LCD CONVERSION KIT

CONVERSION INSTRUCTIONS

For Parts or Service contact your local Distributor or:

Betson Enterprises

303 Paterson Plank Road

Carlstadt, New Jersey

Main Phone: (201) 438-1300

Toll Free Phone: (800) 524-2343

Part Phone: (800) 828-2048

CAUTION:
- The specifications of this product are subject to change without notice for reasons such as performance.
- The contents of this kit, its main devices and design are protected under each federal law concerning patent, copyright and other intellectual properties.
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CABINET REQUIREMENTS & KIT CONTENTS:

The Super Cars Conversion Kit contains the necessary parts, electrical harnessing, and artwork to convert your working Cruis'n or Off Road Challenge CRT cabinet into a working Super Cars LCD game cabinet. The LCD Monitor is to be supplied by the operator and is **NOT** included in this kit.

IMPORTANT CHECKLIST FOR A SUCCESSFUL CONVERSION:

Check that the following game controls are in working order: these are essential to a successful conversion
- Steering Mech – motor is working
- Steering Wheel Collar – secure and free of damage
- Shifter
- Dash Buttons (and corresponding back lamps)
- Keypad (Exotica only)
- Pedal Mech
- Coin Door Switches
- Test/Service Switch Assembly
- Coin Meter

> **NOTES:**
> - Keep all original harnessing and hardware until the conversion is successfully completed.
> - Replace damaged original parts that will be reused as needed.

 BEFORE YOU BEGIN:

Read this manual as well as the Super Cars manual prior to preparing your video game machine.

Super Cars LCD Conversion Kit is to be installed by qualified service personnel only on a fully functional Cruis'n cabinet.

Unplug AC Line Cord to remove all power from cabinet assembly.

A safe, dry and well lit work space will be required to complete the conversion process.

Do not disable, remove or modify any safety functions or devices in the cabinet or the Super Cars LCD Conversion Kit.

The cabinet and the Super Cars LCD Conversion Kit contain sensitive electronic devices. Proper ESD practices need to be followed.

The computer default power setting is 110 VAC.

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SUPER CARS IS COPYRIGHT RAW THRILLS, INC.

RECOMMENDED TOOLS & MATERIALS:

Cordless Drill
Jigsaw (with wood-cutting blade)
Router (with arbor and carbide-tipped blade) – available online through Outwater Plastics
Hammer & Wood Chisel
Rubber Mallet (for T-molding installation)
Adjustable Wrench
Scissors
Utility Knife or Precision Knife
Screwdriver Bits (and matching bit holder adaptor for drill)
- T-27 Tamper-Resistant Torx Bit
- T-25 Tamper-Resistant Torx Bit
- T-15 Tamper-Resistant Torx Bit
- Phillips Bit
- Slotted Bit

Drill Bits
- .188" (3/16")
- .313" (5/16")

Hex Sockets (and matching ratchet or socket adaptor for drill) or wrenches
- 1/4"
- 5/16"
- 11/32"
- 3/8"
- 7/16"
- 9/16" (2 required)
- 10 mm

Hole Saws (and matching arbor for drill)
- 2"
- 4-1/2"

Sanding Tools (Sanding Block/Paper or Belt Sander
Black Permanent Marker
Tape (Duct or Masking)
Wood Filler or Bondo (& Putty Knife)
Black Spray Paint

CABINET-SPECIFIC INSTRUCTIONS:

This Super Cars LCD Conversion manual is written to accommodate the conversion of either Cruis'n USA, Cruis'n World, Cruis'n Exotica, or Off Road Challenge. The step-by-step instructions are to be followed for all platforms, unless otherwise specified. It is HIGHLY RECOMMENDED to read through this manual in its entirety prior to beginning your conversion in order to be properly acquainted with the process.

The instructions are written for the (3) Cruis'n platforms. Since it is possible that your game has been kitted (i.e. USA kitted to Exotica), it imperative that you follow the instructions for your cabinet platform, not necessarily the software or artwork on the cabinet. The differences between the platforms can be most easily recognized by dash assemblies shown below.

Figure 1 - USA Dash

Figure 2 - World Dash

Figure 3 - Exotica Dash

For Off Road Challenge, follow conversion instructions for Cruis'n World.

TEAR DOWN ORIGINAL CABINET

Separate pedestal assembly from the main cabinet (disconnect harnessing) and remove pedestal connecting brackets and set aside. Unlock and remove the back door to the main cabinet. These will be integral parts of your converted game cabinet however they will not be needed until the main cabinet conversion process is complete.

Remove the Dash Assembly: First, disconnect all dash-specific harnessing from the main harness (access from the back door) but leave the connections to the controls (i.e. Steering Mech, Shifter, Buttons, etc.) attached to the dash assembly. Also, locate the grounding braid and disconnect before dash removal (this will be reconnected later). For USA, leave the speaker wires connected to the speakers. These connectors will be used to complete the cabinet conversion. The Z-header connectors must remain attached to the dash harness for a successful conversion.
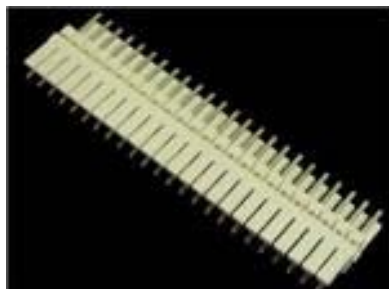
Figure 4 - Z-header connector

Figure 5 - Dash Harness

Detach the dash assembly from the cabinet; the dash assembly will be reused following a few alterations that will be made later in the conversion process. Leave the dash mounting brackets attached to the cabinet.

Remove Original Harnessing and Electronics: Disconnect all remaining cables and harnessing including Woofer (World & Exotica only), Speakers, CRT monitor, Coin Door, and Pedal Mech. This conversion will utilize your original Woofer (World & Exotica), Coin Door and Pedal Mech, so leave the harnessing attached to these assemblies and simply disconnect them from the main harness.

Figure 6 - Coin Door

Super Cars LCD Conversion Kit • Copyright 2012 • Raw Thrills, Inc. • All rights reserved   7

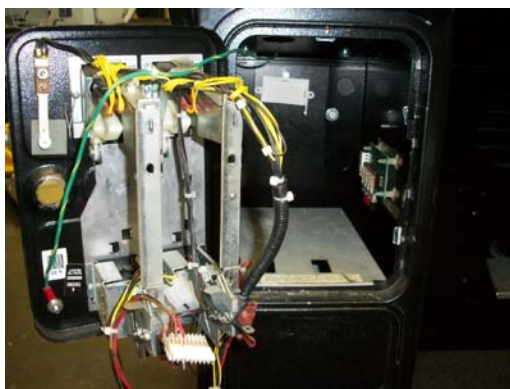With the exception of the Woofer Speaker, the Transformer, and the grounding braid, remove all other original game electronics (mounting board too) from the cabinet. Please retain all of these electronics and harnessing until the conversion is complete and the game is functional.

Remove the marquee plastic (Exotica), monitor front glass, monitor bezel, CRT monitor, and monitor mounting brackets from the cabinet. For World & Exotica conversions, the speakers in the marquee will be reused and can be removed once the cabinet top is cut. Cruis'n USA will utilize the in-dash speakers in their current configuration as there are no marquee speakers in this cabinet assembly.

Remove all AC harnessing and AC Power Switch Plate from the cabinet, but leave the safety ground wires (18 AWG green/yellow wires) connected to the Coin Door, Pedal Mech, Woofer (World & Exotica), and Pedestal harness assemblies intact in the cabinet. If your cabinet has a Pedestal harness, leave the seat speaker harness located in the channel at the base of the main cabinet. To isolate these safety ground wires and remove all others, you will need to cut several cable ties and care must be taken to not damage these wires.

Figure 7 - Remaining Ground Wires

Figure 8 – Before

Figure 9 – After

Lastly, if the cabinet's current T-molding is to be reused (as opposed to using new T-molding), carefully pull back the T-molding on both cabinet sides to just above the height of the Coin Door, being mindful to preserve the grooves in the wood.

Figure 10 - Pull T-molding Back

If you wish to install new T-molding for your cabinet conversion, Outwater Plastics is a recommended vendor. Please measure the current cabinet's groove size as well as the original T-molding to ensure that the T-molding you purchase is compatible with your cabinet (T-molding groove differences have been found throughout the manufacturing life of the Cruis'n series and similar driving game cabinets).

Regardless of whether original or new T-molding will be used, a router equipped with an arbor and carbide tipped blade bit will be needed to cut the necessary T-molding groove after the top cut is made. Outwater Plastics is also the recommended vendor for the arbor and blade.

Follow this link (http://www.outwatercatalogs.com/home/index.cfm) to purchase new T-molding (Page 12 of online catalogue) and arbor and blade (Page 14).
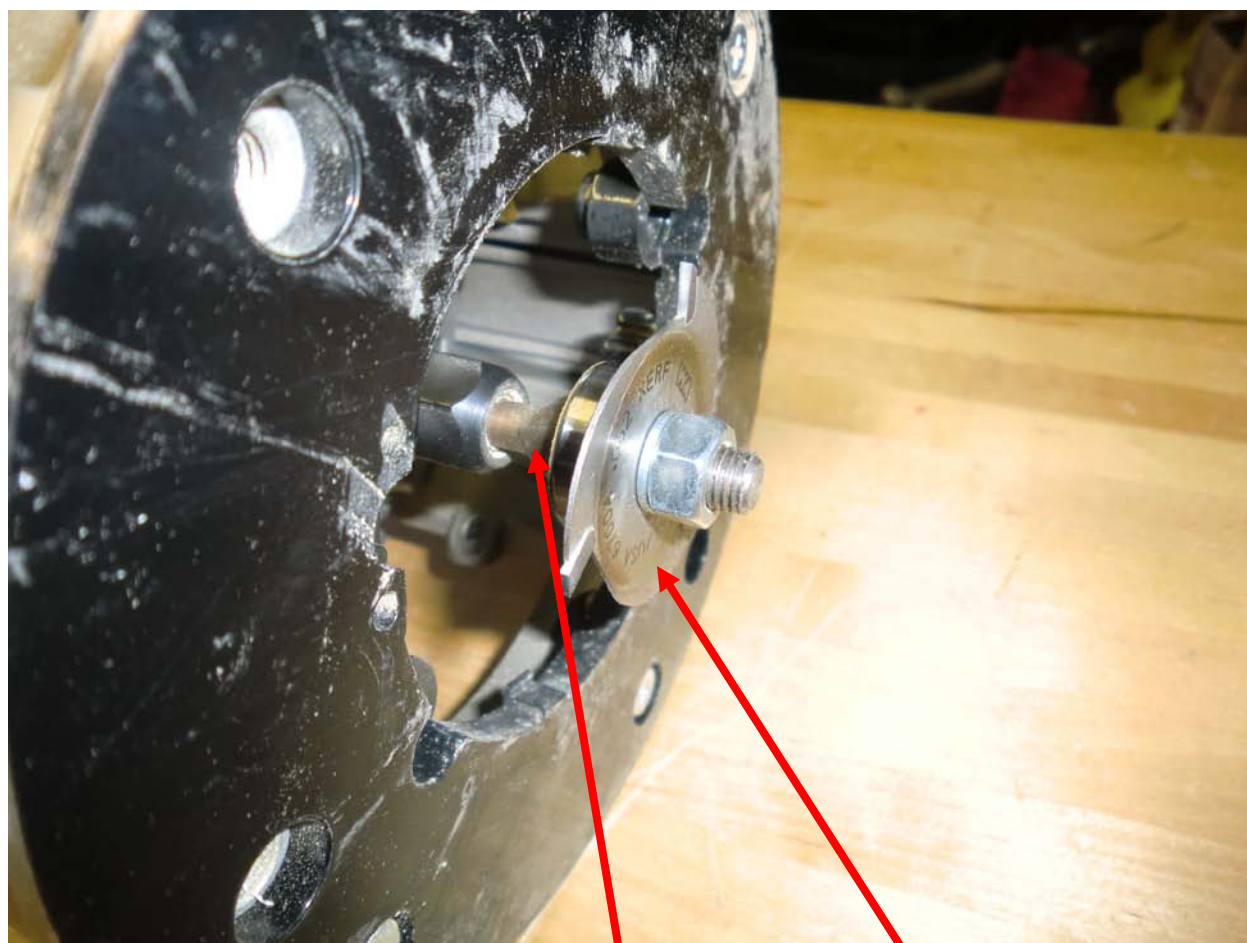
Figure 11 - Router with arbor and carbide-tipped blade

THE NEW BEGINNING - SAWING DOWN YOUR CABINET

Following the instructions and legend code on the supplied templates, use scissors to cut the templates along the specific outlines for your respective cabinet being converted (there are variations between each cabinet).
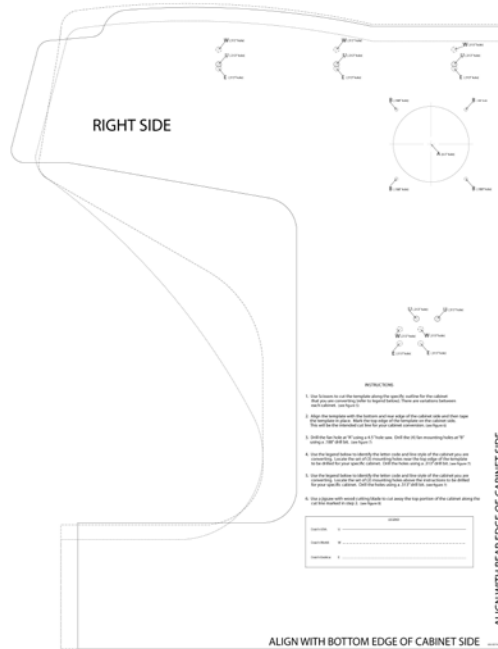
Figure 12 - Right Side Template

Align the templates with the bottom and rear edge of your cabinet and tape the template in place on the three sides not being cut. It is recommended to use a thick permanent marker to mark the top edge of the proposed cut.
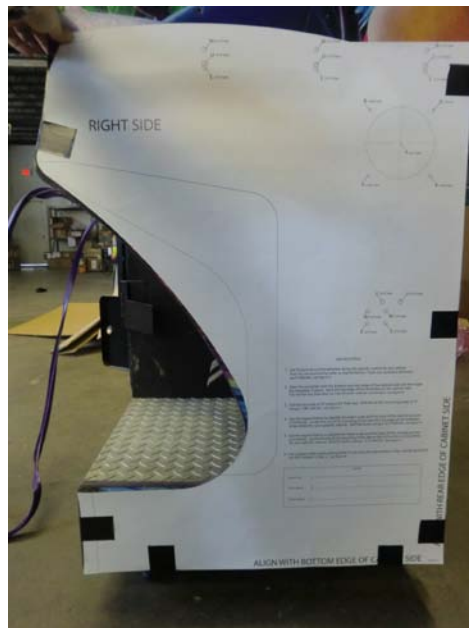
Figure 13 - Template Taped to Side

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Use the supplied instructions and legend code on the template to drill the fan hole (4-1/2") and mounting holes (.188"=3/16" and .313"=5/16") for each side (*NOTE: Fan hole cut-out is only on right side of the cabinet*). Using a transfer punch to spot the hole centers is recommended and should yield better results.
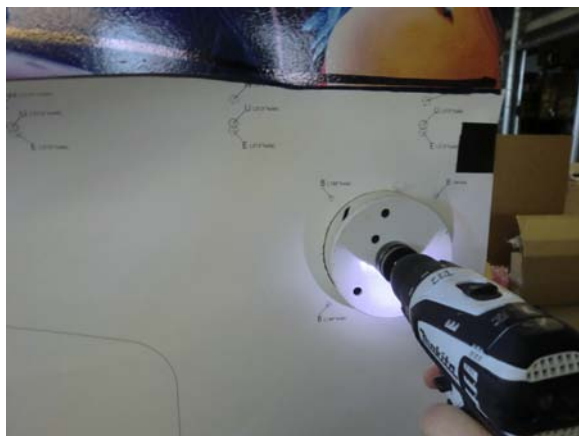
Figure 14 - Fan Cutout (RIGHT SIDE ONLY)
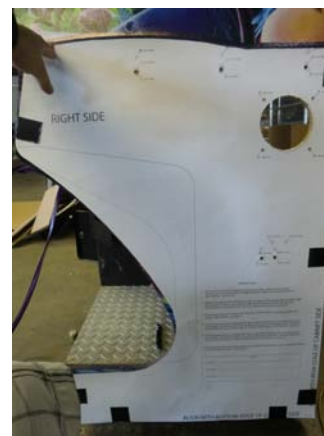
Figure 15 - Use Legend Code

Use a jigsaw with a wood-cutting blade to cut along the top edge of the template for each side. Due to manufacturing differences, the templates may not match the front edges of your cabinet perfectly. Take care to make the cut as clean and as smooth as possible. (*NOTE: You may consider making a preliminary cut above the template to remove most of the top portion of the cabinet. While not necessary, you may find this easier to make a cleaner template cut.*)

Take off the separated cabinet top (can be quite heavy) and dispose of properly after removing the lock plate with accompanying hardware (ALL GAMES) and the speakers from the cabinet top (for World & Exotica conversions).

Figure 16 - After Template Cut

All conversions will require the use of your current lock plate assembly and speakers. For World & Exotica conversions, the speakers will be remounted in a new location whereas USA conversions will leave the speakers in their current configuration on the dash plate.

Figure 17 - Speakers and Lock Plate

Clean up uneven cuts with a belt sander or sanding block/paper. A level edge is necessary to successfully route the new t-molding groove.

Figure 18 - Sand Cut Edges

Using a router equipped with required arbor and carbide-tipped blade bit, cut (route) a new T-molding groove along the top edge that was cut for each side. The groove depth and width should match what is already on your cabinet. (*NOTE: With the router off, use the cabinet's original T-molding groove to set the depth of the router bit before cutting the new groove.*)

Figure 19 - After Router Cut

Using a hammer and wood chisel, remove cleats near front of cabinet (towards dash) that were previously used for bracing the monitor glass.

Remove these cleats

Figure 20 - New Groove Should Match Original

THIS PAGE – WORLD/EXOTICA ONLY

Using a hammer and wood chisel or saw, cut rear door cleat to 1" below top edge on both sides.

Figure 21 - Cut Rear Door Cleats

 Remove cleats on vertical plywood strips on each side. Cut down plywood strip on fan side to 1" below fan hole cut-out for fan clearance.

Figure 22 - After Cleats are Removed & Plywood is Cut

THIS PAGE – WORLD/EXOTICA ONLY

THIS PAGE - USA ONLY

Remove the rear door cleats. Completely remove the 1" x 2" vertical plywood strips from the interior of both cabinet sides.

Figure 23 - Cleats and Strips Need to be Removed

Remove mid-panel plywood support beam.

Figure 24 - Remove Support Beam

THIS PAGE - USA ONLY

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REAR PANEL CUT-OUT FOR AC POWER PLATE:

Exotica – no further cut-out will be required.

World & USA – Remove the AC line cord relief plate on the lower rear cabinet panel to expose the existing hole.

Figure 25 - AC Line Cord Relief Plate

Use the supplied template to spot the existing hole and proceed to drill a 2" hole to the right of the existing hole and (4) new mounting holes (.188"=3/16").

Figure 26 - Follow Instructions on Template

FINAL CABINET PREPARATIONS:

Remove any excess hardware from cabinet sides. (_WARNING: Hardware for Lower Rear Panel Support Brackets and Dash Mounting Brackets must remain on cabinet._ **_DO NOT REMOVE!_**) Use Wood Filler or Bondo to fill these extra holes (_NOTE: DO NOT FILL NEW HOLES!_). Sand smooth when completed. You may also want to repair any edges or corners that have been damaged on the cabinet at this time.

