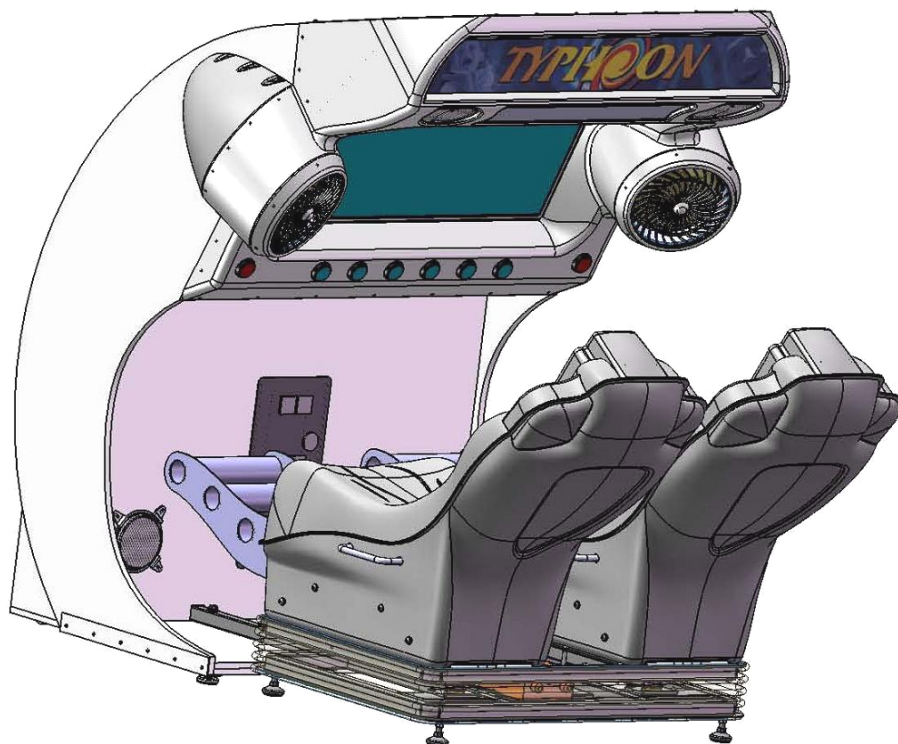


# TYPHOON



## USER MANUAL

Preliminary – January 2009



Triotech Amusement Inc.  
190 Des Industries Lavaltrie, Quebec (Canada)

J5T 3R2

Tel.: 450.586.5009

Toll free: 1-888-IN-LINE-4

Fax: 450.586.0299

e-mail: [service@trio-tech.com](mailto:service@trio-tech.com)



Dear valued customer,

Congratulations and thank you for purchasing TRIOTECH AMUSEMENT's *Typhoon*. You will not be disappointed with your purchase. Your 2-seat theater is coin-operated and does not require attendant. Featuring 4.1 Surround Sound and a 42" LCD screen this dual-actuator motion platform is the most realistic simulation available in coin-op.

Sincerely,  
TRIOTECH

**ATTENTION ALL GUESTS  
READ IMPORTANT SAFETY INFORMATION  
AND FOLLOW INSTRUCTIONS OF ATTENDANTS**

**RIDE DESCRIPTION: MODERATE**

A movie ride with intense back and forth and side to side movement of the seats.

**TYPHOON**

Do not ride if you have any of the following conditions:



Recent Surgery  
or Illness



Heart Conditions



Neck, Back or  
Bone Ailments



Pregnancy



High Blood Pressure  
or Aneurysms



Under the influence  
of Drugs or Alcohol

**For your safety, you should be in good health to ride.  
Only you know your physical conditions or limitations.  
If you suspect your health could be at risk for any reason, or you  
could aggravate a pre-existing condition of any kind, DO NOT RIDE!**

**RIDE RULES**

- Secure all loose articles (glasses, cameras, cell phones, hats, wallets, keys, etc.) or leave them with a non-rider
- Cameras and video equipment are not permitted on the ride
- Smoking is not permitted on the ride
- Chewing gum, candy, food and drinks are not permitted on the ride

# Typhoon reception

Reception

# 1



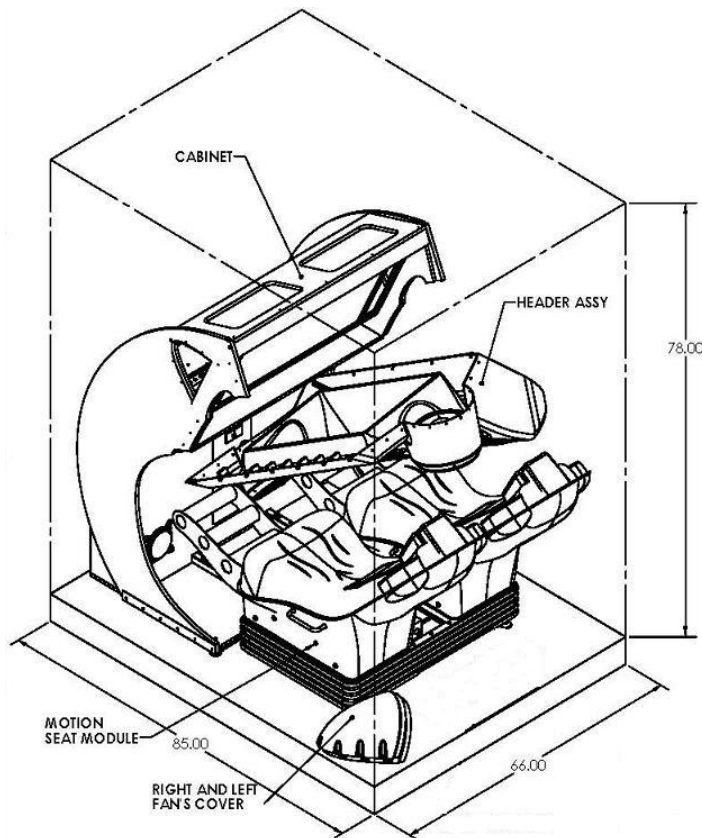
## CAUTION

Typhoon requires a dedicated 120V, 15 amp circuit or 220V, 7.5amp or the machine may experience sporadic technical difficulties. Your Typhoon should not share a breaker with other deluxe or motion based cabinets.

### Determine Optimum Location

The game location must be free of: exposure to direct sunlight, high humidity, dust, salt mist, high heat, or extreme cold. If installed in an unusually hot location, allow additional clearance between ventilation slots in the game and any structure or object that would tend to restrict air circulation.

### TYPHOON Ships in one (1) crate


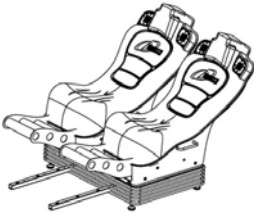

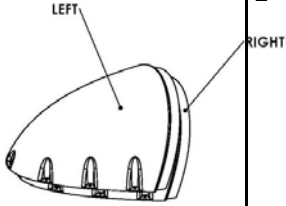
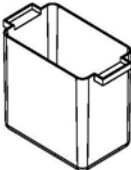


### Package approximate dimensions:

90" x 56" x 80"

LIST OF SUPPLIED ASSEMBLY PARTS

Package Content




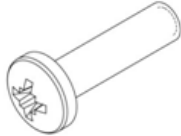



Item	Description	Photo/ Image	Qty.
1	Main cabinet		1
2	Motion seat module		1
3	Header assy		1
4	Fan's cover (right & left)		2
5	Hardware box (inside of the coin door; the access is from the front of the machine; a bag with the necessities keys is attached to the coin door's door)		1



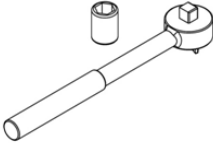

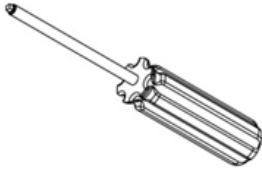
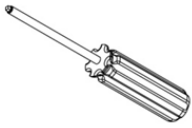
# HARDWARE BOX MANIFEST

Reception

# 3

Bag or bin No.	IMAGE	DESCRIPTION	SIZE	QTY.	SPARE
1	 SD-100-0215	FLAT WASHER NEORENE	#10	26	
2	 SD-100-0187	PAN HEAD QUADREX DRIVE	#10-24 x 3/4"	26	
3	 SD-100-0216	FLAT WASHER NEOPRENE	#14	12	
4	 SD-100-0190	PAN HEAD QUADREX DRIVE	1/4-20 x 3/4"	12	
5	 SD-100-0328	LOCK WASHER	1/2"	6	
6	 SD-100-0047	FLAT WASHER	1/2 "	6	
7	 SD-100-0342	HEX.MACHINE SCREW	1/2 "-13 x 4"	6	

**Installation****4****NECESSARY TOOLS  
TO COMPLETE ASSEMBLY**

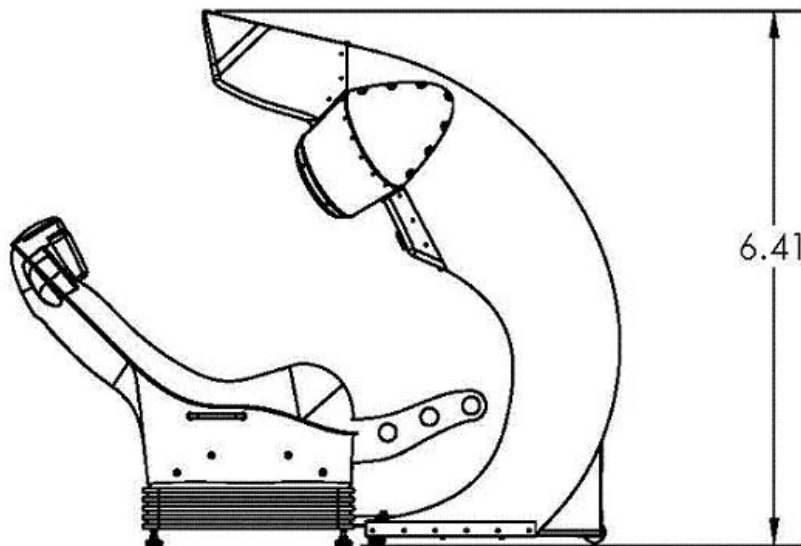
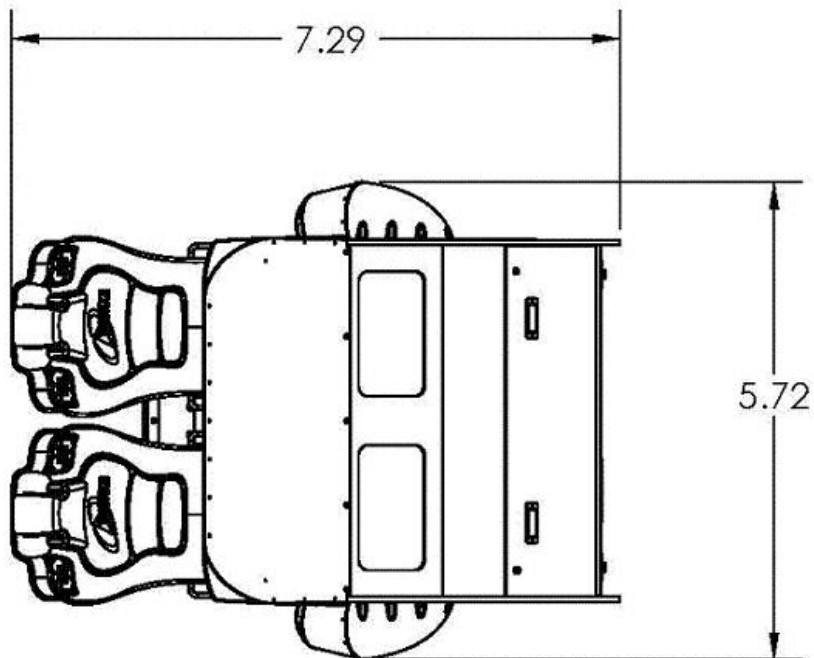
No.	Tools	Description /Image	Application
1	Forklift	Capacity over 1000 lb Appropriated long forks attached (~65")	Put the carrying package in the place
2	Socket 3/4"	 A technical drawing of a 3/4 inch socket wrench assembly, showing the socket, the drive pin, and the handle.	Install the seat module (pg.14)
3	Wrench 3/4"	 A technical drawing of an open end wrench with 3/4 inch jaws.	Adjust the height of the cabinet and seats (pg.9 and 14)
4	Screwdriver no.2 (square) (Screw #10) Or Phillips #2	 A technical drawing of a screwdriver with a square bit.	Install the fan's covers on to the header(pg.10 )and the header to the cabinet (pg. 11)
5	Screwdriver no.3 (square) (Screw 1/4) Or Phillips #3	 A technical drawing of a screwdriver with a square bit.	Install the header on the cabinet (pg.11)



## SPACE REQUIREMENTS

For installation, the required space is ~ 15' X 10'

When fully assembled, the required space will be ~ 7.5' X 8'



## Installation

# 6

## Uncrating

1 - Start by removing the header assembly from the seat.



