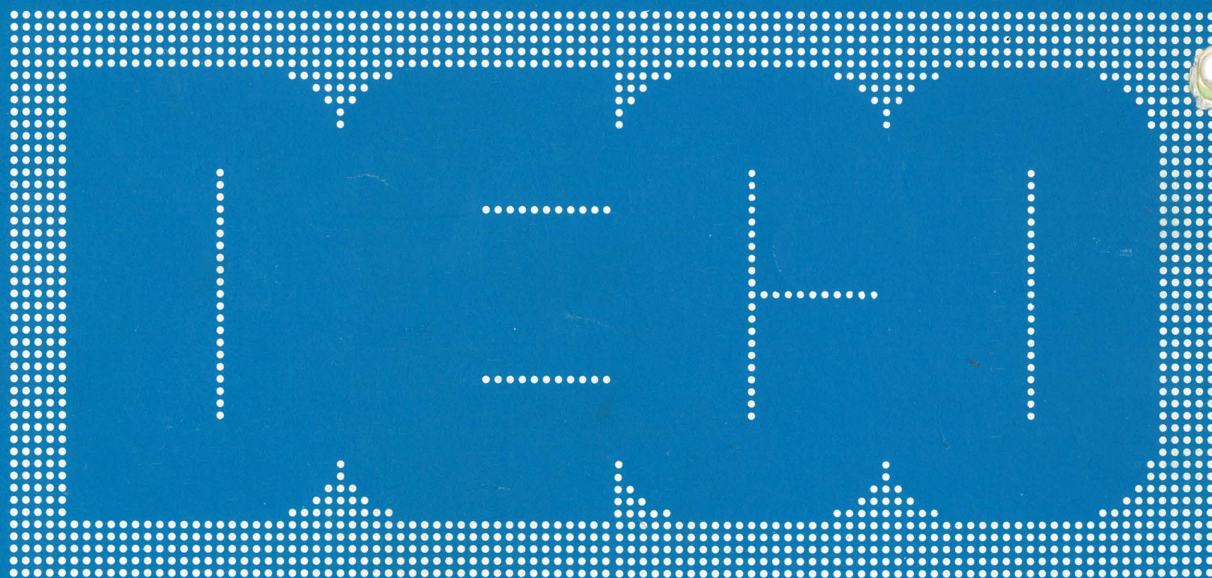


DS SERIES
DS-173
E CHOP MANUAL



DATA EAST CO., LTD.



DS SERIES

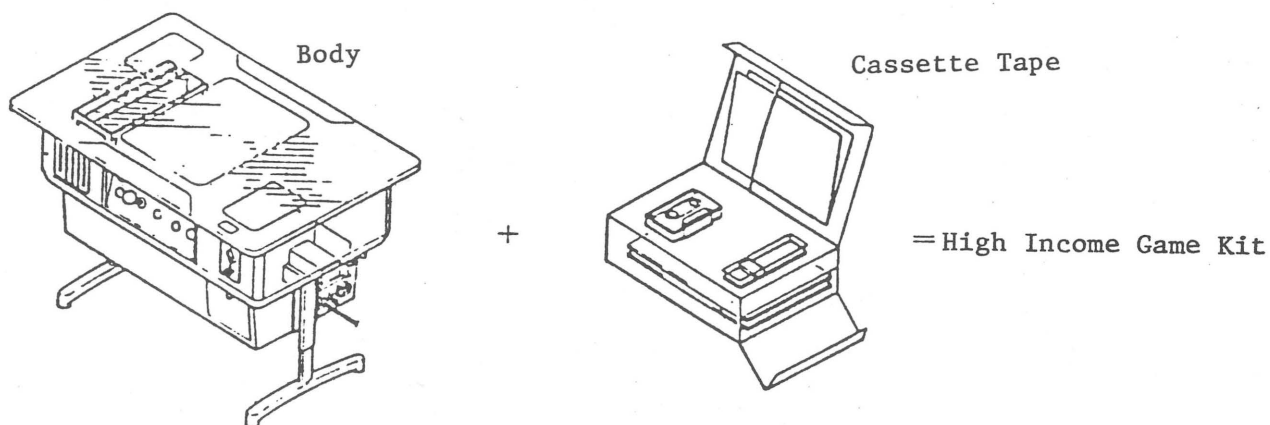
DS-173

CHOP MANUAL

| | | |
|-----|--------------------------------------|-------------|
| | Introduction to DECO CASSETTE SYSTEM | EMN-50038-1 |
| A-1 | Specifications | EMN-50039-2 |
| B-1 | Installation | EMN-50040-1 |
| B-2 | Cautions | EMN-50041 |
| B-3 | Maintenance | EMN-50042-2 |
| B-4 | CRT Monitor | EMN-50042-2 |
| B-5 | Service Switch | EMN-50043-2 |
| B-6 | Coin Selector | EMN-50043-2 |
| C-1 | Mechanical Parts | EMN-50137 |
| C-2 | Electrical Parts | EMN-50045-2 |
| C-3 | Control Panel | EMN-50046-2 |
| C-4 | Cassette Deck | EMN-50047-2 |
| C-5 | P.C.B. WRACK ASSEMBLY, POWER SUPPLY | EMN-50116-1 |
| C-6 | Parts List | EMN-50138 |
| C-7 | Parts List | EMN-50139 |
| C-8 | Parts List | EMN-50140 |

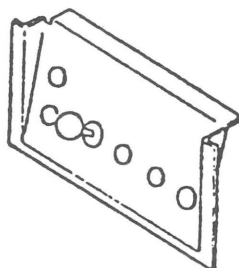
Introduction to DECO CASSETTE SYSTEM

1. Large Gaming Capabilities

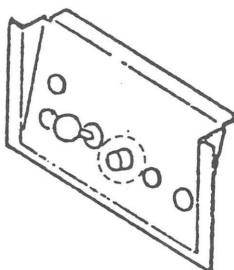


- a) The DECO CASSETTE SYSTEM consists of a cabinet assembly and a game kit. The game kit comprises a set of tape, key module, and an explanation panel. The game kit is designed to provide the operator with a wide variety of popular video games.
- b) The cabinet assembly is designed to accept and display any game provided by a DECO game kit. Once a customer has installed a cabinet assembly new games may be introduced easily and inexpensively, simply by exchanging game kits. It is no longer necessary to replace your cabinet assembly.
- c) Optional player control panels are also prepared for those games which cannot be operated with the standard panel. See below.

