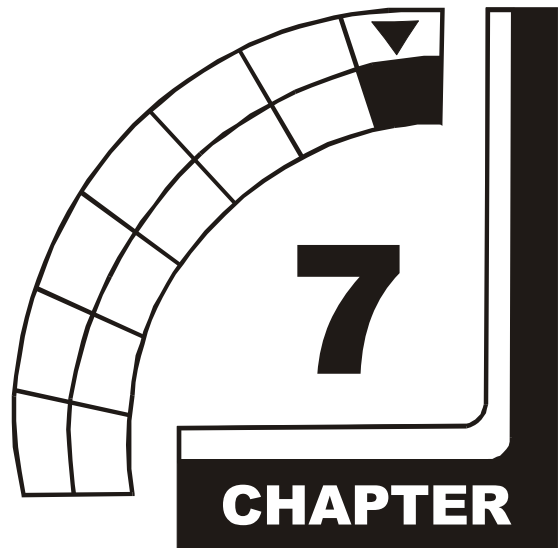




OFFROAD

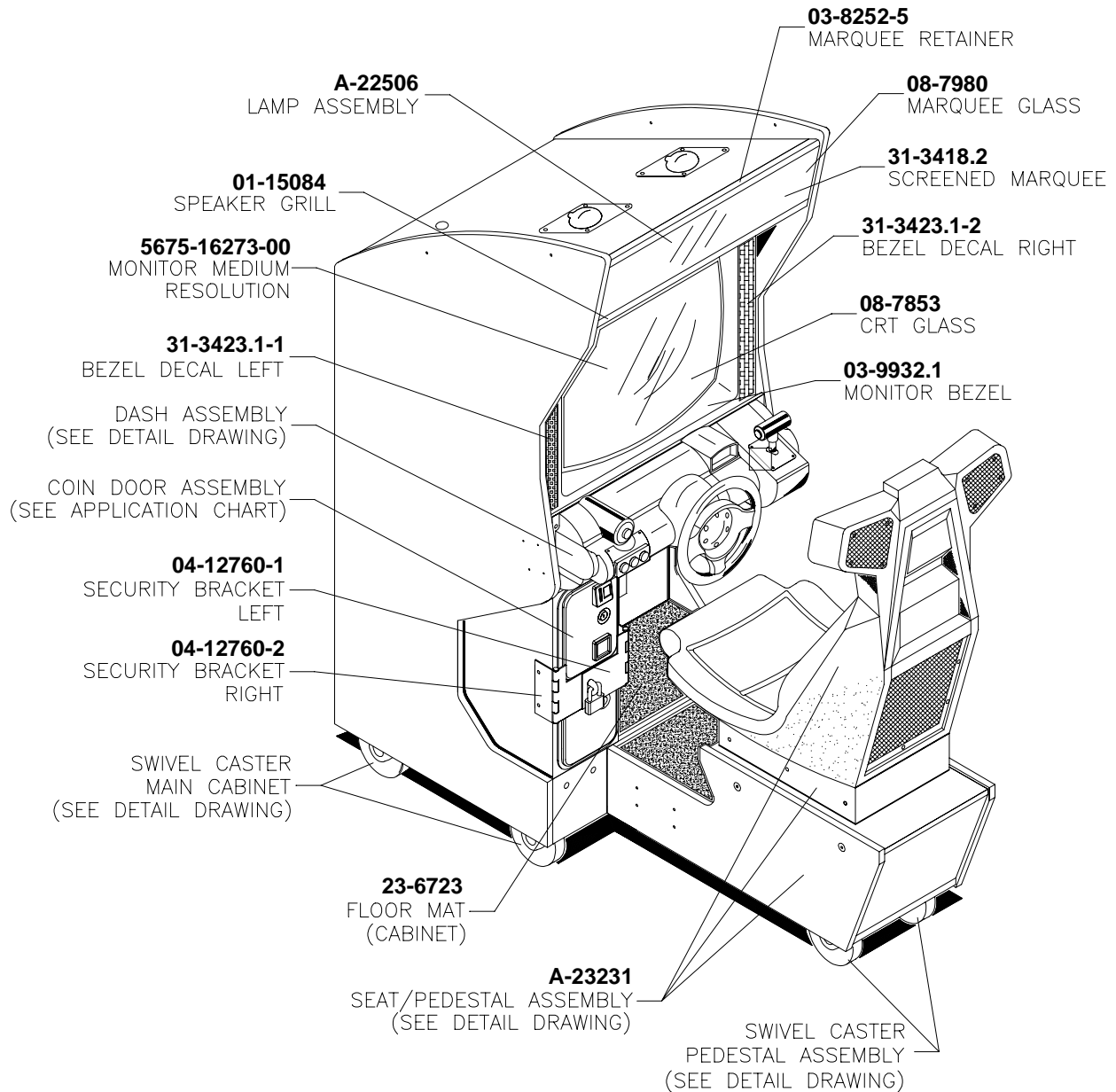
THE THUNDER™



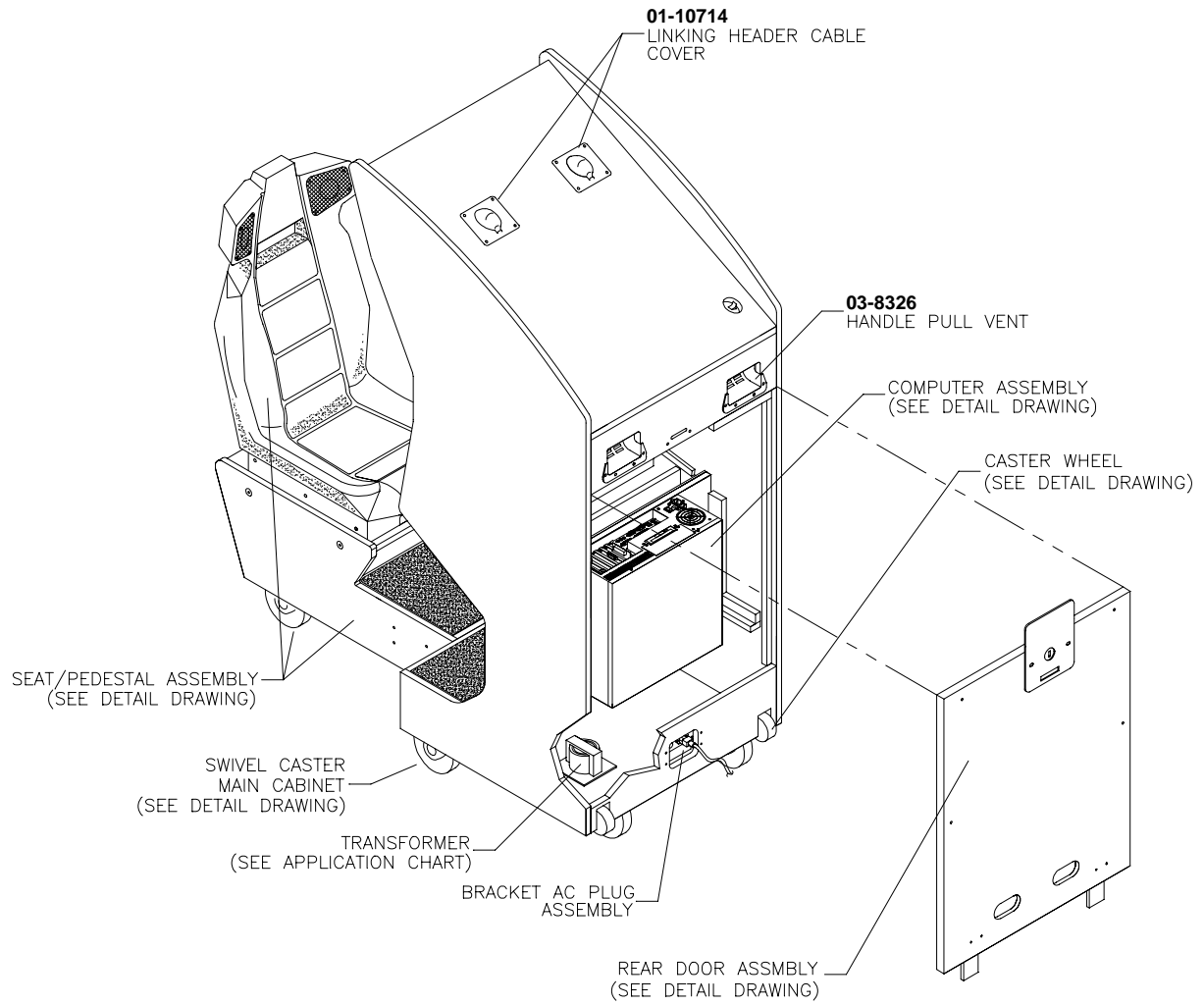
PARTS

	<p>WARNING: Use of non-Midway parts or circuit modifications may cause serious injury or equipment damage! Use only Midway authorized parts.</p> <p>For safety and reliability, don't substitute parts or modify Midway products. Substitute parts or modifications may void the game's EMC directive or FCC type acceptance.</p>
	<p>NOTICE: The term VGM refers to the video game machine.</p>

