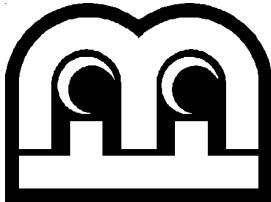




***TECHNICAL SERVICE  
REFERENCE MANUAL***



Merit Industries, Inc.  
2525 State Rd.  
Bensalem, PA 19020-8529  
(215) 639-4700; (800) 523-2760  
<http://www.meritind.com>

# Megatouch FORCE Technical Service Manual Contents

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# Section 1

# Cabinet Information

## *General Information - All FORCE Products*

Dimensions/Shipping Weights

## *General Information - FORCE Classic*

Parts Illustrations

## *General Information - FORCE Elite*

Parts Illustrations

## *General Information - FORCE Radion*

Parts Illustrations

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Parts Illustrations

## *General Information - The Vibe*

Parts Illustrations

## *General Information - FORCE EVO*

Parts Illustrations

## *General Information - FORCE EVO Wallette*

Parts Illustrations

## *General Information - FORCE Upright Fusion*

Parts Illustrations

## *General Information - Mr. VIPS*

Parts Illustrations

## *General Information - Merit/TouchTunes Products*

Parts Illustrations

## *FORCE Parts List*

## Cabinet Information Section

### General Information

#### **Megatouch FORCE Classic**

Dimensions: D=20"; W=21"; H=16"  
Shipping dimensions: D=23"; W=26"; H=22"  
Shipping weight: 100 lbs.

#### **Megatouch FORCE Elite**

Dimensions: D=17.5"; W=16"; H=15.5"  
Shipping dimensions: D=18.5"; W=21"; H=20"  
Shipping weight: 75 lbs.

#### **Megatouch FORCE Radion**

Dimensions: D=18"; W=20"; H=15.25"  
Shipping dimensions: D=23"; W=26"; H=22"  
Shipping weight: 90 lbs.

#### **Megatouch FORCE Upright**

Dimensions: D=29"; W=23"; H=62"  
Shipping dimensions: D=30.5"; W=26"; H=65.5"  
Shipping weight: 270 lbs.

#### **The Vibe**

Terminal: D=7"; W=14"; H=16"  
Processor: D=15"; W=11.5"; H=4.5"  
Shipping weight: 50 lbs.

#### **Megatouch FORCE EVO**

Dimensions: D=15"; W=16.5"; H=18.5"  
Shipping weight: 75 lbs.

#### **Megatouch FORCE EVO Wallette**

Dimensions: D=9"; W=16.5"; H=19"  
Shipping weight: 65 lbs.

#### **Megatouch FORCE Upright Fusion**

Dimensions: D=21"; W=20"; H=61"  
Shipping weight: 200 lbs.

#### **Megatouch FORCE Fun Zone**

Dimensions: D=21"; W=25"; H=67  
Shipping weight: 175 lbs.

#### **Megatouch FORCE Fun Zone Jr.**

Dimensions: D=22"; W=25"; H=43.75"

#### **Megatouch Mr. VIPS**

Dimensions: D=30"; W=28"; H=79"

#### **Megatouch Combo Jukebox**

Dimensions: D=26"; W=25"; H=71.25"  
Shipping Dimensions: D=28.5"; W=35.5";  
H=78.5"  
Shipping weight: 425 lbs.

#### **MegaTunes**

Dimensions: D=15.5"; W=20.25"; H=4.75"

#### **Remote Sound System**

Cabinet Dimensions: D=23"; W=23"; H=26.5"

# **Megatouch FORCE Classic**

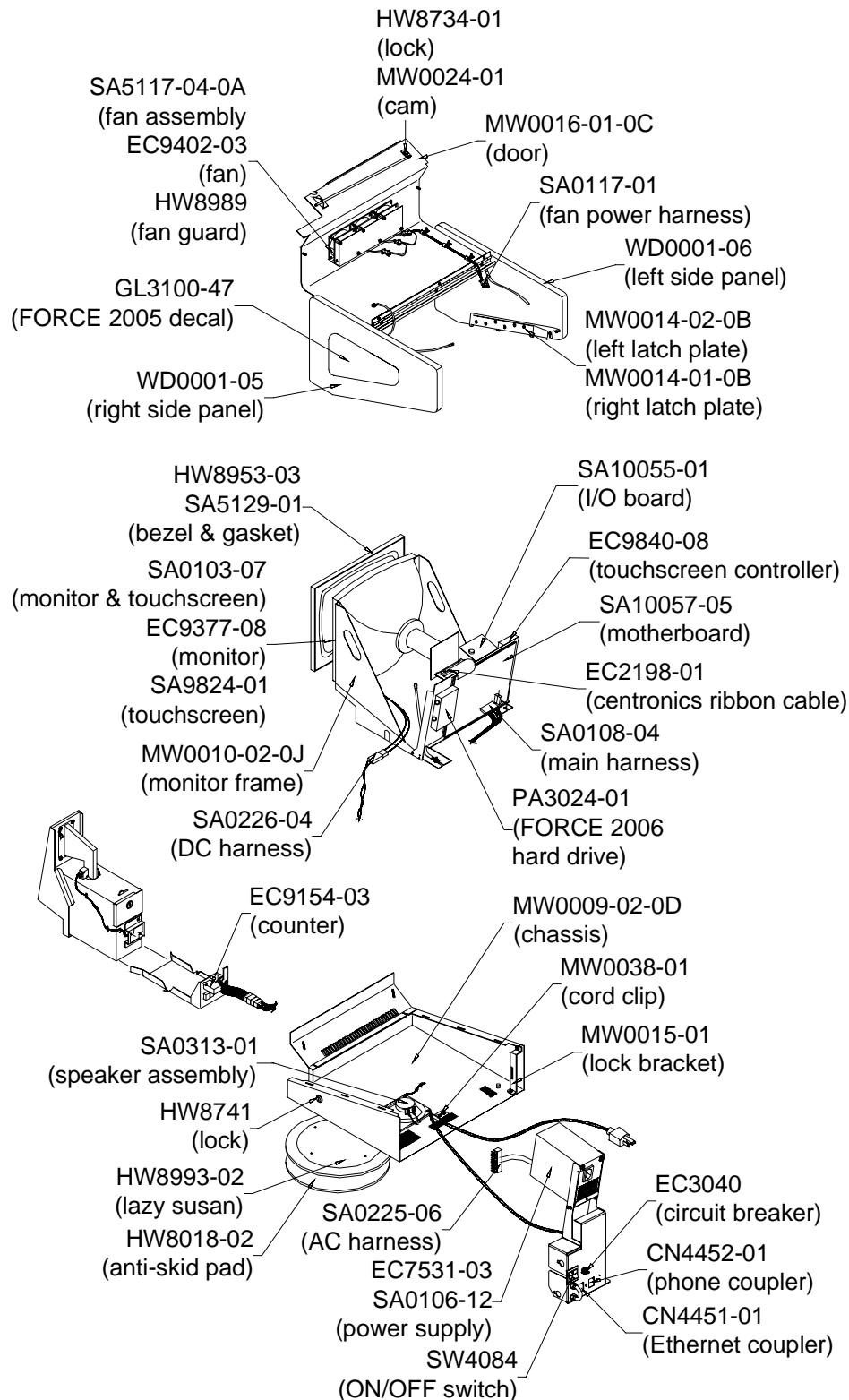
Dimensions: L - 20"; W - 21"; H - 16"  
Shipping weight: 100 lbs.

## ***Motherboard Information***

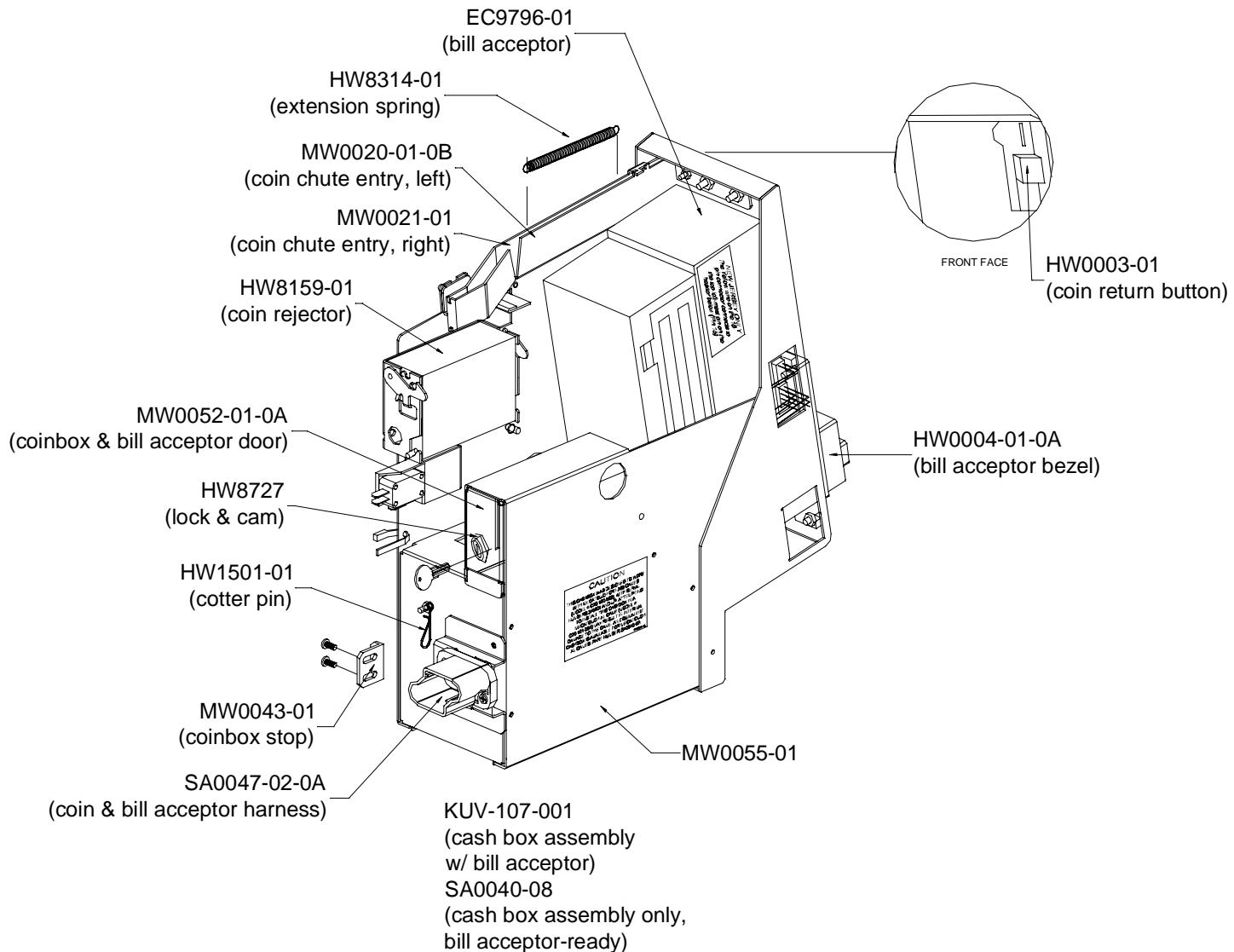
ECS

## ***Touchscreen Type***

Microtouch



FORCE CLASSIC COUNTERTOP



FORCE CLASSIC COUNTERTOP

# Megatouch FORCE Elite

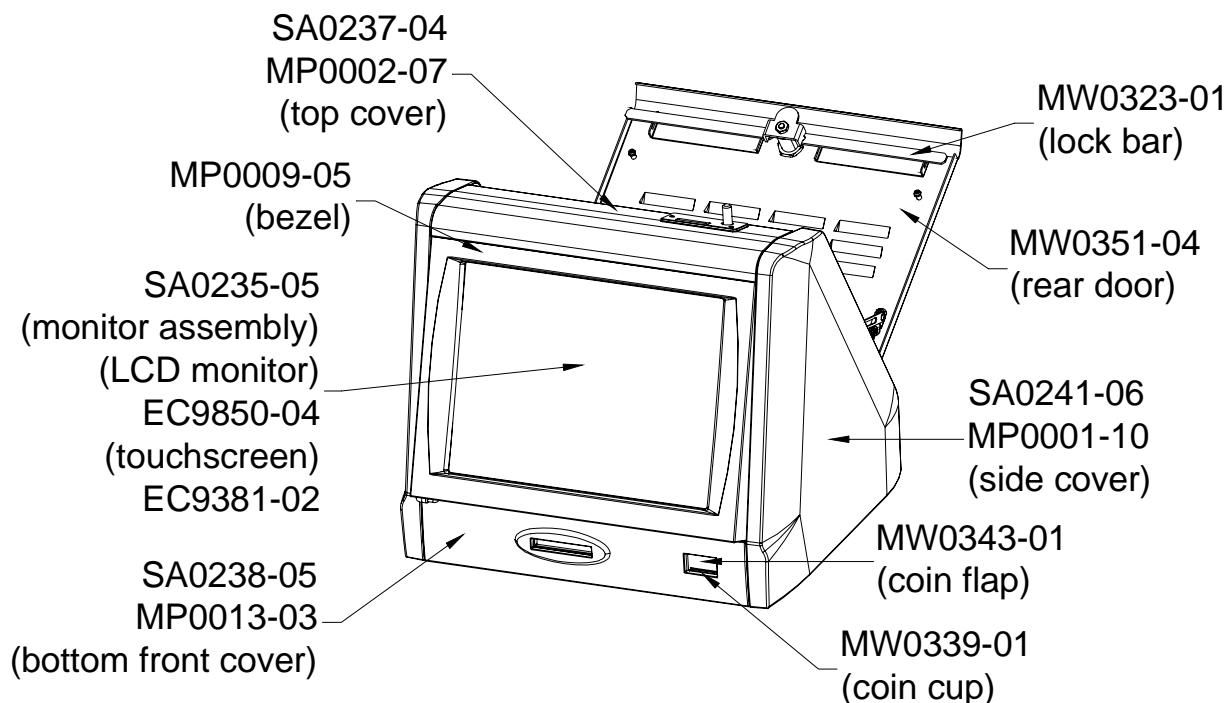
Dimensions: L - 17.5"; W - 16"; H - 15.5"  
Shipping weight: 75 lbs.

## ***Motherboard Information***

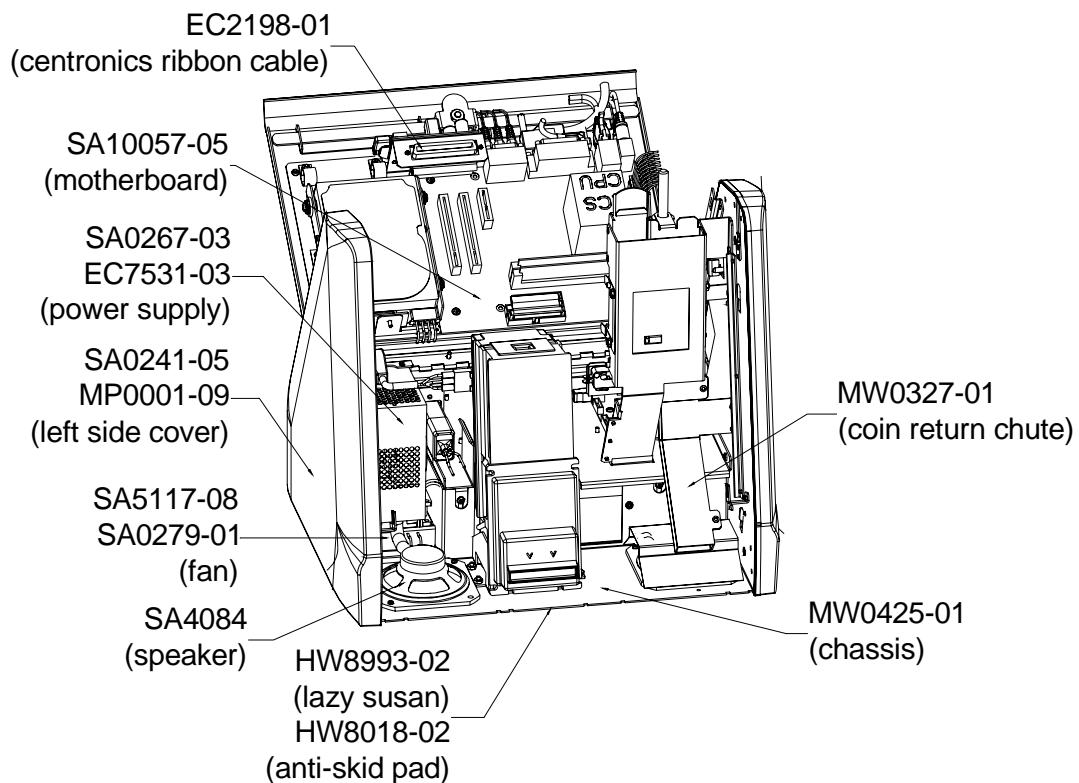
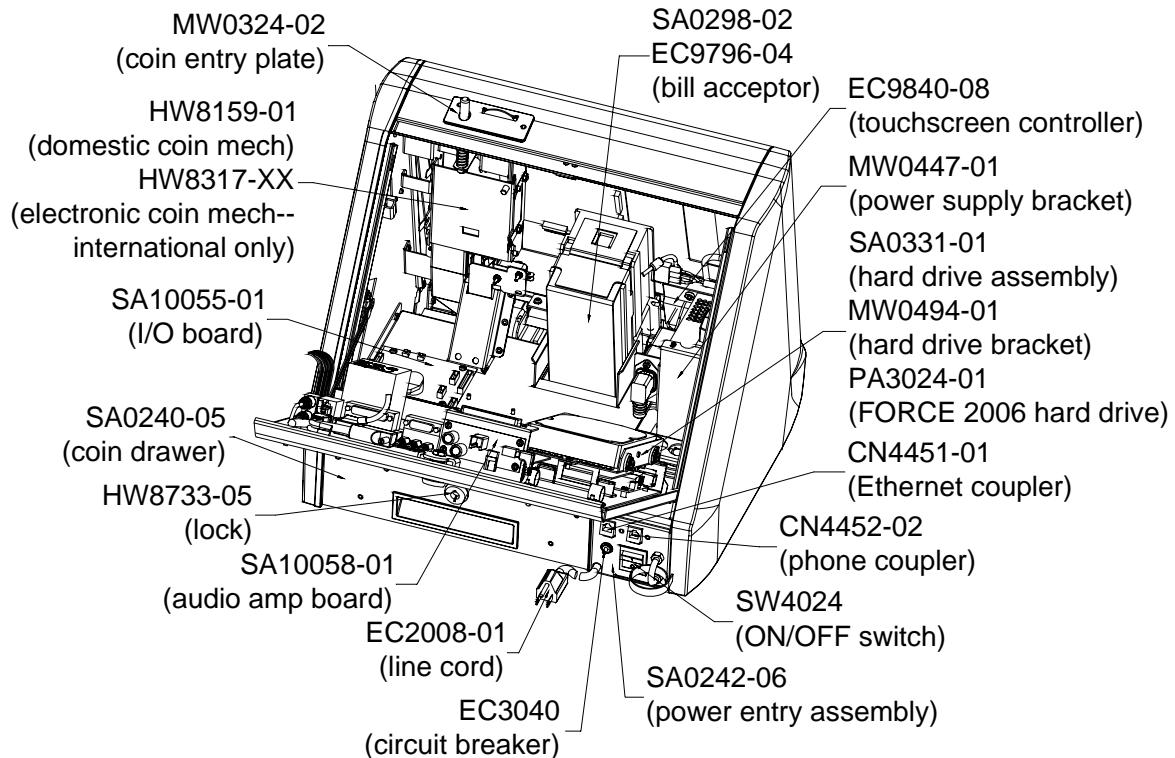
ECS

## ***Touchscreen Type***

Microtouch



FORCE ELITE COUNTERTOP



FORCE ELITE COUNTERTOP

# FORCE Radion

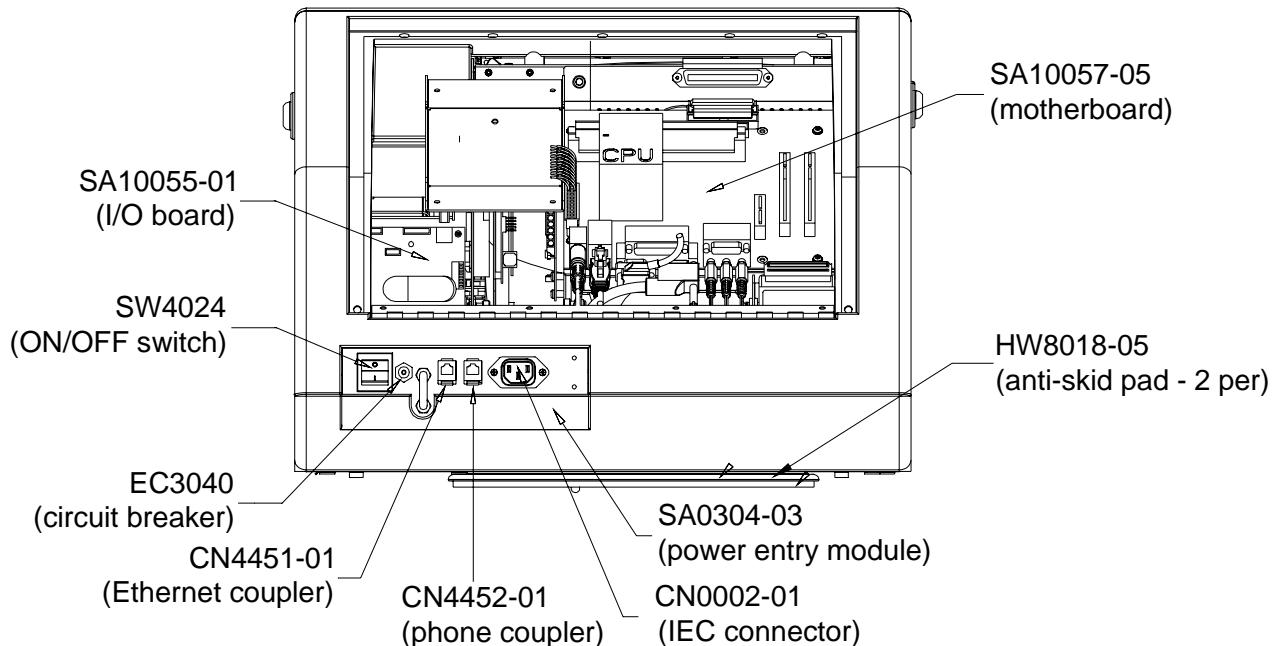
Dimensions: L - 18"; W - 20"; H - 15.25"  
Shipping weight: 90 lbs.

## ***Motherboard Information***

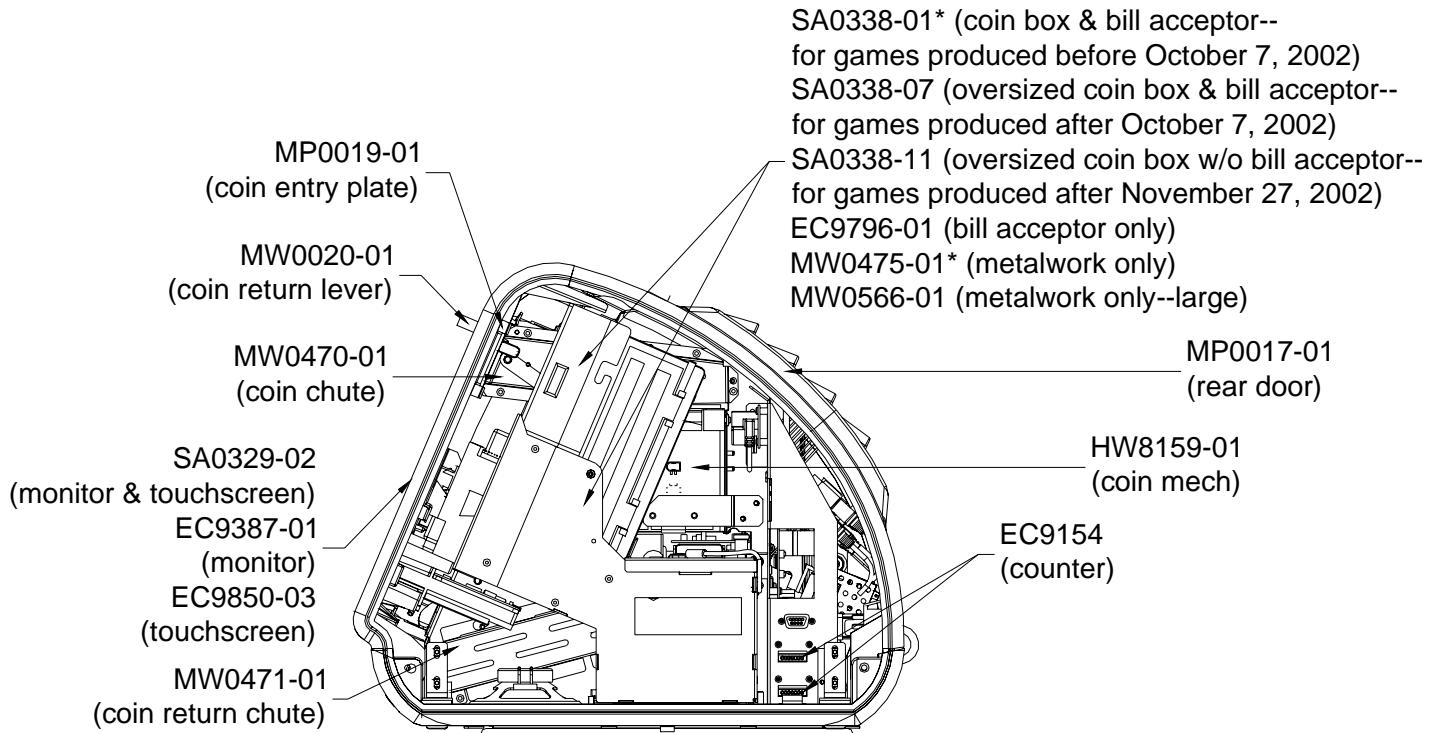
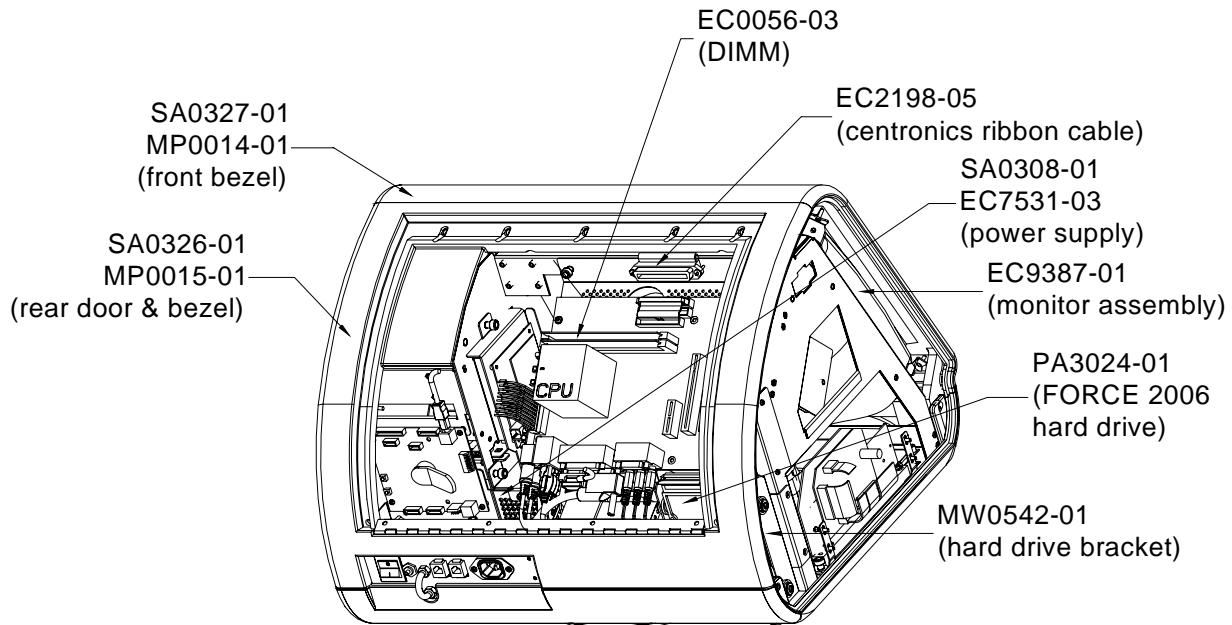
ECS

## ***Touchscreen Type***

Microtouch



## **FORCE RADION COUNTERTOP**



\*If desired, an oversized coinbox upgrade kit can be ordered:

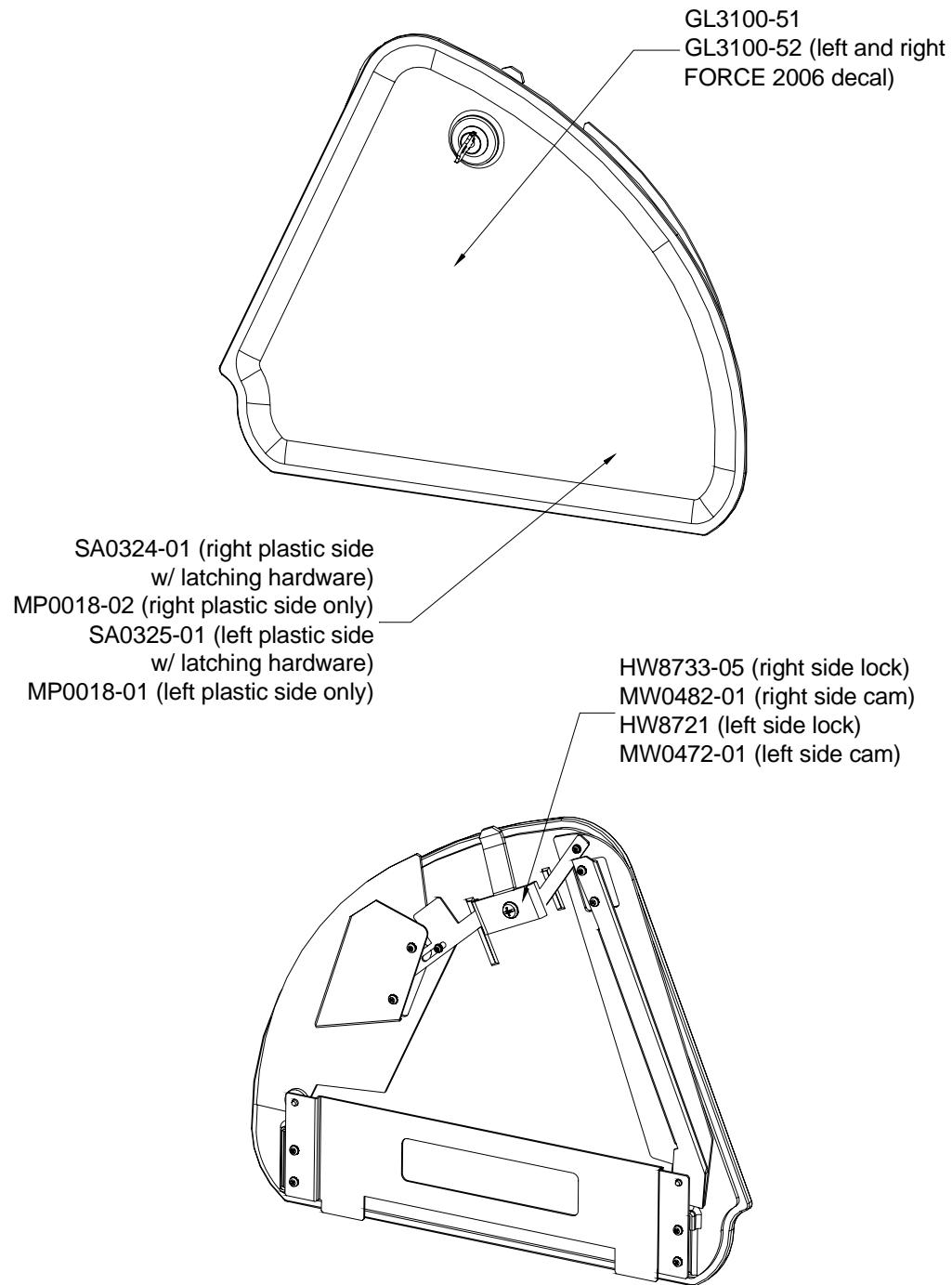
KUV-112-000-01 includes coinbox only-- hardware (lock, etc.) would be reused.

KUV-112-001-01 includes bill acceptor, coinbox, and hardware.

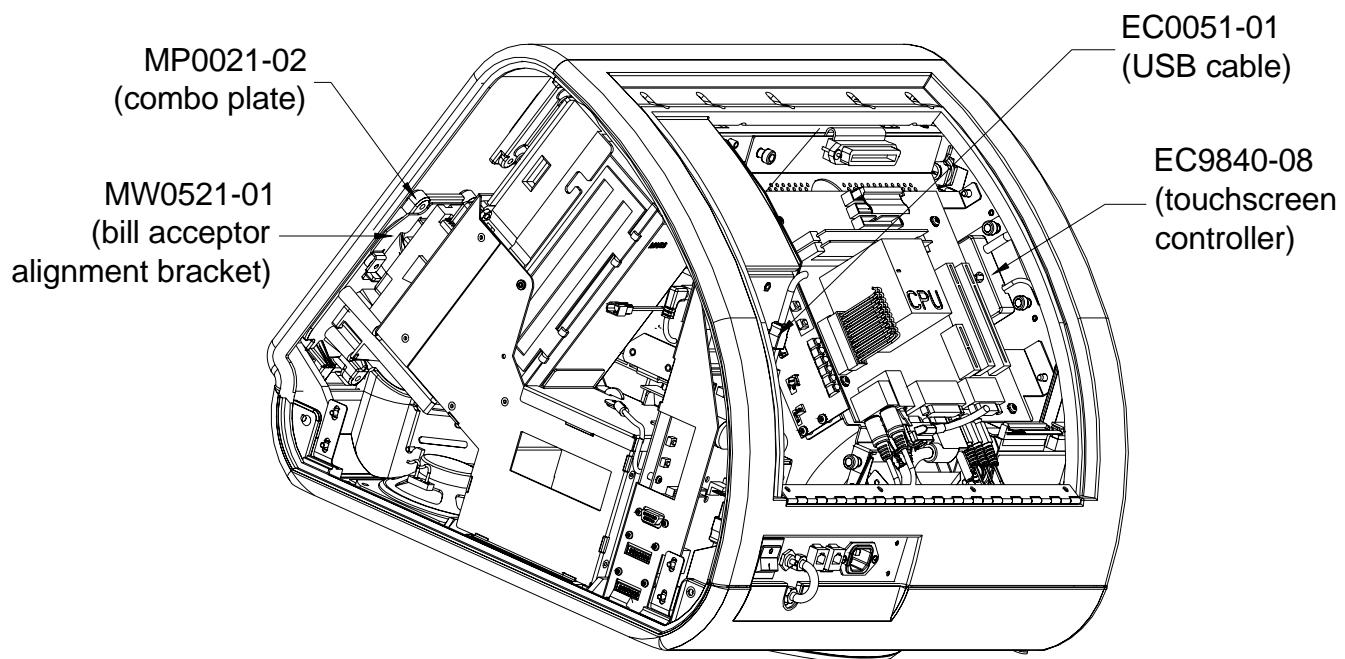
## FORCE RADION COUNTERTOP

### Cabinet Information - General Information - Megatouch FORCE Radion

Megatouch FORCE Technical Reference Manual



#### FORCE RADION COUNTERTOP



FORCE RADION COUNTERTOP

# **FORCE Upright w/o Coin Door**

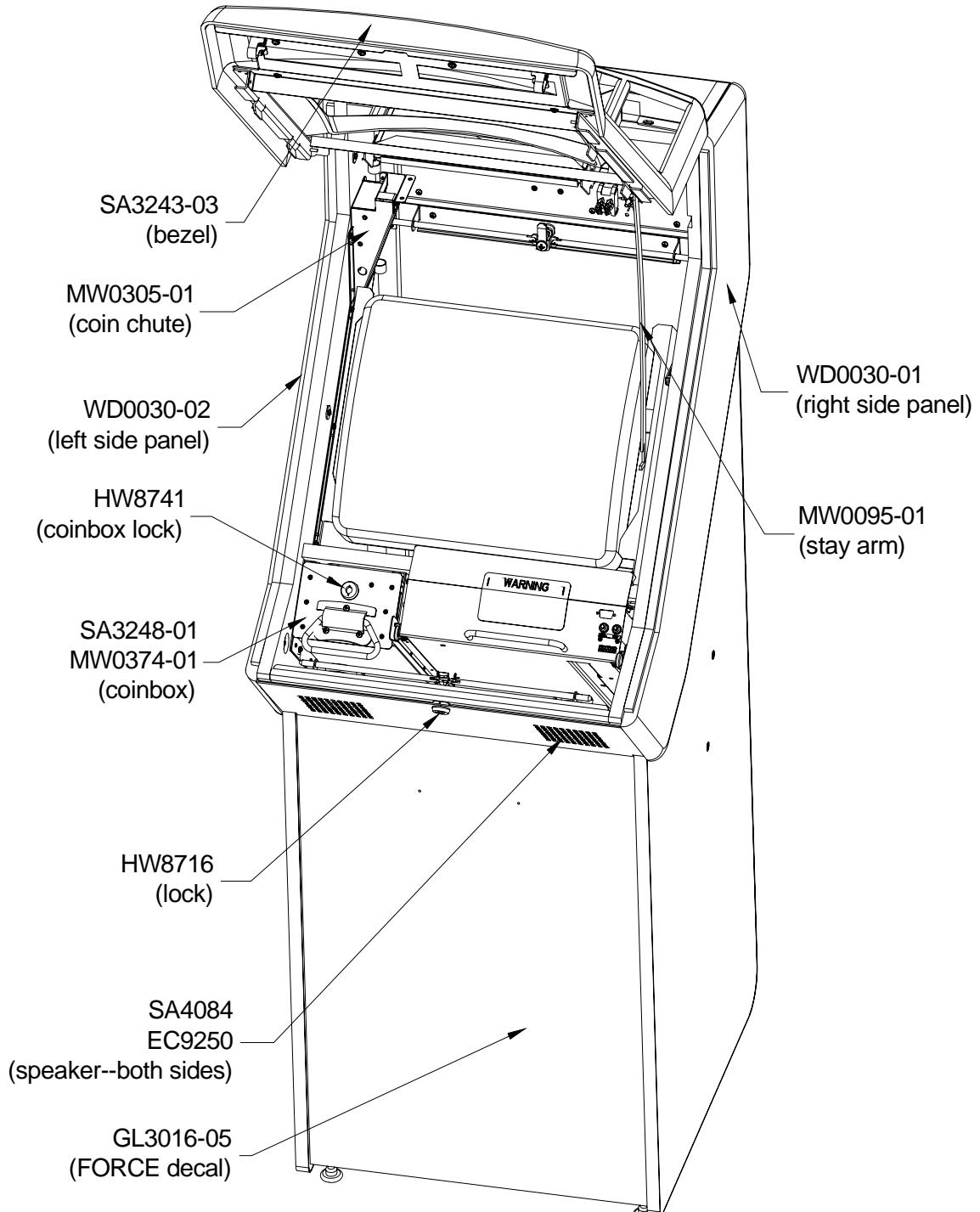
Dimensions: L - 29"; W - 23"; H - 62"  
Shipping weight: 270 lbs.

## ***Motherboard Information***

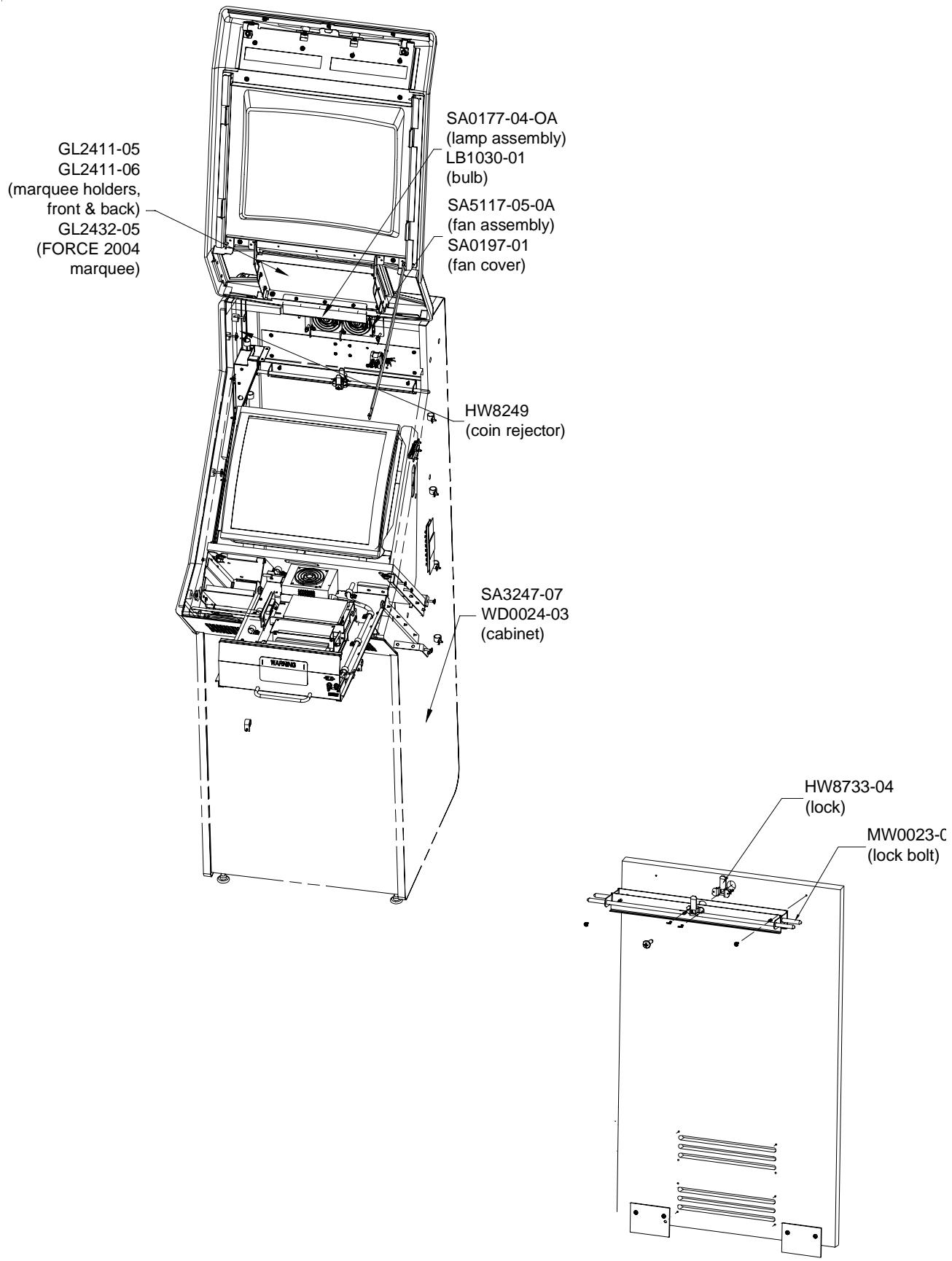
ECS

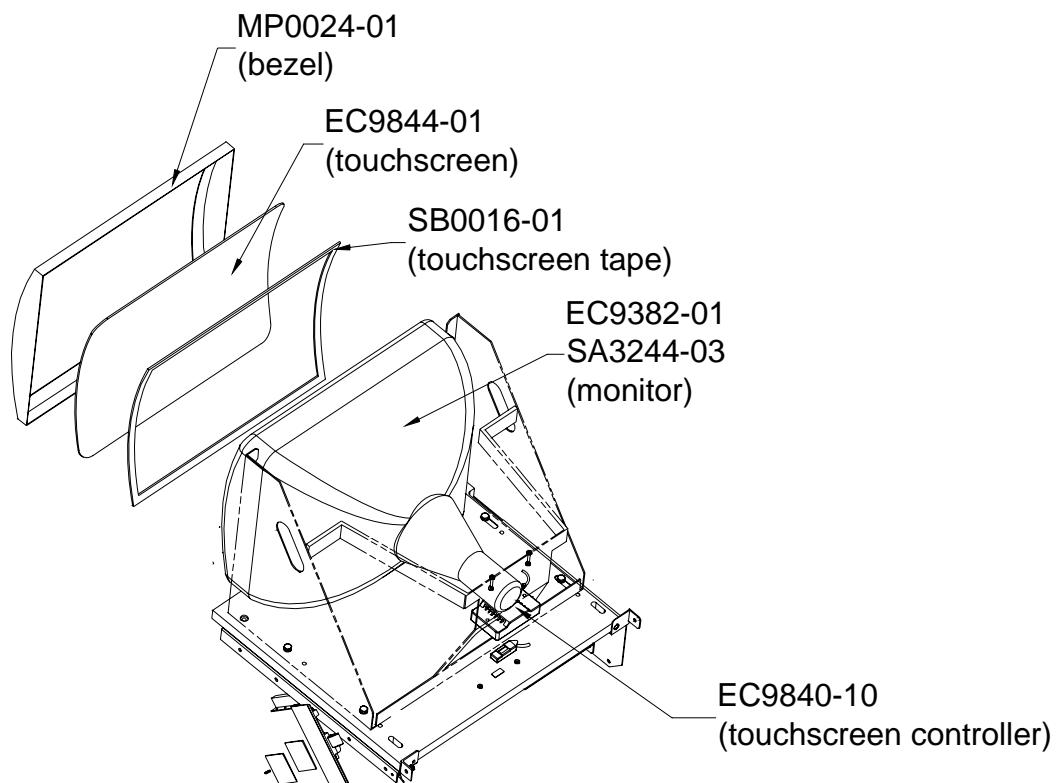
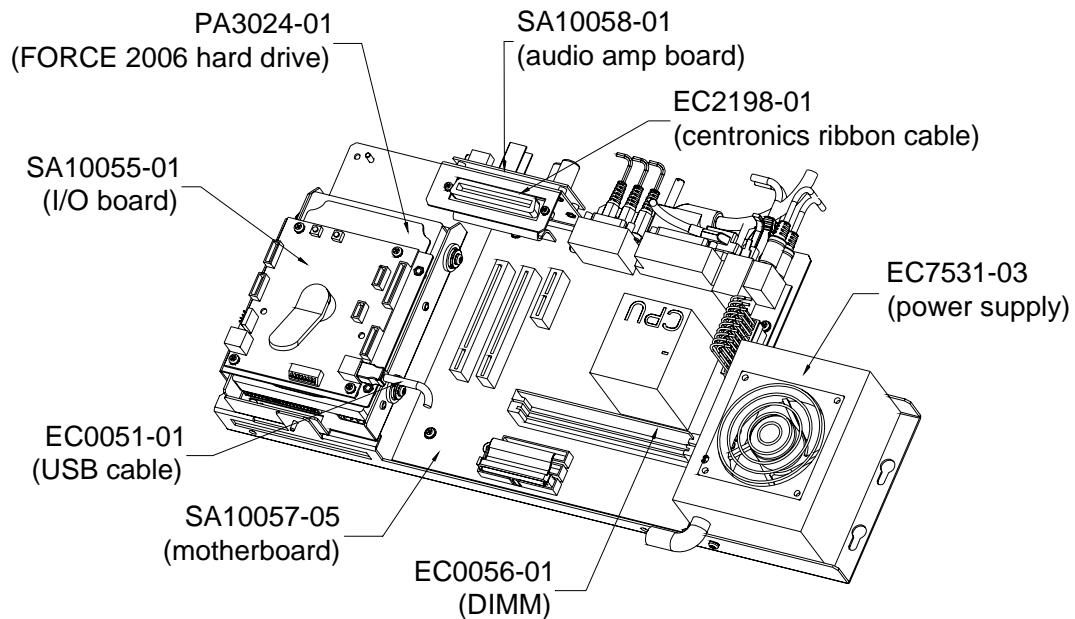
## ***Touchscreen Type***

Microtouch



FORCE UPRIGHT W/O COIN DOOR





FORCE UPRIGHT W/O COIN DOOR

# FORCE Upright w/ Coin Door

Dimensions: L - 29"; W - 23"; H - 62"

Shipping weight: 270 lbs.

## ***Motherboard Information***

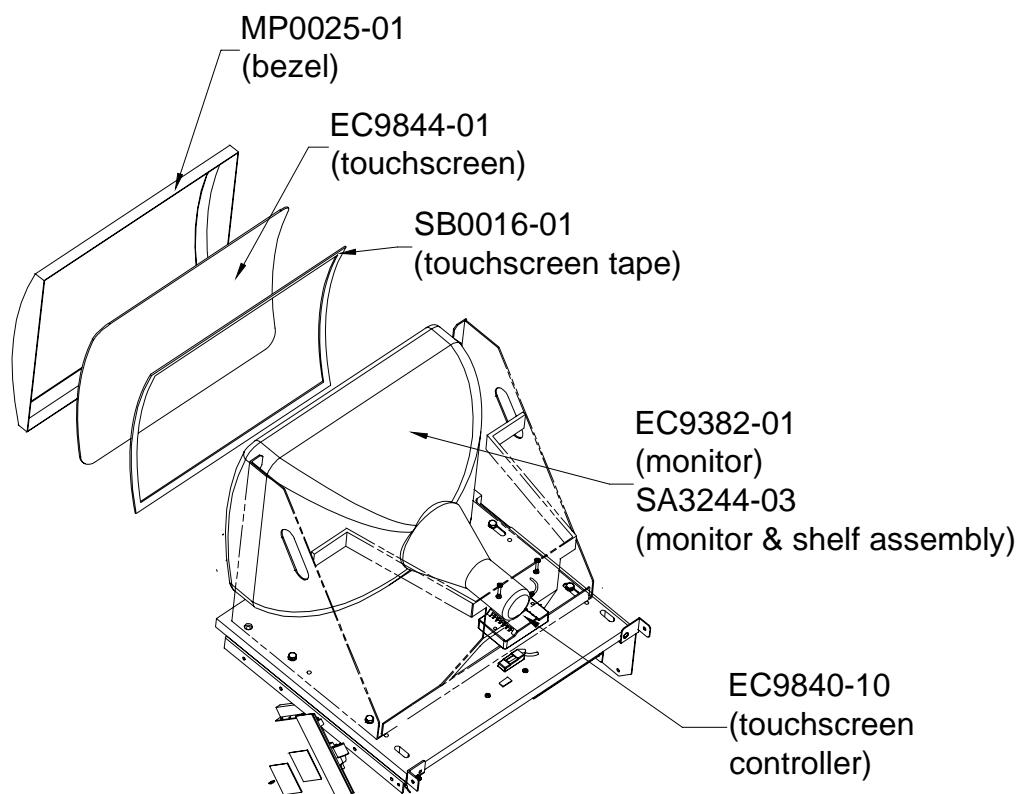
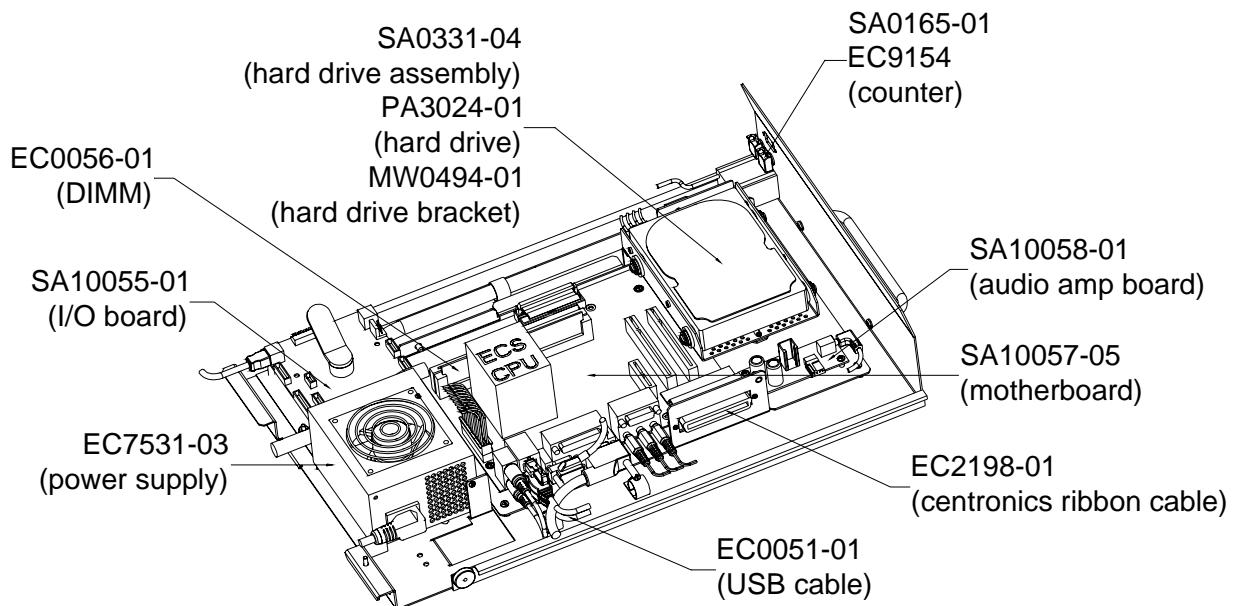
ECS

## ***Touchscreen Type***

Microtouch



FORCE UPRIGHT W/ COIN DOOR



FORCE UPRIGHT W/ COIN DOOR

# The Vibe

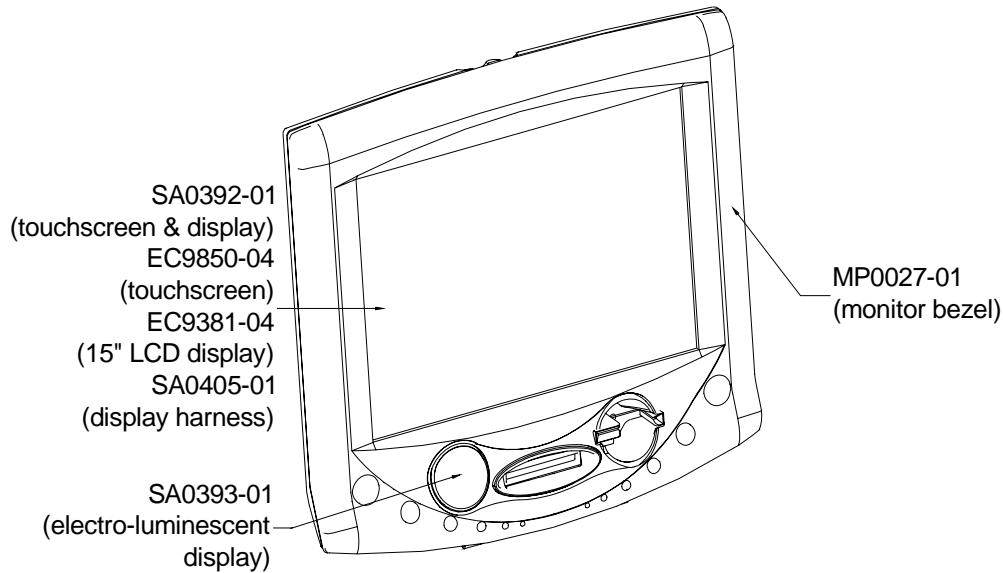
Terminal Dimensions: D - 7"; W - 14"; H - 16"  
Processor Dimensions: D - 15"; W - 11.5"; H - 4.5"  
Shipping weight: 50 lbs.

## ***Motherboard Information***

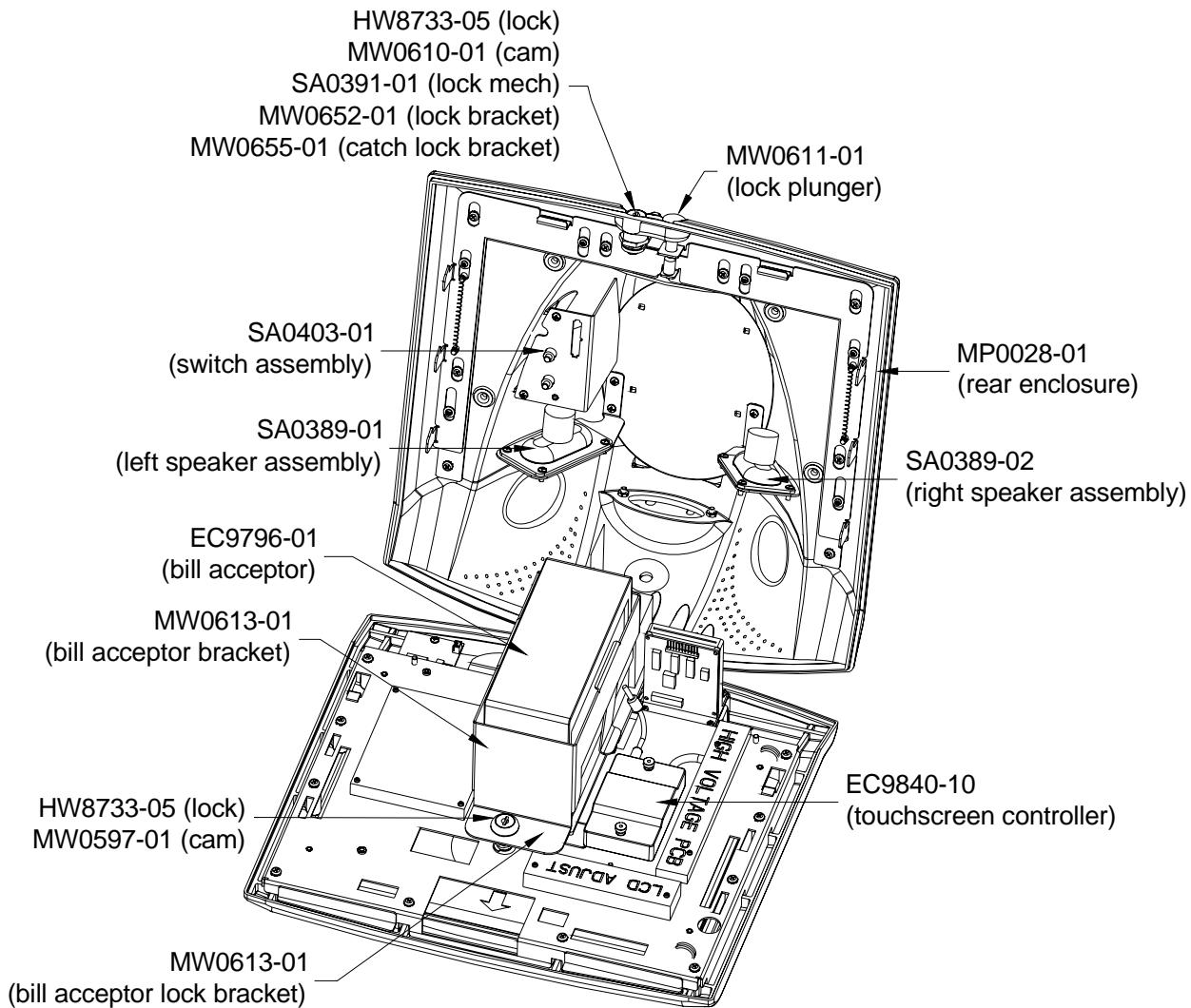
ECS

## ***Touchscreen Type***

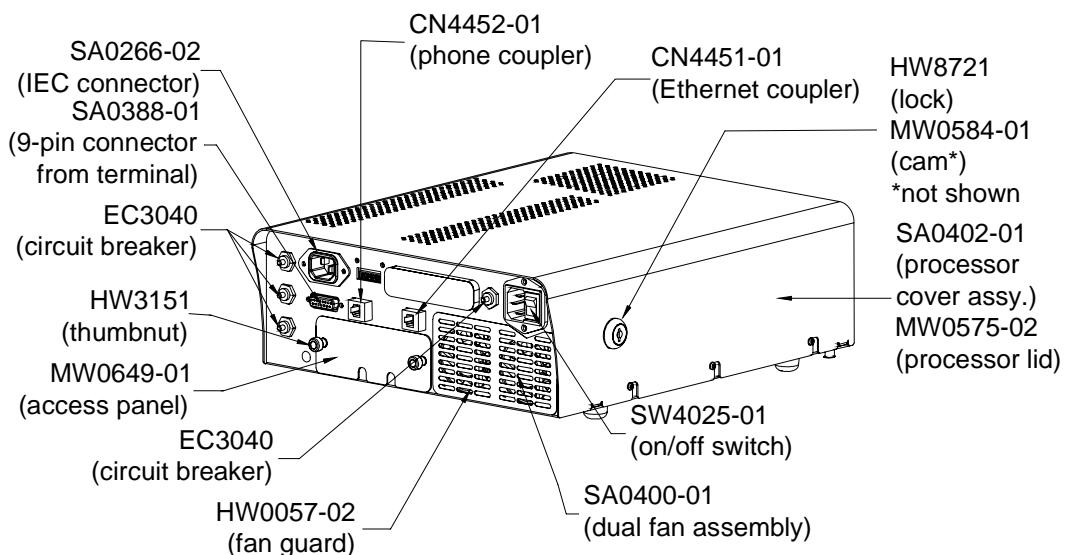
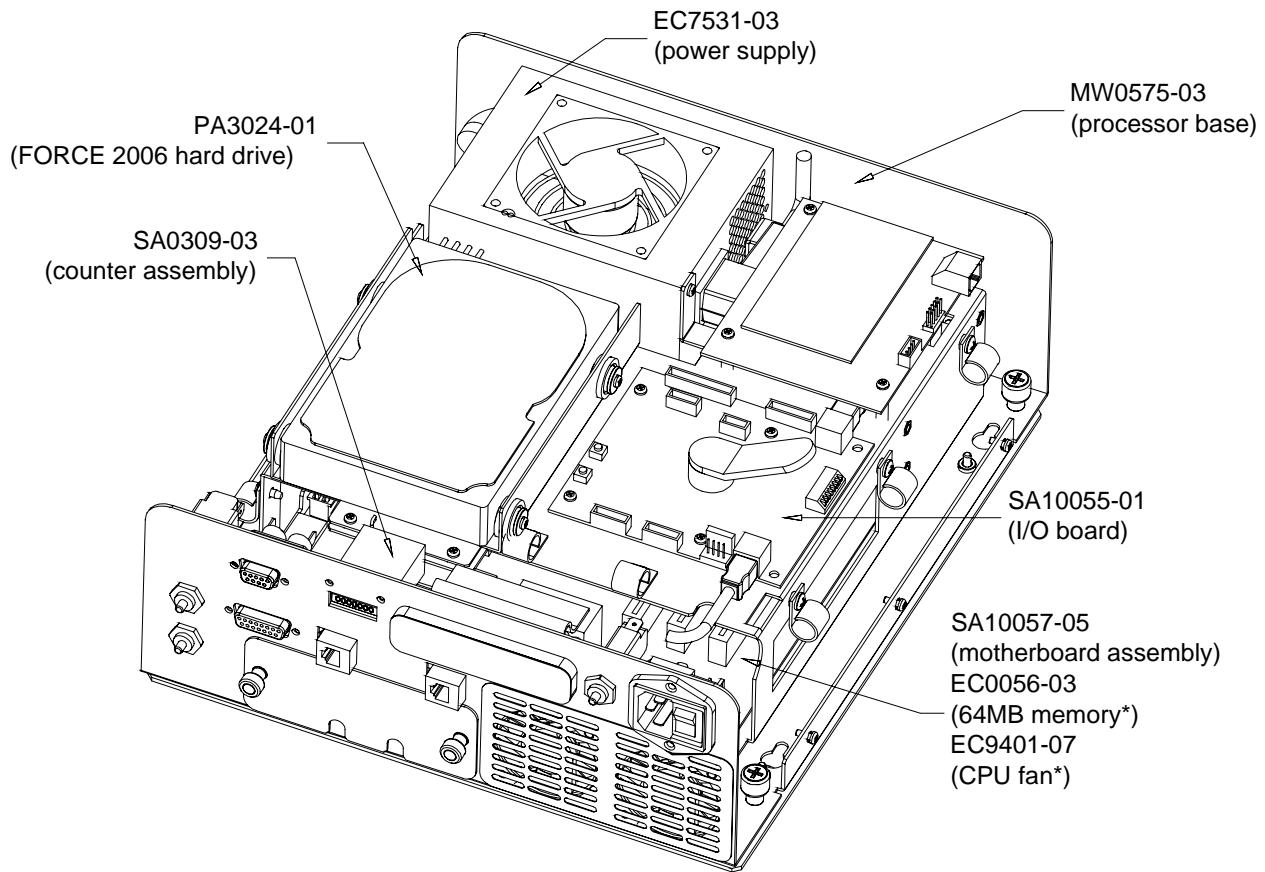
Microtouch



THE VIBE

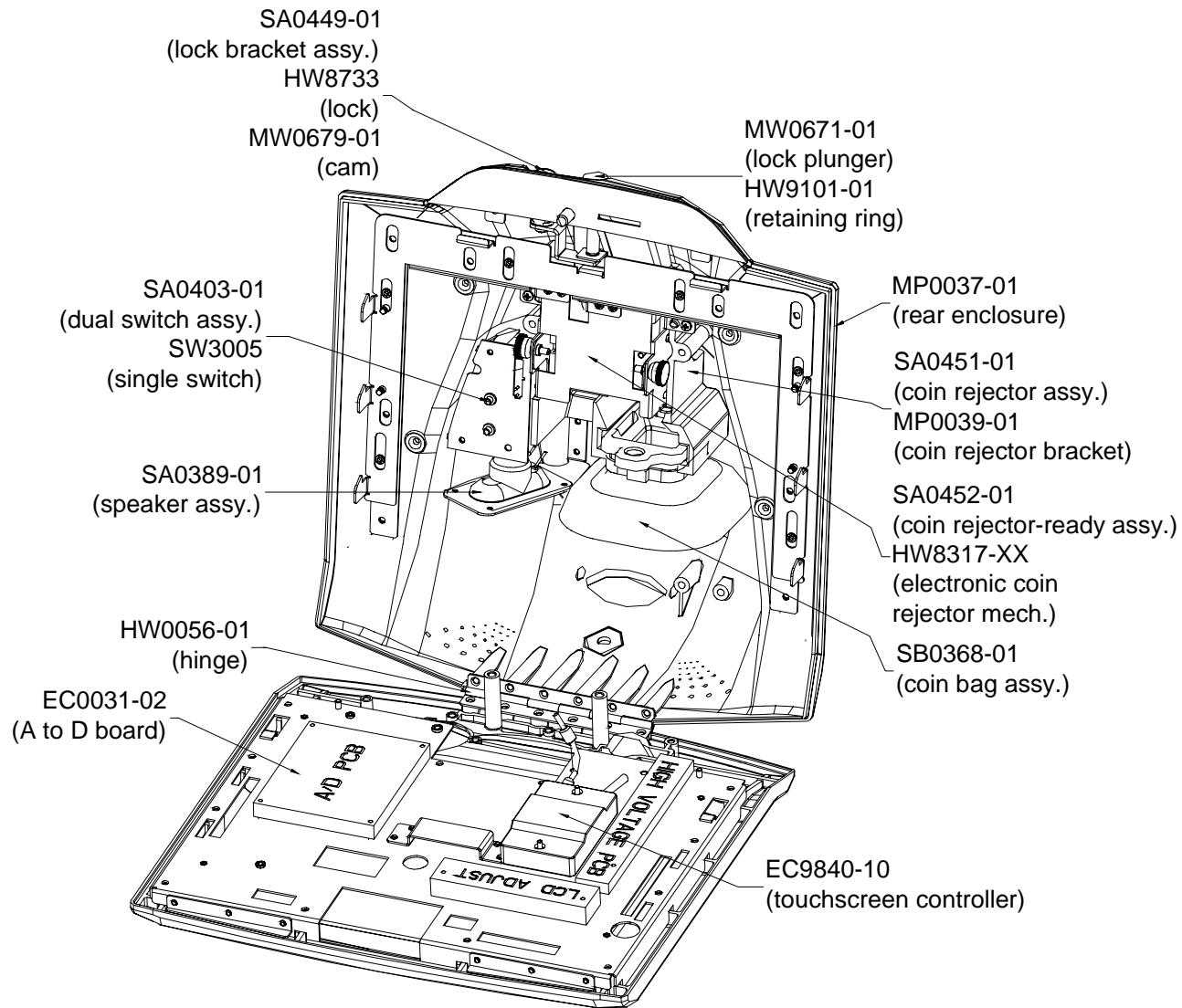


THE VIBE

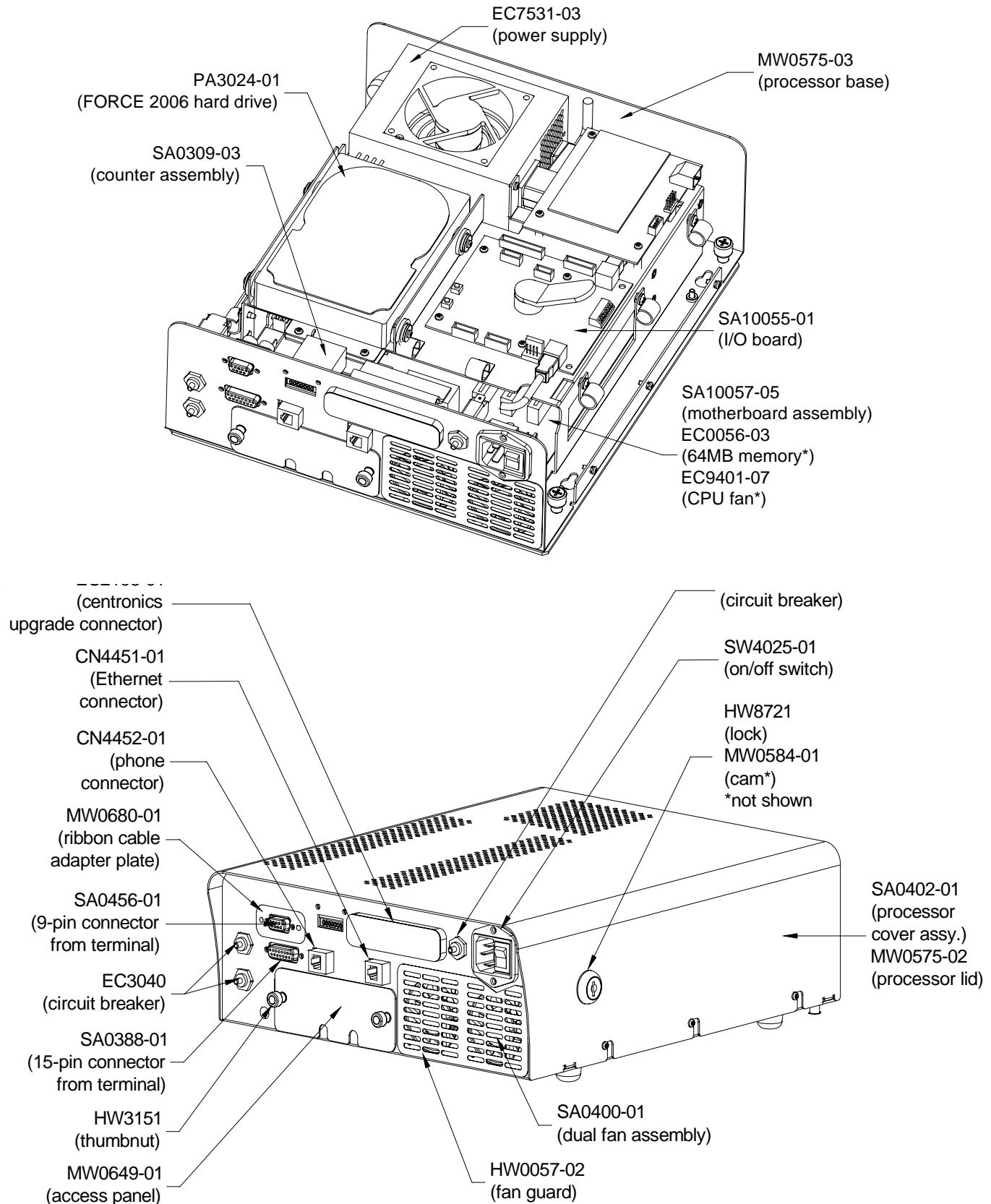


THE VIBE

**Cabinet Information - General Information - The Vibe**  
 Megatouch FORCE Technical Reference Manual



THE VIBE W/ COIN



THE VIBE W/ COIN  
**Cabinet Information - General Information - The Vibe w/ Coin**  
 Megatouch FORCE Technical Reference Manual

# **Megatouch FORCE EVO**

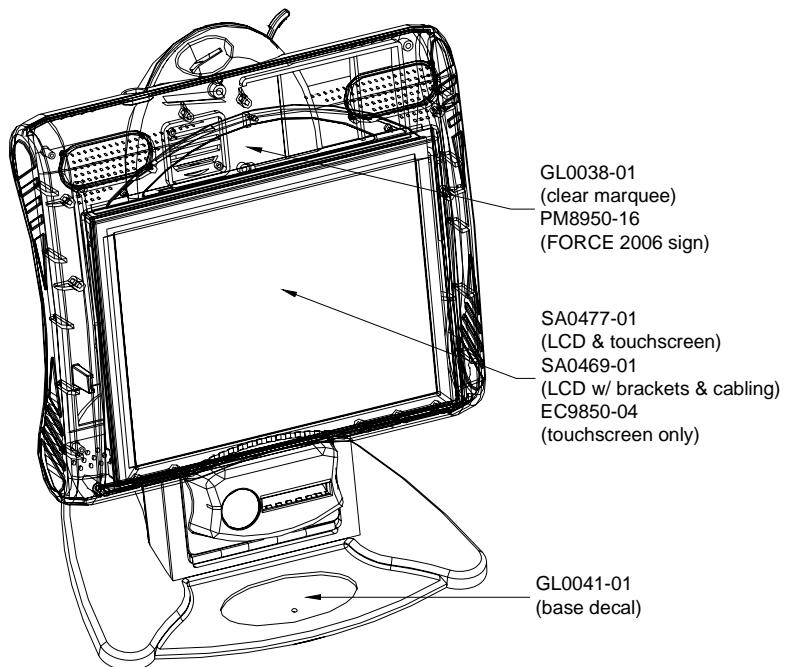
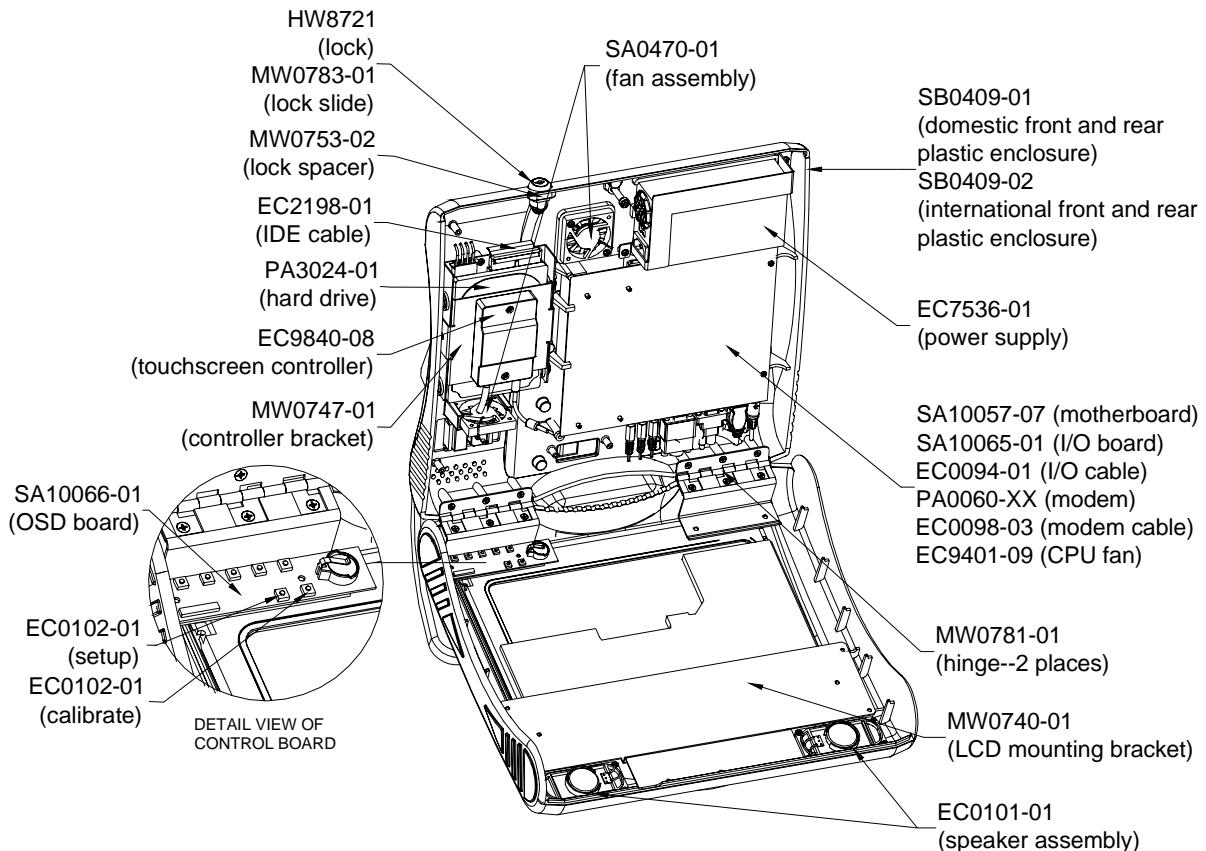
Dimensions: D - 15"; W - 16.5"; H - 18.5"  
Shipping weight: 75 lbs.