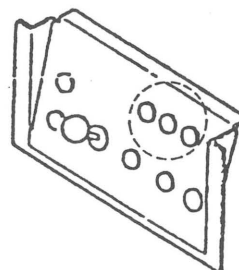
Standard



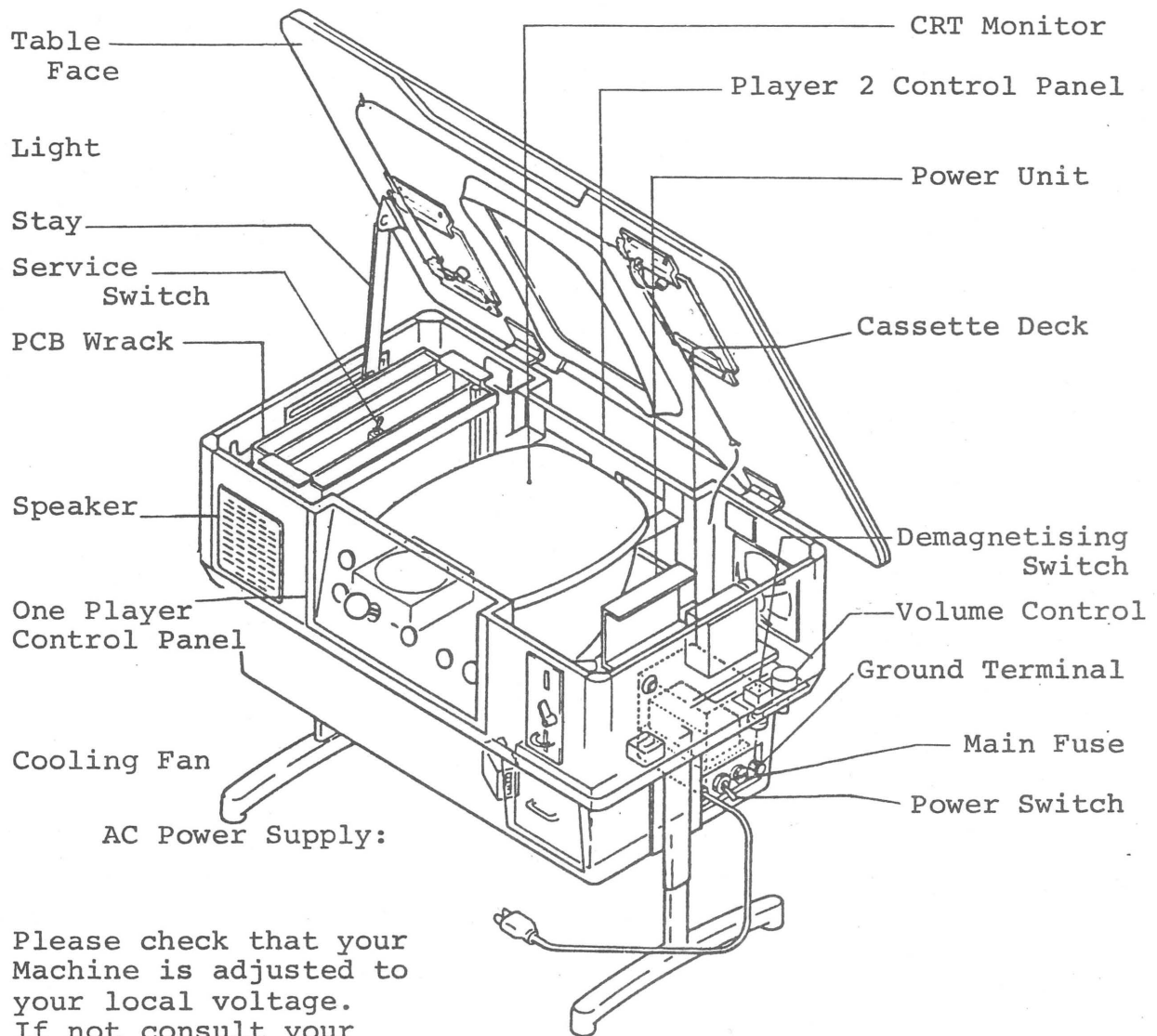
Option 1



Option 2



A-1 Specifications



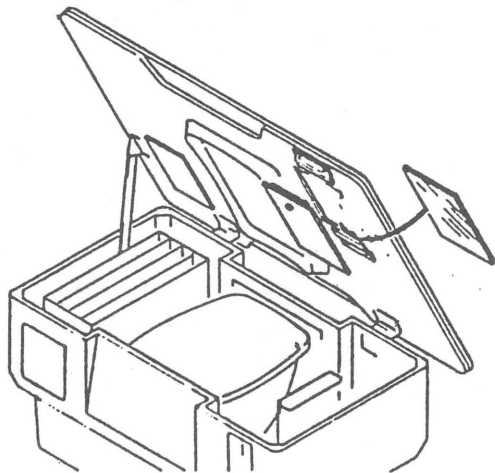
Please check that your Machine is adjusted to your local voltage. If not consult your nearest repair center as the power supply unit and cord must be replaced.

| | |
|-------------------|---------------------------------|
| Power Supply | AC 115V, 220V, 240V, $\pm 10\%$ |
| Power Consumption | abt. 100 W |
| Coin | Changeable |
| Dimensions | W860 x D560 x H600-800m/m |
| Weight | 55 kg |
| Cash Box Capacity | 1500 coins |
| CRT | 14 inches color |

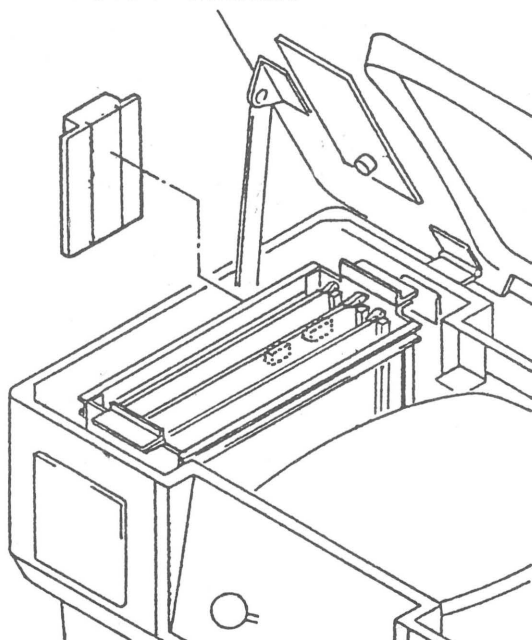
Above specifications are subject to change without notice.

B-1 INSTALLATION

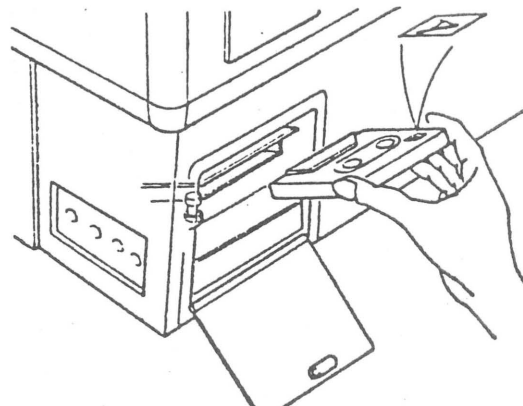
1. Fix the legs on firmly and adjust the height.
2. Open the table and fit the acrylic explanation panel into place under the surface glass.



