CRUIS'N EXOTICA ™

TM

S E C T I O N
TWO

ADJUSTMENT, DIAGNOSTIC & AUDIT
MENUS

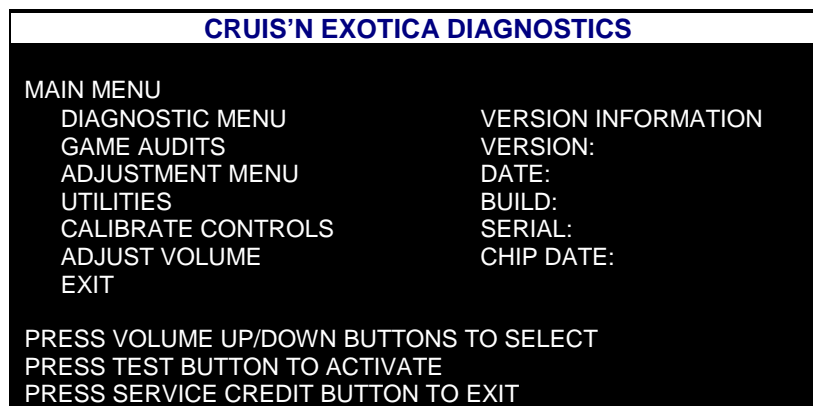# MENU SYSTEM

WHAT IS THE MENU SYSTEM?
The game's Menu System is a series of auditing, game adjustments and diagnostic screens. You can easily access and apply these screens to optimize game performance. For instance…

➢ Use game audit screens to assess game performance.
➢ Use adjustment screens to help you customize game performance. For example, you can restore factory default game settings. You can also calibrate player controls for player accuracy.
➢ Use diagnostic screens to verify proper equipment operation.

ACCESSING THE MENU SYSTEM
Open the coin door. Locate and press the TEST MODE switch. The game system will exit game Attract Mode and enter Diagnostic Mode. The system runs a brief self-test, and then displays the Main Menu. The Main Menu is the opening screen of the Menu System.

Game audits, adjustments and diagnostics are line items on the Main Menu. Selecting an item opens its submenu. Every submenu presents various options that you may act upon.

```
             CRUIS'N EXOTICA DIAGNOSTICS

MAIN MENU
     DIAGNOSTIC MENU              VERSION INFORMATION
     GAME AUDITS                  VERSION:
     ADJUSTMENT MENU              DATE:
     UTILITIES                    BUILD:
     CALIBRATE CONTROLS           SERIAL:
     ADJUST VOLUME                CHIP DATE:
     EXIT


PRESS VOLUME UP/DOWN BUTTONS TO SELECT
PRESS TEST BUTTON TO ACTIVATE
PRESS SERVICE CREDIT BUTTON TO EXIT
```
Typical Main Menu Screen

MENU LAYOUT
Observe that each menu screen basically uses the same layout. The game ID, Serial Number, and Date of Manufacture will appear on most of the menu screens. These numbers will be helpful to factory personnel when referring to your game for parts or service.

➢ The block at the top of each screen displays the current menu title.
➢ Data, such as menu items and video reports, etc., appears in the center of the screen.
➢ Messages, for example explanations and active control functions, etc., appear at the bottom of the screen.

MENU NAVIGATION TOOLS
Use the operator control buttons located inside the coin door to navigate menus. Press the Volume Up or Volume Down buttons to scroll through the menu options. Notice the options sequentially become highlighted. Press the Test button to select a highlighted option and access the next menu level. Press the Service Credit button to exit from a menu option screen. **NOTE:** Only one highlighted option can be selected at a time.

To return to play mode, press the Service Credit button while in the Main Menu screen.

DIAGNOSTIC MENU

To verify the condition of the electrical and electronic hardware in the game, select DIAGNOSTIC MENU at the Main Menu. Diagnostic tests assist you in checking and adjusting the game's major systems. It is important to periodically run diagnostics to improve and maintain game performance and player satisfaction.

Use the Volume Up or Volume Down button to highlight the desired Diagnostic Menu option and press the Test button to enter. Use the Service Credit button at any time to exit the Diagnostics and return to the Main Menu. **NOTE:** *The Burn-In Test cannot be halted from the menus.*

```
                        DIAGNOSTIC MENU
            SWITCH TEST
            MOTION TEST
            DIP SWITCH TEST
            CPU BOARD TEST
            SOUND BOARD TEST
            LINKING TEST
            STEERING WHEEL TEST
            MONITOR TEST
            BURN-IN TEST
            LAMP TEST
            LED TEST
            EXIT TO MAIN MENU

            PRESS VOLUME UP/DOWN BUTTONS TO SELECT
            PRESS TEST BUTTON TO ACTIVATE
            PRESS SERVICE CREDIT BUTTON TO EXIT
```

Main Menu
    Diagnostic Menu, *continued*
        Switch Test Menu

SWITCH TEST

To verify proper operation of switch and button inputs in the game, select SWITCH TEST at the Main Menu.

```
                          SWITCH TEST
  HIT SERVICE CREDIT TO EXIT
     POT READING                CMOS VALUE
                                MIN          CENTER        MAX
     STEERING WHEEL   XXX       XX           XXX           XXX
     GAS PEDAL        XX        XX                         XX
     BRAKE PEDAL      XXX       XX           XXX           XXX


     VIEW 1                     SHIFT 1      SHIFT 3
     VIEW 2
     VIEW 3
     START                      SHIFT 2      SHIFT 4
     COIN 1 LEFT                                           KEYPAD
     COIN 2 RIGHT               TEST                       1   2   3
     COIN 3 CENTER              VOLUME UP                  4   5   6
     COIN 4                     VOLUME DOWN                7   8   9
     RADIO                      SERVICE CREDIT             -   0   -
```
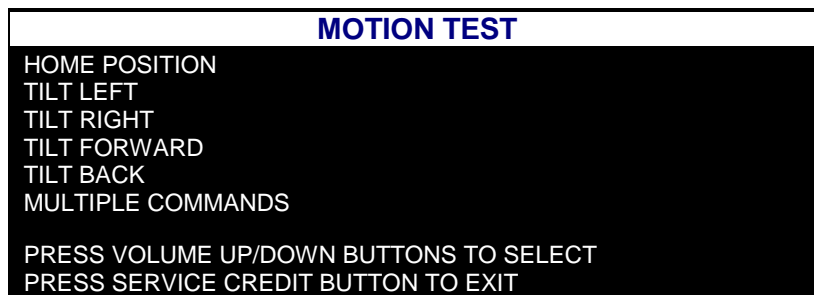
Use the Volume Up or Volume Down button to highlight the Switch Test option and press the Test button to access it. Press any switch on the control panel or coin door to cause the corresponding indicator on the screen to illuminate. Each illuminated square represents one completed switch circuit.

Main Menu
Diagnostic Menu, *continued*
Motion Test Menu

MOTION TEST
To verify functionality of motion seat controls, select MOTION TEST at the Main Menu.

Use the Volume Up or Volume Down button to highlight the Motion Test option and press the Test button to access it. Use the Service Credit button at any time to exit the Motion Test and return to the Main Menu.

```
                    MOTION TEST
   HOME POSITION
   TILT LEFT
   TILT RIGHT
   TILT FORWARD
   TILT BACK
   MULTIPLE COMMANDS

   PRESS VOLUME UP/DOWN BUTTONS TO SELECT
   PRESS SERVICE CREDIT BUTTON TO EXIT
```

HOME POSITION. The Home Position routine automatically centers the motion seat so that it is positioned upright and does not tilt at any angle.