Figure 27 - Fill Preexisting Holes with Wood Filler or Bondo

Vacuum all old dirt, dust, and saw dust from cabinet interior and cut edges. Paint all cut edges, holes, and sanded areas with black spray paint, including rear cut-out for AC Power Plate. If the inside of the side panels are not black already, you will need to paint the inside upper portion (above the set of (3) holes that were drilled) as well.

Figure 28 - Paint Edges, Holes, and Sanded Areas

Prepare the surfaces for art installation by cleaning the sides of any dirt, dust, or residue. If original decals are peeling off, it is recommended to remove them entirely before installing supplied decals. Install cabinet side decals (*NOTE: ALL LOGOS SHOULD BE VISIBLE (NOT CUTOFF) WHEN DECALS ARE INSTALLED PROPERLY.*) and use a utility knife or precision knife to cut away the decal around the edges of the cabinet as well as from areas where new holes were drilled. You will also need to cut the decal away from preexisting cabinet bolts.

Figure 29 - Logos should not be Cutoff

Reinstall T-molding with rubber mallet. Cut away extra T-molding with utility knife.

Figure 30 - T-molding Installation

BUILDING YOUR CABINET - MOUNTING MECHANICAL PARTS

MOUNTING ELECTRONICS BOARDS, AC POWER PLATE, & FAN:

Install supplied electronics boards and mounting plate assembly on the mid-panel (harnessing will be attached to RIO Board), just below the protruding screws of the coin vault and against the right side cleat when viewing the cabinet from the rear. Use (4) #6 x 3/4" L Hex Head Wood Screws (P/N: 31-SA006-01-006) to mount the electronics plate. Remove original wire clamps if they interfere with the installation of this plate.

Figure 31 - Mount the RIO Plate Assembly

Install supplied AC Power Plate on the interior of the lower rear cabinet panel with (4) 8-32 x 1" L Black Tamper-Resistant Torx (T-15) Machine Screws (P/N: 31-TP008-03-012) and (4) #8 Black Flat Washers (P/N: 3-160).

Figure 32 - Exotica AC Plate

Figure 33 - USA/World AC Plate

Install the Cabinet Exhaust Fan and (2) Wire Fan Guards: use (4) 8-32 x 3" L Phillips Machine Screws (P/N: 31-MS008-01-013) and (4) 8-32 Elastic Stop Nuts (P/N: 32-801) to mount the fan and 2 wire guards on the interior of the cabinet side. The fan should be sandwiched between the wire guards for safety reasons, and the fan should be exhausting air out of the cabinet.
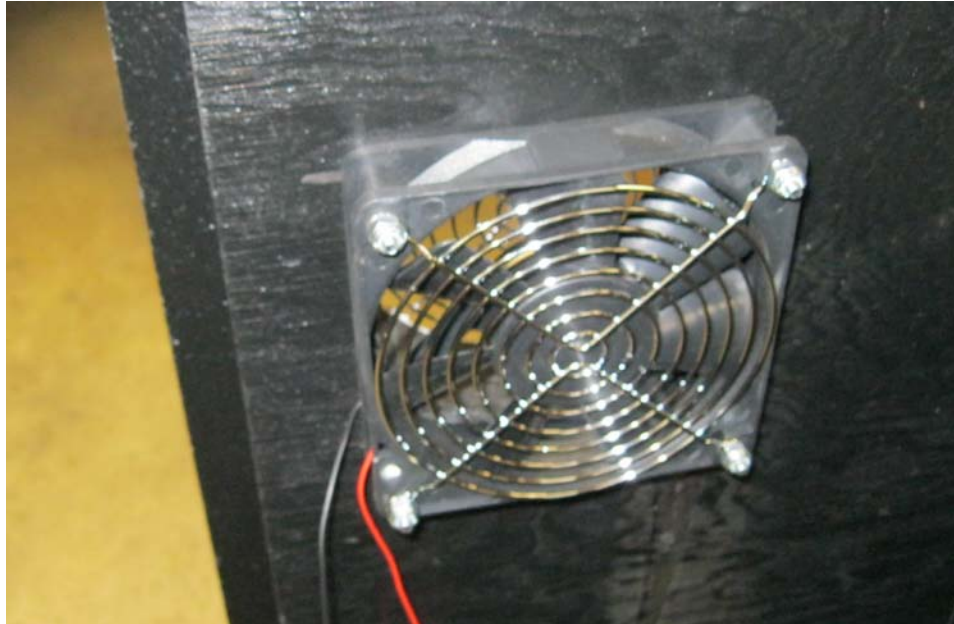
Figure 34 - Exhaust Fan between Wire Guards

NOTE: THE FAN GUARD SHOULD BE ON THE INSIDE OF THE CABINET!!!

Figure 35 - DO NOT INSTALL FAN GUARD ON OUTSIDE AS SHOWN

DASH CONVERSION (INSTALLATION OF REPLACEMENT PARTS):

This conversion kit includes a steering mech timing belt, a steering wheel hoop and a chrome wheel cap, as well as relevant replacement hardware. We recommend installing the timing belt to ensure the longevity of your converted cabinet as it is likely that the original belt has signs of wear. Also, the new steering wheel hoop and chrome wheel cap will give your cabinet a rejuvenated look.

Please follow these instructions to install these new parts:

Remove (6) screws used to fasten the original wheel cap. You will not need to save these screws as replacement hardware has been supplied. Remove the original wheel cap; it will not be reused.

Figure 36 - Remove 6 Screws and Wheel Cap

Remove (3) screws used to fasten the steering wheel hoop to the steering wheel collar on the steering mech shaft and set aside as these will be reused. Remove the original steering wheel hoop; it will not be reused.

Figure 37 - Remove 3 Screws and Steering Wheel Hoop

Remove (4) flange nuts used to fasten the steering mech to the dash plate and set aside as these will be reused. Remove the steering mech for timing belt installation.

Figure 38 - Remove 4 Flange Nuts to Remove Steering Mech

On the steering mech, loosen (4) mounting nuts on the motor bracket to remove original belt and install new belt.

Figure 39 - Loosen 4 Nuts to Replace Timing Belt

With the belt in place, tighten the tension adjusting bolt until there is no longer belt deflection, then loosen the bolt one full turn and tighten the (4) mounting nuts on motor bracket.
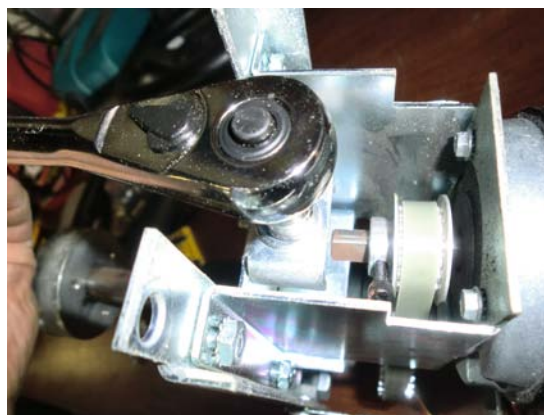
Figure 40 - Tighten Bolt to Eliminate Belt Deflection

Replace the steering mech on its original mounts on the dash plate and install original (4) flange nuts. Check that the hub mounting nut is tightened.

Figure 41 - Tighten Hub Mounting Nut after Steering Mech is Reinstalled

Install the new steering wheel hoop using the original (3) screws that were previously used on the original hoop.

Figure 42 - Install New Steering Wheel Hoop

Install the chrome wheel cap on the steering hoop mounts using the supplied (6) 8-32 x 1/2" L Black Tamper-Resistant Torx (T-15) Machine Screws (P/N: 31-TP008-03-001) and (6) #8 Black Flat Washers (P/N: 3-160). (*NOTE: DO NOT OVERTIGHTEN THESE SCREWS AS CRACKING OF THE WHEEL CAP MAY OCCUR.*)

Figure 43 - DO NOT OVERTIGHTEN SCREWS WHEN INSTALLING WHEEL CAP

Reinstall Dash Assembly using the same mounting hardware that was used originally.

Figure 44 - Reinstall Dash Assembly

WIRING & PC MOUNTING:

Connect the harnessing (all labeled) from the RIO Board to the dash assembly which includes Dash Lamps, Steering Mech Motor and Potentiometer, Button Switches (use adapter harness for Exotica), and Keypad (Exotica only). (*NOTE: KEYPAD HARNESS CONNECTS DIRECTLY TO KEYPAD; ORIGINAL ADAPTER HARNESS (LIKELY BLUE) SHOULD BE REMOVED.*) Reconnect the grounding braid that was disconnected during dash removal. For USA only, connect the in-dash speakers to a matching speaker harness labeled "USA speakers."
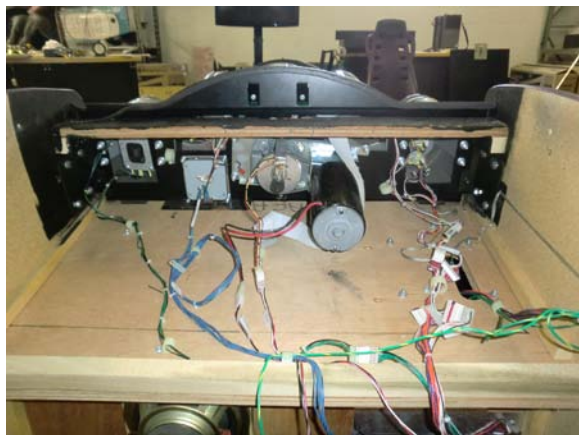
Figure 45 - Exotica Dash Harnessing Connected
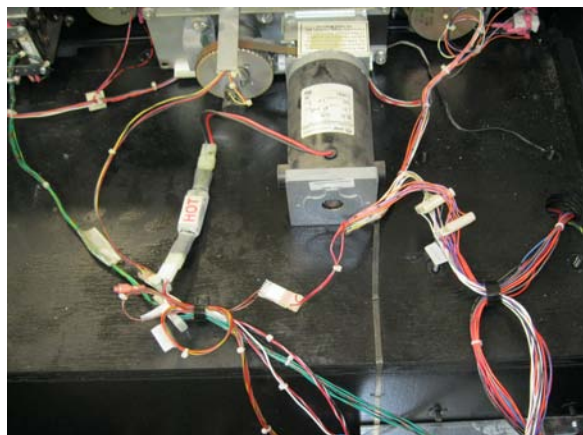
Figure 46 - USA Dash Harnessing Connected

Connect harnessing for Coin Door, Dollar Bill Validator (if applicable), Test/Service Switch Assembly, Pedal Mech, and existing Woofer (World & Exotica only). (*NOTE: ORIGINAL WOOFER HARNESS SHOULD BE REMOVED TO CONNECT HARNESS FROM RIO BOARD.*)

Connect harnessing from AC Power Plate to the input of the Transformer. Connect the output connector of the Transformer to the blue harness from RIO/Wheel Driver Board, labeled either "C USA X-FORMER" OR "WORLD EXOTICA X-FORMER" depending on the cabinet you are converting.

Figure 47 - Exotica Transformer Connections
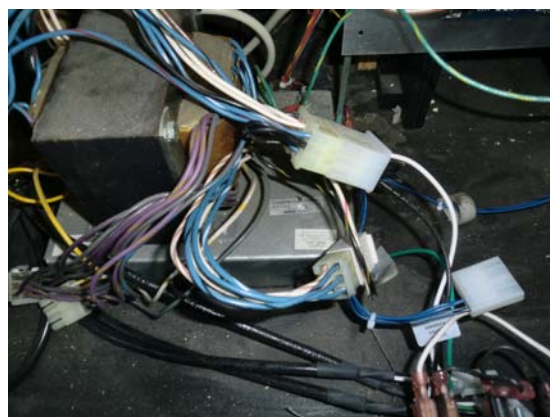
Figure 48 - USA Transformer Connections

Connect the ground wire (18 AWG green wire with fork terminal) from AC Power Plate and the cabinet safety ground wires (18 AWG green/yellow wires with ring terminals – from Coin Door, Pedal Mech, Pedestal Channel harness, and Woofer) to the Transformer mounting plate chassis by sandwiching the fork terminal and ground rings between the mounting wood screw and the chassis plate. Alternatively, the ring terminals (not the fork terminal) can be mounted to the AC Power Plate ground stud.

Figure 49 - Transformer Chassis Plate Grounds
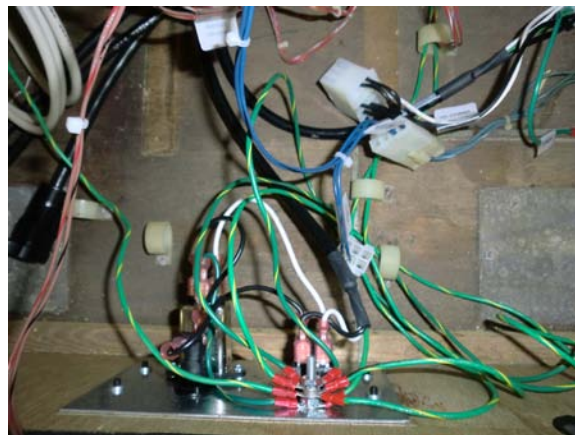
Figure 50 - AC Power Plate Grounds

Connect All Safety Grounds!!!

INSTALL PC SHELF ASSEMBLY FOR WORLD & EXOTICA CONVERSIONS:

The PC will be attached to the PC shelf using (2) brackets, (1) foam pad, and (2) mounting straps with snap buckles. The brackets will be attached to the plywood PC shelf using (3) #8 x 3/4" L Hex Head Wood Screws (P/N: 31-SA008-01-003) for each bracket.

Figure 51 - PC Strapping Parts (plus Foam Pad)

World & Exotica cabinets have a Woofer above the Pedal Mech which will restrict the position of the PC. In order to mount the PC successfully, the bracket shown with screws (toward rear of cabinet) will overhang the shelf slightly. It is best to install screws in slots first to allow for translational adjustment. The last screw can be used on any of the other 3 holes and will lock the bracket from further movement.

After the position of the PC has been determined, mount the second bracket in the orientation shown in Figure 51 using the same hardware that was used to mount the first bracket. Install (2) mounting straps with snap buckles through outer slots in bracket (buckles will need to be removed while running the strap through the brackets). After the straps and buckles have been installed place the foam pad atop the brackets and the PC on the pad with the front of the PC against the cleat. Snap both buckle clips and tighten. (*NOTE: The straps should wrap around the top of the PC and when tightened, should hold it tight to the PC Shelf.*)

Figure 52 - Strap and PC Orientation

Use (4) 1/4-20 x 1-7/8" L Black Flat-Head Carriage Bolts (P/N: 31-CB250-03-006) and (4) 1/4-20 Keps Lock Nuts (P/N: 32-1400) to affix the brackets attached to the PC shelf assembly to the side walls through the holes that were drilled during the sawdown process. The orientation of the PC shelf should be such that the PC front is toward the right side of the cabinet when viewed from the rear.

Figure 53 - Proper Mounting of PC Shelf for World & Exotica Conversions

Tighten the PC straps by pulling on the legs of the straps. (*NOTE: THESE MUST BE TIGHT FOR THE PC TO BE SAFELY SECURED IN ANY TYPE OF TRANSIT. IT IS RECOMMENDED TO ROUTINELY CHECK THAT THESE STRAPS ARE TIGHT DURING NORMAL OPERATION.*)

INSTALL PC SHELF ASSEMBLY FOR USA CONVERSION:

USA cabinets do not have a Woofer like World & Exotica, therefore installing the brackets will be easier. Follow the same process as was described for World/Exotica, except the bracket and snap buckles must **NOT** extend beyond the rear edge of the PC shelf. If this happens, the back door will not close properly and damage to the buckles and/or PC is likely.
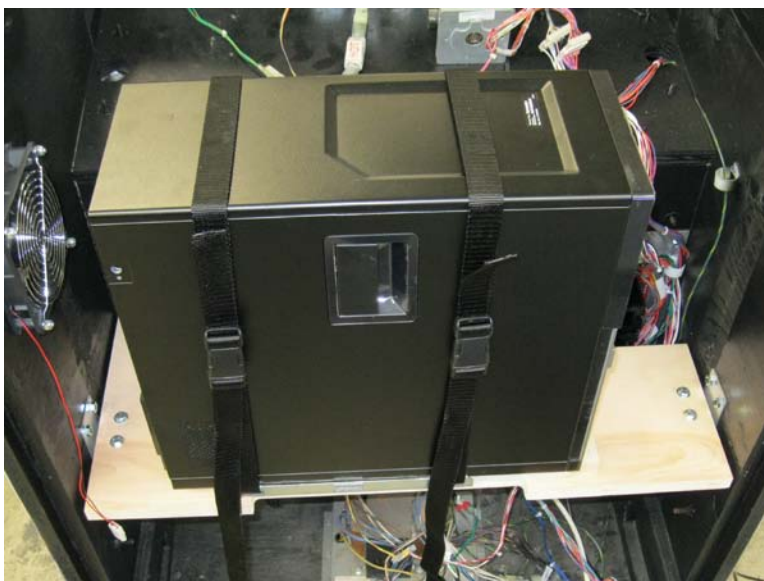
Figure 54 - Proper Mounting of PC Shelf for USA Conversions

As was mentioned in the World & Exotica section, THESE STRAPS MUST BE TIGHT FOR THE PC TO BE SAFELY SECURED IN ANY TYPE OF TRANSIT.

NOTE: You may consider removing the PC from the cabinet until the remainder of the cabinet has been built. If this is the case, be sure to reference this section when you plan to complete the PC connections.

Complete PC Harnessing by connecting the following connections from the RIO Board to the PC: 8-pin watchdog connector (labeled "PC"), Parallel Port Connector, 1/8" stereo plug (to green stereo output jack on rear of PC), and USB Cable. Connect the DVI side of the supplied DVI-HDMI cable into the PC Video Card (not onboard video). Plug AC Line cord into PC, and then plug into mating 3-prong AC receptacle at the base of the cabinet. Also, plug Security Dongle into USB port.

Figure 55 - PC Connections

Connect the 2-pin connector labeled "12V FAN" from the main harness to the fan on the side wall.

INSTALLING CABINET BRACKETS, WOOD PANELS, & PLASTIC HOOD:

Install (2) Long L-Brackets (1 each side): use (6) 1/4-20 x 1-1/4" L Black Flat-Head Carriage Bolts (P/N: 31-CB250-03-005) and (6) 1/4-20 Keps Lock Nuts (P/N: 32-1400) to affix the brackets to the side wall near the top edge of the cabinet through the holes that were drilled during the sawdown process. For World & Exotica conversions, the short leg of the bracket should be on the cabinet sides; for USA conversions, the long leg of the bracket should be on the cabinet sides and 1-7/8" L bolts should be used (P/N: 31-CB250-03-006).

Figure 56 - Install Long L-Brackets (World & Exotica shown)

NOTE: Area on interior cabinet sides above L-bracket needs to be painted black, as this area will be visible when the cabinet is fully assembled.

