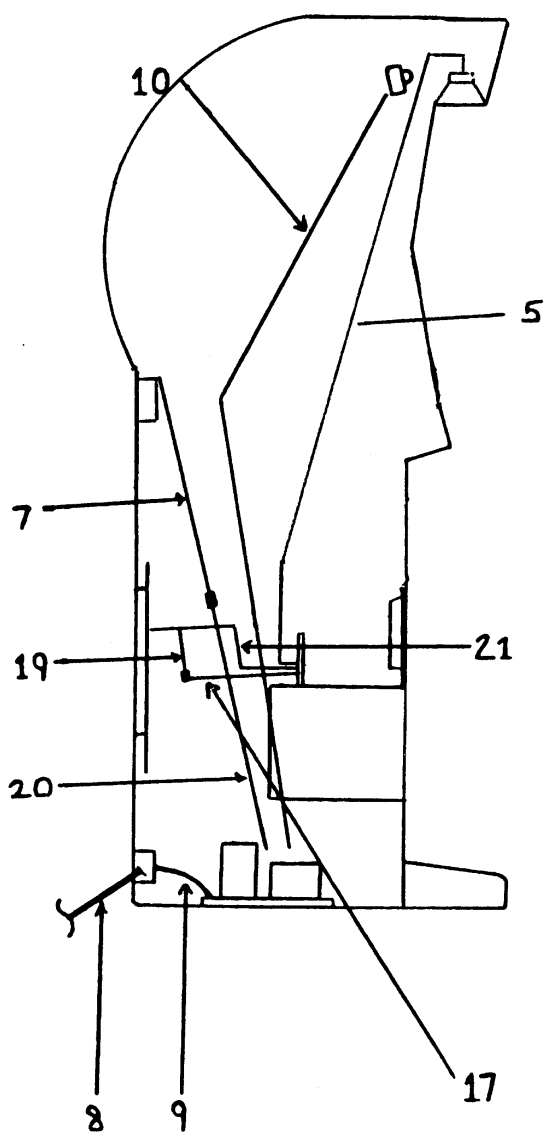


COIN DOOR ASSY., A037619-XX

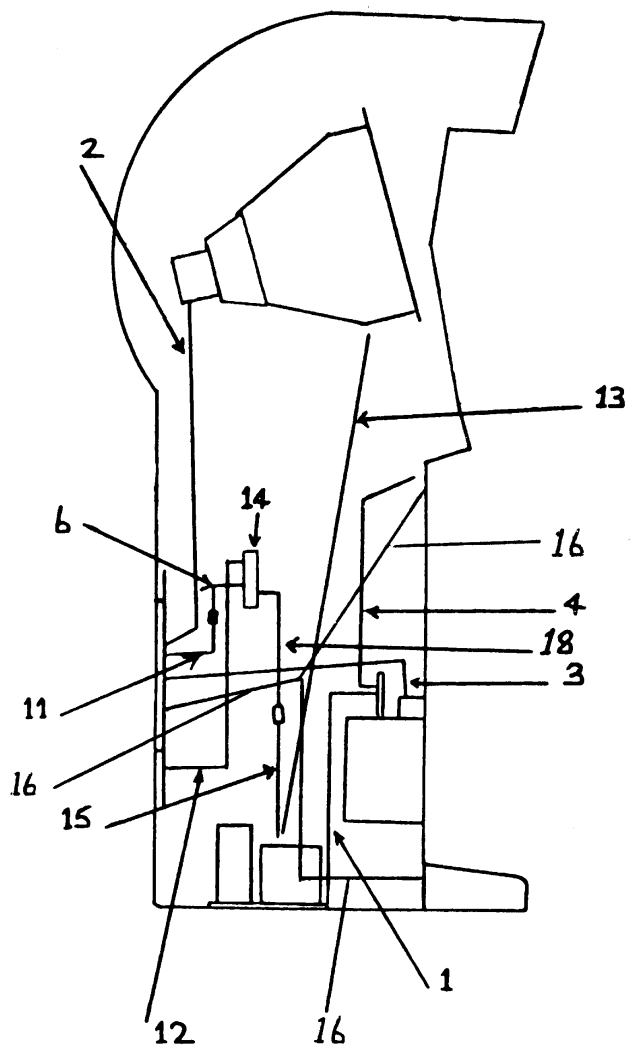
Part No.	Description
A037542-01	Harness Assembly
72-1414S	#4-40 x 7/8-Inch Cross-Recessed Pan-Head Steel Machine Screw
75-056	#6 Internal-Tooth Zinc-Plated Steel Lock Washer
75-914S	#4-40 Steel Machine Hex Nut
75-3414S	#4-40 x 7/8-Inch 82° Cross-Recessed Flat-Head Steel Machine Screw
99-15001	Coin Return Button with U.S. 25¢ Price Plate
99-15002	Coin Return Button with U.S. \$1 Price Plate
99-15003	Coin Return Button with German 1 DM Price Plate
99-15004	Coin Return Button with German 2 DM Price Plate
99-15005	Coin Return Button with German 5 DM Price Plate
99-15006	Coin Return Button with Belgian 5 Fr Price Plate
99-15007	Coin Return Button with French 1 Fr Price Plate
99-15008	Coin Return Button with Japanese 100 Yen Price Plate
99-15009	Coin Return Button with British 10 Pence Price Plate
99-15010	Coin Return Button with Australian 20¢ Price Plate
99-15011	Coin Return Button with Italian 100 Lire Price Plate
99-15023	Base Plate
99-15025	Left Half of Coin Inlet
99-15026	Right Half of Coin Inlet
99-15027	Side Plate of Coin Return Box
99-15028	Base Plate of Coin Return Box
99-15029	Switch Bracket
99-15036	Metal Coin Return Cover
99-15038	Bezel for Coin Return Button
99-15039	Metal Bezel for Coin Return Cover
99-15040	Coin Return Lever
99-15042	Coin Switch for U.S. 25¢
99-15052	Spring for Coin Return Button
99-15054	Pivot for Coin Return Lever
99-15055	Retaining Screw
99-15056	#4-40 x 7/8-Inch Cross-Recessed Pan-Head Steel Machine Screw
99-15060	Switch Cover
99-15063	Screw for Hinge
99-15066	Screw for Clamp
99-15067	Lock Assembly
99-15070	Doors and Frame
99-15071	Clamp for Frame
99-15072	Door Frame
99-15073	Upper Door
99-15074	Lower Door
99-15075	Switch Adjuster
038091-01	Coin Box <i>(Not included in assembly) Acceptable substitute is part number A037491-01</i>
170000-001	6.3 V Miniature Wedge-Base Incandescent Lamp
171006-035	Metal Coin Mechanism
179047-001	Lamp Base