3. Put the CPP (Key module) into the connector on P.C.B. Wrack.



4. Set the dip switch for the game. (Ref. game explanation)
5. Be sure the power is off. Open the cassette box and fit the cassette into the deck.

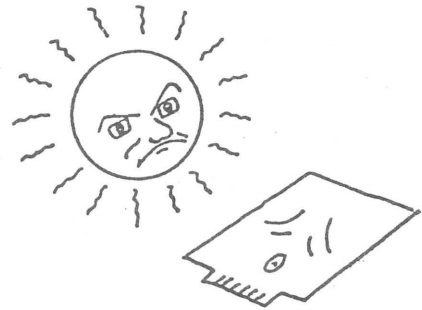


6. Confirm that connectors and P.C. Boards are properly set.
7. When you switch power on, the tape starts to run and game memories are transferred into the set. Wait a few minutes for the programming to complete.
8. Push the service switch on to confirm the game contents and procedures. (Ref. service switch B-5)
9. Try a game with a coin to check the starting mechanism.
10. If color is uneven, push the demagnetising switch for a few seconds to clear.
11. Close and lock the cassette box and table top. The new game is now ready to play.

B-2 CAUTIONS

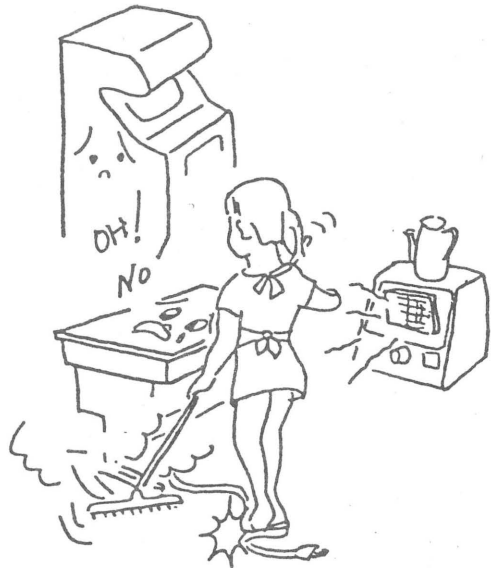
1. Cautions when installing

- a) Power switch must be off when fitting the cassette, or on removal.
- b) Each time power is switched on, the tape turns and the game memory transferring process repeats. Please wait a few minutes until the process is over.
- c) When you change a cassette, the game explanation panel and the key module must be changed for the new game.
For certain games, it is also necessary to change the player's control panel.



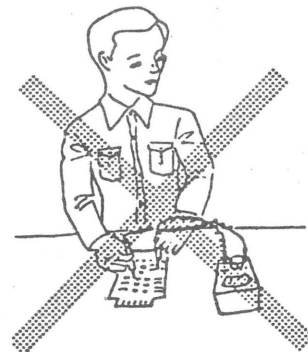
2.

- a) Never expose the P.C. Boards to direct sunlight as it will ruin their programming.
- b) Do not carry or store the L.S.I or I.C.S used in this machine without first wrapping in either aluminium foil or in carbon foam and placing in a protective bag or box.
- c) For safety reasons maintenance and cash box key-lock units will only be supplied as key and lock units. They will not be supplied separately as only key or only lock parts.
- d) Avoid installing in humid or dusty places. The machines cooling fan will collect all dust if you are sweeping around the machine while it is on. Switch it off while cleaning and place a cover over it. Preferably use a vacuum cleaner. From time to time clean inside the set and the cooling fan entry port.

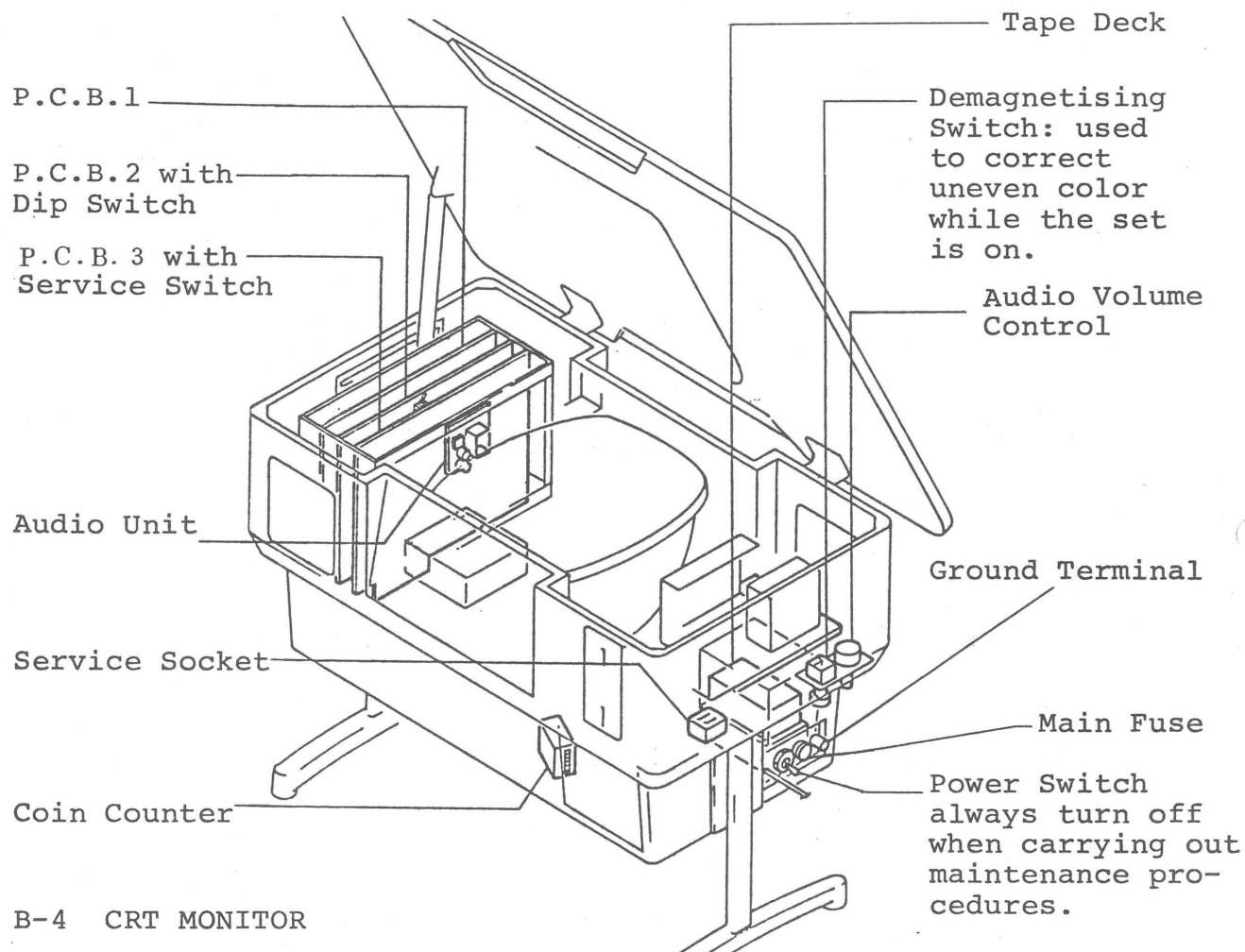


3.

