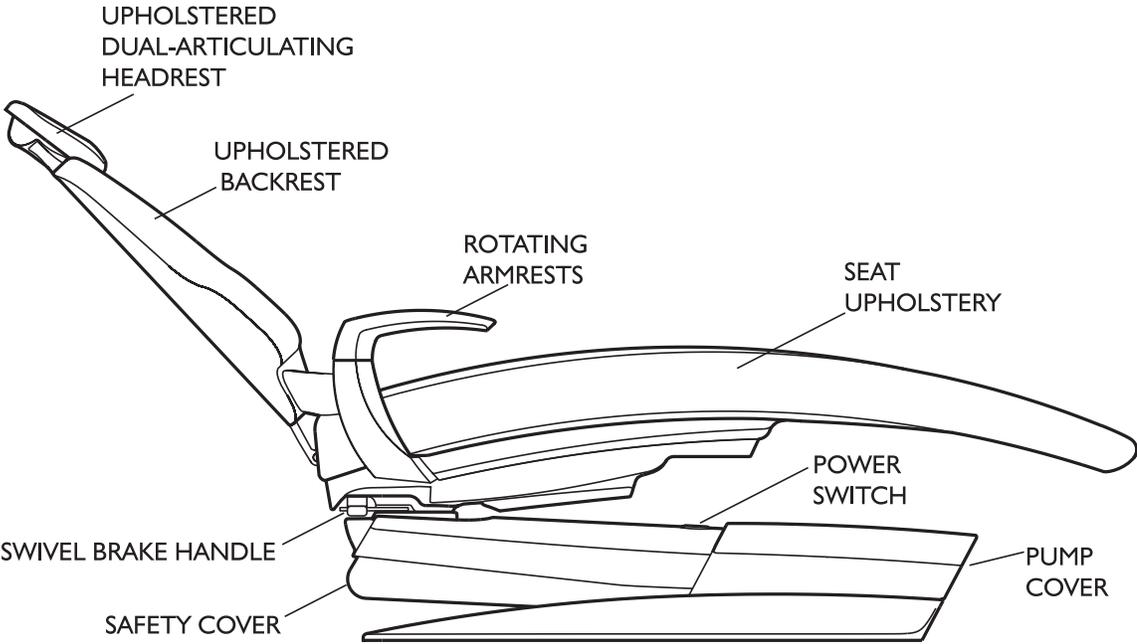


SERIES 5 DENTAL CHAIR

Installation Instructions

OVERVIEW



INTRODUCTION

BEFORE YOU BEGIN

Study the chair overview in this booklet and layout dimensions from the owner's manual. Make sure the planned location will have the necessary space available for installation, including room for travel of the chair's base and backrest.

Locate all documentation supplied with the package. Manuals and installation sheets may be found in one or more boxes accompanying their respective components. Set aside the owner's manual for the end user to review.

SYMBOLS USED IN THIS MANUAL

The following symbols may be used throughout this product manual:



WARNING: Failure to carefully follow the described procedure may result in damage to the equipment or the operator.



CAUTION: Failure to carefully follow the described procedure may result in damage to the equipment.



NOTE: Take note of additional important information. Not a warning or caution.



ELECTRICAL HAZARD: Risk of electrical shock present. Ensure that power is disconnected before attempting procedure.

TABLE OF CONTENTS

Overview	2
Introduction	3
Setup	4
Dimensional Layout	5
Chair Preparation	6
Upholstery Installation	7
Optional Quick Connect Box	8
Adjusting Soft Limits	9
Hydraulic System	10
Electrical	11
Diagnostic Codes	12

REGULATORY INFORMATION

Regulatory information is delivered with DCI Edge dental equipment as mandated by agency requirements and can be found in the accompanying Instructions for Use for this device.

