ROADS EDGE

HYPER NEO-GEO 64 LINK SETTINGS:

2 - 4 UNITS CAN BE LINKED TOGETHER FOR MULTI -PLAYER GAMES.

- The link cable can be installed in either of the 2 available jacks. (upper or lower serial cable input)

- Connect the link harness from 1st communication PCB to 2nd, 2nd to 3rd, and 3rd to 4th.

- Use one cable for each link between games. Verify the link cable is connected with extra "play" in the length connections. Do not allow the link cable to become pinched or pulled. This will cause the CPU to recycle the network test function and reset the game.

- Set the rotary switch id number on the communication board to position 1,2,3,or 4. Each machine must have a unique number between 1 – 4. You cannot use same number for id settings. This will result in an error in the communications.

- Verify that the dip switch bank located near the rotary connector is set to 1, 3 on 2 ,4 off.

| Positions	1 on	2 off	3 on	4 off

These settings will allow you to use the factory installed link communications capabilities on the roads edge games. (Multi player mode only accessible between linked units.)

If you have any questions please feel free to fax or telephone us with your concerns.

Parts / Customer service (phone) 310 371-7100 (fax) 310 371 0969

PRECAUTIONS FOR SAFE OPERATION

The procedures listed herein must be carefully followed to ensure both safe operation and to prevent personal injury and property damage. Before use, please carefully ready through the manual for proper usage methods. After reading it, be sure to keep the manual in a safe place for later reference.

DANGER HIGH VOLTAGE
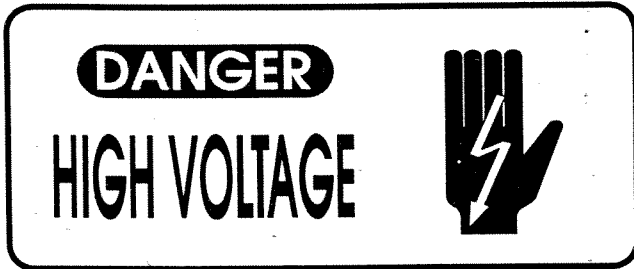
WARNING
High voltages are present behind this panel. There are no user-serviceable parts inside. Refer all servicing to qualified personnel. To reduce risk of electrical shock, disconnect power supply cord before servicing.
497130037W

- This cabinet is for indoor use only. This machine should never be placed outdoors or used in the places listed below. Doing so may damage the machine and cause accidents.
  - In areas such as indoor pools or near a shower where humidity is high.
  - In areas exposed to direct sunlight.
  - Near areas exposed to direct heat from a heater, etc., and around dangerous materials.
  - In excessively dusty areas.
  - In areas that are prone to water leakage and flooding.
  - Near ventilators and areas of severe temperature extremes.
  - In areas subject to severe jolts and unstable locations.
  - Near fire fighting equipment.

- Should any of the following occur, immediately turn the power switch off and unplug the cabinet. Continued use in any of these circumstances may result in accidents such as fire and electric shock.
  - When the cabinet breaks down.
  - When the cabinet is damaged.
  - When water or foreign matter enters the cabinet.
  - When smoke, unusual odors, or strange noises emanate from the cabinet

- Be sure to tightly connect all connectors. If insertions are partially or incorrectly made, these may result in accidents such as fire and electric shock.

- Before changing software and performing other procedures, be sure the power switch is turned off and the cabinet unplugged. Performing procedures while the power is on may result in accidents such as fire and electric shock.

- Do not perform repairs or modifications on the cabinet yourself. Doing so may result in accidents such as fire and electric shock.

- Be sure to use an outlet rated at AC110-120V and insert the plug into a standard outlet. If other high-capacity products (air conditioners and large-size cabinets, etc.) are used on the same power line, this may result in accidents such as fire and electric shock.

- Be sure receptacle is a 3-prong duplex - DO NOT USE a ground elimination adapters. If not suitably grounded, the cabinet may cause electric shocks in the event of a short circuit.

- Place the cabinet as close as possible to the outlet and ground connections. Keep electric cords out of sight from customers. If exposing cables cannot be avoided, be sure to place a protective cover over them for protection. Do not forcefully bend, pull, or place heavy objects on cords.

  If cords are damaged, they may result in accidents such as fire and electric shock.

- While moving the cabinet with casters, move it slowly being careful of the area around you. Make sure this is done with a suitable number of personnel and take proper measures to accommodate the cabinet's size and weight.

- Absolutely do not touch the back of the monitor.
  Because the monitor has high voltage parts, touching these even after the machine is unplugged may cause severe electric shock.

- Do not place any of the following materials on or around the cabinet.
  If liquid should spill onto or into the cabinet, it may cause accidents involving electric shock and damage the machine.
  - Vases, potted plants, cups, cosmetic products, and containers holding medicine and water.

- Do not use multiple appliances in excess of current capacity on a single outlet. This may cause fire and electric shock.

- Before moving the cabinet, be sure to unplug the power cord. This is necessary to avoid accidents and damage to the cabinet.

- Do not damage the power cord and ground cable when moving the cabinet.
  This may cause accidents and damage to the cabinet.

- Be sure to use specified parts and fuses meeting the specifications listed herein. Using parts not meeting these standards may cause damage or breakdowns.

- Make sure the warning labels affixed to the cabinet can be read at all times. Be sure they are in an open place, well-lighted, and not dirty.
  Also, be careful these labels are not hidden by other objects such as game cabinets, etc.

- Do not unplug the machines if your hands are wet. This may cause an electric shock.

- Do not mount the cabinet or place heavy objects on it. This will not only cause injury should it become unbalanced and tip over or fall, it may also damage the cabinet.

- When unused for long periods, turn the cabinet off and unplug it for safety.

- Place the cabinet where room temperature is between 5° and 35°. If the temperature exceeds or falls below the recommended temperature range, this may damage the cabinet.

- During shipping or moving, avoid serious jolts to the cabinet. This may cause damage or breakdowns.

- Be sure to use fuses meeting the specifications listed herein. Using parts not meeting these standards may cause damage or breakdowns.

- Always use a Logic tester when checking IC port circuitry. Using a normal tester may cause damage or breakdowns.

- When installing the cabinet, be sure to calibrate the adjusters to bring the cabinet level. Should it fall over, it may cause injury and accidents.
  If the machine is not level, there are times when the coin sorting function may not work.

- Do not apply volatile liquid cleaners like benzene, alcohol, thinner, and insecticides to the cabinet. This may cause paint and stickers to peel and ruin the luster of the cabinet's finish.

- Raise the adjusters and move the cabinet. This is necessary to avoid accidents and injury.

- Over graded areas, be sure to remove the control section and seat section before moving the cabinet. This is necessary to avoid accidents and injury.

- When disposing of this machine, make sure you do so according to the laws of your area concerning collection, shipping and disposal.

- When disposing of this cabinet through the agency of another, be sure to do this through a suitably qualified agency.

INDEX

SPECIFICATIONS

*Specifications may be changed without not
Model number: RE29-S

1) Power supply: PETER CHOU 44-1065   AC110-120V
2) Power consumption: 200W
3) Cabinet section: 37"(L) x 40" (W) x 80" (H) includes height of pallet
   Seat section: 22"(L) x 40.5" (W) x 59"(H) includes height of pallet
4) Total weight: 500 lbs.
5) Internal monitor: NEOTEC NT29-C
6) Fuse Standard: 7A/250V

CONVENIENCE KIT

1 - Mounting bracket left
1 - Mounting bracket right
10 - Bolt hex M8 x 30 mm black
10 - Washer flat M8 black
10 - Washer split lock M8 black
4 - Screw Phillips Pan head #8 x 3/4 black
4 - Washer flat #8 black
1 - Link cable
1 - Wrench Allen M5
1 - Manual

* Be aware that the items listed herein are subject to change without prior notice for product improvement.

PACKING CHECK

This cabinet is packed in the method below:
- Number of packages: 2
- Package contents: Monitor Base
                       Seat Section

* Because packing will be needed subsequently for shipping between locations, store the cardboard boxes and pallets, etc., in good condition in an suitable location.

• The convenience kit is packed in the coin box. Remove the kit and check contents.

PART NAMES

Front

Lamp panel assembly

Control panel (upper)

Control panel assembly

Service door

Pedal assembly

Seat base cover

Seat section

Rear

Operating section

Rear door

Back panel

Rear power section
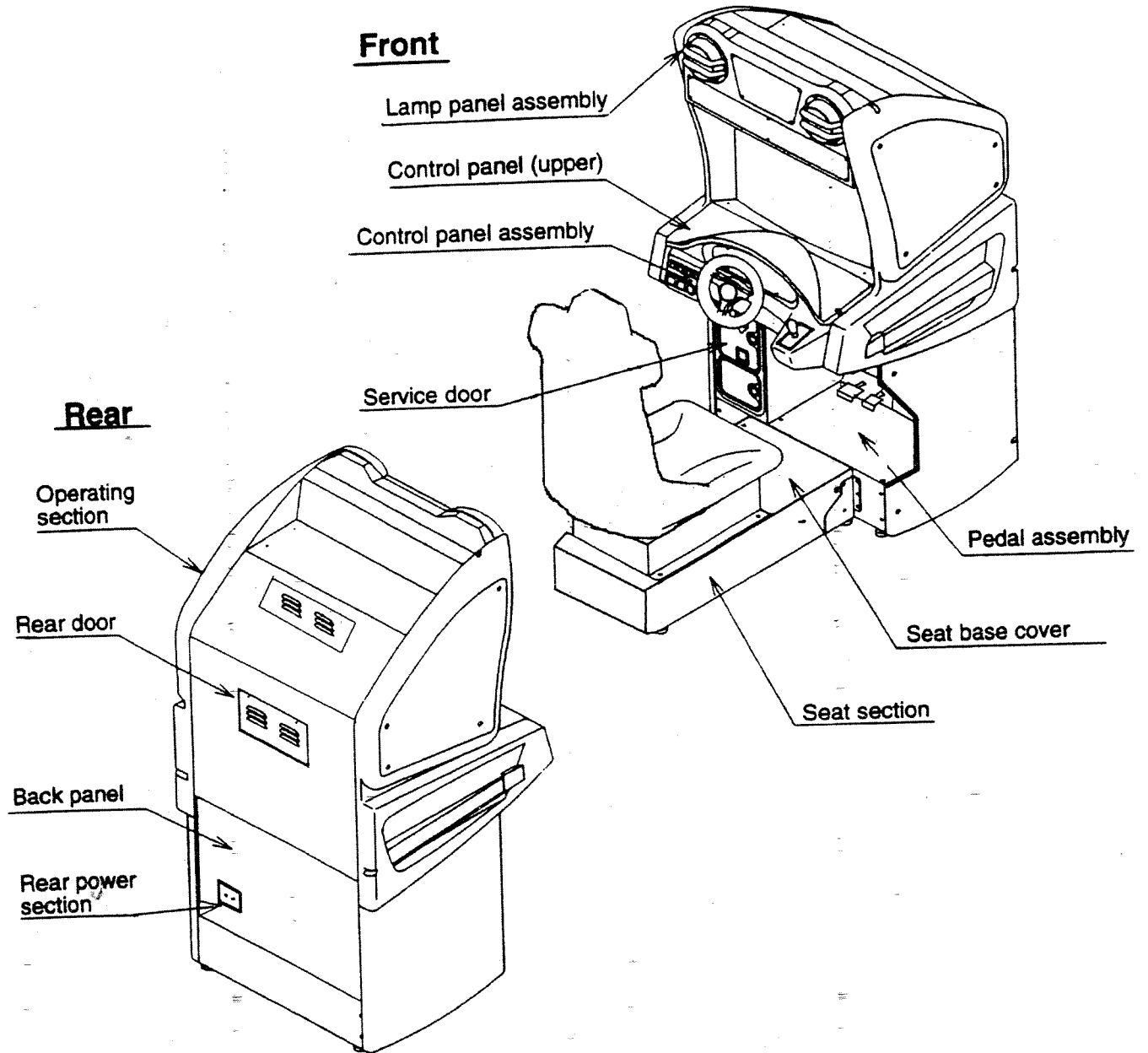
SWITCH AND TERMINAL LOCATIONS

Control Panel: Inside the service door, the following switches and terminals are accessible.