Install (2) Speakers on Bottom Side of Top Panel (World & Exotica only): use (8) 6-32 x 1-1/4" L Carriage Bolts (P/N: 31-CB006-01-001) and (8) #6 Flat Washers (P/N: 3-180) and (8) 6-32 Keps Lock Nuts (P/N: 32-600) to mount the Speakers from your original cabinet to the bottom side of the Top Panel. The bottom side of the panel can be determined by the visible t-nut inserts. The connection tabs on the speakers should be pointed toward the back (toward oval cut-outs) of the Top Panel for easier harnessing connection.
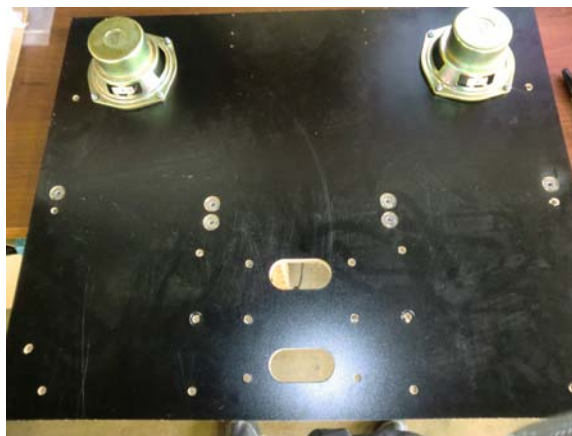
Figure 57 - Install Speakers on Top Panel (World & Exotica only)

Install Top Panel (and Connect Speaker Harnessing): place Top Panel atop the L-Brackets and connect the fast-on connectors from harness to the speakers (brown/red on positive (+) terminals and brown/black on the negative (-) terminals). Then use (6) 1/4-20 x 1-1/4" L Black Flat-Head Carriage Bolts (P/N: 31-CB250-03-005) and (6) 1/4-20 Keps Lock Nuts (P/N: 32-1400) to mount Top Panel to the L-Brackets. The orientation of this panel is shown in Figure 58. For USA conversions, don't mount the panel on the middle hole of the L-Brackets (the free hole will be used for mounting the dash plastic). Also, drive (4) #8 x 1-1/4" L Phillips Wood Screws (P/N: 31-BH008-03-003) through the pilot holes near the front of the Top Panel into the existing wood support beam found on all cabinets.

Figure 58 – Install Top Panel

Install (2) Short L-Brackets to Rear of Top Panel: use (2) 1/4-20 x 1-1/4" L Black Flat-Head Carriage Bolts (P/N: 31-CB250-03-005) and (2) 1/4-20 Keps Lock Nuts (P/N: 32-1400) to mount short L-Brackets to bottom side of Top Panel at the rear of the cabinet. The orientation of the bracket can be seen in Figure 59, showing the short leg of the bracket mounting flush to the Top Panel. Use only (1) set of fasteners per bracket on their outermost mounts (towards cabinet sides) as the other mounts (towards cabinet center) will be utilized when the LCD Tower is mounted.

Figure 59 - Install Short L-Brackets

Install Back Door Jamb Panel (with Lock Hardware): use the hardware from your current cabinet to remount the original lock plate assembly (see Figure 17) to the plywood Back Door Jamb Panel in the same fashion that it was installed previously. The exterior face of the panel can be recognized by the counter-bored holes that the lock plate assembly hardware will utilize (see Figure 60). Use (4) 1/4-20 x 1-1/4" L Black Flat-Head Carriage Bolts (P/N: 31-CB250-03-005) and (4) 1/4-20 Keps Lock Nuts (P/N: 32-1400) to mount the plywood Jamb Panel to the short L-Brackets. Also, drive (4) #8 x 1-1/4" L Phillips Wood Screws (P/N: 31-BH008-03-003) through the pilot holes near the edges of the panel. (*NOTE: You may consider using wood glue on wood-to-wood joints to increase strength, although not required.*)

Figure 60 - Exterior Face of Back Door Jamb Panel

Figure 61 - Install Back Door Jamb Panel

Install Hood Mounting Block: use (2) #10 x 2-1/2" L Phillips Wood Screws (P/N: 31-BH010-02-001) to mount the Hood Mounting Block to the Top Panel such that the T-nut inserts are facing upward. Use the pilot holes on the Top Panel to spot the mounting locations, which vary depending on the cabinet you are converting. For World & Exotica conversions, use the set of pilot holes closer to the front of the cabinet and use the second set (offset 1" further back) for USA conversions.

Figure 62 - Install Hood Mounting Block

Install Plastic Hood: use (6) 1/4-20 x 3/4" L Black Tamper-Resistant Torx (T-27) Machine Screws (P/N: 31-TP250-03-008) and (6) 1/4" Black Flat Washers (P/N: 3-177) to mount the Plastic Hood to the Top Panel and Hood Mounting Block. Slots have been cut in the Hood to allow for some translational adjustments to close any gaps between the Plastic Hood and the existing dash assembly. Single-sided foam tape has been supplied as a supplementary solution to close gaps of this nature. Foam tape should be applied to the dash plate (not the plastic hood).

Figure 63 - Install Plastic Hood
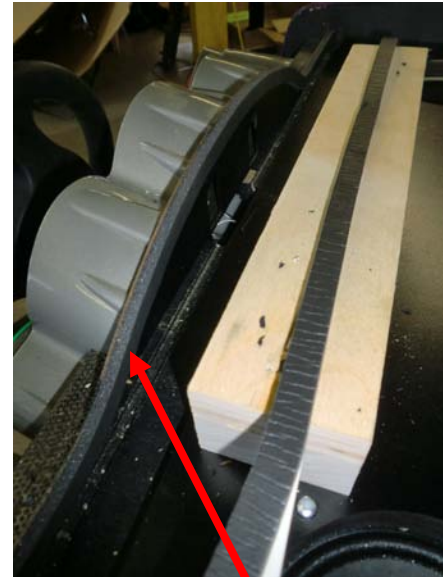
Figure 64 - Foam Tape on Dash Plate

For USA conversions, the outer rear mounts on each side of the Plastic Hood will need to pass through the middle hole of the long L-Brackets and will require (2) 1/4-20 x 1-1/4" L Black Flat-Head Carriage Bolts (P/N: 31-CB250-03-005) and (2) 1/4-20 Keps Lock Nuts (P/N: 32-1400) for successful installation.

Figure 65 - Plastic Hood Hardware for USA conversions

INSTALLING LCD TOWER ASSEMBLY & MONITOR:

This Super Cars LCD Conversion Kit is designed to accommodate any retail flat screen LCD monitor up 42" in size (we recommend using a monitor 32-42" in size). There are two different configurations of the LCD Tower Assembly. The configuration of the tower as delivered in the kit is intended for a 37-42" monitor. If you wish to use a smaller monitor (32-36"), the LCD mounting plate and the marquee will need to be rotated 180°, which orients the monitor closer to the player. Also, the installed wire-way grommet would need to be moved to the other side of the tower. (*NOTE: All photos will show installation process for larger (37-42") monitors.*)

SUPPORTED MONITORS: The mounting holes on the Monitor Mounting Bracket are based on the VESA mounting standard, the most widely accepted monitor mounting standard. The following mounting hole patterns can be accommodated (Height x Width): 200 mm x 200 mm & 200 mm x 400 mm. As most manufacturers follow this standard, most monitors (including cost-effective units) should mount and function without any issues. If you plan on doing multiple conversions, sample your first monitor for fit and function prior to purchasing multiple units.

Install the LCD Tower: use (12) 1/4-20 x 1-1/2" L Black Carriage Bolts (P/N: 31-CB250-03-001) and (12) 1/4-20 Keps Lock Nuts (P/N: 32-1400) and (10) 1/4" Zinc Flat Washers (P/N: 3-177-1) to secure the Tower to the Top Panel. The washers should be used between the wood Top Panel and the Keps Lock Nuts, but are not necessary for the rearmost outside mounts which pass through the short L-Brackets at the rear of the cabinet. (*NOTE: the connector inside the tower is the power connection to the Marquee Assembly. Be sure that the harnessing feeds through the oval cut-out on the Top Panel before mounting the LCD Tower.*)

Figure 66 - Mount LCD Tower (Shown for 37-42" Monitor Setup)

NOTE: For 32-35" Monitors, rotate LCD Tower 180° compared to the orientation shown in Figure 66. Likewise, the Marquee Assembly and the LCD Mounting Plate will need to be rotated as well.

Connecting the Marquee Harnessing: retrieve the connector from the Marquee/LCD tower and plug into "P1" connector on RIO PCB.
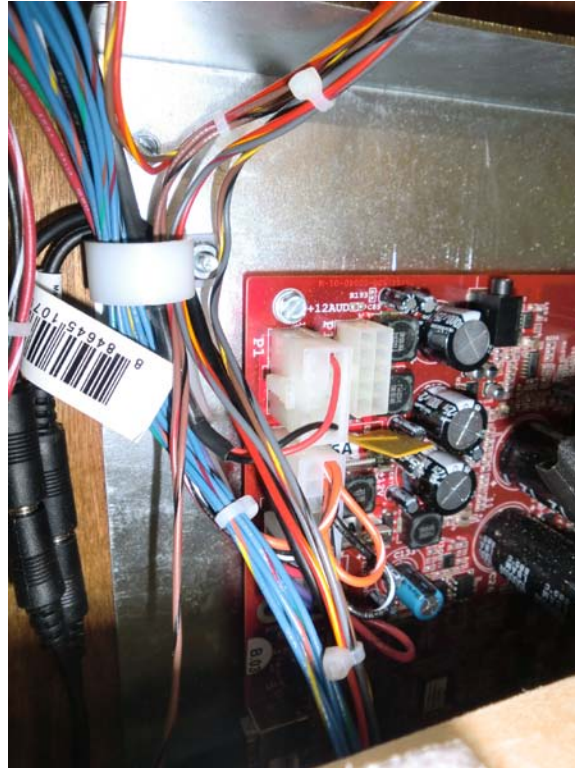
Figure 67 - Marquee Connector at "P1" on RIO PCB

Install Monitor: First, remove the Monitor Security Box to access the Monitor Mounting Bracket by removing (6) 10-32 x 1/2" L Black Tamper-Resistant Torx (T-25) Machine Screws and (6) #10 Black Flat Washers on the sides and top of the Box. After you have access to the Monitor Mounting Bracket, you may need to adjust the position of the Bracket to accommodate your Monitor; do this by loosening and moving the 2 Black Hex Bolts up or down on the Tower tube. You may also need to slide the Marquee assembly up or down as well to accommodate the size of your Monitor. To mount the Monitor, use (4) M6 x 16mm L Hex Bolts (P/N: 31-MSM06-01-004) with (4) 1/4" Split Lock Washers (P/N: 3-200-25) to mount your Monitor to the Mounting Bracket. (*NOTE: DO NOT OVERTIGHTEN THE BOLTS AS DAMAGE TO YOUR MONITOR'S MOUNTING INSERTS MAY OCCUR.*) After the Monitor is mounted, determine the proper mounting holes on the Tower tube for the Monitor Mounting Bracket such that there is clearance (the Monitor shouldn't be resting on the T-molding) between the cabinet sides and the bottom of your Monitor. Tighten the (2) 3/8-16 x 5" L Black Hex Bolts and (2) 3/8" Black Flat Washers and (2) 3/8-16 Black Elastic Stop Nuts once the Monitor position is set.

Figure 68 - Monitor Mounted on Narrow Hole Pattern

NOTE: If you previously removed the PC during the "construction" of the cabinet, re-install the PC and make all necessary connections at this time (see Figure 55).

Attach the Monitor Harnessing: feed HDMI cable (from PC) up through the oval cut-out in the Top Panel and up the Tower assembly and pull the cable through the front wire-way hole (the one with the grommet) of the tower assembly. Connect the HDMI cable to your Monitor at the most convenient HDMI connection. Feed the Monitor's power cord into the tower through the wire-way hole and back into the cabinet and plug into its mating 3-prong AC receptacle at the base of the cabinet. (*WARNING: DO NOT PLUG MONITOR DIRECTLY INTO THE WALL!*)

Moving the Marquee Assembly: use (2) 3/8-16 x 5" L Black Hex Bolts and (2) 3/8" Black Flat Washers and (2) 3/8-16 Black Elastic Stop Nuts to securely affix the Marquee Assembly in place such that there is some, albeit minimal, clearance between the top of your Monitor and the base of the Marquee box.

Figure 69 - Side View Marquee Clearance

Figure 70 - Front View Marquee Clearance

Reinstall Monitor Security Box and Install Tower Plug: the Monitor Security Box is designed to utilize (2) standard door locks (not supplied) to maximize the security of your Monitor from theft. Install (2) standard locks with its latch horizontal toward the center of the Box when in its locked position. Remount the Security Box on the rear of the Monitor Mounting Bracket using (6) 10-32 x 1/2" L Black Tamper-Resistant Torx (T-25) Machine Screws and (6) #10 Black Flat Washers on the sides and top to secure the Box in the same fashion that you received it. Then, install the supplied plastic Tower Plug in 2" hole on the rear of the Tower assembly, once all Monitor and Marquee harnessing have been connected.

Figure 71 - Install Standard Locks on Security Box

Figure 72 - Install Security Box and Tower Plug

REMAINING ARTWORK INSTALLATION

Your pedestal assembly will remain in its current form for this conversion process, with the exception of new artwork. Prepare the surfaces for art installation by cleaning the sides of any dirt, dust, or residue. If original decals are peeling off, it is recommended to remove them entirely before installing supplied decals. (*NOTE: ALL LOGOS SHOULD BE VISIBLE (NOT CUTOFF) WHEN DECALS ARE INSTALLED PROPERLY.*) It may be necessary to cut away holes in decals for preexisting bolt heads. We recommend removing the bolts and replacing after art installation is complete.

For USA and World Conversions, you will need to install the supplied artwork on each side and the back of the pedestal (use a utility knife or precision knife to cut away excess material).

For Exotica conversion, in addition to the two sides and back, two extra pieces of side art are supplied to be installed on the secondary wood sides of the pedestal.

Figure 73 - Exotica Pedestal Art

Lastly, there are supplemental decals as replacements for the seat backs of World and Exotica seats as well as decals for the dash assemblies of World and Exotica cabinets.

CONNECT PEDESTAL ASSEMBLY TO MAIN CABINET

Connect the Seat Speaker Harnessing: find connector labeled "seat speaker" on the main harness and plug into the original seat speaker harness located in the channel at the base of the cabinet. Connect the original seat speaker harness to the pedestal harness.

Use original hardware to reattach the pedestal to the main cabinet.

BACK DOOR SAWDOWN

Remove all existing lock and tongue plate hardware from your existing cabinet back door. All of these parts and hardware will be reused after the door is cut to size.

Measure the vertical distance of the new cabinet door opening, and proceed to cut the back door to this height less 1/8", **CUTTING OFF THE EXCESS HEIGHT FROM THE BOTTOM OF THE DOOR** with a table or circular saw. (*NOTE: If the vents for your current back door interferes with cutting from the bottom, you will need to cut the excess height from the top of the door; however, you will need to use the sawed off portion to drill the new hole for the lock assembly, including counter-boring the hole to the proper depth to match the lock that you are using.*)
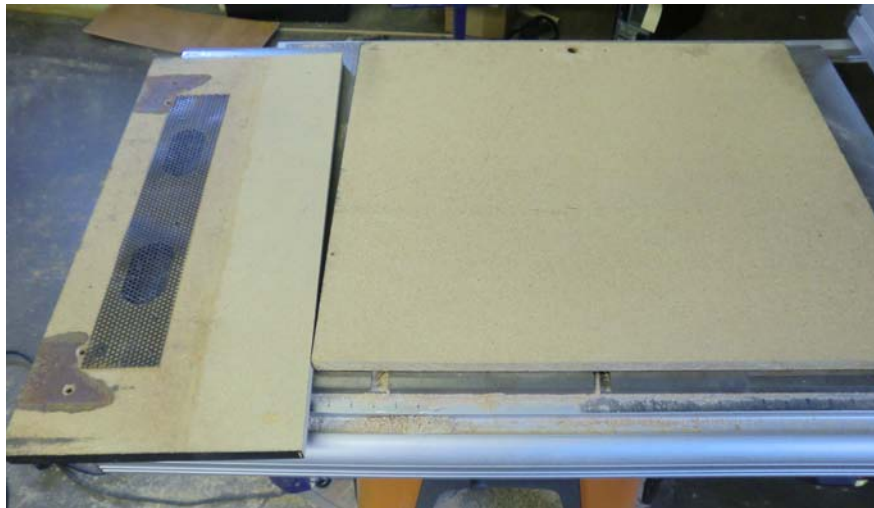
Figure 74 - Cut Excess Height from the Bottom of the Door (See Above if Not Possible)

Using the sawed off portion of the back door as a template, drill holes to remount the tongue plates.

Figure 75 - Drill Holes for Tongue Plates

Align the bottom edge of the sawed off portion of the back door with the right side of the sawdown back door (when viewed from the finished side) and mark the ventilation hole slots. Cut these slots using a jig saw and/or hole saw. Paint any cut edges black, as was done with the main cabinet. Reinstall the lock assembly and tongue plates. Staple the vent material to the inside surface of the back door where the vent holes were cut-out (cutting of the vent material may be necessary for proper fit).

Figure 76 - Completed Back Door

For further security, we suggest using a rear door padlock assembly.

Check that all connectors and wires are safely secured away from sharp objects and moving parts. Using cable clamps from your original electronics assembly, dress harnessing as needed. Make sure the cabinet power switch is in the off position. Plug in AC Line Cord to AC Power Plate at rear of cabinet and plug into wall outlet.

Turn on game and begin initial calibration process per the Super Cars manual included in the kit.

AFTER YOU HAVE VERIFIED THAT THE GAME AND MONITOR ARE WORKING:

Install Monitor Button Guard: a black piece of plastic has been supplied to prevent monitor button tampering, such as input, menu, channel and volume adjustments. The plastic can be cut to size and/or pre-bent by hand to accommodate a curved surface if needed to fit your specific monitor. Use the supplied double-sided foam tape to mount the plastic guard in such a way that it blocks button access but leaves the monitor's IR sensor free of obstruction (check monitor manual for IR sensor location), in case the use of the monitor's remote control is needed. (*WARNING: FOAM TAPE IS SEMI-PERMANENT AND WILL REQUIRE SPECIALTY PRODUCTS TO REMOVE ADHESIVE RESIDUE SHOULD IT NEED TO BE REMOVED FOR ANY REASON.*)

Figure 77 - Monitor Button Guard (as Delivered)

EXPLODED VIEW & KIT CONTENTS:
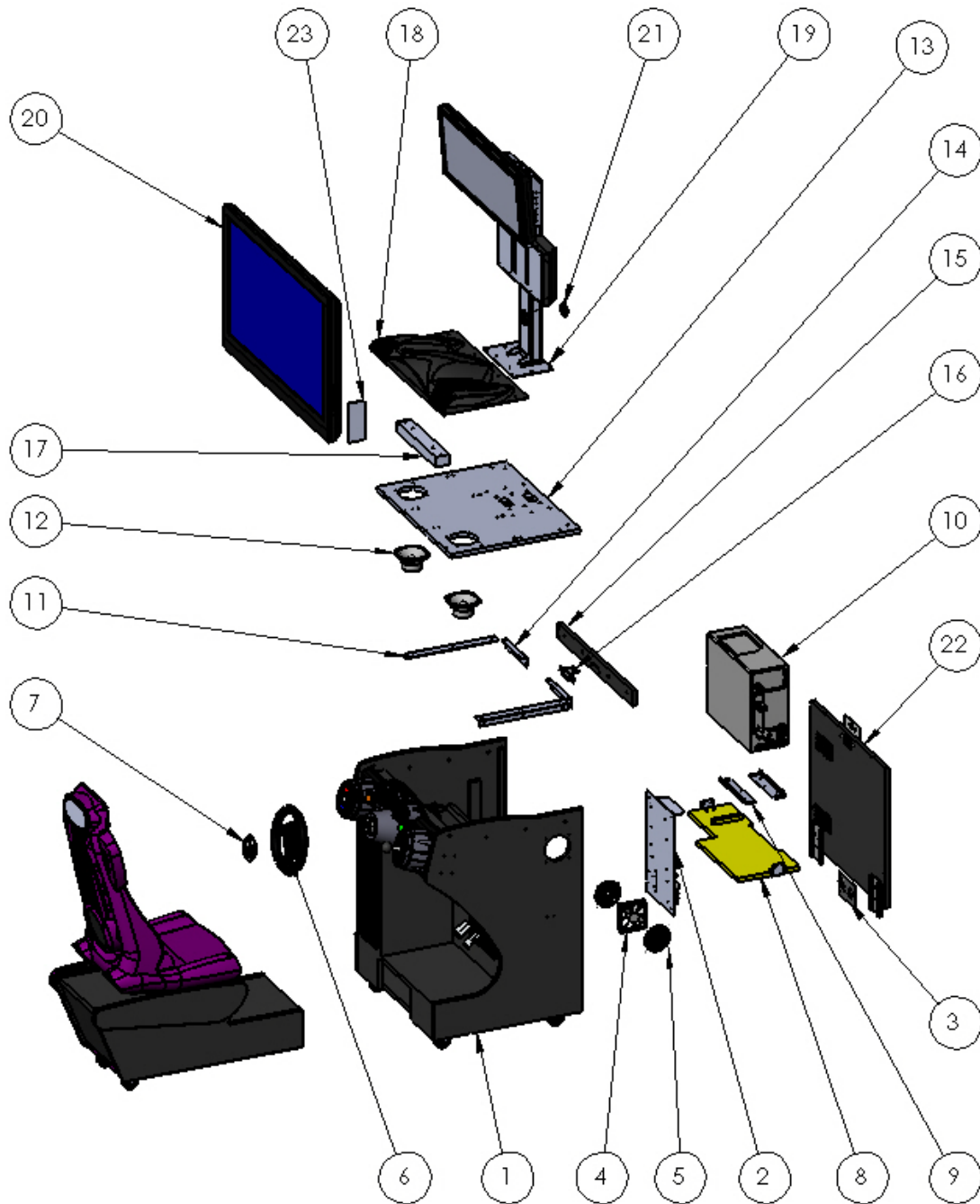
SUPER CARS LCD CONVERSION KIT
MECHANICAL EXPLODED VIEW DRAWING