TILT LEFT. The Tilt Left routine automatically tilts the motion seat at a left leaning angle.

TILT RIGHT. The Tilt Right routine automatically tilts the motion seat at a right leaning angle.

TILT FORWARD. The Tilt Forward routine automatically tilts the motion seat at a forward leaning angle.

TILT BACK. The Tilt Back routine automatically tilts the motion seat at a backward leaning angle.

MULTIPLE COMMANDS. The Multiple Commands routine automatically cycles through and performs each of the other routines. Press the Service Credit button to stop the cycle and return to the Motion Test Menu

Main Menu
Diagnostic Menu, *continued*
DIP Switch Test

DIP SWITCH TEST
To verify the functionality of both 8-position DIP switches on the CPU Board, select DIP SWITCH TEST at the Main Menu. Observe immediate on-screen results by changing the setting on a switch.

Use the Volume Up or Volume Down button to highlight the DIP Switch Test option and press the Test button to access it. The current settings appear on-screen. Consult the table on the next page to determine if changes are required. The default switch positions are all OFF for standard operation.

A vertical bar next to the switch position column indicates a common switch function.

```
                    DIP SWITCH TEST
 DIP SW 1
    1  OFF    KIT OFF
    2  OFF    MOTION OFF
    3  OFF    UPRIGHT CABINET
    4  ON     WHEEL INVERT ON

    5  OFF    UNUSED
    6  OFF    LINK DISABLED
    7  OFF
    8  OFF

 DIP SW 2
    1  OFF
    2  OFF
    3  OFF   | USA 1
    4  OFF   | 3 COINS/ 1 CREDIT
    6  OFF
    7  OFF
    8  OFF

          PRESS SERVICE CREDIT BUTTON TO EXIT
```

Function	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
Dedicated *	OFF							
Kit	ON							
Motion Disabled		OFF						
Motion Enabled		ON						
Stand Up Style Cabinet			OFF					
Sit Down Style Cabinet			ON					
Wheel Invert Disabled				OFF				
Wheel Invert Enabled				ON				
Unused					OFF			
					ON			
Link Disabled						OFF		
Link Enabled						ON		
Linking I.D. Number								
Master (Game Number 1)							OFF	OFF
Slave (Game Number 2)							ON	OFF
Slave (Game Number 3)							OFF	ON
Slave (Game Number 4)							ON	ON

Setting Table for DIP Switch 1

* DIP 1, Switch 1 <u>must</u> be set to the OFF position in order for proper operation.

Game Adjustments for Linked Operation
To avoid confusion, we recommend that all adjustments be set to identical values before Video Game Machines (VGMs) are linked. VGMs might operate incorrectly if this is not the case, with the following exceptions:

NOTE: All cabinets must have compatible software in order to link properly. Unlock the coin door and press the TEST button. The software version number is found on the Main Menu screen in game diagnostics. It does not matter what version is installed as long as all version numbers are the same.

1. **Linked VGMs must all have compatible software versions.** Newer versions may contain instructions that previous versions do not have, causing them to halt or reset at random. On-screen messages will indicate that different versions are in use when the linking feature is enabled for each.

2. **The graphic effects and added attractions for the slave cabinets must be the same as the master.** All games must have these features enabled or all must have them disabled. Mixed settings, for example road kill or a show girls setting, can cause games to become unsynchronized during competition and lead to incorrect final results (i.e., two first place finishes with different times, collisions with unseen objects, etc.).

3. **The linking feature overrides some of the individual software settings.** For instance, the master (VGM #1) sets and controls the difficulty level for all linked slaves. The difficulty level reported by the slave games may not match the setting of the master game.

4. **The linked game with the highest ranking determines software settings**. Adjustments such as bonus times will be controlled by the games in decreasing identification order. For example, if four games are linked, slave game #3 will always override game #4 but have no effect on games #1 or #2. This permits games to have different standards to help equalize players with different skill levels.

   The linking cables attach to a connector on a metal bracket located under the CPU Board Assembly at the rear of the cabinet. Unlock and remove the cabinet rear door for linking access.

Notes on Linking:
1. For a 2-way link, the leftmost VGM is the master (#1); the second VGM is slave #2. One linking cable is required.

   For a 3-way link, the left VGM is the master (#1); the center and right VGMs are slaves #2 and #3. Two cables are required.

   For a 4-way link, the leftmost VGM is the master (#1); the left center VGM is slave #2, right center machine is #3, and the right most machine is slave #4. Three linking cables are required.

2. The linking feature will not function if the master is not turned on and in normal game play mode. If the master is turned off, disconnected from the linking cable, or in any other mode of operation (offline, diagnostics, etc.), none of the slaves will be able to link.

   The linking feature will function for all other VGMs if one of the slaves is not turned on and in normal game play mode. If any slave is turned off, disconnected from the linking cable, or in any other mode of operation (offline, diagnostics, etc.), the linking ability of other slaves will not be affected.

   The linking feature will function for some VGMs, and not others, if all of the link activity switches are not enabled or the software version numbers are not the same. The master game will not recognize other games with disabled linking or different link identification numbers.

DIP SWITCH SETTING FOR COINAGE
There are many ways to select the type and quantity of currency recognized by the game machine.

1. The most common coin combinations for several countries are pre-programmed and may be selected from the table when Standard Pricing is activated (see Game Adjustments).

2. DIP Switch settings may be changed with the power switched on. Set any switch and then observe the screen to verify that the desired selection is enabled. **NOTE:** If CMOS Coin Settings are active, switch settings for an individual Country will have no effect.

3. Some European countries may accept currency used in other countries. The most popular coinage settings are listed beneath 'Other' in the Standard Pricing Table.

4. Alternate settings are listed beneath 'General' in the Standard Pricing Table.

5. Default settings are denoted by an (*). Switches 1 through 5 select country codes. Switches 6 and 7 are used to select one of four modes for each country.

DIP Switch 2 Settings	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
COUNTRY CODE								
USA	OFF*	OFF*	OFF*	OFF*	OFF*			
GERMANY	ON	OFF	OFF	OFF	OFF			
FRANCE	OFF	ON	OFF	OFF	OFF			
CANADA	ON	ON	OFF	OFF	OFF			
SWITZERLAND	OFF	OFF	ON	OFF	OFF			
ITALY	ON	OFF	ON	OFF	OFF			
UK	OFF	ON	ON	OFF	OFF			
SPAIN	ON	ON	ON	OFF	OFF			
AUSTRALIA	OFF	OFF	OFF	ON	OFF			
JAPAN	ON	OFF	OFF	ON	OFF			
TAIWAN	OFF	ON	OFF	ON	OFF			
AUSTRIA	ON	ON	OFF	ON	OFF			
BELGIUM	OFF	OFF	ON	ON	OFF			
SWEDEN	OFF	OFF	OFF	OFF	ON			
FINLAND	ON	OFF	OFF	OFF	ON			
NETHERLANDS	OFF	ON	OFF	OFF	ON			
NORWAY	ON	ON	OFF	OFF	ON			
DENMARK	OFF	OFF	ON	OFF	ON			
HUNGARY	ON	OFF	ON	OFF	ON			
GENERAL	ON	ON	ON	OFF	ON			
USA1/GER1/FR1/SPN1/AUSTRIA1/GEN1						OFF	OFF	
USA3/GER1/FR1/SPN1/AUSTRIA1/GEN3						ON	OFF	
USA7/GER1/FR1/SPN1/AUSTRIA1/GEN5						OFF	ON	
USA8/GER1/FR1/SPN1/AUSTRIA1/GEN7						ON	ON	
CAN1/SWI1/ITL1/UK1/JPN1/TWN1/BLGN1						OFF	OFF	
CAN2/SWI2/ITL2/UK2/JPN2/TWN2/BLGN2						ON	OFF	
CAN3/SWI3/ITL3/UK3/JPN3/TWN3/BLGN3						OFF	ON	
NTHRLDS1/FNLD1/NRWY1/DNMK1/HUN1						OFF	OFF	
NTHRLDS2						ON	OFF	