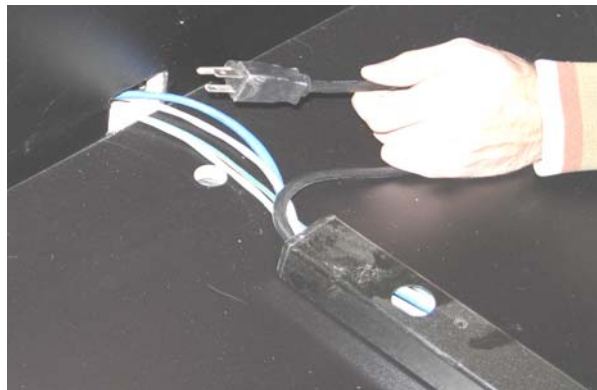
2- Remove the header support



3- Remove the back legs holder



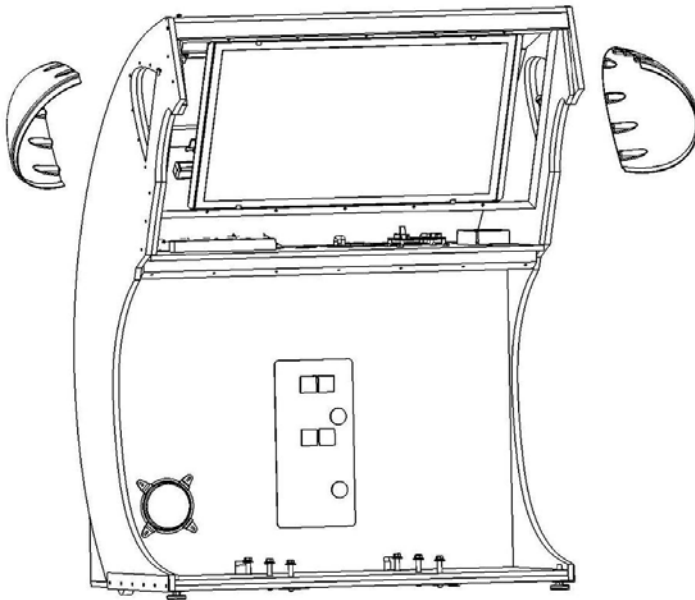
4-Pull the seat out of the cabinet about 6" or 15cm. Then pull the 3 cables out of the hole one by one as shown in the picture below.



5- Remove seat assembly from the crate.



6- Remove cabinet from the crate and move in the desired final location.  
- Locate the hardware box inside of the coin door  
- You will find a description of the hardware on the bag.

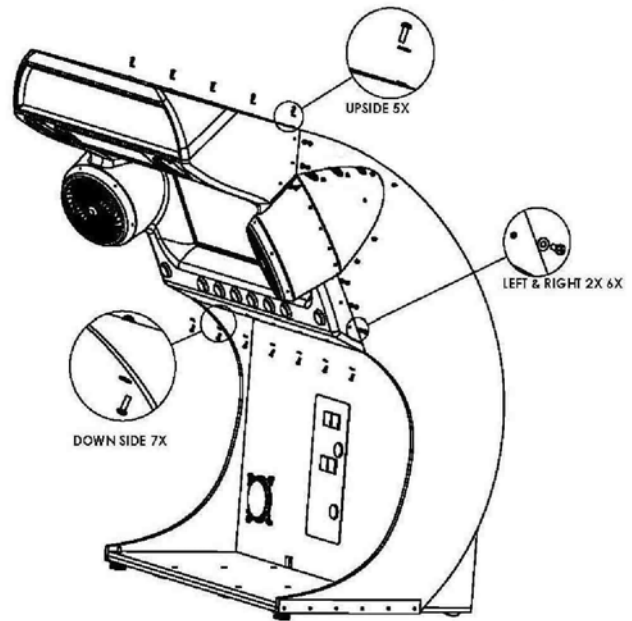
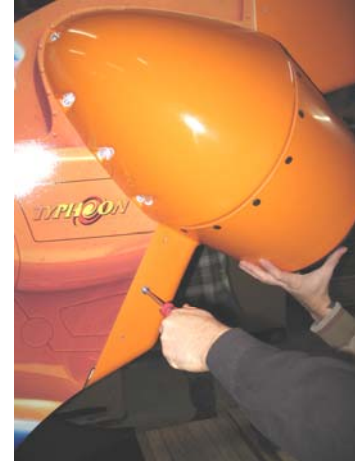
**STEP 2. Header assembly**

Install the two fan covers (right and left) to the cabinet

Tools	Fasteners Reference
Screwdriver no.2	Flat neoprene washer #10"(14X), Screw #10-32 x 3/4"(14X)

### **STEP 3. Header installation**

Place the header on the machine as shown



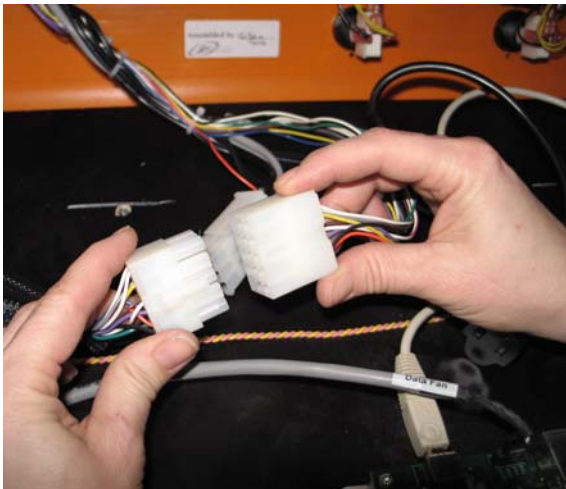
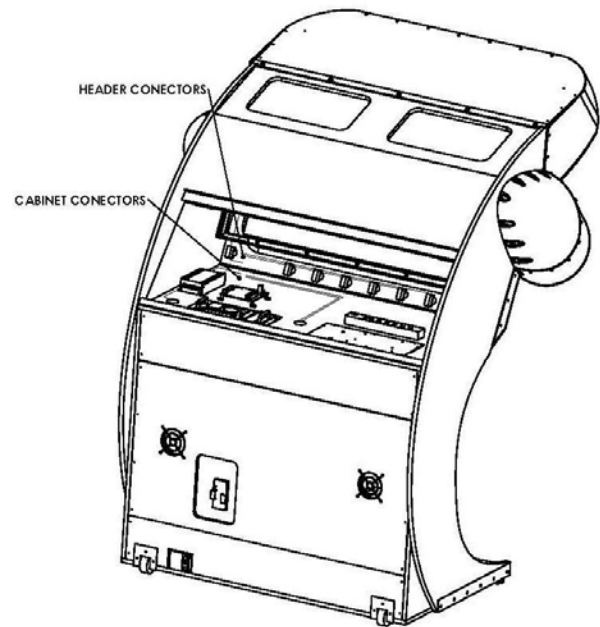
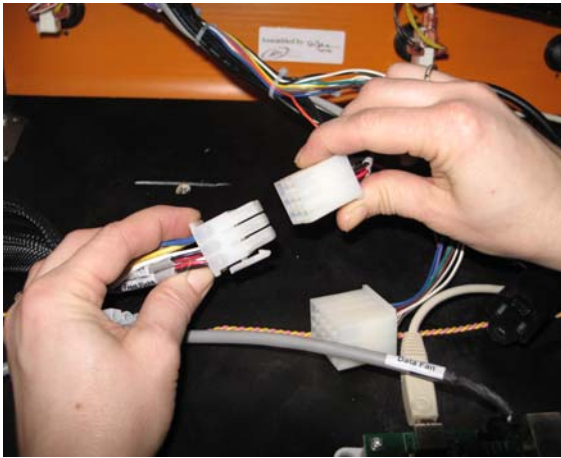
Tools	Fasteners Reference
Screwdriver no.2 (Down side, upside )	Flat neoprene washer #10''(12X), Screw #10 -32 x 3/4''(12X)
Screwdriver no.2 (right and left side fan's cover)	BAG/BIN NO: Flat neoprene washer #14''(12X), BAG/BIN NO : Screw 1/4''-20x 3/4''(12X)

# Header

Installation

# 7

- Open the back service door.
- Connect the header cables. There are **three connectors**; one MOLEX, 9 pin and one 15 pins + one NEMA /standard 110V.



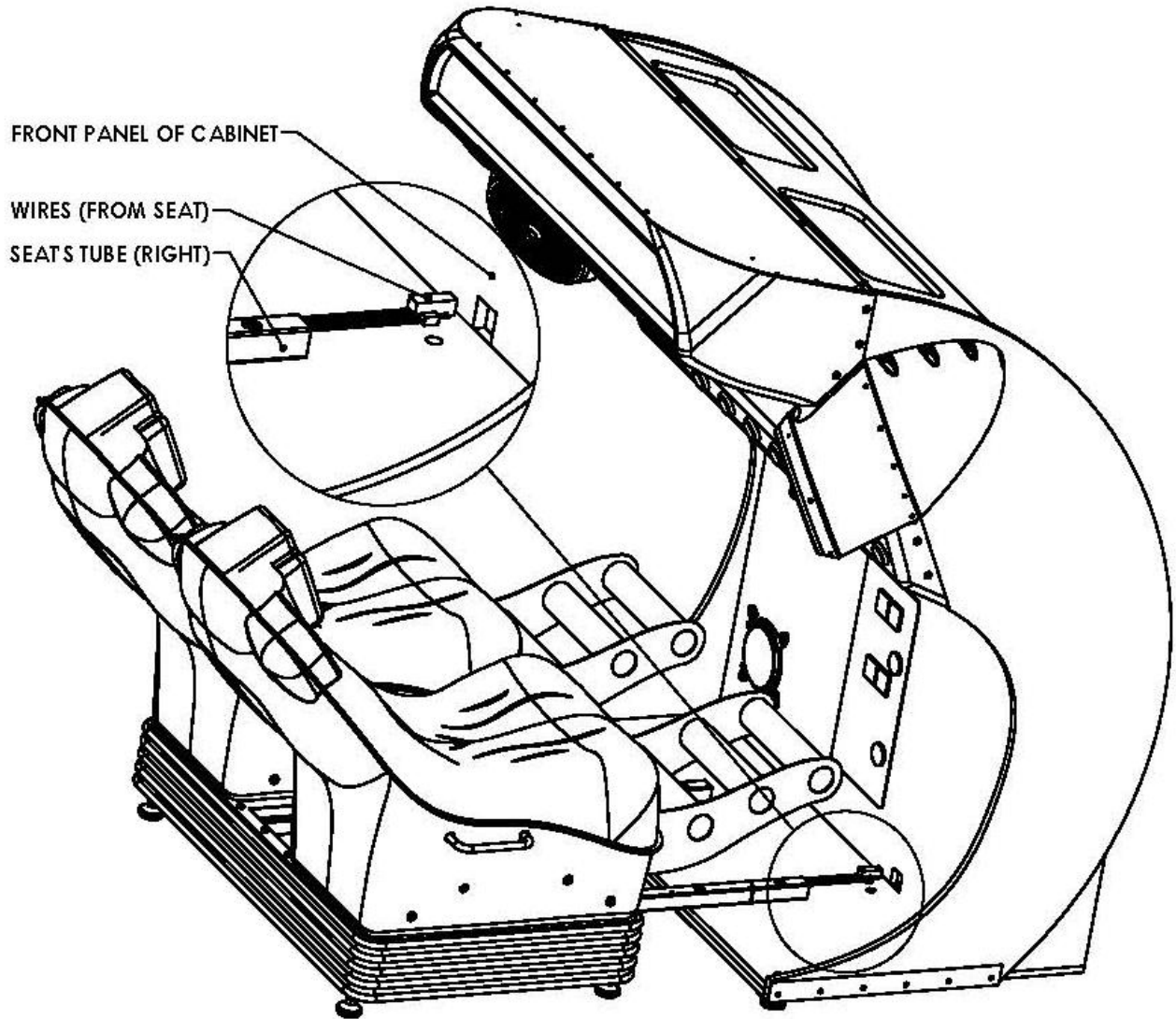
Once connected, close & lock top door.