## ***Motherboard Information***

ECS

## ***Touchscreen Type***

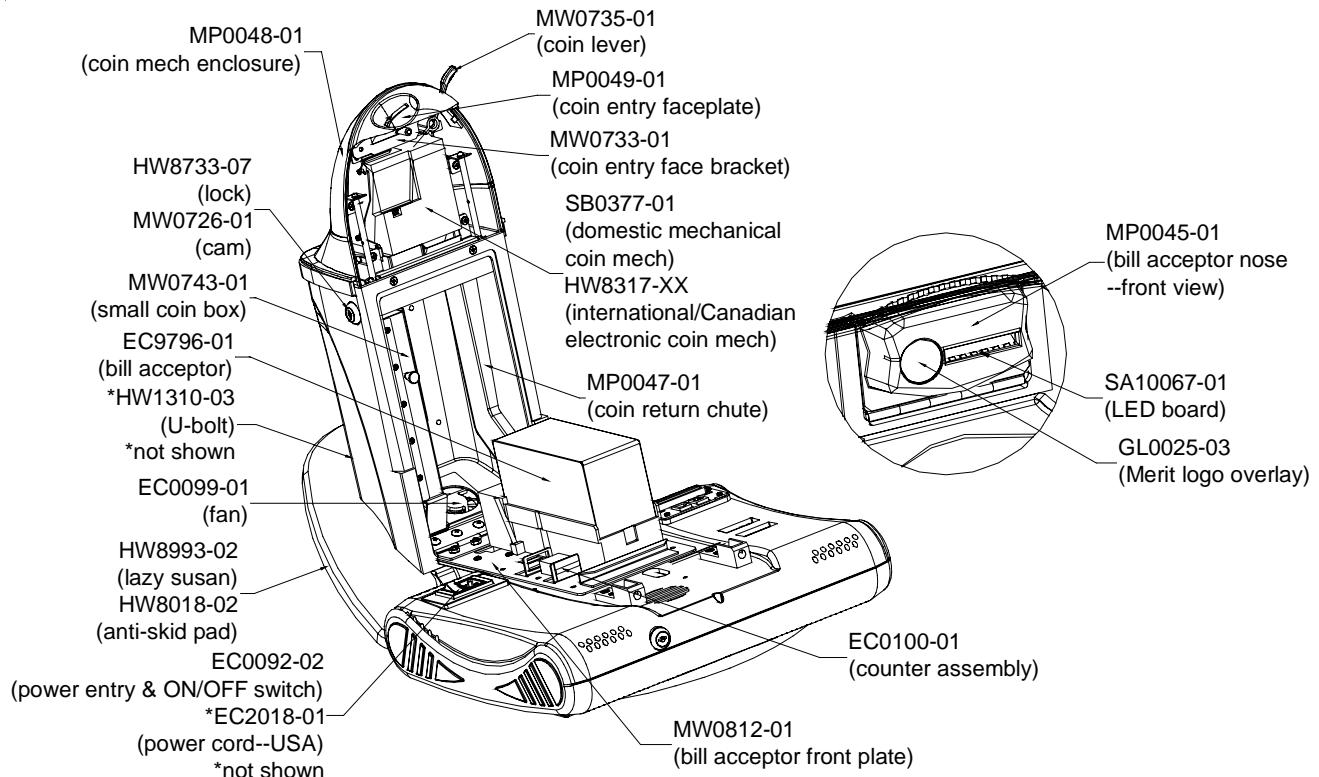
Microtouch



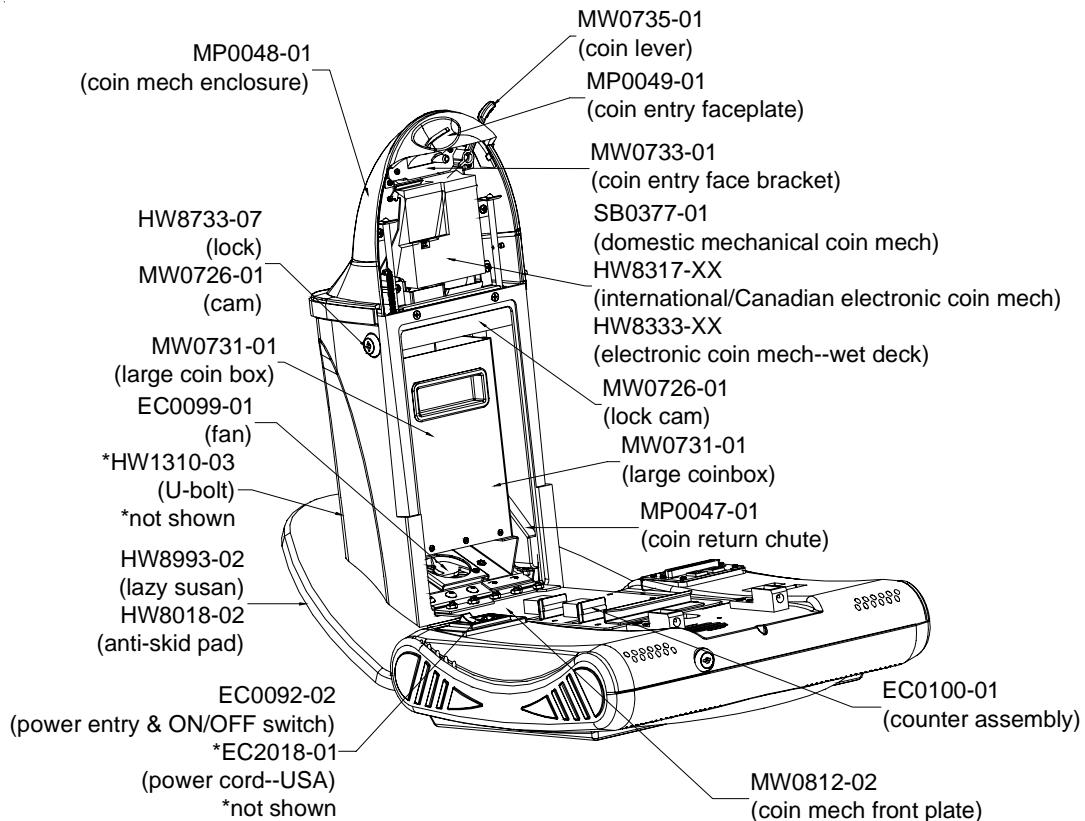
#### PARTS FOUND IN ALL EVO MODELS

### Cabinet Information - General Information - Megatouch FORCE EVO

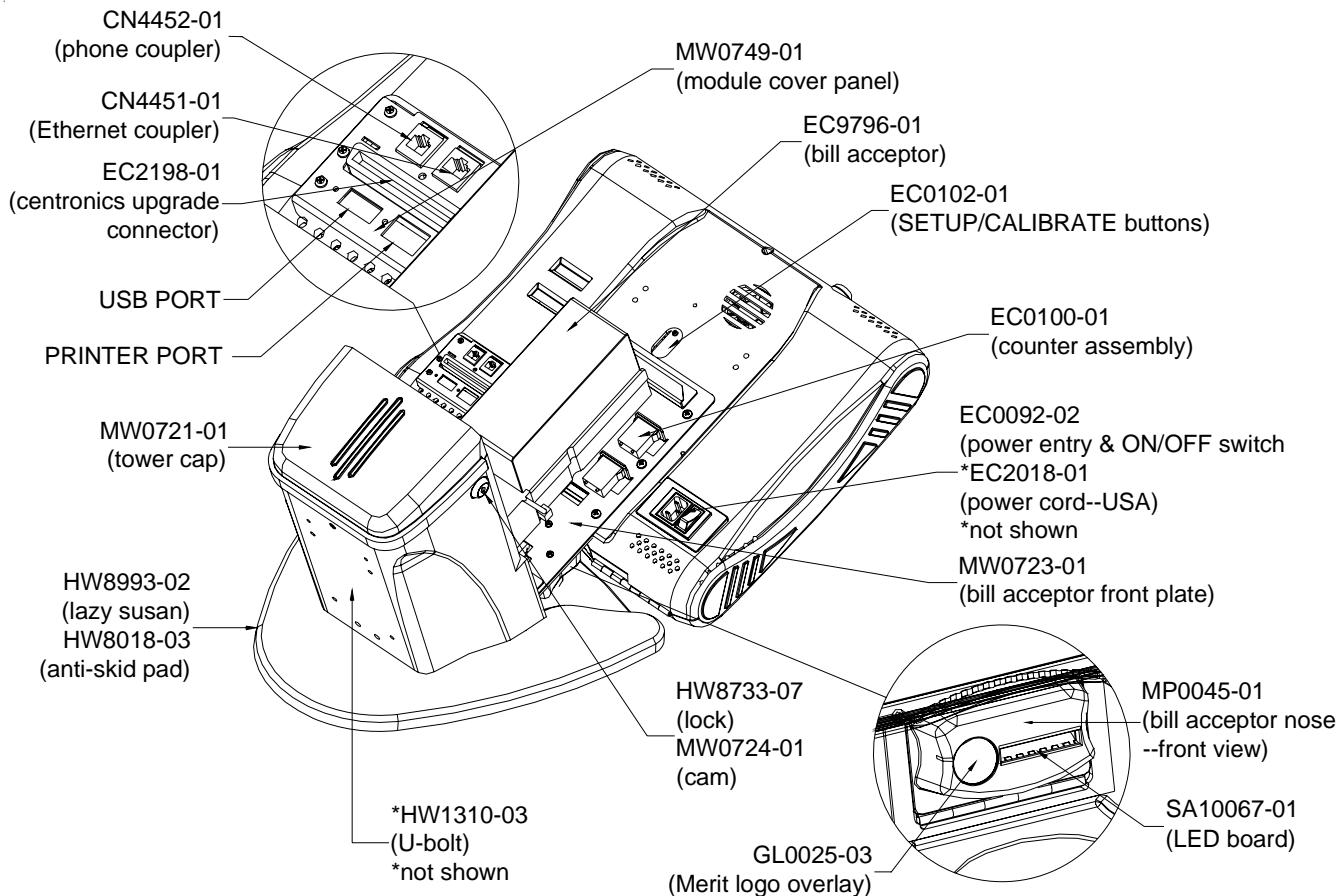
Megatouch FORCE Technical Reference Manual



EVO WITH BILL AND COIN



EVO WITH COIN ONLY



EVO WITH BILL ONLY

# Megatouch FORCE EVO Wallette

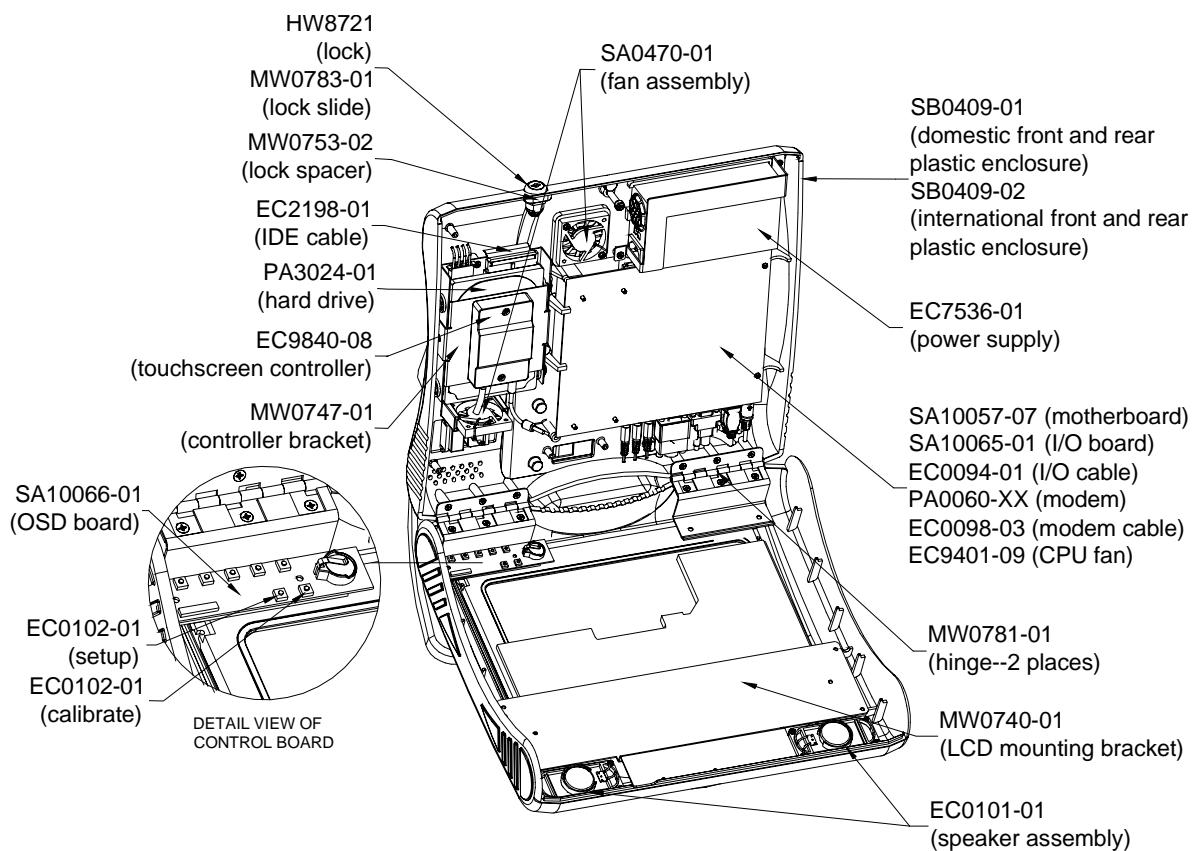
Dimensions: D - 9"; W - 16.5"; H - 19"

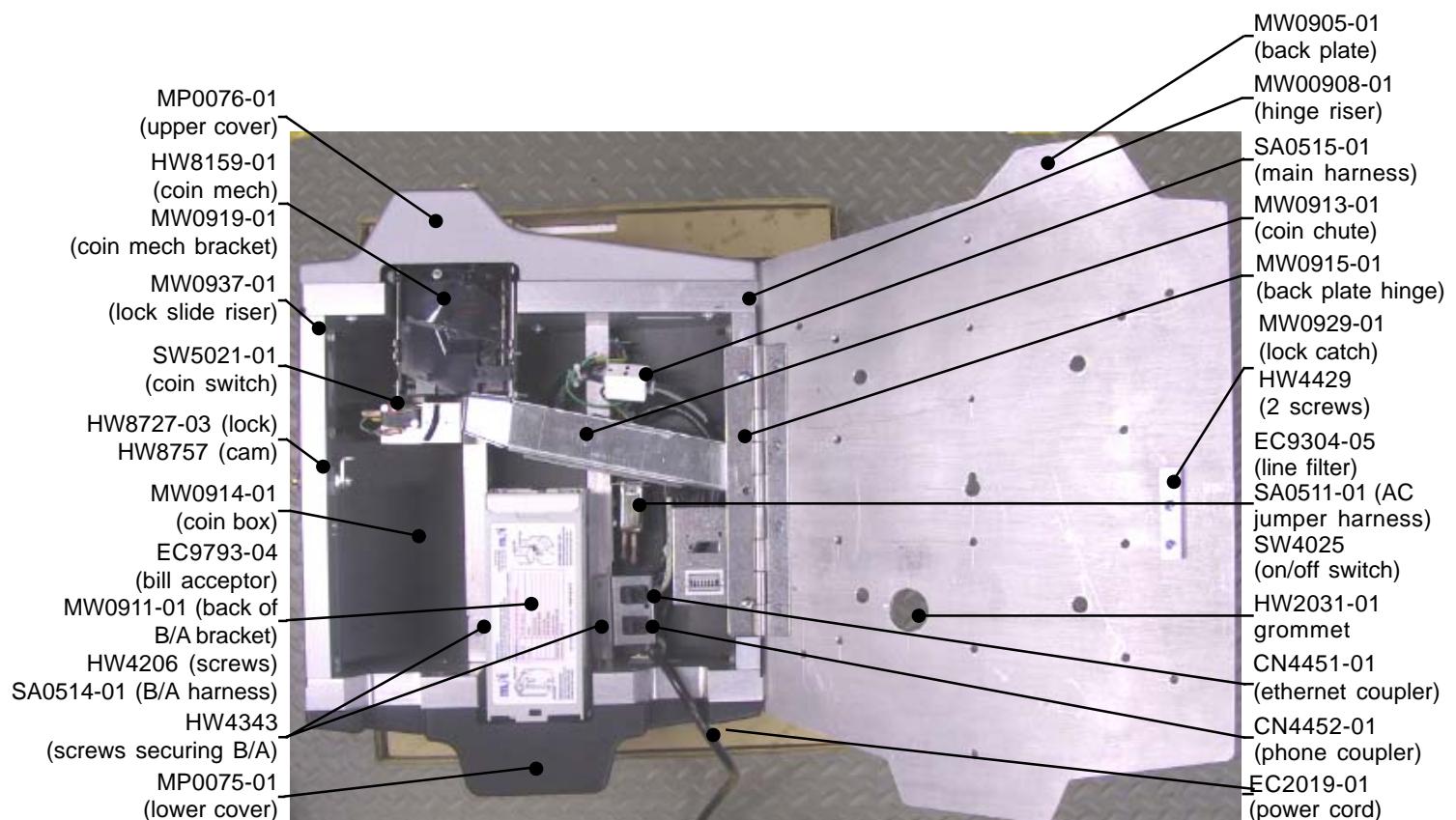
## ***Motherboard Information***

ECS

***Touchscreen Type***

Microtouch





EVO WALLETTE



MW0935-01  
(coin rejector button)  
HW9101-01  
(retaining clip)

PM8950-XX  
marquee  
GL0038-01  
plexi-glass

SA0477-01  
(LCD & touchscreen)  
SA0469-01  
(LCD w/ brackets)  
EC9850-04  
(touchscreen)  
EC0096-01  
(VGA cable)  
EC0097-06  
(osd cable)



MP0075-01  
(bottom cover)

MW0912-02  
(B/A face plate)

MW0312-01  
(blanking plate)

MW0916-01  
(housing slide)

EVO WALLETTE



# **Megatouch FORCE Elite Edge**

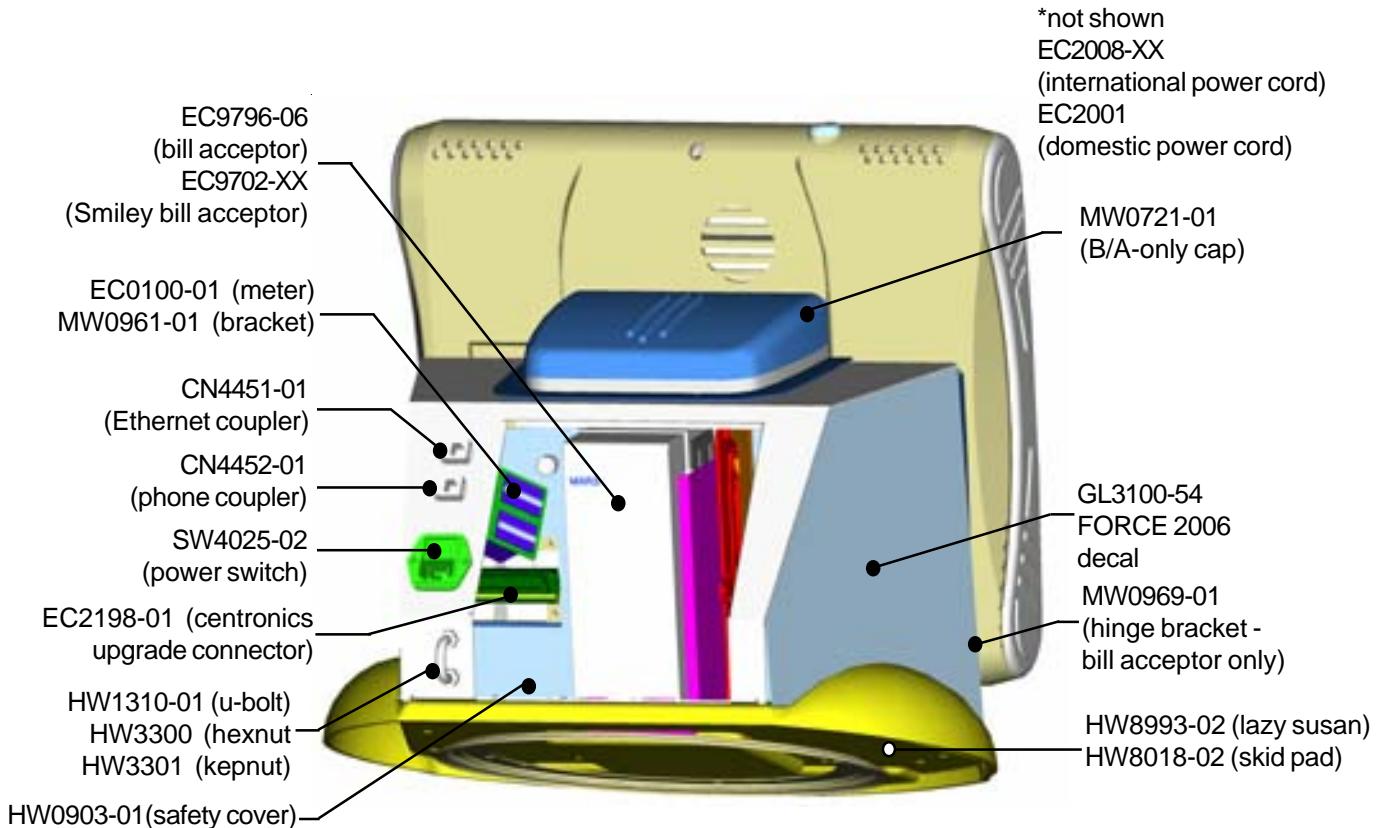
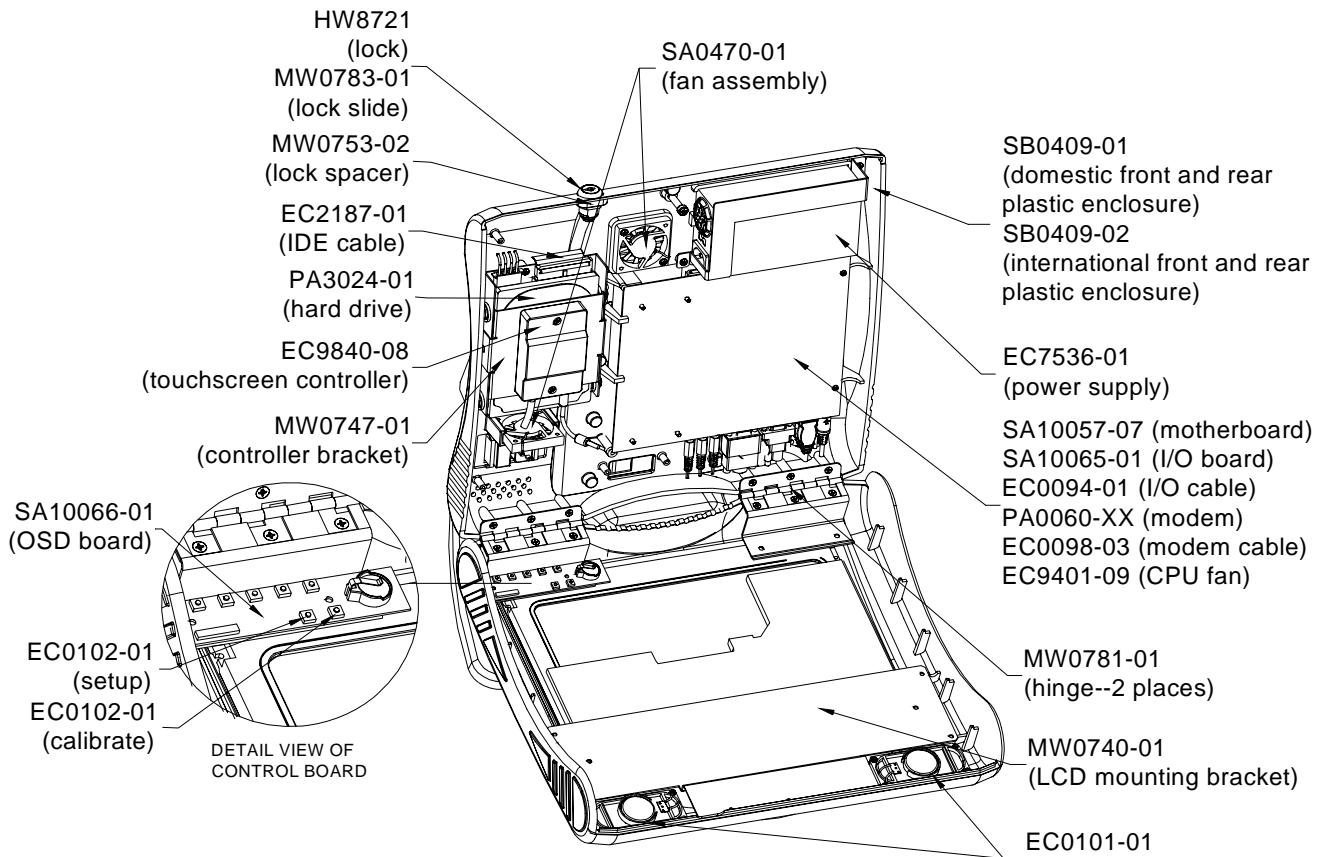
Dimensions: D - 15"; W - 18"; H - 18"

***Motherboard Information***

ECS

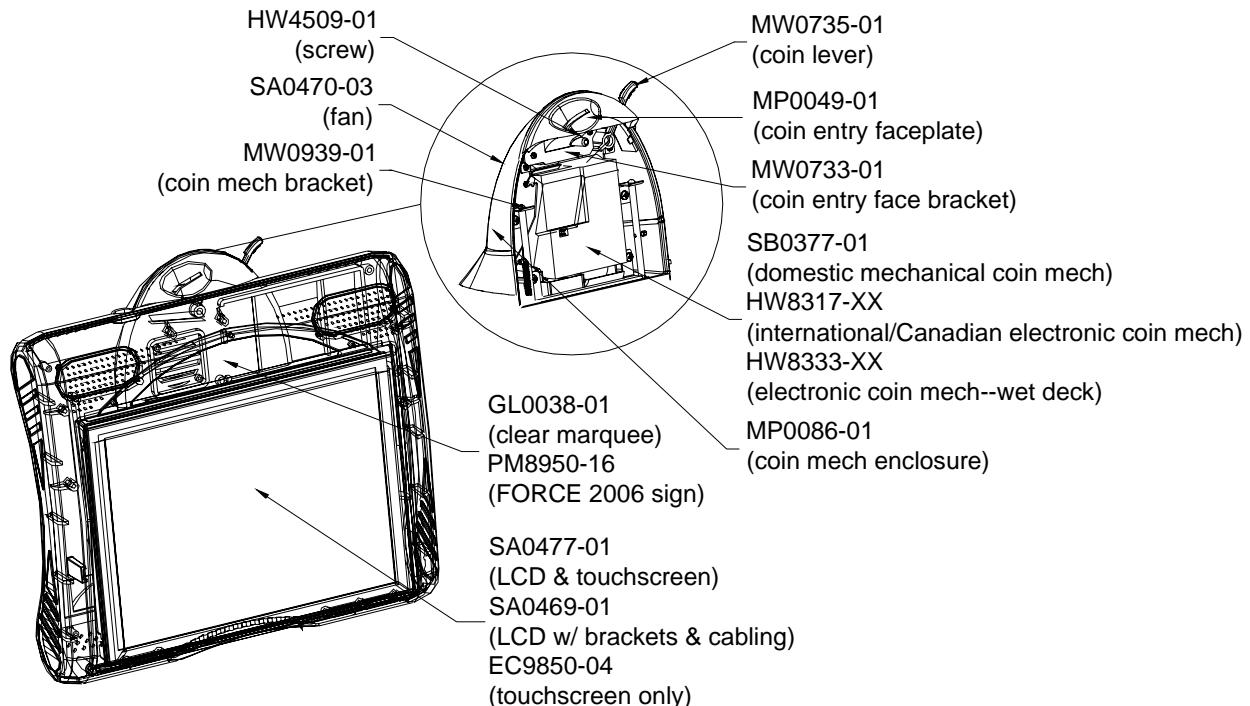
***Touchscreen Type***

Microtouch



### Cabinet Information - General Information - Megatouch FORCE Elite Edge

Megatouch FORCE Technical Reference Manual



\*not shown

GL0041-02 (Elite Edge base decal)

MP0085-01 (front plate)

LB0004-01 (blue light)

MW0945-01 (domestic bill acceptor bracket)

MW0945-02 (Smiley bill acceptor bracket)

MW0945-03 (bill acceptor block out plate for coin only games)

\*not shown

MW0944-01 (rear door)

HW8733-03 (lock)

MW0510-01 (lock cam)

MW0970-01  
(enclosure)

MW0940-01  
(coin chute)

MP0082-01  
(coin cup)

HW8207  
(screw)

SW4025-02  
(power entry  
module)

MW0930-01  
(base)

MP0086-01  
(coin entry pod)

MW0967-01  
(hinge bracket)

MW0942-02  
(large coin box - coin  
only games)

MW0942-03  
(small coin box - coin  
and bill games)

HW8314-01  
(spring)

MW0981-01  
(coin box support)

### Cabinet Information - General Information - Megatouch FORCE Elite Edge

Megatouch FORCE Technical Reference Manual

# **Megatouch FORCE Upright Fusion**

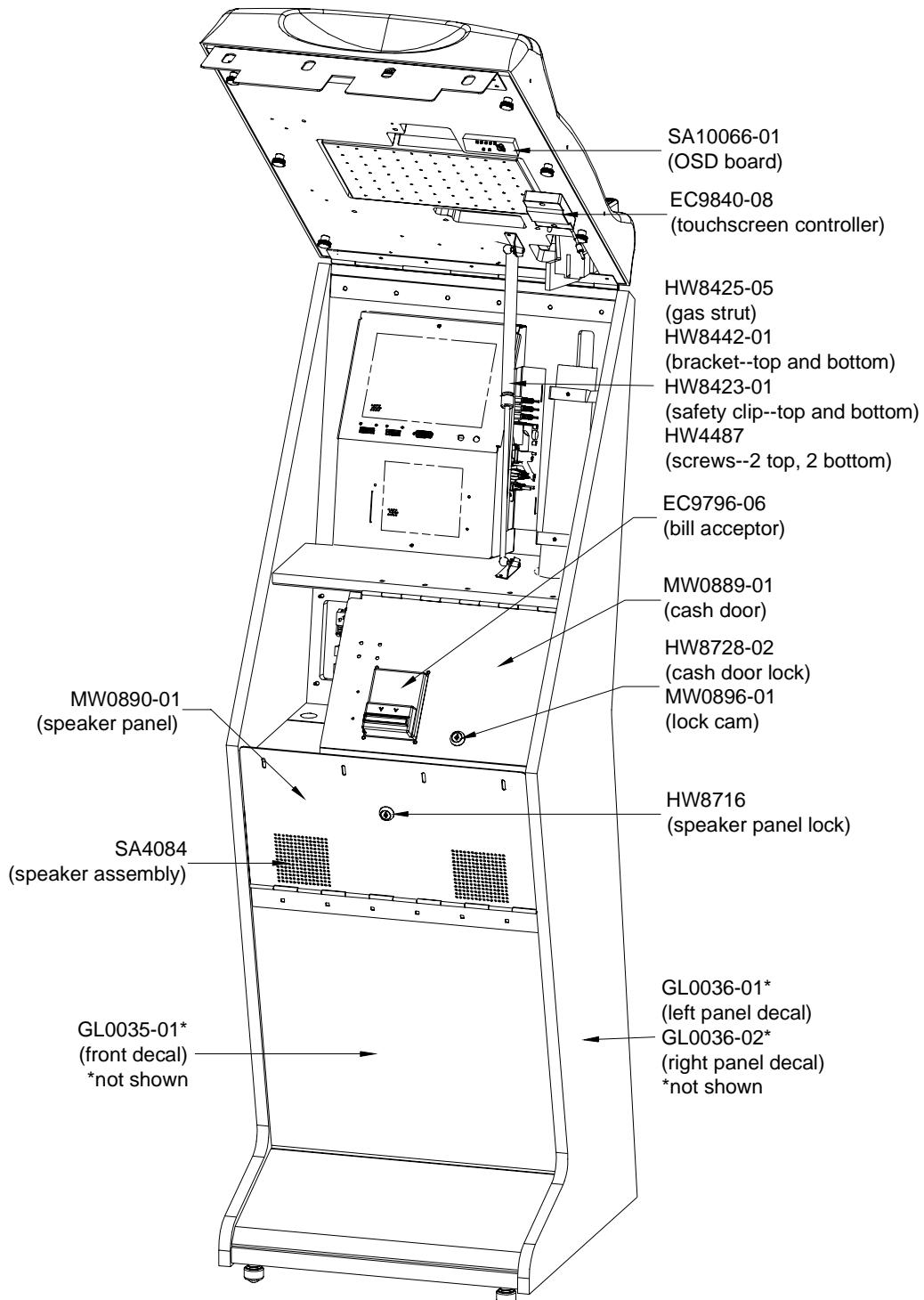
Dimensions: D - 21"; W - 20"; H - 67"  
Shipping weight: 200 lbs.

## ***Motherboard Information***

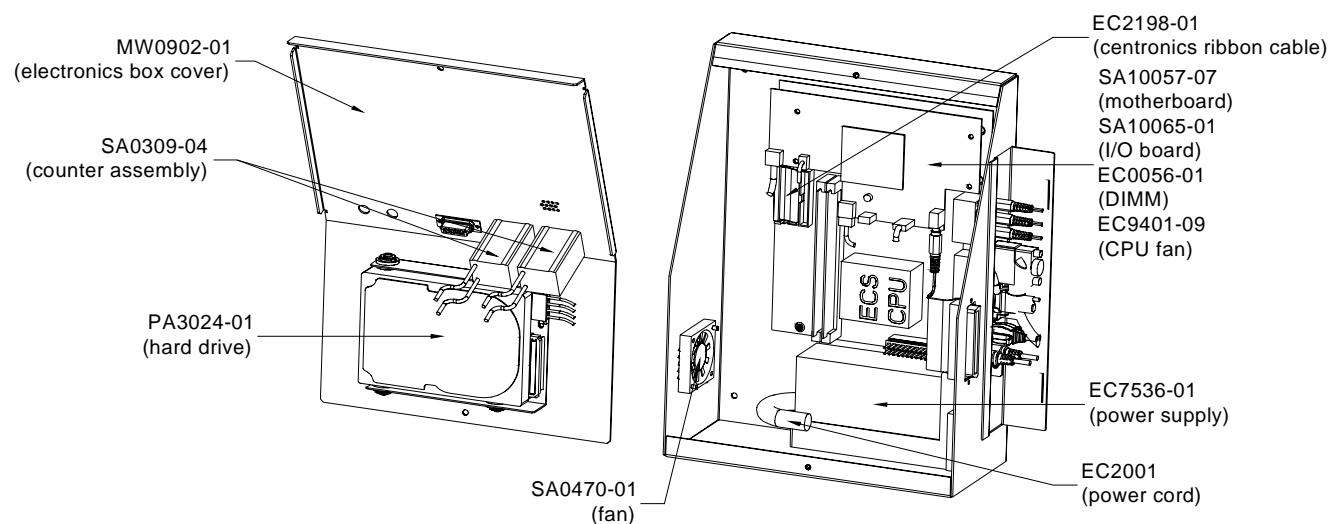
ECS

## ***Touchscreen Type***

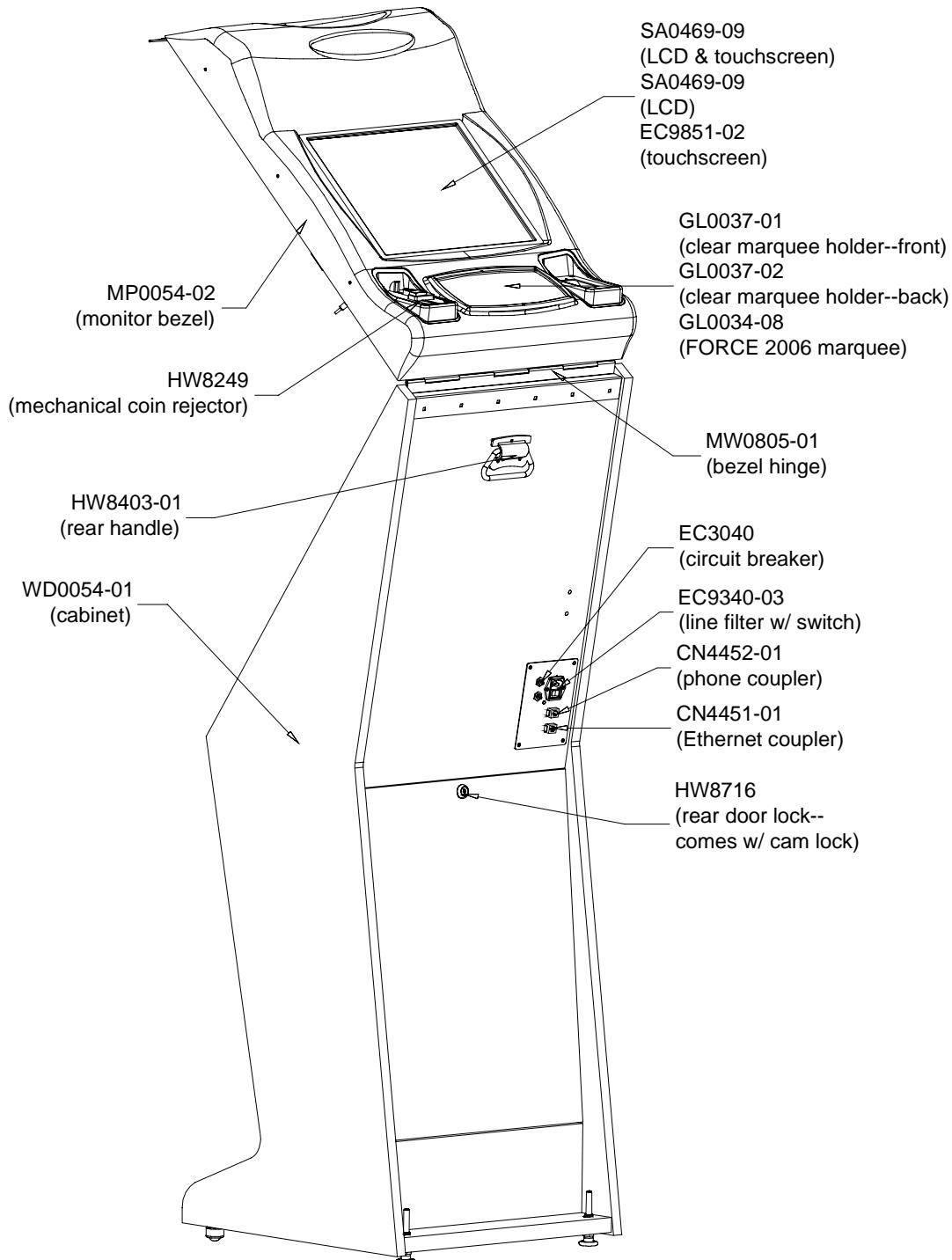
Microtouch



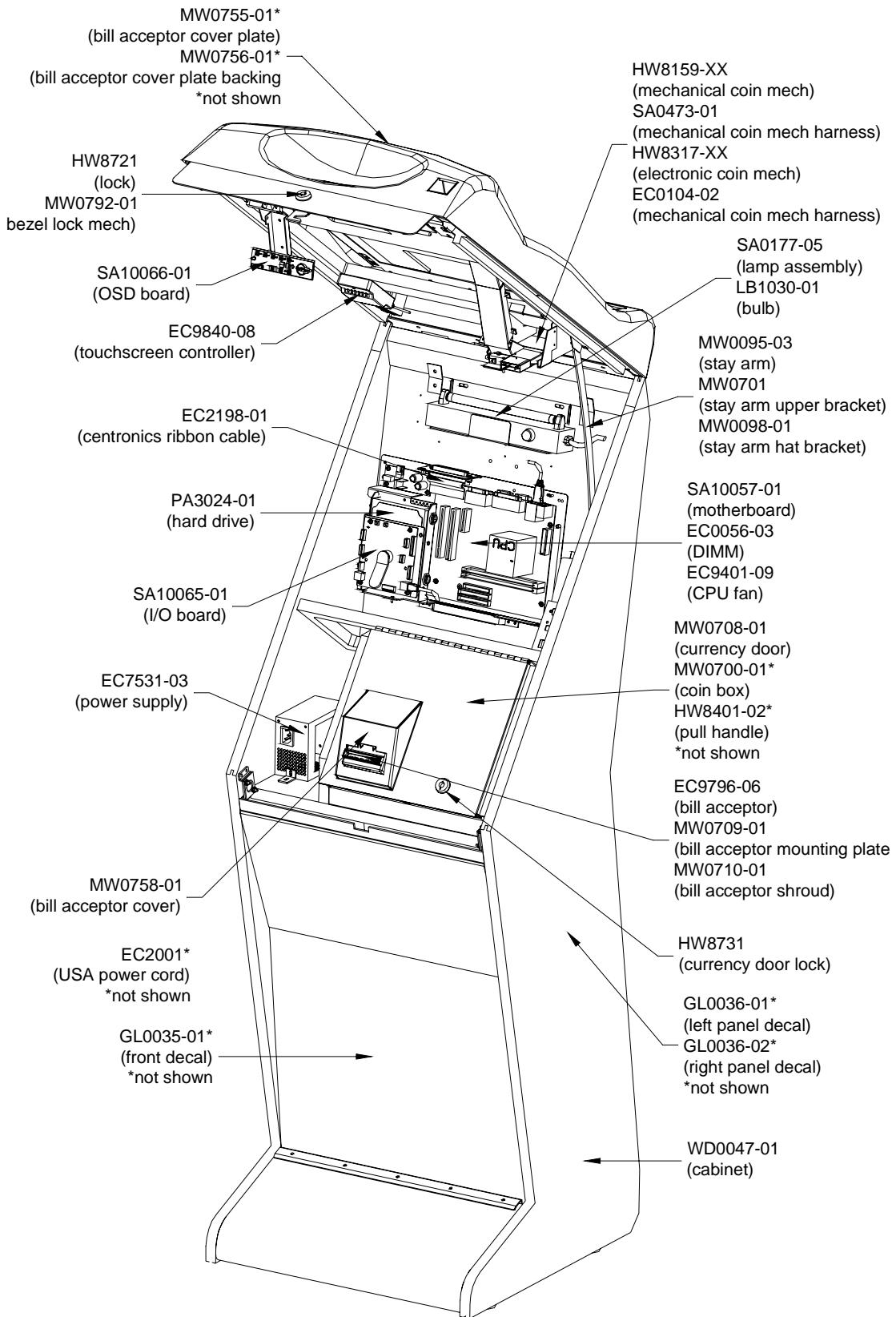
MEGATOUCH FORCE FUSION WITH ELECTRONICS BOX



MEGATOUCH FORCE FUSION WITH ELECTRONICS BOX

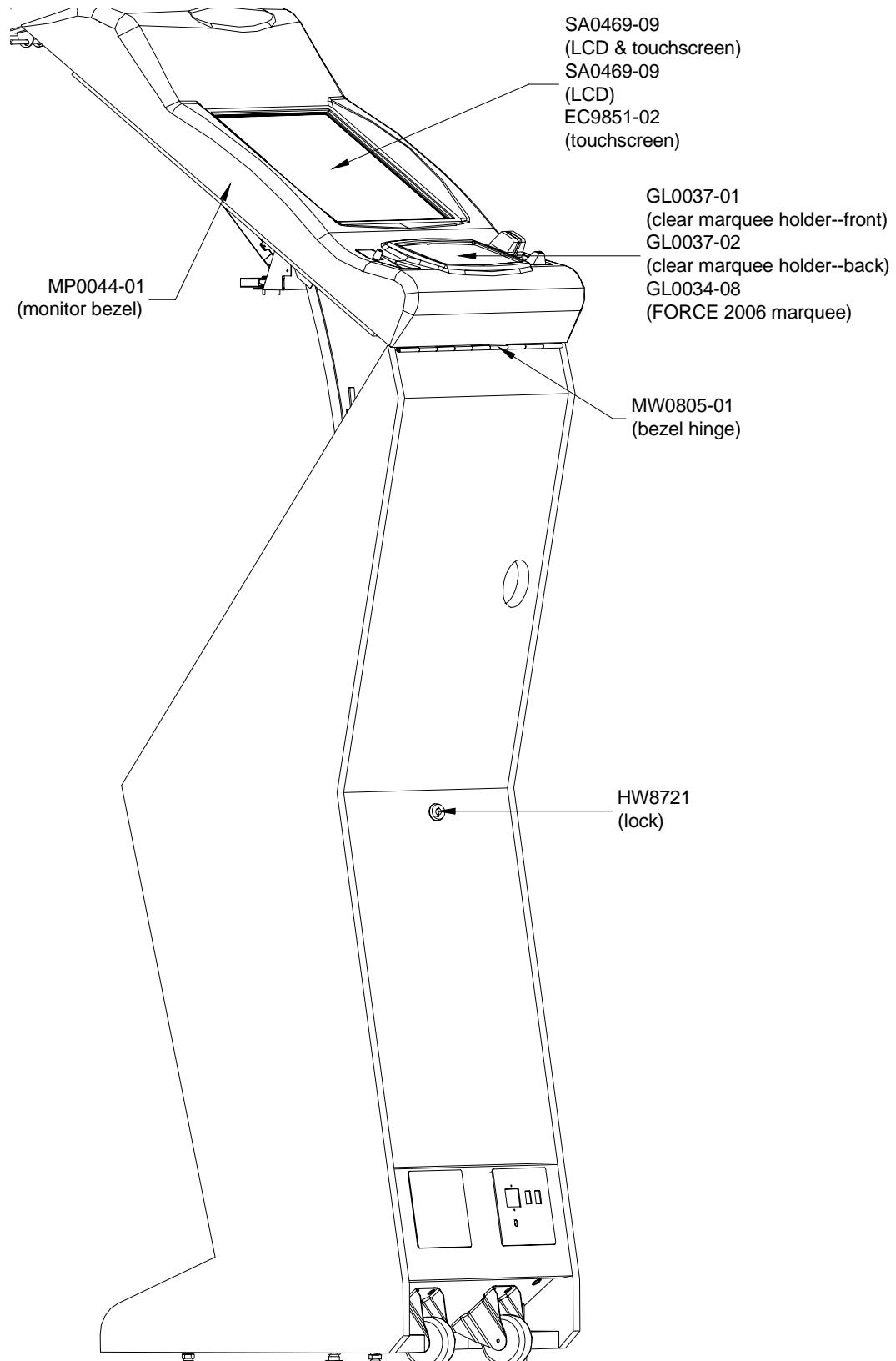


MEGATOUCH FORCE FUSION WITH ELECTRONICS BOX

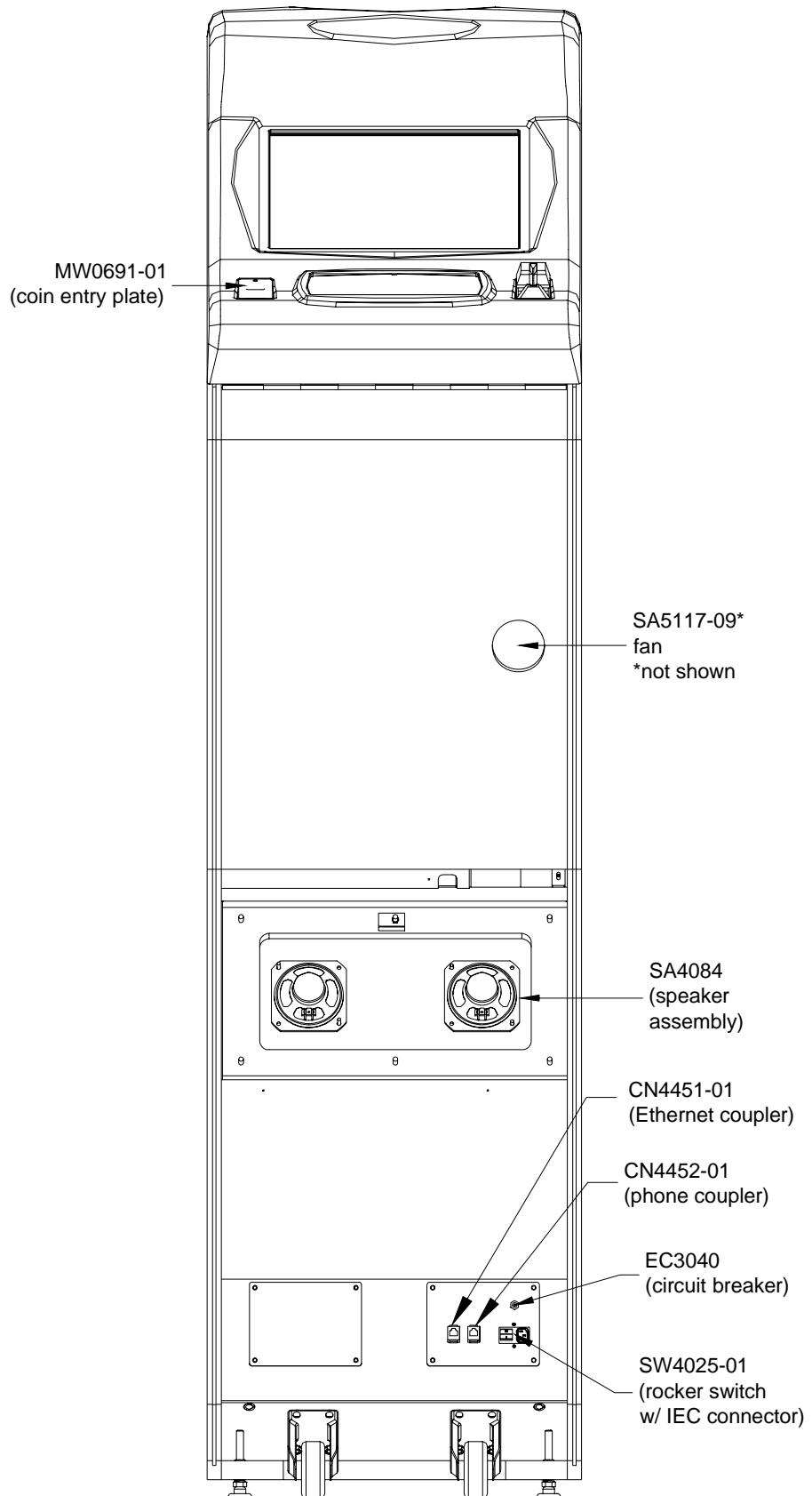


MEGATOUCH FORCE FUSION WITHOUT ELECTRONICS BOX

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MEGATOUCH FORCE FUSION WITHOUT ELECTRONICS BOX



MEGATOUCH FORCE FUSION WITHOUT ELECTRONICS BOX

# **Megatouch FORCE Fun Zone**

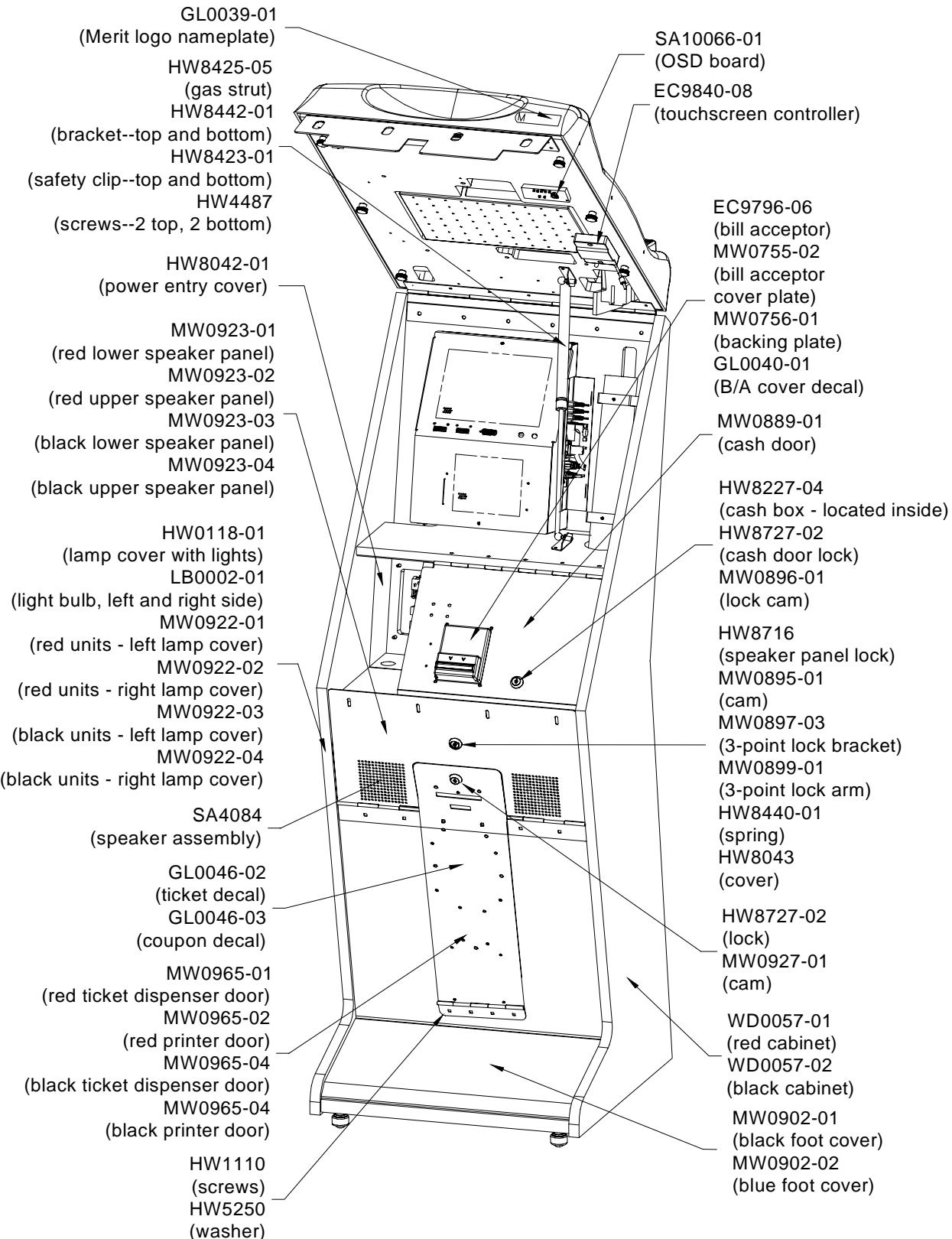
Dimensions: D - 21"; W - 25"; H - 67"  
Shipping weight: 175 lbs.