Setting Table for DIP Switch 2

Main Menu
Diagnostic Menu, *continued*
CPU Board Test

CPU BOARD TEST

To verify proper operation of the memory circuits, select CPU Board Test at the Main Menu. This test checks the memory circuits in a manner similar to the Start-Up Test. A "rug" pattern representing the layout of the RAM and ROM circuits on the CPU Board will appear on-screen while the video circuits are tested.
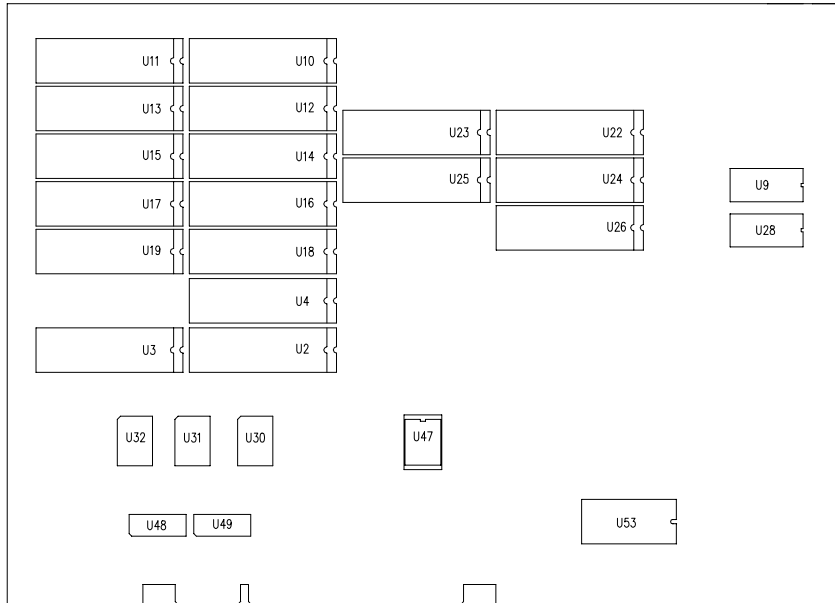
Typical Rug Pattern

Use the Volume Up or Volume Down buttons to highlight CPU Board Test and press the Test button. The memory circuits are shown as gray with a white outline. During the test, ICs are good if they turn green; they are faulty if they turn red. The game automatically returns to the Diagnostic Menu after the test is completed.

Main Menu
Diagnostic Menu, *continued*
Sound Board Test

SOUND BOARD TEST

To verify proper operation of the sound components, select Sound Board Test at the Main Menu. This test allows you to access and listen to the sounds used in the game.

Use the Volume Up or Volume Down button to highlight the Sound Board Test option and press the Test button. Press Service Credit to return to the Diagnostic Menu when finished.

Diagnostics - 8

Press Volume Up to activate the tune selection and each additional push of the switch automatically selects and plays the next tune. Pressing the Volume Down button will trigger a sound effect and each additional push selects and plays the next sound effect.

Main Menu
Diagnostic Menu, *continued*
Linking Test

LINKING TEST
To verify communications between the game machine and others connected to it, select Linking Test at the Main Menu.

```
                          LINKING TEST
        MACHINE 1 MASTER          ACTIVE
        MACHINE 2 SLAVE           ACTIVE
        MACHINE 3 SLAVE           ACTIVE
        MACHINE 4 SLAVE           ACTIVE

        TOTAL TRANSMISSIONS       X
        TOTAL ERRORS              X

        LINK ENABLED
        LINKED GAME NUMBER:       X

     PRESS TEST TO CLEAR ERRORS
     PRESS SERVICE CREDITS BUTTON TO EXIT
```

Use the Volume Up or Volume Down button to highlight Linking Test and press the Test button. This test runs automatically and will display results on-screen.

Press the Service Credit button to clear errors and restart the test cycle. Press the Test button to exit from this menu screen.

Main Menu
Diagnostic Menu, *continued*
Steering Wheel Test

STEERING WHEEL TEST
To verify the proper directional movement of the steering wheel, select Steering Wheel Test at the Main Menu. Make sure hands and other objects are clear of the steering wheel when this test is selected because the steering wheel will automatically rotate to the left. Follow the on-screen instructions.

```
              STEERING WHEEL TEST
     TURN WHEEL LEFT
         PRESS TEST TO CONTINUE

     TURN WHEEL RIGHT
         PRESS TEST TO CONTINUE
```

Use the Volume Up or Volume Down button to highlight the Steering Wheel Test and then press the Test button. The steering wheel immediately turns to the left. Press the Test button a second time and the wheel turns to the right and will automatically return to the Diagnostic Menu.

Main Menu
Diagnostic Menu, *continued*
Monitor Test

MONITOR TEST

To verify color clarity of the monitor, select Monitor Test at the Main Menu.

Use the Volume Up or Volume Down button to highlight the desired monitor test and press the Test button. Repeatedly press the Test button to cycle through test screens and automatically return to the Main Menu. Watch for the following results on-screen during this test.

COLOR BARS. Observe 4 color bars in different shades appear on-screen as aids in adjusting the green, blue, and red color levels. Each color should appear sharp and clear. Check video brightness and contrast.

The **CROSSHATCH PATTERNS** test fills the screen with a series of dots within a grid. Observe the dots are perfectly round and that both the grid and dots are clear. Inspect monitor convergence, linearity, and screen size.

If any of the tests show a need for CRT adjustment, use the proper knobs on the Monitor Controls board.