9 HARNESS INSTALLATION DRAWING

O



O



HARNES S I N S T A L L A T I O N D R A W I N G

ITEM NO.	PART NO.	DESCRIPTION
I	3637-83 AT	I2 VOLT HARNES S
2	3637-9 AT	VIDEO HARNES S
3	3637-II AT	COIN HARNES S
4	324371-51	CONTROL MOTOR HARNES S
5	3637-69 AT	SPEAKER HARNES S
6	I286I-24	5 VOLT EXTENSION HARNES S
7	A043I7I-AT	FAN HARNES S
8	A043086-04	POWER CORD
9	A043054-OI	ON / OFF SWITCH HARNES S
I0	3637-I8 AT	LIGHT HARNES S
II	SGB-3751-9	WIRE EXT. 50P
I2	SGB-3751-22	WIRE HARNES S PWR IOP
I3	3637-I9 AT	MONITOR EXTENSION HARNES S
I4	IOIO8I-NN	TERMINAL BLOCK
I5	3637-29 AT	5 VOLT HARNES S ASSY
I6	SGB-3751-10	WIRE HARNES S CON
I7	3637-30 AT	AUDIO EXTENSION HARNES S
I8	3637-40 AT	5 VOLT ADAPTOR
I9	SGB-3751-1012	AUDIO HARNES S
20	II385-OI	FAN EXTENSION HARNES S
2I	797426-OI	SELF TEST HARNES S

NOTES

0

0

NOTES

S U P P L E M E N T

A support had been added to the OUTFUN game to further strengthen the Control Panel.

This support is connected between the left hand side of the Control Panel and the left hand gable of the game.

This support is made up of the following parts : -

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
KR-0005-AT	SUPPORT CONTROL PANEL	1
72-66168	SCREW, No. 6 x 1"	2
176030-1610	SCREW, No. 6 x 5/8"	2

January 1987.

WELLS GARDNER MONITOR MANUAL

We regret to inform you that this manual is currently unavailable.

Copies will be forwarded to your distributor when they are available and we recommend that you advise your distributor of your requirements.

January 1987.

SEGA ENTERPRISES, LTD.

**No. 2-12, Haneda 1-chome
Ohta-ku, Tokyo 144, Japan**

○ **Tel. : (03) 743 - 7438**

○ **FAX : (03) 743 - 5539**

○ **TLX : J22357 SEGASTAR**

© **SEGA 1986**