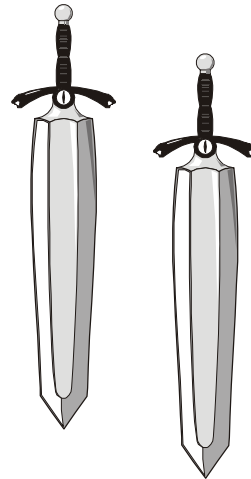


GAUNTLET DARK LEGACY

CHAPTER



Service



NOTICE: Information in this manual may change without notice. Midway Games West Inc. reserves the right to make improvements in equipment function, design, or components as progress in engineering or manufacturing methods may warrant.

Only qualified service personnel should perform maintenance and repairs. The following product guidelines apply to all game operators and service personnel. Specific notes, cautions and warnings appear throughout this manual. Read safety information in Setup Chapter thoroughly before beginning service.

Control Panel

Switch off AC power. Remove screws along curved front edge of control panel. Protect speaker grilles where joysticks will touch. Grip joysticks and carefully tilt control panel back on its hinge.

To return control panel to normal position, slowly lean it forward until it rests on cabinet. Do not let panel slam down onto control base. Fix bound or pinched wires before re-installing screws. Rotate each joystick and verify motion is smooth and does not bind.

Coin Mechanism

Switch off AC power. Unlock and open coin door. Unlatch and remove each coin mechanism separately to clean or replace with a different type. Ensure mechanism seats properly in holder upon reinstallation. Close and lock release latch, then close door. Turn on AC power and change mechanism setup, then test known good and bad coins to verify operation.

Dollar Bill Validator

(Use MARS AE2411-U3 or other U.L. Recognized currency changer)

Install dollar bill validators or other currency acceptors in games manufactured with additional wiring connector. Turn AC power off and unplug line cord. Unlock and open coin door. Read door label for additional information. Remove nuts, spacers, and cover plate from door. Change switch setting or other adjustments before mounting unit. If manufacturer has supplied an adapter plate, place it over door cutout.

Install spacers on threaded studs, then align validator mounting holes with studs and seat unit in door opening. Install nuts and tighten firmly. Attach ground wire (green with yellow stripe) lug to door ground stud next to hinge. Mate wiring harnesses and press to fully seat connectors. Route wires away from door edges and hinge. Check for proper bill chute alignment. Plug in line cord and turn on AC power. Change mechanism setup and pricing, then test known good and bad bills to verify proper operation. Close and lock coin door when correct.