Installation

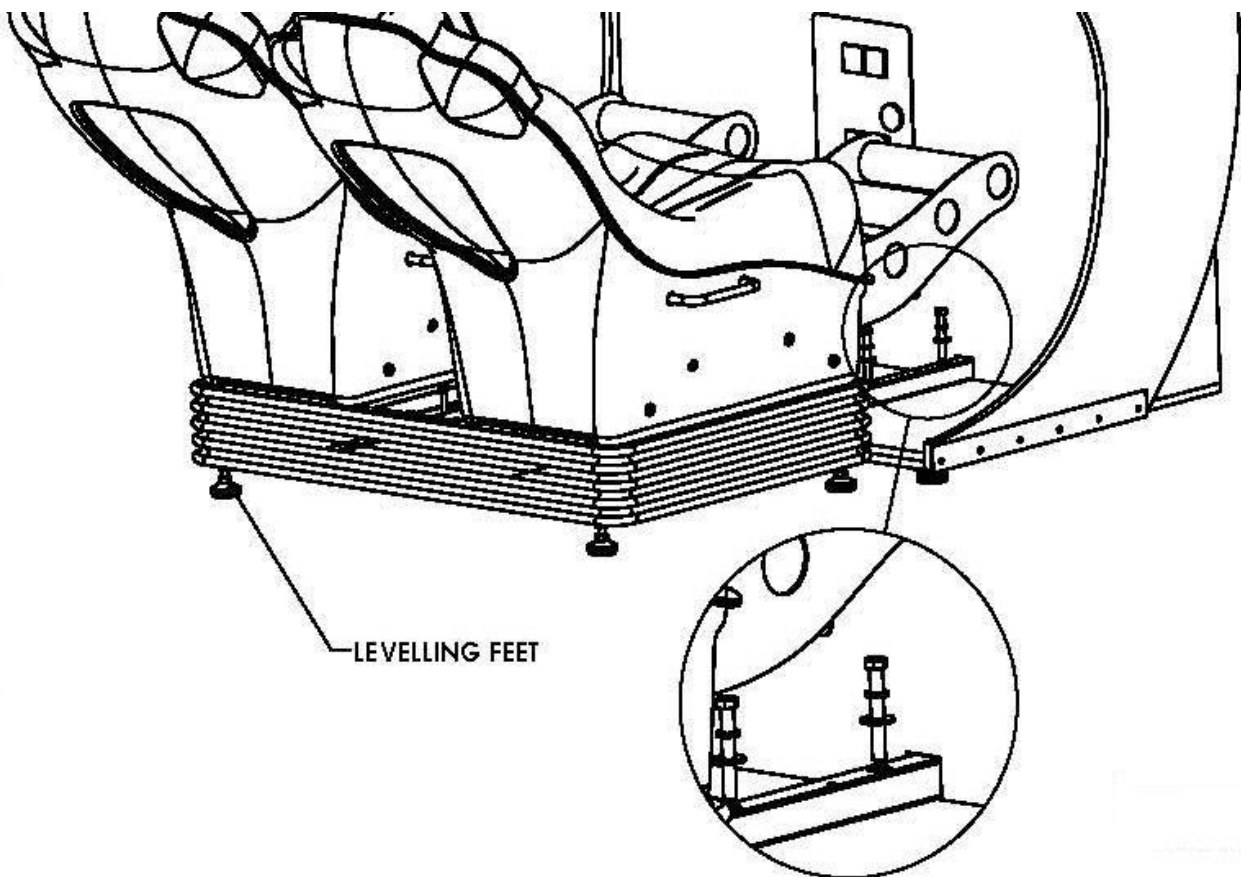
8

Seat

Align seats for wires to easily run through hole on lower right part of cabinet.



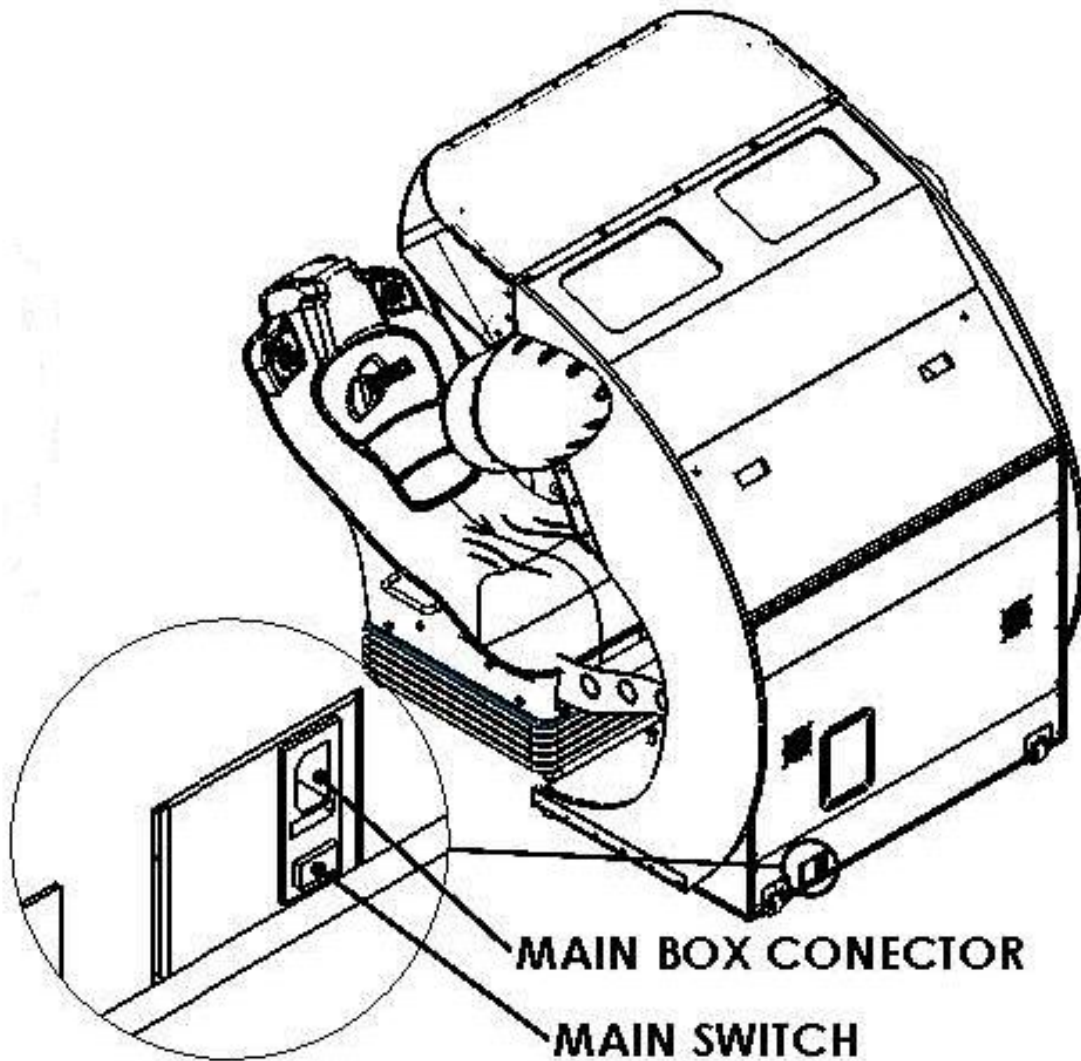
Fasten seats to cabinet using 6 hexagonal head screw 1/2" -13 x 4", flat and lock washer. Level seats using adjustable feet



Tools	Fasteners Reference
Ratchet 3/4"	Flat washer 1/2"( 6X), lock washer 1/2 (6X), Hex. Screw 1/2"-13 x 4"( 6X)
Wrench 3/4"	Levelling feet





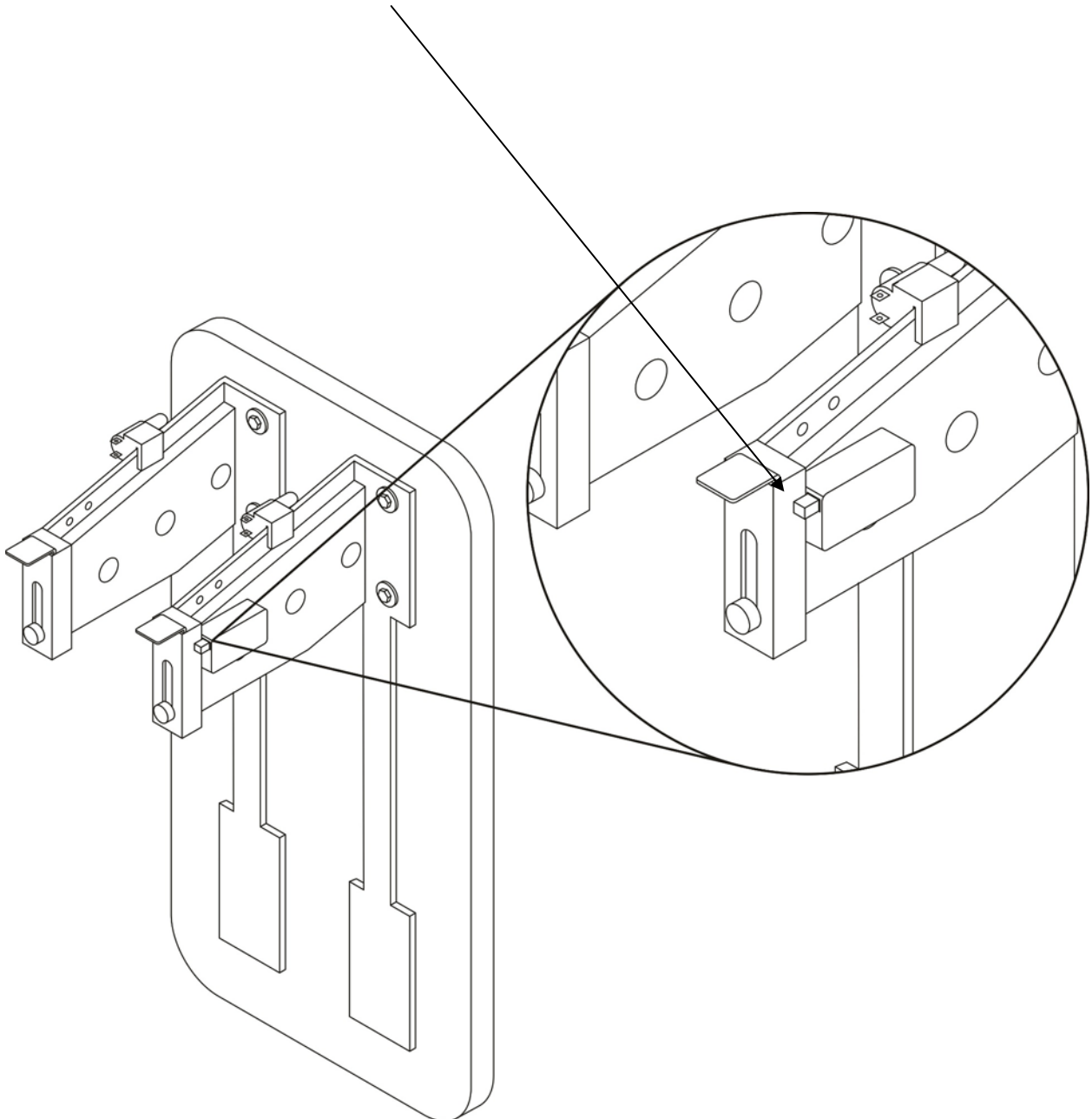


Before you connect, make sure main switch is in off position.  
Connect power cord to cabinet and wall outlet.  
Then turn the main switch ON

# 10

## Operator Setting

Accessing operator settings interface is done by opening the coin mech door and pushing the micro switch attached to the coin mech (*while in attract mode only*).