(1) Volume - Adjusts the volume levels of the front speakers.
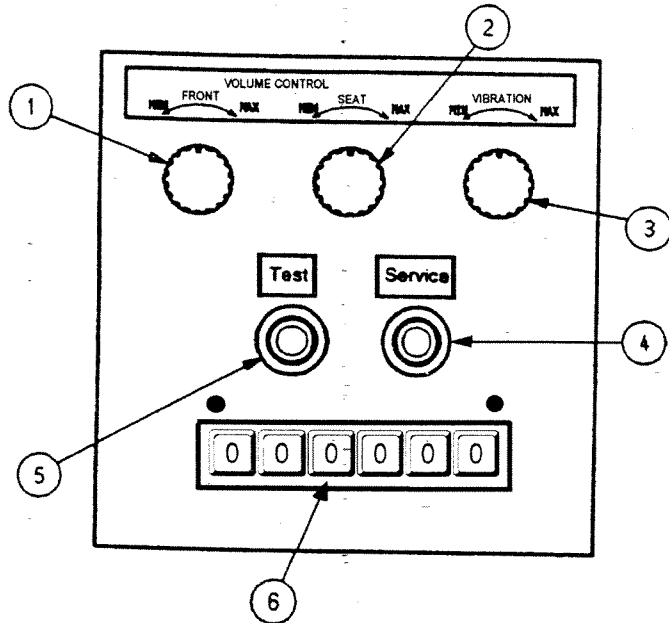
(2) Volume - Adjusts the volume levels of the seat speakers.

(3) Volume - Adjusts the volume levels of the woofer in the seat.

(4) Service switch - The service credit switch.

(5) Test switch - The switch that begins the Test Mode.

(6) Coin counter - Counts the amount of coins.
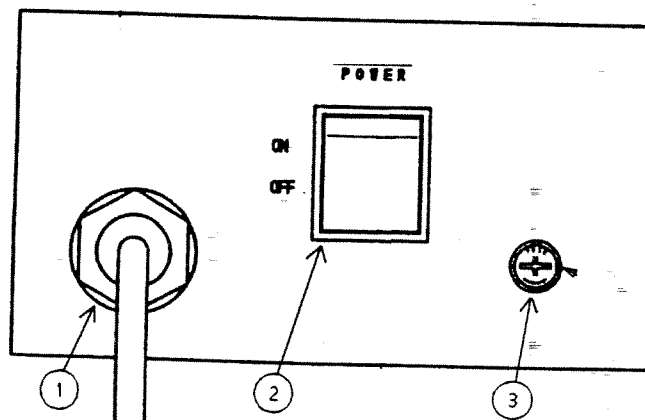
Power plate: In the rear power section, the following switches and terminals are accessible.

(1) Power plug
(2) On-Off switch
(3) Fuse

When moving or shipping the cabinet, be aware of the points listed below.
- When moving and carrying the cabinet over graded surfaces, be sure this is done with the control panel and seat section separated. Separating parts is to be done in the reverse order of the procedures used to assemble the cabinet during installation.
- Use a forklift only when the cabinet has been fully packed.
- When moving the control panel section separately, be sure to push it in the orientation and direction shown in the diagram below.
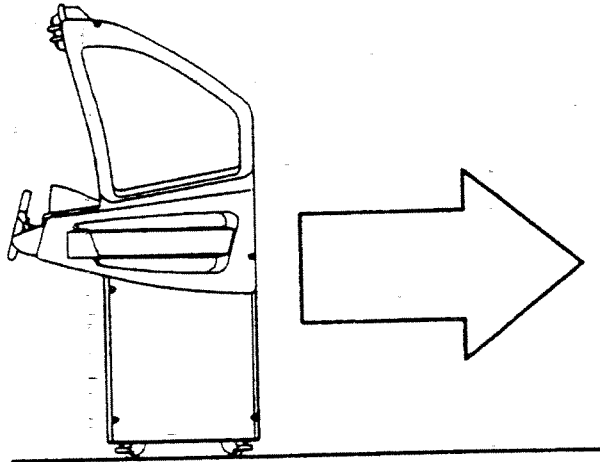
*CABINET IS TOP HEAVY!

- Move the cabinet as shown here.

DANGER
- When moving the cabinet, be sure to do so with the appropriate number of personnel. If the cabinet should fall or tip over, it may cause personal injury and other accidents.
- When moving the cabinet, be careful of conditions around you and create a path sufficient to safely move the cabinet.
- Before moving the cabinet, make sure the power cord is unplugged. This is necessary to avoid accidents and damage to the cabinet.
- Do not damage the power cord when moving the cabinet.
   This may cause accidents and damage to the cabinet.
- Moving and shipping should be carried out with a number of personnel.
   This is necessary to avoid accidents and personal injury.
- When moving the control panel separately, be sure to move it in the orientation and direction specified. If the cabinet falls over, it may cause personal injury and other accidents.
- Do not damage the wiring. This may cause fire and electric shocks.
- When moving the cabinet in an unpacked state, do not use a fork lift.
There is the danger of personal injury should the cabinet tip over or fall.

WARNING
- Do not move the cabinet with the adjusters lowered. This may cause personal injury and accidents.
- When separating the cabinet's sections, keep careful track of removed parts and screws so you do not lose them.

Necessary Entrance Dimensions

At the time of shipment from the factory, the cabinet is shipped with the control panel and seat sections separately packed. Each package's size and weight are shown below. Check the size of your entrances to see if these can be accommodated.

- Cabinet section:
  37"(L) x 40" (W) x 80" (H) includes height of pallet
- Seat section:
  22"(L) x 40.5" (W) x 59"(H) includes height of pallet
- Total shipping weight: 500 lbs.

Placing Conditions

The areas needed for operating and maintaining the machine are shown below.
- Single-cabinet use: 33" (W) x 72" (D)

Aisle
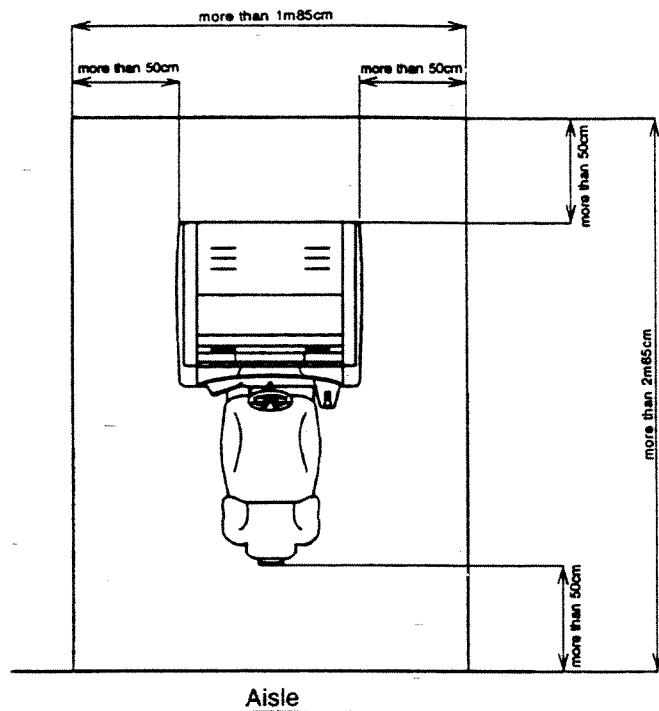
This cabinet can be linked with up to four cabinets for communication competition.
When using communication links, place cabinets as listed below.

- As with single-cabinet usage, the back of cabinets should be placed apart by more than 50 cm.
- As with single-cabinet usage, the edges of both sides of the cabinet should be separated by more than 50 mm from walls and other cabinets.
- Cabinets in a communication network should be placed so the communication cables easily reach the other cabinets.

Preparations for Installation

Before installing cabinets, locate convenience kit and check for the following:

- Billboard, Left and Right seat mounting fixtures, and attaching hardware
- Allen wrench

Installation Methods

Connecting the control panel section and the seat section.

1. Loosely fasten the seat mounting fixtures (Left and Right) to the locations shown in the diagram of the control panel section with the hex bolts and washers.
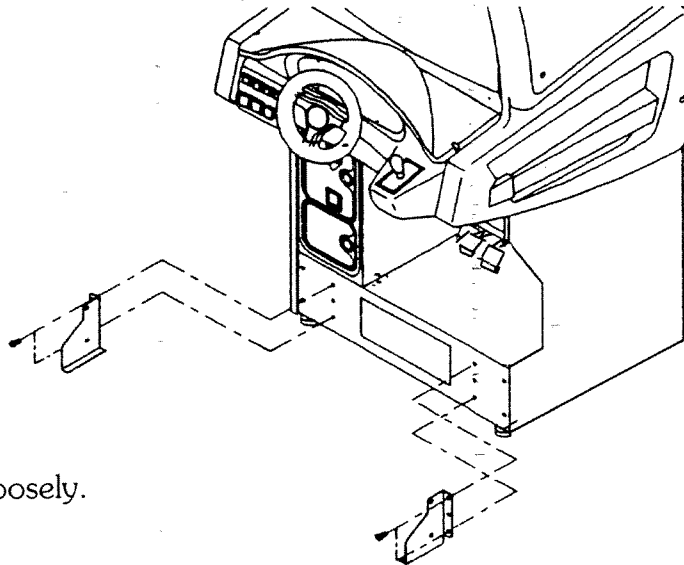
* At this time, fasten these loosely.

2. Position the control panel near the seat section and connect the seven connectors.

WARNING

Be sure machine is not plugged into electrical outlet.
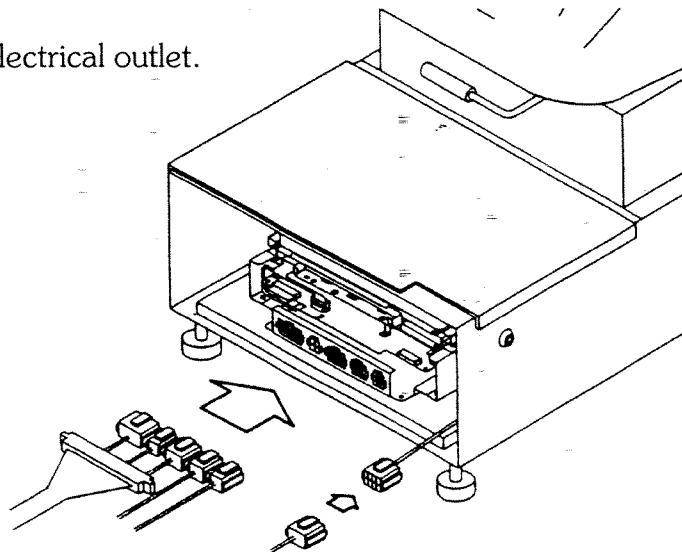
3. Lower the adjusters at the bottom of the control panel section (four locations) to the surface. When they are set on the surface, use the spanner to adjust the height of each adjuster and bring the cabinet level (the casters should be about 5 mm off the ground).

4. Adjust the four adjusters on the bottom of the seat section to the same height of the control panel section.

Cabinet · Caster · Adjuster · About 5mm · Placement surface

Raise · Lower · Directions for turning adjusters
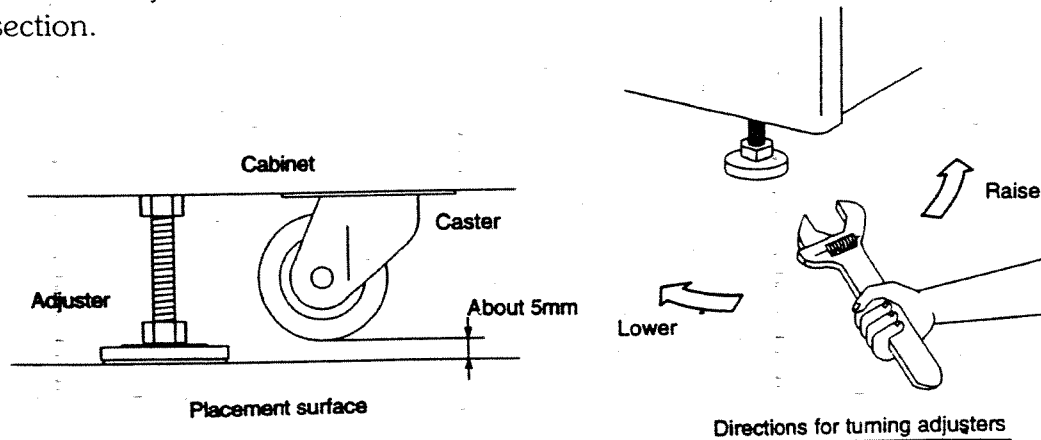
5. Being careful not to pinch the connectors and harnesses, attach the control panel section to the seat section.

6. As shown in the diagram, attach the four hexagonal bolts (M8 x 15) to the seat section.

7. Tighten the hexagonal bolts loosely screwed into the cabinet in step (1).

   * When separating the sections, follow the above procedures in reverse order.

DANGER
- Under no circumstances should the cabinet be placed in the locations listed below. So doing may result in accidents such as fire and electric shock.
  - Indoor pools, areas near a shower, and other locations where humidity is high.
  - In areas exposed to direct sunlight.
  - In areas that are excessively hot, like next to a heater. In areas around dangerous materials.
  - In places that are excessively dusty.
  - In areas prone to leaking or flooding.
  - Near ventilators and areas of severe temperature extremes
  - On inclines, areas subject to severe jolts, and other unstable locations.
  - Near fire fighting equipment, etc.