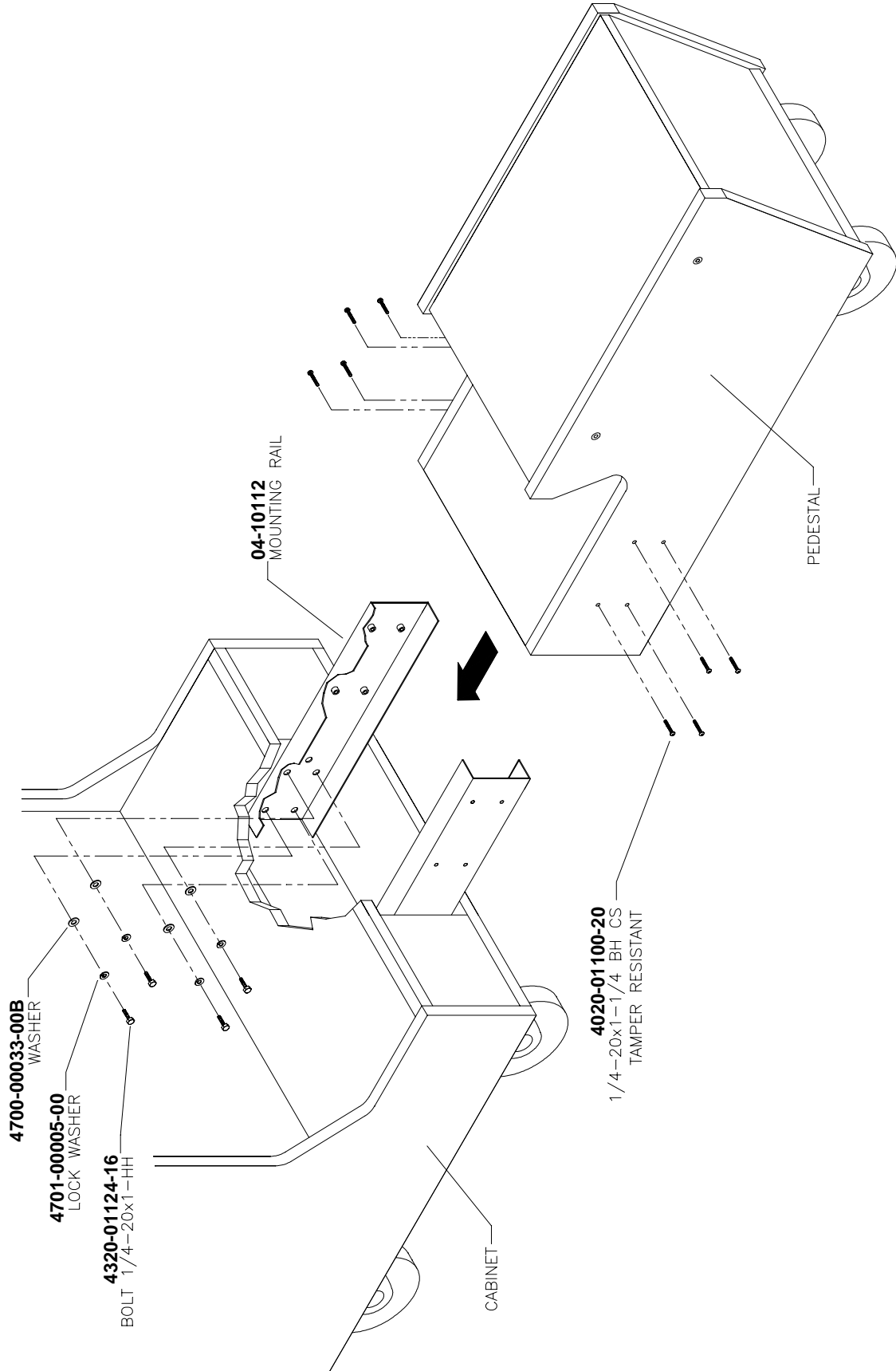
Cabinet Front View



Cabinet Rear View

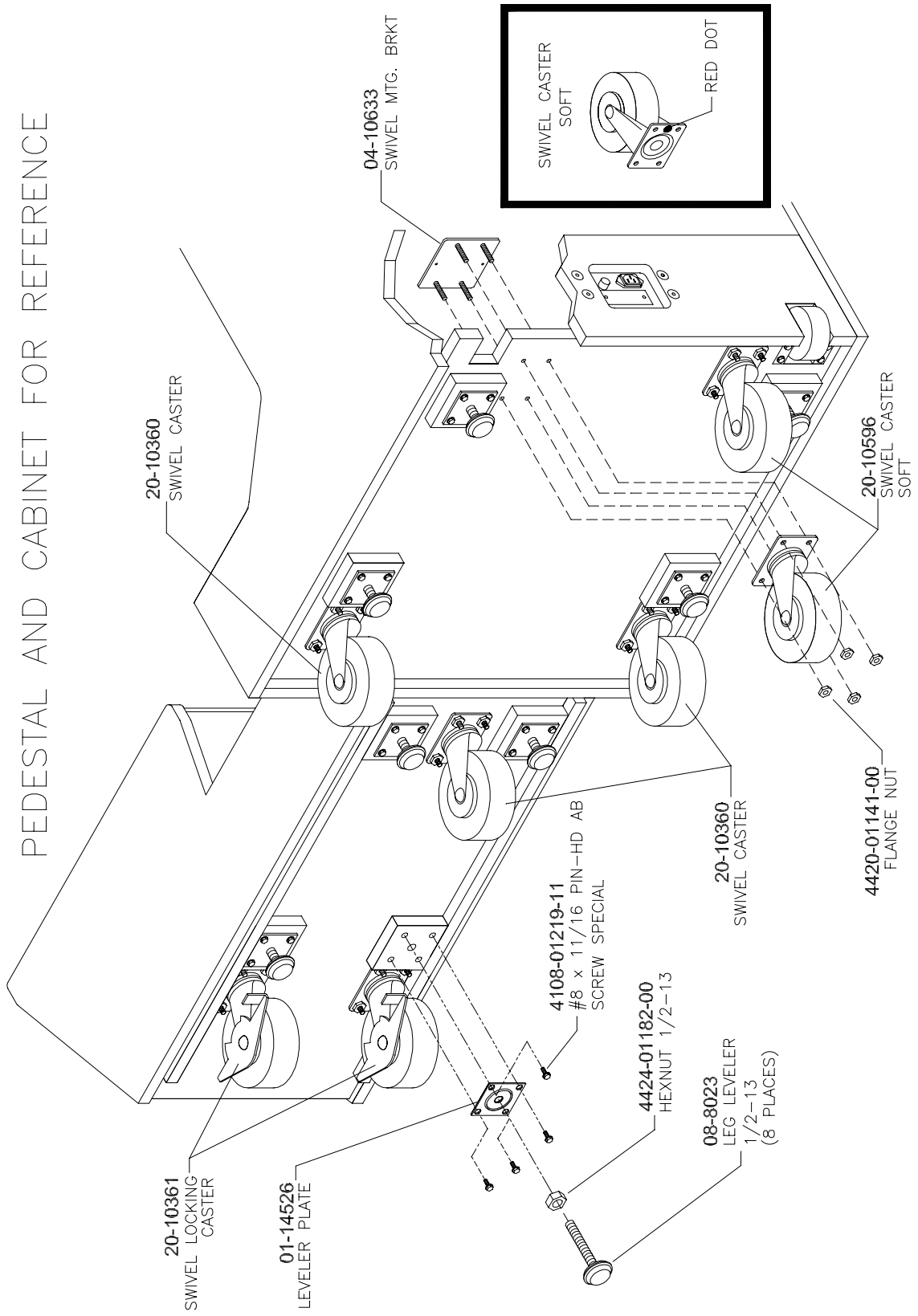


Cabinet Joining Details

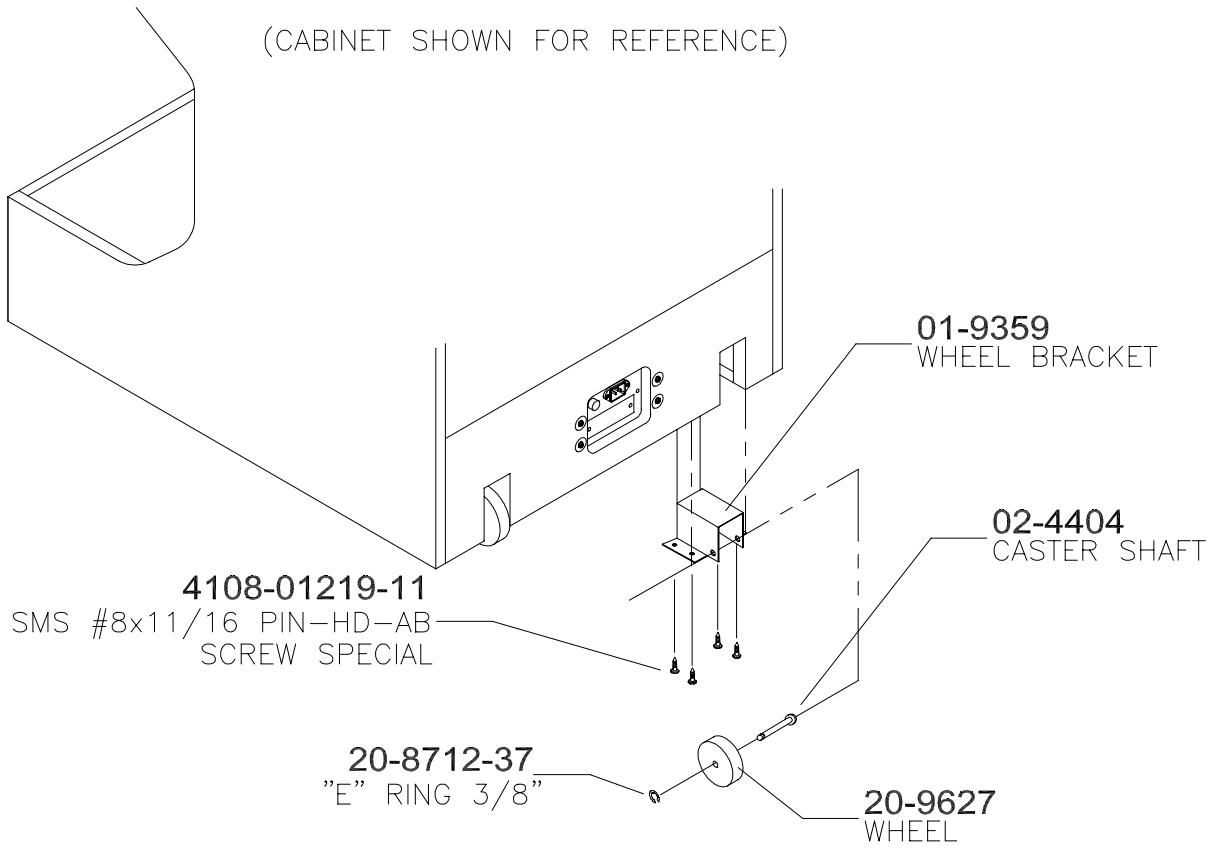


Casters and Levelers

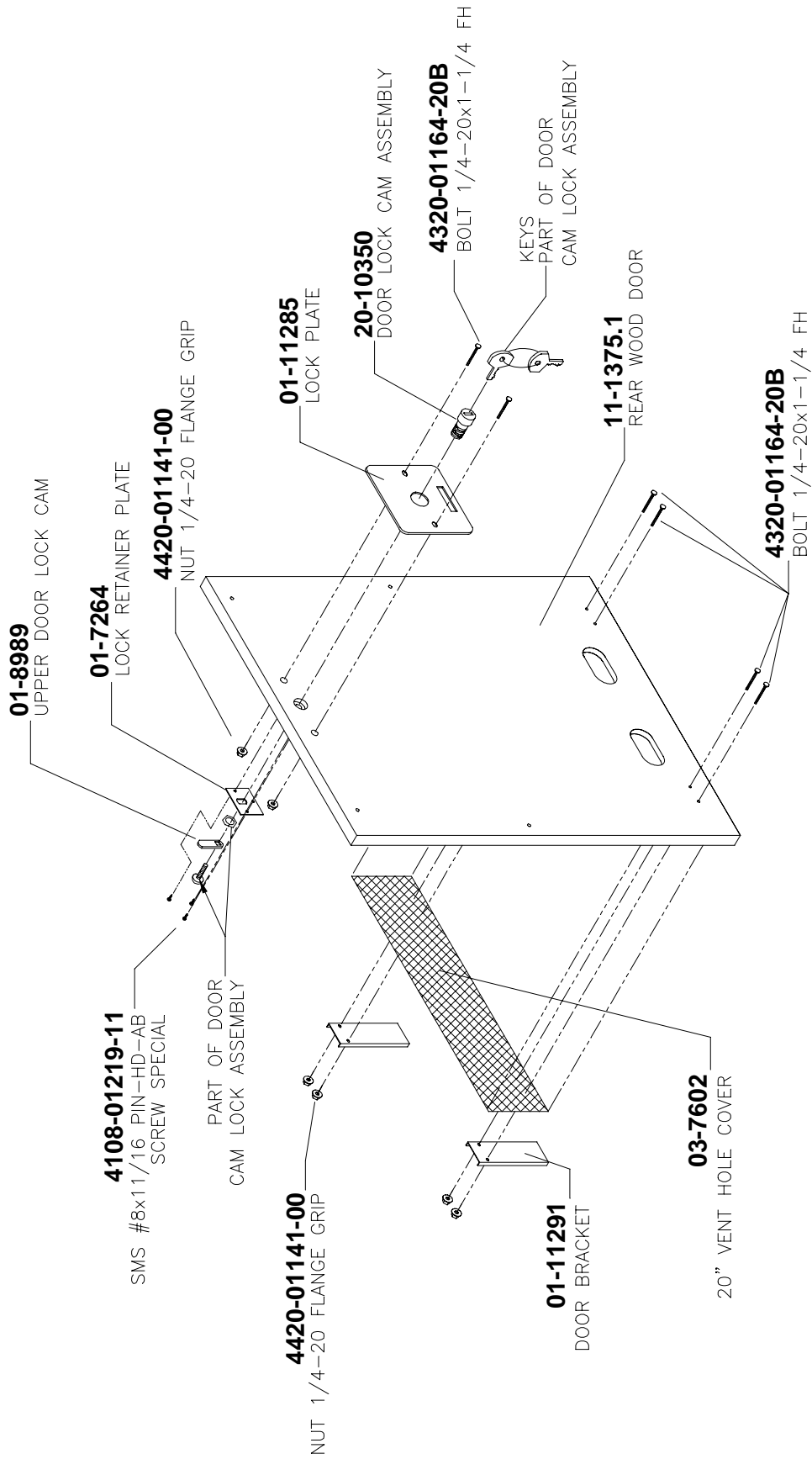
PEDESTAL AND CABINET FOR REFERENCE



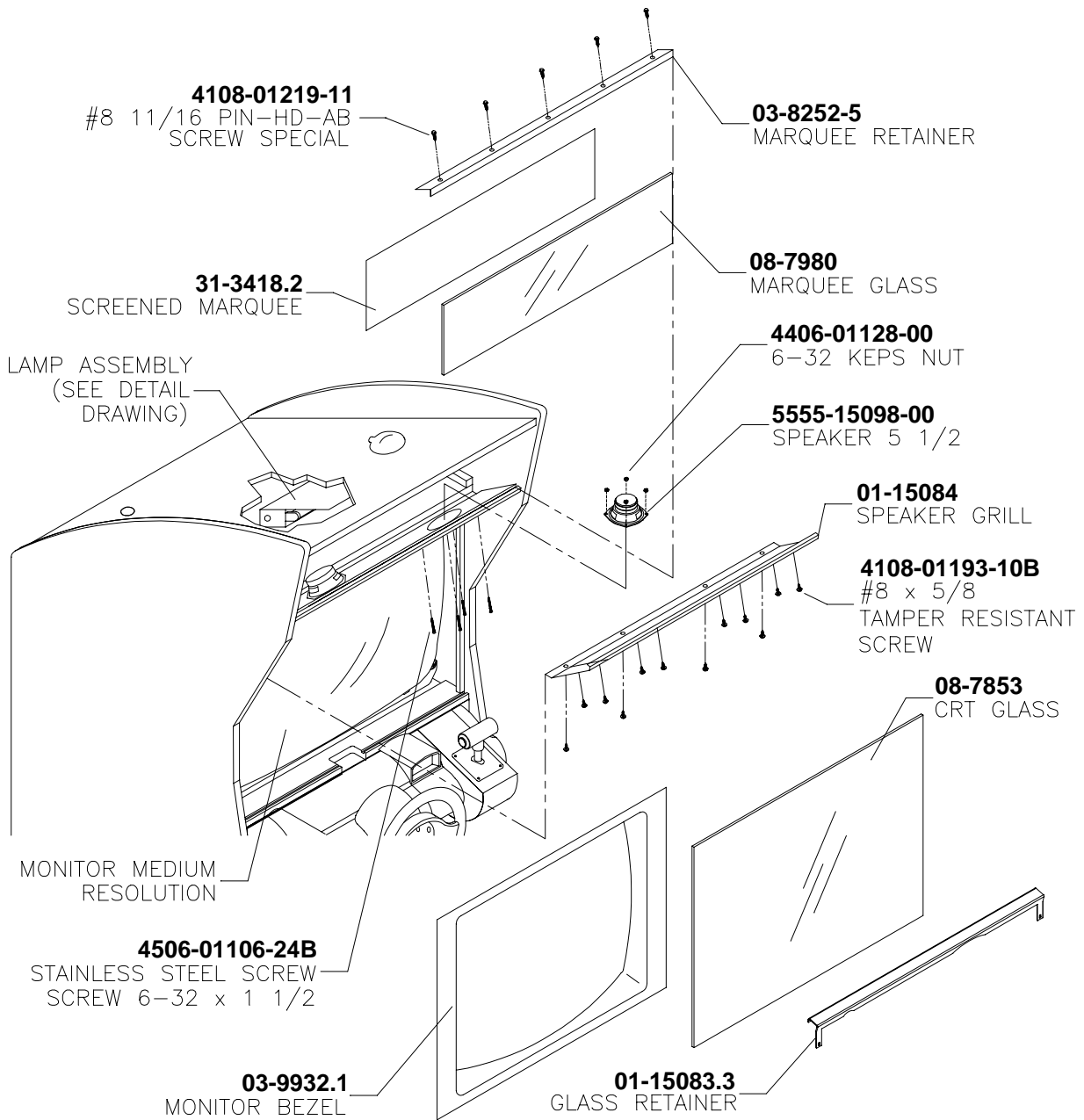
Rear Casters



Rear Door Assembly A-23238

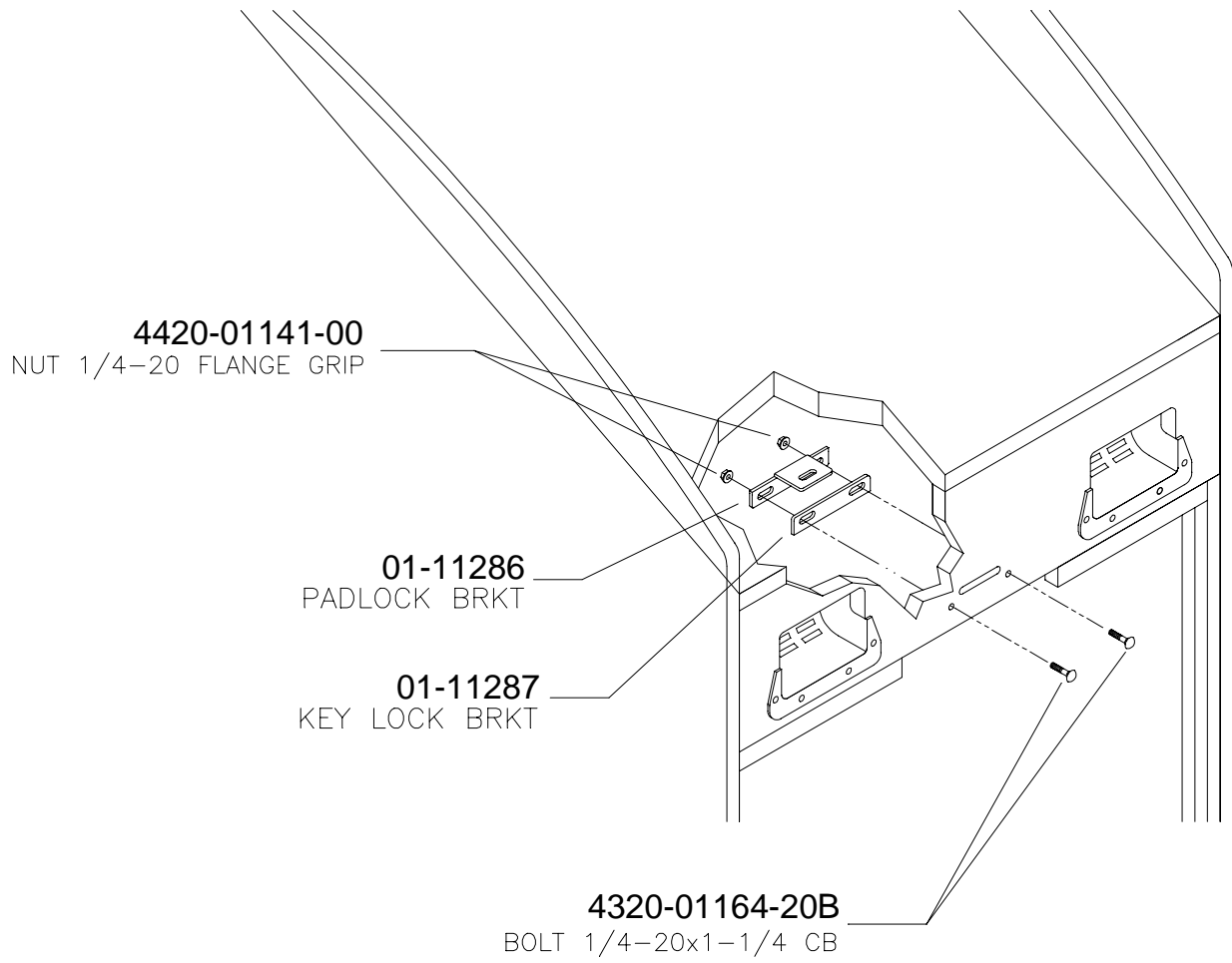


Monitor Bezel Components



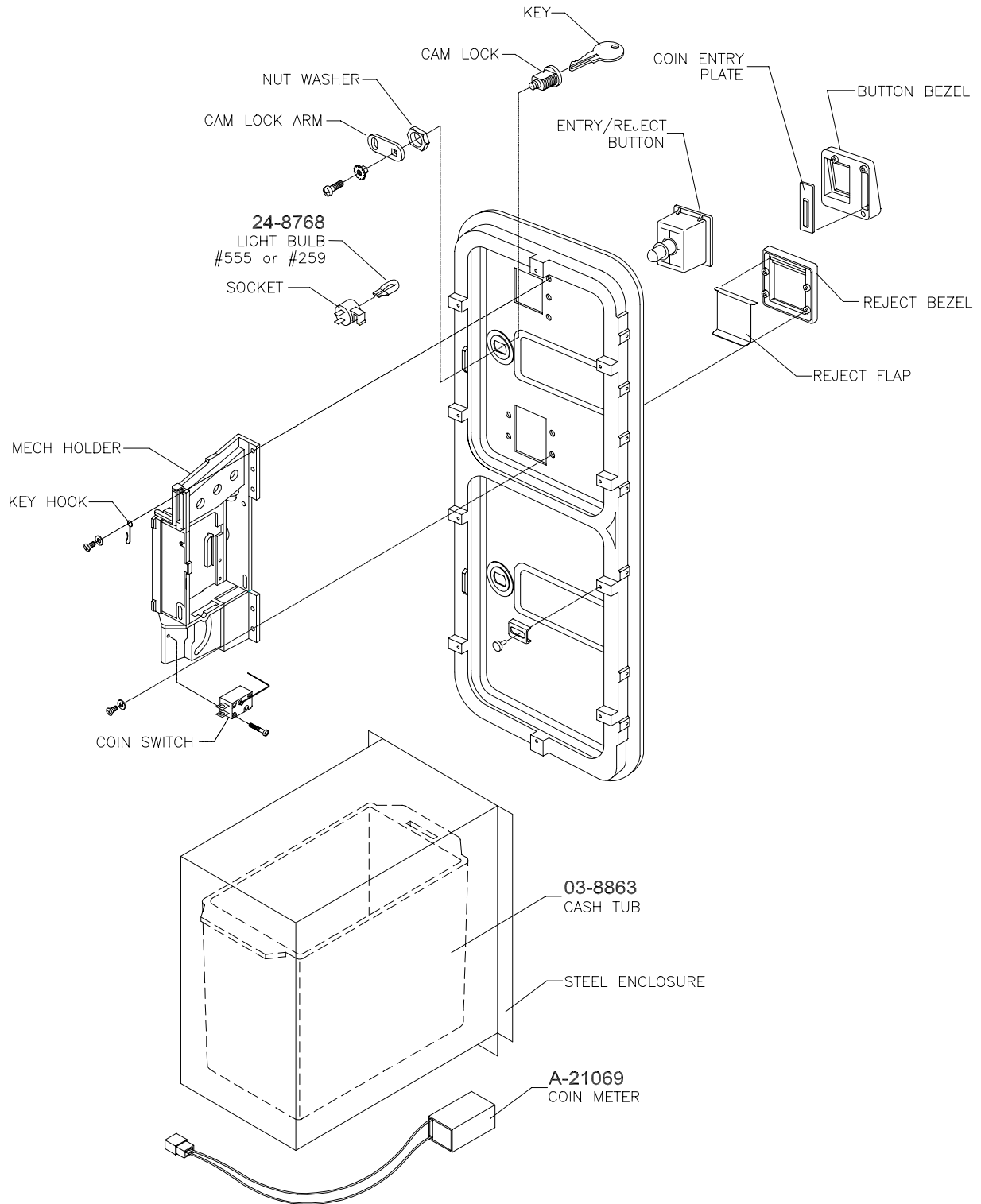
Padlock

CABINET SHOWN FOR REFERENCE