Main Menu
Diagnostic Menu, *continued*
Burn-In Test

BURN-IN TEST

To properly diagnose intermittent CPU problems, select Burn-in Test at the Main Menu. This test cycles non-stop through the CPU Board Test. A "rug" pattern representing the layout of the RAM and ROM circuits on the CPU Board will appear on-screen while the video circuits are tested.
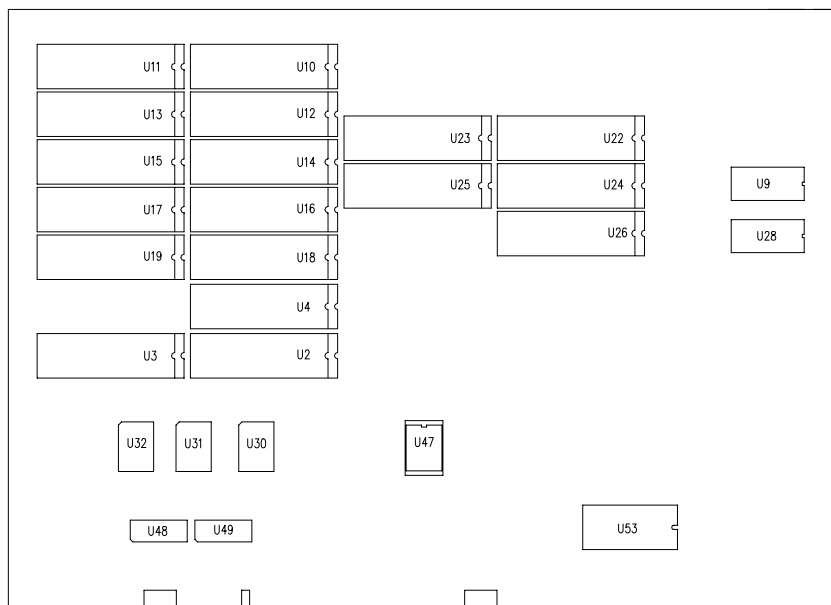
Typical Burn-In Test Rug Pattern

Use the Volume Up or Down Switch to highlight the Burn-in Test and press the Test button to activate. The Burn-in Test will stop and display an error message on-screen if an error is detected.
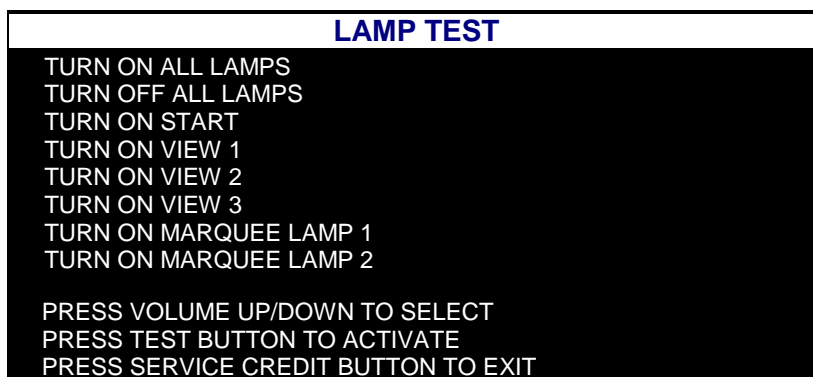
Inputs from the control buttons are ignored during Burn-in. The Burn-in Test cannot be halted from the menus, you must switch the power to the game machine off and then switch it back on.

Main Menu
Diagnostic Menu, *continued*
Lamp Test

LAMP TEST

To detect intermittent or faulty incandescent bulbs, select Lamp Test at the Main Menu. This test ensures that the incandescent bulbs critical to game operation function properly.

Use the Volume Up or Volume Down button to highlight Lamp Test and press the Test button. During the test observe the selected lamp(s) switches turn on or off when the corresponding selection is made.

```
                    LAMP TEST
    TURN ON ALL LAMPS
    TURN OFF ALL LAMPS
    TURN ON START
    TURN ON VIEW 1
    TURN ON VIEW 2
    TURN ON VIEW 3
    TURN ON MARQUEE LAMP 1
    TURN ON MARQUEE LAMP 2

    PRESS VOLUME UP/DOWN TO SELECT
    PRESS TEST BUTTON TO ACTIVATE
    PRESS SERVICE CREDIT BUTTON TO EXIT
```

NOTES ON THE LAMP TEST:

1. The RADIO button is not illuminated and requires no lamp test.

2. The MARQUEE LAMPS are located inside the lighted header as part of the Deluxe Linking Kit.

3. To override individual tests select either TURN ON or TURN OFF ALL LAMPS. The lamps also automatically switch off when the SERVICE CREDIT button is pressed to exit this screen.
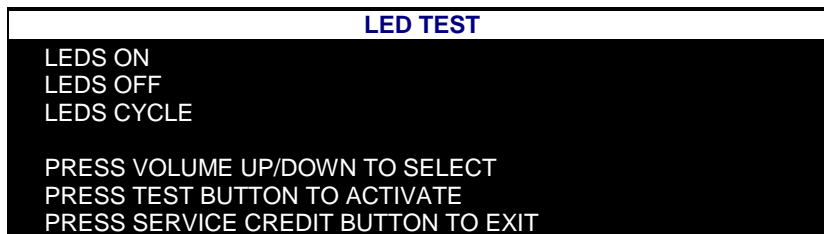
Press the Service Credit button to return to the Diagnostic Menu.

Main Menu
Diagnostic Menu, *continued*
LED Test

LED TEST

To verify that the Dashboard LED's function properly, select LED Test at the Main Menu. This test allows you to control and test the illumination of the LED's located on the dash PCB.

Use the Volume Up or Volume Down button to highlight the LED Test and press the Test button. This test detects intermittent or faulty LED's that are critical to game operation. Observe the following activity on the dash PCB.

```
                    LED TEST
    LEDS ON
    LEDS OFF
    LEDS CYCLE

    PRESS VOLUME UP/DOWN TO SELECT
    PRESS TEST BUTTON TO ACTIVATE
    PRESS SERVICE CREDIT BUTTON TO EXIT
```

LED's ON. This option simultaneously turns on all LED's. LED's remain illuminated until switched off.

LED's OFF. This option simultaneously turns off all LED's. LED's will not be illuminated during this phase.

LED's CYCLE. This option causes the LED's to cycle sequentially turns LED's on and off beginning with those located on the far left-hand side of the dash PCB. To stop the cycle press the Service Credit button.

GAME AUDITS

Press the Volume Up or Volume Down button to highlight Game Audits in the Main Menu and press the Test button. To move between pages of the Game Audit Table, press the Volume Up or Volume Down button. Press the Service Credit button to return to the Main Menu from this screen.

The Game Audits Table displays the play statistics. The left side of the table names the Audit item; the right side shows the amount of play. Record these statistics before any service or repairs are done.

GAME AUDITS

COIN AUDITS, PAGE 1

COIN 1 LEFT	X
COIN 2 RIGHT	X
COIN 3 CENTER	X
COIN 4	X
BILL	X
SERVICE CREDITS	X
TOTAL STARTS	X
TOTAL CONTINUES	X
TOTAL GAMES	X
TOTAL FREE RACES	X
FREE GAMES PERCENT	X
EXPIRED RACES	X

PRESS VOLUME UP/DOWN FOR NEXT PAGE
PRESS SERVICE CREDIT BUTTON TO EXIT

Typical Audit Table, page 1

GAME AUDITS

MISC. AUDITS, PAGE 2

POWER-ON TIME SECONDS	X
GAME TIME SECONDS	X
AVERAGE GAME TIME SECONDS	X
KEYPAD LOG-INS	X
EVENT	X
U-GAMES	X
WATCHDOG(S)	X
BURN-IN LOOPS	X