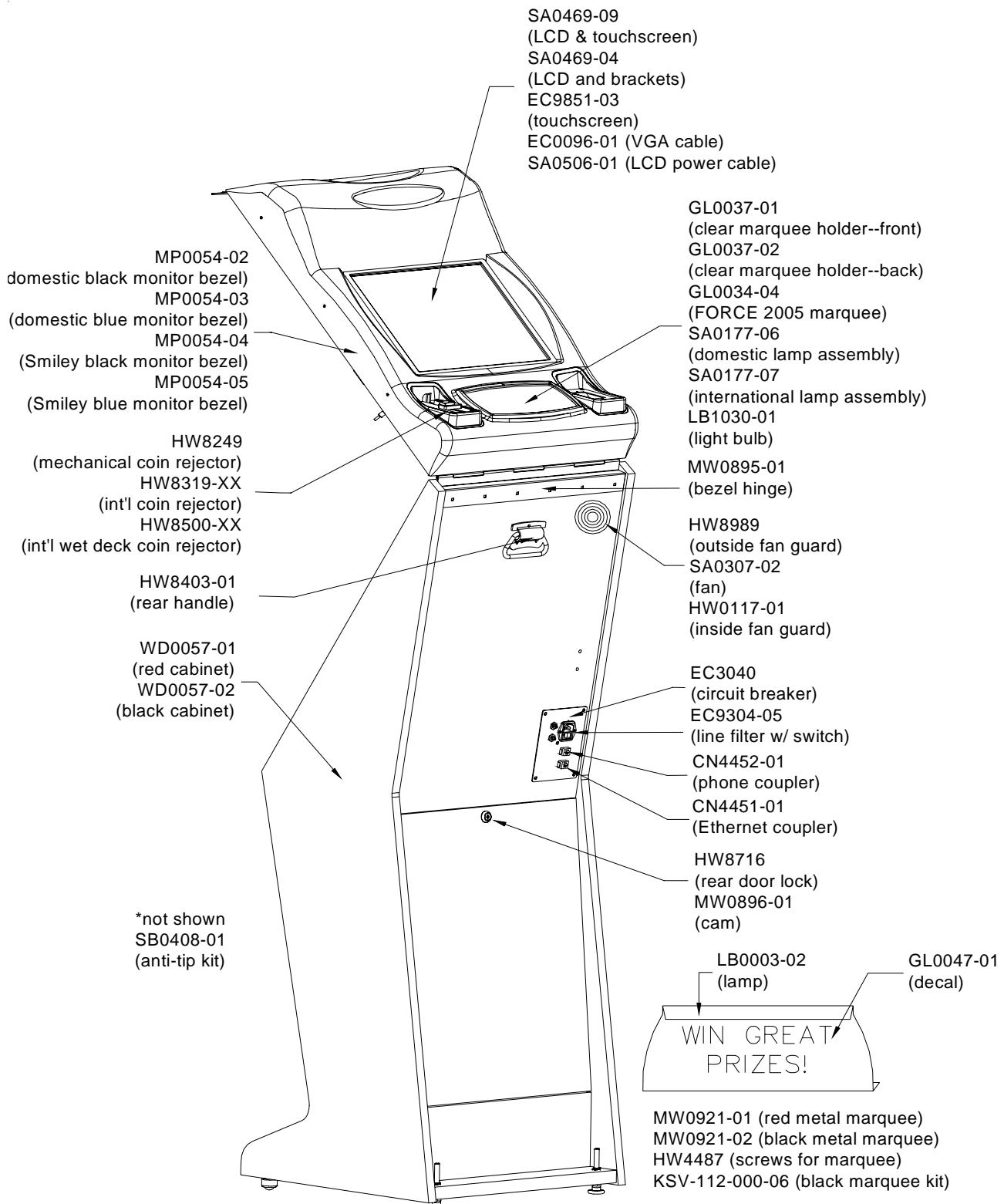
## ***Motherboard Information***

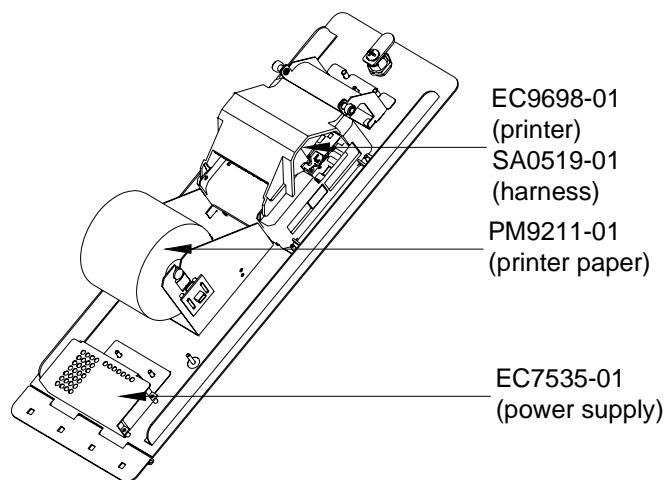
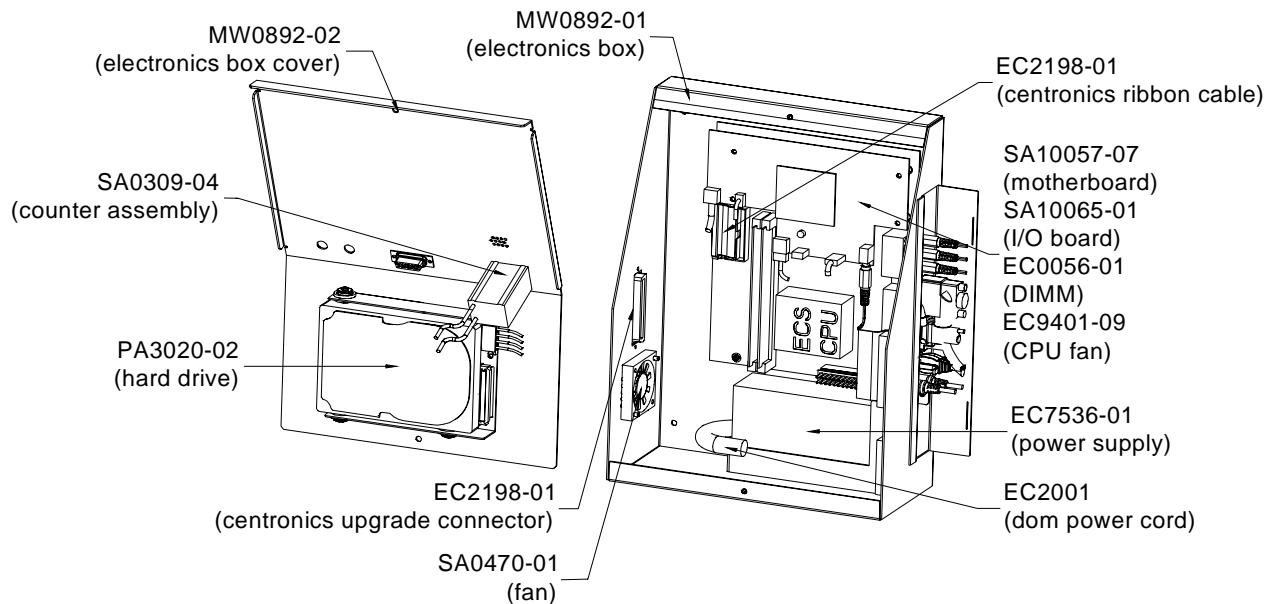
ECS

## ***Touchscreen Type***

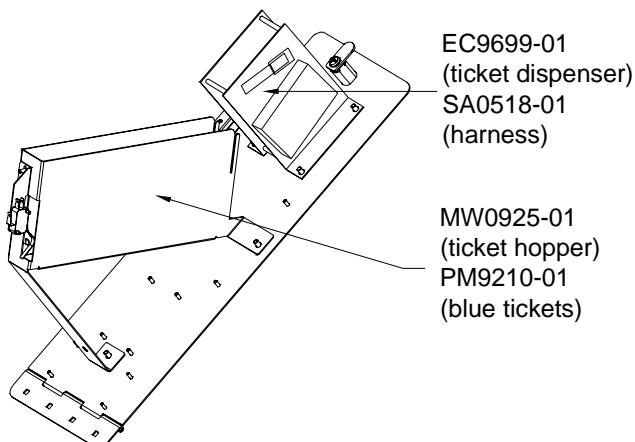
Microtouch







PRINTER DISPENSER DOOR



TICKET DISPENSER DOOR

# Megatouch FORCE Fun Zone Jr.

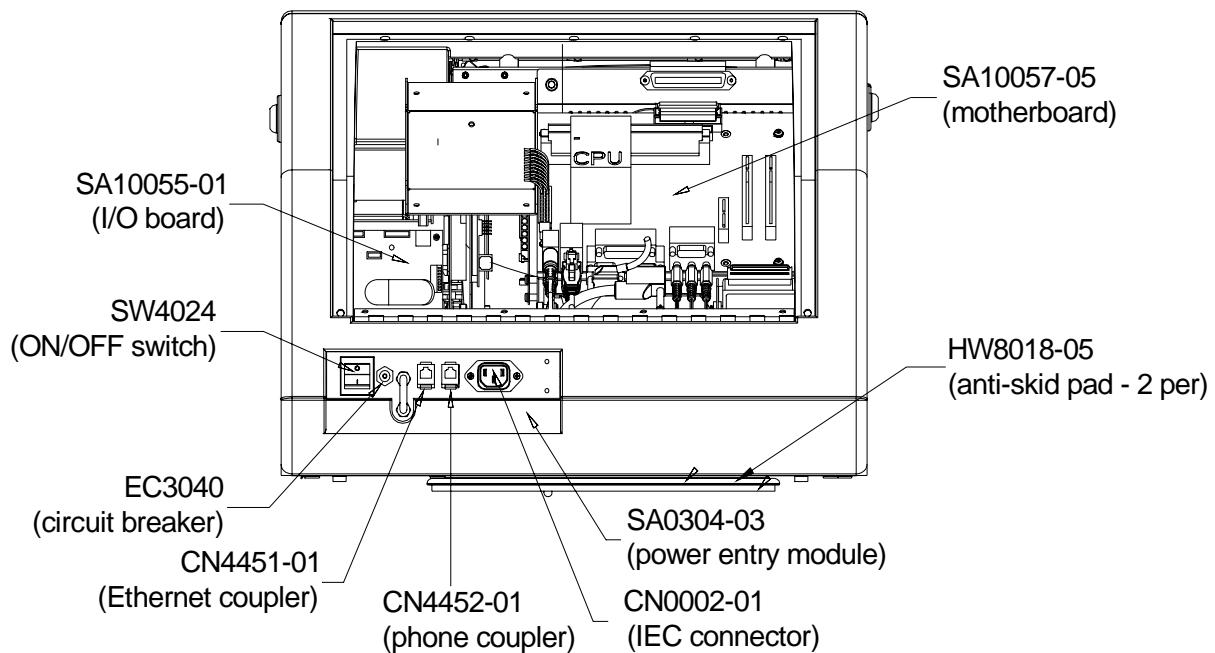
Dimensions: D - 22"; W - 25"; H - 43.75"

## ***Motherboard Information***

ECS

## ***Touchscreen Type***

Microtouch



**FORCE FUN ZONE JR.**

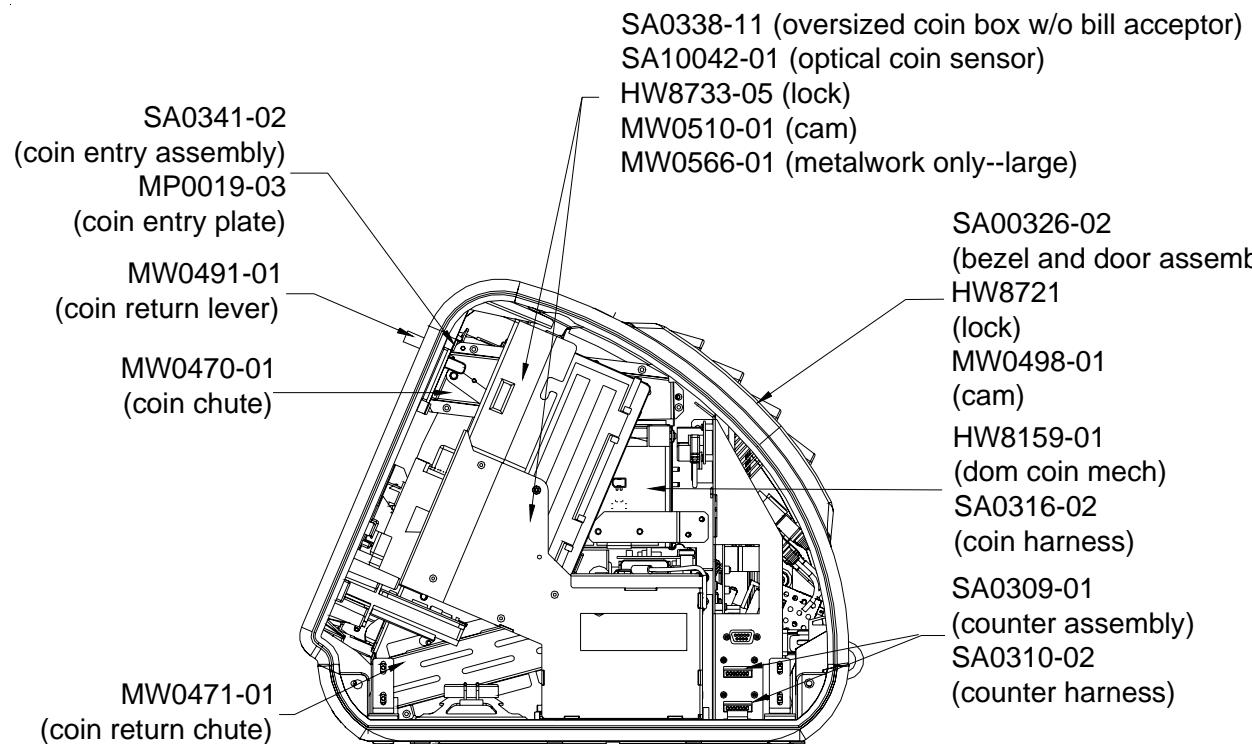
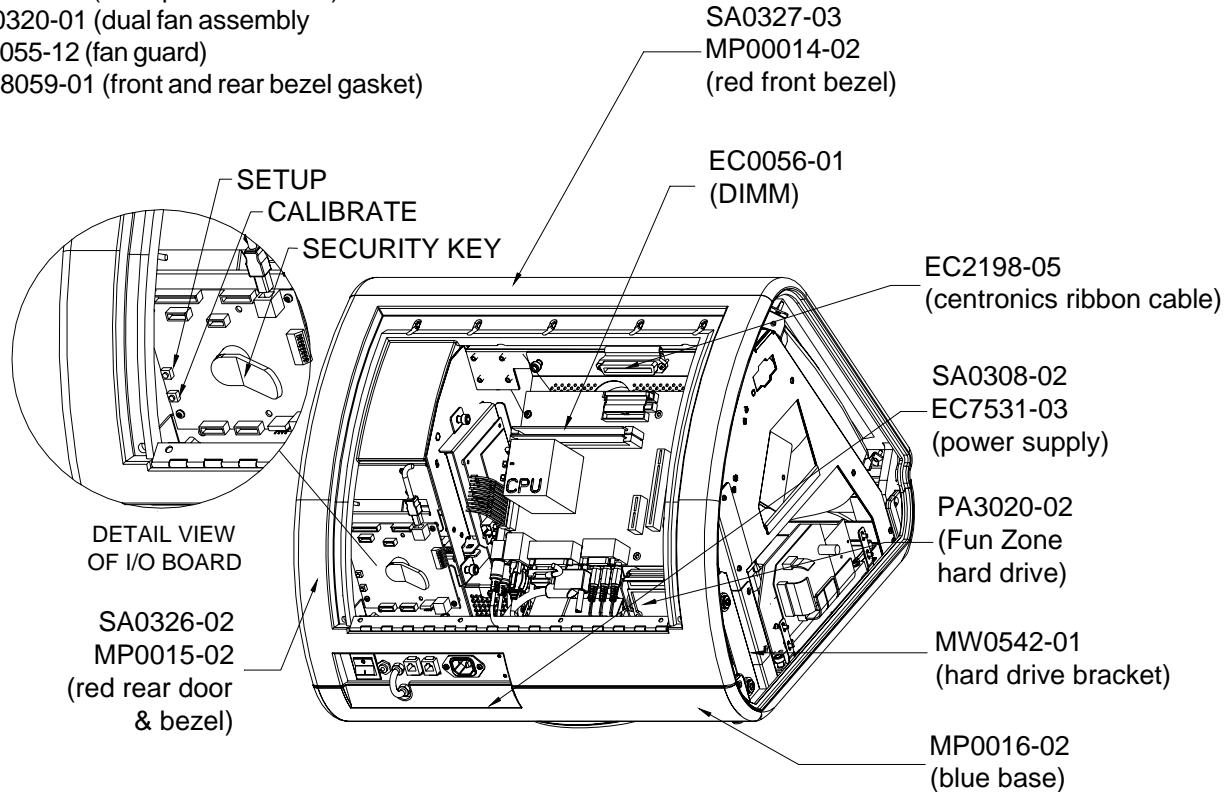
\*not shown

SA0318-01 (main power harness)

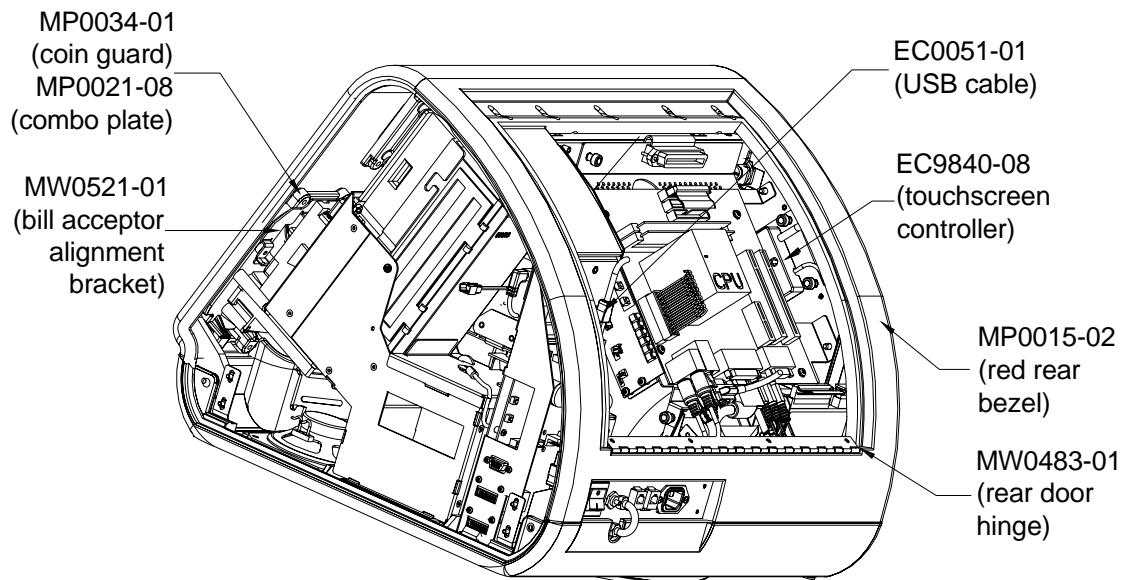
SA0320-01 (dual fan assembly)

HW055-12 (fan guard)

HW8059-01 (front and rear bezel gasket)

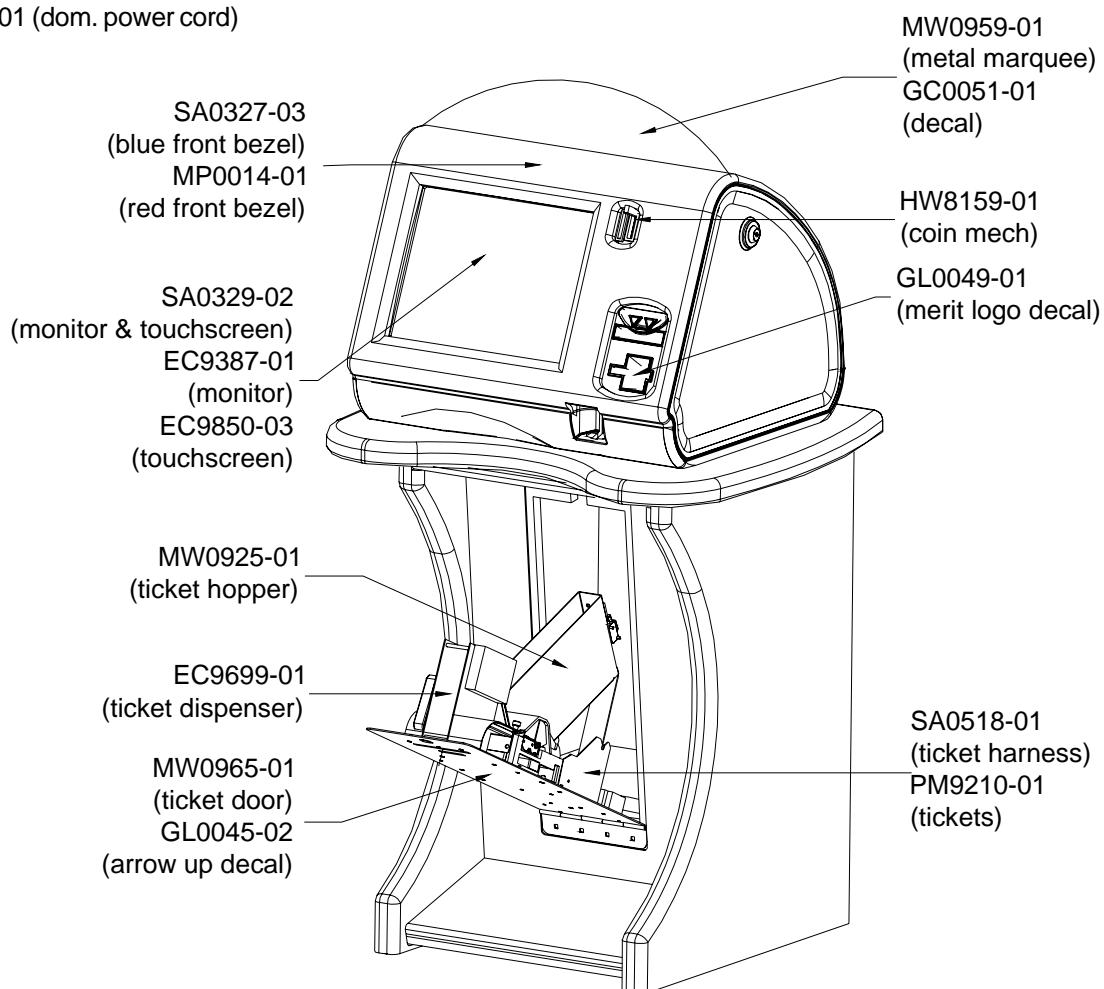


FORCE FUN ZONE JR.

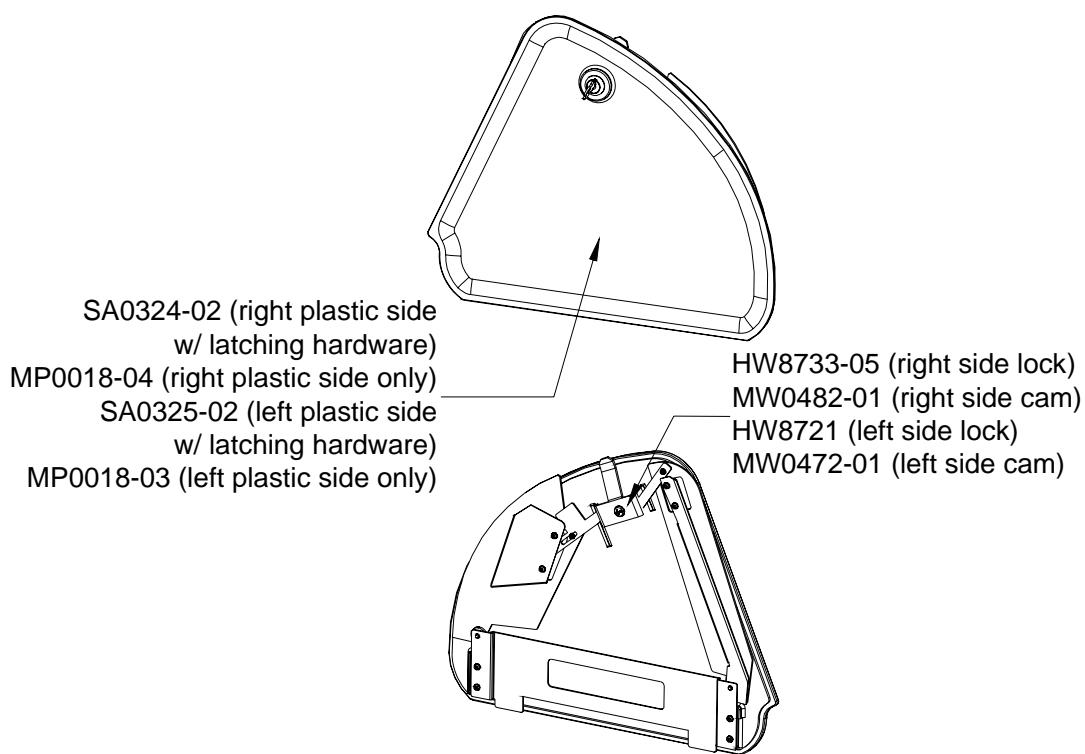


\*not shown

SB0417-01 (anti-tip kit)  
 EC2015-05 (int'l power cord)  
 EC2018-01 (dom. power cord)



### FORCE FUN ZONE JR.



**FORCE FUN ZONE JR.**

# Mr. VIPS

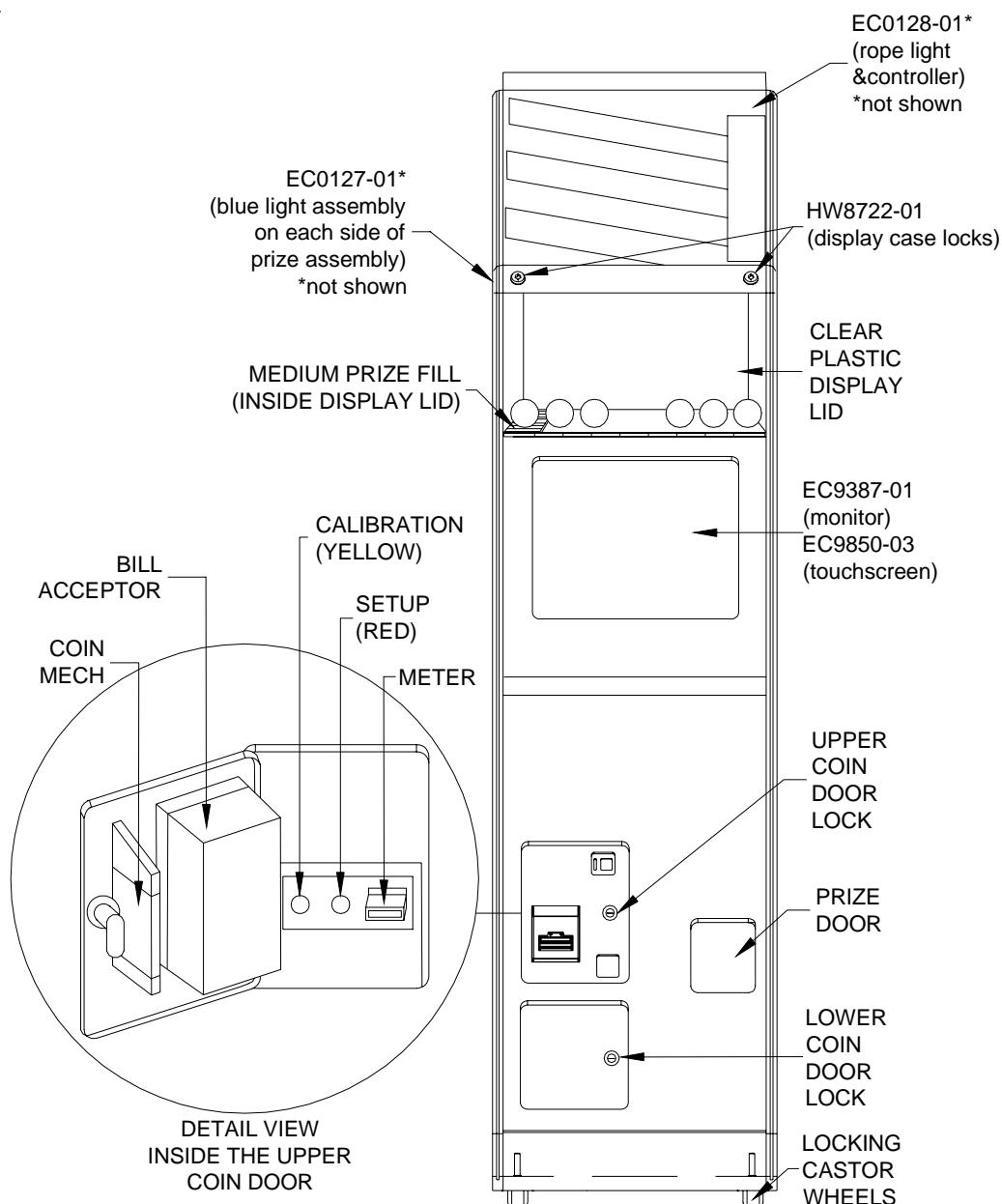
Dimensions: D - 30"; W - 28"; H - 79"  
Weight: 290 lbs.

## ***Motherboard Information***

ECS

## ***Touchscreen Type***

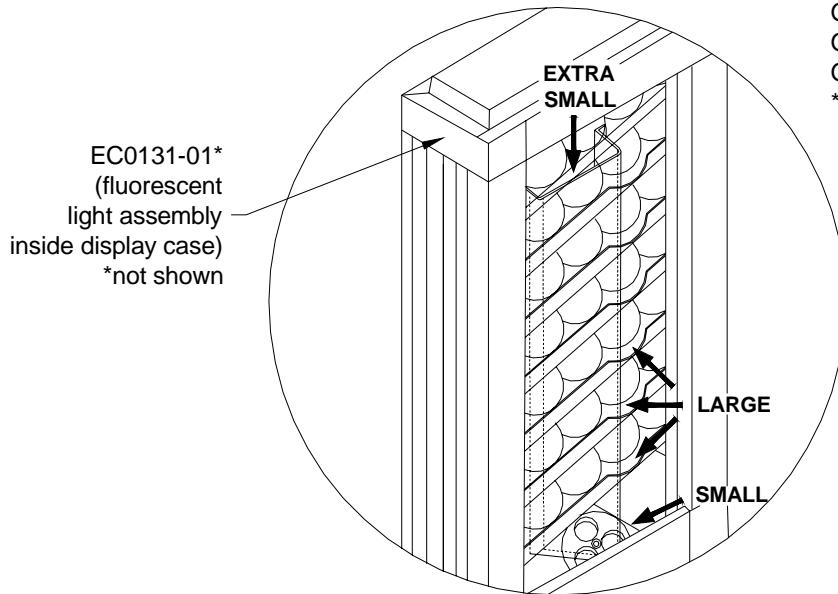
Microtouch



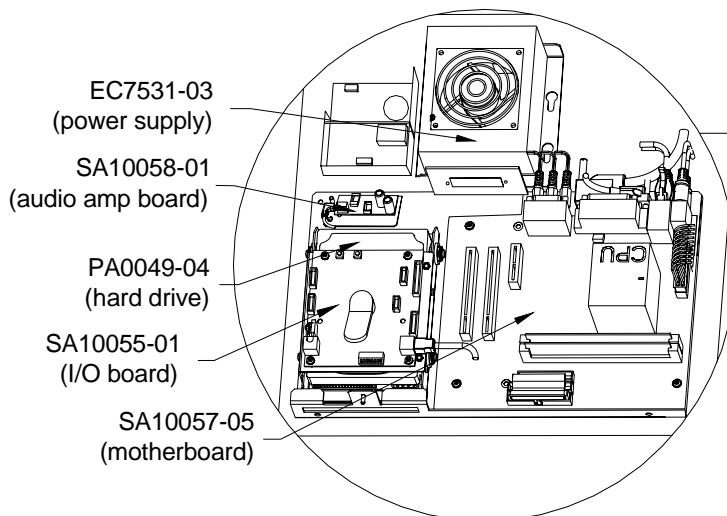
## **Cabinet Information - General Information - Mr. VIPS**

Megatouch FORCE Technical Reference Manual

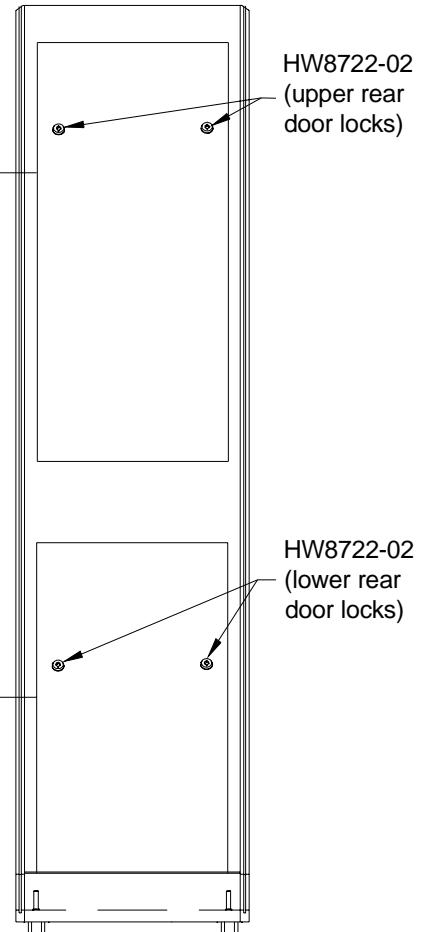
GL3103-01 (left decal)\*  
 GL3103-02 (right decal)\*  
 GL3103-03 (Mr. VIPS logo decal)\*  
 GL3104-01 (Play'n Win decal)\*  
 GL3105-01 (Instant Redemption decal)\*  
 GL3106-01 (Win a Prize decal)\*  
 GL3107-03 (Center Arrow Prize decal)\*  
 GL3108-01 (Prize Matrix decal)\*  
 \*not shown



DETAIL VIEW INSIDE  
THE UPPER REAR DOOR -  
PRIZE FILL LOCATIONS



DETAIL VIEW OF CPU SECTION  
INSIDE THE LOWER REAR DOOR  
ON THE LEFT WALL



EC2201-01\*  
 (power outlet strip)  
 EC7537-02\*  
 (120V to 12V wall  
 AC/DC converter)  
 \*not shown

MR. VIPS

# **Megatouch Combo Jukebox**

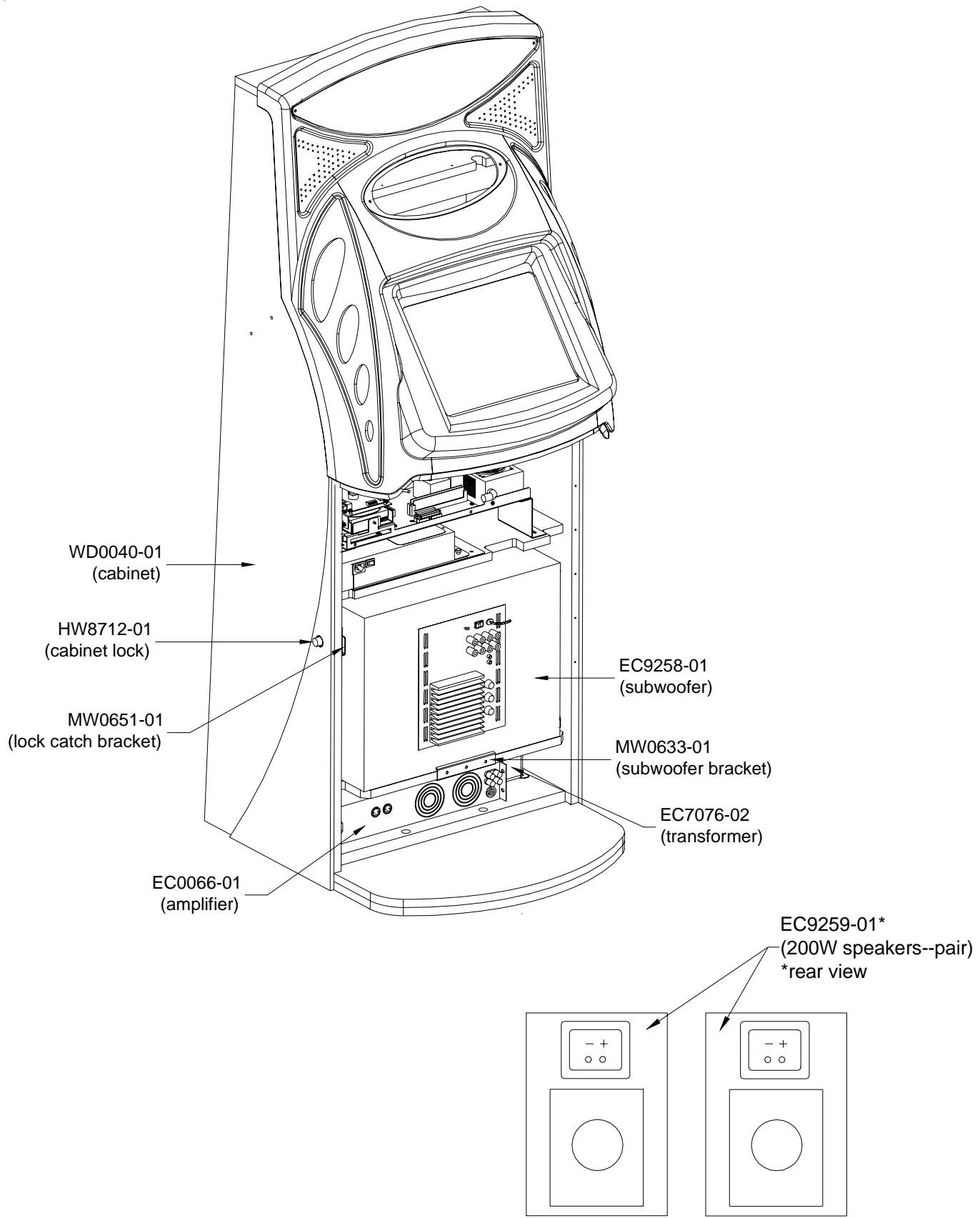
Dimensions: D - 26"; W - 25"; H - 71.25"  
Shipping weight: 425 lbs.

## ***Motherboard Information***

ECS

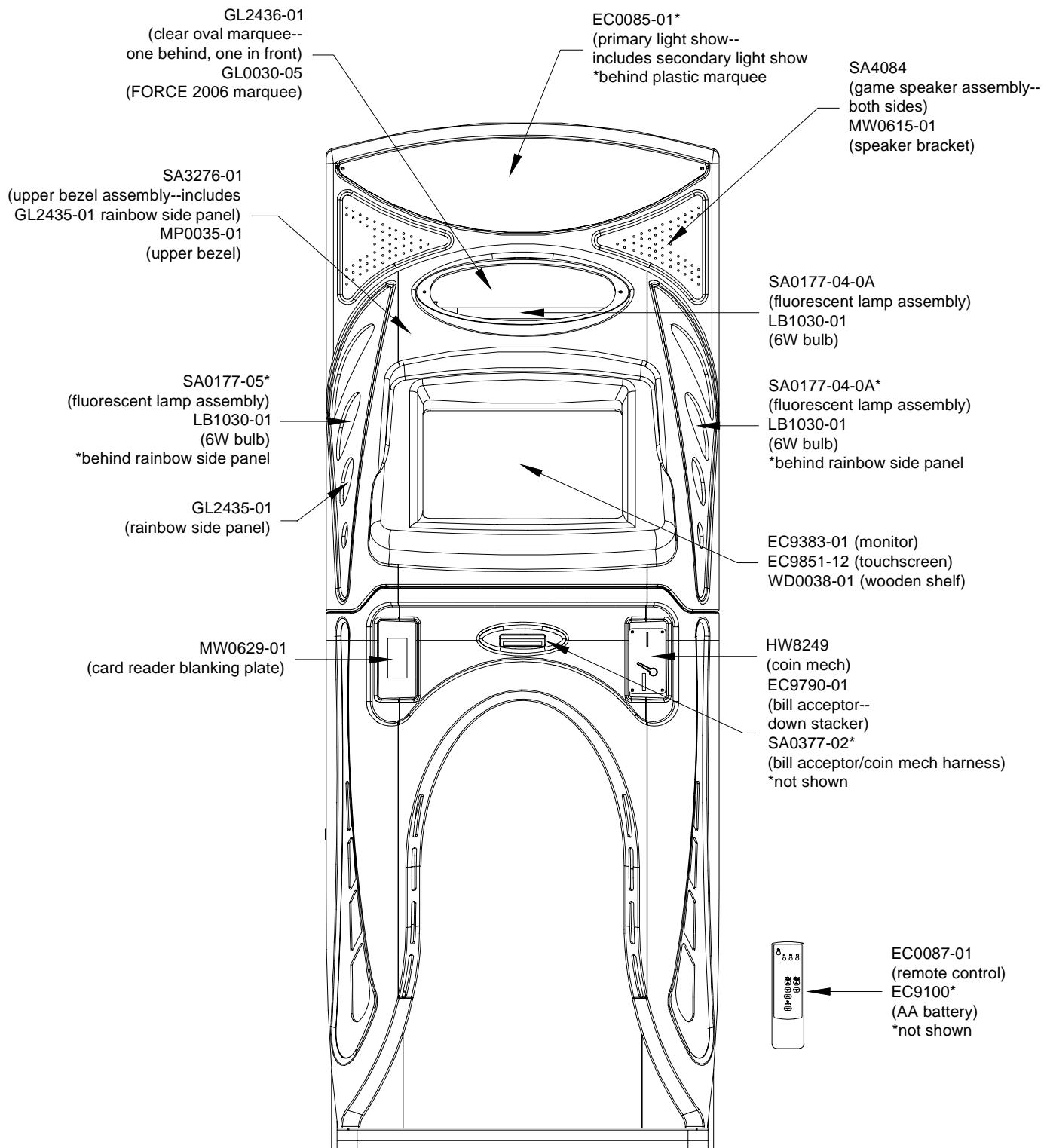
## ***Touchscreen Type***

Microtouch

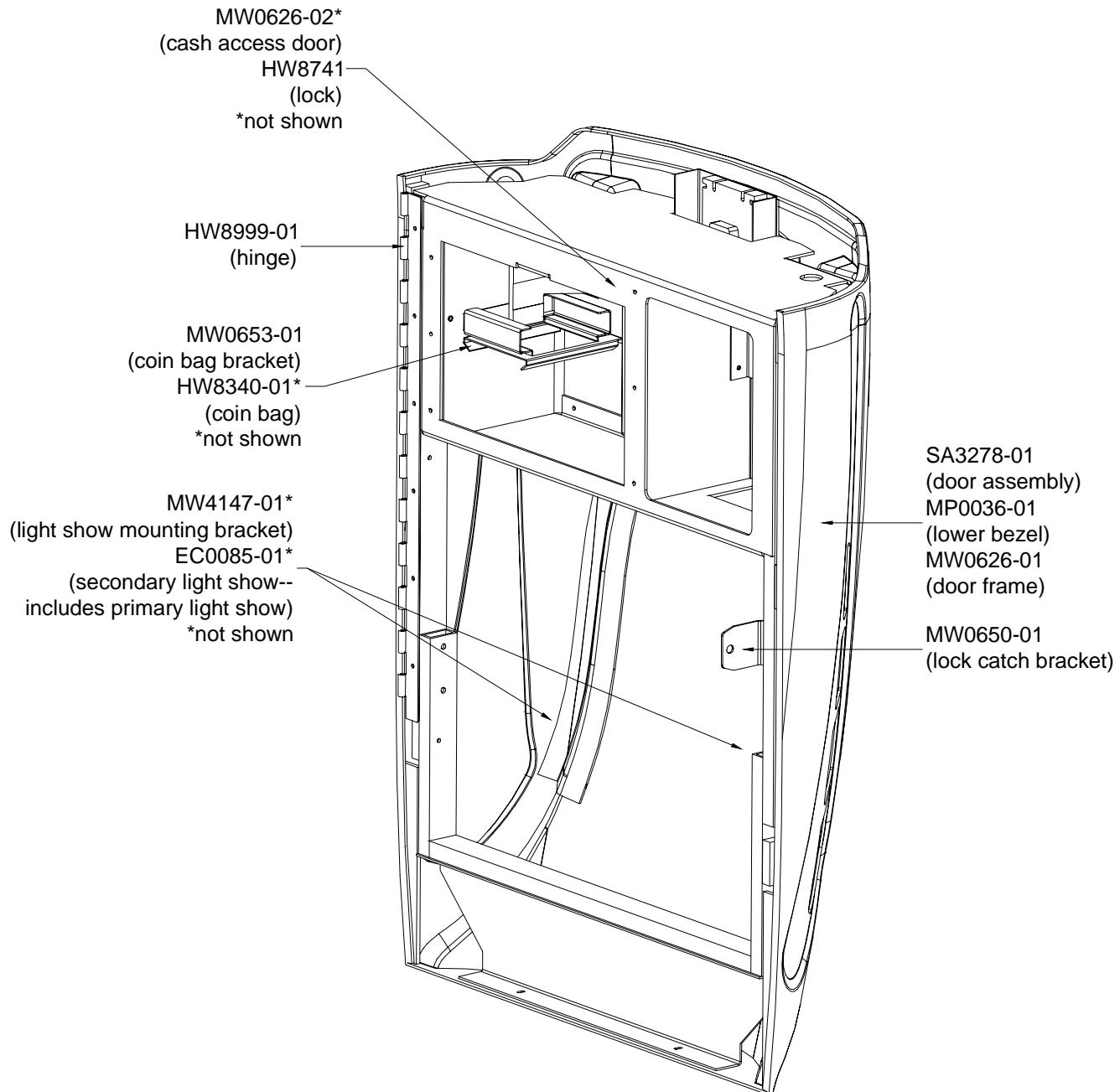


#### MEGATOUCH COMBO JUKEBOX

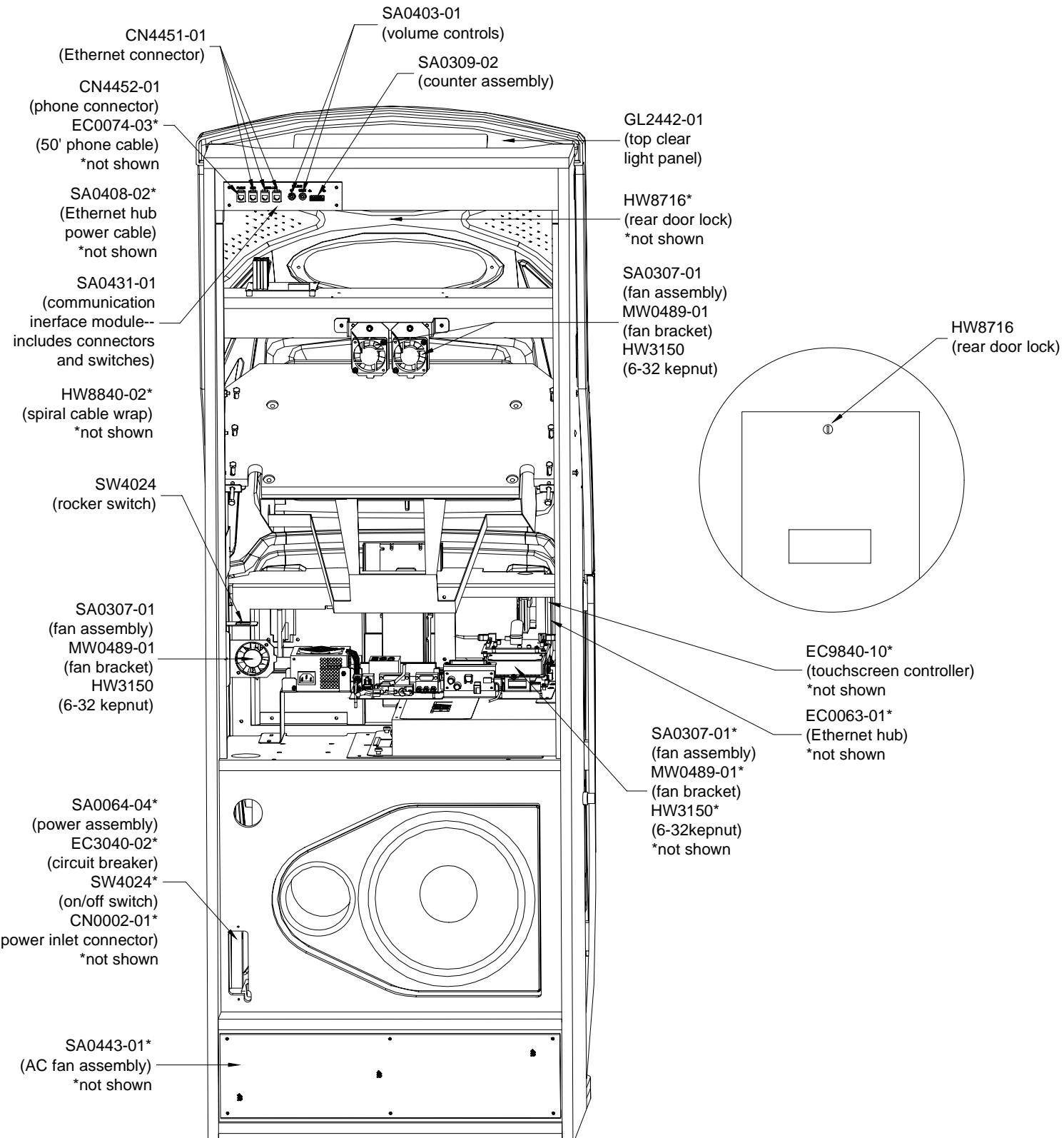
**Cabinet Information - General Information - Megatouch Combo Jukebox**  
**Megatouch FORCE Technical Reference Manual**



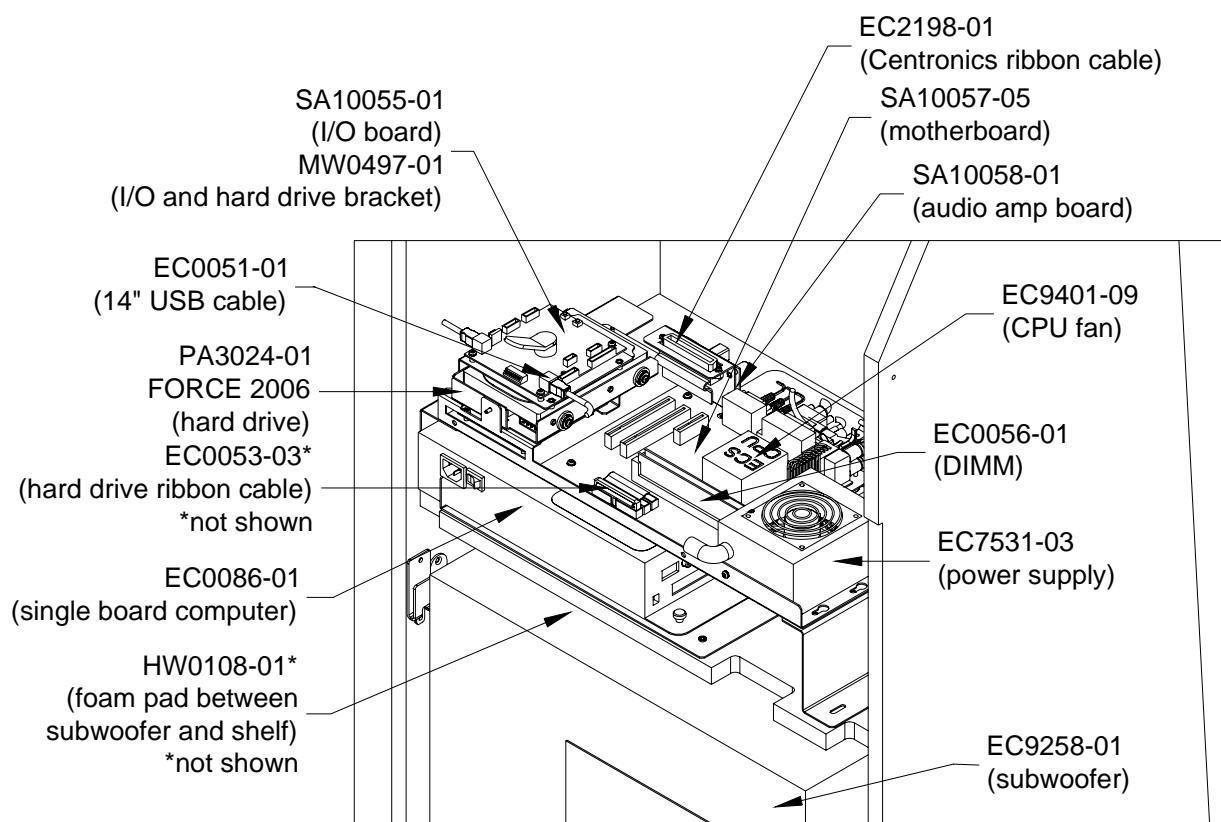
### MEGATOUCH COMBO JUKEBOX



MEGATOUCH COMBO JUKEBOX



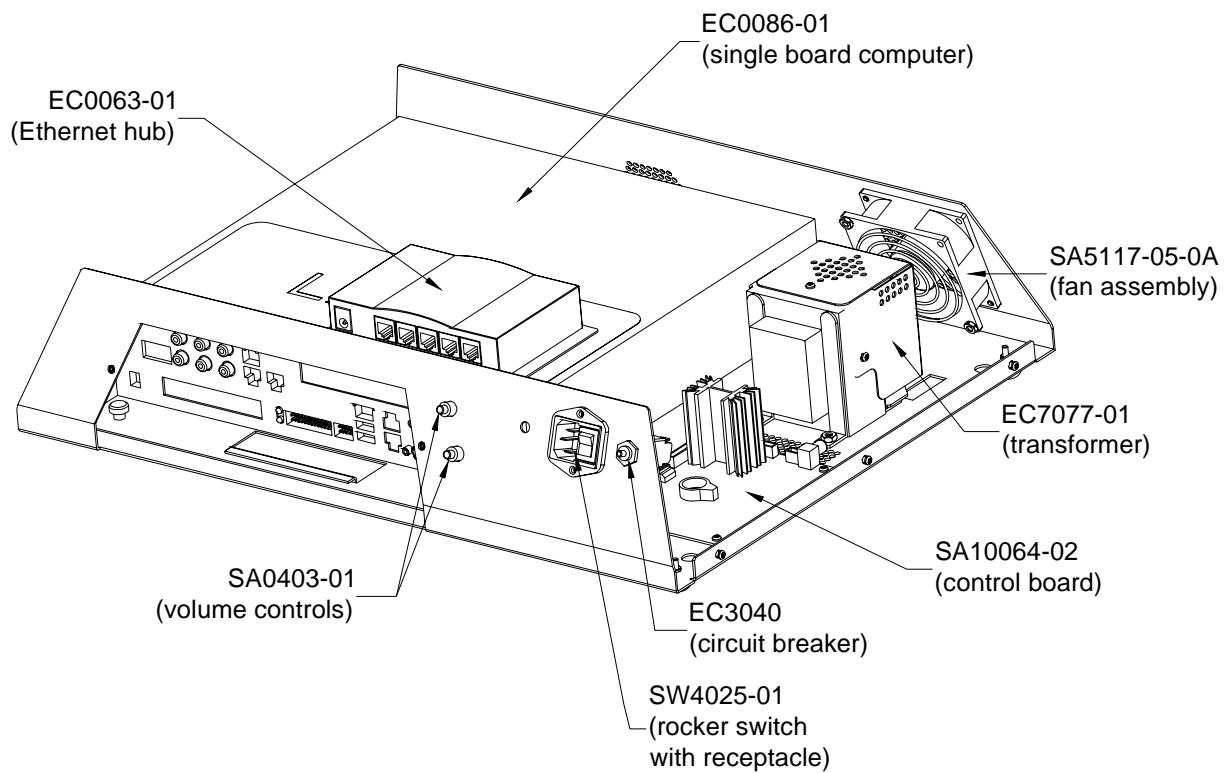
MEGATOUCH COMBO JUKEBOX



MEGATOUCH COMBO JUKEBOX

# MegaTunes

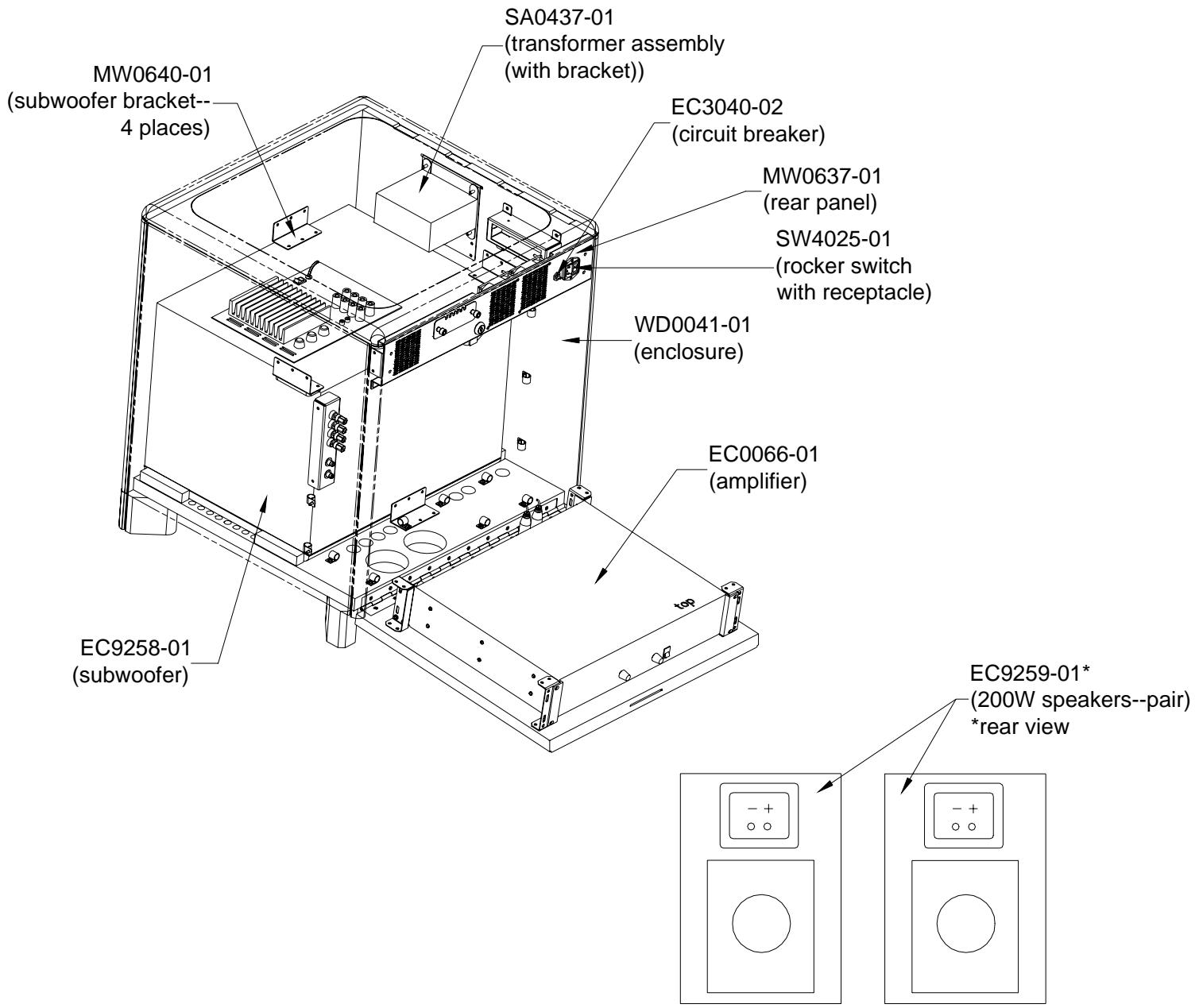
Dimensions: D - 15.5"; W - 20.25"; H - 4.75"  
Weight: 30 lbs.



MEGATUNES

# Remote Sound System

Cabinet Dimensions: D - 23"; W - 23"; H - 26.5"



REMOTE SOUND SYSTEM

## Megatouch FORCE Parts List

Item	Description
CN0029-01	RIGHT ANGLE MALE XLR CONNECTOR
CN0031-01	RCA PANEL MOUNTING JACK
CN0032-01	RCA PHONO PLUG
CN4451-01	ETHERNET COUPLER, RJ45, 8-POSITION, R/A
CN4452-01	PHONE COUPLER, RJ11, 6-POSITION, R/A
CN4452-02	RJ11, COUPLER, 4-CONDUCTOR
CN4452-03	RJ11 MALE/FEMALE SPLITTER, 4-CONDUCTOR
CN4453-01	RJ45 CROSS-OVER COUPLER
CN7507	METRIMATE RECEPTACLE, 12 PIN
CN7508	METRIMATE PLUG, 12 PIN
EC0050-01	566MHz, CPU
EC0051-01	14", I/O USB CABLE
EC0051-02	I/O USB CABLE, 3'
EC0053-02	18" RIBBON CABLE, ATA100, 40P/80 CONDUCTOR
EC0053-03	17 5/8" RIBBON CABLE, ATA100, 40P/80 CONDUCTOR
EC0056-01	UNICORN/ITOX 64 MEG DIMM SDRAM
EC0057-01	STEREO CABLE, 3.5MM, R/A
EC0057-02	5.00L,3.5MM,R/A,STEREO CABLE
EC0059-01	17" SERIAL MODEM CABLE
EC0059-02	7: SERIAL MODEM CABLE
EC0063-01	5P,10&100MPBS ETHERNET HUB
EC0066-01	250W AMPLIFIER
EC0070-01	1.8 METER VIDEO EXTENSION CABLE
EC0072-02	CAT 5 LINE/PATCH CORD, 2', UTP
EC0072-04	LINE/PATCH CORD, 5', UTP, CAT 5
EC0072-05	84.00L,UTP,CAT 5 LINE/PATCH CORD
EC0072-06	50',UTP,CAT 5 LINE/PATCH CORD
EC0072-07	16.5",UTP,CAT 5 LINE/PATCH CORD
EC0072-09	6.00L,UTP,CAT5 LINE/PATCH CORD
EC0072-10	120.00L,UTP,CAT5 LINE/PATCH CORD
EC0074-03	50' RJ11 PHONE CABLE
EC0080-01	ELECTRO-LUMINESCENT LAMP, VIBE
EC0081-01	2000MM STEREO PCH CAB
EC0082-01	10'L,VIDEO CAB
EC0085-01	PRIMARY & SECONDARY TOUCHTUNES LIGHT SHOW
EC0086-01	TOUCHTUNES SINGLE BOARD COMPUTER (NO DISCOUNT)
EC0087-01	JKUKEBOX REMOTE CONTROL TRANSMITTER, JUKEBOX
EC0088-02	JKUKEBOX REMOTE CONTROL RECEIVER BOARD
EC0091-01	8.00L,MON CTLR EXT CAB
EC0092-01	POWER ENTRY W/ LINE FILTER, AC INPUT & ON/OFF SWITCH
EC0092-02	POWER ENTRY W/ LINE FILTER, AC INPUT & ON/OFF SWITCH
EC0093-01	3.00L, DC POWER HARNESS
EC0094-01	16.00L,USB I/O CABLE
EC0095-01	6.00L, MODEM AUDIO CABLE
EC0096-01	28.00L,VGA CABLE
EC0096-02	59.00L, VGA CABLE
EC0097-01	21.00L,OSD CABLE

**Megatouch FORCE Parts List continued**

Item	Description
EC0097-02	36.00L,OSD CABLE
EC0098-01	9.00L, MODEM CABLE
EC0098-02	62.00L, MODEM CABLE
EC0099-01	7.00L,FAN ASSEMBLY
EC0100-01	SNAP-IN COUNTER ASSEMBLY
EC0101-01	SPEAKER ASSEMBLY,DUAL,EVO
EC0102-01	CABLE, SETUP/CALIBRATE/KEY,EVO
EC0102-02	66.00L,SETUP/CAL CAB,FUSION
EC0103-01	6.00L,USER INTERFACE USB CAB
EC0104-01	27.00L, ELECTRONIC COIN REJECTOR HARNESS, FUSION
EC0104-02	37.00L,E/CREJ HARN
EC0105-01	WATCHDOG/POWER-ON HARNESS
EC0106-01	12VDC JUMPER HARNESS
EC0107-01	3.00L,+5VDC MATING HARN
EC0108-01	AC/STACKER HARNESS, EVO
EC0109-01	4.00L, AC JUMPER WIRE
EC0110-01	59.00L, DUAL SPEAKER HARNESS, FUSION
EC0111-01	5.00L, COUNTER EXTENSION HARNESS, FUSION
EC0112-01	DC POWER CABLE, LCD, TOUCHSCREEN, FUSION
EC0113-01	3.00L,I/O POWER HARNESS
EC0114-01	SECONDARY AC CABLE, FUSION
EC0115-01	PRIMARY AC CABLE, FUSION
EC0117-01	7.00L,GROUND CABLE
EC0127-01	LED LIGHT BD (BLUE LED)
EC0128-01	ROPE LIGHT & CONTROLLER
EC0131-01	F-LMP,U3a (FLURO LMP)
EC2001	USA POWER CORD W/ DTCH IEC CONNECTOR, FUSION
EC2004-02	2MTR, UK<IEC, POWER CORD, SJT, FUSION
EC2008-01	USA POWER CORD, W/ DTCH R/A IEC CONN
EC2011-04	7.00L, INTERNATIONAL IEC POWER CORD, FUSION
EC2014-01	5-POS,OUT,IEC PANEL MOUNTING CONNECTOR
EC2015-02	INTERNATIONAL POWER CORD, 9" R/A
EC2015-03	INTERNATIONAL POWER CORD, 6", R/A
EC2015-05	INTERNATIONAL POWER CORD, 12", R/A
EC2018-01	SJT,USA,R/A IEC POWER CORD
EC2019-01	16AWG,US/IEC,SJT, POWER CORD
EC2020-01	90.00L,US<IEC,PWRCD
EC2198-01	CENTRONIC RCPT-IDE-POWER, 12"
EC2198-05	CENTRONIC RCPT-IDE-POWER, 4.50"
EC2201-01	36.00L PWRCD,6 POSN,15A,PWR STP
EC2660	.25D HEAT SHRINK TUBING, BLACK
EC3040	2A CIRCUIT BREAKER
EC3040-02	6A,PANEL MOUNTING,CB
EC5145-01	40A,12V RELAY
EC6103	STARTER - 8W
EC6109	FLUORESCENT LAMP STARTER, 220-240V
EC6111	STARTER SOCKET W/ CLIPS

**Megatouch FORCE Parts List continued**

Item	Description
EC6112-01	LAMP SOCKET FOR F6T5
EC6914-03	SOLID FERRITE CORE FOR .735OD X .400ID BB CABLE
EC7016-01	BALLAST, 120V/60HZ, 6W
EC7016-02	BALLAST, 220V/50HZ, 6W
EC7076-02	STM, 500VAC, ISOLATION TRANSFORMER
EC7076-03	650VAC, ISOLATION TRANSFORMER
EC7077-01	130VAC, ISOLATION TRANSFORMER
EC7529-02	60W,+12VDC,OPEN FR,PWRSPLY
EC7531-03	POWER SUPPLY, 110W ±12, +5, +3.3, AC-ON
EC7536-01	125W ±12,±5,+3.3, POWER SUPPLY
EC9100	AA ALK BATTERY
EC9154	FROG EYE COUNTER, 12V
EC9154-03	FROG EYE COUNTER, 12V, HMI, STG@0
EC9236	RING LUG #6 STUD INSL. 10-12
EC9250	8 OHM SPEAKER, 4"
EC9257-01	SHLD,50MMx90MM RECT,8-OHM S
EC9258-01	12" SUBWOOFER
EC9259-01	200W SPEAKER, PR
EC9304-01	LINE FILTER, 6A, RFI, IEC & FASTON
EC9377-08	13" VGA CRT MONITOR, R/A CONN MOUNTING
EC9381-02	LCD DISPLAY, 15", XGA, R/A CONN MOUNTING (NO DISCOUNT)
EC9381-04	15" LCD DISPLAY, XGA (NO DISCOUNT)
EC9382-01	19" VGA DIGITAL MONITOR
EC9382-01-01	19" VGA DIGITAL MONITOR CHASSIS
EC9383-01	FS,19"VGA MONITOR
EC9384-02	17" LCD DISPLAY, FUSION (NO DISCOUNT)
EC9387-01	15" VGA MONITOR
EC9387-01-01	15" VGA MONITOR CHASSIS
EC9401-09	BBRG,RFI,SKT370,21CFM, CPU FAN
EC9402-03	3",42.5CFM,12V,FAN
EC9403-01	10 CFM FAN, 50MM, 12V
EC9404-01	60MM, 12V, 25 CU. FT./MINUTE FAN
EC9411-02	3",22<25CFM, 110V, FAN, TUBAXIAL
EC9790-01	\$1/2/5, 500 DOWN BILL STACKER, AE2000, MARS
EC9796-01	\$1/2/5, 500 BILL STACKER, AE2411, MARS BILL ACCEPTOR
EC9796-04	MARS BILL ACCEPTOR, \$1/2/5, 300 STACKER, AE2000
EC9796-06	US, MARS 700 STACKER,\$1/\$2/\$5B/A,AE2411
EC9840-08	R/A CONN,26.00L,SMT4,TOUCHSCREN CONTROLLER
EC9840-09	MICROTOUCH SMT4 TOUCHSCREEN CONTROLLER, 96"
EC9840-10	MICROTOUCH SMT4 TOUCHSCREEN CONTROLLER, 144"
EC9844-01	19" TOUCHSCREEN OVERLAY
EC9850-03	15" TOUCHSCREEN OVERLAY, CRVD
EC9850-04	15" TOUCHSCREEN OVERLAY, W/ 12" CABLE, W/O ESD
EC9850-05	FLAT SCREEN, 19" TOUCHSCREEN OVERLAY
EC9851-02	FLAT SCREEN, 17" TOUCHSCREEN OVERLAY
GL0016-01	SPEAKER COVER
GL0018-01	DOMED NAMEPLATE

**Megatouch FORCE Parts List continued**

Item	Description
GL0023-01	FORCE STICKER, DOME
GL0025-01	MERIT LOGO OVERLAY, VIBE
GL0025-03	EVO, MERIT LOGO OVERLAY
GL0030-03	FORCE 2004 MARQUEE, JUKEBOX
GL0034-02	FORCE 2005 MARQUEE, FUSION
GL0035-01	MEGATOUCH FRONT DECAL, FUSION
GL0035-01	SYSTEM MEGATOUCH FRONT DECAL, FUSION
GL0036-01	LEFT SIDE PANEL DECAL, FUSION
GL0036-02	RIGHT SIDE PANEL DECAL, FUSION
GL0037-01	CLEAR MARQUEE, FUSION (FRONT)
GL0037-02	CLEAR MARQUEE, FUSION (BACK)
GL0038-01	CLEAR MARQUEE, VIDEO MODULE, EVO
GL0039-01	MERIT NAMEPLATE, FUSION
GL0040-01	B/A COVER DECAL, FUSION
GL0041-01	BASE DECAL, TOWER MODULE, EVO
GL0044-01	LEFT SIDE PANEL DECAL, FUSION
GL0044-02	RIGHT SIDE PANEL DECAL, FUSION
GL2411-05	CLEAR PLEXI, 12.27x 8.28
GL2411-06	CLEAR PLEXI, 12.32 x 8.32 x .177
GL2414-01	CLEAR MARQUEE HOLDER
GL2431-04	FORCE MARQUEE
GL2432-05	FORCE 2004 MARQUEE, UPRIGHT
GL2435-01	RAINBOW S/PANEL, JUKEBOX
GL2436-01	OVL, CLR MARQUEE, JUKEBOX
GL2442-01	TOP CLR LT PANEL, JUKEBOX
GL3016-04	FORCE DECAL, UPRIGHT (NON-FUSION)
GL3016-05	FULL FORCE FRONT DECAL
GL3016-06	FORCE FRONT DECAL
GL3100-18	FORCE DECAL
GL3100-47	FORCE 2005 CTOP SIDE PANEL DECAL
GL3103-01	LEFT SIDE DECAL, VIPS
GL3103-02	RIGHT SIDE DECAL, VIPS
GL3103-03	MR VIPS LOGO DECAL
GL3104-01	PLAY'N WIN' DECAL, VIPS
GL3105-01	INSTANT REDEMPTION' DECAL, VIPS
GL3106-01	WIN A PRIZE' DECAL, VIPS
GL3107-03	CENTER ARROW PRIZE DECAL, VIPS
GL3108-01	PRIZE MATRIX' DECAL, VIPS
HW0003-01	BILL ACCEPTOR & COINBOX BUTTON
HW0004-01-0A	BILL ACCEPTOR & COINBOX BEZEL
HW0022-03	MODIFIED BEZEL, MARS 2000 BILL ACCEPTOR
HW0031-01	BEZEL TRIM, REAR
HW0035-01	16L" DRAWER SLIDE
HW0037-01	MOUNTING BRACKET, 12GA STL, 3x3, .25D
HW0041-01	MAGNETIC TAPE, HD, W/PSA, 1"W x .06T
HW0056-01	HINGE, VIBE
HW0057-02	4-7/8x2-1/2, VHB PSA FAN GUARD, VIBE

**Megatouch FORCE Parts List continued**

Item	Description
HW0061-01	SPILL COVER, UPRIGHT W/ COIN DOOR
HW0081-05	18" COATED WIRE CABLE W/ RING LUGS
HW0081-06	14.5" COATED WIRE CABLE W/ RING LUGS
HW0100-01	15P,D-SUB MALE CONNECTOR COVER
HW0100-02	PROTECTIVE COVER, MALE CONNECTOR, 9P, D-SUB
HW0103-01	FOAM PAD, SUBWOOFER BRACKET, SS, JUKEBOX
HW0104-01	FOAM PAD, SUBWOOFER, SS, JUKEBOX
HW0105-01	TRANSFORMER COVER, MEGATUNES
HW0106-01	FLUORESCENT LAMP COVER, JUKEBOX
HW0107-01	LCD ANLG<DGTL PCB CVR,X1a
HW0108-01	10" X 15" FOAM PAD, JUKEBOX
HW0117-01	2.38x2.38, FAN GUARD FOR 60MM FAN, FUSION
HW0900-01	FORCR MOTHERBOARD FISH PAPER
HW0901-01	7.00Lx1.25Wx.02T,PSA,FORMEX PL
HW1107-03	10-24x1.63L BLACK OXIDE CARRIAGE BOLT, FUSION
HW1110	10-24x1.25L BLACK OXIDE CARRIAGE BOLT, FUSION
HW1114	10-24x2.00L BLACK OXIDE CARRIAGE BOLT, FUSION
HW1310	U BOLT, 1/4-20x1-1/4
HW1310-03	1/4-20X1.75IBHx.75IS U BOLT
HW1330	HEX BOLT, 1/4-20 x 1-1/2
HW1501-01	COTTER PIN, M2 DIA x 14MM L
HW2045	.370<.430DIA, SJT, STRAIN RELIEF, FUSION
HW3070-03	4-40 HEXNUT
HW3151	NYLON THumbnut, 6-32
HW3250	10-24 HEXNUT
HW4201	6-32x1/4L PAN/PHL SEMS SCREW
HW4201-07	6-32 x 5/16I PAN/PHL SEMS SCREW
HW4207	PAN/PHL MACHINE SCREW, 6-32x1/4, BLK
HW4497-02	10-24X 1.25L PAN/PHL MACHINE SCREW
HW5554-02	3/64Tx5/32IDx9/16OD FLAT FENDER WASHER
HW5658-01	.31SDx.06Lx.25IDx.44OD SHW,FBR
HW6051-01	SPACER, .168ID x .25OD x .08L
HW8018-02	ANTI-SKID PAD, 11.5D, W/6.0 C/O
HW8018-03	2.00IDx10.00OD,AS PAD
HW8031-01	COIN ENTRY GASKET
HW8059-01	FRONT & REAR BEZEL GASKET, FM, W/PSA, RADION
HW8062-01	REAR DOOR GASKET, FM, W/PSA
HW8066-01	.38Wx.06T, POLYETHYLENE FOAM TAPE, BLK, BS
HW8067	.50Wx.03T, POLYETHYLENE FOAM TAPE, BLK, BS
HW8067-02	FOAM TAPE, 1/2W x 1/8T, BLK, PSA BS
HW8120-02	BUTTON HEAD RIVET, .19-.25GR x.12DIA, ALU
HW8159-01	\$.25 MECHANICAL COIN REJECTOR, IMONEX 950
HW8159-02	BACK CHAN, MECHANICAL COIN REJECTOR, IMONEX C4
HW8171-01	PCB GUIDE, SNP, DP CHAN, 8" L
HW8227-04	SMALL COINBOX W/ PLASTIC O/U COIN DOOR
HW8249	25¢ MECH COIN REJECTOR W/ MTG FRONT PLATE
HW8312-02	SPRING, COMPRESSION, SST, .48OD x 1.50L

**Megatouch FORCE Parts List continued**

Item	Description
HW8312-03	SPRING, .42OD x 1.25L, COMPRESSION
HW8313-01	1/4ODx1-3/4L STAINLESS STEEL EXTENSION SPRING
HW8314-01	EXTENSION SPRING, EXT, SST, .24OD X3.50L
HW8314-02	EXTENSION SPRING, .19OD x .63L
HW8317-00	UNPROGRAMMED & PROGRAMMABLE MARS COIN REJ.
HW8317-XX	ELECTRONIC COIN MECH TD330
HW8319-04	UK ELECTRONIC COIN REJECTOR, 10/20/50P & 1/2£, G13, 330
HW8327-01	EXT SPRING, 3/16OD X 1" L
HW8333-XX	ELECTRONIC COIN MECH, WET DECK
HW8334-01	.19ODx4.13L,OPEN-END EXTENSION SPRING
HW8340-01	COIN BAG
HW8341-01	COIN BAG, VIBE w/ COIN
HW8401-01	FLAT HANDLE POCKET PULL, 5.0, .06T MOUNTING
HW8401-02	POCKET PULL, 3-1/4", .06T MOUNTING, FLAT HANDLE
HW8402-01	HANDLE, 5.50L/10-32 MOUNTING x.31D x 1.50H
HW8403-01	2-3/4 CHEST HANDLE
HW8423-01	SAFETY CLIP FOR 10MM GAS SPR BSKT END FTG, FUSION
HW8425-05	75LB,7.25" STROKE, EXTN GAS SPR W/ BALL STD & SKT FTGS
HW8440-01	.63ODx2.66L, SS CLOSED-END CMPRSN SPR, FUSION
HW8441-01	.48ODx.88L, SS PRCSN CLOSED-END CMPRSN SPR, FUSION
HW8442-01	GAS SPR MTG BRKT FOR 10MM BALL SKT END FTG, FUSION
HW8712-01	KEYED-SAME SLIDING DOOR LOCK
HW8716	564 LOCK, 1 3/8L, STRAIGHT CAM
HW8721	564 LOCK, 7/8L, W/ JAM NUT
HW8722-01	VIPS LOCKS - REAR DOOR
HW8722-02	VIPS LOCKS - DISPLAY CASE
HW8727	KEYED LOCK, 1-1/8L, CAPTIVE KEY, STRAIGHT CAM
HW8727-02	KEYED LOCK, 1.38L, CAPTIVE KEY, W/O CAM
HW8731	KEYED LOCK, 7/8L, W/ JAM NUT, 90°
HW8733-03	KEYED LOCK, 5/8L, CAPTIVE KEY, HI SECURITY, W/O CAM
HW8733-04	KEYED LOCK, 1.38, CAPTIVE KEY, HI SECURITY, W/O CAM
HW8733-05	KEYED LOCK, 7/8L, CAPTIVE KEY, HI SECURITY, W/O CAM
HW8733-07	KEYED LOCK, .88L, CAPTIVE KEY, CCW,H/S,-CAM
HW8734-01	564 LOCK, 5/8L, W/O CAM
HW8741	CASH DOOR LOCK, 1/2L, CIRC, BENT CAM
HW8848-01	B/A FISH PAPER,TOWER MODULE, EVO
HW8854	5/8DIA,13/64 MTGHOLE HARN CLIP
HW8880-02	STANDOFF, TWIST LOCK, .75/.85BDL, .187DIA
HW8911-02	SPRING PIN, .188OD x .50L
HW8953-03	MODIFIED 13" MONITOR BEZEL
HW8960-02	3/8-16 X 3L LEG LEVELER W/ 3/8-16 NUT
HW8989	FAN GUARD, 2.8"
HW8993-02	LAZY SUSAN, 12" DIAMETER, 15° STOPS
HW9030-01	SHOCK MOUNT GROMMET, .245ID x .755OD
HW9101-01	.303GDX.039GW E RING
HW9252-02	2 x 2 VELCRO, HOOK & LOOP
HW9252-03	1 x 3 VELCRO, HOOK & LOOP