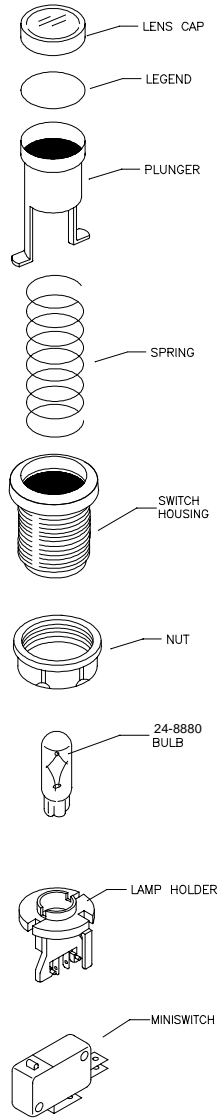
Coin Door Assembly

(See Coin Door Application Table for Assembly Number)

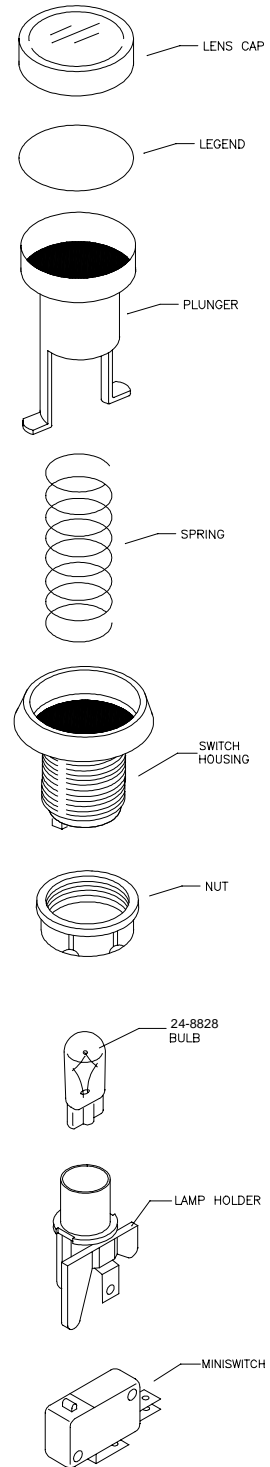


Pushbutton Assembly

20-9663-XX



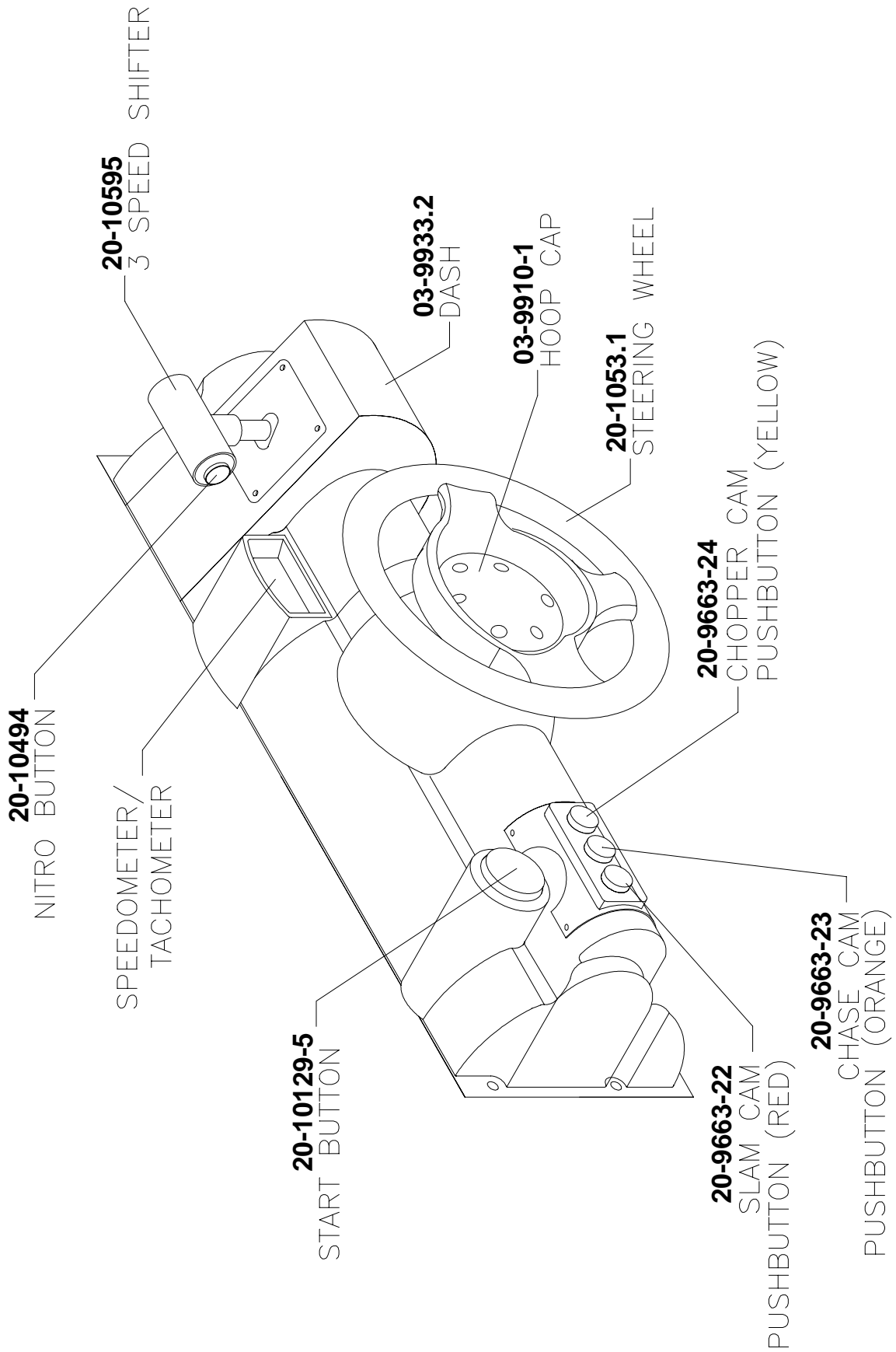
20-10129-5



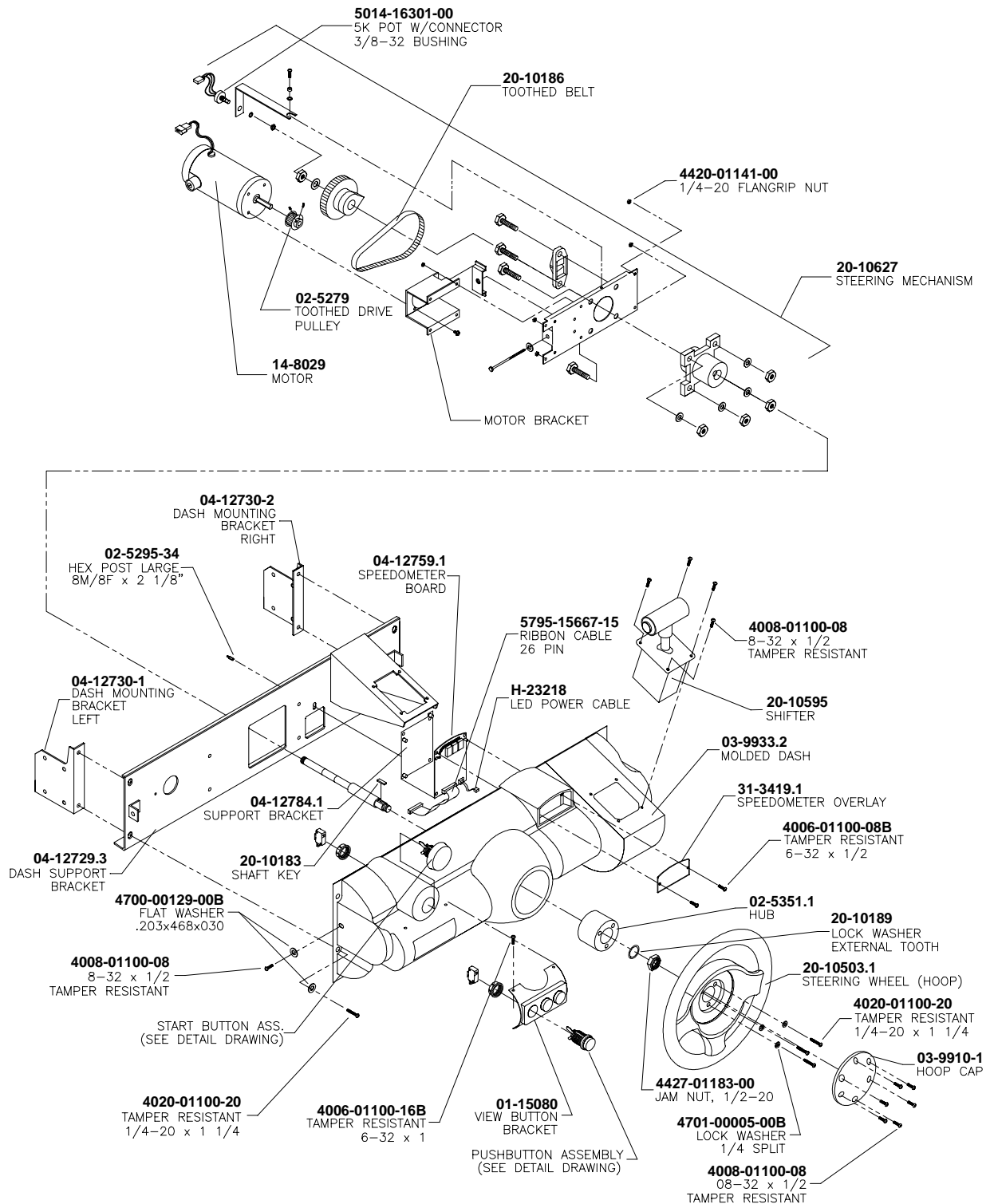
OFFROAD THUNDER SWITCH PUSHBUTTON CHART

20-10129-5	SWITCH PUSHBUTTON	GREEN	START
20-9663-22	SWITCH PUSHBUTTON	RED	SLAM CAM
20-9663-23	SWITCH PUSHBUTTON	AMBER	CRASH CAM
20-9663-24	SWITCH PUSHBUTTON	YELLOW	CHOPPER CAM