SETUP

TOOLS NEEDED FOR INSTALLATION

- Scissors or utility knife
- Allen wrench set
- Socket wrench set

INCLUDED HARDWARE AND COMPONENTS

- Power Switch Cover



PLACE THE CHAIR IN LOCATION

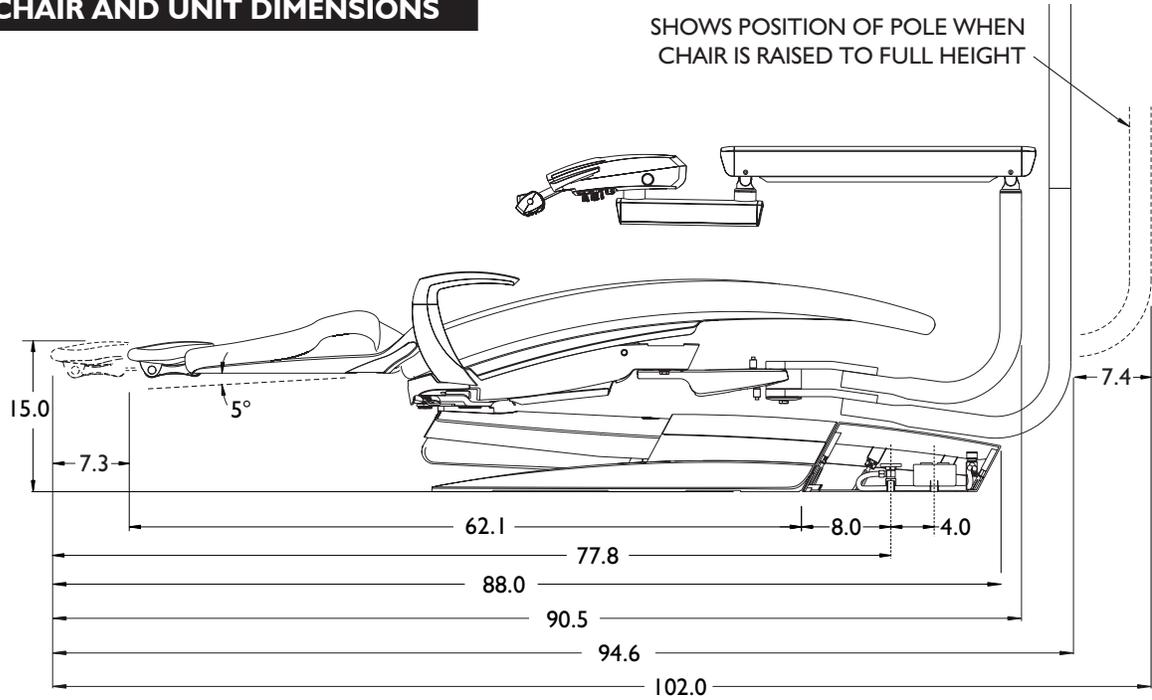
- 1** Remove the shipping straps and open the crate.
- 2** Remove the 3/8" bolts holding the chair to the wood pallet.
- 3** Carefully remove the chair from the pallet and position it in the proper location for installation. Refer to dimensional information on the next page for guidance in positioning the chair.
- 4** Check that the chair rests flat and level on the floor and that it does not rock due to uneven areas on the floor. Use shims to eliminate gaps if the surface is uneven.



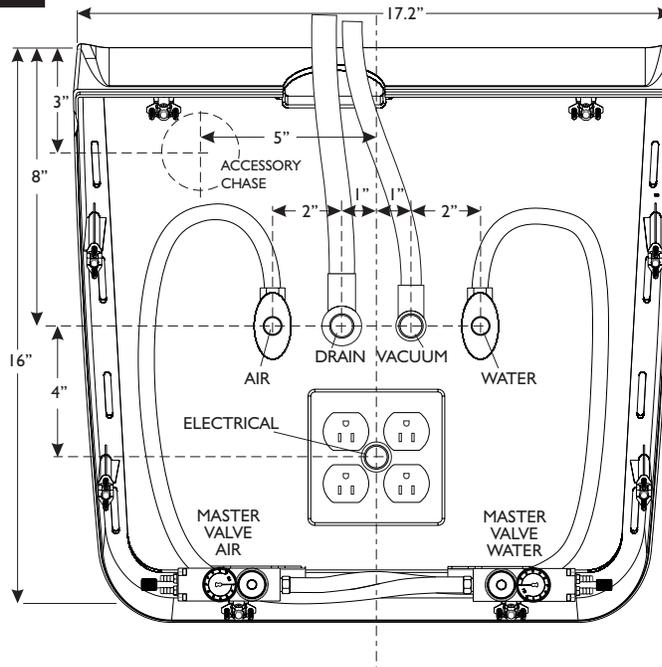
WARNING: To prevent injury, use an assistant to help safely position the chair in the operatory.