- Do not place any of the following materials on or around the cabinet. If liquid should spill onto or into the cabinet, it may cause accidents involving electric shock and damage the machine.
  - Vases, potted plants, and containers holding medicine, water and other types of liquids.
  - Heavy objects

- Be sure to lower the eight adjusters of the control panel and seat sections to the surface and stabilize the cabinet. If not stabilized, it may result in personal injury or accidents.

- Set up the cabinet according to the explanations and procedures listed in this user's manual. If these are not followed correctly, there is a danger of accidents involving electric shock and other personal injuries.

- Use the cabinet with indoor wiring meeting the proper voltage specifications. Failing to do so may cause fire or electric shock.

- Absolutely do not use numerous appliances on one outlet. It may result in fire or electric shock.

- Do not damage, bend, or placing heavy or hot objects on the power cord. If the cord is damaged, this may cause accidents involving fire and electric shock.

WARNING
- Do not place the power cord in areas where people can step on or kick it. This may result in personal injury and accidents.

ATTACHING THE BILLBOARD

1. Attach the billboard to the control panel's lamp box with provided screws.

MARQUEE
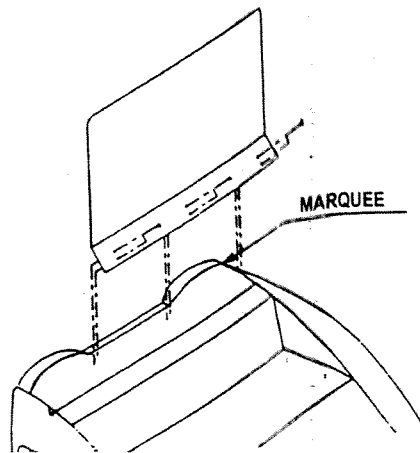
WARNING
- Before beginning assembly, have a footstool ready and use it for assembling parts. Trying to assemble parts without a footstool may cause accidents and personal injury.
- Be sure to tighten screws securely.
  If screws become loose, this may damage parts and cause accidents.
- Prepare enough space to safely set up the cabinet. Failing to do so may cause accidents and personal injury.

TURNING ON THE MACHINE

- Turn on the machine and check the following;

1. Check to see if the rear power switch is "OFF."
2. Plug the AC cord into the outlet.
3. Connect the ground cable.
4. Switch "ON" the power switch on rear power plate.

WARNING
- When turning on the cabinet, do not touch the steering wheel.
- If the power switch is not switched on, the cabinet will not operate.

Checking Operations

1. The fluorescent light turns on.
2. After the power has been turned on, the RAM TEST will automatically begin. If all displays show [OK], the next display will appear. For a few seconds at this time, each lamp will turn on and off.
3. After the crosshatch screen appears for a few seconds, the screen will change to the "Network Check" screen.
4. The "Network Check" screen will be displayed for about 40 seconds whether the cabinet is connected for communication competition or not. After this, the game screen will then appear. At the same time the "Network Check" screen is displayed, the steering wheel will automatically straighten itself out.

WARNING

- During the "Network Check," absolutely do not touch or try to use the steering wheel, pedal, shift lever and switches. This will cause the cabinet to malfunction.
- If the steering wheel does not return to its home position, check the connections again.

TEST MODE

When you press the Test switch inside the service door, the Test Mode begins.
Settings and adjustments you can make in the Test Mode are listed below.

MEMORY TEST (Memory check)
Checks the read/write capabilities of the RAM device.

MONITOR TEST (Display check)
A screen display for adjusting the monitor.

NETWORK TEST (Communication check)
Displays the condition of communication between cabinets.

I/O TEST (I/O check)
Checks all types of input devices.

SOUND TEST (Sound check)
Checks the output of all sound-system devices.

COIN DATA (Income totals)
Shows coin/play totals.

GAME OPTIONS (Game settings)
Sets game difficulty levels, etc.

SYSTEM OPTIONS (Cabinet settings)
Sets all cabinet characteristics.

While conducting the Test Mode with multiple cabinets connected in a linked communication network, be careful of the points below.

- Check whether power switch is connected.
- When a number of cabinets are connected in a communication network and the Test button is pressed, all connected cabinets will enter the Test Mode. If there is a cabinet that is in operation, do not push the Test switch.
- During communication play, when a communication error occurs, the game will be forcefully stopped and cabinets will enter the Network Test Mode.

MAIN MENU

SCREEN DISPLAY

```
                    MAIN MENU

            → MEMORY TEST
              MONITOR TEST
              NETWORK TEST
              I/O TEST
              SOUND TEST
              COIN DATA
              GAME OPTIONS
              SYSTEM OPTIONS
              EXIT

  CURSOR UP    :SHIFT UP
  CURSOR DOWN  :SHIFT DOWN
  ENTER        :ACCELERATOR
                      SNK © SNK CORPORATION 1997
```
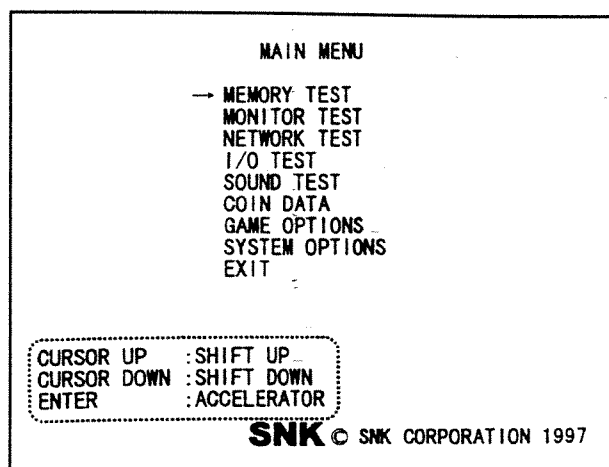
ACTIVATION METHOD
During the game, when the Test button is pressed, this menu is displayed.

BASIC OPERATION INSTRUCTIONS

1. Move the arrow (*) with the shift lever and match it to the item you wish to change.
   - CURSOR UP: The cursor moves up.
   - CURSOR DOWN: The cursor moves down.
2. Make settings according to the operation instructions in the lower left corner of the screen. (There is an operation explanation for each selected item.)
   - ENTER: Step on the accelerator (pedal) to call up the item contents.
   - CHANGE: When you step down on the accelerator or brake, the item contents will change.
3. Choose the EXIT display in each item and step on the accelerator to return to the previous screen.

END: To get out of the Test Mode, match the cursor to EXIT and step down on the accelerator. (Restart the cabinet to go to the game.)

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SCREEN DISPLAY

```
              MEMORY TEST

        SCROLL RAM      OK
        PALETTE RAM     OK
        SPRITE RAM      OK
        3D BANK A RAM   OK
        3D BANK B RAM   OK


                        ┌─────────────────────────────┐
                        │ For the items on the left, OK or NG │
                        │ (No good) test results are displayed. │
                        └─────────────────────────────┘

    EXIT : ACCELERATOR

              SNK © SNK CORPORATION 1997
```
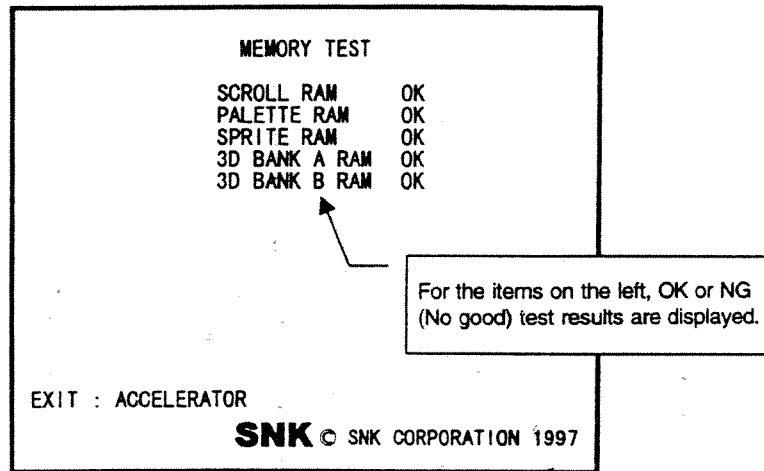
OPERATIONS

The memory is checked automatically and if there is nothing wrong an "OK" will appear. If there is something wrong, an "NG" is displayed.

*When an "NG" message appears, quickly turn the cabinet off and contact your nearest SNK Service Center.

FUNCTIONS

The test pattern for adjusting the monitor is displayed. Three types of screens are displayed: a color bar for correcting color tones, the crosshatch for correcting image and size distortions, and the monitor adjustment screen.

1. COLOR BAR [Color Tone Adjustment]

```
              COLOR BAR


        ▓▓▓▓▓▓▓▓▓▓▓▓        RED

        ▓▓▓▓▓▓▓▓▓▓▓▓        GREEN

        ▓▓▓▓▓▓▓▓▓▓▓▓        BLUE

        ▓▓▓▓▓▓▓▓▓▓▓▓        WHITE


    EXIT : ACCELERATOR
              SNK © SNK CORPORATION 1997
```
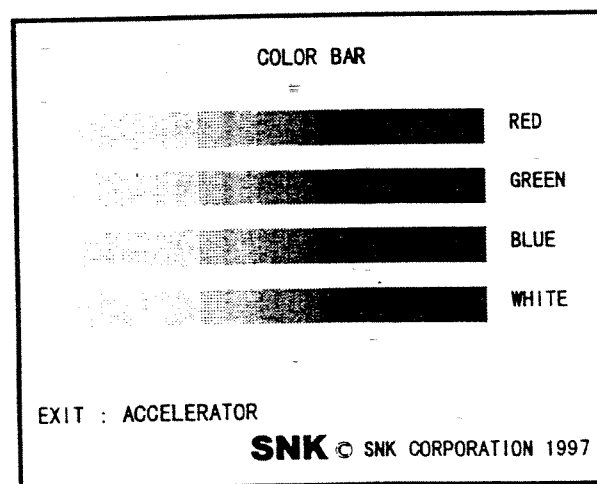
2. CROSS HATCH [Positioning Adjustment]
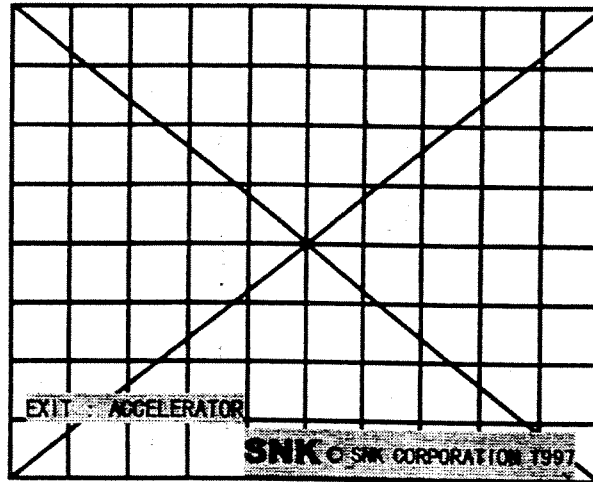
3. MONITOR CHECK [Screen Adjustment]

Based on sample images, color misalignment, rasters, display scaling, brightness, contrast, sizes possible for stabilized displays, and screen center images are examined.

NETWORK TEST

SCREEN DISPLAY

```
                    NETWORK TEST

        ID1
        —>——
          .

        01:OK   02: —   03:OK   04: —
        —>—  >——  —>—  >——
        —>—  >——  —>—  >——


                                    ┌─────────────────────────────────┐
                                    │ The communication circumstances for │
                                    │ each ID are displayed.              │
                                    │   Upper level: Data communication   │
                                    │                circumstances        │
                                    │   Lower level: Cabinet's communication│
        EXIT : ACCELERATOR          │                operations           │
                                    └─────────────────────────────────┘
                SNK © SNK CORPORATION 1997
```

┌───────────────────────────────────────┐
│ Communication settings and IDs are   │
│ displayed.   │
│   │
│   ID NUMBER: Connected   │
│   SEARCH: Searching   │
│   LINK: Forming connection   │
│   information   │
│   │
│ If the ID numbers are not displayed   │
│ after more than two minutes, there is │
│ something wrong with the network.   │
└───────────────────────────────────────┘

FUNCTIONS
Checks communication settings and displays communication circumstances.

ID CHECK
Displays the ID number of the cabinet and the ID numbers of each connected cabinet.

SYNCHRONIZING CHECK
Displays communication circumstances.