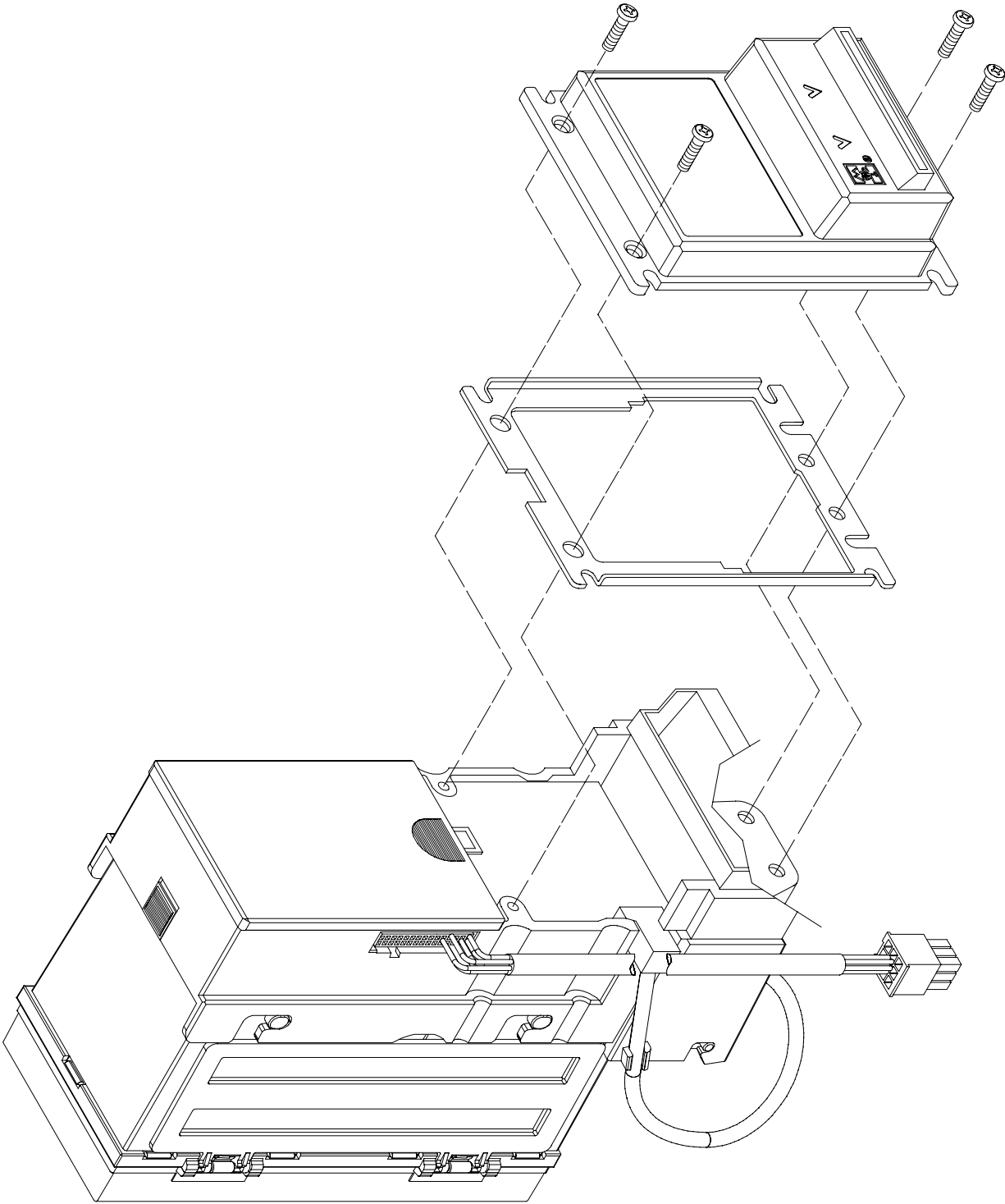
Dash Assembly A-23113



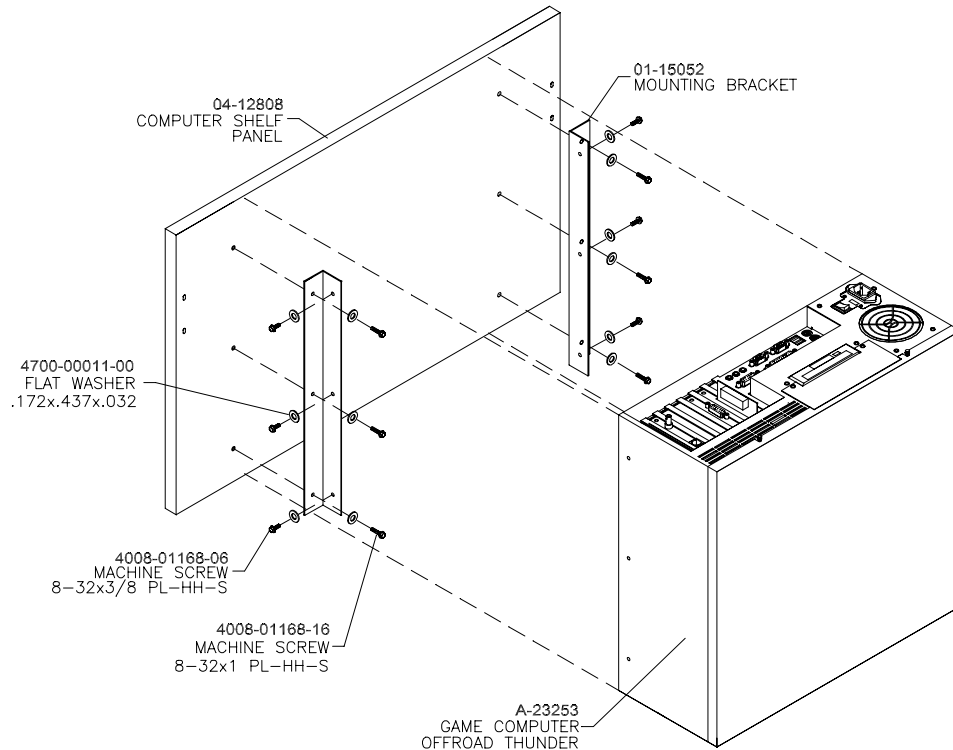
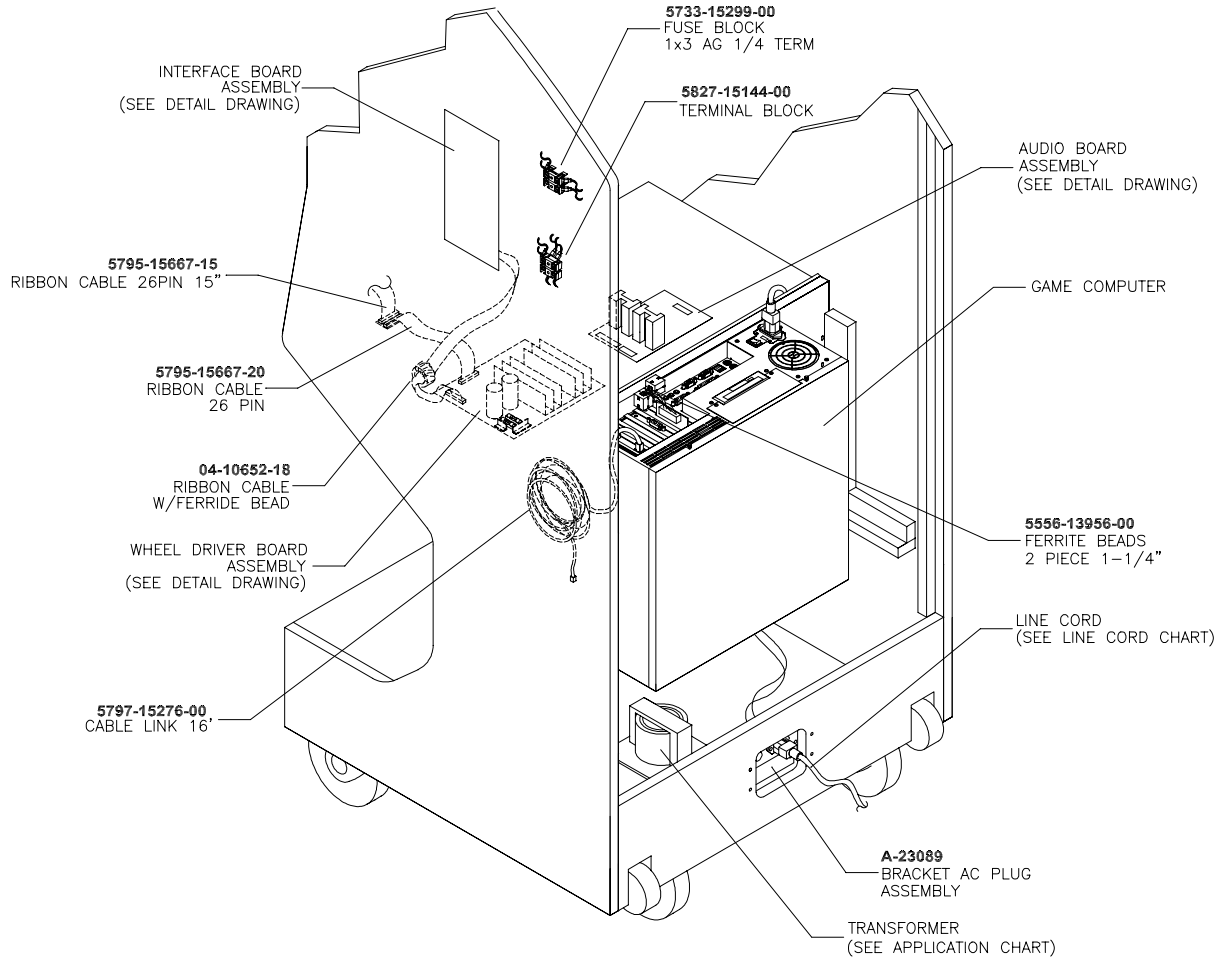
Dash Assembly A-23241 (Exploded)