DIMENSIONAL LAYOUT

CHAIR AND UNIT DIMENSIONS



JUNCTION BOX LAYOUT



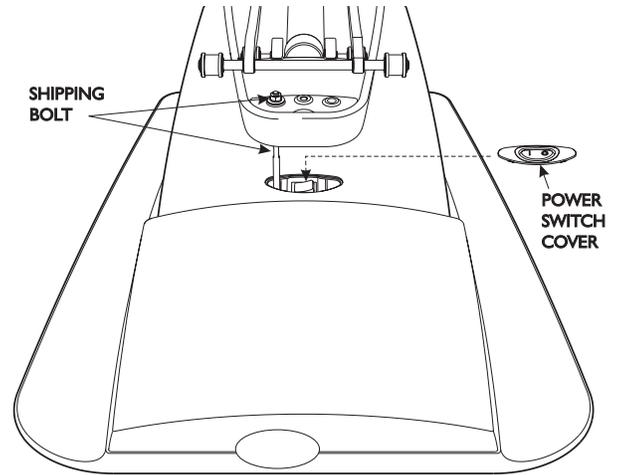
CHAIR PREPARATION

SHIPPING BOLT

Remove the shipping bolt by unscrewing from above the seat pan casting using a 3/8" wrench. Once unscrewed, removed the bolt and related hardware from the assembly.

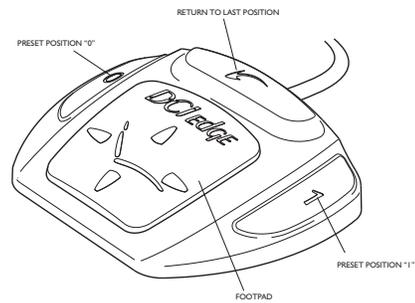
POWER SWITCH COVER

Power Switch Cover: Install the power switch cover into the opening around the power switch by snapping it firmly into place.



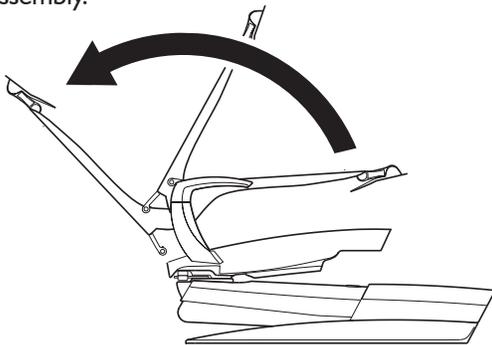
FOOT SWITCH

Foot Switch: Unpack the foot switch and set in position for use.

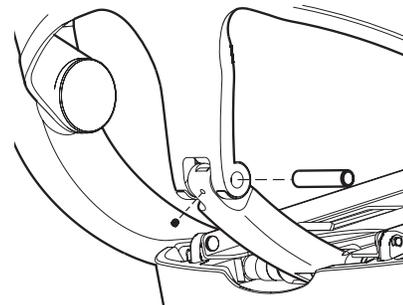


BACKREST

1 Rotate the backrest into position by aligning the backrest bottom holes to the holes in the link bar which extends from the upper hydraulic assembly.



2 Loosen the set screw which secures the steel cross pin. Align the holes of the backrest and the back link and re-insert the cross pin. If necessary, use a rubber mallet to drive the pin until it has fully engaged both parts.