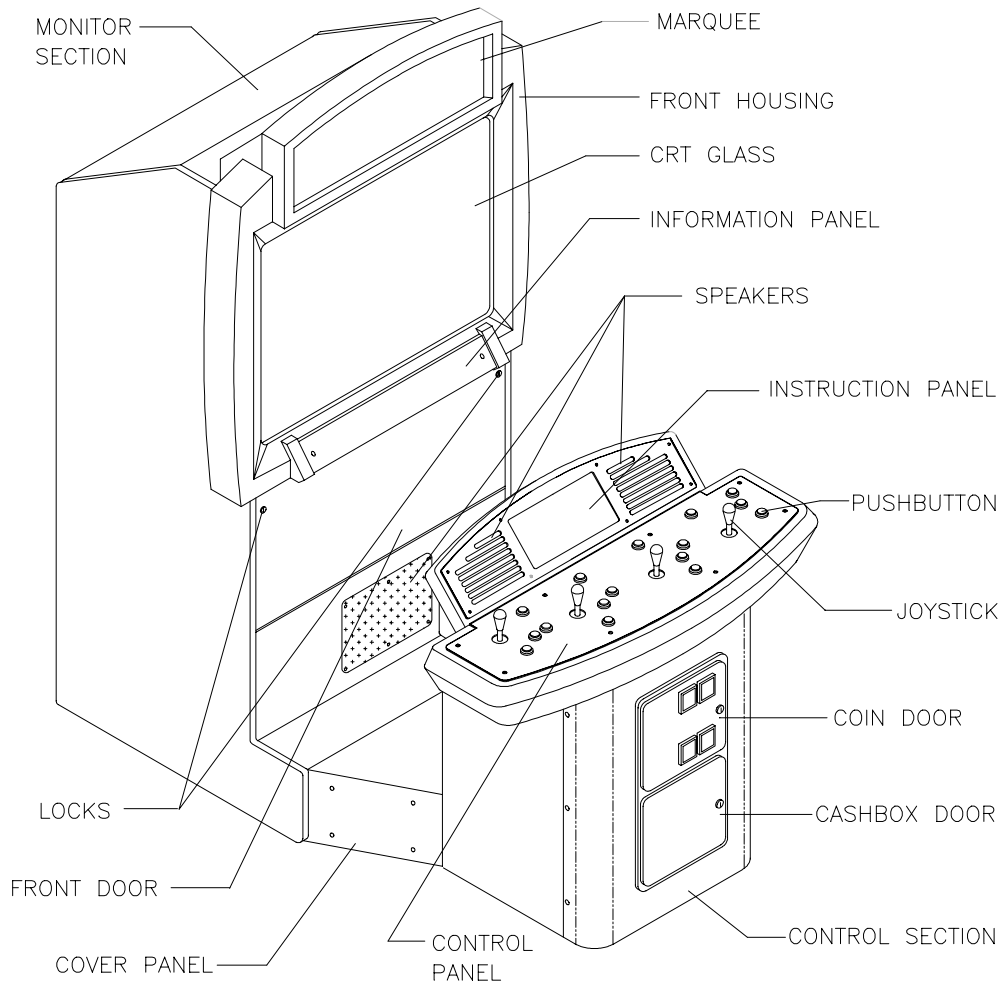
Front Housing/Marquee Assembly

Switch off AC power. Unlock and open front cabinet door until it rests on chains. Unlatch front housing and gently pull out on bottom, swinging it up towards the control section. Remove free end of prop rod from retainer at left side of monitor shelf and swing up until it rests in rod bracket on lower right side of front housing. Disconnect fluorescent light harness. Remove prop rod and snap into retainer before lowering housing to its previous position. Have someone hold housing from control panel side while removing three screws holding hinge to top of cabinet. Place housing face down on a workbench for service. Do not overtighten hinge screws during reinstallation.

Viewing Glass

Switch off AC power. Remove front housing and marquee assembly. Set assembly on a workbench. Remove metal bracket between viewing window and marquee. Remove metal bracket under window. Lift

viewing glass out of front housing. Clean glass before reinstalling. Install bracket and tighten screws. Do not use excessive force.



EXTERNAL COMPONENTS

Marquee

Switch off AC power. Open front cabinet door and prop up front housing. Disconnect fluorescent light harness. Remove Front Housing/Marquee Assembly and place on a workbench. Remove metal bracket between viewing window and marquee. Remove metal bracket at top of marquee opening. Lift glass and artwork out from front housing. Clean glass before reinstalling. Tighten screws.

Fluorescent Light Assembly

	<p>WARNING. If a dropped fluorescent tube or a CRT breaks, it will implode. Use care in handling.</p>
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Switch off AC power. To change starter or bulb, open front cabinet door and prop up front housing. Grasp bulb at each end and give it a quarter turn. Gently pull bulb straight out to remove from sockets. Starter

also requires quarter turn for removal. Do not force bulb or starter during reinstallation. Clean bulb to remove fingerprints and dust. Close housing and turn on AC power. Verify lamp lights before locking door.

To remove entire light fixture, open door and prop up housing. Disconnect fluorescent light assembly connector from power cable. Close and remove housing from cabinet, setting it on a workbench. Remove bulb. Remove screws that hold assembly to light cover, then lift out assembly. Ballast is in the base.

Instruction Overlay and Mini Marquee

Remove eight screws from speaker panel. Lift cover up and off to expose instruction overlay and mini marquee. Bulbs may be removed from strip light assembly with a fuse puller when necessary.

Coin Counter

Switch off AC power. Unlock and open coin and cash doors. Meter is in a lower corner of the door opening. Record meter count before testing or replacing.