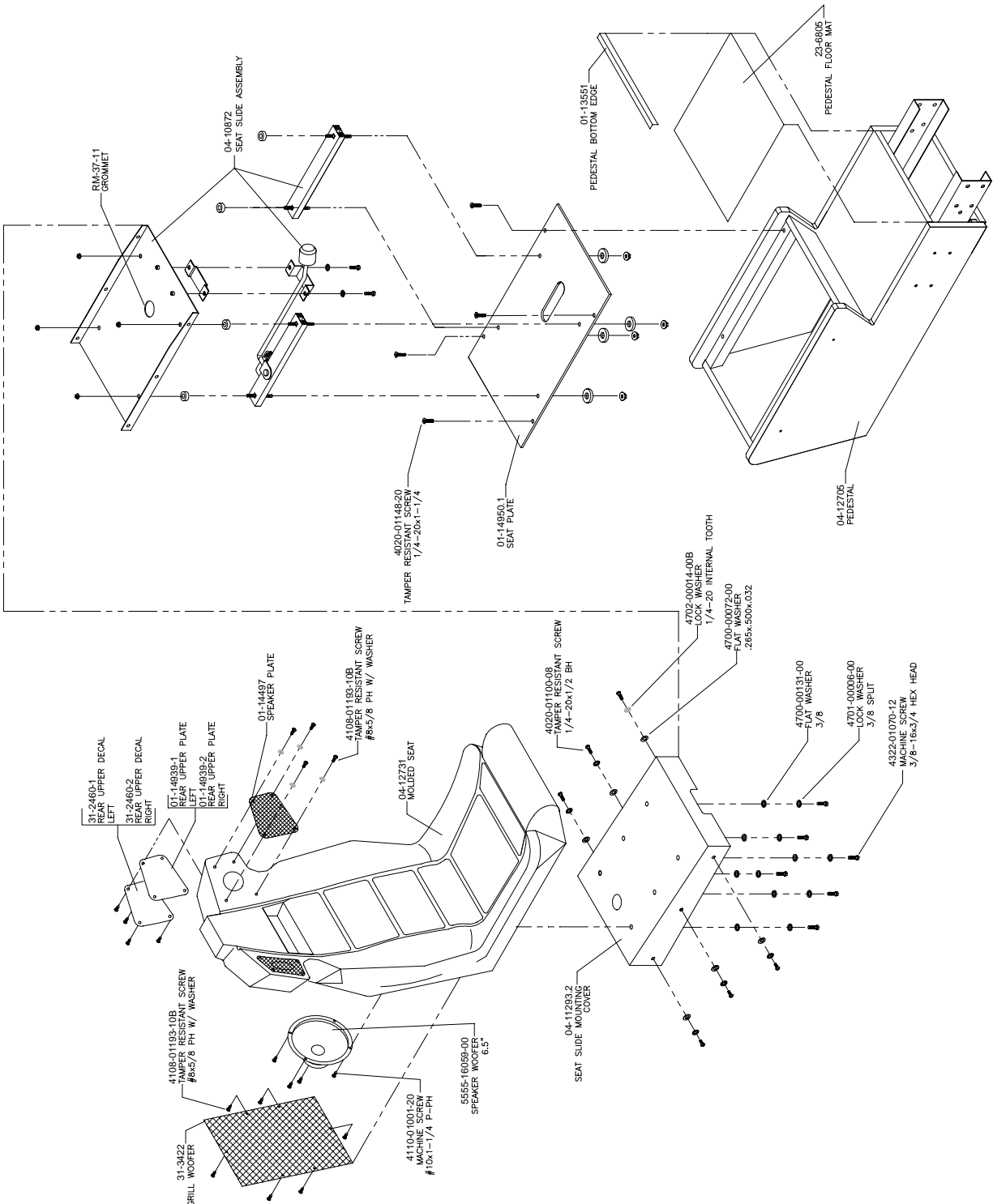
Optional Bill Validator



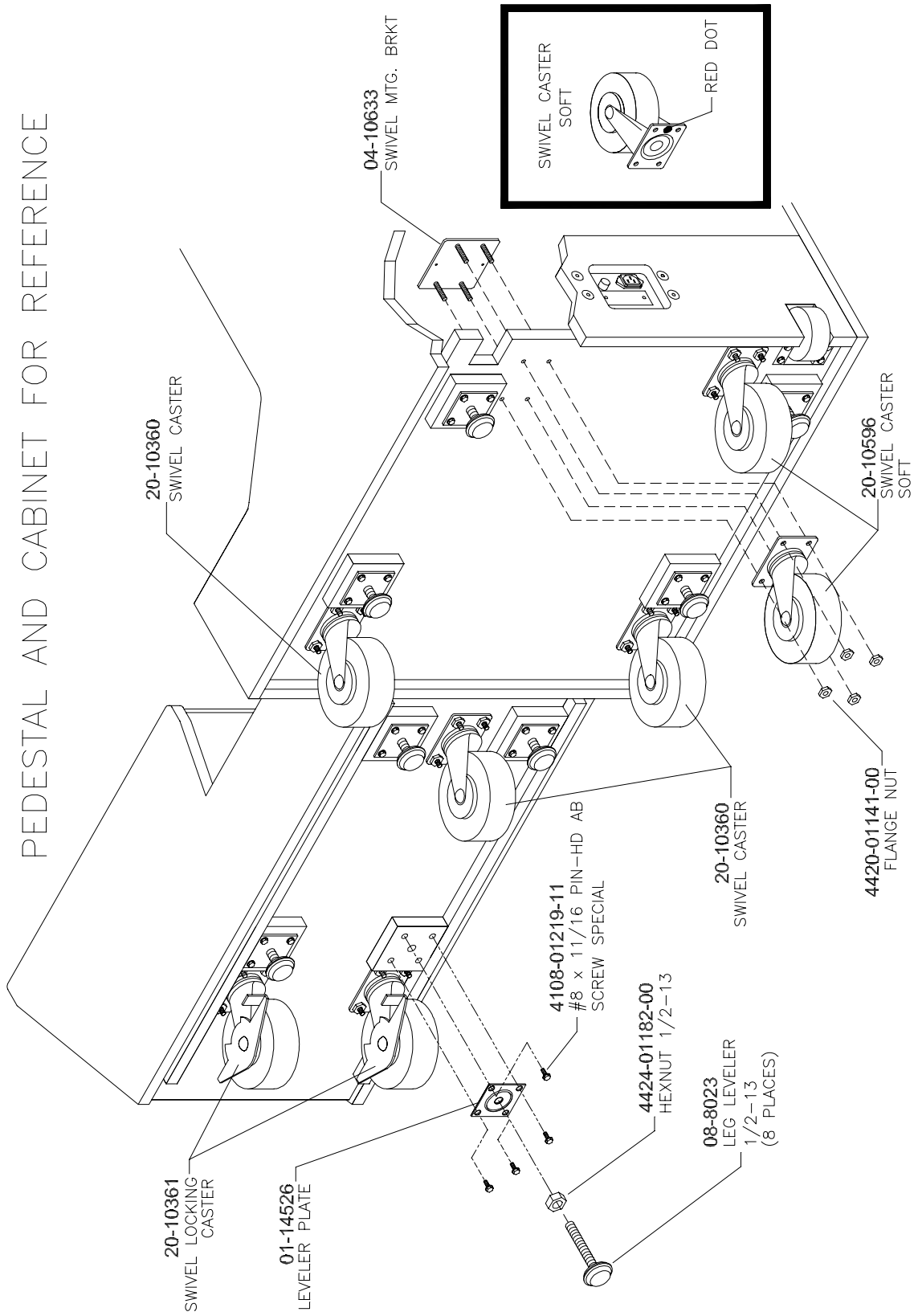
Cabinet Components



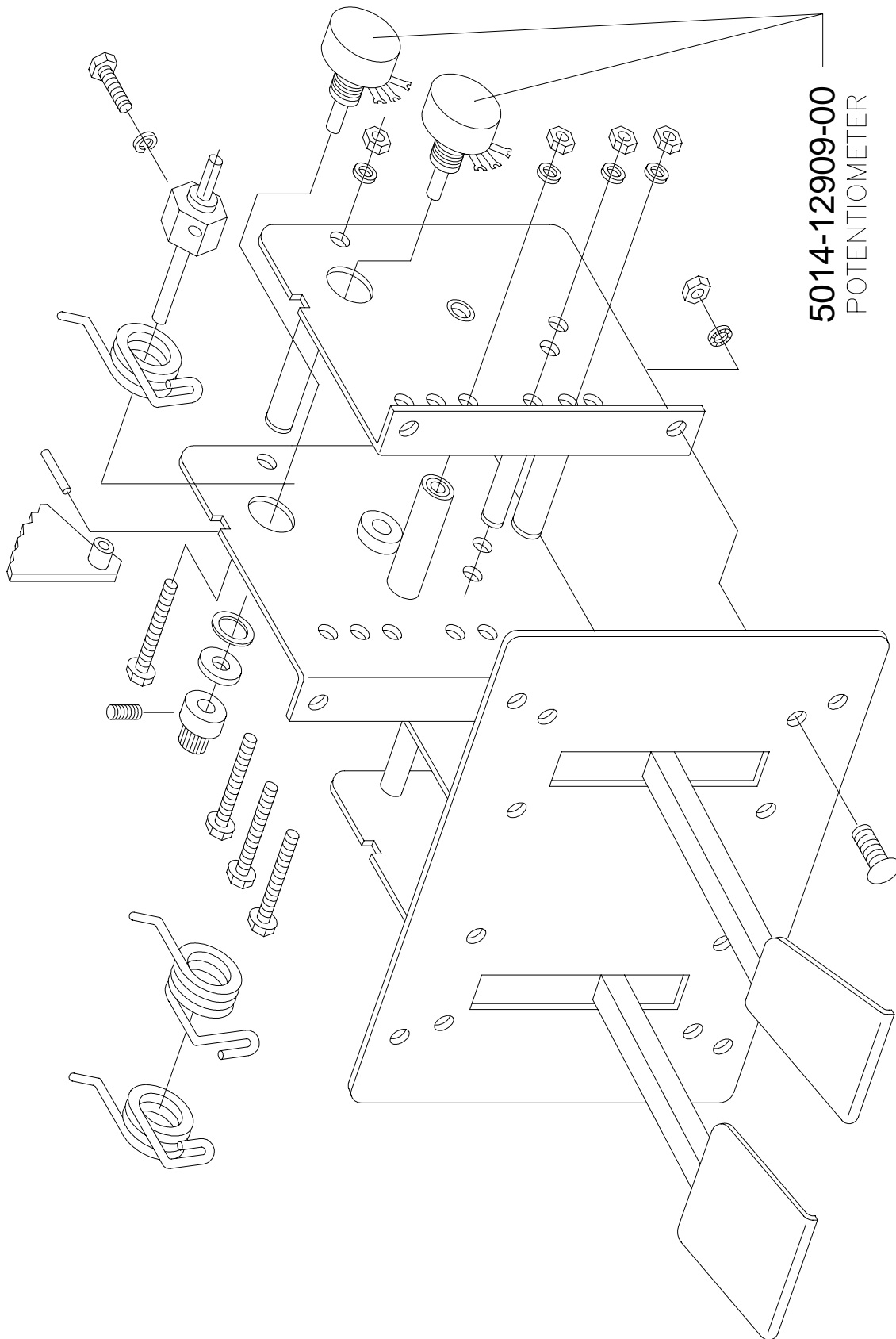
Seat and Pedestal Assembly A-23231



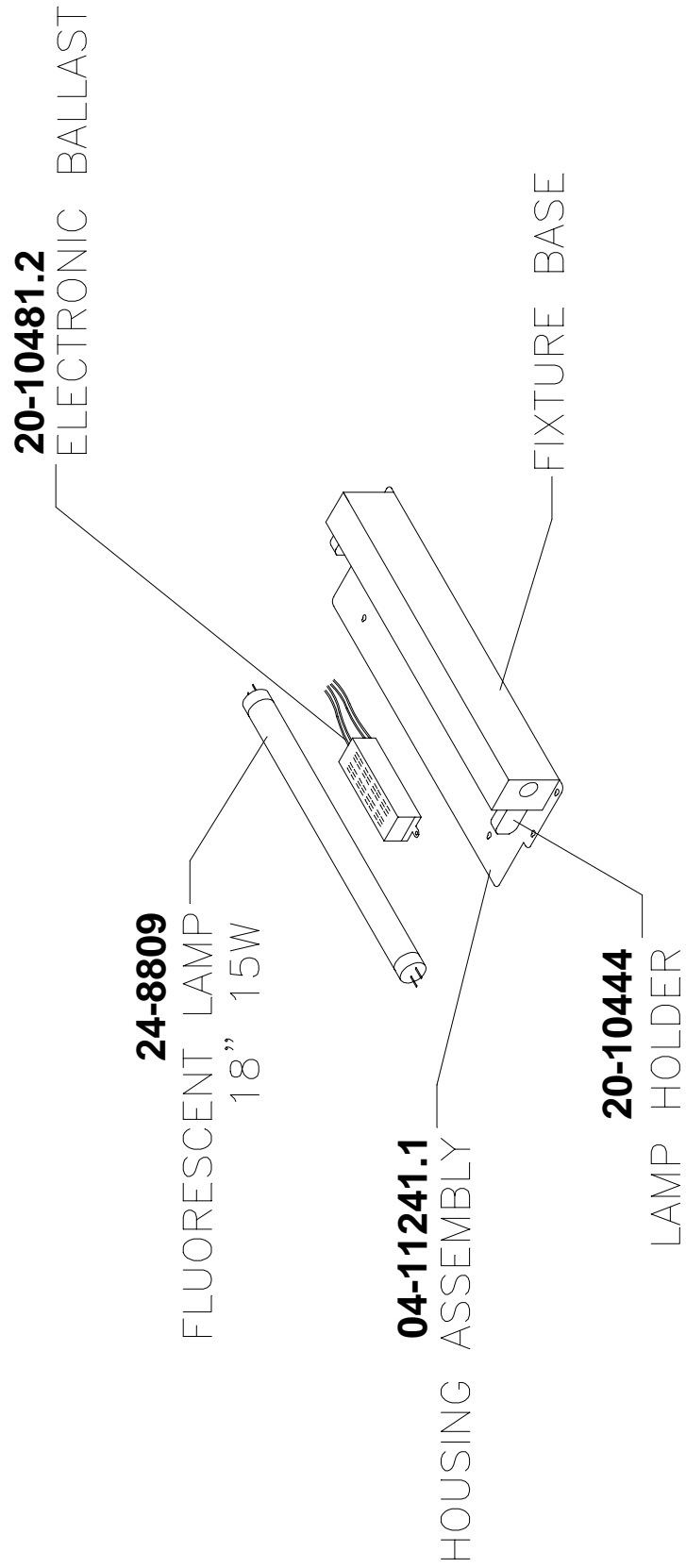
Casters and Leg Levelers



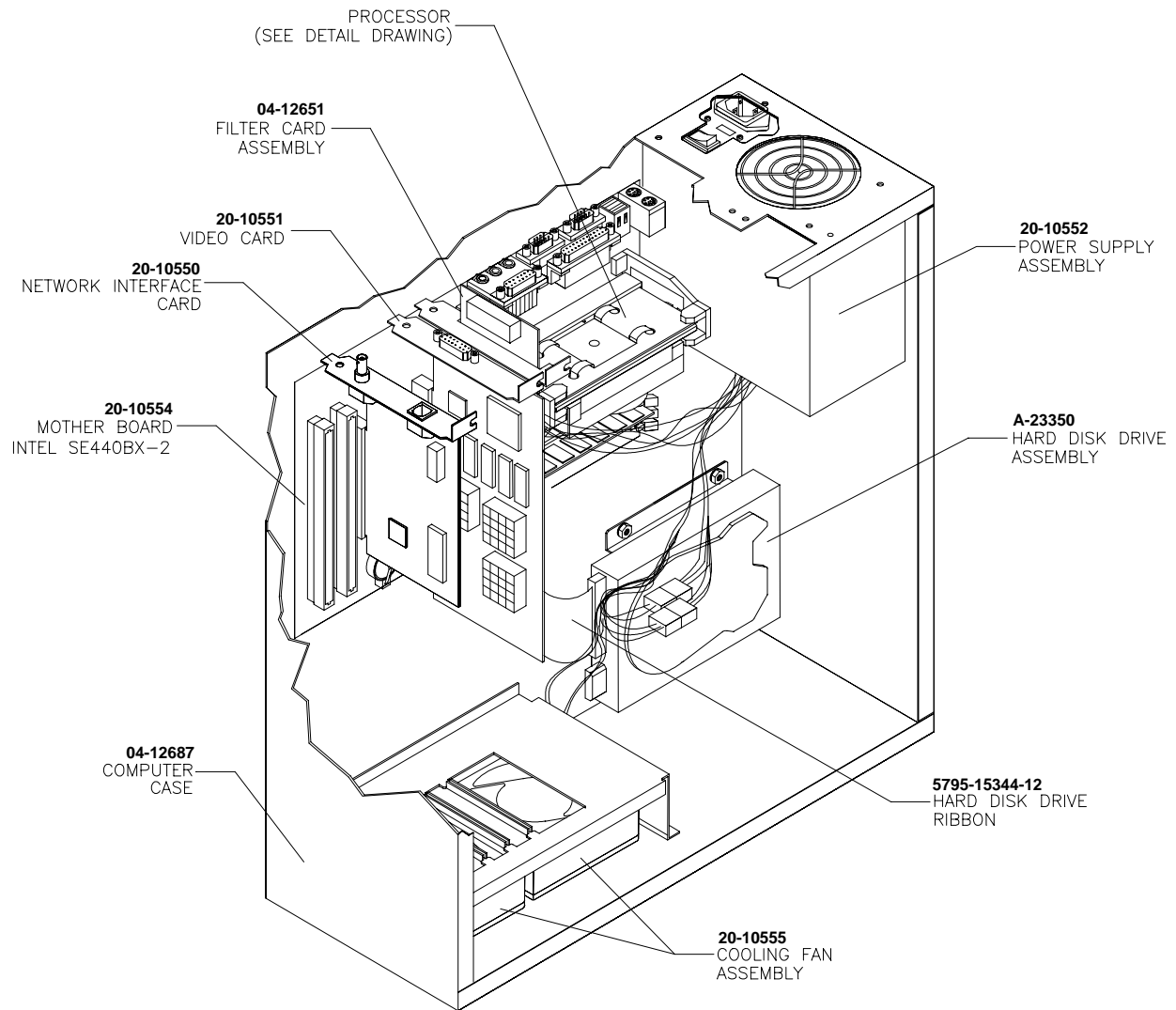
Throttle Assembly 20-10135



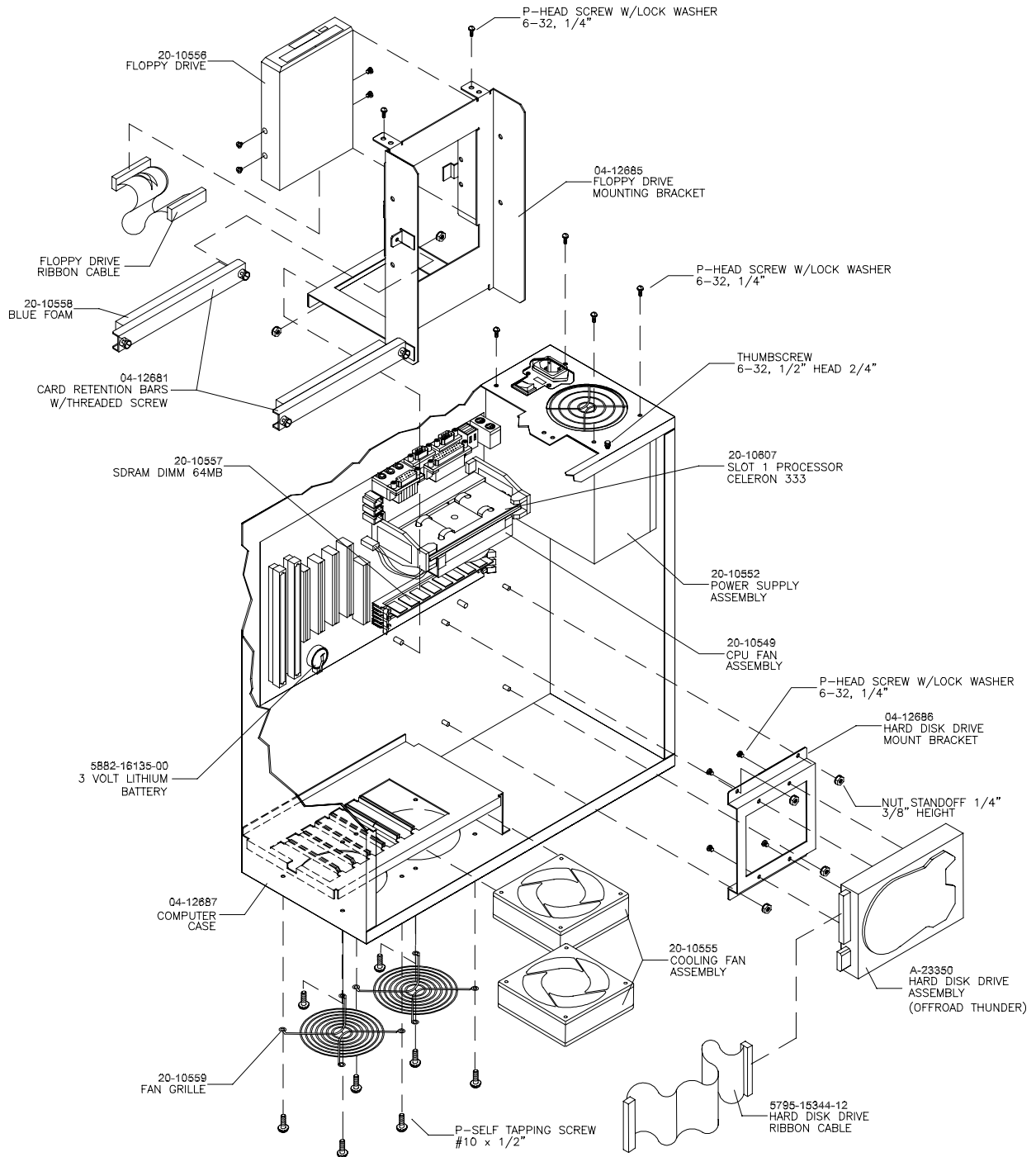
Fluorescent Lamp Assembly A-22506



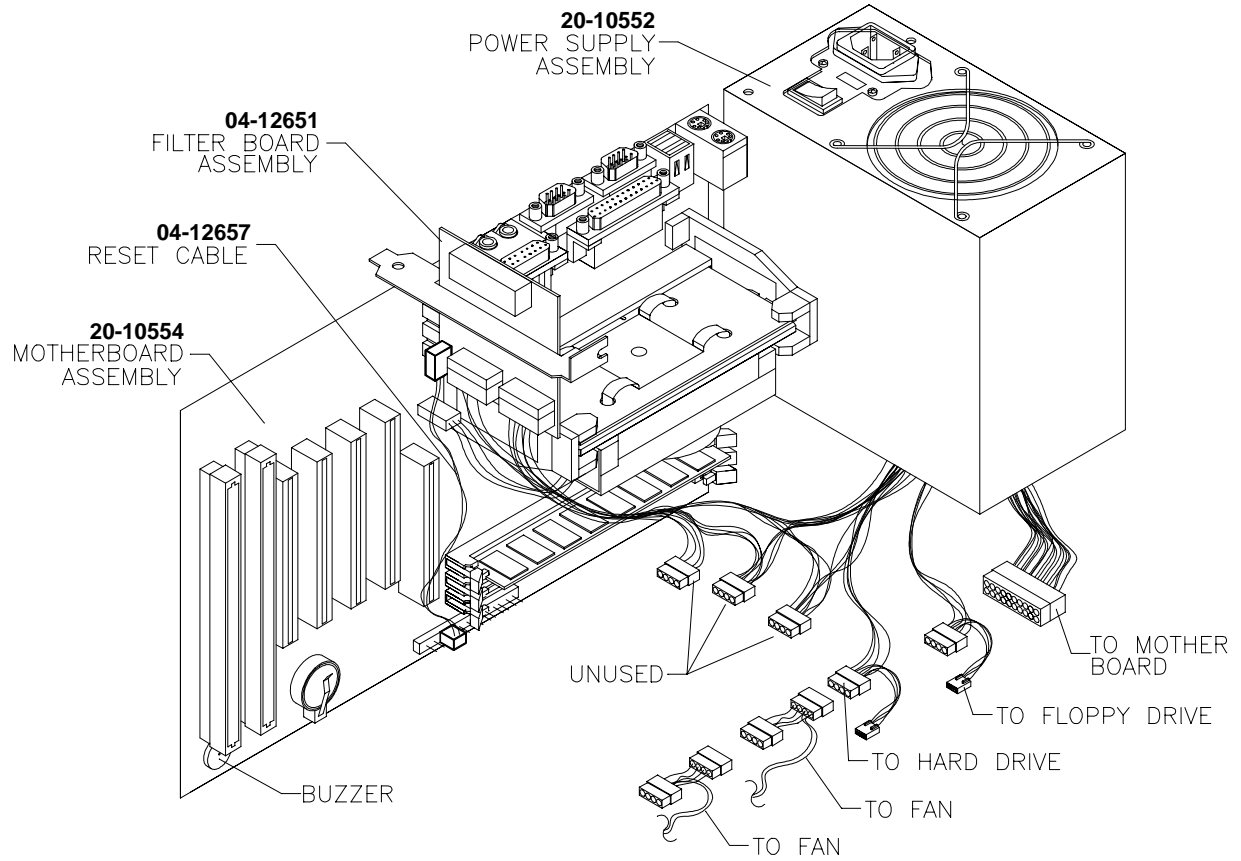
Arcade Computer Assembly A-23253



Arcade Computer Mechanical Components

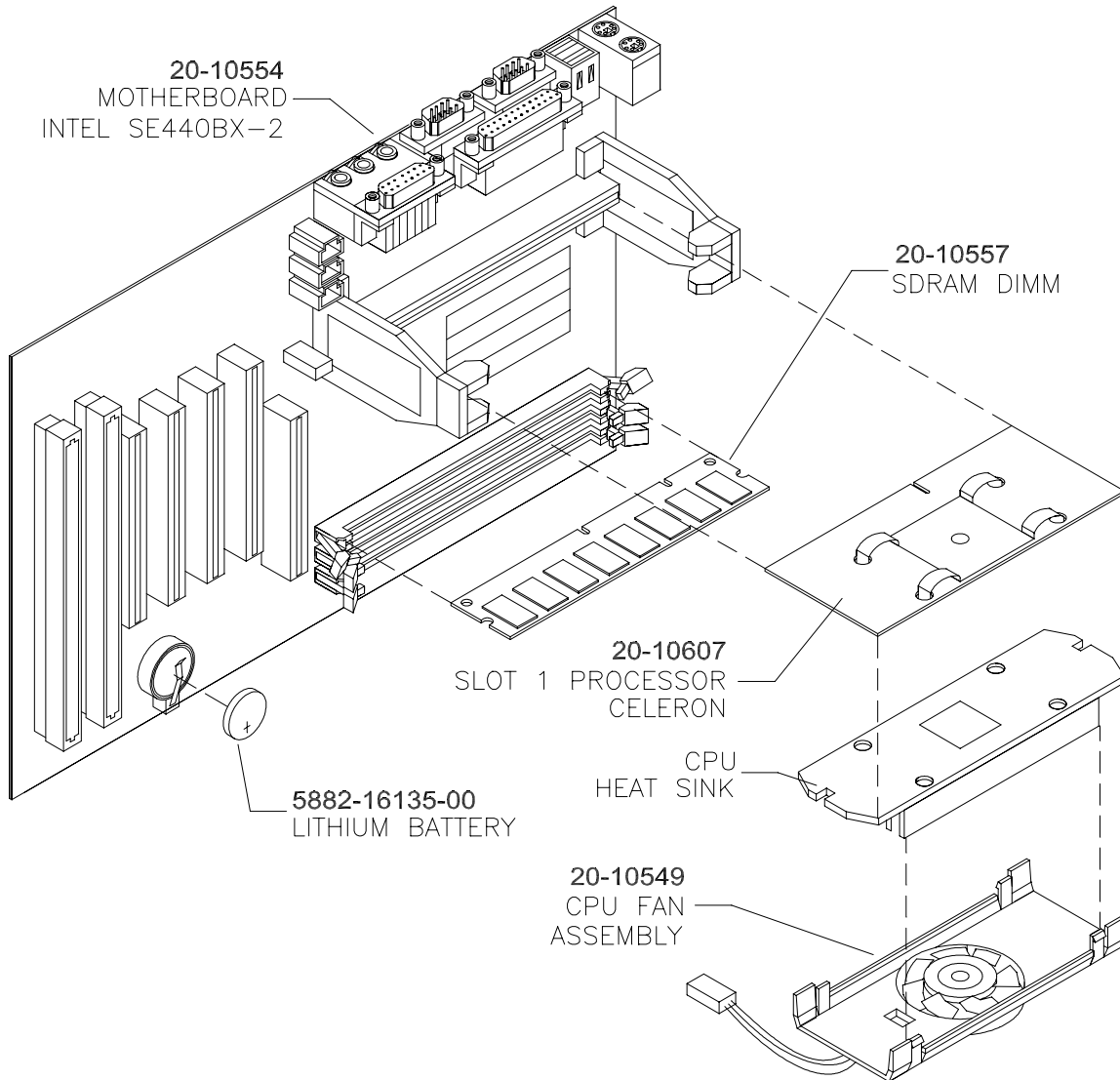





Arcade Computer Cables



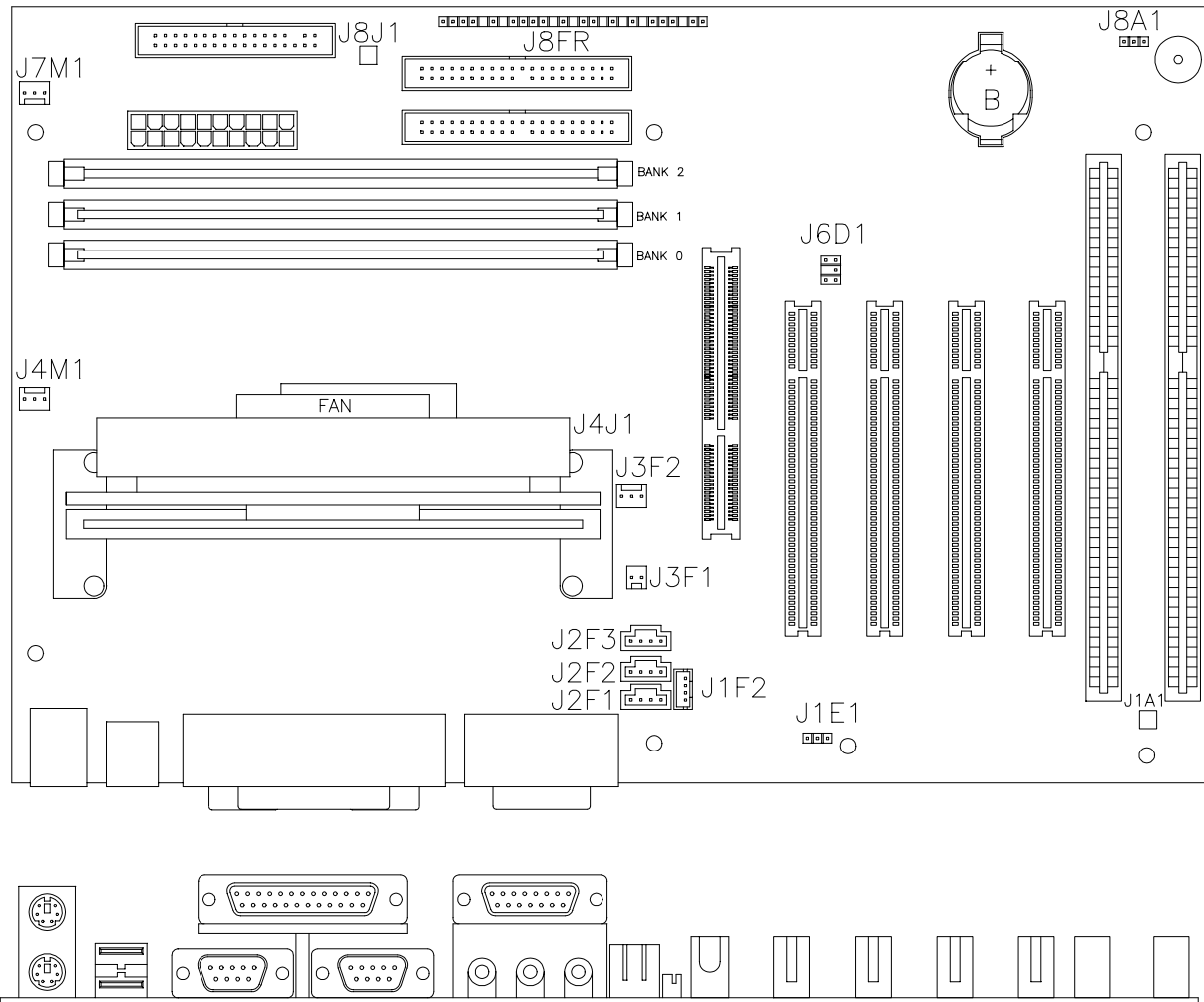
NOTICE: DC power cables are part of the power supply. You can't replace these cables individually.

Arcade Computer Electronic Components