3 Tighten the set screw on the backrest link against the pin to prohibit its movement.

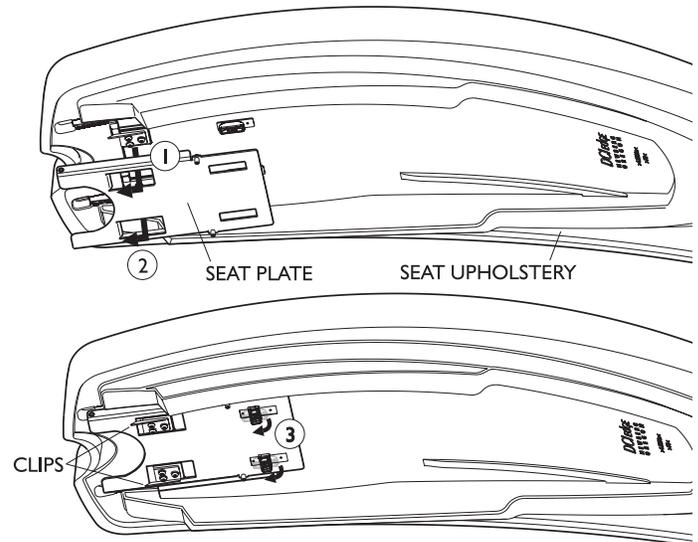
UPHOLSTERY INSTALLATION

SEAT UPHOLSTERY

- 1 Center and place the seat upholstery on the seat plate so that the clips on the bottom of the seat upholstery drop into the slots of the Seat Plate.
- 2 Engage the clips by pushing the seat upholstery toward the backrest.
- 3 Once the clips are engaged, turn the two rotating catches 90 degrees to lock the seat in position.

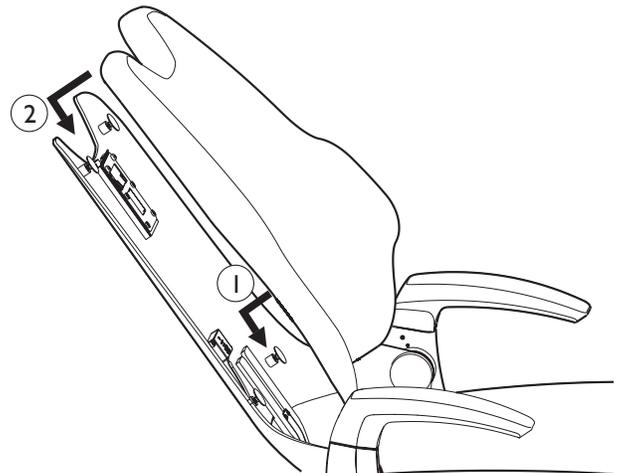


WARNING: Failure to properly assemble the seat upholstery to the chair could result in injury or damage to the equipment.



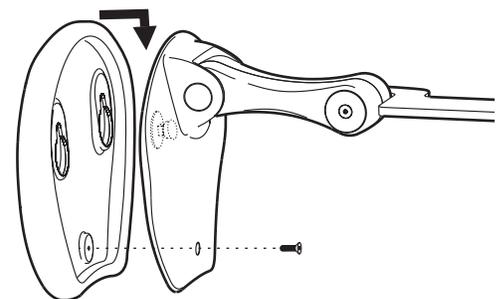
BACKREST UPHOLSTERY

- 1 Attach the backrest upholstery by aligning the lower keyhole features in the plastic substrate to the flat head elevator bolts on the metal back.
- 2 Push down and slide the backrest upholstery toward the seat until the upper keyhole features catch on the upper elevator bolts.
- 3 Ensure that the upper elevator bolts engage in the upper keyhole slots of the backrest upholstery substrate and continue to push the backrest toward the seat until it is fully engaged on the metal back.



HEADREST UPHOLSTERY

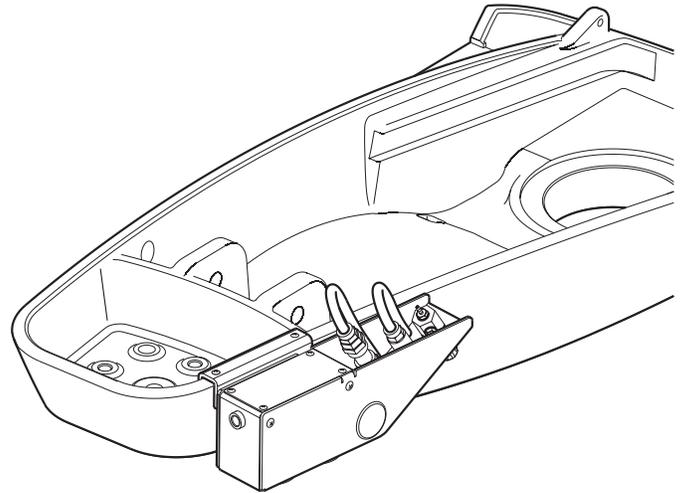
- 1 Remove the 6-32 screw from the back of the headrest upholstery and set aside.
- 2 Align the keyholes of the headrest upholstery to the flat head bolts on the headrest assembly.
- 3 Push down and slide the headrest upholstery toward the bottom tip of the casting to engage the bolts in the keyhole slots.
- 4 Complete the assembly by adding the 6-32 screw to the back of the headrest as shown (right).