**Megatouch FORCE Parts List continued**

Item	Description
HW9420	9x11 VINYL SHEET HOLDER
HW9461-03	SIGN HOLDER, 4X12
HW9996-01	10-32M, 5/8" DIAMETER PHENOLIC KNULED RIM KNOB
HW9998-01	10-32x.50L,KNOB,CLAMPING MACHINE SCREW
KOV-105-102-01	FORCE VIDEO MODULE OEM KIT (NO DISCOUNT)
KOV-105-104-01	VIBE PROCESSOR MODULE (NO DISCOUNT)
KOV-105-104-02	FORCE PROCESSOR MOD OEM KIT, VIBE w/ COIN (NO DISCOUNT)
KOV-105-105-01	COIN REJ.-READY VID MOD OEM KT, VIBE w/ COIN (NO DISCOUNT)
KUV-107-001	BILL ACCEPTOR COINBOX, .25/\$1/\$2/\$5 (NO DISCOUNT)
LB1030-01	9", 6 WATT FLUORESCENT CLOCKWISE BULB
MP0001-09	LEFT SIDE COVER
MP0001-10	RIGHT SIDE COVER
MP0002-07	TOP COVER, 15", COIN ENTRY
MP0005-08	FRONT COVER
MP0009-05	BEZEL, 15" LCD
MP0010-01	BEARING, DISPLAY PIVOT
MP0011-01	BEARING SEAT, DISPLAY PIVOT
MP0013-03	FRONT COVER
MP0014-01	FRONT BEZEL
MP0015-01	REAR BEZEL
MP0016-01	RADION BASE
MP0017-01	REAR DOOR
MP0018-01	LEFT SIDE COVER
MP0018-02	RIGHT SIDE COVER
MP0019-01	COIN ENTRY PLATE
MP0020-01	COIN RETURN LEVER
MP0021-02	MARS BILL ACCEPTOR COMBO PLATE
MP0024-01	MONITOR BEZEL
MP0025-01	MONITOR BEZEL
MP0026-01	CLEAR INSERT, VIBE
MP0027-01	MONITOR BEZEL, VIBE
MP0028-01	REAR ENCLOSURE, VIBE
MP0029-01	CENTRONICS COVER
MP0030-01	PLASTIC CREDIT CARD BLANKING PLATE, VIBE
MP0034-01	COIN GUARD, RADION
MP0035-01	MONITOR BEZEL, JUKEBOX
MP0036-01	LOWER BEZEL, JUKEBOX
MP0037-01	REAR ENCLOSURE, VIBE w/ COIN
MP0038-01	COIN CUP INSERT, VIBE w/ COIN
MP0039-01	COIN REJECTOR BRACKET, VIBE w/ COIN
MP0040-02	COIN BAG COLLAR, VIBE w/ COIN
MP0041-01	COIN RETURN BUTTON, VIBE w/ COIN
MP0044-01	MONITOR BEZEL, FUSION
MP0045-01	NOSE, B/A, TOWER MODULE, EVO
MP0047-01	COIN RETURN CHUTE, TOWER MODULE, EVO
MP0048-01	POD, TWR MDL, EVO
MP0049-01	FACE, CN ENT, TWR MDL, EVO

**Megatouch FORCE Parts List continued**

Item	Description
MP0050-01	FR,ENCL,VID MDL,EVO
MP0051-01	REAR,ENCL,VID MDL,EVO
MP0053-01	COIN RETURN KNOB,FUSION
MP0054-02	MON BZL, FUSION
MW0009-02-0D	COUNTERTOP CHASSIS
MW0010-02-0J	DISPLAY FRAME
MW0013-01-0C	TOP, CLASSIC
MW0014-01-0B	LATCH PLATE, (RIGHT)
MW0014-02-0B	LATCH PLATE, (LEFT)
MW0015-01	LOCK BRACKET
MW0016-01-0C	DOOR, CLASSIC
MW0020-01-0B	COIN CHUTE, ENTRY, LEFT
MW0021-01	COIN CHUTE, ENTRY, RIGHT
MW0023-01	LOCK BOLT, 13.64" L
MW0023-04	BOLT, LOCK, 7.99" L
MW0024-01	CAM LOCK
MW0038-01	CORD CLAMP
MW0043-01	COINBOX STOP
MW0051-01	LINKAGE, COIN RETURN
MW0052-01-0A	BILL ACCEPTOR & COINBOX DOOR
MW0053-01	EXTENSION, BILL ACCEPTOR & COINBOX BUTTON
MW0055-01	COINBOX & BILL ACCEPTOR CHASSIS
MW0061-02	FAN PROTECTOR COVER,
MW0092-01-0A	MARQUEE FRAME
MW0093-01-0B	MARQUEE CLAMP
MW0095-01	STAY ARM
MW0095-03	.19T,STAY ARM,FUSION
MW0097-01-0A	TAMPER PROOF BEZEL BRACKET
MW0098-01	STAY ARM HAT BRACKET, FUSION
MW0098-01-0A	STAY ARM HAT BRACKET
MW0118-01-0B	SMILEY BRACKET
MW0119-03	MECHANICAL COIN REJECTOR BRACKET, RD
MW0124-01-0B	HINGE, UPRIGHT
MW0126-01-0D	FRONT LOCK/SPEAKER PANEL GRILL
MW0129-01	COVER PLATE, B/A OPENING
MW0133-01-0A	FLUORESCENT LAMP BRACKET
MW0138-01-0B	2 POINT LOCK BRACE
MW0221-01	ANGLE,SCTY REINF,UR,XL5
MW0224-01	ELECTRONIC COIN REJECTOR BRACKET, L
MW0241-01	BRACKET, TOP, MAIN
MW0242-01	BRACKET, SIDE PANEL, L
MW0242-02	BRACKET, SIDE PANEL, R
MW0243-01	COINBOX DRAWER
MW0244-04	DRAWER FACE
MW0245-01	DRAWER COVER
MW0246-01	UPPER LATCH CLIP
MW0246-02	LOWER LATCH CLIP

**Megatouch FORCE Parts List continued**

Item	Description
MW0248-01	LOWER BEZEL BRACKET
MW0253-01	LOCK BAR, COINBOX DOOR
MW0254-01	CAM LOCK, COINBOX DOOR
MW0260-01	LATCH, UPPER-LEFT SIDE PANEL
MW0260-02	LATCH, LOWER-LEFT SIDE PANEL
MW0260-03	LATCH, UPPER-RIGHT SIDE PANEL
MW0260-04	LATCH, LOWER-RIGHT SIDE PANEL
MW0281-06	POWER ENTRY BRACKET
MW0298-01	BRACE/MARQUEE BRACKET
MW0299-01	CRT SHELF BRACKET
MW0305-01	COIN CHUTE, SIDE MOUNT
MW0321-01	PLATE, SIDE LATCH
MW0322-01	REAR DOOR CAM, 3 PT
MW0323-01	REAR DOOR LOCK BAR
MW0324-02	COIN ENTRY PLATE, TILT
MW0325-01	COIN MECH BRACKET
MW0326-01	COIN REJECTOR SHAFT
MW0327-01	COIN RETURN CHUTE
MW0333-01	COIN MECH CLIP, LEFT
MW0333-02	COIN MECH CLIP, RIGHT
MW0339-01	COIN RETURN CUP, TILT
MW0343-01	COIN RTN CUP FLAP
MW0345-01	METER BRACKET
MW0346-01	CHASSIS, MAIN, ATX
MW0350-01	DISPLAY CLIP
MW0351-04	REAR DOOR
MW0361-01	FAN BRACKET
MW0362-02	ELECTRONIC SHELF
MW0366-01	COINBOX/CRT BRACKET
MW0367-01	POWER ENTRY/COUPLER PLATE
MW0374-01	COINBOX, UPRIGHT
MW0378-01	MARS BILL ACCEPTOR BRACKET
MW0379-01	BILL ACCEPTOR CAM, 5/8OFS
MW0382-01	LEG LEVELER ADAPTER, UPRIGHT
MW0394-01	LEFT LCD BRACKET
MW0394-02	RIGHT LCD BRACKET
MW0407-01	LABEL BRACKET
MW0425-01	MAIN CHASSIS
MW0426-02	HINGE BRACKET
MW0427-01	COINBOX DRAWER
MW0428-01	DRAWER, COVER
MW0429-01	LOWER BEZEL BRACKET
MW0431-01	BILL ACCEPTOR BRACKET
MW0432-01	BEZEL CLAMP BRACKET
MW0435-01	BILL ACCEPTOR CLAMP, TOP
MW0436-01	BILL ACCEPTOR CLAMP, BOTTOM
MW0443-01	COIN CHUTE FUNNEL, UPRIGHT

**Megatouch FORCE Parts List continued**

Item	Description
MW0447-01	ATX POWER SUPPLY BRACKET
MW0467-01	MICROTOUCH CONTROLLER BRACKET
MW0469-01	POWER SUPPLY MOUNTING BRACKET
MW0470-01	COIN CHUTE
MW0471-01	COIN RETURN CHUTE
MW0472-01	CAM, L, DOOR
MW0475-01	DOMESTIC COINBOX
MW0476-01	I/O BRACKET
MW0479-01	COIN RETURN ARM
MW0482-01	LEFT LOCKING CAM
MW0483-01	REAR DOOR HINGE
MW0486-01	SHORT LOCKING BAR
MW0486-02	LONG LOCKING BAR
MW0487-01	MOTHERBOARD TRAY
MW0488-01	COIN OPTION BRACKET
MW0489-01	FAN BRACKET, 60MM
MW0491-01	COIN RETURN LEVER
MW0493-01	MOTHERBOARD TRAY, W/B/A
MW0494-01	HARD DRIVE BRACKET
MW0495-01	HARD DRIVE FAN BRACKET, W/B/A
MW0496-01	MOTHERBOARD TRAY
MW0497-01	I/O & HARD DRIVE BRACKET
MW0498-01	REAR DOOR CAM
MW0499-01	BRACKET, DUAL 50MM FANS
MW0500-01	SPILL PLATE, REAR DOOR
MW0502-01	CURVED STRAP HINGE
MW0503-01	STRAIGHT STRAP HINGE
MW0509-01	LONG LOCKING BAR RETAINING PLATE
MW0510-01	COINBOX LOCK CAM
MW0516-01	SLIDE PLATE
MW0520-01	I/O BRACKET
MW0521-01	BILL ACCEPTOR ALIGN BRACKET
MW0542-01	HARD DRIVE BRACKET, RADION
MW0543-01	FAN GUARD W/ SWITCH OPENING
MW0544-01	SPEAKER GRILL, UPRIGHT W/ COIN DOOR
MW0545-01	SIGN HOLDER, UPRIGHT W/ COIN DOOR
MW0546-01	MOTHERBOARD CHASSIS, UPRIGHT W/ COIN DOOR
MW0559-01	ESCUTCHEON, UPRIGHT
MW0560-01	B/A COVER, UPRIGHT W/ COIN DOOR
MW0561-01	B/A COVER BRACKET
MW0566-01	OVERSIZED COINBOX, RADION
MW0567-01	LEFT SPEAKER BRACKET, VIBE
MW0567-02	RIGHT SPEAKER BRACKET, VIBE
MW0568-01	SWITCH CONNECTOR BRACKET, VIBE
MW0572-01	CHASSIS, VIBE
MW0573-01	HARD DRIVE BRACKET
MW0575-02	PROCESSOR ENCLOSURE LID, VIBE

**Megatouch FORCE Parts List continued**

Item	Description
MW0575-03	PROCESSOR ENCLOSURE BASE, VIBE
MW0577-01	LCD BRACKET, VIBE
MW0578-01	METAL CREDIT CARD BACKING PLATE, VIBE
MW0584-01	.39 OFFSET LOCK CAM, VIBE
MW0597-01	CAM, BILL ACCEPTOR LOCK BRACKET, VIBE
MW0610-01	CAM, CATCH, LOCK BRACKET, VIBE
MW0611-01	LOCK PLUNGER, VIBE
MW0612-01	WIRE ENTRY PLATE, VIBE
MW0613-01	BILL ACCEPTOR LOCK BRACKET, VIBE
MW0615-01	SPEAKER BRACKET, JUKEBOX
MW0616-01	COMM INTFC PANEL, JUKEBOX
MW0617-01	SW BRACKET, JUKEBOX
MW0618-01	TOUCHTUNES MODULE MOUNTING PLATE, JUKEBOX
MW0619-01	RISER MOUNTING BRACKET, JUKEBOX
MW0621-01	IEC OUTLET MODULE MOUNTING BRACKET
MW0625-01	LEFT JUKEBOX MONITOR MOUNTING BRACKET
MW0625-02	RIGHT JUKEBOX MONITOR MOUNTING BRACKET
MW0626-01	JUKEBOX DOOR FRAME ASSEMBLY
MW0629-01	JUKEBOX CARD READER BLANKING PLATE
MW0631-01	JUKEBOX LIGHT SHOW MOUNTING BRACKET
MW0633-01	SUBWOOFER BRACKET, JUKEBOX
MW0634-01	FAN MOUNTING BRACKET, JUKEBOX
MW0635-01	DL FAN MOUNTING BRACKET, JUKEBOX
MW0637-01	REAR PANEL, SS, JUKEBOX
MW0638-01	LOCK CAM, SS, JUKEBOX
MW0639-01	INTERNAL AUDIO BRACKET, SS, JUKEBOX
MW0640-01	SUBWOOFER BRACKET
MW0641-01	TRANSFORMER BRACKET
MW0642-01	AMPLIFIER BRACKET, SS, JUKEBOX
MW0643-01	18Lx5.25Wx.05T PERF PANEL
MW0645-01	ENET BRACKET, MEGATUNES, JUKEBOX
MW0646-01	TRANSFORMER BRACKET, MEGATUNES, JUKEBOX
MW0647-01	TRANSFORMER BRACKET, MEGATUNES, JUKEBOX
MW0649-01	ACCESS PANEL, VIBE
MW0650-01	LOCK CATCH BRACKET, JUKEBOX
MW0651-01	RCPT, LOCK CATCH BRACKET, JUKEBOX
MW0652-01	LOCK BRACKET, VIBE
MW0653-01	COIN BAG BRACKET, JUKEBOX
MW0655-01	CATCH, LOCK BRACKET, VIBE
MW0657-01	CHASSIS, MEGATUNES
MW0663-01	COIN RETURN CHUTE, VIBE w/ COIN
MW0664-01	TIILT BRACKET, VIBE w/ COIN
MW0665-01	RIGHT COIN REJECTOR HANDLE, VIBE w/ COIN
MW0665-02	LEFT COIN REJECTOR HANDLE, VIBE w/ COIN
MW0666-01	LOCK BRACKET CATCH, VIBE w/ COIN
MW0667-01	LOCK BRACKET BASE, VIBE w/ COIN
MW0668-01	ELECTRONIC COIN REJECTOR BRACKET, VIBE w/ COIN

**Megatouch FORCE Parts List continued**

Item	Description
MW0669-01	SWITCH/CONNECTOR BRACKET, VIBE w/ COIN
MW0670-01	FACEPLATE, VIBE w/ COIN
MW0671-01	LOCK PLUNGER, VIBE w/ COIN
MW0672-01	WIRE ENT PLATE, VIBE w/ COIN
MW0679-01	.98" OFFSET LOCK CAM, VIBE w/ COIN
MW0680-01	RIBBON CABLE ADAPTER PLATE, VIBE w/ COIN
MW0690-01	CREDIT CARD COVER,FUSION
MW0691-01	COIN ENTRY PLATE,FUSION
MW0695-01	MAIN<RETURN COIN CHUTE CUP,FUSION
MW0696-01	MAIN ASSEMBLY,COIN CHUTE,FUSION
MW0697-01	ENTRY<RTN,COIN CHUTE,FUSION
MW0699-01	COIN RETURN CUP ASSEMBLY,FUSION
MW0700-01	COIN BOX,FUSION
MW0701-01	STAY ARM UPR BRACKET,FUSION
MW0702-01	POWER SUPPLY HOLDER,FUSION
MW0704-01	GAME COUNTER BRACKET,FUSION
MW0708-01	INNER CURRENCY HATCH,FUSION
MW0709-01	B/A MOUTING PLATE,FUSION
MW0710-01	MARS B/A SHROUD,FUSION
MW0712-01	FRONT ADAPTER PLATE,FUSION
MW0714-01	UPPER,FOAM HOLDER,FUSION
MW0715-01	LOWER,FOAM HOLDER,FUSION
MW0718-01	POWER ENTRY MODULE PANEL,FUSION
MW0718-02	MUSIC & POWER ENTRY MODULE PNL,FUSION
MW0720-01	B/A-RDY,TWR MDL,EVO
MW0720-02	COIN REJECTOR-READY TOWER MODULE,EVO
MW0721-01	TOWER MODULE CAP,EVO
MW0722-01	TOWER MODULE BASE, EVO
MW0724-01	REAR MTG BRACKET, POD/CAP TWR MDL,EVO
MW0725-01	FRONT MTG BRACKET, CAP, TWR MDL,EVO
MW0726-01	LOCK CAM,EVO
MW0730-01	CNBX/FAN BRKT,TWR MDL,EVO
MW0731-01	LARGE CNBX,TWR MDL,EVO
MW0732-01	COIN EXIT BRKT,TWR MDL,EVO
MW0733-01	FACE BRKT,CN ENT,TWR MDL,EVO
MW0734-01	COIN REJECTOR BRKT,TWR MDL,EVO
MW0735-01	COIN REJECTOR LEVER,TWR MDL,EVO
MW0737-01	CAST IRON WEIGHT, FUSION
MW0740-01	LCD MTG BRKT,VID MDL,EVO
MW0742-01	FRONT POD BRKT,TWR MDL,EVO
MW0743-01	SMALL CNBX,TWR MDL,EVO
MW0744-01	BRKT,SMALL CNBX,TWR MDL,EVO
MW0746-01	BRKT,COIN RETURN,TWR MDL,EVO
MW0747-01	BRKT,TOUCHSCREEN CONTROLLER,VID MDL,EVO
MW0749-01	COMMUNICATIONS MODULE COVER PANEL,VID MDL,EVO
MW0750-01	MOTHERBOARD CHASIS,FUSION
MW0751-01	COIN RETURN EXTENSION BRKT,CN RTN/FP,TWR MDL,EVO

**Megatouch FORCE Parts List continued**

Item	Description
MW0752-01	LWR BRKT,COIN RETURN,TWR MDL,EVO
MW0753-01	LOCK RESTRICTOR/SPACER,VID MDL,EVO
MW0754-01	ADJUSTABLE COIN LEVER EXT,FUSION
MW0755-01	B/A COVER PLATE,FUSION
MW0756-01	B/A COVER PLATE BACKING,FUSION
MW0758-01	B/A COVER,INNER CURRENCY HATCH,FUSION
MW0759-01	LCD HOLDER/SIDE EXPANDER,FUSION (LCD EXT)
MW0760-01	MECH. COIN REJECTOR HOLDER CLAMP,FUSION
MW0760-02	ELEC. COIN REJECTOR HOLDER CLAMP,FUSION
MW0761-01	COIN SWITCH REPLACEMENT CHUTE,FUSION
MW0762-01	COIN REJECTOR CHUTE,FUSION
MW0780-01	PWRSPPLY BRKT,VID MDL,EVO
MW0781-01	HINGE,VID MDL,EVO
MW0782-01	BRKT,COMM MDL,VID MDL,EVO
MW0783-01	LOCK SLIDE,VID MDL,EVO
MW0789-01	OSD BOARD HINGE ARM,FUSION
MW0791-01	CASH AREA BASE GUARD,FUSION
MW0792-01	BEZEL LOCK MECH,FUSION
MW0794-01	LOCK RECEPTACLE FRAME,FUSION
MW0795-01	LOCK RECEPTACLE INSERT,FUSION
MW0797-01	BEZEL CLOSURE BASE,FUSION
MW0798-01	LCD MOUNTING BRACKET,FUSION
MW0801-01	CURRENCY DOOR LOCK CAM,FUSION
MW0802-02	MARS B/A SHROUD REAR BLANKING PLATE,FUSION
MW0805-01	BEZEL< CABINET HINGE,FUSION
MW0806-01	LOCK CATCH,FUSION
MW0807-01	COIN ACCEPTANCE CHUTE COLLAR,FUSION
MW0808-01	COIN ACCEPTANCE CHUTE MOUNTING BRACKET,FUSION
MW0809-01	COIN ACCEPTANCE CHUTE, FUSION
MW0810-01	BEZEL CLOSURE BASE REINFORCEMENT,FUSION
MW0812-01	BILL ACCEPTOR FRONT PLATE, TOWER MODULE, EVO
MW0812-02	COIN MECH FRONT PLATE, TOWER MODULE, EVO
MW0856-01	FLUORESCENT LAMP BRACKET, FUSION
MW0886-01	MONITOR BEZEL LOCK MOUNTING PLATE, FUSION
MW0887-01	CASH PANEL LOCK CATCH BRACKET, FUSION
MW0888-01	B/A<BEZEL ADAPTER BRACKET, FUSION
MW0889-01	CASH PANEL, FUSION
MW0890-01	SPEAKER PANEL, FUSION
MW0890-02	SPEAKER PANEL TRIM, FUSION
MW0891-01	BEZEL HINGE, FUSION
MW0892-01	EMI/RFI ELECTRONICS ENCLOSURE, FUSION
MW0893-01	BEZEL MOUNTING BRACKET, FUSION
MW0894-01	UPPER COIN ENTRY BRACKET, FUSION
MW0894-02	LOWER COIN ENTRY BRACKET, FUSION
MW0895-01	BEZEL LOCK CAM, FUSION
MW0896-01	CASH PANEL & REAR DOOR, LOCK CAM, FUSION
MW0897-01	3-POINT LOCK BRACKET, FUSION

**Megatouch FORCE Parts List continued**

Item	Description
MW0898-01	CREDIT CARD BLANKING PLATE MOUNTING BRACKET, FUSION
MW0898-02	CREDIT CARD READER MOUNTING BRACKET, FUSION
MW0899-01	3-POINT LOCK ARM, MONITOR BEZEL, FUSION
MW0902-01	FOOT COVER, FUSION
MW0904-01	DOOR NUT, FUSION
MW1720-01-0B	SPEAKER SCREEN
MW2012-01	SECURITY LOOP, R
MW2012-02	SECURITY LOOP, L
MW2013-01	DUCK BILL CAM
MW4147-01	SMALL FLUORESCENT LAMP FIXTURE ENCLOSURE
MW5000-03	DUAL METER & SWITCH BRACKET
MW5003-01	LEFT CRT ADJ BRACKET W/ CUTOUT
MW5003-03	LEFT CRT ADJ BRACKET W/O CUTOUT
MW5004-01-0A	POWER ENTRY BRACKET, U/R 19", T/S
MW5164-01	REAR DOOR HINGE, COUNTERTOP
MW5171-01	COINBOX CONN BRACKET, W/B
MW5171-02	COINBOX CONN BRACKET
PA0049-03	VIPS HARD DRIVE
PA0060-01	FRC, US MODEM
PA3021-02	FORCE 2005 HARD DRIVE
PM0212-02	COIN/COUNTRY JUMPER CHART
PM0347-01	RADION SIGN INSTALLATION INSTRUCTIONS
PM0353-03	RECESSED WALL MOUNTING TEMPLATE, VIBE w/ COIN
PM0354-01	PROCESSOR MOUNTING TEMPLATE, VIBE
PM0398-01	MOUNTING TEMPLATE, MEGATUNES
PM0409-01	VIDEO MODULE WALL MOUNTING TEMPLATE, VIBE w/ COIN
PM2417-01	BASE/WALL MTG COIN REJ. ADJUSTING LABEL, VIBE w/ COIN
PM5131-01	WARNING LABEL
PM5937-02	PATENT LABEL VIDEO GAMES
PM6063-01	\$1/\$2/\$5 STICKER
PM6064-01	\$1/\$2 & \$5 STICKER
PM8928-39	FORCE SIGN
PM8928-68	FORCE 2005 COUNTERTOP SIGN
PM8949-01	TOURNAMAXX READY PROMO SIGN
PM8950-07	2K5 SIGN,EVO
SA0014-03	ELECTRONIC/MANUAL COIN REJECTOR HARNESS
SA0040-08	CASH BOX ASSY, COIN & B/A READY, XL/CLASSIC
SA0047-02-0A	COIN-BILL ACCEPTOR HARNESS
SA0064-04	120V POWER ENTRY MODULE
SA0078-07	GROUND, #10 RING LUG, 17"
SA0078-10	GROUND, #6 RING LUG & #10 RING LUG, 20"
SA0078-15	GROUND, #6 RING LUG & #10 RING LUG, 7"
SA0078-23	GROUND, #10 RING LUG, 44"
SA0078-26	GROUND, #10 RING LUG, 14"
SA0078-27	GROUND, #10 RING LUG, 4"
SA0082-01	AC JUMPER HARNESS
SA0082-02	AC JUMPER HARNESS, 32" L

**Megatouch FORCE Parts List continued**

Item	Description
SA0096-04	POWER ENTRY W/ COUPLERS
SA0097-01	MODIFIED MARS 2000 BILL ACCEPTOR (500 STACKER)
SA0097-04	MOD MARS 2000 B/A (500 STACKER)
SA0102-03	INTERFACE, CASH SYSTEM
SA0103-07	13" VGA TOUCHSCREEN ASSEMBLY
SA0105-06	SILVER & BLACK COVER
SA0106-12	DOMESTIC POWER ENTRY ASSEMBLY
SA0108-04	MAIN HARNESS
SA0118-03	POWER EXTENSION CABLE, PCA/HARD DRIVE
SA0118-03	HARD DRIVE/CD-ROM POWER EXTENSION CABLE
SA0118-04	HARD DRIVE/CD-ROM POWER EXTENSION CABLE
SA0152-01	SMILEY HARNESS, JUMPER1
SA0152-02	SMILEY HARNESS, JUMPER2
SA0152-03	SMILEY HARNESS, JUMPER3
SA0152-04	SMILEY HARNESS, JUMPER4
SA0165-01	SWITCH COUNTER ASSEMBLY
SA0177-03-0A	FLUORESCENT LAMP FIXTURE, 6W, 220V/50HZ
SA0177-04-0A	FLUORESCENT LAMP FIXTURE, 117V/60HZ, 6W
SA0177-05	6W,117V/60HZ, FLUORESCENT LAMP ASSEMBLY
SA0177-06	6W,117V/60HZ, FLUORESCENT LAMP ASSEMBLY W/O BRKT
SA0178-02	MAIN HARNESS
SA0181-02	POWER SWITCH HARNESS
SA0183-03	COIN MECH HARNESS
SA0183-04	INTERNATIONAL COIN MECH HARNESS
SA0184-01	MARS BILL ACCEPTOR HARNESS
SA0185-03	SMILEY BILL ACCEPTOR HARNESS
SA0197-01	12V FAN ASSEMBLY, CVR/3"
SA0225-06	AC HARNESS, ATX
SA0226-04	DC POWER HARNESS, ATX
SA0226-05	DC POWER HARNESS, ATX
SA0237-04	TOP COVER, GND
SA0238-05	BOTTOM FRONT COVER
SA0238-06	BOTTOM FRONT COVER
SA0240-05	COIN DRAWER
SA0240-06	COIN DRAWER
SA0241-05	LEFT SIDE COVER
SA0241-06	RIGHT SIDE COVER
SA0242-06	DOMESTIC POWER ENTRY
SA0242-07	INTERNATIONAL POWER ENTRY ASSEMBLY
SA0250-06	POWER SHELF
SA0250-07	POWER SHELF ASSEMBLY
SA0252-04	HARNESS, AC, CIRCUIT BREAKER, ATX
SA0255-03	MECHANICAL COIN REJECTOR BRACKET ASSEMBLY
SA0260-04	ATX POWER/PCB HARNESS
SA0266-01	POWERCORD, 6" R/A, F, IEC W/F CONNECTOR, R
SA0266-02	9" R/A,F,IEC W/ F CONNECTOR, POWER CORD, R
SA0267-03	POWER SUPPLY

**Megatouch FORCE Parts List continued**

Item	Description
SA0268-01	METER/BRACKET
SA0279-01	COUNTERTOP FAN
SA0298-02	BILL ACCEPTOR ASSEMBLY
SA0304-01	POWER ENTRY
SA0306-01	DC DIST HARN,XL7
SA0307-01	60MM SINGLE FAN ASSEMBLY, RADION
SA0307-02	60MM SINGLE FAN ASSEMBLY, FUSION
SA0308-01	POWER SUPPLY ASSEMBLY, RADION
SA0309-01	DUAL CENTER ASSEMBLY
SA0309-02	COUNTER ASSEMBLY, RADION
SA0309-03	COUNTER ASSEMBLY, VIBE
SA0309-04	COUNTER ASSEMBLY, FUSION
SA0310-01	COUNTER HARNESS
SA0312-01	I/O, AUDIO, COUNTER ASSEMBLY
SA0313-01	SPEAKER, ASSEMBLY
SA0313-02	SPEAKER, W/22 AWG, ASSEMBLY
SA0314-01	STACKER HARNESS W/ LOCKOUT
SA0316-01	ELECTRONIC COIN REJECTOR HARNESS
SA0318-01	DC POWER HARNESS, MAIN, RADION
SA0319-01	AC CR STACKER HARNESS
SA0320-01	DUAL FAN ASSEMBLY, 50MM
SA0324-01	RIGHT SIDE PANEL, RADION
SA0325-01	LEFT SIDE PANEL, RADION
SA0326-01	REAR DOOR & BEZEL, RADION
SA0327-01	FRONT BEZEL, RADION
SA0328-01	UPPER COIN CHUTE, RADION
SA0329-02	MONITOR & TOUCHSCREEN, RADION
SA0329-03	MONITOR & TOUCHSCREEN, U3a
SA0330-12	MR VIPS HARD DRIVE & MTHBD MODULE
SA0336-01	DC Y CONN HARN
SA0338-01	DOMESTIC COINBOX & BILL ACCEPTOR
SA0338-07	OVERSIZED DOMESTIC COINBOX & BILL ACCEPTOR, RADION
SA0338-09	OVERSIZED NJ COINBOX & BILL ACCEPTOR, RADION
SA0338-10	OVERSIZED SMILEY-READY COINBOX, RADION
SA0338-11	OVERSIZED COINBOX, RADION
SA0339-01	COIN OPTION BRACKET
SA0341-01	COIN ENTRY
SA0345-01	I/O & AUDIO HARNESS, DC
SA0346-01	INTERNATIONAL AC HARNESS
SA0347-01	DOMESTIC AC HARNESS, FORCE
SA0348-01	DC/AUDIO HARNESS, FORCE
SA0349-02	MAIN AC HARNESS, FORCE
SA0350-01	DC HARNESS, I/O & VIDEO, FORCE
SA0351-01	MAIN SIGNAL HARNESS, FORCE
SA0352-01	MAIN DC HARNESS, FORCE
SA0354-01	I/O HARNESS
SA0355-01	COUNTER HARNESS

**Megatouch FORCE Parts List continued**

Item	Description
SA0356-01	POWER ON HARNESS
SA0361-01	ELECTRONIC COIN REJECTOR
SA0372-01	POWER ON/OFF MODULE
SA0373-01	DC MOTHERBOARD HARNESS, UPRIGHT W/ COIN DOOR
SA0375-01	AC BILL ACCEPTOR EXTENSION HARNESS
SA0376-01	I/O HARNESS, UPRIGHT W/ COIN DOOR
SA0377-01	MANUAL COIN REJECTOR HARNESS
SA0377-02	JUKEBOX, MECHANICAL COIN REJECTOR CABLE
SA0378-01	MAIN HARNESS
SA0379-01	ELECTRONIC COIN REJECTOR HARNESS
SA0386-02	9' LINKING HARNESS, VIBE
SA0387-01	AC PROCESSOR HARNESS, VIBE
SA0387-02	AC HARNESS, PROCESSOR, VIBE w/ COIN
SA0388-01	PROCESSOR HARNESS, VIBE
SA0389-01	LEFT SPEAKER, VIBE
SA0389-02	RIGHT SPEAKER, VIBE
SA0390-01	SWITCH CONNECTOR MODULE, VIBE
SA0390-02	SWITCH/CONNECTOR MODULE, VIBE w/ COIN
SA0391-01	LINKING MECHANISM, VIBE
SA0392-01	15" TOUCHSCREEN AND DISPLAY, VIBE
SA0393-01	ELECTRO-LUMINESCENT DISPLAY, VIBE
SA0393-02	ELECTRO-LUMINESCENT DISPLAY, VIBE w/ COIN
SA0399-01	VIDEO CHASSIS MODULE, VIBE
SA0400-01	DUAL 50MM FAN ASSEMBLY, VIBE
SA0402-01	PROCESSOR COVER ASSEMBLY, VIBE
SA0403-01	3-POSITION CONNECTOR & DUAL PUSH BUTTON SWITCH
SA0404-01	3" SPEAKER BRACKET, RADION
SA0405-01	DISPLAY HARNESS, VIBE
SA0406-02	9' AC HARNESS STACKER, VIBE
SA0407-02	JUKEBOX CONTROL CABLE
SA0408-02	JUKEBOX HUB POWER HARNESS
SA0410-01	LOW LEVEL AUDIO CABLE, JUKEBOX
SA0418-01	HARNESS, DC TAP, VIBE
SA0422-01	MONITOR/LIGHT AC CABLE, JUKEBOX
SA0423-02	SECONDARY AC HARNESS, FCC, JUKEBOX
SA0425-01	AC PRIMARY INLET HARNESS, JUKEBOX
SA0426-01	LIGHT SHOW EXTENSION HARNESS, JUKEBOX
SA0427-02	DC DISTRIBUTION CABLE, MEGATUNES
SA0427-03	LIGHT SHOW DC DISTRIBUTION CABLE, FCC, JUKEBOX
SA0428-02	TOUCHTUNES CONTROL BOARD HARNESS, MEGATUNES
SA0428-03	TOUCHTUNES CONTROL BOARD HARNESS, FCC, JUKEBOX
SA0429-01	ELECTRO-LUMINESCENT ASSEMBLY, VIBE
SA0429-02	ELECTRO-LUMINESCENT ASSEMBLY, VIBE w/ COIN
SA0431-01	COMMUNICATIONS INTERFACE MODULE, JUKEBOX
SA0438-01	AUDIO GAME HARNESS, JUKEBOX
SA0439-02	DC DISTRIBUTION HARNESS, FCC, JUKEBOX
SA0440-04	VER3,SIG&RLY HARN,SP2

**Megatouch FORCE Parts List continued**

Item	Description
SA0442-01	PRIMARY AC HARNESS, MEGATUNES
SA0442-02	SECONDARY AC HARNESS, MEGATUNES
SA0443-01	AC FAN ASSEMBLY, JUKEBOX
SA0444-01	COUNTER HARNESS, JUKEBOX
SA0445-01	HUB PWR CABLE, MEGATUNES
SA0446-01	ANTENNA CABLE
SA0447-01	30" RED & BLACK PAIRED CABLE
SA0449-01	LOCK MECHANISM, VIBE w/ COIN
SA0451-01	COIN REJECTOR, VIBE w/ COIN
SA0452-01	COIN REJECTOR-READY ASSEMBLY, VIBE w/ COIN
SA0455-02	6 CH. ELEC. COIN REJ. CAB., VIDEO MDL, VIBE w/ COIN
SA0456-01	ELECTRONIC COIN REJ. HARNESS, PROC. MDL, VIBE w/ COIN
SA0458-01	AC CAB,SP2
SA0459-02	CAB,60" L,AUD EXT,SP2
SA0467-02	B/A-RDY,TWR MDL,EVO
SA0469-01	15.00 DSPL, SAM VID MDL,EVO <b>(NO DISCOUNT)</b>
SA0469-03	V2,17" TOUCHSCREN & MONITOR,FUSION <b>(NO DISCOUNT)</b>
SA0469-04	V2,17 MONITOR,FUSION <b>(NO DISCOUNT)</b>
SA0469-05	15" DISPLAY, KORTEK VIDEO MODULE,EVO <b>(NO DISCOUNT)</b>
SA0469-09	17" DISPLAY & TOUCHSCREEN, FUSION <b>(NO DISCOUNT)</b>
SA0470-01	4.00L,52MM FAN ASSY,EVO
SA0473-01	MECH. COIN REJECTOR HARNESS,FUSION
SA0474-01	HARN,JMPR,M-CREJ,EVO
SA0477-01	15.00TS&DSPL,VID MDL,EVO <b>(NO DISCOUNT)</b>
SA0480-01	SM PRZ ASSY,U3a
SA0481-01	MED PRZ ASSY,U3a
SA0482-01	LG PRZ ASSY,U3a
SA0483-01	PRZ DSPL ASSY,U3a
SA0484-01	PRZ SHIELD (TOWER) ASSEMBLY,U3a
SA0485-01	MED PRZ HOPPER,U3a
SA0486-01	BENT PLASTIC PARTS,U3a
SA0487-01	VACUMED FORMED PARTS,U3a
SA0503-02	FLATSCREEN PRIMARY AC CABLE ASSEMBLY, FUSION
SA0505-01	TOUCHSCREEN POWER CABLE, FUSION
SA0506-01	LCD POWER CABLE, FUSION
SA0507-01	MECHANICAL COIN REJECTOR CABLE, FUSION
SA0519-01	65" L LED HARNESS, VIPS
SA10051-01	I/O BOARD W/ PRINTER
SA10055-01	USB I/O BOARD, W/O PRINTER
SA10057-05	533MHZ FORCE MOTHERBOARD ASSEMBLY
SA10057-07	810E,566MHz FORCE MOTHERBOARD ASSEMBLY
SA10058-01	AUDIO AMP BOARD
SA10062-01	ELECTRO-LUMINESCENT DRIVER BOARD, VIBE
SA10064-02	CTRL BOARD, JUKEBOX
SA10065-01	3-IN-1 I/O BOARD
SA10066-01	OSD SMART PANEL
SA10067-02	CC, LED BD,EVO

**Megatouch FORCE Parts List continued**

Item	Description
SA3220-12-0A	.25 / .25 COIN DOOR ASSEMBLY
SA3235-12	.25/\$1&\$5B/A, 500 STACKER
SA3243-03	BEZEL, UPRIGHT (W/O COIN DOOR)
SA3244-03	19" CRT MONITOR ASSEMBLY
SA3248-01	COINBOX ASSEMBLY
SA3273-01	BEZEL ASSEMBLY
SA3276-01	FR BZL, JUKEBOX
SA3277-01	MONITOR MODULE, JUKEBOX
SA3278-01	LOWER FRONT PANEL ASSEMBLY, JUKEBOX
SA4084	4" SPEAKER ASSEMBLY W/ 2-PIN CONNECTOR
SA5117-04-0A	FAN ASSEMBLY, 3", 12V, 2 PIN CONNECTOR, W/O GUARD
SA5117-05-0A	FAN ASSEMBLY, 3", 12VDC, 3 PIN, W/ GUARD
SA5117-08	FAN ASSEMBLY, 3", 12V, M&F CONNECTOR, W/ GUARD
SA5117-09	3" 12V FAN ASSEMBLY W/ 2-PIN CONNECTOR & GUARD
SA5129-01	GASKET/BEZEL ASSEMBLY, 13"
SA7297-13	MAG SIGN HOLDER
SA9824-01	13" TOUCHSCREEN OVERLAY
SB0016-01	13"/19" TOUCHSCREEN TAPE KIT
SB0350-01	ELECTRONIC COIN REJECTOR-READY
SB0353-01	RADION SIGN MOUNTING KIT
SB0368-01	COIN BAG ASSEMBLY, VIBE W/ COIN
SB0377-01	US,.25¢/\$1,V92 COIN REJECTOR (HW8337-01)
SB1771-05	GROUND, W/#4 & #6 RING LUGS 5"
SC7000	VARISTOR V130LA2OB
SC7005	VARISTOR 230VAC
SW3005	PANEL MOUNTING SWITCH, PB MOMENTARY
SW4024	ROCKER SWITCH, DPST, 250V, PANEL MOUNTING
SW4025-01	IEC, 250V, DPST, PANEL MOUNTING ROCKER SWITCH
SW5021-01	COIN SWITCH ASSEMBLY
WD0001-05	RIGHT SIDE PANEL
WD0001-06	LEFT SIDE PANEL
WD0013-01	CRT SHELF
WD0022-01	WOOD SHIM
WD0024-02	BLACK CABINET (discontinued under run out)
WD0024-03	DARK GRAY CABINET
WD0025-01	DARK GRAY CABINET
WD0030-01	SIDE PANEL
WD0030-02	SIDE PANEL
WD0038-01	MON SLF, JUKEBOX
WD0040-01	ENCLOSURE, JUKEBOX
WD0041-01	SOUND SYSTEM ENCLOSURE, SS
WD0047-01	FUSION CABINET
WD0054-01	FUSION CABINET

# Section 2

# Hard Drive

# Information

## *Hard Drive Numbers*

Program Numbers

Part Numbers

Security Key Numbers

## FORCE Hard Drive Program Numbers, Part Numbers, and Compatible Security Keys

<b>FORCE 2005.5</b>		
Program #PG3002 (V15.00)	Part #PA3021-02	Security Key #SA3083-01
<b>FORCE 2005</b>		
Program # PG3002 (V14.00)	Part # PA3018-02	Security Key # SA3083-01
<b>FORCE 2004 POINT 5</b>		
Program # PG3002 (V13.00, V13.01, V13.02, V13.10)	Part # PA3017-02	Security Key # SA3068-01
<b>FORCE 2004</b>		
Program # PG3002 (V12.00, V12.01, V12.02, V12.03, V12.10, V12.11)	Part # PA3016-02	Security Key # SA3068-01
<b>FORCE 2003 POINT 5</b>		
Program # PG3002 (V11.00, V11.01, V11.02, V11.05)	Part # PA3014-02	Security Key # SA3059-01
<b>FORCE 2003</b>		
Program # PG3002 (V10.00, V10.02, V10.03, V10.06, V10.07, V10.08, V10.09, V10.10)	Part # PA3013-02	Security Key # SA3059-01
<b>FORCE 2002 POINT 5</b>		
Program # PG3002 (V9.00, V9.01)	Part # PA3012-02	Security Key # SA3050-01
<b>FORCE 2002</b>		
Program # PG3002 (V8.00, V8.01, V8.02, V8.03, V8.04, V8.05, V8.06)	Part # PA3010-01	Security Key # SA3050-01
<b>MR VIPS</b>		
Program # PG4000 (V1.09, V2.01, V3.00, V3.01)	Part # SA0331-03	Security Key # SA3073-01

Hard drive program versions are in parentheses.  
All security key program numbers are USA standard.

# Section 3

# Troubleshooting

# Information

## *Touchscreens*

- Troubleshooting
- Touchscreen Calibration

## *Motherboard Handling Precautions*

## *Motherboard Diagrams*

## *Access/Removal of Major Assemblies*

- Motherboard
- Hard drive
- Monitor
- Touchscreen

## *Troubleshooting Guide*

## *CMOS Setup*

## *Mars 2000 Bill Acceptor*

- DIP Switch Settings

## Troubleshooting Your Touchscreen

### MICROTOUCH:

#### Features:

- SMT-4 Controller in black box
- Green LED on controller lit at half brightness, full brightness when screen is touched
- Overlay functions on capacitance.
- Touchscreen cable is on right side of CRT.

#### Troubleshooting:

- LED Flashing from 1 to 5 times - detected error or possible defective controller
- LED not lit - Check +12 vdc. The SMT-3 controller may also be defective

See Figure 1 for the touchscreen overlay connector schematic.

### CALIBRATION:

- 1 - Press the calibration button.
- 2 - Touch the dot that appears in the corner for 2 seconds.
- 3 - Touch the dot that appears in the opposite corner for 2 seconds.

The cursor should follow your finger wherever you touch the screen.

### CALIBRATION or LOCKUP PROBLEMS:

- If the calibration is off over the whole area of the screen, recalibrate the screen. If this does not correct the problem, replace the touchscreen.
- If the calibration is off in one area, check for scratches or nicks on the screen. If you detect scratches or nicks, replace the touchscreen.
- If the screen loses calibration entirely, check the ground pin on the line cord.
- Microwave ovens and neon lights can and will interfere with the calibration of the touchscreen and should not be within 6 feet (or 2 meters) of the game.
- Improper grounding will affect the operation of the touchscreen.
- If you are experiencing problems with double-touching (e.g. two cards are taken away after only one touch to the screen), make sure the A/C plug and wall outlets are properly grounded.
- The touchscreen cable should not be positioned under or on top of the yoke of the monitor.
- The touchscreen controller cable should not be positioned near the flyback transformer.

**NOTE: If the cable was incorrectly installed, the touchscreen response will be out of sync by 180 degrees.**

## Troubleshooting Your Touchscreen (cont'd)

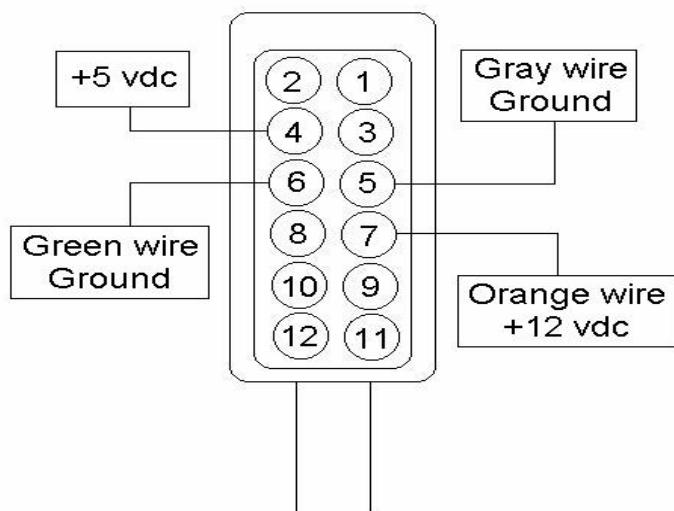


FIGURE 1 - MICROTOUCH TOUCHSCREEN OVERLAY CONNECTOR SCHEMATIC

## Touchscreen Calibration

1. Find the **CALIBRATE** button on the I/O board and press it to enter the screen calibration mode.
2. Touch the center of the first circle that appears on the screen. Once you release your finger, a second circle will appear.

**NOTE:** *You must hold your finger on the circle for approximately 2 seconds for the calibration to be recognized.*

3. Touch the center of the second circle that appears on the screen.
4. *Pre-FORCE 2003 games only:* A third circle will appear to calibrate for low color games. Touch the center of the third circle.
5. *Pre-FORCE 2003 games only:* Once the third circle is touched and released, a crosshair will appear on the screen. To test the calibration of the screen, touch the crosshair with your finger and slowly drag your finger around the screen. The crosshair should follow your movement.
6. Move the cursor to ensure proper calibration.
7. Touch the **EXIT** button.

**NOTE:** *If you perform a touchscreen test through set-up mode on a Pre-FORCE 2003 game, a "LOW COLOR ADJUSTMENT" button will appear in the upper left corner of the screen to give you the option to set the low color adjustment.*

**NOTE:** *If you have enabled high resolution, the game will prompt you to go through the calibration procedure twice.*

**ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

**Motherboard Handling Precautions**

**NOTE:** Before handling any boards, observe the following procedures:

- Remove any static charge from your body before handling the boards.
- Use a ground strap when handling the boards.
- When plugging in connectors to the board, make sure the connector is inserted straight onto the header and that the connector covers all header pins.
- Do not connect any peripheral device to the board if the power is still connected to the peripheral or if power is already applied to the board.
- Prevent electro-static discharge by storing the boards in the anti-static bags in which they are shipped.

## Motherboard Diagrams

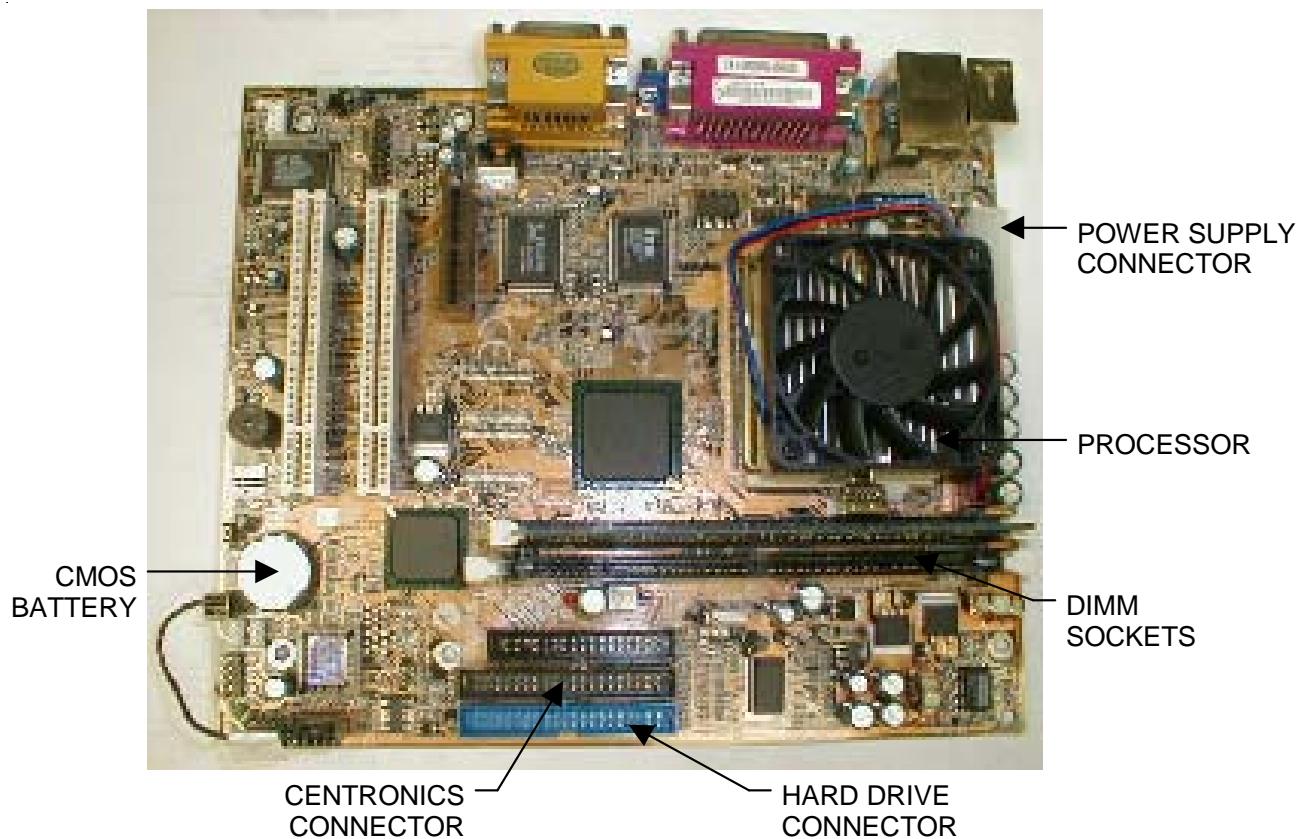


FIGURE 1 - ECS MOTHERBOARD

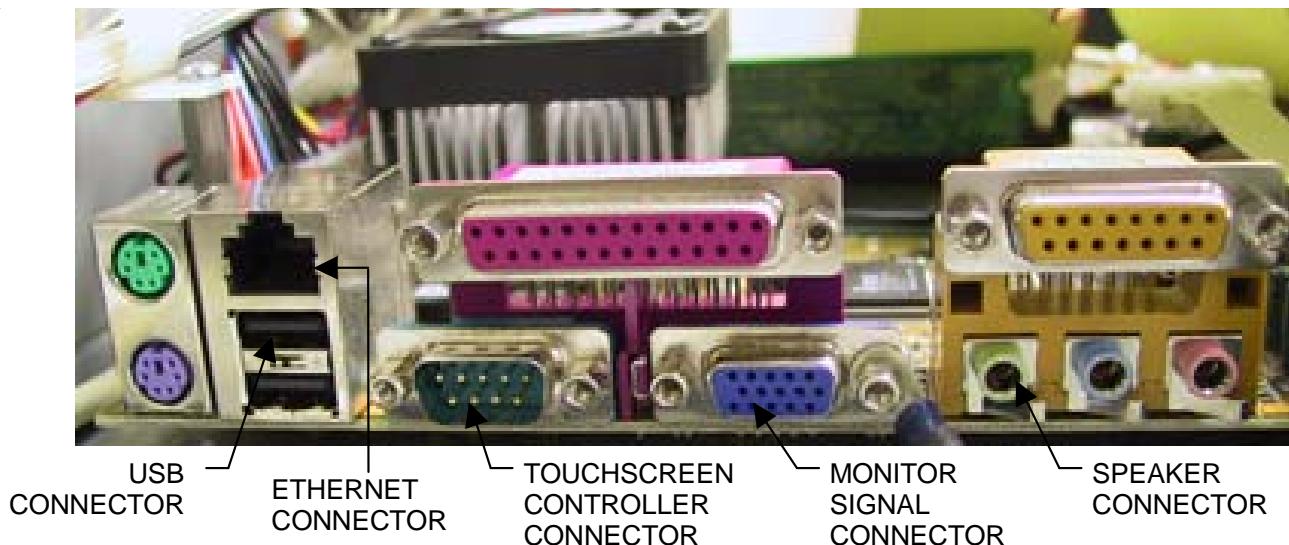


FIGURE 2 - ECS MOTHERBOARD (SIDE VIEW)

## Motherboard Diagrams

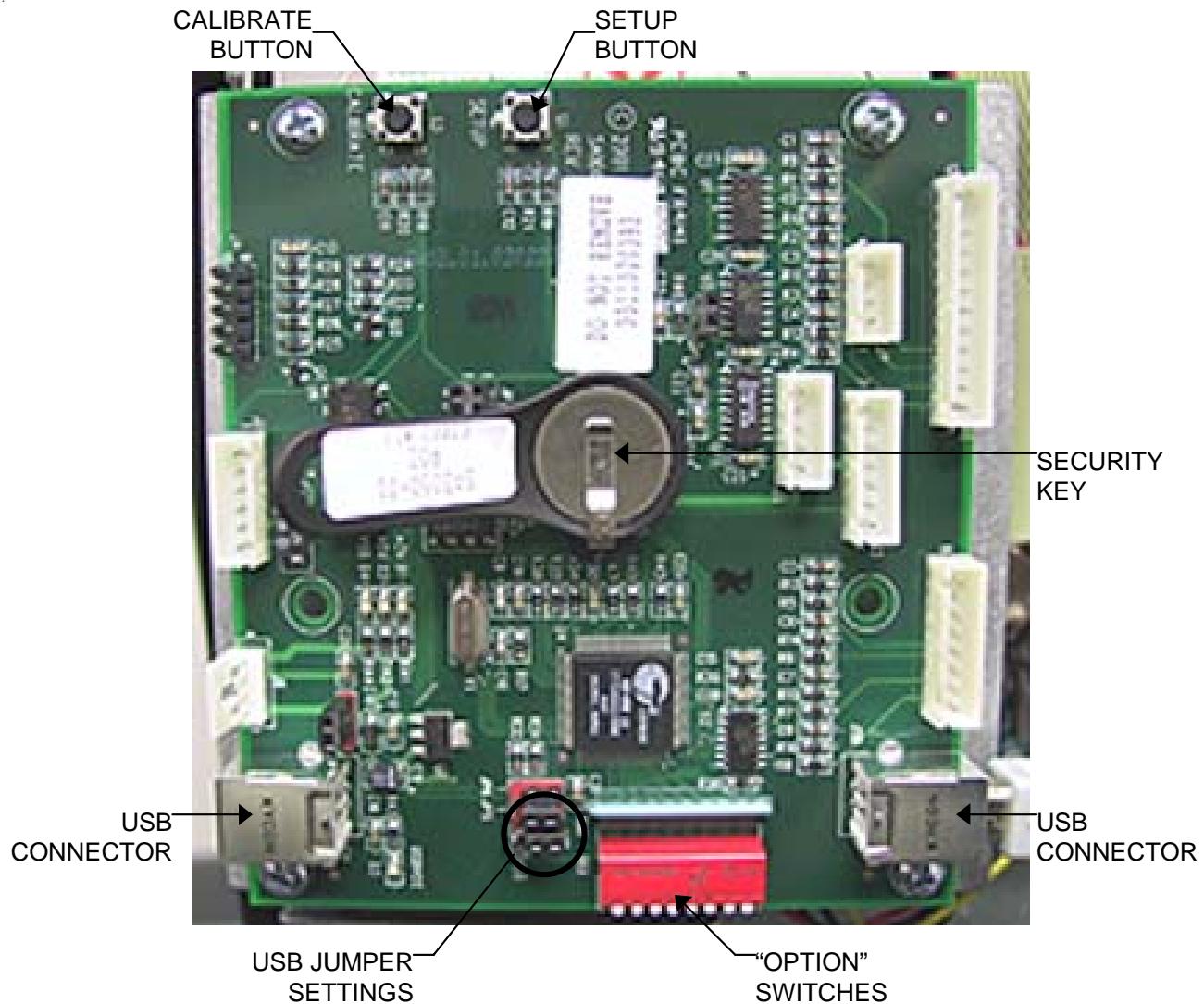


FIGURE 3 - I/O BOARD USED WITH ECS MOTHERBOARD  
IN FORCE RADION, CLASSIC, ELITE, AND UPRIGHT GAMES

## Motherboard Diagrams

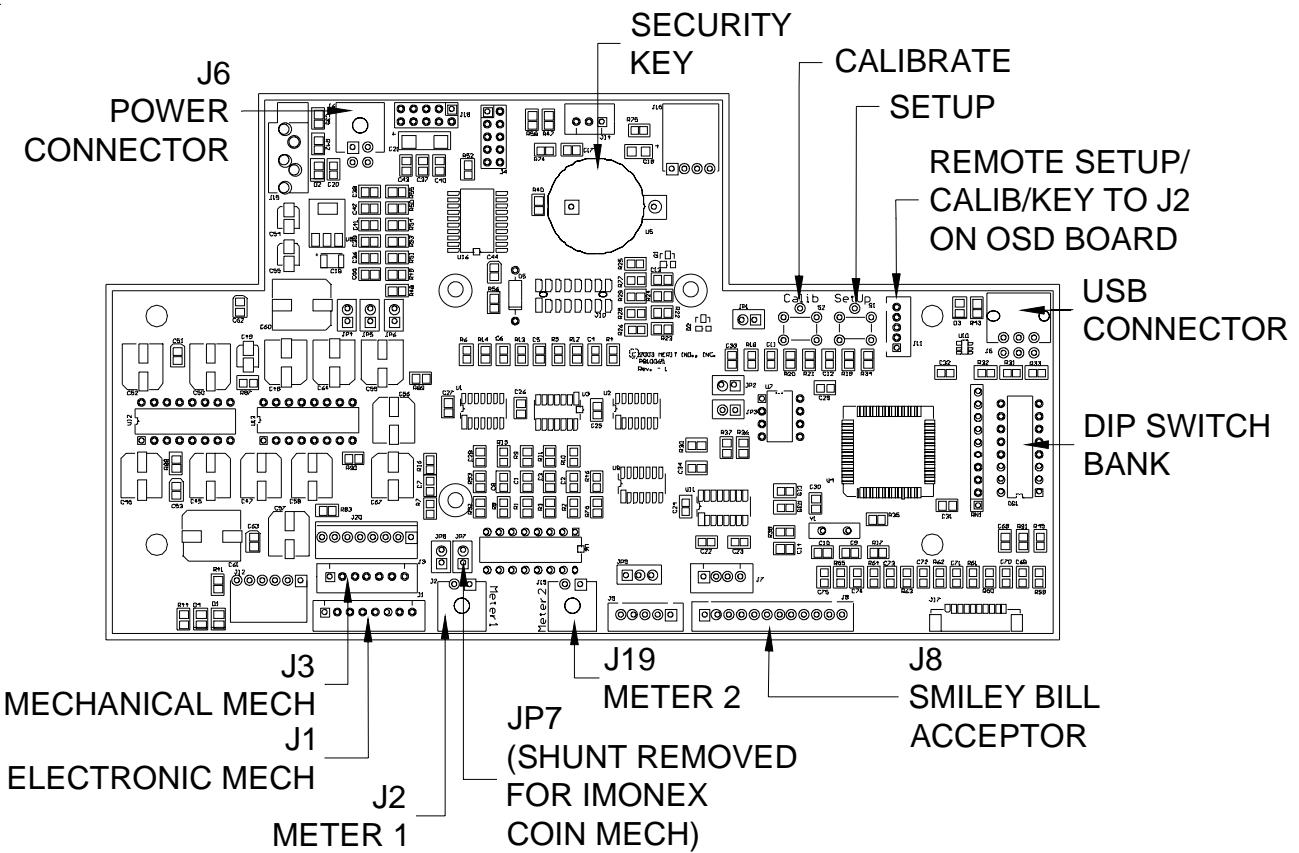


FIGURE 4 - I/O BOARD USED WITH ECS MOTHERBOARD  
IN FORCE EVO AND FUSION GAMES

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Classic Countertop**

#### **Hard Drive Removal**

1. Turn off and unplug the game.
2. Unlock and open the lid.
3. Remove the screw securing the hard drive mounting plate to the game. See Figure 1.
4. Remove the 4 screws and shoulder washers securing the hard drive to the mounting plate.
5. Disconnect the 4-PIN power connector and the ribbon cable from the hard drive, then remove the hard drive assembly from the game.

#### **Hard Drive Installation**

1. Connect the 4-PIN power connector and the ribbon cable to the new hard drive.
2. Place the new hard drive in the mounting plate and replace the 4 screws and shoulder washers securing the drive to the plate.
3. Fasten the hard drive mounting plate to the game with the mounting screw. See Figure 1.
4. Close and lock the lid.
5. Plug in and turn on the game.

#### **Motherboard Removal**

1. Turn off and unplug the game.
2. Unlock and open the lid.
3. Disconnect all connections to the motherboard, including the ground wire attached to the motherboard mounting frame.
4. Remove the 4 screws mounting the motherboard to the mounting frame (see Figure 2) and carefully remove the board. Insert the board into an anti-static bag for storage. NOTE: Be sure to read the Motherboard Handling Precautions before handling the board.

#### **Motherboard Installation**

1. Place the new motherboard on the mounting frame, lining up the screw holes on the board with the holes in the game, then replace the 4 screws.
2. Reconnect all connections to the motherboard, including the ground wire attached to the motherboard mounting frame.
3. Close and lock the lid.
4. Plug in and turn on the game.

#### **Monitor Removal**

1. Turn off and unplug the game.
2. Unlock and remove the coin box or coin box/bill acceptor assembly.
3. Unlock and remove the lid by first disconnecting the fan power connector, then the clear drainage tubing (from lid end) and ground strap. Also remove the monitor control board attached with velcro to the inside of the game. Then press up on the spring-loaded levers (located on each side of the lid), push the levers forward, and lift and remove the lid. Also remove the front bezel. See Figures 3 and 4.

#### **Troubleshooting Information - Removal/Installation of Major Assemblies - FORCE Classic Countertop**

Megatouch FORCE Technical Reference Manual

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Classic Countertop (cont'd)**

4. Disconnect the ground wire (with the ring lug) that is attached to the metalwork next to the touchscreen controller. Then disconnect the cable from the back of the controller and disconnect the Molex connector connecting the orange and gray wires (from the touchscreen controller cable) to the main harness.
5. Disconnect the monitor power connector (black and white wires running from the monitor board to the right angle connector plugged into the power supply).
6. Disconnect the monitor signal cable from the motherboard.
7. Remove the 4 nuts securing the monitor chassis to the main chassis. Two nuts are located on each side of the monitor board. See Figure 5 for locations. NOTE: BE CAREFUL TO AVOID THE FLYBACK TRANSFORMER AND HIGH VOLTAGE WIRE RUNNING TO THE MONITOR.
8. Pick up the monitor assembly and remove it from the cabinet.

### **Monitor Installation**

1. Place the new monitor assembly in the cabinet.
2. Fasten the monitor chassis to the main chassis with the 4 nuts, 2 on each side of the monitor board. NOTE: BE CAREFUL TO AVOID THE FLYBACK TRANSFORMER AND HIGH VOLTAGE WIRE RUNNING TO THE MONITOR.
3. Connect the monitor signal cable to the motherboard.
4. Reconnect the monitor power connector to the monitor board.
5. Reconnect the touchscreen cable in the back of the controller, then reconnect the Molex connector to the main harness.
6. After replacing the front bezel, install the hood on the chassis, connecting the fan power connector, monitor control board, ground strap, and plastic drain tube. Then pull the lid towards you until the spring-loaded levers lock into place. See Figures 3 and 4.
7. Close and lock the lid.
8. Replace and lock the coin box or coin box/bill acceptor assembly.
9. Plug in and turn on the game.

### **Touchscreen Removal**

1. Turn off and unplug the game.
2. Unlock and remove the coin box or coin box/bill acceptor assembly.
3. Unlock and remove the lid by first disconnecting the fan power connector, then the clear drainage tubing (from lid end) and ground strap. Also remove the monitor control board attached with velcro to the inside of the game. Then press up on the spring-loaded levers (located on each side of the lid), push the levers forward, and lift and remove the lid. Also remove the front bezel. See Figures 3 and 4.
4. Remove the two nuts and washers securing the touchscreen controller to the game and remove the controller from the mounting screws. Then disconnect the touchscreen controller cable from the back of the controller and disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness.

### **Troubleshooting Information - Removal/Installation of Major Assemblies - FORCE Classic Countertop**

Megatouch FORCE Technical Reference Manual

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Classic Countertop (cont'd)**

5. Remove the black poly tape from around the edges of the old touchscreen. Remember how the tape was placed in order to tape the new touchscreen.
6. Use dental floss to carefully cut the foam tape holding the touchscreen to the picture tube until you are able to completely remove the touchscreen.
7. Remove any remaining adhesive residue with denatured alcohol, then wipe the surface of the picture tube with the supplied alcohol wipe.

#### **Touchscreen Installation**

1. Clean the reverse side of the replacement touchscreen with the supplied alcohol wipe.
2. If there is no tape already on the screen, cut pieces of the supplied 1/2" double-sided foam tape long enough to cover each edge of the screen without overlapping. After the tape is in place on the screen, peel off the backing.
3. Replace the new touchscreen over the picture tube (with the cable on the right if you are facing the game), making sure the screen is properly and evenly aligned over the picture tube. Then clean the front of the screen with the supplied alcohol wipe.
4. Remembering the manner in which the tape was placed around the touchscreen you removed, place and cut a length of the supplied black poly tape evenly over an entire edge of the touchscreen and repeat until all 4 edges are covered.
5. Place and cut a longer length of black poly tape around all 4 edges of the screen.
6. Route the new touchscreen controller cable under the picture tube and away from the flyback transformer. Then reconnect the cable in the back of the controller and secure the controller on the mounting screws in the game with the existing hardware. Also connect the Molex connector (orange and gray wires) to the main power harness.

NOTE: Use the supplied roll of 3/8" foam tape (the thicker of the two 3/8" rolls) if you need to replace the gasket on the inside of the front bezel. Be sure to remove all of the existing foam tape and adhesive first.

7. After replacing the front bezel, install the lid on the chassis, connecting the fan power connector, monitor control board, ground strap, and plastic drain tube. Then pull the lid towards you until the spring-loaded levers lock into place. See Figures 3 and 4 for locations.
8. Close and lock the lid.
9. Plug in and turn on the game.
10. When the game is finished booting, calibrate the touchscreen.
11. Replace and lock the coin box or coin box/bill acceptor assembly.

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FIGURE 1 – HARD DRIVE REMOVAL



FIGURE 2 – MOTHERBOARD REMOVAL –  
LOCATION OF SCREWS SECURING MOTHERBOARD TO MOUNTING FRAME

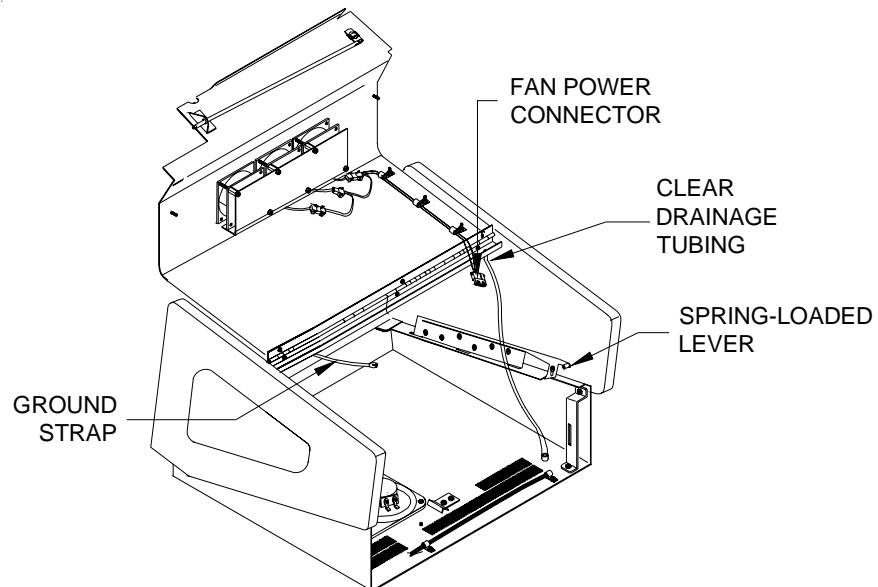


FIGURE 3 - FORCE CLASSIC - HOOD ASSEMBLY

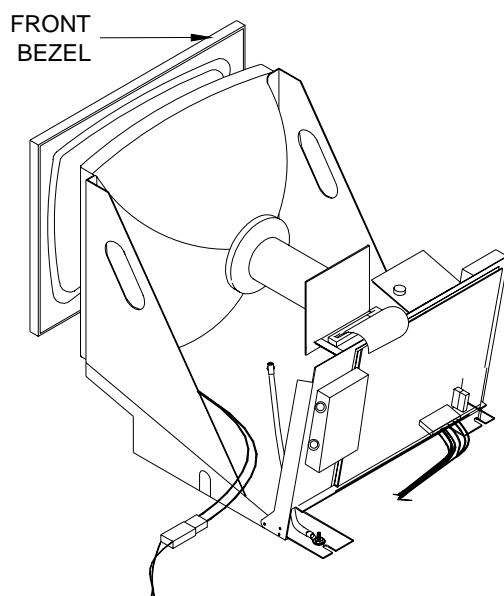


FIGURE 4 - FORCE CLASSIC - MONITOR ASSEMBLY

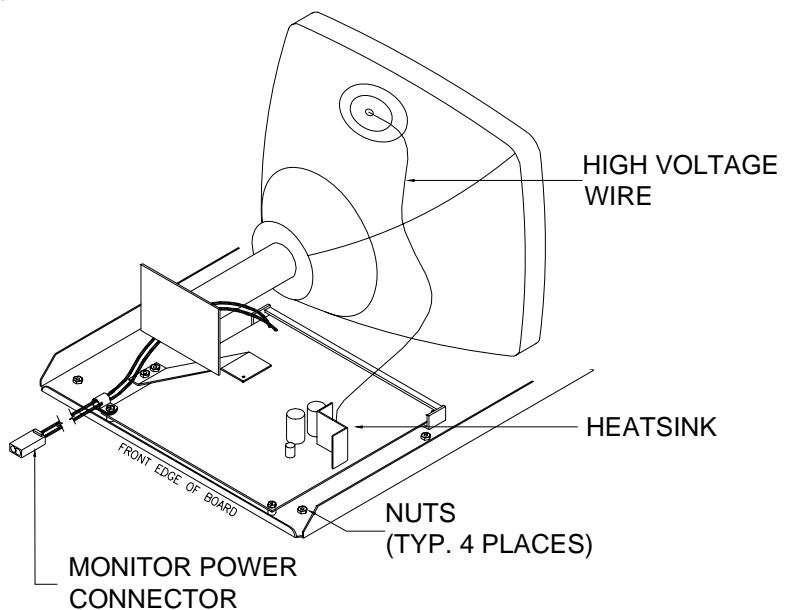


FIGURE 5 - MONITOR REMOVAL

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Elite Countertop**

#### **Motherboard Removal**

1. Turn off and unplug the game.
2. Unlock and open the rear door.
3. Disconnect all connections to the motherboard.
4. Remove the 4 screws mounting the motherboard to the mounting frame (see Figure 1) and carefully remove the board. Insert the board into an anti-static bag for storage. NOTE: Be sure to read the Motherboard Handling Precautions before handling the board.