	<p>NOTICE: Many stock computers use a motherboard that resembles this one. Still, a standard motherboard won't function correctly in this video game machine. Operation in this VGM also requires a custom operating system.</p>
	<p>NOTICE: Before attempting to use other than factory authorized parts, ask your distributor for information. Other DIMM and processor modules may be equivalent or superior to those illustrated here. Midway hasn't verified performance with alternate components.</p>
	<p>NOTICE: Celeron and Slot 1 are registered trademarks of Intel.</p>

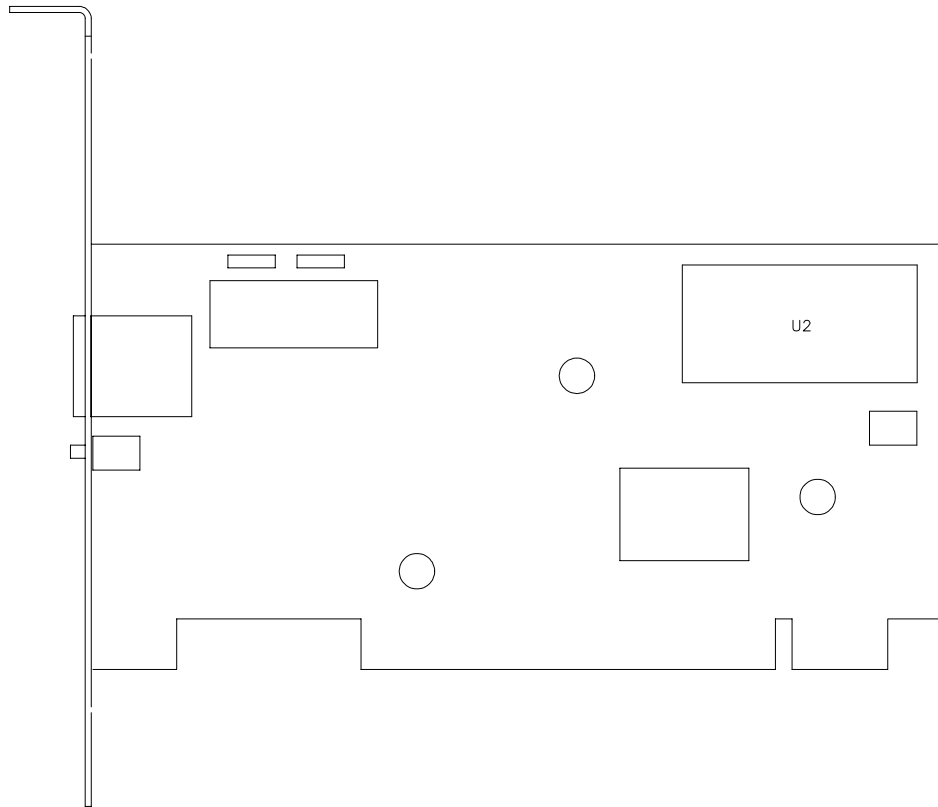
Computer Motherboard Assembly 20-10554



Field Replaceable Parts

Component	Description	Board Location	Part Number
Dual Inline Memory Module	64MB SDRAM DIMM	BANK 0-1-2	20-10557
Memory Backup	3-Volt Lithium Battery	B	5882-16135-00
Processor Assembly	Celeron Processor	J4J1	20-10607
Processor Cooling	Fan with Bracket	FAN	20-10549
Shunt Jumper	BIOS Startup Configuration	J8A1	5882-13046-00