## Operator Setting

## 10





To access the statistic mode screen, press the micro switch once (or toggle micro switch until you reach this screen).

1. Amount of credits inserted into game in lifetime.
2. Amount of money inserted into game in lifetime.
3. Value of one credit
4. Actuator usage time since game installed
5. Actuator usage time since game installed
6. Revenue from each movie installed

**Statistic mode :**

**COUNTER** : 40 CREDITS  
**REVENUE** : \$10.00  
**CREDIT VALUE** : \$0.25  
**MOTION USAGE SERVICE** : 0000 hr 18 min  
**MOTION USAGE TOTAL** : 0000 hr 18 min

**Movie Title Credits <Revenue>**

Haunted mine		16 cr. <\$4.00>
Cosmic Coaster		8 cr. <\$2.00>
Road fury		8 cr. <\$2.00>
Aqua Ride		8 cr. <\$2.00>

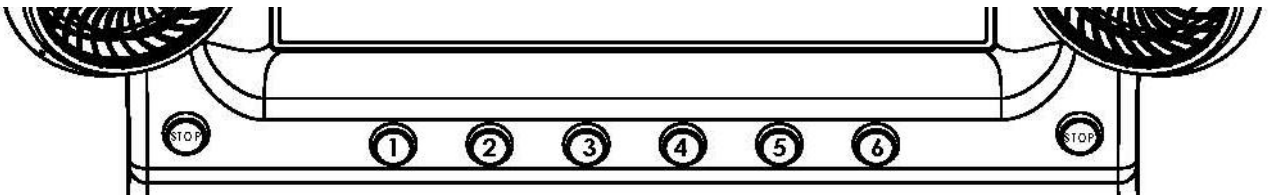
# 10

## Operator Setting

Use the large dash selection buttons 1 through 6 to change configurations. To change any of the options, press the appropriate button until the desired setting is reached. To return to a previous setting, keep toggling the button until it reaches the end of the settings; then it will restart the settings from the beginning.

- Amount of credits needed to start game. Set to 0 for free play (Press 1)
- Choose to display credits or money on screen. (Press 2)
- Value of one credit. (Press 3)
- Sound volume in attract mode. (Press 4)

Hit the appropriate button on the header to change variables



Maintenance mode :

Configuration Elements :

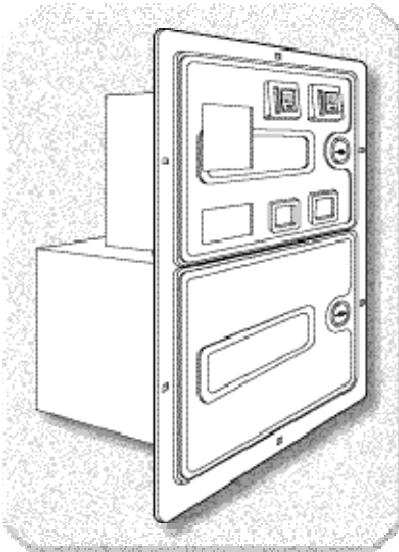
- (1) cost per game (credit) : 8
- (2) cost display : credits
- (3) credit value (\$) : \$0.25
- (4) volume (demo) : 2

Press on the appropriate button

## Dollar bill validator information

## 11

Typhoon does not ship equipped with a DBV, however it is pre-wired to accept one and we suggest the installation of one of the models below. This door accepts Mars upstacker bill validator with compact fitted Bezel (up to 10" deep)



Accepts both bills and coins

Fitted with full metal cash box enclosure

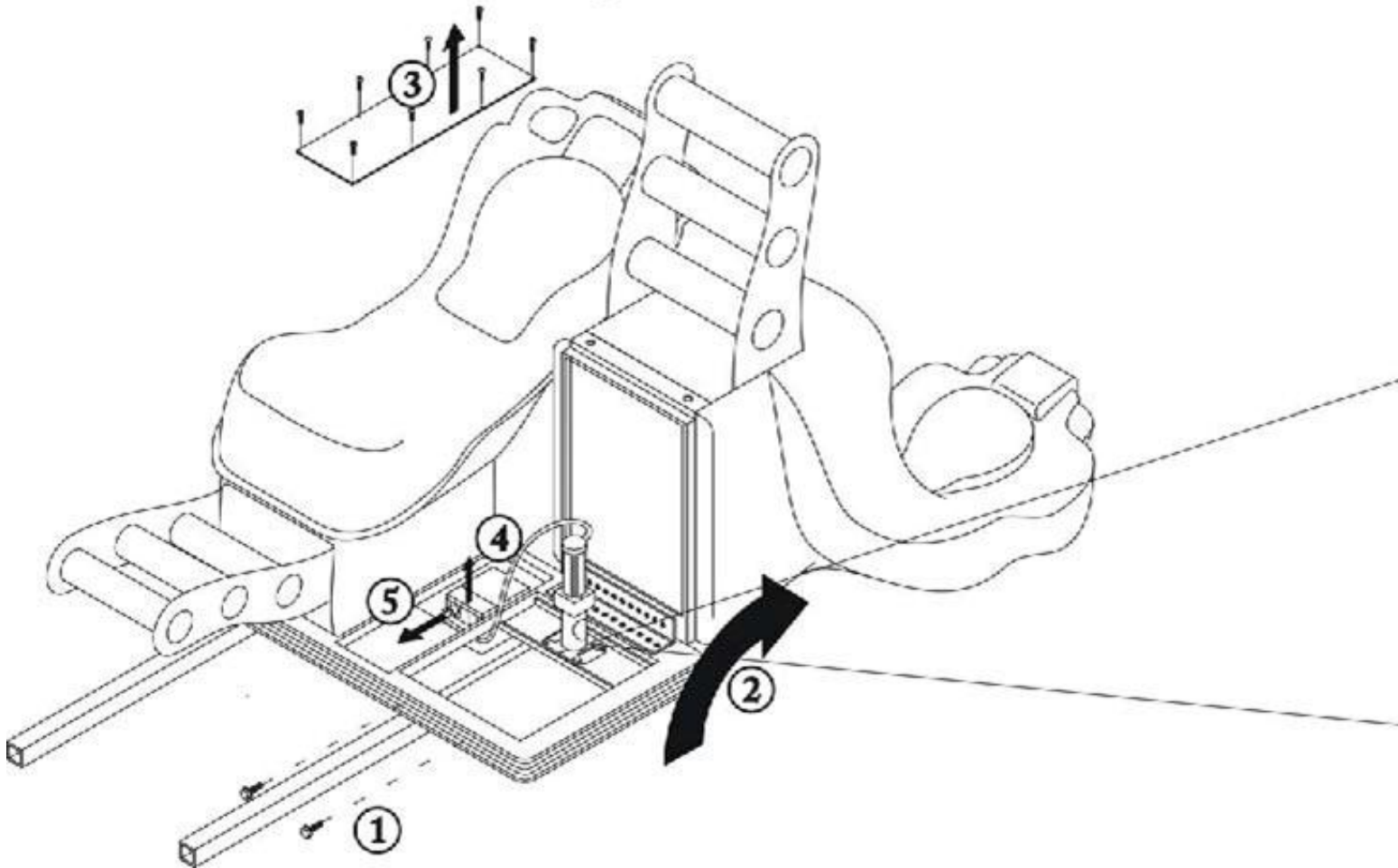
Fitted with two \$.25 U.S. Coin

**FACTORY SUGGESTED PRICING PER RIDE IS \$3.00**

Upstacker Bill validator fits these Models amongst others

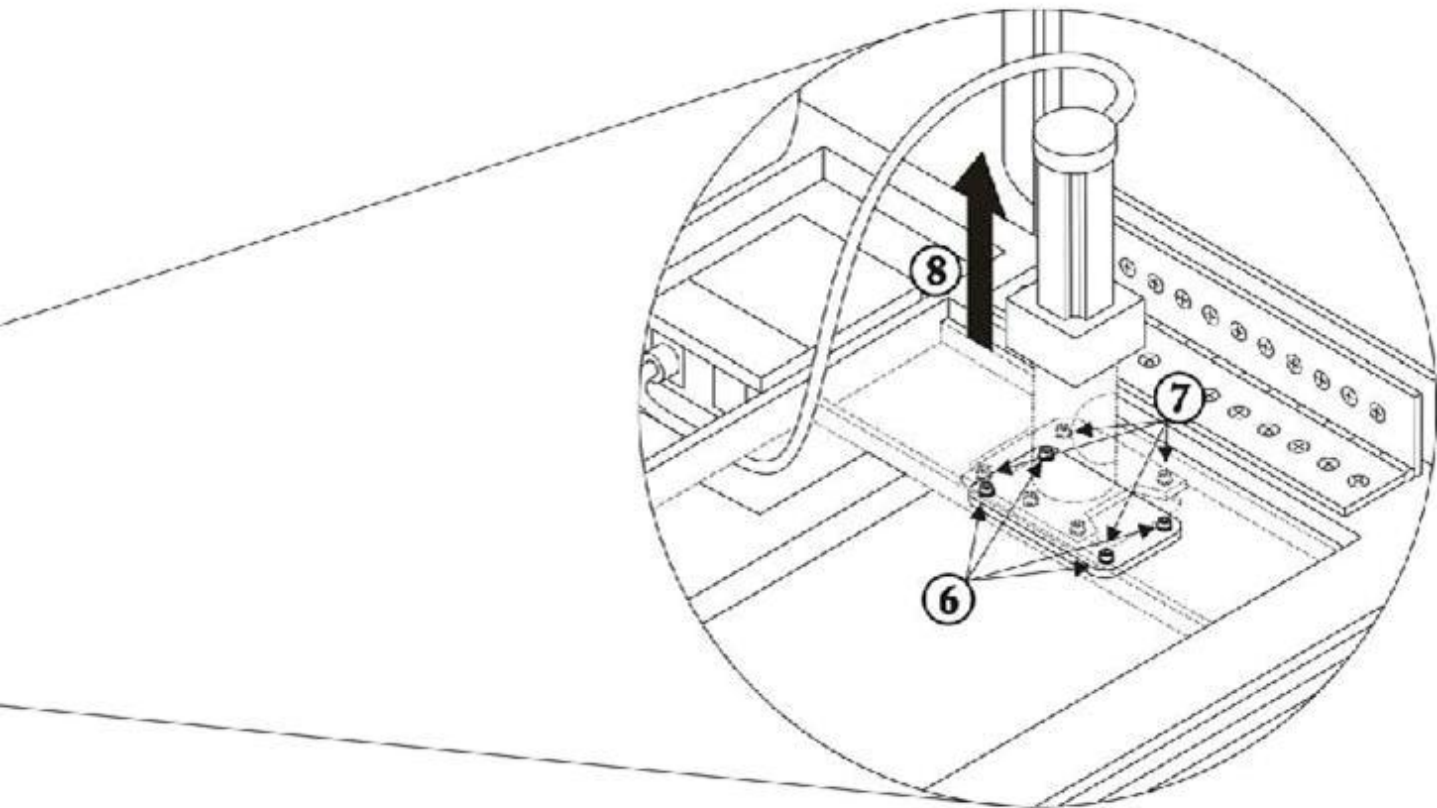
	Happ Control P/N
MARS	42-7312-00
MARS	42-7311-00
MARS	42-7310-00

Fig.1



### Actuator replacement procedure

1. Unscrew the 2 bolts holding the defective seat (under foot rest)
2. Flip seat back (protect head rest by covering floor with something soft)
3. Remove cover plate between the 2 seats
4. Open cover of control box, and detach the actuators's 2 connectors from the control box board (see page 38)
5. Remove front cover plate from control box