PARTS LIST:

1. ORIGINAL CRUIS'N CABINET (supplied by operator)
2. RIO PLATE ASSEMBLY
   - RIO HARDWARE PLATE (RT P/N: 600-00511-01)
   - RIO PCB (RT P/N: 500-00040-00)
   - H (WHEEL) DRIVER PCB (RT P/N: 500-00037-00)
   - HARNESSING
3. AC POWER PLATE (RT P/N: 600-00897-01)
4. DC FAN (RT P/N: 820-00012-00)
5. WIRE FAN GUARD – 2 PIECES (RT P/N: 800-00001-00)
6. STEERING HOOP (RT P/N: 2-1-03-00-00-001)
7. WHEEL CAP (RT P/N: 2-1-03-00-00-003)
8. PC SHELF ASSEMBLY
   - PLYWOOD SHELF (RT P/N: 601-00559-01)
   - PC SHELF BRACKET – 2 PIECES (RT P/N: 600-00814-01)
9. PC STRAP BRACKET – 2 PIECES (RT P/N: 600-00901-01)
10. PC (models may vary)
11. CABINET SIDE (LONG) L-BRACKET – 2 PIECES (RT P/N: 600-00815-01)
12. SPEAKERS – 2 PIECES (from original cabinet)
13. PLYWOOD TOP PANEL (RT P/N: 601-00561-01)
14. CABINET MINI (SHORT) L-BRACKET – 2 PIECES (RT P/N: 600-00813-01)
15. PLYWOOD REAR DOOR JAMB PANEL (RT P/N: 601-00558-01)
16. LOCK PLATE & HARDWARE (from original cabinet)
17. HOOD MOUNTING BLOCK (RT P/N: 601-00578-01)
18. PLASTIC HOOD ASSEMBLY
    - PLASTIC HOOD (RT P/N: 603-00577-01)
    - HOOD SPEAKER GRILL – 2 PIECES (RT P/N: 600-00895-01)
19. LCD TOWER ASSEMBLY
    - TOWER POST (RT P/N: 600-00799-01)
    - LCD MOUNTING BRACKET (RT P/N: 600-00842-01)
    - LCD SECURITY BRACKET (RT P/N: 600-00843-01)
    - MONITOR SECURITY BOX (RT P/N: 600-00802-01)
    - MARQUEE MOUNTING BRACKET (RT P/N: 600-00801-01)
    - PVC GROMMET (RT P/N: 603-00580-01)
    - MARQUEE ASSEMBLY
      - MARQUEE BOX (RT P/N: 600-00802-01)
      - MARQUEE TRANSLITE (RT P/N: 606-00665-01)
      - MARQUEE PETG (RT P/N: 603-00573-01)
      - LONG EDGE BRACKET – 2 PIECES (RT P/N: 600-00870-01)
      - SHORT EDGE BRACKET – 2 PIECES (RT P/N: 600-00871-01)
20. LCD MONITOR: 32"-42" (supplied by operator)
21. TOWER PLUG (RT P/N: 603-00579-01)
22. BACK DOOR (will be altered during conversion)
23. LCD BUTTON COVER GUARD (RT P/N: 603-00585-01)

NOT SHOWN:
- STEERING MECH TIMING BELT (RT P/N: 604-00025-01)
- PC MOUNTING STRAP – 2 PIECES (RT P/N: 600-00925-01)
- PC BUCKLE CLASP: MALE & FEMALE – 2 PIECES (RT P/N: 600-00906-01)
- PC FOAM PAD (RT P/N: 600-00924-01)
- SECURITY DONGLE
- COMPLETE HARDWARE KIT (INDIVIDUALLY LABELED BAGS)

LOOSE TEMPLATES:
- RIGHT SIDE TEMPLATE (RT P/N: 606-00714-01)
- LEFT SIDE TEMPLATE (RT P/N: 606-00715-01)
- REAR PANEL TEMPLATE (RT P/N: 606-00716-01)

LOOSE ARTWORK PIECES:
- CABINET RIGHT SIDE DECAL (RT P/N: 606-00669-01)
- CABINET LEFT SIDE DECAL (RT P/N: 606-00670-01)
- PEDESTAL RIGHT SIDE DECAL (RT P/N: 606-00671-01)
- PEDESTAL LEFT SIDE DECAL (RT P/N: 606-00672-01)
- EXOTICA PEDESTAL RIGHT SIDE DECAL (RT P/N: 606-00712-01)
- EXOTICA PEDESTAL LEFT SIDE DECAL (RT P/N: 606-00713-01)
- PEDESTAL BACK DECAL (RT P/N: 606-00673-01)
- WORLD SEAT BACK DECAL (RT P/N: 606-00674-01)
- WORLD DASH DECAL (RT P/N: 606-00711-01)
- EXOTICA SEAT BACK DECAL (RT P/N: 606-00675-01)
- EXOTICA CENTER DASH DECAL (RT P/N: 606-00708-01)
- EXOTICA LEFT DASH DECAL (RT P/N: 606-00709-01)
- EXOTICA RIGHT DASH DECAL (RT P/N: 606-00710-01)

MANUALS:
- CONVERSION KIT INSTRUCTIONS MANUAL (RT P/N: 040-00029-01)
- SUPER CARS OPERATOR'S MANUAL (RT P/N: 040-00019-01 SCARS)

CABINET COOLING FAN

FAN 12V
12V
GND

VIDEO OUT
DVI

LCD DISP

TO DASH ASSEMBLY

USB-A
USB-A
USB-A
USB-A
USB-A

SECURE KEY

AUDIO OUT

SERIAL PORT
DB25
TO MTR DRIVE BRD

+5V STBY SWITCHED
DIGITAL GND
+5V STBY
5VDC
GND
POWER ON
12V

8 ORG VHT
7 VID ORG
6 GRY
5 VID GRN
4 GRN
3 BLK VHT
2 RED
1 BLK VHT

R I/O

P6
1 STEER
2
3 WHT
4 WHT ORG
5 AD 5V   RED VHT X2
6 AD GND BLK VHT X2

P8
1 WHT GRY
2 BRN
3 BRAKE   GRN BLK
4 GEAR 1 GRN BRN
5 GEAR 2 GRN RED
6 GEAR 3 GRN BRN
7 GEAR 4 GRN ORG
8 TUNES   WHT BRN
9 BLK
10 ORG
11 12V_PWM   BLK
12 12V_PWM   ORG
13 GND   WHT BLK
14 VIEW 2   WHT BRN
15 VIEW 3   WHT RED
16 START1 LMP VID ORG
17 VIEW 1 LMP VID BLK
18 VIEW 2 LMP VID BRN
19 VIEW 3 LMP VID RED
20 TUNES LMP   VID YEL
21 P1START
22

P2
18 BLK VHT
17 BLK VHT
16 VID GRN
19 5V STBY SW VID ORG
20 PC PWR ON   GRN

P1
1 12V AUDIO IN   ORG
2 GND BLK
3 GND BLK VHT
4 GND GRY
5 GND DIG BLK VHT
6 GND DIG RED
7 5V IN BLK VHT
8 5V IN RED
9 12V IN ORG VHT
10 12V STBY VID GRN
11 5V IN
12 12V IN
13 GND DIG
14 GND PC
15 GND DIG
16 GND DIG
17 12V FUSED
18 12V FUSED
19 12V FUSED
20
1 12V FUSED ORG
2 12V FUSED ORG
3 RED
4 BLK
5 BLK
6 BLK
7 ORG
8 BLK
9 RED
10 BLK

AUDIO IN

P7
24 WOOFER(+)
23 WOOFER(-)
...

P9
1 L SPKR(+)   GRY RED
2 L SPKR(-)   GRY BLK
3 R SPKR(+)   BRN RED
4 R SPKR(-)   BRN RED
5 RED YEL(X2)
6 BRN YEL(X2)
7 WOOFER(+)
8 WOOFER(-)

P5
12 COL 0 BLU
11 COL 1 BLU
10 COL 2 BLU GRN
9 ROW 0 BLU YEL
8 ROW 1 BLU BRN
7 ROW 2 BLU RED
6 ROW 3 BLU ORG
5 ROW 4 BLU BLK

P4
1 COIN 1   GRY BRN
2 COIN 2   GRY BLU
3 DBV   GRY ORG
4 TEST   BLU
5 SERVICE VID
6 VOL +   ORG RED
7 VOL -   ORG
...

SEAT WOOFER (EXOTICA)
RIGHT
LEFT

KEYPAD
1 GRN ORG
2 GRN RED
3 GRN BRN
4 GRN BRN
5 GRN BLK
6 GRN BLU
7 GRN
8 GRN YEL
KEY-TEK

COIN DOOR

COIN DOOR
FIELD GND
TEST
VOL +
VOL -
SERVICE
5V
BRN YEL
METER
(99999)
COIN_MTR
COIN 1
COIN 2
GND
DBV
12V

STEER MTR DRIVE BD
PARALLEL PORT
FROM PC

FROM EXISTING CABINET X-FORMER

BLU BLK 18AWG 1 +18V
BLU 18AWG   2 0V
18VAC MAX

MOTOR OUT
1 MOTOR OUT RED WHT 18AWG
2 GND   BLK WHT 18 AWG

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Parental Advisory

A note to parents: The Fast and the Furious is rated PG-13. Consult www.filmratings.com for further information.

Steering wheel force feedback technology is licensed from Atari Games Corporation, United States Patent #5,044,956.

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OPERATOR'S MANUAL

For Parts or Service contact your local Distributor or:

Betson Enterprises

303 Paterson Plank Road

Carlstadt, New Jersey

Main Phone: (201) 438-1300

Toll Free Phone: (800) 524-2343

Part Phone: (800) 828-2048

CAUTION:
• The specifications of this product are subject to change without notice for reasons such as performance.
• The content of this game, its main devices and design are protected under each federal law concerning patent, copyright and other intellectual properties.
• Unauthorized reproduction of this document or any of its contents is strictly forbidden.

Safety Instructions

Safety instructions apply to operators and service personnel. Read these instructions before preparing the video game machine (VGM) for play. Other safety instructions appear throughout thris manual.

WARNING: TRANSPORTING THE VIDEO GAME MACHINE (VGM).
The VGM contains glass and fragile electronic devices. Use appropriate care when transporting . Avoid rough handling when moving the VGM.
WARNING: DISCONNECT POWER.
Always turn the power OFF and unplug the VGM before attempting service or adjustments unless otherwise instructed. Installing or repairing components with the power switched ON can damage the components an void warranty.
WARNING: GROUND GAMES.
Avoid electrical shock! Do not plug in the VGM until you have inspected and properly grounded it. Only plug into a grounded, three-wire outlet. Do not use a "cheater" plug, or cut off the ground pin on the line cord.
WARNING: AVOID ELECTRICAL SHOCKS.
This VGM does not utilize an isolation transformer. Internal cabinet AC is not isolated from the external AC line.
WARNING: HANDLE FLOURESCENT TUBE AND CRT WITH CARE.
If you drop a fluorescent tube or CRT and it breaks, it will implode! Shattered glass can fly eight feet or more from the implosion.
WARNING: CHECK POWER SELECTOR, LAMP.
Set the 115/230 VAC selector switch on the power supply for the correct line voltage on the installation site. Verify that the fluorescent lamps are rated for the proper line voltage.
WARNING: USE PROPER FUSE.
Avoid electrical shock! Replacement fuses must be identically rated to the original fuse!
WARNING: ATTACH CONNECTORS PROPERLY.
Be sure all connectors mate properly. If connectors do not slip in easily, do not force them. Connectors are often keyed and only connect one way. Check for correct orientation.
WARNING: USE EXTREME CARE WHEN HANDLING PC.
The PC contains sensitive components such as a hard drive. Do not handle roughly. Call your distributor before servicing PC internal components. Ask about warranty information as it relates to the PC.

WARNING: HAZARD TO EPILEPTICS.

A very small portion of the population has a condition which may cause them to experience epileptic seizures or have momentary loss of consciousness when viewing certain kinds of flashing lights or patterns that are present in our daily environment. These persons may experience seizures while watching some kinds of television pictures or playing certain video games. Peoples who have not had any previous seizures may nonetheless have an undetected epileptic condition.

If you or anyone in your family has experienced symptoms linked to an epileptic condition (e.g., seizures or loss of awareness), immediately consult your physician before using any video games.

We recommend that parents observe their children while they play video games. If you or your child experience the following symptoms: dizziness, altered vision, eye or muscle twitching, involuntary movements, loss of awareness, disorientation, or convulsions, DISCONTINUE USE IMMEDIATELY and consult your physician.

PRODUCT SPECIFICATIONS

OPERATING REQUIREMENTS

ELECTRICAL POWER
Domestic   120VAC @ 60 Hz, 5 amps
Foreign   240VAC @ 50Hz, 2.5 amps

TEMPERATURE
32° F to 100°F
(0°C to 38°C)

HUMIDITY
Not to exceed 95% relative humidity.

INSPECTION AND INSTALLATION

WARNING: Use extreme care when moving or servicing the game cabinet. Don't plug in the game until you have read this manual. **If the line cord is damaged, it must be replaced by a similar cord available from the manufacturer or service agent.**

Please check the following after the game has been removed from its shipping crate and placed in a suitable play or service area.

Make sure that the game cabinet is level. Adjust the casters as needed.

1. Check the AC line cord for any visible signs of damage to the plug or line cord insulation.

2. Check for possible shipping damage to the following:

    - Player interfaces: steering wheel, buttons, keypad and shifter.

    - Seat assembly.

    - Monitor glass.

    - Cabinet backdoor.

    - Cabinet coin door.

    - Cabinet and seat decals.

3. Remove the coin door key from the coin return chute.

4. Open the top coin door and locate the key for the backdoor and the cashbox.

5. Locate hardware kit: tamper proof tool kit

     crossover network cable

     line cord

     seat hardware fasteners (8 sets)

6. Remove the backdoor the backdoor from the cabinet and visually inspect the electronic components.

7. Verify that all connectors are secure and that the bottom of the cabinet is free of loose objects which may have possibly come loose during shipping.

CAUTION: Access to back of the games should be limited to service personnel only! Allow minimum clearance between back of game and wall structure for cable and ventilation while preventing non-authorized access. Maximum clearance should be 6 inches (15 cm), in accordance with local code or whichever is less.

Seat Assembly Procedure

WARNING: The cabinet is top heavy. Install only on level surface. Use the leg levelers to make sure the cabinet and seat are stable. Do not push against plastic parts during movement.

1. Roll the cabinet and seat to the intended location and lower the leg levelers until both are equal height and stable.
2. Reach inside the base of the cabinet remove the bolts to fasten a mounting rail to the cabinet and set aside. Individually pull the rail out, flip it end over end and reinsert it. Fasten the rail to the inside of the cabinet with bolts until finger tight; some movement is required in the mounting rails to align holes with seat pedestal assembly. Repeat for the mounting rail on the other side. See diagram.
3.
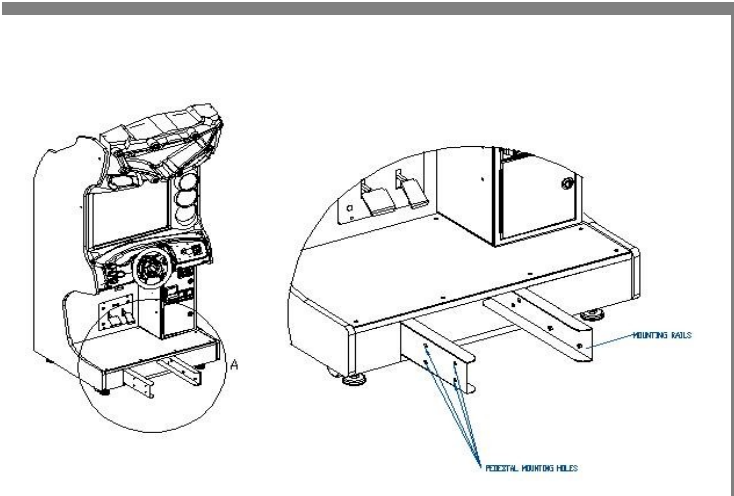
4. Roll the pedestal near the cabinet and align the opening in the pedestal with the ends of the rails. Slide the pedestal forward onto the rails leaving enough space to attach the wiring harness. Mate each cable connector and press firmly to seat the contacts. Ensure no wires are pinched during the pedestal attachment. Fasten in place with the ¼" X 20 tamper resistant screws and large flat washers provided.
5. Tighten the screws firmly with the wrench provided, and then tighten the bolts for the mounting rails.
6. Adjust all levelers until both cabinet and seat are flush and parallel with each other. Inspect for pinched wires before firmly tightening the remaining fasteners to attach the two pieces as one.

Power Up Procedure

1. Plug the game line cord into an appropriately wired and fused AC receptacle.
2. Locate the game AC main switch to the bottom left side on back of the game cabinet.
3. Turn the switch to the ON position.
4. The game attract feature will begin after the game is finished loading- approximately 1 minute.
5. Proceed to Switch Test of this document and verify proper game operation.

Game Networking

> NOTICE: To link the two games together, use the crossover cable provided in the spare parts bag. Use of another cable other than the one shipped with the game could void warranty or cause games not to link. Use network cables which are at least CAT5 grade.

Networking Considerations

Each FNF Super Cars game comes with a network cable. Optionally, a hub can be installed and located remotely to link additional units.

Take care to protect exposed game wiring from general foot traffic around the game. Use a conduit or wire way to protect the cables as needed.

Please mark linking cables for your game if other such cables are in the vicinity to avoid confusion. Network cables are not marked or coded.

Avoid routing the network cables near sources of heat, moisture or electrical energy such as neon lights, compressor motors, transformers etc.