SCREEN DISPLAY

```
                    I/O TEST

              → INPUT TEST
                OUTPUT TEST
                ANALOG DEVICE ADJUST
                EXIT




        CURSOR UP    :SHIFT UP
        CURSOR DOWN  :SHIFT DOWN
        ENTER        :ACCELERATOR

                      SNK © SNK CORPORATION -1997
```

1. [Input Test]

```
                    INPUT TEST
            BGM          HANDLE          GEAR
          O O O O      ← 80 →             ↑

          O O    O    ↓00      00↓    ↓
          VIEW START BRAKE  ACCELERATOR

          O O    O      O
          COIN SERVICE TEST

              STEP ON THE ACCELERATOR AND
              THE BRAKE PEDAL TO EXIT
                      SNK © SNK CORPORATION 1997
```
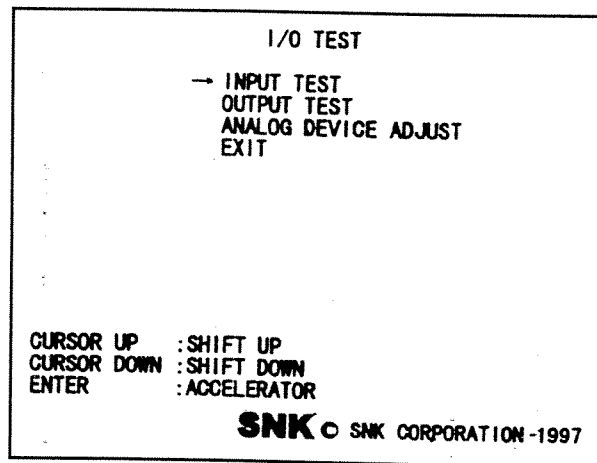
Input data is reflected on successive screens.

By stepping down on the accelerator and brake simultaneously, it is possible to exit from this screen.

CHECK CONTENTS

Steering wheel, accelerator, and brake input is carried out through analog input.

- The steering wheel center value is "80," turning all the way to the left is "0," and turning all the way to the right is "FF."
  * Steering wheel 1-digit values can vary slightly, but this is normal.
- If the brake and accelerator are not being stepped on, a full left turn "0" condition is represented as "FF."

2. [Output Test]

```
                    OUTPUT TEST

              → BGM SELECT#1    ON
                BGM SELECT#2    OFF
                BGM SELECT#3    OFF
                BGM SELECT#4    OFF
                START LAMP      ON
                BRAKING LAMP    OFF
                WINNING LAMP    BLINK#1
                REACTIVE STEER  OFF
                EXIT


      CURSOR UP    :SHIFT UP
      CURSOR DOWN  :SHIFT DOWN
      CHANGE +     :ACCELERATOR
      CHANGE -     :BRAKE

              SNK © SNK CORPORATION 1997
```
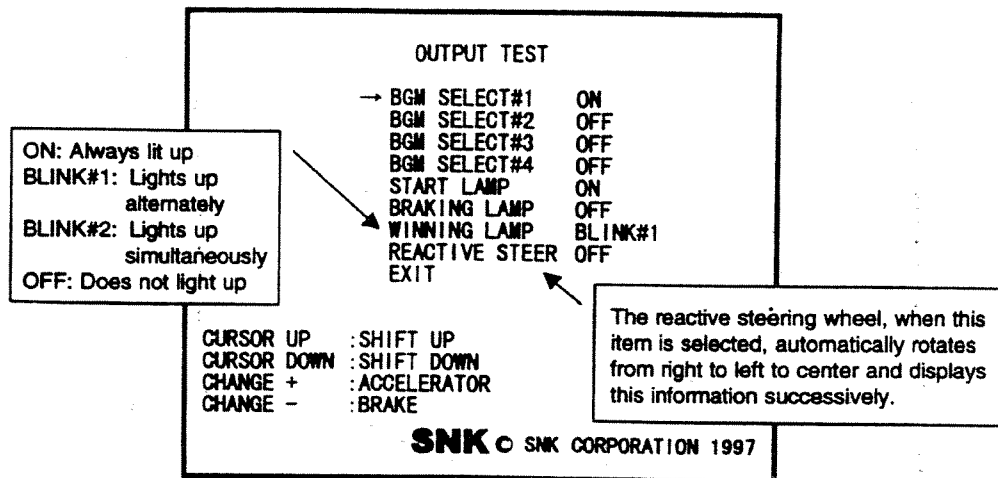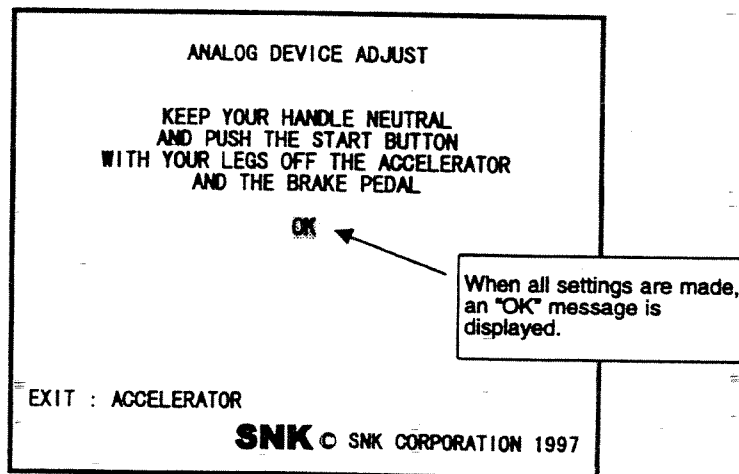
ON: Always lit up
BLINK#1: Lights up alternately
BLINK#2: Lights up simultaneously
OFF: Does not light up

The reactive steering wheel, when this item is selected, automatically rotates from right to left to center and displays this information successively.

There are four types of winning lamp patterns.
When the reactive steering item is selected, a warning message is displayed.

3. ANALOG DEVICE ADJUST [Sets basic analog standard values]

```
                ANALOG DEVICE ADJUST


              KEEP YOUR HANDLE NEUTRAL
             AND PUSH THE START BUTTON
          WITH YOUR LEGS OFF THE ACCELERATOR
                AND THE BRAKE PEDAL

                       OK




      EXIT : ACCELERATOR

              SNK © SNK CORPORATION 1997
```

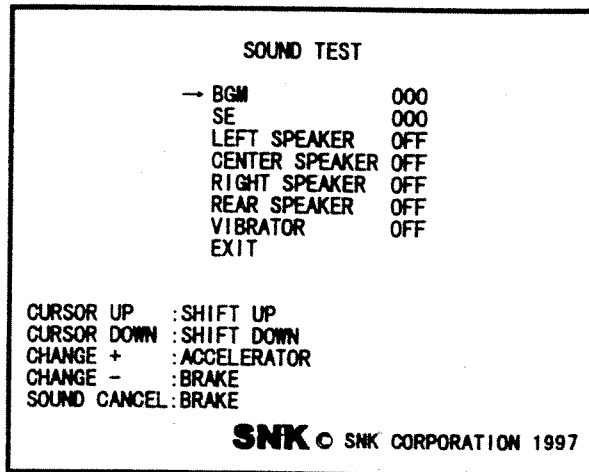When all settings are made, an "OK" message is displayed.

When all settings are made, an "OK" message is displayed.

When you press the Start button with the steering wheel in neutral and your feet off the accelerator and brake, you can match the centers of each part.

  * The Start button is deactivated when you step down on the accelerator.

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SCREEN DISPLAY

```
                 SOUND TEST

          → BGM                000
            SE                 000
            LEFT SPEAKER       OFF
            CENTER SPEAKER     OFF
            RIGHT SPEAKER      OFF
            REAR SPEAKER       OFF
            VIBRATOR           OFF
            EXIT


   CURSOR UP     :SHIFT UP
   CURSOR DOWN   :SHIFT DOWN
   CHANGE +      :ACCELERATOR
   CHANGE -      :BRAKE
   SOUND CANCEL:BRAKE

             SNK © SNK CORPORATION 1997
```
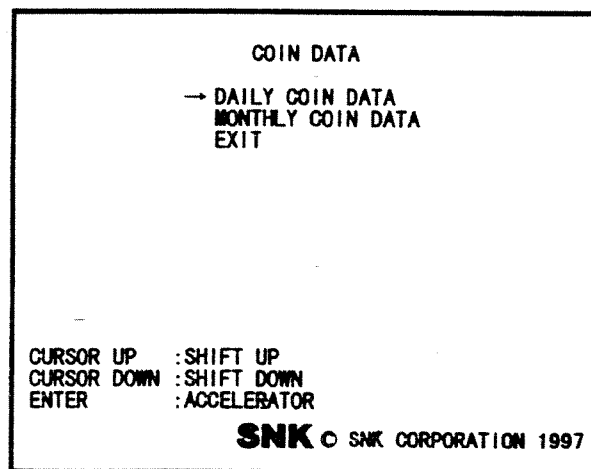
FUNCTIONS

Performs tests of music and sound effects.

1. BGM (Background music)
- When selected, the BGM will begin to play simultaneously. (All sounds playing beforehand will be canceled.)
- After selection, this is played only for 10 seconds.
- You can cancel the test by stepping down on the brake when the sound is playing.

2. SE [Sound Effects]
- When selected, the sound effects will begin to play. (All sounds playing beforehand will be canceled.)
- After selection, this is played only for 10 seconds.
- You can cancel the test by stepping down on the brake when the sound is playing.

3. LEFT SPEAKER [Speakers on the left side]
- Based on the view from the seat, plays sound through all speakers on the left side.
- The sound will continue until the brake is stepped on or another item is selected.

4. CENTER SPEAKER [Central speakers]
- Plays sound through the right and left speakers.
- The sound will continue to until the brake is stepped on or another item is selected.

5. RIGHT SPEAKER [Speakers on the right side]
- Based on the view from the seat, plays sound through all speakers on the right side.
- The sound will continue until the brake is stepped on or another item is selected.

6. REAR SPEAKER [Speakers in the rear of the cabinet]
- Plays sound through the speakers located in back of the seat.
- The sound will continue until the brake is stepped on or another item is selected.

7. VIBRATION DEVICE [Vibration device levels]
- Sends sounds through the vibration device located under the seat.
- The sound will continue to until the brake is stepped on or another item is selected.

COIN DATA

SCREEN DISPLAY

```
                    COIN DATA

            → DAILY COIN DATA
              MONTHLY COIN DATA
              EXIT




      CURSOR UP    :SHIFT UP
      CURSOR DOWN  :SHIFT DOWN
      ENTER        :ACCELERATOR
                      SNK © SNK CORPORATION 1997
```

FUNCTIONS
- The coin data for all cabinets linked through the network is displayed.
- Income total data and play frequency data is displayed.
  1. Totals for the past week by time
  2. Totals for the past year by month.

1. DAILY COIN DATA

DAILY COIN DATA

EXIT : ACCELERATOR

SNK © SNK CORPORATION 1997
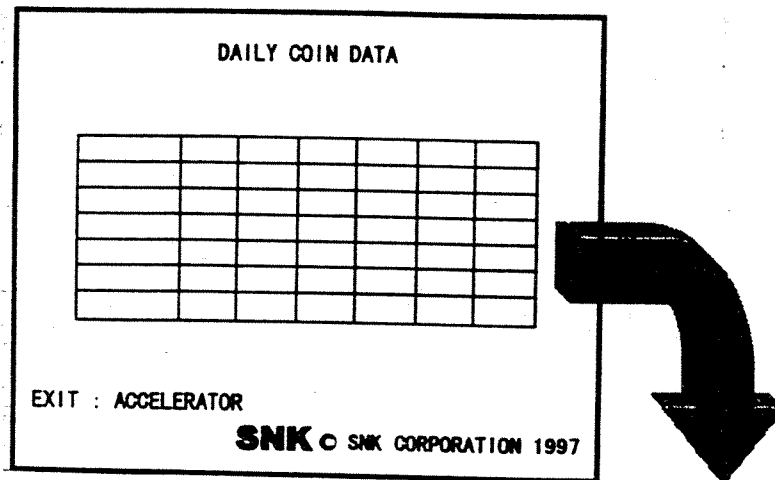
	PLAY	CONT.	TIME	COIN1	COIN2	SERVICE
06/09 MON	—					
06/10 TUE						
06/11 WED						
06/12 THU						
06/13 FRI	28	—	02:30	28	0	0
06/14 SAT	43	—	03:55	40	2	1
06/15 SUN	55	—	03:12	51	3	1
	Play frequency	Continue frequency	Average play time	Number of coins 1	Number of coins 2	Service frequency