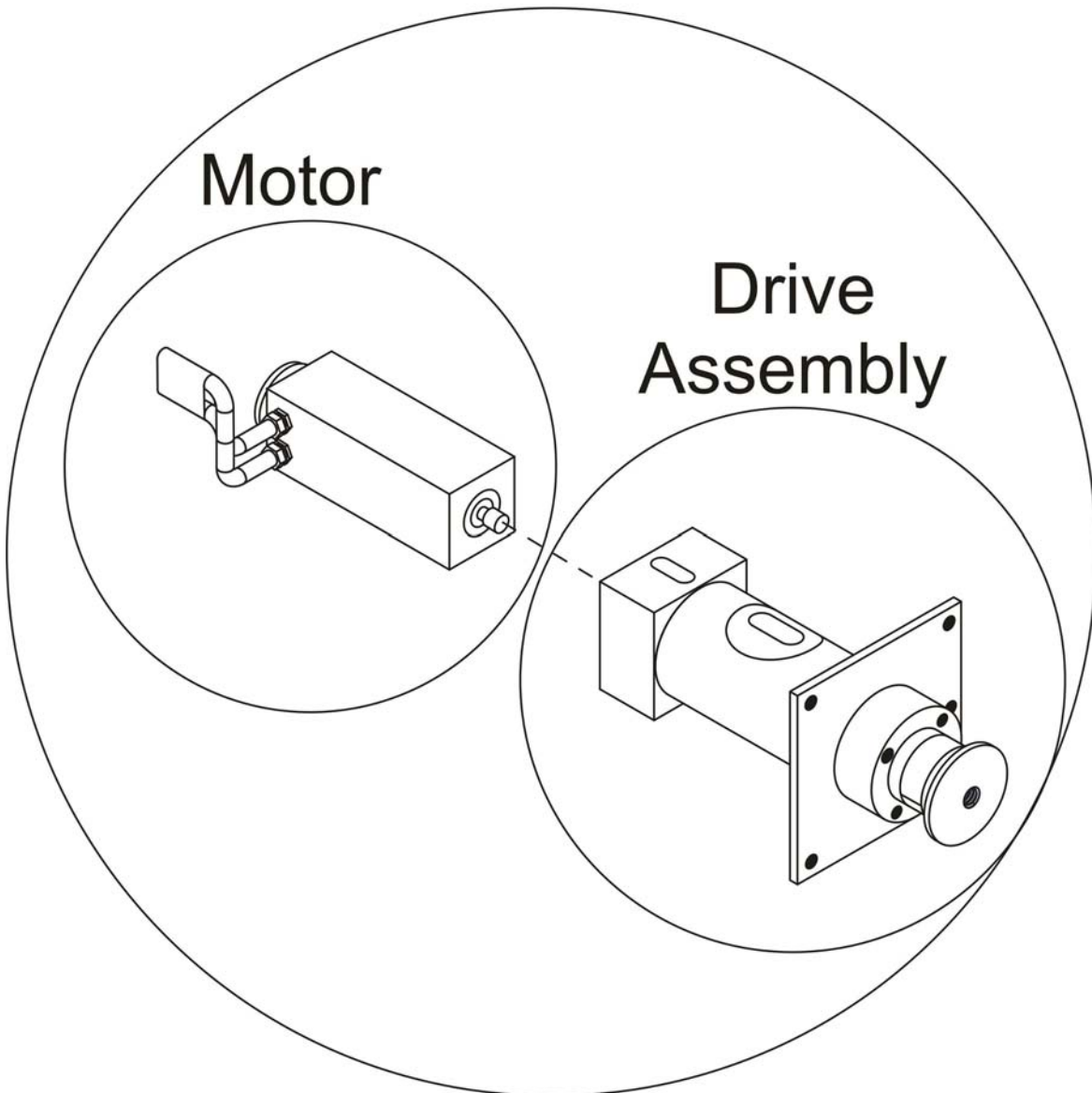
**Fig.2****Actuator replacement procedure**

6. Unscrew the 4 hex socket screws from inside the actuator positioning hole
7. Unscrew the 5 hex socket screws attaching the actuator to the seat frame
8. Remove actuator
9. Reverse procedure to re-install new actuator

## Replacing a drive assembly

Remove drive assembly from motor. Shipping a drive assembly is the cheapest way to get the actuator repaired as you save on shipping (weight).

### Actuator

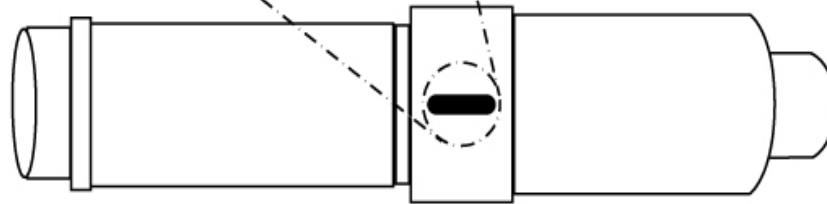
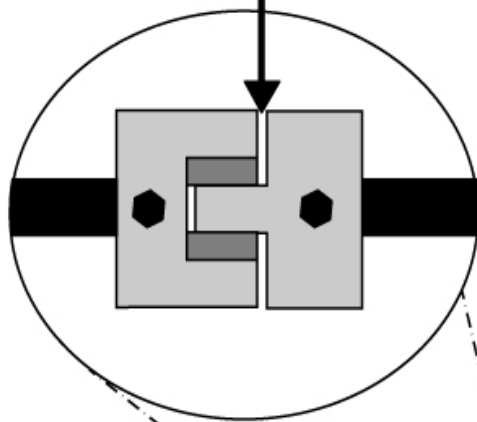




## Replacing a drive assembly



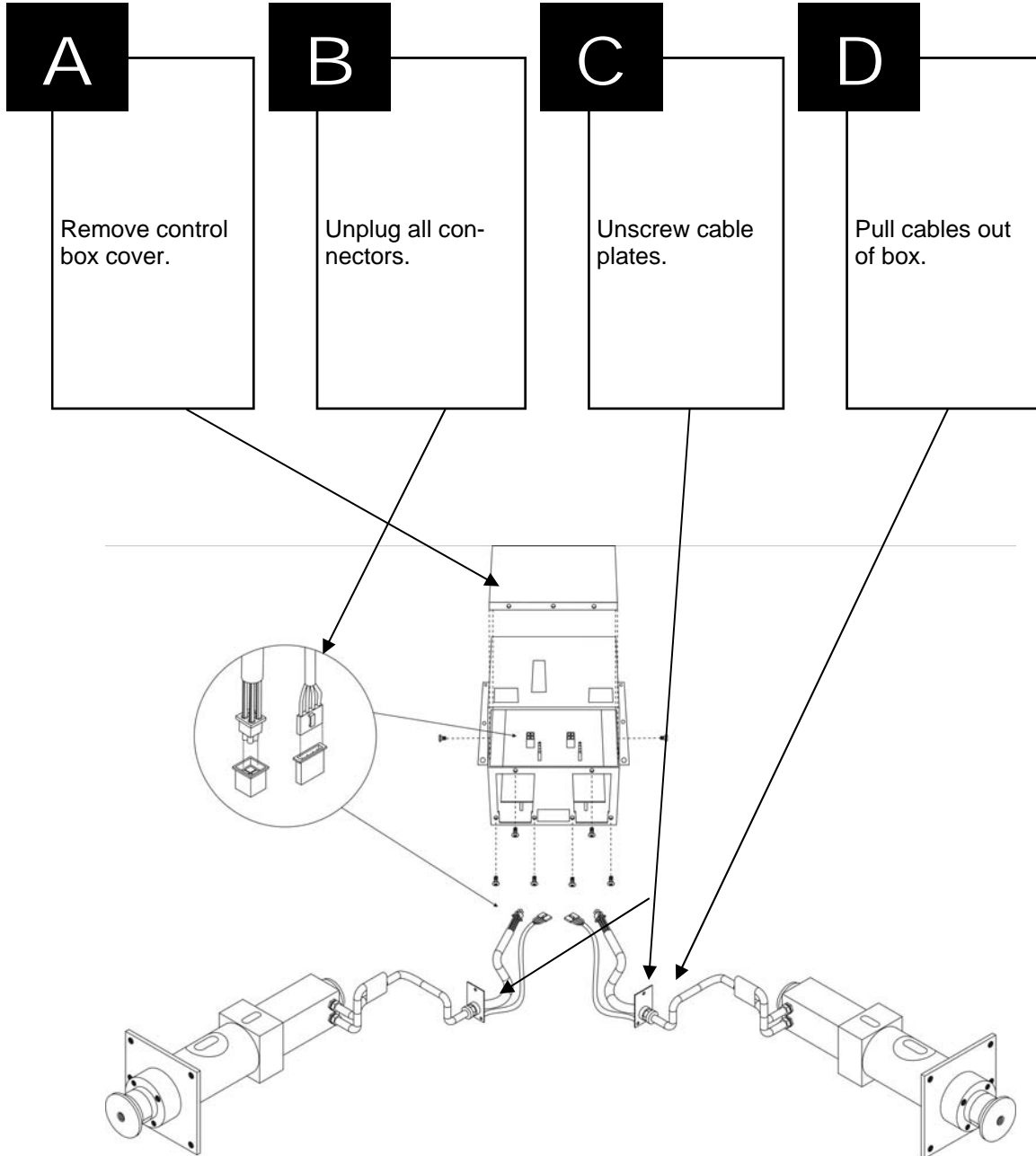
**1/16"**  
between couplers



If positioned too close the heat and pressure will damage the bearings. You can adjust spacing by repositioning the coupler on the motor with the set screw.

# 14

## Replacing control box



# E

Remove and replace control box.

# Diagnostic screen and error codes

## Continued

Troubleshooting

# 15

### Motion Theater Diagnostic Mode : [Seat 5]:com3

General status (com3) : Synchronizing

actuator 2 (left) status : Unknowned

actuator 3 (right) status : Unknowned

actuator 2 (left) error : OK

actuator 3 (right) error : OK

Motion error. Press any selection button to retry.

ver. 2.01 Mar 31 2004 14:00:29

- **SYNCRONIZED** No problem reported with this actuator
- **SYNCRONIZING** Move to box below
- **NOT RESPONDING** Goto page 43

- **Software (overweight)Command OverRunFail State** Goto page 36
- **Software (travel)Command OverRunFail State** Goto page 36
- **Software (fail hall)Command OverRunFail State** Goto page 41
- **Software (overpos)Command OverRunFail State** Goto page 41
- **Software (Timeout)** Goto page 38
- **Command OverRunFail State** Goto page 42
- **Software Command OverRunFail State** Goto page 40

# Diagnostic screen and error codes Continued

**Software (Travel)**

**Software (overweight)**

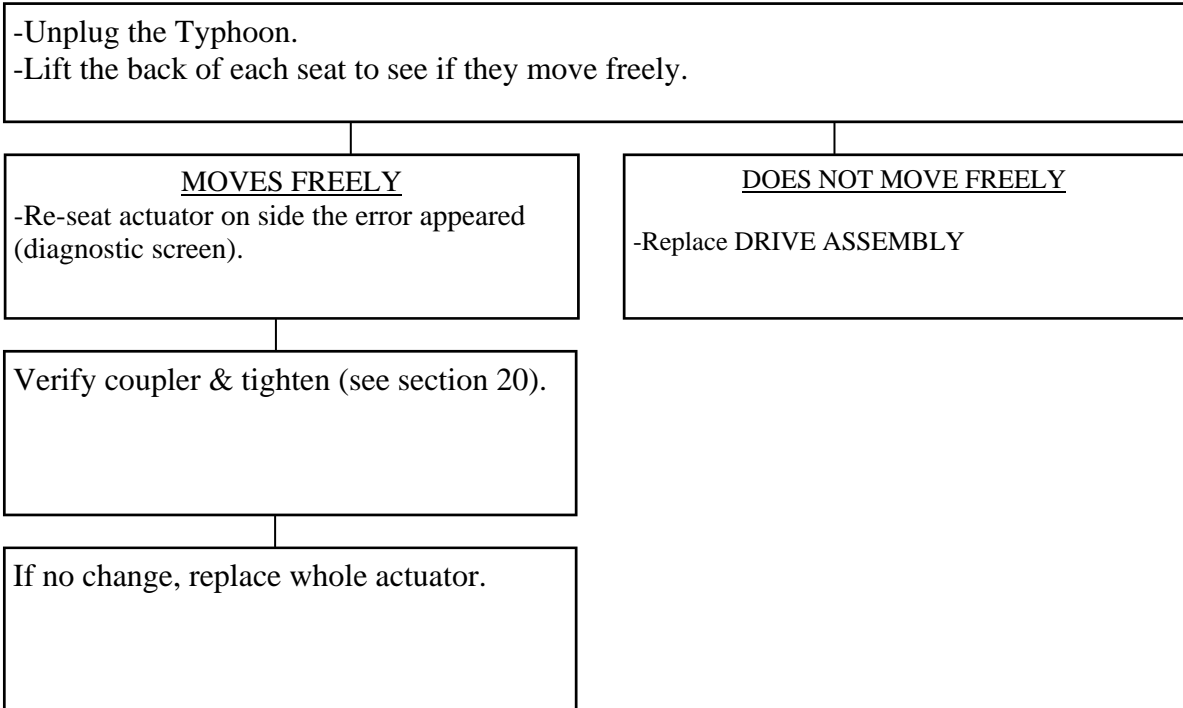
**Software (overweight) Command OverRun Fail State**

**Software (OverPos)**

**Software (Travel) Command OverRun Fail State**

Cause

- Mechanical fault



Diagnostic screen and error codes  
Continued

Troubleshooting

17

**Software (Fail Hall)**

**Software (Fail encoder)**

**Cause**

- Electrical fault

-Replace whole ACTUATOR on side error appears.  
Section 3-3.