Networking Setup

1. Remove the network cable from the spare parts bag inside the cashbox.
2. Connect each end of the cable to network jack behind each PC.
3. Neatly route the cable through the notch on the back of the cabinet.
4. Use the SYSTEM ADJUSTMENT in TEST MODE below for enabling link feature .Press TEST Button to access TEST MENU. Iis mounted inside the coin door of the cabinet.
5. Reset both games simultaneously and verify that link is successful. If not, check the settings for Machine ID conflict and make sure that the network cable is connected properly and secured. Please refer to the Game Troubleshooting Guide on this manual for more details.

```
                                    System Adjustments

                                    Attract Audio             No
                                    Max Name Length           7
                                    Wheel Stiffness           0.20
                                    Automatic Volume Sync.    Yes
                                    Allow Wheel Effects       Yes
  SET NETWORK ENABLE= ON  >>        Network Enabled           No
  SET UNIQUE MACHINE ID= 1-8  >>    Current Machine ID        8
                                    Language                  English

                                    Sync All Adjustments

                                    Exit
```

SETUP AND TEST MENU VOL (+)

Locate the *Service Button Panel*. The Service Button Panel is made up of two rocker switches. Simply press the side of the switch indicated by the function you want to activate. It is mounted inside the coin door area on top of the cash box vault. Press the **TEST** button to access the **Test Menu**.

```
┌─────────────────────────────┐
│        Raw Thrills, Inc      │
│                              │
│   Test              Vol (+)  │
│   ┌───┐             ┌───┐    │
│   │   │             │   │    │
│   └───┘             └───┘    │
│   Service           Vol (-)  │
└─────────────────────────────┘
```
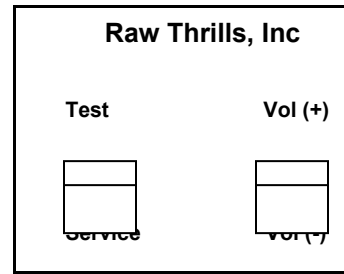
Menu Navigation:

Button	Action
Test	Enter Operator Screen
Start Button	Enter/Select Item Sub-Menu
Vol. (+) or View 1 Button	Scroll up thru Menu items
Vol. (-) or View 3 Button	Scroll down thru Menu items
Service or Tunes	Exit to previous Menu

MAIN MENU

The **Test Main Menu** appears when the **TEST** button is pressed.

```
Test Main Menu              Version Information

Diagnostics                 Version     : Super Cars 0.28
Game Audits                 OS Version  : OS v10.0b
Pricing Adjustments         Exe Version : 1.1.4
System Adjustments          Date        : Nov 29 2010
Game Adjustments            Time        : 10:42:10
Utilities                   ---
Calibration                 Machine ID       : 3
                            IP Address       : none
Volume                      ---
Attract Volume              RIO PCB Version  : 8
                            RIO FW Version   : 8010
Exit                        H2O SPD Version  : 02
                            ---
                            Serial number    : 80882
                            Lifetime Coin Count: 00000200




Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit
```

Diagnostics Menu

From the **Main Menu**, select **Diagnostics** and enter to view options.

```
Diagnostics Menu                        Diagnostics

Switch Test
Sound Test
Wheel Test
Monitor Test
Lamp Test
Coin Meter Test
Watchdog Test
Link System

Exit




Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit
```

Switch Test

From the **Diagnostics** select and enter **Switch Test**. Verify proper switch input function using this menu. Each switch activated will be indicated on the test screen in corresponding yellow box and will be accompanied by a switch active sound indicator. Verify pot value for min, center and max are correct. If not, proceed to Calibration section of this manual. Press and hold the **Service Button** for three seconds to return to the **Diagnostics Menu**.

```
Wheel/Pedals Info
  Input Device      Pot Value         Min     Max
     Wheel        [      ]  0          0      4080
     Gas          [      ]  0          0      4095
     Brake              Off          N/A     N/A

Button Info      TVVS Info        Keypad Info
     1          TEST    VOL +      1    2    3
     2
     3          CREDIT  VOL -      4    5    6
   TUNES        Shift Info
   START        ONE    THREE       7    8    9
   BRAKE        TWO    FOUR         *    0    #
   COIN 1                          Date:  Nov 29 2010
   COIN 2               Hold Service Or   Time:  10:42:10
   BILL                 Tunes To Exit     Version: Super Cars 0.28
                                          OS Ver:  OS v10.0b
                                          ID:      3
```
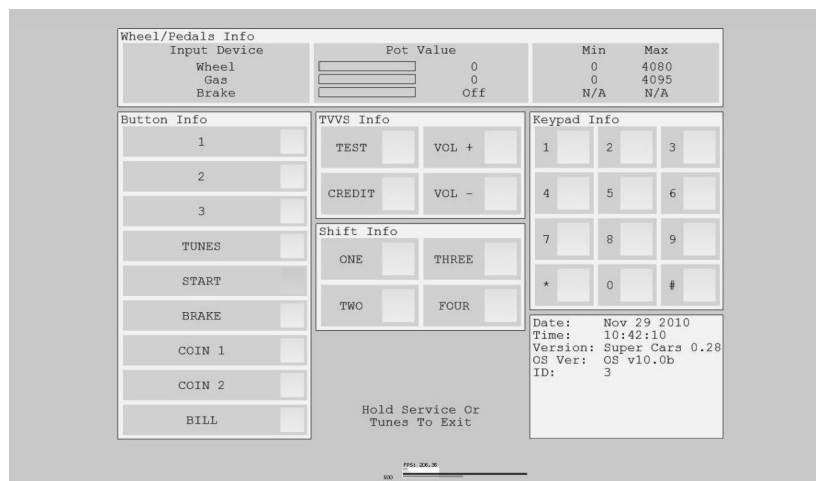
Sound Test

From the *Diagnostics Menu* select and enter *Sound Test*. Verify that marquee, cabinet and seat sound volume and quality are good. Press the Tunes Button to return to *Diagnostics Menu*

```
Sound Test Menu                    Sound Test

Change Music                       Current Music Track:
Change Effect                        Overflow
                                   Current Sound Effect:
Play 100 Hz Test                     gui_start
Play 1000 Hz Test

Set Pan Center
Set Pan Left
Set Pan Right

Exit




Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit
```
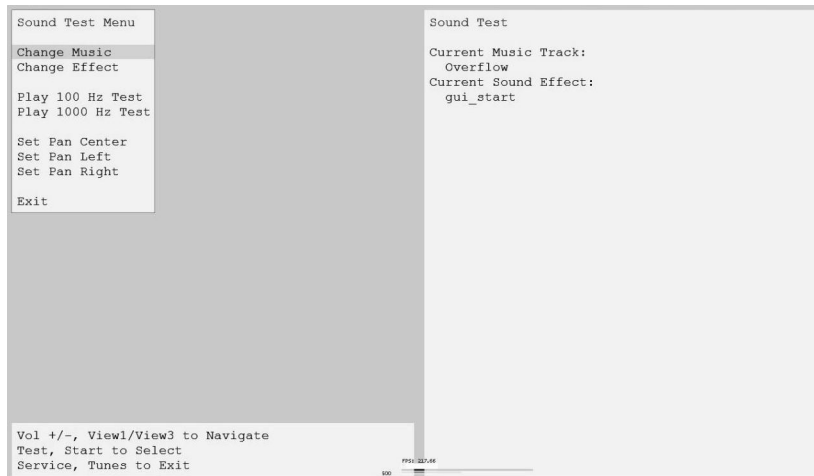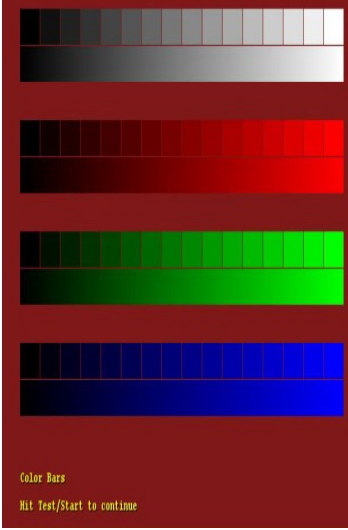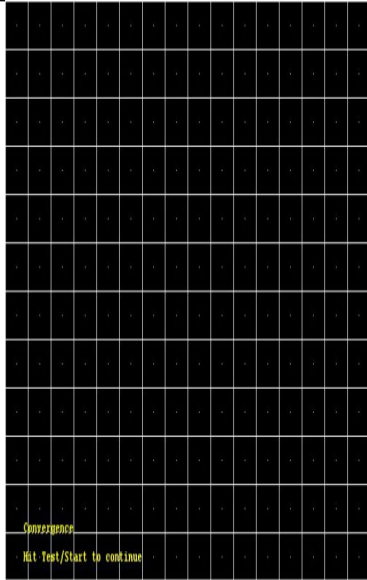
Wheel Test

Caution: Begin by placing the wheel at center position. The steering wheel moves automatically during the wheel test. Stay clear of the wheel!

From the *Diagnostics Menu* select and enter *Wheel Test*. Verify proper wheel force feedback function using this menu. Follow the screen instruction carefully.

```
Wheel Test
        Hit Test/Start to Begin

        Turning Wheel Left

        Hit Test/Start to Continue

        Turning Wheel Right

        Hit Test/Start to Exit
```
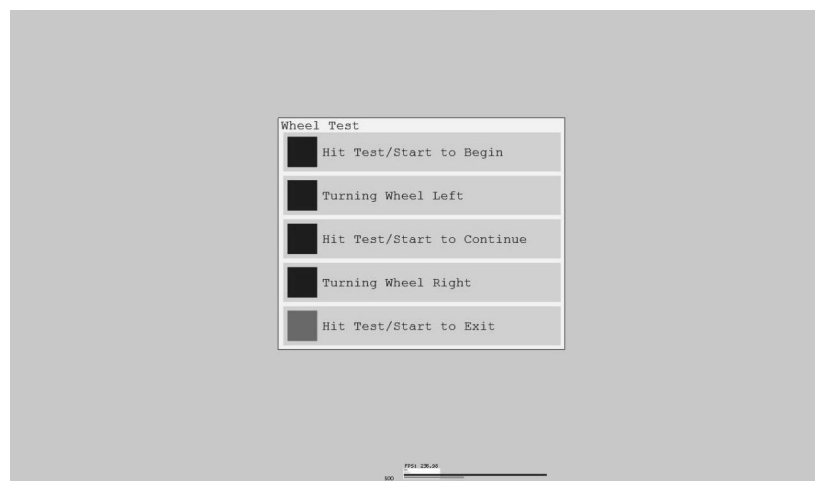
Monitor Test

From the *Audio/Video Options* menu, select and enter *Color Bars & Purity*. Verify correct color and purity for Red, Blue and Green screens.   Use the convergence screen to also verify linearity. See Appendix n.

- White Screen

- Red Screen

- Green Screen

- Blue Screen

Purity Screen

Color Bars

Hit Test/Start to continue

Convergence

Hit Test/Start to continue

Convergence

Lamp Test

From the *Diagnostics Menu* select and enter *Lamp Test.* Use View1 or View 3 to select the lamp and press Start to activate that lamp. Verify that ALL lamps are working.

```
Lamp Test Menu                         Lamp Test

All Lights On
All Lights Off
View1 Light On
View2 Light On
View3 Light On
Start Light On
Tunes Light On
Top Lights On
Leader Light On
Seat Lights On
Pedestal Lights On
Top Speaker Lights On
Keypad Light On
Seatback Lights On
Tachometer On
Speedometer On
7 Segment On

Exit


Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit
```

Note:

Lamp function could also be verified using Switch Test.

Please check the coin door lamps as part of your game diagnostic check.

Coin Meter Test

From the *Diagnostics Menu* select and enter *Coin Meter Test.* Advance the meter once using by pressing Start. Press the Tunes Button to return to *Diagnostics Menu.*

```
Hit Test/Start to advance coin meter




Hit Service/Tunes to exit




FPS: 1.94
500
```

Watchdog Test

From the *Diagnostics Menu* select and enter *Watchdog Test.* The game will reset in approximately 6 seconds. The watchdog feature allows the PC to monitor normal game software and hardware operation.

```
Hit Test/Start to Begin




...PC will RESET in 14 seconds...
*** Hit Test/Start to CANCEL ***




FPS: 1.94
500
```
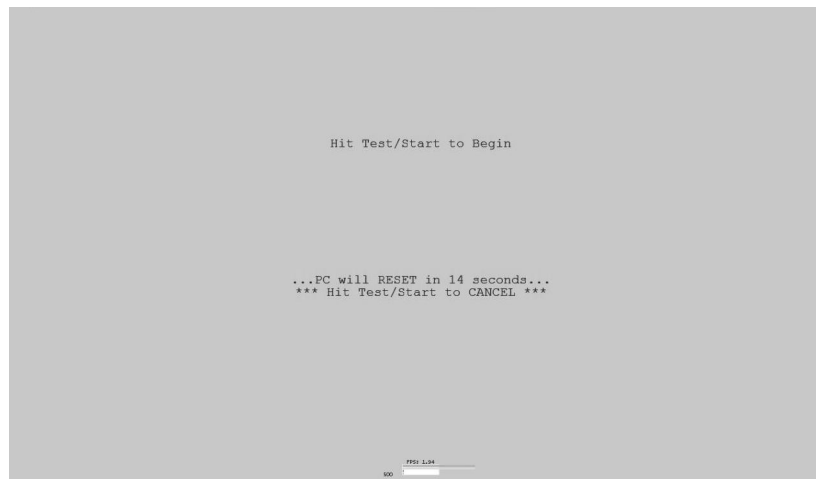
Link Sytem

From the *Main Menu*, select *Link System* and enter to view options.
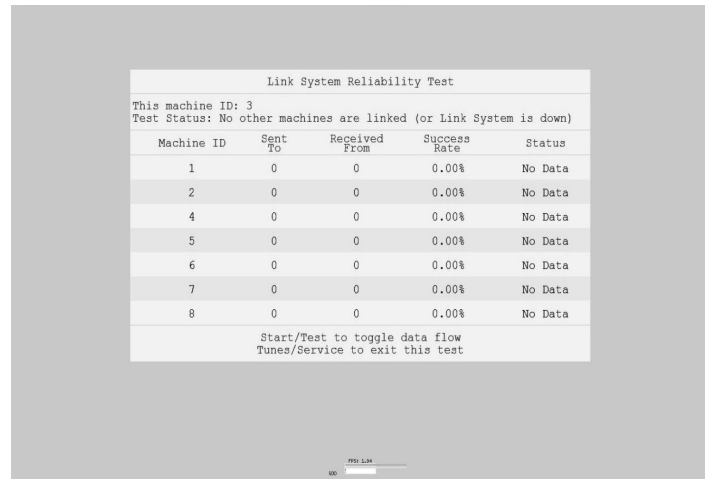
Game Audits

From the *Main Menu*, select *Game Audits* and enter to view options.

> **Note:**
> - Use game audit screens to assess game performance.
> - Use information to determine options such as game difficulty and free game award to maximize game earnings.
> - Use information to detect possible intermittent problems.

General 1 Audits

From the *Audits Menu*, select *General 1* and enter to view general game statistics. Press the Tunes Button to return to *Main Menu.*

```
Audits Menu              General Audits

General 1                Time Game On       3:43:31.96
General 2                Time Game Played   0:07.21
Courses                  Time Per Game      0:00.13
Course Wins
Placings                 Games Played       55
Vehicles                 Games Started      2
Upgrades                 Games Continued    0
Stunts                   Games Timed Out    0
Trophies                 Free Games         0        0.00%
                         Pin Games          0        0.00%
Exit                     Link Games         0        0.00%
                         Quick Play Games   0        0.00%

                         Boot Ups           347
                         Test Mode Entries  94
                         Automatic Reboots  0
                         Watchdog Resets    329
                         No I/O Board Init  0
                         Unfinished Games   55




Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit           FPS: 240.42
                          600
```

General 2 Audits

From the *Audits Menu*, select *General 2* and enter to view additional general game statistics. Press the Tunes Button to return to *Main Menu.*

```
Audits Menu              General Audits

General 1                Automatic Games    0     0.00%
General 2                Manual Games       0     0.00%
Courses
Course Wins              Low Cam Time       0:00.00
Placings                 Med Cam Time       0:00.00
Vehicles                 High Cam Time      0:00.00
Upgrades
Stunts                   Total Coindrops    220
Trophies                 Slot 0 Left        219
                         Slot 1 Right       1
Exit                     Slot 2 DBV         0

                         Current Credits    0
                         Current Coins      0

                         Lifetime Coin Count 0000000200




Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit           FPS: 240.34
                          600
```

Course Audits

From the *Audits Menu*, select *Courses* and enter to view individual information on each course. View how many times each course is selected, as well as its popularity by overall percentage. Press the Tunes Button to return to *Main Menu.*

```
Audits Menu                Course Plays / Percent | Course Selects / Percent

General 1                  Mojave          0     0.00% 0      0.00%
General 2                  Times Square    0     0.00% 0      0.00%
Courses                    Hawaii          0     0.00% 0      0.00%
Course Wins                Chinatown       0     0.00% 0      0.00%
Placings                   Shinjuku        0     0.00% 0      0.00%
Vehicles                   Sturgis         0     0.00% 0      0.00%
Upgrades                   Baja            0     0.00% 0      0.00%
Stunts                     Florida         0     0.00% 0      0.00%
Trophies                   Switzerland     0     0.00% 0      0.00%
                           Monaco          0     0.00% 0      0.00%
Exit                       New England     0     0.00% 0      0.00%
                           Malibu          0     0.00% 0      0.00%
                           Shibuya         0     0.00% 0      0.00%
                           Kyoto           0     0.00% 0      0.00%
                           Chicago         0     0.00% 0      0.00%
                           Sado            0     0.00% 0      0.00%
                           LA Ghetto       0     0.00% 0      0.00%
                           Shanghai        0     0.00% 0      0.00%
                           Central Park    0     0.00% 0      0.00%
                           Detroit         0     0.00% 0      0.00%
                           Takayama        0     0.00% 0      0.00%
                           Nagano          0     0.00% 0      0.00%
                           San Francisco   0     0.00% 0      0.00%
                           Hollywood       0     0.00% 0      0.00%
                           SF Tour         0     0.00% 0      0.00%
Vol +/-, View1/View3 to Navigate   Chinatown EX    0     0.00% 0      0.00%
Test, Start to Select      Mulholland Dr   0     0.00% 0      0.00%
Service, Tunes to Exit               FPS: 226.30
                                  600
```

Course Wins Audit

From the *Audits Menu*, select *Courses Wins* and enter to view individual win and overall percentage information on each course. Press the Tunes Button to return to *Main Menu.*

```
Audits Menu                Course Wins / Percent

General 1                  Mojave          0     0.00%
General 2                  Times Square    0     0.00%
Courses                    Hawaii          0     0.00%
Course Wins                Chinatown       0     0.00%
Placings                   Shinjuku        0     0.00%
Vehicles                   Sturgis         0     0.00%
Upgrades                   Baja            0     0.00%
Stunts                     Florida         0     0.00%
Trophies                   Switzerland     0     0.00%
                           Monaco          0     0.00%
Exit                       New England     0     0.00%
                           Malibu          0     0.00%
                           Shibuya         0     0.00%
                           Kyoto           0     0.00%
                           Chicago         0     0.00%
                           Sado            0     0.00%
                           LA Ghetto       0     0.00%
                           Shanghai        0     0.00%
                           Central Park    0     0.00%
                           Detroit         0     0.00%
                           Takayama        0     0.00%
                           Nagano          0     0.00%
                           San Francisco   0     0.00%
                           Hollywood       0     0.00%
                           SF Tour         0     0.00%
Vol +/-, View1/View3 to Navigate   Chinatown EX    0     0.00%
Test, Start to Select      Mulholland Dr   0     0.00%
Service, Tunes to Exit               FPS: 226.23
                                  600
```