PRESS VOLUME UP/DOWN FOR NEXT PAGE
PRESS SERVICE CREDIT BUTTON TO EXIT

Audit Table, page 2

```
GAME AUDITS
VEHICLE SELECTED, PAGE 3

    JEEP                               X
    PROWLER                            X
    VETTE                              X
    HUMMER                             X

    NASH                               X
    MUSTANG                            X
    TRIPY                              X
    UGLY CAR                           X

    JET CAR                            X
    VIPER                              X
    MUSCLE                             X
    SEMI                               X


PRESS VOLUME UP/DOWN FOR NEXT PAGE
PRESS SERVICE CREDIT BUTTON TO EXIT
```

Audit Table, page 3

```
GAME AUDITS
SPECIAL EFFECTS, PAGE 4

    AUTOMATIC SELECTED                 X
    MANUAL SELECTED                    X

    CUSTOM PAINT JOBS                  X
    WHEELIES                           X
    HORN BEEPED                        X
    TRICK JUMPS                        X
    SPINOUTS                           X

    CAM 1 TIME SECS                    X
    CAM 2 TIME SECS                    X
    CAM 3 TIME SECS                    X


PRESS VOLUME UP/DOWN FOR NEXT PAGE
PRESS SERVICE CREDIT BUTTON TO EXIT
```

Audit Table, page 4

GAME AUDITS	
INDIVIDUAL TRACK SELECTED, PAGE 5	
VEGAS	X
KOREA	X
ALASKA	X
ATLANTIS	X
HONG KONG	X
INDIA	X
SAHARA	X
HOLLAND	X
IRELAND	X
AMAZON	X
TIBET	X
MARS	X
PRESS VOLUME UP/DOWN FOR NEXT PAGE	
PRESS SERVICE CREDIT BUTTON TO EXIT	

Audit Table, page 5

GAME AUDITS	
CRUIS'N EXOTICA STARTS, PAGE 6	
VEGAS	X
KOREA	X
ALASKA	X
ATLANTIS	X
HONG KONG	X
INDIA	X
SAHARA	X
HOLLAND	X
IRELAND	X
AMAZON	X
TIBET	X
MARS	X
PRESS VOLUME UP/DOWN FOR NEXT PAGE	
PRESS SERVICE CREDIT BUTTON TO EXIT	

Audit Table, page 6

GAME AUDITS

TRACK WINS, PAGE 7

VEGAS	X
KOREA	X
ALASKA	X
ATLANTIS	X
HONG KONG	X
INDIA	X
SAHARA	X
HOLLAND	X
IRELAND	X
AMAZON	X
TIBET	X
MARS	X

PRESS VOLUME UP/DOWN FOR NEXT PAGE
PRESS SERVICE CREDIT BUTTON TO EXIT

Audit Table, page 7

GAME AUDITS

DRIVER SELECTION, PAGE 8

JEN	X
JASON	X
CLOWN	X
RETRO	X
DUDE	X
ASIAN	X
BABY	X
AFM	X
COWBOY	X
ALIEN	X

PRESS VOLUME UP/DOWN FOR NEXT PAGE
PRESS SERVICE CREDIT BUTTON TO EXIT

Audit Table, page 8

GAME AUDITS

BIG HEAD DRIVER SELECTION, PAGE 9

JEN BIGHEAD	X
JASON BIGHEAD	X
CLOWN BIGHEAD	X
RETRO BIGHEAD	X
DUDE BIGHEAD	X
ASIAN BIGHEAD	X
BABY BIGHEAD	X
AFM BIGHEAD	X
COWBOY BIGHEAD	X
ALIEN BIGHEAD	X

PRESS VOLUME UP/DOWN FOR NEXT PAGE
PRESS SERVICE CREDIT BUTTON TO EXIT

Audit Table, page 9
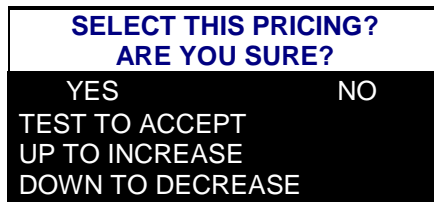
ADJUSTMENT MENU

To optimize game performance and earnings or to change the look or sound of the game, select the Adjustment Menu at the Main Menu. The Attract Mode features, Game Pricing and Game Difficulty may also be customized. Free races may be awarded to encourage players. *Free game player incentives may reduce earnings.* **NOTE:** Individual Game Adjustments are explained in more detail on the following pages.

Press the Volume Up or Volume Down button to highlight the desired Adjustments Menu option on the Main Menu and press the Test button. Use these screens to optimize game performance and earnings.

The Adjustments Menu offers several options. Press the Volume Up or Volume Down button to highlight an option and press the Test button. Each time an option on the menu is activated you are provided with multiple setting choices. Use the Volume Up or Volume Down button to change the current value setting and observe a confirmation box as shown below appears.

```
        SELECT THIS PRICING?
          ARE YOU SURE?
     YES                 NO
  TEST TO ACCEPT
  UP TO INCREASE
  DOWN TO DECREASE
```

Typical Confirmation box

Press the Volume Up or Volume Down button to select YES or NO, then press the Test button to lock in the setting. Selecting NO cancels any changes values and returns the previous values to memory.

```
                    ADJUSTMENT MENU

    STANDARD PRICING --USA 1              ON
    CUSTOM PRICING                        OFF
    FREE PLAY                             OFF
    FIRST PLACE GETS FREE RACE            ON
    START TIME BONUS SECS                 75
    CHECKPOINT BONUS TIME SECS            20
    ATTRACT MODE SOUNDS                   OFF
    INITIAL ENTRY                         ON
    MINIMUM VOLUME LEVEL                  11
    STEERING WHEEL POWER                   5
    SPEED IN MPH OR KPH                   MPH
    KEYPAD ACTIVE                         OFF
    MANUAL TRANS DISABLED                 OFF
    SHOW ROADKILL                         ON
    SHOW ENDING                           ON
    SHOW GIRLS                            ON
    HIGH SCORE RESET                      5000
    GAME DIFFICULTY                       5
    MAXIMUM CREDITS                       30
    MULTI PLAYER FREE RACES               OFF



    PRESS VOLUME UP/DOWN TO SELECT
    PRESS TEST BUTTON TO ACTIVATE
    PRESS SERVICE CREDIT BUTTON TO EXIT
```

Game Adjustments, *continued*

Standard Pricing

Use the Standard Pricing Table illustrated below as a guide to select the desired coin credit setting(s) for your game machine.