Diagnostic screen and error codes  
Continued

**Software (Timeout)**

Cause

- Actuators have not received data from computer for more than one minute

- Unplug machine
- Wait 1 minutes
- Re-plug machine

# Diagnostic screen and error codes Continued

Troubleshooting

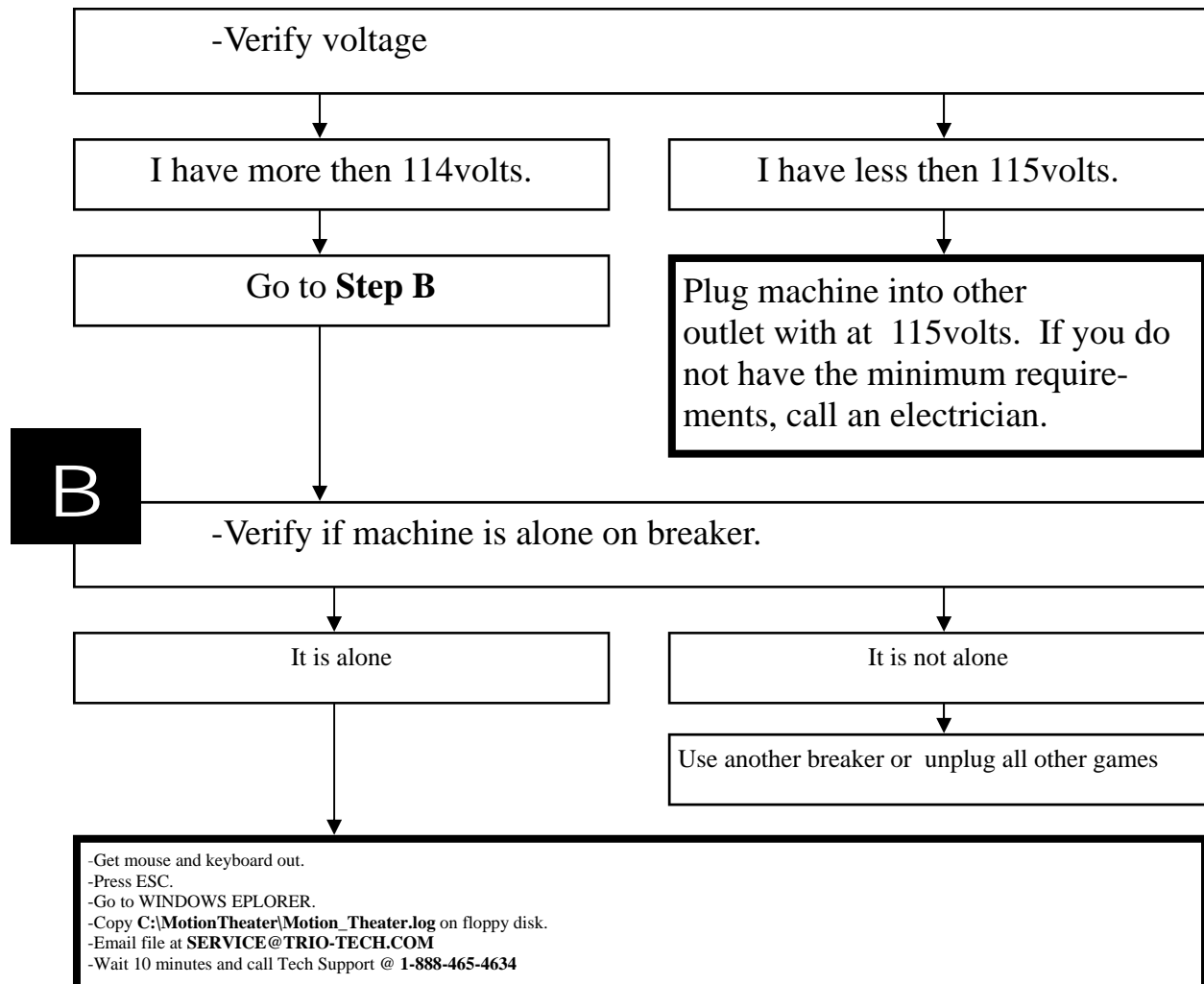
# 19

## Software

### Software Command OverRun Fail State

#### Cause

- Machine is sharing breaker with other devices.
- Machine is not receiving at least 115volts.



**Software (overPos) Command OverRun Fail State**

**Software (fail hall) Command OverRun Fail State**

Cause

- Mechanical, electrical and/or software fault

**B**

-Remove Actuator from the side error appears on. (Sec 3-3)  
-Verify condition of Coupler (small aluminum cylinder Linking Drive Assembly and Motor.



Coupler is in perfect condition

-Replace actuator

Coupler is loose or broken

-If coupler is loose, use HEX key to tighten.  
-If coupler is broken, call Tech Support @ 1-888-465-4634 to get replacement.



**Command OverRun Fail State**

- When error appears as is, without the word **software**, no problem is detected on **this** actuator.

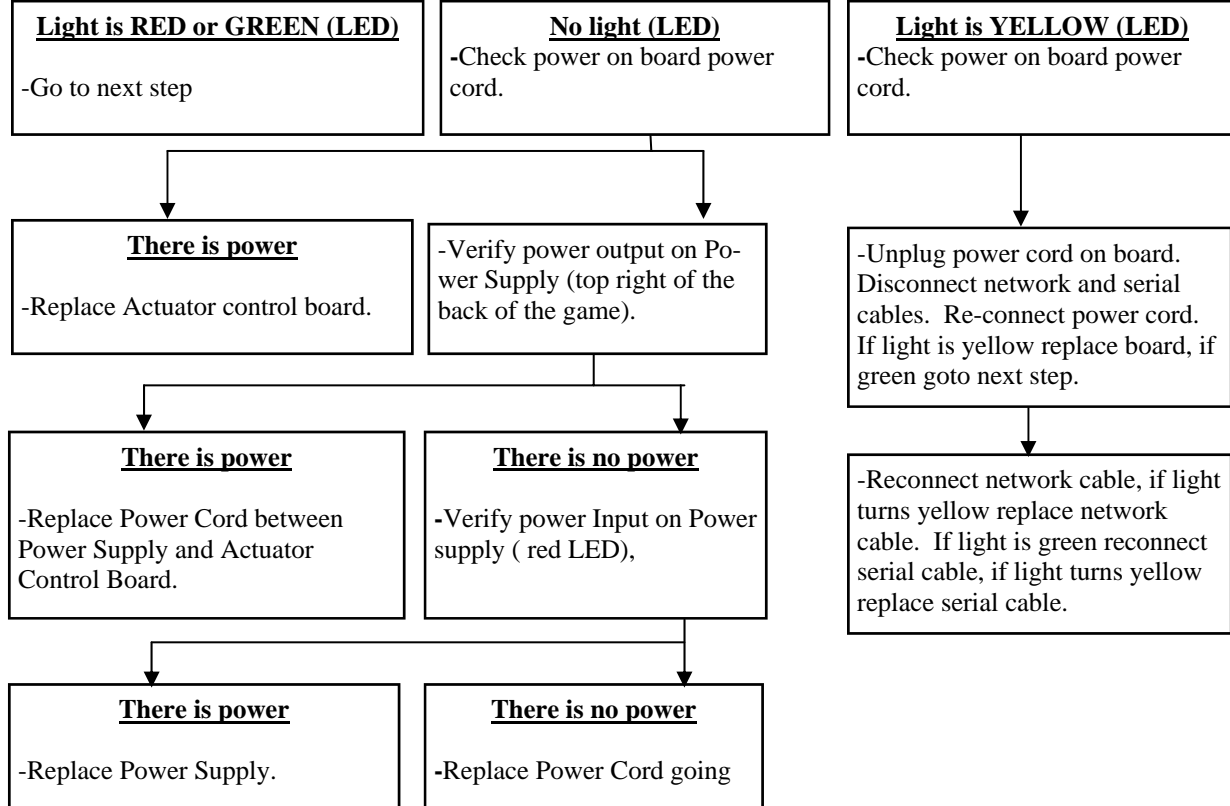
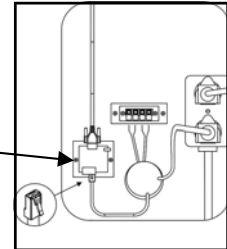
**Not Responding**

**Cause**

- No communication or no power going to actuators.

**Step 1**

-Open service door on bottom left in the back of the game.  
-Look inside at Actuator control Board.



# Diagnostic screen and error codes Continued

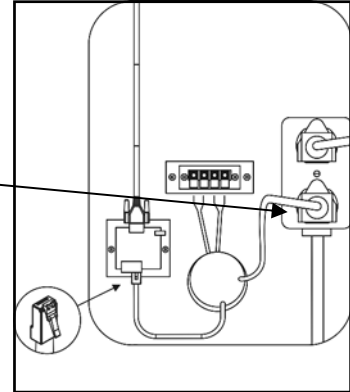
Troubleshooting

# 22

## **Not Responding**

### **Step 2**

- Open service door on bottom left in back of the game.
- Look inside and test Power on Power Outlet



### **There is Power**

- Remove seat assembly
- Connect another Power cord to Control Box (IF EQUIPPED WITH CONTROL BOX)
- Restart computer

### **There is no power**

- Open Outlet and repair connections.

### **There is Movement**

- Replace Power Cord(s)

## Motion stops and restarts during ride

### Cause

- One or more Actuator is faulty, but does not generate an error in the Diagnostic Screen.