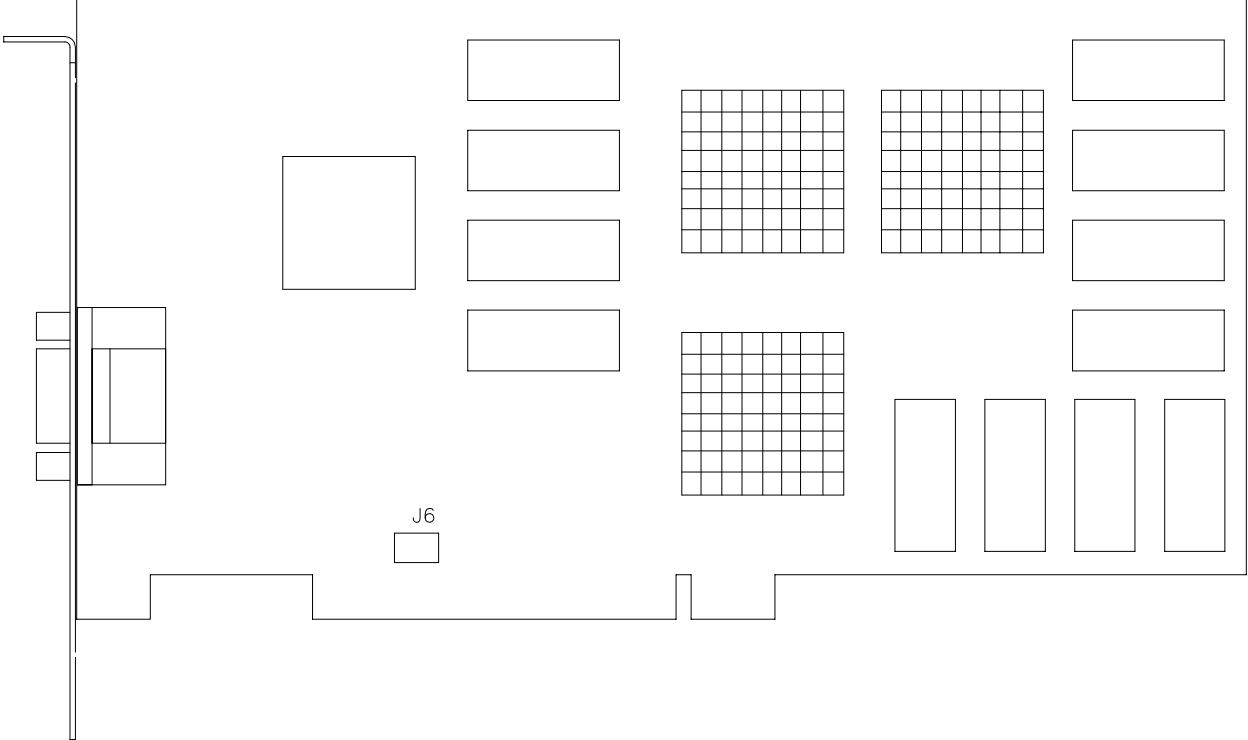
Network Interface Card Assembly 20-10550



Field Replaceable Parts

Component	Description	Board Location	Part Number
Instruction ROM	Not required in this game	U2	--

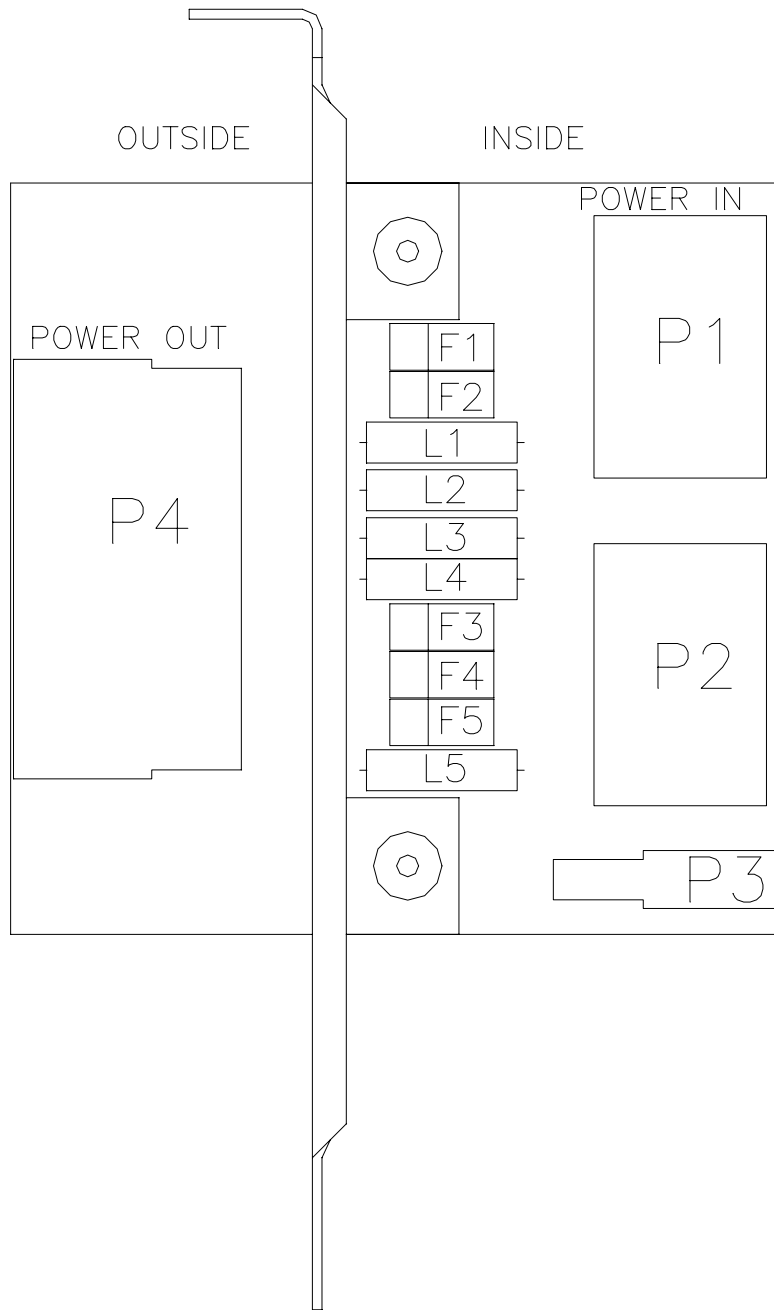
Video Graphics Card Assembly 20-10551



Field Replaceable Parts

Component	Description	Board Location	Part Number
Graphics Mode Select	Not required in this game	J6	--

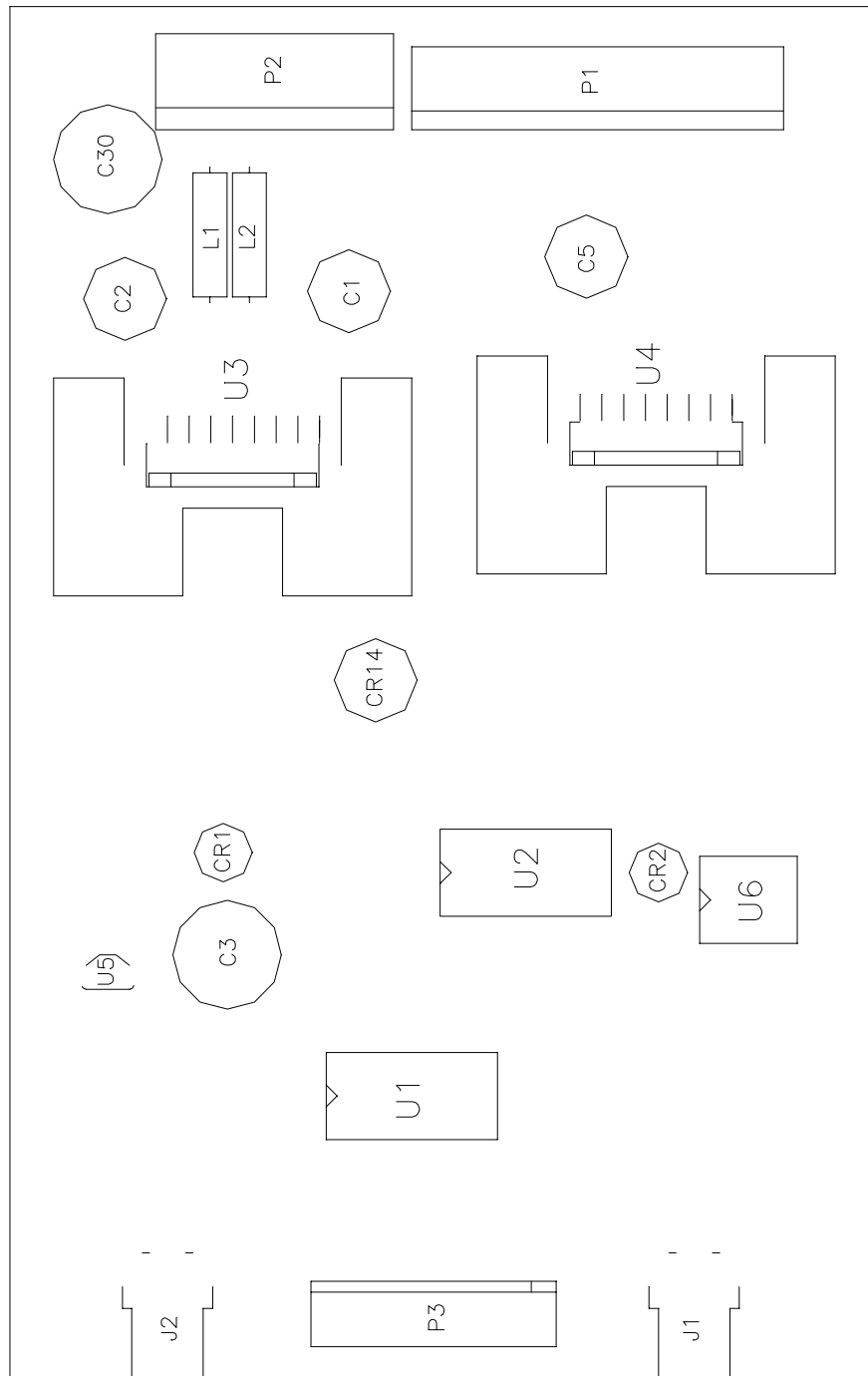
Power Filter Board Assembly 04-12651



Field Replaceable Parts

Component	Description	Board Location	Part Number
EMI Filter	2200 pF Dual Capacitor	F1-F5	5060-15633-00
EMI Filter	Ferrite Bead Inductor	L1-L5	5556-14181-00

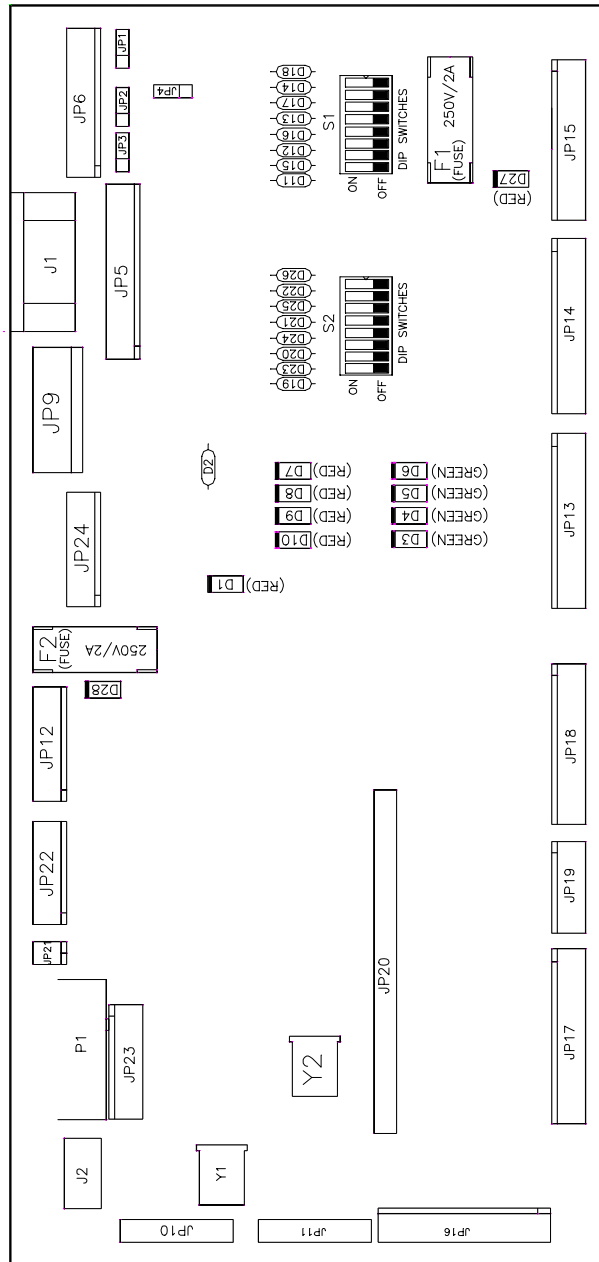
BB12 Audio Amplifier Board Assembly 04-12529.1



Field Replaceable Parts

Component	Description	Board Location	Part Number
Audio Amplifier	LM3403 Quad Amplifier	U1-U2	5370-15163-00
Audio Output	TDA1560Q Power Amplifier	U3	5370-15984-00
Audio Output	TDA7375 Power Amplifier	U4	5370-15833-00
Voltage Regulator	+5VDC, 5% Fixed Regulator	U5	5250-13302-00
None	Not required in this game	U6	--

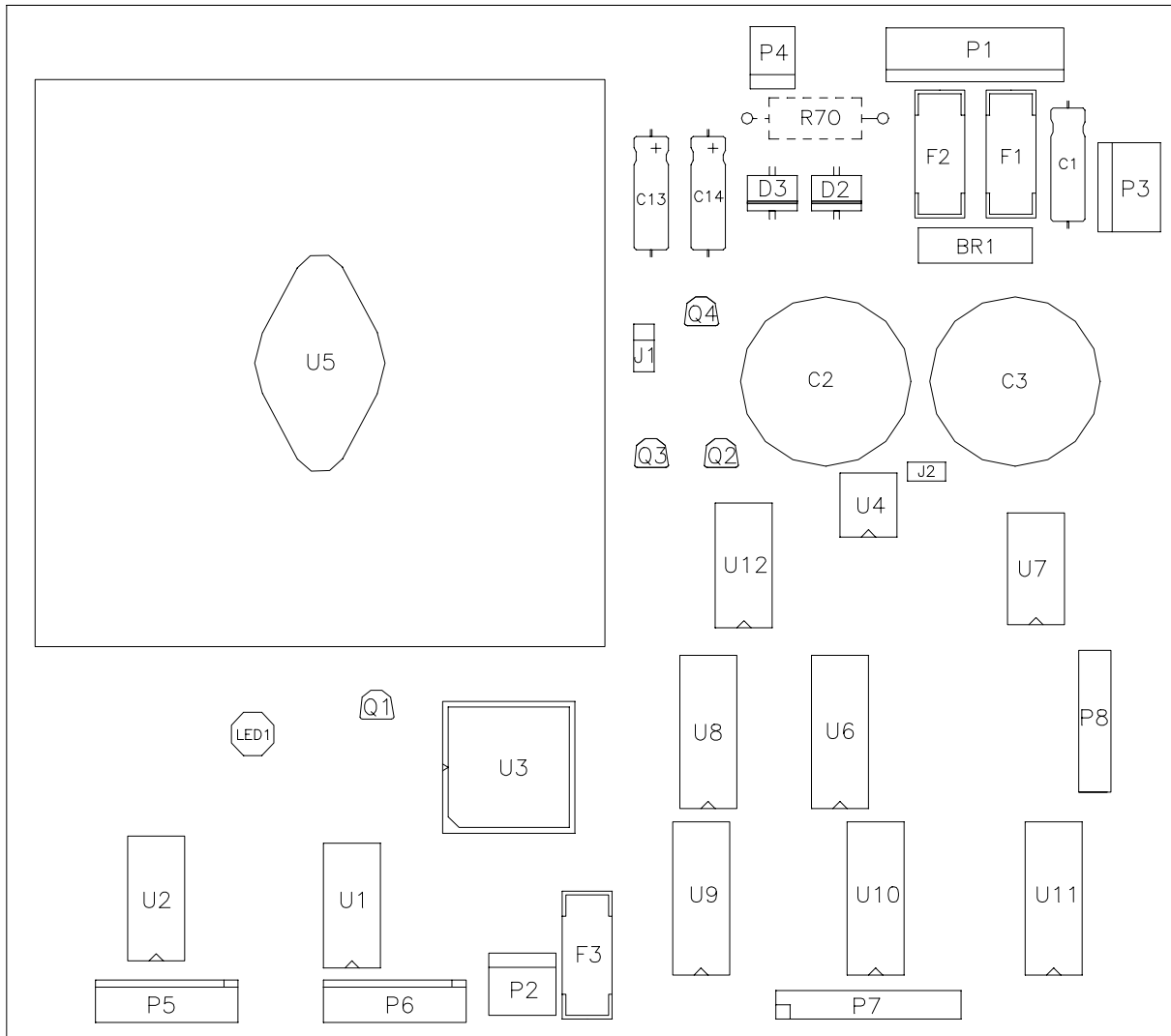
MagicBus™ Interface Board Assembly 04-12697.3