OPTIONAL QUICK CONNECT BOX

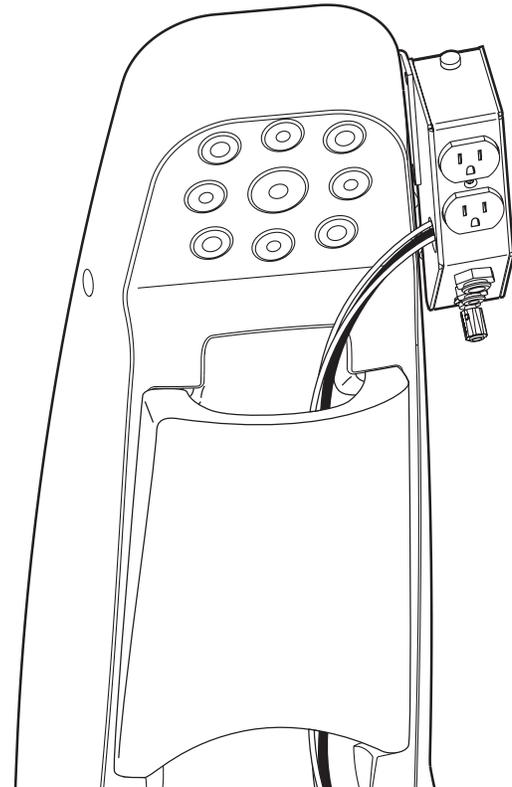
ATTACH BOX TO CHAIR

- 1** Identify to which side of the chair the box will mount.
- 2** Use two 10-32 fasteners to attach the bracket to the Quick Connection Box. Determine orientation based on the side of the chair to which it will mount.
- 3** Use two 10-32 fasteners to attach to the seat pan casting.



ROUTE LINES

- 1** Route wires and tubings out the hole on the side of the Quick Connection Box which is closest to the chair casting.
- 2** Remove the umbilical cover, the wire hanger, the truss cover, and the pump cover, and then route the wires under the seat casting and into the wire channel of the truss casting.



CONNECT TO UTILITIES

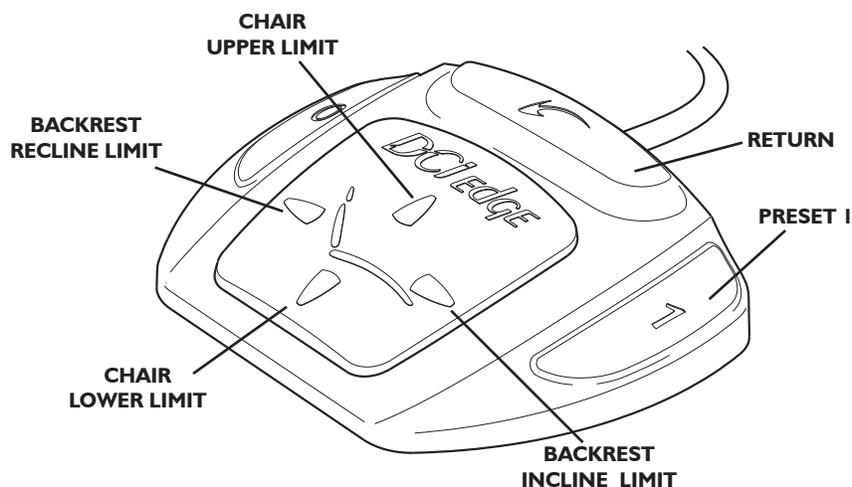
- 1** Connect the power cable to the connector labeled AUXILIARY OUTPUT at the front side of the transformer box in the chair.
- 2** Remove the top cover of the Junction Box in front of the chair and route air and water lines through the opening at the front of the chair into the Junction Box. Make air and water connections to the incoming air and water lines after the regulator.

ADJUSTING THE CHAIR POSITION SOFT LIMITS

PROGRAMMING SOFT LIMITS

Soft Limits are the software controlled position limits for the hydraulic chair movements. These can be programmed using the foot switch or any touchpad that controls chair movement. Soft limits are factory set and should only be adjusted by a technician.