- a) Always switch the set off before you lift the table top. Never touch P.C. Boards or use a tester when power is on.
- b) Only a qualified technician should use a tester on the P.C. Boards as a wrong voltage will ruin the Boards.



B-3 MAINTENANCE



B-4 CRT MONITOR

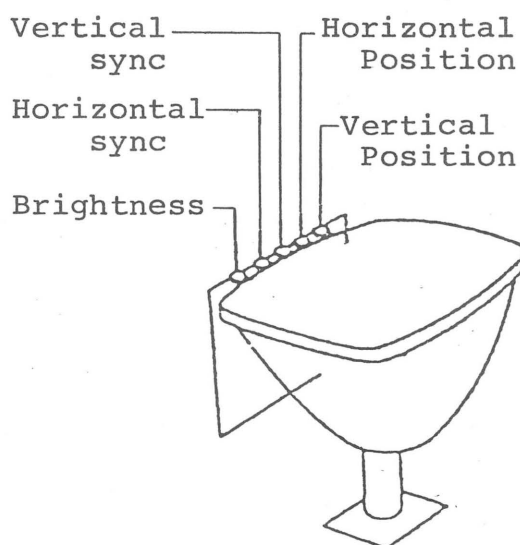
Usually adjustment is not necessary, but in case of the following 1-4 problems

1. The image is too small or too large.
2. The image flickers.
3. The image is not synchronised.
4. The image is too dark.

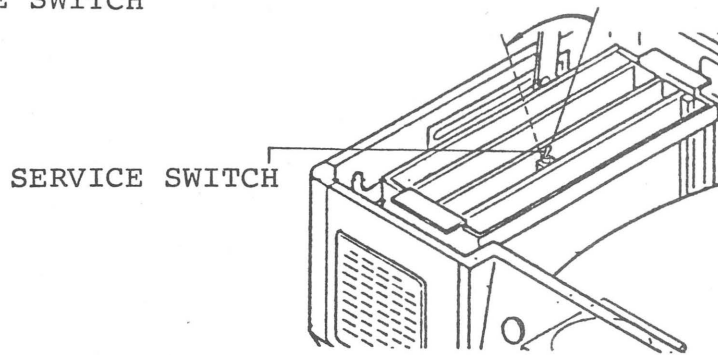
Use the following positions to adjust.

You cannot improve the image you will need to replace the T.V. Assembly.

5. Color harmony should be adjusted by a qualified technician only.



B-5 SERVICE SWITCH



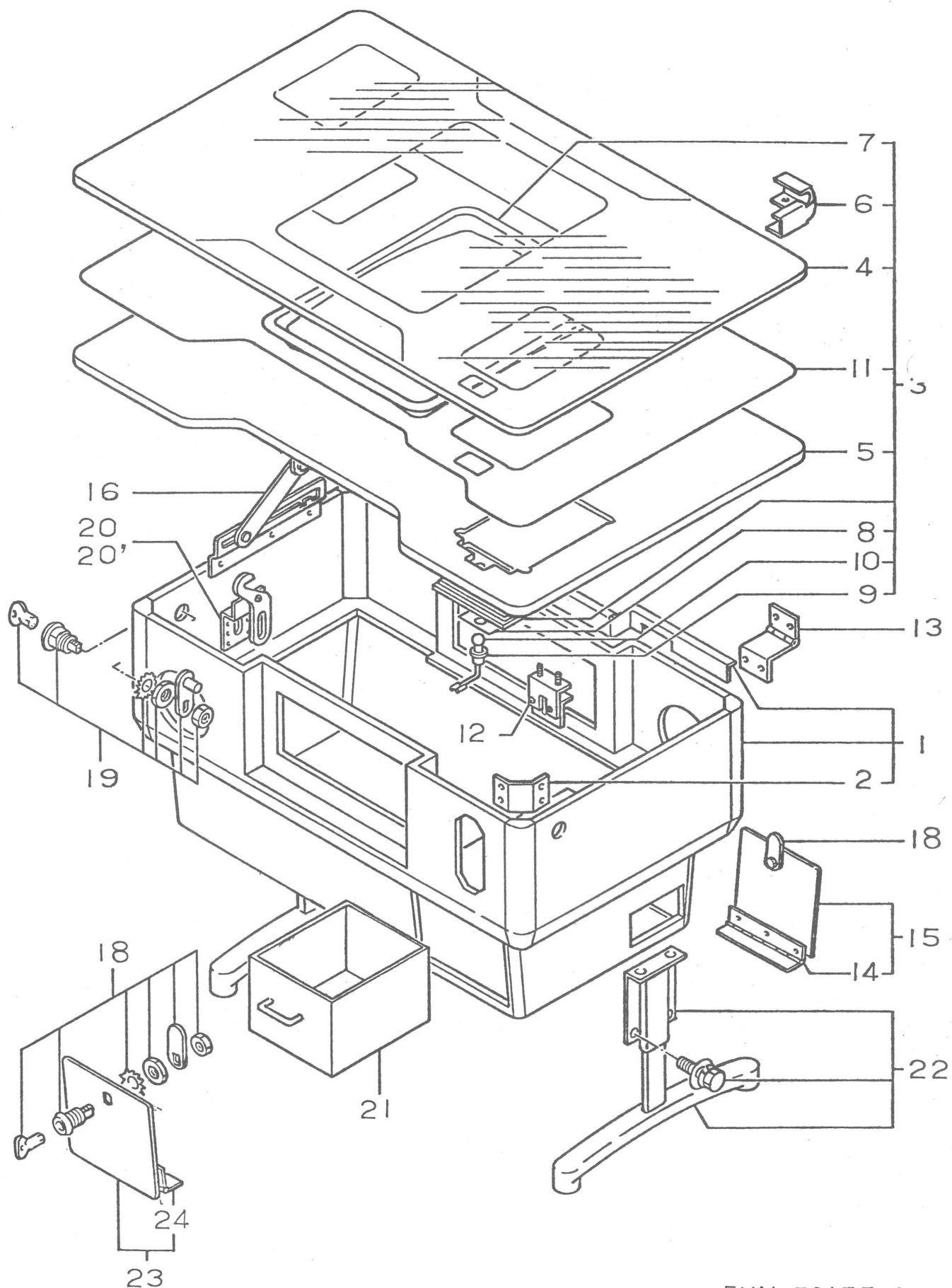
Depress the service switch.