Field Replaceable Parts

Component	Description	Board Location	Part Number
Crystal	6 MHz	Y2	5520-16004-00
Diode	1N270	D11-15, D17-25, D28	5070-16229-00
Diode	1N5817, 1A	D2	5070-09266-00
Fuse	5 x 20mm, 2ASB	F1	5735-13853-00
Jumper	2-Pin	JP1, JP2, JP3, JP4	5791-13045-00
Transistor	2N2369 NPN	Q1	5190-15997-00
Transistor	2N3904 NPN	Q5-Q6	5160-14035-00
Transistor	ULN2064 NPN	Q3-Q4	5160-14035-00

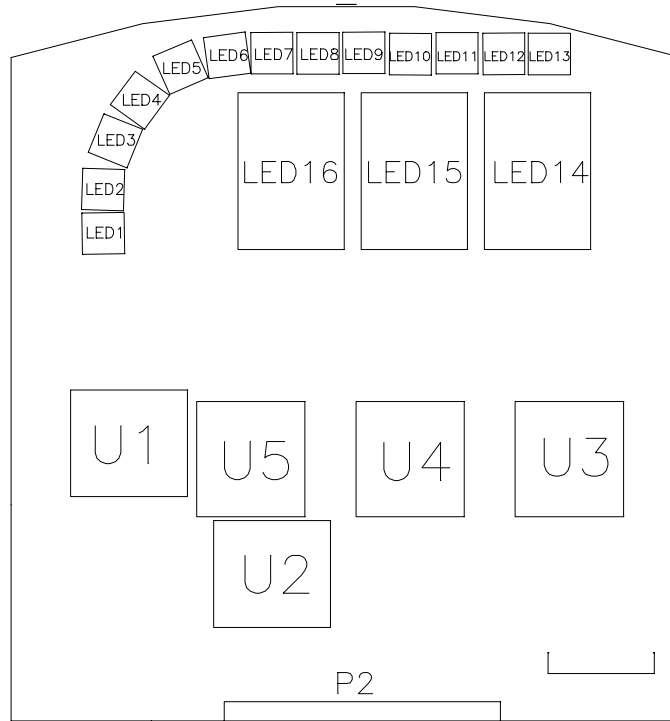
Wheel Driver Board Assembly 04-12770.1



Field Replaceable Parts

Component	Description	Board Location	Part Number
--	TO-92 Device	Q4	Not Used
Darlington	2N6427 NPN	Q1	5162-08976-00
Diode	Fast FE6B-35nS	D2, D3	5070-16272-00
Driver, Power	LM12 Op Amplifier	U5	5370-14069-00
Fuse	0.63AFB, 250V, 5x20mm	F3	5731-15627-00
Fuse	4ASB, 125V, 5x20mm	F1, F2	5731-14094-00
Pre-Driver	ULN2064B IC	U1, U2	5370-12602-00
Rectifier, Bridge	100V, 6A, SIP	BR1	5100-13945-01
Regulator, Voltage	78L15, 15VDC, TO-92	Q2	5250-15624-00
Regulator, Voltage	79L15, -15VDC, TO-92	Q3	5250-15625-00

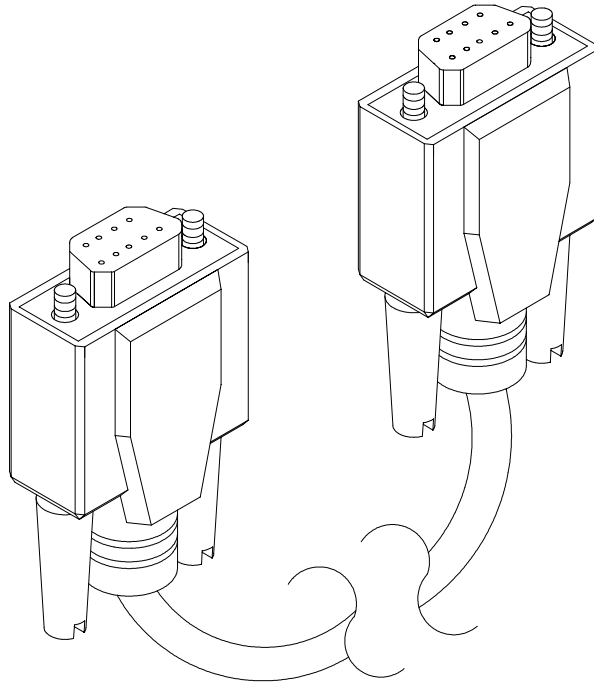
Speedometer/Tachometer Board Assembly 04-12759.1



Field Replaceable Parts

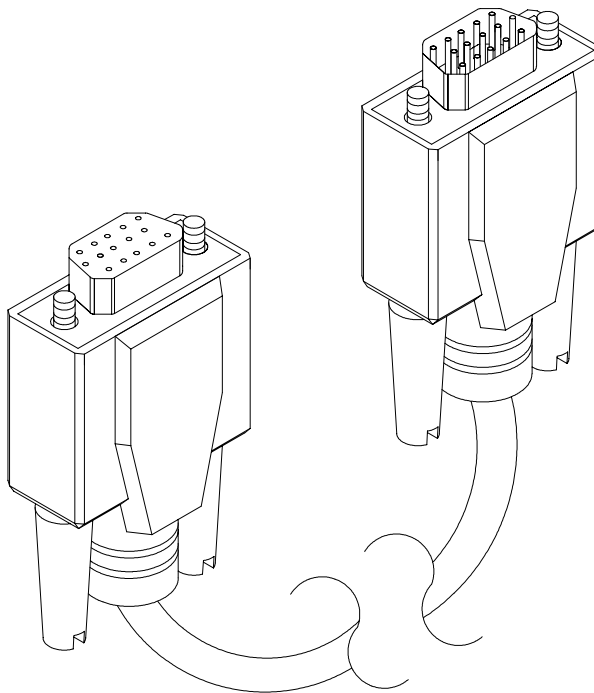
Component	Description	Board Location	Part Number
LED	Green, Bright	LED1 - 6	5671-16256-00
LED	Orange, Bright	LED7 - 10	5671-15953-00
LED	Red, Bright	LED11 - 13	5671-15954-00

Electronic Cable Assemblies



SERIAL COMMUNICATIONS CABLE (NULL MODEM DB-9F TO DB-9F)

20-10532

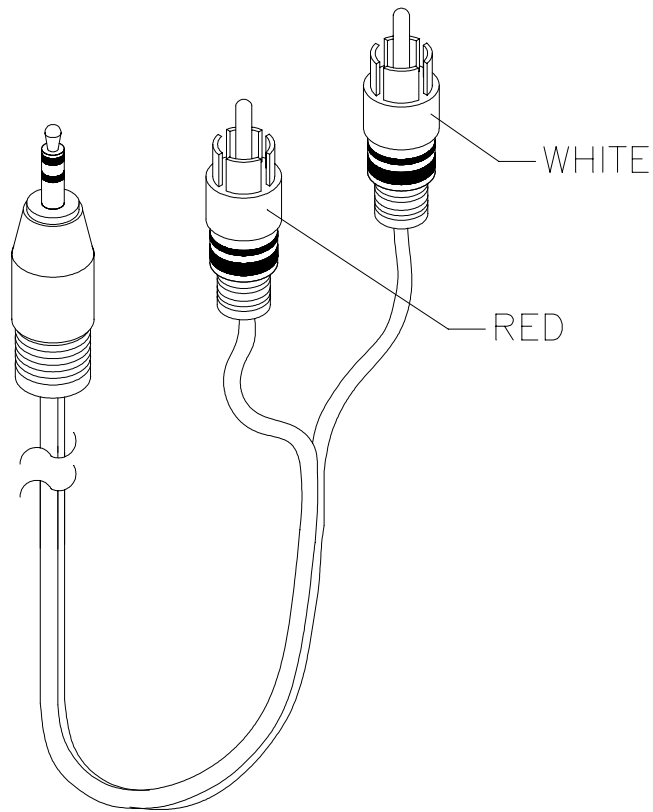


VIDEO COMMUNICATIONS CABLE (SHIELDED DB-15F TO DB-15M)

5797-13171-00

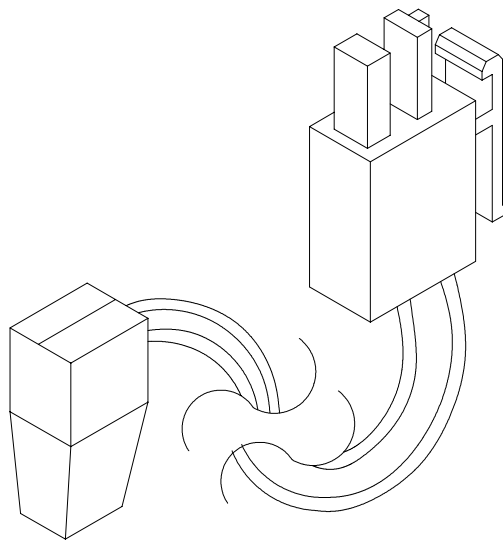
Parts 7-32

Electronic Cable Assemblies



AUDIO AMPLIFIER CABLE (SHIELDED, MINIATURE STEREO PHONE PLUG TO PHONO PLUGS)

04-12578-2



COMPUTER RESET CABLE (2-PIN PLUG TO LOCKING, 2-PIN PLUG)

04-12657

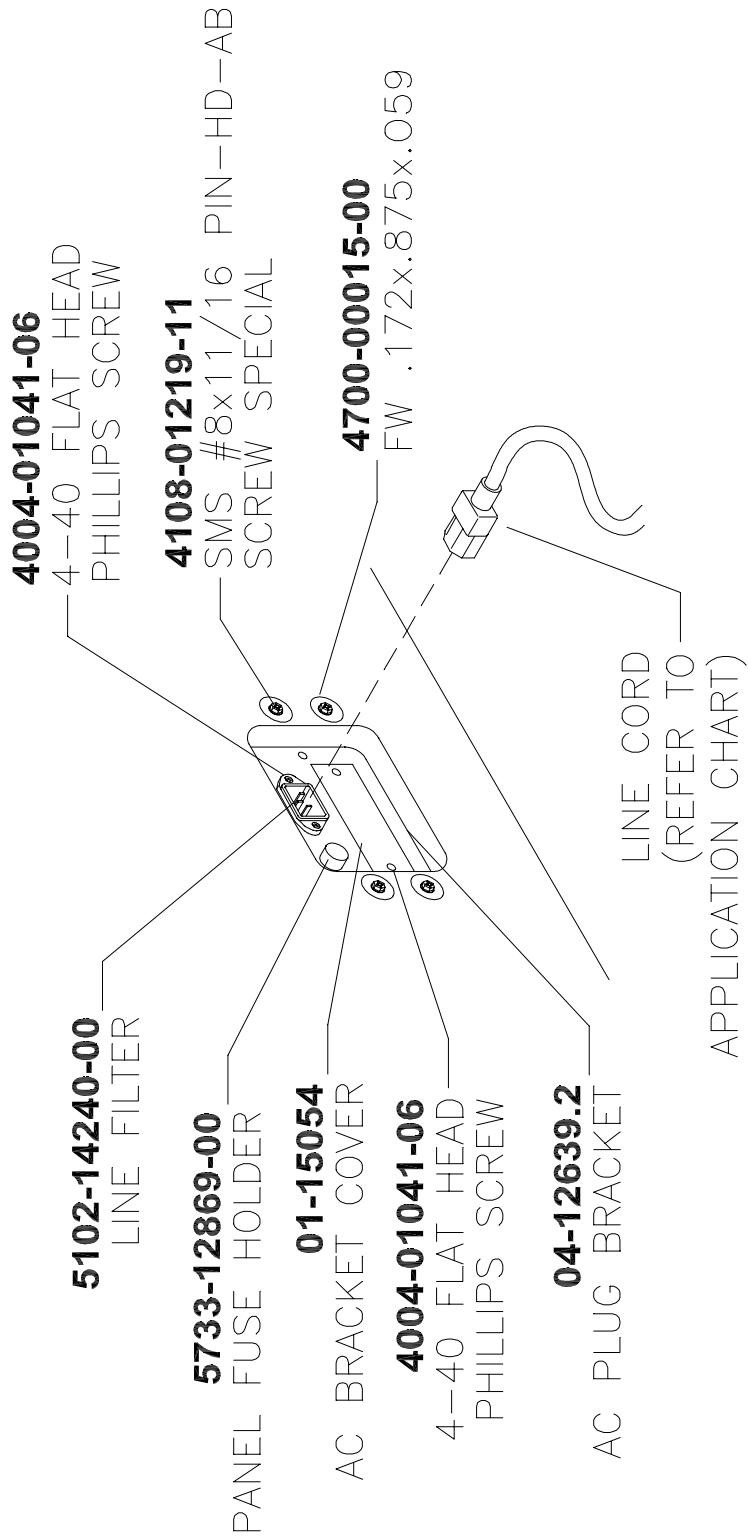
Line Cord Application Table

Part Number	5850-13271-00	5850-15521-00	5850-15521-02	5850-15521-03	5850-15521-06
Country					
France			■		
Germany			■		
Italy		■			
Japan					■
Spain			■		
UK				■	
USA	■				



TYPICAL LINE CORD

Line Cord Installation Bracket AC Plug Assembly A-23089



Coin Door Application Table

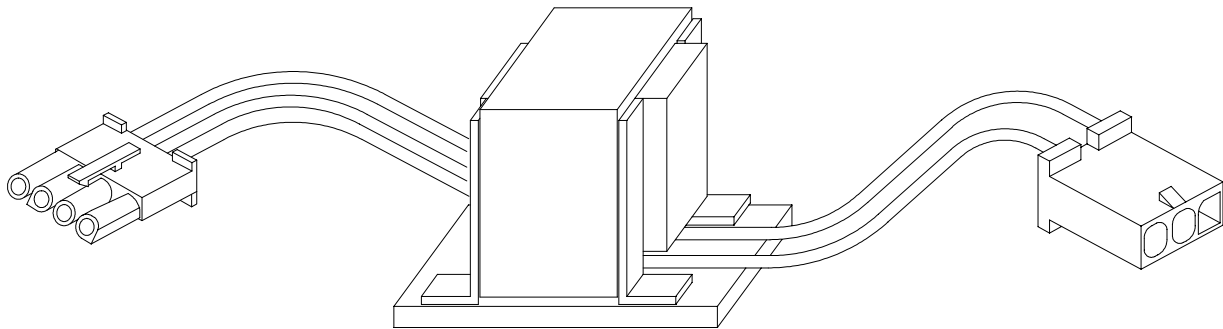
ELECTROMECHANICAL COIN DOOR ASSEMBLIES

Part Number Country	09-72000-14	09-72000-15	09-72000-20	09-96011.1	09-96023-33
France				■	
Germany				■	
Italy	■				
Japan		■			
Spain			■		
UK				■	
USA, DBV Ready					■

Transformer Application Table

POWER TRANSFORMER ASSEMBLIES

Part Number	5610-16282-00	5610-16283-00	5610-16284-00	
Line Power				
120 VAC 60 HZ	■			
230 VAC 50HZ		■		
100 VAC 50HZ			■	



TYPICAL POWER TRANSFORMER ASSEMBLY