NAME	START	CONTINUE	CREDITS/COIN	COIN 1	COIN 2	COIN 3	COIN4	BILL
ANTILLES	2	2	1/25¢, 4/1G	.25¢	1G			
AUSTRALIA 1	2	2	1/3X20¢, 2/$1.00	.20¢	$1.00			
AUSTRALIA 2	2	2	1/5X20¢, 1/$1.00	.20¢	$1.00			
AUSTRIA 1	2	2	1/5Sch, 2/10Sch	5 Sch	10 Sch			
AUSTRIA 2	2	2	1/2X5Sch, 3/2X10Sch	5 Sch	10 Sch			
BELGIUM 1	2	2	1/20BF	20BF	20BF			
BELGIUM 2	2	2	3/20BF	20BF	20BF			
BELGIUM 3	2	2	2/20BF	20BF	20BF			
BELGIUM ECA	2	2	1/20BF	50BF	20BF	5BF		
CANADA 1	2	2	1 / 2 x 25¢, 3 / $1	25¢	25¢			
CANADA 2	2	2	1 / 2 x 25¢, 3 / $1	25¢	$1.00			
CANADA 3	2	2	3 / $1.00, 6 / $2.00	$1.00	$2.00			
CANADA ECA	2	2	1 / 2 x 25¢, 3 / $1	25¢		$1.00	$2.00	
DENMARK	2	2	3/5DKr, 7/10DKr	5DKr	10DKr			
FINLAND	2	2	1/1Fmk	1Fmk	5Fmk			
FRANCE 1	2	2	2/5Fr, 5/10Fr	5Fr	10Fr			
FRANCE 2	2	1	2/5Fr, 4/10Fr	5Fr	10Fr			
FRANCE 3	2	1	1/5Fr, 3/10Fr	5Fr	10Fr			
FRANCE 4	2	1	1/5Fr, 2/10Fr	5Fr	10Fr			
FRANCE 5	2	1	2/5Fr, 5/10Fr, 11/2 X 10Fr	5Fr	10Fr			
FRANCE 6	2	1	2/5Fr, 4/10Fr, 9/2 X 10Fr	5Fr	10Fr			
FRANCE 7	2	1	1/5Fr, 3/10Fr, 7/2 X 10Fr	5Fr	10Fr			
FRANCE 8	2	1	1/5Fr, 2/10Fr, 5/2 X 10Fr	5Fr	10Fr			
FRANCE 9	2	1	1/3 X 1Fr, 2/5Fr	1Fr	5Fr			
FRANCE 10	2	1	1/2 X 1Fr, 3/5Fr	1Fr	5Fr			
FRANCE 11	2	1	1/3 X 1Fr, 2/5Fr, 5/2 X 5Fr	1Fr	5Fr			
FRANCE 12	2	1	1/2 X 1Fr, 3/5Fr, 7/2 X 5Fr	1Fr	5Fr			
FRANCE ECA 1	1	1	2/5Fr, 5/10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 2	1	1	2/5Fr, 4/10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 3	1	1	1/5Fr, 3/10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 4	1	1	1/5Fr, 2/10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 5	1	1	2/5Fr, 5/10Fr, 11/2 X 10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 6	1	1	2/5Fr, 4/10Fr, 9/2 X 10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 7	1	1	1/5Fr, 3/10Fr, 7/2 X 10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 8	1	1	1/5Fr, 2/10Fr, 5/2 X 10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 9	1	1	1/3 X 1Fr, 2/5Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 10	1	1	1/2 X 1Fr, 3/5Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 11	1	1	1/3 X 1Fr, 2/5Fr, 5/10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 12	1	1	1/2 X 1Fr, 3/5Fr, 7/10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 13	1	1	1/10Fr, 2/20Fr, 4/30Fr	1Fr	5Fr	10Fr	20Fr	
FREE PLAY	--	--	--	None	None	None	None	None
GERMANY 1	2	2	1/1DM, 6/5DM	1DM	5DM			
GERMANY 2	2	1	1/1DM, 7/5DM	1DM	5DM			
GERMANY 3	2	1	1/1DM, 8/5DM	1DM	5DM			
GERMANY 4	2	1	1/1DM, 5/5DM	1DM	5DM			
GERMANY 5	2	1	1/1DM, 6/5DM	1DM	5DM			
GERMANY ECA 1	2	2	1/1DM, 2/2DM, 6/5DM	1DM	2DM	5DM		
GERMANY ECA 2	2	1	1/1DM, 2/2DM, 6/5DM	1DM	2DM	5DM		
GERMANY ECA 3	1	1	1/1DM, 2/2DM, 6/5DM	1DM	2DM	5DM		
HUNGARY	2	2	1/2X10Ft, 3/2X20Ft	10Ft	20Ft			
ITALY	2	2	1/500Llt	500Llt	500Llt			
JAPAN 1	2	2	1/100Yen	100 Yen	100 Yen			
JAPAN 2	2	2	2/100Yen	100 Yen	100 Yen			
JAPAN 3	1	1	1/100Yen	100	100			
JAPAN 4	1	1	2/100Yen	100	100			
JAPAN 5	1	1	4/100Yen	100	100			
JAPAN 6	1	1	1/2X100Yen	100	100			
NETHERLANDS	2	2	1/1HFl, 3/2.5HFl	1HFl	2.5HFl			
NEW ZEALAND 1	1	1	1/$1	$1	$2			
NEW ZEALAND 2	1	1	2/$1	$1	$2			
NORWAY	2	2	3/5NKr, 6/10NKr	5NKr	10NKr			
SPAIN 1	2	2	1/100Pta, 6/500Pta	100Pta	500Pta			
SPAIN 2	2	2	1/100Pta, 5/500Pta	100Pta	500Pta			
SWEDEN	2	2	1/3X1SKr, 2/5SKr	1SKr	5SKr			
SWITZERLAND 1	2	2	1/1SFr, 6/5SFr	1SFr	5SFr			
SWITZERLAND 2	2	2	1/1SFr, 7/5SFr	1SFr	5SFr			
SWITZERLAND 3	2	2	1/1SFr, 8/5SFr	1SFr	5SFr			

NAME	START	CONTINUE	CREDITS/COIN	COIN 1	COIN 2	COIN 3	COIN4	BILL
UK ECA 1	1	1	1/50p, 3/£1.00	£1.00	50p	20p	10p	£2.00
UK ECA 2	1	1	1/50p, 2/£1.00	£1.00	50p	20p	10p	£2.00
UK ECA 3	1	1	1/30p, 2/50p, 5/£1.00	£1.00	50p	20p	10p	£2.00
UK 4	1	1	1/50p, 3/£1.00	£1.00	50p			
UK 5	1	1	1/50p, 2/£1.00	£1.00	50p			
UK ECA 6	1	1	1/30p, 2/50p, 4/£1.00	£1.00	50p	20p	10p	£2.00
UK ECA 7	1	1	3/£1.00	£1.00	50p	20p	10p	£2.00
UK ECA 8	1	1	1/50p, 2/£1.00, 4/£2.00	£1.00	50p	20p	10p	£2.00
USA1	2	2	1/25¢	25¢	25¢			$1.00
USA2	2	1	1/25¢	25¢	25¢			$1.00
USA3	1	1	1/25¢	25¢	25¢			$1.00
USA4	1	1	1/50¢, 3/$1.00	25¢	25¢			$1.00
USA5	2	1	1/50¢, 4/$1.00	25¢	25¢			$1.00
USA6	1	1	1/50¢	25¢	25¢			$1.00
USA7	1	1	1/50¢, 3/$1.00	25¢	25¢			$1.00
USA8	2	2	1/50¢, 4/$1.00	25¢	25¢			$1.00
USA9	3	2	1/25¢, 4/$1.00	25¢	25¢			$1.00
USA10	3	3	1/25¢, 4/$1.00	25¢	25¢			$1.00
USA11	4	2	1/25¢, 4/$1.00	25¢	25¢			$1.00
USA12	4	3	1/25¢, 4/$1.00	25¢	25¢			$1.00
USA13	4	4	1/25¢, 4/$1.00	25¢	25¢			$1.00
USA ECA	3	3	1/25¢, 4/$1.00	$1.00	25¢	10¢	05¢	$1.00