1. If you press 1 player button and the game doesn't start. Turn the power switch off and check the service switch, and the single player switch. If there is no fault there then the fault is in the P.C. Board.
2. Sound Use the volume control inside the cabinet to adjust sound by turning it right to increase. No sound. Turn power off and check the volume control. If there is no fault, the fault will be in the P.C.B..
3. If the button doesn't function. Turn power off and check the micro switch. Otherwise the fault is in the P.C.B..
4. If the joy stick does not function. Turn the power off and check the micro switch. Otherwise the fault is in the P.C.B..

B-6 COIN SELECTOR

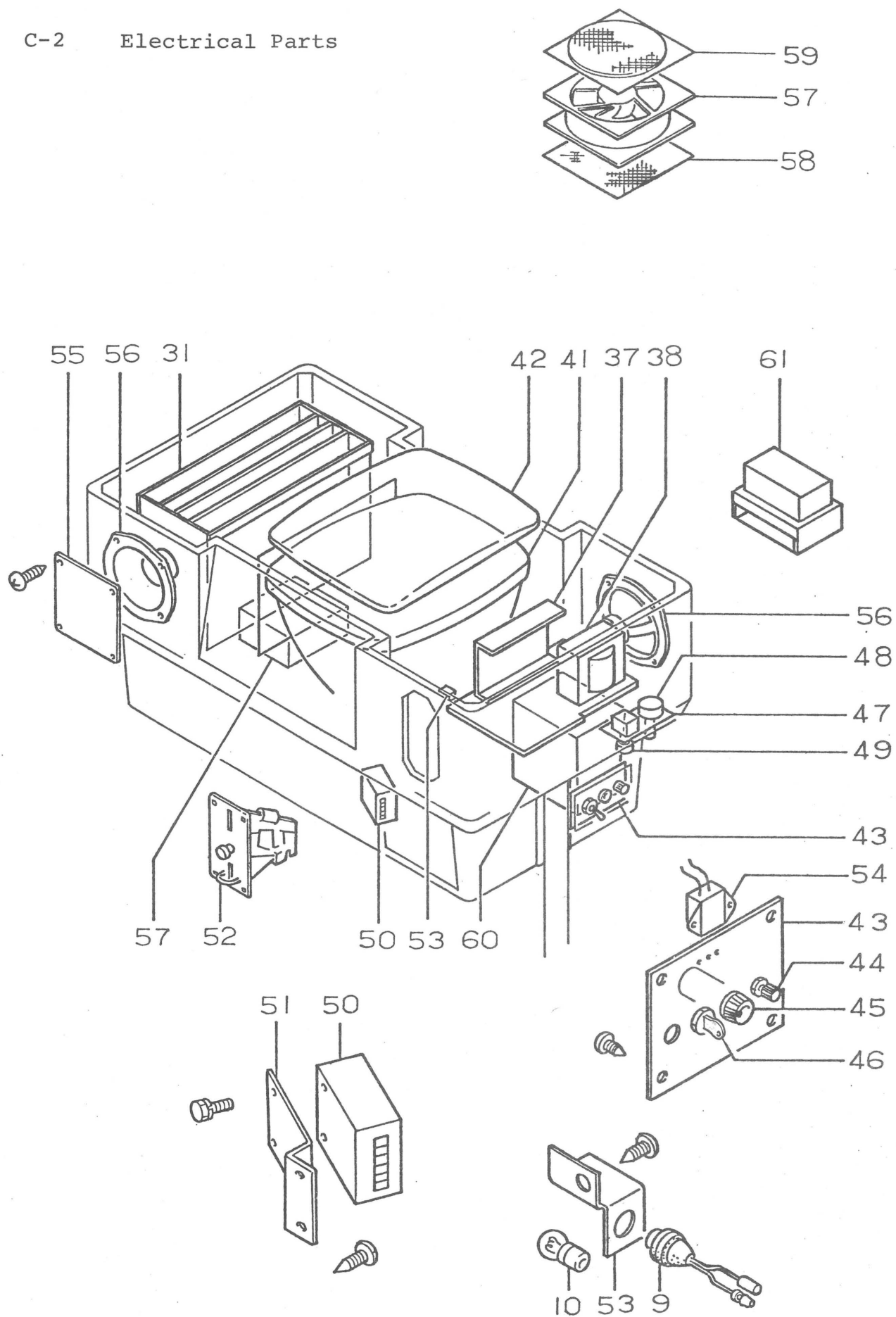
1. A coin cannot be inserted. First check to see if the coin box is full. If not a coin may be jammed. Pull the lever to release. Next clean the coin slot entry thoroughly with alcohol. If the problem continues then the selector is faulty and the selector assembly will need replacing.
2. Coin does not register. Replace the service switch. If still faulty please contact our servicing dept.. If the game can be played, turn power off and check the microswitch. If there is no fault in the micro switch, the fault is with the P.C.B..
3. Coin is not counted. Check the coin counter, and see if the wire-lead inside is broken or not.