#### **Motherboard Installation**

1. Place the new motherboard on the mounting frame, lining up the screw holes on the board with the holes in the game, then replace the 4 screws.
2. Reconnect all connections to the motherboard.
3. Close and lock the rear door.
4. Plug in and turn on the game.

#### **Hard Drive Removal**

1. Turn off and unplug the game.
2. Unlock and open the rear door.
3. Remove the screw securing the hard drive mounting plate (see Figure 2) and slide the hard drive assembly towards the back of the unit.
4. Remove the 4 screws and shoulder washers fastening the hard drive to the mounting plate.
5. Lift the hard drive out of the game until you're able to disconnect the 4-pin power connector and the hard drive ribbon cable from the rear of the hard drive.

#### **Hard Drive Installation**

1. Connect the power connector and the ribbon cable to the hard drive.
2. Fasten the hard drive to the mounting plate with the 4 screws and shoulder washers.
3. Slide the hard drive assembly into the game and fasten it with the mounting screw.
4. Close and lock the rear door.
5. Plug in and turn on the game.

#### **Monitor Removal**

1. Turn off and unplug the game.
2. Unlock and open the rear door.
3. Disconnect the monitor power connection (black and yellow wires) running to the power supply.
4. Disconnect the monitor signal cable from the motherboard and remove it from the cable clamps.
5. Inside the game, access the latches for each side panel and remove both panels (see Figure 3).

#### **Troubleshooting Information - Removal/Installation of Major Assemblies - FORCE Elite Countertop**

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Elite Countertop (cont'd)**

6. Remove the two nuts and washers securing the touchscreen controller to the game and remove the controller from the mounting screws. Then disconnect the cable from the back of the controller and disconnect the Molex connector connecting the orange and gray wires (from the touchscreen controller cable) to the main power harness.
7. Remove the 3 screws at the top of each side piece fastening the top cover to the game (see Figure 4) and remove the top cover.
8. Loosen the 5/16" nuts securing the 2 LCD clips (one on each side piece). See Figure 4.
9. Lift the bezel and monitor assembly from the game.

### **Monitor Installation**

1. Place the new bezel and monitor assembly in the game.
2. Tighten the nuts securing the LCD clips on each side piece. See Figure 4.
3. Replace the top cover and the 3 screws at the top of each side piece. See Figure 4.
4. Connect the touchscreen cable in the back of the touchscreen connector and the touchscreen power connector to the main power harness. Then replace the connector on the mounting screws in the game and secure it with the two nuts.
5. Replace both side panels (see Figure 3).
6. Replace the monitor signal cable in the cable clamps and reconnect it to the motherboard.
7. Connect the power connector on the new monitor to the connector running to the power supply.
8. Close and lock the rear door.
9. Plug in and turn on the game.
10. Calibrate the touchscreen.

### **Touchscreen Removal**

1. Turn off and unplug the game.
2. Unlock and open the rear door.
3. Disconnect the monitor power connection (black and yellow wires) running to the power supply.
4. Disconnect the monitor signal cable from the motherboard and remove it from the cable clamps.
5. Inside the game, access the latches for each side panel and remove both panels (see Figure 3).
6. Remove the two nuts and washers securing the touchscreen controller to the game and remove the controller from the mounting screws. Then disconnect the cable from the back of the controller and disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness.
7. Remove the 3 screws at the top of each side piece fastening the top cover to the game (see Figure 4) and remove the top cover.
8. Loosen the 5/16" nuts securing the 2 LCD clips (one on each side piece). See Figure 4.
9. Lift the bezel and monitor assembly from the game.

### **Troubleshooting Information - Removal/Installation of Major Assemblies - FORCE Elite Countertop**

Megatouch FORCE Technical Reference Manual

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Elite Countertop (cont'd)**

10. Remove the 3 screws on top of the front bezel (see Figure 4) and separate the bezel from the monitor.
11. Use dental floss to carefully cut the foam tape holding the touchscreen to the monitor until you are able to completely remove the touchscreen.
12. Remove any remaining adhesive residue with denatured alcohol, then clean the monitor glass with the supplied alcohol wipe.

#### **Touchscreen Installation**

1. Clean the reverse side of the replacement touchscreen with the supplied alcohol wipe.
2. Cut pieces of the supplied 1/2" double-sided foam tape long enough to cover each edge of the screen without overlapping. After the tape is in place on the screen, peel off the backing.
3. Replace the new touchscreen over the monitor (with the cable on the left if you are facing the game), making sure the screen is properly and evenly aligned over the monitor glass. Then clean the front of the screen with the supplied alcohol wipe.
4. Reattach the front bezel to the monitor with the 3 screws removed earlier. See Figure 4.
5. Replace the monitor assembly, aligning it with the support brackets inside the game and making sure the LCD clips fit properly into the slots at the top of each side.
6. Tighten the nuts securing the 2 LCD clips. See Figure 4.
7. Replace the top cover.
8. Replace the 3 screws at the top of each side piece. The shorter screw will go in the screw hole closest to the rear of the game. See Figure 4.
9. Connect the new touchscreen controller cable in the back of the controller and secure the controller on the mounting screws in the game with the existing hardware. Also connect the Molex connector (orange and gray wires) to the main power harness.
10. Replace both side panels.
11. Reconnect the monitor power connector to the power supply.
12. Route the monitor signal connector through the cable clamps and reconnect it to the motherboard.
13. Plug in and turn on the game.
14. When the game is finished booting, calibrate the touchscreen.
15. Close and lock the rear door.



FIGURE 1 – MOTHERBOARD REMOVAL –  
LOCATION OF SCREWS SECURING MOTHERBOARD TO MOUNTING FRAME

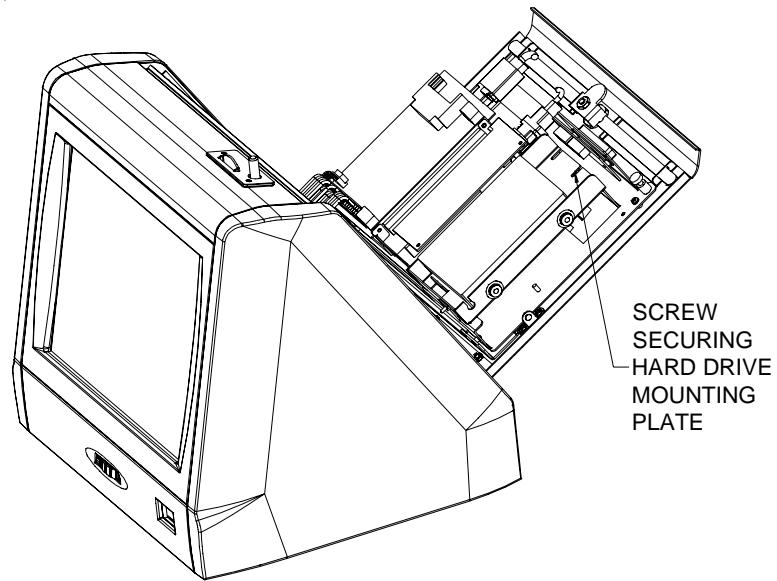


FIGURE 2 - HARD DRIVE ACCESS

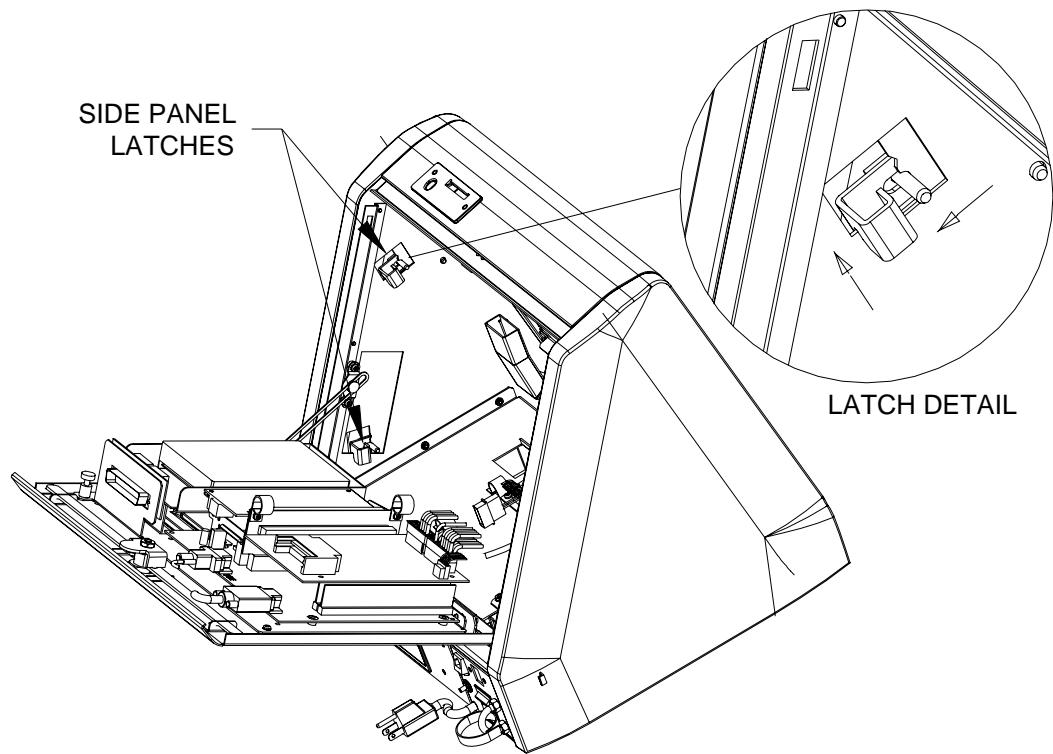


FIGURE 3 - SIDE PANEL LATCH ACCESS

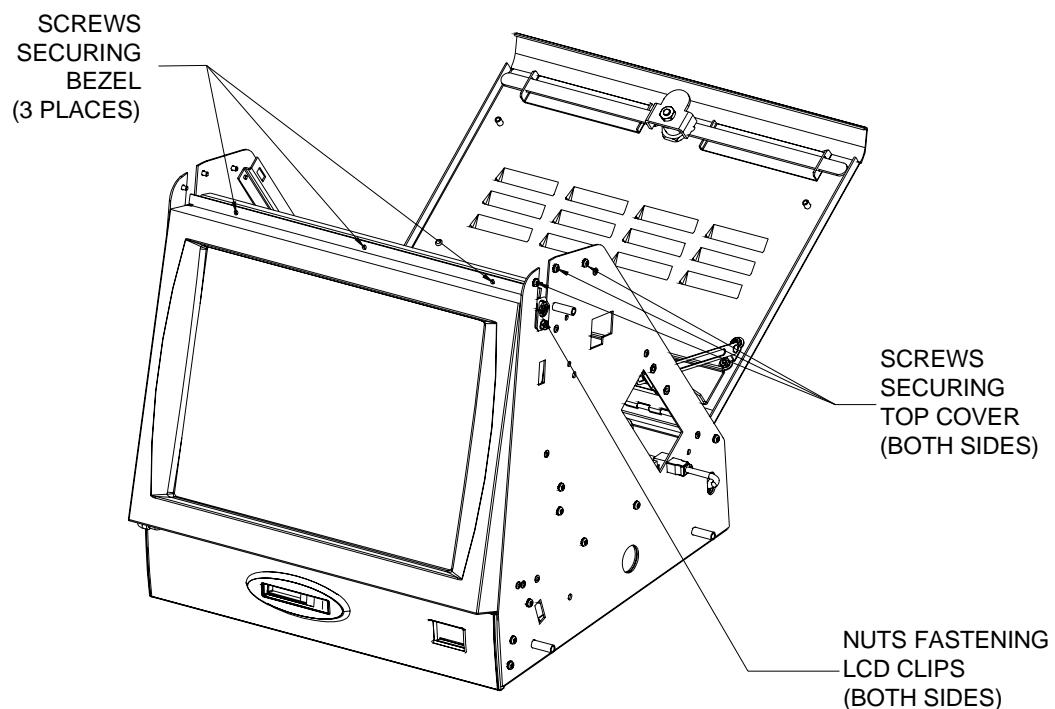


FIGURE 4 - TOP COVER/LCD CLIP ACCESS

**Troubleshooting Information - Removal/Installation of Major Assemblies -  
FORCE Elite Countertop**  
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## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Radion Countertop/Fun Zone JR.**

#### **Motherboard Removal**

1. Turn off and unplug the game.
2. Unlock and open/remove the rear door and the side doors.
3. Disconnect all connections to the motherboard, as well as the touchscreen and centronics power connectors from the power supply harness.
4. Remove the 4 screws mounting the motherboard to the mounting frame (see Figure 1) and carefully remove the board. Insert the board into an anti-static bag for storage. NOTE: Be sure to read the Motherboard Handling Precautions before handling the board.

#### **Motherboard Installation**

1. Place the new motherboard on the mounting frame, lining up the screw holes on the board with the holes in the game, then replace the 4 screws.
2. Reconnect all connections to the motherboard, as well as the touchscreen and centronics power connectors from the power supply harness.
3. Close/replace and lock the rear door and the side doors.
4. Plug in and turn on the game.

#### **Hard Drive Removal**

1. Turn off and unplug the game.
2. Unlock and open/remove the side doors and the rear door.
3. Locate the hard drive and remove the 2 screws securing the hard drive mounting bracket to the game (see Figure 2), then remove the hard drive assembly until you're able to disconnect the hard drive power connector and the motherboard ribbon cable.
4. Remove the 4 screws and shoulder washers fastening the hard drive to the mounting plate.

#### **Hard Drive Installation**

1. Fasten the new hard drive to the mounting plate with the 4 screws and shoulder washers.
2. Connect the power connector and the hard drive ribbon cable to the hard drive, then replace the hard drive assembly in the game and fasten it with the 2 screws.
3. Close/replace and lock the rear door and the side doors.
4. Plug in and turn on the game.

#### **Monitor Removal**

1. Turn off and unplug the game.
2. Unlock and open/remove the side doors and the rear door.
3. Remove the screw securing the strain relief cord to the rear door, then remove the monitor control board from the velcro on the rear door.
4. Remove the screws holding the rear bezel to the game and remove the bezel. Five screws fasten the top edge of the bezel and 2 on each side fasten the bottom. See Figure 3.

**ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

**Removal/Installation of Major Assemblies -  
FORCE Radion Countertop/Fun Zone JR. (cont'd)**

5. Remove the 4 screws holding the front bezel to the game and remove the bezel. Two screws fasten the top of the bezel and 1 screw on each side fastens the bottom. See Figures 3 and 4.
6. Disconnect all connections to the motherboard, as well as the touchscreen and centronics power connectors from the power supply harness.
7. Unscrew the 2 thumbscrews securing the motherboard mounting tray to the game and remove the motherboard and mounting tray. NOTE: Be sure to read the Motherboard Handling Precautions before handling the board.
8. Locate the hard drive and remove the 2 screws securing the hard drive mounting bracket to the game (see Figure 2), then remove the hard drive assembly until you're able to disconnect the hard drive power connector.
9. Unscrew the thumbscrew securing the fan assembly, disconnect the 2-pin fan power connector, and remove the fan assembly from the game. See Figure 2.
10. Unscrew the 2 thumbscrews securing the touchscreen controller mounting plate and remove the touchscreen controller assembly. After removing the two thumbnuts securing the touchscreen controller to the mounting plate, disconnect the cable from the back of the controller and disconnect the Molex connector connecting the orange and gray wires (from the touchscreen controller cable) to the main power harness.
11. Remove the 2 cable clamps fastening the power harnesses to the game.
12. Disconnect the power supply line cord, then unscrew the thumbnut securing the power supply to the game. After disconnecting the second fan power connector and the power supply connector from the I/O board, remove the power supply from the game. NOTE: Be sure to note the orientation of the wiring when disconnecting the fan power connector.
13. Pull out the coin rejector (see Figure 5) and remove the single fan assembly (attached to the game chassis with 1 thumbnut).
14. Remove the coin rejector chute (secured with 4 nuts and washers) and the coin chute (secured with 2 nuts). See Figure 5. NOTE: You may need to move the speaker assembly aside to access the nuts securing the coin chute.
15. Remove the 2 screws fastening the optical coin sensor (see Figure 5) to the game.
16. Remove the 2 nuts fastening the monitor assembly to the metalwork inside the game. You will also need to remove the cable clamp secured by one of the nuts.
17. Remove the nut and screw securing the strain relief cord to the inside of the game.
18. Remove the 2 screws fastening the coin harness connector (see Figure 5) to the monitor assembly.
19. Disconnect the line cord from the monitor assembly, then disconnect the ground wire and monitor signal cable from the mounting standoff on the game chassis.
20. Remove the 3 screws fastening each side of the monitor assembly to the game chassis (one screw will also be securing a cable clamp and another will be securing the angled bracket on the edge of the monitor chassis board). Then carefully remove the monitor assembly from the game.

**ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

**Removal/Installation of Major Assemblies -  
FORCE Radion Countertop/Fun Zone JR. (cont'd)**

**Monitor Installation**

1. Replace the monitor assembly in the game and fasten it to the chassis with the 3 screws (also fasten the cable clamp and angled bracket with the appropriate screw).
2. Replace the ground wire and monitor signal cable on the mounting standoff on the game chassis, then connect the line cord to the monitor assembly.
3. Fasten the coin harness connector to the monitor assembly with the 2 screws (see Figure 5).
4. Fasten the strain relief cord to the inside of the game with the nut and screw.
5. Fasten the monitor assembly to the metalwork inside the game with the 2 nuts. One of the nuts will also secure the cable clamp.
6. Fasten the optical coin sensor (see Figure 5) to the game with the 2 screws.
7. Replace the coin rejector chute and secure it with the 4 nuts and washers, then secure the coin chute with the 2 nuts. See Figure 5. Also replace the speaker assembly if you moved it in order to access the nuts securing the coin chute.
8. Replace the single fan assembly and fasten it to the game chassis with the thumbnut, then replace the coin rejector (see Figure 5).
9. Replace the power supply in the game and secure it with the thumbnut, then reconnect the power supply line cord. Also reconnect the power supply connector and fan power connector to the I/O board.
10. Replace the 2 cable clamps and refasten the power harness to the game.
11. Connect the touchscreen cable in the back of the touchscreen controller and also reconnect the touchscreen power connector to the main power harness. After securing the controller on the mounting plate with the 2 thumbnuts, replace the touchscreen controller assembly in the game and fasten the mounting plate with the 2 thumbscrews.
12. Replace the fan assembly in the game and reconnect the fan power connector, then tighten the thumbscrew securing the fan assembly. See Figure 2.
13. Reconnect the hard drive power connector to the hard drive, then replace the hard drive in the game and secure it with the 2 screws (see Figure 2).
14. Replace the motherboard and mounting tray in the game and secure the tray with the 2 thumbscrews.
15. Reconnect the touchscreen and centronics power connectors to the power supply harness, then reconnect all connections to the motherboard.
16. Replace the front bezel and fasten it to the game with the 4 screws. Two screws will fasten the top of the bezel and 1 screw on each side will fasten the bottom. See Figures 3 and 4.
17. Replace the rear bezel and fasten it to the game with the 7 screws. Five screws will fasten the top edge of the bezel and 2 on each side will fasten the bottom. See Figure 3.
18. Replace the monitor control board on the velcro on the rear door, then replace the screw securing the strain relief cord to the rear door.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Radion Countertop/Fun Zone JR. (cont'd)**

19. Close/replace and lock the rear door and the side doors.
20. Plug in and turn on the game.
21. Calibrate the touchscreen.

#### **Touchscreen Removal**

1. Turn off and unplug the game.
2. Unlock and open/remove the rear door and the side doors.
3. Remove the cash box.
4. Remove the screw securing the strain relief cord to the rear door, then remove the monitor board from the velcro on the rear door.
5. Remove the screws holding the rear bezel to the game. Five screws are located along the top edge of the game and 2 are at the bottom rear of each side of the game. See Figure 3.
6. Lift the rear bezel from the game.
7. Remove the 4 screws holding the front bezel to the game. Two screws are located at the bottom on each side of the game (see Figure 3) and 2 are on the top surface (see Figure 4).
8. Lift the front bezel from the game.
9. Remove the two nuts and washers securing the touchscreen controller (see Figure 6) to the game and remove the controller from the mounting screws. Then disconnect the cable from the back of the controller and disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness.
10. Remove the black poly tape from around the edges of the old touchscreen. Remember how the tape was placed in order to tape the new touchscreen.
11. Use dental floss to carefully cut the foam tape holding the touchscreen to the picture tube until you are able to completely remove the touchscreen.
12. Remove any remaining adhesive residue with denatured alcohol, then wipe the surface of the picture tube with the supplied alcohol wipe.

#### **Touchscreen Installation**

1. Clean the reverse side of the replacement touchscreen with the supplied alcohol wipe.
2. Peel the backing from the 8 pieces of foam tape already adhered to the reverse side of the touchscreen. Then cut 8 pieces of equal size from the supplied roll of 3/8" double-sided foam tape (the thinner of the two supplied 3/8" rolls) and place them (backing side facing out) on the tape already on the touchscreen before peeling off the backing. The double-thickness of the foam tape will allow enough distance between the touchscreen and the picture tube once the new screen is in place.

**ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

**Removal/Installation of Major Assemblies -  
FORCE Radion Countertop/Fun Zone JR. (cont'd)**

3. Replace the new touchscreen over the picture tube (with the cable on the left if you are facing the game), making sure the screen is properly and evenly aligned over the picture tube. Then clean the front of the screen with the supplied alcohol wipe.
4. Connect the new touchscreen controller cable in the back of the controller and secure the controller on the mounting screws in the game with the existing hardware (see Figure 6). Also connect the Molex connector (orange and gray wires) to the main power harness.
5. Remembering the manner in which the tape was placed around the touchscreen you removed, place and cut a length of the supplied black poly tape evenly over an entire edge of the touchscreen and repeat until all 4 edges are covered.
6. Place and cut a longer length of black poly tape around all 4 edges of the screen. NOTE: Use the additional 3/8" foam tape (the thicker of the two supplied 3/8" rolls) if you need to replace the gasket on the inside of the front bezel. Be sure to remove all of the existing foam tape and adhesive first.
7. Replace the front bezel and the 4 screws (2 at the bottom, 2 at the top) holding the bezel to the game. See Figures 3 and 4.
8. Replace the rear bezel and the 7 screws (5 along the top edge, 2 at the bottom rear) holding the bezel to the game. See Figure 3.
9. Replace the screw securing the strain relief cord to the rear door, then replace the monitor board.
10. Replace the cash box.
11. Plug in and turn on the game.
12. When the game is finished booting, calibrate the touchscreen.
13. Close/replace and lock the rear door and the side doors.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Radion Countertop/Fun Zone JR. (cont'd)**

#### **Power Supply Removal**

1. Turn off and unplug the game.
2. Unlock and open the rear door.
3. Remove the screw securing the strain relief cord to the rear door, if necessary.
4. If applicable, loosen the captive screw securing the modem assembly to the game (see Figure 7), and remove the modem assembly from the game.
5. Loosen the captive screw securing the power supply assembly to the game (see Figure 8). (If necessary, free the cables from the cable clamp on the motherboard; these cables may be blocking the power supply. See Figure 7.) Unplug the power cord from the power supply and remove the power supply from the game as much as possible. Disconnect the 10-pin connector harness from the back of the power supply and remove the assembly from the game completely. See Figure 8.
6. Remove the 4 screws securing the power supply to the power supply mounting bracket (3 are located near the power inlet and 1 is near the 10-pin harness. See Figure 9. Separate the power supply from its mounting bracket, and set this power supply aside.

#### **Power Supply Installation**

1. Place the new power supply in the power supply mounting bracket in the same manner as the old power supply. Secure the supply to the mounting bracket with the same 4 screws. See Figure 9.
2. Connect the 10-pin connector harness from the new power supply to its mating connector. See Figure 8. Insert the power supply assembly in the game, making sure that the tabs on the bottom of the bracket fit securely into their mating slots (you may have to press on the bracket until it snaps into place). Secure the power supply assembly to the game by tightening the captive screw. Plug the power cord into the power inlet on the new power supply. See Figure 8.
3. Replace the cables in the clamp on the motherboard (if applicable). See Figure 7. If applicable, replace the modem assembly in the game, making sure that the 2 tabs on the bracket fit securely in their mating slots. Secure by tightening the captive screw. See Figure 7.
4. Replace the screw securing the strain relief cord to the rear door, if applicable.
5. Close and lock the rear door.
6. Plug in and turn on the game.



FIGURE 1 – MOTHERBOARD REMOVAL –  
LOCATION OF SCREWS SECURING MOTHERBOARD TO MOUNTING FRAME

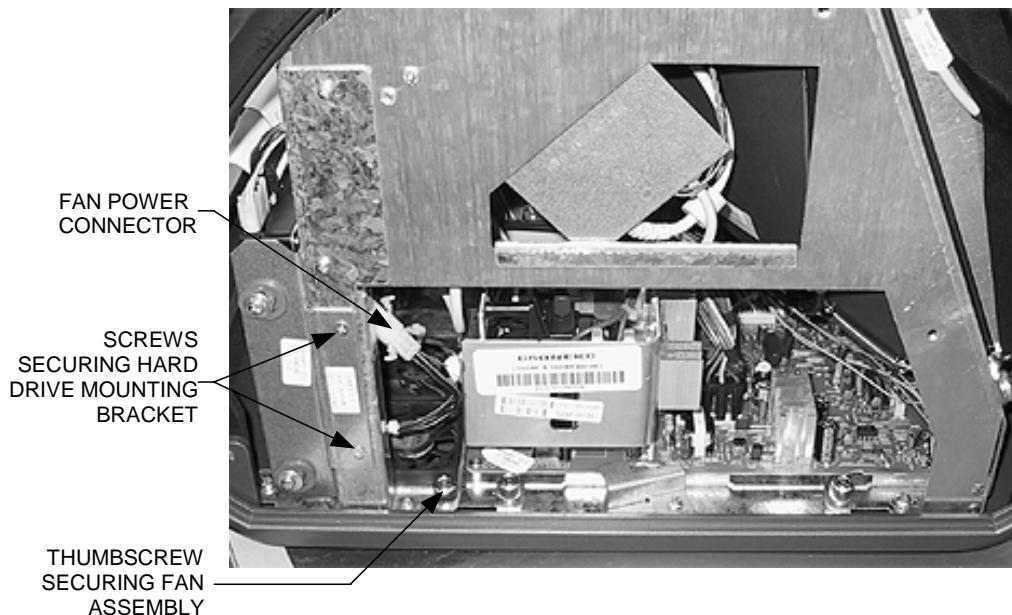


FIGURE 2 - HARD DRIVE/MONITOR REMOVAL

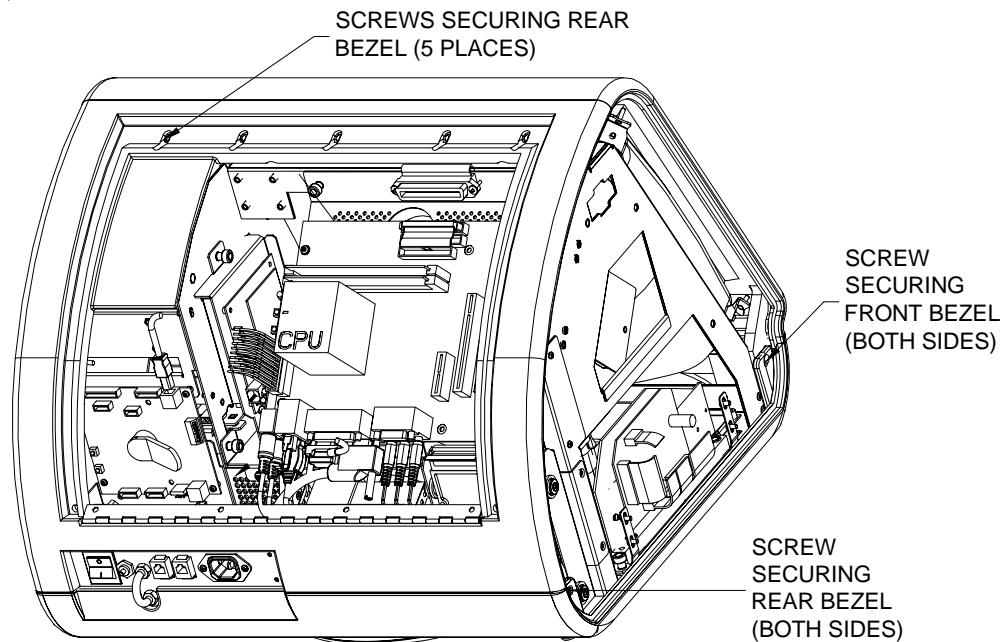


FIGURE 3 - MONITOR REMOVAL



FIGURE 4 - MONITOR REMOVAL -  
SCREWS SECURING FRONT BEZEL

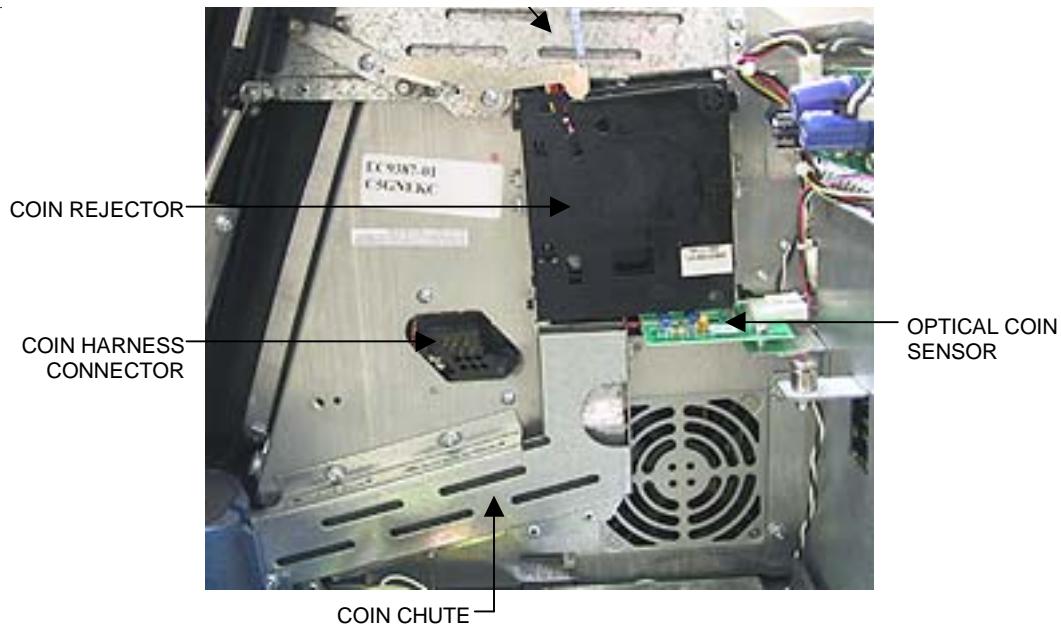


FIGURE 5 - MONITOR REMOVAL

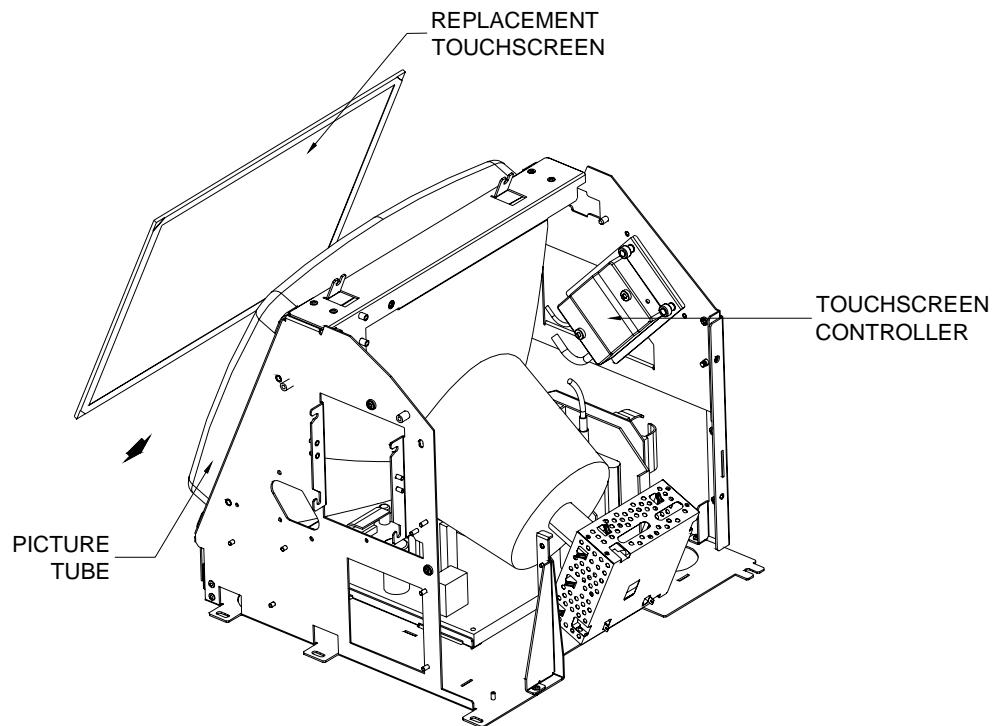


FIGURE 6 - FORCE RADION - MONITOR ASSEMBLY



FIGURE 7 - MODEM IN GAME

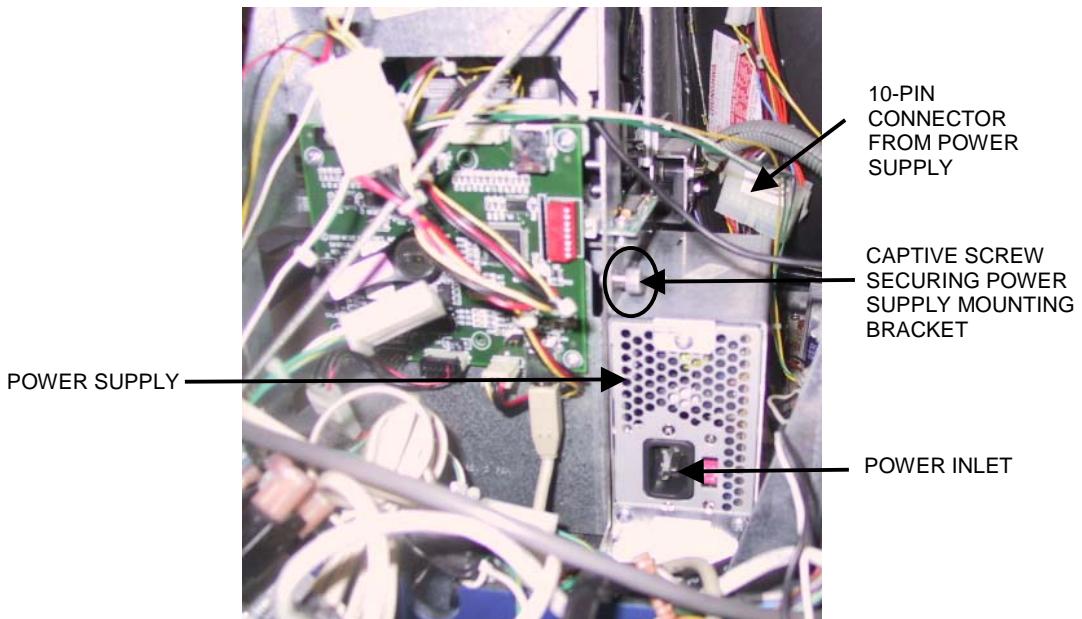


FIGURE 8 - POWER SUPPLY IN GAME

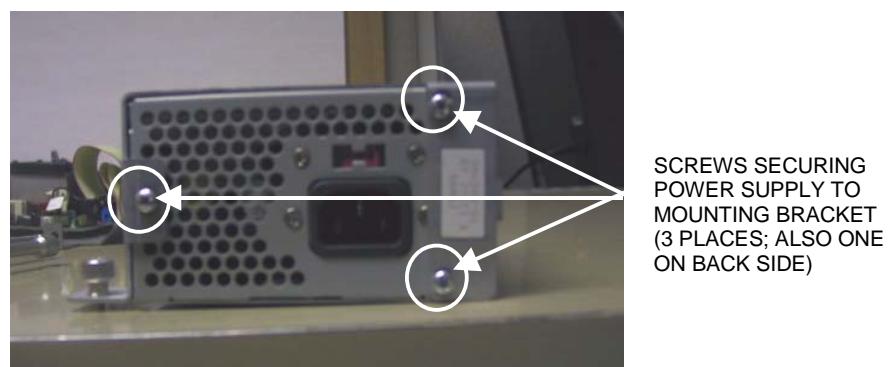


FIGURE 9 - POWER SUPPLY AND MOUNTING BRACKET

**Troubleshooting Information - Installation of Major Assemblies -**  
**FORCE Radion Countertop/Fun Zone JR.**  
Megatouch FORCE Technical Reference Manual

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE EVO (all models)/EVO Wallette/Elite Edge**

#### **Motherboard Removal**

1. Turn off and unplug the game.
2. Unlock and open the CPU section.
3. Remove the 2 screws securing the motherboard assembly to the game (see Figure 1).
4. Carefully pull the motherboard assembly away from the 2 brackets holding it in place on the opposite side of the screws you removed (see Figure 2). NOTE: It may be necessary to disconnect some of the connections to the board in order to pull the motherboard away from the brackets.
5. Disconnect all connections to the motherboard, as well as the touchscreen and centronics power connectors from the power supply harness. Then carefully remove the motherboard assembly and insert the board into an anti-static bag for storage. NOTE: Be sure to read the Motherboard Handling Precautions before handling the board.

#### **Motherboard Installation**

1. Reconnect the touchscreen and centronics power connectors to the power supply harness and reconnect all connections to the motherboard.
2. Place the motherboard assembly behind the two brackets, line up the screw holes, and replace the 2 mounting screws.
3. Close and lock the CPU section.
4. Plug in and turn on the game.

#### **Hard Drive Removal**

1. Turn off and unplug the game.
2. Unlock and open the CPU section.
3. Remove the 3 screws securing the hard drive mounting bracket to the game, then remove the hard drive assembly until you're able to disconnect the hard drive power connector and the hard drive ribbon cable running to the motherboard. See Figure 3.
4. Remove the 4 screws and shoulder washers fastening the hard drive to the mounting plate. See Figure 3.

#### **Hard Drive Installation**

1. Fasten the new hard drive to the mounting plate with the 4 screws and shoulder washers. See Figure 3.
2. Connect the power connector and the ribbon cable to the hard drive, then fasten the hard drive assembly in the game with the 3 screws. See Figure 3.
3. Close and lock the CPU section.
4. Plug in and turn on the game.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE EVO (all models)/EVO Wallette/Elite Edge (cont'd)**

#### **Monitor Removal**

1. Turn off and unplug the game.
2. Place something in front of the game to brace the bezel once the strain relief cord is undone, then unlock and open the CPU section.
3. Remove the screw and washer fastening the strain relief cord, then remove the remaining 5 screws fastening the LCD mounting bracket to the game and remove the bracket. Refer to Figure 4 for monitors with interior circuit boards and Figure 5 for monitors with exterior circuit boards. The bracket will not be reused.
4. Carefully cut the tie wrap around the VGA monitor cable, the OSD cable, and the setup/calibrate harness. See Figures 4 and 5.
5. Remove the ground screw attached to the VGA monitor cable, then disconnect the cable from the monitor and remove it from the cable clamp. Also disconnect the other end of the cable from the motherboard. See Figure 6 for monitors with interior circuit boards and Figures 7 and 8 for monitors with exterior circuit boards. NOTE: Monitors with exterior circuit boards will have the ground screw attached in one of two places. Be sure to refer to Figures 7 and 8.
6. Remove the OSD cable from the twist clamp and disconnect it from the OSD board. Then remove the OSD board from the velcro attached to the hinge and set it aside. See Figures 4 and 5.
7. Disconnect the LCD power connector. See Figures 6 and 7.
8. Remove the touchscreen controller ground screw under the hard drive (see Figures 6 and 7), then remove the touchscreen cable from the corrugated loom alongside the bezel.
9. Disconnect the touchscreen power connector (see Figures 6 and 7), then remove both the touchscreen controller cable and the touchscreen power cable from the clamp in the game.
10. Remove the 2 screws fastening the touchscreen controller to the mounting plate over the hard drive, then disconnect the cable from the back of the controller.
11. Loosen the 3 screws on the monitor side of the hinges in order to carefully raise the hinges and allow room to remove the monitor. See Figures 6 and 7.
12. Slide the monitor out of the bezel.
13. If you will not be reusing the existing touchscreen, continue with installing the new monitor. If you will be reusing the touchscreen, note the orientation of the screen (i.e., the positioning of the ribbon cable and which side is the front) before removing it from the monitor. Then use dental floss to carefully cut the foam tape holding the screen to the monitor. Once the touchscreen is completely free from the monitor, remove any residual foam tape from the screen with denatured alcohol and clean the glass with the supplied alcohol wipe.

#### **Monitor Installation**

1. If you will not be using the touchscreen from your original monitor, skip to step 3. If you will be using the original touchscreen, clean the glass on the new LCD monitor with the supplied alcohol wipe, then cut pieces of the supplied 1/2" foam tape long enough to cover each edge of the monitor without overlapping. After the tape is in place on the monitor, peel off the backing.

#### **Troubleshooting Information - Removal/Installation of Major Assemblies -**

**FORCE EVO (all models)/EVO Wallette/Elite Edge**

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## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE EVO (all models)/EVO Wallette/Elite Edge (cont'd)**

2. Carefully place the touchscreen over the monitor in the same manner it was attached to the old monitor, making sure the screen is properly and evenly aligned over the glass. Clean the front of the touchscreen with the supplied alcohol wipe once it is in place.

3. **Monitors with interior circuit boards:** Carefully slide the new monitor into the bezel with the white edge of the monitor closest to the hinges in the game. Make sure the monitor is properly centered, then tighten the hinge screws.

**Monitors with exterior circuit boards:** Carefully slide the new monitor into the bezel with the A to D board on the left and the inverter board on the right (if you are facing the game--see Figure 5). Make sure the monitor is properly centered, then tighten the hinge screws.

4. Install the supplied LCD mounting bracket and fasten it to the game with the 6 screws. One screw (and washer) will fasten the strain relief cord. See Figures 4 and 5.

5. Connect the touchscreen cable in the back of the controller, then mount the controller on the plate above the hard drive with the 2 screws.

6. Replace the touchscreen controller cable and the touchscreen power cable in the cable clamp, then connect the touchscreen power connector. See Figures 6 and 7.

7. Replace the touchscreen controller cable in the corrugated loom alongside the bezel, then replace the touchscreen controller ground screw under the hard drive. See Figures 6 and 7.

8. Connect the LCD power connector. See Figures 6 and 7.

9. Reattach the OSD board to the velcro on the hinge, then connect the new OSD cable to both the OSD board and the monitor. Secure the cable in the twist clamp. See Figures 4 and 5.

10. Connect the new VGA cable to both the monitor and the motherboard, then secure the cable in the clamp under the bottom left corner of the motherboard. Also replace the ground screw. See Figures 6-8. NOTE: Monitors with exterior circuit boards will have the ground screw attached in one of two places. Be sure to refer to Figures 7 and 8.

11. Tie wrap the VGA monitor cable, the OSD cable, and the setup/calibrate harness. See Figures 4 and 5.

12. Close and lock the CPU section.

13. Plug in and turn on the game.

### **Touchscreen Removal**

1. Turn off and unplug the game.
2. Unlock and open the CPU section and place something under the front bezel to brace it when the strain relief cord is disconnected.
3. Remove the two screws securing the touchscreen controller to the game, then disconnect the cable from the back of the controller. Also disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness.
4. Remove the 6 screws fastening the LCD mounting bracket to the game (one screw also fastens the strain relief cord) and remove the bracket. See Figures 4 and 5.
5. Disconnect all connections to the LCD monitor until you're able to slide the monitor out of the game.

### **Troubleshooting Information - Removal/Installation of Major Assemblies -**

**FORCE EVO (all models)/EVO Wallette/Elite Edge**

Megatouch FORCE Technical Reference Manual

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE EVO (all models)/EVO Wallette/Elite Edge (cont'd)**

6. Note the orientation of the touchscreen cable before removing the screen. Then use dental floss to carefully cut the foam tape holding the touchscreen to the monitor until you are able to completely remove the screen.
7. Remove any remaining adhesive residue with denatured alcohol, then clean the monitor glass with the supplied alcohol wipe.

#### **Touchscreen Installation**

1. Clean the reverse side of the replacement touchscreen with the supplied alcohol wipe.
2. Cut pieces of the supplied 1/2" double-sided foam tape long enough to cover each edge of the screen without overlapping. After the tape is in place on the screen, peel off the backing.
3. Replace the new touchscreen over the monitor in the same manner as the old screen, making sure the screen is properly and evenly aligned over the monitor glass. Then clean the front of the screen with the supplied alcohol wipe.
4. Slide the LCD monitor assembly back into the game and reconnect all cables to the monitor.
5. Replace the LCD mounting bracket in the game and fasten it with the 6 screws removed earlier. Also refasten the strain relief cord.
6. Connect the new touchscreen controller cable in the back of the controller and secure the controller in the game with the existing hardware. Also connect the Molex connector (orange and gray wires) to the main power harness.
7. Close and lock the CPU section.
8. Plug in and turn on the game.
9. When the game is finished booting, calibrate the touchscreen.

#### **Power Supply Removal**

1. Turn off and unplug the game.

**If your game is NOT an eVo skip to Step 5.**

2. Unlock and open the cash tower section.
3. Disconnect the LED power connector behind the CPU section (see Figure 9) and carefully route the wires back through the access hole below the motherboard (see Figure 1).
4. Close and lock the cash tower section.
5. Unlock and open the CPU section.
6. Unplug the IEC connector from the power supply (see Figure 1).
7. Disconnect the power connector from the hard drive (see Figure 3) and remove the wires from the cable clamp.
8. Disconnect the touchscreen/fan power connector, then remove the harness from the cable clamp and disconnect the power connector to the other fan.
9. Remove the 2 screws on the right side of the motherboard (see Figure 1) and carefully pull the motherboard forward after sliding it out of the clips on the left side of the board.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE EVO (all models)/EVO Wallette/Elite Edge (cont'd)**

10. Disconnect the centronics power connector (black, yellow, and red wires--see Figure 10).
11. Disconnect the I/O board power connector (black, yellow, blue, and black wires--see Figure 11) located at J6 on the I/O board.
12. Disconnect the power supply connector from the motherboard (see Figure 12).
13. Remove the standoff securing the twist clamp in the upper right corner of the game, then undo and remove the clamp (see Figure 13).
14. Remove the wires (black and yellow) running to the LCD monitor power connector from the cable clamp, then disconnect the connector (see Figure 10).
15. Remove the 2 screws fastening the power supply and mounting bracket to the game (see Figure 13).
16. Remove the power supply.

### **Power Supply Installation**

1. Install the new power supply and bracket in the game and fasten them with the 2 screws that were used to fasten the old power supply and bracket (see Figure 13).
2. **EVO ONLY:** Locate the LED power connector on the new power supply harness and route the wires down toward the access hole (see step 3 above).
3. Replace the twist clamp around the larger set of wires that will run to the motherboard and I/O board, then reinstall the standoff (see Figure 13).
4. Reconnect the centronics power and LCD monitor connectors (see Figure 10), then replace the wires running to the monitor in the cable clamp.
5. Reconnect the I/O board and power supply connectors on the I/O board and motherboard respectively (see Figures 11 and 12).
6. Replace the motherboard by sliding it into the clamps on the left side of the game and lining up the two screw holes on the right side of the board with the two standoffs in the game. Then replace the 2 screws that fasten the board to the game (see Figure 1). Make sure no wires are pinched after the motherboard is in place.
7. Reconnect power to the upper fan (next to the power supply).
8. Reconnect the IEC connector to the power supply (see Figure 1).
9. Reconnect the power connectors to the lower fan and the touchscreen.
10. Reconnect the hard drive power connector (see Figure 3) and replace the wires in the clamp on the top left side of the game, then fasten the clamp.
11. **EVO ONLY:** Route the LED power connector through the access hole below the motherboard (see Figure 1).
12. Close and lock the CPU section. Make sure no wires interfere when the bezel is closed.
13. **EVO ONLY:** Unlock and open the cash tower section.
14. **EVO ONLY:** Reconnect the LED power connector in the appropriate location behind the CPU section (see Figure 9).

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE EVO (all models)/EVO Wallette/Elite Edge (cont'd)**

15. **EVO ONLY:** Close and lock the cash tower.

#### **Bill Acceptor Removal**

**NOTE: Do not follow these instructions for Elite Edge. Please see the Elite Edge Instruction section.**

1. Turn off and unplug the game.
2. Unlock and open the CPU section, then place something in front of the front bezel to keep the touchscreen from being scratched when the cash tower section is opened.
3. In the CPU section, locate and disconnect the coin mech harness (blue and gray ribbon cable) found near the lower edge of the motherboard (see Figure 14) and remove it from the cable clamps. Also disconnect the counter harness on the left edge of the motherboard, opposite the touchscreen controller (see Figure 14). Then pull both connectors back through the access hole below the board (see Figure 1) and out of the game.
4. Close and lock the CPU section.
5. Unlock and open the cash access section.
6. Pull out the bill acceptor magazine.
7. **EVO only:** Disconnect the bill acceptor power connectors, as well as the fan and LED board connectors (see Figure 15).

**EVO Wallette only:** Remove the 2 screws fastening the bill acceptor mounting clip to the game and gently pull up on the bill acceptor so that you can access the two connectors on the right side. Disconnect the 2 connectors and remove the bill acceptor and mounting clip from the game. Then remove the other two screws fastening the clip to the bill acceptor. See Figure 16. Skip to "Bill Acceptor Installation".

8. Remove the 6 screws fastening the bill acceptor mounting plate to the CPU section (see Figure 15). One screw also fastens the strain relief cord. Once the screws are removed, pull the harnesses attached to the CPU section through the access hole in the bill acceptor mounting plate so the CPU section can be pulled free of the bill acceptor. Disconnect the IEC power connector from the CPU section, then place the CPU section down with the touchscreen side facing up.
9. Remove the 4 screws on the reverse side of the mounting plate fastening the bill acceptor bezel to the plate (see Figure 17). One screw also fastens the cable clamp.
10. Remove the 4 screws fastening the bill acceptor to the mounting plate (see Figure 17) and remove the bill acceptor.

#### **Bill Acceptor Installation**

1. Remove the magazine from the new bill acceptor. If you are replacing the bill acceptor on an EVO Wallette, skip to step 5.
2. Using Figure 18, insert the bill acceptor into the mounting plate, then fasten the bill acceptor to the plate with the 4 screws.
3. Reattach the bill acceptor bezel to the mounting plate by replacing the 4 screws on the reverse side of the plate (see Figure 17). Also replace the cable clamp.

#### **Troubleshooting Information - Removal/Installation of Major Assemblies -**

**FORCE EVO (all models)/EVO Wallette/Elite Edge**

Megatouch FORCE Technical Reference Manual

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE EVO (all models)/EVO Wallette/Elite Edge (cont'd)**

4. Reconnect the IEC power connector on the CPU section, then route the harnesses from the CPU section back through the access hole in the bill acceptor mounting plate. Use the 6 screws to reattach the plate to the CPU section (see Figure 15) and fasten the strain relief cord.
5. Reconnect the bill acceptor power connectors, as well as the fan and LED board connectors (see Figure 15).  
**EVO Wallette only:** Fasten the bill acceptor mounting clip to the new bill acceptor. Then connect the bill acceptor power connectors and fasten the bill acceptor mounting clip to the game. See Figure 16.
6. Replace the bill acceptor magazine.
7. Unlock and open the CPU section.
8. Feed the coin mech and counter harnesses back through the access holes in the bill acceptor mounting plate and motherboard (see Figure 1).
9. Reconnect the counter harness in the connector below the lower clip securing the motherboard, then reconnect coin mech harness after replacing it in the cable clamps. See Figure 14.
10. Close and lock the CPU section.
11. Close and lock the cash tower section.  
**EVO Wallette only:** Close and lock the cash door.
12. Plug in and turn on the game.

**ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

**Removal/Installation of Major Assemblies -  
FORCE EVO (all models)/EVO Wallette/Elite Edge (cont'd)**

**Bill Acceptor Removal - Elite Edge only**

1. Turn off and unplug the game.
2. Unlock and open the cash door.
3. Disconnect the ground wire and remove the cash door.
4. Remove any money from the coin box, then remove the coin box and magazine stacker from the game. See Figure 19.
5. Rest the game facedown to access the base. Protect and stabilize the front casing and monitor by prepping the area with cardboard, foam, etc.
6. Remove the circular anti-skid pad on the bottom of the game. Keep the anti-skid pad for use in installation. See Figure 20.
7. Remove the (2) screws located at the bottom of the anti-skid circle. See Figure 20.
8. Remove the (12) screws outside the circle that are securing the bottom cover. See Figure 20.  
NOTE: When removing the last few screws, be sure to hold the cover in place. If the cover is not properly secured, it may cause injury to the operator and/or damage the cover.
9. Separate the convertor from the Velcro strip on the game base, then completely remove the base.
10. Remove all harnesses from the bill acceptor.
11. Remove the (4) nuts and spacers securing the bill acceptor to the mounting plate.
13. Remove the power wire clip from the PEM stud.
14. Separate the bill acceptor from the mounting plate.
12. Remove the (4) screws connecting the mounting plate to the game housing. Lift the mounting plate out of the game. See Figure 21.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE EVO (all models)/EVO Wallette/Elite Edge (cont'd)**

#### **Bill Acceptor Installation - Elite Edge only**

1. Remove the magazine stacker from the new bill acceptor.
2. Reattach the (4) screws connecting the mounting plate to the housing of the game. See Figure 21.
3. Insert the bill acceptor into the mounting plate. Put power wire clip back on PEM stud, then fasten the bill acceptor to the plate with the existing (4) nuts and spacers.
4. Reconnect all harnesses. Plug the harness with (3) wires into the back socket. Plug the harness with (2) wires into the front socket. NOTE: The front is the socket closest to the monitor of the game. The harnesses MUST be installed in the proper slots. Failure to do so will result in game malfunction.
5. Slide the base cover into place for re-installation. When doing so, make sure the lights on the left and right side of the game are securely in place. Also tuck in the wires on the bottom of the bill acceptor. See Figure 21.
6. Reattach the converter to the Velcro strip on the base of the game.
7. Reattach the base using the (12) screws. NOTE: Keep the back cover securely in place as you work. If the cover is not properly secured, it may cause injury to the operator and/or damage the cover. See Figure 20.
8. Secure the anti-skid circle by replacing the (2) bottom screws. See Figure 20.
9. Reaffix the anti-skid pad to the circle. See Figure 20. If it will not adhere properly, apply glue to the back of the pad or contact Merit to order a replacement.
10. Return the game to its proper upright position.
11. In the cash tower section, reinstall the coin box and the new bill acceptor magazine.
12. Reattach the cash door and ground wire, then close and lock the door.

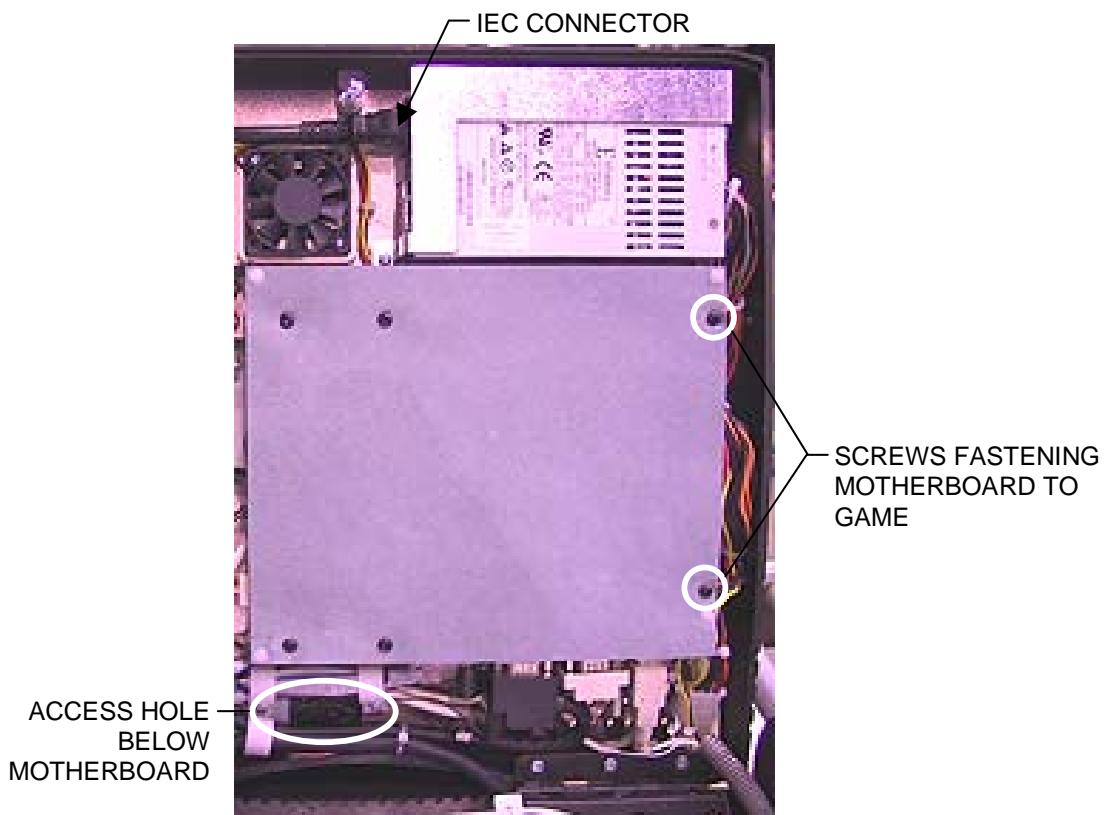


FIGURE 1 - SCREWS SECURING MOTHERBOARD ASSEMBLY TO GAME

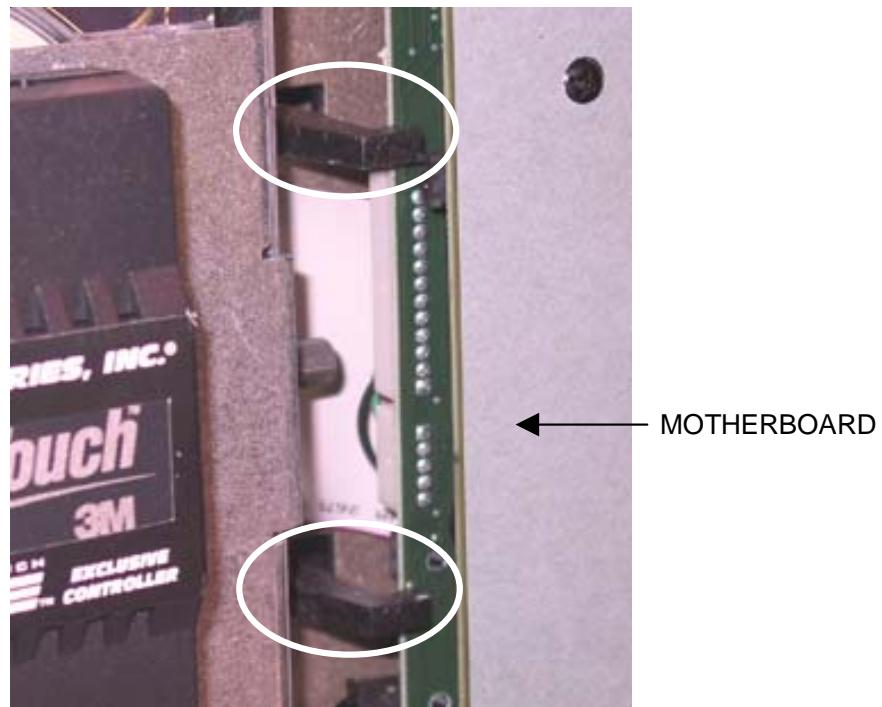


FIGURE 2 - BRACKETS SECURING OPPOSITE SIDE OF MOTHERBOARD ASSEMBLY

**Troubleshooting Information - Removal/Installation of Major Assemblies -  
FORCE EVO (all models)/EVO Wallette/Elite Edge  
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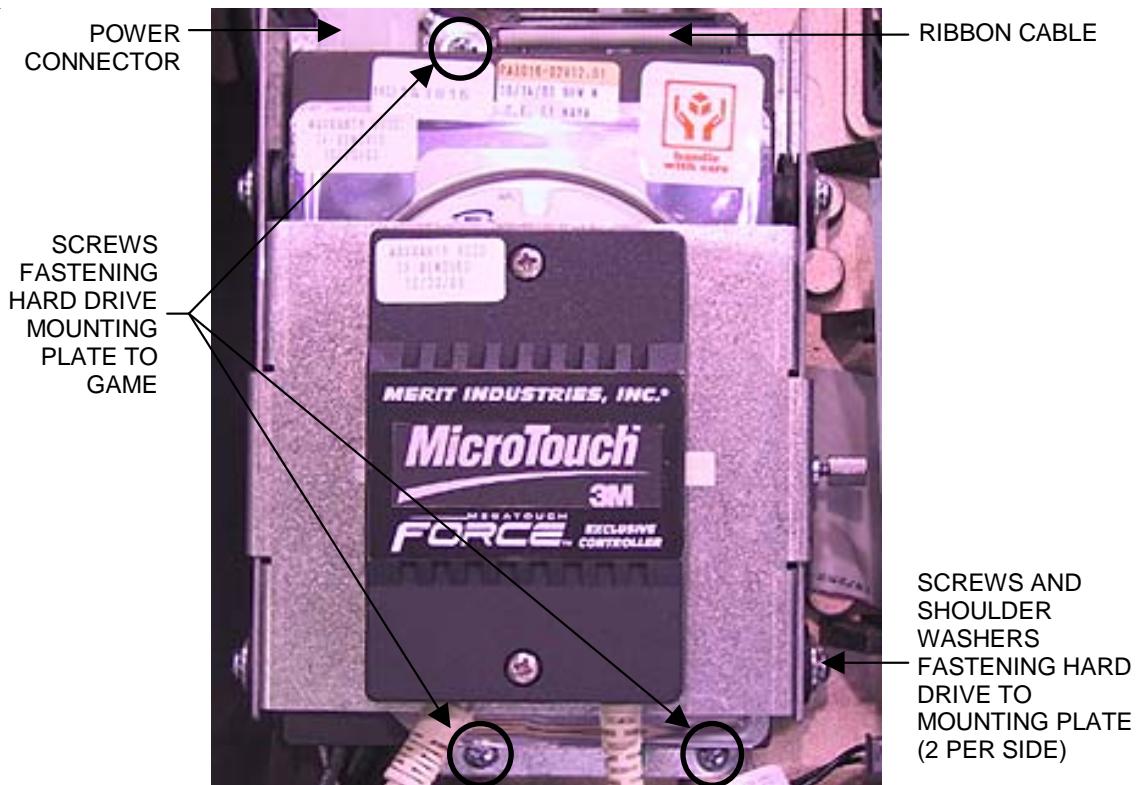


FIGURE 3 - SCREWS FASTENING HARD DRIVE MOUNTING PLATE TO GAME

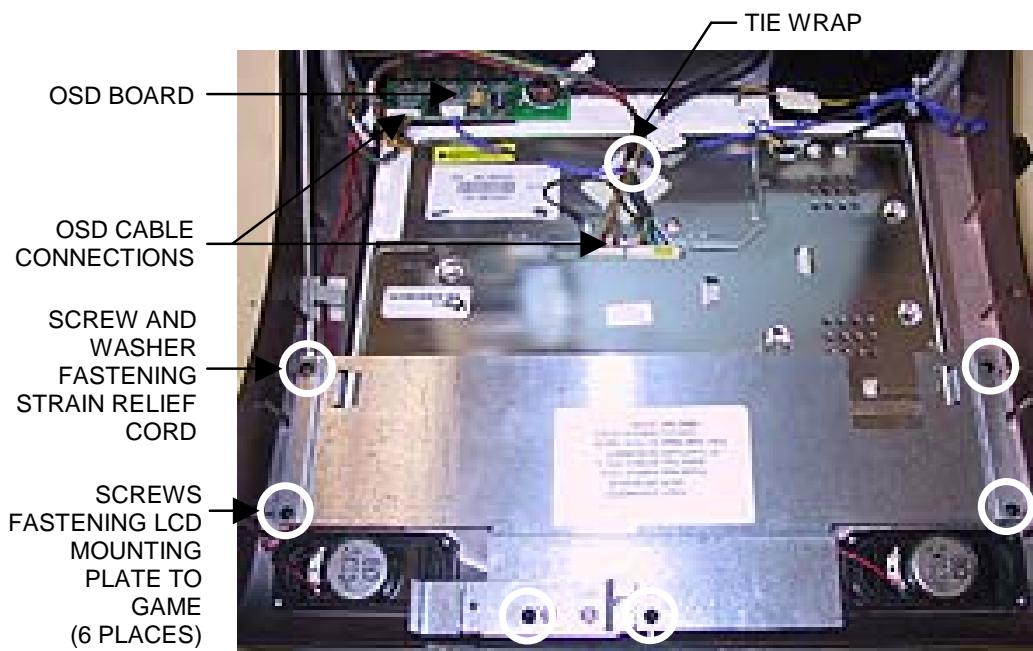


FIGURE 4 - CLOSEUP OF LCD MONITOR WITH INTERIOR CIRCUIT BOARDS

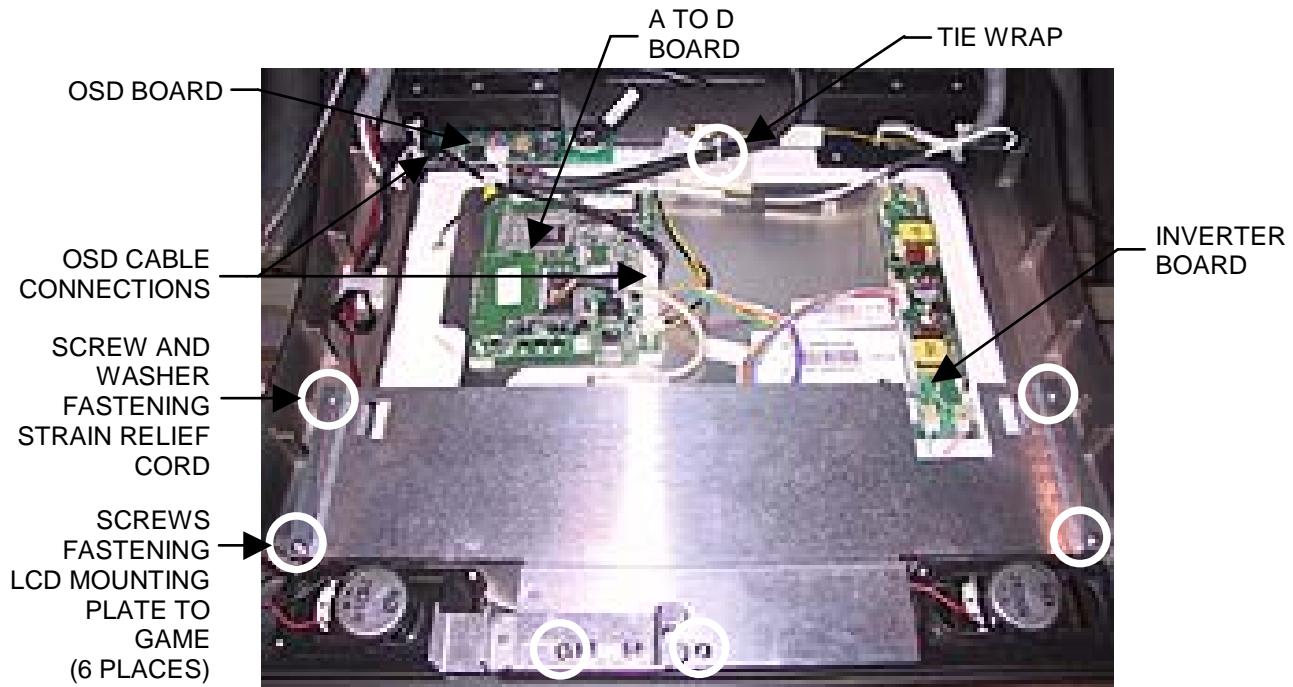


FIGURE 5 - CLOSEUP OF LCD MONITOR WITH EXTERIOR CIRCUIT BOARDS

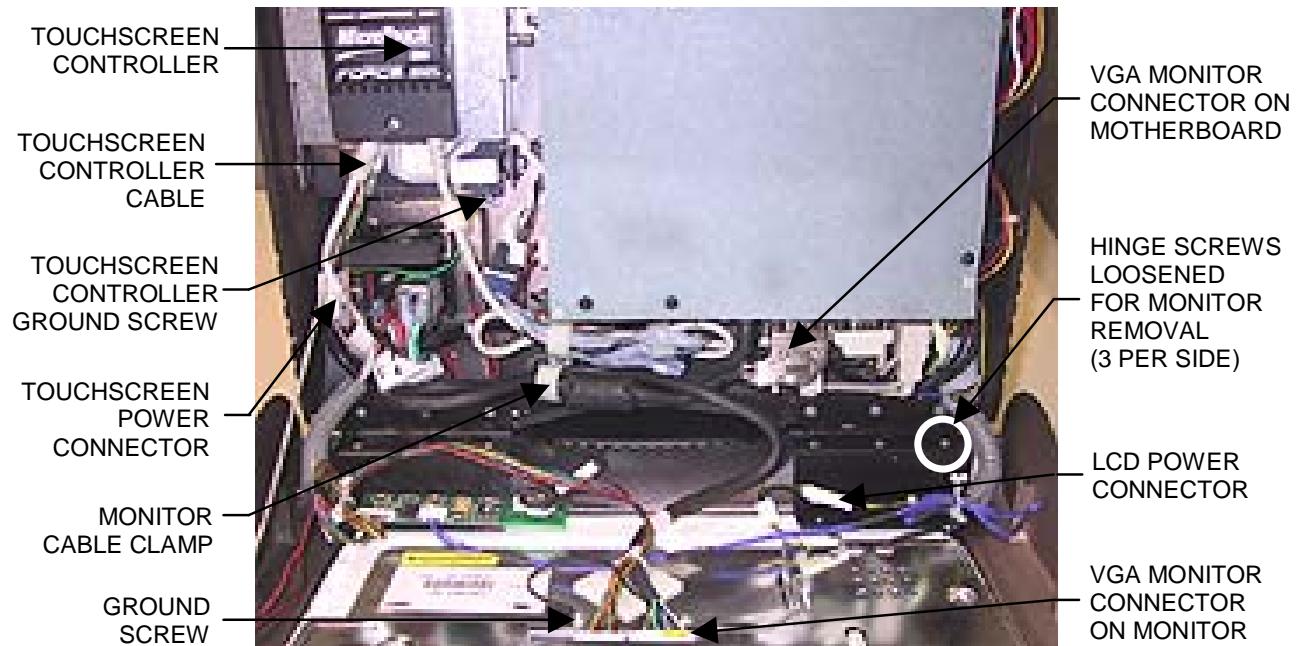


FIGURE 6 - CLOSEUP OF CPU SECTION, LCD MONITOR WITH INTERIOR CIRCUIT BOARDS

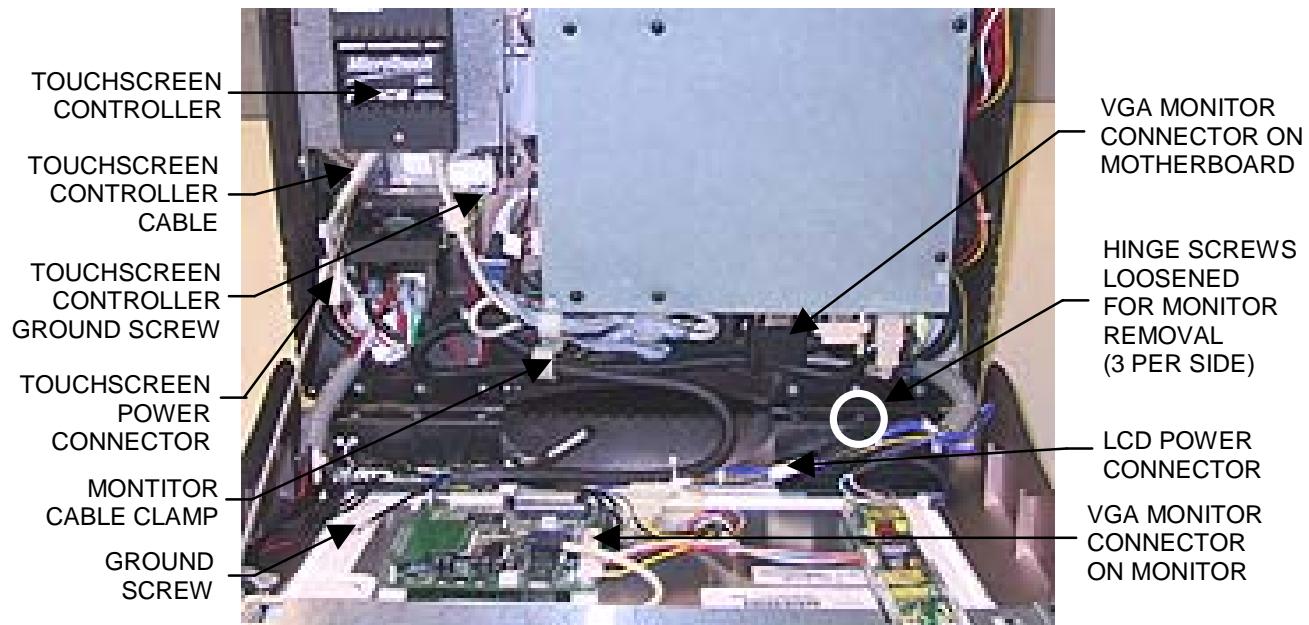


FIGURE 7 - CLOSEUP OF CPU SECTION, LCD MONITOR  
WITH EXTERIOR CIRCUIT BOARDS



FIGURE 8 - CLOSEUP OF CPU SECTION, LCD MONITOR  
WITH EXTERIOR CIRCUIT BOARDS



FIGURE 9 - REAR VIEW OF CPU SECTION



FIGURE 10 - CLOSEUP OF CPU SECTION



FIGURE 11 - CLOSEUP OF MOTHERBOARD

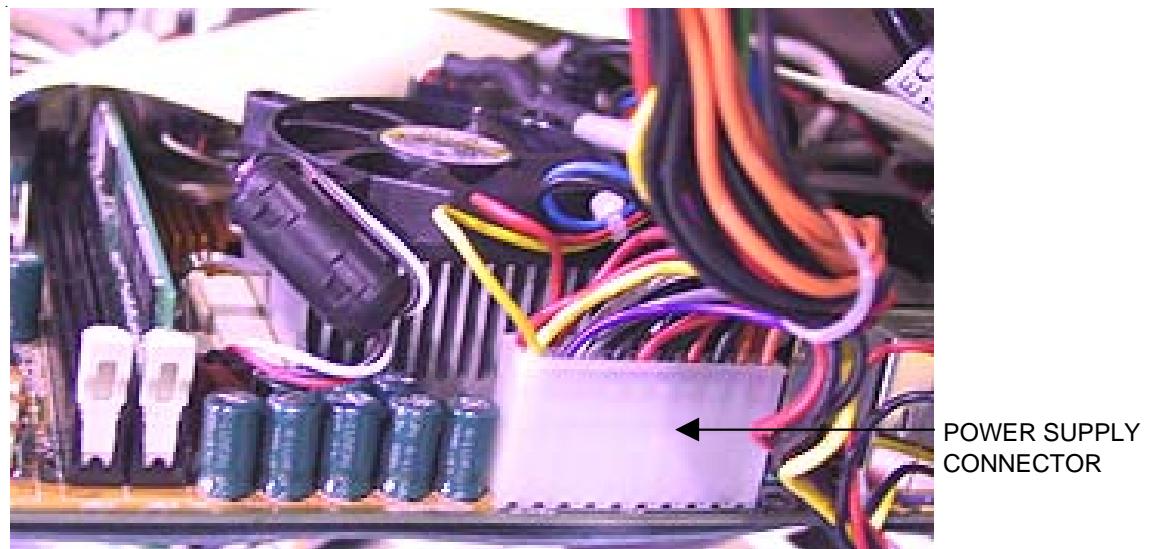


FIGURE 12 - CLOSEUP OF MOTHERBOARD

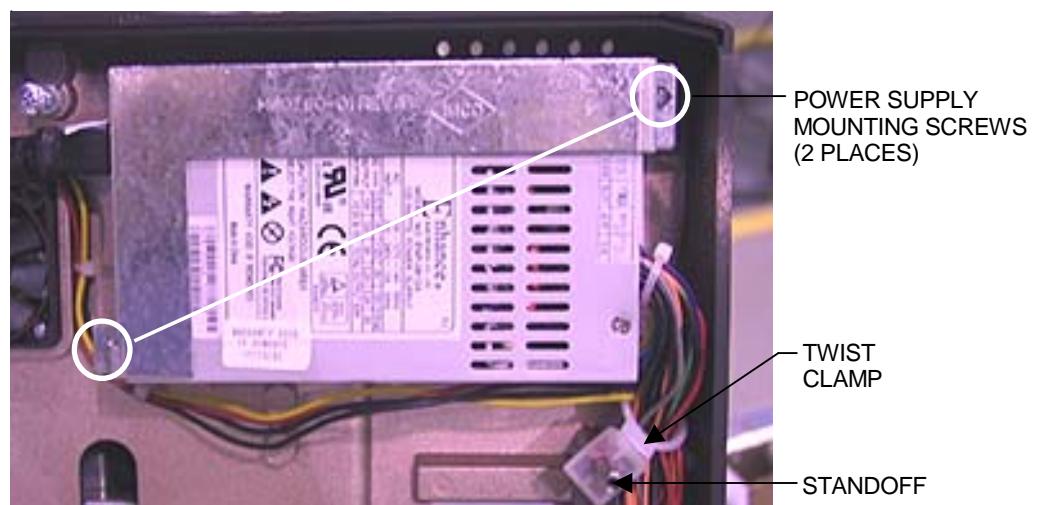


FIGURE 13 - POWER SUPPLY

**Troubleshooting Information - Removal/Installation of Major Assemblies -  
FORCE EVO (all models)/EVO Wallette/Elite Edge  
Megatouch FORCE Technical Reference Manual**

