

## **Mirage 4000 Hydraulic Patient Chair- Operations Procedures**

Please take time out to read the features and to familiarize yourself with the chair.



### 1. Seat Height Adjustments

- To raise, press down on upper area of the foot control disc.
- To lower, press down on the lower area of foot control disc.

### 2. Backrest Adjustments

- To raise, press down on right side of foot control disc.
- To recline, press down on left side of foot control disc.

### 3. Preset Operation

- Momentarily press pre set switch (#1 or #2) on foot control.

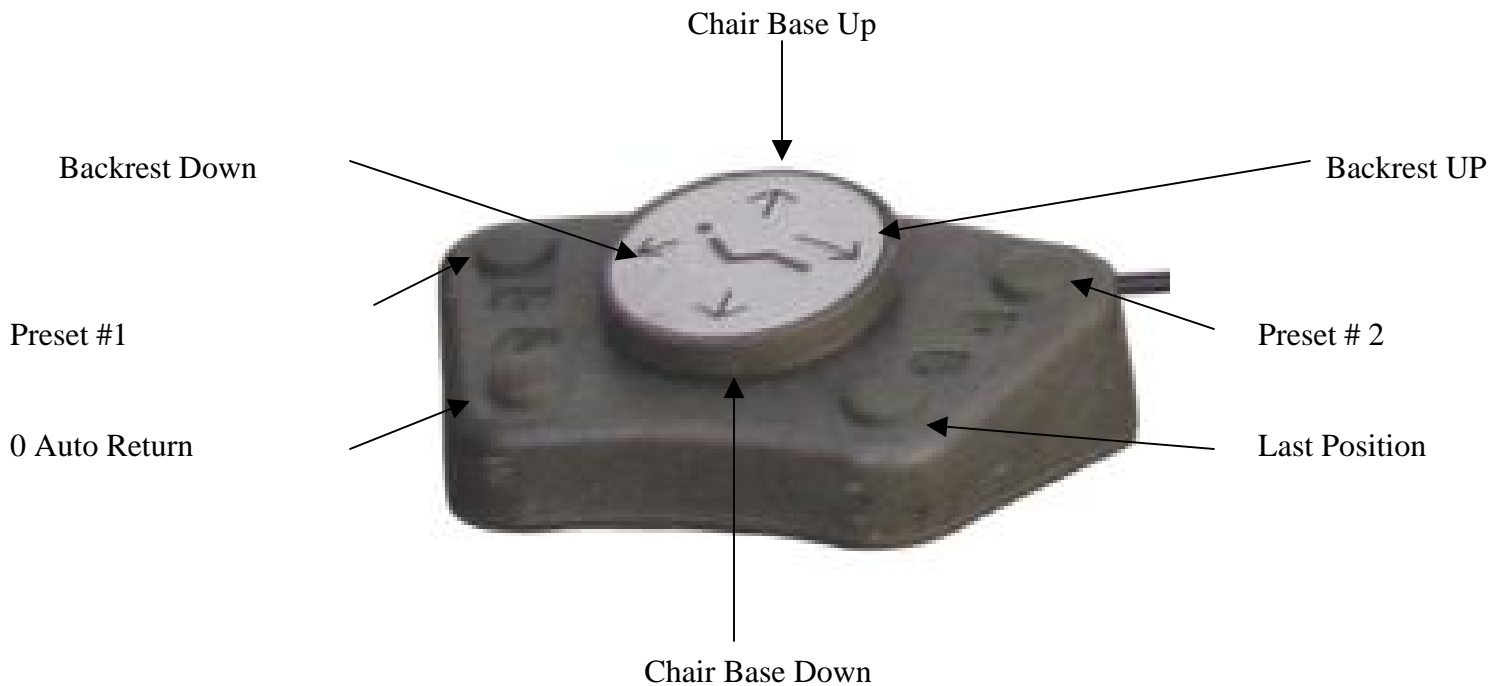
### 4. Adjusting Preset

The preset mode is factory installed but can be changed at your convenience as shown below.

Set backrest angle and seat height to desired position using foot control disc. Press preset position 1 or 2 on foot control and you will here an initial tone. After about 5 seconds you will here a confirm tone. Now that preset position is programmed.

### 5. Automatic Return

Momentarily press 0 switch on foot control to activate chair to return to normal position.



## **6. Safety Plate**

Safety plate is provided below base link cover to stop motion of chair when object is accidentally caught underneath.



## **7. Armrest Rotation**

Either armrest can be rotated outward by grasping lower back portion of armrest, pulling upward and turning.



## **8. Chair Rotation**

To swivel chair, release lock lever located on rear of dental chair. Pull lever to the right to release lock. This allows chair to swivel to the right (30 degrees) and to the left (30 degrees). To lock swivel, pull lever to the left.



## **9. Headrest Adjustments**

Height of headrest can be adjusted simply by pulling headrest up or down due to friction mount incorporated in backrest. Angle of articulating headrest can be changed by releasing slide bar on headrest back.



## **10. Automatic Motion**

Automatic motion activated either by automatic return switch or preset switch, can be cancelled at any time by depressing any control switches.

## **Motion Limit Controls**

### **1. Function**

The Mirage Hydraulic Patient Chair does not use conventional mechanical or mercury limit switches. Motion of the chair base and backrest move variable resistances (potentiometers) making it possible for the control circuitry to continuously know the exact position of the base and backrest, not only when they hit the end of their travel. Adjustments for all four actions (seat raise/ lower, backrest raise/recline) are located on the control PCB.