Main Menu
Game Adjustments, *continued*
Custom Pricing

Use the custom Pricing Menu to specify pricing settings other than the ones listed in the Standard Pricing Table. Custom Pricing can also be used to select the amount of credits required to start a game and the amount of credits required to continue a game. This option is adjusted from the Dip Switch Settings.

```
                    CUSTOM PRICING MENU

         LEFT CHUTE UNITS                    X
         RIGHT CHUTE UNITS                   X
         CENTER CHUTE UNITS                  X
         FOURTH CHUTE UNITS                  X
         BILL CHUTE UNITS                    X
         UNITS PER CREDIT                    X
         UNITS FOR BONUS                     X
         MINIMUM UNITS                       X
         CREDITS TO START                    X
         CREDITS TO CONTINUE                 X
         LEFT CHUTE COUNTER                  X
         RIGHT CHUTE COUNTER                 X
         CENTER CHUTE COUNTER                X
         FOURTH CHUTE COUNTER                X
         BILL CHUTE COUNTER                  X
         SHOW FRACTIONS                      YES
         SELECT CUSTOMER PRICING             NO
         EXIT TO MAIN MENU

         PRESS VOLUME UP/DOWN TO SELECT
         PRESS TEST BUTTON TO ACTIVATE
         PRESS SERVICE CREDIT BUTTON TO EXIT
```
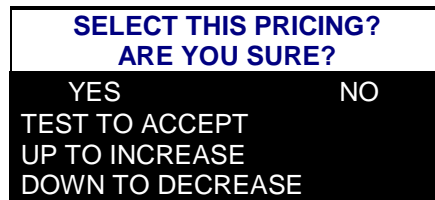
The following table clarifies Pricing Menu terms…

SCREEN TERM	DEFINITION
Chute Units	Currency inserted accumulates units. This adjustment specifies the quantity of units given for each coin or bill in each coin chute.
Units Per Credit	Units needed to accumulate a credit.
Units For Bonus	Units awarded after a player has accumulated enough points for a bonus.
Minimum Units	No credits will be awarded until the minimum required currency units have been accumulated.
Credits to Start	Units needed to enter game play.
Credits to Continue	Units needed to continue game play.
Chute Counter	Total number of units accepted by a chute.
Show Fractions	Fractional credits are observable on the credit screen when YES is selected.
Select Customer Pricing	Selecting YES enables custom pricing and overrides default settings.

Main Menu
Game Adjustments, *continued*

To further optimize game performance and earnings, select any one of the options on the Adjustments Menu. Press the Volume Up or Volume Down button to highlight an option and press the Test button.

Each time an option on the menu is activated you are provided with multiple setting choices. Use the Volume Up or Volume Down button to change the current value setting and observe a confirmation box as shown below appears.

```
        SELECT THIS PRICING?
          ARE YOU SURE?
      YES                 NO
  TEST TO ACCEPT
  UP TO INCREASE
  DOWN TO DECREASE
```
Typical Confirmation box

Press the Volume Up or Volume Down button to select YES or NO, then press the Test button to lock in the setting. Selecting NO cancels any changes values and returns the previous values to memory.

Main Menu
Game Adjustments, *continued*
Free Play Menu

Free Play
This option selects free play. The setting choices for this adjustment are:
- -ON
- -OFF
- **-Factory Setting: OFF**

Main Menu
Game Adjustments, *continued*
First Place Awards Free Game Menu

First Place Awards Free Game
Awards a player a free game on first place finish. The setting choices for this adjustment are:
- -ON
- -OFF
- **-Factory Setting: ON**

Main Menu
Game Adjustments, *continued*
Start Time Bonus Seconds Menu

Start Time Bonus Seconds
This determines the initial time a player is given to finish a race. The setting range is:
- -Maximum: 90
- -Minimum: 60
- **-Factory Setting: 75**

Main Menu
Game Adjustments, *continued*
Checkpoint Bonus Time Menu

Checkpoint Bonus Time
This awards the player a time bonus for passing a checkpoint. The setting range is:
- -Maximum: 10
- -Minimum: 25
- **-Factory Setting: 20**

Main Menu
Game Adjustments, *continued*
Attract Mode Sound Menu

Attract Mode Sound
This determines if the game will make sounds in the attract mode. The settings for this adjustment are:
- -ON
- -OFF
- **-Factory Setting: OFF**

Main Menu
Game Adjustments, *continued*
Initial Entry Menu

Initial Entry
This determines if the game will allow High Score Entry and Display Table. The setting choices are:
- -ON
- -OFF
- **-Factory Setting: ON**

Main Menu
Game Adjustments, *continued*
Minimum Volume Level Menu

Minimum Volume Level
This determines the minimum volume level of the game sounds. The setting range is:
- -Maximum: 30
- -Minimum: 0
- **-Factory Setting: 11**

Main Menu
Game Adjustments, *continued*
Steering Wheel Power Menu

Steering Wheel Power
This determines the amount of power provided to steering. The setting choices are:
- -Maximum: 10
- -Minimum: 1
- **-Factory Setting: 5**

Main Menu
Game Adjustments, *continued*
Speed in MPH or KPH Menu

Speed in MPH or KPH
This determines speedometer setting in miles per hour or kilometers per hour. The setting choices are:
- -MPH
- -KPH
- **-Factory Setting: MPH**

Main Menu
Game Adjustments, *continued*
Manual Trans Disabled Menu

Manual Trans Disabled
This provides control of the manual transmission option. The setting choices are:
- -ON
- -OFF
- **-Factory Setting: OFF**

Main Menu
Game Adjustments, *continued*
Keypad Active Menu

Keypad Active
This determines whether players' are allowed to use the keypad for inputs. The setting choices are:
- -ON
- -OFF
- **-Factory Setting: ON**

Main Menu
Game Adjustments, *continued*
Show Road Kill Menu

Show Road Kill
This determines if dead animals are shown in the game. The setting choices are:
- -ON
- -OFF
- **-Factory Setting: ON**

Main Menu
Game Adjustments, *continued*
Show Ending Menu

Show Ending
This determines if an image of the President is seen at various points in the game. The setting choices are:
>   -ON
>   -OFF
>   **-Factory Setting: ON**

Main Menu
Game Adjustments, *continued*
Show Girls Menu

Show Girls
This determines if "sexy" girls are seen at various points in the game. The setting choices are:
>   -ON
>   -OFF
>   **-Factory Setting: ON**

Main Menu
Game Adjustments, *continued*
High Score Reset Menu

High Score Reset
This determines the number of points required to reset the high score. The setting range is:
>   -Maximum: 25000
>   -Minimum: 1000
>   **-Factory Setting: 5000**

Main Menu
Game Adjustments, *continued*
Game Difficulty Menu

Game Difficulty
This allows the operator to select the difficulty level of the game. The setting range is:
>   -Easiest: 0
>   -Hardest: 19
>   **-Factory Setting: 5**

Main Menu
Game Adjustments, *continued*
Maximum Credits Menu

Maximum Credits
This allows the operator to select the maximum number of credits alotted. The setting range is:
>   -Minimum: 1
>   -Maximum: 99
>   **-Factory Setting: 30**