- 1 Enter Soft Limit Mode:** While holding the “Return” key, press and hold the “Preset 1” key for 6 seconds. Two short beeps followed by one long beep indicate that you have entered Soft Limit Mode. While in Soft Limit Mode, the chair will be able to move through its full mechanical range of travel.
- 2 Position the chair:** Press a directional key (up, down, recline, incline) to position the chair at its desired soft limit position.
- 3 Set soft limits:** While pressing and holding the “Return” key, press the directional key (up, down, recline, incline) for the direction that you want to limit. Two long audible beeps will indicate successful programming of that soft limit. **Example: To set the lower limit of chair height, press and hold the Return key and the Chair Down arrow key.**

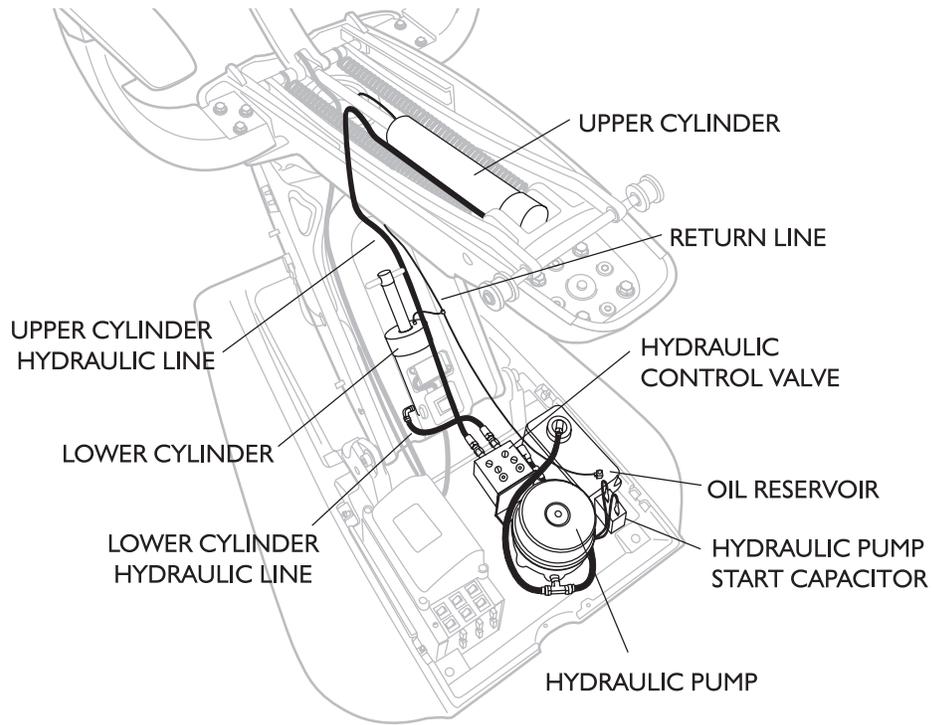


- 4 Exit Soft Limit Mode:** while holding the “Return” key, press and hold the “Preset 1” key for 6 seconds. Three audible beeps indicate that you have left Soft Limit Mode. Once exited, the chair will operate within the movement constraints that have been programmed.

If, while in Soft Limit Mode, no keys are pressed for over 60 seconds, the chair will automatically exit Soft Limit Mode, at which time three audible beeps will sound. Once exited, the chair will operate within the movement constraints that have been programmed.