C-1 Mechanical Parts



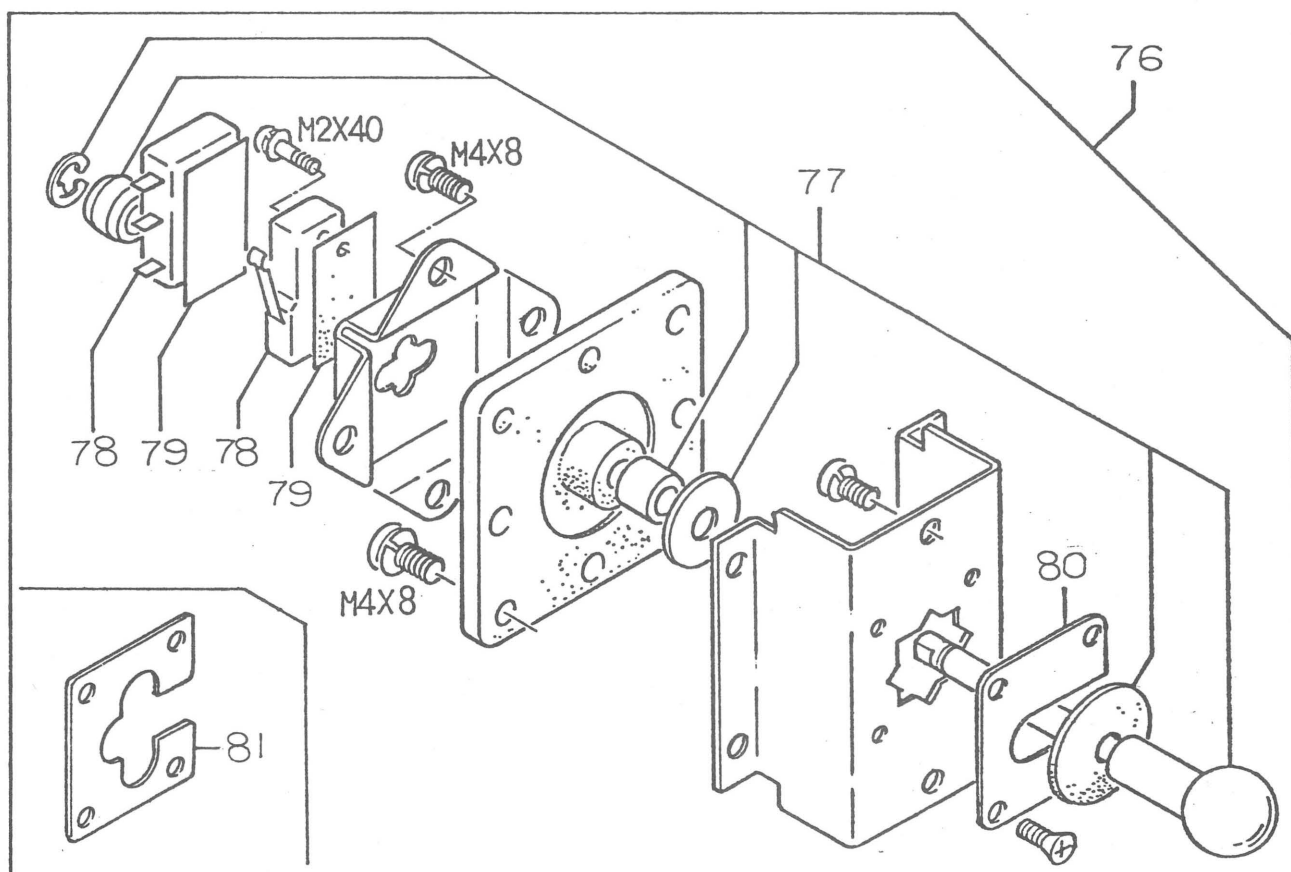
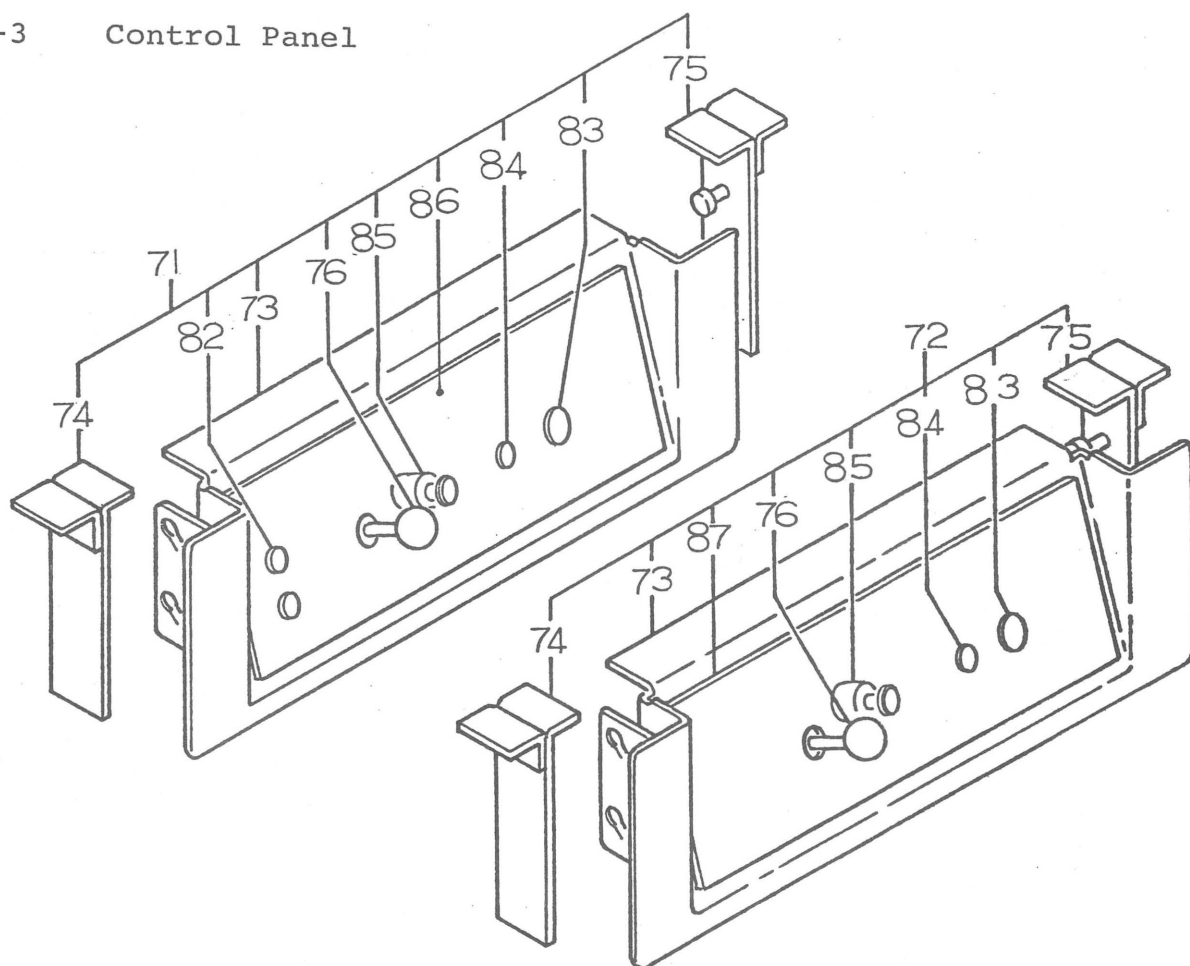
EMN-50137-1