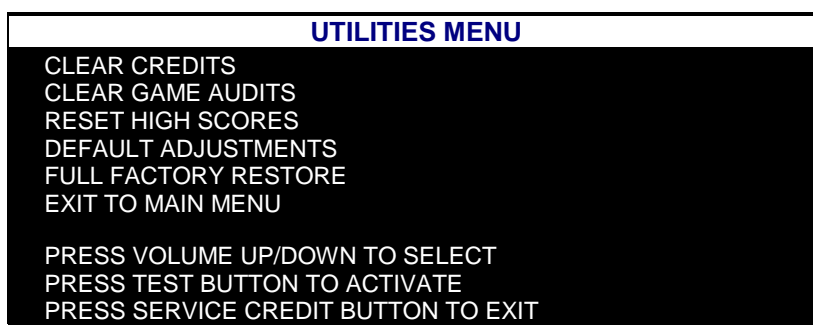| Main Menu |
|---|
| **Game Adjustments,** *continued* |
| **Multi Player Free Races Menu** |

Multi Player Free Races
This determines whether or not multiple players win free races for top scores. The setting range is:
> -On:
> -Off:
> **-Factory Setting: Off**

| Main Menu |
|---|
| **Utilities** |

UTILITIES
To clear bookkeeping memory and reset factory defaults, select Utilities at the Main Menu. Press the Volume Up or Volume Down button to highlight the Utilities option on the Main Menu, then press the Test button. Press the Service button to return to the Main Menu from this screen.

> **UTILITIES MENU**
>
> CLEAR CREDITS
> CLEAR GAME AUDITS
> RESET HIGH SCORES
> DEFAULT ADJUSTMENTS
> FULL FACTORY RESTORE
> EXIT TO MAIN MENU
>
> PRESS VOLUME UP/DOWN TO SELECT
> PRESS TEST BUTTON TO ACTIVATE
> PRESS SERVICE CREDIT BUTTON TO EXIT

Utilities Menu

The Utilities Menu offers several options. Press the Volume Up or Volume Down button to highlight an option, then press the Test button. Each time an option on the menu is activated you are provided with multiple setting choices. Use the Volume Up or Volume Down button to change the current value setting and observe a confirmation box as shown below appears.

> **CLEAR CREDITS?**
> **ARE YOU SURE?**
>
> YES   NO
>
> TEST TO ACCEPT
> UP TO INCREASE
> DOWN TO DECREASE
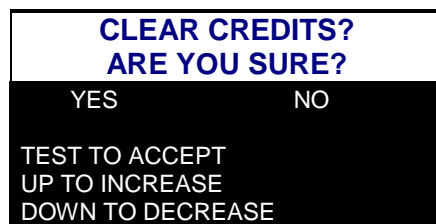
Typical Confirmation Box

Press the Volume Up or Volume Down button to select YES or NO, then press the Test button to lock in the setting. Selecting NO cancels any changes values and returns the previous values to memory.
NOTE: Record the numbers before they are cleared. These values cannot be restored once erased.

Main Menu
Utilities, *continued*
Clear Credits Menu

Clear Credits

Press the Volume Up or Volume Down buttons to highlight the Clear Credits option on the Main Menu, then press the Test button. This returns all credit values to zero and removes credit amounts from memory.

 - Yes
 - No
 - Factory Setting: NO

Main Menu
Utilities, *continued*
Clear Game Audits Menu

Clear Game Audits

Press the Volume Up or Volume Down buttons to highlight the Clear Game Audits option on the Main Menu, then press the Test button. This returns all audit values to zero and removes totals from memory.

 - Yes
 - No
 - Factory Setting: NO

Main Menu
Utilities, *continued*
Reset High Scores Menu

Reset High Scores

Press the Volume Up or Volume Down buttons to highlight the Reset High Scores option on the Main Menu, then press the Test button. This deletes all high scores and removes player identities from memory.

 - Yes
 - No
 - Factory Setting: NO

Main Menu
Utilities, *continued*
Default Adjustments Menu

Default Adjustments

Press the Volume Up or Volume Down buttons to highlight the Default Adjustments option on the Main Menu, then press the Test button. This sets the adjustments back to their original values.

 - Yes
 - No
 - **Factory Setting: NO**

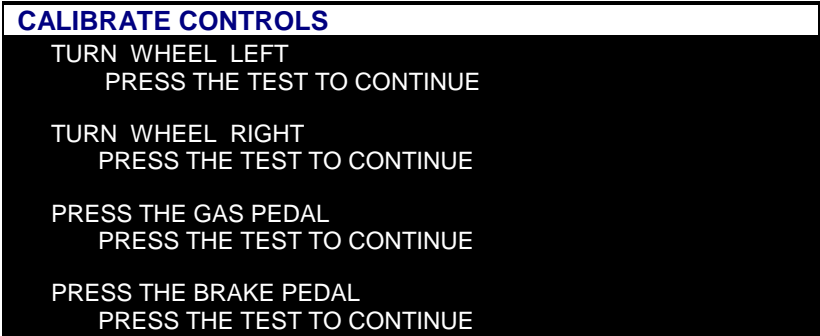| Main Menu |
| --- |
| **Utilities,** *continued* |
| **Full Factory Restore Menu** |

Full Factory Restore

Press the Volume Up or Volume Down buttons to highlight the Full Factory Restore option on the Main Menu, then press the Test button. This returns every variable in the game to the original factory settings.

 - Yes
 - No
 - **Factory Setting: NO**

Main Menu
Calibrate Controls

CALIBRATE CONTROLS

To calibrate controls for optimum performance, select Calibrate Controls at the Main Menu.

```
CALIBRATE CONTROLS
   TURN  WHEEL  LEFT
        PRESS THE TEST TO CONTINUE

   TURN  WHEEL  RIGHT
        PRESS THE TEST TO CONTINUE

   PRESS THE GAS PEDAL
        PRESS THE TEST TO CONTINUE

   PRESS THE BRAKE PEDAL
        PRESS THE TEST TO CONTINUE
```
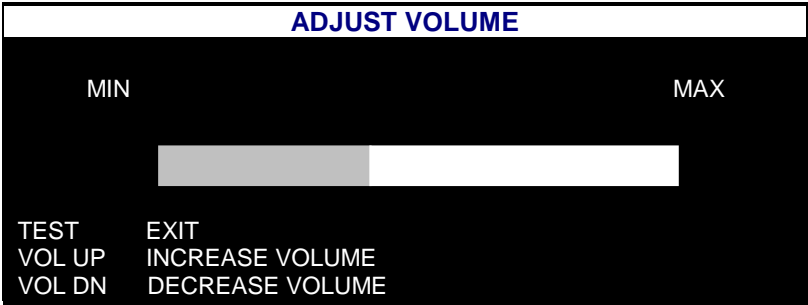
Press the Volume Up or Volume Down buttons to highlight the Calibrate Controls option on the Main Menu, then press the Test button. Follow the instructions that appear on-screen.

Main Menu
Adjust Volume

ADJUST VOLUME

To select a desirable volume level, select Adjust Volume at the Main Menu. Press the Volume Up or Volume Down button to highlight the Adjust Volume option on the Main Menu, then press the Test button. Remember that the minimum sound level is set under Game Adjustments.

Press the Volume Up button to increase, or the Volume Down button to decrease the sound level of the game. Press the Test button to lock the volume level at the selected value and return to the Main Menu.

```
ADJUST VOLUME

   MIN                                   MAX



   TEST      EXIT
   VOL UP    INCREASE VOLUME
   VOL DN    DECREASE VOLUME
```
Adjust Volume Screen

NOTES