HYDRAULIC SYSTEM

HYDRAULIC SCHEMATIC



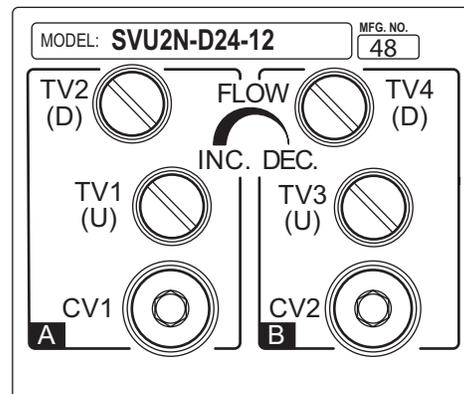
HYDRAULIC CONTROL VALVE

SPEED ADJUSTMENT

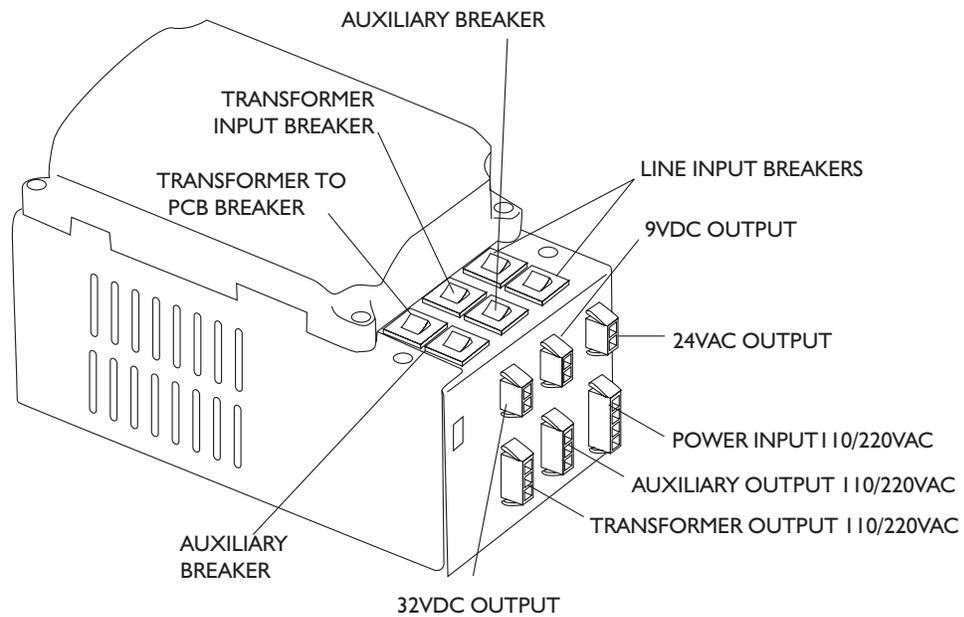
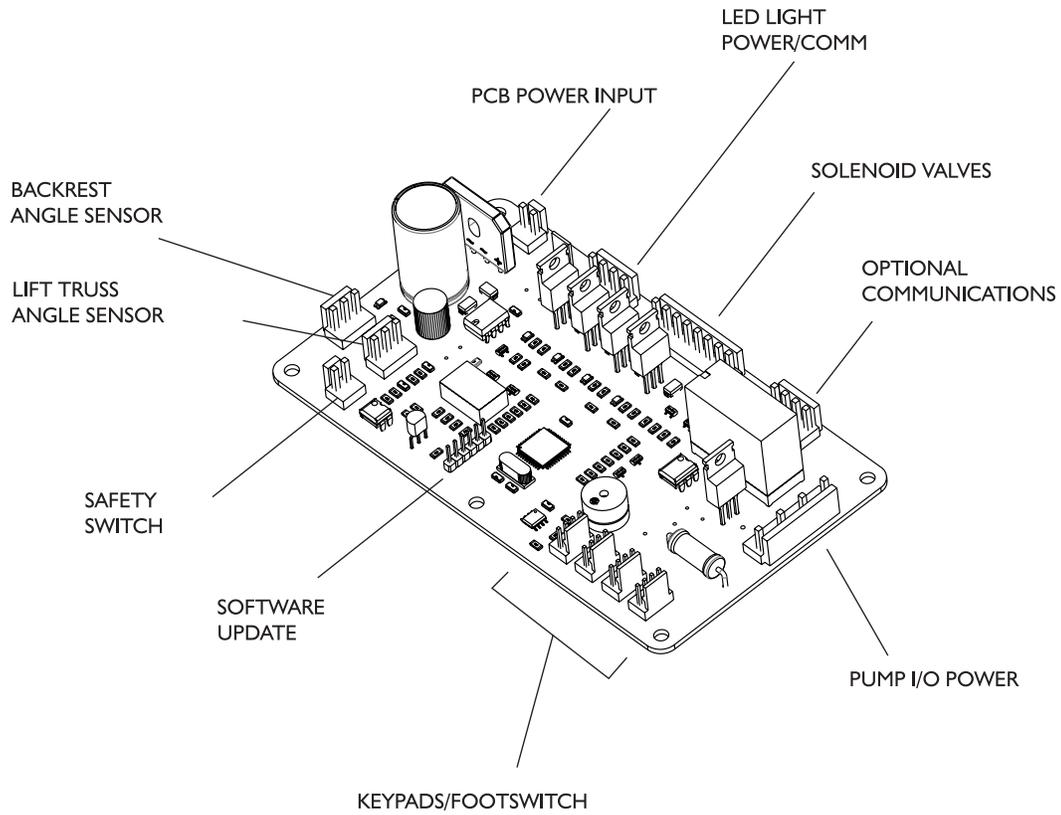
- TV1 = BACK UP
- TV2 = BACK DOWN
- TV3 = BASE UP
- TV4 = BASE DOWN

To increase speed turn counterclockwise.