2. MONTHLY COIN DATA

```
              MONTHLY COIN DATA

          → NEXT [ 1/2 ]
            EXIT



    CURSOR UP   :SHIFT UP
    CURSOR DOWN :SHIFT DOWN
    ENTER       :ACCELERATOR

                    SNK © SNK CORPORATION 1997
```
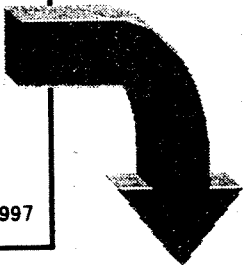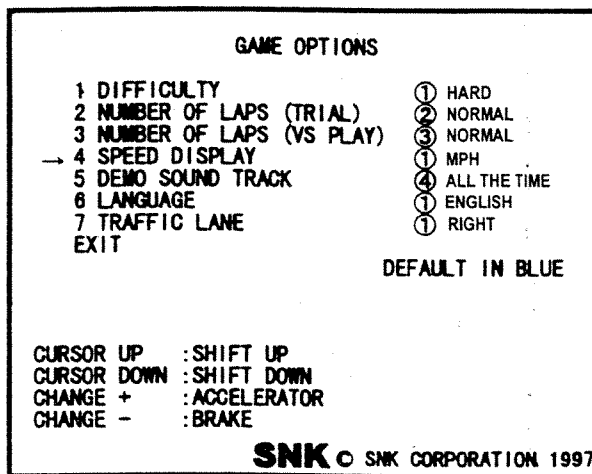
—	PLAY	CONT.	TIME	COIN1	COIN2	SERVICE
97/01 JAN						
97/02 FEB						
97/03 MAR	—					
97/04 APR						
97/05 MAY	511	—	3:30	501	0	0
97/06 JUN	1578	—	3:51	1520	25	12
	Play frequency	Continue frequency	Average play time	Number of coins 1	Number of coins 2	Service frequency

SCREEN DISPLAY

```
                        GAME OPTIONS

     1 DIFFICULTY                  ①  HARD
     2 NUMBER OF LAPS (TRIAL)      ②  NORMAL
     3 NUMBER OF LAPS (VS PLAY)    ③  NORMAL
  → 4 SPEED DISPLAY                ①  MPH
     5 DEMO SOUND TRACK            ④  ALL THE TIME
     6 LANGUAGE                    ①  ENGLISH
     7 TRAFFIC LANE                ①  RIGHT
     EXIT
                                  DEFAULT IN BLUE



     CURSOR UP     :SHIFT UP
     CURSOR DOWN   :SHIFT DOWN
     CHANGE +      :ACCELERATOR
     CHANGE -      :BRAKE

                        SNK © SNK CORPORATION 1997
```

FUNCTIONS

- Sets software dip settings, such as game difficulty, etc.
- Settings for basic game contents is done here.
- When making connections for a communication network, if there is a faulty connection or a cabinet's items (GAME OPTIONS) are changed, all settings are simultaneously changed for the other cabinets.

1. DIFFICULTY

EASY
NORMAL
HARD
HARDEST

Total: 4 types
Initial settings: "HARD"

2. NUMBER OF LAPS (TRIAL)

	① SHORT	② NORMAL	③ LONG	④ LONGER	⑤ LONGEST
Beginner	2	3	4	5	20
Intermediate	2	3	4	5	18
Advanced	1	2	3	4	15

Total: 5 types
Default: "NORMAL"

Sets the standard laps of the Trail Mode.

3. NUMBER OF LAPS (VS PLAY)

	① SHORT	② NORMAL	③ LONG	④ LONGER	⑤ LONGEST
Beginner	1	2	3	5	20
Intermediate	1	2	3	5	18
Advanced	1	2	3	4	15

Total: 5 types
Default: "NORMAL"

Sets the standard laps of the Competition Trial Mode.

4. SPEED DISPLAY

1) km/h   - Displays the speed meter units in kilometers per hour.
   - Displays distance meter units in meters.
   - Displays course information in meters.

2) MPH   - Displays speed meter units in miles per hour.
   - Displays distance meter units in miles.
   - Displays course information in miles and feet.

Total: 2 types
Initial setting: "MPH"

5. DEMO SOUND TRACK

1) ALL THE TIME Plays music all the time during demo screens.
2) ONCE EVERY 2 Plays music once every two demo screens.
3) ONCE EVERY 4 Plays music once every four demo screens.
4) BGM OFF   Doesn't play music during demo screens.
5) SOUND OFF   Doesn't play any sound during demo screens.

Total: 5 types
Initial setting: "ALL THE TIME"

"DEMO PLAY" is the only item where you can choose whether sound plays or not.

6. LANGUAGE

1) Japanese
2) English

Total: 2 types
Initial setting: "ENGLISH"

7. TRAFFIC LANE

1) Left
2) Right

Total: 2 types
Initial settings: "RIGHT"

Decides whether other cars drive mainly on the right or left sides.

SCREEN DISPLAY

```
                    SYSTEM OPTIONS

              → COIN/CREDIT SETTING
                CALENDER SETTING
                BACKUP MEMORY CLEAR
                EXIT




    CURSOR UP    :SHIFT UP
    CURSOR DOWN  :SHIFT DOWN
    ENTER        :ACCELERATOR
                      SNK © SNK CORPORATION 1997
```
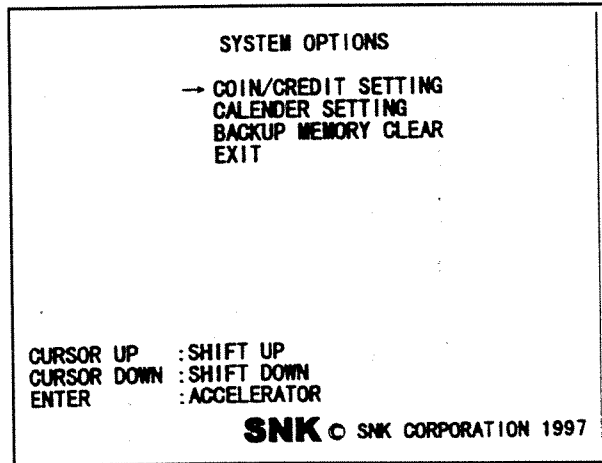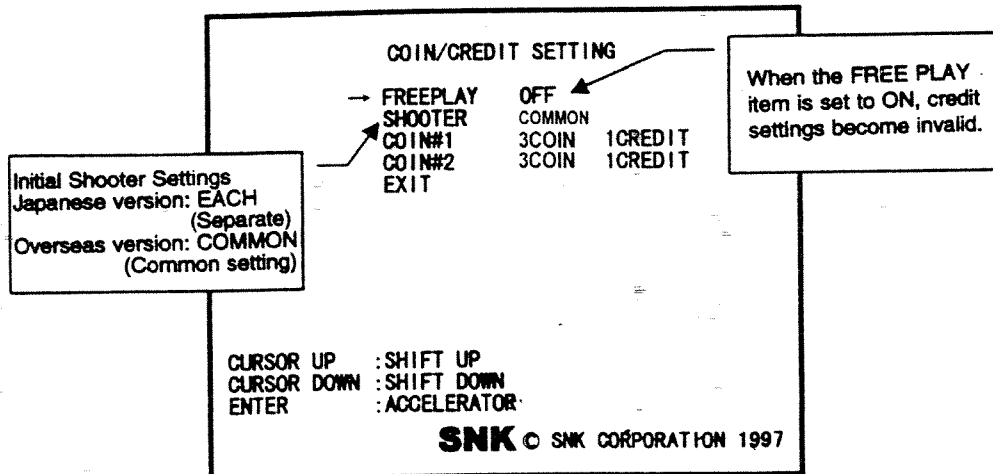
FUNCTIONS

- When the communication network is set up, making item changes (SYSTEM OPTIONS) on any one of the cabinets will simultaneously alter settings on the other cabinets.
- Performs system information settings.

1. Sets coin shooter and credits.
2. Sets the calendar.
3. Initializes the back-up memory.

1. COIN/CREDIT SETTING

```
                    COIN/CREDIT SETTING
                                                    When the FREE PLAY
              → FREEPLAY    OFF                     item is set to ON, credit
                SHOOTER     COMMON                  settings become invalid.
                COIN#1      3COIN   1CREDIT
                COIN#2      3COIN   1CREDIT
                EXIT

    Initial Shooter Settings
    Japanese version: EACH
                 (Separate)
    Overseas version: COMMON
                 (Common setting)




    CURSOR UP    :SHIFT UP
    CURSOR DOWN  :SHIFT DOWN
    ENTER        :ACCELERATOR
                      SNK © SNK CORPORATION 1997
```

```
                        COIN#1

                    →  1COIN
                       2CREDITS      ←
                       EXIT                   ┌──────────────────────┐
                                              │ Settings can be made for │
                                              │ each coin shooter from  │
                                              │ 1COIN 1CREDIT        │
                                              │ to 9COINS 9CREDITS.  │
                                              └──────────────────────┘

        CURSOR UP     :SHIFT UP
        CURSOR DOWN :SHIFT DOWN
        CHANGE +      :ACCELERATOR
        CHANGE −      :BRAKE

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```

2. CALENDAR SETTING

```
                        CALENDER SETTING

              97 / 06 / 09 (MON)  16 : 05
                              ↓
              97 / 06 / 09 (MON)  16 : 05
                                         ▲
  ┌─────────────────────┐        SET
  │ When date and time settings │   ▲ CANCEL
  │ are changed, move the     │              ┌──────────────────────────┐
  │ cursor to EXIT.           │              │ After matching lower calender dates │
  └─────────────────────┘              │ with the cursor ▲, the calendar  │
                                              │ settings are altered when the cursor │
        CURSOR UP     :SHIFT UP        │ is moved to the SET item.        │
        CURSOR DOWN :SHIFT DOWN        └──────────────────────────┘
        CHANGE +      :ACCELERATOR
        CHANGE −      :BRAKE

                       SNK © SNK CORPORATION 1997
```

3. BACKUP MEMORY CLEAR

```
                     BACKUP MEMORY CLEAR

                   →  YES
                      NO
                                   ┌──────────────────────────┐
                                   │ When settings are determined with "YES," │
                                   │ the data for credit total information, etc., │
                                   │ will be cleared.                  │
                                   │ Cabinet Information, credit settings and │
                                   │ software dip information is not cleared. │
                                   └──────────────────────────┘

        CURSOR UP     :SHIFT UP
        CURSOR DOWN :SHIFT DOWN
        ENTER          :ACCELERATOR

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```

Changing Fluorescent Lights and Lamps

- Methods for Changing Fluorescent Lights and Lamps in the Control Panel Section.

1. Remove the fluorescent light (15 W), the glow bulb (FG1E), and the lamp (S35 E17Y8W). Replace these with new ones.
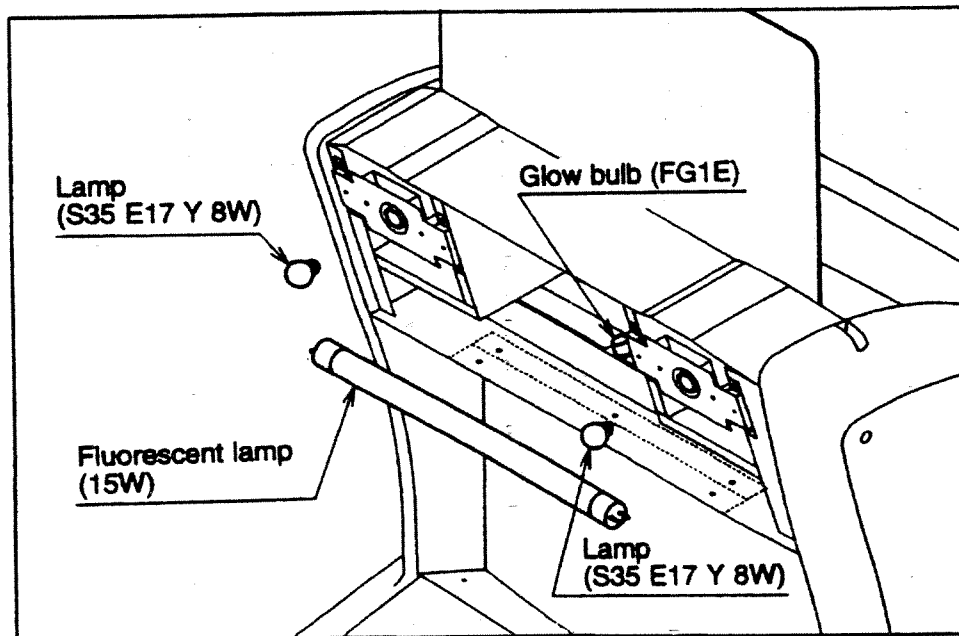
2. Put the lamp box back together following the procedures in reverse.

DANGER

- Make sure these operations are done with the power off.
  This can cause accidents involving electric shock and personal injury.
- During replacement procedures, do not touch any other areas than those indicated.
  This can cause personal injury and accidents.
- Do not use replacement parts other than those designated by the SNK Corporation.
  Doing so can cause accidents and damage to the cabinet.

WARNING

- Make sure all screws are screwed in tightly. If screws become loose, it may damage parts or cause accidents.
- Because lamps and fluorescent lights become very hot right after the cabinet is turned on, wait a while before beginning to replace lights and lamps.

CONTROL PANEL

On the Test Mode screen, when the volume values of the steering wheel are shown to be abnormal, it is necessary to change the volume.