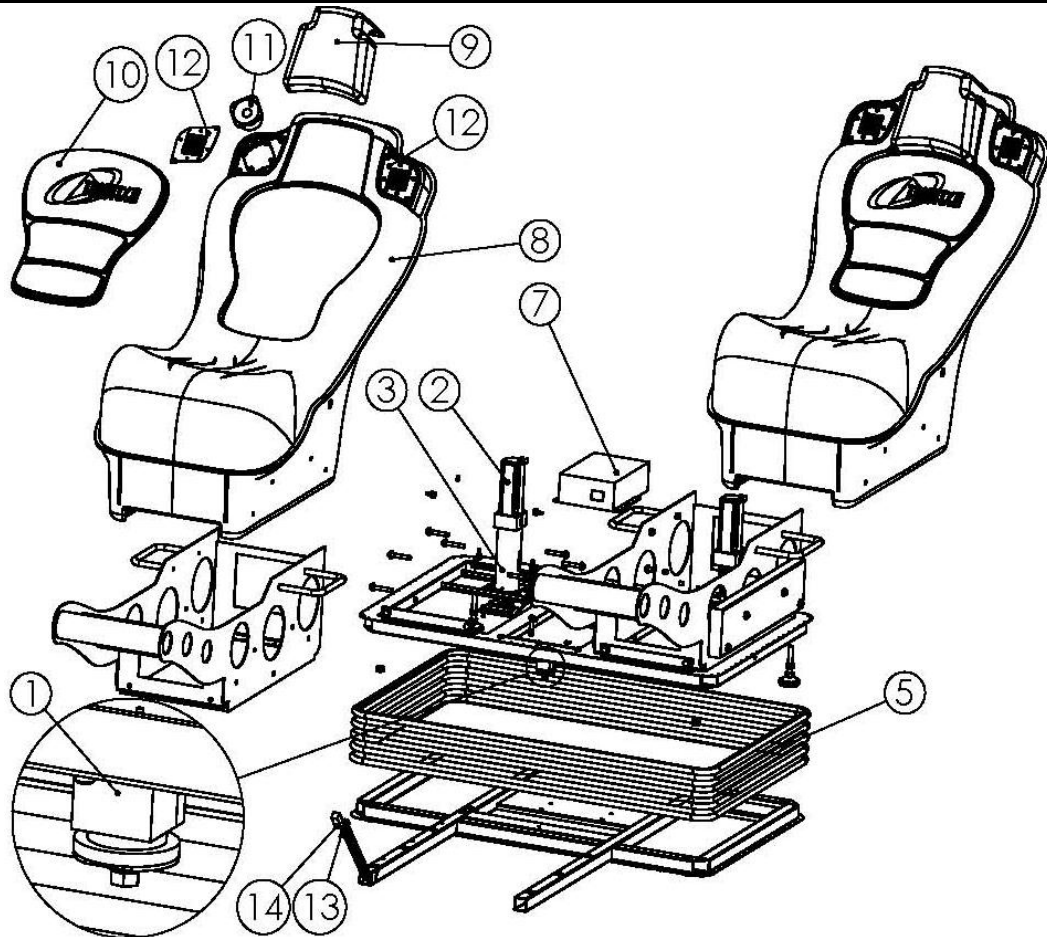
- Get mouse and keyboard out.
- Press ESC.
- Go to WINDOWS EXPLORER.
- Copy **D:\Typhoon.log** on floppy disk.
- Email file at **SERVICE@TRIO-TECH.COM**
- Wait 10 minutes and call Tech Support @ **1-888-465-4634**

Parts

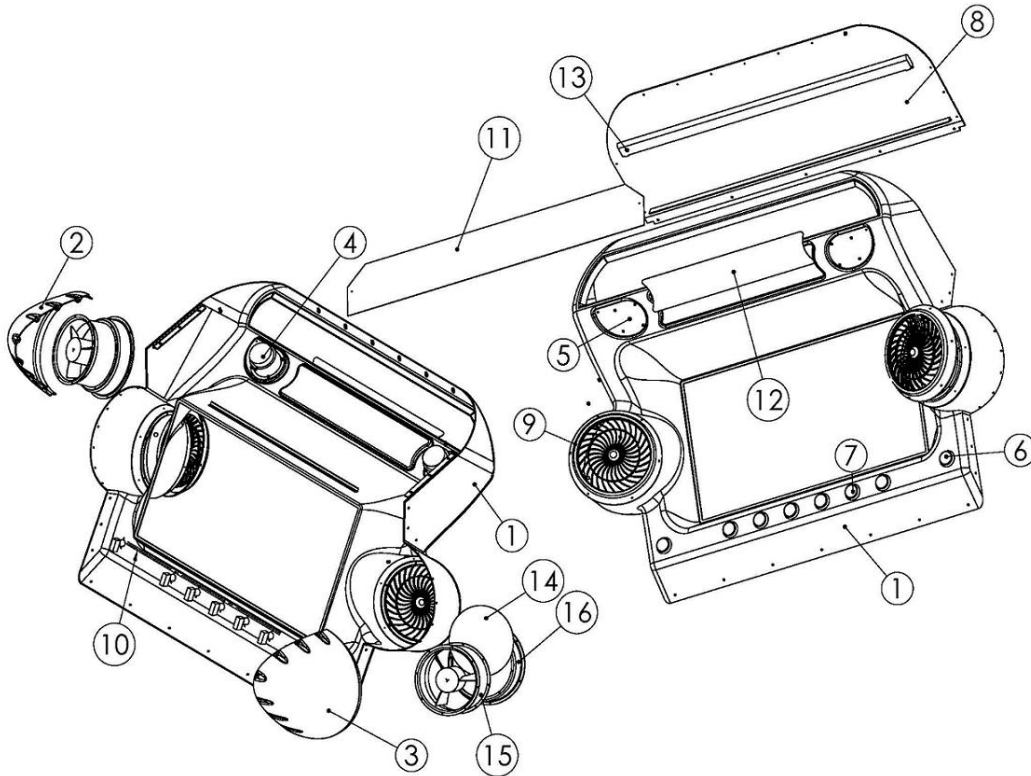
Parts

**24**

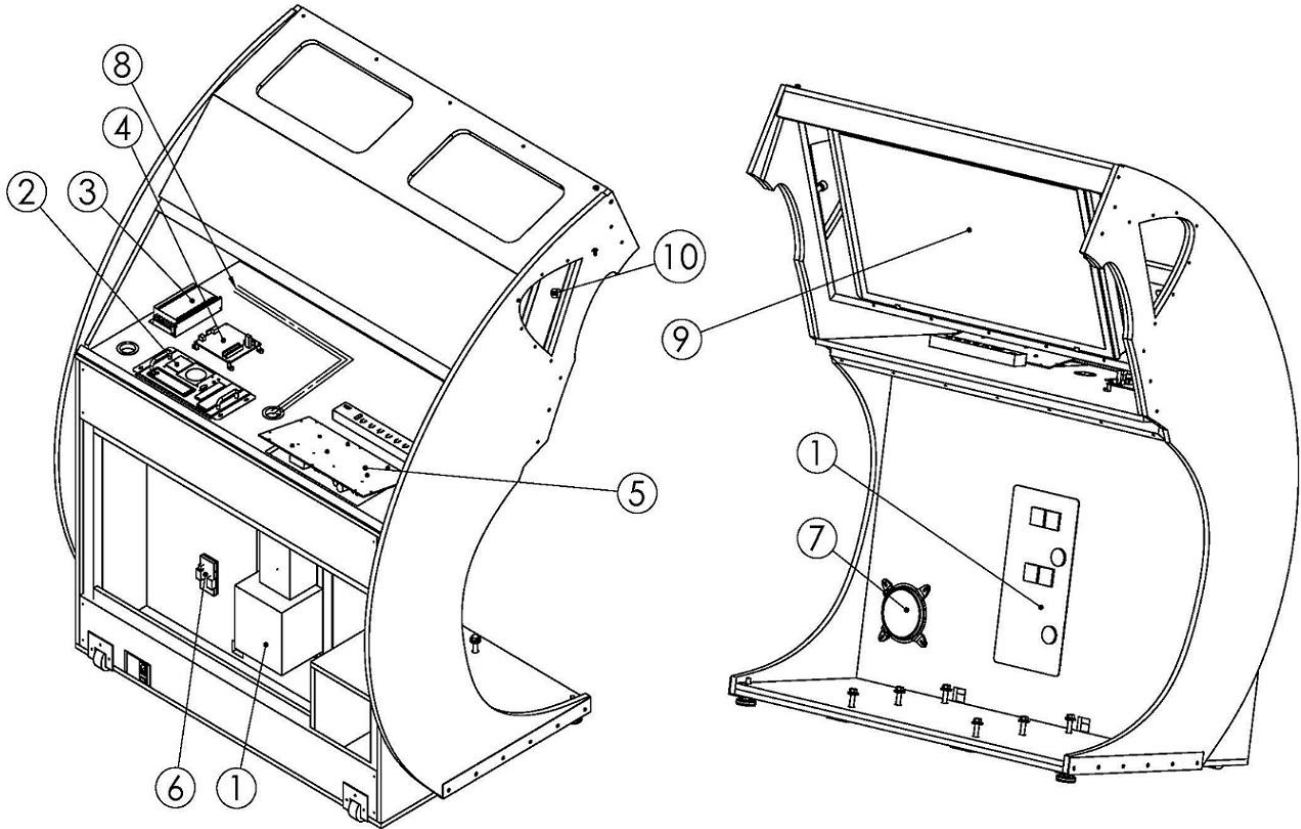
## Seat assembly



ITEM	PART NUMBER	DESCRIPTION
1	SD-450-0003	PIVOT ASSEMBLY
2	SD-450-0008	ACTUATOR MOTOR AKM 24D
3	SD-450-0022	DRIVE ASSY AC10
4	SD-250-0068	ACTUATOR PLATE
5	SD-400-0010	SKIRT, RUBBER BASE
6	SD-900-0015	CAP PIVOT PISTON
7	SD-450-0013	CONTROL BOX "B"
8	SD-350-0015	FIBER GLASS SEAT
9	SD-500-0040	HEAD CUSHION
10	SD-500-0039	BACK REST CUSHION
11	SD-700-0070	3" SPEAKER ASSEMBLY
12	SD-250-0336	GRILL
13	SD-150-0019	NETWORK CABLE
14	IMT- 0151	SOUND WIRING HARNESS



ITEM	PART NUMBER	DESCRIPTION
1	SD-400-0071	HEADER
2	SD-400-0075	FAN CASING, RIGHT
3	SD-400-0074	FAN CASING, LEFT
4	SD-700-0065	SPEAKER 5.25_2 WAY
5	SD-250-0336	CABINET SPEAKER GRILL
6	SD-150-0091	RED BUTTON
7	SD-150-0090	BLUE BUTTON
8	SD-400-0072	HEADER TOP COVER
9	SD-400-0077	FAN GRILL
10	IMT-0269	HEADER HARNESS
11	SD-650-0118	HEADER BACKLITE SIGN
12	SD-650-0117	FRON HEADER DECAL
13	SD-550-0018	NEON FIXTURE
14	IMT-0226	FAN PROTECTION
15	SD-150-0420	FAN 10" X3.5" AC115V
16	SD-400-0073	FUNNEL