To decrease speed turn clockwise.

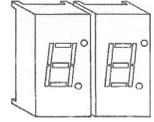


ELECTRICAL



DIAGNOSTIC CODES

Status Codes are displayed on two 7-segment displays on the main chair control circuit board. These are visible through the clear window of the protective cover. Errors are designated with an 8 as the first digit. While there are error codes displayed, no other input or output code will be displayed. When more than one code's condition is present, each applicable code will be displayed, alternating every second.



POSITION CONTROLS

Display	Status	If this status is incorrect
00	System Normal, No current action	Examine keypads and connections
10	Foot switch key is currently being pressed	Foot switch may have a stuck key
11	Keypad 1 is currently being pressed	Keypad 1 may have a stuck key
12	Keypad 2 is currently being pressed	Keypad 2 may have a stuck key
13	Keypad 3 is currently being pressed	Keypad 3 may have a stuck key
14	No motion in progress while keypad is pressed	Examine connections and hydraulic systems
15	Backrest in motion	(normal function)
16	Base in motion	(normal function)
17	Auto-position in progress	(normal function)
18	Auto-position in progress	(normal function)

SAFETY SWITCHES

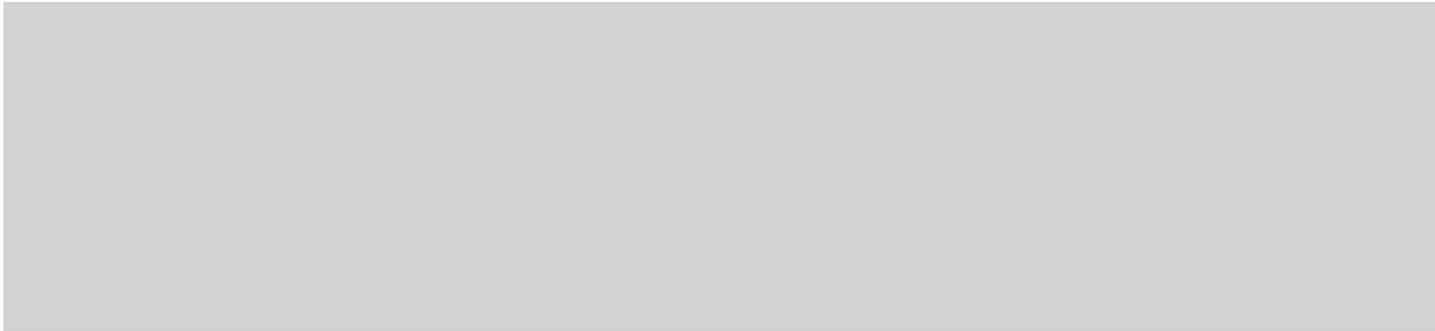
Display	Status	If this status is incorrect
30	Safety cover switch engaged	Examine connections
31	Auxiliary Switch engaged	Examine connections

POSITION INDICATORS

Display	Status	If this status is incorrect
20	Signal received to move backrest but it has reached its soft limit	Reprogram soft limits
21	Signal received to move base but it has reached its soft limit	Reprogram soft limits
22	Signal received to move both base and backrest but both have reached their soft limits	Reprogram soft limits

ERROR CODES

Display	Status	If this status is incorrect
80	Backrest Position value too low	Check soft limits
81	Backrest Position value too high	Check soft limits
82	Base Position value too low	Check soft limits
83	Base Position value too high	Check soft limits
84	Corrupt signal received by the main chair PCB	Turn the chair off for 10 seconds and then back on. If it still persists, check connectors and wire harnesses



CE

PN 5005 I, Rev. B, 05/16

www.dcionline.com
800-624-2793

DCI **EDGE**

305 N. Springbrook Road
Newberg, OR 97132, USA