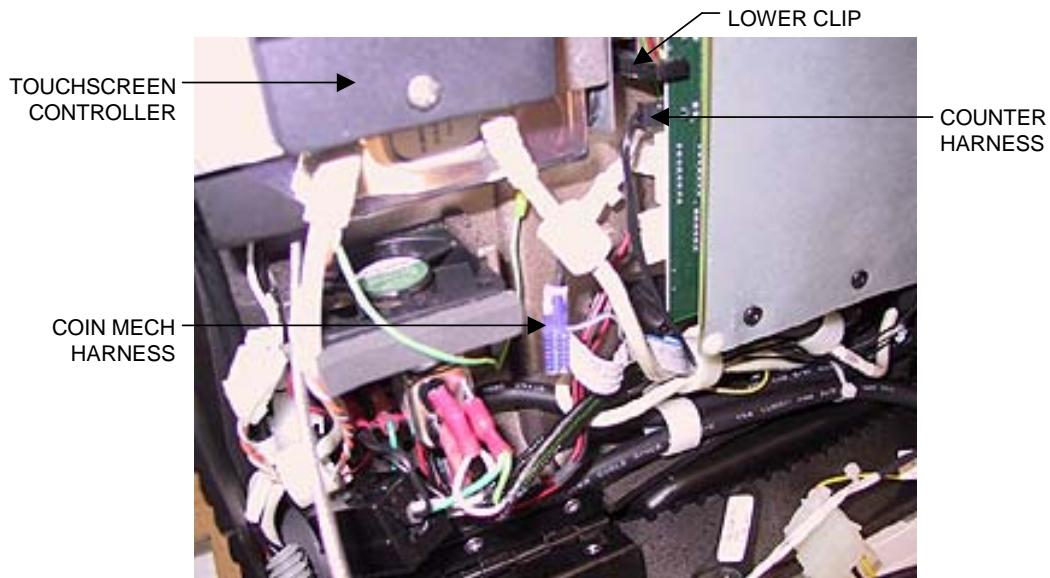


FIGURE 14 - CLOSEUP OF CPU SECTION

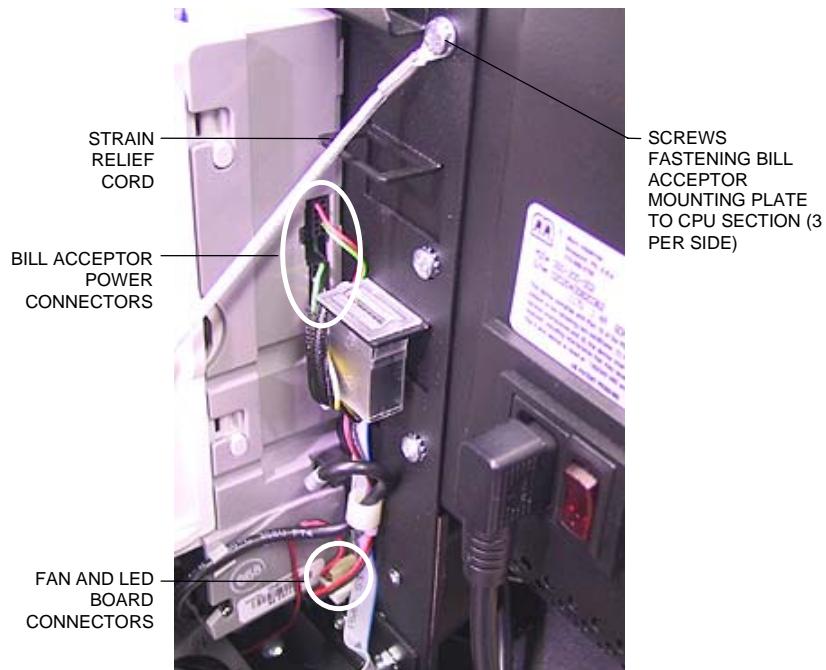


FIGURE 15 - REAR VIEW OF BILL ACCEPTOR MOUNTING PLATE

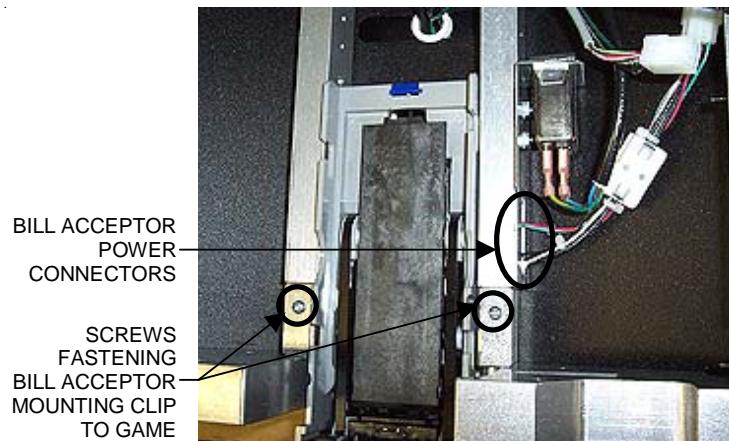


FIGURE 16 - EVO WALLETTE - BILL ACCEPTOR ACCESS/REMOVAL

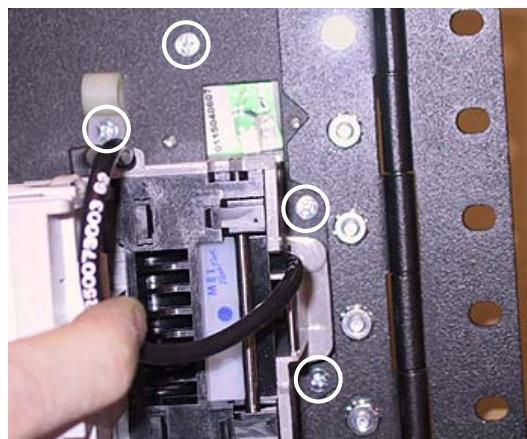


FIGURE 17 - SCREWS FASTENING BILL ACCEPTOR BEZEL TO MOUNTING PLATE

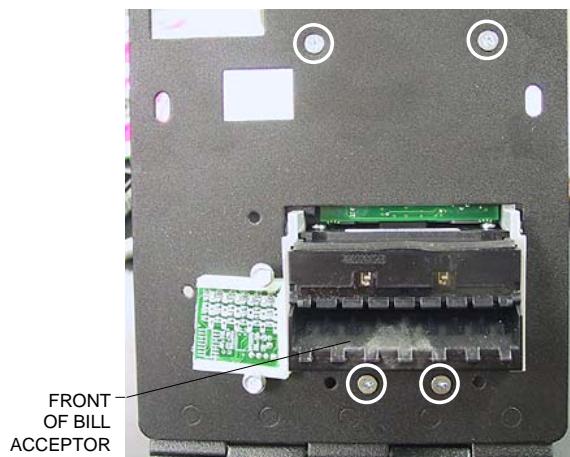


FIGURE 18 - SCREWS FASTENING BILL ACCEPTOR TO MOUNTING PLATE



FIGURE 19 - ELITE EDGE - BILL ACCEPTOR ACCESS/REMOVAL



FIGURE 20 - ELITE EDGE - BASE AND ANTI-SKID CIRCLE REMOVAL

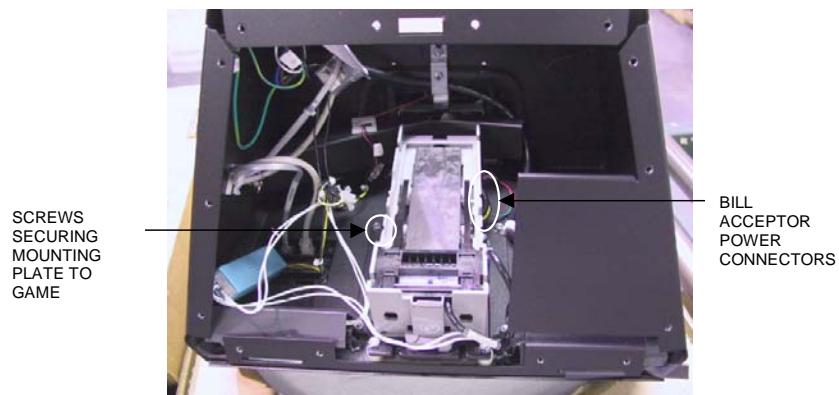


FIGURE 21 - EVO WALLETTE - BILL ACCEPTOR REMOVAL AND INSTALLATION

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - The Vibe and Vibe w/ Coin**

NOTE: Do NOT attempt to remove the monitor or motherboard from The Vibe. If these components need to be replaced, contact Merit Customer Service at 1-800-445-9353 or (215) 639-4700 outside the USA and Canada to arrange to have your game sent in for repair.

#### **Hard Drive Removal**

1. Turn off and unplug the game.
2. Unlock the lock on the processor cover and loosen the 3 screws on either side of the cover (see Figure 1). Slide the cover away from the connector side of the processor and lift the cover off of the unit.
3. Remove the 3 screws securing the hard drive to the processor (see Figure 2).
4. Disconnect the SA0345-01 I/O and audio harness, then remove the hard drive assembly until you're able to disconnect the hard drive ribbon cable and hard drive power connector. See Figure 2.
5. Remove the 4 screws and shoulder washers fastening the hard drive to the mounting plate.

#### **Hard Drive Installation**

1. Fasten the new hard drive to the mounting plate with the 4 screws and shoulder washers.
2. Connect the ribbon cable and power connector to the hard drive, then reconnect the audio harness.
3. Fasten the hard drive to the processor with the 3 screws (see Figure 2).
4. Replace the processor cover and tighten the 3 screws (see Figure 1).
5. Plug in and turn on the game.

#### **Touchscreen Removal**

1. Turn off and unplug the game.
2. Unlock and open the CPU section.
3. Games with bill acceptors only: Remove the clamp fastening the bill acceptor sensor cable to the VGA monitor cable. Then disconnect the 12-pin power connector from the side of the bill acceptor and remove the 4 screws and washers securing the bill acceptor to the CPU. You will then be able to remove the bill acceptor.
4. Disconnect the VGA monitor cable connector and the screw fastening the cable to the monitor mounting plate, and also disconnect the ground screw. Then disconnect the monitor power connector. See Figure 3.
5. Remove the 2 thumbnuts securing the touchscreen controller to the game and remove the controller from the mounting screws. Then disconnect the cable from the back of the controller and disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness. Also disconnect the ground screw. See Figure 3.
6. Using Figure 3, remove the 10 screws fastening the monitor to the bezel (2 screws also fasten strain relief cords on either side of the CPU) and carefully pull the monitor assembly away from

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - The Vibe and Vibe w/ Coin (cont'd)**

the bezel until you're able to access the touchscreen. NOTE: Keep track of all hardware removed in the touchscreen replacement process.

7. Note the orientation of the touchscreen cable before removing the screen. Then use dental floss to carefully cut the foam tape holding the touchscreen to the monitor until you are able to completely remove the screen. Note the manner in which the 2 layers of foam tape are placed on the front edge of the screen.
8. Remove any remaining adhesive residue with denatured alcohol, then clean the monitor glass with the supplied alcohol wipe.

#### **Touchscreen Installation**

1. Clean the reverse side of the replacement touchscreen with the supplied alcohol wipe.
2. If there is no tape already on the touchscreen, cut pieces of the supplied 1/2" double-sided foam tape long enough to cover each edge of the screen without overlapping. After the tape is in place on the screen, peel off the backing.
3. Replace the new touchscreen over the monitor in the same manner as the old screen, making sure the screen is properly and evenly aligned over the monitor glass. Then clean the front of the screen with the supplied alcohol wipe.
4. Using the original touchscreen for reference, cut pieces of the supplied 1/2" single-sided foam tape long enough to cover each edge of the front of the screen without overlapping, then place the tape on the screen. After the tape is in place, repeat this step so there are two layers of tape on the screen.
5. Connect the new touchscreen controller cable in the back of the controller and secure the controller on the mounting screws in the game with the existing hardware. Also connect the Molex connector (orange and gray wires) to the main power harness.
6. Replace the monitor assembly in the bezel, lining up the screw holes in the monitor with the holes in the bezel, then replace the 10 screws. See Figure 3.
7. Reconnect the VGA monitor cable connector and the screw fastening the cable to the monitor mounting plate, and also reconnect the ground screw. Then reconnect the monitor power connector. See Figure 3.
8. Games with bill acceptors only: Replace the bill acceptor in the CPU section (make sure the touchscreen controller cables do not interfere) and fasten it with the 4 screws and washers. Then reconnect the 12-pin bill acceptor power connector. It is also recommended you use a cable clamp to refasten the bill acceptor sensor and VGA monitor cables.
9. Plug in and turn on the game.
10. When the game is finished booting, calibrate the touchscreen.
11. Close and lock the CPU section.

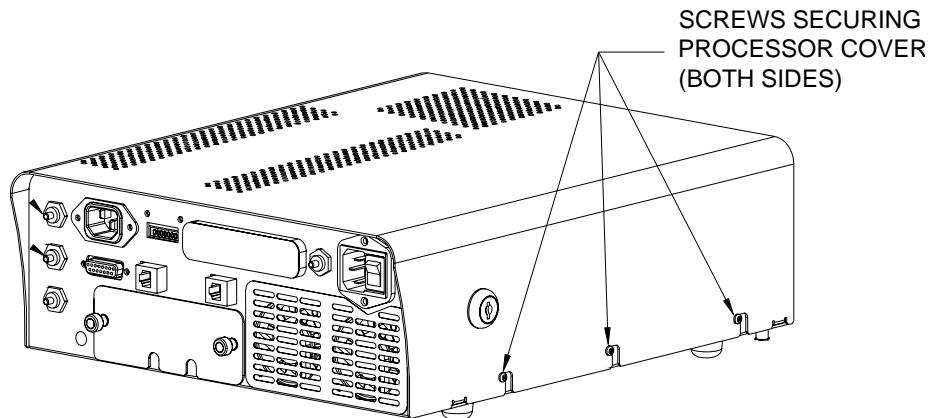


FIGURE 1 - REMOVING PROCESSOR COVER

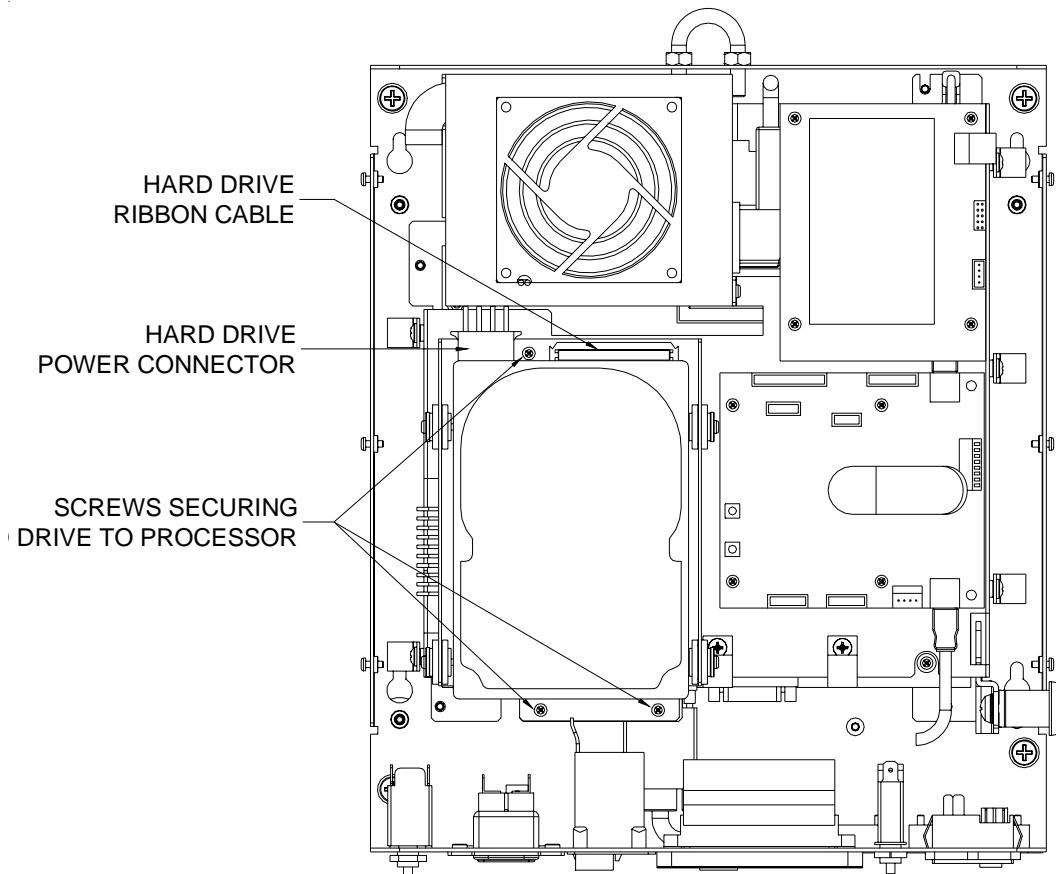


FIGURE 2 - TOP VIEW OF PROCESSOR WITH COVER REMOVED -  
REMOVING HARD DRIVE

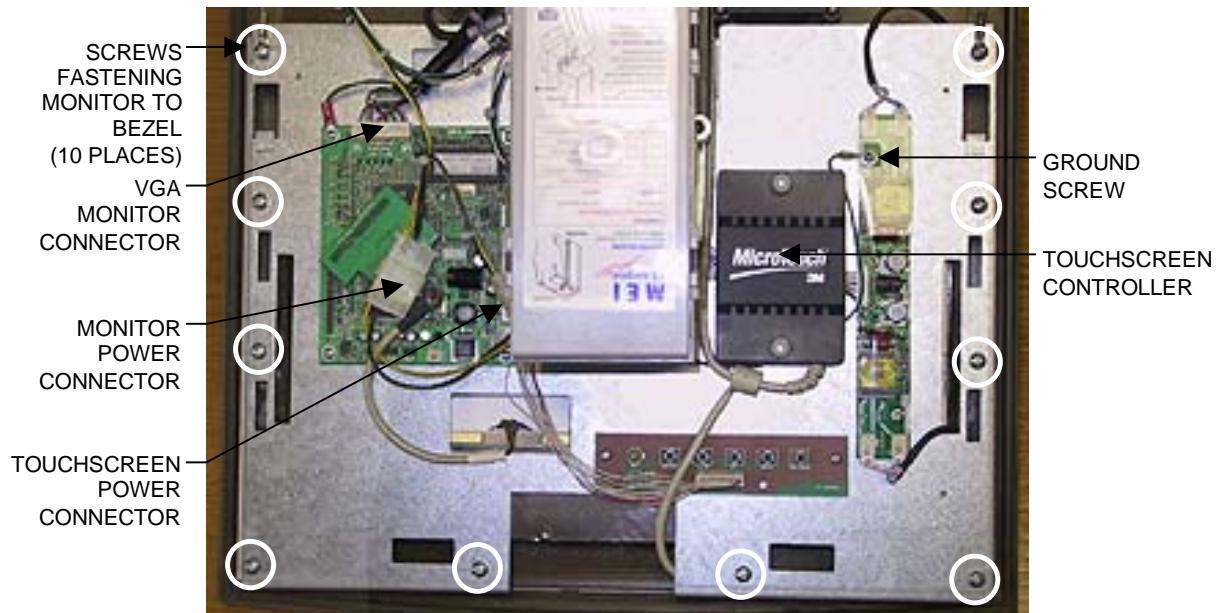


FIGURE 3 - FORCE VIBE - MONITOR REMOVAL

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Upright Fusion/Fune Zone**

#### **Motherboard Removal**

1. Turn off and unplug the game.
2. Unlock and open the bezel.

**Fun Zone games and Fusion games with electronic boxes only:** Remove the 2 screws fastening the electronics box cover and move the cover aside.

3. Disconnect all connections to the motherboard, as well as any other connectors that may interfere with removal of the board.
4. Using Figure 1, remove the 4 screws fastening the I/O board (the I/O board will be on the top or left edge of the motherboard). Then carefully move the board aside until you're able to remove the 2 standoffs fastening the edge of the motherboard to the game (see Figure 2).
5. Remove the 2 screws fastening the other edge of the motherboard to the inside of the game (see Figure 1), then carefully lift the motherboard out of the game and insert the board into an anti-static bag for storage. NOTE: Be sure to read the Motherboard Handling Precautions before handling the board.

#### **Motherboard Installation**

1. Place the new motherboard in the game and fasten one side with the 2 screws and the other side with the 2 standoffs (see Figures 1 and 2).
  2. Fasten the I/O board and with the 4 screws (see Figure 1).
  3. Reconnect all connections to the motherboard, as well as any harnesses that were disconnected earlier.
  4. Close and lock the bezel.
- Fun Zone games and Fusion games with electronic boxes only:** Replace the electronics box cover and fasten it with the 2 screws.
5. Plug in and turn on the game.

#### **Hard Drive Removal**

1. Turn off and unplug the game.
2. Unlock and open the bezel.

**Fun Zone games and Fusion games with electronic boxes only:** Remove the 2 screws fastening the electronics box cover and move the cover aside.

3. Locate the hard drive. It will either be mounted to the electronics box cover or against the back wall of the game. Remove the 3 screws or standoffs (see Figure 3) securing the hard drive mounting bracket to the cover or the game, then remove the hard drive assembly until you're able to disconnect the hard drive power connector and hard drive ribbon cable.
4. Remove the 4 screws and shoulder washers fastening the hard drive to the mounting plate.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Upright Fusion/Fun Zone (cont'd)**

#### **Hard Drive Installation**

1. Fasten the new hard drive to the mounting plate with the 4 screws and shoulder washers.
2. Connect the power connector and ribbon cable to the hard drive, then fasten the hard drive assembly to the electronics box cover or the game with the 3 screws or standoffs. See Figure 3.
3. Close and lock the bezel.  
**Games with electronic boxes only:** Replace the electronics box cover and fasten it with the 2 screws.
4. Plug in and turn on the game.

#### **Monitor Removal (Fun Zone games and Fusion games with electronic boxes)**

1. Turn off and unplug the game.
2. Unlock and open the bezel.
3. Remove the 6 thumbnuts fastening the bezel to the game (see Figure 4) and remove the bezel.
4. If you will not be reusing the existing touchscreen, remove the cable clamps securing the touchscreen cable and the touchscreen power harness, then remove the screws fastening the touchscreen controller (see Figure 4) to the game and disconnect the cable from the back of the controller. Locate and disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness, and also disconnect the ground screw. See Figure 4.

If you will be reusing the existing touchscreen, disconnect the touchscreen controller cable from the LCD panel (see Figure 4). Then use dental floss to carefully cut the foam tape holding the touchscreen to the monitor until you are able to completely remove the screen. You will need to place the touchscreen on a stable surface until it is installed on the new monitor. Then remove any residual foam tape from the reverse side of the screen with denatured alcohol.

5. Disconnect the VGA monitor connector and ground screw, as well as the monitor power connector. Standard monitors only: Also disconnect the monitor control board connector. See Figure 4.
6. Remove the 4 screws fastening the monitor to the game (see Figure 5) and remove it. Be sure to keep track of the plastic standoffs under the monitor.

#### **Monitor Installation (Fun Zone games and Fusion games with electronic boxes)**

1. With the plastic standoffs in place, install the new monitor in the game and fasten it with the 4 screws (see Figure 5).
2. Connect the VGA monitor connector and ground screw to the new monitor, as well as the monitor power connector. Standard monitors only: Also connect the monitor control board connector. See Figure 4.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Upright Fusion/Fun Zone (cont'd)**

3. If your replacement monitor already has a touchscreen, connect the touchscreen cable in the back of the controller and secure the controller with the existing hardware. Also connect the Molex connector (orange and gray wires) to the main power harness (after routing the wires through the cable clamps) and attach the ground screw. See Figure 4.  
If you are using the original touchscreen, clean the glass on the new LCD monitor with the supplied alcohol wipe, then cut pieces of the supplied 1/2" foam tape long enough to cover each edge of the monitor without overlapping. After the tape is in place on the monitor, peel off the backing. Carefully place the touchscreen over the monitor in the same manner it was attached to the old monitor, making sure the screen is properly and evenly aligned over the glass, then connect the cable to the LCD panel (see Figure 4). Clean the front of the touchscreen with the supplied alcohol wipe once it is in place.
4. Reinstall the bezel on the game and fasten it with the 6 thumbnuts.
5. Plug in and turn on the game.
6. When the game is finished booting, press the CALIBRATE button.
7. Close and lock the bezel, then calibrate the touchscreen.

### **Monitor Removal (Fusion games without electronic boxes)**

1. Turn off and unplug the game.
2. Unlock and open the bezel.
3. Disconnect the VGA monitor connector and ground screw, the monitor control board connector, and the monitor power connector and also remove the cables from the 2 clamps attached to the monitor. See Figure 6.
4. If you will not be reusing the existing touchscreen, remove the screws fastening the touchscreen controller to the game and disconnect the cable from the back of the controller. Then locate and disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness. After disconnecting the ground screw, pull the cables out of the clamps. See Figures 7 and 8.  
If you will be reusing the existing touchscreen, disconnect the touchscreen controller cable from the LCD panel (see Figure 7).
5. Remove the 10 screws securing the plastic bezel to the wooden frame (see Figure 6) and carefully remove the bezel from the game. Be careful not to damage the bezel with the coin cup during removal. NOTE: Keep track of all hardware removed in the monitor replacement process.
6. Place the bezel assembly upside-down on a flat surface and remove the 10 screws fastening the LCD monitor to the bezel (remember which 2 screws also fasten cable clamps), then remove the monitor from the bezel. See Figure 9. NOTE: Be sure the glass is not scratched when setting the monitor aside.
7. If you will not be reusing the existing touchscreen, continue with installing the new monitor. If you will be reusing the touchscreen, note the orientation of the screen (i.e., the positioning of the ribbon cable and which side is the front) before removing it from the LCD monitor. Then

### **Troubleshooting Information - Removal/Installation of Major Assemblies - FORCE Upright Fusion/Fun Zone**

Megatouch FORCE Technical Reference Manual

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Upright Fusion/Fun Zone (cont'd)**

use dental floss to carefully cut the foam tape holding the screen to the monitor. Once the touchscreen is completely free from the monitor, remove any residual foam tape from the screen with denatured alcohol and clean the glass with the supplied alcohol wipe.

#### **Monitor Installation (Fusion games without electronic boxes)**

1. If your replacement monitor already has a touchscreen, skip to step 3. If you will be using the original touchscreen, clean the glass on the new LCD monitor with the supplied alcohol wipe, then cut pieces of the supplied 1/2" foam tape long enough to cover each edge of the monitor without overlapping. After the tape is in place on the monitor, peel off the backing.
2. Carefully place the touchscreen over the monitor in the same manner it was attached to the old monitor, making sure the screen is properly and evenly aligned over the glass. Clean the front of the touchscreen with the supplied alcohol wipe once it is in place.
3. Place the new LCD monitor in the bezel (make sure it is not upside-down), lining up the screw holes on the face of the mounting frame with the larger, drilled holes on the plastic mounting pieces (see Figure 10), and fasten it with the 10 screws. Also replace the cable clamps in the appropriate screw holes. See Figure 9.
4. Carefully replace the plastic bezel assembly in the game, making sure the coin cup protrudes into the lower cutout and no wires are pinched, then secure it to the wooden frame with the 10 screws (see Figure 6).
5. If the monitor has a new touchscreen, connect the touchscreen controller cable in the back of the controller and secure the controller in the game with the existing hardware. Then connect the Molex connector (orange and gray wires) to the main power harness and attach the ground screw. Replace the cables in the clamps as before. See Figure 8.

If the monitor has the original touchscreen, reconnect the touchscreen controller cable to the LCD panel (see Figure 7).

6. Connect the VGA monitor connector and ground screw (do not overtighten), the monitor control board connector, and the monitor power connector (see Figure 6) to the new monitor and replace the cables in the 2 clamps attached to the monitor.
7. Plug in and turn on the game.
8. When the game is finished booting, press the CALIBRATE button.
9. Close and lock the bezel, then calibrate the touchscreen.

#### **Touchscreen Removal (Fun Zone games and Fusion games with electronic boxes)**

1. Turn off and unplug the game.
2. Unlock and open the bezel.
3. Remove the 6 thumbnuts fastening the bezel to the game (see Figure 4) and remove the bezel.
4. Remove the cable clamps securing the touchscreen cable and the touchscreen power harness,

#### **Troubleshooting Information - Removal/Installation of Major Assemblies - FORCE Upright Fusion/Fun Zone**

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## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Upright Fusion/Fun Zone (cont'd)**

then remove the screws fastening the touchscreen controller (see Figure 4) to the game and disconnect the cable from the back of the controller. Locate and disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness, and also disconnect the ground screw. See Figure 4.

5. Use dental floss to carefully cut the foam tape holding the touchscreen to the monitor until you are able to completely remove the screen. Once the touchscreen is completely free from the monitor, remove any residual foam tape from the monitor with denatured alcohol.

#### **Touchscreen Installation (Fun Zone game and Fusion games with electronic boxes)**

1. Clean the glass on the reverse side of the new touchscreen with the supplied alcohol wipe, then cut pieces of the supplied 1/2" foam tape long enough to cover each edge of the monitor without overlapping. After the tape is in place on the monitor, peel off the backing. Carefully place the touchscreen over the monitor in the same manner it was attached to the old monitor, making sure the screen is properly and evenly aligned over the glass. Clean the front of the touchscreen with the supplied alcohol wipe once it is in place.
2. Connect the touchscreen cable in the back of the controller and secure the controller with the existing hardware. Also connect the Molex connector (orange and gray wires) to the main power harness (after routing the wires through the cable clamps) and attach the ground screw. See Figure 4.
3. Reinstall the bezel on the game and fasten it with the 6 thumbnuts.
4. Plug in and turn on the game.
5. When the game is finished booting, press the CALIBRATE button.
6. Close and lock the bezel, then calibrate the touchscreen.

#### **Touchscreen Removal (Fun Zone games and Fusion games without electronic boxes)**

1. Turn off and unplug the game.
2. Unlock and open the bezel.
3. Disconnect the VGA monitor connector and ground screw, the monitor control board connector, and the monitor power connector and also remove the cables from the 2 clamps attached to the monitor. See Figure 6.
4. Remove the screws fastening the touchscreen controller to the game and disconnect the cable from the back of the controller. Then locate and disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness. After disconnecting the ground screw, pull the cables out of the clamps. See Figures 7 and 8.
5. Remove the 10 screws securing the plastic bezel to the wooden frame (see Figure 6) and carefully remove the bezel from the game. Be careful not to damage the bezel with the coin cup during removal. NOTE: Keep track of all hardware removed in the touchscreen replacement process.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Upright Fusion/Fun Zone (cont'd)**

6. Place the bezel assembly upside-down on a flat surface and remove the 10 screws fastening the LCD monitor to the bezel (remember which 2 screws also fasten cable clamps), then remove the monitor from the bezel. See Figure 9. NOTE: Be sure the glass is not scratched when setting the monitor aside.
7. Note the orientation of the touchscreen cable before removing the screen. Then use dental floss to carefully cut the foam tape holding the touchscreen to the monitor until you are able to completely remove the screen. Once the touchscreen is completely free from the monitor, remove any residual foam tape from the monitor with denatured alcohol.

#### **Touchscreen Installation (Fusion games without electronic boxes)**

1. Clean the glass on the reverse side of the new touchscreen with the supplied alcohol wipe, then cut pieces of the supplied 1/2" foam tape long enough to cover each edge of the monitor without overlapping. After the tape is in place on the monitor, peel off the backing.
2. Carefully place the touchscreen over the monitor in the same manner as the old screen, making sure the screen is properly and evenly aligned over the glass. Then clean the front of the screen with the supplied alcohol wipe.
3. Place the new LCD monitor in the bezel (make sure it is not upside-down), lining up the screw holes on the face of the mounting frame with the larger, drilled holes on the plastic mounting pieces (see Figure 10), and fasten it with the 10 screws. Also replace the cable clamps in the appropriate screw holes (See Figure 9).
4. Carefully replace the plastic bezel assembly in the game, making sure the coin cup protrudes into the lower cutout and no wires are pinched, then secure it to the wooden frame with the 10 screws (see Figure 6).
5. Connect the touchscreen controller cable in the back of the controller and secure the controller in the game with the existing hardware. Then connect the Molex connector (orange and gray wires) to the main power harness and attach the ground screw. Replace the cables in the clamps as before. See Figure 8.
6. Reconnect the VGA monitor connector and ground screw (do not overtighten), the monitor control board connector, and the monitor power connector (see Figure 6) and replace the cables in the 2 clamps attached to the monitor.
7. Plug in and turn on the game.
8. When the game is finished booting, press the CALIBRATE button.
9. Close and lock the bezel, then calibrate the touchscreen.

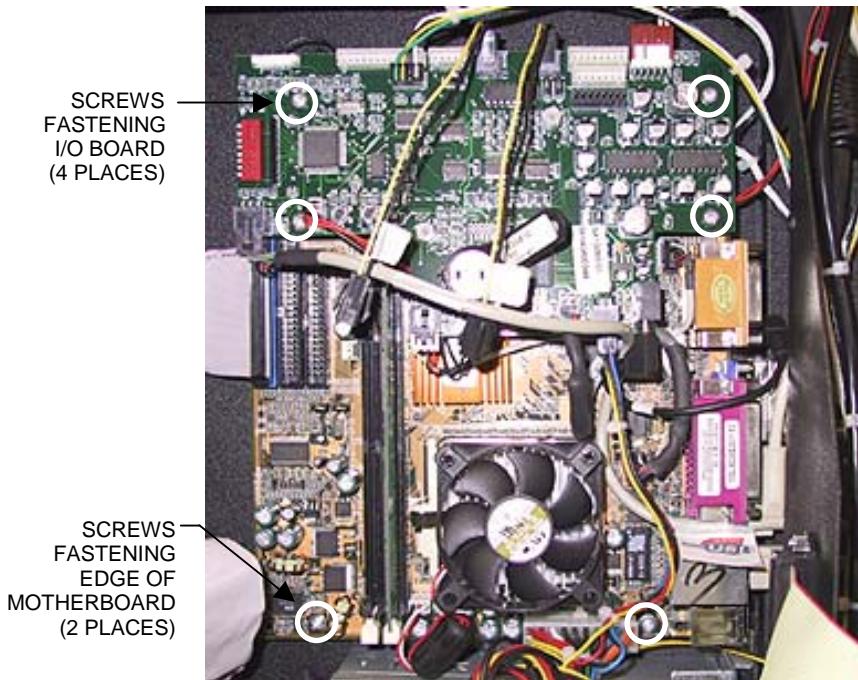


FIGURE 1 - MOTHERBOARD AND I/O BOARD

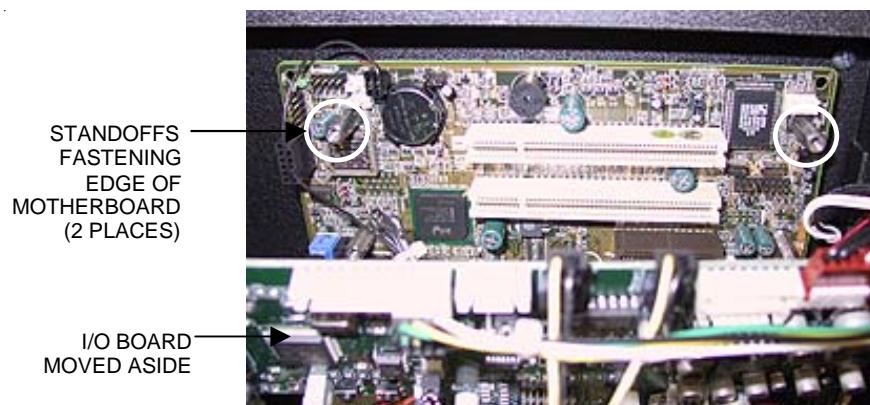


FIGURE 2 - CPU SECTION



FIGURE 3 - HARD DRIVE

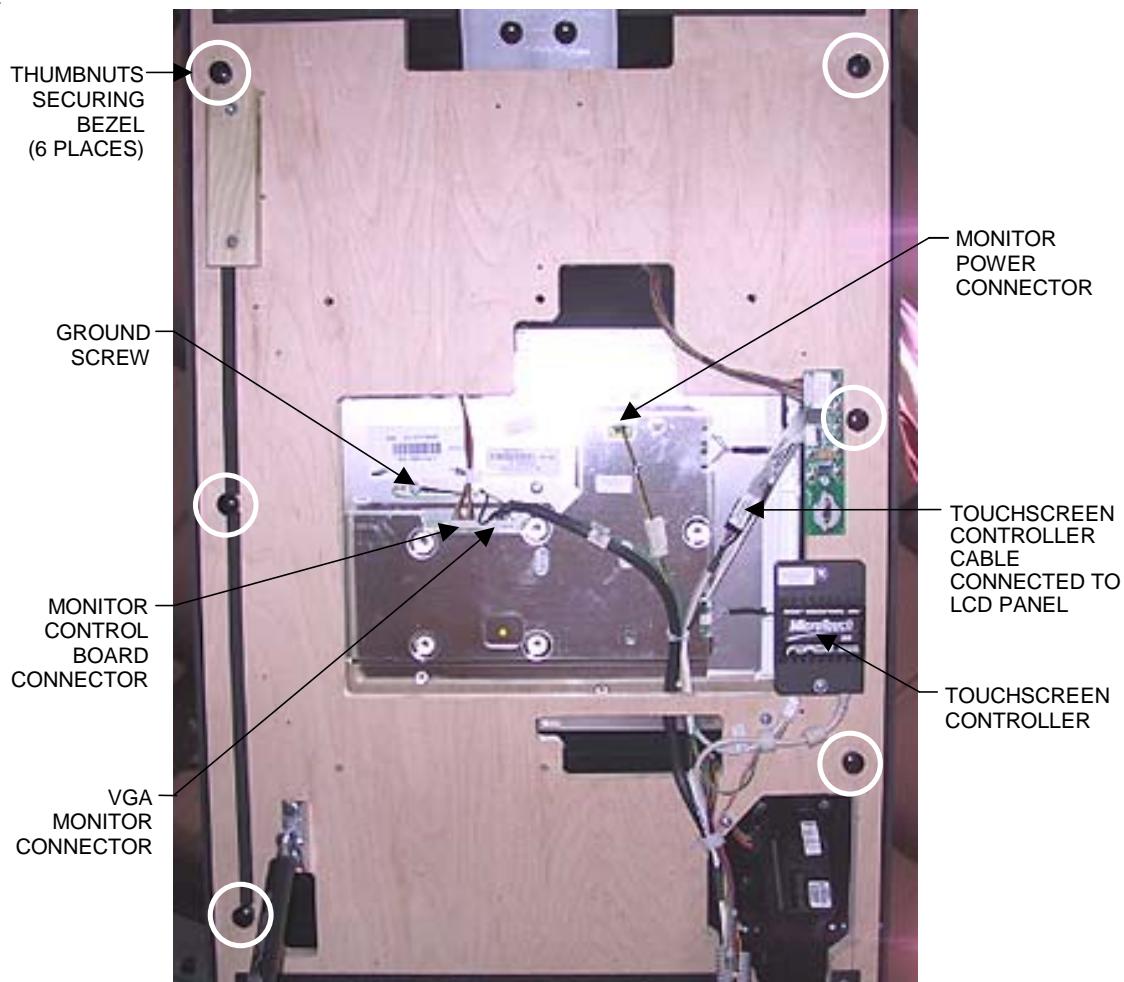


FIGURE 4 - UNDERSIDE OF BEZEL



FIGURE 5 - MONITOR (WITH BEZEL REMOVED)

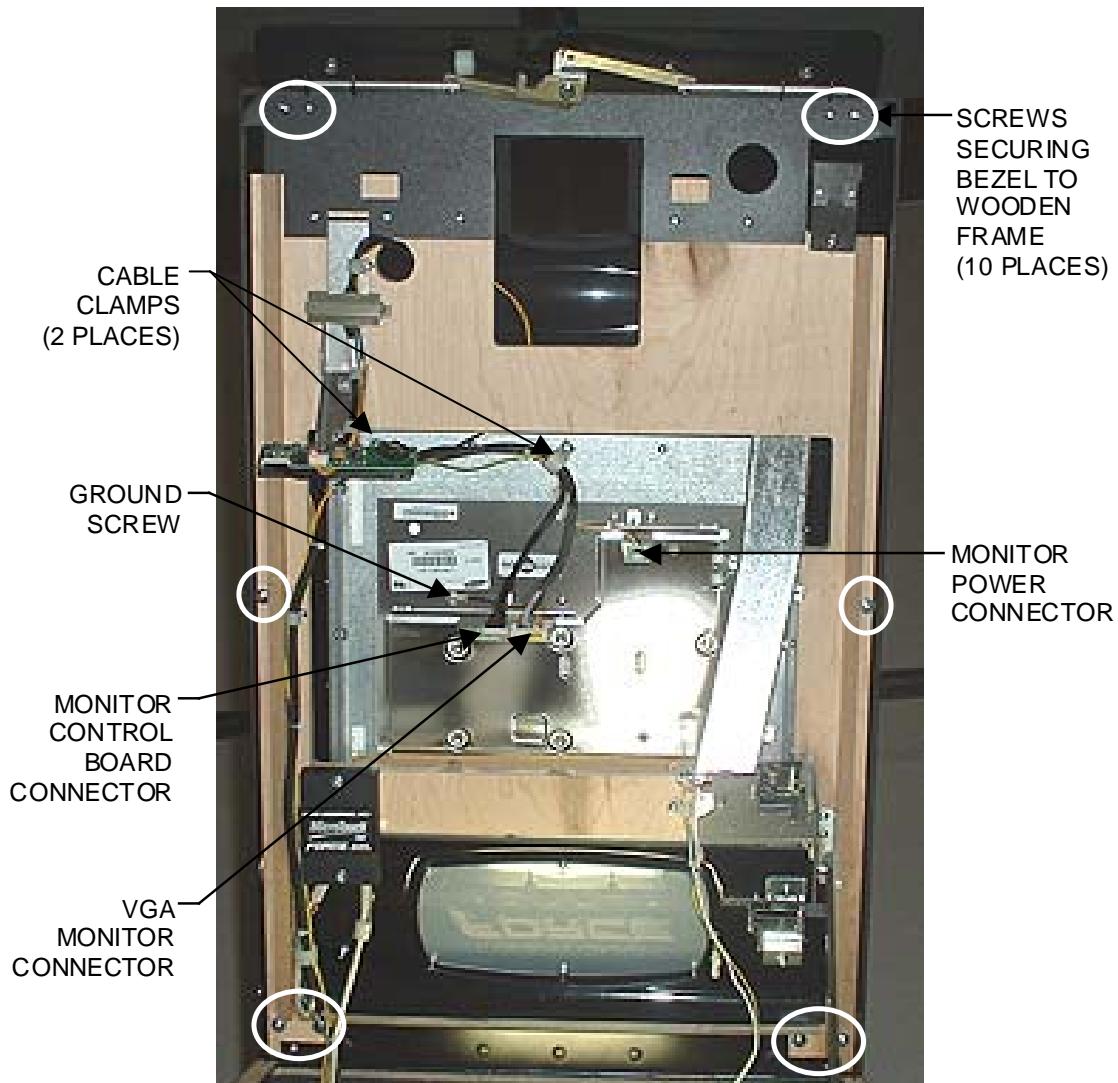


FIGURE 6 - UNDERSIDE OF BEZEL

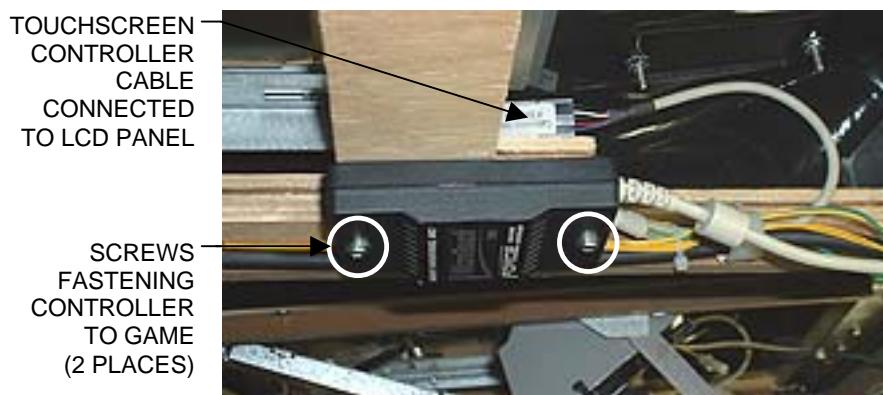


FIGURE 7 - CLOSEUP OF TOUCHSCREEN CONNECTOR MOUNTED ON BEZEL

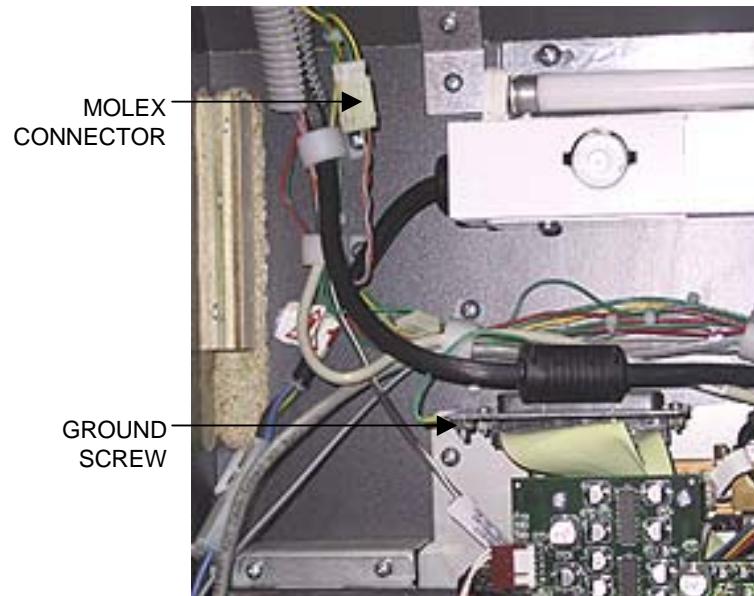


FIGURE 8 - CLOSEUP OF CPU SECTION

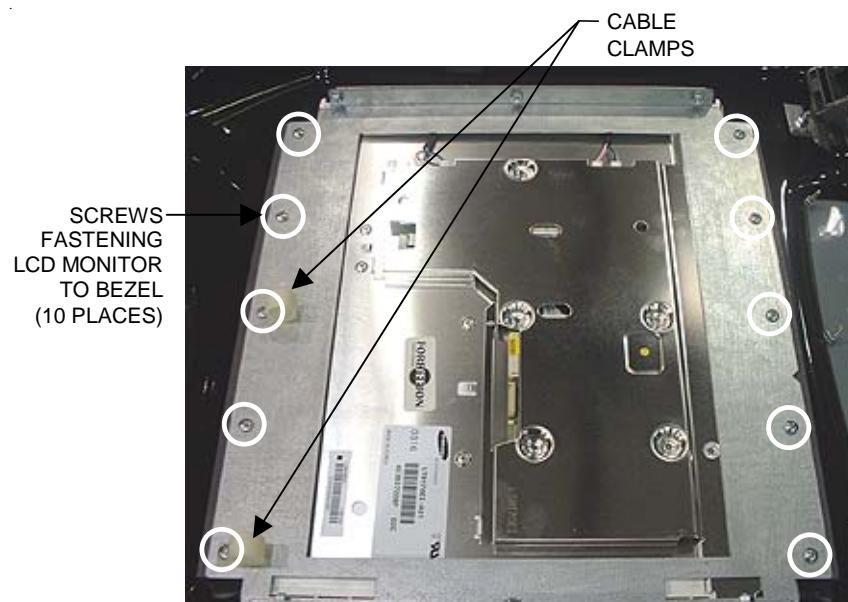


FIGURE 9 - UNDERSIDE OF MONITOR



FIGURE 10 - FORCE FUSION - PLASTIC MOUNTING PIECES ON BEZEL

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Upright w/o Coin Door**

#### **Motherboard Removal**

1. Turn off and unplug the game.
2. Unlock and open the front bezel.
3. Slide the CPU shelf into its service position to access the motherboard.
4. Disconnect all connections to the motherboard.
5. Remove the 4 screws mounting the motherboard to the CPU shelf (see Figure 1) and carefully remove the board. Insert the board into an anti-static bag for storage. NOTE: Be sure to read the Motherboard Handling Precautions before handling the board.

#### **Motherboard Installation**

1. Place the new motherboard on the CPU shelf and fasten it with the 4 screws.
2. Reconnect all connections to the motherboard.
3. Slide the CPU shelf back into the game.
4. Close and lock the front bezel.
5. Plug in and turn on the game.

#### **Hard Drive Removal**

1. Turn off and unplug the game.
2. Unlock and open the front bezel.
3. Slide the CPU shelf into its service position to access the hard drive.
4. Remove the screw securing the hard drive mounting plate to the shelf (see Figure 2).
5. Remove the 4 screws and shoulder washers fastening the hard drive to the mounting plate.
6. Disconnect the hard drive ribbon cable and the hard drive power connector.

#### **Hard Drive Installation**

1. Plug the ribbon cable and power connector into the new hard drive.
2. Fasten the hard drive to the mounting plate with the 4 screws and shoulder washers.
3. Fasten the hard drive mounting plate to the CPU shelf with the mounting screw (see Figure 2).
4. Slide the CPU shelf back into the game.
5. Close and lock the front bezel.
6. Plug in and turn on the game.

#### **Monitor Removal**

1. Turn off and unplug the game.
2. Open the rear door to gain access to the monitor. See Figure 3.
3. Disconnect all harnesses from the monitor.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Upright w/o Coin Door (cont'd)**

4. Remove the screws fastening the touchscreen controller to the game, then disconnect the cable from the back of the controller and disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness.
5. Remove both bolts securing the rear of the monitor shelf to the cabinet. See Figure 4.
6. Open the front bezel.
7. Remove both bolts securing the front of the monitor shelf to the cabinet (located on the underside of the shelf). See Figure 4.
8. Remove the ground strap attached to the monitor door.
9. Pull the monitor up and out through the front of the game.

### **Monitor Installation**

1. Place the new monitor in the game.
2. Replace the ground strap on the monitor door.
3. Fasten the front of the monitor shelf to the cabinet with the 2 bolts (see Figure 4).
4. Close the front bezel.
5. Secure the rear of the monitor shelf to the cabinet with the 2 bolts (see Figure 4).
6. Connect the touchscreen cable in the back of the controller and secure the controller in the game with the existing hardware. Also connect the Molex connector (orange and gray wires) to the main power harness.
7. Reconnect all harnesses to the monitor.
8. Close the rear door.
9. Plug in and turn on the game.

### **Touchscreen Removal**

1. Turn off and unplug the game.
2. Unlock and open the front bezel (see Figure 5).
3. Remove the black poly tape (see Figure 5) from around the edges of the old touchscreen, keeping the manner in which the tape was placed around the screen in mind.
4. Remove the two nuts and washers securing the touchscreen controller to the game and remove the controller from the mounting screws. Then disconnect the cable from the back of the controller and disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness.
5. Use dental floss to carefully cut the foam tape holding the touchscreen to the picture tube until you are able to completely remove the touchscreen.
6. Remove any remaining adhesive residue with denatured alcohol, then wipe the surface of the picture tube with the supplied alcohol wipe.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Upright w/o Coin Door (cont'd)**

#### **Touchscreen Installation**

1. Clean the reverse side of the replacement touchscreen with the supplied alcohol wipe.
2. Peel the backing from the 8 pieces of double-sided foam tape already adhered to the reverse side of the touchscreen.
3. Replace the new touchscreen over the picture tube (with the cable on the right if you are facing the game), making sure the screen is properly and evenly aligned over the picture tube. Then clean the front of the screen with the supplied alcohol wipe.
4. Connect the new touchscreen cable in the back of the controller and secure the controller on the mounting screws in the game with the existing hardware. Also connect the Molex connector (orange and gray wires) to the main power harness.
5. Remembering the manner in which the tape was placed around the touchscreen you removed, place and cut a length of the supplied black poly tape evenly over an entire edge of the touchscreen and repeat until all 4 edges are covered.
6. Place and cut a longer length of black poly tape around all 4 edges of the screen.
7. Plug in and turn on the game.
8. When the game is finished booting, calibrate the touchscreen.
9. Close and lock the front bezel.



FIGURE 1 – MOTHERBOARD REMOVAL –  
LOCATION OF SCREWS SECURING MOTHERBOARD TO CPU SHELF



FIGURE 2 - HARD DRIVE REMOVAL -  
LOCATION OF SCREW SECURING HARD DRIVE MOUNTING PLATE TO CPU SHELF

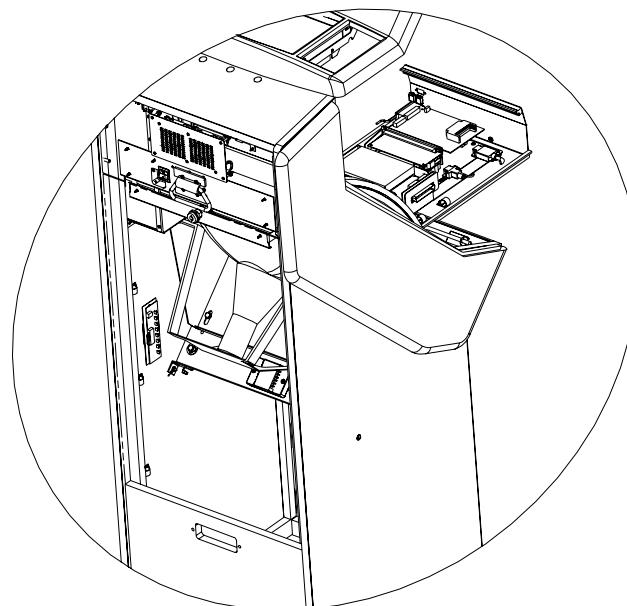


FIGURE 3 - MONITOR ACCESS

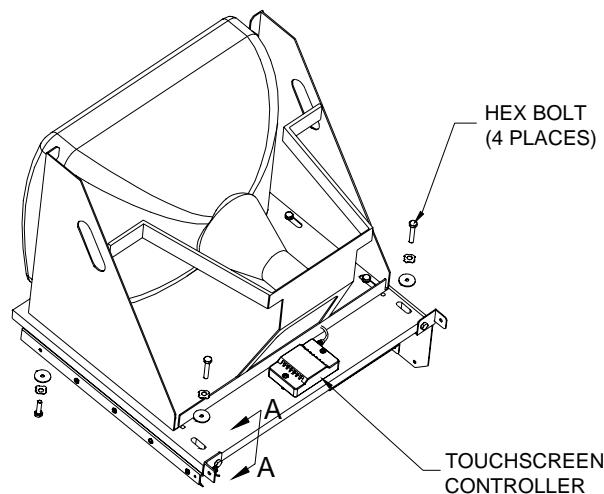


FIGURE 4 - MONITOR REMOVAL

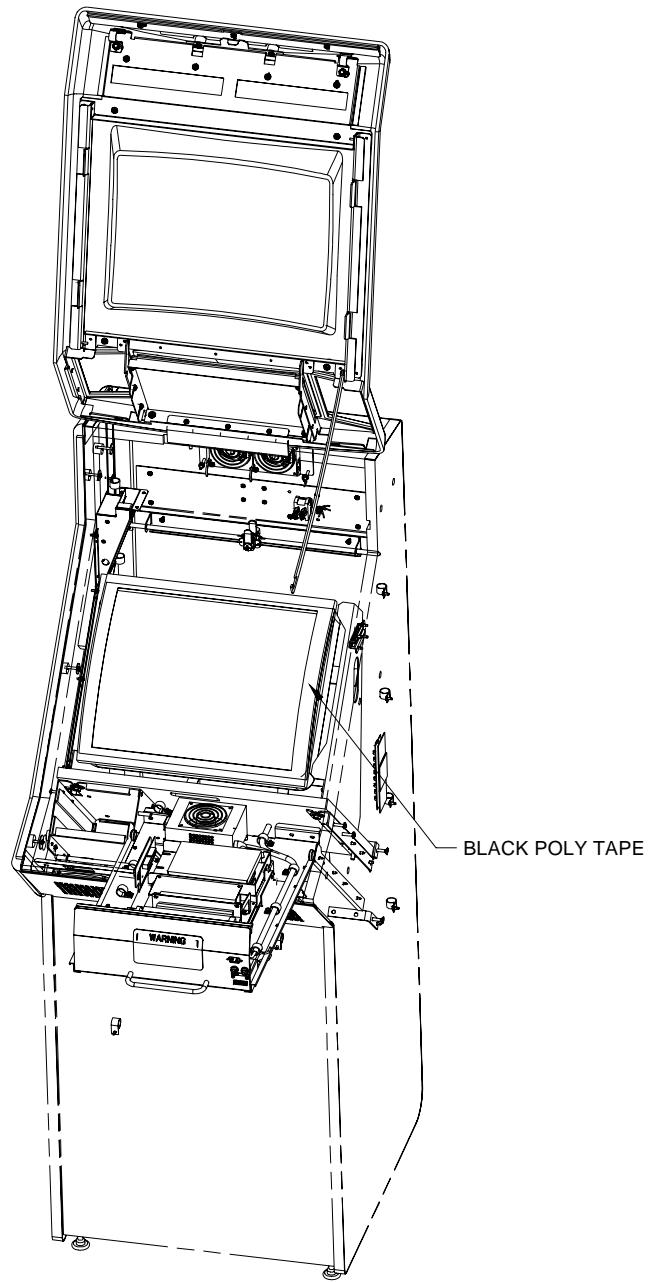


FIGURE 5 - FORCE UPRIGHT (NON-FUSION) TOUCHSCREEN ACCESS

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Upright w/ Coin Door**

#### **Motherboard Removal**

1. Turn off and unplug the game.
2. Unlock and open the front door to access the electronics shelf.
3. Disconnect all connections to the motherboard.
4. Remove the 2 screws securing the centronics ribbon cable and move it aside. See Figure 1.
5. Remove the 4 screws mounting the motherboard to the CPU shelf (see Figure 2) and carefully remove the board. Insert the board into an anti-static bag for storage. NOTE: Be sure to read the Motherboard Handling Precautions before handling the board.

#### **Motherboard Installation**

1. Place the new motherboard on the CPU shelf and fasten it with the 4 screws. See Figure 2.
2. Resecure the centronics ribbon cable with the 2 screws. See Figure 1.
3. Reconnect all connections to the motherboard.
4. Close and lock the front door.
5. Plug in and turn on the game.

#### **Hard Drive Removal**

1. Turn off and unplug the game.
2. Unlock and open the front door to access the electronics shelf.
3. Remove the 2 screws securing the I/O board mounting plate to the hard drive mounting plate (see Figure 3). The I/O board assembly will need to be moved aside in order to access the hard drive.
4. Remove the screw securing the hard drive mounting plate to the game (see Figure 1).
5. Remove the 4 screws and shoulder washers fastening the hard drive to the mounting plate.
6. Disconnect the hard drive ribbon cable and the hard drive power connector.

#### **Hard Drive Installation**

1. Plug the ribbon cable and power connector into the new hard drive.
2. Fasten the hard drive to the mounting plate with the 4 screws and shoulder washers.
3. Fasten the hard drive mounting plate to the game with the mounting screw (see Figure 1).
4. Fasten the I/O board mounting plate to the hard drive mounting plate with the 2 screws (see Figure 3).
5. Close and lock the front door.
6. Plug in and turn on the game.

#### **Monitor Removal**

1. Turn off and unplug the game.
2. Unlock and open the rear door to gain access to the monitor. See Figure 4.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Upright w/ Coin Door (cont'd)**

3. Disconnect all harnesses from the monitor.
4. Remove the hardware fastening the touchscreen controller to the game, then disconnect the cable from the back of the controller and disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness.
5. Remove both bolts securing the rear of the monitor shelf to the cabinet. See Figure 5.
6. To remove the front bezel, remove the 2 wing nuts inside the CPU door along the bottom of the bezel and the 3 wing nuts inside the game along the top piece. Then disconnect the 2 speaker connectors inside the game on either side of the marquee before lifting the bezel from the game.
7. Remove both bolts securing the front of the monitor shelf to the cabinet (located on the under-side of the shelf). See Figure 5.
8. Remove the ground strap attached to the monitor door.
9. Pull the monitor up and out through the front of the game.

### **Monitor Installation**

1. Place the new monitor in the game.
2. Replace the ground strap on the monitor door.
3. Fasten the front of the monitor shelf to the cabinet with the 2 bolts (see Figure 5).
4. Replace the front bezel and the 5 wing nuts (2 inside the CPU door along the bottom of the bezel, 3 along the top piece) fastening it to the game. Then reconnect the 2 speaker connectors inside the game.
5. Fasten the rear of the monitor shelf to the cabinet with the 2 bolts (see Figure 5).
6. Connect the touchscreen cable in the back of the controller and secure the controller in the game with the existing hardware. Also connect the Molex connector (orange and gray wires) to the main power harness.
7. Reconnect all harnesses to the monitor.
8. Close and lock the rear door.
9. Plug in and turn on the game.

### **Touchscreen Removal**

1. Turn off and unplug the game.
2. Remove the bezel by removing the 2 wing nuts inside the CPU door along the bottom of the bezel and the 3 wing nuts inside the game along the top piece (after removing the rear door). Then disconnect the 2 speaker connectors inside the game on either side of the marquee before lifting the bezel from the game.
3. Remove the black poly tape (see Figure 6) from around the edges of the old touchscreen, keeping the manner in which the tape was placed around the screen in mind.
4. Remove the two nuts and washers securing the touchscreen controller to the game and remove the controller from the mounting screws. Then disconnect the cable from the back of the

### **Troubleshooting Information - Removal/Installation of Major Assemblies -**

#### **FORCE Upright w/ Coin Door**

Megatouch FORCE Technical Reference Manual

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - FORCE Upright w/ Coin Door (cont'd)**

controller and disconnect the Molex connector (orange and gray wires) running from the touch-screen controller cable to the main power harness.

5. Use dental floss to carefully cut the foam tape holding the touchscreen to the picture tube until you are able to completely remove the touchscreen.
6. Remove any remaining adhesive residue with denatured alcohol, then wipe the surface of the picture tube with the supplied alcohol wipe.

#### **Touchscreen Installation**

1. Clean the reverse side of the replacement touchscreen with the supplied alcohol wipe.
2. Peel the backing from the 8 pieces of double-sided foam tape already adhered to the reverse side of the touchscreen.
3. Replace the new touchscreen over the picture tube (with the cable on the right if you are facing the game), making sure the screen is properly and evenly aligned over the picture tube. Then clean the front of the screen with the supplied alcohol wipe.
4. Connect the new touchscreen controller cable in the back of the controller and secure the controller on the mounting screws in the game with the existing hardware. Also connect the Molex connector (orange and gray wires) to the main power harness.
5. Remembering the manner in which the tape was placed around the touchscreen you removed, place and cut a length of the supplied black poly tape evenly over an entire edge of the touchscreen and repeat until all 4 edges are covered.
6. Place and cut a longer length of black poly tape around all 4 edges of the screen.
7. Plug in and turn on the game.
8. When the game is finished booting, calibrate the touchscreen.
9. Replace the bezel and secure it with the 5 wing nuts removed earlier. Also reconnect the 2 speaker connectors, then replace the rear door.