Abnormal examples
- Even when the steering wheel is turned all the way, a "0" or "FF" reading does not appear.
- Even when the steering wheel is not turned all the way, a "0" or "FF" reading appears.

- Removing the Control Panel Assembly

1. Remove the five screws shown in the diagram below and remove the upper control panel.

Control panel (upper)
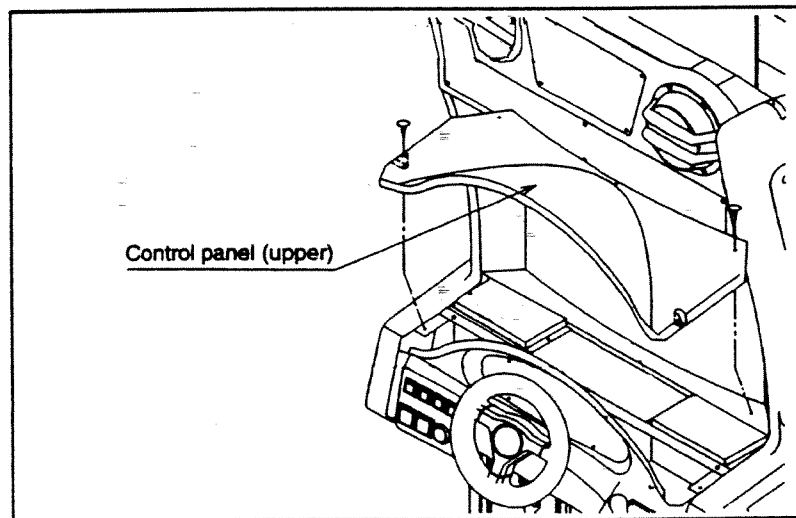
2. Remove the screws on the upper surface shown in the diagram below.
3. Remove the bolts of the lower area shown in the diagram below.
4. Pull out the control panel assembly forward until there is a gap you can fit your hand into.
5. With your right hand, support the control panel assembly and remove the four connectors with your left hand.
6. Pull out the control panel assembly at the end.
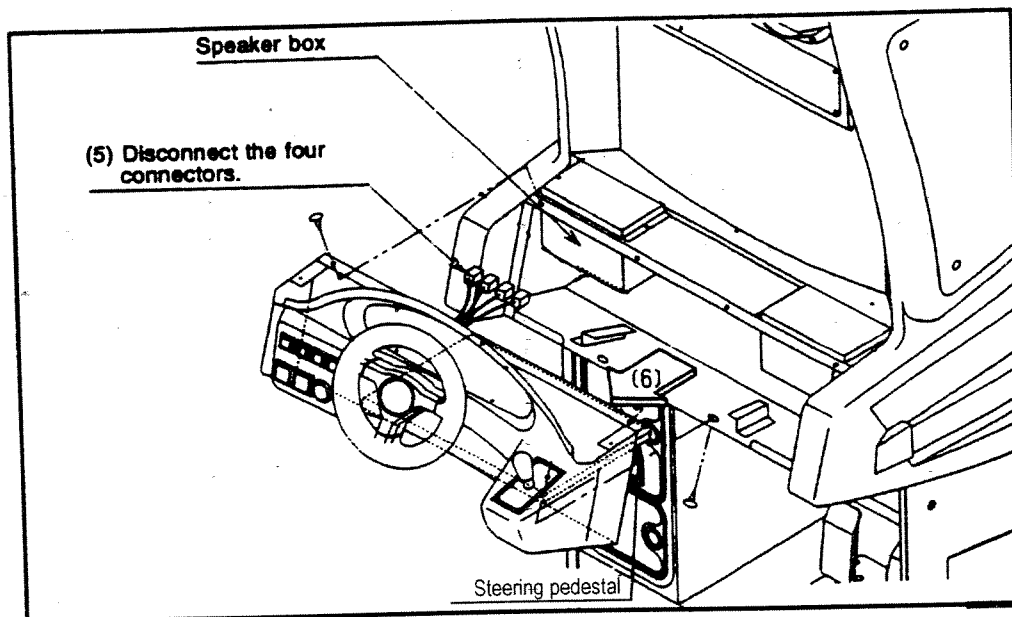
DANGER
- Make sure the power has been turned off before beginning to replace parts. Failing to do so may cause accidents involving electric shock and personal injury.

WARNING
- Because the control panel unit is very heavy at 12 kg, perform procedures carefully.
- Directly after the game is finished, because the motor is still extremely hot, wait a while after the game before beginning to remove parts.
- When the control panel is pulled forward, be sure to support it with your hand. Failing to do so may damage the panel and cause accidents.
- Be sure to hold the housing when removing connectors. Pulling on the cords will damage them.

• Replacing Volume Knobs

* Loosening the hexagon socket head cap screw is sufficient. If these are removed, be careful not to lose them.

(1) Pull out the connector.

(3) With the included hexagonal wrench, loosen the hexagon socket head cap screw.
(See the diagram below for details.)

(4) Pull out the steering wheel volume knob one attachment at a time.

(5) Remove the volume knob from the L-shaped fixture.

(6) Remove the harness soldered to the handle volume knob and solder a new knob to the harness.

Soldering

Insulate soldered areas with electrical tape, etc.

Red Yellow Black

WARNING
- After soldering parts together, be sure to insulate these with electrical tape, etc. Without insulation, these may cause accidents involving electric shock.

- **Attaching the Control Panel**

  Reassemble following the removal procedures above in reverse.

WARNING
- At the time of assembling parts, be careful not to pinch harnesses. This may cause damage to the cabinet.

- **Adjusting Volume**

1. Turn on the cabinet and go to the "Analog Standard Value Settings" item of the Test Mode.
2. In the Test Mode's "Input Test," check to see if the cabinet is operating properly.

DANGER
- Following removal and replacement procedures, do not touch areas other than those indicated. Doing so may cause injury and accidents.

WARNING
- After replacing the volume knob, be sure to perform necessary adjustments. If these are not made, there are cases where the game will not operate normally.
- Make certain all screws are tightened. If screws become loose, they may damage parts and cause accidents.

- Removing the pedal assembly.

1. Remove the two screws and pull up the pedal assembly.
2. When the two connectors are disconnected, remove the pedal assembly.

After pulling the assembly towards you,
remember to disconnect the connectors.
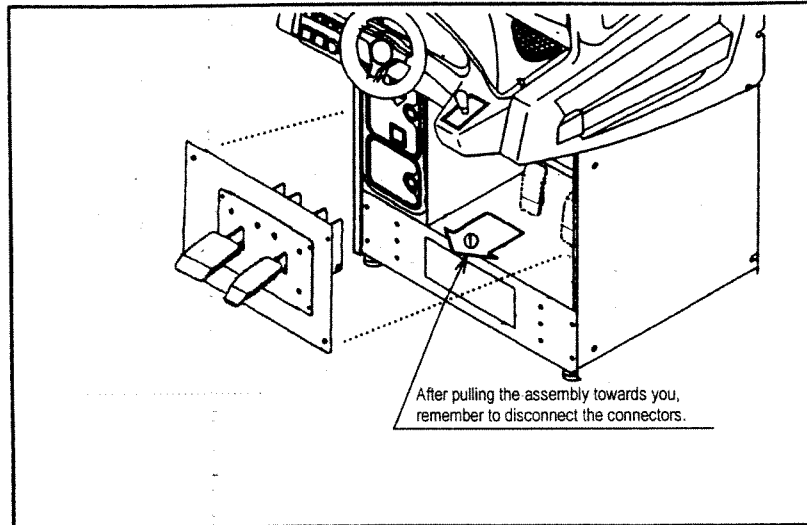
DANGER
-   Make sure the power has been turned off when removing parts. Failing to do so may result
    in accidents from electric shock and personal injury.

37

Explanation of Parts

64 bit software ROADS EDGE

Hyper NEOGEO 64 PCB
PCB unit driving game specification

Connector
Connection Area

Power section

I/O port 15 pin

I/O port 12 pin

+5v
GND

I/O port 21 pin

I/O port 9 pin
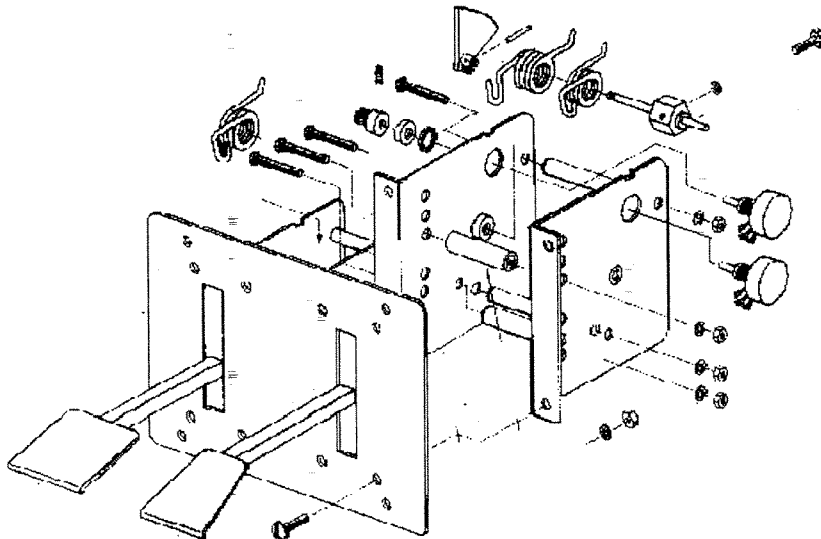
Connector Connection Area Section Details
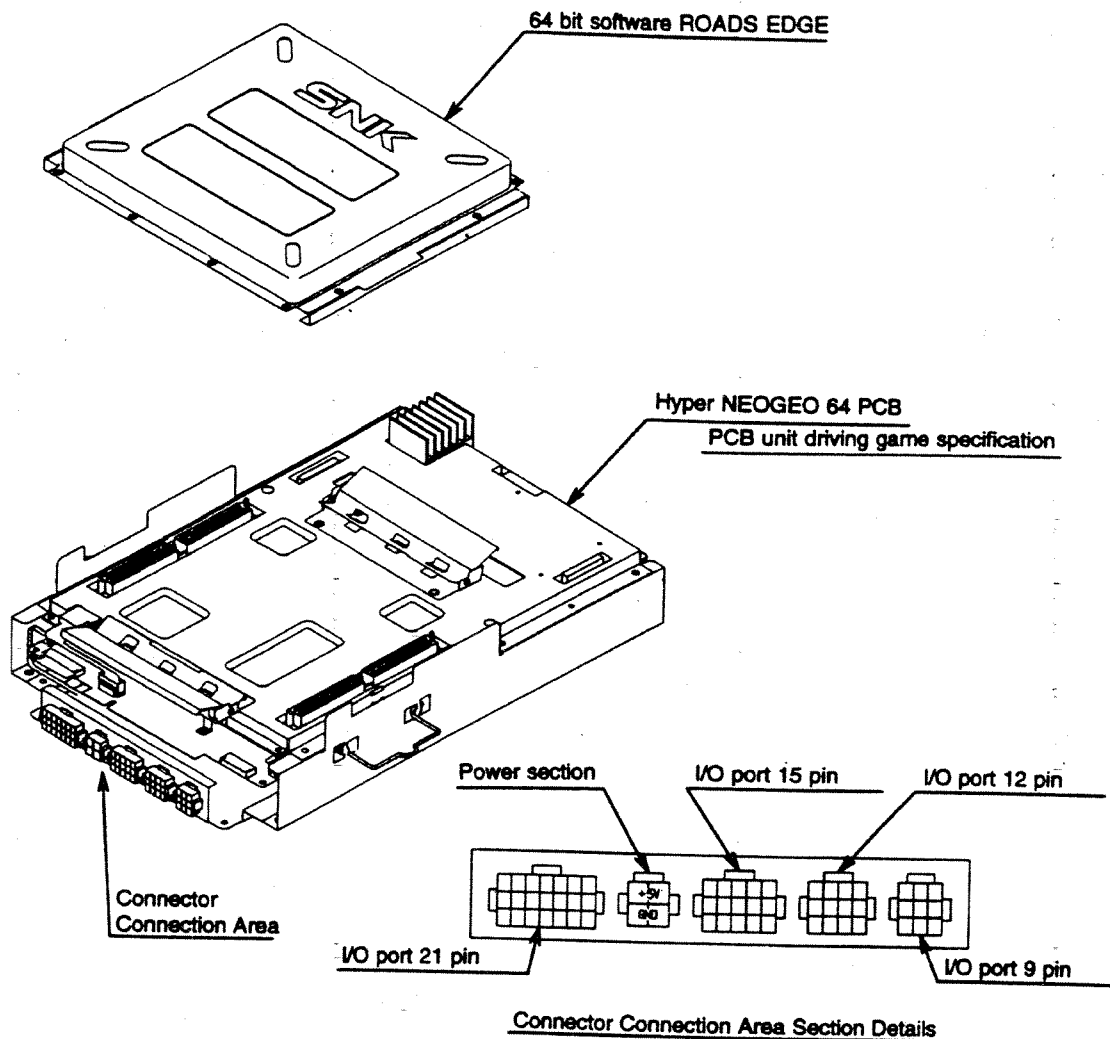
WARNING
- The PCB unit of the cabinet is customized for the Road's Edge cabinet. Do not use other Hyper NEO-GEO 64 software cartridges.
- Do not take apart the PCB unit and software cartridge.