Placings Audit

From the *Audits Menu*, select *Placings* and enter to view individual count for each standing and percentage information. Use this information to determine game difficulty adjustments to properly reward players and maximize game earning performance. Press the Tunes Button to return to *Main Menu.*

```
Audits Menu                    Placings / Percent

General 1                      1st  Place     0     0.00%
General 2                      2nd  Place     0     0.00%
Courses                        3rd  Place     0     0.00%
Course Wins                    4th  Place     0     0.00%
Placings                       5th  Place     0     0.00%
Vehicles                       6th  Place     0     0.00%
Upgrades                       7th  Place     0     0.00%
Stunts                         8th  Place     0     0.00%
Trophies
                               Average Place     0.00
Exit
                               Max Win Streak     0
                               Max Lose Streak    0
                               Cur Win Streak     0
                               Cur Lose Streak    0




Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit          FPS: 246.54
```

Vehicles Audit

From the *Audits Menu*, select *Vehicles* and enter to view individual count for each vehicle selection and percentage information. Press the Tunes Button to return to *Main Menu.*

```
Audits Menu              Vehicle Plays / Percent | Vehicle Selects / Percent

General 1                Viper_SRT10         0   0.00% 0    0.00%
General 2                Mustang_GT          0   0.00% 0    0.00%
Courses                 Camaro_SS           0   0.00% 0    0.00%
Course Wins              GT                  0   0.00% 0    0.00%
Placings                 370Z                0   0.00% 0    0.00%
Vehicles                 S7_Twin_Turbo       0   0.00% 0    0.00%
Upgrades                 Corvette_ZR1        0   0.00% 0    0.00%
Stunts                   S5S_Raptor          0   0.00% 0    0.00%
Trophies                 Challenger_SRT8_392 0   0.00% 0    0.00%
                         GT-R                0   0.00% 0    0.00%
Exit




Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit      FPS: 245.00
```

Upgrade Audit

From the *Audits Menu*, select *Upgrades* and enter to view individual count for each vehicle feature upgrade selection and percentage information. Press the Tunes Button to return to *Main Menu.*

```
Audits Menu                Upgrades

General 1                  Decal          0
General 2                  Tires          0
Courses                    Neon           0
Course Wins                Nitro          0
Placings                   Body           0
Vehicles                   Spoiler        0
Upgrades                   Engine         0
Stunts
Trophies                   Upgrade Users      0
                           Upgrade Buy-Ins    0
Exit                       Upgrade Credits    0

                            1 visit:      0      0.00%
                            2 -  4 visits:  0      0.00%
                            5 -  9 visits:  0      0.00%
                           10 - 14 visits:  0      0.00%
                           15 - 19 visits:  0      0.00%
                           20 - 24 visits:  0      0.00%
                           25 - 29 visits:  0      0.00%
                           30 - 39 visits:  0      0.00%
                           40 - 49 visits:  0      0.00%
                           50 - 69 visits:  0      0.00%
                           70 - 99 visits:  0      0.00%
                           100+ visits:     0      0.00%

Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit             FPS: 240.44
                                   600
```

Stunts and Trophies Audit

From the *Audits Menu,* select *Stunts* and enter to view individual count for each stunt performed. Press the Tunes Button to return to Main Menu

```
Audits Menu                Stunts / Assists

General 1                  Wheelies       0
General 2                  Slides         0
Courses                    Leap Frogs     0
Course Wins                Back Flips     0
Placings                   Helis          0
Vehicles                   Rolls          0
Upgrades                   End-Over-Ends  0
Stunts                     Spinouts       0
Trophies                   Nitros         0

Exit                       Autopilot Triggers 0






Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit             FPS: 241.76
                                   600
```

```
Audits Menu                Trophies

General 1                  THE BEST! AROUND!    0
General 2                  GLOBETROTTER         0
Courses                    DRIFTOLOGIST         0
Course Wins                SUPERBIKER           0
Placings                   MUY FURIOSO          0
Vehicles                   KING OF THE MTN      0
Upgrades                   BROKE THE BANK       0
Stunts                     PACKED GARAGE        0
Trophies                   STABLE MASTER        0
                           HOBBYIST             0
Exit                       TRIPLE THREAT        0
                           FIRST OF MANY        0
                           ROCK STEADY          0
                           STICK WRANGLER       0
                           UNTOUCHABLE          0
                           QUICK DRAW           0
                           GOLD CHAIN           0
                           SILVER CHAIN         0
                           BRONZE CHAIN         0
                           TRICK MEISTER        0
                           GOLD FLIPPER         0
                           SILVER FLIPPER       0
                           GOLD BOND            0
                           BOOM! ROASTED        0

Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit             FPS: 230.66
                                   600
```

Pricing Adjustment Menu

From the *Main Menu*, select *Pricing Adjustment* and enter. The Adjustment Menu allows you to customize the game. Each variable will change an aspect of the basic game pricing, other related player free game reward and upgrade cost. Optimizing these settings should result in continued high player interest and game earnings. You can monitor the affects of these options by comparing audit information before and after the changes have been implemented. Press Start to Select. Press Tunes or Service to Exit.

```
Pricing Menu                          Credit Options

Freeplay              No              Please note the following:
Money Unit            USD
Coin Value            0.25            Adjusting the number of coins
Coins Per Bill Pulse  1              per credit will reset the
Coins Per Credit      4              stored number of partial
Credits To Start      1              credits.
Credits To Continue   1
Max Credits           30
First Place Free Race Yes
Multiplay Win Free Race No
Purchasable Upgrades  Yes
  Credits Per Purchase 1
  Upgrades Per Purchase 2

Sync All Adjustments

Exit


Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit
```

Price Menu

From the *Pricing Adjustment Menu*, select *Freeplay* and enter. This option allows you to set the game to Free Play or at no cost. Any coins or bills inserted will continue to be accepted and counted. This will be reflected in the Audits. The credits issued money accepted during Freeplay mode will be available after Freeplay is turned off or deactivated. Please perform Clear Credits to remove unwanted credits. Press Start to Select. Press Tunes or Service to Exit.

```
Freeplay Activate?                    Credit Options

Yes                                   Please note the following:
No
                                      Adjusting the number of coins
Cancel                                per credit will reset the
                                      stored number of partial
                                      credits.


Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit
```

Money Unit Menu

From the *Pricing Menu*, select *Money Unit* and enter. Select the currency which applies to the games location and press Start to select. Press Start to Select. Press Tunes or Service to Exit.

```
Select Currency                          Credit Options

USD  US Dollars                          Please note the following:
AUD  Aus Dollars
CAD  Can Dollars                         Adjusting the number of coins
EUR  Euros                               per credit will reset the
GBP  British Pounds                      stored number of partial
DEM  Deutschemarks                       credits.
FRF  French Francs
JPY  Japanese Yen
NLG  Dutch Guilders
ITL  Italian Lire
CHF  Swiss Francs
BRL  Brazilian Reals
DKK  Danish Kroner
MXN  Mexican Pesos
RUR  Russian Rubles
KRW  Korean Won
CNY  Chinese Yuan

Cancel




Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit
```

Coin Value Menu

From the *Pricing Menu*, select *Coin Value* and enter. Choose the coin value based on the currency selected and the coin acceptor type or setting. Press Start to Select. Press Tunes or Service to Exit.

```
Coin Value?                              Credit Options

0.01 USD                                 Please note the following:
0.05 USD
0.10 USD                                 Adjusting the number of coins
0.25 USD                                 per credit will reset the
0.50 USD                                 stored number of partial
1.00 USD                                 credits.
2.00 USD
5.00 USD
10.00 USD
20.00 USD
50.00 USD
100.00 USD
500.00 USD
1000.00 USD
10000.00 USD

Cancel




Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit
```

Coin Per Bill Pulse Menu

From the *Pricing Menu*, select *Coin per Bill Pulse Menu* and enter. Choose the equivalent coin value based on the bill acceptor currency type or settings. Press Start to Select. Press Tunes or Service to Exit.

```
Coins Per Bill Pulse?                          Credit Options

1                                              Please note the following:
2
3                                              Adjusting the number of coins
4                                              per credit will reset the
5                                              stored number of partial
10                                             credits.
20
25
50
100

Cancel




Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit
```
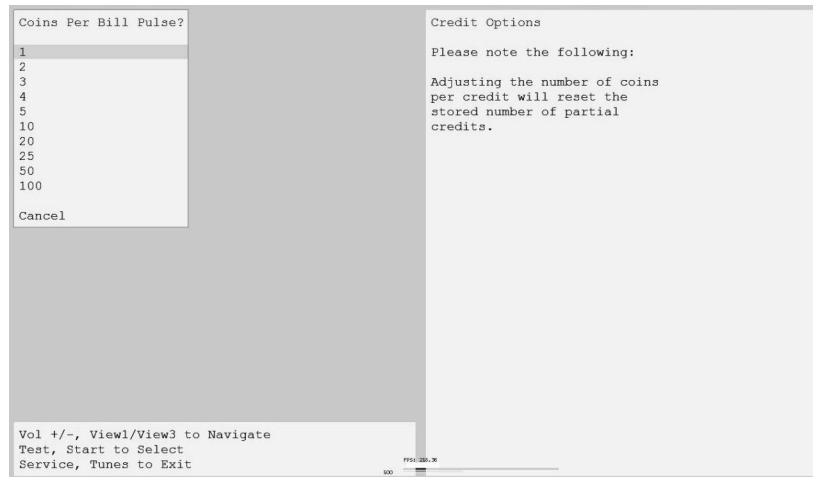
Coin Per Credit Menu

From the *Pricing Menu*, select *Coin per Credit Menu* and enter. Choose the number of coins required to earn one credit. Press Start to Select. Press Tunes or Service to Exit.

```
Coins Per Credit?                              Credit Options

1                                              Please note the following:
2
3                                              Adjusting the number of coins
4                                              per credit will reset the
5                                              stored number of partial
6                                              credits.
7
8
9
10

Cancel




Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit
```

Credit To Start Menu

From the *Pricing Menu*, select *Credit To Start Menu* and enter. Choose the number of credits required to start one game. Press Start to Select. Press Tunes or Service to Exit.

```
Coins Per Credit?                    Credit Options

1                                    Please note the following:
2
3                                    Adjusting the number of coins
4                                    per credit will reset the
5                                    stored number of partial
6                                    credits.
7
8
9
10

Cancel




Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit
                              FPS: 260.41
                         800
```
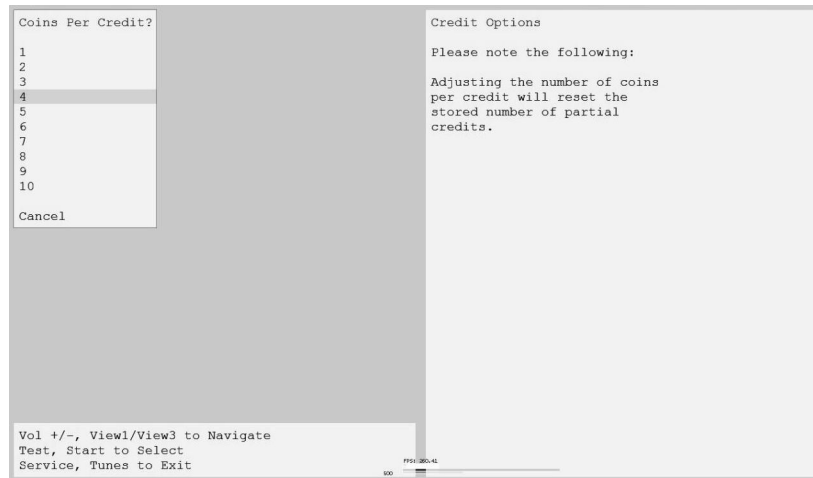
Credit to Continue Menu

From the *Pricing Menu*, select *Credit To Continue Menu* and enter. Choose the number of credits required to continue from the current game. Press Start to Select. Press Tunes or Service to Exit.

Max Credits Menu

From the *Pricing Menu*, select *Max Credit Menu* and enter. Choose the number of maximum credits the game will post. Please note that the game will continue to accept and count additional coins with no additional credits added over the maximum number selected. Press Start to Select. Press Tunes or Service to Exit.

1st Place Free Race Menu

From the *Pricing Menu*, select *1st Place Free Race* and enter. The player wins a free race for a 1st place overall finish during a single of networked race game. Press Start to Select. Press Tunes or Service to Exit.

Multiplay 1st Place Wins Free Race

From the *Pricing Menu*, select *Multiplay 1st Wins Free Race* and enter. Select the amount of time in seconds given to the player to reach the first check point. Press Start to Select. Press Tunes or Service to Exit.

Purchasable Upgrades ?

From the *Pricing Menu*, select *Purchasable Upgrades* and enter. This option if enabled allows purchase of upgrades. Press Start to Select. Press Tunes or Service to Exit.

Upgrades per Credit Menu

From the *Pricing Menu*, select *Upgrades per Credit* and enter. Choose the number of upgrades given per credit. Press Start to Select. Press Tunes or Service to Exit.

System Ajustments Menu

From the *Main Menu*, select *System Adjustments* and enter. Press Start to Select. Press Tunes or Service to Exit.

```
System Adjustments                      Preferences and Adjustments

Attract Audio            No             Change all system related
Max Name Length          7              adjustments and settings here.
Wheel Stiffness          0.20
Automatic Volume Sync.   Yes
Allow Wheel Effects      Yes
Network Enabled          No
Current Machine ID       8
Language                 English

Sync All Adjustments

Exit




Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit
```

Attract Audio Menu

From the *System Adjustment Menu*, select *Attract Audio* and enter. Select option to play game music during standby or attract mode.   Press Start to Select. Press Tunes or Service to Exit.

Max Name Length Menu

From the *System Adjustment Menu*, select *Max Name Length* and enter. Choose the maximum number of alpha numeric characters allowed during player name entry. Press Start to Select. Press Tunes or Service to Exit.

Wheel Stiffness Level Menu

From the *Adjustment Menu*, select *Wheel Stiffness* and enter. Select wheel stiffness level. Default setting is 0.20. Press Start to Select. Press Tunes or Service to Exit.

Automatic Volume Sync Menu

From the *System Adjustment Menu*, select *Automatic Volume Sync* and enter. Select option to synchronize game volume adjustment across all linked or networked games. When active, volume for all linked games can be adjusted to the same level from any one of the games connected to the network. Press Start to Select.

.

Automatic Volume Sync Menu

From the *System Adjustment Menu*, select *Automatic Volume Sync* and enter. Select option to synchronize game volume adjustment across all linked or networked games. When active, volume for all linked games can be adjusted to the same level from any one of the games connected to the network. Press Start to Select. Press Tunes or Service to Exit.

Allow Feedback Wheel Effects

From the *System Adjustment Menu*, select *Allow Feeback Wheel Effects* and enter. If this feature is active, the steering wheel feedback mechanism produces an appropriate response to the steering wheel during events such as collisions or driving on gravel for added realism and enhanced player experience. Press Start to Select. Press Tunes or Service to Exit.

Networking

From the *System Adjustment Menu*, select *Networking* and enter. If this feature is ON the game will look for networked games and assign IP address to each unit. Set to OFF for single unit operation. Press Start to Select. Press Tunes or Service to Exit.

Network ID

From the *System Adjustment Menu*, select *Network ID* and enter. It is critical that each networked unit is assigned a different Network ID for proper link operation. Games in the network may require reboot after setting Network parameter. Press Start to Select. Press Tunes or Service to Exit.
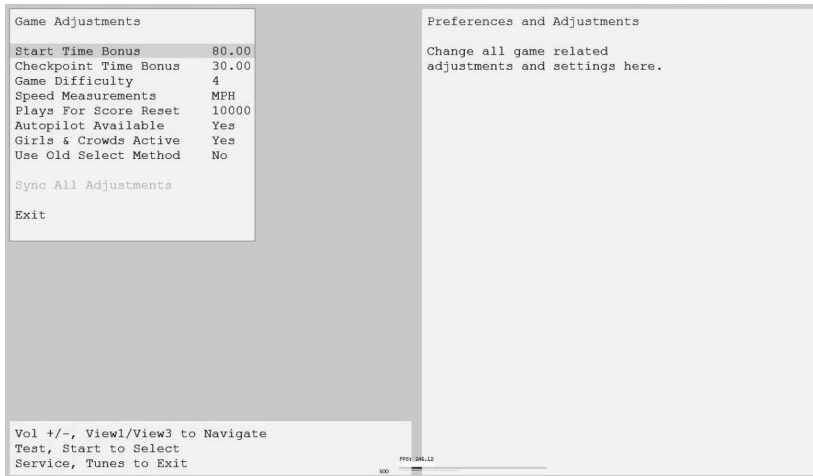
Language

From the *System Adjustment Menu*, select *Language* and enter.   Press Start to Select. Press Tunes or Service to Exit.

Game Ajustments Menu

From the *Main Menu*, select *Game Adjustments* and enter. Press Start to Select. Press Tunes or Service to Exit.

```
Game Adjustments                        Preferences and Adjustments

Start Time Bonus        80.00           Change all game related
Checkpoint Time Bonus   30.00           adjustments and settings here.
Game Difficulty         4
Speed Measurements      MPH
Plays For Score Reset   10000
Autopilot Available     Yes
Girls & Crowds Active   Yes
Use Old Select Method   No

Sync All Adjustments

Exit




Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit
```

> **Note:**
>
> Please reference the game Audit information to determine the appropriate difficulty setting for your location. Compare changes in game statistics and game revenue before and after the change.

Start Time Bonus Menu

From the **Game Adjustment Menu**, select *Start Bonus Time* and enter. Select amount of time given at the start of the race to reach the first Checkpoint. Additional time is given at each Checkpoint. Press Start to Select. Press Tunes or Service to Exit

.

Checkpoint Bonus Time Menu

From the **Game *Adjustment Menu***, select *Checkpoint Bonus Time* and enter. Select the amount of time in seconds given to the player to reach the next check point after reaching a check point. Press Start to Select. Press Tunes or Service to Exit.

Game Difficulty Menu

From the **Game *Adjustment Menu***, select *Game Difficulty* and enter. The default difficulty level is 5. Press Start to Select. Press Tunes or Service to Exit.

Speed Measurement Menu

From the **Game *Adjustment Menu***, select *Speed Measurement* and enter. Select which unit is to be used to measure car speed. Choose MPH or Miles per Hour. Choose KPH or Kilometers per Hour. Press Start to Select. Press Tunes or Service to Exit

Plays for High Score Reset Menu

From the *Adjustment Menu*, select *Plays for High Score Reset* and enter. Select the number of plays before high score table is reset. Press Start to Select. Press Tunes or Service to Exit.

Autopilot Available Menu

From the **Game** *Adjustment Menu*, select *Autopilot Available* and enter. When active, this feature allows the game to run in autopilot mode after 10 seconds has elapsed without player input. This provides an opportunity for younger players to enjoy the game experience as well. Press Start to Select. Press Tunes or Service to Exit

Girls and Crowds Enable Menu

From the *Game Adjustment Menu*, select *Girls and Crowds* and enter. Starting line girl and crowds feature can be activated or deactivated by selecting yes or no. Press Start to Select. Press Tunes or Service to Exit.

Note:

The starting line girl and crowd can be removed for certain locations which may consider this feature not suitable or appropriate.

Utilities Menu

From the *Test Main Menu*, select *Utilities* and enter. The Utilities Menu contains tools which the operator could use to manage game adjustments or reset key game and player score and statistic information. The option to perform a game factory restore can also be accessed.

```
Utilities Menu                        Utilities

CRC Check

Clear Credits
Clear Audits
Reset High Scores
Reset Player Stats
Default Adjustments
Reset Link System Config.
Factory Restore

Sync All Adjustments

View Errors
View Messages
Copy Audits and Log to USB
Copy High Scores to USB

Exit




Vol +/-, View1/View3 to Navigate
Test, Start to Select
Service, Tunes to Exit
```

Note:

- Information will be permanently erased by Clear or Reset functions.
- It is often ideal to perform a factory restore when the game is being moved to a new location.
- Record your game audit information if performing any of the above functions.