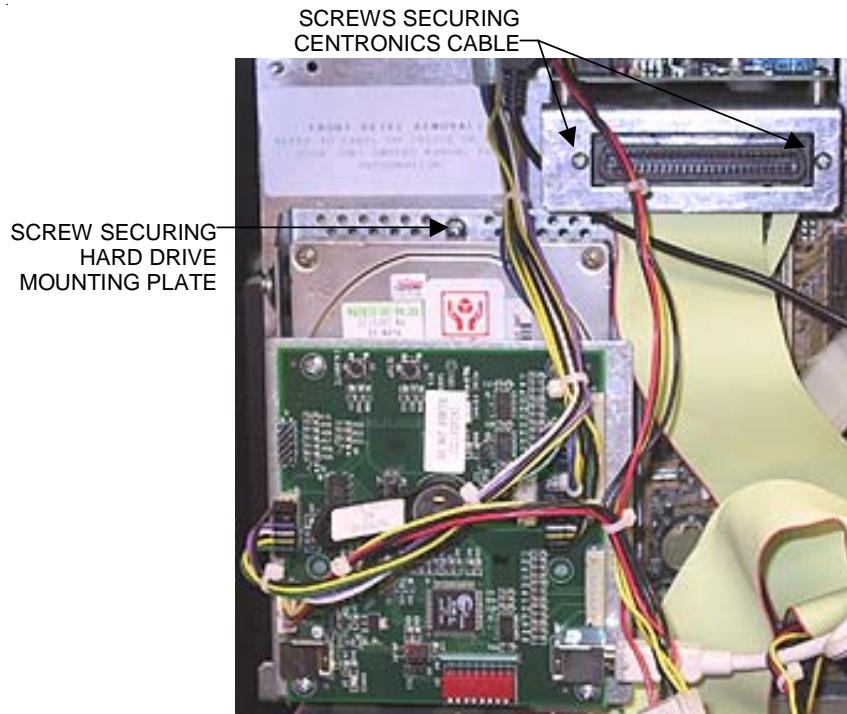
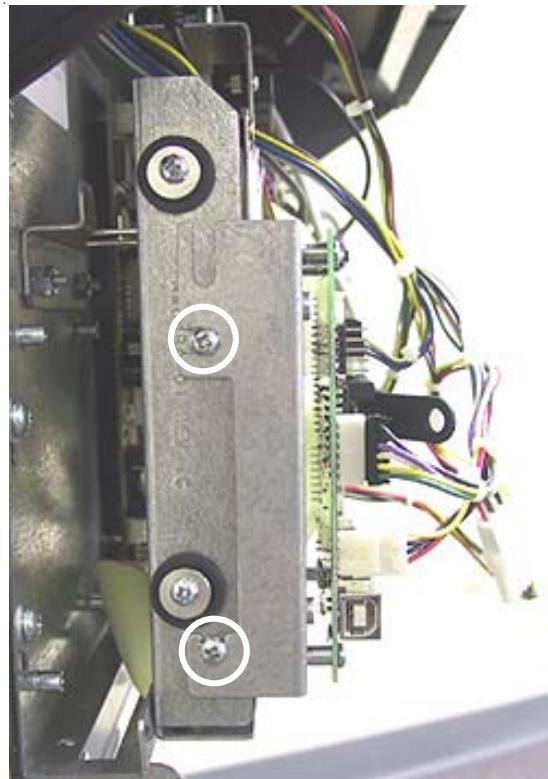


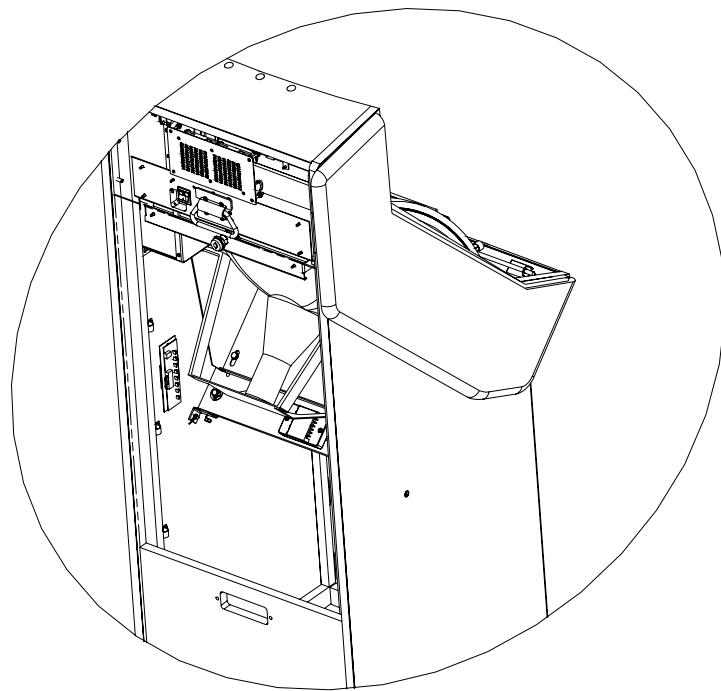
FIGURE 1 - MOTHERBOARD/HARD DRIVE REMOVAL



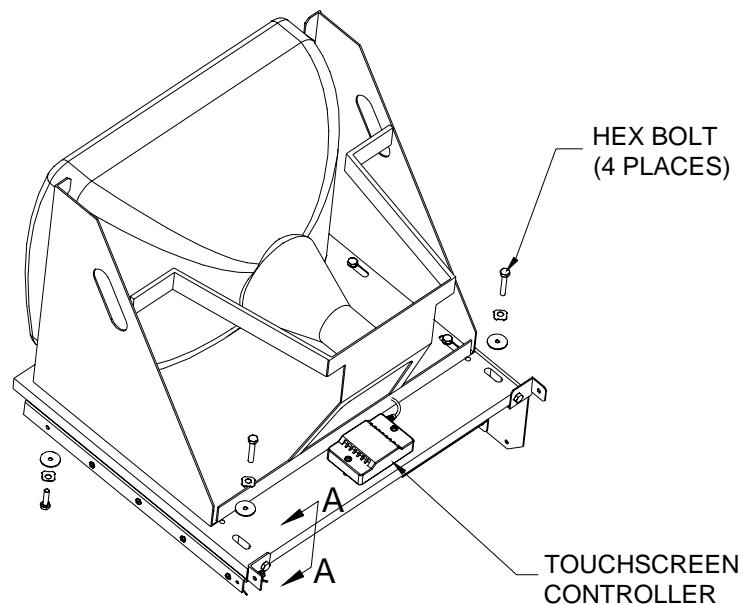
FIGURE 2 - MOTHERBOARD REMOVAL -  
LOCATION OF SCREWS SECURING MOTHERBOARD TO CPU SHELF



**FIGURE 3 - HARD DRIVE REMOVAL - LOCATION OF SCREWS SECURING I/O BOARD MOUNTING PLATE TO HARD DRIVE MOUNTING PLATE**



**FIGURE 4 – MONITOR ACCESS w/ REAR DOOR REMOVED**



**FIGURE 5 - MONITOR REMOVAL**

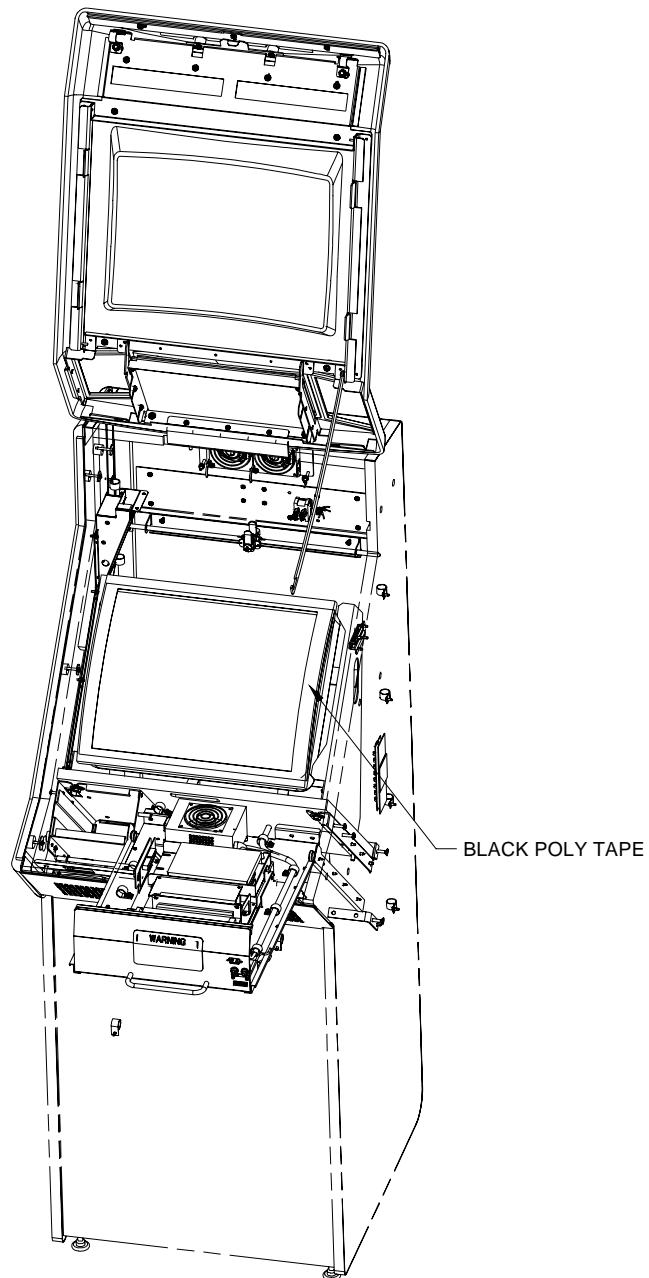


FIGURE 6 - FORCE UPRIGHT (NON-FUSION) TOUCHSCREEN ACCESS

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - Megatouch Combo Jukebox**

#### **Hard Drive Removal**

1. Turn off the main power switch on the outside of the game.
2. Unlock and remove the rear door, then turn off the internal power switch (located above the cooling fan on the left side). Then unplug the game.
3. Disconnect all connections to the I/O board on the electronics shelf. This will allow for I/O board and hard drive removal.
4. Disconnect the power connector and the ribbon cable from the hard drive.
5. Remove the screw securing the hard drive and I/O board assemblies to the electronics tray and remove them from the unit (see Figure 1).
6. Remove the 4 screws securing the I/O board to the mounting plate above the hard drive and remove the I/O board (see Figure 1). Then remove the 2 screws fastening the I/O board mounting plate to the hard drive and remove the hard drive assembly.
7. Remove the 4 screws and shoulder washers fastening the hard drive to the hard drive mounting plate.

#### **Hard Drive Installation**

1. Fasten the new hard drive to the mounting plate with the 4 screws and shoulder washers.
2. Fasten the I/O board mounting plate to the hard drive assembly with the 2 screws, then fasten the I/O board to the mounting plate with the 4 screws (see Figure 1).
3. Fasten the hard drive and I/O board assemblies to the electronics tray with the mounting screw (see Figure 1).
4. Connect the power connector and ribbon cable to the hard drive.
5. Reconnect all connections to the I/O board.
6. Plug in the game, then turn on the internal power switch and replace and lock the rear door.
7. Turn on the main power switch on the outside of the game.

#### **Motherboard Removal**

1. Turn off the main power switch on the outside of the game.
2. Unlock and remove the rear door, then turn off the internal power switch (located above the cooling fan on the left side). Then unplug the game.
3. Disconnect all connections to the I/O board. This will allow for I/O board and hard drive removal.
4. Disconnect the power connector from the hard drive and the hard drive ribbon cable from the motherboard.
5. Remove the screw securing the hard drive and I/O board assemblies to the electronics tray and remove them from the unit (see Figure 1).
6. Disconnect all connections to the motherboard.
7. Remove the 2 screws securing the centronics ribbon cable and move it aside (see Figure 1).

#### **Troubleshooting Information - Removal/Installation of Major Assemblies - Megatouch Combo Jukebox**

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## **ATTENTION:**

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### **Removal/Installation of Major Assemblies - Megatouch Combo Jukebox (cont'd)**

8. Remove the 4 screws mounting the motherboard to the CPU shelf (see Figure 1) and carefully remove the board. Insert the board into an anti-static bag for storage. NOTE: Be sure to read the Motherboard Handling Precautions before handling the board.

#### **Motherboard Installation**

1. Fasten the new motherboard to the CPU shelf (see Figure 1) with the 4 screws.
2. Resecure the centronics cable with the 2 screws.
3. Reconnect all connections to the motherboard.
4. Fasten the hard drive and I/O board assemblies to the electronics tray with the mounting screw (see Figure 1).
5. Reconnect the power connector to the hard drive and the hard drive ribbon cable to the motherboard.
6. Reconnect all connections to the I/O board.
7. Plug in the game, then turn on the internal power switch and replace and lock the rear door.
8. Turn on the main power switch on the outside of the game.

#### **Monitor Removal**

1. Turn off the main power switch on the outside of the game.
2. Unlock and remove the rear door, then turn off the internal power switch (located above the cooling fan on the left side). Then unplug the game.
3. Disconnect all harnesses from the monitor.
4. Using Figure 2, locate the touchscreen controller mounted inside the cabinet on the right side (if you are facing the rear of the game) and remove the two screws fastening the controller to the cabinet. Then disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness.
5. Remove the screws securing the 2 clamps fastening the power cable to the fluorescent light assembly (after removing the upper screw, immediately replace it in order to keep the fan assembly fastened). Then move the cable aside in order to make room for monitor removal. You may need to disconnect one of the fan power harnesses as well.
6. Remove the 3 hex bolts on either side of the mounting plate (see Figure 3) fastening the plate to the 2 monitor mounting brackets inside the unit.
7. Remove the 2 lower nuts and bolts (one on each side) fastening the monitor mounting brackets to the unit (see Figure 3). This will allow room to slide out the monitor assembly.
8. Carefully remove the monitor assembly from the game. Disconnect other wires and harnesses if necessary.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - Megatouch Combo Jukebox (cont'd)**

#### **Monitor Installation**

1. Place the new monitor assembly in the game.
2. Replace the 2 lower nuts and bolts through the monitor mounting brackets to fasten the monitor to the game.
3. Fasten the mounting plate to the monitor mounting brackets with the 3 hex bolts (see Figure 3).
4. Connect the new touchscreen controller cable in the back of the controller and secure the controller with the existing hardware. Also connect the Molex connector (orange and gray wires) to the main power harness.
5. Reconnect the all harnesses to the monitor, as well as any other harnesses that were disconnected when removing the monitor. Also replace the power cable to the fluorescent light assembly in the clamps.
6. Plug in the game, then turn on the internal power switch and replace and lock the rear door.
7. Turn on the main power switch on the outside of the game.
8. Calibrate the touchscreen.

#### **Touchscreen Removal**

1. Turn off the main power switch on the outside of the game.
2. Unlock and remove the rear door, then turn off the internal power switch (located above the cooling fan on the left side). Then unplug the game.
3. Using Figures 4 and 5, remove the 6 bolts and wing nuts (3 per side) fastening the front bezel to the cabinet and remove the bezel.
4. Using Figure 2, locate the touchscreen controller mounted inside the cabinet on the right side (if you are facing the rear of the game) and remove the two screws fastening the controller to the cabinet. Then disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness.
5. Remove the black poly tape from around the edges of the old touchscreen (see Figure 6). Remember how the tape was placed in order to tape the new touchscreen.
6. Use dental floss to carefully cut the foam tape holding the touchscreen to the picture tube until you are able to completely remove the touchscreen.
7. Remove any remaining adhesive residue with denatured alcohol, then wipe the surface of the picture tube with the supplied alcohol wipe.

#### **Touchscreen Installation**

1. Clean the reverse side of the replacement touchscreen with the supplied alcohol wipe.
2. If there is no tape already on the touchscreen, cut pieces of the supplied 1/2" foam tape long enough to cover each edge of the screen without overlapping. After the tape is in place on the screen, peel off the backing.
3. Replace the new touchscreen over the monitor (with the cable on the left if you are facing the game), making sure the screen is properly and evenly aligned over the picture tube. Then

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**Removal/Installation of Major Assemblies -  
Megatouch Combo Jukebox (cont'd)**

clean the front of the screen with the supplied alcohol wipe.

4. Remembering the manner in which the tape was placed around the original touchscreen, place and cut a length of the supplied black poly tape evenly over an entire edge of the touchscreen and repeat until all 4 edges are covered.
5. Place and cut a longer length of black poly tape around all 4 edges of the screen.
6. Connect the new touchscreen controller cable in the back of the controller and secure the controller with the existing hardware. Also connect the Molex connector (orange and gray wires) to the main power harness.
7. Carefully replace the front bezel, lining up the holes in the bezel with the screw holes on the game. Then replace the 6 bolts and wing nuts (3 per side) fastening the bezel to the game. Refer to Figures 4 and 5.
8. Plug in the game, then turn on the internal power switch and replace and lock the rear door.
9. Turn on the main power switch on the outside of the game.
10. Calibrate the touchscreen.

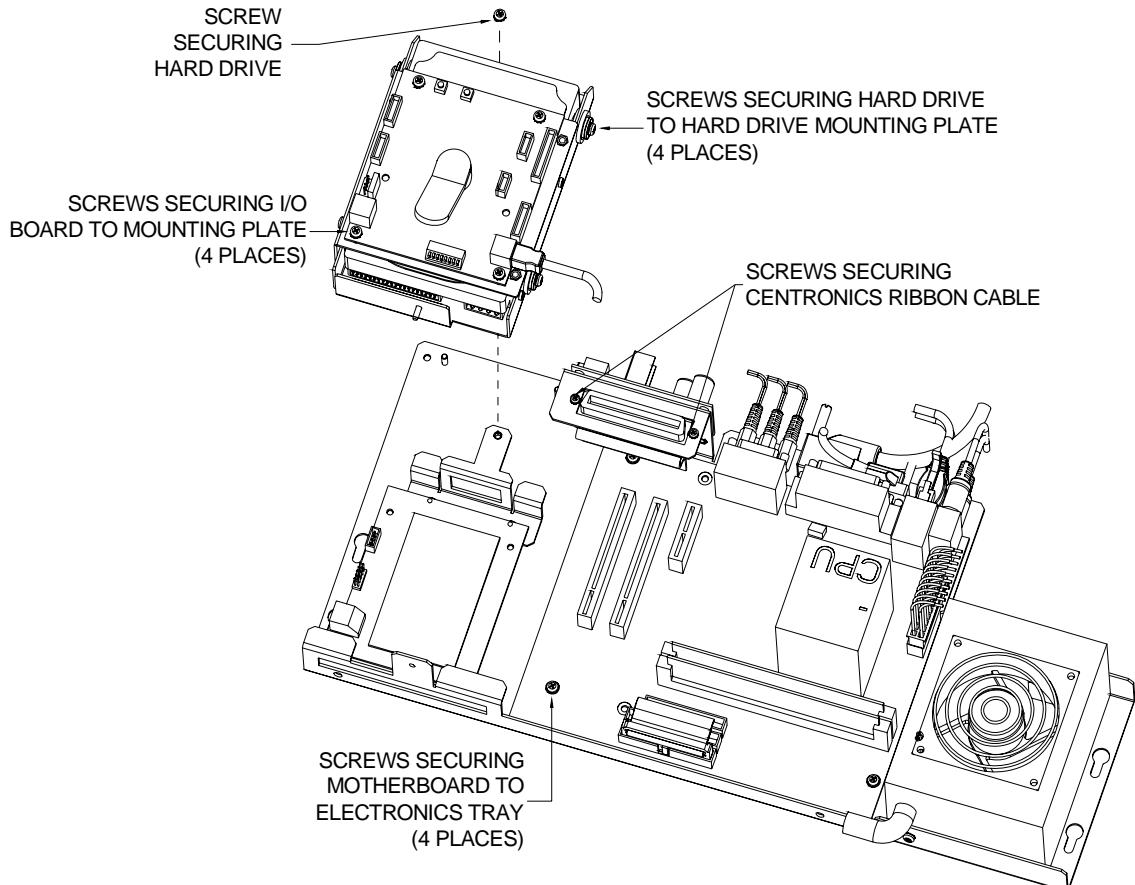


FIGURE 1 - REMOVING HARD DRIVE/MOTHERBOARD

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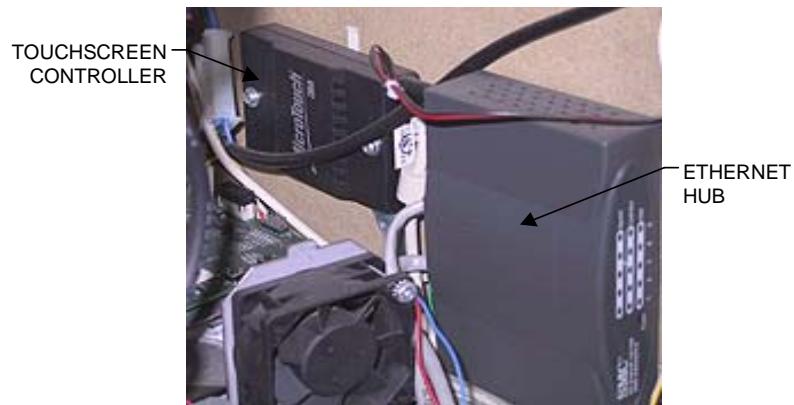


FIGURE 2 - MEGATOUCH COMBO JUKEBOX - INSIDE REAR OF CABINET

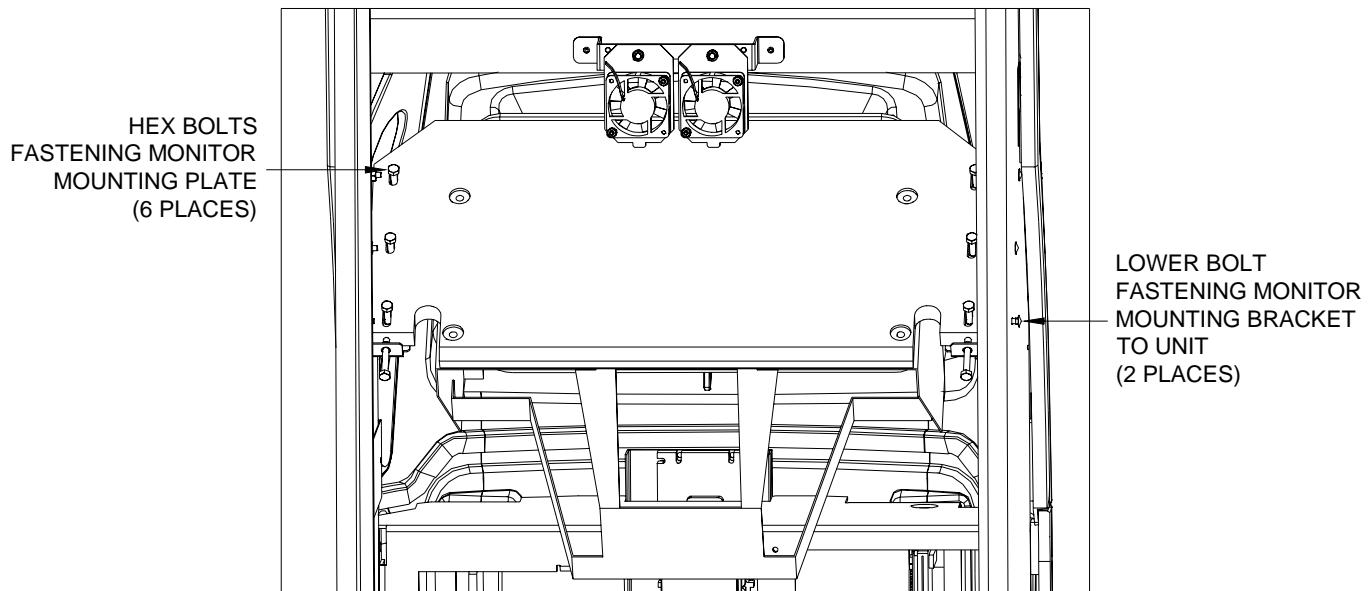


FIGURE 3 - REMOVING MONITOR ASSEMBLY

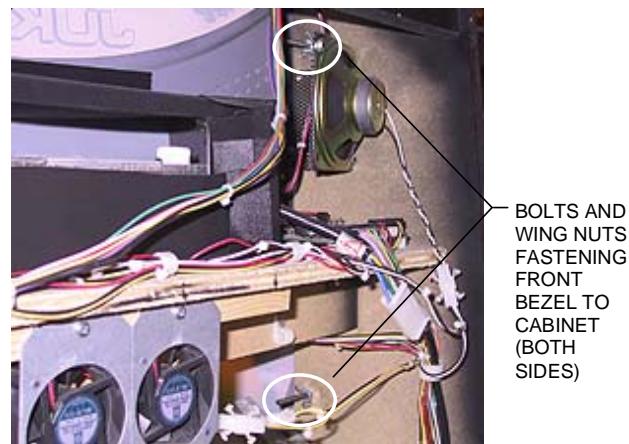


FIGURE 4 - MEGATOUCH COMBO JUKEBOX - INSIDE REAR OF CABINET

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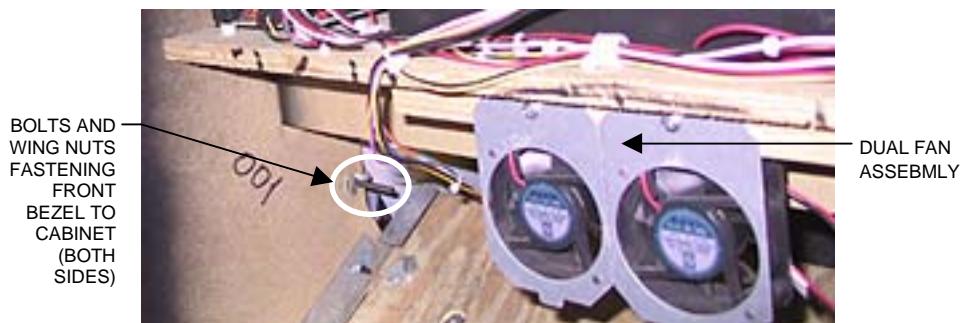


FIGURE 5 - MEGATOUCH COMBO JUKEBOX - INSIDE REAR OF CABINET



FIGURE 6 - MEGATOUCH COMBO JUKEBOX - MONITOR AND TOUCHSCREEN

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - Mr. VIPS**

#### **Hard Drive Removal**

1. Turn off and unplug the game.
2. Unlock and remove the lower rear door.
3. Remove the nuts fastening the electronics tray to the game. The side wall mounted tray will have 4 nuts (see Figure 1). The bottom mounted tray will have 3 nuts, 2 in the right front corner and 1 on the left side by the power strip (see Figure 2).
4. Disconnect any connections or cables preventing the electronics tray from being removed from the game, then remove the tray. Be sure to keep track of what was disconnected.
5. Remove the 4 screws and shoulder washers fastening the hard drive to the mounting plate on the electronics tray, then slide out the hard drive from under the I/O board until you're able to disconnect the power connector and ribbon cable from the drive. See Figure 2.

#### **Hard Drive Installation**

1. Place the new hard drive under the I/O board and connect the power connector and ribbon cable to the drive, then fasten the drive to the mounting plate with the 4 screws and shoulder washers (see Figure 2)
2. Replace the electronics tray in the game and fasten it with the same nuts removed in step 3 (see Figure 1 or Figure 2).
3. Reconnect any connections from step 4 above.
4. Replace and lock the rear door.
5. Plug in and turn on the game.

#### **Motherboard Removal**

1. Turn off and unplug the game.
2. Unlock and remove the rear door.
3. Remove the nuts fastening the electronics tray to the game. The side wall mounted tray will have 4 nuts (see Figure 1). The bottom mounted tray will have 3 nuts, 2 in the right front corner and 1 on the left side by the power strip (see Figure 2).
4. Disconnect any connections or cables preventing the electronics tray from being removed from the game, then remove the tray. Be sure to keep track of what was disconnected.
5. Disconnect all connections to the motherboard. Be sure to keep track of what was disconnected.
6. Side wall mounted tray: Remove the 4 screws mounting the motherboard to the electronics tray. Bottom mounted tray: Release the locking head of the nylon standoffs by pushing in the sides (see Figure 4 for both locations). Carefully remove the board and insert into an anti-static bag for storage. NOTE: Be sure to read the Motherboard Handling Precautions before handling the board.

#### **Troubleshooting Information - Removal/Installation of Major Assemblies - Mr. VIPS**

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### **Removal/Installation of Major Assemblies - Mr. VIPS (cont'd)**

#### **Motherboard Installation**

1. Place the new motherboard on the electronics tray and secure it with the 4 screws or nylon standoffs (see Figure 4).
2. Reconnect all connections to the motherboard.
3. Replace the electronics tray in the game and fasten it with the nuts. See Figure 1 or Figure 2.
4. Reconnect any connections from step 4 above.
5. Replace and lock the rear door.
6. Plug in and turn on the game.

#### **Power Supply Removal**

1. Turn off and unplug the game.
2. Unlock and remove the rear door.
3. Unplug the IEC connector from the power supply.
4. Disconnect all connections to the main power supply harness.
5. If the power supply is fastened to the game with a metal strap (see Figure 5) and double-sided tape, remove the 2 screws fastening the strap, then carefully pull the power supply off the double-sided tape and out of the game. For games without the metal strap, remove the 2 screws fastening the power supply to the game (see Figure 6).

#### **Power Supply Installation**

1. Install the new power supply in the game in the same manner as the old power supply and fasten it with the existing hardware. If applicable, use double-sided tape to ensure the power supply is firmly held in place.
2. Reconnect all connections to the main power supply harness.
3. Plug the IEC connector into the new power supply.
4. Replace and lock the rear door.
5. Plug in and turn on the game.

#### **Monitor Removal**

1. Turn off and unplug the game.
2. Unlock and remove the upper rear door.
3. To remove the large prize assembly, first remove the 2 nuts and bolts fastening the cap and unplug the fluorescent light assembly, then remove the remaining 8 nuts and bolts fastening the prize assembly to the game. The cap and prize assembly can be removed together. See Figure 7.
4. Remove the cable clamp fastening the small prize assembly light wiring to the monitor frame.

#### **Troubleshooting Information - Removal/Installation of Major Assemblies - Mr. VIPS**

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### **Removal/Installation of Major Assemblies - Mr. VIPS (cont'd)**

See Figure 6.

5. From inside the game, access and remove the 4 screws (2 per side) fastening the sides of the shroud to the game. See Figure 9.
6. To completely remove the shroud and proceed with monitor removal, first determine the type of hardware securing the shroud to your game. See Figures 10 and 11.

**Games with screws securing front of shroud:** Remove the 4 screws from under the monitor (see Figure 10), then carefully remove the shroud and small prize assembly from the game. Then remove the bolts and nuts (there may be as many as 6) securing the monitor to the game (see Figures 12-14 for possible locations).

**Games with bolts securing front of shroud:** Remove the bolts and nuts (there may be as many as 6) securing the monitor to the game (see Figures 12-14 for possible locations). Then carefully pull the monitor towards you until you have enough room to access the 4 nuts securing the bolts holding the front of the shroud to the game. Remove the nuts and bolts, then carefully remove the shroud and small prize assembly from the game.

7. Remove the two nuts and washers securing the touchscreen controller to the inside of the monitor (see Figure 15) and remove the controller from the mounting screws. Then disconnect the cable from the back of the controller and disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness.
8. Disconnect all harnesses from the monitor.
9. Remove the monitor from the game.

### **Monitor Installation**

1. Place the new monitor in the game. If the front of the shroud was secured with bolts, be sure to temporarily leave enough room in front of the monitor to replace the mounting hardware.
2. Reconnect all harnesses to the monitor.
3. Connect the new touchscreen controller cable in the back of the controller and secure the controller on the mounting screws in the game with the existing hardware (see Figure 15). Also connect the Molex connector (orange and gray wires) to the main power harness.
4. Replace the shroud and the prize assembly, then secure the front of the shroud with the existing hardware.
5. Secure the monitor in the game with the existing hardware. See Figures 12-14.
6. From inside the game, replace the 4 screws (2 per side) fastening the sides of the shroud to the game. See Figure 9.
7. Fasten the small prize assembly light wiring to the monitor frame with a new cable clamp as shown in Figure 8.
8. Replace the cap and large prize assembly, then replace the 8 nuts and bolts fastening the prize assembly to the game. Then replace the 2 nuts and bolts fastening the cap to the game and plug in the fluorescent light. See Figure 7.
9. Replace and lock the upper rear door.

## **ATTENTION:**

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### **Removal/Installation of Major Assemblies - Mr. VIPS (cont'd)**

10. Plug in and turn on the game.

#### **Touchscreen Removal**

1. Turn off and unplug the game.
2. Unlock and remove the upper rear door.
3. To remove the large prize assembly, first remove the 2 nuts and bolts fastening the cap and unplug the fluorescent light assembly, then remove the remaining 8 nuts and bolts fastening the prize assembly to the game. The cap and prize assembly can be removed together. See Figure 7.
4. To proceed with touchscreen removal, first determine the type of hardware securing the shroud to your game. See Figures 10 and 11.

##### **Games with screws securing front of shroud:**

- To remove the front bezel from the shroud, remove the 4 screws on the underside of the bezel (see Figure 10), then remove the 4 screws (2 per side) on either side of the front bezel (see Figure 16). The bezel can then be removed.

##### **Games with bolts securing front of shroud:**

- Remove the cable clamp fastening the small prize assembly light wiring to the monitor frame. See Figure 8.
  - From inside the game, access and remove the 4 screws (2 per side) fastening the sides of the shroud to the game. See Figure 9.
  - Remove the bolts and nuts (there may be as many as 6) securing the monitor to the game (see Figures 11-14 for possible locations). Then carefully pull the monitor towards you until you have enough room to access the 4 nuts securing the bolts holding the front of the shroud to the game. Remove the nuts and bolts, then carefully remove the shroud and small prize assembly from the game.
5. Remove the black poly tape (see Figure 17) from around the edges of the old touchscreen, keeping the manner in which the tape was placed around the screen in mind.
  6. Remove the two nuts and washers securing the touchscreen controller to the inside of the monitor (see Figure 15) and remove the controller from the mounting screws. Then disconnect the cable from the back of the controller and disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness.
  7. Use dental floss to carefully cut the foam tape holding the touchscreen to the picture tube until you are able to completely remove the touchscreen.
  8. Remove any remaining adhesive residue with denatured alcohol, then wipe the surface of the picture tube with the supplied alcohol wipe.

#### **Touchscreen Installation**

1. Clean the reverse side of the replacement touchscreen with the supplied alcohol wipe.

#### **Troubleshooting Information - Removal/Installation of Major Assemblies - Mr. VIPS**

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### **Removal/Installation of Major Assemblies - Mr. VIPS (cont'd)**

2. Peel the backing from the 8 pieces of double-sided foam tape already adhered to the reverse side of the touchscreen.
3. Replace the new touchscreen over the picture tube (with the cable on the right if you are facing the game), making sure the screen is properly and evenly aligned over the picture tube. Then clean the front of the screen with the supplied alcohol wipe.
4. Connect the new touchscreen controller cable in the back of the controller and secure the controller on the mounting screws in the game with the existing hardware (see Figure 15). Also connect the Molex connector (orange and gray wires) to the main power harness.
5. Remembering the manner in which the tape was placed around the touchscreen you removed, place and cut a length of the supplied black poly tape evenly over an entire edge of the touchscreen and repeat until all 4 edges are covered.
6. Place and cut a longer length of black poly tape around all 4 edges of the screen.
7. **Games with screws securing front of shroud:**
  - Replace the bezel in the shroud and secure it with the 8 screws. See Figures 10 and 16.**Games with bolts securing front of shroud:**
  - Replace the shroud and small prize assembly, then secure the front of the shroud with the 4 nuts and bolts removed earlier.
  - Slide the monitor back into position and secure it with the hardware removed earlier (see Figures 12-14 for hardware locations).
  - Replace the 4 screws (2 per side) fastening the sides of the shroud to the game. See Figure 7.
  - Replace the cable clamp fastening the small prize assembly light wiring to the monitor frame. See Figure 8.
8. Replace the cap and large prize assembly, then replace the 8 nuts and bolts fastening the prize assembly to the game. Then replace the 2 nuts and bolts fastening the cap to the game and plug in the fluorescent light. See Figure 7.
9. Replace and lock the upper rear door.
10. Plug in and turn on the game.

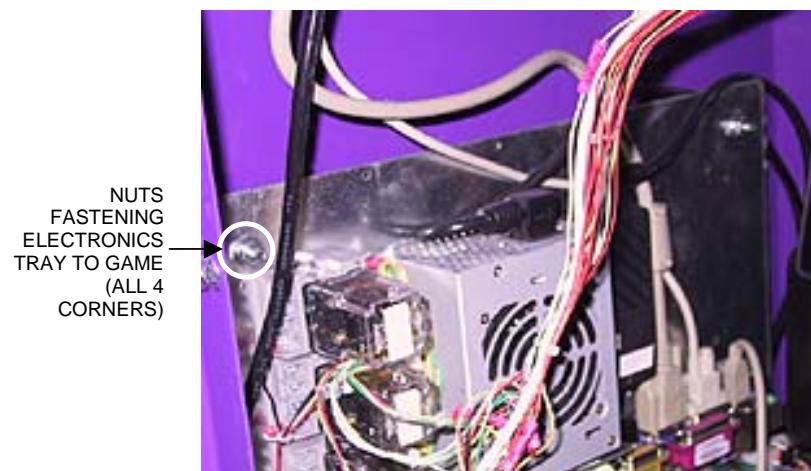


FIGURE 1 - CPU SECTION - ELECTRONICS TRAY MOUNTED ON SIDE WALL

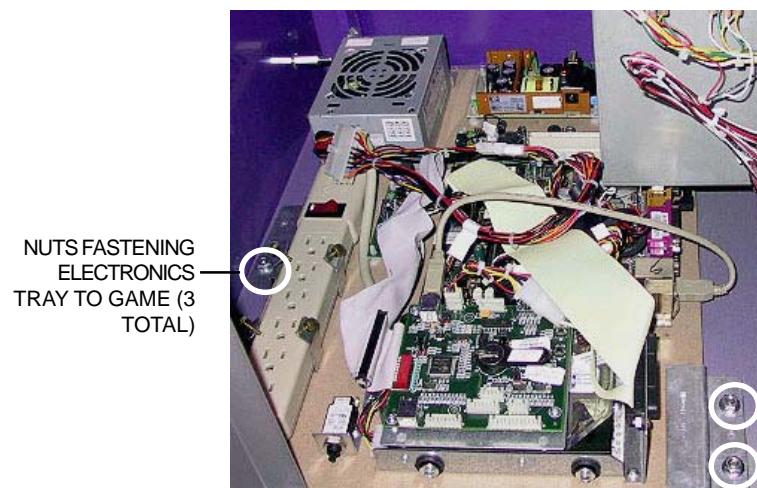


FIGURE 2 - CPU SECTION - ELECTRONICS TRAY MOUNTED ON BOTTOM WALL

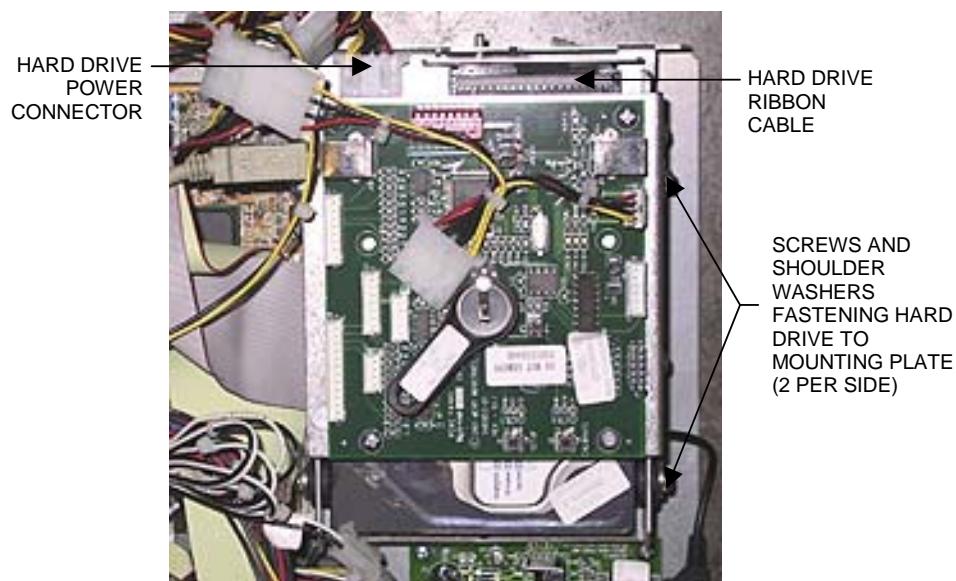


FIGURE 3 - CLOSEUP OF HARD DRIVE

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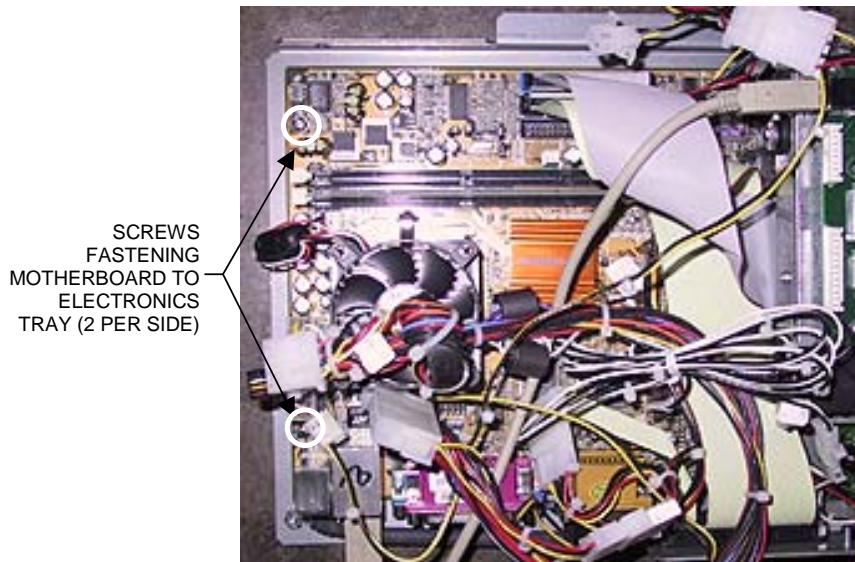


FIGURE 4 - CLOSEUP OF MOTHERBOARD



FIGURE 5 - CLOSEUP OF POWER SUPPLY WITH METAL STRAP

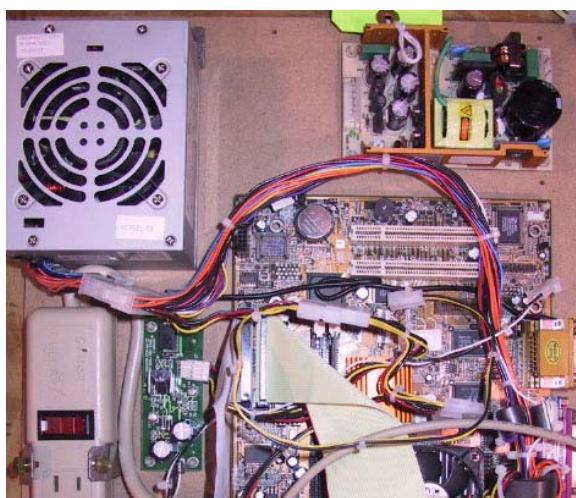


FIGURE 6 - CLOSEUP OF POWER SUPPLY WITHOUT METAL STRAP

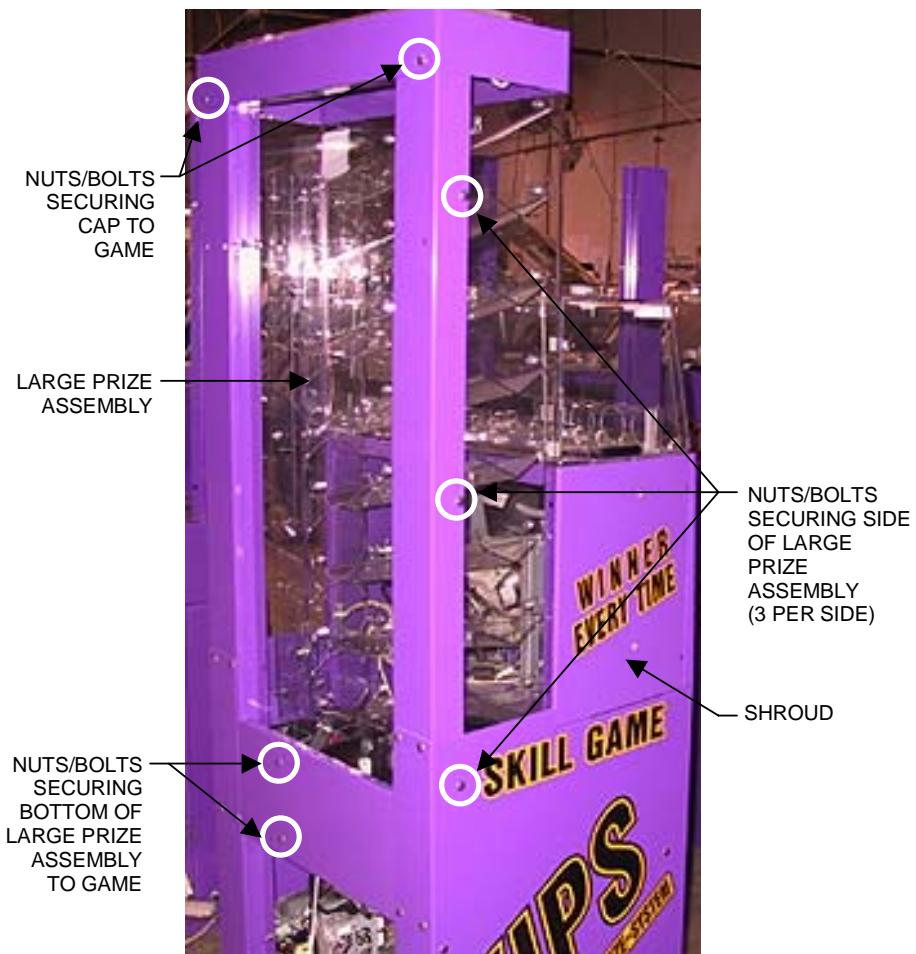


FIGURE 7 - SIDE/REAR VIEW OF GAME

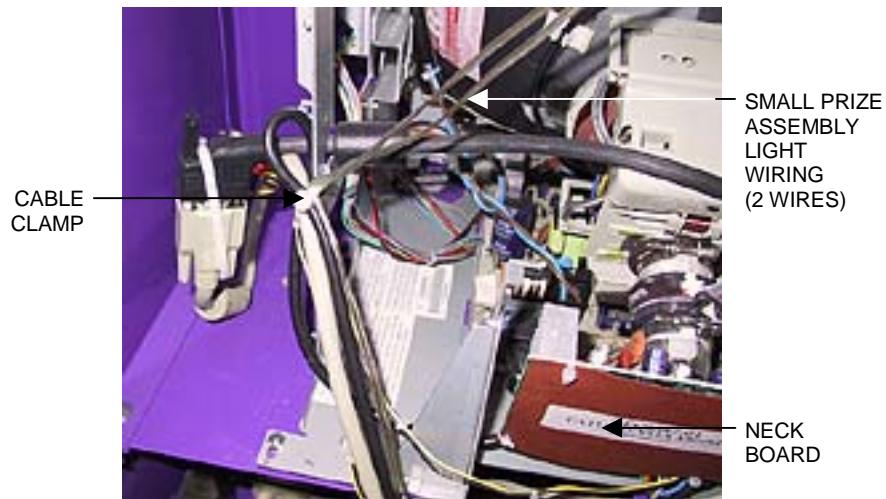


FIGURE 8 - REAR OF MONITOR

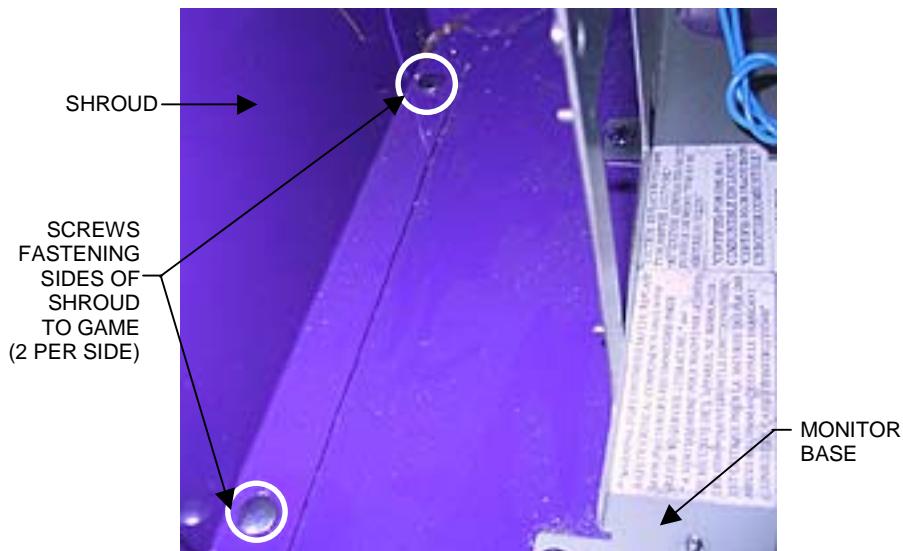


FIGURE 9 - INSIDE OF SHROUD



FIGURE 10 - FRONT OF SHROUD FASTENED WITH SCREWS



FIGURE 11 - FRONT OF SHROUD FASTENED WITH BOLTS



FIGURE 12 - POSSIBLE HARDWARE LOCATION FOR MOUNTING MONITOR

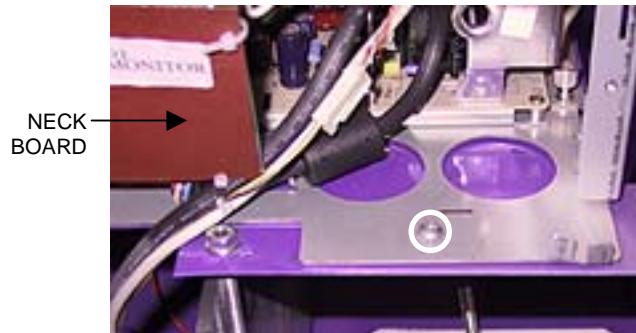


FIGURE 13 - POSSIBLE HARDWARE LOCATION FOR MOUNTING MONITOR

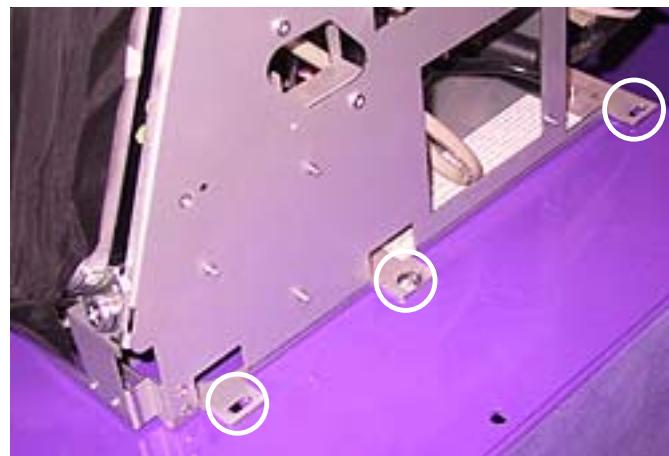


FIGURE 14 - POSSIBLE HARDWARE LOCATION FOR MOUNTING MONITOR

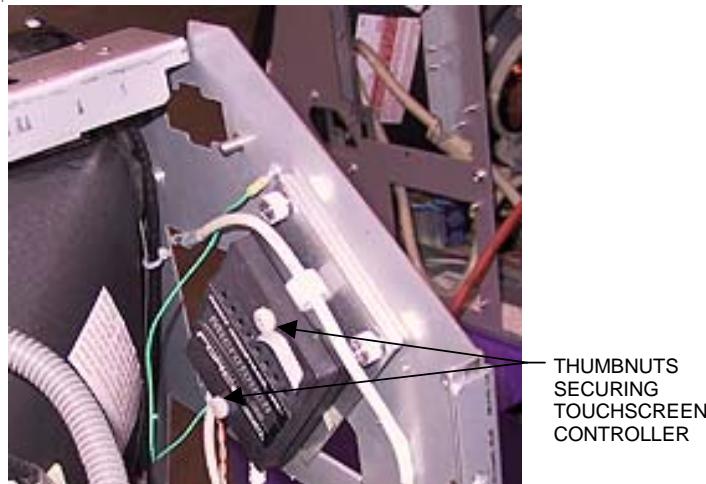


FIGURE 15 - TOUCHSCREEN CONTROLLER

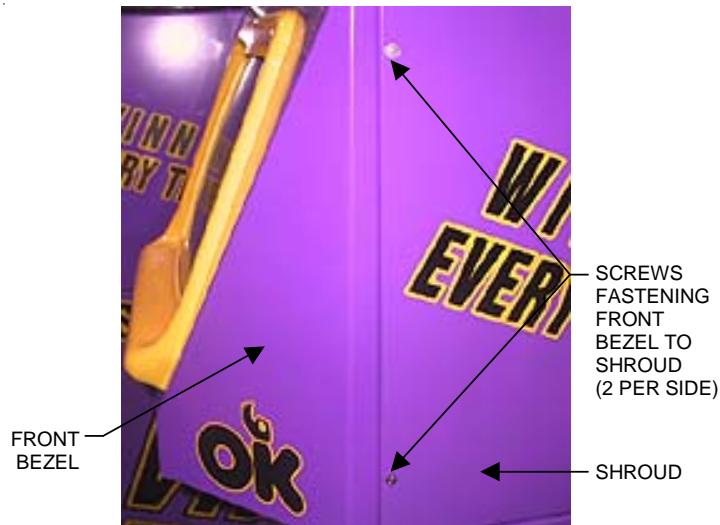


FIGURE 16 - SIDE/FRONT OF GAME

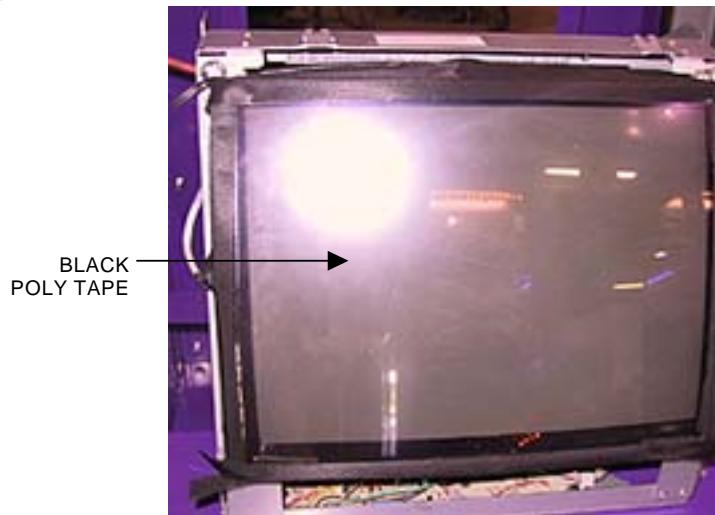


FIGURE 17 - MONITOR AND TOUCHSCREEN

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - Megatouch Money Shoot**

#### **Hard Drive Removal**

1. Turn off and unplug the game.
2. Unlock and open the bottom door.
3. Remove the 4 screws fastening the electronics box cover and carefully remove the cover. See Figure 1.
4. Using Figure 2, locate the hard drive behind the I/O board. Remove the 4 screws and any connectors securing the I/O board to the hard drive assembly.
5. Remove the 5 shoulder washers securing the hard drive assembly to the electronics box, then remove the assembly until you're able to disconnect the hard drive power connector and hard drive ribbon cable. See Figure 2.
6. Remove the 4 screws fastening the hard drive to the mounting plate. See Figure 3.
7. Slide the hard drive out of the mounting plate.

#### **Hard Drive Installation**

1. Slide the new hard drive into the mounting plate and secure with the 4 screws.
2. Using the existing hardware, re-secure the I/O board to the hard drive mounting plate. Reconnect any necessary connectors.
3. Reconnect the power connector and ribbon cable to the hard drive, then slide the hard drive assembly into place in the electronics box. Tighten the 5 shoulder washers to secure. See Figure 2.
4. Replace the electronics box cover and fasten it with the 4 screws. See Figure 1.
5. Close and lock the bottom door.
6. Plug in and turn on the game.

#### **Motherboard Removal**

1. Turn off and unplug the game.
2. Unlock and open the bottom door.
3. Remove the 4 screws securing the electronics box cover. Carefully remove the cover (see Figure 1).
4. Disconnect all connections to the motherboard, as well as any other harnesses that may interfere with removal of the board.
5. Remove the 6 screws (3 top and 3 bottom) fastening the edge of the motherboard to the inside of the electronics box (see Figure 4), then carefully lift the motherboard out of the game and insert the board into an anti-static bag for storage. **NOTE: Be sure to read the Motherboard Handling Precautions before handling the board.**

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - Money Shoot (cont'd)**

#### **Motherboard Installation**

1. Place the new motherboard in the electronics box and refasten the 6 screws (3 top and 3 bottom) securing it to the inside of the box. See Figure 4.
2. Reconnect all connections to the motherboard, as well as any harnesses that were disconnected earlier.
3. Replace the electronics box cover and fasten it with the 4 screws. See Figure 1.
4. Close and lock the bottom door.
5. Plug in and turn on the game.

#### **Power Supply Removal**

1. Turn off and unplug the game.
2. Unlock and open the bottom door.
3. Remove the 4 screws securing the electronics box cover. See Figure 1. Carefully remove the cover.
4. Remove the 4 shoulder washers (2 on the left interior wall and 2 on the floor of the electronics box) securing the power supply assembly to the game. See Figure 5.
5. Disconnect all connections to the main power supply harness.
6. Remove the power supply.

#### **Power Supply Installation**

1. **NOTE: Before securing the power supply assembly, make sure the ground wire is secured around the left rear pem stud.** Install the new power supply assembly in the game in the same manner as the old power supply. Fasten with the existing hardware. See Figure 5.
2. Reconnect all connections to the main power supply harness.
3. Plug the IEC connector into the new power supply.
4. Replace the electronics box cover and fasten it with the 4 screws. See Figure 1.
5. Close and lock the bottom door.
6. Plug in and turn on the game.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - Money Shoot (cont'd)**

#### **Monitor Removal**

1. Turn off and unplug the game.
2. Unlock and open the top bezel
3. Use dental floss to carefully cut the foam tape holding the touchscreen to the monitor until you are able to completely remove the screen. Once the touchscreen is completely free from the monitor, remove any residual foam tape from the monitor with denatured alcohol. You will need to place the touchscreen on a stable surface until it is installed on the new monitor.
4. Remove the 2 screws securing the monitor mounting bracket to the game. See Figure 7.
5. Carefully shifting the monitor mounting bracket on the pegs (if necessary), remove the following connections behind the monitor (see Figure 8):
  - VGA monitor connector (gray cord),
  - Power connector and ground screw,
  - Monitor control board connector,
  - Power cable connector (black and yellow wire).
6. Slide the monitor assembly off the bezel and put aside.
7. Unlock and open the monitor bezel.
8. If you will be reusing the existing touchscreen, remove the 2 screws fastening the touchscreen controller to back of the monitor bezel (see Figure 6) and disconnect the cable from the underside of the controller. Locate and disconnect the Molex connector (orange and gray wires). See Figure 6.  
If you will not be reusing the existing touchscreen, remove the cable clamps securing the touchscreen cable and the touchscreen power harness. Next, remove the screws fastening the touchscreen controller (see Figure 6) to the game and disconnect the cable from the underside of the controller. Locate and disconnect the Molex connector (orange and gray wires). See Figure 6.
9. Return to the monitor assembly and remove the 4 corner screws securing the monitor to the bracket. See Figure 7. Remove the monitor.
10. Close and lock the monitor bezel.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - Money Shoot (cont'd)**

#### **Monitor Installation**

1. Attach the new monitor to the monitor mounting bracket with the 4 screws.
2. If your replacement monitor already has a touchscreen, go to Step 3.

If you are using the original touchscreen, clean the glass on the new LCD monitor with the supplied alcohol wipe, then cut pieces of the supplied ½" foam tape long enough to cover each edge of the monitor without overlapping. After the tape is in place on the monitor, peel off the packing. Carefully place the touchscreen over the monitor in the same manner it was attached to the old monitor, making sure the screen is properly and evenly aligned over the glass, then connect to the LCD panel. Clean the front of the touchscreen with the supplied alcohol wipe once it is in place.

3. Open the top bezel, then slide the monitor assembly onto the 4 pegs. Reattach the 2 screws securing the monitor assembly to the monitor bezel.
4. Reconnect the following connections behind the monitor (see Figure 8). Make sure to properly dress the wires so they remain secured. Unlock and open the monitor bezel if necessary:

VGA monitor connector (gray cord),  
Power connector and ground screw,  
Monitor control board wire connector, and  
Power cable connector (black and yellow wire).

5. If you are reusing the existing touchscreen, reconnect the touchscreen cable underneath the touchscreen controller and secure the controller with the existing 2 screws. Also connect the Molex connector (orange and gray wires) to the main power harness. Make sure to properly dress the wires so they remain secured.. See Figure 6.

If you are not be reusing the existing touchscreen, install the new touchscreen controller with the 2 screws. Connect the molex connector, touchscreen controller cable, and the touchscreen power harness. Make sure to properly dress the wires so they remain secured. See Figure 6.

6. Close and lock the monitor and top bezels.
7. Plug in and turn on the game.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - Money Shoot (cont'd)**

#### **Touchscreen Removal**

1. Turn off and unplug the game.
2. Unlock and open the top and monitor bezels.
3. Cut the tie wraps securing the touchscreen cable and the touchscreen power harness, then remove the 2 screws fastening the touchscreen controller (see Figure 6) to the game and disconnect the cable from the back of the controller. Locate and disconnect the Molex connector (orange and gray wires) running from the touchscreen controller cable to the main power harness, and also disconnect the ground screw. See Figure 6.
4. Close and lock the monitor bezel.
5. Use dental floss to carefully cut the foam tape holding the touchscreen to the monitor until you are able to completely remove the screen. Once the touchscreen is completely free from the monitor, remove any residual foam tape from the monitor with denatured alcohol.

#### **Touchscreen Installation**

1. Clean the glass on the reverse side of the new touchscreen with the supplied alcohol wipe, then cut pieces of the supplied 1/2" foam tape long enough to cover each edge of the monitor without overlapping. After the tape is in place on the monitor, peel off the backing. Carefully place the touchscreen over the monitor in the same manner it was attached to the old monitor, making sure the screen is properly and evenly aligned over the glass. Clean the front of the touchscreen with the supplied alcohol wipe once it is in place.
2. Unlock and open the top and monitor bezels.
3. Reconnect the touchscreen cable underneath the touchscreen controller and secure the controller with the existing hardware. Also connect the Molex connector (orange and gray wires) to the main power harness (after routing the wires through the cable clamps). See Figure 6.
4. Close and lock the monitor bezel.
5. Plug in and turn on the game.
6. When the game is finished booting, press the CALIBRATE button on the monitor control board.
7. Close and lock the top bezel, then calibrate the touchscreen.

## **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DEVICES

### **Removal/Installation of Major Assemblies - Money Shoot (cont'd)**

#### **Top Bezel Removal**

1. Turn off and unplug the game.
2. Unlock and open the top bezel
3. Remove the 6 hexnuts and screws securing the bracket to the back of the game (including the two screws holding the small silver bracket). See Figure 9.
4. Go to Step 5 if you are not replacing the top bezel hinge.

Lift the monitor bezel, and remove the 6 hexnuts and screws securing the exterior bracket to the game (see Figure 10). Remove the bracket.

5. Close the monitor bezel. Locate the yellow rubber coated brackets. On the left and right sides, remove the hexnut, spring, spacer, and screw securing the top bezel to the bracket. See Figure 9.
6. Lift and remove the top bezel.

#### **Top Bezel Installation**

1. Go to Step 2 if you are not replacing the top bezel hinge.  
Place the new bracket in the correct position. See Figure 11.
2. Use the 6 hexnuts and screws to secure the exterior bracket to the game in the monitor bezel section. See Figure 10.
3. Close and lock the monitor bezel.
4. Replace the hexnut, spring, spacer and screw securing the top bezel to the side brackets on the left and right sides. See Figure 9.
5. Replace the 6 hexnuts and screws securing the bracket to the back of the game (including the silver bracket and 2 screws). See Figure 10.
6. Close and lock the top bezel.
7. Plug in and turn on the game.



FIGURE 1 - CLOSED ELECTRONICS BOX - LOCATED IN BOTTOM OF MONEY SHOOT CABINET

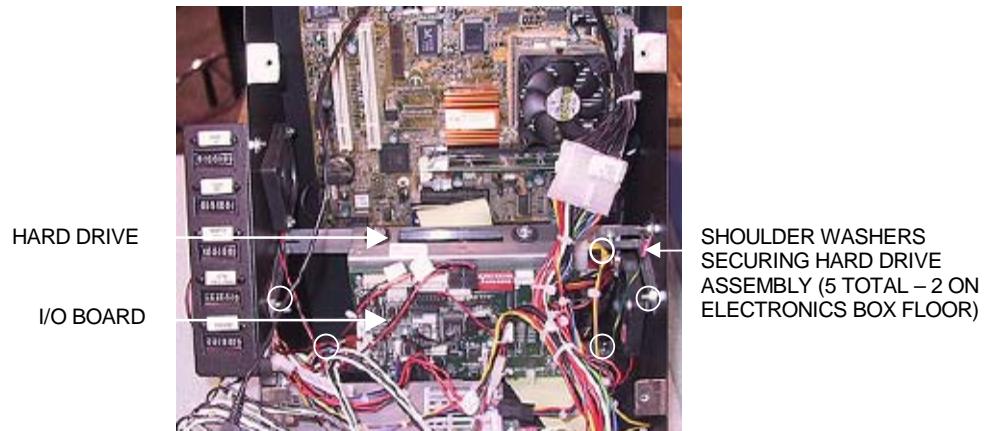


FIGURE 2 - ELECTRONICS BOX WITH COVER REMOVED - CPU SECTION



FIGURE 3 - HARD DRIVE

**Troubleshooting Information - Removal/Installation of Major Assemblies -  
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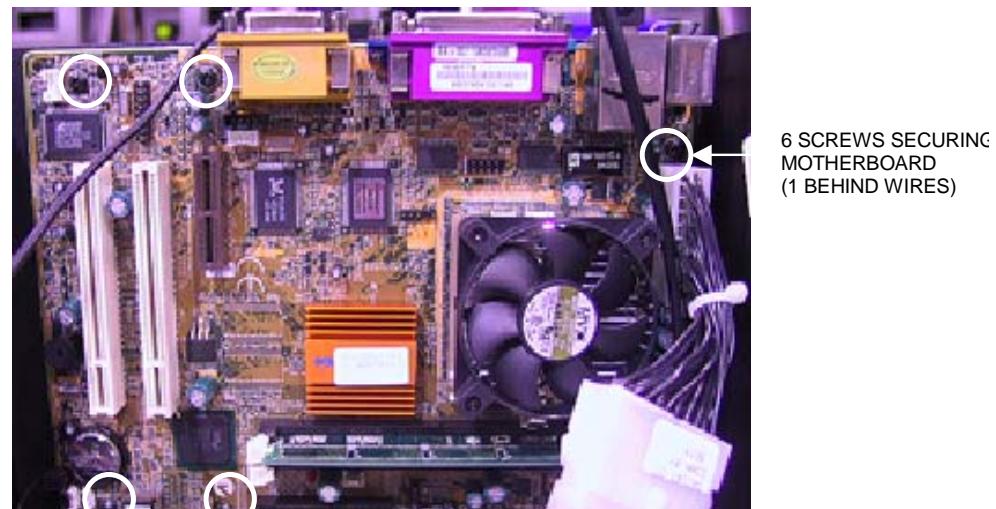


FIGURE 4 - MOTHERBOARD



FIGURE 5 - POWER SUPPLY AND MOUNTING BRACKET

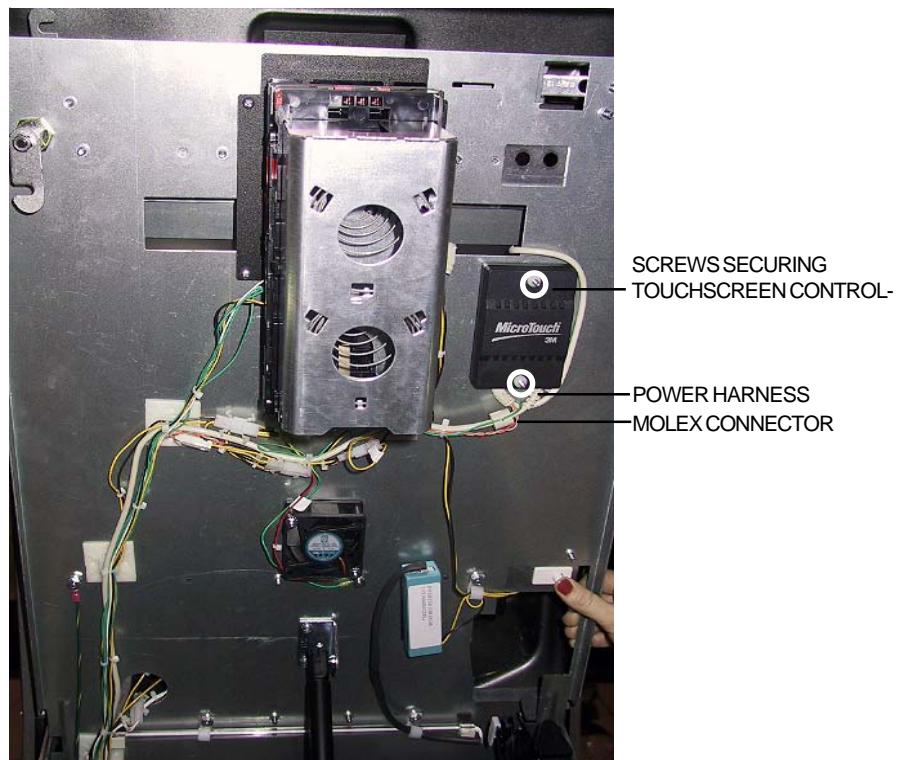


FIGURE 6 - UNDERSIDE OF MONITOR BEZEL

### Troubleshooting Information - Removal/Installation of Major Assemblies -

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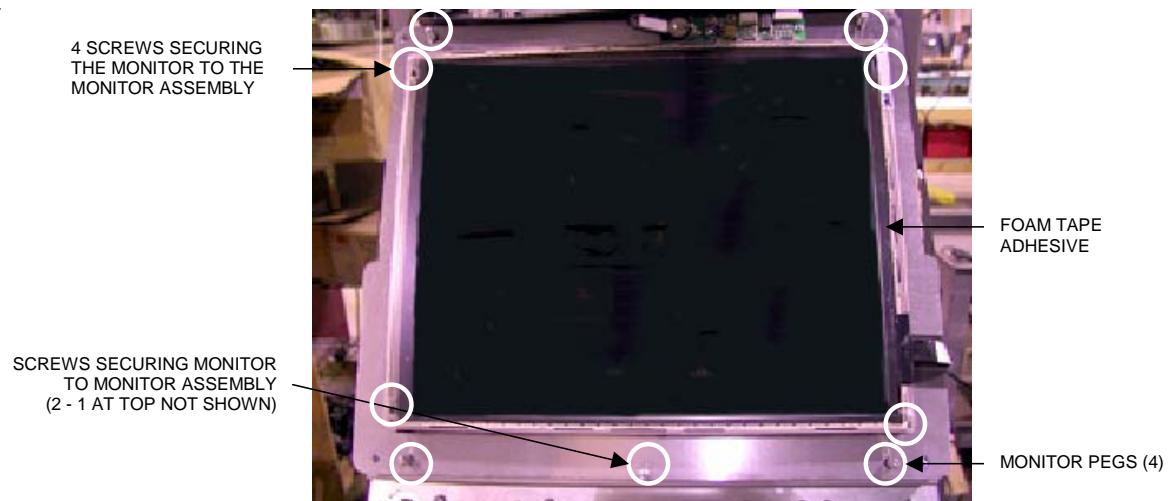


FIGURE 7 - MONITOR ASSEMBLY - TOP BEZEL OPEN

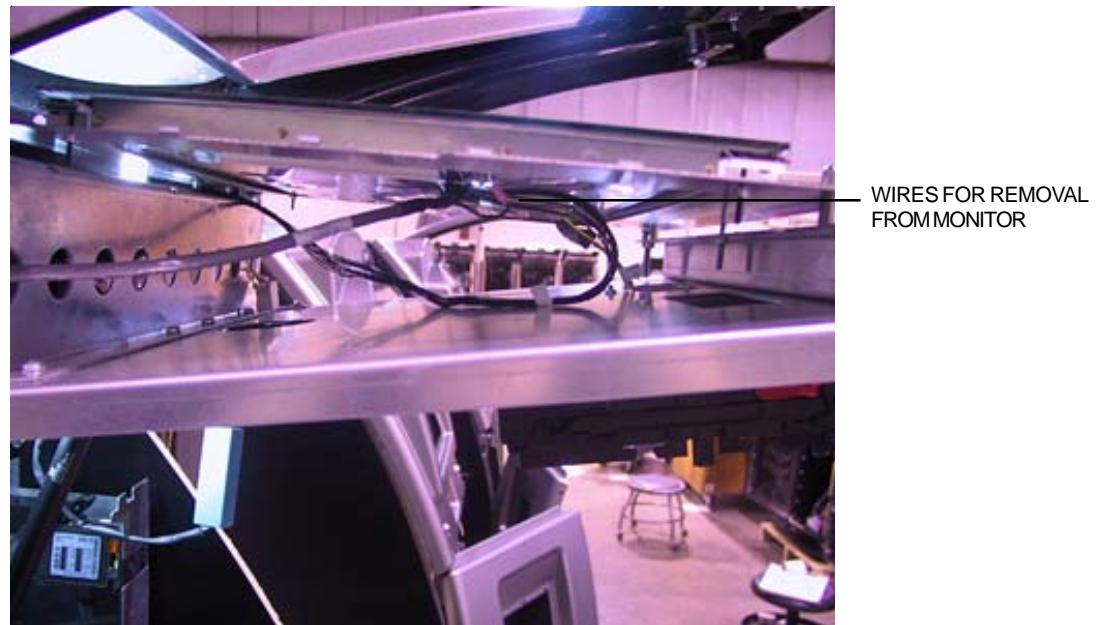


FIGURE 8 - UNDERSIDE OF MONITOR ASSEMBLY

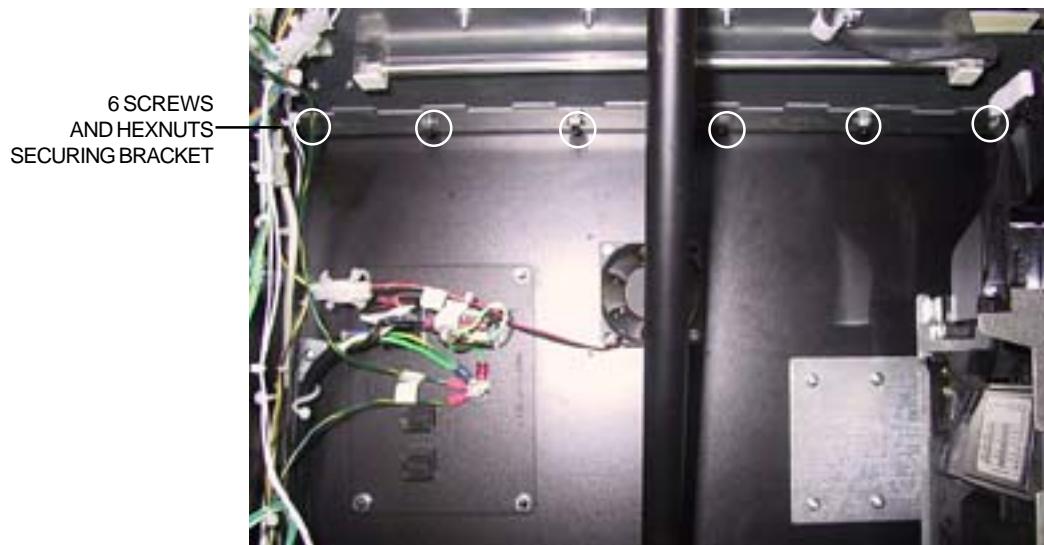


FIGURE 9 - BRACKET - UNDER MONITOR BEZEL



FIGURE 10 - SCREWS AND HEXNUTS SECURING HINGE - UNDER TOP BEZEL



FIGURE 11 - EXTERIOR VIEW OF BRACKET - TOP VIEW OF THE GAME  
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## DIP SWITCH SETTINGS IN FORCE GAMES

The following tables provide information on the functionality of the hard DIP switches in FORCE games. Make sure to read the information in the "Notes" column to determine what is affected when performing these functions. After performing any DIP switch function, make sure to follow the instructions on the screen. In most cases, you will be instructed to reset the DIP switch in order to reboot the game. If you fail to reset the DIP switch before rebooting, it could result in corruption of the hard drive.