DANGER
- When removing/inserting software cartridges and replacing connector connection areas and unit parts, be sure to turn off the cabinet and unplug the power cord from the outlet. If procedures are done with the power on, this may cause accidents like electric shock and cause personal injury.

Slide the seat back to its farthest position.

Pull up the seat slide handle.

1. Slide the seat back to its farthest position.

2. Remove the two screws shown in the diagram. Next, use the included two common keys and open the seat base cover.

Seat base lid
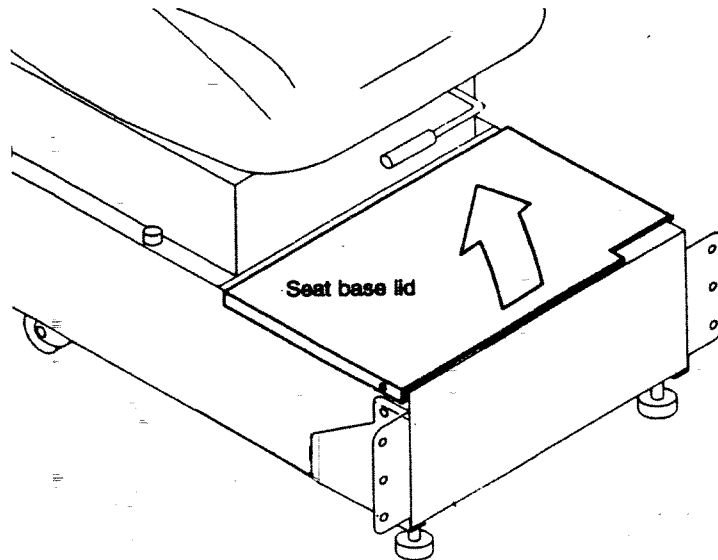
DANGER
- When inserting/removing software cartridges, be sure to turn off the cabinet. Failing to do so may cause accidents involving electrical shock and personal injury.
- When inserting software cartridges, be sure to turn off the cabinet and unplug the power cord from the outlet. Performing operations with the power on may cause accidents involving electrical shock and personal injury.

• Installing Software Cartridges
First, while being careful of the position of the software cartridge as shown in diagram A, push the cartridge securely into the guides along the sides of the PCB unit. Install the cartridge into the connectors. After installing the cartridge, be sure to fasten the lock levers on the side of the PCB unit onto the software cartridge as shown in diagram B.

Diagram A (Be careful of the positioning of the software cartridge.)
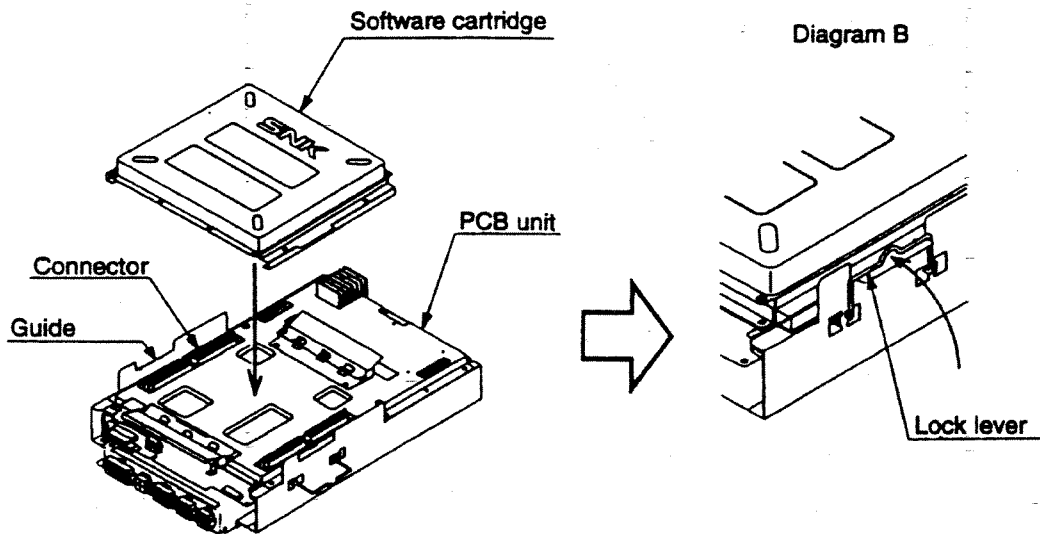
WARNING
- Be sure the lock levers on either side of the PCB unit are securely clamped onto the software cartridge. When the lock levers cannot be sufficiently clamped, because the installation is incomplete, push the software cartridge down securely into the connector.
- When the software cartridge is in use and at times of shipping, make sure such objects as foreign matter and conductive materials do not get into the connectors underneath the software cartridge.

• When Removing Software Cartridges

Pull back the lock levers 90* as shown in diagram C and release the locks. Next, push levers in the front and back of the software cartridge down together and remove the software cartridge.

Diagram C

Diagram D

① Push

② Remove

Push lever

① Push

Pull down 90°
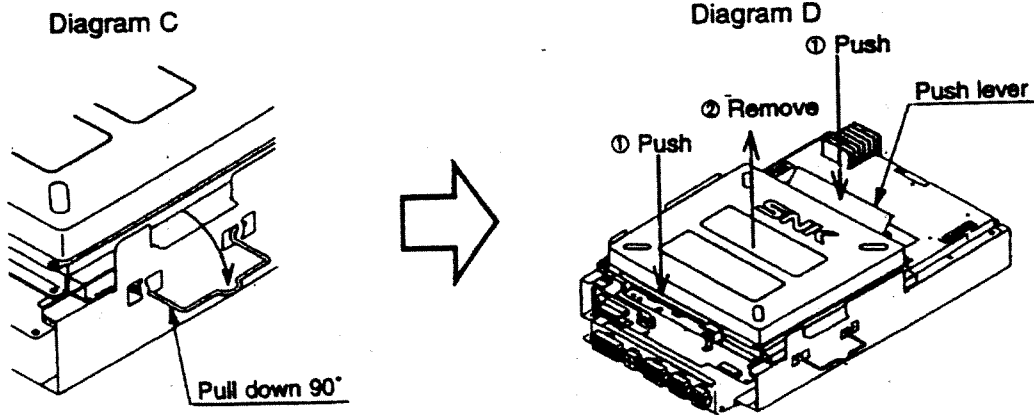
WARNING

- When installing (and removing) the software cartridge, do not touch the parts on top of the PCB and the various harnesses and plate edge sections, etc. This may damage the cabinet and cause personal injury.

Things to Note When Connecting the Communication Cable

- Always place the communication PCB's dip switches to 1 & 3 to ON and those of 2 & 4 OFF.
- Set the rotary switch of the communication board between 1 and 4. Because the ID number of cabinets is set with this switch, be careful that the number is not set to that of another cabinet.
- Because there is no distinction between input and output in connection terminals, connector plugs can be placed in any of these sockets.
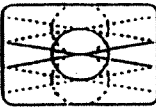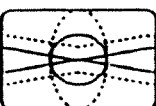
The 1 and 3 dip switches should always be placed to ON.

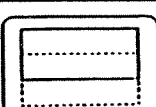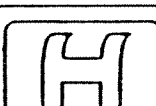Set between 1 and 4.
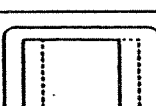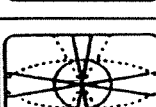
Connect the link harness here.
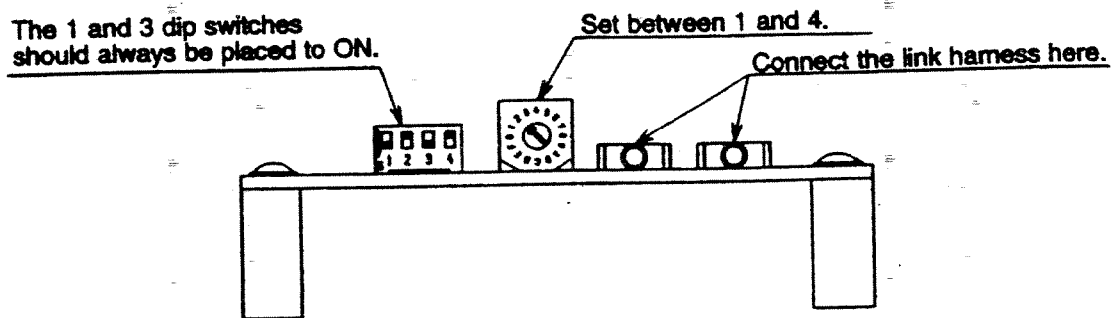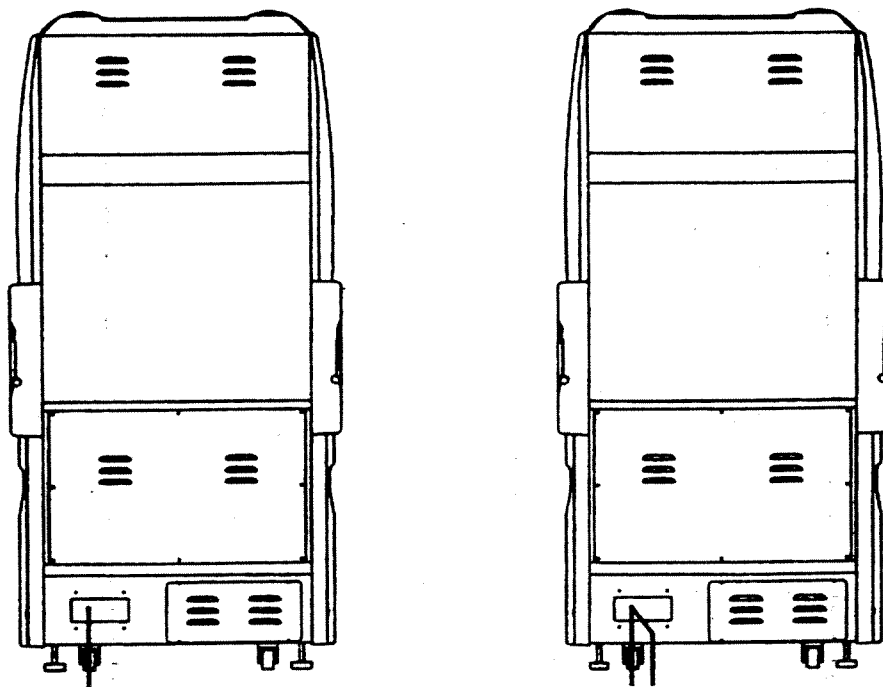
- When cable connections and board settings are finished, close the seat base cover and turn on the cabinet.
- While the "Network Check" screen is displayed, turn on the other cabinets. If the communication set-up has been done correctly, the game screen will appear.

WARNING
- For connecting the link cable, to prevent electric shock and damage to electric circuits, be sure to turn the cabinet off before beginning procedures.
- So the link cable is not tripped over, be sure to run it through the back of the cabinet.