CRC Check Menu

From the *Utilities Menu*, select *CRC Check* and enter. Performing CRC check verifies the integrity of the software. Press Start to Select. Press Tunes or Service to Exit.

Clear Credit Menu

From the *Utilities Menu*, select *Clear Credits* and enter. Performing Clear Credit will delete any remaining credits posted. Press Start to Select. Press Tunes or Service to Exit.

Clear Audit Menu

From the *Utilities Menu*, select *Clear Audit* and enter. Performing Clear Audit will delete all audit information found on the Audit Menu. Please record them if you ever need to reference the information. Press Start to Select. Press Tunes or Service to Exit.

Clear High Scores Menu

From the *Utilities Menu*, select *Clear High Scores* and enter. Performing Clear High Score will clear the all high score tables. Press Start to Select. Press Tunes or Service to Exit.

Clear Player Stats Menu

From the *Utilities Menu*, select *Clear Player Stats* and enter. Performing Clear Player Stats will clear all player information, including PIN, car upgrades and money earned. Press Start to Select. Press Tunes or Service to Exit.

Set Default Adjustments Menu

From the *Utilities Menu*, select *Default Adjustment* and enter. Performing Default Adjustment setting will restore game adjustments back to its manufacturer recommended settings. The game will need to be re-calibrated. Press Start to Select. Press Tunes or Service to Exit.

Set Default Adjustments Menu

From the *Utilities Menu*, select *Reset Link System Config* and enter. This utility allows the communication between linked games to be re-established due to a possible fault other than hardware. Check all network related hardware (cables, router) and make sure that they are connected and then power cycle the games. Press Start to Select. Press Tunes or Service to Exit.

Factory Restore Menu

From the *Utilities Menu*, select *Factory Restore* and enter. Performing Factory Restore will restore game adjustments back to its manufacturer recommended settings and clear all audit information. The game will need to be re-calibrated. Press Start to Select. Press Tunes or Service to Exit.

Calibration Menu

From the *Test Main Menu*, select *Calibration* and enter. Making sure that the wheel, gas and brake are all properly calibrated is the easiest way to make sure that your driving game could maximize its earning potential. Follow the screen instructions carefully. Verify proper calibration on the Switch Test screen. Check and make sure that the minimum, center and maximum values correspond to the actual position of the control.
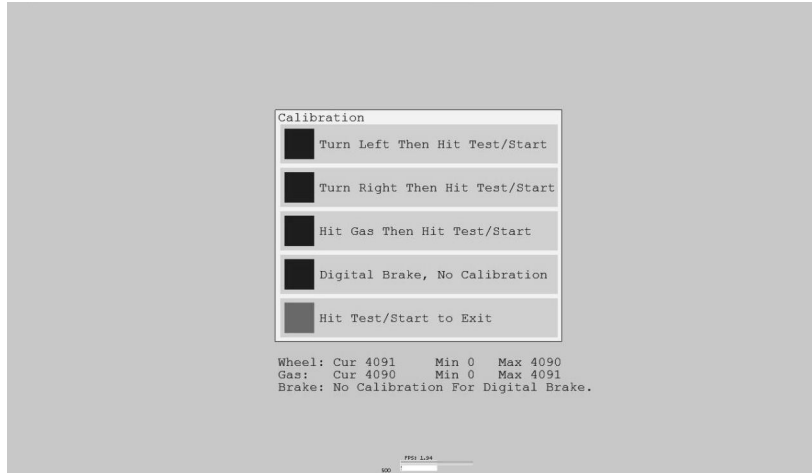
<table>
<tr><td>

```
Calibration
   ███   Turn Left Then Hit Test/Start
   ███   Turn Right Then Hit Test/Start
   ███   Hit Gas Then Hit Test/Start
   ███   Digital Brake, No Calibration
   ███   Hit Test/Start to Exit


Wheel: Cur 4091    Min 0   Max 4090
Gas:   Cur 4090    Min 0   Max 4091
Brake: No Calibration For Digital Brake.



              FPS: 1.94
        600 ▭
```
</td><td>

Note:

- If the game requires constant re-calibration, check the controls for mechanical wear or damage. Replace if necessary.
- Normal wear and tear of the controls means that calibration should be part of the games

</td></tr>
</table>

Volume Menu

From the *Test Main Menu*, select *Volume* and enter. This refers to the game volume while in play. Use the Volume Up/ Volume Down button on the service panel to adjust volume level. Press Start to Select. Press Tunes or Service to Exit.

Volume Menu

From the *Test Main Menu*, select *Attract Volume* and enter. This refers to the attract mode volume. Use the Volume Up/ Volume Down button on the service panel to adjust volume level. Press Start to Select. Press Tunes or Service to Exit.

Note:

- Adjusting the volume while in attract mode only affects the attract volume and the not the actual game volume.
- Adjustment to game volume must be done while on Volume Adjust screen or while on game mode.
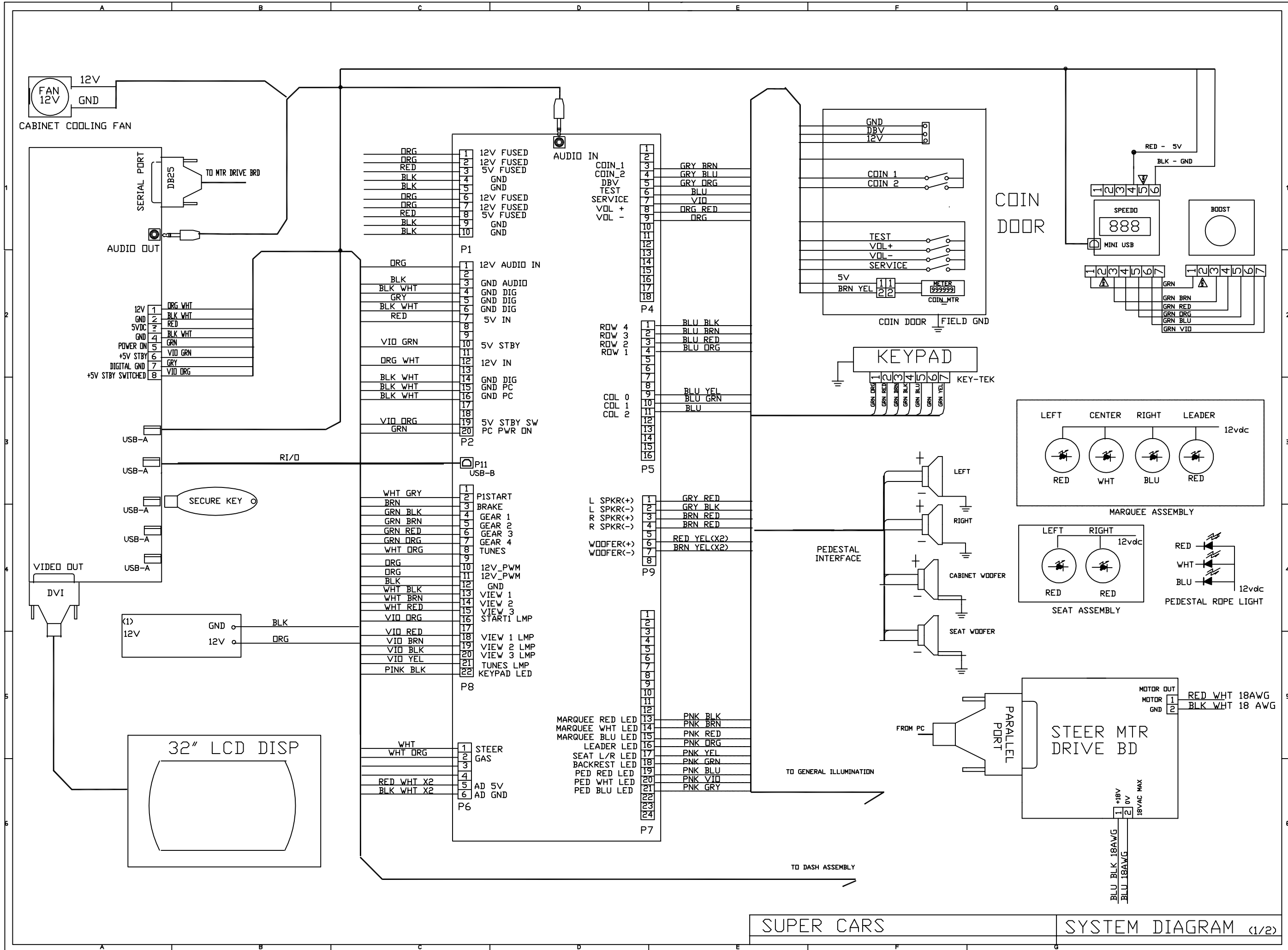
TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SOLUTION
Game will not power up.	Game not plugged in.	Plug game into receptacle.
	Game not turned on.	Turn ON main power switch
	Game fuse is blown	Check game fuse.
	No power to receptacle.	Plug game into powered receptacle.
	PC power switch is OFF	Turn PC power switch ON.
	PC BIOS set wrong.	See Appendix B.
"No Signal" Message	Video cable not secure.	Check and secure video connector.
	PC not turned ON.	Turn ON power to PC.
No video display.	No power to video display.	Check power to video display.
		see *Game will not power up.*
No sound.	Audio cable not connected.	Check audio cable connection.
	Speaker not connected.	Check speaker connection.
"I/O Board Missing"	USB connector not connected.	Check USB connector from PC to I/O board. Perform Hard Drive Recovery
Game will not load.	New Hard Drive installed.	Power cycle by un-plugging game. Perform Hard Drive Recovery
	Hard Drive data corrupted.	Perform Hard Drive Recovery.
Game Freezes	Secure Dongle Loose	Secure and Tighten Dongle
	Poor Ventilation	Check Fan Operation and Airflow
	USB cable loose	Remove and Reinsert USB both ends of cable
	Failing or Bad Power Supply	Check Power Supply Output or Replace With Known Good.
	Corrupted Hard Drive	Perform CRC Check. Re-Image if bad.
Game resets.	Low DC voltage.	Check for proper voltage(+5V,+12V). Adjust cabinet main power supply.
	Door lamp is wrong rating.	Use only 5volt lamps.
	Cabinet/PC temperature is too high.	Check that vents and fans are functioning and not obstructed.
	Hard Drive data corrupted.	Perform Hard Drive Recovery..
Not Linking	DIP Switch Set Wrong	Refer to Networking Setup Section.
	Network Cable Bad	Check Connection or Replace
	Game Operator Settings Not The Same.	Make Sure All Settings Are The Same Between Linked Games
No Wheel Feedback	Bad Wheel Driver Board	Replace With Known Good To Verify
	Bad Fuse on Wheel Driver Board	Replace Fuse On Wheel Driver With The Same Value Fuse
	Parallel Cable Loose	Secure and Tighten Parallel Cable
	Loose Electrical Connection	Check Connection To Motor and Wheel Driver Board
	Bad Transformer Fuse	Replace With Same Value Fuse

Warning: Do not connect or disconnect any cables or connectors on this game with the power on. This could potentially damage the game.
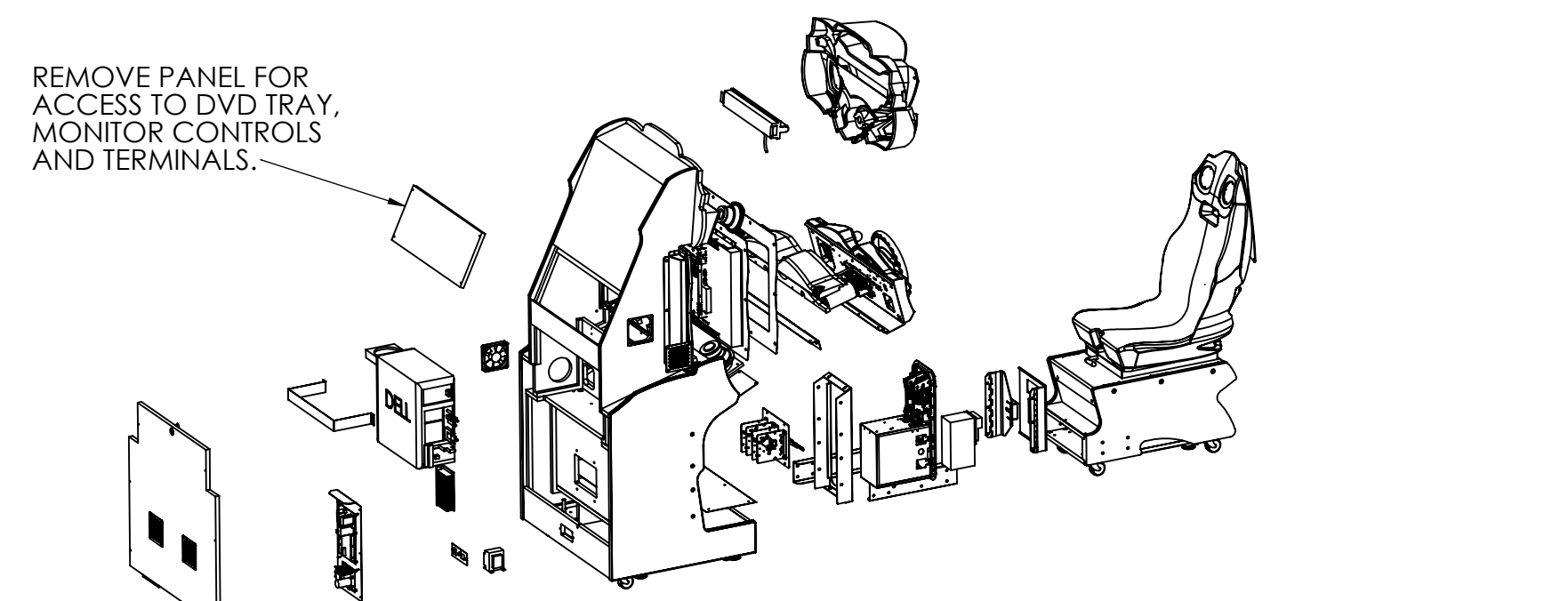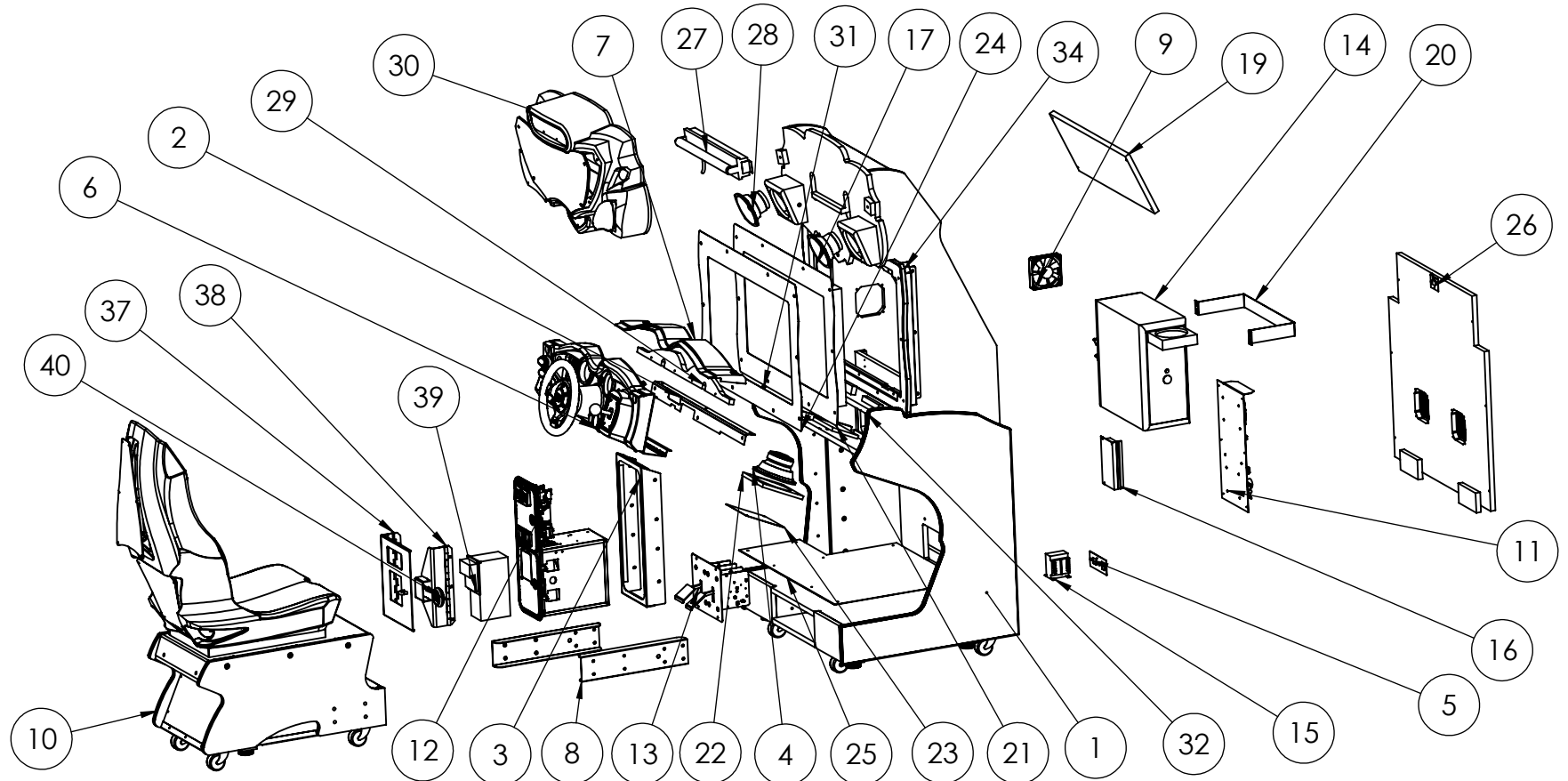
Super Cars Technical Information

Electrical
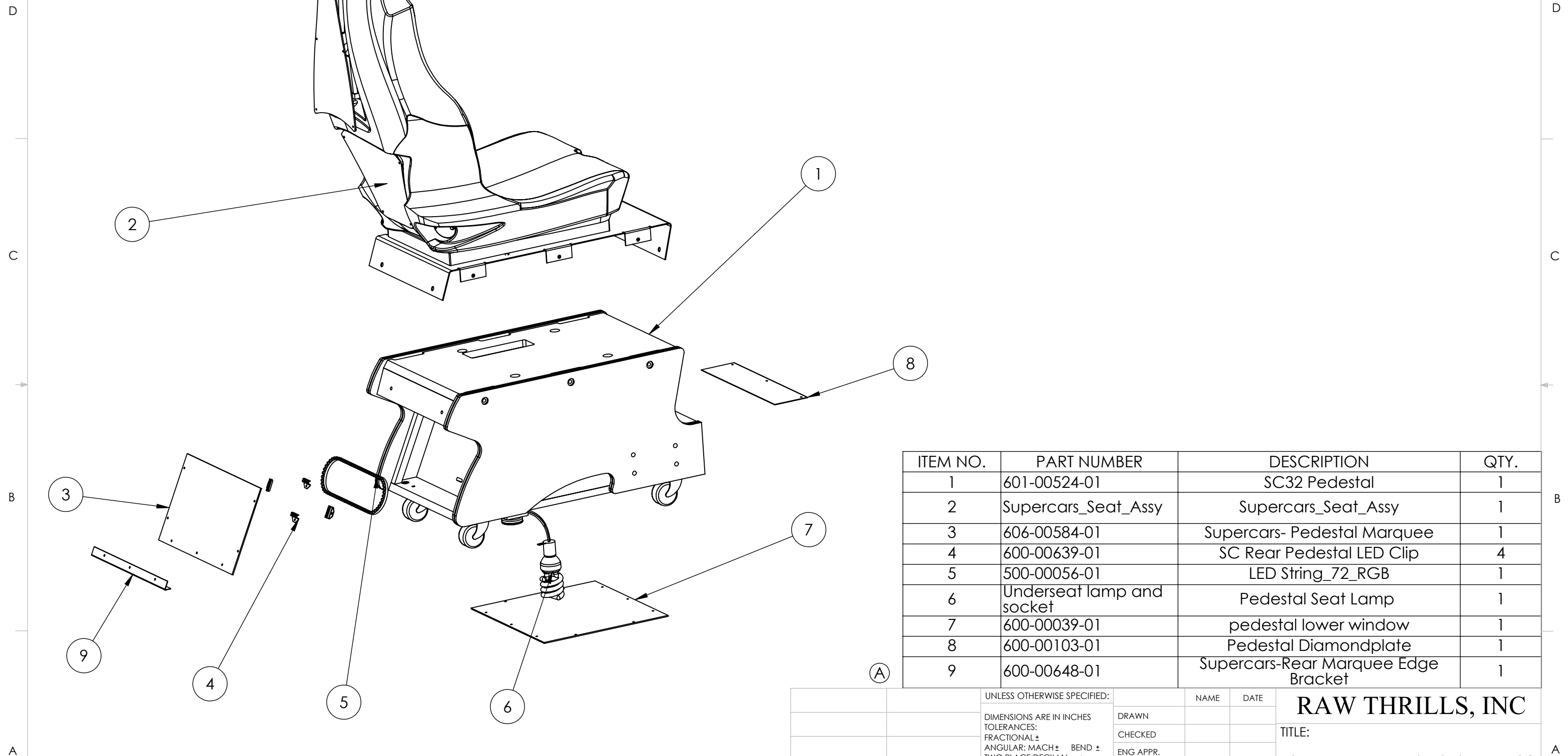Mechanical
Parts
Appendixes
Notes