Disconnect wiring harnesses and ground wires to coin mechanisms. Reach through coin door and locate meter wires. Disconnect wires. Remove coin door mounting screws. Remove coin door and set on a workbench. Remove meter mounting screws from front. Ensure replacement unit has a diode across the terminals. Remember to reconnect wiring harnesses and ground wire upon reinstallation.

Joysticks

Switch off AC power. Protect speaker grilles and open control panel. Mark and disconnect wiring harness at joystick. Remove fasteners and separate joystick from panel. Remove E-ring and stop spacer from end of joystick shaft, then grasp knob and extract stick from the assembly. Remove corner screws to free slide carriage and stop piece from joystick top. This exposes centering grommet. Do not cross-thread screws during reassembly.

Speakers

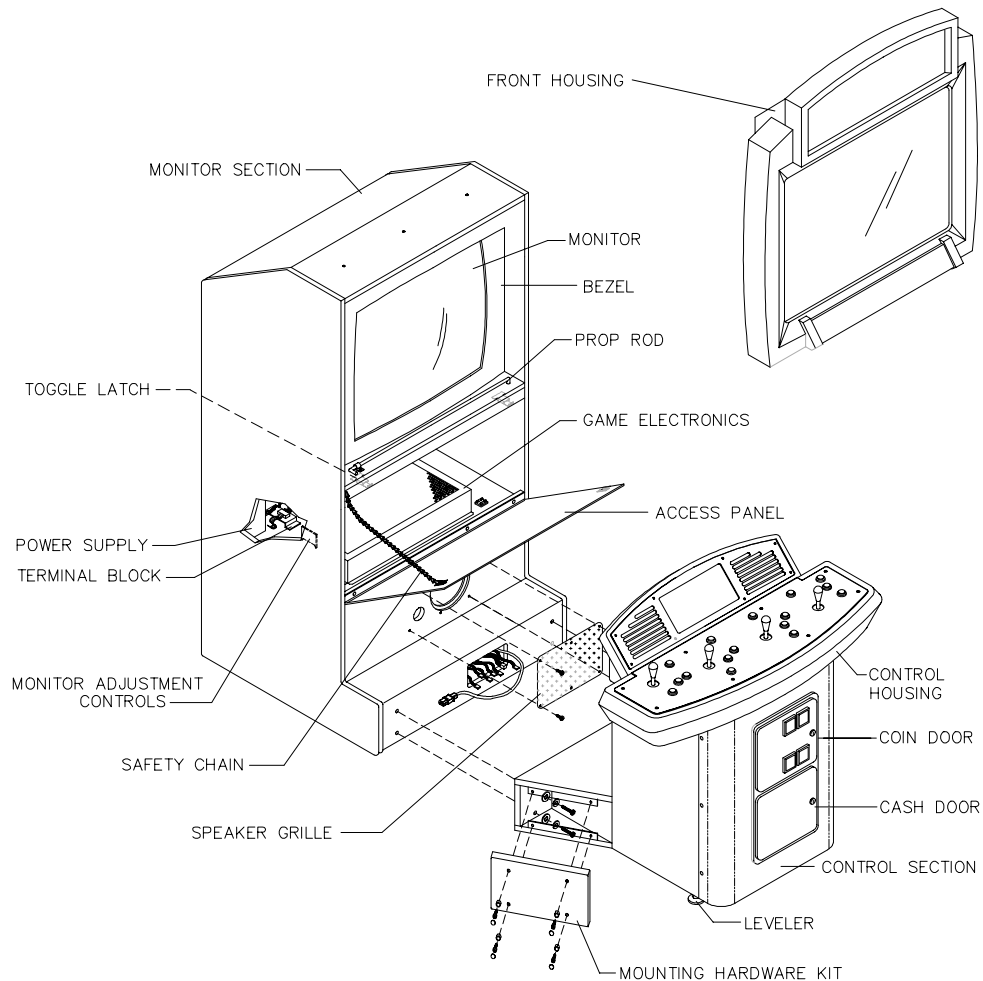
Switch off AC power. Two full range speakers are mounted behind grille at top of the control section. Grill and speakers come out the front. Remove screws and set grille aside. Always remove upper mounting screws first and replace them last to avoid damaging speaker.