The monitor in this cabinet is adjusted to optimal performance at the time of shipment from the factory. If for some reason it becomes necessary to make adjustments, make sure it is done by a technician who has experience and knowledge regarding the daily maintenance and supervision of amusement machines. Under no circumstances should areas not designated herein be touched.
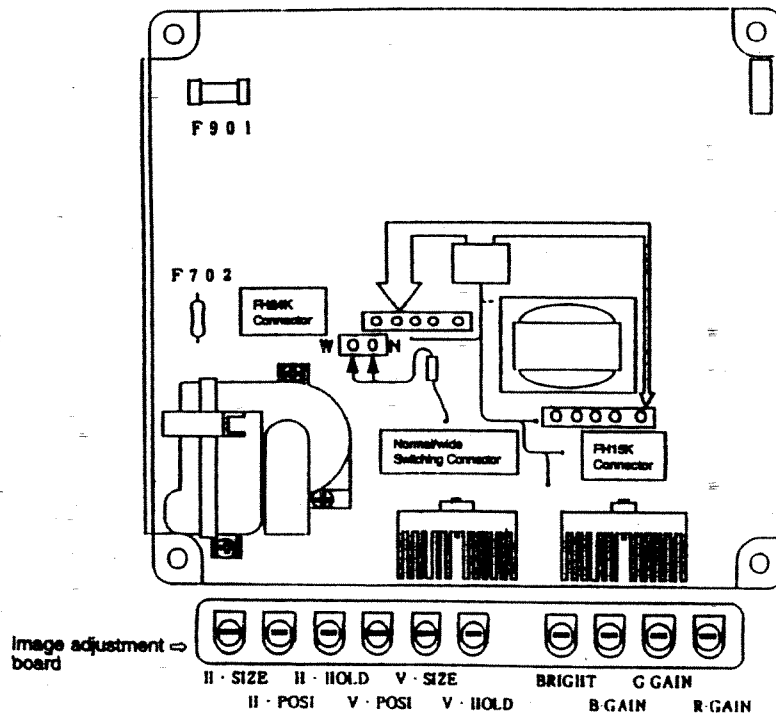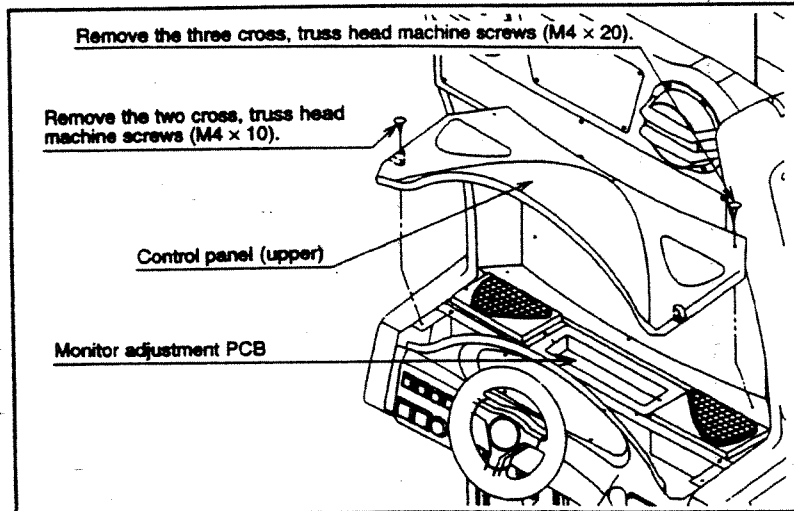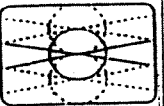
Explanation of Adjustment Functions
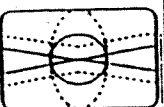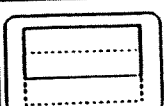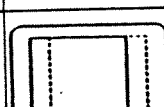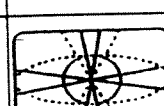
Item No.	Name		Operation	
	BRIGHT	Brightness	Adjusts image brightness	
	V. HOLD	Vertical hold	Use when the screen runs up and down	
	V. SIZE	Vertical size	Adjusts vertical image size	
	V. POSI	Vertical positioning	Adjusts vertical image position	
	H. HOLD	Horizontal hold	Adjusts image running right to left	
	H. POSI	Horizontal positioning	Adjusts horizontal image position	
	H. SIZE	Horizontal size	Adjusts horizontal image size	

(Left side panel labels: BRIGHT, V. HOLD, V. SIZE, V. POSI, H. HOLD, H. POSI, H. SIZE)

WARNING

Inside this cabinet, there are areas that contain a high-voltage of over 25,000 volts (FBT section, etc.). Even when the power has been turned off, because there are instances where these parts still contain an electric charge, under no circumstances should parts other than those designated be touched. There is the danger of severe injury and even death.

Remove the three cross, truss head machine screws (M4 × 20).

Remove the two cross, truss head machine screws (M4 × 10).

Control panel (upper)

Monitor adjustment PCB

F901

F702

FH24K Connector

W N

Normal/wide Switching Connector

FH15K Connector

image adjustment board

II · SIZE   II · HOLD   V · SIZE   BRIGHT   G GAIN

II · POSI   V · POSI   V · HOLD   B·GAIN   R·GAIN

R-GAIN
G-GAIN
B-GAIN
BRIGHT
V. HOLD
V. SIZE
V. POSI
H. HOLD
H. POSI
H. SIZE

Item No.	Name		Operation	
1	R-GAIN	Red signal amplitude	Adjusts red signal amplitude	
2	G-GAIN	Green signal amplitude	Adjusts green signal amplitude	
3	B-GAIN	Blue signal amplitude	Adjusts blue signal amplitude	
4	BRIGHT	Brightness	Adjusts image brightness	
5	V. HOLD	Vertical hold	Use when the screen runs up and down	
6	V. SIZE	Vertical size	Adjusts vertical image size	
7	V. POSI	Vertical positioning	Adjusts vertical image position	
8	H. HOLD	Horizontal hold	Adjusts image running right to left	
9	H. POSI	Horizontal positioning	Adjusts horizontal image position	
10	H. SIZE	Horizontal size	Adjusts horizontal image size	

REV	DESCRIPTION	DATE	
A	RELEASED FOR PRODUCTION	11-11-11	TSF

J-27

TO U.L. BRACKET

TO U.L. BRACKET

HYPER NEO-GEO 64

J-28

COIN COUNTER

LVS-LAC

N64 SAB

WIN LAMPS

LAMP   LAMP

RE-1031-00

J-7   J-8

RE-1018-00

J-17

J-56

J-21

RE-1018-02

RE-1016-00

RE-1006-00

J-5

RE-1005-00

J-20

TO PINS 2 & 6 J-14 COIN CONTROL LAMPS

CRT COLOR MONITOR

J-60

RE-1003-00

200W POWER SUPPLY

STEP DOWN TRANSFORMER 48V CT

RE-1018-00 TO J-56

FLOURSCENT LAMP

J-9   J-7

RE-1003-00

TO OPTIONAL BRAKE LIGHT

RE-1028-00   RE-1007-00

RE-1003-00

J-2

J-6

120 V OUT

J-50

J-3   J-4

LVS-LDA

RE-1003-00

RE-1003-00   RE-1004-00

AC IN

UL BRACKET

CONTROL INPUT

LINE IN   LOAD OUT

J-1

J-32

RE-1002-00

RE-1010-00

RE-1001-00

RE-1019-00 TO J-31

AM&D   Interactive Technologies

ADVANCED MANUFACTURING & DEVELOP
Phone (707) 459-7560   300 EAST HILL ROAD
FAX (707) 459-3715   WILLITS, CA. 954

CUSTOMER: SNK

USED ON: ROADS EDGE

DWG. TITLE: OVERALL WIRING

SIZE: B   PART NO.: —

DWG NO. RE-1000-01

DRAWN BY: THOMAS FOWLER   DATE: 12-10-97   CHECKED BY: —   DATE: 11-11-1

TOLERANCE: UNLESS OTHERWISE SPECIFIED
.X +/- .5 MILLIMETERS
.XX +/- .030 INCHES
ANGLES +/- 1 DEG.   .XXX +/- .015 INCHES

DO NOT SCALE DRAWING

SHEET 1 OF

HYPER NEO-GEO 64
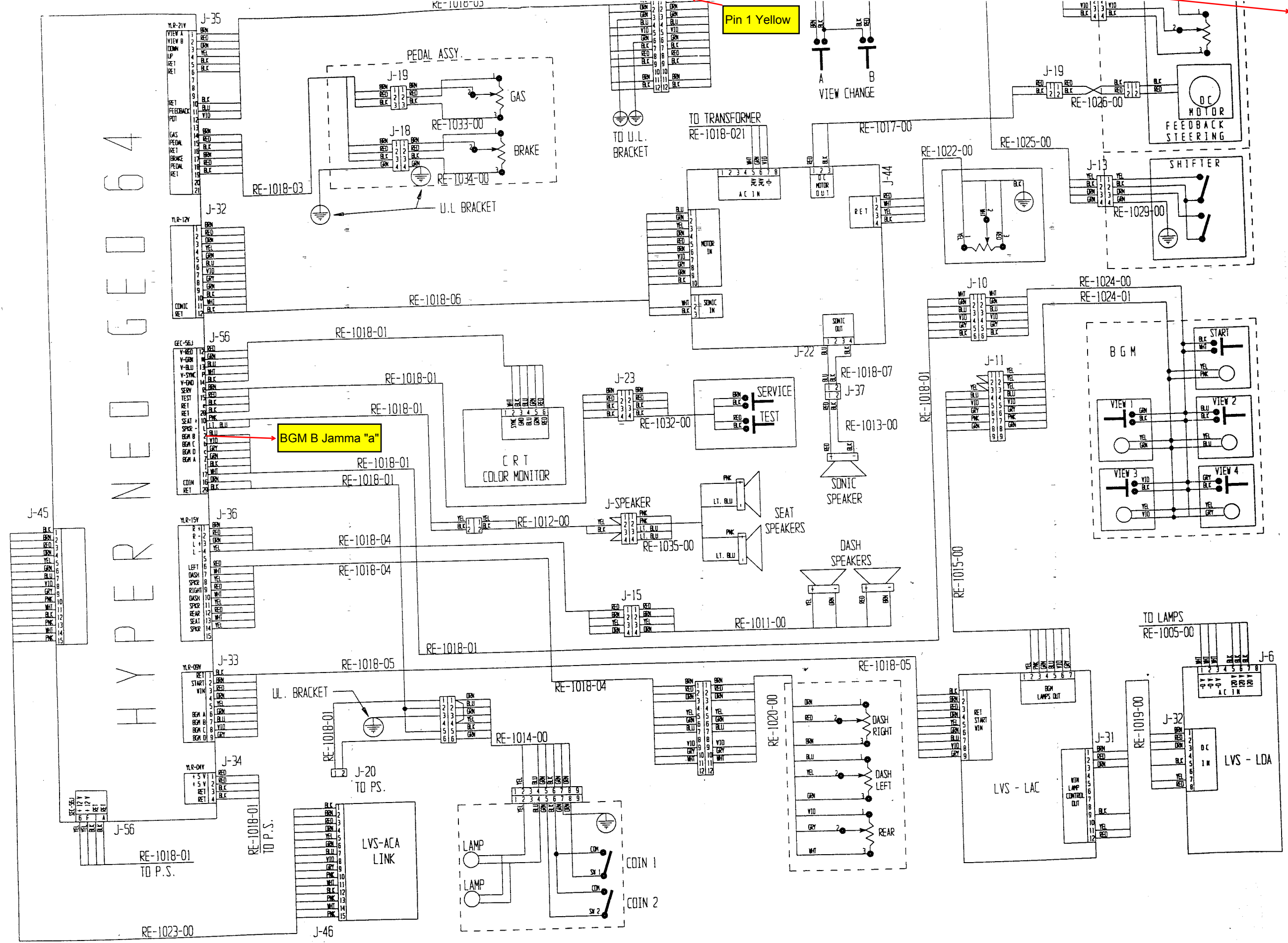
Pin 1 Yellow

Pin 1 Blue
Pin 2 N/C

BGM B Jamma "a"

PEDAL ASSY.
GAS
BRAKE
RE-1033-00
RE-1034-00
U.L BRACKET
TO U.L. BRACKET
RE-1018-03

VIEW CHANGE
A   B

TO TRANSFORMER
RE-1018-021
AC IN
MOTOR IN
MOTOR OUT
RE-1017-00
RE-1022-00
RE-1025-00
RE-1026-00
DC MOTOR
FEEDBACK STEERING
SHIFTER
RE-1029-00

SONIC IN
SONIC OUT
SONIC SPEAKER
RE-1018-07
RE-1013-00

J-35
J-32
J-56
J-36
J-33
J-34
J-45
J-46
J-19
J-18
J-23
J-22
J-37
J-10
J-11
J-13
J-44
J-15
J-20
J-31
J-32
J-6

CRT COLOR MONITOR
SERVICE
TEST
RE-1032-00

J-SPEAKER
SEAT SPEAKERS
DASH SPEAKERS
RE-1012-00
RE-1035-00
RE-1011-00

BGM
START
VIEW 1   VIEW 2
VIEW 3   VIEW 4
RE-1024-00
RE-1024-01
RE-1015-00

DASH RIGHT
DASH LEFT
REAR
RE-1020-00

LVS - LAC
WIN LAMP CONTROL OUT
BGM LAMPS OUT
TO LAMPS
RE-1005-00
RE-1019-00
LVS - LDA
AC IN
DC IN

LVS-ACA LINK
LAMP
LAMP
COIN 1
COIN 2
TO P.S.
RE-1023-00
RE-1014-00
RE-1018-05
RE-1018-04
RE-1018-01
RE-1018-06
U.L. BRACKET
TO P.S.

CUSTOMER: SNK
USED ON: ROADS EDGE
DWG. TITLE: OVERALL WIRING
DWG NO: RE-1000-01
SIZE: B
DRAWN BY: THOMAS FOWLER
DATE: 12-10-97
CHECKED BY: -
SHEET 1

ADVANCED MANUFACTURING & DEVELO
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FAX (707) 459-3715   WILLITS, CA.

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