SUPER CARS — SYSTEM DIAGRAM (1/2)

CABINET COOLING FAN
- FAN 12V — 12V
- GND

SERIAL PORT — DB25 — TO MTR DRIVE BRD

AUDIO OUT

Power connector:
Pin	Signal	
1	12V	ORG WHT
2	GND	BLK WHT
3	5VDC	RED
4	GND	BLK WHT
5	POWER ON	GRN
6	+5V STBY	VIO GRN
7	DIGITAL GND	GRY
8	+5V STBY SWITCHED	VIO ORG

- USB-A
- USB-A — RI/O
- USB-A
- SECURE KEY
- USB-A
- USB-A

VIDEO OUT — DVI

(1) 12V
- GND — BLK
- 12V — ORG

32" LCD DISP

P1
	Signal	Color
1	12V FUSED	ORG
2	12V FUSED	ORG
3	5V FUSED	RED
4	GND	BLK
5	GND	BLK
6	12V FUSED	ORG
7	12V FUSED	ORG
8	5V FUSED	RED
9	GND	BLK
10	GND	BLK

P2
	Signal	Color
1	12V AUDIO IN	ORG
2		
3	GND AUDIO	BLK
4	GND DIG	BLK WHT
5	GND DIG	GRY
6	GND DIG	BLK WHT
7	5V IN	RED
8		
9		
10	5V STBY	VIO GRN
11		
12	12V IN	ORG WHT
13		
14	GND DIG	BLK WHT
15	GND PC	BLK WHT
16	GND PC	BLK WHT
17		
18		
19	5V STBY SW	VIO ORG
20	PC PWR ON	GRN

P11 USB-B

P8
	Signal	Color
1	P1START	WHT GRY
2		BRN
3	BRAKE	
4	GEAR 1	GRN BLK
5	GEAR 2	GRN BRN
6	GEAR 3	GRN RED
7	GEAR 4	GRN ORG
8	TUNES	WHT ORG
9		
10	12V_PWM	ORG
11	12V_PWM	ORG
12	GND	BLK
13	VIEW 1	WHT BLK
14	VIEW 2	WHT BRN
15	VIEW 3	WHT RED
16	START1 LMP	VIO ORG
17		
18	VIEW 1 LMP	VIO RED
19	VIEW 2 LMP	VIO BRN
20	VIEW 3 LMP	VIO BLK
21	TUNES LMP	VIO YEL
22	KEYPAD LED	PINK BLK

P6
	Signal	Color
1	STEER	WHT
2	GAS	WHT ORG
3		
4		
5	AD 5V	RED WHT X2
6	AD GND	BLK WHT X2

AUDIO IN

P4
	Signal	Color
1		
2		
3	COIN_1	GRY BRN
4	COIN_2	GRY BLU
5	DBV	GRY ORG
6	TEST	BLU
7	SERVICE	VIO
8	VOL +	ORG RED
9	VOL -	ORG
10		
11		
12		
13		
14		
15		
16		
17		
18		

P5
	Signal	Color
1	ROW 4	BLU BLK
2	ROW 3	BLU BRN
3	ROW 2	BLU RED
4	ROW 1	BLU ORG
5		
6		
7		
8		
9	COL 0	BLU YEL
10	COL 1	BLU GRN
11	COL 2	BLU
12		
13		
14		
15		
16		

P9
	Signal	Color
1	L SPKR(+)	GRY RED
2	L SPKR(-)	GRY BLK
3	R SPKR(+)	BRN RED
4	R SPKR(-)	BRN RED
5		
6	WOOFER(+)	RED YEL (X2)
7	WOOFER(-)	BRN YEL (X2)

P7
	Signal	Color
1–12		
13	MARQUEE RED LED	PNK BLK
14	MARQUEE WHT LED	PNK BRN
15	MARQUEE BLU LED	PNK RED
16	LEADER LED	PNK ORG
17	SEAT L/R LED	PNK YEL
18	BACKREST LED	PNK GRN
19	PED RED LED	PNK BLU
20	PED WHT LED	PNK VIO
21	PED BLU LED	PNK GRY
22–24		

COIN DOOR
- GND
- DBV
- 12V
- COIN 1
- COIN 2
- TEST
- VOL+
- VOL-
- SERVICE
- 5V
- BRN YEL
- METER 999999 / COIN_MTR
- COIN DOOR FIELD GND

- RED – 5V
- BLK – GND

SPEEDO 888 — MINI USB

BOOST

GRN / GRN BRN / GRN RED / GRN ORG / GRN BLU / GRN VIO

KEYPAD — KEY-TEK
GRN ORG / GRN RED / GRN BRN / GRN BLK / GRN BLU / GRN GRN / GRN YEL

MARQUEE ASSEMBLY
LEFT	CENTER	RIGHT	LEADER
RED	WHT	BLU	RED
12vdc

SEAT ASSEMBLY
LEFT	RIGHT
RED	RED
12vdc

PEDESTAL ROPE LIGHT
- RED
- WHT
- BLU
12vdc

Speakers:
- LEFT
- RIGHT
- CABINET WOOFER
- SEAT WOOFER

PEDESTAL INTERFACE

TO GENERAL ILLUMINATION

TO DASH ASSEMBLY

STEER MTR DRIVE BD
- PARALLEL PORT — FROM PC
- MOTOR OUT — MOTOR / GND
- 1 RED WHT 18AWG
- 2 BLK WHT 18 AWG
- +18V
- 0V
- 18VAC MAX
- BLU BLK 18AWG
- BLU 18AWG

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	601-00523-01	Supercars 32" Main Cabinet	1
2	600-00618-01	SC32 Dash Jamb Mounting Bracket	1
3	608-00031-01	H2O Coindoor Housing	1
4	2-1-11-00-00-000	Speaker Woofer-6.5" 4 OHm	1
5	600-00076-01	AC Inlet Power Plate (standard)	1
6	Dash_Assy_SC-32wLEDboards	Dash_Assy_DRIFT_Exploded	1
7	603-00518-01	SC32 Hood Plastic	1
8	600-00030-01	PEDESTAL MOUNTING CHANNEL	2
9	820-00001-00	Fan, 120vac,19/15W	1
10	Supercars_Pedestal_Assy-32	Supercars_Pedestal_Assy-32	1
11	RIO_DRIFT_ASSY		1
12	40-6000-00		1
13	604-00012-01	50-2661-10 Happ Dual Pedals	1
14	850-00010-00	OPTIPLEX_PC	1
15	X-former		1
16	2-1-02-00-00-021	UP52 Power Supply 12V/9A GH	1
17	600-00608-01	SC32- LCD End Cap	2
18	600-00110-01	H2O Cabinet Perf Side Vent	1
19	601-00526-01	SC32 Upper Back Door	1
20	600-00120-01	Dell OptiPlex 740 Mounting Bracket	1
21	32-LCD-ASSY-SC-Strippeddown3		1
22	601-00527-01	Woofer Mounting Board	1
23	600-00616-01	SC32 Under dash Woofer Grill	1
24	606-00544-01	SC32 Monitor Frame Sticker	1
25	600-00619-01	SC32 Cabinet Floor Diamond Plate	1
26	Backdoor Assy		1
27	812-00004-01	18" Flourescent Assy 240V	1
28	2-1-10-00-00-000	5.25 Full Range Speaker	2
29	601-00531-01	Cabt Dash Support_SC_32 (Camel Back)	1
30	Marquee_Assy-32		1
31	T-molding_Left		1
32	T-molding_Right		1
33	T-molding_Ped		2
34	T-molding_Monitor		1
35	702-00006-00	12 inch red CCFL	1
36	600-00021-01	Pedal Light Lens	1
37	600-00650-01	Supercars-Hasp-Left(dbv/under)	1
38	600-00651-01	SC-Hasp-Right(DBV-under)	1
39	DBVrough		1
40	Diskus-Lock		1

REMOVE PANEL FOR ACCESS TO DVD TRAY, MONITOR CONTROLS AND TERMINALS.

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL±
ANGULAR: MACH± BEND ±
TWO PLACE DECIMAL ±
THREE PLACE DECIMAL ±

INTERPRET GEOMETRIC TOLERANCING PER:

MATERIAL

FINISH

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

RAW THRILLS, INC

TITLE:

DRIFT-32_Final_Assy

SIZE **B** | DWG. NO. SC-32_Final_Assy3 | REV

SCALE: 1:48 | WEIGHT: | SHEET 1 OF 1

NEXT ASSY | USED ON

APPLICATION | DO NOT SCALE DRAWING

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	601-00524-01	SC32 Pedestal	1
2	Supercars_Seat_Assy	Supercars_Seat_Assy	1
3	606-00584-01	Supercars- Pedestal Marquee	1
4	600-00639-01	SC Rear Pedestal LED Clip	4
5	500-00056-01	LED String_72_RGB	1
6	Underseat lamp and socket	Pedestal Seat Lamp	1
7	600-00039-01	pedestal lower window	1
8	600-00103-01	Pedestal Diamondplate	1
9	600-00648-01	Supercars-Rear Marquee Edge Bracket	1

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	RAW THRILLS, INC
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL± ANGULAR: MACH± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN			TITLE:
	CHECKED			
	ENG APPR.			Supercars_Pedestal_Assy-32
	MFG APPR.			
INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			
	COMMENTS:			
MATERIAL				SIZE: B DWG. NO.: Supercars_Pedestal_Assy-32 REV: A
FINISH				

NEXT ASSY | USED ON

APPLICATION | DO NOT SCALE DRAWING

SCALE: 1:10 WEIGHT: | SHEET 1 OF 1
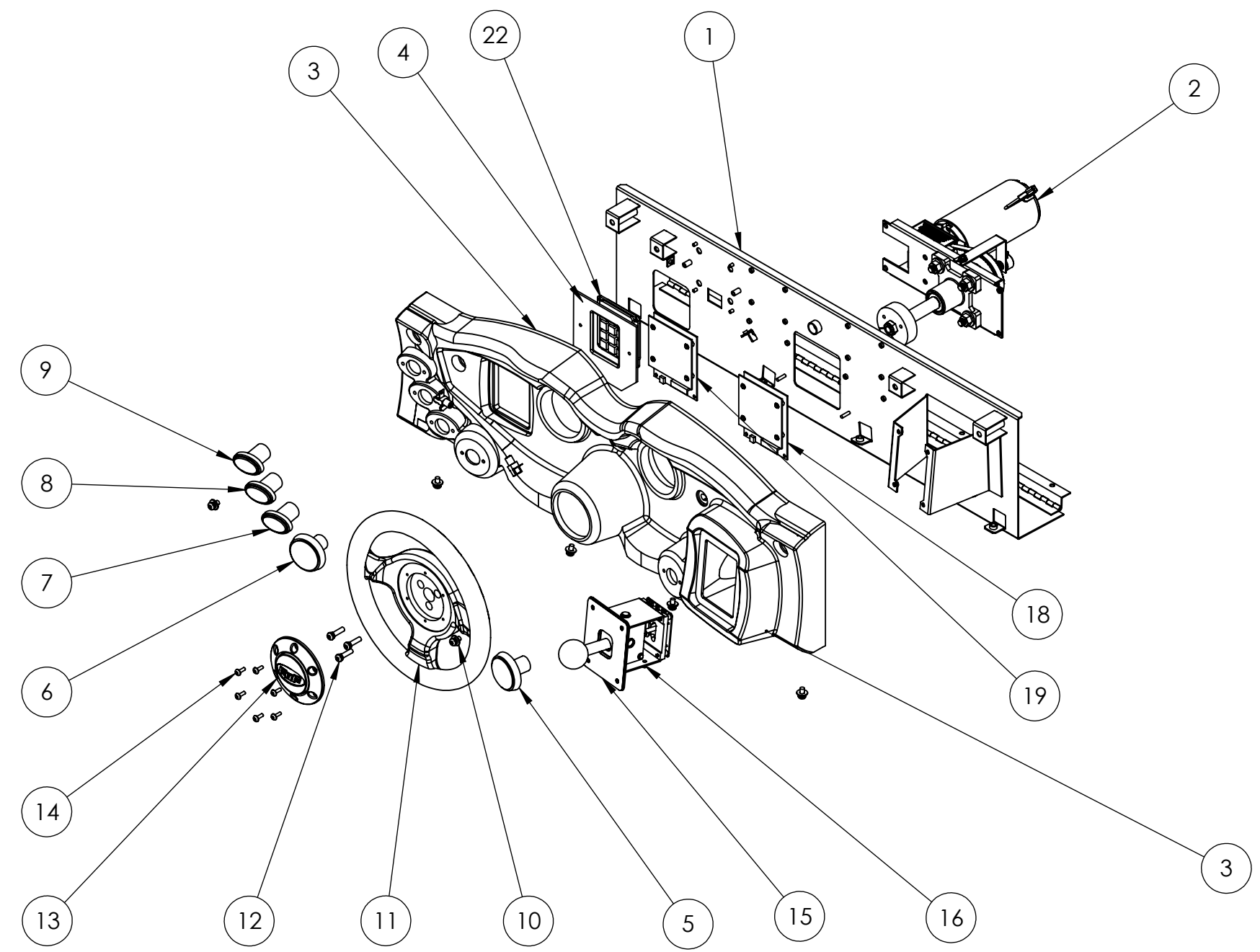
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	600-00609-01ASSY	Dash_Assy_SC32	1
2	Steering_Assy		1
3	603-00517-01	Supercars Dash- PRODUCTION	1
4	813-00006-01	Keypad- ATM Style Key-Tek	1
5	702-00032-00	Large Green Round Button- Start/Nitrous	1
6	702-00031-00	Large Orange Round Button- Tunes	1
7	702-00000-00	blue view button -small oval	1
8	702-00003-00	white view button -small oval	1
9	702-00002-00	red view button -small oval	1
10	Dash_screw-lock-flat-500		6
11	Midway-HappSteeringWheel		1
12	Dash_screw-lock-1000		3
13	603-00521-01	FNF Steering Wheel Cap	1
14	Torx832-500		6
15	606-00553-01	SC32 Shifter Plate Decal (5 Mil)	1
16	604-00013-01-2	Happ-4 Speed Shifter	1
17	606-00553-01-R5	SC32 Shifter Plate Decal (5 Mil)	1
18	BoostAssy		1
19	SpeedoAssy		1
20	600-00649-01	Supercars - Keypad Edge glow	1
21	Bulb and Holder		2
22	2-1-14-00-00-000	Old School Keypad	1

UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL± ANGULAR: MACH± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN		
	CHECKED		
	ENG APPR.		
	MFG APPR.		
INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
MATERIAL	COMMENTS:		
FINISH			

NEXT ASSY | USED ON

APPLICATION | DO NOT SCALE DRAWING

RAW THRILLS, INC

TITLE:

Dash_Assy_DRIFT_Exploded

SIZE **B** | DWG. NO. Dash_Assy_SC-32w-o LEDboards | REV

SCALE: 1:8 | WEIGHT: | SHEET 1 OF 1

Appendix A: Hard Drive Recovery

> **NOTICE:** Fast and the Furious is shipped with a recovery compact disk. Hard drives have been known to occasionally fail for many reasons. Follow the procedure below to restore data on the hard drive if a disk failure should occur. Use extreme care when performing the following procedure and avoid rough handling of pc or CD. Please check the Troubleshooting Guide section of this document. Have the recovery CD ready before you begin.

The following are some symptoms which may indicate a possible bad hard drive:

- Hard Drive Test reports "bad" or "missing" files. Please refer to Trouble Shooting section of the manual.
- The game fails to finish loading.
- A boot error is reported after game is power cycled or reset.
- The game is looking for a boot CD to be inserted.
- Erratic game or attract mode.

Note: It is important that the USB cable from pc and power is connected to the I/O board before you proceed.

Hard Drive Recovery Procedure:

1. Open the control panel to access the pc.
2. Press the button on the CD drive to open CD tray.
3. Carefully insert the recovery disk into the tray.
4. Press the button on the CD drive to close the CD tray.
5. Turn OFF the pc by pressing the power button once.
6. Turn ON the pc by pressing the power button once.
7. Disk recovery process will begin automatically.
8. A message at the top of the screen will prompt you to remove the disk when process is over. Press the CD drive button to open tray. Remove the recovery disk and store safely.
9. Turn OFF the pc by pressing the power button once.
10. Turn ON the pc by pressing the power button once.

Note: Do not interrupt power or reset the game during the following process!

11. The game will begin to initialize and load. It will typically take about five minutes to complete.
12. The hard drive recovery process is complete when the game enters attract mode.
13. Proceed with control calibration and make necessary game adjustments. Please refer to Setup and Test section of this manual.

-- End of Procedure--

AppendixB: Power Management Setting(BIOS)

NOTE: Fast and Furious is shipped with the correct BIOS settings. Any changes made to the BIOS other than what is described below may adversely affect game functionality.

This BIOS setting allows the PC to automatically power up when AC power is detected. This eliminates the need to manually turn the PC ON after a power disruption.

Procedure:
1. Turn game *OFF.*
2. Connect a PS/2 or USB keyboard to the PC.
3. Hold the <u>DELETE</u> key while turning the PC *ON*.
4. On the **BIOS** menu screen, use the <u>DOWN</u> arrow to scroll down to **Power Management Setup**. Hit <u>ENTER</u> key once.
5. On the **Power Management Setup** menu, use the <u>DOWN</u> arrow to scroll down to **Afte**r **AC Power Lost**.
6. Use the (+) button to change **After Power Lost** setting to: [**Power ON**].
7. Press ESC key to go back to main menu and select save and exit option..
8. Hit <u>Enter</u> to Save and Exit.
9. PC will reset and begin to load game.

Other BIOS settings to consider when replacing a PC:

1: Halt on Error = NO ERROR
2: BOOT Sequence = 1st: CD/DVD, 2nd HDD

<u>Please note that due to the PC power supply's safety feature which protects against damage due to power disruptions, it may be necessary to remove AC power from the game for a period of 5-10 seconds before the power supply becomes operational again.</u>

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Parental Advisory

A note to parents: The Fast and the Furious is rated PG-13. Consult www.filmratings.com for further information.

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