Remove speakers from enclosure and disconnect wires. Refer to Cabinet Wiring Diagram for speaker wiring information. Do not use excess force when removing or tightening mounting screws threaded into plastic.

Monitor

Switch off AC power. Open front cabinet door. Move monitor remote board and wiring harness and place it in monitor assembly. (Monitor remote adjustment board is behind front door.) Disconnect fluorescent light assembly connector and all monitor cables. Remove front housing hinge screws and set housing aside. Remove monitor bezel and all barrier panels. Remove four flange nuts securing monitor mounting

brackets to mounting panel. Pull monitor carefully from cabinet and set in safe place. Clean CRT face before reinstalling barrier panels and monitor bezel.



INTERNAL COMPONENTS

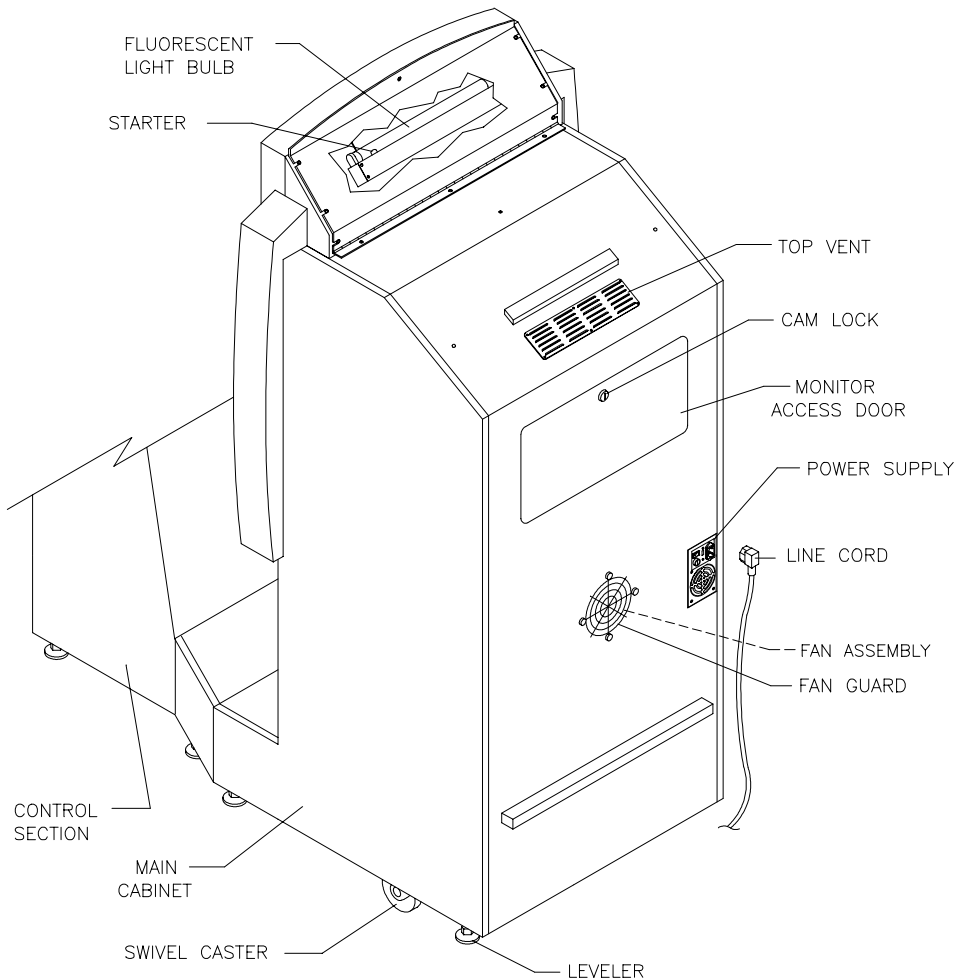
	<p>CAUTION. Video monitor is heavy, with most weight toward front of assembly. Firmly support monitor when you remove it from cabinet.</p>
	<p>WARNING. Monitor does not require isolation from AC line voltage in normal operation. However, when operating outside the cabinet or servicing the monitor on a test bench, you must isolate monitor from line voltage with an isolation transformer</p>