C-2 Electrical Parts



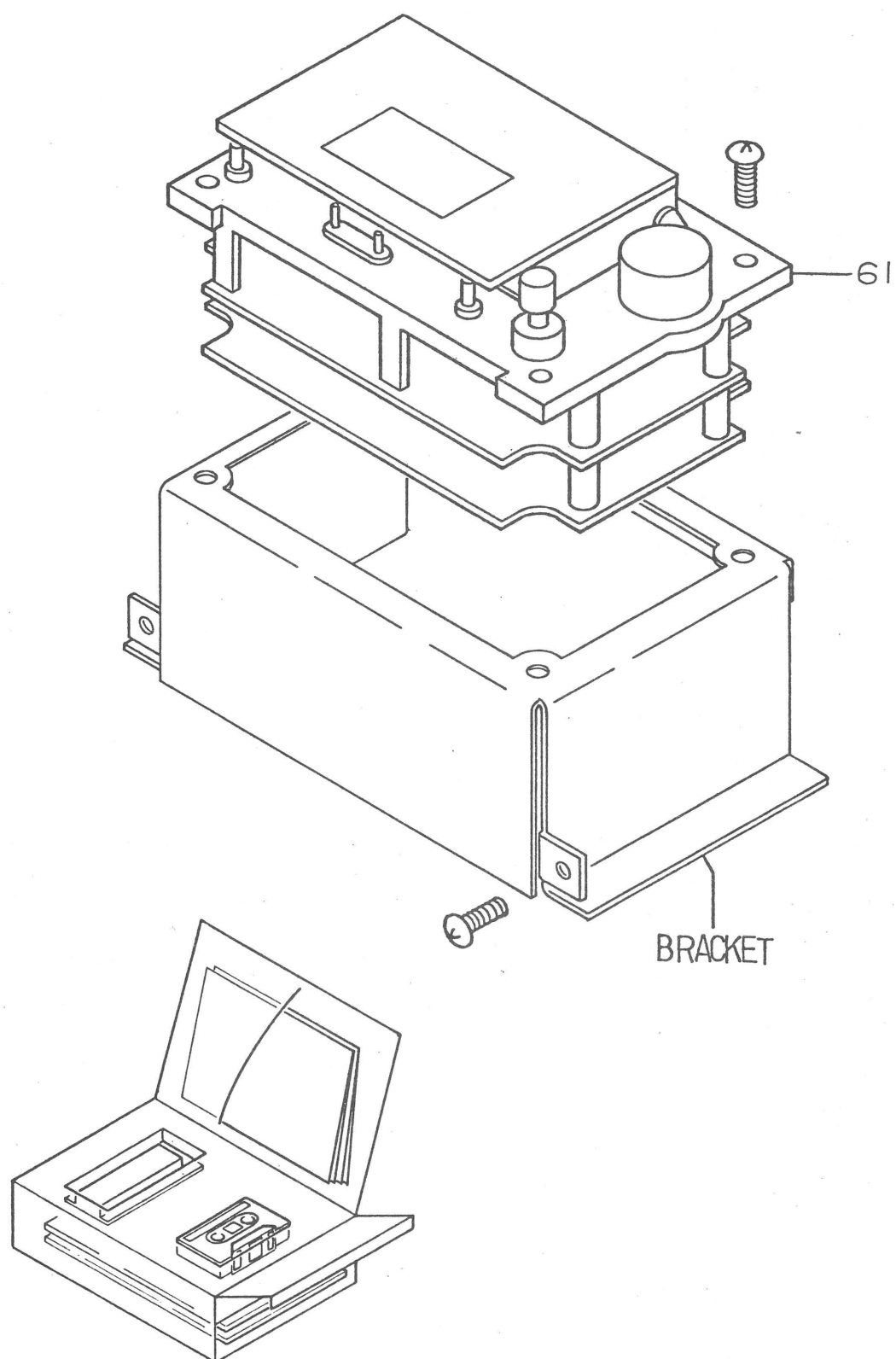
EMN-50045-2

C-3 Control Panel

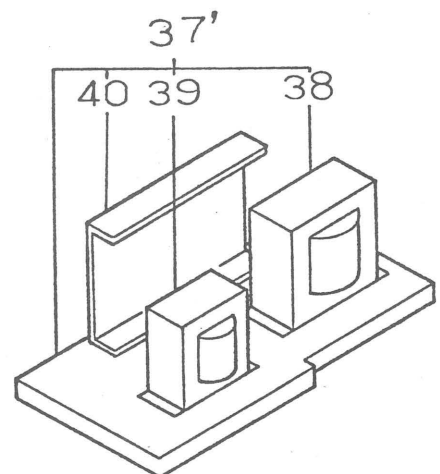
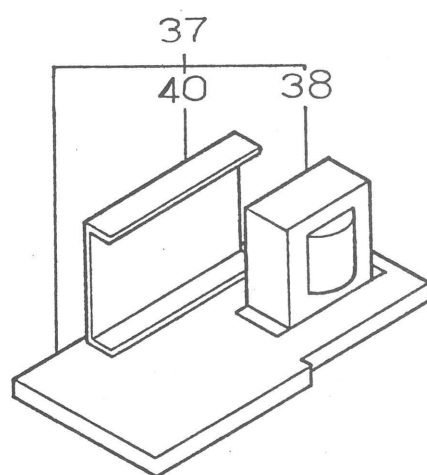
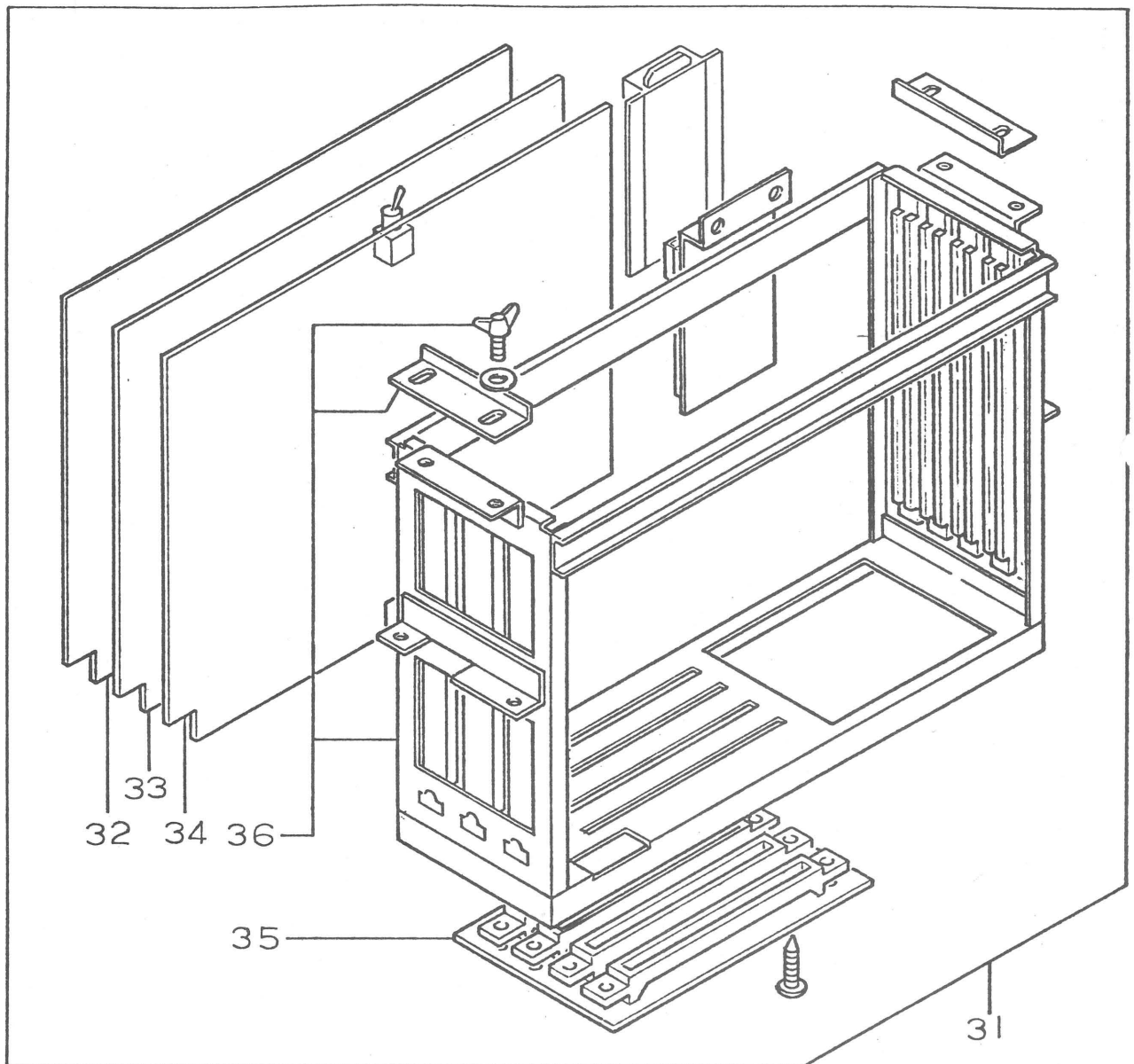