**NOTE:** In FORCE 2005 and Jade software, the DIP switch functionality is built into the software. To access the DIP switches through the software: Turn off the game. Set DIP switch 1 to the closed position. Turn power on. When the message **Please reset DIP 1 to proceed** appears, reset DIP 1 to the open position. The Merit diagnostics page will appear. Touch ? for information on DIP switch functionality. Touch the specific DIP switch to activate it. Touch X to exit.

<b>FORCE 2003 / MAXX Ruby and greater</b>		
<b>DIP#</b>	<b>Function</b>	<b>Usage/Notes</b>
8	Motherboard configuration & checksum test	<ul style="list-style-type: none"> <li>Configures the CMOS settings on the motherboard to Merit specifications and checks the files on the hard drive.</li> </ul> <p>A checksum test should be performed when the game is locking up or rebooting. If the test fails, the program should be reloaded onto the hard drive. After reloading, perform another checksum test. If it fails again, the hard drive should be replaced.</p>
6	Hardware configuration	<ul style="list-style-type: none"> <li>Identifies system hardware and configures the motherboard.</li> </ul> <p>A hardware configuration occasionally needs to be performed after a kit is installed and the touchscreen is not responding to touch or the calibration is off.</p>
5 & 7	Memory clear for TournaMAXX™ and TouchTunes®	<ul style="list-style-type: none"> <li>Clears the login name, password, access phone number, and all call-in settings for TournaMAXX users.</li> <li>Clears all the loaded albums for TouchTunes users.</li> <li>Clears current books, coin-in, high scores and resets the software options.</li> </ul> <p>A memory clear should be performed when a game is not able to connect to TournaMAXX and there is some question about the information in the Dial-Up Network Screen being correct. After performing a memory clear, TournaMAXX setup information must be re-entered, and an <b>Update From Server</b> should be performed.</p> <p><b>NOTE: TournaMAXX games must perform an Update From Server BEFORE performing a memory clear.</b></p>
4 & 7	Complete memory clear	<ul style="list-style-type: none"> <li>Clears ALL memory on hard drive including the TournaMAXX player database, TournaMAXX settings, advertising screens, bookkeeping, high scores, coin-in, options, etc. It resets the game to the factory defaults. It also marks bad sectors on hard drive.</li> </ul> <p>A complete memory clear should only be performed when the game is locking up or resetting and it has passed the checksum test. After performing a memory clear, the player database should be reloaded, TournaMAXX setup information must be re-entered, and an <b>Update From Server</b> should be performed.</p> <p><b>NOTE: TournaMAXX games must perform an Update From Server BEFORE performing a complete memory clear.</b></p>
3	Watchdog Timer (EVO, Elite Edge, Fusion and Money Shoot games)	<ul style="list-style-type: none"> <li>When the watchdog timer is enabled, it will reboot the machine within 2 minutes of a failure, allowing the game to automatically reset itself if a problem arises.</li> </ul>

**Merit Industries, Inc.**Troubleshooting Guide for **Megatouch FORCE™ Games (FORCE 2002 and earlier)**

PROBLEM	CORRECTIVE ACTION
<ul style="list-style-type: none"> <li>• <b>no power</b></li> <li>• <b>bill acceptor motor does not run</b></li> <li>• <b>no flash on the monitor screen</b></li> <li>• <b>no cooling fans operating</b></li> <li>• <b>no output from power supply</b></li> </ul>	<ul style="list-style-type: none"> <li>• Check that the power cord is connected to a "live" outlet.</li> <li>• Check that the power switch is on.</li> <li>• Check that the power cord is connected to the game power supply.</li> <li>• Check that the power supply's voltage select switch is set to the proper voltage.</li> <li>• Check the harness connections to the on/off switch and circuit breaker.</li> <li>• Check the circuit breaker for an "open".</li> <li>• Check the A/C harness connection to the power supply.</li> <li>• Check the line cord.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>no video</b></li> <li>• <b>no cooling fan operation</b></li> <li>• <b>screen is blank</b></li> <li>• <b>no A/C power to the monitor and bill acceptor</b></li> <li>• <b>no output from power supply</b></li> </ul>	<ul style="list-style-type: none"> <li>• Check the power on jumper wire located on the motherboard. It should connect J2 to pin 21 of Panel 1. If this jumper wire is missing or not connected between the correct pins, it may prevent the power supply from turning on. For more information, see Tech Note 52.</li> <li>• Check the D/C harness connection to the motherboard.</li> <li>• Check the A/C harness connection to the power supply.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>no video</b></li> <li>• <b>cooling fans are working</b></li> <li>• <b>there is a sound when coins are deposited</b></li> </ul>	<p><b>Radion, Classic and Upright games:</b></p> <ul style="list-style-type: none"> <li>• Check the video cable connections to the motherboard and the monitor.</li> <li>• Check the AC power harness to the monitor.</li> <li>• Radion and FORCE Upright monitors will display a test pattern on the screen when the video cable is disconnected from the motherboard and the monitor has power. Disconnect the video cable and if there is no test pattern; replace the monitor chassis board.</li> </ul> <p><b>Elite games and Vibe:</b></p> <ul style="list-style-type: none"> <li>• Check the video cable connections to the motherboard and the LCD display.</li> <li>• Check the +12 volt supply voltage to the LCD display (yellow wire +12, black wire ground)</li> <li>• Check the harness connections between the PC boards on the back of the LCD display.</li> <li>• Replace the LCD display.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>no video</b></li> <li>• <b>constant beeping or a sequence of beeps</b></li> </ul>	<ul style="list-style-type: none"> <li>• The memory card (DIMM) may not be seated properly. Reseat the DIMM or replace it.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>no video</b></li> <li>• <b>no sound when coins are deposited</b></li> </ul>	<ul style="list-style-type: none"> <li>• Check all connections to the motherboard.</li> <li>• Reseat the DIMM.</li> <li>• Replace the motherboard or send it for repair.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>poor picture quality</b></li> </ul>	<ul style="list-style-type: none"> <li>• Adjust Brightness, Contrast, Horizontal, and Vertical controls with monitor controls.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>no sound or distorted sound</b></li> </ul>	<ul style="list-style-type: none"> <li>• Check the audio cable from the green audio jack on the motherboard to the audio amp board.</li> <li>• Check the harness from the audio amp board to the speaker.</li> <li>• Do a two-button memory clear.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>coin jam</b></li> </ul>	<ul style="list-style-type: none"> <li>• Check the coin mech and coin chute for coins blocking the pathway.</li> <li>• Make sure the coin harness is connected between the normally open and common terminals on the coin switch.</li> <li>• Disconnect the bill acceptor and the coin switch one at a time to narrow down the problem.</li> <li>• Check the coin harness for pinched or damaged wires.</li> <li>• Disconnect the coin harness from J3 of the I/O board. If the coin jam still appears, the motherboard will have to be sent for repair.</li> </ul> <p>(NOTE: The Radion cabinets have an optical coin switch.)</p>
<ul style="list-style-type: none"> <li>• <b>meter not advancing</b></li> </ul>	<ul style="list-style-type: none"> <li>• Check connection at I/O board.</li> <li>• Check wiring at J2 METER connector on I/O board.</li> </ul>

**Troubleshooting Information - Troubleshooting Guide**

## Megatouch FORCE Technical Reference Manual

**Merit Industries, Inc.**Troubleshooting Guide for **Megatouch FORCE™ Games (FORCE 2002 and earlier)**

PROBLEM	CORRECTIVE ACTION														
<ul style="list-style-type: none"> <li>• game locks up or resets while being played or in the attract mode</li> <li>• no movement on the screen</li> <li>• power has to be cycled off and on to get the game to function again</li> </ul>	<ul style="list-style-type: none"> <li>• Check the output voltages from the power supply:</li> </ul> <p><b>Enhance SFX 1211J</b></p> <table> <tbody> <tr> <td>Red wire</td> <td>+5 volt</td> </tr> <tr> <td>Yellow wire</td> <td>+12 volt</td> </tr> <tr> <td>Blue wire</td> <td>-12 volt</td> </tr> <tr> <td>White wire</td> <td>+5 volt power good</td> </tr> <tr> <td>Violet wire</td> <td>+5 volt VSB</td> </tr> <tr> <td>Black wire</td> <td>ground</td> </tr> <tr> <td>Brown wire</td> <td>+3.3 volt</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• Clean the vents and the fans of any dust and dirt that may interfere with airflow.</li> <li>• Clean the CPU cooling fan under the I/O board.</li> <li>• Replace the CPU cooling fan if it is not operating properly.</li> <li>• Reseat the DIMM on the motherboard.</li> <li>• Clear memory with the following procedure: <ul style="list-style-type: none"> <li>• Turn off the game.</li> <li>• Press and hold the "Setup" and "Calibrate" buttons.</li> <li>• Turn the game on and keep holding the buttons until the screen displays "TWO BUTTON CLEAR DETECTED RELEASE BUTTONS". This should take about 30 seconds.</li> <li>• Release the buttons. This will clear high scores, clear the books and reset options, and reset the game menu and coin menu to their factory settings.</li> </ul> </li> <li>• Perform a checksum test on the hard drive: <ul style="list-style-type: none"> <li>• Turn off the game.</li> <li>• Turn on DS1 position 8 on the I/O board.</li> <li>• Turn on the game. The test will take about 20 minutes.</li> <li>• A failed test will lock up and display "CHECKSUM ERROR" on the screen.</li> <li>• A passed test will display "CHECKSUM OK" then continue to the attract screens mode.</li> </ul> </li> </ul>	Red wire	+5 volt	Yellow wire	+12 volt	Blue wire	-12 volt	White wire	+5 volt power good	Violet wire	+5 volt VSB	Black wire	ground	Brown wire	+3.3 volt
Red wire	+5 volt														
Yellow wire	+12 volt														
Blue wire	-12 volt														
White wire	+5 volt power good														
Violet wire	+5 volt VSB														
Black wire	ground														
Brown wire	+3.3 volt														
<ul style="list-style-type: none"> <li>• game locks up with "invalid key for version PG3002 – V XXXX"</li> </ul>	<ul style="list-style-type: none"> <li>• Check the program number on the security key. It should be compatible with the program on the hard drive.</li> <li>• Check the contacts on the security key socket. Lift up on the contact on the bottom of the socket and make sure there is a good connection to the base of the security key.</li> <li>• Check the USB cable that connects the I/O board to the motherboard.</li> <li>• Check jumpers JP5 and JP6 on the I/O board. The USB cable can be connected to two connectors on the I/O board (J5A and J5B). The position of the shunts on jumpers JP5 and JP6 will enable either J5A or J5B. The shunts should be positioned towards the connector where the USB cable is connected. For more information, see Tech Note 55.</li> <li>• Try another security key with the same program number or test the security key in another game with the same program version.</li> </ul>														
<ul style="list-style-type: none"> <li>• "INVALID KEY" message while downloading software to the hard drive</li> </ul>	<ul style="list-style-type: none"> <li>• If the security key was replaced before the download: The motherboard did not boot from the CD-ROM drive. Check that the CD-ROM drive is set as master. Check the ribbon cable connections between the CD-ROM drive and the motherboard. Try another CD ROM drive.</li> <li>• If the security key was replaced after the download: See the "Invalid Key" section above.</li> </ul>														

**Troubleshooting Information - Troubleshooting Guide**

## Megatouch FORCE Technical Reference Manual

**Merit Industries, Inc.**Troubleshooting Guide for **Megatouch FORCE™ Games (FORCE 2002 and earlier)**

PROBLEM	CORRECTIVE ACTION
<ul style="list-style-type: none"> <li>• <b>"DISK BOOT FAILURE"</b></li> </ul>	<p>This message indicates the motherboard is not receiving data from the hard drive and has locked up.</p> <ul style="list-style-type: none"> <li>• Check the IDE ribbon cable connections to the motherboard and hard drive.</li> <li>• Check the power to the hard drive. It should have +5 volts, +12 volts, and ground.</li> <li>• Move the hard drive IDE cable to the secondary IDE port on the motherboard to test the board. If the game does not lock up, there is a motherboard failure and the board should be sent for repair. The game will work with the IDE cable in the secondary IDE port, but the Head 2 Head games will be missing and the screen will say "Emerald" instead of "FORCE".</li> </ul>
<ul style="list-style-type: none"> <li>• <b>"QUANTUM FIREBALL, SMART FAILURE DETECTED, BACK UP HARD DRIVE"</b></li> </ul>	<ul style="list-style-type: none"> <li>• The self-diagnostics on the hard drive has detected an error. The hard drive will have to be replaced.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>"ERROR READING DRIVE C"</b></li> </ul>	<p>This message can be caused by the hard drive or in some program versions, a coin jam while the game is turned on.</p> <ul style="list-style-type: none"> <li>• Turn the game off.</li> <li>• Locate DS 1, position 8 and turn it on.</li> <li>• Turn on power to the cabinet. This will start the hard drive checksum test, which should take about 20 minutes to complete. <ul style="list-style-type: none"> <li>• When the hard drive passes the test it will display a "CHECKSUM GOOD" message and continue to boot up into the game attract screens. This indicates a coin jam.</li> <li>• When the hard drive fails the test, the game will lock up with a "CHECKSUM ERROR" message, which will stay on the screen until the power is turned off. In this case, the hard drive will have to be replaced.</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• <b>"CRITICAL ERROR ABORT RETRY FAIL" – or "BAD COMMAND OR FILE NAME" error</b></li> </ul>	<ul style="list-style-type: none"> <li>• Try reloading the program onto the hard drive with a set of update CD's compatible with the security key. If it will not accept the download, replace the hard drive.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>the screen does not display FORCE it has MAXX, and the H2H category is missing</b></li> </ul>	<ul style="list-style-type: none"> <li>• When the game is turned on, it will check the type of touchscreen controller, motherboard and hard drive. If one of these does not match with FORCE hardware, the game will power up and display "MAXX" on the screen and it will not have the H2H category.</li> <li>• The IDE cable from the hard drive must be connected to the primary IDE port on the motherboard. When it is connected to the secondary IDE port, the screen will display "MAXX" and not have the H2H category.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>game will not download CD</b></li> </ul>	<ul style="list-style-type: none"> <li>• Make sure the CD is installed correctly, with the logo facing up.</li> <li>• Check for scratches or a defective disc.</li> <li>• Try a different set of CDs.</li> <li>• If you're downloading a CD set, make sure each disc is of the same revision.</li> </ul>

**Merit Industries, Inc.**Troubleshooting Guide for **Megatouch FORCE™ Games (FORCE 2003 and later)**

PROBLEM	CORRECTIVE ACTION
<ul style="list-style-type: none"> <li>• no power</li> <li>• bill acceptor motor does not run</li> <li>• no flash on the monitor screen</li> <li>• no cooling fans operating</li> <li>• no output from power supply</li> </ul>	<ul style="list-style-type: none"> <li>• Check that the power cord is connected to a "live" outlet.</li> <li>• Check that the power switch is on.</li> <li>• Check that the power cord is connected to the game power supply.</li> <li>• Check that the power supply's voltage select switch is set to the proper voltage.</li> <li>• Check the harness connections to the on/off switch and circuit breaker.</li> <li>• Check the circuit breaker for an "open".</li> <li>• Check the A/C harness connection to the power supply.</li> <li>• Check the line cord.</li> </ul>
<ul style="list-style-type: none"> <li>• no video</li> <li>• no cooling fan operation</li> <li>• screen is blank</li> <li>• A/C power to the monitor and bill acceptor</li> <li>• no output from power supply</li> </ul>	<ul style="list-style-type: none"> <li>• Check the power on jumper wire located on the motherboard. It should connect J2 to pin 21 of Panel 1. If this jumper wire is missing or not connected between the correct pins, it may prevent the power supply from turning on. For more information, see Tech Note 52.</li> <li>• Check the D/C harness connection to the motherboard.</li> <li>• Check the A/C harness connection to the power supply.</li> </ul>
<ul style="list-style-type: none"> <li>• no video</li> <li>• cooling fans are working</li> <li>• there is a sound when coins are deposited</li> </ul>	<p><b>Radion, Classic and Upright games:</b></p> <ul style="list-style-type: none"> <li>• Check the video cable connections to the motherboard and the monitor.</li> <li>• Check the AC power harness to the monitor.</li> <li>• Radion and FORCE Upright monitors will display a test pattern on the screen when the video cable is disconnected from the motherboard and the monitor has power. Disconnect the video cable and if there is no test pattern; replace the monitor chassis board.</li> </ul> <p><b>Elite games and Vibe:</b></p> <ul style="list-style-type: none"> <li>• Check the video cable connections to the motherboard and the LCD display.</li> <li>• Check the +12 volt supply voltage to the LCD display (yellow wire +12, black wire ground)</li> <li>• Check the harness connections between the PC boards on the back of the LCD display.</li> <li>• Replace the LCD display.</li> </ul>
<ul style="list-style-type: none"> <li>• no video</li> <li>• constant beeping or a sequence of beeps</li> </ul>	<ul style="list-style-type: none"> <li>• The memory card (DIMM) may not be seated properly. Reseat the DIMM or replace it.</li> </ul>
<ul style="list-style-type: none"> <li>• no video</li> <li>• no sound when coins are deposited</li> </ul>	<ul style="list-style-type: none"> <li>• Check all connections to the motherboard.</li> <li>• Reseat the DIMM.</li> <li>• Replace the motherboard or send it for repair.</li> </ul>
<ul style="list-style-type: none"> <li>• poor picture quality</li> </ul>	<ul style="list-style-type: none"> <li>• Adjust Brightness, Contrast, Horizontal, and Vertical controls with monitor controls.</li> </ul>
<ul style="list-style-type: none"> <li>• coin jam</li> </ul>	<ul style="list-style-type: none"> <li>• Check the coin mech and coin chute for coins blocking the pathway.</li> <li>• Make sure the coin harness is connected between the normally open and common terminals on the coin switch.</li> <li>• Disconnect the bill acceptor and the coin switch one at a time to narrow down the problem.</li> <li>• Check the coin harness for pinched or damaged wires.</li> <li>• Disconnect the coin harness from J1, J3, J7, and J8 of the I/O board. If the coin jam still appears, the I/O board will have to be sent for repair.</li> </ul> <p>(NOTE: The Radion cabinets have an optical coin switch.)</p>
<ul style="list-style-type: none"> <li>• meter not advancing</li> </ul>	<ul style="list-style-type: none"> <li>• Check connection at I/O board.</li> <li>• Check wiring at J2 METER connector on I/O board.</li> </ul>

**Troubleshooting Information - Troubleshooting Guide**

## Megatouch FORCE Technical Reference Manual

**Merit Industries, Inc.**Troubleshooting Guide for **Megatouch FORCE™ Games (FORCE 2003 and later)**

PROBLEM	CORRECTIVE ACTION														
<ul style="list-style-type: none"> <li>• game locks up or resets while being played or in the attract mode</li> <li>• no movement on the screen</li> <li>• power has to be cycled off and on to get the game to function again</li> </ul>	<ul style="list-style-type: none"> <li>• Check the output voltages from the power supply:</li> </ul> <p><b>Enhance SFX 1211J</b></p> <table> <tr> <td>Red wire</td> <td>+5 volt</td> </tr> <tr> <td>Yellow wire</td> <td>+12 volt</td> </tr> <tr> <td>Blue wire</td> <td>-12 volt</td> </tr> <tr> <td>White wire</td> <td>+5 volt power good</td> </tr> <tr> <td>Violet wire</td> <td>+5 volt VSB</td> </tr> <tr> <td>Black wire</td> <td>ground</td> </tr> <tr> <td>Brown wire</td> <td>+3.3 volt</td> </tr> </table> <ul style="list-style-type: none"> <li>• Clean the vents and the fans of any dust and dirt that may interfere with airflow.</li> <li>• Clean the CPU cooling fan on the motherboard.</li> <li>• Replace the CPU cooling fan if it is not operating properly.</li> <li>• Reseat the DIMM on the motherboard.</li> <li>• Clear memory with the following procedure: <ul style="list-style-type: none"> <li>• Turn off the game.</li> <li>• Press and hold the "Setup" and "Calibrate" buttons.</li> <li>• Turn the game on and keep holding the buttons until the screen displays "TWO BUTTON CLEAR DETECTED RELEASE BUTTONS". This should take about 30 seconds.</li> <li>• Release the buttons. This will clear high scores, clear the books and reset options, and reset the game menu and coin menu to their factory settings.</li> </ul> </li> <li>• Perform a checksum test on the hard drive: <ul style="list-style-type: none"> <li>• Turn off the game.</li> <li>• Turn on DIP switch 8 on the I/O board.</li> <li>• Turn on the game. The test will take about 10 minutes. <ul style="list-style-type: none"> <li>• A failure will cause the test to stop.</li> <li>• A passed test will display "DRIVE CHECKSUM COMPLETE RESET ALL DIP SWITCHES TO REBOOT MACHINE".</li> </ul> </li> <li>• With power on, turn off DIP switch 8.</li> </ul> </li> </ul>	Red wire	+5 volt	Yellow wire	+12 volt	Blue wire	-12 volt	White wire	+5 volt power good	Violet wire	+5 volt VSB	Black wire	ground	Brown wire	+3.3 volt
Red wire	+5 volt														
Yellow wire	+12 volt														
Blue wire	-12 volt														
White wire	+5 volt power good														
Violet wire	+5 volt VSB														
Black wire	ground														
Brown wire	+3.3 volt														
<ul style="list-style-type: none"> <li>• game locks up with "invalid key for version PG3002 – V XXXX"</li> </ul>	<ul style="list-style-type: none"> <li>• Check the program number on the security key. It should be compatible with the program on the hard drive.</li> <li>• Check the contacts on the security key socket. Lift up on the contact on the bottom of the socket and make sure there is a good connection to the base of the security key.</li> <li>• Check the USB cable that connects the I/O board to the motherboard.</li> <li>• Check jumpers JP5 and JP6 on the I/O board. The USB cable can be connected to two connectors on the I/O board (J5A and J5B). The position of the shunts on jumpers JP5 and JP6 will enable either J5A or J5B. The shunts should be positioned towards the connector where the USB cable is connected. For more information, see Tech Note 55.</li> <li>• Try another security key with the same program number or test the security key in another game with the same program version.</li> </ul>														
<ul style="list-style-type: none"> <li>• "INVALID KEY" message while downloading software to the hard drive</li> </ul>	<ul style="list-style-type: none"> <li>• If the security key was replaced before the download: <ul style="list-style-type: none"> <li>• The motherboard did not boot from the CD-ROM drive.</li> </ul> </li> <li>• Check that the CD-ROM drive is set as master.</li> <li>• Check the ribbon cable connections between the CD-ROM drive and the motherboard.</li> <li>• Try another CD-ROM drive or another set of CDs.</li> </ul>														

**Troubleshooting Information - Troubleshooting Guide**

## Megatouch FORCE Technical Reference Manual

**Merit Industries, Inc.**Troubleshooting Guide for **Megatouch FORCE™ Games (FORCE 2003 and later)**

PROBLEM	CORRECTIVE ACTION
<ul style="list-style-type: none"> <li>the screen displays MAXX and not FORCE, and the H2H category is missing</li> </ul>	<p>When the game is turned on, it will check the type of touchscreen controller, motherboard and hard drive. If one of these does not match with FORCE hardware, the game will power up and display "MAXX" on the screen and it will not have the H2H category.</p> <ul style="list-style-type: none"> <li>Make sure the game is only using FORCE hardware.</li> </ul>
<ul style="list-style-type: none"> <li>game will not download CD</li> </ul>	<ul style="list-style-type: none"> <li>Make sure the CD is installed correctly, with the logo facing up.</li> <li>Check for scratches or a defective CD.</li> <li>Try a different CD-ROM drive or another set of CDs.</li> <li>If you're downloading a CD set, make sure each CD is of the same revision.</li> </ul>
<ul style="list-style-type: none"> <li>"ERROR READING DRIVE C"</li> </ul>	<ul style="list-style-type: none"> <li>This message can be caused by the hard drive or in some program versions, a coin jam while the game is turned on.             <ol style="list-style-type: none"> <li>Turn the game off.</li> <li>Locate DS 1, position 8 and turn it on.</li> <li>Turn on power to the cabinet. This will start the hard drive checksum test, which should take about 20 minutes to complete.</li> <li>When the hard drive passes the test it will display a "CHECKSUM GOOD" message and continue to boot up into the game attract screens. This indicates a coin jam.</li> <li>When the hard drive fails the test, the game will lock up with a "CHECKSUM ERROR" message, which will stay on the screen until the power is turned off. In this case, the hard drive will have to be replaced.</li> </ol> </li> </ul>
<ul style="list-style-type: none"> <li>"DISK BOOT FAILURE"</li> </ul>	<p>This message indicates the motherboard is not receiving data from the hard drive and has locked up.</p> <ul style="list-style-type: none"> <li>Check the IDE ribbon cable connections to the motherboard and hard drive.</li> <li>Check the power to the hard drive. It should have +5 volts, +12 volts, and ground.</li> </ul>
<ul style="list-style-type: none"> <li>"QUANTUM FIREBALL, SMART FAILURE DETECTED, BACK UP HARD DRIVE"</li> </ul>	<p>The self-diagnostics on the hard drive has detected an error.</p> <ul style="list-style-type: none"> <li>The hard drive will have to be replaced.</li> </ul>
<ul style="list-style-type: none"> <li>"CRITICAL ERROR ABORT RETRY FAIL" or "BAD COMMAND OR FILE NAME" error</li> </ul>	<ul style="list-style-type: none"> <li>Try reloading the program onto the hard drive with a different set of update CD's compatible with the security key. If it will not accept the download, try another CD-ROM drive. If it still does not work, replace the hard drive.</li> </ul>

## Merit Industries, Inc.

## TouchTunes® Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
• <b>TouchTunes® button does not appear in the Main Menu and TouchTunes® icon does not appear in the Game Menu.</b>	<ul style="list-style-type: none"> <li>The Single Board Computer (SBC) is not properly connected to the game.</li> <li>The SBC experienced an error (a "Check Diagnostics" message will appear at the bottom of the screen).</li> <li>A song did not finish downloading.</li> </ul>	<ul style="list-style-type: none"> <li>Make sure the cable between the game and the Ethernet hub is properly connected.</li> <li>MegaTunes™ only:</li> <li>In MAXX™ games without Unicorn boards, make sure you properly followed the steps outlined in the MegaLink® kit when linking the game to the MegaTunes™ unit.</li> <li>Enter the Diagnostic screen from the Jukebox Operator Menu and follow the on-screen instructions.</li> <li>Reboot the machine.</li> </ul> <p>If the problem persists, call TouchTunes Technical Support: 1-888-711-JUKE.</p>
• <b>unit cannot connect to the server</b>	<ul style="list-style-type: none"> <li>The unit failed to communicate with the TouchTunes server.</li> <li>A period of inactivity has caused the unit to lose communication with the server.</li> <li>There is a problem with the phone line.</li> </ul>	<ul style="list-style-type: none"> <li>Follow these steps until the problem is solved:             <ol style="list-style-type: none"> <li>Activate the Jukebox Operator menu.</li> <li>Touch Diagnostic to see the results of the last call to the server. If you see an error message, follow the instructions on the screen. The problem could simply be a matter of the unit needing to reconnect with the server via the CALL NOW button.</li> <li>Check that the phone line is functioning properly.</li> </ol> </li> </ul> <p>If the problem persists, call TouchTunes Technical Support: 1-888-711-JUKE.</p>
• <b>"ERROR: Modem rejected initialization string."</b>	<ul style="list-style-type: none"> <li>The modem could not be initialized because it rejected the initialization string.</li> </ul>	<ul style="list-style-type: none"> <li>Call TouchTunes Technical Support: 1-888-711-JUKE.</li> </ul>
• <b>"ERROR: Modem is not responding."</b>	<ul style="list-style-type: none"> <li>The modem could not be initialized because it is not responding. This may be caused by one of the following:             <ul style="list-style-type: none"> <li>The modem card is not properly seated.</li> <li>The modem card is defective.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Follow these steps to re-seat the modem card in the SBC:             <ol style="list-style-type: none"> <li>Remove the screw that holds the card in place.</li> <li>Place the connector on the bottom of the card in line with its socket on the motherboard.</li> <li>Place a thumb on the front and back of the card and press down firmly on the card until it is securely seated in its socket.</li> <li>Replace the screw.</li> </ol> </li> </ul> <p>If the problem persists, call TouchTunes Technical Support: 1-888-711-JUKE.</p>
• <b>"ERROR: Authentication failed."</b>	<ul style="list-style-type: none"> <li>Authentication failed.</li> </ul>	<ul style="list-style-type: none"> <li>The jukebox will automatically retry to authenticate.</li> </ul> <p>If the problem persists, call TouchTunes Technical Support: 1-888-711-JUKE.</p>

## Troubleshooting Information - Troubleshooting Guide

## Megatouch FORCE Technical Reference Manual

**Merit Industries, Inc.**

## TouchTunes® Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
<ul style="list-style-type: none"> <li><b>“ERROR: Call failed: No dial tone. The call could not be completed because the modem failed to detect a dial tone.”</b></li> </ul>	<ul style="list-style-type: none"> <li>The phone line is not working.</li> <li>Another device already using the phone line.</li> <li>Phone line has voice mail or other service that interferes with the dial tone.</li> <li>The calling prefix that disables call waiting or other service does not contain a long enough pause to permit return of the dial tone.</li> <li>There is a bad phone connection between the modem card and telephone wall outlet.</li> <li>The modem is defective.</li> </ul>	<ul style="list-style-type: none"> <li>Verify that the jukebox is connected to the phone line.</li> <li>Connect a phone to the telephone wall outlet and make sure the phone line is working properly.</li> <li>If the line has voice mail or other services that interfere with the dial tone, make sure the proper dialing prefix is being used to temporarily disable the service.</li> <li>Check the phone connections between the modem card and wall outlet.</li> <li>Make sure toll-free numbers are not blocked at the location.</li> </ul> <p>If the problem persists, call TouchTunes Technical Support: 1-888-711-JUKE.</p>
<ul style="list-style-type: none"> <li><b>“ERROR: Call failed: The modem detected a busy signal.”</b></li> </ul>	<p>The call could not be completed because the modem detected a busy signal. This may be caused by one of the following:</p> <ul style="list-style-type: none"> <li>The ISP or the TouchTunes server is busy.</li> <li>The phone line in use by shared location phone.</li> <li>The wrong dialing prefix was used.</li> </ul>	<p>Follow these steps until the problem is solved:</p> <ol style="list-style-type: none"> <li>Wait a few minutes and then try the connection again. If the problem persists, continue with step2.</li> <li>Connect a phone to the telephone wall outlet and make sure the phone line is working properly and not being used by a shared phone.</li> <li>Check that the dialing prefix entered for the location is correct.</li> </ol> <p>If the problem persists, call TouchTunes Technical Support: 1-888-711-JUKE.</p>
<ul style="list-style-type: none"> <li><b>“ERROR: Call failed: A modem did not answer at the dialed number.”</b></li> </ul>	<p>The call could not be completed because a modem did not answer the call. This may be caused by one of the following:</p> <ul style="list-style-type: none"> <li>The modem dialed the wrong number (bad dialing prefix).</li> <li>The ISP server or TouchTunes server is not working.</li> </ul>	<p>Follow these steps until the problem is solved:</p> <ol style="list-style-type: none"> <li>Wait a few minutes and then try the connection again. If the problem persists, continue with step 2.</li> <li>Check that the dialing prefix entered for the location is correct.</li> </ol> <p>If the problem persists, call TouchTunes Technical Support: 1-888-711-JUKE.</p>

**Troubleshooting Information - Troubleshooting Guide**

## Megatouch FORCE Technical Reference Manual

**Merit Industries, Inc.**

## TouchTunes® Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
<ul style="list-style-type: none"> <li>“<b>ERROR: Call failed: PPP connection failure.</b>”</li> </ul>	<ul style="list-style-type: none"> <li>The jukebox failed to establish a PPP connection with the TouchTunes server or your ISP. The most frequent cause of this is that the ISP is down.</li> </ul>	<ul style="list-style-type: none"> <li>Keep trying the connection again until it is successful.</li> <li>If the problem persists, call TouchTunes Technical Support: 1-888-711-JUKE.</li> </ul>
<ul style="list-style-type: none"> <li><b>no sound</b></li> </ul>	<ul style="list-style-type: none"> <li>zone 1 and 2 (if applicable) volume levels are both at zero</li> <li>amplifier fault protection circuit was tripped</li> <li>speaker wiring is loose or damaged</li> <li>amplifier cables are loose or not connected</li> <li>amplifier or speakers are defective or blown</li> <li>sound card is loose or defective</li> </ul>	<ul style="list-style-type: none"> <li>Make sure the volume has not been turned down to 0 using the remote or volume controls on the unit.</li> <li>Try pausing/unpausing the unit with the remote several times.</li> <li>Verify the Sound Mixer screen settings.</li> <li>Check the connections to the amplifier.</li> <li>Make sure that the amplifier and speakers are not defective or blown.</li> <li>Reset amplifier fault protection circuit.</li> <li>Re-seat the sound card.</li> <li>If the problem persists, call TouchTunes Technical Support: 1-888-711-JUKE.</li> </ul>
<ul style="list-style-type: none"> <li><b>volume automatically goes to maximum or minimum</b></li> </ul>	<ul style="list-style-type: none"> <li>backup volume control buttons on the unit are pushed in or jammed in place</li> <li>there is interference from another RF-based remote</li> </ul>	<ul style="list-style-type: none"> <li>Check the condition of the backup volume control buttons.</li> <li>Check to see if another remote may be causing the problem.</li> <li>If the problem persists, call TouchTunes Technical Support: 1-888-711-JUKE.</li> </ul>
<ul style="list-style-type: none"> <li><b>one or more songs in the purchase list failed to download</b></li> </ul>	<ul style="list-style-type: none"> <li>The purchase list has more songs in it than the download limit allows per night. Generally, seven songs will download each time the unit calls the server. This can be overridden by TouchTunes personnel if required.</li> <li>Communications with the TouchTunes server was slow due to noisy phone lines, interrupted communications, or Internet congestion.</li> <li>The unit failed to communicate with the TouchTunes server.</li> </ul>	<ul style="list-style-type: none"> <li>Follow these steps until the problem is solved: <ol style="list-style-type: none"> <li>Activate the Jukebox Operator menu.</li> <li>Touch Diagnostic to see the results of the last call to the server. If you see an error message, follow the instructions on the screen.</li> <li>If no errors exist and you did not get your full download of seven songs: <ul style="list-style-type: none"> <li>a noisy phone line (internal or external) caused a communication problem, and therefore only a few songs could be downloaded in the allowed time. If noisy phone lines are a chronic problem, you may want to increase the size of the calling window available to the unit every night.</li> <li>a person or device tried to use the phone while the unit was calling out. If this happens repeatedly, it can reduce the number of songs the unit is able to download.</li> <li>the Internet is congested. The unit connects to the server via an Internet connection. Sometimes, traffic on the Internet is backed up, resulting in very slow throughput. This can significantly reduce the number of songs the unit can download in one night.</li> </ul> </li> </ol> </li> </ul> <p>If the problem persists, call TouchTunes Technical Support: 1-800-711-JUKE.</p>

**Troubleshooting Information - Troubleshooting Guide**

## Megatouch FORCE Technical Reference Manual

**Merit Industries, Inc.**

## TouchTunes® Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
<ul style="list-style-type: none"> <li><b>a song cannot be added to the purchase list</b></li> </ul>	<ul style="list-style-type: none"> <li>The unit already has the maximum number of songs installed on it (approximately 2,000). Songs in the purchase list are counted in this total, since space must be reserved on the hard drive to receive them.</li> </ul>	<ul style="list-style-type: none"> <li>Delete songs from the unit in order to create space for songs on the purchase list.</li> </ul> <p>If the problem persists, call TouchTunes Technical Support 1-800-711-JUKE.</p>
<ul style="list-style-type: none"> <li><b>remote control does not work</b></li> </ul>	<ul style="list-style-type: none"> <li>Support for the remote is not enabled.</li> <li>The batteries in the remote control are dead.</li> <li>The switches in the battery compartment were changed.</li> </ul>	Follow these steps until the problem is solved: <ul style="list-style-type: none"> <li>Put new batteries into the remote control.</li> <li>Check the System Settings screen and make sure the REMOTE CONTROL MODE is ON.</li> <li>Re-learn the remote ID.</li> </ul> <p>If the problem persists, call TouchTunes Technical Support: 1-888-711-JUKE.</p>
<ul style="list-style-type: none"> <li><b>no sound when using microphone</b></li> </ul>	<ul style="list-style-type: none"> <li>The PAUSE button was pressed on the remote control.</li> <li>The microphone volume limit is set to 0.</li> <li>The microphone is improperly connected to the Single Board Computer.</li> <li>The microphone is defective.</li> <li>The microphone cable is damaged or defective.</li> </ul>	<ul style="list-style-type: none"> <li>Follow these steps until the problem is solved: <ol style="list-style-type: none"> <li>Go to the Sound Mixer screen and make sure that the maximum volume for the microphone is not limited to 0.</li> <li>Make sure that the microphone is connected to the MIC IN input on the Single Board Computer.</li> <li>Verify that the microphone is in working order and that the cable between the microphone and Single Board Computer has not been severed or damaged.</li> </ol> </li> </ul> <p>If the problem persists, call TouchTunes Technical Support: 1-888-711-JUKE.</p>
<ul style="list-style-type: none"> <li><b>humming noise from any speaker after connecting to an external audio device</b></li> </ul>	<ul style="list-style-type: none"> <li>There is a ground loop.</li> </ul>	<ul style="list-style-type: none"> <li>Ground loops can occur when there is more than one path to the electrical ground. A quick way to solve the problem is to install a ground loop isolator on the audio cable that connects the unit to the external audio device.</li> </ul> <p>If the problem persists, call TouchTunes Technical Support: 1-888-711-JUKE.</p>

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## Megatouch FORCE Technical Reference Manual

## **CMOS Configuration Procedure for Megatouch FORCE**

The CMOS configuration should only be performed if your Megatouch FORCE game experiences problems booting up.

### ECS MOTHERBOARD CMOS CONFIGURATION:

1. Plug your keyboard into the bottom PS2 connector on the motherboard.
2. Turn on the power.
3. Press DEL to enter SETUP.
4. Arrow over and down to LOAD OPTIMIZED DEFAULTS.
5. Press ENTER.
6. Press Y for YES.
7. Press ENTER
8. Press F10
9. Press ENTER. The game should reboot.
10. Unplug keyboard.

## DIP Switch Settings for the Mars 2000 Bill Acceptor

(The DIP switches are located on the side of the bill acceptor)

SETTING	SWITCHES
1 WAY	DIP 1 ON/DIP 2 OFF
2 WAY	DIP 1 OFF/DIP 2 ON
4 WAY	DIP 1 ON/DIP 2 ON
HIGH ACCEPTANCE	DIP 3 OFF
HIGH SECURITY	DIP 3 ON
*\$1	DIP 4 ON=ACCEPT/OFF=REJECT
*\$2	DIP 5 ON=ACCEPT/OFF=REJECT
*\$5	DIP 6 ON=ACCEPT/OFF=REJECT
1 PULSE PER DOLLAR	DIP 7 OFF
*4 PULSES PER DOLLAR	DIP 7 ON
ALWAYS ENABLE	DIP 8 OFF
HARNESS ENABLE	DIP 8 ON

\* Recommended factory settings allow for acceptance of \$1, \$2, and \$5 bills at 4 pulses per dollar.

### Setting the Coin-In Menu

Settings for the bill acceptor are controlled by the settings for Electronic Mech 2 (2E) in the Coin-In Menu screen.

To set the Coin-In Menu to provide a bonus credit for the use of a dollar, set the number of coins (for Electronic Mech 2) to **4** and set the number of credits to **5**. This will provide 5 credits for each dollar entered. **Meter Pulses** can be set to **4** to record the amount of "coins" in the cashbox, or it can be set to **5** to record the number of credits played, depending on your individual need. An illustration of the coin-in menu set to offer 5 credits for a dollar, with the meter counting coins, is shown below.

See your owner's manual for complete operating instructions for the Coin-In Menu.

COIN INPUT	COINS	=	CREDITS	&	METER PULSES			
1E	<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>1</td></tr></table>	1		<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>1</td></tr></table>	1		<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>1</td></tr></table>	1
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4								
5								
4								

# Section 4

# Power Supply

*Power Supply Used in FORCE Games*

Enhance SFX-1211J

Enhance ENP-0812A

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## Power Supply - Enhance



ENHANCE SFX-1211J  
MERIT PART NUMBER: EC7531-03

Used in all FORCE games except EVO, EVO Wallette, and Fusion with Electronics Box.



ENHANCE ENP-0812A  
MERIT PART NUMBER: EC7536-01

Used in FORCE EVO, EVO Wallette and Fusion with Electronics Box.

# Section 5

# Motherboard

*Circuit Board Cross Reference Chart*

*Motherboard Diagrams*

*I/O Board Diagrams*

## Motherboard Diagrams

### Merit # EC0049-02 Motherboard

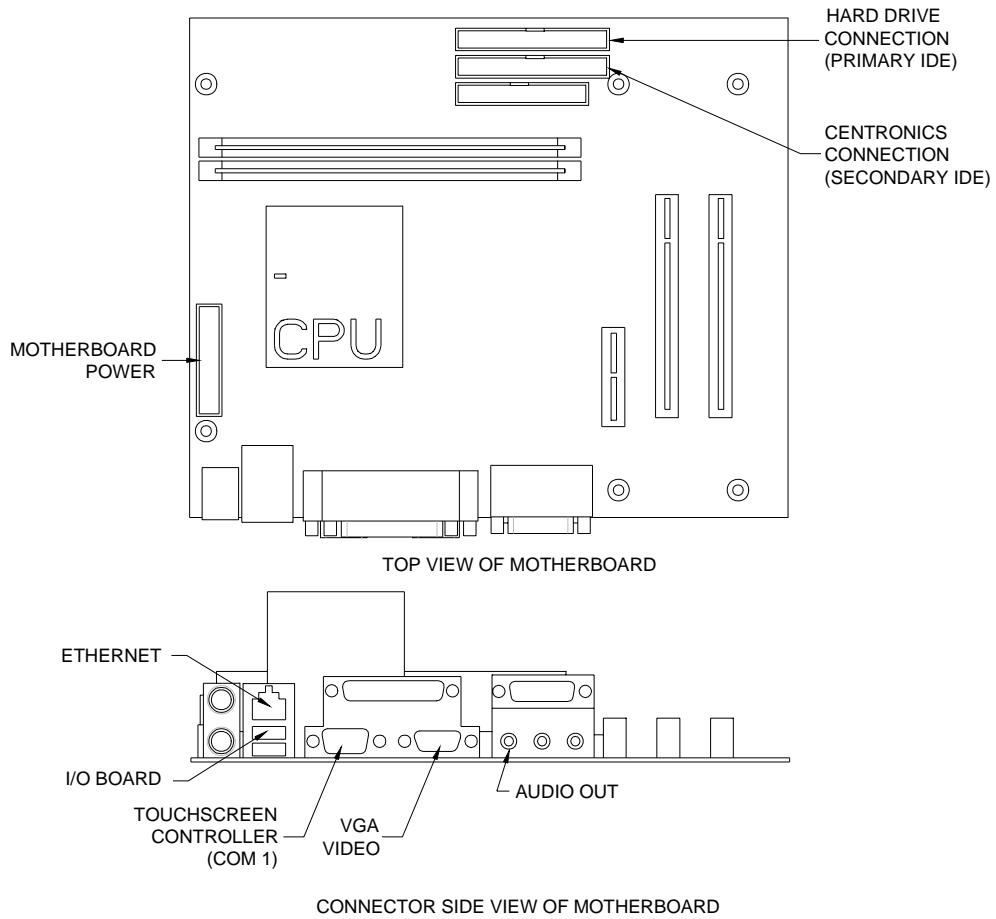


FIGURE 1 - ECS MOTHERBOARD DRAWING

### Required Connections

Motherboard Power Connector: to supply power to the motherboard

Hard Drive Connection (Primary IDE): to connect FORCE hard drive, connected at the factory

Centronics Connection (Secondary IDE): for future software upgrades

I/O Board: connects I/O board and motherboard, connected at the factory

Touchscreen Controller (Com 1): for touchscreen operation

VGA Video: for monitor operation

Audio Out: provides audio output to audio amp board

### Optional Connections

Ethernet: for linking multiple games

### **Motherboard - Motherboard Diagrams**

Megatouch FORCE FORCE Technical Reference Manual

## Motherboard Diagrams (cont'd)

### Motherboard - Power Connector

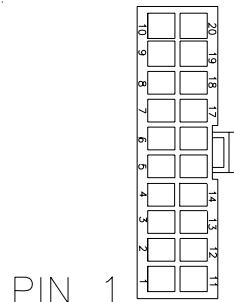


FIGURE 2 - REAR VIEW OF CABLE CONNECTOR  
Molex Connector (manufacturer part # 39-01-2200)  
Molex Pin (manufacturer part # 39-00-0038)

<u>PIN</u>	<u>WIRE COLOR</u>	<u>USE</u>
1	BROWN	+3.3 VDC
2	BROWN	+3.3 VDC
3	BLACK	GND
4	RED	+5 VDC
5	BLACK	GND
6	RED	+5 VDC
7	BLACK	GND
8	WHITE	PWR GOOD
9	VIOLET	+5V VSB
10	YELLOW	+12 VDC
11	BROWN	+3.3 VDC
12	BLUE	-12 VDC
13	BLACK	GND
14	BLACK	GND
15	BLACK	GND
16	BLACK	GND
17	BLACK	GND
18	-----	-----
19	RED	+5 VDC
20	RED	+5 VDC

## SA10055-01 - I/O Board Diagrams (Radion, Classic, Elite, and Combo Jukeboxes and Upright games)

### Merit # SA10055-01 I/O Board

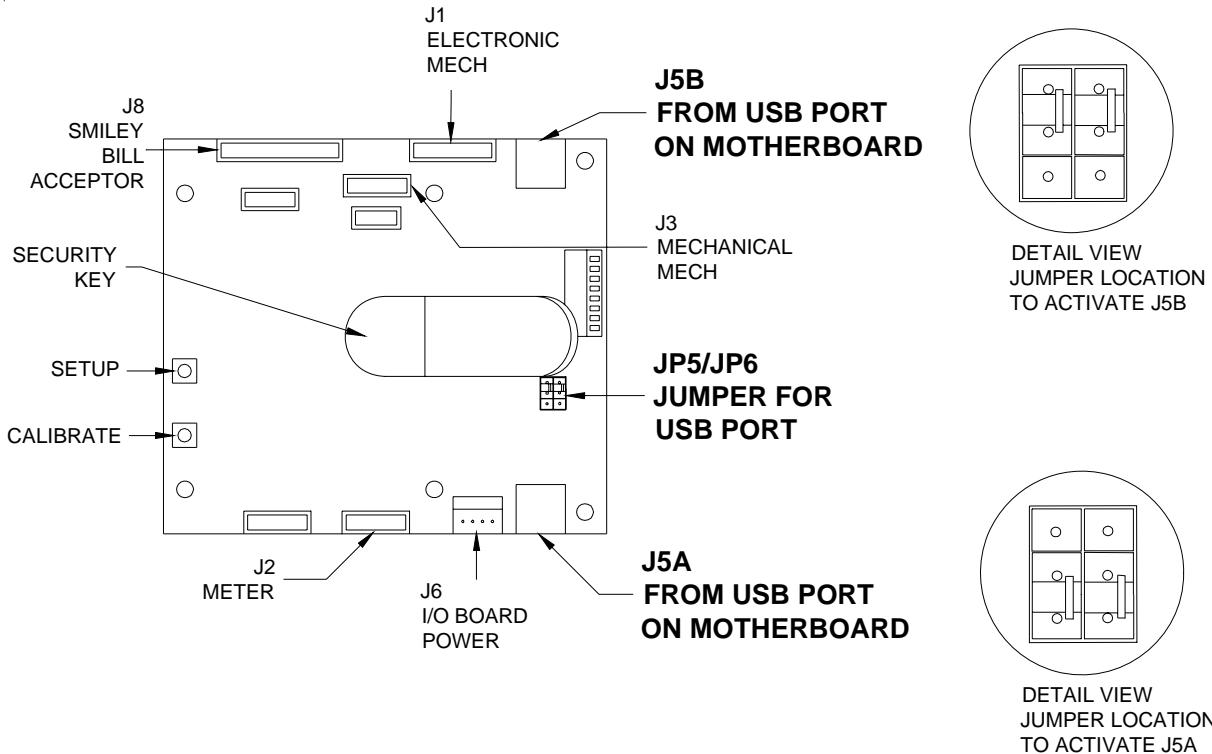


FIGURE 3 - I/O BOARD DRAWING

### Required Connections

- I/O Board Power Connector: to supply power to the I/O board
- Electronic Mech Connector: for electronic mech operation
- Smiley Bill Acceptor Connector: for Smiley bill acceptor operation
- Mechanical Mech/Lockout Connector: for mechanical mech operation
- Meter Connector: for meter operation
- Security Key Socket: install security key for game operation
- Motherboard: connects I/O board and motherboard, connected at the factory

***NOTE: The orientation of the jumpers at JP5/JP6 will determine which USB connector on the I/O board is activated.***

### Motherboard - I/O Board Diagrams

Megatouch FORCE FORCE Technical Reference Manual

## SA10055-01 - I/O Board Diagrams (cont'd)

### I/O Board - Smiley Bill Acceptor Connector (J8)

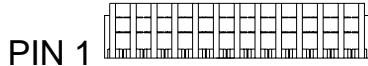


FIGURE 4 - TOP VIEW OF CABLE CONNECTOR  
JST Connector (manufacturer part # 12NR-E4K)

<u>PIN</u>	<u>WIRE COLOR</u>	<u>USE</u>
1	WHITE	BILL 1
2	WHITE	BILL 2
3	WHITE	BILL 3
4	WHITE	BILL 4
5	GREEN	INHIBIT 1 (GND)
6	GREEN	INHIBIT 2 (GND)
7	GREEN	INHIBIT 3 (GND)
8	GREEN	INHIBIT 4 (GND)
9	BLUE	ESCROW +12 VDC
10	YELLOW	+12 VDC
11	GREEN	GROUND
12	YELLOW	+12 VDC

### I/O Board - Meter Connector (J2)



FIGURE 5 - TOP VIEW OF CABLE CONNECTOR  
JST Connector (manufacturer part # 06NR-E4K)

<u>PIN</u>	<u>WIRE COLOR</u>	<u>USE</u>
1	BLACK	COUNTER 1(-) TERMINAL COIN
2	BLACK	COUNTER 2 (-) TERMINAL TMAXX
3	BLACK	SETUP HI
4	BLACK	CALIBRATE HI
5	YELLOW	+12 VDC
6	GREEN	GROUND, SETUP/CALIBRATE COMMON

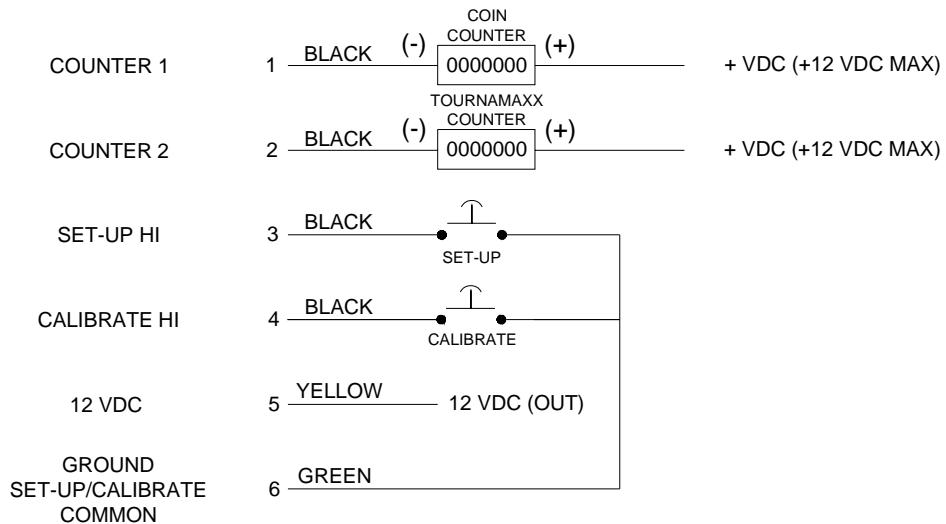
**SA10055-01 - I/O Board Diagrams (cont'd)****I/O BOARD**

FIGURE 6 - I/O BOARD METER CONNECTOR SCHEMATIC

**I/O Board - Mechanical Mech Connector (J3)**FIGURE 7 - TOP VIEW OF CABLE CONNECTOR  
JST Connector (manufacturer part # 07NR-E4K)

<u>PIN</u>	<u>WIRE COLOR</u>	<u>USE</u>
1	-----	-----
2	YELLOW	+ 12VDC (OUT)
3	WHITE	COIN 1
4	RED	+ 5 VDC (OUT)
5	GREEN	GROUND
6	GREEN	GROUND
7	GREEN	GROUND

**Motherboard - I/O Board Diagrams**

Megatouch FORCE FORCE Technical Reference Manual

## SA10055-01 - I/O Board Diagrams (cont'd)

### I/O Board - Electronic Mech Connector (J1)

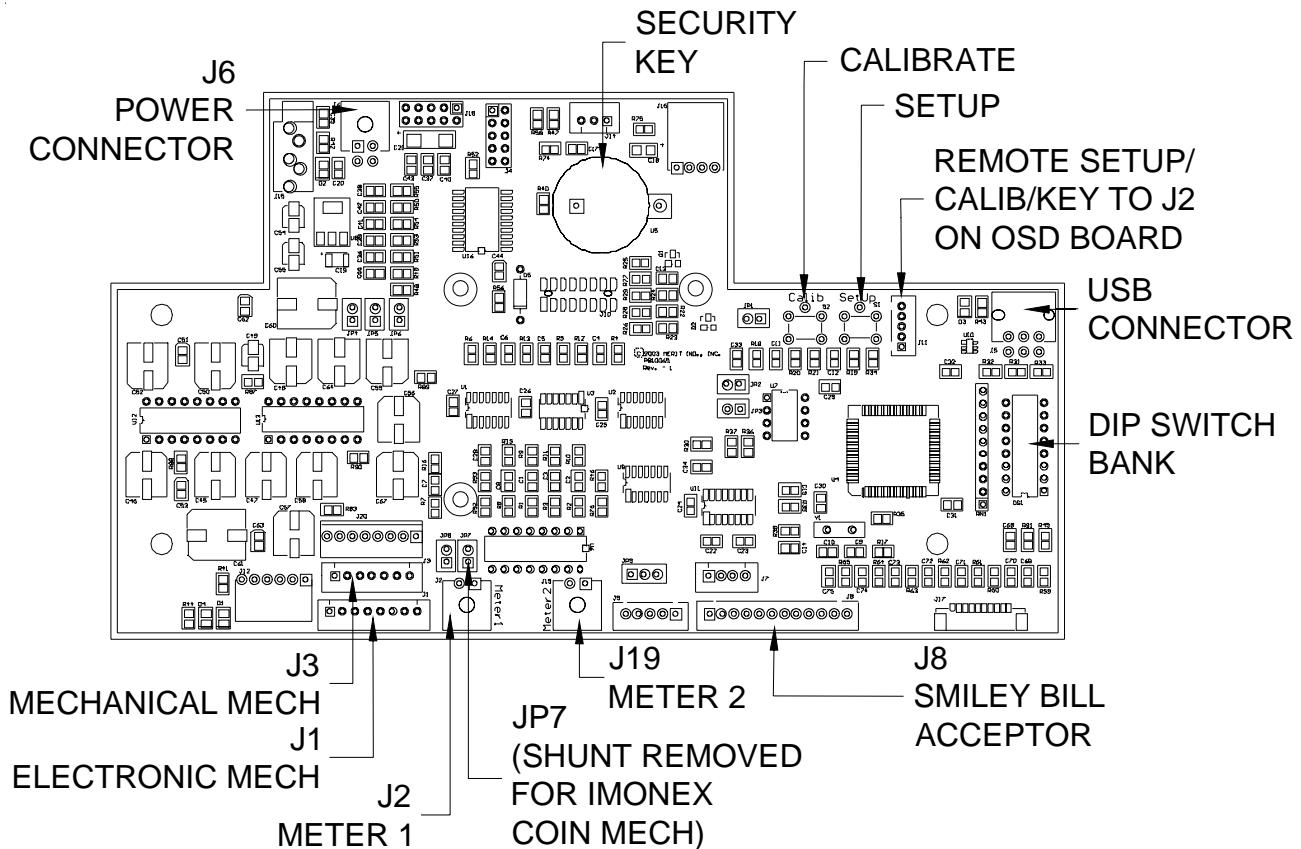


FIGURE 8 - TOP VIEW OF CABLE CONNECTOR  
JST Connector (manufacturer part # 08NR-E4K)

<u>PIN</u>	<u>WIRE COLOR</u>	<u>USE</u>
1	WHITE	COIN 1
2	WHITE	COIN 2
3	WHITE	COIN 3
4	WHITE	COIN 4
5	WHITE	COIN 5
6	WHITE	COIN 6
7	YELLOW	+12 VDC
8	GREEN	GROUND

## SA10065-01 - I/O Board Diagrams (FORCE Fusion and EVO games)

## Merit # SA10065-01 I/O Board



## FIGURE 9 - I/O BOARD DRAWING

## Required Connections

I/O Board Power Connector: to supply power to the I/O board

Electronic Mech Connector: for electronic mech operation

## Smiley Bill Acceptor Connector: for Smiley bill acceptor operation

Mechanical Mech/Lockout Connector: for mechanical mech operation

#### Meter Connector: for meter operation

Security Key Socket: install security key for game operation

Motherboard: connects I/O board and motherboard, connected at the factory

## Motherboard - I/O Board Diagrams

## I/O Board Diagrams (cont'd)

### I/O Board - Smiley Bill Acceptor Connector (J8)

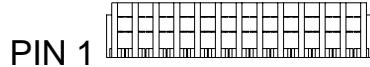


FIGURE 10 - TOP VIEW OF CABLE CONNECTOR  
JST Connector (manufacturer part # 12NR-E4K)

<u>PIN</u>	<u>WIRE COLOR</u>	<u>USE</u>
1	WHITE	BILL 1
2	WHITE	BILL 2
3	WHITE	BILL 3
4	WHITE	BILL 4
5	GREEN	INHIBIT 1 (GND)
6	GREEN	INHIBIT 2 (GND)
7	GREEN	INHIBIT 3 (GND)
8	GREEN	INHIBIT 4 (GND)
9	BLUE	ESCROW +12 VDC
10	YELLOW	+12 VDC
11	GREEN	GROUND
12	YELLOW	+12 VDC

### I/O Board - Meter Connector (J2)

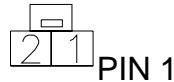


FIGURE 11 - TOP VIEW OF CABLE CONNECTOR  
Molex Connector (manufacturer part # 43645-0200)

<u>PIN</u>	<u>WIRE COLOR</u>	<u>USE</u>
1	BLACK	COUNTER 1 (-) TERMINAL COIN
2	BLACK	COUNTER 2 (-) TERMINAL TMAXX

## I/O Board Diagrams (cont'd)

### I/O Board - Mechanical Mech Connector (J3)

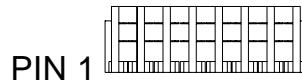


FIGURE 12 - TOP VIEW OF CABLE CONNECTOR  
JST Connector (manufacturer part # 07NR-E4K)

<u>PIN</u>	<u>WIRE COLOR</u>	<u>USE</u>
1	-----	-----
2	YELLOW	+ 12VDC (OUT)
3	WHITE	COIN 1
4	RED	+ 5 VDC (OUT)
5	GREEN	GROUND
6	GREEN	GROUND
7	GREEN	GROUND

### I/O Board - Electronic Mech Connector (J1)

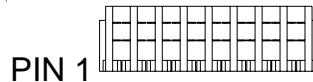


FIGURE 13 - TOP VIEW OF CABLE CONNECTOR  
JST Connector (manufacturer part # 08NR-E4K)

<u>PIN</u>	<u>WIRE COLOR</u>	<u>USE</u>
1	WHITE	COIN 1
2	WHITE	COIN 2
3	WHITE	COIN 3
4	WHITE	COIN 4
5	WHITE	COIN 5
6	WHITE	COIN 6
7	YELLOW	+12 VDC
8	GREEN	GROUND

# Section 6

# Monitors

## *Monitors Used in FORCE Games*

**Tatung VS14428TSV03**  
**Kortek KTLS15XH**  
**Tatung C5GNEKC**  
**Samsung LTM150Xi-A01**  
**Samsung LTM170EU-A01, LTM170EI-A01**  
**Tatung VT19726Z**  
**Tatung VT19725FZ**

## *Monitor Adjustments*

**Degaussing**  
**Monitor Adjustment Procedures**

# Monitors Used in FORCE Games

**Tatung Part Number: VS14428TSV03**  
**Merit Part Number: EC9377-08**

Used in: FORCE Classic

**Kortek Part Number: KTLS15XH**  
**Merit Part Number: EC9381-02**

Used in: FORCE Elite

**Tatung Part Number: C5GNEKC**  
**Merit Part Number: EC9387-01**

Used in: FORCE Radion, Mr. VIPS

**Samsung Part Number: LTM170EU-A01**  
**Merit Part Number: EC9381-04**

Used in: FORCE Vibe

**Samsung Part Number: LTM150Xi-A01**  
**Merit Part Number: EC9388-01**

Used in: FORCE EVO, EVO Wallette

**Samsung Part Numbers: LTM170EU-A01, LTM170EI-A01**  
**Merit Part Number: EC9384-01**

Used in: FORCE Fusion

**Tatung Part Number: VT19726Z**  
**Merit Part Number: EC9382-01**

Used in: FORCE Upright, FORCE Upright with Coin Door

**Tatung Part Number: VT19725FZ**  
**Merit Part Number: EC9383-01**

Used in: Megatouch Combo Jukebox

## **Degaussing your Monitor**

**(Classic, Upright, Megatouch Combo Jukebox, and Radion games only)**

If your monitor is displaying “purity problems,” (a display with purity problems will have parts of an all-white screen affected by blotches of color) the monitor needs to be degaussed using a “degaussing coil.” A degaussing coil is a circular electromagnet used to cancel out any stray magnetic fields that may build up on a metal object.

All of our monitors have built-in degaussing coils that are automatically activated on power-up. If your game is experiencing minor purity problems, try powering down the game for 5 minutes and then reapplying power to activate the degaussing coil. If the problem is not corrected, you will have to use a manual degaussing coil.

Follow the instructions below for degaussing a monitor.

1. Plug in your degaussing coil.
2. Hold the coil about three feet from the monitor, press the trigger to activate the magnetic field (for circular-shaped coils, orient the coil so you see the monitor through the hole in the middle; for wand-shaped coils, point the wand towards the screen).
3. Move the coil in a circular motion around the face of the monitor and slowly approach the game.
4. Continuing to move the coil in a circular motion, slowly back away from the monitor.
- 5a. CIRCULAR-SHAPED COILS: When you are about three feet away, quickly turn the coil perpendicular to the monitor and release the trigger.
- 5b. WAND-SHAPED COILS: When you are about three feet away, point the wand away from the monitor and release the trigger.

## Monitor Adjustment Procedures

For adjusting the picture on MAXX games, we suggest following the procedures described below. The vertical/horizontal controls and brightness/contrast controls are located on the monitor control panel that is Velcroed inside the game. The monitor RGB controls are located on the monitor neck board.

### ***Tatung/Wells Gardner Monitors***

For games running software versions prior to Emerald:

1. Under STRATEGY, select the 11-Ball game.
2. Adjust the brightness and contrast controls until there is no shadow on the yellow balls and no pixels of the incorrect color appear on any of the balls. (Adjusting the brightness and contrast can also correct for a lack of sharpness.)
3. To adjust the color and screen positioning, use the SETUP button inside the game to bring up the VIDEO TEST button.
4. Select VIDEO TEST and bring up the grid screens (the third and fourth screens in the VIDEO TEST). Use the grid screen to ensure that the game is centered, using the vertical/horizontal controls on the monitor control board to adjust the screen position and ensure that the game screen correctly fills the monitor screen.
5. Use the RGB controls on the monitor neck board with the remaining video test screens to adjust screen color.
6. Once the necessary adjustments have been made, touch the screen until you bring up the VIDEO TEST menu again, then exit out of the menu.

For games running Emerald software or a later version:

1. Under STRATEGY, select the 11-Ball game.
2. Adjust the brightness and contrast controls until there is no shadow on the yellow balls and no pixels of the incorrect color appear on any of the balls. (Adjusting the brightness and contrast can also correct for a lack of sharpness.)
3. To adjust the color, use the SETUP button inside the game to bring up the VIDEO TEST button.
4. Select VIDEO TEST and bring up the color test screens, then use the RGB controls on the monitor neck board to adjust screen color.
5. Once the necessary adjustments have been made, touch the screen until you bring up the VIDEO TEST menu again, then exit out of the menu.
6. To adjust the screen positioning, select NEW GAMES, then Backjammin, then Acey Deucey (Acy Deucey has the widest playing screen of all the games). Use the vertical/horizontal controls on the monitor control board to center the screen position and ensure that the game screen correctly fills the monitor screen.

### ***Kortek Flatscreen Monitors***

1. Press any button on the monitor control board (located on the reverse side of the LCD screen) to bring up the menu screen.
2. Use the SW2 and SW3 buttons to arrow through the menu and select BASIC SETTINGS with the SW1 button.
3. Use SW1 to select default or manual settings. Follow the menus on the screen to make manual adjustments.
4. Exit out of each menu once the necessary adjustments have been made.

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# **Section 7**

# **Technical Service**

# **Bulletins**