Buttons

Open control panel. Mark and disconnect wiring harness at the switches. Bend large prong away from each switch just enough to slide switch off housing. Separate each switch from its button. Mark switches and harnesses with player numbers and lay them inside control panel box. Unscrew mounting nut from housing. Remove button housing through switch hole from front of control panel.

CPU Board Assembly

Switch off AC power. Open front door. Remove groundplane cover to expose Electronics Assembly. Note orientation of JAMMA connector and other cables. Extract harness and hard disk drive ribbon cable from board connectors. Remove ground plane mounting screws. Slide entire electronics assembly out of cabinet and set in static-free place. Disconnect VGA connector. Remove mounting screws from circuit boards. Carefully remove Sound I/O Board, pulling gently to disconnect PCI edge connector from CPU Board. Set Sound I/O board in static-free place. Carefully remove CPU Board, pulling gently to disconnect from Video Card. Use anti-static bags and protective containers from new parts to store board, if not reinstalled.



REAR VIEW OF CABINET

Sound I/O Assembly

Switch off AC power. Open front door. If used, remove metal cover top to expose Electronics Assembly. Carefully note orientation of JAMMA connector and other cables. Extract harness and hard disk drive ribbon cable from board connectors. Remove groundplane mounting screws. Slide entire electronics assembly from cabinet and set in a static-free place. Remove mounting screws from circuit board. Carefully remove Sound I/O Board, pulling gently to disconnect PCI edge connector from CPU Board. Use anti-static bags and protective containers from new parts to store board if not reinstalled.

Hard Disk Drive

Switch off AC power. Unlock and open front cabinet door until it rests on chains. Remove metal cover from electronics assembly. Disconnect power cable from hard disk drive. Unplug ribbon cable from hard drive and leave attached to CPU board. Remove screws and lift drive assembly from cabinet. Do not stack or drop drives. Store drives in anti-static bags or approved shipping containers.



CAUTION. Hard disk drives are fragile. Never move cabinet while AC power is on. Never stack or drop hard disk drives. Store unused hard disk drives in anti-static bags.

Video Card

Switch off AC power. Open front door. If used, remove metal cover top to expose Electronics Assembly. Disconnect VGA connector. Remove screws holding Video Card to groundplane. Carefully slide Video Card away from CPU Board, disconnecting PCI edge connector. Use anti-static bags and protective containers from new parts to store board if not reinstalled.

Memory

ROM (Read Only Memory) circuits contain computer operating instructions. Switch off AC power. Carefully note position, then remove using chip extraction tool.

To reinstall memory circuits, orient chip over its socket and press firmly to seat pins. Do not force.

Power Supply

Switch off AC power and disconnect line cord. Unlock and open front door. Unplug IEC connector from top of supply and wiring harnesses from back. Disconnect DC. power cable from hard disk drive. Remove two rear screws from supply, then slide from cabinet. Verify line voltage switch setting before reinstalling power supply.



CAUTION. Discharge any static electricity built up in your body by touching power supply chassis. Do this *before* touching or handling electronic assemblies.

Battery

Switch off AC power. Unlock and remove rear door. Remove perforated metal cover. Battery is mounted on top of integrated circuit at Sound I/O Board Assembly location U28. Use chip extraction tool to grasp battery edges and pull up firmly to remove device. Set aside with pins facing up. When installing new battery, align key with slot in integrated circuit.



NOTE. To avoid explosion, replacement batteries must match original in size, voltage rating, and composition. These batteries are designed for very long life. Do not attempt to recharge. Avoid direct shorts across terminals or from terminals to ground. Remove from their holders and store in a safe place until repairs are complete. Dispose of used batteries according to manufacturer's instructions

NOTES