### **2. Adjustment**

To set a specific limit for the mirage operatory chair, perform the following instructions. Remove the pump cover from the chair. Locate the slider switch labeled S6. The switch is located on the left side of the main PCB board. Once the switch is activated, the L8 LED will illuminate. This LED is located just below the switch. This will put the chair into manual mode. Use the foot control to move the chair to the desired position. See below for detailed instructions on setting each limit. PCB board diagram on following page.

#### **Seat Lower Limit**

Using the manual controls, set seat height to the position where the lower limit is set. Press Lift DO on the main PCB board to program. Reset the Slide Switch on PCB to Normal. Use the foot control to move the chair up, then use the lift down on the foot control to verify that the new limit is set.

#### **Seat Height Limit**

Using the manual controls raise the seat height fully. At the physical top of travel, the motor will continue to run, but upward motion will stop (oil bypass channel has opened in cylinder). Lower the seat height slightly from this point, and press LIFT UP button on Control PCB. Reset the Slide Switch on PCB board to Normal. Then use the foot control disc to lower the chair, raise the chair and verify the desired height limit is set.

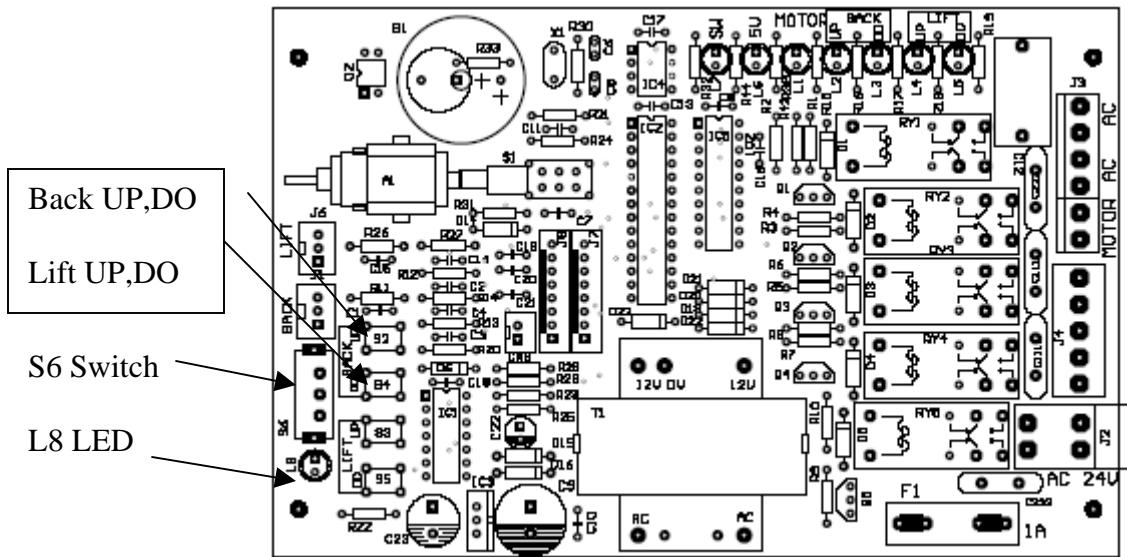
#### **Backrest Recline Limit**

Using the manual controls, Recline the backrest fully. Raise the backrest slightly from this point, and press the BACK DN button on the main PCB board. Reset the Slide Switch on PCB board to Normal. Then raise the back rest and then lower it to verify the desired setting is set.

#### **Backrest Up Limit**

Using the manual controls, raise the backrest fully. Then lower the backrest slightly from this point. Press the back up button on the main PCB board. Reset the Slide Switch on PCB board to Normal. Then use the foot control disc to lower the backrest. Raise the backrest to verify the desired height limit is set.

# Main PCB Board



## Operating Speed Controls

Operating speeds are preset at factory, but can be changed if desired.

To increase speed, turn counterclockwise appropriate speed control valve located on the solenoid valve block.

To decrease speed, turn counterclockwise appropriate speed control valve located on solenoid valve block.

## **Mirage Hydraulic Patient Chair – Care and Maintenance**

No maintenance is required except normal care and cleaning.

Clean vinyl upholstery and plastic components with mild soap and water.

Barrier covers should be used on chairs for asepsis.

Surface disinfecting chemical will eventually cause some discoloring of upholstery.

### **Suggested Disinfectant Application**

Clean dirt and stains with mild soap and water.

Moisten an applicator with disinfectant; mildly wipe the material with the disinfectant.

Do not allow the disinfectant to soak in or dry on the surface; wipe off with soap and water.

### **PLEASE KEEP LIQUIDS AWAY FROM ELECTRICAL CONNECTIONS !**

Most electrical control switches ARE NOT hermetically sealed.

When a switch gets wet, it can self-activate, or perhaps short out and damage other system components.

Keep switches dry. Avoid costly equipment damage or failure.

Avoid downtime by following these guidelines:

Please DO NOT spray disinfectants directly AT OR INTO electrical switches and controls.

Simply spray these solutions onto a cloth and wipe down the control surfaces. Be careful not to saturate the cloth.

### **FOR ADDITIONAL INFORMATION CONTACT YOUR TPC DEALER**