EMN-50046-2

C-4 Cassette Deck



EMN-50047-2



C - 6 PARTS LIST

| KeyNo | Description | Qty | Parts No | Remarks |
|-------|--------------------|-----|------------|-----------------|
| 1 | Cabinet Ass'y | 1 | E-50018 | |
| 2 | Stay | 4 | P-50392-1 | |
| 3 | Table Ass'y | 1 | | |
| 4 | Glass Table Top | 1 | K-50134-0 | |
| 5 | Table Top Frame | 1 | K-50058-0 | |
| 6 | Metal Corner Piece | 4 | P-50492-0 | |
| 7 | Escutcheon | 1 | K-50042-0 | |
| 8 | Lampe Bracket | 2 | P-50393-0 | |
| 9 | Lamp Socket | 3 | S-22 | |
| 10 | Lamp | 2 | PL-406 | 18V |
| 11 | Masking Sheet | 1 | K-50135-0 | |
| 12 | Stay Ass'y | 2 | | |
| 13 | Hinge | 1 | P-50383-0 | Table Top Frame |
| 14 | Hinge | 1 | P-50521-0 | Coin, Tape |
| 15 | Door | 1 | P-50524-0 | |
| 16 | Stopper | 1 | ML-50157-0 | |
| 17 | Lock | 2 | P-50146-0 | |
| 18 | Key Lock | 2 | C-88MS | C-88MS |
| 19 | Key Lock | 2 | C-88MS | C-88MS(D-6420) |
| 20' | Hook Ass'y(right) | 1 | | |
| 20 | " (left) | 1 | | |
| 21 | Cash Box Ass'y | 1 | K-50224 | |
| 22 | Legs | 2 | K-50133-0 | |
| 23 | Door | 1 | P-50628 | |
| 24 | Hinge | 1 | P-50629 | |
| 31 | P.C.B.Wrack Ass'y | 1 | | |
| 32 | P.C.B. 1 | 1 | ML-10107 | RMS3 |
| 33 | P.C.B. 2 | 1 | ML-10106 | DSP3 |
| 34 | P.C.B. 3 | 1 | ML-10108 | B103 |
| 35 | Mother Board | 1 | ML-10111 | |
| 36 | P.C.B. Wrack | 1 | ML-50244 | |
| 37 | Power Unit Ass'y | 1 | | |
| 37' | " | 1 | | |
| 38 | Transformer | 1 | T-14 | |

EMN-50138

C - 7 PARTS LIST

| KeyNo | Description | Qty | Parts No | Remarks |
|-------|-------------------------|-----|------------|-----------|
| 39 | Transformer | 1 | | |
| 40 | Power Unit Chassis | 1 | P-50527-0 | |
| 41 | CRT Monitor Ass'y | 1 | KZ-14EA-D | |
| 42 | Filter | 1 | K-50041 | |
| 43 | Switch Panel (A) | 1 | P-50390-0 | |
| 44 | Ground Terminal | 1 | T-10 | |
| 45 | Main Fuse | 1 | | 3 A |
| 46 | Power Switch | 1 | TKS-11 | |
| 47 | Switch Panel (B) | 1 | P-50391-0 | |
| 48 | Volume | 1 | RA28Y25S | 100 ohm |
| 49 | Demagnetising Switch | 1 | BPF-52 | |
| 50 | Coin Counter | 1 | NR-06 | |
| 51 | Bracket | 1 | P-50379-0 | |
| 52 | Coin Selector Ass'y | 1 | 730D(25¢) | USA |
| | " | 1 | 740D(10P) | England |
| 53 | Lamp Bracket | 1 | P-50394 | |
| 54 | Noise Filter | 1 | ZGB2202-01 | |
| 55 | Mask | 2 | P-50108-2 | |
| 56 | Speaker Ass'y | 1 | | 3W(8 ohm) |
| 57 | Fan | 1 | EP-114G-25 | |
| 58 | Net | 1 | P-50396-0 | |
| 59 | Fan Panel | 1 | P-50239-0 | |
| 60 | Cassette Bracket | 1 | | |
| 61 | Cassette Deck Ass'y | 1 | | |
| 71 | Control Panel Ass'y F | 1 | | |
| 72 | " R | 1 | | |
| 73 | Control Box | 1 | E-50011-0 | |
| 74 | Control Box Bracket (A) | 2 | P-50375 | |
| 75 | " (B) | 2 | P-50376 | |
| 76 | Lever Switch Ass'y | 2 | | |
| 77 | Lever Ass'y | 2 | ML-50140-1 | |
| 78 | Micro Switch | 4 | AM6225 | |
| 79 | Insulator | 4 | P-50093-0 | |
| 80 | Lever Guide(B) | 1 | P-50357 | |

EMN-50139

C - 8 PARTS LIST

| Key No | Description | Qty | Parts No | Remarks |
|--------|-------------------|-----|-------------|---------|
| 81 | Lever Guide (A) | 1 | P-50356 | |
| 82 | Switch Ass'y | 2 | SS-IJB-PW | Select |
| 83 | Switch Ass'y | 2 | SS-1-IDR-MB | Shoot 1 |
| 84 | Switch Ass'y | 2 | SS-IJB-PW | Shoot 2 |
| 85 | Volume | 2 | 500Ω | |
| 86 | Control Panel (F) | 1 | G-50059 | |
| 87 | Control Panel (R) | 1 | G-50061 | |

 DATA EAST CORPORATION