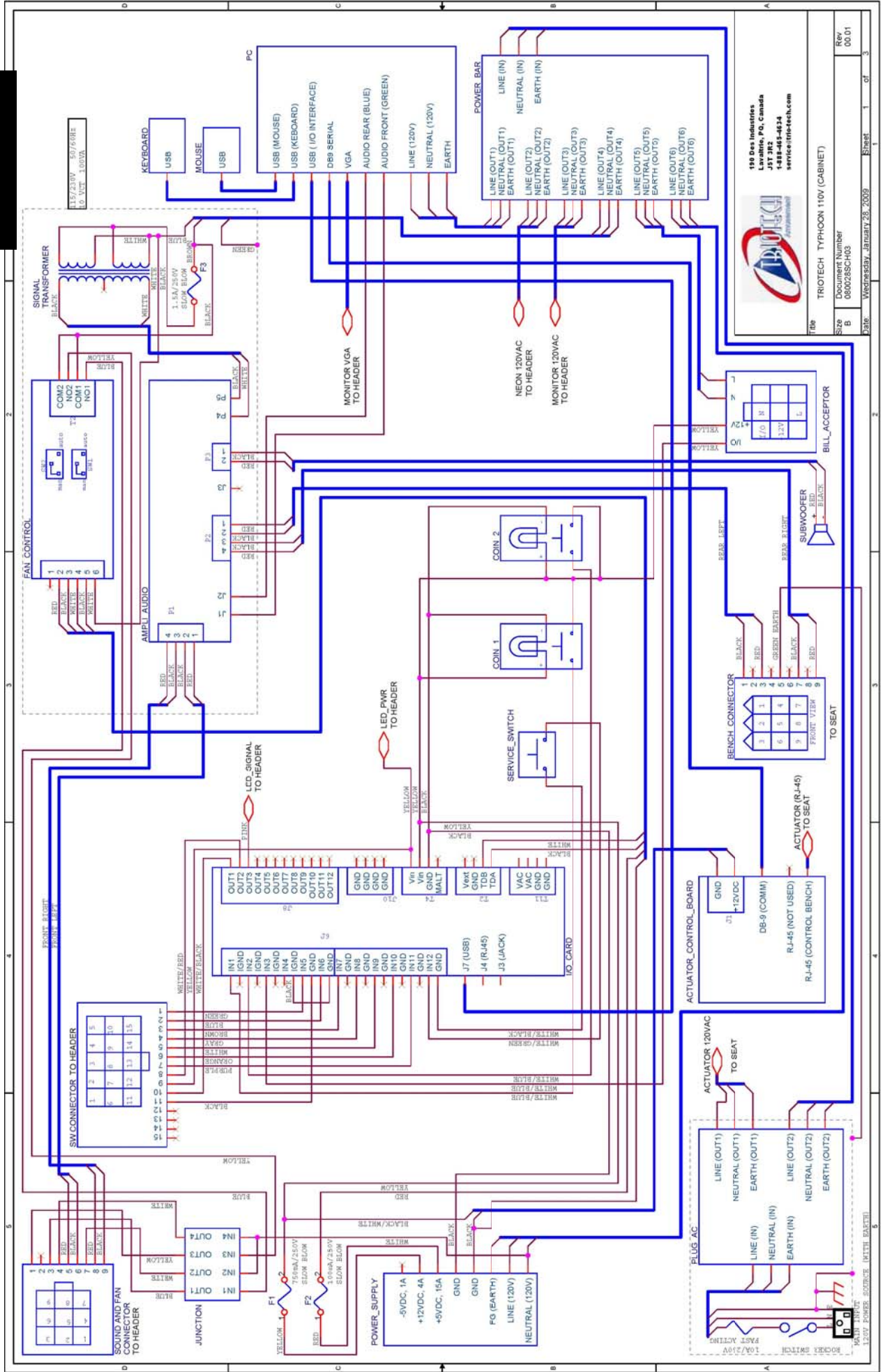
ITEM	PART NUMBER	DESCRIPTION
1	SD-150-0035	COIN DOOR
2	IMT-0270	COMPUTER ASSEMBLY
3	SD-150-0098	5-12v POWER SUPPLY
4	SD-150-0297	I/O INTERFACE
5	SD-150-0370	10A TRANSFORMER
5	IMT-0303	BLOWER CONTROLLER
5	SD-700-0117	4.1 SOUND AMPLIFIER
6	IMT-0040	ACTUATOR CONTROL BOARD
7	SD-700-0075	SUB-WOOFER 6-1/2
8	IMT-0271	WIRING HARNESS (CABINET)
9	SD-700-0129	MONITOR 42"LCD
10	SD-150-0436	BLUE LED



# 110v CABINET ELECTRIC SCHEMATICS

Electrical

# 28

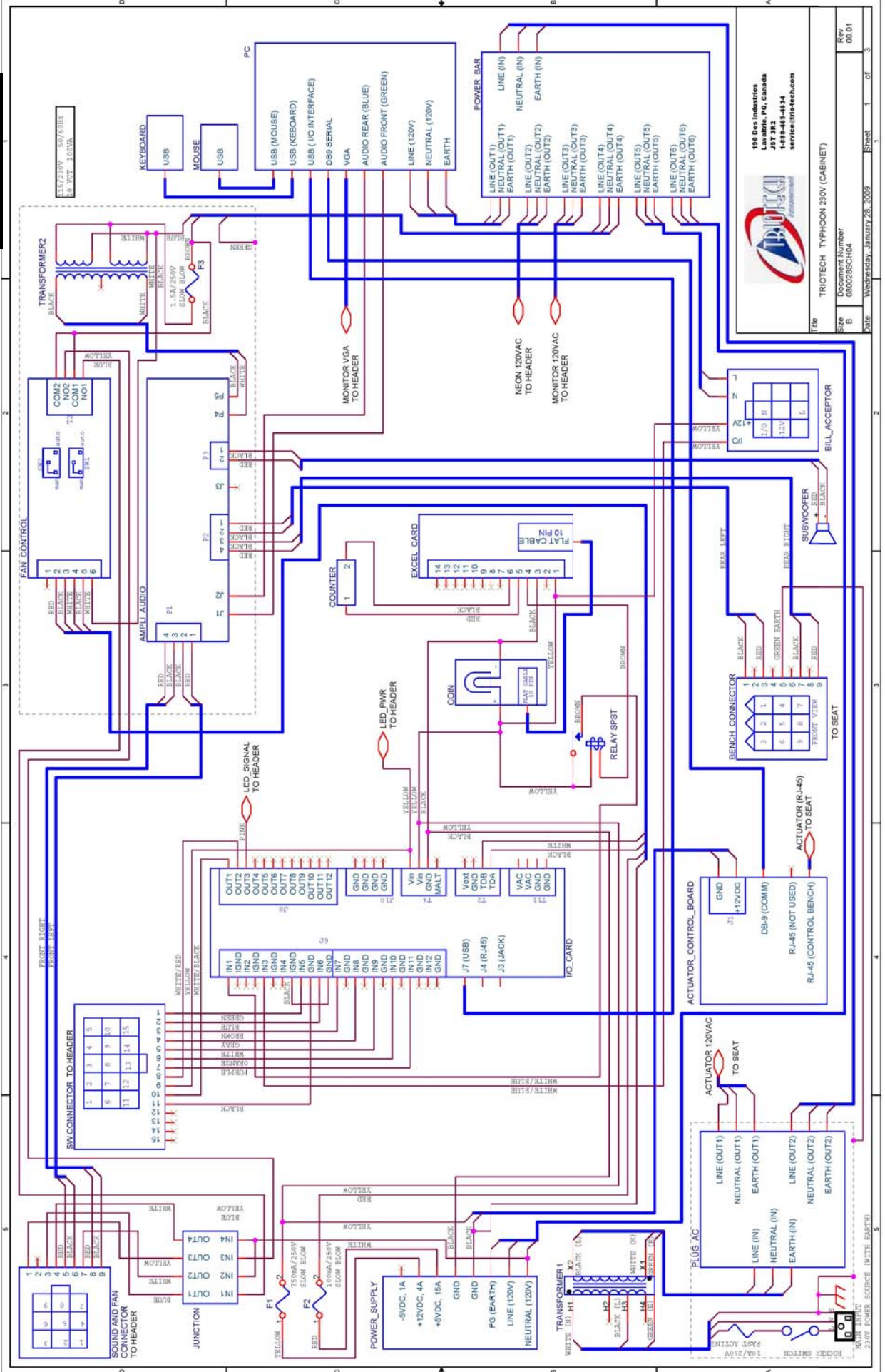


198 Das Industries  
Lavaltrie, P.Q. Canada  
J5T 3K2  
1-888-465-4634  
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Tb TRIOTECH TYPHOON 110V (CABINET)  
B Document Number 080028SCH-H03  
Size 1 of 3  
Date Wednesday, January 28, 2009 Sheet 1 of 3  
Rev 00.01



# 110-230V HEADER ELECTRIC SCHEMATICS

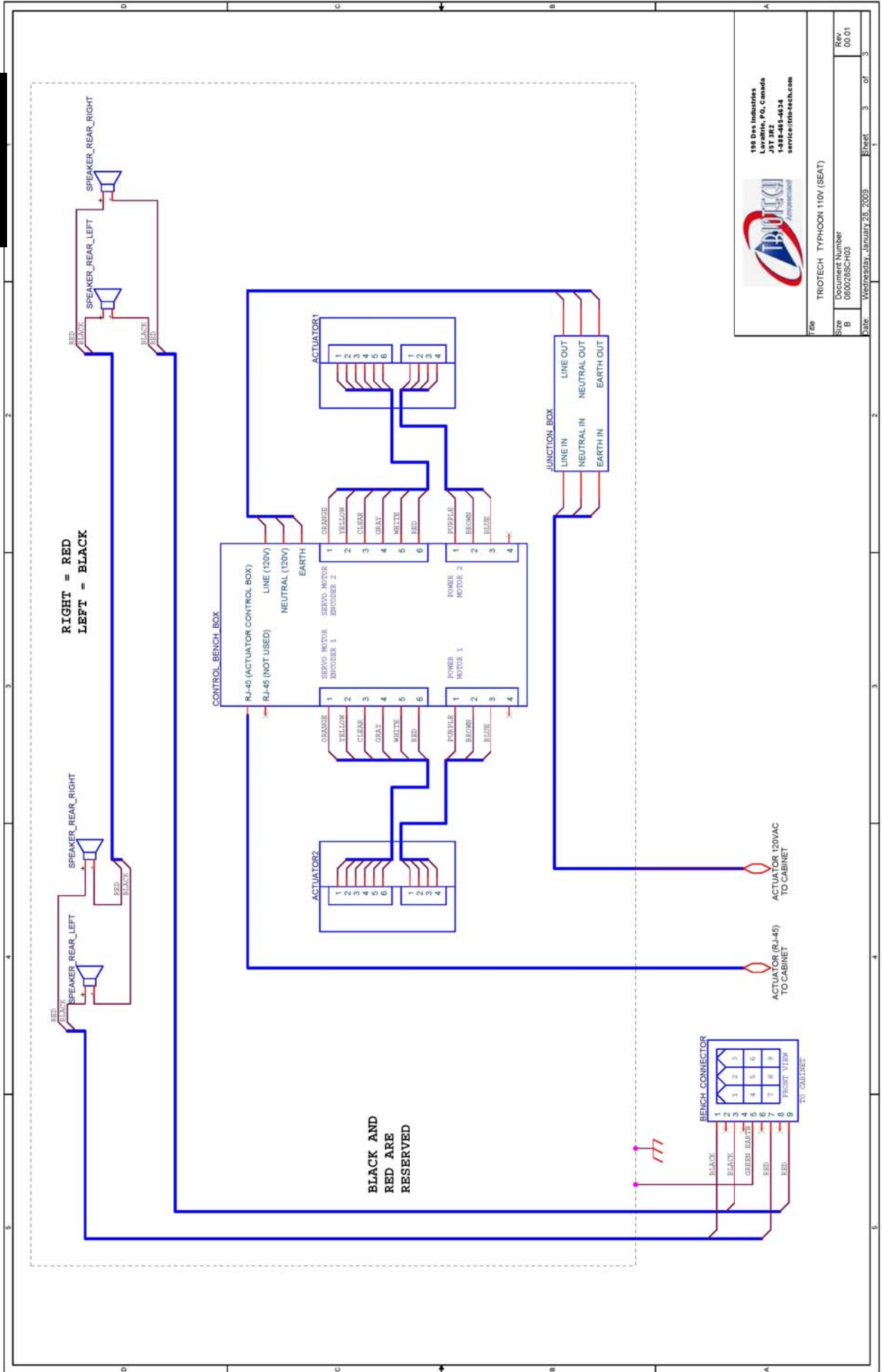


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**TRITECH**  
Automation

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# 110-230v SEAT ELECTRIC SCHEMATICS



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## **LIMITED WARRANTY**

Triotech warrants to the buyer, for a period of (1) one year starting on the day of product delivery, all parts against any manufacturer's defect. During this warranty period, Triotech agrees to replace defective parts. Installation costs onsite are at the charge of the buyer.

Ground Freight costs for replacement parts are at the charge of Triotech, For the return of the defective part. The buyer agrees to send back defective parts to Triotech within (30) thirty days and freight costs will be at his charge.

The warranty is limited to manufacturer's defects.

As for parts or components not manufactured by Triotech, the only valid warranty is that of the manufacturer's.

Triotech assumes no liabilities for any loss of revenue, damage or inconvenience of any type resulting from a defect of any part of the system and will not assume the temporary replacement of the system during the period of repair.

Triotech is not liable of any late delivery of the system.

Any apparent defect or non-delivery of a part of the system shall be notified in writing within 5 days of delivery.

Defective parts covered by the warranty will be replaced at Triotech's discretion either by new or rebuilt parts with the same or with a replacement model of the same parts. Warranty on replacement parts ends on the same date as the original part warranty.

No warranty is valid if the defect is the result of a misuse, or contrary to the norms of instruction or user manuals, or the result of improper maintenance.

Using spare parts that do not fit specifications will void the warranty. Removing serial numbers and/or bar codes from product or component will void the warranty.

Triotech is only liable to the replacement, in a reasonable delay, of the defective parts.

No warranty is granted on the productivity of the system sold or on the result of its use.



